



## Ceramic Pressure Transmitter



# Model TFP-40C For General Industrial Applications

### Features

- Measuring ranges from 1.6bar to 250bar
- Gauge type
- Accuracy:  $\pm 0.5\%$ FSO
- Calibrated and temperature compensated
- Ceramic pressure sensor design
- Variety of Pressure & Electrical connections
- Output 4...20mA, 0...10V, 0.5...4.5V and others

### Product Overview

The TFP-40C pressure transmitters offers the user the high stability of ceramic piezoresistive sensor in a low cost OEM package. The TFP-40C is developed for applications of processing and control operations involving aggressive media. The compact and rugged design makes these pressure transmitter suitable for applications including process control systems, hydraulic systems and valves, refrigeration and HVAC controls, level measurement and test equipment.

A wide range of process connection and electrical connection options are available to meet almost requirement.

### Applications

- Process control systems
- Refrigeration and HVAC controls
- Hydraulic systems and valve
- Mechanical and plant engineering
- Pumps and compressors

### Standard Pressure Ranges

Nominal pressure	gauge	sealed gauge	absolute
0...1.6bar	●		
0...2.5bar	●		
0...4bar	●		
0...6bar	●		
0...10bar	●		
0...16bar	●		
0...25bar	●		
0...40bar	●		
0...60bar	●		
0...100bar	●		
0...160bar	●		
0...250bar	●		

Other pressure ranges available. Please consult the factory.

# TFP-40C: Ceramic Pressure Transmitter

## Performance Specifications

Parameter	Value	Units	Notes
<b>General</b>			
Pressure Range	0-1.6, ..., 250	bar	1bar=14.5psi
Overpressure	1.5xFS		
<b>Environmental</b>			
Operating Temperature Range	-20 to +85	°C	-4 °F to 185 °F
Compensated Temperature Range	0 to +70	°C	32 °F to 158 °F
Storage Temperature Range	-40 to +125	°C	-40 °F to 257 °F
Vibration	10	g	20 to 2000Hz
Shock	100	g	10ms
Cycles	10x10 <sup>5</sup>	cycles	

### Electrical @ 25°C(77°F)

Output Signal	4...20mA	0...5Vdc	1...5Vdc	0...10Vdc	0.5...4.5Vdc(ratiometric)
Power Supply(Vs)	12...36Vdc	12...36Vdc	12...36Vdc	15...36Vdc	5Vdc
Load Resistance	<(Vs-12)/0.02A (For current output), >10kΩ (For voltage output)				
Insulation Resistance	100MΩ @50Vdc				

### Physical Specifications

Media Compatibility	All media compatible with ceramic
Housing	304 stainless steel
Diaphragm	ceramic
Seal Ring	Viton or NBR
Oil Filling	/
Protection	IP65(Standard), IP66(only for cable outlet)
Net Weight	Approx.175g


Parameter	Minimum	Typical	Maximum	Units	Notes
<b>Performance</b>					
Accuracy		0.5	1.0	%FSO	1,2
Temp Coeff - Zero		±1.5	±2.0	%FSO	3
Temp Coeff - Span		±1.5	±2.0	%FSO	3
Long-Term Stability		±0.2	±0.3	%FSO/year	1

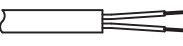
### Notes


1. All values measured at 25°C(77°F)
2. Including non-linearity, hysteresis and repeatability.
3. 0°C to 70°C(32°F to 158°F) with reference to 25°C(77°F).

The listed specifications and dimensions are subject to change without prior notice.

### Connection Diagrams

Connector DIN43650		2-wire(current)	3-wire(voltage)
	Supply+	1	1
	Signal+	2	3
	Gnd	-	2

Cable outlet		2-wire(current)	3-wire(voltage)
	Supply+	red	red
	Signal+	black	green
	Gnd	-	black

Connector M12x1(4-pin)		2-wire(current)	3-wire(voltage)
	Supply+	1	1
	Signal+	2	3
	Gnd	-	2

## Trumen Process Indicator (Model-ILP)

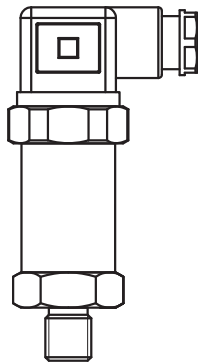
Dimension: 65 x 45 x 45 mm  
 Display: 4 Digit 7 Segment  
 Display resolution: 1999 to 9999  
 Input: 4-20mA  
 Accuracy: mA : 0.5% of span  
 Enclosure: ABS



# TFP-40C: Ceramic Pressure Transmitter

## Electrical Connection

Connector DIN43650



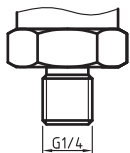
Cable outlet with PVC-cable



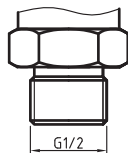
M12x1, 4-pin



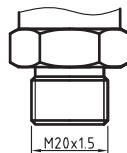
## Mechanical Connection



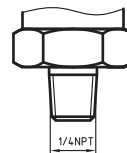
**G1/4**



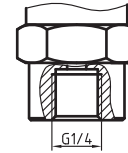
**G1/2**



**M20x1.5**



**1/4NPT**



**G1/4(F)**

## Ordering Information

<b>Option1: Model</b>									
TFP-40C	Ceramic Pressure Transmitter								
<b>Option2: Pressure Ranges</b>									
0016	0...1.6bar      0400    0...40bar								
0025	0...2.5bar      0600    0...60bar								
0040	0...4bar        1000    0...100bar								
0060	0...6bar        1600    0...160bar								
0100	0...10bar      2500    0...250bar								
0160	0...16bar      Cxxx    Customized range								
0250	0...25bar								
<b>Option3: Pressure Type</b>									
G	gauge								
<b>Option4: Output Signal</b>									
42	4...20mA								
05	0...5Vdc								
15	1...5Vdc								
10	0...10Vdc								
45	0.5...4.5(ratiometric)								
<b>Option5: Accuracy</b>									
01	0.5%FSO								
10	1.0%FSO								
<b>Option6: Electrical Connection</b>									
D	Connector DIN43650								
C	Cable outlet with PVC-cable,length=1.5m								
M	M12x1, 4-pin								
<b>Option7: Indicator</b>									
Ix	Without Indicator								
I	With Indicator								
<b>Option8: Mechanical Connection</b>									
M2	M20x1.5(male)	N1	1/4NPT(male)						
G4	G1/4(male)	F4	G1/4(female)						
G2	G1/2(male)	Nx	Customized						
TFP-40C	0060	G	42	01	D	Ix	G2	Example of Ordering Code: TFP-40C-0060-G-42-01-D-Ix-G2	

Specifications are subject to change without prior notice

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