

Parker Series REEW Proportional Pressure Relief Valve Service Manual

General Description

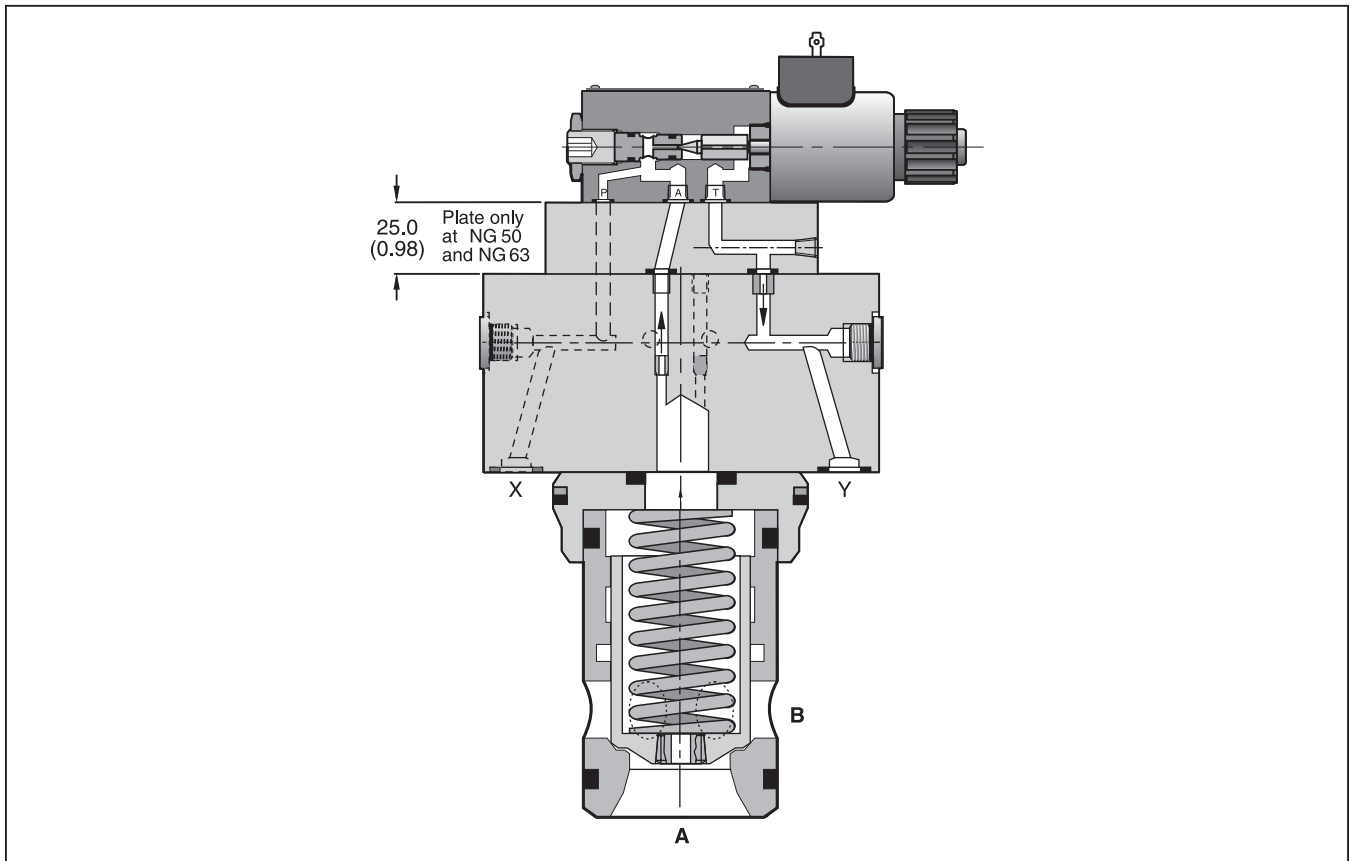
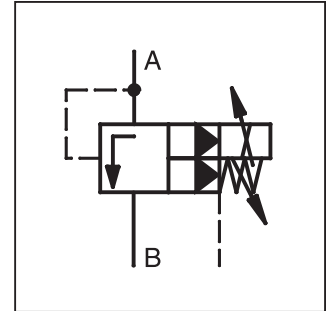
Series RE*E*W proportional pressure relief valves consist of a proportional pilot stage and a slip-in cartridge main stage. A mechanical maximum pressure stage is optionally available. For sizes NG25 and NG32 a screw-in cartridge is used; for sizes NG40, NG50 and NG63 an additional sandwich unit is used.

The RE*W model code embraces the pilot valves, covers and cartridges that are also offered as separate items. See combination examples for details.

In combination with the digital power amplifier PCD00A-400 the valve parameters can be saved, changed and duplicated.

Features

- Pilot operated with proportional solenoid.
- Continuous adjustment by proportional solenoid.
- Optional mechanical maximum pressure stage.
- Cavity and mounting pattern according to ISO 7368.
- 4 pressure ranges.
- 6 sizes, NG16 to NG63.



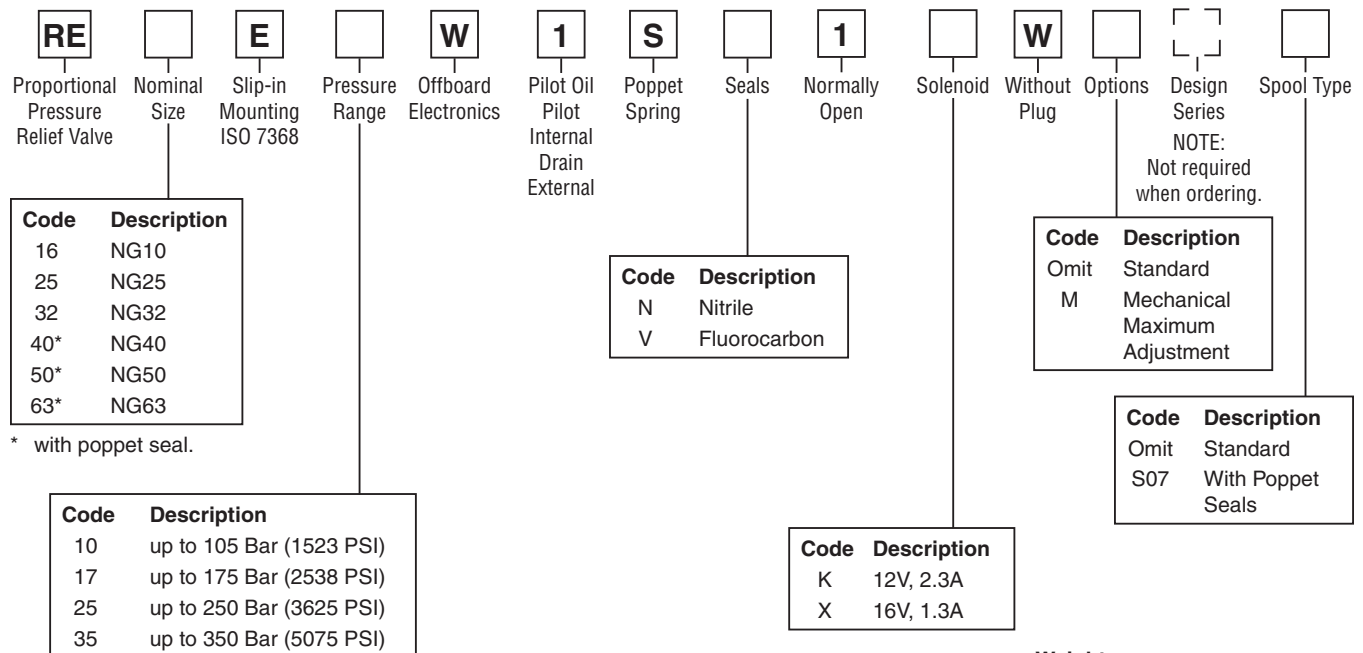
WARNING: This product can expose you to chemicals including Lead, Nickel (Metallic), or 1,3-Butadiene which are known to the State of California to cause cancer, and Lead or 1,3-Butadiene which is known to the State of California to cause birth defects and other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Cat3200_02.indd, ddp, 04/19

Specifications

General						
Size	NG16	NG25	NG32	NG40	NG50	NG63
Interface	Slip-in mounting according to ISO 7368					
Mounting Position	As desired, horizontal mounting preferred					
Ambient Temperature	-20 to +80°C (-4 to +176°F)					
Hydraulic						
Maximum Operating Pressure	Ports A and X: 350 Bar (5075 PSI), Ports B and Y: depressurized					
Pressure Range	105, 175, 250, 350 Bar (1523, 2538, 3625, 5075 PSI)					
Nominal Flow	220 LPM (58 GPM)	500 LPM (132 GPM)	950 LPM (251 GPM)	1400 LPM (370 GPM)	2300 LPM (609 GPM)	4000 LPM (1058 GPM)
Fluid	Hydraulic oil according to DIN 51524 ... 525					
Viscosity Recommended	30 to 50 cSt (mm ² /s)					
Viscosity Permitted	20 to 380 cSt (mm ² /s)					
Fluid Temperature	-20 to +70°C (-4 to +158°F)					
Filtration	ISO 4406 (1999); 18/16/13 (meet NAS 1638:7)					
Electrical (Proportional Solenoid)						
Duty Ratio	100% ED					
Protection Class	IP65 in accordance with EN 60529 (plugged and mounted)					
Nominal Voltage	12 VDC (maximum current 2.3 amps), 16 VDC (maximum current 1.3 amps)					
Coil Resistance	4 Ohm at 20°C (68°F)					
Solenoid Connection	Connector as per EN 175301-803					
Power Amplifier Recommended	PCD00A-400					

Ordering Information

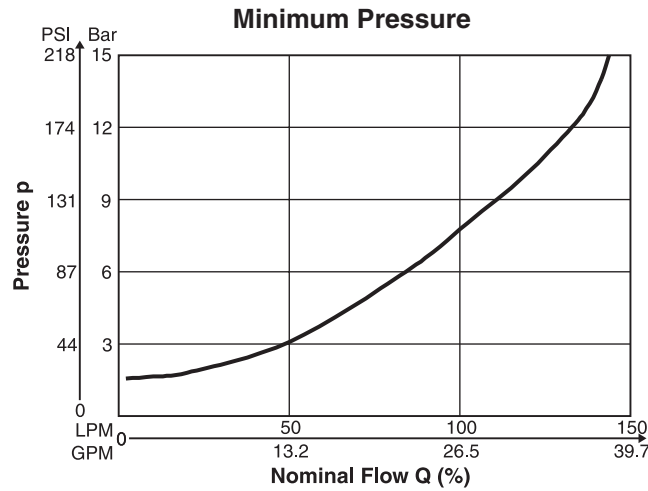
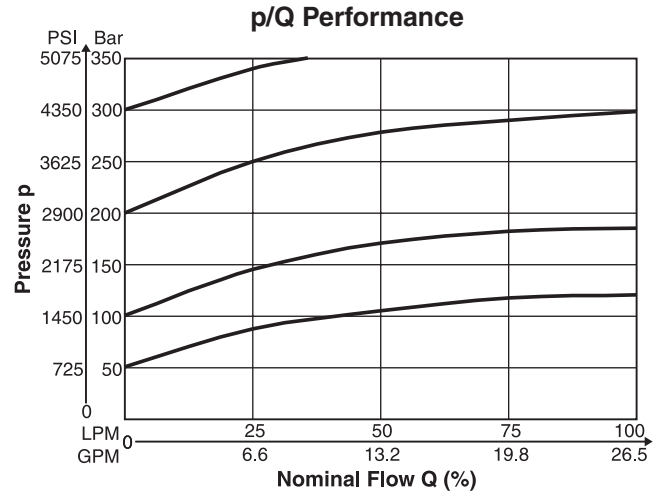
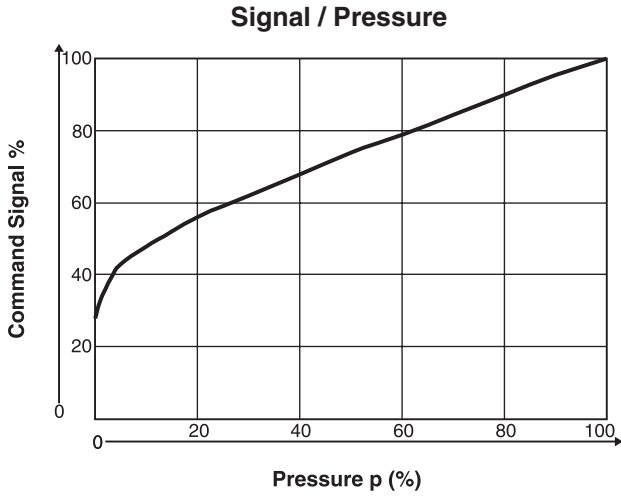


Weight:

RE16E*W	2.7 kg (6.0 lbs.)
RE25E*W	5.2 kg (11.5 lbs.)
RE32E*W	6.4 kg (14.1 lbs.)
RE40E*W	9.5 kg (20.9 lbs.)
RE50E*W	15.2 kg (33.5 lbs.)
RE63E*W	24.3 kg (53.6 lbs.)

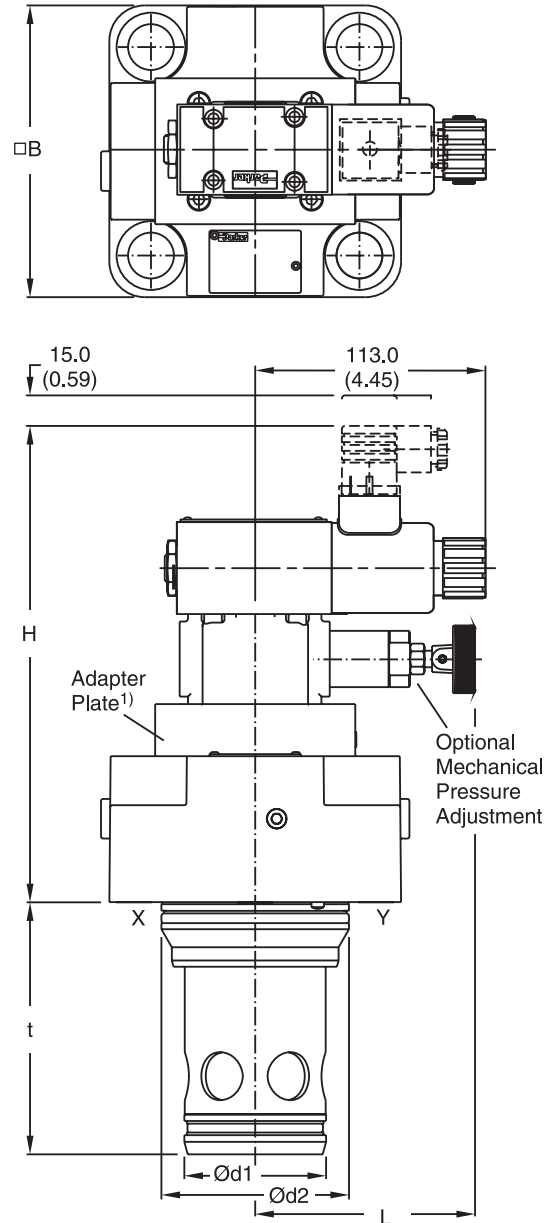
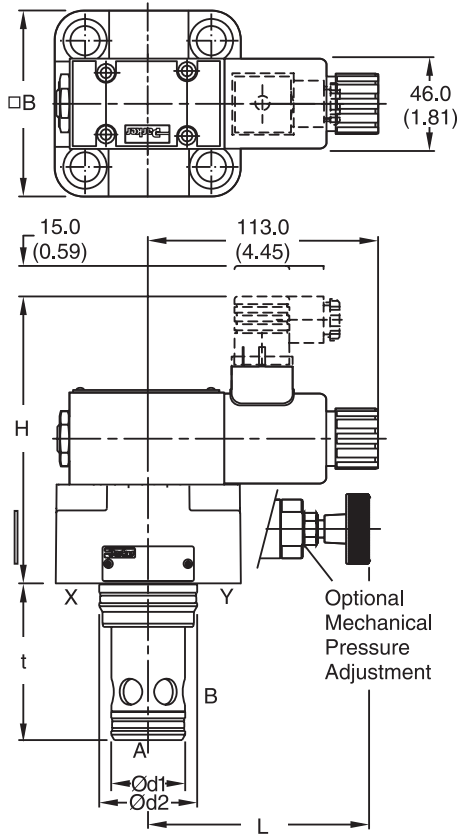
Performance Curves

The performance curves are measured with external drain. For internal drain the tank pressure has to be added to curve.



NG16 - NG32

NG40 - NG63



¹⁾ NG40 without Adapter Plate






Dimensions

Inch equivalents for millimeter dimensions are shown in (**)

Size	H	B	d1	d2	t
NG16	135.0 (5.31)	79.0 ¹⁾ (3.11)	32.0 (1.26)	25.0 (0.98)	56.0 (2.20)
NG25	140.0 (5.51)	85.0 (33.5)	45.0 (1.77)	34.0 (1.34)	72.0 (2.83)
NG32	145.0 (5.71)	102.0 (4.02)	60.0 (2.36)	45.0 (1.77)	85.0 (3.35)
NG40	137.0 (5.39) ²⁾ 179.0 (7.05) ²⁾	125.0 (4.92)	75.0 (2.95)	55.0 (2.17)	105.0 (4.13)
NG50	172.0 (6.77) ²⁾ 214.0 (8.43) ²⁾	140.0 (5.51)	90.0 (3.54)	68.0 (2.68)	122.0 (4.80)
NG63	187.0 (7.36) ²⁾ 229.0 (9.02) ²⁾	180.0 (7.09)	120.0 (4.72)	90.0 (3.54)	155.0 (6.10)

¹⁾ Width 65mm (2.56 in.)

²⁾ With mechanical maximum adjustment

NG	Bolt Kit - 		Kit 	
			Nitrile	Fluorcarbon
16	BK414 (BK84)	33 Nm (24.3 lb.-ft.)	SK-RE16E	SK-RE16EV
25	BK391 (BK77)	115 Nm (84.8 lb.-ft.)	SK-RE25E	SK-RE25EV
32	BK415 (BK85)	281 Nm (207.2 lb.-ft.)	SK-RE32E	SK-RE32EV
40	BK416 (BK86)	553 Nm (407.8 lb.-ft.)	SK-RE40E	SK-RE40EV
50	BK417 (BK87)	553 Nm (407.8 lb.-ft.)	SK-RE50E	SK-RE50EV
63	BK418 (BK88)	1910 Nm (1408.6 lb.-ft.)	SK-RE63E	SK-RE63EV