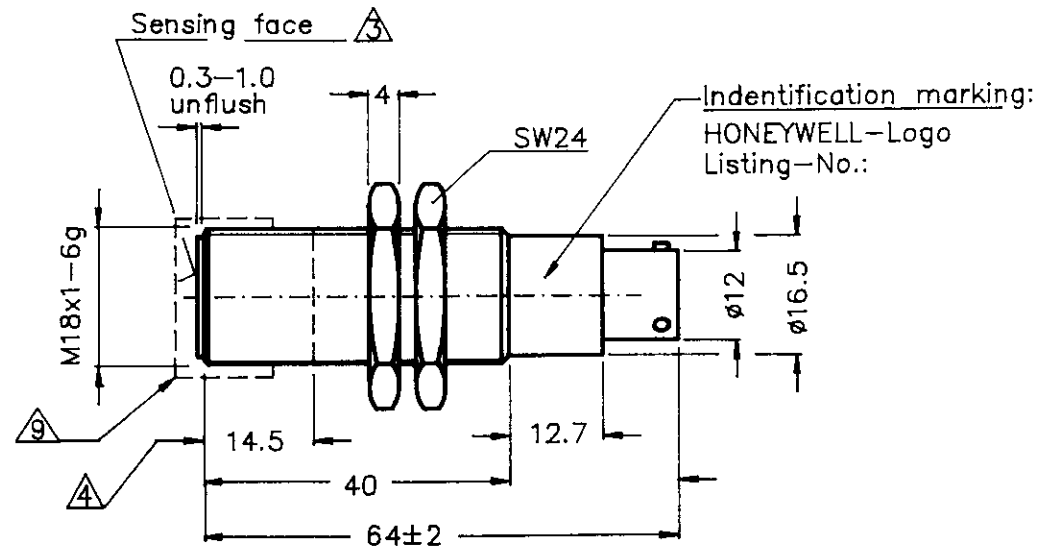
TECHNICAL DATA

			TESTS REQUIREMENT / MEASURING METHOD ⚠7	
SENSING CHARACTERISTICS				
Nominal sensing distance	[mm]	5		
Effective sensing distance	[mm]	4.5 to 5.5	5.3.2.1.8	a,b,c
Differential travel	[%]	3 to 15	5.3.2.7	a,b,c
Stability of sensing distance	[%]	+10/−5 within −25°C to +70°C	5.3.2.4	b,c
		+25/−5 within −40°C to +100°C	5.3.2.4	b,c
Reproduceability	[%]	≤ 1	5.3.2.5.1	c
Repetition rate of sensing	[Hz]	≥ 2000	5.3.2.12	c
Swing−on delay	[ms]	≤ 10	5.3.2.13	c
Power−on false pulse	[us]	t_{fp} 30% ≤ 25@ R_L = 1KOhm	5.3.2.15.1	c
POWER SUPPLY				
Supply voltage range	[V]	20 to 37.2	5.3.1.4	a,b,c
Ripple voltage	[V_{ss}]	≤ 7	MIL−STD−1275 A (AT)	c
Surge voltage	[V]	100V , 50ms	MIL−STD−1275 A (AT)	c
Transients	[V]	250V , 50us	MIL−STD−1275 A (AT)	c
Burden current	[mA]	≤ 20	5.3.1.7	a,c
OUTPUT CHARACTERISTICS				
Voltage drop	[V]	≤ 3	5.3.2.17	a,b,c
Residual current	[uA]	≤ 100	5.3.2.18.6	a,b,c
Load current	[mA]	≤ 250 to +20°C lin falling to 100 @ +100°C	5.3.2.18.1	a,b,c
ENVIRONMENTAL CHARACTERISTICS				
Operating temperature range	[°C]	−40 to 100	IEC 68−2−1 / IEC 68−2−2	b,c
Storage temperature	[°C]	−55 to 100	IEC 68−2−8 / IEC 68−2−2	c
Damp heat , steady state		56 days	IEC 68−2−3, Ca	c
Damp heat , cyclic		≤ +55°C , 6 Cycles	IEC 68−2−30, Db	c
Rapid change of temperature		−55°C/+85°C , 5 Cycles	IEC 68−2−14, Na	c
Vibration		10 to 500Hz , 0.75/100ms^{-2}	IEC 68−2−6, Fc	c
Bump		400ms^{-2} , 6x4000 bumps	IEC 68−2−29, Eb	c
Shock		1000ms^{-2} / 6ms	IEC 68−2−27, Ea	c
Salt mist		pH 6.5−7.2 @ +35°C	IEC 68−2−11, Ka	c
Tensile strength	[N]	40	IEC 68−2−21, Ua1	c
Insulation resistance	[MOHM]	≥ 50 @ 500Vdc	5.3.1.8	a,c
Insulation voltage	[Veff]	≥ 1000 @ 1min	5.3.1.10	c
SPECIAL FEATURES				
Reverse polarity, supply leads		yes	5.3.6.1	c
Short circuit protection		yes	5.3.6.4	a,b,c,
EMI ⚠8		Class A3 , A4	MIL−STD−461B	c,d
EMP ⚠8		Category B	DEF 07−55,T2,S5	c,d
MTBF Prediction		160449 @+20°C , GM application	MIL−HDKB 217D	——

⚠7 = to ZS−60000 if not otherwise specified
⚠8 = CE03,CS01,CS02,CS06,RE01,RS01,RS02,RS03 ?/ 50kV/m,130A/m
a = 100% test at +20°C
b = test within specified temperature range, test level II, AQL=4%
c = type approval test
d = in reference to similar listings (932AA3W−A2P−PGM and ZS−00209−72)



⚠1 Housing and mounting nuts: Stainless steel to 1.4541

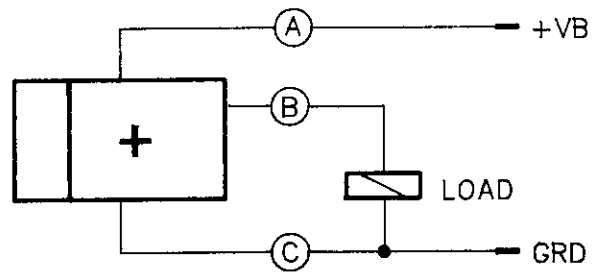
⚠3 Sensing face: 96% Al_2O_3Ceramic

⚠9 Sensing face transport protection

Connector : 3−pin, size 8, MIL−C−26482 series 1 / VG95328

Mounting torque : max. 80Nm
max. 30Nm within ⚠4

Thread quality : 6g



FREIGABE

Änderung	Datum	Name
a TAEM 994−91	17.9.92	Gn
Frg."P" 3/88−10	18.7.88	Be
Frg."F" 3/88−1	13.1.88	Eey

	Datum	Name
Bearb.	7.10.87	Gnoth
Gepr.	7.12.87	Gnoth
Norm	8.1.88	Meissner

Allgemeintoleranz DIN ISO 2768 mittel
Oberfläche DIN ISO 1302
Kanten DIN 6784
Maßstab —— DIN A3

HONEYWELL REGELSYSTEME GMBH D 6457 Maintal Germany D9444

Benennung: Proximity Switch ZS−00303−01

Sach−Nr. 43187383−001

Blatt 1 / 2 Bl

Ersatz für: 43187383−001 Rev. „−" Frg. „P" 3/88−10

ZS303−01

CAE − N 11.91