

**Special features:**

- Ashcroft® K Series polysilicon thin film pressure sensor (transducer) for long, stable life (minimum 1 million cycles at rated load)
- Setpoint repeatability of 0.5% of range
- Choice of watertight, NEMA 4 or explosion-proof NEMA 7/9, IP66 enclosures for safety and reliability
- Pressure setpoints to 20,000 psi
- Deadbands adjustable between 0.1% and 95% of nominal range
- Multi-turn potentiometers make setpoint and deadband adjustments easy

**1 - FUNCTION**
**NPA** - Single setpoint with adjustable deadband

**2 - ENCLOSURE**

N4	NEMA 4, IP66, watertight
N7	NEMA 7/9, IP66, explosion proof

**3 - OUTPUT**

D	SPDT Relay	10A, 250 Vac 10A, 30 Vdc
I	SPDT Relay and current output	10A, 250 Vac 10A, 30 Vdc and 4-20mA

**4 - POWER REQUIREMENTS**

Code	Power Supply
L	110 Vac, 50/60 Hz
C	24 Vdc
V	250 Vac, 50/60 Hz

**5 - PRESSURE CONNECTIONS**

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-male
S06	1/2 NPT male
S07	1/4 AMINCO-female
S08	7/16-20 SAE-J514-female

- Status lights indicate switch state
- Continuous power assures operation first time and every time even after years of inactivity

**Ideal for pressure alarm, shutdown, control on:**

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

**6 - OPTIONS**

Code	Description
XEA	External adjustment (N4 only)

**7 - STANDARD PRESSURE RANGES**

Range psi	Setpoint <sup>(1)</sup> Limits psi	Proof psi	Burst psi
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	15,000
5000	250-5000	7500	25,000
7500	375-7500	9000	22,500
10,000 <sup>(2)</sup>	500-10,000	12,000	30,000
15,000 <sup>(2)</sup>	750-15,000	18,000	45,000
20,000 <sup>(2)</sup>	1000-20,000	24,000	60,000

<sup>(1)</sup> Switch setpoint is adjustable throughout these limits.

<sup>(2)</sup> Pressure connection S07 only on these ranges.

**NOTES:**
**Temperature Specifications (70°F ref.)**

-20°F to 160°F ambient and process

Setpoint shift of up to 2% of range per 50°F change can be expected



NEMA 7 (N7) Model Shown

**OPTIONAL TRANSMITTER SPECIFICATIONS**
**PERFORMANCE CHARACTERISTICS**

<b>Accuracy Class (F.S.):</b>	<b>1%</b>
Nonlinearity	
Terminal Point*	±0.7%
B.F.S.L.	±0.4%
Hysteresis	±0.2%
Nonrepeatability	±0.07%
Interchangeability	±1.0%

\*Includes hysteresis

**Stability:** ±0.5% F.S./year

**Durability:** 10<sup>8</sup> cycles 20/80% F.S. with negligible performance change

**Response Time:** Less than 5msec

**ENVIRONMENTAL CHARACTERISTICS**
**Temperature Limits:**

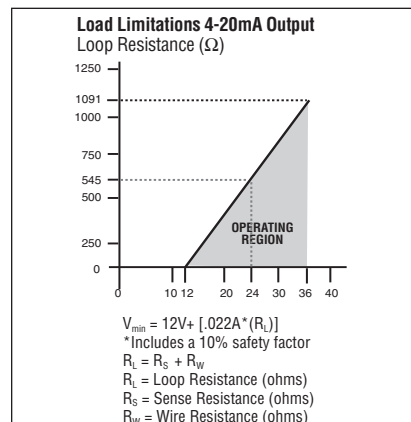
Storage	-65/+250°F
Operating	-20/+180°F
Compensated	-20/+160°F

**Thermal Coefficients (70°F ref.):**

<u>Accuracy</u>	<u>Zero and Span</u>
1%	±0.040% F.S./°F

**ELECTRICAL SPECIFICATIONS**
**Output Signal: Supply Voltage:**

4-20mA (2 wire) 12-36 Vdc unregulated

**Reverse wiring protected.**
**Zero Offset:** ±1.0%F.S.

**TO ORDER THIS N-SERIES PRESSURE SWITCH:**

**Select:** \_\_\_\_\_ **NPA** **N4** **D** **L** **S02** **XEA** **100#**  
 1. Function: \_\_\_\_\_  
 2. Body: \_\_\_\_\_  
 3. Electrical Output: \_\_\_\_\_  
 4. Power Requirements: \_\_\_\_\_  
 5. Pressure Port: \_\_\_\_\_  
 6. Options (see table 6): \_\_\_\_\_  
 7. Pressure Range (see table 7): \_\_\_\_\_