

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
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Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
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Expert team | Trust guarantee | 100% satisfaction

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The 100X series is an open-loop, highly accurate current – pressure Converter.

A rugged and reliable unit which has been proven in application installations globally.

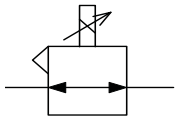
The uncomplicated design of the 100X/101X enhances the reliability and reduces maintenance requirements, offering a cost effective accurate solution.

- *Reliable, rugged, open loop control*
- *ATEX and FM certified units are available as Intrinsically Safe, Type N*
- *Proportional I/P and E/P converters*
- *Minimum Vibration Effects*
- *IP65 environmental protection*
- *Mounting Bracket and Connector Included*

Type 100/101X

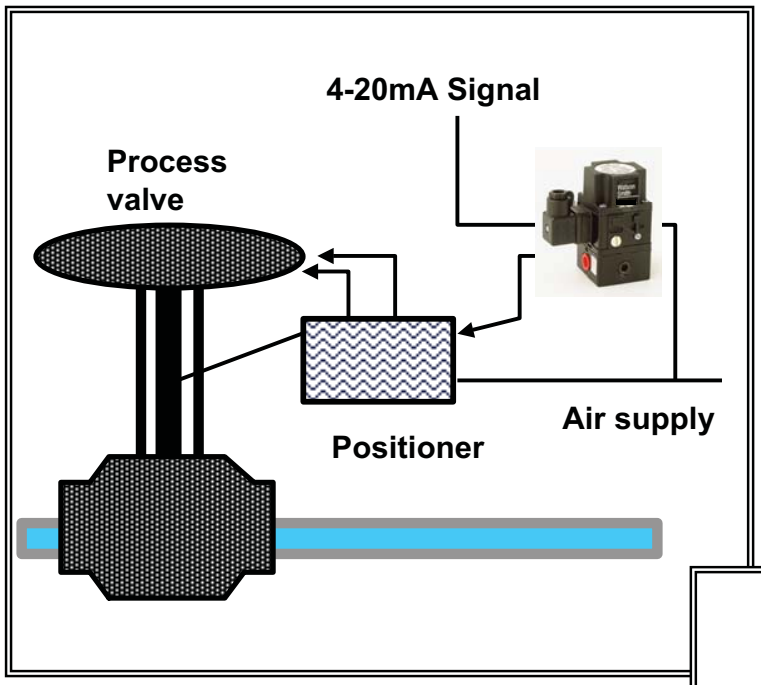
I/P Converter





Functional Symbol

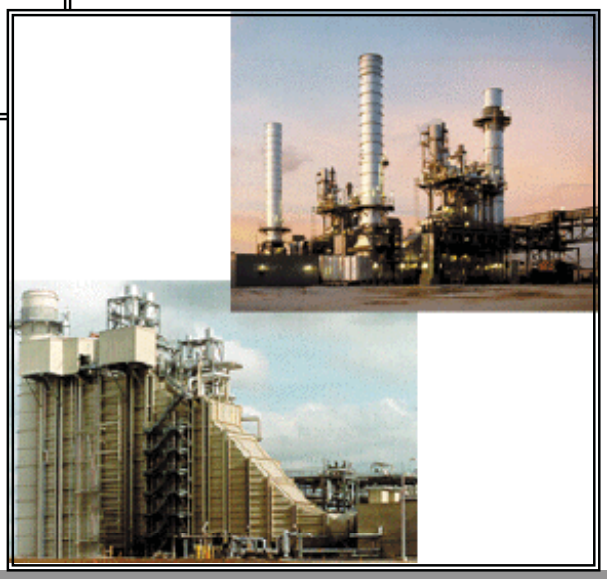
TYPICAL APPLICATIONS



Industry :

Any industry using I/P Converters for positioning valves or electrical regulation for pressure control.

e.g. Petrochemical, Oil and Gas and also Tyre manufacturing etc.



Solution:

The proportional valve/ I/P provides accuracy and is robust for different applied loads and conditions.

It can also be used to raise and lower objects to preset positions.

TECHNICAL DATA

Pneumatic

• Output Pressure	Ranges up to 4bar (2 wire), up to 8bar (3 wire) – ***See Ordering Options***
• Air Supply	Oil free, dry air, filtered to 5 microns; at least 0.5bar above maximum required output pressure; maximum 5bar for a standard 100X (upto 10bar for 101X)
• Flow Capacity	Up to 300nL/min (10scfm) forward flow, 150nL/min (5scfm) relief
• Air Consumption	1.4 l/min (0.06scfm) typical
• Linearity	Maximum 0.5% of span for 100X
• Hysteresis	Maximum 0.35% of span for 100X
• Response Time	Typically less than 0.5 seconds (dependent on input for 10-90% step change in outlet pressures) into a 10cc load
• Temperature Sensitivity	< 0.1% span/°C for span and zero over operating range
• Supply Sensitivity	Better than 0.075% span output change per % supply pressure change
• Port Sizes	1/4" NPT or 1/4" BSP

Physical

• Operating Temperature	-40°C to +85°C
• I.P. Rating	IP65 in normal operation
• Electromagnetic Compatibility	This is a passive electro-pneumatic instrument and is unaffected by interfering high frequency signals
• Material of Construction	Zinc diecasting passivated and epoxy paint, nitrile diaphragms, Be_2Cu flapper nozzle & supply valve
• Weight	825g
• Mounting Position	Integral surface mounting bracket provided for preferred vertical mounting. ***Alternative mounting available.***
• Vibration Effect	<5% of span : $4mm_{p-p}$ 5-15Hz & 2g sine 15-150Hz, vertical, horizontal & inverted, in accordance with ISA-S75.13-1996

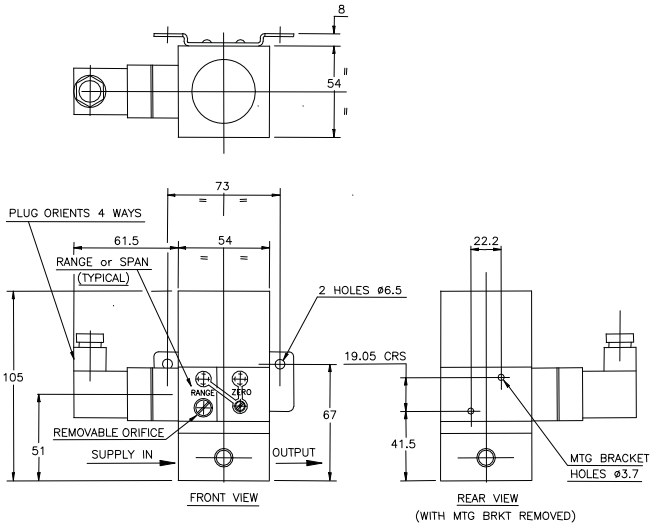
Electrical

• Input Signal	4-20mA/1-10V (2 & 3 wire) – ***See Ordering Options***
• Failure Mode	Output pressure falls to bleed pressure when electrical supply fails
• Connections	30mm square connector DIN 43650
• Span/Zero	Adjustable 20% output range – ***Further Options Available***
• Input Impedance	11kohms for a 0-10V Current required from the voltage source (0-10V) would be 10/11000 = 0.9mA

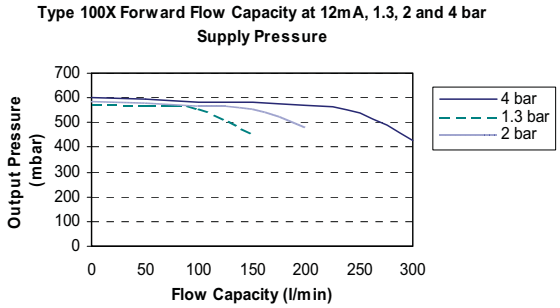
INSTALLATION DIAGRAM

Pneumatic connections:
¼" NPT or ¼" BSP Female

Electrical connections:
30mm square connector
DIN 43650 (provided)



CHARACTERISTIC GRAPHS



ORDERING INFORMATION & ACCESSORIES

Standard models are 2 wire; 3 wire units require 12-24V supply

OUTPUT PRESSURE	INPUT SIGNAL	
	4-20mA	1-10V
0.2-1bar	402100R	-
0.14-8bar (3 wire)	572400R	562400R
3-15psig	400100R	440100R
2-120psig (3 wire)	570400R	560400R

Options available:

- Alternative input signal ranges
- Alternative pressure ranges
- Flying Leads
- Conduit entry with flying leads
- Junction box (M20 / ½" NPT)
- Intrinsically safe certification
- 50mm pipe mounting bracket
- Captured exhaust
- Reverse acting
- Split range
- Weatherproof (IP66)

CERTIFICATION

An intrinsically safe 100X model is certified to ATEX 94/9/EC, ⟨ex⟩ II 1G EEx ia IIC T4 (Ta= -40°C to +80°C) (EN 50020) is available. (Installations with these models must comply with the information given in BS EN 60079.

Your distributor:
Coulton Instrumentation Ltd
17 Somerford Business Park, Christchurch, BH23 3RU, UK
Tel: +44 1202 480 303
E-mail: sales@coulton.com
Web: www.coulton.com

Our Ref: ds100XN-06/06
Controlled Doc. 2006-114a

All instruments are tested, soaked at 60°C, cycled for 1000 full scale electrical /pneumatic operations and retested on the Watson Smith Automatic Testing System for linearity, hysteresis, drift, supply sensitivity, response time, start up pressure, air consumption and terminal resistance. An individual test certificate is provided at no extra charge.

Our policy is one of continuous research and development. We therefore reserve the right to amend without notice the specifications given in this document. Customers are responsible for ensuring that the product is used only for the purpose for which it is intended. In case of doubt Norgren will be pleased to advise.

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

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