

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) 17-4SS
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	17-4SS
	2:1 for 100 psi range	Over Pressure	
Output	4-20 mA 1-5 VDC option (27mW ± 5mW @ 9 VDC)	0-100 psi	3 times FSPR
Zero Offset	+10% URL	Up to 10000 psi	2 times FSPR
Temperature	±1% URL/100°F @ -40 to -176°F	Burst Pressure	
Temperature Range		0-100 thru 0-250 psi	40 times FSPR
Compensated	-40 to 176°F (-40 to 80°C)	0-500 thru 0-1000 psi	20 times FSPR
Ambient	-40 to 176°F (-40 to 80°C)	0-2500 psi	10 times FSPR
Process	-40 to 194°F (-40 to 90°C)	0-5000 psi	8 times FSPR
Storage	-40 to 194°F (-40 to 90°C)	0-10000 psi	4 times FSPR
Long Term Stability	≤ ±0.5% URL per year	Weight	1.8 lb (0.8 kg)
Response Time	≤ 5 ms	Warranty	3 years
Supply Voltage	8-30VDC		

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

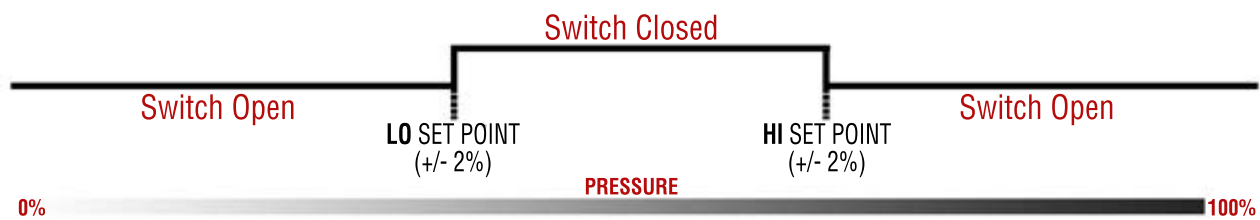
805QS Pressure Switch-Transmitter

Switch Operation

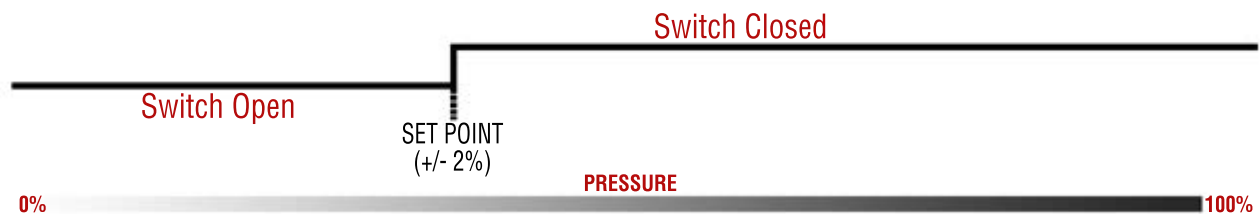
The primary switch output of the 805QS is a “Normally Open Solid State Relay” rated 30V, 120mA. It can be configured 3 ways; as shown below. Switch set point(s) and supplemental continuous output zero and span points are set at the factory as specified by the customer.

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.



805QS Pressure Switch-Transmitter

How to Order

Model Number System

805QS - C07 - A - RR9A

805QS pressure switch-transmitter with 4-20mA output, 0-2500 psi, 17-4SS port, 1/2" NPT(M) with 1/4" NPT(F) and optional SS tag wired to housing with customer specified information.

Range		2	3		4		
0-100 psi	03	C	07	A	Process Connection Size		
0-250 psi	04				1/2"NPT(M) with 1/4"NPT(F)		
0-500 psi	05				Accessories		
0-1000 psi	06				BB	Cleaned for industrial oxygen service	
0-2500 psi	07				DS	Dual Seal approval (FM)*	
0-5000 psi	08				HB	SS universal terminal box, 1/2" NPT(F), ATEX approved	
0-10000 psi	09				HBME	SS universal terminal box, M20 x 1.5(F), ATEX approved	
Supplemental Output		1	HT	SS universal terminal box, 1/2" NPT(F), CSA certified	PK	Pipe mounting kit	
4-20 mA	C	C	RR	9A ←	Model Number	RR	SS tag wired to housing with customer specified information
1-5 VDC	V						
805QS	C	07	A	RR	9A	Model Number	

* Dual Seal version is not hermetically sealed.

Note: The supplemental continuous zero and span points and the Switch Configuration Mode and set point(s) must be specified. Refer to switch configuration diagrams on page 2.

Example: 805QS-C07-A-RR9A, which has a range of 0-2500 psi could be ordered with a span of 200 psi to 2300 psi. The Window Mode switch configuration could have a LO set point of 210 psi and a HI set point of 2290 psi.

Test Certificates

805QS	Certificates*	C1	C2	C3	C4	C8
	Calibration	◆				
Hydrostatic Pressure Test		◆				
Inspection Report				◆		
Compliance / Conformance					◆	
Typical Material of Wetted Parts						◆

*Add certificate code to the end of model number.

Calibration Kit - Part Number 9231026 (includes hardware and software). This kit allows you to adjust switch set point(s) and zero and span points in the field. The calibration kit does not require any license or registration fees.

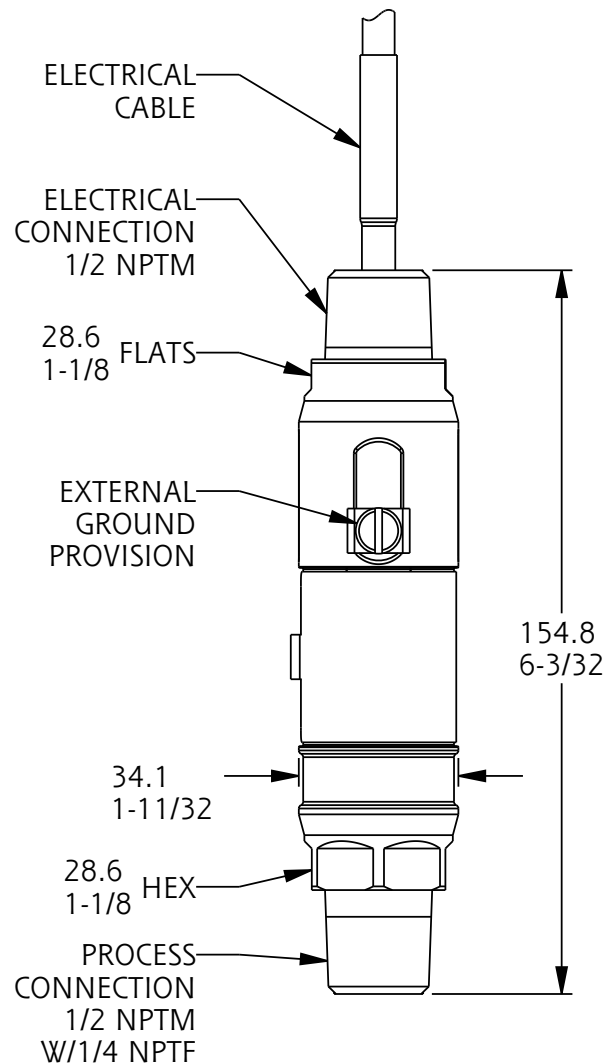
815PT Smart Pressure Transmitter

Agency Approvals

Approved*	Safety Method	Approval
FM (U.S. and Canada)	Explosion Proof Hazardous Locations	Class I, II, III; Division 1 Groups A-G; T5; Type 4X
	Non-incendive	Class I, II, III; Division 2 Groups A-G; T5; Type 4X
ATEX or INMETRO	Flameproof	II 2 G Ex d IIC T5 IP 66

Dimensions

Dimensions shown are for reference only. Contact the factory for certified dimension drawings.
Linear = mm/in.



Drawing 0091438