WatsonSmith

ELECTRONIC CONVERTER CURRENT TO PRESSURE (I/P) TYPE 425 FAILSAFE

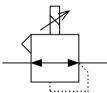
FEATURES

- Advanced electronic control
- Explosion proof
- ·Failsafe operation (output pressure falls to minimum on power failure)
- Vibration immune
- Weatherproof

GENERAL DESCRIPTION

The 425 proportional I/P converter uses advanced closed loop electronic control to achieve accurate, high resolution pressure control. It is available in explosion proof and intrinsically safe versions and its vibration immunity and weatherproofing make it ideal for field application.





Functional Symbol

TECHNICAL DATA

PNEUMATIC

 Output Signal 0.2-1bar (3-15psig); minimum outlet pressure less than 15mbar (0.2psig)

Air Supply Oil free, dry air, filtered to 5 microns;

1.3-4bar (18-60psig)

Up to 300NI/min (10scfm) Flow Capacity Air Consumption 0.6 l/min (0.02scfm) typical

5 seconds (from 0 to 90% or 100 to Response Time

10% of output pressure into a 0.5 litre

load)

 Total Error ±0.25% of span (typical, independent error includes the combined effect of

non-linearity, hysteresis, deadzone

and repeatability)

 Temperature Effect Typically less than ±1% span

between -10°C to +60°C

 Supply Sensitivity Less than 1% span for 10% supply

pressure change

 Connections 1/4" NPT female standard (plus two

integral 1/4" NPT gauge ports)

PHYSICAL

•Operating Temperature -40°C to +85°C

 Weatherproofing IP66, NEMA 4X (when mounted upright)

Vibration Output pressure changes less than 1%

for vibration amplitude 5mm 10-30Hz, 10g

30-500Hz

 Electromagnetic Compliant and CE marked in accordance with the EC E.M.C. directive. Tested to Compatibility

standards: BS EN50082-2: 1995,

BS EN50081-2: 1994

·Material of Construction Aluminium and zinc diecasting with nitrile

diaphragms, black epoxy powder coating

standard

Mass 930a

 Mounting Position Integral bracket allows for surface or

pipe mounting in any orientation. Note: the

unit must be mounted upright to achieve

the weatherproof ratings

ELECTRICAL

50mm

 Electrical Signal 4-20mA (two wire); load presents 6 volts

(±0.5V) constant voltage drop to the current

source

·Failure Mode Signal falls to below 15mbar (0.2psig) when

input signal fails

Tight Shut-off A potentiometer setting causes the output to

fall to zero at between 3.2 and 4.5mA

 Connections 1/2" NPT or M20 female; internal terminal block with capacity up to 2.5mm² cable

ds425F_10/03



Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.

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Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.