

MIL-DTL-38999

Contacts, Tools and Seal Plugs

Series III



Contacts, Plastic Insertion/Removal Tools and Seal Plugs

Contact Size	Application	Pin Contacts	Socket Contacts	Seal Plugs	Insertion/Removal Tools
	Type	Military No.	Military No.	Military No.	Plastic Military No.
22D	Power/Signal	M39029/58-360	M39029/56-348	MS27488-22-1	M81969/14-01
20	Power/Signal	M39029/58-363	M39029/56-351	MS27488-20-1	M81969/14-10
16	Power/Signal	M39029/58-364	M39029/56-352	MS27488-16-1	M81969/14-03
12	Power/Signal	M39029/58-365	M39029/56-353	MS27488-12-1	M81969/14-04
12 Coax	Coax	M39029/28-211	M39029/75-416		
12 Coax	Coax	M39029/102-558	M39029/103-559		
10 (Power)	Power	M39029/58-528	M39029/56-527	M85049/81-10***	M81969/14-05
8 Coax	Coax	M39029/60-367	M39029/59-366	MS27488-8-1	M81969/14-06
8 Twinax	Twinax	M39029/90-529	M39029/91-530	MS27488-8-1	M81969/14-12

Crimping and Metal Insertion/Extraction Tools

Contact Size/Type	Crimp Tool	Positioner	Positioner	Insertion Tool	Extraction Tool
	Military No.	For Pin Contacts Military No.	For Socket Contacts Military No.	Metal Military No.	Metal Military No.
22D	M22520/2-01	M22520/2-09	M22520/2-07	M81969/8-01	M81969/8-02
20	M22520/1-01	M22520/1-04	M22520/1-04	M81969/8-05	M81969/8-06
	M22520/2-01	M22520/2-10	M22520/2-10		
16	M22520/1-01	M22520/1-04	M22520/1-04	M81969/8-07	M81969/8-08
12	M22520/1-01	M22520/1-04	M22520/1-04	M81969/8-09	M81969/8-10
12 Coax Inner	M22520/2-01	M22520/2-34	M22520/2-34		
12 Coax Outer	M22520/31-01	M22520/31-02	M22520/31-02		
10 (Power)	—	—	—	M81969/8-11	M81969/8-12
8 Coax Inner	M22520/2-01	M22520/2-31	M22520/2-31	M81969/8-13**	M81969/8-14
8 Coax Outer	M22520/5-01	M22520/5-05 Die Closure B	M22520/5-05 Die Closure B		
8 Twinax Center	M22520/2-01	M22520/2-37	M22520/2-37	—	—
8 Twinax Outer & Intermediate	M22520/5-01	M22520/5-200	M22520/5-200		

Contact and Wire Data

Contact Size	Test Current*	Voltage*	Crimp Well Data			Wire Range		Finished Wire Ø Range			
	DC Test	Max. Drop	Well Dia.	Minimum Well Dept		AWG	mm ²	Minimum		Maximum	
	Amps	Millivolts	inch	inch	mm			inch	mm	inch	mm
22D	5.0	73	.0345 ±.0010	.141	3.58	28-22	.08-.33	.030	.76	.054	1.37
20	7.5	55	.047 ±.001	.209	5.31	24-20	.20-.52	.040	1.02	.083	2.11
16	13.0	49	.067 ±.001	.209	5.31	20-16	.52-1.31	.065	1.65	.109	2.77
12	23.0	42	.100 ±.002	.209	5.31	14-12	2.08-3.31	.097	2.46	.142	3.61
10	33.0	33	.137 ±.003	.355	9.02	12-10†	3.31-5.26	.135	3.42	.162	4.12

† MS3348 bushing required with 12 gauge wire.

* When tested with silver-plated wire.

** Insertion tool is not required.

*** Dummy contact, used in lieu of unwired contact and seal plug.

Note: Size 8 coax contacts are used with M17/095-RG180 cable, while size 8 Twinax contacts are used with M17/176-00002 cable.