

# Valve bank type BA

to allow combination of various different directional valves  
with connection hole pattern NG 6 conforming DIN 24 340-A6

Flow  $Q_{\max}$  = approx. 25 lpm  
Pressure  $p_{\max}$  = approx. 400 bar (dependent on the installed valve types)

## 1. General information

The valve bank type BA serves to combine various different valves with connection hole pattern NG 6 conforming DIN 24340-A6

- Clamping module type NSMD (D 7787)
- Directional spool valve type NSWP (D 7451 N)
- Directional spool valve type SWPN (D 7451 PA)
- Directional seated valves type NBVP (D 7765 N)
- All kinds of directional valves with connection hole pattern NG 6 conforming DIN 24340-A6
- Intermediate plates for series connection (D 7788 Z)

This valve bank may be either connected via pipes or be directly mounted to a connection block type A... acc. to D 6905 A/1 of a compact power pack (e.g. type HK acc. to D 7600 ++).

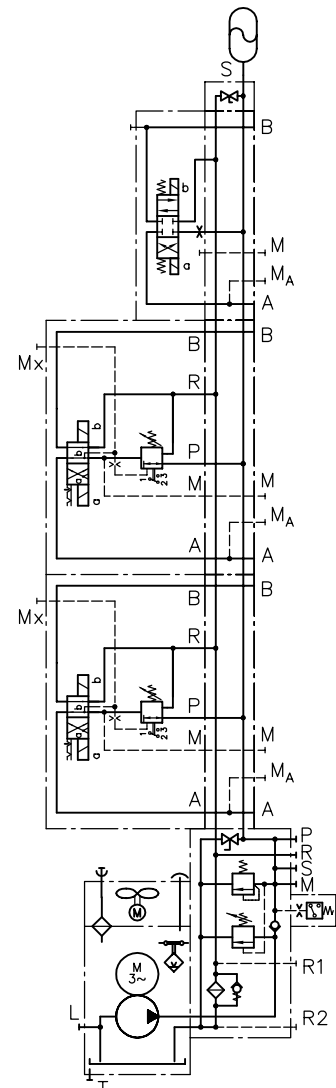
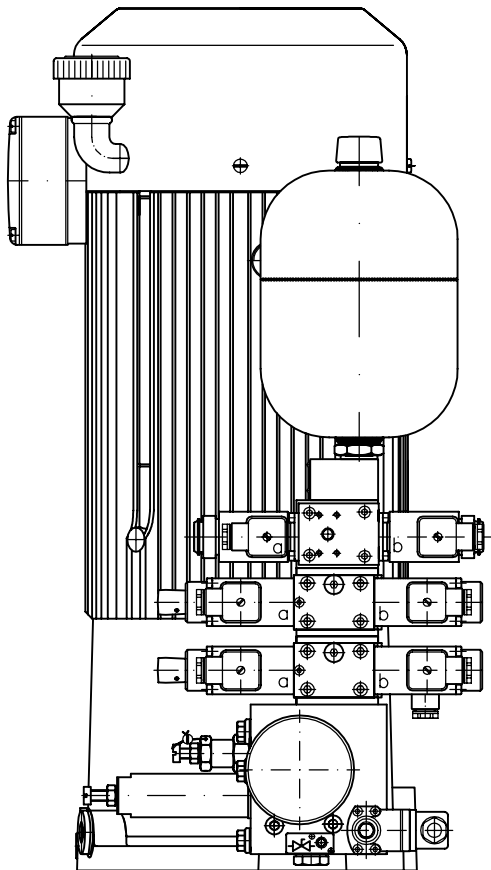
It is additionally possible to mount, instead of the end plate, a wide range of directional seated valves (e.g. type BVZP 1 acc. to D 7785 B or type BWN(H) acc. to D 7470 B/1) via an adapter plate.

Accumulators type AC acc. to D 7969 can be fitted as well when required.

### Order example with hydraulic circuit:

Combination with compact hydraulic power packs type HKF acc. to D 7600-4.

**HKF 449 D/1 M - Z12,3 - AL21F2 - E50/60 - 5/150**  
**- BA2 - NSMD 2 K/GRK/B1,0/0**  
**- NSMD 2 K/GRK/B1,0/0**  
**- NSWP 2 G/02/B1,0/0 - 8 - G 24**  
**- AC 2001**



## 2. Available versions

### 2.1 Connection block and end plate

Order example:

**BA2 A5 - NBVP 16 G /3**  
**- NSWP 2 D03/MP/NZP 16 Q33 /1**  
**- CZ 5R/180/5R**  
**- NBVP 16 G/ABR0,8 BBR1,0/M /0 - 1 - G 24**

**Table 1:** Basic type and connection block

Basic type	Connection block (version)	Symbol
<b>BA2</b>	Suited for direct mounting to connection blocks type A (D 6905 A/1) for combination with compact hydraulic power packs type HK D 7600 ++ HC(G) D 7900, D 7900 G MP D 7200 H	(without)
<b>BA2 A5</b>	Version for pipe connection	
<b>BA2 A8</b>	Like version BA2 A5 but with additional check valve at R	
<b>BA2 A9</b>	Blanking plate, when P and R connection takes place via an intermediate or an end plate.	

**Table 4**  
Directional valves (page 4)

**Table 5**  
Sub-plates (page 5)

**Table 3**  
End plates (page 3)

**Table 2:** Solenoid voltage (applies to all solenoids of the valve bank!)

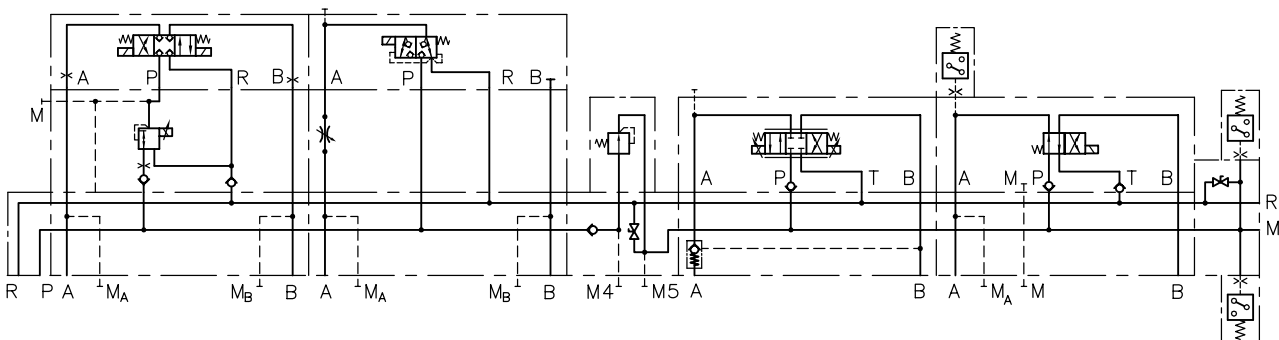
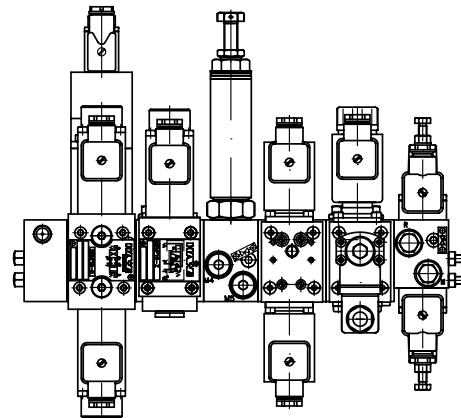
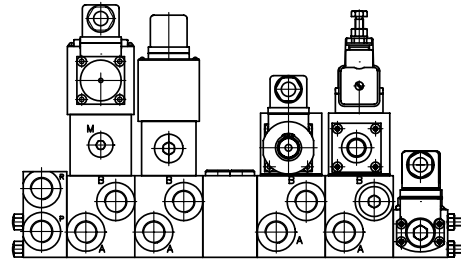
With plug	Without plug	Plug with LED	Nom. voltage
<b>G 12</b>	<b>X 12</b>	<b>L 12</b>	12 V DC
<b>G 24</b>	<b>X 24</b>	<b>L 24, L5K 24 <sup>2)</sup>, L10K 24 <sup>2)</sup></b>	24 V DC
<b>WG 110 <sup>1)</sup></b>	<b>X 98 <sup>1)</sup></b>	---	110 V AC 50/60 Hz
<b>WG 230 <sup>1)</sup></b>	<b>X 205 <sup>1)</sup></b>	---	230 V AC 50/60 Hz

- 1) Solenoids 98 V DC or 205 V DC, as a rectifier circuit is usually integrated in the plug  
 2) Version L5 K24 and L10 K24 come with cable length 5 or 10 m, see also D 7163

**Order example with hydraulic circuit:**

(Combination with intermediate plates acc. to D 7788 Z)

**BA2 A5 - NBVP 16 G/AB1,0-M /NZP 16 PDM 2-44/24 /3**  
**- NBVP 16 Z/2-M /NZP 16 Q10 /3**  
**- CZ 2H/180/5**  
**- NSWP 2 G 12/MP/R/20 /1**  
**- NSWP 2 W/M/R/80/S /0**  
**- 48/7 - G 24**



**Table 3:** End plates or adapter plates to further valve banks

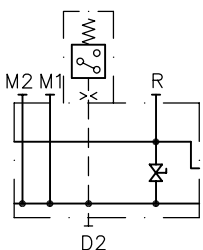
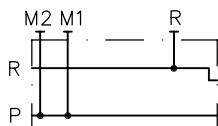
Coding	Brief description
<b>1</b> 11, 12 <sup>1)</sup>	Standard
<b>2</b> 21, 22 <sup>1)</sup>	Additional ports P and R (G 3/8) (BSPP)
<b>4./..</b> 4./.1, 4./.2 <sup>1)</sup>	With drain valve, ports P and R, and two pressure switches type DG.. acc. to D 5440 2 prepared for retrofitting 3 DG 33 200 ... (700) bar 4 DG 34 100 ... 400 bar 5 DG 35 40 ... 250 bar 6 DG 36 4 ... 12 bar 7 DG 365 12 ... 170 bar 8 DG 364 4 ... 50 bar
<b>6</b> 61, 62 <sup>1)</sup>	With drain valve
End plates and accumulator port (for accumulators see D 7969)	
<b>8</b>	Additional port S (G 1/2) (BSPP) with warning sign and drain valve
<b>8W</b>	With warning sign, without drain valve
<b>80</b>	Without warning sign, without drain valve
<b>8W / EM 21D</b> <b>8W / EM 21DS</b> <b>80 / EM 21S</b> <b>80 / EM 21V</b> <b>80 / EMP 21S</b> <b>80 / EMP 21V</b>	Like coding 80 or 8W, but with additional drain and idle circulation valve
<b>81</b>	Several ports P
<b>88</b> <b>88W</b> <b>880</b> <b>880(88W) / EM 21D(DS)</b>	See coding 8..., but with additional ports S1 and S2 (G 1/2) (BSPP)
Adapter plates for adding other valve banks	
<b>BVZP 1F</b>	Valve bank acc. to D 7785 B (without or with pressure switches) in the adapter plate
<b>BWN 1F(F1)</b> <b>BWH 1F(F1)</b> <b>BWH 2F</b>	Valve bank acc. to D 7470 B/1

1) Coding .1 (spacer) enabling retrofitting of one valve section  
 Coding .2 (spacer) enabling retrofitting of two valve sections

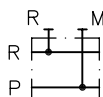
**Symbols (adapter plate)**

Type BVZP 1F 52 (example with one pressure switch)

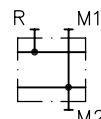
Type BVZP 1F



Type BWN(H) 1F  
BWH 2F



Type BWN(H) 1 F1

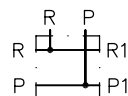


**Symbols (end plates)**

Coding 1

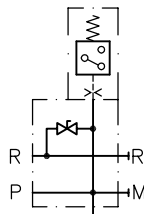


Coding 2

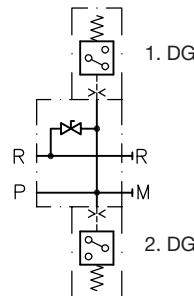


Coding 4

(example: -46/2)



(example: -47/8)



Coding 6



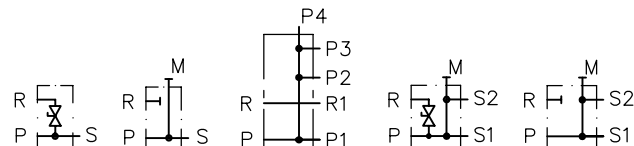
Coding 8

Coding 80  
8W

Coding 81

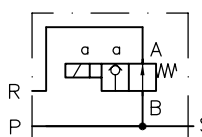
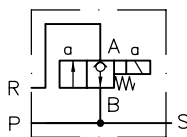
Coding 88

Coding 880  
88W



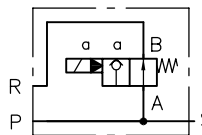
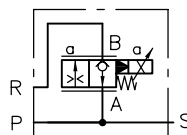
Coding 8W/EM 21D

Coding 8W/EM 21DS



Coding 80/EM 21 V  
80/EMP 21 V

Coding 80/EM 21 S  
80/EMP 21 S

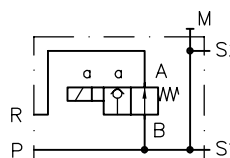
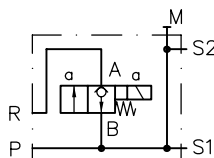


Illustrated here  
EMP21V

Illustrated here  
EMP21V

Coding 880/EM 21 D  
88W/EM 21 D

Coding 880/EM 21 DS  
88W/EM 21 DS



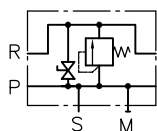
## 2.2 Valve sections

**Table 4:** Directional valves and intermediate plates for series connection

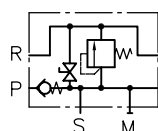
Basic type	Pamphlet	Brief description	Flow Q <sub>max</sub> (lpm)	Pressure p <sub>max</sub> (bar)
Directional valves mounted on sub-plates acc. to table 5 on page 5 (combinations with intermediate plates type NZP acc. to D 7788 Z are possible)				
<b>NSWP 2</b>	D 7451 N	3/2-, 3/3-, 4/2- and 4/3-way directional spool valve with option for an additional pressure switch type DG 3.. (D 5440) connected to the consumer port	25	315
<b>SWPN 2</b>	D 7451 PA	3/3- and 4/3-way directional spool valve	50	350
<b>NSMD 2</b>	D 7787	Clamping module (combination of 4/2- or 4/3-way directional spool valve, pressure reducing valve and tracked pressure switch)	25	100
<b>NBVP 16</b>	D 7765 N	2/2- 3/2- and 4/3-way directional seated valves <b>Attention:</b> Differing to the coding of individual valves acc. to D 7765 N it is necessary to specify the actuation mode (M - solenoid 400 bar; GM - solenoid 250 bar; H - draulic; P - pneumatic; A - hand lever)	20	400
<b>NBMD 16</b> <b>NBMD 16</b>	Sk 7983	Braking module (Combination of directional seated valves and pre-loaded return)	20	400
<b>NPMVP</b>	D 7485 N	Prop. pressure limiting valve	16	500
<b>NG 6X</b>		Blanking plate (for retrofitting of a directional valve)		
<b>NG 6X PA</b>		Blanking plate with short-cut connection between P and A		
Intermediate plates for series connection				
<b>CZ</b> <b>CZA</b> <b>CZD</b> <b>LZ</b>	see sect. 2.2.1 and D 7745, D 7745 L	Pressure reducing valve reducing the pressure for the subsequent P-line	22	500
<b>Z 5</b>		Intermediate plate as spacer (50 mm), without internal function		
<b>Z 52</b>		Intermediate plate with additional ports for P and R		
<b>ZPL/V...</b> <b>ZPL/S...</b>	see sect. 2.2.2 and D 7490/1	Intermediate plate for 2. speed rate		
<b>ZPL/MVE6/..</b> <b>ZPL/MVE6/..R</b> <b>ZPL/MVEX6/..</b> <b>ZPL/MVEX6/..R</b>	D 7000/1 D 7000 TÜV	Intermediate plate with pressure limiting valve (type ...X...: with unit approval (TUEV), drain valve, accumulator port and optional check valve (coding /R)	60	450
<b>ZPL/P4...</b> <b>ZPL/P45...</b>	see sect. 2.2.3 and D 7485/1	Intermediate plate with prop. pressure limiting valve and a second pressurized circuit within the valve bank type BA	16	500 (700)
Plugs and/or orifices				
<b>XR, XP, XPR</b>		Plugs in P and/or R	---	P: 315 R: 315 <sup>1)</sup>
<b>XP...</b> <b>XR...</b> <b>XP...R...</b>		Orifices in P and/or R available orifice $\varnothing$ 0.5/0.6/0.8/1.0/1.5/2.0/2.5/3.0	---	P: 315 R: 315 <sup>1)</sup>

**Symbols**

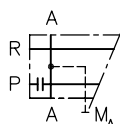
**ZPL/MVE 6/..**  
**ZPL/MVEX 6/..**



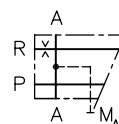
**ZPL/MVE 6/..R**  
**ZPL/MVEX 6/..R**



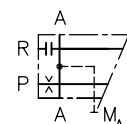
**XP**



**XR 1,0**



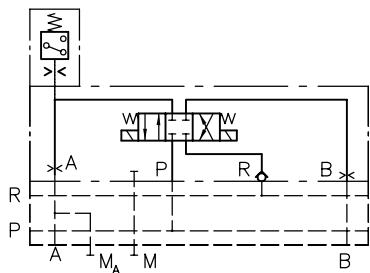
**XP 1,5 R**



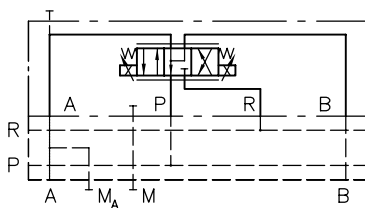
1) **Attention:** Observe the max pressure rating of the valve mounted!

**Symbols of directional valves with sub-plate (examples)**

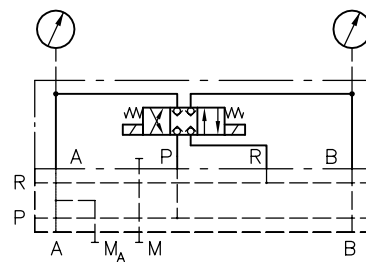
NSWP 2 G/M/R/ABV1,0 BBV1,5/70/S/0



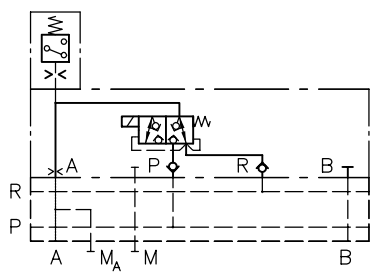
NSWP 2 D06/MP/20/0



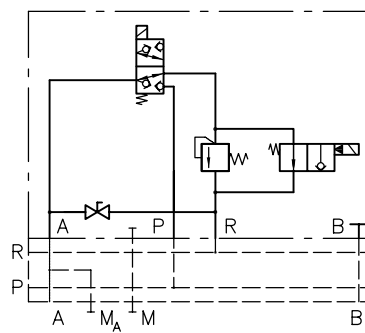
NBVP 16 G/R/A9/400/B9/700-M/0



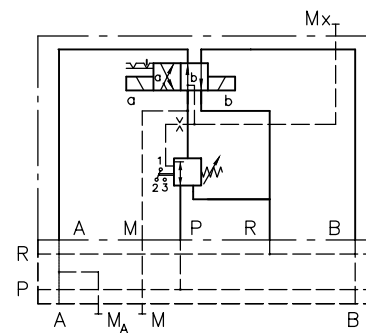
NBVP 16 Z/R/AB1,5/4/S-M/0



NBMD 16 Z/EMP 21S/10/0



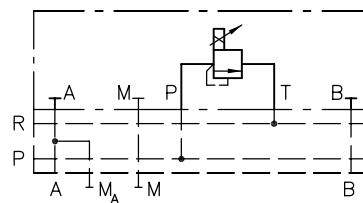
NSMD 2 K/GRK/M/0



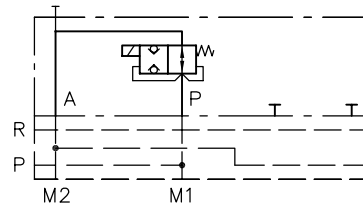
**Table 5:** Sub-plates

Coding	Brief description	Symbols
/0 /01	Standard	
/1	With additional, releasable check valve at A (type CRH 1 acc. to D 7712)	
/5	Releasable double check valve	
/2	With additional throttle at T (type Q 30 acc. to D 7730)	
/3	With additional pressure gauge ports M <sub>A</sub> and M <sub>B</sub>	
/6	Arbitrary blockage of gallery P, only available in combination with 2/2-way directional valves, e.g. NBVP 16 S/2-M	

NPMVP 4-41/G 24/0



NBVP 16S/2-M/6



1) Port M for pressure gauge required when a clamping module type NSMD acc. to D 7787 or an intermediate plate type NZP acc. to D 7788 Z is mounted, not with version /01

### 2.2.1 Pressure reducing valve at P

Order example: BA2 A5 - ...

**- CZ 5 R / 120 / 5R - ...**

<b>5</b>	Without check valve in P
<b>5R</b>	With check valve in P (not avail. with type CZD)

Pressure setting in bar

Adjustability

Coding	Brief description
without	Tool adjustable
<b>R</b>	Manually adjustable
<b>H 1)</b>	With lock

Manually adjustable

With lock

Tool adjustable



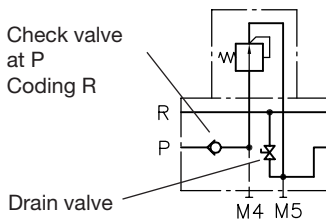
Basic type

Pressure range

<b>- CZ</b>	Pressure reducing valve; for differences, see dimensional drawings sect. 4.
<b>- CZA</b>	Pressure reducing valve with direct accumulator port (G 3/8)
<b>- CZD</b>	Pressure reducing valve with direct accumulator port (G 3/8)
<b>- LZ</b>	Pressure reducing valve with safety valve functionality

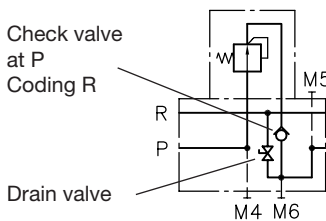
Coding	Pressure range (bar)	Coding	Pressure range (bar)	Flow max. (lpm)
<b>08 1)</b>	50 ... (400)	<b>081 1)</b>	50 ... (500)	15
<b>1</b>	30 ... 300	<b>11</b>	30 ... (380)	15
<b>2</b>	20 ... 200	<b>21</b>	20 ... (250)	15
<b>5</b>	15 ... 130	<b>51</b>	15 ... 165	15
<b>25</b>	8 ... 130	<b>251</b>	8 ... 165	6
<b>55</b>	30 ... 130	<b>551</b>	30 ... 165	22
<b>X</b>	Prepared for retrofitting	--		

Coding **-CZ..**

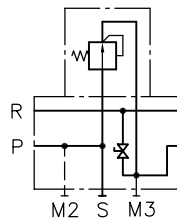


1) Not available with type LZ

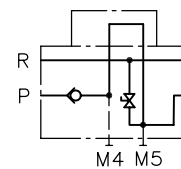
Coding **-CZA..**



Coding **-CZD..**

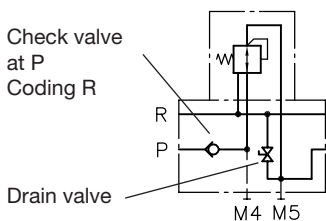


Coding **-CZX...**  
**-CZAX...**  
**-CZDX...**  
**-LZX...**



(illustrated here type CZX)

Coding **-LZ**



**2.2.2 Second speed rate**

Application: Arbitrary activation of a second speed rate e.g. for initial operation, to vary the flow or to enable a specific speed profile.

Order example: BA2A5 -...

**-ZPL/V/PB0.3 - ... - G 24**

Solenoid voltage, see table 2

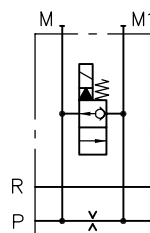
Intermediate plate 2/2-way directional seated valves type EM21 and EMP21 acc. to D 7490/1 for this functionality

Orifice in duct PI (not avail. In combination with coding VP and SP)

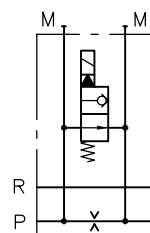
Coding	Function
<b>ZPL/V</b>	NC (type EM21V)
<b>ZPL/S</b>	NO (type EM21S)
<b>ZPL/VPG</b>	NC, dampened switching characteristic (type EMP21VG)
<b>ZPL/SPG</b>	NO, dampened switching characteristic (type EMP21SG)
<b>ZPL/VP</b>	NC, proportional valve (throttle function, type EMP21V)
<b>ZPL/SP</b>	NO, proportional valve (throttle function, type EMP21S)

Coding	Orifice diameter
<b>PB 0,3</b>	0.3 mm
<b>PB 0,4</b>	0.4 mm
<b>PB 0,5</b>	0.5 mm
<b>PB 0,8</b>	0.8 mm
<b>PB 1,0</b>	1.0 mm
<b>PB 1,5</b>	1.5 mm
<b>PB 1,8</b>	1.8 mm
<b>PB 2,0</b>	2.0 mm
<b>PB 2,5</b>	2.5 mm

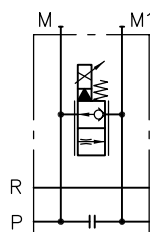
**ZPL/V/PB...  
ZPL/VPG/PB...**



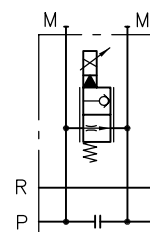
**ZPL/S/PB...  
ZPL/SPG/PB...**



**ZPL/VP**



**ZPL/SP**



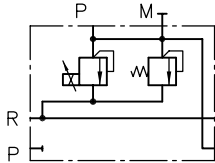
**2.2.3 Prop. pressure limiting valve for the second pressurized circuit within the valve bank type BA**

Intended use: Compact solution for generating two pressure circuits within one valve bank together with a dual circuit pump e.g. type HK 4 acc. to D 7600-4 and a connection block Sk 6905 Z/AP.

Order example: HKF449 DT/1 - HH 2,5/2,5  
 - Sk 6905 Z / AP1 F1 - P45-43 / G 24 - 270  
 - BA2  
 - ...

**- ZPL / P45-42 / G 24 - 150 / R**  
 - ...

Symbol

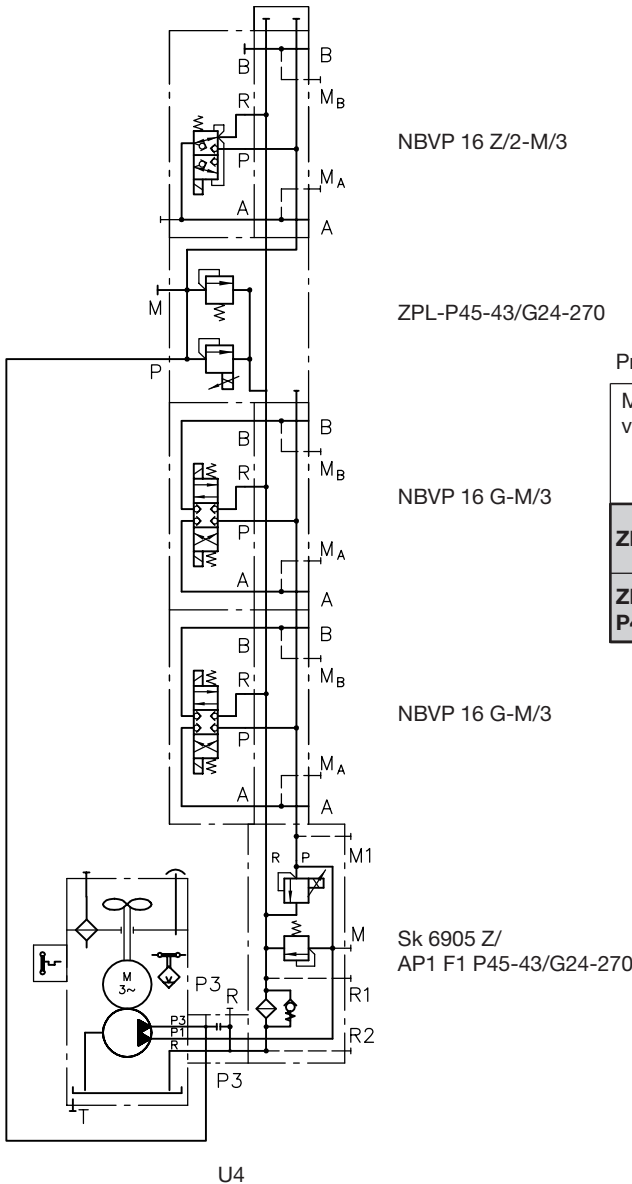


ZPL / P..

Check valve at P (optional)

max. pressure setting in bar

Example circuit plan



Voltage spec. of the prop. solenoid

Std., with plug	without plug	with plug incl. LED	Nom. voltage
<b>G 12</b>	<b>X 12</b>	<b>L 12</b>	12 V DC
<b>G 24</b>	<b>X 24</b>	<b>L 24</b>	24 V DC

Prop. pressure limiting valve, for details see D 7485/1

Main valves	Prop. controls			
	-41	-42	-43	-44
	prop. adjustable pressure range (bar) $p_{min} \dots p_{max}$			
<b>ZPL / P4</b>	5...180	5...290	5...440	5...700
<b>ZPL / P45</b>	5...110	5...180	5...270	5...450

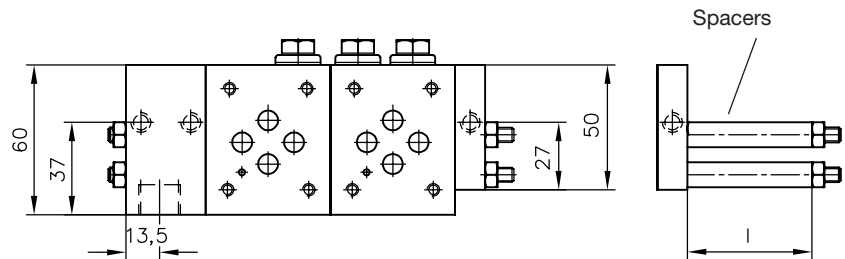
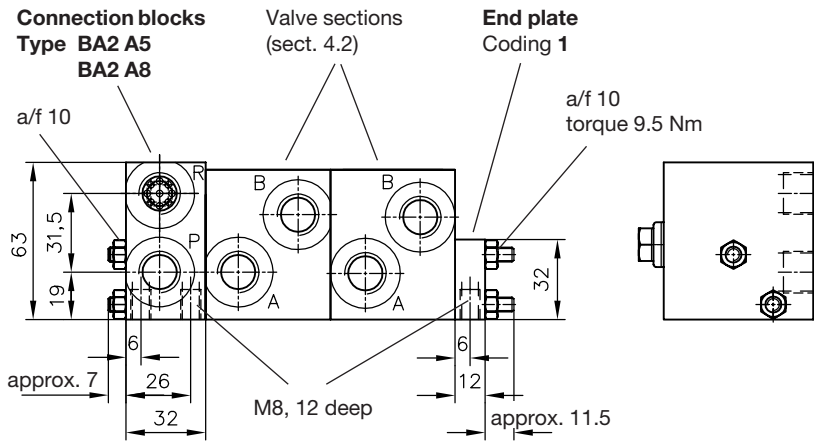


### 3. Additional data

Type coding	acc. to type coding key		
Max. number of valve sections	10		
Installed position	any		
Fastening	Thread M8, see dimensional drawings		
Ports	P, R, A, B = G 3/8 (G 1/4) (BSPP)	P	= Pump
	S = G 1/2 (BSPP)	R	= Return
	M = G 1/4 (BSPP)	A, B	= Consumers
		S	= Accumulator
		M	= Pressure gauge
Pressure, flow, pressure fluid, and temperature	The specifications of the mounted directional valves and/or hydraulic power pack are binding and must not be exceeded		
Mass (weight)	Connection blocks	BA 2	= 0.8 kg
		A5 (A8) A9	= 0.3 kg
End plates		1	= 0.3 kg
		2	= 0.8 kg
		4	= 1.2 kg
		6	= 0.4 kg
		8, 80, 8W	= 1.0 kg
		80(8W) / EM 21D(DS)	= 1.3 kg
		81	= 0.8 kg
		88, 880, 88W	= 3.5 kg
		880(88W) / EM 21D(DS)	= 3.8 kg
	Sub-plates		/0, /1, /2, /3, /6
		/5	= 1.4 kg
		/01	= 0.6 kg
Intermediate plates		Z 5	= 0.8 kg
		Z 52	= 0.9 kg
		ZPL/MVE(X)6	= 2.3 kg
		ZPL/V, ZPL/S	= 1.1 kg
		ZPL/P4, ZPL/P45	= 2.0 kg
		CZ, CZA, CZD, LZ CZX, CZAX	= 2.3 kg = 1.6 kg
Blanking plate		NG 6X	= 0.3 kg
		NG 6X PA	= 0.4 kg
Directional valves	dep. on type, see resp. pamphlet		

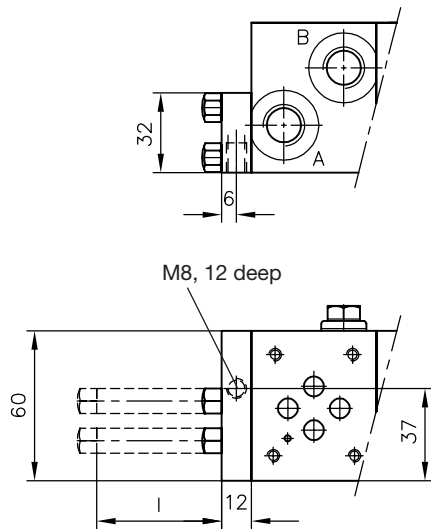
## 4. Unit dimensions All dimensions in mm, subject to change without notice!

### 4.1 Connection blocks and end plates



Ports conf. ISO 228/1 (BSPP):  
P, R, A, and B = G 3/8

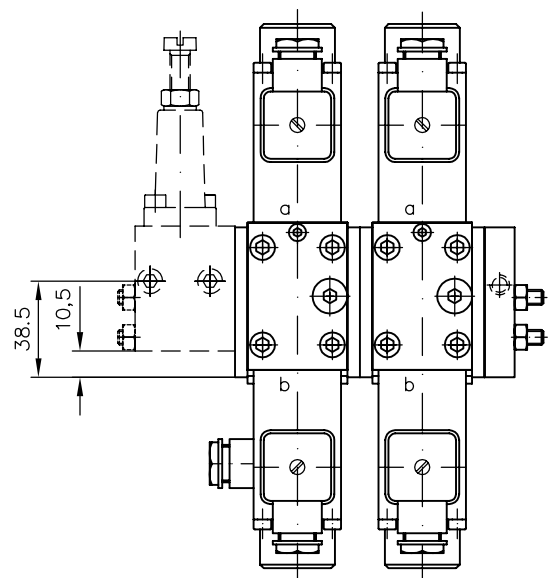
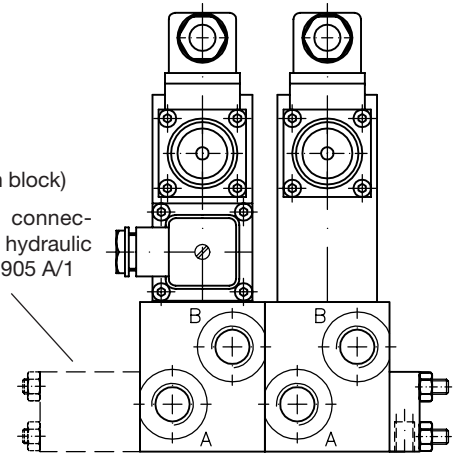
#### Type BA2 A9



#### Type BA 2

(without own connection block)

Direct mounting onto connection blocks for compact hydraulic power packs acc. to D 6905 A/1

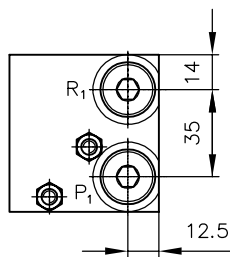


l = 50 with coding 1; Sufficient space for retrofitting of one valve section

l = 100 with coding 2; Sufficient space for retrofitting of two valve sections

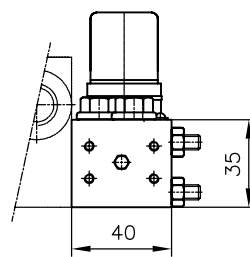
**End plates**

Coding 2



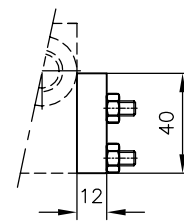
M8, 12 deep

Coding 4

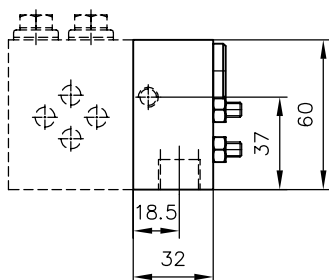


Ports P, M = G 1/4 (BSPP)

Coding 6

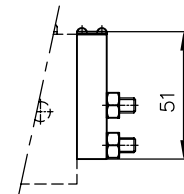
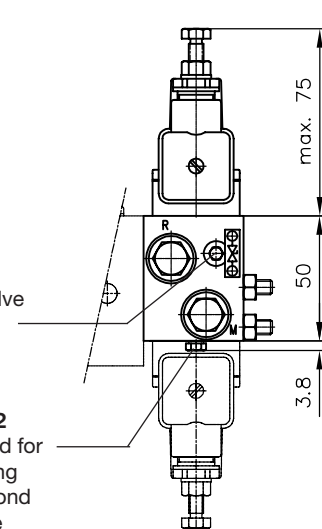


Ports conf.  
ISO 228/1 (BSPP):  
P, R, P<sub>1</sub>, R<sub>1</sub> = G 3/8

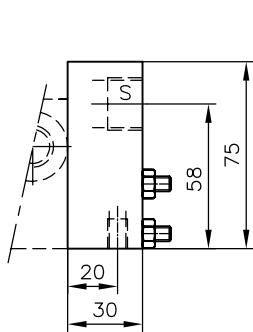


Drain valve  
a/f 5

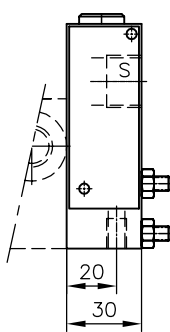
Coding 2  
(prepared for  
retrofitting of a  
second  
pressure  
switch)



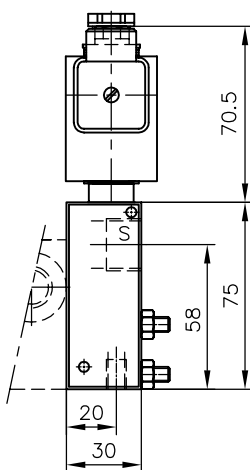
Coding 8



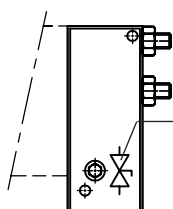
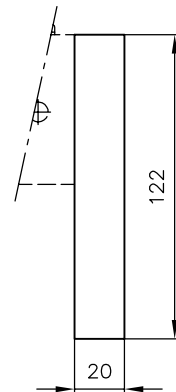
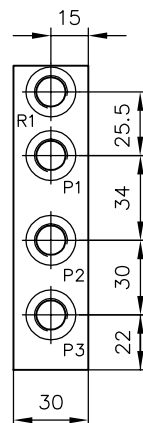
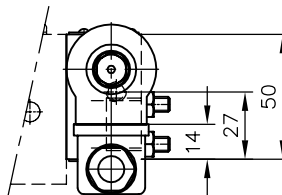
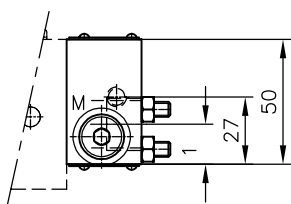
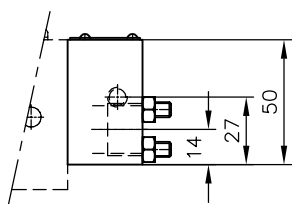
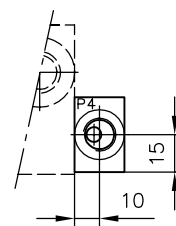
Coding 80  
8W



Coding 80 / EM 21V(S)  
8W / EM 21D(DS)  
80 / EMP 21V(S)



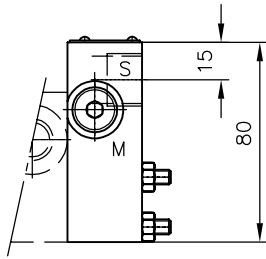
Coding 81



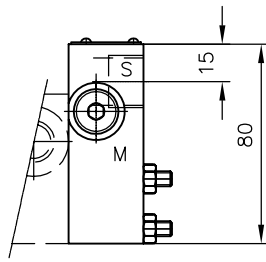
Drain valve  
a/f 5

Ports conf. ISO 228/1 (BSPP):  
S = G 1/2

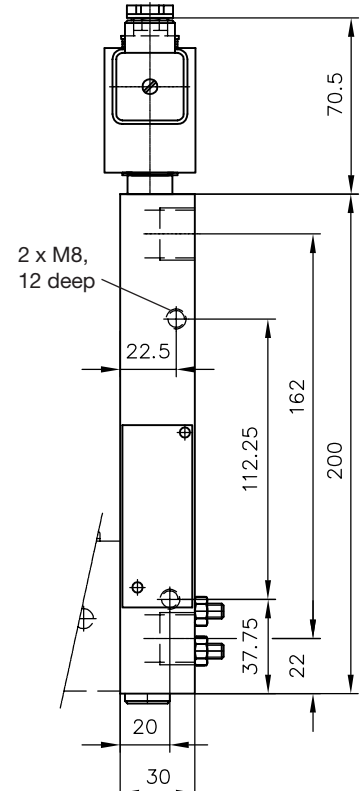
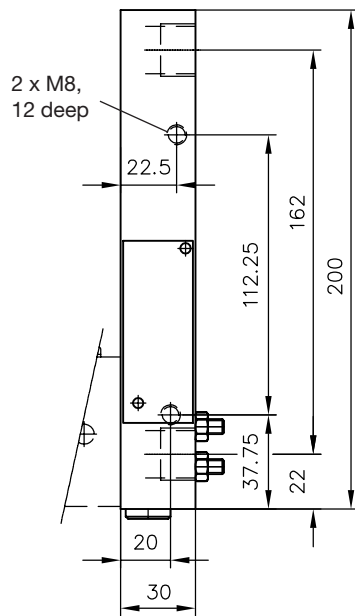
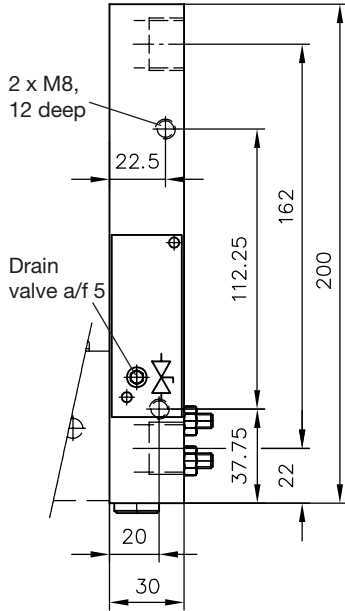
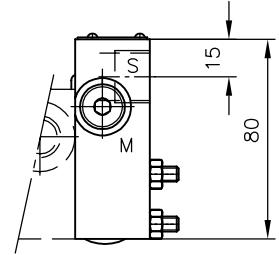
Coding 88



Coding 880  
88W

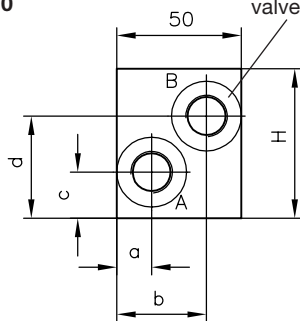


Coding 880 / EM 21D(DS)  
88W / EM 21D(DS)

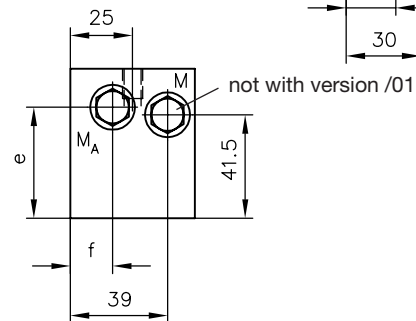
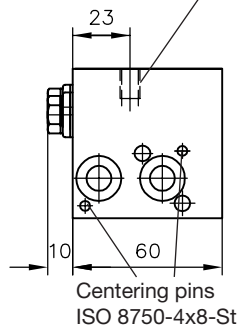


4.2 Valve sections

Sub-plates  
Coding /0

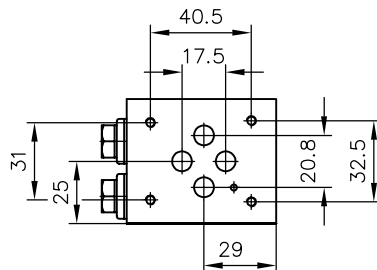


Port B is plugged with 3/2-way directional seated valves  
Mounting hole M8, 12 deep (only coding /0)



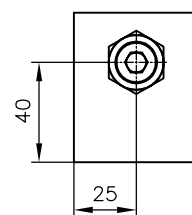
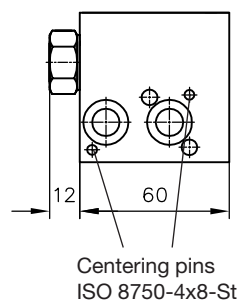
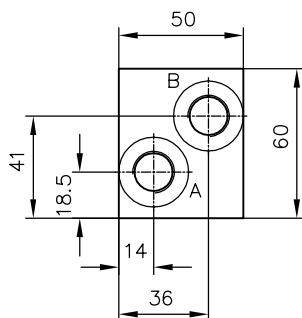
Note:

Port M (G 1/4 (BSPP)) is used as signal inlet port with type NSMD 2 acc. to D 7787.  
The pressure from port A can be picked-up from port MA (G 1/4 (BSPP)).



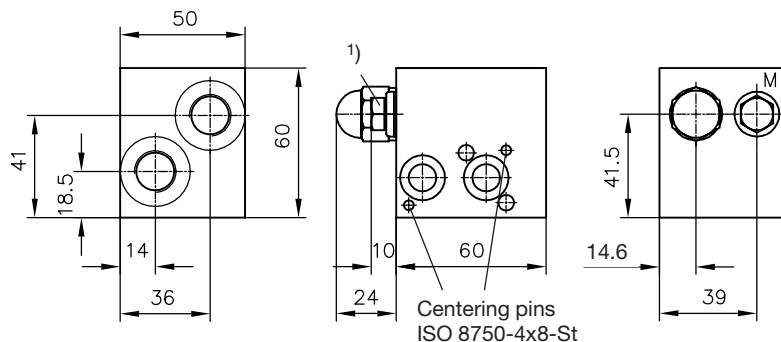
	H	a	b	c	d	e	f
/0	60	14	36	18.5	41	44.5	17
/01	39.5	12	37.5	17	17	28.5	20

Coding /1

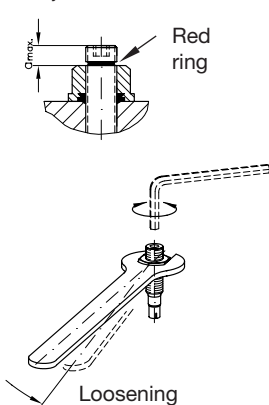


Ports conf. ISO 228/1 (BSPP):  
A, B = G 3/8, or version /01 = G 1/4  
M = G 1/4

Coding /2



Adjustment



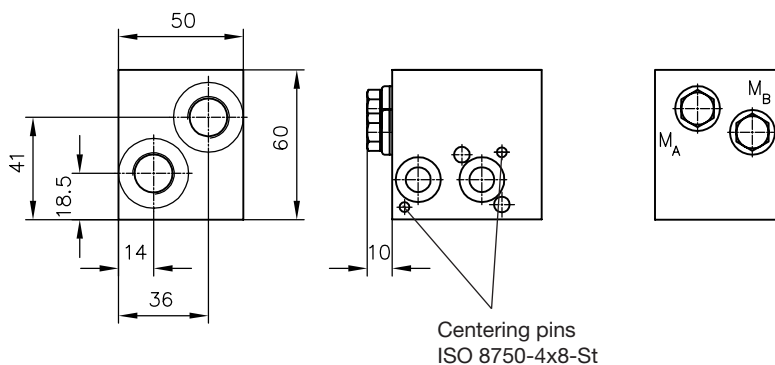
1) Note regarding the adjustment of the throttle mounted in R

At the maximum adjustment length ( $a_{max} = 5 \text{ mm}$ ), the ring marking will become visible. Further unscrewing will not achieve any further change (reduction) in the  $\Delta p$ -value. From a design point of view, an internal stop to prevent further or complete unscrewing cannot be provided. The red ring marking accordingly also represents the end of the permissible adjustment length. If it is exceeded, the number of load-bearing threads will be reduced, and if unscrewed too far there is the risk that the throttle screw might be torn out at high pressure. This point should, if necessary, be included in the operating manual or the operating instructions for the system.

**Caution:** Do not unscrew throttle screw beyond red marking ring!

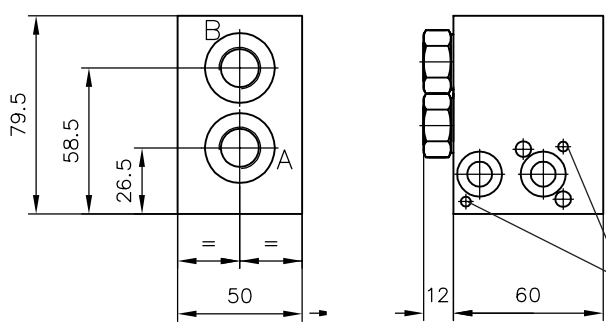
Only slight loosening of the Seal-Lock-nut (a/f 17) is required for adjusting the throttle screw with an Allen key (a/f 5). This way almost no fluid will escape out of the bore.

Coding /3

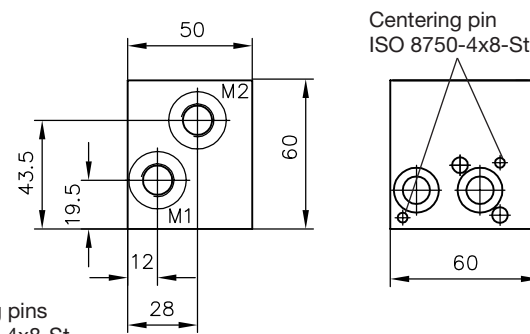


Ports conf. ISO 228/1 (BSPP):  
 A, B = G 3/8  
 M<sub>A</sub>, M<sub>B</sub> = G 1/4

Coding /5

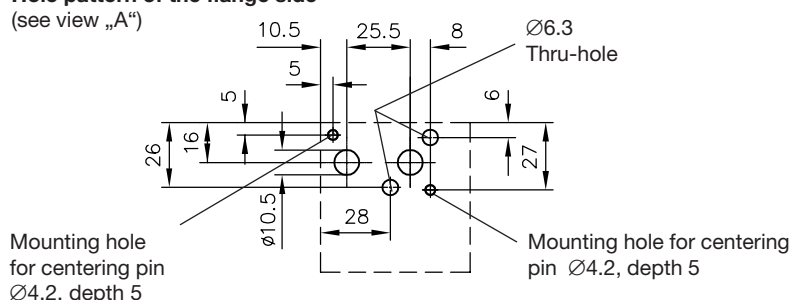


Coding /6



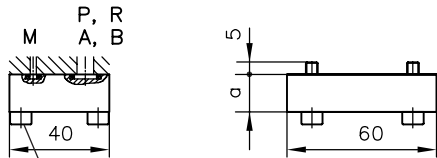
Hole pattern of the flange side

(see view „A“)



Ports conf. ISO 228/1 (BSPP):  
 A, B = G 3/8

**Blanking plate coding NG 6 X and NG 6 X PA** (for connection hole pattern NG 6, DIN 24340-A6)



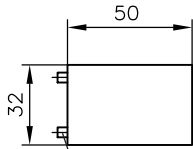
Type	a
NG 6 X	15
NG 6 X PA	20

Sealing of ports via  
O-rings NBR 90 Sh:  
A, B, P, R 9.25x1.78  
M 2.9x1.78

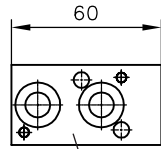
Max. torque 5 Nm

**Intermediate plates for series connection**

**Coding Z 5**

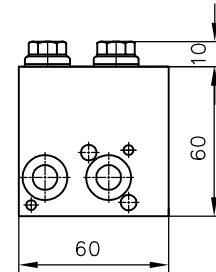
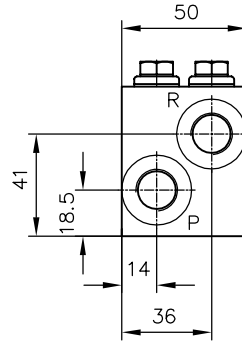


Centering pins  
ISO 8750-4x8-St

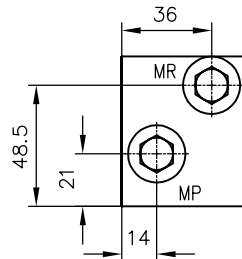


Hole pattern of the flange  
side see page 12!

**Coding Z 52**



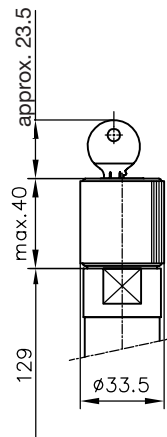
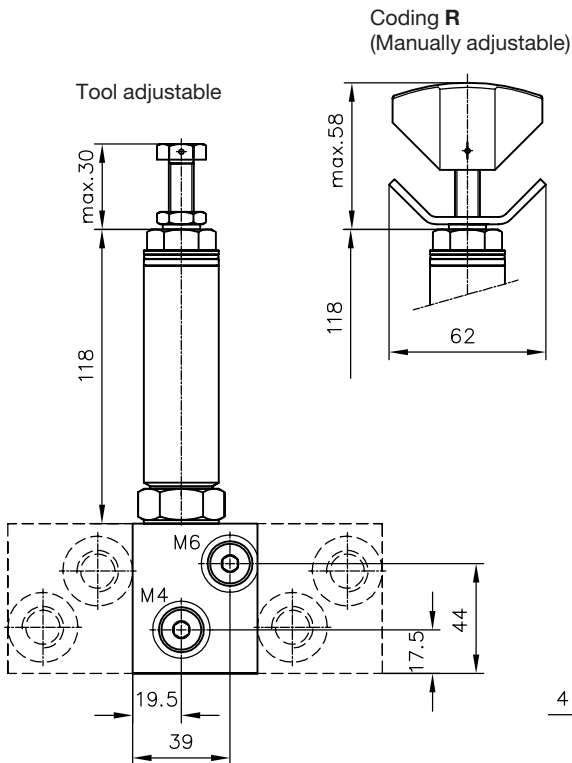
Ports conf. ISO 228/1 (BSPP):  
P, R = G 3/8  
MP, MR = G 1/4



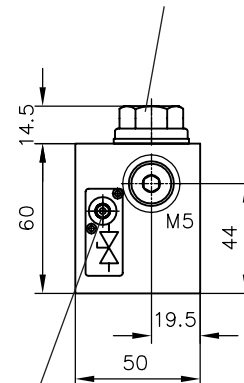
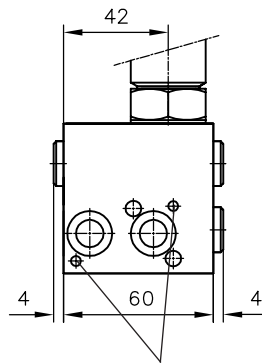
**Pressure reducing valve**

**Coding H**  
(with lock)

**Type CZA**



Blocked with tapped plug  
at type **CZAX**

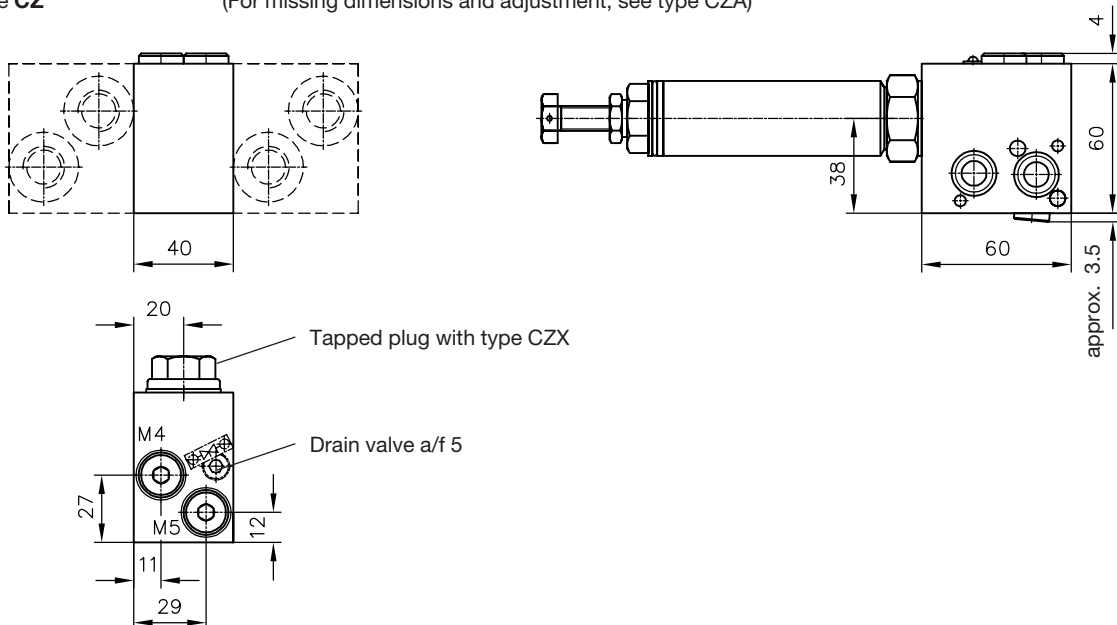


Centering pins  
ISO 8750-4x8-St

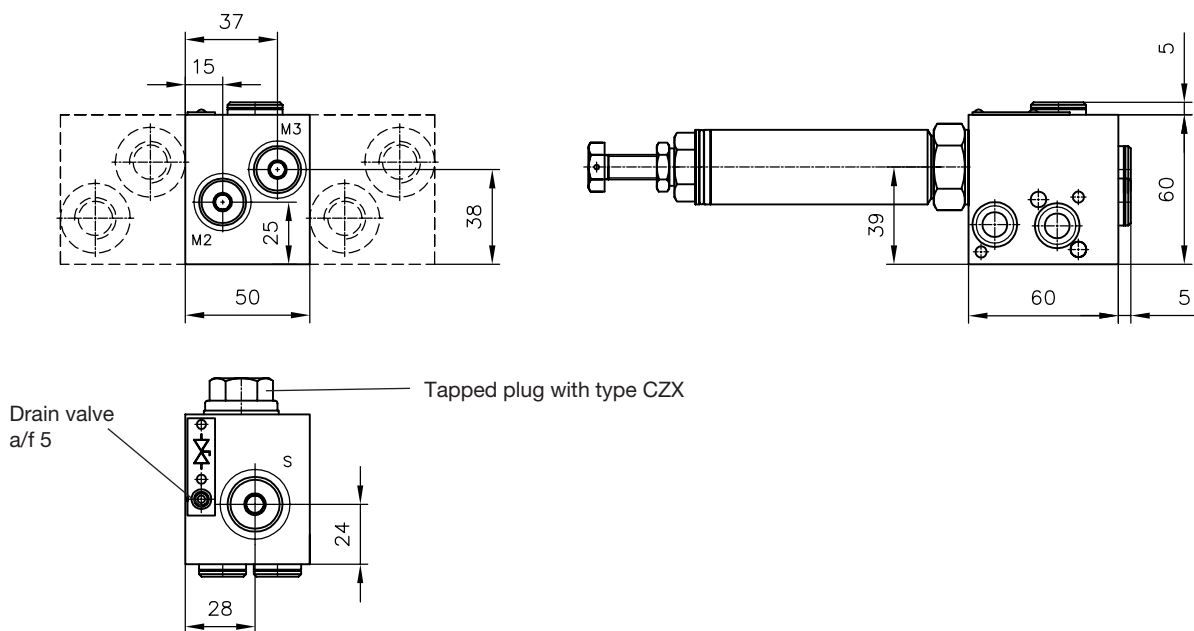
Drain valve a/f 5

Ports conf. ISO 228/1 (BSPP):  
M4, M5, and M6 = G 1/4

**Type CZ** (For missing dimensions and adjustment, see type CZA)

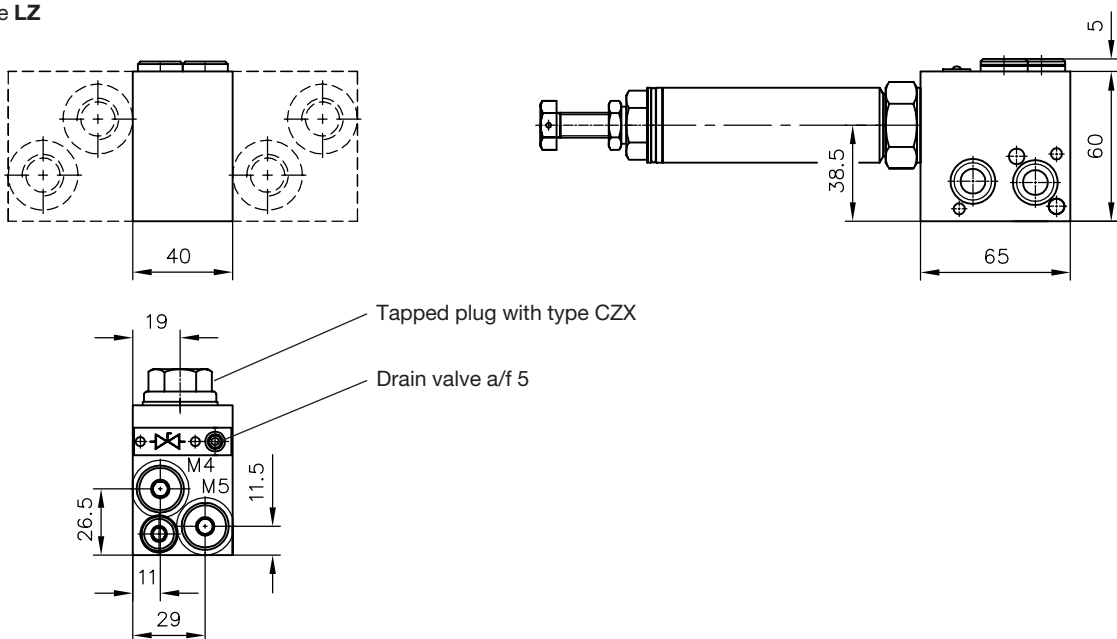


**Type CZD** (For missing dimensions and adjustment, see type CZA)

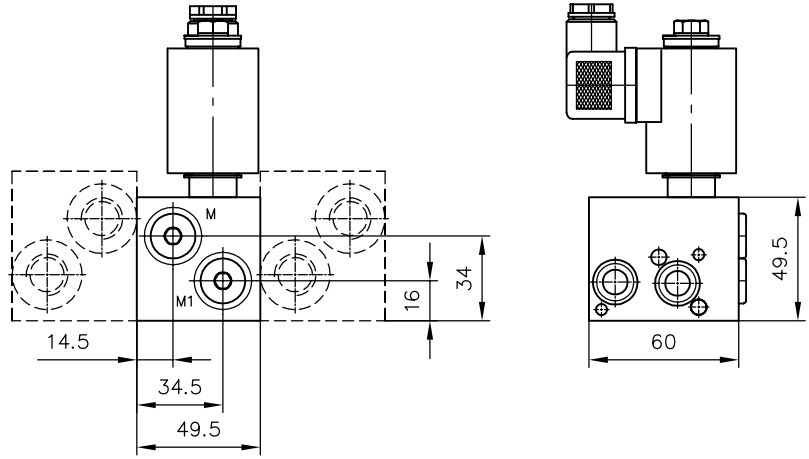


(For missing dimensions and adjustment, see type CZA)

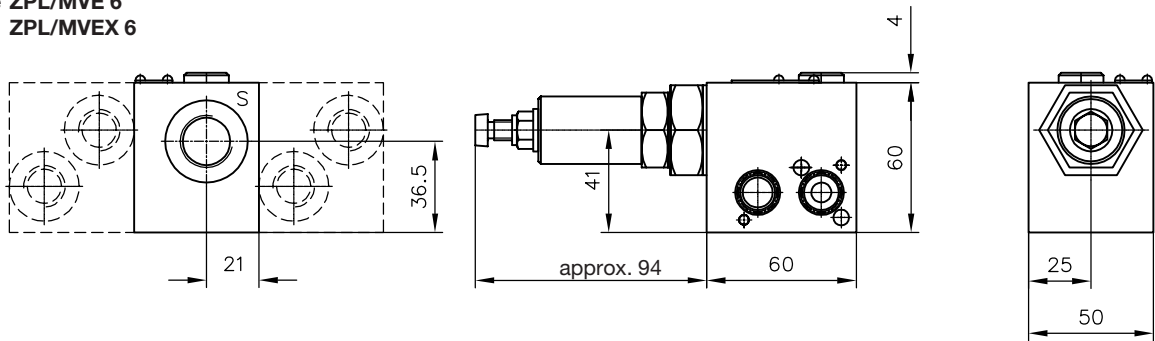
**Type LZ**



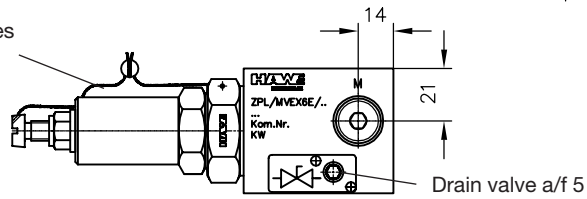
**Second speed rate**  
Type **ZPL/V...**  
**ZPL/S...**



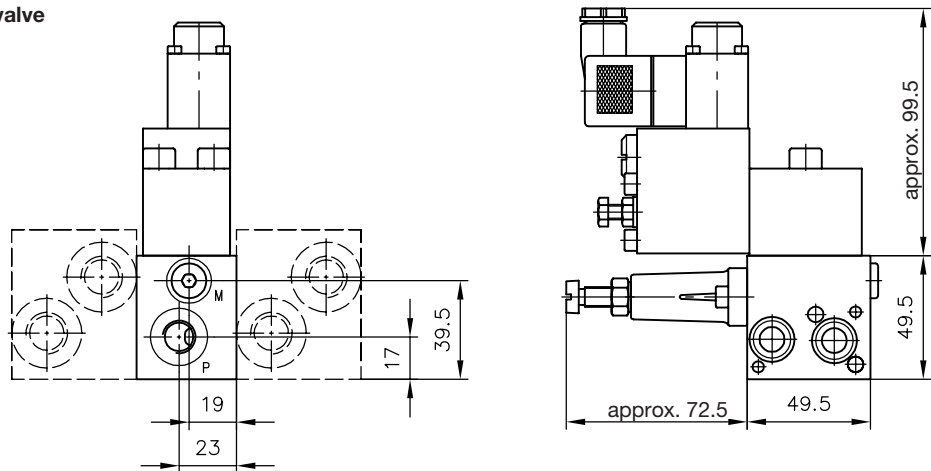
**Pressure limiting valves**  
Type **ZPL/MVE 6**  
**ZPL/MVEX 6**



Pressure limiting valves are lead sealed with type MVEX



**Prop. pressure limiting valve**  
Type **ZPL / P4...**  
**ZPL / P45...**



**Blanking shims and orifices**

Order coding

Type	Nomenclature	Order coding
XP, XR	Blanking shim	6905 018
XP 0.5, XR 0.5	Orifice	6905 018-0.5
XP 0.6, XR 0.6	Orifice	6905 018-0.6
XP 0.8, XR 0.8	Orifice	6905 018-0.8
XP 1.0, XR 1.0	Orifice	6905 018-1.0
XP 1.5, XR 1.5	Orifice	6905 018-1.5
XP 2.0, XR 2.0	Orifice	6905 018-2.0
XP 2.5, XR 2.5	Orifice	6905 018-2.5
XP 3.0, XR 3.0	Orifice	6905 018-3.0

