

The proportional pressure relief valves series RE*E*T with onboard electronics and a slip-in cartridge main stage is electronically based on the functionality of the digital amplifier PCD00.

The digital onboard electronics is situated in a robust metal housing and can be used in rough environments. The nominal values of the valves are factory set. Additionally the ProPxD software permits the editing of all parameters. The software is also used for the digital electronic modules. The cable for connection to a serial RS232C interface is available as accessory.

The valves are optionally available with a mechanical maximum pressure adjustment.

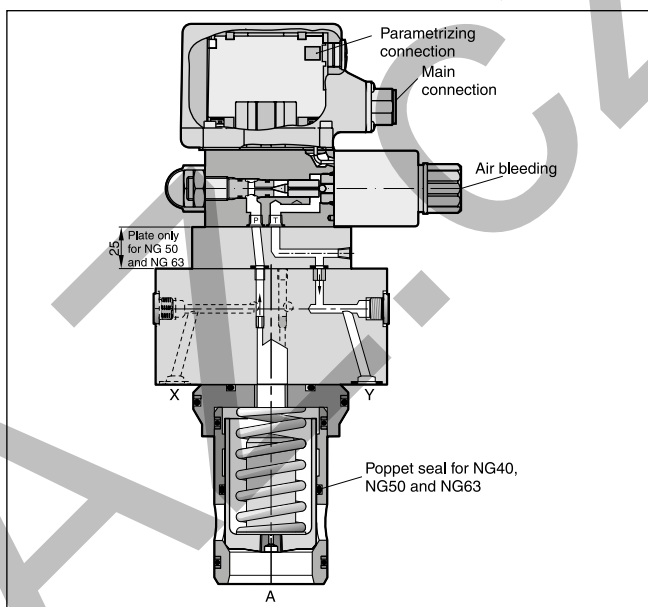
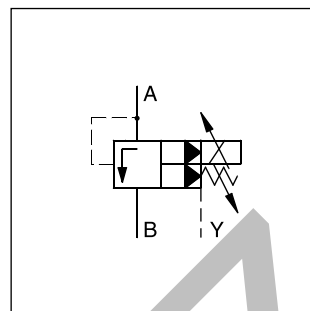
The RE*E*T model code embraces the pilot valves, covers and cartridges that are also offered as separate items.

Features

- Pilot operated pressure relief valve
- Onboard electronics
- Optional mechanical max. pressure stage
- Factory setting
- Ramp time adjustment
- Linearized characteristics
- 4 pressure stages
- Cavity and mounting pattern according to ISO 7368
- 6 sizes, NG16 to NG63

Note

Port X only usable for remote control.



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Ordering code

RE		E		T	1	S		1		0				
Prop. pressure relief valve with elec. unloading	Nominal size	Slip-in mounting ISO 7368	Pressure stages	Onboard electronics	Pilot oil (pilot int., drain ext.)	Poppet spring	Seal	Normally open	Command signal	Electr. attachments	Options	Design series (not required for ordering)	Spool type	
Code	Nominal size											Code	Spool type	
16	NG16											omit	Standard	
25	NG25											S07 ²⁾	with poppet seals	
32	NG32											Code	Options	
40 ¹⁾	NG40											omit	Standard	
50 ¹⁾	NG50											M	Mechanical max. adjustment	
63 ¹⁾	NG63											Code	Command signal	
Code	Pressure stages											F	Voltage input 0...+10 V with ref. output +10 V	
10	up to 105 bar											R	Current input 4...20 mA	
17	up to 175 bar											Code	Seal	
25	up to 250 bar											N	NBR	
35	up to 350 bar											V	FPM	

¹⁾ With poppet seal.

²⁾ Not for NG16.

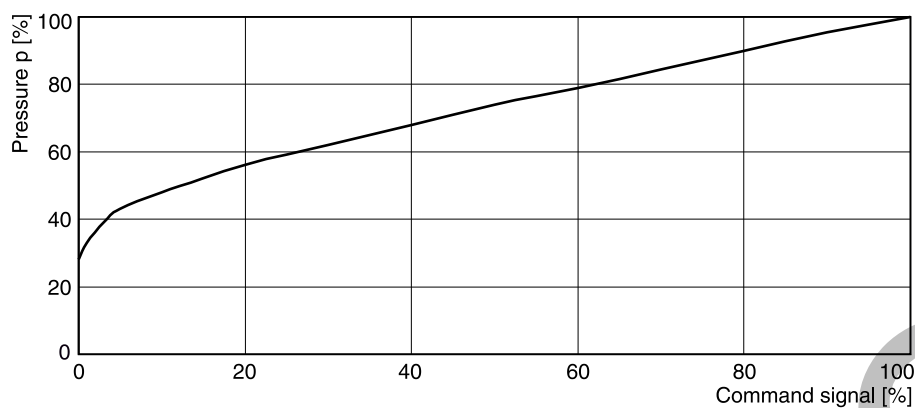
Please order plugs separately, item no. 5004072

Parametrizing cable OBE -> RS-232: item no. 40982923

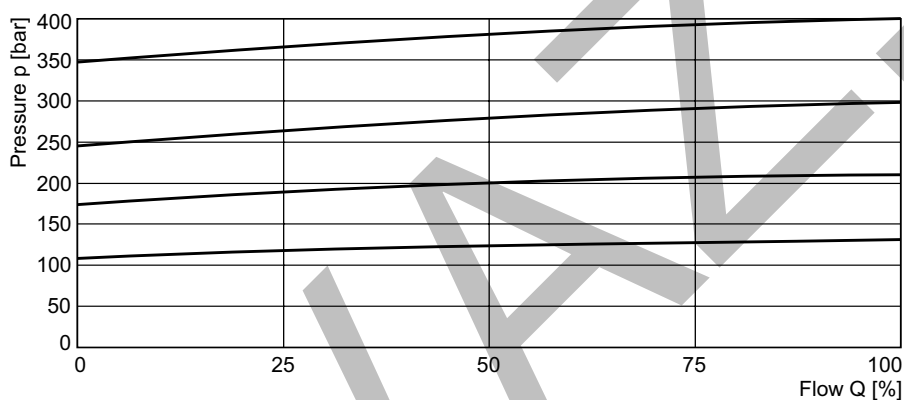
General									
Nominal size			NG16	NG25	NG32	NG40	NG50	NG63	
Interface			Slip-in mounting acc. ISO 7368						
Mounting position			as desired, horizontal mounting preferred						
Ambient temperature			[°C]	-20...+60					
MTTF _D value ¹⁾			[years]	75					
Weight			[kg]	2.7	5.2	6.4	9.5	15.2	24.3
Vibration strength			[g]	10 sinus 5...2000 Hz acc. to IEC 68-2-6 10 (RMS) noise 20...2000 Hz acc. to IEC 68-2-36 15 shock acc. to IEC 68-2-27					
Hydraulic									
Max. operating pressure			[bar]	Ports A and X 350, ports B and Y 30					
Pressure stages			[bar]	105, 175, 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 recommended			[cSt] / [mm²/s]	20...400					
			[cSt] / [mm²/s]	30...80					
Filtration			ISO 4406; 18/16/13						
Electrical									
Duty ratio ED			[%]	100					
Protection class			IP65 in accordance with EN 60529 (with correctly mounted plug-in connector)						
Supply voltage			VDC	18...30, ripple < 5 % eff., surge free					
Current consumption max.			[A]	2.0					
Pre-fusing			[A]	2.5 medium lag					
Potentiometer supply			[V]	+10 / ±5 % max. 10 mA					
Command signal			[V]	0...+10, ripple < 0.01 % eff., surge free, Ri = 100 kOhm					
Code F voltage			[mA]	4...20, ripple < 0.01 % eff., surge free, Ri = <250 Ohm					
Code R current			< 3.6 mA = enable off, > 3.8 mA = enable on (acc. NAMUR NE43)						
Differential input voltage max.			[V]	30 for terminal D and E against PE (terminal G)					
			[V]	11 for terminal D and E against 0V (terminal B)					
Adjustment ranges			Min current	[%]	0...50				
			Max current	[%]	50...100				
			Ramp	[s]	0...32.5				
Interface			RS 232C, parametrizing connection 5-pole						
EMC			EN 61000-6-2, EN 61000-6-4						
Central connection			6 + PE acc. EN 175201-804						
Cable specification			[mm²]	7 x 1.0 overall braid shield					
Cable length max.			[m]	50					

¹⁾ If valves with onboard electronics are used in safety-related parts of control systems, in case the safety function is requested, the valve electronics voltage supply is to be switched off by a suitable switching element with sufficient reliability.

Command pressure curve RE*E*T



p/Q performance curve RE*E*T



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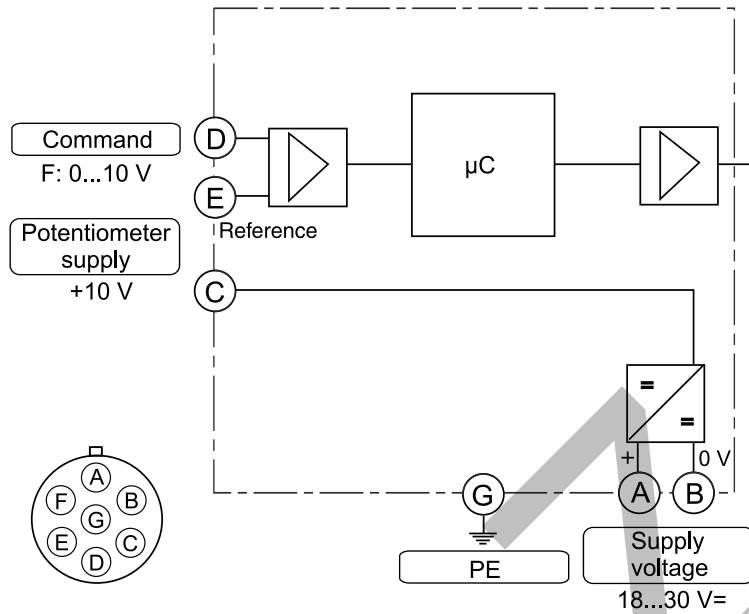
All characteristic curves measured with HLP46 at 50 °C.

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

Block diagram

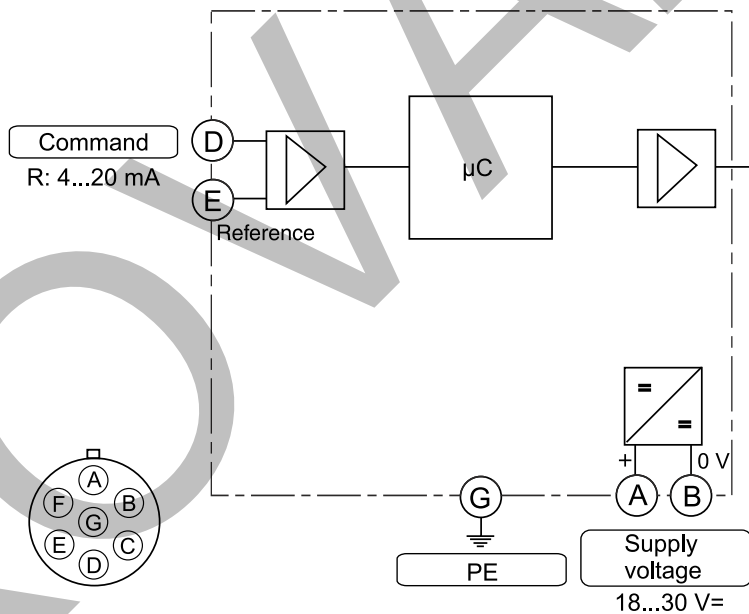
Code F

6 + PE acc. EN 175201-804

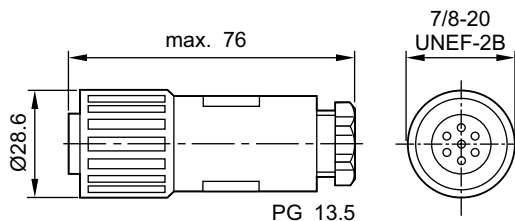


Code R

6 + PE acc. EN 175201-804



Female connector (EMC conform)



Please order plugs separately,
 ID no. 5004072

ProPxD interface program

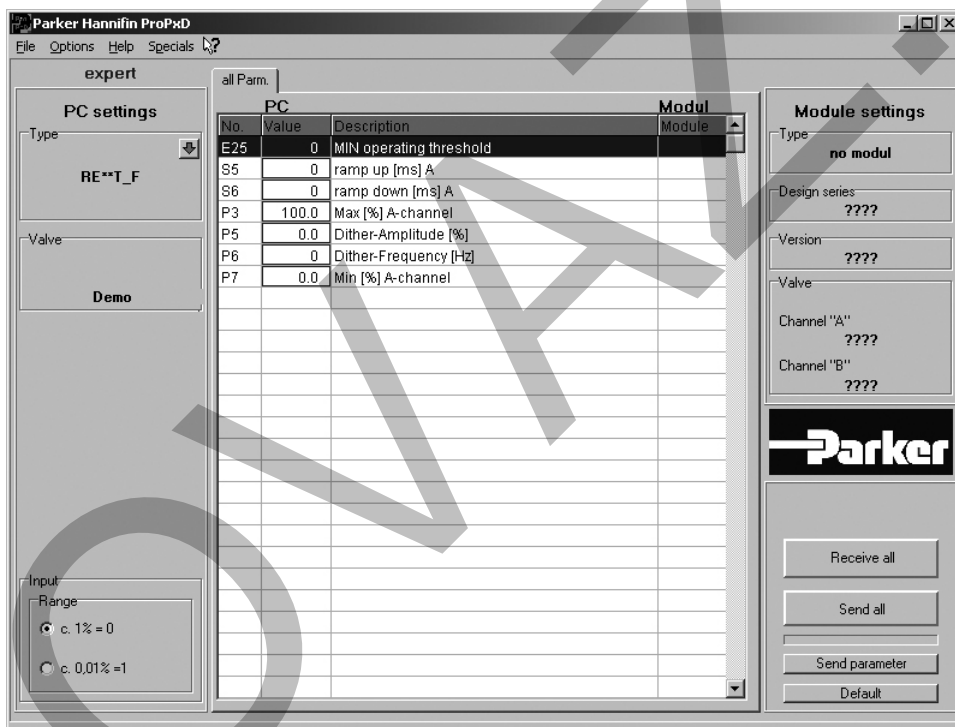
The ProPxD software permits comfortable parameter setting for the module electronics. Via the clearly arranged entry mask the parameters can be noticed and modified. Storage of complete parameter sets is possible as well as printout or record as a text file for further documentation. Stored parameter sets may be loaded anytime and transmitted to other valves. Inside the electronics a non-volatile memory stores the data with the option for recal-ling or modification.

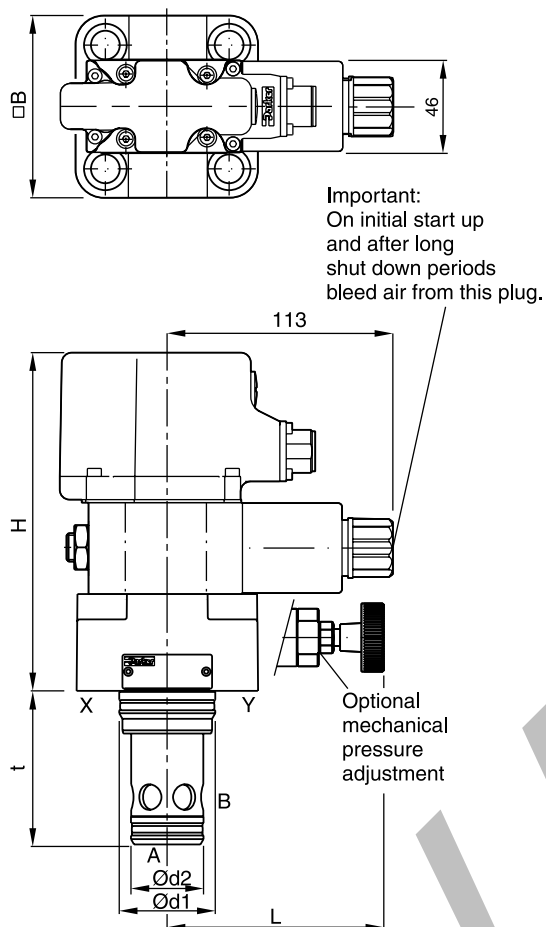
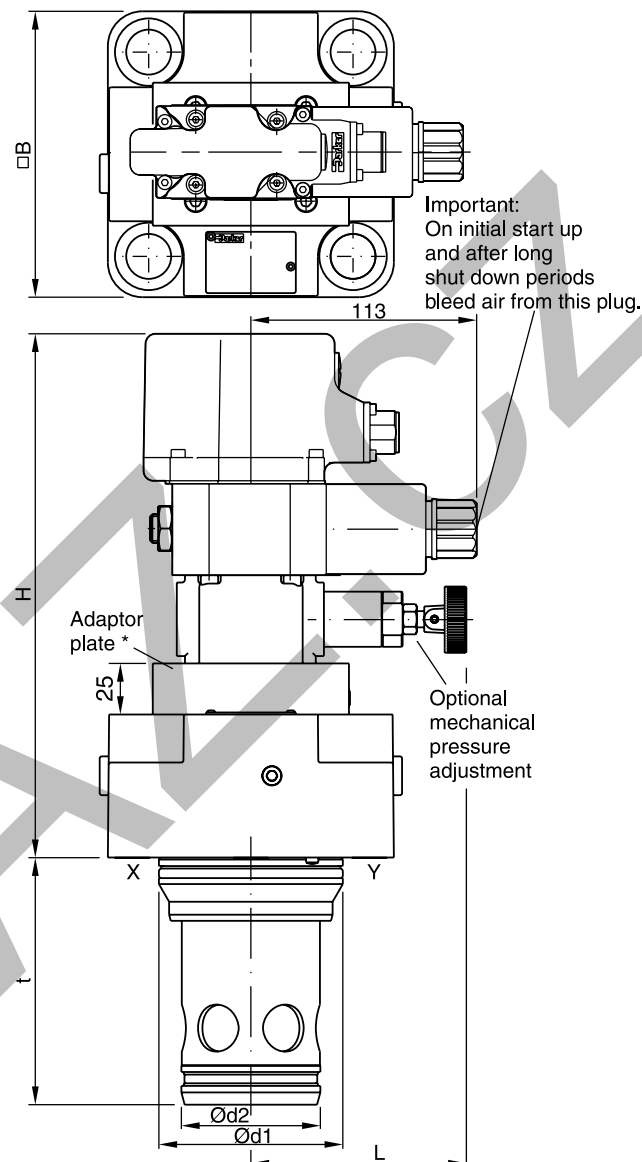
The PC software can be downloaded free of charge at www.parker.com/isde – see page “Support” or directly at www.parker.com/propxd.

Features




- Comfortable editing of all parameters
- Depiction and documentation of parameter sets
- Storage and loading of optimized parameter adjust-ments
- Executable with all actual Windows® operating systems from Windows® XP upwards
- Plain communication between PC and electronics via serial interface RS232C

The parametrizing cable may be ordered under item no. 40982923.



Dimensions**Proportional Pressure Relief Valve, OBE
Series RE*E*T****NG16 - NG32****NG40 - NG63 ***

NG	H	B	d ₁	d ₂	t	L
16	179	79 ¹⁾	32	25	56	114
25	124	85	45	34	72	102
32	129	102	60	45	85	95
40	139 (182.2) ²⁾	125	75	55	105	106
50	174 (217.2) ²⁾	140	90	68	122	106
63	189 (232.2) ²⁾	180	120	90	155	106

NG	Kit	 ISO 4762-12.9	 [Nm]	 Kit	
				NBR	FPM
16	BK414	4 x M8x40	31.8	SK-RE16EN	SK-RE16EV
25	BK391	4 x M12x50	108	SK-RE25EN	SK-RE25EV
32	BK415	4 x M16x55	264	SK-RE32EN	SK-RE32EV
40	BK416	4 x M20x70	517	SK-RE40EN	SK-RE40EV
50	BK417	4 x M20x75	517	SK-RE50EN	SK-RE50EV
63	BK418	4 x M30x100	1775	SK-RE63EN	SK-RE63EV

* NG40 without adaptor plate.

¹⁾ Width 65 mm.²⁾ With mechanical pressure adjustment.

RE_E_T UK.INDD 18.10.22