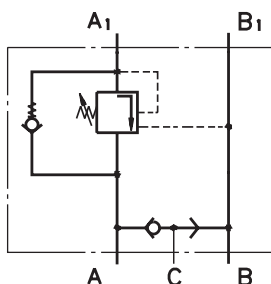
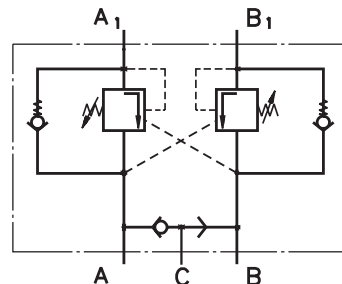


# VALVES FOR HYDRAULIC MOTORS

## OVERCENTER VALVES WITH BRAKE CONTROL



Single Overcenter Valves with Brake Control



Dual Overcenter Valves with Brake Control

### CONTENTS

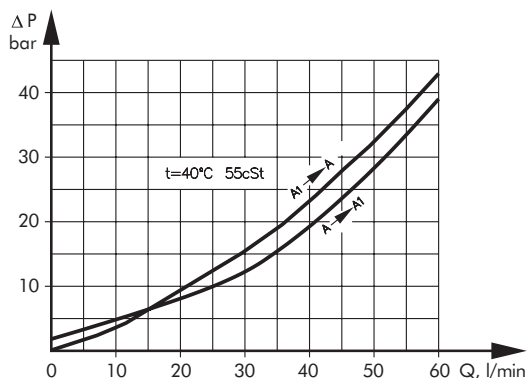
Valves for EPM and EPRM type KPBR ...	118
Valves for EPMS type KPBS .....	119
Valves for EPMTtype KPBT .....	120
Switch valves type KPWR and KPWS ....	121
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### SPECIFICATION DATA

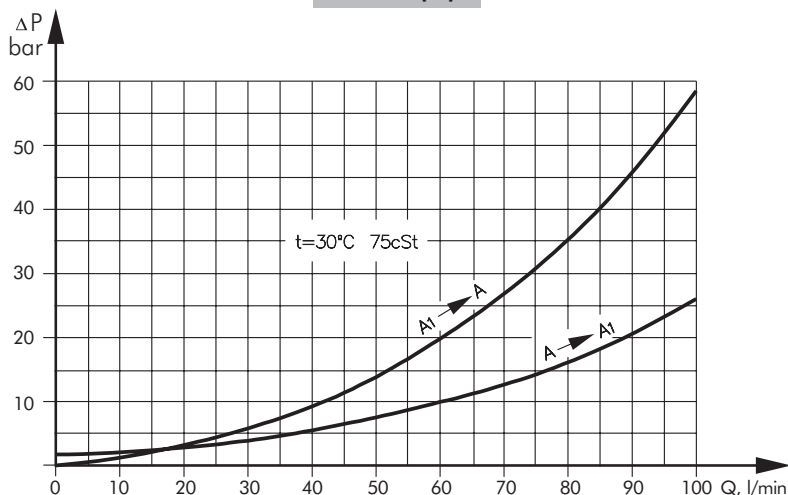
Parameters	Type					
	KPBR...E	KPBS...E	KPBR...D	KPBS...D	KPBT...E	KPBT...D
Flow Rate , l/min	60				100	
Rated Pressure , bar	250				250	
Pilot Ratio	4,25:1				4,25:1	
Weight , kg	3,300	3,340	3,350	3,390	5,400	5,800

### PRESSURE LOSSES

KPBRE(D) and KPBSE(D)



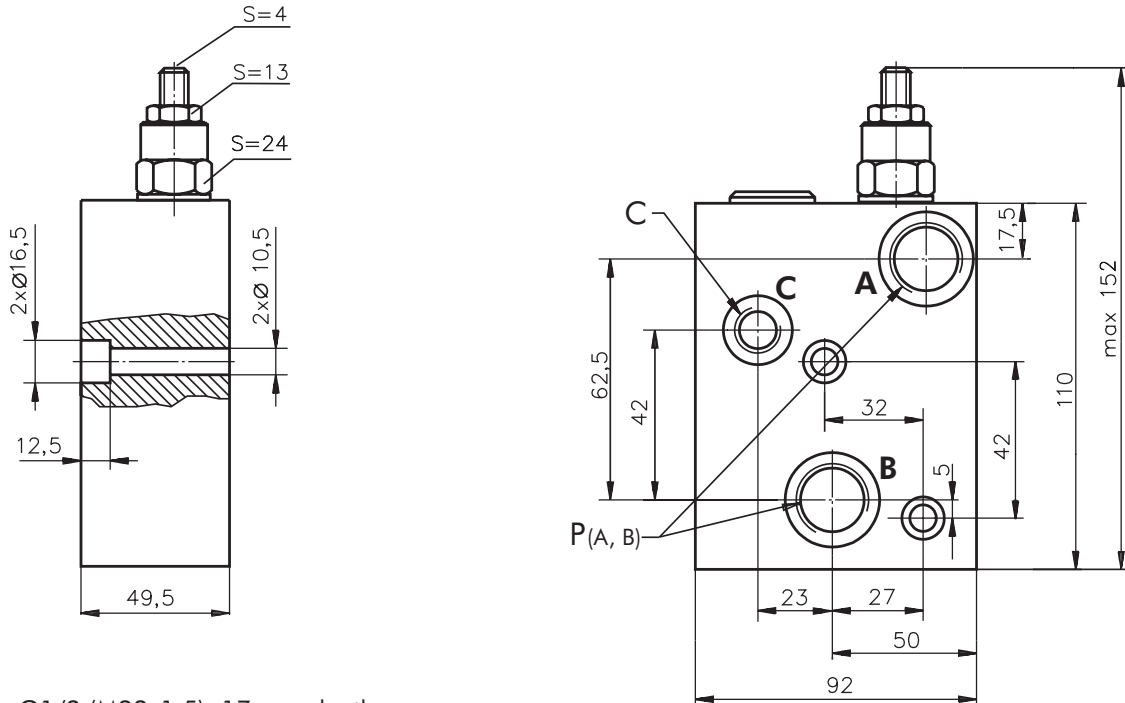
KPBTE(D)





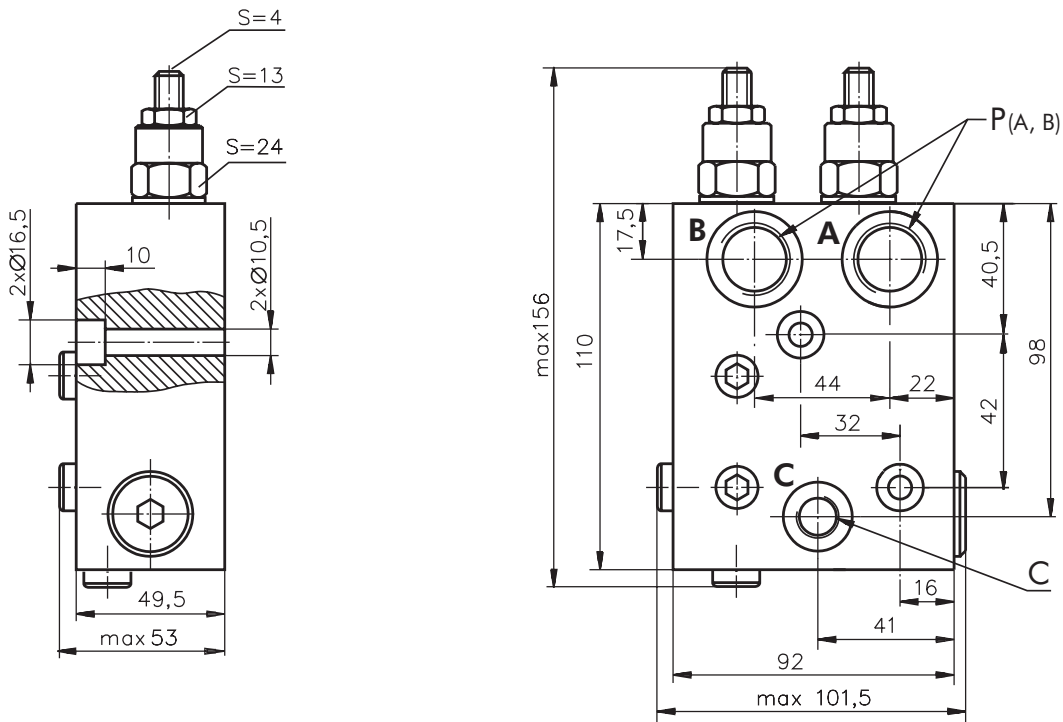
**VALVES FOR EPMS HYDRAULIC MOTORS**

**SINGLE VALVE KPBS-250/1/E... - Series 2**



**P<sub>(A, B)</sub>** : G1/2 (M22x1,5), 17 mm depth  
**C** : G1/4 (M14x1,5), 14 mm depth

**DUAL VALVE KPBS-250/1/D... - Series 2**

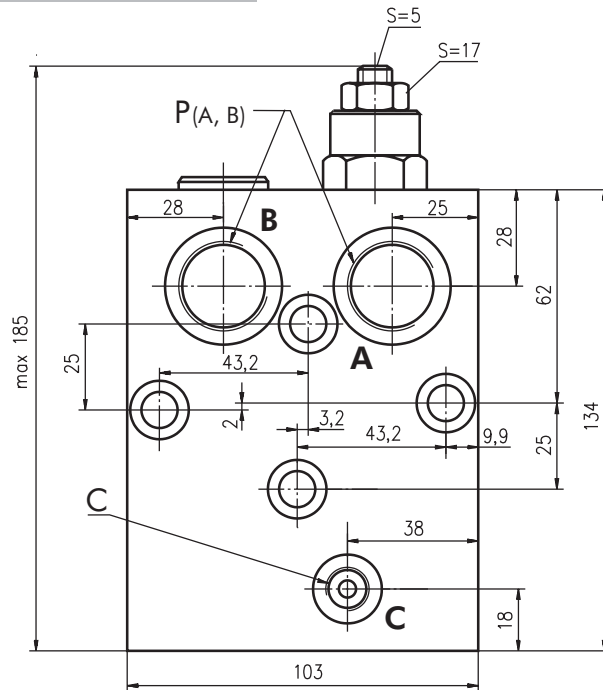
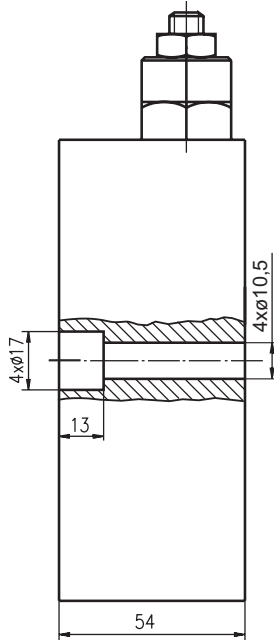


**P<sub>(A, B)</sub>** : G1/2 (M22x1,5), 17 mm depth  
**C** : G1/4 (M14x1,5), 14 mm depth

**Note** : KPBS Blocks are installed directly on EPMS Motors with two bolts M10x50 - 8.8 DIN 912.  
 Tightening torque 4,5<sup>+0.5</sup> daNm.

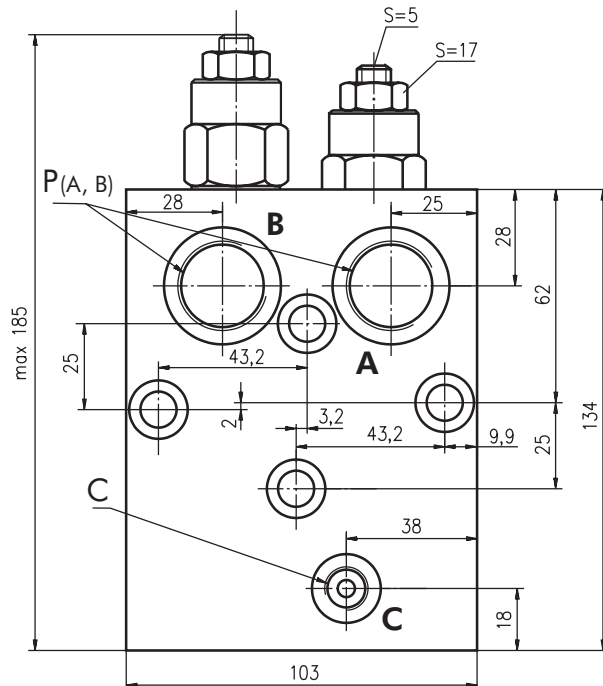
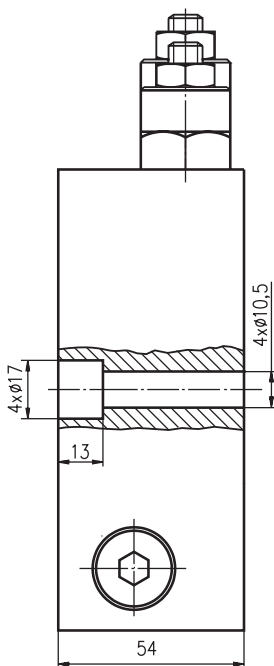
**VALVES FOR EPMT HYDRAULIC MOTORS**

**SINGLE VALVE KPBT-250/1/E...**



**P<sub>(A, B)</sub>** : G3/4 (M27x2), 17 mm depth  
**C** : G1/4 (M14x1,5), 14 mm depth

**DUAL VALVE KPBT-250/1/D...**



**P<sub>(A, B)</sub>** : G3/4 (M27x2), 17 mm depth  
**C** : G1/4 (M14x1,5), 14 mm depth

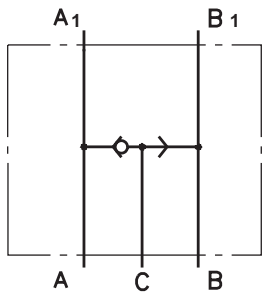
**Note** :KPBT Blocks are installed directly on EPMT Motors with four bolts M10x55 - 8.8 DIN 912.  
 Tightening torque 4,5<sup>+0,5</sup> daNm.



**SWITCH VALVE**

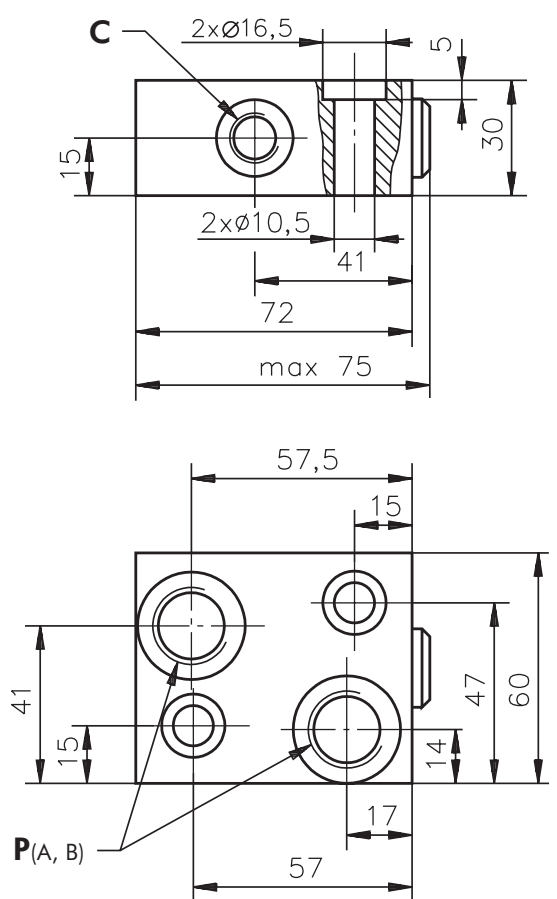
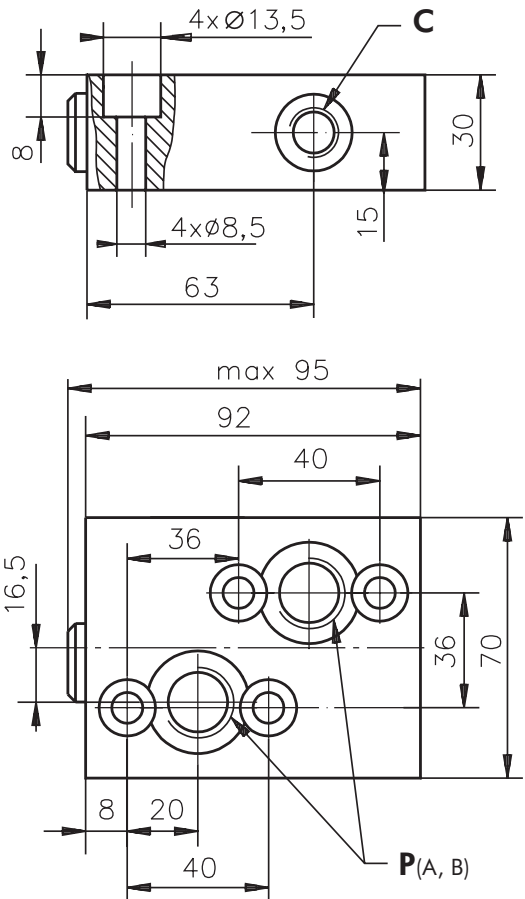
**SPECIFICATION DATA**

Parameters	Type	
	KPWR	KPWS
Flow Rate , l/min	60	
Rated Pressure , bar	250	
Weight , kg	0,850	0,670



**VALVE FOR EPM, EPRM HYDRAULIC MOTORS  
KPWR-250**

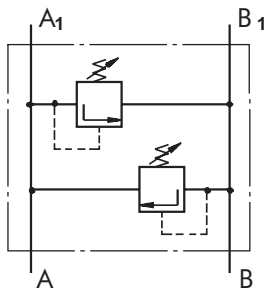
**VALVE FOR EPMS HYDRAULIC MOTORS  
KPWS-250**



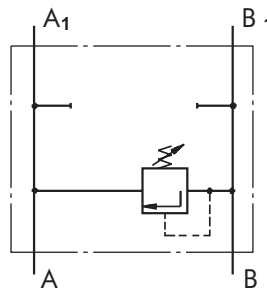
**P(A, B):** G1/2 (M22x1,5), 17 mm depth  
**C :** G1/4 (M14x1,5), 14 mm depth

**Note :** KPWR Blocks are installed directly on EPM and EPRM Motors with four bolts M8x40 - 8.8 DIN 912. Tightening torque 2<sup>+0.5</sup> daNm.  
KPWS Blocks are installed directly on EPMS Motors with two bolts M10x40 - 8.8 DIN 912. Tightening torque 4,5<sup>+0.5</sup> daNm.

**CROSSOVER RELIEF VALVES**



Dual Crossover Relief Valve



Single Crossover Relief Valve



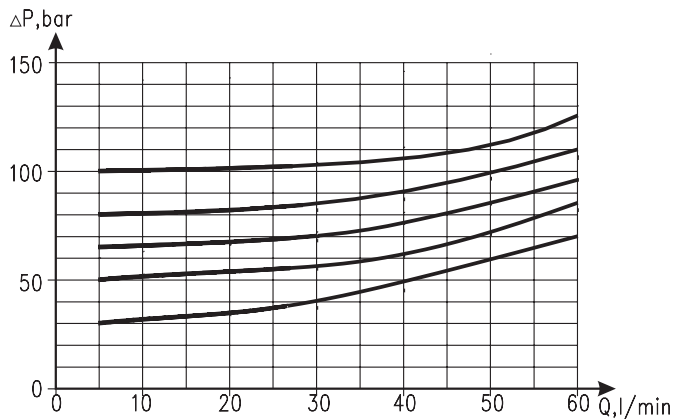
**CONTENTS**

Valves for EPM and EPRM type KPD(E)R .... 123  
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 Valves for EPMT type KPD(E)T ..... 125  
 Order code ..... 126

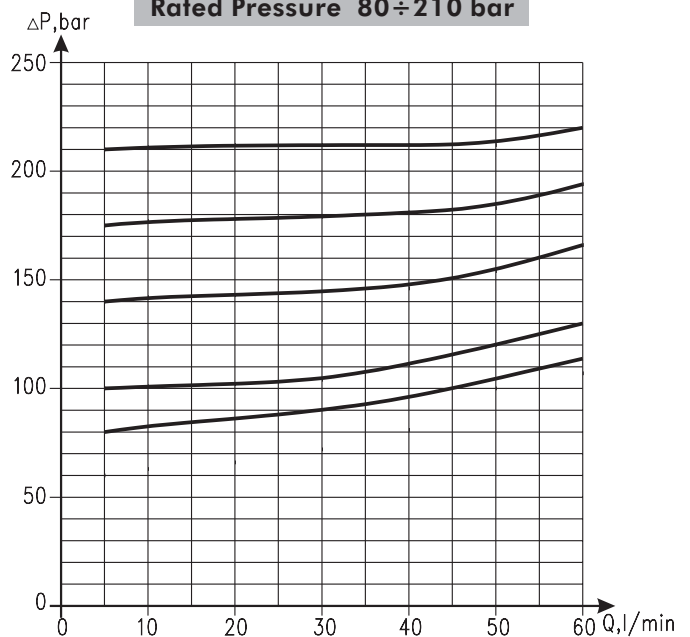
**SPECIFICATION DATA**

Parameters	Type					
	KPER(H)	KPES(H)	KPDR(H)	KPDS(H)	KPET	KPDT
Flow Rate , l/min	60				120	
Rated Pressure , bar	30 to 100; 80 to 210				80 to 210	
Weight , kg	1,32	1,58	1,44	1,70	5,10	5,54

**Rated Pressure 30 ÷ 100 bar**

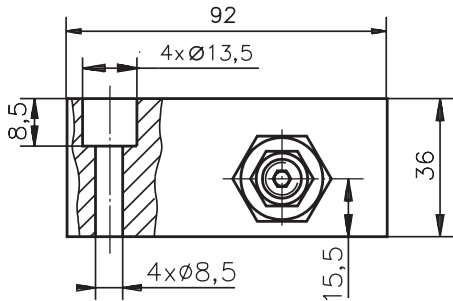


**Rated Pressure 80 ÷ 210 bar**

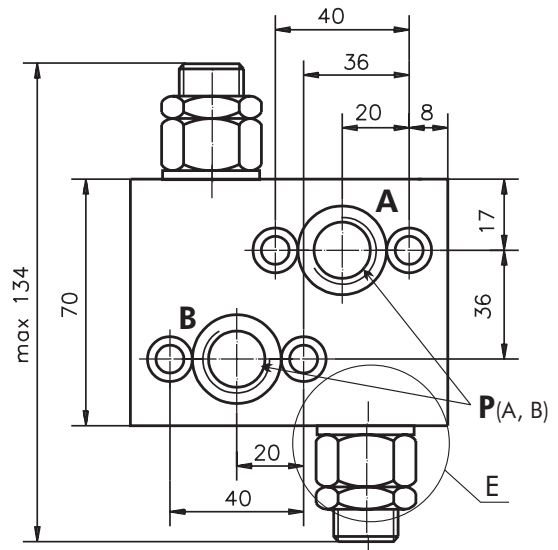
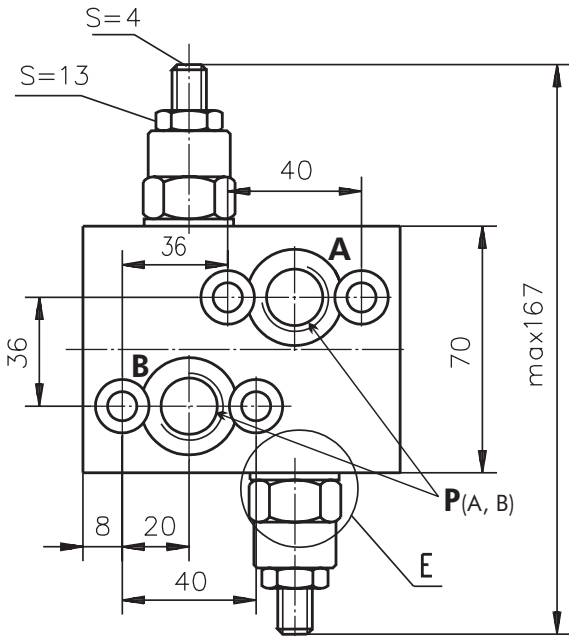
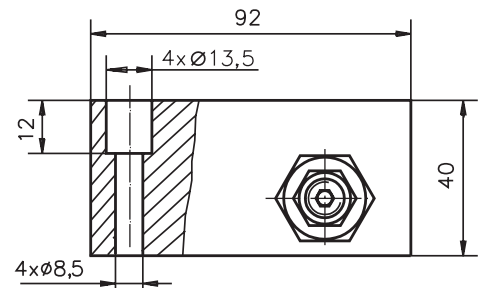


**VALVES FOR EPM, EPRM HYDRAULIC MOTORS**

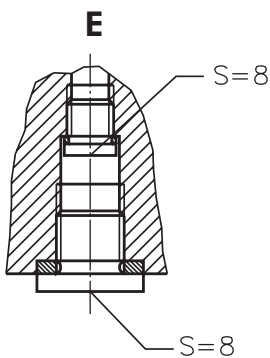
**DUAL VALVE KPDR.../...**



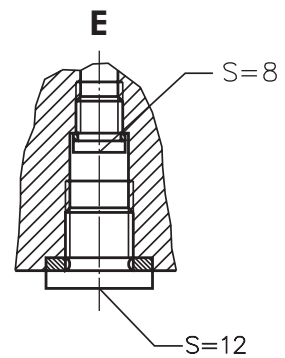
**DUAL VALVE KPDRH.../...**



**SINGLE VALVES KPER.../...**



**SINGLE VALVES KPERH.../...**



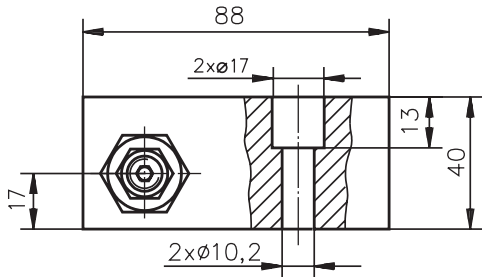
$P_{(A, B)}$ : G1/2 (M22x1,5), 15 mm depth

$P_{(A, B)}$ : G1/2 (M22x1,5), 17 mm depth

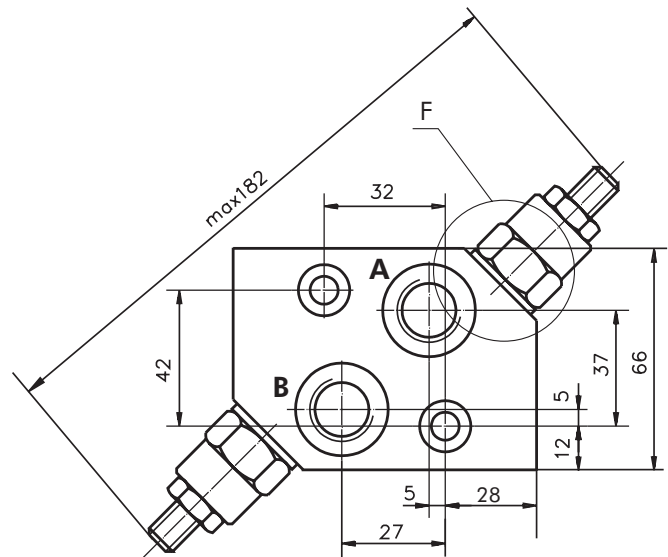
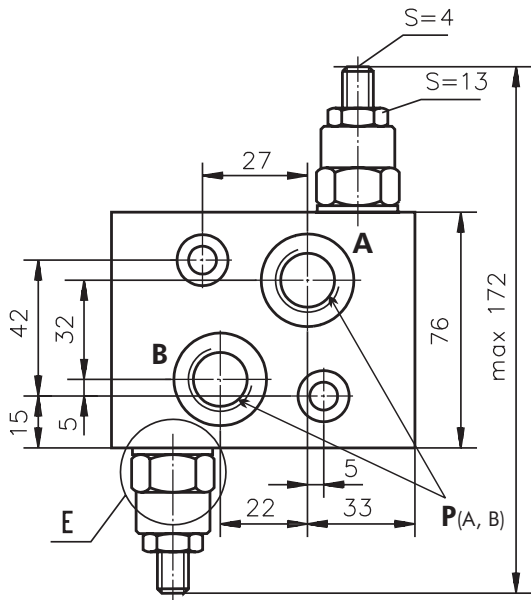
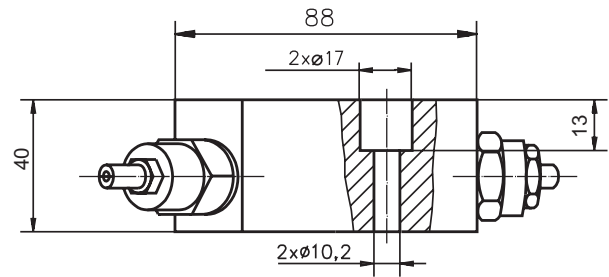
**Note:**-KPDR(H) ( KPER(H)) Blocks are installed directly on EPM and EPRM Motors with four bolts M8x40-8.8 DIN 912. Tightening torque  $2^{+0.5}$  daNm.

**VALVES FOR EPMS HYDRAULIC MOTORS**

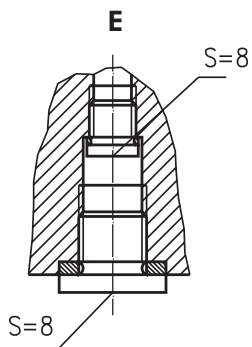
**DUAL VALVE KPDS .../...**



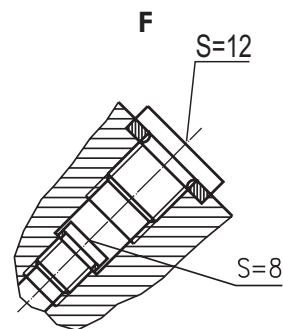
**DUAL VALVE KPDSH .../...**



**SINGLE VALVES KPES.../...**



**SINGLE VALVES KPESH.../...**



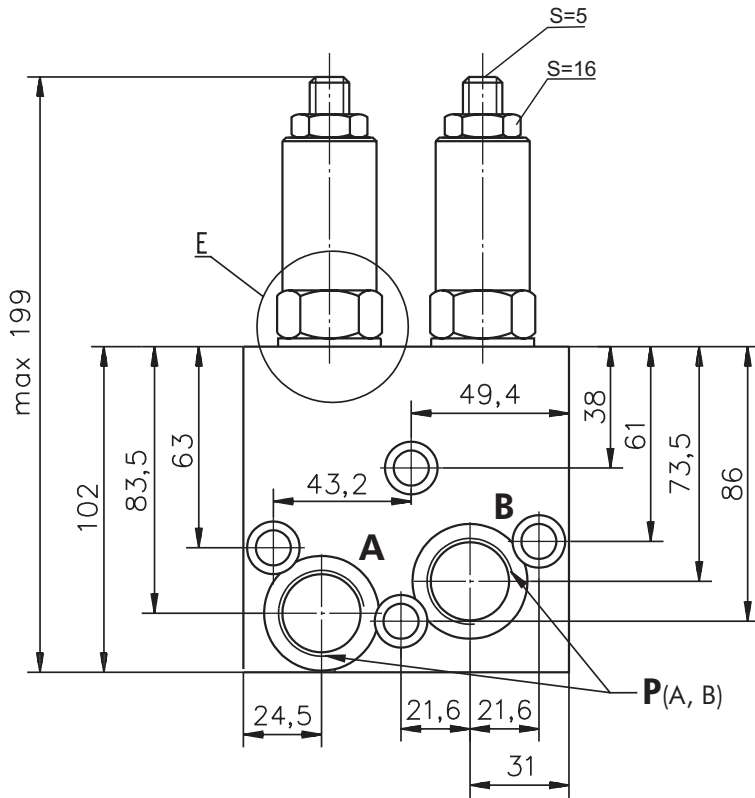
$P_{(A, B)}$ : G1/2 (M22x1,5), 15 mm depth

$P_{(A, B)}$ : G1/2 (M22x1,5), 17 mm depth

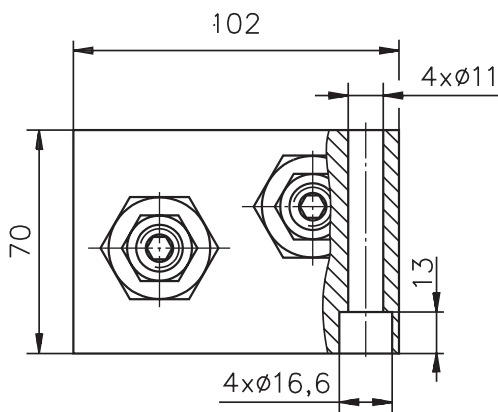
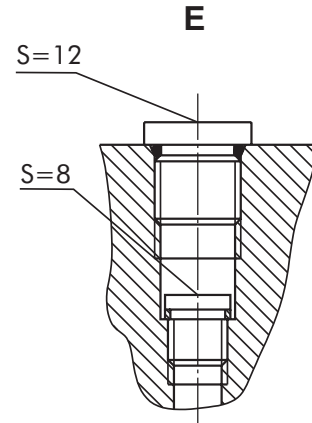
**Note:**-KPDS(H) ( KPES(H)) Blocks are installed directly on EPMS Motors with two bolts M10x40-8.8 DIN 912.  
Tightening torque  $4,5^{+0,5}$  daNm.

VALVE FOR EPMT HYDRAULIC MOTORS

DUAL VALVE KPDT .../...



SINGLE VALVE KPET .../...



P (A, B): G3/4 (M27x2), 20 mm depth

**Note** :KPDT (KPET) Blocks are installed directly on EPMT Motors with four bolts M10x70 - 8.8 DIN 912.  
Tightening torque  $4,5^{+0,5}$  daNm.

**ORDER CODE - OVERCENTER VALVES WITH BRAKE CONTROL**

	1	2	3	4	5	6	7	8
<b>K P</b>			-	/	/			

**Pos.1 - Valve Type**

- B** - with overcenter valve (s)
- W** - Switch valve

**Pos.2 - Housing Type**

- R** - Valve block for EPM and EPRM Motors
- S** - Valve block for EPMS Motors
- T\*** - Valve block for EPMT Motors

**Pos.3 - Rated Pressure, bar**

**250**

**Pos.4 - Pilot Ratio\***

**1** -4,25 : 1

**Pos.5 - Number of Valves\***

- D** -Two Valves
- E** -One Valve

**Pos.6 - Ports**

- omit - BSPP (ISO 228)
- M** - Metric (ISO 262)

**Pos.7 - Option (Paint)\*\***

- omit - no Paint
- P** - Painted
- PC** - Corrosion Protected Paint

**Pos.8 - Design Series**

omit - Factory specified

**NOTES:**

- \* Useful for overcenter valve type **B** only .
- \*\* The color is by customer's request.

**ORDER CODE - CROSSOVER RELIEF VALVES**

	1	2	3	4	5	6	7
<b>K P</b>				/			

**Pos.1 - Number of Valves**

- D** - Two Valves
- E** - One Valves

**Pos.2 - Housing Type**

- R** - Valve block for EPM and EPRM Motors
- S** - Valve block for EPMS Motors
- T** - Valve block for EPMT Motors

**Pos.3 - Housing Design code**

- omit - Model 1
- H\*** - Model 2

**Pos.4 - Max. pressure range, bar**

- 100** - 30÷100 [bar]
- 210** - 80÷210 [bar]

**Pos.5 - Ports**

- omit - BSPP (ISO 228)
- M** - Metric (ISO 262)

**Pos.6 - Option (Paint)\*\***

- omit - no Paint
- P** - Painted
- PC** - Corrosion Protected Paint

**Pos.7 - Design Series**

omit - Factory specified

**NOTES:**

- \* Useful for types **R** and **S** only .
- \*\* The color is by customer's request.

The Valve Blocks are mangano-phosphatized as standard.