

TECHNICAL DATA

For level monitoring sensors CLS 40

Medium	water / oil
Function	minimum / maximum
Operating voltage	12 / 24 V (-25% / +50%) (9 - 36 V DC)
Current consumption	typ. < 8mA
Output	low-side switch / high-side switch / analog voltage ≤ 1 A over the whole temperature range. Short-circuit and over-load protected over the ambient temperature range. For inductive loads freewheeling diode e.g. 1N4007, has to be mounted at the load.
Mounting thread	see order number overview
Function control time	see order number overview
Fault indication delay time	see order number overview
Connection	see overview of the connections
Housing material	standard brass, CuZn38Pb2, EN12146; CW608N optional stainless steel X5Cr Ni 1810, EN10088-3, 1.4301 housing capacitive connected to ground
Sensor coating	Tefzel® ETFE
Sensor protection	IP 65 - 69K to DIN40050 (depending on connector type)
Switch point hysteresis	typ. < 3 mm
Medium temperature	-40°C to +125°C water / +150°C oil (-40°F to +257°F/302°F)
Ambient temperature	-40°C to +125°C (-40°F to +257°F)
Storage temperature	-50°C to +125°C (-58°F to +257°F)
Mounting position	any
Reverse polarity protection	built-in, between positive and negative terminal

Caution!

With low-side switching sensors do not connect **minus potential** to the signal terminal and plus potential to the minus terminal. With high-side switching sensors do not connect **plus potential** to the signal terminal and minus potential to the plus terminal.

Approval	Ⓔ 10R - 03 5459
Customs tariff number	90261029

Environmental simulations

Vibration	ISO 16750-3:2007 10 Hz - 2000 Hz 20 g
Free Fall	IEC 16750
Machanical Shock	DIN EN 60068-2-27:1995; 100 g / 11 ms
Dry Cold	DIN EN 60068-2-1:2006; -40°C / 24 h (-40°F / 24 h)
Dry Heat	DIN EN 60068-2-1:2008; -125°C / 96 h (+257°F / 96 h)
Temperature cycling	DIN EN 60068-2-14:2000
Damp Heat	DIN EN 60068-7-78:2002
Damp Heat, steady state	DIN EN 60068-2-30:2006
Salt spray	DIN EN 60068-2-52:1996
Pressure resistance	2,5 Mpa (25 bar / 362,6 psi) (25°C / 77°F / 1 h)

EMC

Radiated emission	2004/104/EG 30 MHz - 1 GHz; 1 m
Conducted transient emission	ISO 7637-2:2004
Immunity to RF electromagnetic fields	ISO 11452-1/-2/-5 20 MHz - 2000 MHz; 150 V / m (rms)
Transient immunity test on power lines	ISO 7637-2/2004 pulses 1, 2a, 2b, 3a, 3b, 4