

Pressure relief valve, pilot-operated

Type ZDB and Z2DB



H7746

- ▶ Size 6
- ▶ Component series 4X
- ▶ Maximum operating pressure 315 bar
- ▶ Maximum flow 60 l/min

Features

- ▶ Sandwich plate valve
- ▶ Porting pattern according to ISO 4401-03-02-0-05 (with or without locating hole)
- ▶ 4 pressure ratings
- ▶ 5 directions of action, optional
- ▶ 1 or 2 pressure valve cartridges
- ▶ 4 adjustment types for pressure adjustment, optionally
 - Rotary knob
 - Bushing with hexagon and protective cap
 - Lockable rotary knob with scale
 - Rotary knob with scale
- ▶ Corrosion-protected design

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Ordering code

01	02	03	04	05	06	07	08	09	10	11	12
Z		DB	6			-	4X	/		V	*

01	Sandwich plate	Z
02	1 pressure valve cartridge (only with version "VA", "VB" and "VP")	no code
	2 pressure valve cartridges (only with version "VC" and "VD")	2
03	Pressure relief valve	DB
04	Size 6	6

Relief function from – to:

05	A – T	VA
	P – T	VP
	B – T	VB
	A – T and B – T	VC
	A – B and B – A	VD

Adjustment type for pressure adjustment

06	Rotary knob	1
	Bushing with hexagon and protective cap	2
	Lockable rotary knob with scale	3 ¹⁾
	Rotary knob with scale	7
07	Component series 40 ... 49 (40 ... 49: unchanged installation and mounting dimensions)	4X

Pressure rating

08	Set pressure up to 50 bar	50
	Set pressure up to 100 bar	100
	Set pressure up to 200 bar	200
	Set pressure up to 315 bar	315

Corrosion resistance

09	None	no code
	Improved corrosion protection (240 h salt spray test according to EN ISO 9227)	J3 ²⁾
	High corrosion protection (720 h salt spray test according to EN ISO 9227)	J5 ²⁾

Seal material

10	NBR seals	no code
	FKM seals	V
	Observe compatibility of seals with hydraulic fluid used. (Other seals upon request)	
11	Without locating hole	no code
	With locating hole	/60 ³⁾
12	Further details in the plain text	*

¹⁾ H-key with material no. **R900008158** is included in the scope of delivery

²⁾ Only with adjustment type "2", however without protective cap

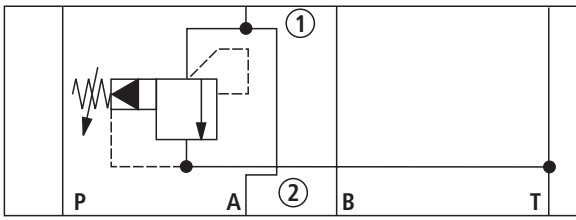
³⁾ Locking pin ISO 8752-3x8-St, material no. **R900005694** (separate order)



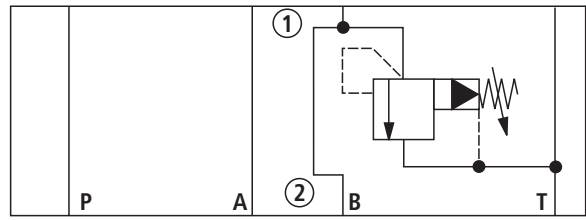
Notice: Preferred types and standard units are contained in the EPS (standard price list).

Symbols (1) = component side, (2) = plate side

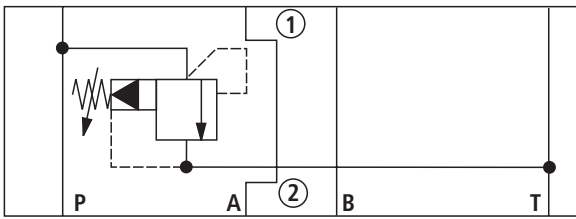
Type ZDB 6 **VA**...



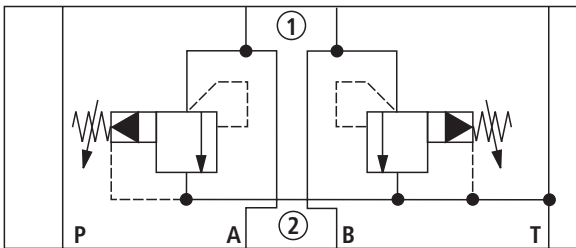
Type ZDB 6 **VB**...



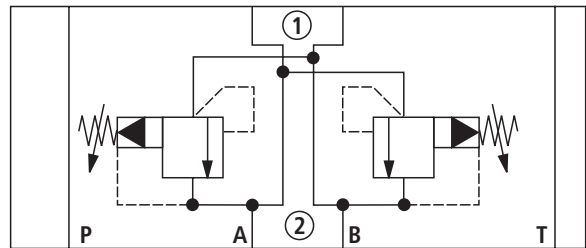
Type ZDB 6 **VP**...



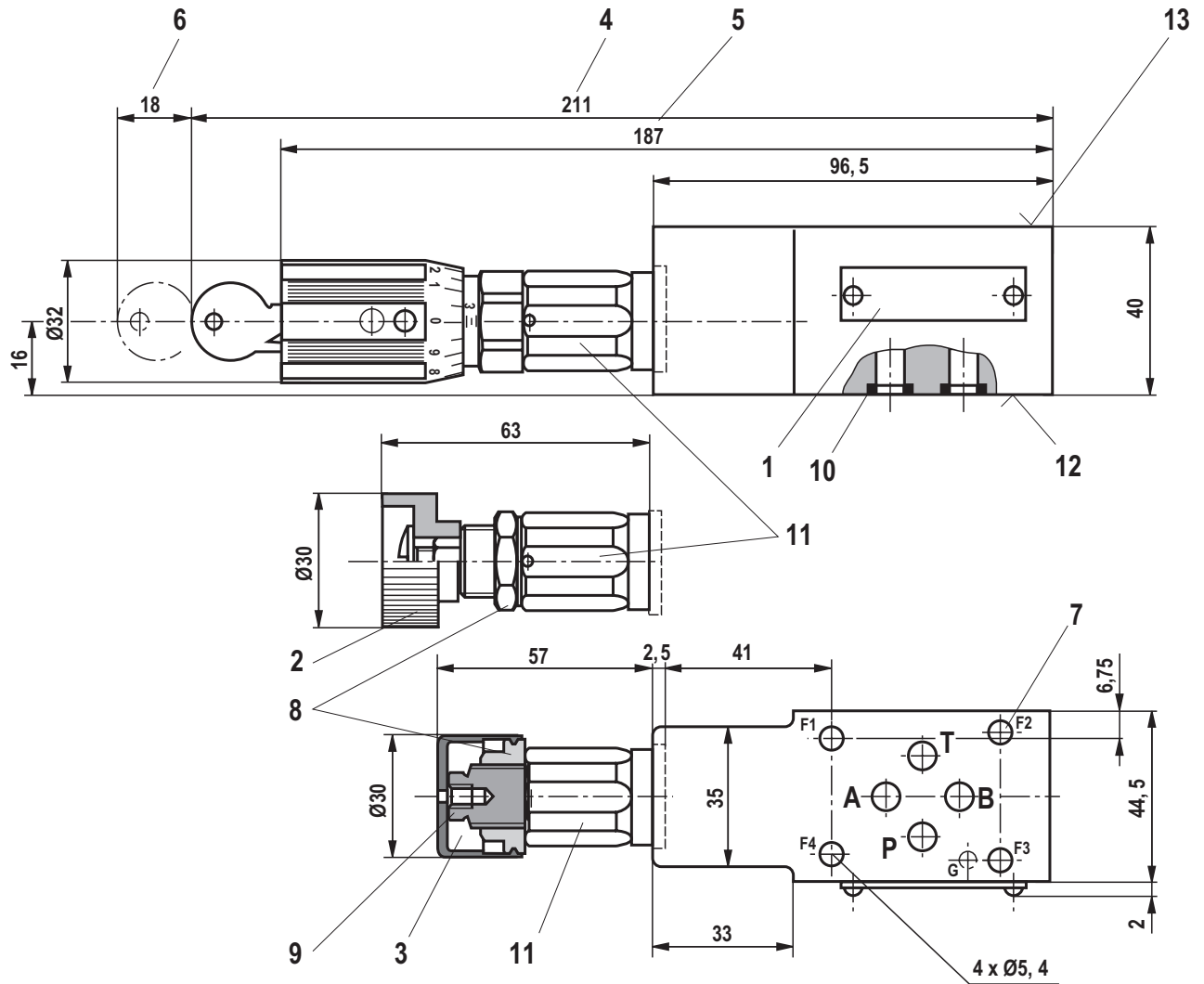
Type Z2DB 6 **VC**...



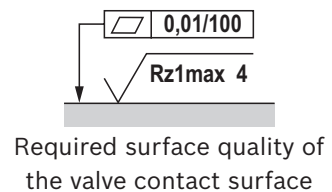
Type Z2DB 6 **VD**...



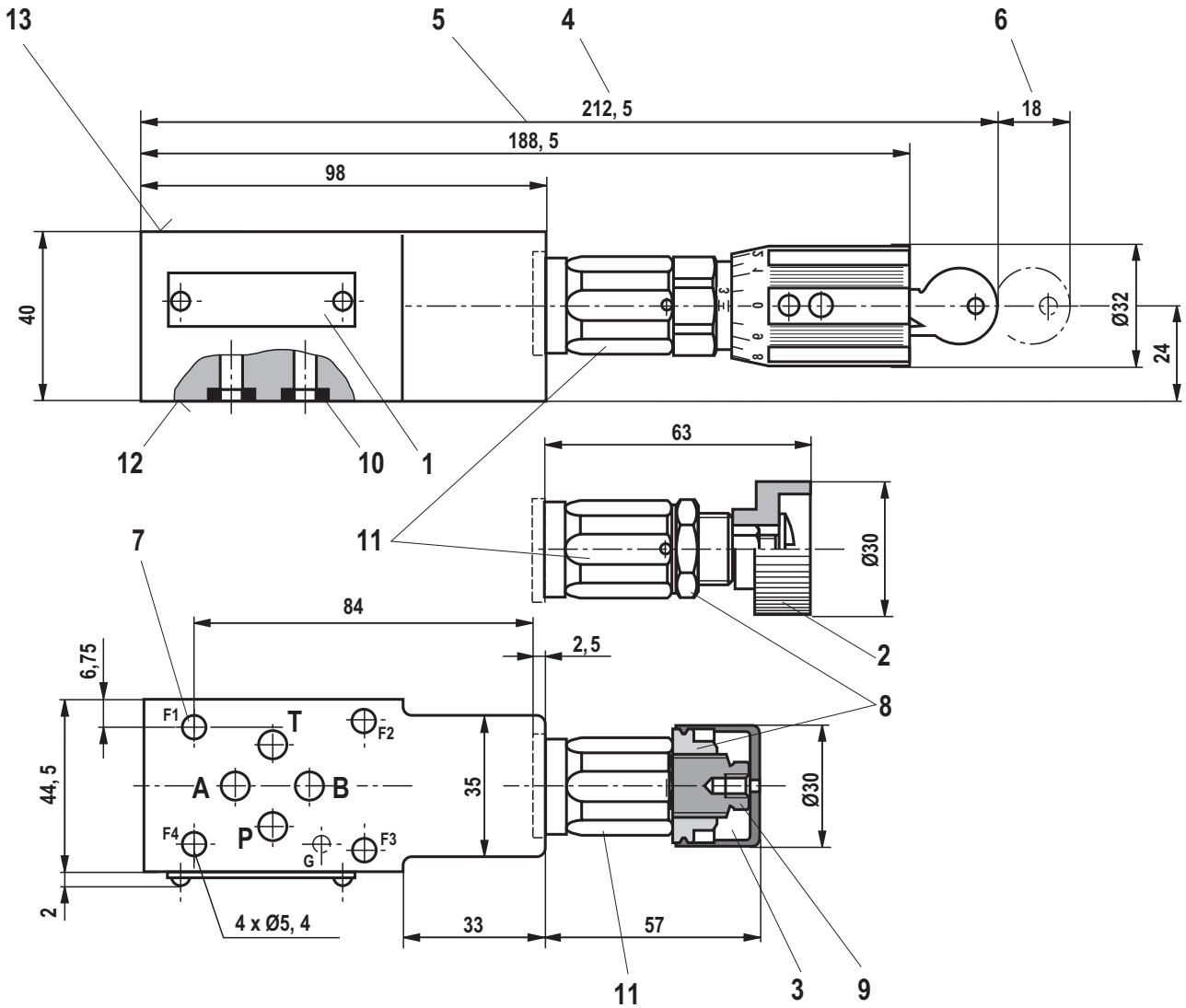
Dimensions: Type ZDB 6 VA...
(dimensions in mm)



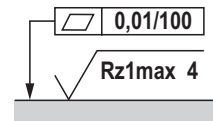
- 1 Name plate
- 2 Adjustment type "1"
- 3 Adjustment type "2" (with version "J3" and "J5" without protective cap)
- 4 Adjustment type "3"
- 5 Adjustment type "7"
- 6 Dimensions required to remove the key
- 7 Valve mounting bores
- 8 Lock nut SW24, tightening torque $M_A = 10^{+5}$ Nm
- 9 Hexagon SW10
- 10 Identical seal rings for ports A, B, P, T (plate side)
- 11 Hexagon SW24, tightening torque $M_A = 50$ Nm
- 12 plate side – porting pattern according to DIN 24340 form A (**without** locating hole), or ISO 4401-03-02-0-05 (**with** locating hole Ø3 x 5 mm deep for locking pin ISO 8752-3x8-St, material no. **R900005694**, separate order)
- 13 component side – porting pattern according to DIN 24340 form A (**without** locating hole), or ISO 4401-03-02-0-95 (**with** locating hole Ø4 x 4 mm deep)



Dimensions: Type ZDB 6 **VB...** and type ZDB 6 **VP...**
(dimensions in mm)

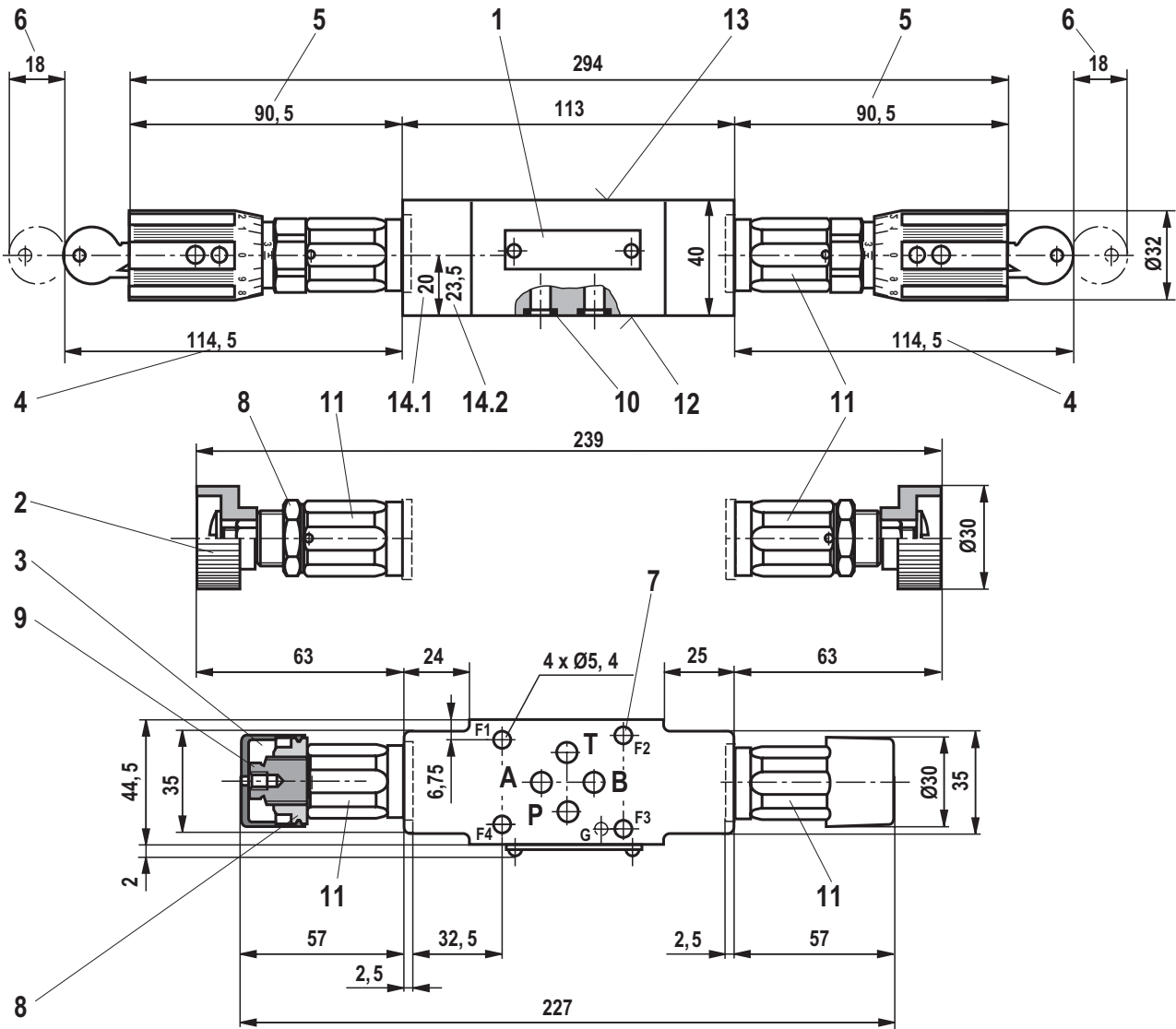


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- 13 component side – porting pattern according to DIN 24340 form A (**without** locating hole), or ISO 4401-03-02-0-95 (**with** locating hole $\varnothing 4 \times 4$ mm deep)

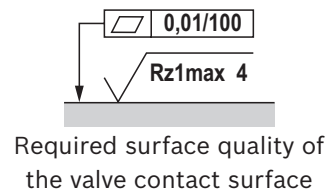


Required surface quality of the valve contact surface

Dimensions: Type Z2DB 6 VC... and type Z2DB 6 VD...
(dimensions in mm)



- | | |
|---|--|
| <ul style="list-style-type: none"> 1 Name plate 2 Adjustment type "1" 3 Adjustment type "2" (with version "J3" and "J5" without protective cap) 4 Adjustment type "3" 5 Adjustment type "7" 6 Dimensions required to remove the key 7 Valve mounting bores 8 Lock nut SW24, tightening torque $M_A = 10^{+5}$ Nm 9 Hexagon SW10 10 Identical seal rings for ports A, B, P, T (plate side) 11 Hexagon SW24, tightening torque $M_A = 50$ Nm 12 plate side – porting pattern according to DIN 24340 form A (without locating hole), or ISO 4401-03-02-0-05 (with locating hole $\varnothing 3 \times 5$ mm deep for locking pin ISO 8752-3x8-St, material no. R900005694, separate order) | <ul style="list-style-type: none"> 13 component side – porting pattern according to DIN 24340 form A (without locating hole), or ISO 4401-03-02-0-95 (with locating hole $\varnothing 4 \times 4$ mm deep) 14.1 Version "VC" 14.2 Version "VD" |
|---|--|



Dimensions

Valve mounting screws (separate order)

► Version "J3"

4 hexagon socket head cap screws

ISO 4762 - M5 - 10.9-CM-Fe-ZnNi-5-Cn-T0-H-B

friction coefficient $\mu_{\text{total}} = 0.09 \dots 0.14$;

tightening torque $M_A = 7.4 \text{ Nm} \pm 10 \%$

► Version "J5"

4 hexagon socket head cap screws

ISO 4762 - M5 - 10.9-CM-Fe-ZnNi-8-Cn-T0-H-B

friction coefficient $\mu_{\text{total}} = 0.09 \dots 0.14$;

tightening torque $M_A = 7.4 \text{ Nm} \pm 10 \%$

► Without corrosion protection

4 hexagon socket head cap screws

ISO 4762 - M5 - 10.9

with friction coefficient $\mu_{\text{total}} = 0.12 \dots 0.17$;

tightening torque $M_A = 8.1 \text{ Nm} \pm 10 \%$