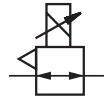


# 100X series Proportional pressure control valves G 1/4 or 1/4 NPT

**Reliable, rugged, open loop control**  
**Proportional I/P and E/P converters**  
**ATEX certified units are available as intrinsically safe**  
**Minimum vibration effects**  
**IP65 environmental protection**  
**Mounting bracket and connector included**



## Technical features

### Medium:

Oil free, dry air, filtered to 5 µm

### Output Pressure:

0,2 ... 1 bar

3 ... 15 psi

3 ... 27 psi

### Supply pressure:

At least 0,7 bar above maximum required output pressure.  
max. 5 bar

### Flow capacity:

>300NL/min forward  
& relief flow

### Air consumption:

up to 1 bar (15 psi): 2,8 NL/min  
up to 2 bar (27 psi): 4,0 NL/min

### Linearity:

< 0,5% of span

### Hysteresis:

< 0,5% of span

### Response Time:

<0,35 seconds for 10 ... 90% or  
90 ...10% of output pressure into  
a 10cc load (1 bar range  
instruments)

### Temperature Sensitivity:

< 0,1% of span/°C between  
-40 ... +85°C

### Supply sensitivity:

<0,075% span output change  
per % supply pressure change

### Port sizes:

Main ports: G 1/4 or 1/4 NPT  
Integral gauge ports:  
G 1/4 or 1/4 NPT

### Operating Temperature:

-40 ... +85°C

Air supply must be dry enough  
to avoid ice formation at  
temperatures below +2°C.

### I.P. Rating:

IP65 in normal operation

### Weight:

1,0 kg

### Mounting Position:

Surface mounting bracket  
provided.  
Alternative mounting options  
available

### Vibration Effect:

5% of span: 4mm-p 5 ... 15Hz  
and 2g sine 15 ... 150Hz.


### Materials

Body: Passivated zinc  
die-casting, epoxy painted  
Cover: Glass reinforced nylon  
Diaphragms: Nitrile

## Electrical parameters

Input Signal	mA versions 1 ... 4 bar: 2 wire 4 ... 20 mA; 3 wire 4 ... 20 mA +12 ... 24 V mA versions 6 ... 8 bar: 3 wire 4 ... 20 mA +12 ... 24 V voltage versions 1 ... 4 bar: 2 wire 0 ... 10 V; 3 wire 0 ... 10 V +12 ... 24 V voltage versions 6 ... 8 bar: 3 wire 0 ... 10 V +12 ... 24 V
Failure Mode	Output pressure falls to zero signal state when electrical supply fails
Connections	30 mm square connector provided (DIN 43650, form A) mountable in four orientations
Span/Zero	Adjustable up to 20 % output range - further information available

## Technical data - standard models

Symbol	Output pressure	Input Signal	ATEX intrinsically safe	Weight (kg)	Model
	3 ... 15 psi	4 ... 20 mA		1,0	400100R
	0,2 ... 1 bar	4 ... 20 mA		1,0	402100R
	3 ... 15 psi	4 ... 20 mA	x	1,0	490100R
	0,2 ... 1 bar	4 ... 20 mA	x	1,0	492100R

## Option selector

4★★★★★



Input signal	Substitute
4 ... 20 mA	0
0 ... 20 mA	2
1 ... 5 V	3
0 ... 10 V / 1 ... 10 V	4
Intrinsically safe	9

	Substitute
Standard	00
Weatherbox	10
Output pressure	Substitute
3 ... 15 psi	01
3 ... 27 psi	07
0,2 ... 1 bar	21

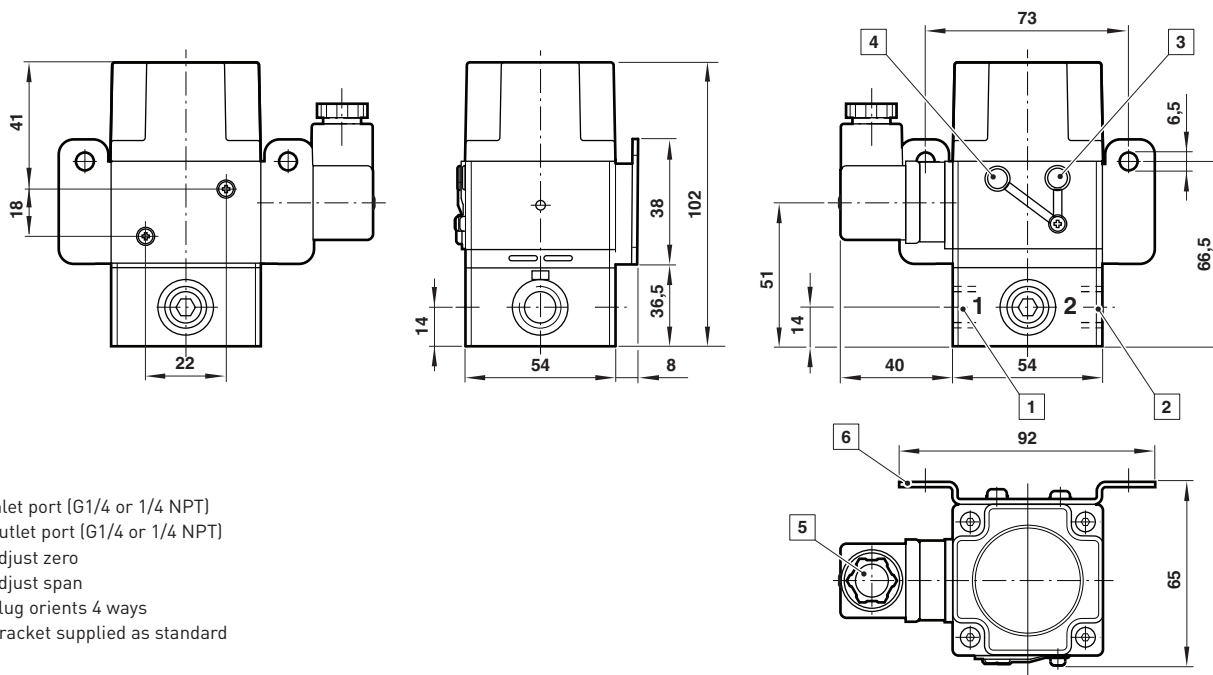
### Other options available:

- Alternative input signal ranges
- Alternative pressure ranges
- Flying Leads
- Conduit entry with flying leads
- Junction box (M20 / 1/2" NPT)
- Intrinsically safe certification
- 50mm pipe mounting bracket
- Captured exhaust
- Reverse acting
- Split range
- For G 1/4 ports, contact your representative

## Certification

Certification agency	Type 100X Intrinsically Safe
SIRA (CENELEC ATEX approved) to EN60079	Sira 02ATEX2002X  Ex ia IIC T4 Ga (Ta = -40° to +80 °C)  Ui = 28 V, Ii = 59 mA, Pi = 0.633 W Ci = 0 Li = 10 mH    II 1G

## Dimensions



## Warning

These products are intended for use in industrial compressed air systems only. Do not use these products where pressures and temperatures can exceed those listed under »**Technical features**«.

Before using these products with fluids other than those specified, for non-industrial applications, life-support systems, or other applications not within published specifications, consult NORGREN.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes.

The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.

System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.