



RANGE MG / MGR

Circular Reverse Bayonet
Coupling Connectors

INDIA'S FIRST CONNECTOR COMPANY

Since its inception in 1966, the name Allied Electronics Corporation - widely known as Allied Connectors - has been synonymous with reliability and trust. Allied is one of the leading manufacturers of a wide range of circular multi-pin connectors. Allied has pioneered the development and indigenisation of connectors for sectors that have driven India's economic growth over the last few decades - such as Defence, Railways, Power Plants, Construction Equipment, Process Control Electronics, CNC Machines, and many others.

WHAT MAKES ALLIED THE BEST IN CLASS

Allied is the supplier of choice for hundreds of customers around the world. Following are just some of the reasons why the company has earned the trust of its customers:

- Focused expertise and experience of over five decades
- Zero Compromise on **Quality**
- Integrated in-house manufacturing facility
- **Capacity** to handle projects of all magnitudes
- Proficiency in **Customization**
- **Quick Prototype Sampling**
- **Quick Delivery** for standard products
- **Personal Attention** and Swift Response
- **Commitment to Relationships**





Circular Reverse Bayonet Coupling Connectors approved under JSS 50815 (equivalent to VG95234)

- **QUICK AND EASY TO COUPLE / UNCOUPLE – EVEN FOR UNTRAINED OPERATORS**

- Quick 120° rotation of coupling nut to achieve full coupling
- Audible and tactile '**CLICK**' on completion of coupling
- Additional visual indication for full coupling in Range MGR

- **RUGGED AND RELIABLE IN ENVIRONMENTS OF VIBRATION AND SHOCK**

- **ENHANCED INTERFACIAL SEAL FOR BETTER INGRESS PROTECTION**

- **DURABILITY AND MATING CYCLE PERFORMANCE - upto 2000 mating cycles for Range MGR**

- **OVER 150 INSERT ARRANGEMENTS**

- **FOR SIGNAL, POWER, AND A COMBINATION OF SIGNAL AND POWER CONNECTIONS IN THE SAME CONNECTOR**

Allied MG connectors are quick coupling connectors, designed for use in harsh environments involving **high vibration, frequent coupling/decoupling**, and **shock**. Range MG is ideally suited for Mass transportation vehicles, Infantry Combat Vehicles, Rail Mass Transit applications, Process control, Earthmoving Machinery, Mining equipment, etc.

These connectors provide all the salient features of the threaded coupling MS Range. Since they have the same mounting dimensions as range MS, it is easy to upgrade existing systems which use threaded coupling connectors to the significantly more durable connectors from range MG.

A few **key advantages** of these connectors **over range MS**:

- **Ease of coupling:**

The bayonet locking arrangement provides an audible and tactile 'click' on mating. This serves as a foolproof mating mechanism compared to the threaded coupling arrangement, where there is a risk of the user stopping the rotation of the coupling nut after only a few threads become engaged.

- **Enhanced performance under vibration:**

Under specification JSS 50815 / VG95234, MG connectors are tested to withstand:

VIBRATION SEVERITY: V14

FREQUENCY RANGE: 10-2000Hz

PEAK VALUE OF VIBRATION AMPLITUDE: 0.75mm OR 200m/s² whichever is less

TOTAL ENDURANCE TEST DURATION: 12 HOURS

This compares to a severity rating of V11 for range MS, which corresponds to a total endurance test duration of 9 hours.



- **Enhanced Interfacial seal for Ingress Protection:**

These connectors feature a square cross-section flat ring which serves as the interfacial seal. This provides much better ingress sealing as compared to the circular cross-section Neoprene O-ring used in range MS, which is prone to ageing and hardening over time.



- **Durability & Mating Cycle Performance:**

The standard range guarantees a mating cycle performance of 500 mating cycles. This can be further enhanced to 2000 mating cycles (**Allied product range "MGR"**) by using a Stainless Steel wear pin on the receptacle, and Spring + Washer in coupling nut.

The main specifications of this product range:

Shell - Aluminium alloy

Finish - Olive drab cadmium (standard)

ROHS & REACH compliant finishes available on request:

Zinc Cobalt Black, Zinc Cobalt Green, Nickel, Zinc Nickel Black.

Insulator - Polychloroprene (standard)

Optional: Silicon, Viton, Flame retardant halogen free elastomer (EN45545-2 R22 & R23 qualified), Polychloroprene UL94V-0

Contacts - copper base alloy, silver plated (standard) or gold plated (optional)

Contact termination - solder (standard) or crimp type (optional). PCB termination available on request.

Over 150 insert arrangements and 13 shell

sizes for signal, power, and combination of signal-power interconnections

Qualification approved by LCSO (Electronic Components Standardisation Organisation - Ministry of Defence, Government of India)

Connectors with IP 67 compliance, Pre-Mating Earth Contact, and many other special and customised features available - consult Factory for more details.

7	TECHNICAL DETAILS
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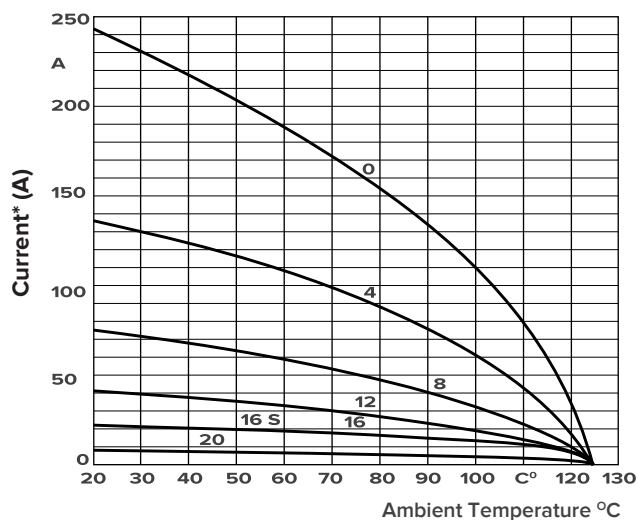
CONTACT RATING					
Contact Size	Standard Wire Size*			Rated Current (Amps)***	Max Test Current (Amps)***
	SQ MM	AWG	Conductor Ø (mm**)		
16S/16	0.75 - 1.5	18 - 16	1.1 - 1.6	13	22
12	2.0 - 3.0	14 - 12	1.8 - 2.3	23	41
8	6.0 - 10.0	10 - 8	3.2 - 4.2	46	73
4	16 - 25	6 - 4	5.2 - 6.5	80	135
0	35 - 50	2 - 0	7.7 - 9.0	150	245

TABLE 1

*Sizes mentioned are standard. In case of special termination size requirements for crimp contacts, please refer to page 62.

**Diameter of stranded conductor is an approximation.

***For single contact, For multi-pin connectors please make a note of current de-rating details provided below.



*NOTE: Contacts are designed for current De-Rating as per above graph.

- The above graph is applicable for a single contact.

- For multiple contacts in a connector, current de-rating as per the limitation of wire bundling in MIL W 5088 is applicable.

- For connectors with more than 15 contacts, total current carrying capacity of the connector = rated current x number of contacts x 0.2

- For connectors with less than 15 contacts, total current carrying capacity of the connector = rated current x number of contacts x Falling rate (as per TABLE 4 below)

General Specification - Standard#	
Shell Housing#	Aluminium Alloy
Plating#	Olive Drab Cadmium
Insulator#	Polychloroprene
Contact Material#	Copper Base Alloy - Silver Plated
Mating Cycles	500 (MG), 2000 (MGR)
Operating Temperature	-55°C to +125°C
Insulation Resistance	Min. 5000 MΩ at 500V DC
Current Rating	Upto 150 AMP (Depends on contact size)
Working Voltage	200V To 3000VAC RMS (Depends on service rating of insert arrangement)
Wire Termination#	Solder Type / Crimp Type
#Other options available - refer to page 10 (ordering guidelines) for details	

TABLE 2

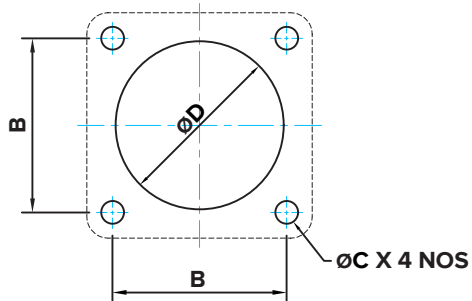
SERVICE RATING	INST	A	D	E	B	C
Test Voltage at Sea level AC (rms)	1000V	2000V	2800V	3500V	4500V	7000V
Rated Working Voltage - DC at Sea level AC (rms)	250V 200V	700V 500V	1250V 900V	1750V 1250V	2450V 1750V	4200V 3000V
Effective Creepage - Inch (nominal) - mm	1/16 1.57	1/8 3.18	3/16 4.75	1/4 6.35	5/16 7.92	1 25.40
Mechanical Spacing - Inch (nominal) - mm	- -	1/16 1.57	1/8 3.18	3/16 4.75	1/4 6.35	5/16 7.92

TABLE 3

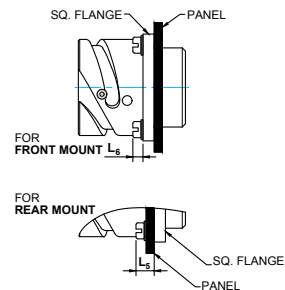
Number of Contacts	Falling Rate
1	1
2	0.94
3	0.89
4	0.82
5	0.77
6	0.71
7	0.65
8	0.60
9	0.54
10	0.48
11	0.42
12	0.37
13	0.31
14	0.26

TABLE 4

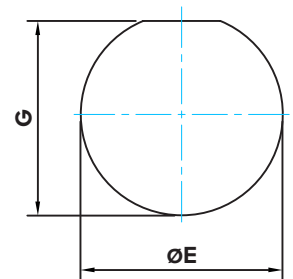
**PANEL CUTOUT
DIMENSIONS
FOR SQUARE FLANGE
RECEPTACLE**



**SEPARATING
DIMENSIONS FOR
SQUARE FLANGE
RECEPTACLE**



**PANEL CUT OUT
DIMENSIONS
FOR JAM-NUT
RECEPTACLE**



SHELL SIZE	B ±0.1	ØD ^{+0.1} -0.0 Front Mount Receptacle	ØC ^{±0.05} Front Mount Receptacle	ØD ^{+0.1} -0.0 Rear Mount Receptacle	ØC ^{±0.05} Rear Mount Receptacle		Recommended Screw to be used*		L ₅ MAX.	L ₆ MAX.	ØE	G	
					TYPE B05 with Through Mounting Holes on Receptacle Connector	TYPE B051 with Metric Tapped Mounting Holes on Receptacle Connector	Front and Rear Mount Receptacle with Through Mounting Holes (Standard and B05 resp.)	Front and Rear Mount Receptacle with Tapped Mounting Holes (TH and B051 resp.)					
10SL	18.2	16.3	3.4	18.5	3.4	4.5	M3... DIN 85	M4... DIN 84	7.7	3.2	22.40	21.00	
12S	20.5	16.5		21.8									
14S	23.0	19.5		24.9							28.80	27.40	
16S	24.6	22.5		27.7							31.95	30.95	
16				31.1					35.10		33.75		
18	27.0	26.0		34.5					7.7		41.45	40.05	
20	29.4	29.3		37.8								44.65	43.35
22	31.8	32.6		41.3					4.7		51.00	49.55	
24	34.9	35.9	47.1		57.35	55.95							
28	39.7	41.9	3.9	4.5	5.5	M3.5... DIN 85	M4... DIN 85	M5... DIN 84	8.7	5.7	63.70	62.35	
32	44.5	48.1									60.0	70.50	68.55
36	49.2	54.6									66.2		
40	55.6	59.8											

NOTE :


- Max Panel Thickness for jam-nut receptacles : 5.2 mm for shell size 10SL to 16S. 6 mm for shell size 16 to 40.

* Check that screw head does not obstruct movement of the coupling nut of the cable connector.

NOTE : Dimensions are not contractual & may be subject to changes

FIXED CONNECTORS (RECEPTACLES)

SHELL STYLE 00	Fixed, square flange wall mount receptacle with accessory threads, with or without accessories.	
	Styles: MG 00E/A, 00F, 00F ADP, 00G, 00M, 00R, 00F ADPBS.	

SHELL STYLE 02	Fixed, square flange panel mount receptacle without accessory threads.	
	Style: MG 02R, 02Y.	

SHELL STYLE 01	In-line, cable extension receptacle with accessory threads, with or without accessories.	
	Style: MG 01E/A, 01F, 01F ADP, 01G, 01M, 01R, 01F ADPBS	

SHELL STYLE 07	Fixed, single hole mounting jam-nut receptacle, with or without accessory threads	
	Style: MG 07A, 07T	

FREE CONNECTORS (CABLE CONNECTORS)

Free, straight cable connector with accessory threads, with or without accessories.		SHELL STYLE 06
Style: MG 06E/A, 06F, 06F ADP, 06G, 06M, 06R, 06T, 06F ADPBS, 06VR.		

Free, 90° cable connector with accessory threads, with or without accessories.		SHELL STYLE 08
Style: MG 08F, 08R, 08F ADP, 08G, 08M, 08F ADPBS.		

MG 06 F 28-11 S X - - A30 003E C&C

Series - MG / MGR	
MG -Reverse Bayonet Coupling Series (As per JSS 50815, eq. to VG 95234)	
MGR -as per MG but Receptacle with Wear Pin, Plug with Spring & Washer under coupling nut.	

Shell Style (see pg 9)	
00	Wall Mount Receptacle with rear accessory Thread
01	Cable extension In-Line Receptacle
02	Box Mounting Receptacle without Rear Accessory Thread
06	Straight cable connector
07	Jam Nut Receptacle
08	90° Cable connector
TBF	Thru - Bulkhead receptacle

Environmental Class (see datasheets pg 25-58)	
EA	Backshell for Flex Tube (also used with 3057 'A' & 3057 'C' Cable clamps)
F	Applies to Cable plug 06, 08; Receptacle 00, 01. Scope is integral cable clamp, Telescopic Bushing & grommet. Also use for accessories codes ADP, ADPBS
FL	Long Coupling Nut on Plug 06
G	Backshell Type G as per VG95234 for Heat Shrink Boot
M	Backshell Type M as per VG95234 for Shielded Cable & Heat Shrink Boot
R	For receptacle 02 - Environmental resistant. For style 00, 01, 06 - Scope short Endbell with grommet. For style 08 - Scope 90° Angle backshell without cable clamp
T	Connector with Accessory Thread (Less Backshell & grommet) Also refer as - 211
VR	For Plug 06 & 08 - Over moulded Coupling Nut (Available in Shell size - 18 to 40)
Y	Receptacle with PCB Contacts

Shell Size & Insert arrangement (see pg 11-20)
Initial 2 digits are for shell size, last 1 or 2 digits are for the specific insert arrangement

Contact : P - Pin, S - Socket

Insert Orientation (see page 21-24)
Omit for Normal Orientation
W, X, Y, Z (as applicable)

Accessories	
C&C	Cap & Chain Assembly
SQG	SQ. Gasket for Front mounting Receptacle
SQGB	SQ. Gasket for Rear mounting Receptacle
SQGM	Conductive silver filled SQ. Gasket
(Size)-A Or (Size)-C	3057A or 3057C Type Cable Clamp - For connectors with EA type backshell (see pg 61 for more details)
ADP P(Size)+G	For PG adapter with gland*
ADP M(Size)+G	For Metric adapter with gland*
*Omit 'G' for No Gland in scope	
ADPBS / ADPBS SCA	Adapter for Brand-Strap/ Constant Force Spring. Add code 'SCA' for 2-piece backshell with spin nut

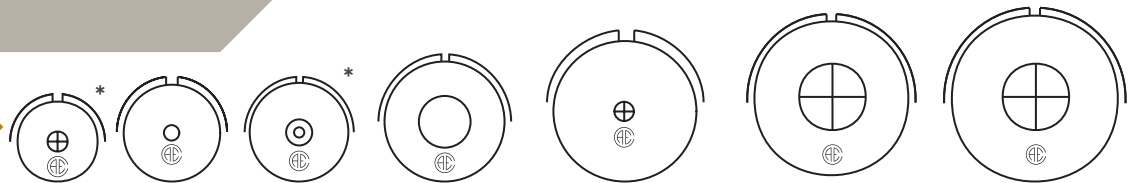
Finish Options	
Omit for Std: Cadmium Olive Drab	
003E	Black Zn - Co. Plated (RoHS & REACH)
101E	Green Zn - Co. Plated (RoHS & REACH)
NI	Bright nickel Plated (RoHS & REACH)
005E	Black Zn - Ni. Plated (RoHS & REACH) Consult Factory
SS	Stainless Steel Connector

Contact Options	
Omit for Std: Solder Contact (Silver Plated)	
A30	Crimp Contact Silver Plated
C30	Crimp Contact Gold Plated
LC	Less Contact
GP	Solder Contact Gold Plated
Contact Termination size options available. - See pg 62.	
Pre-Mating Contacts (First mate - Last Break), Screw termination contact available (Consult Factory)	

Insulator Options	
Omit for Standard: Polychloroprene	
FR	Flame Retardant Elastomer - Halogen free, Low Smoke Toxicity (EN45545 Qualified)
NPF	Flame Retardant Polychloroprene (UL94V - 0 qualified)
SI	Silicon Insulator
VTN	Flouro Carbon Insulator

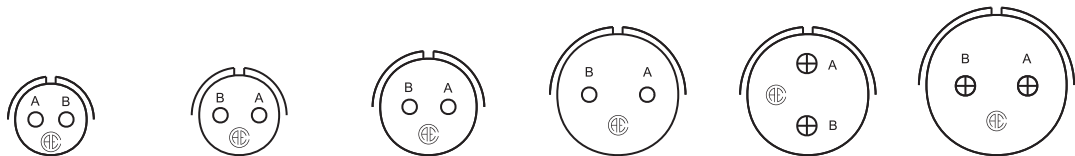
Modifications for shell style 00 & 02 only - Omit for other shell styles	
Omit for Standard: Receptacle for front mounting with thru mounting holes	
TH	Receptacle for front mounting with Metric Thrd. mounting holes
B05	Receptacle for rear mounting with thru mounting holes
B051	Receptacle for rear mounting with Metric Thrd. mounting holes
B052	Receptacle for rear mounting with UN Thrd. mounting holes
Further available - Please consult Factory before ordering	

1

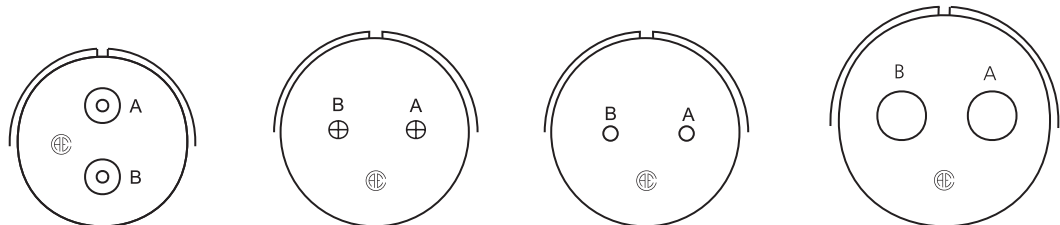


Arrangement	12-5	14S-4	14-3	16-12	18-16	20-2	22-7
No. of Contacts	1	1	1	1	1	1	1
Contact Size	12	16	8	4	12	0	0
Service Rating	D	D	A	A	C	D	E

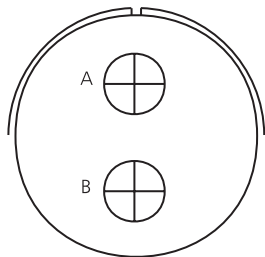
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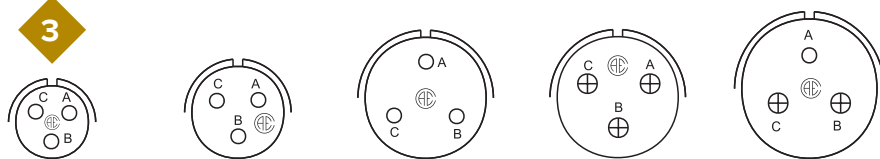
Arrangement	10SL-4	12S-3	14S-9	16S-4	16-11	18-3
No. of Contacts	2	2	2	2	2	2
Contact Size	16	16	16	16	12	12
Service Rating	A	A	A	D	A	D



Arrangement	20-23	22-8	22-11	24-9
No. of Contacts	2	2	2	2
Contact Size	8	12	16	4
Service Rating	A	E	B	A

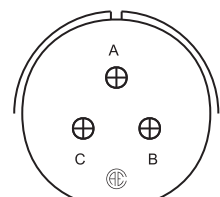
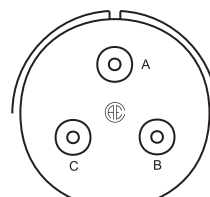
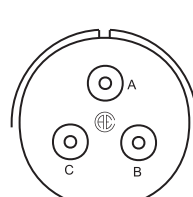
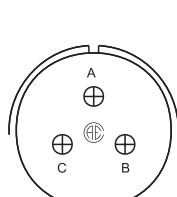
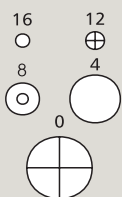


3



Arrangement	32-5	10SL-3	14S-7	16S-5	16-10	18-5
No. of Contacts	2	3	3	3	3	3
Contact Size	0	16	16	16	12	2-12, 1-16
Service Rating	D	A	A	A	A	D

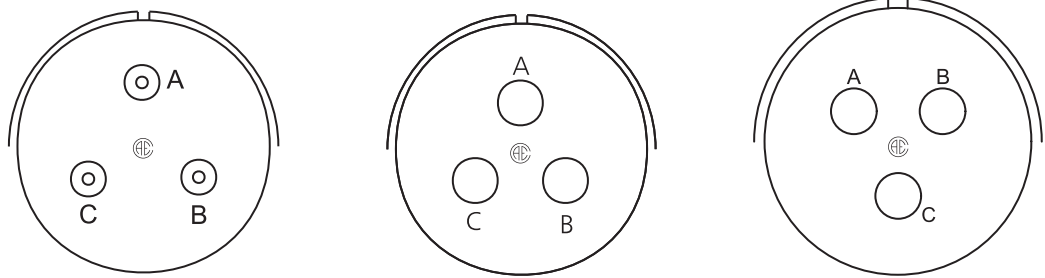
CONTACT LEGEND



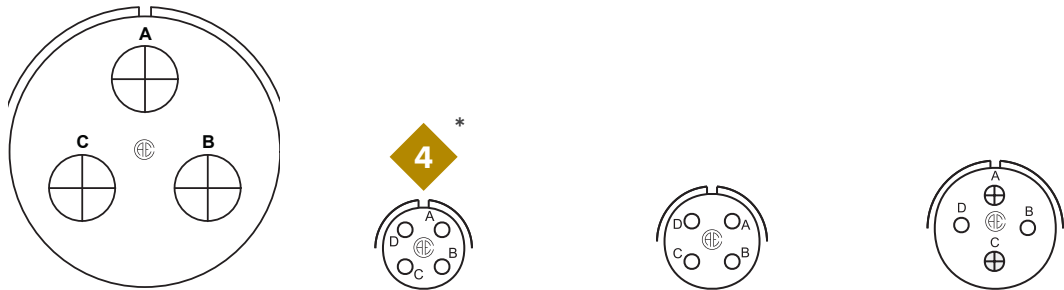
Arrangement	20-3	20-19	22-2	22-9
No. of Contacts	3	3	3	3
Contact Size	12	8	8	12
Service Rating	D	A	D	E

NOTE : Contact arrangement diagrams are for pictorial reference only, and are not drawn to scale.

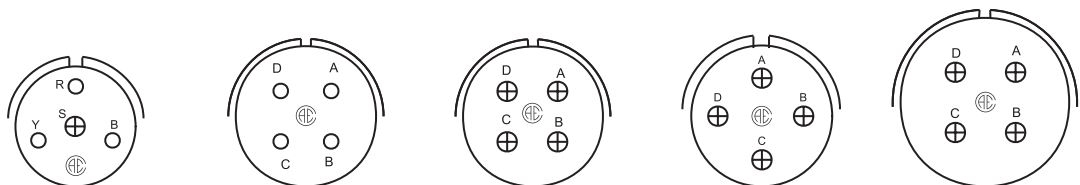
*Consult factory before ordering.



Arrangement	28-3	28-6	32L-3**~
No. of Contacts	3	3	3
Contact Size	8	4	4
Service Rating	E	D	E

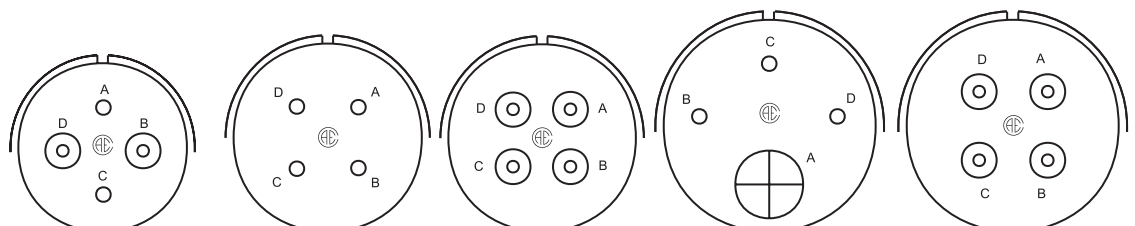
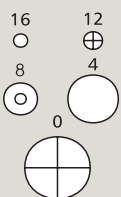


Arrangement	36-4	12SP-10*	14S-2	16-9
No. of Contacts	3	4	4	4
Contact Size	0	16	16	2-12, 2-16
Service Rating	A=D, BAL=A	INST.	INST.	A



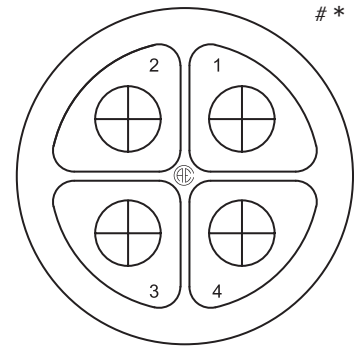
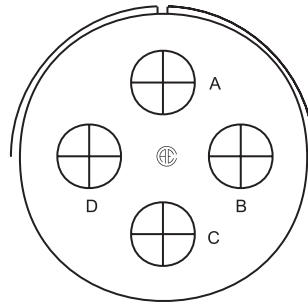
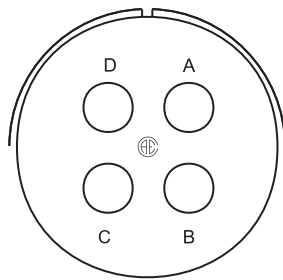
Arrangement	16-40	18-4	18-10	18-15	20-4
No. of Contacts	4	4	4	4	4
Contact Size	1-12, 3-16	16	12	12	12
Service Rating	INST.	D	A	A	D

CONTACT LEGEND



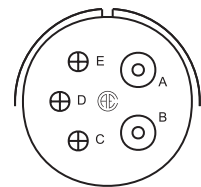
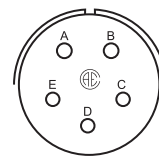
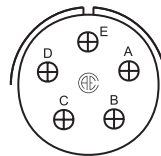
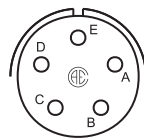
Arrangement	20-24	22-10	22-22	24-4	24-22
No. of Contacts	4	4	4	4	4
Contact Size	2-8, 2-16	16	8	1-0, 3-16	8
Service Rating	A	E	A	D	D

NOTE : Contact arrangement diagrams are for pictorial reference only, and are not drawn to scale * Consult factory before ordering ~ Available in crimp version only

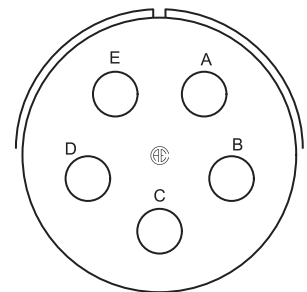
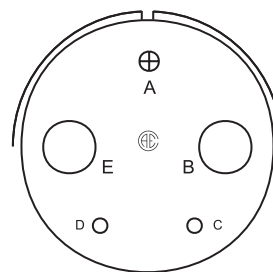
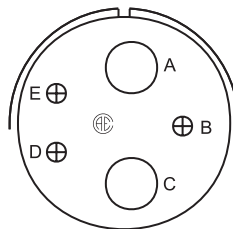
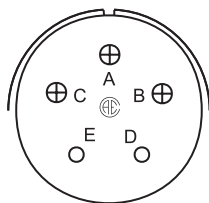


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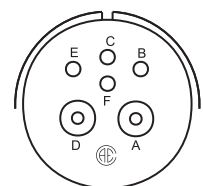
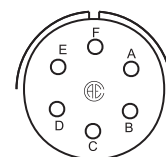
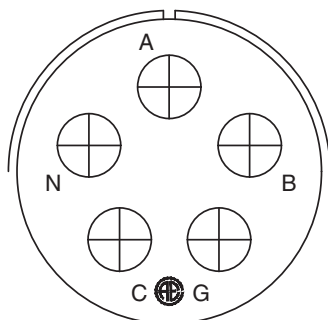
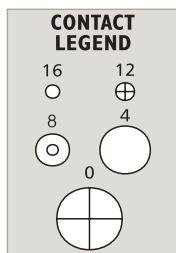
Arrangement	32-17	36-5	40LA-4
No. of Contacts	4	4	4
Contact Size	4	0	0
Service Rating	D	A	ABB 750V



Arrangement	14S-5	16S-8	18-11	18-20	20-14
No. of Contacts	5	5	5	5	5
Contact Size	16	16	12	16	2-8, 3-12
Service Rating	INST.	A	A	A	A

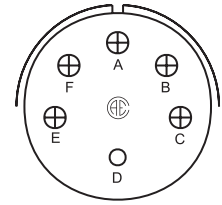
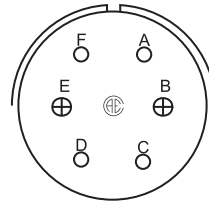
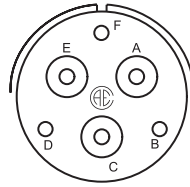
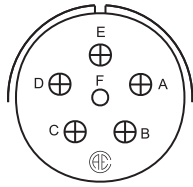


Arrangement	22-34	24-12	28-5	32L-50
No. of Contacts	5	5	5	5
Contact Size	3-12, 2-16	2-4, 3-12	2-4, 1-12, 2-16	4
Service Rating	D	A	D	A

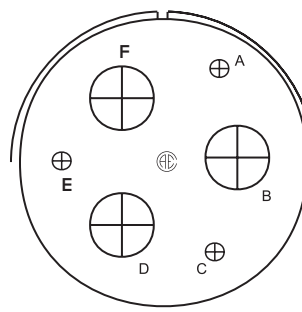
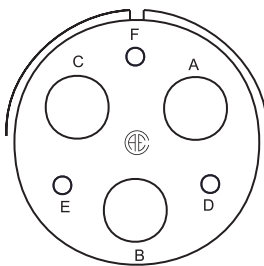
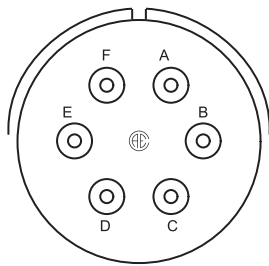


Arrangement	40L-50	14S-6	18-12	20-8
No. of Contacts	5	6	6	6
Contact Size	0	16	16	2-8, 4-16
Service Rating	A	INST.	A	INST.

NOTE : Contact arrangement diagrams are for pictorial reference only, and are not drawn to scale # Railway Specific Layout * Consult factory before ordering



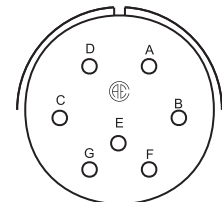
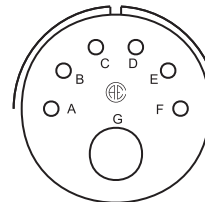
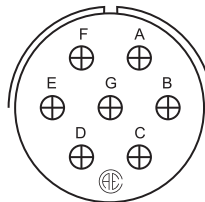
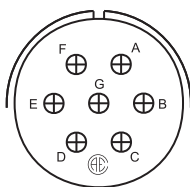
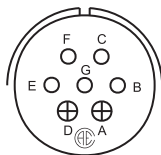
Arrangement	20-17	20-22	22-5	22-15
No. of Contacts	6	6	6	6
Contact Size	5-12, 1-16	3-8, 3-16	2-12, 4-16	5-12, 1-16
Service Rating	A	A	D	D=E, ABCEF=A



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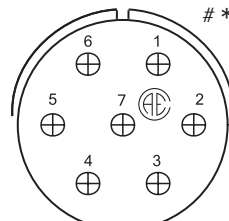
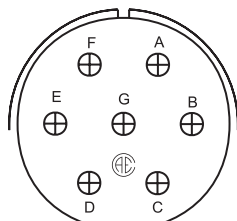
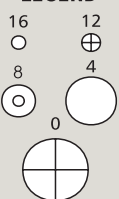


Arrangement	28L-6	28-22	36-3	14SL-61	16S-1
No. of Contacts	6	6	6	7	7
Contact Size	8	3-4, 3-16	3-0, 3-12	16	16
Service Rating	A	D	D	INST.	A

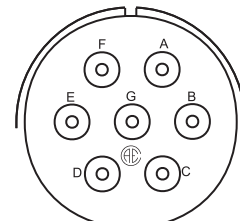


Arrangement	18-9	20-15	22-28	22-29	22-33
No. of Contacts	7	7	7	7	7
Contact Size	2-12, 5-16	12	12	1-4, 6-16	16
Service Rating	INST.	A	A	A	ABCD=D, EFG=A

CONTACT LEGEND



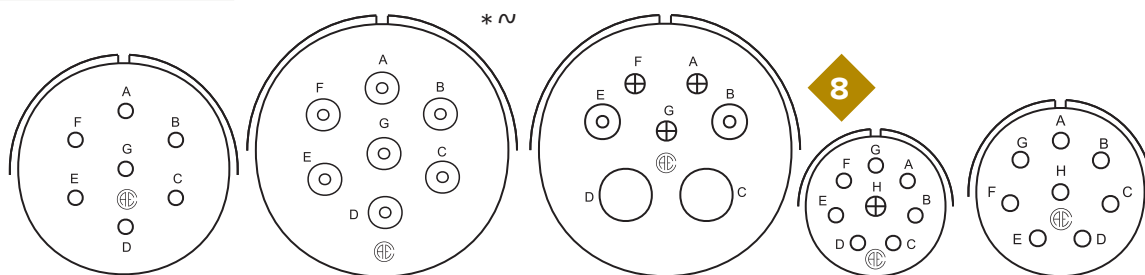
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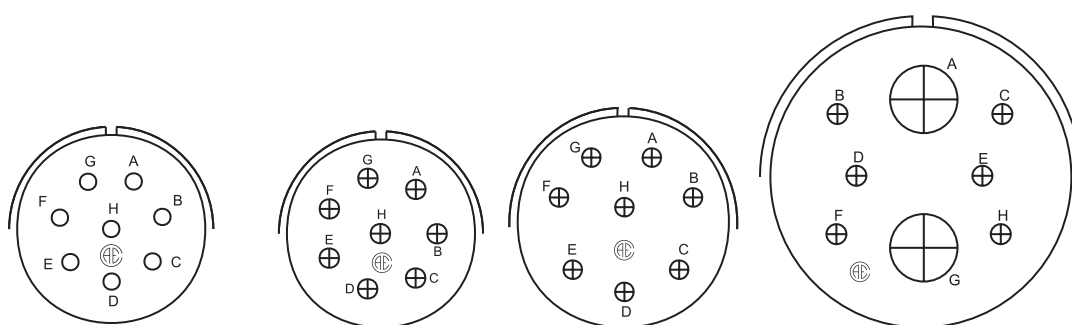
Arrangement	24-2	24GL-07	24-10
No. of Contacts	7	7	7
Contact Size	12	12	8
Service Rating	D	D	A

Railway specific layout * Consult factory before ordering

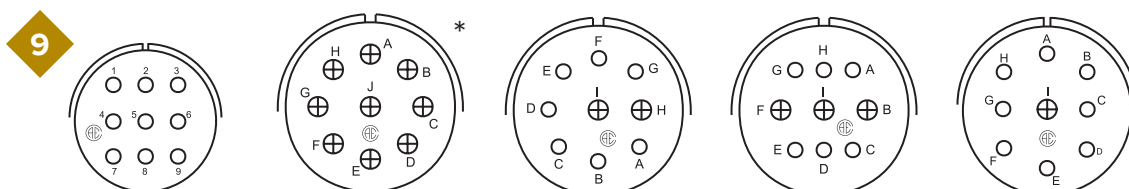
NOTE : Contact arrangement diagrams are for pictorial reference only, and are not drawn to scale



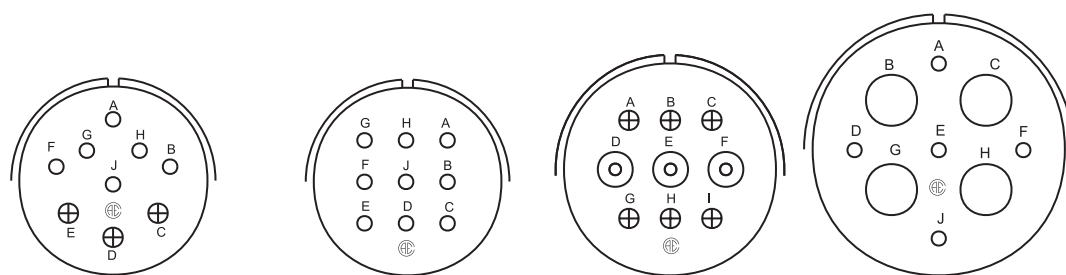
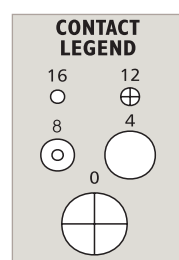
Arrangement	24-27	28 LI-7 [~]	28-10	18-8	20-7
No. of Contacts	7	7	7	8	8
Contact Size	16	8	2-4, 2-8, 3-12	1-12, 7-16	16
Service Rating	E	A	G=D, BAL.=A	A	ABHG=D, CDEF=A



Arrangement	22-18	22-23	24-6	32-15
No. of Contacts	8	8	8	8
Contact Size	16	12	12	2-0, 6-12
Service Rating	ABFGH=D, CDE=A	H=D, BAL=A	AGH=D, BAL=A	D

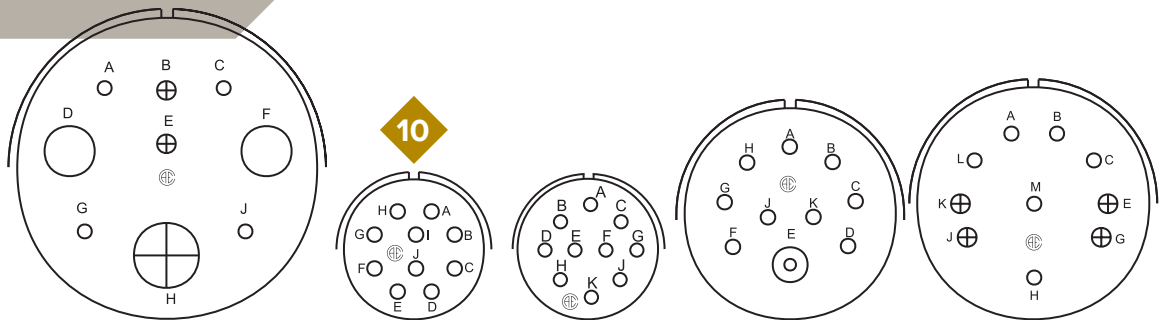


Arrangement	18-99	20L-9	20-16	20-18	20-21
No. of Contacts	9	9	9	9	9
Contact Size	16	12	2-12, 7-16	3-12, 6-16	1-12, 8-16
Service Rating	INST.	INST.	A	A	A

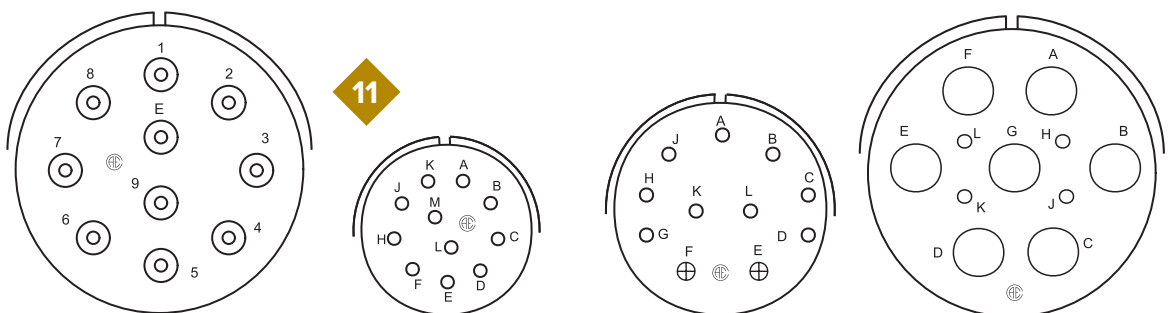


Arrangement	22-16	22-20	24-11	28L-16
No. of Contacts	9	9	9	9
Contact Size	3-12, 6-16	16	3-8, 6-12	5-16, 4-4
Service Rating	A	A	A	A

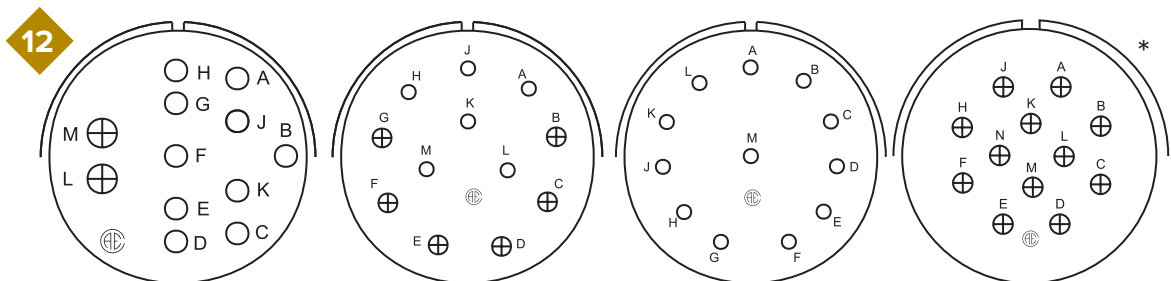
NOTE : Contact arrangement diagrams are for pictorial reference only, and are not drawn to scale
* Consult factory before ordering ~ Available in crimp version only



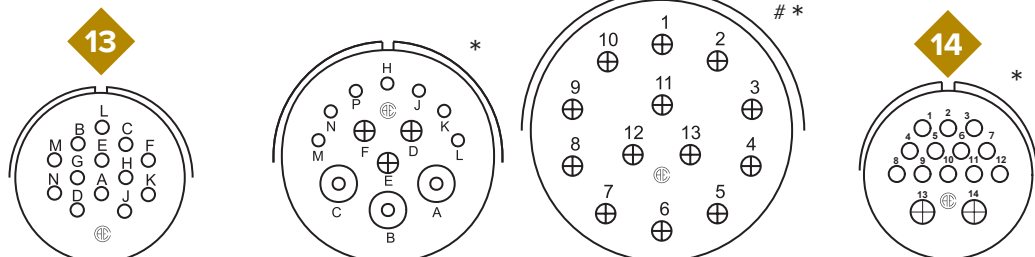
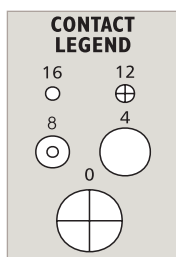
Arrangement	32-3	18-1	18-19	24-21	28-19
No. of Contacts	9	10	10	10	10
Contact Size	4-16, 2-12, 2-4, 1-0	16	16	1-8, 9-16	4-12, 6-16
Service Rating	D	BCFG=A, BAL=INST	A	D	HM=E, B=D, BAL=A



Arrangement	36L-100	20-33	24-20	40L-11
No. of Contacts	10	11	11	11
Contact Size	8	16	9-16, 2-12	7-4, 4-16
Service Rating	A	A	D	A



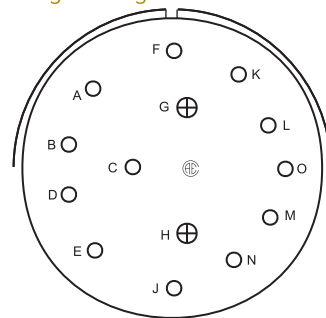
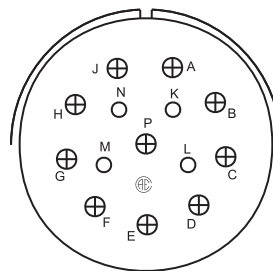
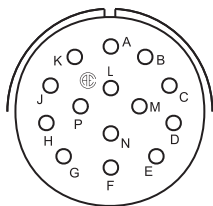
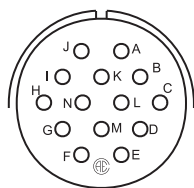
Arrangement	28-8	28-9	28-18	28-51
No. of Contacts	12	12	12	12
Contact Size	2-12, 10-16	6-12, 6-16	16	12
Service Rating	LM=E, B=D, BAL=A	D	M=C, GHJKL=D, AB=A, BAL=INST	A



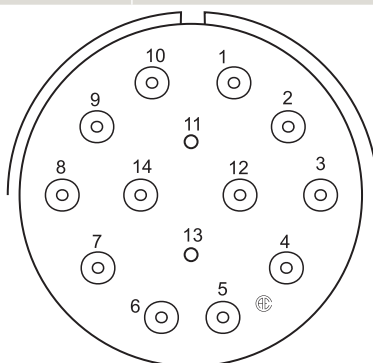
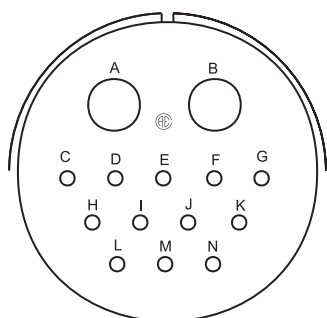
Arrangement	20-11	24L-58	32GL -13	20L-014
No. of Contacts	13	13	13	14
Contact Size	16	3-8, 3-12, 7-16	12	2-12, 12-16
Service Rating	INST	INST	D	13,14=A, BAL=INST

Railway specific layout * Consult factory before ordering

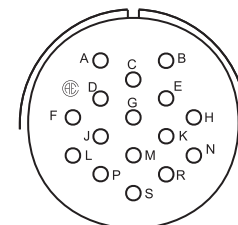
NOTE : Contact arrangement diagrams are for pictorial reference only, and are not drawn to scale



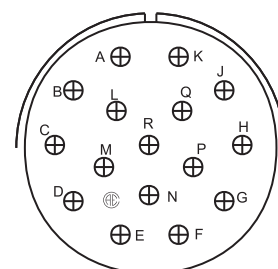
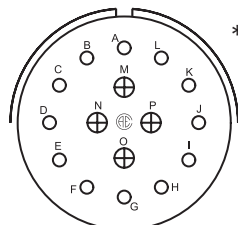
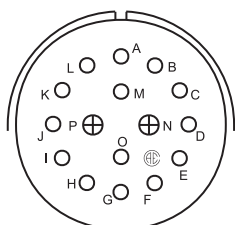
Arrangement	20-27	22-19	28-20	32-4
No. of Contacts	14	14	14	14
Contact Size	16	16	10-12, 4-16	2-12, 12-16
Service Rating	A	A	A	FJKN=A, BAL.=D



16

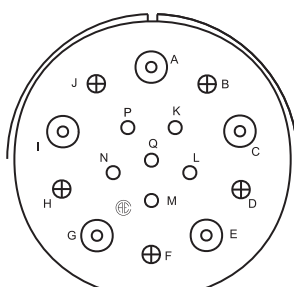
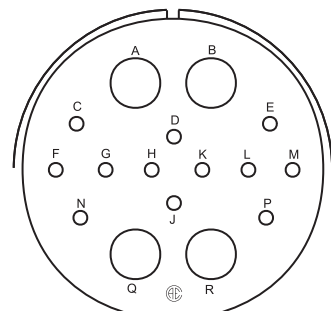
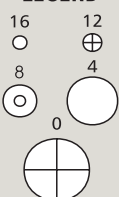


Arrangement	32-9	36L-78*	24-5
No. of Contacts	14	14	16
Contact Size	12-16, 2-4	12-8, 2-16	16
Service Rating	D	D	A

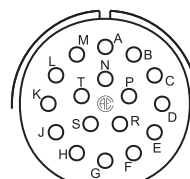


Arrangement	24-7	24L-16	28L-61
No. of Contacts	16	16	16
Contact Size	2-12, 14-16	4-12, 12-16	12
Service Rating	A	MNPQ=INST, BAL=A	A

CONTACT LEGEND



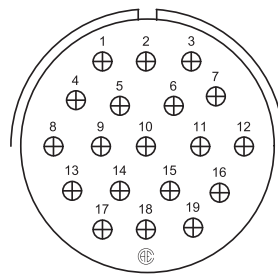
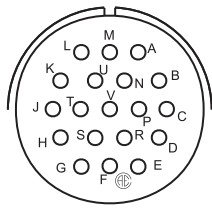
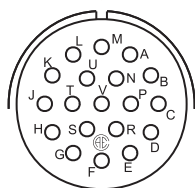
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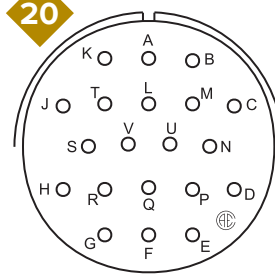
Arrangement	32L-68	36-14	20-29
No. of Contacts	16	16	17
Contact Size	4-4, 12-16	5-8, 5-12, 6-16	16
Service Rating	A	D	A

NOTE : Contact arrangement diagrams are for pictorial reference only, and are not drawn to scale. * Consult factory before ordering

19

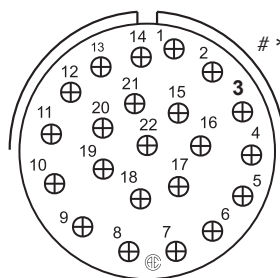
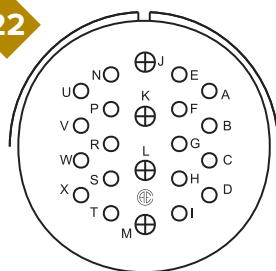


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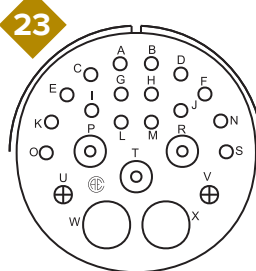


Arrangement	20L-48	22-14	32L-76	28-16
No. of Contacts	19	19	19	20
Contact Size	16	16	12	16
Service Rating	INST.	A	A	A

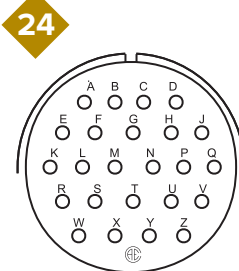
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23

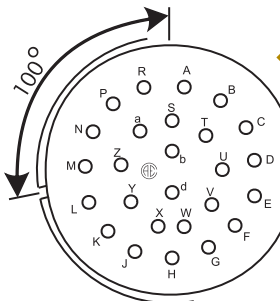
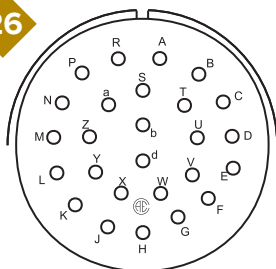


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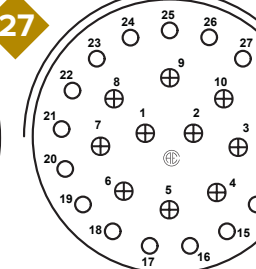


Arrangement	28-11	36GL-22	32-6	24-28
No. of Contacts	22	22	23	24
Contact Size	4-12, 18-16	12	2-4, 3-8, 2-12, 16-16	16
Service Rating	A	A	A	INST.

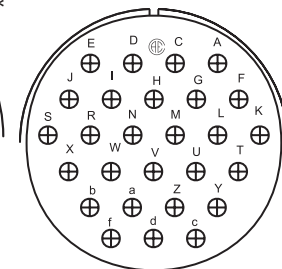
26



27

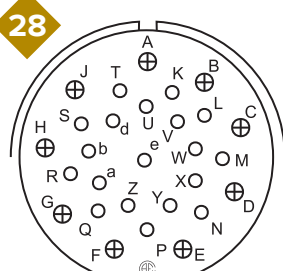


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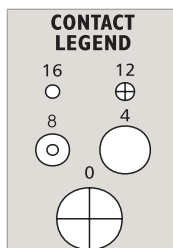
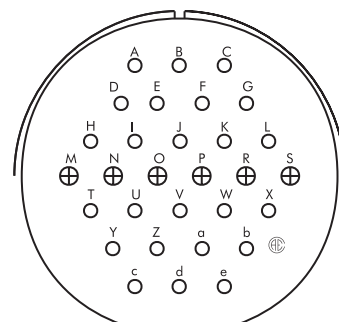
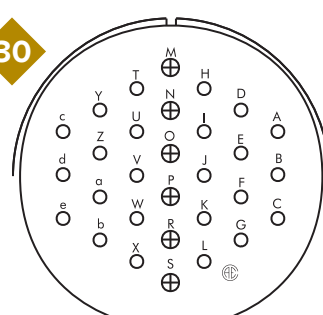


Arrangement	28-12	28-13	32GL-27	36L-46
No. of Contacts	26	26	27	27
Contact Size	16	16	10-12, 17-16	12
Service Rating	A	A	A	A

28



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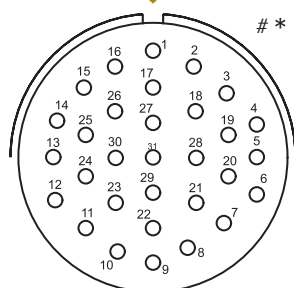


Arrangement	28L-63	32-8	40-1
No. of Contacts	28	30	30
Contact Size	9-12, 19-16	6-12, 24-16	6-12, 24-16
Service Rating	E=A. BAL=INST	A	D

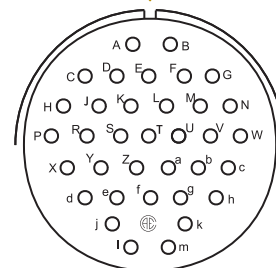
Railway specific layout * Consult factory before ordering

NOTE : Contact arrangement diagrams are for pictorial reference only, and are not drawn to scale

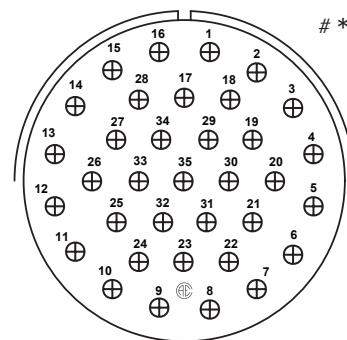
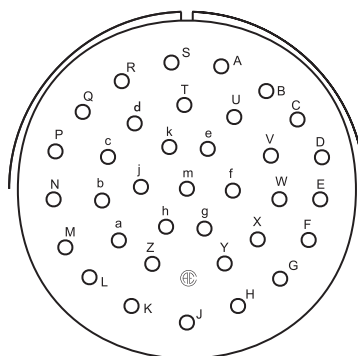
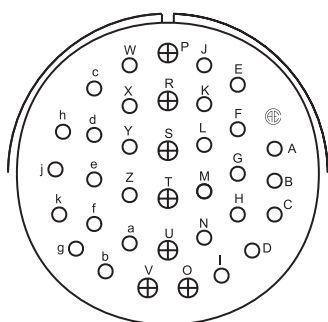
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35

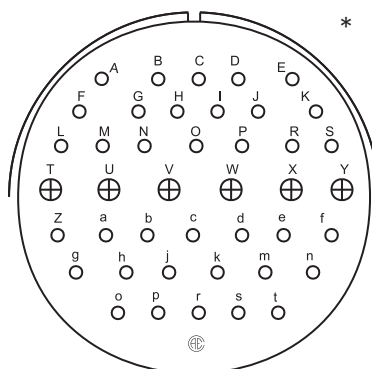


Arrangement	32GL-31	36-9	28-15
No. of Contacts	31	31	35
Contact Size	16	1-4, 2-8, 14-12, 14-16	16
Service Rating	A	A	A

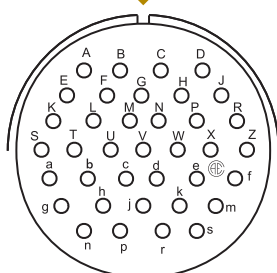


Arrangement	32-7	36-15	40GL-35
No. of Contacts	35	35	35
Contact Size	7-12, 28-16	16	12
Service Rating	ABHI = INST, BAL = A	m = D, BAL = A	D

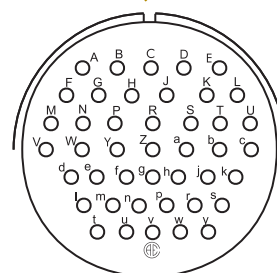
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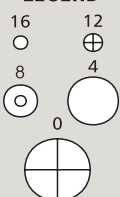
37



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CONTACT LEGEND

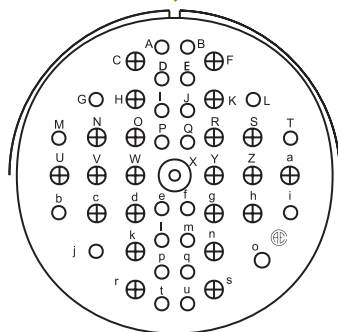


Arrangement	28-21	44-1	28L-51
No. of Contacts	37	42	43
Contact Size	16	6-12, 36-16	16
Service Rating	A	D	A

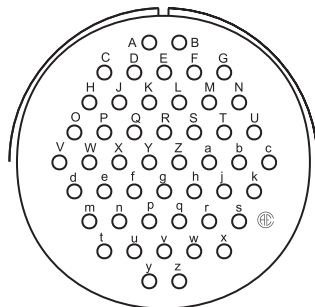
Railway specific layout * Consult factory before ordering

NOTE : Contact arrangement diagrams are for pictorial reference only, and are not drawn to scale

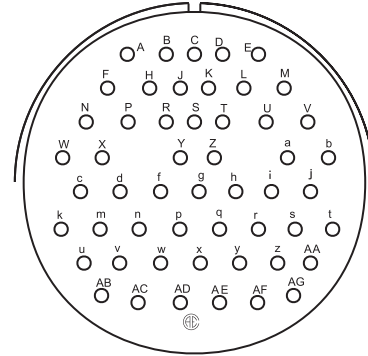
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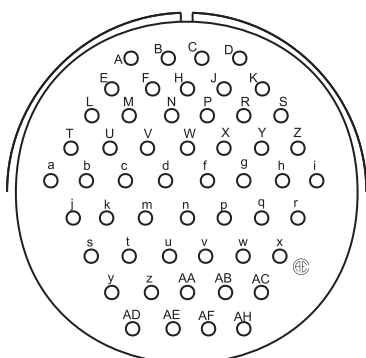


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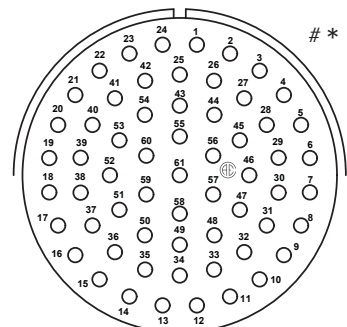


Arrangement	40-9	36-10	36L-34
No. of Contacts	47	48	52
Contact Size	1-8, 22-12, 24-16	16	16
Service Rating	A	A	A

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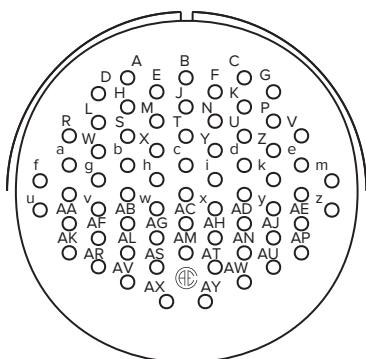


61

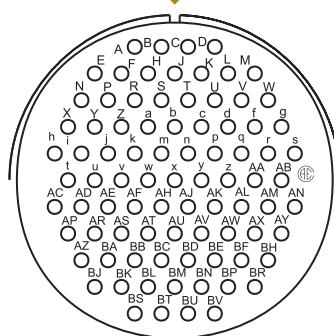


Arrangement	36-52	32L-10	40GL-63
No. of Contacts	52	54	61
Contact Size	16	16	16
Service Rating	A	A	A

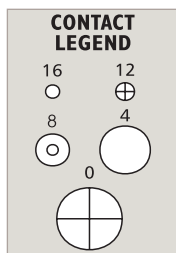
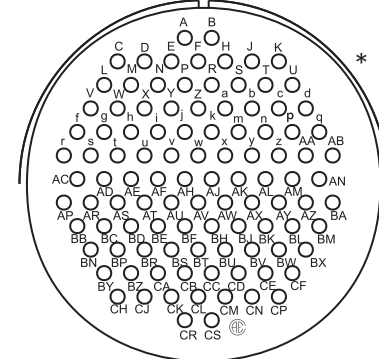
67



85







104



Arrangement	36L-67	40-56	44-52
No. of Contacts	67	85	104
Contact Size	16	16	16
Service Rating	A	A	A

Railway specific layout * Consult factory before ordering NOTE : Contact arrangement diagrams are for pictorial reference only, and are not drawn to scale





INSERT ARRANGEMENTS

INSERT NO.	TOTAL CONTACTS	CONTACT SIZE					ALTERNATE POSITIONS (DEGREES)			
		# 0	# 4	# 8	# 12	# 16				
10SL-3	3	-	-	-	-	3	-	-	-	-
10SL-4	2	-	-	-	-	2	-	-	-	-
12S-3*	2	-	-	-	-	2	70	145	215	290
12-5*	1	-	-	-	1	-	-	-	-	-
12SP-10*	4	-	-	-	-	4	-	-	-	-
14S-1*	3	-	-	-	-	3	-	-	-	-
14S-2	4	-	-	-	-	4	-	120	240	-
14-3	1	-	-	1	-	-	-	-	-	-
14S-4	1	-	-	-	-	1	-	-	-	-
14S-5	5	-	-	-	-	5	-	110	-	-
14S-6	6	-	-	-	-	6	-	-	-	-
14S-7	3	-	-	-	-	3	90	180	270	-
14S-9	2	-	-	-	-	2	70	145	215	290
14SL-61	7	-	-	-	-	7	-	-	-	-
16S-1	7	-	-	-	-	7	80	-	-	280
16S-4	2	-	-	-	-	2	35	110	250	325
16S-5	3	-	-	-	-	3	70	145	215	290
16S-8	5	-	-	-	-	5	-	170	265	-
16-9	4	-	-	-	2	2	35	110	250	325
16-10	3	-	-	-	3	-	90	180	270	-
16-11	2	-	-	-	2	-	35	110	250	325
16-12	1	-	1	-	-	-	-	-	-	-
16-40	4	-	-	-	1	3	-	-	-	-
18-1	10	-	-	-	-	10	70	145	215	290
18-3	2	-	-	-	2	-	35	110	250	325
18-4	4	-	-	-	-	4	35	110	250	325
18-5	3	-	-	-	2	1	80	110	250	280
18-8	8	-	-	-	1	7	70	-	-	290
18-9	7	-	-	-	2	5	80	110	250	280
18-10	4	-	-	-	4	-	-	120	240	-
18-11	5	-	-	-	5	-	-	170	265	-
18-12	6	-	-	-	-	6	80	-	-	280
18-15	4	-	-	-	4	-	-	120	240	-
18-16	1	-	-	-	1	-	-	-	-	-
18-19	10	-	-	-	-	10	-	120	240	-
18-20	5	-	-	-	-	5	90	180	270	-
18-99	9	-	-	-	-	9	-	-	-	-
20-2	1	1	-	-	-	-	-	-	-	-
20-3	3	-	-	-	3	-	70	145	215	290
20-4	4	-	-	-	4	-	45	110	250	-
20-7	8	-	-	-	-	8	80	110	250	280
20-8	6	-	-	2	-	4	80	110	250	280
20L-9*	9	-	-	-	9	-	-	110	250	-
20-11	13	-	-	-	-	13	-	-	-	-
20-14	5	-	-	2	3	-	80	110	250	280
20L-014*	14	-	-	-	2	12	-	-	-	-
20-15	7	-	-	-	7	-	80	-	-	280

For these insert arrangements, mis-mating may occur between some orientations.
User discretion is advised.





* Consult factory before ordering

INSERT ARRANGEMENTS





INSERT NO.	TOTAL CONTACTS	CONTACT SIZE					ALTERNATE POSITIONS (DEGREES)			
		# 0	# 4	# 8	# 12	# 16				
20-16	9	-	-	-	2	7	80	110	250	280
20-17	6	-	-	-	5	1	90	180	270	-
20-18	9	-	-	-	3	6	35	110	250	325
20-19	3	-	-	3	-	-	90	180	270	-
20-21	9	-	-	-	1	8	35	110	250	325
20-22	6	-	-	3	-	3	80	110	250	280
20-23	2	-	-	2	-	-	35	110	250	325
20-24	4	-	-	2	-	2	35	110	250	325
20-27	14	-	-	-	-	14	35	110	250	325
20-29	17	-	-	-	-	17	80	-	-	280
20-33	11	-	-	-	-	11	-	-	-	-
20L-48*	19	-	-	-	-	19	-	80	280	-
22-2	3	-	-	3	-	-	70	145	215	290
22-5	6	-	-	-	2	4	35	110	250	325
22-7	1	1	-	-	-	-	-	-	-	-
22-8	2	-	-	-	2	-	35	110	150	325
22-9	3	-	-	-	3	-	70	145	215	290
22-10	4	-	-	-	-	4	35	110	250	325
22-11	2	-	-	-	-	2	35	110	250	325
22-14	19	-	-	-	-	19	80	110	250	280
22-15	6	-	-	-	5	1	80	110	250	280
22-16	9	-	-	-	3	6	80	110	250	280
22-18	8	-	-	-	-	8	80	110	250	280
22-19	14	-	-	-	-	14	80	110	250	280
22-20	9	-	-	-	-	9	35	110	250	325
22-22	4	-	-	4	-	-	-	110	250	-
22-23	8	-	-	-	8	-	35	-	250	-
22-28	7	-	-	-	7	-	80	-	-	280
22-29	7	-	1	-	-	6	80	110	250	280
22-33	7	-	-	-	-	7	80	110	250	280
22-34	5	-	-	-	3	2	80	110	250	280
24-2	7	-	-	-	7	-	80	-	-	280
24-4	4	1	-	-	-	3	80	110	250	280
24-5	16	-	-	-	-	16	80	110	250	280
24-6	8	-	-	-	8	-	80	110	250	280
24-7	16	-	-	-	2	14	80	110	250	280
24-9	2	-	2	-	-	-	35	110	250	325
24-10	7	-	-	7	-	-	80	-	-	280
24-11	9	-	-	3	6	-	35	110	250	325
24-12	5	-	2	-	3	-	80	110	250	280
24L-16*	16	-	-	-	4	12	-	-	-	-
24-20	11	-	-	-	2	9	80	110	250	280
24-21	10	-	-	1	-	9	80	110	250	280
24-22	4	-	-	4	-	-	45	110	250	-
24-27	7	-	-	-	-	7	80	-	-	280
24-28	24	-	-	-	-	24	80	110	250	280

* Consult factory before ordering # For these insert arrangements, mis-mating may occur between some orientations. User discretion is advised.

INSERT ARRANGEMENTS

INSERT NO.	TOTAL CONTACTS	CONTACT SIZE					ALTERNATE POSITIONS (DEGREES)			
		# 0	# 4	# 8	# 12	# 16				
24L-58*	13	-	-	3	3	7	-	-	-	-
28-3	3	-	-	3	-	-	70	145	215	290
28-5	5	-	2	-	1	2	35	110	250	325
28-6	3	-	3	-	-	-	70	145	215	290
28L-6	6	-	-	6	-	-	-	-	-	-
28LI-7**	7	-	-	7	-	-	-	-	-	-
28-8	12	-	-	-	2	10	80	110	250	280
28-9	12	-	-	-	6	6	80	110	250	280
28-10	7	-	2	2	3	-	80	110	250	280
28-11	22	-	-	-	4	18	80	110	250	280
28-12	26	-	-	-	-	26	90	180	270	-
28-13	26	-	-	-	-	26	-	-	-	-
28-15	35	-	-	-	-	35	80	110	250	280
28-16	20	-	-	-	-	20	80	110	250	280
28L-16	9	-	4	-	-	5	-	-	-	-
28-18	12	-	-	-	-	12	70	145	215	290
28-19	10	-	-	-	4	6	80	110	250	280
28-20	14	-	-	-	10	4	80	110	250	280
28-21	37	-	-	-	-	37	80	110	250	280
28-22	6	-	3	-	-	3	70	145	215	290
28-51*	12	-	-	-	12	-	80	135	195	-
28L-51	43	-	-	-	-	43	-	-	-	-
28L-61	16	-	-	-	16	-	-	-	-	-
28L-63*	28	-	-	-	9	19	-	100	260	-
32-3	9	1	2	-	2	4	80	110	250	280
32L-3**	3	-	3	-	-	-	22	44	76	98
32-4	14	-	-	-	2	12	80	110	250	280
32-5	2	2	-	-	-	-	35	110	250	325
32-6	23	-	2	3	2	16	80	110	250	280
32-7	35	-	-	-	7	28	80	125	235	280
32-8	30	-	-	-	6	24	80	125	235	280
32-9	14	-	2	-	-	12	80	110	250	280
32L-10	54	-	-	-	-	54	-	-	-	-
32-15	8	2	-	-	6	-	35	110	250	280
32-17	4	-	4	-	-	-	45	110	250	-
32L-50	5	-	5	-	-	-	-	-	-	-
32L-68	16	-	4	-	-	12	-	-	-	-
32L-76	19	-	-	-	19	-	80	110	250	280
36-3	6	3	-	-	3	-	70	145	215	290
36-4	3	3	-	-	-	-	70	145	215	290
36-5	4	4	-	-	-	-	-	120	240	-
36-9	31	-	1	2	14	14	80	125	235	280
36-10	48	-	-	-	-	48	80	125	235	280
36-14	16	-	-	5	5	6	90	180	270	-
36-15	35	-	-	-	-	35	60	125	245	305
36L-34	52	-	-	-	-	52	-	-	-	-
36L-46	27	-	-	-	27	-	-	-	-	-

* Consult factory before ordering ** Available in crimp version only

INSERT NO.	TOTAL CONTACTS	CONTACT SIZE					ALTERNATE POSITIONS (DEGREES)			
		# 0	# 4	# 8	# 12	# 16				
36-52	52	-	-	-	-	52	72	144	216	288
36L-67	67	-	-	-	-	67	-	-	-	-
36L-78*	14	-	-	12	-	2	-	-	-	-
36L-100	10	-	-	10	-	-	-	-	-	-
40-1	30	-	-	-	6	24	65	130	235	300
40-9	47	-	-	1	22	24	65	125	225	310
40L-11	11	-	7	-	-	4	-	-	-	-
40-56	85	-	-	-	-	85	72	144	216	288
44-1*	42	-	-	-	6	36	65	125	225	310
44-52*	104	-	-	-	-	104	-	-	-	-

FOR RAILWAY SPECIFIC APPLICATIONS*~^							ALTERNATE POSITIONS AVAILABLE ON REQUEST, PLEASE CONSULT FACTORY
18GL-11	5	-	-	-	5	-	
22GL-14	19	-	-	-		19	
24GL-07	7	-	-	-	7	-	
28GL-21	37	-	-	-		37	
32GL - 13	13	-	-	-	13	-	
32GL - 27	27	-	-	-	10	17	
32GL-31	31	-	-	-		31	
36GL-22	22	-	-	-	22	-	
40LA-4	4	4	-	-	-	-	
40GL - 35	35	-	-	-	35	-	
40GL-63	61	-	-	-	-	61	

* Consult factory before ordering ^ Special crimp contacts applicable
~ Available in crimp version only

DATASHEET

MG 00E/A

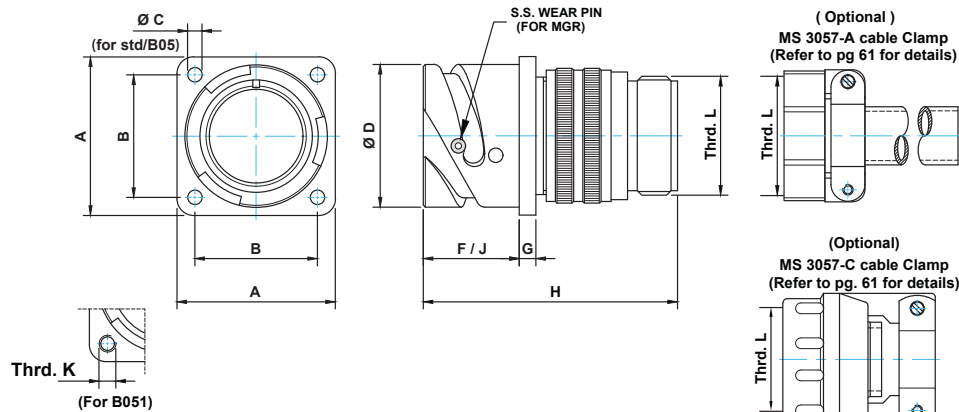
- Wall mount receptacle with endbell for flex tube



MG 00E/A... Wall mounting receptacle for Front mounting with Endbell for flex tube.

MGR 00E/A... As per MG 00E/A but with S.S. wear pin.

00E/A... **B05** : Rear Mounting, Refer Dimn. 'J' & **Clear hole ØC**
00E/A... **B051** : Rear Mounting, Refer Dimn. 'J' & 'K' (**Thrd. hole**).



- 'Step-Up' and 'Step-Down' style endbells available. Consult factory.

**Longer endbell available on request

SHELL SIZE	A REF.	B	ØC +0.15 (for std/ B05)	ØD REF.	F +0.4 (Front Mount)	G ±0.2	H** MAX	J +0.4 (B05 / B051) (Rear Mount)	K ISO Thread (B051)	L UNEF - 2A Thread	MS 3057 Cable Clamp (Optional)			
											Type A	Type C		
10SL	25.4	18.2	3.2	18.2	14.2	2.8	52.0	18.2	M4	5/8 " - 24	4A	4C		
12S*	28.0	20.5		21.4		3.2							62.0	23.0
14S	30.0	23.0		24.6						19.0	7/8" - 20	8A		
16S	31.8	24.6		27.4		4.0								
16				30.8	13/16" - 18		12A	12C						
18	35.0	27.0		34.2						1 7/16" - 18	16A	16C		
20	38.0	29.4		37.4	1 3/4" - 18		20A	20C						
22	41.0	31.8		40.9		2" - 18 UN				24A	24C			
24	44.5	34.9	46.7	2 1/4" - 16 UN	28A		28C							
28	50.8	39.7	53.4			22.2		65.0	24.0	M5				
											46.7			
32	57.0	44.5	4.3								59.6	65.0	24.0	M5
36	63.5	49.2		66.0										
40*	69.8	55.6												

NOTE : Dimensions are not contractual & may be subject to changes

*Consult Factory

DATASHEET

MG 00F

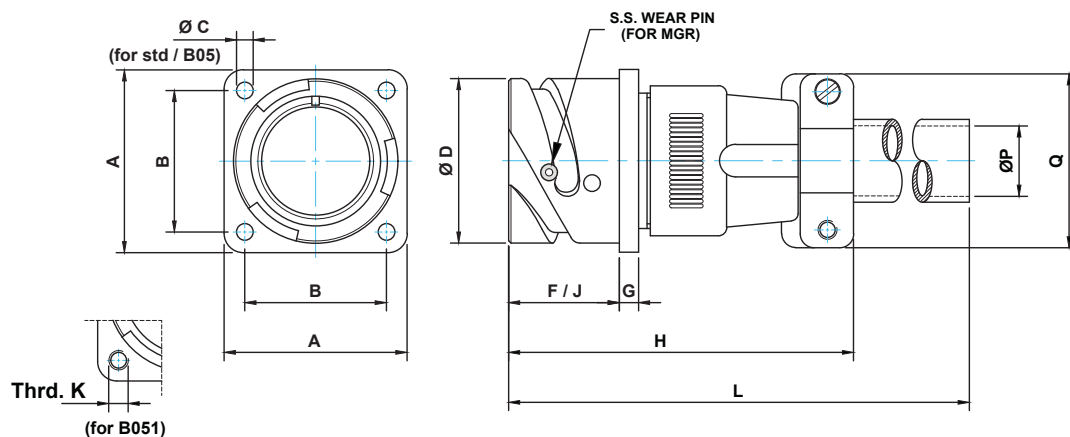
- Wall mount receptacle with integral strain relief cable clamp



MG 00F... Wall mounting receptacle for Front mounting with integral strain relief Cable Clamp (Includes Grommet & Follower)

MGR 00F... As per MG 00F but with S.S. wear pin.

00F... **B05** : Rear Mounting, Refer Dimn. 'J' & **Clear hole ØC**
00F... **B051** : Rear Mounting, Refer Dimn. 'J' & 'K' (**Thrd. hole**).



SHELL SIZE	A REF.	B	ØC +0.15 (for std / B05)	ØD REF.	F +0.4 (Front Mount)	G ±0.2	J +0.4 (B05 / B051) (Rear Mount)	K ISO Thread (B051)	H MAX	L MAX	ØP Ref.	Q MAX			
10SL	25.4	18.2		18.2	14.2	2.8	18.2	M4	53.0	120.0	5.5	23.0			
12S*	28.0	20.5		21.4		3.2					58.0		8.0	28.0	
14S	30.0	23.0		24.6						3.2					
16S	31.8	24.6		3.2	27.4	19.0			23.0		68.0	125.0	14.0	33.0	
16			35.0					27.0							
20	38.0	29.4		34.2	18.8								44.2		
22	41.0	31.8		37.4						24.0				M5	78.0
24	44.5	34.9	3.7	40.9	20.6										
28	50.8	39.7		46.7				22.2							
32	57.0	44.5	4.3	53.4											
36	63.5	49.2		59.6											

NOTE : Dimensions are not contractual & may be subject to changes

*Consult factory before ordering

DATASHEET

MG 00F ... ADP P_/M_

- Wall mount receptacle with adapter backshell with internal PG or metric threads



MG 00F ... ADP P_ / M_ ... Wall mounting receptacle for Front mounting with Adapter backshell (& Cable Gland - Optional) (includes Grommet & Follower)

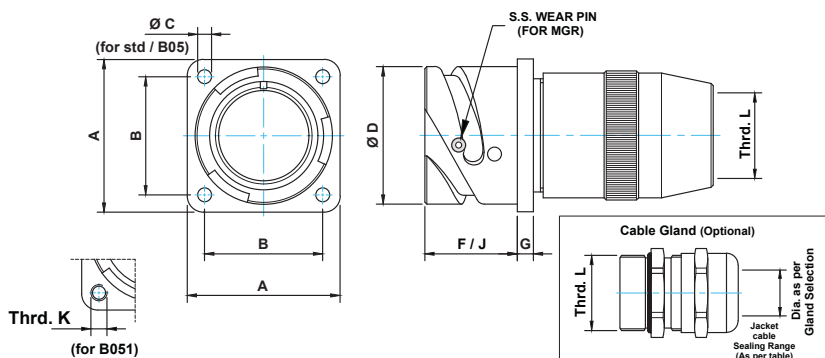
MGR 00F ... ADP P_ / M_ ... As per MG 00F ADP but with **S.S.wear pin.**

00F ... ADP P_/M_... **B05** : Rear Mounting. Refer Dimn. 'J' & **Clear hole ØC**
00F ... ADP P_/M_... **B051** : Rear Mounting. Refer Dimn. 'J' & 'K' (**Thrd. hole**)

Add 'G' at the end for Brass Gland (Nickel Plated) & 'NGB' for Nylon Gland

Eg. : MGR 00F 14S-7P ADP P11 G

Scope Wall Mount Receptacle 14S-7P with Adapter Backshell of PG11 Thd. with PG11 Brass Gland in scope



Jacketed Cable Sealing Range*** (mm)			
PG		METRIC	
PG 7	Ø3-6.5 mm	M12 x 1.5	Ø4.5-7 mm
PG 9	Ø4-8 mm	M16 x 1.5	Ø5.5-10 mm
PG 11	Ø5-10 mm	M20 x 1.5	Ø8-13 mm
PG 13.5	Ø6-12 mm	M25 x 1.5	Ø10-17 mm
PG 16	Ø9-14 mm	M32 x 1.5	Ø12-21 mm
PG 21	Ø12-18 mm	M40 x 1.5	Ø20-28 mm
PG 29	Ø17-25 mm	M50 x 1.5	Ø28-35 mm
PG 36	Ø20-32 mm	M63 x 1.5	Ø35-45 mm
PG 42	Ø29-38 mm		
PG 48	Ø35-44 mm		

*** Reference cable sealing range for brass glands. In case gland is being purchased separately, please refer to catalogue of gland manufacturer.

SHELL SIZE	A REF.	B	ØC +0.15 (for std B05)	ØD REF.	F +0.4 (Front Mount)	G ±0.2	J +0.4 (B05 / B051) (Rear Mount)	K ISO Thread (B051)	L**** THREAD	
									Metric	PG
10SL	25.4	18.2	3.2	18.2	14.2	2.8	18.2	M4	M12 M16	PG7 PG9 PG11 PG13.5
12S*	28.0	20.5		21.4		3.2				
14S	30.0	23.0		24.6					M16 M20 M25	PG7 PG9 PG11 PG13.5 PG16
16S	31.8	24.6		27.4	19.0	M16 M20 M25 M32	PG7 PG9 PG11 PG13.5 PG16 PG21 PG29			
16				30.8					M20 M25 M32 M40	PG9 PG11 PG13.5 PG16 PG21 PG29
18	35.0	27.0		34.2		4.0	24.0			
20	38.0	29.4		37.4	PG11 PG13.5 PG16 PG21 PG29 PG36					
22	41.0	31.8		40.9					PG21 PG29 PG36	
24	44.5	34.9	3.7	46.7	20.6					
28	50.8	39.7							4.3	
32	57.0	44.5	59.6							
36	63.5	49.2	66.0							
40*	69.8	55.6								

NOTE : Dimensions are not contractual & may be subject to changes
*Consult factory before ordering

**** For other sizes, consult factory.
Other option such as stainless steel glands, EMI/EMC glands, Conduit termination fittings available.

DATASHEET

MG 00G

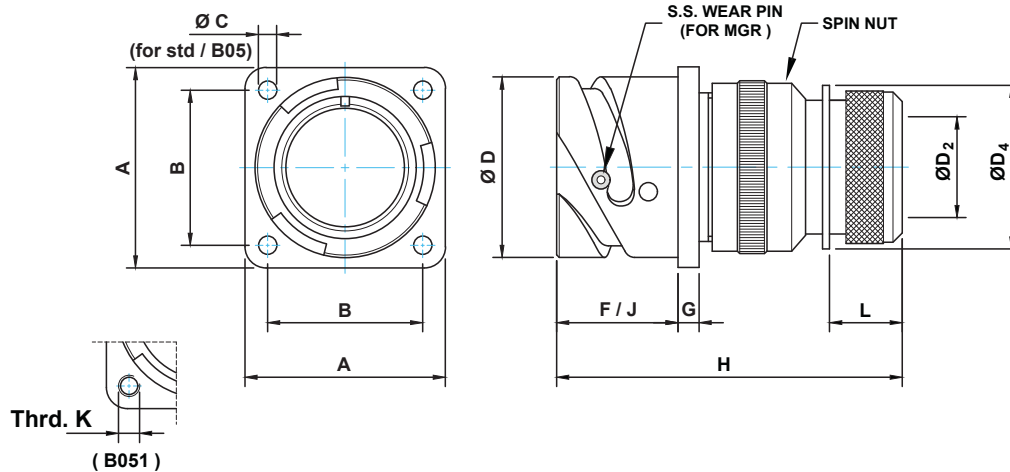
- Wall mount receptacle with backshell for heat shrink boot



MG 00G... Wall mounting receptacle for Front mounting with backshell for heat shrink boot (Includes Grommet & Follower)

MGR 00G... As per MG 00G but with S.S. wear pin.

00G... **B05** : Rear Mounting, Refer Dimn. 'J' & **Clear hole ØC**
00G... **B051** : Rear Mounting, Refer Dimn. 'J' & 'K' (**Thrd. hole**).



SHELL SIZE	A REF.	B	ØC +0.15 (for std / B05)	ØD REF.	F +0.4 (Front Mount)	G ±0.2	H REF.	J +0.4 (B05 / B051) (Rear Mount)	K ISO Thread (B051)	ØD ₂ MIN	ØD ₄ MAX	L REF.
10SL	25.4	18.2	3.2	18.2	14.2	3.2	53.0	18.2	M4	7.7	17.2	11.5
12S*	28.0	20.5		21.4						10.6	20.3	
14S	30.0	23.0		24.6						13.5	24.0	
16S	31.8	24.6		27.4						14.6	26.7	
16	31.8	24.6	3.7	27.4	19.0	4.0	60.0	23.0	M5	18.7	30.4	12.7
18	35.0	27.0		30.8						20.8	33.8	
20	38.0	29.4		34.2						24.6	38.3	
22	41.0	31.8		37.4						27.0	41.0	
24	44.5	34.9	4.3	40.9	20.6	78.0	24.0	M5	M5	33.3	48.8	15.2
28	50.8	39.7		46.7						38.5	55.0	
32	57.0	44.5		53.4								
36	63.5	49.2		59.6								

NOTE : Dimensions are not contractual & may be subject to changes

*Consult factory before ordering

DATASHEET

MG 00M

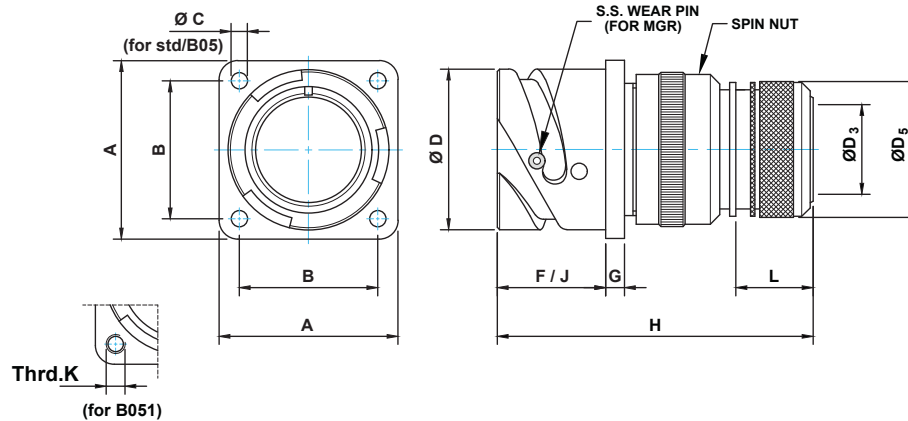
- Wall mount receptacle with backshell for shielded cable & heat shrink boot



MG 00M... Wall mounting receptacle for Front mounting with Backshell for shielded cable & heat shrink termination (Includes Grommet & Follower)

MGR 00M... As per MG 00M but with S.S. wear pin.

00M... **B05** : Rear Mounting, Refer Dimn. 'J' & **Clear hole ØC**
00M... **B051** : Rear Mounting, Refer Dimn. 'J' & 'K' (**Thrd. hole**).



SHELL SIZE	A REF.	B	ØC +0.15 (for std / B05)	ØD REF.	F +0.4 (Front Mount)	G ±0.2	H REF.	J +0.4 (B05 / B051) (Rear Mount)	K ISO THREAD (B051)	ØD ₃ MIN	ØD ₅ REF	L REF.		
10SL	25.4	18.2		18.2	14.2	2.8	56.0	18.2	M4	8.5	18.5	17.0		
12S*	28.0	20.5		21.4		3.2				68.0	23.0		10.6	22.0
14S	30.0	23.0		24.6									18.0	
16S	31.8	24.6	3.2	27.4	19.0	M4	13.5	25.0						
16				30.8			32.0							
18	35.0	27.0			14.6			28.0						
20	38.0	29.4			18.5			32.0						
22	41.0	31.8		37.4	20.8		34.0							
24	44.5	34.9		3.7	40.9		20.6	74.0	24.0	M5	24.6	38.0		
28	50.8	39.7			46.7						27.0	41.0		
32	57.0	44.5		4.3	53.4		22.2		33.0		48.0			
36	63.5	49.2	59.6		38.5	55.0								
40*	69.8	55.6	66.0		46.0	62.0								

NOTE : Dimensions are not contractual & may be subject to changes

***Consult factory before ordering**

DATASHEET

MG 00R

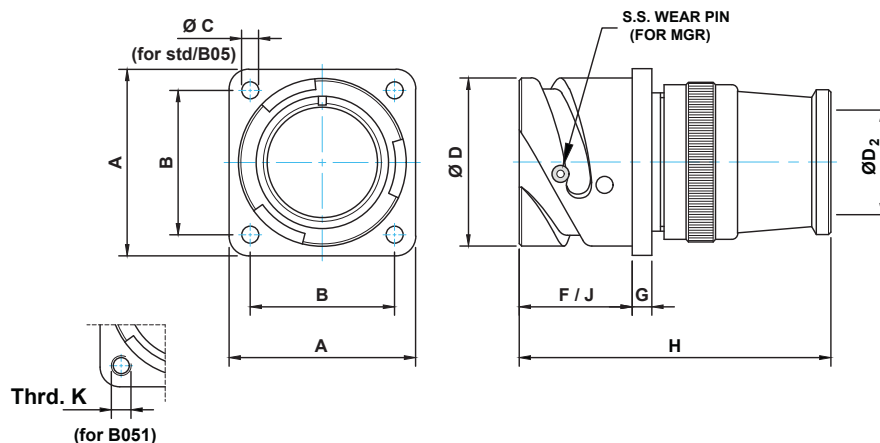
- Wall mount receptacle with short endbell



MG 00R... Wall mounting receptacle for Front mounting with 'Short Endbell' (Includes Grommet & Follower)

MGR 00R... As per MG 00R but with S.S. wear pin.

00R... **B05** : Rear Mounting, Refer Dimn. 'J' & **Clear hole ØC**
00R... **B051** : Rear Mounting, Refer Dimn. 'J' & 'K' (**Thrd. hole**).



SHELL SIZE	A REF.	B	ØC +0.15 (for std / B05)	ØD REF.	ØD ₂ MIN	F +0.4 (Front Mount)	G ±0.2	H MAX	J +0.4 (B05 / B051) (Rear Mount)	K ISO THREAD (B051)
10SL	25.4	18.2	3.2	18.2	8.0	14.2	2.8	53.0	18.2	M4
12S*	28.0	20.5		21.4			3.2			
14S	30.0	23.0		24.6	10.8					
16S	31.8	24.6		27.4	13.8	19.0	4.0	65.5	23.0	
16										
18	35.0	27.0		30.8	16.0			69.0		
20	38.0	29.4		34.2	19.0					
22	41.0	31.8		37.4						
24	44.5	34.9	3.7	40.9	23.0	20.6	72.0	24.0	M5	
28	50.8	39.7		46.7	24.0					
32	57.0	44.5	4.3	53.4	32.0	22.2				
36	63.5	49.2		59.6	35.5					
40*	69.8	55.6		66.0	45.0					

NOTE : Dimensions are not contractual & may be subject to changes

*Consult factory before ordering

DATASHEET

MG 00F ... ADPBS ...

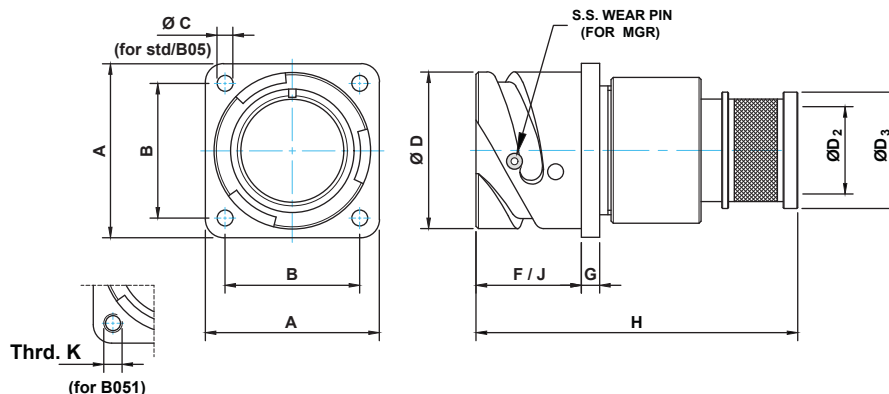
- Wall mount receptacle with adapter to terminate shielded braid with band-strap or constant force spring



MG 00F ... ADPBS ... Wall mounting receptacle with Adapter to terminate Shielded Braid with Band - strap or Constant Force spring, with heat shrink boot (Includes Grommet & Follower)

MGR 00F ... ADPBS ... As per MG 00F ADPBS but with S.S. wear pin.

00F... ADPBS ... **B05** :
Rear Mounting, Refer Dimn. 'J' & **Clear hole ØC**
00F... ADPBS ... **B051** :
Rear Mounting,
Refer Dimn. 'J' & 'K' (**Thrd. hole**).



Part number ordering guidelines for connector with standard, Step-Up, & Step-Down adapter with reduced or increased cable entry diameters*

STANDARD	
Example : MG 00F 28-21 P ADPBS 101E	
Connector 28-21 P	Cable entry & termination sizes as per shell size 28

STEP - UP	
Example : MG 00F 28-21 P ADPBS 28 / 32 101E	
Connector 28-21 P	Cable entry & termination sizes as per shell size 32

STEP - DOWN	
Example : MG 00F 28-21 P ADPBS 28 / 14 101E	
Connector 28-21 P	Cable entry & termination sizes as per shell size 14S

- 'Spin Style' Adapter with Anti-Rotation Teeth also available - Consult factory. Use code 'ADPBS SCA' instead of 'ADPBS' for 2-piece adapter with spin-nut.

SHELL SIZE	A REF.	B	ØC +0.15 (for std / B05)	ØD REF.	F +0.4 (Front Mount)	G ±0.2	J +0.4 (B05 / B051) (Rear Mount)	K ISO Thread (B051)	ØD ₂ MIN	ØD ₃ REF	H REF	
10SL	25.4	18.2	3.2	18.2	14.2	2.8	18.2	M4	8.1	14.5	65.0	
14S	30.0	23.0		24.6		3.2			23.0	11.1		17.5
16S	31.8	24.6		27.4						19.0		23.0
16												
18	35.0	27.0		30.8	15.9	22.3						
20	38.0	29.4		34.2			20.6		27.2			
22	41.0	31.8		37.4						21.0	27.8	
24	44.5	34.9	3.7	40.9	20.6	25.4		32.0				77.0
28	50.8	39.7		46.7		25.4	32.0					
32	57.0	44.5	4.3	53.4	22.2	24.0	M5	28.6	35.2	84.0		
36	63.5	49.2		59.6				33.5	40.5			
									39.0		46.0	

NOTE : Dimensions are not contractual & may be subject to changes

*For non-standard cable entry sizes, consult factory.

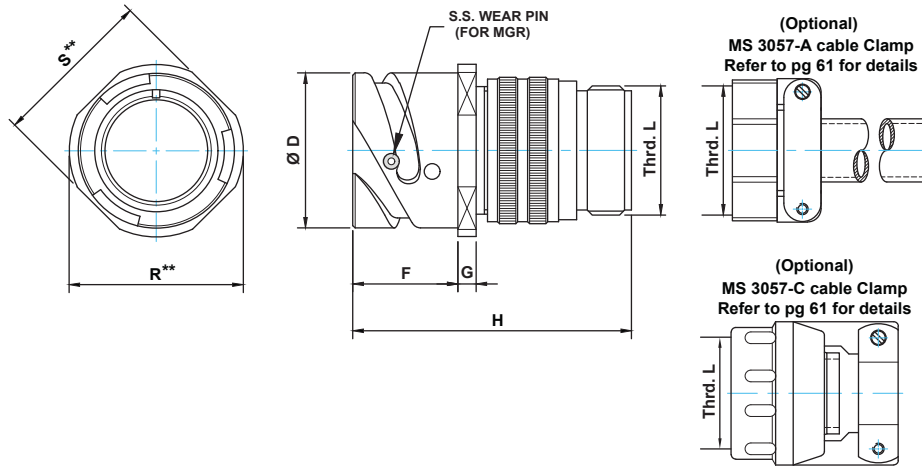
DATASHEET

MG 01 E/A

- In-line receptacle with endbell for flex tube



MG 01 E/A... Cable connecting receptacle (in-line) for Cable Extension with Endbell for flex tube
MGR 01 E/A... As per MG 01 E/A but **with S.S. wear pin.**



- 'Step-Up' and 'Step-Down' style endbells available. Consult factory.

** Actual shape of flange may vary - consult factory.

***Longer length Endbell available on request

SHELL SIZE	R REF.	S ±0.3	ØD REF.	F +0.4 -0.0	G ±0.2	H*** MAX	L UNEF - 2A Thread	MS 3057 Cable Clamp	
								Type A	Type C
10SL	25.4	20.6	18.2	14.2	2.8	50.0	5/8 " - 24	4A	4C
12S*	28.0	23.6	21.4						
14S	30.0	25.4	24.6						
16S	31.8	28.6	27.4	19.0	3.2	60.0	7/8" - 20	8A	8C
16									
18	35.0	31.7	30.8		20.6		4.0		
20	38.0	34.9	34.2	1 3/16" - 18		12A		12C	
22	41.0	38.1	37.4						
24	44.5	41.3	40.9		1 7/16" - 18		16A		16C
28	50.8	47.6	46.7						
32	57.0	54.0	53.4	2 1/4" - 16 UN		20A		20C	
36	63.5	60.6	59.6		24A		24C		
40*	69.8	66.5	66.0						

NOTE : Dimensions are not contractual & may be subject to changes

*Consult factory before ordering

DATASHEET

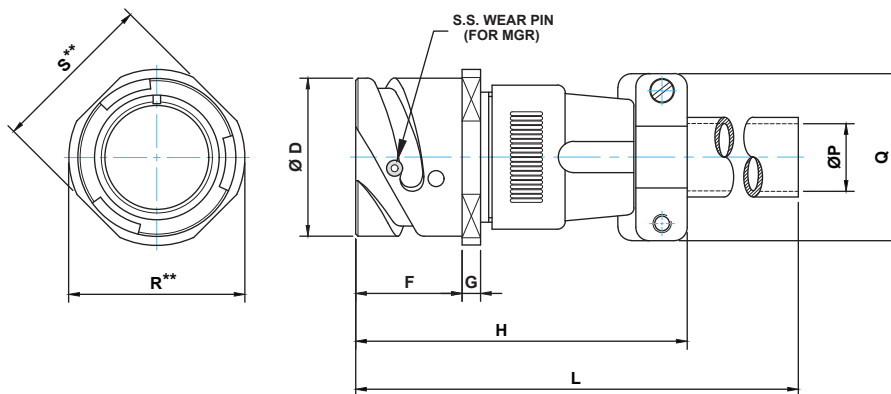
MG 01F

- In-line receptacle with integral strain relief cable clamp



MG 01F... Cable connecting receptacle (in-line) for Cable Extension with integral strain relief Cable Clamp & Telescopic Bushing (Includes Grommet & Follower)

MGR 01F... As per MG 01F but **with S.S. wear pin.**



** Actual shape of flange may vary - consult factory.

SHELL SIZE	R REF.	S ±0.3	ØD REF.	F +0.4	G ±0.2	H MAX	L MAX	ØP REF.	Q MAX		
10SL	25.4	20.6	18.2	14.2	2.8	50.0	120	5.5	23.0		
12S*	28.0	23.6	21.4		3.2					55.0	8.0
14S	30.0	25.4	24.6			19.0	66.0	11.0	30.5		
16S	31.8	28.6	27.4		4.0					75.0	14.0
16				125.0							
18	20.6	18.8	44.2								
20						22.2	24.0	52.7			
22					31.7				58.4		
24				85.0							
28											
32											
36											

NOTE : Dimensions are not contractual & may be subject to changes

***Consult factory before ordering**

DATASHEET

MG 01F ... ADP P _ / M _

- In-line receptacle with adapter backshell with internal PG or metric threads



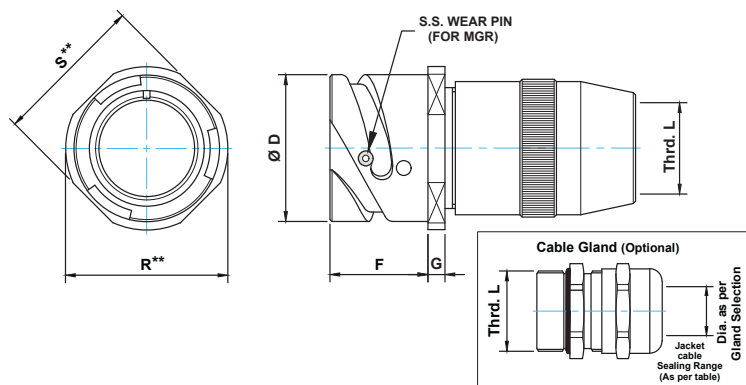
MG 01F ... ADP P _ / M _... Cable connecting receptacle (in-line) for Cable Extension with Adapter backshell (& Cable Gland - Optional) (includes Grommet & Follower)

Add 'G' at the end for Brass Gland (Nickel Plated) & 'NGB' for Nylon Gland

MGR 01F ... ADP P _ / M _... As per MG 01F ADP but **with S.S.wear pin.**

Eg. : MG 01F 14S-7P ADP P11 G

Scope Cable Connecting Receptacle 14S-7P with Adapter Backshell of PG11 Thd. with PG11 Brass Gland in scope



Jacketed Cable Sealing Range*** (mm)			
PG		METRIC	
PG 7	Ø3-6.5 mm	M12 x 1.5	Ø4.5-7 mm
PG 9	Ø4-8 mm	M16 x 1.5	Ø5.5-10 mm
PG 11	Ø5-10 mm	M20 x 1.5	Ø8-13 mm
PG 13.5	Ø6-12 mm	M25 x 1.5	Ø10-17 mm
PG 16	Ø9-14 mm	M32 x 1.5	Ø12-21 mm
PG 21	Ø12-18 mm	M40 x 1.5	Ø20-28 mm
PG 29	Ø17-25 mm	M50 x 1.5	Ø28-35 mm
PG 36	Ø20-32 mm	M63 x 1.5	Ø35-45 mm
PG 42	Ø29-38 mm		
PG 48	Ø35-44 mm		

**Actual shape of flange may vary - Consult factory

***Reference cable sealing range for brass glands. In case gland is being purchased separately, please refer to catalogue of gland manufacturer.

SHELL SIZE	R REF.	S ±0.3	ØD REF.	F +0.4	G ±0.2	L*** Thread				
						Metric	PG			
10SL	25.4	20.6	18.2	14.2	2.8	M12 M16	PG7 PG9 PG11 PG13.5			
12S*	28.0	23.6	21.4		3.2			M16 M20 M25	PG7 PG9 PG11 PG13.5 PG16	
14S	30.0	25.4	24.6			31.8	28.6			27.4
16S	31.8	28.6	27.4							
16										
18	35.0	31.7	30.8	19.0		4.0	M16 M20 M25 M32			PG7 PG9 PG11 PG13.5 PG16 PG21 PG29
20	38.0	34.9	34.2		M20 M25 M32 M40		PG9 PG11 PG13.5 PG16 PG21 PG29			
22	41.0	38.1	37.4					20.6	PG11 PG13.5 PG16 PG21 PG29 PG36	
24	44.5	41.3	40.9		22.2		PG21 PG29 PG36			
28	50.8	47.6	46.7	M32 M40		PG29 PG36 PG48				
32	57.0	54.0	53.4					M50 M63		
36	63.5	60.6	59.6							
40*	69.8	66.5	66.0							

NOTE : Dimensions are not contractual & may be subject to changes

For other sizes, consult factory. Other options such as stainless steel glands, EMI/EMC glands, Conduit termination fittings available.

***Consult factory before ordering**

DATASHEET

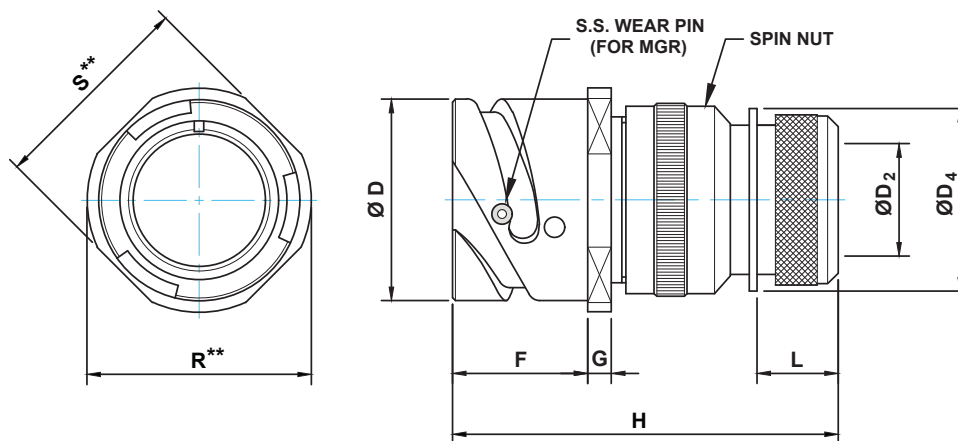
MG 01G

- In-line receptacle with backshell for heat shrink boot



MG 01G... Cable connecting receptacle (in-line) for Cable Extension with Backshell for Heat Shrink boot (Includes Grommet & Follower)

MGR 01G... As per MG 01G but with S.S. wear pin.



** Actual shape of flange may vary - Consult Factory

SHELL SIZE	R REF.	S ±0.3	ØD REF.	F +0.4	G ±0.2	H REF.	ØD ₂ MIN	ØD ₄ MAX	L REF.	
10SL	25.4	20.6	18.2	14.2	2.8	50.0	7.7	17.2	11.5	
12S*	28.0	23.6	21.4		3.2		10.6	20.3		
14S	30.0	25.4	24.6				13.5	24.0		
16S	31.8	28.6	27.4					14.6		26.7
16				35.0	31.7	30.8	19.0		59.0	
20	38.0	34.9	34.2	20.8	33.8					
22	41.0	38.1	37.4			24.6		38.3		
24	44.5	41.3	40.9							27.0
28	50.8	47.6	46.7	22.2	75.0	33.3	48.8	15.2		
32	57.0	54.0	53.4			38.5	55.0			
36	63.5	60.6	59.6							

NOTE : Dimensions are not contractual & may be subject to changes

* Consult Factory before ordering

DATASHEET

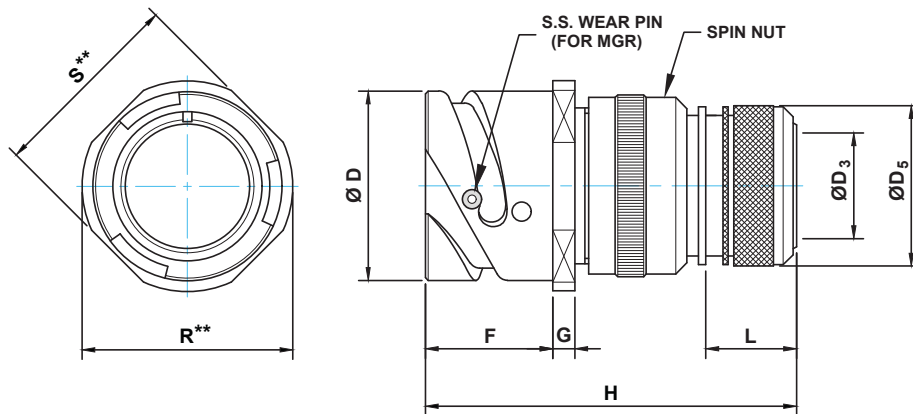
MG 01M

- In-line receptacle with backshell for shielded cable & heat shrink boot



MG 01M... Cable connecting receptacle (in-line) for Cable Extension with backshell for shielded cable & Heat Shrink boot termination (Includes Grommet & Follower)

MGR 01M... As per MG 01M but **with S.S. wear pin**.



** Actual shape of flange may vary - Consult Factory

SHELL SIZE	R REF.	S ±0.3	ØD REF.	F +0.4	G ±0.2	H REF.	ØD ₃ MIN	ØD ₅ REF	L REF.
10SL	25.4	20.6	18.2	14.2	2.8	52.0	8.5	18.5	17.0
12S*	28.0	23.6	21.4		3.2				
14S	30.0	25.4	24.6						
16S	31.8	28.6	27.4	19.0	67.0	13.5	25.0	18.0	
16									
18	35.0	31.7	30.8						
20	38.0	34.9	34.2						
22	41.0	38.1	37.4	20.6	72.0	20.8	34.0		
24	44.5	41.3	40.9			24.6	38.0		
28	50.8	47.6	46.7			27.0	41.0		
32	57.0	54.0	53.4	22.2	72.0	33.0	48.0		
36	63.5	60.6	59.6			38.5	55.0		
40*	69.8	66.5	66.0			46.0	62.0		

NOTE : Dimensions are not contractual & may be subject to changes

* Consult factory before ordering

DATASHEET

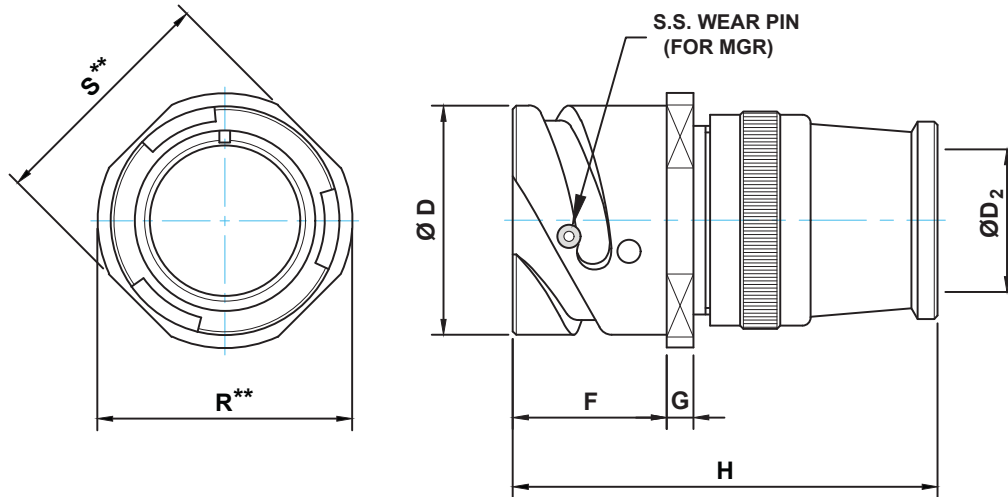
MG 01R

- In-line receptacle with short endbell



MG 01R... Cable connecting receptacle (in-line) for Cable Extension with 'Short Endbell'
(Includes Grommet & Follower)

MGR 01R... As per MG 01R but with S.S. wear pin.



** Actual shape of flange may vary - Consult Factory

SHELL SIZE	R REF.	S ±0.3	ØD REF.	ØD ₂ MIN	F +0.4	G ±0.2	H MAX
10SL	25.4	20.6	18.2	8.0	14.2	2.8	53.0
12S*	28.0	23.6	21.4			10.8	
14S	30.0	25.4	24.6	13.8			
16S	31.8	28.6	27.4			16.0	20.6
16				19.0	69.0		
18	35.0	31.7	30.8			23.0	4.0
20	38.0	34.9	34.2	24.0	72.0		
22	41.0	38.1	37.4			22.2	
24	44.5	41.3	40.9	45.0			
28	50.8	47.6	46.7		22.2		
32	57.0	54.0	53.4	22.2			
36	63.5	60.6	59.6		22.2		
40*	69.8	66.5	66.0	22.2			

NOTE : Dimensions are not contractual & may be subject to changes

* Consult factory before ordering

DATASHEET

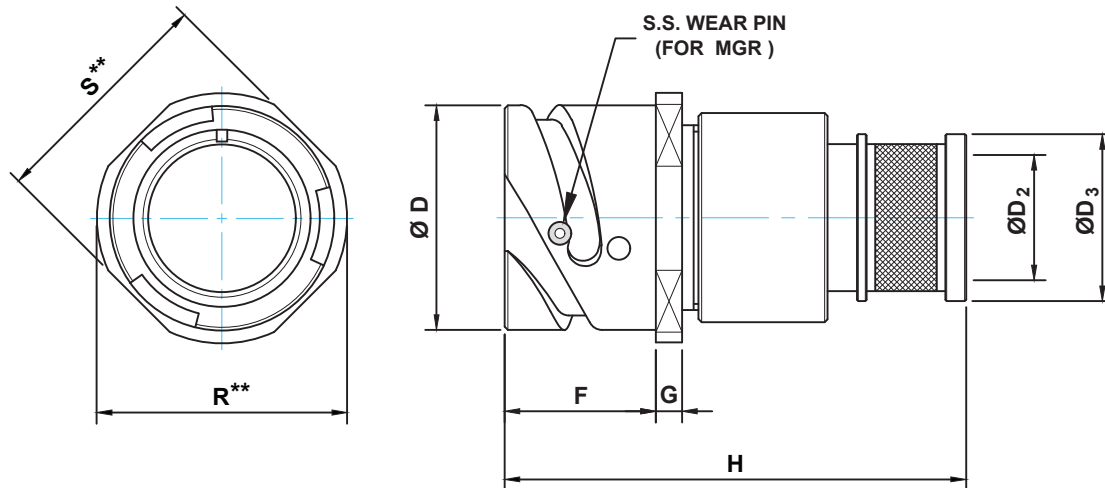
MG 01F ... ADPBS

- In-line receptacle with adapter to terminate shielded braid with band-strap or constant force spring



MG 01F... ADPBS... Cable connecting receptacle (in-line) for cable extension with Adapter to terminate shielded Braid with Band - Strap or Constant Force Spring, with heat shrink boot (Includes Grommet & Follower)

MGR 01F... ADPBS... As per MG 01F ADPBS but with S.S. wear pin.



PART NUMBER ORDERING GUIDELINES FOR CONNECTOR WITH STANDARD, STEP - UP & STEP - DOWN ADAPTER WITH REDUCED OR INCREASED CABLE ENTRY DIAMETER*

STANDARD	STEP - UP	STEP - DOWN
Example : <u>MG 01F 28-21 P ADPBS 101E</u> Connector 28-21 P — Cable entry & termination sizes as per shell size 28	Example : <u>MG 01F 28-21 P ADPBS 28 / 32 101E</u> Connector 28-21 P — Cable entry & termination sizes as per shell size 32	Example : <u>MG 01F 28-21 P ADPBS 28 / 14 101E</u> Connector 28-21 P — Cable entry & termination sizes as per shell size 14S

- 'Spin Style' Adapter with Anti-Rotation Teeth also available - Consult factory. Use code 'ADPBS SCA' instead of 'ADPBS' for 2-piece adapter with spin-nut.

** Actual shape of flange may vary - Consult Factory

SHELL SIZE	R REF	S ±0.3	ØD REF.	F +0.4 -0.0	G ±0.2	ØD ₂ MIN	ØD ₃ REF	H REF
10SL	25.4	20.6	18.2	14.2	2.8	8.1	14.5	62.0
14S	30.0	25.4	24.6		3.2	11.1	17.5	
16S	31.8	28.6	27.4			13.0	19.4	
16				19.0	4.0	15.9	22.3	77.0
18	35.0	31.7	30.8			20.6	27.2	
20	38.0	34.9	34.2			21.0	27.8	
22	41.0	38.1	37.4			25.4	31.0	
24	44.5	41.3	40.9	20.6	28.6	35.2	84.0	
28	50.8	47.6	46.7		33.5	40.5		
32	57.0	54.0	53.4	22.2	39.0	46.0		
36	63.5	60.6	59.6					

*For non - standard cable entry sizes, please consult factory

NOTE : Dimensions are not contractual & may be subject to changes

NOTE : Dimensions are not contractual & may be subject to changes

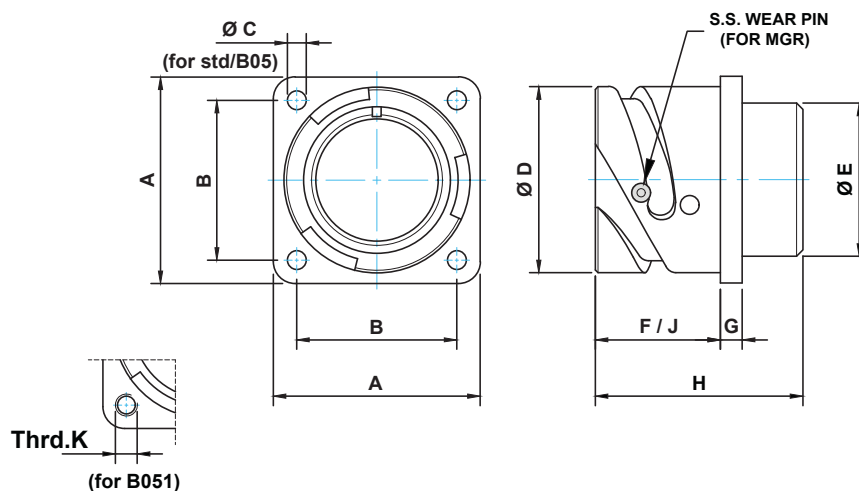


MG 02R ... Box mounting receptacle for Front mounting (no accessory threads).

MGR 02R ... As per MG 02R but with S.S. wear pin.

02R... B05 :
Rear Mounting, Refer Dimn. 'J' & **Clear hole ØC**

02R... B051 :
Rear Mounting, Refer Dimn. 'J' & 'K' (**Thrd. hole**).



SHELL SIZE	A REF.	B	ØC +0.15 (for std / B05)	ØD REF.	ØE MAX	F +0.4 (Front Mount)	G ±0.2	H MAX	J +0.4 (B05 / B051) (Rear Mount)	K ISO Thread (B051)		
10SL	25.4	18.2	3.2	18.2	16.2	14.2	2.8	24.7	18.2	M4		
12S*	28.0	20.5		21.4			3.2					
14S	30.0	23.0		24.6	19.2							
16S	31.8	24.6		27.4	22.4	19.0	4.0	33.8				
16												
18	35.0	27.0		30.8	25.6			23.0				
20	38.0	29.4		34.2	29.0							
22	41.0	31.8		37.4	32.2							
24	44.5	34.9	3.7	40.9	35.3	20.6	4.0	35.7	24.0			
28	50.8	39.7		46.7	41.4							
32	57.0	44.5	4.3	53.4	47.8	22.2		37.3	24.0			
36	63.5	49.2		59.6	54.2							
40*	69.8	55.6		66.0	60.5							

NOTE : Dimensions are not contractual & may be subject to changes

***Consult factory before ordering**

DATASHEET

MG 02Y

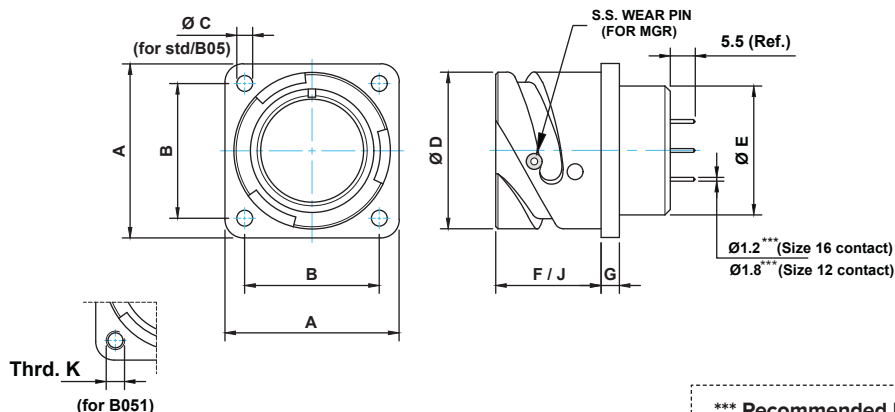
- Box mount receptacle with PCB termination contacts



MG 02Y ... Box mounting receptacle for Front mounting with PCB contacts (no accessory threads).

MGR 02Y ... As per MG 02Y but with S.S. wear pin.

02Y... **B05** :
Rear Mounting**, Refer Dimn. 'J' & **Clear hole ØC**
02Y... **B051** :
Rear Mounting**, Refer Dimn. 'J' & 'K' (**Thrd. hole**).



- PCB contacts only available in contact size 16 and size 12.
Consult factory before ordering.

**Rear mount type recommended

*** Recommended PCB Hole Diameter:

Ø1.7^{+0.1} mm (Size 16 contact)

Ø2.3^{+0.1} mm (Size 12 contact)

SHELL SIZE	A REF.	B	ØC +0.15 (for std / B05)	ØD REF.	ØE MAX	F +0.4 (Front Mount)	G ±0.2	J** +0.4 (B05 / B051) (Rear Mount)	K ISO Thread (B051)	
10SL	25.4	18.2	3.2	18.2	16.2	14.2	2.8	18.2	M4	
12S*	28.0	20.5		21.4			3.2			
14S	30.0	23.0		24.6	19.2					
16S	31.8	24.6		27.4	22.4	19.0	4.0	23.0		
16										
18	35.0	27.0		30.8	25.6					
20	38.0	29.4		34.2	29.0					
22	41.0	31.8	37.4	32.2						
24	44.5	34.9	3.7	40.9	35.3	20.6	24.0	M5		
28	50.8	39.7		46.7	41.4					
32	57.0	44.5	4.3	53.4	47.8	22.2				
36	63.5	49.2		59.6	54.2					
40*	69.8	55.6		66.0	60.5					

NOTE : Dimensions are not contractual & may be subject to changes

*Consult factory before ordering

DATASHEET

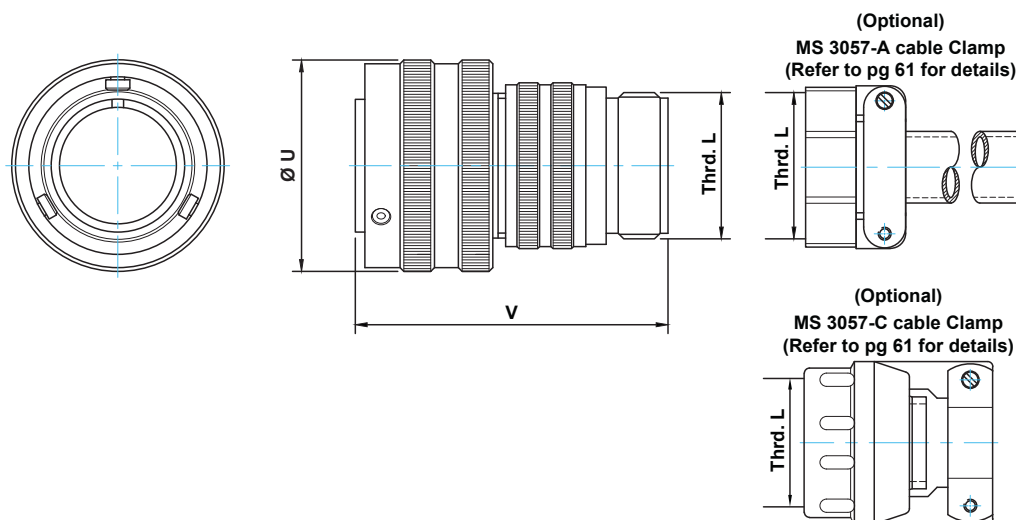
MG 06E/A

- Straight cable connector with endbell for flex tube
for flex tube



MG 06E/A ... Straight Cable connector with Endbell for flex tube

MGR 06E/A ... As per MG 06E/A but **with Spring & Washer under Coupling Nut**



- 'Step-Up' and 'Step-Down' style endbells available. Consult factory.

**Longer length Endbell available on request

SHELL SIZE	ØU MAX	V** MAX	L UNEF - 2A Thread	MS 3057 Cable Clamp	
				Type A	Type C
10SL	25.0	48.0	5/8" - 24	4A	4C
12S*	27.5		3/4" - 20	6A	6C
14S	30.5			8A	8C
16S	33.5	59.0	7/8" - 20	10A	10C
16			1" - 20	12A	12C
18	37.5			16A	16C
20	40.5	63.0	1 3/16" - 18	20A	20C
22	44.0			24A	24C
24	47.5	68.0	1 7/16" - 18	28A	28C
28	53.5				
32	60.0	71.0	1 3/4" - 18		
36	67.5		2" - 18 UN		
40	72.5		2 1/4" - 16 UN		

NOTE : Dimensions are not contractual & may be subject to changes

*Consult factory before ordering

DATASHEET

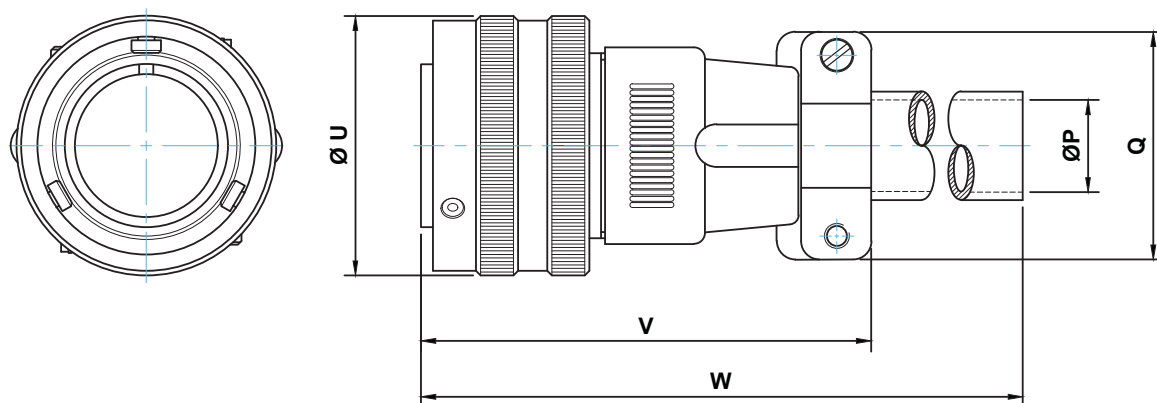
MG 06F

- Straight cable connector with integral strain relief cable clamp



MG 06F ... Straight Cable connector with integral strain relief Cable Clamp & Telescopic Bushing (Includes Grommet & Follower)

MGR 06F ... As per MG 06F but with Spring & Washer under Coupling Nut



SHELL SIZE	ØU MAX	V MAX	W MAX	ØP REF	Q MAX
10SL	25.0	60.0	115.0	5.5	23.0
12S*	27.5				
14S	30.5	64.5		8.0	28.0
16S	33.5				
16		74.0	120.0	11.0	30.5
18	37.5	14.0		33.0	
20	40.5	15.5		38.1	
22	44.0				
24	47.5	18.8		44.2	
28	53.5				
32	60.0				
36	67.5	90.0		130.0	31.7

NOTE : Dimensions are not contractual & may be subject to changes

***Consult factory before ordering**

DATASHEET

MG 06F ... ADP P _ / M _

- Straight cable connector with adapter backshell with internal PG or metric threads



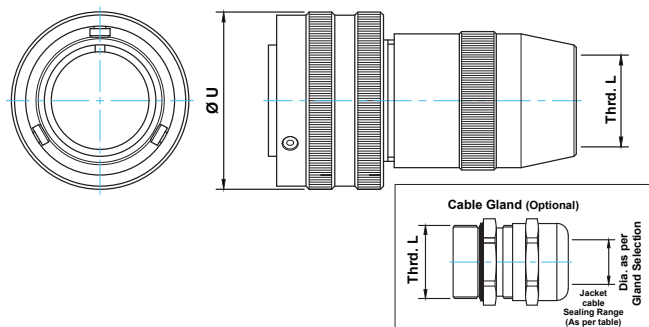
MG 06F ... ADP P _ / M _... Straight cable connector with Adapter backshell (& Cable Gland - Optional) (includes Grommet & Follower)

MGR 06F ... ADP P _ / M _... As per MG 06F ADP but with Spring and Washer under coupling nut

Add 'G' at the end for Brass Gland (Nickel Plated) & 'NGB' for Nylon Gland

Eg. : MGR 06F 14S-7P ADP P11 G

Straight cable connector 14S-7P with Adapter Backshell of PG11 Thd. with PG11 Brass Gland in scope



***Reference cable sealing range for brass gland. In case gland is being purchased separately, please refer to catalogue of gland manufacturer.

Jacketed Cable Sealing Range*** (mm)			
PG		METRIC	
PG 7	Ø3-6.5 mm	M12 x 1.5	Ø4.5-7 mm
PG 9	Ø4-8 mm	M16 x 1.5	Ø5.5-10 mm
PG 11	Ø5-10 mm	M20 x 1.5	Ø8-13 mm
PG 13.5	Ø6-12 mm	M25 x 1.5	Ø10-17 mm
PG 16	Ø9-14 mm	M32 x 1.5	Ø12-21 mm
PG 21	Ø12-18 mm	M40 x 1.5	Ø20-28 mm
PG 29	Ø17-25 mm	M50 x 1.5	Ø28-35 mm
PG 36	Ø20-32 mm	M63 x 1.5	Ø35-45 mm
PG 42	Ø29-38 mm		
PG 48	Ø35-44 mm		

SHELL SIZE	ØU MAX	L** THREAD	
		METRIC	PG
10SL	25.0	M12 M16	PG7 PG9 PG11 PG13.5
12S*	27.5		
14S	30.5	M16 M20 M25	PG7 PG9 PG11 PG13.5 PG16
16S	33.5		
16			
18	37.5	M16 M20 M25 M32	PG7 PG9 PG11 PG13.5 PG16 PG21 PG29
20	40.5	M20 M25 M32 M40	
22	44.0		PG9 PG11 PG13.5 PG16 PG21 PG29
24	47.5		
28	53.5		
32	60.0		PG21 PG29 PG36
36	67.5	M32 M40	
40*	72.5	M50 M63	PG29 PG36 PG48

NOTE : Dimensions are not contractual & may be subject to changes

** For other sizes, consult factory. Other options such as stainless Steel glands, EMI/EMC glands, Conduit termination fittings available

DATASHEET

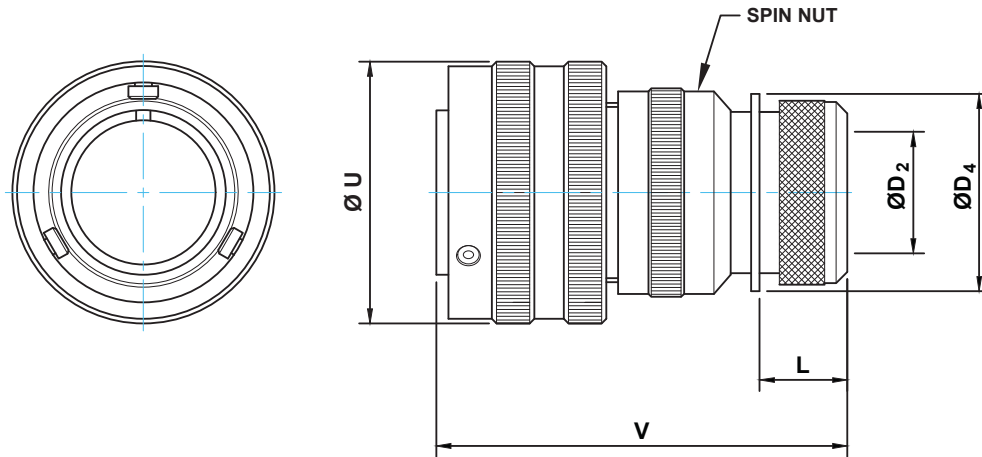
MG 06G

- Straight cable connector with backshell for heat shrink boot



MG 06G ... Straight cable connector with Backshell for Heat shrink boot (Includes Grommet & Follower)

MGR 06G ... As per MG 06G but **with Spring & Washer under Coupling Nut**



SHELL SIZE	ØU MAX	V REF.	ØD ₂ MIN	ØD ₄ MAX	L REF	
10SL	25.0	54.0	7.7	17.2	11.5	
12S*	27.5					
14S	30.5		10.6	20.3		
16S	33.5	58.0	13.5	24.0		12.7
16		65.0				
18			37.5	14.6		
20	40.5	70.0	18.7	30.4	15.2	
22	44.0		20.8	33.8		
24	47.5		24.6	38.3		
28	53.5	80.0	27.0	41.0		
32	60.0		33.3	48.8		
36	67.5		38.5	55.0		

NOTE : Dimensions are not contractual & may be subject to changes

*Consult factory before ordering

DATASHEET

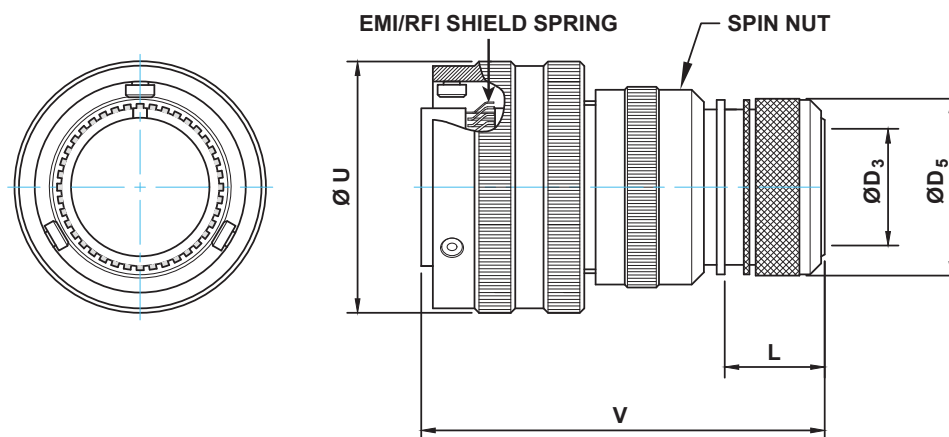
MG 06M

- Straight cable connector with backshell for shielded cable & heat shrink boot



MG 06M ... Straight cable connector with EMI/RFI shield spring & backshell for shielded braid & heat shrinkable boot termination (Includes Grommet & Follower)

MGR 06M ... As per MG 06M but **with Spring & Washer under Coupling Nut**



SHELL SIZE	ØU MAX	V REF.	ØD ₃ MIN	ØD ₅ REF	L REF
10SL*	25.0	58.0	8.5	18.5	17.0
12S*	27.5				
14S	30.5				
16S	33.5	73.0	13.5	25.0	18.0
16			14.6	28.0	
18	37.5		18.5	32.0	
20	40.5		20.8	34.0	
22	44.0	76.0	24.6	38.0	
24	47.5		27.0	41.0	
28	53.5		33.0	48.0	
32	60.0		38.5	55.0	
36	67.5	76.0	46.0	62.0	
40*	72.5				

NOTE : Dimensions are not contractual & may be subject to changes

***Consult factory before ordering**

DATASHEET

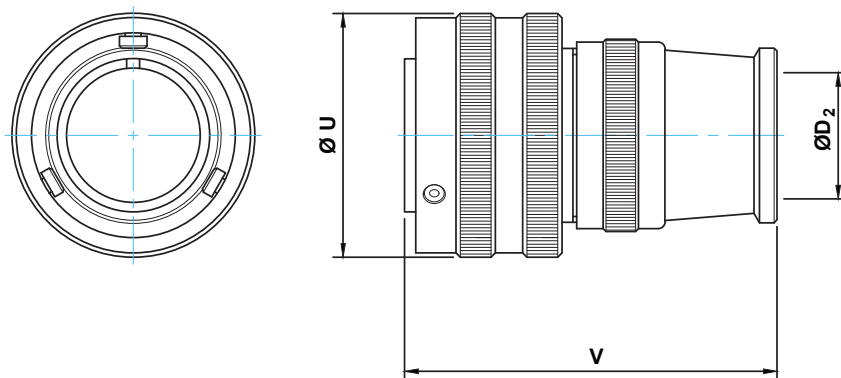
MG 06R

- Straight cable connector with short endbell



MG 06R ... Straight cable connector with short Endbell (Includes Grommet & Follower)

MGR 06R ... As per MG 06R but with Spring & Washer under Coupling Nut



SHELL SIZE	ØU MAX	D ₂ MIN	V MAX
10SL	25.0	8.0	46.0
12S*	27.5		
14S	30.5	10.8	52.0
16S	33.5	13.8	
16			
18	37.5	16.0	64.0
20	40.5	19.0	
22	44.0		
24	47.5	23.0	65.0
28	53.5	24.0	
32	60.0	32.0	
36	67.5	35.5	70.0
40	72.5	45.0	

NOTE : Dimensions are not contractual & may be subject to changes

***Consult factory before ordering**

DATASHEET

MG 06T ... 211

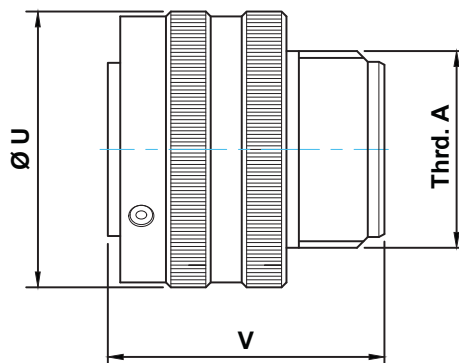
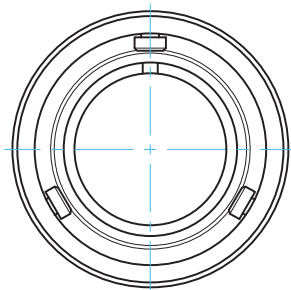
- Straight cable connector with accessory thread (but no accessory)



MG 06T ... 211... Straight cable connector with Accessory thread

MGR 06T ... 211... As per MG 06T but with Spring & Washer under Coupling Nut

} Less backshell & Grommet



SHELL SIZE	ØU MAX	V MAX	A UNEF - 2A Thread.
10SL	25.0	28.5	9/16" - 24
12S*	27.5		5/8" - 24
14S	30.5	32.0	3/4" - 20
16S	33.5		7/8" - 20
16		41.0	1" - 20
18	37.5		1 1/8" - 18
20	40.5		1 1/4" - 18
22	44.0		1 3/8" - 18
24	47.5	42.5	1 5/8" - 18
28	53.5		1 7/8" - 16 UN
32	60.0		2 1/8" - 16 UN
36	67.5		2 5/16" - 16 UNS
40	72.5		

NOTE : Dimensions are not contractual & may be subject to changes

***Consult factory before ordering**

DATASHEET

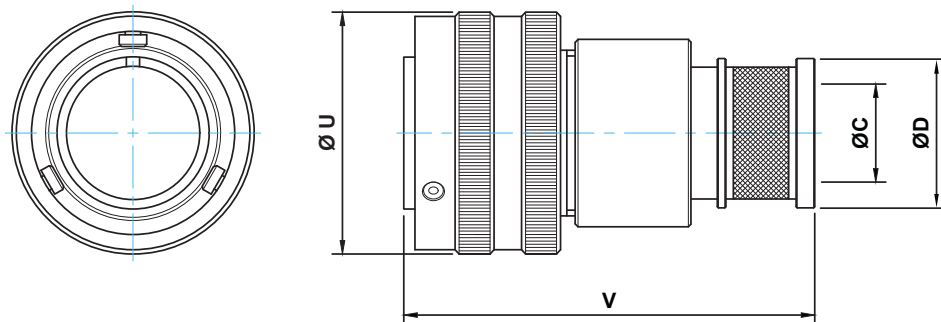
MG 06F ADPBS

- Straight cable connector with adapter to terminate shielded braid with band-strap or constant force spring



MG 06F ... ADPBS ... Straight Cable connector with Adapter to terminate Shielded Braid with Band-Strap or Constant Force Spring (Includes Grommet & Follower)

MGR 06F ... ADPBS ... As per MG 06F ADPBS but with Spring & Washer under Coupling Nut



PART NUMBER ORDERING GUIDELINES FOR CONNECTOR WITH STANDARD, STEP - UP & STEP - DOWN ADAPTER WITH REDUCED OR INCREASED CABLE ENTRY DIAMETER*

STANDARD	STEP - UP	STEP - DOWN
Example : <u>MG 06F 28-21 P ADPBS 101E</u> Connector 28-21 P — Cable entry & termination sizes as per shell size 28	Example : <u>MG 06F 28-21 P ADPBS 28 / 32 101E</u> Connector 28-21 P — Cable entry & termination sizes as per shell size 32	Example : <u>MG 06F 28-21 P ADPBS 28 / 14 101E</u> Connector 28-21 P — Cable entry & termination sizes as per shell size 14S

- 'Spin Style' Adapter with Anti-Rotation Teeth also available - Consult factory.
Use code 'ADPBS SCA' instead of 'ADPBS' for 2-piece adapter with spin-nut.

SHELL SIZE	ØU MAX	ØC MIN	ØD REF	V REF.
10SL	25.0	8.1	14.5	67.0
14S	30.5	11.1	17.5	
16S	33.5	13.0	19.4	
16				
18	37.5	15.9	22.3	80.0
20	40.5	20.6	27.2	
22	44.0	21.0	27.8	
24	47.5	25.4	32.0	
28	53.5	28.6	35.2	82.0
32	60.0	33.5	40.5	
36	67.5	39.0	46.0	87.0

*For non - standard cable entry sizes, please consult factory

NOTE : Dimensions are not contractual & may be subject to changes

DATASHEET

MG 06VR

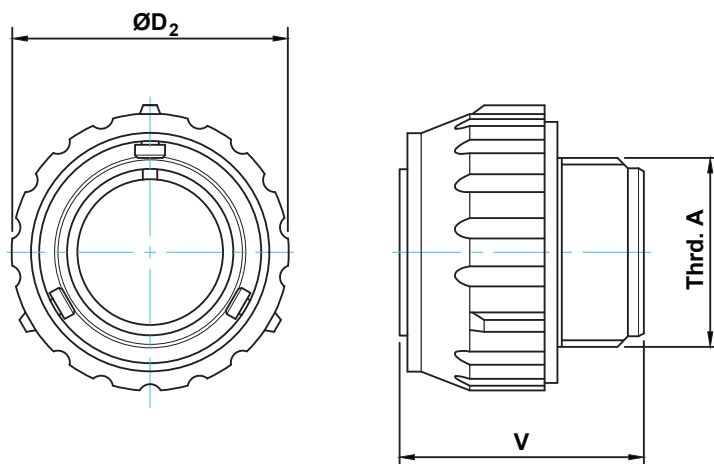
- Straight cable connector with over-moulded coupling nut



MG 06VR... Straight cable connector with overmoulded coupling nut with Accessory thread

MGR 06VR... As per MG 06VR but with Spring & Washer under Coupling Nut

} Less backshell & Grommet*



* Available with backshell to suit - Please consult factory

** To be used with Rear Mount type receptacle only - Mounted from front of panel

SHELL SIZE	ØD ₂ REF.	V MAX.	A UNEF - 2A Thread.
18	43.5	41.0	1" - 20
20	47.8		1 1/8" - 18
22	50.7		1 1/4" - 18
24	52.8	42.5	1 3/8" - 18
28	61.3		1 5/8" - 18
32	68.0		1 7/8" - 16 UN
36	74.2		2 1/8" - 16 UN
40	82.5		2 5/16" - 16 UNS

NOTE : Dimensions are not contractual & may be subject to changes

DATASHEET

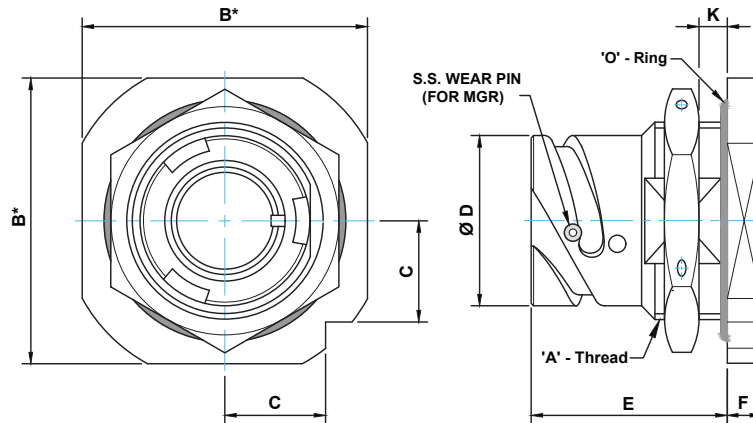
MG 07A

- Jam-nut receptacle without accessory threads



MG 07A... Jamnut Receptacle

MGR 07A... Jamnut Receptacle with S.S.wear pin



* Actual shape of flange may vary - Consult Factory

SHELL SIZE	A UNE F - 2A THREAD	B REF	C REF	ØD REF.	E REF	F REF	K (Panel Thickness)	
							MIN	MAX
10SL	7/8" - 20	31.8	11.2	18.2	24.5	4.0	2.4	5.2
14S	1 1/8" - 18	41.0	14.6	24.6	26.9	4.8		
16S	1 1/4" - 18	44.5	15.7	27.4				
16					32.1			
18	1 3/8" - 18	47.6	16.8	30.8	33.7	4.8		
20	1 1/2" - 18	50.8	18.0	34.2				
22	1 5/8" - 18	57.0	20.2	37.4				
24	1 3/4" - 18 UNS	57.0	20.2	40.9				
28	2" - 18 UNS	63.5	22.5	46.7	35.2	5.6		
32	2 1/4" - 16 UN	69.8	24.7	53.4				
36	2 1/2" - 16 UN	76.2	26.9	59.6				

NOTE : Dimensions are not contractual & may be subject to changes

DATASHEET

MG 07T

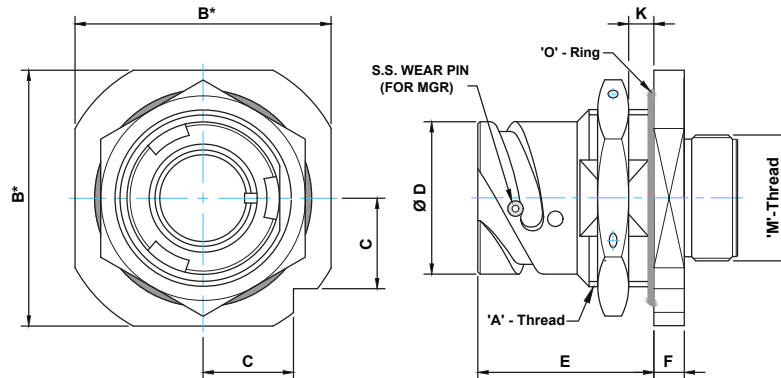
- Jam-nut receptacle with rear accessory threads



MG 07T... Jamnut Receptacle with rear accessory thread**

MGR 07T... As per MG 07T but with S.S. wear pin

Recommended for Crimp Type contacts only.



* Actual shape of flange may vary - Consult Factory

** Various backshell options available - Consult factory

SHELL SIZE	A UNEF - 2A THREAD	B REF	C REF	ØD REF.	E REF	F REF	K (Panel Thickness)		M UNEF - 2A THREAD
							MIN	MAX	
10SL	7/8" - 20	31.8	11.2	18.2	24.5	4.0	2.4	5.2	5/8" - 24
14S	1 1/8" - 18	41.0	14.6	24.6	26.9	4.8			3/4" - 20
16S	1 1/4" - 18	44.5	15.7	27.4					32.1
16									
18	1 3/8" - 18	47.6	16.8	30.8	33.7	5.6	2.4	6.0	1" - 20
20	1 1/2" - 18	50.8	18.0	34.2					1 1/8" - 18
22	1 5/8" - 18	57.0	20.2	37.4					1 1/4" - 18
24	1 3/4" - 18 UNS	57.0	20.2	40.9					1 3/8" - 18
28	2" - 18 UNS	63.5	22.5	46.7	35.2	5.6		1 5/8" - 18	
32	2 1/4" - 16 UN	69.8	24.7	53.4				1 7/8" - 16 UN	
36	2 1/2" - 16 UN	76.2	26.9	59.6				2 1/16" - 16 UN	

NOTE : Dimensions are not contractual & may be subject to changes

DATASHEET

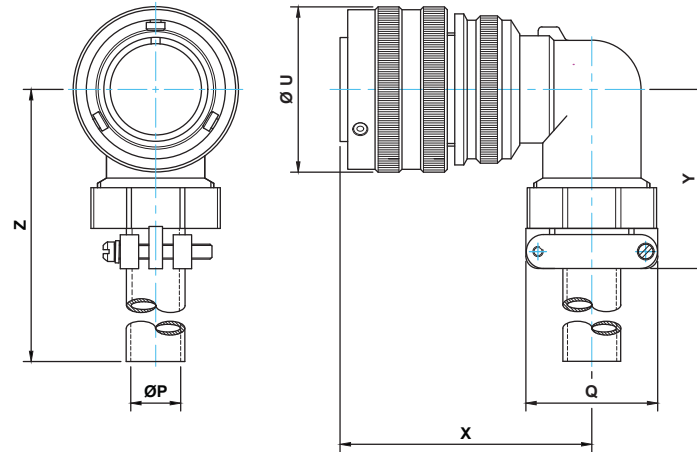
MG 08F

- 90° cable connector with strain relief cable clamp



MG 08F... 90° Angle cable connector with Cable Clamp & Telescopic bushing (Includes Grommet & Follower)

MGR 08F... As per MG 08F but with Spring & Washer under Coupling Nut



SHELL SIZE	ØU MAX	ØP REF	Q MAX	X REF.	Y REF.	Z REF.	
10SL	25.0	5.5	23.0	46.0	40.0	100.0	
12S*	27.5						
14S	30.5	8.0	28.0	52.0	44.0		
16S	33.5	11.0	30.5				60.0
16							
18	37.5	14.0	33.0	65.0	48.0		
20	40.5	15.5	38.1	72.0			
22	44.0						
24	47.5	18.8	44.2				54.0
28	53.5						
32	60.0	24.0	52.7		81.0	66.0	110.0
36	67.5	31.7	58.4	62.0			
40*	72.5	34.9	68.5	83.0			

NOTE : Dimensions are not contractual & may be subject to changes

***Consult factory before ordering**

DATASHEET

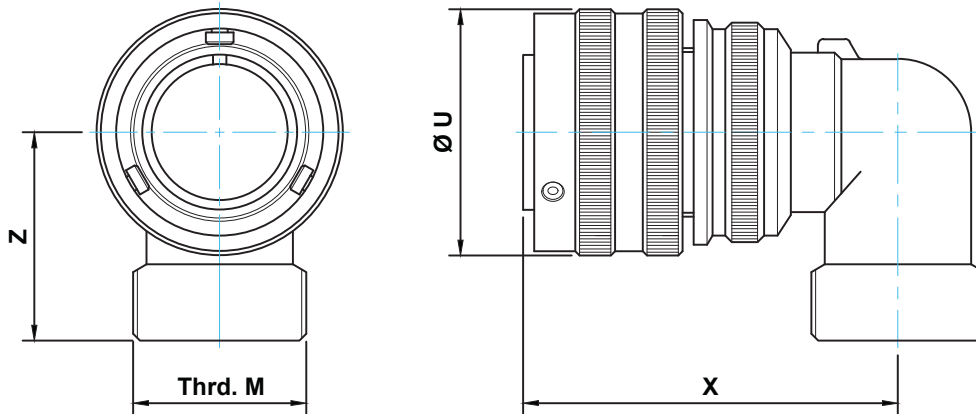
MG 08R

- 90° cable connector with backshell for flex tube



MG 08R... 90° Angle cable connector with Backshell for flex tube (Includes Grommet & Follower)

MGR 08R... As per MG 08R but **with Spring & Washer Coupling Nut**



SHELL SIZE	M UNEF - 2A THREAD.	ØU MAX	X REF.	Z REF.
10SL	5/8 " - 24	25.0	46.0	21.0
12S*		27.5		26.0
14S	3/4" - 20	30.5	52.0	
16S	7/8" - 20	33.5		
16				
18	1" - 20	37.5	65.0	32.0
20	1 3/16" - 18	40.5	72.0	
22		44.0		
24	1 7/16" - 18	47.5		
28		53.5		
32	1 3/4" - 18	60.0	81.0	51.0
36	2" - 18 UN	67.5		
40*	2 1/4" - 16 UN	72.5		

*Consult factory before ordering

NOTE : Dimensions are not contractual & may be subject to changes

DATASHEET

MG 08F ... ADP P_ / M_

- 90° cable connector with adapter backshell with internal PG or metric threads



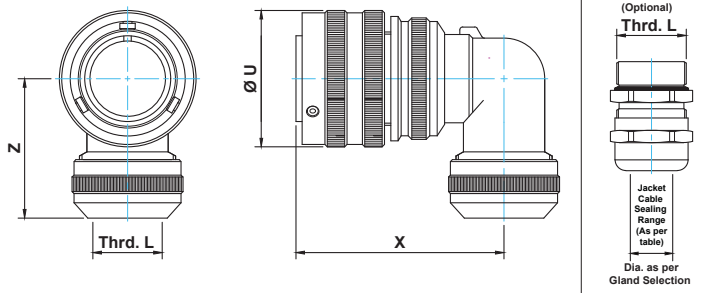
MG 08F ... ADP P_ / M_ ... 90° Angle cable connector with Adapter backshell (& Cable Gland - Optional) (includes Grommet & Follower)

MGR 08F ... ADP P_ / M_ ... As per MG 08F ADP but with Spring & Washer under Coupling Nut

Add 'G' at the end for Brass Gland (Nickel Plated) & 'NGB' for Nylon Gland

Eg. : MG 08F 14S-7P ADP P11 G

Scope 90° Angle Cable connector 14S-7P with Adapter Backshell of PG11 Thd. with PG11 Brass Gland



Jacketed Cable Sealing Range*** (mm)			
PG		METRIC	
PG 7	Ø3-6.5 mm	M12 x 1.5	Ø4.5-7 mm
PG 9	Ø4-8 mm	M16 x 1.5	Ø5.5-10 mm
PG 11	Ø5-10 mm	M20 x 1.5	Ø8-13 mm
PG 13.5	Ø6-12 mm	M25 x 1.5	Ø10-17 mm
PG 16	Ø9-14 mm	M32 x 1.5	Ø12-21 mm
PG 21	Ø12-18 mm	M40 x 1.5	Ø20-28 mm
PG 29	Ø17-25 mm	M50 x 1.5	Ø28-35 mm
PG 36	Ø20-32 mm	M63 x 1.5	Ø35-45 mm
PG 42	Ø29-38 mm		
PG 48	Ø35-44 mm		

*** Reference cable sealing range for brass glands. In case gland is being purchased separately, please refer to catalogue of gland manufacturer

SHELL SIZE	ØU REF.	X REF.	Z REF.	L** THREAD	
				METRIC	PG
10SL	25.0	46.0	36.0	M12 M16	PG7 PG9 PG11 PG13.5
12S*	27.5		41.0		
14S	30.5	52.0		M16 M20 M25	PG7 PG9 PG11 PG13.5 PG16
16S	33.5				
16					
18	37.5	65.0	52.0	M16 M20 M25 M32	PG7 PG9 PG11 PG13.5 PG16 PG21 PG29
20	40.5	72.0		M20 M25 M32 M40	
22	44.0				
24	47.5				
28	53.5		PG11 PG13.5 PG16 PG21 PG29 PG36		
32	60.0	81.0	66.0	M32 M40	PG21 PG29 PG36
36	67.5				
40*	72.5			M50 M63	PG29 PG36 PG48

NOTE : Dimensions are not contractual & may be subject to changes.

** For other sizes, consult factory. Other options such as stainless steel glands, EMI/EMC glands, Conduit termination fittings available.

* Consult factory before ordering

DATASHEET

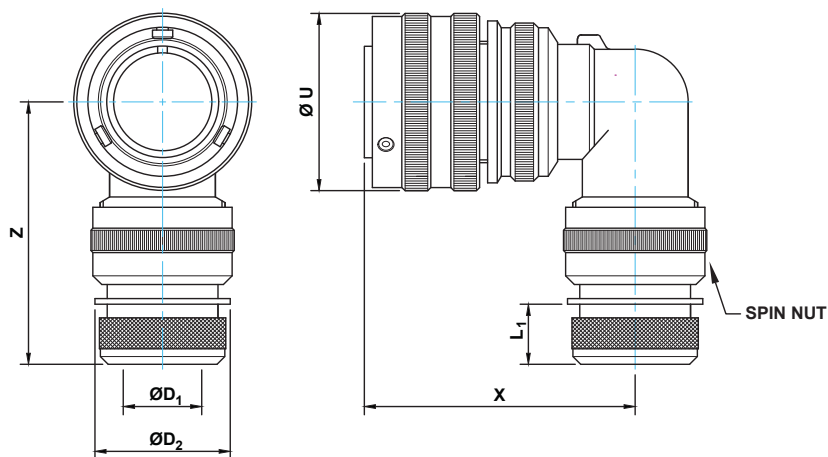
MG 08G

- 90° cable connector with backshell for heat shrink boot



MG 08G... 90° Angle cable connector with backshell for heat shrink boot
(Includes Grommet & Follower)

MGR 08G... As per MG 08G but with Spring & Washer under Coupling Nut



SHELL SIZE	ØU MAX	X REF.	Z REF.	ØD ₁ MIN	ØD ₂ REF	L ₁ REF
10SL	25.0	46.0	50.0	7.7	17.2	11.5
12S*	27.5					
14S	30.5	52.0		10.6	20.3	
16S	33.5					
16		60.0				
18	37.5	65.0	62.0	14.6	26.7	12.7
20	40.5	72.0		18.7	30.4	
22	44.0			20.8	33.8	
24	47.5			24.6	38.3	
28	53.5			27.0	41.0	
32	60.0	81.0	86.0	33.3	48.8	15.2
36	67.5			38.5	55.0	

*Consult factory before ordering

NOTE : Dimensions are not contractual & may be subject to changes

DATASHEET

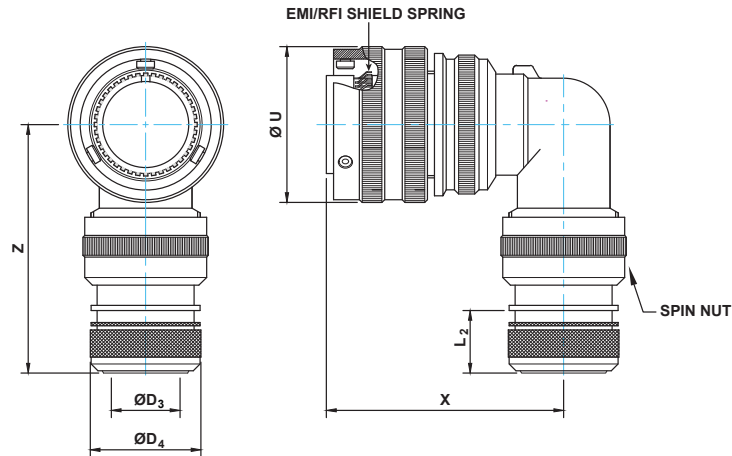
MG 08M

- 90° cable connector with backshell
for shielded cable and heat shrink boot



MG 08M... 90° Angle cable connector with EMI/RFI shield spring & Backshell for shielded cable and heat shrink boot termination (Includes Grommet & Follower)

MGR 08M... As per MG 08M but with Spring & Washer under Coupling Nut



SHELL SIZE	ØU MAX	X REF.	Z REF.	ØD ₃ MIN	ØD ₄ REF	L ₂ REF
10SL*	25.0	53.0	42.5	8.5	18.5	17.0
12S*	27.5		52.5			
14S	30.5					
16S	33.5	58.0	58.0	13.5	25.0	18.0
16						
18	37.5	64.0	65.0	14.6	28.0	
20	40.5	70.0		18.5	32.0	
22	44.0			20.8	34.0	
24	47.5	71.0	24.6	38.0		
28	53.5		27.0	41.0		
32	60.0	80.0	82.5	33.0	48.0	
36	67.5			38.5	55.0	
40*	72.5			46.0	62.0	

NOTE : Dimensions are not contractual & may be subject to changes

*Consult factory before ordering

DATASHEET

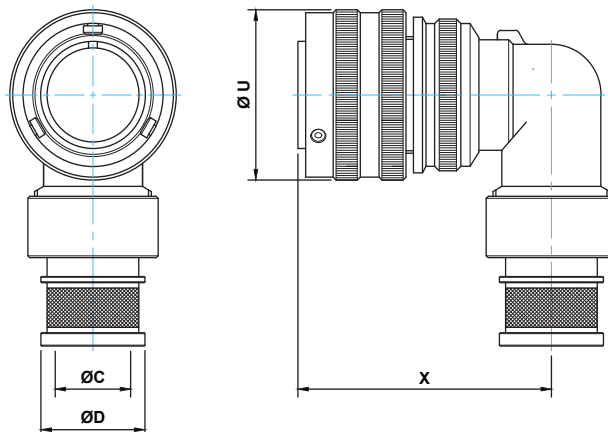
MG 08F ADPBS

- 90° cable connector with adapter to terminate shielded braid with band-strap or constant force spring



MG 08F... ADPBS... 90° Angle cable connector with Adapter to terminate Shielded Braid with Band -Strap or Constant Force Spring (Includes Grommet & Follower)

MGR 08F... ADPBS... As per MG 08F ADPBS but **with Spring & Washer under Coupling Nut**



PART NUMBER ORDERING GUIDELINES FOR CONNECTOR WITH STANDARD, STEP - UP & STEP - DOWN ADAPTER WITH REDUCED OR INCREASED CABLE ENTRY DIAMETER*

STANDARD	STEP - UP	STEP - DOWN
Example : MG 08F 28-21 P ADPBS 101E Connector 28-21 P Cable entry & termination sizes as per shell size 28	Example : MG 08F 28-21 P ADPBS 28 / 32 101E Connector 28-21 P Cable entry & termination sizes as per shell size 32	Example : MG 08F 28-21 P ADPBS 28 / 14 101E Connector 28-21 P Cable entry & termination sizes as per shell size 14S

- 'Spin Style' Adapter with Anti-Rotation Teeth also available - Consult factory.
Use code 'ADPBS SCA' instead of 'ADPBS' for 2-piece adapter with spin-nut.

SHELL SIZE	ØU REF.	X REF.	ØC REF.	ØD REF.
10SL	25.0	46.0	8.1	14.5
14S	30.5		11.1	17.5
16S	33.5	52.0	13.0	19.4
16		60.0		
18	37.5	65.0	15.9	22.3
20	40.5	72.0	20.6	27.2
22	44.0		21.0	27.8
24	47.5		25.4	32.0
28	53.5		28.6	35.2
32	60.0	81.0	33.5	40.5
36	67.5		39.0	46.0

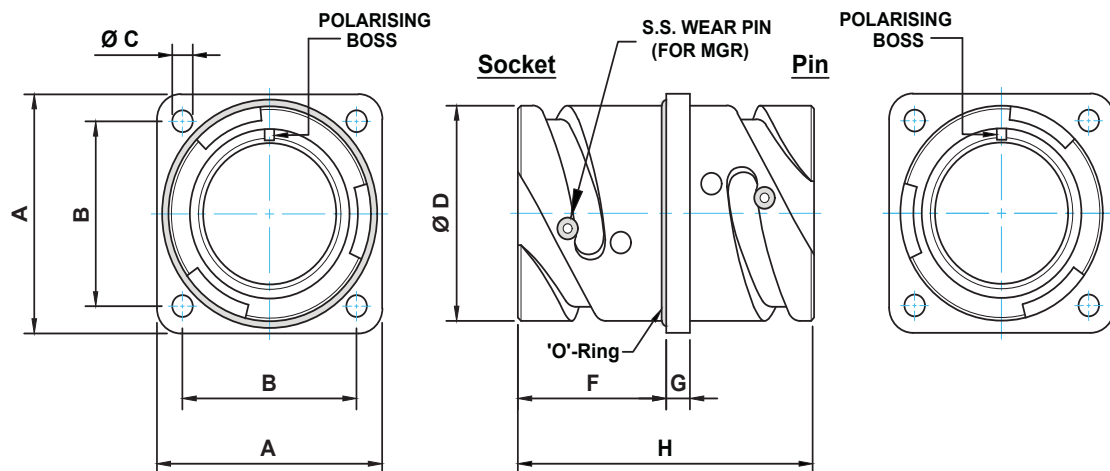
*For non - standard cable entry sizes, please consult factory

NOTE : Dimensions are not contractual & may be subject to changes



MG TBF... Thru Bulkhead Receptacle

MGR TBF... Thru Bulkhead Receptacle with S.S.wear pin



SHELL SIZE	A REF.	B	ØC +0.15	ØD REF.	F +0.4	G ±0.2	H REF.
10SL	25.4	18.2	3.2	18.2	19.5	2.8	36.5
14S	30.0	23.0		24.6	20.1	3.2	37.5
16S	31.8	24.6		27.4			
16					28.4	4.0	51.5
18	35.0	27.0					
20	38.0	29.4					
22	41.0	31.8					
24	44.5	34.9	3.7	40.9	26.8		
28	50.8	39.7		46.7			
32	57.0	44.5	4.3	53.4	25.0		
36	63.5	49.2		59.6			
40*	69.8	55.6		66.0			

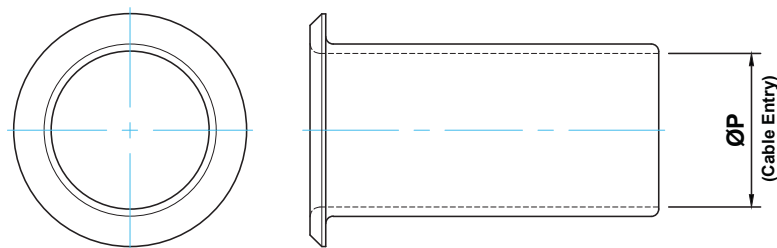
NOTE : Dimensions are not contractual & may be subject to changes

* Consult factory before ordering



TELESCOPING BUSHING MS 3420

Telescoping bushings (used with MS 3057 A cable clamp & 00F, 01F, 06F, 08F styles) keep dirt, oil and moisture out of endbell. Taping or wrapping wires is eliminated, since the bushing protects wires going through clamp. Combinations of bushing may be used to decrease cable entry diameter to improve sealing. Material is polychloroprene. **Supplied by default in range MG for styles 00F, 01F, 06F, 08F.**



Shell Size	Part Number	ØP REF
10SL	MS 3420 - 4	5.5
12S		
14S	MS 3420 - 6	8.0
16S	MS 3420 - 8	11.0
16		
18	MS 3420 - 10	14.0

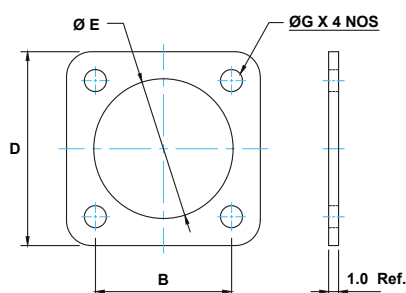
Shell Size	Part Number	ØP REF
20	MS 3420 - 12	15.5
22		
24	MS 3420 - 16	18.8
28		
32	MS 3420 - 20	24.0
36	MS 3420 - 24	32.0
40	MS 3420 - 28	34.9



SQUARE GASKET

These sealing Gaskets made of Neoprene are used with flange mounted receptacles.

***Also available - Conductive Square gaskets with Silver Filling / Alu-Flex, gaskets for rear mount receptables.**



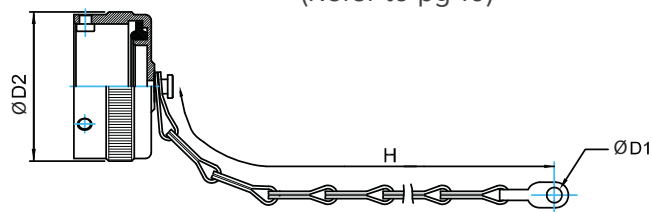
SHELL SIZE	DIMENSIONS							
	D REF	B REF	FRONT MOUNT			REAR MOUNT		
			PART NO.	ØE	ØG REF.	PART NO.	ØE	ØG REF.
10SL	25.40	18.26	MS 02 10SL SQG	15.88	4.37	MG 02 10SL SQGB	18.65	4.3
12SL	27.79	20.62	MS 02 12SL SQG	19.05		MG 02 12SL SQGB	19.05	
14S	30.17	23.01	MS 02 14SL SQG	22.22		MG 02 14SL SQGB	25.00	
16S / 16	32.54	24.61	MS 02 16SL SQG	25.40		MG 02 16SL SQGB	27.80	
18	34.93	26.97	MS 02 18SL SQG	28.58	5.16	MG 02 18SL SQGB	30.80	5.2
20	38.10	29.36	MS 02 20SL SQG	31.75		MG 02 20SL SQGB	34.20	
22	41.27	31.75	MS 02 22SL SQG	34.92		MG 02 22SL SQGB	37.40	
24	44.45	34.93	MS 02 24SL SQG	38.10		MG 02 24SL SQGB	40.90	
28	50.80	39.67	MS 02 28SL SQG	44.45	5.56	MG 02 28SL SQGB	46.70	5.2
32	57.15	44.45	MS 02 32SL SQG	50.80		MG 02 32SL SQGB	53.40	
36	63.50	49.22	MS 02 36SL SQG	55.57		MG 02 36SL SQGB	59.60	
40	69.85	55.57	MS 02 40SL SQG	61.90		MG 02 40SL SQGB	65.40	

- For Silver filled conductive gasket, use code 'SQGM' instead of 'SQG'
- For Alu-Flex Conductive gasket, use code 'SQG AF' instead of 'SQG'

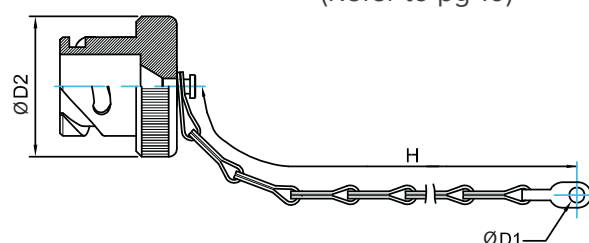
NOTE : Dimensions are not contractual & may be subject to changes

Part number guidelines:

MG - 02 _____ **C&C** _____
(Shell size) (Plating finish)
(Refer to pg 10)



MG - 06 _____ **C&C** _____
(Shell size) (Plating finish)
(Refer to pg 10)



SHELL SIZE	ØD ₁ * REF.	ØD ₂ * REF.	H* REF.	S.S.CHAIN* (no. of links)
10SL	4.4	24.0	90.0	AEC 4 + 2
12S		27.0		
14S		30.0		
16S		33.0		
16		37.0		
18	5.0	39.5	103.0	AEC 5 + 2
20		43.5		
22		47.0		
24		52.7		
28	6.2	59.5	118.0	AEC 6 + 2
32		66.5		
36		72.6		
40				

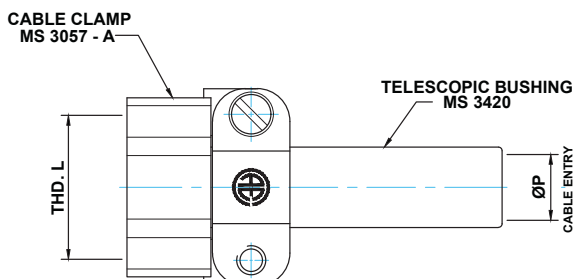
SHELL SIZE	ØD ₁ * REF.	ØD ₂ * REF.	H* REF.	S.S.CHAIN* (no. of links)
10SL	4.4	25.5	90.0	AEC 4 + 2
12S		28.0		
14S		32.5		
16S		35.0		
16		38.2		
18	5.0	42.2	103.0	AEC 5 + 2
20		45.2		
22		48.5		
24		54.4		
28	6.2	61.0	118.0	AEC 6 + 2
32		67.3		
36				
40				

* May be subject to change



CABLE CLAMP MS 3057-A

The MS 3057A cable clamp is made for cable connectors and receptacles that have an endbell with external conduit threads. The double clamping action provides a balanced, positive hold on the wires and greatly reduces moisture ingress. Provision is made for safety wiring. This clamp is supplied with bushing.



Size	Part Number	L UNEF - 2B Thread.	Accommo- dates Bushing P/N	ØP (REF.)
10SL	MS 3057 - 4A	5/8" - 24	MS 3420 - 4	5.5
12S				
14S	MS 3057 - 6A	3/4" - 20	MS 3420 - 6	8.0
16S	MS 3057 - 8A	7/8" - 20	MS 3420 - 8	11.0
16				
18	MS 3057 - 10A	1" - 20	MS 3420 - 10	14.0

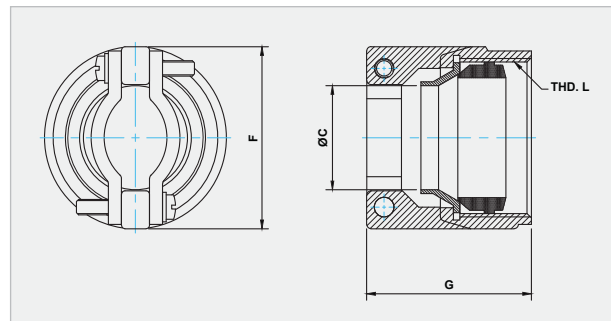
Size	Part Number	L UNEF - 2B Thread.	Accommo- dates Bushing P/N	ØP (REF.)
20	MS 3057 - 12A	1 3/16" - 18	MS 3420 - 12	15.5
22				
24	MS 3057 - 16A	1 7/16" - 18	MS 3420 - 16	18.8
28				
32	MS 3057 - 20A	1 3/4" - 18 UNS	MS 3420 - 20	24.0
36	MS 3057 - 24A	2 - 18 UNS	MS 3420 - 24	31.7
40	MS 3057 - 28A	2 1/4" - 16 UN	MS 3420 - 28	34.6



CABLE CLAMP MS 3057-C (Waterproof)*

Waterproof cable clamp with mechanical strain relief clamp, providing concentric clamping over a wide range of cable sizes. The metal body is manufactured from aluminium alloy. Neoprene grommet with metal ferrule in scope.

*When used with jacketed cable with OD suitable for clamp size.



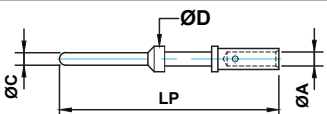
Shell Size	Clamp Order P/N	L UNEF - 2B Thread.	ØC - Jacketed cable sealing range		F (REF.)	G (REF.)
			Open	Close		
10SL	MS 3057 - 4C	5/8" - 24	7.93	2.38	22.7	33.5
14S	MS 3057 - 6C	3/4" - 20	11.12	5.84	25.5	33.0
16S	MS 3057 - 8C	7/8" - 20	13.48	8.00	28.5	33.0
16						
18	MS 3057 - 10C	1" - 20	15.87	9.6	31.0	35.8
20	MS 3057 - 12C	1 3/16" - 18	19.0	11.3	37.0	36.0
22						
24	MS 3057 - 16C	1 7/16" - 18	23.8	15.5	42.0	38.0
28						
32	MS 3057 - 20C	1 3/4" - 18 UNS	31.75	23.4	54.6	45.5
36	MS 3057 - 24C	2 - 18 UNS	35.0	23.4	58.0	51.5
40	MS 3057 - 28C	2 1/4" - 16 UN	41.25	29.9	64.5	51.8

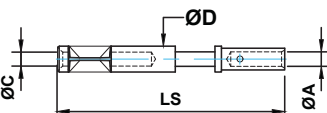
* Consult factory before ordering

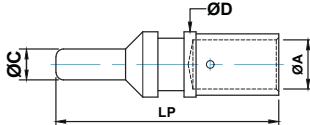
Dimensions are in mm

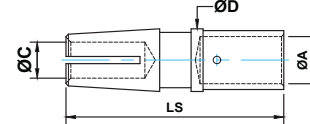
NOTE : Dimensions are not contractual & may be subject to changes

CRIMP CONTACT TERMINATION SIZES

Plug Contact	# 16S (Short Plug) : For shell size 10SL to 16S
	# 16 Plug : For shell size 16 to 40
	# 12 Plug
	

Socket Contact	# 16S (Short Socket) : For shell size 10SL to 16S
	# 16 Socket : For shell size 16 to 40
	# 12 Socket
	

Plug Contact	#8, #4, #0
	

Socket Contact	#8, #4, #0
	

Recommended Wire Stripping Length (mm)	16S	16	12	8	4	0
		6.0 ^{+0.5}		10.0 ^{+0.8} _{-0.4}	11.0 ^{+0.8} _{-0.4}	13.0 ^{+0.8} _{-0.4}

Contact Plating	A30 : Silver Plating (Standard), C30* Gold Plating (Optional)
*Gold Plating Thickness : Flash (Standard) to 2.54 microns - Consult factory	

Replace "A30" by "C30" in part nos. below for gold plated crimp contact

CONTACT SIZE	WIRE SIZE		PLUG CONTACT		SOCKET CONTACT		ØA (Ref.)	ØC (Ref.)	ØD (Ref.)
	mm ²	AWG	Part No.	LP (mm)	Part No.	LS (mm)			
16S**	0.75 - 1.5 (STANDARD)	18 / 16 (STANDARD)	AEC 16 SPC A30	27.5	AEC 16 SSC A30	27.8	1.7	1.6	3.2
	0.2 - 0.38	24 / 22	AEC 16 SPC A30 D0.9		AEC 16 SSC A30 D0.9		0.9		
	0.4 - 0.6	22 / 20	AEC 16 SPC A30 1.1		AEC 16 SSC A30 1.1		1.1		
	1.5 - 2.0 [#]	-	AEC 16 SPC A30 2M		AEC 16 SSC A30 2M		2.0		
16	0.75 - 1.5 (STANDARD)	18 / 16 (STANDARD)	AEC 16 LPC A30	31.8	AEC 16 LSC A30	36.6	1.7	1.6	3.2
	0.2 - 0.38	24 / 22	AEC 16 LPC A30 D0.9		AEC 16 LSC A30 D0.9		0.9		
	0.4 - 0.6	22 / 20	AEC 16 LPC A30 1.1		AEC 16 LSC A30 1.1		1.1		
	1.5 - 2.0	-	AEC 16 LPC A30 2M		AEC 16 LSC A30 2M		2.0		
12	2.0 - 3.0 (STANDARD)	14 / 12 (STANDARD)	AEC 12 PLG A30	36.8	AEC 12 SKT A30	37.2	2.5	2.4	4.7
	1.0 - 1.5	18 / 16	AEC 12 PLG A30 1.5M		AEC 12 SKT A30 1.5M		1.7		
	4.0 [#]	-	AEC 12 PLG A30 4M		AEC 12 SKT A30 4M		3.0		
8	-	8 (STANDARD)	AEC 8 PLG A30	38.0	AEC 8 SKT A30	39.5	4.8	3.6	7.9
	10 (STANDARD)	-							
	4.0	-	AEC 8 PLG 0870 A30	37.0	AEC 8 SKT 0870 A30		3.2		
	6.0	10	AEC 8 PLG A30 6M	38.0	AEC 8 SKT A30 6M		3.5		
4	-	4 (STANDARD)	AEC 4 PLG A30	41.2	AEC 4 SKT A30	41.2	7.8	5.7	11.1
	25 (STANDARD)	-							
	16.0	-	AEC 4 PLG A30 16M		AEC 4 SKT A30 16M		6.2		
	10.0	-	AEC 4 PLG A30 10M		AEC 4 SKT A30 10M		4.8		
0	-	0 (STANDARD)	AEC 0 PLG A30	44.2	AEC 0 SKT A30	44.2	11.8	9.1	15.0
	50 (STANDARD)	-							
	25.0	-	AEC 0 PLG A30 25M		AEC 0 SKT A30 25M		7.8		
	35.0	-	AEC 0 PLG A30 35M		AEC 0 SKT A30 35M		9.2		
	16.0	-	AEC 0 PLG A30 16M		AEC 0 SKT A30 16M		6.2		
	10.0	-	AEC 0 PLG A30 10M		AEC 0 SKT A30 10M		5.2		

**For socket contacts for items 10SL-3S and 12SP-10S, add code 'RD' to part number.

NOTE: For correct wire selector setting on crimp tool for size 16 and size 12 contacts, please take a trial of 2-3 contacts before proceeding for bulk lot. Consult factory for more details.

62 # Consult factory before orderings.

NOTE : Dimensions are not contractual & may be subject to changes

AEC CRIMP KIT - FOR CONTACTS SIZE 16 AND SIZE 12



1 M22520/1-01 - CRIMPING TOOL FOR SIZE 16 AND SIZE 12 CONTACTS

2 Allen Key For M22520/1-01

3 AEC 16/12 Insertion Tool - Actual shape may vary

4 Extraction Pin For Size 16 Contacts

5 Extraction Pins For Size 12 Contacts

6 AEC 16/12 Extraction Tool (Handle)

7 TH29-1 Turret Head (Positioner) for #16 and #12 contacts

8 AEC 16 PLT Pin (To be used for inserting #16 socket contacts)

9 AEC 12 PLT PIN (To be used for inserting #12 socket contacts)



To order use Part Number "AEC CRIMP KIT"

CRIMPING AND ASSEMBLY
INSTRUCTIONS FOR SIZE 16
AND SIZE 12 CRIMP CONTACTS







Allied recommends the use of
M-22520/1-01 (Hand Crimp Tool) with Contact Positioner
(Locater) No.: TH 29 as shown here.



In addition appropriate Insertion Tool, Extraction Tool & Guide/Pilot Pins are required. (refer to pg. 66 for details)

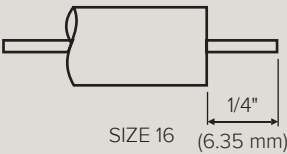
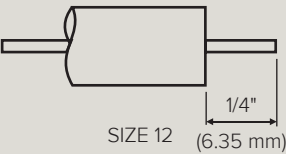
CRIMPING A30/C30 CONTACTS

1. Set the Crimp Tool with Positioner pressed in as shown below.
Select position depending upon the type of contact used. For assistance on wire selector setting for contacts with non-standard termination sizes, consult factory.

Type Of Contact	Positioner Selection	Set For (Wire Selector)
#12 PLUG & SOCKET	GREEN 	
#16 SHORT PLUG & SOCKET	RED 	
#16 LONG PLUG	BLUE 	
#16 LONG SOCKET	GREEN 	

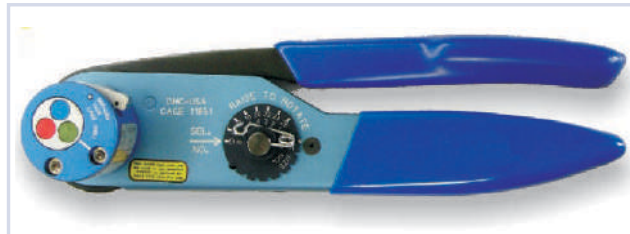
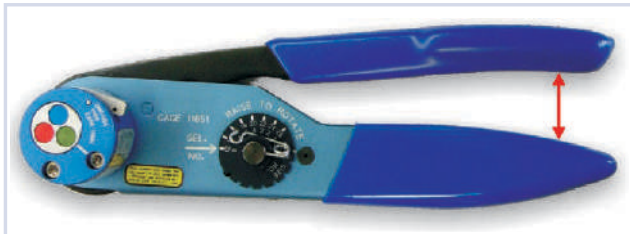
2. Place the contacts,
Mating end first into the tool.
3. Insert the stripped (see table) wire into
the hollow end of the contact.



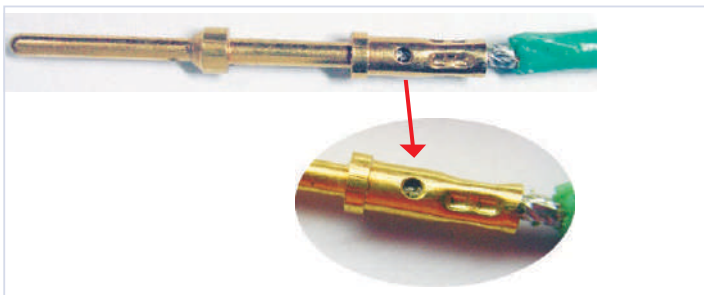
Recommended Wire Stripping	
 SIZE 16 (6.35 mm) 1/4"	 SIZE 12 (6.35 mm) 1/4"

A30/C30 ASSEMBLY INSTRUCTIONS

4. Close the tool completely to crimp. (The tool will release/retract, only if closed completely).



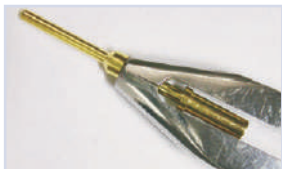
5. Check the contact through the inspection hole to ensure that the wire is fully inserted.
Take a trial on 2-3 contacts before proceeding for bulk lot.



INSERTION OF CONTACTS

1. Before inserting the contacts, slide the coupling nut and the rear accessories over the wire bundle in proper sequence for re-assembly.

2. Hold the contact in the Insertion Tool & dip in Isopropyl Alcohol for lubrication (Do not use any other type of lubricant). For Size 8, Size 4, Size 0 - use lubricant Hellerine (from HellermanTyton - to wipe off with a clean cloth after contact insertion).



Wrong Grip

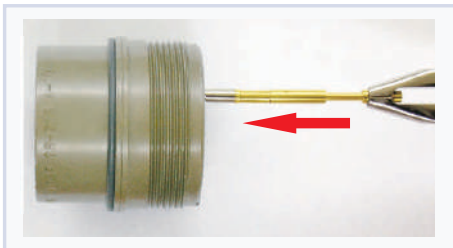


Correct Grip



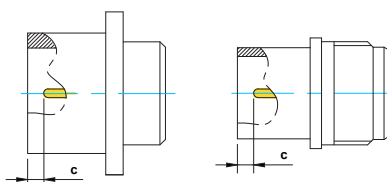
3. For SOCKET Contacts always use Guide/Pilot pins.

4. Hold Connector body firmly and apply a slow, even pressure perpendicular to the insulator face until the contact snaps into position.



5. Check from the mating end to ensure that the contacts are inserted to its proper depth.

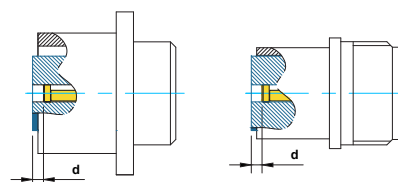
APPROXIMATE CONTACT DEPTH* (PLUG CONTACT):



#16 SPC PLG A30 / C30 (SHELL SIZE 10SL TO 16S)	#16 LPC PLG A30 / C30 (SHELL SIZE 16 TO 40)	#12 PLG A30 / C30 (SHELL SIZE 16 TO 40)
c	c	c
1.5 - 2.8	5.3 - 6.5	2.0 - 3.0

*GIVEN DEPTH IS APPROXIMATE. MAY VARY FOR DIFFERENT ITEMS.

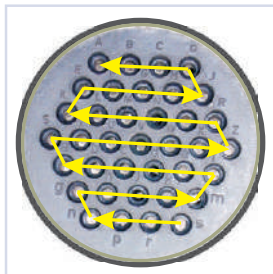
APPROXIMATE CONTACT DEPTH* (SOCKET CONTACT):



#16 SSC SKT A30 / C30 (SHELL SIZE 10SL TO 16S)	#16 LSC SKT A30 / C30 (SHELL SIZE 16 TO 40)	#12 SKT A30 / C30 (SHELL SIZE 16 TO 40)
d	d	d
1.0 - 2.2	1.1 - 2.0	1.8 - 3.0

*GIVEN DEPTH IS APPROXIMATE. MAY VARY FOR DIFFERENT ITEMS.

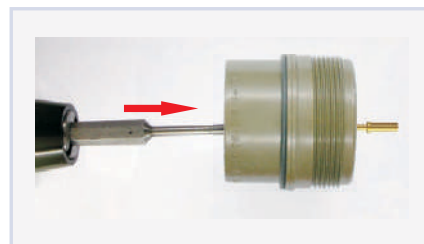
6. Continue the same by working progressively from contact-to-contact across the layout.



7. After all the contacts have been inserted, slide the coupling nut, ferrule, grommet, end-bell and any other accessory back into position.

EXTRACTION OF CONTACTS

1. To remove the contacts, use the Extraction Tool, which contains tool tips for Plug & Socket contacts.
2. Apply a slow even pressure to push the contacts out of the **rear of the insulator**.
Use same lubricants as used for insertion of contacts.



PART NUMBER INFORMATION FOR CRIMP TOOLS*					
CONTACT SIZE	CRIMP TOOL	DIE ASSEMBLY	LOCATOR/TURRET/ POSITIONER	INSERTION TOOL	EXTRACTION TOOL
16S/16	DMC AF8 (M22520/1-01) (Hand Operated - Manual)	Not Applicable	TH-29	AEC 16 / 12 Insertion Tool	AEC 16 EXTR Tool
	DMC WA27F (Hand Operated Pneumatic)				
12	DMC AF8 (M22520/1-01) (Hand Operated - Manual)	Not Applicable	TH-29	AEC 16 / 12 Insertion Tool	AEC 12 EXTR Tool
	DMC WA27F (Hand Operated Pneumatic)				
8	DMC WA23 (M22520/23-01) (Bench Mount Pneumatic)	DMC WA23-2 (M22520/23-02)	DMC WA23-147L. Plug: To Also Use Contact Adaptor 'Allied SK1789'. Socket: No Contact Adaptor Required.	AEC 8 Insertion Tool	AEC 8 EXTR Tool
	DMC HD23 (Hand Operated Hydraulic)				
4	DMC WA23 (M22520/23-01) (Bench Mount Pneumatic)	DMC WA23-4 (M22520/23-04)	DMC WA23-122L	AEC 4 Insertion Tool	Allied: AEC 4 EXTR Tool, Astrotool: ATC2234
	DMC HD23 (Hand Operated Hydraulic)				
0	DMC WA23 (M22520/23-01) (Bench Mount Pneumatic)	DMC WA23-5 (M22520/23-05)	DMC WA23-123L	Allied: AEC 0 Insertion Tool, DMC: DAK99-0S	Allied: AEC 0 EXTR Tool, DMC: Plug Tip: DRK100-0P, Socket Tip: DRK100-0S. Use With Handle DRK100-1, Or Use With Handle Of DAK99-0S
	DMC HD23 (Hand Operated Hydraulic)				

*DMC = Daniels Manufacturing Corporation. For all DMC tools, please confirm scope in DMC catalogue and contact DMC prior to ordering.
All part nos are applicable for contacts with standard termination sizes as given in the 'crimp contact termination sizes' sheet - page 62.
For any non-standard contact part nos, please consult factory.
Recommended lubricant for insertion of power contact - HELLERINE (from Hellermann Tyton). To ensure lubricant is wiped off with a clean cloth after contact insertion.

MS CONNECTORS

Circular Threaded Coupling Connectors as per JSS 50812 (equivalent to MIL-C-5015)

Allied MS connectors are ideal for use in harsh environments, where power/signal has to be transmitted in an environment of extremely low or high temperatures, humidity, and vibration. Apart from providing mechanical protection to the contacts, the connectors are lightweight and easy to handle, which facilitates ease of mating/un-mating. The versatility of this product range is exemplified by its widespread adoption in military as well as various industrial applications.

(LCSO Approved)

METRIC CONNECTORS

Circular Threaded Coupling Connectors conforming to Russian specification

Manufactured as per JSS 50860, Allied Metric series connectors are mainly used in tanks, naval vessels, and military vehicles which are based on Russian design.

(LCSO Approved)

RAILWAY CONNECTORS

Allied offers a wide range of internationally compatible connectors for railway locomotives of different origins-diesel as well as electric. The applications include locomotive control systems, safety systems, communication systems, signalling systems, air-conditioning systems, critical braking systems, amongst many others.

(RDSO/CLW/DLW Approved) (EN45545, UL94V-0 Qualified)

D38999 CONNECTORS

Allied is the exclusive Assembly Distributor (V.A.D.) of Souriau - France for D38999 Series III connectors in India.

These are high density, lightweight connectors designed primarily for airborne applications.

(QPL QUALIFIED)



AQWL CONNECTORS

Allied AQWL connectors are a ruggedized derivative of circular threaded coupling range "MS". These connectors feature double stub coupling threads for quick mating, and left hand accessory threads for foolproof on-field performance. Originally designed for power distribution systems and maritime applications, this range is available with a complete range of backshells, gaskets, and protective covers.



AMR CONNECTORS

Allied AMR waterproof connectors are designed to meet the requirements of MIL-C-5015. The connectors provide effective environmental resistance in the harshest outdoor environments. All mated insert surfaces have resilient O-ring seals for protection against moisture/dust ingress, while gland seals at cable entry provide excellent cable strain relief. Applications include radar installations and nuclear power control systems.



BH CONNECTORS

Designed as per MIL-DTL-26482 Series 1 (Solder Termination), Allied BH Connectors are miniature bayonet coupling connectors. The range comprises 9 shell sizes and various styles. Configuration of contacts varies from 2 to 61, spread across the nine shell sizes. Best suited for applications where space and weight are key constraints; all connectors feature factory fitted gold plated contacts to guarantee reliable long term electrical performance.



MGE CONNECTORS

Allied MGE connectors are single pin high power connectors for interconnect applications involving very high currents and low voltage. The range is derived from NATO specification VG95234, and also meets the performance requirements of NATO specification VG 96929. Current rating up to 750A is achieved using a unique insulator design, while complete foolproof mating is achieved with a 120 degree rotation of the coupling nut, providing an audible and tactile 'click' on mating.

(LCSO Approved)



CABLE HARNESS ASSEMBLIES

Allied offers industrial, defence, and railway equipment customers a range of cable harness assembly solutions, which serve as a valuable one stop interconnect solution. Both "Built to Spec" and "Built to Print" assemblies are available with a range of standard/customised backshells and termination solutions.



CUSTOMISED CONNECTORS

Allied's USP lies in its ability to provide customized solutions for challenging applications. With an experience of over 5 decades and an integrated manufacturing infrastructure, Allied helps convert customer ideas into cost effective, reliable and robust connector solutions.



These notes are intended to be used in conjunction with the Product Catalogues and Product Specifications. Products may be safely used in the applications for which they have been designed, and within the specified ratings and environments. If products are exposed to conditions outside the performance rating or specified environments they may constitute a hazard.

No information and data contained in this catalogue shall be construed to create any liability on the part of Allied. Any new issue of this catalogue shall automatically invalidate and supersede any and all previous issues. A limited warranty applies to Allied products. Except for obligations assumed by Allied under this warranty, Allied shall not be liable for any loss, damage, cost of repairs, incidental or consequential damages of any kind, whether or not based on express or implied warranty, contract, negligence or strict liability arising in connection with the design, manufacture, sale, use or repair of the products.

In particular it should be noted that:-

1. MATERIAL CONTENT

Circular Connectors generally use metalwork parts made of brass, aluminium, phosphor-bronze or steel, which are dependent on the particular application, may be passivated and protected with cadmium or nickel plating in conjunction with chromated surface finishes. The insulating materials can be synthetic rubber, together with plastic or glass-filled plastic moulded parts. Contact materials vary but are usually made of Copper alloys.

2. ELECTRIC SHOCK, BURNS AND FIRE

Hazard can occur if the product is used outside the specified parameters or if the product is damaged, wrongly wired or poorly assembled, or poorly integrated into larger equipments, or contaminated with conductive fluids. Live circuit terminations must be protected and never broken by disconnecting products.

Hot spots may be created when resistance is increased due to damage or incorrect integration particularly soldering, or loose terminations. Overheating can cause breakdown of insulation, electric shock, burns or, ultimately, fire. In the event of fire, noxious and/or toxic fumes may be released. In these circumstances, any fire involving the product should be dealt with by personnel properly equipped. Connector with exposed terminations or contact should not be used on the current supply side of a circuit with exposed contacts or on an unmated product. Before making a circuit live, the product and wiring should be checked to ensure that there is no damage and no electrically conducting debris present. Circuit resistance checks should also be conducted before making the circuit live. Always ensure that connectors are assembled and wired by properly trained personnel.

3. USE, TRANSPORT AND STORAGE OF PRODUCTS

Care must be exercised to avoid damage to any part of the products during transport, storage or use. Abnormal transit or storage conditions and abuse during installation can give rise to damage. Products should not be used in a damaged condition.

Improper storage (particularly of damaged products) can give rise to additional hazards particularly corrosion.

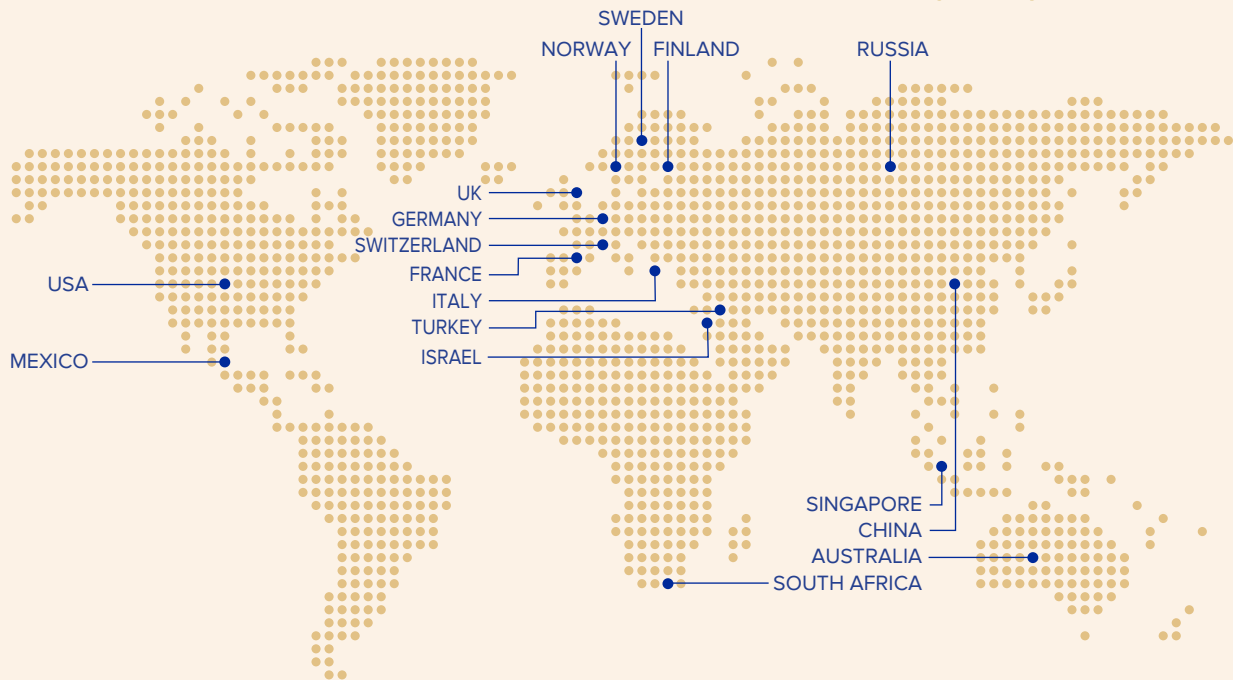
4. DISPOSAL OF PRODUCTS

Products should not be burnt.

SAFETY RULES

- A. Follow the guidelines given.**
- B. Always protect live circuits and never disconnect a live connector.**
- C. Never use a damaged connector.**
- D. Never burn discarded connector.**

GLOBAL PRESENCE



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