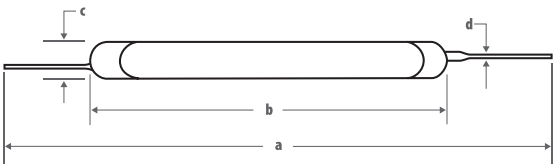
SPEC GUIDE

SPEC GUIDE

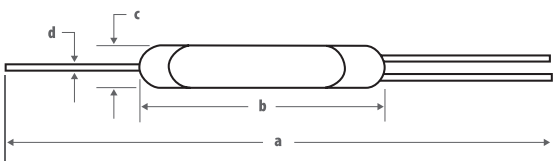
REED SWITCHES

			HIGH POWER ◇7				HIGH POWER & HIGH VOLTAGE ◇7				HIGH VOLTAGE
			Form A			Form C	Form A	Form C			Form A
			HSR-196W	HSR-134W	HSR-156W	HSR-634W	HSR-907W	HSR-834W	HSR-933W	HSA-12100	HSR-920G
PARAMETERS											
Configuration			SPST	SPST	SPST	SPDT	SPST	SPDT	SPDT	SPDT	SPST
Internal Contact Material ◇1			W◇5	W◇5	W◇5	W◇5	W◇5	W◇5	W◇5	W◇5	Diffused Gold
Switching Voltage	Max.	Volts DC	120	120	120	120	6000	500	500	2500	30
Voltage Switching Type			DC	DC	DC	DC	DC	DC	DC	DC	DC
Switching Current	Max.	Amps	3.00	3.00	4.00	3.00	3.00	3.00	3.00	3.00	0.25
Carry Current	Max.	Amps	4.7	5.1	5.5	3.6	5.7	4.0	3.2	3.2	4.0
Switching Power	Max.	Watts	100	100	200	100	200	100	100	100	5
Voltage Breakdown ◇2	Min.	Volts DC	600	700	700	150	8000	1000	1500	5000	10000
Initial Contact Resistance	Max.	Ohms	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.1
Insulation Resistance ◇3	Min.	Ohms	1 E10	1 E11	1 E10	1 E10	1 E11	1 E8	1 E10	1 E10	1 E10
Operate Sensitivity	Range	AT	50-100	60-100	50-100	60-100	90-150	60-100	40-100	70-110	100-150
Standard Test Coil NARM RS-421-A			Coil IV	Coil III	Coil III	Coil IV	Coil III	Coil IV	Coil III	Coil III	Coil III
Operating Time Including Bounce ◇4	Max.	mSeconds	3.2	6.0	4.0	4.0	5.8	4.5	4.2	4.5	2.0
Release Time	Max.	mSeconds	1.2	0.7	1.1	3.9	0.8	4.1	3.7	3.7	1.0
Operating Temperature	Range	°C	-40 to +125	-40 to +125	-40 to +125	-40 to +125	-60 to +125	-25 to +125	-60 to +125	-60 to +125	-60 to +125
Certification											
Corresponding Diagram			①	⑤	⑤	②	③	②	④		③
DIMENSIONS											
Overall Length	a	mm	81.92	85.98	81.92	85.98	81.91	86	71.63	71.63	3.190
Glass Length	b	mm	50.42	31.37	41.02	32.89	49.78	32.26	32.64	32.64	1.960
Glass Diameter	c	mm	5.33	5.33	4.83	5.33	5.33	5.33	5.33	5.33	0.210
Lead Diameter	d	mm	2.49	1.02	1.55	1.02	.53 x 2.49	1.02	1.02	1.02	0.021x0.098

① FORM A



② FORM C



REED SWITCH NOTES

◇1 Contacts: R=Rhodium, D=Durel, W=Tungsten ◇2 Dielectric strength varies with sensitivity. Consult factory at time of order. ◇3 Insulation resistance test voltage: 100 VDC ◇4 Measured at 60 Hz., 50% overdrive

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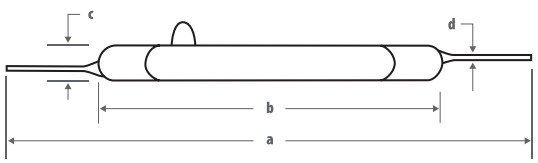
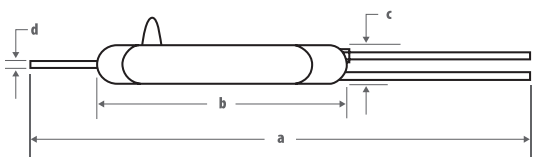
REED SWITCHES

			HIGH VOLTAGE									
			Form A									Form C
			HSR-780R	HSR-900R	HSR-790W	HSR-910W	HSR-910W	HSR-910W	HSR-916W	HSR-916W	HSR-916W	HSR-980R	HSR-830R
PARAMETERS												
Configuration			SPST	SPST	SPST	SPST	SPST	SPST	SPST	SPST	SPST	SPST	SPDT
Internal Contact Material ◇1			R	R	W	W	W	W	W	W	W	W	R
Switching Voltage	Max.	Volts DC	500	500	1000	4000	5000	6000	6000	7500	10000	2500	250
Voltage Switching Type			DC	DC	DC	DC	DC	DC	DC	DC	DC	DC	DC
Switching Current	Max.	Amps	1.50	1.00	2.50	3.00	3.00	3.00	3.00	3.00	3.01	1	1.00
Carry Current	Max.	Amps	8.8	2.2	6.1	4.5	4.5	4.5	5	5	5	5	6.5
Switching Power	Max.	Watts	25	25	50	50	50	50	50	50	50	25	25
Voltage Breakdown ◇2	Min.	Volts DC	2500	1500	2500	7000	10000	15000	10000	14000	17000	10000	1000
Initial Contact Resistance	Max.	Ohms	0.1	0.15	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Insulation Resistance ◇3	Min.	Ohms	1 E7	1 E11	1 E8	1 E11	1 E11	1 E11	1 E11	1 E11	1 E11	1 E10	1 E9
Operate Sensitivity	Range	AT	60-100	15-40	60-100	60-125	100-150	140-170	80-11	110-140	140-170	75-125	50-100
Standard Test Coil NARM RS-421-A			Coil IV	Coil II	Coil IV	Coil III	Coil III	Coil III	Coil III	Coil III	Coil III	Coil III	Coil IV
Operating Time Including Bounce ◇4	Max.	mSeconds	2.5	1.1	3.0	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.6
Release Time	Max.	mSeconds	2.1	0.9	1.6	1.5	1.5	1.5	1.5	1.5	1.5	1.5	4.2
Operating Temperature	Range	°C	-25 to +125	-60 to +125	-25 to +125	-60 to +125	-60 to +125	-60 to +125	-60 to +150	-60 to +150	-60 to +150	-60 to +125	-25 to +125
Certification													
Corresponding Diagram			①	⑤	①	③	③	③	③	③	③	③	②
DIMENSIONS													
Overall Length	a	mm	81.91	55.50	81.79	81.66	81.66	81.66	81.66			3.225	86
Glass Length	b	mm	48.77	20.32	48.90	49.78	49.78	49.78	49.78			2.1	31.88
Glass Diameter	c	mm	5.33	2.79	5.33	5.33	5.33	5.33	5.33			.210	5.33
Lead Diameter	d	mm	.53 x 2.49	.59	.53 x 2.49	.53 x 2.49	.53 x 2.49	.53 x 2.49	.58 x 2.286			.51	1.02

③ FORM A WITH TIP



④ FORM C WITH TIP



◇5 Solid tungsten bar and plate contacts ◇6 Intended for radio frequency (through 30 MHz.) ◇7 3.0 watts minimum ◇8 External plating for all reed switches available as T (Tin), G (Gold), C (Copper) or O (Clean)

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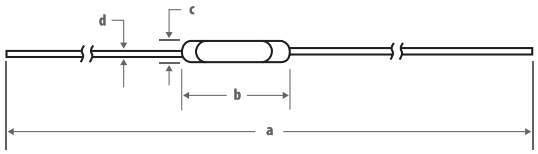
SPEC GUIDE

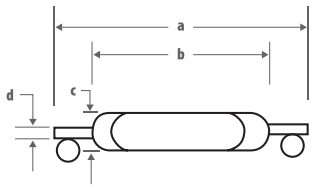
REED SWITCHES

			BI-STABLE LATCHER			MICRO MINIATURE					
			Form C								
			HSA-12080	HSA-12100	HSA-12115	HSR-0025R	HSR-0035R	HSR-004R	HSR-023R	HSR-042R	HSR-067R
PARAMETERS											
Configuration			SPDT	SPDT	SPDT	SPST	SPST	SPST	SPST	SPST	SPST
Internal Contact Material ◇1			R	R	R	R	R	R	R	R	R
Switching Voltage	Max.	Volts DC	150	2500	150	30	30	30	100	100	30
Voltage Switching Type			DC	DC	DC	DC	DC	DC	DC	DC	DC
Switching Current	Max.	Amps	1.00	3.00	2.00	0.01	0.05	0.05	0.25	0.20	0.20
Carry Current	Max.	Amps	5.4	3.2	6.5	0.7	1.0	1.0	1.1	2.0	1.5
Switching Power	Max.	Watts	25	100	50	0.5	1	1	3	4	4
Voltage Breakdown ◇2	Min.	Volts DC	250	5000	350	100	200	250	175	200	350
Initial Contact Resistance	Max.	Ohms	0.1	0.5	0.15	0.75	0.75	0.75	0.15	0.2	0.2
Insulation Resistance ◇3	Min.	Ohms	1 E9	1 E10	1 E9	1 E11	1 E11	1 E12	1 E12	1 E11	1 E11
Operate Sensitivity	Range	AT	20-50	70-110	20-50	4-15	5-20	5-20	5-30	10-35	10-35
Standard Test Coil NARM RS-421-A			Coil III	Coil III	Coil III	Coil I	Coil I	Coil I	Coil I	Coil I	Coil I
Operating Time Including Bounce ◇4	Max.	mSeconds	N/A	N/A	N/A	0.3	0.2	0.2	0.3	0.6	0.4
Release Time	Max.	mSeconds	N/A	N/A	N/A	0.2	0.1	0.1	0.1	0.1	0.1
Operating Temperature	Range	°C	-40 to +125	-40 to +125	-40 to +125	-40 to +125	-40 to +125	-40 to +125	-40 to +125	-40 to +125	-40 to +125
Certification											
Corresponding Diagram						⑤	⑤	⑤	⑤	⑤	⑤
DIMENSIONS											
Overall Length	a	mm	86.11	71.63	85.98	26.64	26.67	25.27	31.80	48.01	31.50
Glass Length	b	mm	32.77	32.64	32.77	4.06	4.83	5.97	6.73	9.14	11.3
Glass Diameter	c	mm	5.33	5.59	5.33	.89 x 1.22	1.4	1.4	1.78	2.29	1.78
Lead Diameter	d	mm	1.02	1.02	1.02	.25	.25	.25	.38	.58	.41

⑤ FORM A



⑥ FORM A SURFACE MOUNT



REED SWITCH NOTES

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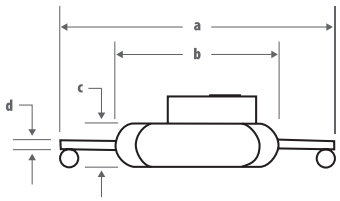
SPEC GUIDE

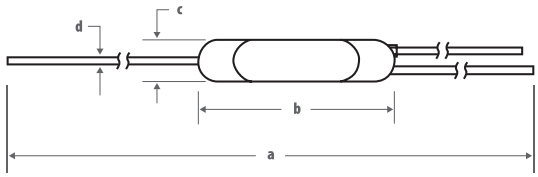
REED SWITCHES

			MICRO MINIATURE							
			Form A				Form B		Form C	
			HSR-069R	HSR-077R	HSR-080R	HSA-12125	HSR-376R	HSA-12114	HSR-370R	HSR-502R
PARAMETERS										
Configuration			SPST	SPST	SPST	SPST	SPST	SPST	SPDT	SPDT
Internal Contact Material ◇1			R	R	R	R	R	R	R	R
Switching Voltage	Max.	Volts DC	30	100	100	30	36	30	30	30
Voltage Switching Type			DC	DC	DC	DC	DC	DC	DC	DC
Switching Current	Max.	Amps	0.20	0.25	0.25	.01	0.10	0.02	0.10	0.10
Carry Current	Max.	Amps	1.5	1.8	1.5	.7	2.0	0.2	1.6	1.2
Switching Power	Max.	Watts	4	7	10	.5	2	0.5	3	2
Voltage Breakdown ◇2	Min.	Volts DC	300	250	500	80	N/A	100	300	200
Initial Contact Resistance	Max.	Ohms	0.2	0.1	0.1	0.75	0.35	0.75	0.2	0.3
Insulation Resistance ◇3	Min.	Ohms	1 E10	1 E11	1 E11	1 E11	1 E8	1 E11	1 E10	1 E10
Operate Sensitivity	Range	AT	10-35	10-40	15-40	2-15	.1-.125	—	15-35	15-35
Standard Test Coil NARM RS-421-A			Coil I	Coil II	Coil II	Coil I	N/A	N/A	Coil I	Coil I
Operating Time Including Bounce ◇4	Max.	mSeconds	0.5	1.0	1.0	-	N/A	0.2	0.9	0.3
Release Time	Max.	mSeconds	0.1	0.2	0.3	-	N/A	0.1	0.7	0.3
Operating Temperature	Range	˚C	-50 to +200	-40 to +125	-40 to +125	-40 to +125	-40 to +125	-40 to +125	-40 to +125	-40 to +125
Certification										
Corresponding Diagram			⑤	⑤	⑤	⑥	⑫	⑦	⑧	⑧
DIMENSIONS										
Overall Length	a	mm	31.5	48.26	50.49	5.89	22.61	7.9	37.72	37.85
Glass Length	b	mm	12.83	13.72	13.72	4.01	9.4	4.83	11.94	7.75
Glass Diameter	c	mm	2.54	2.29	3.17		1.83	1.4	1.83	2.16
Lead Diameter	d	mm	.41	.58	.58	.25	.37	.25	.41	.41

⑦ FORM B



⑧ FORM C



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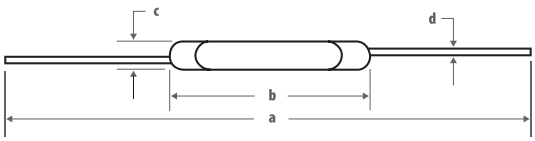
SPEC GUIDE

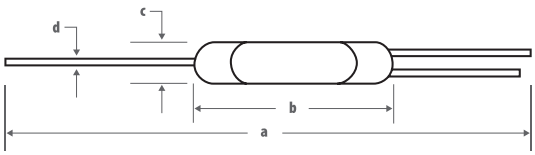
REED SWITCHES

			MINIATURE							UNIVERSAL
			Form A				Form C			Form C
			HSR-1015R	HSR-1016R	HSR-102R	HSR-105R	HSR-302R	HSR-510R	HSR-520R	HSR-637W
PARAMETERS										
Configuration			SPST	SPST	SPST	SPST	SPDT	SPDT	SPDT	SPDT
Internal Contact Material ◇1			R	R	R	R	R	R	R	W
Switching Voltage	Max.	Volts DC	200	200	200	200	120	120	120	120
Voltage Switching Type			DC	DC	DC	DC	DC	DC	DC	DC
Switching Current	Max.	Amps	0.50	0.50	0.50	0.50	0.20	0.25	0.25	3
Carry Current	Max.	Amps	3.5	1.5	1.8	3.2	2.0	TBD	2.9	3.6
Switching Power	Max.	Watts	10	10	10	10	4	3	3	100
Voltage Breakdown ◇2	Min.	Volts DC	500	400	300	600	200	400	400	150
Initial Contact Resistance	Max.	Ohms	0.1	0.15	0.1	0.1	0.15	0.15	0.15	0.50
Insulation Resistance ◇3	Min.	Ohms	1 E11	1 E11	1 E10	1 E10	1 E10	1 E9	1 E9	1 E10
Operate Sensitivity	Range	AT	10-45	15-40	10-45	10-45	15-40	15-45	15-45	60-100
Standard Test Coil NARM RS-421-A			Coil II	Coil II	Coil II	Coil II	Coil II	Coil II	Coil II	Coil IV
Operating Time Including Bounce ◇4	Max.	mSeconds	0.7	0.7	0.7	0.8	0.8	1.3	1.0	4.00
Release Time	Max.	mSeconds	0.3	0.2	0.4	0.3	0.8	0.6	0.8	3.90
Operating Temperature	Range	˚C	-40 to +125	-40 to +125	-40 to +125	-40 to +125	-40 to +125	-40 to +125	-40 to +125	-40 to +125
Certification										
Corresponding Diagram			⑨	⑨	⑨	⑨	⑩	⑩	⑩	⑩
DIMENSIONS										
Overall Length	a	mm	55.63	53.08	52.96	55.37	49.02	50.93	51.05	85.98
Glass Length	b	mm	19.18	19.69	19.30	19.43	14.35	14.22	14.73	32.89
Glass Diameter	c	mm	2.57	2.57	3.10	3.10	3.05	2.67	3.18	5.33
Lead Diameter	d	mm	.58	.57	.58	.58	.58	.58	.58	1.02

⑨ FORM A



⑩ FORM C



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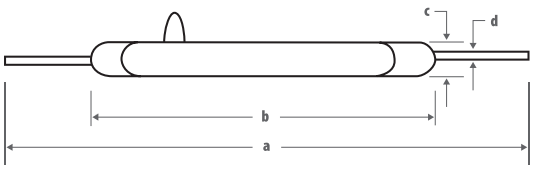
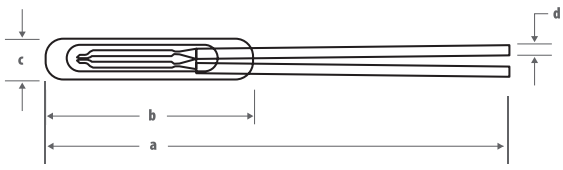
REED SWITCHES

			RADIO FREQUENCY ◇6				STANDARD					
			Form A				Form A					Form C
			HSR-1016F	HSR-900F	HSR-980F	HSR-981F	HSR-130R	HSR-150R	HSR-170R	HSR-190R	HSR-194W	HSR-630R
PARAMETERS												
Configuration			SPST	SPST	SPST	SPST	SPST	SPST	SPST	SPST	SPST	SPDT
Internal Contact Material ◇1			R	R	R	R	R	R	R	R	W	R
Switching Voltage	Max.	Volts DC	200	220	500	3500	150	200	200	250	350	150
Voltage Switching Type			AC	AC	AC	AC	DC	DC	DC	DC	DC	DC
Switching Current	Max.	Amps	0.50	1.00	1.50	1.50	1.00	1.00	1.00	1.00	2.00	1.00
Carry Current	Max.	Amps	2.7	2.2	5	5.4	6.6	6.5	6.5	8.0	6.0	6.2
Switching Power	Max.	Watts	10	10	25	25	25	25	25	25	50	25
Voltage Breakdown ◇2	Min.	Volts DC	400	1500	5000	7500	700	500	500	700	600	350
Initial Contact Resistance	Max.	Ohms	0.15	0.15	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Insulation Resistance ◇3	Min.	Ohms	1 E11	1 E10	1 E11	1 E10	1 E11	1 E10	1 E9	1 E10	1 E10	1 E9
Operate Sensitivity	Range	AT	15-40	15-40	60-125	100-145	40-80	40-80	40-80	40-80	60-100	40-80
Standard Test Coil NARM RS-421-A			Coil II	Coil II	Coil III	Coil III	Coil III	Coil III	Coil III	Coil IV	Coil IV	Coil IV
Operating Time Including Bounce ◇4	Max.	mSeconds	0.7	1.4	3.0	2.5	3.0	3.0	2.5	2.5	3.0	2.7
Release Time	Max.	mSeconds	0.2	1	1.2	1	2	3	1.8	2	1.3	4.5
Operating Temperature	Range	˚C	-40 to +125	-60 to +125	-60 to +125	-60 to +125	-40 to +125	-40 to +125	-40 to +125	-40 to +125	-40 to +125	-40 to +125
Certification												
Corresponding Diagram			⑨	⑨	⑨	⑪	⑨	⑨	①	①	①	⑩
DIMENSIONS												
Overall Length	a	mm	53.08	55.5	81.42	81.92	85.98	81.79	86.86	81.79	81.79	86.11
Glass Length	b	mm	19.69	20.32	53.34	50.42	31.24	41.02	40.64	49.78	49.78	32.89
Glass Diameter	c	mm	2.57	2.79	5.38	5.33	5.33	4.83	4.83	5.33	5.33	5.33
Lead Diameter	d	mm	.57	.57	1.30	1.30	1.02	.089 x 1.5	.089 x 1.5	.563 x 2.49	.563 x 2.49	1.02

⑪ FORM A WITH A TIP



⑫ FORM B



◇5 Solid tungsten bar and plate contacts ◇6 Intended for radio frequency (through 30 MHz.) ◇7 3.0 watts minimum ◇8 External plating for all reed switches available as T (Tin), G (Gold), C (Copper) or O (Clean)

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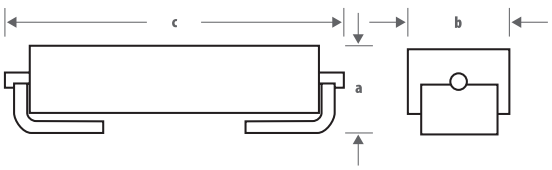
SPEC GUIDE

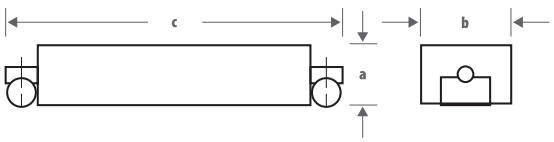
PROXIMITY SENSORS

			OVERMOLDED		SURFACE MOUNT/PC BOARD						
			Form A		Form A						
			PRX+ 2410	**PRX+ 2420**	**PRX+ 2110**	**PRX+ 2112**	**PRX+ 2430**	**PRX+ 2440**	**PRX+ 2450**	**PRX+ 2462**	**PRX+ 155900**
PARAMETERS											
Configuration			SPST	SPST	SPST	SPST	SPST	SPST	SPST	SPST	SPST
Switching Voltage	Max.	Volts DC	30	30	30	30	30	30	30	30	180
Switching Current	Max.	A	0.01	0.01	0.05	0.05	0.01	0.01	0.01	0.01	0.70
Carry Current	Max.	A	0.7	0.7	1.0	1	0.7	0.7	0.7	0.7	1.0
Switching Power	Max.	W/VA	0.5	0.5	1	1	0.5	0.5	0.5	0.5	10
Voltage Breakdown	Min.	Volts DC	80	80	200	200	80	80	80	80	200
VDC or VAC			VDC	VDC	VDC	VDC	VDC	VDC	VDC	VDC	VDC
Initial Contact Resistance	Max.	Ohms	0.75	0.75	1	1	1	1	1	1	1
Insulation Resistance			1 E11	1 E11	1 E11	1 E11	1 E11	1 E11	1 E11	1 E11	1 E9
Operating Temperature	Range or Max.	°C	-40 to +125	-40 to +125	-40 to +125	-40 to +125	-40 to +125	-40 to +125	-40 to +125	-40 to +125	-40 to +125
Must Operate			2-15	2-13	2.8 mT	2.8 mT	2.5 mT	3.75 mT	2.5 mT	3.5 mT	10-15 AT
Must Release			Coil I	1.5 AT	0.5 mT	0.5 mT	0.5 mT	1.75 mT	0.5 mT	1.75	4.0 AT
Wire/AWG ◇2			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Actuator Part No.											
Certification											
Corresponding Diagram							①	②	②	②	②
DIMENSIONS											
Shape (R=Rectangular or C=Cylindrical)			R	R	R	R	R	R	R	R	R
Housing Height	a	Inch	0.044	0.044	0.092	0.092	0.060	0.050	0.050	0.050	0.098
Housing Width/Diameter	b	Inch	0.060	0.062	0.071	0.071	0.062	0.062	0.062	0.062	0.110
Housing Length	c	Inch	0.180	0.180	0.335	0.335	0.210	0.245	0.246	0.245	0.640

① J-BEND TAB OVERMOLD



② SURFACE MOUNT OVERMOLD



NOTES TO TABLES AND DIAGRAMS

◇1 **d**=Distance between the proximity sensor and its actuator. ◇2 Housing and wire color options available upon request.

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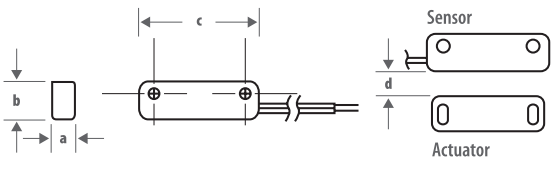
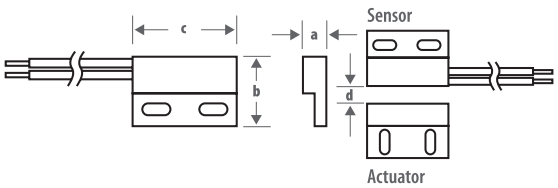
PROXIMITY SENSORS

			LOW PROFILE							
			Form A			Form B				Form C
			PRX+ 7100	**PRX+ 8200**	**PRX+ 8500**	**PRX+ 7300**	**PRX+ 8400**	**PRX+ 8510**	**PRX+ 8800**	**PRX+ 8300**
PARAMETERS										
Configuration			SPST	SPST	SPST	SPST	SPST	SPST	SPST	SPDT
Switching Voltage	Max.	Volts DC	30	200	120	30	120	120	120	120
Switching Current	Max.	A	0.20	0.50	2.00	0.10	0.25	2.00	0.25	0.25
Carry Current	Max.	A	1.5	3.5	4	1.2	2.6	0.5	2.6	2.6
Switching Power	Max.	W/VA	4	10	250	3	3	250	3	3
Voltage Breakdown	Min.	Volts DC	300	400	AC only	200	400	AC only	400	400
VDC or VAC			VDC	VDC	VAC	VDC	VDC	VAC	VDC	VDC
Initial Contact Resistance	Max.	Ohms	0.25	0.25	AC only	0.5	0.25	AC only	0.25	0.25
Insulation Resistance			1 E10	1 E11	1 E7	1 E9	1 E9	1 E7	1 E9	1 E9
Operating Temperature	Max. or Range	°C	+75	+105	+100	+75	+125	+100	+105	+60
Must Operate ◇1		Inch	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Must Release		Inch	1.0	1.0	1.25	1.0	1.5	1.25	1.0	1.0
Wire/AWG ◇2			24	22	22	24	N/A	22	22	22
Actuator Part No.										
Certification				cULus						cULus
Corresponding Diagram			③	④	④	③		④	④	④
DIMENSIONS										
Shape (R=Rectangular or C=Cylindrical)			R	R	R	R	R	R	R	R
Housing Height	a	Inch	0.200	0.250	0.250	0.200	0.250	0.250	0.250	0.250
Housing Width/Diameter	b	Inch	0.340	0.745	0.745	0.340	0.745	0.745	0.745	0.745
Housing Length	c	Inch	1.110	1.125	1.125	1.110	1.125	1.125	1.125	1.125

③ LOW PROFILE



④ LOW PROFILE



NOTES TO TABLES AND DIAGRAMS

◇1 **d**=Distance between the proximity sensor and its actuator. ◇2 Housing and wire color options available upon request.

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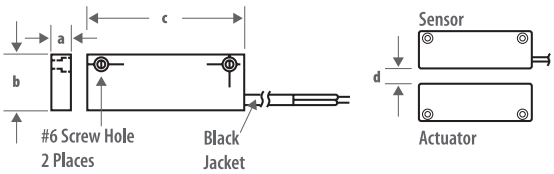
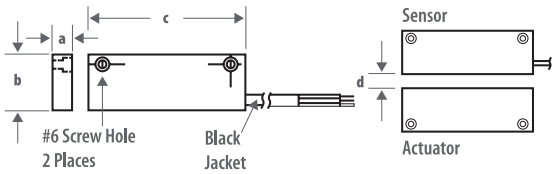
PROXIMITY SENSORS

			HIGH POWER								
			Form A			Form B			Form C		
			PRX+ 9100	**PRX+ 9125**	**PRX+ 9150**	**PRX+ 9200**	**PRX+ 9225**	**PRX+ 9250**	**PRX+ 9300**	**PRX+ 9325**	**PRX+ 9350**
PARAMETERS											
Configuration			SPST	SPST	SPST	SPST	SPST	SPST	SPDT	SPDT	SPDT
Switching Voltage	Max.	Volts DC	250	120	300	150	120	300	150	120	300
Switching Current	Max.	A	1.00	3.00	3.00	1.00	3.00	3.00	1.00	3.00	3.00
Carry Current	Max.	A	7	4	5.5	5.6	3.5	3.0	5.6	3.5	3
Switching Power	Max.	W/VA	25	100	200	25	100	100	25	100	100
Voltage Breakdown	Min.	Volts DC	300	300	300	300	150	300	300	150	300
VDC or VAC			VDC	VDC	VDC	VDC	VDC	VDC	VDC	VDC	VDC
Initial Contact Resistance	Max.	Ohms	0.3	0.7	0.7	0.3	0.7	0.7	0.3	0.7	0.7
Insulation Resistance			1 E10	1 E8	1 E10	1 E9	1 E10	1 E10	1 E9	1 E10	1 E10
Operating Temperature	Max.	°C	+80	+80	+80	+80	+80	+80	+80	+80	+80
Must Operate ◇1		Inch	0.75	0.75	0.50	0.75	0.75	0.50	0.75	0.75	0.50
Must Release		Inch	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Wire/AWG ◇2			22	22	22	22	22	22	22	22	22
Actuator Part No.			ACT+9000	ACT+9000	ACT+9000	ACT+9000	ACT+9000	ACT+9000	ACT+9000	ACT+9000	ACT+9000
Corresponding Diagram			⑤	⑤	⑤	⑤	⑤	⑤	⑥	⑥	⑥
DIMENSIONS											
Shape (R=Rectangular or C=Cylindrical)			R	R	R	R	R	R	R	R	R
Housing Height	a	Inch	0.382	0.382	0.382	0.382	0.382	0.382	0.382	0.382	0.382
Housing Width/Diameter	b	Inch	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990
Housing Length	c	Inch	3.000	3.000	3.000	3.000	3.000	3.000	3.000	3.000	3.000

⑤ HIGH POWER FORM A AND FORM B



⑥ HIGH POWER FORM C



NOTES TO TABLES AND DIAGRAMS

◇1 **d**=Distance between the proximity sensor and its actuator. ◇2 Housing and wire color options available upon request.

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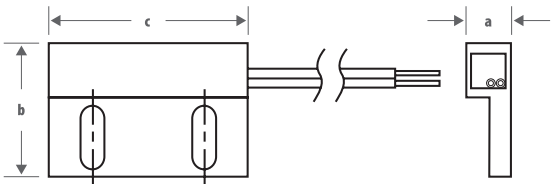
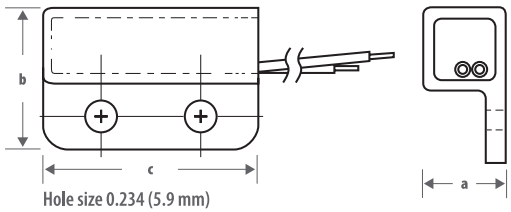
PROXIMITY SENSORS

			STEEL SENSING								
			Form A								
			PRX+ 11200	PRX+ 11300	PRX+ 11400	PRX+ 11500	PRX+ 11700	PRX+ 11900	PRX+ 4100	PRX+4400 ◇3	PRX+4800 ◇3
PARAMETERS											
Configuration			SPST	SPST	SPST	SPST	SPST	SPST	SPST	SPST	SPST
Switching Voltage	Max.	Volts DC	200	200	200	100	100	100	100	50	50
Switching Current	Max.	A	0.20	0.20	0.20	0.25	0.25	0.25	2.5	2.5	.25
Carry Current	Max.	A	1.3	1.3	1.3	1.5	1.5	1.5	0	TBD	2.5
Switching Power	Max.	W/VA	10	10	10	10	10	10	10	10	10
Voltage Breakdown	Min.	Volts DC	300	300	300	200	200	200	200	50	50
VDC or VAC			VDC	VDC	VDC	VDC	VDC	VDC	VDC	VDC	VDC
Initial Contact Resistance	Max.	Ohms	1	1	1	1	1	1	1	1	1
Insulation Resistance			1 E11	1 E11	1 E11	1 E11	1 E11	1 E11	1 E11	1 E11	1 E11
Operating Temperature	Max. or Range	°C	+100	+100	+100	+80	+80	+80	+80	+125	+125
Must Operate ◇1		Inch	0.10	0.10	0.10	0.25	0.25	0.25	0.25	0.19	0.19
Must Release		Inch	0.425	0.425	0.425	.31	.3	.3	.31	0.400	0.400
Wire/AWG ◇2			24	24	24	22	22	22	20	16	16
Actuator Part No.			Steel	Steel	Steel	Steel	Steel	Steel	Steel	Steel	Steel
Corresponding Diagram			⑦	⑦	⑦	⑧	⑧	⑧			
DIMENSIONS											
Shape (R=Rectangular or C=Cylindrical)			R	R	R	R	R	R	R	R	R
Housing Height	a	Inch	0.250	0.250	0.250	0.580	0.580	0.580	0.425	0.390	0.68
Housing Width/Diameter	b	Inch	0.745	0.745	0.745	1.075	1.075	1.075	0.550	1.290	1.625
Housing Length	c	Inch	1.120	1.120	1.120	1.635	1.635	1.635	2.055	1.770	3.105

⑦ **PRX+11200, PRX+11300, PRX+11400**



⑧ **PRX+11500, PRX+11700, PRX+11900**



Hole size 0.234 (5.9 mm)

NOTES TO TABLES AND DIAGRAMS

◇1 **d**=Distance between the proximity sensor and its actuator. ◇2 Housing and wire color options available upon request. ◇3 Mounting on steel has no effect on performance.

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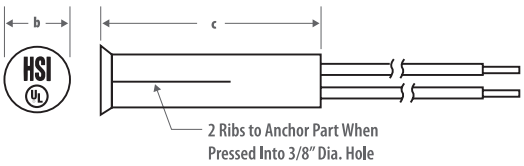
SPEC GUIDE

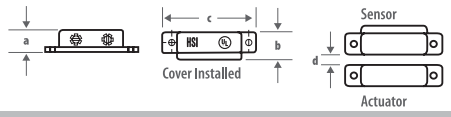
PROXIMITY SENSORS

			SECURITY									HIGH SECURITY	
			Tubular			Lug Type			Rectangular			Sentinel	
			Form A	Form B	Form C	Form A	Form B	Form C	Form A	Form B	Form C		
			PRX+ 1100	PRX+ 1200	PRX+ 1300	PRX+ 5100	PRX+ 5200	PRX+ 5300	PRX+ 6100	PRX+ 6200	PRX+ 6300	PRX+ 12210	PRX+ 12220
PARAMETERS													
Configuration			SPST	SPST	SPDT	SPST	SPST	SPDT	SPST	SPST	SPDT	SPDT	SPDT
Switching Voltage	Max.	Volts DC	30	120	120	30	120	120	30	120	120	30	30
Switching Current	Max.	A	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.2	0.2
Carry Current	Max.	A	1.4	2.6	2.6	1.4	2.6	2.6	1.4	2.6	2.6		
Switching Power	Max.	W/VA	3	3	3	3	3	3	3	3	3	6	6
Voltage Breakdown	Min.	Volts DC	300	300	300	300	400	400	300	300	300		
VDC or VAC			VDC	VDC	VDC	VDC	VDC	VDC	VDC	VDC	VDC	VDC	VDC
Initial Contact Resistance	Max.	Ohms	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.9	0.9
Insulation Resistance			1 E10	1 E9	1 E9	1 E10	1 E9	1 E9	1 E10	1 E9	1 E9		
Operating Temperature	Range	°C	+10 to +70	+10 to +70	+10 to +70	+10 to +70	+10 to +70	+10 to +70	+10 to +70	+10 to +70	+10 to +70	-35 to +70	-35 to +70
Must Operate ◇1		Inch	0.75	0.75	0.75	1.00	1.00	1.00	1.00	1.00	1.00		
Must Release		Inch	1.75	1.5	1.5	2.5	2.5	2.5	2.5	2.5	2.5		
Wire/AWG ◇2			22	22	22	N/A	N/A	N/A	22	22	22	22	22
Actuator Part No.			ACT+1000	ACT+1000	ACT+1000	ACT+6003	ACT+6003	ACT+6003	ACT+6000	ACT+6000	ACT+6000	ACT+12000	ACT+12000
Certification			UL	UL	UL	UL	UL	UL	UL	UL	UL	SECURITY UL LISTED	SECURITY UL LISTED
Corresponding Diagram			9	9	9	10	10	10				18	18
DIMENSIONS													
Shape (R=Rectangular or C=Cylindrical)			C	C	C	R	R	R	R	R	R	R	R
Housing Height	a	Inch				0.575	0.575	0.575	0.575	0.575	0.575	1.285	1.285
Housing Width/Diameter	b	Inch	0.370	0.370	0.370	0.770	0.770	0.770	0.555	0.555	0.555	1.063	1.063
Housing Length	c	Inch	1.515	1.515	1.515	2.562	2.562	2.562	2.562	2.562	2.562	1.95	1.95

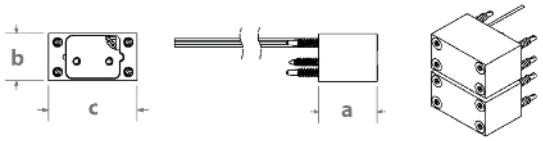
9 TUBULAR



10 LUG TYPE



18 12220



NOTES TO TABLES AND DIAGRAMS

◇1 **d**=Distance between the proximity sensor and its actuator.

◇2 Housing and wire color options available upon request.

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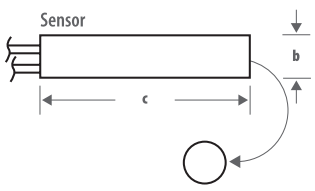
SPEC GUIDE

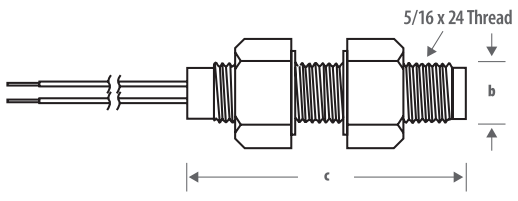
PROXIMITY SENSORS

			TUBULAR							TUBULAR/THREADED		
			Form A			Form B		Form C		Form A	Form B	Form C
			PRX+ 1500	**PRX+ 1600**	**PRX+ 1700**	**PRX+ 1800**	**PRX+ 3800**	**PRX+ 1900**	**PRX+ 3900**	**PRX+ 0700**	**PRX+ 0800**	**PRX+ 0900**
PARAMETERS												
Configuration			SPST	SPST	SPST	SPST	SPST	SPDT	SPDT	SPST	SPST	SPDT
Switching Voltage	Max.	Volts DC	30	100	100	120	30	120	30	100	120	120
Switching Current	Max.	A	0.05	0.20	0.25	0.25	0.10	0.25	0.10	0.25	0.25	0.25
Carry Current	Max.	A	1.0	2.0	1.5	2.6	1.2	2.6	1.2	0	2.6	2.6
Switching Power	Max.	W/VA	1	4	10	3	2	3	2	10	3	3
Voltage Breakdown	Min.	Volts DC	200	200	300	300	175	300	175	300	300	300
VDC or VAC			VDC	VDC	VDC	VDC	VDC	VDC	VDC	VDC	VDC	VDC
Initial Contact Resistance	Max.	Ohms	1	0.25	0.25	0.25	0.5	0.25	0.5	0.25	0.25	0.25
Insulation Resistance			1 E11	1 E11	1 E11	1 E9	1 E10	1 E9	1 E10	1 E11	1 E9	1 E9
Operating Temperature	Max. or Range	°C	+125	+125	+105	+105	+105	+105	+105	+105	+105	+105
Must Operate ◇1		Inch	0.125	0.125	0.20	0.20	0.25	0.20	0.25	0.20	0.20	0.20
Must Release		Inch	0.4	0.4	0.55	0.55	0.5	0.55	0.5	0.75	0.75	0.75
Wire/AWG ◇2			28	N/A	22	22	30	22	30	22	24	24
Actuator Part No.			M-06	ACT+1006	ACT+1007	ACT+1007	M-12	ACT+1007	M-12	ACT+0100	ACT+0100	ACT+0100
Certification												
Corresponding Diagram			⑪		⑪	⑪	⑪	⑪	⑪	⑫	⑫	⑫
DIMENSIONS												
Shape (R=Rectangular or C=Cylindrical)			C	C	C	C	C	C	C	C	C	C
Housing Height	a	Inch										
Housing Width/Diameter	b	Inch	0.095	0.245	0.245	0.245	0.125	0.245	0.125	0.313	0.313	0.313
Housing Length	c	Inch	0.470	0.500	1.000	1.000	0.750	1.000	0.750	1.500	1.500	1.500

⑪ TUBULAR



⑫ TUBULAR/THREADED



NOTES TO TABLES AND DIAGRAMS

◇1 **d**=Distance between the proximity sensor and its actuator. ◇2 Housing and wire color options available upon request.

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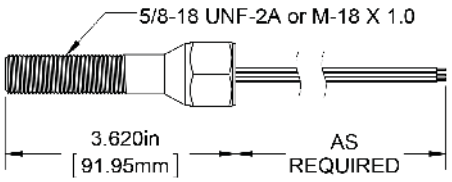
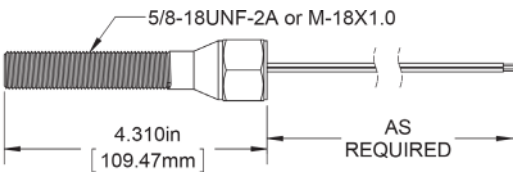
PROXIMITY SENSORS

			HAZARDOUS LOCATION LEVERLESS LIMIT SWITCHES		
			Spot On™ Steel Sensors	SPDT Proximity Sensor	Latching
			PRX+14330 / 14340 / 14350 / 14360	**PRX+13330 / 13340 / 13350 / 13360**	**PRX+13530 / 13540 / 13550 / 13560**
PARAMETERS					
Configuration			SPDT	SPDT	SPDT
Switching Voltage	Max.	Volts DC	500	500	150
Switching Current	Max.	A	3	3	1
Carry Current	Max.	A	3.2	3.2	5.4
Switching Power	Max.	W/VA	100	100	25
Voltage Breakdown	Min.	Volts DC	300	500	250
VDC or VAC			VDC	VDC	VDC
Initial Contact Resistance	Max.	Ohms	0.5	2	0.1
Insulation Resistance	Min.	Ohms	1 E10	1 E10	1 E9
Operating Temperature	Range	°C	-50 to + 105	-50 to + 105	-50 to + 105
Must Operate ①		Inch	.15	.4	.4
Must Release		Inch	N/A	N/A	N/A
Wire/AWG ②			18, 20, or 22	18, 20, or 22	18, 20, or 22
Actuator Part No.			Ferrous Metal		
Certification			c UL us	c UL us	c UL us
Corresponding Diagram			⑬ ⑭ ⑮ ⑯	⑬ ⑭ ⑮ ⑯	⑬ ⑭ ⑮ ⑯

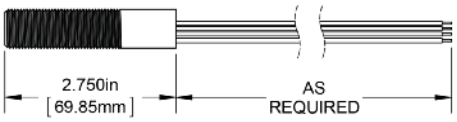
⑬ 14330, 13330, 13530



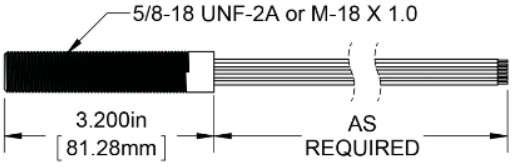
⑮ 14350, 13350, 13550



⑭ 14340, 13340, 13540



⑯ 14360, 13360, 13560



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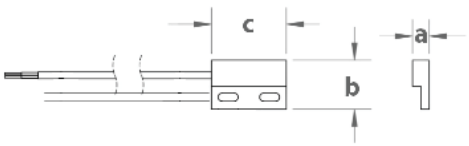
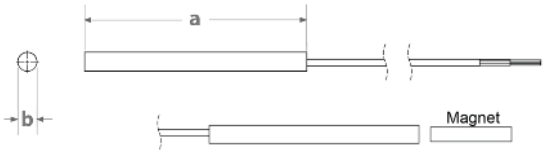
PROXIMITY SENSORS

			EXTREME TEMPERATURE					
			Form A			Form C		
			PRX+8265	PRX+1765	PRX+21460	PRX+8365	PRX+1965	PRX+21465
PARAMETERS								
Configuration			SPST	SPST	SPST	SPDT	SPDT	SPDT
Switching Voltage	Max.	Volts DC	200	100	120	120	120	120
Switching Current	Max.	A	0.5	0.25	3	0.25	0.25	3
Carry Current	Max.	A	3.5	1.5	5	2.6	2.6	3.6
Switching Power	Max.	W/VA	10	10	200	3	3	100
Voltage Breakdown	Min.	Volts DC	400	300	300	400	300	150
VDC or VAC			VDC	VDC	VDC	VDC	VDC	VDC
Initial Contact Resistance	Max.	Ohms	0.5	0.25	1	0.5	0.25	0.5
Insulation Resistance	Min.	Ohms	1 E 11	1 E 11	1 E 11	1 E 9	1 E 9	1 E 10
Operating Temperature	Range	°C	-60 to +200C	-60 to +200C	-60 to +200C	-60 to +200C	-60 to +200C	-60 to +200C
Must Operate ◇1		Inch	0.5	0.2	0.1	0.5	0.2	0.1
Must Release		Inch	1	0.55	0.5	1	0.55	0.5
Wire/AWG ◇2			22 AWG, CL2P/CMP, FEP	22 AWG, CL2P/CMP, FEP	18 AWG, CL2P/CMP, FEP	22 AWG, CL2P/CMP, FEP	22 AWG, CL2P/CMP, FEP	18 AWG, CL2P/CMP, FEP
Certification								
Corresponding Diagram			⑲	⑳	⑳	⑲	⑳	⑳
DIMENSIONS								
Shape (R=Rectangular or C=Cylindrical)			R	C	C	R	C	C
Housing Height	a	Inch	.250	1.00	3.625	.250	1.00	3.675
Housing Width/Diameter	b	Inch	.745	.245	.312	.745	.745	.312
Housing Length	c	Inch	1.125			1.125		

⑲ 8265



⑲ 21465, 1765



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