

The pressure relief valve series R consists of a manual adjustment pilot stage and a cartridge main stage.

The pressure relief valve series RS consists of a manual adjusted pilot stage with a directional valve for an electrically controlled vent function and a cartridge main part.

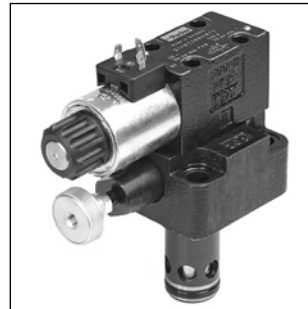
The R/RS\*E model codes embrace the pilot valves, covers and cartridges that are also offered as separate items. See combination examples for details.

**Features**

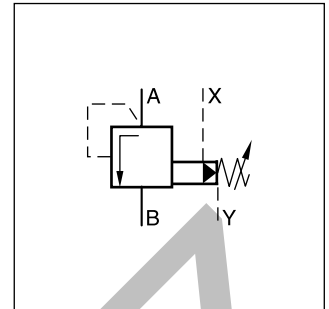
- Pilot operated with manual adjustment
- Cavity and mounting pattern according to ISO 7368
- 6 pressure stages
- 2 switching types (series RS\*E)
- 2 adjustment modes
  - Hand knob
  - Acorn nut with lead seal
- 6 sizes, NG16 to NG63

**Note**

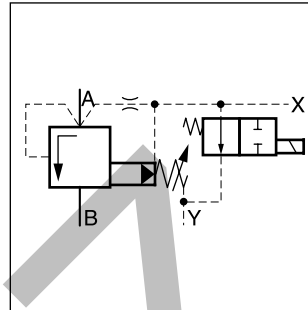
Port X only usable for remote control.



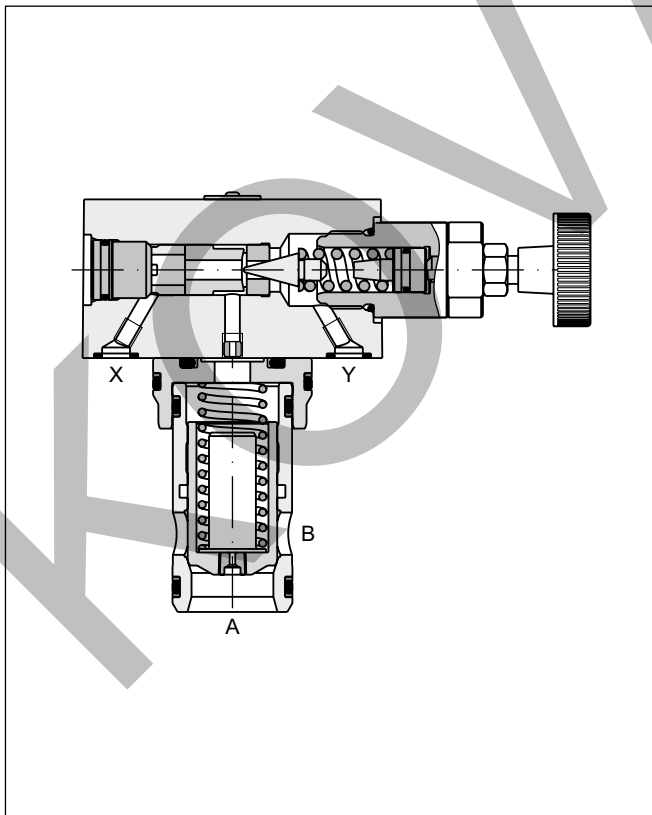
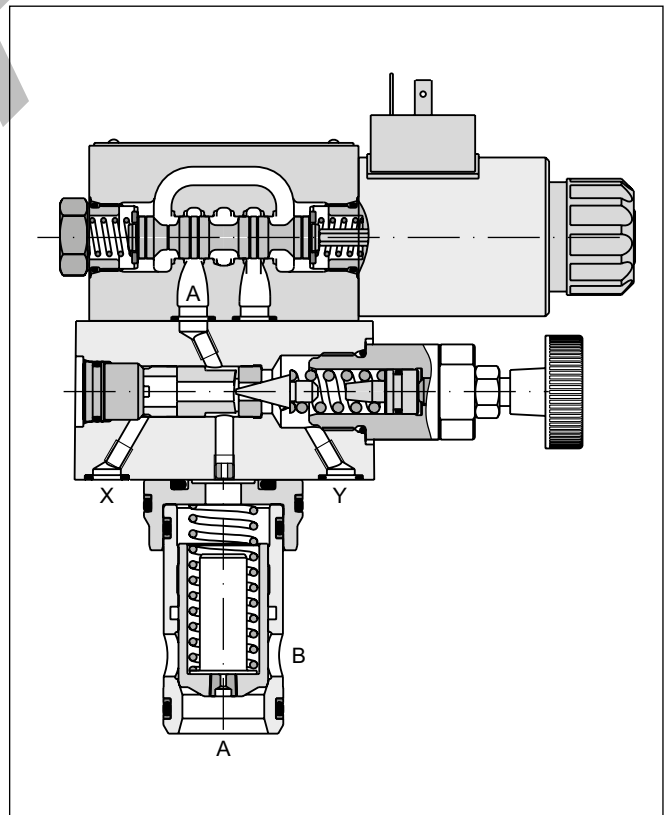
RS\*E



R\*E



RS\*E (simplified symbol)

**R25E****RS25E**

## R\*E

<b>R</b>		<b>E</b>			<b>1</b>	<b>S</b>				
Pressure relief valve	Nominal size	Slip-in mounting ISO 7368	Pressure stages	Adjustment	Pilot oil (pilot internal, drain external)	Poppet spring	Seal	Design series (not required for ordering)	Spool type	

Code	Nominal size
16	NG16
25	NG25
32	NG32
40	NG40
50	NG50
63	NG63

Code	Pressure stages
07	up to 70 bar
10	up to 105 bar
17	up to 175 bar
21	up to 210 bar
25	up to 250 bar
35	up to 350 bar

Code	Spool type
omit	Standard
S07	with poppet seals

Code	Seal
N	NBR
V	FPM

Code	Adjustment
S	Hand knob (standard)
A	Acorn nut with lead seal

## RS\*E

<b>RS</b>		<b>E</b>			<b>1</b>	<b>S</b>				<b>W</b>			
Pressure relief valve with elec. unloading	Nominal size	Slip-in mounting ISO 7368	Pressure stages	Adjustment	Pilot oil (pilot int., drain ext.)	Poppet spring	Seal	Switching type	Solenoid	Without plug	Options	Design series (not required for ordering)	Spool type

Code	Nominal size
16	NG16
25	NG25
32	NG32
40	NG40
50	NG50
63	NG63

Code	Pressure stages
07	up to 70 bar
10	up to 105 bar
17	up to 175 bar
21	up to 210 bar
25	up to 250 bar
35	up to 350 bar

Code	Adjustment
S	Hand knob (standard)
A	Acorn nut with lead seal

Code	Seal
N	NBR
V	FPM

Code	Switching type
1	Solenoid not activated, unpress. circulation
9	Solenoid activated, unpress. circulation

Code	Options
omit	Standard
S	with slow unloading

Code	Solenoid
K	12 V
J	24 V
U <sup>1)</sup>	98 V
G <sup>1)</sup>	205 V

Code	Spool type
omit	Standard
S07	with poppet seals

<sup>1)</sup> To be used in combination with rectifier plugs at 120 VAC / 230 VAC power supply.

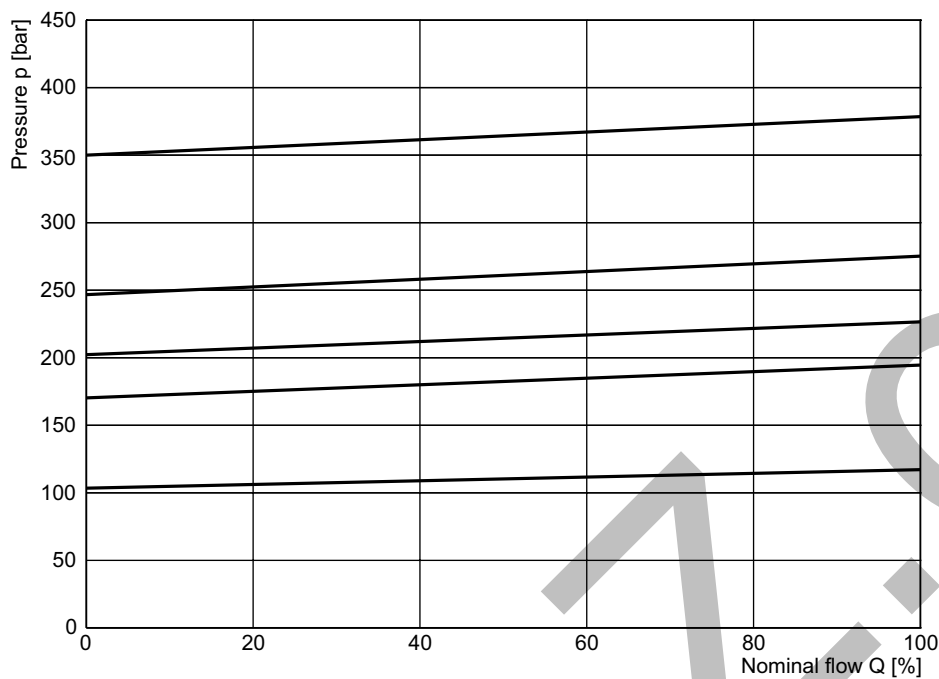
## R\*E

General							
Nominal size		NG16	NG25	NG32	NG40	NG50	NG63
Interface		Slip-in mounting acc. ISO 7368					
Mounting position		as desired, horizontal mounting preferred					
Ambient temperature	[°C]	-20...+60					
MTTF <sub>D</sub> value	[years]	75					
Weight	[kg]	2.2	3.5	4.9	8.0	13.7	22.8
Hydraulic							
Max. operating pressure	[bar]	Ports A and X up to 350, Ports B and Y 30					
Pressure stages	[bar]	75, 105, 175, 210, 250, 350					
Nominal flow	[l/min]	220	500	950	1400	2300	4000
Fluid		Hydraulic oil according to DIN 51524					
Fluid temperature	[°C]	-20...+70 (NBR: -25...+70)					
Viscosity, permitted	[cSt] / [mm²/s]	20...400					
recommended	[cSt] / [mm²/s]	30...80					
Filtration		ISO 4406; 18/16/13					

## RS\*E

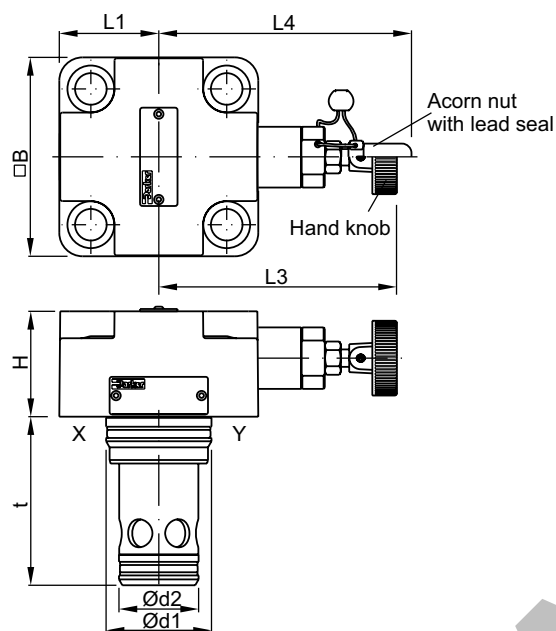
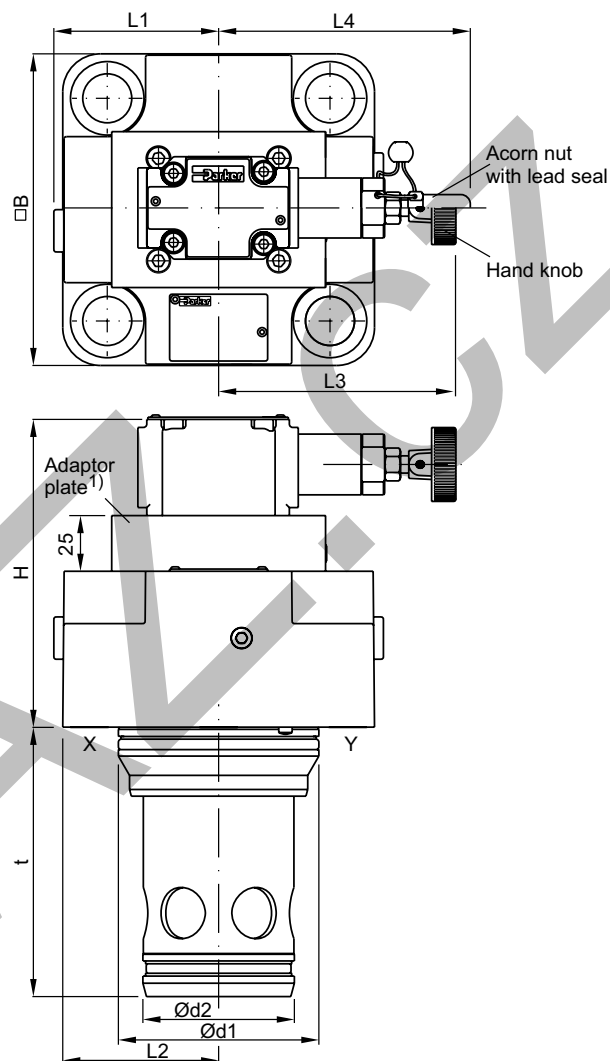
General								
Nominal size		NG16	NG25	NG32	NG40	NG50	NG63	
Interface		Slip-in mounting acc. ISO 7368						
Mounting position		as desired, horizontal mounting preferred						
Ambient temperature		[°C]	-20...+60					
MTTF <sub>D</sub> value		[years]	75					
Weight		[kg]	2.7	5.2	6.4	9.5	15.2	24.3
Hydraulic								
Max. operating pressure		[bar]	Ports A and X 350, ports B and Y 30					
Pressure stages		[bar]	75, 105, 175, 210, 250, 350					
Nominal flow		[l/min]	220	500	950	1400	2300	4000
Fluid			Hydraulic oil according to DIN 51524					
Fluid temperature		[°C]	-20...+70 (NBR: -25...+70)					
Viscosity, permitted		[cSt] / [mm²/s]	20...400					
recommended		[cSt] / [mm²/s]	30...80					
Filtration			ISO 4406; 18/16/13					
Electrical (solenoid)								
Duty ratio			100 % ED; CAUTION: coil temperature up to 150 °C possible					
Protection class			IP65 in accordance with EN 60529 (with correctly mounted plug-in connector)					
	Code		K	J	U	G		
Supply voltage		[V]	12 V =	24 V =	98 V =	205 V =		
Tolerance supply voltage		[%]	±10	±10	±10	±10		
Current consumption		[A]	2.72	1.29	0.33	0.13		
Power consumption		[W]	32.7	31	32.3	26.6		
Solenoid connection			Connector as per EN175301-803, solenoid identification as per ISO 9461					
Wiring min.		[mm²]	3 x 1.5 recommended					
Wiring length max.		[m]	50 recommended					

**p/Q performance curve <sup>1)</sup>**



All characteristic curves measured with HLP46 at 50 °C.

<sup>1)</sup> The performance curves are measured with external drain. For internal drain the tank pressure has to be added to curve.

**Dimensions****Pilot Operated Pressure Relief Valves  
Series R / RS\*E****Dimensions R\*E****NG16 - NG32****NG40 - NG63 <sup>1)</sup>**

Size	H	B	L1	L2	L3	L4	d1	d2	t
NG16	40	65 <sup>2)</sup>	32.5	—	114	117	32	25	56
NG25	47	85	42.5	—	102	105	45	34	71
NG32	50	102	51	—	95	97.5	60	45	85
NG40	106	125	62.5	66.5	106	110.5	75	55	105
NG50	141	140	70	74	106	110.5	90	68	121
NG63	155	180	90	94	106	110.5	120	90	155

NG	Kit	ISO 4762-12.9	[Nm]	Kit	
				NBR	FPM
16	BK414	4 x M8x40	31.8	SK-R16EN	SK-R16EV
25	BK391	4 x M12x50	108	SK-R25EN	SK-R25EV
32	BK415	4 x M16x55	264	SK-R32EN	SK-R32EV
40	BK416	4 x M20x70	517	SK-R40EN	SK-R40EV
50	BK417	4 x M20x75	517	SK-R50EN	SK-R50EV
63	BK418	4 x M30x100	1775	SK-R63EN	SK-R63EV

<sup>1)</sup> NG40 without adaptor plate.<sup>2)</sup> Width 79 mm.