Pressure transmitters

overview





	General						General pu	General purpose						Smart sensors		Harsh environment				
Туре	Standard			MBS 3000	MBS 3200	MBS 3300	MBS 33	MBS 33M	MBS 4000		MBS 4010	MBS 4201					DST P300	DST P30M	DST P40M	DST P40I
Ę	With pulse-snubber		MBS 1750	MBS 3050	MBS 3250	MBS 3350			MBS 4050			MBS 4251	MBS 5150				DST P350	DST P35M		
	Heating		~	~	~		~		~		~			~			~			
ndustries	Industry		•	~	~		~		~		~	~		~			~		~	~
트	Marine					~		~				~	~		~	~		~	~	
	Sensor technology		Piezo resistive	Piezo resistive	Piezo resistive	Piezo resistive	Piezo resistive	Piezo resistive	Piezo resistive		Piezo resistive	Piezo resistive	Piezo resistive	Piezo resistive	Piezo resistive	Piezo resistive	Piezo resistive	Piezo resistive	Ceramic	Ceramic
	Accuracy max @20°C		1%FS	1%FS	1%FS	1%FS	0.8%FS	0.8%FS	0.5%FS		0.8-1%FS	1%FS	0.3%FS	0.5-2.0%FS	0.5-2%FS	0.8%FS	1 %FS	1%FS	1%FS	1%FS
S		bar	0-6 bar to 0-400 bar	0-1 bar to 0-600 bar	0-1 bar to 0-600 bar	0-1 bar to 0-600 bar	0-1 bar to 0-600 bar	0-1bar to 0-600 bar	0-1.6 bar to 0-400 bar	SCX	0-0.25 bar to 0-60 bar	0-1 bar to 0-600 bar	0-4 bar to 0-400 bar	0-40 mbar to 0-250 mbar	0-40 mbar to 0-250 mbar	0-1.6 bar to 0-250 bar	0-1 bar to 0-600 bar	0-1 bar to 0-600 bar	0-4 bar to 0-100 bar	0-4 bar to 0-100 bar
	Measuring range	psi	0-90 psi to 0-6000 psi	0-14.5 psi to 0-9000 psi	0-23 psi to 0-6000 psi		0-3.6 psi to 0-900 psi	0-14.5 psi to 0-9000 psi	0-58 psi to 0-6000 psi	0-0.58 psi to 0-3.6 psi	0-0.58 psi to 0-3.6 psi	0-23 psi to 0-3600 psi	0-14.5 psi to 0-9000 psi	0-14.5 psi to 0-9000 psi	0-58 psi to 0-1450 psi	0-58 psi to 0-1450 psi				
	Ouput signal		4-20mA	4-20mA	4-20mA	4-20mA	4-20mA	4-20mA	4-20mA		4-20mA	4-20mA	4-20mA	4-20mA	4-20mA	4-20mA	4-20mA	4-20mA	4-20mA	4-20mA
				Ratiometric	Ratiometric	Ratiometric								Ratiometric	Ratiometric		Ratiometric	Ratiometric		
				Absolute Voltage	Absolute Voltage	Absolute Voltage	Absolute Voltage										Absolute Voltage	Absolute Voltage		
ristics		°C	-40 to 85°C	-40 to 85°C	-40 to 125°C	-40 to 125°C	-40 to 85°C	-40 to 85°C	-40 to 85°C		-40 to 85°C	-40 to 100°C	-40 to 85°C	-40 to 125°C	-40 to 125°C	-40 to 100°C	-40 to 125°C	-40- 100/125°C	-15 to 85°C	-15 to 85°C
Characteristics	Media temperature	°F	-40 to 185°F	-40 to 185°F	-40 to 257°F	-40 to 257°F	-40 to 185°F	-40 to 185°F	-40 to 185°F		-40 to 185°F	-40 to 212°F	-40 to 185°F	-40 to 257°F	-40 to 257°F	-40 to 212°F	-40 to 257°F	-40- 212/257°F	5 to 185°F	5 to 185°F
U	Enclosure IP		IP65	IP65 IP67	IP65 IP67	IP65 IP67	IP65 IP67	IP65 IP67	IP65		IP65 IP67	IP65 IP67	IP65	IP65 IP67	IP65	IP65	IP65 IP67	IP65 IP67	IP65	IP65
	Wetted parts material		AISI 316L	AISI 316L	AISI 316L	AISI 316L	AISI 316L	AISI 316L	AISI 316L		AISI 316L	AISI 316L	AISI 316L	AISI 316L	AISI 316L	AISI 316L	AISI 316L	AISI 316L	Titanium Ceramic	Titanium Ceramic
	Housing material		AISI 316L, PA 6.6	AISI 316L, PA 6.6	AISI 316L, PA 6.6	AISI 316L, PA 6.6	AISI 316L, PA 6.6	AISI 316L, PA 6.6	AISI 316L, PA 6.6		AISI 316L, PA 6.6	AISI 316L, PA 6.6	Al 6012 PA 6.6	AISI 316L, PA 6.6	AISI 316L, PA 6.6	Al	AISI 316L, PA 6.6	AISI 316L, PA 6.6	Titanium PA 6.6	Titanium PA 6.6
	Marine approvals		FA 0.0	FA 0.0	FA 0.0	✓	FA 0.0	✓	FA 0.0		FA 0.0	✓	✓	FA 0.0	✓	~	FA 0.0	✓	✓	FA 0.0
	ATEX			Zone 2	Zone 2		Zone 2	Zone 0	Zone 2	Zone 2	Zone 2	Zone 2	Zone 2	Zone 2						
	UL Hazloc			Class 1, Div. 2	Class 1, Div. 2		Class 1, Div. 2		Class 1, Div. 2				Class 1, Div. 2							
	Diagnostics / output clam	pina															,	~		
																	•	·		

General OEM pressure sensing















				411		
Model	AXD	206	209	209H	210	256
Description	Low & high range OEM pressure transducer	Field calibration-enabled OEM pressure transducer	General purpose OEM pressure transducer	OEM pressure transducer for harsh applications	Circuit board-mountable pressure transducer	NEMA4/IP65 rated pressure transducer
Sample Applications	Fuel cell OEM, Industrial OEM, CNG/LNG, Hydraulic systems, Compressor control, HVAC/R equipment	Hydraulic systems, Compressor control, HVAC/R equipment, Tank level	Hydraulic systems, Compressor control, HVAC/R equipment, Tank level	Fuel cell OEM, CNG & LNG, Hydrogen production, Water & wastewater, Natural gas distribution.	Analytical measurement & control, OEM Medical Systems	Process control, Chemical processing, Agricultural irrigation, Nat. gas pipeline mon- itoring, Grain processing
Sensing technology	Variable capacitance	Variable capacitance	Variable capacitance	Variable capacitance	Variable capacitance	Variable capacitance
Gauge (PSIG)	•	•	•	•	•	•
Sealed Gauge (PSIS)	•		•	•		
Compound (PSIC)	•	•	•	•		
Absolute (PSIA)		•				
Vacuum (PSIV)	•		•			
	1 to 10,000 PSIG	25 to 10,000 PSIG	1 to 10,000 PSIG	15 to 1,000 PSIG	1 to 1,000 PSIG	1 to 10,000
-	200 to 10,000 PSIS	-	200 to 10,000 PSIS	250 to 1,000 PSIS	-	-
Ranges	5 to 10,000 PSIC	25 to 10,000 PSIC	1 to 10,000 PSIC	15 to 1,000 PSIC	-	-
(PSI)	25 to 5,000 PSIA	25 to 10,000 PSIA	- /	-	-	- ,0
.6	ATM to 14.7 PSIV	-	ATM to 14.7 PSIV	-	-	-65
Accuracy FS (RSS) or % of reading	±0.25% FS	±0.13% FS	±0.25% FS	±0.25% FS	Standard: ±1.0% FS Opt.: ±0.5%, ±0.25%	≥25 PSI: ±0.13% FS <25 PSI: ±0.25% FS
Operating temperature	-40° to 257°F (-40° to 125°C)	-40° to 185°F (-40° to 85°C)	-40° to 185°F (-40° to 85°C)	-40° to 185°F (-40° to 85°C)	-4° to 176°F (-20 to 80°C)	-40° to 185°F (-40° to 85°C)
Compensated temperature range	-4° to 176°F (-20 to 80°C)	-4° to 176°F (-20 to 80°C)	-4° to 176°F (-20 to 80°C)	-4° to 176°F (-20 to 80°C)	NA	-4° to 176°F (-20 to 80°C)
Thermal effect % FS/100°F (% FS/50°C)	<1% (TEB avail.)	Zero: ±1 (0.9) Span: ±1.5 (1.4)	Zero: ±2.0 (1.8) Span: ±1.5 (1.3)	Zero: ±0.03 (0.05) Span: ±0.015 (0.03)	Zero: <±2.0 (1.8) Span: <±1.5 (1.4)	Please view data sheet
Media compatibility	Gases or liquid compatible with 17-4 or 316L stainless steel	Gases or liquid compatible with 17-4 stainless steel	Gases or liquid compatible with 17-4 or 17-7 stainless steel	Gases or liquid compatible with 316L stainless steel	Gases compatible with 304 or 17-7 stainless steel, nylon, polyester, or silicone	Gases or liquid compatible with 17-4 stainless steel
Output	4 to 20 mA 0.5 to 5.5 VDC 0.5 to 10.5 VDC (13.5 VDC Exc. Min) 0.5 to 4.5 VDC (5 VDC Exc.)	4 to 20 mA 0.1 to 5.1 VDC 1 to 5 VDC 1 to 6 VDC 0.1 to 10.1 VDC	4 to 20 mA 0.5 to 5.5 VDC 1 to 5 VDC 1 to 6 VDC 0.5 to 4.5 VDC (5 VDC Exc.)	4 to 20 mA 0.5 to 5.5 VDC 0.2 to 5.2 VDC	1 to 6 VDC 0.5 to 4.5 VDC 0.5 to 5.5 VDC	4 to 20 mA 0.1 to 5.1 VDC
Electrical terminations	Cable, 3-pin Packard, M12 4-pin, 1/2" conduit	Cable, Hirschmann, 1/2" conduit w/ cable, Terminal strip	Cable, 3-pin Packard, 4-pin Packard, "Mini" Hirschmann, Terminal strip	Cable, 3-pin Packard, 4-pin Packard, "Mini" Hirschmann, Terminal strip	PC board mountable pins	Two (2) 1/2" Int. conduit ports
Pressure fittings	1/4" NPT Ext., 1/4" NPT Int., 1/8" NPT Ext., 1/8" NPT Int., 7/16" SAE, 1/4" Int. SAE w/ Schraeder	1/4" NPT Ext., 1/8" NPT Ext., 7/16" SAE	1/4" NPT Ext. 7/16" SAE Ext. 1/8" NPT Ext., 1/4 Int. SAE internal 7/16"- 20 w/ Schrader, 1/2" A Ext., 1/8" NPT Int. bulkhead	1/4"-18 NPT Ext., 7/16"-20 SAE Ext., 1/8"-27 NPT Ext.	Straight barbed, Right angled barbed	1/4" NPT Ext., 1/8" NPT Ext., 1/2" NPT Ext., 1.4" NPT Int.

Industrial Sensing Product Selection Guide













Product images are not shown to scale

					•	
Model	32CS	31CS	3200	3100	550	526
Description	Heavy-duty Intrinsically safe CSA rated pressure transducer	Intrinsically safe CSA rated pressure transducer	Heavy-duty OEM pressure transducer	Rugged OEM pressure transducer	Low range submersible pressure transducer	Submersible pressure transducer
Sample Applications	Natural gas test equip- ment, Gas bottle filling, Petroleum processing, Oil & gas drilling	Industrial processes, Chemical, HVAC/R equipment, Water management	Power generation, Hydraulic systems, Booster pump systems, Irrigation systems, OHV	Power generation, Hydraulic systems, Booster pump systems, Irrigation systems, OHV	Tank level, Reservoir level, River level, Hydro-power, Open channel flow, Flood warning, Waste water	General purpose, OHV, Nat. gas equipment, Power plants, HVAC compressors, Refrigeration, Robotics
Sensing technolog	Thin film strain gauge	Thin film strain gauge	Thin film strain gauge	Thin fi l m strain gauge	Variable capacitance	Thin film strain gauge
Gauge (PSIG)	•	•	•	•	•	•
Sealed Gauge (PSI	•	•	•	•		
Compound (PSIC			•	•		•
Absolute (PSIA)						•
Vacuum (PSIV)						
	75 to 32,000 PSIG	75 to 32,000 PSIG	50 to 25,000 PSIG	75 to 32,000 PSIG	1 to 15 PSIG	15 to 6,000 PSIG
-	1,500 to 32,000 PSIS	1,500 to 32,000 PSIS	2,300 to 25,000 PSIS	2,300 to 32,000 PSIS	-	-
Ranges	-	_	50 to 25,000 PSIC	75 to 32,000 PSIC	-	-14.7 to 300 PSIC
- (PSI)	_	-	0		-	15 to 300 PSIA
٠. ٢٠٠	_	_	6.		-	
Accuracy FS (RSS) or % of reading	±0.5% FS	±0.25% FS	±0.5% FS	±0.25% FS	±0.25% FS	Standard: ±0.25% FS Opt.: ±0.15% FS
Operating temperature	-40° to 176°F (-40 to 80°C)	-40° to 176°F (-40 to 80°C)	-40° to 257°F (-40° to 125°C)	-40° to 257°F (-40° to 125°C)	Please view data sheet	Please view data sheet
Compensated temperature range	-4° to 176°F (-20 to 80°C)	-4° to 176°F (-20 to 80°C)	-40° to 257°F (-40° to 125°C)	-40° to 257°F (-40° to 125°C)	-5° to 140°F (-20 to 60°C)	-4° to 176°F (-20 to 80°C)
Thermal effect % FS/100°F (% FS/50°C)	±0.94 (2.0)	±0.83 (1.5)	±0.94 (2.0)	±0.83 (1.5)	±1.0 (2.0)	Standard: ±0.8 (1.5) Opt.: ±0.5 (1.0)
Media compatibility	Gases or liquid compatible with 17-4 stainless steel	Gases or liquid compatible with 17-4 stainless steel	Gases or liquid compatible with 17-4 stainless steel	Gases or liquid compatible with 17-4 stainless steel	Water or viscous fluids compatible with 316 stainless steel, ceramic, or nitrile	Gases or liquid compatible with 17-4 stainless steel
Output	4 to 20 mA 1 to 6 VDC 0.1 to 5.1 VDC 1 to 5 VDC 1 to 10 VDC 0 to 5 VDC 0 to 10 VDC (and more)	4 to 20 mA 1 to 6 VDC 0.1 to 5.1 VDC 1 to 5 VDC 1 to 10 VDC 0 to 5 VDC 0 to 10 VDC (and more)	4 to 20 mA 1 to 6 VDC 1 to 5 VDC 0.5 to 4.5 VDC 0 to 5 VDC 0 to 10 VDC 0.5 to 4.5 ratiometric	4 to 20 mA 1 to 6 VDC 1 to 5 VDC 0.5 to 4.5 VDC 0 to 5 VDC 0 to 10 VDC 0.5 to 4.5 ratiometric	4 to 20 mA 1 to 6 VDC 0 to 5 VDC 0.5 to 5.5 VDC 1 to 5 VDC 0.1 to 5.1 VDC	100 mV 4 to 20 mA 1 to 6 VDC 1 to 5 VDC 0.5 to 5.5 VDC 0 to 5 VDC 0 to 10 VDC (and more)
Electrical terminations	EN175301 (DIN43650 A), M12xP 4-pin, AMP Superseal 1.5 Series, Deutsch DT04-4P, Packard Metri Pack, Industry Standard Form C, Integrated cable	EN175301 (DIN43650 A), M12XP 4-pin, AMP Superseal 1.5 Series, Deutsch DT04-4P, Packard Metri Pack, Industry Standard Form C, Integrated cable	Industrial DIN, 3-pin Deutsch, M12xP 4-pin, AMP Superseal 1.5 Series, Deutsch DT04-4P, Packard Metri Pack	Industrial DIN, 3-pin Deutsch, M12xP 4-pin, AMP Superseal 1.5 Series, Deutsch DT04-4P, Packard Metri Pack	Large DIN 43650, Immersible cable	10-6 bayonet conn., Immersible cable, 8-4 bayonet conn., 1/2" conduit, Large DIN 43650
Pressure fittings	Please view data sheet	Please view data sheet	Please view data sheet	Please view data sheet	G 1/4" Int., 1/4"-18 NPT Ext., 1/2"-14 NPT Ext., G 1/4" Ext., KF25 flange	1/8"-27 NPT Ext., 1/8"-27 NPT Int., 1/4-18 NPT Ext., 7/16"-20 UNF Ext., G 1/4" Ext., G 1/4" Int., Plastic nose cone, SS nose cone

Test & measurement pressure sensing













					-
Model	ASL	ASM	201	204	239
Description	Test stand-grade low differential pressure transducer	Test stand-grade pressure transducer	Very low differential/gauge pressure transducer	High accuracy pressure transducer	High accuracy low differential pressure transducer
Sample Applications	Filter pressure, Leak detection systems, Exhaust pressure, Medical instrumentation, Part integrity testing, Test stands, Wind tunnels	Engine test stands, Particle test & analysis, Manifold pressure, Refrigeration testing, High accuracy industrial	Vapor recovery systems, Exhaust gas control systems, Industrial scrubbers	Research & development, Vacuum systems, Dynamometers, Engine test cells, General purpose	Filter pressure, Leak detection systems, Exhaust pressure, Medical instrumentation, Part integrity testing, Cleanrooms
Sensing technology	Variable capacitance	Variable capacitance	Variable capacitance	Variable capacitance	Variable capacitance
Gauge (PSIG)		•	•	•	
Compound (PSIC)		•			
Absolute (PSIA)		•		•	
Vacuum (PSIV)		•		•	
Differential (PSID)	•		•		•
	-	15 to 1,000 PSIG	5" W.C. to 20 PSIG	25 to 10,000 PSIG	-
	-	15 to 1,000 PSIC	-	-	-
Ranges	CONT.	15 to 1,000 PSIA	, off	25 to 5,000 PSIA	- , o?
nanges		0 to 14.7 PSIV	-,67-	0 to 14.7 PSIV	6.
	2 to 40" W.C. Unidirectional, ±1 to ±15" W.C. Bidirectional	-	5 to 50" W.C. Unidirectional, ±2.5" to ±25" W.C. Bidirectional	-	0.5 to 30" W.C. Unidirectional, ±0.25 to ±15" W.C. Bidirectional
Accuracy FS (RSS) or % of reading	<±0.07% FS	±0.05% FS	Standard: ±0.5% FS Opt.: ±0.25% FS	±0.11% FS, ±0.073% FS	Standard: ±1.0% FS Opt.: ±0.5%, ±0.25%
Operating temperature	-40° to 185°F (-40° to 85°C)	-40° to 185°F (-40° to 85°C)	-40° to 176°F (-40 to 80°C)	0 to 176°F (-18° to 80°C)	0 to 176°F (-18° to 80°C)
Compensated temperature range	-5° to 140°F (-20 to 60°C)	-5° to 140°F (-20 to 60°C)	-20° to 175°F (-29° to 80°C)	NA	30° to 150° (-1 to 65° C)
Thermal effect % FS/100°F (% FS/50°C)	<0.25% (total error band)	<0.25% (total error band)	Zero: ±2.0 (1.8) Span: ±1.5 (1.4)	Zero: <±0.4 (0.36) Span: <±0.3 (0.27)	<±1.0 (0.9)
Media compatibility	Clean, dry gases compatible with 300 series and 17-4 PH stainless steel	Gases or liquid compatible with 17-4 stainless steel	Gases or liquid compatible with stainless steel and Inconel	Gases or liquid compatible with 17-4 stainless steel	Gases compatible with stainless steel, hard adonized 6061 aluminum (Buna-N 0-ring)
Output	0 to 5 VDC, 0 to 10 VDC, 4 to 20 mA	0 to 5 VDC, 0 to 10 VDC, 4 to 20 mA	4 to 20 mA	4 to 20 mA, 0 to 5 VDC, 0 to 2.5 VDC, 1 to 5 VDC, 1 to 6 VDC, 0 to 10 VDC, 1 to 10 VDC	4 to 20 mA, ±2.5 VDC, 0 to 5 VDC, 1 to 5 VDC, 1 to 6 VDC, 0 to 10 VDC
Electrical terminations	3 ft (1 m) standard cable, Standard 6-pin ext. bayonet connection	3 ft (1 m) standard cable, Standard 6-pin ext. bayonet connection	Cable, 1/2" NPT Ext. conduit, 4-pin bayonet connector, Hirschmann w/ large ext. fitting, Terminal strip	Cable, 30 AWG 9-conductor cable	Cable, 30 AWG 9-conductor cable
Pressure fittings	1/8" NPT Int., Barb; 1/8" NPT Int., 1/8" NPT Int.; 1/8" NPT Ext., Barb; 7/16"-20 SAE Ext., Barb	1/8" NPT Ext, 1/8" NPT Int., 1/4" NPT Ext., 1/4" NPT Int., 7/16"-20 SAE Ext.	1/4"-18 NPT Ext., 1/4" Tube stub, 1/4"-18 NPT Int., 7/16" SAE 37° flare	1/4" NPT Int.	1/8" NPT Int.

Barometric pressure sensing

Industrial Sensing Product Selection Guide











Product images are not shown to scale

-					
270	276	278	370	470	Model
Premium barometric pressure sensor	Low-cost barometric pressure transducer	Low power barometric pressure transducer	Digital barometric pressure standard	OEM digital barometric transducer	Description
High accuracy barometric pressure measurement, Data buoys, Remote weather stations, Engine test cells	Environmental monitoring systems, Wind measurement systems, Weather & environmental data logging,	AWS, Data buoys and ships, Agriculture metrology, AWOS/ASOS systems	Automatic weather reporting systems, Pressure transfer standard, Altimeter calibration, lab process monitoring, altitude chambers	Automatic weather reporting systems, Pressure transfer standard, Altimeter calibration, lab process monitoring, altitude chambers	Samp l e Applications
Variable capacitance	Variable capacitance	Variable capacitance	Variable capacitance	Variable capacitance	Sensing technology
•					Gauge (PSIG)
					Compound (PSIC)
•	•	•	•	•	Absolute (PSIA)
					Vacuum (PSIV)
					Differential (PSID)
5 to 100 PSIG	-	-	-	-	
-	-	-	-	-	-
600/800 to 1,100 mb/hPa, 5 to 100 PSIA	600/800 to 1,100 mb/hPa, 20 PSIA	500/600/800 to 1,100 mb/hPa	600/800 to 1,100 mb/hPa, 10 to 100 PSIA	600/800 to 1,100 mb/hPa, 10 to 100 PSIA	- Ranges
5.	-	-	-6-	-	(PSI)
Jen C	-	- 6	-	-	Centra
±0.03% FS, ±0.05% FS	±0.25% FS	Between ±0.3 and ±2.5 mb/hPa (range dependent)	±0.02% FS at 70°F (21°C)	±0.02% FS at 70°F (21°C)	Accuracy FS (RSS) or % of reading
0 to 176°F (-18° to 80°C)	0 to 176°F (-18° to 80°C)	-40 to 140°F (-40 to 60°C)	32° to 110°F (0 to 45°C)	32° to 110°F (0 to 45°C)	Operating temperature
30° to 120° (-1 to 49° C)	30° to 130° (-1 to 55° C)	NA	32° to 110°F (0 to 45°C)	32° to 110°F (0 to 45°C)	Compensated temperature range
Barometric: ±0.2 (0.18) Other: ±0.1 (0.09)	±1% FS	Please view data sheet	Zero: ±0.002 (0.004) Span: ±0.001 (0.002)	Zero: ±0.002 (0.004) Span: ±0.001 (0.002)	Thermal effect % FS/100°F (% FS/50°C)
Non-condensing air or gas compatible with hard adonized aluminum, alumina ceramics, gold, flourocarbon elastomer sealant & Buna-N O-ring	Non-condensing air or gas compatible with stainless steel, alumina ceramics, gold, and elastomer	Non-condensing air or gas	Non-condensing air or gas	Non-condensing air or gas	Media compatibility
0 to 5 VDC (24 VDC Exc.), 0 to 5 VDC (12 VDC Exc.)	0.1 to 5.1 VDC (24 VDC Exc.), 0.1 to 5.1 VDC (12 VDC Exc.), 0.5 to 4.5 VDC (5 VDC Exc.)	0 to 2.5 VDC (9.5 to 28 VDC Exc.), 0 to 5 VDC (9.5 to 28 VDC Exc.)	Bidirectional RS-232 6 digit LCD display	Bidirectional RS-232	Output
Cable	Cable	5-pin terminal block	25-pin D-Sub	EIA-232 connector DB-9P	Electrical terminations
1/8" NPT Int.	1/8" push tube fitting, 1/8" NPT Ext.	1/8" barbed fitting	1/8" NPT Int.	1/8" barbed fitting	Pressure fittings