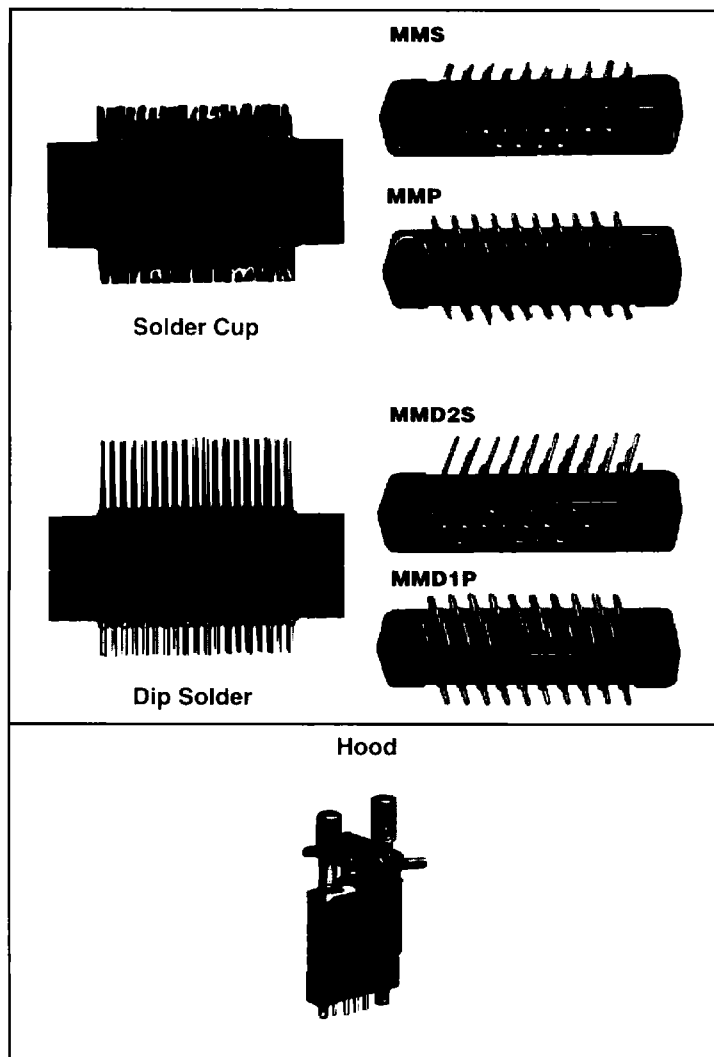


MODELS MM22 and MM24 Rack and Panel Connectors

Military, MIL-C-28748/7/8 Qualified and Commercial
Microminiature Rectangular with Optional Hoods



FEATURES

- Qualified to MIL-C-28748/7/8
- Solder cup contacts
- Dip solder contacts
- Fixed and turnable screwlocks
- Optional closed entry socket contacts

APPLICATIONS

Especially suited for use in airborne, instrumentation and portable equipment applications or wherever the following requirements must be met: Minimum space and weight without sacrifice of performance, high quality materials, long service life, high vibration and shock resistance and positive locking.

ELECTRICAL SPECIFICATIONS

Current Rating: Model MM22 = 5 amps.
Model MM24 = 3 amps.

Breakdown Voltage: At sea level: 2000 V RMS.
At 70,000 feet: 500 V RMS.

MATERIAL SPECIFICATIONS

Contact Pin: Phosphor bronze.

Contact Socket: Phosphor bronze.
(Beryllium copper available on request.)

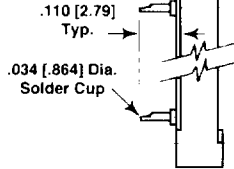
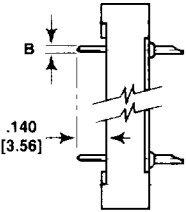
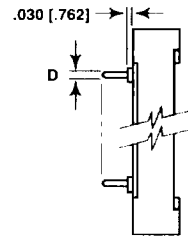
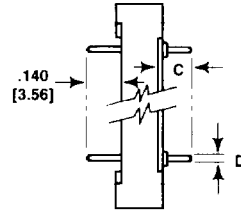
Contact Plating: Gold.

Screwlocks: Stainless steel, passivated.

Guides: Brass, gold plated or stainless steel, passivated.

Standard Body: Glass-filled diallyl phthalate per MIL-M-14, Type SDG-F, green.

DIMENSIONAL CONFIGURATIONS [Numbers in brackets indicate millimeters]

MMS With Solder Cup Contacts		MMP With Solder Cup Contacts		MMDS With Dip Solder Contacts		MMDP With Dip Solder Contacts	
							
CONTACT GAUGE	B DIAMETER	CONTACT GAUGE	C DIP TAIL LENGTH	D DIAMETER			
22 AWG	.030 ± .001 [.762 ± .025]	22 AWG	.160 or .350 [4.06 or 8.89] Nom.	.025 [.635]			
24 AWG	.025 ± .001 [.635 ± .025]	24 AWG	.160 or .350 [4.06 or 8.89] Nom.	.025 [.635]			

DIMENSIONAL CONFIGURATIONS [Numbers in brackets indicate millimeters]

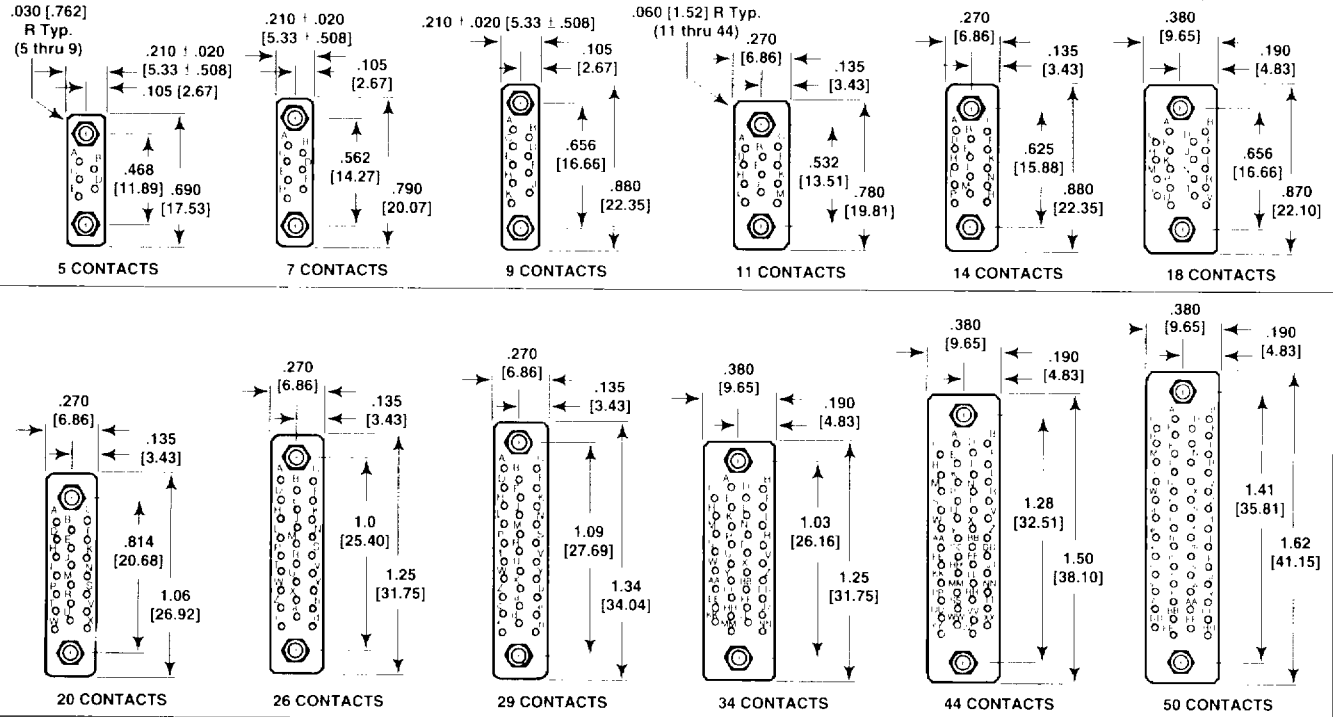
MMS With Fixed (026, 027) Guides		MMP With Fixed (026, 027) Guides	HARDWARE TYPE	E DIAMETER	F DIAMETER
			026	.078 [1.98]	.125 [3.17]
			026L	.078 [1.98]	.125 [3.17]
			027	.078 [1.98]	.125 [3.17]
			027L	.078 [1.98]	.125 [3.17]
MMS With Fixed (026L, 027L) Guides		MMP With Fixed (026L, 027L) Guides	Short Turnable Screwlocks (SK030)		
			Turnable Screwlocks (SK)		
Fixed Screwlocks (SL)		Fixed Screwlocks (SLL)	Fixed Screwlocks And Nylon Retaining Nut And Fiber Washer (NSL)		
			Short Turnable Screwlocks (SK2035)		

HARDWARE MATING CHART

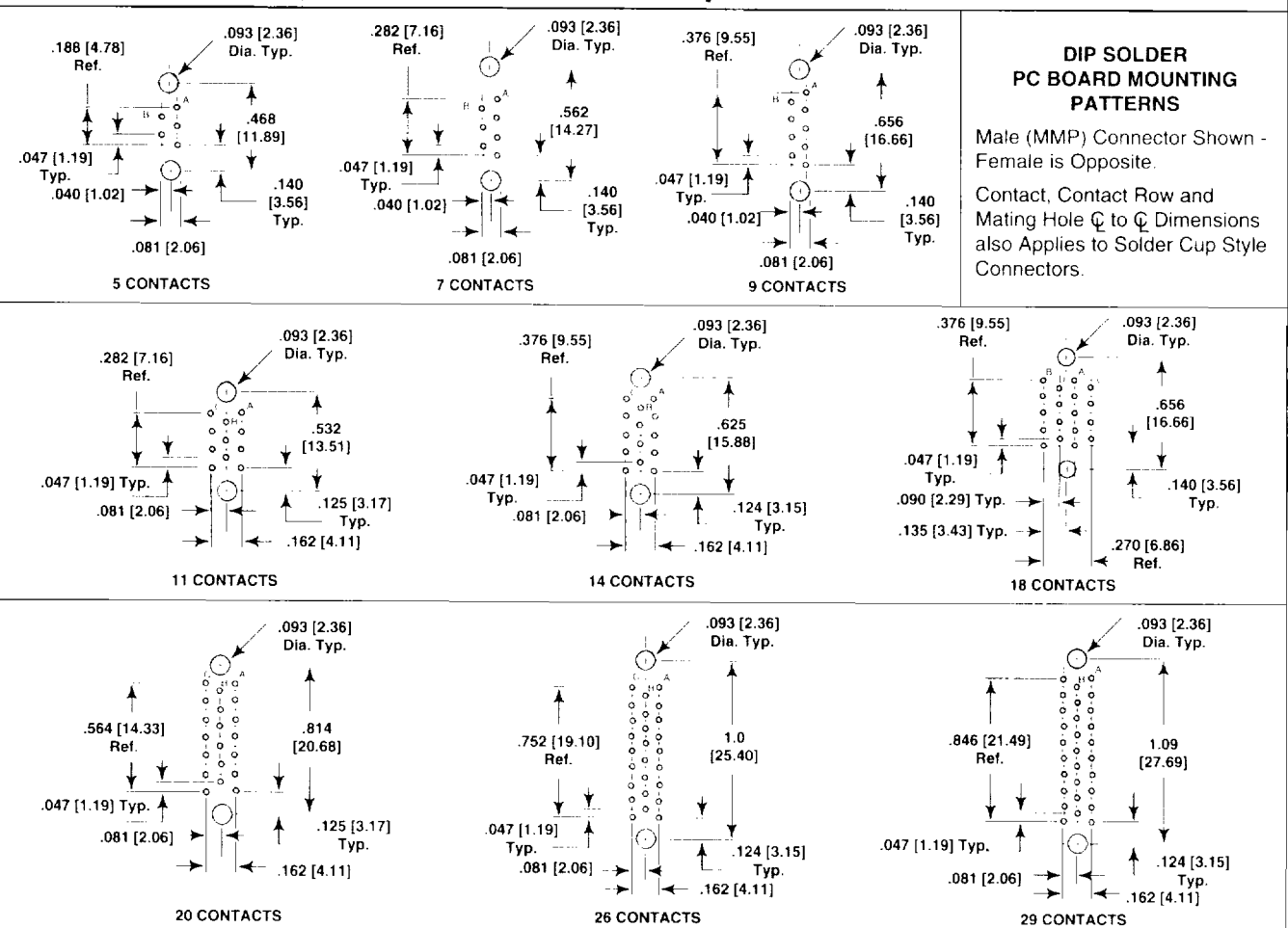
HARDWARE TYPE	MATES WITH HARDWARE TYPE	Note: Either MMP or MMS Connectors may be ordered with any type of hardware shown. EXAMPLES: 1. MMP with 026 Hardware would mate with an MMS with 026 Hardware. 2. MMS with SK Hardware would mate with an MMP with SL or NSL Hardware. 3. MMS with SL2 Hardware would mate with an MMP with SK2 or SK2030 Hardware.
026	026, 026L	
027	027, 027L	
SK	SL, NSL or SLL	
SK030	SL, NSL or SLL	
SK2	SL2, NSL2 or SL2L	
SK2030	SL2, NSL2 or SL2L	
SK2035	SL2, NSL2 or SL2L	

DIMENSIONAL CONFIGURATIONS [Numbers in brackets indicate millimeters]

Note: The views below show the wiring side of a pin type connector (female is opposite). Socket hardware assembled at "A" contact end of a pin type connector.



MOUNTING VARIATIONS [Numbers in brackets indicate millimeters]

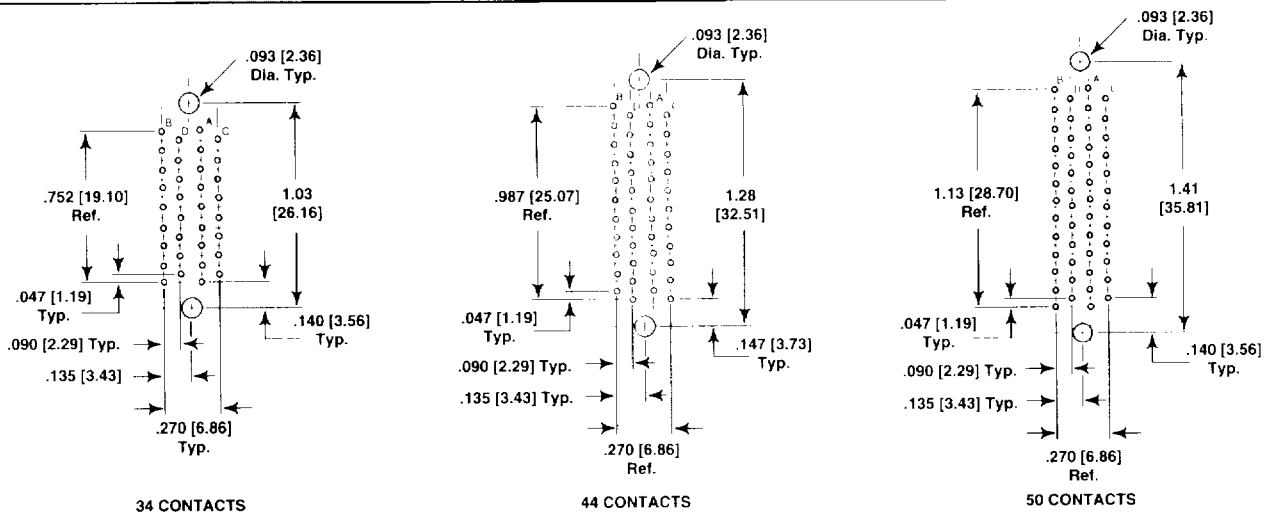


**DIP SOLDER
PC BOARD MOUNTING
PATTERNS**

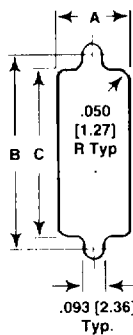
Male (MMP) Connector Shown - Female is Opposite.

Contact, Contact Row and Mating Hole C to C Dimensions also Applies to Solder Cup Style Connectors.

MOUNTING VARIATIONS [Numbers in brackets indicate millimeters]



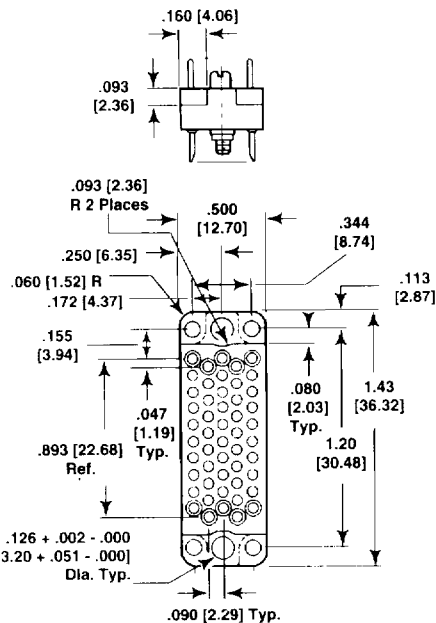
PANEL CUTOUT [Numbers in brackets indicate millimeters]



NUMBER OF CONTACTS	A	B	C	NUMBER OF CONTACTS	A	B	C
5	.210 [5.33]	.468 [11.89]	.340 [8.64]	20	.270 [6.86]	.814 [20.68]	.690 [17.53]
7	.210 [5.33]	.562 [14.27]	.440 [11.18]	26	.270 [6.86]	1.0 [25.40]	.870 [22.10]
9	.210 [5.33]	.656 [16.66]	.530 [13.46]	29	.270 [6.86]	1.09 [27.69]	.970 [24.64]
11	.270 [6.86]	.532 [13.51]	.410 [10.41]	34	.380 [9.65]	1.03 [26.16]	.910 [23.11]
14	.270 [6.86]	.625 [15.88]	.500 [12.70]	44	.380 [9.65]	1.28 [32.51]	1.16 [29.46]
18	.380 [9.65]	.656 [16.66]	.530 [13.46]	50	.380 [9.65]	1.41 [35.81]	1.28 [32.51]

DIMENSIONAL CONFIGURATIONS [Numbers in brackets indicate millimeters]

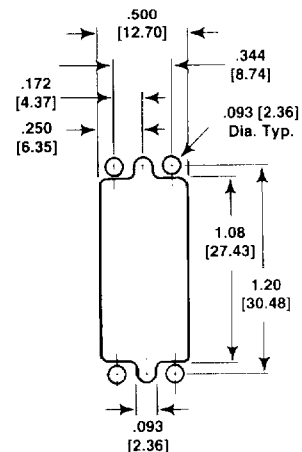
Note: The views below show the wiring side of a pin type connector (Socket style is opposite).
Socket hardware is assembled at "A" contact end of pin connector.



"C50" Configuration

PANEL CUTOUT

[Numbers in brackets indicate millimeters]



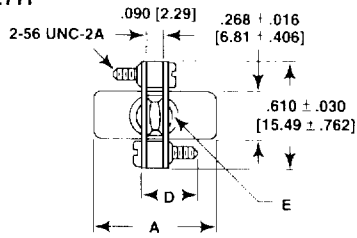
"C50" Configuration

DIP SOLDER PC BOARD MOUNTING PATTERNS

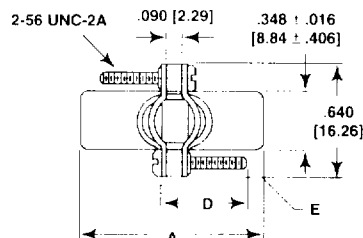
Male (MMP) Connector Shown - Female is Opposite. Contact, Contact Row and Mating Hole ϕ to ϕ Dimensions also Applies to Solder Cup Style Connectors.

HOOD VARIATIONS [Numbers in brackets indicate millimeters]

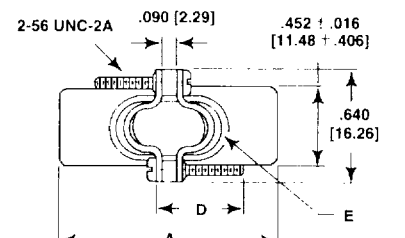
027H



5, 7, 9 CONTACTS

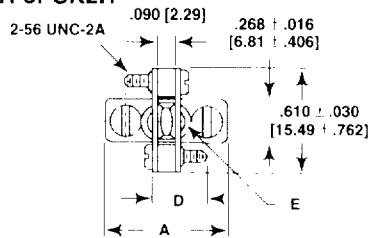


11, 14, 20, 26, 29 CONTACTS

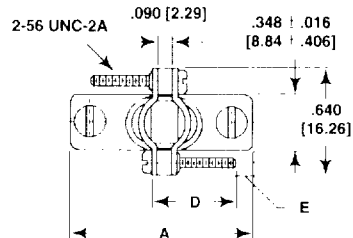


34, 44, 50 CONTACTS

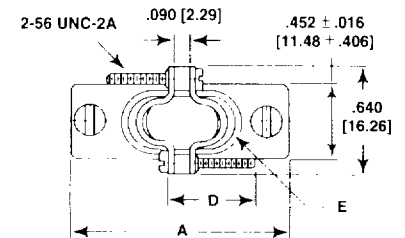
SKH or SK2H



5, 7, 9 CONTACTS



11, 14, 20, 26, 29 CONTACTS



34, 44, 50 CONTACTS

NUMBER OF CONTACTS	A ± .016 [.406]	B	C	D ± .016 [.406]	"E" CABLE OPENING SQ. IN. [SQ. MM]
5	.690 [17.53]	.630 [16.0]	.468 [11.89]	.310 [7.87]	.028 [.711]
7	.780 [19.81]	.630 [16.0]	.562 [14.27]	.440 [11.18]	.037 [.940]
9	.870 [22.10]	.630 [16.0]	.656 [16.66]	.500 [12.70]	.052 [1.321]
11	.780 [19.81]	.630 [16.0]	.532 [13.51]	.440 [11.18]	.054 [1.372]
14	.870 [22.10]	.630 [16.0]	.625 [15.88]	.500 [12.70]	.076 [1.930]
20	1.06 [26.92]	.630 [16.0]	.814 [20.68]	.620 [15.75]	.105 [2.667]
26	1.25 [31.75]	.630 [16.0]	1.0 [25.40]	.620 [15.75]	.105 [2.667]
29	1.34 [34.04]	.630 [16.0]	1.09 [27.67]	.620 [15.75]	.105 [2.667]
34	1.25 [31.75]	.630 [16.0]	1.03 [26.16]	.500 [12.70]	.160 [4.064]
44	1.50 [38.10]	1.19 [30.23]	1.28 [32.51]	.500 [12.70]	.190 [4.826]
50	1.62 [41.15]	1.19 [30.23]	1.41 [35.81]	.620 [15.75]	.202 [5.131]

HOW TO ORDER

CONNECTOR							HARDWARE		HOODS	
C	MM	D1	B	P	22	G	5	R	026*	H
CONTACTS	MODEL	TERMINATION	(OPTIONAL)	CONTACT STYLE	CONTACT SIZE	PLATING	NUMBER OF CONTACTS	(OPTIONAL)	HARDWARE VARIATIONS	HOOD VARIATIONS
	Microminiature		B = Beryllium copper contacts optional on solder cup socket contacts only . (Omit for standard contacts).	P = Pin S = Socket	22 AWG = .030" [.762] Diameter 24 AWG = .025" [.635] Diameter			R = Reversed guides or screwlocks (Omit for standard.)		(Omit if no Hood desired.) 027H = Hood (Top Cable Opening) with standard 027 Slotted Cres Guides. SKH = Hood (Top Cable Opening) with long SK-type Turnable Screwlocks (3-48 NF) and knobs. SK2H = Hood (Top Cable Opening) with long SK-type Turnable Screwlocks (2-56 NF) and knobs.
		(OPTIONAL) Dip solder termination optional. (Omit for standard solder cup.) Select tail length: D1 = .160" [4.06] Nominal D2 = .350" [8.89] Nominal				Optional plating available: G = Gold (.00003 thick) over Nickel. G5 = Gold (.00005 thick) over Nickel. Omit designator for Gold (.00001 thick) over Nickel.	5, 7, 9, 11, 14, 18, 20, 26, 29, 34, 44 or 50* *50 contact connectors are available in either the standard 4-row contact arrangement per MIL-C-28748 or a special 5-row contact arrangement. To order the special 5-row contact arrangement, use the designator "C50" for the number of contacts.			
(OPTIONAL)* Closed entry socket contacts optional or 22 AWG socket contacts only . (Omit for standard contacts.)									(Omit if no Hardware desired.) 026 = Slotted Brass Guides .078" [1.98] Diameter. 026L = Long Slotted Brass Guides .078" [1.98] Diameter. 027 = Slotted Cres Guides .078" [1.98] Diameter. 027L = Long Slotted Cres Guides .078" [1.98] Diameter. SL = Chassis Mounted Fixed Screwlocks (3-48 thread). SL2 = Chassis Mounted Fixed Screwlocks (2-56 thread). SLL = Chassis Mounted Fixed Screwlocks Long (3-48 thread). SL2L = Chassis Mounted Fixed Screwlocks Long (2-56 thread). NSL = Chassis Mounted Fixed Screwlocks (3-48 thread) with Nylon Retaining Nuts and Fiber Washers. NSL2 = Chassis Mounted Fixed Screwlocks (2-56 thread) with Nylon Retaining Nuts and Fiber Washers. SK = Cable Mounted - Turnable Screwlocks (3-48 thread). SK2 = Cable Mounted - Turnable Screwlocks (2-56 thread). SK030 = Cable Mounted - Turnable Screwlocks (3-48 thread) with short knobs. SK2030 = Cable Mounted - Turnable Screwlocks (2-56 thread) with short knobs. SK2035 = Cable Mounted - Turnable Screwlocks (2-56 thread) with socket head knobs.	

* To order complete connector with hardware supplied unassembled, add suffix "UA" on end of hardware designation.