
SUBMERSIBLE

LEVEL TRANSMITTER

MODEL SLX 170



Figure 1

SLX 170 Features

- 0.9" Ceramic Diaphragm
- Wetted Parts: PVC, PVDF, TPE or Teflon
Seals: Viton or FFKM
- Output/Input: 4-20 milli-Amp DC Output, 2-Wire, Loop Powered, w/Integral Surge Suppression
- The PVC Plastic Body (1.90D X 7.75L) provides excellent electrical isolation
- Signal Cable: Two-Conductor Teflon or TPE Jacketed (TPE - Thermoplastic Elastomer)
- Mounting:
 - Self-Suspended via Signal Cable or ...
 - The integral 3/4" NPT-F fitting provides connection for pipe-mounting or enhanced suspension mounting^[Note 9].
- Choice of ranges: The SLX 170-M is available in customer specified ranges (i.e. Ft or PSI)
- Internally weighted

SLX 170 Applications^[Note 10]

- Wet Wells — Sewage Pumping Stations
- Lake, Pond, Stream Level Monitoring
- Chemical tanks
- Water Storage & Recycling Systems
- Process Sumps
- Ground Storage Tanks, Clearwells
- Flow Sensing in Flumes and Weirs

Contegra's SLX 170 submersible level transducers reliably measure the level of liquids based upon the hydrostatic pressure of the liquid above the submerged sensor's diaphragm. The transducer provides an output signal that is directly proportional to the sensed level over the sensor's calibrated range.

The SLX 170 transducers provide superior service in adverse environments. Their wetted parts of PVC PVDF and the Teflon or TPE (Thermoplastic Elastomer) jacketed signal cable provide strong chemical resistance^[Note 2] and electrical isolation.

MODEL SLX 170

Submersible Level Transmitter

Specifications

Calibrated Ranges (Ft/PSI) - M/MIS Version:

Customer specified range from 0-1.5 Ft / 0-0.65 PSI to 0-69.3 Ft / 0-30 PSI.

Sensor Ratings — SLX 170-M

Accuracy: 0.25% over the full scale pressure range

Overpressure: 7X @ <= 3, 4.5X @ 5 & 7, 3X @ =>15

Operating: +32° non-freezing — +100°F

Wetted parts: PVC body, 0.9" Ceramic Diaphragm, Signal Cable Jacket: Teflon® or TPE (Thermoplastic Elastomer), PVDF strain relief. Seals: FFKM/FFKM) or Viton. .

Signal Cable Jacketing:

Teflon® or TPE jacket: The cable is shielded and contains a Kevlar® support member and an integral vent/breather tube.

Cable Jacket Options:

T2 = two-Conductor Teflon®

R = TPE jacketed cable with Ropellant™ additive (Jacket color = Black)

W = TPE jacketed cable for use in potable water applications (Jacket color = Blue)

Output/Input: Loop powered 4-20 mA output proportional to the calibrated range, Input: 12.5-30 VDC Class 2 supply

Mechanical: Height - 7.75, Diameter - 1.9" Cable Diameter - 0.26" nom.

Protection: The SLX 170-M Includes transient voltage suppressors (TVS), MOVs and surge arrestors. The PVC body provides enhanced electrical isolation from the surrounding environment. The mADC input is reverse polarity protected.



SLX170 sensor diaphragm (0.90" dia.)

Identification: The output (i.e. M), units (e.g. F [Feet] / # [PSI]), seals and order number are engraved around the diaphragm.

Ex: M 10P V 15000 1-1

Example Part Number:

SLX 170- M- 20F- V- 40R- B

① ②③ ④ ⑤⑥ ⑦

The Model number, shown to the left, specifies a SLX 170 loop-powered level transmitter with a 4-20 mADC output ① which is calibrated over a 0-20 Foot ②③ span, Viton seals ④, 40 feet ⑤ of Ropellant Jacketed cable ⑥ and a Sealed Breather System ⑦.

① Output:	M = 4-20 mADC loop-powered. Calibrated over customer specified span. See ②, ③ (below) for Span and Units. MIS = 4-20 mADC loop-powered Intrinsically Safe (pending/call the factory), Calibrated over customer specified span.
② Span:	Specify the required Span/Range (a numeric value e.g. 20). See (below) for Units (i.e. F or P).
③ Engineering Units:	Enter F to specify the Span in Feet Enter P to specify the Span in PSI
④ Seals:	'V' = Viton, 'F' = FFKM (Note 7) Call the factory for other options and pricing.
⑤ Cable Length:	Specify the total length of the signal cable (Units = Feet, 20 Feet Min, 10 Foot Increments).
⑥ Cable Jacket:	T2 = Two-Conductor Teflon Jacket R = TPE Jacket with rodent repellent additive (i.e. "Ropellant™" Jacketed) [Typically used in Wastewater applications] W = TPE Jacket [For 'general' use: Water, Wastewater, etc. w/o Ropellant™ additive.]
⑦ Accessories:	H: Hydrophobic Vent (standard) B: Sealed Breather Assembly A: NEMA 4X enclosure w/ Sealed Breather Assembly E: NEMA 4X enclosure w/Hydrophobic Vent

The following accessories require 'A' or 'E' (shown at left)
T: Transient Suppressor — Mounted in the enclosure
M4: NEMA 4X Meter. Door Mounted & Wired
Other - Consult the factory

Notes: 1) The Ropellant™ additive discourages the rodent's interest in the cable. It does not guarantee the rodent's disinterest. 2) TPE = Thermoplastic Elastomer 3) Kevlar and Teflon are registered trademarks of DuPont. 4) CONTEGRA is a registered trademark and Ropellant is a trademark of Contegra Inc. 5) Specifications are subject to change without notice. 6) If not specified, 'V' (Viton) is the default. 7) F = FFKM (@ three primarily seals) and FMK (@ sealing gland/cable interface) . 8) Refer to www.Contegra.com for further specifications and updates including: range availability. 9) Optional feature: For enhanced chemical isolation, the 3/4" NPT fitting may be epoxy filled. 10) Customers must review chemical compatibility charts to confirm that the SLX 170 is appropriate for the application. A chemical compatibility chart/reference is available at www.coleparmer.com/chemical-resistance

Identification: The output (i.e. M), units (F/P), seals (V, F etc.) order number and sub-item are engraved around the diaphragm. Example: **M 10P V 15000 1-1**



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