

# Connection block type B for compact hydraulic power packs

## Product documentation



Operating pressure  $p_{\max}$ :

700 bar

Flow rate  $Q_{\max}$ :

25 lpm



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# 1 Overview of connection blocks for oil immersed hydraulic power packs of type B

A connection block represents the connecting link between the hydraulic power pack and the hydraulic control. The connection blocks described here are suitable for combining with HAWE compact hydraulic power packs.

The connection block type B is suitable for single-circuit pumps. A pressure switch can be mounted directly on the connection block. The type B variant can also be used in combination with differential cylinders.

Directional seated valves are mounted directly or are bolted on. Other connection blocks with integral function elements such as types AB and AL with pressure-limiting valves and shut-off valves. These can also be combined with type B.

The connection block type B can be directly flange-mounted

- Compact hydraulic power packs
  - INKA to D 8132-1
  - KA(W) 2, KA(W) 4 to D 8010 and D 8010-4
  - MPN to D 7207
  - HC, HCW to D 7900
  - MP, MPW to D 7200 H
  - HK, HKF, HKL to D 7600 ff
- Hydraulic power pack LP to D 7280 H

### Features and benefits

- Flexible interface between the hydraulic power pack and consumer
- Space-saving due to direct mounting on the hydraulic power pack
- Compact unit for controlling single-acting or double-acting consumers
- Operating pressures can be up to 700 bar



Connection block type B to compact unit type INKA 1

### Basic types

	Application	Valve	Flow rate $Q_{max}$ (lpm)	Operating pressure $p_{max}$ (bar)
<b>Type 1</b>	at high pressures and/or large flow rates from the consumer to the tank	G to D 7300-12	6, 12, 25	500 (700)
<b>Type 2</b>	in smaller systems	WN, WH to D 7470 A/1	from 6 to 8	320, 450
<b>Type 3</b>	Preferable for applications in systems with pressures up to 450 bar and flow rates to the tank less than 20 lpm	EM to D 7490/1	up to 20	450
<b>Type 4</b>	in clamping devices and locking devices where pump pressure is employed to apply and release a function	with pressure dispersal, without directional valve	up to 12	300

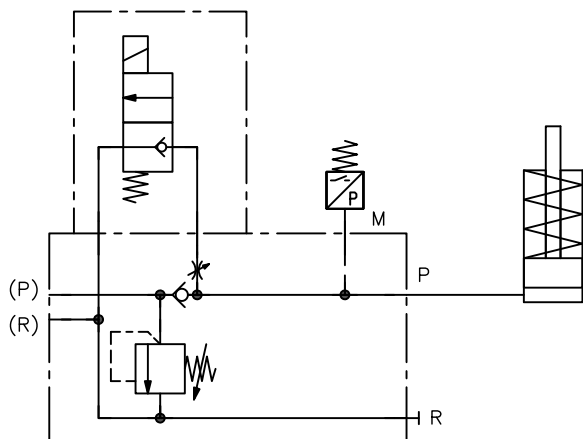
## 2 Available versions

### 2.1 Connection block type 1

Application: for high pressures (> 450 bar) and / or large flow rates from the consumer to the tank ( $Q_{\text{Rück}} > 8 \text{ lpm}$ ).

For versions for direct pipe connection see [D 6905 C](#).

#### Circuit symbol



Example: with pressure switch for single-acting consumers

#### Ordering examples

INKA 1 V00 - H0,64	-B2	/600	-1	-33	3	D	-GM 24
MPN 44 H 9,9 - B25.20	-B1	/600	-2	-1	2	D	-WGM 230

							2.1.6 "Actuation"
							2.1.5 "Directional seated valves"
							2.1.4 "Additional elements"
							2.1.3 "Pressure switch"
							2.1.2 "Size"
							Pressure setting (bar)
							2.1.1 "Basic type"

#### 2.1.1 Basic type

Type	Adjustment	Pressure range p (bar)
B1	Fixed	(0) ... 80
B2	Adjustable	(0) ... 160
		(0) ... 315
		(0) ... 500
		(0) ... 700*

\* only for sizes 1 and 2

**! DAMAGE**

Comply with the permissible pressure for the flow rate for the respective pump.

### 2.1.2 Size

Coding	Port (ISO 228-1)	permissible return flow P → R (lpm)	permissible pressure $p_{max}$ (bar) at < 10% ED
0	G 1/4	6	500
1	G 3/8	12	700
2	G 1/2	25	700

### 2.1.3 Pressure switch

Primarily for clamping hydraulics circuits.

For reasons of space, for pump type LP D 7280 H the version with pressure switch cannot be installed.

Coding	Pressure switch DG to D 5440(E)	Pressure range p (bar)
1	w/o DG, tapped plug G 1/4	
5	DG 1 R	20 ... 600
5S	DG 1 RS	20 ... 600
33	DG 33 - Y1	200 ... 700
34	DG 34 - Y1	100 ... 400
35	DG 35 - Y1	20 ... 250
36	DG 36 - Y1	4 ... 12
364	DG 364 - Y1	4 ... 50
365	DG 365 - Y1	12 ... 170
5E2	DG 5E-250*	(0) ... 250
5E4	DG 5E-400*	(0) ... 400

\* With ERMETO EGE 8 - SR - ED and GE 8 - PSR/A3C, without socket MSD-T7 (order separately if required).

**! DAMAGE**

$p_{min}$  represents the lower reference value for the pressure setting at which the pressure switch can generally still be used. At values lower than this the switching hysteresis is generally too great. This does not apply to electronic DG (DG 5E-...) units, where the switching hysteresis is configurable.

### 2.1.4 Additional elements

Coding	Versions with		Application	available for size		
	Check valve	Throttle		0	1	2
0	No	No	--	●	●	
1	Yes	No	Primarily for clamping hydraulics	●	●	
2	No	Yes	Primarily for lifting equipment		●	●
3	Yes	Yes			●	●

## 2.1.5 Directional seated valves

Coding	Circuit symbol
D	
F	
X	

## 2.1.6 Actuation

Coding	Nominal voltage $U_N$
GM 24	24 V DC
WGM 230	230 V AC 50/60 Hz

**i** NOTE

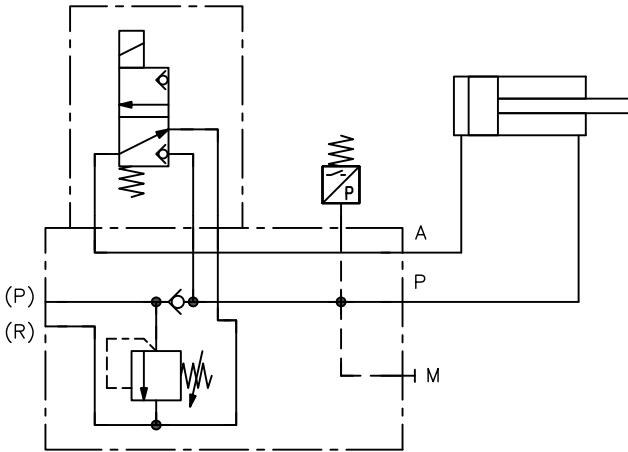
Für further details and further actuation types see [D 7300-12](#).

## 2.2 Connection block type 2

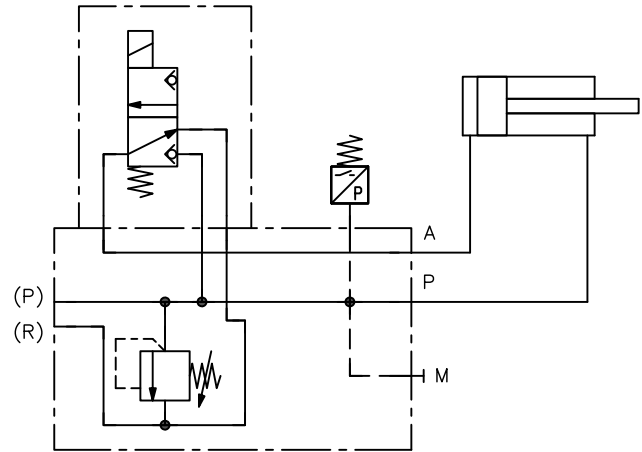
Application: for smaller systems with pressures up to 450 bar and flow rates from consumers to the tank less than 8 lpm, in combination with differential cylinders.

For versions for direct pipe connection see [D 6905 C](#).

### Circuit symbol



Example 1: with check valve in neutral position - connection between pump and consumer



Example 2: without check valve in neutral position - discharge towards the tank

### Ordering examples

INKA 1 V00 - H0,64	-B4	/200	-WN1M	-11	/5	-GM 24
MPN 44 H 9,9 - B25.20	-B3	/400	-WH1H	-10	/3	-GM 24

					2.2.5 "Actuation"
					2.2.4 "Pressure switch"
					2.2.3 "Additional element"
					2.2.2 "Directional seated valves"
				Pressure setting (bar)	
					2.2.1 "Basic type"

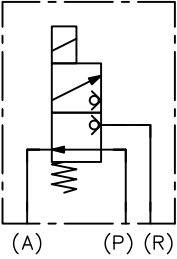
### 2.2.1 Basic type

Type	Adjustment	Pressure range p (bar)*	Port (ISO 228-1)	Pressure gauge connection M and port for DG to D 5440(E)
B3	Fixed	(0) ... 80	G 1/4	Yes
B4	Adjustable	(0) ... 160		
		(0) ... 315		
		(0) ... 450		

\* Comply with permissible pressure for directional seated valves type WN1 (320 bar, for further details see [D 7470 A/1](#))



## 2.2.2 Directional seated valves

Coding	Circuit symbol	Flow rate $Q_{\max}$ (lpm)	Pressure $p_{\max}$ (bar)
WN1H	 (A) (P) (R)	approx. 5	320
WN1M	 (A) (P) (R)		
WH1H	 (A) (P) (R)	approx. 8	450
WH1M	 (A) (P) (R)		

## 2.2.3 Additional element

Coding	Description
10	w/o check valve
11	with check valve

## 2.2.4 Pressure switch

Coding	Pressure switch DG to D 5440(E)	Pressure range p (bar)
2	w/o DG - prepared for subsequent mounting	
3	DG 33	200 ... (700)
4	DG 34	100 ... 400
5	DG 35	20 ... 250
6	DG 36	4 ... 12
64	DG 364	4 ... 50
65	DG 365	12 ... 170
5E2	DG 5E-250-Y1E	(0) ... 250
5E4	DG 5E-400-Y1E	(0) ... 400

### CAUTION

Comply with pressure range of the installed directional seated valve!

	$p_{\max}$ (bar)
WH 1	450
WN 1	350

### DAMAGE

$p_{\min}$  represents the lower reference value for the pressure setting at which the pressure switch can generally still be used. At values lower than this the switching hysteresis is generally too great. This does not apply to electronic DG (DG 5E-..) units, where the switching hysteresis is configurable.

## 2.2.5 Actuation

Coding	Nominal voltage $U_N$
GM 12	12 V DC
GM 24	24 V DC
WGM 230	230 V AC 50/60 Hz

### NOTE

Special voltages on request, for further details see [D 7470 A/1](#).

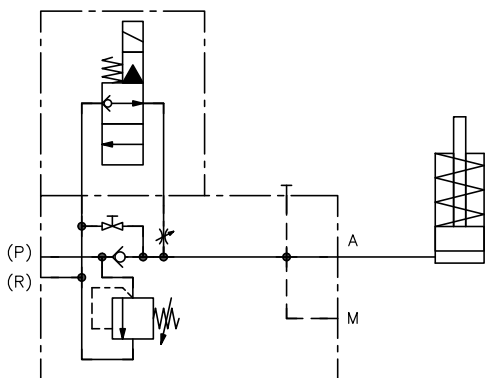
## 2.3 Connection block type 3

Application: for systems with pressures up to 450 bar and flow rates to the tank less than 20 lpm.

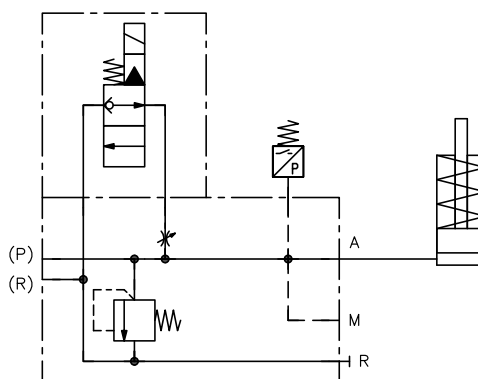
For versions for direct pipe connection see D 6905 C.

### Circuit symbols

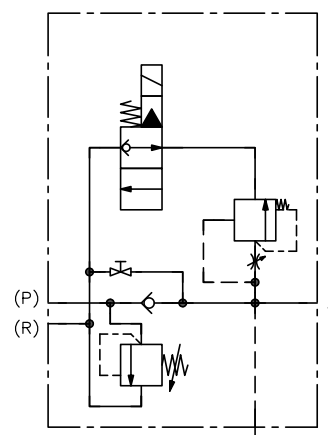
B 32  
B 42



B 31T  
B 41T



B 32 ... -R6  
B 42 ... -R6



### Ordering examples

INKA 1 V00 - H0,64	-B 31	/300	EM 11V	-13	/2	GM 24
C 15	-B 31T	/200	EM 11V	-12	/5	WGM 230
MPN 44 H 9,9 - B25.20	-B 32	/250	EM 21V	-R6/10	/4	WGM 230
C15	-B 32	/300	EMP 21S	-R6/6	-X84V-9/400	GM 24

2.3.1 "Basic type"

Pressure setting (bar)

2.3.2 "Directional seated valves to D 7490/1"

2.3.3 "Additional elements"

2.3.4 "Pressure switch"

2.3.5 "Actuation"

### 2.3.1 Basic type

Type	Adjustment	Pressure range p (bar)	Port (ISO 228-1)			Model
			A	R	M <sub>A</sub>	
B 31/...	Fixed	(0) ... 80 (0) ... 160 (0) ... 315 (0) ... 450	G 1/4	--	--	with integral drain valve
B 41/...	Adjustable		G 3/8	--	G 1/4	with integral drain valve, with 2-way flow control valve
B 32/...	Fixed					
B 42/...	Adjustable		G 1/4	G 1/4	--	with additional return port
B 31T/...	Fixed					
B 41T/...	Adjustable					

### 2.3.2 Directional seated valves to D 7490/1

Coding	Circuit symbol
EM 11V EM 21V	
EM 11S EM 21S	
EMP 21V	
EMP 21S	

### 2.3.3 Additional elements

Coding	Versions with		
	Check valve	Throttle	2-way flow control valve
10	No	No	No
11	Yes	No	No
12	No	Yes	No
13	Yes	Yes	No
R6/..*	No	No	Yes

\* Adjustment range: 0.5 ... 40 lpm

## 2.3.4 Pressure switch

Coding	Pressure switch DG to D 5440(E)		Pressure range p (bar)
	w/o 2-way flow control valve	with 2-way flow control valve	
2	w/o DG - prepared for subsequent mounting		--
3	DG 33	DG 33 - Y1	200 ... (700)
4	DG 34	DG 34 - Y1	100 ... 400
5	DG 35	DG 35 - Y1	20 ... 250
6	DG 36	DG 36 - Y1	4 ... 12
64	DG 364	DG 364 - Y1	4 ... 50
65	DG 365	DG 365 - Y1	12 ... 170
5E2	DG 5E-200-Y1E	--	(0) ... 200
5E4	DG 5E-400-Y1E	--	(0) ... 400

### CAUTION

Comply with the maximum permissible pressure!

Version	$p_{\max}$ (bar)
Directional seated valve EM 11	450
2-way flow control valve	315

### DAMAGE

$p_{\min}$  represents the lower reference value for the pressure setting at which the pressure switch can generally still be used. At values lower than this the switching hysteresis is generally too great. This does not apply to electronic DG (DG 5E-..) units, where the switching hysteresis is configurable.

## Version with pressure gauge

Coding	Pressure $p_{\max}$ (bar)
X84V-9/250	250
X84V-9/400	400

### NOTE

For further applications see [D 7077](#).

## 2.3.5 Actuation

Coding	Nominal voltage $U_N$
GM 12	12 V DC
GM 24	24 V DC
WGM 230	230 V AC 50 and 60 Hz

### NOTE

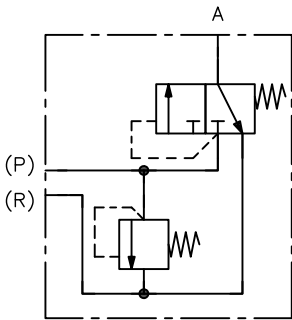
For further details see [D 7490/1](#).

## 2.4 Connection block type 4

Application: in clamping devices and locking devices where pump pressure is employed to apply and release a function. When the pump is switched off the system is automatically depressurised by the integral pressure dispersal.

For trouble-free and quick switching to the neutral position (when the pump is switched off), the connection block should be mounted as close as possible to the pump (for instance by direct mounting on the compact hydraulic power packs).

### Circuit symbol



### Ordering example

INKA 1 V00 - H0,64 **-B1** /180 **-DW-10**

2.4.1 "Basic type"  
Pressure setting (bar)  
2.4.1 "Basic type"

### 2.4.1 Basic type

Type	Adjustment	Pressure range p (bar)	Port A (ISO 228-1)	Flow rate $Q_{max}$ (lpm)	Pressure $p_{max}$ (bar)
B1/...-DW-10	Fixed	20 ... 50 51 ... 100 101 ... 190 191 ... 240 241 ... 300	G 1/4	12	300



#### DAMAGE

Permissible pressures  $p_{max}$  of the compact hydraulic power packs should be reduced by 20 bar.

## 3 Parameters

### 3.1 General data

<b>Designation</b>	Connection block with 2/2 or 3/2 directional seated valve depending on the type
<b>Design</b>	Valve combination
<b>Model</b>	Manifold mounting valve
<b>Material</b>	Surface electro-galvanised Zn
<b>Installation position</b>	Any
<b>Hydraulic fluid</b>	Hydraulic fluid: to DIN 51524 Parts 1 to 3: ISO VG 10 to 68 to DIN 51519. Viscosity range: 4 - 800 mm <sup>2</sup> /s Optimal operating range: approx. 10 - 200 mm <sup>2</sup> /s For viscosities greater than approx. 300 mm <sup>2</sup> /s there will be a greater increase in the flow resistance! Also suitable for biologically degradable hydraulic fluids type HEES (synthetic ester) at operating temperatures up to approx. +70°C. Not suitable for HEPG (restriction due to the oil immersed hydraulic power pack) and HETG.
<b>Cleanliness level</b>	<b>ISO 4406</b> <u>21/18/15...19/17/13</u>
<b>Temperatures</b>	Environment: approx. -40 to +80 °C, hydraulic fluid: -25 to +80 °C, pay attention to the viscosity range. Start temperature: down to -40 °C is permissible (take account of the start viscosities!), as long as the steady-state temperature is at least 20 K higher during subsequent operation. Biologically degradable hydraulic fluids: note manufacturer specifications. With consideration for the seal compatibility, not above +70°C.

### 3.2 Weight

Connection block type 1	Size	Basic block B1/.. and B2/..	Directional seated valve (D 7300-12)		Pressure switch DG (D 5440(E))	
			Coding D and F	Coding X		
	0	= 0.9 kg	= 0.4 kg	= 0.1 kg	DG 1	= 1.3 kg
	1	= 1.2 kg	= 0.7 kg	= 0.2 kg	DG 3..	= 0.3 kg
	2	= 2.6 kg	= 1.2 kg	= 0.2 kg	DG 5E-..	= 0.3 kg
Connection block type 2	Type	Without DG	With DG			
	B3	= 2.7 kg	= 3.0 kg			
	B4					

Connection block type 3	Type	Without DG	With DG
	B 31		
	B 41	= 0.9 kg	= 1.2 kg
	B 32		
	B 42		
	B 31T	= 1.2 kg	= 1.5 kg
	B 41T		
Connection block type 4	B1/..-DW-10	= 0.9 kg	

### 3.3 Characteristic lines

The  $\Delta p$ -Q characteristic lines P(A)→R largely correspond to those of the valves of the respective coding in the publications:

Type 1	D 7300-12
Type 2	D 7470 A/1
Type 3	D 7490/1
	<p>2-way flow control valve:</p> <p>p (bar)</p> <p>Q (l/min)</p> <p>Q flow rate (lpm); p operating pressure (bar)</p>
Type 4	<p>Opening pressure (P→A) = 10 bar</p> <p>A→R = approx. 2 bar, P→A = 12 bar (in each case at <math>Q_{max} = 12</math> lpm)</p>



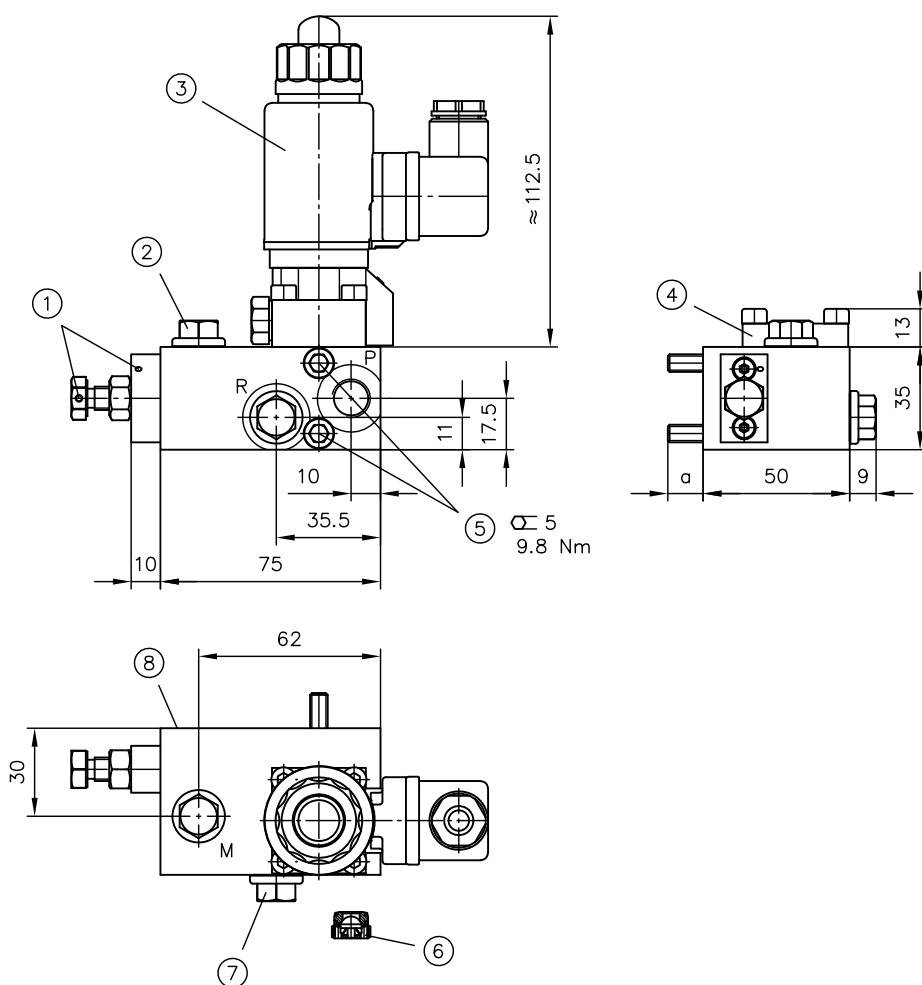
## 4 Dimensions

All dimensions in mm, subject to change.

### 4.1 Connection block type 1

#### 4.1.1 Size 0

B1  
 B2



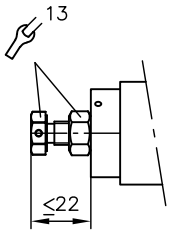
Example, fixed, with throttle, without pressure switch

- 1 Sealing option
- 2 Tapped plug, prepared
- 3 Solenoid valve, coding D and F
- 4 Cover plate, coding X
- 5 Cylinder screw ISO 4762 - M6x b-8.8-A2
- 6 Check valve RK 1 in P, only for coding 1
- 7 Tapped plug, only for coding D and F
- 8 Flange surface for mounting on pump unit

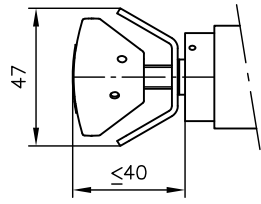
	Ports (ISO 228-1)
P, R, M	G 1/4
<b>Type</b>	<b>a</b>
MP, LP	7
HC, HK, KA, MPN, INKA	12

**Adjustment**

**Fixed**

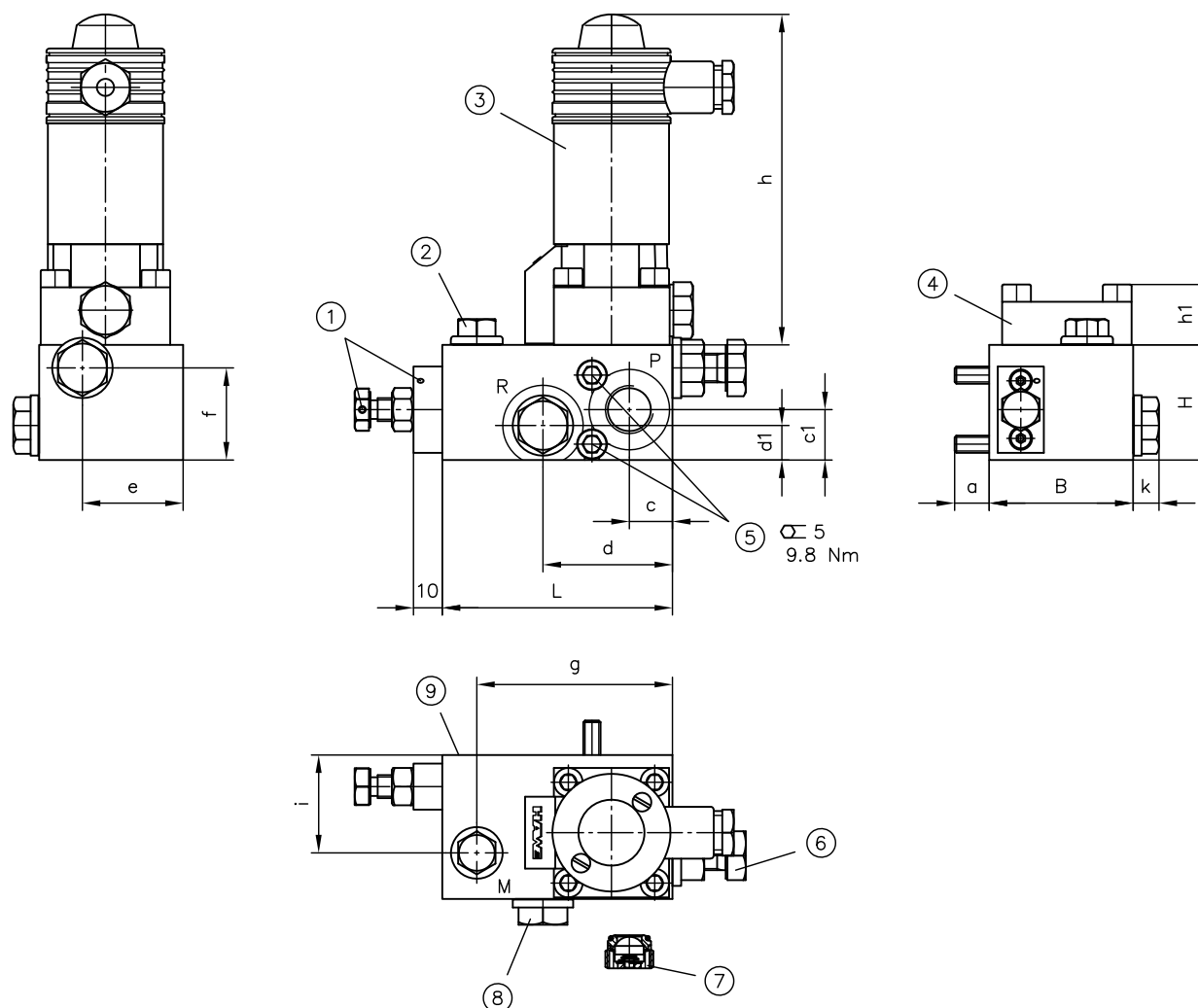


**Adjustable**



### 4.1.2 Size 1, 2

B1  
B2



Example, fixed, with throttle, without pressure switch

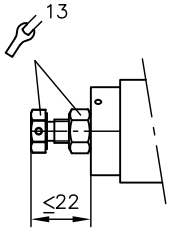
- 1 Sealing option
- 2 Tapped plug, prepared
- 3 Solenoid valve, coding D and F
- 4 Cover plate, coding X
- 5 Cylinder screw ISO 4762 - M6x b-8.8-A2
- 6 Version with or without throttle
- 7 Size 1: Check valve RK 2 in P, only for coding 1  
size 2: Check valve RK 3 in P, only for coding 1
- 8 Tapped plug, only for coding D and F
- 9 Flange surface for mounting on pump unit

	Ports (ISO 228-1)			
	Size 1	Size 2		
P, R, M	G 3/8	G 1/2		
Type	Size 1	Size 2		
	a	b	a	b
MP, LP	7	50	7,5	65
HC, HK, KA, MPN, INKA	12	55	12,5	70

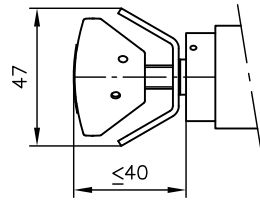
Size	L	B	H	c	c1	d	d1	e	f	g	h	h1	i	k
1	80	50	40	15	17,5	45	12	35	32	68	115	21	34	9
2	100	63	50	24	19	63	31	39	39	87	118	22	47	12

**Adjustment**

Fixed

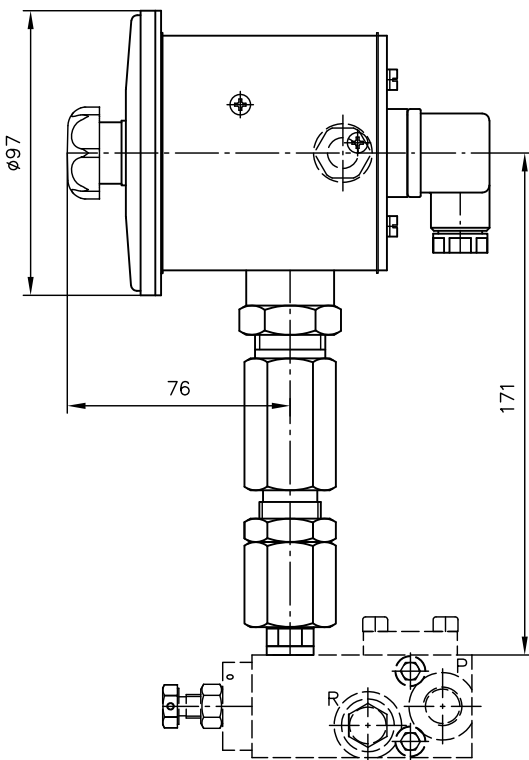


Adjustable

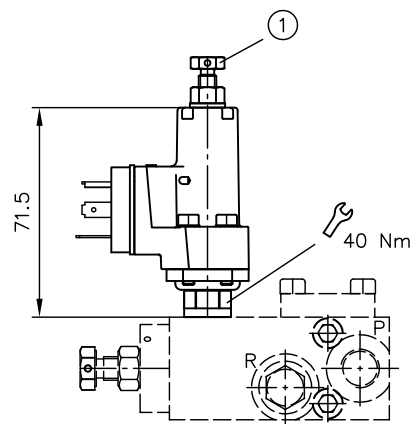


**4.1.3 Pressure switch**

Coding 5, 5S

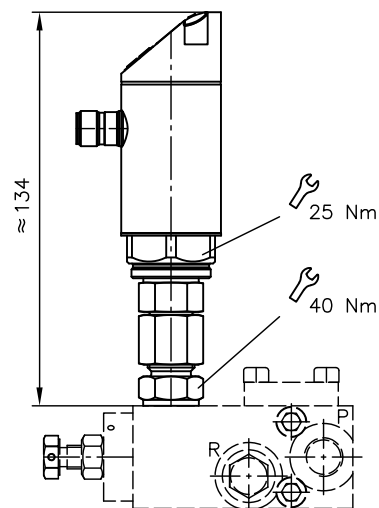


Coding 33 ... 365



1 Pressure switch adjustment according to D 5440

Coding 5E2 and 5E4

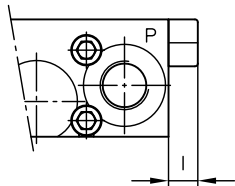


## 4.1.4 Additional elements

### w/o throttle

(only sizes 0, 1)

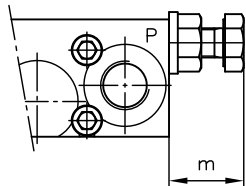
Coding **0, 1**



### with throttle

(only sizes 1, 2)

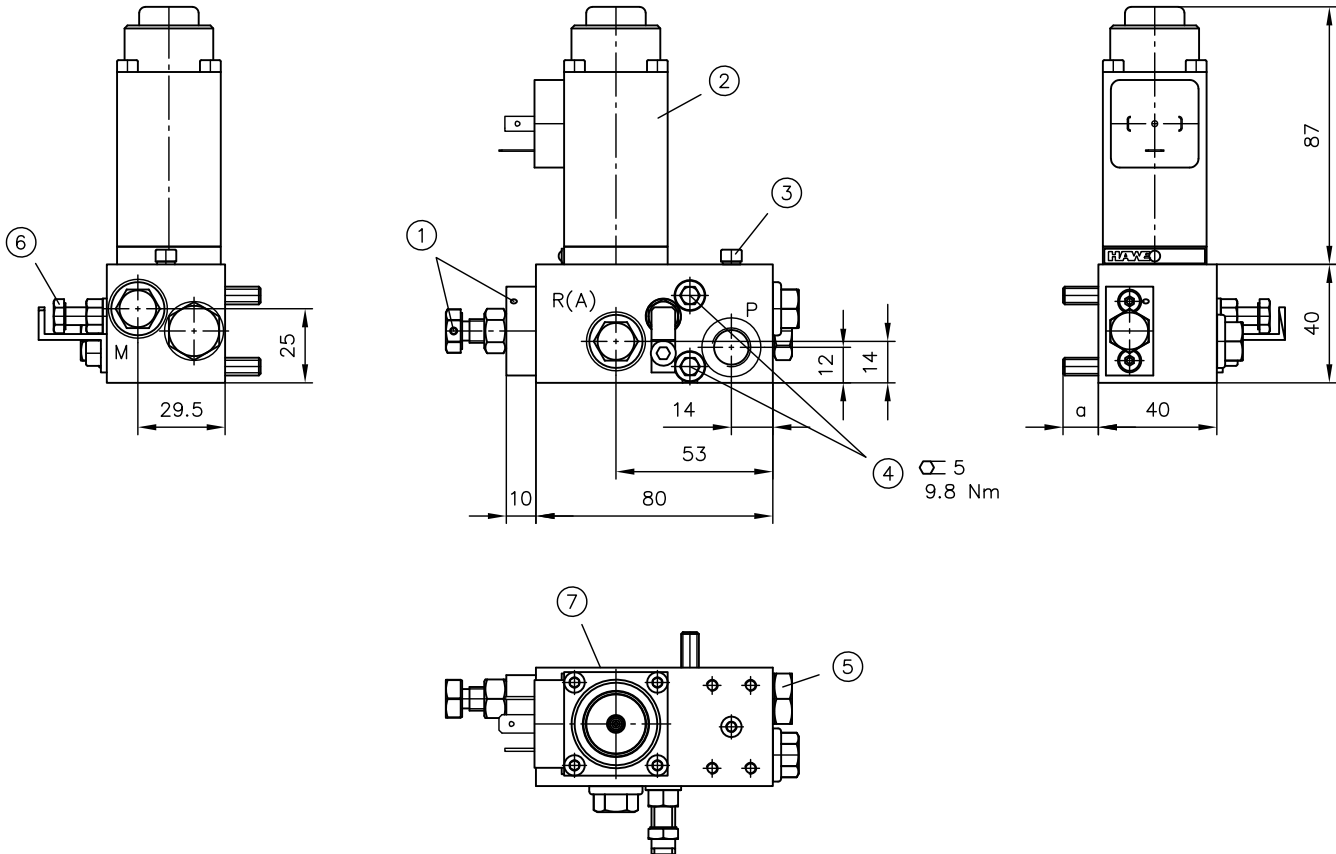
Coding **2, 3**



Size	l	m
1	10	25,5
2	--	32,5

## 4.2 Connection block type 2

B 3/...-WN 1  
B 3/...-WH 1  
B 4/...-WN 1  
B 4/...-WH 1



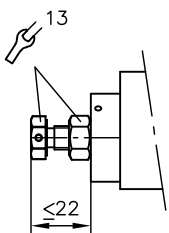
- 1 Sealing option
- 2 Directional seated valve type WN(WH) 1 to D 7470 A/1
- 3 without DG, prepared
- 4 Cylinder screw ISO 4762 - M6x b-8.8-A2
- 5 Version with or without check valve
- 6 Version with or without throttle
- 7 Flange surface for mounting on pump unit

### Ports (ISO 228-1)

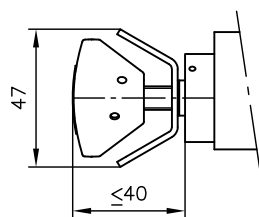
Type	a	b
A, P, R, M	G 1/4	
MP, LP	7	40
HC, HK	12	45

## Adjustment

### Fixed

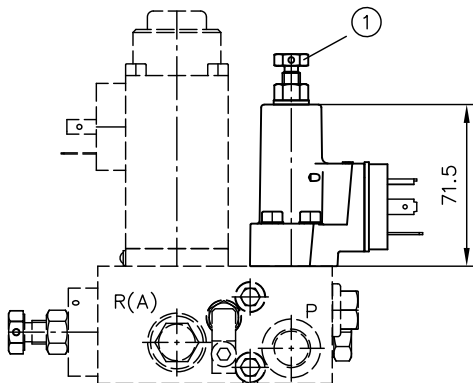


### Adjustable



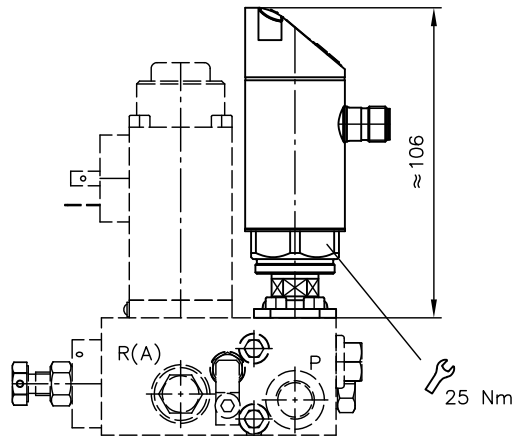
## 4.2.1 Pressure switch

Coding 3 ... 65



1 Pressure switch adjustment according to D 5440

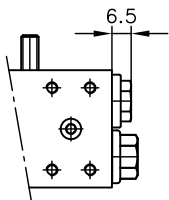
Coding 5E2 and 5E4



## 4.2.2 Additional elements

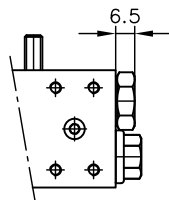
w/o check valve

Coding 10



with check valve

Coding 11

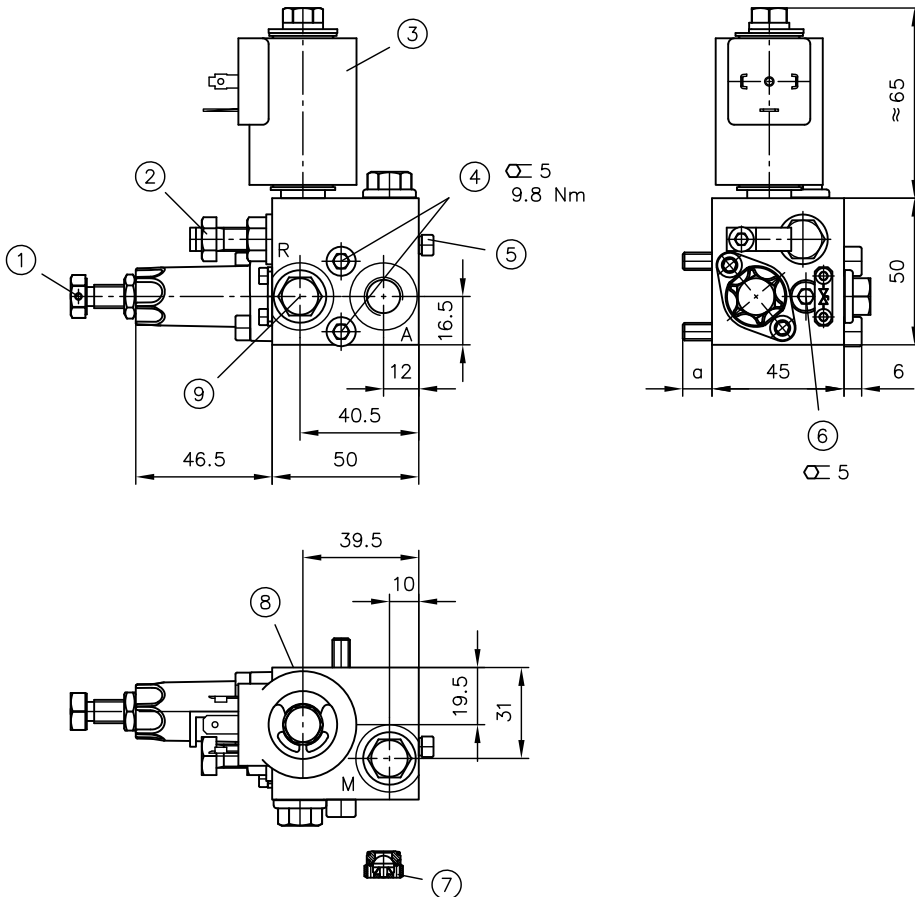


## 4.3 Connection block type 3

### 4.3.1 With directional seated valve EM 11

B 31(T)/-EM 11

B 41(T)/-EM 11



Example with drain valve/return port

- 1 Sealing option
- 2 Version with or without throttle
- 3 Directional seated valve type EM 11 to D 7490/1
- 4 Cylinder screw DIN 912 - M6x b-8.8
- 5 without DG, prepared
- 6 Drain valve (only for variants B 31(41) without additional return port)
- 7 Check valve RK 1 in A, only for coding 11 and 13
- 8 Flange surface for mounting on pump unit
- 9 additional return port (only for variants B 31(41)T)

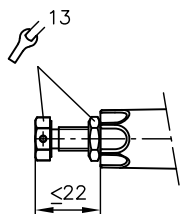
#### Ports (ISO 228-1)

A	G 1/4
R	G 1/4

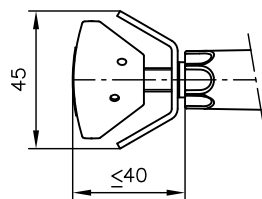


## Adjustment

### Fixed



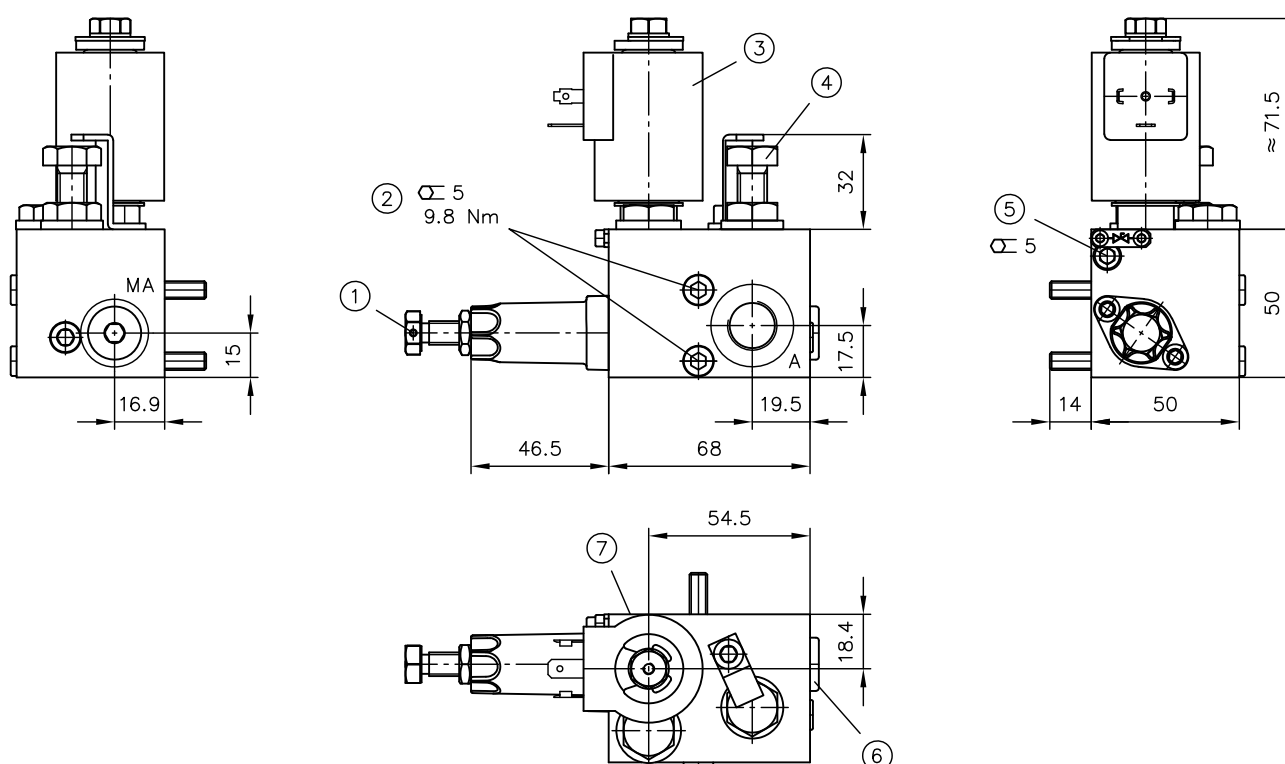
### Adjustable



## 4.3.2 With directional seated valve EM 21

B 32/-EM 21...-R 6

B 42/-EM 21...-R 6



Example with 2-way flow control valve

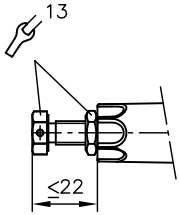
- 1 Sealing option
- 2 Cylinder screw ISO 4762 - M6x60-8.8-A2K
- 3 Directional seated valve type EM 21 (EMP 21) to D 7490/1
- 4 Flow control valve adjusting screw
- 5 Drain valve
- 6 Tapped plug, prepared
- 7 Flange surface for mounting on pump unit

### Ports (ISO 228-1)

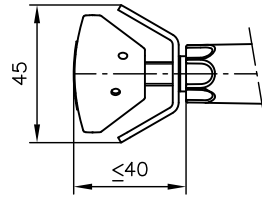
A	G 1/4 (B...1../...)
	G 3/8 (B...2../...)
M	G 1/4

**Adjustment**

Fixed



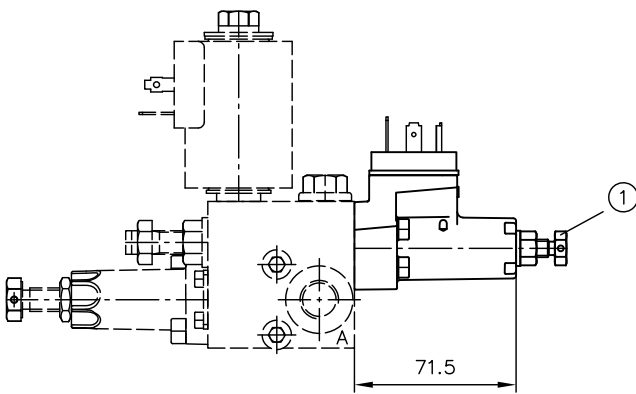
Adjustable



**4.3.3 Pressure switch**

Coding 3 ... 65

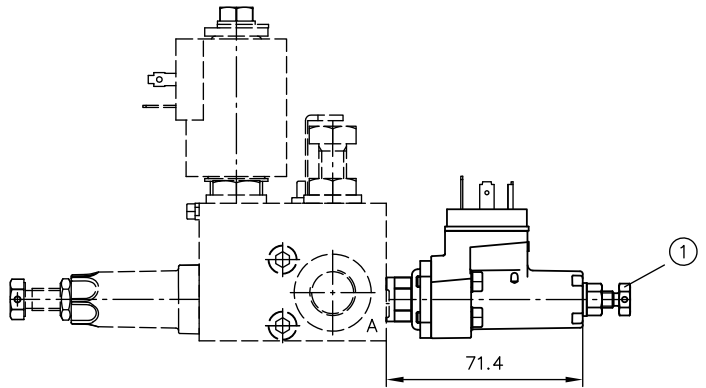
with directional seated valve EM 11



1 Pressure switch adjustment according to D 5440

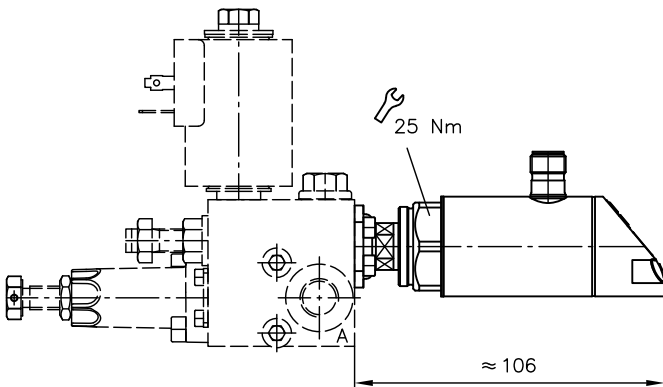
Coding 3 ... 65

with directional seated valve EM 21 and 2-way flow control valve (EM 21-R6)



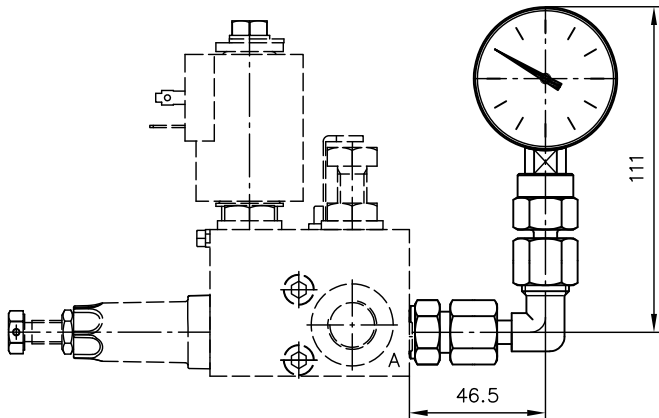
1 Pressure switch adjustment according to D 5440

Coding 5E2(4)



**Version with pressure gauge**

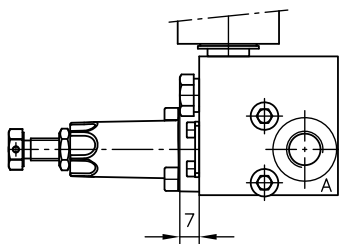
Coding X84V-9/...



**4.3.4 Additional elements**

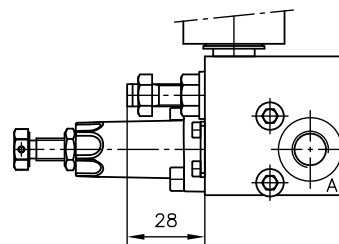
w/o throttle

Coding 10, 11



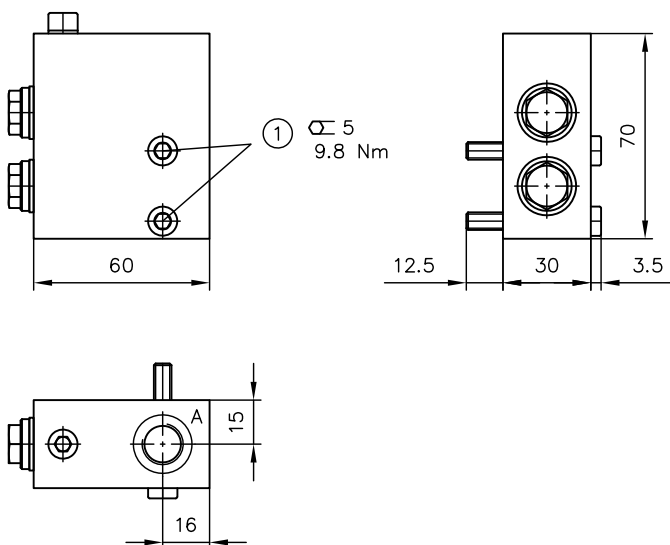
with throttle

Coding 12, 13



**4.4 Connection block type 4**

B 1/...-DW-10



1 Cylinder screw DIN 6912 M6x40-8.8-A2K

**Port (ISO 228-1)**

A G 1/4

Observe the document B 5488 "General operating instructions for assembly, commissioning, and maintenance."

### 5.1 Intended use

This product is intended exclusively for hydraulic applications (fluid technology).

The user must observe the safety measures and warnings in this document.

#### Essential requirements for the product to function correctly and safely:

- ▶ All information in this documentation must be observed. This applies in particular to all safety measures and warnings.
- ▶ The product must only be assembled and put into operation by specialist personnel.
- ▶ The product must only be operated within the specified technical parameters described in detail in this document.
- ▶ All components must be suitable for the operating conditions when using an assembly.
- ▶ The operating instructions for the components, assemblies and the specific complete system must also always be observed.

#### If the product can no longer be operated safely:

1. Remove the product from operation and mark it accordingly.
  - ✓ It is then not permitted to continue using or operating the product.

### 5.2 Assembly information

The product must only be installed in the complete system with standard and compliant connection components (screw fittings, hoses, pipes, fixtures etc.).

The product must be shut down correctly prior to disassembly (in particular in combination with hydraulic accumulators).

#### **DANGER**

##### **Sudden movement of the hydraulic drives when disassembled incorrectly**

Risk of serious injury or death

- ▶ Depressurise the hydraulic system.
- ▶ Perform safety measures in preparation for maintenance.

### 5.3 Operating instructions

Observe product configuration and pressure/flow rate.

The statements and technical parameters in this document must be strictly observed.

The instructions for the complete technical system must also always be followed.

#### **DAMAGE**

- ▶ Read the documentation carefully before usage.
- ▶ The documentation must be accessible to the operating and maintenance staff at all times.
- ▶ Keep documentation up to date after every addition or update.

#### **CAUTION**

##### **Overloading components due to incorrect pressure settings.**

Risk of minor injury.

- Pay attention to the maximum operating pressure of the pump and the valves.
- Always monitor the pressure gauge when setting and changing the pressure.

### Purity and filtering of the hydraulic fluid

Fine contamination can significantly impair the function of the product. Contamination can cause irreparable damage.

#### Examples of fine contamination include:

- Swarf
- Rubber particles from hoses and seals
- Dirt due to assembly and maintenance
- Mechanical debris
- Chemical ageing of the hydraulic fluid

#### **DAMAGE**

**New hydraulic fluid from the manufacturer may not have the required purity.**

Damage to the product is possible.

- ▶ Filter new hydraulic fluid to a high quality when filling.
- ▶ Do not mix hydraulic fluids. Always use hydraulic fluid that is from the same manufacturer, of the same type, and with the same viscosity properties.

For smooth operation, pay attention to the cleanliness level of the hydraulic fluid (cleanliness level [see Chapter 3, "Parameters"](#)).

Additionally applicable document: [D 5488/1](#) Oil recommendations

## 5.4 Maintenance information

Check regularly (at least once a year) by visual inspection whether the hydraulic connections are damaged. If external leakages are found, shut down and repair the system.

Clean the surface of the device regularly (at least once a year) (dust deposits and dirt).

## References

### Additional versions

- Connection blocks for dual-circuit pump types AN, AL, NA: D 6905 A/2
- Connection blocks for single-circuit pump types AB, AL: D 6905 AB
- Connection block type C 5 and C 6: D 6905 C

### Application

- Compact hydraulic power pack type HC and HCW: D 7900
- Compact hydraulic power pack type MP: D 7200 H
- Compact pump unit type HK, HKF, HKL: D 7600 ff
- Hydraulic power pack type LP: D 7280 H
- Compact hydraulic power pack type INKA: D 8132-1
- Compact hydraulic power pack type KA and KAW size 2: D 8010
- Compact hydraulic power packs type KA and KAW size 4: D 8010-4

