#### Catalogue MSG11-3500/UK Characteristics / Ordering Code

# Proportional Pressure Relief Valve, OBE Series RE\*E\*T

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.

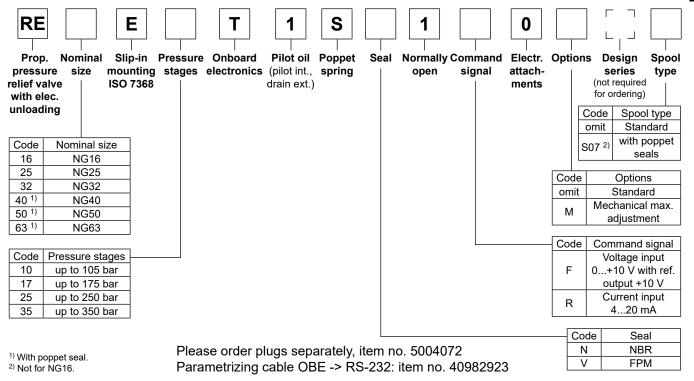
#### Features

- 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

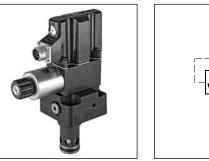
#### Note

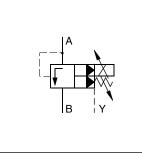
Port X only usable for remote control.

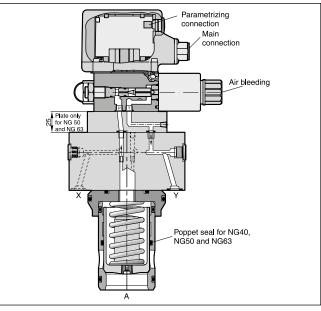
#### Ordering code









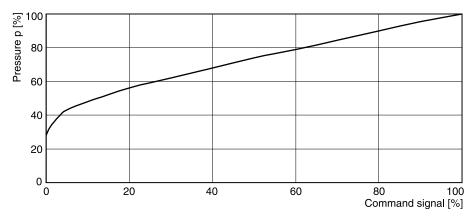


General										
Nominal size				NG16	NG25	NG32	NG40	NG50	NG63	
Interface	Interface				Slip-in mounting acc. ISO 7368					
Mounting p	osition			as desired, h	orizontal mour	nting preferred				
Ambient ter	nperature		[°C]	-20+60						
MTTF <sub>D</sub> valu	le <sup>1)</sup>		[years]	75						
Weight			[kg]	2.7	5.2	6.4	9.5	15.2	24.3	
Vibration strength [g]				10 sinus 52000 Hz acc. to IEC 68-2-6 10 (RMS) noise 202000 Hz acc. to IEC 68-2-36 15 shock acc. to IEC 68-2-27						
Hydraulic										
Max. opera	ting pressu	ure	[bar]	Ports A and >	K 350, ports B	and Y 30				
Pressure st	ages		[bar]	105, 175, 25	0, 350					
Nominal flo	w		[l/min]	220	500	950	1400	2300	4000	
Fluid				Hydraulic oil	according to D	IN 51524				
Fluid tempe	rature		[°C]	-20+70 (NE	3R: -25+70)					
Viscosity, permitted [cSt] / [mm²/s] recommended [cSt] / [mm²/s]										
Filtration			ISO 4406; 18/16/13							
Electrical				100 1100, 10						
Duty ratio ED [%]				100						
Protection class			IP65 in accordance with EN 60529 (with correctly mounted plug-in connector)							
Supply volta	age		VDC							
			2.0							
			2.5 medium lag							
			+10 / ±5 % max. 10 mA							
Command signal Code F voltage [V] Code R current [mA]			0+10, ripple < 0.01 % eff., surge free, Ri = 100 kOhm 420, 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	[%]	050						
		Max current	[%]	50100						
Ramp [s]		032.5								
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 lengt	Cable length max. [m]			50						

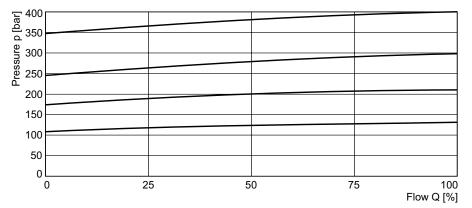
<sup>1)</sup> If valves with onboard electronics are used in safety-related parts of control systems, in case the safety function is requested, the valve electronics voltage supply is to be switched off by a suitable switching element with sufficient reliability.



#### Command pressure curve RE\*E\*T



### p/Q performance curve RE\*E\*T



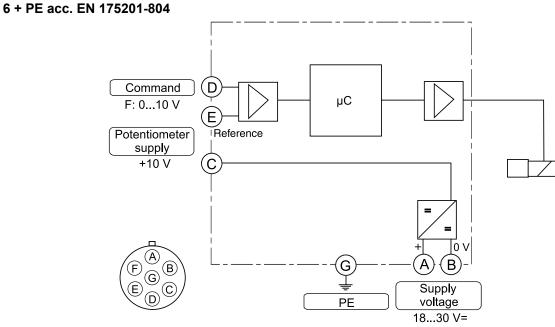
All characteristic curves measured with HLP46 at 50 °C.

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

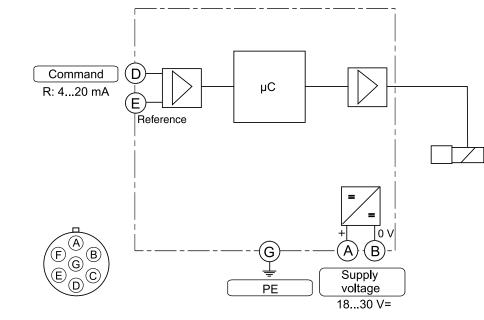


#### Block diagram

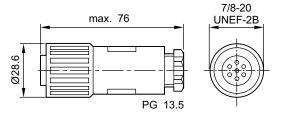
#### Code F



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 nonvolatile memory stores the data with the option for recalling 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.

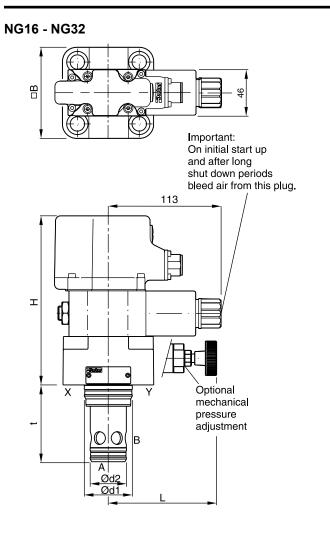
#### Features

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

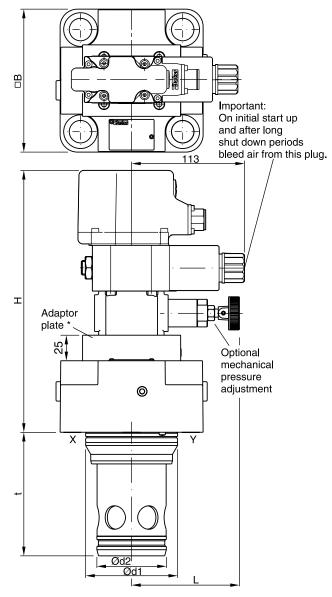
## The parametrizing cable may be ordered under item no. 40982923.

Parker Hannifin ProPxD File Options Help Specials	2			_D×
expert	all Parr	m.		
PC settings	P No. V		Description	Module Module settings
Type 🛃	E25	0	MIN operating threshold	Type no modul
RE**T_F	S5 S6		ramp up (ms) A ramp down (ms) A	
	P3	100.0	Max [%] A-channel	????
Valve	P5 P6	0.0	Dither-Amplitude [%] Dither-Frequency [Hz]	Version ????
Deer	P7	0.0	Min [%] A-channel	Valve
Demo Input Range C c. 1% = 0				Channel "A" ???? Channel "B" ???? Channel "B" ???? Channel "B" ???? Channel "B" ????
C c. 0,01% =1				Send parameter Default





#### NG40 - NG63 \*





NG	н	В	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	町 弐 ISO 4762-12.9	57	🔿 Kit		
			[Nm]	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.

