

TECHNICAL DATA

SENSING CHARACTERISTICS		TEST SPEC.	TEST REQ.
SWITCHING FUNCTION	NORMALLY OPEN, CURRENT SOURCE	AIP-ZS-00427-01	a,b,c
GUARANTEED ACTIVATION DISTANCE	≥0.200	AIP-ZS-00427-01	a,b,c
GUARANTEED DEACTIVATION DISTANCE	≤0.370	AIP-ZS-00427-01	a,b,c
DIFFERENTIAL TRAVEL	≤0.020	AIP-ZS-00427-01	a,b,c
POWER-ON DELAY	≤50	QTP-ZS-00427-01	c
FALSE PULSE SUPPRESSION	YES	QTP-ZS-00427-01	c

BITE INPUT		TEST SPEC.	TEST REQ.
BITE FAR	+V _{Supply} - 3	AIP-ZS-00427-01	a,b,c
BITE NEAR	≤-18	AIP-ZS-00427-01	a,b,c
RESPONSE TIME	≤100	QTP-ZS-00427-01	c

OUTPUT CHARACTERISTICS		TEST SPEC.	TEST REQ.
ON-STATE OUTPUT VOLTAGE	≤1.4V @ 15mA	AIP-ZS-00427-01	a,b,c
MAXIMUM SUPPLY CURRENT	≤30	QTP-ZS-00427-01	a,b,c
LOAD CURRENT	≤15	QTP-ZS-00427-01	a,b,c
CURRENT LIMIT	15 to 23	AIP-ZS-00427-01	c
OFF-STATE LEAKAGE CURRENT	≤67	QTP-ZS-00427-01	a,b,c
SWITCHING TIME	≤20	QTP-ZS-00427-01	c
OUTPUT IMPEDANCE	15000	QTP-ZS-00427-01	c

ENVIRONMENTAL CHARACTERISTICS		TEST SPEC.	TEST REQ.
OPERATING TEMPERATURE	-54 to +55	MIL-S1D-8100, Meth. 501.2, Proc. I&II	b,c
STORAGE TEMPERATURE	-54 to +85	MIL-S1D-8100, Meth. 501.2, Proc. I&II	c
HUMIDITY	240 hrs @ 95% RH	MIL-S1D-8100, Meth. 507.2, Proc. III	c
TEMPERATURE - ALTITUDE	200 to 30000 feet	MIL-S1D-8100, Meth. 520, Proc. III	c
VIBRATION		MIL-S1D-8100, Meth. 514.3, Cat. 5, Proc. I	c
		MIL-S1D-8100, Meth. 514.2, Proc. XI	c
		MIL-S1D-8100, Meth. 516.2, Proc. IV & V	c
SHOCK		LOCKHEED 423638, Para. 4.11	c
HYDRAULIC FLUID	MIL-H-5606 fluid	MIL-S1D-8100, Meth. 512.2, Proc. I	c
IMMERSION		LOCKHEED 423638, Para. 3.3.12 & 4.4.12	c
MAGNETIC ATTRACTION		LOCKHEED 423638, Para. 3.3.13 & 4.4.14	c
ADJACENT METALLIC STRUCTURE		MIL-S1D-8100, Meth. 509.2, Proc. I	c
SALT SPRAY	48 hrs	LOCKHEED 423638, Para. 4.9	c
THERMAL SHOCK	500 cycles, -55°C to +85°C	LOCKHEED 423638, Para. 4.9	c
POWER SOURCE VARIATIONS	18 to 30 V supply	MIL-S1D-704F	c

EMC-REQUIREMENTS		TEST SPEC.	TEST REQ.
RADIATED EMISSIONS		RE101	c
RADIATED EMISSIONS		RE102	c
CONDUCTED SUSCEPTIBILITY		CS101	c
CONDUCTED SUSCEPTIBILITY		CS101	c
CONDUCTED SUSCEPTIBILITY		CS102	c
RADIATED SUSCEPTIBILITY		RS101	c
RADIATED SUSCEPTIBILITY		RS101 (200V/m, 10kHz to 35GHz)	c
LIGHTNING INDUCED TRANSIENTS, PIN TEST		Category A3XX	c
MAGNETIC SUSCEPTIBILITY		Section 3.4.1.2	c
STATIC MAGNETIC FIELDS		LOCKHEED 423062	c
DYNAMIC MAGNETIC FIELDS		Section 3.4.1.4	c

RELIABILITY		TEST SPEC.	TEST REQ.
BURN-IN	160 hrs @ +85°C	MIL-S1D-883	100%
MTBF	>200000 @ A _{pp} , T _a = +40°C	MIL-HDBK-217 F	-

a = 100% TEST AT ROOM TEMPERATURE CONDITIONS
 b = LOT ACCEPTANCE TEST WITHIN TEMPERATURE RANGE
 c = TYPE APPROVAL TEST

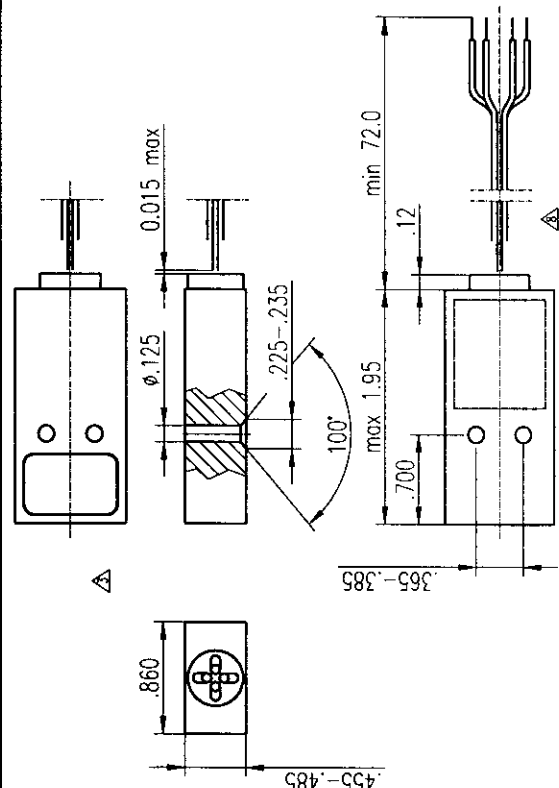
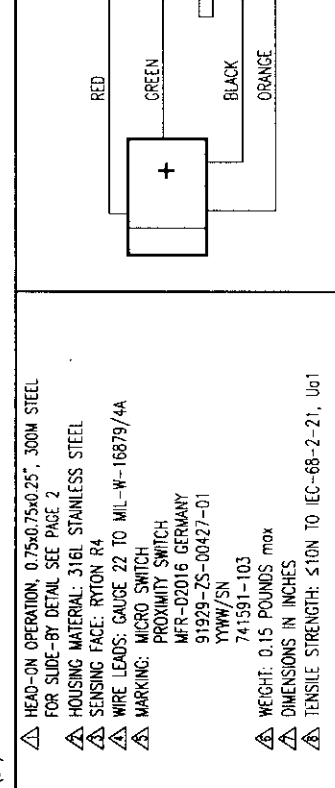


TABLE 1: FAILURE MODE DETECTION

EXTERNAL WIRING FAILURE MODE	PROXIMITY SWITCH FAILURE MODE	PROXIMITY SWITCH OUTPUT STATUS
OPEN INPUT (28 VDC)	ACTUATED OR DE-ACTUATED	DE-ACTUATED
OPEN INPUT (GROUND)	ACTUATED	ACTUATED
OPEN OUTPUT	ACTUATED	DE-ACTUATED
SHORTED BIT (TO 28 VDC)	ACTUATED	DE-ACTUATED
OPEN OR GROUND (BIT)	ACTUATED	DE-ACTUATED



HEAD-ON OPERATION, 0.75x0.75x0.25", 300M STEEL
 FOR SLIDE-BY DETAIL SEE PAGE 2
 HOUSING MATERIAL: 316L STAINLESS STEEL
 SENSING FACE: RYTON R4
 WIRE LEADS: GAUGE 22 TO MIL-W-16879/4A
 MARKING: MICRO SWITCH
 PROXIMITY SWITCH
 MFR-D2016 GERMANY
 91929-ZS-00427-01
 YYWW/SN
 741591-103
 WEIGHT: 0.15 POUNDS max
 DIMENSIONS IN INCHES
 TENSILE STRENGTH: ≤10N TO EC-68-2-21, Uo1

Measures without tolerance Statement after DIN 7168 middle

0.1	0.1
0.2	0.2
0.3	0.3
0.4	0.4
0.5	0.5
0.6	0.6
0.7	0.7
0.8	0.8
0.9	0.9
1.0	1.0
1.1	1.1
1.2	1.2
1.3	1.3
1.4	1.4
1.5	1.5
1.6	1.6
1.7	1.7
1.8	1.8
1.9	1.9
2.0	2.0

File No.: 43400174
 RELEASE

PROXIMITY SWITCH
 ZS-00427-01

43400174-001

Honeywell
 Control Components Division
 63657 Offenbach
 Germany

Proc. 11.12.97
 Exam. Weser
 Date 26.05.98
 Name Weser
 Reason New Release

Page 1
 2 Pg