

N-Series Electronic Pressure Switches

**IDEAL FOR PRESSURE
ALARM, SHUTDOWN,
CONTROL ON –**

- Machine tools
- Injection molding machines
- Presses
- Pumps
- Hydraulic systems
- Turbines and compressors
- Pipelines
- Most process applications
- All high-cycle applications



**NEW!
BIG, BRIGHT
EASY-TO-READ
PRESSURE
DISPLAY**

ISO 9001
REGISTERED FIRM

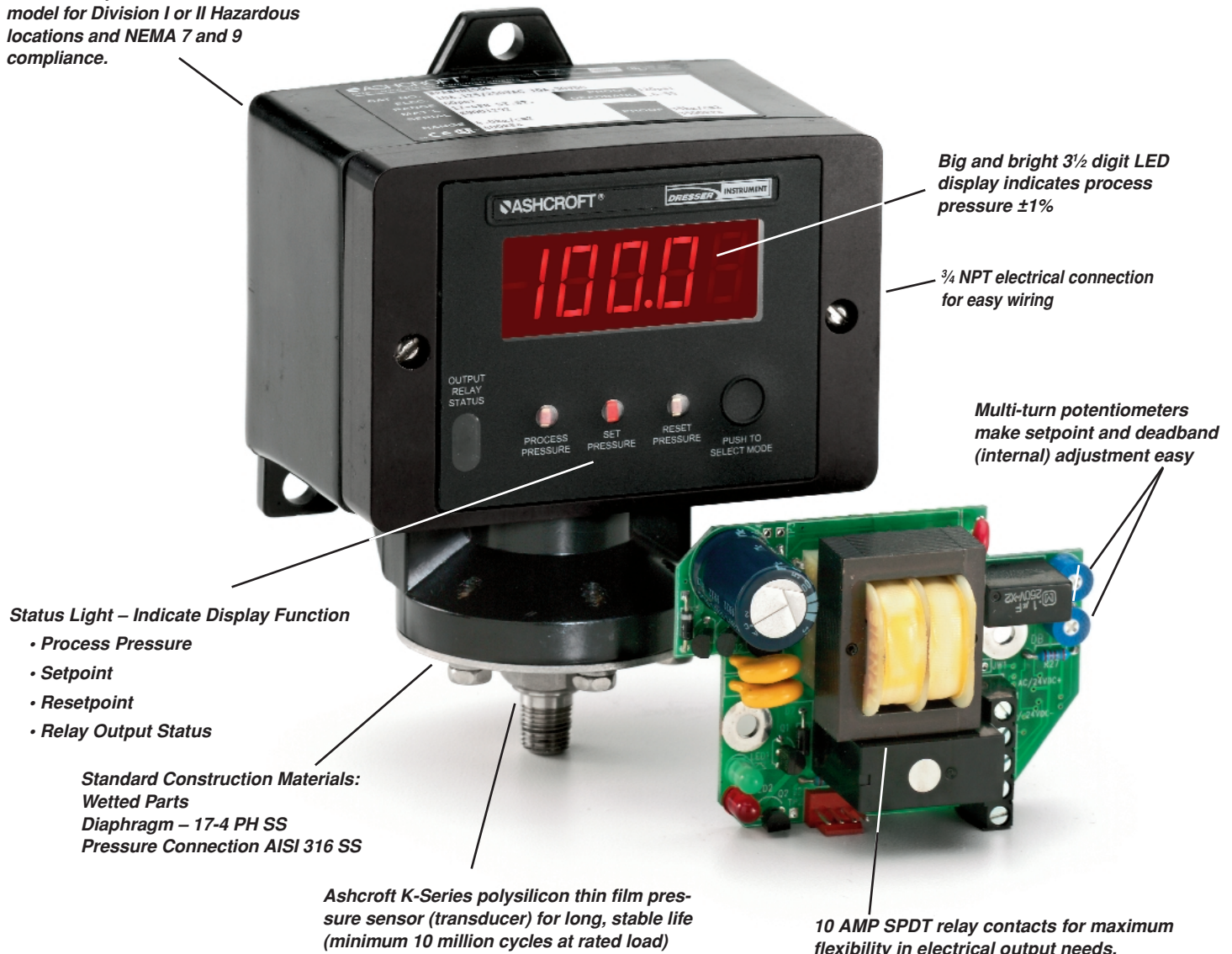
N-SERIES PRODUCT INFORMATION

Ashcroft® N-Series electronic pressure switches have proven reliable in the toughest industrial applications. The pressure sensor is a standard Ashcroft K-Series thin film transducer. The signal developed in the transducer is processed on a conformal coated printed circuit board to produce an output to a high quality electromechanical relay, which is rated for 10,000,000 cycles at rated load! The result is a long lasting pressure switch that will outlast mechanical switches in high cycle applications such as metal stamping presses, plastic injection molding machines, and other machine tool and special equipment. N-Series also features narrow, adjustable deadbands that can be adjusted to less than 0.5% of range, solving many

pipeline and elevated tank applications that are out of the reach of mechanical products.

The new indicating model is ideally suited for applications where both a pressure indicator and a switch output for alarm, shutdown, control or interlock are needed. Sludge and slurry applications in wastewater and pulp and paper mills often require costly diaphragm seals to isolate instruments from the clogging effects of the process. You can save money by installing N-Series with indication on a single seal. You can even set the switch set and reset points on a test bench without pressure on the system, using the indicator and status lights. See below for these additional features:

Watertight epoxy-coated aluminum enclosure for additional corrosion resistance. Meets NEMA 3, 4, 4X, 13 and IP66 requirements. Choose N7 model for Division I or II Hazardous locations and NEMA 7 and 9 compliance.



Status Light – Indicate Display Function

- Process Pressure
- Setpoint
- Resetpoint
- Relay Output Status

Standard Construction Materials:
Wetted Parts
Diaphragm – 17-4 PH SS
Pressure Connection AISI 316 SS

Ashcroft K-Series polysilicon thin film pressure sensor (transducer) for long, stable life (minimum 10 million cycles at rated load)

Big and bright 3 1/2 digit LED display indicates process pressure ±1%

3/4 NPT electrical connection for easy wiring

Multi-turn potentiometers make setpoint and deadband (internal) adjustment easy

10 AMP SPDT relay contacts for maximum flexibility in electrical output needs.

ORDERING INFORMATION

N-SERIES PRESSURE SWITCH MODEL NUMBER:

To specify the exact switch desired select entries from appropriate tables as shown in example below.



1 – FUNCTION		
NPA	Single setpoint, adjustable deadband	
NPI	Single setpoint, adjustable deadband, process and setpoint indication	

2 – ENCLOSURE		
N4	Watertight NEMA 3, 4, 4X, 13 and IP66	
N7	Explosion proof NEMA 3, 4, 4X, 13, 7, 9 and IP66 – Not available with Model NPI (display)	

3 – OUTPUT		
D	SPDT Relay UL & CSA Listed	10A, 250 Vac 10A, 30 Vdc

4 – POWER REQUIREMENT	
Code	
L	110 Vac, 50/60Hz
C	24 Vdc
V	250 Vac, 50/60Hz

5 – PRESSURE PORT	
Code	Description
S01	1/8 NPT Male
S02	1/4 NPT Male
S03	1/8 NPT Female
S04	1/4 NPT Female
S05	7/16-20 SAE-1/4 SAE
S06	1/2 NPT Male 1/4 & NPT Female
S07	1/4 AMINCO – Female

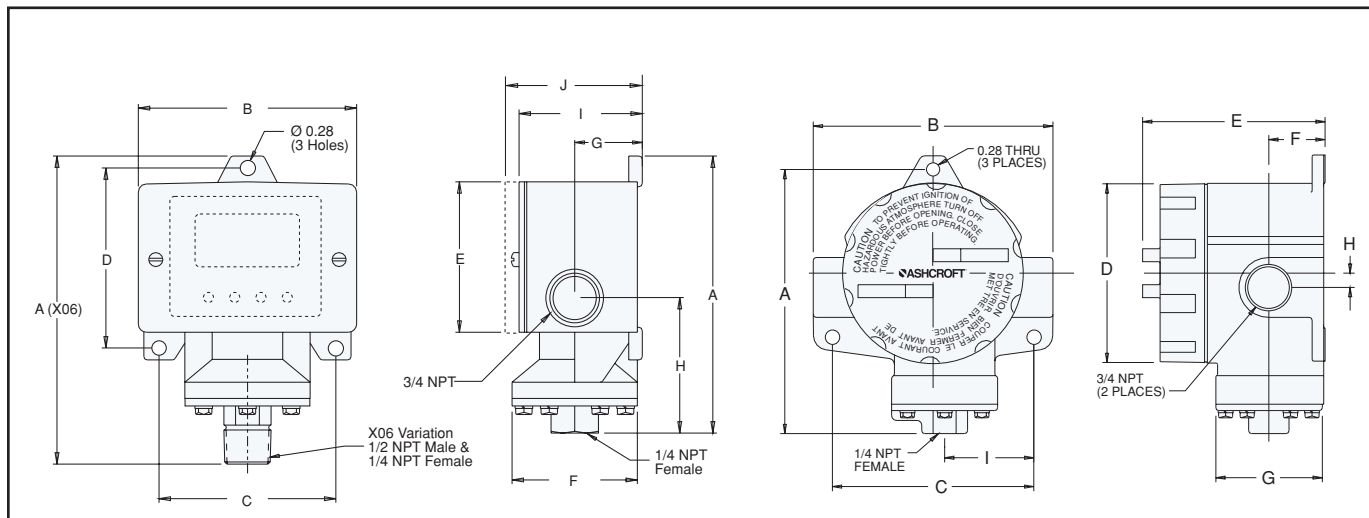
6 – N-SERIES OPTIONS	
CODE	DESCRIPTION
XEA	External setpoint adjustment Consult factory for other options

7 – NOMINAL RANGE PERFORMANCE TABLE (psi)			
Nominal Range	Setpoint Limits	psi Proof	psi Burst
60	3-60	120	480
100	5-100	200	800
200	10-200	400	1600
300	15-300	600	2400
500	25-500	1000	4000
750	35-750	1500	6000
1000	50-1000	2000	8000
2000	100-2000	4000	16,000
3000	150-3000	4500	20,000
5000	250-5000	7500	22,500
7500	375-7500	9000	25,000
10,000	500-10,000	12,000	30,000
15,000	750-15,000	18,000	45,000
20,000	1000-20,000	24,000	60,000

NOTE: TEMPERATURE SPECIFICATIONS
 -20°F to 160°F
 Setpoint shift of up to 2% of range
 per 50°F change can be expected

NEMA 4 (N4)

NEMA 7 (N7)



A	B	C	D	E	F	G	H	I	J	Weight
5	4	3/4	3 5/16	2 3/4	2 5/16	1 3/16	2 3/4	2 3/16	2 3/4	1.8 lb
(127)	(102)	(83)	(84)	(70)	(59)	(30)	(70)	(56)	(70)	(.81 kg)

A	B	C	D	E	F	G	H	I	Weight
5 47/64	5 13/16	4 3/8	3 7/8	3 31/32	1 7/32	2 5/16	5/16	1 5/16	2.7 lb
(146)	(132)	(111)	(99)	(100)	(31)	(59)	(8)	(49)	(1.2 kg)

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All specifications are subject to change without notice.

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