

**GENERAL DESCRIPTION**

Pressure monitoring feature improves productivity and reduces process failure risk.

Masterflex® MasterSense™ pump systems allow for direct integration of a pressure sensor to provide real-time pressure display with high/low pressure monitoring warnings and shut offs.

**APPLICATION**

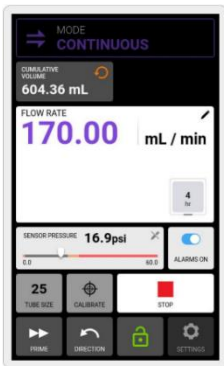
Install sensors downstream of pump to detect process pressure. Configure sensor and warning/stop alarms to free up operator time and avoid overpressure failures. Pressure Monitoring provides additional process reliability for fluid transfers and is recommended for higher-pressure or filtration applications such as tangential-flow filtration, depth filtration, harvest, bulk transfer, chromatography, and filling.

**FEATURES & BENEFITS**

- Plug-and-play capability with all Masterflex® MasterSense™ Pump systems
- Touch screen interface offers fast access with simple set up
- High pressure alarms help prevent process failures due to overpressure
- Low pressure alarms help detect process abnormalities
- Use the MasterSense™ MP1 adaptor for single-use applications; leverages PendoTECH®\*\* Single-Use Pressure Sensors which are sterilizable by gamma irradiation or a single autoclave cycle
- Use the MasterSense™ MP30 reusable sensors for repeat use and Clean-In-Place (CIP) applications



Pump User Interface Screen Shots:



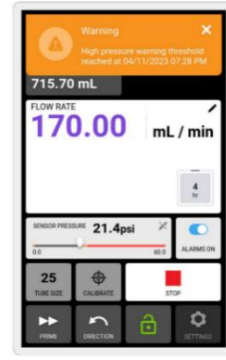
Real-Time Pressure



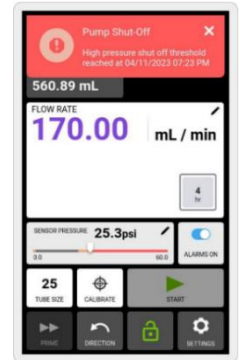
Configure Alarms



Zero Sensor (Tare)



Warning Alarm



Pump Shut-Off



**Compatible with all Masterflex® MasterSense™ Pump Systems\***

\* Software updated to version V.2.22 or later required (Downloadable via Over the Air update)

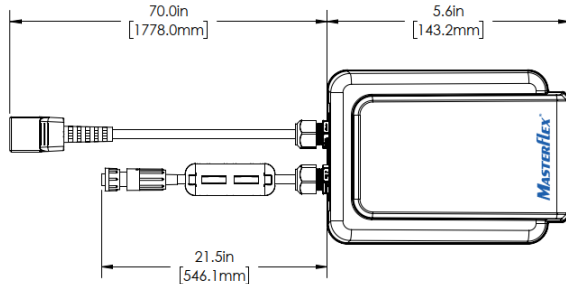
## MasterSense™ MP1 ADAPTOR FOR SINGLE-USE APPLICATIONS

The MP1 adaptor allows connection of a single PendoTECH® Single-Use Pressure Sensor™ into a Masterflex MasterSense drive and workflow. Select the proper sensor for your flow path connection from the ordering information table. Starter kits include the components needed for connection to the listed Masterflex tubing sizes.



## MasterSense™ MP1 SPECIFICATIONS – Single-Use Pressure Sensors

Feature	Specification
Pressure Sensing	0-60 PSI (0-4 Bar)   (input range of 20 mV/V)
Connections	AUX 6 Pin (Pump) & Female PendoTECH® (sensor)
Output	4-20 mA signal to pump
Accuracy	±0.5% (MP1 Transmitter); System Accuracy: ±3.5% (0-30 PSI) ±5.5% (0-60 PSI)
Power Supply	24VDC (powered by pump)
Housing/Ingress	IP66 rated ABS Plastic
Compliance	CE
Pressure Sensing	0-60 PSI (0-4 Bar)   (input range of 20 mV/V)
Connections	AUX 6 Pin (Pump) & Female PendoTECH® (sensor)



## Setup: 1, 2, 3!

1. Install in-line pressure sensor
2. Connect sensor and pump



3. Configure alarms and start pump

## MasterSense™ MP1 ORDERING INFORMATION

SKU	Description	Includes
MFLX07526-90	MP1 Adaptor (sensors sold separately)	MP1 adaptor Only
MFLX07526-91	MP1 Starter Kit for MasterSense Pumps- Luer Fits tubing sizes: L/S 17, 24, 18, 35, 36, I/P 26, 70, 73	MP1 adapter, Luer PC Sensor (MFLX19406-32) 1/4 and 3/8" hose-barb to luer tees
MFLX07526-92	MP1 Starter Kit for MasterSense Pumps- 1/2" barb Kit Fits tubing sizes: I/P 82, 88 and B/T 87	MP1 adapter, 1/2" barb polycarbonate sensor (MFLX19406-28)

## PendoTECH® Single Use Pressure Sensors™ \*\*

Fluid Connection	Fits Masterflex tubing size	Polycarbonate (SKU)	Polysulfone (SKU)
Luer	-	MFLX19406-32	MFLX19406-20
1/8" barb	L/S 16	-	MFLX19406-51
1/4" barb	L/S 17, 24, I/P 26	MFLX19406-21	MFLX19406-27
3/8" barb	L/S 18, 35, 36 I/P 70/73	MFLX19406-23	MFLX19406-25
1/2" barb	I/P 82, 88 B/T 87	MFLX19406-28	MFLX19406-22
3/4" barb	B/T 91	MFLX19406-29	MFLX19406-24
3/4" Sanitary	-	-	MFLX19406-52
1" Sanitary	-	-	MFLX19406-54



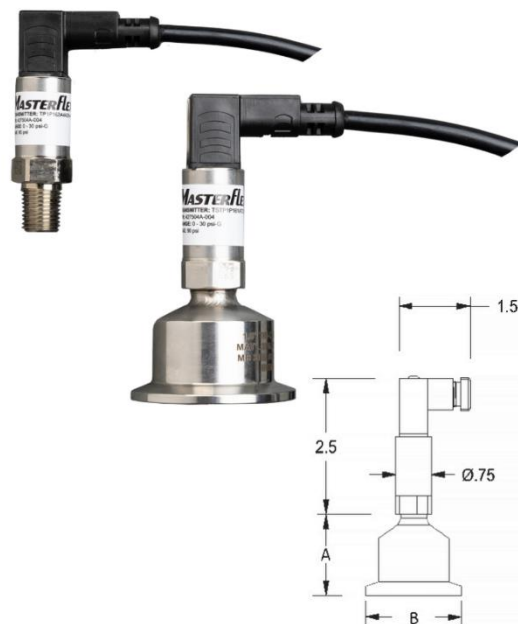
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## MasterSense™ MP30 REUSABLE PRESSURE TRANSDUCERS

The MP30 sensors connect directly into a Masterflex® MasterSense drive. Select the proper sensor for your flow path. Purchase tee-fittings and tubing adaptor fittings to complete integration of sensors into the fluid flow path. 1-1/2" Tri-Clamp size sensors are acceptable for Clean-In-Place (CIP) use.

### MasterSense™ MP30 SPECIFICATIONS – Reusable Pressure Transducers

Model	MFLX07526-80	MFLX07526-82
Pressure Sensing	0-30 PSI (0-2 bar)	
Process Connections	1/4" NPT	1 1/2" Tri-Clamp
Output	4-20 mA signal to pump	
Sensor Accuracy	±0.25% Full Scale	±0.5% Full Scale
System accuracy	±1.25% full scale	±1.25% full scale
Temperature Effect	±0.02% FS/°F (-13/185°F)	±0.1% FS/10
Plug Fill	N/A	Momentive RTV102
Power Supply	24VDC (powered by pump)	
Wetted Material	AISI 630 Stainless Steel	
Ingress Protection Rating	IP65	
Cable Length	6' (2m)	
Electrical Compliance	CE	
Dimensions A	0.5"	1.3"
Dimensions B	0.8"	2"



### MasterSense™ MP30 ORDERING INFORMATION

MP30 Sensor - 1/4" NPT	Tee Fitting 1/4" Female NPT	Barb Adapter- Polypropylene (Male 1/4" NPT x Barb) 10/pk	Corresponding Masterflex Tube Size
MFLX07526-80	MFLX31320-94 (PFA)	1/8" MFLX40621-45	L/S 16
		3/16" MFLX41517-47	L/S 15, 25
		1/4" MFLX40610-38	L/S 17, 24; I/P 26
		3/8" MFLX40610-39	L/S 18, 35, 36; I/P 73, 70
		1/2" MFLX40610-40	I/P 82, 88

MP30 Sensor- 1-1/2" Tri-Clamp	Tee Fitting 1-1/2" Tri-Clamp	Gasket	1-1/2" Tri-Clamp To Barb Fitting (10/PK) (PP)	Sanitary Clamp (1/ea)
MFLX07526-82	MFLX31809-63 (PVDF) MFLX31806-63 (PP)	MFLX30548-04 (Silicone 10/PK)	3/8" 75838-668	MFLX31201-95
			1/2" 75838-672	
			3/4" 75838-674	
	MFLX31203-33 Single-Use Tee with 1/2" hose barb (PP with TPE Fused gasket)   pictured below right			



Visit [www.avantorsciences.com/masterflex](http://www.avantorsciences.com/masterflex) for more information on Masterflex Fluid Handling Solutions