

CAP-300 Series – Capacitive Level Switch

- ▶ Durable sealed design – IP67, IP6K9K
- ▶ Developed for the most rugged coolant applications
- ▶ Tolerates coolant coating
- ▶ Small size – 2" (51 mm) long

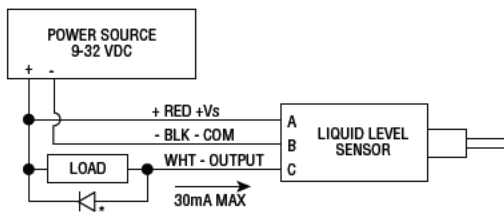
The CAP-300 capacitive level sensor is one of our most durable and reliable point level sensors. Compatible with coolants, the CAP-300 is the ideal OEM solution for power generation equipment, off-highway vehicles and cell phone tower generators and can be mounted in any position. With nearly zero maintenance, the sensor is small in size, tolerates coating and will remain reliable even in the standby mode. Compatible with temperatures up to 257°F (125°C) the capacitive based sensor is suited for the most challenging environments. Available with a variety of mounting types and electrical connections, the CAP-300 is the ideal solution for coolant monitoring.

Specifications

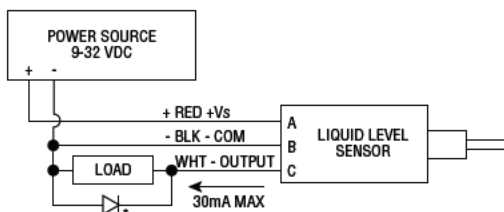
Mountings	1/4" NPT, 1/2"-20 per SAE J1926-3, M12x1.0-8g, M12x1.5 ISO 6149-3, 1/2" NPT
Materials	
Housing	Brass or 316L Stainless Steel
O-Ring	EPDM
Probe Tip	Versaplast™
Operating Pressure	Up to 100 PSIG
Operating Temperature	
Common	-40°F to +257°F (-40°C to +125°C)
Cable Versions	-4°F to +158°F (-20°C to +70°C)
Supply Voltage	9 to 32 VDC
Current Consumption	15mA max. (no load)
Output	Open collector, sinking or sourcing output, 9-32 VDC, 30mA max.
Electrical Termination	3-pin Deutsch, 18 AWG Type SXL flying leads or 18 AWG PVC Cable
Sensing Element Length	1.03" (26.2mm) Max. (including thread length)
Approvals	CE, IP67, RoHS

Wiring Diagram

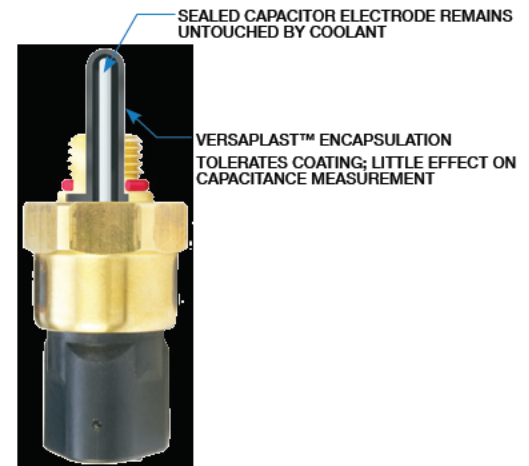
Sinking



Sourcing

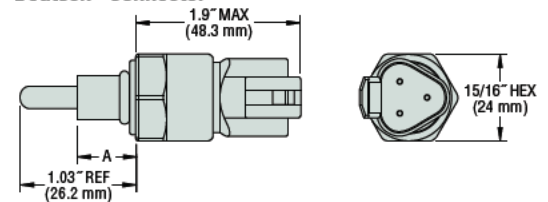


* For inductive loads, use diode suppression.

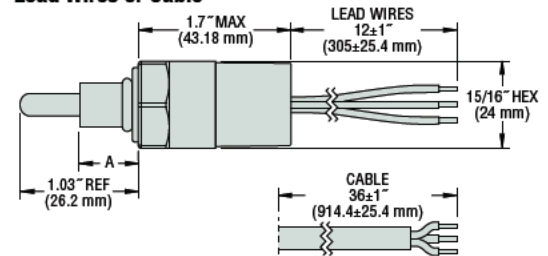


Dimensions

Deutsch® Connector



Lead Wires or Cable



		A DIM. REF.	EPDM O-Ring
Thread Sizes	1/2"-20	0.43" (10.9 mm)	3-905
	M12x1-8g	0.54" (13.5 mm)	2-110
	M12x1.5	0.53" (15.2 mm)	9.3 x 2.2 mm
	1/4"-18NPT	0.62" (15.7 mm)	None
	1/2"-14NPT	0.62" (15.7 mm)	None

How To Order

Select a Part Number based on mounting type, connection and actuation condition.

Actuation Condition	Electrical Connection	Thread Sizes						
		Brass					316L Stainless Steel	
		1/4"-18 NPT (male)	1/2"-20 per SAE J1926-3	M12x1.5 Stud End Per ISO6149-3	M12x1.0-8g	1/2"-14 NPT (male)	1/4"-18 NPT (male)	1/2"-14 NPT (male)
Wet Sink	Integral 3-pin Deutsch® DT04-3P Connector	240640	240700	240800	240900	242970	244510	244540
	12" 18 AWG SXL Flying Leads	240660	240720	240820	240920	242975	244515	244545
	36" PVC Cable	240680	240740	240840	240940	242980	244520	244550
Dry Sink	Integral 3-pin Deutsch® DT04-3P Connector	240650	240710	240810	240910	242985	244525	244555
	12" 18 AWG SXL Flying Leads	240670	240730	240830	240930	242990	244530	244560
	36" PVC Cable	240690	240750	240850	240950	242995	244535	244565
Wet Source	Integral 3-pin Deutsch® DT04-3P Connector	240645	240705	240805	240905	242971	244511	244541
	12" 18 AWG SXL Flying Leads	240665	240725	240825	240925	242976	244516	244546
	36" PVC Cable	240685	240745	240845	240945	242981	244521	244551
Dry Source	Integral 3-pin Deutsch® DT04-3P Connector	240655	240715	240815	240915	242986	244526	244556
	12" 18 AWG SXL Flying Leads	240675	240735	240835	240935	242991	244531	244561
	36" PVC Cable	240695	240755	240855	240955	242996	244536	244566

Optional Delay:

Delays are useful when the liquid being sensed is subjected to frequent sloshing or the reservoir's attitude changes significantly.

For low quantities, we can offer a 5 and 10 second delay. Tolerance $\pm 1/2$ second.

Gems can also customize the delay up to 99 seconds for large volume OEM applications. Call Gems for more information.