

HIGH TEMPERATURE SENSORS

The capacitive high-temperature sensors are especially suitable for applications where the sensor head is exposed to a high ambient temperature, or comes directly into contact with hot materials. The units are used as fill level detectors in liquids and bulk goods, or as distance sensors for testing block materials in hot surroundings.

Sample applications for sensor M18 are: water, granulate, plastic, powder, coffee powder, cocoa powder, cakes and biscuits.

Sample applications for sensor M30 are: oil, glue, water, liquid chocolate, bread dough, granulates and powder.

<p>M18 Level sensor up to 125°C</p>	<p>Sensing distance Sn: M18 • 1... 10 mm adjustable</p>	<p>Sensing distance Sn: M30 • 1...20 mm adjustable</p>	<p>DC Sensor Amplifier with sensor cable</p>
<p>LCFLS-125HT-M18-P-NO LCFLS-125HT-M18-P-NC LCFLS-125HT-M18-N-NO LCFLS-125HT-M18-N-NC</p>	<p>LCA-250HT-M18-10-NF</p>	<p>LCA-250HT-M30-20-NF</p>	<p>LSA-250HT-45/30/15-P-NO LSA-250HT-45/30/15-P-NC LSA-250HT-45/30/15-N-NO LSA-250HT-45/30/15-N-NC</p>

Technical Data:

Part Numbers	LCFLS Series*	LCA Series	LSA Series
Switching hysteresis	depending on medium	typ. 15% of Sn	NA
Switching frequency	5 Hz	NA	100 Hz
Switchpoint reprod. (T = const.)	depending on medium	≤ 0.05 mm	≤ 0.01 mm
Ambient temperature	-30...+125°C (LED:...+100°C)	-180...+250°C	-30...+70°C
Temperature drift	depending on medium	approx. 0.02 mm/°C	approx. 0.02 mm/°C
Protection class DIN 40050	NA	IP 67 (connector IP 54)	IP 67 (connector IP 54)
Housing Material	V2A/PTFE	V2A/PTFE	Polycarbonate (PC)
Connection cable 2 m	Terminals	Connector	3 x 0.14 mm ² PUR
Permissible ripple	≤ 10% U _B	NA	≤ 10%
No-load current (24 VDC)	approx. 10 mA	NA	approx. 10 mA
Output power I _A max.	100 mA	NA	300 mA
Short circuit / overload protection	included	NA	included
EMC/ Reverse polarity protection	included	NA	included

PART NUMBER KEY:	
LCA-250HT-M18-10-NF	
LCA	Mini sensor requiring amplifier
LSA	=amplifier
LCFLS	=high temp. sensor
250HT	High temp. to 250°C
M18	Housing diameter (mm)
M	=thread size
10	Max. sensing distance
NF	Mounting
NF	= Non-flush
F	= Flush
Additional Keys:	
P	Output
P	= PNP output
N	= NPN output
NO	NO = Normally open
NC	NC = Normally closed

* For additional specifications on the LCFLS Series, see the Level Series Capacitive Sensors.