

422 I.S. fail freeze series Current to pressure (I/P) Converter G1/4 or 1/4 NPT

ATEX I.S. I/P Converter

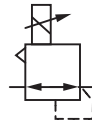
Advanced electronic control

Fail freeze operation (output pressure retained on power failure)

Minimum vibration effects

High accuracy

Captured bleed as standard



Technical features

Medium:

Oil free, dry air, filtered to 5 µm

Output pressure:

0,2 ... 1 bar

Supply pressure:

at least 0,7 bar above maximum required output pressure
maximum 4 bar gauge

Flow capacity:

Up to 250 NL/min

Air consumption:

≤ 0,4 NL/min

Linearity:

≤ 0,5 % of span

Hysteresis:

Typically ≤ 0,5% of span

Vibration effect:

≤ 1 % of span for vibration level up to 4 mm, 5 ... 15 Hz, 3g
15 ... 500 Hz in any orientation.

Response time:

< 6 sec 10 ... 90% into a 0,5 l volume

< 6 sec 90 ... 10% into a 0,5 l volume

Temperature sensitivity:

Typically < 0,1 % span/°C between -10°C and +60°

Supply sensitivity:

Typically < 0,5% of span for full supply pressure range

Port sizes:

Main ports: 1/4 NPT/G1/4 female
Gauge ports: 1/4 NPT/G1/4 female
Captured bleed: 1/8 NPT female

I.P. Rating:

IP65 with piped exhaust

EMC Compatibility:

Compliant and CE marked in accordance with the EC Directive 2004/108/EC tested to
BS EN 61000-6-2:2005
BS EN 61000-6-4:2007+ A11:2011

Ambient/Media temperature:

-10 ... +70°C

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

Maintenance

No user serviable parts

Mounting position:

Operation in any orientation is possible; integral surface mounting bracket provided.
Orientation effect <0.2%

Materials

Body: zinc diecasting passivated and epoxy painted
Cover: Glass reinforced PA
Diaphragms: NBR

Technical data

Symbol	Port size	Output pressure	Weight (kg)	Model
	G1/4	3 ... 15 psi	0,98	AC301PJ1
	1/4 NPT	3 ... 15 psi	0,98	AC301PK1
	G1/4	0,2 ... 1 bar	0,98	AC301BJ1
	1/4 NPT	0,2 ... 1 bar	0,98	AC301BK1

For other port sizes or options please contact your sales representative.

Options to special order:

- Alternative pressure units
- Conduit entry (M20 / 1/2" NPT)
- 50 mm pipe mounting bracket

Electrical parameters

Input Signal	4 ... 20 mA (two wire). Terminal voltage typically < 11 V at 20 mA
Failure Mode	Output pressure held at previous value when input signal fails; drift rate ≤ 0,2% of span in 5 minutes
Overload protection	30 mA max. overload current. Unit unaffected by reverse current
Connections	30mm square connector provided (DIN 43650, form A) mountable in 4 directions
Span/Zero	Independently adjustable up to 15 % output range

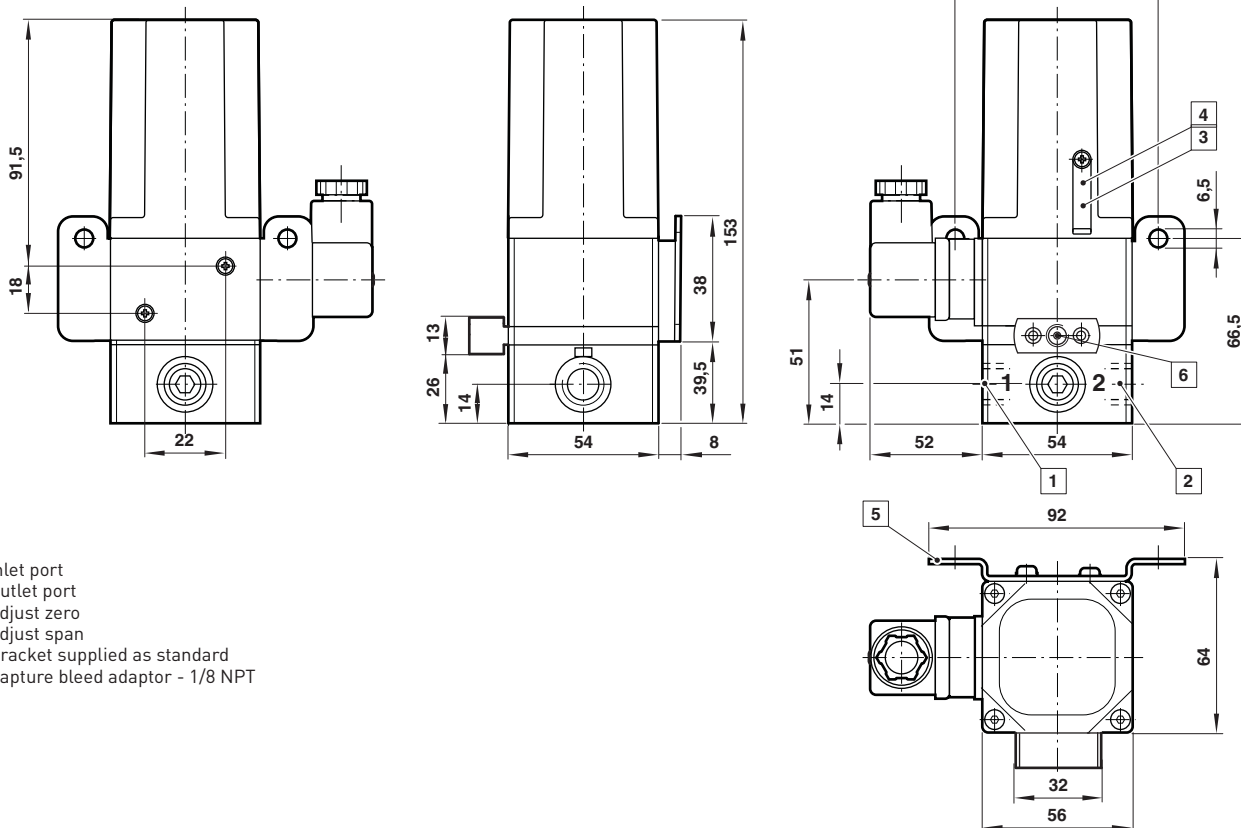
Option selector

Pressure range	Substitute	Special notes	Substitute
3 ... 15 psi	P	Standard exhaust	0
0,2 ... 1 bar	B	Capture bleed	1
Port sizes	Substitute	Junction box & C/B	2
G 1/4	J		
1/4 NPT	K		

AC301***


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Dimensions



- 1 Inlet port
- 2 Outlet port
- 3 Adjust zero
- 4 Adjust span
- 5 Bracket supplied as standard
- 6 Capture bleed adaptor - 1/8 NPT

Certification

Certification Agency	ATEX Intrinsically safe	IECEX Intrinsically safe
Sira	 Sira 03ATEX2007X Ex ia IIC T4 Ga (Ta = -40 ... +80°C) Ui = 28 V d.c. Ii = 110 mA Pi = 0,8 W Ci = 5 nF Li = 0,24 mH 1G	IECEx SIR 11.0095X Ex ia IIC T4 Ga (Ta = -40 ... +80°C) Ui = 28 V d.c. Ii = 110 mA Pi = 0,8 W Ci = 5 nF Li = 0,24 mH

Warning

Do not use these products where values can exceed those listed under »**Technical features/data**«.

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.

Your distributor:

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