

BETA

BACKSHELL / ACCESSORY / TOOLING GUIDE



DMC DANIELS
MANUFACTURING
CORPORATION

An ISO9001:2000 and AS9100:2004 Registered Company



Daniels Manufacturing Corporation offers our BETA Backshell Assembly Tools, a complete line of Adaptor Tools and Torque Tools for holding and torquing circular connectors during the installation and removal of accessories (backshell, strain relief, or EMI/RFI shielding hardware).

With 60 years of industry experience, DMC is the leading manufacturer of Mil-Qualified Crimp Termination Tools, Maintenance Tool Kits, and Insertion/Removal Tools for the High-Reliability Wire Harness Industry. DMC also manufactures ALPHATRON Wire Crimp Pull Testers and SAFE-T-CABLE, the time-saving substitute for safety Lockwire. DMC products have been used on virtually every Defense System, Aircraft Program, Land or Sea Going Transport System, and Space Exploration Program.

DMC is continually working with the government and major manufacturers towards the development of support

materials to keep pace with the most recent advances in technology. DMC is ready and capable to help satisfy your tooling needs with custom engineered tools.

DMC's full-service facility in Orlando, Florida has a qualified staff to recalibrate tools to meet FAA requirements and to refurbish Adaptor Tool Kits. DMC has developed a worldwide network of professionals who can assist in answering technical questions, processing orders for complete kits and individual components, and designing new service kits and modifying existing kits. DMC is an ISO 9100:2008 and AS9100C Registered Company, and RoHS Compliant.



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IMPORTANT NOTICE

The tooling suggested herein may not cover a user's specific contract or manufacturing requirements. It is the user's responsibility to carry out sufficient testing to verify the suitability of the DMC product selected for the specific requirements of each particular application. DMC is not liable for consequential or special damages of any nature or kind resulting from the use of any of our products.

Verbally quoted prices, or any prices, appearing in printed price lists, are subject to change without prior notice.

If you need firm prices for future deliveries, you should request a written quotation from our sales office.

**LIMITED WARRANTY
SEE PAGE 56**

ADAPTOR TOOLS



The central element of the Daniels Manufacturing Corp. Beta connector accessory tool product line is the adaptor tool. This unique device is configured in such a manner as to mate perfectly with the corresponding circular connector keying pattern. Therefore, it can be used to hold the connector in a stationary position while the accessory components are being installed or removed. Many keying arrangements and shell sizes are utilized in high reliability wiring systems and great care must be exercised when selecting and using the Beta adaptor tool. DMC has made great efforts to combine the most possible applications into each adaptor tool design, thereby mini-

mizing the tool requirements for overall system support. Many other important benefits are designed into DMC Beta adaptor tools.

SINGLE TOOL FOR MULTIPLE KEYING POSITIONS

When multiple keying positions exist within a specific shell size (Diameter), DMC engineers have designed each adaptor tool to accommodate as many variations as possible. Most adaptors will mate with six or more connectors having different keying positions. When compared with dummy receptacles or other connector holding devices, this flexibility is not possible.

MULTIPLE KEY ENGAGEMENT

The critical platings and delicate nature of connector keys are a prime consideration in the design of a secure connector holding system. Therefore, in all cases where the basic connector configuration permits, multiple key engagement is utilized. This allows torque to be applied to a greater

surface area and over a larger portion of the circumference of the connector.

ADAPTORS ARE AVAILABLE FOR BOTH PLUGS AND RECEPTACLES

The rotating coupling mechanism found on most plug connectors is the primary factor which prompted the original adaptor tool design; however, many users currently realize the benefits of adaptor tools when assembling or servicing receptacle connectors. DMC has both versions available for most circular connector series.

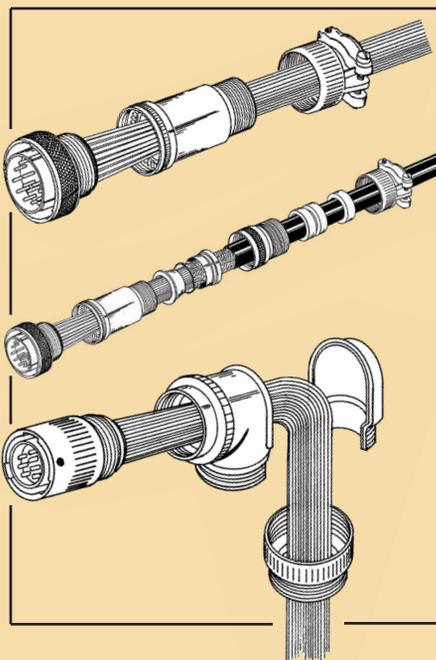
STANDARD SQUARE DRIVE MOUNTING

All DMC adaptor tools are made with a standard square drive (either 3/8" or 1/4") socket for easy utilization with common torque measuring devices or other tooling. This eliminates the need for special mounting fixtures, or other considerations common to the use of dummy receptacles and similar equipment.

CIRCULAR CONNECTORS AND THEIR ACCESSORIES

The evolution of electrical connectors has seen many changes in design configuration and utilization of many varieties of materials to meet the needs of their intended application. Backshells, strain reliefs, and other connector accessories have been a vital factor in that enduring evolutionary process.

Most connector manufacturers and suppliers offer a limited variety of connector accessories. But, the specific needs of aerospace designers has fostered a connector accessory industry comprised of many dynamic manufacturers, with extensive product lines dedicated solely to components which extend the connector's



performance capabilities. This variety of products offers the equipment designer total flexibility in the packaging of electronic wiring systems.

In the past two decades special considerations such as the shielding of electrical circuits from interference generated by radar systems, communication equipment, electrical fields, nuclear fields and harsh environmental conditions, have required accessory suppliers to develop multi-piece components which have very specific assembly and maintenance requirements. The demand for advanced tool capabilities is a critical element in the utilization of these sophisticated backshell systems.

QUICK REFERENCE TOOLING GUIDE

CONNECTOR IDENTIFICATION	ADAPTOR TOOL SETS		ADAPTOR LABEL	PAGE
	PLUG	RECEPTACLE		
AS50151 (MIL-C-5015)	CM-S-5015	CM-S-5015R	CHROME	6
MIL-DTL-22992 CLASS C,J,R	CM-S-229	N/A	BROWN	7
MIL-DTL-22992 CLASS L	CM-S-229L	N/A	BLACK	8
MIL-DTL-26482 SERIES I & II	CM-S-264	CM-S-264R	ORANGE	9
MIL-DTL-26500	CM-S-837	CM-S-837RB*	GREEN	10
MIL-DTL-28840	CM-S-288	CM-S-288R	WHITE	11
MIL-DTL-38999 SERIES I	CM-S-389L	CM-S-389LR	BLUE	12
MIL-DTL-38999 SERIES II	CM-S-389S	CM-S-264R	GRAY/ ORANGE	13
MIL-DTL-38999 SERIES III	CM-S-389T	CM-S-389TR	LAVENDER	14
MIL-DTL-38999 SERIES IV	CM-S-389B	CM-S-389BR	BEIGE	15
MIL-C-81511 SERIES I & III	CM-S-815L	CM-S-815R	YELLOW	16
MIL-C-81511 SERIES I & IV	CM-S-815S	CM-S-815R	RED	17
MIL-DTL-83723 SERIES I	CM-S-264	CM-S-264R	ORANGE	18
MIL-DTL-83723 SERIES II	CM-S-5015	CM-S-5015R	CHROME	19
MIL-DTL-83723 SERIES III*	CM-S-837	CM-S-837RB*	GREEN	20
PATTERN 602	CM-S-602	CM-S-264R	PURPLE	21
PATTERN 615	CM-S-SJT	CM-S-264R	GOLD	22

*BAYONET COUPLINGS ONLY - THREADED RECEPTACLE ADAPTOR SETS ARE NOT AVAILABLE FOR RECEPT.

*MATERIAL: ALUMINUM STEEL TOOLING IS AVAILABLE. CHECK WITH DMC FOR DETAILS.

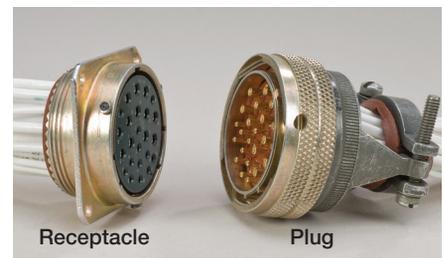
NA (Not available at time of printing - consult DMC)

SIMPLE ORIENTATION TO THE CONNECTOR

All adaptor tools have an indicator (Dot) which visually orients it with the master key on the connector. This enables the user to orient the two components for mating without trial and error fumbling.

ECONOMICAL, RELIABLE, AND AVAILABLE

There is not a precision system for holding circular connectors available anywhere which is more economical, reliable, or readily available to meet your needs than the DMC Beta adaptor tools.



Typical Mated Pair Connectors



**ADAPTOR TOOL COMPATIBILITY
WITH OTHER BETA SYSTEM PRODUCTS**

Adaptor tools and other accessory tools which comprise the DMC Beta™ product line are used in a variety of combinations to afford the user an efficient and flexible system of connector/accessory assembly. The following illustrations depict a few of the products which are combined in use. Certainly there are many applications which are not described. The selection of tools and the ways in which they are used are both dependent upon the types of connectors and accessory components as well as production and quality considerations. DMC will help with any application questions you may have.

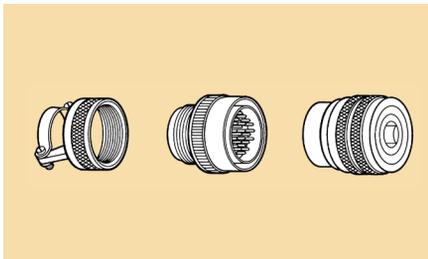
NOTE: Rotating the connector is not recommended — due to the stress which it imposes on the wire, contacts and sealing components. Adaptors and their associated tools that are designed to hold the connector stationary while the backshell accessory is turned.



SIMPLE HAND TIGHTENING

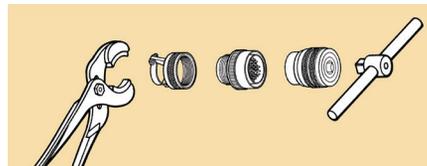
In the most basic operation, the adaptor is mated with the connector, and held in one hand. This stabilizes the connector while the backshell accessory is tightened with the other hand.

SIMPLE MECHANICAL ASSIST



Strain relief, connector, adaptor

When mechanical assistance is necessary to sufficiently tighten the accessory onto the connector, the stabilizing effect of the adaptor can be reinforced with one of several tools — in the operation shown, the connector is held stationary by the



Soft jaw pliers, strain relief, connector, adaptor, T-handle

Other tools, such as circular ring pliers or a strap wrench, could also have been selected to add simple mechanical assistance.



Circular Ring Pliers, strain relief, connector, adaptor, T-handle



Strain relief, connector, adaptor



Soft jaw pliers, strain relief, connector, adaptor, T-handle



Strap wrench, strain relief, connector

PRODUCTION STATION APPLICATIONS

When the measurement of torque is a requirement of a particular cable assembly operation, this can be easily accomplished with the use of the digital torque wrench.



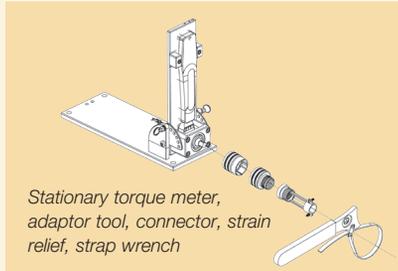
Digital torque wrench, adaptor, connector, strain relief



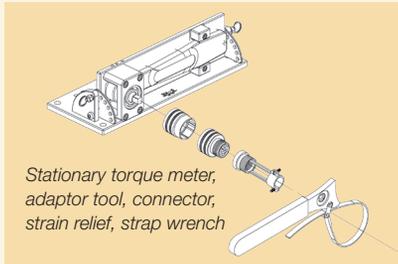
Digital torque wrench, handle-less strap wrench, connector, strain relief

If a stationary torque meter is needed, the digital torque wrench can be placed in a stationary mount base. The adaptor is then attached to the square drive on the torque meter, and this arrangement holds the connector while the backshell accessory is torqued onto the connector, with a strap wrench.

When the torque reaches the pre-set value, a signal light advises the operator that the desired torque value has been applied.

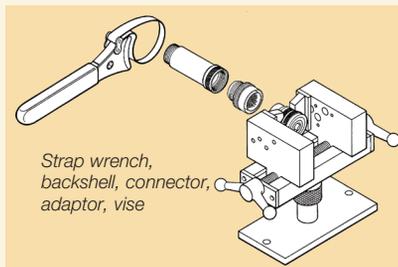


Stationary torque meter, adaptor tool, connector, strain relief, strap wrench



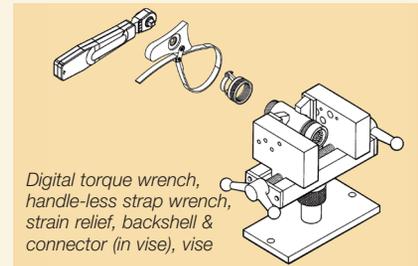
Stationary torque meter, adaptor tool, connector, strain relief, strap wrench

When optimum repeatability and production efficiency demand, the assembly station vise can be used to complement the ability of adaptor tools to stabilize the connector. As shown, the vise is being used to firmly hold the adaptor tool, while a strap wrench is being used to tighten the backshell onto the connector.



Strap wrench, backshell, connector, adaptor, vise

On multi-piece backshells, the correct torque on each accessory can only be achieved by efficiently holding adjacent parts. In the example shown, the assembly station vise is being used to hold the backshell segment already torqued onto the connector, while the strain relief is tightened with a strap wrench and a torque meter. Thus, the correct torque can be applied to the backshell segments without affecting the torque value already applied to prior connector/accessory components.

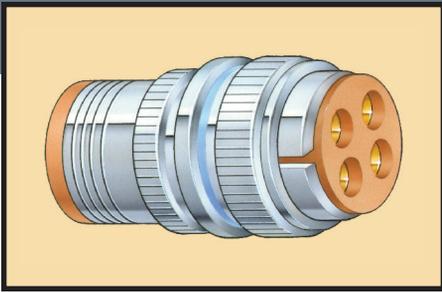


Digital torque wrench, handle-less strap wrench, strain relief, backshell & connector (in vise), vise



Handle-less strap wrench, digital torque wrench, strain relief, backshell (in vise jaws), connector, vise

AS50151 SERIES MS3100, MS3400 & MS3450



Straight Plug Shown

MANUFACTURER:
AERO ELECTRIC
AMPHENOL

AMPHENOL/MATRIX
GLASSEAL
HERMETIC SEAL CORP.
ITT CANNON

ARRAY
SPACECRAFT
GLENAIR
CORSAIR
ELECSYS
J-TECH

SERIES:

AE501, AE55, AE502, AE723
69, 72, 97, 157, 172, 173, 179, 208, 238 246
BT-M, BT-RA, HT, SCP, TBF, 10-72, 10-214, 10-244, 10-741,
10-747, 10-873, 10-874, 5015
MFR, M723, 944, 981
GSP
HS06, S*A-2000, 2000
BFH, BFR, CA, CA-EA, CA-EB, CA-HR, CA-KE, CA-RX, CV,
CVA, EX-A, FRA, FRF, FVA, FVF, FW, GS, MR, TBF, TBFH, WFS
AC
RJ, SC
650B, 660
CJ
D, DJ, DS, L, W, U
D, DJ, DS, DJS, W, L, U, JT

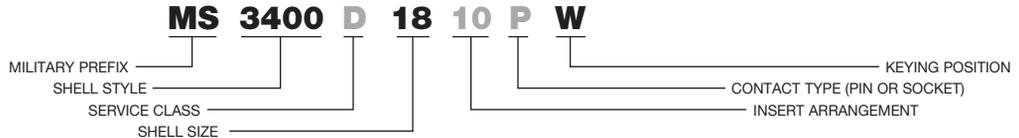
SPECIFICATIONS:

COUPLING METHOD: THREADED (MS3107,
MS3507 QUICK
DISCONNECT)
KEYING POSITIONS: BLANK (NORMAL),
W, X, Y, Z
**ALTERNATE KEYING
METHOD:** ROTATION OF INSERT
WITHIN SHELL – KEY
REMAINS STATIONARY
EMI/RFI GROUNDING: NO

SHELL MATERIAL & FINISH:

SHELL	FINISH
ALUMINUM	Cadmium Olive Drab Nickel Cadmium Olive Drab Over Nickel
WROUGHT ALUMINUM	Cadmium Olive Drab Over Nickel
STEEL	Cadmium Olive Drab Nickel
STAINLESS STEEL	Cadmium Black Passivated

**TYPICAL CONNECTOR
PART NUMBER
BREAKDOWN**



ADAPTOR TOOLS

PLUG (REMOVABLE PORTION)					RECEPTACLE (STATIONARY PORTION)				
BASIC IDENT. #/DESCRIPTION	SHELL SIZE	KEYING POSITIONS	ADAPTOR TOOL NUMBER	COLOR	BASIC IDENT. #/DESCRIPTION	SHELL SIZE	KEYING POSITIONS	ADAPTOR TOOL NUMBER	COLOR
MS3106 /Straight	8	ALL	CM5015-8	CHROME	MS3100 /Wall mount	8	ALL	CM5015R-8	CHROME
MS3107 /Quick disconnect	10	ALL	CM5015-10	CHROME	MS3101 /In-line	10	ALL	CM5015R-10	CHROME
MS3108 /90° angle	12	ALL	CM5015-12	CHROME	MS3102 /Box mount	12	ALL	CM5015R-12	CHROME
MS3436 /Straight	14	ALL	CM5015-14	CHROME	MS3103 /Wall mount, potting seal	14	ALL	CM5015R-14	CHROME
MS3507 /Quick disconnect	16	ALL	CM5015-16	CHROME	MS3142 /Box mount, hermetic seal	16	ALL	CM5015R-16	CHROME
MS25183 /Straight, potting seal	18	ALL	CM5015-18	CHROME	MS3143 /Solder mount, hermetic seal	18	ALL	CM5015R-18	CHROME
MS25183A /Straight, potting seal, with ground lug	20	ALL	CM5015-20	CHROME	MS3400 /Wall mount	20	ALL	CM5015R-20	CHROME
MS3406 /Straight	22	ALL	CM5015-22	CHROME	MS3401 /In-line	22	ALL	CM5015R-22	CHROME
MS3408 /90° angle	24	ALL	CM5015-24	CHROME	MS3402 /Box mount	24	ALL	CM5015R-24	CHROME
MS3409 /45° angle	28	ALL	CM5015-28	CHROME	MS3404 /*Jam nut	28	ALL	CM5015R-28	CHROME
MS3456 /Straight	32	ALL	CM5015-32	CHROME	MS3412 /Box mount, threaded rear skirt	32	ALL	CM5015R-32	CHROME
MS3459 /Straight self-locking coupling nut	36	ALL	CM5015-36	CHROME	MS3450 /Wall mount	36	ALL	CM5015R-36	CHROME
	40	ALL	CM5015-40	CHROME	MS3451 /In-line	40	ALL	CM5015R-40	CHROME
	44	ALL	CM5015-44	CHROME	MS3452 /Box mount	44	ALL	CM5015R-44	CHROME
	48	ALL	CM5015-48	CHROME	MS3454 /*Jam nut	48	ALL	CM5015R-48	CHROME

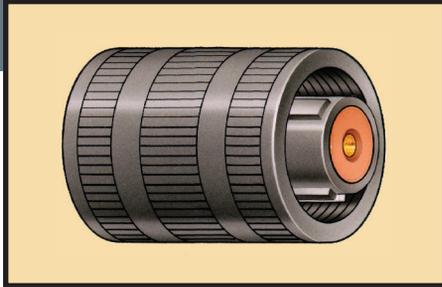
ADAPTOR SET PART NO.	ADAPTORS IN SET	COVERAGE (SHELL SIZE)
CM-S-5015	15	8 THRU 48
CM-S-5015S	10	8 THRU 28
CM-S-5015M	5	32 THRU 48

ADAPTOR SET PART NO.	ADAPTORS IN SET	COVERAGE (SHELL SIZE)
CM-S-5015R	15	8 THRU 48
CM-S-5015RS	10	8 THRU 28
CM-S-5015RM	5	32 THRU 48

*MATERIAL: ALUMINUM STEEL TOOLING IS AVAILABLE. CHECK WITH DMC FOR DETAILS.

NA (Not available)

MIL-DTL-22992 CLASS C, J & R



Plug Shown

MANUFACTURER:
AMPHENOL

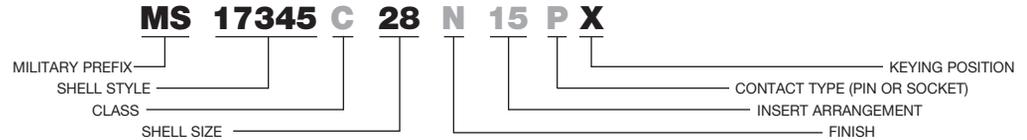
SERIES:
HK, QWLD (10-194), 88-194

SPECIFICATIONS:
COUPLING METHOD: QUICK DISCONNECT –
THREADED COUPLING
RINGS
KEYING POSITIONS: BLANK (NORMAL),
W, X, Y, Z
**ALTERNATE KEYING
METHOD:** ROTATION OF INSERT
WITHIN SHELL – KEYS
REMAIN STATIONARY
EMI/RFI GROUNDING: NO

SHELL MATERIAL & FINISH:

SHELL	FINISH
ALUMINUM	Hard Black Anodize Cadmium Olive Drab Over Nickel

**TYPICAL CONNECTOR
PART NUMBER
BREAKDOWN**



ADAPTOR TOOLS									
PLUG (REMOVABLE PORTION)					RECEPTACLE (STATIONARY PORTION)				
BASIC IDENT. #/DESCRIPTION	SHELL SIZE	KEYING POSITIONS	ADAPTOR TOOL NUMBER*	COLOR	BASIC IDENT. #/DESCRIPTION	SHELL SIZE	KEYING POSITIONS	ADAPTOR TOOL NUMBER*	COLOR
MS17344 /Plug	12	ALL	CM229-12	BROWN	MS17343 /Wall mount MS17345 /In-line MS17346 /Box mount MS17347 /Jam nut wall mount MS17348 /Jam nut box mount	12	-	N/A	-
	14	ALL	CM229-14	BROWN		14	-	N/A	-
	16	ALL	CM229-16	BROWN		16	-	N/A	-
	18	ALL	CM229-18	BROWN		18	-	N/A	-
	20	ALL	CM229-20	BROWN		20	-	N/A	-
	22	ALL	CM229-22	BROWN		22	-	N/A	-
	24	ALL	CM229-24	BROWN		24	-	N/A	-
	36	ALL	CM229-36	BROWN		32	-	N/A	-
	40	ALL	CM229-40	BROWN		36	-	N/A	-
					40	-	N/A	-	

NOTE: For shell sizes 28, 32, 44 see Class "L", Page 8.

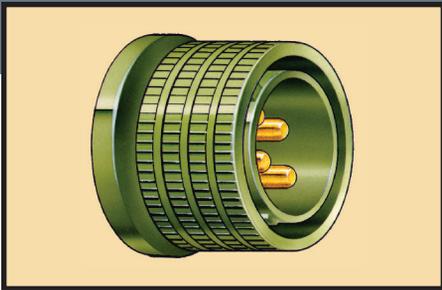
NA (Not available)

ADAPTOR SET PART NO.*	ADAPTORS IN SET	COVERAGE (SHELL SIZE)	ADAPTOR SET PART NO.*	ADAPTORS IN SET	COVERAGE (SHELL SIZE)
CM-S-229	9	12 THRU 40	N/A	-	-

*MATERIAL: ALUMINUM STEEL TOOLING IS AVAILABLE. CHECK WITH DMC FOR DETAILS.

NA (Not available)

MIL-DTL-22992 CLASS L



Straight Plug Shown

MANUFACTURER:
AMPHENOL
ROBERT TECHNOLOGIES

SERIES:
ALQWLD, 229, 10-473, MHD
RT905

SPECIFICATIONS:

COUPLING METHOD: QUICK DISCONNECT –
THREADED COUPLING
RINGS

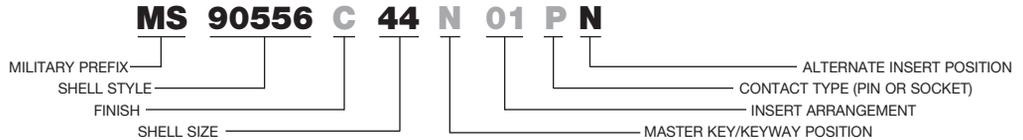
KEYING POSITIONS: N (NORMAL), W, X, Y
**ALTERNATE KEYING
METHOD:** ROTATION OF INSERT
WITHIN SHELL – KEYS
REMAIN STATIONARY

EMI/RFI GROUNDING: NO

SHELL MATERIAL & FINISH:

SHELL	FINISH
ALUMINUM	Hard Black Anodize Cadmium Olive Drab Over Nickel

**TYPICAL CONNECTOR
PART NUMBER
BREAKDOWN**



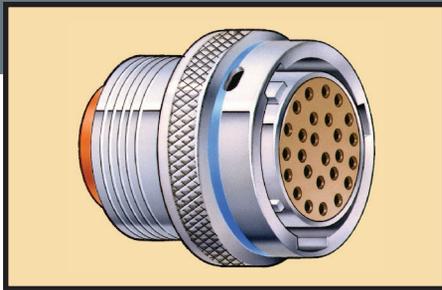
ADAPTOR TOOLS

PLUG (REMOVABLE PORTION)					RECEPTACLE (STATIONARY PORTION)				
BASIC IDENT. #/DESCRIPTION	SHELL SIZE	KEYING POSITIONS	ADAPTOR TOOL NUMBER	COLOR	BASIC IDENT. #/DESCRIPTION	SHELL SIZE	KEYING POSITIONS	ADAPTOR TOOL NUMBER	COLOR
MS90556 /Straight MS90558 /Wall mount	28	ALL	CM229L-28	BLACK	MS90555 /Wall mount MS90557 /In-line	28	–	N/A	–
	32	ALL	CM229L-32	BLACK		32	–	N/A	–
	44	ALL	CM229L-44	BLACK		44	–	N/A	–
	48	ALL	CM229L-48	BLACK		48	–	N/A	–
	52	ALL	CM229L-52	BLACK		52	–	N/A	–

NA (Not available)

ADAPTOR SET PART NO.	ADAPTORS IN SET	COVERAGE (SHELL SIZE)	ADAPTOR SET PART NO.	ADAPTORS IN SET	COVERAGE (SHELL SIZE)
CM-S-229L	5	28 THRU 52	N/A	–	–

MIL-DTL-26482 SERIES I & II



Straight Plug Shown

MANUFACTURER:
ARRAY
AERO ELECTRIC
AMPHENOL
DEUTSCH/TE
GLASSEAL
HERMETIC SEAL CORP.
ITT CANNON

SEALTRON
SOURIAU
SPI
CORSAIR

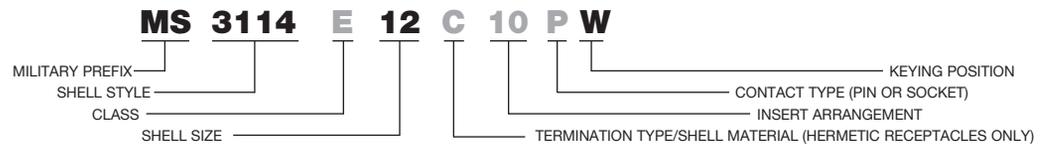
SERIES:
 PW
 AE77
 118, DC, FPT(21-), PT, PT*CE, SP*CE, PT*SE, PTS*DR, SP, MB1
 AFD, DBC, RBC, 226,450, 460, 810, 880
 BE, GB
 S*A-7000, 7000, HR
 KPD, KPSE, KSSE, KP*, KS*, KPT, KSP, KPTM, KSPM PV, PVA,
 PVJ, PVW, PVX
 6300, 8100, 8300, 8312, 8315
 851, 851*R, 8526, BT, L*T
 MS31
 CJO

SPECIFICATIONS:
COUPLING METHOD: BAYONET
KEYING POSITIONS: BLANK (NORMAL),
 W, X, Y, Z
ALTERNATE KEYING METHOD: KEYS REMAIN STATIONARY
EMI/RFI GROUNDING: YES (EMI/RFI GROUNDING FINGERS MAY NOT BE AVAILABLE ON ALL MODELS)

SHELL MATERIAL & FINISH:

SHELL	FINISH
ALUMINUM	Hard Anodize – Gray/Black Cadmium Olive Drab Cadmium Olive Drab Over Nickel
STEEL	Tin

TYPICAL CONNECTOR PART NUMBER BREAKDOWN



ADAPTOR TOOLS

PLUG (REMOVABLE PORTION)					RECEPTACLE (STATIONARY PORTION)				
BASIC IDENT. #/DESCRIPTION	SHELL SIZE	KEYING POSITIONS	ADAPTOR TOOL NUMBER	COLOR	BASIC IDENT. #/DESCRIPTION	SHELL SIZE	KEYING POSITIONS	ADAPTOR TOOL NUMBER*	COLOR
MS3116 /Straight	8	ALL	CM264-8*	ORANGE	MS3110 /Wall mount	8	ALL	CM264R-8	ORANGE
MS3126 /Straight	10	ALL	CM264-10	ORANGE	MS3111 /In-line	10	ALL	CM264R-10	ORANGE
MS3475 /Straight, RFI grounding	12	ALL	CM264-12	ORANGE	MS3112 /Box mount	12	ALL	CM264R-12	ORANGE
MS3476 /Straight	14	ALL	CM264-14	ORANGE	MS3113 /Hermetic seal solder mount	14	ALL	CM264R-14	ORANGE
MS3121 /Straight	16	ALL	CM264-16	ORANGE	MS3114 /Jam nut	16	ALL	CM264R-16	ORANGE
	18	ALL	CM264-18	ORANGE	MS3119 /Thru-bulkhead	18	ALL	CM264R-18	ORANGE
	20	ALL	CM264-20	ORANGE	MS3122 /Box mount	20	ALL	CM264R-20	ORANGE
	22	ALL	CM264-22	ORANGE	MS3124 /Jam nut	22	ALL	CM264R-22	ORANGE
	24	ALL	CM264-24	ORANGE	MS3127 /Large flange box mount	24	ALL	CM264R-24	ORANGE
					MS3128 /Large flange wall mount				
					MS3440 /Hermetic seal box mount				
					MS3442 /Wide flange hermetic seal box mount				
					MS3443 /Hermetic seal solder mount				
					MS3449 /Hermetic seal jam nut				
					MS3470 /Wall mount				
					MS3471 /In-line				
					MS3472 /Wide flange wall mount				
					MS3473 /Hermetic seal solder mount				
					MS3474 /Jam nut				
					MS3477 /Hermetic seal box mount				
					MS3479 /Hermetic seal jam nut				

ADAPTOR SET PART NO.	ADAPTORS IN SET	COVERAGE (SHELL SIZE)	ADAPTOR SET PART NO.	ADAPTORS IN SET	COVERAGE (SHELL SIZE)
CM-S-264*	9	8 THRU 24	CM-S-264R*	9	8 THRU 24

MIL-DTL-26500



Straight Plug Shown

MANUFACTURER:
 AMPHENOL
 BOEING (SPECIFICATION)
 CONNECTOR INDUSTRIES
 DETORONICS
 Deutsch/TE
 ELECTRONIC SEALS
 GLASSEAL
 HERMETIC SEAL CORP.
 ITT CANNON
 SEALTRON
 SOURIAU
 CINCH

SERIES:
 48, 48-7005, 518, MB3, MT3, B, BFH, F, ZZ
 BACC45F, BACC63
 26500
 DX
 DB, DL, 94603
 26500
 50
 26500
 HTMF
 6500, 6600, 8500, 8600
 8530
 C48, CN0915, CN0930, CN0942, CN0966, CN0967, MMB

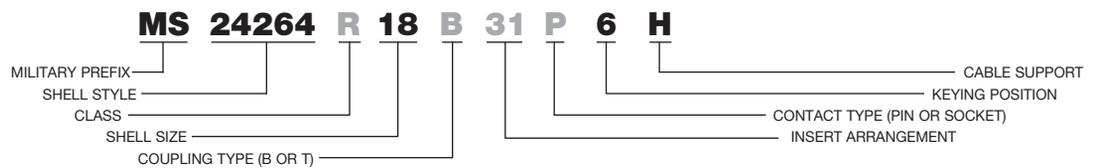
SPECIFICATIONS:

COUPLING METHOD: BAYONET OR THREADED
KEYING POSITIONS: N (NORMAL), 1, 2, 3, 4, 5, 6, 7, 8, 9, 10
ALTERNATE KEYING METHOD: INSERT ROTATION IN POSITIONS 1 THRU 5, MINOR KEYS ROTATE IN POSITIONS 6 THRU 10
EMI/RFI GROUNDING: NO

SHELL MATERIAL & FINISH:

SHELL	FINISH
ALUMINUM	Anodize - Gray/Black Cadmium
STAINLESS STEEL	Passivated
STEEL	Tin Cadmium

TYPICAL CONNECTOR PART NUMBER BREAKDOWN



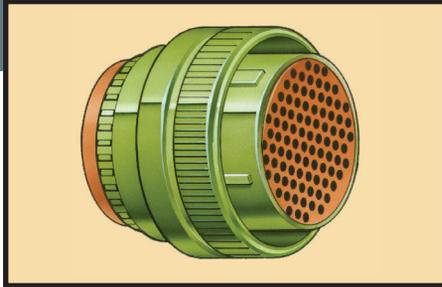
ADAPTOR TOOLS

PLUG (REMOVABLE PORTION)					RECEPTACLE (STATIONARY PORTION)				
BASIC IDENT. #/DESCRIPTION	SHELL SIZE	KEYING POSITIONS	ADAPTOR TOOL NUMBER	COLOR	BASIC IDENT. #/DESCRIPTION	SHELL SIZE	KEYING POSITIONS	ADAPTOR TOOL NUMBER	COLOR
MS24266 /Straight	8	N, 8, 9	CM837-8A*	GREEN	MS24264 /Wall mount	8	ALL	CM837RB-8	GREEN
MS27615 /Straight	8	6, 7	CM837-8B*	GREEN	MS24265 /Jam nut	10	ALL	CM837RB-10	GREEN
	8	N, 8, 9	CM837-8C**	GREEN	MS27034 /Hermetic solder mount	12	ALL	CM837RB-12	GREEN
	8	6, 7	CM837-8D**	GREEN	MS27613 /Wall mount	14	ALL	CM837RB-14	GREEN
	10	N, 8, 9	CM837-10A	GREEN	MS27614 /Jam nut	16	ALL	CM837RB-16	GREEN
	10	6, 7, 10	CM837-10B	GREEN		18	ALL	CM837RB-18	GREEN
	12	N, 6, 8	CM837-12A	GREEN		20	ALL	CM837RB-20	GREEN
	12	7, 9, 10	CM837-12B	GREEN		22	ALL	CM837RB-22	GREEN
	14	N, 6, 8	CM837-14A	GREEN		24	ALL	CM837RB-24	GREEN
	14	7, 9, 10	CM837-14B	GREEN					
	16	N, 6, 8	CM837-16A	GREEN					
	16	7, 9, 10	CM837-16B	GREEN					
	18	N, 6, 8	CM837-18A	GREEN					
	18	7, 9, 10	CM837-18B	GREEN					
	20	N, 6, 8	CM837-20A	GREEN					
	20	7, 9, 10	CM837-20B	GREEN					
	22	N, 6, 8	CM837-22A	GREEN					
	22	7, 9, 10	CM837-22B	GREEN					
	24	N, 6, 8	CM837-24A	GREEN					
	24	7, 9, 10	CM837-24B	GREEN					
	28	N, 6, 8	CM837-28A	GREEN					
	28	7, 9, 10	CM837-28B	GREEN					

*For bayonet coupling connectors only. **For threaded coupling connectors only. *** MATERIAL: ALUMINUM STEEL TOOLING IS AVAILABLE. CHECK WITH DMC FOR DETAILS.

ADAPTOR SET PART NO.	ADAPTORS IN SET	COVERAGE (SHELL SIZE)	ADAPTOR SET PART NO.	ADAPTORS IN SET	COVERAGE (SHELL SIZE)
CM-S-837	22	8 THRU 28	CM-S-837RB	9	8 THRU 24

MIL-DTL-28840



Straight Plug Shown

MANUFACTURER:
GLENAIR

SERIES:
GT, GS, GS28840, 900

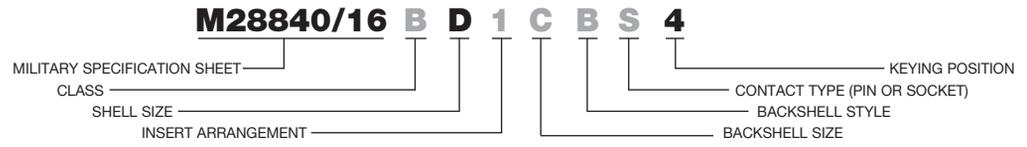
SPECIFICATIONS:
COUPLING METHOD: THREADED
KEYING POSITIONS: 1, 2, 3, 4, 5, 6
ALTERNATE KEYING METHOD: MASTER KEY REMAINS STATIONARY – MINOR KEYS ROTATE INDEPENDENTLY

EMI/RFI GROUNDING: YES (EMI/RFI GROUNDING FINGERS MAY NOT BE AVAILABLE ON ALL MODELS)

SHELL MATERIAL & FINISH:

SHELL	FINISH
ALUMINUM	Cadmium Olive Drab Over Nickel
STEEL	Cadmium

TYPICAL CONNECTOR PART NUMBER BREAKDOWN



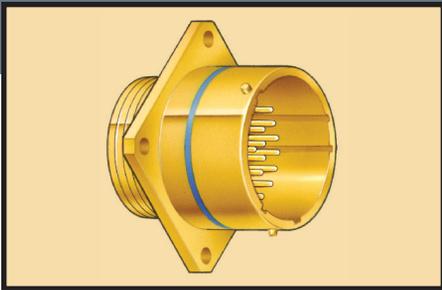
ADAPTOR TOOLS

PLUG (REMOVABLE PORTION)					RECEPTACLE (STATIONARY PORTION)				
BASIC IDENT. #/DESCRIPTION	SHELL SIZE	KEYING POSITIONS	ADAPTOR TOOL NUMBER	COLOR	BASIC IDENT. #/DESCRIPTION	SHELL SIZE	KEYING POSITIONS	ADAPTOR TOOL NUMBER	COLOR
M28840/16 /Straight	11(A)	1, 3, 5	CM288-11A	WHITE	M28840/10 /Wall mount	11(A)	1	CM288R-11A	WHITE
M28840/17 /Straight, straight strain relief	11(A)	2, 4, 6	CM288-11B	WHITE	M28840/11 /In-line	13(B)	1	CM288R-13A	WHITE
M28840/18 /Straight, 90° strain relief	13(B)	1, 3, 5	CM288-13A	WHITE	M28840/12 /Box mount	15(C)	1	CM288R-15A	WHITE
M28840/19 /Straight, 45° strain relief	13(B)	2, 4, 6	CM288-13B	WHITE	M28840/14 /Jam nut	17(D)	1	CM288R-17A	WHITE
M28840/26 /Straight, straight backshell for jacketed cable	15(C)	2, 3, 4	CM288-15A	WHITE	M28840/20 /Wall mount, EMI	19(E)	1	CM288R-19A	WHITE
M28840/28 /Straight, 90° backshell for jacketed cable	15(C)	1, 5, 6	CM288-15B	WHITE	M28840/21 /In-line, straight backshell for jacketed cable	23(F)	1	CM288R-23A	WHITE
M28840/29 /Straight, 45° backshell for jacketed cable	17(D)	2, 3, 4	CM288-17A	WHITE		25(G)	1	CM288R-25A	WHITE
	17(D)	1, 5, 6	CM288-17B	WHITE		29(H)	1	CM288R-29A	WHITE
	19(E)	2, 3, 4	CM288-19A	WHITE		33(J)	1	CM288R-33A	WHITE
	19(E)	1, 5, 6	CM288-19B	WHITE		11(A)	2, 3, 4, 5, 6	CM288R-11B	WHITE
	23(F)	2, 3, 4	CM288-23A	WHITE		13(B)	2, 3, 4, 5, 6	CM288R-13B	WHITE
	23(F)	1, 5, 6	CM288-23B	WHITE		15(C)	2, 3, 4, 5, 6	CM288R-15B	WHITE
	25(G)	2, 3, 4	CM288-25A	WHITE		17(D)	2, 3, 4, 5, 6	CM288R-17B	WHITE
	25(G)	1, 5, 6	CM288-25B	WHITE		19(E)	2, 3, 4, 5, 6	CM288R-19B	WHITE
	29(H)	2, 3, 4	CM288-29A	WHITE		23(F)	2, 3, 4, 5, 6	CM288R-23B	WHITE
	29(H)	1, 5, 6	CM288-29B	WHITE		25(G)	2, 3, 4, 5, 6	CM288R-25B	WHITE
	33(J)	2, 3, 4	CM288-33A	WHITE		29(H)	2, 3, 4, 5, 6	CM288R-29B	WHITE
	33(J)	1, 5, 6	CM288-33B	WHITE		33(J)	2, 3, 4, 5, 6	CM288R-33B	WHITE

ADAPTOR SET PART NO.	ADAPTORS IN SET	COVERAGE (SHELL SIZE)
CM-S-288	18	11 THRU 33

ADAPTOR SET PART NO.	ADAPTORS IN SET	COVERAGE (SHELL SIZE)
CM-S-288R	18	11 THRU 33

MIL-DTL-38999 SERIES I



Wall Mount Receptacle Shown

MANUFACTURER:
 AMERICAN MICRO
 AMPHENOL/SOCAPEX
 AMPHENOL/PYLE NATIONAL
 DEUTSCH/TE
 ELECTRONIC SEALS
 GLASSEAL
 GLENAIR
 ITT CANNON/VEAM
 PLESSEY
 SAE
 SEALTRON
 SOURIAU
 SPACECRAFT COMPONENTS
 CORSAIR HI REL
 RMS

SERIES:
 3
 416, MB91, LJT, 5388, ILJT
 G, P, T1
 CTC, DJT
 SERIES I
 700
 90000, 9220, 230, 231, 232, 91500, 92200
 KJL, KJL, LTT
 CT, LCT
 HM (SERIES I)
 9700
 8LT
 DCR, DCP
 7600
 R07

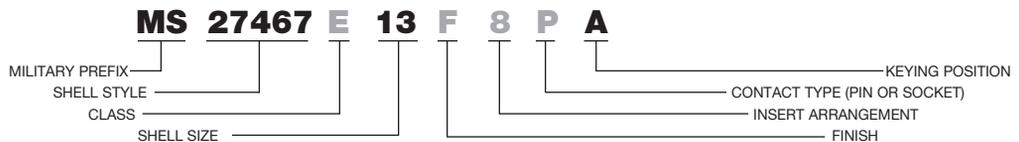
SPECIFICATIONS:

COUPLING METHOD: BAYONET
KEYING POSITIONS: BLANK (NORMAL),
 A, B, C, D
ALTERNATE KEYING METHOD: ROTATION OF MASTER
 KEY – MINOR KEYS
 REMAIN STATIONARY
EMI/RFI GROUNDING: YES (EMI/RFI GROUNDING
 FINGERS MAY NOT
 BE AVAILABLE ON
 ALL MODELS)

SHELL MATERIAL & FINISH:

SHELL	FINISH
ALUMINUM	Bright Cadmium Over Nickel Cadmium Olive Drab Over Nickel Anodize Nickel
STAINLESS STEEL	Passivated Nickel
STEEL	Fused Tin

**TYPICAL CONNECTOR
PART NUMBER
BREAKDOWN**



ADAPTOR TOOLS

PLUG (REMOVABLE PORTION)

RECEPTACLE (STATIONARY PORTION)

BASIC IDENT. #/DESCRIPTION	SHELL SIZE	KEYING POSITIONS	ADAPTOR TOOL NUMBER	COLOR	BASIC IDENT. #/DESCRIPTION	SHELL SIZE	KEYING POSITIONS	ADAPTOR TOOL NUMBER	COLOR
MS27467 /Straight, EMI grounding	9	ALL	CM389L-9	BLUE	MS27466 /Wall mount	9	ALL	CM389LR-9	BLUE
MS27498 /90°	11	ALL	CM389L-11	BLUE	MS27468 /Jam nut	11	ALL	CM389LR-11	BLUE
MS27653 /Straight, EMI grounding	13	ALL	CM389L-13	BLUE	MS27469 /Hermetic wall mount	13	ALL	CM389LR-13	BLUE
MS27661 /Straight plug, lanyard release	15	ALL	CM389L-15	BLUE	MS27470 /Hermetic jam nut	15	ALL	CM389LR-15	BLUE
	17	ALL	CM389L-17	BLUE	MS27471 /Hermetic solder mount	17	ALL	CM389LR-17	BLUE
	19	ALL	CM389L-19	BLUE	MS27496 /Box mount	19	ALL	CM389LR-19	BLUE
	21	ALL	CM389L-21	BLUE	MS27505 /Box mount, (rear panel mounting)	21	ALL	CM389LR-21	BLUE
	23	ALL	CM389L-23	BLUE	MS27515 /Wall mount, (rear panel mounting)	23	ALL	CM389LR-23	BLUE
	25	ALL	CM389L-25	BLUE	MS27652 /Wall mount	25	ALL	CM389LR-25	BLUE
					MS27654 /Wall mount, (rear panel mounting)				
					MS27656 /Wall mount, (rear panel mounting)				
					MS27662 /Thru-bulkhead				

ADAPTOR SET PART NO.	ADAPTORS IN SET	COVERAGE (SHELL SIZE)	ADAPTOR SET PART NO.	ADAPTORS IN SET	COVERAGE (SHELL SIZE)
CM-S-389L	9	9 THRU 25	CM-S-389LR	9	9 THRU 25

MIL-DTL-38999 SERIES II



Straight Plug Shown

MANUFACTURER:	SERIES:
AMERICAN MICRO	4
AERO ELECTRIC	AE273
AMPHENOL	418, JT, MB91
CONNECTOR INDUSTRIES	G, H
CORSAIR	CJ
DETORONICS	DJT
ELECTRONIC SEALS	SERIES II
GLASSEAL	800
GLENAIR	231, 232, 233
HERMETIC SEAL CORP.	900000
ITT CANNON	KJ, KJM
PLESSEY	CT
SPI	MS
SEALTRON	9800, A9B03
SOURIAU	8LT, 8TO, 8T2
HI REL	53000, 54010

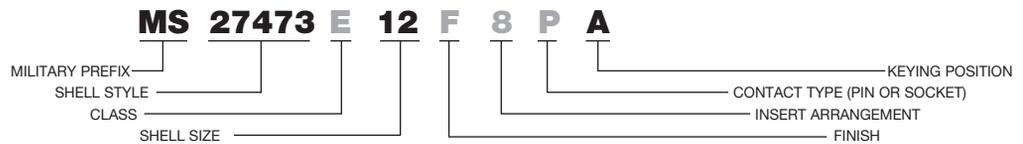
SPECIFICATIONS:

COUPLING METHOD: BAYONET
KEYING POSITIONS: BLANK (NORMAL),
 A, B, C, D
ALTERNATE KEYING METHOD: MASTER KEY ROTATES –
 MINOR KEYS REMAIN STATIONARY
EMI/RFI GROUNDING: YES (EMI/RFI GROUNDING
 FINGERS MAY NOT BE AVAILABLE ON
 ALL MODELS)

SHELL MATERIAL & FINISH:

SHELL	FINISH
ALUMINUM	Nickel Bright Cadmium Over Nickel Cadmium Olive Drab Over Nickel Anodize
STAINLESS STEEL	Passivated Nickel
STEEL	Fused Tin

TYPICAL CONNECTOR PART NUMBER BREAKDOWN

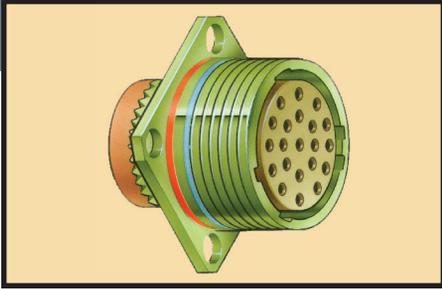


ADAPTOR TOOLS

PLUG (REMOVABLE PORTION)					RECEPTACLE (STATIONARY PORTION)				
BASIC IDENT. #/DESCRIPTION	SHELL SIZE	KEYING POSITIONS	ADAPTOR TOOL NUMBER	COLOR	BASIC IDENT. #/DESCRIPTION	SHELL SIZE	KEYING POSITIONS	ADAPTOR TOOL NUMBER	COLOR
MS27473 /Straight	8	ALL	CM389S-8	GRAY	MS27472 /Wall mount	8	ALL	CM264R-8	ORANGE
MS27480 /Straight	10	ALL	CM389S-10	GRAY	MS27474 /Jam nut	10	ALL	CM264R-10	ORANGE
MS27484 /Straight, EMI grounding	12	ALL	CM389S-12	GRAY	MS27475 /Hermetic wall mount	12	ALL	CM264R-12	ORANGE
MS27500 /90°	14	ALL	CM389S-14	GRAY	MS27476 /Hermetic box nut	14	ALL	CM264R-14	ORANGE
	16	ALL	CM389S-16	GRAY	MS27477 /Hermetic jam mount	16	ALL	CM264R-16	ORANGE
	18	ALL	CM389S-18	GRAY	MS27478 /Hermetic solder mount	18	ALL	CM264R-18	ORANGE
	20	ALL	CM389S-20	GRAY	MS27479 /Wall mount	20	ALL	CM264R-20	ORANGE
	22	ALL	CM389S-22	GRAY	MS27481 /Jam mount	22	ALL	CM264R-22	ORANGE
	24	ALL	CM389S-24	GRAY	MS27482 /Hermetic wall mount	24	ALL	CM264R-24	ORANGE
					MS27483 /Hermetic jam nut				
					MS27497 /Wall mount, back panel mounting				
					MS27499 /Box mount				
					MS27503 /Hermetic solder mount				
					MS27504 /Box mount				
					MS27508 /Box mount, back panel mounting				
					MS27513 /Box mount, long grommet				
					MS27664 /Wall mount, back panel mounting				

ADAPTOR SET PART NO.	ADAPTORS IN SET	COVERAGE (SHELL SIZE)	ADAPTOR SET PART NO.	ADAPTORS IN SET	COVERAGE (SHELL SIZE)
CM-S-389S	9	8 THRU 24	CM-S-264R	9	8 THRU 24

MIL-DTL-38999 SERIES III



Wall Mount Receptacle Shown

MANUFACTURER:
CORSAIR
G&H TECH/COOPER
AMPHENOL/PYLE NATIONAL
AMPHENOL
AMPHENOL/SOCAPEX
AERO ELECTRIC
DEUTSCH/TE
ELECTRONIC SEALS
ITT CANNON
PLESSEY
AB CONNECTORS
HI REL
SEALTRON
HERMETIC SEAL
CONESYS EUROPE
AMERICAN MICRO
SPACECRAFT
SOURAIU

SERIES:
CJ
G300/G3GB, G3L6
T3
TV, 5565, T3, MT93, TVP, CTVP, ITV, TVS
TVP, TVO7
38999, AE320, AE322
DTS, ACT
SERIES III
KJA, KJB, VTTP
TCT
ABAC
85010, 86000, 59000, 87000
9900, 9903
HR
AE
5, 2, 6
SC999
8D5, 200

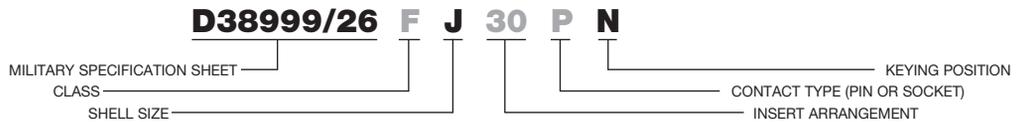
SPECIFICATIONS:

COUPLING METHOD: THREADED, TRIPLE
 START SELF-LOCKING
KEYING POSITIONS: N (NORMAL), A, B, C, D, E
ALTERNATE KEYING METHOD: MASTER KEY REMAINS STATIONARY – MINOR KEYS ROTATE INDEPENDENTLY
EMI/RFI GROUNDING: YES (EMI/RFI GROUNDING FINGERS MAY NOT BE AVAILABLE ON ALL MODELS)

SHELL MATERIAL & FINISH:

SHELL	FINISH
ALUMINUM	Anodize Nickel Cadmium Olive Drab
STEEL	Passivated Nickel

TYPICAL CONNECTOR PART NUMBER BREAKDOWN



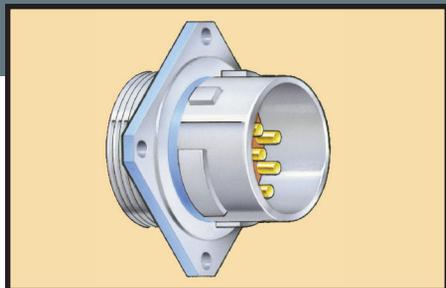
ADAPTOR TOOLS

PLUG (REMOVABLE PORTION)					RECEPTACLE (STATIONARY PORTION)				
BASIC IDENT. #/DESCRIPTION	SHELL SIZE	KEYING POSITIONS	ADAPTOR TOOL NUMBER	COLOR	BASIC IDENT. #/DESCRIPTION	SHELL SIZE	KEYING POSITIONS	ADAPTOR TOOL NUMBER	COLOR
D38999/26 /Straight	9(A)	N, C, D	CM389T-9A	LAVENDER	D38999/20 /Wall mount	9(A)	N	CM389TR-9A	LAVENDER
D38999/29 /Lanyard release	9(A)	A, B, E	CM389T-9B	LAVENDER	D38999/21 /Hermetic seal box mount	11(B)	N	CM389TR-11A	LAVENDER
D38999/30 /Lanyard release	11(B)	N, D, E	CM389T-11A	LAVENDER	D38999/23 /Hermetic seal jam nut	13(C)	N	CM389TR-13A	LAVENDER
D38999/31 /Lanyard release	11(B)	A, B, C	CM389T-11B	LAVENDER	D38999/24 /Jam nut	15(D)	N	CM389TR-15A	LAVENDER
D38999/36 /Lanyard release (25(J) Cell size only)	13(C)	N, D, E	CM389T-13A	LAVENDER	D38999/25 /Hermetic seal solder mount	17(E)	N	CM389TR-17A	LAVENDER
D38999/60 /Straight tight tolerance	13(C)	A, B, C	CM389T-13B	LAVENDER	D38999/27 /Hermetic seal weld mount	19(F)	N	CM389TR-19A	LAVENDER
	15(D)	N, D, E	CM389T-15A	LAVENDER	D38999/34 /Breakaway, jam nut (25 (J) shell size only)	21(G)	N	CM389TR-21A	LAVENDER
	15(D)	A, B, C	CM389T-15B	LAVENDER	D38999/35 /Breakaway, wall mount (25 (J) shell size only)	23(H)	N	CM389TR-23A	LAVENDER
	17(E)	N, A, B	CM389T-17A	LAVENDER	D38999/61 /Wall mount tight tolerance	25(J)	N	CM389TR-25A	LAVENDER
	17(E)	C, D, E	CM389T-17B	LAVENDER		9(A)	A, B, C, D, E	CM389TR-9B	LAVENDER
	19(F)	N, A, B	CM389T-19A	LAVENDER		11(B)	A, B, C, D, E	CM389TR-11B	LAVENDER
	19(F)	C, D, E	CM389T-19B	LAVENDER		13(C)	A, B, C, D, E	CM389TR-13B	LAVENDER
	21(G)	N, A, B	CM389T-21A	LAVENDER		15(D)	A, B, C, D, E	CM389TR-15B	LAVENDER
	21(G)	C, D, E	CM389T-21B	LAVENDER		17(E)	A, B, C, D, E	CM389TR-17B	LAVENDER
	23(H)	N, A, B	CM389T-23A	LAVENDER		19(F)	A, B, C, D, E	CM389TR-19B	LAVENDER
	23(H)	C, D, E	CM389T-23B	LAVENDER		21(G)	A, B, C, D, E	CM389TR-21B	LAVENDER
	25(J)	N, A, B	CM389T-25A	LAVENDER		23(H)	A, B, C, D, E	CM389TR-23B	LAVENDER
	25(J)	C, D, E	CM389T-25B	LAVENDER		25(J)	A, B, C, D, E	CM389TR-25B	LAVENDER

ADAPTOR SET PART NO.	ADAPTORS IN SET	COVERAGE (SHELL SIZE)
CM-S-389T	18	9 THRU 25

ADAPTOR SET PART NO.	ADAPTORS IN SET	COVERAGE (SHELL SIZE)
CM-S-389TR	18	9 THRU 25

MIL-DTL-38999 SERIES IV



Wall Mount Receptacle Shown

MANUFACTURER:
DEUTSCH/TE
ELECTRONIC SEALS
G & H TECH/COOPER
AMPHENOL
CINCH
GLENAIR

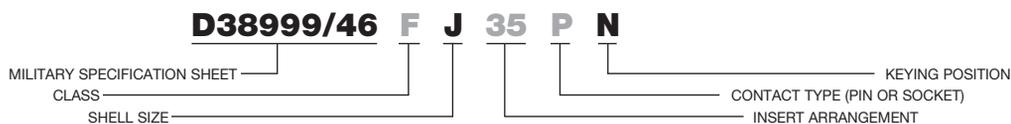
SERIES:
DIV
SERIES IV
BL
ML94
CN
230

SPECIFICATIONS:
COUPLING METHOD: BREECH-LOCK (SELF LOCKING)
KEYING POSITIONS: N (NORMAL), A, B, C, D
ALTERNATE KEYING METHOD: MASTER KEY REMAINS STATIONARY – INTERLOCKING SECTIONS ROTATE INDEPENDENTLY
EMI/RFI GROUNDING: YES (EMI/RFI GROUNDING FINGERS MAY NOT BE AVAILABLE ON ALL MODELS)

SHELL MATERIAL & FINISH:

SHELL	FINISH
ALUMINUM	Anodize Nickel Cadmium Olive Drab
STEEL	Passivated Nickel

TYPICAL CONNECTOR PART NUMBER BREAKDOWN

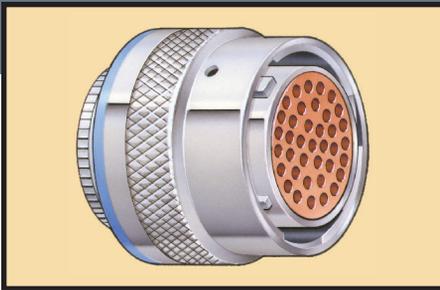


ADAPTOR TOOLS

PLUG (REMOVABLE PORTION)					RECEPTACLE (STATIONARY PORTION)				
BASIC IDENT. #/DESCRIPTION	SHELL SIZE	KEYING POSITIONS	ADAPTOR TOOL NUMBER	COLOR	BASIC IDENT. #/DESCRIPTION	SHELL SIZE	KEYING POSITIONS	ADAPTOR TOOL NUMBER	COLOR
D38999/46/EMI straight	11(B)	ALL	CM389B-11	BEIGE	D38999/40/Wall mount	11(B)	ALL	CM389BR-11	BEIGE
D38999/47/Straight	13(C)	ALL	CM389B-13	BEIGE	D38999/41/Hermetic box mount	13(C)	ALL	CM389BR-13	BEIGE
	15(D)	ALL	CM389B-15	BEIGE	D38999/42/Box mount	15(D)	ALL	CM389BR-15	BEIGE
	17(E)	ALL	CM389B-17	BEIGE	D38999/43/Hermetic jam nut	17(E)	ALL	CM389BR-17	BEIGE
	19(F)	ALL	CM389B-19	BEIGE	D38999/44/Jam nut	19(F)	ALL	CM389BR-19	BEIGE
	21(G)	ALL	CM389B-21	BEIGE	D38999/45/Hermetic solder mount	21(G)	ALL	CM389BR-21	BEIGE
	23(H)	ALL	CM389B-23	BEIGE	D38999/48/Hermetic weld mount	23(H)	ALL	CM389BR-23	BEIGE
	25(J)	ALL	CM389B-25	BEIGE	D38999/49/In-line	25(J)	ALL	CM389BR-25	BEIGE

ADAPTOR SET PART NO.	ADAPTORS IN SET	COVERAGE (SHELL SIZE)	ADAPTOR SET PART NO.	ADAPTORS IN SET	COVERAGE (SHELL SIZE)
CM-S-389B	8	11 THRU 25	CM-S-389BR	8	11 THRU 25

MIL-C-81511 SERIES I & III



Straight Plug Shown

MANUFACTURER:
AMPHENOL
DEUTSCH/TE
HERMETIC SEAL CORP.

SERIES:
348
815
10-00000

SPECIFICATIONS:
COUPLING METHOD: BAYONET
KEYING POSITIONS: 1, 2, 3, 4, 5, 6
ALTERNATE KEYING: MASTER KEY REMAINS STATIONARY – MINOR KEYS ROTATE INDEPENDENTLY
EMI/RFI GROUNDING: YES – PLUGS CONTAIN EMI/RFI GROUNDING FINGERS

SHELL MATERIAL & FINISH:

SHELL	FINISH
ALUMINUM	Nickel Cadmium Olive Drab Over Nickel Cadmium Olive Drab
STAINLESS STEEL	Passivated
STEEL	Tin

**TYPICAL CONNECTOR
PART NUMBER
BREAKDOWN**

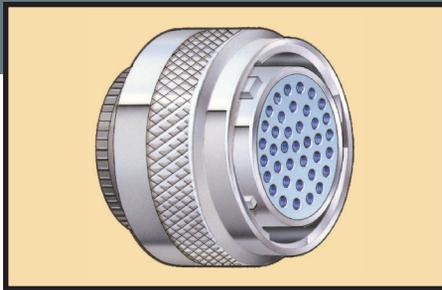


ADAPTOR TOOLS

PLUG (REMOVABLE PORTION)					RECEPTACLE (STATIONARY PORTION)				
BASIC IDENT. #/DESCRIPTION	SHELL SIZE	KEYING POSITIONS	ADAPTOR TOOL NUMBER	COLOR	BASIC IDENT. #/DESCRIPTION	SHELL SIZE	KEYING POSITIONS	ADAPTOR TOOL NUMBER	COLOR
M81511/26 /Straight	8(A)	1, 2, 3	CM815L-8A	YELLOW	M81511/21 /Wall mount	8(A)	ALL	CM815R-8	YELLOW
M81511/46 /Straight	8(A)	4, 5, 6	CM815L-8B	YELLOW	M81511/23 /Jam nut	10(B)	ALL	CM815R-10	YELLOW
	10(B)	1, 2, 6	CM815L-10A	YELLOW	M81511/25 /In-line	14(D)	ALL	CM815R-14	YELLOW
	10(B)	3, 4, 5	CM815L-10B	YELLOW	M81511/41 /Wall mount	16(E)	ALL	CM815R-16	YELLOW
	14(D)	1, 2, 6	CM815L-14A	YELLOW	M81511/45 /In-line	18(F)	ALL	CM815R-18	YELLOW
	14(D)	3, 4, 5	CM815L-14B	YELLOW	M81511/49 /Jam nut	20(G)	ALL	CM815R-20	YELLOW
	16(E)	1, 2, 3	CM815L-16A	YELLOW		22(H)	ALL	CM815R-22	YELLOW
	16(E)	4, 5, 6	CM815L-16B	YELLOW		24(J)	ALL	CM815R-24	YELLOW
	18(F)	1, 2, 3	CM815L-18A	YELLOW					
	18(F)	4, 5, 6	CM815L-18B	YELLOW					
	20(G)	1, 2, 3	CM815L-20A	YELLOW					
	20(G)	4, 5, 6	CM815L-20B	YELLOW					
	22(H)	1, 2, 3	CM815L-22A	YELLOW					
	22(H)	4, 5, 6	CM815L-22B	YELLOW					
	24(J)	1, 2, 3	CM815L-24A	YELLOW					
	24(J)	4, 5, 6	CM815L-24B	YELLOW					

ADAPTOR SET PART NO.	ADAPTORS IN SET	COVERAGE (SHELL SIZE)	ADAPTOR SET PART NO.	ADAPTORS IN SET	COVERAGE (SHELL SIZE)
CM-S-815L	16	8 THRU 24	CM-S-815R	8	8 THRU 24

MIL-C-81511 SERIES II & IV



Straight Plug Shown

MANUFACTURER:
AMPHENOL
DEUTSCH/TE

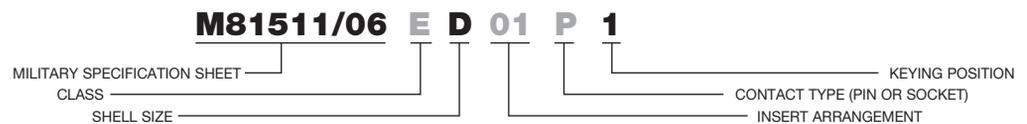
SERIES:
348
815

SPECIFICATIONS:
COUPLING METHOD: BAYONET
KEYING POSITIONS: 1, 2, 3, 4, 5, 6
ALTERNATE KEYING METHOD: MASTER KEY REMAINS STATIONARY – MINOR KEYS ROTATE INDEPENDENTLY
EMI/RFI GROUNDING: YES

SHELL MATERIAL & FINISH:

SHELL	FINISH
ALUMINUM	Nickel Cadmium Olive Drab Over Nickel Cadmium Olive Drab
STAINLESS STEEL	Passivated
STEEL	Tin

**TYPICAL CONNECTOR
PART NUMBER
BREAKDOWN**



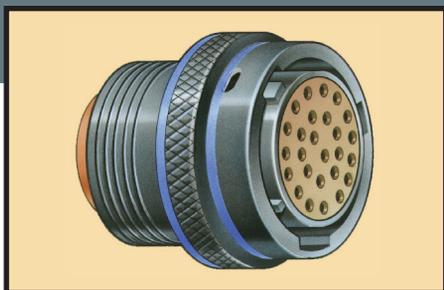
ADAPTOR TOOLS

PLUG (REMOVABLE PORTION)					RECEPTACLE (STATIONARY PORTION)				
BASIC IDENT. #/DESCRIPTION	SHELL SIZE	KEYING POSITIONS	ADAPTOR TOOL NUMBER	COLOR	BASIC IDENT. #/DESCRIPTION	SHELL SIZE	KEYING POSITIONS	ADAPTOR TOOL NUMBER	COLOR
M81511/06/Straight	8(A)	ALL	CM815S-8	RED	M81511/01/Wall mount	8(A)	ALL	CM815R-8	YELLOW
M81511/56/Straight	10(B)	1, 4, 5	CM815S-10A	RED	M81511/03/Jam nut	10(B)	ALL	CM815R-10	YELLOW
	10(B)	2, 3, 6	CM815S-10B	RED	M81511/05/In-line	14(D)	ALL	CM815R-14	YELLOW
	14(D)	1, 4, 5	CM815S-14A	RED	M81511/51/Wall mount	16(E)	ALL	CM815R-16	YELLOW
	14(D)	2, 3, 6	CM815S-14B	RED	M81511/53/Jam nut	18(F)	ALL	CM815R-18	YELLOW
	16(E)	1, 2, 4	CM815S-16A	RED	M81511/53/Jam nut	20(G)	ALL	CM815R-20	YELLOW
	16(E)	3, 5, 6	CM815S-16B	RED		22(H)	ALL	CM815R-22	YELLOW
	18(F)	1, 2, 4	CM815S-18A	RED		24(H)	ALL	CM815R-24	YELLOW
	18(F)	3, 5, 6	CM815S-18B	RED					

ADAPTOR SET PART NO.	ADAPTORS IN SET	COVERAGE (SHELL SIZE)	ADAPTOR SET PART NO.	ADAPTORS IN SET	COVERAGE (SHELL SIZE)
CM-S-815S	9	8 THRU 18	CM-S-815R	8	8 THRU 24

MIL-DTL-83723 SERIES I

(REPLACED BY MIL-DTL-26482, SERIES 2)



Straight Plug Shown

MANUFACTURER:	SERIES:
AERO ELECTRIC	AE77/AE8337
AMPHENOL	118, DC, FPT(21-), PT, PT*CE, SP*CE, PT*SE, PTS*DR, SP, MB1
BURNDY	BT, L*T
CONNECTOR INDUSTRIES	C, K
DETRONICS	DT
DEUTSCH/TE/TE	AFD, DBC, RBC, 450, 460, 810, 880
ELECTRONIC SEALS	9-
GENERAL CONNECTOR	GC, GC*C
GLASSEAL	BE, GB
HERMETIC SEAL CORP.	S*A-7000, 7000
ITT CANNON	KPD, KPSE, KSSE, KP*, KS*, KPT, KSP, KPTM, KSPM, PV, PVA, PVJ, PVW, PVX
	6300, 8100, 8300
SEALTRON	PW
S.E.C.	851, 851*R, 8526
SOURIAU	VPT, VPT*SE, VUT
VEAM/LITTON	

SPECIFICATIONS:

COUPLING METHOD: BAYONET
KEYING POSITIONS: N (NORMAL), W, X, Y, Z
ALTERNATE KEYING METHOD: ROTATION OF INSERT – KEYS REMAIN STATIONARY
EMI/RFI GROUNDING: YES (EMI/RFI GROUNDING FINGERS MAY NOT BE AVAILABLE ON ALL MODELS)

SHELL MATERIAL & FINISH:

SHELL	FINISH
ALUMINUM	Anodize Nickel
STAINLESS STEEL	Passivated
STEEL	Tin

TYPICAL CONNECTOR PART NUMBER BREAKDOWN

M83723/13 A 22 55 N



ADAPTOR TOOLS

PLUG (REMOVABLE PORTION)

RECEPTACLE (STATIONARY PORTION)

SHELL SIZE	KEYING POSITIONS	ADAPTOR TOOL NUMBER	COLOR
8	ALL	CM264-8	ORANGE
10	ALL	CM264-10	ORANGE
12	ALL	CM264-12	ORANGE
13	ALL		
14	ALL	CM264-14	ORANGE
16	ALL	CM264-16	ORANGE
18	ALL	CM264-18	ORANGE
20	ALL	CM264-20	ORANGE
22	ALL	CM264-22	ORANGE
36	ALL		
37	ALL		
48	ALL		
49	ALL		

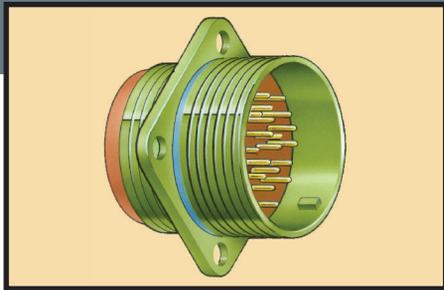
BASIC IDENT. #/DESCRIPTION	SHELL SIZE	KEYING POSITIONS	ADAPTOR TOOL NUMBER	COLOR
M83723/01 / Narrow flange wall mount	8	ALL	CM264R-8	ORANGE
M83723/02 / Narrow flange wall mount	10	ALL	CM264R-10	ORANGE
M83723/03 / Wide flange wall mount	12	ALL	CM264R-12	ORANGE
M83723/04 / Wide flange wall mount	14	ALL	CM264R-14	ORANGE
M83723/05 / Jam nut	16	ALL	CM264R-16	ORANGE
M83723/06 / Jam nut	18	ALL	CM264R-18	ORANGE
M83723/07 / In-line	20	ALL	CM264R-20	ORANGE
M83723/08 / In-line	22	ALL	CM264R-22	ORANGE
M83723/09 / Hermetic narrow flange box mount	24	ALL	CM264R-24	ORANGE
M83723/10 / Hermetic wide flange box mount				
M83723/11 / Hermetic solder mount				
M83723/12 / Hermetic jam nut				
M83723/38 / Prewired size 8 narrow flange wall mount				
M83723/39 / Prewired size 8 narrow flange wall mount				
M83723/40 / Prewired size 8 wide flange wall mount				
M83723/41 / Prewired size 8 wide flange wall mount				

ADAPTOR SET PART NO.	ADAPTORS IN SET	COVERAGE (SHELL SIZE)
CM-S-264	9	8 THRU 24

ADAPTOR SET PART NO.	ADAPTORS IN SET	COVERAGE (SHELL SIZE)
CM-S-264R	9	8 THRU 24

MIL-DTL-83723 SERIES II

(INTERMATEABLE WITH AS50151)



Wall Mount Receptacle Shown

MANUFACTURER:
AERO ELECTRIC
AMPHENOL

ITT CANNON

SERIES:

AE55, AE723
69, 72, 97, 157, 172, 173, 179, 208, 238, 246, BT-M, BT-RA, HT, SCP, TBF, 10-72, 10-214, 10-244, 10-741, 10-747, 10-873, 10-874, 5015, MFR, M723, 944, 981
BFH, BFR, CA, CA-EA, CA-EB, CA-HR, CA-KE, CA-RX, CV, CVA, EX-A, FRA, FRF, FVA, FVF, FW, GS, MR, TBF, TBFH, WFS

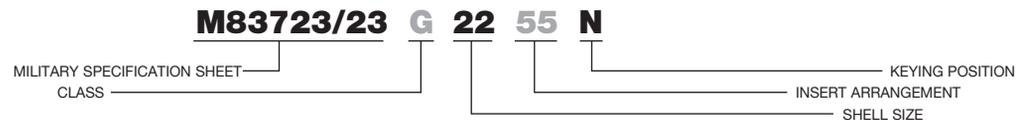
SPECIFICATIONS:

COUPLING METHOD: THREADED
KEYING POSITIONS: N (NORMAL), W, X, Y, Z
ALTERNATE KEYING METHOD: ROTATION OF INSERT – KEYS REMAIN STATIONARY
EMI/RFI GROUNDING: NO

SHELL MATERIAL & FINISH:

SHELL	FINISH
ALUMINUM	Anodize Nickel
STEEL	Tin
STAINLESS STEEL	Passivated

TYPICAL CONNECTOR PART NUMBER BREAKDOWN



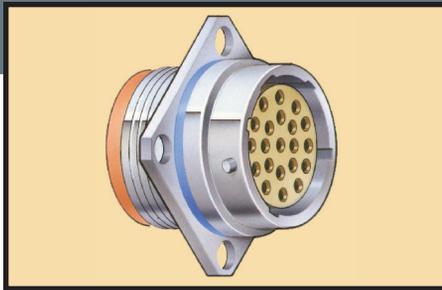
ADAPTOR TOOLS

PLUG (REMOVABLE PORTION)					RECEPTACLE (STATIONARY PORTION)				
BASIC IDENT. #/DESCRIPTION	SHELL SIZE	KEYING POSITIONS	ADAPTOR TOOL NUMBER	COLOR	BASIC IDENT. #/DESCRIPTION	SHELL SIZE	KEYING POSITIONS	ADAPTOR TOOL NUMBER	COLOR
M83723/23 /Straight	8	ALL	CM5015-8	CHROME	M83723/17 /In-line	8	ALL	CM5015R-8	CHROME
M83723/24 /Straight	10	ALL	CM5015-10	CHROME	M83723/18 /In-line	10	ALL	CM5015R-10	CHROME
M83723/52 /Straight, self-locking coupling nut	12	ALL	CM5015-12	CHROME	M83723/19 /Wall mount	12	ALL	CM5015R-12	CHROME
M83723/53 /Straight, self-locking coupling nut	14	ALL	CM5015-14	CHROME	M83723/20 /Wall mount	14	ALL	CM5015R-14	CHROME
	16	ALL	CM5015-16	CHROME	M83723/21 /Box mount	16	ALL	CM5015R-16	CHROME
	18	ALL	CM5015-18	CHROME	M83723/22 /Box mount	18	ALL	CM5015R-18	CHROME
	20	ALL	CM5015-20	CHROME	M83723/25 /Box mount hermetic	20	ALL	CM5015R-20	CHROME
	22	ALL	CM5015-22	CHROME	M83723/26 /Solder mount hermetic	22	ALL	CM5015R-22	CHROME
	24	ALL	CM5015-24	CHROME		24	ALL	CM5015R-24	CHROME
	28	ALL	CM5015-28	CHROME		28	ALL	CM5015R-28	CHROME
	32	ALL	CM5015-32	CHROME		32	ALL	CM5015R-32	CHROME
	36	ALL	CM5015-36	CHROME		36	ALL	CM5015R-36	CHROME
	40	ALL	CM5015-40	CHROME		40	ALL	CM5015R-40	CHROME
	44	ALL	CM5015-44	CHROME		44	ALL	CM5015R-44	CHROME
	48	ALL	CM5015-48	CHROME		48	ALL	CM5015R-48	CHROME

ADAPTOR SET PART NO.	ADAPTORS IN SET	COVERAGE (SHELL SIZE)	ADAPTOR SET PART NO.	ADAPTORS IN SET	COVERAGE (SHELL SIZE)
CM-S-5015	15	8 THRU 48	CM-S-5015R	15	8 THRU 48

MIL-DTL-83723 SERIES III

(REF: MIL-C-26500)



Wall Mount Receptacle Shown

MANUFACTURER:
 AMPHENOL
 BOEING (SPECIFICATION)
 DEUTSCH/TE
 HERMETIC SEAL CORP.
 ITT CANNON
 SEALTRON
 GLENAIR
 J-TECH
 AERO ELECTRIC
 AMPHENOL/MATRIX
 RMS
 AMPHENOL/PYLE NATIONAL
 AMERICAN MICRO
 HI REL

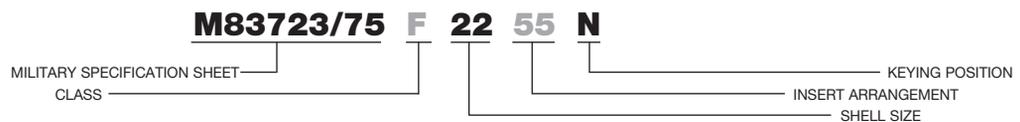
SERIES:
 48, 518, MB3, MT3, B, BFH
 BACC45F
 DB, DL, 94603
 83723
 HTMF
 6500, 6600
 G534
 JT837
 AE83
 MB, MQ
 RO73
 BY, BJK, BT, BEN
 30J, 20, 40,50K
 690000, 70000, 71000

SPECIFICATIONS:
COUPLING METHOD: BAYONET OR THREADED
KEYING POSITIONS: N (NORMAL), 1, 2, 3, 4, 5, 6, 7, 8, 9, 10
ALTERNATE KEYING METHOD: INSERT ROTATION IN POSITIONS 1 THRU 5, MINOR KEY ROTATION IN POSITIONS 6 THRU 10
EMI/RFI GROUNDING: YES (EMI/RFI FINGERS MAY NOT BE AVAILABLE ON ALL MODELS)

SHELL MATERIAL & FINISH:

SHELL	FINISH
ALUMINUM	Black anodize Cadmium
STAINLESS STEEL	Passivated Nickel
STEEL	Tin

TYPICAL CONNECTOR PART NUMBER BREAKDOWN



ADAPTOR TOOLS

PLUG (REMOVABLE PORTION)					RECEPTACLE (STATIONARY PORTION)*				
	SHELL SIZE	KEYING POSITIONS	ADAPTOR TOOL NUMBER	COLOR	BASIC IDENT. #/DESCRIPTION	SHELL SIZE	KEYING POSITIONS	ADAPTOR TOOL NUMBER	COLOR
MS83723/66 /Straight, push-pull quick disconnect	8	N, 8, 9	CM837-8A*	GREEN	MS83723/65 /Jam nut, hermetic seal	8	ALL	CM837RB-8	GREEN
MS83723/67 /Straight, push-pull quick disconnect	8	6, 7	CM837-8B*	GREEN	MS83723/71 /Wall mount	10	ALL	CM837RB-10	GREEN
MS83723/68 /Straight, push-pull quick disconnect, lanyard	8	N, 8, 9	CM837-8C**	GREEN	MS83723/72 /Wall mount	12	ALL	CM837RB-12	GREEN
MS83723/69 /Straight, push-pull quick disconnect, lanyard	8	6, 7	CM837-8D**	GREEN	MS83723/73 /Jam nut	14	ALL	CM837RB-14	GREEN
MS83723/75 /Straight	10	N, 8, 9	CM837-10A	GREEN	MS83723/74 /Jam nut	16	ALL	CM837RB-16	GREEN
MS83723/76 /Straight	10	6, 7, 10	CM837-10B	GREEN	MS83723/79 /Box mount, hermetic seal	18	ALL	CM837RB-18	GREEN
MS83723/77 /Straight, EMI grounding	12	N, 6, 8	CM837-12A	GREEN	MS83723/80 /Solder mount, hermetic seal	20	ALL	CM837RB-20	GREEN
MS83723/78 /Straight, EMI grounding	12	7, 9, 10	CM837-12B	GREEN	MS83723/81 /Jam nut, hermetic seal	22	ALL	CM837RB-22	GREEN
MS83723/87 /Straight	14	N, 6, 8	CM837-14A	GREEN	MS83723/82 /Wall mount	24	ALL	CM837RB-24	GREEN
MS83723/91 /Straight, EMI grounding	14	7, 9, 10	CM837-14B	GREEN	MS83723/83 /Wall mount				
MS83723/92 /Straight, EMI grounding	16	N, 6, 8	CM837-16A	GREEN	MS83723/84 /Jam nut				
MS83723/96 /Straight, self-locking coupling nut	16	7, 9, 10	CM837-16B	GREEN	MS83723/85 /Jam nut				
MS83723/97 /Straight, self-locking coupling nut, EMI grounding	18	N, 6, 8	CM837-18A	GREEN	MS83723/88 /Box mount, hermetic seal				
MS83723/98 /Straight, self-locking coupling nut, EMI grounding	18	7, 9, 10	CM837-18B	GREEN	MS83723/90 /Solder mount, hermetic seal				
	20	N, 6, 8	CM837-20A	GREEN	MS83723/93 /Solder mount, hermetic seal				
	20	7, 9, 10	CM837-20B	GREEN	MS83723/94 /Jam nut, hermetic seal				
	22	N, 6, 8	CM837-22A	GREEN					
	22	7, 9, 10	CM837-22B	GREEN					
	24	N, 6, 8	CM837-24A	GREEN					
	24	7, 9, 10	CM837-24B	GREEN					
	28	N, 6, 8	CM837-28A	GREEN					
	28	7, 9, 10	CM837-28B	GREEN					

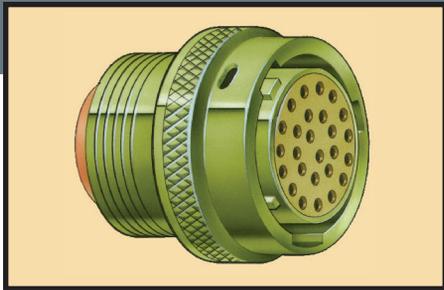
*For bayonet coupling only. **For threaded coupling connectors only.

* Bayonet coupling only. Adaptors not available for connectors with threaded coupling.

ADAPTOR SET PART NO.	ADAPTORS IN SET	COVERAGE (SHELL SIZE)
CM-S-837	22	8 THRU 28

ADAPTOR SET PART NO.	ADAPTORS IN SET	COVERAGE (SHELL SIZE)
CM-S-837RB*	9	8 THRU 24

PATTERN 602 PAN 6432-4, EL2112



Straight Plug Shown

MANUFACTURER:
AMPHENOL
CANNON ELECTRIC GB
HELLERMANN DEUTSCH/TE
SOURIAU

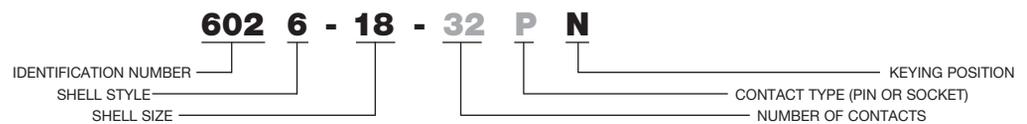
SERIES:
602GB
PVX
RR
8526

SPECIFICATIONS:
COUPLING METHOD: BAYONET
KEYING POSITIONS: N (NORMAL), B, C, E, F FOR SHELL; N (NORMAL), W, X, Y, Z FOR INSERT
ALTERNATE KEYING METHOD: MASTER KEY REMAINS STATIONARY – MINOR KEYS AND BAYONET PINS ROTATE. ALSO, INSERT ROTATES
EMI/RFI GROUNDING: YES (EMI/RFI GROUNDING FINGERS MAY NOT BE AVAILABLE ON ALL MODELS)

SHELL MATERIAL & FINISH:

SHELL	FINISH
ALUMINUM	Cadmium Olive Drab

TYPICAL CONNECTOR PART NUMBER BREAKDOWN

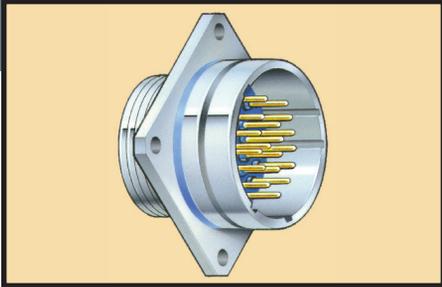


ADAPTOR TOOLS

PLUG (REMOVABLE PORTION)					RECEPTACLE (STATIONARY PORTION)				
BASIC IDENT. #/DESCRIPTION	SHELL SIZE	KEYING POSITIONS	ADAPTOR TOOL NUMBER	COLOR	BASIC IDENT. #/DESCRIPTION	SHELL SIZE	KEYING POSITIONS	ADAPTOR TOOL NUMBER	COLOR
6026/Plug	8	N	CM602-8A	PURPLE	6020/Square flange 6027/Jam nut 6021H/Solder fixing hermetic 6027H/Jam nut hermetic	8	ALL	CM264R-8	ORANGE
	8	E, F	CM602-8B	PURPLE		10	ALL	CM264R-10	ORANGE
	10	N, B, C	CM602-10A	PURPLE		12	ALL	CM264R-12	ORANGE
	10	E, F	CM602-10B	PURPLE		14	ALL	CM264R-14	ORANGE
	12	N, B, C	CM602-12A	PURPLE		16	ALL	CM264R-16	ORANGE
	12	E, F	CM602-12B	PURPLE		18	ALL	CM264R-18	ORANGE
	14	N, B, C	CM602-14A	PURPLE		20	ALL	CM264R-20	ORANGE
	14	E, F	CM602-14B	PURPLE		22	ALL	CM264R-22	ORANGE
	16	N, B, C	CM602-16A	PURPLE		24	ALL	CM264R-24	ORANGE
	16	E, F	CM602-16B	PURPLE					
	18	N, B, C	CM602-18A	PURPLE					
	18	E, F	CM602-18B	PURPLE					
	20	N, B, C	CM602-20A	PURPLE					
	20	E, F	CM602-20B	PURPLE					
	22	N, B, C	CM602-22A	PURPLE					
	22	E, F	CM602-22B	PURPLE					
	24	N, B, C	CM602-24A	PURPLE					
	24	E, F	CM602-24B	PURPLE					

ADAPTOR SET PART NO.	ADAPTORS IN SET	COVERAGE (SHELL SIZE)	ADAPTOR SET PART NO.	ADAPTORS IN SET	COVERAGE (SHELL SIZE)
CM-S-602	18	8 THRU 24	CM-S-264R	9	8 THRU 24

PATTERN 615 PAN 6433-2



Wall Mount Receptacle Shown

MANUFACTURER:
AMPHENOL
PLESSEY

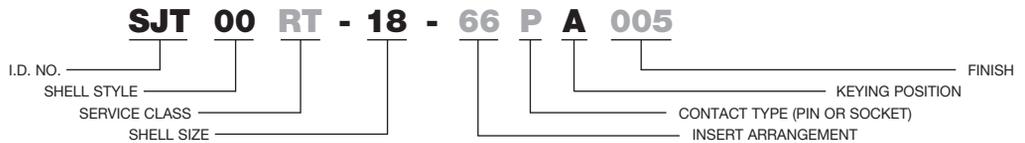
SERIES:
SJT
MK26

SPECIFICATIONS:
COUPLING METHOD: BAYONET
KEYING POSITIONS: BLANK (NORMAL),
A, B, C, D
ALTERNATE KEYING METHOD: MASTER KEY ROTATES –
MINOR KEYS REMAIN STATIONARY
EMI/RFI GROUNDING: YES (EMI/RFI GROUNDING
FINGERS MAY NOT BE AVAILABLE ON ALL
MODELS)

SHELL MATERIAL & FINISH:

SHELL	FINISH
ALUMINUM	Cadmium Over Nickel Bright Cadmium Cadmium Olive Drab Gray Anodize Anodic Coating (Alumilite) Bright Nickel Chromate Treated (Iridite 14-2) Cadmium Olive Drab Over Nickel Nickel
STEEL	Tin
STAINLESS STEEL	Passivated

**TYPICAL CONNECTOR
PART NUMBER
BREAKDOWN**



ADAPTOR TOOLS

PLUG (REMOVABLE PORTION)					RECEPTACLE (STATIONARY PORTION)				
BASIC IDENT. #/DESCRIPTION	SHELL SIZE	KEYING POSITIONS	ADAPTOR TOOL NUMBER	COLOR	BASIC IDENT. #/DESCRIPTION	SHELL SIZE	KEYING POSITIONS	ADAPTOR TOOL NUMBER	COLOR
SJT06RT /Straight	8	ALL	CMSJT-8	GOLD	SJT00RT /Wall mount	8	ALL	CM264R-8	ORANGE
SJT06RT /Straight, RFI grounding fingers	10	ALL	CMSJT-10	GOLD	SJT02RE /Box mount	10	ALL	CM264R-10	ORANGE
	12	ALL	CMSJT-12	GOLD	SJT00RT /Wall mount	12	ALL	CM264R-12	ORANGE
	14	ALL	CMSJT-14	GOLD	SJT07RT /Jam nut	14	ALL	CM264R-14	ORANGE
	16	ALL	CMSJT-16	GOLD	SJT1Y /Solder mount hermetic	16	ALL	CM264R-16	ORANGE
	18	ALL	CMSJT-18	GOLD	SJT07Y /Jam nut hermetic	18	ALL	CM264R-18	ORANGE
	20	ALL	CMSJT-20	GOLD		20	ALL	CM264R-20	ORANGE
	22	ALL	CMSJT-22	GOLD		22	ALL	CM264R-22	ORANGE
	24	ALL	CMSJT-24	GOLD		24	ALL	CM264R-24	ORANGE

ADAPTOR SET PART NO.	ADAPTORS IN SET	COVERAGE (SHELL SIZE)	ADAPTOR SET PART NO.	ADAPTORS IN SET	COVERAGE (SHELL SIZE)
CM-S-SJT	9	8 THRU 24	CM-S-264R	9	8 THRU 24

CONNECTOR IDENTIFICATION

THIS TABLE CAN BE USED TO IDENTIFY THE ADAPTOR TOOL SERIES REQUIRED FOR A PARTICULAR CONNECTOR. IF YOU KNOW THE COMMERCIAL OR MILITARY PREFIX OF THE CONNECTOR PART NUMBER, FIND IT IN THE LEFT COLUMN. IN THE SECOND COLUMN WILL BE THE APPLICABLE PAGE NUMBER FOR THE ADAPTOR TOOL SERIES, ALONG WITH MANUFACTURER AND SPECIFICATION REFERENCE INFORMATION.

PREFIX	PAGE	MANUFACTURER	CONNECTOR SERIES (REFERENCE)
10-0000	16	HERMETIC SEAL CORP.	MIL-C-81511 SERIES 1 & 3
10-0000	17	HERMETIC SEAL CORP.	MIL-C-81511 SERIES 2 & 4
10-194	7	AMPHENOL	MIL-C-22992 CLASSES C, J, R
10-214	6	AMPHENOL	ASS05151
10-214	19	AMPHENOL	MIL-C-83723 SERIES II
10-244	6	AMPHENOL	ASS05151
10-244	19	AMPHENOL	MIL-C-83723 SERIES II
10-473	8	AMPHENOL	MIL-C-22992 CLASS L
10-72	6	AMPHENOL	ASS05151
10-72	19	AMPHENOL	MIL-C-83723 SERIES II
10-741	6	AMPHENOL	ASS05151
10-741	19	AMPHENOL	MIL-C-83723 SERIES II
10-747	6	AMPHENOL	ASS05151
10-747	19	AMPHENOL	MIL-C-83723 SERIES II
10-873	6	AMPHENOL	ASS05151
10-873	19	AMPHENOL	MIL-C-83723 SERIES II
10-874	6	AMPHENOL	ASS05151
10-874	19	AMPHENOL	MIL-C-83723 SERIES II
1071	6	VEAM/LITTON	ASS05151
1071	19	VEAM/LITTON	MIL-C-83723 SERIES II
118	9	AMPHENOL	MIL-C-26482 SERIES 1 & 2
118	18	AMPHENOL	MIL-C-83723 SERIES I
157	6	AMPHENOL	ASS05151
157	19	AMPHENOL	MIL-C-83723 SERIES II
172	6	AMPHENOL	ASS05151
172	19	AMPHENOL	MIL-C-83723 SERIES II
173	6	AMPHENOL	ASS05151
173	19	AMPHENOL	MIL-C-83723 SERIES II
179	6	AMPHENOL	ASS05151
179	19	AMPHENOL	MIL-C-83723 SERIES II
2000	6	HERMETIC SEAL CORP.	ASS05151
2000	19	HERMETIC SEAL CORP.	MIL-C-83723 SERIES II
208	6	AMPHENOL	ASS05151
208	19	AMPHENOL	MIL-C-83723 SERIES II
229	8	AMPHENOL	MIL-C-22992 CLASS L
238	6	AMPHENOL	ASS05151
238	19	AMPHENOL	MIL-C-83723 SERIES II
246	6	AMPHENOL	ASS05151
246	19	AMPHENOL	MIL-C-83723 SERIES II
26500	10	CONNECTOR INDUSTRIES	MIL-C-26500

PREFIX	PAGE	MANUFACTURER	CONNECTOR SERIES (REFERENCE)
26500	10	ELECTRONIC	MIL-DTL-26500
26500	10	HERMETIC SEAL CORP.	MIL-DTL-26500
348	16	AMPHENOL	MIL-C-81511 SERIES 1 & 3
348	17	AMPHENOL	MIL-C-81511 SERIES 2 & 4
416	12	AMPHENOL	MIL-DTL-38999 SERIES I
418	13	AMPHENOL	MIL-DTL-38999 SERIES II
450	9	DEUTSCH/TE	MIL-DTL-26482 SERIES 1 & 2
450	18	DEUTSCH/TE	MIL-DTL-83723 SERIES I
460	9	DEUTSCH/TE	MIL-DTL-26482 SERIES 1 & 2
460	18	DEUTSCH/TE	MIL-DTL-83723 SERIES I
48	10	AMPHENOL	MIL-DTL-26500
48	20	AMPHENOL	MIL-DTL-83723 SERIES III
48-7005	10	AMPHENOL	MIL-DTL-26500
50	10	GLASSEAL	MIL-DTL-26500
50	20	GLASSEAL	MIL-DTL-83723 SERIES III
5015	6	AMPHENOL	ASS05151
5015	6	ELECTRONIC SEALS	ASS05151
5015	19	AMPHENOL	MIL-DTL-83723 SERIES II
5015	19	ELECTRONIC SEALS	MIL-DTL-83723 SERIES II
518	10	AMPHENOL	MIL-DTL-26500
518	20	AMPHENOL	MIL-DTL-83723 SERIES III
5388	12	AMPHENOL	MIL-DTL-38999 SERIES I
5565	14	AMPHENOL	MIL-DTL-38999 SERIES III
6000	6	SEALTRON	ASS05151
6000	19	SEALTRON	MIL-DTL-83723 SERIES II
6026B	21	AMPHENOL	PATTERN 602
6300	9	SEALTRON	MIL-DTL-26482 SERIES 1 & 2
6300	18	SEALTRON	MIL-DTL-83723 SERIES I
6500	10	SEALTRON	MIL-DTL-26500
6500	20	SEALTRON	MIL-DTL-83723 SERIES III
6600	10	SEALTRON	MIL-C-26500
6600	20	SEALTRON	MIL-C-83723 SERIES III
69	6	AMPHENOL	ASS05151
69	19	AMPHENOL	MIL-DTL-83723 SERIES II
700	12	GLASSEAL	MIL-DTL-38999 SERIES I
7000	9	HERMETIC SEAL CORP.	MIL-DTL-26482 SERIES 1 & 2
7000	18	HERMETIC SEAL CORP.	MIL-DTL-83723 SERIES I
72	6	AMPHENOL	ASS05151

PREFIX	PAGE	MANUFACTURER	CONNECTOR SERIES (REFERENCE)
72	19	AMPHENOL	MIL-C-83723 SERIES II
75	6	VEAM/LITTON	ASS05151
75	19	VEAM/LITTON	MIL-C-83723 SERIES II
800	13	GLASSEAL	MIL-C-38999 SERIES II
8000	6	SEALTRON	ASS05151
8000	19	SEALTRON	MIL-DTL-83723 SERIES II
810	9	DEUTSCH/TE	MIL-DTL-26482 SERIES 1 & 2
810	18	DEUTSCH/TE	MIL-DTL-83723 SERIES I
8100	9	SEALTRON	MIL-DTL-26482 SERIES 1 & 2
8100	18	SEALTRON	MIL-DTL-83723 SERIES I
815	16	DEUTSCH/TE	MIL-DTL-81511 SERIES 1 & 3
815	17	DEUTSCH/TE	MIL-DTL-81511 SERIES 2 & 4
8300	9	SEALTRON	MIL-DTL-26482 SERIES 1 & 2
8300	18	SEALTRON	MIL-DTL-83723 SERIES I
83723	20	HERMETIC SEAL CORP.	MIL-DTL-83723 SERIES III
83723	20	SOURIAU	MIL-DTL-83723 SERIES III
83723 III	20	CONNECTOR INDUSTRIES	MIL-DTL-83723 SERIES III
8500	10	SEALTRON	MIL-DTL-26500
851	9	SOURIAU	MIL-DTL-26482 SERIES 1 & 2
851	18	SOURIAU	MIL-DTL-83723 SERIES I
851'R	9	SOURIAU	MIL-DTL-26482 SERIES 1 & 2
851'R	18	SOURIAU	MIL-DTL-83723 SERIES I
8526	9	SOURIAU	MIL-DTL-26482 SERIES 1 & 2
8526	18	SOURIAU	MIL-DTL-83723 SERIES I
8526	21	SOURIAU	PATTERN 602
8530	10	SOURIAU	MIL-DTL-26500
8530	20	SOURIAU	MIL-DTL-83723 SERIES III
8600	10	SEALTRON	MIL-DTL-26500
88-194	7	AMPHENOL	MIL-DTL-22992 CLASSES C, J, R
880	9	DEUTSCH/TE	MIL-DTL-26482 SERIES 1 & 2
880	18	DEUTSCH/TE	MIL-DTL-83723 SERIES I
8LT	12	SOURIAU	MIL-DTL-38999 SERIES I
IT	13	SOURIAU	MIL-DTL-38999 SERIES II
9—	9	ELECTRONIC SEALS	MIL-DTL-26482 SERIES 1 & 2
9—	18	ELECTRONIC SEALS	MIL-DTL-83723 SERIES I
900000	12	HERMETIC SEAL CORP.	MIL-DTL-38999 SERIES I
900000	13	HERMETIC SEAL CORP.	MIL-DTL-38999 SERIES II
944	6	MATRIX SCIENCE	ASS05151

CONNECTOR IDENTIFICATION

PREFIX	PAGE	MANUFACTURER	CONNECTOR SERIES (REFERENCE)	PREFIX	PAGE	MANUFACTURER	CONNECTOR SERIES (REFERENCE)	PREFIX	PAGE	MANUFACTURER	CONNECTOR SERIES (REFERENCE)
944	19	AMPHENOL	MIL-C-83723 SERIES II	C	18	CONNECTOR INDUSTRIES	MIL-C-83723 SERIES I	DBC	18	DEUTSCH/TE	MIL-DTL-83723 SERIES I
94603	10	DEUTSCH/TE	MIL-C-26500	C48	10	CINCH	MIL-C-26500	DC	9	AMPHENOL	MIL-DTL-26482 SERIES 1 & 2
94603	20	DEUTSCH/TE	MIL-C-83723 SERIES III	CA	6	AS505151	AS505151	DC	18	AMPHENOL	MIL-DTL-83723 SERIES I
97	6	AMPHENOL	AS505151	CA	19	ITT CANNON	MIL-C-83723 SERIES II	DIV	15	DEUTSCH/TE	MIL-DTL-38999 SERIES IV
97	19	AMPHENOL	MIL-C-83723 SERIES II	CA-EA	6	ITT CANNON	AS505151	DJT	12	DEUTSCH/TE	MIL-DTL-38999 SERIES I
9700	12	SEALTRON	MIL-C-38999 SERIES I	CA-EA	19	ITT CANNON	AS505151	DJT	13	DETORONICS	MIL-DTL-38999 SERIES II
9800	13	SEALTRON	MIL-C-38999 SERIES II	CA-EB	6	ITT CANNON	AS505151	DL	10	DEUTSCH/TE	MIL-DTL-26500
981	6	MATRIX SCIENCE	AS505151	CA-EB	19	ITT CANNON	MIL-C-83723 SERIES II	DL	20	DEUTSCH/TE	MIL-DTL-83723 SERIES III
981	19	AMPHENOL	MIL-C-83723 SERIES II	CA-HR	6	ITT CANNON	AS505151	DS	6	DETORONICS	AS505151
9900	14	SEALTRON	MIL-C-38999 SERIES III	CA-HR	19	ITT CANNON	MIL-C-83723 SERIES II	DS	19	DETORONICS	MIL-DTL-83723 SERIES II
A	6	CONNECTOR INDUSTRIES	AS505151	CA-KE	6	ITT CANNON	AS505151	DT	9	DETORONICS	MIL-DTL-26482 SERIES 1 & 2
A	19	CONNECTOR INDUSTRIES	MIL-C-83723 SERIES II	CA-KE	19	ITT CANNON	MIL-C-83723 SERIES II	DT	18	DETORONICS	MIL-DTL-83723 SERIES I
AE55	6	AERO ELECTRIC	AS505151	CA-RX	6	ITT CANNON	AS505151	DTS	14	DEUTSCH/TE	MIL-DTL-38999 SERIES III
AE55	19	AERO ELECTRIC	MIL-C-83723 SERIES II	CA-RX	19	ITT CANNON	MIL-DTL-83723 SERIES II	DX	10	DETORONICS	MIL-C-26500
AE723	6	AERO ELECTRIC	AS505151	CN	15	CINCH	MIL-DTL-38999 SERIES IV	DX	20	DETORONICS	MIL-C-83723 SERIES III
AE723	19	AERO ELECTRIC	MIL-DTL-83723 SERIES II	CN0915	10	CINCH	MIL-DTL-26500	EX-A	6	ITT CANNON	AS505151
AE77	9	AERO ELECTRIC	MIL-DTL-26482 SERIES 1 & 2	CN0930	10	CINCH	MIL-DTL-26500	EX-A	19	ITT CANNON	MIL-C-83723 SERIES II
AE77	18	AERO ELECTRIC	MIL-DTL-83723 SERIES I	CN0930	20	CINCH	MIL-DTL-83723 SERIES III	F	10	PYLE-NATIONAL	MIL-C-26500
AFD	9	DEUTSCH/TE	MIL-DTL-26482 SERIES 1 & 2	CN0942	10	CINCH	MIL-DTL-26500	FC	6	FLIGHT CONNECTOR	AS505151
AFD	18	DEUTSCH/TE	MIL-DTL-83723 SERIES I	CN0966	10	CINCH	MIL-DTL-26500	FC	19	FLIGHT CONNECTOR	MIL-C-83723 SERIES II
B	10	PYLE-NATIONAL	MIL-DTL-26500	CN0967	10	CINCH	MIL-DTL-26500	FF0	6	FLIGHT CONNECTOR	AS505151
B	20	PYLE-NATIONAL	MIL-DTL-83723 SERIES III	CN0967	20	CINCH	MIL-DTL-83723 SERIES III	FF0	19	FLIGHT CONNECTOR	MIL-C-83723 SERIES II
B555	8		MIL-DTL-22992 CLASS L	CT	12	PLESSEY	MIL-DTL-38999 SERIES I	FF5	6	FLIGHT CONNECTOR	AS505151
B556	8	BURNDY	MIL-DTL-22992 CLASS L	CT	13	PLESSEY	MIL-DTL-38999 SERIES II	FF5	19	FLIGHT CONNECTOR	MIL-C-83723 SERIES II
B557	8	BURNDY	MIL-DTL-22992 CLASS L	CTC	12	DEUTSCH/TE	MIL-C-38999 SERIES I	FH	6	FLIGHT CONNECTOR	AS505151
B558	8	BURNDY	MIL-DTL-22992 CLASS L	CV	6	ITT CANNON	AS505151	FH	19	FLIGHT CONNECTOR	MIL-C-83723 SERIES II
BACC45F	10	BOEING	MIL-DTL-26500	CV	19	ITT CANNON	MIL-C-83723 SERIES II	FPT(21-)	9	AMPHENOL	MIL-C-26482 SERIES 1 & 2
BACC45F	20	BOEING	MIL-DTL-83723 SERIES III	CVA	6	ITT CANNON	AS505151	FPT(21-)	18	AMPHENOL	MIL-C-83723 SERIES I
BACC63	10	BOEING	MIL-DTL-26500	CVA	19	ITT CANNON	MIL-DTL-83723 SERIES II	FRA	6	ITT CANNON	AS505151
BE	9	GLASSEAL	MIL-DTL-26482 SERIES 1 & 2	CWLD	7	ITT CANNON	MIL-DTL-22992 CLASSES C, J, R	FRA	19	ITT CANNON	MIL-C-83723 SERIES II
BE	18	GLASSEAL	MIL-DTL-83723 SERIES I	D38999/20	14	MILITARY	MIL-DTL-38999 SERIES III	FRF	6	ITT CANNON	AS505151
BFH	6	ITT CANNON	AS505151	D38999/21	14	MILITARY	MIL-DTL-38999 SERIES III	FRF	19	ITT CANNON	MIL-C-83723 SERIES II
BFH	10	AMPHENOL	MIL-C-26500	D38999/23	14	MILITARY	MIL-DTL-38999 SERIES III	FRF	19	ITT CANNON	MIL-C-83723 SERIES II
BFH	19	ITT CANNON	AS505151	D38999/24	14	MILITARY	MIL-DTL-38999 SERIES III	FVA	6	ITT CANNON	AS505151
BFH	20	AMPHENOL	MIL-C-83723 SERIES III	D38999/25	14	MILITARY	MIL-DTL-38999 SERIES III	FVA	19	ITT CANNON	MIL-C-83723 SERIES II
BFR	6	ITT CANNON	AS505151	D38999/26	14	MILITARY	MIL-DTL-38999 SERIES III	FVF	6	ITT CANNON	AS505151
BFR	19	ITT CANNON	MIL-C-83723 SERIES II	D38999/27	14	MILITARY	MIL-DTL-38999 SERIES III	FVF	19	ITT CANNON	MIL-C-83723 SERIES II
BL	15	G & H TECHNOLOGY	MIL-C-38999 SERIES IV	D38999/29	14	MILITARY	MIL-DTL-38999 SERIES III	FW	6	ITT CANNON	AS505151
BT	9	BURNDY	MIL-C-26482 SERIES 1 & 2	D38999/30	14	MILITARY	MIL-DTL-38999 SERIES III	FW	19	ITT CANNON	MIL-C-83723 SERIES II
BT	18	BURNDY	MIL-C-83723 SERIES I	D38999/31	14	MILITARY	MIL-DTL-38999 SERIES III	FZC	6	FLIGHT CONNECTOR	AS505151
BT-M	6	AMPHENOL	AS505151	D38999/40	14	MILITARY	MIL-DTL-38999 SERIES III	FZC	19	FLIGHT CONNECTOR	MIL-C-83723 SERIES II
BT-M	19	AMPHENOL	MIL-C-83723 SERIES II	D38999/41	14	MILITARY	MIL-DTL-38999 SERIES III	FZH	6	FLIGHT CONNECTOR	AS505151
BT-RA	6	AMPHENOL	AS505151	D38999/42	14	MILITARY	MIL-DTL-38999 SERIES III	FZH	19	FLIGHT CONNECTOR	MIL-C-83723 SERIES II
BT-RA	19	AMPHENOL	MIL-C-83723 SERIES II	D38999/43	14	MILITARY	MIL-DTL-38999 SERIES III	G	12	CONNECTOR INDUSTRIES	MIL-C-38999 SERIES I
C	9	CONNECTOR INDUSTRIES	MIL-C-26482 SERIES 1 & 2	D38999/44	14	MILITARY	MIL-DTL-38999 SERIES III	G	13	CONNECTOR INDUSTRIES	MIL-DTL--38999 SERIES II
				D38999/45	14	MILITARY	MIL-DTL-38999 SERIES III	GB	9	GLASSEAL	MIL-DTL--26482 SERIES 1 & 2
				D38999/46	14	MILITARY	MIL-DTL-38999 SERIES III				
				D38999/47	14	MILITARY	MIL-DTL-38999 SERIES III				
				D38999/48	14	MILITARY	MIL-DTL-38999 SERIES III				
				D38999/49	14	MILITARY	MIL-DTL-38999 SERIES III				
				DB	10	DEUTSCH/TE	MIL-DTL-26500				
				DB	20	DEUTSCH/TE	MIL-DTL-83723 SERIES III				
				DBC	9	DEUTSCH/TE	MIL-DTL-26482 SERIES 1 & 2				

PREFIX	PAGE	MANUFACTURER	CONNECTOR SERIES (REFERENCE)	PREFIX	PAGE	MANUFACTURER	CONNECTOR SERIES (REFERENCE)	PREFIX	PAGE	MANUFACTURER	CONNECTOR SERIES (REFERENCE)
GB	18	GLASSEAL	MIL-DTL--83723 SERIES I	KSSE	9	ITT CANNON	MIL-DTL--26482 SERIES 1 & 2	M81511/47	16	MILITARY	MIL-DTL-81511 SERIES 1 & 3
GC	9	GENERAL CONNECTOR	MIL-DTL--26482 SERIES 1 & 2	KSSE	18	ITT CANNON	MIL-DTL--83723 SERIES I	M81511/48	16	MILITARY	MIL-DTL-81511 SERIES 1 & 3
GC	18	GENERAL CONNECTOR	MIL-DTL--83723 SERIES I	L*T	9	BURNDY	MIL-DTL--26482 SERIES 1 & 2	M81511/49	16	MILITARY	MIL-DTL-81511 SERIES 1 & 3
GC*C	9	GENERAL CONNECTOR	MIL-DTL--26482 SERIES 1 & 2	L*T	18	BURNDY	MIL-DTL--83723 SERIES I	M81511/50	17	MILITARY	MIL-DTL-81511 SERIES 2 & 4
GC*C	18	GENERAL CONNECTOR	MIL-DTL--83723 SERIES I	LCT	12	PLESSEY	MIL-DTL--38999 SERIES I	M81511/51	17	MILITARY	MIL-DTL-81511 SERIES 2 & 4
GS	6	ITT CANNON	AS505151	LJT	12	AMPHENOL	MIL-DTL--38999 SERIES I	M81511/52	17	MILITARY	MIL-DTL-81511 SERIES 2 & 4
GS	11	HUGHES	MIL-DTL-28840	LM*C	6	BURNDY	AS505151	M81511/53	17	MILITARY	MIL-
GS	19	ITT CANNON	MIL-DTL-83723 SERIES II	LM*C	19	BURNDY	MIL-DTL-83723 SERIES II	M81511/54	17	MILITARY	MIL-DTL-81511 SERIES 2 & 4
GSP	6	GLASSEAL	AS5015	MO	6	IPI (SEA)	AS505151	M81511/55	17	MILITARY	MIL-DTL-81511 SERIES 2 & 4
GSP	19	GLASSEAL	MIL-DTL--83723 SERIES II	MO	19	IPI (SAE)	MIL-DTL-83723 SERIES II	M81511/56	17	MILITARY	MIL-DTL-81511 SERIES 2 & 4
GT	11	HUGHES	MIL-DTL--28840	M28840/10	11	MILITARY	MIL-DTL--28840	M81511/57	17	MILITARY	MIL-DTL-81511 SERIES 2 & 4
H	13	CONNECTOR INDUSTRIES	MIL-DTL--38999 SERIES II	M28840/11	11	MILITARY	MIL-DTL--28840	M83723/01	18	MILITARY	MIL-DTL--83723 SERIES I
HD	11	IPI (SAE)	MIL-DTL--28840	M28840/12	11	MILITARY	MIL-DTL--28840	M83723/02	18	MILITARY	MIL-DTL--83723 SERIES I
HK	7	AMPHENOL	MIL-DTL--22992 CLASSES C, J, R	M28840/16	11	MILITARY	MIL-DTL--28840	M83723/03	18	MILITARY	MIL-DTL--83723 SERIES I
HM SERIES	12	IPI (SAE)	MIL-DTL--38999 SERIES I	M28840/16	11	MILITARY	MIL-DTL--28840	M83723/04	18	MILITARY	MIL-DTL--83723 SERIES I
HM SERIES	13	IPI (SAE)	MIL-DTL--38999 SERIES II	M28840/17	11	MILITARY	MIL-DTL--28840	M83723/05	18	MILITARY	MIL-DTL--83723 SERIES I
HS06	6	HERMETIC SEAL CORP.	AS505151	M28840/18	11	MILITARY	MIL-DTL--28840	M83723/06	18	MILITARY	MIL-DTL--83723 SERIES I
HS06	19	HERMETIC SEAL CORP.	MIL-DTL-83723 SERIES II	M28840/19	11	MILITARY	MIL-DTL--28840	M83723/07	18	MILITARY	MIL-DTL--83723 SERIES I
HT	6	AMPHENOL	AS505151	M28840/20	11	MILITARY	MIL-DTL--28840	M83723/08	18	MILITARY	MIL-DTL--83723 SERIES I
HT	19	AMPHENOL	MIL-DTL-83723 SERIES II	M28840/21	11	MILITARY	MIL-DTL--28840	M83723/09	18	MILITARY	MIL-DTL--83723 SERIES I
HTMF	10	ITT CANNON	MIL-DTL-26500	M28840/26	11	MILITARY	MIL-DTL--28840	M83723/10	18	MILITARY	MIL-DTL--83723 SERIES I
HTMF	20	ITT CANNON	MIL-DTL-83723 SERIES III	M28840/28	11	MILITARY	MIL-DTL--28840	M83723/11	18	MILITARY	MIL-DTL--83723 SERIES I
JT	13	AMPHENOL	MIL-DTL-38999 SERIES II	M28840/29	11	MILITARY	MIL-DTL--28840	M83723/12	18	MILITARY	MIL-DTL--83723 SERIES I
K	9	CONNECTOR INDUSTRIES	MIL-DTL-26482 SERIES 1 & 2	M5	6	IPI (SAE)	AS505151	M83723/13	18	MILITARY	MIL-DTL--83723 SERIES I
K	18	CONNECTOR INDUSTRIES	MIL-DTL-83723 SERIES I	M5	19	IPI (SAE)	MIL-DTL-83723 SERIES II	M83723/16	18	MILITARY	MIL-DTL--83723 SERIES I
KFS	11	ITT CANNON	MIL-DTL-28840	M723	6	MATRIX SCIENCE	AS505151	M83723/17	19	MILITARY	MIL-DTL--83723 SERIES II
KJ	13	ITT CANNON	MIL-DTL-38999 SERIES II	M723	19	MATRIX SCIENCE	MIL-DTL--83723 SERIES II	M83723/18	19	MILITARY	MIL-DTL--83723 SERIES II
KJA	14	ITT CANNON	MIL-DTL-38999 SERIES III	M81511/01	17	MILITARY	MIL-DTL--81511 SERIES 2 & 4	M83723/19	19	MILITARY	MIL-DTL--83723 SERIES II
KJJ	13	ITT CANNON	MIL-DTL-38999 SERIES II	M81511/02	17	MILITARY	MIL-DTL--81511 SERIES 2 & 4	M83723/20	19	MILITARY	MIL-DTL--83723 SERIES II
KJL	12	ITT CANNON	MIL-DTL-38999 SERIES I	M81511/03	17	MILITARY	MIL-DTL--81511 SERIES 2 & 4	M83723/21	19	MILITARY	MIL-DTL--83723 SERIES II
KJL	12	ITT CANNON	MIL-DTL-38999 SERIES I	M81511/04	17	MILITARY	MIL-DTL--81511 SERIES 2 & 4	M83723/22	19	MILITARY	MIL-DTL--83723 SERIES II
KP*	9	ITT CANNON	MIL-DTL-26482 SERIES 1 & 2	M81511/05	17	MILITARY	MIL-DTL--81511 SERIES 2 & 4	M83723/23	19	MILITARY	MIL-DTL--83723 SERIES II
KP*	18	ITT CANNON	MIL-DTL-83723 SERIES I	M81511/06	17	MILITARY	MIL-DTL--81511 SERIES 2 & 4	M83723/24	19	MILITARY	MIL-DTL--83723 SERIES II
KPD	9	ITT CANNON	MIL-DTL-26482 SERIES 1 & 2	M81511/21	16	MILITARY	MIL-DTL--81511 SERIES 1 & 3	M83723/25	19	MILITARY	MIL-DTL--83723 SERIES II
KPD	18	ITT CANNON	MIL-DTL-83723 SERIES I	M81511/22	16	MILITARY	MIL-DTL--81511 SERIES 1 & 3	M83723/26	19	MILITARY	MIL-DTL--83723 SERIES II
KPSE	9	ITT CANNON	MIL-DTL-26482 SERIES 1 & 2	M81511/23	16	MILITARY	MIL-DTL--81511 SERIES 1 & 3	M83723/36	18	MILITARY	MIL-DTL--83723 SERIES I
KPSE	18	ITT CANNON	MIL-DTL-83723 SERIES I	M81511/24	16	MILITARY	MIL-DTL--81511 SERIES 1 & 3	M83723/37	18	MILITARY	MIL-DTL--83723 SERIES I
KPT	9	ITT CANNON	MIL-DTL-26482 SERIES 1 & 2	M81511/25	16	MILITARY	MIL-DTL--81511 SERIES 1 & 3	M83723/38	18	MILITARY	MIL-DTL--83723 SERIES I
KPT	18	ITT CANNON	MIL-DTL-83723 SERIES I	M81511/26	16	MILITARY	MIL-DTL--81511 SERIES 1 & 3	M83723/39	18	MILITARY	MIL-DTL--83723 SERIES I
KPTM	9	ITT CANNON	MIL-DTL-26482 SERIES 1 & 2	M81511/27	16	MILITARY	MIL-DTL--81511 SERIES 1 & 3	M83723/40	18	MILITARY	MIL-DTL--83723 SERIES I
KPTM	18	ITT CANNON	MIL-DTL-83723 SERIES I	M81511/28	17	MILITARY	MIL-DTL--81511 SERIES 2 & 4	M83723/41	18	MILITARY	MIL-DTL--83723 SERIES I
KS*	9	ITT CANNON	MIL-DTL-26482 SERIES 1 & 2	M81511/31	17	MILITARY	MIL-DTL--81511 SERIES 2 & 4	M83723/42	18	MILITARY	MIL-DTL--83723 SERIES I
KS*	18	ITT CANNON	MIL-DTL-83723 SERIES I	M81511/32	17	MILITARY	MIL-DTL--81511 SERIES 2 & 4	M83723/43	18	MILITARY	MIL-DTL--83723 SERIES I
KSP	9	ITT CANNON	MIL-DTL-26482 SERIES 1 & 2	M81511/33	17	MILITARY	MIL-DTL--81511 SERIES 2 & 4	M83723/48	18	MILITARY	MIL-DTL--83723 SERIES I
KSP	18	ITT CANNON	MIL-DTL--83723 SERIES I	M81511/34	17	MILITARY	MIL-DTL--81511 SERIES 2 & 4	M83723/49	18	MILITARY	MIL-DTL--83723 SERIES I
KSPM	9	ITT CANNON	MIL-DTL-26482 SERIES 1 & 2	M81511/35	16	MILITARY	MIL-DTL--81511 SERIES 1 & 3	M83723/52	19	MILITARY	MIL-DTL--83723 SERIES II
KSPM	18	ITT CANNON	MIL-DTL--83723 SERIES I	M81511/36	16	MILITARY	MIL-DTL--81511 SERIES 1 & 3	M83723/53	19	MILITARY	MIL-DTL--83723 SERIES II
				M81511/37	16	MILITARY	MIL-DTL--81511 SERIES 1 & 3	M83723/65	20	MILITARY	MIL-DTL--83723 SERIES III
				M81511/38	16	MILITARY	MIL-DTL--81511 SERIES 1 & 3	M83723/66	20	MILITARY	MIL-DTL--83723 SERIES III
				M81511/41	16	MILITARY	MIL-DTL--81511 SERIES 1 & 3	M83723/67	20	MILITARY	MIL-DTL--83723 SERIES III
				M81511/42	16	MILITARY	MIL-DTL--81511 SERIES 1 & 3	M83723/68	20	MILITARY	MIL-DTL--83723 SERIES III
				M81511/44	16	MILITARY	MIL-DTL-81511 SERIES 1 & 3	M83723/69	20	MILITARY	MIL-DTL--83723 SERIES III
				M81511/45	16	MILITARY	MIL-DTL-81511 SERIES 1 & 3	M83723/71	20	MILITARY	MIL-DTL-83723 SERIES III
				M81511/46	16	MILITARY	MIL-DTL-81511 SERIES 1 & 3	M83723/72	20	MILITARY	MIL-DTL-83723 SERIES III
								M83723/73	20	MILITARY	MIL-DTL-83723 SERIES III

CONNECTOR IDENTIFICATION

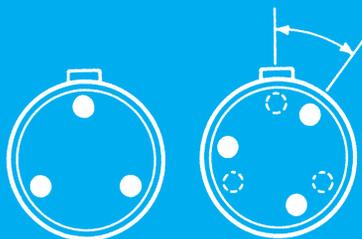
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M83723/74	20	MILITARY	MIL-DTL-83723 SERIES III	MS17347	7	MILITARY	MIL-DTL-22992 CLASSES C, J, R	MS27664	13	MILITARY	MIL-DTL-38999 SERIES II
M83723/75	20	MILITARY	MIL-DTL-83723 SERIES III	MS17348	7	MILITARY	MIL-DTL-22992 CLASSES C, J, R	MS3100	6	MILITARY	AS505151
M83723/76	20	MILITARY	MIL-DTL-83723 SERIES III					MS3101	6	MILITARY	AS505151
M83723/77	20	MILITARY	MIL-DTL-83723 SERIES III	MS24264	10	MILITARY	MIL-DTL-26500	MS3102	6	MILITARY	AS505151
M83723/78	20	MILITARY	MIL-DTL-83723 SERIES III	MS24265	10	MILITARY	MIL-DTL-26500	MS3103	6	MILITARY	AS505151
M83723/79	20	MILITARY	MIL-DTL-83723 SERIES III	MS24266	10	MILITARY	MIL-DTL-26500	MS3106	6	MILITARY	AS505151
M83723/80	20	MILITARY	MIL-DTL-83723 SERIES III	MS24183	6	MILITARY	AS505151	MS3107	6	MILITARY	AS505151
M83723/81	20	MILITARY	MIL-DTL-83723 SERIES III	MS25183A	6	MILITARY	AS505151	MS3108	6	MILITARY	AS505151
M83723/82	20	MILITARY	MIL-DTL-83723 SERIES III	MS27034	10	MILITARY	MIL-DTL-26500	MS3120	9	MILITARY	MIL-DTL-26482 SERIES 1 & 2
M83723/83	20	MILITARY	MIL-DTL-83723 SERIES III	MS27466	12	MILITARY	MIL-DTL-38999 SERIES I	MS3121	9	MILITARY	MIL-DTL-26482 SERIES 1 & 2
M83723/84	20	MILITARY	MIL-DTL-83723 SERIES III	MS27467	12	MILITARY	MIL-DTL-38999 SERIES I	MS3122	9	MILITARY	MIL-DTL-26482 SERIES 1 & 2
M83723/85	20	MILITARY	MIL-DTL-83723 SERIES III	MS27468	12	MILITARY	MIL-DTL-38999 SERIES I	MS3124	9	MILITARY	MIL-DTL-26482 SERIES 1 & 2
M83723/86	20	MILITARY	MIL-DTL-83723 SERIES III	MS27469	12	MILITARY	MIL-DTL-38999 SERIES I	MS3126	9	MILITARY	MIL-DTL-26482 SERIES 1 & 2
M83723/87	20	MILITARY	MIL-DTL-83723 SERIES III	MS27470	12	MILITARY	MIL-DTL-38999 SERIES I	MS3127	9	MILITARY	MIL-DTL-26482 SERIES 1 & 2
M83723/88	20	MILITARY	MIL-DTL-83723 SERIES III	MS27471	12	MILITARY	MIL-DTL-38999 SERIES I	MS3128	9	MILITARY	MIL-DTL-26482 SERIES 1 & 2
M83723/89	20	MILITARY	MIL-DTL-83723 SERIES III	MS27472	13	MILITARY	MIL-DTL-38999 SERIES II	MS3142	6	MILITARY	AS505151
M83723/90	20	MILITARY	MIL-DTL-83723 SERIES III	MS27473	13	MILITARY	MIL-DTL-38999 SERIES II	MS3143	6	MILITARY	AS505151
M83723/91	20	MILITARY	MIL-DTL-83723 SERIES III	MS27474	13	MILITARY	MIL-DTL-38999 SERIES II	MS3400	6	MILITARY	AS505151
M83723/92	20	MILITARY	MIL-DTL-83723 SERIES III	MS27475	13	MILITARY	MIL-DTL-38999 SERIES II	MS3401	6	MILITARY	AS505151
M83723/93	20	MILITARY	MIL-DTL-83723 SERIES III	MS27476	13	MILITARY	MIL-DTL-38999 SERIES II	MS3402	6	MILITARY	AS505151
M83723/94	20	MILITARY	MIL-DTL-83723 SERIES III	MS27477	13	MILITARY	MIL-DTL-38999 SERIES II	MS3404	6	MILITARY	AS505151
M83723/95	20	MILITARY	MIL-DTL-83723 SERIES III	MS27478	13	MILITARY	MIL-DTL-38999 SERIES II	MS3406	6	MILITARY	AS505151
M83723/96	20	MILITARY	MIL-DTL-83723 SERIES III	MS27479	13	MILITARY	MIL-DTL-38999 SERIES II	MS3408	6	MILITARY	AS505151
M83723/97	20	MILITARY	MIL-DTL-83723 SERIES III	MS27480	13	MILITARY	MIL-DTL-38999 SERIES II	MS3409	6	MILITARY	AS505151
M83723/98	20	MILITARY	MIL-DTL-83723 SERIES III	MS27481	13	MILITARY	MIL-DTL-38999 SERIES II	MS3412	6	MILITARY	AS505151
MB1	9	MATRIX SCIENCE	MIL-DTL-26482 SERIES 1 & 2	MS27482	13	MILITARY	MIL-DTL-38999 SERIES II	MS3436	6	MILITARY	AS505151
MB1	18	MATRIX SCIENCE	MIL-DTL-83723 SERIES I	MS27483	13	MILITARY	MIL-DTL-38999 SERIES II	MS3440	9	MILITARY	MIL-DTL-26482 SERIES 1 & 2
				MS27484	13	MILITARY	MIL-DTL-38999 SERIES II	MS3442	9	MILITARY	MIL-DTL-26482 SERIES 1 & 2
MB3	10	MATRIX SCIENCE	MIL-DTL-26500	MS27496	12	MILITARY	MIL-DTL-38999 SERIES I	MS3443	9	MILITARY	MIL-DTL-26482 SERIES 1 & 2
MB3	20	MATRIX SCIENCE	MIL-DTL-83723 SERIES III	MS27497	13	MILITARY	MIL-DTL-38999 SERIES II	MS3447	9	MILITARY	MIL-DTL-26482 SERIES 1 & 2
				MS27498	12	MILITARY	MIL-DTL-38999 SERIES I	MS3450	6	MILITARY	AS505151
MB91	12	MATRIX SCIENCE	MIL-DTL-38999 SERIES I	MS27499	13	MILITARY	MIL-DTL-38999 SERIES II	MS3451	6	MILITARY	AS505151
MB92	13	MATRIX SCIENCE	MIL-DTL-38999 SERIES II	MS27500	13	MILITARY	MIL-DTL-38999 SERIES II	MS3452	6	MILITARY	AS505151
				MS27503	13	MILITARY	MIL-DTL-38999 SERIES II	MS3454	6	MILITARY	AS505151
MFR	6	MATRIX SCIENCE	AS505151	MS27504	13	MILITARY	MIL-DTL-38999 SERIES II	MS3456	6	MILITARY	AS505151
				MS27505	12	MILITARY	MIL-DTL-38999 SERIES I	MS3459	6	MILITARY	AS505151
MHD	8	MATRIX SCIENCE	MIL-DTL-22992 CLASS L	MS27508	13	MILITARY	MIL-DTL-38999 SERIES II	MS3470	9	MILITARY	MIL-DTL-26482 SERIES 1 & 2
				MS27513	13	MILITARY	MIL-DTL-38999 SERIES II	MS3471	9	MILITARY	MIL-DTL-26482 SERIES 1 & 2
ML94	15	MATRIX SCIENCE	MIL-DTL-38999 SERIES IV	MS27515	12	MILITARY	MIL-DTL-38999 SERIES I	MS3472	9	MILITARY	MIL-DTL-26482 SERIES 1 & 2
				MS27613	10	MILITARY	MIL-DTL-26500	MS3473	9	MILITARY	MIL-DTL-26482 SERIES 1 & 2
MR	6	ITT CANNON	AS505151	MS27616	10	MILITARY	MIL-DTL-26500	MS3474	9	MILITARY	MIL-DTL-26482 SERIES 1 & 2
MR	19	ITT CANNON	MIL-DTL-83723 SERIES II	MS27615	10	MILITARY	MIL-DTL-26500	MS3475	9	MILITARY	MIL-DTL-26482 SERIES 1 & 2
MS17343	7	MILITARY	MIL-DTL-22992 CLASSES C, J, R	MS27652	12	MILITARY	MIL-DTL-38999 SERIES I	MS3476	9	MILITARY	MIL-DTL-26482 SERIES 1 & 2
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MS17344	7	MILITARY	MIL-DTL-22992 CLASSES C, J, R	MS27654	12	MILITARY	MIL-DTL-38999 SERIES I	MS3479	9	MILITARY	MIL-DTL-26482 SERIES 1 & 2
MS17345	7	MILITARY	MIL-DTL-22992 CLASSES C, J, R	MS27656	12	MILITARY	MIL-DTL-38999 SERIES I	MS3507	6	MILITARY	AS505151
				MS27661	12	MILITARY	MIL-DTL-38999 SERIES I	MS90555	8	MILITARY	MIL-C-22992 CLASS L
MS17346	7	MILITARY	MIL-DTL-22992 CLASSES C, J, R	MS27662	12	MILITARY	MIL-DTL-38999 SERIES I				

PREFIX	PAGE	MANUFACTURER	CONNECTOR SERIES (REFERENCE)
MS90556	8	MILITARY	MIL-C-22992 CLASS L
MS90557	8	MILITARY	MIL-C-22992 CLASS L
MS90558	8	MILITARY	MIL-C-22992 CLASS L
MT3	10	MATRIX SCIENCE	MIL-C-26500
MT3	20	MATRIX SCIENCE	MIL-C-83723 SERIES III
MT93	14	MATRIX SCIENCE	MIL-C-38999 SERIES III
NC	11	G & H TECHNOLOGY	MIL-C-28840
P	12	CONNECTOR INDUSTRIES	MIL-C-38999 SERIES I
PL	15	FLIGHT CONNECTOR	MIL-C-38999 SERIES IV
PT	9	AMPHENOL	MIL-C-26482 SERIES 1 & 2
PT	18	AMPHENOL	MIL-C-83723 SERIES I
PT*CE	9	AMPHENOL	MIL-C-26482 SERIES 1 & 2
PT*CE	18	AMPHENOL	MIL-C-83723 SERIES I
PT*SE	9	AMPHENOL	MIL-C-26482 SERIES 1 & 2
PT*SE	18	AMPHENOL	MIL-C-83723 SERIES I
PTS*DR	9	AMPHENOL	MIL-C-26482 SERIES 1 & 2
PTS*DR	18	AMPHENOL	MIL-C-83723 SERIES I
PV	9	ITT CANNON	MIL-C-26482 SERIES 1 & 2
PV	18	ITT CANNON	MIL-C-83723 SERIES I
PVA	9	ITT CANNON	MIL-C-26482 SERIES 1 & 2
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PVJ	9	ITT CANNON	MIL-C-26482 SERIES 1 & 2
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PVW	9	ITT CANNON	MIL-C-26482 SERIES 1 & 2
PVW	18	ITT CANNON	MIL-C-83723 SERIES I
PVX	9	ITT CANNON	MIL-C-26482 SERIES 1 & 2
PVX	18	ITT CANNON	MIL-C-83723 SERIES I
PVX	21	CANNON ELECTRIC GB	PATTERN 602

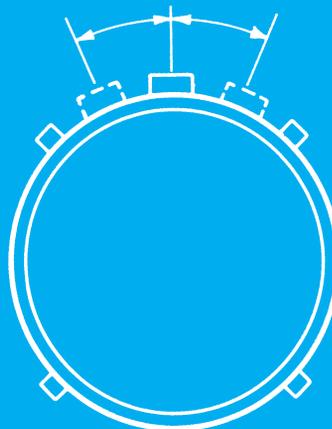
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PW	9	S.E.C.	MIL-C-26482 SERIES 1 & 2
PW	18	S.E.C.	MIL-C-83723 SERIES I
QWLD	7	AMPHENOL	MIL-C-22992 CLASSES C, J, R
RBC	9	DEUTSCH/TE	MIL-C-26482 SERIES 1 & 2
RBC	18	DEUTSCH/TE	MIL-C-83723 SERIES I
RR	21	HELLERMANN DEUTSCH/TE	PATTERN 602
S*A-2000	6	HERMETIC SEAL CORP.	AS505151
S*A-2000	19	HERMETIC SEAL CORP.	MIL-C-83723 SERIES II.
S*A-7000	9	HERMETIC SEAL CORP.	MIL-C-26482 SERIES 1 & 2.
S*A-7000	18	HERMETIC SEAL CORP.	MIL-C-83723 SERIES I
SA	6	IPI (SAE)	AS505151
SA	19	IPI (SAE)	MIL-C-83723 SERIES II
SCP	6	AMPHENOL	AS505151
SCP	19	AMPHENOL	MIL-C-83723 SERIES II
SERIES I	12	ELECTRONIC SEALS	MIL-C-38999 SERIES I
SERIES II	13	ELECTRONIC SEALS	MIL-C-38999 SERIES II
SERIES III	14	ELECTRONIC SEALS	MIL-C-38999 SERIES III
SERIES IV	15	ELECTRONIC SEALS	MIL-C-38999 SERIES IV
SJT	22	AMPHENOL	SJT
SP	9	AMPHENOL	MIL-C-26482 SERIES 1 & 2
SP	18	AMPHENOL	MIL-C-83723 SERIES I
SP*CE	9	AMPHENOL	MIL-C-26482 SERIES 1 & 2
SP*CE	18	AMPHENOL	MIL-C-83723 SERIES I
T3	14	PYLE-NATIONAL	MIL-C-38999 SERIES III
TBF	6	AMPHENOL	AS505151

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TBF	6	ITT CANNON	AS505151
TBF	19	AMPHENOL	MIL-C-83723 SERIES II
TBF	19	ITT CANNON	MIL-C-83723 SERIES II
TBFH	6	ITT CANNON	AS505151
TBFH	19	ITT CANNON	MIL-C-83723 SERIES II
TCT	14	PLESSEY	MIL-C-38999 SERIES III
TV	14	AMPHENOL	MIL-C-38999 SERIES III
VE	6	VEAM/LITTON	AS505151
VE	19	VEAM/LITTON	AS505151
VG	6	VEAM/LITTON	AS505151
VPT	9	VEAM/LITTON	MIL-C-26482 SERIES 1 & 2
VPT	18	VEAM/LITTON	MIL-C-83723 SERIES I
VPT*SE	9	VEAM/LITTON	MIL-C-26482 SERIES 1 & 2
VPT*SE	18	VEAM/LITTON	MIL-C-83723 SERIES I
VS	6	VEAM/LITTON	AS505151
VS	19	VEAM/LITTON	MIL-C-83723 SERIES II
VTBF	6	VEAM/LITTON	AS505151
VTBF	19	VEAM/LITTON	MIL-C-83723 SERIES II
VUT	9	VEAM/LITTON	MIL-C-26482 SERIES 1 & 2
VUT	18	VEAM/LITTON	MIL-C-83723 SERIES I
WFS	6	ITT CANNON	AS505151
WFS	19	ITT CANNON	MIL-C-83723 SERIES II
ZZ	10	PYLE-NATIONAL	MIL-C-26500

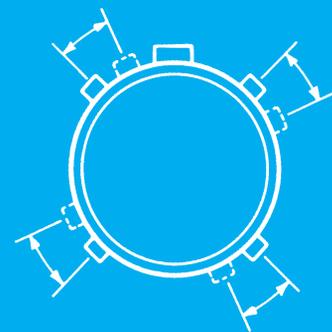
TYPICAL METHODS FOR ALTERNATE KEYING



INSERT ROTATION
(KEYS REMAIN STATIONARY)



MASTER KEY ROTATION



MINOR KEY ROTATION

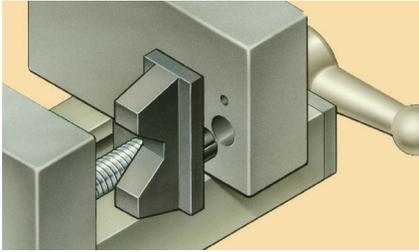
CONNECTOR MATE® ASSEMBLY VISE

**CONNECTOR
MATE®**



The continuing demands of electrical system designers have imposed such rapid development in the field of interconnection technology that new and different hardware is emerging to meet those demands. Along with the introduction of these new, and often more complex connectors and accessories, the challenge for versatile and reliable production tooling becomes apparent. To this end, DMC has accepted the challenge by developing the assembly station vise which provides a reliable and repeatable holding method for countless combinations of connectors and accessories. The use of removable soft-grip jaw inserts allows the vise to easily accommodate all popular connector diameters.

This is a reliable method of retaining circular parts, which avoids damage to critical platings and retains the circular shape of delicate parts.



HOW THE ASSEMBLY VISE WORKS

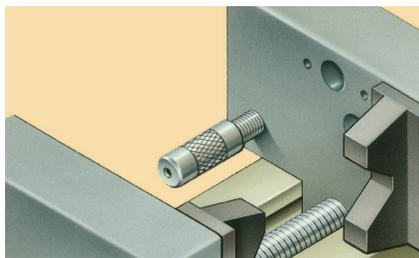
The system consists of non-marring jaw inserts and a specially designed vise to hold them. They can be used to hold any circular part within the size range available, including connectors, backshell accessories and adaptor tools.

In a conventional vise, one jaw is stationary, while the other moves on the thread mechanism. The assembly station vise is different in that it employs an *opposing thread design* — that is, both jaws move in synchronization. This design has several advantages for connector assembly:

FAST TIGHTENING: A part can be secured faster, which is a benefit to production procedures.

HIGH STRENGTH: A substantial increase in strength and thread life is achieved by the double-thread arrangement.

SELF-CENTERING: Because the jaws move towards each other, the work is always centered in the vise, and therefore, lateral stress and unnecessary movement of the work pieces are not introduced into the process.

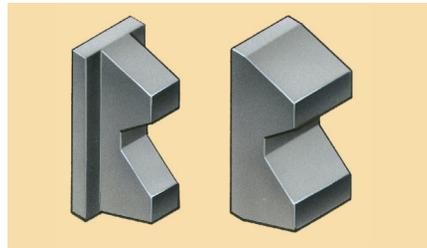


ADJUSTABLE STOP: An added feature for convenience and efficiency of operation is the adjustable stop on the vise. This provides for extra gripping stability and a repeatable reference for production line applications.

JAW SETS

A set of jaws is designed to accommodate diameters from .375" to 3.00" (3/8" to 3"), within six different jaw sizes. This provides for flexibility of application — the same system can be used for most or all of the circular connectors and accessories in a cable assembly operation.

Jaws are available in two gripping

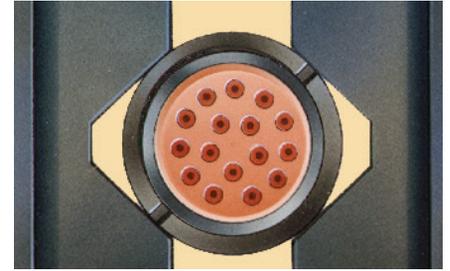


widths — .400" and 1.000".

The narrow jaws allow access to accessories which are smaller in diameter than adjacent components, whereas the wider jaws allow for a large grip area when higher torque values are required.

Jaws are made from high-friction material which will not damage connectors or accessories, yet will provide sufficient grip for most operations.

Prevents deformation of circular connectors and accessories by applying holding pressure evenly at four points on the circumference. That is, the jaws apply a force radially at four points equally spaced around the circumference such that the circular part readily accepts it without deformation.

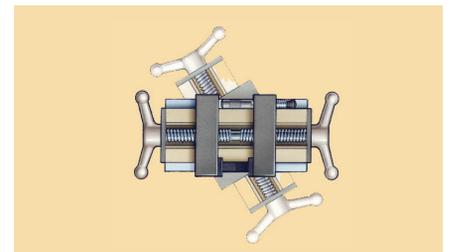


If the force is applied on opposite sides (only two pressure points), the circular part will tend to collapse, and this will produce false torque readings because of increased friction between the components where the threads have been forced together.

A square drive on the thread handle allows the use of a torque device to minimize the possibility of overtightening.

The position of the jaw inserts in the vise can be changed to hold the work in the most convenient location for assembly.

The jaw inserts come packaged in a convenient metal container which



keeps them clean, orderly and readily available for use. Instructions are also provided for their proper use. There are twelve pairs of jaw inserts in the container which accommodate diameters from 3/8" to 3".

ASSEMBLY VISE	
BT-VS-511	ASSEMBLY VISE WITH 24-PIECE SET OF JAW INSERTS
BT-VS-500	ASSEMBLY VISE ONLY (WITHOUT JAW INSERTS)
BT-S-550	24-PIECE SET OF JAW INSERTS, FOR USE WITH VISE BT-VS-500

DIGITAL TORQUE WRENCH



Torque Range:

in-lb = 15 ~ 300 in-lb

ft-lb = 1.25 ~ 25 ft-lb

kg-cm = 17.3 ~ 345 kg-cm

N-m = 1.7 ~ 33 N-m

- Visual and audible warning when the force torque reaches 90%, 100%, and 110% of the set torque.
- Modes: Preset, Track or Peak for Torque and New Angle Mode
- Saves last 999 torque values.
- USB interface & software package included.
- Universal AC Power adapter included.
- Splash-Proof, protected against water & moisture. Metal components are chrome plated for maximum corrosion resistance.
- Ruggedized, withstands drops and rough handling without failure
- Torque overload display and audible signal
- ISO-6789-203 and ASME B107-28-2005 Standards Compliant.

Higher Torque ratings to meet mechanical fastening requirements and the need for improved electrical bonding have fostered the need for an improved Torque Tightening System. DMC has responded to that need with a unique Digital Torque System that is rugged, flexible, and easy to use. This highly repeatable Digital Torque System can be easily used

with other BETA™ Connector Accessory Tools to maintain precise tightening consistency through every facet of wiring system final assembly.

Normally, torque is only thought of as a means to prevent an assembly from loosening under vibration or other external forces. But in the present environment it is equally important



Dual 3/8" Drives on opposite sides of the tool for Hand and Static Use

not to over tighten an assembly risking damage to plating, threads, or fastening components made of metal or composite materials, and risking failure, or a reduced service life of the wiring system.

DMC introduces the BT-ST-3001D Digital Torque Tool which provides OEMs and field service techs with a simple and efficient way to precisely measure the torque values. This state-of-the-art product was developed specifically to meet the demands of connector and connector/accessory final assembly. The optional Static Mount Base was an integral design objective to provide OEM and Depot level operations utilization of the Digital Torque Tool as a bench-top or wiring board mountable Torque Station.

HAND-HELD DIGITAL TORQUE TOOLS

BT-ST-301D	DIGITAL TORQUE TOOL, 15-300 INCH POUNDS
BT-D-0551	ADAPTER - 3/8" DRIVE TO 1/4" SOCKET (Included)

TORQUE ACCURACY

IN-LB	FT-LB	KG-CM	N.M	ACCURACY (READING)
30-300	2.5-25	34.5-345	3.4-33	CW +/-2% / CCW +/-2%
15-29	1.25-2.4	17.3-33.4	1.7-3.3	CW +/-4% / CCW +/-6%

DMC torque wrench calibration data is traceable to NIST.

STATIONARY MOUNT BASES FOR DIGITAL TORQUE TOOLS

DMC's Stationary Mount Base is a secure system to mount the Digital Torque Tool in a stationary position. Until now, it required two separate torque devices to have the ability for portable or stationary (or stationary) use, but DMC has designed one system that allows the conversion of a hand-held portable unit into a stable, high production torque station in just a few minutes. This will allow a hands-free environment that is accurate, repeatable, and a far more ergonomic torque station for final assembly.

The base can be configured for

horizontal or vertical positioning of the tool and allows the tool to tilt 90 degrees in each configuration for usability. The tool can still be switched between clockwise and counter-clockwise functions while attached to the Stationary Mount Base. Because of their compact size and lightweight construction, it can be mounted in a variety of locations either on workbench or even on harness form board.

There will sometimes be applications where the use of a stationary unit is impractical. In which case, the Digital Torque Tool is easily removed



Horizontal Configuration



Vertical Configuration

DMC Recommends the use of AIR6151 (SAE) as an industry standard for torque and connector assembly.

Stationary MOUNT DIGITAL TORQUE TOOL

BT-ST-301D	DIGITAL TORQUE TOOL, 15-300 INCH POUNDS
BM-6	Stationary MOUNT BASE FOR BT-ST-301D



The set screw of the BT-BS-611T is shown here. It can be used to lock on to the torque wrench.

PART NUMBER	STRAP WIDTH	GRIPPING DIAMETER
BT-BS-609T	1/2"	.50" to 2.50"
BT-BS-610T	1/2"	.25" to 1.50"
BT-BS-611T	5/8"	1.00" to 4.00"
BT-BS-618T	1"	1.00" to 4.00"

Different color straps and strap configurations have different part numbers. See pages 32 through 35.

STRAP WRENCH ATTACHMENT FOR THE DIGITAL TORQUE TOOL

DMC's handle-less strap wrench line has been specifically designed for torque accurate connector assembly. Based on DMC's established line of torque wrenches, the handle-less strap wrench attaches to the BT-ST-3001D and provides accurate torque without the interference of the strap wrench handle.

Modern connectors and accessories comprised of lightweight materials, torque sensitive threads, and critical platings have mandated the requirement for precision strap wrenches. DMC Strap Wrenches meet this need by applying a uniform grip around the diameter and avoid pressure points or metal-to-metal contact.

A variety of widths and lengths of straps is available in several different head configurations, so the system is suited to all common connector applications. See page 35 or our Web site for a full list of handle-less strap wrench part numbers.



STRAP WRENCHES

DMC strap wrenches have been specifically designed for connector assembly, rather than merely adapted from another use. The combination of lightweight materials, torque sensitive threads, and critical platings on modern connectors has mandated the requirement for precision made strap-wrenches, which apply a uniform grip around the diameter and avoid pressure points or metal-to-metal contact.

A variety of widths and lengths of straps is available, in several different handle configurations, so the system is suited to all common connector applications.



STANDARD STRAP WRENCHES

TOOL TIP STYLE	WRENCH P/N	STRAP P/N	STRAP WIDTH (COLOR)	STRAP LOOPED	SUGGESTED GRIPPING DIAMETER															
A	BT-BS-610	BT-A-6010	1/2" (Black)	Yes	.25" to 1.50"															
	BT-BS-610B*	BT-A-6010B*	1/2" (Blue)	Yes	.25" to 1.50"															
	BT-BS-610W	BT-A-6010W	1/2" (White)	Yes	.25" to 1.50"															
	BT-BS-610R	BT-A-6010R	1/2" (Red)	Yes	.25" to 1.50"															
B	BT-BS-609	BT-A-6010	1/2" (Black)	Yes	.50" to 2.50"															
	BT-BS-609B*	BT-A-6010B*	1/2" (Blue)	Yes	.50" to 2.50"															
	BT-BS-609W	BT-A-6010W	1/2" (White)	Yes	.50" to 2.50"															
	BT-BS-609R	BT-A-6010R	1/2" (Red)	Yes	.50" to 2.50"															
C	BT-BS-611	BT-A-6175	5/8" (Black)	Yes	1.00" to 4.00"															
	BT-BS-611B*	BT-A-6175B*	5/8" (Blue)	Yes	1.00" to 4.00"															
	BT-BS-611W	BT-A-6175W	5/8" (White)	Yes	1.00" to 4.00"															
C	BT-BS-618	BT-A-6185	1" (Black)	Yes	1.00" to 4.00"															
	BT-BS-618B*	BT-A-6185B*	1" (Blue)	Yes	1.00" to 4.00"															
	BT-BS-618W	BT-A-6185W	1" (White)	Yes </tr <tr> <td rowspan="2">D</td> <td>BT-BS-625</td> <td>BT-A-6250</td> <td>1/2" (Red)</td> <td>Yes</td> <td>.50" to 2.0"</td> </tr> <tr> <td>BT-BS-630</td> <td>BT-A-6300</td> <td>7/16" (Black)</td> <td>Yes</td> <td>.50" to 2.0"</td> </tr> <tr> <td>E</td> <td colspan="5">The Handle-Less Strap Wrenches are presented on page 35.</td> </tr>	D	BT-BS-625	BT-A-6250	1/2" (Red)	Yes	.50" to 2.0"	BT-BS-630	BT-A-6300	7/16" (Black)	Yes	.50" to 2.0"	E	The Handle-Less Strap Wrenches are presented on page 35.			
D	BT-BS-625	BT-A-6250	1/2" (Red)	Yes		.50" to 2.0"														
	BT-BS-630	BT-A-6300	7/16" (Black)	Yes	.50" to 2.0"															
E	The Handle-Less Strap Wrenches are presented on page 35.																			

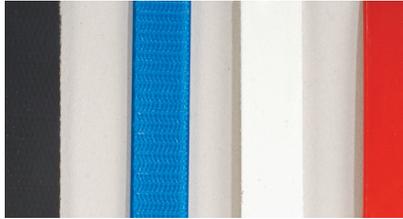
*The blue series strap wrench and replacement straps are preferred for connector/accessory use.

SEE TORQUE CONVERSION CHARTS ON PAGE 37 FOR USE OF STRAP WRENCHES AND TORQUE MEASUREMENT TOOLS.



STRAPS

The straps for DMC Strap Wrenches are available in four styles (which are color coded for easy identification) to better meet the needs of individual applications.



The **Black Strap** is the traditional rubber strap for DMC strap wrenches. It is the most flexible and grip-friendly of all strap materials, but requires replacement more often than other strap constructions. It is good for all sizes, and flexible enough to grip smaller diameters (.25 to .75 inches). But the black strap is not recommended for high torque range tightening. It is available in looped and loopless configurations. Because of the shorter service life of this material, we recommend the loopless version so the user can make adjustments to compensate for wear or breakage.

The **Blue Strap** is made of a thin layer of extruded polyethylene over a nylon belt. This strap is the preferred choice for all general purpose connector and backshell tightening applications, and it has good service life at medium to high-medium torque ranges. The Blue Straps, although not as flexible and grip-friendly as the Black Rubber straps, are a good choice because of the increased durability. This strap will grip .75 inch diameters and larger, and is available in looped and loopless configurations.

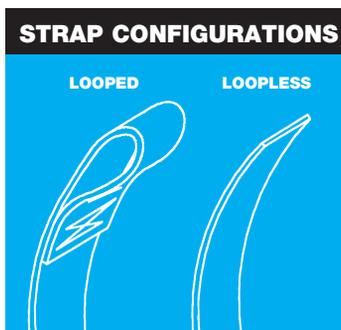
The **Red Strap** is the same material and construction as the Blue Strap, but it is thicker and stronger for higher torque range tightening and increased durability. This heavy duty construction allows it to be used on smooth or knurled surfaces, and can be used to tighten fittings with 1.0 inch diameters and larger. It is available in looped and loopless versions.

The **White Strap** is a traditional hard rubber construction option that has a durable rubber surface on one side. It is used effectively where high strength is needed, but flexibility is not important. It is well suited to all diameters of 2.0 inches or larger. Due to its sturdy & thick construction, the white strap is only available in looped configuration.

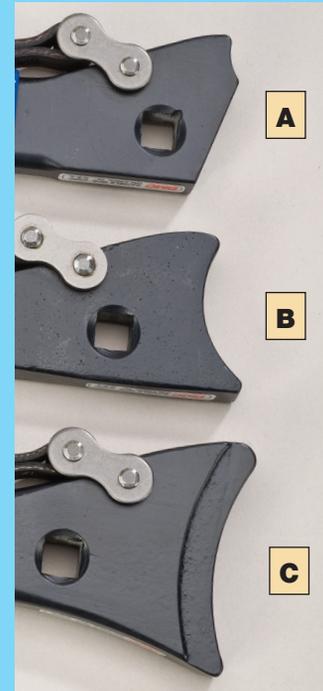
NOTE: Strap length and width are important considerations in selecting a strap wrench and the replacement straps. Sometimes Grip Pads are recommended for use with strap wrenches to add traction while tightening some surfaces. If you have any questions about the best combination for your application, contact DMC.

STRAP COLORS					
COLOR	SMALL DIAMETERS	MEDIUM DIAMETERS	LARGE DIAMETERS	TORQUE RANGE	LOOPLESS AVAILABLE
Black	X	X	X	Med	X
Blue*	X	X	X	Med-High	X
Red		X	X	High	X
White		X	X	High	

*The blue straps are preferred for connector/accessory use.



STRAP WRENCH SIZES



A: The BT-BS-610 Series tool tip is our small-diameter tip and designed to accommodate connectors and backshells with diameters from .25 to 1.5 inches. Straps are .5 an inch wide.

B: The BT-BS-609 Series tool tip is our most popular choice for general purpose use. The mid-diameter tip is designed to accommodate connectors and backshells with diameters from .5 to 2.50 inches. Straps are .5 an inch wide.

C: The BT-BS-611 Series tool tip is our large-diameter tip designed to accommodate connectors and backshells with diameters from 1 to 4 inches. Straps are 5/8 an inch wide.

C: The BT-BS-618 Series tool tip is also a large-diameter tip like the BT-BS-611 designed to accommodate connectors and backshells with diameters from 1 to 4 inches, but with a 1 inch wide strap for better gripping and applying higher torque values.

LOOPLESS-STRAP WRENCH

All straps wear and break. The most common point of wear is at the upper edge of the tool tip, near the base of the strap. The standard straps have a loop sewn into one end and attach to the wrench body with a simple link. However, when the strap eventually breaks, it is unusable.

The Loopless Strap Tool Series uses a clamping buckle to attach a loopless strap to the wrench body. When a loopless strap breaks at the strain point, the majority of the strap is still usable. The operator simply removes the broken section, installs the remaining strap, and continues working.

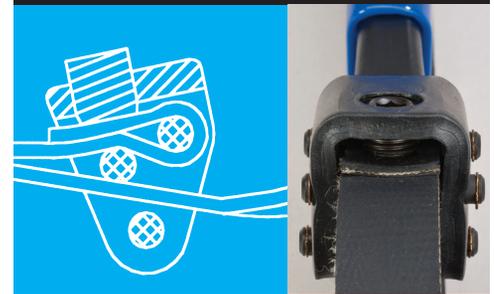
LOOPLESS-STRAP STRAP WRENCHES

TOOL TIP STYLE	WRENCH P/N	STRAP P/N	STRAP WIDTH (COLOR)	STRAP LOOPED	SUGGESTED GRIPPING DIAMETER
A	BT-BS-610SS	BT-A-6010-BK	1/2" (Black)	No	.25" to 1.50"
	BT-BS-610BSS	BT-A-6010B-BK*	1/2" (Blue)	No	.25" to 1.50"
	BT-BS-610RSS	BT-A-6010R-BK	1/2" (Red)	No	.25" to 1.50"
B	BT-BS-609SS	BT-A-6010-BK	1/2" (Black)	No	.50" to 2.50"
	BT-BS-609BSS	BT-A-6010B-BK*	1/2" (Blue)	No	.50" to 2.50"
	BT-BS-609RSS	BT-A-6010R-BK	1/2" (Red)	No	.50" to 2.50"
C	BT-BS-611SS	BT-A-6175-BK	5/8" (Black)	No	1.00" to 4.00"
	BT-BS-611BSS*	BT-A-6175B-BK*	5/8" (Blue)	No	1.00" to 4.00"
C	BT-BS-618SS	BT-A-6185-BK	1" (Black)	No	1.00" to 4.00"
	BT-BS-618BSS*	BT-A-6185B-BK*	1" (Blue)	No	1.00" to 4.00"

*The blue series straps are preferred for general connector/accessory use.

SEE TORQUE CONVERSION CHARTS ON PAGE 37 FOR USE OF STRAP WRENCHES AND TORQUE MEASUREMENT TOOLS.

LOOPLESS STRAP INSTALLATION



The strap is inserted into the buckle, folded back over itself, and clamped in place with a 7/32 inch set screw.



**Loopless-Strap
Strap Wrench**

**Loopless
Strap**



**Looped Strap
Strap Wrench**

**Looped
Strap**

STANDARD DMC STRAP WRENCHES CAN BE CONVERTED TO "LOOPLESS".

All strap wrenches can be ordered as Loopless versions. However, if you already own DMC strap tools, we offer a Retro Fit Kit to convert your existing looped strap tools to Loopless Strap Tools

RETROFIT KITS to convert looped strap tools to loopless strap tools.

Retrofit Kit P/N	for Tool P/N	Strap Width (color)	Strap Looped	Suggested Gripping Diameter
BT-BS-609SS-RK	BT-BS-609	1/2" (Black)	No	.50" to 2.50"
BT-BS-609BSS-RK	BT-BS-609B	1/2" (Blue)	No	.50" to 2.50"
BT-BS-610SS-RK	BT-BS-610	1/2" (Black)	No	.25" to 1.50"
BT-BS-610BSS-RK	BT-BS-610B	1/2" (Blue)	No	.25" to 1.50"
BT-BS-611SS-RK	BT-BS-611	5/8" (Black)	No	1.00" to 4.00"
BT-BS-618SS-RK	BT-BS-618	1" (Black)	No	1.00" to 4.00"

RETROFIT KIT COMPONENTS





The **BT-BS-611T** is shown here.

HANDLE-LESS STRAP WRENCHES

DMC's handle-less strap wrench line has been specifically designed for torque-accurate connector assembly. Based on DMC's established line of torque wrenches, the handle-less strap wrench attaches to the **BT-ST-301D Digital Torque Tool** and provides accurate torque without the interference of the strap wrench handle.

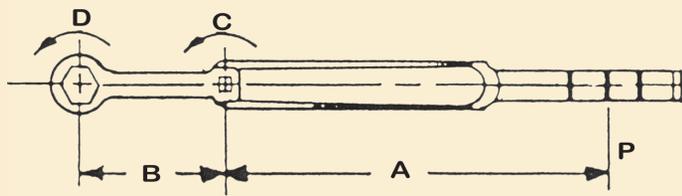
SEE TORQUE CONVERSION CHARTS ON PAGE 37 FOR USE OF STRAP WRENCHES AND TORQUE MEASUREMENT TOOLS.

HANDLE-LESS STRAP WRENCHES FOR TORQUE WRENCHES					
TOOL TIP STYLE	WRENCH P/N	STRAP P/N	STRAP WIDTH (COLOR)	STRAP LOOPED	SUGGESTED GRIPPING DIAMETER
HANDLE-LESS LOOPED STRAP WRENCHES					
A	BT-BS-610T	BT-A-6010	1/2" (Black)	Yes	.25" to 1.50"
	BT-BS-610BT*	BT-A-6010B*	1/2" (Blue)	Yes	.25" to 1.50"
	BT-BS-610WT	BT-A-6010W	1/2" (White)	Yes	.25" to 1.50"
	BT-BS-610RT	BT-A-6010R	1/2" (Red)	Yes	.25" to 1.50"
B	BT-BS-609T	BT-A-6010	1/2" (Black)	Yes	.50" to 2.50"
	BT-BS-609BT*	BT-A-6010B*	1/2" (Blue)	Yes	.50" to 2.50"
	BT-BS-609WT	BT-A-6010W	1/2" (White)	Yes	.50" to 2.50"
	BT-BS-609RT	BT-A-6010R	1/2" (Red)	Yes	.50" to 2.50"
C	BT-BS-611T	BT-A-6175	5/8" (Black)	Yes	1.00" to 4.00"
	BT-BS-611BT*	BT-A-6175B*	5/8" (Blue)	Yes	1.00" to 4.00"
	BT-BS-611WT	BT-A-6175W	5/8" (White)	Yes	1.00" to 4.00"
C	BT-BS-618T	BT-A-6185	1" (Black)	Yes	1.00" to 4.00"
	BT-BS-618BT*	BT-A-6185B*	1" (Blue)	Yes	1.00" to 4.00"
	BT-BS-618WT	BT-A-6185W	1" (White)	Yes	1.00" to 4.00"
HANDLE-LESS LOOPLESS STRAP WRENCHES					
A	BT-BS-610SST	BT-A-6010-BK	1/2" (Black)	No	.25" to 1.50"
	BT-BS-610BSST	BT-A-6010B-BK*	1/2" (Blue)	No	.25" to 1.50"
	BT-BS-610RSST	BT-A-6010R-BK	1/2" (Red)	No	.25" to 1.50"
B	BT-BS-609SST	BT-A-6010-BK	1/2" (Black)	No	.50" to 2.50"
	BT-BS-609BSST	BT-A-6010B-BK*	1/2" (Blue)	No	.50" to 2.50"
	BT-BS-609RSST	BT-A-6010R-BK	1/2" (Red)	No	.50" to 2.50"
C	BT-BS-611SST	BT-A-6175-BK	5/8" (Black)	No	1.00" to 4.00"
	BT-BS-611BSST*	BT-A-6175B-BK*	5/8" (Blue)	No	1.00" to 4.00"
C	BT-BS-618SST	BT-A-6185-BK	1" (Black)	No	1.00" to 4.00"
	BT-BS-618BSST*	BT-A-6185B-BK*	1" (Blue)	No	1.00" to 4.00"

*The blue series strap wrench and replacement straps are preferred for connector/accessory use.

TORQUE CONVERSION GENERAL INFORMATION

Torque is a standard term that is comprised of “distance and force”. Since the force is applied to a threaded component in a circular motion, the distance applies to the radius (center of the torque wrench drive to a designated point on the torque wrench handle). In the case of wire harness applications, it is usually expressed in INCH-POUNDS, NEWTON-METERS, or KILOGRAM-CENTIMETERS. When extensions such as a crowfoot, or strap wrench is added to a torque wrench, it changes the distance (radius), so a mathematical formula is used to determine the correct torque readings on the torque wrench to compensate for the added length. We have included the following formulas for your convenience. See AIR 6151 (SAE) for more information torque for connector/backshell assembly.



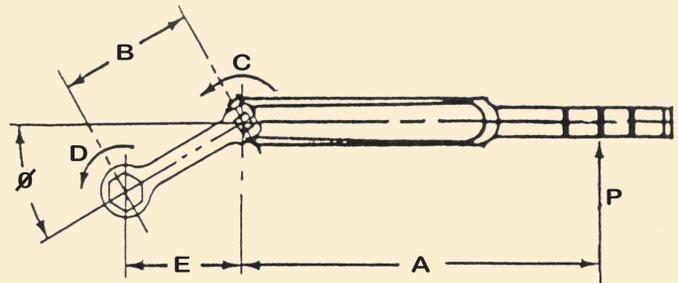
When an adapter or extension is used on a torque wrench it increases the torque range of the wrench. The formula for computing torque when using an adapter or extension is explained below.

- A** = (Length) Distance from center of torque wrench square drive to center of the puller's hand grip.
- B** = Distance from center of torque wrench square drive to center of drive at end of extension.
- C** = (Torque) Torque wrench setting.
- D** = Torque desired at drive on end of extension.
- P** = (Force) Pull applied.

To determine torque wrench setting:

$$C = (D \cdot A) / (A + B)$$

NOTE: After computing “C” and setting wrench to computation, measure and mark “A” where pull is applied. It is recommended that the axis of the extension always be used in line with axis of the torque wrench as shown above.



Should it be necessary, due to obstructions, to have an angle between the two axes, then the above formula is modified as follows. Due to increasing rounding errors, keep the angle as small as possible.

A, B, C, D, & P are the same as above.

E = Effective moment arm of the extension.

Ø = Angle between extension axis and torque wrench axis.

$$E = (B)(\cos \theta)$$

Therefore:

$$C = (D \cdot A) / (A + (B \cdot \cos \theta))$$

When $\theta = 0$, $\cos \theta = 1$, then equation is reduced to $C = (D \cdot A) / (A + B)$

When $\theta = 90^\circ$, $\cos \theta = 0$ then $C = D$
(Regardless of the length **B**)
(Ref AIR 6151)

These torque conversion charts were calculated for the **BT-ST-301D Digital Torque Tool**. If any other torque tool or instrument is used, calculate the torque conversion by using the mathematical formula to page 36. See page 55-56 for torque recommendations (Ref AS6151).

TORQUE CONVERSION CHART FOR BT-BS-611 AND BT-BS-618 SERIES USED WITH BT-ST-301D									
Diameter of Part Being Tightened	DESIRED TORQUE VALUE (in-lbs)								
	40	60	80	100	120	140	160	180	200
1.00"	33	50	67	83	100	117	134	150	167
1.50"	33	50	66	83	99	116	132	149	165
1.75"	33	49	65	82	98	114	131	147	163
2.00"	32	48	64	80	96	112	128	144	160
2.25"	32	48	63	79	95	111	127	143	158
2.50"	31	47	63	78	94	110	126	141	157
2.75"	31	47	62	78	93	109	124	140	155
3.00"	31	46	62	77	92	108	123	138	154
3.25"	30	46	61	76	91	107	122	137	152
3.50"	30	45	60	75	90	106	121	136	151
3.75"	30	45	60	75	90	105	119	134	149
4.00"	30	44	59	74	89	104	118	133	148
TORQUE READING ON INSTRUMENT ("C")									

TORQUE CONVERSION CHART FOR BT-BS-609 SERIES USED WITH BT-ST-301D									
Diameter of Part Being Tightened	DESIRED TORQUE VALUE (in-lbs)								
	40	60	80	100	120	140	160	180	200
0.50	35	53	70	88	106	123	141	158	176
0.75	35	52	70	87	105	122	139	157	174
1.00	34	52	69	86	103	121	138	155	172
1.50	34	51	67	84	101	118	135	152	169
1.75	33	50	67	83	100	117	134	150	167
2.00	33	50	66	83	99	116	132	149	165
2.25	33	49	65	82	98	115	131	147	164
2.50	32	49	65	81	97	113	130	146	162
TORQUE READING ON INSTRUMENT ("C")									

TORQUE CONVERSION CHART FOR BT-BS-610 SERIES USED WITH BT-ST-301D									
Diameter of Part Being Tightened	DESIRED TORQUE VALUE (in-lbs)								
	40	60	80	100	120	140	160	180	200
0.25"	36	54	72	89	107	125	143	161	179
0.50"	35	52	70	87	104	122	139	156	174
0.75"	34	51	68	86	103	120	137	154	171
1.00"	34	51	67	84	101	118	135	152	169
1.50"	33	49	65	81	98	114	130	146	163
1.75	34	51	68	84	101	118	135	152	169
2.00	33	50	67	83	100	117	133	150	166
2.25	33	49	66	82	99	115	132	148	165
2.50	32	49	65	81	97	113	130	146	162
TORQUE READING ON INSTRUMENT ("C")									

GENERAL PURPOSE BACKSHELL/ACCESSORY TOOLS

TOOL IDENTIFICATION CHART (SEE PHOTO)		
A.	BT-HT-110	1/4" Socket Drive Handle
B.	BT-HT-210	1/4" Stationary Drive Mounting Arm
	BT-HT-211	3/8" Stationary Drive Mounting Arm
C.	BT-D-0551	3/8" to 1/4" Adapter
	BT-D-0622	1/4" to 3/8" Adapter
D.	BT-HT-107	3/8" Square Drive T-Handle Wrench
E.	BT-HT-100	1/4" Square Drive T-Handle Wrench
F.	BT-A-0513	Ratchet 3/8" Drive
G.	4-1149	Illuminated Magnifier



JAM NUT SOCKET TOOLS



The correct application of torque is essential to most connector applications where Jam Nut receptacle connectors are used. The sealing components (usually an "O" ring) must be compressed, but not to the point of damage. Another important consideration when tightening Jam Nuts is the thread strength, especially in the various types of aluminum and composite connectors.

DMC's Jam Nut Socket tools have been developed specifically for the installation of Jam Nut receptacle connectors. They are available in a light weight composite construction, anodized machined aluminum, and durable steel series.



Jam Nut Sockets are ideal for torquing jam nuts on panels where several connectors are crowded together and in other tight spaces.

COMPOSITE JAM NUT SOCKETS

A unique process was developed to mold this composite material which contains a higher percentage of fiberglass than is customarily used in conventional molding technology. This makes them as light and as strong as possible. The material will not scratch plating, or damage the finish on cabinets, panels, or bulkheads when used properly.

ALUMINUM JAM NUT SOCKETS

When a metal socket is required, the anodized aluminum series jam nut sockets are a good choice. They are machined to the same configuration as the composite jam nut sockets with the square hold drive for torquing.

STEEL JAM NUT SOCKETS

A steel series of jam nut sockets is also available, which some users prefer for firewall or other applications where higher torque values are required.

The traditional "General Purpose" formed stainless steel sockets (on page 40) are great for non-torque

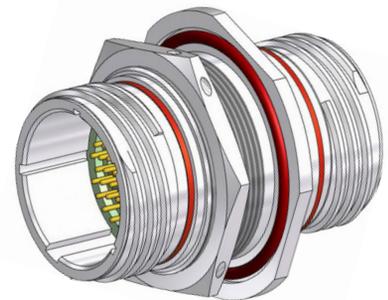


A COMPOSITE (NON-MARKING)

B STEEL

C ALUMINUM

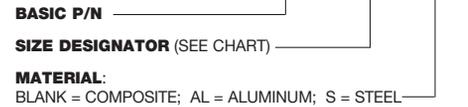
Specific Jam Nut applications. Jam nut durability test report available upon request - contact DMC customer service.



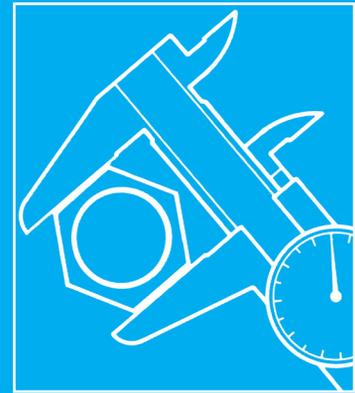
COMPOSITE OR METAL JAM NUT SOCKETS				
DMC PART NUMBER	FITS JAM NUT SIZE: INCHES	FITS JAM NUT SIZE: MILLIMETERS	SQUARE DRIVE	OUTSIDE DIAMETER REFERENCE
BT-J-117	.608 to .628	15.41 to 15.95	1/4	.914
BT-J-118*	.628 to .649	15.95 to 16.48	1/4	.955
BT-J-120	.671 to .693	17.04 to 17.60	1/4	.010
BT-J-121	.693 to .717	17.60 to 18.21	1/4	1.04
BT-J-122*	.717 to .741	18.21 to 18.82	1/4	1.07
BT-J-123	.741 to .765	18.82 to 19.43	1/4	1.10
BT-J-124	.765 to .791	19.43 to 20.09	1/4	1.13
BT-J-125	.791 to .818	20.09 to 20.77	1/4	1.16
BT-J-126	.818 to .845	20.77 to 21.46	1/4	1.19
BT-J-127	.845 to .873	21.46 to 22.17	1/4	1.22
BT-J-128	.873 to .902	22.17 to 22.91	1/4	1.26
BT-J-129	.902 to .933	22.91 to 23.69	1/4	1.29
BT-J-130	.933 to .964	23.69 to 24.48	3/8	1.33
BT-J-131	.964 to .996	24.48 to 25.29	3/8	1.36
BT-J-132	.996 to 1.030	25.29 to 26.16	3/8	1.41
BT-J-133	1.030 to 1.064	26.16 to 27.02	3/8	1.45
BT-J-134	1.064 to 1.100	27.02 to 27.94	3/8	1.51
BT-J-135	1.100 to 1.137	27.94 to 28.87	3/8	1.55
BT-J-136	1.137 to 1.175	28.87 to 29.84	3/8	1.59
BT-J-137	1.175 to 1.214	29.84 to 30.83	3/8	1.63
BT-J-138	1.214 to 1.255	30.83 to 31.87	3/8	1.69
BT-J-139	1.255 to 1.297	31.87 to 32.94	3/8	1.73
BT-J-140	1.297 to 1.340	32.94 to 34.03	3/8	1.78
BT-J-141	1.340 to 1.385	34.03 to 35.17	3/8	1.84
BT-J-142	1.385 to 1.432	35.17 to 36.37	3/8	1.89
BT-J-143	1.432 to 1.480	36.37 to 37.59	3/8	1.95
BT-J-144	1.480 to 1.529	37.59 to 38.83	3/8	2.00
BT-J-145	1.529 to 1.580	38.83 to 40.13	3/8	2.06
BT-J-146	1.580 to 1.633	40.13 to 41.47	3/8	2.12
BT-J-147	1.633 to 1.688	41.47 to 42.87	3/8	2.19
BT-J-148	1.688 to 1.745	42.87 to 44.32	3/8	2.25
BT-J-149	1.745 to 1.803	44.32 to 45.79	3/8	2.32
BT-J-150	1.803 to 1.864	45.79 to 47.34	3/8	2.39
BT-J-151	1.864 to 1.926	47.34 to 48.92	3/8	2.46
BT-J-152	1.926 to 1.991	48.92 to 50.57	3/8	2.54
BT-J-153	1.991 to 2.057	50.57 to 52.24	3/8	2.61
BT-J-154	2.057 to 2.126	52.24 to 54.00	3/8	2.69
BT-J-155	2.126 to 2.197	54.00 to 55.80	3/8	2.78
BT-J-156	2.197 to 2.271	55.80 to 57.68	3/8	2.87
BT-J-157	2.271 to 2.347	57.68 to 59.61	3/8	2.95
BT-J-158	2.347 to 2.426	59.61 to 61.62	3/8	3.04
BT-J-159	2.426 to 2.507	61.62 to 63.67	3/8	3.14
BT-J-160*	2.507 to 2.591	63.67 to 65.81	3/8	3.24
BT-J-161	2.591 to 2.678	65.81 to 68.02	3/8	3.34
BT-J-162	2.678 to 2.769	68.02 to 70.33	3/8	3.44
BT-J-163	2.769 to 2.860	70.33 to 72.64	3/8	3.54
BT-J-164	2.860 to 2.956	72.64 to 75.08	3/8	3.66
BT-J-165	2.956 to 3.055	75.08 to 77.59	3/8	3.77
BT-J-166	3.055 to 3.157	77.59 to 80.18	3/8	3.89
BT-J-170*	3.457 to 3.557	87.81 to 90.35	3/8	4.38

* Not available in composite material.

PART NUMBER **BT-J -XXX XX**



TO FIND THE CORRECT JAM NUT SOCKET FOR YOUR APPLICATION, MEASURE ACROSS THE FLATS OF THE JAM NUT YOU ARE WORKING WITH. NEXT, FIND THE SIZE RANGE IN THE ADJACENT TABLE. LISTED BESIDE IT WILL BE THE SOCKET YOU NEED.



We also recommend that you consider DMC's **Safe-T-Cable**® to secure Jam Nut receptacles where lockwire holes are provided.

The Low Profile Ferrule (shown here) lends itself to an efficient security system for jam nut receptacles.

GENERAL PURPOSE JAM NUT SOCKETS

GENERAL PURPOSE JAM NUT SOCKETS

Formed Stainless Steel Jam Nut sockets are great for non-torque specific jam nut applications. They are plated for corrosion resistance, and have drive holes to accommodate a metal rod drive tool (P/N DW75).



ADJUSTABLE JAM NUT WRENCH

The **JR700** adjustable jam nut wrench is a versatile tool for maintenance and low volume production. The rugged all steel construction makes this tool a good choice for heavy duty applications.

The tool may be adjusted to accommodate hex nuts from .75 inch to 3.25 inch (across flat) dimensions. The maximum working depth is 1.0 inch. This range accommodates most common connectors.

A standard 3/8 inch drive torque tool may be used in conjunction with this tool to limit the possibility of overtightening. If torque values require close tolerance accuracy, direct reading sockets (page 38) are recommended.

GENERAL PURPOSE JAM NUT SOCKETS

DMC PART#	FITS JAM NUT SIZE: INCHES	AMPHENOL BCO PART NUMBER	HEX REF. DIM: INCHES	EQUIVALENT COMPOSITE
CS8	.755 to .763	11-6266-3	3/4"	BT-J-123
CS10	.880 to .888	11-6266-5	7/8"	BT-J-128
CS12	1.068 to 1.077	11-6266-8	1 1/16"	BT-J-134
CS14	1.194 to 1.204	11-6266-10	1 3/16"	BT-J-137
CS16	1.320 to 1.331	11-6266-12	1 5/16"	BT-J-140
CS18	1.446 to 1.457	11-6266-14	1 7/16"	BT-J-143
CS20	1.571 to 1.580	11-6266-16	1 9/16"	BT-J-145
CS22	1.696 to 1.708	11-6266-18	1 11/16"	BT-J-148
CS24	1.822 to 1.835	11-6266-20	1 13/16"	BT-J-150
CS22-1	2.011 to 2.025	11-6266-23	2"	BT-J-153
CS24-1	2.137 to 2.151	11-6266-25	2 1/8"	BT-J-155
CS32	2.640 to 2.687	11-6266-33	2 5/8"	BT-J-161 & BT-J-162
DMC1554	SET INCLUDES ALL 12 SOCKETS LISTED ABOVE AND DW75 DRIVE ROD.			

TORQUE CONVERSION CHART FOR JR700 TOOL USED WITH BT-ST-301D*									
Diameter of Part Being Tightened	DESIRED TORQUE VALUE (in-lbs) ("D")								
	40	60	80	100	120	140	160	180	200
0.50"	25	38	51	64	76	89	102	115	127
0.75"	26	39	51	64	77	90	103	116	128
1.00"	26	39	52	65	78	91	104	117	129
1.50"	26	40	53	66	79	92	106	119	132
1.75"	27	40	53	67	80	93	107	120	133
2.00"	27	40	54	67	81	94	108	121	135
2.25"	27	41	54	68	82	95	109	122	136
2.50"	27	41	55	69	82	96	110	124	137
2.75"	28	42	55	69	83	97	111	125	139
3.00"	28	42	56	70	84	98	112	126	140
3.25"	28	42	57	71	85	99	113	127	141
TORQUE READING ON INSTRUMENT ("C")									

SEE TORQUE CONVERSION CHARTS ON PAGE 37 FOR USE OF STRAP WRENCHES AND TORQUE MEASUREMENT TOOLS.



Durable hinge allows tool to open 180°.

Pads are easily replaceable.

TOOL PART NUMBER	GRIP RANGE*	
	INCH	METRIC (mm)
DRP8	0.56 to 0.59	14.224 to 14.986
DRP9	0.62 to 0.65	15.748 to 16.51
DRP10	0.67 to 0.70	17.018 to 17.78
DRP11	0.74 to 0.77	18.796 to 19.558
DRP12	0.80 to 0.83	20.32 to 21.082
DRP13	0.85 to 0.88	21.59 to 22.352
DRP14	0.89 to 0.92	22.606 to 23.368
DRP16	1.05 to 1.08	26.67 to 27.432
DRP18	1.11 to 1.14	28.194 to 28.956
DRP20	1.27 to 1.30	32.258 to 33.02
DRP22	1.39 to 1.42	35.306 to 36.068
DRP24	1.49 to 1.52	37.846 to 38.608
DRP26	1.61 to 1.64	40.894 to 41.656
DRP28	1.89 to 1.92	48.006 to 48.768
DMC1924	Set of all 14 DRP SERIES PLIERS and 10 REPLACEMENT PADS	
DRP078R	REPLACEMENT PAD for all DRP SERIES PLIERS	

*ON A SMOOTH SURFACE.
 KNURLED SURFACES SLIGHTLY BELOW THIS RANGE ARE COMPATIBLE WITH THESE TOOLS.



CIRCULAR RING PLIERS

The DRP-XX circular ring pliers are specifically designed to grip circular connector and backshell components which would be deformed by other gripping methods. The non marring rubber jaw lining material is available in strip form and may be used to replace worn jaw inserts. It is held in place by interlocking fingers which are molded into the material.

The following chart defines the working diameters and the tools which are available in this series.

Replacement Pads for Circular Ring Pliers are available (P/N DRP-078R). This replacement pad is supplied as a 4.25" strip that must be cut to length needed.



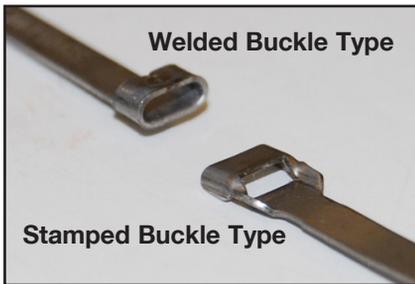
SOFT JAW ADJUSTABLE PLIERS

The BT-SJ-468 soft jaw adjustable pliers are a handy addition to general maintenance tool stations. This tool can provide a reliable gripping function for assembly, disassembly, and positioning of circular and oval parts.

The soft jaw inserts are replaceable and may be ordered as separate parts (part number BT-SJ-468-1). This part number applies to an individual jaw (two pieces are required per tool).

The overall length is 9.5 inches and the approximate weight is .5 lb.

EMI/RFI SHIELD BAND APPLICATION TOOLS



Introduction:

The Aerospace Industry has standardized on two distinct Band Styles for Termination of EMI/RFI Shielding on wiring systems. DMC is the only QPL Supplier with complete coverage of all M85049/128 Accessory Bands. This page and the following page is a summary of our Shield Band Installation Tooling. More complete and detailed Product Information is available. Contact DMC and ask for the [M85049/128 EMI/RFI Shield Band Tooling Guide](#).



The two Configurations are commonly referred to as the “Stamped Buckle” Bands and the “Welded Buckle” Bands. Each configuration is terminated with a different compliment of tooling. The following table is a quick reference guide to the Shield Band Part Numbers, and the Tooling Type which is designated for each.



Quick Reference Band Part Number Installation to Tool Table			
M85049/128-1	2 STEP TOOL	M85049/128-5	2 STEP TOOL
M85049/128-2	2 STEP TOOL	M85049/128-6	2 STEP TOOL
M85049/128-3	1 STEP TOOL	M85049/128-7	1 STEP TOOL
M85049/128-4	1 STEP TOOL	M85049/128-8	1 STEP TOOL

One Step Banding Tools System

ONE-STEP BAND APPLICATION TOOLS

DBS-2100 & DBS-2200 (M81306/1-A & M81306/1-B)

The One-Step Band Application Tools are built to M81306/1 and designed to install M85049/128-03, M85049/128-04, M85049/128-07, and M85049/128-08 “stamped buckle” bands. These tools are constructed to survive the demands of production and maintenance use, and remain precisely adjusted to provide a quality band termination.



The tension-lock system gives the operator a positive indication when the preset tension is reached.

DBS-2200 .125 Wide Mini-Band Application Tool M81306/1-B:

- Size and Weight: 6.71” x 6.75” x .92”, 1.02 lbs.
- Tension Range: 75–85 lbs.
- Cut-off blades replaceable with Blade Replacement Kit: DBS-2100-BRK

DBS-2100 .250 Wide Band Application Tool M81306/1-A:

- Size and Weight: 6.71” x 6.75” x .92”, 1.02 lbs.
- Tension Range: 145–155 lbs.
- Cut-off blades replaceable with Blade Replacement Kit: DBS-2100-BRK



Field Inspection Gages are available to check the tension of the DMC One-Step Banding Tools. The .250 width band tool (DBS-2100 Series) requires the DBS-CG7 (M81306/1C) gage and the .125 width band tool (DBS-2200) requires the DBS-CG8 (M81306/1D) gage. Other verification devices are available. Consult DMC for details.

MILITARY PART NUMBER TO DMC PART NUMBER CHART

TOOL MIL P/N	DESCRIPTION	WIDTH	DMC P/N	APPLICATION
M81306/1-01	Set: One-Step Tool, Gage, and Tension Key	.250	DBS-2102	M85049/128-3 & -4
M81306/1-02	Set: One-Step Tool, Gage, and Tension Key	.125	DBS-2202	M85049/128-7 & -8
M81306/1A	One-Step Band Installation Tool	.250	DBS-2100	M85049/128-3 & -4
M81306/1B	One-Step Band Installation Tool	.125	DBS-2200	M85049/128-7 & -8
M81306/1C	Tension Verification Compression Fixture	.250	DBS-CG7	DBS-2100
M81306/1D	Tension Verification Compression Fixture	.125	DBS-CG8	DBS-2200
M81306/1E	Tension Adjustment Key	.125 & .250	DBS-2100-32	DBS-2100 & DBS-2200
M81306/2-01	Two-Step Installation Tool and Roll-Over Tool	.250	DBS-1101	M85049/128-1 & -2
M81306/2-02	Two-Step Installation Tool and Roll-Over Tool	.125	DBS-1201	M85049/128-5 & -6
M81306/2-01A	Two-Step Band Tool	.250	DBS-1100	M85049/128-1 & -2
M81306/2-02B	Two-Step Band Tool	.125	DBS-1200	M85049/128-5 & -6
M81306/2-01C	Roll Over Tool	.250	DBS-RO3	M85049/128-1 & -2
M81306/2-02D	Roll Over Tool	.125	DBS-RO5	M85049/128-5 & -6
M81306/2-01E	Tension Verification Gage & Compression Fixture	.250	DBS-CG2A	DBS-1100
M81306/2-02F	Tension Verification Gage & Compression Fixture	.125	DBS-CG3A	DBS-1200

Two-Step Banding Tools System



The DMC verification System is easily accomplished with a simple compression fixture and a GO-NO/GO Gage. See table above for part numbers and Application for the DBS-CG verification Gage and Compression Fixtures. Other verification devices are available, consult DMC for details.

DBS-1100 AND DBS-1200 HAND OPERATED BANDING TOOLS

TWO STEP BAND APPLICATION TOOLS

DBS-1100 (M81306/2-01A) .250 Wide Band Tool:

- Size and Weight: 1.38" x 5.5" x 7.5", 1.4 lbs.
- Tension Range: 140-160 lbs.
- Cut-off blade: replaceable with DBS-1100-7

DBS-1200 (M81306/2-02B) .125 Wide Mini-Band Tool:

- Size and Weight: 1.38" x 5.5" x 7.5", 1.4 lbs.
- Tension Range: 70-90 lbs.
- Cut-off blade: replaceable with DBS-1100-7

PBT1100 & PMBT1200 PNEUMATIC BAND APPLICATION TOOLS

The PBT1100 & PMBT1200 series Pneumatic Band Application Tools are lightweight, dependable, and easy to operate. Many of the components are interchangeable with the corresponding hand tool. DMC's Pneumatic Two-Step Banding Tools are compatible with all currently available welded bands to M85049/128.

PBT1100 .250 Wide Band Application Tool

- Size and Weight: 8.75" L, 1.52 lbs.
- Calibration Range: 140-160 lbs.

PMBT1200 .125 Wide Mini-Band Application Tool

- Size and Weight: 8.75" L x 1.52 lbs.
- Calibration Range: 70-90 lbs.

DMC SHIELD BAND INSTALLATION KITS

The DMC2058A One-Step Band Installation Kit

The DMC2058A is an all inclusive One-step Band Installation Kit. It provides your service technicians with both the DBS-2100 (M81306/1A) .250" Wide Band Application Tool and the DBS-2200 (M81306/1B) .125" Wide Mini-Band Application Tool, along with stamped buckle bands, and all accessories needed to terminate bands.

DMC2058A Contents

DBS-2102 (M81306/1-01)

DBS-2202 (M81306/1-02)

M85049/128-3 (10 PCS)

M85049/128-7 (10 PCS)

Also included are all calibration, support accessories, and illustrated operating instructions for all the tooling included.

The DMC2058A Kit is equipped to install all M85049/128-3,-4 (.250 Wide) and M85049/128-7, -8 (.125 Wide) stamped EMI/RFI shield bands.



DMC2058A One-Step Banding Tool Kit

See page 8 for other tool combinations available from DMC.



DMC60A Two-Step Banding Tool Kit

The DMC Two-Step Band Installation Kit

If your process calls for the welded buckle shield bands, the Two-Step Band Installation Kit will provide all tools and accessories to support the assembly or maintenance of your wiring system.

Also included are all calibration, support accessories, and illustrated operating instructions for all the tooling included.

The DMC60A Kit is equipped to install all M85049/128-1, -2 (.250 Wide) welded EMI/RFI shield bands. The DMC 1379 similar to the DMC60A, but without cutters and shielding (includes all two step tools for .250 wide welded buckle bands).

Tool Kit is supplied in 1 fiberglass case and includes : Name Plate, Foam Pads/Inserts, Contents and Instruction Sheets. Other installation kits available with different capabilities. Contact DMC for details.

DMC60A Contents

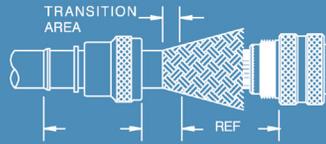
Quantity	Part #	Description
1	DBS-1100 (M81306/2-01A)	Hand Operated Band Application Tool - 1/4"
1	DBS-BR1	Band Removal Tool
1	DBS-RO3 (M81306/2-01C)	Roll-Over Tool for .250 Band Tab
1	DBS-GG2	Field Calibration Fixture for DBS-1100
1	G691	Go/No-Go Gage for DBS-CG2 Fixture
100	M85049/128-2	.250 wide x 14.0 long EMI/RFI Band (coiled)*
1	MISC.	Tape, Braided Shielding, & Split Rings, & Hex Wrenches, Shears, Spare Cutter blades

MI/RFI BAND APPLICATION SYSTEM

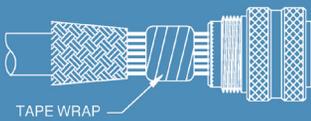
R .125 & .250 SHIELD TERMINATION BANDS



Careful measurement should be made prior to installing the backshell. The outer jacket is then uniformly removed at a distance which would allow the braid to make a comfortable transition onto the backshell termination area. This dimension will vary depending upon the differences between cable and backshell diameters or other application dependent factors.



The braid is then trimmed to a length which will allow it to extend 1 inch past the backshell termination platform.



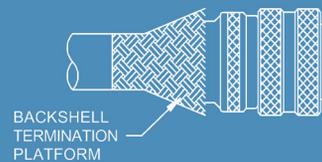
Then the braid is carefully folded rearward to expose the wires which will be inside the backshell.

A sufficient number of wraps of self-vulcanizing tape (normally red in color) are applied over the wires to build up a diameter slightly less than the inside diameter of the backshell. Care should be taken not to apply tension to the contacts located in the outer perimeter of the connector.

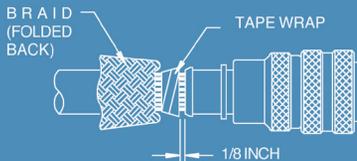
These layers of tape are followed by a minimum of one layer of Teflon tape which will prevent adhesion with the backshell and other components.

The backshell is then installed onto the connector, using a nonabrasive tool

such as a strap wrench.

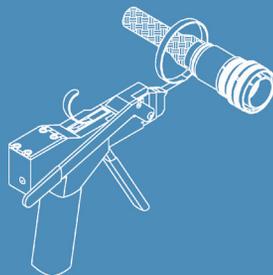


The braid is then carefully moved from under the backshell. It is important to retain the woven characteristics of the braid during this step.



Use self-vulcanizing tape or a preformed component to build up the area behind the backshell. It is important that the braid is supported in the transition from the backshell rear diameter to the natural diameter of the wire bundle. Leave approximately 1/8 inch spacing between the tape wrap and the backshell.

The braid is pushed into position over the backshell termination platform. Care must be taken to make sure the weave is uniform and no large "windows" are present.



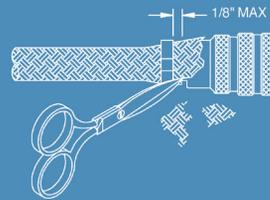
A shield termination band is then loaded into the tool. The band is then slid over the connector/backshell assembly into a position of alignment with the termination platform.

Apply an adequate amount of pressure in line with the cable as it enters the backshell to allow the 1/8 inch space to be reduced to zero. The tool is then activated to the preset tension. The band is then bent sharply at the buckle approximately 90° then cut-off using the cut-off lever on the tool (applies to two-step only). If the band is uncurled for any reason, it must be double looped through the buckle before termination.



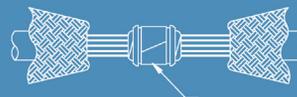
The 90° tab is then curled and folded back over the buckle using the rollover tool (applies to two-step only).

For braiding a non-jacket cable use fine point shears to trim the excess braid as close to the connector side of the bands as possible. Do not leave any unsecured braid wires longer than 1/8 inch. Do not allow the trimmed wires to fall in any areas where they may present a foreign object damage hazard.



PROCEDURE FOR SPLICING

The jacket is present, and shield has been cut and separated to expose the wires requiring service. Care must be taken to avoid damaging the insulation on internal wires. The required service is then completed.



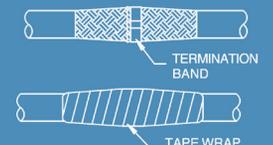
The wire bundle is then protected by a few wraps of self-vulcanizing tape followed by 2-3 layers of teflon tape. An appropriate size split-ring set is then selected and installed. One layer of teflon tape is applied over the split



ring set to hold the halves in position while the next steps are being performed.

The braid is then overlapped across the split ring set. Be sure the braid ends protrude completely under the band in both directions.

Heat-shrinkable tape is then applied over the splice. When a jacketed cable is used, be sure the tape extends onto the jacket in both directions.



*NOTE: 2 Step Tool shown. These instructions are general and apply to One Step and Two Step tools. If these instructions conflict with engineering processes, the latter shall apply.

BETA ADAPTOR KITS

*Kit configuration may vary from example shown.
Configuration depends on application, user requirements,
and packaging needs of the customer.*



The Adaptor Tool - A vastly improved low cost assembly tool and system that solves existing problems in the assembly and maintenance of circular connectors and their rear accessories (Backshells). The Adaptor Tool works on a revolutionary principle: the socket like tool exerts pressure equally on the connector's keys and keyways preventing damage, distortion and false torque readings.

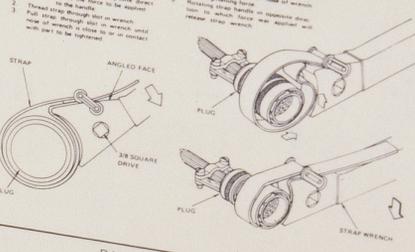
The illustrations demonstrate the installation of a straight strain relief accessory direct to the connector. These methods would normally apply for angled accessories direct to the connector as well. For accessory removal the assembly operation is reversed.



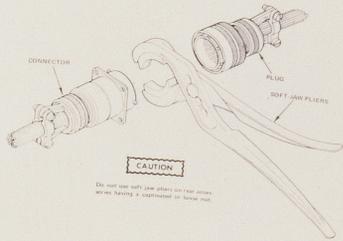
CAUTION!!! DOT ON ADAPTOR TOOL MUST BE IN LINE WITH MASTER KEY OF CONNECTOR PRIOR TO INSERTION. SPINNING THE ADAPTOR INTO PLACE CAUSES UNNECESSARY WEAR TO THE TOOL'S KEYS OR KEYWAYS.

Note: Above listed adaptor tools are for plugs only. Consult DMC for available receptacle tools.

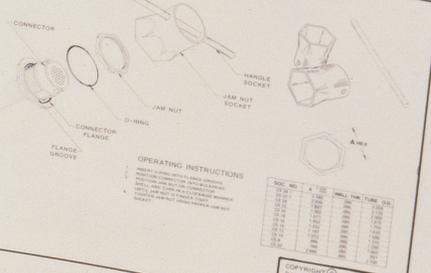
BT-BS-609 OPERATING INSTRUCTIONS



SOFT-JAW PLIERS



DANIELS JAM NUT WRENCH



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AS85049 CONNECTOR ACCESSORIES

QUICK REFERENCE GUIDE

SPECIFICATION	TITLE	APPLICATION	PAGE
AS85049/1	Backshell, Environmental, Cable Sealing, Straight, Grounding (Without Strain Relief), Category 1C	AS50151 Solder Type, V Thread of MS310X, Classes A, B, C or K Connectors	6
AS85049/2	Backshell, Environmental, Cable Sealing, Straight, Category 1C	AS50151 Solder Type, V Thread of MS310X, Classes A, B, C or K Connectors	6
AS85049/3	Backshell, Cable Sealing, Straight, Category 1A	MIL-DTL-22992 Connectors, Classes C, J, and R	7
AS85049/4	Backshell, Cable Sealing, Straight, Step-Up, Category 1A	MIL-DTL-22992 Connectors, Classes C, J, and R	7
AS85049/5	Backshell, Cable Sealing, Straight, Step-Down, Category 1A	MIL-DTL-22992 Connectors, Classes C, J, and R	7
AS85049/6	Backshell, Environmental, Cable Sealing, 45°, Shield Termination, Category 1A	AS50151 Crimp, MIL-DTL-26482 Series 2, AS81703 Series 3, and MIL-DTL-83723 Series III Connectors	9, 20
AS85049/7	Backshell, Environmental, Cable Sealing, 45°, Category 1A	AS50151 Crimp, MIL-DTL-26482 Series 2, AS81703 Series 3, and MIL-DTL-83723 Series III Connectors	9, 20
AS85049/8	Backshell, Environmental, Cable Sealing, 90°, Shield Termination, Category 1A	AS50151 Crimp, MIL-DTL-26482 Series 2, AS81703 Series 3, and MIL-DTL-83723 Series III Connectors	9, 20
AS85049/9	Backshell, Environmental, Cable Sealing, 90°, Category 1A	AS50151 Crimp, MIL-DTL-26482 Series 2, AS81703 Series 3, and MIL-DTL-83723 Series III Connectors	9, 20

SPECIFICATION	TITLE	APPLICATION	PAGE
AS85049/10	Backshell, Environmental, Cable Sealing, Straight, Shield Termination, Category 1A	AS50151 Crimp, MIL-DTL-26482 Series 2, AS81703 Series 3, and MIL-DTL-83723 Series III Connectors	9, 20
AS85049/11	Backshell, Environmental, Cable Sealing, Straight, Category 1A	AS50151 Crimp, MIL-DTL-26482 Series 2, AS81703 Series 3, and MIL-DTL-83723 Series III Connectors	9, 20
AS85049/14	Backshell, Straight, Non-Self-Locking and Self-Locking, Category 3B	MIL-DTL-38999 Series III and IV Connectors	14, 15
AS85049/15	Strain Relief, 45°, Non-Self-Locking and Self-Locking, Category 4C	MIL-DTL-38999 Series III and IV Connectors	14, 15
AS85049/16	Strain Relief, 90°, Non-Self-Locking and Self-Locking, Category 4C	MIL-DTL-38999 Series III and IV Connectors	14, 15
AS85049/17	Backshell, Environmental, Straight, Shield Termination, Category 2B	MIL-DTL-38999 Series I and II Connectors	12, 13
AS85049/18	Backshell, Environmental, Straight, RFI/EMI, Category 2B	MIL-DTL-38999 Series III and IV Connectors	14, 15
AS85049/19	Backshell, Nonenvironmental, Straight, RFI/EMI, Category 3B	MIL-DTL-38999 Series III and IV Connectors	14, 15
AS85049/20	Backshell, Straight, RFI, EMI, Category 3B	MIL-DTL-38999 Series III and IV Connectors	14, 15
AS85049/21	Backshell, Nonenvironmental, Straight, Category 3B	MIL-DTL-38999 Series III and IV Connectors	14, 15
AS85049/23	Backshell, Nonenvironmental, 45°, Shield Termination, Category 3A	AS50151 Crimp, MIL-DTL-26482 Series 2, AS81703 Series 3, and MIL-DTL-83723 Series III Connectors	9, 20
AS85049/24	Backshell, Nonenvironmental, 90°, Shield Termination, Category 3A	AS50151 Crimp, MIL-DTL-26482 Series 2, AS81703 Series 3, and MIL-DTL-83723 Series III Connectors	9, 20



Non-Environmental Right Angle Strain Relief Backshells



Right Angle Environmental Backshell



Straight Non-Environmental Strain Relief Backshell

Strain Relief Backshells with Shield Sockets



DMC does NOT provide connectors, backshells, accessories, or wiring components. Parts shown here are for reference only.

SPECIFICATION	TITLE	APPLICATION	PAGE
AS85049/25	Backshell, Nonenvironmental, Straight, Shield Termination, Category 3A	AS50151 Crimp, MIL-DTL-26482 Series 2, AS81703 Series 3, and MIL-DTL-83723 Series III Connectors	9, 20
AS85049/26	Backshell, Nonenvironmental, Straight, Shield Termination, Category 3A	AS50151 Crimp, MIL-DTL-26482 Series 2, AS81703 Series 3, and MIL-DTL-83723 Series III Connectors	9, 20
AS85049/27	Backshell, Nonenvironmental, Straight, Self-Locking and Non-Self-Locking, Category 3B	MIL-DTL-38999 Series I and II Connectors	12, 13
AS85049/28	Backshell, Nonenvironmental, Straight, Shield Termination, Category 3B	MIL-DTL-83733 Connectors	N/A
AS85049/29	Backshell, Nonenvironmental, Straight, Category 3B	MIL-DTL-38999 Series I and II Connectors	12, 13
AS85049/30	Backshell, Nonenvironmental, Straight, Individual Shielded Wire Termination, Category 3B	MIL-DTL-38999 Series I and II Connectors	12, 13
AS85049/31	Backshell, Nonenvironmental, Straight, Shield-Locking and Non-Self-Locking, Category 3B	AS50151 Crimp, MIL-DTL-26482 Series 2, AS81703 Series 3, and MIL-DTL-83723 Series III Connectors	9, 20
AS85049/32	Backshell, Nonenvironmental, 90°, Shield Termination, Category 7	MIL-DTL-38999 Series I and II Connectors	12, 13
AS85049/33	Backshell, Nonenvironmental, Straight, Shield Termination, Category 7	MIL-DTL-38999 Series I and II Connectors	12, 13
AS85049/34	Backshell, Nonenvironmental, Threaded Adapter, Category 7	MIL-DTL-26482 Series I Jam Nut Receptacle Connector (Inactive for New Design Equipment or Modification of Existing Equipment)	9
AS85049/36	Backshell, Nonenvironmental, Straight, EM/RFI Shield Termination, Category 3B	MIL-DTL-27599 Series 1 and MIL-DTL-38999 Series I and II Connectors	12, 14
AS85049/37	Backshell, Nonenvironmental, Split 90°, EM/RFI Shield Termination, Category 3B	MIL-DTL-38999 Series I and II Connectors	12, 13

SPECIFICATION	TITLE	APPLICATION	PAGE
AS85049/38	Strain Relief, Straight, Self-Locking and Non-Self-Locking Category 4C	MIL-DTL-38999 Series III and IV Connectors	14, 15
AS85049/39	Strain Relief, 90°, Self-Locking and Non-Self-Locking Category 4C	MIL-DTL-38999 Series III and IV Connectors	14, 15
AS85049/41	Nonenvironmental, Strain Relief, Straight, Category 4C	AS50151 Solder Type, V Thread of MS310X, Classes A, B, C or K Connectors	6
AS85049/42	Nonenvironmental, Strain Relief, Straight, Category 4A	AS50151 Solder Type, V Thread of MS310X, Classes A, B, C or K Connectors	6
AS85049/43	Strain Relief, Nonenvironmental, Self-Locking and Non-Self-Locking, 45°, Category 4B	AS50151 Crimp, MIL-DTL-26482 Series 2, AS81703 Series 3, and MIL-DTL-83723 Series III Connectors	6, 9, 20
AS85049/44	Strain Relief, Straight, Category 4C	MIL-DTL-83733 Rectangular Connectors	N/A
AS85049/45	Strain Relief, Straight, Nonmetallic, Category 4C	MIL-DTL-27599 Series I and MIL-DTL-38999 Series I and II Connectors	12, 13
AS85049/46	Strain Relief, 90°, Nonmetallic, Category 4C	MIL-DTL-27599 Series I and MIL-DTL-38999 Series I and II Connectors	12, 13
AS85049/47	Strain Relief, 90°, Self-Locking and Nonself-Locking, Category 4C	MIL-DTL-38999 Series I and II Connectors	12, 13
AS85049/48	Strain Relief, Straight, Category 7	MIL-DTL-24308 Rectangular Connectors	N/A
AS85049/49	Strain Relief, Straight, Self-Locking and Nonself-Locking, Category 4C	MIL-DTL-38999 Series I and II Connectors	12, 13
AS85049/50	Strain Relief, 90°, Category 7	MIL-DTL-24308 Rectangular Connectors	N/A
AS85049/51	Strain Relief, Nonenvironmental, 90°, Self-Locking and Non-Self-Locking, Category 4B	AS50151 Crimp, MIL-DTL-26482 Series 2, AS81703 Series 3, and MIL-DTL-83723 Series III Connectors	6, 9, 20



Extended Backshells



Straight Non-Environmental Strain Relief Backshells



Compression Ring



Straight Environmental Backshell

DMC does NOT provide connectors, backshells, accessories, or wiring components. Parts shown here are for reference only.

AS85049 CONNECTOR ACCESSORIES

QUICK REFERENCE GUIDE

SPECIFICATION	TITLE	APPLICATION	PAGE
AS85049/52	Strain Relief, Nonenvironmental, Straight, Self-Locking and Non-Self-Locking, Category 4B	AS50151 Crimp, MIL-DTL-26482 Series 2, AS81703 Series 3, and MIL-DTL-83723 Series III Connectors	6, 9, 20
AS85049/53	Strain Relief, Nonenvironmental, Straight, Category 4C	AS50151 Crimp, MIL-DTL-26482 Series 2, AS81703 Series 3, and MIL-DTL-83723 Series III Connectors	6, 9, 20
AS85049/54	Strain Relief, Nonenvironmental, 45°, Category 4C	AS50151 Crimp, MIL-DTL-26482 Series 2, AS81703 Series 3, and MIL-DTL-83723 Series III Connectors	6, 9, 20
AS85049/55	Strain Relief, Nonenvironmental, 90°, Self-Locking and Non-Self-Locking, Category 4C	AS50151 Crimp, MIL-DTL-26482 Series 2, AS81703 Series 3, and MIL-DTL-83723 Series III Connectors	6, 9, 20
AS85049/56	Strain Relief, Straight, Category 4C	MIL-DTL-38999 Series I and II Connectors	12, 13
AS85049/57	Strain Relief, 45°, Self-Locking and Nonself-Locking, Category 4C	MIL-DTL-38999 Series I and II Connectors	12, 13
AS85049/58	Ring, Potting Boot, Category 5	MIL-DTL-38999 Series I and II Connectors	12, 13
AS85049/59	Adapter, Shrink Boot, Category 5	MIL-DTL-22992 Connectors, Classes C, J, and R	7
AS85049/60	Adapter, Shrink Boot, Category 5	AS50151 Crimp, MIL-C-26482 Series 2, AS81703 Series 3, and MIL-DTL-83723 Series III Connectors	6, 9, 20
AS85049/61	Ring, Potting Boot, Category 5	MIL-DTL-27599 Connectors	N/A
AS85049/62	Adapter, Shrink Boot, Category 5	MIL-DTL-38999 Series I and II Connectors	12, 13
AS85049/63	Strain Relief, 90°, Self-Locking and Nonself-Locking, Category 4C	MIL-DTL-38999 Series I and II Connectors	12, 13
AS85049/64	Strain Relief, Split, Straight, Category 4C	MIL-DTL-38999 Series I and II Connectors	12, 13

SPECIFICATION	TITLE	APPLICATION	PAGE
AS85049/65	Strain Relief, Split 90°, Category 4C	MIL-DTL-38999 Series I and II Connectors	12, 13
AS85049/69	Adapter, Shrink Boot, Category 5	MIL-DTL-38999 Series III and IV Connectors	14, 15
AS85049/74	Potting Boot, Category 7	Use With AS85049/61 Potting Boot Ring	N/A
AS85049/75	Potting Boot, Category 7	Use With AS85049/58 Potting Boot Ring	N/A
AS85049/76	Backshell, Environmental, 90°, Shield Termination, Category 2B, Nonself-Locking	MIL-DTL-38999 Series I and II Connectors	12, 13
AS85049/77	Backshell, Environmental, 45°, Shield Termination, Category 2B, Nonself-Locking	MIL-DTL-38999 Series I and II Connectors	12, 13
AS85049/78	Backshell, Environmental, 45°, Shield Termination, Category 2B, Nonself-Locking	MIL-DTL-38999 Series III and IV Connectors	14, 15
AS85049/79	Backshell, Environmental, 90°, Shield Termination, Category 2B, Nonself-Locking	MIL-DTL-38999 Series III and IV Connectors	14, 15
AS85049/80	Dummy Contact, Sizes 12 and 8, Category 7	MIL-DTL-38999 Connectors	12, 13, 14, 15
AS85049/81	Seal Plug, Size 10, Category 7	MIL-DTL-38999 Connectors	12, 13, 14, 15
AS85049/82	Backshell, Straight, Self-Locking, Non Self-Locking, Shield Band Termination (RFI/EMI), Shrink Sleeve Accommodation, Category 3B	AS50151 Crimp, MIL-DTL-26482 Series 2, AS81703 Series 3, and MIL-DTL-83723 Series III Connectors	6, 9, 20
AS85049/83	Backshell, 45°, Self-Locking, Non Self-Locking, Shield Band Termination, (RFI/EMI), Shrink Sleeve Accommodation, Category 3B	AS50151 Crimp, MIL-DTL-26482 Series 2, AS81703 Series 3, and MIL-DTL-83723 Series III Connectors	6, 9, 20
AS85049/84	Backshell, 90°, Self-Locking, Non Self-Locking, Shield Band Termination, (RFI/EMI), Shrink Sleeve Accommodation, Category 3B	AS50151 Crimp, MIL-DTL-26482 Series 2, AS81703 Series 3, and MIL-DTL-83723 Series III Connectors	6, 9, 20
AS85049/85	Backshell, Straight, Self-Locking, Non Self-Locking, Shield Band Termination, (RFI/EMI), Shrink Boot Accommodation, Category 3B	MIL-DTL-38999 Series I and II Connectors	12, 13



Shorting Cap Backshell

Protective Cover and Lanyard



Dummy Contacts
(Ref: AS85049/80)



DMC does NOT provide connectors, backshells, accessories, or wiring components. Parts shown here are for reference only.

SPECIFICATION	TITLE	APPLICATION	PAGE
AS85049/86	Backshell, 45°, Self-Locking, Non Self-Locking, Shield Band Termination, (RFI/EMI), Shrink Sleeve Accommodation, Category 3B	MIL-DTL-38999 Series I and II Connectors	12, 13
AS85049/87	Backshell, 90°, Self-Locking, Non Self-Locking, Shield Band Termination, (RFI/EMI), Shrink Sleeve Accommodation, Category 3B	MIL-DTL-38999 Series I and II Connectors	12, 13
AS85049/88	Backshell, Straight, Self-Locking, Non Self-Locking, Shield Band Termination, (RFI/EMI), Shrink Boot Accommodation, Category 3B	MIL-DTL-38999 Series III and IV Connectors	14, 15
AS85049/89	Backshell, 45°, Self-Locking, Non Self-Locking, Shield Band Termination, (RFI/EMI), Shrink Sleeve Accommodation, Category 3B	MIL-DTL-38999 Series III and IV Connectors	14, 15
AS85049/90	Backshell, 90°, Self-Locking, Non Self-Locking, Shield Band Termination, (RFI/EMI), Shrink Sleeve Accommodation, Category 3B	MIL-DTL-38999 Series III and IV Connectors	14, 15
AS85049/91	Strain Relief, Straight, Self-Locking, Category 4C	MIL-DTL-38999 (Composite) Series III and IV Connectors	14, 15
AS85049/92	Strain Relief, 90°, Self-Locking, Category 4C	MIL-DTL-38999 (Composite) Series III and IV Connectors	14, 15
AS85049/93	Termination, Shield, Split Support Ring, Composite, Nonenvironmental, Straight, Category 7	General Use	N/A
AS85049/94	Mounting Device, Flange Type, Full Perimeter, Medium/Light Duty, Category 7	General Use	N/A
AS85049/95	Mounting Device, Flange Type, 3/4 Mounting Perimeter, Medium/Light Duty, Category 7	General Use	N/A

SPECIFICATION	TITLE	APPLICATION	PAGE
AS85049/96	Mounting Device, Flange Type, 1/4 Mounting Perimeter, Medium/Light Duty, Category 7	General Use	N/A
AS85049/103	RFI/EMI, Electrical, Strain Relief, Straight, Self-Locking, Category 3C	MIL-DTL-38999 (Composite) Series III and IV Connectors	14, 15
AS85049/104	RFI/EMI, Electrical, Strain Relief, 45°, Self-Locking, Category 3C	MIL-DTL-38999 (Composite) Series III and IV Connectors	14, 15
AS85049/105	RFI/EMI, Electrical, Strain Relief, 90°, Self-Locking, Category 3C	MIL-DTL-38999 (Composite) Series III and IV Connectors	14, 15
AS85049/109	Backshell, Straight, Non Self-Locking, Self-Locking, Pre-Attached Shield Termination (RFI/EMI), Boot Accommodation, Category 3B	AS50151 Crimp, MIL-DTL-26482 Series 2, AS81703 Series 3, and MIL-DTL-83723 Series III Connectors	6, 9, 20
AS85049/111	Backshell, 90°, Non Self-Locking, Self-Locking, Pre-Attached Shield Termination (RFI/EMI), Boot Accommodation, Category 3B	AS50151 Crimp, MIL-DTL-26482 Series 2, AS81703 Series 3, and MIL-DTL-83723 Series III Connectors	6, 9, 20
AS85049/112	Backshell, Straight, Non Self-Locking, Self-Locking, Pre-Attached Shield Termination (RFI/EMI), Boot Accommodation, Category 3B	MIL-DTL-38999 Series I and II Connectors	12, 13
AS85049/114	Backshell, 90°, Non Self-Locking, Self-Locking, Pre-Attached Shield Termination (RFI/EMI), Boot Accommodation, Category 3B	MIL-DTL-38999 Series I and II Connectors	12, 13
AS85049/115	Backshell, Straight, Non Self-Locking, Self-Locking, Pre-Attached Shield Termination (RFI/EMI), Boot Accommodation, Category 3B	MIL-DTL-38999 Series III and IV Connectors	14, 15
AS85049/117	Backshell, 90°, Non Self-Locking, Self-Locking, Pre-Attached Shield Termination (RFI/EMI), Boot Accommodation, Category 3B	MIL-DTL-38999 Series III and IV Connectors	14, 15



Jam Nut for Panel Mount Connectors

Nut Plate for Mounting Connectors



Right Angle EMI Shielded Backshell

DMC does NOT provide connectors, backshells, accessories, or wiring components. Parts shown here are for reference only.

AS85049 CONNECTOR ACCESSORIES

QUICK REFERENCE GUIDE

SPECIFICATION	TITLE	APPLICATION	PAGE
AS85049/118	Backshell, Strain Relief, Straight, Self-Locking, Non Self-Locking, Category 4B	AS50151 Crimp, MIL-DTL-26482 Series 2, AS81703 Series 3, and MIL-DTL-83723 Series III Connectors	6, 9, 20
AS85049/120	Backshell, Strain Relief, 90°, Self-Locking, Non Self-Locking, Category 4B	AS50151 Crimp, MIL-DTL-26482 Series 2, AS81703 Series 3, and MIL-DTL-83723 Series III Connectors	6, 9, 20
AS85049/121	Backshell, Strain Relief, Straight, Self-Locking, Non Self-Locking, Category 4C	MIL-DTL-38999 Series I and II Connectors	12, 13
AS85049/123	Backshell, Strain Relief, 90°, Self-Locking, Non Self-Locking, Category 4C	MIL-DTL-38999 Series I and II Connectors	12, 13
AS85049/124	Backshell, Strain Relief, Straight, Self-Locking, Non Self-Locking, Category 4C	MIL-DTL-38999 Series III and IV Connectors	14, 15
AS85049/126	Backshell, Strain Relief, 90°, Self-Locking, Non Self-Locking, Category 4C	MIL-DTL-38999 Series III and IV Connectors	14, 15
AS85049/127	Bushing Strip, Category 7	Use With SAE AS85049/118, /120, /121, /123, /124, and /126 Accessories	N/A
AS85049/128	Backshell, Shield Band, Category 7	Use With SAE AS85049/82 - /90, /109 - /117 Accessories, and General Use	42 - 45

SPECIFICATION	TITLE	APPLICATION	PAGE
AS85049/130	Gasket Material, Conductive, Non Conductive, Flange Mount, Category 7	General Use	N/A
AS85049/131	Connector Accessories, Fiber Optic, Straight, Self-Locking, Category 3B	MIL-DTL-38999 Series III and AS5590/1 Connectors	14
AS85049/132	Connector Accessories, Fiber Optic, 45°, Self-Locking, Category 3B	MIL-DTL-38999 Series III and AS5590/1 Connectors	14
AS85049/133	Connector Accessories, Fiber Optic, 90°, Self-Locking, Category 3B	MIL-DTL-38999 Series III and AS5590/1 Connectors	14
AS85049/134	Connector Accessories, Fiber Optic, Filler Plug, Category 7	Fiber Optic Connectors and Systems	N/A
AS85049/135	Connector Accessories, Fiber Optic, Split, Straight, Self-Locking, Category 3B	MIL-DTL-38999 Series III and AS5590/1 Connectors	14
AS85049/136	Connector Accessories, Fiber Optic, Split, 45°, Self-Locking, Category 3B	MIL-DTL-38999 Series III and AS5590/1 Connectors	14
AS85049/137	Connector Accessories, Fiber Optic, Split, 90°, Self-Locking, Category 3B	MIL-DTL-38999 Series III and AS5590/1 Connectors	14
AS85049/138	Cap, Dust, Plastic, Category 9	General Use	N/A
AS85049/139	Bushing, Cable Clamp to Cable, Telescoping For AS85049 Cable Clamps, Category 9	General Use	N/A
AS85049/140	Boots, Heat-Shrinkable, Straight, Category 9	General Use	N/A
AS85049/141	Boots, Heat-Shrinkable, 90°, Category 9	General Use	N/A
AS85049/142	Boots & Sleeves, Transitions, Heat-Shrinkable, Category 9	General Use	N/A

Band Termination System



EMI Shielded Backshells for Rectangular Connectors

Shield Termination Bands (Ref: AS85049/128)



DMC does NOT provide connectors, backshells, accessories, or wiring components. Parts shown here are for reference only.

TORQUE TIGHTENING REFERENCE (FROM SAE-AIR 6151 STANDARD)



The SAE AIR 6151 Standard (Torque, Threaded Application, Electrical Connector, Accessory and Terminal Board Installation) was the product of work by DMC and other experienced aerospace wiring system designers, manufacturers, and component suppliers (including connectors and backshells/accessories). We recommend the use of this valuable industry specification for torque relating to connectors and other threaded components. The following tables reflect Torque Values (based on Connector Classification) and are presented here as a quick reference guide. The SAE AIR6151 is available at www.sae.org by typing AIR6151 into the search box, and following the instructions for purchase and download.

CONNECTOR ACCESSORY* TORQUE/in-lb (Source SAE AIR6151)					
Connector Shell Sizes	Group 1	Group 2	Group 3	Group 4	Group 5
	MIN/MAX	MIN/MAX	MIN/MAX	MIN/MAX	MIN/MAX
8,9,A	30/40	51/61	20/25	66-77	91-101
3,10,10SL, 11, B	30/40	71/81	20/30	103-113	115-125
7,12,12S,13,C	35/45	103/113	25/35	115-125	115-125
14,14S,15,D	35/45	111/121	25/35	139-149	139-149
16,16S,17,E	35/45	111/121	30/40	139-149	139-149
18,19,27,F	35/45	111/121	30/40	139-149	175-185
20,21,37,G	75/85	131/141	35/45	175-185	199-209
22,23,H	75/85	131/141	35/45	175-185	223-233
24,25,61,J	75/85	131/141	35/45	175-185	259-269
28,29	115/125	143/153	115/125	187-197	307-317
32,33	115/125	143/153	SEE PAGES 30 & 31 FOR INFORMATION ON TORQUE APPLICATION TOOLING		
36	115/125	142/153			
40	155/165	159/169			
44	155/165	159/169			
48	155/165	159/169			

Connector Accessory Recommended Torque (Backshell Installation)

Recommended torque for accessories such as those defined in SAE AS85049 to connector rear threads are listed in the table above.

Group 1 is for aluminum connectors and medium/light duty accessories including connector series; AS50151 (AS31001 Series), MIL-DTL-26482 Series 1, MIL-DTL-26500, MIL-DTL-27599, MIL-DTL-38999 Series I and II, MIL-C-81511 Series 1, 2, 3, 4, AS81703 Series 1.

Group 2 is for aluminum connectors and heavy duty accessories including connector series; AS50151 (AS34001 Series), MIL-DTL-22992, MIL-DTL-26482 Series 2, MIL-DTL-28840, MIL-DTL-38999 Series III and IV, AS81703 Series 3, MIL-DTL-83723 Series 1, 2, 3.

Group 3 is for connectors and accessories with composite (high grade engineering thermoplastic) material coupling threads.

Group 4 is for connectors and accessories with aluminum coupling threads used in high vibration (engine) applications.

Group 5 is for connectors and accessories with corrosion resistant steel coupling threads used in high vibration (engine) applications.

*Source for torque values: AIR6151 Rev B.

TORQUE TIGHTENING REFERENCE (FROM SAE AIR6151 STANDARD)



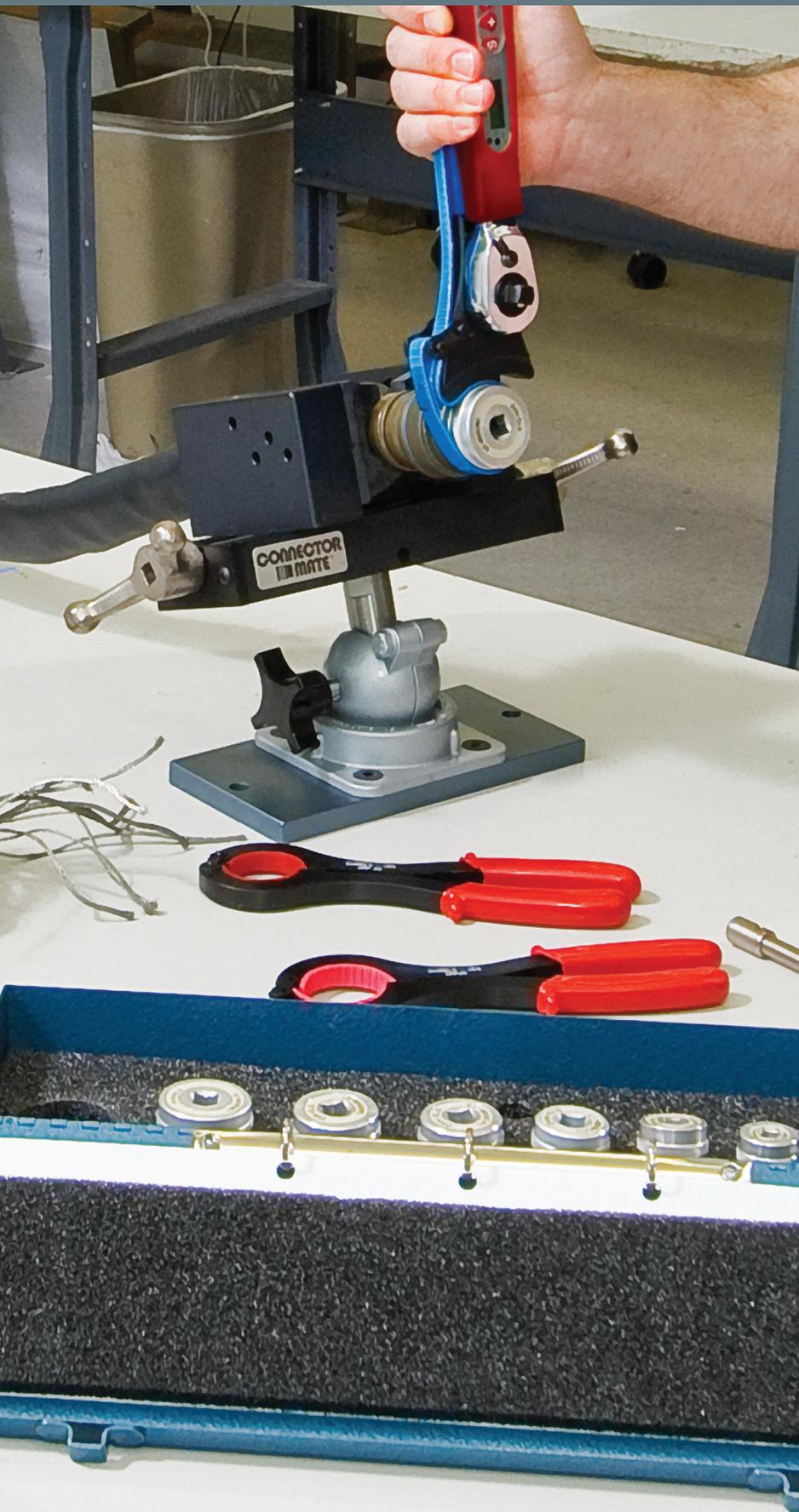
Typical Application - Torque Tightening a Connector Assembly

Recommended Connector Receptacle Jam Nut Torque/in-lb MIL-DTL-38999 (Source SAE AIR6151)					
Recommended Torque (Max/Min)	Series I	Series II	Recommended Torque (Max/Min)	Series III	Series IV
28/34	9		30/36	09	
30/36			40/46	11	
34/40	11		55/60	13	11
40/46		8	70/75	15	13
46/50			70/75		15
50/55	13	10	80/85	17	
55/60			80/85		17
70/75	15	12	90/95	19	
75/80			100/110	21	19
80/85	17	14	110/120	23	21
80/85	19	16	120/130	25	23
100/110			120/130		25
105/115	21	18	SEE PAGES 38-40 FOR DETAILS ON BETA JAM-NUT TOOLING FROM DMC		
105/115	23	20			
110/120	25	22			
120/130		24			

NATIONAL STOCK NUMBERS FOR BETA™ SERIES TOOLING

DMC P/N	NSN P/N	DMC P/N	NSN P/N	DMC P/N	NSN P/N	DMC P/N	NSN P/N
BT-AT-1500	5120-01-376-9839	CM288-33B	5120-01-377-4586	CM389S-8	5120-01-377-1273	CM5015R-32	5120-01-377-1333
BT-BS-601	5120-01-335-8841	CM288R-11A	5120-01-377-4603	CM389T-11A	5120-01-377-1302	CM5015R-36	5120-01-377-1298
BT-BS-609	5120-01-335-8842	CM288R-11B	5120-01-377-4534	CM389T-11B	5120-01-377-1178	CM5015R-40	5120-01-377-1316
BT-BS-610	5120-01-335-8843	CM288R-13A	5120-01-377-4545	CM389T-13A	5120-01-377-1215	CM5015R-44	5120-01-377-1202
BT-BS-611	5120-01-335-8844	CM288R-13B	5120-01-377-1327	CM389T-13B	5120-01-377-1297	CM5015R-48	5120-01-379-0200
BT-BS-618	5120-01-335-8845	CM288R-15A	5120-01-377-1269	CM389T-15A	5120-01-377-1172	CM5015R-8	5120-01-377-1238
BT-BS-625	5120-01-335-8846	CM288R-15B	5120-01-379-0154	CM389T-15B	5120-01-377-1200	CM815L-10A	5120-01-377-1312
BT-BS-630	5120-01-335-8847	CM288R-17A	5120-01-377-1182	CM389T-17A	5120-01-379-0146	CM815L-10B	5120-01-377-1264
BT-J-132	5120-01-368-4132	CM288R-17B	5120-01-377-1321	CM389T-17B	5120-01-377-1263	CM815L-14A	5120-01-377-1169
BT-ST-701	5120-01-335-8179	CM288R-19A	5120-01-377-1301	CM389T-19A	5120-01-377-4604	CM815L-14B	5120-01-377-1328
BT-ST-725	5120-01-335-8177	CM288R-19B	5120-01-377-1314	CM389T-19B	5120-01-377-1311	CM815L-16A	5120-01-377-1170
BT-ST-751	5120-01-335-8178	CM288R-23A	5120-01-377-1227	CM389T-21A	5120-01-377-1207	CM815L-16B	5120-01-377-4583
CM229-12	5120-01-377-1198	CM288R-23B	5120-01-377-1251	CM389T-21B	5120-01-377-1224	CM815L-18A	5120-01-377-4530
CM229-14	5120-01-377-1250	CM288R-25A	5120-01-377-1294	CM389T-23A	5120-01-377-1245	CM815L-18B	5120-01-377-4567
CM229-16	5120-01-377-1284	CM288R-25B	5120-01-377-1171	CM389T-23B	5120-01-377-1158	CM815L-20A	5120-01-377-1335
CM229-18	5120-01-377-1157	CM288R-29A	5120-01-377-1197	CM389T-25A	5120-01-255-7893	CM815L-20B	5120-01-377-1189
CM229-20	5120-01-377-4529	CM288R-29B	5120-01-377-1240	CM389T-25B	5120-01-377-1320	CM815L-22A	5120-01-377-4553
CM229-22	5120-01-377-1324	CM288R-33A	5120-01-377-4523	CM389T-9A	5120-01-377-1230	CM815L-22B	5120-01-377-4570
CM229-24	5120-01-377-1257	CM288R-33B	5120-01-377-1318	CM389T-9B	5120-01-379-0194	CM815L-24A	5120-01-377-1334
CM229-36	5120-01-377-1272	CM389B-11	5120-01-377-1234	CM389TR-11A	5120-01-377-1288	CM815L-24B	5120-01-377-4508
CM229-40	5120-01-377-4507	CM389B-13	5120-01-368-4117	CM389TR-11B	5120-01-379-0139	CM815L-8A	5120-01-377-4595
CM229L-28	5120-01-377-1319	CM389B-15	5120-01-368-4133	CM389TR-13A	5120-01-377-1252	CM815L-8B	5120-01-377-4543
CM229L-32	5120-01-377-1223	CM389B-17	5120-01-377-1261	CM389TR-13B	5120-01-379-0171	CM815L-10A	5120-01-377-4569
CM229L-44	5120-01-377-4578	CM389B-19	5120-01-377-1305	CM389TR-15A	5120-01-377-1188	CM815L-10B	5120-01-377-4519
CM229L-48	5120-01-377-1287	CM389B-21	5120-01-377-1208	CM389TR-15B	5120-01-379-0140	CM815S-14A	5120-01-377-4552
CM229L-52	5120-01-377-1187	CM389B-23	5120-01-377-1236	CM389TR-17A	5120-01-379-0193	CM815S-14B	5120-01-377-4581
CM264-10	5120-01-377-4551	CM389B-25	5120-01-377-1152	CM389TR-17B	5120-01-379-0191	CM815S-16A	5120-01-377-1308
CM264-12	5120-01-368-4118	CM389BR-11	5120-01-377-1186	CM389TR-19A	5120-01-379-0172	CM815S-16B	5120-01-377-1216
CM264-14	5120-01-368-4119	CM389BR-13	5120-01-377-1210	CM389TR-19B	5120-01-379-0161	CM815S-18A	5120-01-377-1310
CM264-16	5120-01-368-4120	CM389BR-15	5120-01-377-1244	CM389TR-21A	5120-01-379-0142	CM815S-18B	5120-01-377-1211
CM264-18	5120-01-377-4564	CM389BR-17	5120-01-377-1300	CM389TR-21B	5120-01-379-0180	CM815S-8	5120-01-377-1331
CM264-20	5120-01-368-4121	CM389BR-19	5120-01-377-1181	CM389TR-23A	5120-01-379-0173	CM837-10A	5120-01-368-4124
CM264-22	5120-01-377-4584	CM389BR-21	5120-01-377-1214	CM389TR-23B	5120-01-377-4535	CM837-10B	5120-01-377-1296
CM264-24	5120-01-377-4513	CM389BR-23	5120-01-377-1190	CM389TR-25A	5120-01-377-4605	CM837-12A	5120-01-377-1313
CM264-8	5120-01-377-1212	CM389BR-25	5120-01-377-1249	CM389TR-25B	5120-01-377-4568	CM837-12B	5120-01-377-1307
CM264R-10	5120-01-377-1233	CM389L-11	5120-01-377-1156	CM389TR-9A	5120-01-377-4600	CM837-14A	5120-01-368-4125
CM264R-12	5120-01-368-4123	CM389L-13	5120-01-377-1192	CM389TR-9B	5120-01-377-4527	CM837-14B	5120-01-377-1193
CM264R-14	5120-01-368-4122	CM389L-15	5120-01-377-1225	CM5015-10	5120-01-377-4562	CM837-16A	5120-01-368-4126
CM264R-16	5120-01-377-1256	CM389L-17	5120-01-377-1266	CM5015-12	5120-01-377-4602	CM837-16B	5120-01-377-1231
CM264R-18	5120-01-377-1291	CM389L-19	5120-01-377-1151	CM5015-14	5120-01-377-4536	CM837-18A	5120-01-368-4127
CM264R-20	5120-01-377-1149	CM389L-21	5120-01-377-1180	CM5015-16	5120-01-377-4547	CM837-18B	5120-01-377-1260
CM264R-22	5120-01-377-1203	CM389L-23	5120-01-368-4143	CM5015-18	5120-01-368-4147	CM837-20A	5120-01-368-4128
CM264R-24	5120-01-377-1222	CM389L-25	5120-01-368-4142	CM5015-20	5120-01-377-4587	CM837-20B	5120-01-377-1285
CM264R-8	5120-01-377-1239	CM389L-9	5120-01-377-1226	CM5015-22	5120-01-377-4526	CM837-22A	5120-01-368-4131
CM288-11A	5120-01-377-1271	CM389LR-11	5120-01-377-1259	CM5015-24	5120-01-377-4559	CM837-22B	5120-01-368-4129
CM288-11B	5120-01-377-1150	CM389LR-13	5120-01-377-1292	CM5015-28	5120-01-368-4146	CM837-24A	5120-01-368-4130
CM288-13A	5120-01-377-1179	CM389LR-15	5120-01-377-1161	CM5015-32	5120-01-377-4588	CM837-24B	5120-01-377-1162
CM288-13B	5120-01-377-1204	CM389LR-17	5120-01-377-1213	CM5015-36	5120-01-377-4518	CM837-8A	5120-01-377-1194
CM288-15A	5120-01-377-1235	CM389LR-19	5120-01-377-1267	CM5015-40	5120-01-377-1209	CM837-8B	5120-01-377-4560
CM288-15B	5120-01-377-1258	CM389LR-21	5120-01-377-1329	CM5015-44	5120-01-377-4574	CM837-8C	5120-01-377-1330
CM288-17A	5120-01-377-1332	CM389LR-23	5120-01-368-4145	CM5015-48	5120-01-377-1306	CM837-8D	5120-01-377-1147
CM288-17B	5120-01-377-1177	CM389LR-25	5120-01-368-4144	CM5015-8	5120-01-377-1201	CM837RB-10	5120-01-377-4571
CM288-19A	5120-01-377-4548	CM389LR-9	5120-01-377-1295	CM5015R-10	5120-01-377-4579	CM837RB-12	5120-01-368-4135
CM288-19B	5120-01-377-4565	CM389S-10	5120-01-377-4549	CM5015R-12	5120-01-377-4506	CM837RB-14	5120-01-368-4136
CM288-23A	5120-01-377-4609	CM389S-12	5120-01-377-4573	CM5015R-14	5120-01-368-4134	CM837RB-16	5120-01-368-4137
CM288-23B	5120-01-377-4524	CM389S-14	5120-01-377-1309	CM5015R-16	5120-01-377-1315	CM837RB-18	5120-01-368-4138
CM288-25A	5120-01-377-1326	CM389S-16	5120-01-377-1183	CM5015R-18	5120-01-377-1217	CM837RB-20	5120-01-368-4139
CM288-25B	5120-01-377-1278	CM389S-18	5120-01-377-1323	CM5015R-20	5120-01-377-1253	CM837RB-22	5120-01-368-4140
CM288-29A	5120-01-377-4514	CM389S-20	5120-01-377-1268	CM5015R-22	5120-01-368-4149	CM837RB-24	5120-01-368-4141
CM288-29B	5120-01-377-1317	CM389S-22	5120-01-377-4598	CM5015R-24	5120-01-410-7026	CM837RB-8	5120-01-377-1185
CM288-33A	5120-01-377-1243	CM389S-24	5120-01-377-1325	CM5015R-28	5120-01-377-1218		

Additional NSNs may be available, consult DMC.



LIMITATION OF LIABILITY/ LIMITED WARRANTY*

DANIELS MANUFACTURING CORPORATION IS NOT LIABLE FOR CONSEQUENTIAL OR SPECIAL DAMAGES OF ANY NATURE OR KIND RESULTING FROM THE USE OF ANY OF ITS PRODUCTS.

OWNERS AND USERS OF DMC PRODUCTS ASSUME FULL RESPONSIBILITY FOR INSTRUCTING THEIR EMPLOYEES IN THE PROPER AND SAFE USE OF SUCH PRODUCTS.

Daniels Manufacturing Corporation warrants each new unit sold by it to be free from defects in material and workmanship under normal use and service. Its obligation under this warranty is limited to the free correction or, at its option, the refund of the purchase price of any such unit which proves defective within ninety (90) days after delivery to the first user, provided that the unit is returned to it with all transportation charges prepaid, and which shall appear to its satisfaction, upon inspection by it, to have been defective in material or workmanship. This warranty shall not cover any damage to such products, which in the opinion of Daniels Manufacturing Corporation, was caused by normal wear, misuse, improper operation or accident. This warranty is in lieu of all other warranties express or implied. No warranty, express or implied, is made or authorized to be made or assumed with respect to products of Daniels Manufacturing Corporation, other than that herein set forth.

*As defined by PL93-637

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Contact our knowledgeable staff of customer service application experts for details on other quality products from **DMC**.

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DMC can meet your needs for connector system production and maintenance, fastener retention system and test/verification equipment for compliance with SPC/ISO standards.



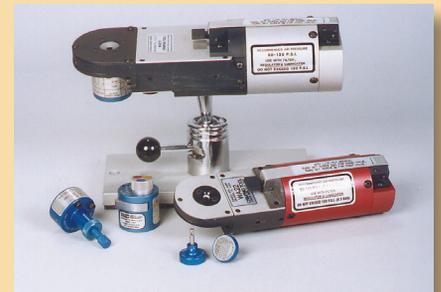
HAND OPERATED CRIMP TOOLS



ALPHATRON WIRE CRIMP PULL TESTERS



Safe-T-Cable® FASTENER RETENTION SYSTEM



PNEUMATIC CRIMP TOOLS



WIRE STRIPPERS AND REPLACEMENT BLADES



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BETA

BACKSHELL / ACCESSORY / TOOLING GUIDE



DMC DANIELS
MANUFACTURING
CORPORATION

An ISO9001:2000 and AS9100:2004 Registered Company

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



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