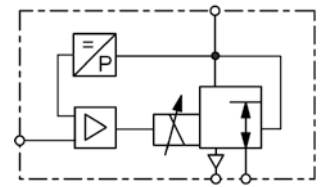


## Technical features

• <b>Pressure range</b>	0...30 bar to 0...80 bar	• <b>Linearity / Hysteresis</b>	± 3% FS
• <b>Command signal</b>	0-10 V, 0-20 mA, 4-20 mA	• <b>Response sensitivity</b>	± 3% FS
• <b>Output signal</b>	0-10 V, 0-20 mA, 4-20 mA	• <b>Repeatability</b>	± 3% FS
• <b>Regulating time</b>	< 1 s	• <b>Protection class</b>	IP65
• <b>Flow rate</b>	40 l/min	• <b>Relief capacity</b>	full nominal size



**G<sub>1/4</sub>**  
**0 ... 30 / 80 bar**

## General technical features

<b>Design</b>	3-port/2-way valve with proportional magnet and digital control
<b>Mounting position</b>	any, preferably upright
<b>Protection class</b>	IP65 with mounted coupling socket
<b>Temperature range</b>	0 °C to 60 °C / 32 °F to 140 °F, media- and ambient temperature
<b>Material</b>	Body: aluminium Inner valve: stainless steel Seals: FPM, NBR/Buna-N, TPS

## Pneumatic features

<b>Media</b>	dry, lubricated, unlubricated and 50 µm filtered compressed air or non-corrosive gases
<b>Supply pressure</b>	see chart
<b>Flow rate</b>	up to 40 l/min, at 6 bar supply pressure and 5 bar outlet
<b>Nominal size</b>	DN 1.0, DN 1.2
<b>Exhaust</b>	same nominal size as on inlet valve, thus same relief capacity
<b>Air consumption</b>	without air consumption

## Electrical features

<b>Supply voltage</b>	24 V DC ± 10%
<b>Electrical connector</b>	M12, 5-pin, with coupling socket
<b>Power consumption</b>	max. 24 W
<b>Current consumption</b>	max. 1000 mA
<b>Command Signal</b>	0-10 V, 0-20 mA, 4-20 mA
<b>Impedance</b>	100 kΩ at voltage signal 250 Ω at current signal
<b>Feedback signal</b>	0-10 V, 0-20 mA, 4-20 mA
<b>Pressure switch</b>	adjustable via software

## Accuracy

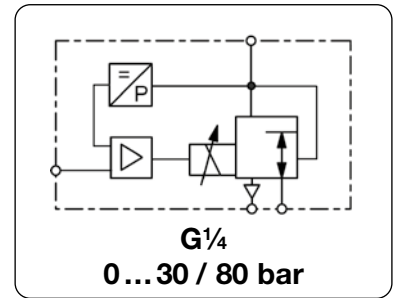
<b>Linearity / Hysteresis</b>	± 3% FS
<b>Response sensitivity</b>	± 3% FS
<b>Regulating time</b>	< 1 s
<b>Repeatability</b>	± 3% FS
<b>Over all accuracy</b>	± 3% FS

## Adjustment

<b>Zero point</b>	The zero point and the end value can be changed in %
<b>Types of regulation/reinforcement</b>	Different types of regulation can be set in the software. P, PI and PID valves can be changed with all individual parameters.
<b>Diagnosis</b>	A diagnostic tool is available in the software.
<b>Characteristic curve</b>	The characteristic curve can be adjusted upwards and downwards, the standard is upwards.



<b>Description</b>	The 3-port/2-way proportional high-pressure valve regulates the output pressure proportionally to the electrical input signal in a closed loop. The output pressure is transformed into an electrical signal and compared to the command signal. If the output pressure rises above the pre-selected set point as a result of a pressure increase the valve exhausts to the desired pressure. The digital control system offers the advantage of a quick adjustment of the control parameters during installation or commissioning. The valve does not consume air. At absence of input signal or supply voltage the valve exhausts.	
<b>Software</b>	Visualization: Scope Function:	Set point, outlet pressure, control parameters, Pressure switch signal Swing-in behaviour can be recorded and read immediately. Data can be accessed.
	Parameterization: Valve diagnostics:	Setpoint, zero point, control limit, ramp function Custom or factory-specific setting. Optimization of the controller.



Dimensions			Nenn- weite	K <sub>v</sub> - value	Flow rate	Supply pressure	Connection thread	Pressure range	Order number
A	B	C	DN	(m <sup>3</sup> /h)	l/min <sup>1</sup>	max. bar	G	bar	E*

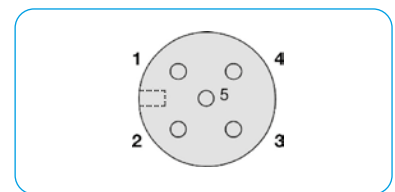
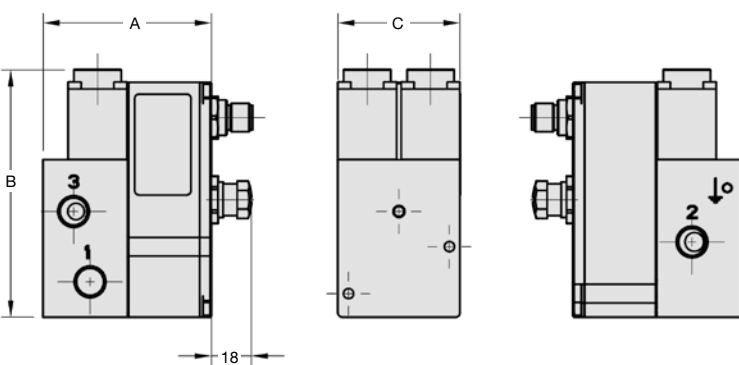
Proportional pressure regulator						0-10 V input signal, Supply 24 V DC, with coupling socket	PHP		
72	105	52	1.0	0.035	40	40	G <sup>1</sup> / <sub>4</sub>	0 ... 30	PHP00-3000
						50		0 ... 40	PHP00-4000
						60		0 ... 50	PHP00-5000
						70		0 ... 60	PHP00-6000
						80		0 ... 70	PHP00-7000
						90		0 ... 80	PHP00-8000



PHP

Special options, appropriate letter or number		
<b>setpoint input</b>	0-20 mA 4-20 mA	PHP. 1- .... PHP. 2- ....
<b>feedback output</b>	0-10 V 0-20 mA 4-20 mA	PHP1.- .... PHP2.- .... PHP3.- ....
<b>nominal size DN1,2</b>	K <sub>v</sub> value 0.048, V=54 l/min	to PHP...-5000 PHP...-...X101

Accessories, enclosed		
<b>PR module</b>	USB programming module with 1 m cable	PHPUSB
<b>Software</b>	Basic version "Light"	PHPSOFT1*2
<b>coupling socket</b>	M12x1, 5-pin with 2 m cable, 5 x 0.25 angular	KM12-C5-2



view from solder pin side

Pin	Description
1	supply voltage
2	input signal
3	Power supply negativ
4	feedback signal
5	pressure switch
Body	emc shielding

Connection plan

\* Product group



Order example:  
PHP00-3000

- 1: supply port
- 2: outlet port
- 3: exhaust

\*1 at 6 bar supply pressure and 5 bar outlet pressure

\*2 You do not need any software to use the valve!