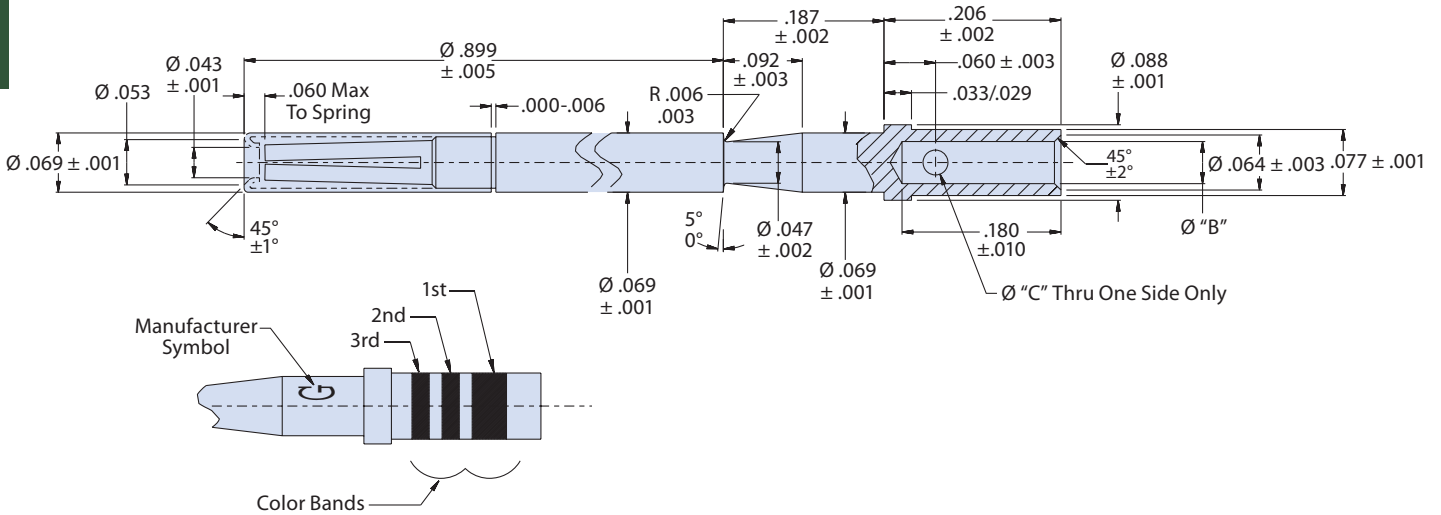# Glenair®

M28840

Standard Socket Crimp Contact for MIL-DTL-28840 Connectors

Mating End Size	Wire Accomodation	Military Part Number	Glenair Part Number
20	28-32 AWG	**M39029/84-453**	**850-005-20-453**
20	22-26 AWG	**M39029/84-452**	**850-005-20-452**
20	20-24 AWG	**M39029/84-509**	**850-005-20-509**

D

Ø .053
Ø .043 ± .001
Ø .069 ± .001
.060 Max To Spring
Ø .899 ± .005
.000-.006
R .006 .003
.092 ± .003
.187 ± .002
.206 ± .002
.060 ± .003
.033/.029
Ø .088 ± .001
45° ±2°
Ø .064 ± .003
.077 ± .001
Ø "B"
45° ±1°
5° 0°
Ø .047 ± .002
Ø .069 ± .001
Ø .069 ± .001
.180 ±.010
Ø "C" Thru One Side Only

Manufacturer Symbol
1st
2nd
3rd
Color Bands

Material and Finish
Socket Contact: Copper alloy per ASTM B197, 50 microinches gold plated per ASTM B488 Type II Code C Class 1,27 over nickel plate per QQ-N-290 Class 2, 50-100 microinches. Approved for space flight.
Socket Contact Hood: Stainless steel, passivated per AMS-QQ-P-35. Approved for space flight.

Dimensions in Inches (millimeters) are subject to change without notice.

U.S. CAGE Code 06324

Printed in U.S.A.

M39029/84
850-005
Standard Duty Electrical Socket Contact

Glenair®

MIL-DTL-28840
Introduction

Table I: Contact Dimensions

Size	Part Number	Military Number	Ø B	Ø C	Color Bands 1st	2nd	3rd
20	850-005-20-509	M39029/84-509	.050 .048	.032 .026	Green	Black	White
20	850-005-20-452	M39029/84-452	.0355 .0335	.032 .026	Yellow	Green	Red
20	850-005-20-453	M39029/84-453	.0200 .0180	.022 .018	Yellow	Green	Orange

Table II: Tool Compatibility

Size	Part Number	Military Number	AWG Handling	Crimp Tool	Positioner	Insertion Tool	Extraction Tool
20	850-005-20-509	M39029/84-509	20, 22, 24	M22520/34-01	M22520/34-02	M81969/33-01	M81969/34-01
20	850-005-20-452	M39029/84-452	22, 24, 26	M22520/34-01	M22520/34-02	M81969/33-01	M81969/34-01
20	850-005-20-453	M39029/84-453	28, 30, 32	M22520/34-01	M22520/34-02	M81969/33-01	M81696/34-01

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Test	Performance Specifications
Durability	(meets SAE-AS39029, paragraph 3.5.9) No electrical or mechanical defects after 500 cycles of engagement and disengagement
Contact Retention	(meets MIL-DTL-38999, paragraph 3.23) The axial displacement of the contact shall not exceed .012 inch (0.30 mm). No damage to contacts or inserts shall result.
Pin Engagement End	(meets SAE-AS39029 paragraph 3.4.1) Unless otherwise specified, the mating end of all contacts (except size 22 and smaller) shall be formed with an approximate spherical radius.
Permeability	(meets SAE-AS39029, paragraph 3.5.1) When tested as specified in paragraph 4.7.2, the relative magnetic permeability of the contact shall be no greater than 2.0.
Vibration	(meets SAE-AS39029, paragraph 3.5.10) When contacts are tested as specified in paragraph 4.7.11, there shall be no electrical discontinuity of 1 microsecond or greater. There shall be no defects detrimental to the mechanical or electrical performance.
Salt Spray (corrosion)	(meets SAE-AS39029, paragraph 3.5.12) When tested as specified in 4.7.13, mated contacts shall withstand 48 hours of salt spray conditioning without defects detrimental to the mechanical or electrical performance.
Temperature life	(meets SAE-AS39029, paragraph 3.5.13) When tested as specified in paragraph 4.7.14, mated contacts shall withstand temperature conditioning for 1,000 hours without defects detrimental to mechanical or electrical performance. There shall be no diffusion/migration of the base metal through the contact outer plating.Class A - Maximum operating temperature +125°C. per paragraph 1.2.2
Dielectric withstanding voltage	(meets SAE-AS39029, paragraph 3.5.19) When tested as specified in paragraph 4.7.20, crimped contacts shall show no evidence of breakdown or flashover.
Workmanship	(meets SAE-AS39029, paragraph 3.7) Contacts shall be processed in such a manner as to be uniform in quality and shall be free from foreign material and burrs or sharp corners that might damage the connector or affect mating of the contacts. Burrs and sharp edges shall be removed 0.005 inch maximum.

Dimensions in Inches (millimeters) are subject to change without notice.

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