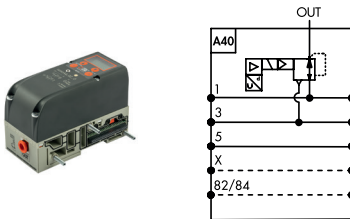


Proportional pressure regulator

Art. No. 153142

Type No. 02282A400Z00



Exemplary illustration

The EB 80 proportional pressure regulator delivers precise, dynamic pressure control based on electrical input. Its closed-loop system uses a precision sensor and mini-solenoid valves to continuously adjust pressure in real time. The proportional pressure regulator fits any EB 80 island and supports up to 16 regulators per island, compatible with all EB 80 communication protocols.

For multi-pole islands, it is available with external M12 electrical connection, accepting commands in Volts, mA and via RS232 protocol. The fieldbus versions feature integrated control, offering flexible connectivity and intuitive operation. Islands without valves can also be constructed, consisting exclusively of several regulators connected in series.

Versions without display are configured remotely, while versions with screen and keypad allow direct configuration on the device and display of information and diagnostic values.

Two pneumatic configurations are available: In variants with local regulation only, regulated air can be taken from a quick-fit coupling on the front while the island's air supply in port 1 passes through unregulated. On the other hand, versions with in series regulation set pressure at port 1 to supply all downstream modules (while the front outlet is present and operational as well, but closed off with a plug).

For the fieldbus versions, please refer to the operating instructions for the electrical fieldbus connection module used.

Technical data

Module type	A
Module description	proportional pressure regulator
Version	analogue
Analogue output	0 - 10 V DC
Port 1	unregulated (locally regulated output)
Display	with
Medium	filtered, unlubricated compressed air
Required purity class in accordance w. ISO 8573-1	3.7.3
Flow rate measurement 1	at P1 = 10 bar, P2 = 6.3 bar and pressure drop $\Delta p = 0.5$ bar
Flow rate 1	720 NI/min

Technical data

Flow rate measurement 2	at P1 = 10 bar, P2 = 6.3 bar and pressure drop $\Delta p = 1$ bar
Flow rate 2	1000 NI/min
Supply voltage range	12 -10 % to 24 +30 % V DC
Operating voltage min.	10.8 V DC
Operating voltage max.	31.2 V DC
Max. admissible voltage	32 V DC*
Input signal	0 - 5 V DC / 0 - 10 V DC / 4 - 20 mA / RS 232 / keyboard
Electrical connection	M12 male connector, 8-pin
Min. input pressure	pressure to be regulated +0.5 to 1 bar
Input pressure max.	10.5 bar
Min. control range	0.05 bar
Max. control range	10 bar
Hysteresis	$\leq \pm 0,2$ % (full scale)
Repeatability	$\leq \pm 0,2$ % (full scale)
Temperature characteristics	max. 2 mbar / °C
Current consumption	max. 220 mA at 12 V DC
Digital output	PNP / NPN
Display - accuracy	$< \pm 0.3$ % (full scale)
Display - unit of measurement	bar, MPa, psi
Min. ambient temperature	-10 °C
Max. ambient temperature	50 °C
Housing	technopolymer
Sealant	NBR
Protection IP	IP 65
Series	EB 80

*IMPORTANT! Voltage greater than 32 V DC will damage the system irreparably.

Commercial data

eCl@ss 5.1.4	27291501
eCl@ss 9.0	27291390
UNSPSC_Code_v190501	40141603
UNSPSC_CodeDesc_v190501	Pneumatic valves

Accessories

	Art. No.	Type No.
Closing plate for analogue proportional pressure regulator for valve island EB 80	153703	02282R8000
Connection cable, M12 connector female straight / open ended wires, 8-pin, A-coded, 8-wire, length 5 m	153059	W0970513010
Connection cable, M12 connector female 90° / open ended wires, 8-pin, A-coded, 8-wire, length 5 m	153060	W0970513011
PC-connection cable for REGTRONIC, RS232 CONN female / M12 CONN female 0°, 2 wires to supply 24 VDC power, incl. RS232-USB adapter	153061	W0970513019

Spareparts

	Art. No.	Type No.
EB 80 square cartridge with push-in fitting Ø 8 mm for valve base plate, PU 10 pcs.	153915	02282R2003
EB 80 base interface gasket, PU 10 pcs.	153860	02282R1000