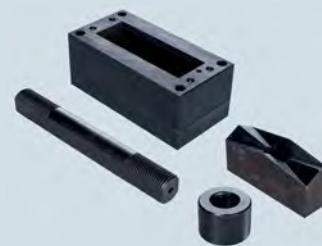


hydraulic panel punch



**NEW**

punching die



**NEW**

description	part No.	part No.
hydraulic punching tool (excluding punching die)	<b>CCW CT</b>	
punching unit - for M25 hole		<b>CCW M25 2)</b>
punching units for panel cut out of bulkhead mounting housings - for size 21.21 CK/CKA - for size 21.21 CKG IP68 - for size 49.16 - for size 66.16 - for size 44.27 - for size 57.27 - for size 77.27 - for size 104.27		<b>CCW PD 03 CCW PD 03G CCW PD 15 CCW PD 25 CCW PD 06 CCW PD 10 CCW PD 16 CCW PD 24</b>

Rectangular punch mm	ILME Product Number	Draw stud 3)	Suggested	Sheet thickness pilot hole	Manual screw-wrench use	Hydraulic use
21,3 x 21,3	<b>CCW PD 03</b>	13,0/11,0 mm	14,5 mm	St./Fe. 2 mm	x	x (*)
22,2 x 22,2	<b>CCW PD 03 G</b>	13,0/11,0 mm	14,5 mm	St./Fe. 2 mm	x	x (*)
24,0 x 57,0	<b>CCW PD 15</b>	19,0/14,0 mm	20,4 mm M20	St./Fe. 3 mm		x
24,0 x 73,0	<b>CCW PD 25</b>	19,0/14,0 mm	20,4 mm M20	St./Fe. 3 mm		x
36,0 x 52,0	<b>CCW PD 06</b>	25,0/21,0 mm	25,4 mm M25 2)	St./Fe. 3 mm		x
36,0 x 65,0	<b>CCW PD 10</b>	25,0/21,0 mm	25,4 mm M25 2)	St./Fe. 3 mm		x
36,0 x 86,0	<b>CCW PD 16</b>	25,0/21,0 mm	25,4 mm M25 2)	St./Fe. 3 mm		x
36,0 x 112,0	<b>CCW PD 24</b>	25,0/21,0 mm	25,4 mm M25 2)	St./Fe. 3 mm		x

accessory	ILME Product Number	Draw stud	Suggested pilot hole	Sheet thickness	Manual screw-wrench use	Hydraulic use
punch and die 25,4 M25	<b>CCW M25 (***)</b>	3/8" 3)	10 mm	St./Fe. 2 mm		x (**)
Hydraulic hand pump	<b>CCW CT</b>					

(\*) Adaptor (delivered with **CCW PD 03/03G**) and spacer (delivered with **CCW CT**) needed.

(\*\*) Adaptor M25 and spacer (delivered with **CCW CT**) needed.



③, ⑥ and ⑦ delivered with **CCW CT**

**LEGEND:**

- ③ Draw stud 3/8"
- ⑥ Spacer
- ⑦ Adaptor 3/8" - 3/4" UNF

**Hydraulic operating instructions (CCW PD ..)**

1. Screw the short thread of the 13,0/11,0 mm draw stud (3) into the 3/4" UNF adaptor (7) (CCW PD 03/03 G only).
2. Screw the 13,0/11,0 mm draw stud (3) complete with the 3/4" UNF adaptor (7) onto the hydraulic cylinder or screw the short thread of any of the larger draw studs (3) (without the adaptor) directly onto the hydraulic cylinder (CCW PD 03/03 G only).
3. Put the die (4) onto the draw stud (3) and move it towards the hydraulic cylinder. If necessary, place the spacer (6) between the hydraulic cylinder and die (4).
4. Insert draw stud (3) with pre-mounted die through the pilot hole in the sheet until the die abuts the sheet.
5. Place the punch (2) onto the draw stud and move it towards the sheet until it abuts the sheet.
6. Screw the counter nut (1) onto the thread of the draw stud (3).
7. Adjust punch rectangularly (4 marks on die) and tighten counter nut manually.

**Punching**

8. Operate hydraulic punch CCW CT driver until punch is drawn through sheet.
9. Depressurise hydraulic punch driver after punching.
10. Remove the counter nut (1) and punch (2) from the draw stud (3).
11. Remove the die (4) from the draw stud (3) and remove slugs from the die (4).

**Drilling mounting holes**

When punching, the position of mounting holes are marked. Use suitable spiral drill to drill mounting holes.

**Manual operating instructions (CCW PD 03 / 03G only)**

**Knockout punch mounting**

1. Screw the ball-bearing nut (5) onto the long thread of the draw stud 13,0/11,0 mm (3). Put the die (4) onto the draw stud (3) and move it towards the ball bearing nut (5).
2. For further steps refer to hydraulic operating instructions steps 4 to 7.

**Punching**

3. Use screw wrench SW 24 to rotate ball-bearing nut (5) until punch is drawn through sheet.
4. For further steps refer to hydraulic operating instructions steps 10 to 11.

**Prior to commissioning please read operating instructions**

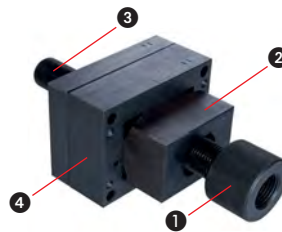
Components under voltage must not be machined. Prior to operating ensure tensionless state of the work environment (e.g. switch cabinet) or the material to be machined.

**Punching tool components**

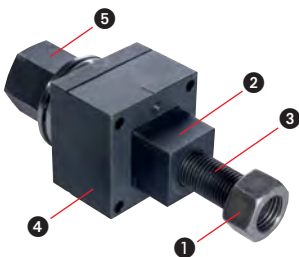
**CCW CT**



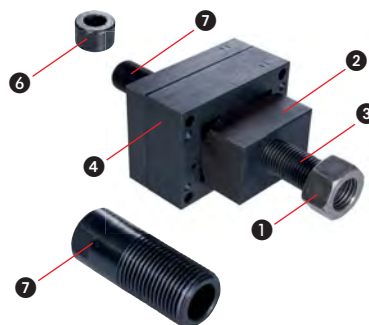
**Hydraulic operating CCW PD .. (except CCW PD 03/03G)**



**Manual operating (CCW PD 03/03G only)**



**Hydraulic operating (CCW PD 03/03G only)**



**LEGEND:**

- ① Counter nut
- ② Punch
- ③ Draw stud
- ④ Die
- ⑤ Ball-bearing nut
- ⑥ Spacer
- ⑦ Adaptor

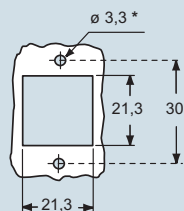
Accessories

Bulkhead housings Size	Punching die	Pilot hole	Mounting configuration	Draw stud	Adaptor	Spacer
21.21	CCW PD 03	Ø 14,5 mm	<b>Hydraulic tool operation CCW CT</b> with adaptor and with spacer <b>Manual operation</b> with screw ballbearing nut (no adaptor and spacer)	Delivered with	Delivered with	Delivered with
21.21 (IP68)	CCW PD 03 G			CCW PD 03	CCW PD 03	CCW CT
49.16	CCW PD 15	Ø 20,4 mm	<b>Hydraulic tool operation CCW CT</b> without adaptor and without spacer	CCW PD 15	ND	ND
66.16	CCW PD 25			CCW PD 25	ND	ND
44.27	CCW PD 06	Ø 25,4 mm	<b>Hydraulic tool operation CCW CT</b> without adaptor and without spacer	CCW PD 06	ND	ND
57.27	CCW PD 10			CCW PD 10	ND	ND
77.27	CCW PD 16			CCW PD 16	ND	ND
104.27	CCW PD 24			CCW PD 24	ND	ND
M25 hole or MKA IAF25 housings	CCW M25 dimensions Ø 25 mm	Ø 10 mm	<b>Hydraulic tool operation CCW CT</b> with adaptor and with spacer	CCW CT	CCW CT	CCW CT

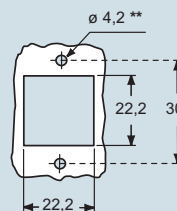
ND = Not Needed

Panel cut-out (in mm)

for size 21.21

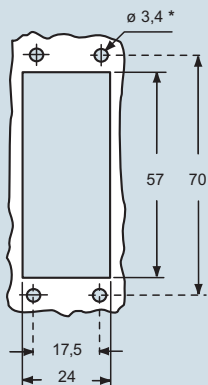


for size 21.21 (IP68)

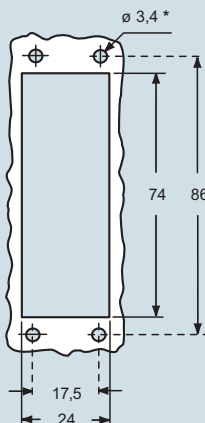


\*\* the fixing holes are not indicated

for size 49.16



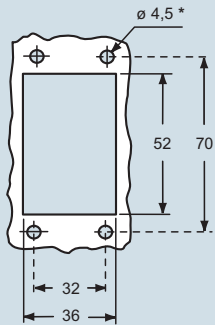
for size 66.16



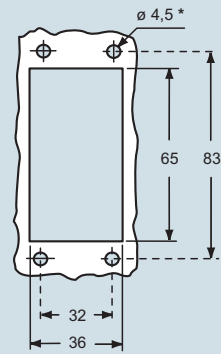
\* fixing holes (to be pierced)

Panel cut-out (in mm)

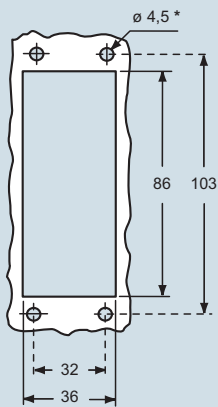
for size **44.27**



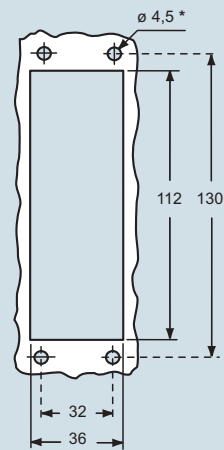
for size **57.27**



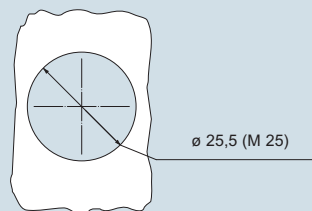
for size **77.27**, in mm



for size **104.27**



for size **21.21** (MKA IAF25)



\* fixing holes (to be pierced)