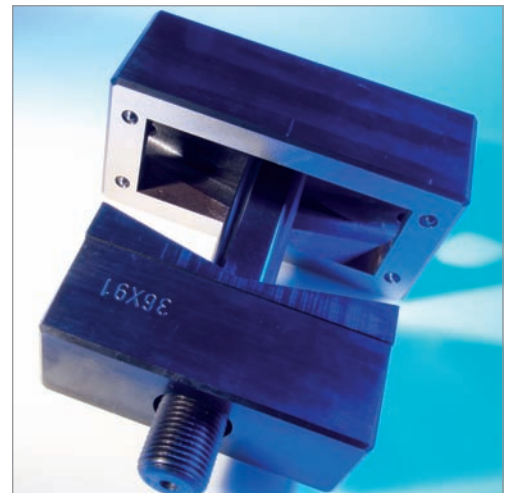
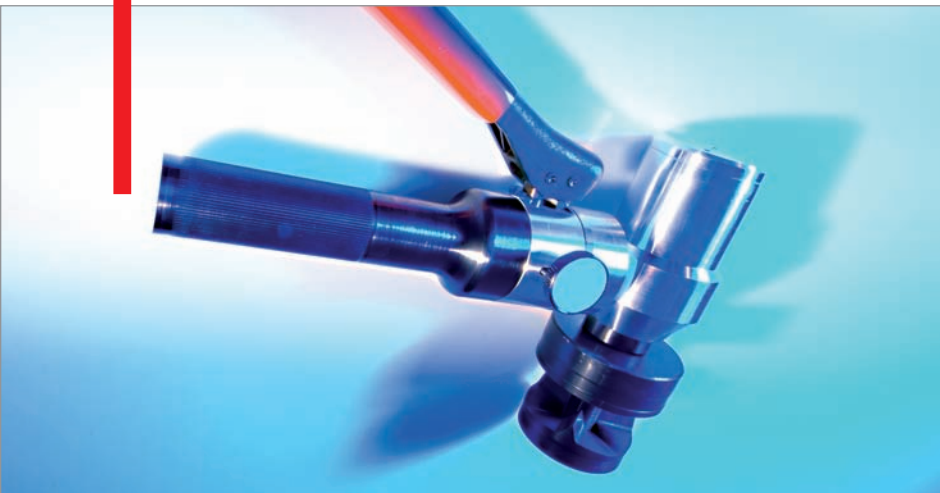


Punching tools



Advantages



Punching tools

For years, Murrplastik Systemtechnik has been developing easy-to-assemble, maintenance-free connection systems for the routing of lines and cables.

Thanks to our practical punching tools, you now have the option of quickly and easily implementing the appropriate control cabinet cut-outs for our conduit and cable fittings, cable entry panels KDP and cable entry systems KDL and KDL/E.

You can choose between three different hydraulic punches and a wide range of punching tools.

Punching tools are available for sheet steel and for stainless steel applications.



- ✓ Compact construction
- ✓ For workshop and assembly
- ✓ Long service life
- ✓ Easy handling
- ✓ Compatible with many other systems

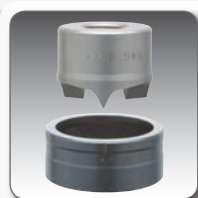
Punching tool product range



Type SW-WR / SW-WQ (Punching tools rectangular / square)

Several punching tools for the creation of square or rectangular cut-outs.

Page 248



Type SW-WE (Punching tools round)

Round hole punch, individual tools for steel or stainless steel plates.

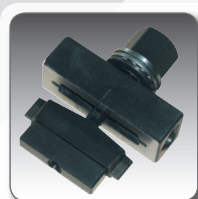
Page 250



Type SW-WS (Set of punching tools)

Round hole perforator tool sets from M16 to M40 and/or to M63.

Page 252



Type SW-WD (Punching tools SUB-MIN-D)

Punching tool for creation of SUB-MIN-D plug cut-outs (9 to 50 poles).

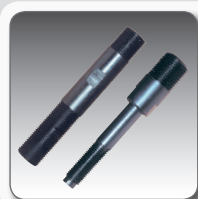
Page 253



Type SW-ASN (Special nibbling tool)

Universal punching tool for creation of various cut-out sizes and shapes.

Page 254



Spare part for punching tools

Replacement parts for the entire punching tool system.

Page 255



Type SW-HG and SW-HW (Hydraulic hand punch)

Practical manual punch without additional conduit and cylinder, ideal for workshop and assembly.

Page 246



Type SW-HF (Hydraulic punch with foot pump)

Practical hydraulic punch with foot pump; ideal for use in the workshop. Both hands remain free for exact positioning and punching.

Page 247

Type SW-HG und SW-HW (hydraulic manual punch)

Practical manual punch without additional conduit and cylinder, ideal for workshop and assembly.

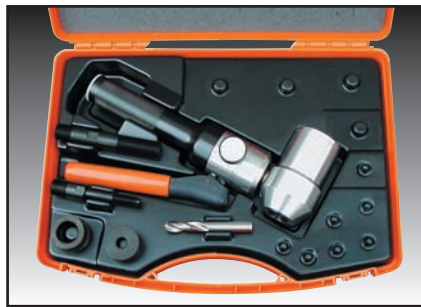
- Hydraulic punch made of high-strength aluminium
- Overload protection provided by excess pressure valve
- Ergonomic handle, springs back automatically

SW-HW version:

- The angle head can be pivoted 360° for better handling.



SW-HG



SW-HW

Type	Order no.	Weight kg	Punching force kN	Operating pressure bar	Pack qty.
Compact hydraulic manual punch, straight					
SW-HG hydraulic manual punch	87801010	1.6	75	650	1
Compact hydraulic manual punch with pivoting head					
SW-HW hydraulic manual angle punch	87801012	1.9	75	650	1
consisting of:					
1 pce compact hydraulic manual punch					
1 pce tension bolt version A					
1 pce tension bolt version C					
1 pce spacer bushing set (3-pce.)					
1 pce tap drill 11.0 mm					
1 pce transport case					
Punching performance, round hole perforator:					
2.0 mm sheet steel (St37) max. Ø 84 mm					
3.0 mm sheet steel (St37) max. Ø 64 mm					
2.0 mm stainless steel (V2A) max. Ø 84 mm					
Punching performance, square hole perforator:					
2.0 mm sheet steel (St37) max. 36 x 112 mm					
Spare part see chapter "Spare part for punching tool"					

Type SW-HF (Hydraulic punch with foot pump)

Practical hydraulic punch with foot pump; ideal for use in the workshop.

The foot pump does not require use of the hands, leaving both hands free for exact positioning and punching at the control cabinet.

The support frame of the foot pump is splayed. This provides for stable, anti-tip working.

- Overload protection via installed pump safety valve
- Better punching performance than with a manual punch
- For larger punching tools



SW-HF

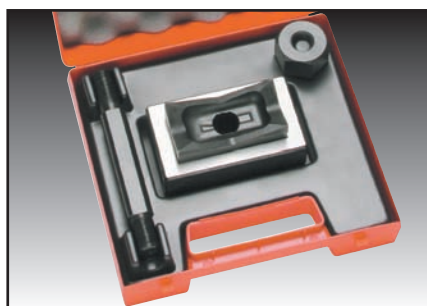
Type	Order no.	Weight kg	Punching force kN	Operating pressure bar	Pack qty.
Hydraulic punch with foot pump					
SW-HF Hydraulic punch with foot pump	87801014	13.9	100	700	1
consisting of:					
1 pce hydraulic cylinder with quick coupling					
1 pce Hydraulic conduit 2.8 m					
1 pce tension bolt version A					
1 pce tension bolt version C					
1 pce spacer bushing set (5-pce.)					
1 pce tap drill 11.0 mm					
1 pce sheet steel transport case					
Punching performance, round hole perforator:					
2.0 mm sheet steel (St37) max. Ø 150 mm					
3.0 mm sheet steel (St37) max. Ø 100 mm					
2.0 mm stainless steel (V2A) max. Ø 100 mm					
Punching performance, square hole perforator:					
2.0 mm sheet steel (St37) max. 138 x 138 mm					
2.0 mm stainless steel (V2A) max. 92 x 92 mm					
Spare part see chapter "Spare part for punching tool".					

Type SW-WR / SW-WQ (Punching tool rectangular / square)

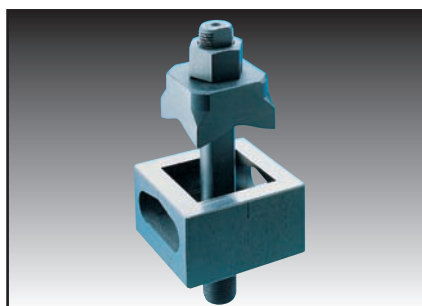


Steel

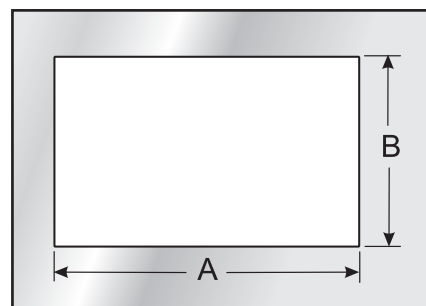
Several punching tools for the creation of square or rectangular cut-outs. These hole punches are delivered a plastic transport case. Also ideal for mounting use. Corresponding tension bolt is included in the delivery. During the punching process, the attachment points for the screw holes are centred.



SW-WR...



SW-WQ...



Type	Order- No.	Press cut A mm	Press cut B mm	Suitable for	Suitable tensioning screw version	Cutting for	Suitable for hydraulic punch SW-HG(HW)/SW-HF	Pack qty.
Hole perforator (rectangular) for sheet steel with centring tips								
SW-WR 17.0x19.0	87801330	17.0	19.0	Sheet steel ≤2 mm	G		●/●	1
SW-WR 21.8x25.8	87801332	21.8	25.8	Sheet steel ≤2 mm	K		●/●	1
SW-WR 22.0x30.0	87801334	22.0	30.0	Sheet steel ≤2 mm	K		●/●	1
SW-WR 22.0x42.0	87801336	22.0	42.0	Sheet steel ≤2 mm	K		●/●	1
SW-WR 25.0x30.0	87801340	25.0	50.0	Sheet steel ≤2 mm	K		●/●	1
SW-WR 36.0x52.0	87801350	36.0	52.0	Sheet steel ≤2 mm	D *	Industrial Connectors 6 pole	●/●	1
SW-WR 36.0x65.0	87801352	36.0	65.0	Sheet steel ≤2 mm	D *	Industrial Connectors 10 pole	●/●	1
SW-WR 45.0x92.0	87801342	45.0	92.0	Sheet steel ≤2 mm	D *		●/●	1
SW-WR 46.0x86.0	87801354	46.0	86.0	Sheet steel ≤2 mm	D *		●/●	1
SW-WR 46.0x92.0	87801344	46.0	92.0	Sheet steel ≤2 mm	D *		●/●	1
SW-WR 46.0x112.0	87801356	46.0	112.0	Sheet steel ≤2 mm	E		-/●	1
SW-WR 68.0x138.0	87801346	68.0	138.0	Sheet steel ≤3 mm	E		-/●	1
SW-WR 86.0x36.0	87801292	86.0	36.0	Sheet steel ≤2 mm	D *	KDL 16	●/●	1
						KDL/E 16 (screwed)		
						KDL/S 16		
						KD/AG16		
SW-WR 91.0x36.0	87801294	91.0	36.0	Sheet steel ≤2 mm	D *	KDL/E 16 (snap in or screwed)	●/●	1
SW-WR 112.0x36.0	87801290	112.0	36.0	Sheet steel ≤2 mm	D *	KDP 24	●/●	1
						KDL 24		
						KDL/E 24		
						KD/AG24		

Type SW-WR / SW-WQ (Punching tool rectangular / square)

Type	Order no.	Press cut A mm	Press cut B mm	Suitable for	Suitable tensioning screw version	Cutting for	Suitable for hydraulic punch SW-HG(HW)/SW-HF	Pack qty.
Hole perforator (rectangular) for sheet steel with centring tips								
SW-WQ 12.7x12.7	87801300	12.7	12.7	Sheet steel ≤1.75 mm	H		●/●	1
SW-WQ 15.8x15.8	87801302	15.8	15.8	Sheet steel ≤1.75 mm	H		●/●	1
SW-WQ 19.0x19.0	87801304	19.0	19.0	Sheet steel ≤2 mm	G		●/●	1
SW-WQ 22.2x22.2	87801306	22.2	22.2	Sheet steel ≤2 mm	G		●/●	1
SW-WQ 24.0x24.0	87801308	24.0	24.0	Sheet steel ≤2 mm	G		●/●	1
SW-WQ 25.4x25.4	87801310	25.4	25.4	Sheet steel ≤2 mm	K		●/●	1
SW-WQ 45.8x15.8	87801312	45.5	45.5	Sheet steel ≤3 mm	F		●/●	1
SW-WQ 46.0x46.0	87801314	46.0	46.0	Sheet steel ≤3 mm	F		●/●	1
SW-WQ 50.8x50.8	87801316	50.8	50.8	Sheet steel ≤3 mm	D *		●/●	1
SW-WQ 68.0x68.0	87801318	68.0	68.0	Sheet steel ≤3 mm	D *		●/●	1
SW-WQ 92.0x92.0	87801320	92.0	92.0	Sheet steel ≤3 mm	E		-/●	1
SW-WQ 125.0x125.0	87801322	125.0	125.0	Sheet steel ≤3 mm	E		-/●	1
SW-WQ 138.0x138.0	87801324	138.0	138.0	Sheet steel ≤3 mm	E		-/●	1

* Suitable tool for forming the cut-out for the tension screw:
Round hole perforator SW-WE-NS Pg 16

Spare part see chapter "Spare part for punching tool"

Type SW-WE (Punching tool round)

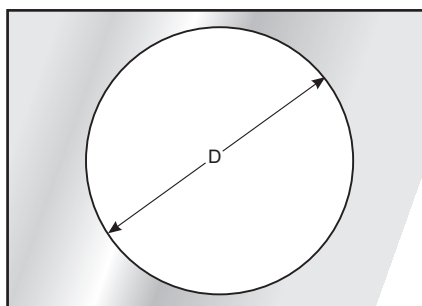
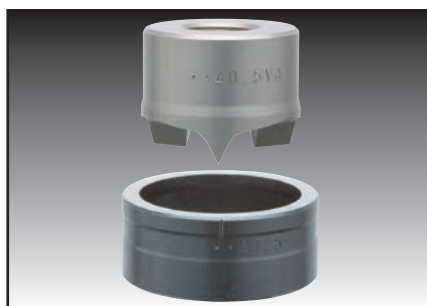


Steel

Round hole punch, individual tools for steel or stainless steel plates. Versions for punching holes in metric or Pg threaded connections.

Metric sizes from M16 to M63.

Pg sizes from Pg 9 to Pg 48.



SW-WE...

Type	Order no.	Dimension	Press cut D mm	Suitable for	Suitable tensioning screw version	Cutting for	Pack qty.
Hole perforator (round) for steel sheets							
SW-WE-NS M16	87801210	M16	16.2	Sheet steel ≤2 mm	A		1
SW-WE-NS M20	87801212	M20	20.4	Sheet steel ≤2 mm	A		1
SW-WE-NS M25	87801214	M25	25.4	Sheet steel ≤2 mm	A		1
SW-WE-NS M32	87801216	M32	32.5	Sheet steel ≤3 mm	C		1
SW-WE-NS M40	87801218	M40	40.5	Sheet steel ≤3 mm	C		1
SW-WE-NS M50	87801220	M50	50.5	Sheet steel ≤3 mm	C	KDP/R M50/x	1
SW-WE-NS M63	87801222	M63	63.5	Sheet steel ≤3 mm	C	KDP/R M63/x	1
SW-WE-NS Pg. 9	87801238	Pg 9	15.2	Sheet steel ≤2 mm	A		1
SW-WE-NS Pg. 11	87801240	Pg 11	18.6	Sheet steel ≤2 mm	A		1
SW-WE-NS Pg. 13	87801242	Pg 13	20.4	Sheet steel ≤2 mm	A		1
SW-WE-NS Pg. 16	87801244	Pg 16	22.5	Sheet steel ≤2 mm	A		1
SW-WE-NS Pg. 21	87801246	Pg 21	28.3	Sheet steel ≤2 mm	A		1
SW-WE-NS Pg. 29	87801248	Pg 29	37.0	Sheet steel ≤3 mm	C		1
SW-WE-NS Pg. 36	87801250	Pg 36	47.0	Sheet steel ≤3 mm	C		1
SW-WE-NS Pg. 42	87801252	Pg 42	54.0	Sheet steel ≤3 mm	C		1
SW-WE-NS Pg. 48	87801254	Pg 48	60.0	Sheet steel ≤3 mm	C		1

Type SW-WS (Punching tool set)



Steel

Round hole perforator tool sets from M16 to M40 and/or to M63. For steel or stainless steel plates. Punching tools are delivered in handy plastic transport case. Also ideal for mounting use.



SW-WS-... M16-M40



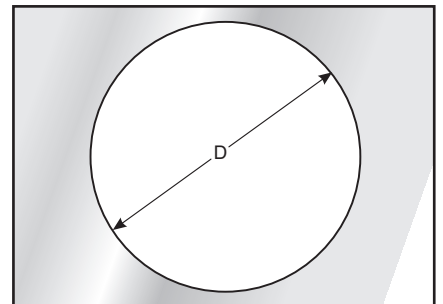
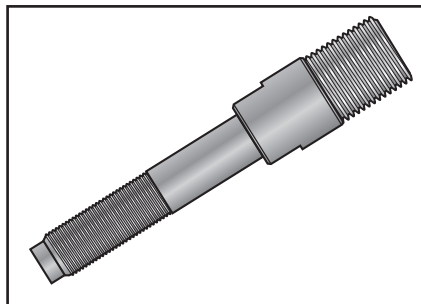
SW-WS-... M16-M63

Type	Order no.	Suitable tensioning screw version	Suitable for	Pack qty.
Sheet metal perforator set for sheet steel				
SW-WS-NS M16-M40	87801280	A & C	Sheet steel	1
consisting of:				
1 each M16; M20; M25; M32; M40; transport case				
Sheet metal perforator set for sheet steel				
SW-WS-NS M16-M63	87801282	A & C	Sheet steel	1
consisting of:				
1 each M16; M20; M25; M32; M40; M50; M63; transport case				
Sheet metal perforator set for stainless sheet steel				
SW-WS-VA M16-M40	87801284	B & C	Sheet steel and stainless sheet steel	1
consisting of:				
1 each M16; M20; M25; M32; M40; transport case				
Sheet metal perforator set for stainless sheet steel				
SW-WS-VA M16-M63	87801286	B & C	Sheet steel and stainless sheet steel	1
consisting of:				
1 each M16; M20; M25; M32; M40; M50; M63; transport case				
Spare part see chapter "Spare part for punching tool"				

Spare part for punching tools

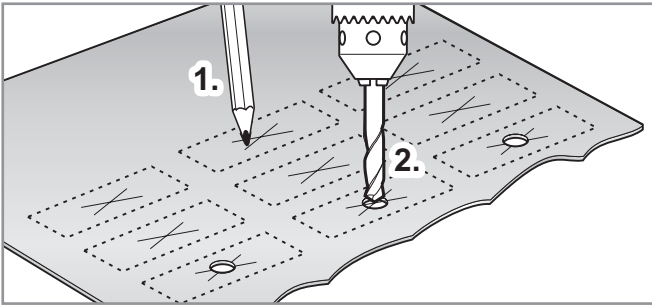


Replacement parts for the entire punching tool system.



Type	Order no.	Tensioning screw version	Length mm	Pilot hole D mm	Pack qty.
Tensioning screw					
SW-WE-ZS Type A	87801410	A	100.0	10.0	1
SW-WE-ZS Type B	87801412	B	100.0	11.5	1
SW-WE-ZS Type C	87801414	C	120.0	20.0	1
SW-WE-ZS Type D	87801416	D	165.0	24.0	1
SW-WE-ZS Type E	87801434	E	173.0	30.0	1
SW-WE-ZS Type F	87801436	F	141.0	20.0	1
SW-WE-ZS Type G	87801438	G	106.0	14.0	1
SW-WE-ZS Type H	87801440	H	87.0	10.0	1
SW-WE-ZS Type K	87801442	K	106.0	17.0	1
SW-WE-ZS Type L	87801444	L	87.0	10.0	1
spacer bushing set					
SW-WS-DS 3-pce.	87801430				1
SW-WS-DS 5-pce.	87801432				1
Predrill					
SW-WE-VB 10.0 mm	87801420				1
SW-WE-VB 11.0 mm	87801422				1
SW-WE-VB 11.5 mm	87801424				1
Replacement stamp for special nibbling tool					
SW-ASN 15 stamp	87801374				1
SW-ASN 20 stamp	87801376				1

Operating manual punching tool

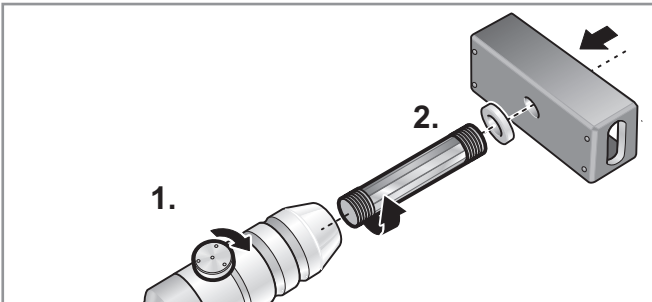


Establish and mark cut-outs.

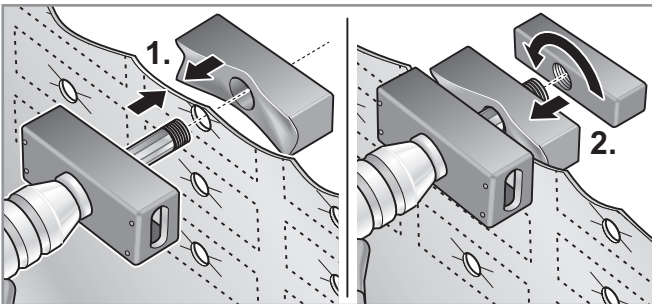
Caution:

Ensure sufficient distance between the press cuts!

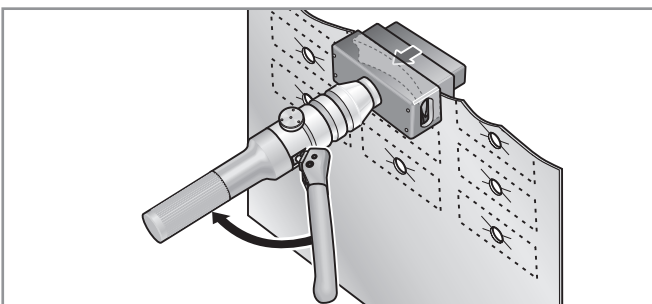
Mark drilling point for the pilot hole for the tension screw and punch out the pilot hole for the tension screw.



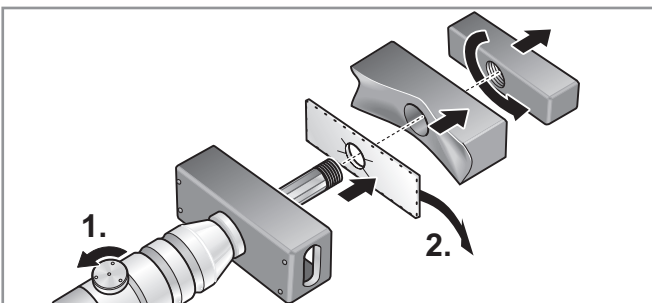
Screw in corresponding tension screw into the tool head and close the valve on the punching tool. Push on appropriate spacer and die.



Insert tension screw into pilot hole. Stick or screw stamp onto tension bolt. Secure with lock nut where needed. Align die and draw in lock nut by hand.



Activate hydraulic mechanism until the press cut is completed. Then actuate 3-4 further strokes. This ensures an easier removal of the plate from the die. Caution: If excessive force is required, inspect the hydraulic tool and punching tool! Observe the tool's operating instructions.



Remove hydraulic tool from the cut-out. Open valve and remove lock nut and stamp. Remove plate from the die.