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About the Company

R&B Electronics is a certified, approved manufacturer of aircraft quality products. We specialize in electro-mechanical assemblies and precision-machined parts. Currently, we supply products to the U.S. Government, major OEM aircraft manufacturers, and PMA approved part suppliers.

Our products can be found in government and commercial applications ranging from air, land, sea, and space. They can be found being utilized in such things as the Northrop Grumman Global Hawk, the Lockheed Martin F-22 Raptor, the M1 Abrams Main Battle Tank, the NASA space shuttle program, and various aircraft carriers and submarines.

Here at R&B Electronics we take pride in the high quality of our products and use modern equipment and techniques to keep that quality. Our test lab facilities include direct and indirect measuring equipment (optical, dial, linear, digital, and laser), electrical testing equipment, mechanical testing (stress/strain), durability test equipment, and environmental test chambers.

Our quality management systems have been audited and compliance approved by the following independent sources: Underwriters Laboratories Incorporated, Defense Contract Management Agency (DMCA) Detroit - Grand Rapids, Boeing Company, Lockheed Martin Aeronautics Company, Air-Motive Engineering Engine Components, Inc., Mitsubishi Heavy Industries America, Inc., Superior Air Parts, Inc., and Bombardier Inc. Canadair Group.

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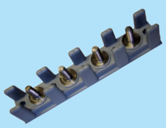

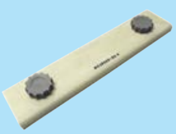

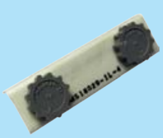

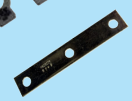

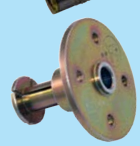

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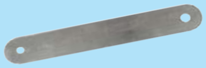
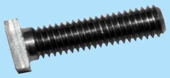




MS27212 & AS27212
MOLDED-IN-STUD, ELECTRIC TERMINAL BOARDS

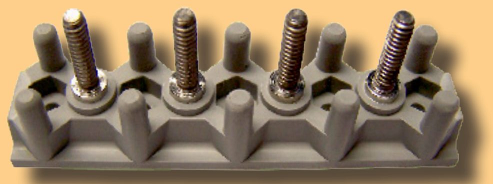
INSULATION MATERIAL:
DIALLYLISOPHTHALATE GDI-30F.
TOTAL CONTINUOUS RATING: (155 DEG. C) (311 DEG. F).

STUD MATERIAL:
CORROSION-RESISTANT STAINLESS STEEL.

MAXIMUM TORQUE:

MS27212-1 (6-32 UNC-2A STUD)	22 INCH POUNDS MAX.
MS27212-6 (8-32 UNC-2A STUD)	32 INCH POUNDS MAX.
MS27212-2 (10-32 UNF-2A STUD)	40 INCH POUNDS MAX.
MS27212-3 (1/4-28 UNF-2A STUD)	150 INCH POUNDS MAX.
MS27212-4 (5/16-24 UNF-2A STUD)	170 INCH POUNDS MAX.
MS27212-5 (3/8-24 UNF-2A STUD)	170 INCH POUNDS MAX.

TERMINAL BOARDS:
EXCELLENT CORROSION-RESISTANCE.
EXCELLENT DIELECTRIC STRENGTH.
RESISTANCE TO THERMAL SHOCK.
EXCELLENT MOISTURE RESISTANCE.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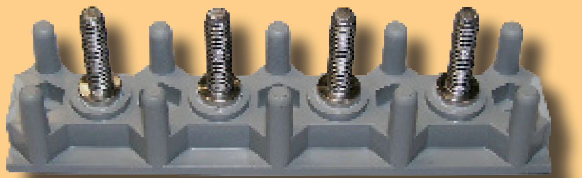
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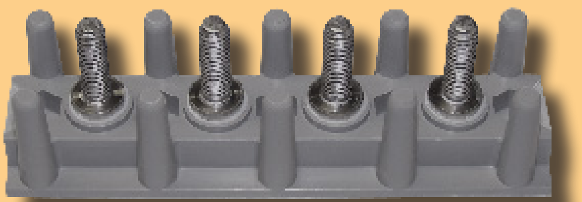
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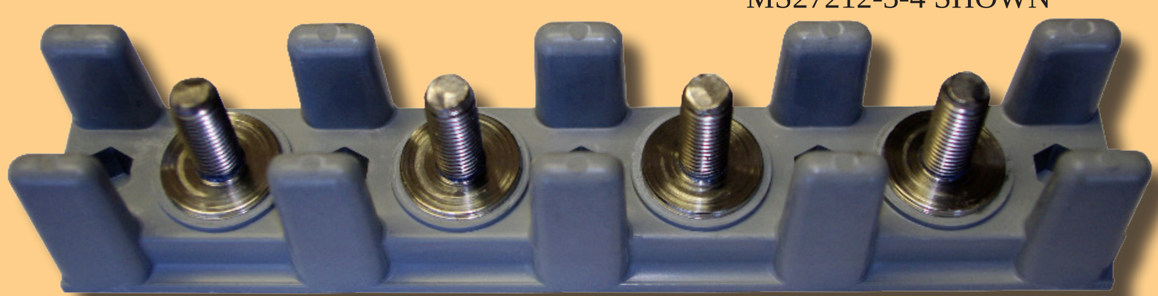
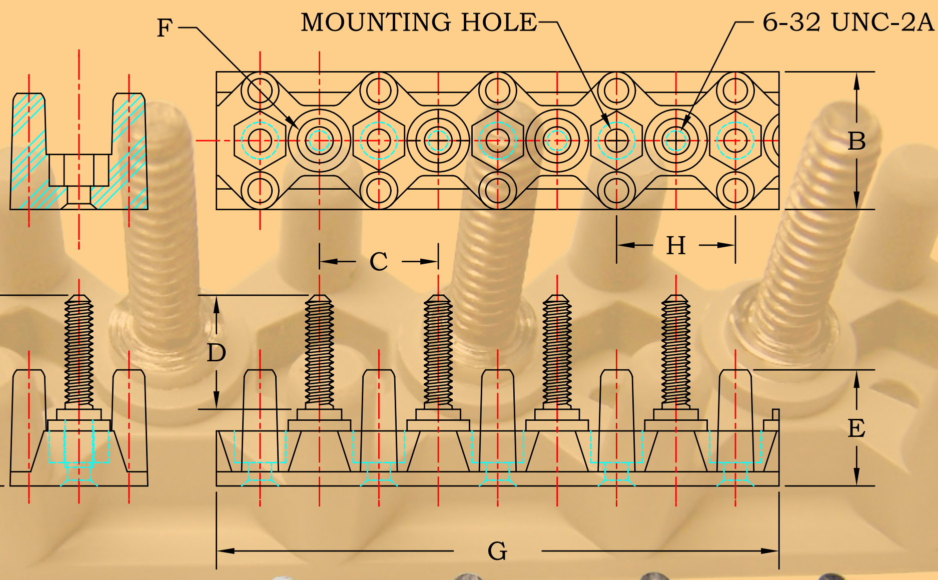
MS27212-3-4 SHOWN

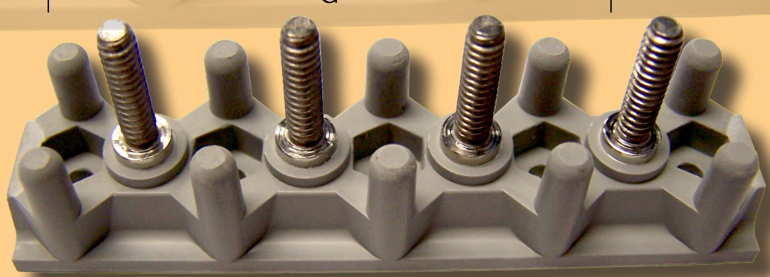

MS27212-4-4 SHOWN


MS27212-5-4 SHOWN

MS27212 MOLDED IN STUD, ELECTRICAL TERMINAL BOARD ASSEMBLY

Part Number	Stud Size	Number of Studs	Overall Height Dim (A)	Overall Width Dim (B)	Stud Spacing Dim (C)	Stud Height Dim (D)	Terminal Board Post Hieght Dim (E)	Stud Terminal Mounting Dia. Dim (F)	Overall Length Dim (G)	Terminal Board Mounting Hole Spacing Dim (H)	Terminal Board Mounting Bolt & Hex Nut Size
MS27212-1-20	6-32 UNC-2A	20	.953	.688	.594	.522	.580	.222	12.316	.594	4-40-UNC
MS27212-1-19	6-32 UNC-2A	19	.953	.688	.594	.522	.580	.222	11.722	.594	4-40-UNC
MS27212-1-18	6-32 UNC-2A	18	.953	.688	.594	.522	.580	.222	11.128	.594	4-40-UNC
MS27212-1-17	6-32 UNC-2A	17	.953	.688	.594	.522	.580	.222	10.534	.594	4-40-UNC
MS27212-1-16	6-32 UNC-2A	16	.953	.688	.594	.522	.580	.222	9.940	.594	4-40-UNC
MS27212-1-15	6-32 UNC-2A	15	.953	.688	.594	.522	.580	.222	9.346	.594	4-40-UNC
MS27212-1-14	6-32 UNC-2A	14	.953	.688	.594	.522	.580	.222	8.752	.594	4-40-UNC
MS27212-1-13	6-32 UNC-2A	13	.953	.688	.594	.522	.580	.222	8.158	.594	4-40-UNC
MS27212-1-12	6-32 UNC-2A	12	.953	.688	.594	.522	.580	.222	7.564	.594	4-40-UNC
MS27212-1-11	6-32 UNC-2A	11	.953	.688	.594	.522	.580	.222	6.970	.594	4-40-UNC
MS27212-1-10	6-32 UNC-2A	10	.953	.688	.594	.522	.580	.222	6.376	.594	4-40-UNC
MS27212-1-9	6-32 UNC-2A	9	.953	.688	.594	.522	.580	.222	5.782	.594	4-40-UNC
MS27212-1-8	6-32 UNC-2A	8	.953	.688	.594	.522	.580	.222	5.188	.594	4-40-UNC
MS27212-1-7	6-32 UNC-2A	7	.953	.688	.594	.522	.580	.222	4.594	.594	4-40-UNC
MS27212-1-6	6-32 UNC-2A	6	.953	.688	.594	.522	.580	.222	4.000	.594	4-40-UNC
MS27212-1-5	6-32 UNC-2A	5	.953	.688	.594	.522	.580	.222	3.406	.594	4-40-UNC
MS27212-1-4	6-32 UNC-2A	4	.953	.688	.594	.522	.580	.222	2.812	.594	4-40-UNC
MS27212-1-3	6-32 UNC-2A	3	.953	.688	.594	.522	.580	.222	2.218	.594	4-40-UNC
MS27212-1-2	6-32 UNC-2A	2	.953	.688	.594	.522	.580	.222	1.624	.594	4-40-UNC
MS27212-1-1	6-32 UNC-2A	1	.953	.688	.594	.522	.580	.222	1.030	.594	4-40-UNC

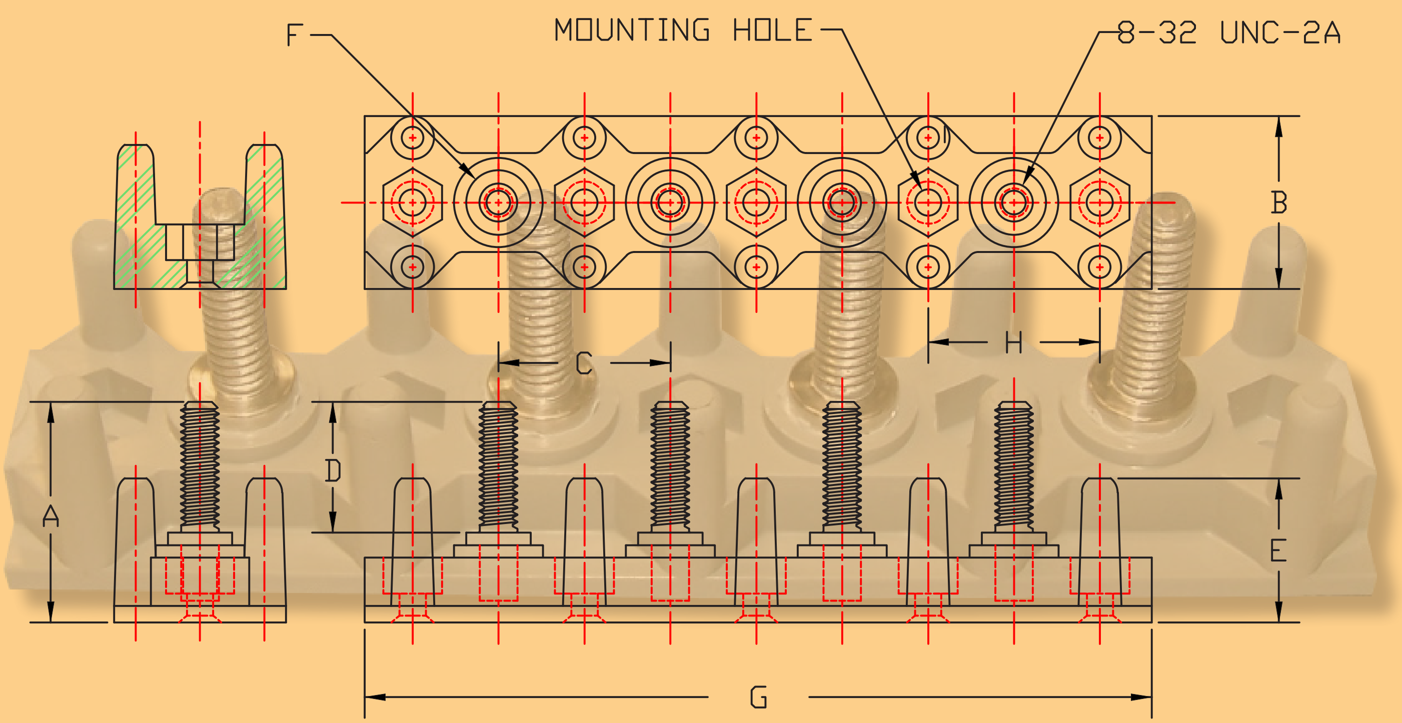


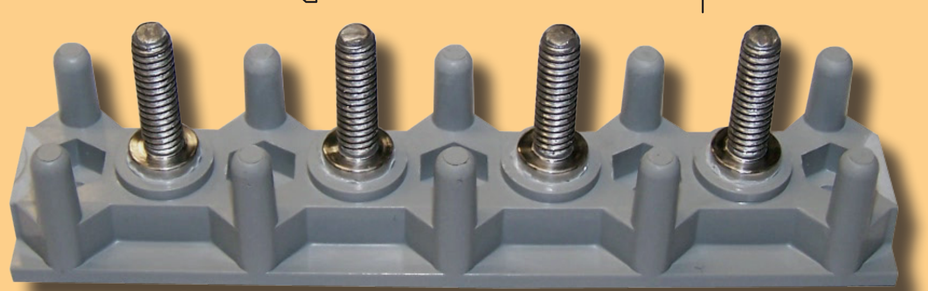


MS27212-1-4 SHOWN

MS27212-6 MOLDED IN STUD, ELECTRICAL TERMINAL BOARD ASSEMBLY

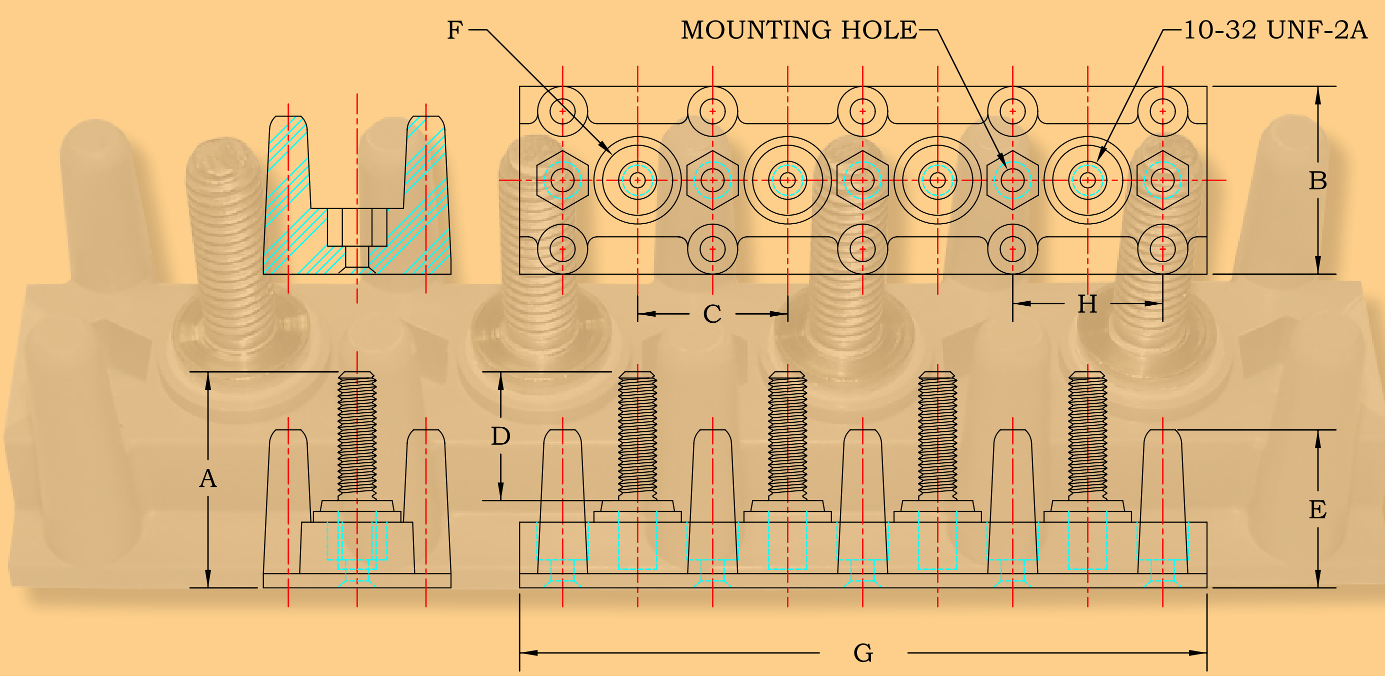
Part Number	Stud Size	Number of Studs	Overall Height Dim (A)	Overall Width Dim (B)	Stud Spacing Dim (C)	Stud Height Dim (D)	Terminal Board Post Hieght Dim (E)	Stud Terminal Mounting Dia. Dim (F)	Overall Length Dim (G)	Terminal Board Mounting Hole Spacing Dim (H)	Terminal Board Mounting Bolt & Hex Nut Size
MS27212-6-16	8-32 UNC-2A	16	1.005	.750	.750	.568	.625	.281	12.436	.750	4-40-UNC
MS27212-6-15	8-32 UNC-2A	15	1.005	.750	.750	.568	.625	.281	11.686	.750	4-40-UNC
MS27212-6-14	8-32 UNC-2A	14	1.005	.750	.750	.568	.625	.281	10.936	.750	4-40-UNC
MS27212-6-13	8-32 UNC-2A	13	1.005	.750	.750	.568	.625	.281	10.186	.750	4-40-UNC
MS27212-6-12	8-32 UNC-2A	12	1.005	.750	.750	.568	.625	.281	9.436	.750	4-40-UNC
MS27212-6-11	8-32 UNC-2A	11	1.005	.750	.750	.568	.625	.281	8.686	.750	4-40-UNC
MS27212-6-10	8-32 UNC-2A	10	1.005	.750	.750	.568	.625	.281	7.936	.750	4-40-UNC
MS27212-6-9	8-32 UNC-2A	9	1.005	.750	.750	.568	.625	.281	7.186	.750	4-40-UNC
MS27212-6-8	8-32 UNC-2A	8	1.005	.750	.750	.568	.625	.281	6.436	.750	4-40-UNC
MS27212-6-7	8-32 UNC-2A	7	1.005	.750	.750	.568	.625	.281	5.686	.750	4-40-UNC
MS27212-6-6	8-32 UNC-2A	6	1.005	.750	.750	.568	.625	.281	4.936	.750	4-40-UNC
MS27212-6-5	8-32 UNC-2A	5	1.005	.750	.750	.568	.625	.281	4.186	.750	4-40-UNC
MS27212-6-4	8-32 UNC-2A	4	1.005	.750	.750	.568	.625	.281	3.436	.750	4-40-UNC
MS27212-6-3	8-32 UNC-2A	3	1.005	.750	.750	.568	.625	.281	2.686	.750	4-40-UNC
MS27212-6-2	8-32 UNC-2A	2	1.005	.750	.750	.568	.625	.281	1.936	.750	4-40-UNC
MS27212-6-1	8-32 UNC-2A	1	1.005	.750	.750	.568	.625	.281	1.186	.750	4-40-UNC

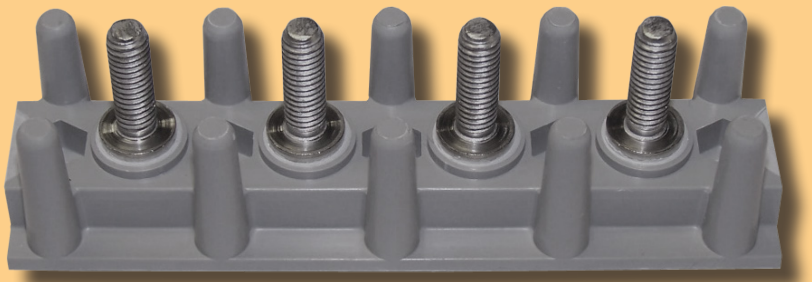




MS27212-6-4 SHOWN

MS27212-2 MOLDED IN STUD, ELECTRICAL TERMINAL BOARD ASSEMBLY											
Part Number	Stud Size	Number of Studs	Overall Height Dim (A)	Overall Width Dim (B)	Stud Spacing Dim (C)	Stud Height Dim (D)	Terminal Board Post Hieght Dim (E)	Stud Terminal Mounting Dia. Dim (F)	Overall Length Dim (G)	Terminal Board Mounting Hole Spacing Dim (H)	Terminal Board Mounting Bolt & Hex Nut Size
MS27212-2-16	10-32 UNF-2A	16	1.079	.936	.750	.595	.798	.350	12.436	.750	4-40-UNC
MS27212-2-15	10-32 UNF-2A	15	1.079	.936	.750	.595	.798	.350	11.686	.750	4-40-UNC
MS27212-2-14	10-32 UNF-2A	14	1.079	.936	.750	.595	.798	.350	10.936	.750	4-40-UNC
MS27212-2-13	10-32 UNF-2A	13	1.079	.936	.750	.595	.798	.350	10.186	.750	4-40-UNC
MS27212-2-12	10-32 UNF-2A	12	1.079	.936	.750	.595	.798	.350	9.436	.750	4-40-UNC
MS27212-2-11	10-32 UNF-2A	11	1.079	.936	.750	.595	.798	.350	8.686	.750	4-40-UNC
MS27212-2-10	10-32 UNF-2A	10	1.079	.936	.750	.595	.798	.350	7.936	.750	4-40-UNC
MS27212-2-9	10-32 UNF-2A	9	1.079	.936	.750	.595	.798	.350	7.186	.750	4-40-UNC
MS27212-2-8	10-32 UNF-2A	8	1.079	.936	.750	.595	.798	.350	6.436	.750	4-40-UNC
MS27212-2-7	10-32 UNF-2A	7	1.079	.936	.750	.595	.798	.350	5.686	.750	4-40-UNC
MS27212-2-6	10-32 UNF-2A	6	1.079	.936	.750	.595	.798	.350	4.936	.750	4-40-UNC
MS27212-2-5	10-32 UNF-2A	5	1.079	.936	.750	.595	.798	.350	4.186	.750	4-40-UNC
MS27212-2-4	10-32 UNF-2A	4	1.079	.936	.750	.595	.798	.350	3.436	.750	4-40-UNC
MS27212-2-3	10-32 UNF-2A	3	1.079	.936	.750	.595	.798	.350	2.686	.750	4-40-UNC
MS27212-2-2	10-32 UNF-2A	2	1.079	.936	.750	.595	.798	.350	1.936	.750	4-40-UNC
MS27212-2-1	10-32 UNF-2A	1	1.079	.936	.750	.595	.798	.350	1.186	.750	4-40-UNC

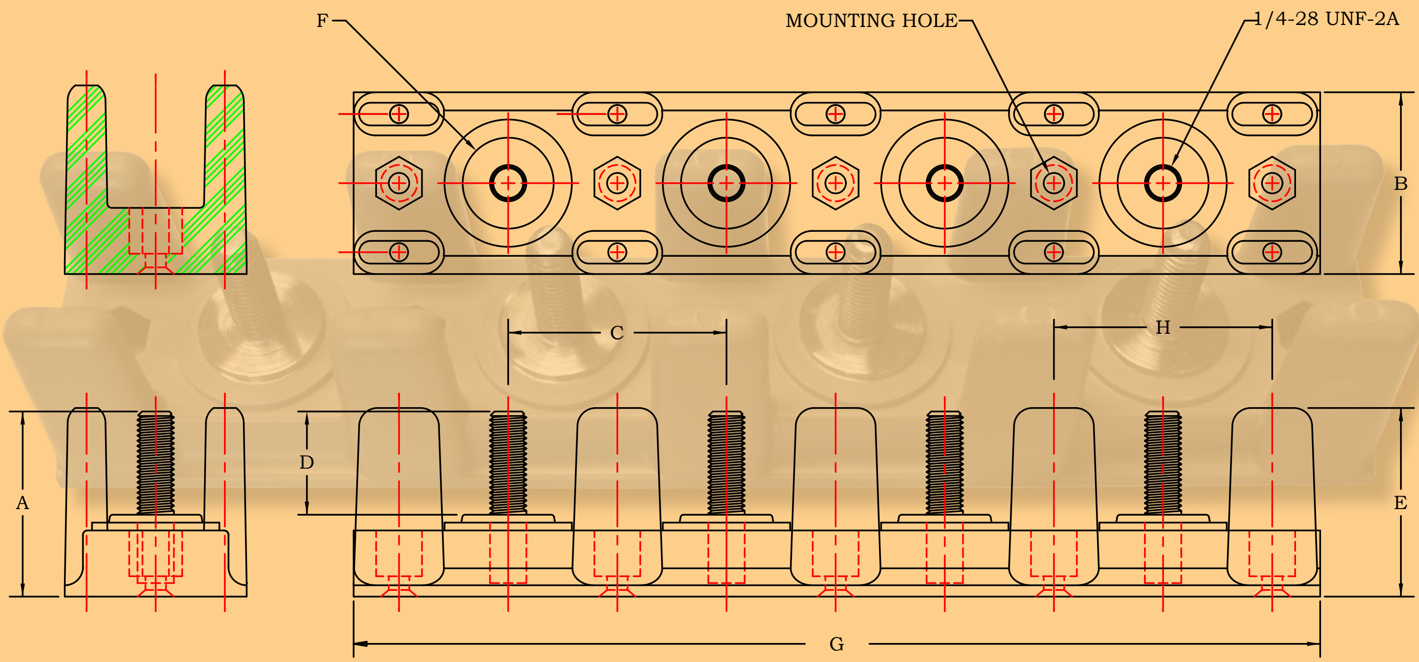




MS27212-2-4 SHOWN

MS27212-3 MOLDED IN STUD, ELECTRICAL TERMINAL BOARD ASSEMBLY

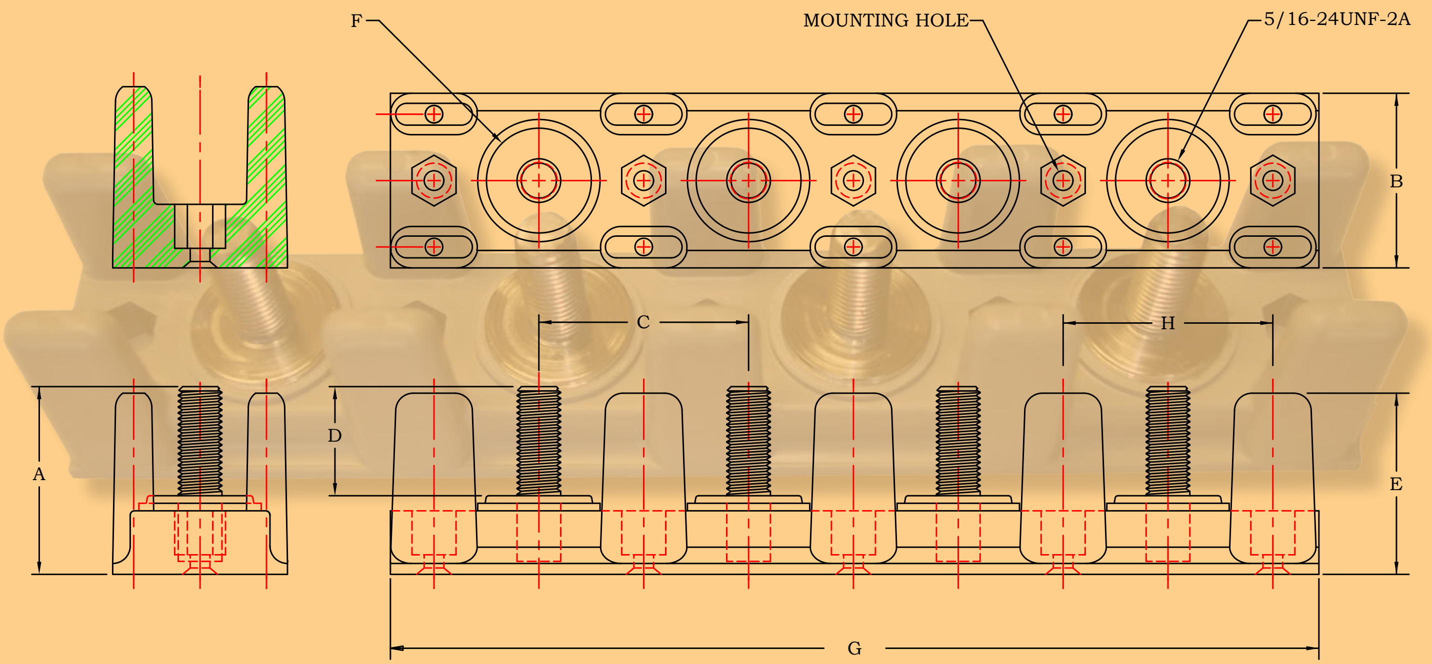
Part Number	Stud Size	Number of Studs	Overall Height Dim (A)	Overall Width Dim (B)	Stud Spacing Dim (C)	Stud Height Dim (D)	Terminal Board Post Hieght Dim (E)	Stud Terminal Mounting Dia. Dim (F)	Overall Length Dim (G)	Terminal Board Mounting Hole Spacing Dim (H)	Terminal Board Mounting Bolt & Hex Nut Size
MS27212-3-8	1/4-28 UNF-2A	8	1.321	1.250	1.500	.710	1.297	.625	12.624	1.500	6-32-UNC
MS27212-3-7	1/4-28 UNF-2A	7	1.321	1.250	1.500	.710	1.297	.625	11.124	1.500	6-32-UNC
MS27212-3-6	1/4-28 UNF-2A	6	1.321	1.250	1.500	.710	1.297	.625	9.624	1.500	6-32-UNC
MS27212-3-5	1/4-28 UNF-2A	5	1.321	1.250	1.500	.710	1.297	.625	8.124	1.500	6-32-UNC
MS27212-3-4	1/4-28 UNF-2A	4	1.321	1.250	1.500	.710	1.297	.625	6.624	1.500	6-32-UNC
MS27212-3-3	1/4-28 UNF-2A	3	1.321	1.250	1.500	.710	1.297	.625	5.124	1.500	6-32-UNC
MS27212-3-2	1/4-28 UNF-2A	2	1.321	1.250	1.500	.710	1.297	.625	3.624	1.500	6-32-UNC
MS27212-3-1	1/4-28 UNF-2A	1	1.321	1.250	1.500	.710	1.297	.625	2.124	1.500	6-32-UNC

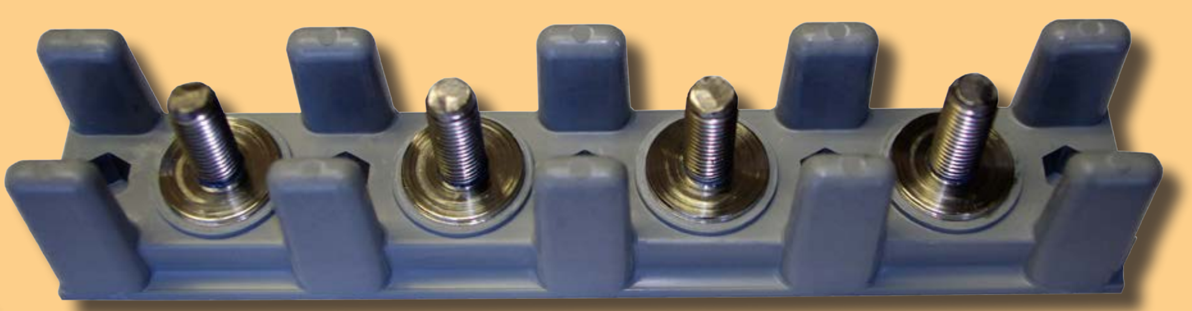


MS27212-3-4 SHOWN

MS27212-4 MOLDED IN STUD, ELECTRICAL TERMINAL BOARD ASSEMBLY

Part Number	Stud Size	Number of Studs	Overall Height Dim (A)	Overall Width Dim (B)	Stud Spacing Dim (C)	Stud Height Dim (D)	Terminal Board Post Hieght Dim (E)	Stud Terminal Mounting Dia. Dim (F)	Overall Length Dim (G)	Terminal Board Mounting Hole Spacing Dim (H)	Terminal Board Mounting Bolt & Hex Nut Size
MS27212-4-8	5/16-24 UNF-2A	8	1.392	1.250	1.500	.781	1.297	.750	12.624	1.500	6-32-UNC
MS27212-4-7	5/16-24 UNF-2A	7	1.392	1.250	1.500	.781	1.297	.750	11.124	1.500	6-32-UNC
MS27212-4-6	5/16-24 UNF-2A	6	1.392	1.250	1.500	.781	1.297	.750	9.624	1.500	6-32-UNC
MS27212-4-5	5/16-24 UNF-2A	5	1.392	1.250	1.500	.781	1.297	.750	8.124	1.500	6-32-UNC
MS27212-4-4	5/16-24 UNF-2A	4	1.392	1.250	1.500	.781	1.297	.750	6.624	1.500	6-32-UNC
MS27212-4-3	5/16-24 UNF-2A	3	1.392	1.250	1.500	.781	1.297	.750	5.124	1.500	6-32-UNC
MS27212-4-2	5/16-24 UNF-2A	2	1.392	1.250	1.500	.781	1.297	.750	3.624	1.500	6-32-UNC
MS27212-4-1	5/16-24 UNF-2A	1	1.392	1.250	1.500	.781	1.297	.750	2.124	1.500	6-32-UNC

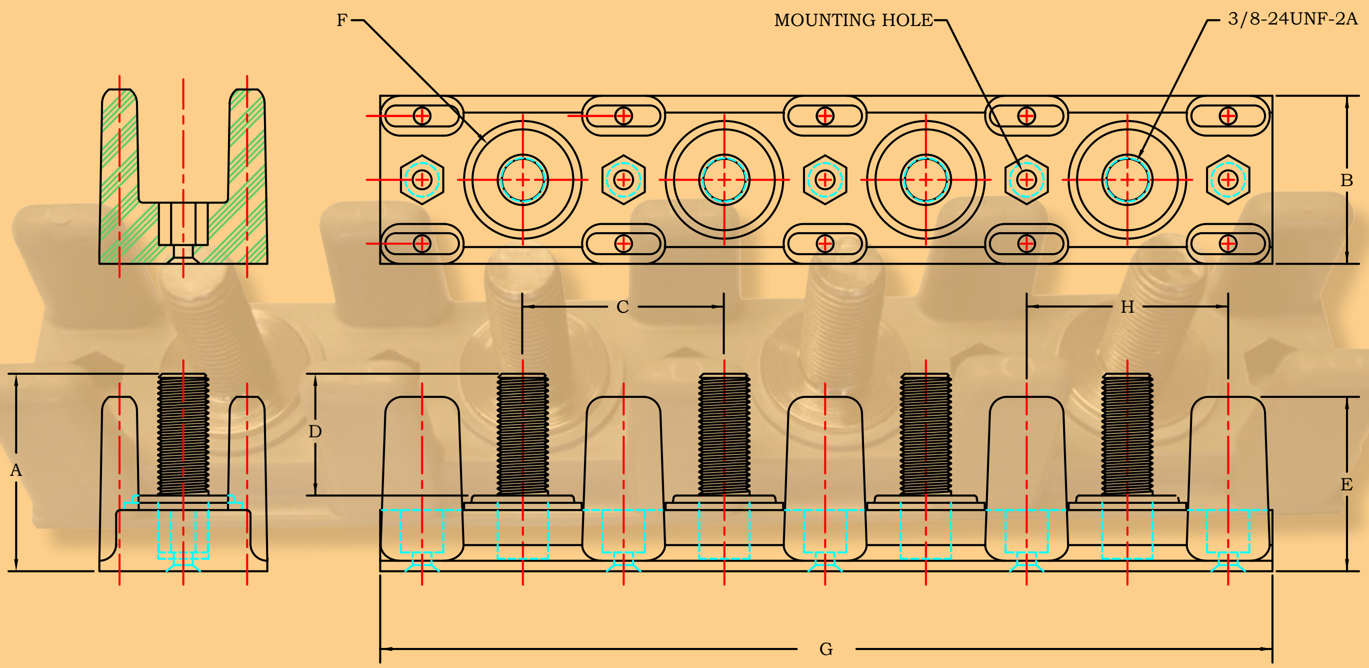




MS27212-4-4 SHOWN

MS27212-5 MOLDED IN STUD, ELECTRICAL TERMINAL BOARD ASSEMBLY

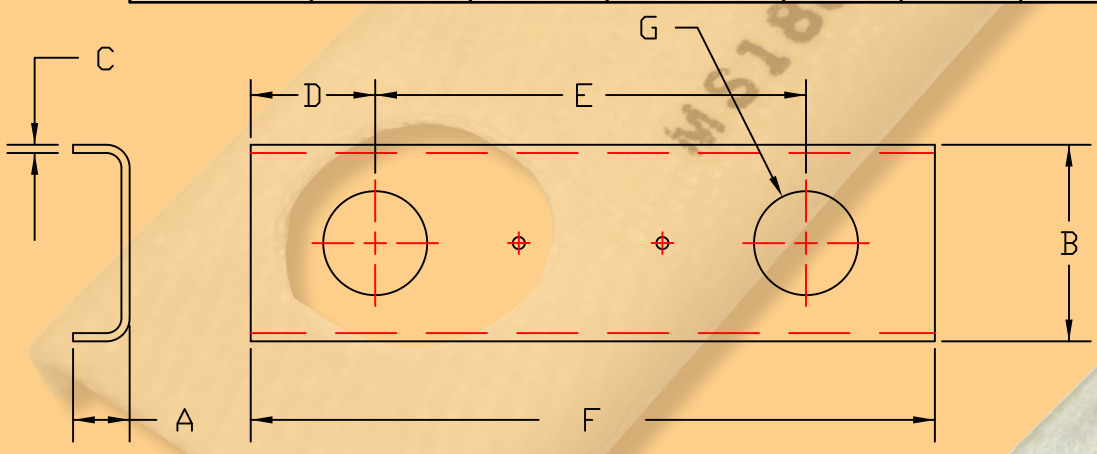
Part Number	Stud Size	Number of Studs	Overall Height Dim (A)	Overall Width Dim (B)	Stud Spacing Dim (C)	Stud Height Dim (D)	Terminal Board Post Hieght Dim (E)	Stud Terminal Mounting Dia. Dim (F)	Overall Length Dim (G)	Terminal Board Mounting Hole Spacing Dim (H)	Terminal Board Mounting Bolt & Hex Nut Size
MS27212-5-8	3/8-24 UNF-2A	8	1.517	1.250	1.500	.906	1.297	.750	12.624	1.500	6-32-UNC
MS27212-5-7	3/8-24 UNF-2A	7	1.517	1.250	1.500	.906	1.297	.750	11.124	1.500	6-32-UNC
MS27212-5-6	3/8-24 UNF-2A	6	1.517	1.250	1.500	.906	1.297	.750	9.624	1.500	6-32-UNC
MS27212-5-5	3/8-24 UNF-2A	5	1.517	1.250	1.500	.906	1.297	.750	8.124	1.500	6-32-UNC
MS27212-5-4	3/8-24 UNF-2A	4	1.517	1.250	1.500	.906	1.297	.750	6.624	1.500	6-32-UNC
MS27212-5-3	3/8-24 UNF-2A	3	1.517	1.250	1.500	.906	1.297	.750	5.124	1.500	6-32-UNC
MS27212-5-2	3/8-24 UNF-2A	2	1.517	1.250	1.500	.906	1.297	.750	3.624	1.500	6-32-UNC
MS27212-5-1	3/8-24 UNF-2A	1	1.517	1.250	1.500	.906	1.297	.750	2.124	1.500	6-32-UNC



MS27212-5-4 SHOWN

MS18029-11S PLASTIC, LAMINATE ELECTRICAL COVER

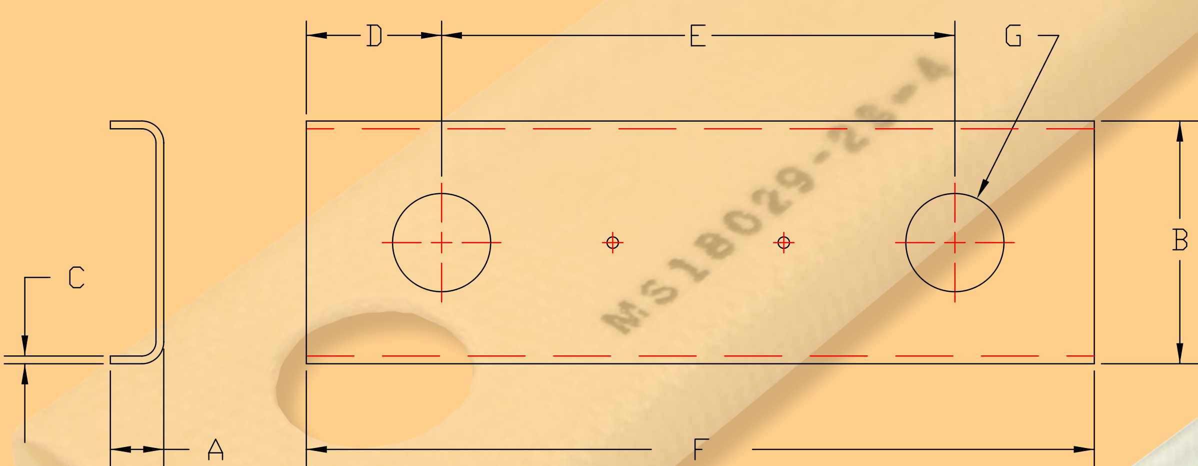
Part Number	Overall Height Dim (A)	Overall Width Dim (B)	Cover Thickness Dim (C)	End to Cnt of Hole Dim (D)	Hole Cnt to Hole Cnt Dim (E)	Overall Length Dim (F)	knob/ nut Hole Dia. Dim (G)
MS18029-11S-20	.234	.813	.034	.515	11.286	12.316	.430
MS18029-11S-19	.234	.813	.034	.515	10.692	11.722	.430
MS18029-11S-18	.234	.813	.034	.515	10.098	11.128	.430
MS18029-11S-17	.234	.813	.034	.515	9.504	10.543	.430
MS18029-11S-16	.234	.813	.034	.515	8.910	9.940	.430
MS18029-11S-15	.234	.813	.034	.515	8.316	9.346	.430
MS18029-11S-14	.234	.813	.034	.515	7.722	8.752	.430
MS18029-11S-13	.234	.813	.034	.515	7.128	8.158	.430
MS18029-11S-12	.234	.813	.034	.515	6.534	7.564	.430
MS18029-11S-11	.234	.813	.034	.515	5.940	6.970	.430
MS18029-11S-10	.234	.813	.034	.515	5.346	6.376	.430
MS18029-11S-9	.234	.813	.034	.515	4.752	5.782	.430
MS18029-11S-8	.234	.813	.034	.515	4.158	5.188	.430
MS18029-11S-7	.234	.813	.034	.515	3.564	4.594	.430
MS18029-11S-6	.234	.813	.034	.515	2.970	4.000	.430
MS18029-11S-5	.234	.813	.034	.515	2.376	3.406	.430
MS18029-11S-4	.234	.813	.034	.515	1.782	2.812	.430
MS18029-11S-3	.234	.813	.034	.515	1.188	2.218	.430
MS18029-11S-2	.234	.813	.034	.515	.594	1.624	.430
MS18029-11S-1	.234	.813	.034	.515	.000	1.030	.430

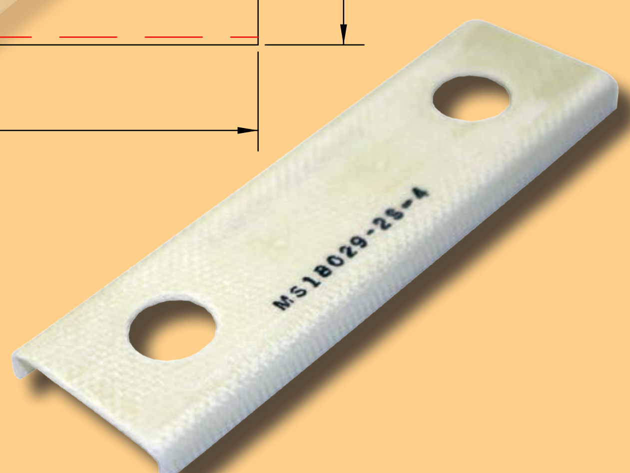


MS18029-1S-4 ASSEMBLY PART NUMBER SHOWN STAMPED ON TOP OF COVER
MS18029-11S-4 PART NUMBER STAMPED ON BOTTOM SIDE OF COVER NOT SHOWN

MS18029-12S PLASTIC, LAMINATE ELECTRICAL COVER

Part Number	Overall Height Dim (A)	Overall Width Dim (B)	Cover Thickness Dim (C)	End to Cnt of Hole Dim (D)	Hole Cnt to Hole Cnt Dim (E)	Overall Length Dim (F)	knob/ nut Hole Dia. Dim (G)
MS18029-12S-16	.234	1.063	.034	.593	11.250	12.436	.430
MS18029-12S-15	.234	1.063	.034	.515	10.500	11.686	.430
MS18029-12S-14	.234	1.063	.034	.515	9.750	10.936	.430
MS18029-12S-13	.234	1.063	.034	.515	9.000	10.186	.430
MS18029-12S-12	.234	1.063	.034	.515	8.250	9.436	.430
MS18029-12S-11	.234	1.063	.034	.515	7.500	8.686	.430
MS18029-12S-10	.234	1.063	.034	.515	6.750	7.936	.430
MS18029-12S-9	.234	1.063	.034	.515	6.000	7.186	.430
MS18029-12S-8	.234	1.063	.034	.515	5.250	6.436	.430
MS18029-12S-7	.234	1.063	.034	.515	4.500	5.686	.430
MS18029-12S-6	.234	1.063	.034	.515	3.750	4.936	.430
MS18029-12S-5	.234	1.063	.034	.515	3.000	4.186	.430
MS18029-12S-4	.234	1.063	.034	.515	2.250	3.436	.430
MS18029-12S-3	.234	1.063	.034	.515	1.500	2.686	.430
MS18029-12S-2	.234	1.063	.034	.515	.750	1.936	.430
MS18029-12S-1	.234	1.063	.034	.515	.000	1.186	.430

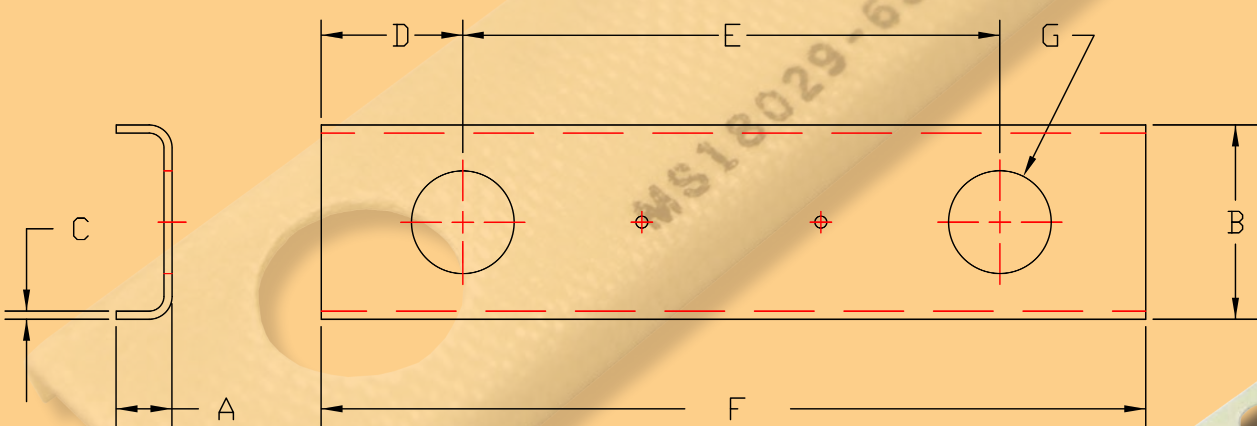


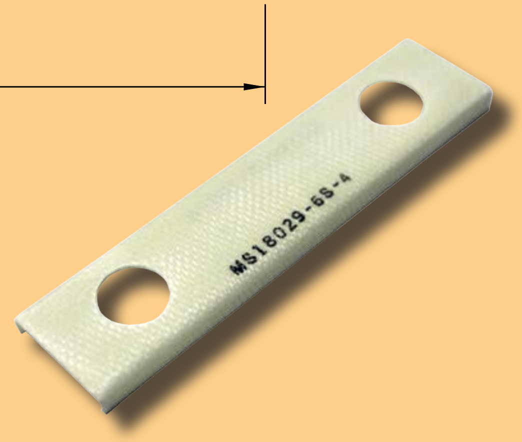


MS18029-12S-4 ASSEMBLY PART NUMBER SHOWN STAMPED ON TOP OF COVER
MS18029-12S-4 PART NUMBER STAMPED ON BOTTOM SIDE OF COVER NOT SHOWN

MS18029-14S PLASTIC, LAMINATE ELECTRICAL COVER

Part Number	Overall Height Dim (A)	Overall Width Dim (B)	Cover Thickness Dim (C)	End to Cnt of Hole Dim (D)	Hole Cnt to Hole Cnt Dim (E)	Overall Length Dim (F)	knob/ nut Hole Dia. Dim (G)
MS18029-14S-16	.234	.813	.034	.593	11.250	12.436	.430
MS18029-14S-15	.234	.813	.034	.515	10.500	11.686	.430
MS18029-14S-14	.234	.813	.034	.515	9.750	10.936	.430
MS18029-14S-13	.234	.813	.034	.515	9.000	10.186	.430
MS18029-14S-12	.234	.813	.034	.515	8.250	9.436	.430
MS18029-14S-11	.234	.813	.034	.515	7.500	8.686	.430
MS18029-14S-10	.234	.813	.034	.515	6.750	7.936	.430
MS18029-14S-9	.234	.813	.034	.515	6.000	7.186	.430
MS18029-14S-8	.234	.813	.034	.515	5.250	6.436	.430
MS18029-14S-7	.234	.813	.034	.515	4.500	5.686	.430
MS18029-14S-6	.234	.813	.034	.515	3.750	4.936	.430
MS18029-14S-5	.234	.813	.034	.515	3.000	4.186	.430
MS18029-14S-4	.234	.813	.034	.515	2.250	3.436	.430
MS18029-14S-3	.234	.813	.034	.515	1.500	2.686	.430
MS18029-14S-2	.234	.813	.034	.515	.750	1.936	.430
MS18029-14S-1	.234	.813	.034	.515	.000	1.186	.430

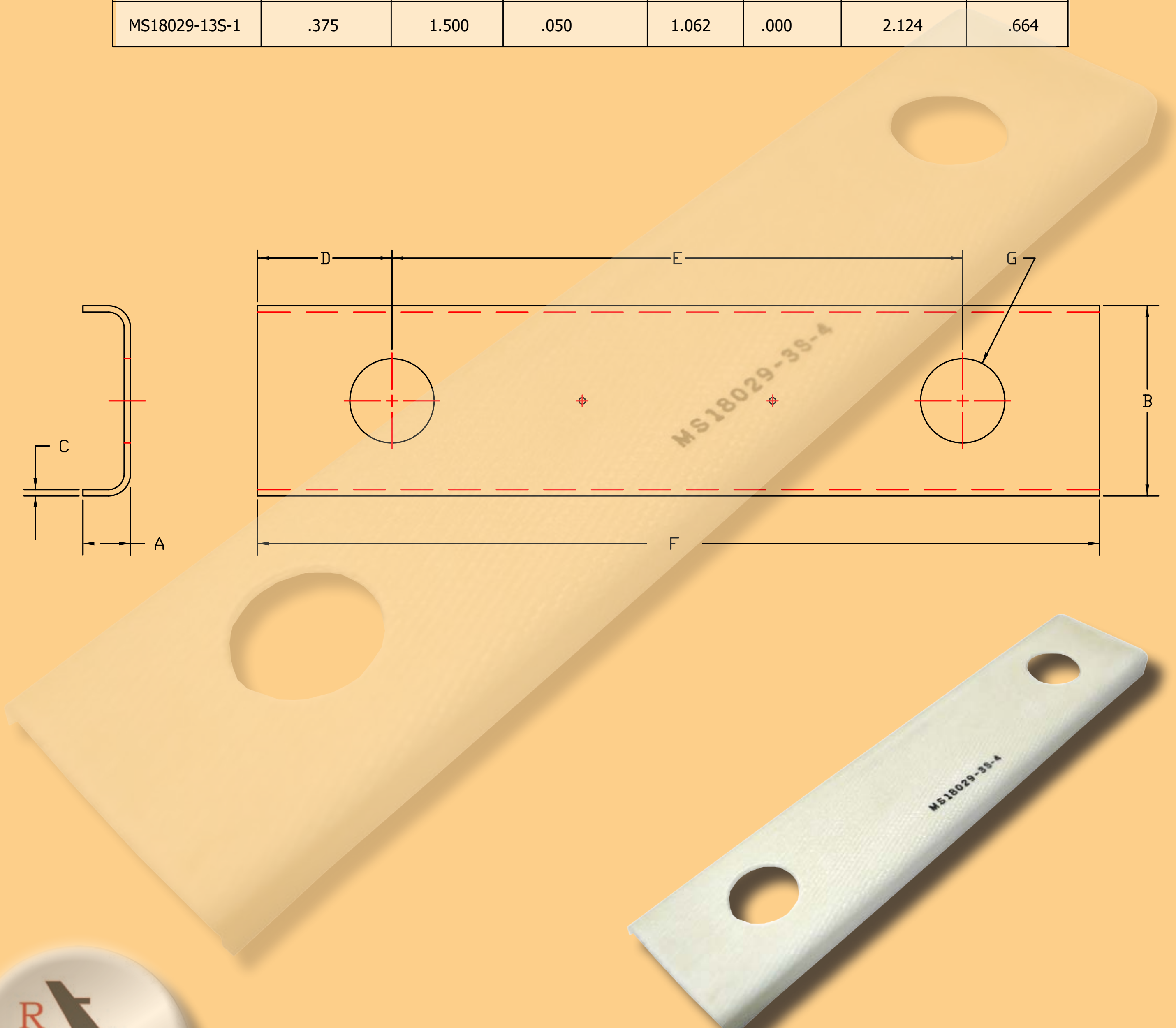




MS18029-14S-4 ASSEMBLY PART NUMBER SHOWN STAMPED ON TOP OF COVER
MS18029-12S-4 PART NUMBER STAMPED ON BOTTOM SIDE OF COVER NOT SHOWN

MS18029-13S PLASTIC, LAMINATE ELECTRICAL COVER

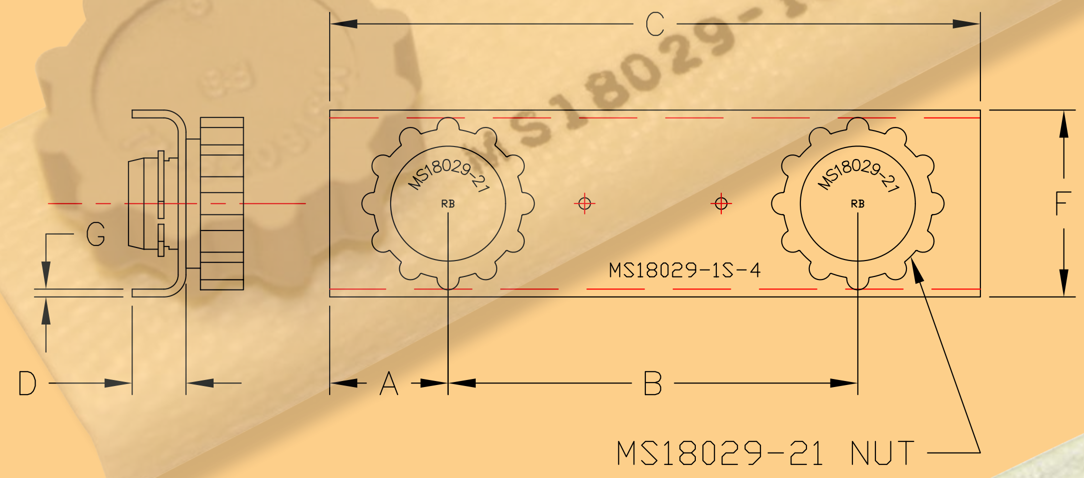
Part Number	Overall Height Dim (A)	Overall Width Dim (B)	Cover Thickness Dim (C)	End to Cnt of Hole Dim (D)	Hole Cnt to Hole Cnt Dim (E)	Overall Length Dim (F)	knob/ nut Hole Dia. Dim (G)
MS18029-13S-8	.375	1.500	.050	1.062	8.500	12.624	.664
MS18029-13S-7	.375	1.500	.050	1.062	7.000	11.124	.664
MS18029-13S-6	.375	1.500	.050	1.062	6.500	9.624	.664
MS18029-13S-5	.375	1.500	.050	1.062	5.000	8.125	.664
MS18029-13S-4	.375	1.500	.050	1.062	4.500	6.624	.664
MS18029-13S-3	.375	1.500	.050	1.062	3.000	5.124	.664
MS18029-13S-2	.375	1.500	.050	1.062	1.500	3.624	.664
MS18029-13S-1	.375	1.500	.050	1.062	.000	2.124	.664

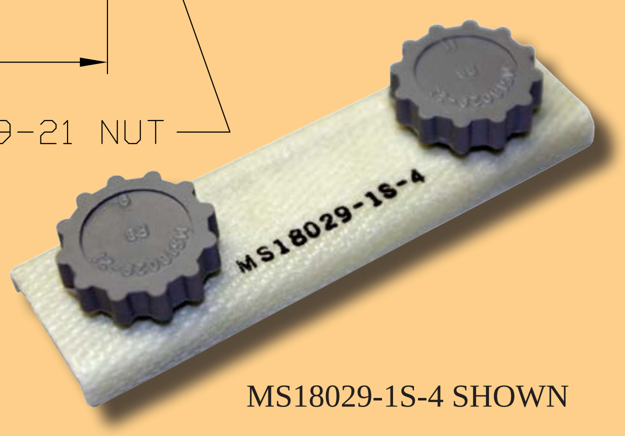


MS18029-13S-4 ASSEMBLY PART NUMBER SHOWN STAMPED ON TOPE OF COVER
MS18029-14S-4 PART NUMBER STAMPED ON BOTTOM SIDE OF COVER NOT SHOWN

MS18029-1S PLASTIC, LAMINATE ELECTRICAL COVER ASSEMBLY

Part Number	End to Cnt of Hole Dim (A)	Nut Cnt to Nut Cnt Dim (B)	Overall Height Dim (D)	Overall Width Dim (F)	Overall Length Dim (C)	Cover Thickness Dim (G)	Cover Part NO.	Snap Ring Part NO.	knob/ nut Part NO.
MS18029-1S-20	.515	11.286	.234	.813	12.316	.034	MS18029-11S-20	MS16624-1040	MS18029-21
MS18029-1S-19	.515	10.692	.234	.813	11.722	.034	MS18029-11S-19	MS16624-1040	MS18029-21
MS18029-1S-18	.515	10.098	.234	.813	11.128	.034	MS18029-11S-18	MS16624-1040	MS18029-21
MS18029-1S-17	.515	9.504	.234	.813	10.543	.034	MS18029-11S-17	MS16624-1040	MS18029-21
MS18029-1S-16	.515	8.910	.234	.813	9.940	.034	MS18029-11S-16	MS16624-1040	MS18029-21
MS18029-1S-15	.515	8.316	.234	.813	9.346	.034	MS18029-11S-15	MS16624-1040	MS18029-21
MS18029-1S-14	.515	7.722	.234	.813	8.752	.034	MS18029-11S-14	MS16624-1040	MS18029-21
MS18029-1S-13	.515	7.128	.234	.813	8.158	.034	MS18029-11S-13	MS16624-1040	MS18029-21
MS18029-1S-12	.515	6.534	.234	.813	7.564	.034	MS18029-11S-12	MS16624-1040	MS18029-21
MS18029-1S-11	.515	5.940	.234	.813	6.970	.034	MS18029-11S-11	MS16624-1040	MS18029-21
MS18029-1S-10	.515	5.346	.234	.813	6.376	.034	MS18029-11S-10	MS16624-1040	MS18029-21
MS18029-1S-9	.515	4.752	.234	.813	5.782	.034	MS18029-11S-9	MS16624-1040	MS18029-21
MS18029-1S-8	.515	4.158	.234	.813	5.188	.034	MS18029-11S-8	MS16624-1040	MS18029-21
MS18029-1S-7	.515	3.564	.234	.813	4.594	.034	MS18029-11S-7	MS16624-1040	MS18029-21
MS18029-1S-6	.515	2.970	.234	.813	4.000	.034	MS18029-11S-6	MS16624-1040	MS18029-21
MS18029-1S-5	.515	2.376	.234	.813	3.406	.034	MS18029-11S-5	MS16624-1040	MS18029-21
MS18029-1S-4	.515	1.782	.234	.813	2.812	.034	MS18029-11S-4	MS16624-1040	MS18029-21
MS18029-1S-3	.515	1.188	.234	.813	2.218	.034	MS18029-11S-3	MS16624-1040	MS18029-21
MS18029-1S-2	.515	.594	.234	.813	1.624	.034	MS18029-11S-2	MS16624-1040	MS18029-21
MS18029-1S-1	.515	.000	.234	.813	1.030	.034	MS18029-11S-1	MS16624-1040	MS18029-21

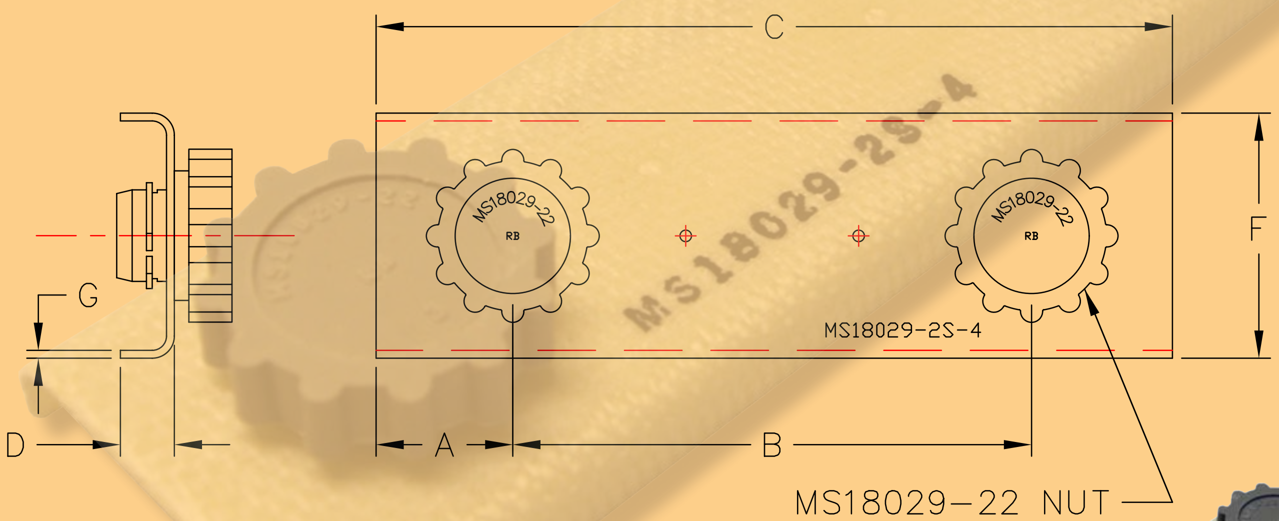


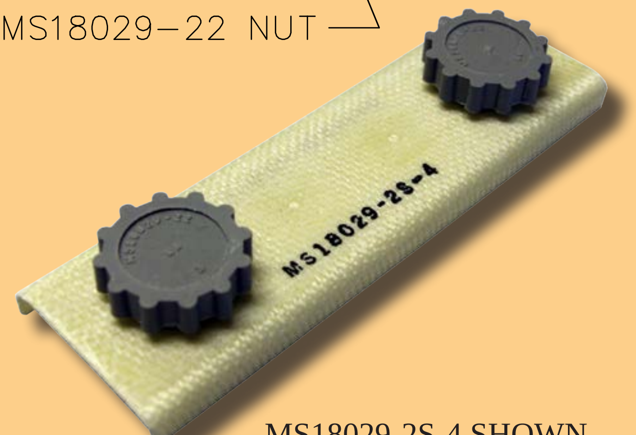


MS18029-1S-4 SHOWN

MS18029-2S PLASTIC, LAMINATE ELECTRICAL COVER ASSEMBLY

Part Number	End to Cnt of Hole Dim (A)	Nut Cnt to Nut Cnt Dim (B)	Overall Height Dim (D)	Overall Width Dim (F)	Overall Length Dim (C)	Cover Thickness Dim (G)	Cover Part NO.	Snap Ring Part NO.	knob/ nut Part NO.
MS18029-2S-16	.593	11.250	.234	1.063	12.436	.034	MS18029-12S-16	MS16624-1040	MS18029-22
MS18029-2S-15	.593	10.500	.234	1.063	11.686	.034	MS18029-12S-15	MS16624-1040	MS18029-22
MS18029-2S-14	.593	9.750	.234	1.063	10.936	.034	MS18029-12S-14	MS16624-1040	MS18029-22
MS18029-2S-13	.593	9.000	.234	1.063	10.186	.034	MS18029-12S-13	MS16624-1040	MS18029-22
MS18029-2S-12	.593	8.250	.234	1.063	9.436	.034	MS18029-12S-12	MS16624-1040	MS18029-22
MS18029-2S-11	.593	7.500	.234	1.063	8.686	.034	MS18029-12S-11	MS16624-1040	MS18029-22
MS18029-2S-10	.593	6.750	.234	1.063	7.936	.034	MS18029-12S-10	MS16624-1040	MS18029-22
MS18029-2S-9	.593	6.000	.234	1.063	7.186	.034	MS18029-12S-9	MS16624-1040	MS18029-22
MS18029-2S-8	.593	5.250	.234	1.063	6.436	.034	MS18029-12S-8	MS16624-1040	MS18029-22
MS18029-2S-7	.593	4.500	.234	1.063	5.686	.034	MS18029-12S-7	MS16624-1040	MS18029-22
MS18029-2S-6	.593	3.750	.234	1.063	4.936	.034	MS18029-12S-6	MS16624-1040	MS18029-22
MS18029-2S-5	.593	3.000	.234	1.063	4.186	.034	MS18029-12S-5	MS16624-1040	MS18029-22
MS18029-2S-4	.593	2.250	.234	1.063	3.436	.034	MS18029-12S-4	MS16624-1040	MS18029-22
MS18029-2S-3	.593	1.500	.234	1.063	2.686	.034	MS18029-12S-3	MS16624-1040	MS18029-22
MS18029-2S-2	.593	.750	.234	1.063	1.936	.034	MS18029-12S-2	MS16624-1040	MS18029-22
MS18029-2S-1	.593	.000	.234	1.063	1.186	.034	MS18029-12S-1	MS16624-1040	MS18029-22

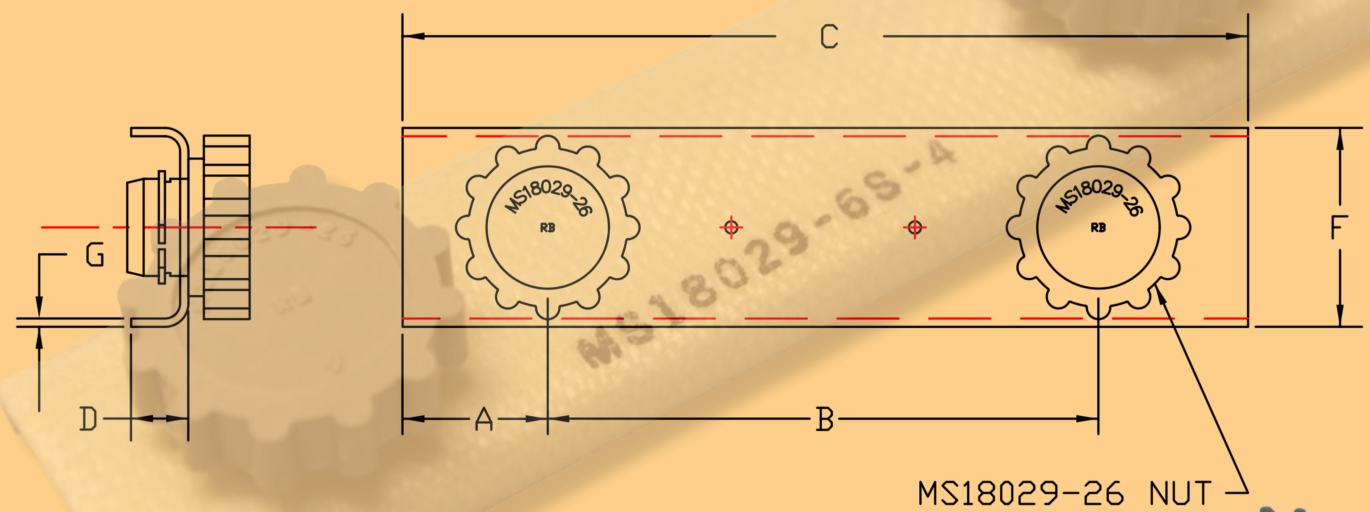


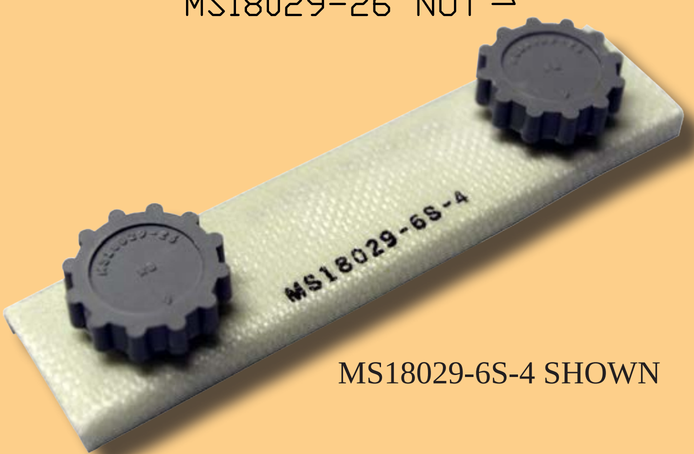


MS18029-2S-4 SHOWN

MS18029-6S PLASTIC, LAMINATE ELECTRICAL COVER ASSEMBLY

Part Number	End to Cnt of Hole Dim (A)	Nut Cnt to Nut Cnt Dim (B)	Overall Height Dim (D)	Overall Width Dim (F)	Overall Length Dim (C)	Cover Thickness Dim (G)	Cover Part NO.	Snap Ring Part NO.	knob/ nut Part NO.
MS18029-6S-16	.593	11.250	.234	.813	12.436	.034	MS18029-14S-16	MS16624-1040	MS18029-26
MS18029-6S-15	.593	10.500	.234	.813	11.686	.034	MS18029-14S-15	MS16624-1040	MS18029-26
MS18029-6S-14	.593	9.750	.234	.813	10.936	.034	MS18029-14S-14	MS16624-1040	MS18029-26
MS18029-6S-13	.593	9.000	.234	.813	10.186	.034	MS18029-14S-13	MS16624-1040	MS18029-26
MS18029-6S-12	.593	8.250	.234	.813	9.436	.034	MS18029-14S-12	MS16624-1040	MS18029-26
MS18029-6S-11	.593	7.500	.234	.813	8.686	.034	MS18029-14S-11	MS16624-1040	MS18029-26
MS18029-6S-10	.593	6.750	.234	.813	7.936	.034	MS18029-14S-10	MS16624-1040	MS18029-26
MS18029-6S-9	.593	6.000	.234	.813	7.186	.034	MS18029-14S-9	MS16624-1040	MS18029-26
MS18029-6S-8	.593	5.250	.234	.813	6.436	.034	MS18029-14S-8	MS16624-1040	MS18029-26
MS18029-6S-7	.593	4.500	.234	.813	5.686	.034	MS18029-14S-7	MS16624-1040	MS18029-26
MS18029-6S-6	.593	3.750	.234	.813	4.936	.034	MS18029-14S-6	MS16624-1040	MS18029-26
MS18029-6S-5	.593	3.000	.234	.813	4.186	.034	MS18029-14S-5	MS16624-1040	MS18029-26
MS18029-6S-4	.593	2.250	.234	.813	3.436	.034	MS18029-14S-4	MS16624-1040	MS18029-26
MS18029-6S-3	.593	1.500	.234	.813	2.686	.034	MS18029-14S-3	MS16624-1040	MS18029-26
MS18029-6S-2	.593	.750	.234	.813	1.936	.034	MS18029-14S-2	MS16624-1040	MS18029-26
MS18029-6S-1	.593	.000	.234	.813	1.186	.034	MS18029-14S-1	MS16624-1040	MS18029-26

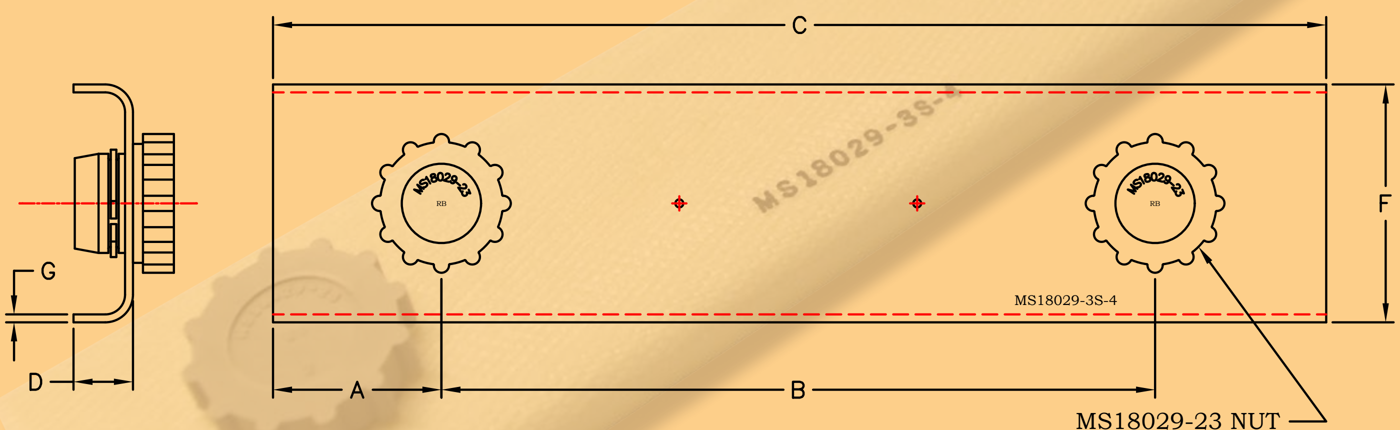


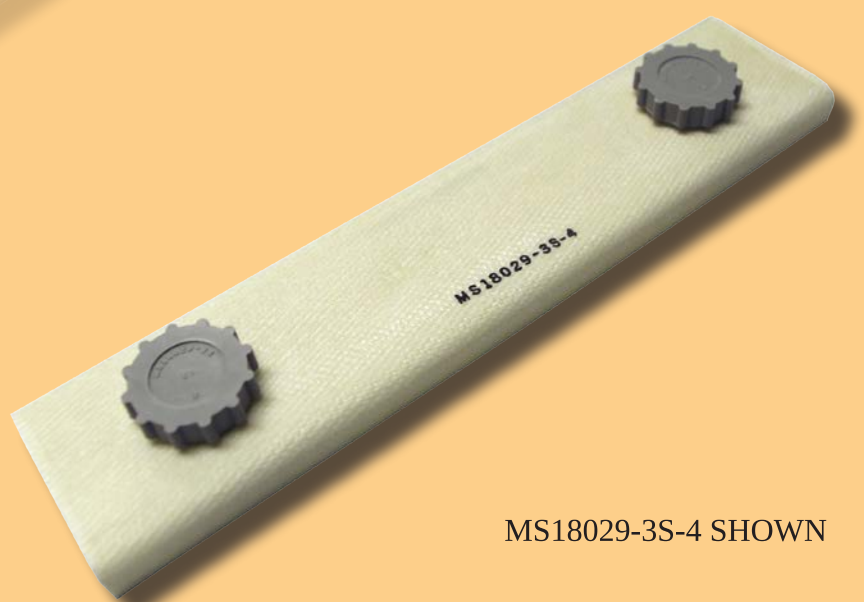


MS18029-6S-4 SHOWN

MS18029-3S PLASTIC, LAMINATE ELECTRICAL COVER ASSEMBLY

Part Number	End to Cnt of Hole Dim (A)	Nut Cnt to Nut Cnt Dim (B)	Overall Height Dim (D)	Overall Width Dim (F)	Overall Length Dim (C)	Cover Thickness Dim (G)	Cover Part NO.	Snap Ring Part NO.	knob/ nut Part NO.
MS18029-3S-8	1.062	8.500	.375	1.500	12.624	.050	MS18029-13S-8	MS16624-1062	MS18029-23
MS18029-3S-7	1.062	7.000	.375	1.500	11.124	.050	MS18029-13S-7	MS16624-1062	MS18029-23
MS18029-3S-6	1.062	6.500	.375	1.500	9.624	.050	MS18029-13S-6	MS16624-1062	MS18029-23
MS18029-3S-5	1.062	5.000	.375	1.500	8.125	.050	MS18029-13S-5	MS16624-1062	MS18029-23
MS18029-3S-4	1.062	4.500	.375	1.500	6.624	.050	MS18029-13S-4	MS16624-1062	MS18029-23
MS18029-3S-3	1.062	3.000	.375	1.500	5.124	.050	MS18029-13S-3	MS16624-1062	MS18029-23
MS18029-3S-2	1.062	1.500	.375	1.500	3.624	.050	MS18029-13S-2	MS16624-1062	MS18029-23
MS18029-3S-1	1.062	.000	.375	1.500	2.124	.050	MS18029-13S-1	MS16624-1062	MS18029-23

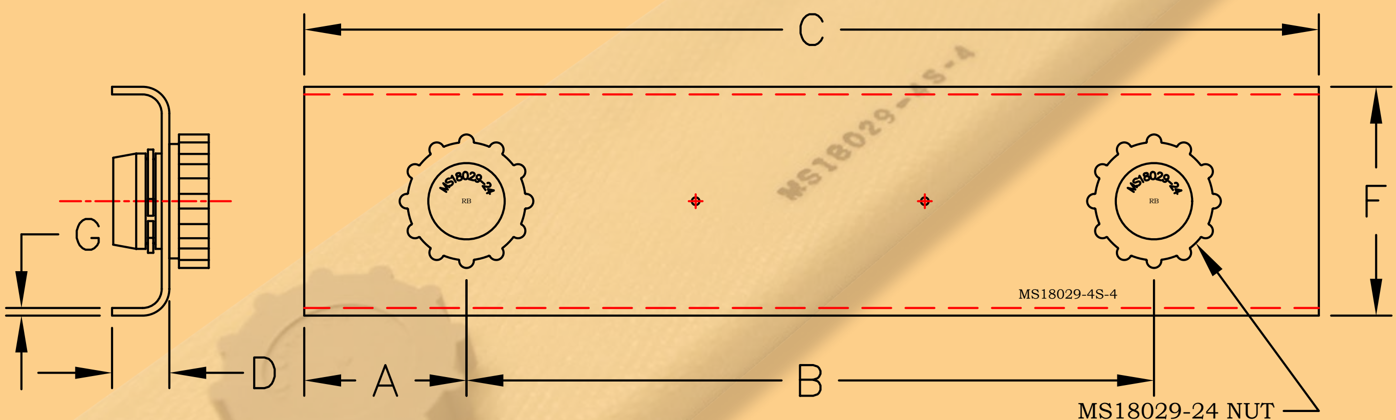




MS18029-3S-4 SHOWN

MS18029-4S PLASTIC, LAMINATE ELECTRICAL COVER ASSEMBLY

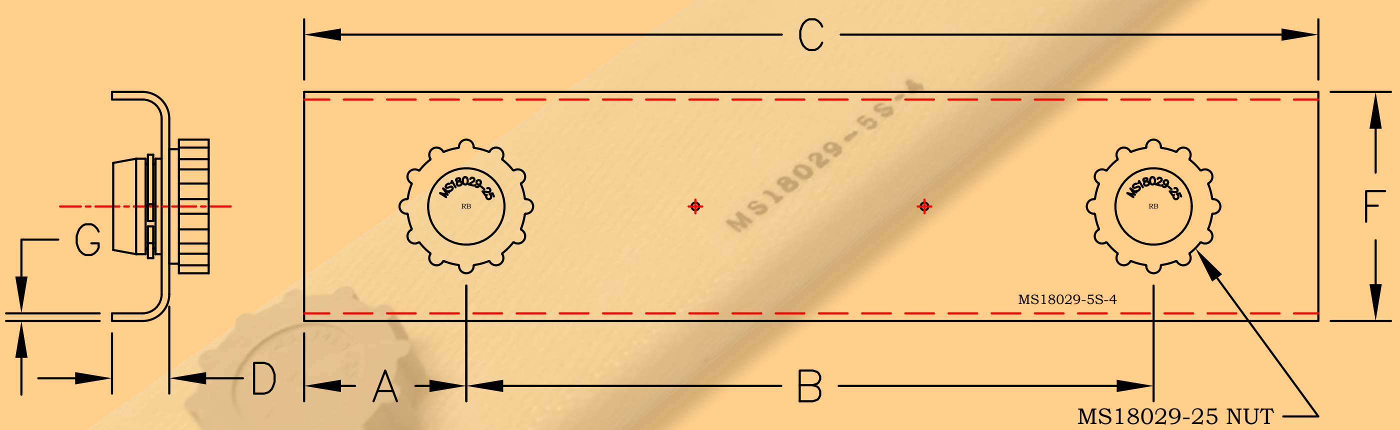
Part Number	End to Cnt of Hole Dim (A)	Nut Cnt to Nut Cnt Dim (B)	Overall Height Dim (D)	Overall Width Dim (F)	Overall Length Dim (C)	Cover Thickness Dim (G)	Cover Part NO.	Snap Ring Part NO.	knob/ nut Part NO.
MS18029-4S-8	1.062	8.500	.375	1.500	12.624	.050	MS18029-13S-8	MS16624-1062	MS18029-24
MS18029-4S-7	1.062	7.000	.375	1.500	11.124	.050	MS18029-13S-7	MS16624-1062	MS18029-24
MS18029-4S-6	1.062	6.500	.375	1.500	9.624	.050	MS18029-13S-6	MS16624-1062	MS18029-24
MS18029-4S-5	1.062	5.000	.375	1.500	8.125	.050	MS18029-13S-5	MS16624-1062	MS18029-24
MS18029-4S-4	1.062	4.500	.375	1.500	6.624	.050	MS18029-13S-4	MS16624-1062	MS18029-24
MS18029-4S-3	1.062	3.000	.375	1.500	5.124	.050	MS18029-13S-3	MS16624-1062	MS18029-24
MS18029-4S-2	1.062	1.500	.375	1.500	3.624	.050	MS18029-13S-2	MS16624-1062	MS18029-24
MS18029-4S-1	1.062	.000	.375	1.500	2.124	.050	MS18029-13S-1	MS16624-1062	MS18029-24



MS18029-4S-4 SHOWN

MS18029-5S PLASTIC, LAMINATE ELECTRICAL COVER ASSEMBLY

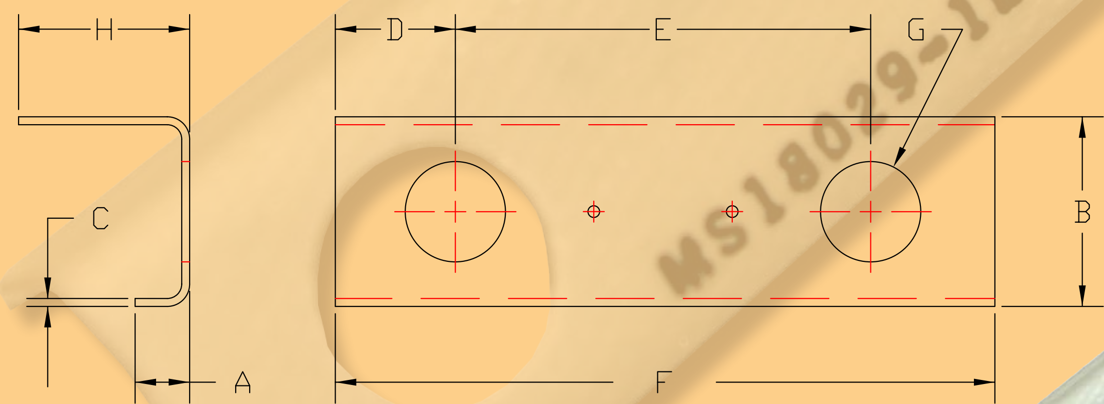
Part Number	End to Cnt of Hole Dim (A)	Nut Cnt to Nut Cnt Dim (B)	Overall Height Dim (D)	Overall Width Dim (F)	Overall Length Dim (C)	Cover Thickness Dim (G)	Cover Part NO.	Snap Ring Part NO.	knob/ nut Part NO.
MS18029-5S-8	1.062	10.50	.375	1.500	12.624	.050	MS18029-13S-8	MS16624-1062	MS18029-25
MS18029-5S-7	1.062	9.000	.375	1.500	11.124	.050	MS18029-13S-7	MS16624-1062	MS18029-25
MS18029-5S-6	1.062	7.500	.375	1.500	9.624	.050	MS18029-13S-6	MS16624-1062	MS18029-25
MS18029-5S-5	1.062	6.000	.375	1.500	8.125	.050	MS18029-13S-5	MS16624-1062	MS18029-25
MS18029-5S-4	1.062	4.500	.375	1.500	6.624	.050	MS18029-13S-4	MS16624-1062	MS18029-25
MS18029-5S-3	1.062	3.000	.375	1.500	5.124	.050	MS18029-13S-3	MS16624-1062	MS18029-25
MS18029-5S-2	1.062	1.500	.375	1.500	3.624	.050	MS18029-13S-2	MS16624-1062	MS18029-25
MS18029-5S-1	1.062	.000	.375	1.500	2.124	.050	MS18029-13S-1	MS16624-1062	MS18029-25

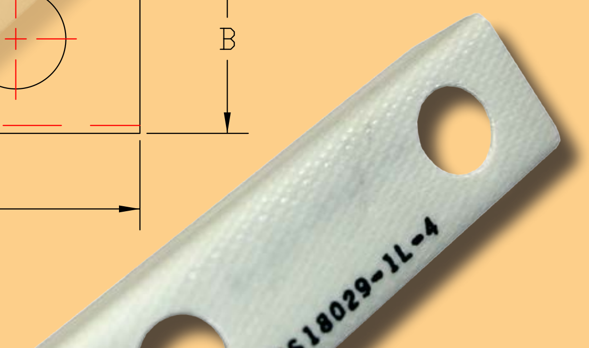


MS18029-5S-4 SHOWN

MS18029-11L PLASTIC, LAMINATE ELECTRICAL COVER

Part Number	Overall Height Dim (A)	Overall Height Dim (H)	Overall Width Dim (B)	Cover Thickness Dim (C)	End to Cnt of Hole Dim (D)	Hole Cnt to Hole Cnt Dim (E)	Overall Length Dim (F)	knob/ nut Hole Dia. Dim (G)
MS18029-11L-20	.234	.734	.813	.034	.515	11.286	12.316	.430
MS18029-11L-19	.234	.734	.813	.034	.515	10.692	11.722	.430
MS18029-11L-18	.234	.734	.813	.034	.515	10.098	11.128	.430
MS18029-11L-17	.234	.734	.813	.034	.515	9.504	10.543	.430
MS18029-11L-16	.234	.734	.813	.034	.515	8.910	9.940	.430
MS18029-11L-15	.234	.734	.813	.034	.515	8.316	9.346	.430
MS18029-11L-14	.234	.734	.813	.034	.515	7.722	8.752	.430
MS18029-11L-13	.234	.734	.813	.034	.515	7.128	8.158	.430
MS18029-11L-12	.234	.734	.813	.034	.515	6.534	7.564	.430
MS18029-11L-11	.234	.734	.813	.034	.515	5.940	6.970	.430
MS18029-11L-10	.234	.734	.813	.034	.515	5.346	6.376	.430
MS18029-11L-9	.234	.734	.813	.034	.515	4.752	5.782	.430
MS18029-11L-8	.234	.734	.813	.034	.515	4.158	5.188	.430
MS18029-11L-7	.234	.734	.813	.034	.515	3.564	4.594	.430
MS18029-11L-6	.234	.734	.813	.034	.515	2.970	4.000	.430
MS18029-11L-5	.234	.734	.813	.034	.515	2.376	3.406	.430
MS18029-11L-4	.234	.734	.813	.034	.515	1.782	2.812	.430
MS18029-11L-3	.234	.734	.813	.034	.515	1.188	2.218	.430
MS18029-11L-2	.234	.734	.813	.034	.515	.594	1.624	.430
MS18029-11L-1	.234	.734	.813	.034	.515	.000	1.030	.430

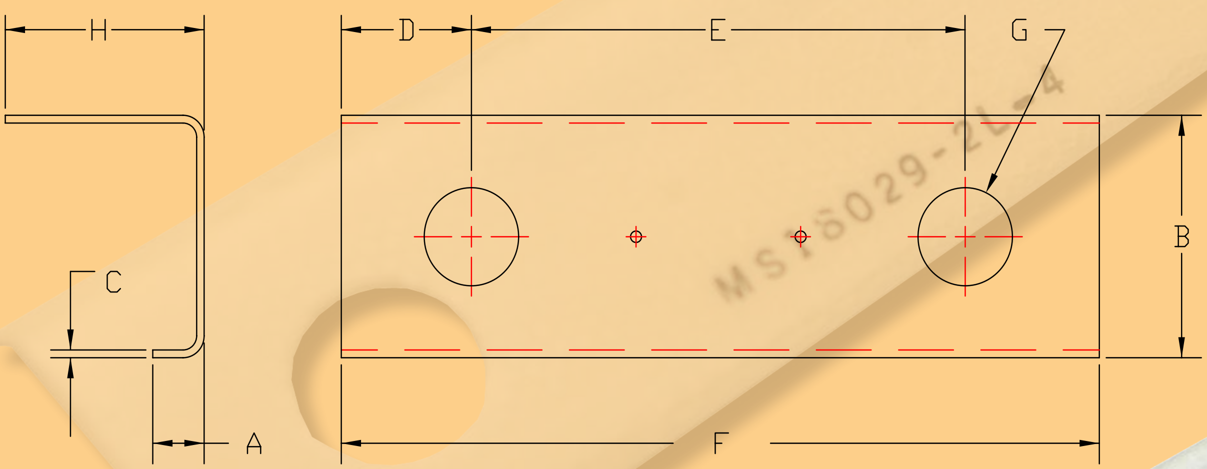




MS18029-1L-4 ASSEMBLY PART NUMBER SHOWN STAMPED ON TOP OF COVER
MS18029-11L-4 PART NUMBER STAMPED ON BOTTOM SIDE OF COVER NOT SHOWN

MS18029-12L PLASTIC, LAMINATE ELECTRICAL COVER

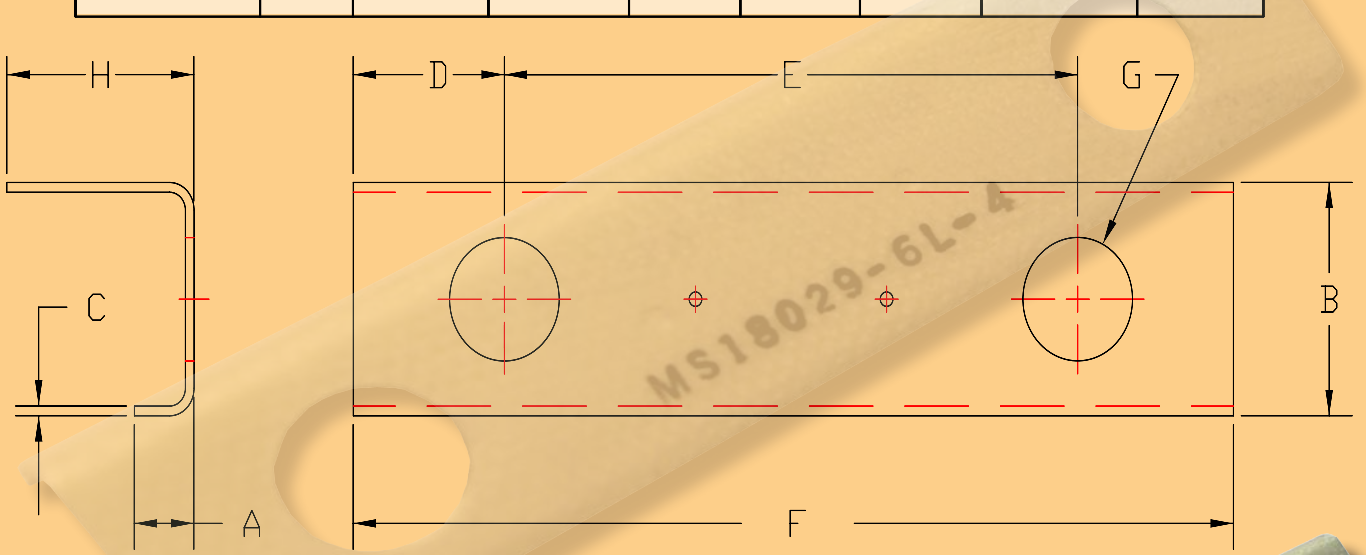
Part Number	Overall Height Dim (A)	Overall Height Dim (H)	Overall Width Dim (B)	Cover Thickness Dim (C)	End to Cnt of Hole Dim (D)	Hole Cnt to Hole Cnt Dim (E)	Overall Length Dim (F)	knob/ nut Hole Dia. Dim (G)
MS18029-12L-16	.234	.906	1.063	.034	.593	11.250	12.436	.430
MS18029-12L-15	.234	.906	1.063	.034	.515	10.500	11.686	.430
MS18029-12L-14	.234	.906	1.063	.034	.515	9.750	10.936	.430
MS18029-12L-13	.234	.906	1.063	.034	.515	9.000	10.186	.430
MS18029-12L-12	.234	.906	1.063	.034	.515	8.250	9.436	.430
MS18029-12L-11	.234	.906	1.063	.034	.515	7.500	8.686	.430
MS18029-12L-10	.234	.906	1.063	.034	.515	6.750	7.936	.430
MS18029-12L-9	.234	.906	1.063	.034	.515	6.000	7.186	.430
MS18029-12L-8	.234	.906	1.063	.034	.515	5.250	6.436	.430
MS18029-12L-7	.234	.906	1.063	.034	.515	4.500	5.686	.430
MS18029-12L-6	.234	.906	1.063	.034	.515	3.750	4.936	.430
MS18029-12L-5	.234	.906	1.063	.034	.515	3.000	4.186	.430
MS18029-12L-4	.234	.906	1.063	.034	.515	2.250	3.436	.430
MS18029-12L-3	.234	.906	1.063	.034	.515	1.500	2.686	.430
MS18029-12L-2	.234	.906	1.063	.034	.515	.750	1.936	.430
MS18029-12L-1	.234	.906	1.063	.034	.515	.000	1.186	.430



MS18029-2L-4 ASSEMBLY PART NUMBER SHOWN STAMPED ON TOP OF THE COVER
MS18029-12L-4 PART NUMBER STAMPED ON BOTTOM SIDE OF COVER NOT SHOWN

MS18029-14L PLASTIC, LAMINATE ELECTRICAL COVER

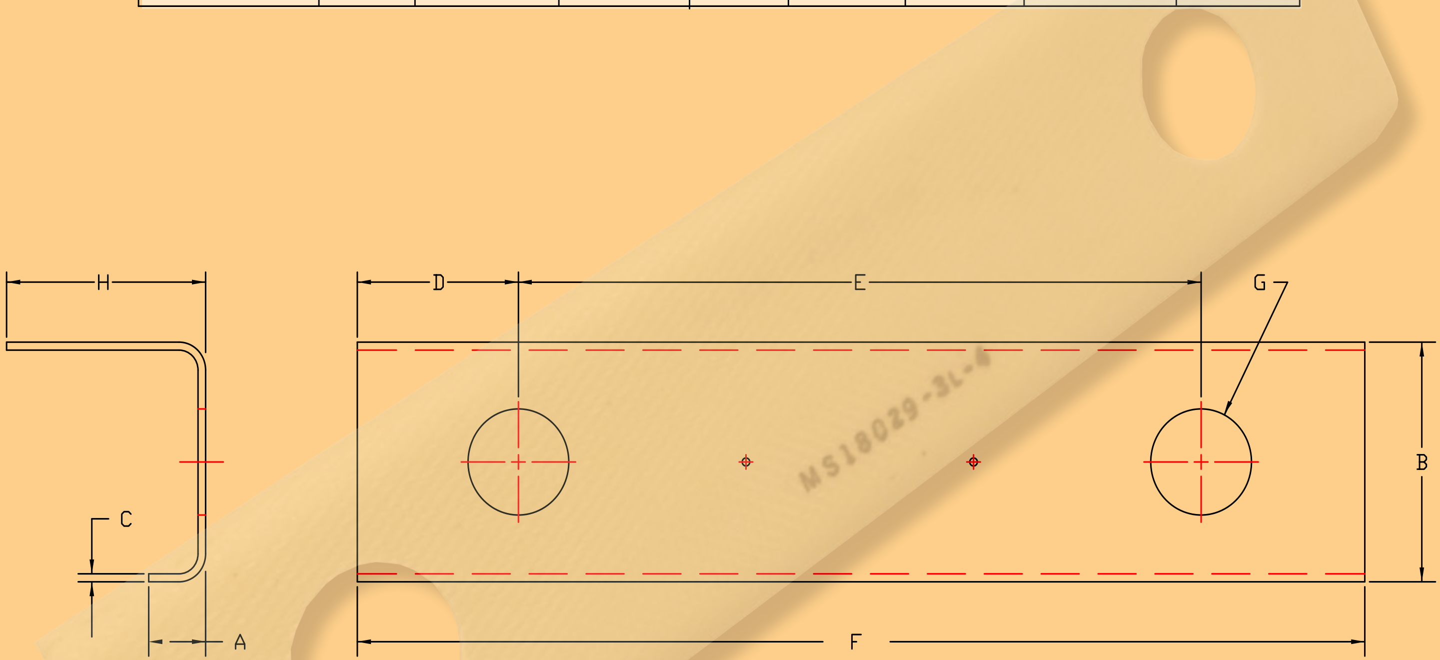
Part Number	Overall Height Dim (A)	Overall Height Dim (H)	Overall Width Dim (B)	Cover Thickness Dim (C)	End to Cnt of Hole Dim (D)	Hole Cnt to Hole Cnt Dim (E)	Overall Length Dim (F)	knob/ nut Hole Dia. Dim (G)
MS18029-14L-16	.234	.734	.813	.034	.593	11.250	12.436	.430
MS18029-14L-15	.234	.734	.813	.034	.515	10.500	11.686	.430
MS18029-14L-14	.234	.734	.813	.034	.515	9.750	10.936	.430
MS18029-14L-13	.234	.734	.813	.034	.515	9.000	10.186	.430
MS18029-14L-12	.234	.734	.813	.034	.515	8.250	9.436	.430
MS18029-14L-11	.234	.734	.813	.034	.515	7.500	8.686	.430
MS18029-14L-10	.234	.734	.813	.034	.515	6.750	7.936	.430
MS18029-14L-9	.234	.734	.813	.034	.515	6.000	7.186	.430
MS18029-14L-8	.234	.734	.813	.034	.515	5.250	6.436	.430
MS18029-14L-7	.234	.734	.813	.034	.515	4.500	5.686	.430
MS18029-14L-6	.234	.734	.813	.034	.515	3.750	4.936	.430
MS18029-14L-5	.234	.734	.813	.034	.515	3.000	4.186	.430
MS18029-14L-4	.234	.734	.813	.034	.515	2.250	3.436	.430
MS18029-14L-3	.234	.734	.813	.034	.515	1.500	2.686	.430
MS18029-14L-2	.234	.734	.813	.034	.515	.750	1.936	.430
MS18029-14L-1	.234	.734	.813	.034	.515	.000	1.186	.430



MS18029-6L-4 ASSEMBLY PART NUMBER SHOWN STAMPED ON TOP OF THE COVER
MS18029-14L-4 PART NUMBER STAMPED ON BOTTOM SIDE OF COVER NOT SHOWN

MS18029-13L PLASTIC, LAMINATE ELECTRICAL COVER

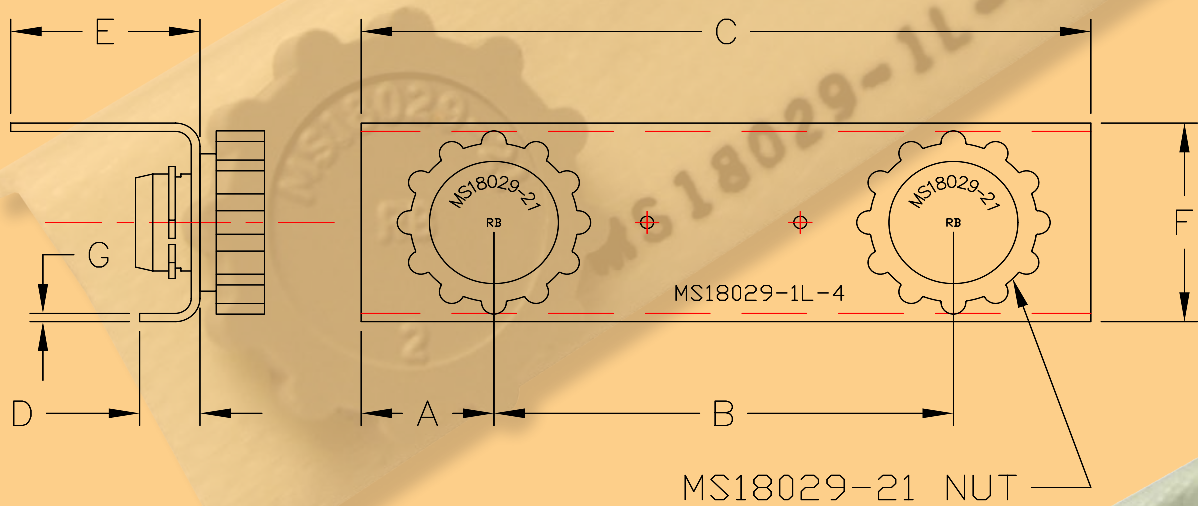
Part Number	Overall Height Dim (A)	Overall Height Dim (H)	Overall Width Dim (B)	Cover Thickness Dim (C)	End to Cnt of Hole Dim (D)	Hole Cnt to Hole Cnt Dim (E)	Overall Length Dim (F)	knob/ nut Hole Dia. Dim (G)
MS18029-13L-8	.375	1.312	1.500	.050	1.062	8.500	12.624	.664
MS18029-13L-7	.375	1.312	1.500	.050	1.062	7.000	11.124	.664
MS18029-13L-6	.375	1.312	1.500	.050	1.062	6.500	9.624	.664
MS18029-13L-5	.375	1.312	1.500	.050	1.062	5.000	8.125	.664
MS18029-13L-4	.375	1.312	1.500	.050	1.062	4.500	6.624	.664
MS18029-13L-3	.375	1.312	1.500	.050	1.062	3.000	5.124	.664
MS18029-13L-2	.375	1.312	1.500	.050	1.062	1.500	3.624	.664
MS18029-13L-1	.375	1.312	1.500	.050	1.062	.000	2.124	.664



MS18029-3L-4 ASSEMBLY PART NUMBER SHOWN STAMPED ON TOP OF THE COVER
MS18029-13L-4 PART NUMBER STAMPED ON BOTTOM SIDE OF COVER NOT SHOWN

MS18029-1L PLASTIC, LAMINATE ELECTRICAL COVER ASSEMBLY

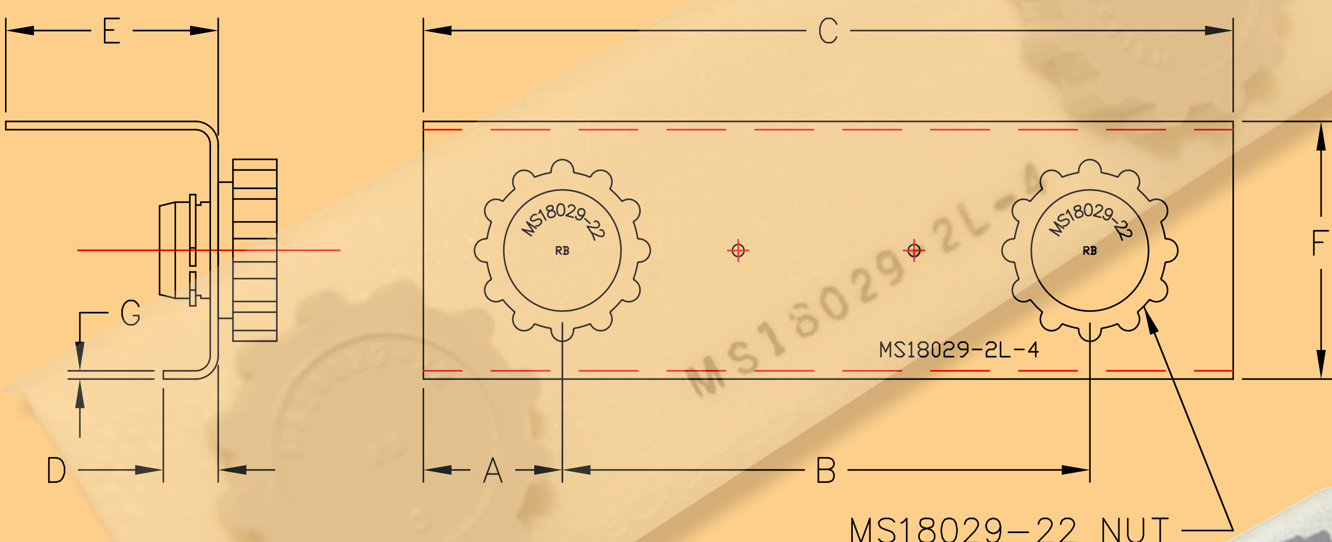
Part Number	End to Cnt of Hole Dim (A)	Nut Cnt to Nut Cnt Dim (B)	Overall Height Dim (D)	Overall Height Dim (E)	Overall Width Dim (F)	Overall Length Dim (C)	Cover Thickness Dim (G)	Cover Part NO.	Snap Ring Part NO.	knob/ nut Part NO.
MS18029-1L-20	.515	11.286	.234	.734	.813	12.316	.034	MS18029-11L-20	MS16624-1040	MS18029-21
MS18029-1L-19	.515	10.692	.234	.734	.813	11.722	.034	MS18029-11L-19	MS16624-1040	MS18029-21
MS18029-1L-18	.515	10.098	.234	.734	.813	11.128	.034	MS18029-11L-18	MS16624-1040	MS18029-21
MS18029-1L-17	.515	9.504	.234	.734	.813	10.543	.034	MS18029-11L-17	MS16624-1040	MS18029-21
MS18029-1L-16	.515	8.910	.234	.734	.813	9.940	.034	MS18029-11L-16	MS16624-1040	MS18029-21
MS18029-1L-15	.515	8.316	.234	.734	.813	9.346	.034	MS18029-11L-15	MS16624-1040	MS18029-21
MS18029-1L-14	.515	7.722	.234	.734	.813	8.752	.034	MS18029-11L-14	MS16624-1040	MS18029-21
MS18029-1L-13	.515	7.128	.234	.734	.813	8.158	.034	MS18029-11L-13	MS16624-1040	MS18029-21
MS18029-1L-12	.515	6.534	.234	.734	.813	7.564	.034	MS18029-11L-12	MS16624-1040	MS18029-21
MS18029-1L-11	.515	5.940	.234	.734	.813	6.970	.034	MS18029-11L-11	MS16624-1040	MS18029-21
MS18029-1L-10	.515	5.346	.234	.734	.813	6.376	.034	MS18029-11L-10	MS16624-1040	MS18029-21
MS18029-1L-9	.515	4.752	.234	.734	.813	5.782	.034	MS18029-11L-9	MS16624-1040	MS18029-21
MS18029-1L-8	.515	4.158	.234	.734	.813	5.188	.034	MS18029-11L-8	MS16624-1040	MS18029-21
MS18029-1L-7	.515	3.564	.234	.734	.813	4.594	.034	MS18029-11L-7	MS16624-1040	MS18029-21
MS18029-1L-6	.515	2.970	.234	.734	.813	4.000	.034	MS18029-11L-6	MS16624-1040	MS18029-21
MS18029-1L-5	.515	2.376	.234	.734	.813	3.406	.034	MS18029-11L-5	MS16624-1040	MS18029-21
MS18029-1L-4	.515	1.782	.234	.734	.813	2.812	.034	MS18029-11L-4	MS16624-1040	MS18029-21
MS18029-1L-3	.515	1.188	.234	.734	.813	2.218	.034	MS18029-11L-3	MS16624-1040	MS18029-21
MS18029-1L-2	.515	.594	.234	.734	.813	1.624	.034	MS18029-11L-2	MS16624-1040	MS18029-21
MS18029-1L-1	.515	.000	.234	.734	.813	1.030	.034	MS18029-11L-1	MS16624-1040	MS18029-21



MS18029-1L-4 SHOWN

MS18029-2L PLASTIC, LAMINATE ELECTRICAL COVER ASSEMBLY

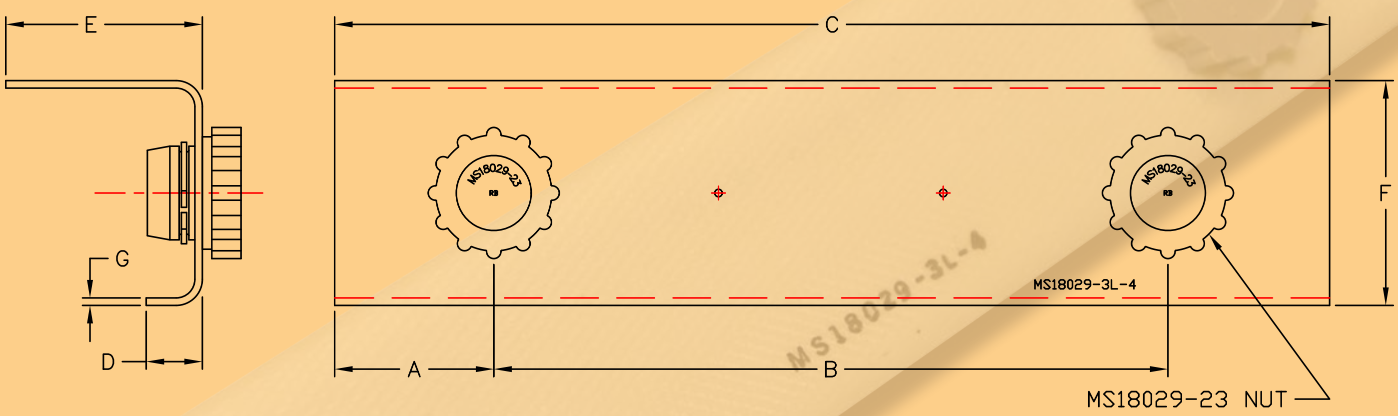
Part Number	End to Cnt of Hole Dim (A)	Nut Cnt to Nut Cnt Dim (B)	Overall Height Dim (D)	Overall Height Dim (E)	Overall Width Dim (F)	Overall Length Dim (C)	Cover Thickness Dim (G)	Cover Part NO.	Snap Ring Part NO.	knob/ nut Part NO.
MS18029-2L-16	.593	11.250	.234	.906	1.063	12.436	.034	MS18029-12L-16	MS16624-1040	MS18029-22
MS18029-2L-15	.593	10.500	.234	.906	1.063	11.686	.034	MS18029-12L-15	MS16624-1040	MS18029-22
MS18029-2L-14	.593	9.750	.234	.906	1.063	10.936	.034	MS18029-12L-14	MS16624-1040	MS18029-22
MS18029-2L-13	.593	9.000	.234	.906	1.063	10.186	.034	MS18029-12L-13	MS16624-1040	MS18029-22
MS18029-2L-12	.593	8.250	.234	.906	1.063	9.436	.034	MS18029-12L-12	MS16624-1040	MS18029-22
MS18029-2L-11	.593	7.500	.234	.906	1.063	8.686	.034	MS18029-12L-11	MS16624-1040	MS18029-22
MS18029-2L-10	.593	6.750	.234	.906	1.063	7.936	.034	MS18029-12L-10	MS16624-1040	MS18029-22
MS18029-2L-9	.593	6.000	.234	.906	1.063	7.186	.034	MS18029-12L-9	MS16624-1040	MS18029-22
MS18029-2L-8	.593	5.250	.234	.906	1.063	6.436	.034	MS18029-12L-8	MS16624-1040	MS18029-22
MS18029-2L-7	.593	4.500	.234	.906	1.063	5.686	.034	MS18029-12L-7	MS16624-1040	MS18029-22
MS18029-2L-6	.593	3.750	.234	.906	1.063	4.936	.034	MS18029-12L-6	MS16624-1040	MS18029-22
MS18029-2L-5	.593	3.000	.234	.906	1.063	4.186	.034	MS18029-12L-5	MS16624-1040	MS18029-22
MS18029-2L-4	.593	2.250	.234	.906	1.063	3.436	.034	MS18029-12L-4	MS16624-1040	MS18029-22
MS18029-2L-3	.593	1.500	.234	.906	1.063	2.686	.034	MS18029-12L-3	MS16624-1040	MS18029-22
MS18029-2L-2	.593	.750	.234	.906	1.063	1.936	.034	MS18029-12L-2	MS16624-1040	MS18029-22
MS18029-2L-1	.593	.000	.234	.906	1.063	1.186	.034	MS18029-12L-1	MS16624-1040	MS18029-22



MS18029-2L-4 SHOWN

MS18029-3L PLASTIC, LAMINATE ELECTRICAL COVER ASSEMBLY

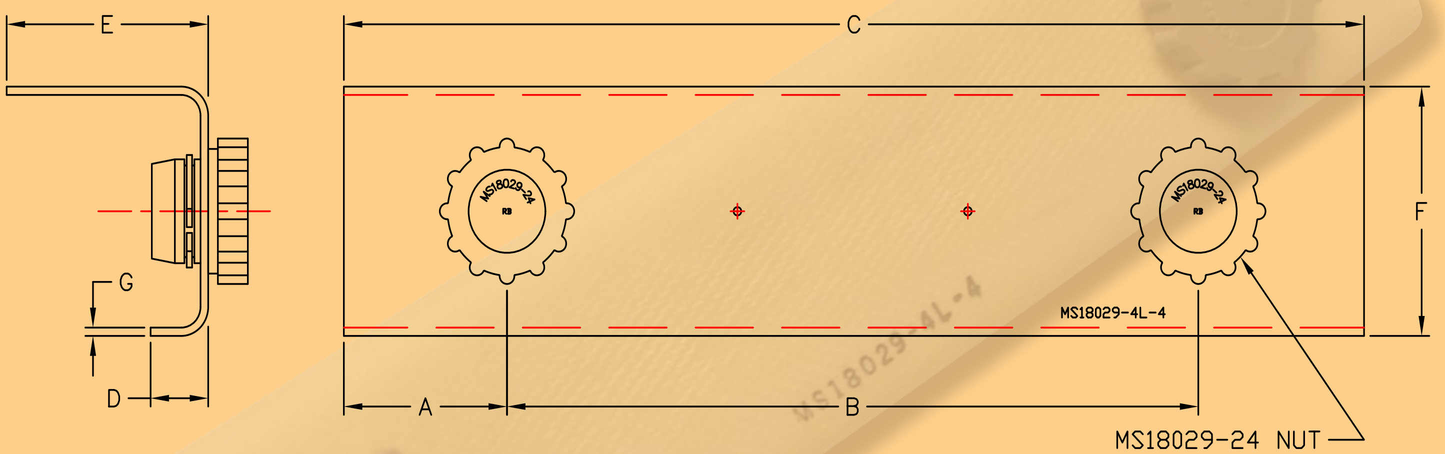
Part Number	End to Cnt of Hole Dim (A)	Nut Cnt to Nut Cnt Dim (B)	Overall Height Dim (D)	Overall Height Dim (E)	Overall Width Dim (F)	Overall Length Dim (C)	Cover Thickness Dim (G)	Cover Part NO.	Snap Ring Part NO.	knob/ nut Part NO.
MS18029-3L-8	1.062	8.500	.375	1.312	1.500	12.624	.050	MS18029-13L-8	MS16624-1062	MS18029-23
MS18029-3L-7	1.062	7.000	.375	1.312	1.500	11.124	.050	MS18029-13L-7	MS16624-1062	MS18029-23
MS18029-3L-6	1.062	6.500	.375	1.312	1.500	9.624	.050	MS18029-13L-6	MS16624-1062	MS18029-23
MS18029-3L-5	1.062	5.000	.375	1.312	1.500	8.125	.050	MS18029-13L-5	MS16624-1062	MS18029-23
MS18029-3L-4	1.062	4.500	.375	1.312	1.500	6.624	.050	MS18029-13L-4	MS16624-1062	MS18029-23
MS18029-3L-3	1.062	3.000	.375	1.312	1.500	5.124	.050	MS18029-13L-3	MS16624-1062	MS18029-23
MS18029-3L-2	1.062	1.500	.375	1.312	1.500	3.624	.050	MS18029-13L-2	MS16624-1062	MS18029-23
MS18029-3L-1	1.062	.000	.375	1.312	1.500	2.124	.050	MS18029-13L-1	MS16624-1062	MS18029-23



MS18029-3L-4 SHOWN

MS18029-4L PLASTIC, LAMINATE ELECTRICAL COVER ASSEMBLY

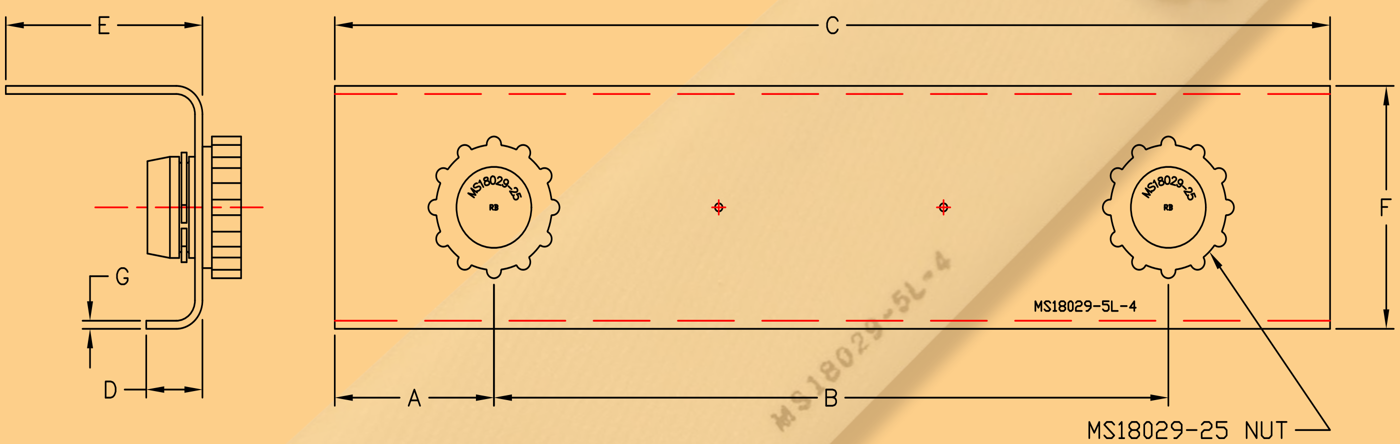
Part Number	End to Cnt of Hole Dim (A)	Nut Cnt to Nut Cnt Dim (B)	Overall Height Dim (D)	Overall Height Dim (E)	Overall Width Dim (F)	Overall Length Dim (C)	Cover Thickness Dim (G)	Cover Part NO.	Snap Ring Part NO.	knob/ nut Part NO.
MS18029-4L-8	1.062	8.500	.375	1.312	1.500	12.624	.050	MS18029-13L-8	MS16624-1062	MS18029-24
MS18029-4L-7	1.062	7.000	.375	1.312	1.500	11.124	.050	MS18029-13L-7	MS16624-1062	MS18029-24
MS18029-4L-6	1.062	6.500	.375	1.312	1.500	9.624	.050	MS18029-13L-6	MS16624-1062	MS18029-24
MS18029-4L-5	1.062	5.000	.375	1.312	1.500	8.125	.050	MS18029-13L-5	MS16624-1062	MS18029-24
MS18029-4L-4	1.062	4.500	.375	1.312	1.500	6.624	.050	MS18029-13L-4	MS16624-1062	MS18029-24
MS18029-4L-3	1.062	3.000	.375	1.312	1.500	5.124	.050	MS18029-13L-3	MS16624-1062	MS18029-24
MS18029-4L-2	1.062	1.500	.375	1.312	1.500	3.624	.050	MS18029-13L-2	MS16624-1062	MS18029-24
MS18029-4L-1	1.062	.000	.375	1.312	1.500	2.124	.050	MS18029-13L-1	MS16624-1062	MS18029-24



MS18029-4L-4 SHOWN

MS18029-5L PLASTIC, LAMINATE ELECTRICAL COVER ASSEMBLY

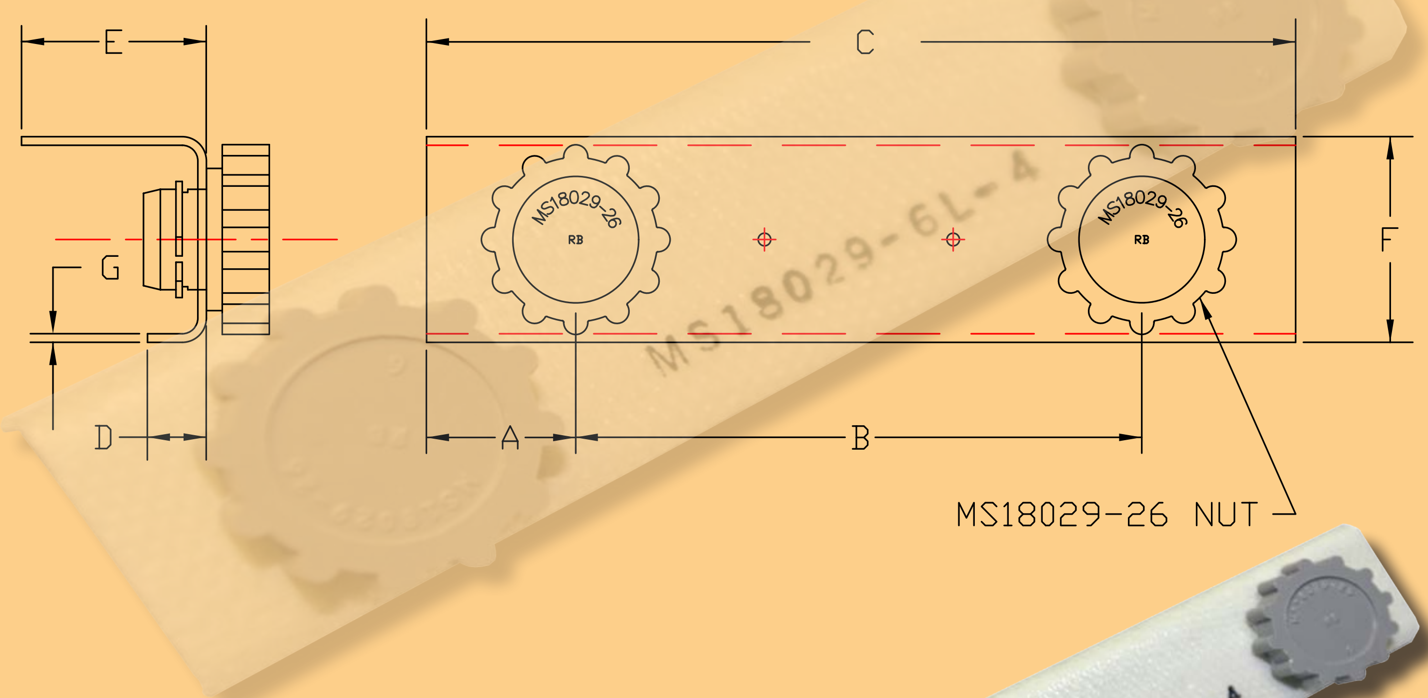
Part Number	End to Cnt of Hole Dim (A)	Nut Cnt to Nut Cnt Dim (B)	Overall Height Dim (D)	Overall Height Dim (E)	Overall Width Dim (F)	Overall Length Dim (C)	Cover Thickness Dim (G)	Cover Part NO.	Snap Ring Part NO.	knob/ nut Part NO.
MS18029-5L-8	1.062	10.50	.375	1.312	1.500	12.624	.050	MS18029-13L-8	MS16624-1062	MS18029-25
MS18029-5L-7	1.062	9.000	.375	1.312	1.500	11.124	.050	MS18029-13L-7	MS16624-1062	MS18029-25
MS18029-5L-6	1.062	7.500	.375	1.312	1.500	9.624	.050	MS18029-13L-6	MS16624-1062	MS18029-25
MS18029-5L-5	1.062	6.000	.375	1.312	1.500	8.125	.050	MS18029-13L-5	MS16624-1062	MS18029-25
MS18029-5L-4	1.062	4.500	.375	1.312	1.500	6.624	.050	MS18029-13L-4	MS16624-1062	MS18029-25
MS18029-5L-3	1.062	3.000	.375	1.312	1.500	5.124	.050	MS18029-13L-3	MS16624-1062	MS18029-25
MS18029-5L-2	1.062	1.500	.375	1.312	1.500	3.624	.050	MS18029-13L-2	MS16624-1062	MS18029-25
MS18029-5L-1	1.062	.000	.375	1.312	1.500	2.124	.050	MS18029-13L-1	MS16624-1062	MS18029-25



MS18029-5L-4 SHOWN

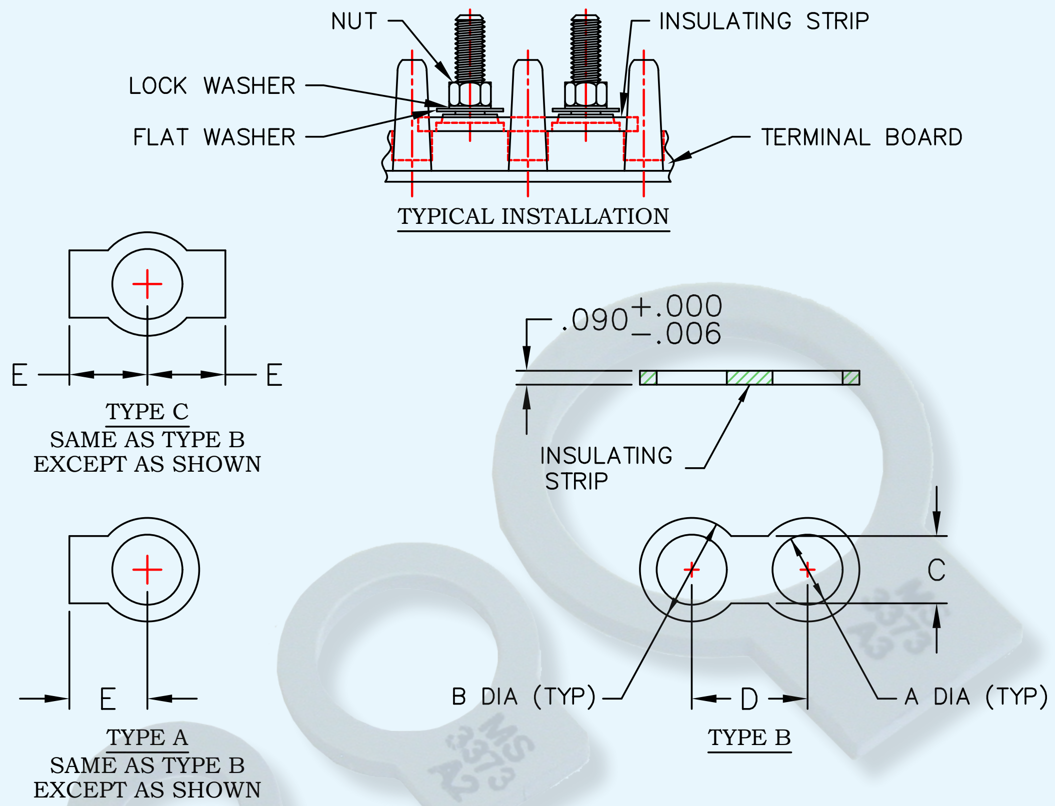
MS18029-6L PLASTIC, LAMINATE ELECTRICAL COVER ASSEMBLY

Part Number	End to Cnt of Hole Dim (A)	Nut Cnt to Nut Cnt Dim (B)	Overall Height Dim (D)	Overall Height Dim (E)	Overall Width Dim (F)	Overall Length Dim (C)	Cover Thickness Dim (G)	Cover Part NO.	Snap Ring Part NO.	knob/ nut Part NO.
MS18029-6L-16	.593	11.250	.234	.734	.813	12.436	.034	MS18029-14L-16	MS16624-1040	MS18029-26
MS18029-6L-15	.593	10.500	.234	.734	.813	11.686	.034	MS18029-14L-15	MS16624-1040	MS18029-26
MS18029-6L-14	.593	9.750	.234	.734	.813	10.936	.034	MS18029-14L-14	MS16624-1040	MS18029-26
MS18029-6L-13	.593	9.000	.234	.734	.813	10.186	.034	MS18029-14L-13	MS16624-1040	MS18029-26
MS18029-6L-12	.593	8.250	.234	.734	.813	9.436	.034	MS18029-14L-12	MS16624-1040	MS18029-26
MS18029-6L-11	.593	7.500	.234	.734	.813	8.686	.034	MS18029-14L-11	MS16624-1040	MS18029-26
MS18029-6L-10	.593	6.750	.234	.734	.813	7.936	.034	MS18029-14L-10	MS16624-1040	MS18029-26
MS18029-6L-9	.593	6.000	.234	.734	.813	7.186	.034	MS18029-14L-9	MS16624-1040	MS18029-26
MS18029-6L-8	.593	5.250	.234	.734	.813	6.436	.034	MS18029-14L-8	MS16624-1040	MS18029-26
MS18029-6L-7	.593	4.500	.234	.734	.813	5.686	.034	MS18029-14L-7	MS16624-1040	MS18029-26
MS18029-6L-6	.593	3.750	.234	.734	.813	4.936	.034	MS18029-14L-6	MS16624-1040	MS18029-26
MS18029-6L-5	.593	3.000	.234	.734	.813	4.186	.034	MS18029-14L-5	MS16624-1040	MS18029-26
MS18029-6L-4	.593	2.250	.234	.734	.813	3.436	.034	MS18029-14L-4	MS16624-1040	MS18029-26
MS18029-6L-3	.593	1.500	.234	.734	.813	2.686	.034	MS18029-14L-3	MS16624-1040	MS18029-26
MS18029-6L-2	.593	.750	.234	.734	.813	1.936	.034	MS18029-14L-2	MS16624-1040	MS18029-26
MS18029-6L-1	.593	.000	.234	.734	.813	1.186	.034	MS18029-14L-1	MS16624-1040	MS18029-26



MS18029-6L-4 SHOWN

MS3373 STRIP, MOUNTING, NUT INSULATING FOR MS27212 TERMINAL BOARDS



DASH NO.	A DIA +.010 −.000	B DIA	C ±.005	D	E	USED ON MS27212
−A1	.329	.540	.310	−−	.427	−1
−B1				.594	−−	
−C1				−−	.427	
−A2	.454	.671	.436	−−	.505	−2
−B2				.750	−−	
−C2				−−	.505	
−A3	.892	1.141	.562	−−	.909	−3, −4, −5
−B3				1.500	−−	
−C3				−−	.909	
−A4	.405	.610	.375	−−	.505	−6
−B4				.750	−−	
−C4				−−	.505	

NOTES:
1. MATERIAL INSULATOR STRIP: DIALLYL PHTHALATE PER MIL−P−19833, TYPE DDI−30F.
2. DIMENSIONS IN INCHES, UNLESS OTHERWISE SPECIFIED. TOLERANCES: DECIMALS ±.010
3. REMOVE ALL BURRS AND SHARP EDGES. MOLD MARKS AND NORMAL VENT FLASH ARE PERMISSIBLE.
4. IDENTIFICATION MARKING: EACH STRIP SHALL BE MARKED WITH THE MS PART NUMBER.
5. EXAMPLE OF PART NO. MS3373−B1 (DUAL HOLE TYPE B PART, SIZE 1)

MS3373 TYPE A SHOWN

MS3373 TYPE B SHOWN

MS3373 TYPE C SHOWN

MS25226 LINK, TERMINAL, CONNECTING FOR MS27212 TERMINAL BOARDS

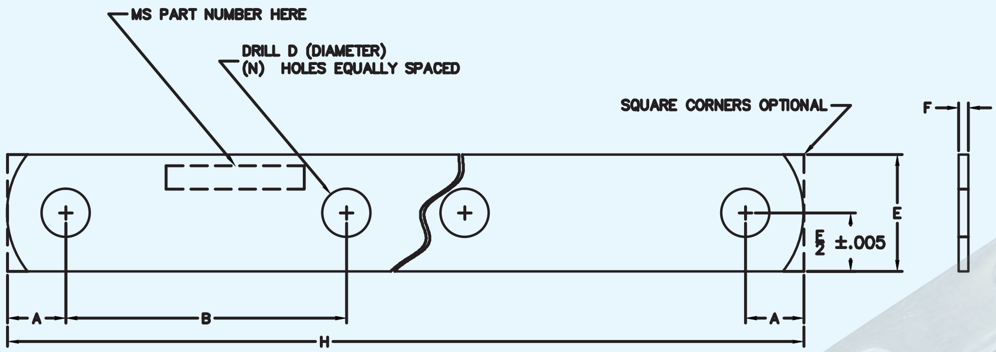


TABLE I - LINK TERMINAL, CONNECTING DETAILS

DASH NO. (NOTE 3)				STUD SIZE	A ±.010	B (REQUIREMENT 6)	D ±.005	E ±.010	F ±.003	G ±.03	H REF	MAX CAPACITY IN AMPS
CADMIUM PLATE	SILVER PLATE (NOTE 7)	NICKEL PLATE	TIN PLATE									
-2-(N)	-2S-(N)	-2N-(N)	-2T-(N)	NO. 6	.219	.594	.147	.250	.032	.19	0.594(N-1) + .438	40
-4-(N)	-4S-(N)	-4N-(N)	-4T-(N)	NO. 10	.219	.750	.201	.438	.051	.31	0.75(N-1) + .438	70
-6-(N)	-6S-(N)	-6N-(N)	-6T-(N)	1/4	.312	1.500	.257	.625	.051	.50	1.5(N-1) + .625	90
-8-(N)	-8S-(N)	-8N-(N)	-8T-(N)	5/16, 3/8	.312	1.500	.386	.625	.051	.50	1.5(N-1) + .625	90
-10-(N)	-10S-(N)	-10N-(N)	-10T-(N)	NO. 8	.219	.750	.174	.350	.051	.31	0.75(N-1) + .438	50

REQUIREMENTS:

1. MATERIAL : COPPER: BARS, RODS AND SHAPES, IN ACCORDANCE WITH ASTM-B133 OR ASTM-B272.
   COPPER: SHEETS, STRIPS, PLATES AND ROLLED BARS IN ACCORDANCE WITH ASTM-B152.
2. FINISH: CADMIUM PLATE, SILVER PLATE, NICKEL PLATE OR TIN PLATE.
   1/ a. CADMIUM PLATE, IN ACCORDANCE WITH QQ-P-416, CLASS 3, TYPE II, FOR MAXIMUM TEMPERATURE OF 450°F. NOT TO BE USED IN CONTACT WITH TITANIUM OR IN VACUUM APPLICATIONS INCLUDING OUTER SPACE.
   b. SILVER PLATE, IN ACCORDANCE WITH QQ-S-365, MINIMUM THICKNESS .0002 INCH. NOT TO BE USED IN CONTACT WITH TITANIUM.
   c. NICKEL PLATE, IN ACCORDANCE WITH QQ-N-290, TYPE V, MINIMUM THICKNESS .0005 INCH FOR EXTERIOR APPLICATION AND TYPE VII MINIMUM THICKNESS .0001 INCH FOR INTERNAL APPLICATION.
3. PART OR IDENTIFYING NUMBER (PIN).
4. IDENTIFICATION MARKING - EACH PART SHALL BE PERMANENTLY MARKED WITH THE PART NUMBER AS SHOWN ABOVE. THE LAST DIGIT FOR THE PART NUMBER FOR THE NUMBER OF HOLES IS OPTIONAL.
5. DIMENSIONS ARE IN INCHES, UNLESS OTHERWISE SPECIFIED, TOLERANCES: DECIMALS ±.010.
6. TOLERANCE BETWEEN ANY HOLES OF THE BUS (B DIMENSION) SHALL BE ±.010 INCH (NONCUMULATIVE).
7. THE CUMULATIVE TOLERANCE BETWEEN THE TWO END MOUNTING HOLES SHALL BE A MAXIMUM OF .003 INCH PER INCH OF LENGTH.

1/ CADMIUM PLATED TERMINALS LINKS ARE INACTIVE FOR NEW DESIGN.

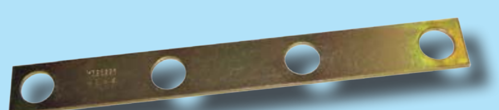
EXAMPLE OF PIN: MS25226-4S-3

MS25226-4S-3

- 3 — BUS WITH 3 HOLES FOR USE WITH TERMINAL BLOCK ASSEMBLY INCORPORATING NUMBER 10 STUDS
- S — FINISH: NO LETTER — CADMIUM PLATE; S — SILVER PLATE; N — NICKEL PLATE
- 4 — DASH NUMBER, TABLE I
- MS25226 — BASIC PART NUMBER

NOTES:

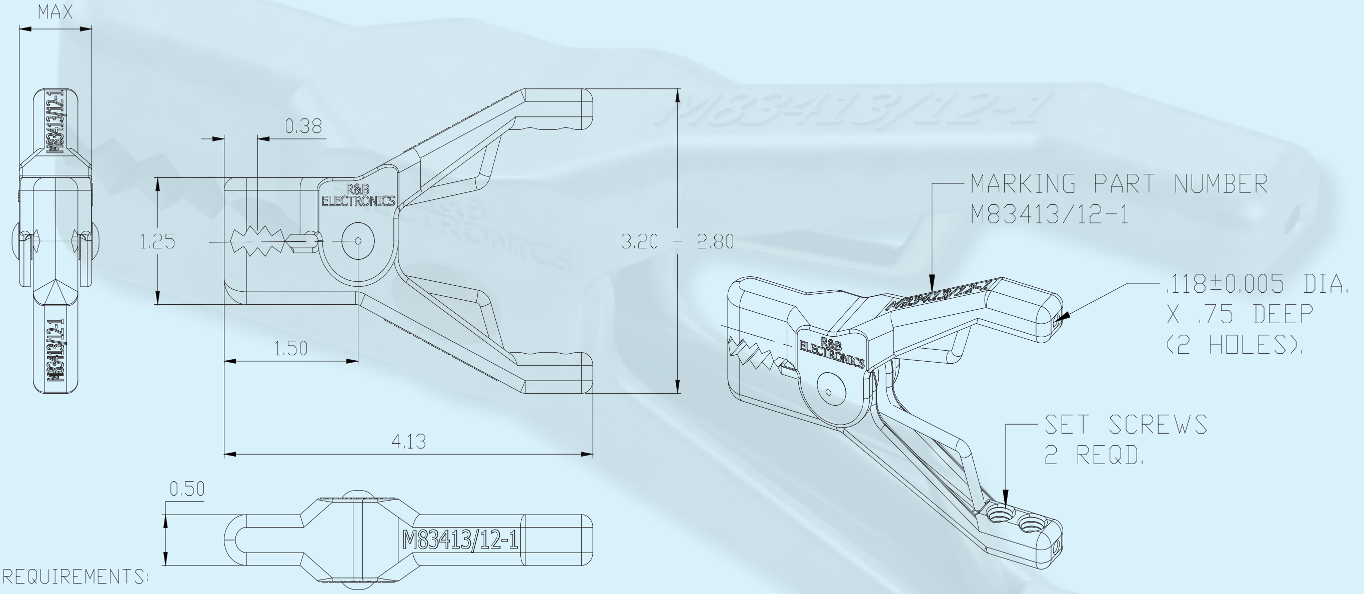
1. (N) INDICATES NUMBER OF HOLES IN BUS.
2. SILVER PLATED PARTS ARE NOT TO BE USED FOR AIR FORCE ACQUISITION.
3. FOR TERMINAL BLOCK ASSEMBLY, USE MS27212.
4. PART NUMBER MS25226-2-(N) THROUGH -8-(N), REPLACE AND ARE INTERCHANGEABLE WITH AN3433-2-(N) THROUGH AN3433-8-(N).
5. TIN PLATE IS NOT OFFERED AT THIS TIME.



MS25226-8-4 SHOWN

M83413/12-1 ELECTRICAL AIRCRAFT GROUNDING CLAMP

AIRCRAFT GROUNDING CLAMP CONNECTOR FOR TYPES I AND III
GROUNDING ASSEMBLIES, STAINLESS STEEL CLIP, ELECTRICAL



REQUIREMENTS:

MATERIAL

HANDLE: STAINLESS STEEL IN ACCORDANCE WITH SAE-AMS-5355 OR SAE-AMS-5343, GRADE 17-4PH

CLAMP CONNECTOR RESISTANCE: SHALL NOT EXCEED 500 MILLI-OHMS.

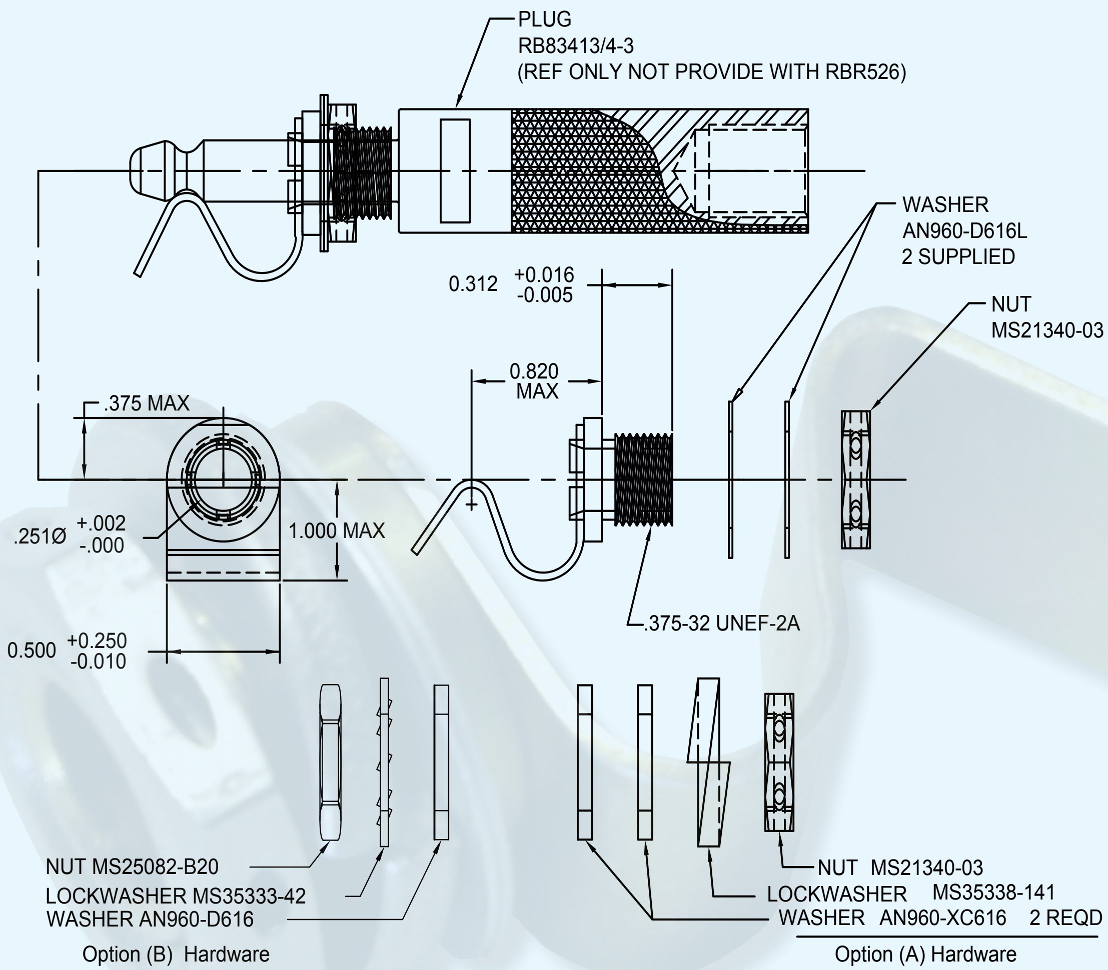
SALT SPRAY: TEST PROCEDURE NUMBER 26, EIA-364 500 HOURS.

PART OR IDENTIFYING NUMBER (PIN) M83413/12-1

NSN 5999-01-605-8107

M83413/12-1 SHOWN

RB9526 ELECTRICAL, AIRCRAFT GROUNDING RECEPTACLE



NOTES:

1. Dimensions are in inches.

REQUIREMENTS:

Material: Sleeve: Brass Per QQ-B-613, Contact: Phosphor Bronze Per QQ-B-750, composition a, Spring Temper.

Finish: Cadmium plate per QQ-p-416, type II, class 2, or aluminum coating or plating.

Detent action shall be provided for the mating plug.

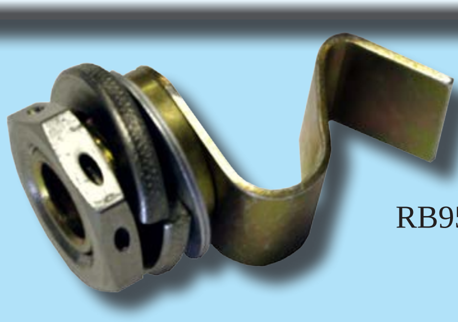
Mating Plugs: RB83413/4-1, M83413/4-1, RB3493-1, and MS3493-1.

Similar to part number M83413/5-1 in material and dimensional specifications only.

RB9526 Standard Assembly shipped with the following component parts:
(2) AN960-D616L, AND (1) MS21340-03.

RB9526 Option (A) assembly shipped with the following component parts:
(2) AN960-XC616, (1) MS35338-141 AND (1) MS21340-03.

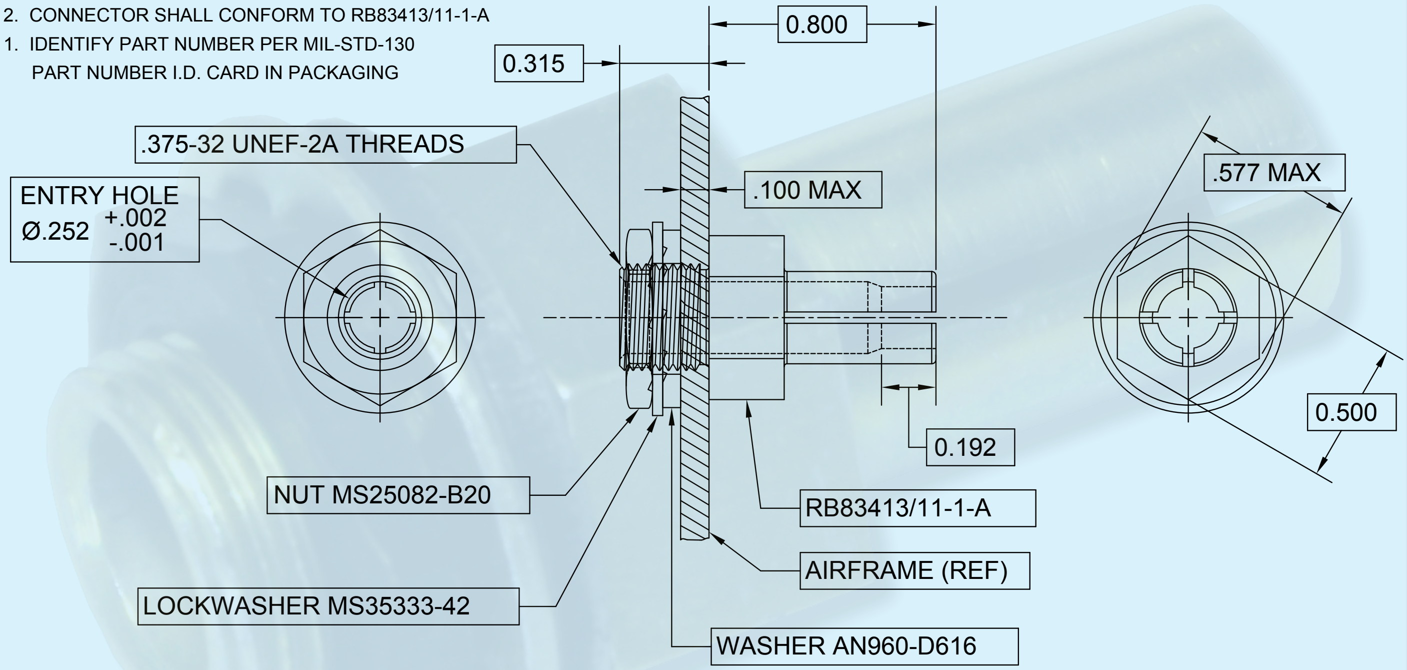
RB9526 Option (B) assembly shipped with the following component parts:
(1) AN960-D616, (1) MS35333-42 AND (1) MS25082-B20.



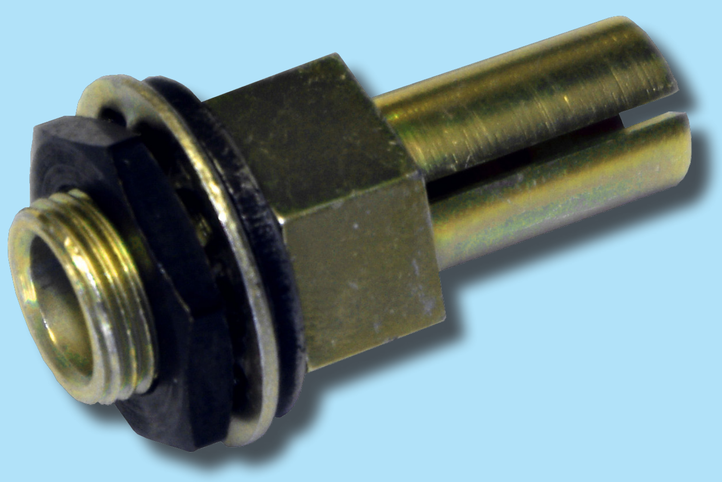
RB9526 OPTION (A) SHOWN

RB83413-11-1 ELECTRICAL AIRCRAFT GROUNDING RECEPTACLE

NOTES:
GROUNDING RECEPTACLE/ INSERT DETENT
2. CONNECTOR SHALL CONFORM TO RB83413/11-1-A
1. IDENTIFY PART NUMBER PER MIL-STD-130
PART NUMBER I.D. CARD IN PACKAGING

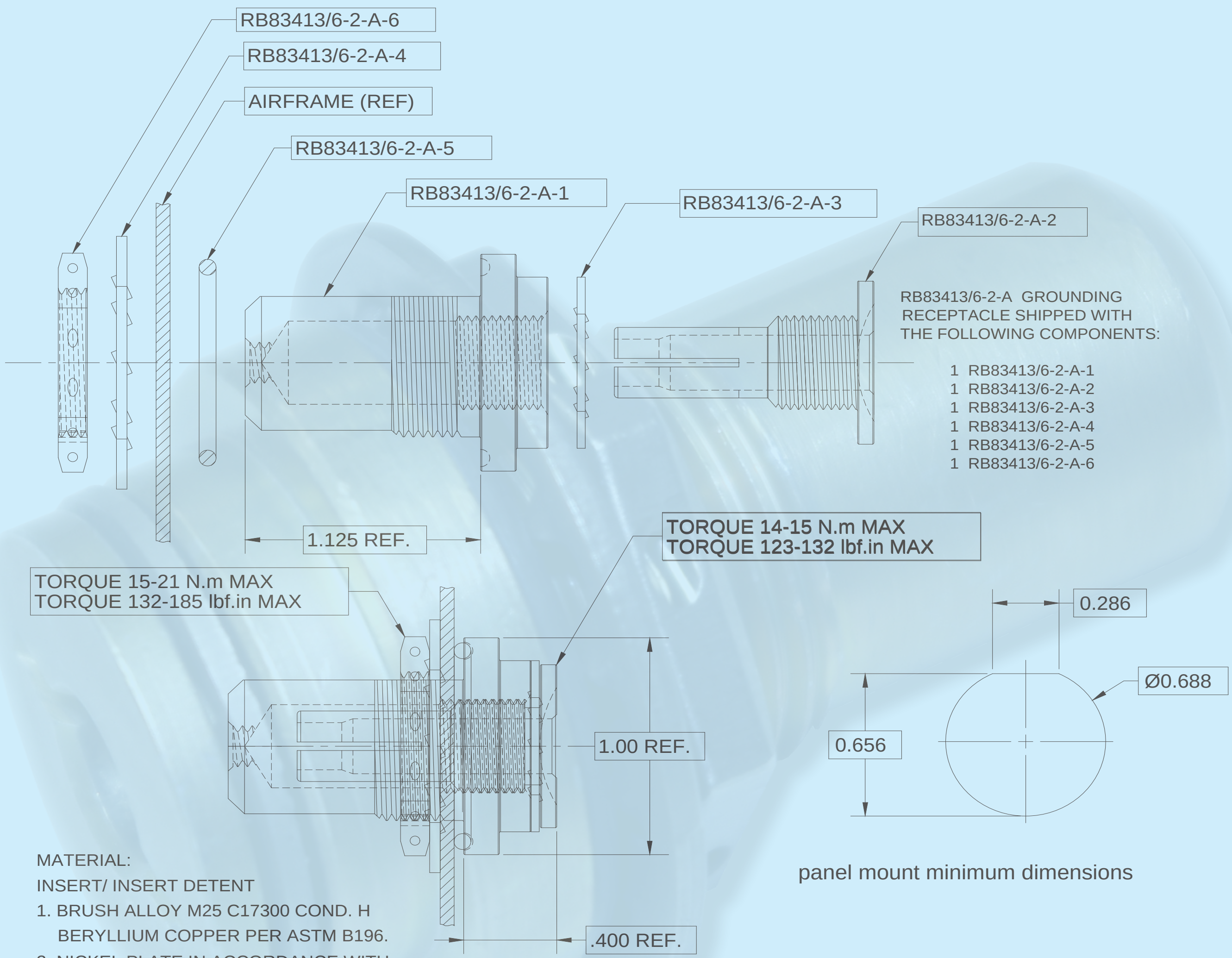


REQUIREMENTS:
MATERIAL:
GROUNDING RECEPTACLE/ INSERT DETENT
1. BRUSH ALLOY M25 C17300
BERYLLIUM COPPER PER ASTM B196.
2. CAD. PLATE PER QQ-P-416, TYPE 2, CLASS 2.
3. INSERT/ DETENT COMPATIBLE WITH:
RB3493-1, RB3493-4, RB83413/4-3
MS3493-1, MS3493-4, AND M83413/4-1



RB83413-11-1 SHOWN

RB83413-6-2-A SEALED ELECTRICAL AIRCRAFT GROUNDING RECEPTACLE



MATERIAL:

INSERT/ INSERT DETENT

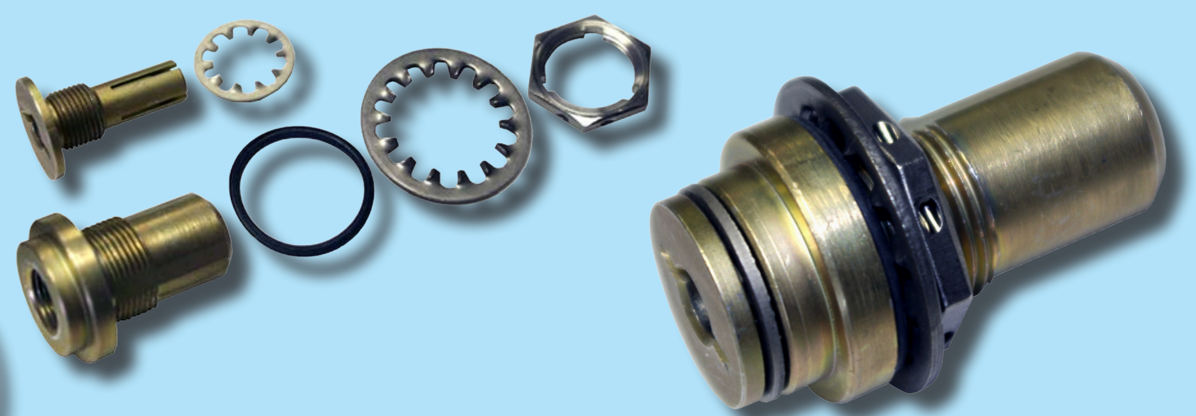
1. BRUSH ALLOY M25 C17300 COND. H BERYLLIUM COPPER PER ASTM B196.
2. NICKEL PLATE IN ACCORDANCE WITH ASTM B733 TYPE III CLASS II.

GROUNDING RECEPTACLE HOUSING TYPE A

1. STAINLESS STEEL IN ACCORDANCE WITH: SAE-AMS-S-7720 OR MIL-S-7720, 302 SERIES COMPOSITION, CONDITION A, PASSIVATED IN IN ACCORDANCE WITH ASTM-A967 OR SAE-AMS-QQ-P-35.

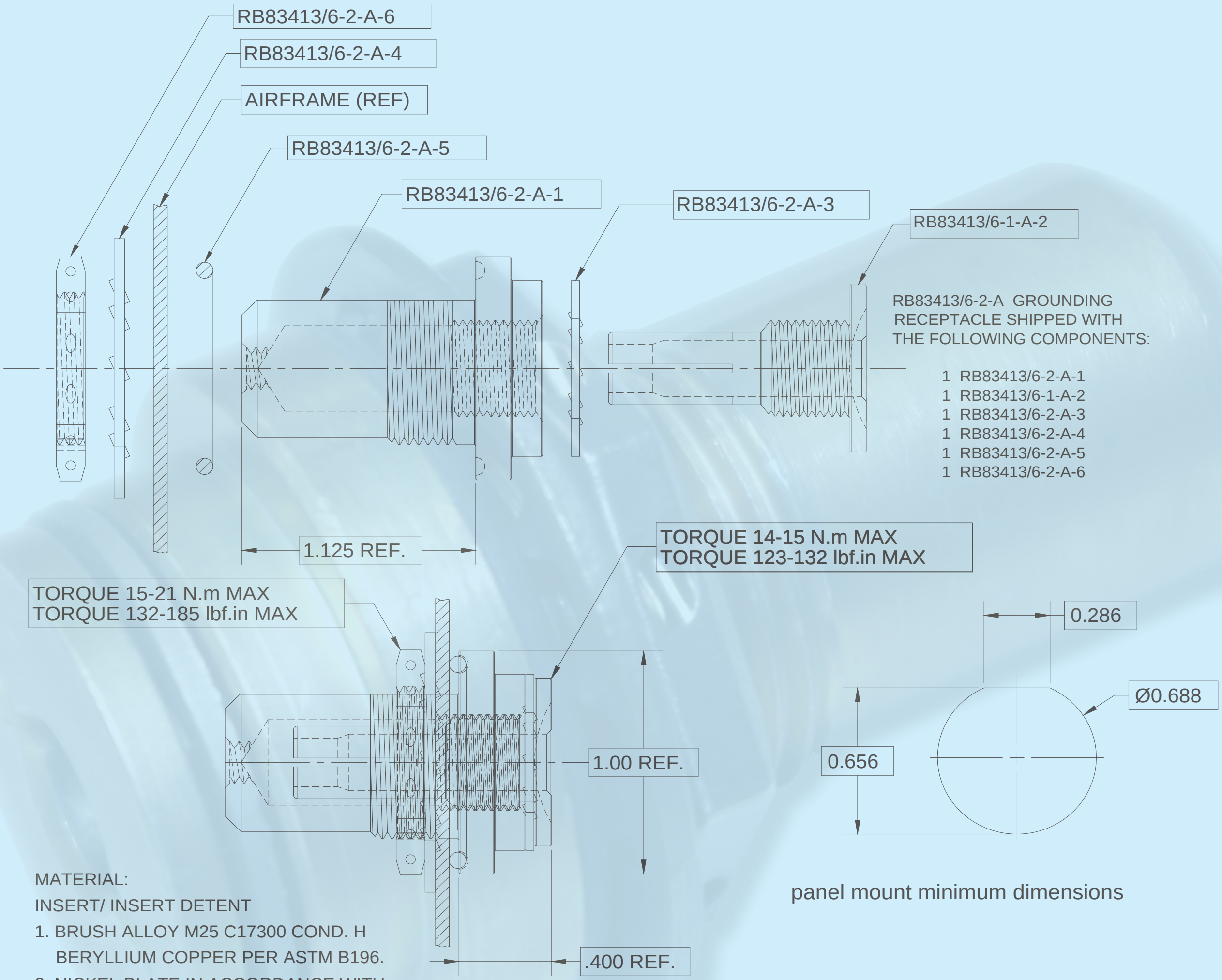
NOTES:
1. UNLESS OTHERWISE SPECIFIED, DIMENSIONS IN INCHES.
2. DETENT ACTION SHALL BE PROVIDED FOR THE MATING PLUG.
3. CONTACT RESISTANCE: SHALL NOT EXCEED 5.0 MILLIOHMS.

INSERT/ DETENT COMPATIBLE WITH:
RB3493-1, RB3493-4, M83413/4-3
MS3493-1, MS3493-4, AND M83413/4-1.



RB83413-6-2-A SHOWN

RB83413-6-1-A SEALED ELECTRICAL AIRCRAFT GROUNDING RECEPTACLE



RB83413/6-2-A GROUNDING RECEPTACLE SHIPPED WITH THE FOLLOWING COMPONENTS:

- 1 RB83413/6-2-A-1
- 1 RB83413/6-1-A-2
- 1 RB83413/6-2-A-3
- 1 RB83413/6-2-A-4
- 1 RB83413/6-2-A-5
- 1 RB83413/6-2-A-6

panel mount minimum dimensions

MATERIAL:

INSERT/ INSERT DETENT

1. BRUSH ALLOY M25 C17300 COND. H BERYLLIUM COPPER PER ASTM B196.
2. NICKEL PLATE IN ACCORDANCE WITH ASTM B733 TYPE III CLASS II.

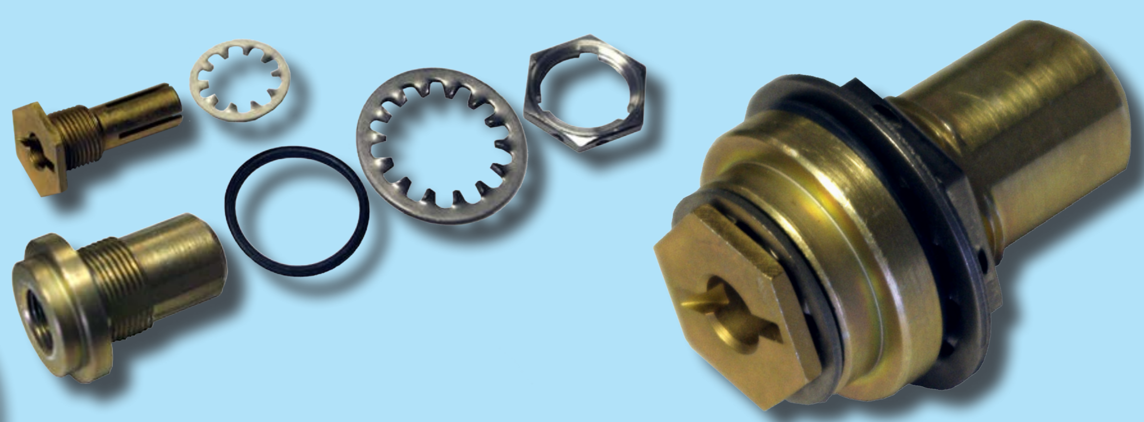
GROUNDING RECEPTACLE HOUSING TYPE A

1. STAINLESS STEEL IN ACCORDANCE WITH: SAE-AMS-S-7720 OR MIL-S-7720, 302 SERIES COMPOSITION, CONDITION A, PASSIVATED IN IN ACCORDANCE WITH ASTM-A967 OR SAE-AMS-QQ-P-35.

NOTES:

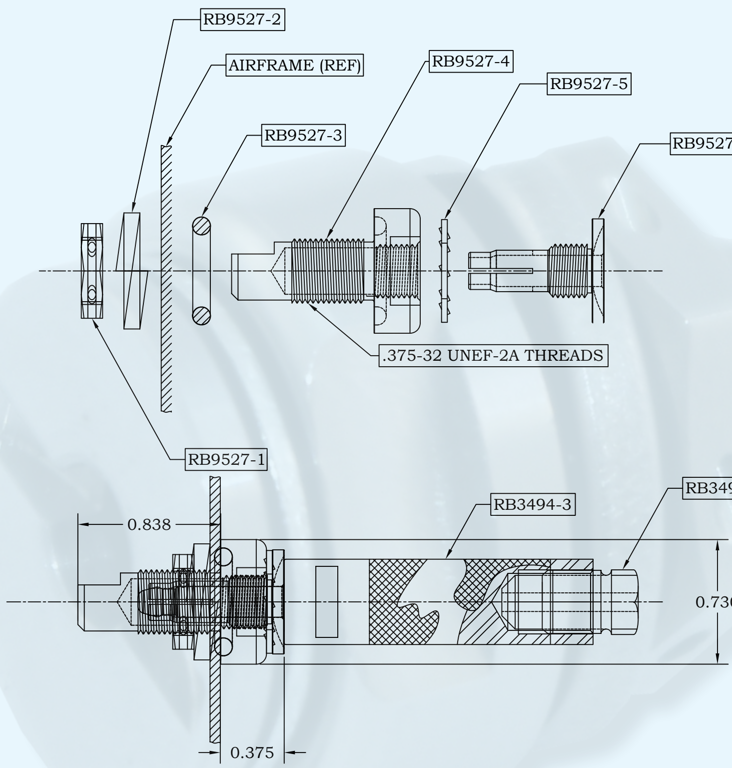
1. UNLESS OTHERWISE SPECIFIED, DIMENSIONS IN INCHES.
2. DETENT ACTION SHALL BE PROVIDED FOR THE MATING PLUG.
3. CONTACT RESISTANCE: SHALL NOT EXCEED 5.0 MILLIOHMS.

INSERT/ DETENT COMPATIBLE WITH:
RB3493-1, RB3493-4, M83413/4-3
MS3493-1, MS3493-4, AND M83413/4-1.



RB83413-6-1-A SHOWN

RB9527-7 SEALED ELECTRICAL AIRCRAFT GROUNDING RECEPTACLE



CONTACT–RECEPTACLE GROUNDING ASSY PART NUMBER: RB9527–7

REQUIREMENTS:

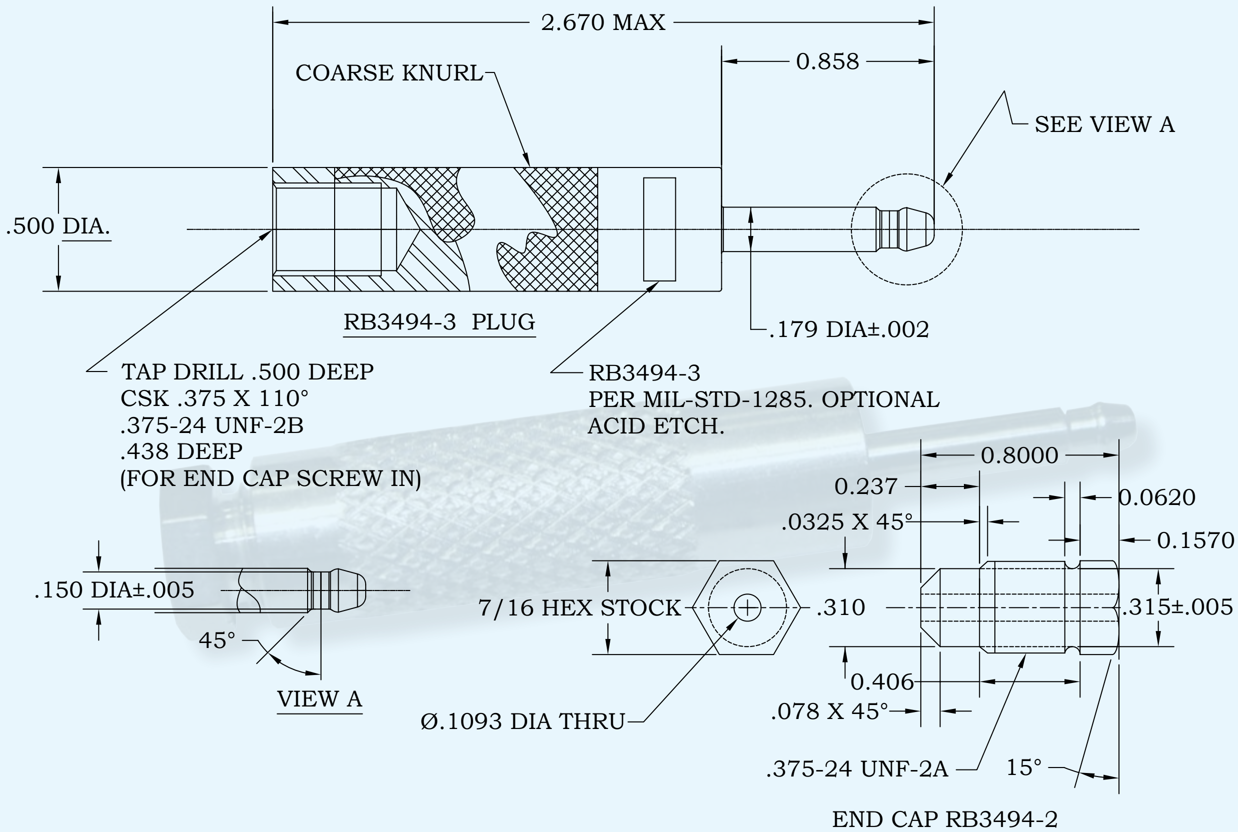
1. SEALED GROUNDING RECEPTACLE FOR REPLACEMENT OF NON SEALED 3/8" DIA. MOUNT HOLE GROUNDING RECEPTACLES (EXAMPLE M83413/5–1).

MATERIAL:

1. INSERT/ DETENT BRUSH ALLOY M25 C17300 COND. H, BERYLLIUM COPPER PER ASTM B196. FINISH CAD. PLATE PER QQ–P–416, TYPE 2, CLASS 2.
2. GROUNDING RECEPTACLE HOUSING TYPE A, STAINLESS STEEL IN ACCORDANCE WITH: SAE–AMS–S–7720, 302 or 316 SERIES COMPOSITION, CONDITION A , PASSIVATED IN ACCORDANCE WITH ASTM–A967 OR SAE–AMS–QQ–P–35. FINISH: CADMIUM PLATE IN ACCORDANCE WITH SAE–QQ–P–416, TYPE II, CLASS 2, OR ALUMINUM COATING PLATING, OR ZINC IN ACCORDANCE WITH ASTM–B633.
3. INSERT/ DETENT COMPATIBLE WITH: RB3494–1 GROUNDING PLUG & RB3494–5 GROUNDING PLUG AND ADAPTER.
4. RB9527–7 SHIPPED WITH THE FOLLOWING COMPONENTS: RB9527–1, RB9527–2, RB9527–3, RB9527–4, RB9527–5, AND RB9527–6.

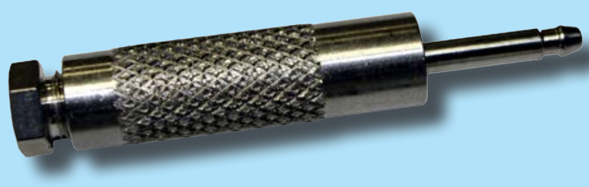
RB9527-7 REV A SHOWN

RB3494-1 ELECTRICAL AIRCRAFT GROUNDING PLUG



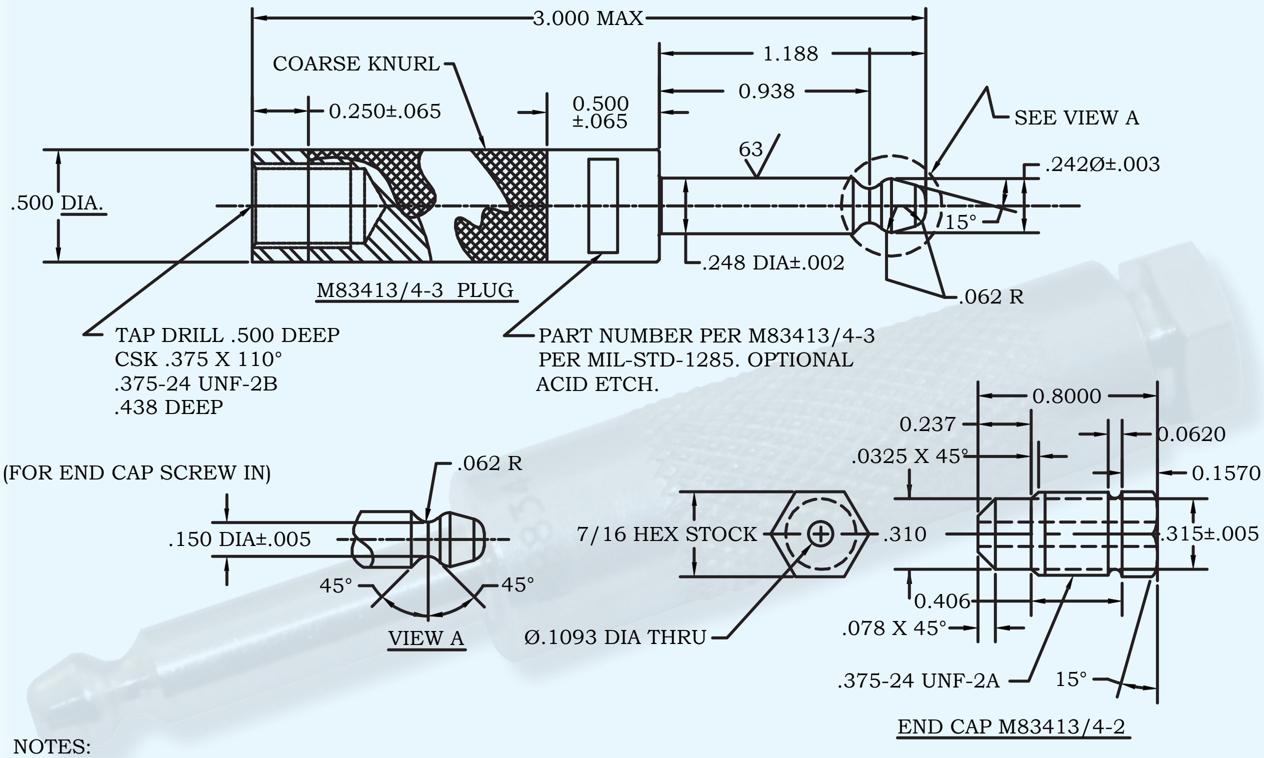
NOTES:
1. Dimensions are in inches.
2. This plug will be used with a receptacle having a minimum bore diameter of .182 (4.62 mm) and a maximum bore diameter of .184 (4.67 mm).

REQUIREMENTS:
1. Material: Stainless steel per MIL-S-7720, 302 OR 316 composition, condition A, Passivated per QQ-P-35 for plugs and caps.
2. Contact resistance: .005 ohm maximum.
3. Mating receptacle: Per RB9527-0.
4. Part number: Apply permanently by stamping, etching, embossing or other means.
5. Part number marking is not required to be marked on RB3494-2 end caps.
6. Plugs shall be supplied with the end caps screwed in the mating end.
7. RB3494-1 Assembly shipped with the following component parts: (1) RB3494-3 plug and (1) RB3494-2 cap assembly.



RB3494-1 REV ORG SHOWN

M83413/4-1 ELECTRICAL AIRCRAFT GROUNDING PLUG
FOR TYPE I AND II GROUNDING ASSEMBLIES

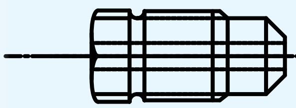


NOTES:
1. Dimensions are in inches.
2. This plug will be used with a receptacle having a minimum bore diameter of .251 (6.38 mm) and a maximum bore diameter of .253 (6.43 mm).
3. The M83413/4-3 plug is functionally interchangeable with RB83413/4-3 and RB3493-5.

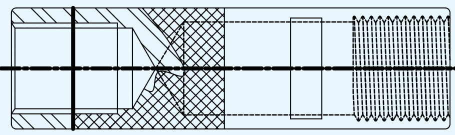
REQUIREMENTS:
1. Material: Stainless steel per MIL-S-7720, 302 OR 316 composition, condition A, Passivated per QQ-P-35 for plugs and caps.
2. Contact resistance: .005 ohm maximum.
3. Mating receptacle: Per RB9526, RB83413/11-1, RB83413/6-1A, RB83413/6-1A, M83413/5-1, M83413/11-1, M83413/6-2A, M83413/6-1A, MS90298-2, M83413/6-2B, M83413/6-1B.
4. Part number: Apply permanently by stamping, etching, embossing or other means. Part number marking is not required to be marked on M83413/4-2 end caps.
5. M83413/4-1 Assembly shipped with the following component parts: (1) M83413/4-3 plug and (1) M83413/4-2 cap assembly.

M83413/4-1 SHOWN

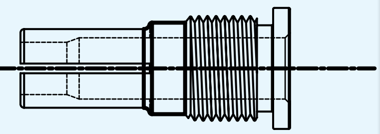
RB83413-4-6 ELECTRICAL AIRCRAFT GROUNDING ADAPTER EXTENSION
FOR TYPE I AND II GROUNDING ASSEMBLIES



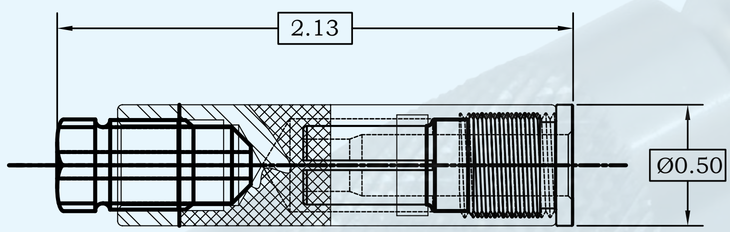
END CAP RB83413/4-2



DETENT HOUSING RB3494-4



INSERT/ DETENT RB83413/4-5



GROUNDING RECEPTACLE ASSY RB3494-6

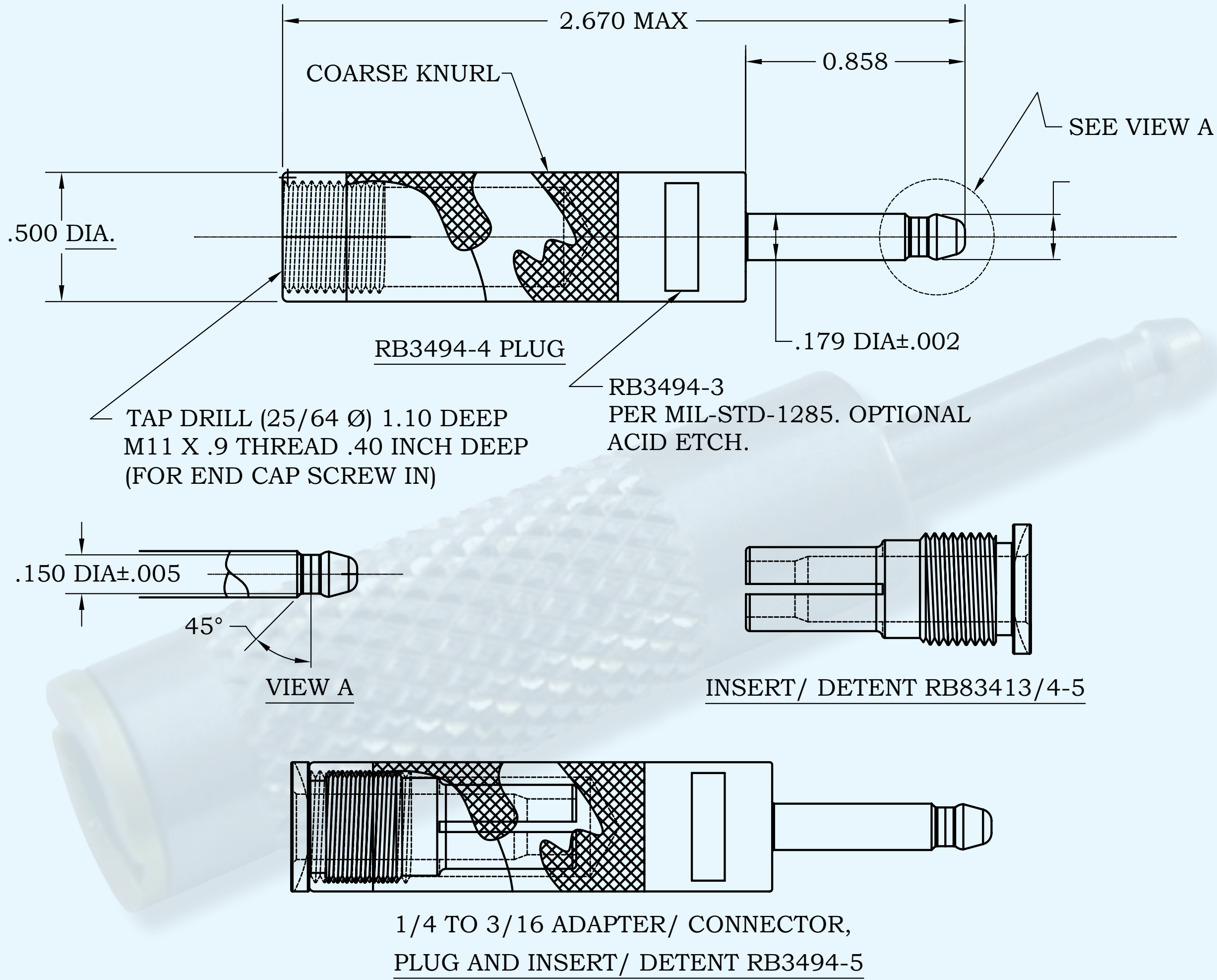
NOTES:
1. Dimensions are in inches.
2. P-STATIC Grounding cable extention adapter.
3. compatable with: 7X7 wire in accordance with MIL-DTL-83420, type II, Composition B, grounding controll cable.

REQUIREMENTS:

Material:
1. Housing Stainless steel per MIL-S-7720, 300 series composition, condition A, Passivated per QQ-P-35 for plugs and caps.
2. Insert/ Detent brush alloy M25 C17300 Beryllium Copper Per ASTM B196.
3. Cad. plate per QQ-P-416, type 2, class 2.
4. Grounding receptacle adapter RB83413/4-6 is compatable with, grounding plugs, RB3493-1, RB3493-4, RB83413/4-3, MS3493-1, MS3493-4, AND M83413/4-1.

RB83413-4-6 SHOWN

RB3494-5 ELECTRICAL AIRCRAFT GROUNDING PLUG & ADAPTER
FOR TYPE I AND II GROUNDING ASSEMBLIES

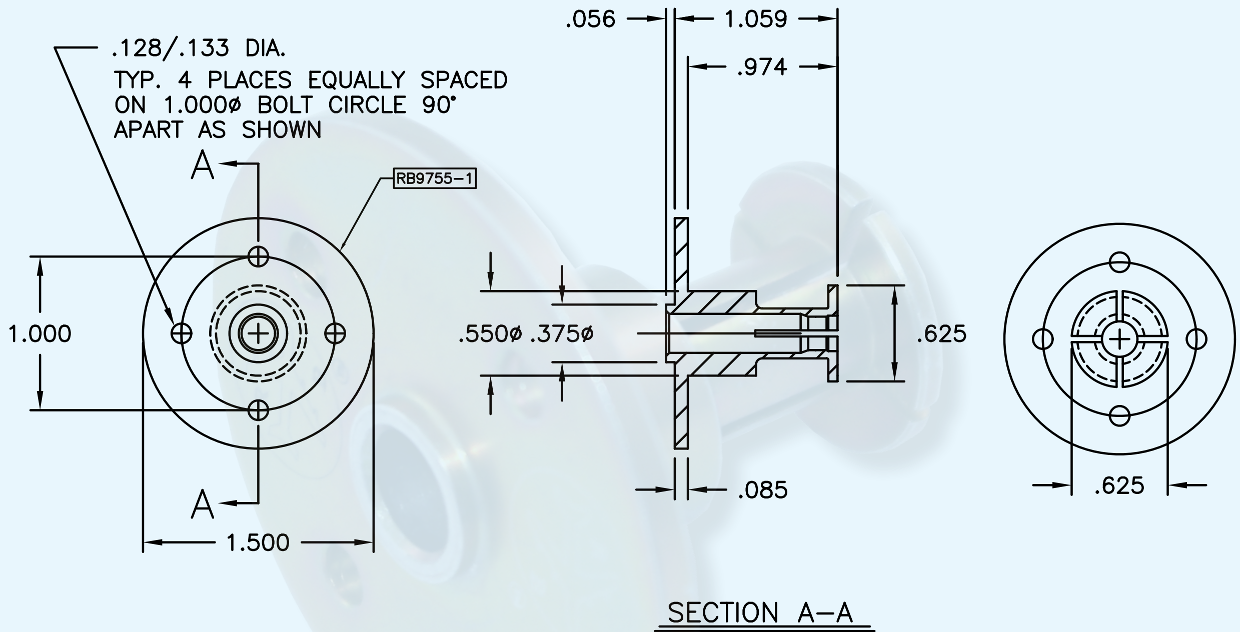


NOTES:
1. Dimensions are in inches.
2. This plug will be used with a receptacle having a minimum bore diameter of .182 (4.62 mm) and a maximum bore diameter of .184 (4.67 mm).

REQUIREMENTS:
1. Material: Stainless steel per MIL-S-7720, 300 series composition, condition A, Passivated per QQ-P-35 for plugs and caps.
2. Contact resistance: .005 ohm maximum.
3. Mating receptacle: Per RB9527-0.
4. Part number: Apply permanently by stamping, etching, embossing or other means.
5. Part number marking is not required to be marked on RB83413/4-5 insert/ detent.
6. RB3494-5 Assembly shipped with the following component parts: (1) RB3494-4 adapter plug and (1) RB83413/4-5 insert/ detent.
7. Insert/ Detent compatible with: RB83413/4-1, M83413/4-1, RB83493-5.

RB3494-5 REV ORG SHOWN

RB9755-1 ONE PIECE RIVET MOUNT ELECTRICAL AIRCRAFT GROUNDING RECEPTACLE



NOTES:
1. UNLESS OTHERWISE SPECIFIED, DIMENSIONS IN INCHES.
2. DETENT ACTION SHALL BE PROVIDED FOR THE MATING PLUG.
3. CONTACT RESISTANCE: SHALL NOT EXCEED 5.0 MILLIOHMS.

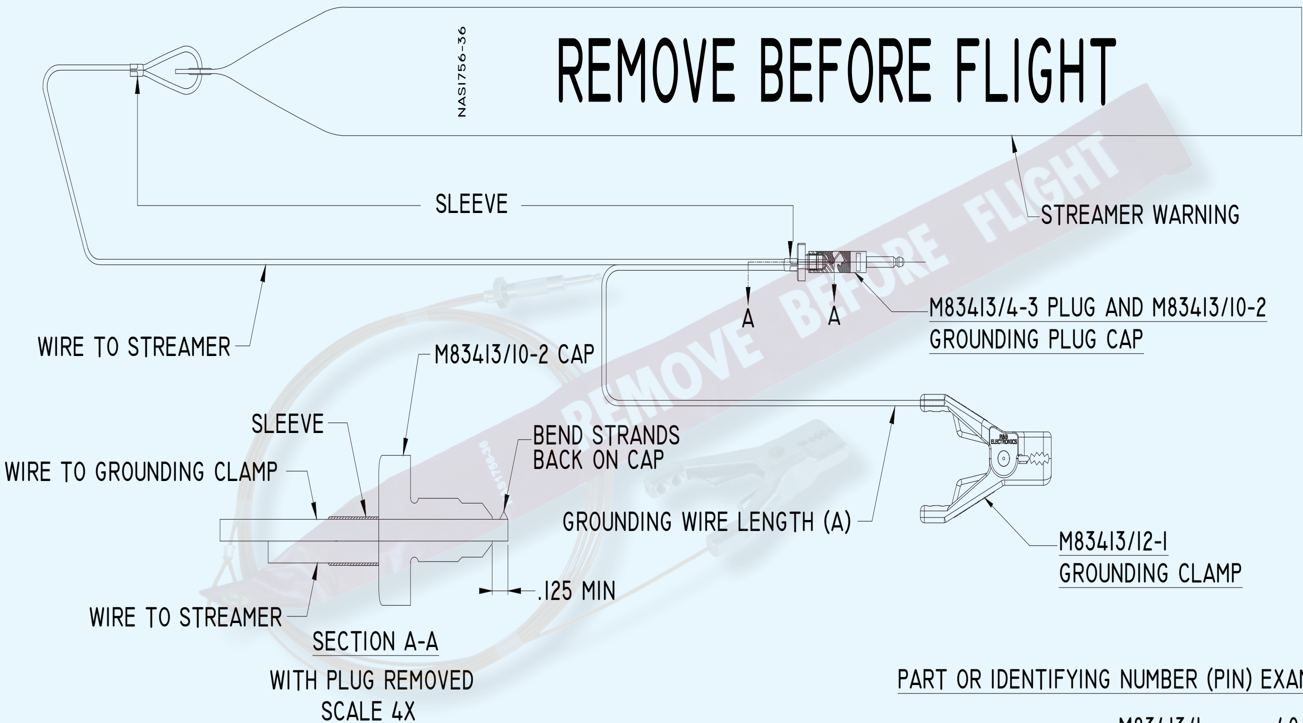
MATERIAL:
1. INSERT/ DETENT BRUSH ALLOY M25 C17300 COND. H BERYLLIUM COPPER PER ASTM B196.
2. CAD. PLATE PER QQ-P-416, TYPE 2, CLASS 2.

INSERT/ DETENT COMPATIBLE WITH:
RB3493-1, RB3493-4, RB83413/4-3. RB83413/4-1, MS3493-1, MS3493-4, AND M83413/4-1.

RB9755-1 REV A SHOWN

M83413/1 Type 1 Electrostatic discharge grounding assembly

TYPE I AIRCRAFT GROUNDING ASSEMBLY, DISCHARGER, ELECTROSTATIC.



PART OR IDENTIFYING NUMBER (PIN) EXAMPLE:

M83413/1 - 40 T

BASIC PART NUMBER

WIRE LENGTH (FEET)
(SEE DIMENSION A)

T = TRANSLUCENT, IF NO LETTER=
(INTERNATIONAL ORANGE)

WIRE LENGTH SHALL BE 10, 20, 30
OR 40 FEET ±1 FOOT.

REQUIREMENTS:
GROUNDING PLUG: IN ACCORDANCE WITH M83413/4-3.

GROUNDING WIRE: 7 X 7 WIRE IN ACCORDANCE WITH MIL-DTL-83420, TYPE II, COMPOSITION B, JACKET COLOR TRANSLUCENT (SEE PIN EXAMPLE) OR INTERNATIONAL ORANGE IN ACCORDANCE WITH FED-STD-595/22510.

GROUNDING CLAMP: IN ACCORDANCE WITH M83413/12-1. GROUNDING CLAMPS STAINLESS STEEL CONSTRUCTION EXCEEDS CURRENT MILITARY SPECIFICATION.

SLEEVES: SHALL BE MANUFACTURED FROM SAE-AS20659 TERMINALS.

WARNING STREAMERS: SHALL BE IN ACCORDANCE WITH NAS1756, AND SHALL BE ATTACHED SECURELY NEAR THE PLUG.

SPLICES SHALL NOT BE USED.

ASSEMBLY RESISTANCE: RESISTANCE OF THE GROUNDING ASSEMBLY SHALL NOT EXCEED 6 OHMS MAX.

M83413/1-40 SHOWN

MS27488 REVISION L, M, AND N PLUG, END SEAL ELECTRICAL CONNECTOR

MS27488 REVISION L, M, AND N, PLUG, END SEAL ELECTRICAL CONNECTOR

NOTES:
1. MATERIAL:
   PLASTIC ROD, MOLDED AND EXTRUDED – TEMPERATURE LIMIT 200°C MINIMUM.
   POLYTETRAFLUOROETHYLENE PER MIL-P-19468
   FLUORINATED ETHYLENE PROPYLENE (FEP) OR PERFLUOROALKOXY (PFA)
2. INSULATION RESISTANCE SHALL BE 100 MEGAOHMS MINIMUM AT 500 VDC.
3. DIMENSIONS ARE IN INCHES.
4. LENGTH OF "B" DIAMETER SHALL BE FREE FROM FLASH AND BURRS.
5. DESIGNED FOR USE WITH CONNECTORS AND TERMINAL JUNCTION SYSTEM HAVING WIRE SEALING GROMMETS.

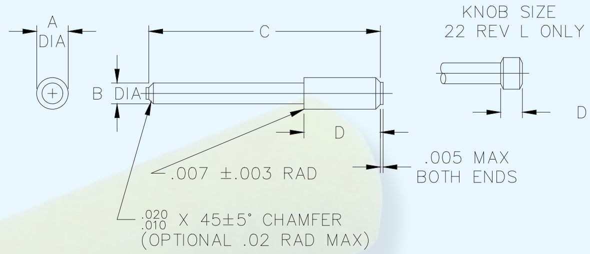


TABLE I REVISION L

DASH NO.	COLOR CODE	A DIA.	B DIA.	C DIM.	D DIM.	INSTALL IN CONNECTOR CONTACT CAVITY OR MODULE (GROMMET CAVITY SIZE)
–22	BLACK	.068 .058	.045 .035	.500 .438	.055 .039	22–23
–20	RED	.100 .085	.065 .045	.584 .544	.110 .165	20
–16	BLUE	.138 .128	.093 .073	.584 .544	.110 .165	16
–12	YELLOW	.176 .166	.131 .111	.584 .544	.110 .165	12
–8	RED	.320 .310	.195 .175	.480 .460	.110 .165	8
–4	BLUE	.420 .410	.320 300	.480 .460	.110 .165	4
–0	YELLOW	.610 .600	.450 .430	1.010 .990	.110 .165	0

EXAMPLE OF APPROVED REVISION L CALLOUT:

7. EXAMPLE OF MILITARY PART NUMBER:

MS27488 –12
- –12: DASH NUMBER (SEE TABLE I)
- MS27488: BASIC PART NUMBER

EXAMPLE OF APPROVED REVISION M CALLOUT:

7. EXAMPLE OF MILITARY PART NUMBER:

MS27488 –22–1
- –22–1: DASH NUMBER (SEE TABLE II)
- MS27488: BASIC PART NUMBER

EXAMPLE OF APPROVED REVISION N CALLOUT:

7. EXAMPLE OF MILITARY PART NUMBER:

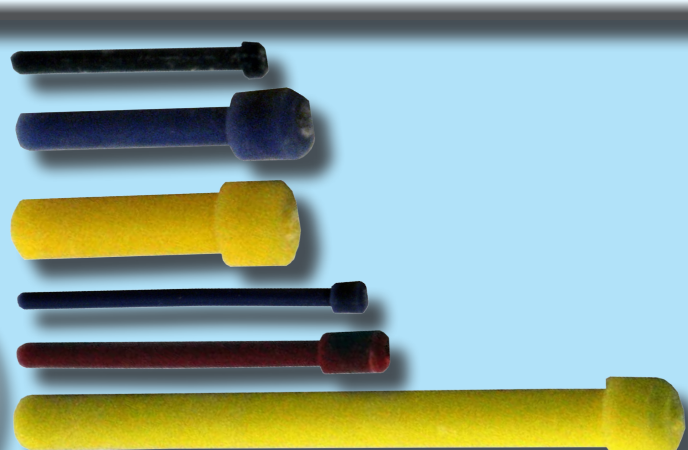
MS27488 –22–2
- –22–2: DASH NUMBER (SEE TABLE III)
- MS27488: BASIC PART NUMBER

TABLE II REVISION M

DASH NO.	COLOR CODE	A DIA.	B DIA.	C DIM.	D DIM.	INSTALL IN CONNECTOR CONTACT CAVITY OR MODULE (GROMMET CAVITY SIZE)
–22–1	BLACK	.068 .058	.045 .038	.796 .746	.115 .135	23–22
–20–1	RED	.090 .080	.058 .048	.805 .755	.115 .135	20
–16–1	BLUE	.130 .120	.079 .069	1.472 1.422	.115 .135	16
–12–1	YELLOW	.170 .160	.125 .115	1.441 1.391	.115 .135	12
–8–1	RED	.315 .305	.175 .165	1.189 1.139	.115 .135	8
–4–1	BLUE	.414 .404	.283 273	1.189 1.139	.115 .135	4
–0–1	YELLOW	.606 .596	.431 .416	1.071 1.021	.115 .135	0

TABLE III REVISION N

DASH NO.	COLOR CODE	A DIA.	B DIA.	C DIM.	D DIM.	INSTALL IN CONNECTOR CONTACT CAVITY OR MODULE (GROMMET CAVITY SIZE)
–22–2	BLACK	.058 .066	.038 .045	.438 .500	.115 .135	23–22
–20–2	RED	.080 .090	.048 .058	.755 .805	.115 .135	20
–16–3	BLUE	.120 .130	.079 .069	1.422 1.472	.115 .135	16
–16–2	GREEN	.120 .130	.069 .079	0.822 0.872	.115 .135	16
–12–3	YELLOW	.160 .170	.115 .125	1.391 1.441	.115 .135	12
–12–2	ORANGE	.160 .170	.115 .125	0.791 0.841	.115 .135	12
–8–3	RED	.305 .315	.165 .175	1.139 1.189	.115 .135	8
–4–3	BLUE	.404 .414	.273 .283	1.139 1.189	.115 .135	4
–0–3	YELLOW	.596 .606	.416 .431	1.021 1.071	.115 .135	0



VARIOUS MS27488'S SHOWN

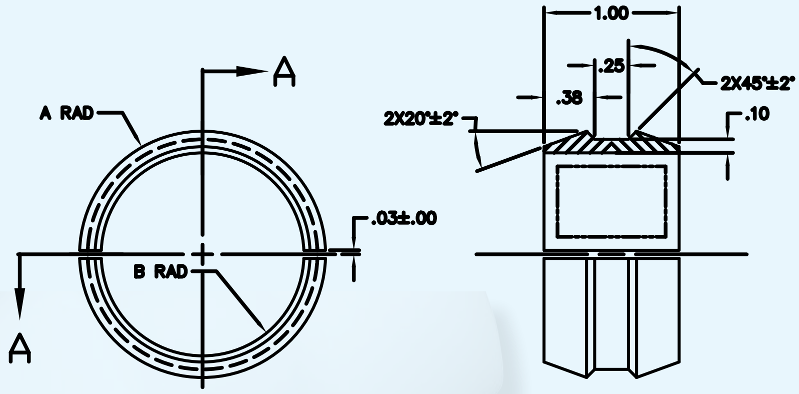


TABLE 1

APPROVED NUMBER CALL OUT (NOTE 2)	A RAD	B RAD
RBE9D0067-1	.222	.062
RBE9D0067-2	.285	.125
RBE9D0067-3	.347	.187
RBE9D0067-4	.410	.250
RBE9D0067-5	.472	.312
RBE9D0067-6	.535	.375
RBE9D0067-7	.597	.437
RBE9D0067-8	.660	.500
RBE9D0067-9	.722	.562
RBE9D0067-10	.785	.625
RBE9D0067-11	.847	.687
RBE9D0067-12	.910	.750
RBE9D0067-13	.253	.093
RBE9D0067-14	.316	.156
RBE9D0067-15	.378	.218

DESIGN INFORMATION

1. MAX OPERATING TEMPERATURE +329°F (+165°C).
2. SINGLE FERRULE ASSEMBLY (TWO HALVES) IS DESIGNED TO ENCIRCLE A GROUP OF ELECTRICAL WIRES TO PROVIDE A CLAMPING SURFACE FOR THE JOINING OF METALLIC SHIELD OVER BRAIDS.

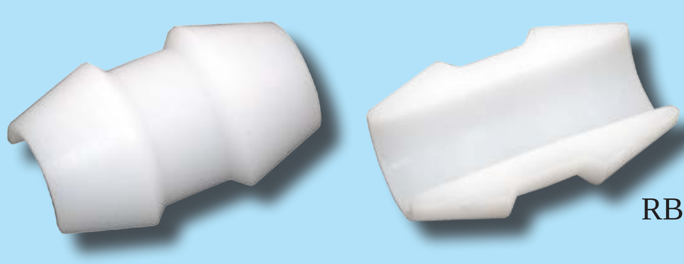
NOTES:

1. A SINGLE PART CALL OUT (ASSEMBLY) CONSISTS OF TWO PIECES (HALVES).

MATERIAL:
ACETAL HOMOPOLYMER RESIN POM 111 OR POM 112 PER ASTM D 4181, COLOR-NATURAL

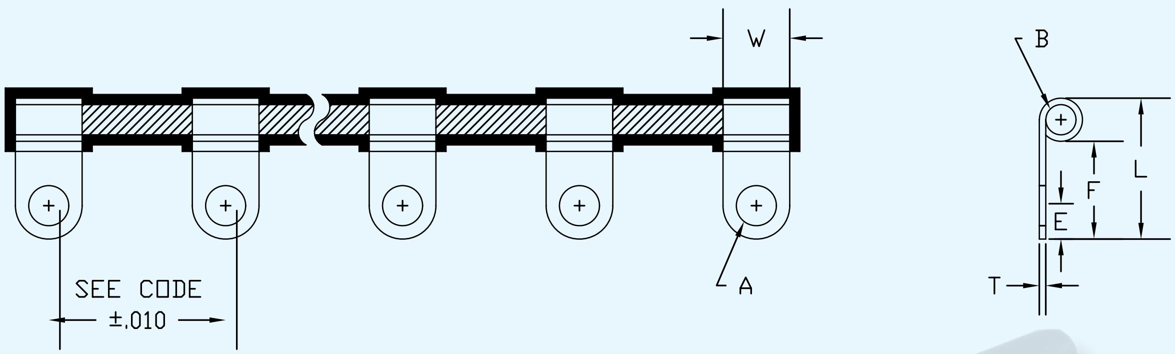
EXAMPLE OF APPROVED NUMBER CALL OUT

RBE9D0067 - 5-FERRULE ASSEMBLY .312 RAD
SEE TABLE 1
BASIC PART NUMBER



RB9D0067-3 REV A SHOWN

RB3 ELECTRICAL FLEXIBLE BUSS ASSEMBLY



NOTES: UNLESS OTHERWISE SPECIFIED

MATERIALS:

THE CABLE TINNED COPPER PER QQ-W-343
THE TERMINALS TINNED COPPER PER QQ-C-576
INSULATION SEE EXAMPLE OF NUMBER CALLOUT

CONSTRUCTION & APPLICATION

TERMINALS ARE STAKE TYPE, PERMANENTLY SWAGED TO THE CABLE INSURING POSITIVE CONTACT.

AT ANY REQUIRED SPACING THE FLEXABILITY OF THIS ASSY ALLOWS EASY INSTALLATION AND MAINTENANCE OF ELECTRICAL UNITS

ALL MATERIALS AND CONSTRUCTION CONFORM TO APPLICABLE SPECIFICATIONS.

ASSY. SUPPLIED BARE, UNLESS INSULATION SPECIFIED.

TERMINAL NO.	AWG. AIRCFT WIRE SIZE	SCREW SIZE	DIMENSION (REF)				
	B	A	W	L	T	F	E
-5	14-16	.198	.330	.695	.032	.536	.169
-6	14-16	.147	.330	.695	.032	.536	.169
-7	10-12	.198	.330	.695	.032	.504	.169
-8	10-12	.198	.500	1.096	.032	.904	.250
-9	8-10	.198	.500	.895	.032	.650	.250
-10	8	.198	.500	.775	.064	.453	.200
-11	6-8	.198	.500	.858	.064	.510	.255
-12	6-8	.257	.500	.858	.064	.510	.255
-13	6-8	.257	.500	1.008	.064	.660	.255

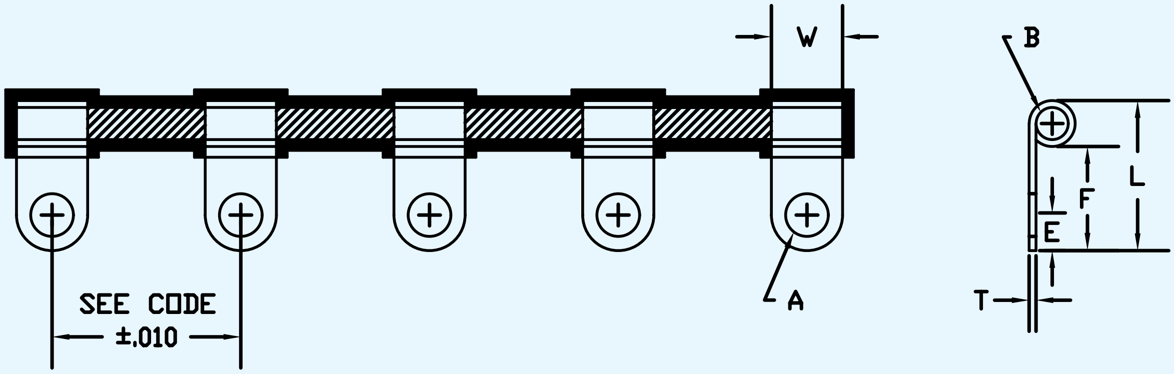
EXAMPLE OF NUMBER CALLOUT

RB3 V-8-10-028-5

- NO. OF TERMINALS
- CENTER TO CENTER OF TERM. IN 1/32" INCREMENTS
- WIRE SIZE
- TERMINAL SIZE (SEE TABLE)
- INSULATION CODE
  - "V" = VINYL - GRAY BLACK
  - "R" = VINYL - RED
  - "S" = SILICONE RUBBER - BLACK
- BASIC PART NO.

RB3S-8-10-28-6 REV C SHOWN

RB4 ELECTRICAL FLEXIBLE BUSS ASSEMBLY



NOTES: UNLESS OTHERWISE SPECIFIED

MATERIALS:

THE CABLE TINNED COPPER PER QQ-W-343
THE TERMINALS TINNED COPPER PER QQ-C-576
INSULATION SEE EXAMPLE OF NUMBER CALLOUT

CONSTRUCTION & APPLICATION

TERMINALS ARE STAKE TYPE, PERMANENTLY SWAGED TO THE CABLE INSURING POSITIVE CONTACT.

AT ANY REQUIRED SPACING THE FLEXABILITY OF THIS ASSY ALLOWS EASY INSTALLATION AND MAINTENANCE OF ELECTRICAL UNITS

ALL MATERIALS AND CONSTRUCTION CONFORM TO APPLICABLE SPECIFICATIONS.

TERMINAL NO.	AWG. AIRCFT WIRE SIZE	SCREW SIZE	DIMENSION (REF)				
	B	A	W	L	T	F	E
-5	14-16	.198	.330	.695	.032	.536	.169
-6	14-16	.147	.330	.695	.032	.536	.169
-7	10-12	.198	.330	.695	.032	.504	.169
-8	10-12	.198	.500	1.096	.032	.904	.250
-9	8-10	.198	.500	.895	.032	.650	.250
-10	8	.198	.500	.775	.064	.453	.200
-11	6-8	.198	.500	.858	.064	.510	.255
-12	6-8	.257	.500	.858	.064	.510	.255
-13	6-8	.257	.500	1.008	.064	.660	.255

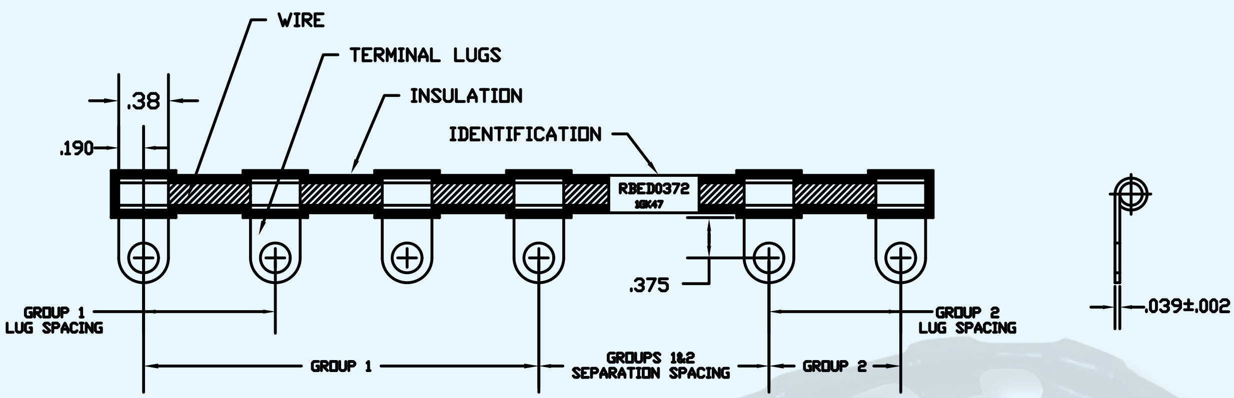
EXAMPLE OF NUMBER CALLOUT

RB4 V 028-8-10-5

- NO. OF TERMINALS
- WIRE SIZE
- TERMINAL SIZE (SEE TABLE)
- CENTER TO CENTER OF TERM. IN 1/32" INCREMENTS
- INSULATION CODE
  - "V" = VINYL - GRAY BLACK
  - "R" = VINYL - RED
  - "S" = SILICONE RUBBER - BLACK
  - "P" = NO INSULATION
- BASIC PART NO.

RB4S-48-9-8-3 REV C SHOWN

RBED0372 ELECTRICAL FLAGGED BUS, CONDUCTOR ASSEMBLY



REQUIREMENTS:

MATERIAL:

TERMINAL LUGS - TIN PLATED COPPER.

CONDUCTOR WIRE, UNINSULATED - AWG 10 TIN PLATED COPPER STRANDED, COMPLYING WITH QQW343C10DIT.

INSULATION - SILICON ADHESIVE SEALANT WITH A NON-HALOGEN CONTAINING FLAME RETARDANT. COLOR BLACK.

IDENTIFICATION - SHRINKTUBING PER M23053/5, COLOR WHITE.

MARK IDENTIFICATION TAG LEGIBLY AND PERMANENTLY WITH P/N AND CAGE CODE PER MIL-T-81531, MARKING SHALL BE IN CONTASTING COLOR.

TABLE 1

LETTER CODES	
LETTER	SPACING
A	.88
B	1.75
C	2.63
D	3.50
E	4.38
F	5.25
G	6.13
H	7.00
J	7.88
K	8.75
L	9.63
M	10.50
N	11.38
P	12.25
R	13.13
T	14.00
U	14.88
V	15.75
Y	16.63

EXAMPLE OF APPROVED NUMBER CALLOUT

RBED0372 4 A C 2 A = BUSS ASSY WITH 2 GROUPS OF LUGS, FIRST GROUP CONTAINS 4 LUGS .88 APART; 2ND GROUP 2 LUGS .88 APART WITH A 2.63 SEPARATION BETWEEN GROUPS.

- SPACE BETWEEN LUGS IN SECOND GROUP. SEE TABLE. 1 OMIT IF NUMBER OF LUGS IS ONE.
- NUMBER OF LUGS IN SECOND GROUP. (MAX 2 DIGIT NUMBER FOR EACH GROUP.)
- SPACE BETWEEN LUG GROUPS. SEE TABLE. 1
- SPACE BETWEEN LUGS IN FIRST GROUP. SEE TABLE. 1 OMIT IF NUMBER OF LUGS IS ONE.
- NUMBER OF LUGS IN FIRST GROUP. (MAX 2 DIGIT NUMBER FOR EACH GROUP.)
- BASIC PART NUMBER

RBED0372-17A REV B SHOWN

RBE10252 LANYARD ASSEMBLY

MATERIAL:
CABLE: M83420/2-002 1/16Ø 7X7 CONSTRUCTION, TYPE I, COMPOSITION B, PVC JACKET TRANSLUCENT GREEN COATED TO 0.125Ø TO MIL-I-631, OR M83420/2-002 1/16Ø 7X7 CONSTRUCTION, TYPE II, COMPOSITION B, TRANSLUCENT NYLON JACKET .125Ø, OR CORROSION RESISTANT STEEL, VINYL COATED, DIAMETER .062.
SLEEVE: MS51844-62 OR MS51844-82 OR -28-IC.
TAB: PER RBE0095.

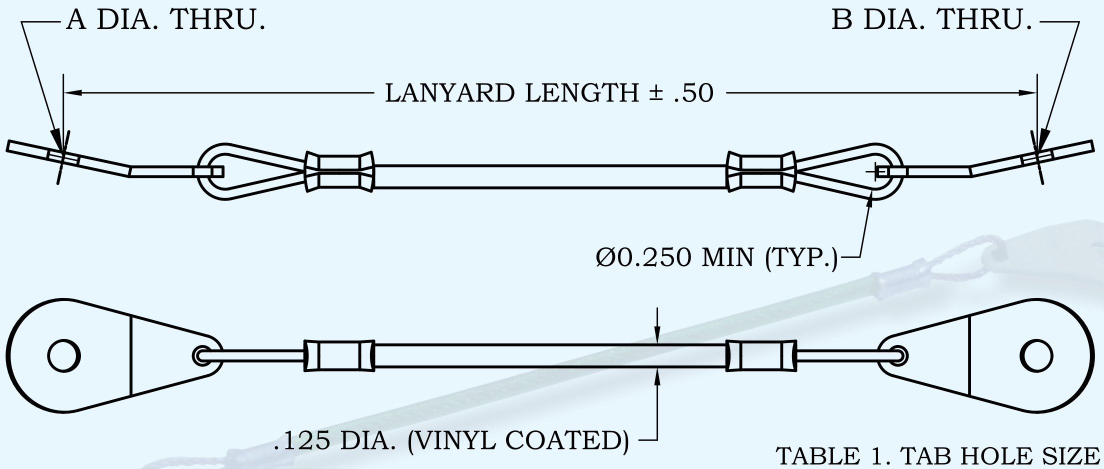


TABLE 1. TAB HOLE SIZE

DASH NUMBER	A +.004 -.001	B +.004 -.001
- 4	.129	.129
- 6	.194	.194
- 8	.254	.254
- 9	.281	.281
- 10	.318	.318
- 11	.388	.388

EXAMPLE BASIC PART NUMBER CALLOUT:
RBES10252 X X X X - X

- X (after dash): LENGTH IN INCHES (4.00 MIN)
- 4th X: TABLE 1, B DIA. IN TAB
- 3rd X: TAB MATERIAL (A) ALUMINUM OR (C) CRESS PER RBE0095
- 2nd X: TABLE 1, A DIA. IN TAB
- 1st X: TAB MATERIAL (A) ALUMINUM OR (C) CRESS PER RBE0095
- RBES10252: BASIC PAR NUMBER FOR LANYARD

RBES10252A6A8-10 = LANYARD ASSEMBLY, 10.0" LONG, ALUMINUM TAB, .194 DIA. HOLE, ALUMINUM TAB .254 DIA. HOLE.
RBES10252A6A6-8 = LANYARD ASSEMBLY, 8.00" LONG, ALUMINUM TAB, .194 DIA. HOLE, ALUMINUM TAB .194 DIA. HOLE.

RBED10252 REV A SHOWN

RBEB29B FLEXIBLE BUS ASSEMBLY

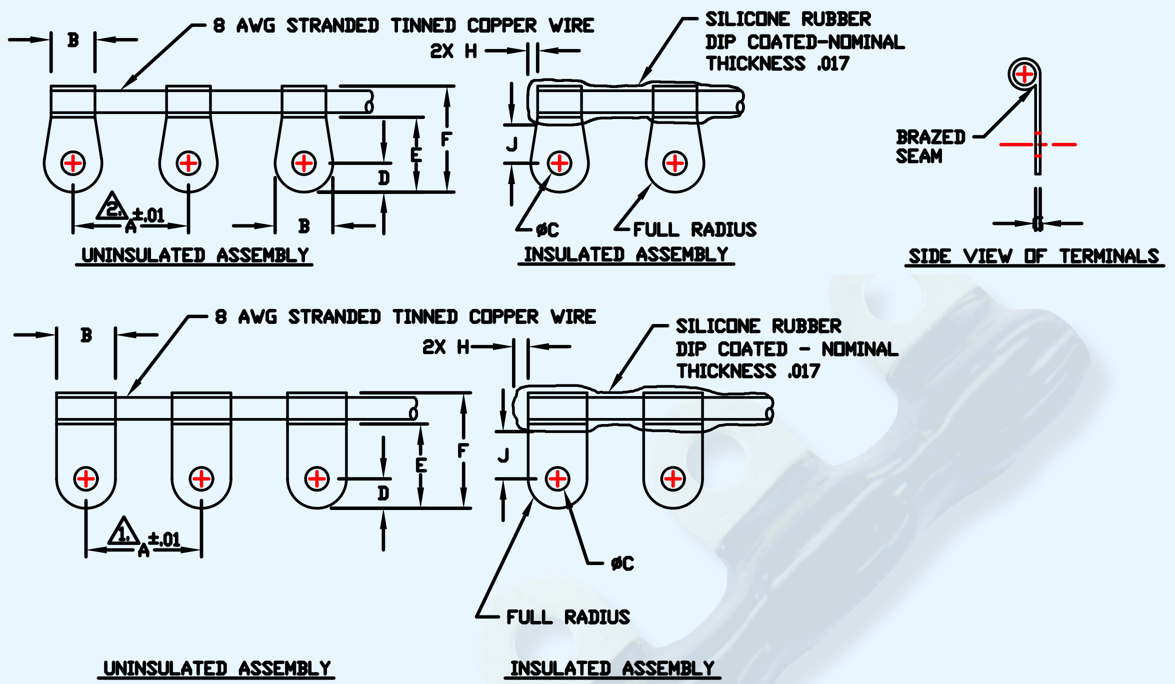


TABLE 1

RBEB29B SPACING CODE DASH #	A ±.010 (2)	B	C ±.005	D	E	F MAX	G	H MAX	J
7	.880	.515 .390	.198	.250	.660 .490	1.000	.069 .035	.063	.250 .187
8	1.000								
9	1.120								
10	1.250								
12	1.500								
13	.810								
15	.940								
16	2.000								
17	1.060								
19	1.190								
21	1.310								
22	.910								

RBEB29B-7 S 5

- TOTAL NUMBER OF TERMINALS
- "-" UNINSULATED TERMINALS
  "S" INSULATED TERMINALS
  SILICONE DIPPED
- SPACING-SEE TABLE 1
- BASIC NUMBER

MATERIAL:

STRANDED WIRE - TO BE 8 AWG APPROXIMATELY 16,625 CIRCULAR MILS. CONSTRUCTED OF 7X95 36 GAGE STRANDS PER QQ-W-343 FOR A TOTAL OF 665 STRANDS.

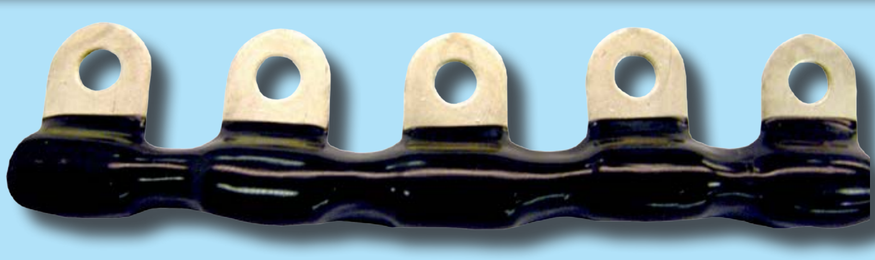
TERMINAL - COPPER PER QQ-C-576

INSULATION - DIP COATED WITH GE FLAME RETARDANT SILICONE RUBBER, RTV-133.

FINISH - STRANDED WIRE AND TERMINALS TINNED, NO BARE COPPER SHALL BE EXPOSED.

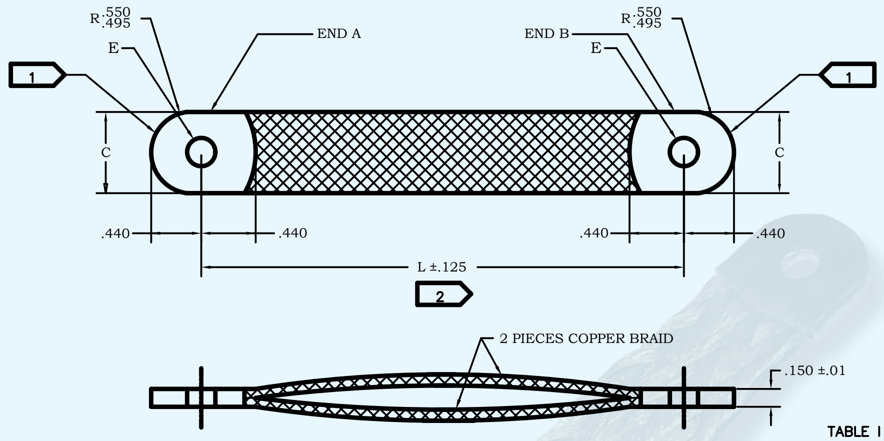
NOTES:

1. 'A' DIMENSIONS APPLY BETWEEN ADJACENT TERMINALS. THE MAXIMUM TOLERANCE ACCUMULATION FROM THE FIRST TERMINAL TO ANY OTHER TERMINAL EXCEPT ADJACENT TERMINALS SHALL BE ±.030.
2. REMOVE ALL BURRS AND BREAK ALL SHARP EDGES.
3. DIMENSIONS APPLY AFTER PLATING AND/OR FINISHING.



RBEB29B REV C SHOWN

RBEJ40E MAIN POWER SHIELD 200 AMPERE JUMPER ASSEMBLY



NOTES:

1 TERMINALS TO BE HOT TIN DIPPED .0003 TO .0005 INCHES THICK. TIN SHALL BE IN ACCORDANCE WITH ASTM B 339. TIN WICKING INTO BRAID $\frac{1}{4}$ INCH MAXIMUM IS ACCEPTABLE.

2 THE BRAID LENGTH IS "L" PLUS .880.

3 THE MINIMUM JUMPER LENGTH "L" IS 1.50 INCHES. JUMPERS STARTING FROM 2 INCHES MAY BE PROCURED IN .25 INCH INCREMENTS. FOR MAXIMUM LENGTH SEE USAGE AND APPLICATION INFORMATION SECTION.

4 SEE USAGE AND APPLICATION INFORMATION TO COMPLETE R&B PART NUMBER.

MAXIMUM ALLOWABLE FLATNESS FOR TERMINALS TO BE .015 INCHES.

MATERIAL:

TERMINALS COPPER, HOT TIN DIPPED IN ACCORDANCE WITH ASTM B 339.
BRAID TINNED COPPER BRAID, PER QQ-B-575 OR A-A-59569. 672 STRANDS OF #32 WIRE (PREFERRED) = 42,500 CIRCULAR MILS OR 1056 STRANDS OF #34 WIRE = 42,000 CIRCULAR MILS.
FINISH NONE REQUIRED AFTER HOT TIN DIPPING IS COMPLETED PER 1
MARKING EACH PACKAGE OF PARTS WILL CONTAIN THE R&B PART NUMBER, AND DATE OF MANUFACTURE.

USAGE AND APPLICATION INFORMATION
THE INTENDED USE FOR STANDARD JUMPERS IS FOR POWER SHIELDS.
THE MINIMUM JUMPER LENGTH IS 1.50 INCHES. STANDARD JUMPER LENGTHS ARE IN ONE INCH INCREMENTS FROM 2 TO 12 INCHES. INTERMETIATE LENGTHS IN .25 INCHE INCREMENTS MAY BE USED.
THE BRAID RESISTANCE AT 20 DEGREES C IS AS FOLLOWS:
1.50 LONG JUMPER IS 18 MICRO-OHMS MAXIMUM.
2.00 LONG JUMPER IS 25 MICRO-OHMS MAXIMUM.
EACH ADDITIONAL INCH OVER TWO INCHES ADDS 15 MICRO-OHMS FOR A MAXIMUM OF 175 MICRO-OHMS FOR 12.00 INCHES.

CODING
FIRST VARIABLE AFTER THE BASIC NUMBER DESIGNATES TERMINAL STUD SIZE COMBINATIONS PER TABLE I.
DASH (-) SEPARATES FIRST AND SECOND VARIABLE.
SECOND VARIABLE DESIGNATES CABLE LENGTH (L) IN .25 INCREMENTS. 2

EXAMPLE OF PART NUMBER

RBEJ40E - 24 - 20 (DRAWING CALLOUT WILL APPEAR AS RBEJ40E-24-20)

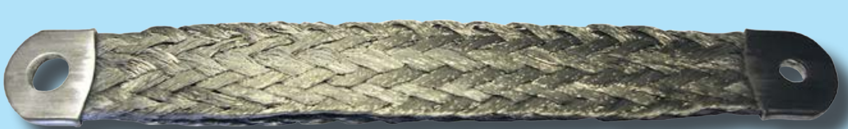
BASIC NUMBER
SEPARATOR
TERMINAL STUD SIZE COMBINATION FOR END A (SIZE .250) AND END B (SIZE .0625) (SEE TABLE I)
LENGTH: 5.00 INCHES (20 X .25 = 5.00 INCHES) 2
SEPARATOR

TABLE I TERMINAL CONFIGURATION

R & B PART NUMBER RBEJ40E 4	STUD SIZE (REF) COMBINATIONS END A	END B	JUMPER WIDTH C +0.030 −0.075
10	.190	.190	
11	.190	.250	
12	.190	.313	
13	.190	.375	
14	.190	.500	
15	.190	.625	
20	.250	.250	
21	.250	.313	
22	.250	.375	
23	.250	.500	
24	.250	.625	1.065
30	.313	.313	
31	.313	.375	
32	.313	.500	
33	.313	.625	
40	.375	.375	
41	.375	.500	
42	.375	.625	
50	.500	.500	
51	.500	.625	
60	.625	.625	

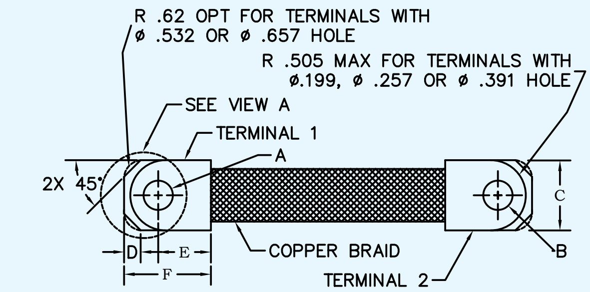
TABLE II TERMINAL DIMENSIONS

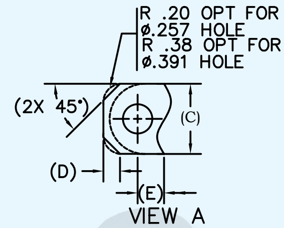
STUD SIZE (REF)	ØE ±.005
.190	.199
.250	.257
.313	.328
.375	.391
.500	.532
.625	.657



RBEJ40E-22-28 SHOWN

RBEJ40D 135 AMPERE COPPER BONDING JUMPER ASSEMBLY





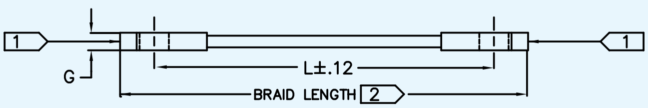


TABLE II TERMINAL CONFIGURATION

R & B STANDARD NUMBER RBEJ40D 4	STUD SIZE (REF)	
	TERMINAL 1	TERMINAL 2
00	NONE	NONE
10	.190	.190
11	.190	.250
12	.190	.375
14	.190	.500
15	.190	.625
20	.250	.250
21	.250	.375
23	.250	.500
24	.250	.625
30	.375	.375
32	.375	.500
33	.375	.625
50	.500	.500
51	.500	.625
60	.625	.625

NOTES

1. TERMINALS HOT TIN DIPPED .0003 TO .0005 INCHES THICK IN ACCORDANCE WITH ASTM B 339. TIN WICKING INTO BRAID 1/4 INCH MAXIMUM IS ACCEPTABLE.
2. THE BRAID LENGTH REQUIRED FOR THE JUMPER IS "L" PLUS THE "E" DIMENSION OF EACH TERMINAL END.
3. THE MINIMUM JUMPER LENGTH "L" IS 1.50 INCHES. JUMPERS STARTING FROM 2 INCHES MAY BE PROCURED IN .25 INCH INCREMENTS.
4. SEE USAGE AND APPLICATION INFORMATION TO COMPLETE R & B PART NUMBER.

MATERIAL

TERMINALS COPPER TERMINALS HOT TIN DIPPED .0003 TO .0005 INCHES THICK IN ACCORDANCE WITH ASTM B 339.

BRAID - TINNED COPPER BRAID PER QQ-B-575 OR A-A-59569. 672 STRANDS OF #32 WIRE (PREFERRED) = 42,500 CIRCULAR MILS, OR 1056 STRANDS OF #34 WIRE = 42,000 CIRCULAR MILS.

FINISH

NONE REQUIRED AFTER HOT TIN DIPPING IS COMPLETED PER 1

MARKING

EACH PACKAGE OF PARTS WILL CONTAIN THE R&B PART NUMBER, AND THE DATE OF MANUFACTURE.

USAGE AND APPLICATION INFORMATION

THE INTENDED USE FOR JUMPERS IS FOR STATIC BONDING.

BRAID RESISTANCE AT 20 DEGREES C FOR A 1.50 JUMPER IS 35 MICRO-OHMS MAXIMUM AND 2.00 JUMPER IS 50 MICRO-OHMS MAXIMUM, EACH ADDITIONAL INCH OVER 2.00 ADDS 30 MICRO-OHMS. [i.e.20.00 JUMPER = 50 MICRO-OHMS + (18 X 30 MICRO-OHMS) = 590 MICRO-OHMS].

THE MINIMUM JUMPER LENGTH IS 1.50 INCHES. STANDARD JUMPER LENGTH ARE IN ONE INCH INCREMENTS FROM 2 TO 13 INCHES. INTERMEDIATE LENGTH IN .25 INCH INCREMENTS MAY BE USED. LENGTH GREATER THAN MUST REQUIRE SPECIAL APPROVAL.

TABLE I TERMINAL DIMENSIONS

STUD SIZE (REF)	ØA OR ØB ±.005	C +.030 −.075	D	E	F	G +.008 −.007
.190	.199	.875	.250	.440	.880	.100
.250	.257	.875	.250	.440	.880	.100
.375	.391	.875	.250	.440	.880	.100
.500	.532	1.065	.310	.560	1.120	.135
.625	.657	1.065	.310	.560	1.120	.135

CODING

FIRST VARIABLE AFTER THE BASIC NUMBER DESIGNATES TERMINAL STUD SIZE WITH THE TERMINAL 1 BEING EQUAL TO OR SMALLER TERMINAL 2. SEE TABLE II.

SECOND VARIABLE DESIGNATES TERMINAL TRIM: ("-" - NORMAL TRIM), (A - TERMINALS TRIMMED AT A 45 DEGREE ANGLE ON SIZES 20 AND 21 ONLY AS SHOWN IN "VIEW A".

THIRD VARIABLE DESIGNATES JUMBER LENGTH (L) EXPRESS IN .250 INCREMENTS. 2

EXAMPLE OF PART NUMBER

RBEJ40D 30 - 52

BASIC NUMBER

TERMINAL STUD SIZE (.375 STUD FOR TERMINAL 1 AND 2)

LENGTH: 13 INCHES (52 X .25 = 13.00 INCH) 2

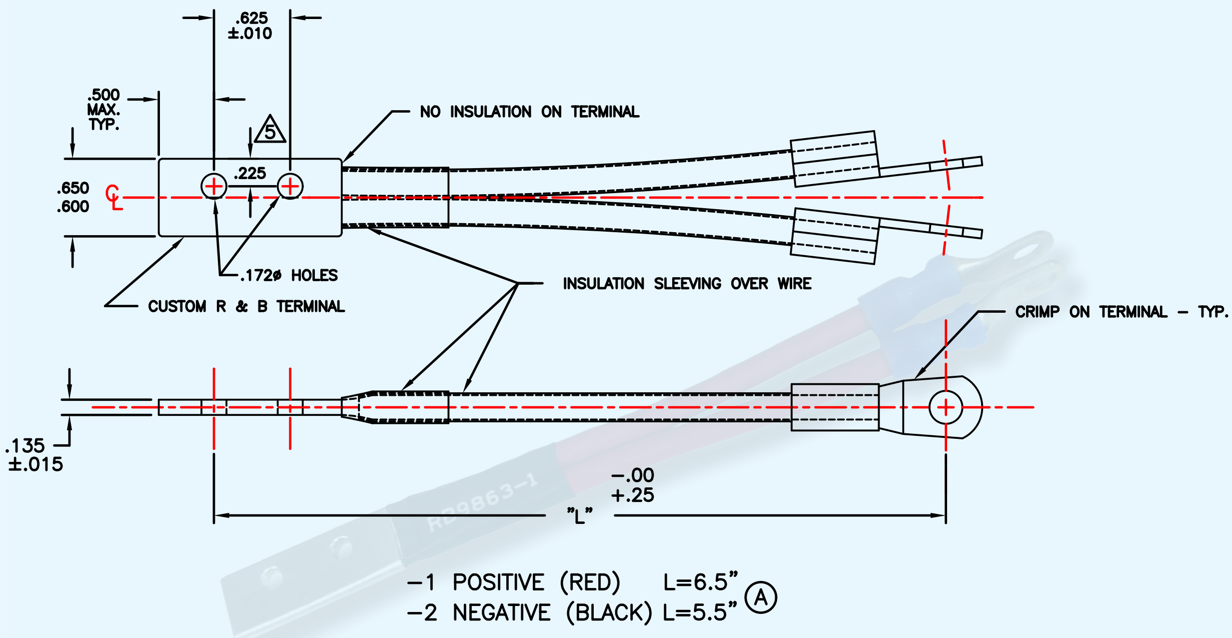
TERMINAL TRIM: NORMAL TRIM (SEE CODING)

(DRAWING CALL OUT WILL APPEAR AS RBEJ40D30-52)

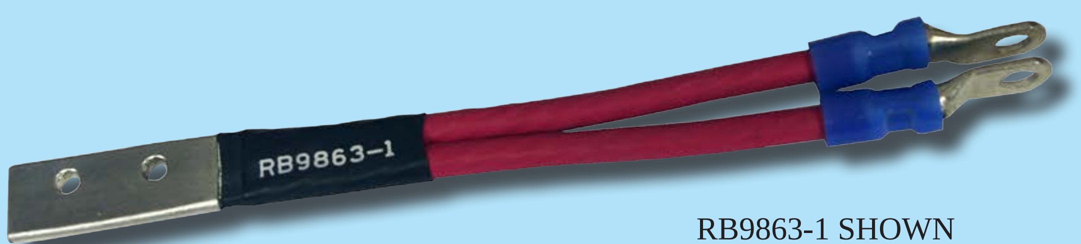
PREVIOUS PART NUMBERS MAY HAVE INSIGNIFICANT DASHES (-) BEFORE AND AFTER "J40D" (i.e., RBE-J40D-()-()).

RBEJ40D10-29 SHOWN

RB9863 DUAL POWER SUPPLY JUMPER



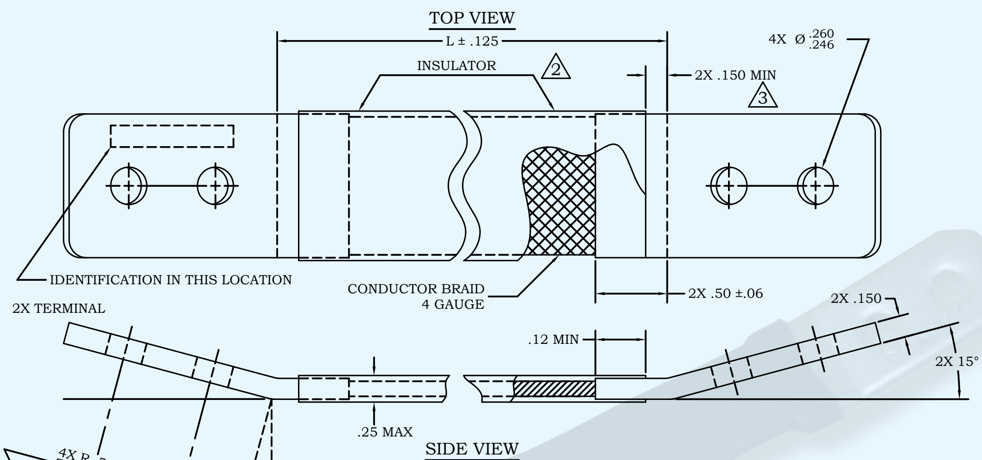
NOTES:
1. STRANDED WIRE ROPE TO BE TINNED COPPER 7 X 150/36TC CONSTRUCTION APPROXIMATELY EQUIVALENT TO 6 AWG.
2. CRIMP ON PLATED COPPER TERMINALS.
3. INSULATION SLEEVING TO BE M23053/5 CLASS 1 OR 3 . USE RED ON –1 POSITIVE ASSEMBLY AND BLACK ON –2 NEGATIVE ASSEMBLY.
4. CUSTOM R & B TERMINAL WITH .172ø HOLES TO BE MADE FROM TINNED COPPER.
5. HOLES MAY BE LOCATED .225 OFF EITHER EDGE OF TERMINAL.
6. DIMENSIONS APPLY AFTER PLATING AND BEFORE COATING.

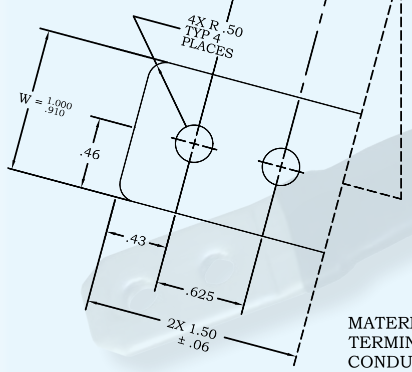


RB9863-1 SHOWN

RB9863-2 SHOWN

RB5D00235LEAD ELECTRICAL JUMPER





NOTES: UNLESS OTHERWISE SPECIFIED.

1. HOT TIN DIP OR TIN PLATING MUST BE DONE AFTER BRAID ASSEMBLY.

2. INSULATOR SLEEVE SHALL PROVIDE SNUG FIT AND UNIFORM SEAL OVER CONDUCTOR BRAID AND TERMINALS AS SHOWN.

3. .15 MINIMUM INSULATOR CLEARANCE FROM TERMINAL BEND.

MATERIALS:

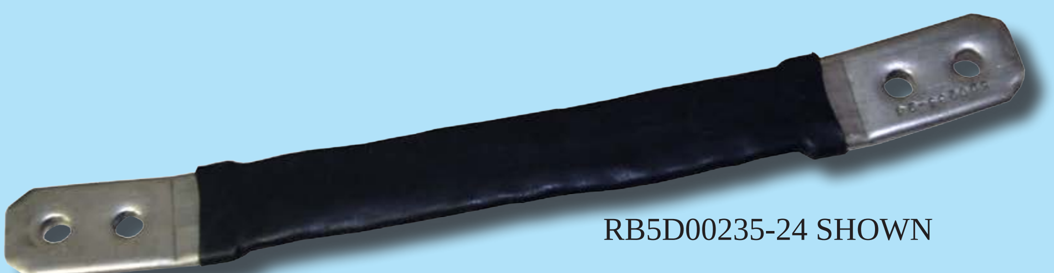
TERMINALS - COPPER PER WW-T-799 HOT TIN DIP TYPE 2, OR TIN PLATE PER MIL-T-107272, TYPE 1.
CONDUCTOR - WIRE BRAID, TIN PLATE COPPER TO MEET REQUIREMENTS OF ASTM B33
INSULATOR - TUBING, HEAT SHRINKABLE.

PART NUMBER

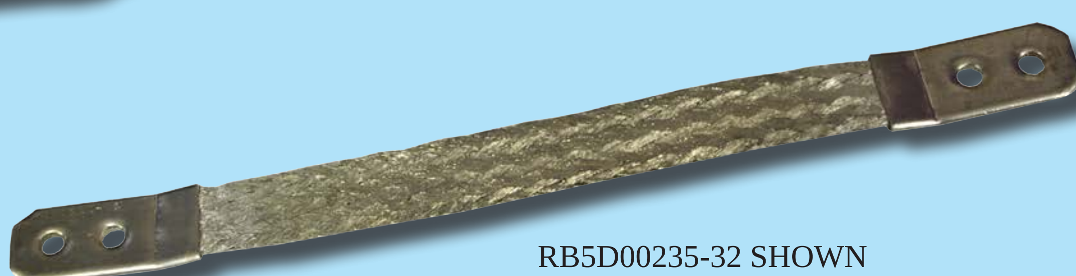
RBD0235 - 24 LEAD IS 6" (24 X.25") LONG

24 — DASH NUMBER DETERMINES LENGTH (L) IN MULTIPLES OF .25 INCHES

RBD0235 — BASIC PART NUMBER



RB5D00235-24 SHOWN



RB5D00235-32 SHOWN

M83413/8-A TYPE IV COPPER BONDING JUMPER ASSEMBLY REV E

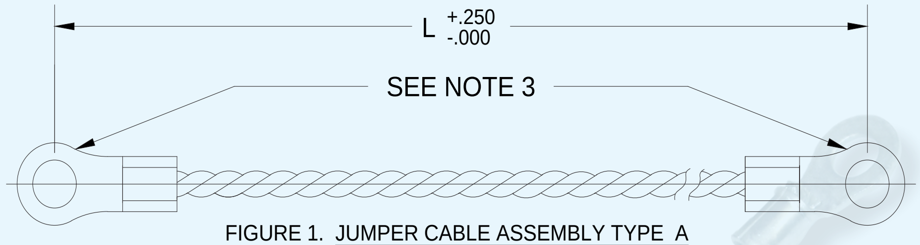


FIGURE 1. JUMPER CABLE ASSEMBLY TYPE A

TABLE I. Jumper assembly type and characteristics

Jumper assembly type	Construction type	Wire and terminal material	Wire size (see table II)	Available lug sizes (see table III)	Available cable length, see "L" dimensions on figure 1	Lightning tested	Fuel Compatible /1	Method of attaching terminals	Color of ID band	Supersedes And Reference only
A	Bonding	Copper	12	A thru J	002 - 999	No	No	Crimp	No band	MS25083-2

1/ Only fuel compatible jumper assemblies may be used within fuel tank and cells.

TABLE II. Wire characteristics by jumper assembly type.

Jumper assembly type	Material	Stranding No. x AWG	Wire Size	Assembly resistance (max-ohms)	Tensile strength (min-lb)
A	Copper	(7x37) x 36	12	.00016xL +.00034 Ω	110

TABLE III. Available lug sizes A type jumper assembly.

Code letter lug size designation	For stud size	12 AWG Copper Terminals. SAE-AS25036 Insulated	SAE-AS20659 Un-insulated
A	.138	-111	...
F	.138	...	-165
I	.164	-156	...
B	.190	-112	...
G	.190	...	-105
C	.250	-157	...
D	.312	-113	...
H	.312	...	-106
E	.375	-114	...
J	.375	...	-128

NOTES:

1. Dimensions are in inches.
2. Resistance readings to be taken at the junction of terminal barrels and tongues.
3. Dimensions and configuration: See figure 1.
4. Where L = length of the cable assembly in inches. Example: For a 24 inch type A assembly, assembly resistance = .00016 ohm/inch x 24 inches + .00034Ω = .00418 ohms (max).
5. Nominal Copper Cable Weight (20.38 LBS/1000 FT) or (0.001698 LBS/Inch).

Example of PIN: M83413/8-A006AB

M 83413/ 8 - A 006 AB

- AB — Letters designating lug size for specific end (left or right). See table III for available lug sizes.
- 006 — Three digits designating cable length in inches. See table I for available cable lengths.
- A — Jumper assembly type as specified in table I.
- 8 — Specification sheet number.
- 83413/ — General specification number.
- M — M prefix.

M83413/8-A005BG SHOWN

M83413/8-B TYPE IV COPPER
CURRENT RETURN JUMPER ASSEMBLY REV E

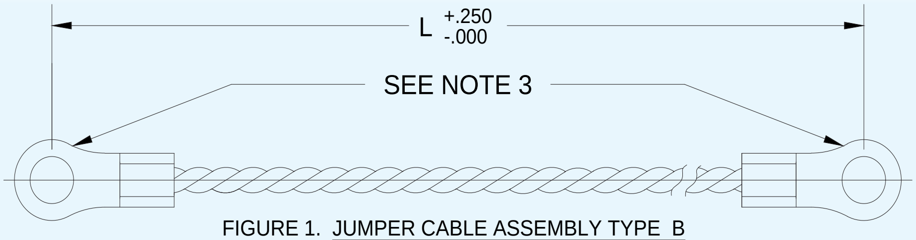


FIGURE 1. JUMPER CABLE ASSEMBLY TYPE B

TABLE I. Jumper assembly type and characteristics

Jumper assembly type	Construction type	Wire and terminal material	Wire size (see table II)	Available lug sizes (see table III)	Available cable length, see “L” dimensions on figure 1	Lightning tested	Fuel Compatible /1	Method of attaching terminals	Color of ID band	Supersedes And Reference only
B	Current Return	Copper	8	K,L,M,N,T,U	002 - 999	No	No	Crimp	No band	MS25083-4

1/ Only fuel compatible jumper assemblies may be used within fuel tank and cells.

TABLE II. Wire characteristics by jumper assembly type.

Jumper assembly type	Material	Stranding No. x AWG	Wire Size	Assembly resistance (max-ohms)	Tensile strength (min-lb)
B	Copper	(7x95) x 36	8	.0006xL +.00016 Ω	225

TABLE IV. Available lug sizes B type jumper assembly.

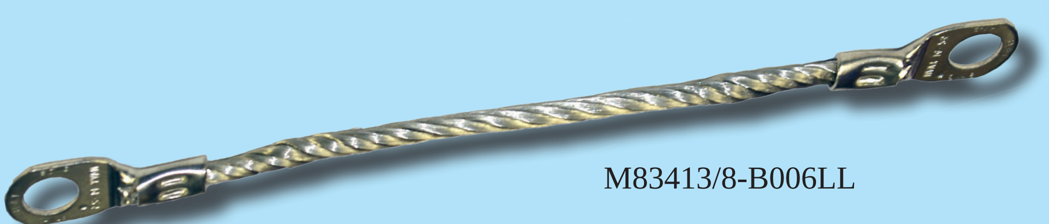
Code letter lug size designation	For stud size	8 AWG Copper Terminals.	
		SAE-AS25036 Insulated	SAE-AS20659 Un-insulated
T	.250	-116	...
U	.250	...	-141
K	.312	-117	...
L	.312	...	-108
M	.375	-118	...
N	.375	...	-129
W	.164	...	-140
V	..190	...	-107
Z	.190	-115	...

NOTES:
1. Dimensions are in inches.
2. Resistance readings to be taken at the junction of terminal barrels and tongues.
3. Dimensions and configuration: See figure 1.
4. Where L = length of the cable assembly in inches. Example: For a 24 inch type B assembly, assembly resistance = .0006 ohm/inch x 24 inches + .00016Ω = .01456 ohms (max).
5. Nominal Copper Cable Weight (52.34 LBS/1000 FT) or (0.00436 LBS/Inch).

Example of PIN: M83413/8-B006KL

M 83413/ 8 - B 006 KL

- KL — Letters designating lug size for specific end (left or right). See table IV for available lug sizes.
- 006 — Three digits designating cable length in inches. See table I for available cable lengths.
- B — Jumper assembly type as specified in table I.
- 8 — Specification sheet number.
- 83413/ — General specification number.
- M — M prefix.



M83413/8-B006LL

M83413/8-C TYPE IV ALUMINUM BONDING JUMPER ASSEMBLY REV E

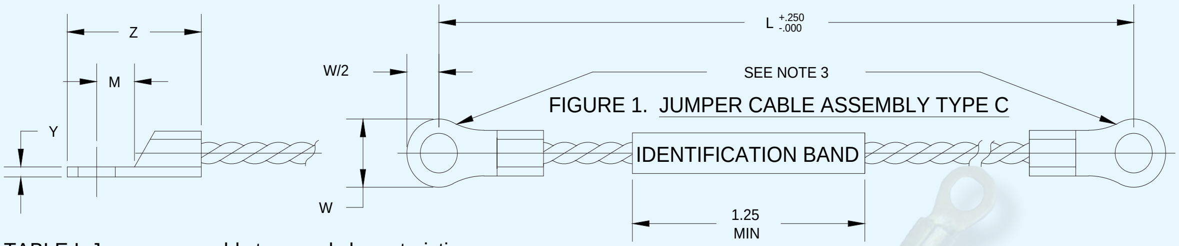


FIGURE 1. JUMPER CABLE ASSEMBLY TYPE C

TABLE I. Jumper assembly type and characteristics

Jumper assembly type	Construction type	Wire and terminal material	Wire size (see table II)	Available lug sizes (see table III)	Available cable length, see "L" dimensions on figure 1	Lightning tested	Fuel Compatible /1	Method of attaching terminals	Color of ID band	Supersedes And Reference only
C	Bonding	Aluminum	10	O,P,Q,R,S	003 - 999	No	Yes	Brazed	Clear	MS25083-1 and 7

NOTES:
1. Only fuel compatible jumper assemblies may be used within fuel tank and cells.
2. Do not use outside fuel tanks and cells.
3. Dimensions are in inches.
4. Resistance readings to be taken at the junction of terminal barrels and tongues.
5. Dimensions and configuration: See figure 1.
6. Where L = length of the cable assembly in inches. Example: For a 24 inch type C assembly, assembly resistance = .00042 ohm/inch x 24 inches + .00011Ω = .01118 ohms (max).
7. Nominal Copper Cable Weight (9.66 LBS/1000 FT) or (0.000805 LBS/Inch).
8. Part or identifying number (PIN) shall be marked on the identification band. if the identification band is too short to accommodate the entire pin on a single line, the PIN may be put on two lines or both sides of the identification band. Parts shall be marked with an ink or fluid which is compatible with fuel.

TABLE II. Wire characteristics by jumper assembly type.

Jumper assembly type	Material	Stranding No. x AWG	Wire Size	Assembly resistance (max-ohms)	Tensile strength (min-lb)
C	Aluminum	37 x 0.0167 inch	10	.00042xL +.00110 Ω	75

TABLE V. Available lug sizes C type jumper assembly.

Code letter lug size designation	For Stud Size	Stud hole I.D.	Aluminum terminals			
			M min	W	Y	Z
O	.138	.152 .142	.218	.406 .313		1.172
P	.190	.203 .193	.250		.083 .037	
Q	.250	.285 .260	.281	.540 .450		1.300
R	.312	.343 .320	.329	.741 .531	.090 .038	1.390
S	.375	.385 .410	.343			1.626

Example of PIN: M83413/8-C006OP

M 83413/ 8 - C 006 OP

- OP — Letters designating lug size for specific end (left or right). See table IV for available lug sizes.
- 006 — Three digits designating cable length in inches. See table I for available cable lengths.
- C — Jumper assembly type as specified in table I.
- 8 — Specification sheet number.
- 83413/ — General specification number.
- M — M prefix.

M83413/8-C007PP SHOWN

M83413/8-D TYPE IV COPPER QUICK DISCONNECT JUMPER ASSEMBLY REV E

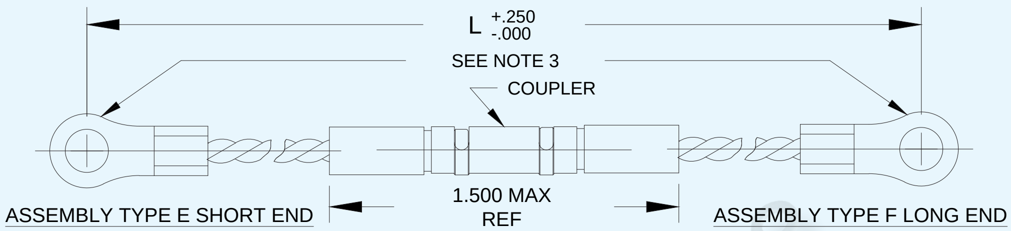


FIGURE 1. JUMPER CABLE ASSEMBLY TYPE D

TABLE I. Jumper assembly type and characteristics

Jumper assembly type	Construction type	Wire and terminal material	Wire size (see table II)	Available lug sizes (see table III)	Available cable length, see "L" dimensions on figure 1	Lightning tested	Fuel Compatible /1	Method of attaching terminals	Color of ID band	Supersedes And Reference only
D	Quick disconnect	Copper	12	A,B,C,D,E ,F,G	003 - 999	No	No	Crimp	No band	MS25083-3

1/ Only fuel compatible jumper assemblies may be used within fuel tank and cells.

TABLE II. Wire characteristics by jumper assembly type.

Jumper assembly type	Material	Stranding No. x AWG	Wire Size	Assembly resistance (max-ohms)	Tensile strength (min-lb)
D	Copper	(7x37) x 36	12	.00016xL +.00034 Ω	5 to 28

TABLE III. Available lug sizes D type jumper assembly.

Code letter lug size designation	For stud size	12 AWG Copper Terminals. SAE-AS25036 Insulated	12 AWG Copper Terminals. SAE-AS20659 Un-insulated
A	.138	-111	...
F	.138	...	-165
I	.164	-156	...
B	.190	-112	...
G	.190	...	-105
C	.250	-157	...
D	.312	-113	...
H	.312	...	-106
E	.375	-114	...
J	.375	...	-128

NOTES:
1. Dimensions are in inches.
2. Resistance readings to be taken at the junction of terminal barrels and tongues.
3. Dimensions and configuration: See figure 1.
4. Where L = length of the cable assembly in inches. Example: For a 24 inch type A assembly, assembly resistance = .00016 ohm/inch x 24 inches + .00034Ω = .00418 ohms (max).
5. Nominal Copper Cable Weight (20.38 LBS/1000 FT) or (0.001698 LBS/Inch).

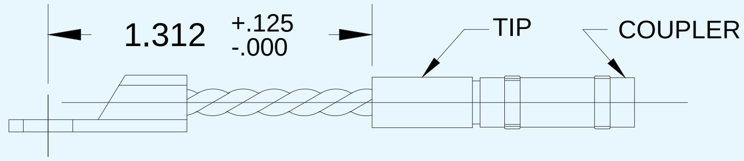
Example of PIN: M83413/8-D006BB

M 83413/ 8 - D 006 BB

- BB — Letters designating lug size for specific end (left or right). See table III for available lug sizes.
- 006 — Three digits designating cable length in inches. See table I for available cable lengths.
- D — Jumper assembly type as specified in table I.
- 8 — Specification sheet number.
- 83413/ — General specification number.
- M — M prefix.

M83413/8-D007GG SHOWN

M83413/8-E TYPE IV COPPER SHORT END OF QUICK DISCONNECT JUMPER ASSEMBLY REV E



ASSEMBLY TYPE E SHORT END OF QUICK DISCONNECT

FIGURE 1. JUMPER CABLE ASSEMBLY TYPE E

TABLE I. Jumper assembly type and characteristics

Jumper assembly type	Construction type	Wire and terminal material	Wire size (see table II)	Available lug sizes (see table III)	Available cable length, see "L" dimensions on figure 1	Lightning tested	Fuel Compatible /1	Method of attaching terminals	Color of ID band	Supersedes And Reference only
E	Short End of quick disconnect	Copper	12	A,B,C,D,E, F,G	Fixed Length	No	No	Crimp	No band	MS25083-3S

1/ Only fuel compatible jumper assemblies may be used within fuel tank and cells.

TABLE II. Wire characteristics by jumper assembly type.

Jumper assembly type	Material	Stranding No. x AWG	Wire Size	Assembly resistance (max-ohms)	Tensile strength (min-lb)
E	Copper	(7x37) x 36	12	.00057 Ω	110

TABLE III. Available lug sizes E type jumper assembly.

Code letter lug size designation	For stud size	12 AWG Copper Terminals.	
		SAE-AS25036 Insulated	SAE-AS20659 Un-insulated
A	.138	-111	...
F	.138	...	-165
I	.164	-156	...
B	.190	-112	...
G	.190	...	-105
C	.250	-157	...
D	.312	-113	...
H	.312	...	-106
E	.375	-114	...
J	.375	...	-128

NOTES:
1. Dimensions are in inches.
2. Resistance readings to be taken at the junction of terminal barrels and tongues.
3. Dimensions and configuration: See figure 1.
4. Nominal Copper Cable Weight (20.38 LBS/1000 FT) or (0.001698 LBS/Inch).

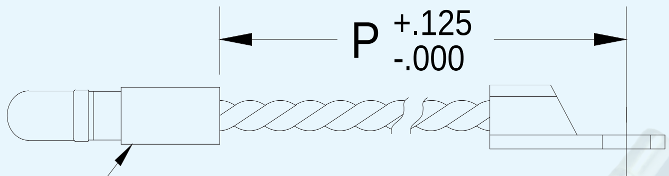
Example of PIN: M83413/8-E00BX

M 83413/ 8 - E 00 BX

- BX — Letters designating lug size for specific end (left or right). See table III for available lug sizes.
- 00 — Three digits designating cable length in inches. See table I for available cable lengths.
- E — Jumper assembly type as specified in table I.
- 8 — Specification sheet number.
- 83413/ — General specification number.
- M — M prefix.

M83413/8-E000GX

M83413/8-F TYPE IV COPPER LONG END OF QUICK DISCONNECT JUMPER ASSEMBLY REV E



ASSEMBLY TYPE F LONG END OF QUICK DISCONNECT

FIGURE 1. JUMPER CABLE ASSEMBLY TYPE F

TABLE I. Jumper assembly type and characteristics

Jumper assembly type	Construction type	Wire and terminal material	Wire size (see table II)	Available lug sizes (see table III)	Available cable length, see "L" dimensions on figure 1	Lightning tested	Fuel Compatible /1	Method of attaching terminals	Color of ID band	Supersedes And Reference only
F	Long End of quick disconnect	Copper	12	A,B,C,D,E, F,G	002-999	No	No	Crimp	No band	MS25083-3P

1/ Only fuel compatible jumper assemblies may be used within fuel tank and cells.

TABLE II. Wire characteristics by jumper assembly type.

Jumper assembly type	Material	Stranding No. x AWG	Wire Size	Assembly resistance (max-ohms)	Tensile strength (min-lb)
F	Copper	(7x37) x 36	12	.00016xL +00034 Ω	110

TABLE III. Available lug sizes F type jumper assembly.

Code letter lug size designation	For stud size	12 AWG Copper Terminals.	
		SAE-AS25036 Insulated	SAE-AS20659 Un-insulated
A	.138	-111	...
F	.138	...	-165
I	.164	-156	...
B	.190	-112	...
G	.190	...	-105
C	.250	-157	...
D	.312	-113	...
H	.312	...	-106
E	.375	-114	...
J	.375	...	-128

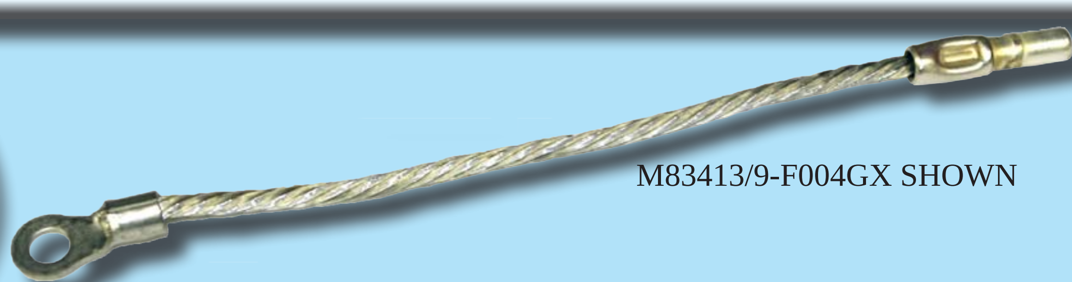
NOTES:

1. Dimensions are in inches.
2. Resistance readings to be taken at the junction of terminal barrels and tongues.
3. Dimensions and configuration: See figure 1.
4. Nominal Copper Cable Weight (20.38 LBS/1000 FT) or (0.001698 LBS/Inch).

Example of PIN: M83413/8-F006BX

M 83413/ 8 - F 006 BX

- BX — Letters designating lug size for specific end (left or right). See table III for available lug sizes.
- 006 — Three digits designating cable length in inches. See table I for available cable lengths.
- F — Jumper assembly type as specified in table I.
- 8 — Specification sheet number.
- 83413/ — General specification number.
- M — M prefix.



M83413/9-F004GX SHOWN

M83413/8-G TYPE IV COPPER BONDING JUMPER ASSEMBLY REV E

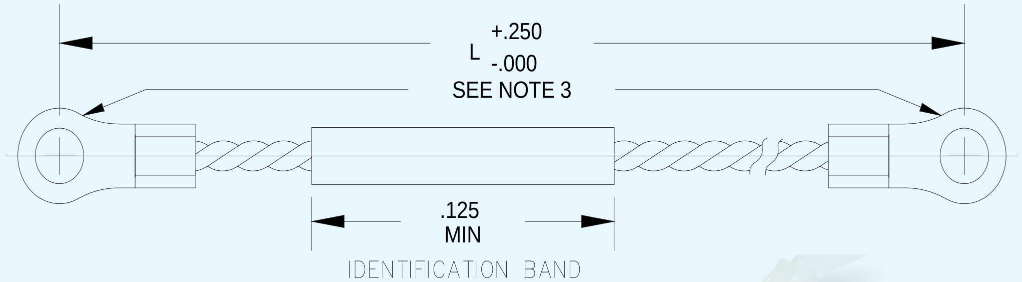


FIGURE 1. JUMPER CABLE ASSEMBLY TYPE G

TABLE I. Jumper assembly type and characteristics

Jumper assembly type	Construction type	Wire and terminal material	Wire size (see table II)	Available lug sizes (see table III)	Available cable length, see "L" dimensions on figure 1	Lightning tested	Fuel Compatible /1	Method of attaching terminals	Color of ID band	Supersedes And Reference only
G	Bonding	Copper	12	A thru J	002 - 999	Yes	No	Crimp	Yellow	MS25083-5

1/ Only fuel compatible jumper assemblies may be used within fuel tank and cells.

TABLE II. Wire characteristics by jumper assembly type.

Jumper assembly type	Material	Stranding No. x AWG	Wire Size	Assembly resistance (max-ohms)	Tensile strength (min-lb)
G	Copper	(7x37) x 36	12	.00016xL +.00034 Ω	110

NOTES:

1. Dimensions are in inches.
2. Resistance readings to be taken at the junction of terminal barrels and tongues.
3. Dimensions and configuration: See figure 1.
4. Where L = length of the cable assembly in inches. Example: For a 24 inch type A assembly, assembly resistance = .00016 ohm/inch x 24 inches + .00034Ω = .00418 ohms (max).
5. Nominal Copper Cable Weight (20.38 LBS/1000 FT) or (0.001698 LBS/Inch).

TABLE III. Available lug sizes G type jumper assembly.

Code letter lug size designation	For stud size	12 AWG Copper Terminals. SAE-AS25036 Insulated	12 AWG Copper Terminals. SAE-AS20659 Un-insulated
A	.138	-111	...
F	.138	...	-165
I	.164	-156	...
B	.190	-112	...
G	.190	...	-105
C	.250	-157	...
D	.312	-113	...
H	.312	...	-106
E	.375	-114	...
J	.375	...	-128

Example of PIN: M83413/8-G006AB

M 83413/ 8 - G 006 AB

- AB: Letters designating lug size for specific end (left or right). See table III for available lug sizes.
- 006: Three digits designating cable length in inches. See table I for available cable lengths.
- G: Jumper assembly type as specified in table I.
- 8: Specification sheet number.
- 83413/: General specification number.
- M: M prefix.

M83413/8-G008CC SHOWN

M83413/8-H TYPE IV COPPER
CURRENT RETURN JUMPER ASSEMBLY REV E

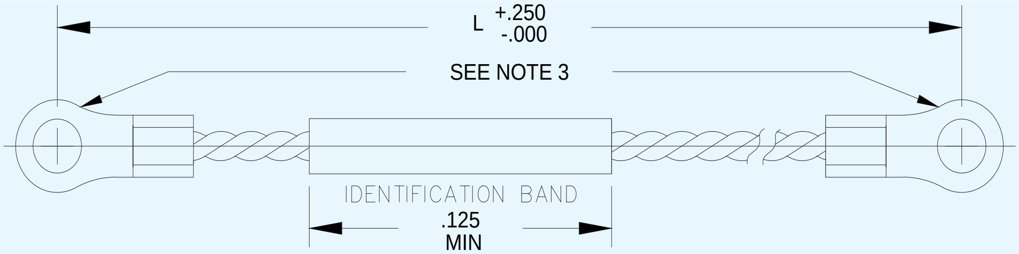


FIGURE 1. JUMPER CABLE ASSEMBLY TYPE H

TABLE I. Jumper assembly type and characteristics

Jumper assembly type	Construction type	Wire and terminal material	Wire size (see table II)	Available lug sizes (see table III)	Available cable length, see "L" dimensions on figure 1	Lightning tested	Fuel Compatible /1	Method of attaching terminals	Color of ID band	Supersedes And Reference only
H	Current Return	Copper	8	K,L,M,N,T,U	003 - 999	Yes	No	Crimp	Yellow	MS25083-6

1/ Only fuel compatible jumper assemblies may be used within fuel tank and cells.

TABLE II. Wire characteristics by jumper assembly type.

Jumper assembly type	Material	Stranding No. x AWG	Wire Size	Assembly resistance (max-ohms)	Tensile strength (min-lb)
H	Copper	(7x95) x 36	8	.0006xL +.00016 Ω	225

NOTES:
1. Dimensions are in inches.
2. Resistance readings to be taken at the junction of terminal barrels and tongues.
3. Dimensions and configuration: See figure 1.
4. Where L = length of the cable assembly in inches. Example: For a 24 inch type B assembly, assembly resistance = .0006 ohm/inch x 24 inches + .00016Ω = .01456 ohms (max).
5. Nominal Copper Cable Weight (52.34 LBS/1000 FT) or (0.00436 LBS/Inch).

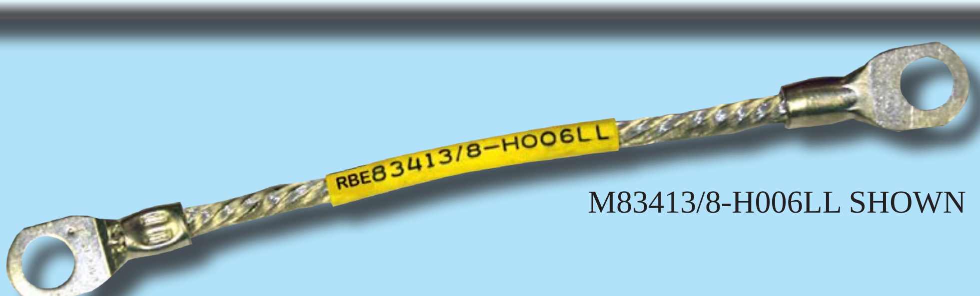
TABLE IV. Available lug sizes H type jumper assembly.

Code letter lug size designation	For stud size	8 AWG Copper Terminals. SAE-AS25036 Insulated	8 AWG Copper Terminals. SAE-AS20659 Un-insulated
T	.250	-116	...
U	.250	...	-141
K	.312	-117	...
L	.312	...	-108
M	.375	-118	...
N	.375	...	-129
W	.164	...	-140
V	..190	...	-107
Z	.190	-115	...

Example of PIN: M83413/8-H006KL

M 83413/ 8 - H 006 KL

- KL — Letters designating lug size for specific end (left or right). See table IV for available lug sizes.
- 006 — Three digits designating cable length in inches. See table I for available cable lengths.
- H — Jumper assembly type as specified in table I.
- 8 — Specification sheet number.
- 83413/ — General specification number.
- M — M prefix.



M83413/8-H006LL SHOWN

M83413/8-I TYPE IV COPPER CABLE / COPPER TERMINALS STATIC CHARGE BONDING JUMPER ASSEMBLY REV E

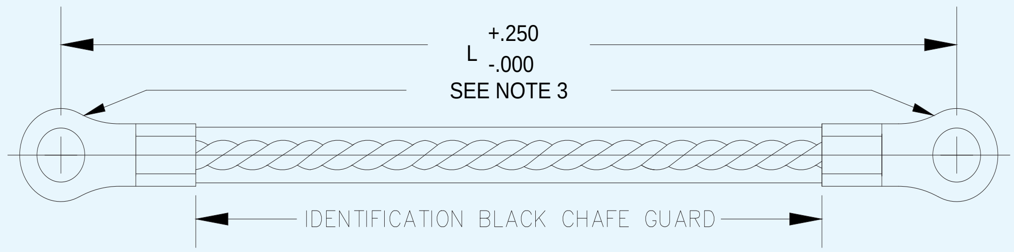


FIGURE 1. JUMPER CABLE ASSEMBLY TYPE I

TABLE I. Jumper assembly type and characteristics

Jumper assembly type 2/	Construction type	Wire and terminal material	Wire size (see table II)	Available lug sizes (see table VI)	Available cable length, see "L" dimensions on figure 1	Lightning tested	Fuel Compatible /1	Method of attaching terminals	Color of ID band	Reference only
I	Static Charge Bonding	Copper	14	A,B,C,D,E, F,G	003 - 999	No	No	Crimp	Id Black Chafe Guard	SS7039-7

1/ Only fuel compatible jumper assemblies may be used within fuel tank and cells.

2/ Static charge bonding type I, are used for static charge bonding applications. Static charge bonding Type I, shall not be used for ligtning protection bonding, which requires conductor sizes of 12 AWG or larger.

TABLE II. Wire characteristics by jumper assembly type.

Jumper assembly type	Material	Stranding No. x AWG	Wire Size	Assembly resistance (max-ohms)	Tensile strength (min-lb)
I	Copper	(7x24) x 36	14	.00021xL +.00043 Ω	70

NOTES:
1. Dimensions are in inches.
2. Resistance readings to be taken at the junction of terminal barrels and tongues.
3. Dimensions and configuration: See figure 1.
4. Where L = length of the cable assembly in inches. Example: For a 24 inch type I assembly, assembly resistance = .00021 ohm/inch x 24 inches + .00043Ω = .00547 ohms (max).
5. Nominal Copper Cable Weight (--.-- LBS/1000 FT) or (-.------- LBS/Inch).

Example of PIN: M83413/8-I006AB

M 83413/ 8 - I 006 AB

- AB — Letters designating lug size for specific end (left or right). See table III for available lug sizes.
- 006 — Three digits designating cable length in inches. See table I for available cable lengths.
- I — Jumper assembly type as specified in table I.
- 8 — Specification sheet number.
- 83413/ — General specification number.
- M — M prefix.

TABLE VI. Available lug sizes I type jumper assembly.

Code letter lug size designation	For stud size	12 AWG Copper Terminals. 3/ SAE-AS7928/1 Insulated
A	.138	-56
B	.164	-57
C	.190	-58
D	.250	-59
E	.312	-60
F	.375	-61
G	.500	-62

3/ Wire diameter slightly larger than concentric lay AWG due to rope lay construction. Terminal lug size have been selected accordingly.

M83413/8-J TYPE IV STEEL CABLE / COPPER TERMINALS STATIC CHARGE BONDING JUMPER ASSEMBLY REV E

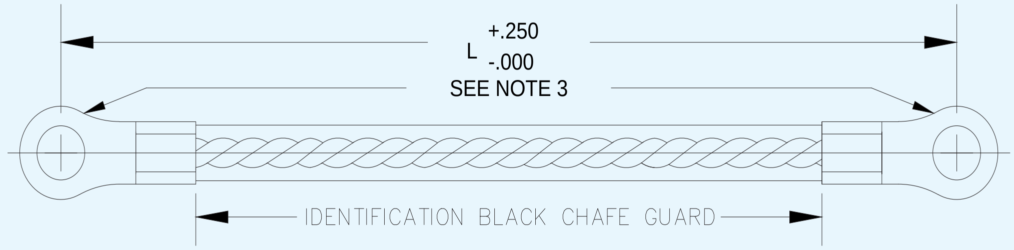


FIGURE 1. JUMPER CABLE ASSEMBLY TYPE J

TABLE I. Jumper assembly type and characteristics

Jumper assembly type 2/	Construction type	Wire and terminal material	Wire size (see table II)	Available lug sizes (see table VII)	Available cable length, see "L" dimensions on figure 1	Lightning tested	Fuel Compatible /1	Method of attaching terminals	Color of ID band	Reference only
J	Static Charge Bonding	Steel	1/16	A,B,C,D,E, F,G	003 - 999	No	No	Crimp	Id Black Chafe Guard	SS7039-2

1/ Only fuel compatible jumper assemblies may be used within fuel tank and cells.

2/ Static charge bonding type J, are used for static charge bonding applications. Static charge bonding Type J, shall not be used for lightning protection bonding, which requires conductor sizes of 12 AWG or larger.

TABLE II. Wire characteristics by jumper assembly type.

Jumper assembly type	Material	Stranding No. x AWG	Wire Size	Assembly resistance (max-ohms)	Tensile strength (min-lb)
J	Steel	(7x19)	1/6	.08333xL +.00043 Ω	70

NOTES:
1. Dimensions are in inches.
2. Resistance readings to be taken at the junction of terminal barrels and tongues.
3. Dimensions and configuration: See figure 1.
4. Where L = length of the cable assembly in inches. Example: For a 24 inch type J assembly, assembly resistance = .08333 ohm/inch x 24 inches + .00043Ω = 2.00035 ohms (max).
5. Nominal Steel Cable Weight (--.-- LBS/1000 FT) or (-.------- LBS/Inch).

TABLE VII. Available lug sizes J type jumper assembly.

Code letter lug size designation	For stud size	14 AWG Copper Terminals. SAE-AS7928/1 Insulated
A	.138	-49
B	.164	-50
C	.190	-51
D	.250	-52
E	.312	-53
F	.375	-54
G	.500	-55

Example of PIN: M83413/8-J006AB

M 83413/ 8 - J 006 AB

- AB — Letters designating lug size for specific end (left or right). See table III for available lug sizes.
- 006 — Three digits designating cable length in inches. See table I for available cable lengths.
- J — Jumper assembly type as specified in table I.
- 8 — Specification sheet number.
- 83413/ — General specification number.
- M — M prefix.

M83413/8-K TYPE IV STEEL CABLE / COPPER TERMINALS BONDING JUMPER ASSEMBLY REV E

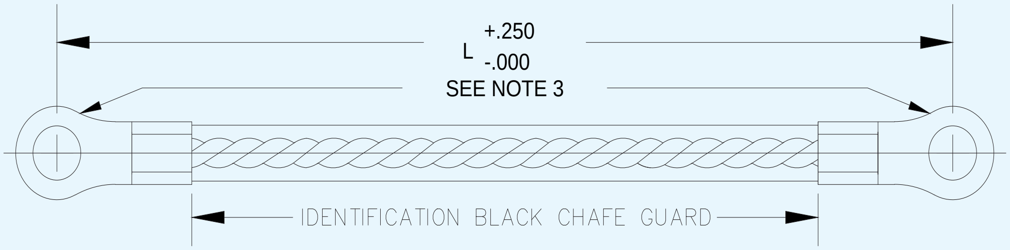


FIGURE 1. JUMPER CABLE ASSEMBLY TYPE K

TABLE I. Jumper assembly type and characteristics

Jumper assembly type 2/	Construction type	Wire and terminal material	Wire size (see table II)	Available lug sizes (see table VIII)	Available cable length, see "L" dimensions on figure 1	Lightning tested	Fuel Compatible /1	Method of attaching terminals	Color of ID band	Reference only
K	Bonding	Steel	3/32	A,B,C,D,E, F,G	003 - 999	No	No	Crimp	Id Black Chafe Guard	SS7039-3

1/ Only fuel compatible jumper assemblies may be used within fuel tank and cells.

2/ Bonding jumper Type k, are intended for use on aircraft structures where they are subjected to continuous and/ or excessive vibrations.

TABLE II. Wire characteristics by jumper assembly type.

Jumper assembly type	Material	Stranding No. x AWG	Wire Size	Assembly resistance (max-ohms)	Tensile strength (min-lb)
K	Steel	(7x19)	3/32	.08333xL +.00043 Ω	110

NOTES:
1. Dimensions are in inches.
2. Resistance readings to be taken at the junction of terminal barrels and tongues.
3. Dimensions and configuration: See figure 1.
4. Where L = length of the cable assembly in inches. Example: For a 24 inch type K assembly, assembly resistance = .08333 ohm/inch x 24 inches + .00043Ω = 2.00035 ohms (max).
5. Nominal Steel Cable Weight (--.-- LBS/1000 FT) or (-.------- LBS/Inch).

Example of PIN: M83413/8-K006AB

M 83413/ 8 - K 006 AB

- AB: Letters designating lug size for specific end (left or right). See table III for available lug sizes.
- 006: Three digits designating cable length in inches. See table I for available cable lengths.
- K: Jumper assembly type as specified in table I.
- 8: Specification sheet number.
- 83413/: General specification number.
- M: M prefix.

TABLE VIII. Available lug sizes K type jumper assembly.

Code letter lug size designation	For stud size	10 AWG Copper Terminals. 3/ SAE-AS7928/1 Insulated
A	.138	-63
B	.164	-64
C	.190	-65
D	.250	-66
E	.312	-67
F	.375	-68
G	.500	-69

3/ Wire diameter slightly larger than concentric lay AWG due to rope lay construction. Terminal lug size have been selected accordingly.

M83413/8-L TYPE IV STEEL CABLE / COPPER TERMINALS BONDING JUMPER ASSEMBLY REV E

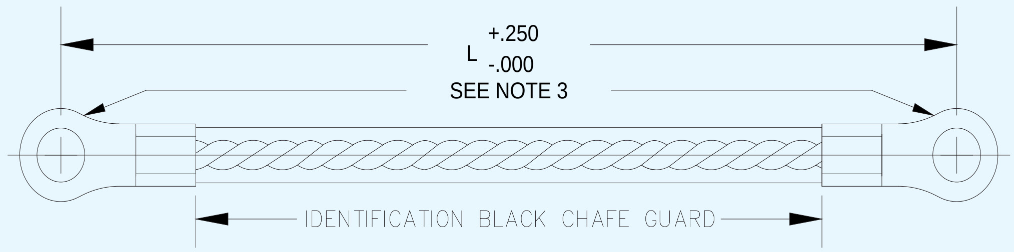


FIGURE 1. JUMPER CABLE ASSEMBLY TYPE L

TABLE I. Jumper assembly type and characteristics

Jumper assembly type 2/	Construction type	Wire and terminal material	Wire size (see table II)	Available lug sizes (see table VIIII)	Available cable length, see "L" dimensions on figure 1	Lightning tested	Fuel Compatible /1	Method of attaching terminals	Color of ID band	Reference only
L	Bonding	Steel	1/8	A,B,C,D	003 - 999	No	No	Crimp	Id Black Chafe Guard	SS7039-4

1/ Only fuel compatible jumper assemblies may be used within fuel tank and cells.

2/ Bonding jumper Type L, are intended for use on aircraft structures where they are subjected to continuous and/ or excessive vibrations.

TABLE II. Wire characteristics by jumper assembly type.

Jumper assembly type	Material	Stranding No. x AWG	Wire Size	Assembly resistance (max-ohms)	Tensile strength (min-lb)
K	Steel	(7x19)	1/8	.08333xL +.00043 Ω	225

NOTES:
1. Dimensions are in inches.
2. Resistance readings to be taken at the junction of terminal barrels and tongues.
3. Dimensions and configuration: See figure 1.
4. Where L = length of the cable assembly in inches. Example: For a 24 inch type L assembly, assembly resistance = .08333 ohm/inch x 24 inches + .00043Ω = 2.00035 ohms (max).
5. Nominal Steel Cable Weight (--.-- LBS/1000 FT) or (-.------- LBS/Inch).

TABLE VIII. Available lug sizes L type jumper assembly.

Code letter lug size designation	For stud size	8 AWG Copper Terminals. 3/ SAE-AS7928/1 Insulated
A	.190	-115
B	.250	-116
C	.312	-117
D	.375	-118

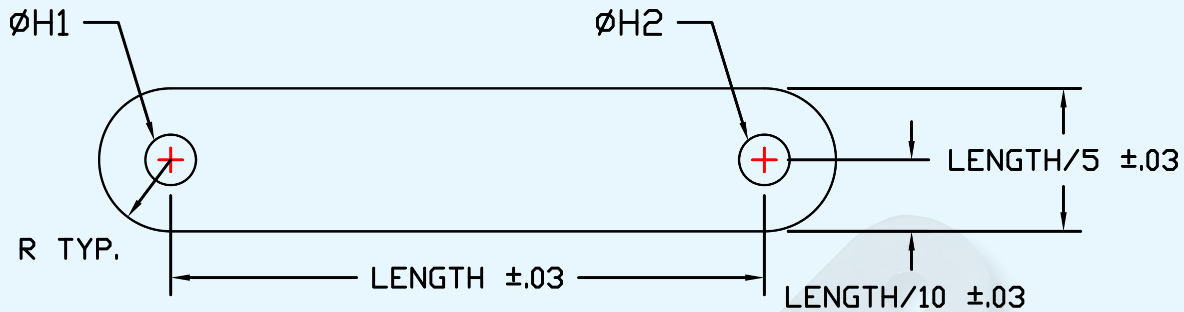
3/ Wire diameter slightly larger than concentric lay AWG due to rope lay construction. Terminal lug size have been selected accordingly.

Example of PIN: M83413/8-L006AB

M 83413/ 8 - L 006 AB

- AB — Letters designating lug size for specific end (left or right). See table III for available lug sizes.
- 006 — Three digits designating cable length in inches. See table I for available cable lengths.
- L — Jumper assembly type as specified in table I.
- 8 — Specification sheet number.
- 83413/ — General specification number.
- M — M prefix.

RBE756 ELECTRONIC CASE/MOUNT GROUNDING STRIP REV C



NOTES
1. MATERIAL: .010 THICK COPPER.
2. FINISH: "–" SILVER PLATE .0005 TO .0010
"A" ION VAPOR DEPOSITED ALUMINUM PLATE OR HIGH PURITY ALUMINUM COATING, FOR ELECTRICAL CONDUCTIVITY (TO HAVE A RESISTANCE NO GREATER THAN 2.5 MILLIONTHS)
3. CURRENT RATING: 10 TO 30 AMP
4. MARKINGS: MARKING SHALL INCLUDE PART NUMBER PER MIL-STD-130
5. REF. DRAWINGS SIMILAR TO P756 REV. C, AND EY000163 IN MATERIAL AND DIMENSION ONLY.

PART NUMBER	PART NUMBER
EY000163-001	RBE756_325-C-C
EY000163-002	RBE756_350-D-G
EY000163-003	RBE756_350-D-E
EY000163-004	RBE756_400-D-E
EY000163-005	RBE756_450-D-E
EY000163-006	RBE756_225-C-E
EY000163-007	RBE756_200-B-C
EY000163-008	RBE756_300-D-E

TABLE 1

H1 , H2 DESIGNATION	HOLE SIZE
A	.120/.128
B	.147/.152
C	.172/.180
D	.199/.204
E	.257/.266
F	.323/.328
G	.386/.391

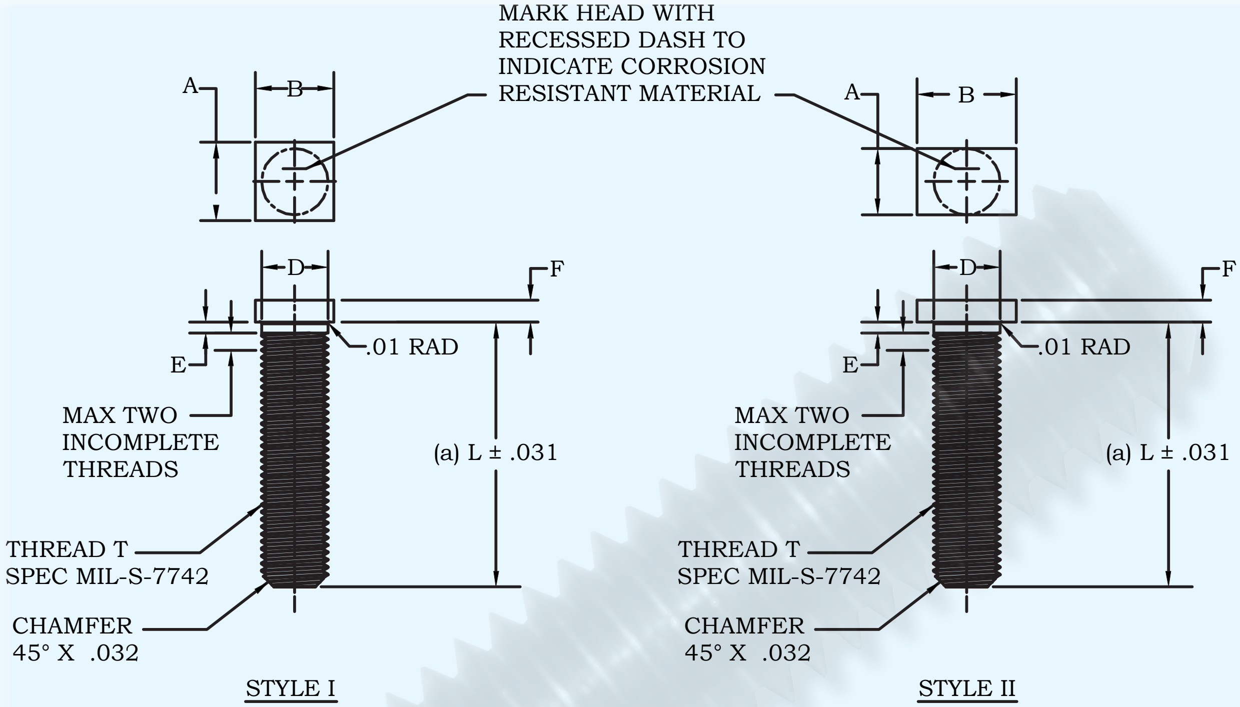
EXAMPLE OF CALLOUT:

RBE756 - 225-C-E

- E: INDICATES H2 HOLE SIZE PER TABLE 1
- C: INDICATES H1 HOLE SIZE PER TABLE 1
- 225: LENGTH IN 100 OF INCH
- -: FINISH CODE (SEE FINISH NOTES)
- RBE756: BASIC PART NUMBER

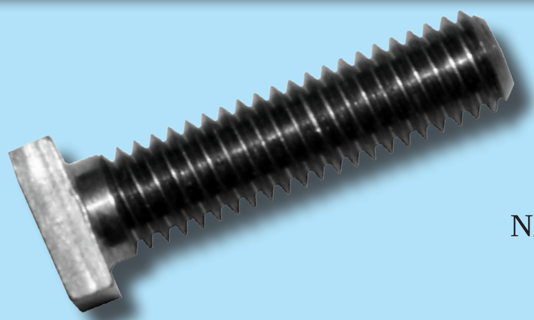
RBE756-450-D-E SHOWN

NAS1065 STUD - HIGH TEMPERATURE ELECTRICAL TERMINAL BLOCK



(a) NAS PART NO.	THREAD T	STYLE	A	B	D DIA.	E	F
NAS1065-6-L	No. 6-32 UNC-2A	I	.1875 +.0000 -.0030	.1875 +.0000 -.0030	.1380 +.0000 -.0054	.06	.063
NAS1065-10-L	No. 10-32 UNF-3A	II	.192 +.0000 -.0030	.281	.1900 +.0000 -.0054	.06	.078
NAS1065-428-L	1/4-28 UNF-3A	II	.375 +.0000 -.0050	.563	.2500 +.0000 -.0062	.06	.125
NAS1065-524-L	5/16-24 UNF-3A	II	.375 +.0000 -.0050	.563	.3125 +.0000 -.0066	.06	.125
NAS1065-624-L	3/8-24 UNF-3A	II	.375 +.0000 -.0050	.563	.3750 +.0000 -.0066	.06	.125

(a) LENGTH L CODED IN 1/16 INCH INCREMENTS IN LAST DASH NUMBERS.
FOR TERMINAL BLOCK ASSEMBLY SEE NAS1066.
MATERIAL: CRES, SPECIFICATION MIL-S-7720 CON. B, COMP. 302 OR 303 Se.
ULTIMATE TENSILE STRENGTH - 115,000 PSI
FINISH: PASSIVATE PER SPEC. MIL-S-5002
EXAMPLES OF PART NO.'S: NAS1065-6-13 - NO. 6-32 SCREW, $\frac{13}{16}$ LONG, STYLE I.
NAS1065-10-13 - NO. 10-32 SCREW, $\frac{13}{16}$ LONG, STYLE II.
DIMENSIONS IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: .XX ±.03 .XXX ±.01 ANGLES± 2°



NAS1065-10-12 SHOWN

RBE Specialty parts: hydraulic valves, valve components, fasteners, hardened bushings, roller assemblies, Valve guides, contact bushings, nas-1065 high temperature electrical terminal block studs, rivets, nuts, special tools, end cap seals, and special diode assemblies.

www.randbelectronics.com phone: (906) 632-1542