

punching tool for bulkhead mounting housing

hydraulic panel punching tool



punching unit



description	part No.	part No.
hydraulic punching tool (without punching unit)	CCW CT	
punching unit for M25 hole ¹⁾		CCW M25
punching unit for M32 hole		CCW M32
punching units for panel cut-out of bulkhead mounting housings		
for size 21.21 CK/CKA		CCW PD 03
for size 21.21 CGK IP68		CCW PD 03G
for size 21.21 IVG		CCW PD 03IVG
for MIXO ONE		CCW PD 1M
for size 49.16		CCW PD 15
for size 66.16		CCW PD 25
for size 44.27		CCW PD 06
for size 57.27		CCW PD 10
for size 77.27		CCW PD 16
for size 104.27		CCW PD 24

Punching unit	Bulkhead mounting housings	Pilot hole [mm]	Mounting configuration		Draw stud	Adapter	Spacer
			Hydraulic tool operation CCW CT	Manual operation			
CCW M25 ²⁾ dimensions \varnothing 25 mm	M25 hole or MKA IAF25 housings	\varnothing 10,0	with adapter and with spacer	---	CCW CT	CCW CT	CCW CT
CCW M32	M32 hole for MKA IF	\varnothing 20,0	with adapter and with spacer	---	CCW CT	CCW CT	CCW CT
CCW PD 03	21.21	\varnothing 14,5	with adapter and with spacer	with screw ball-bearing nut (no adapter and no spacer)	CCW PD 03	CCW PD 03	CCW CT
CCW PD 03G	21.21 (CGK IP68)				CCW PD 03G	CCW PD 03G	CCW CT
CCW PD 03IVG	21.21 (IVG)	\varnothing 14,5	with adapter and with spacer	with screw ball-bearing nut (no adapter and no spacer)	CCW PD 03IVG	CCW PD 03IVG	CCW CT
CCW PD 1M	MIXO ONE	\varnothing 14,5	without adapter and without spacer	with screw ball-bearing nut (no adapter and no spacer)	CCW PD 1M	CCW PD 1M	CCW CT
CCW PD 15	49.16	\varnothing 20,4	without adapter and without spacer	---	CCW PD 15	NN	NN
CCW PD 25	66.16				CCW PD 25	NN	NN
CCW PD 06	44.27	\varnothing 25,4	without adapter and without spacer	---	CCW PD 06	NN	NN
CCW PD 10	57.27				CCW PD 10	NN	NN
CCW PD 16	77.27				CCW PD 16	NN	NN
CCW PD 24	104.27				CCW PD 24	NN	NN

²⁾ CCW M25 can be used to drill M25 pilot hole; NN = Not Needed

③, ⑥ and ⑦ delivered with CCW CT

LEGEND:

- ② Punch ¹⁾
- ③ Draw stud 3/8"
- ④ Die
- ⑥ Spacer
- ⑦ Adapter 3/8" - 3/4" UNF



TOOLS

Use and maintenance instructions

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 adapter ⑦ (CCW PD 03/03G only).
2. Screw the 13,0/11,0 mm draw stud ③ complete with the 3/4" UNF adapter ⑦ onto the hydraulic cylinder or screw the short thread of any of the larger draw studs ③ (without the adapter) directly onto the hydraulic cylinder (CCW PD 03/03G 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/..03IVG/ and ..1M)

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

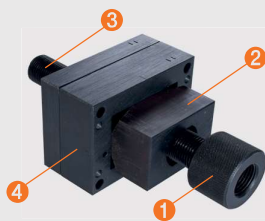
3. Use screw wrench SW 24 to rotate ball-bearing nut ⑤ until punch is drawn through sheet.
4. For further steps refer to hydraulic operating instructions steps 10 to 11.

Prior to commissioning please read operating instructions.

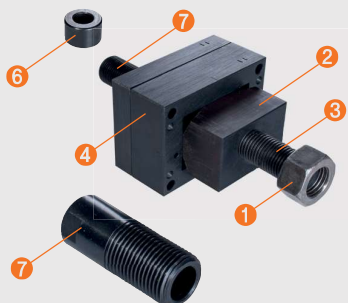
Components under voltage must not be machined.

Prior to operating ensure de-energised state of the work environment (e.g. switch cabinet) or the material to be machined.

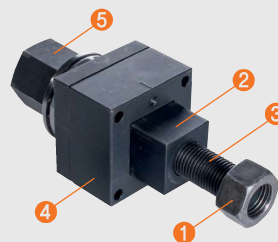
Hydraulic operating CCW PD.. (except CCW PD 03/ 03G)



Hydraulic operating (CCW PD 03G/..03IVG/..1M and CCW M32)



Manual operating (CCW PD 03/..03G/..03IVG/ and ..1M)



LEGEND:

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

Use and maintenance instructions

ILME Product Number	Bulkhead mounting housings Size	Accessories	Draw stud ³⁾	Pilot hole	Sheet thickness	Manual screw-wrench use	Hydraulic use
CCW M25 (***)	M25 hole or MKA IAF25 housings	Punch and die 25,4 M25	3/8"	10,0 mm	St./Fe. 2 mm		● (**)
CCW M32	M32 hole for MKA IF	Punch and die 32,5 M32	13,0/11,0 mm	20,0 mm	St./Fe. 2 mm		●
		Panel cut-out (mm)					
CCW PD 03	21.21	22,2 x 22,2	13,0/11,0 mm	14,5 mm	St./Fe. 2 mm	●	● (*)
CCW PD 03G	21.21 (CGK IP68)	21,3 x 21,3	13,0/11,0 mm	14,5 mm	St./Fe. 2 mm	●	● (*)
CCW PD 03IVG	21.21 (IVG)	26 x 26	13,0/11,0 mm	14,5 mm	St./Fe. 2 mm	●	● (*)
CCW PD 1M	MIXO ONE	32 x 27,5	13,0/11,0 mm	14,5 mm	St./Fe. 2 mm	●	●
CCW PD 15	49.16	24,0 x 57,0	19,0/14,0 mm	20,4 mm M20	St./Fe. 3 mm		●
CCW PD 25	66.16	24,0 x 73,0	19,0/14,0 mm	20,4 mm M20	St./Fe. 3 mm		●
CCW PD 06	44.27	36,0 x 52,0	25,0/21,0 mm	25,4 mm M25 ²⁾	St./Fe. 3 mm		●
CCW PD 10	57.27	36,0 x 65,0	25,0/21,0 mm	25,4 mm M25 ²⁾	St./Fe. 3 mm		●
CCW PD 16	77.27	36,0 x 86,0	25,0/21,0 mm	25,4 mm M25 ²⁾	St./Fe. 3 mm		●
CCW PD 24	104.27	36,0 x 112,0	25,0/21,0 mm	25,4 mm M25 ²⁾	St./Fe. 3 mm		●

(*) Adapter (delivered with **CCW PD 03/03G/IVG**) and spacer (delivered with **CCW CT**) needed; (**) Adapter M25 and spacer (delivered with **CCW CT**) needed; (***) **CCW M25** can be used to drill M25 hole.

Panel cut-out dimensions (in mm)

