

Now you're connected!

MIL-C-5015 PRODUCT SHORTFORM



Amphenol Australia Pty Ltd

Quick Facts:

- Harsh environment multipole connectors.
- Silver plated solder contacts.
- Resilient synthetic rubbers inserts to aid sealing.
- High grade aluminum alloy connector shells.
- Standard contact layouts available ex-stock in Australia.
- Cable connectors supplied complete with telescopic bushing MS3420. This is designed to keep dirt, oil and moisture out of the endbell.



Telescopic bushing



Amphenol MS connectors satisfy all the performance requirements of MIL-C-5015 and are recommended for conditions where vibration, moisture, pressure and / or temperature are extreme.

Shells:

Shell components are fabricated from high grade aluminum alloy. The standard hardware plating is electrically zinc plated finish with an olive drab chromate after treatment for corrosion resistance. the choice is simple.

Contacts:

Contacts are silver plated copper alloy for maximum corrosion resistance, maximum current carrying capacity and low millivolt drop. Size 16 and 12 contacts incorporate a closed entry design.

Inserts:

Inserts are resilient synthetic rubber, offering high dielectric strength, high arc resistance and resistance to vibration. Proprietary design permits pressurization of either pin or socket insert.

Strain relief:

Strain relief clamp minimizes tension at the solder well connection and provides a positive mechanical moisture seal. Complete field serviceability is possible with the strain relief clamp.



Straight Plug
MS3106Fxx-xxx*



Cable Connecting Receptacle
MS3101Fxx-xxx*



Right Angle Plug
MS3108Exx-xxx*

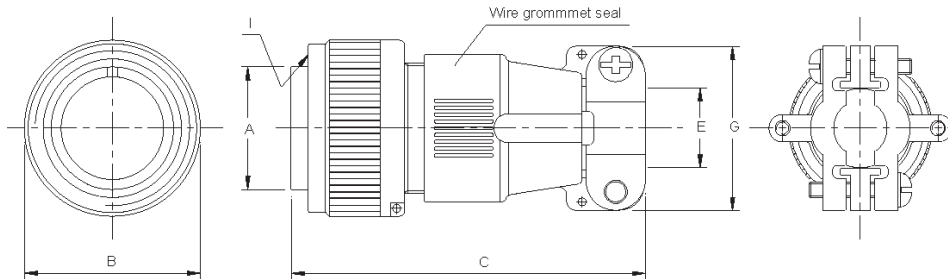


Box Mounting Receptacle
MS3102Rxx-xxx*

* Please Note: to complete part number please refer to Part Number Breakdown

MIL-C-5015 - PRODUCT SHORTFORM

MS3106F Straight Plug – Integral Cable Clamp (supplied complete with telescopic bushing)



Shell Size	A +0.00 -0.38	B Max.	C Max.	ØE Max.	ØG Max.	I Thread-2B (UNEF)
10SL	11.33	24.61	57.15	7.9	23.0	5/8-24 NEF
14S	17.15	29.36	57.15	11.2	26.0	3/4-20 NEF
16S	20.45	31.75	57.15	14.2	29.0	3/4-20 NEF
18	23.62	34.13	68.27	16.0	31.6	1-20 NEF
20	26.67	37.31	69.85	19.1	37.5	1 1/4-18 NEF
24	33.02	43.66	75.41	23.8	43.0	1 1/2-18 NEF

MS3106F10SL-3P



MS3106F10SL-3S



MS3106F10SL-4P



MS3106F10SL-4S



MS3106F14S-2P



MS3106F14S-2S



MS3106F14S-5P



MS3106F14S-5S



MS3106F14S-6P



MS3106F14S-6S



MS3106F14S-7P



MS3106F14S-7S



MS3106F16S-1P



MS3106F16S-1S



MS3106F18-1P



MS3106F18-1S



MS3106F20-27P



MS3106F20-27S



MS3106F20-29P



MS3106F20-29S



MS3106F24-28P

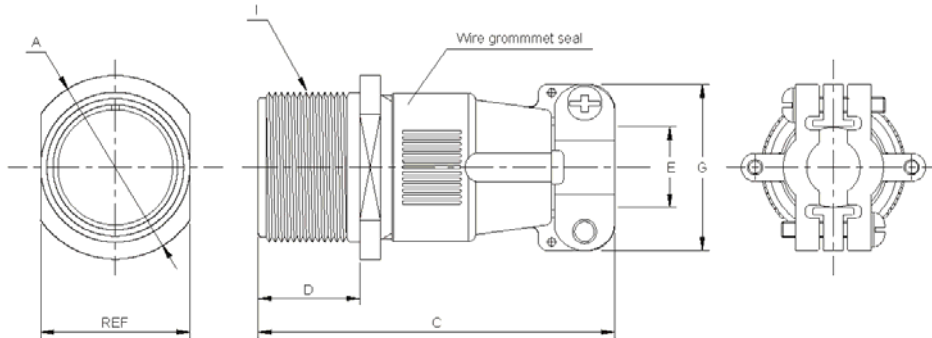


MS3106F24-28S



MIL-C-5015 - PRODUCT SHORTFORM

MS3101F Cable Connecting Receptacle – Integral Cable Clamp (supplied complete with telescopic bushing)

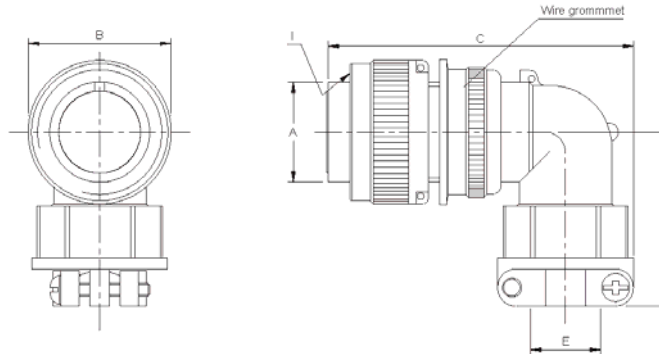


Shell Size	A Max.	C Max.	D +0.79 -0.00	ØE Max.	ØG Max.	I Thread-2B (UNEF)
10SL	25.40	57.15	14.28	7.9	23.0	5/8-24 NEF
14S	30.18	57.15	14.28	11.2	26.0	3/4-20 NEF
16S	32.54	57.15	14.28	14.2	29.0	3/4-20 NEF
18	34.93	68.27	19.05	16.0	31.6	1-20 NEF
20	38.10	69.85	19.05	19.1	37.5	1 1/4-18 NEF
24	44.45	75.41	20.63	23.8	43.0	1 1/2-18 NEF

MS3101F10SL-3P	MS3101F10SL-3S			MS3101F14S-2P	MS3101F14S-2S
MS3101F14S-5P	MS3101F14S-5S	MS3101F14S-6P	MS3101F14S-6S		
MS3101F16S-1P	MS3101F16S-1S	MS3101F18-1P	MS3101F18-1S	MS3101F20-27P	MS3101F20-27S
MS3101F20-29P	MS3101F20-29S				

MIL-C-5015 - PRODUCT SHORTFORM

MS3108F Right Angle Plug – Integral Cable Clamp (supplied complete with telescopic bushing)



Shell Size	A +0.00 -0.38	B Max.	C Max.	D Max.	ØE Max.	I Thread-2B (UNEF)
10SL	11.33	24.61	55.57	38.1	7.9	5/8-24 NEF
14S	17.15	29.36	58.72	40.4	11.2	3/4-20 NEF
16S	20.45	31.75	61.11	42.8	14.2	3/4-20 NEF
18	23.62	34.13	72.23	45.2	16.0	1-20 NEF
20	26.67	37.31	82.55	50.0	19.1	1 1/4-18 NEF
24	33.02	43.66	94.46	53.9	23.8	1 1/2-18 NEF

MS3108E10SL-3P



MS3108S10SL-3S



MS3108E14S-5P



MS3108E14S-6P



MS3108E14S-6S



MS3108E14S-7P



MS3108E16S-1P



MS3108E16S-1S



MS3108E18-1P



MS3108E18-1S



MS3108E20-27P

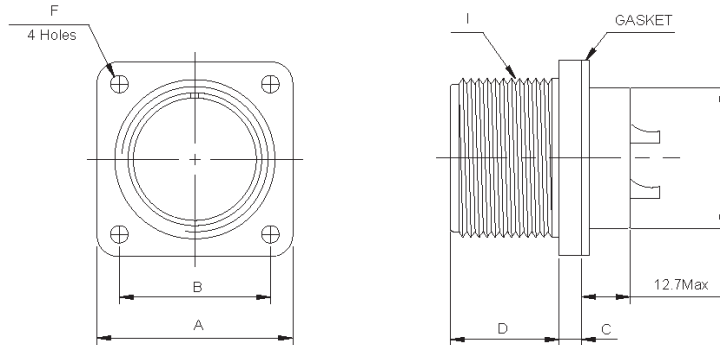


MS3108E20-27S



MIL-C-5015 - PRODUCT SHORTFORM

MS3102R Box Mounting Receptacle (supplied complete with sealing gasket)



Shell Size	A ±0.79	B ±0.12	C ±0.5	D +0.79 -0.00	ØF +0.25 -0.12	ØG Max.	I Thread-2A (UNEF)
10SL	25.40	18.26	3.0	14.28	3.05	16.0	5/8-24 NEF
14S	30.18	23.01	3.0	14.28	3.05	20.0	3/4-20 NEF
16S	32.54	24.61	3.0	14.28	3.05	23.0	3/4-20 NEF
18	34.93	26.97	4.0	19.05	3.05	26.0	1-20 NEF
20	38.10	29.36	4.0	19.05	3.05	29.0	1 1/4-18 NEF
24	44.45	34.93	4.0	20.63	3.73	35.5	1 1/2-18 NEF

MS3102R10SL-3P



MS3102R10SL-3S



MS3102R10SL-4P



MS3102R10SL-4S



MS3102R14S-2P



MS3102R14S-2S



MS3102R14S-5P



MS3102R14S-5S



MS3102R14S-6P



MS3102R14S-6S



MS3102R14S-7P



MS3102R14S-7S



MS3102R16S-1P



MS3102R16S-1S



MS3102R18-1P



MS3102R18-1S



MS3102R20-27P



MS3102R20-27S



MS3102R20-29P



MS3102R20-29S

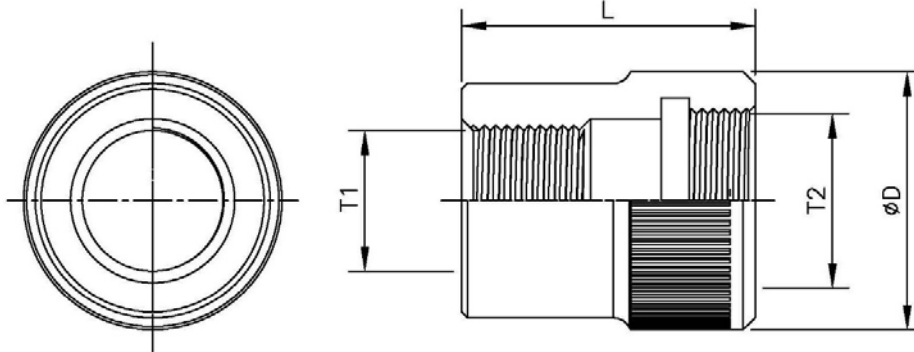


MS3102R24-28P

MS3102R24-28S

MIL-C-5015 - PRODUCT SHORTFORM

Accessories - Metric Adaptors



Part Number	Shell Size	T1	T2	D Max.	L ±0.20
10SL ADAPTOR **	10SL	9/16-24 UNEF	5/8-24 UNEF		
97B-10SLM12*1.5 **	10	M12X1.5	9/16-24 UNEF	22.00	25.00
97B-14S-M16*1.5	14S	M16X1.5	3/4-20 UNEF	25.00	25.00
97B-16S-M16*1.5	16S / 16	M16X1.5	7/8-20 UNEF	27.00	30.00
97B-18-M20*1.5	18	M20X1.5	1-20 UNEF	30.50	40.00
97B-20-M25*1.5	20	M25X1.5	1 1/8-18 UNEF	33.00	40.00
97B-24-M32*1.5	24	M32X1.5	1 3/8-18 UNEF	39.50	50.00

**** Please Note: Both the 10SL ADAPTOR & the 97B-10SLM12*1.5 are required**



Application example: MS3106 fitted with metric adaptor and cable gland

10SL ADAPTOR

97B-10SLM12*1.5



97B-14S-M16*1.5



97B-16S-M16*1.5



97B-18-M20*1.5



97B-20-M25*1.5



97B-24-M32*1.5



MIL-C-5015 - PRODUCT SHORTFORM

Accessories – Dust Caps (suits 00, 01 and 02 Receptacles)

MS25043-10D	MS25043-12D	MS25043-14D	MS25043-16D	MS25043-18D	MS25043-20D
					

Accessories – Dust Caps (suits 06 and 08 Plugs)

MS25042-10D	MS25042-12D	MS25042-14D	MS25042-16D	MS25042-18D	MS25042-20D
					

Accessories – Telescopic bushing

MS3420-4	MS3420-6	MS3420-8	MS3420-10	MS3420-12	MS3420-16
					
MS3420-20	MS3420-24				
					

Accessories – Sealing Gaskets

BMA-31-10	BMA-31-12	BMA-31-14	BMA-31-16	BMA-31-18	BMA-31-20
					
BMA-31-22	BMA-31-24	BMA-31-28	BMA-31-32	BMA-31-40	
					

MIL-C-5015 PRODUCT SHORTFORM



Quick Facts:

Contact Layouts -
Standard contact layouts shown here are available ex-stock in Australia. Please contact us directly to check availability of non-standard inserts.

Accessories - We have large range of MIL-C-5015 accessories available including protection dust caps, EMI shielded backshells and PG, Metric or heat shrink adaptor backshells.

Pre-mating Earth – MS
style connectors are also available featuring a pre-mating earth contact. Please call to discuss your specific requirements.

CONTACT DETAILS

Phone
03 8796 8888
Facsimile
03 8796 8801

E-mail
info@amphenol.com.au

Web
www.amphenol.com.au

Now you're connected!

Amphenol

Standard connector layouts (front face of pin insert or rear face of socket insert illustrated)

Insert Arrangement	10SL-3	10SL-4	14S-2	14S-5	14S-6	14S-7
Service Rating	A	A	Inst.	Inst.	Inst.	A
Number of Contacts	3	2	4	5	6	3
Contact Size	16	16	16	16	16	16

Insert Arrangement	16S-1	18-1	20-27	20-29	24-28	
Service Rating	A	B,C,F,G = A, Bal. = Inst.	A	A	Inst.	
Number of Contacts	7	10	14	17	24	
Contact Size	16	16	16	16	16	

Technical Data

1 . Characteristics

Insulation resistance	5,000 Mega ohms minimum (@25°C)
Temperature range	-55°C to 125°C
Durability	500 mating cycles

2 . Dielectric withstanding voltage

Service Rating	Test Voltage AC (RMS)	Operating voltage	
		AC	DC
Inst.	1,000	200	250
A	2,000	500	700
D	2,800	900	1,250
E	3,500	1,250	1,750
B	4,500	1,750	2,450
C	7,000	3,000	4,200

3 . Electrical data

Contact Size	Pin contact Ø	Solder pot Ø	Rated current (Mated with insulators fitted)	Contact resistance	
				Test current DC A	Potential Drop (Max) mV
#16	1.6mm	1.9mm	13A	13A	49
#12	2.4mm	3.0mm	23A	23A	42
#8	3.6mm	5.4mm	46A	46A	26

4 . Wire range

Contact Size	A.W.G	MM ²	Conductor O.D.
#16	#22 ~ #16	≤1.3	1.7 ~ 3.3
#12	#14 ~ #12	≤3.5	2.9 ~ 4.3
#8	#10 ~ #8	≤8.0	4.2 ~ 6.4

MIL-C-5015 PRODUCT SHORTFORM



Radsok® Technology Connector options



Part Number Breakdown

MIL-C-5015 (Solder Contacts)

MS	3102	A	18-10	P	W	XXX	
1	2	3	4	5	6	7	8

- Connector Type
MS - designates Military Standard
DS - Amphenol MIL- C-5015 Europe use
- Connector Style
3100- wall mounting receptacle
3101- cable connecting plug
3102- box mounting receptacle
3106- straight plug
3108- 90° Right angle plug
- Service Class
A - General purpose, Solid Endbell
E - Environmental resisting, with grommet seal & strain relief back shell
F - Environmental resisting with grommet seal & strain relief back shell
3106F and 3108E style include a front 'O' ring seal
R - Environmental resisting with grommet seal, light weight and shorter
Overall length 310R style include a front 'O' ring seal
5. Shell size and insert arrangement - see tables, page 26.27
- Contact Types
P- designates pin contact, (+) Male
S- designates socket contact, (-) Female
- Insert Rotation
No suffix-Normal
"W", "X", "Y", or "Z" - See page 26.27
- Plating information
No suffix - Olive Drab Zinc
CD - Cadmium
C1 - Cobalt (Without +6 Cr)
621 - Black Zinc
689 - Electro-less Nickel
426 - Electro-less Nickel & gold flash contacts

MIL-C-5015 (Crimp Contacts)

MS	4102	A	18-10	P	W	XXX	
1	2	3	4	5	6	7	8

- Connector Type
MS - designates Military Standard
- Connector Style
4100 - wall mounting receptacle
4101 - cable connecting plug
4102 - box mounting receptacle
4106 - straight plug
4108 - 90° Right angle plug
- Service Class
A - General purpose, Solid Endbell
E - Environmental resisting, with grommet seal & strain relief back shell
F - Environmental resisting with grommet seal & strain relief back shell
3106F and 3108E style include a front 'O' ring seal
R - Environmental resisting with grommet seal, light weight and shorter
Overall length 310R style include a front 'O' ring seal
5. Shell size and insert arrangement - see tables, page 26.27
- Contact Types
P- designates pin contact, (+) Male
S- designates socket contact, (-) Female
- Insert Rotation
No suffix - Normal
"W", "X", "Y", or "Z" - See page 26.27
- Plating information
No suffix - Olive Drab Zinc
CD - Cadmium
C1 - Cobalt (Without +6 Cr)
621 - Black Zinc
689 - Electro-less Nickel
426 - Electro-less Nickel & gold flash contacts

Radsok® Technology

Amphenol Radsok® design and construction technology create an electrical contact interface that exceeds typical interconnect requirements. Applications in aerospace, industrial, automotive, mining, offshore and other harsh environments depend on high reliability of the Amphenol Radsok® technology.

- HIGH CURRENT RATING
- 50A TO OVER 1000A
- HIGH RELIABILITY
- HIGH CYCLE DURABILITY
- LOW MILIVOLT DROP
- LOW INSERTION FORCE
- LOW TEMPERATURE RISE



Radsok® socket contact
(Available in standard and custom sizes)