

# SANITARY FLUSH DIAPHRAGM PRESSURE TRANSDUCER/TRANSMITTER

**Models 280 & 283  
380 & 383**



## FEATURES:

- 3A Approved
- All Welded Stainless Steel
- RFI Protection
- Model 383 Temperature Compensated to 400°F

## PRESSURE RANGES:

- From 0-20" wc to 0-1000 psi

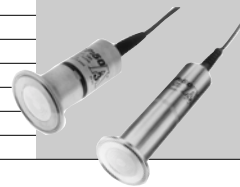
## ACCURACY:

- From 0.1% FSO to 0.5% FSO

MODEL	OUTPUT @ 70°F	EXCITATION
280/283	0-5 Vdc $\pm$ 2% FSO	10.5-42 Vdc
380/383	4-20 mA $\pm$ 2% FSO	13-37 Vdc
280X	Explosion-Proof, Rated Class I, II, III, Division I Groups A, B, C, D, E, F, G, Shaded Specifications	
380X		

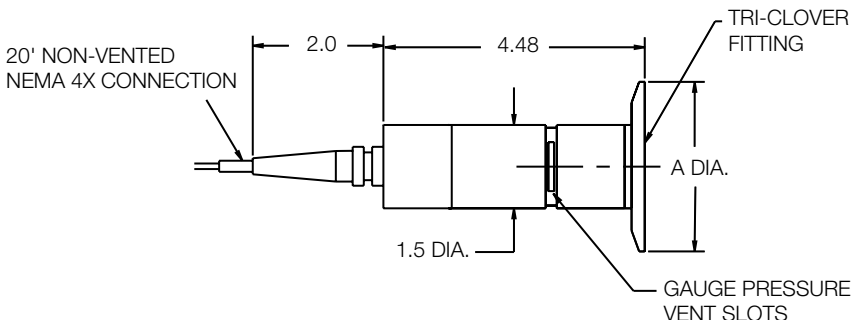
FLUSH DIAPHRAGM

# OUTLINE

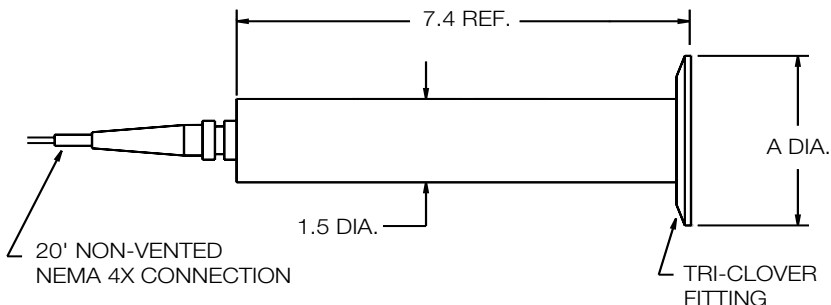


Some options will affect dimensions. Consult factory if important. Consult factory for Intrinsically Safe approved options.

## MODEL 80



## MODEL 83



Pressure/Sizes	Tri-clover Fitting	A
0-75 psi to 0-1000 psi	1/2" & 3/4" pipe	.984" dia
0-20" wc to 0-1000 psi	1-1/2" pipe	1.984" dia
0-20" wc to 0-300 psi	2" pipe	2.516" dia
0-20" wc to 0-300 psi	2-1/2" pipe	3.047" dia
0-20" wc to 0-300 psi	3" pipe	3.579" dia

## GASKETS FOR MODEL 80

Quick clamp style with compression ridge for superior sealing

Size	BUNA-N	TEFLON	SILICON
1/2"	GTRI-0.50 B	GTRI-0.50 T	GTRI-0.50 S
3/4"	GTRI-0.75 B	GTRI-0.75 T	GTRI-0.75 S
1 1/2"	GTRI-1.50 B	GTRI-1.50 T	GTRI-1.50 S
2	GTRI-2.00 B	GTRI-2.00 T	GTRI-2.00 S
2 1/2"	GTRI-2.50 B	GTRI-2.50 T	GTRI-2.50 S
3"	GTRI-3.00 B	GTRI-3.00 T	GTRI-3.00 S

High polish 304 stainless steel quick clamps

Size	
1/2" & 3/4"	CTRI-0.50
1 1/2"	CTRI-1.50
2"	CTRI-2.00
2 1/2"	CTRI-2.50
3"	CTRI-3.00

# WIRING CODE CODE

		280/283	380/383
A/1	Red	+ Excit.	+ Excit./Signal
B/2	Green	+ Signal	NC
C/3	White	NC	NC
D/4	Black	- Excit./Signal	- Excit./Signal
E/5	Blue	NC	NC
F/6	Brown	NC	NC
	Shield	Case Ground	Case Ground

# SPECIFICATIONS

Unless otherwise stated, these specifications are the standards to which the units are normally constructed. Alterations may be easily and readily accomplished by the standard modification code or by discussion with the factory. We invite your inquiry.

Accuracy		(Static error band includes non-linearity, hysteresis, non-repeatability)
Series B		±0.5% FSO (RSS)
Series C		±0.2% FSO (RSS)
Series D		±0.1% FSO (RSS)
Material in contact with measured fluids		Type 316L Stainless Steel.
Temperature Limits		
Ambient Temp. Compensated	Model 80	0°F to 180°F
	Model 83	0°F to 180°F
Operating	Model 80	-20°F to 200°F
	Model 83	-20°F to 200°F
Media Temp. Compensated	Model 80	0°F to 180°F
	Model 83	0°F to 400°F
Operating	Model 80	-20°F to 200°F
	Model 83	-20°F to 400°F
Temperature Compensation		
Zero		Less than ±2.0% FSO/100°F
Span		Less than ±2.0% FSO/100°F
Electrical		
Input Current	Model 280/283	6.2 mA, nominal
Output Current	Model 280/283	2.0 mA maximum for less than 0.1% FSO attenuation
Load Impedance	Model 380/383	1200 ohms maximum at 37 Vdc and 550 ohms maximum at 24 Vdc
Zero Balance	Model 280/283	0.0 Vdc ±5% FSO at 70°F
	Model 380/383	4.0 mA ±5% FSO at 70°F
Resolution		Infinite 0.2% practical
RFI		Included
Mechanicals		
Proof Pressure		3 times full scale pressure
Burst Pressure		6 times full scale pressure
Weight		14 oz. nominal, dependent on pressure fitting
Enclosure		All welded type 316 Stainless Steel, rated NEMA-4X Approved 3A
Identification		Etched into body
Connections		Pressure - Tri-clamp 1/2" through 3" Electrical - 20' 6-Conductor cable

\* See modifications on ordering guide.

# ORDERING GUIDE

Ordering: Specify model, and pressure range and indicate modifications or options required.

Only shaded codes and options are available with Explosion-Proof ratings. These units are provided with 1/2" NPT(M) threaded conduit fitting as standard.

## MODEL

280 - 283 0-5 Vdc  
 380 - 383 4-20 mA  
 280X 0-5 Vdc  
 380X 4-20 mA

## SERIES (Accuracy)

B 0.5% FSO  
 C 0.2% FSO  
 D 0.1% FSO

## PRESSURE RANGE

in wc		psi	
XB	20	PC	1
XC	25	PE	2
XD	30	PG	3
XF	50	PJ	5
XH	75	PL	7.5
XK	100	PN	10
XM	150	PP	15
XO	200	PR	20
XQ	300	PO	25
XS	500	PT	30
XU	750	PV	50
XW	1000	PX	75
XY	1500	PZ	100
YA	2000	RB	150
SZ	Non-standard	RD	200
		RE	250
		RF	300
		RH	500
		RK	750
		RM	1000
		SZ	Non-standard

## PRESSURE TYPE

2 Gauge  
 4 Vacuum  
 10 Compound

Use the following codes to identify desired item.

MODEL	SERIES	RANGE	PRESSURE	OPTIONS
•	—	•	—	• / • / •

Example: 380-B-PZ-2-CF-FS

## OPTIONS

### CONNECTOR OR CABLE

AA NEMA 4 with 20' cable (standard)  
 CF 1/2" NPT (M) Thread with 20' potted leads  
 CZ Alternate connector/cable/other

### PRESSURE PORT

AA 2" Tri-Clamp (is standard)  
 FR 1/2" Tri-Clamp (ranges 0-75 psi and higher only)  
 FS 1" Tri-Clamp  
 FU 2 1/2" Tri-Clamp  
 LV 3/4" Tri-Clamp (ranges 0-75 psi and higher only)  
 LW 1 1/2" Tri-Clamp  
 FV 3" Tri-clamp

### GENERAL

GA Standardized output to  $\pm 0.5\%$  FSO  
 GB Alternate full scale outputs  
 GE Improved temperature compensation to  $\pm 0.5\%$  FSO/100°F for zero and span respectively  
 GF Expanded temperature range, -20°F to 200°F (Compensated to  $\pm 2.0\%$  FSO/100°F Max)  
 GJ Zero & span controls. Can-mounted  
 GP Hastelloy diaphragm & tri-clamp fitting (wetted port)  
 GS 0-10 Vdc FSO, Models 280/283 only  
 GZ Customer special  
 HE Improved zero balance  $\pm 0.5\%$  FSO  
 HX Hastelloy diaphragm  
 JH Remote cable-mounted Zero & Span controls. 3' cable on open side. Cable on closed side as required. Model 380/383 only  
 JV Voltage surge protection. 380/383 only  
 MD Explosion-proof/explosion-resistant zero and span controls  
 MH 3:1 ranging for upper ranges  $\leq 0-15$  psi and 0-20" wc through 0-100" wc only  
 Pressure code indicates upper pressure range

GP:50 reserves the right to make product improvements and amendments to the product specification stated throughout this brochure without prior notification. Please contact the factory on all critical dimensions and specifications for verification.