

## Data Sheet

# ZL92 Fluoropolymer Pressure Transducer For Corrosive Liquids and Gases

### FEATURES

- PTFE/PFA wetted parts
- Corrosion resistant to chemicals such as hydrofluoric acid
- Compatible with pipe diameters from 0.25 to 0.5 in. O.D.
- Capacitance sensor for excellent thermal stability
- Multiple mounting options include tube connections, press fit nuts, flared nuts, and threaded nuts
- Class 100,000 cleanroom packaged and bagged

### TYPICAL USES

- Cleaning equipment for semiconductor
- Cleaning equipment for Flat Panel Displays (FPD)
- Wet stations
- Chemical supply systems



ZL92  
Pressure Transducer



### PERFORMANCE SPECIFICATIONS

Static Accuracy:	±1.0% of span @ 73 °F (23 °C) Accuracy includes the effects of linearity, hysteresis and repeatability
Temperature Effect:	±0.05% of span/°C (Zero & Span) in operating temperature range

### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature:	50 °F to 140 °F (10 °C to 60 °C)
Storage Temperature:	14 °F to 149 °F (-10 °C to 65 °C)
Humidity:	25% to 80% RH

### FUNCTIONAL SPECIFICATIONS

Pressure Ranges:	0-45 psi to 0-75 psi
Response Time:	≤ 100 mSec (10% to 90%)
Proof Pressure:	100 psi max.

### ELECTRICAL SPECIFICATIONS

Output Signal:	4 to 20 mA (2 wire) or 1 to 5 Vdc (3 wire)
Supply Voltage:	21.6 to 26.4 Vdc for 2 wire, 12-24 Vdc for 3 wire
Load Resistance:	Rmax = 500Ω for 4 to 20 mA output Rmin = 10kΩ for 1 to 5 Vdc output
Insulation Resistance:	> 100MΩ at 50 Vdc
EMC/EMI:	EN61326-1: 2013, EN61326-2-3: 2013

### KEY BENEFITS

- Isolated sensing elements for corrosive liquids and gases incorporating special vent design
- Low metal ion elution
- PTFE/PFA wetted parts for protection against corrosion

### PHYSICAL SPECIFICATIONS

Ingress Rating:	IP54
Case Material:	Polypropylene and PTFE/PFA
Pressure Connection Sizes:	Tube connection sizes include: ¼", ⅜", and ½"
Unit Weight:	Approx. 140g

### WETTED MATERIALS

Fitting:	PTFE/PFA
Diaphragm:	PFA

### APPROVALS

CE, UKCA, RoHS

## Data Sheet

### ZL92 Fluoropolymer Pressure Transducer For Corrosive Liquids and Gases

ORDERING CODE	Example:	ZL92	7	1	5	1	42	C06	75#	-X1N
<b>Model</b>										
ZL92		ZL92								
<b>Accuracy</b>										
7 - 1.0% of span			7							
<b>Pressure Connection Type</b>										
1 - In-Line type				1						
2 - Single port type										
<b>Pressure Connection Bore Diameter</b>										
5 - Bore diameter O.D. ¼" I.D. 5/32"					5					
6 - Bore diameter O.D. 3/8", I.D. ¼"										
7 - Bore diameter O.D. ½", I.D. 3/8"										
<b>Pressure connecting Port</b>										
1 - Tube connection						1				
2 - S300 nut (press fit)										
4 - 20 series nut (press fit)										
6 - Flare nut (Insert)										
A - S300 male screw (in-line type only)										
<b>Analog Output</b>										
42 - 4 to 20 mA							42			
15 - 1-5 Vdc										
<b>Cable Length</b>										
C06 - 6 feet								C06		
<b>Pressure Range</b>										
45#										
75#									75#	
P3MP										
P5MP										
<b>Options (If indicating an option must include an "X" (-X...))</b>										X
1N - Material Test Report/ Traceability Certificate										1N

# Data Sheet

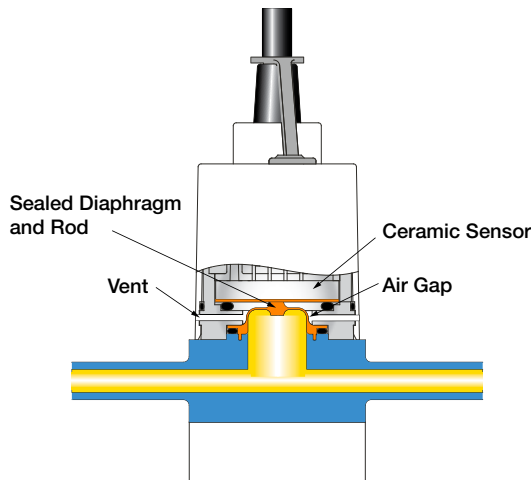
## ZL92 Fluoropolymer Pressure Transducer For Corrosive Liquids and Gases

### STANDARD RANGES

psi	mPa
45#	P3MP
75#	P5MP

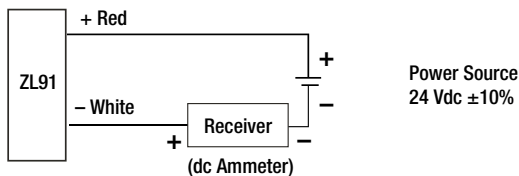
### INTRODUCTION

The ZL92 is a fluoropolymer pressure transducer designed for use in semiconductor processes that require PTFE/PFA wetted parts for improved chemical compatibility for use in corrosive gases and fluids. A secondary isolation diaphragm and vent design isolates the ceramic sensing element from corrosive gases and liquids.

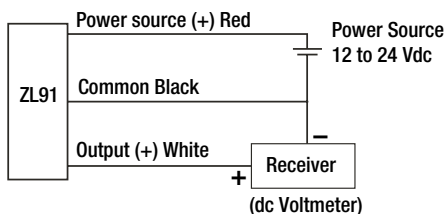


### WIRING DIAGRAMS

#### Two Wire System (Current output)



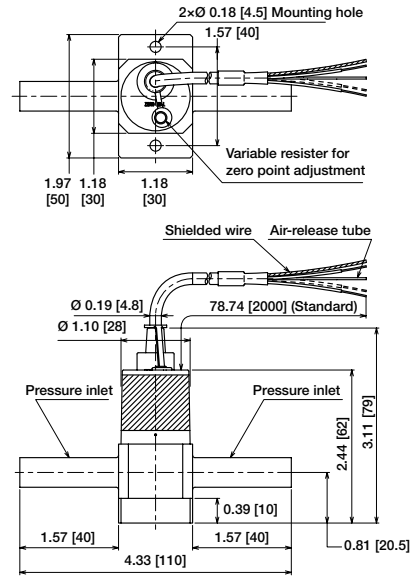
#### Three Wire System (Voltage output)



### Inline Pressure Connection Dimensions are inches [mm]

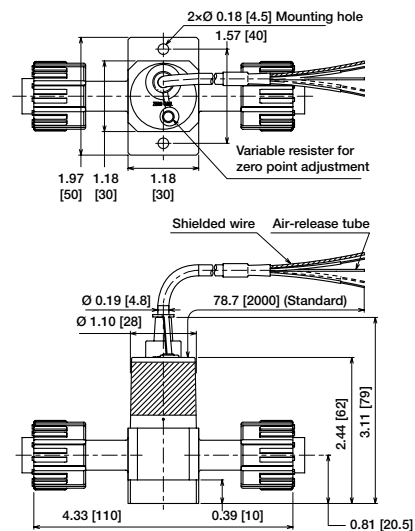
For Reference only, consult Ashcroft for specific dimension drawings

#### Tube Connection



MODEL NUMBER	CONNECTING PORT
ZL92-151	Ø ¼"
ZL92-161	Ø ⅜"
ZL92-171	Ø ½"

#### S300 Nut (Press Fit) From Pillar Packing Co., Ltd



MODEL NUMBER	CONNECTING PORT
ZL92-152	Ø ¼"
ZL92-162	Ø ⅜"
ZL92-172	Ø ½"

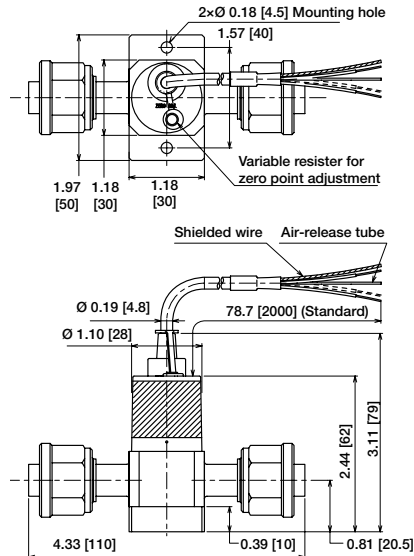
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## ZL92 Fluoropolymer Pressure Transducer For Corrosive Liquids and Gases

Inline Pressure Connection Dimensions are inches [mm]

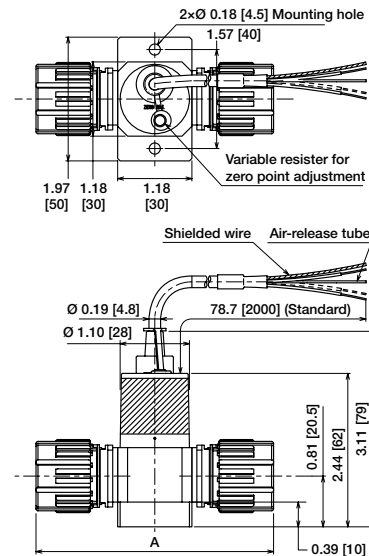
For Reference only, consult Ashcroft for specific dimension drawings

### 20 Series Nut (Press Fit) Flowell Corporation



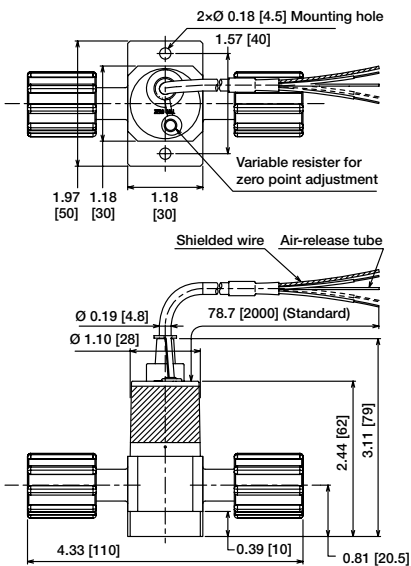
MODEL NUMBER	CONNECTING PORT
ZL92-154	Ø ¼"
ZL92-164	Ø ⅜"
ZL92-174	Ø ½"

### S300 Male Screw From Pillar Packing Co., Ltd



MODEL NUMBER	CONNECTING PORT	A SIZE
ZL92-15A	Ø ¼"	2.68 [68]
ZL92-16A	Ø ⅜"	3.15 [80]
ZL92-17A	Ø ½"	3.78 [96]

### Flare Nut (Insert) From Entgris, Inc



MODEL NUMBER	CONNECTING PORT
ZL92-156	Ø ¼"
ZL92-166	Ø ⅜"
ZL92-176	Ø ½"

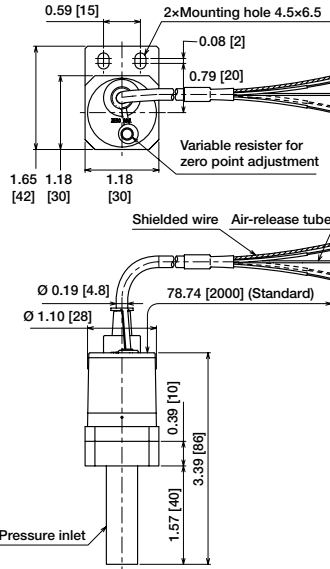
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## ZL92 Fluoropolymer Pressure Transducer For Corrosive Liquids and Gases

### Single Port Pressure Connection Dimensions are inches [mm]

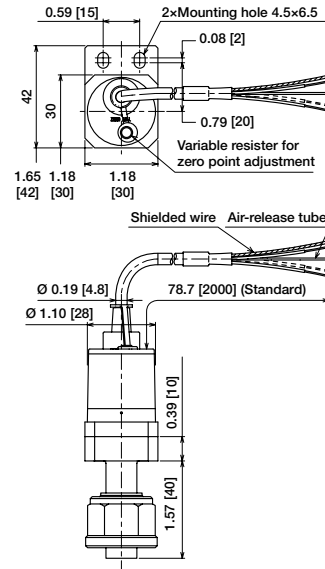
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#### Tube Connection



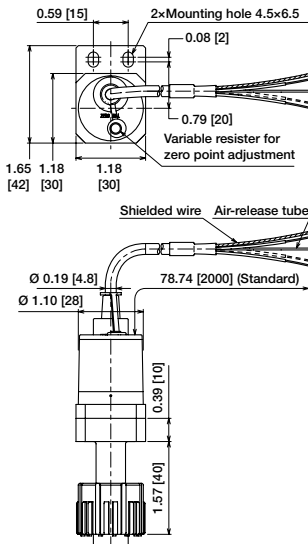
MODEL NUMBER	CONNECTING PORT
ZL92-251	Ø ¼"
ZL92-261	Ø ⅜"
ZL92-271	Ø ½"

#### 20 Series Nut (Press Fit) Flowell Corporation



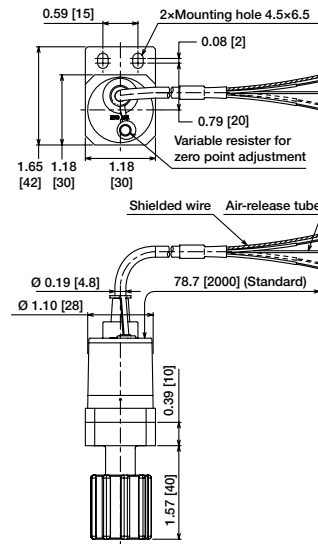
MODEL NUMBER	CONNECTING PORT
ZL92-254	Ø ¼"
ZL92-264	Ø ⅜"
ZL92-274	Ø ½"

#### S300 Nut (Press Fit) From Nippon Pillar Packing Co., Ltd.



MODEL NUMBER	CONNECTING PORT
ZL92-252	Ø ¼"
ZL92-262	Ø ⅜"
ZL92-272	Ø ½"

#### Flare Nut (Insert) From Entgris, Inc.



MODEL NUMBER	CONNECTING PORT
ZL92-256	Ø ¼"
ZL92-266	Ø ⅜"
ZL92-276	Ø ½"