

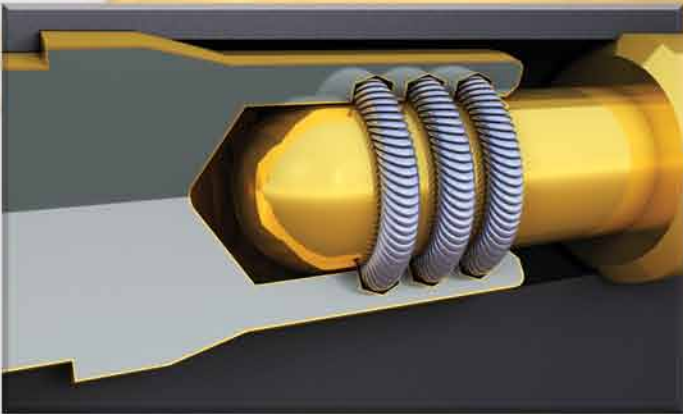
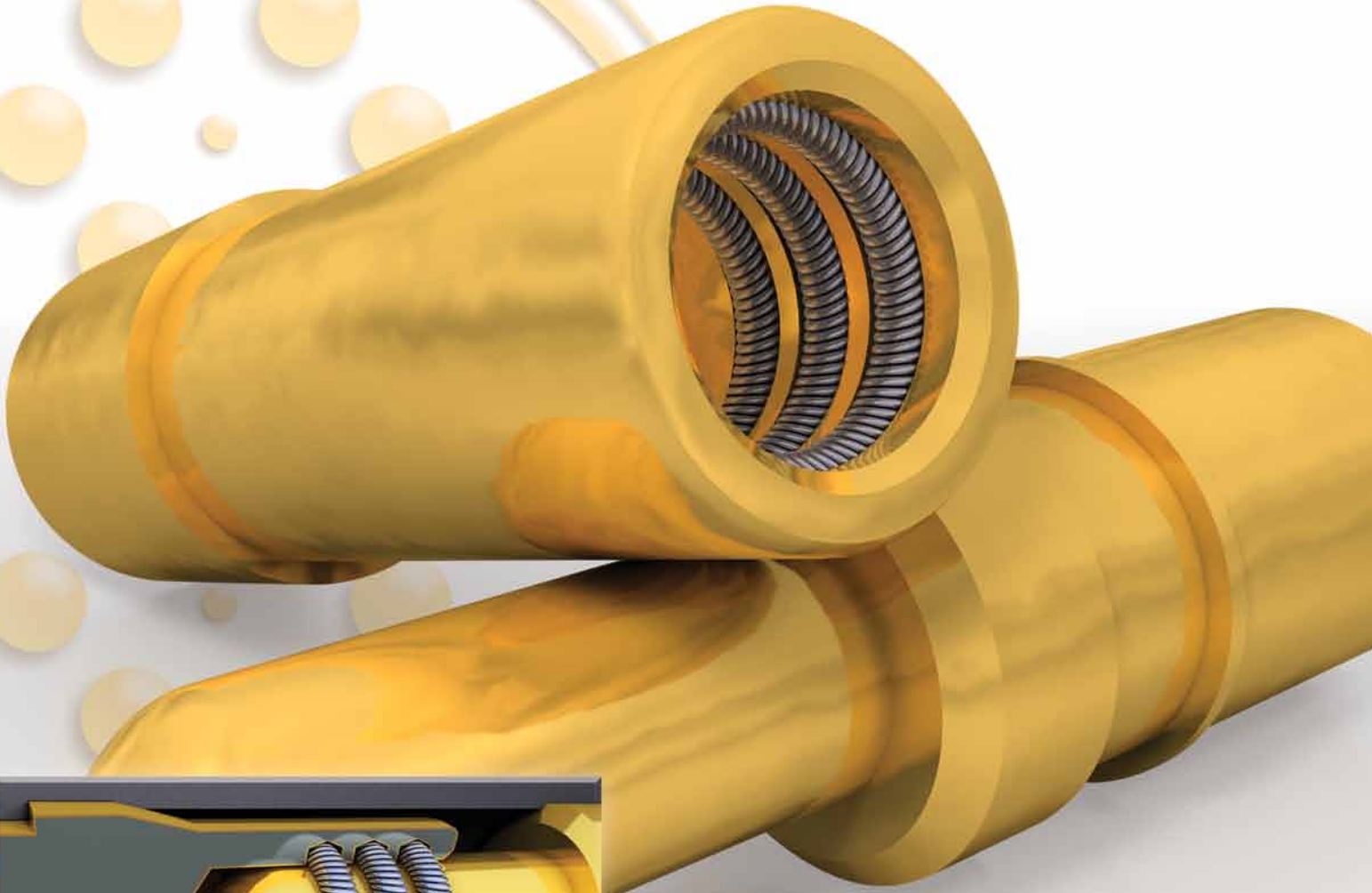
SPACECRAFT COMPONENTS CORP.

Your Connector Consultant Since 1962



# PowerBand

HIGH CURRENT CONTACTS



High Current  
Low Insertion Force  
Up to 10,000 Mating Cycles



**SPACECRAFT**  
COMPONENTS CORP.

# DIMENSIONS FOR RUBBER RETENTION CONTACTS

**R10 - 85 00 - 140**

**SERIES PREFIX**

- R10** Size 1/0 & 4/0 Contacts Only\*.
- R12** Size 8 & 4 Contacts Only\*.
- R98** All Sizes, MIL-DTL-5015 Series III.
- R99** All Sizes, MIL-DTL-5015 Series II.
- \* MIL-DTL-5015 Series I.

**CONTACT SIZE**

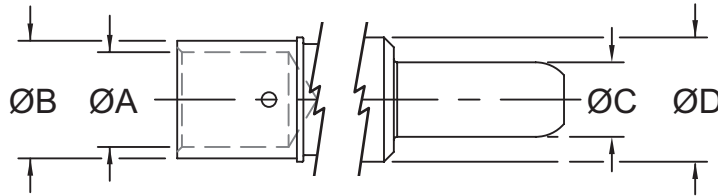
CODE	79	85	92	97
SIZE	8	4	1/0	4/0

**MATERIAL/FINISH**

- 110** Copper/Silver.
- 140** Copper/Gold.
- 142** Copper/Gold 0.000030.

**WIRE RANGE**

Table below shows standard range. Other sizes are available. Consult Sales.



PIN PART NUMBER	SIZE	FOR WIRE SIZE		RATING	ØA		ØB		ØC		ØD	
		AWG	MM <sup>2</sup>									
Rxx-7900-110	8	8	9.0	100 Amps	0.181	[4.60]	0.272	[6.90]	0.142	[3.61]	0.307	[7.80]
Rxx-8500-110	4	4	22.0	168 Amps	0.281	[7.15]	0.375	[9.50]	0.225	[5.70]	0.433	[11.00]
Rxx-9200-110	1/0	1/0	53.0	304 Amps	0.453	[11.50]	0.565	[14.35]	0.357	[9.07]	0.595	[15.11]
Rxx-9798-110	4/0	4/0	107.0	500 Amps	0.650	[16.50]	0.787	[20.00]	0.550	[13.97]	0.787	[20.00]

Dimensions in brackets [ ] are in mm.

**T10 - 85 00 - 140 - 1**

**SERIES PREFIX**

- T10** All Sizes, MIL-DTL-5015 Series I.
- T98** All Sizes, MIL-DTL-5015 Series III.
- T99** All Sizes, MIL-DTL-5015 Series II.

**CONTACT SIZE**

CODE	79	85	92	97
SIZE	8	4	1/0	4/0

**MODIFICATION\***

- Standard Duty: 1 Spring.
- Extended Duty: 2 Springs.
- High Current: 3 Springs.

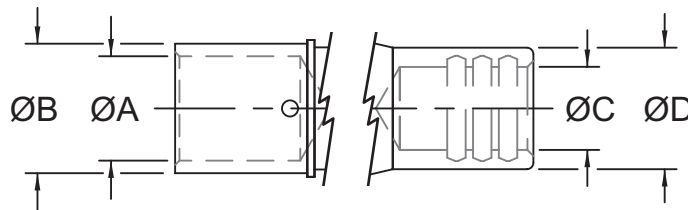
\*Applies only to socket contacts sizes 8, 4, 1/0 and 4/0.

**MATERIAL/FINISH**

- 110** Copper/Silver.
- 140** Copper/Gold.
- 142** Copper/Gold 0.000030.

**WIRE RANGE**

Table below shows standard range. Other sizes are available. Consult Sales.



SOCKET PART NUMBER	SIZE	FOR WIRE SIZE		SPRINGS	RATING	ØA		ØB		ØC		ØD	
		AWG	MM <sup>2</sup>										
Txx-7900-110-1	8	8	9	1	46 Amps	0.181	[4.60]	0.272	[6.90]	0.145	[3.68]	0.265	[6.73]
Txx-7900-110-2				2	73 Amps								
Txx-7900-110-3				3	90 Amps								
Txx-8500-110-1	4	4	22	1	80 Amps	0.281	[7.15]	0.375	[9.50]	0.235	[5.97]	0.336	[8.53]
Txx-8500-110-2				2	135 Amps								
Txx-8500-110-3				3	168 Amps								
Txx-9200-110-1	1/0	1/0	53	1	150 Amps	0.453	[11.50]	0.565	[14.35]	0.368	[9.35]	0.532	[13.51]
Txx-9200-110-2				2	245 Amps								
Txx-9200-110-3				3	304 Amps								
Txx-9795-110-1	4/0	4/0	107	1	225 Amps	0.650	[16.50]	0.787	[20.00]	0.560	[14.22]	0.750	[19.05]
Txx-9795-110-2				2	350 Amps								
Txx-9795-110-3				3	500 Amps								

Dimensions in brackets [ ] are in mm.

# CONTACT COMPARISONS & TEST RESULTS

## Comparison Table

Wire Size	MIL-DTL-5015 Connector Series	Standard Socket P/N	Standard Contact Rating (Amps)	Max. Wire Rating (Amps)	New Contact Rating (Amps)	New Socket P/N <sup>a</sup>	Mating Pin P/N <sup>a</sup> with Springs	Alternate Mating Pin P/N <sup>a</sup>
8	Rubber Retention Series I	T12-7900-510	46	90	46	T10-7900-110-1	R12-7900-110	-
					73	T10-7900-110-2		
					90	T10-7900-110-3		
	Front Release Series II	M39029/45-298*	46	90	46	T99-7990-110-1	R99-7900-110	M39029/44-291*
					73	T99-7990-110-2		
					90	T99-7990-110-3		
	Rear Release Series III	M39029/30-220*	46	90	46	T98-7990-110-1	R98-7900-110	M39029/29-214*
					73	T98-7990-110-2		
					90	T98-7990-110-3		
4	Rubber Retention Series I	T12-8500-510	80	168	80	T10-8500-110-1	R12-8500-110	-
					135	T10-8500-110-2		
					168	T10-8500-110-3		
	Front Release Series II	M39029/45-299*	80	168	80	T99-8590-110-1	R99-8500-110	M39029/44-292*
					135	T99-8590-110-2		
					168	T99-8590-110-3		
	Rear Release Series III	M39029/30-221*	80	168	80	T98-8590-110-1	R98-8500-110	M39029/29-215*
					135	T98-8590-110-2		
					168	T98-8590-110-3		
1/0	Rubber Retention Series I	T12-9200-510	150	304	150	T10-9200-110-1	R10-9200-110	-
					245	T10-9200-110-2		
					304	T10-9200-110-3		
	Front Release Series II	M39029/45-300*	150	304	150	T99-9290-110-1	R99-9200-110	M39029/44-293*
					245	T99-9290-110-2		
					304	T99-9290-110-3		
	Rear Release Series III	M39029/30-222*	150	304	150	T98-9290-110-1	R98-9200-110	M39029/29-216*
					245	T98-9290-110-2		
					304	T98-9290-110-3		
4/0	Rubber Retention Series I	T12-9700-510	225	500	225	T10-9795-110-1	R10-9798-110	-
					350	T10-9795-110-2		
					500	T10-9795-110-3		

- ▣ Contacts are silver plated. Various gold platings are available.
- See Military drawing for details.

## Power Band Heat Rise Test in Free Air

Contact Size	Socket Description	Socket P/N	Results at 10 Minutes			Results at 20 Minutes			Results at 30 Minutes		
			AMPS	Heat Rise (°F)		AMPS	Heat Rise (°F)		AMPS	Heat Rise (°F)	
				Initial Mating	After 500 Matings		Initial Mating	After 500 Matings		Initial Mating	After 500 Matings
#8	Standard	T12-7900-510*	46	18.8°	13.8°	73	40.9°	37.2°	90	64.8°	60.9°
	1 Spring	T10-7900-140-1†	46	14.0°	18.0°	73	42.1°	42.8°	90	64.4°	65.9°
	2 Springs	T10-7900-140-2†	46	12.8°	17.4°	73	35.7°	37.9°	90	56.0°	58.5°
	3 Springs	T10-7900-140-3†	46	12.1°	16.6°	73	33.0°	34.8°	90	51.2°	52.8°
#4	Standard	T12-8500-510*	80	25.7°	21.7°	135	63.3°	64.7°	168	132.7°	135.4°
	1 Spring	T10-8500-110-1	80	16.6°	19.5°	135	73.4°	77.6°	168	101.2°	107.3°
	2 Springs	T10-8500-110-2	80	16.2°	16.7°	135	53.4°	56.0°	168	83.8°	90.4°
	3 Springs	T10-8500-110-3	80	15.2°	15.8°	135	47.7°	50.3°	168	75.2°	82.2°
1/0	Standard	T12-9200-510*	150	19.9°	22.5°	245	54.5°	60.1°	304	97.4°	104.0°
	1 Spring	T10-9200-110-1	150	23.8°	24.7°	245	71.2°	72.7°	304	132.4°	134.2°
	2 Springs	T10-9200-110-2	150	19.4°	20.1°	245	60.7°	62.0°	304	101.8°	102.7°
	3 Springs	T10-9200-110-3	150	17.5°	17.7°	245	56.1°	54.9°	304	95.6°	96.3°
4/0	Standard	T12-9700-510*	225	18.9°	19.5°	350	53.0°	55.4°	500	112.1°	114.1°
	1 Spring	T10-9795-110-1	225	31.1°	32.8°	350	84.8°	85.0°	500	148.9°	152.4°
	2 Springs	T10-9795-110-2	225	27.5°	29.4°	350	58.1°	60.5°	500	72.6°	73.5°
	3 Springs	T10-9795-110-3	225	19.7°	20.9°	350	47.8°	52.2°	500	51.0°	53.5°

- ♦ Standard T12\* contacts contain no springs and are shown to represent the results for a "standard" socket.
- † Gold plated contacts. Remainder of contacts are silver plated.



# SPACECRAFT COMPONENTS CORP.

Your Connector Consultant Since 1962



SCP 5015 STYLE CONNECTORS (CATALOG 102)



SCPT 26482 STYLE SC1 38999 SERIES I SC2 38999 SERIES II SC39 38999 SERIES III (CATALOG 202)



SCPB SERIES (CATALOG 302)



CONNECTOR ACCESSORIES (CATALOG 402)



COMING SOON... CATALOG 701 All Plastic Connectors

CONNECTORS WITH INTEGRATED BACKSHELLS (CATALOG 601)

Try our other connector products. Catalogs available.



**SPACECRAFT COMPONENTS CORP.**

## Headquarters

3040 Clayton Street  
North Las Vegas, NV 89032

Phone: 702.851.7600  
Fax: 702.851.7620

Email: [salesinfo@spacecraft.com](mailto:salesinfo@spacecraft.com)  
Web: [www.spacecraft.com](http://www.spacecraft.com)

## Florida Office

4577 Nob Hill Road  
Suite 106  
Sunrise, FL 33351  
Tel: 954.748.4540  
Fax: 954.748.4128

## Arizona Office

519 W. Lone Cactus Dr.  
Suite 401  
Phoenix, AZ 85027  
Tel: 623.580.1162  
Fax: 623.580.1165

## Italy Office

Spacecraft Components, Sp A  
Milan, Italy  
+39 (335) 719.4512

## Mexico Office

Av. Constituyentes 13-6 Col. Pueblo Nuevo  
Queretaro, Qro 76900  
+52 442 341 69 63

OCT2012  
SF-181

COMPILED AND PRODUCED BY SPACECRAFT COMPONENTS CORP.  
©2012 SPACECRAFT COMPONENTS CORP., NORTH LAS VEGAS, NV 89032