



805QS Pressure Switch-Transmitter

Form 1552CM

The 805QS pressure switch-transmitter is a compact loop-powered pressure switch-transmitter. A supplemental continuous output is also available (either 4-20mA or 1-5VDC). Its rugged construction makes cost of ownership low and it carries a three-year warranty. The 805QS pressure switch-transmitter is suitable for hazardous locations and hostile environments where space is limited. It meets applications where low-cost, discrete and continuous monitoring is preferred. Switch set points and supplemental continuous output zero and span points are field adjusted via Calibration Kit with USB communication cable.

Features

- Compact, 316 Stainless Steel, hermetically sealed enclosure
- Stainless Steel sensor, no o-ring
- Solid state relay output
- 0.25% continuous output accuracy
- Supplemental 4-20 mA or 1-5 VDC output
- EMI/RFI protection
- NEMA 4X, IP 66 housing
- FM and ATEX certified for hazardous locations in U.S., Canada and Europe
- Dual Seal approval



Product Specifications

Primary Switch Output		Loop Resistance	800 ohms @ 24VDC
Accuracy	±2% URL	Circuit Protection	Reverse polarity and EMI/RFI protected
Type	Normally Open Solid State Relay	Construction	316SS housing (CF8M)
Electrical Rating	30V, 120mA	Process Connection	1/2" NPT(M) with 1/4" NPT(F) 17-4SST
Temperature Effect	±2% URL/100°F @ -40 to 176°F	Electrical Connection	
Supplemental Continuous Output		Size	1/2" NPT(M)
Accuracy	±0.25% URL (BFSL)	Termination	18 AWG shielded cable, 72-inch length
Turndown	5:1	Wetted Materials	17-4SST
Output	4-20 mA 1-5 VDC option (27mW ± 5mW @ 9 VDC)	Over Pressure	
Zero Offset	+10% URL	0-100 psi	3 times FSPR
Temperature	±1% URL/100°F @ -40 to -176°F	Up to 10000 psi	2 times FSPR
Temperature Range		Burst Pressure	
Compensated	-40 to 176°F (-40 to 80°C)	0-100 thru 0-250 psi	40 times FSPR
Ambient	-40 to 176°F (-40 to 80°C)	0-500 thru 0-1000 psi	20 times FSPR
Process	-40 to 194°F (-40 to 90°C)	0-2500 psi	10 times FSPR
Storage	-40 to 194°F (-40 to 90°C)	0-5000 psi	8 times FSPR
Long Term Stability	≤ ±0.5% URL per year	0-10000 psi	4 times FSPR
Response Time	≤ 5 ms	Weight	1.8 lb (0.8 kg)
Supply Voltage	8-30VDC	Warranty	3 years

Design and specifications are subject to change without notice. For latest revision, see c-a-m.com/measurement.

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Switch Operation

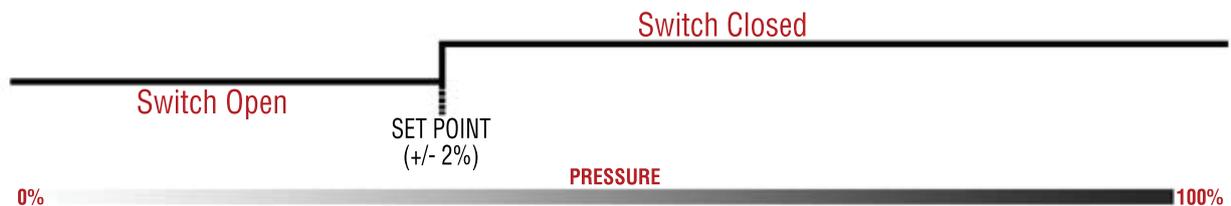
The primary switch output of the 805QS is a “Normally Open Solid State Relay” rated 30V, 120mA. It can be configured 3 ways; as shown below. Switch set point(s) and supplemental continuous output zero and span points are set at the factory as specified by the customer.

In all three configurations, the fail-safe state for the 805QS switch output will be open (i.e., if power is removed from the 805QS, the switch contacts will open automatically).

Window Mode Switch is closed when the process pressure is within the user selected range (LO and HI set points), and open when the pressure is above or below that range.



Close on Rise/Open on Fall Switch is open when the process pressure is below the user selected set point and closed when the pressure is above that set point.



Open on Rise/Close on Fall Switch is closed when the process pressure is below the user selected set point and open when the pressure is above that set point.

