

MIL-C-38999 Series I LJT Series Bayonet Coupled Crimp Circular Connectors

Features

- Lightweight Space-saving design
- Durability – 500 cycles
- EMI Shielded
- 100% Scoop-proof

Customer Options

Shell sizes	– 9
Contact arrangements	– 100+
Circuit sizes	– 1 to 128

Specifications

Operating Temperature	– -55°C up to 200°C
<u>Current Rating</u>	
Contact Size 20	– 7.5A
Contact Size 16	– 13A
<u>Voltage Rating (sea level)</u>	
Service Rating I	– 600VAC(rms)
Service Rating II	– 900VAC(rms)

Tooling

Crimp Tool	– M22520/1-01
Positioner	– M22520/1-04
Insert/Remove*	– M81969/14-03**
Insert/Remove*	– M81969/14-10***

* Plastic Tool ** For Size 16 Contacts. *** For Size 20 Contacts

Related Information

Detailed catalogue – 12-090-14
Solder, PCB, Wire Wrap, Coax, Fiber & Filter optional

Part Number System: (refer to Part Number Make-up for assistance – opposite)

LJT XX XX-XX-X X X (X)

CONNECTOR TYPE

LJT: Standard Mil-C-38999 I
High Temperature, Chemical & Fuel
Resistant versions available upon request

SHELL STYLE

00: Wall Mount Receptacle
01: Line Receptacle
02: Box Mount Receptacle
06: Straight Plug
07: Jam-Nut Receptacle
08: 90° Plug (AAO)
I: Solder Mount Rec. (Hermetic only)

SERVICE CLASS

RP: Potting Boot + Grommet
RE: Environmental Sealed Can add SR
RT: Environmental w/o rear Accessory
Y: Hermetically Sealed
A: Fixed Solder Contacts (LTD only)

For Cadmium-free Zinc Cobalt plating consult representative SR = Strain Relief

DEVIATIONS

Finish	Suffix	W/SR Suffix
Cadmium Plated Ni Base		(SR)
Olive Drab Cadmium Plated, Ni Base	(014)	(386)
Electroless Ni	(023)	(424)
Anodic Coating (Alumilite)	(005)	(300)
Chromate treated (Iridite 14-2)	(011)	(344)

ALTERNATE KEYING

Blank: Normal Position
See detailed catalogue for variations

CONTACT STYLE

P: Pins
S: Sockets

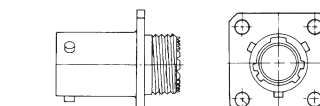
INSERT ARRANGEMENTS

See Insert Arrangement Table
(page D-12 and D-13)

SHELL SIZE

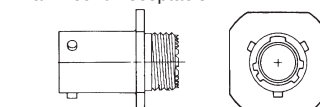
See Insert Arrangement Table
(page D-12 and D-13)

Part Number
Make-up
LJT00...



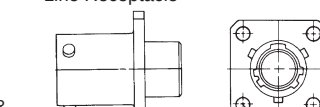
Wall Mount Receptacle

Part Number
Make-up
LJT01RE-...
LTJ01A-...



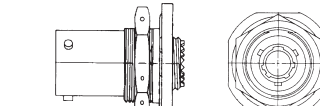
Line Receptacle

Part Number
Make-up
LJT02RE-...
LTJ02A-...
Cannot add SR



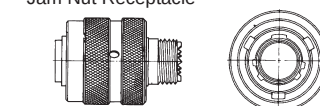
Box Mount Receptacle

Part Number
Make-up
LJT07...



Jam Nut Receptacle

Part Number
Make-up
LJT06...



Straight Plug

LJT Accessories – Cable Clamp for Crimp type Housing (if ordered separately to connector)

Part Number System:	Finish (-XX9 standard)	Diagram
10-405982-XXX	Chromate Treat	
SHELL SIZE	Anodic Coating	
9/11/13/15/17/19/21/23/25	Cadmium Plated Nickel Base	
FINISH	Olive Drab, Cadmium, Nickel Base	
See adjacent table	Electroless Nickel	

LJT Accessories – Heat Shrinkable Backshells (shielded)

Part Number:	Shell Size	Finish	Type	Backshell Configuration (-X)			Diagram
				-1	-2	-3	
ABK A-WAR-X	9	Olive Drab Cadmium	Shielded	Straight	45°	Right Angle	
ABK A-WBR-X	11						
ABK A-WCR-X	13						
ABK A-WDR-X	15						
ABK A-WER-X	17						
ABK A-WFR-X	19						
ABK A-WGR-X	21						
ABK A-WHR-X	23						
ABK A-WJR-X	25						

Alternatives: Unshielded Replace R with U, Electroless Nickel replace W with F.

LJT Accessories - Caps

Shell Size	Part Numbers:			
	Cap & Chain for Plugs Cadmium Plate, Ni Base	Chain length	Cap & Chain for Receptacle Cadmium Plate, Ni Base	Chain length
9	10-421399-099	76.2mm	10-427406-099	76.2mm
11	10-421399-119		10-427406-119	
13	10-421399-139		10-427406-139	
15	10-421399-159	88.9mm	10-427406-159	88.9mm
17	10-421399-179		10-427406-179	
19	10-421399-199		10-427406-199	
21	10-421399-219	101.6mm	10-427406-219	101.6mm
23	10-421399-239		10-427406-239	
25	10-421399-259		10-427406-259	
Diagram				

Alternate Cap finishes (Replace last digit): 0=Chromate, 5=Anodic, G=Electroless Ni
Connectors individually packaged with crimp contacts (bulk contacts available) and insert/extract tool.
ASF/LTD/AAO

MS Part Numbering System:

MS27467 T-11B-35 S A

Style See Chart	Alternate Keyway Letters A to D
Class T= Threaded accessory E= With grommet nut	Contact Style P= Pin contact S= Socket contact A= Less pin contact B= Less socket contact
Shell Size Series 1 Odd nos 9 to 25 Series 2 Even Nos 8 to 24	Insert arrangement
Finish A= Clear Chromate B= Olive drab F= Electroless nickel	

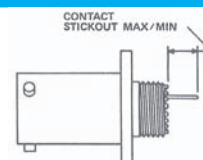
* Not available in box mount receptacle style

Style Chart Series 1

Style	LJT	MS Series 1	BS Series	HE308
Wall mount receptacle	00	27466	C6160	00
Back wall mount receptacle	PQ00	27656	C6163	
Box mount receptacle	02	27496	C6162	
Long box mount receptacle	02 (053)			
Jam nut	07	27468	C6167	07
Back box receptacle	P02	27505	C6164	
Grounded plug	06	27467	C6166	06

Contact Variations:

See page D-13 for a list of PINS, SOCKETS, COAX and POWER contacts available.



Mil-C-38999 Insert Arrangements continued

Series I Series II Series III Rating Contacts	23-21 22-21 23-21 II 21x16*	23-32 22-32 II 32x20	23-34 II 34x20	23-35 22-35 23-35 M 100x22D*	23-36 II 36x20	23-53 22-53 23-53 I 53x20*	23-54 M 40x22D 9x16 4x12	23-55 22-55 23-55 I 55x20
Series I Series II Series III Rating Contacts	23-97 II 16x16	23-99 II 11x16	25-1 24-1 M 128x22M	25-2 24-2 M 100x22	25-4 24-4 25-4 I 48x20 8x16	25-7 25-7 M 97x22D 2x8(Twinax)	25-8 M 8x8(Twinax)**	25-11 25-11 N 2x20 9x10
Series I Series II Series III Rating Contacts	25-17 M 36x22D 6x8(Twinax)**	25-19 24-19 25-19 I 19x12	25-20 25-20 N 10x20 13x16 3x8(Twinax) 4x12(Coax)	25-24 24-24 25-24 I 12x16 12x12	25-26 I 16x20 5x12 4x8(Coax)	25-29 24-29 25-29 I 29x16	25-35 24-35 25-35 M 128x22D	25-37 24-37 25-37 I 37x16
Series I Series II Series III Rating Contacts	25-43 24-43 25-43 I 23x20 20x16	25-46 25-46 I 40x20 4x16 2x8(Coax)	25-61 24-61 25-61 I 61x20	25-64 N 22x22D 3x20 11x16 2x12 3x8(Twinax)***	25-64 M 18x22D 28x20 18x16***	Contact Legend Front end of pins illustrated		

Contacts

- Quadrax 100 and 150 Ohm
- Differentiated Twinax 100 and 150 Ohm
- Twinax
- Coax
- Size 10 Power
- Signal contacts from sizes 12 to 22D
- RADSOK – High Power, Small Package, Low Temperature Rise, Long Life, Low Insertion Force Super Duper Contacts using Twisted Hyperbolic Grid technology.

Contacts are available in various sizes and for any cable.

Consult representative for solution part numbers



RADSOK

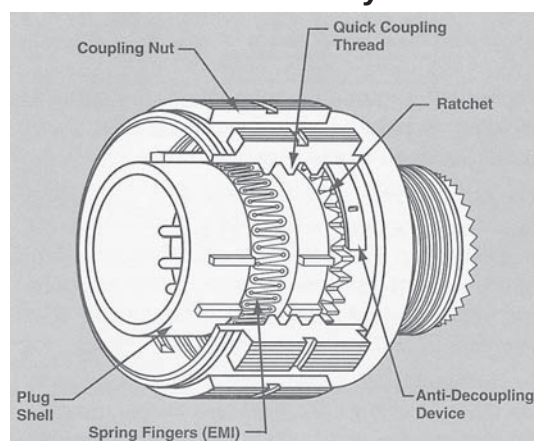


QUDRAX

Amphe-Lite Series Commercial 38999 Subminiature Connector System

Features

- Based on the Mil-C-38999 Series III Connector System
- Up to 30% more economical than composite connectors (CTV)
- Class F provides – EMI Shielded and grounded thru electroless nickel plating and spring grounding rings
- Class X – Non-conductive version
- Resists severe corrosion (Salt spray test to minimum 2000Hrs)
- One turn for complete mate
- Scoop-proof
- Can be fitted with Signal, Power, RF and Fibre Optic Contacts
- Detailed Catalogue 12-094



For ordering information please contact an Amphenol representative.

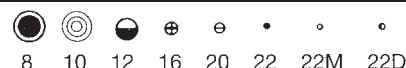
AAO 12-094 (ASCA)

AAO/LTD *AAO/ASF/LTD **AAO ***LTD

Mil-C-38999 Insert Arrangements

Series I Series II Series III Rating Contacts	8-2 M 2x20	9-3 8-3 M 3x20	9-6 8-6 M 6x22M	9-7 M 7x22M	9-22 I 2x20	9-35 8-35 9-35 M 6x22D	9-44 8-44 M 4x22	8-97 M 2x20 2x22M	9-98 8-98 9-98 I 3x20	10-01 11-01 M 1x8(twinax)***	11-2 I 2x16	11-4 10-4 I 4x20	11-5 10-5 11-5 I 5x20
Series I Series II Series III Rating Contacts	11-6 I 6x20	11-13 10-13 M 13x22M	11-35 10-35 11-35 M 13x22D*	11-98 10-98 11-98 I 6x20	11-99 10-99 11-99 I 7x20	13-3 12-3 II 3x16	13-4 12-4 13-4 I 4x16*	13-8 12-8 13-8 I 8x20	13-22 12-22 M 22x22M	13-35 12-35 13-35 M 22x22D*			
Series I Series II Series III Rating Contacts	13-98 12-98 13-98 I 10x20*	15-4 14-4 I 4x12	15-5 14-5 15-5 II 5x16*	15-15 14-15 15-15 II 14x20 1x16	15-18 14-18 15-18 I 18x20	15-19 14-19 15-19 I 19x20*	15-35 14-35 15-35 M 37x22D*	15-37 14-37 M 37x22M					
Series I Series II Series III Rating Contacts	15-68 14-68 I 8x16	15-97 14-97 15-97 I 8x20 4x16*	17-2 17-2 M 38x22D 1x8(Coax)	17-6 16-6 17-6 I 6x12*	17-8 16-8 17-8 II 8x16*	17-13 16-13 I 13x16	17-22(US) M 2x12(Coax) 2x8(Coax)	17-26 16-26 17-26 I 26x20*					
Series I Series II Series III Rating Contacts	17-35 16-35 17-35 M 55x22D*	17-42 16-42 M 42x22	17-55 16-55 M 55x22M	17-99 16-99 17-99 I 21x20 2x16*	19-11 18-11 19-11 II 11x16*	18-17 17-17 M 1x20 4x12 2x8(twinax)***	19-28 18-28 I 26x20 2x16	19-30 18-30 I 29x20 1x16					
Series I Series II Series III Rating Contacts	19-32 18-32 19-32 I 32x20*	19-35 18-35 19-35 M 66x22D*	19-53 18-53 M 53x22	19-66 18-66 M 66x22M	19-67 M 67x22M	19-68 18-68 I 18x16	18-96 I 9x12	21-1 20-1 M 79x22M					
Series I Series II Series III Rating Contacts	21-2 20-2 M 65x22	21-11 20-11 21-11 I 11x12*	21-16 20-16 21-16 II 16x16*	21-24 I 24x20	21-25 I 25x20	21-27 I 27x20	21-35 20-35 21-35 M 79x22D*	21-39 20-39 21-39 I 37x20 2x16*					
Series I Series II Series III Rating Contacts	21-41 20-41 21-41 I 41x20*	21-75 21-75 M 4x8(Coax)*	21-79 II 17x22D 2x8(Twinax)	23-1 22-1 M 100x22M	23-2 22-2 M 85x22	23-5 M 5x8(Twinax)	23-6 23-6 M 6x8(Twinax)	23-14 22-14 I 14x12					

Contact Legend
Front end of pins illustrated



MIL-C-38999 Series III Tri-Start Series Threaded Coupled Crimp Circular Connectors

Features

- Metal & Composite shells available
- Composite up to 70% lighter than metal
- Durability – up to 1500 cycles
- EMI Shielded Min 65dB @ 10GHz
- 100% Scoop-proof
- ESD protected
- Anti-Decoupling Device

Specifications

Operating Temperature	– -55°C up to 200°C
<u>Current Rating</u>	
Contact Size 20	– 7.5A
Contact Size 16	– 13A
<u>Voltage Rating (sea level)</u>	
Service Rating I	– 600VAC(rms)
Service Rating II	– 900VAC(rms)

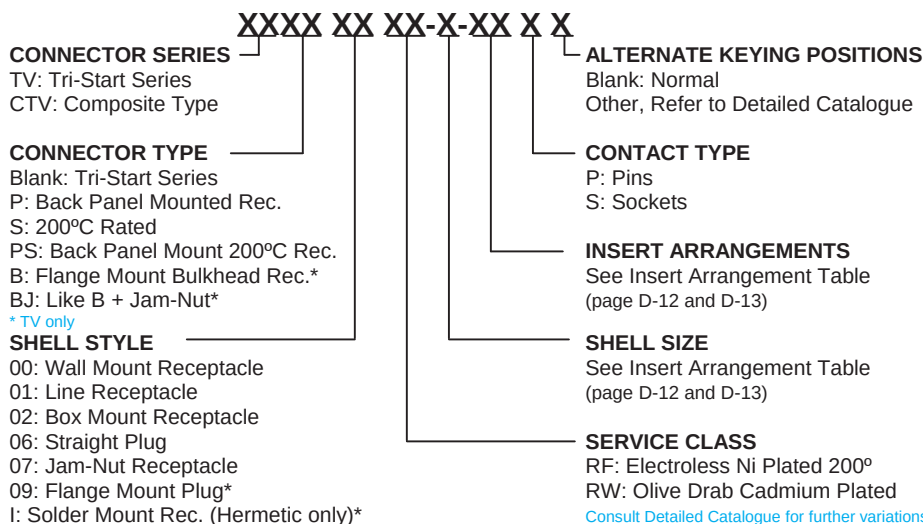
Related Information

Detailed catalogue - 12-092-10
 Shell sizes – 9, Insert arrangements – 58,
 Circuit sizes – 2 to 128
[Solder, PCB, Wire Wrap, Coax, Fiber & Filter optional](#)

Tooling

Crimp Tool	– M22520/1-01
Positioner	– M22520/1-04
Insert/Remove (Plastic)	– M81969/14-03 (Contact 16)
Insert/Remove (Plastic)	– M81969/14-10 (Contact 20)

Part Number System: (refer to Part Number Make-up for assistance – opposite)



* TV only
 For Black Anodized finish or Cadmium-free Zinc Cobalt plating consult representative
 Marine Nickel Aluminum Bronze for Naval Applications available upon request

TV Accessories – Cable Clamp

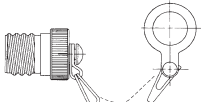
Part Number System:	Finish (-XX9 standard)	Diagram
10-595103-XXX	Chromate Treat -XX0	
SHELL SIZE 9/11/13/15/17/19/21/23/25	Anodic Coating -XX5	
FINISH See adjacent table	Cadmium Plated Nickel Base -XX7	
	Olive Drab, Cadmium, Nickel Base -XX9	
	Electroless Nickel -XXG	

TV Accessories – Heat Shrinkable Backshells (shielded)

Part Number:	Shell Size	Finish	Type	Backshell Configuration (-X)			Diagram
				-1	-2	-3	
ABK B-WAR-X	9	Olive Drab Cadmium	Shielded	Straight	45°	Right Angle	
ABK B-WBR-X	11						
ABK B-WCR-X	13						
ABK B-WDR-X	15						
ABK B-WER-X	17						
ABK B-WFR-X	19						
ABK B-WGR-X	21						
ABK B-WHR-X	23						
ABK B-WJR-X	25						

Alternatives: Unshielded Replace R with U, Electroless Nickel replace W with F

TV Accessories – Caps

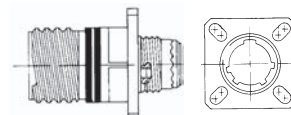
Shell Size	Part Numbers:			
	Cap & Chain with Plug Ring for Plugs	Chain length	Cap & Chain with Receptacle Ring for Rec.	Chain length
9	10-553998-099	127mm + Ring	10-553120-099	88.9mm + Ring
11	10-553998-119		10-553120-119	
13	10-553998-139		10-553120-139	
15	10-553998-159		10-553120-159	
17	10-553998-179		10-553120-179	
19	10-553998-199		10-553120-199	
21	10-553998-219		10-553120-219	
23	10-553998-239		10-553120-239	
25	10-553998-259		10-553120-259	
Diagram				

Connectors individually packaged with crimp contacts (bulk contacts available) and insert/extract tool.

ASF/LTD/AAO

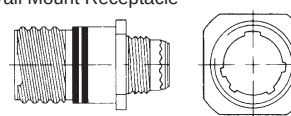
Part Number Make-up

TVP00RW...
 TVPS00RF...
 CTVP00RW...
 CTVPS00RF...



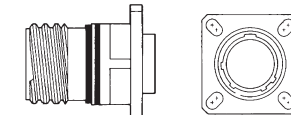
Part Number Make-up

TV01RW...
 TVS01RF...
 CTV01RW...
 CTVS01RF...



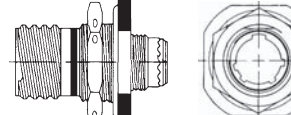
Part Number Make-up

TVP02RW...
 TVPS02RF...
 CTVP02RW...
 CTVPS02RF...



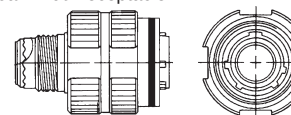
Part Number Make-up

TV07RW...
 TVS07RF...
 CTV07RW...
 CTVS07RF...



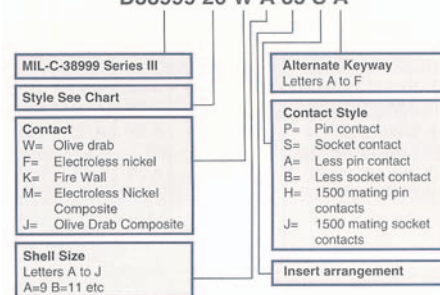
Part Number Make-up

TV06RW...
 TVS06RF...
 CTV06RW...
 CTVS06RF...



MS Part Numbering System:

D38999 26 W A 35 S A

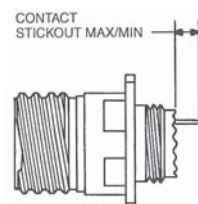


Style Chart Series 3

Style	TV	D38999	BS Series 3	JN1034
Back wall mount receptacle	(S) P00	20	C6170	A
Jam nut	(S) 07	24	C6177	B
Back box receptacle	(S) P02	-	-	F
Grounded plug	(S) 06	26	C6176	G
Lanyard release	FBR	31	-	E

Contacts Variations:

See page D-13 for a list of PINS, SOCKETS, COAX and POWER contacts available.



MIL-C-38999 Series II JT Series Bayonet Coupled Crimp Circular Connectors

Features

- Lightweight Space-saving design
- Durability – 500 cycles
- EMI Shielded Optional

Customer Options

Shell sizes	– 9
Contact arrangements	– 100+
Circuit sizes	– 1 to 128

Specifications

Operating Temperature	– -55°C up to 200°C
<u>Current Rating</u>	
Contact Size 20	– 7.5A
Contact Size 16	– 13A
<u>Voltage Rating (sea level)</u>	
Service Rating I	– 600VAC(rms)
Service Rating II	– 900VAC(rms)

Tooling

Crimp Tool	– M22520/1-01
Positioner	– M22520/1-04
Insert/Remove*	– M81969/14-03**
Insert/Remove*	– M81969/14-10***

* Plastic Tool ** For Size 16 Contacts. *** For Size 20 Contacts

Related Information

Detailed catalogue – 12-090-14
Solder, PCB, Wire Wrap, Coax, Fiber & Filter optional

Part Number System: (refer to Part Number Make-up for assistance – opposite)

CONNECTOR TYPE

JT: Standard Mil-C-38999 II
JTS: High Temperature
JTN: Chemical & Fuel Resistant

SHELL STYLE

00: Wall Mount Receptacle
01: Line Receptacle
02: Box Mount Receptacle
06: Straight Plug
07: Jam-Nut Receptacle
08: 90° Plug (AAO)
I: Solder Mount Rec. (Hermetic only)

SERVICE CLASS

RP: Potting Boot + Grommet
RE: Environmental Sealed Can add SR
RT: Environmental w/o rear Accessory
Y: Hermetically Sealed
A: Fixed Solder Contacts (LTD only)

For Cadmium-free Zinc Cobalt plating consult representative SR = Strain Relief

JT XX XX-XX-X X X (X)

DEVIATIONS

Finish	Suffix	W/SR Suffix
Cadmium Plated Ni Base		(SR)
Olive Drab Cadmium Plated, Ni Base	(014)	(386)
Electroless Ni	(023)	(424)
Anodic Coating (Alumilite)	(005)	(300)
Chromate treated (Iridite 14-2)	(011)	(344)

ALTERNATE KEYING

Blank: Normal Position
See detailed catalogue for variations

CONTACT STYLE

P: Pins
S: Sockets

INSERT ARRANGEMENTS

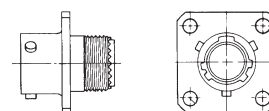
See Insert Arrangement Table (page D-12 and D-13)

SHELL SIZE

See Insert Arrangement Table (page D-12 and D-13)

Part Number Make-up

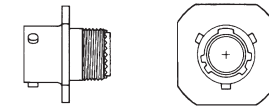
JT00...
JTS00...
JTN00...



Wall Mount Receptacle

Part Number Make-up

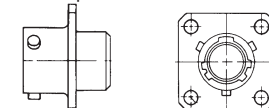
JT01...
JTS01...
JTN01...



Line Receptacle

Part Number Make-up

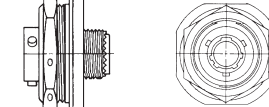
JT02RE...
JTS02RE...
JTN02RE...



Box Mount Receptacle

Part Number Make-up

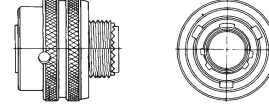
JT07...
JTS07...
JTN07...



Jam Nut Receptacle

Part Number Make-up

JT06...
JTS06...
JTN06...



Straight Plug

JT Accessories – Cable Clamp for Crimp type Housing (if ordered separately to connector)

Part Number System:	Finish (-XX9 standard)	Diagram
10-405982-XXX	Chromate Treat	-XX0
	Anodic Coating	-XX5
	Cadmium Plated Nickel Base	-XX7
	Olive Drab, Cadmium, Nickel Base	-XX9
	Electroless Nickel	-XXG

JT Accessories – Heat Shrinkable Backshells (shielded)

Part Number:	Shell Size	Finish	Type	Backshell Configuration (-X)			Diagram
				-1	-2	-3	
ABK A-WAR-X	8	Olive Drab Cadmium	Shielded	Straight	45°	Right Angle	
ABK A-WBR-X	10						
ABK A-WCR-X	12						
ABK A-WDR-X	14						
ABK A-WER-X	16						
ABK A-WFR-X	18						
ABK A-WGR-X	20						
ABK A-WHR-X	22						
ABK A-WJR-X	24						

Alternatives: Unshielded Replace R with U, Electroless Nickel replace W with F.

JT Accessories - Caps

Shell Size	Part Numbers:			
	Cap & Chain for Plugs Cadmium Plate, Ni Base	Chain length	Cap & Chain for Receptacle Cadmium Plate, Ni Base	Chain length
8	10-241801-089	76.2mm	10-241800-089	76.2mm
10	10-241801-109		10-241800-109	
12	10-241801-129		10-241800-129	
14	10-241801-149	88.9mm	10-241800-149	88.9mm
16	10-241801-169		10-241800-169	
18	10-241801-189		10-241800-189	
20	10-241801-209	101.6mm	10-241800-209	101.6mm
22	10-241801-229		10-241800-229	
24	10-241801-249		10-241800-249	

Alternate Cap finishes (Replace last digit): 0=Chromate, 5=Anodic, G=Electroless Ni
Connectors individually packaged with crimp contacts (bulk contacts available) and insert/extract tool.

ASF/LTD/AAO

MS Part Numbering System

MS27467 T-11B-35 S A	
Style See Chart	Alternate Keyway Letters A to D
Class *T= Threaded accessory E= With grommet nut	Contact Style P= Pin contact S= Socket contact A= Less pin contact B= Less socket contact
Shell Size Series 1 Odd nos 9 to 25 Series 2 Even Nos 8 to 24	Insert arrangement
Finish A= Clear Chromate B= Olive drab F= Electroless nickel	

* Not available in box mount receptacle style

Style Chart Series 2

Style	JT	Pan	BS series 2	MS series 2	HE309
Wall mount receptacle	00	-	C2022	27472	
Back wall mount receptacle	PQ00	B	C2023	27497	03
Box mount receptacle	02	-	C2251	27499	
Long box mount receptacle	02 (053)	-	C2552	27513	
Jam nut	07	A	C2024	27474	07
Back box receptacle	P02	E	C2253	27508	
Plug	06	F	C2020	27473	06
Grounded plug	G06	FG	C2021	27484	G06

Contacts Variations:

See page D-13 for a list of PINS, SOCKETS, COAX and POWER contacts available

