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 vent function.

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
16	NG16
25	NG25
32	NG32
40 [1]	NG40
50 [1]	NG50
63 [1]	NG63

Code	Pressure stages
10	up to 105 bar
17	up to 175 bar
25	up to 250 bar
35	up to 350 bar

Code	Spool type
omit	Standard
S07 [2]	with poppet seals

Code	Options
omit	Standard
M	Mechanical max. adjustment

Code	Command signal
F	Voltage input 0...+10 V with ref. output +10 V
R	Current input 4...20 mA

Code	Seal
N	NBR
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

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Parker Hannifin Corporation
Hydraulics Group

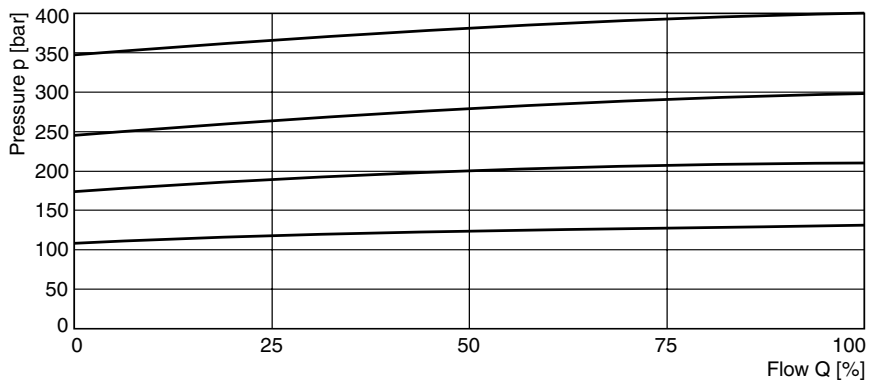| **General**							
Nominal size		**NG16**	**NG25**	**NG32**	**NG40**	**NG50**	**NG63**
Interface		Slip-in mounting acc. ISO 7368					
Mounting position		as desired, horizontal mounting preferred					
Ambient temperature	[°C]	-20...+60					
MTTF$_D$ value [1]	[years]	75					
Weight	[kg]	2.7	5.2	6.4	9.5	15.2	24.3
Vibration strength	[g]	10 sinus 5...2000 Hz acc. to IEC 68-2-6 30 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	[cSt] / [mm²/s]	20...400					
recommended	[cSt] / [mm²/s]	30...80					
Filtration		ISO 4406 (1999); 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	[mm²]	7 x 1.0 overall braid shield					
Cable length max.	[m]	50					

8

[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.
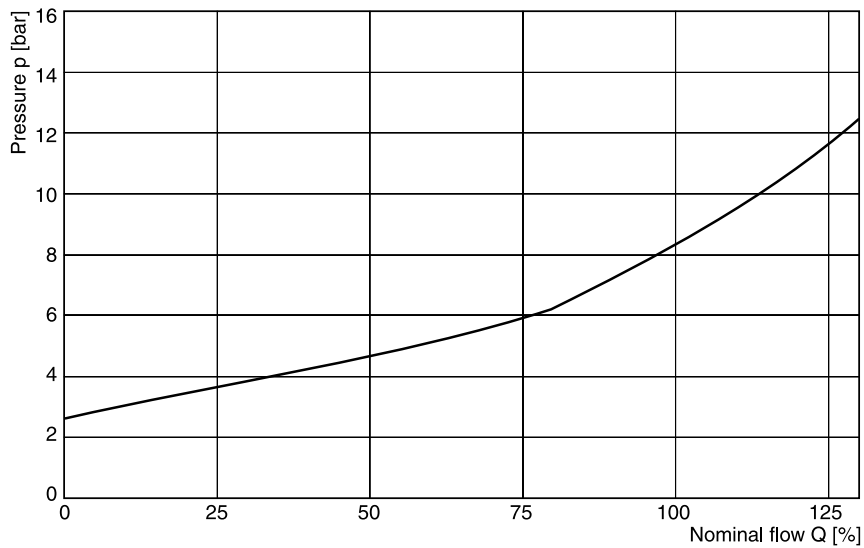
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Command pressure curve RE*E*T

Pressure p [%] vs Command signal [%]
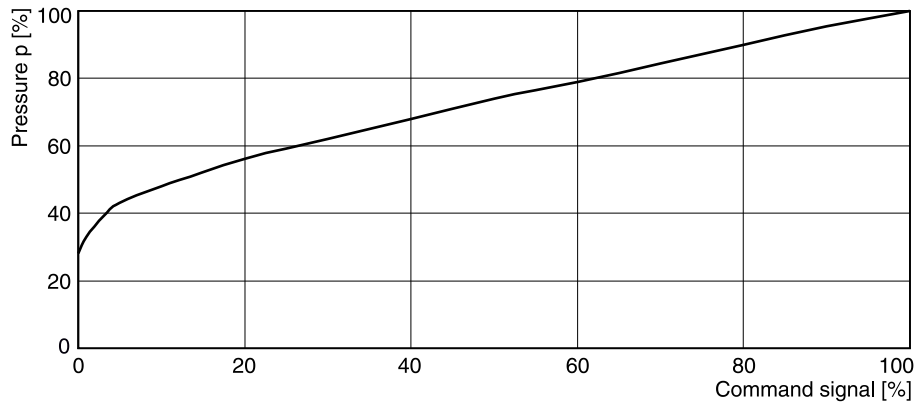
p/Q performance curve RE*E*T

Pressure p [bar] vs Flow Q [%]

Minimum pressure curve RE*E*T

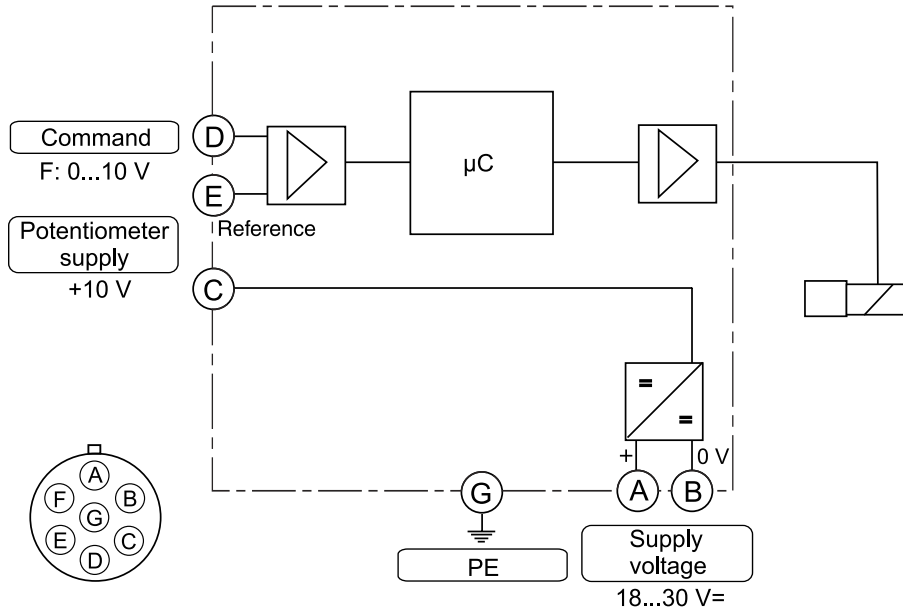Pressure p [bar] vs Nominal flow Q [%]

All characteristic curves measured with HLP46 at 50 °C.

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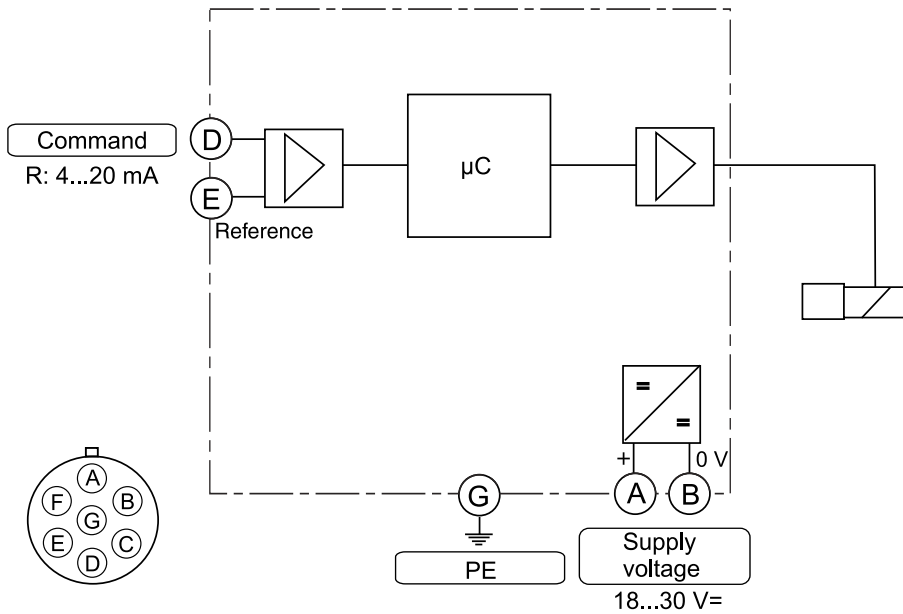drain the tank pressure has to be added to curve.

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Block diagram

Code F
6 + PE acc. EN 175201-804

Code R
6 + PE acc. EN 175201-804

Female connector (EMC conform)
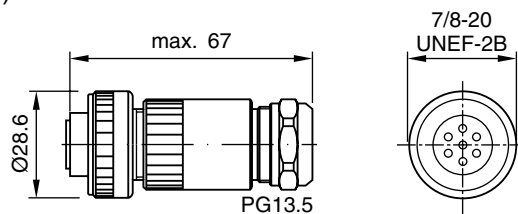
Please order plugs separately,
ID no. 5004072

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 recalling or modification.

The PC software can be downloaded free of charge at www.parker.com/euro_hcd – see page "Support" or directly at www.parker.com/propxd.
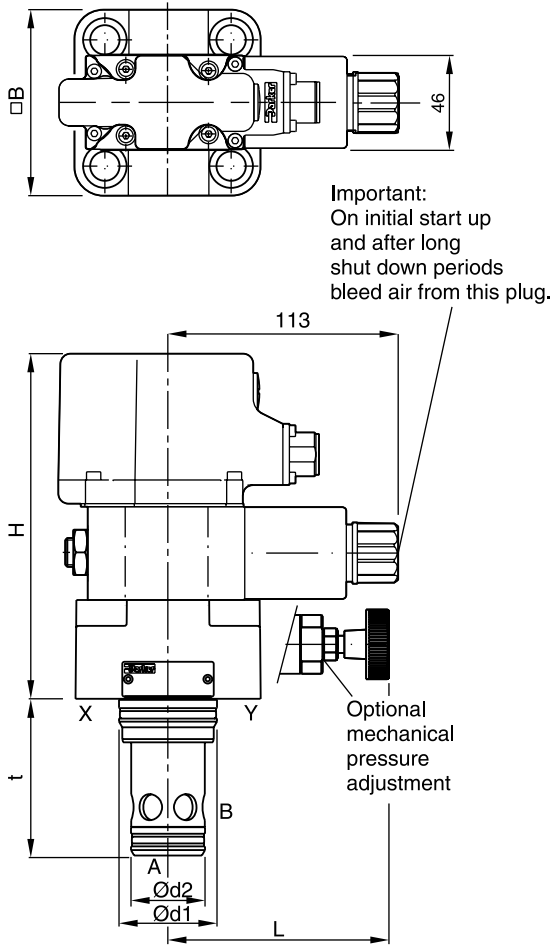
Features

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

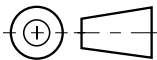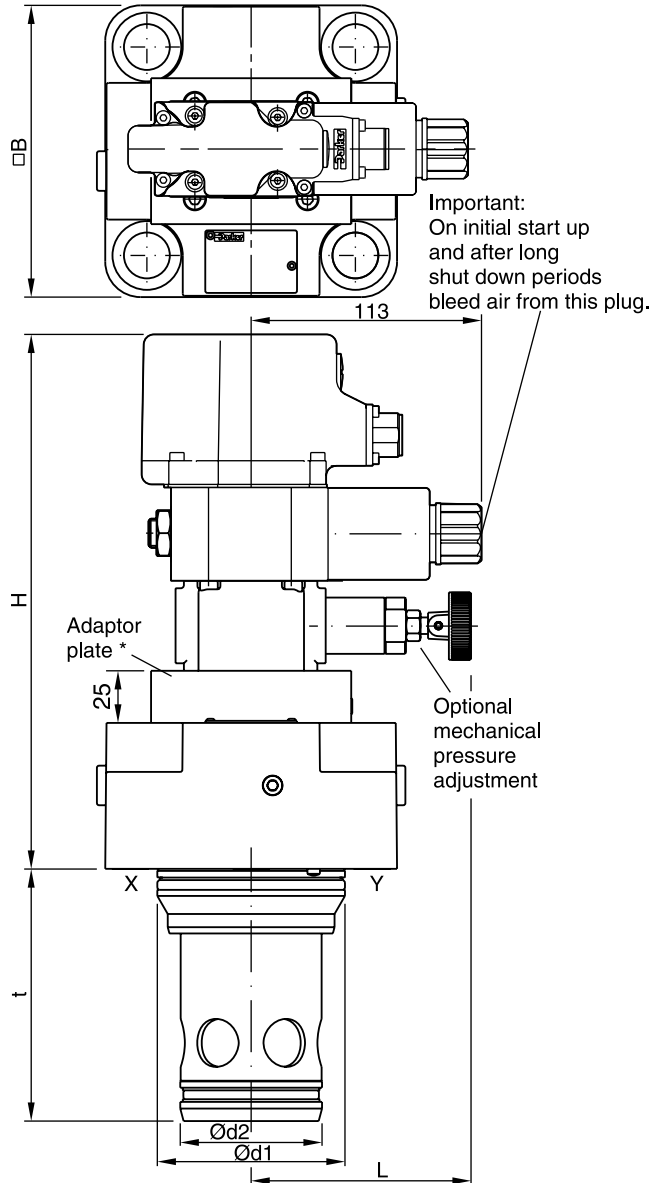**The parametrizing cable may be ordered under item no. 40982923.**

8

NG16 - NG32

Important:
On initial start up
and after long
shut down periods
bleed air from this plug.

Optional
mechanical
pressure
adjustment

NG40 - NG63 *

Important:
On initial start up
and after long
shut down periods
bleed air from this plug.

Adaptor
plate *

Optional
mechanical
pressure
adjustment
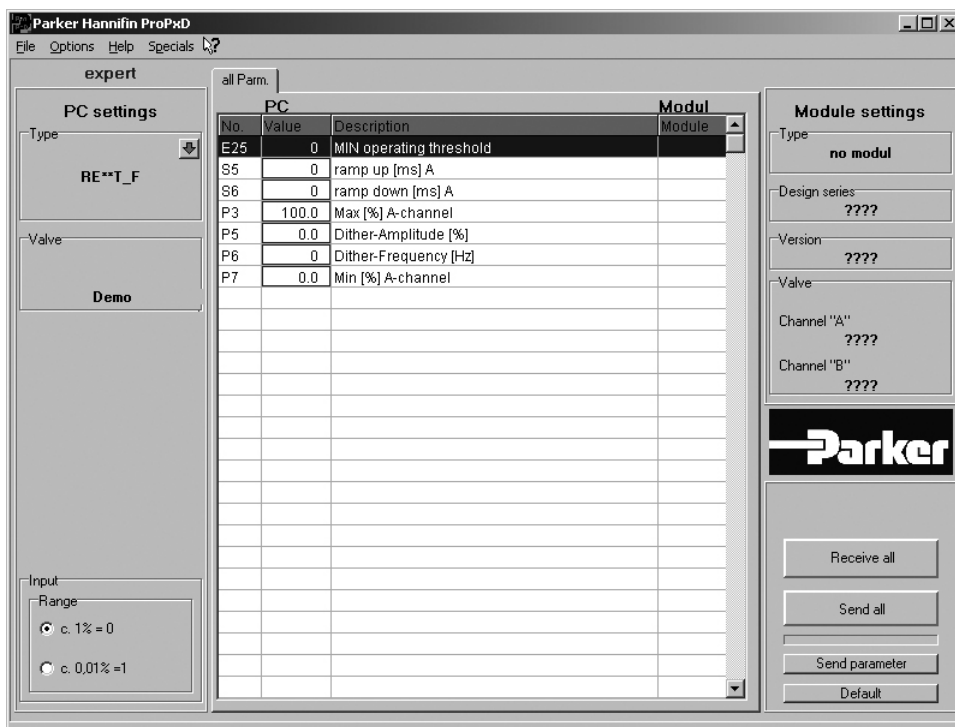
NG	H	B	d₁	d₂	t	L
16	179	79 [1]	32	25	56	114
25	124	85	45	34	72	102
32	129	102	60	45	85	95
40	139 (182.2) [2]	125	75	55	105	106
50	174 (217.2) [2]	140	90	68	122	106
63	189 (232.2) [2]	180	120	90	155	106

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.
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