



**REED SWITCH DEVELOPMENTS CORP.**

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## SPECIFICATION SHEET

**2451-1166-400**

Alternate Part Number:  
**AM2451-1166-10K01**

**Active / Equivalent Part Numbers:**

**2451-1166-400 - KIT - Contains**

(1) 2451-1166-100 - Magnetic Reed Sensor

(1) 2451-4006-000 - Magnetic Actuator

**AM2451-1166-10K01 - KIT - Contains**

(1) AM2451-1166-10-01 - Magnetic Reed Sensor

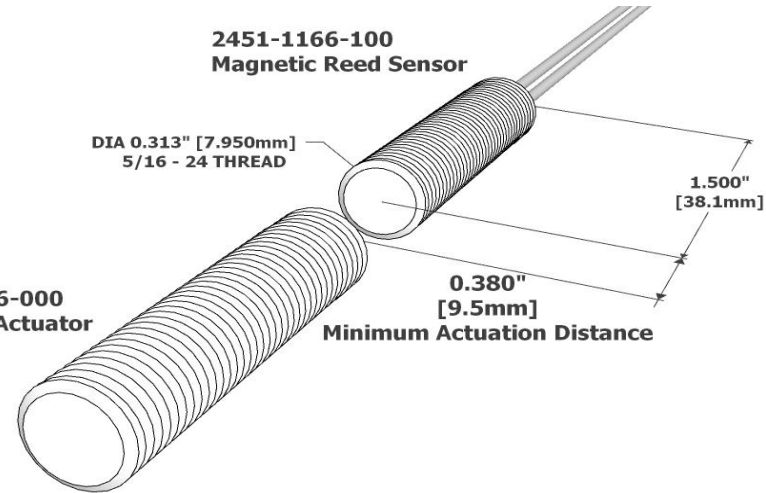
(1) AM2451-4006-00-01 - Magnetic Actuator

**Sensor (Reed) - Specifications 1166**

Physical		Operating		Electrical	
Configuration	SPST				
Form	A				
Contact Position	CENTER				
Glass L	19.00	mm			
Glass D	2.60	mm			
Total L*	55.00	mm			
Wire D	0.70	mm			
Gap Location	CENTER				
Mount Spec*	N/A				
Contact Material	N/A				
Max Vibration Resistance	20	G			
Max Shock Resistance (11ms)	50	G			
Lead Tensile Strength	N/A	KG			
Pull in (+/- 2AT)*	15-20	AT			
Drop out*	N/A	AT			
Operate Time	0.5	ms			
Bounce Time	INCL	ms			
Release Time	0.1	µs			
Resonant Frequency	N/A	Hz			
Max Operating Frequency	N/A	Hz			
Operating Temperature Range	-40 - 130	°C			
Storage Temperature	-55 - 130	°C			
DC Contact Rating	20	W			
AC Contact Rating	N/A	VA			
DC Switching Voltage	200	VDC			
AC Switching Voltage	140	VAC			
DC Switching Current	1.00	A			
AC Switching Current	1.00	A			
DC Max Carry Current	1.25	A			
AC Max Carry Current	1.25	A			
Min Breakdown Voltage	220	VDC			
Max Initial Contact Resistance	150	mOhm			
Typical Initial Contact Resistance	N/A	mOhm			
Max Contact Capacitance	0.30	pF			
Min Insulation Resistance	10 <sup>12</sup>	Ohm			

\* Pre-processed, bare reed element

**2451-4006-000  
Magnetic Actuator**



All measurements are in Inches [millimeters]

### Sensor - Wire/Cable Characteristics (cont.)

Type	Wire
Conductor Count	2
Length	6.0"/152.4mm
Colors	BLK
Insulation Material	PVC
Gauge	24 AWG
Stranded Copper	7 STR-TC
Maximum Temp	105°C

### Housing Characteristics 2451

Cylindrical Threaded (5/16-24)	
Length / Thickness	1.500"/38.1mm
Diameter	0.313"/7.95mm
Material	Aluminum

### Standard Actuator: 2451-4006-000

Specifications	Description	UM
Magnetic Orientation	Through Length	
Max Operating Temp.	975/525	°F/°C
Curie Temp.	1580/860	°F/°C
BR max	12.8	kGauss
BH max	5.5	MGOe
Coercive Force Hc	640	kOe
Intrinsic Coercive Force Hci	640	kOe
Standard Sensor/Actuator - Min. Actuation Distance		
2451-4006-000	0.38"/9.5mm	
Assembly Certifications		
UL Recognized (File #: E102207)	Y	
RoHS / Reach Compliant	Y	
Conflict Free Material	Y	

REV DATE: 10/06/2021

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