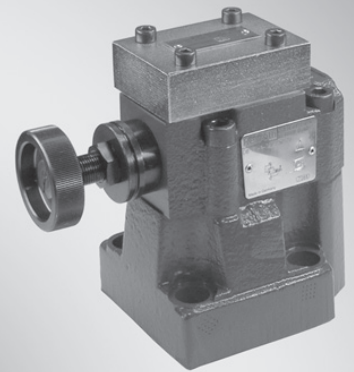


# Pressure relief valve, pilot operated

**RE 25802-XC-B2/01.07****Type DB...5X/...XC**

Nominal sizes (NG) 10, 20, 30  
 Unit series 5X  
 Maximum operating pressure 350 bar



TB0107

**ATEX units**  
**For potentially explosive atmospheres**

## Part II Technical Data Sheet



### Information on explosion protection:

Range of application in accordance with the  
 Explosion Protection Directive and type of protection

- Range of application as per Directive  
 RL 94/9/EG IM2, II2G, II2D
- Type of protection of valve: c (EN 13463-5:2001-01)

## What you need to know about these Operating Instructions

These Operating Instructions apply to the explosion-proof version of Rexroth valves,  
 and consist of the following three parts:

- |          |  |   |                            |
|----------|--|---|----------------------------|
| Part I   | General Information RE 07010-X-B1            | } | <b>Mat. No. R901155669</b> |
| Part II  | Technical Data Sheet RE 25802-XC-B2          |   |                            |
| Part III | Product-specific Instructions RE 25802-XC-B3 |   |                            |

You can find further information on the correct handling of Rexroth hydraulic products in our publication  
 "General Product Information for Hydraulic Products", RE 07008.

## Ordering data and scope of delivery

DB		1	5X/			XC	V
Pilot operated pressure relief valve							V =
Nominal size (NG) = 10, 20, 30							FKM seals <b>Note:</b> Take compatibility of seals and pressure fluid into account!
Type of connection							XC =
Valve for subplate mounting = -							Valve in explosion-proof design, see information on explosion protection, page 5 for details
Valve for threaded connection = G							No code =
Type of adjustment							Standard version
Rotary knob = 1							U =
With main piston Ø24 mm (NG10, NG20) = -							Valve for minimum opening pressure (only possible up to pressure stage 315 bar)
With main piston Ø28 mm (NG30 only) = N							<b>Control oil flow</b>
Unit series 50 to 59 = 5X (50 to 59: installation and connection dimensions unchanged)							- = Internal control oil supply and return
Set pressure up to 50 bar = 50							X = External control oil supply, internal return
Set pressure up to 100 bar = 100							Y = Internal control oil supply, external return
Set pressure up to 200 bar = 200							XY = External control oil supply and return
Set pressure up to 315 bar = 315							
Set pressure up to 350 bar = 350							

### Included in scope of delivery:

Valve operating instructions

## Technical data

### General

Nominal size			NG10	NG20	NG30	
Installation position			Optional			
Ambient temperature range	°C		-20...+80			
Storage temperature range	°C		-20...+80			
Weight	Subplate mounting	- DB...	kg	2.6	3.5	4.4
	Threaded connection	- DB...G	kg	5.3	5.1	4.8
Surface protection		Standard	Paint, layer thickness max. 100 µm			

### Hydraulic

Maximum working pressure	- Ports P, X	bar	350		
	- Port T	bar	315		
Maximum counter pressure	- Port Y (DB)	bar	315		
	- Ports Y, T (with spool-type directional control valve)	bar	See Technical Data Sheets listed in table on page 11		
Maximum set pressure <sup>1)</sup>		bar	50; 100; 200; 315; 350		
Minimum set pressure <sup>1)</sup>			Dependent on flow rate (see characteristic curves on page 6)		
Maximum flow rate	- Subplate mounting	l/min	250	500	650
	- Threaded connection	l/min	250	500	650
Pressure fluid			Mineral oil (HL, HLP) to DIN 51524, rapidly biodegradable pressure fluids to VDMA 24568 (also see RE 90221), HETG (rapeseed oil); HEPG (polyglycols); HEES (synthetic ester) Ignition temperature > 180 °C		
Pressure fluid temperature range	°C		-20...+80		
Viscosity range	mm <sup>2</sup> /s		10...800		
Maximum permissible degree of contamination of pressure fluid Purity class to ISO 4406 (c)			Class 20/18/15 <sup>2)</sup>		

## Information on explosion protection

Range of application as per Directive RL 94/9/EG		IM2, II2G	II2D
Type of protection of valve		c (EN 13463-5:2001-01)	c (EN 13463-5:2001-01)
Maximum surface temperature <sup>3)</sup>	°C	-	115
Temperature class		T4	-
Degree of protection		-	IP 65

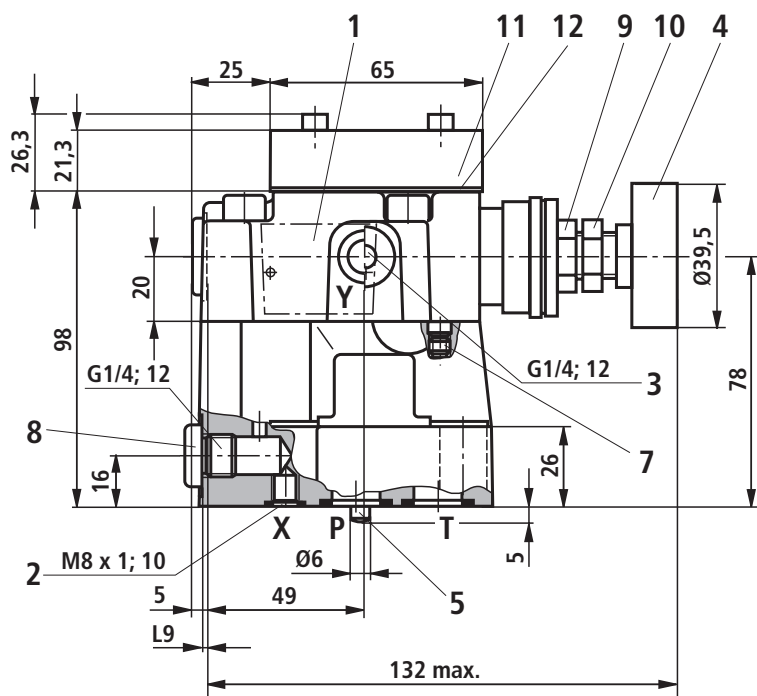
<sup>1)</sup> In order to prevent the maximum permitted response pressure from being exceeded in the system, it must be checked with a suitable measuring instrument during the setting process.

<sup>2)</sup> The purity classes stated for the components must be complied with in hydraulic systems. Effective filtration prevents problems and also extends the service life of components. For a selection of filters, see Technical Data Sheets RE 50070, RE 50076 and RE 5008.

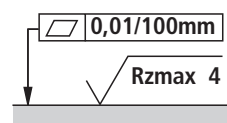
<sup>3)</sup> As high surface temperatures may occur, European standards EN 563 and EN 982 on the prevention of accidental contact must be observed.

## Unit dimensions: Subplate mounting (nominal dimensions in mm)

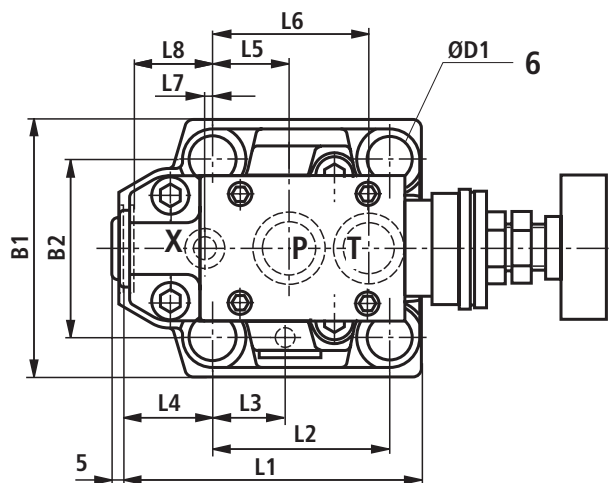
### Type DB.-...XC...



See page 10 for legend to item numbers



Required surface quality of mating component



Typ	L1	L2	L3	L4	L5	L6	L7	L8	L9	B1	B2	ØD1
DB 10	91	53.8	22.1	27.5	22.1	47.5	0	25.5	2	78	53.8	14
DB 20	116	66.7	33.4	33.3	11.1	55.6	23.8	22.8	10.5	100	70	18
DB 30	147.5	88.9	44.5	41	12.7	76.2	31.8	20	21	115	82.6	20