Specification sheet

Kent-Taylor Deltapi N Series Pneumatic Transmitters Model NEA Pressure transmitter

GENERAL CHARACTERISTICS

The blind type pressure transmitter, mod. NEA, is used to measure a pressure and convert it into a proportional pneumatic signal.
The instrument works on the force-balance principle and consists of two main units:

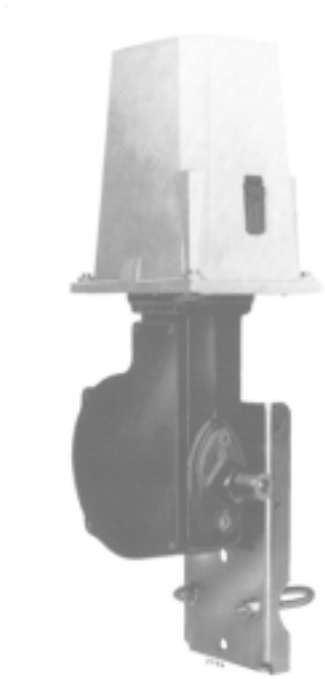
the measuring unit consists of a Bourdon Tube assembly housed in a cast iron primary unit enclosure which has an aluminium gasketed cover. The connection block is welded to the root of the tube.
The measuring element can withstand the maximum overrange without damage.

the transmission unit converts the differential force applied to the measuring element into a proportional output pneumatic signal.
The output pressure, generated by a flapper nozzle relay, is fed to a feedback bellows with a rising pressure until the bellows force balances that of the measuring element.

Span value continuously adjustable by an internal micrometric screw.

Zero value adjustable by an external screw.

Mounting in a vertical position on 2in diameter pipe by a special bracket.



OPTIONAL EXTRA FEATURES

A zero suppression device allows to set as a zero of the transmitter a measured variable value different from zero. The sum of the zero suppression value (S) plus the calibrated span cannot exceed the upper range limit (M) suitable by the Bourdon Tube :
S + span ≤ M (see table).

Air filter regulator can be directly mounted on the transmitter, with or without output gauge, and connected with piping and fittings either in stainless steel or copper.

SPECIFICATIONS

SPAN LIMITS min and max	RANGE LIMITS lower and upper (M)	MAXIMUM ZERO SUPPRESSION (S)	OVERRANGE LIMIT
7000 and 70000 kPa 70 and 700 bar	0 and 70000 kPa 0 and 700 bar	63000 kPa 630 bar	85 MPa 850 bar

Air supply
nom. 140 kPa (1.4 bar, 20 psi); min. 125 kPa (1.25 bar, 18 psi), max. 175 kPa (1.75 bar, 25 psi)

Output signal
20 to 100 kPa/0.2 to 1 bar, 3 to 15 psi or 0.2 to 1 kg/cm^2

Static air consumption
350 Nl/h

Maximum output flow
- with rising output pressure: 30 Nl/min.
- with falling output pressure: 40 Nl/min.

Accuracy
± 0.5% F.S.D. (typical)

Thermal drift (for ambient temperature variation between -20° C and + 65° C)
- range 0 to 7000 kPa (70 bar): ± 1%/10°C
- range 0 to 40000 kPa (400 bar): ± 0.2%/10°C

Degree of protection in accordance with IEC 529
IP55

Ambient temperature limits
-40 and + 120°C

Cover material
thermoplastic resin

Bourdon Tube material
AISI 316

Process connections (see figure ref. D)
1/2 in NPT-M

Pneumatic connections
- Air supply (in figure ref. A): 1/4 in NPT-F
- Output (in figure ref. B): 1/4 in NPT-F

Net weight (maximum)
7 kg approx

Packing
expanded polythene box

ORDERING INFORMATION

Select one character or set of characters from each category and specify complete catalog number.

PRODUCT CODE

	abc	de	fg	hi	j	k	lm
BASE MODEL							
VERSION							
MEASURING ELEMENT			00				
OUTPUT					0		
EXTRAS							

abc **BASE MODEL**

	Code
Pressure transmitter	NEA

de **VERSION**

Standard	01

fg

Use code	00

hi **MEASURING ELEMENT**

AISI 316 s.s. Bourdon tube	01

j

Use code	0

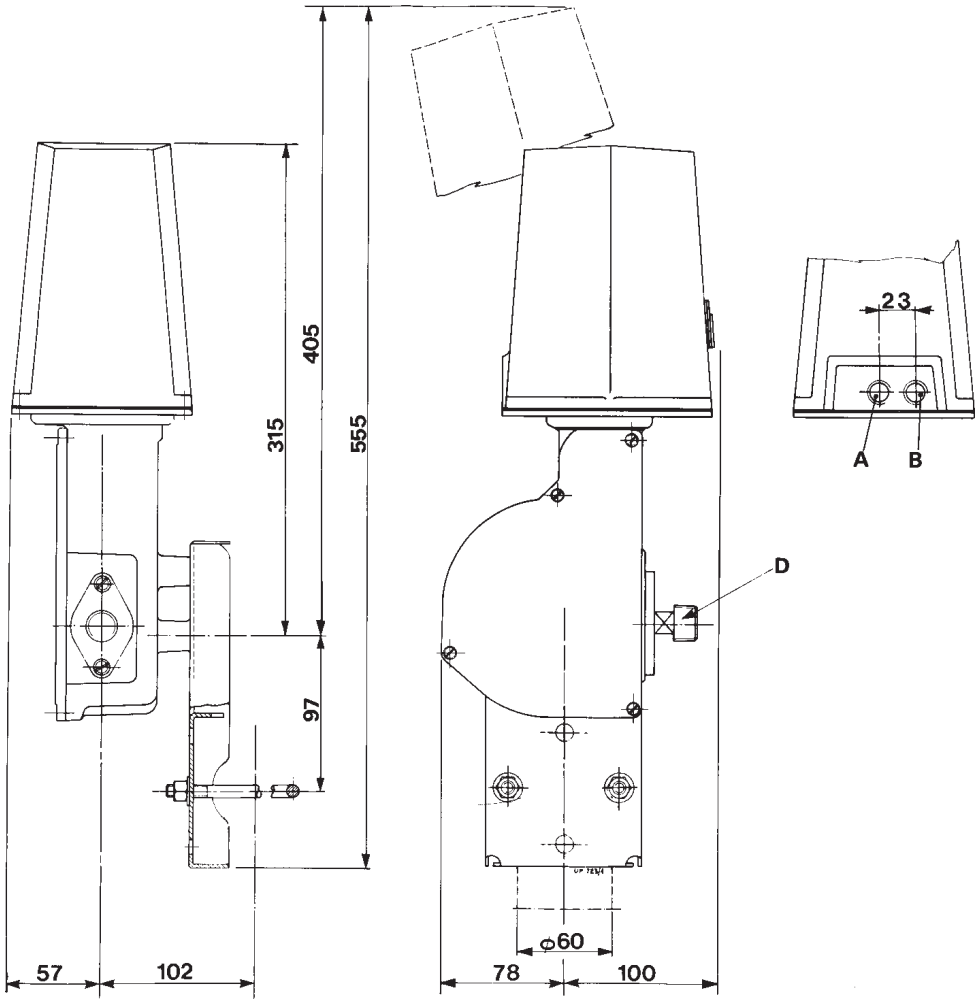
k **OUTPUT**

3 to 15 psi	According to ANSI/ISA S 51.1-1979 standard terminology	1
3 to 15 psi with zero suppression device		3
0.2 to 1.0 kg/cm^2		4
0.2 to 1.0 kg/cm^2 with zero suppression device		6
20 to 100 kPa / 0.2 to 1 bar		7
20 to 100 kPa / 0.2 to 1 bar with zero suppression device		9

EXTRAS

lm	Identification tag material	Piping material	Air filter regulator	Pressure gauge	
	s.s.	- -	- -	- -	02
	s.s.	s.s.	with	- -	10
	s.s	Copper	with	- -	11
	s.s.	s.s.	with	with	13
	s.s.	Copper	with	with	14

MOUNTING DIMENSIONS



SS/NEA Rev 5

The Company's policy is one of continuous product improvement and the right is reserved to modify the specifications contained herein without notice.

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