

## 4 TECHNICAL DATA

Characteristics			
tecno basic	Symbol	Unit	G1/8, NW 2,5
Actuation			piezo-electrically actuated 3-way proportional pressure regulator, electronically controlled
General Features			
Mounting			flange <sup>8)</sup>
Port size		mm	2,5
Thread base plate			G1/8
Weight		kg	0,100
		kg	0,155 with base plate
Installation			in any position
Medium:			Compressed air - filtered 30 µm, recommended 5 µm - dried according ISO 8573-1, cl.3
Flow direction			ON: from 1 - 2 OFF: from 2 - 3
Storage temperature		°C	-20 to +60
Ambient temperature		°C	0 to +50
Medium temperature		°C	0 to +50
Material			Aluminium, brass, spring steel, plastic, elastomer
Protection class			IP 30, DIN EN 60529
Properties power loss			Port 2 exhausting
RoHs			conform
Pneumatic Characteristics			
Version <sup>1)</sup>			0 - 8 bar      0 - 2 bar      0 - 0,2 bar
Pressure inlet	p <sub>1min</sub>	bar	1,5
	p <sub>1max</sub>	bar	10      7      2,5
Pressure outlet <sup>1)</sup>	p <sub>2min</sub>	bar	0
	p <sub>2max</sub>	bar	8      2      0,2
Nominal flow rate	Q <sub>N</sub>	l/min	200      -      -
Max. flow rate	Q <sub>max</sub>	l/min	350 <sup>2)</sup> 200      70
Hysteresis <sup>4)</sup>	p <sub>2max</sub>	%	<0,2      <0,2      <0,5
Repeatability <sup>4)</sup>	p <sub>2max</sub>	%	<0,2      <0,2      <0,5
Responsiveness <sup>4)</sup>	p <sub>2max</sub>	%	<0,1      <0,1      <0,5
Linearity <sup>3) 4)</sup>	p <sub>2max</sub>	%	<0,5      <0,5      <1,0
Leakage <sup>5)</sup>		Nl/min	≤0,6      ≤0,5      ≤0,4
Own air consumption <sup>9)</sup>		Nl/min	≤1,0      ≤1,0      ≤1,0

Electrical Characteristics					
PRE-U PS120000- / PS120006-					
Version <sup>1)</sup>			0 - 8 bar	0 - 2 bar	0 - 0,2 bar
Nominal voltage	$U_N$	V DC	24 $\pm$ 10%		
Nominal power	$P_N$	W	0,4		
Residual ripple	$U_N$	%	10		
Current consumption	$I_{Bmax}$	mA	15		
Input resistance	$R_E$	k $\Omega$	$\geq$ 66		
Set value input	W	V	0 - 8	0 - 10	
Scale	W/p <sub>2</sub>	V/bar	1	5	5 0
PRE-I PS120001-					
Power supply <sup>6)</sup>	$I_B$	mA	4		
Set value input	W	mA	4 - 20		
Scale	W/p <sub>2</sub>	mA/bar	2	8	80
Max. voltage input <sup>7)</sup>	$U_{Wmax}$	V	12,5		
Input resistance	RE	$\Omega$	$\leq$ 500		
Actual output PS120006-					
Output voltage	$U_x$	V	$p_{2min} = 0$ ; $p_{2max} = 10$		
Output max.	$I_{Xmax}$	mA	1 (short-circuit-proof)		
Cable connector					
PS120000- / PS120001-			M8 ; 3 Pin		
PS120006-			M8 ; 4 Pin		
Electromagnetic compatibility (EMC)			shielded connecting cables must be used		
Interference resistance			EN 61000-6-2		
Transient emissions			EN 61000-6-4		

Remarks:

- 1) other pressure ranges on request
- 2) at  $p_1 = 10$  bar and  $p_2 = 6,3$  bar,  $\Delta p = 1$  bar
- 3) at ambient temperature +20 °C
- 4) relative to  $p_{2max}$
- 5) bei  $p_{1max}$  und  $p_{2min}$  (0 bar)
- 6) 2-wire technology, i.e. power supply and set value via the same cable, switch on time < 10ms (0...4 mA)
- 7) higher voltage will damage the valve
- 8) flange plates with screw thread see accessory
- 9) only when set valve > 0