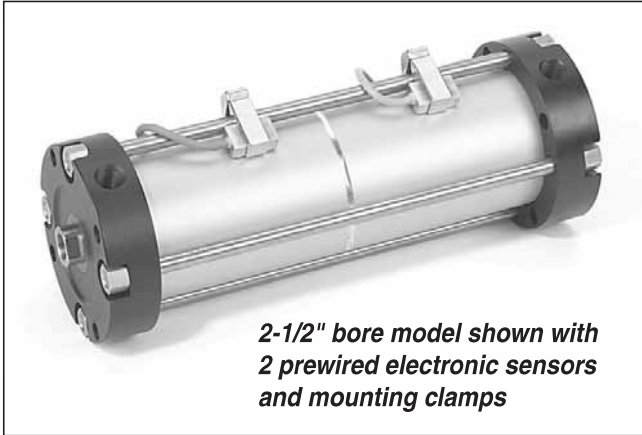


Series MLR & MLS Option Specifications

Magnetic Piston

Option -E

(Order Sensors and Sensor Clamps Separately)



- **Option -E** consists of a magnet bonded into the piston head. When the piston magnet moves past an external sensor, the magnetic field activates the sensor without physical contact.

- **Mounting** – The sensor snaps into a 2-part clamp that attaches rigidly to any of the tie rods and can be positioned anywhere along the length of the cylinder.

- **Reliability** – The annular piston magnet is permanently bonded into a groove in the piston. It is a polarized permanent magnet of rubber bonded barium ferrite that is very stable and is not affected by shock. Under normal usage it will remain magnetized indefinitely.

- **Warning** – External magnetic fields and/or ferrous objects may affect the strength of the piston magnet therefore affecting sensor actuation and piston position indication. Warning labels (shown left) are affixed to the cylinder.

- **Please note there is an increase in base length of the cylinder to accommodate the magnet. Add 1.00" to Dimension 'B' on pages 5.24.**

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2-Piece Sensor Clamp shown with quick disconnect sensor snapped in place

Quick Disconnect Sensor Shown

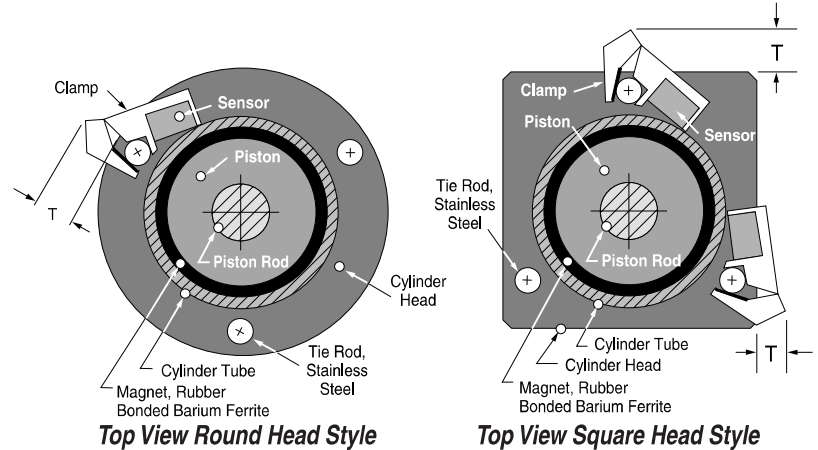
Socket Head Screw

WARNING

This cylinder is equipped with a Magnetic Piston for use with Magnetically Operated Sensors. Other Magnetic Sensitive Devices Should be Kept at a Distance to Avoid Inadvertent Operation.

Sensor Clamp Stick Out Dimensions

Model	MLR2	MLS2	MLR2-1/2	MLS2-1/2	MLR3	MLS3	MLR4	MLS4
T	.50"	.50"	.50"	.10"	.50"	.30"	.30"	.30"



Sensor & Clamp Ordering Guide

Temperature Range: -20° to +80°C (-4° to +176°F)
Sensor housing rated NEMA 6/IP67.

Warning!

Do not exceed sensor ratings. Permanent damage to sensor may occur.

Power supply polarity **MUST** be observed for proper operation of sensors.

See wiring diagrams included with each sensor.

LED Lighted Magnetic Piston Position Sensors

Product Type	Prewired 9 ft. Part No.	Quick Disconnect Part Number.	Electrical Characteristics
Reed Switch	9-2A197-1004	9-2A197-1304	5-120 VDC/VAC, 0.5 Amp Max., 10 Watt Max., SPST N.O., 3.5 Voltage Drop
Electronic	9-2A197-1033	9-2A197-1333	Sourcing, PNP, 6-24 VDC, 0.5 Amp Max., 1.0 Voltage Drop
Electronic	9-2A197-1034	9-2A197-1334	Sinking, NPN, 6-24VDC, 0.5 Amp Max., 1.0 Voltage Drop

Female Cordsets for Quick Disconnect

Length	1 Meter	2 Meter	5 Meter
Part Number	CFC-1M	CFC-2M	CFC-5M

Sensor Mounting Clamp - for all MLS & MLR Models

For all MLS & MLR Models Order Part Number 800-200-000