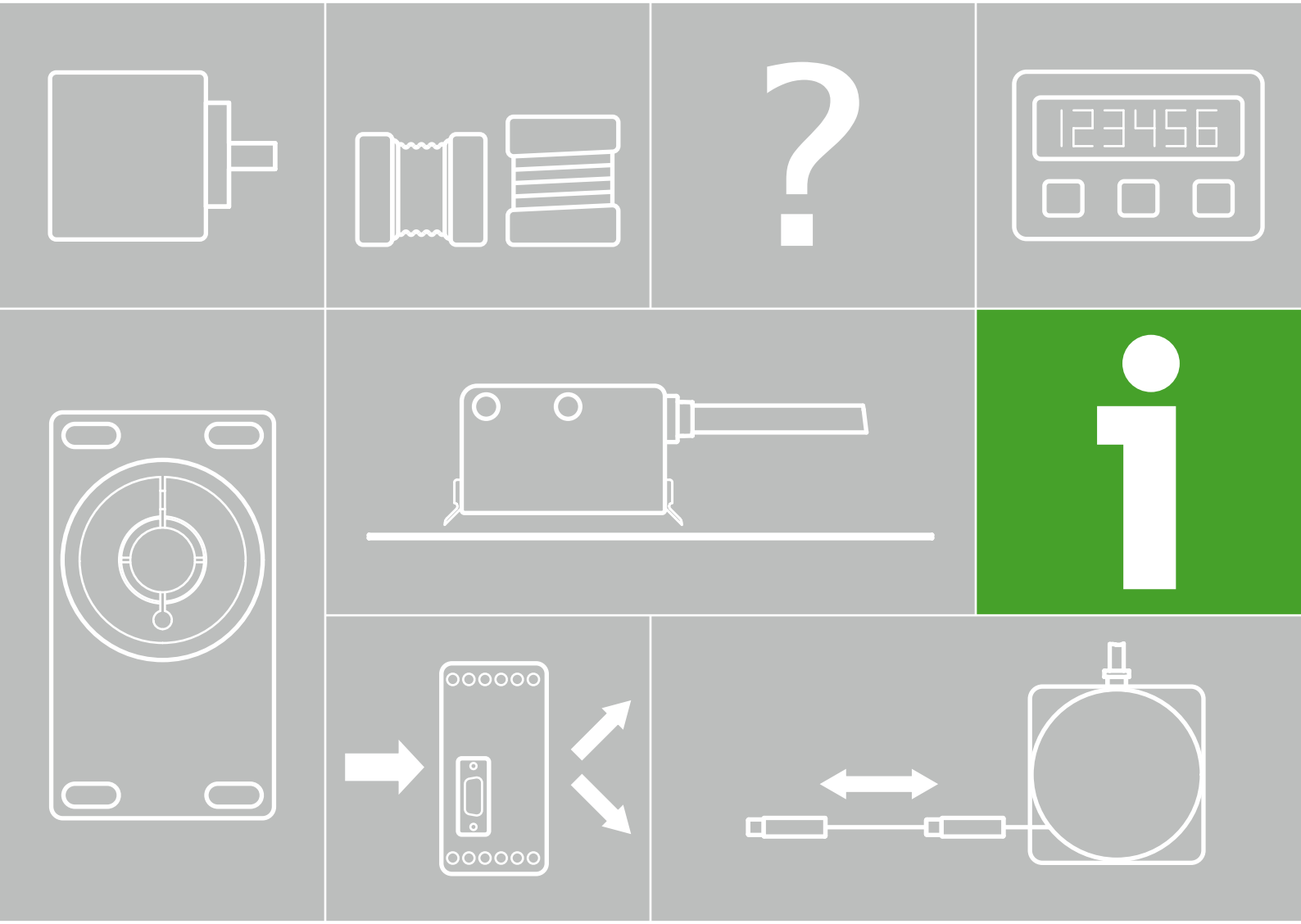
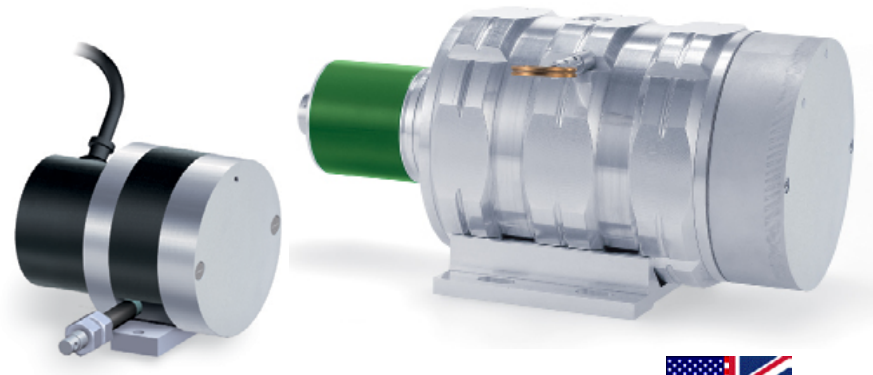
30 YEARS
YOUNG
1982.2012

lika®

Smart encoders & actuators





Draw wire units 2014

ROTAPULS

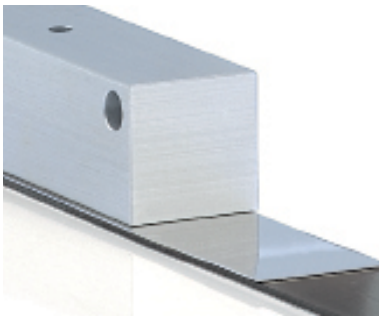
Incremental rotary encoders

ROTACOD

Absolute rotary & Fieldbus encoders

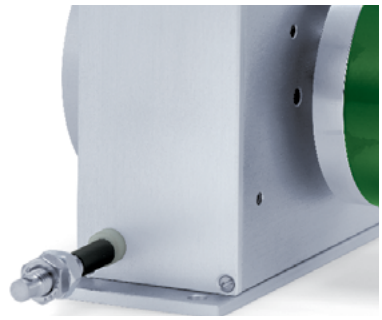
ROTAMAG

Rotary Magnetic encoder &
Encoder modules



LINEPULS – LINECOD

Linear Absolute & Incremental encoders



DRAW-WIRE

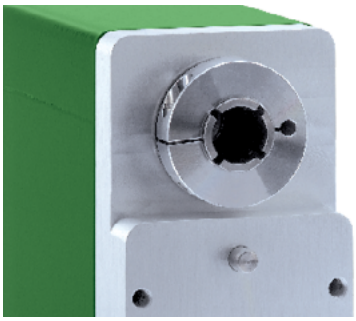
Draw-wire encoders & potentiometers

COUPLINGS

Flexible & Transmission couplings

POSICONTROL

Displays & Signal converters
Encoder Interfaces



DRIVECOD

Rotary Actuators & Positioning units

30th

30 YEARS YOUNG
1982.2012

1982
Lika Electronic founded in Schio (VI).

1983
Lika numbers 8 customers.

1985
Lika starts the production of absolute encoders for the German market.

1986
Manufacturing of absolute encoders with integrated display and incremental encoders for the Italian market.

1987
Lika produces a 50 mm diameter miniature encoder, the smallest absolute encoder in Europe.

1991
Foundation of Lika Trading commercial corporate.

1993
Lika Electronic is the first company in Italy to offer a complete portfolio of encoders in the 58 mm diam. range.

1995
The 100,000th encoder rolled off the production line.

1996
ROTACAM ASR58 is the first absolute encoder fitted with integrated cam programmer.

1997
Lika is first certified to ISO 9001:1994.

1982 1986 1990 1995

An international family company, corporate profile

Lika Electronic stands for encoders and position measuring systems. Since its inception in 1982, Lika Electronic develops and manufactures *incremental and absolute, optical and magnetic, rotary and linear encoders, incremental & absolute sensors, linear and rotary incremental & absolute magnetic measurement systems, rotary actuators, displays, signal converters and encoder interfaces.*

Starting as a family-owned business, thanks to its technical competence and comprehensive know-how in the automation industry along with the high quality standards and the skill in providing solutions that target specific customer needs, over the years **Lika Electronic has grown becoming a forward thinking innovative and global company** and has become one of the leading manufacturers of optical encoders and magnetic measurement systems in Europe and worldwide.
Many key features include the extensive technical engineering skills , in-depth knowledge and expertise in digital and analogical electronic design as well as the proven daily practice in co-operation with universities, research institutions and customers in order to **develop and provide advanced electronic equipment and high-tech materials & devices tailored to specific customer and market requirements**. Moreover software development and mechanical & optical components design are entirely performed within the company. Often production machinery and tools are often engineered and built internally to satisfy specific needs and performances.

Every day Lika Electronic is committed to being a step ahead and always at the forefront of innovation, looking to the future with the enthusiasm that steers the company towards new opportunities *without giving up the strength of being an international family company.*

Lika Electronic is certified for compliance with ISO 9001:2000 quality management system and is now committed to adopt an environmental management system complying with ISO 14001:2004 requirements. All Lika's products are designed and manufactured to fully meet the requirements of CE, RoHS and REACH directives, most of them are UL and CSA compliant too. ATEX certified solutions suitable to be integrated into potential explosive environments and hazardous areas are also available.

Global presence, make us closer to the customer

Every day, everywhere Lika Electronic works in close contact with its customers to build strong, long-lasting relationships and support them at all times in each day-to-day requirement.
Lika's actions focus on customers' needs with daily challenges to develop reliable and cutting edge solutions.
Continuous innovation, outstanding expertise, overall quality, prompt action and maximum flexibility are the fundamental values that Lika Electronic is truly proud of offering its customers when working together.
Lika Electronic operates all over the world providing a widespread and efficient global distribution network, offering unrivalled technical support and excellent customer service.
At the present time the export share is approximately 60% of the turnover in more than 50 countries.

1998
First 16-bit resolution single-turn absolute encoder engineered for installation in aerostatic probes developed by Florence University.

1999
Lika Electronic moves its corporate headquarters to Carrè (VI) establishing in new larger production and office premises.

2000
ROSETTA space probe project gets under way in co-operation with CISAS.

2001
Foundation of Lika subsidiary in Germany.

2002
Production in antistatic environment (ESD). DRIVECOD & POSICONTROL product ranges are launched in the market.

2004
Arianne 5 rocket successfully launched: Rosetta probe fits Lika encoders.

2007
Lika Electronic celebrates its 25th anniversary with a series of special events.

2008
ALMA project: giant array of 12-m radio telescopes equipped with special custom-made Lika encoders.

2010
Lika introduces the innovative range of heavy-duty products dedicated to steel & iron industry and wind mills.

2012
30th anniversary: "30 new products for our 30 years" event launched.

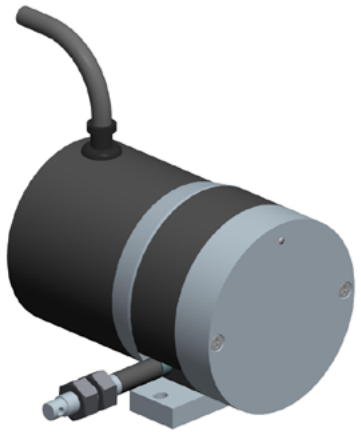
2000 2004 2008 2012

DRAW WIRE

Miniature wire actuated transducer

Series **SFP**

- Robust and space saving construction
- Integrated potentiometer
- Measuring length up to 2000 mm



SFP

ENVIRONMENTAL SPECIFICATIONS	
Operating temperature range:	-25°C +85°C (-13°F +185°F)
Protection:	IP64

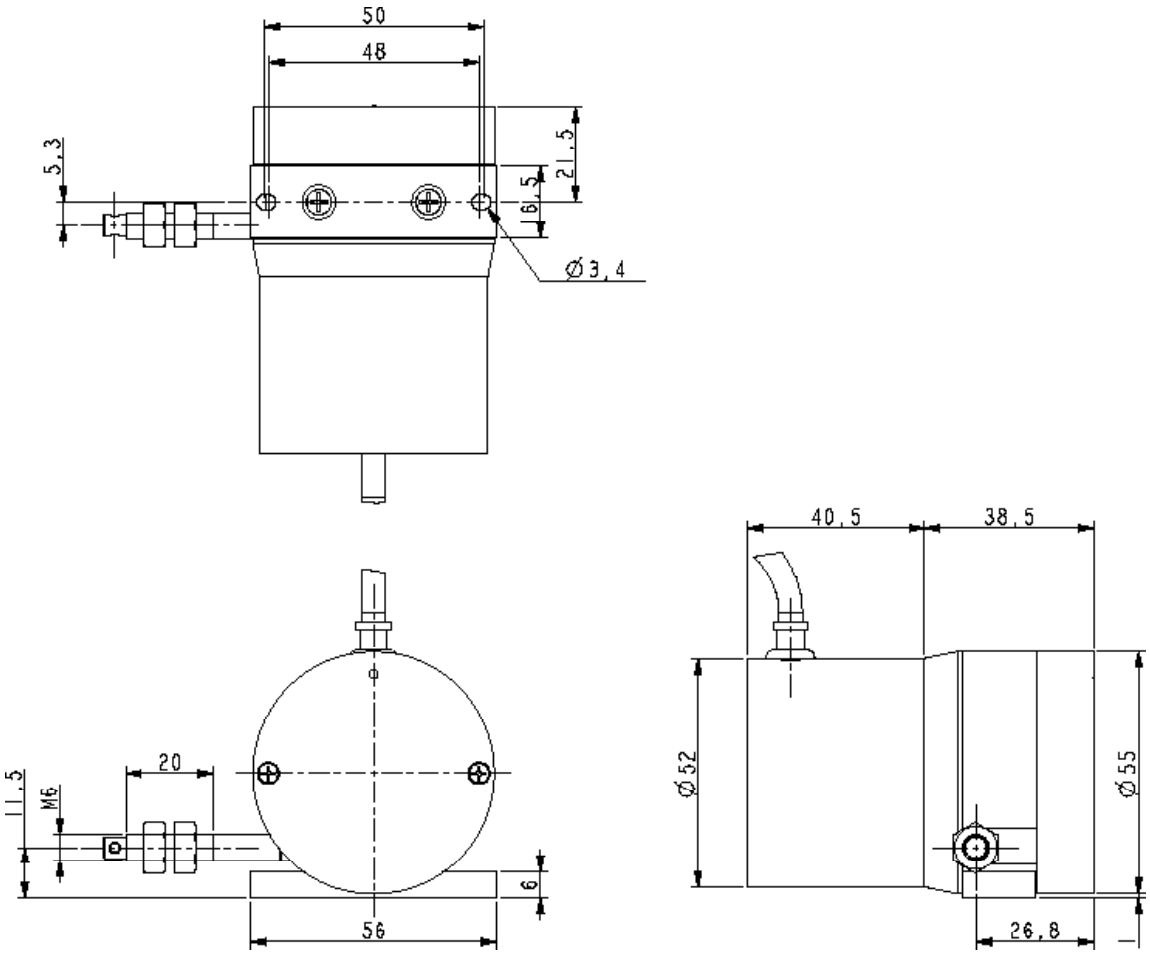
MECHANICAL SPECIFICATIONS	
Dimensions:	see drawing
Stroke per turn:	100 mm
Wire retraction force:	3 ÷5 N
Measuring length:	300, 500, 1000, 1500, 2000 mm
Measuring speed:	1 m/sec max.
Repeat accuracy:	± 0,15 mm
Weight:	~ 0,2 kg
Connections:	cable 2,0 m

ELECTRICAL SPECIFICATIONS	
Resistance value:	1, 5, 10, 20 kΩ
Tolerance of resistance:	± 5%
Linearity:	± 0,25%
Power rating:	2 W

MATERIALS	
Housing:	Aluminium
Wire:	Stainless steel

ELECTRICAL CONNECTIONS	
1	**Function**
green	A (slider)
red	C+
black	C-

1 = cable LIKA 3x0,25 mm² (LIYCY)



SFP

Order code

SFP	-	XXXX ⓐ	-	XX ⓑ	-	XX ⓒ

ⓐ MEASURING LENGTH	ⓑ POTENTIOMETER	ⓒ CABLE LENGTH
300 = 300 mm	**1** = 1 kΩ	**L2** = cable output 2 m
500 = 500 mm	**5** = 5 kΩ	**L4** = cable output 4 m
1000 = 1000 mm	**10** = 10 kΩ	**Lx** = cable length on request
1500 = 1500 mm	**20** = 20 kΩ	
2000 = 2000 mm		

DRAW WIRE

Miniature draw wire encoder

Series SFE

- Robust and space saving construction
- Integrated incremental encoder
- Measuring length up to 2000 mm

SFE

ENVIRONMENTAL SPECIFICATIONS	
Operating temperature range:	-25°C + 85°C (-13°F + 185°F)
Protection:	IP64

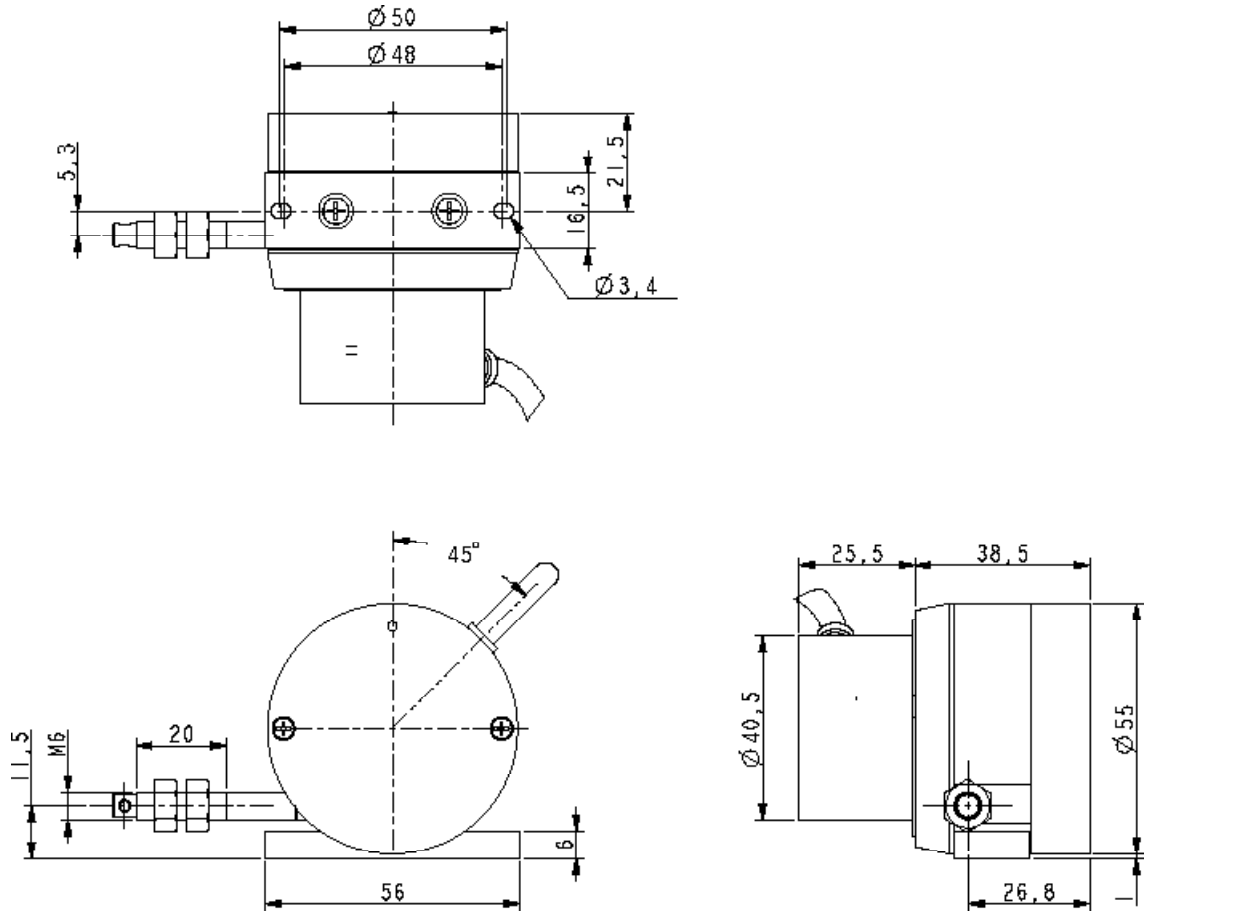
MECHANICAL SPECIFICATIONS	
Dimensions:	see drawing
Stroke per turn:	100 mm
Wire retraction force:	5 ÷15 N
Measuring length:	1500, 2000 mm
Measuring speed:	1 m/sec max.
Weight:	~ 0,2 kg
Connections:	cable 2,0 m

ELECTRICAL SPECIFICATIONS	
Power supply:	+5Vdc +30Vdc
Output circuit:	Universal circuit PP/LD
Resolution:	1 / 0,5 / 0,4 / 0,05 mm
Output current:	40 mA max.
Input current:	60 mA max.
Output signals:	AB, /AB

MATERIALS	
Housing:	Aluminium + plastic
Wire:	stainless steel, non magnetic - UNI EN 4305

ELECTRICAL CONNECTIONS	
1	**Function**
yellow	A
blue	/A
green	B
orange	/B
white	0
grey	/0
red	+Vdc
black	0Vdc GND

1 = Lika encoder cable l8 (8x0,25 mm²)



SFE

Order code

SFE	-	XXXX ⓐ	-	X ⓑ	-	XXX ⓒ	-	X ⓓ	-	XX ⓔ

ⓐ **MEASURING LENGTH**
1500 = 1500 mm
2000 = 2000 mm

ⓑ **OUTPUT CIRCUIT**
H = PP/LD universal circuit

ⓒ **RESOLUTION**
100 = 1 mm (x4 = 0,25 mm)
200 = 0,5 mm (x4 = 0,125 mm)
250 = 0,4 mm (x4 = 0,1 mm)
500 = 0,2 mm (x4 = 0,05 mm)

ⓓ **POWER SUPPLY**
4 = +5Vdc +30Vdc

ⓔ **CONNECTIONS**
L2 = 2 meters
L4 = 4 meters
Lx = cable length on request

DRAW WIRE

Miniature absolute draw wire encoder

Series **SFA**

- Absolute draw-wire encoder
- Robust and compact design
- Resolution from 0.1 to 0.012 mm
- Measuring range 1000 and 2000 mm

SFA

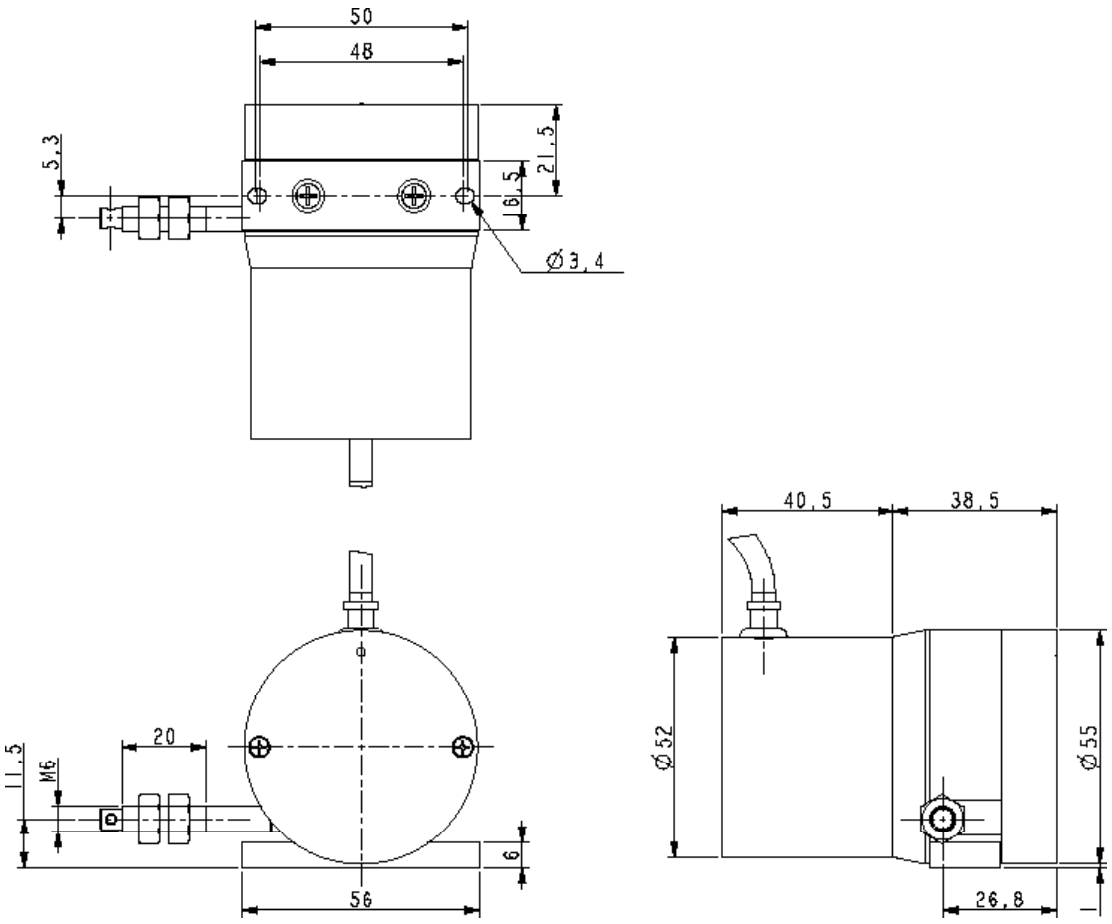
ENVIRONMENTAL SPECIFICATIONS	
Operating temperature range:	-25°C + 85°C (-13°F + 185°F)
Protection:	IP64

MECHANICAL SPECIFICATIONS	
Dimensions:	see drawing
Stroke per turn:	100 mm
Wire retraction force:	5 ÷15 N
Measuring length:	1000, 2000 mm
Measuring speed:	1 m/sec max.
Weight:	~ 0,3 kg
Connections:	M12 8 pin plug, cable 2,0 m

ELECTRICAL SPECIFICATIONS	
Resolution:	0.012, 0.025, 0.05, 0.1 mm
Output code:	Binary, Gray
Power supply:	+10Vdc +30Vdc
Power consumption:	25 mA max.
Output circuits:	SSI (25 bit, LSB alligned, clock 300 kHz max, Tp > 64 µsec)
Protection:	against inversion of polarity
EMC:	acc. to EN-61000-4-2/A1 EN-61000-4-4
Battery life:	10 years min.
Function:	Zero setting

MATERIALS	
Housing:	non corroding, UNI EN AW-6082
Wire:	stainless steel, non magnetic - UNI EN 4305

ELECTRICAL CONNECTIONS		
Function	**M12 8-pin**	**M8 cable**
0Vdc GND	1	Black
+10 +30Vdc	2	Red
Clock in +	3	Yellow
Clock in -	4	Blue
Data out +	5	Green
Data out -	6	Orange
Zero setting	7	White
n.c.	8	Grey
Shield	Shielded	Shielded



SFA

Order code

SFA	-	XXXX ⓐ	-	XX ⓑ	-	XXXX ⓒ	-	XXX ⓓ

ⓐ MEASURING LENGTH
1000 = 1000 mm
2000 = 2000 mm

ⓑ OUTPUT CIRCUIT
BA = SSI, binary code, LSB aligned
GA = SSI, gray code, LSB aligned

ⓒ RESOLUTION
8192 = 0.012 mm
4000 = 0.025 mm
2000 = 0.05 mm
1000 = 0.1 mm

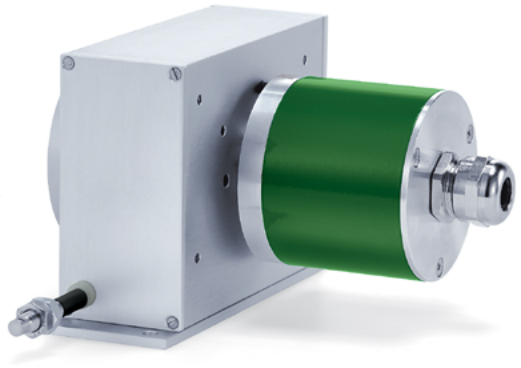
ⓓ CONNECTIONS
L2 = 2 meters
Lx = cable length on request
M0,5 = 0.5 m cable + M12 8 pin inline connector
M2 = 2 m cable + M12 8 pin inline connector

DRAW WIRE

Draw wire support for encoders

Series SF-I • SF-A

- Compact and cost effective draw-wire unit for encoders
- Simple and reliable construction
- Fits incremental, absolute, analogue & fieldbus encoder
- Measurement range from 5000 to 6800 mm
- Drum circumference:
  - 200,0 mm for incremental encoder
  - 204,8 mm for absolute encoders



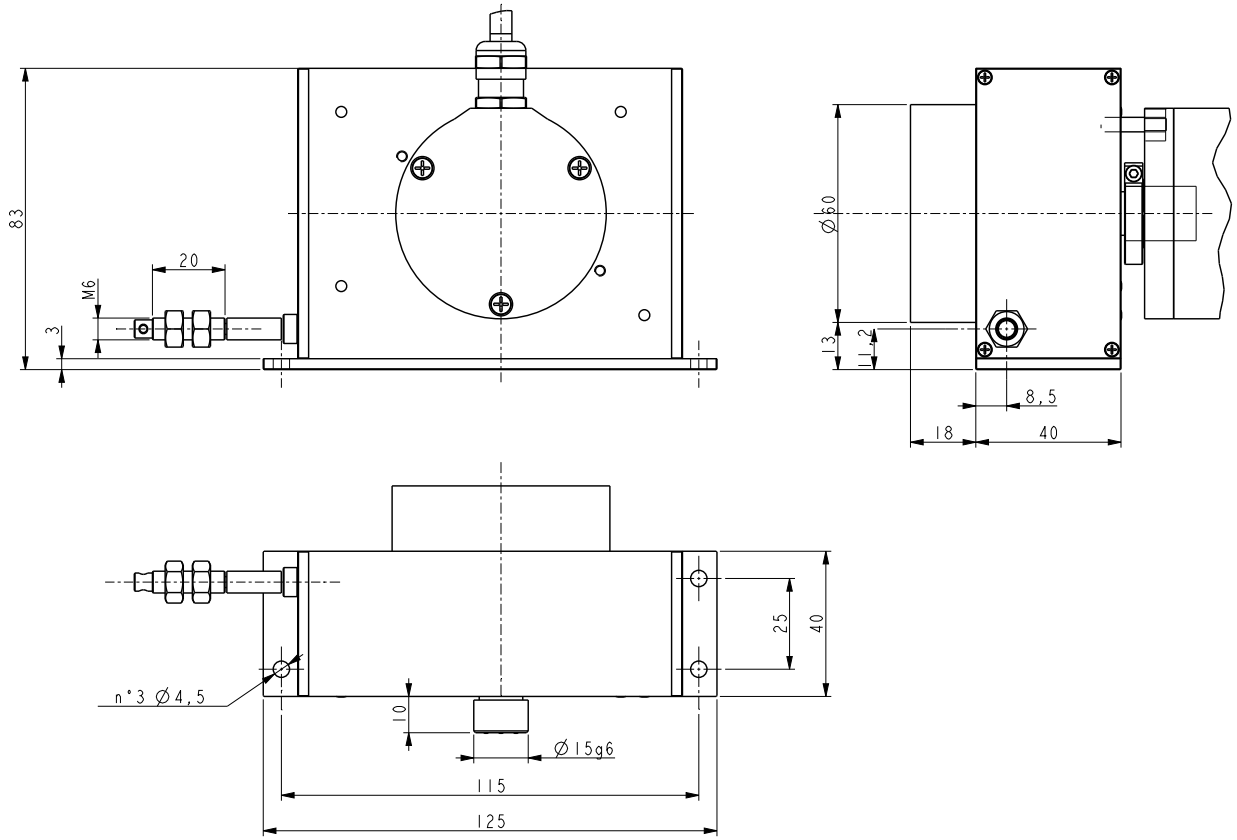
SF-I
SF-A

COMBINATIONS WITH ENCODERS	
SF-I + CK58-H-500ZCU415R:	Incremental encoder, resolution 0,1 mm (after x 4)
SF-I + CK58-H-2000ZCU415R:	Incremental encoder, resolution 0,1 mm
SF-A + EMC5812/4096GS-15-RM2+EPFL121H:	SSI absolute encoder, resolution 0,05 mm
SF-A + EMC5812/16384PA-15-RM2:	Programmable analogue encoder
SF-A + AMC5812/4096PB-15 + CC-PB:	Profibus absolute encoder

ENVIRONMENTAL SPECIFICATIONS	
Operating temperature range:	-25°C +85°C (-13°F +158°F)
Protection:	see encoder

MECHANICAL SPECIFICATIONS	
Dimensions:	see drawing
Stroke per turn:	200 - 204,8 mm
Wire retraction force:	5 ÷15 N
Measuring length:	5000, 6800 mm
Measuring speed:	3 m/sec max.
Repeat accuracy:	± 0.15 mm
Weight:	~ 0,6 kg (without encoder)

MATERIALS	
Housing:	anodized, UNI EN AW-6082
Wire:	stainless steel, non magnetic - UNI EN 4305



SF-I
SF-A

Order code

SF	-	X ⓐ	-	XXXX ⓑ

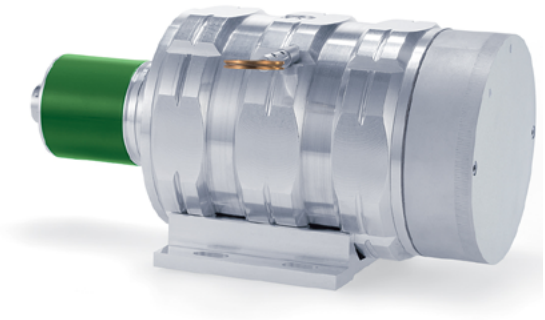
ⓐ STROKE PER TURN	ⓑ MEASURING LENGTH
I = 200 mm (for incremental encoders)	**5000** = 5000 mm
A = 204,8 mm (for absolute encoders)	**6800** = 6800 mm

DRAW WIRE

Draw-wire support for incremental & absolute encoders

Series	SAK

- 10 or 15 m measurement length
- Robust aluminium housing with optional anticorrosive surface treatment
- Forced wire guidance and one layer winding
- ATEX encoder on request



SAK

SUITABLE ENCODERS	
I58-H-3000ZCU46RL2:	Incremental encoder, 0.1 mm resolution, cable output
I58-H-3000ZCZ46R + EPFL121:	Incremental encoder, 0.1 mm resolution, connector output
HM5818/16384-PS-6:	Programmable SSI encoder, res. up to 0,01 mm
EM58 TA:	Programmable analogue output
AM5812/4096PB-6 + CC-PB:	AM5812/4096PB-6 + CC-PB

ENVIRONMENTAL SPECIFICATIONS	
Operating temperature range:	-25° +85°C (-13°F +185°F)
Protection:	see encoder

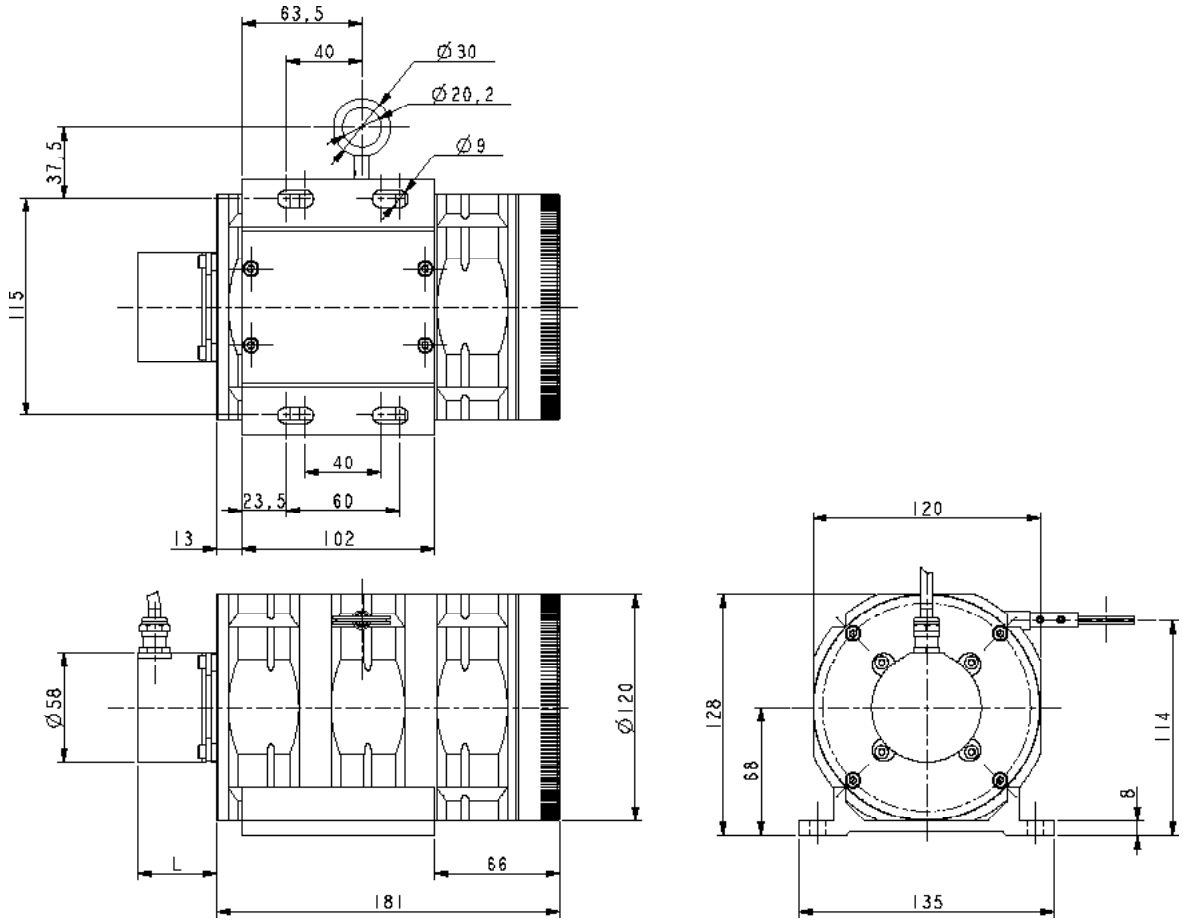
MECHANICAL SPECIFICATIONS	
Dimensions:	see drawing
Stroke per turn:	300 mm
Wire retraction force:	10 ÷15 N
Measuring length:	10.000, 15.000 mm
Measuring speed:	10 m/sec max.
Acceleration:	4 m/s² max.
Linearity:	± 0,05% FS max.
Weight:	~ 6-8 kg (without encoder)

MATERIALS	
Housing:	Aluminium
Wire:	Stainless steel, ø 0,9 mm

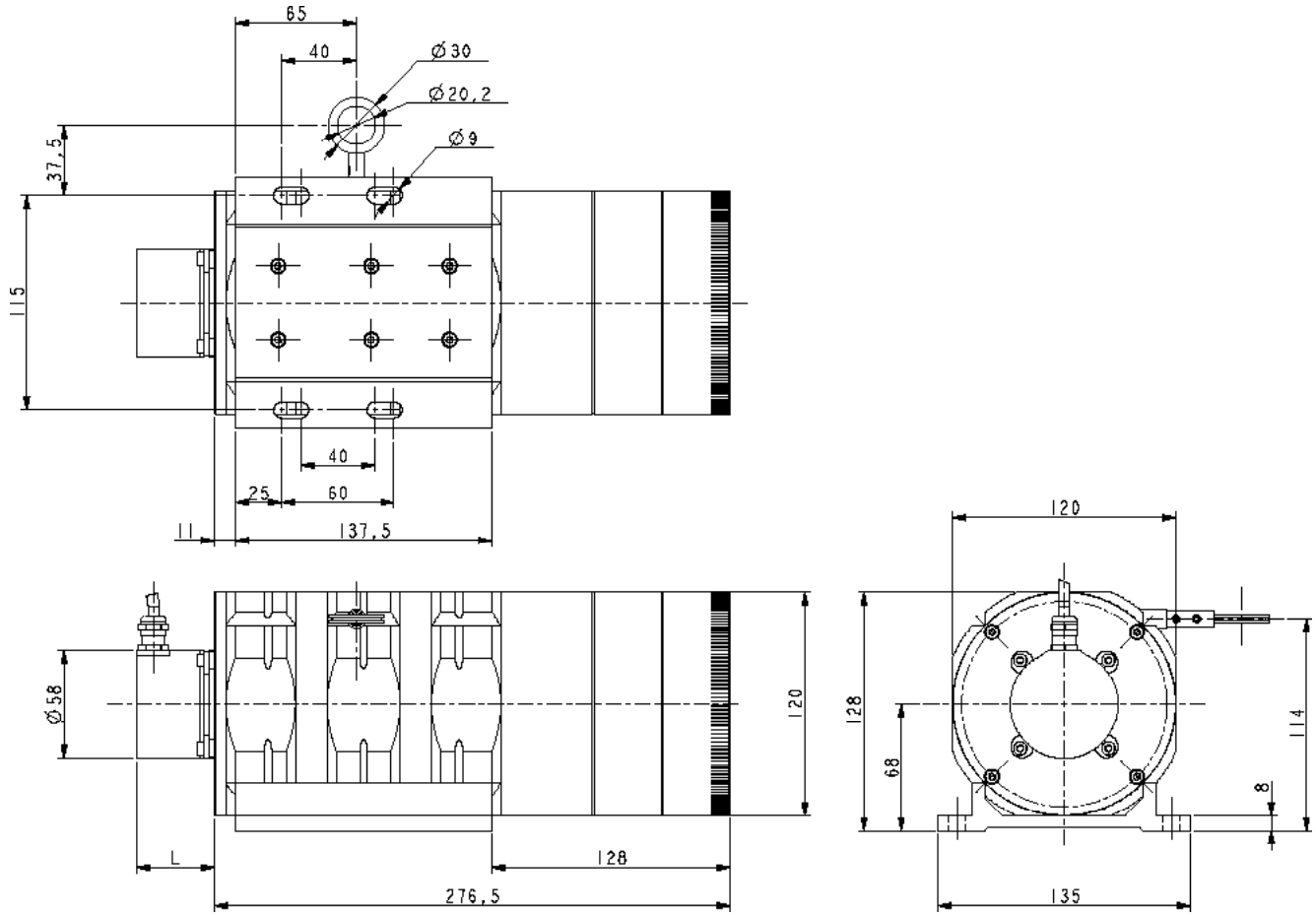
Order code

SAK	-	XXXXX ⓐ

ⓐ MEASURING LENGTH
10000 = 10000 mm
15000 = 15000 mm



SAK-10000



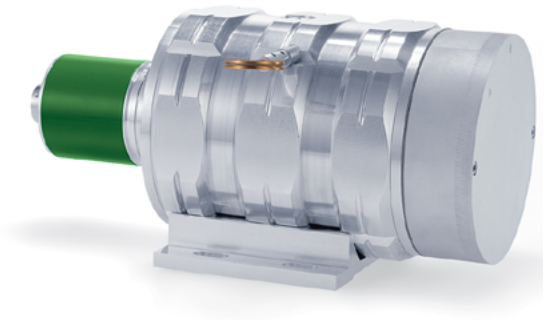
SAK-15000

DRAW WIRE

Draw-wire support for incremental & absolute encoders

Series **SBK**

- From 20 to 50 m measurement length
- Robust aluminium housing
- Forced wire guidance and one-layer winding
- ATEX encoder on request
- Fits any encoders with servoflange



SBK

SUITABLE ENCODERS	
I58-H-5000ZCU46RL2:	Incremental encoder, 0.1 mm resolution, cable output
I58-H-5000ZCZ46R + EPFL121:	Incremental encoder, 0.1 mm resolution, connector output
HM5818/16384-PS-6:	Programmable SSI encoder, res. up to 0,01 mm
EM58 TA:	Programmable analogue output
AM5812/4096PB-6 + CC-PB:	AM5812/4096PB-6 + CC-PB

ENVIRONMENTAL SPECIFICATIONS	
Operating temperature range:	-25° +85°C (-13°F +185°F)
Protection:	see encoder

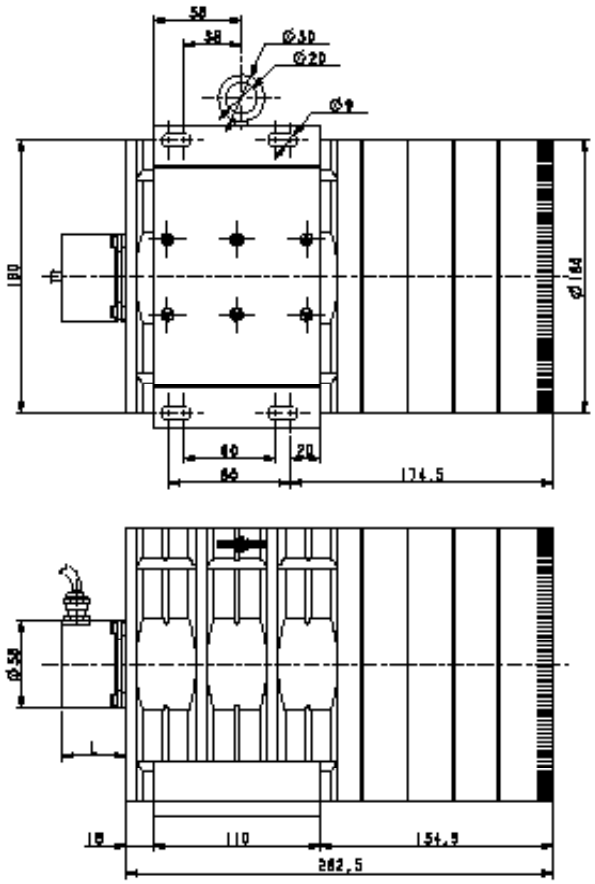
MECHANICAL SPECIFICATIONS	
Dimensions:	see drawing
Stroke per turn:	500 mm
Wire retraction force:	10 ÷ 30 N
Measuring length:	20.000, 30.000, 40.000, 50.000 mm
Measuring speed:	10 m/sec max.
Acceleration:	2 m/s² max. (20, 30 m versions) 1 m/s² max. (40, 50 m versions)
Linearity:	± 0,05% FS max.
Weight:	~ 12-13 kg (without encoder)

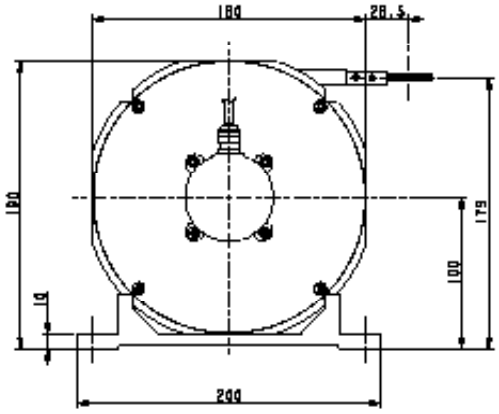
MATERIALS	
Housing:	Aluminium
Wire:	Stainless steel, ø 0,9 mm

Order code

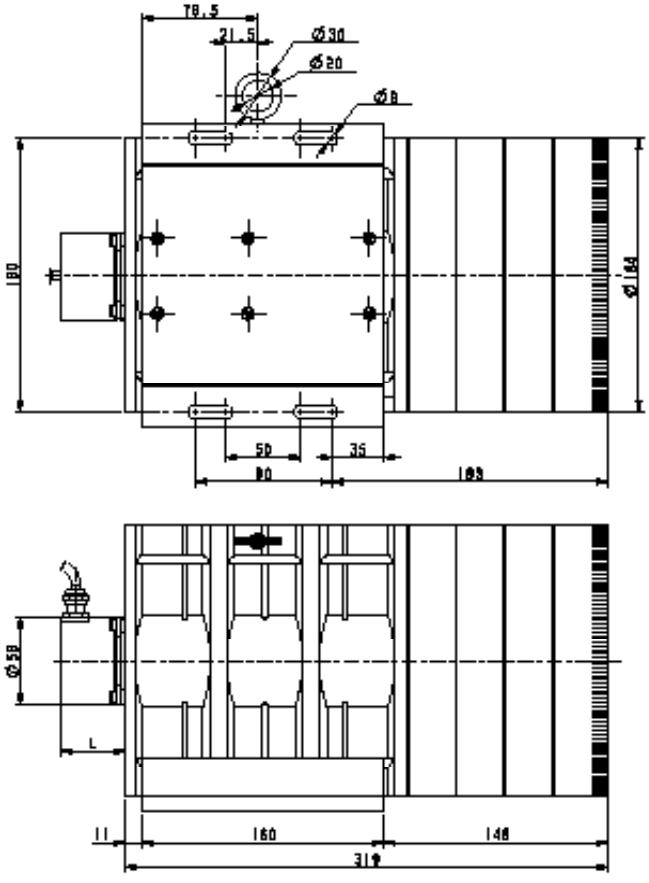
SBK	-	XXXXX ⓐ

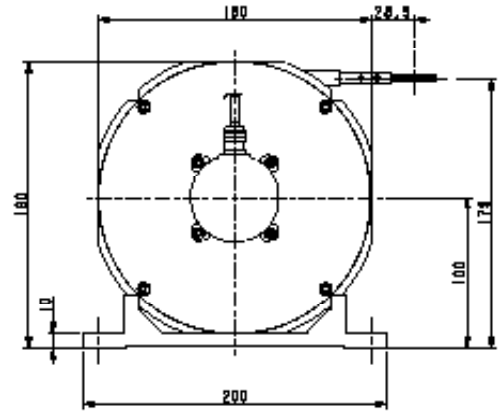
ⓐ MEASURING LENGTH
20000 = 20000 mm
30000 = 30000 mm
40000 = 40000 mm
50000 = 50000 mm



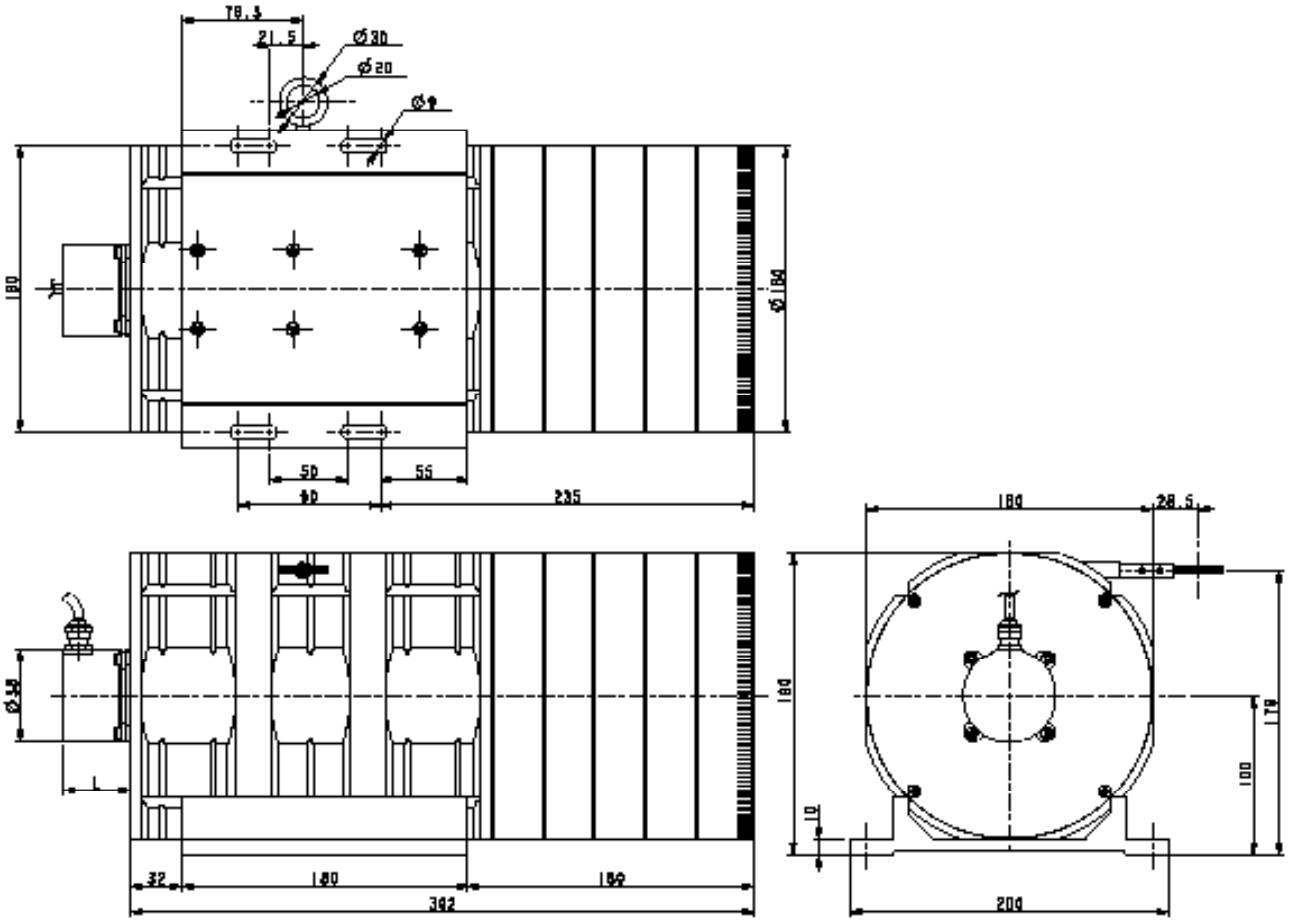


SBK-20000

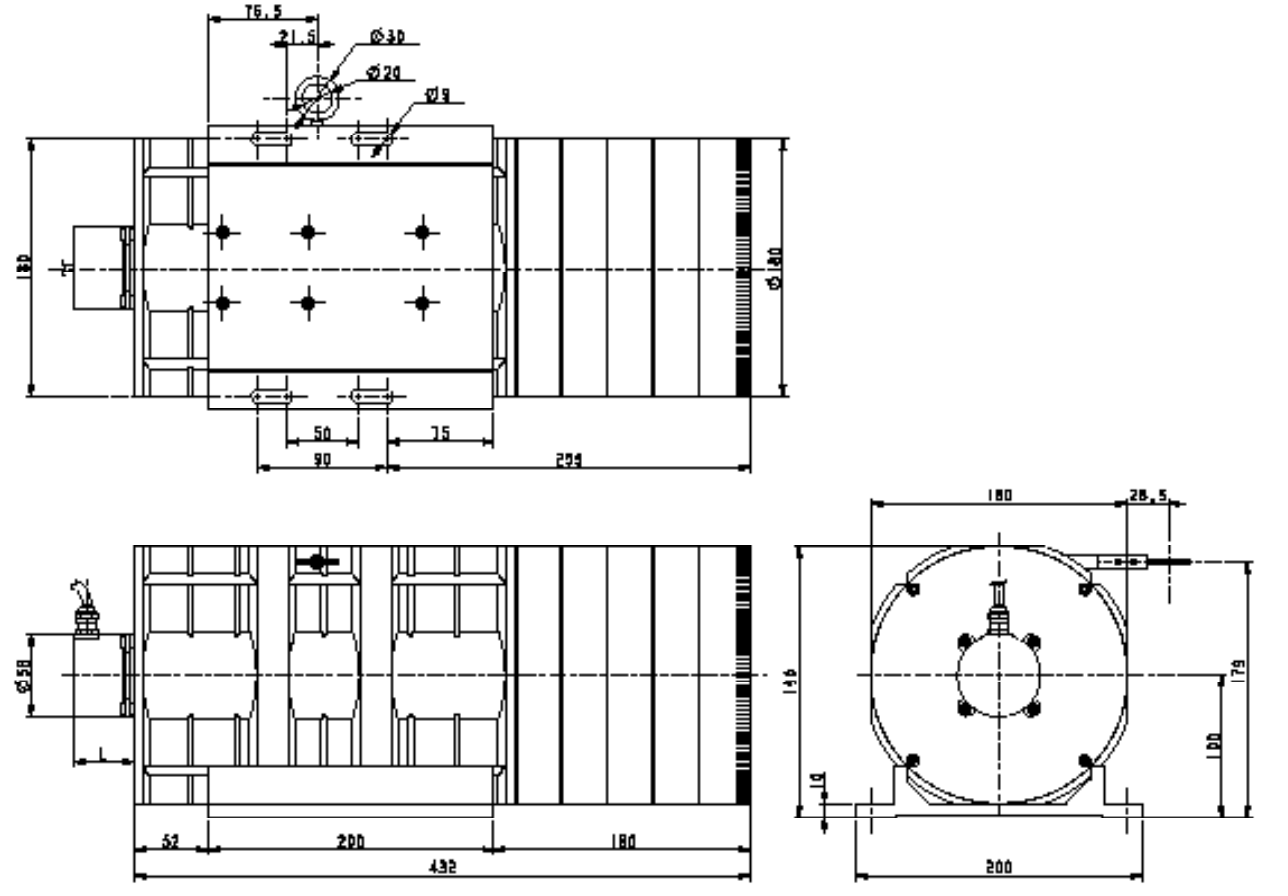




SBK-30000



SBK-40000



SBK-50000

NOTES

NOTES

NOTES

Contact...

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