

TECHNICAL DATA

SENSING CHARACTERISTICS

SWITCHING FUNCTION	NORMALLY OPEN CURRENT SOURCE	TEST SPEC.	TEST REQ.
GUARANTEED ACTUATION DISTANCE	20.040	ATP-ZS-00426-01	a,b,c
GUARANTEED DEACTUATION DISTANCE	0.115	ATP-ZS-00426-01	a,b,c
DIFFERENTIAL TRAVEL	0.005	ATP-ZS-00426-01	a,b,c
POWER-ON DELAY	≤50	QTP-ZS-00426-01	c
FALSE PULSE SUPPRESSION	YES	QTP-ZS-00426-01	c

BITE INPUT

BITE FAR	V	+V _(supply) -3	ATP-ZS-00426-01	a,b,c
BITE NEAR	V	≤-18	ATP-ZS-00426-01	a,b,c
RESPONSE TIME	ms	≤100	QTP-ZS-00426-01	c

OUTPUT CHARACTERISTICS

ON-STATE OUTPUT VOLTAGE	V	≤1.4V @ 15mA	ATP-ZS-00426-01	a,b,c
MAXIMUM SUPPLY CURRENT	mA	≤30	QTP-ZS-00426-01	a,b,c
LOAD CURRENT	mA	≤15	QTP-ZS-00426-01	a,b,c
CURRENT LIMIT	mA	15 to 23	ATP-ZS-00426-01	c
OFF-STATE LEAKAGE CURRENT	μA	≤67	QTP-ZS-00426-01	a,b,c
SWITCHING TIME	ms	≤20	QTP-ZS-00426-01	c
OUTPUT IMPEDANCE	ohms	15000	QTP-ZS-00426-01	c

ENVIRONMENTAL CHARACTERISTICS

OPERATING TEMPERATURE	°C	-54 to +55	MIL-STD-883C, Meth. 501.2, Proc. II	b,c
STORAGE TEMPERATURE	°C	-54 to +85	MIL-STD-883C, Meth. 501.2, Proc. II	c
HUMIDITY		240 hrs @ 95% RH	MIL-STD-883C, Meth. 507.2, Proc. III	c
TEMPERATURE - ALTITUDE		200 to 30000 feet	MIL-STD-883C, Meth. 520, Proc. III	c
VIBRATION			MIL-STD-883C, Meth. 514.3, Cat. 5, Proc. I	c
SHOCK			MIL-STD-883C, Meth. 516.2, Proc. IV & V	c
HYDRAULIC FLUID		MIL-H-5606 fluid	LOCKHEED 423638, Para. 4.11	c
IMMERSION			MIL-STD-883C, Meth. 512.2, Proc. I	c
MAGNETIC ATTRACTION			LOCKHEED 423638, Para. 3.3.12 & 4.4.12	c
ADJACENT METALLIC STRUCTURE			LOCKHEED 423638, Para. 3.3.13 & 4.4.14	c
SALT SPRAY		48 hrs	MIL-STD-883C, Meth. 509.2, Proc. I	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-STD-704E	c

EMC-REQUIREMENTS

RADIATED EMISSIONS	RE101	MIL-STD-461D	c
RADIATED EMISSIONS	RE102	MIL-STD-461D	c
CONDUCTED SUSCEPTIBILITY	CS101	MIL-STD-461D	c
CONDUCTED SUSCEPTIBILITY	CS101	MIL-STD-461D	c
CONDUCTED SUSCEPTIBILITY	CS102	MIL-STD-461D	c
RADIATED SUSCEPTIBILITY	RS101	MIL-STD-461D	c
RADIATED SUSCEPTIBILITY	RE103 (200V/m, 10kHz to 350Hz)	MIL-STD-461D	c
LIGHTNING INDUCED TRANSIENTS, PIN TEST	Category A3XX	DO-160C, section 22, June 19, 1992	c
MAGNETIC SUSCEPTIBILITY	Section 3.4.1.2	LOCKHEED 423062	c
STATIC MAGNETIC FIELDS	Section 3.4.1.3	LOCKHEED 423062	c
DYNAMIC MAGNETIC FIELDS	Section 3.4.1.4	LOCKHEED 423062	c

RELIABILITY

BURN-IN	hrs	160 hrs @ +85°C	MIL-STD-883	100%
MTBF	hrs	>200000 @ Avg. T=+40°C	MIL-HDBK-217 F	-

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

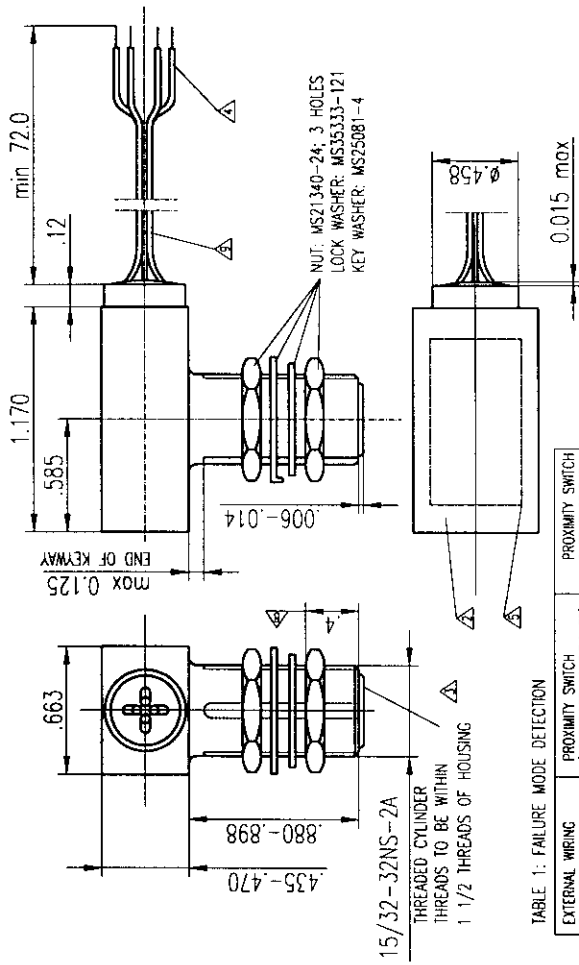
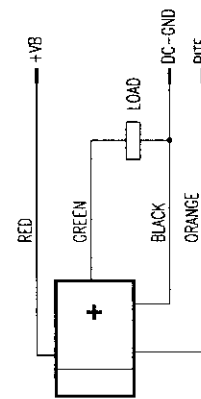


TABLE 1: FAILURE MODE DETECTION

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

- △ HEAD-ON OPERATION, 0.5x0.5x0.75", 300M STEEL
- △ 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-00426-01 YYYW/SN 741588-103
- △ WEIGHT: 0.11 POUNDS max
- △ DIMENSIONS IN INCHES
- △ MOUNTING TORQUE: ≤40Nm, ≤8Nm within △
- △ TENSILE STRENGTH: S10N TO EC-68-2-21, Ucl



File No.: 43400173		RELEASE	
Measures without Tolerance Statement after DIN 7168 middle 0.1 mm 0.2 mm 0.3 mm 0.4 mm 0.5 mm 0.6 mm 0.8 mm 1.0 mm 1.2 mm 1.5 mm 2.0 mm 2.5 mm 3.0 mm 4.0 mm 5.0 mm 6.0 mm 8.0 mm 10.0 mm 12.0 mm 15.0 mm 20.0 mm 25.0 mm 30.0 mm 40.0 mm 50.0 mm 60.0 mm 80.0 mm 100.0 mm		Date Name Proc. 11.12.97 Exam. QS Date Name Date Name	
A New Release Weser 26.05.98		PROXIMITY SWITCH	
ZS-00426-01		A	
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