Electronic

Main Catalogue

04/2009

BALZER® KABEL
KABELWERK MEISSEN

Flexible conductors for energy chains, servo cables

dragchain cable PVC

dragchain cable PUR

dragchain cable PVC-PUR

combined servo motor connecting cable PVC

combined servo motor connecting cable PUR

system servo cable PUR

motor signal cable PUR

Control cables

control cables PVC

Core and wiring cables

cores and wiring cables PVC

cores and wiring cables PVC according to UL CSA

multi-standard cores and wiring cables PVC VDE UL CSA

stranded hook-up wires PVC

cores and wiring cables, special designs

EMC conductors

control cables PE/PVC (EMC conductor)

Heat and cold-resistant cables

ETFE insulated cables, shielded

TPE-S insulated wiring cables

PVC flexible conduits

PVC cores and wiring cables

halogen-free cores with extended temperature range

Cables with optical transmission elements (fibre optic cables)

plastic fibre optic cables (POF)

polymer cladded fibre (PCF) optic cables

Battery connecting cables

battery connecting cables and connecting leads

Control cables in intrinsically safe circuits

Conductors for photovoltaic applications

photovoltaic conductors

BALZERCONTROL SL 300

The slim PVC dragchain cable

As data transmission cable for control devices and electric resources in machines, production and processing tools etc. with medium mechanical load conditions, compulsory guidance and frequently alternate bending demands

- in energy chains
- in handling devices
- for the handling in permanently moving machine parts

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, extra fine-wired, class 6 according to DIN EN 60228 (former VDE 0295) and BKM product specification
c. core insulation PVC TI2 according to HD 21.1
d. wire marking from 0.14 mm² to 0.34 mm² coloured according to BKM specification (former draft DIN VDE 0245-1), from 0.5 mm² cores onwards black with white figure printing, from 3 cores onwards with (-JZ) or without (-OZ) green/yellow core
e. ply stranding and if necessary banding over external layer
f. outer sheath PVC TM 2 according to HD 21.1, preferred colour grey
g. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage Uo/U 300/300 V
b. test voltage 2000 V
c. temperature range at the conductor in operation +70° C
d. temperature range at the conductor in case of short circuit +150° C
e. temperature range at the surface fixed installation -40° C ... +70° C
f. temperature range at the surface flexible application +5° C ... +70° C
g. fire behaviour according to DIN EN 60332-1-2
h. minimum bending radius 7.5 x D
i. highly flexible - designed for at least 1 million alternate bending cycles (EFK1)

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.14	4.3	19	2.7
3 x 0.14	4.5	22	4.0

BALZERCONTROL SL 300

The slim PVC dragchain cable

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
4 X 0.14	4.8	26	5.4
5 X 0.14	5.1	30	6.7
7 X 0.14	5.8	40	9.4
12 X 0.14	6.9	55	16.1
18 X 0.14	7.8	76	24.0
27 X 0.14	9.4	103	36.0
2 X 0.25	4.6	23	4.8
3 X 0.25	4.8	27	7.2
4 X 0.25	5.1	32	9.0
5 X 0.25	5.5	38	12.5
12 X 0.25	7.5	73	33.0
7 X 0.25	6.3	52	16.8
18 X 0.25	8.7	102	43.0
27 X 0.25	10.1	161	65.0
2 X 0.34	4.8	25	6.5
3 X 0.34	5.0	30	9.8
4 X 0.34	5.3	36	13.1
5 X 0.34	5.7	43	16.3
7 X 0.34	6.6	59	23.0
12 X 0.34	7.8	83	39.2
18 X 0.34	9.2	118	59.0
27 X 0.34	10.9	185	88.0
2 X 0.5	5.6	33	9.6
3 G/X 0.5	5.9	42	14.4
4 G/X 0.5	6.3	51	19.0
5 G/X 0.5	6.8	63	24.0
7 G/X 0.5	7.9	87	34.0
12 G/X 0.5	9.7	124	58.0
18 G/X 0.5	12	201	86.0
27 G/X 0.5	13.9	277	130.0
2 X 0.75	5.9	40	14.4
3 G/X 0.75	6.2	52	21.6
4 G/X 0.75	6.7	64	28.8
5 G/X 0.75	7.3	78	36.0
7 G/X 0.75	8.7	109	51.0
12 G/X 0.75	11.2	179	87.0
18 G/X 0.75	12.8	254	130.0
27 G/X 0.75	14.9	355	194
2 X 1.0	6.3	47	19.2
3 G/X 1.0	6.6	61	28.8
4 G/X 1.0	7.1	76	38.4
5 G/X 1.0	7.7	94	48.0
7 G/X 1.0	9.3	132	68.0
12 G/X 1.0	12	216	115.0
18 G/X 1.0	13.7	310	173.0

BALZERCONTROL SL 300

The slim PVC dragchain cable

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
27 G/X 1.0	16.7	458	259.0
2 X 1.5	7.3	62	28.8
3 G/X 1.5	7.7	81	43.2
4 G/X 1.5	8.5	102	58.0
5 G/X 1.5	9.3	127	72.0
7 G/X 1.5	11.7	202	101.0
12 G/X 1.5	14.0	291	173.0
18 G/X 1.5	17.0	446	259.0
27 G/X 1.5	21.0	653	389.0

G/X: in your order please indicate after the article number if with protective conductor (-JZ) or without protective conductor (-OZ)
other numbers of cores on request
usual delivery design: 500 m drum

BALZERCONTROL SLC 300

The slim PVC dragchain cable with Cu shield

As data transmission cable for control devices and electric resources in machine, production and processing tools etc. with medium mechanical load conditions, compulsory guidance and frequently alternate bending demands

- in energy chains
- in handling devices
- for the handling in permanently moving machine parts

The optimized shielding of the cable improves the signal transmission and reduces the radiated emission respectively cross interference (EMC).

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, extra fine-wired, class 6 according to DIN EN 60228 (former VDE 0295) and BKM product specification
c. core insulation PVC TI2 according to HD 21.1
d. wire marking from 0.14 mm² to 0.34 mm² coloured according to BKM specification (former draft DIN VDE 0245-1), from 0.5 mm² cores onwards black with white figure printing, from 3 cores onwards with (-JZ) or without (-OZ) green/yellow core
e. ply stranding and banding over the external layer
f. optimized screening braiding of tinned copper wires
g. outer sheath PVC TM 2 according to HD 21.1, preferred colour grey
h. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage Uo/U 300/300 V
b. test voltage 2000 V
c. temperature range at the conductor in operation +70° C
d. temperature range at the conductor in case of short circuit +150° C
e. temperature range at the surface fixed installation -40° C ... +70° C
f. temperature range at the surface flexible application +5° C ... +70° C
g. fire behaviour according to DIN EN 60332-1-2
h. minimum bending radius 7.5 x D
i. highly flexible - designed for at least 1 million alternate bending cycles (EFK1)

BALZERCONTROL SLC 300

The slim PVC dragchain cable with Cu shield

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.14	4.8	29	11.1
3 X 0.14	5.0	32	12.4
4 X 0.14	5.3	37	14.8
5 X 0.14	5.6	42	17.2
7 X 0.14	6.5	61	28.3
12 X 0.14	7.6	80	39.7
18 X 0.14	8.7	105	53.0
27 X 0.14	10.9	156	70.0
2 X 0.25	5.0	32	13.2
3 X 0.25	5.2	38	16.7
4 X 0.25	5.5	44	20.1
5 X 0.25	5.9	51	23.5
7 X 0.25	6.9	74	38.0
12 X 0.25	8.0	99	55.0
18 X 0.25	9.3	135	77.0
27 X 0.25	11.7	199	102.0
2 X 0.34	5.3	36	16.0
3 X 0.34	5.5	42	20.3
4 X 0.34	5.8	49	24.6
5 X 0.34	6.4	64	35.2
7 X 0.34	7.3	84	46.4
12 X 0.34	8.7	113	68.0
18 X 0.34	10.3	161	92.0
27 X 0.34	12.4	229	131.0
2 X 0.5	6.1	47	21.1
3 G/X 0.5	6.6	63	33.3
4 G/X 0.5	7.0	74	40.4
5 G/X 0.5	7.5	88	47.6
7 G/X 0.5	8.8	117	62.0
12 G/X 0.5	11.2	183	96.0
18 G/X 0.5	12.7	246	129.0
27 G/X 0.5	15.1	346	197.0
2 X 0.75	6.6	61	33.3
3 G/X 0.75	6.9	74	42.8
4 G/X 0.75	7.4	89	53.0
5 G/X 0.75	8.0	105	62.0
7 G/X 0.75	9.4	143	84.0
12 G/X 0.75	11.9	219	124.0
18 G/X 0.75	13.7	315	189.0
27 G/X 0.75	16.9	455	270.0
2 X 1.0	7.0	70	40.4
3 G/X 1.0	7.3	86	53.0
4 G/X 1.0	7.8	103	65.0
5 G/X 1.0	8.6	123	77.0
7 G/X 1.0	10.8	185	101.1

BALZERCONTROL SLC 300

The slim PVC dragchain cable with Cu shield

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
12 G/X 1.0	12.7	260	158.0
18 G/X 1.0	14.6	378	240.0
27 G/X 1.0	18.0	544	343.0
2 X 1.5	8.0	89	55.0
3 G/X 1.5	8.6	111	72.0
4 G/X 1.5	9.2	132	86.0
5 G/X 1.5	10.8	180	105.0
7 G/X 1.5	12.4	246	144.0
12 G/X 1.5	14.9	360	240.0
18 G/X 1.5	17.9	531	343.0
27 G/X 1.5	22.6	770	490.0

G/X: in your order please indicate after the article number if with protective conductor (-JZ) or without protective conductor (-OZ)
other numbers of cores on request
usual delivery design: 500 m drum

BALZERCONTROL SL 500

The robust PVC dragchain cable

As data transmission cable for control devices and electric resources in machine, production and processing tools etc. with medium mechanical load conditions, compulsory guidance and frequently alternate bending demands

- in energy chains
- in handling devices
- for the handling in permanently moving machine parts

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, extra fine-wired, class 6 according to DIN EN 60228 (former VDE 0295)
c. core insulation PVC TI2 according to HD 21.1
d. wire marking black with white figure printing, from 3 cores onwards with (-JZ) or without (-OZ) green/yellow core
e. ply stranding and if necessary banding over external layer
f. outer sheath PVC TM 2 according to HD 21.1, preferred colour grey
g. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage Uo/U 300/500 V
b. test voltage 4000 V
c. temperature range at the conductor in operation +70° C
d. temperature range at the conductor in case of short circuit +150° C
e. temperature range at the surface fixed installation -40° C ... +70° C
f. temperature range at the surface flexible application +5° C ... +70° C
g. fire behaviour according to DIN EN 60332-1-2
h. minimum bending radius 7.5 x D
i. highly flexible - designed for at least 1 million alternate bending cycles (EFK1)

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.5	6.4	41	9.6
3 G/X 0.5	6.7	52	14.4
4 G/X 0.5	7.3	63	19.2
5 G/X 0.5	8.5	85	24.0
7 G/X 0.5	9.9	118	33.6
12 G/X 0.5	12.2	176	58.0
18 G/X 0.5	14.0	250	87.0

BALZERCONTROL SL 500

The robust PVC dragchain cable

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
25 G/X 0.5	16.4	350	120.0
2 X 0.75	6.7	48	14.4
3 G/X 0.75	7.1	61	21.6
4 G/X 0.75	7.7	76	28.8
5 G/X 0.75	8.9	102	36.0
7 G/X 0.75	10.8	152	51.0
12 G/X 0.75	12.9	214	87.0
18 G/X 0.75	14.8	306	130.0
25 G/X 0.75	18.1	454	180.0
2 X 1.0	7.1	55	19.2
3 G/X 1.0	7.5	71	28.8
4 G/X 1.0	8.7	97	38.4
5 G/X 1.0	9.4	119	48.0
7 G/X 1.0	11.4	177	68.0
12 G/X 1.0	13.6	253	116.0
18 G/X 1.0	16.4	387	173.0
25 G/X 1.0	19.1	535	240.0
3 G/X 1.5	9.1	101	43.2
4 G/X 1.5	9.9	126	58.0
5 G/X 1.5	11.1	166	72.0
7 G/X 1.5	13.1	234	101.0
2 X 1.5	8.7	78	28.8
2 X 2.5	10.1	113	48.0
12 G/X 1.5	16.5	357	173.0
18 G/X 1.5	19.6	540	259.0
25 G/X 1.5	22.6	708	360.0
3 G/X 2.5	11.0	160	72.0
4 G/X 2.5	12.0	201	96.0
5 G/X 2.5	13.0	250	120.0
7 G/X 2.5	15.6	355	168.0
12 G/X 2.5	19.9	573	288.0
18 G/X 2.5	23.4	828	432.0
25 G/X 2.5	28.5	1,134	600.0
3 G/X 4.0	12.5	208	116.0
4 G/X 4.0	13.6	262	154.0
5 G/X 4.0	14.8	328	192.0
3 G/X 6.0	14.0	282	173.0
4 G/X 6.0	15.3	359	231.0
5 G/X 6.0	17.6	476	288.0
3 G/X 10	18.3	478	288.0
4 G/X 10	20.6	639	384.0
5 G/X 10	23.0	801	480.0
3 G/X 16	21.9	710	461.0
4 G/X 16	23.8	910	615.0
5 G/X 16	26.6	1,183	768.0

BALZERCONTROL SL 500

The robust PVC dragchain cable

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
3 G/X 25	26.0	1,019	720.0
4 G/X 25	28.3	1,306	960.0
5 G/X 25	31.6	1,692	1,200.0

G/X: in your order please indicate after the article number if with protective conductor (-JZ) or without protective conductor (-OZ)
other numbers of cores on request
usual delivery design: 500 m drum

BALZERCONTROL SLC 500

The robust PVC dragchain cable with Cu shield

As data transmission cable for control devices and electric resources in machine, production and processing tools etc. with medium mechanical load conditions, compulsory guidance and frequently alternate bending demands

- in energy chains
- in handling devices
- for the handling in permanently moving machine parts

The optimized shielding of the cable improves the signal transmission and reduces the radiated emission respectively cross interference (EMC).

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, extra fine-wired, class 6 according to DIN EN 60228 (former VDE 0295)
c. core insulation PVC TI2 according to HD 21.1
d. wire marking black with white figure printing, from 3 cores onwards with (-JZ) or without (-OZ) green/yellow core
e. ply stranding, banding over external layer or with inner sheath on request
f. optimized screening braiding of tinned copper wires
g. outer sheath PVC TM 2 according to HD 21.1, preferred colour grey
h. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage Uo/U 300/500 V
b. test voltage 3000 V (without inner sheath)
c. test voltage 4000 V (with inner sheath)
d. temperature range at the conductor in operation +70° C
e. temperature range at the conductor in case of short circuit +150° C
f. temperature range at the surface fixed installation -40° C ... +70° C
g. temperature range at the surface flexible application +5° C ... +70° C
h. fire behaviour according to DIN EN 60332-1-2
i. minimum bending radius 7.5 x D
j. highly flexible - designed for at least 1 million alternate bending cycles (EFK1)

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.5	8.5	103	35.5
3 G/X 0.5	8.8	113	40.3

BALZERCONTROL SLC 500

The robust PVC dragchain cable with Cu shield

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
4 G/X 0.5	9.5	132	47.5
5 G/X 0.5	10.2	154	57.0
7 G/X 0.5	12.0	208	72.0
12 G/X 0.5	14.3	302	125.0
18 G/X 0.5	17.2	429	162.0
25 G/X 0.5	20.9	588	212.0
2 X 0.75	8.8	113	40.3
3 G/X 0.75	9.4	132	49.9
4 G/X 0.75	9.9	153	62.0
5 G/X 0.75	11.0	184	69.0
7 G/X 0.75	12.5	241	93.0
12 G/X 0.75	15.0	345	154.0
18 G/X 0.75	18.1	501	214.0
25 G/X 0.75	21.9	688	281.0
2 X 1.0	9.1	126	47.5
3 G/X 1.0	9.7	149	62.0
4 G/X 1.0	10.7	179	72.0
7 G/X 1.0	12.4	250	150.0
5 G/X 1.0	11.5	209	86.0
12 G/X 1.0	17.5	305	164.0
18 G/X 1.0	19.5	593	257.0
25 G/X 1.0	23.4	815	353.0
2 X 1.5	10.7	170	62.0
3 G/X 1.5	11.2	196	81.0
4 G/X 1.5	12.0	223	96.0
5 G/X 1.5	13.0	268	115.0
7 G/X 1.5	15.7	390	177.0
12 G/X 1.5	19.5	580	265.0
18 G/X 1.5	22.8	780	360.0
25 G/X 1.5	27.3	1,109	517.0
2 X 2.5	12.1	226	86.0
3 G/X 2.5	12.7	264	115.0
4 G/X 2.5	14.0	337	163.0
5 G/X 2.5	15.1	391	187.0
7 G/X 2.5	19.3	592	252.0
18 G/X 2.5	27.1	1,194	589.0
12 G/X 2.5	23.2	841	401.0
25 G/X 2.5	32.5	1,682	797.0
3 G/X 4	14.6	356	183.0
4 G/X 4	16.9	458	229.0
5 G/X 4	18.2	541	276.0
3 G/X 6	17.4	493	248.0
4 G/X 6	18.6	585	315.0
5 G/X 6	20.6	725	380.0
3 G/X 10	22.0	774	389.0

BALZERCONTROL SLC 500

The robust PVC dragchain cable with Cu shield

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
4 G/X 10	24.0	947	497.0
5 G/X 10	26.7	1,202	637.0
3 G/X 16	24.7	1,055	574.0
4 G/X 16	27.4	1,343	772.0
5 G/X 16	30.1	1,605	945.0
3 G/X 25	29.9	1,557	897.0
4 G/X 25	32.8	1,929	1,157.0
5 G/X 25	36.5	2,409	1,416.0

G/X: in your order please indicate after the article number if with protective conductor (-JZ) or without protective conductor (-OZ)
other numbers of cores on request
usual delivery design: 500 m drum

BALZERCONTROL SL 1000

The 0.6/1 kV PVC dragchain cable without shielding

As data transmission cable and supply cable for control devices and electric resources in machine, production and processing tools etc. with medium mechanical load conditions, compulsory guidance and frequently bending demands

- in energy chains
- in handling devices
- for the handling in permanently moving machine parts

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, extra fine-wired, class 6 according to DIN EN 60228 (former VDE 0295)
c. core insulation PVC TI2 according to HD 21.1
d. wire marking black with white figure printing, from 3 cores onwards with (-JZ) or without (-OZ) green/yellow core
e. ply stranding and if necessary banding over external layer
f. outer sheath PVC TM 2 according to HD 21.1, preferred colour grey
g. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage Uo/U 600/1000 V
b. test voltage 4000 V
c. temperature range at the conductor in operation +70° C
d. temperature range at the conductor in case of short circuit +150° C
e. temperature range at the surface fixed installation -40° C ... +70° C
f. temperature range at the surface flexible application +5° C ... +70° C
g. fire behaviour according to DIN EN 60332-1-2
h. minimum bending radius 7.5 x D
i. highly flexible - designed for at least 1 million alternate bending cycles (EFK1)

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.5	7.2	48	9.6
3 G/X 0.5	7.6	62	14.4
4 G/X 0.5	8.8	84	19.0
5 G/X 0.5	9.5	103	24.0
7 G/X 0.5	11.6	155	34.0
12 G/X 0.5	13.8	214	58.0
2 X 0.75	7.8	60	14.4

BALZERCONTROL SL 1000

The 0.6/1 kV PVC dragchain cable without shielding

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
3 G/X 0.75	8.5	80	21.6
4 G/X 0.75	9.2	98	29.0
5 G/X 0.75	10.0	120	36.0
7 G/X 0.75	12.1	181	50.0
12 G/X 0.75	14.5	254	86.0
2 X 1.0	8.4	71	19.2
3 G/X 1.0	8.9	90	29.0
4 G/X 1.0	9.6	112	38.0
5 G/X 1.0	10.8	148	48.0
7 G/X 1.0	12.7	208	67.0
12 G/X 1.0	15.6	295	115.0
2 X 1.5	9.5	88	28.8
3 G/X 1.5	10.0	114	43.0
4 G/X 1.5	11.2	153	58.0
7 G/X 1.5	14.4	269	101.0
5 G/X 1.5	12.2	190	72.0
12 G/X 1.5	18.3	409	173.0
18 G/X 1.5	22.1	622	259.0
3 G/X 2.5	11.9	177	72.0
27 G/X 1.5	26.6	849	389.0
2 X 2.5	11.2	134	48.0
4 G/X 2.5	12.9	221	96.0
5 G/X 2.5	14.1	277	120.0
7 G/X 2.5	17.5	420	168.0
18 G/X 2.5	26.0	954	432.0
12 G/X 2.5	22.2	636	288.0
27 G/X 2.5	31.5	1,377	648.0
4 G/X 4.0	14.5	285	154.0
3 G/X 4.0	13.4	226	116.0
5 G/X 4.0	16.8	381	192.0
3 G/X 6.0	14.9	302	173.0
4 G/X 6.0	17.1	408	231.0
5 G/X 6.0	18.6	512	288.0
3 G/X 10	19.8	531	288.0
4 G/X 10	22.1	673	384.0
5 G/X 10	24.1	847	480.0
3 G/X 16	22.7	741	461.0
4 G/X 16	24.7	949	615.0
5 G/X 16	27.6	1,236	768.0
3 G/X 25	27.2	1,116	720.0
4 G/X 25	29.6	1,434	960.0
5 G/X 25	33.1	1,857	1,200.0
3 G/X 35	30.2	1,472	1,008.0
4 G/X 35	33.5	1,948	1,344.0
5 G/X 35	37.4	2,513	1,680.0

BALZERCONTROL SL 1000

The 0.6/1 kV PVC dragchain cable without shielding

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
3 G/X 50	34.8	2,031	1,440.0
4 G/X 50	38.7	2,682	1,920.0
3 G/X 70	40.1	2,717	2,016.0
4 G/X 70	43.9	3,519	2,688.0
3 G/X 95	44.0	3,592	2,736.0
4 G/X 95	48.2	4,676	3,648.0
3 G/X 120	47.8	4,118	3,456.0
4 G/X 120	52.5	5,366	4,608.0

G/X: in your order please indicate after the article number if with protective conductor (-JZ) or without protective conductor (-OZ)
other numbers of cores on request
usual delivery design: 500 m drum

BALZERCONTROL SLC 1000

The 0.6/1 kV PVC dragchain cable with shielding

As data transmission cable for control devices and electric resources in machine, production and processing tools etc. with medium mechanical load conditions, compulsory guidance and frequently alternate bending demands

- in energy chains
- in handling devices
- for the handling in permanently moving machine parts

The optimized shielding of the cable improves the signal transmission and reduces the radiated emission respectively cross interference (EMC).

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, extra fine-wired, class 6 according to DIN EN 60228 (former VDE 0295)
c. core insulation PVC TI2 according to HD 21.1
d. wire marking black with white figure printing, from 3 cores onwards with (-JZ) or without (-OZ) green/yellow core
e. ply stranding, banding over external layer or with inner sheath on request
f. optimized screening braiding of tinned copper wires
g. outer sheath PVC TM 2 according to HD 21.1, preferred colour grey
h. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage Uo/U 600/1000 V
b. test voltage 4000 V
c. temperature range at the conductor in operation +70° C
d. temperature range at the conductor in case of short circuit +150° C
e. temperature range at the surface fixed installation -40° C ... +70° C
f. temperature range at the surface flexible application +5° C ... +70° C
g. fire behaviour according to DIN EN 60332-1-2
h. minimum bending radius 7.5 x D
i. highly flexible - designed for at least 1 million alternate bending cycles (EFK1)

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.5	8.5	84	35.5
3 G/X 0.5	8.9	100	42.7

BALZERCONTROL SLC 1000

The 0.6/1 kV PVC dragchain cable with shielding

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
4 G/X 0.5	9.5	115	47.5
5 G/X 0.5	10.2	138	57.0
7 G/X 0.5	12.3	200	76.0
12 G/X 0.5	14.7	283	125.0
2 X 0.75	8.8	91	40.3
3 G/X 0.75	9.2	110	49.9
4 G/X 0.75	9.9	133	62.0
5 G/X 0.75	11.1	166	69.0
7 G/X 0.75	12.8	226	93.0
12 G/X 0.75	15.6	330	162.0
2 X 1.0	9.1	101	47.5
4 G/X 1.0	10.7	157	72.0
3 G/X 1.0	9.6	121	58.0
5 G/X 1.0	11.5	189	86.0
7 G/X 1.0	13.6	269	126.0
12 G/X 1.0	16.9	384	191.0
2 X 1.5	10.2	123	62.0
3 G/X 1.5	11.1	160	77.0
4 G/X 1.5	11.9	194	96.0
5 G/X 1.5	12.9	235	115.0
7 G/X 1.5	15.5	338	168.0
12 G/X 1.5	19.6	528	265.0
2 X 2.5	11.9	175	86.0
5 G/X 2.5	15.0	346	187.0
4 G/X 2.5	13.8	282	155.0
7 G/X 2.5	19.0	533	252.0
12 G/X 2.5	22.9	737	389.0
18 G/X 2.5	27.1	1,085	558.0
27 G/X 2.5	32.6	1,575	845.0
3 G/X 4.0	14.3	295	183.0
5 G/X 4.0	17.7	460	268.0
4 G/X 4.0	15.7	354	221.0
3 G/X 6.0	16.1	379	249.0
4 G/X 6.0	18.0	494	315.0
5 G/X 6.0	20.1	633	381.0
3 G/X 10	21.3	626	381.0
4 G/X 10	23.0	777	485.0
5 G/X 10	25.6	997	593.0
3 G/X 16	23.6	844	562.0
4 G/X 16	26.2	1,100	728.0
5 G/X 16	28.7	1,396	925.0
3 G/X 25	28.3	1,275	877.0
4 G/X 25	31.3	1,654	1,137.0
5 G/X 25	34.1	2,055	1,397.0
3 G/X 35	31.8	1,693	1,185.0

BALZERCONTROL SLC 1000

The 0.6/1 kV PVC dragchain cable with shielding

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
4 G/X 35	34.6	2,146	1,541.0
5 G/X 35	38.7	2,796	1,963.0
3 G/X 50	36.5	2,298	1,656.0
4 G/X 50	40.0	2,964	2,203.0
3 G/X 70	41.4	3,026	2,327.0
3 G/X 95	45.2	3,928	3,075.0
4 G/X 70	45.2	3,854	3,027.0
4 G/X 95	49.5	5,038	4,016.0
3 G/X 120	49.1	4,480	3,824.0

G/X: in your order please indicate after the article number if with protective conductor (-JZ) or without protective conductor (-OZ)
other numbers of cores on request
usual delivery design: 500 m drum

BALZERCONTROL SL PUR 312

The slim dragchain cable with PUR sheath

As data transmission and signal cable for control devices and electric resources in machine, processing and production tools etc. for very high mechanical load conditions, compulsory guidance and extremely high alternate bending demands

- in energy chains
- in handling devices
- for the handling in permanently moving machine parts

Moreover, the PUR sheath exhibits a very good resistance against a lot of substances (oils, acids, lyes) and convinces through a high abrasion and cut resistance.

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, extra fine-wired, class 6 according to DIN EN 60228 (former VDE 0295) and BKM product specification
c. core insulation TPE/E (12Y)
d. wire marking from 0.14 mm² to 0.34 mm² coloured according to BKM specification (former draft DIN VDE 0245-1), from 0.5 mm² cores onwards black with white figure printing, from 3 cores onwards with (-JZ) or without (-OZ) green/yellow core
e. ply stranding or banding over every stranded layer
f. outer sheath PUR (11Y) according to DIN EN 50363-10-2 (TMPU) matted, preferred colour grey or DESINA
g. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage Uo/U 300/300 V
b. test voltage 2000 V
c. temperature range at the conductor in operation +70° C
d. temperature range at the conductor in case of short circuit +150° C
e. temperature range at the surface fixed installation -40° C ... +80° C
f. temperature range at the surface flexible application -30° C ... +80° C
g. fire behaviour according to DIN EN 60332-1-2
h. resistant to oil according to DIN EN 50363-10-2 und DIN EN 60811-2-1
i. minimum bending radius 7.5 x D
j. highly flexible - designed for at least 5 million alternate bending cycles (EFK5)

BALZERCONTROL SL PUR 312

The slim dragchain cable with PUR sheath

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.14	4.1	16	2.7
3 G 0.14	4.3	19	4.0
4 G 0.14	4.6	22	5.4
5 G 0.14	4.9	26	6.7
7 G 0.14	5.6	35	9.4
12 G 0.14	6.7	48	16.1
18 G 0.14	7.6	67	24.0
27 G 0.14	9.2	92	36.0
2 X 0.25	4.4	19	4.8
3 G 0.25	4.6	24	7.2
4 G 0.25	4.9	28	9.0
5 G 0.25	5.3	34	12.5
7 G 0.25	6.1	46	16.8
12 G 0.25	7.3	65	33.0
18 G 0.25	8.5	93	43.0
27 G 0.25	10.9	146	65.0
2 X 0.34	4.6	21	6.5
3 G 0.34	4.8	26	9.8
4 G 0.34	5.1	32	13.1
5 G 0.34	5.5	39	16.3
7 G 0.34	6.4	53	23.0
12 G 0.34	7.7	75	39.2
18 G 0.34	9.0	108	59.0
27 G 0.34	11.5	168	88.0
2 X 0.5	5.4	30	9.6
3 G/X 0.5	5.7	38	14.4
4 G/X 0.5	6.1	46	19.0
5 G/X 0.5	6.6	56	24.0
7 G/X 0.5	7.7	79	34.0
12 G/X 0.5	9.5	113	58.0
18 G/X 0.5	11.8	183	86.0
27 G/X 0.5	14.0	253	130.0
2 X 0.75	5.7	36	4.4
3 G/X 0.75	6.0	46	21.6
4 G/X 0.75	6.5	58	28.8
5 G/X 0.75	7.1	71	36.0
7 G/X 0.75	8.5	100	51.0
12 G/X 0.75	11.0	164	87.0
18 G/X 0.75	12.6	234	130.0
27 G/X 0.75	15.0	328	194.0
2 X 1	6.1	42	19.2
3 G/X 1	6.4	56	28.8
4 G/X 1	6.9	70	38.4
5 G/X 1	9.1	123	48.0
7 G/X 1	9.1	123	68.0

BALZERCONTROL SL PUR 312

The slim dragchain cable with PUR sheath

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
12 G/X 1	11.8	199	115.0
18 G/X 1	13.5	288	173.0
27 G/X 1	16.9	425	259.0
2 X 1.5	7.1	56	28.8
3 G/X 1.5	7.5	74	43.2
4 G/X 1.5	8.3	94	58.0
5 G/X 1.5	9.1	117	72.0
7 G/X 1.5	11.5	186	101.0
12 G/X 1.5	13.8	269	173.0
18 G/X 1.5	16.8	413	259.0
27 G/X 1.5	21.0	604	389.0

G/X: in your order please indicate after the article number if with protective conductor (-JZ) or without protective conductor (-OZ)
other numbers of cores on request
usual delivery design: 500 m drum

BALZERCONTROL SLC PUR 312

The slim dragchain cable with Cu shield and PUR sheath

As data transmission and signal cable for control devices and electric resources in machine, production and processing tools etc. for high mechanical load conditions, compulsory guidance and extremely high alternate bending demands

- in energy chains
- in handling devices
- for the handling in permanently moving machine parts

The optimized shielding of the cable improves the signal transmission and reduces the radiated emission respectively cross interference (EMC).
Moreover, the PUR sheath exhibits a very good resistance against a lot of substances (oils, acids, lyes) and convinces through a high abrasion and cut resistance.

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, extra fine-wired, class 6 according to DIN EN 60228 (former VDE 0295) and BKM product specification
c. core insulation TPE/E (12Y)
d. wire marking from 0.14 mm² to 0.34 mm² coloured according to BKM specification (former draft DIN VDE 0245-1), from 0.5 mm² cores onwards black with white figure printing, from 3 cores onwards with (-JZ) or without (-OZ) green/yellow core
e. ply stranding or banding over every stranded layer
f. optimized screening braiding of tinned copper wires
g. outer sheath PUR (11Y) according to DIN EN 50363-10-2 (TMPU) matted, preferred colour grey or DESINA
h. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage Uo/U 300/300 V
b. test voltage 2000 V
c. temperature range at the conductor in operation +70° C
d. temperature range at the conductor in case of short circuit +150° C
e. temperature range at the surface fixed installation -40° C ... +80° C
f. temperature range at the surface flexible application -30° C ... +80° C
g. fire behaviour according to DIN EN 60332-1-2
h. resistant to oil according to DIN EN 50363-10-2 und DIN EN 60811-2-1
i. minimum bending radius 7.5 x D
j. highly flexible - designed for at least 5 million alternate bending cycles (EFK5)

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.14	4.8	26	11.1
3 G 0.14	5.0	29	12.4

BALZERCONTROL SLC PUR 312

The slim dragchain cable with Cu shield and PUR sheath

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
4 G 0.14	5.3	33	14.8
5 G 0.14	5.6	39	17.2
7 G 0.14	6.3	50	22.0
12 G 0.14	7.6	74	39.7
18 G 0.14	8.7	97	53.0
27 G 0.14	10.9	143	70.0
2 X 0.25	5.0	29	13.2
3 G 0.25	5.2	35	16.6
4 G 0.25	5.5	40	20.1
5 G 0.25	5.9	47	23.5
7 G 0.25	6.9	69	38.0
12 G 0.25	8.0	92	55.0
18 G 0.25	9.3	126	77.0
27 G 0.25	11.7	184	102
2 X 0.34	5.3	33	15.9
3 G 0.34	5.5	39	20.3
4 G 0.34	5.8	45	24.6
5 G 0.34	6.2	53	28.9
7 G 0.34	7.3	78	46.4
12 G 0.34	8.7	105	68.0
18 G 0.34	10.3	150	92.0
27 G 0.34	12.4	213	131
2 X 0.5	6.1	43	21.1
3 G/X 0.5	6.4	52	27.0
4 G/X 0.5	7.0	69	40.4
5 G/X 0.5	7.5	82	47.5
7 G/X 0.5	8.8	109	62.0
12 G/X 0.5	11.2	169	96.0
18 G/X 0.5	12.7	228	129.0
27 G/X 0.5	15.1	322	197.0
2 X 0.75	6.4	50	27.0
3 G/X 0.75	6.7	63	36.2
4 G/X 0.75	7.4	83	53.0
5 G/X 0.75	8.0	99	62.0
7 G/X 0.75	9.4	135	84.0
12 G/X 0.75	11.9	204	124.0
18 G/X 0.75	13.5	284	177.0
27 G/X 0.75	16.9	425	270.0
2 X 1.0	6.8	59	33.8.0
3 G/X 1.0	7.3	81	53.0
4 G/X 1.0	7.8	97	65.0
5 G/X 1.0	8.6	116	77.0
7 G/X 1.0	10.8	173	100.0
12 G/X 1.0	12.7	244	158.0
18 G/X 1.0	14.6	356	240.0

BALZERCONTROL SLC PUR 312

The slim dragchain cable with Cu shield and PUR sheath

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
27 G/X 1.0	18.0	511	343.0
2 X 1.5	8.0	83	55.0
3 G/X 1.5	8.6	104	72.0
4 G/X 1.5	9.2	123	86.0
5 G/X 1.5	10.8	168	105.0
7 G/X 1.5	12.4	230	143.0
12 G/X 1.5	14.9	338	240.0
18 G/X 1.5	17.9	498	343.0
27 G/X 1.5	22.0	706	489.0

G/X: in your order please indicate after the article number if with protective conductor (-JZ) or without protective conductor (-OZ)
other numbers of cores on request
usual delivery design: 500 m drum

BALZERCONTROL SLC PUR 312 TP

The paired dragchain cable with Cu shield and PUR sheath

As data transmission and signal cable for control devices and electric resources in machine, production and processing tools etc. for high mechanical load conditions, compulsory guidance and extremely high alternate bending demands

- in energy chains
- in handling devices
- for the handling in permanently moving machine parts

Moreover, the PUR sheath exhibits a very good resistance against a lot of substances (oils, acids, lyes) and convinces through a high abrasion and cut resistance.
The optimized shielding of the cable improves the signal transmission and reduces the radiated emission respectively cross interference (EMC).
In addition, the paired cores prevent electric couplings of single signals as far as possible.

CABLE MAKE-UP

a. according to BKM product specification
b. core insulation TPE/E (12Y)
c. wire marking from 0.14 mm² to 0.34 mm² coloured according to BKM specification (former draft DIN VDE 0245-1), from 0.5 mm² cores onwards black with white figure printing, from 3 cores onwards with (-JZ) or without (-OZ) green/yellow core
d. cores paired, pairs in ply stranding and banding over every stranded layer
e. optimized screening braiding of tinned copper wires
f. outer sheath PUR (11Y) according to DIN EN 50363-10-2 (TMPU) matted, preferred colour grey or DESINA
g. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage Uo/U 300/300 V
b. test voltage 2000 V
c. temperature range at the conductor in operation +70° C
d. temperature range at the conductor in case of short circuit +150° C
e. temperature range at the surface fixed installation -40° C ... +80° C
f. temperature range at the surface flexible application -30° C ... +80° C
g. fire behaviour according to DIN EN 60332-1-2
h. resistant to oil according to DIN EN 50363-10-2 und DIN EN 60811-2-1
i. minimum bending radius 7.5 x D
j. highly flexible - designed for at least 5 million alternate bending cycles (EFK5)

BALZERCONTROL SLC PUR 312 TP

The paired dragchain cable with Cu shield and PUR sheath

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 2 X 0.14	5.9	41	18.5
3 X 2 X 0.14	6.1	49	23.0
4 X 2 X 0.14	6.3	55	26.8
5 X 2 X 0.14	7.0	70	37.3
6 X 2 X 0.14	7.9	85	48.8
8 X 2 X 0.14	8.5	99	54.0
10 X 2 X 0.14	9.2	113	60.0
12 X 2 X 0.14	9.6	145	67.0
16 X 2 X 0.14	10.7	158	80.0
2 X 2 X 0.25	6.9	60	31.0
3 X 2 X 0.25	7.1	70	41.0
4 X 2 X 0.25	7.6	85	47.3
5 X 2 X 0.25	8.2	100	56.0
6 X 2 X 0.25	8.8	118	71.0
8 X 2 X 0.25	10.5	135	78.0
10 X 2 X 0.25	11.2	163	102.0
12 X 2 X 0.25	11.5	197	120.0
16 X 2 X 0.25	13.0	242	147.0
2 X 2 X 0.34	7.8	77	39.6
3 X 2 X 0.34	8.2	100	58.0
4 X 2 X 0.34	8.6	116	65.0
5 X 2 X 0.34	9.4	136	76.0
6 X 2 X 0.34	10.2	158	91.0
8 X 2 X 0.34	12.2	197	109.0
10 X 2 X 0.34	13.0	235	136.0
12 X 2 X 0.34	13.7	276	160.0
16 X 2 X 0.34	16.3	351	194.0
2 X 2 X 0.5	8.7	93	48.1
3 X 2 X 0.5	9.3	129	74.0
4 X 2 X 0.5	9.6	146	82.0
5 X 2 X 0.5	10.6	172	96.0
6 X 2 X 0.5	11.6	198	110.0
8 X 2 X 0.5	13.9	259	139.0
10 X 2 X 0.5	14.8	307	169.0
12 X 2 X 0.5	15.8	354	199.0
16 X 2 X 0.5	19.6	459	240.0
2 X 2 X 0.75	9.8	109	60.0
3 X 2 X 0.75	9.9	144	87.0
4 X 2 X 0.75	10.6	184	112.0
5 X 2 X 0.75	11.5	221	130.0
6 X 2 X 0.75	12.8	253	151.0
8 X 2 X 0.75	15.4	314	186.0
10 X 2 X 0.75	16.3	392	227.0
12 X 2 X 0.75	17.1	469	269.0

other numbers of pairs on request

BALZERCONTROL SLC PUR 312 TP

The paired dragchain cable with Cu shield and PUR sheath

usual delivery design: 500 m drum

BALZERCONTROL SL PUR 512

The robust dragchain cable with PUR sheath

As data transmission and signal cable for control devices and electric resources in machine, processing and production tools etc. for high mechanical load conditions, compulsory guidance and extremely high alternate bending demands

- in energy chains
- in handling devices
- for the handling in permanently moving machine parts

Moreover, the PUR sheath exhibits a very good resistance against a lot of substances (oils, acids, lyes) and convinces through a high abrasion and cut resistance.

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, extra fine-wired, class 6 according to DIN EN 60228 (former VDE 0295)
c. core insulation TPE/E (12Y)
d. wire marking black with white figure printing, from 3 cores onwards with (-JZ) or without (-OZ) green/yellow core
e. ply stranding or if necessary banding over every stranded layer
f. outer sheath PUR (11Y) according to DIN EN 50363-10-2 (TMPU) matted, preferred colour grey or DESINA
g. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage Uo/U 300/500 V
b. test voltage 4000 V
c. temperature range at the conductor in operation +70° C
d. temperature range at the conductor in case of short circuit +150° C
e. temperature range at the surface fixed installation -40° C ... +80° C
f. temperature range at the surface flexible application -30° C ... +80° C
g. fire behaviour according to DIN EN 60332-1-2
h. resistant to oil according to DIN EN 50363-10-2 und DIN EN 60811-2-1
i. minimum bending radius 7.5 x D
j. highly flexible - designed for at least 5 million alternate bending cycles (EFK5)

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.5	5.7	37	10.0
3 G/X 0.5	6.3	42	15.0

BALZERCONTROL SL PUR 512

The robust dragchain cable with PUR sheath

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
4 G/X 0.5	7.2	58	20.0
5 G/X 0.5	7.1	57	25.0
7 G/X 0.5	8.2	76	35.0
12 G/X 0.5	9.6	117	60.0
18 G/X 0.5	11.5	168	90.0
25 G/X 0.5	14.0	223	125.0
2 X 0.75	6.2	44	15.0
3 G/X 0.75	6.5	54	22.5
4 G/X 0.75	7.3	63	30.0
5 G/X 0.75	7.9	74	37.5
7 G/X 0.75	9.3	102	52.5
12 G/X 0.75	10.9	161	90.0
18 G/X 0.75	12.9	222	135.0
25 G/X 0.75	16.0	312	187.5
2 X 1.0	6.5	53	20.0
3 G/X 1.0	7.2	64	30.0
4 G/X 1.0	7.7	73	40.0
5 G/X 1.0	8.3	95	50.0
7 G/X 1.0	10.1	122	70.0
12G/ X 1.0	11.8	201	120.0
18 G/X 1.0	14.4	277	180.0
25 G/X 1.0	17.6	388	250.0
2 X 1.5	7.2	71	30.0
3 G/X 1.5	7.7	86	45.0
4 G/X 1.5	8.6	104	60.0
5 G/X 1.5	9.4	132	75.0
7 G/X 1.5	11.4	181	105.0
12 G/X 1.5	13.3	279	180.0
18 G/X 1.5	15.9	408	270.0
25 G/X 1.5	19.3	569	375.0
2 X 2.5	9.1	105	50.0
3 G/X 2.5	9.5	124	75.0
4 G/X 2.5	10.4	164	100.0
5 G/X 2.5	11.6	199	125.0
7 G/X 2.5	14.0	269	175.0
12 G/X 2.5	16.6	448	300.0
18 G/X 2.5	19.7	666	450.0
25 G/X 2.5	24.3	932	625.0

G/X: in your order please indicate after the article number if with protective conductor (-JZ) or without protective conductor (-OZ)
other numbers of cores on request
usual delivery design: 500 m drum

BALZERCONTROL SLC PUR 512

The robust dragchain cable with Cu shield and PUR sheath

As data transmission, signal and supply cable for control devices and electric resources in machine tools etc. for very high mechanical load conditions, compulsory guidance and extremely high alternate bending demands

- in in energy chains
- in handling devices
- for the handling in permanently moving machine parts

Moreover, the PUR sheath exhibits a very good resistance against a lot of substances (oils, acids, lyes) and convinces through a high abrasion and cut resistance.
The optimized shielding of the cable improves the signal transmission and reduces the radiated emission respectively cross interference (EMC).

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, extra fine-wired, class 6 according to DIN EN 60228 (former VDE 0295)
c. core insulation TPE/E (12Y)
d. wire marking black with white figure printing, from 3 cores onwards with (-JZ) or without (-OZ) green/yellow core
e. ply stranding, banding over external layer or with inner sheath on request
f. optimized screening braiding of tinned copper wires
g. outer sheath PUR (11Y) according to DIN EN 50363-10-2 (TMPU) matted, preferred colour grey or DESINA
h. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage Uo/U 300/500 V
b. test voltage 3000 V
c. test voltage 4000 V (with inner sheath)
d. temperature range at the conductor in operation +70° C
e. temperature range at the conductor in case of short circuit +150° C
f. temperature range at the surface fixed installation -40° C ... +70° C
g. temperature range at the surface flexible application -5° C ... +70° C
h. fire behaviour according to DIN EN 60332-1-2
i. resistant to oil according to DIN EN 50363-10-2 und DIN EN 60811-2-1
j. minimum bending radius 7.5 x D

BALZERCONTROL SLC PUR 512

The robust dragchain cable with Cu shield and PUR sheath

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.5	7.1	68	33.0
3 G/X 0.5	7.4	81	48.5
4 G/X 0.5	8.5	90	45.5
5 G/X 0.5	8.9	106	53.0
7 G/X 0.5	10.0	134	67.5
12 G/X 0.5	11.9	192	101.0
18 G/X 0.5	13.6	250	131.0
25 G/X 0.5	16.8	371	191.0
34 G/X 0.5	20.7	512	255.0
2 X 0.75	7.7	79	40.0
3 G/X 0.75	8.1	96	47.5
4 G/X 0.75	8.7	114	58.0
5 G/X 0.75	9.5	125	65.0
7 G/X 0.75	11.3	167	85.5
12 G/X 0.75	12.9	235	126.0
18 G/X 0.75	15.5	336	199.0
25 G/X 0.75	18.4	466	260.5
34 G/X 0.75	21.8	601	345.0
2 X 1.0	8.2	93	45.1
3 G/X 1.0	8.7	105	55.0
4 G/X 1.0	9.3	128	68.0
5 G/X 1.0	10.1	147	81.2
7 G/X 1.0	12.0	198	106.0
12 G/X 1.0	13.9	301	175.0
18 G/X 1.0	16.8	420	242.5
25 G/X 1.0	20.2	576	330.0
34 G/X 1.0	22.8	739	439
2 X 1.5	8.8	116	58.0
3 G/X 1.5	9.4	139	76.0
4 G/X 1.5	10.2	157	91.3
5 G/X 1.5	11.3	198	111.0
7 G/X 1.5	12.9	252	145.0
12 G/X 1.5	15.6	419	242.2
18 G/X 1.5	18.7	561	346.0
25 G/X 1.5	22.4	815	486.0
34 G/X 1.5	25.8	989	647.0
2 X 2.5	10.7	141	81.0
3 G/X 2.5	11.2	197	110.0
4 G/X 2.5	12.1	233	135.5
5 G/X 2.5	13.3	290	180.0
7 G/X 2.5	16.2	417	246.0
12 G/X 2.5	18.9	631	377.5
18 G/X 2.5	22.5	918	569.0
25 G/X 2.5	26.5	1,274	765.7
34 G/X 2.5	31.6	1,575	1,012.0

BALZERCONTROL SLC PUR 512

The robust dragchain cable with Cu shield and PUR sheath

G/X: in your order please indicate after the article number if with protective conductor (-JZ) or without protective conductor (-OZ)
other numbers of cores on request
usual delivery design: 500 m drum

BALZERCONTROL SL PUR 1012

The 0.6/1 kV dragchain cable with PUR sheath

As data transmission, signal and supply cable for control devices and electric resources in machine, processing and production tools etc. for very high mechanical load conditions, compulsory guidance and extremely high alternate bending demands

- in energy chains
- in handling devices
- for the handling in permanently moving machine parts

Moreover, the PUR sheath exhibits a very good resistance against a lot of substances (oils, acids, lyes) and convinces through a high abrasion and cut resistance.

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, extra fine-wired, class 6 according to DIN EN 60228 (former VDE 0295)
c. core insulation TPE/E (12Y)
d. wire marking black with white figure printing, from 3 cores onwards with (-JZ) or without (-OZ) green/yellow core
e. ply stranding or banding over every stranded layer
f. preferably without inner sheath, with inner sheath on request
g. outer sheath PUR (11Y) according to DIN EN 50363-10-2 (TMPU) matted, preferred colour grey or DESINA

TECHNICAL DATA

a. rated voltage Uo/U 600/1000 V
b. test voltage 4000 V
c. temperature range at the conductor in operation +70° C
d. temperature range at the conductor in case of short circuit +150° C
e. temperature range at the surface fixed installation -40° C ... +80° C
f. temperature range at the surface flexible application -30° C ... +80° C
g. fire behaviour according to DIN EN 60332-1-2
h. resistant to oil according to DIN EN 50363-10-2 und DIN EN 60811-2-1
i. minimum bending radius 7.5 x D
j. highly flexible - designed for at least 5 million alternate bending cycles (EFK5)

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.5	6.2	36	9.6
3 G/X 0.5	6.5	45	14.4

BALZERCONTROL SL PUR 1012

The 0.6/1 kV dragchain cable with PUR sheath

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
4 G/X 0.5	7.1	56	19.0
5 G/X 0.5	8.3	75	24.0
7 G/X 0.5	9.7	106	34.0
12 G/X 0.5	12.0	157	58.0
18 G/X0.5	13.8	224	86.0
27 G/X 0.5	17.2	330	130.0
2 X 0.75	6.5	42	14.4
3 G/X 0.75	6.9	55	21.6
4 G/X 0.75	7.5	68	29.0
5 G/X 0.75	8.7	91	36.0
7 G/X 0.75	10.2	129	50.0
12 G/X 0.75	12.7	193	86.0
18 G/X 0.75	14.6	278	135.0
27 G/X 0.75	18.3	410	194.0
2 X 1	6.9	49	19.2
3 G/X 1.0	7.3	64	29.0
4 G/X 1.0	8.5	87	38.0
5 G/X 1.0	9.2	108	48.0
7 G/X 1.0	11.2	161	67.0
12 G/X 1.0	13.6	231	115.0
18 G/X 1.0	16.4	355	173.0
27 G/X 1.0	19.9	515	259.0
2 X 1.5	8.5	70	28.8
3 G/X 1.5	8.9	91	43.0
4 G/X 1.5	9.7	114	58.0
5 G/X 1.5	10.9	151	72.0
7 G/X 1.5	12.9	214	101.0
12 G/X 1.5	16.5	326	173.0
18 G/X 1.5	19.6	496	259.0
27 G/X 1.5	23.4	685	389.0
2 X 2.5	9.9	102	48.0
3 G/X 2.5	10.8	146	72.0
4 G/X 2.5	11.8	183	96.0
5 G/X 2.5	12.8	229	120.0
7 G/X 2.5	15.2	329	168.0
12 G/X 2.5	19.9	528	288.0
18 G/X 2.5	23.2	765	432.0
27 G/X 2.5	28.3	1,111	648.0
3 G/X 4.0	12.3	191	116.0
4 G/X 4.0	13.4	242	154.0
5 G/X 4.0	14.6	305	192.0
3 G/X 6.0	13.8	262	173.0
4 G/X 6.0	15.1	336	231.0
5 G/X 6.0	17.4	445	288.0
3 G/X 10	18.1	446	288.0

BALZERCONTROL SL PUR 1012

The 0.6/1 kV dragchain cable with PUR sheath

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
4 G/X 10	20.4	596	384.0
5 G/X 10	22.8	751	480.0
3 G/X 16	21.7	668	461.0
4 G/X 16	23.6	860	615.0
5 G/X 16	26.4	1,119	768.0
3 G/X 25	26.1	1,018	720.0
4 G/X 25	28.5	1,313	960.0
5 G/X 25	31.8	1,701	1,200.0
3 G/X 35	29.1	1,361	1,008.0
4 G/X 35	32.4	1,803	1,344.0
5 G/X 35	35.5	2,285	1,680.0

G/X: in your order please indicate after the article number if with protective conductor (-JZ) or without protective conductor (-OZ)
other numbers of cores on request
usual delivery design: 500 m drum

BALZERCONTROL SLC PUR 1012

The 0.6/1 kV dragchain cable with Cu shield and PUR sheath

As data transmission, signal and supply cable for control devices and electric resources in machine tools etc. for high mechanical load conditions, compulsory guidance and high alternate bending demands

- in energy chains
- in handling devices
- for the handling in permanently moving machine parts

Moreover, the PUR sheath exhibits a very good resistance against a lot of substances (oils, acids, lyes) and convinces through a high abrasion and cut resistance.
The optimized shielding of the cable improves the signal transmission and reduces the radiated emission respectively cross interference (EMC).

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, extra fine-wired, class 6 according to DIN EN 60228 (former VDE 0295)
c. core insulation TPE/E (12Y)
d. wire marking black with white figure printing, from 3 cores onwards with (-JZ) or without (-OZ) green/yellow core
e. ply stranding with or without inner sheath, banding over every stranded layer
f. optimized screening braiding of tinned copper wires
g. outer sheath PUR (11Y) according to DIN EN 50363-10-2 (TMPU) matted, preferred colour grey or DESINA
h. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage Uo/U 600/1000 V
b. test voltage 3000 V (without inner sheath)
c. test voltage 4000 V (with inner sheath)
d. temperature range at the conductor in operation +70° C
e. temperature range at the conductor in case of short circuit +150° C
f. temperature range at the surface fixed installation -40° C ... +80° C
g. temperature range at the surface flexible application -30° C ... +80° C
h. fire behaviour according to DIN EN 60332-1-2
i. resistant to oil according to DIN EN 50363-10-2 und DIN EN 60811-2-1
j. minimum bending radius 7.5 x D
k. highly flexible - designed for at least 5 million alternate bending cycles (EFK5)

BALZERCONTROL SLC PUR 1012

The 0.6/1 kV dragchain cable with Cu shield and PUR sheath

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.5	7.1	59	30.8
3 G/X 0.5	7.4	71	37.9
4 G/X 0.5	8.5	90	45.1
5 G/X 0.5	9.2	106	53.0
7 G/X 0.5	10.9	149	67.0
12 G/X 0.5	13.1	218	116.0
18 G/X 0.5	14.9	293	153.0
27 G/X 0.5	18.3	416	213.0
36 G/X 0.5	21.1	545	265.0
2 X 0.75	7.4	67	37.9
3 G/X 0.75	8.4	89	47.5
4 G/X 0.75	9.0	105	57.0
5 G/X 0.75	9.6	122	65.0
7 G/X 0.75	11.5	177	89.0
12 G/X0.75	13.8	254	145.0
18 G/X 0.75	16.5	374	205.0
27 G/X 0.75	19.9	527	287.0
36 G/X 0.75	22.3	661	360.0
2 X 1.0	8.4	83	45.1
3 G/X 1.0	8.7	98	55.0
4 G/X 1.0	9.4	117	67.0
5 G/X 1.0	10.1	143	81.0
7 G/X 1.0	12.1	201	105.0
12 G/X 1.0	14.5	298	182.0
18 G/X 1.0	17.3	431	248.0
27 G/X 1.0	21.4	610	351.0
36 G/X 1.0	23.4	783	459.0
2 X 1.5	9.4	100	57.0
3 G/X 1.5	9.8	126	77.0
4 G/X 1.5	11.0	157	91.0
5 G/X 1.5	11.8	191	110.0
7 G/X 1.5	13.8	263	148.0
12 G/X 1.5	17.4	403	248.0
18 G/X 1.5	20.8	588	351.0
27 G/X 1.5	25.1	830	502.0
36 G/X 1.5	27.8	1,085	675.0
2 X 2.5	11.1	150	86.0
3 G/X 2.5	11.7	186	110.0
4 G/X 2.5	12.6	228	138.0
5 G/X 2.5	13.9	298	187.0
7 G/X 2.5	17.1	425	243.0
12 G/X 2.5	21.2	621	380.0
18 G/X 2.5	24.3	879	545.0
27 G/X 2.5	29.5	1,288	825.0
3 G/X 4.0	13.2	251	174.0

BALZERCONTROL SLC PUR 1012

The 0.6/1 kV dragchain cable with Cu shield and PUR sheath

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
4 G/X 4	14.5	311	221.0
5 G/X 4.0	16.0	381.0	2670.0
3 G/X 6.0	14.9	331	240.0
4 G/X 6.0	17.0	432	306.0
5 G/X 6	18.5	530	372.0
3 G/X 10	19.8	555	372.0
4 G/X 10	22.0	698	484.0
5 G/X 10	23.9	882	611.0
3 G/X 16	22.8	771	561.0
4 G/X 16	24.7	1,003	758.0
5 G/X 16	27.7	1,277	925.0
3 G/X 25	27.4	1,177	877.0
4 G/X 25	29.7	1,490	1,137.0
5 G/X 25	33.1	1,898	1,396.0
3 G/X 35	31.0	1,575	1,185.0
4 G/X 35	33.7	2,028	1,570.0
5 G/X 35	37.4	2,580	1,934.0

G/X: in your order please indicate after the article number if with protective conductor (-JZ) or without protective conductor (-OZ)
other numbers of cores on request
usual delivery design: 500 m drum

BALZERCONTROL SL YPUR 500

The robust PVC dragchain cable with PUR sheath

As data transmission, signal and supply cable for control devices and electric resources in machine tools etc. for high mechanical load conditions, compulsory guidance and high alternate bending demands

- in energy chains
- in handling devices
- for the handling in permanently moving machine parts

Moreover, the PUR sheath exhibits a very good resistance against a lot of substances (oils, acids, lyes) and convinces through a high abrasion and cut resistance.

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, extra fine-wired, class 6 according to DIN EN 60228 (former VDE 0295)
c. core insulation PVC TI2 according to HD 21.1
d. wire marking black with white figure printing, from 3 cores onwards with (-JZ) or without (-OZ) green/yellow core
e. ply stranding and banding over the external layer
f. outer sheath PUR (11Y) according to DIN EN 50363-10-2 (TMPU) matted, preferred colour grey or DESINA
g. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage Uo/U 300/300 V
b. test voltage 4000 V
c. temperature range at the conductor in operation +70° C
d. temperature range at the conductor in case of short circuit +150° C
e. temperature range at the surface fixed installation -40° C ... +70° C
f. temperature range at the surface flexible application +5° C ... +70° C
g. fire behaviour according to DIN EN 60332-1-2
h. resistant to oil according to DIN EN 50363-10-2 und DIN EN 60811-2-1
i. minimum bending radius 7.5 x D
j. highly flexible - designed for at least 1 million alternate bending cycles (EFK1)

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
3 G/X 0.5	6.8	54	14.4
4 G/X 0.5	7.4	66	19.2
5 G/X 0.5	8.0	76	24.0

BALZERCONTROL SL YPUR 500

The robust PVC dragchain cable with PUR sheath

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
7 G/X 0.5	9.2	97	33.6
12 G/X 0.5	11.1	155	58.0
18 G/X 0.5	13.2	218	87.0
25 G/X 0.5	15.7	302	120.0
3 G/X 0.75	7.3	65	21.6
4 G/X 0.75	7.9	80	28.8
5 G/X 0.75	8.5	91	36.0
7 G/X 0.75	9.9	118	51.0
12 G/X 0.75	12.0	190	87.0
18 G/X 0.75	14.2	268	130.0
25 G/X 0.75	17.0	373	180.0
3 G/X 1.0	7.7	75	28.8
4 G/X 1.0	8.3	92	38.4
5 G/X 1.0	9.1	107	48.0
7 G/X 1.0	10.6	140	68.0
12 G/X 1.0	13.2	236	115.0
18 G/X 1.0	15.2	320	173.0
25 G/X 1.0	18.8	466	240.0
3 G/X 1.5	8.5	100	43.2
4 G/X 1.5	9.3	122	58.0
5 G/X 1.5	10.1	144	72.0
7 G/X 1.5	11.9	199	101.0
12 G/X 1.5	14.9	323	173.0
18 G/X 1.5	17.2	449	259.0
25 G/X 1.5	21.2	650	360.0
3 G/X 2.5	10.2	133	72.0
4 G/X 2.5	11.4	178	96.0
5 G/X 2.5	12.5	222	120.0
7 G/X 2.5	14.4	316	168.0
12 G/X 2.5	18.2	487	288.0
18 G/X 2.5	21.4	736	432.0
25 G/X 2.5	26.5	998	600.0

G/X: in your order please indicate after the article number if with protective conductor (-JZ) or without protective conductor (-OZ)
other numbers of cores on request
usual delivery design: 500 m drum

BALZERCONTROL SLC YPUR 500

The robust PVC dragchain cable with Cu shield and PUR sheath

As data transmission, signal and supply cable for control devices and electric resources in machine tools etc. for high mechanical load conditions, compulsory guidance and high alternate bending demands

- in energy chains
- in handling devices
- for the handling in permanently moving machine parts

Moreover, the PUR sheath exhibits a very good resistance against a lot of substances (oils, acids, lyes) and convinces through a high abrasion and cut resistance.
The optimized shielding of the cable improves the signal transmission and reduces the radiated emission respectively cross interference (EMC).

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, extra fine-wired, class 6 according to DIN EN 60228 (former VDE 0295)
c. core insulation PVC TI2 according to HD 21.1
d. wire marking black with white figure printing, from 3 cores onwards with (-JZ) or without (-OZ) green/yellow core
e. ply stranding, banding over external layer or with inner sheath on request
f. optimized screening braiding of tinned copper wires
g. outer sheath PUR (11Y) according to DIN EN 50363-10-2 (TMPU) matted, preferred colour grey or DESINA
h. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage Uo/U 300/500 V
b. test voltage 3000 V (without inner sheath)
c. test voltage 4000 V (with inner sheath)
d. temperature range at the conductor in operation +70° C
e. temperature range at the conductor in case of short circuit +150° C
f. temperature range at the surface flexible application -5° C ... +70° C
g. fire behaviour according to DIN EN 60332-1-2
h. resistant to oil according to DIN EN 50363-10-2 und DIN EN 60811-2-1
i. minimum bending radius 7.5 x D
j. highly flexible - designed for at least 1 million alternate bending cycles (EFK1)

BALZERCONTROL SLC YPUR 500

The robust PVC dragchain cable with Cu shield and PUR sheath

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
3 G/X 0.5	8.7	98	40.0
4 G/X 0.5	9.3	118	48.0
5 G/X 0.5	9.9	137	54.0
7 G/X 0.5	11.3	182	69.0
12 G/X 0.5	13.6	251	120.0
18 G/X 0.5	15.7	358	157.0
25 G/X 0.5	19.2	488	210.0
34 G/X 0.5	22.0	590	259.0
3 G/X 0.75	9.2	119	52.0
4 G/X 0.75	9.8	147	65.0
5 G/X 0.75	10.6	168	72.0
7 G/X 0.75	12.0	226	92.0
12 G/X 0.75	14.5	299	150.0
18 G/X 0.75	16.7	458	203.0
25 G/X 0.75	20.5	591	272.0
34 G/X 0.75	23.3	729	347.0
3 G/X 1.0	9.6	130	60.0
4 G/X 1.0	10.4	159	76.0
5 G/X 1.0	11.2	183	84.0
7 G/X 1.0	13.1	250	110.0
12 G/X 1.0	15.5	348	188.0
18 G/X 1.0	18.3	528	255.0
25 G/X 1.0	21.7	688	340.0
34 G/X 1.0	23.9	791	444.0
3 G/X 1.5	10.6	165	79.0
4 G/X 1.5	11.4	198	94.0
5 G/X 1.5	12.3	225	114.0
7 G/X 1.5	14.2	310	153.0
12 G/X 1.5	17.4	452	255.0
18 G/X 1.5	20.6	659	350.0
25 G/X 1.5	24.8	896	470.0
34 G/X 1.5	27.5	1,146	644.0
3 G/X 2.5	11.9	206	112.2
4 G/X 2.5	12.8	247	136.7
5 G/X 2.5	14.1	321	182.6
7 G/X 2.5	17.2	468	247.9
12 G/X 2.5	21.0	687	387.6
18 G/X 2.5	24.5	969	555.9
25 G/X 2.5	29.7	1,402	772.1
34 G/X 2.5	33.4	1,863	1,032.2

G/X: in your order please indicate after the article number if with protective conductor (-JZ) or without protective conductor (-OZ)
other numbers of cores on request
usual delivery design: 500 m drum

combined servo motor connecting cable PVC

BALZERSERVOTROL 1000

The combined PVC motor connecting cable with Cu shield

This combined motor connecting cable is especially suitable for a flexible application for supplying energy as well as for data exchange with control devices of servo drives in the automation technology. Power cores and signal cables are combined in one conductor in such a perfect way that it results in low weight, low required space, simplified installation as well as higher functional reliability.
The optimized shielding of the cable improves the signal transmission and reduces the radiated emission respectively cross interference (EMC).

CABLE MAKE-UP

a. according to BKM product specification (approval also according to UL/CSA possible)
b. bare copper wire, extra fine-wired, class 6 according to DIN EN 60228 (former VDE 0295) and BKM product specification
c. core insulation PVC TI2 according to HD 21.1
d. wire marking power cores black with white figure printing, control cores coloured, paired, banding with static shielding of Al-laminated foil and screening braiding or envelopment of tinned copper wire lying on top
e. ply stranding and if necessary banding over external layer
f. optimized screening braiding of tinned copper wires
g. outer sheath PVC TM 2 according to HD 21.1, preferred colour grey
h. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage power cores Uo/U 600/1000 V
b. rated voltage control cores Uo/U 300/300 V
c. for UL/CSA version: power cores 1000 V
d. for UL/CSA version: control cores 300 V
e. test voltage power cores 4000 V
f. test voltage control cores 2000 V
g. temperature range at the conductor in operation +70° C
h. temperature range at the conductor in case of short circuit +150° C
i. temperature range at the surface fixed installation -40° C ... +70° C
j. temperature range at the surface flexible application +5° C ... +70° C
k. fire behaviour according to DIN EN 60332-1-2
l. on request resistant to oil according to DIN VDE 0282-10 and DIN EN 60811-2-1
m. minimum bending radius 7.5 x D
n. highly flexible - designed for at least 1 million alternate bending cycles (EFK1)

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
4 X 0.75+2X(2X0.34) STC	13.4	165	114

combined servo motor connecting cable PVC

BALZERSERVOTROL 1000

The combined PVC motor connecting cable with Cu shield

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
4 X 1 +2X(2X0.75) STC	16.0	242	133
4 X 1.5 +2X(2X0.75) STC	16.0	242	158
4 X 2.5 +2X(2X0.75) STC	16.4	289	234
4 X 4 +(2X0.75) STC+(2X1) STC	18.6	397	305
4 X 6 +(2X0.75) STC+(2X1) STC	21.2	516	394
4 X 10 +(2X0.75) STC+(2X1) STC	24.9	773	658
4 X 16 +2X(2X1) STC	28.5	1,072	903
4 X 25 +2X(2X1.5) STC	32.2	1,510	1,263
4 X 1.5 +(2 X 0.75) C	13.0	186	117
5 X 1.5 +(2 X 0.75) C	14.0	227	132
7 X 1.5 +(2 X 0.75) C	15.1	268	163
4 X 1.5 +(2X0.75) D	11.6	157	128
4 X 2.5 +(2X1) D	13.4	207	172
4 X 4 +(2X1) D	14.8	277	260
4 X 6 +(2X1) D	17.4	400	350
4 X 10 +(2X1) D	21.1	633	534
4 X 16 +(2X1) D	26.0	975	794
4 X 25 +(2X1.5) D	31.9	1,443	1,084
4 X 35 +(2X1.5) D	37.8	1,959	1,605
4 X 2.5 +(2 X 0.75) C	14.6	247	168
5 X 2.5 +(2 X 0.75) C	16.2	289	188
7 X 2.5 +(2 X 0.75) C	16.7	351	238

production of other combinations of cross sections on request

usual delivery design: 500 m drum

combined servo motor connecting cable PUR

BALZERSERVOTROL 512

The combined motor connecting cable with Cu shield and PUR sheath

This combined motor connecting cable is especially suitable for a flexible application for supplying energy as well as for data exchange with control devices of servo drives in the automation technology. Power cores and signal cables are combined in one conductor in such a perfect way that it results in low weight, low required space, simplified installation as well as higher functional reliability.
Moreover, the PUR sheath exhibits a very good resistance against a lot of substances (oils, acids, lyes) and convinces through a high abrasion and cut resistance.
The optimized shielding of the cable improves the signal transmission and reduces the radiated emission respectively cross interference (EMC).

CABLE MAKE-UP

a. according to BKM product specification (approval also according to UL/CSA)
b. bare copper wire, extra fine-wired, class 6 according to DIN EN 60228 (former VDE 0295) and BKM product specification
c. core insulation TPE/E (12Y)
d. wire marking power cores black with white figure printing, control cores coloured, paired, banding with static shielding of Al-laminated foil and screening braiding or envelopment of tinned copper wire lying on top
e. ply stranding and banding over the external layer
f. optimized screening braiding of tinned copper wires
g. outer sheath PUR (11Y) according to DIN EN 50363-10-2 (TMPU) matted, preferred colour grey or DESINA
h. changes in core or sheath colours and marking on request
i. production of other cross-section combinations on request

TECHNICAL DATA

a. rated voltage power cores Uo/U 300/500 V
b. rated voltage control cores Uo/U 300/300 V
c. for UL/CSA version: power cores 1000 V
d. for UL/CSA version: control cores 300 V
e. test voltage power cores 3000 V
f. test voltage control cores 2000 V
g. temperature range at the conductor in operation +70° C
h. temperature range at the conductor in case of short circuit +150° C
i. temperature range at the surface fixed installation -40° C ... +80° C
j. temperature range at the surface flexible application -30° C ... +80° C
k. fire behaviour according to DIN EN 60332-1-2
l. resistant to oil according to DIN EN 50363-10-2 und DIN EN 60811-2-1
m. minimum bending radius 7.5 x D
n. highly flexible - designed for at least 5 million alternate bending cycles (EFK5)

combined servo motor connecting cable PUR

BALZERSERVOTROL 512

The combined motor connecting cable with Cu shield and PUR sheath

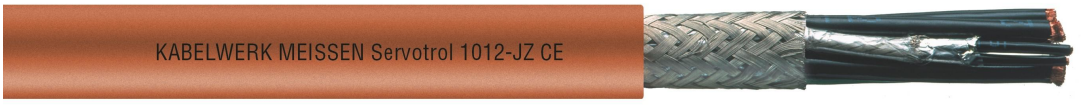
Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
4 X 0.75+ 2X(2X0.34) STC	12.4	155	100
4 X 1 + 2X(2X0.75) STC	12.8	208	124
4 X 1.5 + 2X(2X0.75) STC	13.0	235	157
4 X 2.5 + 2X(2X0.75) STC	14.7	315	201
4 X 4 + 2X(2X1) STC	16.7	430	296
4 X 6 + 2X(2X1) STC	18.1	540	382
4 X 10 + (2X2X1) STC	23.5	820	543
4 X 16 + (2X2X1) STC	28.0	1,180	792
4 X 25 + 2X(2X1.5) STC	30.5	1,530	1,256
4 X 35 + 2X(2X1.5) STC	33.0	1,920	1,638

production of other combinations of cross sections on request
usual delivery design: 500 m drum

combined servo motor connecting cable PUR

BALZERSERVOTROL 1012

The combined motor connecting cable with Cu shield and PUR sheath



This combined motor connecting cable is especially suitable for a flexible application for supplying energy as well as for data exchange with control devices of servo drives in the automation technology. Power cores and signal cables are combined in one conductor in such a perfect way that it results in low weight, low required space, simplified installation as well as higher functional reliability.
Moreover, the PUR sheath exhibits a very good resistance against a lot of substances (oils, acids, lyes) and convinces through a high abrasion and cut resistance.
The optimized shielding of the cable improves the signal transmission and reduces the radiated emission respectively cross interference (EMC).

CABLE MAKE-UP

a. according to BKM product specification (approval also according to UL/CSA)
b. bare copper wire, extra fine-wired, class 6 according to DIN EN 60228 (former VDE 0295) and BKM product specification
c. core insulation TPE/E (12Y)
d. wire marking power cores black with white figure printing, control cores coloured, paired, banding with static shielding of Al-laminated foil and screening braiding or envelopment of tinned copper wire lying on top
e. ply stranding and banding over the external layer
f. optimized screening braiding of tinned copper wires
g. changes in core or sheath colours and marking on request
h. outer sheath PUR (11Y) according to DIN EN 50363-10-2 (TMPU) matted, preferred colour grey or DESINA

TECHNICAL DATA

a. rated voltage power cores Uo/U 600/1000 V
b. rated voltage control cores Uo/U 300/300 V
c. for UL/CSA version: power cores 1000 V
d. for UL/CSA version: control cores 300 V
e. test voltage power cores 4000 V
f. test voltage control cores 2000 V
g. temperature range at the conductor in operation +70° C
h. temperature range at the conductor in case of short circuit +150° C
i. temperature range at the surface fixed installation -40° C ... +80° C
j. temperature range at the surface flexible application -30° C ... +80° C
k. fire behaviour according to DIN EN 60332-1-2
l. on request resistant to oil according to DIN VDE 0282-10 and DIN EN 60811-2-1
m. minimum bending radius 7.5 x D
n. highly flexible - designed for at least 5 million alternate bending cycles (EFK5)

combined servo motor connecting cable PUR

BALZERSERVOTROL 1012

The combined motor connecting cable with Cu shield and PUR sheath

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
4 X 0.75+2X(2X0.34) STC	12.4	160	100
4 X 1 +2X(2X0.75) STC	14.8	235	124
4 X 1.5 +2X(2X0.75) STC	14.8	235	153
4 X 2.5 +2X(2X0.75) STC	15.2	280	227
4 X 4 +(2X0.75) STC+(2X1) STC	17.2	385	290
4 X 6 +(2X0.75) STC+(2X1) STC	19.6	500	375
4 X 10 +(2X0.75) STC+(2X1) STC	23.1	750	627
4 X 16 +2X(2X1) STC	26.4	1,040	860
4 X 25 +2X(2X1.5) STC	29.8	1,465	1,203
4 X 1.5 +(2 X 0.75) C	12.0	180	114
5 X 1.5 +(2 X 0.75) C	13.0	220	128
7 X 1.5 +(2 X 0.75) C	14.0	260	158
4 X 1.5 +(2X0.75) D	10.7	152	124
4 X 2.5 +(2X1) D	12.4	201	167
4 X 4 +(2X1) D	13.7	269	248
4 X 6 +(2X1) D	16.1	388	333
4 X 10 +(2X1) D	19.5	614	509
4 X 16 +(2X1) D	24.1	946	756
4 X 25 +(2X1.5) D	29.5	1,400	1,032
4 X 35 +(2X1.5) D	35.0	1,900	1,529
4 X 2.5 +(2 X 0.75) C	13.5	240	163
5 X 2.5 +(2 X 0.75) C	15.0	280	183
7 X 2.5 +(2 X 0.75) C	15.5	340	231

production of other combinations of cross sections on request
usual delivery design: 500 m drum

combined feedback cable

The combined feedback cable without and with complete shield and PUR sheath 300/300 V

This combined motordealer conductor is especially suitable for a flexible application for supplying energy as well as for data exchange with control devices of servo drives in the automation technology. Power cores and signal cables are combined in one conductor in such a perfect way that it results in low weight, low required space, simplified installation as well as higher functional reliability.
Moreover, the PUR sheath exhibits a very good resistance against a lot of substances (oils, acids, lyes) and convinces through a high abrasion and cut resistance.
The optimized shielding of the cable improves the signal transmission and reduces the radiated emission respectively cross interference (EMC).

CABLE MAKE-UP

a. according to BKM product specification (approval also according to UL/CSA)
b. bare copper wire, extra fine-wired, class 6 according to DIN EN 60228 (former VDE 0295) and BKM product specification
c. core insulation TPE/E (12Y)
d. wire marking power cores black with white figure printing, control cores coloured, paired, banding with static shielding of Al-laminated foil and screening braiding or envelopment of tinned copper wire lying on top
e. depending on the construction with inner sheath and/or complete shield
f. outer sheath PUR (11Y) according to DIN EN 50363-10-2 (TMPU) matted, preferred colour grey or DESINA
g. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage Uo/U 300/300 V
b. for UL/CSA version: 300 V
c. test voltage 2000 V
d. temperature range at the conductor in operation +70° C
e. temperature range at the conductor in case of short circuit +150° C
f. temperature range at the surface fixed installation -40° C ... +80° C
g. temperature range at the surface flexible application -30° C ... +80° C
h. fire behaviour according to DIN EN 60332-1-2
i. resistant to oil according to DIN EN 50363-10-2 und DIN EN 60811-2-1
j. minimum bending radius 7.5 x D
k. highly flexible - designed for at least 5 million alternate bending cycles (EFK5)

combined feedback cable

The combined feedback cable without and with complete shield and PUR sheath 300/300 V

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
(9X2X25AWG)STC +16X2 AWG	10.5	140	83.0
(2X0.25)STC ORANGE	5.9	50	26.1
2X(2X0.25)STC	0	0	0
2X0.5+2X(2X0.25)STC	8.0	88	55.0
3X0.25+3X(2X0.25)C+2X1.0	11.0	165	84.0
4X(2X0.14)STC	9.8	115	60.0
4X0.25+6X2X0.34	0	0	0
4X2X0.14+ 4X0.34+ (4X0.14)D	9.8	115	57.0
4X2X0.14+4X1+(4X0.14)D	10.3	150	85.0
4X2X0.25+2X0.5 ORANGE	9.4	110	51.0
4X2X0.25+2X1 ORANGE	9.4	120	61.0
9X0.5 ORANGE MATT	8.8	110	60.0
34X0.25+2X0.5 ORANGE **	11.0	180	120.0
3X(2X0.25)C	0	0	0
57X25 AWG + 5X21 AWG **	13.4	265	173.0

production of other combinations of cross sections on request
usual delivery design: 500 m drum
** not for the application in energy chains

combined servo connecting cable without complete shield

The combined servo connecting cable without complete shield with PUR sheat 300/500 V

This combined motor connecting cable is especially suitable for a flexible application for supplying energy as well as for data exchange with control devices of servo drives in the automation technology. Power cores and signal cables are combined in one conductor in such a perfect way that it results in low weight, low required space, simplified installation as well as higher functional reliability.
Moreover, the PUR sheath exhibits a very good resistance against a lot of substances (oils, acids, lyes) and convinces through a high abrasion and cut resistance.
The optimized shielding of the cable improves the signal transmission and reduces the radiated emission respectively cross interference (EMC).

CABLE MAKE-UP

a. according to BKM product specification (approval also according to UL/CSA)
b. bare copper wire, extra fine-wired, class 6 according to DIN EN 60228 (former VDE 0295)
c. core insulation TPE/E (12Y)
d. wire marking power cores black with white figure printing, control cores coloured, paired, banding with static shielding of Al-laminated foil and screening braiding or envelopment of tinned copper wire lying on top
e. ply stranding and banding over the external layer
f. outer sheath PUR (11Y) according to DIN EN 50363-10-2 (TMPU) matted, preferred colour grey or DESINA
g. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage power cores Uo/U 300/500 V
b. for UL/CSA version: power cores 1000 V
c. rated voltage control cores Uo/U 300/300 V
d. for UL/CSA version: control cores 300 V
e. test voltage power cores 4000 V
f. test voltage control cores 2000 V
g. temperature range at the conductor in operation +70° C
h. temperature range at the conductor in case of short circuit +150° C
i. temperature range at the surface fixed installation -40° C ... +80° C
j. temperature range at the surface flexible application -30° C ... +80° C
k. fire behaviour according to DIN EN 60332-1-2
l. resistant to oil according to DIN EN 50363-10-2 und DIN EN 60811-2-1
m. minimum bending radius 7.5 x D
n. highly flexible - designed for at least 5 million alternate bending cycles (EFK5)

combined servo connecting cable without complete shield

The combined servo connecting cable without complete shield with PUR sheat 300/500 V

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Material code	Copper weight kg/km
4X1.0+2X(2X0.75)STC	12.2	190	12YSL11Y-JZ	117
4X1.5+2X(2X0.75)STC	12.4	215	12YSL11Y-JZ	136
4X2.5+2X(2X1)STC	15.6	310	12YSL11Y-JZ	224
4X4+(2X1)STC+ (2X1.5)STC	17.6	405	12YSL11Y-JZ	236
4X6+(2X1)STC+ (2X1.5)STC	18.0	536	12YSL11Y-JZ	312
4X10+(2x1.0)STC+ (2x1.5)STC	21.5	720	12YSL11Y-JZ	463
4X16+(2x2x1.5)	26.8	1,120	12YSL11Y-JZ	701
4X25+2x(2x1.5)STC	29.2	1,580	12YSL11Y-JZ	1,053
4X35+2X(2X1.5)STC	31.8	1,890	12YSL11Y-JZ	1,437
4X50+2X(2X2.5)STC	37.6	2,580	12YSL11Y-JZ	2,102
4X2.5	10.6	170	12YSL11Y-JZ	96
4X10	17.7	550	12YSL11Y-JZ	384

production of other combinations of cross sections on request
usual delivery design: 500 m drum

system servo cable PUR

combined servo connecting cable with complete shield

The combined servo connecting cable with complete shield and PUR sheat 300/500 V

This combined motor connecting cable is especially suitable for a flexible application for supplying energy as well as for data exchange with control devices of servo drives in the automation technology. Power cores and signal cables are combined in one conductor in such a perfect way that it results in low weight, low required space, simplified installation as well as higher functional reliability.
Moreover, the PUR sheath exhibits a very good resistance against a lot of substances (oils, acids, lyes) and convinces through a high abrasion and cut resistance.
The optimized shielding of the cable improves the signal transmission and reduces the radiated emission respectively cross interference (EMC).

CABLE MAKE-UP

a. according to BKM product specification (approval also according to UL/CSA)
b. bare copper wire, extra fine-wired, class 6 according to DIN EN 60228 (former VDE 0295)
c. core insulation TPE/E (12Y)
d. wire marking power cores black with white figure printing, control cores coloured, paired, banding with static shielding of Al-laminated foil and screening braiding or envelopment of tinned copper wire lying on top
e. ply stranding and banding over the external layer
f. optimized screening braiding of tinned copper wires
g. outer sheath PUR (11Y) according to DIN EN 50363-10-2 (TMPU) matted, preferred colour grey or DESINA
h. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage power cores Uo/U 300/500 V
b. for UL/CSA version: power cores 1000 V
c. rated voltage control cores Uo/U 300/300 V
d. for UL/CSA version: control cores 300 V
e. test voltage power cores 4000 V
f. test voltage control cores 2000 V
g. temperature range at the conductor in operation +70° C
h. temperature range at the conductor in case of short circuit +150° C
i. temperature range at the surface fixed installation -40° C ... +80° C
j. temperature range at the surface flexible application -30° C ... +80° C
k. fire behaviour according to DIN EN 60332-1-2
l. resistant to oil according to DIN EN 50363-10-2 und DIN EN 60811-2-1
m. minimum bending radius 7.5 x D
n. highly flexible - designed for at least 5 million alternate bending cycles (EFK5)

combined servo connecting cable with complete shield

The combined servo connecting cable with complete shield and PUR sheat 300/500 V

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Material code	Copper weight kg/km
4X1.5+(2X0.75)STC	12.2	200	12YSLC11Y-JZ	114
4X1.5+ 2X(2X0.75)STC	12.9	250	12YSLC11Y-JZ	153
4X1+2X(2X0.75)STC	12.6	220	12YSLC11Y-JZ	124
4X10+(2X1)STC+ (2x1.5)STC	22.9	855	12YSLC11Y-JZ	576
4X16+2X(2x1.5)STC	27.6	1,240	12YSLC11Y-JZ	829
4X2.5+2X(2X1)STC	16.4	375	12YSLC11Y-JZ	227
4X25+2X(2X1.5)STC	30.5	1,620	12YSLC11Y-JZ	1,203
4X35+2X(2x1.5)STC	32.8	2,080	12YSLC11Y-JZ	1,644
4X4+(2X1)STC	15.7	385	12YSLC11Y-JZ	242
4X4+(2X1)STC+ (2X1.5)STC	18.3	485	12YSLC11Y-JZ	302
4X50+2X(2X2.5)STC	38.5	2,810	12YSLC11Y-JZ	2,303
4X6+(2X1)STC+ (2x1.5)STC	19.0	555	12YSLC11Y-JZ	380

production of other combinations of cross sections on request
usual delivery design: 500 m drum

BALZERSENSOTROL 312

The combined signal cable with Cu shield and PUR sheath

The combined signal cable is especially suitable for a flexible application as a measure line, control and connecting cable for control devices in the automation technology, control engineering and production control technology. These special conductors transmit signals for monitoring brakes, engine speed and temperature.
Moreover, the PUR sheath exhibits a very good resistance against a lot of substances (oils, acids, lyes) and convinces through a high abrasion and cut resistance.
The optimized shielding of the cable improves the signal transmission and reduces the radiated emission respectively cross interference (EMC).

CABLE MAKE-UP

a. according to BKM product specification (approval also according to UL/CSA)
b. bare copper wire, extra fine-wired, class 6 according to DIN EN 60228 (former VDE 0295) and BKM product specification
c. core insulation TPE/E (12Y)
d. wire marking coloured according to BKM product specification (former draft DIN VDE 0245-1 and DIN 47100 respectively), paired, banding with static shielding of Al-laminated foil and screening braiding (STC) or envelopment (D) of tinned copper wire lying on top
e. ply stranding and banding over the external layer
f. optimized screening braiding of tinned copper wires
g. outer sheath PUR (11Y) according to DIN EN 50363-10-2 (TMPU) matted, preferred colour grey or DESINA
h. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage Uo/U 300/300 V
b. for UL/CSA version: 300 V
c. test voltage core / core 2000 V
d. test voltage core / shield 2000 V
e. test voltage shield / shield 500 V
f. temperature range at the conductor in operation +70° C
g. temperature range at the conductor in case of short circuit +150° C
h. temperature range at the surface fixed installation -40° C ... +80° C
i. temperature range at the surface flexible application -30° C ... +80° C
j. fire behaviour according to DIN EN 60332-1-2
k. resistant to oil according to DIN EN 50363-10-2 und DIN EN 60811-2-1
l. minimum bending radius 7.5 x D
m. highly flexible - designed for at least 5 million alternate bending cycles (EFK5)

BALZERSENSOTROL 312

The combined signal cable with Cu shield and PUR sheath

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Material code	Copper weight kg/km
9 X 0.5	9.1	105	12YSLC11Y	60
2 X 0.5 + 2 X (2X0.25)STC	8.0	88	12YSLC11Y	55
5 X (2 X 0.14) + 2 X 0.5	9.2	95	12YSLC11Y	59
4 X (2 X 0.14) + 4 X 0.5	8.7	96	12YSLC11Y	59
4 X 2 X 0.14 + 4 X 1 + (4 X 0.14)D	10.0	135	12YSLC11Y	85
4 X 2 X 0.25 + 2 X 1	9.1	100	12YSLC11Y	62
4 X 2 X 0.25 + 2 X 0.5	8.8	91	12YSLC11Y	60
34 X 0.25 + 2 X 0.5	11.0	180	12YSLC11Y	120

production of other combinations of cross sections on request
usual delivery design: 500 m drum

BALZERCONTROL SL PUR SINGLE 1000

The highly flexible single core conductor with additional PUR sheath

Motor supply chains respectively earth leads for machine tools, transfer lines etc. for high mechanical load condition, compulsory guidance and high alternate bending demands

- in energy chains
- in handling devices
- für the handling in permanently moving machine parts

Moreover, the PUR sheath exhibits a very good resistance against a lot of substances (oils, acids, lyes) and convinces through a high abrasion and cut resistance.

CABLE MAKE-UP

a. according to BKM product specification (approval also according to UL/CSA)
b. bare copper wire, extra fine-wired, class 6 according to DIN EN 60228 (former VDE 0295)
c. core insulation PVC TI2 according to HD 21.1, preferred colour black
d. banding over the core
e. outer sheath PUR (11Y) according to DIN EN 50363-10-2 (TMPU) matted, preferred colour grey or DESINA
f. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage Uo/U 600/1000 V
b. test voltage (type test): 4000 V
c. temperature range at the conductor in operation +70° C
d. temperature range at the conductor in case of short circuit +150° C
e. temperature range at the surface fixed installation -40° C ... +70° C
f. temperature range at the surface flexible application +5° C ... +70° C
g. fire behaviour according to DIN EN 60332-1-2
h. resistant to oil according to DIN EN 50363-10-2 und DIN EN 60811-2-1
i. minimum bending radius 7.5 x D
j. highly flexible - designed for at least 1 million alternate bending cycles (EFK1)

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 4	6.7	43	38.4
1 X 6	7.4	65	58.0
1 X 10	9.5	108	96.0
1 X 16	10.8	173	154.0
1 X 25	12.7	270	240.0
1 X 35	14.2	370	336.0
1 X 50	16.7	560	480.0
1 X 70	19.5	790	672.0
1 X 95	21.8	1,050	912.0
1 X 120	23.5	1,310	1,152.0

usual delivery design: 500 m drum

BALZERCONTROL SLC PUR SINGLE 1000

The highly flexible single core conductor with Cu shield and additional PUR sheath

Motor supply chains respectively earth leads for machine tools, transfer lines etc. for high mechanical load condition, compulsory guidance and high alternate bending demands

- in energy chains
- in handling devices
- für the handling in permanently moving machine parts

Moreover, the PUR sheath exhibits a very good resistance against a lot of substances (oils, acids, lyes) and convinces through a high abrasion and cut resistance.
The optimized shielding of the cable reduces the radiated emission respectively cross interference (EMC).

CABLE MAKE-UP

a. according to BKM product specification (approval also according to UL/CSA)
b. bare copper wire, extra fine-wired, class 6 according to DIN EN 60228 (former VDE 0295)
c. core insulation PVC TI2 according to HD 21.1, preferred colour black
d. banding over the core
e. optimized screening braiding of tinned copper wires
f. outer sheath PUR (11Y) according to DIN EN 50363-10-2 (TMPU) matted, preferred colour grey or DESINA
g. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage power cores Uo/U 600/1000 V
b. test voltage 4000 V
c. temperature range at the conductor in operation +70° C
d. temperature range at the conductor in case of short circuit +150° C
e. temperature range at the surface fixed installation -40° C ... +70° C
f. temperature range at the surface flexible application +5° C ... +70° C
g. fire behaviour according to DIN EN 60332-1-2
h. resistant to oil according to DIN EN 50363-10-2 und DIN EN 60811-2-1
i. minimum bending radius 7.5 x D
j. highly flexible - designed for at least 1 million alternate bending cycles (EFK1)

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 4	7.6	63	68
1 X 6	8.7	94	89

BALZERCONTROL SLC PUR SINGLE 1000

The highly flexible single core conductor with Cu shield and additional PUR sheath

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 10	10.8	155	136
1 X 16	12.0	250	207
1 X 25	14.1	369	325
1 X 35	15.5	478	427
1 X 50	18.2	706	586
1 X 70	20.8	980	791
1 X 95	23.3	1,246	1,052
1 X 120	25.4	1,437	1,299

usual delivery design: 500 m drum

BALZERCONTROL SL PUR SINGLE 1012

The highly flexible TPE single core conductor with additional PUR sheath

Motor supply chains respectively earth leads for machine tools, transfer lines etc. for very high mechanical load condition, compulsory guidance and high alternate bending demands

- in energy chains
- in handling devices
- für the handling in permanently moving machine parts

Moreover, the PUR sheath exhibits a very good resistance against a lot of substances (oils, acids, lyes) and convinces through a high abrasion and cut resistance.

CABLE MAKE-UP

a. according to BKM product specification (approval also according to UL/CSA)
b. bare copper wire, extra fine-wired, class 6 according to DIN EN 60228 (former VDE 0295)
c. core insulation TPE/E (12Y), preferred colour black
d. banding over the core
e. outer sheath PUR (11Y) according to DIN EN 50363-10-2 (TMPU) matted, preferred colour grey or DESINA
f. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage Uo/U 600/1000 V
b. test voltage (type test): 4000 V
c. temperature range at the conductor in operation +70° C
d. temperature range at the conductor in case of short circuit +150° C
e. temperature range at the surface fixed installation -40° C ... +80° C
f. temperature range at the surface flexible application -30° C ... +80° C
g. fire behaviour according to DIN EN 60332-1-2
h. resistant to oil according to DIN EN 50363-10-2 und DIN EN 60811-2-1
i. minimum bending radius 7.5 x D
j. highly flexible - designed for at least 5 million alternate bending cycles (EFK5)

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 4	6.7	41	38.4
1 X 6	7.4	63	58
1 X 10	9.5	106	96

BALZERCONTROL SL PUR SINGLE 1012

The highly flexible TPE single core conductor with additional PUR sheath

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 16	10.8	170	154
1 X 25	12.7	267	240
1 X 35	14.2	367	336
1 X 50	16.7	556	480
1 X 70	19.5	783	672
1 X 95	21.8	1,043	912
1 X 120	23.5	1,302	1,152.00

usual delivery design: 500 m drum

BALZERCONTROL SLC PUR SINGLE 1012

The highly flexible TPE single core conductor with Cu shield and additional PUR sheath

Motor supply chains respectively earth leads for machine tools, transfer lines etc. for very high mechanical load condition, compulsory guidance and high alternate bending demands

- in energy chains
- in handling devices
- für the handling in permanently moving machine parts

Moreover, the PUR sheath exhibits a very good resistance against a lot of substances (oils, acids, lyes) and convinces through a high abrasion and cut resistance.
The optimized shielding of the cable reduces the radiated emission respectively cross interference (EMC).

CABLE MAKE-UP

a. according to BKM product specification (approval also according to UL/CSA possible)
b. bare copper wire, extra fine-wired, class 6 according to DIN EN 60228 (former VDE 0295)
c. banding over the core
d. core insulation TPE/E (12Y), preferred colour black
e. optimized screening braiding of tinned copper wires
f. outer sheath PUR (11Y) according to DIN EN 50363-10-2 (TMPU) matted, preferred colour grey or DESINA
g. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage power cores Uo/U 600/1000 V
b. test voltage 4000 V
c. temperature range at the conductor in operation +70° C
d. temperature range at the conductor in case of short circuit +150° C
e. temperature range at the surface fixed installation -40° C ... +80° C
f. temperature range at the surface flexible application -30° C ... +80° C
g. fire behaviour according to DIN EN 60332-1-2
h. resistant to oil according to DIN EN 50363-10-2 und DIN EN 60811-2-1
i. minimum bending radius 7.5 x D
j. highly flexible - designed for at least 5 million alternate bending cycles (EFK5)

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 4	7.2	61	64
1 X 6	8.3	92	85

BALZERCONTROL SLC PUR SINGLE 1012

The highly flexible TPE single core conductor with Cu shield and additional PUR sheath

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 10	9.9	153	131
1 X 16	11.6	245	202
1 X 25	13.5	365	319
1 X 35	14.9	475	421
1 X 50	17.4	700	580
1 X 70	20.0	975	784
1 X 95	22.5	1,240	1,045
1 X 120	24.5	1,430	1,293

usual delivery design: 500 m drum

BALZERCONTROL-Y-JZ(-OZ)

The slim PVC control cable with numbered cores and VDE registration

Optimized connection cable for control devices in and on processing and production tools with medium mechanical load conditions, in the machine engineering, plant engineering and construction as well as in the field of power plant building, air conditioning installations and also in office machines and machines for data processing. The conductor is suitable for fixed installation as well as for occasionally non-continuously recurring movement application, also in wet interiors. For outdoor use considering the temperature range, UV protection must be guaranteed.

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation PVC TI2 according to HD 21.1
d. core colour: black with white figure printing, from 3 cores onwards with (-JZ) or without (-OZ) green/yellow core
e. cores stranded in layers
f. outer sheath PVC TM 2 according to HD 21.1, preferred colour grey
g. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage Uo/U 300/500 V
b. test voltage 4000 V
c. temperature range flexible application -5° C ... +70° C
d. temperature range fixed installation -40° C ... +70° C
e. minimum bending radius fixed installation 6 x outer diameter
f. minimum bending radius flexible 15 x outer diameter
g. fire behaviour according to DIN EN 60332-1-2

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.5	4.9	35	9.6
3 G/X 0.5	5.2	41	14.4
4 G/X 0.5	5.9	52	19.2
5 G/X 0.5	6.3	63	24.0
7 G/X 0.5	6.9	81	33.6
12 G/X 0.5	9.1	131	58.0
18 G/X 0.5	10.8	188	86.0
25 G/X 0.5	12.7	261	120.0
35 G/X 0.5	14.8	356	168.0

BALZERCONTROL-Y-JZ(-OZ)

The slim PVC control cable with numbered cores and VDE registration

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
40 G/X 0.5	15.8	400	192.0
50 G/X 0.5	17.2	515	240.0
60 G/X 0.5	18.3	600	288.0
2 X 0.75	5.4	45	14.4
3 G/X 0.75	5.8	53	21.6
4 G/X 0.75	6.3	65	28.8
5 G/X 0.75	6.9	78	36.0
7 G/X 0.75	7.4	98	51.0
12 G/X 0.75	10.1	165	87.0
18 G/X 0.75	11.9	240	130.0
25 G/X 0.75	14.0	337	180.0
34 G/X 0.75	16.4	440	245.0
41 G/X 0.75	17.7	538	296.0
50 G/X 0.75	19.5	648	360.0
60 G/X 0.75	20.4	772	432
2 X 1.0	5.9	53	19.2
3 G/X 1.0	6.1	63	28.8
4 G/X 1.0	6.7	79	38.4
5 G/X 1.0	7.3	92	48.0
7 G/X 1.0	8.2	126	67.0
12 G/X 1.0	10.8	205	115.0
18 G/X 1.0	12.9	295	173.0
25 G/X 1.0	15.1	395	240.0
34 G/X 1.0	17.4	551	326.0
41 G/X 1.0	19.2	661	394.0
50 G/X 1.0	21.0	797	480.0
60 G/X 1.0	22.0	950	576.0
2 X 1.5	6.4	67	28.8
3 G/X 1.5	6.8	82	43.2
4 G/X 1.5	7.4	100	58.0
5 G/X 1.5	8.3	130	72.0
7 G/X 1.5	9.0	165	101.0
12 G/X 1.5	12.2	275	173.0
18 G/X 1.5	14.5	405	260.0
25 G/X 1.5	17.3	550	360.0
34 G/X 1.5	19.7	746	490.0
41 G/X 1.5	21.7	895	591.0
50 G/X 1.5	23.9	1,089	720.0
60 G/X 1.5	25.1	1,301	864.0
2 X 2.5	7.7	101	48.0
3 G/X 2.5	8.4	130	72.0
4 G/X 2.5	9.2	160	96.0
5 G/X 2.5	10.2	200	120.0
7 G/X 2.5	11.3	260	168.0
12 G/X 2.5	15.2	435	288.0

BALZERCONTROL-Y-JZ(-OZ)

The slim PVC control cable with numbered cores and VDE registration

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
18 G/X 2.5	18.2	640	432.0
25 G/X 2.5	21.3	890	600.0
34 G/X 2.5	24.9	1,208	816.0
3 G/X 4.0	10.1	195	116.0
4 G/X 4.0	11.1	240	154.0
5 G/X 4.0	12.4	300	192.0
7 G/X 4.0	13.7	390	269.0
4 G/X 6.0	13.2	350	231.0
5 G/X 6.0	14.7	430	288.0
7 G/X 6.0	16.2	565	404.0
3 G/X 10	15.0	466	288.0
4 G/X 10	16.7	575	384.0
5 G/X 10	18.5	710	480.0
7 G/X 10	20.4	930	672.0
4 G/X 16	19.6	850	615.0
5 G/X 16	21.9	1,060	770.0
7 G/X 16	24.2	1,400	1,078.0
4 G/X 25	24.3	1,210	960.0
5 G/X25	27.2	1,560	1,200.0
4 G/X 35	27.3	1,610	1,344.0
5 G/X 35	30.4	2,040	1,680.0
4 G/X 50	36.3	2,510	1,920.0
5 G/X 50	39.3	3,062	2,400.0
4 G/X 70	40.2	3,553	2,688.0
5 G/X 70	44.3	4,113	3,360.0
4 G/X 95	46.5	4,608	3,648.0
5 G/X 95	52.4	5,930	4,560.0
4 G/X 120	50.2	5,653	4,608.0

G/X: in your order please indicate after the article number if with protective conductor (-JZ) or without protective conductor (-OZ)
other numbers of cores on request
usual delivery design: 500 m drum

BALZERCONTROL-CY-JZ(-OZ)

The slim PVC control cable with numbered cores, Cu shield and VDE registration

Optimized connection cable for control devices in and on processing and production tools with medium mechanical load conditions, in the machine engineering, plant engineering and construction as well as in the field of power plant building, air conditioning installations and also in office machines and machines for data processing. For fixed installation as well as for occasionally, non-continuously recurring movement application, also in wet interiors. For outdoor use considering the temperature range, UV protection must be guaranteed.
Due to the optimized shielding the conductor is suitable for systems where a good noise suppression is necessary and where interference of signals by electric external magnetic fields must be avoided (EMC).

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation PVC TI2 according to HD 21.1
d. core colour: black with white figure printing, from 3 cores onwards with (-JZ) or without (-OZ) green/yellow core
e. cores stranded in layers, inner sheath
f. optimized screening braiding of tinned copper wires
g. outer sheath PVC TM 2 according to HD 21.1, transparent
h. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage Uo/U 300/500 V
b. test voltage 4000 V
c. temperature range flexible application -5° C ... +70° C
d. temperature range fixed installation -40° C ... +70° C
e. minimum bending radius fixed installation 6 x outer diameter
f. minimum bending radius flexible 20 x outer diameter
g. fire behaviour according to DIN EN 60332-1-2

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.5	7.2	76	32.5
3 G/X 0.5	7.5	85	38.8
4 G/X 0.5	7.9	101	45.4
5 G/X 0.5	8.6	115	52.0

BALZERCONTROL-CY-JZ(-OZ)

The slim PVC control cable with numbered cores, Cu shield and VDE registration

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
7 G/X 0.5	9.1	133	64.0
12 G/X 0.5	11.5	204	96.0
18 G/X 0.5	13.5	291	144.0
25 G/X 0.5	15.6	381	186.0
35 G/X 0.5	16.5	433	215.0
40 G/X 0.5	18.6	546	272.0
2 X 0.75	7.6	85	37.3
3 G/X 0.75	7.9	96	46.3
4 G/X 0.75	8.6	115	57.0
5 G/X 0.75	9.1	130	66.0
7 G/X 0.75	9.9	160	82.0
12 G/X 0.75	12.6	245	128.0
18 G/X 0.75	14.8	355	194.0
25 G/X 0.75	16.9	466	252.0
34 G/X 0.75	19.2	602	324.0
41 G/X 0.75	20.8	730	404.0
2 X 1.0	8.1	102	47.2
3 G/X 1.0	8.4	115	57.8
4 G/X 1.0	8.9	135	68.4
5 G/X 1.0	9.7	158	81.0
7 G/X 1.0	10.4	185	102.0
12 G/X 1.0	13.5	307	172.0
25 G/X 1.0	18.0	535	320.0
34 G/X 1.0	20.8	730	435.0
41 G/X 1.0	22.5	858	512.0
2 X 1.5	8.7	120	57.0
3 G/X 1.5	9.0	135	72.0
4 G/X 1.5	9.9	165	89.0
5 G/X 1.5	10.5	190	106.0
7 G/X 1.5	11.5	239	136.0
12 G/X 1.5	15.0	395	236.0
18 G/X 1.5	17.4	540	335.0
25 G/X 1.5	20.4	715	449.0
34 G/X 1.5	23.2	935	591.0
41 G/X 1.5	25.1	1,098	844.0
2 X 2.5	7.7	101	85.0
3 G/X2.5	10.6	195	109.0
4 G/X 2.5	11.6	235	135.0
5 G/X2.5	12.9	285	164.0
7 G/X 2.5	14.2	375	232.0
12 G/X 2.5	18.0	589	355.0
18 G/X 2.5	21.5	978	569.0
25 G/X 2.5	22.3	1,358	827.0
4 G/X 4.0	14.1	330	204.0
5 G/X 4.0	15.3	404	247.0

BALZERCONTROL-CY-JZ(-OZ)

The slim PVC control cable with numbered cores, Cu shield and VDE registration

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
7 G/X 4.0	16.8	513	327.0
4 G/X 6.0	16.1	470	298.0
5 G/X 6.0	17.4	565	384.0
7 G/X 6.0	18.9	705	505.0
4 G/X 10	19.6	725	486.0
5 G/X 10	21.7	883	565.0
7 G/X 10	23.8	1,138	760.0
4 G/X 16	22.9	1,050	718.0
5 G/X 16	25.0	1,270	882.0
4 G/X 25	27.6	1,600	1,151.0
5 G/X 25	30.2	1,865	1,407.0

G/X: in your order please indicate after the article number if with protective conductor (-JZ) or without protective conductor (-OZ)
other numbers of cores on request
usual delivery design: 500 m drum

BALZERCONTROL-SY-JZ(-OZ)

The slim PVC control cable with numbered cores, steel wire braiding and VDE registration

Optimized connection cable for control devices in and on processing and production tools with medium mechanical load conditions, in the machine engineering, plant engineering and construction as well as in the field of power plant building, air conditioning installations and also in office machines and machines for data processing. For fixed installation as well as for occasionally, non-continuously recurring movement application, also in wet interiors. For outdoor use considering the temperature range, UV protection must be guaranteed.
The zinc-coated steel wire braiding provides a high mechanical protection for the conductor.

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.5	7.8	84	9.6
3 G/X 0.5	8.0	92	14.4
4 G/X 0.5	8.5	105	19.2
5 G/X 0.5	9.2	120	24.0
7 G/X 0.5	9.7	140	33.6
12 G/X 0.5	11.9	205	58.0
18 G/X 0.5	14.1	290	87.0
25 G/X 0.5	16.0	365	120.0
30 G/X 0.5	16.7	410	144.0
40 G/X 0.5	19.3	530	192.0
2 X 0.75	7.9	95	14.4
3 G/X 0.75	8.4	105	21.6
4 G/X 0.75	9.2	125	28.8
5 G/X 0.75	9.5	130	36.0
7 G/X 0.75	10.3	165	51.0
12 G/X 0.75	12.9	250	87.0
18 G/X 0.75	15.0	345	130.0
25 G/X 0.75	17.3	450	180.0
34 G/X 0.75	19.7	585	245.0
41 G/X 0.75	21.3	693	296.0
2 X 1.0	8.4	100	19.2
3 G/X 1.0	8.8	115	28.8
4 G/X 1.0	9.5	138	38.4
5 G/X 1.0	10.1	160	48.0

BALZERCONTROL-SY-JZ(-OZ)

The slim PVC control cable with numbered cores, steel wire braiding and VDE registration

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
7 G/X 1.0	10.9	190	68.0
12 G/X 1.0	14.0	300	116.0
18 G/X 1.0	16.0	405	173.0
25 G/X 1.0	18.4	530	240.0
34 G/X 1.0	21.2	710	327.0
41 G/X 1.0	22.7	825	394.0
2 X 1.5	8.7	120	28.8
3 G/X 1.5	9.6	145	43.2
4 G/X 1.5	10.2	165	58.0
5 G/X 1.5	11.1	200	72.0
7 G/X 1.5	11.8	240	101.0
12 G/X 1.5	15.5	385	173.0
18 G/X 1.5	17.6	525	260.0
25 G/X 1.5	20.3	715	360.0
34 G/X 1.5	23.6	935	490.0
41 G/X 1.5	25.2	1,090	591.0
2 X 2.5	7.7	101	48.0
3 G/X 2.5	11.2	205	72.0
4 G/X 2.5	12.3	245	96.0
5 G/X 2.5	13.3	290	120.0
7 G/X 2.5	14.4	360	168.0
12 G/X 2.5	18.5	570	288.0
18 G/X 2.5	21.9	825	432.0
25 G/X 2.5	25.2	1,090	600.0
4 G/X 4.0	14.2	340	154.0
5 G/X 4.0	15.3	410	192.0
7 G/X 4.0	16.6	500	269.0
4 G/X 6.0	16.3	460	231.0
5 G/X 6.0	17.8	555	288.0
7 G/X 6.0	19.3	695	404.0
4 G/X 10	19.8	715	384.0
5 G/X 10	21.8	875	480.0
7 G/X 10	23.9	1,130	672.0
4 G/X 16	23.1	1,040	615.0
5 G/X 16	25.2	1,261	768.0
4 G/X 25	27.8	1,590	960.0
5 G/X 25	30.4	1,856	1,200.0

G/X: in your order please indicate after the article number if with protective conductor (-JZ) or without protective conductor (-OZ)
other numbers of cores on request
usual delivery design: 500 m drum

BALZERCONTROL-Y-J(-O)

The slim PVC control cable with colourd cores

Optimized connection cable for control devices in and on processing and production tools with medium mechanical load conditions, in the machine engineering, plant engineering and construction as well as in the field of power plant building, air conditioning installations and also in office machines and machines for data processing. For fixed installation as well as for occasionally, non-continuously recurring movement application, also in wet interiors. For outdoor use considering the temperature range, UV protection must be guaranteed.

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation PVC TI2 according to HD 21.1
d. core colour: coloured according to BKM product specification, from 3 cores onwards with (-J) or without (-O) green/yellow core
e. cores stranded in layers
f. outer sheath PVC TM 2 according to HD 21.1, grey
g. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage Uo/U 300/500 V or 450/750 V
b. test voltage 4000 V
c. temperature range flexible application -5° C ... +70° C
d. temperature range fixed installation -40° C ... +70° C
e. minimum bending radius fixed installation 6 x outer diameter
f. minimum bending radius flexible 15 x outer diameter
g. fire behaviour according to DIN EN 60332-1-2

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.5	5.5	42	9.6
3 G/X 0.5	5.8	50	14.4
5 G/X 0.5	6.9	71	24.0
4 G/X0.5	6.3	60	19.2
7 G/X 0.5	7.6	81	33.6
12 G/X 0.5	9.1	130	58.0
16 G/X 0.5	10.3	169	77.0
18 G/X 0.5	11.2	190	86.0
21 G/X 0.5	11.7	223	99.0

BALZERCONTROL-Y-J(-O)

The slim PVC control cable with colourd cores

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
24 G/X 0.5	12.5	254	114.0
27 G/X 0.5	13.0	276	128.0
40 G/X0.5	15.7	404	192.0
2 X 0.75	6.4	57	14.4
3 G/X 0.75	6.7	68	21.6
4 G/X 0.75	7.3	82	28.8
5 G/X 0.75	7.8	100	36.0
7 G/X 0.75	8.4	123	51.0
8 G/X 0.75	8.8	130	58.0
10 G/X 0.75	9.8	150	72.0
12 G/X 0.75	10.1	165	87.0
15 G/X0.75	11.3	205	108.0
18 G/X 0.75	11.9	240	130.0
21 G/X 0.75	13.4	285	152.0
25 G/X 0.75	14.2	330	180.0
40 G/X 0.75	17.3	571	288.0
50 G/X 0.75	19.5	698	360.0
2 X 1.0	6.6	63	19.2
3 G/X 1.0	6.9	78	28.8
4 G/X 1.0	7.8	97	38.4
5 G/X 1.5	10.2	165	72.0
7 G/X 1.5	9.0	165	101.0
12 G/X1.5	12.2	275	173.0
14 G/X 1.5	12.9	320	202.0
18 G/X1.5	14.5	405	260.0
25 G/X1.5	17.3	550	360.0
2 X 2.5	9.1	130	48.0
3 G/X 2.5	9.9	160	72.0
4 G/X 2.5	11.0	205	96.0
5 G/X 2.5	12.2	250	120.0
7 G/X 2.5	13.4	320	168.0
8 G/X2.5	16.1	384	192.0
3 G/X 4.0	10.6	175	116.0
4 G/X 4.0	13.0	295	154.0
5 G/X 4.0	14.2	355	192.0
7 G/X 4.0	15.7	470	269.0
3 G/X 6.0	13.0	305	173.0
4 G/X 6.0	14.2	380	231.0
5 G/X 6.0	16.0	475	288.0
7 G/X 6.0	17.6	620	404.0
3 G/X10	16.5	511	288.0
4 G/X 10	18.3	645	384.0
5 G/X 10	20.4	795	480.0
7 G/X 10	22.4	930	672.0
3 G/X 16	19.4	801	461.0

BALZERCONTROL-Y-J(-O)

The slim PVC control cable with colourd cores

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
4 G/X 16	21.6	960	615.0
5 G/X 16	23.8	1,160	770.0
3 G/X 25	23.9	995	720.0
4 G/X 25	26.6	1,310	960.0
5 G/X 25	29.7	1,660	1,200.0
3 G/X 35	26.6	1,320	1,008.0
4 G/X 35	29.7	1,740	1,344.0
5 G/X 35	33.1	2,200	1,680.0
3 G/X 50	32.8	2,120	1,440.0
4 G/X 50	36.3	2,500	1,920.0
3 G/X 70	37.2	2,500	2,016.0
4 G/X 70	41.4	3,410	2,688.0
3 G/X 95	43.0	3,560	2,736.0
4 G/X 95	47.7	4,850	3,648.0
3 G/X 120	50.2	4,367	3,456.0
4 G/X 120	51.4	5,950	4,608.0

G/X: in your order please indicate after the article number if with protective conductor (-J) or without protective conductor (-O)
other numbers of cores on request
usual delivery design: 500 m drum

BALZERCONTROL-CY-J(-O)

The slim PVC control cable with coloured cores and Cu shield

Optimized connection cable for control devices in and on processing and production tools with medium mechanical load conditions, in the machine engineering, plant engineering and construction as well as in the field of power plant building, air conditioning installations and also in office machines and machines for data processing. For fixed installation as well as for occasionally, non-continuously recurring movement application, also in wet interiors. For outdoor use considering the temperature range, UV protection must be guaranteed.
Due to the optimized shielding the conductor is suitable for systems where a good noise suppression is necessary and where interference of signals by electric external magnetic fields must be avoided (EMC).

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation PVC TI2 according to HD 21.1
d. core colour: coloured according to BKM product specification, from 3 cores onwards with (-J) or without (-O) green/yellow core
e. cores stranded in layers, inner sheath
f. optimized screening braiding of tinned copper wires
g. outer sheath PVC TM 2 according to HD 21.1, transparent
h. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage Uo/U 300/500 V or 450/750 V
b. test voltage 4000 V
c. temperature range flexible application -5° C ... +70° C
d. temperature range fixed installation -40° C ... +70° C
e. minimum bending radius fixed installation 6 x outer diameter
f. minimum bending radius flexible 20 x outer diameter
g. fire behaviour according to DIN EN 60332-1-2

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.5	7.2	76	32.5
3 G/X 0.5	7.5	85	38.8
4 G/X 0.5	7.9	101	45.4
5 G/X 0.5	8.6	115	52.0

BALZERCONTROL-CY-J(-O)

The slim PVC control cable with coloured cores and Cu shield

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
7 G/X 0.5	9.1	133	64.0
12 G/X 0.5	11.5	204	96.0
18 G/X 0.5	13.5	291	144.0
25 G/X 0.5	15.6	381	186.0
35 G/X 0.5	16.5	433	215.0
40 G/X 0.5	18.6	546	272.0
2 X 0.75	7.6	85	37.3
3 G/X 0.75	7.9	96	46.3
8 G/X 0.75	8.8	130	58.0
7 G/X 0.75	8.4	123	51.0
10 G/X 0.75	9.8	150	72.0
12 G/X 0.75	12.6	245	128.0
18 G/X0.75	14.8	355	194.0
25 G/X 0.75	16.9	466	252.0
34 G/X 0.75	19.2	602	324.0
41 G/X 0.75	20.8	730	404.0
2 X 1.0	8.1	102	47.2
3 G/X 1.0	8.4	115	57.8
4 G/X 1.0	8.9	135	68.4
5 G/X 1.0	9.7	158	81.0
7 G/X 1.0	10.4	185	102.0
12 G/X 1.0	13.5	307	172.0
18 G/X 1.0	15.7	418	236.0
25 G/X 1.0	18.0	535	320.0
34 G/X 1.0	20.8	730	435.0
41 G/X 1.0	22.5	858	512.0
2 X 1.5	10.1	150	61.0
3 G/X 1.5	10.6	175	80.0
4 G/X 1.5	11.5	205	97.0
5 G/X 1.5	12.9	250	113.0
7 G/X 1.5	14.1	325	165.0
12 G/X 1.5	18.0	490	251.0
18 G/X 1.5	21.1	700	352.0
25 G/X 1.5	25.2	930	469.0
2 X 2.5	11.7	185	96.0
3 G/X 2.5	12.2	235	113.0
4 G/X 2.5	13.9	315	160.0
5 G/X 2.5	15.0	365	187.0
7 G/X 2.5	17.8	510	244.0
12 G/X 2.5	21.3	680	385.0
18 G/X 2.5	25.0	1,000	541.0
25 G/X 2.5	30.1	1,420	771.0
4 G/X 4.0	15.5	400	221.0
5 G/X 4.0	17.5	505	251.0
7 G/X 4.0	19.5	635	353.0

BALZERCONTROL-CY-J(-O)

The slim PVC control cable with coloured cores and Cu shield

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
4 G/X 6.0	17.1	515	307.0
5 G/X 6.0	18.6	615	372.0
7 G/X 6.0	20.8	877	510.0
4 G/X 10	21.4	820	480.0
5 G/X 10	23.7	1,020	612.0
7 G/X 10	25.9	1,339	856.0
4 G/X 16	24.5	1,150	730.0
5 G/X 16	27.5	1,440	927.0
4 G/X 25	30.1	1,740	1,134.0
5 G/X 25	33.2	2,120	1,390.0
4 G/X 35	33.0	2,210	1,544.0
5 G/X 35	36.6	2,720	1,890.0
4 G/X 50	40.2	3,210	2,197.0
4 G/X 70	45.1	4,190	2,943.0
4 G/X 95	52.4	5,600	4,011.0
4 G/X 120	57.6	6,890	4,992.0

G/X: in your order please indicate after the article number if with protective conductor (-J) or without protective conductor (-O)
other numbers of cores on request
usual delivery design: 500 m drum

BALZERCONTROL-SY-J(-O)

The slim PVC control cable with coloured cores and steel wire braiding

Optimized connection cable for control devices in and on processing and production tools with medium mechanical load conditions, in the machine engineering, plant engineering and construction as well as in the field of power plant building, air conditioning installations and also in office machines and machines for data processing. For fixed installation as well as for occasionally, non-continuously recurring movement application, also in wet interiors. For outdoor use considering the temperature range, UV protection must be guaranteed.
The zinc-coated steel wire braiding provides a high mechanical protection for the conductor.

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation PVC TI2 according to HD 21.1
d. core colour: coloured according to BKM product specification, from 3 cores onwards with (-J) or without (-O) green/yellow core
e. cores stranded in layers, inner sheath
f. braid of zinc-coated steel wires
g. outer sheath PVC TM 2 according to HD 21.1, transparent
h. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage Uo/U 300/500 V
b. test voltage 4000 V
c. temperature range flexible application -5° C ... +70° C
d. temperature range fixed installation -40° C ... +70° C
e. minimum bending radius fixed installation 6 x outer diameter
f. minimum bending radius flexible 20 x outer diameter
g. fire behaviour according to DIN EN 60332-1-2

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.5	7.8	84	9.6
3 G/X 0.5	8.0	92	14.4
4 G/X 0.5	8.5	105	19.2
5 G/X 0.5	9.2	120	24.0
7 G/X 0.5	9.7	140	33.6
12 G/X 0.5	11.9	205	58.0

BALZERCONTROL-SY-J(-O)

The slim PVC control cable with coloured cores and steel wire braiding

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
18 G/X 0.5	14.1	290	87.0
25 G/X 0.5	16.0	365	120.0
30/X G 0.5	16.7	410	144.0
40 G/X 0.5	19.3	530	192.0
2 X 0.75	7.9	95	14.4
3 G/X 0.75	8.4	105	21.6
4 G/X 0.75	9.2	125	28.8
5 G/X 0.75	9.5	130	36.0
7 G/X 0.75	10.3	165	51.0
12 G/X 0.75	12.9	250	87.0
18 G/X 0.75	15.0	345	130.0
25 G/X 0.75	17.3	450	180.0
34 G/X 0.75	19.7	585	245.0
41 G/X 0.75	21.3	693	296.0
2 X 1.0	8.4	100	19.2
3 G/X 1.0	8.8	115	28.8
4 G/X 1.0	9.5	138	38.4
5 G/X 1.0	10.1	160	48.0
7 G/X 1.0	10.9	190	68.0
12 G/X 1.0	14.0	300	116.0
18 G/X 1.0	16.0	405	173.0
4 G/X 4.0	15.9	395	154.0
5 G/X 4.0	17.3	475	192.0
7 G/X 4.0	19.7	625	269.0
4 G/X 6.0	17.5	505	231.0
5 G/X 6.0	19.1	605	288.0
7 G/X 6.0	20.8	877	404.0
4 G/X 10	21.8	820	384.0
5 G/X 10	23.7	1,020	480.0
7 G/X 10	25.9	1,339	672.0
4 G/X 16	24.9	1,150	616.0
5 G/X 16	27.5	1,440	768.0
4 G/X 25	30.3	1,720	960.0
5 G/X 25	33.2	2,120	1,200.0
4 G/X 35	33.0	2,210	1,344.0
5 G/X 35	36.6	2,720	1,680.0
4 G/X 50	40.2	3,210	1,920.0
4 G/X 70	45.1	4,190	2,688.0
4 G/X 95	52.4	5,600	3,648.0
4 G/X 120	57.6	6,890	4,608.0

G/X: in your order please indicate after the article number if with protective conductor (-J) or without protective conductor (-O)
other numbers of cores on request
usual delivery design: 500 m drum

BALZERCONTROL-UL-Y-JZ(-OZ)

The slim PVC control cable with numbered cores with VDE registration and UL/CSA

Optimized connection cable for control devices in and on processing and production tools with medium mechanical load conditions, in the machine engineering, plant engineering and construction as well as in the field of power plant building, air conditioning installations and also in office machines and machines for data processing. For fixed installation as well as for occasionally, non-continuously recurring movement application, also in wet interiors. For outdoor use considering the temperature range, UV protection must be guaranteed.
Due to the chosen materials and dimensions this conductor can be utilized both on the European and North American market. Therefore, it is easy to decide for this conductor. There is no more need to plan with two conductors because of different export countries.

CABLE MAKE-UP

a. according to BKM product specification and UL style 2587, 10012, C22.2 NO. 210.2 Clause 7 U. 8
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation PVC TI3 according to HD 21.1
d. core colour: black with white figure printing, from 3 cores onwards with (-JZ) or without (-OZ) green/yellow core
e. cores stranded in layers
f. outer sheath PVC TM 3 according to HD 21.1, grey
g. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage Uo/U VDE 300/500 V
b. operating voltage UL/CSA 600 V
c. test voltage 4000 V
d. temperature range flexible application -5° C ... +90° C
e. temperature range fixed installation -40° C ... +90° C
f. minimum bending radius fixed installation 6 x outer diameter
g. minimum bending radius flexible 15 x outer diameter
h. fire behaviour according to DIN EN 50265-2-1 (previously DIN VDE 0472-804 test method B) and according to VW1-UL 1581, FT1-CSA 22.2 No 210.2

Number of cores x cross-section in mm² per conductor	Cross-section in AWG/MCM	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.5	22	5.4	35	9.6
3 G/X 0.5	22	5.7	41	14.4
4 G/X 0.5	22	6.5	52	19.2

BALZERCONTROL-UL-Y-JZ(-OZ)

The slim PVC control cable with numbered cores with VDE registration and UL/CSA

Number of cores x cross-section in mm² per conductor	Cross-section in AWG/MCM	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
5 G/X 0.5	22	6.9	63	24.0
7 G/X 0.5	22	7.6	81	33.6
12 G/X 0.5	22	10.0	131	58.0
18 G/X 0.5	22	11.7	188	86.0
25 G/X 0.5	22	13.7	261	120.0
35 G/X 0.5	22	15.7	356	168.0
40 G/X 0.5	22	16.7	400	192.0
50 G/X 0.5	22	18.2	515	240.0
60 G/X 0.5	22	19.4	600	288.0
2 X 0.75	20	6.0	45	14.4
3 G/X 0.75	20	6.4	53	21.6
4 G/X 0.75	20	7.0	65	28.8
5 G/X 0.75	20	7.6	78	36.0
7 G/X 0.75	20	8.5	98	51.0
12 G/X 0.75	20	11.3	165	87.0
18 G/X 0.75	20	13.3	240	130.0
25 G/X 0.75	20	15.5	337	180.0
34 G/X 0.75	20	18.2	440	245.0
41 G/X 0.75	20	19.6	538	296.0
50 G/X 0.75	20	21.6	648	360.0
60 G/X 0.75	20	22.6	772	432.0
2 X 1.0	18	5.9	53	19.2
3 G/X 1.0	18	6.1	63	28.8
4 G/X 1.0	18	6.7	79	38.4
5 G/X 1.0	18	7.3	92	48.0
7 G/X 1.0	18	8.2	126	67.0
12 G/X 1.0	18	10.8	205	115.0
18 G/X 1.0	18	12.9	295	173.0
25 G/X 1.0	18	15.1	395	240.0
34 G/X 1.0	18	17.4	551	326.0
41 G/X 1.0	18	19.2	661	394.0
50 G/X 1.0	18	21.0	797	480.0
60 G/X 1.0	18	22.0	950	576.0
2 X 1.5	18	6.8	67	28.8
3 G/X 1.5	16	7.8	82	43.2
4 G/X 1.5	16	8.2	100	58.0
5 G/X 1.5	16	9.1	130	72.0
7 G/X 1.5	16	10.0	165	101.0
12 G/X 1.5	16	13.3	275	173.0
18 G/X 1.5	16	15.5	405	260.0
25 G/X 1.5	16	18.3	550	360.0
34 G/X 1.5	16	20.9	746	490.0
41 G/X1.5	16	23.0	895	591.0
50 G/X1.5	16	25.3	1,089	720.0
60 G/X 1.5	16	26.6	1,301	864.0

BALZERCONTROL-UL-Y-JZ(-OZ)

The slim PVC control cable with numbered cores with VDE registration and UL/CSA

Number of cores x cross-section in mm² per conductor	Cross-section in AWG/MCM	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 2.5	14	7.7	101	48.0
3 G/X 2.5	14	8.4	130	72.0
4 G/X 2.5	14	9.2	160	96.0
5 G/X 2.5	14	10.2	200	120.0
7 G/X 2.5	14	11.3	260	168.0
12 G/X 2.5	14	15.2	435	288.0
18 G/X2.5	14	18.2	640	432.0
25 G/X 2.5	14	21.3	890	600.0
34 G/X 2.5	14	24.9	1,208	816.0
3 G/X 4.0	12	10.1	195	116.0
4 G/X 4.0	12	11.1	240	154.0
5 G/X 4.0	12	12.4	300	192.0
7 G/X 4.0	12	13.7	390	269.0
4 G/X 6.0	10	13.2	350	231.0
5 G/X 6.0	10	14.7	430	288.0
7 G/X 6.0	10	16.2	565	404.0
3 G/X 10	8	15.0	466	288.0
4 G/X10	8	16.7	575	384.0
5 G/X 10	8	18.5	710	480.0
7 G/X 10	8	20.4	930	672.0
4 G/X 16	6	19.6	850	615.0
5 G/X 16	6	21.9	1,060	770.0
7 G/X 16	6	24.2	1,400	1,078.0
4 G/X 25	4	24.3	1,210	960.0
5 G/X 25	4	27.2	1,560	1,200.0
4 G/X35	2	27.3	1,610	1,344.0
5 G/X 35	2	30.4	2,040	1,680.0

G/X: in your order please indicate after the article number if with protective conductor (-JZ) or without protective conductor (-OZ)
other numbers of cores on request
usual delivery design: 500 m drum

BALZERCONTROL-UL-CY-JZ(-OZ)

The slim PVC control cable with numbered cores, Cu shield, VDE registration and UL/CSA

Optimized connection cable for control devices in and on processing and production tools with medium mechanical load conditions, in the machine engineering, plant engineering and construction as well as in the field of power plant building, air conditioning installations and also in office machines and machines for data processing. For fixed installation as well as for occasionally, non-continuously recurring movement application, also in wet interiors. For outdoor use considering the temperature range, UV protection must be guaranteed.
Due to the optimized shielding the conductor is suitable for systems where a good noise suppression is necessary and where interference of signals by electric external magnetic fields must be avoided (EMC).
Due to the chosen materials and dimensions this conductor can be utilized both on the European and North American market. Therefore, it is easy to decide for this conductor. There is no more need to plan with two conductors because of different export countries.

CABLE MAKE-UP

a. according to BKM product specification and UL style 2587, 10012, C22.2 NO. 210.2 Clause 7 U. 8
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation PVC TI3 according to HD 21.1
d. core colour: black with white figure printing, from 3 cores onwards with (-JZ) or without (-OZ) green/yellow core
e. cores stranded in layers, inner sheath
f. optimized screening braiding of tinned copper wires
g. outer sheath PVC TM 3 according to HD 21.1, grey
h. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage Uo/U VDE 300/500 V
b. operating voltage UL/CSA 600 V
c. test voltage 4000 V
d. temperature range flexible application -5° C ... +90° C
e. temperature range fixed installation -40° C ... +90° C
f. minimum bending radius fixed installation 6 x outer diameter
g. minimum bending radius flexible 20 x outer diameter
h. fire behaviour according to DIN EN 50265-2-1 (previously DIN VDE 0472-804 test method B) and according to VW1-UL 1581, FT1-CSA 22.2 No 210.2

BALZERCONTROL-UL-CY-JZ(-OZ)

The slim PVC control cable with numbered cores, Cu shield, VDE registration and UL/CSA

Number of cores x cross-section in mm² per conductor	Cross-section in AWG/MCM	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.5	22	7.2	76	32.5
3 G/X 0.5	22	7.5	85	38.8
4 G/X 0.5	22	7.9	101	45.4
5 G/X 0.5	22	8.6	115	52.0
7 G/X 0.5	22	9.1	133	64.0
12 G/X 0.5	22	11.5	204	96.0
18 G/X 0.5	22	13.5	291	144.0
25 G/X 0.5	22	15.6	381	186.0
35 G/X 0.5	22	16.5	433	215.0
40 G/X 0.5	22	18.6	546	272.0
2 X 0.75	20	7.6	85	37.3
3 G/X 0.75	20	7.9	96	46.3
4 G/X 0.75	20	8.6	115	57.0
5 G/X 0.75	20	9.1	130	66.0
7 G/X 0.75	20	9.9	160	82.0
12 G/X 0.75	20	12.6	245	128.0
18 G/X 0.75	20	14.8	355	194.0
25 G/X 0.75	20	16.9	466	252.0
34 G/X 0.75	20	19.2	602	324.0
41 G/X 0.75	20	20.8	730	404.0
2 X 1.0	18	8.1	102	47.2
3 G/X 1.0	18	8.4	115	57.8
4 G/X 1.0	18	8.9	135	68.4
5 G/X 1.0	18	9.7	158	81.0
7 G/X 1.0	18	10.4	185	102.0
12 G/X 1.0	18	13.5	307	172.0
18 G/X 1.0	18	15.7	418	236.0
25 G/X 1.0	18	18.0	535	320.0
34 G/X 1.0	18	20.8	730	435.0
41 G/X 1.0	18	22.5	858	512.0
2 X 1.5	16	8.7	120	57.0
3 G/X 1.5	16	9.0	135	72.0
4 G/X 1.5	16	9.9	165	89.0
5 G/X 1.5	16	10.5	190	106.0
7 G/X 1.5	16	11.5	239	136.0
12 G/X 1.5	16	15.0	395	236.0
18 G/X 1.5	16	17.4	540	335.0
25 G/X 1.5	16	20.4	715	449.0
34 G/X 1.5	16	23.2	935	591.0
41 G/X 1.5	16	25.1	1,098	1,098.0
2 X 2.5	14	7.7	101	85.0
3 G/X 2.5	14	10.6	195	109.0
4 G/X 2.5	14	11.6	235	135.0
5 G/X 2.5	14	12.9	285	164.0
7 G/X 2.5	14	14.2	375	232.0

BALZERCONTROL-UL-CY-JZ(-OZ)

The slim PVC control cable with numbered cores, Cu shield, VDE registration and UL/CSA

Number of cores x cross-section in mm² per conductor	Cross-section in AWG/MCM	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
12 G/X 2.5	14	18.0	589	355.0
18 G/X 2.5	14	21.5	978	569.0
25 G/X 2.5	14	22.3	890	827.0
4 G/X 4.0	12	14.1	330	204.0
5 G/X 4.0	12	15.3	404	247.0
7 G/X 4.0	12	16.8	513	327.0
4 G/X 6.0	10	16.1	470	298.0
5 G/X 6.0	10	17.4	565	384.0
7 G/X 6.0	10	18.9	705	505.0
4 G/X 10	8	19.6	725	486.0
5 G/X 10	8	21.7	883	565.0
7 G/X 10	8	23.8	1,138	760.0
4 G/X 16	8	22.9	1,050	718.0
5 G/X 16	8	25.0	1,270	882.0
4 G/X 25	4	27.6	1,600	1,151.0
5 G/X 25	4	30.2	1,865	1,407.0

BALZERCONTROL-UL-SY-JZ(-OZ)

The slim PVC control cable with numbered cores, steel wire braiding, VDE registration and UL/CSA

Optimized connection cable for control devices in and on processing and production tools with medium mechanical load conditions, in the machine engineering, plant engineering and construction as well as in the field of power plant building, air conditioning installations and also in office machines and machines for data processing. For fixed installation as well as for occasionally, non-continuously recurring movement application, also in wet interiors. For outdoor use considering the temperature range, UV protection must be guaranteed.
The zinc-coated steel wire braiding provides a high mechanical protection for the conductor.
Due to the chosen materials and dimensions this conductor can be utilized both on the European and North American market. Therefore, it is easy to decide for this conductor. There is no more need to plan with two conductors because of different export countries.

CABLE MAKE-UP

a. according to BKM product specification and UL style 2587, 10012, C22.2 NO. 210.2 Clause 7 U. 8
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation PVC TI3 according to HD 21.1
d. core colour: black with white figure printing, from 3 cores onwards with (-JZ) or without (-OZ) green/yellow core
e. cores stranded in layers, inner sheath
f. braid of zinc-coated steel wires
g. outer sheath PVC TM 3 according to HD 21.1, grey
h. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage Uo/U VDE 300/500 V
b. operating voltage UL/CSA 600 V
c. test voltage 4000 V
d. temperature range flexible application -5° C ... +90° C
e. temperature range fixed installation -40° C ... +90° C
f. minimum bending radius fixed installation 6 x outer diameter
g. minimum bending radius flexible 20 x outer diameter
h. fire behaviour according to DIN EN 50265-2-1 (previously DIN VDE 0472-804 test method B) and according to VW1-UL 1581, FT1-CSA 22.2 No 210.2

Number of cores x cross-section in mm² per conductor	Cross-section in AWG/MCM	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.5	22	7.8	84	9.6

BALZERCONTROL-UL-SY-JZ(-OZ)

The slim PVC control cable with numbered cores, steel wire braiding, VDE registration and UL/CSA

Number of cores x cross-section in mm² per conductor	Cross-section in AWG/MCM	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
3 G/X 0.5	22	8.0	92	14.4
4 G/X 0.5	22	8.5	105	19.2
5 G/X 0.5	22	9.2	120	24.0
7 G/X 0.5	22	9.7	140	33.6
12 G/X 0.5	22	11.9	205	58.0
18 G/X 0.5	22	14.1	290	87.0
25 G/X 0.5	22	16.0	365	120.0
30 G/X 0.5	22	16.7	410	144.0
40 G/X 0.5	22	19.3	530	292.0
2 X 0.75	20	7.9	95	14.4
3 G/X 0.75	20	8.4	105	21.6
4 G/X 0.75	20	9.2	125	28.8
5 G/X 0.75	20	9.5	130	36.0
7 G/X 0.75	20	10.3	165	51.0
12 G/X 0.75	20	12.9	250	87.0
18 G/X 0.75	20	15.0	345	130.0
25 G/X 0.75	20	17.3	450	180.0
34 G/X 0.75	20	19.7	585	245.0
41 G/X 0.75	20	21.3	693	296.0
2 X 1.0	18	8.4	100	19.2
3 G/X1.0	18	8.8	115	28.8
4 G/X 1.0	18	9.5	138	38.4
5 G/X 1.0	18	10.1	160	48.0
7 G/X 1.0	18	10.9	190	68.0
12 G/X 1.0	18	14.0	300	116.0
18 G/X 1.0	18	16.0	405	173.0
25 G/X 1.0	18	18.4	530	240.0
34 G/X 1.0	18	21.2	710	327.0
41 G/X 1.0	18	22.7	825	394.0
2 X 1.5	16	8.7	120	28.8
3 G/X 1.5	16	9.6	145	43.2
4 G/X 1.5	16	10.2	165	58.0
5 G/X 1.5	16	11.1	200	72.0
7 G/X 1.5	16	11.8	240	101.0
12 G/X 1.5	16	15.5	385	173.0
18 G/X 1.5	16	17.6	525	260.0
25 G/X 1.5	16	20.3	715	360.0
34 G/X 1.5	16	23.6	935	490.0
41 G/X 1.5	16	25.2	1,090	591.0
2 X 2.5	14	7.7	101	48.0
3 G/X 2.5	14	11.2	205	72.0
4 G/X 2.5	14	12.3	245	96.0
5 G/X 2.5	14	13.3	290	120.0
7 G/X 2.5	14	14.4	360	168.0
12 G/X 2.5	14	18.5	570	288.0

BALZERCONTROL-UL-SY-JZ(-OZ)

The slim PVC control cable with numbered cores, steel wire braiding, VDE registration and UL/CSA

Number of cores x cross-section in mm² per conductor	Cross-section in AWG/MCM	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
18 G/X 2.5	14	21.9	825	432.0
25 G/X 2.5	14	25.2	1,090	600.0
4 G/X 4.0	12	14.2	340	154.0
5 G/X 4.0	12	15.3	410	192.0
7 G/X 4.0	12	16.6	500	269.0
4 G/X 6.0	10	16.3	460	231.0
5 G/X 6.0	10	17.8	555	288.0
7 G/X 6.0	10	19.3	695	404.0
4 G/X 10	8	19.8	715	384.0
5 G/X 10	8	21.8	875	480.0
7 G/X 10	8	23.9	1,130	672.0
4 G/X166	6	23.1	1,040	615.0
5 G/X 16	6	25.2	1,261	768.0
4 G/X 25	4	27.8	1,590	960.0

YSLY-JZ(-OZ)

The standard PVC control cable with numbered cores

Standard connection cable for control devices in and on processing and production tools with medium mechanical load conditions, in the machine engineering, plant engineering and construction as well as in the field of power plant building, air conditioning installations and also in office machines and machines for data processing. For fixed installation as well as for occasionally, non-continuously recurring movement application, also in wet interiors. For outdoor use considering the temperature range, UV protection must be guaranteed.

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation PVC TI2 according to HD 21.1
d. core colour: black with white figure printing, from 3 cores onwards with (-JZ) or without (-OZ) green/yellow core
e. cores stranded in layers
f. outer sheath PVC TM 2 according to HD 21.1, preferred colour grey
g. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage Uo/U 300/500 V
b. test voltage 4000 V
c. temperature range flexible application -5° C ... +70° C
d. temperature range fixed installation -40° C ... +70° C
e. minimum bending radius fixed installation 6 x outer diameter
f. minimum bending radius flexible 15 x outer diameter
g. fire behaviour according to DIN EN 60332-1-2

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.5	6.0	47	9.6
3 X 0.5	6.3	55	14.4
4 X 0.5	6.9	67	19.2
5 X 0.5	7.5	80	24.0
7 X 0.5	8.5	110	33.6
12 X 0.5	11.4	165	58.0
16 X 0.5	12.6	220	77.0
18 X 0.5	13.3	250	87.0
25 X 0.5	16.0	340	120.0

YSLY-JZ(-OZ)

The standard PVC control cable with numbered cores

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
34 X 0.5	18.8	455	164.0
40 X 0.5	20.1	545	192.0
50 X 0.5	21.8	610	240.0
2 X 0.75	6.3	56	14.4
3 X 0.75	6.7	66	21.6
4 X 0.75	7.3	80	28.8
5 X 0.75	8.4	105	36.0
7 X 0.75	9.1	130	51.0
12 X 0.75	12.2	215	87.0
18 X 0.75	14.2	300	130.0
25 X 0.75	17.1	420	180.0
34 X 0.75	20.1	575	245.0
41 X 0.75	22.5	665	296.0
50 X 0.75	23.4	780	360.0
61 X 0.75	25.4	920	440.0
2 X 1.0	6.6	63	19.2
3 X 1.0	7.0	76	28.8
4 X 1.0	7.7	92	38.4
5 X 1.0	8.8	120	48.0
7 X 1.0	9.6	150	68.0
12 X 1.0	12.9	250	116.0
18 X 1.0	15.6	375	173.0
25 X 1.0	18.6	530	240.0
34 X 1.0	21.2	670	327.0
41 X 1.0	22.7	800	394.0
50 X 1.0	25.3	955	480.0
60 X 1.0	26.8	1,090	586.0
2 X 1.5	7.2	79	28.8
3 X 1.5	7.7	96	43.2
4 X 1.5	8.8	130	58.0
5 X 1.5	9.6	155	72.0
7 X 1.5	10.8	205	101.0
12 X 1.5	14.0	325	173.0
16 X 1.5	15.6	415	231.0
18 X 1.5	17.0	485	260.0
25 X 1.5	20.3	680	360.0
34 X 1.5	23.2	875	490.0
41 X 1.5	24.9	1,064	590.6
50 X 1.5	27.7	1,240	720.0
2 X 2.5	8.9	125	48.0
3 X 2.5	9.5	150	72.0
4 X 2.5	10.8	195	96.0
5 X 2.5	11.7	240	120.0
7 X 2.5	12.8	300	168.0
12 X 2.5	17.4	505	288.0

YSLY-JZ(-OZ)

The standard PVC control cable with numbered cores

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
18 X 2.5	20.9	750	432.0
25 X 2.5	24.8	1,030	600.0
34 X 2.5	27.6	1,225	711.0
3 X 4.0	11.6	230	116.0
4 X 4.0	12.8	290	154.0
5 X 4.0	14.0	350	192.0
7 X 4.0	15.3	445	269.0
3 X 6.0	13.1	310	173.0
4 X 6.0	14.4	390	231.0
5 X 6.0	15.9	475	288.0
7 X 6.0	17.6	620	404.0
4 X 10	18.3	645	384.0
5 X 10	20.6	805	480.0
7 X 10	22.8	1,050	672.0
4 X 16	21.6	950	615.0
5 X 16	23.8	1,160	768.0
7 X 16	26.7	1,540	1,078.0
4 X 25	27.0	1,380	960.0
5 X 25	29.7	1,660	1,200.0
7 X 25	32.9	2,370	1,680.0
4 X 35	29.5	1,910	1,344.0
5 X 35	33.1	2,250	1,680.0
4 X 50	36.7	2,610	1,920.0
5 X 50	40.4	3,230	2,400.0
4 X 70	41.2	3,740	2,688.0
5 X 70	45.4	4,330	3,360.0
4 X 95	47.7	4,850	3,648.0
5 X 95	52.4	5,930	4,560.0
4 X 120	51.4	5,950	4,608.0

other numbers of cores on request
usual delivery design: 500 m drum

YSLYCY-JZ(-OZ)

The standard PVC control cable with numbered cores and Cu shield

Standard connection cable for control devices in and on processing and production tools with medium mechanical load conditions, in the machine engineering, plant engineering and construction as well as in the field of power plant building, air conditioning installations and also in office machines and machines for data processing. For fixed installation as well as for occasionally, non-continuously recurring movement application, also in wet interiors. For outdoor use considering the temperature range, UV protection must be guaranteed.
Due to the optimized shielding the conductor is suitable for systems where a good noise suppression is necessary and where interference of signals by electric external magnetic fields must be avoided (EMC).

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation PVC TI2 according to HD 21.1
d. core colour: black with white figure printing, from 3 cores onwards with (-JZ) or without (-OZ) green/yellow core
e. cores stranded in layers, inner sheath
f. optimized screening braiding of tinned copper wires
g. outer sheath PVC TM 2 according to HD 21.1, preferred colour grey
h. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage Uo/U 300/500 V
b. test voltage 4000 V
c. temperature range flexible application -5° C ... +70° C
d. temperature range fixed installation -40° C ... +70° C
e. minimum bending radius fixed installation 6 x outer diameter
f. minimum bending radius flexible 20 x outer diameter
g. fire behaviour according to DIN EN 60332-1-2

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.5	7.8	95	39
3 X 0.5	8.4	105	45
4 X 0.5	8.9	120	50
5 X 0.5	9.6	139	60

YSLYCY-JZ(-OZ)

The standard PVC control cable with numbered cores and Cu shield

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
7 X 0.5	11.0	187	76
12 X 0.5	12.9	254	121
18 X 0.5	15.4	360	163
27 X 0.5	18.3	489	218
36 X 0.5	20.8	619	276
48 X 0.5	24.0	820	380
2 X 0.75	8.4	105	47
3 X 0.75	8.7	115	52
4 X 0.75	8.6	115	57
5 X 0.75	10.1	158	69
7 X 0.75	11.8	216	93
12 X 0.75	14.2	316	155
18 X 0.75	16.7	427	210
27 X 0.75	19.7	590	288
36 X 0.75	22.6	763	369
48 X 0.75	25.6	988	507
2 X 1.0	8.7	115	50
3 X 1.0	9.3	134	63
4 X 1.0	9.8	153	75
5 X 1.0	10.7	182	88
7 X 1.0	12.4	249	123
12 X 1.0	15.2	364	189
18 X 1.0	17.3	484	255
27 X 1.0	21.0	672	358
36 X 1.0	23.7	868	456
48 X 1.0	26.7	1,123	625
2 X 1.5	9.7	148	63
3 X 1.5	10.7	165	80
4 X 1.5	11.2	200	89
5 X 1.5	12.1	225	109
7 X 1.5	13.1	285	135
12 X 1.5	17.5	455	232
18 X 1.5	20.5	645	328
25 X 1.5	24.9	935	492
34 X 1.5	27.1	1,090	611
42 X 1.5	29.5	1,380	757
2 X 2.5	7.7	101	85
3 X 2.5	11.9	230	109
4 X 2.5	13.1	275	130
5 X 2.5	14.2	335	183
7 X 2.5	15.2	415	227
12 X 2.5	20.9	640	367
18 X 2.5	25.0	1,062	588
25 X 2.5	25.9	1,475	854
3 X 4.0	13.9	325	161

YSLYCY-JZ(-OZ)

The standard PVC control cable with numbered cores and Cu shield

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
4 X 4.0	15.2	400	218
5 X 4.0	17.5	505	251
7 X 4.0	19.5	635	353
3 X 6.0	16.6	455	249
4 X 6.0	17.7	555	307
5 X 6.0	20.8	725	376
3 X 10	20.2	690	381
4 X 10	23.3	930	488
5 X 10	24.1	1,030	567
4 X 16	25.5	1,180	719
5 X 16	29.5	1,530	885
4 X 25	31.3	1,810	1,157
5 X 25	34.2	2,109	1,415
4 X 35	34.0	2,300	1,573
4 X 50	40.8	3,210	2,153
4 X 70	45.9	4,290	3,002
4 X 95	52.8	5,540	4,004
4 X 120	56.3	6,720	5,026

other numbers of cores on request
usual delivery design: 500 m drum

YSLYSY-JZ(-OZ)

The standard PVC control cable with numbered cores and zinc-coated steel wire braiding

Standard connection cable for control devices in and on processing and production tools with medium mechanical load conditions, in the machine engineering, plant engineering and construction as well as in the field of power plant building, air conditioning installations and also in office machines and machines for data processing. For fixed installation as well as for occasionally, non-continuously recurring movement application, also in wet interiors. For outdoor use considering the temperature range, UV protection must be guaranteed.
The zinc-coated steel wire braiding provides a high mechanical protection for the conductor.

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation PVC TI2 according to HD 21.1
d. core colour: black with white figure printing, from 3 cores onwards with (-JZ) or without (-OZ) green/yellow core
e. cores stranded in layers, inner sheath
f. braid of zinc-coated steel wires
g. outer sheath PVC TM 2 according to HD 21.1, preferred colour grey
h. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage Uo/U 300/500 V
b. test voltage 4000 V
c. temperature range flexible application -5° C ... +70° C
d. temperature range fixed installation -40° C ... +70° C
e. minimum bending radius fixed installation 6 x outer diameter
f. minimum bending radius flexible 20 x outer diameter
g. fire behaviour according to DIN EN 60332-1-2

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.5	8.2	97	9.6
3 X 0.5	8.8	107	14.4
4 X 0.5	9.3	122	19.2
5 X 0.5	10.0	141	24.0
7 X 0.5	11.4	189	33.6
12 X 0.5	13.3	256	58.0

YSLYSY-JZ(-OZ)

The standard PVC control cable with numbered cores and zinc-coated steel wire braiding

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
18 X 0.5	15.8	362	87.0
27 X 0.5	18.7	491	130.0
36 X 0.5	21.2	621	173.0
48 X 0.5	24.4	822	231.0
2 X 0.75	8.4	108	14.4
3 X 0.75	8.7	118	21.6
4 X 0.75	8.6	118	28.8
5 X 0.75	10.1	161	36.0
7 X 0.75	11.8	219	51.0
12 X 0.75	14.2	319	87.0
18 X 0.75	16.7	430	130.0
27 X 0.75	19.7	593	195.0
36 X 0.75	22.6	766	260.0
48 X 0.75	25.6	991	346.0
2 X 1	9.5	119	19.2
3 X 1	10.1	138	28.8
4 X 1	10.6	157	38.4
5 X 1	11.5	186	48.0
7 X 1	13.2	253	68.0
12 X 1	16.0	368	116.0
18 X 1	18.1	488	173.0
27 X 1	21.8	676	260.0
36 X 1	24.5	872	346.0
48 X 1	27.5	1,127	461.0
2 X 1.5	9.7	148	28.8
3 X 1.5	10.7	165	43.2
4 X 1.5	11.2	200	58.0
5 X 1.5	12.1	225	73.0
7 X 1.5	13.1	285	101.0
12 X 1.5	17.5	455	173.0
18 X 1.5	20.5	645	260.0
25 X 1.5	24.9	935	361.0
34 X 1.5	27.1	1,090	490.0
42 X 1.5	29.5	1,380	605.0
2 X 2.5	7.7	101	48.0
3 X 2.5	11.9	230	73.0
4 X 2.5	13.1	275	97.0
5 X 2.5	14.2	335	121.0
7 X 2.5	15.2	415	169.0
12 X 2.5	20.9	640	289.0
18 X 2.5	25.0	1,062	433.0
25 X 2.5	25.9	1,475	601.0
3 X 4.0	13.9	325	116.0
4 X 4.0	15.2	400	154.0
5 X 4.0	17.5	505	193.0

YSLYSY-JZ(-OZ)

The standard PVC control cable with numbered cores and zinc-coated steel wire braiding

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
7 X 4.0	19.5	635	269.0
3 X 6.0	16.6	455	173.0
4 X 6.0	17.7	555	231.0
5 X 6.0	20.8	725	289.0
3 X 10	20.2	690	289.0
4 X 10	23.3	930	385.0
5 X 10	24.1	1,030	481.0
4 X 16	25.5	1,180	615.0
5 X 16	29.5	1,530	769.0
4 X 25	31.3	1,810	961.0
5 X 25	34.2	2,109	1,201.0
4 X 50	40.8	3,210	1,921.0
4 X 70	45.9	4,290	2,689.0
4 X 95	52.8	5,540	3,649.0
4 X 120	56.3	6,720	4,609.0

other numbers of cores on request
usual delivery design: 500 m drum

YSLY-J(-O)

The standard PVC control cable with coloured cores

Standard connection cable for control devices in and on processing and production tools with medium mechanical load conditions, in the machine engineering, plant engineering and construction as well as in the field of power plant building, air conditioning installations and also in office machines and machines for data processing. For fixed installation as well as for occasionally, non-continuously recurring movement application, also in wet interiors. For outdoor use considering the temperature range, UV protection must be guaranteed.

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation PVC TI2 according to HD 21.1
d. core colour: coloured according to BKM product specification, from 3 cores onwards with (-J) or without (-O) green/yellow core
e. cores stranded in layers
f. outer sheath PVC TM 2 according to HD 21.1, preferred colour grey
g. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage Uo/U 300/500 V
b. test voltage 4000 V
c. temperature range flexible application -5° C ... +70° C
d. temperature range fixed installation -40° C ... +70° C
e. minimum bending radius fixed installation 6 x outer diameter
f. minimum bending radius flexible 15 x outer diameter
g. fire behaviour according to DIN EN 60332-1-2

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.5	6.0	47	9.6
3 X 0.5	6.3	55	14.4
4 X 0.5	6.9	67	19.2
5 X 0.5	7.5	80	24.0
7 X 0.5	8.5	110	33.6
12 X 0.5	11.4	165	58.0
16 X 0.5	12.6	220	77.0
18 X 0.5	13.3	250	87.0
25 X 0.5	16.0	340	120.0

YSLY-J(-O)

The standard PVC control cable with coloured cores

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
34 X 0.5	18.8	455	164.0
40 X 0.5	20.1	545	192.0
50 X 0.5	21.8	610	240.0
2 X 0.75	6.3	56	14.4
3 X 0.75	6.7	66	21.6
4 X 0.75	7.3	80	28.8
5 X 0.75	8.4	105	36.0
7 X 0.75	9.1	130	51.0
12 X 0.75	12.2	215	87.0
18 X 0.75	14.2	300	130.0
25 X 0.75	17.1	420	180.0
34 X 0.75	20.1	575	245.0
41 X 0.75	22.5	665	296.0
50 X 0.75	23.4	780	360.0
61 X 0.75	25.4	920	440.0
2 X 1	6.6	63	19.2
3 X 1	7.0	76	28.8
4 X 1	7.7	92	38.4
5 X 1	8.8	120	48.0
7 X 1	9.6	150	68.0
12 X 1	12.9	250	116.0
18 X 1	15.6	375	173.0
25 X 1	18.6	530	240.0
34 X 1	21.2	670	327.0
41 X 1	22.7	800	394.0
50 X 1	25.3	955	480.0
60 X 1	26.8	1,090	586.0
2 X 1.5	7.2	79	28.8
3 X 1.5	7.7	96	43.2
4 X 1.5	8.8	130	58.0
5 X 1.5	9.6	155	72.0
7 X 1.5	10.8	205	101.0
12 X 1.5	14.0	325	173.0
16 X 1.5	15.6	415	231.0
18 X 1.5	17.0	485	260.0
25 X 1.5	20.3	680	360.0
34 X 1.5	23.2	875	490.0
41 X 1.5	24.9	1,064	590.6
50 X 1.5	27.7	1,240	720.0
2 X 2.5	8.9	125	48.0
3 X 2.5	9.5	150	72.0
4 X 2.5	10.8	195	96.0
5 X 2.5	11.7	240	120.0
7 X 2.5	12.8	300	168.0
12 X 2.5	17.4	505	288.0

YSLY-J(-O)

The standard PVC control cable with coloured cores

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
18 X 2.5	20.9	750	432.0
25 X 2.5	24.8	1,030	600.0
34 X 2.5	27.6	1,225	711.0
3 X 4.0	11.6	230	116.0
4 X 4.0	12.8	290	154.0
5 X 4.0	14.0	350	192.0
7 X 4.0	15.3	445	269.0
3 X 6.0	13.1	310	173.0
4 X 6.0	14.4	390	231.0
5 X 6.0	15.9	475	288.0
7 X 6.0	17.6	620	404.0
4 X 10	18.3	645	384.0
5 X 10	20.6	805	480.0
7 X 10	22.8	1,050	672.0
4 X 16	21.6	950	615.0
5 X 16	23.8	1,160	768.0
7 X 16	26.7	1,540	1,078.0
4 X 25	27.0	1,380	960.0
5 X 25	29.7	1,660	1,200.0
7 X 25	32.9	2,370	1,680.0
4 X 35	29.5	1,910	1,344.0
5 X 35	33.1	2,250	1,680.0
4 X 50	36.7	2,610	1,920.0
5 X 50	40.4	3,230	2,400.0
4 X 70	41.2	3,740	2,688.0
5 X 70	45.4	4,330	3,360.0
4 X 95	47.7	4,850	3,648.0
5 X 95	52.4	5,930	4,560.0
4 X 120	51.4	5,950	4,608.0

other numbers of cores on request
usual delivery design: 500 m drum

YSLYCY-J(-O)

The standard PVC control cable with coloured cores and Cu shielding

Standard connection cable for control devices in and on processing and production tools with medium mechanical load conditions, in the machine engineering, plant engineering and construction as well as in the field of power plant building, air conditioning installations and also in office machines and machines for data processing. For fixed installation as well as for occasionally, non-continuously recurring movement application, also in wet interiors. For outdoor use considering the temperature range, UV protection must be guaranteed. Due to the optimized shielding the conductor is suitable for systems where a good noise suppression is necessary and where interference of signals by electric external magnetic fields must be avoided (EMC).

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation PVC TI2 according to HD 21.1
d. core colour: coloured according to BKM product specification, from 3 cores onwards with (-J) or without (-O) green/yellow core
e. cores stranded in layers, inner sheath
f. optimized screening braiding of tinned copper wires
g. outer sheath PVC TM 2 according to HD 21.1, preferred colour grey
h. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage Uo/U 300/500 V
b. test voltage 4000 V
c. temperature range flexible application -5° C ... +70° C
d. temperature range fixed installation -40° C ... +70° C
e. minimum bending radius fixed installation 6 x outer diameter
f. minimum bending radius flexible 20 x outer diameter
g. fire behaviour according to DIN EN 60332-1-2

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.5	7.8	95	39.0
3 X 0.5	8.4	105	45.0
4 X 0.5	8.9	120	50.0
5 X 0.5	9.6	139	60.0

YSLYCY-J(-O)

The standard PVC control cable with coloured cores and Cu shielding

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
7 X 0.5	11.0	187	76.0
12 X 0.5	12.9	254	121.0
18 X 0.5	15.4	360	163.0
27 X 0.5	18.3	489	218.0
36 X 0.5	20.8	619	276.0
48 X 0.5	24.0	820	380.0
2 X 0.75	8.6	110	37.9
3 X 0.75	9.2	120	49.0
4 X 0.75	10.3	155	54.0
5 X 0.75	10.8	170	68.0
7 X 0.75	11.5	205	80.0
12 X 0.75	14.6	290	143.0
18 X 0.75	17.7	430	197.0
25 X 0.75	21.0	565	260.0
36 X 0.75	24.3	750	358.0
48 X 0.75	27.0	970	452.0
2 X 1.0	8.7	115	50.0
3 X 1.0	9.3	134	63.0
4 X 1.0	9.8	153	75.0
5 X 1.0	10.7	182	88.0
7 X 1.0	12.4	249	123.0
12 X 1.0	15.2	364	189.0
18 X 1.0	17.3	484	255.0
27 X 1.0	21.0	672	358.0
36 X 1.0	23.7	868	456.0
48 X 1.0	26.7	1,123	625.0
2 X 1.5	10.3	165	65.0
3 X 1.5	10.5	165	75.0
4 X 1.5	11.2	195	95.0
5 X 1.5	12.1	225	109.0
7 X 1.5	13.1	280	135.0
12 X 1.5	17.5	450	240.0
18 X 1.5	20.5	625	337.0
25 X 1.5	24.7	850	455.0
34 X 1.5	27.1	1,090	611.0
42 X 1.5	29.5	1,380	757.0
2 X 2.5	7.7	101	85.0
3 X 2.5	11.9	230	109.0
4 X 2.5	13.1	275	130.0
5 X 2.5	14.2	335	183.0
7 X 2.5	15.2	415	227.0
12 X 2.5	20.9	640	367.0
18 X 2.5	25.0	1,062	588.0
25 X 2.5	25.9	1,475	854.0
3 X 4.0	13.9	325	161.0

YSLYCY-J(-O)

The standard PVC control cable with coloured cores and Cu shielding

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
4 X 4.0	15.2	400	218.0
5 X 4.0	17.5	505	251.0
7 X 4.0	19.5	635	353.0
3 X 6.0	16.6	455	249.0
4 X 6.0	17.7	555	307.0
5 X 6.0	20.8	725	376.0
3 X 10	20.2	690	381.0
4 X 10	23.3	930	488.0
5 X 10	24.1	1,030	567.0
4 X 16	25.5	1,180	719.0
5 X 16	29.5	1,530	885.0
4 X 25	31.3	1,810	1,157.0
5 X 25	34.2	2,109	1,415.0
4 X 35	34.0	2,300	1,573.0
4 X 50	40.8	3,210	2,153.0
4 X 70	45.9	4,290	3,002.0
4 X 95	52.8	5,540	4,004.0
4 X 120	56.3	6,720	5,026.0

other numbers of cores on request
usual delivery design: 500 m drum

YSLYSY-J(-O)

The standard PVC control cable with coloured cores and zinc-coated steel wire braiding

Standard connection cable for control devices in and on processing and production tools with medium mechanical load conditions, in the machine engineering, plant engineering and construction as well as in the field of power plant building, air conditioning installations and also in office machines and machines for data processing. For fixed installation as well as for occasionally, non-continuously recurring movement application, also in wet interiors. For outdoor use considering the temperature range, UV protection must be guaranteed. The zinc-coated steel wire braiding provides a high mechanical protection for the conductor.

CABLE MAKE-UP

a. according to BKM product specification
b. core insulation PVC TI2 according to HD 21.1
c. core colour: coloured according to BKM product specification, from 3 cores onwards with (-J) or without (-O) green/yellow core
d. cores stranded in layers, inner sheath
e. braid of zinc-coated steel wires
f. outer sheath PVC TM 2 according to HD 21.1, preferred colour grey
g. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage Uo/U 300/500 V
b. test voltage 4000 V
c. temperature range flexible application -5° C ... +70° C
d. temperature range fixed installation -40° C ... +70° C
e. minimum bending radius fixed installation 6 x outer diameter
f. minimum bending radius flexible 20 x outer diameter
g. fire behaviour according to DIN EN 60332-1-2

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.5	8.2	97	9.6
3 X 0.5	8.8	107	14.4
4 X 0.5	9.3	122	19.2
5 X 0.5	10.0	141	24.0
7 X 0.5	11.4	189	33.6
12 X 0.5	13.3	256	58.0
18 X 0.5	15.8	362	87.0
27 X 0.5	18.7	491	130.0
36 X 0.5	21.2	621	173.0
48 X 0.5	24.4	822	231.0
2 X 0.75	8.4	108	14.4

YSLYSY-J(-O)

The standard PVC control cable with coloured cores and zinc-coated steel wire braiding

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
3 X 0.75	8.7	118	21.6
4 X 0.75	8.6	118	28.8
5 X 0.75	10.1	161	36.0
7 X 0.75	11.8	219	51.0
12 X 0.75	14.2	319	87.0
18 X 0.75	16.7	430	130.0
27 X 0.75	19.7	593	195.0
36 X 0.75	22.6	766	260.0
48 X 0.75	25.6	991	346.0
2 X 1.0	9.5	119	19.2
3 X 1.0	10.1	138	28.8
4 X 1.0	10.6	157	38.4
5 X 1.0	11.5	186	48.0
7 X 1.0	13.2	253	68.0
12 X 1.0	16.0	368	116.0
18 X 1.0	18.1	488	173.0
27 X 1.0	21.8	676	260.0
36 X 1.0	24.5	872	346.0
48 X 1.0	27.5	1,127	461.0
2 X 1.5	9.7	148	28.8
3 X 1.5	10.7	165	43.2
4 X 1.5	11.2	200	58.0
5 X 1.5	12.1	225	73.0
7 X 1.5	13.1	285	101.0
12 X 1.5	17.5	455	173.0
18 X 1.5	20.5	645	260.0
25 X 1.5	24.9	935	361.0
34 X 1.5	27.1	1,090	490.0
42 X 1.5	29.5	1,380	605.0
2 X 2.5	7.7	101	48.0
3 X 2.5	11.9	230	73.0
4 X 2.5	13.1	275	97.0
5 X 2.5	14.2	335	121.0
7 X 2.5	15.2	415	169.0
12 X 2.5	20.9	640	289.0
18 X 2.5	25.0	1,062	433.0
25 X 2.5	25.9	1,475	601.0
3 X 4.0	13.9	325	116.0
4 X 4.0	15.2	400	154.0
5 X 4.0	17.5	505	193.0
7 X 4.0	19.5	635	269.0
3 X 6.0	16.6	455	173.0
4 X 6.0	17.7	555	231.0
5 X 6.0	20.8	725	289.0
3 X 10	20.2	690	289.0

YSLYSY-J(-O)

The standard PVC control cable with coloured cores and zinc-coated steel wire braiding

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
4 X 10	23.3	930	385.0
5 X 10	24.1	1,030	481.0
4 X 16	25.5	1,180	615.0
5 X 16	29.5	1,530	769.0
4 X 25	31.3	1,810	961.0
5 X 25	34.2	2,109	1,201.0
4 X 50	40.8	3,210	1,921.0
4 X 70	45.9	4,290	2,689.0
4 X 95	52.8	5,540	3,649.0
4 X 120	56.3	6,720	4,609.0

other numbers of cores on request
usual delivery design: 500 m drum

YSLCY-JZ(-OZ)

The slimmer PVC control cable without inner sheath with numbered cores and Cu shield

Standard connection cable without inner sheath for control devices in and on processing and production tools with medium mechanical load conditions, in the machine engineering, plant engineering and construction as well as in the field of power plant building, air conditioning installations and also in office machines and machines for data processing. For fixed installation as well as for occasionally, non-continuously recurring movement application, also in wet interiors. For outdoor use considering the temperature range, UV protection must be guaranteed. Due to the optimized shielding the conductor is suitable for systems where a good noise suppression is necessary and where interference of signals by electric external magnetic fields must be avoided (EMC).

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation PVC TI2 according to HD 21.1
d. core colour: black with white figure printing, from 3 cores onwards with (-JZ) or without (-OZ) green/yellow core
e. cores stranded in layers, without inner sheath, wrapping in plastic foil
f. optimized screening braiding of tinned copper wires
g. outer sheath PVC TM 2 according to HD 21.1, preferred colour grey
h. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage Uo/U 300/500 V
b. test voltage 4000 V
c. temperature range flexible application -5° C ... +70° C
d. temperature range fixed installation -40° C ... +70° C
e. minimum bending radius fixed installation 6 x outer diameter
f. minimum bending radius flexible 20 x outer diameter
g. fire behaviour according to DIN EN 60332-1-2

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.5	6.7	63	28.4
3 X 0.5	7.0	71	36.0
4 X 0.5	7.6	84	43.2

YSLCY-JZ(-OZ)

The slimmer PVC control cable without inner sheath with numbered cores and Cu shield

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
5 X 0.5	8.7	106	49.1
7 X 0.5	9.3	128	62.0
12 X 0.5	12.2	204	96.0
18 X 0.5	14.2	299	151.0
27 X 0.5	17.3	421	205.0
36 X 0.5	19.8	555	257.0
48 X 0.5	22.2	692	331.0
2 X 0.75	7.1	68	35.0
3 X 0.75	7.5	81	44.0
4 X 0.75	8.4	105	54.0
5 X 0.75	9.2	125	65.0
7 X 0.75	9.8	152	82.0
12 X 0.75	13.0	244	129.0
18 X 0.75	15.1	353	197.0
27 X 0.75	18.4	507	279.0
36 X 0.75	21.0	670	356.0
48 X 0.75	24.1	840	457.0
2 X 1	7.4	80	41.2
3 X 1	8.2	100	52.0
4 X 1	8.9	120	66.0
5 X 1	8.5	146	79.0
7 X 1	9.4	192	102.0
12 X 1	12.1	285	176.0
18 X 1	14.5	395	247.0
27 X 1	18.9	534	349.0
36 X 1	21.6	761	447.0
48 X 1	25.7	1,027	574.0
2 X 1.5	8.4	100	53.0
3 X 1.5	8.7	124	71.0
4 X 1.5	9.5	145	87.0
5 X 1.5	10.6	185	104.0
7 X 1.5	11.5	227	138.0
12 X 1.5	14.8	369	240.0
18 X 1.5	18.0	545	335.0
25 X 1.5	21.2	740	453.0
34 X 1.5	23.9	953	603.0
42 X 1.5	26.2	1,179	727.0
2 X 2.5	9.6	136	79.0
3 X 2.5	10.1	169	105.0
4 X 2.5	11.4	213	133.0
5 X 2.5	12.4	260	162.0
7 X 2.5	13.6	338	228.0
12 X 2.5	18.2	558	372.0
18 X 2.5	21.6	817	531.0
25 X 2.5	25.5	1,121	713.0

YSLCY-JZ(-OZ)

The slimmer PVC control cable without inner sheath with numbered cores and Cu shield

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 4.0	11.8	205	114.0
3 X 4.0	13.0	248	154.0
4 X 4.0	13.8	325	214.0
5 X 4.0	15.0	395	259.0
7 X 4.0	16.7	505	345.0
2 X 6.0	13.0	260	157.0
3 X 6.0	13.7	334	173.0
4 X 6.0	15.1	415	298.0
5 X 6.0	16.9	521	364.0
3 X 10	17.4	539	304.0
4 X 10	19.7	702	401.0
5 X 10	21.5	859	499.0

other numbers of cores on request
usual delivery design: 500 m drum

BALZERCONTROL-EB-Y-JZ(-OZ)

The slim PVC control cable with numbered cores and VDE registration

Optimized connecting cable for intrinsically safe circuits. This cable corresponds to the regulation DIN EN 60079-14. A circuit is intrinsically safe if a certain potentially explosive atmosphere, determined in harmonized standards or other generally recognized rules of technology, cannot be ignited by sparks or hot surfaces, which arise under the test conditions defined in these standards or rules. They are suitable for a voltage range of ≤ 50 V AC voltage or ≤ 75 V DC voltage. The cable is suitable for fixed installation as well as for occasionally, non-continuously recurring movement application, also in wet interiors. Outdoor use is not allowed.

CABLE MAKE-UP

a. according to BKM product specification, DIN EN 60079-14 and DIN EN 61241-14/-17
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation PVC TI2 according to HD 21.1
d. core colour: black with white figure printing, from 3 cores onwards with (-JZ) or without (-OZ) green/yellow core
e. cores stranded in layers
f. outer sheath PVC TM 2 according to HD 21.1, colour blue

TECHNICAL DATA

a. AC/DC voltage 50 V/75 V
b. test voltage 3000 V
c. temperature range flexible application -5° C ... +70° C
d. temperature range fixed installation -40° C ... +70° C
e. minimum bending radius fixed installation 6 x outer diameter
f. minimum bending radius flexible 15 x outer diameter
g. fire behaviour according to DIN EN 60332-1-2

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Version	Copper weight kg/km
2 X 0.5	4.9	35	0	9.6
3 G/X 0.5	5.2	41	0	14.4
4 G/X 0.5	5.9	52	0	19.2
5 G/X 0.5	6.3	63	0	24.0
7 G/X 0.5	6.9	81	0	33.6
12 G/X 0.5	9.1	131	0	58.0
18 G/X 0.5	10.8	188	0	86.0
25 G/X 0.5	12.7	261	0	120.0
35 G/X 0.5	14.8	356	0	168.0
40 G/X 0.5	15.8	400	0	192.0
50 G/X 0.5	17.2	515	0	240.0
60 G/X 0.5	18.3	600	0	288.0
2 X 0.75	5.4	45	0	14.4
3 G/X 0.75	5.8	53	0	21.6
4 G/X 0.75	6.3	65	0	28.8
5 G/X 0.75	6.9	78	0	36.0

BALZERCONTROL-EB-Y-JZ(-OZ)

The slim PVC control cable with numbered cores and VDE registration

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Version	Copper weight kg/km
7 G/X 0.75	7.4	98	0	51.0
12 G/X 0.75	10.1	165	0	87.0
18 G/X 0.75	11.9	240	0	130.0
25 G/X 0.75	14.0	337	0	180.0
34 G/X 0.75	16.4	440	0	245.0
41 G/X 0.75	17.7	538	0	296.0
50 G/X 0.75	19.5	648	0	360.0
60 G/X 0.75	20.4	772	0	432
2 X 1.0	5.9	53	0	19.2
3 G/X 1.0	6.1	63	0	28.8
4 G/X 1.0	6.7	79	0	38.4
5 G/X 1.0	7.3	92	0	48.0
7 G/X 1.0	8.2	126	0	67.0
12 G/X 1.0	10.8	205	0	115.0
18 G/X 1.0	12.9	295	0	173.0
25 G/X 1.0	15.1	395	0	240.0
34 G/X 1.0	17.4	551	0	326.0
41 G/X 1.0	19.2	661	0	394.0
50 G/X 1.0	21.0	797	0	480.0
60 G/X 1.0	22.0	950	0	576.0
2 X 1.5	6.4	67	0	28.8
3 G/X 1.5	6.8	82	0	43.2
4 G/X 1.5	7.4	100	0	58.0
5 G/X 1.5	8.3	130	0	72.0
7 G/X 1.5	9.0	165	0	101.0
12 G/X 1.5	12.2	275	0	173.0
18 G/X 1.5	14.5	405	0	260.0
25 G/X 1.5	17.3	550	0	360.0
34 G/X 1.5	19.7	746	0	490.0
41 G/X 1.5	21.7	895	0	591.0
50 G/X 1.5	23.9	1,089	0	720.0
60 G/X 1.5	25.1	1,301	0	864

G/X: in your order please indicate after the article number if with protective conductor (-JZ) or without protective conductor (-OZ)
other numbers of cores on request
usual delivery design: 500 m drum

BALZERCONTROL-EB-CY-JZ(-OZ)

The slim PVC control cable with numbered cores, Cu shield for intrinsically safe circuits

Optimized connecting cable for intrinsically safe circuits. This cable corresponds to the regulation DIN EN 60079-14. A circuit is intrinsically safe if a certain potentially explosive atmosphere, determined in harmonized standards or other generally recognized rules of technology, cannot be ignited by sparks or hot surfaces, which arise under the test conditions defined in these standards or rules. They are suitable for a voltage range of ≤ 50 V AC voltage or ≤ 75 V DC voltage. The cable is suitable for fixed installation as well as for occasionally, non-continuously recurring movement application, also in wet interiors. Outdoor use is not allowed. Due to the optimized shielding the conductor is suitable for systems where a good noise suppression is necessary and where interference of signals by electric external magnetic fields must be avoided (EMC).

CABLE MAKE-UP

a. according to BKM product specification, DIN EN 60079-14 and DIN EN 61241-14/-17
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation PVC TI2 according to HD 21.1
d. core colour: black with white figure printing, from 3 cores onwards with (-JZ) or without (-OZ) green/yellow core
e. cores stranded in layers, without inner sheath, wrapping in plastic foil
f. optimized screening braiding of tinned copper wires
g. outer sheath PVC TM 2 according to HD 21.1, colour blue

TECHNICAL DATA

a. AC/DC voltage 50 V/75 V
b. test voltage 3000 V
c. transfer impedance at 30 MHz <250 Ohm/km
d. temperature range flexible application -5° C ... +70° C
e. temperature range fixed installation -40° C ... +70° C
f. minimum bending radius fixed installation 6 x outer diameter
g. minimum bending radius flexible 20 x outer diameter
h. fire behaviour according to DIN EN 60332-1-2

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.5	7.2	76	32.5
3 G/X 0.5	7.5	85	38.8
4 G/X 0.5	7.9	101	45.4
5 G/X 0.5	8.6	115	52.0
7 G/X 0.5	9.1	133	64.0
12 G/X 0.5	11.5	204	96.0
18 G/X 0.5	13.5	291	144.0
25 G/X 0.5	15.6	381	186.0
35 G/X 0.5	16.5	433	215.0
40 G/X 0.5	18.6	546	272.0
2 X 0.75	7.6	85	37.3

BALZERCONTROL-EB-CY-JZ(-OZ)

The slim PVC control cable with numbered cores, Cu shield for intrinsically safe circuits

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
3 G/X 0.75	7.9	96	46.3
4 G/X 0.75	8.6	115	57.0
5 G/X 0.75	9.1	130	66.0
7 G/X 0.75	9.9	160	82.0
12 G/X 0.75	12.6	245	128.0
18 G/X 0.75	14.8	355	194.0
25 G/X 0.75	16.9	466	252.0
34 G/X 0.75	19.2	602	324.0
41 G/X 0.75	20.8	730	404.0
2 X 1.0	8.1	102	47.2
3 G/X 1.0	8.4	115	57.8
4 G/X 1.0	8.9	135	68.4
5 G/X 1.0	9.7	158	81.0
7 G/X 1.0	10.4	185	102.0
12 G/X 1.0	13.5	307	172.0
25 G/X 1.0	18.0	535	320.0
34 G/X 1.0	20.8	730	435.0
41 G/X 1.0	22.5	858	512.0
2 X 1.5	8.7	120	57.0
3 G/X 1.5	9.0	135	72.0
4 G/X 1.5	9.9	165	89.0
5 G/X 1.5	10.5	190	106.0
7 G/X 1.5	11.5	239	136.0
12 G/X 1.5	15.0	395	236.0
18 G/X 1.5	17.4	540	335.0
25 G/X 1.5	20.4	715	449.0
34 G/X 1.5	23.2	935	591.0
41 G/X 1.5	25.1	1,098	844

G/X: in your order please indicate after the article number if with protective conductor (-JZ) or without protective conductor (-OZ)
other numbers of cores on request
usual delivery design: 500 m drum

H05VV5-F

The oil-resistant harmonized PVC control cable with numbered cores according to HD 21.13

Harmonized control cable for fixed installation and occasionally flexible application. As a measuring line or control cable for machine-tool building, control devices in and on processing and production tools with medium mechanical load conditions, in the machine engineering, plant engineering and construction as well as in the field of power plant building, air conditioning installations and also in office machines and machines for data processing. For fixed installation as well as for occasionally, non-continuously recurring movement application, also in wet interiors. For outdoor use considering the temperature range, UV protection must be guaranteed.
The outer sheath ist made of special PVC and resistant to the most common oils and lubricants.

CABLE MAKE-UP

a. according to HD 21.13
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation PVC TI2 according to HD 21.1
d. core colour: black with white figure printing, from 3 cores onwards with green/yellow core
e. cores stranded in layers
f. outer sheath PVC TM 5 according to HD 21.1, preferred colour grey
g. changes in sheath colour on request

TECHNICAL DATA

a. rated voltage Uo/U 300/500 V
b. test voltage 4000 V
c. temperature range flexible application -5° C ... +70° C
d. temperature range fixed installation -40° C ... +70° C
e. minimum bending radius fixed installation 6 x outer diameter
f. minimum bending radius flexible 15 x outer diameter
g. fire behaviour according to DIN EN 60332-1-2

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.5	5.9	48	9.6
3 G 0.5	6.2	55	14.4
4 G 0.5	6.9	67	19.2
5 G 0.5	7.5	80	24.0
7 G 0.5	8.5	110	33.6
12 G 0.5	11.4	165	58.0
16 G 0.5	12.6	220	77.0
18 G 0.5	13.3	250	87.0
25 G 0.5	16.0	340	120.0

H05VV5-F

The oil-resistant harmonized PVC control cable with numbered cores according to HD 21.13

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
34 G 0.5	18.8	455	164.0
40 G 0.5	20.1	545	192.0
50 G 0.5	21.8	610	240.0
2 G 0.75	6.3	59	14.4
3 G 0.7	6.7	69	21.6
4 G 0.75	7.3	83	28.8
5 G 0.75	8.2	105	36.0
7 G 0.75	9.9	150	51.0
12 G 0.75	11.9	220	87.0
18 G 0.75	14.4	305	130.0
25 G 0.75	17.5	430	180.0
34 G 0.75	20.1	575	245.0
41 G 0.75	22.5	665	296.0
50 G 0.75	23.4	780	360.0
61 G 0.75	25.4	920	440.0
2 X 1.0	6.6	63	19.2
3 G 1.0	7.0	77	28.8
4 G 1.0	7.7	93	38.4
5 G 1.0	8.6	120	48.0
7 G 1.0	10.4	170	68.0
12 G 1.0	12.9	250	116.0
18 G 1.0	15.1	355	173.0
25 G 1.0	18.6	530	240.0
34 G 1.0	21.0	655	327.0
41 G 1.0	22.7	800	394.0
50 G 1.0	25.3	955	480.0
60 G 1.0	26.8	1,090	586.0
2 X 1.5	7.2	79	28.8
3 G 1.5	8.1	105	43.2
4 G 1.5	9.1	140	58.0
5 G 1.5	10.2	175	72.0
7 G 1.5	12.5	260	101.0
12 G 1.5	15.1	370	173.0
14 G 1.5	16.1	420	202.0
18 G 1.5	18.0	540	260.0
25 G 1.5	21.9	750	360.0
34 G 1.5	23.2	875	490.0
41 G 1.5	24.9	1,064	590.0
50 G 1.5	27.7	1,240	720.0
2 X 2.5	8.9	125	48.0
3 G 2.5	9.9	170	72.0
4 G 2.5	11.0	205	96.0
5 G 2.5	12.2	250	120.0
7 G 2.5	14.9	375	168.0
12 G 2.5	18.2	555	288.0

H05VV5-F

The oil-resistant harmonized PVC control cable with numbered cores according to HD 21.13

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
18 G 2.5	21.9	815	432.0
25 G 2.5	26.5	1,140	600.0
34 G 2.5	27.6	1,225	711.0

usual delivery design: 500 m drum

H05VVC4V5-K

The oil-resistant harmonized PVC control cable with numbered cores and Cu shield according to HD 21.13

Harmonized control cable for fixed installation and occasionally flexible application. As a measuring line or control cable for machine-tool building, control devices, in and on processing and production tools with medium mechanical load conditions, in the machine engineering, plant engineering and construction as well as in the field of power plant building, air conditioning installations and also in office machines and machines for data processing. For fixed installation as well as for occasionally, non-continuously recurring movement application, also in wet interiors. For outdoor use considering the temperature range, UV protection must be guaranteed. Due to the optimized shielding the conductor is suitable for systems where a good noise suppression is necessary and where interference of signals by electric external magnetic fields must be avoided (EMC). The outer sheath is made of special PVC and resistant to the most common oils and lubricants.

CABLE MAKE-UP

a. according to HD 21.13
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation PVC TI2 according to HD 21.1
d. core colour: black with white figure printing, from 3 cores onwards with green/yellow core
e. cores stranded in layers, inner sheath
f. optimized screening braiding of tinned copper wires
g. outer sheath PVC TM 5 according to HD 21.1, preferred colour grey
h. changes in sheath colour on request

TECHNICAL DATA

a. rated voltage Uo/U 300/500 V
b. test voltage 4000 V
c. temperature range flexible application -5° C ... +70° C
d. temperature range fixed installation -40° C ... +70° C
e. minimum bending radius fixed installation 6 x outer diameter
f. minimum bending radius flexible 20 x outer diameter
g. fire behaviour according to DIN EN 60332-1-2

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.5	7.8	95	39
3 G 0.5	8.4	105	45
4 G 0.5	8.9	120	50
5 G 0.5	9.6	139	60
7 G 0.5	11.0	187	76

H05VVC4V5-K

The oil-resistant harmonized PVC control cable with numbered cores and Cu shield according to HD 21.13

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
12 G 0.5	12.9	254	121
18 G 0.5	15.4	360	163
27 G 0.5	18.3	489	218
36 G 0.5	20.8	619	276
48 G 0.5	24.0	820	380
2 X 0.75	8.4	110	47
3 G 0.75	9.0	125	52
4 G 0.75	9.8	150	57
5 G 0.75	10.5	175	69
7 G 0.75	12.4	240	93
12 G 0.75	14.8	316	162
18 G 0.75	17.3	445	215
25 G 0.75	19.7	620	278
34 G 0.75	22.2	810	379
50 G 0.75	27.1	1,075	535
2 X 1.0	8.7	115	50
3 G 1.0	9.3	134	63
4 G 1.0	9.8	153	75
5 G 1.0	10.7	182	88
7 G 1.0	12.4	249	123
12 G 1.0	15.2	364	189
18 G 1.0	17.3	484	255
27 G 1.0	21.0	672	358
36 G 1.0	23.7	868	456
48 G 1.0	26.7	1,123	625
2 X 1.5	9.7	148	63
3 G 1.5	10.6	165	80
4 G 1.5	11.2	200	89
5 G 1.5	12.1	225	109
7 G 1.5	13.1	285	135
12 G 1.5	17.5	455	232
18 G 1.5	20.5	645	328
25 G 1.5	24.9	935	492
34 G 1.5	27.1	1,090	611
42 G 1.5	29.5	1,380	757
2 X 2.5	7.7	101	85
3 G 2.5	11.9	230	109
4 G 2.5	13.1	275	130
5 G 2.5	14.2	335	183
7 G 2.5	15.2	415	227
12 G 2.5	20.9	640	367
18 G 2.5	25.0	1,062	588
25 G 2.5	25.9	1,475	854

usual delivery design: 500 m drum

S05VV5-F

The oil-resistant PVC control cable with two standards and with numbered cores according to UL/CSA

Control cable designed for the North America market with UL/CSA approval for fixed installation and occasionally flexible application. As a measuring line or control cable for machine-tool building, control devices, in and on processing and production tools with medium mechanical load conditions, in the machine engineering, plant engineering and construction as well as in the field of power plant building, air conditioning installations and also in office machines and machines for data processing. For fixed installation as well as for occasionally, non-continuously recurring movement application, also in wet interiors. For outdoor use considering the temperature range, UV protection must be guaranteed. The outer sheath is made of special PVC and resistant to the most common oils and lubricants.

CABLE MAKE-UP

a. according to UL style 2587 and 10012, CSA 22.2 No 210.2
b. bare copper wire according to UL 1581
c. core insulation PVC according to Class 43 UL 1581
d. core colour: black with white figure printing, from 3 cores onwards with green/yellow core
e. cores stranded in layers
f. outer sheath PVC Class 43 UL 1581
g. changes in sheath colour on request

TECHNICAL DATA

a. operating voltage U 600 V
b. test voltage 4000 V
c. temperature range flexible application -5° C ... +90° C
d. temperature range fixed installation -40° C ... +90° C
e. minimum bending radius fixed installation 6 x outer diameter
f. minimum bending radius flexible 15 x outer diameter
g. resistant to oil according to HD 21.1 (TM5)
h. fire behaviour according to VW1-UL 1581, FT1-CSA 22.2 No 210.2

Number of cores x cross-section in AWG/MCM per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X AWG 22	5.6	45	7.2
3 G AWG 22	6.0	52	10.8
4 G AWG 22	6.5	64	14.4
5 G AWG 22	7.1	76	18.0
7 G AWG 22	7.7	106	25.2

S05VV5-F

The oil-resistant PVC control cable with two standards and with numbered cores according to UL/CSA

Number of cores x cross-section in AWG/MCM per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
12 G AWG 22	10.0	161	43.2
16 G AWG 22	10.9	216	58.0
16 G AWG 22	11.7	255	65.0
25 G AWG 22	13.1	335	90.0
34 G AWG 22	15.8	450	122.0
40 G AWG 22	17.1	540	144.0
50 G AWG 22	19.8	605	180.0
2 X AWG 20	5.9	59	11.0
3 G AWG 20	6.3	69	17.0
4 G AWG 20	6.8	83	22.0
5 G AWG 20	7.4	105	28.0
7 G AWG 20	8.0	150	39.0
12 G AWG 20	10.5	220	67.0
18 G AWG 20	12.3	305	101.0
25 G AWG 20	15.3	430	140.0
34 G AWG 20	17.1	575	190.0
41 G AWG 20	19.2	665	230.0
50 G AWG 20	20.3	780	280.0
61 G AWG 20	22.5	920	342.0
2 X AWG 18	6.2	60	17.0
3 G AWG 18	6.5	74	26.0
4 G AWG 18	7.1	90	35.0
5 G AWG 18	7.7	116	44.0
7 G AWG 18	8.6	166	61.0
18 G AWG 18	12.9	350	157.0
12 G AWG 18	11.1	254	104.0
25 G AWG 18	16.5	525	218.0
34 G AWG 18	18.4	650	296.0
41 G AWG 18	20.0	795	357.0
50 G AWG 18	22.1	949	435.0
60 G AWG 18	24.4	1,084	522.0
2 X AWG 16	6.7	74	27.0
3 G AWG 16	7.1	100	41.0
4 G AWG 16	7.8	135	55.0
5 G AWG 16	8.6	170	69.0
7 G AWG 16	9.4	255	96.0
12 G AWG 16	12.2	364	192.0
14 G AWG 16	13.9	414	164.0
18 G AWG 16	15.5	534	247.0
25 G AWG 16	18.6	735	343.0
34 G AWG 16	21.2	870	466.0
41 G AWG 16	23.9	1,058	562.0
50 G AWG 16	27.7	1,234	685.0
2 X AWG 14	7.5	120	44.0

S05VV5-F

The oil-resistant PVC control cable with two standards and with numbered cores according to UL/CSA

Number of cores x cross-section in AWG/MCM per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
3 G AWG 14	8.0	165	66.0
4 G AWG 14	8.8	200	88.0
5 G AWG 14	9.7	245	110.0
7 G AWG 14	10.5	370	154.0
12 G AWG 14	13.8	550	264.0
18 G AWG 14	17.4	810	396.0
25 G AWG 14	21.9	1,134	550.0
34 G AWG 14	24.6	1,219	748.0

usual delivery design: 500 m drum

S05VVC4V5-K

The oil-resistant PVC control cable with two standards, with numbered cores and Cu shield according to UL/CSA

Control cable designed for the North American market with UL/CSA approval for fixed installation and occasionally flexible application. As a measuring line or control cable for machine-tool building, control devices, in and on processing and production tools with medium mechanical load conditions, in the machine engineering, plant engineering and construction as well as in the field of power plant building, air conditioning installations and also in office machines and machines for data processing. For fixed installation as well as for occasionally, non-continuously recurring movement application, also in wet interiors. For outdoor use considering the temperature range, UV protection must be guaranteed. Due to the optimized shielding the conductor is suitable for systems where a good noise suppression is necessary and where interference of signals by electric external magnetic fields must be avoided (EMC). The outer sheath is made of special PVC and resistant to the most common oils and lubricants.

CABLE MAKE-UP

a. according to UL style 2587 and 10012, CSA 22.2 No 210.2
b. bare copper wire according to UL 1581
c. core insulation PVC according to Class 43 UL 1581
d. core colour: black with white figure printing, from 3 cores onwards with green/yellow core
e. cores stranded in layers
f. optimized screening braiding of tinned copper wires
g. outer sheath PVC Class 43 UL 1581
h. changes in sheath colour on request

TECHNICAL DATA

a. operating voltage UL/CSA 600 V
b. test voltage 4000 V
c. temperature range flexible application -5° C ... +90° C
d. minimum bending radius fixed installation 6 x outer diameter
e. minimum bending radius flexible 20 x outer diameter
f. fire behaviour according to VW1-UL 1581, FT1-CSA 22.2 No 210.2

Number of cores x cross-section in AWG/MCM per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X AWG22	7.6	91	36.6
3 G AWG22	8.0	101	41.4
4 G AWG22	8.6	116	45.2
5 G AWG22	9.2	135	54.0
7 G AWG22	9.8	183	68.0

S05VVC4V5-K

The oil-resistant PVC control cable with two standards, with numbered cores and Cu shield according to UL/CSA

Number of cores x cross-section in AWG/MCM per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
12 G AWG22	12.2	249	107.7
18 G AWG22	14.1	355	141.0
27 G AWG22	17.5	484	186.0
36 G AWG22	19.3	614	233.0
48 G AWG22	23.4	815	322.0
2 X AWG20	7.8	105	43.8
3 G AWG20	8.3	120	47.2
4 G AWG20	8.8	145	51.0
5 G AWG20	9.4	170	90.0
7 G AWG20	10.1	235	82.0
12 G AWG20	12.8	311	143.0
18 G AWG20	15.7	439	186.0
25 G AWG20	18.0	614	238.0
34 G AWG20	20.1	804	325.0
50 G AWG20	23.5	1,069	455.0
2 X AWG18	8.7	111	48.2
3 G AWG18	9.3	130	60.0
4 G AWG18	9.8	149	71.0
5 G AWG18	10.7	178	84.0
7 G AWG18	12.4	245	117.0
12 G AWG18	15.2	359	178.0
18 G AWG18	17.3	479	239.0
27 G AWG18	21	667	334.0
36 G AWG18	23.7	863	424.0
48 G AWG18	26.7	1,118	582.0
2 X AWG16	9.7	144	62.0
3 G AWG16	9.7	161	78.0
4 G AWG16	11.2	196	86.0
5 G AWG16	12.1	221	106.0
7 G AWG16	13.1	281	130.0
12 G AWG16	17.5	450	224.0
18 G AWG16	20.5	640	315.0
25 G AWG16	24.9	930	475.0
34 G AWG16	27.1	1,085	587.0
42 G AWG16	29.5	1,375	728.0
2 X AWG14	7.7	97	81.0
3 G AWG14	11.9	226	103.0
4 G AWG14	13.1	271	122.0
5 G AWG14	14.2	331	173.0
7 G AWG14	15.2	411	213.0
12 G AWG14	20.9	635	343.0
18 G AWG14	25.0	1,057	552.0
25 G AWG14	25.9	1,470	804.0

usual delivery design: 500 m drum

H05VV5-F

The oil-resistant PVC control cable with three standards, with numbered cores according to VDE/UL/CSA for the application in Europe and North America

Harmonized cable designed with UL/CSA approval for fixed installation and occasionally flexible application. As a measuring line or control cable for machine-tool building, control devices, in and on processing and production tools with medium mechanical load conditions, in the machine engineering, plant engineering and construction as well as in the field of power plant building, air conditioning installations and also in office machines and machines for data processing. For fixed installation as well as for occasionally, non-continuously recurring movement application, also in wet interiors. For outdoor use considering the temperature range, UV protection must be guaranteed. The outer sheath is made of special PVC and resistant to the most common oils and lubricants.

CABLE MAKE-UP

a. according to UL style 2587 and 10012, CSA 22.2 No 210.2
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation PVC TI3 according to HD 21.1
d. core colour: black with white figure printing, from 3 cores onwards with green/yellow core
e. cores stranded in layers
f. outer sheath PVC TM 5 according to HD 21.1, preferred colour grey
g. changes in sheath colour on request

TECHNICAL DATA

a. rated voltage Uo/U VDE 300/500 V
b. operating voltage UL/CSA 600 V
c. test voltage power cores 4000 V
d. temperature range flexible application -5° C ... +90° C
e. temperature range fixed installation -40° C ... +90° C
f. minimum bending radius fixed installation 6 x outer diameter
g. minimum bending radius flexible 15 x outer diameter
h. fire behaviour according to DIN EN 50265-2-1 (previously DIN VDE 0472-804 test method B) and according to VW1-UL 1581, FT1-CSA 22.2 No 210.2

Number of cores x cross-section in mm² per conductor	Cross-section in AWG/MCM	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.5	AWG 22	5.9	48	9.6
3 G 0.5	AWG 22	6.2	55	14.4
4 G 0.5	AWG 22	6.9	67	19.2
5 G 0.5	AWG 22	7.5	80	24.0

H05VV5-F

The oil-resistant PVC control cable with three standards, with numbered cores according to VDE/UL/CSA for the application in Europe and North America

Number of cores x cross-section in mm² per conductor	Cross-section in AWG/MCM	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
7 G 0.5	AWG 22	8.5	110	33.6
12 G 0.5	AWG 22	11.4	165	58.0
16 G 0.5	AWG 22	12.6	220	77.0
18 G 0.5	AWG 22	13.3	250	87.0
25 G 0.5	AWG 22	16.0	340	120.0
34 G 0.5	AWG 22	18.8	455	164.0
40 G 0.5	AWG 22	20.1	545	192.0
50 G 0.5	AWG 22	21.8	610	240.0
2 X 0.75	AWG 20	6.3	59	14.4
3 G 0.75	AWG 20	6.7	69	21.6
4 G 0.75	AWG 20	7.3	83	28.8
5 G 0.75	AWG 20	8.2	105	36.0
7 G 0.75	AWG 20	9.9	150	51.0
12 G 0.75	AWG 20	11.9	220	87.0
18 G 0.75	AWG 20	14.4	305	130.0
25 G 0.75	AWG 20	17.5	430	180.0
34 G 0.75	AWG 20	20.1	575	245.0
41 G 0.75	AWG 20	22.5	665	296.0
50 G 0.75	AWG 20	23.4	780	360.0
61 G 0.75	AWG 20	25.4	920	440.0
2 X 1	AWG 18	6.6	63	19.2
3 G 1	AWG 18	7.0	77	28.8
4 G 1	AWG 18	7.7	93	38.4
5 G 1	AWG 18	8.6	120	48.0
7 G 1	AWG 18	10.4	170	68.0
12 G 1	AWG 18	12.9	250	116.0
18 G 1	AWG 18	15.1	355	173.0
25 G 1	AWG 18	18.6	530	240.0
34 G 1	AWG 18	21.0	655	327.0
41 G 1	AWG 18	22.7	800	394.0
60 G 1	AWG 18	26.8	1,090	586.0
50 G 1	AWG 18	25.3	955	480.0
2 X 1.5	AWG 16	7.2	79	28.8
3 G 1.5	AWG 16	8.1	105	43.2
4 G 1.5	AWG 16	9.1	140	58.0
5 G 1.5	AWG 16	10.2	175	72.0
7 G 1.5	AWG 16	12.5	260	101.0
12 G 1.5	AWG 16	15.1	370	173.0
14 G 1.5	AWG 16	16.1	420	202.0
18 G 1.5	AWG 16	18.0	540	260.0
25 G 1.5	AWG 16	21.9	750	360.0
34 G 1.5	AWG 16	23.2	875	490.0
41 G 1.5	AWG 16	24.9	1,064	590.0
50 G 1.5	AWG 16	27.7	1,240	720.0
2 X 2.5	AWG 14	8.9	125	48.0

H05VV5-F

The oil-resistant PVC control cable with three standards, with numbered cores according to VDE/UL/CSA for the application in Europe and North America

Number of cores x cross-section in mm² per conductor	Cross-section in AWG/MCM	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
3 G 2.5	AWG 14	9.9	170	72.0
4 G 2.5	AWG 14	11.0	205	96.0
5 G 2.5	AWG 14	12.2	250	120.0
7 G 2.5	AWG 14	14.9	375	168.0
12 G 2.5	AWG 14	18.2	555	288.0
18 G 2.5	AWG 14	21.9	815	432.0
25 G 2.5	AWG 14	26.5	1,140	600.0
34 G 2.5	AWG 14	27.6	1,225	711.0

usual delivery design: 500 m drum

H05VVC4V5-K

The oil-resistant PVC control cable with three standards, with numbered cores and Cu shield according to VDE/UL/CSA for the application in Europe and North America

Harmonized cable designed with UL/CSA approval for fixed installation and occasionally flexible application. As a measuring line or control cable for machine-tool building, control devices, in and on processing and production tools with medium mechanical load conditions, in the machine engineering, plant engineering and construction as well as in the field of power plant building, air conditioning installations and also in office machines and machines for data processing. For fixed installation as well as for occasionally, non-continuously recurring movement application, also in wet interiors. For outdoor use considering the temperature range, UV protection must be guaranteed. Due to the optimized shielding the conductor is suitable for systems where a good noise suppression is necessary and where interference of signals by electric external magnetic fields must be avoided (EMC). The outer sheath is made of special PVC and resistant to the most common oils and lubricants.

CABLE MAKE-UP

a. according to UL style 2587 and 10012, CSA 22.2 No 210.2
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation PVC TI3 according to HD 21.1
d. core colour: black with white figure printing, from 3 cores onwards with green/yellow core
e. cores stranded in layers, inner sheath
f. optimized screening braiding of tinned copper wires
g. outer sheath PVC TM 5 according to HD 21.1, preferred colour grey
h. changes in sheath colour on request

TECHNICAL DATA

a. rated voltage Uo/U VDE 300/500 V
b. operating voltage UL/CSA 600 V
c. test voltage 4000 V
d. temperature range flexible application -5° C ... +90° C
e. temperature range fixed installation -40° C ... +90° C
f. minimum bending radius fixed installation 6 x outer diameter
g. minimum bending radius flexible 20 x outer diameter
h. fire behaviour according to DIN EN 60332-1-2

Number of cores x cross-section in mm² per conductor	Cross-section in AWG/MCM	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.5	AWG 22	7.8	95	39.0
3 G 0.5	AWG 22	8.4	105	45.0
4 G 0.5	AWG 22	8.9	120	50.0
5 G 0.5	AWG 22	9.6	139	60.0

H05VVC4V5-K

The oil-resistant PVC control cable with three standards, with numbered cores and Cu shield according to VDE/UL/CSA for the application in Europe and North America

Number of cores x cross-section in mm² per conductor	Cross-section in AWG/MCM	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
7 G 0.5	AWG 22	11.0	187	76.0
12 G 0.5	AWG 22	12.9	254	121.0
18 G 0.5	AWG 22	15.4	360	163.0
27 G 0.5	AWG 22	18.3	489	218.0
36 G 0.5	AWG 22	20.8	619	276.0
48 G 0.5	AWG 22	24.0	820	380.0
2 X 0.75	AWG 20	8.4	110	47.0
3 G 0.75	AWG 20	9.0	125	52.0
4 G 0.75	AWG 20	9.8	150	57.0
5 G 0.75	AWG 20	10.5	175	69.0
7 G 0.75	AWG 20	12.4	240	93.0
12 G 0.75	AWG 20	14.8	316	162.0
18 G 0.75	AWG 20	17.3	445	215.0
25 G 0.75	AWG 20	19.7	620	278.0
34 G 0.75	AWG 20	22.2	810	379.0
50 G 0.75	AWG 20	27.1	1,075	535.0
2 X 1	AWG 18	8.7	115	50.0
3 G 1	AWG 18	9.3	134	63.0
4 G 1	AWG 18	9.8	153	75.0
5 G 1	AWG 18	10.7	182	88.0
12 G 1	AWG 18	15.2	364	189
7 G 1	AWG 18	12.4	249	123
18 G 1	AWG 18	17.3	484	255
27 G 1	AWG 18	21.0	672	358.0
36 G 1	AWG 18	23.7	868	456.0
48 G 1	AWG 18	26.7	1,123	625.0
2 X 1.5	AWG 16	9.9	148	63.0
3 G 1.5	AWG 16	10.2	165	80.0
4 G 1.5	AWG 16	11.2	200	89.0
5 G 1.5	AWG 16	12.1	225	109.0
7 G 1.5	AWG 16	13.1	285	135.0
12 G 1.5	AWG 16	17.5	455	232.0
18 G 1.5	AWG 16	20.5	645	328.0
25 G 1.5	AWG 16	24.9	935	492.0
34 G 1.5	AWG 16	27.1	1,090	611.0
42 G 1.5	AWG 16	29.5	1,380	757.0
2 X 2.5	AWG 16	7.7	101	85.0
3 G 2.5	AWG 16	11.9	230	109.0
4 G 2.5	AWG 16	13.1	275	130.0
5 G 2.5	AWG 16	14.2	335	183.0
7 G 2.5	AWG 16	15.2	415	227.0
12 G 2.5	AWG 16	20.9	640	367.0
18 G 2.5	AWG 16	25.0	1,062	588.0

usual delivery design: 500 m drum

BALZERCONTROL-PUR

The robust PVC control cable with numbered cores and PUR sheath

Optimized control cable for control devices, in and on processing and production tools with medium mechanical load conditions, in the machine engineering, plant engineering and construction as well as in the field of power plant building, air conditioning installations and also in office machines and machines for data processing. For fixed installation as well as for occasionally, non-continuously recurring movement application, also in wet interiors. The robust PUR sheath provides a high abrasion and impact resistance as well as good resistance to the most common oils and lubricants. For permanent outdoor use, UV protection must be guaranteed or a design with integrated UV protection must be chosen.

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation PVC TI2 according to HD 21.1
d. core colour: black with white figure printing, from 3 cores onwards with green/yellow core
e. cores stranded in layers
f. outer sheath PUR according to DIN EN 50363-10-2 matted, preferred colour grey
g. changes in sheath colour on request
h. UV resistant version on request

TECHNICAL DATA

a. rated voltage Uo/U VDE 300/500 V
b. test voltage 4000 V
c. temperature range flexible application -5° C ... +70° C
d. temperature range fixed installation -40° C ... +70° C
e. minimum bending radius fixed installation 6 x outer diameter
f. minimum bending radius flexible 15 x outer diameter
g. fire behaviour according to DIN EN 60332-1-2

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 x 0.5	7.8	95	9.6
3 G 0.5	8.4	105	14.4
4 G 0.5	8.9	120	19.2
5 G 0.5	9.6	139	24.0
7 G 0.5	11.0	187	33.6
12 G 0.5	12.9	254	58.0

BALZERCONTROL-PUR

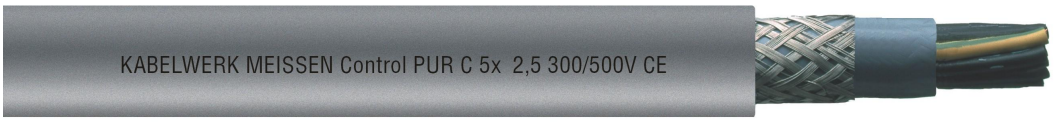
The robust PVC control cable with numbered cores and PUR sheath

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
18 G 0.5	15.4	360	87.0
27 G 0.5	18.3	489	130.0
36 G 0.5	20.8	619	173.0
48 G 0.5	24.0	820	231.0
2 x 0.75	8.4	110	14.4
3 G 0.75	9.0	125	21.6
4 G 0.75	9.8	150	28.8
5 G 0.75	10.5	175	36.0
7 G 0.75	12.4	240	51.0
12 G 0.75	14.8	316	87.0
18 G 0.75	17.3	445	130.0
25 G 0.75	19.7	620	180.0
34 G 0.75	22.2	810	245.0
50 G 0.75	27.1	1,075	360.0
2 x 1.0	8.7	115	19.2
3 G 1.0	9.3	134	28.8
4 G 1.0	9.8	153	38.4
5 G 1.0	10.7	182	48.0
7 G 1.0	12.4	249	68.0
12 G 1.0	15.2	364	116.0
18 G 1	17.3	484	173.0
27 G 1.0	21.0	672	260.0
36 G 1.0	23.7	868	346.0
48 G 1.0	26.7	1,123	461.0
2 x 1.5	9.7	148	28.8
3 G 1.5	10.7	165	43.2
4 G 1.5	11.2	200	58.0
5 G 1.5	12.1	225	72.0
7 G 1.5	13.1	285	101.0
12 G 1.5	17.5	455	173.0
18 G 1.5	20.5	645	260.0
25 G 1.5	24.9	935	360.0
34 G 1.5	27.1	1,090	490.0
42 G 1.5	29.5	1,380	605.0
2 x 2.5	7.7	101	48.0
3 G 2.5	11.9	230	72.0
4 G 2.5	13.1	275	96.0
5 G 2.5	14.2	335	120.0
7 G 2.5	15.2	415	168.0
12 G 2.5	20.9	640	288.0

usual delivery design: 500 m drum

BALZERCONTROL-PUR C

The robust PVC control cable with numbered cores, PUR sheath and Cu shield



Optimized control cable for control devices in and on processing and production tools with medium mechanical load conditions, in the machine engineering, plant engineering and construction as well as in the field of power plant building, air conditioning installations and also in office machines and machines for data processing. For fixed installation as well as for occasionally, non-continuously recurring movement application, also in wet interiors. The robust PUR sheath provides a high abrasion and impact resistance as well as good resistance to the most common oils and lubricants. For permanent outdoor use, UV protection must be guaranteed or a design with integrated UV protection must be chosen. Due to the optimized shielding the conductor is suitable for systems where a good noise suppression is necessary and where interference of signals by electric external magnetic fields must be avoided (EMC).

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation PVC TI2 according to HD 21.1
d. core colour: black with white figure printing, from 3 cores onwards with green/yellow core
e. cores stranded in layers, inner sheath
f. optimized screening braiding of tinned copper wires
g. outer sheath PUR according to DIN EN 50363-10-2 matted, preferred colour grey
h. UV resistant version on request
i. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage Uo/U 300/500 V
b. test voltage 4000 V
c. temperature range flexible application -5° C ... +70° C
d. temperature range fixed installation -40° C ... +70° C
e. minimum bending radius fixed installation 6 x outer diameter
f. minimum bending radius flexible 20 x outer diameter
g. fire behaviour according to DIN EN 60332-1-2
h. resistant to oil according to DIN EN 50363-10-2

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 x 0.5	7.1	59	30.8
2 x 0.75	7.4	67	37.9

BALZERCONTROL-PUR C

The robust PVC control cable with numbered cores, PUR sheath and Cu shield

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 x 1	8.4	83	45.1
2 x 1.5	9.0	96	57.0
2 x 2.5	10.7	141	81.0
3 x 0.5	7.4	71	37.9
4 x 0.5	8.5	90	45.1
5 x 0.5	9.2	106	53.0
7 x 0.5	10.9	149	67.0
12 x 0.5	13.1	218	116.0
18 x 0.5	14.9	293	153.0
25 x 0.5	18.3	416	204.0
34 x 0.5	21.1	545	255.0
3 x 0.75	8.4	89	47.5
4 x 0.75	9.0	105	57.0
5 x 0.75	9.6	122	65.0
7 x 0.75	11.5	177	88.0
12 x 0.75	13.8	254	145.0
18 x 0.75	16.5	374	205.0
25 x 0.75	19.9	527	272.0
34 x 0.75	22.3	661	345.0
3 x 1	8.7	98	55.0
4 x 1	9.4	117	67.0
5 x 1	10.1	143	81.0
7 x 1	12.1	201	105.0
12 x 1	14.5	298	182.0
18 x 1	17.3	431	248.0
25 x 1	21.4	610	332.0
34 x 1	23.4	783	439.0
3 x 1.5	9.4	116	72.0
4 x 1.5	10.1	142	91.0
5 x 1.5	11.3	181	110.0
7 x 1.5	13.1	244	143.0
12 x 1.5	16.5	383	248.0
18 x 1.5	19.5	549	343.0
25 x 1.5	23.3	758	473.0
34 x 1.5	26.4	1,026	647.0
3 x 2.5	11.3	179	110.0
4 x 2.5	12.2	215	134.0
5 x 2.5	13.4	279	179.0
7 x 2.5	16.4	407	243.0
12 x 2.5	20.0	597	380.0
18 x 2.5	23.3	843	545.0
25 x 2.5	28.3	1,219	757.0
34 x 2.5	31.8	1,620	1,012.0

usual delivery structure: 500 m drum

motor connecting cables PVC for fixed installation

YSLY-JZ

The 0.6/1 kV PVC motor connecting cable with numbered cores for fixed installation

Connection cable with high safety requirements for control devices in and on processing and production tools in the machine-tool building, plant engineering and construction, production lines and band-conveyors with medium mechanical load conditions. For fixed installation as well as for occasionally non-continuously recurring movement application, also in wet interiors. For outdoor use considering the temperature range, UV protection must be guaranteed.

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation PVC TI2 according to HD 21.1
d. core colour: black with white figure printing and green/yellow core
e. cores stranded
f. outer sheath PVC TM 2 according to HD 21.1, preferred colour grey
g. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage Uo/U 600/1000 V
b. test voltage 4000 V
c. temperature range flexible application -5° C ... +70° C
d. temperature range fixed installation -40° C ... +70° C
e. minimum bending radius fixed installation 6 x outer diameter
f. minimum bending radius flexible 15 x outer diameter
g. fire behaviour according to DIN EN 60332-1-2

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
4 X 1.5	9.9	155	58
4 X 2.5	12.1	226	96
4 X 4.0	13.7	325	154
4 X 6.0	15.9	462	231
4 X 10	21.1	768	384
4 X 16	24.8	1,156	615

usual delivery design: 500 m drum

motor connecting cables PVC for fixed installation

YSLYCY-JZ

The 0.6/1 kV PVC motor connecting cable with numbered cores and Cu shield for fixed installation

Connection cable with high safety requirements for control devices in and on processing and production tools in the machine-tool building, plant engineering and construction, production lines and band-conveyors with medium mechanical load conditions. For fixed installation as well as for occasionally non-continuously recurring movement application, also in wet interiors. For outdoor use considering the temperature range, UV protection must be guaranteed. Due to the optimized shielding the conductor is suitable for systems where a good noise suppression is necessary (EMC).

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation PVC TI2 according to HD 21.1
d. core colour: black with white figure printing and green/yellow core
e. cores paired, PVC inner sheath
f. optimized screening braiding of tinned copper wires
g. outer sheath PVC TM 2 according to HD 21.1, preferred colour grey
h. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage Uo/U 600/1000 V
b. test voltage 4000 V
c. temperature range flexible application -5° C ... +70° C
d. temperature range fixed installation -40° C ... +70° C
e. minimum bending radius fixed installation 6 x outer diameter
f. minimum bending radius flexible 20 x outer diameter
g. fire behaviour according to DIN EN 60332-1-2

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
4 X 1.5	12.4	260	102
4 X 2.5	15.3	412	169
4 X 4	18.3	578	235
4 X 6	19.6	710	317
4 X 10	24.5	1,179	568
4 X 16	29.5	1,650	822
4 X 25	32.9	2,170	1,163

usual delivery design: 500 m drum

BALZERCONTROL-FEEDER

The 0.6/1 kV PVC servo cable for brushless motors with Cu shield for fixed installation

Connection cable for motors, which need simultaneously message and data transmission cables, especially for robots and similar systems with electric drives, with medium mechanical load conditions. For fixed installation as well as for occasionally non-continuously recurring movement application, also in wet interiors. For outdoor use considering the temperature range, UV protection must be guaranteed. Due to the optimized shielding the conductor is suitable for systems where a good noise suppression is necessary and where interference of signals by electric external magnetic fields must be avoided (EMC).

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation PVC TI2 according to HD 21.1
d. core colour power cores: black with white figure printing and green/yellow core
e. marking of the control pairs: black cores with white figure printing, cores stranded with Al-laminated foil and screening braiding of tinned copper wire
f. power cores and control pairs stranded in layers, wrapping in foil
g. optimized screening braiding of tinned copper wires
h. outer sheath PVC TM 2 according to HD 21.1, preferred colour grey
i. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage power cores Uo/U 600/1000 V
b. rated voltage control cores Uo/U 300/300 V
c. test voltage power cores 4000 V
d. test voltage control cores 2000 V
e. temperature range flexible application -5° C ... +70° C
f. temperature range fixed installation -40° C ... +70° C
g. minimum bending radius fixed installation 6 x outer diameter
h. minimum bending radius flexible 20 x outer diameter
i. fire behaviour according to DIN EN 60332-1-2

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
(4X0.75 +2X(2X0.34)STC)C	12.6	210	97.0
(4X1.5 +2X(2X0.77)STC)C	15.5	320	172

BALZERCONTROL-FEEDER

The 0.6/1 kV PVC servo cable for brushless motors with Cu shield for fixed installation

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
(4X2.5 +2X(2X0.75)STC)C	16.8	405	215
(4X4 + (2X0.75)STC +(2X1.0)STC)C	18.1	495	286
(4X6 +(2X0.75)STC +(2X1.0)STC)C	20.2	620	370
(4X10 +(2x0.75)STC +(2x1.0)STC)C	23.3	900	539

other combinations of cross-sections and greater cross-sections on request
usual delivery design: 500 m drum

BALZERCONTROL-Y-EMV (2YSLSTCY-J) 2YSLSTCY-J

The motor connecting cable with coloured PE cores, Cu shield and PVC sheath

As motor connecting cable in machine tools, handling devices, production and processing tools, band-conveyors and industrial robots. At the moment the demand for three phase current drives variable in speed is increasing. A complete system consists of the frequency converter, the motor connecting cable and the three phase current motor driven by a frequency converter.
Especially high demands are made on the motor connecting cable. These demands result from the use of modern converter technology, which produces electromagnetic fields via high pulse frequencies. To minimize the effect of these interfering fields to the environment, CONTROL-Y-EMV cables have a special Cu braid and an additional electrostatic shield. Thus a low transfer independence and good EMC results can be achieved. In addition CONTROL-Y-EMV cables are characterized as cables with especially good dialectric properties and low capacitance because of the use of polyethylene (PE) as insulation material. In comparison to conventional PVC connecting cables it means a power transfer with less loss. The cables are suitable for medium mechanical load conditions and fixed installation in dry, damp and wet interiors and for outside use.

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation polyethylene (PE) according to DIN EN 50290-2-23
d. core colours grey, black, brown and protective conductor green/yellow
e. cores stranded
f. banding with static shielding of Al-laminated foil
g. optimized screening braiding of tinned copper wires
h. outer sheath PVC TM 2 according to HD 21.1, preferred colour transparent

TECHNICAL DATA

a. rated voltage Uo/U 600/1000 V
b. test voltage 4000 V
c. coupling impedance at 30 MHz: <100 Ohm/km
d. temperature range flexible application -5° C ... +70° C
e. temperature range fixed installation -40° C ... +70° C
f. allowable limiting temperature at the conductor in operation +70° C
g. allowable limiting temperature at the conductor in case of short circuit +150° C, 5 s
h. fire behaviour according to EN 60332-1-2
i. minimum bending radii according to DIN VDE 0298-300

BALZERCONTROL-Y-EMV (2YSLSTCY-J) 2YSLSTCY-J

The motor connecting cable with coloured PE cores, Cu shield and PVC sheath

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
4 X 1.5	11.4	170	96
4 X 2.5	13.0	230	144
4 X 4	14.7	320	223
4 X 6	16.7	425	306
4 X 10	21.0	670	478
4 X 16	23.7	950	723
4 X 25	28.3	1,400	1,100
4 X 35	31.2	1,890	1,542
4 X 50	38.7	2,650	2,166
4 X 70	43.4	3,530	3,006
4 X 95	49.4	4,520	4,007
4 X 120	53.4	5,570	5,108
4 X 185	64.1	8,230	7,691
4 X 240	72.5	10,900	10,629

BALZERCONTROL-Y-EMV (2YSLSTCYk-J) 2YSLSTCYk-J

The motor connecting cable with coloured PE cores, Cu shield and PVC sheath for outdoor use

As motor connecting cable in machine tools, handling devices, production and processing tools, band-conveyors and industrial robots. At the moment the demand for three phase current drives variable in speed is increasing. A complete system consists of the frequency converter, the motor connecting cable and the three phase current motor driven by a frequency converter.
Especially high demands are made on the motor connecting cable. These demands result from the use of modern converter technology, which produces electromagnetic fields via high pulse frequencies. To minimize the effect of these interfering fields to the environment, CONTROL-Y-EMV cables have a special Cu braid and an additional electrostatic shield. Thus a low transfer independence and good EMC results can be achieved. In addition CONTROL-Y-EMV cables are characterized as cables with especially good dialectric properties and low capacitance because of the use of polyethylene (PE) as insulation material. In comparison to conventional PVC connecting cables it means a power transfer with less loss. The cables are suitable for medium mechanical load conditions and fixed installation in dry, damp and wet interiors and for outside use.

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation polyethylene (PE) according to DIN EN 50290-2-23
d. core colours grey, black, brown and protective conductor green/yellow
e. cores stranded
f. banding with static shielding of Al-laminated foil
g. optimized screening braiding of tinned copper wires
h. outer sheath PVC TM 4 according to HD 21.1, black

TECHNICAL DATA

a. rated voltage Uo/U 600/1000 V
b. test voltage 4000 V
c. coupling impedance at 30 MHz: <100 Ohm/km
d. temperature range flexible application -25° C ... +50° C
e. temperature range fixed installation -40° C ... +70° C
f. allowable limiting temperature at the conductor in operation +70° C
g. allowable limiting temperature at the conductor in case of short circuit +150° C
h. fire behaviour according to EN 50265-2-1
i. minimum bending radii according to DIN VDE 0298-300

BALZERCONTROL-Y-EMV (2YSLSTCYk-J) 2YSLSTCYk-J

The motor connecting cable with coloured PE cores, Cu shield and PVC sheath for outdoor use

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
4 X 1.5	11.4	175	96
4 X 2.5	13.0	235	141
4 X 4	14.7	330	222
4 X 6	16.7	440	301
4 X 10	21.0	690	478
4 X 16	23.7	970	723
4 X 25	28.3	1,440	1,100
4 X 35	31.2	1,900	1,544
4 X 50	38.7	2,670	2,150
4 X 70	43.2	3,550	3,002
4 X 95	49.4	4,570	4,109
4 X 120	53.4	5,660	5,108
4 X 150	64.1	8,330	7,977
4 X 150	72.5	10,900	10,629

BALZERCONTROL-Y-EMV (2YSLSTCY-J) ("3 1/2 conductor") 2YSLSTCY-J

The motor connecting cable with coloured PE cores, Cu shield and PVC sheath

As motor connecting cable in machine tools, handling devices, production and processing tools, band-conveyors and industrial robots. At the moment the demand for three phase current drives variable in speed is increasing. A complete system consists of the frequency converter, the motor connecting cable and the three phase current motor driven by a frequency converter.
Especially high demands are made on the motor connecting cable. These demands result from the use of modern converter technology, which produces electromagnetic fields via high pulse frequencies. To minimize the effect of these interfering fields to the environment, CONTROL-Y-EMV cables have a special Cu braid and an additional electrostatic shield. Thus a low transfer independence and good EMC results can be achieved. In addition CONTROL-Y-EMV cables are characterized as cables with especially good dialectric properties and low capacitance because of the use of polyethylene (PE) as insulation material. In comparison to conventional PVC connecting cables it means a power transfer with less loss. The cables are suitable for medium mechanical load conditions and fixed installation in dry, damp and wet interiors.

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation polyethylene (PE) according to DIN EN 50290-2-23
d. core colours grey, black, brown and protective conductor green/yellow
e. cores stranded
f. balanced arrangement of 3 power cores; the protective conductor, splitted into 3 single conductors, lies in the external filling
g. banding with static shielding of Al-laminated foil
h. optimized screening braiding of tinned copper wires
i. outer sheath PVC TM 2 according to HD 21.1, preferred colour transparent

TECHNICAL DATA

a. rated voltage Uo/U 600/1000 V
b. test voltage 4000 V
c. coupling impedance at 30 MHz: <100 Ohm/km
d. temperature range flexible application -5° C ... +70° C
e. temperature range fixed installation -40° C ... +70° C
f. allowable limiting temperature at the conductor in operation +70° C
g. allowable limiting temperature at the conductor in case of short circuit +150° C 5 s
h. fire behaviour according to EN 50265-2-1
i. minimum bending radii according to DIN VDE 0298-300

BALZERCONTROL-Y-EMV (2YSLSTCY-J) ("3 1/2 conductor") 2YSLSTCY-J

The motor connecting cable with coloured PE cores, Cu shield and PVC sheath

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Material code	Copper weight kg/km
3X1.5 + 3G0.25	12.5	200	0	91
3X2.5 + 3G0.5	14.2	275	0	144
3X4 + 3G0.75	15.5	345	0	205
3X6 + 3G1	18.4	470	0	284
3X10 + 3G1.5	19.5	610	0	511
3X16 + 3G2.5	22.1	850	0	635
3X25 + 3G4	25.4	1,260	0	1,204
3X35 + 3G6	28.7	1,660	0	1,492
3X50 + 3G10	35.4	2,330	0	1,945
3X70 + 3G10	39.7	3,120	0	2,980
3X95 + 3G16	44.8	4,050	0	3,564
3X120 + 3G16	47.4	4,770	0	4,836
3X150 + 3G25	54.6	6,100	0	5,527
3X150 + 3G25	58.6	7,340	0	6,848

BALZERCONTROL-Y-EMV (2YSLSTCYk-J) ("3 1/2 conductor") 2YSLSTCYk-J

The motor connecting cable with coloured PE cores, Cu shield and PVC sheath for outdoor use (cold-resistant)

As motor connecting cable in machine tools, handling devices, production and processing tools, band-conveyors and industrial robots. At the moment the demand for three phase current drives variable in speed is increasing. A complete system consists of the frequency converter, the motor connecting cable and the three phase current motor driven by a frequency converter.
Especially high demands are made on the motor connecting cable. These demands result from the use of modern converter technology, which produces electromagnetic fields via high pulse frequencies. To minimize the effect of these interfering fields to the environment, CONTROL-Y-EMV cables have a special Cu braid and an additional electrostatic shield. Thus a low transfer independence and good EMC results can be achieved. In addition CONTROL-Y-EMV cables are characterized as cables with especially good dialectric properties and low capacitance because of the use of polyethylene (PE) as insulation material. In comparison to conventional PVC connecting cables it means a power transfer with less loss. The cables are suitable for medium mechanical load conditions and fixed installation in dry, damp and wet interiors and for outside use.

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation polyethylene (PE) according to DIN EN 50290-2-23
d. core colours grey, black, brown and protective conductor green/yellow
e. cores stranded
f. balanced arrangement of 3 power cores; the protective conductor, splitted into 3 single conductors, lies in the external filling
g. banding with static shielding of Al-laminated foil
h. optimized screening braiding of tinned copper wires
i. outer sheath PVC TM 4 according to HD 21.1, black

TECHNICAL DATA

a. rated voltage Uo/U 600/1000 V
b. test voltage 4000 V
c. coupling impedance at 30 MHz: <100 Ohm/km
d. temperature range flexible application -5° C ... +70° C
e. temperature range fixed installation -40° C ... +70° C
f. allowable limiting temperature at the conductor in operation +70° C
g. allowable limiting temperature at the conductor in case of short circuit +150° C 5 s
h. fire behaviour according to EN 50265-2-1
i. minimum bending radii according to DIN VDE 0298-300

BALZERCONTROL-Y-EMV (2YSLSTCYk-J) ("3 1/2 conductor") 2YSLSTCYk-J

The motor connecting cable with coloured PE cores, Cu shield and PVC sheath for outdoor use (cold-resistant)

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Material code	Copper weight kg/km
3X1.5 + 3G0.25	12.5	200	2YSLSTCYk-J	91
3X2.5 + 3G0.5	14.2	275	2YSLSTCYk-J	144
3X4 + 3G0.75	15.5	345	2YSLSTCYk-J	205
3X6 + 3G1	18.4	470	2YSLSTCYk-J	284
3X10 + 3G1.5	19.5	610	2YSLSTCYk-J	511
3X16 + 3G2.5	22.7	850	2YSLSTCYk-J	635
3X25 + 3G4	25.4	1,260	2YSLSTCYk-J	1,204
3X35 + 3G6	28.7	1,660	2YSLSTCYk-J	1,492
3X50 + 3G10	35.4	2,330	2YSLSTCYk-J	1,945
3X70 + 3G10	39.7	3,120	2YSLSTCYk-J	2,980
3X95 + 3G16	44.8	4,050	2YSLSTCYk-J	3,564
3X120 + 3G16	47.4	4,770	2YSLSTCYk-J	4,836
3X150 + 3G25	54.6	6,100	2YSLSTCYk-J	5,527
3X185 + 3G35	58.6	7,340	2YSLSTCYk-J	6,848

H03VV-F

The harmonized PVC flexible conduit according to DIN VDE 0281-5

RoHS COMPLIANT CE ⊲VDE⊳ ⊲HAR⊳

As a connecting cable for light electrical appliances like kitchen machines, office machines and similar appliances with low mechanical load conditions. Excluded from use in damp and wet interiors as well as for connecting of cookers and heating devices. This conductor is not suitable for outdoor use. Futhermore, utilization under industrial application conditions and for the connection of power tools used in an industrial way is not allowed.

CABLE MAKE-UP

a. according to DIN VDE 0281-5 (HD 21.5)
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation PVC TI2 according to HD 21.1
d. core colour: coloured according to DIN VDE 0293-308, from 3 cores onwards with green/yellow core
e. cores stranded
f. outer sheath PVC TM 2 according to HD 21.1, preferred colour white (standard colours: black, chocolate coloured, gold, grey)
g. number of cores >4 on request, then cable make-up based on DIN VDE 0293-308 and classification "S03VV-F"
h. changes in sheath colour on request

TECHNICAL DATA

a. rated voltage Uo/U 300/300 V
b. test voltage 3000 V
c. temperature range flexible application -5° C ... +70° C
d. temperature range fixed installation -40° C ... +70° C
e. minimum bending radius fixed installation 6 x outer diameter
f. minimum bending radius flexible 15 x outer diameter
g. fire behaviour according to DIN EN 60332-1-2

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.5	5.1	37	9.6
3 G 0.5	5.9	49	14.4
4 G 0.5	6.1	60	19.2
5 G 0.5	6.7	71	24.0
2 X 0.75	5.5	45	14.4
3 G 0.75	5.8	54	21.6
4 G 0.75	6.4	65	28.8

usual delivery design: 500 m drum, 100 m coil shrink wrapped

H05VV-F

The harmonized PVC flexible conduit according to DIN VDE 0281-5

RoHS COMPLIANT CE ◁VDE▷ ◁HAR▷

As a connecting cable for light electrical appliances like kitchen machines, office machines and similar appliances with medium mechanical load conditions in households and offices as well as for home appliances also in damp and wet interiors. This conductor is not suitable for outdoor use and for the connection of power tools used in an industrial way.
The utilization for the connection of cookers and heating devices is allowed as long as the cable gets not in touch with hot parts or is exposed to other heat sources.

CABLE MAKE-UP

a. according to DIN VDE 0281-5 (HD 21.5)
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation PVC TI2 according to HD 21.1
d. core colour: coloured according to DIN VDE 0293-308, from 3 cores onwards with green/yellow core
e. outer sheath PVC TM 2 according to HD 21.1, preferred colour white (standard colours: black, chocolate coloured, gold, grey)
f. number of cores >5 on request, then cable make-up based on DIN VDE 0293-308 and classification "S05VV-F"
g. changes in sheath colour on request

TECHNICAL DATA

a. rated voltage Uo/U 300/500 V
b. test voltage 4000 V
c. temperature range flexible application +5° C ... +60° C
d. temperature range fixed installation -40° C ... +60° C
e. minimum bending radius fixed installation 6 x outer diameter
f. minimum bending radius flexible 15 x outer diameter
g. fire behaviour according to DIN EN 60332-1-2

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.75	6.3	56	14.4
3 G 0.75	6.7	66	21.6
4 G 0.75	7.7	86	28.8
5 G 0.75	8.2	99	36.0
2 X 1.0	6.6	63	19.2
3 G 1.0	7.0	76	28.8
4 G 1.0	7.9	10	38.4
5 G 1.0	8.6	120	48.0
2 X 1.5	7.6	87	28.8
3 G 1.5	8.3	110	43.2
4 G 1.5	9.3	140	58.0
5 G 1.5	10.4	175	72.0
2 X 2.5	9.5	130	48.0
3 G 2.5	10.1	165	72.0

H05VV-F

The harmonized PVC flexible conduit according to DIN VDE 0281-5

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
4 G 2.5	11.0	200	96.0
5 G 2.5	12.4	255	120.0

usual delivery design: 500 m drum, 100 m coil shrink wrapped

H03V2V2-F

The harmonized, heat-resistant PVC flexible conduit according to DIN VDE 0281-12

RoHS COMPLIANT CE ◁VDE▷ ◁HAR▷

As a heat-resistant connecting cable for light electrical appliances like kitchen machines, office machines and similar appliances with low mechanical load conditions.
Not allowed for utilization in damp and wet interiors and for the connection of cookers and heating devices. This conductor is not suitable for outdoor use. Furthermore, the utilization under industrial conditions and for the connection of power tools used in an industrial way is excluded.

CABLE MAKE-UP

a. according to DIN VDE 0281-12 (HD 21.12)
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation PVC TI3 according to HD 21.1
d. wire marking: coloured according to DIN VDE 0293-308, from 3 cores onwards with green/yellow core
e. number of cores >4 on request, then cable make-up based on DIN VDE 0293-308 and classification "S03V2V2-F"
f. cores stranded in layers
g. outer sheath: PVC TM 3 according to HD 21.1
h. standard colours for sheath: white, black, brown, gold, grey
i. changes in sheath colour on request

TECHNICAL DATA

a. rated voltage Uo/U 300/300 V
b. test voltage 3000 V
c. temperature range fixed installation -40° C...+90° C
d. temperature range flexible application +5° C ... +90° C
e. minimum bending radius fixed installation 6 x outer diameter
f. minimum bending radius flexible 15 x outer diameter
g. fire behaviour according to DIN EN 60332-1-2

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.5	5.1	37	9.6
3 G 0.5	5.9	49	14.4
4 G 0.5	6.1	60	19.2
5 G 0.5	6.7	71	24.0
2 X 0.75	5.5	45	14.4
3 G 0.75	5.8	54	21.6
4 G 0.75	6.4	65	28.8

usual delivery design: 500 m drum, 100 m coil shrink wrapped

H05V2V2-F

The harmonized, heat-resistant PVC flexible conduit according to DIN VDE 0281-12

RoHS COMPLIANT CE ⊲VDE⊳ ⊲HAR⊳

As a connecting cable for light electrical appliances like kitchen machines, office machines and similar appliances with medium mechanical load conditions in households and offices as well as for home appliances also in damp and wet interiors. This conductor is not suitable for outdoor use and for the connection of power tools used in an industrial way.
The utilization for the connection of cookers and heating devices is allowed as long as the cable gets not in touch with hot parts or is exposed to other heat sources.

CABLE MAKE-UP

a. according to DIN VDE 0281-12 (HD 21.12)
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation PVC TI3 according to HD 21.1
d. wire marking: coloured according to DIN VDE 0293-308, from 3 cores onwards with green/yellow core
e. number of cores >4 on request, then cable make-up based on DIN VDE 0293-308 and classification "S03V3V3-F"
f. cores stranded in layers
g. outer sheath: PVC TM 3 according to HD 21.1
h. standard colours for sheath: white, black, brown, gold, grey
i. changes in sheath colour on request

TECHNICAL DATA

a. rated voltage Uo/U 300/500 V
b. test voltage 3000 V
c. minimum bending radius fixed installation 6 x outer diameter
d. minimum bending radius flexible 15 x outer diameter
e. fire behaviour according to DIN EN 60332-1-2
f. temperature range flexible application +5° C ... +90° C
g. temperature range fixed installation -40° C...+90° C
h. fire behaviour according to DIN EN 60332-1-2

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.75	6.3	56	14.4
3 G 0.75	6.7	66	21.6
4 G 0.75	7.7	86	28.8
5 G 0.75	8.2	99	36.0
2 X 1.0	6.6	63	19.2
3 G 1.0	7.0	76	28.8
4 G 1.0	7.9	10	38.4
5 G 1.0	8.6	120	48.0
2 X 1.5	7.6	87	28.8
3 G 1.5	8.3	110	43.2
4 G 1.5	9.3	140	58.0
5 G 1.5	10.4	175	72.0
2 X 2.5	9.5	130	48.0

H05V2V2-F

The harmonized, heat-resistant PVC flexible conduit according to DIN VDE 0281-12

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
3 G 2.5	10.1	165	72.0
4 G 2.5	11.0	200	96.0
5 G 2.5	12.4	255	120.0

usual delivery design: 500 m drum, 100 m coil shrink wrapped

H05VV-F

The harmonized PVC flexible conduit according to DIN VDE 0281-5 und UL/CSA

As a connecting cable for light electrical appliances like kitchen machines, office machines and similar appliances with medium mechanical load conditions in households and offices as well as for home appliances also in damp and wet interiors. This conductor is not suitable for outdoor use and for the connection of power tools used in an industrial way.
The utilization for the connection of cookers and heating devices is allowed as long as the cable gets not in touch with hot parts or is exposed to other heat sources.

CABLE MAKE-UP

a. according to DIN VDE 0281-5 (HD 21.5) and UL style 20200 and CSA C22.2 No. 210.2
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation PVC, soft TI1,2 according to HD 21.1
d. core colour: coloured according to DIN VDE 0293-308, from 3 cores onwards with green/yellow core
e. outer sheath PVC soft, TM 1,2 according to HD 21.1, preferred colour white (standard colours: black, chocolate coloured, gold, grey)
f. number of cores >5 on request, then cable make-up based on DIN VDE 0293-308 and classification "S05VV-F"
g. changes in sheath colour on request

TECHNICAL DATA

a. rated voltage Uo/U 300/500 V
b. operating voltage UL: 300 V
c. test voltage 4000 V
d. temperature range flexible application +5° C ... +60° C
e. temperature range fixed installation -40° C ... +60° C
f. minimum bending radius fixed installation 6 x outer diameter
g. minimum bending radius flexible 15 x outer diameter
h. fire behaviour according to DIN EN 60332-1-2

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.75	6.3	56	14.4
3 G 0.75	6.7	66	21.6
4 G 0.75	7.7	86	28.8
5 G 0.75	8.2	99	36.0
2 X 1.0	6.6	63	19.2
3 G 1.0	7.0	76	28.8
4 G 1.0	7.9	10	38.4
5 G 1.0	8.6	120	48.0
2 X 1.5	8.2	87	28.8
3 G 1.5	8.3	110	43.2
4 G 1.5	9.3	140	58.0
5 G 1.5	10.4	175	72.0

H05VV-F

The harmonized PVC flexible conduit according to DIN VDE 0281-5 und UL/CSA

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 2.5	9.5	130	48.0
3 G 2.5	10.1	165	72.0
4 G 2.5	11.0	200	96.0
5 G 2.5	12.4	255	120.0

usual delivery design: 500 m drum, 100 m coil shrink wrapped

PUR cable YMH11Y, yellow

The flexible conduit with PUR outer sheath for extreme application conditions

As a connecting cable for electric handheld units and light to medium-heavy machine tools with no contact to hot parts and no exposition to intensive heat radiation. It is suitable for agricultural devices and for the utilization at site. The cable can also be used as a control cable in the industry under extreme environmental conditions with increased mechanical load condition (metall chips, rough ground, sharp edges) and occasional contact with mineral oils, weak acids and lyes, solvents.
The cable is largely resistant to oil, hydrolysis, mircobes and weather. This cable is suitable for outdoor use.

CABLE MAKE-UP

a. based on DIN VDE 0250 part 407
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation PVC TI2 according to HD 21.1
d. core colour: coloured according to DIN VDE 0293-308, from 3 cores onwards with green/yellow core
e. cores stranded in layers
f. outer sheath PUR according to DIN EN 50363-10-2 matted, colour yellow (RAL 1016)
g. changes in sheath colour on request

TECHNICAL DATA

a. rated voltage Uo/U 300/300 V
b. test voltage 3000 V
c. temperature range flexible application -5° C ... +70° C
d. temperature range fixed installation -40° C ... +70° C
e. minimum bending radius fixed installation 6 x outer diameter
f. minimum bending radius flexible 15 x outer diameter
g. fire behaviour according to DIN EN 60332-1-2
h. resistant to oil according to DIN EN 50363-10-2

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.5	5.1	37	9.6
3 X 0.5	5.9	49	14.4
4 X 0.5	6.1	60	19.2
5 X 0.5	6.7	71	24.0
2 X 0.75	5.5	45	14.4
3 X 0.75	5.8	54	21.6
4 X 0.75	6.4	65	28.8
5 X 0.75	7.3	86	36.0
2 X 1.0	5.8	50	19.2

PUR cable YMH11Y, yellow

The flexible conduit with PUR outer sheath for extreme application conditions

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
3 X 1.0	6.2	62	28.8
4 X 1.0	6.9	77	38.4
5 X 1.0	7.6	96	48.0
2 X 1.5	6.7	69	28.8
3 X 1.5	7.3	88	43.2
4 X 1.5	8.2	112	58.0
5 X 1.5	9.2	140	72.0
2 X 2.5	8.2	104	48.0
3 X 2.5	8.9	132	72.0
4 X 2.5	9.7	160	96.0
5 X 2.5	10.9	204	120.0
4 X 4.0	14.0	280	154.0
5 X 4.0	15.2	350	192.0
4 X 6.0	15.9	395	231.0
5 X 6.0	17.4	490	288.0
4 X 10	20.0	618	384.0
5 X 10	22.2	740	480.0

usual delivery design: 500 m drum, 100 m coil shrink wrapped
other numbers of cores on request

PUR cable YMH11Y, orange

The highly flexible conduit with PUR outer sheath for extreme application conditions

As a highly flexibel connecting cable for electric handheld units and light to medium-heavy machine tools with no contact to hot parts and no exposition to intensive heat radiation. It is suitable for agricultural devices and for the utilization at site. The cable can also be used as a control cable in the industry under extreme environmental conditions with increased mechanical load condition (metall chips, rough ground, sharp edges) and occasional contact with mineral oils, weak acids and lyes, solvents.
The cable is largely resistant to oil, hydrolysis, mircobes and weather. This cable is suitable for outdoor use.

CABLE MAKE-UP

a. based on DIN VDE 0250 part 407
b. bare copper wire, extra finely stranded class 6 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation PVC TI2 according to HD 21.1
d. core colour: coloured according to DIN VDE 0293-308, from 3 cores onwards with green/yellow core
e. cores stranded in layers
f. outer sheath PUR according to DIN EN 50363-10-2 matted, colour orange (RAL 2003)
g. changes in sheath colour on request

TECHNICAL DATA

a. rated voltage Uo/U 300/500 V
b. temperature range flexible application -5° C ... +70° C
c. temperature range fixed installation -30° C ... +70° C
d. minimum bending radius fixed installation 6 x outer diameter
e. minimum bending radius flexible 15 x outer diameter
f. fire behaviour according to DIN EN 60332-1-2
g. resistant to oil according to DIN EN 50363-10-2

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.5	5.3	38	9.6
3 X 0.5	6.1	50	14.4
4 X 0.5	6.4	61	19.2
5 X 0.5	7.0	73	24.0
2 X 0.75	6.4	54	14.4
3 X 0.75	7.0	64	21.6
4 X 0.75	7.6	79	28.8
5 X 0.75	8.5	100	36.0
2 X 1.0	7.0	61	19.2

PUR cable YMH11Y, orange

The highly flexible conduit with PUR outer sheath for extreme application conditions

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
3 X 1.0	7.4	72	28.8
4 X 1.0	8.1	90	38.4
5 X 1.0	9.1	112	48.0
2 X 1.5	8.0	78	28.8
3 X 1.5	8.6	105	43.2
4 X 1.5	9.6	133	58.0
5 X 1.5	10.5	170	72.0
2 X 2.5	9.8	115	48.0
3 X 2.5	10.4	165	72.0
4 X 2.5	11.6	207	96.0
5 X 2.5	12.9	260	120.0
4 X 4.0	13.6	280	154.0
5 X 4.0	14.8	348	192.0
4 X 6.0	15.5	386	231.0
5 X 6.0	17.0	485	288.0
4 X 10	20.5	620	384.0
5 X 10	22.8	745	480.0

usual delivery design: 500 m drum, 100 m coil shrink wrapped
other numbers of cores on request

BALZERTRONIC LSYY-JZ (-OZ)

The light flexible PVC control cable with numbered cores

Utilization as a light data transmission cable for measuring and controlling applications for electronic automatic controllers in machine engineering, plant engineering and construction for free movement application and without tensile load as well as for fixed installation, also in wet interiors. Application outdoors only with fixed installation and protected from direct solar radiation (UV).
The cables must be protected from stepping on, rolling over and similar mechanical condition by using appropriate arrangement e.g. laying in ducts or conduits.

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation PVC TI2 according to DIN VDE 0281-1 (HD 21.1)
d. core colour: black with white figure printing, with (-JZ) or without (-OZ) green/yellow core
e. cores stranded in layers
f. outer sheath PVC TM2 according to DIN VDE 0281-1 (HD 21.1), preferred colour grey
g. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage Uo/U 300/300 V
b. test voltage 2000 V
c. temperature range flexible application -5° C ... +70° C
d. temperature range fixed installation -40° C ... +70° C
e. minimum bending radius fixed installation 6 x outer diameter
f. minimum bending radius flexible 15 x outer diameter
g. fire behaviour according to DIN EN 50265-2-1

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
3 x 0.5	5.0	33	14.4
4 x 0.5	5.4	41	19.2
5 x 0.5	5.9	51	24.0
6 x 0.5	6.5	61	28.8
7 x 0.5	6.9	73	34.0
8 x 0.5	7.7	87	38.4
10 x 0.5	8.3	94	48.0
12 x 0.5	8.6	110	58.0

BALZERTRONIC LSYY-JZ (-OZ)

The light flexible PVC control cable with numbered cores

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
16 x 0.5	9.5	140	77.0
18 x 0.5	10.1	160	86.0
20 x 0.5	10.7	175	96.0
25 x 0.5	12.0	210	120.0
30 x 0.5	12.5	245	144.0
40 x 0.5	15.0	345	192.0
3 x 0.75	5.4	42	21.6
7 x 0.75	7.7	97	50.0
4 x 0.75	5.9	52	29.0
5 x 0.75	6.4	66	36.0
6 x 0.75	7.0	78	43.0
8 x 0.75	8.3	110	58.0
10 x 0.75	9.0	125	72.0
12 x 0.75	9.4	140	86.0
16 x 0.75	10.5	185	115.0
20 x 0.75	11.6	230	144.0
25 x 0.75	13.2	275	180.0
30 x 0.75	13.7	325	216.0
40 x 0.75	16.3	450	288.0
3 x 1.0	5.7	50	29.0
4 x 1.0	6.2	63	38.4
5 x 1.0	6.8	78	48.5
7 x 1.0	8.3	115	67.0
9 x 1.0	9.7	155	87.0
10 x 1.0	9.8	160	96.0
12 x 1.0	10.0	170	115.0
18 x 1.0	11.8	250	173.0
25 x 1.0	14.5	350	240.0
3 x 1.5	6.8	69	43.0
4 x 1.5	7.5	88	58.0
5 x 1.5	8.4	115	72.0
7 x 1.5	9.9	165	101.0
10 x 1.5	11.6	210	144.0
12 x 1.5	12.0	245	173.0
18 x 1.5	14.5	375	259.0
25 x 1.5	17.5	495	360.0

usual delivery design: 500 m drum
other numbers of cores on request

BALZERTRONIC LSYY-J

The light flexible PVC control cable with coloured cores

Utilization as a light data transmission cable for measuring and controlling applications, for electronic automatic controllers in machine engineering, plant engineering and construction. For a flexible application with low mechanical load conditions, free movement application and without tensile load as well as for fixed installation, also in wet interiors. Application outdoors only with fixed installation and protected from direct solar radiation (UV).
The cables must be protected from stepping on, rolling over and similar mechanical condition by using appropriate arrangement e.g. laying in ducts or conduits.

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core colour: coloured according to BKM product specification
d. cores stranded in layers
e. outer sheath PVC TM2 according to DIN VDE 0281-1 (HD 21.1), preferred colour grey
f. changes in core or sheath colours and marking on request

TECHNICAL DATA

a. rated voltage Uo/U 300/300 V
b. test voltage 2000 V
c. temperature range flexible application -5° C ... +70° C
d. temperature range fixed installation -40° C ... +70° C
e. minimum bending radius fixed installation 6 x outer diameter
f. minimum bending radius flexible 15 x outer diameter
g. fire behaviour according to DIN EN 50265-2-1

Number of cores x cross-section in mm² per conductor	Cross-section in AWG/MCM	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 x 0.14	0	3.5	14	2.7
3 x 0.14	0	3.7	17	4.0
4 x 0.14	0	4.0	20	5.4
5 x 0.14	0	4.3	25	6.7
7 x 0.14	0	5.0	33	9.4
8 x 0.14	0	5.3	38	10.8
10 x 0.14	0	5.7	40	13.4
12 x 0.14	0	5.9	45	16.1
14 x 0.14	0	6.2	51	18.8

BALZERTRONIC LSYY-J

The light flexible PVC control cable with coloured cores

Number of cores x cross-section in mm² per conductor	Cross-section in AWG/MCM	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
15 x 0.14	0	6.5	56	20.2
16 x 0.14	0	6.5	58	21.5
18 x 0.14	0	6.9	65	24.2
20 x 0.14	0	7.2	71	26.9
21 x 0.14	0	7.7	80	28.2
25 x 0.14	0	8.3	88	33.6
28 x 0.14	0	8.6	96	37.6
30 x 0.14	0	8.6	105	40.3
32 x 0.14	0	8.9	110	43.0
36 x 0.14	0	9.3	120	48.4
40 x 0.14	0	10.0	135	54.0
44 x 0.14	0	10.5	145	59.0
50 x 0.14	0	11.0	160	67.0
56 x 0.14	0	11.3	170	75.0
61 x 0.14	0	11.5	185	82.0
2 x 0.25	0	3.9	17	4.8
3 x 0.25	0	4.2	22	7.2
4 x 0.25	0	4.5	26	9.6
5 x 0.25	0	4.9	33	12.0
7 x 0.25	0	5.7	46	16.8
8 x 0.25	0	6.1	52	19.2
9 x 0.25	0	6.6	59	21.6
10 x 0.25	0	6.6	60	24.0
12 x 0.25	0	6.8	63	28.8
14 x 0.25	0	7.2	72	33.6
15 x 0.25	0	7.7	81	36.0
16 x 0.25	0	7.7	85	38.4
18 x 0.25	0	8.1	95	43.2
20 x 0.25	0	8.5	105	48.0
21 x 0.25	0	8.9	115	50.0
25 x 0.25	0	9.6	136	60.0
28 x 0.25	0	10.0	140	67.0
30 x 0.25	0	10.2	145	72.0
32 x 0.25	0	10.4	155	77.0
36 x 0.25	0	10.8	175	86.0
40 x 0.25	0	11.6	195	96.0
44 x 0.25	0	12.1	205	106.0
50 x 0.25	0	12.6	230	120.0
61 x 0.25	0	13.3	285	146.0
2 x 0.34	0	4.0	20	6.5
3 x 0.34	0	4.3	25	9.8
4 x 0.34	0	4.6	31	13.1
5 x 0.34	0	5.0	38	16.3
7 x 0.34	0	5.8	54	22.8
8 x 0.34	0	6.3	61	26.1

BALZERTRONIC LSYY-J

The light flexible PVC control cable with coloured cores

Number of cores x cross-section in mm² per conductor	Cross-section in AWG/MCM	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
9 x 0.34	0	6.8	71	29.4
10 x 0.34	0	6.8	66	32.6
12 x 0.34	0	7.0	77	39.2
14 x 0.34	0	7.4	87	45.7
15 x 0.34	0	7.9	98	49.0
16 x 0.34	0	7.9	105	52.0
18 x 0.34	0	8.4	115	59.0
20 x 0.34	0	8.8	130	65.0
21 x 0.34	0	9.3	140	69.0
25 x 0.34	0	9.9	155	82.0
28 x 0.34	0	10.4	170	91.0
30 x 0.34	0	10.4	180	98.0
32 x 0.34	0	10.8	190	104.0
36 x 0.34	0	11.2	215	118.0
40 x 0.34	0	12.0	240	131.0
44 x 0.34	0	12.5	255	144.0
50 x 0.34	0	13.1	285	163.0
61 x 0.34	0	14.2	355	199.0

usual delivery design: 500 m drum
other numbers of cores on request

BALZERTRONIC LSYCY-JZ (-OZ)

The light flexible PVC control cable with numbered cores and Cu shield

Utilization as a light data transmission cable for measuring and controlling applications, for electronic automatic controllers in machine engineering, plant engineering and construction. For a flexible application with low mechanical load conditions, free movement application and without tensile load as well as for fixed installation, also in wet interiors. Application outdoors only with fixed installation and protected from direct solar radiation (UV). The cables must be protected from stepping on, rolling over and similar mechanical condition by using appropriate arrangement e.g. laying in ducts or conduits.
Due to the optimized shielding the conductor is suitable for systems where a good noise suppression is necessary and where interference of signals by electric external magnetic fields must be avoided (EMC).

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation PVC TI2 according to DIN VDE 0281-1 (HD 21.1)
d. core colour: black with white figure printing, with (-JZ) or without (-OZ) green/yellow core
e. cores stranded in layers, wrapping in plastic foil
f. outer sheath PVC TM2 according to DIN VDE 0281-1 (HD 21.1), preferred colour grey
g. changes in core or sheath colours on request

TECHNICAL DATA

a. rated voltage Uo/U 300/300 V
b. test voltage 2000 V
c. coupling impedance at 30 MHz: <250 Ohm/km
d. temperature range flexible application -5° C ... +70° C
e. temperature range fixed installation -40° C ... +70° C
f. minimum bending radius fixed installation 6 x outer diameter
g. minimum bending radius flexible 15 x outer diameter
h. fire behaviour according to DIN EN 50265-2-1

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
3 x 0.5	5.5	44	27.0
4 x 0.5	6.1	60	36.0
5 x 0.5	6.6	70	40.8
7 x 0.5	7.8	98	55.0
8 x 0.5	8.4	110	59.0

BALZERTRONIC LSYCY-JZ (-OZ)

The light flexible PVC control cable with numbered cores and Cu shield

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
10 x 0.5	9.0	120	73.0
12 x 0.5	9.3	135	83.0
18 x 0.5	10.9	190	116.0
20 x 0.5	11.4	210	130.0
25 x 0.5	13.0	260	172.0
30 x 0.5	13.4	295	196.0
3 x 0.75	6.0	58	38.4
4 x 0.75	6.5	71	45.6
5 x 0.75	7.1	87	57.0
7 x 0.75	8.4	120	76.0
10 x 0.75	9.8	155	97.0
12 x 0.75	10.0	175	116.0
18 x 0.75	11.8	240	163.0
25 x 0.75	14.5	340	233.0
30 x 0.75	15.1	395	276.0
3 x 1.0	6.4	68	45.6
4 x 1.0	6.9	81	55.0
5 x 1.0	7.7	105	69.0
7 x 1.0	8.9	145	92.0
9 x 1.0	10.5	185	116.0
10 x 1.0	10.5	180	125.0
12 x 1.0	10.8	200	145.0
18 x 1.0	12.7	305	225.0
25 x 1.0	15.4	410	300.0
3 x 1.5	7.6	94	64.0
4 x 1.5	8.2	115	79.0
5 x 1.5	9.0	145	97.0
7 x 1.5	10.6	195	130.0
10 x 1.5	12.3	245	178.0
12 x 1.5	12.9	295	225.0
18 x 1.5	15.4	435	319.0
25 x 1.5	18.2	565	428.0

usual delivery design: 500 m drum
other numbers of cores on request

BALZERTRONIC LSYCY-J

The light flexible PVC control cable with coloured cores and Cu shield

Utilization as a light data transmission cable for measuring and controlling applications, for electronic automatic controllers in machine engineering, plant engineering and construction. For a flexible application with low mechanical load conditions, free movement application and without tensile load as well as for fixed installation, also in wet interiors. Application outdoors only with fixed installation and protected from direct solar radiation (UV). The cables must be protected from stepping on, rolling over and similar mechanical condition by using appropriate arrangement e.g. laying in ducts or conduits.
Due to the optimized shielding the conductor is suitable for systems where a good noise suppression is necessary and where interference of signals by electric external magnetic fields must be avoided (EMC).

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core colour: coloured according to BKM product specification
d. cores stranded in layers, wrapping in plastic foil
e. optimized screening braiding of tinned copper wires
f. changes in core or sheath colours on request

TECHNICAL DATA

a. rated voltage Uo/U 300/300 V
b. test voltage 2000 V
c. coupling impedance at 30 MHz: <250 Ohm/km
d. temperature range flexible application -5° C ... +70° C
e. temperature range fixed installation -40° C ... +70° C
f. minimum bending radius fixed installation 6 x outer diameter
g. minimum bending radius flexible 15 x outer diameter
h. fire behaviour according to DIN EN 50265-2-1

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 x 0.14	4.0	22	11.3
3 x 0.14	4.2	25	16.7
4 x 0.14	4.5	28	18.0
5 x 0.14	4.8	34	19.3
7 x 0.14	5.5	44	26.6
8 x 0.14	6.1	54	27.6
10 x 0.14	6.6	59	30.3
12 x 0.14	6.6	64	33.0

BALZERTRONIC LSYCY-J

The light flexible PVC control cable with coloured cores and Cu shield

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
14 x 0.14	6.9	70	35.8
15 x 0.14	7.3	77	38.2
16 x 0.14	7.3	80	39.6
18 x 0.14	7.8	90	45.2
20 x 0.14	8.1	98	47.9
21 x 0.14	8.5	105	49.3
25 x 0.14	9.0	115	59.0
28 x 0.14	9.3	125	63.0
30 x 0.14	9.4	130	66.0
32 x 0.14	9.6	135	68.0
36 x 0.14	10.1	150	78.0
40 x 0.14	10.8	165	83.0
44 x 0.14	11.2	180	89.0
50 x 0.14	11.7	195	101.0
56 x 0.14	12.0	200	109.0
61 x 0.14	12.2	230	135.0
2 x 0.25	4.4	25	17.4
3 x 0.25	4.6	31	19.8
4 x 0.25	5.0	36	22.2
5 x 0.25	5.3	43	24.6
7 x 0.25	6.4	65	33.6
8 x 0.25	6.8	71	36.0
9 x 0.25	7.3	81	42.6
10 x 0.25	7.3	77	45.0
12 x 0.25	7.7	88	49.8
14 x 0.25	8.0	97	55.0
15 x 0.25	8.4	105	57.0
16 x 0.25	8.4	110	59.0
18 x 0.25	8.8	125	68.0
20 x 0.25	9.2	135	73.0
21 x 0.25	9.6	140	76.0
25 x 0.25	10.4	155	90.0
28 x 0.25	10.8	170	97.0
30 x 0.25	10.8	175	102.0
32 x 0.25	11.1	185	106.0
36 x 0.25	11.5	210	120.0
40 x 0.25	12.3	230	130.0
44 x 0.25	13.0	260	166.0
50 x 0.25	13.5	285	180.0
61 x 0.25	14.6	340	207.0
2 x 0.34	4.5	29	19.2
3 x 0.34	4.7	34	22.4
4 x 0.34	5.1	40	25.7
5 x 0.34	5.5	49	33.2
7 x 0.34	6.5	73	39.7

BALZERTRONIC LSYCY-J

The light flexible PVC control cable with coloured cores and Cu shield

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
8 x 0.34	6.9	80	42.9
9 x 0.34	7.7	96	50.0
10 x 0.34	7.7	92	54.0
12 x 0.34	7.9	105	60.0
14 x 0.34	8.2	115	67.0
15 x 0.34	8.6	125	74.0
16 x 0.34	8.6	130	78.0
18 x 0.34	9.0	145	84.0
20 x 0.34	9.5	155	91.0
21 x 0.34	9.9	170	98.0
25 x 0.34	10.7	185	111.0
28 x 0.34	11.1	200	121.0
30 x 0.34	11.1	210	128.0
32 x 0.34	11.5	225	138.0
36 x 0.34	11.9	250	151.0
40 x 0.34	12.9	290	183.0
44 x 0.34	13.4	305	196.0
50 x 0.34	14.4	350	216.0
61 x 0.34	15.1	405	259.0

usual delivery design: 500 m drum
other numbers of cores on request

BALZERTRONIC LSPYY-J

The light flexible PVC control cable with paired cores

Utilization as a control and signal cable (bus conductor) with good transfer characteristics for measuring and controlling applications, for electronic automatic controllers in machine engineering, plant engineering and construction. Due to the stranding in pairs an optimal attenuation of crosstalk can be achieved. For flexible application with low mechanical load conditions, for free movement application and without tensile load as well as for fixed installation, also in wet interiors. Application outdoors only with fixed installation and protected from direct solar radiation (UV).
The cable must be protected from stepping on, rolling over and similar mechanical conditions by using appropriate arrangement, e.g. lying in ducts or conduits.

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation PVC TI2 according to DIN VDE 0281-1 (HD 21.1)
d. core colour: coloured according to BKM product specification (former DIN 47100)
e. cores stranded in layers to pairs
f. pairs stranded in layers, wrapping in plastic foil
g. outer sheath PVC TM2 according to DIN VDE 0281-1 (HD 21.1), preferred colour grey
h. changes in core or sheath colours on request

TECHNICAL DATA

a. rated voltage Uo/U 300/300 V
b. test voltage 2000 V
c. temperature range flexible application -5° C ... +70° C
d. temperature range fixed installation -40° C ... +70° C
e. minimum bending radius fixed installation 6 x outer diameter
f. minimum bending radius flexible 15 x outer diameter
g. fire behaviour according to DIN EN 50265-2-1

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 x 2 x 0.14	3.8	17	5.4
3 x 2 x 0.14	4.9	25	8.0
4 x 2 x 0.14	5.9	32	10.8
5 x 2 x 0.14	6.3	41	13.4
6 x 2 x 0.14	6.8	49	16.1
8 x 2 x 0.14	7.5	54	21.5
10 x 2 x 0.14	8.7	66	26.9
12 x 2 x 0.14	9.3	81	32.3
16 x 2 x 0.14	10.3	105	43.0
20 x 2 x 0.14	11.5	126	54.0
24 x 2 x 0.14	12.8	150	65.0
28 x 2 x 0.14	13.6	170	75.0

BALZERTRONIC LSPYY-J

The light flexible PVC control cable with paired cores

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
32 x 2 x 0.14	14.1	190	86.0
40 x 2 x 0.14	16.0	240	108.0
2 x 2 x 0.25	4.3	24	9.6
3 x 2 x 0.25	5.6	32	14.4
4 x 2 x 0.25	6.9	44	19.2
5 x 2 x 0.25	7.5	56	24.0
6 x 2 x 0.25	8.0	68	28.8
8 x 2 x 0.25	8.7	77	38.4
10 x 2 x 0.25	10.4	99	48.0
12 x 2 x 0.25	10.8	115	58.0
16 x 2 x 0.25	12.0	150	77.0
20 x 2 x 0.25	13.5	180	96.0
2 x 2 x 0.5	5.3	37	19.2
3 x 2 x 0.5	6.4	54	28.8
4 x 2 x 0.5	8.5	71	38.4
5 x 2 x 0.5	9.3	96	48.0
6 x 2 x 0.5	10.1	120	58.0
8 x 2 x 0.5	11.1	135	77.0
10 x 2 x 0.5	13.0	165	96.0
12 x 2 x 0.5	13.5	195	115.0
16 x 2 x 0.5	15.3	255	154.0
20 x 2 x 0.5	17.2	315	192.0
2 x 2 x 0.75	5.7	48	29.0
3 x 2 x 0.75	7.7	72	43.2
4 x 2 x 0.75	9.6	96	58.0
5 x 2 x 0.75	10.3	122	72.0
6 x 2 x 0.75	11.0	150	86.0
8 x 2 x 0.75	12.2	175	115.0
12 x 2 x 0.75	15.0	260	173.0
16 x 2 x 0.75	16.8	340	230.0
20 x 2 x 0.75	19.0	405	288.0
2 x 2 x 1	6.0	58	38.0
3 x 2 x 1	8.2	87	57.6
4 x 2 x 1	10.3	115	77.0
5 x 2 x 1	11.1	150	96.0
6 x 2 x 1	11.9	185	116.0
8 x 2 x 1	13.1	215	154.0
12 x 2 x 1	16.1	320	230.0

BALZERTRONIC LSPYCY-J

The light flexible PVC control cable with paired coloured cores and Cu shield

As a control and signal cable (bus conductor) with good transfer characteristics, e.g. for reading and process data processing as well as in data processing and office technique. Due to the stranding in pairs an optimal attenuation of crosstalk can be achieved. Due to the optimized shielding the conductor is suitable for systems where a good noise suppression is necessary or where interference of signals by electric external magnetic fields must be avoided (EMC). For flexible application without tensile load and without compulsory guidance with low mechanical load conditions as well as for fixed installation. Utilization also in wet interiors. Application outdoors only with fixed installation and protected from direct solar radiation. The cable must be protected from stepping on, rolling over and similar mechanical conditions by using appropriate arrangement, e.g. lying in ducts or conduits.

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation PVC TI2 according to DIN VDE 0281-1 (HD 21.1)
d. core colour: coloured according to BKM product specification
e. cores stranded in layers to pairs
f. pairs stranded in layers, wrapping in plastic foil
g. optimized screening braiding of tinned copper wires
h. outer sheath PVC TM2 according to DIN VDE 0281-1 (HD 21.1), preferred colour grey
i. changes in core or sheath colours on request

TECHNICAL DATA

a. rated voltage Uo/U 300/300 V
b. test voltage 2000 V
c. temperature range flexible application -5° C ... +70° C
d. temperature range fixed installation -40° C ... +70° C
e. minimum bending radius fixed installation 6 x outer diameter
f. minimum bending radius flexible 15 x outer diameter
g. fire behaviour according to DIN EN 50265-2-1

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 x 2 x 0.14	4.4	25	18.0

BALZERTRONIC LSPYCY-J

The light flexible PVC control cable with paired coloured cores and Cu shield

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
3 x 2 x 0.14	5.2	39	23.8
4 x 2 x 0.14	6.7	50	31.8
5 x 2 x 0.14	7.1	60	36.5
6 x 2 x 0.14	7.6	70	41.4
8 x 2 x 0.14	8.2	85	51.2
10 x 2 x 0.14	9.7	100	61.0
12 x 2 x 0.14	10.0	110	66.0
16 x 2 x 0.14	11.1	140	95.0
20 x 2 x 0.14	12.5	180	106.0
25 x 2 x 0.14	13.3	218	130.0
2 x 2 x 0.25	4.9	32	22.2
3 x 2 x 0.25	6.8	43	31.1
4 x 2 x 0.25	7.6	65	40.2
5 x 2 x 0.25	8.1	81	49.1
6 x 2 x 0.25	8.6	94	58.0
8 x 2 x 0.25	9.6	110	72.0
10 x 2 x 0.25	11.1	135	100.0
12 x 2 x 0.25	11.5	150	110.0
16 x 2 x 0.25	13.0	200	137.0
20 x 2 x 0.25	14.2	249	168.0
25 x 2 x 0.25	15.9	310	196.0
2 x 2 x 0.34	5.0	36	26.0
3 x 2 x 0.34	7.1	51	40.0
4 x 2 x 0.34	7.7	76	52.0
5 x 2 x 0.34	8.5	96	65.7
6 x 2 x 0.34	8.8	110	68.0
8 x 2 x 0.34	9.9	136	88.0
10 x 2 x 0.34	12.4	156	125.0
12 x 2 x 0.34	11.7	178	138.0
16 x 2 x 0.34	13.7	246	164.0
20 x 2 x 0.34	15.0	301	195.0
25 x 2 x 0.34	16.8	394	278.0
2 x 2 x 0.5	6.0	56	36.0
3 x 2 x 0.5	7.8	77	52.0
4 x 2 x 0.5	9.5	105	68.0
5 x 2 x 0.5	10.2	127	98.0
6 x 2 x 0.5	10.9	150	110.0
8 x 2 x 0.5	11.9	170	137.0
10 x 2 x 0.5	14.0	220	164.0
12 x 2 x 0.5	14.6	260	183.0
16 x 2 x 0.5	16.3	325	247.0
20 x 2 x 0.5	18.1	485	289.0
25 x 2 x 0.5	19.7	592	355.0
2 x 2 x 0.75	6.4	66	45.6
3 x 2 x 0.75	8.5	93	68.0

BALZERTRONIC LSPYCY-J

The light flexible PVC control cable with paired coloured cores and Cu shield

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
4 x 2 x 0.75	10.4	130	91.0
5 x 2 x 0.75	11.1	165	115.0
6 x 2 x 0.75	11.8	185	147.0
8 x 2 x 0.75	13.2	230	175.0
12 x 2 x 0.75	16.0	330	267.0
16 x 2 x 0.75	17.8	405	336.0
20 x 2 x 0.75	20.1	569	420.0
25 x 2 x 0.75	22.9	711	520.0
2 x 2 x 1	6.9	76	55.0
3 x 2 x 1	9.0	108	84.0
4 x 2 x 1	11.0	150	110.0
5 x 2 x 1	11.9	195	142.0
6 x 2 x 1	12.8	240	175.0
8 x 2 x 1	14.0	265	221.0
12 x 2 x 1	17.0	385	336.0
16 x 2 x 1	20.3	495	412.0

BALZERTRONIC LiFPYCY-J

The highly flexible PVC data transmission cable with paired coloured cores and Cu shield

Utilization as a control and signal cable (bus conductor) with good transfer characteristics for reading and process data processing as well as for data processing and office technique. Due to the stranding in pairs an optimal attenuation of crosstalk can be achieved. Due to the optimized shielding the conductor is suitable for systems where a good noise suppression is necessary or where interference of signals by electric external magnetic fields must be avoided (EMC). For flexible application without tensile load and without compulsory guidance with low mechanical load conditions as well as for fixed installation. Utilization also in wet interiors. Application outdoors only with fixed installation and protected from direct solar radiation. The cable must be protected from stepping on or similar mechanical conditions by using appropriate arrangement, e.g. lying in ducts or conduits.

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, extra finely stranded class 6 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation PVC TI2 according to DIN VDE 0281-1 (HD 21.1)
d. core colour: coloured according to BKM product specification
e. cores stranded in layers to pairs
f. pairs stranded in layers, wrapping in plastic foil
g. optimized screening braiding of tinned copper wires
h. outer sheath PVC TM2 according to DIN VDE 0281-1 (HD 21.1), preferred colour grey
i. changes in core or sheath colours on request

TECHNICAL DATA

a. rated voltage Uo/U 300/300 V
b. test voltage 2000 V
c. temperature range flexible application -5° C ... +70° C
d. temperature range fixed installation -40° C ... +70° C
e. minimum bending radius fixed installation 6 x outer diameter
f. minimum bending radius flexible 15 x outer diameter
g. fire behaviour according to DIN EN 50265-2-1

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 x 2 x 0.20	6.0	52	30

BALZERTRONIC LiFPYCY-J

The highly flexible PVC data transmission cable with paired coloured cores and Cu shield

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
3 x 2 x 0.20	6.5	57	36
4 x 2 x 0.20	7.0	65	40
6 x 2 x 0.20	8.5	97	56
8 x 2 x 0.20	9.2	126	68
12 x 2 x 0.20	10.8	162	89
18 x 2 x 0.20	13.0	228	124
21 x 2 x 0.20	14.3	232	159
24 x 2 x 0.20	14.7	304	164
32 x 2 x 0.20	16.6	384	212

HSLH-JZ(-OZ) 300/500 V

The halogen-free control cable with numbered cores

Halogen-free connecting cable and lead for control devices in and on processing and production tools with medium mechanical load conditions, in the machine engineering, plant engineering and construction as well as in the field of power plant building, air conditioning installation and also in office machines and machines for data processing. For fixed installation as well as for occasionally, non-continuously recurring movement application, also in wet interiors. This cable prevents fire propagation at local flame exposure. The emerging fire gases do not contain any corrosive elements.

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation flame-retardant, halogen-free according to DIN EN 50290-2-26
d. wire marking: black with white figure printing, from 3 cores onwards with (-JZ) or without (-OZ) green/yellow core
e. cores stranded in layers
f. outer sheath flame-retardant, halogen-free according to DIN EN 50290-2-27, preferred colour grey
g. changes in core or sheath colours on request

TECHNICAL DATA

a. rated voltage Uo/U 300/500 V
b. test voltage 4000 V
c. temperature range flexible application -5° C ... +70° C
d. temperature range fixed installation -40° C ... +70° C
e. minimum bending radius fixed installation 6 x outer diameter
f. minimum bending radius flexible 20 x outer diameter
g. smoke density according to DIN EN 61034-2
h. no corrosive fire gases according to DIN EN 50267-2-2
i. fire behaviour according to DIN EN 60332-1-2

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.5	5.4	40	9.6
3 X 0.5	6.3	55	14.4
4 X 0.5	6.8	66	19.2
5 X 0.5	7.5	80	24.0
7 X 0.5	8.5	110	33.6
8 X 0.5	8.7	110	38.0
10 X 0.5	10.2	150	48.0
12 X 0.5	11.4	180	58.0

HSLH-JZ(-OZ) 300/500 V

The halogen-free control cable with numbered cores

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
16 X 0.5	12.6	220	76.0
18 X 0.5	13.3	250	86.0
20 X 0.5	14.2	286	96.0
25 X 0.5	16.0	340	120.0
34 X 0.5	17.8	420	163.0
42 X 0.5	20.1	540	202.0
50 X 0.5	21.8	640	240.0
61 X 0.5	23.6	720	293.0
2 X 0.75	6.4	56	14.4
3 X 0.75	6.7	66	21.6
4 X 0.75	7.3	79	28.8
5 X 0.75	8.4	105	36.0
7 X 0.75	9.1	135	51.0
8 X 0.75	10.9	175	58.0
10 X 0.75	11.3	190	72.0
12 X 0.75	12.2	215	87.0
16 X 0.75	13.5	260	115.0
18 X 0.75	14.2	295	130.0
20 X 0.75	15.6	350	144.0
25 X 0.75	17.1	415	180.0
34 X 0.75	20.1	590	245.0
42 X 0.75	21.2	590	302.0
50 X 0.75	23.4	640	360.0
61 X 0.75	25.4	940	439.0
2 X 1.0	6.6	64	19.2
3 X 1.0	7.1	76	28.8
4 X 1.0	7.7	91	38.4
5 X 1.0	8.9	120	48.0
7 X 1.0	9.6	150	68.0
8 X 1.0	10.8	175	77.0
10 X 1.0	12.0	220	96.0
12 X 1.0	12.9	250	116.0
16 X 1.0	14.1	320	154.0
18 X 1.0	15.6	365	173.0
20 X 1.0	16.0	370	192.0
25 X 1.0	18.1	485	240.0
34 X 1.0	21.2	650	326.0
42 X 1.0	22.7	780	404.0
50 X 1.0	25.4	955	480.0
2 X 1.5	7.2	80	28.8
3 X 1.5	7.7	96	43.2
4 X 1.5	8.8	125	58.0
5 X 1.5	9.6	150	72.0
7 X 1.5	10.8	205	101.0
8 X 1.5	12.9	215	115.0

HSLH-JZ(-OZ) 300/500 V

The halogen-free control cable with numbered cores

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
10 X 1.5	14.2	258	144.0
12 X 1.5	14.0	320	173.0
16 X 1.5	16.6	390	230.0
18 X 1.5	17.0	480	260.0
20 X 1.5	19.4	560	288.0
25 X 1.5	20.3	660	360.0
34 X 1.5	23.2	855	490.0
42 X 1.5	26.5	900	605.0
2 X 2.5	8.9	121	48.0
3 X 2.5	9.5	150	72.0
4 X 2.5	10.8	195	96.0
5 X 2.5	11.8	235	120.0
7 X 2.5	12.8	300	168.0
12 X 2.5	17.4	510	288.0
18 X 2.5	20.9	750	432.0
25 X 2.5	25.4	1,140	600.0
4 X 4	12.8	285	154.0
5 X 4	14.1	340	192.0
7 X 4	15.8	442	268.0
4 X 6	14.2	385	231.0
5 X 6	15.6	465	288.0
7 X 6	17.6	600	404.0
4 X 10	18.4	640	384.0
5 X 10	20.8	825	480.0
7 X 10	22.8	1,105	672.0
4 X 16	21.6	945	615.0
5 X 16	23.9	1,160	768.0
4 X 25	26.8	1,460	960.0

usual delivery design: 500 m drum
other numbers of cores on request

HSLCH-JZ(-OZ) 300/500 V

The halogen-free control cable with numbered cores

Halogen-free connecting cable and lead for control devices in and on processing and production tools with medium mechanical load conditions, in the machine engineering, plant engineering and construction as well as in the field of power plant building, air conditioning installation and also in office machines and machines for data processing. Due to the optimized shielding the conductor is suitable for systems where a good noise suppression is necessary or where interference of signals by electric external magnetic fields must be avoided (EMC). For fixed installation as well as for occasionally, non-continuously recurring movement application, also in wet interiors. This cable prevents fire propagation at local flame exposure. The emerging fire gases do not contain any corrosive elements.

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation flame-retardant, halogen-free according to DIN EN 50290-2-26
d. wire marking: black with white figure printing, from 3 cores onwards with (-JZ) or without (-OZ) green/yellow core
e. cores stranded in layers, wrapping in plastic foil
f. optimized screening braiding of tinned copper wires
g. outer sheath flame-retardant, halogen-free according to DIN EN 50290-2-27, preferred colour grey
h. changes in core or sheath colours on request

TECHNICAL DATA

a. rated voltage Uo/U 300/500 V
b. test voltage 4000 V
c. temperature range flexible application -5° C ... +70° C
d. temperature range fixed installation -40° C ... +70° C
e. minimum bending radius fixed installation 6 x outer diameter
f. minimum bending radius flexible 20 x outer diameter
g. no corrosive fire gases according to DIN EN 50267-2-2
h. smoke density according to DIN EN 61034-2
i. fire behaviour according to DIN EN 60332-1-2

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.5	6.8	64	28.8
3 X 0.5	7.1	72	36.5

HSLCH-JZ(-OZ) 300/500 V

The halogen-free control cable with numbered cores

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
4 X 0.5	7.7	85	43.8
5 X 0.5	8.8	107	49.8
7 X 0.5	11.8	170	62.9
12 X 0.5	12.4	206	97.4
18 X 0.5	14.4	302	153.3
27 X 0.5	17.6	425	208.0
2 X 0.75	7.5	75	38.8
3 X 0.75	7.8	84	47.3
4 X 0.75	8.8	110	57.0
5 X 0.75	9.5	130	65.0
7 X 0.75	10.2	160	84.0
12 X 0.75	13.3	245	133.0
18 X 0.75	15.6	360	197.0
25 X 0.75	19.6	510	264.0
2 X 1.0	7.8	79	43.8
3 X 1.0	8.6	100	55.0
4 X 1.0	9.0	125	69.0
5 X 1.0	9.9	145	80.0
7 X 1.0	11.1	190	104.0
12 X 1.0	14.2	295	180.0
18 X 1.0	17.0	440	247.0
25 X 1.0	20.7	620	331.0
2 X 1.5	8.8	105	57.0
3 X 1.5	9.2	125	72.0
4 X 1.5	9.6	150	90.0
5 X 1.5	11.1	190	109.0
7 X 1.5	11.9	230	140.0
12 X 1.5	15.3	370	240.0
18 X 1.5	18.3	540	342.0
25 X 1.5	21.6	730	461.0
2 X 2.5	10.1	140	81.0
3 X 2.5	11.0	180	109.0
4 X 2.5	11.8	220	135.0
5 X 2.5	12.8	265	166.0
7 X 2.5	14.1	340	236.0
12 X 2.5	19.3	580	372.0
18 X 2.5	22.7	833	531.0
25 X 2.5	26.8	1,143	713.0
2 X 4	12.0	205	116.0
3 X 4	13.3	248	157.0
4 X 4	13.7	320	218.0
5 X 4	15.3	380	260.0
7 X 4	17.3	500	341.0
2 X 6	13.5	260	157.0
3 X 6	14.1	334	173.0

HSLCH-JZ(-OZ) 300/500 V

The halogen-free control cable with numbered cores

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
4 X 6	15.6	415	298.0

other numbers of cores on request
usual delivery design: 500 m drum

HSLH-J(-O) 300/500 V

The halogen-free control cable with coloured cores

Halogen-free connecting cable and lead for control devices in and on processing and production tools with medium mechanical load conditions, in the machine engineering, plant engineering and construction as well as in the field of power plant building, air conditioning installation and also in office machines and machines for data processing. For fixed installation as well as for occasionally, non-continuously recurring movement application, also in wet interiors. This cable prevents fire propagation at local flame exposure. The emerging fire gases do not contain any corrosive elements.

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation flame-retardant, halogen-free according to DIN EN 50290-2-26
d. wire marking: coloured according to DIN VDE 0293-308, from 3 cores onwards with (-J) or without (-O) green/yellow core
e. cores stranded in layers
f. outer sheath flame-retardant, halogen-free according to DIN EN 50290-2-27, preferred colour grey
g. changes in core or sheath colours on request

TECHNICAL DATA

a. rated voltage Uo/U 300/500 V
b. test voltage 4000 V
c. temperature range flexible application -5° C ... +70° C
d. temperature range fixed installation -40° C ... +70° C
e. minimum bending radius fixed installation 6 x outer diameter
f. minimum bending radius flexible 20 x outer diameter
g. smoke density according to DIN EN 61034-2
h. no corrosive fire gases according to DIN EN 50267-2-2
i. fire behaviour according to DIN EN 60332-1-2

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.5	5.4	40	9.6
3 X 0.5	5.6	47	14.4
4 X 0.5	6.7	57	19.2
5 X 0.5	7.2	66	24.0
7 X 0.5	8.5	85	33.6
8 X 0.5	8.7	110	38.0
10 X 0.5	9.8	142	48.0
12 X 0.5	10.5	133	58.0
16 X 0.5	11.5	198	76.0
18 X 0.5	12.5	216	86.0
20 X 0.5	13.0	231	96.0
25 X 0.5	15.0	257	120.0
34 X 0.5	17.0	398	163.0
42 X 0.5	18.5	471	202.0
50 X 0.5	20.5	510	240.0

HSLH-J(-O) 300/500 V

The halogen-free control cable with coloured cores

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
61 X 0.5	22.0	670	293.0
2 X 0.75	6.7	43	14.4
3 X 0.75	6.8	61	22.0
4 X 0.75	7.5	75	28.8
5 X 0.75	8.2	100	36.0
7 X 0.75	8.5	125	51.0
8 X 0.75	10.2	140	58.0
10 X 0.75	11.3	172	72.0
12 X 0.75	12.0	210	87.0
16 X 0.75	13.2	253	115.0
18 X 0.75	14.1	270	130.0
20 X 0.75	15.0	310	144.0
25 X 0.75	16.6	415	180.0
34 X 0.75	19.3	512	245.0
42 X 0.75	21.2	590	302.0
50 X 0.75	23.4	640	360.0
61 X 0.75	25.1	775	439.0
2 X 1	7.0	57	19.2
3 X 1	7.5	80	28.8
4 X 1	8.2	106	38.4
5 X 1	8.6	123	48.0
7 X 1	10.5	149	68.0
8 X 1	10.8	175	77.0
10 X 1	12.0	220	96.0
12 X 1	12.8	260	116.0
16 X 1	14.1	320	154.0
18 X 1	15.1	350	173.0
20 X 1	16.0	370	192.0
25 X 1	17.5	485	240.0
34 X 1	20.8	600	326.0
42 X 1	22.7	720	403.0
50 X 1	25.0	926	480.0
2 X 1.5	7.2	100	28.8
3 X 1.5	8.3	110	43.2
4 X 1.5	8.5	125	58.0
5 X 1.5	10.2	145	72.0
7 X 1.5	11.5	195	101.0
8 X 1.5	12.9	215	115.0
10 X 1.5	14.2	258	144.0
12 X 1.5	13.6	320	173.0
16 X 1.5	16.6	390	230.0
18 X 1.5	16.5	480	260.0
20 X 1.5	18.6	489	288.0
25 X 1.5	19.7	660	360.0
34 X 1.5	24.3	730	490.0

HSLH-J(-O) 300/500 V

The halogen-free control cable with coloured cores

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
42 X 1.5	26.5	900	605.0
2 X 2.5	8.5	121	48.0
3 X 2.5	9.0	170	72.0
4 X 2.5	10.0	180	96.0
5 X 2.5	11.4	235	120.0
7 X 2.5	13.0	280	168.0
12 X 2.5	17.4	510	288.0
18 X 2.5	19.0	870	432.0
25 X 2.5	23.5	1,140	600.0
4 X 4	12.4	285	154.0
5 X 4	13.6	300	192.0
7 X 4	16.0	410	268.0
4 X 6	12.3	330	231.0
5 X 6	13.6	430	288.0
7 X 6	16.0	600	404.0
4 X 10	17.8	640	384.0
5 X 10	20.3	930	480.0
7 X 10	23.0	1,105	672.0
4 X 16	21.0	945	615.0
5 X 16	25.0	1,300	768.0
4 X 25	26.0	1,460	960.0

other numbers of cores on request
usual delivery design: 500 m drum

HSLCH-J(-O) 300/500 V

The halogen-free control cable with coloured cores and Cu shield

Halogen-free connecting cable and lead for control devices in and on processing and production tools with medium mechanical load conditions, in the machine engineering, plant engineering and construction as well as in the field of power plant building, air conditioning installation and also in office machines and machines for data processing.
Due to the optimized shielding the conductor is suitable for systems where a good noise suppression is necessary or where interference of signals by electric external magnetic fields must be avoided (EMC).
For fixed installation as well as for occasionally, non-continuously recurring movement application, also in wet interiors. This cable prevents fire propagation at local flame exposure. The emerging fire gases do not contain any corrosive elements.

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation flame-retardant, halogen-free according to DIN EN 50290-2-26
d. wire marking: coloured according to DIN VDE 0293-308, from 3 cores onwards with (-J) or without (-O) green/yellow core
e. cores stranded in layers, wrapping in plastic foil
f. optimized screening braiding of tinned copper wires
g. outer sheath flame-retardant, halogen-free according to DIN EN 50290-2-27, preferred colour grey
h. changes in core or sheath colours on request

TECHNICAL DATA

a. rated voltage Uo/U 300/500 V
b. test voltage 4000 V
c. temperature range flexible application -5° C ... +70° C
d. temperature range fixed installation -40° C ... +70° C
e. minimum bending radius fixed installation 6 x outer diameter
f. minimum bending radius flexible 20 x outer diameter
g. no corrosive fire gases according to DIN EN 50267-2-2
h. smoke density according to DIN EN 61034-2
i. fire behaviour according to DIN EN 60332-1-2

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.5	6.8	64	28.8
3 X 0.5	7.1	72	36.5
4 X 0.5	7.7	85	43.8
5 X 0.5	8.8	107	51.0
7 X 0.5	9.4	129	63.0
12 X 0.5	12.4	206	98.0
18 X 0.5	14.4	302	154.0
27 X 0.5	17.6	425	208.0

HSLCH-J(-O) 300/500 V

The halogen-free control cable with coloured cores and Cu shield

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.75	7.5	75	38.8
3 X 0.75	7.8	84	47.3
4 X 0.75	8.8	110	57.0
5 X 0.75	9.5	130	65.0
7 X 0.75	10.2	160	84.0
12 X 0.75	13.3	245	133.0
18 X 0.75	15.6	360	197.0
25 X 0.75	19.6	510	264.0
2 X 1	7.8	79	43.8
3 X 1	8.6	100	55.0
4 X 1	9.2	125	69.0
5 X 1	9.9	145	80.0
7 X 1	11.1	190	104.0
12 X 1	14.2	295	180.0
18 X 1	17	440	247.0
25 X 1	20.7	620	331.0
2 X 1.5	8.8	105	57.0
3 X 1.5	9.2	125	72.0
4 X 1.5	9.9	150	90.0
5 X 1.5	11.1	190	109.0
7 X 1.5	11.9	230	140.0
12 X 1.5	15.3	370	240.0
18 X 1.5	18.3	540	342.0
25 X 1.5	21.6	730	461.0
2 X 2.5	10.1	140	81.0
3 X 2.5	11	180	109.0
4 X 2.5	11.8	220	135.0
5 X 2.5	12.8	265	166.0
7 X 2.5	14	345	232.0
12 X 2.5	19.3	580	372.0
18 X 2.5	22.7	833	531.0
25 X 2.5	26.8	1,143	713.0
2 X 4	12.0	205	116.0
3 X 4	13.3	248	157.0
4 X 4	14.1	320	218.0
5 X 4	15.3	380	260.0
7 X 4	17.3	500	341.0
2 X 6	13.5	260	157.0
3 X 6	14.1	334	173.0

other numbers of cores on request
usual delivery design: 500 m drum

HSLHCH-JZ(-OZ) 300/500 V

The halogen-free control cable with numbered cores, inner sheath and Cu shield

Halogen-free connecting cable and lead for control devices in and on processing and production tools with medium mechanical load conditions, in the machine engineering, plant engineering and construction as well as in the field of power plant building, air conditioning installation and also in office machines and machines for data processing. Due to the optimized shielding the conductor is suitable for systems where a good noise suppression is necessary or where interference of signals by electric external magnetic fields must be avoided (EMC).
For fixed installation as well as for occasionally, non-continuously recurring movement application, also in wet interiors. This cable prevents fire propagation at local flame exposure. The emerging fire gases do not contain any corrosive elements.

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation flame-retardant, halogen-free according to DIN EN 50290-2-26
d. wire marking: black with white figure printing, from 3 cores onwards with (-JZ) or without (-OZ) green/yellow core
e. cores stranded in layers, wrapping in plastic foil
f. inner sheath flame-retardant, halogen-free according to DIN EN 50290-2-27
g. optimized screening braiding of tinned copper wires
h. outer sheath flame-retardant, halogen-free according to DIN EN 50290-2-27, preferred colour grey
i. changes in core or sheath colours on request

TECHNICAL DATA

a. rated voltage Uo/U 300/500 V
b. test voltage 4000 V
c. temperature range flexible application -5° C ... +70° C
d. temperature range fixed installation -40° C ... +70° C
e. minimum bending radius fixed installation 6 x outer diameter
f. minimum bending radius flexible 20 x outer diameter
g. no corrosive fire gases according to DIN EN 50267-2-2
h. smoke density according to DIN EN 61034-2
i. fire behaviour according to DIN EN 60332-1-2

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
2 X 0.5	6.8	64	28.8
3 X 0.5	7.1	72	36.5
4 X 0.5	7.7	85	43.8
5 X 0.5	8.4	134	66.0
7 X 0.5	9.9	160	80.5
12 X 0.5	11.3	237	138.5

HSLHCH-JZ(-OZ) 300/500 V

The halogen-free control cable with numbered cores, inner sheath and Cu shield

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
3 X 0.75	7.9	125	57.9
4 X 0.75	9.9	150	61.0
5 X 0.75	10.3	162	77.4
7 X 0.75	11.6	215	89.0
12 X 0.75	12.3	313	177.0
18 X 0.75	14.5	456	243.0
25 X 0.75	16.6	575	307.3
3 X 1	8.2	140	65.3
4 X 1	8.7	160	78.1
5 X 1	9.5	182	89.4
7 X 1	10.8	215	113.6
12 X 1	13.3	352	188.1
18 X 1	15.5	514	286.0
25 X 1	17.5	677	388.5
3 X 1.5	10.2	175	82.0
4 X 1.5	11.3	210	96.0
5 X 1.5	12.2	240	112.0
7 X 1.5	13.2	295	149.0
12 X 1.5	17.2	495	258.0
18 X 1.5	20.4	700	363.0
25 X 1.5	22.8	985	535.0
3 X 2.5	10.8	211	146.0
4 X 2.5	13.2	295	145.0
5 X 2.5	14.4	355	188.0
3 X 4	14.0	335	164.0
4 X 4	15.4	415	221.0
5 X 4	17.2	515	278.0
4 X 6	17.4	550	317.0
4 X 10	21.7	850	490.0
4 X 16	25.1	1,195	727.0
4 X 25	29.8	1,730	1,097.0
4 X 50	39.9	3,190	2,163.0
4 X 150	61.7	8,380	6,744.0
5 X 16	27.4	1,500	948.0
4 X 35	33.2	2,300	1,620.0
4 X 70	45.6	4,420	3,349.0
4 X 95	51.1	5,550	4,065.0
5 X 10	23.6	1,030	627.0
5 X 25	32.8	2,170	1,479.0
5 X 35	36.9	2,770	1,903.0
5 X 50	45.3	3,940	2,686.0
5 X 70	50.3	5,330	4,327.0
5 X 95	56.3	6,695	5,000.0

other numbers of cores on request
usual delivery design: 500 m drum

H05Z-K

The harmonized halogen-free wiring cable with finely stranded conductor

For the inner wiring of devices, protected installation in and on lamps, application in and on electric resources in electric power installations. Utilization in ducts on-wall and in-wall. Not allowed for safety class II.

This cable prevents fire propagation at local flame exposure. The emerging fire gases do not contain any corrosive elements.

CABLE MAKE-UP

a. according to VDE 0282-9 (HD 22.9)
b. tinned copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. conductor insulation halogen-free compound EI5 according to DIN EN 50363-5
d. wire marking according to DIN VDE 0282-1 (HD 22.1)

TECHNICAL DATA

a. rated voltage Uo/U 300/500 V
b. test AC voltage 10 kV (Spark test)
c. temperature range for installation -5° C ... +90° C
d. temperature range fixed installation -40° C ... +90° C
e. allowable limiting temperature at the conductor in operation +90° C
f. allowable temperature at the conductor in case of short circuit +250 °C, 5 s
g. fire behaviour according to DIN EN 60332-2-2
h. no corrosive fire gases according to DIN EN 50267-2-2
i. smoke density according to DIN EN 61034-2

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.
1 X 0.5	2.2	9
1 X 0.75	2.3	12
1 X 1	2.5	14

usual delivery design: 100 m coil in cardboard box, non-returnable or returnable barrel, plastic coil
Further delivery designs on request.

H07Z-K

The harmonized halogen-free wiring cable with finely stranded conductor

Protected installation in devices, switch stations, distribution frames, in electric power installations, in lamps with a rated voltage of up to 750 V DC voltage to earth. In rail vehicles the operating DC voltage can be 900 V to earth. The cables have to be installed only as a potential equalisation cable directly on-wall and in-wall or in trays. They are not allowed for safety class II.
This cable prevents fire propagation at local flame exposure. The emerging fire gases do not contain any corrosive elements.

CABLE MAKE-UP

a. according to VDE 0282-9 (HD 22.9)
b. tinned copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. conductor insulation halogen-free compound EI5 according to DIN EN 50363-5
d. wire marking according to DIN VDE 0282-1 (HD 22.1)

TECHNICAL DATA

a. rated voltage Uo/U 450/750 V
b. test AC voltage 10 kV (Spark test)
c. temperature range for installation -5° C ... +90° C
d. temperature range fixed installation -40° C ... +90° C
e. allowable limiting temperature at the conductor in operation +90° C
f. allowable temperature at the conductor in case of short circuit +250 °C, 5 s
g. fire behaviour according to DIN EN 60332-1-2
h. no corrosive fire gases according to DIN EN 50267-2-2
i. smoke density according to DIN EN 61034-1

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.
1 X 1.5	3.0	20
1 X 2.5	3.6	31
1 X 4	4.3	45
1 X 6	4.8	64
1 X 10	6.3	110
1 X 16	7.4	185
1 X 25	9.1	255
1 X 35	10.3	355

H07Z-K

The harmonized halogen-free wiring cable with finely stranded conductor

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.
1 X 50	12.8	525
1 X 70	15.1	743
1 X 95	17.2	937
1 X 120	18.7	1,150
1 X 150	21.3	1,440
1 X 120	23.1	1,740
1 X 240	27.5	2,330

usual delivery design: 100 m coil in cardboard box (up to 6 mm²), non-returnable or returnable barrel (up to 6 mm²), plastic coil (upt to 6 mm²), plastic coil (up to 2.5 mm²) 10 mm² - 35 mm² 100 m coil or drum, 50 mm² - 95 mm² 50 m coil or drum, from 120 mm² onwards drum
Further delivery designs on request.

H05Z-U

The harmonized halogen-free wiring cable with single-wire conductor

For the inner wiring of devices, protected installation in and on lamps, application in and on electric resources in electric power installations. Utilization in ducts on-wall and in-wall. Not allowed for safety class II.

This cable prevents fire propagation at local flame exposure. The emerging fire gases do not contain any corrosive elements.

CABLE MAKE-UP

a. according to VDE 0282-9 (HD 22.9)
b. tinned copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. conductor insulation halogen-free compound EI5 according to DIN EN 50363-5
d. wire marking according to DIN VDE 0282-1 (HD 22.1)

TECHNICAL DATA

a. rated voltage Uo/U 300/500 V
b. test AC voltage 10 kV (Spark test)
c. temperature range for installation -5° C ... +90° C
d. temperature range fixed installation -40° C ... +90° C
e. allowable limiting temperature at the conductor in operation +90° C
f. allowable temperature at the conductor in case of short circuit +250 °C, 5 s
g. fire behaviour according to DIN EN 60332-2-2
h. no corrosive fire gases according to DIN EN 50267-2-2
i. smoke density according to DIN EN 61034-1

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.
1 X 0.5	2.0	9
1 X 0.75	2.2	12
1 X 1	2.4	14

usual delivery design: 100 m coil in cardboard box, non-returnable or returnable barrel, plastic coil
Further delivery designs on request.

H07Z-U

The harmonized halogen-free core with single-wire conductor

Protected installation in devices, switch stations, distribution frames, in electric power installations, in lamps with a rated voltage of up to 750 V DC voltage to earth. In rail vehicles the operating DC voltage can be 900 V to earth. The cables have to be installed only as a potential equalisation cable directly on-wall and in-wall or in trays. They are not allowed for safety class II.
This cable prevents fire propagation at local flame exposure. The emerging fire gases do not contain any corrosive elements.

CABLE MAKE-UP

a. according to VDE 0282-9 (HD 22.9)
b. bare or tinned copper wire, single-wire class 1 according to DIN EN 60228 (former DIN VDE 0295)
c. conductor insulation halogen-free compound EI5 according to DIN EN 50363-5
d. wire marking according to DIN VDE 0282-1 (HD 22.1)

TECHNICAL DATA

a. rated voltage Uo/U 450/750 V
b. test AC voltage 10 kV (Spark test)
c. temperature range for installation -5° C ... +90° C
d. temperature range fixed installation -40° C ... +90° C
e. allowable limiting temperature at the conductor in operation +90° C
f. allowable temperature at the conductor in case of short circuit +250 °C, 5 s
g. fire behaviour according to DIN EN 60332-1-2
h. no corrosive fire gases according to DIN EN 50267-2-2
i. smoke density according to DIN EN 61034-1

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.
1 X 1.5	2.8	20
1 X 2.5	3.4	32
1 X 4	3.9	46
1 X 6	4.4	65
1 X 10	5.7	110

usual delivery design: 100 m coil in cardboard box (up to 6 mm²), non-returnable or returnable barrel (up to 6 mm²), plastic coil (upt to 6 mm²), plastic coil (up to 2.5 mm²) 10 mm² - 35 mm² 100 m coil or drum, 50 mm² - 95 mm² 50 m coil or drum, from 120 mm² onwards drum

H07Z-U

The harmonized halogen-free core with single-wire conductor

Further delivery designs on request.

H07Z-R

The harmonized halogen-free core with multicore cable

Protected installation in devices, switch stations, distribution frames, in electric power installations, in lamps with a rated voltage of up to 750 V DC voltage to earth. In rail vehicles the operating DC voltage can be 900 V to earth. The cables have to be installed only as a potential equalisation cable directly on-wall and in-wall or in trays. They are not allowed for safety class II.
This cable prevents fire propagation at local flame exposure. The emerging fire gases do not contain any corrosive elements.

CABLE MAKE-UP

a. according to VDE 0282-9 (HD 22.9)
b. bare or tinned copper wire, stranded class 2 according to DIN EN 60228 (former DIN VDE 0295)
c. conductor insulation halogen-free compound EI5 according to DIN EN 50363-5
d. wire marking according to DIN VDE 0282-1 (HD 22.1)

TECHNICAL DATA

a. rated voltage Uo/U 450/750 V
b. test AC voltage 10 kV (Spark test)
c. temperature range for installation -5° C ... +90° C
d. temperature range fixed installation -40° C ... +90° C
e. allowable limiting temperature at the conductor in operation +90° C
f. allowable temperature at the conductor in case of short circuit +250 °C, 5 s
g. fire behaviour according to DIN EN 60332-1-2
h. no corrosive fire gases according to DIN EN 50267-2-2
i. smoke density according to DIN EN 61034-1

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.
1 X 1.5	3.0	22
1 X 2.5	3.6	32
1 X 4	4.3	46
1 X 6	4.7	65
1 X 10	6.2	115

+ ... compacted conductor, usual delivery design: 100 m coil in cardboard box (up to 6 mm²), non-returnable or returnable barrel (up to 6 mm²), plastic coil (upt to 6 mm²), plastic coil (up to 2.5 mm²) 10 mm² - 35 mm² 100 m coil or drum, 50 mm² - 95 mm² 50 m coil or drum, from 120 mm² onwards drum

H07Z-R

The harmonized halogen-free core with multicore cable

Further delivery designs on request.

PV conductor with cross-linked FRNC insulation and PUR sheath

PV conductor with cross-linked FRNC insulation and PUR sheath can be found in chapter 12.01.1

PV conductor with cross-linked FRNC insulation and cross-linked FRNC sheath

PV conductor with cross-linked FRNC insulation and cross-linked FRNC sheath can be found in chapter 12.01.2

BALZERTHERM 110 HX

The halogen-free core with extended temperature range

This flexible core is equipped with a cross-linked by irradiation, halogen-free insulation of polyolefin copolymer. Therefore it possesses a good resistance to warmth and warmth pressure and good mechanical characteristics.
This conductor is suitable for the installation in service ducts, on-wall and in-wall or in similar closed systems, especially for applications where a low emmission of smoke and corrosive gases in case of fire is required. It is suitable for the protected, fixed laying in or on lighting systems, control devices, switch stations as well as means of transport.

CABLE MAKE-UP

a. according to BKM product specification
b. tinned copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. conductor insulation of PO-FRNC, electron-beam cross-linked, halogen-free

TECHNICAL DATA

a. rated voltage Uo/U 600/1000 V
b. test AC voltage 10 kV (Spark test)
c. fire behaviour according to DIN EN 60332-1-2
d. no corrosive fire gases according to DIN EN 50267-2-2
e. smoke density according to DIN EN 61034-2
f. allowable limiting temperature at the conductor in operation +110 °C (20.000 h)
g. allowable temperature at the conductor in case of short circuit +250 °C, 5 s
h. lowest allowable ambient temperature, fixed installation -40° C
i. lowest allowable ambient temperature, flexible application -25° C
j. minimum bending radius fixed installation 3 x D (up to D <= 8 mm), 4 x D (D <= 20 mm)
k. minimum bending radius free movement application 4 x D (bis D <= 12 mm), 5 x D (D <= 20 mm)

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 1.5	3.2	21	14.4
1 X 2.5	3.6	30	24.0
1 X 4	4.3	45	38.4
1 X 6	4.9	64	58.0
1 X 10	6.5	110	96.0
1 X 16	7.8	175	154.0
1 X 25	9.5	255	240.0
1 X 35	11.5	350	336.0

BALZERTHERM 110 HX

The halogen-free core with extended temperature range

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 50	12.8	510	480.0
1 X 70	14.9	690	672.0
1 X 95	17.3	915	912.0

usual delivery design: 500 m drum
other numbers of cores on request

BALZERTHERM 110 HX (UL)

The halogen-free core with extended temperature range and UL approval

This flexible core is equipped with a cross-linked by irradiation, halogen-free insulation of polyolefin copolymer. Therefore it possesses a good resistance to warmth and warmth pressure and good mechanical characteristics.
This conductor is suitable for the installation in service ducts, on-wall and in-wall or in similar closed systems, especially for applications where a low emmission of smoke and corrosive gases in case of fire is required. It is suitable for the protected, fixed laying in or on lighting systems, control devices, switch stations as well as means of transport.

CABLE MAKE-UP

a. according to BKM product specification
b. according to UL style 3237/UL758
c. tinned copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
d. conductor insulation of PO-FRNC, electron-beam cross-linked, halogen-free

TECHNICAL DATA

a. rated voltage Uo/U 600/1000 V
b. operating voltage UL: U 1000 V
c. test AC voltage 10 kV (Spark test)
d. fire behaviour according to DIN EN 60332-1-2
e. no corrosive fire gases according to DIN EN 50267-2-2
f. smoke density according to DIN EN 61034-2
g. allowable limiting temperature at the conductor in operation +110 °C (20.000 h)
h. allowable temperature at the conductor in case of short circuit +250 °C, 5 s
i. lowest allowable ambient temperature, fixed installation -40° C
j. lowest allowable ambient temperature, flexible application -25° C
k. minimum bending radius fixed installation 3 x D (up to D <= 8 mm), 4 x D (D <= 20 mm)
l. temperature rating (UL): + 105° C
m. minimum bending radius free movement application 4 x D (bis D <= 12 mm), 5 x D (D <= 20 mm)

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 1.5	3.1	20	14.4
1 X 2.5	3.7	32	24.0
1 X 4	4.3	47	38.4
1 X 6	4.8	66	58.0
1 X 10	6.6	115	96.0
1 X 16	8.5	190	154.0

BALZERTHERM 110 HX (UL)

The halogen-free core with extended temperature range and UL approval

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 25	10.1	270	240.0
1 X 35	11.5	370	336.0
1 X 50	14.1	550	480.0
1 X 70	16.7	765	672.0
1 X 95	18.2	950	912.0

usual delivery design: 500 m drum
other numbers of cores on request

H05V-K

The harmonized PVC wiring cable with finely stranded conductor

For the internal wiring of devices, protected installation in and on lamps (UV exposure should be avoided), application in and on electric resources in electric power installations. Utilization in ducts on-wall and in-wall. Not allowed for safety class II.

CABLE MAKE-UP

a. according to DIN VDE 0281-3 (HD21.3)
b. bare or tinned copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. conductor insulation PVC TI1 according to DIN VDE 0281-1 (HD 21.1)
d. wire marking according to DIN VDE 0281-1 (HD 21.1)
e. green and yellow as single colours are allowed, as well as two coloured combinations of all colours, unless they are in conflict with the relevant regulations
f. product marking: BALZER KABELWERK MEISSEN <VDE> <HAR> H05V-K CE

TECHNICAL DATA

a. rated voltage Uo/U 300/500 V
b. test voltage (single core): 10 kV Spark test
c. temperature range for installation +5° C ... +70° C
d. temperature range fixed installation -40 °C...+70 °C
e. allowable limiting temperature at the conductor in operation +70 °C
f. allowable limiting temperature at the conductor in case of short circuit +160° C
g. fire behaviour according to DIN EN 60332-1-2
h. minimum bending radii according to DIN VDE 0298-300
i. The materials used for manufacturing are silicone and cadmium free and free of substances harmful to lacquer.

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 0.5	2.2	9	4.8
1 X 0.75	2.3	12	7.2
1 X 1	2.5	14	9.6

usual delivery design: 100 m coil in cardboard box, non-returnable or returnable barrel, plastic coil
other delivery designs on request

H07V-K

The harmonized PVC core with finely stranded conductor

RoHS COMPLIANT CE ◁VDE▷ ◁HAR▷

For the internal wiring of devices, switch stations, distribution frames, in electric power installations, in lamps with a rated voltage of up to 750 V DC voltage to earth (UV exposure should be avoided). In rail vehicles the operating DC voltage can be 900 V to earth.
It is only allowed to install the conductors as a potential equalisation cable directly on-wall and in-wall or in trays. Not allowed for safety class II.

CABLE MAKE-UP

a. according to DIN VDE 0281-3 (HD21.3)
b. bare or tinned copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. conductor insulation PVC TI1 according to DIN VDE 0281-1 (HD 21.1)
d. wire marking according to DIN VDE 0281-1 (HD 21.1)
e. colours according to DIN IEC 304. Colour combinations except green/yellow, as well as the single colours green and yellow are not allowed.
f. product marking: BALZER KABELWERK MEISSEN <VDE> <HAR> H07V-K CE

TECHNICAL DATA

a. rated voltage Uo/U 450/750 V
b. test voltage (single core): 10 kV Spark test
c. temperature range for installation +5° C ... +70° C
d. temperature range fixed installation -40 °C...+70 °C
e. allowable limiting temperature at the conductor in operation +70 °C
f. allowable limiting temperature at the conductor in case of short circuit +160° C
g. fire behaviour according to DIN EN 60332-1-2
h. minimum bending radii depending on the core diamenter according to DIN VDE 0298-300
i. The materials used for manufacturing are silicone and cadmium free and free of substances harmful to lacquer.

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 1.5	3.0	21	14.4
1 X 2.5	3.6	32	24.0
1 X 4	4.3	46	38.4
1 X 6	4.8	65	58.0
1 X 10	6.3	115	96.0
1 X 16	7.4	170	154.0
1 X 25	9.1	260	240.0

H07V-K

The harmonized PVC core with finely stranded conductor

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 35	10.3	350	336.0
1 X 50	12.8	505	480.0
1 X 70	14.6	695	672.0
1 X 95	17.1	910	912.0
1 X 120	18.7	1,150	1,152.0
1 X 150	21.3	1,440	1,440.0
1 X 185	23.1	1,740	1,776.0
1 X 240	27.5	2,330	2,304.0

usual delivery design: 100 m coil in cardboard box (up to 6 mm²), non-returnable or returnable barrel (bis 6 mm²), plastic coil (bis 6 mm²), 10 mm² - 35 mm² 100 coil or drum, 50 mm² - 95 mm² 50 m coil or drum, from 120 mm² onwards drum
additional printing (numbers, letters) on request
other delivery designs on request

H05V-U

The harmonized PVC wiring cable with single-wire conductor

For the internal wiring of devices, protected installation in and on lamps (UV exposure should be avoided), application in and on electric resources in electric power installations. Utilization in ducts on-wall and in-wall for signal systems. Not allowed for safety class II.

CABLE MAKE-UP

a. according to DIN VDE 0281-3 (HD21.3)
b. bare or tinned copper wire, single-wire class 1 according to DIN EN 60228 (former DIN VDE 0295)
c. conductor insulation PVC TI1 according to DIN VDE 0281-1 (HD 21.1)
d. wire marking according to DIN VDE 0281-1 (HD 21.1)
e. green and yellow as single colours are allowed, unless they are in conflict with the relevant regulations
f. product marking: BALZER KABELWERK MEISSEN <VDE> <HAR> H05V-U CE

TECHNICAL DATA

a. rated voltage Uo/U 300/500 V
b. test voltage (single core): 10 kV Spark test
c. temperature range for installation +5° C ... +70° C
d. temperature range fixed installation -40 °C...+70 °C
e. allowable limiting temperature at the conductor in operation +70 °C
f. allowable limiting temperature at the conductor in case of short circuit +160° C
g. fire behaviour according to DIN EN 60332-1-2
h. minimum bending radii according to DIN VDE 0298-300
i. The materials used for manufacturing are silicone and cadmium free and free of substances harmful to lacquer.

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 0.5	2.0	9	4.8
1 X 0.75	2.2	12	7.2
1 X 1	2.4	14	9.6

usual delivery design: 100 m coil in cardboard box, non-returnable or returnable barrel, plastic coil
other delivery designs on request

H07V-U

The harmonized PVC wiring cable with single-wire conductor

RoHS COMPLIANT CE ⊲VDE⊳ ⊲HAR⊳

For the internal wiring of devices, switch stations, distribution frames, in electric power installations, in lamps (UV exposure should be avoided) with a rated voltage of up to 750 V DC voltage to earth. In rail vehicles the operating DC voltage can be 900 V to earth.
It is only allowed to install the conductors as a potential equalisation cable directly on-wall and in-wall or in trays. Not allowed for safety class II.

CABLE MAKE-UP

a. according to DIN VDE 0281-3 (HD21.3)
b. bare or tinned copper wire, single-wire class 1 according to DIN EN 60228 (former DIN VDE 0295)
c. conductor insulation PVC TI1 according to DIN VDE 0281-1 (HD 21.1)
d. wire marking according to DIN VDE 0281-1 (HD 21.1)
e. colours according to DIN IEC 304. Colour combinations except green/yellow, as well as the single colours green and yellow are not allowed.
f. product marking: BALZER KABELWERK MEISSEN <VDE> <HAR> H07V-U CE

TECHNICAL DATA

a. rated voltage Uo/U 450/750 V
b. test voltage (single core): 10 kV Spark test
c. temperature range for installation +5° C ... +70° C
d. temperature range fixed installation -40 °C...+70 °C
e. allowable limiting temperature at the conductor in operation +70 °C
f. allowable limiting temperature at the conductor in case of short circuit +160° C
g. fire behaviour according to DIN EN 60332-1-2
h. minimum bending radii depending on the core diamenter according to DIN VDE 0298-300
i. The materials used for manufacturing are silicone and cadmium free and free of substances harmful to lacquer.

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 1.5	2.8	20	14.4
1 X 2.5	3.4	32	24.0
1 X 4	3.9	46	38.4
1 X 6	4.4	65	58.0
1 X 10	5.7	110	96.0

usual delivery design: 100 m coil in cardboard box (up to 6 mm²), non-returnable or returnable barrel (up to 4 mm²), 100 m coil shrink wrapped or drum (6 mm², 10 mm²)

H07V-U

The harmonized PVC wiring cable with single-wire conductor

additional printing (numbers, letters) on request
other delivery designs on request

H05V-R

The harmonized PVC wiring cable with stranded conductor

RoHS COMPLIANT CE ◁VDE▷ ◁HAR▷

For the internal wiring of devices, protected installation in and on lamps (UV exposure should be avoided), application in and on electric resources in electric power installations. Utilization in ducts on-wall and in-wall. Not allowed for safety class II.

CABLE MAKE-UP

a. according to DIN VDE 0281-3 (HD21.3)
b. bare or tinned copper wire, stranded class 2 according to DIN EN 60228 (former DIN VDE 0295)
c. conductor insulation PVC TI1 according to DIN VDE 0281-1 (HD 21.1)
d. wire marking according to DIN VDE 0281-1 (HD 21.1)
e. colours according to DIN IEC 304. Colour combinations except green/yellow, as well as the single colours green and yellow are not allowed.
f. product marking: BALZER KABELWERK MEISSEN <VDE> <HAR> H07V-R CE

TECHNICAL DATA

a. rated voltage Uo/U 300/500 V
b. test voltage (single core): 10 kV Spark test
c. temperature range for installation +5° C ... +70° C
d. temperature range fixed installation -40 °C...+70 °C
e. allowable limiting temperature at the conductor in operation +70 °C
f. allowable limiting temperature at the conductor in case of short circuit +160° C
g. fire behaviour according to DIN EN 60332-1-2
h. minimum bending radii according to DIN VDE 0298-300
i. The materials used for manufacturing are silicone and cadmium free and free of substances harmful to lacquer.

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.
1 X 0.5	2.1	9
1 X 0.75	2.3	12
1 X 1	2.5	14

additional printing (numbers, letters) on request
other delivery designs on request

H07V-R

The harmonized PVC core with stranded conductor

Protected installation in devices, switch stations, distribution frames, in electric power installations, in lamps (UV exposure should be avoided) with a rated voltage of up to 750 V DC voltage to earth. In rail vehicles the operating DC voltage can be 900 V to earth.
It is only allowed to install the conductors as a potential equalisation cable directly on-wall and in-wall or in trays. Not allowed for safety class II.

CABLE MAKE-UP

a. according to DIN VDE 0281-3 (HD21.3)
b. bare or tinned copper wire, stranded class 2 according to DIN EN 60228 (former DIN VDE 0295)
c. conductor insulation PVC TI1 according to DIN VDE 0281-1 (HD 21.1)
d. wire marking according to DIN VDE 0281-1 (HD 21.1)
e. colours according to DIN IEC 304. Colour combinations except green/yellow, as well as the single colours green and yellow are not allowed.
f. product marking: BALZER KABELWERK MEISSEN <VDE> <HAR> H07V-R CE

TECHNICAL DATA

a. rated voltage Uo/U 450/750 V
b. test voltage (single core): 10 kV Spark test
c. temperature range for installation +5° C ... +70° C
d. temperature range fixed installation -40 °C...+70 °C
e. allowable limiting temperature at the conductor in operation +70 °C
f. allowable limiting temperature at the conductor in case of short circuit +160° C
g. fire behaviour according to DIN EN 60332-1-2
h. minimum bending radii depending on the core diamenter according to DIN VDE 0298-300
i. The materials used for manufacturing are silicone and cadmium free and free of substances harmful to lacquer.

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 1.5	3.0	22	14.4
1 X 2.5	3.6	32	24.0
1 X 4	4.3	46	38.4
1 X 6	4.7	65	57.6
1 X 10	6.2	115	96
1 X 16	7.2	170	154.0
1 X 25	8.9	260	240.0

H07V-R

The harmonized PVC core with stranded conductor

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 35 +	9.7	350	336.0
1 X 50 +	11.2	475	480.0
1 X 70 +	13.0	670	672.0
1 X 95 +	15.0	920	912.0
1 X 120 +	16.4	1,150	1152.0
1 X 150 +	18.3	1,420	1440.0
1 X 185 +	20.7	1,780	1776.0
1 X 240 +	23.6	2,340	2304.0

+ ... compacted conductor
additional printing (numbers, letters) on request
other delivery designs on request

H05V2-K

The heat-resistant, harmonized PVC wiring cable with finely stranded conductor

RoHS COMPLIANT CE ◁VDE▷ ◁HAR▷

Protected installation in devices, switch stations, distribution frames, in electric power installations with increased thermal stress and in lamps (UV exposure should be avoided).
The direct contact with objects having more than 85° C should be avoided.
Not allowed for safety class II.

CABLE MAKE-UP

a. according to DIN VDE 0281-7 (HD21.7)
b. bare or tinned copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. conductor insulation PVC TI3 according to DIN VDE 0281-1 (HD 21.1)
d. wire marking according to DIN VDE 0281-1 (HD 21.1)
e. green and yellow as single colours are allowed, unless they are in conflict with the relevant regulations
f. product marking: BALZER KABELWERK MEISSEN <VDE> <HAR> H05V2-K CE

TECHNICAL DATA

a. rated voltage Uo/U 300/500 V
b. test voltage (single core): 10 kV Spark test
c. temperature range for installation +5° C ... +90° C
d. temperature range fixed installation -40 °C...+90 °C
e. allowable limiting temperature at the conductor in operation +90 °C
f. allowable limiting temperature at the conductor in case of short circuit +160° C
g. fire behaviour according to DIN EN 60332-1-2
h. minimum bending radii according to DIN VDE 0298-300
i. The materials used for manufacturing are silicone and cadmium free and free of substances harmful to lacquer.

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 0.5	2.2	9	4.8
1 X 0.75	2.3	11	7.2
1 X 1	2.5	13	9.6

usual delivery design: 100 m coil in cardboard box, non-returnable or returnable barrel, plastic coil
other delivery designs on request

H07V2-K

The heat-resistant, harmonized PVC core with finely stranded conductor

RoHS COMPLIANT CE ◁VDE▷ ◁HAR▷

Protected installation in devices, switch stations, distribution frames, in electric power installations with increased thermal stress and in lamps (UV exposure should be avoided) with a rated voltage of up to 750 V DC voltage to earth. The direct contact with objects having more than 85° C should be avoided.

CABLE MAKE-UP

a. according to DIN VDE 0281-7 (HD21.7)
b. bare or tinned copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. conductor insulation PVC TI3 according to DIN VDE 0281-1 (HD 21.1)
d. wire marking according to DIN VDE 0281-1 (HD 21.1)
e. colours according to DIN IEC 304. Colour combinations except green/yellow, as well as the single colours green and yellow are not allowed.
f. product marking: BALZER KABELWERK MEISSEN <VDE> <HAR> H07V2-K CE

TECHNICAL DATA

a. rated voltage Uo/U 450/750 V
b. test voltage (single core): 10 kV Spark test
c. temperature range for installation +5° C ... +90° C
d. temperature range fixed installation -40 °C...+90 °C
e. allowable limiting temperature at the conductor in operation +90 °C
f. allowable limiting temperature at the conductor in case of short circuit +160° C
g. fire behaviour according to DIN EN 60332-1-2
h. minimum bending radii depending on the core diamenter according to DIN VDE 0298-300
i. The materials used for manufacturing are silicone and cadmium free and free of substances harmful to lacquer.

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 1.5	3.0	19	14.4
1 X 2.5	3.6	30	24.0
1 X 4	4.3	45	38.4
1 X 6	4.8	63	58.0
1 X 10	6.3	110	96.0
1 X 16	7.4	165	154.0
1 X 25	9.1	255	240.0
1 X 35	10.3	345	336.0

usual delivery design: 100 m coil in cardboard box (up to 6 mm²), returnable or non-returnable barrel (up to 6 mm²), plastic coil (up to 6 m²), 10 mm² - 35 mm² 100 m coil or drum, 50 mm² - 95 mm² 50 m coil or drum, from 120 mm² onwards drum
additional printing (numbers, letters) on request
other delivery designs on request

H05V2-U

The heat-resistant, harmonized PVC wiring cable with single-wire conductor

RoHS COMPLIANT CE ◁VDE▷ ◁HAR▷

Protected installation in devices, switch stations, distribution frames, in electric power installations with increased thermal stress and in lamps (UV exposure should be avoided).
The direct contact with objects having more than 85° C should be avoided.
Not allowed for safety class II.

CABLE MAKE-UP

a. according to DIN VDE 0281-7 (HD21.7)
b. bare or tinned copper wire, single-wire class 1 according to DIN EN 60228 (former DIN VDE 0295)
c. conductor insulation PVC TI3 according to DIN VDE 0281-1 (HD 21.1)
d. wire marking according to DIN VDE 0281-1 (HD 21.1)
e. green and yellow as single colours are allowed, unless they are in conflict with the relevant regulations
f. product marking: BALZER KABELWERK MEISSEN <VDE> <HAR> H05V2-U CE

TECHNICAL DATA

a. rated voltage Uo/U 300/500 V
b. test voltage (single core): 10 kV Spark test
c. temperature range for installation +5° C ... +90° C
d. temperature range fixed installation -40 °C...+90 °C
e. allowable limiting temperature at the conductor in operation +90 °C
f. allowable limiting temperature at the conductor in case of short circuit +160° C
g. fire behaviour according to DIN EN 60332-1-2
h. minimum bending radii according to DIN VDE 0298-300
i. The materials used for manufacturing are silicone and cadmium free and free of substances harmful to lacquer.

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 0.5	2.0	9	4.8
1 X 0.75	2.2	11	7.2
1 X 1	2.4	14	9.6

usual delivery design: 100 m coil in cardboard box, non-returnable or returnable barrel, plastic coil
other delivery designs on request

H07V2-U

The heat-resistant, harmonized PVC core with single-wire conductor

RoHS COMPLIANT CE ◁VDE▷ ◁HAR▷

Protected installation in devices, switch stations, distribution frames, in electric power installations with increased thermal stress, in lamps (UV exposure should be avoided) with a rated voltage of up to 750 V DC voltage to earth.
The direct contact with objects having more than 85° C should be avoided.

CABLE MAKE-UP

a. according to DIN VDE 0281-7 (HD21.7)
b. bare or tinned copper wire, single-wire class 1 according to DIN EN 60228 (former DIN VDE 0295)
c. conductor insulation PVC TI3 according to DIN VDE 0281-1 (HD 21.1)
d. wire marking according to DIN VDE 0281-1 (HD 21.1)
e. colours according to DIN IEC 304. Colour combinations except green/yellow, as well as the single colours green and yellow are not allowed.
f. product marking: BALZER KABELWERK MEISSEN <VDE> <HAR> H07V2-U CE

TECHNICAL DATA

a. rated voltage Uo/U 450/750 V
b. test voltage (single core): 10 kV Spark test
c. allowable limiting temperature at the conductor in case of short circuit +160° C
d. temperature range for installation +5° C ... +90° C
e. temperature range fixed installation -40 °C...+90 °C
f. allowable limiting temperature at the conductor in operation +90 °C
g. fire behaviour according to DIN EN 60332-1-2
h. minimum bending radii depending on the core diamenter according to DIN VDE 0298-300
i. The materials used for manufacturing are silicone and cadmium free and free of substances harmful to lacquer.

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 1.5	2.8	20	14.4
1 X 2.5	3.4	31	24.0

usual delivery design: 100 m coil in cardboard box (up to 6 mm²), returnable or non-returnable barrel (up to 4 mm²), plastic coil (up to 4 m²), 100 m coil shrink wrapped or drumm (6 mm², 10 mm²)
additional printing (numbers, letters) on request
other delivery designs on request

H05V2-R

The heat-resistant, harmonized PVC core with stranded conductor

RoHS COMPLIANT CE ◁VDE▷ ◁HAR▷

Protected installation in devices, switch stations, distribution frames, in electric power installations with increased thermal stress, in lamps (UV exposure should be avoided).
The direct contact with objects having more than 85° C should be avoided.
Not allowed for safety class II.

CABLE MAKE-UP

a. according to DIN VDE 0281-7 (HD21.7)
b. bare or tinned copper wire, stranded class 2 according to DIN EN 60228 (former DIN VDE 0295)
c. conductor insulation PVC TI3 according to DIN VDE 0281-1 (HD 21.1)
d. wire marking according to DIN VDE 0281-1 (HD 21.1)
e. green and yellow as single colours are allowed, unless they are in conflict with the relevant regulations
f. product marking: BALZER KABELWERK MEISSEN <VDE> <HAR> H05V2-R CE

TECHNICAL DATA

a. rated voltage Uo/U 300/500 V
b. test voltage (single core): 10 kV Spark test
c. temperature range for installation +5° C ... +90° C
d. temperature range fixed installation -40 °C...+90 °C
e. allowable limiting temperature at the conductor in operation +90 °C
f. allowable limiting temperature at the conductor in case of short circuit +160° C
g. fire behaviour according to DIN EN 60332-1-2
h. minimum bending radii according to DIN VDE 0298-300
i. The materials used for manufacturing are silicone and cadmium free and free of substances harmful to lacquer.

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 0.5	2.1	9	4.8
1 X 0.75	2.3	12	7.2
1 X 1	2.5	14	9.6
1 X 16	8.0	165	154

usual delivery design: 100 m coil in cardboard box, non-returnable or returnable barrel, plastic coil
other delivery designs on request

H07V2-R

The heat-resistant, harmonized PVC core with stranded conductor

RoHS COMPLIANT CE ◁VDE▷ ◁HAR▷

Protected installation in devices, switch stations, distribution frames, in electric power installations with increased thermal stress and in lamps (UV exposure should be avoided).
The direct contact with objects having more than 85° C should be avoided.
Not allowed for safety class II.

CABLE MAKE-UP

a. according to DIN VDE 0281-7 (HD21.7)
b. bare or tinned copper wire, stranded class 2 according to DIN EN 60228 (former DIN VDE 0295)
c. conductor insulation PVC TI3 according to DIN VDE 0281-1 (HD 21.1)
d. wire marking according to DIN VDE 0281-1 (HD 21.1)
e. colours according to DIN IEC 304. Colour combinations except green/yellow, as well as the single colours green and yellow are not allowed.
f. product marking: BALZER KABELWERK MEISSEN <VDE> <HAR> H07V2-R CE

TECHNICAL DATA

a. rated voltage Uo/U 450/750 V
b. test voltage (single core): 10 kV Spark test
c. temperature range for installation +5° C ... +90° C
d. temperature range fixed installation -40 °C...+90 °C
e. allowable limiting temperature at the conductor in operation +90 °C
f. allowable limiting temperature at the conductor in case of short circuit +160° C
g. fire behaviour according to DIN EN 60332-1-2
h. minimum bending radii depending on the core diamenter according to DIN VDE 0298-300
i. The materials used for manufacturing are silicone and cadmium free and free of substances harmful to lacquer.

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 1.5	3.0	22	14.4
1 X 2.5	3.6	32	24
1 X 4	4.3	46	38.4
1 X 6	4.7	65	57.6
1 X 10	6.2	115	96
1 X 16	7.2	170	153.6
1 X 25	8.9	260	240
1 X 35 +	9.7	350	0

+ ... compacted conductor
additional printing (numbers, letters) on request
other delivery designs on request

H07V3-K

The cold-resistant, harmonized PVC core with finely stranded conductor

RoHS COMPLIANT CE ◁VDE▷ ◁HAR▷

Protected installation in devices, switch stations, distribution frames, in electric power installations at low temperatures, in lamps with a rated voltage of up to 750 V DC voltage to earth (UV exposure should be avoided). In rail vehicles the operating DC voltage can be 900 V to earth.
It is only allowed to install the conductors as a potential equalisation cable directly on-wall and in-wall or in trays. Not allowed for safety class II.

CABLE MAKE-UP

a. according to DIN VDE 0281-9 (HD 21.9)
b. bare or tinned copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. conductor insulation PVC TI4 according to DIN VDE 0281-1 (HD 21.1)
d. wire marking according to DIN VDE 0281-1 (HD 21.1)
e. colours according to DIN IEC 304. Colour combinations except green/yellow, as well as the single colours green and yellow are not allowed.
f. product marking: BALZER KABELWERK MEISSEN <VDE> <HAR> H07V3-K CE

TECHNICAL DATA

a. rated voltage Uo/U 450/750 V
b. test voltage (single core): 10 kV Spark test
c. temperature range for installation -25° C ... +70° C
d. temperature range fixed installation -40 °C...+70 °C
e. allowable limiting temperature at the conductor in operation +70 °C
f. allowable limiting temperature at the conductor in case of short circuit +160° C
g. fire behaviour according to DIN EN 60332-1-2
h. minimum bending radii depending on the core diamenter according to DIN VDE 0298-300
i. The materials used for manufacturing are silicone and cadmium free and free of substances harmful to lacquer.

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 1.5	3.0	21	14.4
1 X 2.5	3.6	32	24.0
1 X 4	4.3	46	38.4
1 X 6	4.8	65	58.0
1 X 10	6.3	115	96.0
1 X 16	7.4	170	154.0
1 X 25	9.1	260	240.0
1 X 35	10.3	350	336.0
1 X 50	12.8	505	480.0
1 X 70	14.6	695	672.0
1 X 95	17.1	910	912.0
1 X 120	18.7	1,150	1,152
1 X 150	21.3	1,440	1,440
1 X 185	23.1	1,740	1,776

H07V3-K

The cold-resistant, harmonized PVC core with finely stranded conductor

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 240	27.5	2,330	2,304

usual delivery design: 100 m coil in cardboard box (up to 6 mm²), non-returnable or returnable barrel (up to 6 mm²), plastic coil (up to 6 m²), 10 mm² - 35 mm² 100 m coil or drum, 50 mm² - 95 mm² 50 m coil or drum, from 120 mm² onwards drum
additional printing (numbers, letters) on request
other delivery designs on request

H07V3-U

The cold-resistant, harmonized PVC core with single-wire conductor

RoHS COMPLIANT CE ◁VDE▷ ◁HAR▷

Protected installation in devices, switch stations, distribution frames, in electric power installations at low temperatures, in lamps (UV exposure should be avoided) with a rated voltage of up to 750 V DC voltage to earth. In rail vehicles the operating DC voltage can be 900 V to earth.
It is only allowed to install the conductors as a potential equalisation cable directly on-wall and in-wall or in trays. Not allowed for safety class II.

CABLE MAKE-UP

a. according to DIN VDE 0281-9 (HD 21.9)
b. bare or tinned copper wire, single-wire class 1 according to DIN EN 60228 (former DIN VDE 0295)
c. conductor insulation PVC TI4 according to DIN VDE 0281-1 (HD 21.1)
d. wire marking according to DIN VDE 0281-1 (HD 21.1)
e. colours according to DIN IEC 304. Colour combinations except green/yellow, as well as the single colours green and yellow are not allowed.
f. product marking: BALZER KABELWERK MEISSEN <VDE> <HAR> H07V3-U CE

TECHNICAL DATA

a. rated voltage Uo/U 450/750 V
b. test voltage (single core): 10 kV Spark test
c. temperature range for installation -25° C ... +70° C
d. temperature range fixed installation -40 °C...+70 °C
e. allowable limiting temperature at the conductor in operation +70 °C
f. allowable limiting temperature at the conductor in case of short circuit +160° C
g. fire behaviour according to DIN EN 60332-1-2
h. minimum bending radii depending on the core diamenter according to DIN VDE 0298-300
i. The materials used for manufacturing are silicone and cadmium free and free of substances harmful to lacquer.

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 1.5	2.8	20	14.4
1 X 2.5	3.4	32	24.0
1 X 4	3.9	46	38.4
1 X 6	4.4	65	58.0
1 X 10	5.7	110	96.0

usual delivery design: 100 m coil in cardboard box (up to 6 mm²), non-returnable or returnable barrel (up to 4 mm²), plastic coil (up to 4 mm²), 100 m coil shrink wrapped or drum (6 mm², 10 mm²)
additional printing (numbers, letters) on request
other delivery designs on request

H07V3-R

The cold-resistant, harmonized PVC core with stranded conductor

RoHS COMPLIANT CE ◁VDE▷ ◁HAR▷

Protected installation in devices, switch stations, distribution frames, in electric power installations at low temperatures, in lamps (UV exposure should be avoided) with a rated voltage of up to 750 V DC voltage to earth. In rail vehicles the operating DC voltage can be 900 V to earth. It is only allowed to install the conductors as a potential equalisation cable directly on-wall and in-wall or in trays. Not allowed for safety class II.

CABLE MAKE-UP

a. according to DIN VDE 0281-9 (HD 21.9)
b. bare or tinned copper wire, stranded class 2 according to DIN EN 60228 (former DIN VDE 0295)
c. conductor insulation PVC TI4 according to DIN VDE 0281-1 (HD 21.1)
d. wire marking according to DIN VDE 0281-1 (HD 21.1)
e. colours according to DIN IEC 304. Colour combinations except green/yellow, as well as the single colours green and yellow are not allowed.
f. product marking: BALZER KABELWERK MEISSEN <VDE> <HAR> H07V3-R CE

TECHNICAL DATA

a. rated voltage Uo/U 450/750 V
b. test voltage (single core): 10 kV Spark test
c. temperature range for installation -25° C ... +70° C
d. temperature range fixed installation -40 °C...+70 °C
e. allowable limiting temperature at the conductor in operation +70 °C
f. allowable limiting temperature at the conductor in case of short circuit +160° C
g. fire behaviour according to DIN EN 60332-1-2
h. minimum bending radii depending on the core diamenter according to DIN VDE 0298-300
i. The materials used for manufacturing are silicone and cadmium free and free of substances harmful to lacquer.

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.
1 X 1.5	3.0	22
1 X 2.5	3.6	32
1 X 4	4.3	46
1 X 6	4.7	65
1 X 10	6.2	115
1 X 16	7.2	170
1 X 25	8.9	260
1 X 35 +	9.7	350

H07V3-R

The cold-resistant, harmonized PVC core with stranded conductor

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.
1 X 50 +	11.2	475
1 X 70 +	13.0	670
1 X 95 +	15.0	920
1 X 120 +	16.4	1,150
1 X 150 +	18.3	1,420
1 X 185 +	20.7	1,780
1 X 240 +	23.6	2,340

+ ... compacted conductor
additional printing (numbers, letters) on request
other delivery designs on request

03V-K

PVC core and wiring cable according to UL/CSA

Flexible wiring cable on a special PVC basis with UL/CSA approval especially for the North American market. It is used for the internal wiring of switch stations, technical devices, radio installations, household appliances, for the connection of electronic units within devices as well as for the installation in machine engineering.
The packaging has a UL/CSA label.

CABLE MAKE-UP

a. according to UL STYLE 1007 and/or 1569
b. bare or tinned copper wire according to UL 758, UL 1581, CSA C 22.2 No. 210-05
c. conductor insulation PVC according to Class 43 UL 1581
d. wire marking coloured

TECHNICAL DATA

a. operating voltage UL: 300 V
b. test voltage (single core): 5 kV Spark test
c. temperature rating (UL): + 105° C
d. application recommendation: temperature range for installation +5 °C...+90 °C
e. application recommendation: temperature range fixed installation -40 °C...+90 °C
f. fire behaviour according to VW-1 UL 1581, FT1 CSA C 22.2 No. 210-05
g. The materials used for manufacturing are silicone and cadmium free and free of substances harmful to lacquer.

Number of cores x cross-section in AWG/MCM per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 26 AWG	1.3	3	1.4
1 X 24 AWG	1.4	4	2.2
1 X 22 AWG	1.6	6	3.5
1 X 20 AWG	1.8	8	5.6
1 X 18 AWG	2.0	11	8.7
1 X 16 AWG	2.3	16	13.7
1 X 14 AWG	2.7	24	22.0
1 X 12 AWG	3.3	37	34.0
1 X 10 AWG	4.1	57	55.0

delivery design: coil, barrel
other delivery designs on request

03V-K (TR-64)

PVC core and wiring cable according to UL/CSA

Flexible wiring cable on a special PVC basis with UL/CSA approval especially for the North American market. It is used for the internal wiring of switch stations, technical devices, radio installations, household appliances, for the connection of electronic units within devices as well as for the installation in machine engineering.
The packaging has a UL/CSA label.

CABLE MAKE-UP

a. according to UL STYLE 1007
b. bare or tinned copper wire according to UL 758, UL 1581, CSA C22.2 No. 127 (TR-64)
c. conductor insulation PVC according to Class 43 UL 1581
d. wire marking coloured

TECHNICAL DATA

a. operating voltage UL: 300 V (CSA 600 V peak voltage)
b. test voltage (single core): 5 kV Spark test
c. temperature rating (UL): + 105° C
d. temperature rating (CSA): +90° C
e. application recommendation: temperature range for installation +5 °C...+90 °C
f. application recommendation: temperature range fixed installation -40 °C...+90 °C
g. fire behaviour according to VW1-UL 1581, FT1-CSA C 22.2 No. 127
h. The materials used for manufacturing are silicone and cadmium free and free of substances harmful to lacquer.

Number of cores x cross-section in AWG/MCM per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 26 AWG	1.3	3	1.4
1 X 24 AWG	1.4	4	2.2
1 X 22 AWG	1.6	6	3.5
1 X 20 AWG	1.8	8	5.6
1 X 18 AWG	2.0	11	8.7
1 X 16 AWG	2.3	16	13.7
1 X 14 AWG	2.7	24	22.0
1 X 12 AWG	3.3	37	34.0
1 X 10 AWG	4.1	57	55.0

delivery design: coil, barrel
other delivery designs on request

07V-K

PVC core and wiring cable according to UL/CSA

Flexible wiring cable on a special PVC basis with UL/CSA approval especially for the North American market. It is used for the internal wiring of switch stations, technical devices, radio installations, household appliances, for the connection of electronic units within devices as well as for the installation in machine engineering.
The packaging has a UL/CSA label.

CABLE MAKE-UP

a. according to UL style 1015
b. bare or tinned copper wire according to UL 758, UL 1581, CSA C22.2 No. 127
c. conductor insulation PVC according to Class 43 UL 1581
d. wire marking coloured

TECHNICAL DATA

a. operating voltage UL: 600 V
b. test voltage (single core): 10 kV Spark test
c. temperature rating (UL): + 105° C
d. application recommendation: temperature range for installation +5 °C...+90 °C
e. application recommendation: temperature range fixed installation -40 °C...+90 °C
f. The materials used for manufacturing are silicone and cadmium free and free of substances harmful to lacquer.

Number of cores x cross-section in AWG/MCM per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 24 AWG	2.2	7	2.2
1 X 22 AWG	2.3	8	3.5
1 X 20 AWG	2.6	11	5.6
1 X 18 AWG	2.8	15	8.7
1 X 16 AWG	3.1	20	13.7
1 X 14 AWG	3.5	28	22.0
1 X 12 AWG	4.0	42	34.0
1 X 10 AWG	4.6	61	55.0
1 X 8 AWG	6.4	105	86.0
1 X 6 AWG	8.9	175	142.0
1 X 4 AWG	10.2	255	217.0
1 X 3 AWG	11.1	315	275.0
1 X 2 AWG	11.3	370	340.0
1 X 1 AWG	13.8	510	445.0

07V-K

PVC core and wiring cable according to UL/CSA

Number of cores x cross-section in AWG/MCM per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 1/0 AWG	15.5	610	534.0
1 X 2/0 AWG	16.0	740	672.0
1 X 3/0 AWG	17.4	915	848.0
1 X 4/0 AWG	19.1	1,140	1,072.0

Usual delivery design: 100 m coil in cardboard box (up to 10 AWG), non-returnable or returnable barrel (up to 10 AWG), plastic coil (up to 14 AWG), 8 AWG-2 AWG 100 m coil or drum, 1 AWG-3/0 AWG 50 m coil or drum, from 4/0 AWG onwards drum
additional printing (numbers, letters) on request
other delivery designs on request

07V-K (MTW)

PVC core and wiring cable according to UL/MTW/CSA

Flexible wiring cable on a special PVC basis with UL/CSA approval especially for the North American market. It is used for the internal wiring of switch stations, technical devices, radio installations, household appliances, for the connection of electronic units within devices as well as for the installation in machine engineering.
The packaging has a UL/CSA label.

CABLE MAKE-UP

a. according to UL style 1015
b. bare or tinned copper wire according to UL 758, UL 1581, UL 1063, CSA C22.2 No. 127
c. conductor insulation PVC according to Class 43 UL 1581
d. wire marking coloured

TECHNICAL DATA

a. operating voltage UL: 600 V
b. test voltage (single core): 10 kV Spark test
c. temperature rating (UL): + 105° C
d. application recommendation: temperature range for installation +5 °C...+90 °C
e. application recommendation: temperature range fixed installation -40 °C...+90 °C
f. The materials used for manufacturing are silicone and cadmium free and free of substances harmful to lacquer.

Number of cores x cross-section in AWG/MCM per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 22 AWG	2.3	8	3.5
1 X 20 AWG	2.6	11	5.6
1 X 18 AWG	2.8	15	8.7
1 X 16 AWG	3.1	20	13.7
1 X 14 AWG	3.5	28	22.0
1 X 12 AWG	4.0	42	34.0
1 X 10 AWG	4.6	61	55.0
1 X 8 AWG	6.4	105	86.0
1 X 6 AWG	8.9	175	142.0
1 X 4 AWG	10.2	255	217.0
1 X 3 AWG	11.1	315	275.0
1 X 2 AWG	11.3	370	340.0
1 X 1 AWG	13.8	510	445.0
1 X 1/0 AWG	15.5	610	534.0

07V-K (MTW)

PVC core and wiring cable according to UL/MTW/CSA

Number of cores x cross-section in AWG/MCM per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 2/0 AWG	16.0	740	672.0
1 X 3/0 AWG	17.4	915	848.0
1 X 4/0 AWG	19.1	1,140	1,072.0

usual delivery design: 100 m coil in cardboard box (up to 10 AWG), non-returnable or returnable barrel (up to 10 AWG), plastic coil (up to 14 AWG), 8 AWG-2 AWG 100 m coil or drum, 1 AWG-3/0 AWG 50 m coil or drum, from 4/0 AWG onwards drum
additional printing (numbers, letters) on request
other delivery designs on request

multi-standard cores and wiring cables PVC VDE UL CSA

H05V-K

The harmonized PVC multi-standard wiring cable with finely stranded conductor according to VDE/UL/CSA

For the internal wiring in devices, protected installation in and on lamps (UV exposure should be avoided), application in and on electrical resources in electric power installation. Utililzation in ducts on-wall and in-wall. Not allowed for safety class II.
This cable has been developped especially for producers of machines and devices which sell their products on the European as well as on the North American market in the USA and Canada.
The packaging has a UL/CSA label.

CABLE MAKE-UP

a. according to DIN VDE 0281-3 and UL STYLE 1007, 1569, CSA C22.2 No. 210-05
b. bare or tinned copper wire, finely stranded class 5 according to DIN EN 60288 und UL 758, UL 1581, CSA C22.2 No. 210-05
c. conductor insulation PVC TI3 according to DIN VDE 0281-1 (HD 21.1)
d. wire marking according to DIN VDE 0281-1 (HD 21.1)
e. green and yellow as single colours are allowed, unless they are in conflict with the relevant regulations

TECHNICAL DATA

a. operating voltage UL: 300 V
b. rated voltage Uo/U 300/500 V
c. test voltage (single core): 10 kV Spark test
d. temperature range for installation +5° C ... +70° C
e. temperature range fixed installation -40 °C...+70 °C
f. allowable limiting temperature at the conductor in operation +70 °C
g. allowable limiting temperature at the conductor in case of short circuit +160° C
h. temperature rating (UL): + 105° C
i. fire behaviour according to DIN EN 60332-1-2 and to VW-1 UL 1581, FT1 CSA C 22.2 No. 210-05
j. minimum bending radii according to DIN VDE 0298-300
k. The materials used for manufacturing are silicone and cadmium free and free of substances harmful to lacquer.

Number of cores x cross-section in mm² per conductor	Cross-section in AWG/MCM	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 0.5	22	2.2	9	4.8
1 X 0.75	20	2.3	11	7.2
1 X 1	18	2.5	13	9.6

usual delivery design: 100 m coil in cardboard box (up to 6 mm²), non-returnable or returnable barrel (up to 6 mm²), plastic coil (up to 6 m²), 10 mm² - 35 mm² 100 m coil or drum, 50 mm² - 95 mm² 50 m coil or drum, from 120 mm² onwards drum
other delivery designs on request

multi-standard cores and wiring cables PVC VDE UL CSA

H07V-K

The harmonized PVC multi-standard wiring cable with finely stranded conductor according to VDE/UL/CSA

Protected installation in devices, switch stations, distribution frames, in electric power installations, in lamps with a rated voltage up to 750 V DC voltage to earth. In rail vehicles, the operating DC voltage can be 900 V to earth.
The cables can only be installed as potential equalisation cables directly on-wall and in-wall or in trays.
This cable has been developped especially for producers of machines and devices which sell their products on the European as well as on the North American market in the USA and Canada.
The packaging has a UL/CSA label.

CABLE MAKE-UP

a. according to DIN VDE 0281-3 (HD 21.3) and UL STYLE 1015, CSA C22.2 No. 127 respectively No. 210-05
b. bare or tinned copper wire, finely stranded class 5 according to DIN EN 60288 und UL 758, UL 1581, CSA C22.2 No. 127 and No. 210-05 respectively
c. conductor insulation PVC TI3 according to DIN VDE 0281-1 (HD 21.1)
d. wire marking according to DIN VDE 0281-1 (HD 21.1)
e. colours according to DIN IEC 304. Colour combinations except green/yellow, as well as the single colours green and yellow are not allowed.

TECHNICAL DATA

a. rated voltage Uo/U 450/750 V
b. operating voltage UL: 600 V
c. test voltage (single core): 10 kV Spark test
d. temperature range for installation +5° C ... +70° C
e. temperature range fixed installation -40 °C...+70 °C
f. allowable limiting temperature at the conductor in operation +70 °C
g. allowable limiting temperature at the conductor in case of short circuit +160° C
h. temperature rating (UL): + 105° C
i. fire behaviour according to DIN EN 60332-1-2 and to VW-1 UL 1581, FT1 CSA C 22.2 No. 127 respectively 210-05
j. minimum bending radii according to DIN VDE 0298-300
k. The materials used for manufacturing are silicone and cadmium free and free of substances harmful to lacquer.

Number of cores x cross-section in mm² per conductor	Cross-section in AWG/MCM	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 0.5 *1)	22	2.5	10	0
1 X 0.75 *1)	20	2.7	13	0
1 X 1 *1)	18	2.8	15	0
1 X 1.5	16	3.1	20	14.4
1 X 2.5	14	3.6	30	24.0
1 X 4	12	4.2	45	38.4
1 X 6	10	4.8	63	58.0

multi-standard cores and wiring cables PVC VDE UL CSA

H07V-K

The harmonized PVC multi-standard wiring cable with finely stranded conductor according to VDE/UL/CSA

Number of cores x cross-section in mm² per conductor	Cross-section in AWG/MCM	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 10	8	6.6	115	96.0
1 X 16 *2)	6	8.9	185	154.0
1 X 25	4	10.2	265	240.0
1 X 35	2	11.7	375	336.0
1 X 50 *2)	1	14.1	530	480.0
1 X 70 *2)	2/0	15.9	736	672.0
1 X 95	3/0	18.0	930	912.0
1 X 120	4/0	19.7	1,170	1,152.0
1 X 150	250	22.6	1,470	1440.00
1 X 185	350	22.4	1,870	1776.00
1 X 240	450	27.0	2,340	2304.00

*1) S07V-K without <VDE> <HAR> (deviation: cross section)

*2) S07V-K without <VDE> <HAR> (deviation: outer diameter)

usual delivery design: 100 m coil in cardboard box (up to 6 mm²), non-returnable or returnable barrel (up to 6 mm²), plastic coil (up to 6 mm²), 10 mm² - 35mm² 100 m coil or drum, 50 mm² - 95 mm² 50 m coil or drum, from 120 mm² onwards drum

additional printing (numbers, letters) on request

other delivery designs on request

multi-standard cores and wiring cables PVC VDE UL CSA

H07V-K (MTW)

The harmonized PVC multi-standard wiring cable with finely stranded conductor according to VDE/UL/MTW/CSA

Protected installation in devices, switch stations, distribution frames, in electric power installations, in lamps with a rated voltage up to 750 V DC voltage to earth. In rail vehicles, the operating DC voltage can be 900 V to earth.
The cables can only be installed as potential equalisation cables directly on-wall and in-wall or in trays. Not allowed for safety class II.
This cable has been developped especially for producers of machines and devices which sell their products on the European as well as on the North American market in the USA and Canada.
The packaging has a UL/CSA label.

CABLE MAKE-UP

a. according to DIN VDE 0281-3 (HD 21.3) and UL STYLE 1015, UL 1063 (MTW), CSA C22.2 No. 127 respectively No. 210-05
b. bare or tinned copper wire, finely stranded class 5 according to DIN EN 60288 und UL 758, UL 1581, CSA C22.2 No. 127 and No. 210-05 respectively
c. conductor insulation PVC TI3 according to DIN VDE 0281-1 (HD 21.1)
d. wire marking according to DIN VDE 0281-1 (HD 21.1)
e. colours according to DIN IEC 304. Colour combinations except green/yellow, as well as the single colours green and yellow are not allowed.

TECHNICAL DATA

a. rated voltage Uo/U 450/750 V
b. operating voltage UL: 600 V
c. test voltage (single core): 10 kV Spark test
d. temperature range for installation +5° C ... +70° C
e. temperature range fixed installation -40 °C...+70 °C
f. allowable limiting temperature at the conductor in operation +70 °C
g. allowable limiting temperature at the conductor in case of short circuit +160° C
h. temperature rating (UL): + 105° C
i. fire behaviour according to DIN EN 60332-1-2 and to VW-1 UL 1581, FT1 CSA C 22.2 No. 127
j. minimum bending radii according to DIN VDE 0298-300
k. The materials used for manufacturing are silicone and cadmium free and free of substances harmful to lacquer.

Number of cores x cross-section in mm² per conductor	Cross-section in AWG/MCM	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 0.5 *1)	22	2.5	11	0
1 X 0.75 *1)	20	2.7	13	0
1 X 1 *1)	18	2.8	15	0
1 X 1.5	16	3.1	21	14.4
1 X 2.5	14	3.6	31	24.0
1 X 4	12	4.2	46	38.4
1 X 6	10	4.8	63	58.0

H07V-K (MTW)

The harmonized PVC multi-standard wiring cable with finely stranded conductor according to VDE/UL/MTW/CSA

Number of cores x cross-section in mm² per conductor	Cross-section in AWG/MCM	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 10	8	6.9	115	96.0
1 X 16 *2)	6	8.9	190	154.0
1 X 25	4	10.2	270	240.0
1 X 35	2	11.7	375	336.0
1 X 50 *2)	1	14.1	530	480.0
1 X 70 *2)	2/0	15.9	736	672.0
1 X 95	3/0	18.0	930	912.0
1 X 120	4/0	19.5	1,170	1,152.0

*1) S07V-K without <VDE> <HAR> (deviation: cross section)
2) S07V-K without <VDE> <HAR> (deviation: outer diameter)
usual delivery design: 100 m coil in cardboard box (up to 6 mm²), non-returnable or returnable barrel (up to 6 mm²), plastic coil (up to 6 mm²), 10 mm² - 35mm² 100 m coil or drum, 50 mm² - 95 mm² 50 m coil or drum, from 120 mm² onwards drum
additional printing (numbers, letters) on request
other delivery designs on request

multi-standard cores and wiring cables PVC VDE UL CSA

H05V2-K

Heat-resistant, harmonized PVC multi-standard wiring cable with finely stranded conductor according to VDE/UL/CSA

For the internal wiring in devices, protected installation in and on lamps (UV exposure should be avoided), application in and on electrical resources in electric power installation. Utililzation in ducts on-wall and in-wall. Not allowed for safety class II. The direct contact with objects having more than 85° C should be avoided.
This cable has been developped especially for producers of machines and devices which sell their products on the European as well as on the North American market in the USA and Canada.
The packaging has a UL/CSA label.

CABLE MAKE-UP

a. according to DIN VDE 0281-7 and UL STYLE 1007, 1569, CSA C22.2 No. 210-05
b. bare or tinned copper wire, finely stranded class 5 according to DIN EN 60288 und UL 758, UL 1581, CSA C22.2 No. 210-05
c. conductor insulation PVC TI3 according to DIN VDE 0281-1 (HD 21.1)
d. wire marking according to DIN VDE 0281-1 (HD 21.1)
e. green and yellow as single colours are allowed, unless they are in conflict with the relevant regulations

TECHNICAL DATA

a. rated voltage Uo/U 300/500 V
b. operating voltage UL: 300 V
c. test voltage (single core): 10 kV Spark test
d. temperature range for installation +5° C ... +90° C
e. temperature range fixed installation -40 °C...+90 °C
f. allowable limiting temperature at the conductor in operation +90 °C
g. allowable limiting temperature at the conductor in case of short circuit +160° C
h. temperature rating (UL): + 105° C
i. fire behaviour according to DIN EN 60332-1-2 and to VW-1 UL 1581, FT1 CSA C 22.2 No. 210-05
j. minimum bending radii according to DIN VDE 0298-300
k. The materials used for manufacturing are silicone and cadmium free and free of substances harmful to lacquer.

Number of cores x cross-section in mm² per conductor	Cross-section in AWG/MCM	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 0.5	22	2.2	9	4.8
1 X 0.75	20	2.3	11	7.2
1 X 1	18	2.5	14	9.6

usual delivery design: 100 m coil in cardboard box (up to 6 mm²), non-returnable or returnable barrel (up to 6 mm²), plastic coil (up to 6 mm²), 10 mm² - 35mm² 100 m coil or drum, 50 mm² - 95 mm² 50 m coil or drum, from 120 mm² onwards drum
other delivery designs on request

multi-standard cores and wiring cables PVC VDE UL CSA

H05V2-U

Heat-resistant, harmonized PVC multi-standard wiring cable with single-wire conductor according to VDE/UL/CSA

For the internal wiring in devices, protected installation in and on lamps (UV exposure should be avoided), application in and on electrical resources in electric power installation. Not allowed for safety class II. The direct contact with objects having more than 85° C should be avoided.
This cable has been developped especially for producers of machines and devices which sell their products on the European as well as on the North American market in the USA and Canada.
The packaging has a UL/CSA label.

CABLE MAKE-UP

a. according to DIN VDE 0281-7 and UL STYLE 1007, 1569, CSA C22.2 No. 210-05
b. bare or tinned copper wire, single-wire class 1 according to DIN EN 60228 and UL 758, UL 1581, CSA C 22.2 No. 210-05
c. conductor insulation PVC TI3 according to DIN VDE 0281-1 (HD 21.1)
d. wire marking according to DIN VDE 0281-1 (HD 21.1)
e. green and yellow as single colours are allowed, unless they are in conflict with the relevant regulations

TECHNICAL DATA

a. rated voltage Uo/U 300/500 V
b. operating voltage UL: 300 V
c. test voltage (single core): 10 kV Spark test
d. temperature range for installation +5° C ... +90° C
e. temperature range fixed installation -40 °C...+90 °C
f. allowable limiting temperature at the conductor in operation +90 °C
g. allowable limiting temperature at the conductor in case of short circuit +160° C
h. temperature rating (UL): + 105° C
i. fire behaviour according to DIN EN 60332-1-2 and to VW-1 UL 1581, FT1 CSA C 22.2 No. 210-05
j. minimum bending radii according to DIN VDE 0298-300
k. The materials used for manufacturing are silicone and cadmium free and free of substances harmful to lacquer.

Number of cores x cross-section in mm² per conductor	Cross-section in AWG/MCM	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 0.5	22	2.0	8	4.8
1 X 0.75	20	2.2	11	7.2
1 X 1	18	2.5	14	9.6

usual delivery design: 100 m coil in cardboard box (up to 6 mm²), non-returnable or returnable barrel (up to 6 mm²), plastic coil (up to 6 mm²), 10 mm² - 35mm² 100 m coil or drum, 50 mm² - 95 mm² 50 m coil or drum, from 120 mm² onwards drum
other delivery designs on request

multi-standard cores and wiring cables PVC VDE UL CSA

H07V2-K

Heat-resistant, harmonized PVC multi-standard wiring cable with finely stranded conductor according to VDE/UL/CSA

Protected installation in devices, switch stations, distribution frames, in electric power installations, in lamps with a rated voltage up to 750 V DC voltage to earth. In rail vehicles, the operating DC voltage can be 900 V to earth.
The cables can only be installed as potential equalisation cables directly on-wall and in-wall or in trays.
Not allowed for safety class II. The direct contact with objects having more than 85° C should be avoided.
This cable has been developped especially for producers of machines and devices which sell their products on the European as well as on the North American market in the USA and Canada.
The packaging has a UL/CSA label.

CABLE MAKE-UP

a. bare or tinned copper wire, finely stranded class 5 according to DIN EN 60288 und UL 758, UL 1581, CSA C22.2 No. 127
b. conductor insulation PVC TI3 according to DIN VDE 0281-1 (HD 21.1)
c. wire marking according to DIN VDE 0281-1 (HD 21.1)
d. colours according to DIN IEC 304. Colour combinations except green/yellow, as well as the single colours green and yellow are not allowed.

TECHNICAL DATA

a. rated voltage Uo/U 450/750 V
b. operating voltage UL: 600 V
c. test voltage (single core): 10 kV Spark test
d. temperature range for installation +5° C ... +90° C
e. temperature range fixed installation -40 °C...+90 °C
f. allowable limiting temperature at the conductor in operation +90 °C
g. allowable limiting temperature at the conductor in case of short circuit +160° C
h. temperature rating (UL): + 105° C
i. fire behaviour according to DIN EN 60332-1-2 and to VW-1 UL 1581, FT1 CSA C 22.2 No. 127
j. minimum bending radii according to DIN VDE 0298-300
k. The materials used for manufacturing are silicone and cadmium free and free of substances harmful to lacquer.

Number of cores x cross-section in mm² per conductor	Cross-section in AWG/MCM	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 0.5 *1)	22	2.5	10	0
1 X 0.75 *1)	20	2.7	13	0
1 X 1 *1)	18	2.8	15	0
1 X 1.5	16	3.1	20	14.4
1 X 2.5	14	3.7	30	24.0
1 X 4	12	4.3	45	38.4
1 X 6	10	4.8	63	0

multi-standard cores and wiring cables PVC VDE UL CSA

H07V2-K

Heat-resistant, harmonized PVC multi-standard wiring cable with finely stranded conductor according to VDE/UL/CSA

Number of cores x cross-section in mm² per conductor	Cross-section in AWG/MCM	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 10	8	6.9	110	96.0
1 X 16 *2)	6	8.9	185	154.0
1 X 25	4	10.2	260	0
1 X 35	2	11.7	370	336.0

*1) S07V2-K without <VDE> <HAR> (deviation: cross section)
*2) S07V-K without <VDE> <HAR> (deviation: outer diameter)
usual delivery design: 100 m coil in cardboard box (up to 6 mm²), non-returnable or returnable barrel (up to 6 mm²), plastic coil (up to 6 mm²), 10 mm² - 35mm² 100 m coil or drum, 50 mm² - 95 mm² 50 m coil or drum, from 120 mm² onwards drum
additional printing (numbers, letters) on request
other delivery designs on request

multi-standard cores and wiring cables PVC VDE UL CSA

H07V2-K (MTW)

Heat-resistant, harmonized PVC multi-standard wiring cable with finely stranded conductor according to VDE/UL/MTW/CSA

Protected installation in devices, switch stations, distribution frames, in electric power installations, in lamps with a rated voltage up to 750 V DC voltage to earth. In rail vehicles, the operating DC voltage can be 900 V to earth.
The cables can only be installed as potential equalisation cables directly on-wall and in-wall or in trays.
Not allowed for safety class II. The direct contact with objects having more than 85° C should be avoided.
This cable has been developped especially for producers of machines and devices which sell their products on the European as well as on the North American market in the USA and Canada.
The packaging has a UL/CSA label.

CABLE MAKE-UP

a. according to DIN VDE 0281-7 (HD 21.7) and UL-STYLE 1015, UL 1063 (MTW), CSA C 22.2 No. 127
b. bare or tinned copper wire, finely stranded class 5 according to DIN EN 60288 und UL 758, UL 1581, CSA C22.2 No. 127
c. conductor insulation PVC TI3 according to DIN VDE 0281-1 (HD 21.1)
d. wire marking according to DIN VDE 0281-1 (HD 21.1)
e. colours according to DIN IEC 304. Colour combinations except green/yellow, as well as the single colours green and yellow are not allowed.

TECHNICAL DATA

a. rated voltage Uo/U 450/750 V
b. operating voltage UL: 1000 V
c. operating voltage CSA: 600 V
d. test voltage (single core): 10 kV Spark test
e. temperature range for installation +5° C ... +90° C
f. temperature range fixed installation -40 °C...+90 °C
g. allowable limiting temperature at the conductor in operation +90 °C
h. allowable limiting temperature at the conductor in case of short circuit +160° C
i. temperature rating (UL): + 105° C
j. fire behaviour according to DIN EN 60332-1-2 and to VW-1 UL 1581, FT1 CSA C 22.2 No. 127
k. minimum bending radii according to DIN VDE 0298-300
l. The materials used for manufacturing are silicone and cadmium free and free of substances harmful to lacquer.

Number of cores x cross-section in mm² per conductor	Cross-section in AWG/MCM	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 0.5 *1)	22	2.5	10	0
1 X 0.75 *1)	20	2.7	13	0
1 X 1 *1)	18	2.8	15	0
1 X 1.5	16	3.1	20	14.4
1 X 2.5	14	3.7	30	24.0
1 X 4	12	4.3	45	38.4

H07V2-K (MTW)

Heat-resistant, harmonized PVC multi-standard wiring cable with finely stranded conductor according to VDE/UL/MTW/CSA

Number of cores x cross-section in mm² per conductor	Cross-section in AWG/MCM	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 6	10	4.8	63	0
1 X 10	8	6.9	110	0
1 X 16 *2)	6	8.9	185	154.0
1 X 25	4	10.2	260	0
1 X 35	2	11.7	370	336.0

*1) S07V2-K without <VDE> <HAR> (deviation: cross section)
*2) S07V-K without <VDE> <HAR> (deviation: outer diameter)
usual delivery design: 100 m coil in cardboard box (up to 6 mm²), non-returnable or returnable barrel (up to 6 mm²), plastic coil (up to 6 mm²), 10 mm² - 35mm² 100 m coil or drum, 50 mm² - 95 mm² 50 m coil or drum, from 120 mm² onwards drum
additional printing (numbers, letters) on request
other delivery designs on request

LIY

PVC stranded hook-up wire based on VDE 0812

RoHS COMPLIANT

For the internal wiring of telecommunication devices and systems, of electronic units in devices, in toys and in pieces of sports equipment with low voltage.

CABLE MAKE-UP

a. according to DIN VDE 0812
b. bare or tinned copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. conductor insulation PVC TI2 according to DIN VDE 0281-1 (HD 21.1)
d. wire marking coloured

TECHNICAL DATA

a. rated voltage 42 V
b. test voltage (single core): 2 kV Spark test
c. temperature range for installation +5° C ... +70° C
d. temperature range fixed installation -40 °C...+70 °C
e. allowable limiting temperature at the conductor in operation +70 °C
f. allowable limiting temperature at the conductor in case of short circuit +160° C
g. fire behaviour according to DIN EN 60332-1-2
h. The materials used for manufacturing are silicone and cadmium free and free of substances harmful to lacquer.

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 0.14	1.1	3	1.4
1 X 0.25	1.3	4	2.4
1 X 0.5	1.8	7	4.8
1 X 0.75	2.0	10	7.2
1 X 1	2.1	13	9.6
1 X 1.5	2.6	19	14.4

usual delivery design: 100 m coil in cardboard box, non-returnable or returnable barrel, plastic coil
colour combinations are also available for ring printing, please ask
other delivery designs on request

31YFA

31YFA can be found in chapter 8.02.1

31YFAF

31YFAF can be found in chapter 8.02.2

BALZERCONTROL-Y-EMV (2YSLSTCY-J) 2YSLSTCY-J

The motor connecting cable with coloured PE cores, Cu shield and PVC sheath

As motor connecting cable in machine tools, handling devices, production and processing tools, band-conveyors and industrial robots. At the moment the demand for three phase current drives variable in speed is increasing. A complete system consists of the frequency converter, the motor connecting cable and the three phase current motor driven by a frequency converter.
Especially high demands are made on the motor connecting cable. These demands result from the use of modern converter technology, which produces electromagnetic fields via high pulse frequencies. To minimize the effect of these interfering fields to the environment, CONTROL-Y-EMV cables have a special Cu braid and an additional electrostatic shield. Thus a low transfer independence and good EMV results can be achieved. In addition CONTROL-Y-EMV cables are characterized as cables with especially good dialectric properties and low capacitance because of the use of polyethylene (PE) as insulation material. In comparison to conventional PVC connecting cables it means a power transfer with less loss. The cables are suitable for medium mechanical load conditions and fixed installation in dry, damp and wet interiors and for outside use.

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation polyethylene (PE) according to DIN EN 50290-2-23
d. core colours grey, black, brown and protective conductor green/yellow
e. cores stranded
f. banding with static shielding of Al-laminated foil
g. optimized screening braiding of tinned copper wires
h. outer sheath PVC TM 2 according to HD 21.1, preferred colour transparent

TECHNICAL DATA

a. rated voltage Uo/U 600/1000 V
b. test voltage 4000 V
c. coupling impedance at 30 MHz: <100 Ohm/km
d. temperature range flexible application -5° C ... +70° C
e. temperature range fixed installation -40° C ... +70° C
f. allowable limiting temperature at the conductor in operation +70° C
g. allowable limiting temperature at the conductor in case of short circuit +150° C, 5 s
h. fire behaviour according to EN 60332-1-2
i. minimum bending radii according to DIN VDE 0298-300

BALZERCONTROL-Y-EMV (2YSLSTCY-J) 2YSLSTCY-J

The motor connecting cable with coloured PE cores, Cu shield and PVC sheath

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
4 X 1.5	11.4	170	96
4 X 2.5	13.0	230	144
4 X 4	14.7	320	223
4 X 6	16.7	425	306
4 X 10	21.0	670	478
4 X 16	23.7	950	723
4 X 25	28.3	1,400	1,100
4 X 35	31.2	1,890	1,542
4 X 50	38.7	2,650	2,166
4 X 70	43.4	3,530	3,006
4 X 95	49.4	4,520	4,007
4 X 120	53.4	5,570	5,108
4 X 185	64.1	8,230	7,691
4 X 240	72.5	10,900	10,629

BALZERCONTROL-Y-EMV (2YSLSTCYk-J) 2YSLSTCYk-J

The motor connecting cable with coloured PE cores, Cu shield and PVC sheath for outdoor use

As motor connecting cable in machine tools, handling devices, production and processing tools, band-conveyors and industrial robots. At the moment the demand for three phase current drives variable in speed is increasing. A complete system consists of the frequency converter, the motor connecting cable and the three phase current motor driven by a frequency converter.
Especially high demands are made on the motor connecting cable. These demands result from the use of modern converter technology, which produces electromagnetic fields via high pulse frequencies. To minimize the effect of these interfering fields to the environment, CONTROL-Y-EMV cables have a special Cu braid and an additional electrostatic shield. Thus a low transfer independence and good EMV results can be achieved. In addition CONTROL-Y-EMV cables are characterized as cables with especially good dialectric properties and low capacitance because of the use of polyethylene (PE) as insulation material. In comparison to conventional PVC connecting cables it means a power transfer with less loss. The cables are suitable for medium mechanical load conditions and fixed installation in dry, damp and wet interiors and for outside use.

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation polyethylene (PE) according to DIN EN 50290-2-23
d. core colours grey, black, brown and protective conductor green/yellow
e. cores stranded
f. banding with static shielding of Al-laminated foil
g. optimized screening braiding of tinned copper wires
h. outer sheath PVC TM 4 according to HD 21.1, black

TECHNICAL DATA

a. rated voltage Uo/U 600/1000 V
b. test voltage 4000 V
c. coupling impedance at 30 MHz: <100 Ohm/km
d. temperature range flexible application -25° C ... +50° C
e. temperature range fixed installation -40° C ... +70° C
f. allowable limiting temperature at the conductor in operation +70° C
g. allowable limiting temperature at the conductor in case of short circuit +150° C
h. fire behaviour according to EN 50265-2-1
i. minimum bending radii according to DIN VDE 0298-300

BALZERCONTROL-Y-EMV (2YSLSTCYk-J) 2YSLSTCYk-J

The motor connecting cable with coloured PE cores, Cu shield and PVC sheath for outdoor use

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
4 X 1.5	11.4	175	96
4 X 2.5	13.0	235	141
4 X 4	14.7	330	222
4 X 6	16.7	440	301
4 X 10	21.0	690	478
4 X 16	23.7	970	723
4 X 25	28.3	1,440	1,100
4 X 35	31.2	1,900	1,544
4 X 50	38.7	2,670	2,150
4 X 70	43.2	3,550	3,002
4 X 95	49.4	4,570	4,109
4 X 120	53.4	5,660	5,108
4 X 150	64.1	8,330	7,977
4 X 150	72.5	10,900	10,629

BALZERCONTROL-Y-EMV (2YSLSTCY-J) ("3 1/2 conductor") 2YSLSTCY-J

The motor connecting cable with coloured PE cores, Cu shield and PVC sheath

As motor connecting cable in machine tools, handling devices, production and processing tools, band-conveyors and industrial robots. At the moment the demand for three phase current drives variable in speed is increasing. A complete system consists of the frequency converter, the motor connecting cable and the three phase current motor driven by a frequency converter.
Especially high demands are made on the motor connecting cable. These demands result from the use of modern converter technology, which produces electromagnetic fields via high pulse frequencies. To minimize the effect of these interfering fields to the environment, CONTROL-Y-EMV cables have a special Cu braid and an additional electrostatic shield. Thus a low transfer independence and good EMV results can be achieved. In addition CONTROL-Y-EMV cables are characterized as cables with especially good dialectric properties and low capacitance because of the use of polyethylene (PE) as insulation material. In comparison to conventional PVC connecting cables it means a power transfer with less loss. The cables are suitable for medium mechanical load conditions and fixed installation in dry, damp and wet interiors and for outside use.

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation polyethylene (PE) according to DIN EN 50290-2-23
d. core colours grey, black, brown and protective conductor green/yellow
e. cores stranded
f. balanced arrangement of 3 power cores; the protective conductor, splitted into 3 single conductors, lies in the external filling
g. banding with static shielding of Al-laminated foil
h. optimized screening braiding of tinned copper wires
i. outer sheath PVC TM 2 according to HD 21.1, preferred colour transparent

TECHNICAL DATA

a. rated voltage Uo/U 600/1000 V
b. test voltage 4000 V
c. coupling impedance at 30 MHz: <100 Ohm/km
d. temperature range flexible application -5° C ... +70° C
e. temperature range fixed installation -40° C ... +70° C
f. allowable limiting temperature at the conductor in operation +70° C
g. allowable limiting temperature at the conductor in case of short circuit +150° C 5 s
h. fire behaviour according to EN 50265-2-1
i. minimum bending radii according to DIN VDE 0298-300

BALZERCONTROL-Y-EMV (2YSLSTCY-J) ("3 1/2 conductor") 2YSLSTCY-J

The motor connecting cable with coloured PE cores, Cu shield and PVC sheath

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
3X1.5 + 3G0.25	12.5	200	91
3X2.5 + 3G0.5	14.2	275	144
3X4 + 3G0.75	15.5	345	205
3X6 + 3G1	18.4	470	284
3X10 + 3G1.5	19.5	610	511
3X16 + 3G2.5	22.1	850	635
3X25 + 3G4	25.4	1,260	1,204
3X35 + 3G6	28.7	1,660	1,492
3X50 + 3G10	35.4	2,330	1,945
3X70 + 3G10	39.7	3,120	2,980
3X95 + 3G16	44.8	4,050	3,564
3X120 + 3G16	47.4	4,770	4,836
3X150 + 3G25	54.6	6,100	5,527
3X150 + 3G25	58.6	7,340	6,848

BALZERCONTROL-Y-EMV (2YSLSTCYk-J) ("3 1/2 conductor") 2YSLSTCYk-J

The motor connecting cable with coloured PE cores, Cu shield and PVC sheath for outdoor use (cold-resistant)

As motor connecting cable in machine tools, handling devices, production and processing tools, band-conveyors and industrial robots. At the moment the demand for three phase current drives variable in speed is increasing. A complete system consists of the frequency converter, the motor connecting cable and the three phase current motor driven by a frequency converter.
Especially high demands are made on the motor connecting cable. These demands result from the use of modern converter technology, which produces electromagnetic fields via high pulse frequencies. To minimize the effect of these interfering fields to the environment, CONTROL-Y-EMV cables have a special Cu braid and an additional electrostatic shield. Thus a low transfer independence and good EMV results can be achieved. In addition CONTROL-Y-EMV cables are characterized as cables with especially good dialectric properties and low capacitance because of the use of polyethylene (PE) as insulation material. In comparison to conventional PVC connecting cables it means a power transfer with less loss. The cables are suitable for medium mechanical load conditions and fixed installation in dry, damp and wet interiors and for outside use.

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation polyethylene (PE) according to DIN EN 50290-2-23
d. core colours grey, black, brown and protective conductor green/yellow
e. cores stranded
f. balanced arrangement of 3 power cores; the protective conductor, splitted into 3 single conductors, lies in the external filling
g. banding with static shielding of Al-laminated foil
h. optimized screening braiding of tinned copper wires
i. outer sheath PVC TM 4 according to HD 21.1, black

TECHNICAL DATA

a. rated voltage Uo/U 600/1000 V
b. test voltage 4000 V
c. coupling impedance at 30 MHz: <100 Ohm/km
d. temperature range flexible application -5° C ... +70° C
e. temperature range fixed installation -40° C ... +70° C
f. allowable limiting temperature at the conductor in operation +70° C
g. allowable limiting temperature at the conductor in case of short circuit +150° C 5 s
h. fire behaviour according to EN 50265-2-1
i. minimum bending radii according to DIN VDE 0298-300

BALZERCONTROL-Y-EMV (2YSLSTCYk-J) ("3 1/2 conductor") 2YSLSTCYk-J

The motor connecting cable with coloured PE cores, Cu shield and PVC sheath for outdoor use (cold-resistant)

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
3X1.5 + 3G0.25	12.5	200	91
3X2.5 + 3G0.5	14.2	275	144
3X4 + 3G0.75	15.5	345	205
3X6 + 3G1	18.4	470	284
3X10 + 3G1.5	19.5	610	511
3X16 + 3G2.5	22.7	850	635
3X25 + 3G4	25.4	1,260	1,204
3X35 + 3G6	28.7	1,660	1,492
3X50 + 3G10	35.4	2,330	1,945
3X70 + 3G10	39.7	3,120	2,980
3X95 + 3G16	44.8	4,050	3,564
3X120 + 3G16	47.4	4,770	4,836
3X150 + 3G25	54.6	6,100	5,527
3X185 + 3G35	58.6	7,340	6,848

ETFE insulated cables, shielded

LI7YC11Y

The heat-resistant, fluoroplastic insulated control cable with PUR sheath

This conductor is designed as a signal cable and for the connection of electribal and/or electronical units with increased ambient temperature, e.g. in rail vehicles.

CABLE MAKE-UP

a. according to BKM product specification
b. tinned copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation ETFE 7Y according to DIN VDE 0207-6
d. wire marking: coloured
e. optimized screening braiding of tinned copper wires
f. outer sheat PUR according to DIN EN 50363-10-2, preferred colour black
g. changes in core or sheath colours on request

TECHNICAL DATA

a. operating voltage 600 V
b. test voltage 1500 V
c. temperature range flexible application -5° C ... +90° C
d. temperature range fixed installation -40° C...+90° C
e. minimum bending radius flexible 5 x outer diameter
f. minimum bending radius during bending with caution 3/Lx outer diameter
g. fire behaviour according to DIN EN 50265-2-1 (former VDE 0472 part 804 test method B)
h. resistance to oil according to DIN EN 50363-10-2

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
LI7YC11Y 1 X 18 AWG	3.0	25	17.4
LI7YC11Y 2 X 18 AWG	4.7	40	31.0
LI7YC11Y 3 X 18 AWG	4.9	55	42.1
LI7YC11Y 4 X 18 AWG	5.3	65	54.0
LI7YC11Y 5 X 18 AWG	6.2	85	65.0
LI7YC11Y 6 X 18 AWG	6.7	95	75.0
LI7YC11Y 7 X 18 AWG	6.7	105	85.0
LI7YC11Y 10 X 18 AWG	9.1	155	116.0

TPE-S insulated wiring cables

31YFA

The heat-resistant TPE-S insulated wiring cable

This conductor with increased thermal stress is designed for the internal wiring of devices, as well as for the protected installation in and on lamps. It is suitable for the application in and on electrical resources. For the installation in tubes on-wall and in-wall.

CABLE MAKE-UP

a. according to BKM product specification
b. copper wire, single-wire class 1 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation TPE-S according to BKM test directives

TECHNICAL DATA

a. rated voltage Uo/U 300/500 V
b. test voltage (single core): 10 kV Spark test
c. temperature range fixed installation -40 °C...+120 °C
d. allowable limiting temperature at the conductor in case of short circuit +150° C
e. minimum bending radius fixed installation 4 x outer diameter
f. fire behaviour according to DIN EN 60332-1-2

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 0.5	2.1	8	4.8
1 X 0.75	2.2	121	7.2
1 X 1	2.4	14	9.6
1 X 1.5	2.6	18	14.4
1 X 2.5	3.2	29	24.0

Colours and delivery designs on request.

TPE-S insulated wiring cables

31YFAF

The heat-resistant TPE-S insulated wiring cable with flexible conductor

This conductor is designed for the internal wiring of devices, as well as for the protected installation in and on lamps. It is suitable for the application in and on electrical resources. For the installation in tubes on-wall and in-wall. For the particular specific applications the standards according to HD 516 are valid.

CABLE MAKE-UP

a. according to BKM product specification
b. copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
c. core insulation TPE-S according to BKM test directives

TECHNICAL DATA

a. rated voltage Uo/U 300/500 V
b. test voltage (single core): 10 kV Spark test
c. temperature range flexible application -40° C ... +90° C
d. temperature range fixed installation -40 °C...+120 °C
e. allowable limiting temperature at the conductor in case of short circuit +150° C
f. minimum bending radius fixed installation 4 x outer diameter
g. fire behaviour according to DIN EN 60332-1-2

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 0.5	2.2	9	4.8
1 X 0.75	2.3	12	7.2
1 X 1	2.5	15	9.6
1 X 1.5	2.7	19	14.4
1 X 2.5	3.3	30	24.0

Colours and delivery designs on request.

H03V2V2-F

H03V2V2-F can be found in chapter 3.01.3

H05V2V2-F

H05V2V2-F can be found in chapter 3.01.4

H05V2-K

H05V2-K can be found in chapter 6.01.7

H07V2-K

H07V2-K can be found in chapter 6.01.8

H05V2-U

H05V2-U can be found in chapter 6.01.9

H07V2-U

H07V2-U can be found in chapter 6.01.10

H07V2-R

H07V2-R can be found in chapter 6.01.12

H07V3-K

H07V3-K can be found in chapter 6.01.13

H07V3-U

H07V3-U can be found in chapter 6.01.14

H07V3-R

H07V3-R can be found in chapter 6.01.15

BALZERTHERM 110 HX

BALZERTHERM 110 HX can be found in chapter 5.03.3

BALZERTHERM 110 HX (UL)

BALZERTHERM 110 HX (UL) can be found in chapter 5.03.4

PV conductor with cross-linked FRNC insulation and PUR sheath

PV conductor with cross-linked FRNC insulation and PUR sheath can be found in chapter 12.01.1

PV conductor with cross-linked FRNC insulation and cross-linked FRNC sheath

PV conductor with cross-linked FRNC insulation and cross-linked FRNC sheath can be found in chapter 12.01.2

single-core plastic fibre optic cable with PE core jacket/PUR sheath

RoHS COMPLIANT

Single-core plastic fibre optic cable with polymer optical fibre. This cable is suitable for the inner installation between the fibre optic cable interfaces of the transmitter and the receiver for short distances. Furthermore it is applied for the direct signal transmission in the visible spectral region for sensor appliances. Due to the very robust core jacket and sheath material PE respectively PUR, this cable is very versatile regarding different industrial environments. The usage of this cable is especially easy in the practical area because of the uncomplicated assembly technique of the connecting plug. It allows the realization of transfer distances with all the advantages of the fibre optic cable technique in a little while. The cable is suitable - considering the assembly requirements - for the application in energy chains.

CABLE MAKE-UP

a. according to BKM product specification
b. optical transmission medium POF 980/1000
c. core protective sheath PE (2Y)
d. Kevlar® tension relief
e. outer sheat PUR (11Y) according to DIN EN 50363-10-2, preferred colours red or grey
f. product marking and meter marking

TECHNICAL DATA

a. temperature range in operation -20° C...+70° C
b. temperature range during storage -30° C...+70° C
c. numerical aperture rated value 0.47
d. minimum bending radius fixed installation 70 mm
e. minimum bending radius fixed installation 50 mm
f. temperature range for flexible application 70 mm
g. alternate bending cycles: min. 30,000
h. ultimate tensile strength during installation max. 250 N
i. ultimate tensile strength permanently max. 100 N
j. core diameter of single fibre 980 µm
k. diameter over cladding 1000 µm
l. diameter over core protective sheath 2.2 mm
m. attenuation at 650 nm monochromatic <= 160 dB/km
n. attenuation at 660 nm (LED) <= 230 dB/km

Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Material code
3.6	13	I-V2Y(ZN)11Y 1P 980/1000 160A 10
6.0	31	I-V2Y(ZN)11Y 1P 980/1000 160A 10

usual delivery design: 500 m drum

single-core plastic fibre optic cable with PA core jacket/PVC sheath

RoHS COMPLIANT

Single-core plastic fibre optic cable with polymer optical fibre. This cable is suitable for the inner installation between the fibre optic cable interfaces of the transmitter and the receiver for short distances. Furthermore it is applied for the direct signal transmission in the visible spectral region for sensor appliances. Due to the robust core jacket and sheath material PA respectively PVC, this cable is very versatile regarding different industrial environments. The usage of this cable is especially easy in the practical area because of the uncomplicated assembly technique of the connecting plug. It allows the realization of transfer distances with all the advantages of the fibre optic cable technique in a little while.

CABLE MAKE-UP

a. according to BKM product specification
b. core protective sheath PA (4Y)
c. outer sheat PVC (Y) according to DIN EN 50290-2-22, preferred colours red or grey
d. product marking and meter marking

TECHNICAL DATA

a. temperature range in operation -20° C...+70° C
b. temperature range during storage -30° C...+70° C
c. numerical aperture rated value 0.47
d. minimum bending radius during installation 25 mm
e. minimum bending radius fixed installation 30 mm
f. ultimate tensile strength during installation max. 60 N
g. ultimate tensile strength permanently max. 10 N
h. core diameter of single fibre 980 µm
i. diameter over cladding 1000 µm
j. diameter over core protective sheath 2.2 mm
k. attenuation at 650 nm monochromatic <= 160 dB/km
l. attenuation at 660 nm (LED) <= 230 dB/km

Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Material code
5.0	29	I-VY4Y 1P 980/1000 160A 10

usual delivery design: 500 m drum

two-core plastic fibre optic cable with PA core jacket/PUR sheath

RoHS COMPLIANT

Two-core plastic fibre optic cable with polymer optical fibre. This duplex cable is suitable for the inner installation between the fibre optic cable interfaces of the transmitter and the receiver for short distances. Furthermore it is applied for the direct signal transmission in the visible spectral region for sensor appliances. Due to the robust core jacket and sheath material PA respectively PUR, this cable is very versatile regarding different industrial environments. The usage of this cable is especially easy in the practical area because of the uncomplicated assembly technique of the connecting plug. It allows the realization of transfer distances with all the advantages of the fibre optic cable technique in a little while.

CABLE MAKE-UP

a. according to BKM product specification
b. two parallel arranged optical transmission mediums POF 980/1000
c. core protective sheath PA (4Y)
d. Kevlar® tension relief
e. outer sheat PUR (11Y) according to DIN EN 50363-10-2, preferred colours red or grey
f. product marking and meter marking

TECHNICAL DATA

a. temperature range in operation -20° C...+70° C
b. temperature range during storage -30° C...+70° C
c. numerical aperture rated value 0.47
d. minimum bending radius during installation 50 mm
e. minimum bending radius fixed installation 50 mm
f. ultimate tensile strength during installation max. 400 N
g. ultimate tensile strength permanently max. 100 N
h. core diameter of single fibre 980 µm
i. diameter over cladding 1000 µm
j. diameter over core protective sheath 2.2 mm
k. attenuation at 650 nm monochromatic 160 dB/km
l. attenuation at 660 nm (LED) 230 dB/km

Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Material code
6.5	38	I-V4Y(ZN)11Y2P 980/1000 160A 10

usual delivery design: 500 m drum

two-core, highly flexible plastic fibre optic cable (POF)

RoHS COMPLIANT

Highly flexible, two-core plastic fibre optic cable with polymer optical fibre. This duplex cable is suitable for the flexible installation. also in dragchains, between the fibre optic cable interfaces of the transmitter and the receiver for short distances. Furthermore it is applied for the direct signal transmission in the visible spectral region for sensor appliances. Due to the robust core jacket materials PVC (Y), PE (2Y) or PA (4Y) and the sheath materials PVC (Y) or PUR (11Y), this cable is very versatile regarding different industrial environments. The usage of this cable is especially easy in the practical area because of the uncomplicated assembly technique of the connecting plug. It allows the realization of transfer distances with all the advantages of the fibre optic cable technique in a little while. The cable is suitable for the application in energy and dragchains. Please attend to the relevant assembly requirements.

CABLE MAKE-UP

a. according to BKM product specification
b. two optical transmission mediums POF 980/1000
c. core protective sheath (Var. A1) PVC (Y)
d. core protective sheath (Var. A2) PE (2Y)
e. core protective sheath (Var. A3) PA (4Y)
f. ply standing and banding
g. outer sheat (Var. M1) PVC (Y) according to DIN EN 50290-2-22, preferred colours red or grey
h. outer sheat (Var. M2) PUR (11Y) according to DIN EN 50363-10-2, preferred colours red or grey
i. product marking and meter marking

TECHNICAL DATA

a. temperature range in operation +5° C...+70° C
b. temperature range during storage -30° C...+70° C
c. numerical aperture rated value 0.47
d. minimum bending radius during installation 80 mm
e. minimum bending radius fixed installation 80 mm
f. temperature range for flexible application 90 mm
g. alternate bending cycles: min. 30,000
h. ultimate tensile strength during installation max. 400 N
i. ultimate tensile strength permanently max. 100 N
j. core diameter of single fibre 980 µm
k. diameter over cladding 1000 µm
l. diameter over core protective sheath 2.2 mm
m. attenuation at 650 nm monochromatic 250 dB/km
n. attenuation at 660 nm (LED) 350 dB/km

Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Material code
6.4	42	I-VY(ZN) Y2P 980/1000 250A10
6.4	42	I-V2Y(ZN)11Y2P 980/1000 250A10
6.4	42	I-V4Y11Y 2P 980/1000 250A10

usual delivery design: 500 m drum
also available with central tension relief (KEVLAR®), please ask us

highly flexible plastic fibre optic / copper hybrid conductor

Highly flexible hybrid conductor plastic fibre optic and copper cores. This duplex cable is suitable for the flexible installation. also in dragchains, between the fibre optic cable interfaces of the transmitter and the receiver for short distances. Furthermore it is applied for the direct signal transmission in the visible spectral region for sensor appliances. Due to the very robust core jacket materials PVC (Y) or PE (2Y) and the sheath materials PVC (Y) or PUR (11Y), this cable is very versatile regarding different industrial environments. The usage of this cable is especially easy in the practical area because of the uncomplicated assembly technique of the connecting plug. It allows the realization of transfer distances with all the advantages of the fibre optic cable technique in a little while. The PVC insulated copper cores can be used for the transmission of electrical signals and for locating the cable.

CABLE MAKE-UP

a. according to BKM product specification
b. two or three optical transmission mediums POF 980/1000
c. core protective sheath PE (2Y)
d. bare copper wire, extra finely stranded class 6 according to DIN EN 60228 (former VDE 0295)
e. marking copper cores: black with white figure printing
f. core marking POF: black
g. ply standing and with/without banding
h. outer sheat (var. 1 and 2) PVC (Y) according to DIN EN 50290-2-22, preferred colours red or grey
i. outer sheat (var. 3) PUR (11Y) according to DIN EN 50363-10-2, preferred colours red or grey
j. product marking and meter marking

TECHNICAL DATA

a. temperature range in operation +5° C...+70° C
b. temperature range during storage -30° C...+70° C
c. numerical aperture rated value 0.47
d. minimum bending radius during installation 10 x D
e. minimum bending radius fixed installation 6 x D
f. minimum bending radius for flexible application 8 x D
g. ultimate tensile strength during installation max. 50 N
h. ultimate tensile strength permanently max. 15 N
i. core diameter of single fibre 980 µm
j. diameter over cladding 1000 µm
k. diameter over core protective sheath 2.2 mm
l. attenuation at 650 nm monochromatic 250 dB/km
m. attenuation at 660 nm (LED) 350 dB/km
n. rated voltage of copper cores Uo/U 300/300 V
o. test voltage 2000 V
p. resistance to oil PUR sheath according to DIN EN 50363-10-2
q. highly flexible

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Material code	Copper weight kg/km
3 x 0.5	7.5	65	I-V2YY 2P 980/1000 250A 10 FFLIY 3x0.5	14.4

highly flexible plastic fibre optic / copper hybrid conductor

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Material code	Copper weight kg/km
3 x 0.5	8.2	73	I-V2YY 3P 980/1000 250A 10 FFLIY 3x0.5	14.4
2 x 1.0	7.5	70	I-V2Y11Y 2P 980/1000 250A10 FFLIY 2x1	19.2

usual delivery design: 500 m drum
also available with central tension relief (KEVLAR®)

single core polymer cladded fibre (PCF) optic cable with PVC or PUR outer sheath

RoHS COMPLIANT

Single core polymer cladded fibre (PCF) optic cable with glass fibre (PCF). This cable is suitable for the inner installation between the fibre optic cable interfaces of the transmitter and the receiver for medium distances. Furthermore it is applied for the direct signal transmission in the visible spectral region for sensor appliances. Due to the robust core jacket material PVC and the sheath material PUR, this cable is very versatile regarding different industrial environments. The usage of this cable is especially easy in the practical area because of the uncomplicated assembly technique of the connecting plug. It allows the realization of transfer distances with all the advantages of the fibre optic cable technique in a little while.

CABLE MAKE-UP

a. according to BKM product specification
b. optical transmission medium PCF 200/230
c. core protective sheath PVC with tension relief lying underneath (Kevlar®)
d. outer sheat (var. 1) PVC (Y) according to DIN EN 50290-2-22, preferred colours red or grey
e. outer sheat (var. 2) PUR (11Y) according to DIN EN 50363-10-2, preferred colours red or grey, additional Kevlar® braid under the outer sheath

TECHNICAL DATA

a. temperature range in operation -20° C...+70° C
b. temperature range during storage -40° C...+70° C
c. numerical aperture rated value 0.36
d. minimum bending radius during installation 60 mm
e. minimum bending radius fixed installation 40 mm
f. ultimate tensile strength during installation max. 200 N
g. ultimate tensile strength permanently max. 90 N
h. core diameter of single fibre 200 µm
i. diameter over cladding 230 µm
j. diameter over core protective sheath 2.2 mm
k. attenuation at 650 nm 10 dB/km
l. attenuation at 820 nm 8 dB/km

Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Material code
5.2	29	I-VYY1K 200/230 10A 17 + 8B 20
5.2	22	I-VY11Y1K 200/230 10A 17 + 8B 20

usual delivery design: 500 m drum

two-core, flexible polymer cladded fibre (PCF) optic cable with PUR outer sheath

Two-core fibre optic cable with glass fibre (PCF). This duplex cable is suitable for the inner installation between the fibre optic cable interfaces of the transmitter and the receiver for medium distances. Furthermore it is applied for the direct signal transmission in the visible spectral region for sensor appliances. Due to the very robust core jacket and sheath material PVC respectively PUR, this cable is very versatile regarding different industrial environments. The usage of this cable is especially easy in the practical area because of the uncomplicated assembly technique of the connecting plug. It allows the realization of transfer distances with all the advantages of the fibre optic cable technique in a little while.

CABLE MAKE-UP

a. according to BKM product specification
b. two optical transmission mediums PCF 200/230
c. core protective sheath PVC with tension relief lying underneath (Kevlar®)
d. ply standing and banding
e. outer sheat (Var. M2) PUR (11Y) according to DIN EN 50363-10-2, preferred colours red or grey
f. product marking and meter marking

TECHNICAL DATA

a. temperature range in operation -20° C...+70° C
b. temperature range during storage -40° C...+70° C
c. numerical aperture rated value 0.36
d. minimum bending radius fixed installation 70 mm
e. minimum bending radius fixed installation 50 mm
f. ultimate tensile strength during installation max. 250 N
g. ultimate tensile strength permanently max. 100 N
h. core diameter of single fibre 200 µm
i. diameter over cladding 230 µm
j. diameter over core protective sheath 2.2 mm
k. attenuation at 650 nm 10 dB/km
l. attenuation at 820 nm 8 dB/km

Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Material code
7.0	40.0	I-V(ZN)Y11Y 2K200/230

usual delivery design: 500 m drum

polymer cladded fibre optic cable / copper hybrid conductor with PUR outer sheath

Hybrid conductor with polymer cladded fibre optic cable and copper cores. This cable is suitable for the inner installation between the fibre optic cable interfaces of the transmitter and the receiver for medium distances. Furthermore it is applied for the direct signal transmission in the visible spectral region for sensor appliances. Due to the robust core jacket and sheath materials PVC respectively PUR, this cable is very versatile regarding different industrial environments. The usage of this cable is especially easy in the practical area because of the uncomplicated assembly technique of the connecting plug. It allows the realization of transfer distances with all the advantages of the fibre optic cable technique in a little while. The PVC insulated copper cores can be used for the transmission of electrical signals and for locating the cable.

CABLE MAKE-UP

a. according to BKM product specification
b. two optical transmission mediums PCF 200/230
c. core protective sheath PVC with tension relief lying underneath (Kevlar®)
d. wire marking optical cores: blue, orange
e. two copper cores 1 mm², blank wire, class 5 according to DIN EN 60228
f. marking copper cores: black with white figure printing

TECHNICAL DATA

a. temperature range in operation -20° C...+70° C
b. temperature range during storage -40° C...+70° C
c. numerical aperture rated value 0.36
d. minimum bending radius during installation 8 x D
e. minimum bending radius fixed installation 6 x D
f. ultimate tensile strength during installation max. 250 N
g. ultimate tensile strength permanently max. 100 N
h. core diameter of single fibre 200 µm
i. diameter over cladding 230 µm
j. diameter over core protective sheath 2.2 mm
k. attenuation at 650 nm 10 dB/km
l. attenuation at 820 nm 8 dB/km
m. rated voltage of copper cores Uo/U 300/300 V
n. test voltage 2000 V
o. resistance to oil PUR sheath according to DIN EN 50363-10-2

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Material code	Copper weight kg/km
2x1	7.6	60.0	I-VY11Y2K 200/230 10A17 + 8B20 FLIY 2x1	19.2

usual delivery design: 500 m drum
lso available with central tension relief (KEVLAR®)
also available in other combinations

LIFTPE-0/LIF91Y

Battery connecting cable and connecting lead

Optimized connecting cable and connecting lead for batteries and storage batteries in the automotive sector. The extremely unsusceptible insulation compound is resistant against most fuels and oils found in vehicles and it is notch tough. The extra fine-wired conductor guarantees highest flexibility, also for bigger cross-sections. Also for outdoor use.

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, extra finely stranded class 6 according to DIN EN 60228
c. core insulation thermoplastic elastomer on polyolefin basis
d. core colour black
e. changes in core colours on request

TECHNICAL DATA

a. rated voltage U 42 V
b. test voltage 10000 V
c. temperature range flexible application -25° C ... +105° C
d. temperature range fixed installation -40° C...+105° C
e. minimum bending radius flexible 15 x outer diameter
f. minimum bending radius fixed installation 6 x outer diameter

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
1 X 16	9.5	180	160
1 X 25	11.5	275	240
1 X 35	13.3	400	350
1 X 50	15.5	560	480
1 X 70	17.7	750	672
1 X 95	19.8	1,020	912

usual delivery design: 500 m drum

LIFYW

Battery connecting cable and connecting lead

Optimized connecting cable and connecting lead for batteries and storage batteries in the automotive sector. The unsusceptible insulation compound of special PVC is resistant against most fuels and oils found in vehicles. The extra fine-wired conductor guarantees highest flexibility, also for bigger cross-sections.

CABLE MAKE-UP

a. according to BKM product specification
b. bare copper wire, extra finely stranded class 6 according to DIN EN 60228
c. core insulation PVC HD 21.1
d. core colour black
e. changes in core colours on request

TECHNICAL DATA

a. rated voltage U 42 V
b. c
c. temperature range flexible application -5° C ... +90° C
d. temperature range fixed installation -40° C...+90° C
e. minimum bending radius flexible 15 x outer diameter
f. minimum bending radius fixed installation 6 x outer diameter
g. fire behaviour according to EN 50265-2-1 (former VDE 0472 part 804 test method B)

Cross-section in mm²	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Copper weight kg/km
0	9.9	275	250
0	11.5	405	350
0	13.5	535	500
0	15.4	765	700
0	18.3	1,030	912

usual delivery design: 500 m drum

PV conductor with cross-linked FRNC insulation and PUR sheath

PV conductor with cross-linked FRNC insulation and PUR sheath

This conductor is suitable for the application in photovoltaic systems for connecting the modules and for the connection between the solar generator and the inverter. The conductor is equipped with a short-circuit-proof conductor insulation; the material of the sheath is UV and ozone resistant, permanently resistant to high temperatures, halogen-free and self-extinguishing.
The very good mechanical characteristics and the good weather resistance allows installation outdoors (but not unprotected in the ground). Due to the very good resistance to microbes and chemical (long-time firmness) the conductor can be installed in agricultural buildings with farm animals (ammonia).
The conductor is certified by TÜV according to test specification 2Pfg1169.

CABLE MAKE-UP

a. tinned copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
b. conductor insulation of PO-FRNC, electron-beam cross-linked, halogen-free
c. colour of the conductor insulation black, blue or red
d. outer sheath of PO-FRNC, cross-linked, halogen-free
e. sheath colour black
f. special designs on request

TECHNICAL DATA

a. rated voltage (AC) Uo/U 600/1000 V
b. rated voltage (DC) 1000 V
c. test AC voltage 10 kV (Spark test)
d. ambient application temperature fixed installation -40° C...+85° C (TÜV)
e. ambient application temperature fixed installation -40° C...+110° C (20,000 h)
f. ambient application temperature flexible installation -25° C...+110° C (20,000 h)
g. allowable limiting temperature at the conductor in case of short circuit +250° C, 5 s
h. resistance to oil according to DIN EN 50363-10-2
i. halogen-free according to DIN EN 50267-2-1
j. minimum bending radius fixed installation 4 x outer diameter
k. minimum bending radius for freely moveable application 7 x outer diameter
l. fire behaviour according to DIN EN 60332-1-2

PV conductor with cross-linked FRNC insulation and PUR sheath

PV conductor with cross-linked FRNC insulation and PUR sheath

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Calory value in kWh/m	Copper weight kg/km
1 x 2.5	5.3	45	0.145	24.0
1 x 4	5.9	62	0.170	38.4
1 x 6	6.5	82	0.195	58.0

PV conductor with cross-linked FRNC insulation and cross-linked FRNC sheath

PV conductor with cross-linked PO-FRNC insulation and cross-linked PO-FRNC sheath

This conductor is suitable for the application in photovoltaic systems for connecting the modules and for the connection between the solar generator and the inverter. The conductor is equipped with a short-circuit-proof conductor insulation; the material of the sheath is UV and ozone resistant, permanently resistant to high temperatures, halogen-free and self-extinguishing.
The very good mechanical characteristics and the good weather resistance allows installation outdoors (but not unprotected in the ground). Due to the very good resistance to microbes and chemical (long-time firmness) the conductor can be installed in agricultural buildings with farm animals (ammonia).

CABLE MAKE-UP

a. tinned copper wire, finely stranded class 5 according to DIN EN 60228 (former DIN VDE 0295)
b. conductor insulation of PO-FRNC, electron-beam cross-linked, halogen-free
c. colour of the conductor insulation black, blue or red
d. outer sheath of PO-FRNC, cross-linked, halogen-free
e. sheath colour black
f. special designs on request

TECHNICAL DATA

a. rated voltage (AC) Uo/U 600/1000 V
b. rated voltage (DC) 1000 V
c. test AC voltage 10 kV (Spark test)
d. ambient application temperature fixed installation -40° C...+85° C (TÜV)
e. ambient application temperature fixed installation -40° C...+110° C (20,000 h)
f. ambient application temperature flexible installation -25° C...+110° C (20,000 h)
g. allowable limiting temperature at the conductor in case of short circuit +250° C, 5 s
h. halogen-free according to HD 22.13 appendix C
i. minimum bending radius fixed installation 4 x outer diameter
j. minimum bending radius for freely moveable application 7 x outer diameter
k. fire behaviour according to DIN EN 60332-1-2
l. corrosivity of the fire gases according to DIN EN 50267-2-2

Number of cores x cross-section in mm² per conductor	Product detail: outer diameter D in mm ca.	Weight in kg/km ca.	Calory value in kWh/m	Copper weight kg/km
1 x 2.5	5.3	47	0.145	24.0
1 x 4	5.9	65	0.170	38.4
1 x 6	6.5	86	0.195	58.0

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