

# Model 235TFC

## High Precision Transmitter-Flush Connection

INDUSTRIAL TRANSMITTERS

### Applications

- Hydraulic Systems
- Pneumatics
- Industrial Environments
- Mobile Hydraulics
- Food & Beverage Industry
- Water Treatment
- Pharmaceutical Industry



Model 235TFC

### Features

- Ranges from 0 to 10 psi thru 0 to 800 psi
- 4:1 Turndown with optional programming tool
- Zero Point adjustment can made using permanent magnet
- 4-20mA and 0-10Vdc Standard Industrial Output Signals
- 316L stainless steel wetted parts
- 304 stainless steel body
- Industry standard electrical connections including DIN 175301-803A, C and Shielded Cable
- Highly flexible modular design
- Protection Class IP65/NEMA 4X (Shielded Cable and M12 4 pin Connections IP67/NEMA 6)

The **TRERICE 235TFC** "Flush-Connection" Digital-Programmable, Pressure Transmitter is the ideal choice for demanding chemical, sanitary and food process applications. By use of the optional programming tool this transmitter provides 4 to 1 turn down and adjustable zero-point & span, allowing for multiple units of measure. The stainless membrane is completely vacuum-sealed, extremely burst resistant and is applicable for use with a variety of process mediums. Stainless steel wetted parts provide long-term durability even in the harshest environments.

In addition, the modular design of the 235TFC Pressure Transmitter allows for a wide variety of electrical connections, output signals and process connections to be specified to meet the requirements of any application.

### Specifications

<b>Model</b>	<b>235TFC • Flush Connection Transmitter</b>		
<b>Sensor Element</b>	Capsule Type - Thin film resistors on a Silicon Membrane, Oil-Filled, Stainless Steel Diaphragm		
<b>Process Connection</b>	G 1/2 A, G 3/4 A, G 1 A Type E (per ISO 1179-2)		
<b>Materials of Construction</b>			
Housing:	304 stainless steel		
Wetted Parts:	316L stainless steel, Viton®		
Pressure Transmission Liquid:	Silicone Oil		
<b>Accuracy at 77° F (25°C)</b>	<b>BFSL</b>	<b>Full Scale</b>	
Non-Linearity:	0.35%	0.50%	
Hysteresis:	0.15%	0.30%	
Repeatability:	0.10%	0.10%	
<b>Operating Temperature Ranges</b>			
Medium:	-4/+257°F (-20/+125°C)		
Ambient:	-4/+185°F (-20/+85°C)		
<b>Temperature Error Band</b>			
Temperature compensated to within 1% between 41°F to 185°F (5 to +85 °C)			
<b>Humidity</b>			
95% RH Non-condensing 100% RH with Shielded Cable Connection (E3)			
<b>Electronic Connection</b>			
90° Angle "Standard" Connector / DIN 175301-803 (A) Shielded Cable (3 Feet Standard) M12 (S723) 4 pin Circular Connector			
<b>Output Signal</b>			
4-20mA (2 wire) and 0-10Vdc (3 wire)			
<b>Overpressure Limit</b>			
at least:	1.5 x FS		
burst pressure at least:	2.9 x FS		
<b>Response Time (10-90%)</b> < 10 ms			
<b>Power Supply</b>			
Output Signal:	Minimum	Maximum	Recommended
4-20mA:	10Vdc	32Vdc	24Vdc
0-10Vdc:	12Vdc	32Vdc	24Vdc
<b>Load Resistance</b>			
4-20mA:	$\leq \frac{V_{SUPPLY} - 10 \text{ Vdc}}{0.02 \text{ A}}$		
0-10 Vdc:	> 5 kOhm		
<b>Circuit Protection</b>			
Protected against reverse polarity and short circuits			
<b>CE Conformity</b> RoHS2 Directive 2011/65/EU EMC Directive: 2014/30/EU - PED Directive: 2014/68/EU Applied standards: EN 61326-1:2013, EN 61326-2-3:2013			
<b>Ingress Protection Rating</b>			
90° Angle Connector: IP65 / NEMA 4X Shielded Cable and M12 4 pin: IP67 / NEMA 6			
<b>Approximate Shipping Weight</b> 0.4 lbs (0.20kg)			

### HOW TO ORDER

Sample Order Number: **235TFC 32 C A 0/1000 E1 3**

Model	Process Connection	Accuracy	Units of Measure	Range Code	Electrical Connection	Cable Length (omit if none)	Output Signal
235TFC	32 G 1/2 A	C 0.5% FS (0.35% BFSL)	A psi	See Standard Ranges	E1 DIN 175301-803 (A) "std"	Specify Length in Feet (ie., 3 Ft=003)	3 4-20mA (2-wire)
	33 G 3/4 A				E3 Shielded Cable (3 Ft Std)		2 0-10 Vdc (3-wire)
	34 G 1 A				E9 M12 (S723) 4 pin		

Multiple electrical connections, output signals and process connections are available. Please consult factory.

# Model 235TFC

## High Precision Transmitter-Flush Connection

All dimensions are nominal.  
Dimensions in [ ] are in millimeters.

INDUSTRIAL TRANSMITTERS

E1 90° Angle "std" Connector DIN 175301-803 (A)	E3 Shielded Cable* (3 Feet Standard)	E9 M12 (S723) 4 pin
	<p>* ≤ 600 psi vented &gt; 600 psi non-vented</p>	

### 235TFC FLUSH CONNECTIONS

--	--	--

### Standard Ranges

psi Ranges (A)			
Range Code	Specific Range	Overpressure Limit	Burst Pressure
0/10	0 to 10 psi	15 psi	29 psi
0/15	0 to 15 psi	23 psi	44 psi
0/30	0 to 30 psi	45 psi	87 psi
0/60	0 to 60 psi	90 psi	174 psi
0/100	0 to 100 psi	150 psi	290 psi
0/160	0 to 160 psi	240 psi	464 psi
0/200	0 to 200 psi	300 psi	580 psi
0/300	0 to 300 psi	450 psi	870 psi
0/400	0 to 400 psi	600 psi	1160 psi
0/600	0 to 600 psi	900 psi	1740 psi
0/800	0 to 800 psi	1200 psi	2320 psi

Actual working pressures should never exceed the "Specific Range" or the maximum process connection rating. "Overpressure Limits" and "Burst Pressures" shown refer to the sensor or body of the transmitter and are for reference purposes only. For correct use and application See: ASTM F2070-00.