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Issue: 01.01See Section 16 for applicable
Preferred/Spotlight part numbers
and unit price.**Pressure relief valve, direct operated
Model DBD**

Sizes 6 to 30, Series 1X

Maximum operating pressure 630 bar (9150 PSI)

Maximum flow 330 L/min (87 GPM)

- Direct operated, fast response pressure relief valve
- Optional mounting styles
 - Screw-in cartridge valve
 - Cartridge in threaded housing
- Multiple pressure adjustment options



Model DBD A..K 1X/..

- Multiple pressure adjustment ranges available for maximum resolution

Ordering code

DBD							1X/	/	*
Pressure relief valve, direct operated									
Type of adjustment	Size	6	10	15	20	25	30		
Screw adjustment with locknut and protective cap		●	●	●	●	●	●	= S	
Handknob		●	●	●	●	—	—	= H	
Size	= 6	= 10	= 15	= 20	= 25	= 30	e.g.		
SAE	-4;	-8;	-12;	-16;	-20;	-24;			
	7/16-20	3/4-16	1 1/16-12	1 5/16-12	1 5/8-12	1 7/8-12	= 10		
Type of connection	6	10	15	20	25	30			
for block mounting (cartridge)	●	●	—	●	—	●	= K		
for threaded connections	●	●	●	●	●	●	= G		
Series 10 to 19, (10 to 19, externally interchangeable)							= 1X		
Ordering code for pressure range PSI									
25 bar (365 PSI)	●	●	—	—	—	●	= 25		
50 bar (725 PSI)	●	●	●	●	—	●	= 50		
100 bar (1450 PSI)	●	●	—	●	●	●	= 100		
200 bar (2900 PSI)	●	●	●	●	●	●	= 200		
315 bar (4600 PSI)	●	●	—	●	●	●	= 315		
400 bar (5800 PSI)	●	●	—	●	—	—	= 400		
630 bar (9150 PSI)	—	—	—	—	—	—	= 630		
Thread options – Model "G" only									
SAE threaded housing							= 12		
NBR seals, suitable for petroleum oils (HM, HL, HLP)							= no code		
Further details to be written in clear text									

Technical data

Operating pressure range		Size 6	Size 10	Size 15 and 20	Size 25 and 30
Inlet "P"	bar (PSI)	... 400 (5800)	... 630 (9140)	... 400 (5800)	... 315 (4600)
Outlet "T"	bar (PSI)	... 315 (4600)	... 315 (4600)	... 315 (4600)	... 315 (4600)

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Issue: 06.06

**Pressure relief valve, directly operated
Model DB 6 D**

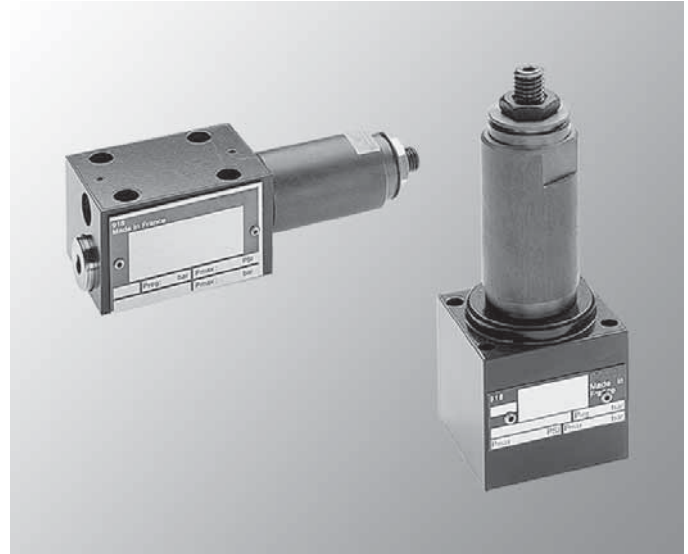
Nominal size 6

Series 1X

Max. working pressure up to 315 bar (4500 PSI)

Max. flow 60 l/min (15.85 GPM)

- For subplate mounting
- 3 pressure setting elements, choice of:
 - Sleeve with hexagon socket
 - Rotary knob, lockable, with scale
 - Rotary knob with scale



Model DB 6 D

Ordering code

DB 6 D W - 1X / V *									
Pressure relief valve	= DB								= Further information in plain text
Nominal size 6	= 6								No code = horizontal adjustment
Directly operated	= D								W65 = vertical adjustment
Pressure relief in P-duct	= P								V = FPM seals
Pressure relief in P and B-ducts	= PB								(other seals available on request)
Mounting hole configuration to ISO 6264	= W								Note
Setting elements									Take compatibility of seals and pressure fluid into account!
Sleeve with hexagon socket									
Rotary knob, lockable, with scale ¹⁾									
Rotary knob with scale									
¹⁾ 2H key included in scope of delivery									
									180 = max. setting pressure = 80 bar (1160 PSI)
									160 = max. setting pressure = 160 bar (2320 PSI)
									315 = max. setting pressure = 315 bar (4500 PSI)
									1X = Unit series 10 to 19
									(10 to 19: installation and connection dimensions unchanged)

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Technical data**General**

Valve function			Pressure relief valve, directly operated
Type of mounting			Subplate, mounting hole configuration NG6, ISO 6264
Mounting position			Optional
Ambient temperature range		°C (°F)	–25 to +50 (–13 to +122)
Weight	Horizontal	kg (lbs.)	1.4 (3.09)
	Vertical	kg (lbs.)	1.1 (2.42)

Hydraulic

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), other pressure fluids available on request
Maximum permissible degree of contamination of pressure fluid Purity class to ISO 4406 (c)			Class 20/18/15 ¹⁾
Pressure fluid temperature range		°C (°F)	–25 to +80 (–13 to +176)
Seals			FPM (Viton® Dupont)
Viscosity range		mm ² /s (SUS)	10 to 500 (45 to 2320)
Max. setting pressure		bar (PSI)	80, 160 or 315 (1160, 2320 or 4500)
Max. working pressure		bar (PSI)	315 (4500)
Max. flow rate		l/min (GPM)	60 (15.85)

¹⁾ 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 catalog sections RE 50070, RE 50076 and RE 50081.

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**Pressure relief valve, directly operated
Model ZDBY D / Z2DBY D**

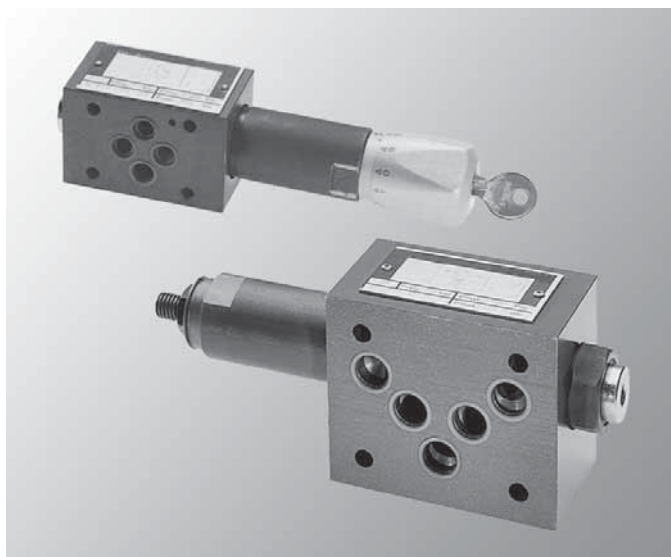
Nominal size 6 and 10

Series 1X

Max. working pressure up to 315 bar (4500 PSI)

Max. flow 60 and 120 l/min (15.85 and 31.70 GPM)

- Modular valve
- Mounting hole configuration to ISO 4401
- 3 pressure stages
- 5 effective directions
- With 1 or 2 pressure valve cartridges
- 2 setting elements:
 - Sleeve with hexagon socket
 - Rotary knob, lockable, with scale
- Subplates as per catalog sections RE 45053 (NG6) and RE 45055 (NG10) (order separately)



Model ZDBY D / Z2DBY D

Ordering code

Z	DB	Y	D	1X	V	*
Modular valve = Z						Further information in plain text
With 2 pressure valve cartridges (only enter for versions "DC" and "DD") = 2						No code = mounting hole config. ISO 4401, without locating bore
Pressure relief valve = DB						60 = mounting hole config. ISO 4401 with locating bore
Mounting hole configuration to ISO 4401 = Y						V = FPM seals (other seals available on request)
Nominal size 6 = 60						Note
Nominal size 10 = 10						Take compatibility of seals and pressure fluid into account!
Directly operated = D						max. setting pressure
Injection						
P to T = P						180 = setting pressure range up to 80 bar (1160 PSI)
A to T = A						160 = setting pressure range up to 160 bar (2320 PSI)
B to T = B						315 = setting pressure range up to 315 bar (4500 PSI)
A to T and B to T = C						
A to B and B to A = D						
Setting element						1X = Unit series 10 to 19 (10 to 19: installation and connection dimensions unchanged)
Sleeve with hexagon socket = 2						
Rotary knob, lockable, with scale ¹⁾ = 3						

¹⁾ 2H key is included in scope of delivery

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Technical data**Size 6 – General**

Valve function			Pressure reducing valve, directly operated
Type of mounting			Intermediate plate NG6, ISO 4401-03-04-0-94
Installation position			Optional
Weight	Version 2	kg (lbs.)	1.4 (3.09)
	Version 3	kg (lbs.)	1.8 (3.97)

Hydraulic

Pressure fluid		Mineral oil (HL, HLP) to DIN 51524. Rapidly biodegradable pressure fluids to VDMA 24568 (see also RE 90221), HETG (rapeseed oil), HEPG (polyglycols), HEES (synthetic ester), other pressure fluids available on request
Maximum permissible degree of contamination of pressure fluid. Purity class to ISO 4406 (c)		Class 20/18/15 ¹⁾
Pressure fluid temperature range		°C (°F) –20 to +80 (–4 to +176)
Seals		FPM (Viton® Dupont)
Viscosity range		mm²/s (SUS) 10 to 500 (45 to 2320)
Max. setting pressure		bar (PSI) 80, 160 or 315 (1160, 2320 or 4500)
Max. working pressure		bar (PSI) 315 (4500)
Max. flow rate		l/min (GPM) 60 (15.85)

¹⁾ 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 catalog sections RE 50070, RE 50076 and RE 50081.

Size 10 – General

Valve function			Pressure reducing valve, directly operated
Type of mounting			Intermediate plate NG10, ISO 4401-05-04-0-94
Installation position			Optional
Weight	Version 2	kg (lbs.)	2.9 (6.39)
	Version 3	kg (lbs.)	3.5 (7.71)

Hydraulic

Pressure fluid		Mineral oil (HL, HLP) to DIN 51524. Rapidly biodegradable pressure fluids to VDMA 24568 (see also RE 90221), HETG (rapeseed oil), HEPG (polyglycols), HEES (synthetic ester), other pressure fluids available on request	
Maximum permissible degree of contamination of pressure fluid. Purity class to ISO 4406 (c)		Class 20/18/15 ¹⁾	
Pressure fluid temperature range		°C (°F) –20 to +80 (–4 to +176)	
Seals		FPM (Viton® Dupont)	
Viscosity range		mm²/s (SUS) 10 to 500 (45 to 2320)	
Max. setting pressure		bar (PSI) 80 (1160)	160 or 315 (2320 or 4500)
Max. working pressure		bar (PSI) 315 (4500)	315 (4500)
Max. flow rate		l/min (GPM) 90 (23.78)	120 (31.70)

¹⁾ 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 catalog sections RE 50070, RE 50076 and RE 50081.

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**Pressure relief valve
Model (Z)DBT/DZT**

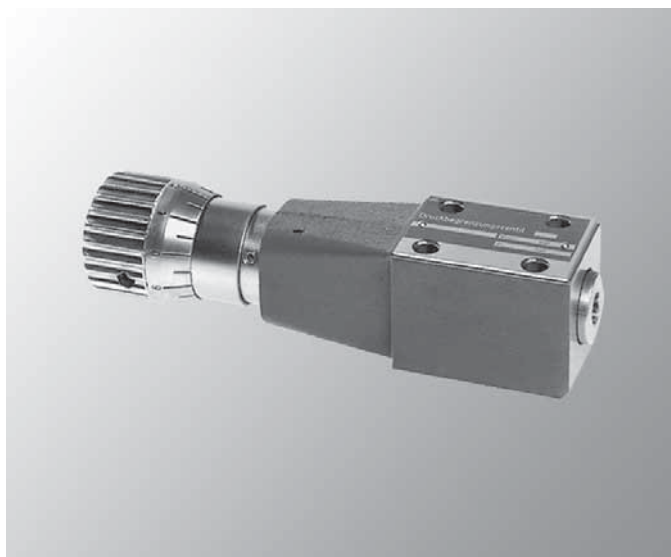
Nominal size 6

Series 1X

Max. working pressure up to 315 bar (4500 PSI)

Max. flow 3 l/min (0.79 GPM)

- Directly operated valves for limiting the system pressure
- Used as a pilot valve
- For subplate mounting:
Mounting hole configuration to ISO 4401-03-02-0-94
- Subplates as per catalog sections RE 45052
(order separately)



Model (Z)DBT / DZT

Ordering code

		1X /	
Subplate mounting			No code = NBR seals (other seals available on request)
Pressure relief function	= DBT		
Pressure sequence function	= DZT		
Intermediate plate			Note Take compatibility of seals and pressure fluid into account!
Pressure relief function	= ZDBT		
For installation in instrument panel	= G		180 = setting pressure range 3 to 80 bar (43 to 1160 PSI)
Mounting hole configuration to ISO 4401-03-02-0-94	= X		160 = setting pressure range 3 to 160 bar (43 to 2320 PSI)
Function in A-duct	= A		315 = setting pressure range 3 to 315 bar (43 to 4500 PSI)
Function in B-duct	= B		
Function in P-duct	= P		
Setting elements		1X =	Unit series 10 to 19 (10 to 19: installation and connection dimensions unchanged)
Handwheel and lock nut	= 1		
External square with lock nut and protective cap	= 2		
Rotary knob, lockable, with scale ¹⁾	= 3		
Rotary knob with scale	= 7		
External square and lock nut	= 8		

¹⁾ 2H key is included in scope of delivery