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Mechanical
Data:

Housing material: CuZn38Pb2; EN12164, CW608N or CuZn39Pb3; EN12164, CW614N

Mounting thread: M14x1.5

Connection: connector DEUTSCH 3-pole

Marking: manufacturer
manufacturer-part no.
year / week
approval

Tightening torque: max. 20 Nm

Electrical
Data:

Sensing resistor: PT 1000 to DIN 60751

Signal: min 0,5 V ± 62 mV at -30°C (-22°F)
max 5 V ± 90 mV at +100°C (+212°F) (medium)

Power supply: 10 mA constant current or
12 / 24 V (-25% / +50%) (9 - 36 VDC) (b)

Approval: (E1) 10R-03 4628

Environmental
Conditions:

Relative humidity: 92% at 40°C (104°F) / 83% at 23°C (73°F)

Medium temperature: -50°C to +150°C (-58°F to +302°F)

Ambient temperature: -40°C to +125°C (-40°F to +257°F)

Storage temperature: -40°C to +125°C (-40°F to +257°F)

Pressure resistance: -60°C (-76°F) max. 20 hours

Pressure resistance: 20 bar (290.08 psi)

Environmental protection: IP 67 to DIN 40 050 with mounted mating connector

Measuring medium: lubricant, hydraulic oil, fuel, coolant

EMC:

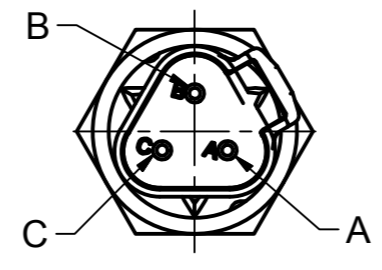
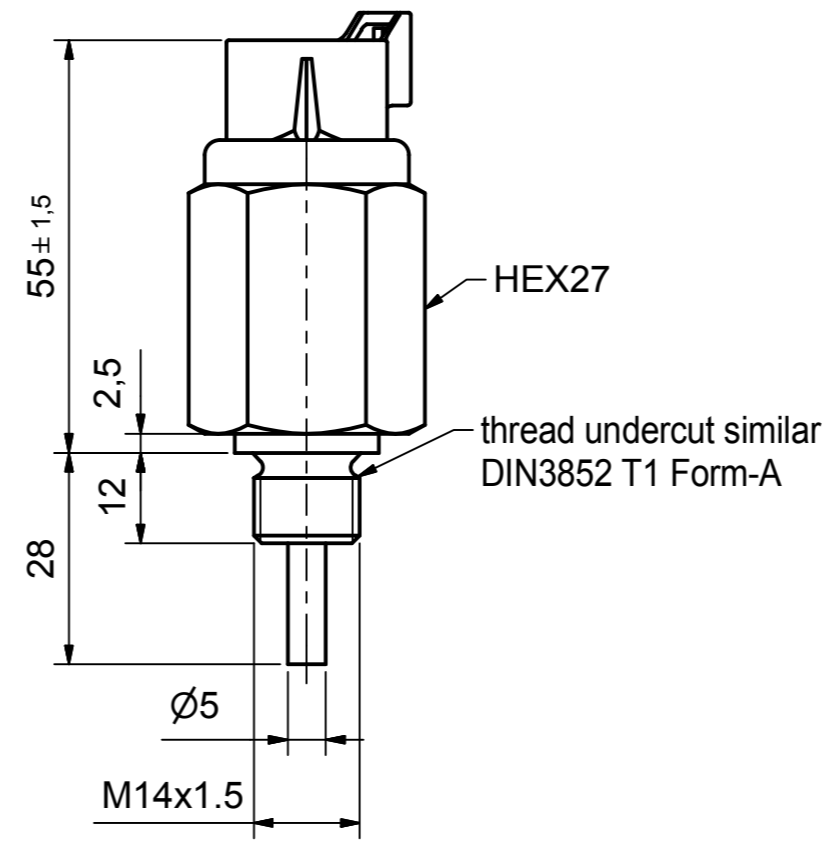
Radiated emission: 2004/104/EG 30 MHz - 1 GHz; 1 m

Conducted transient emission: ISO 7637-2:2004

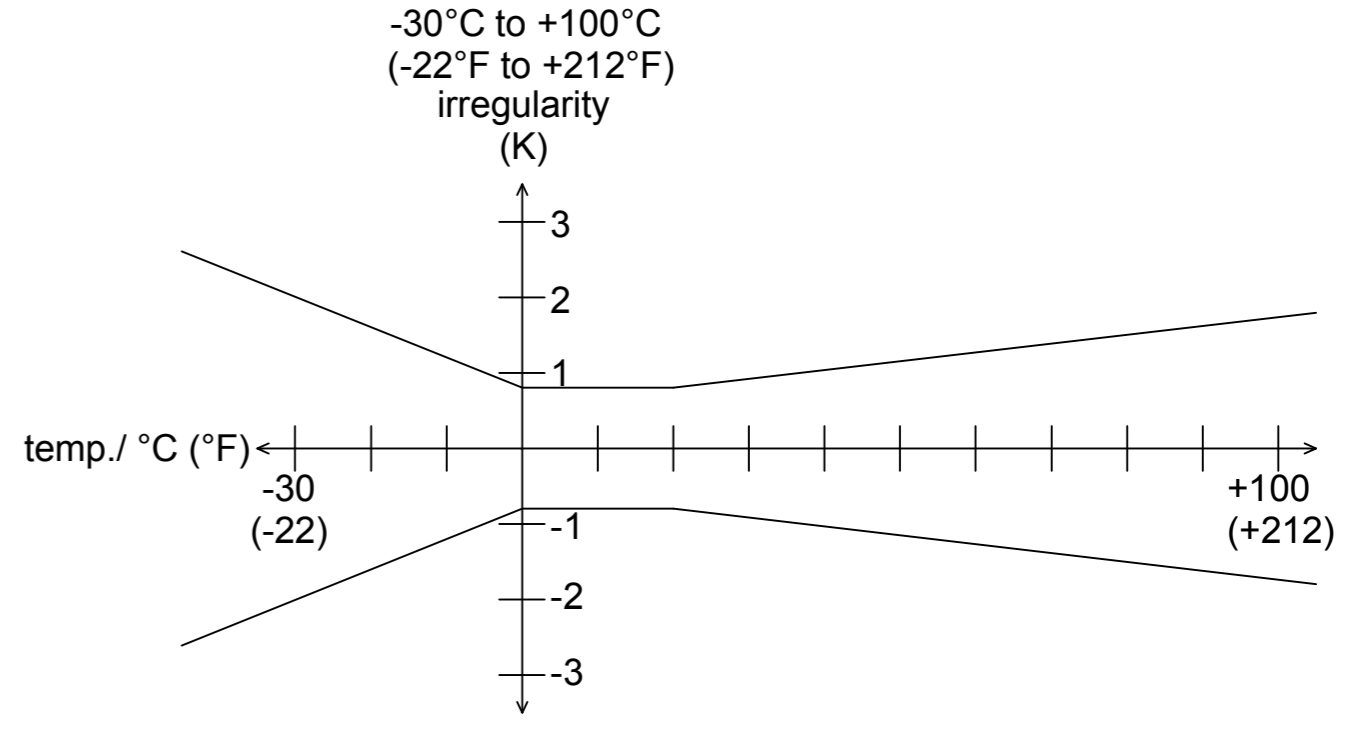
Immunity to RF electromagnetic fields: ISO 11452-1/-2 1000 MHz - 2000 MHz; 30 V / m (rms)

Immunity to RF electromagnetic fields in the stripline: ISO 11452-1/-5 20 MHz - 1000 MHz; 60 V / m (rms)

Transient immunity test on power lines: ISO 7637-2/2004 Impulse 1, 2a, 2b, 3a, 3b, 4



A = positive (+)
B = negative (-)
C = output (Uout)



nominal resistance of PT 1000
0,5 V to 5 V

T [°C] ([°F])	U _{out} [V]	PT 1000 R _{nom} [Ω]
-30 (-22,0)	0,50	882
-20 (-4,0)	0,85	921
-10 (14,0)	1,19	960
0 (32,0)	1,54	1000
10 (50,0)	1,88	1039
20 (68,0)	2,23	1077
30 (86,0)	2,58	1116
40 (104,0)	2,92	1155
50 (122,0)	3,27	1194
60 (140,0)	3,62	1232
70 (158,0)	3,96	1270
80 (176,0)	4,31	1309
90 (194,0)	4,65	1347
100 (212,0)	5,00	1385

Zul. Abweichung / admissible tolerance	Oberfläche / surface	Maßstab / scale	2:1	Sprache / language	ENU	Blatt / sheet	1 / 1
ISO2768-mK	-	-	-	-	-	-	-
Erstellt / created by	Datum / date	Name / name	Benennung / description				
23.08.2011	Möderer	Active temperature sensor					
Geprüft / checked by	21.12.2011	Saß	-30°C to +100°C (-22°F to +212°F)				
Format / Size	Maßeinheit / dimension unit	Zeichnungsnummer / drawing number					
A2	mm	420511					
b	TA-2015-0026	13.05.15	Kern/Carreras	Zng. Art/ drw.type			DRW
a	new approval	21.11.14	Kern/Saß				
Zust./ rev.	Änderung/modification		Datum/date	Name/Geprüft checked by			