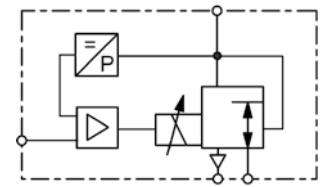


Technical features

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



G_{1/4}
0 ... 30 / 80 bar

General technical features

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

Pneumatic features

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

Electrical features

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

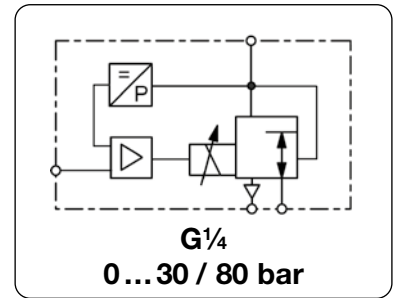
Accuracy

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

Adjustment

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

Description	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.	
Software	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 _v - value	Flow rate	Supply pressure	Connection thread	Pressure range	Order number
A	B	C	DN	(m ³ /h)	l/min ¹	max. bar	G	bar	E*

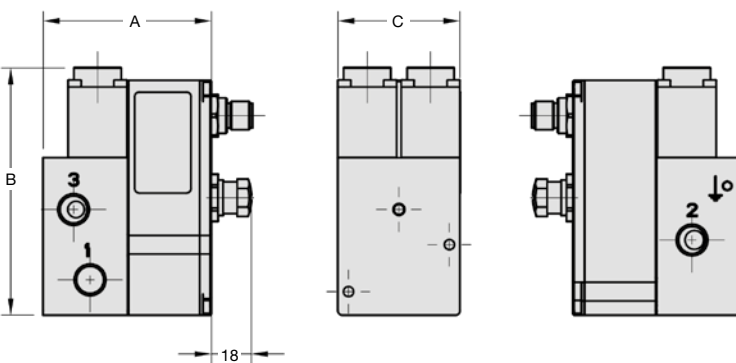
Proportional pressure regulator						0-10 V input signal, Supply 24 V DC, with coupling socket	PHP		
72	105	52	1.0	0.035	40	40	G ¹ / ₄	0 ... 30	PHP00-3000
						50		0 ... 40	PHP00-4000
						60		0 ... 50	PHP00-5000
						70		0 ... 60	PHP00-6000
						80		0 ... 70	PHP00-7000
						90		0 ... 80	PHP00-8000



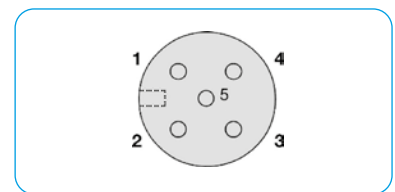
PHP

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

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



PHP



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

PDF CAD
www.aircom.net