

**Characteristics / Ordering Code**

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.

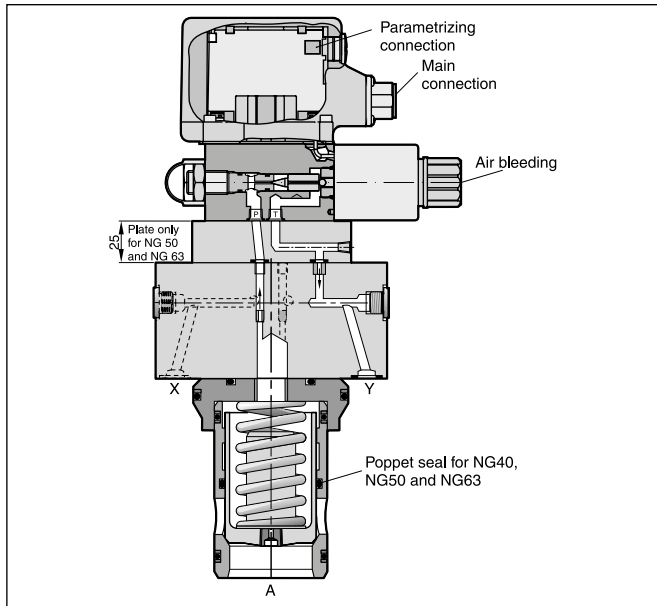
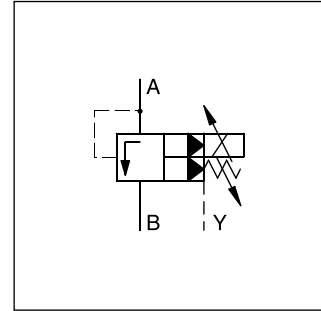
The RE\*E\*T model code embraces the pilot valves, covers and cartridges that are also offered as separate items.

**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**

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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																																			
	<table border="1" style="width:100%; border-collapse: collapse;"> <tr><th>Code</th><th>Nominal size</th></tr> <tr><td>16</td><td>NG16</td></tr> <tr><td>25</td><td>NG25</td></tr> <tr><td>32</td><td>NG32</td></tr> <tr><td>40 <sup>1)</sup></td><td>NG40</td></tr> <tr><td>50 <sup>1)</sup></td><td>NG50</td></tr> <tr><td>63 <sup>1)</sup></td><td>NG63</td></tr> </table>	Code	Nominal size	16	NG16	25	NG25	32	NG32	40 <sup>1)</sup>	NG40	50 <sup>1)</sup>	NG50	63 <sup>1)</sup>	NG63		<table border="1" style="width:100%; border-collapse: collapse;"> <tr><th>Code</th><th>Pressure stages</th></tr> <tr><td>10</td><td>up to 105 bar</td></tr> <tr><td>17</td><td>up to 175 bar</td></tr> <tr><td>25</td><td>up to 250 bar</td></tr> <tr><td>35</td><td>up to 350 bar</td></tr> </table>	Code	Pressure stages	10	up to 105 bar	17	up to 175 bar	25	up to 250 bar	35	up to 350 bar							<table border="1" style="width:100%; border-collapse: collapse;"> <tr><th>Code</th><th>Options</th></tr> <tr><td>omit</td><td>Standard</td></tr> <tr><td>M</td><td>Mechanical max. adjustment</td></tr> </table>	Code	Options	omit	Standard	M	Mechanical max. adjustment	<table border="1" style="width:100%; border-collapse: collapse;"> <tr><th>Code</th><th>Spool type</th></tr> <tr><td>omit</td><td>Standard</td></tr> <tr><td>S07 <sup>2)</sup></td><td>with poppet seals</td></tr> </table>	Code	Spool type	omit	Standard	S07 <sup>2)</sup>	with poppet seals	
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Please order plugs separately, item no. 5004072  
Parametrizing cable OBE -> RS-232: item no. 40982923

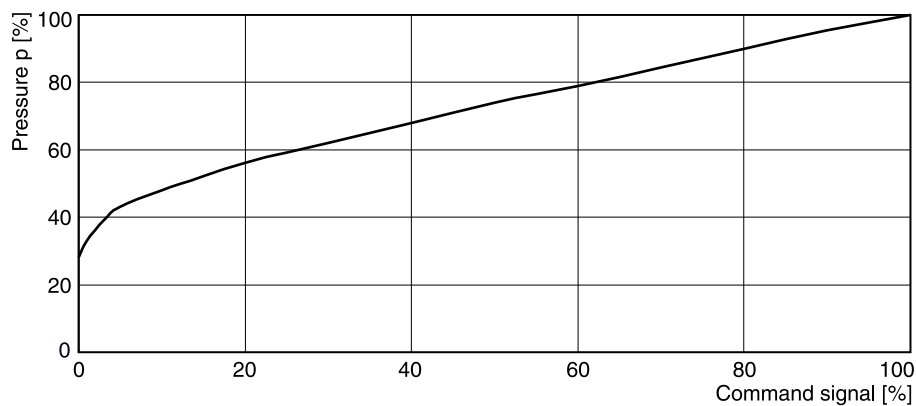
<sup>1)</sup> With poppet seal.  
<sup>2)</sup> Not for NG16.

## Technical Data

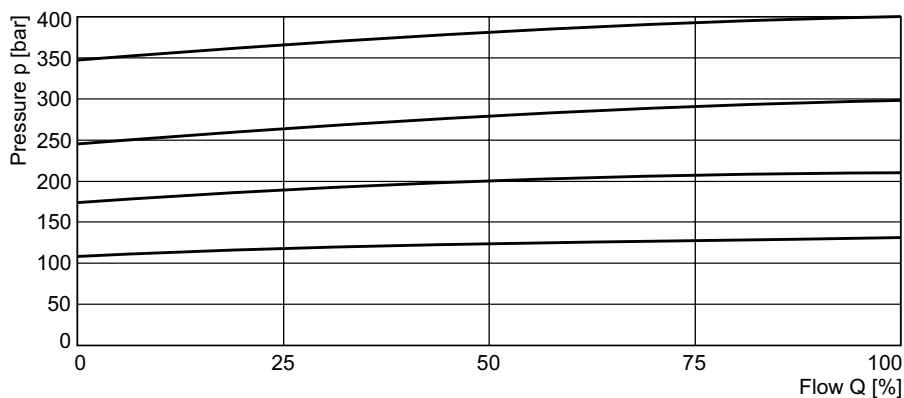
General							
Nominal size		<b>NG16</b>	<b>NG25</b>	<b>NG32</b>	<b>NG40</b>	<b>NG50</b>	<b>NG63</b>
Interface	Slip-in mounting acc. ISO 7368						
Mounting position	as desired, horizontal mounting preferred						
Ambient temperature	[°C]	-20...+60					
MTTF <sub>D</sub> value <sup>1)</sup>	[years]	75					
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] / [mm <sup>2</sup> /s]	20...400					
	[cSt] / [mm <sup>2</sup> /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	Code F voltage	[V]	0...+10, ripple < 0.01 % eff., surge free, Ri = 100 kOhm				
	Code R current	[mA]	4...20, ripple < 0.01 % eff., surge free, Ri = <250 Ohm < 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	[mm <sup>2</sup> ]	7 x 1.0 overall braid shield					
Cable length max.	[m]	50					

<sup>1)</sup> 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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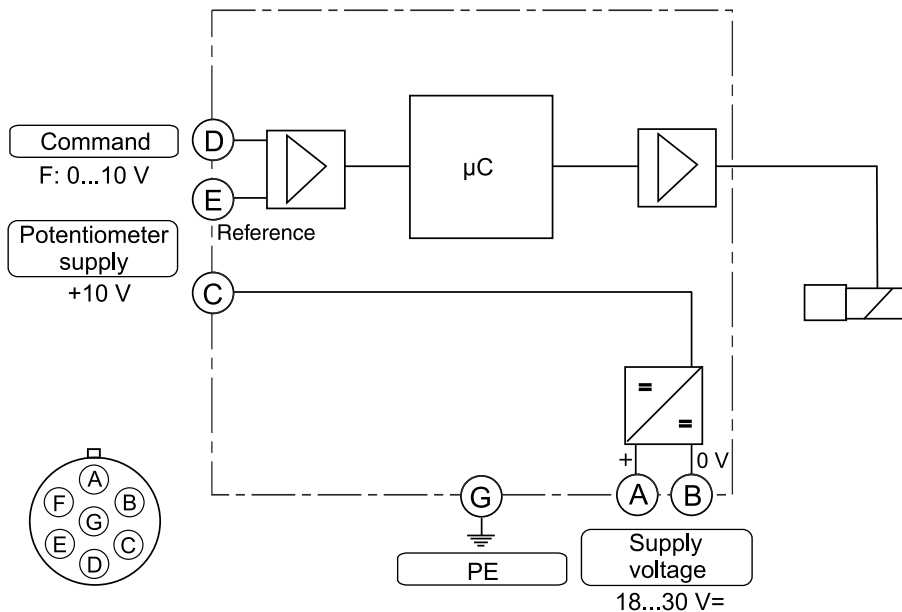
All characteristic curves measured with HLP46 at 50 °C.

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

**Block diagram**

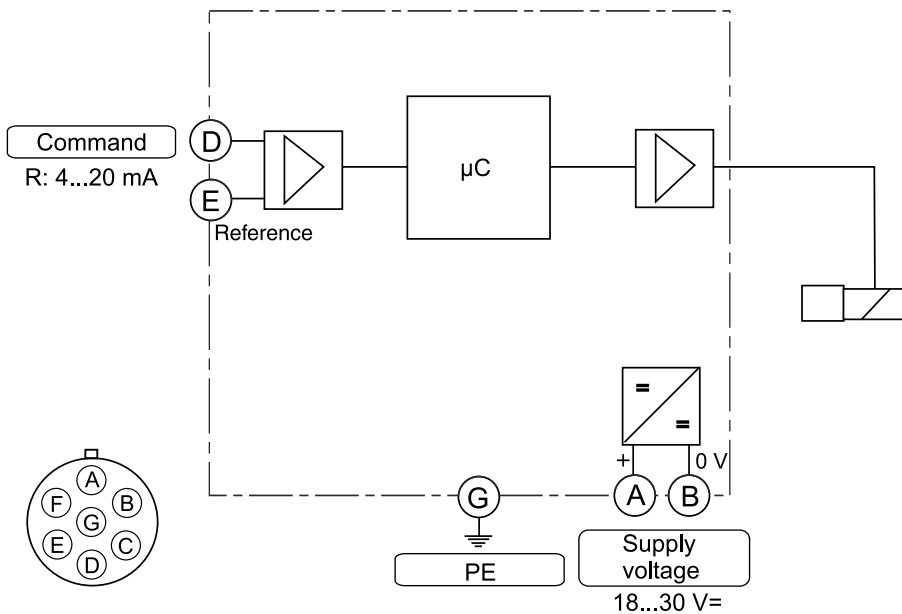
**Code F**

6 + PE acc. EN 175201-804

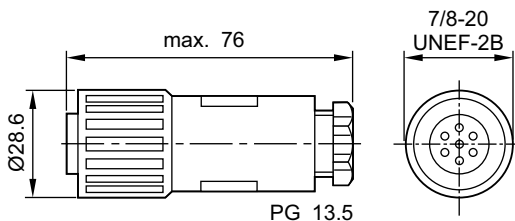


**Code R**

6 + PE acc. EN 175201-804



**Female connector (EMC conform)**



Please order plugs separately,  
 ID no. 5004072

**ProPxD interface program**

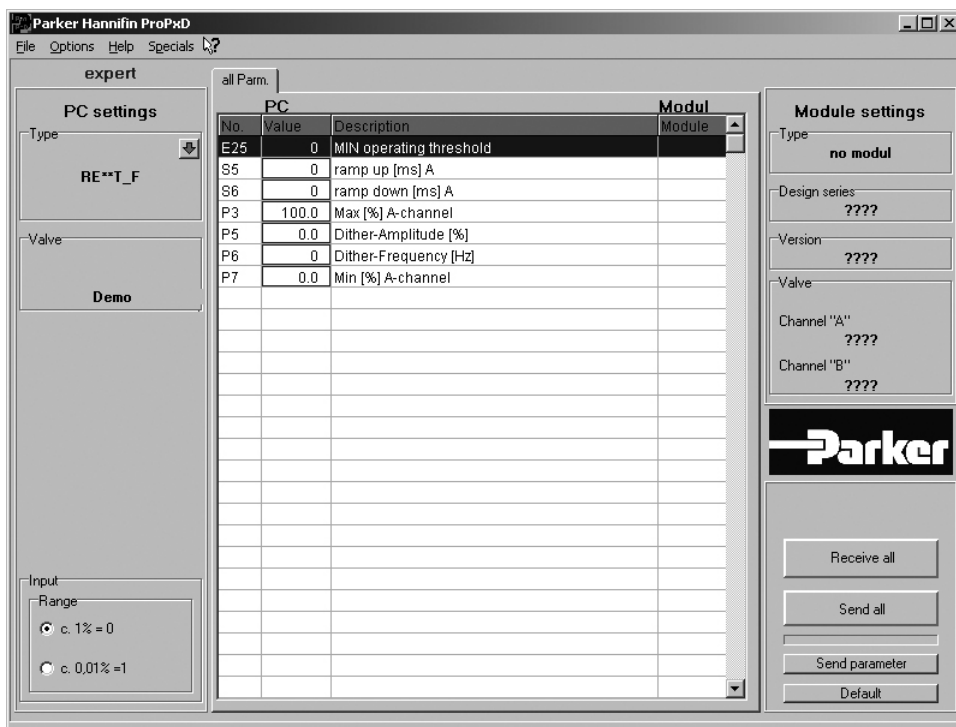
The ProPxD software permits comfortable parameter setting for the module electronics. Via the clearly arranged entry mask the parameters can be noticed and modified. Storage of complete parameter sets is possible as well as printout or record as a text file for further documentation. Stored parameter 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](http://www.parker.com/isde) – see page “Support“ or directly at [www.parker.com/propxd](http://www.parker.com/propxd).

**Features**

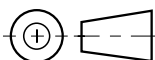
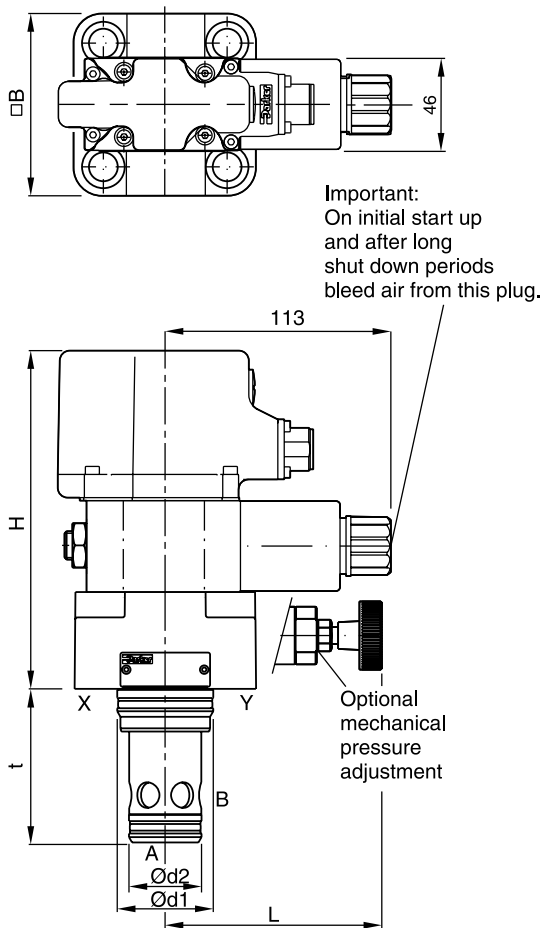
- Comfortable editing of all parameters
- Depiction and documentation of parameter sets
- Storage and loading of optimized parameter adjust-ments
- Executable with all actual Windows® operating systems from Windows® XP upwards
- Plain communication between PC and electronics via serial interface RS232C

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

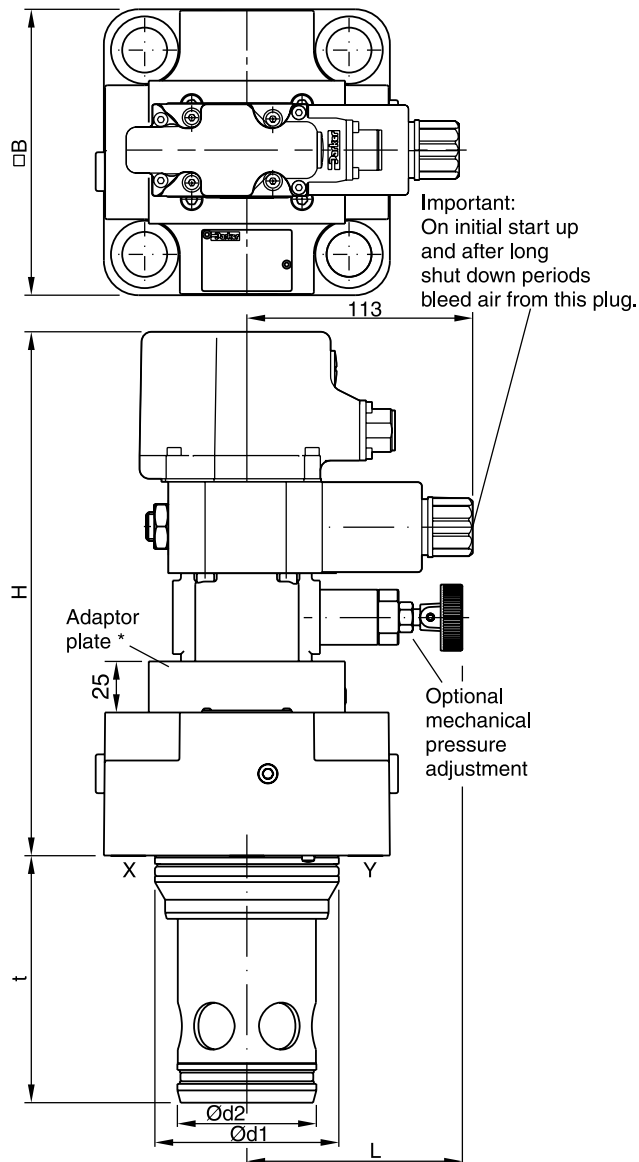


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**NG16 - NG32**



**NG40 - NG63 \***



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

<sup>1)</sup> Width 65 mm.

<sup>2)</sup> With mechanical pressure adjustment.