

4M SERIES TRIAX CAMERA CONNECTORS

4M Series TRIAX Camera Connectors

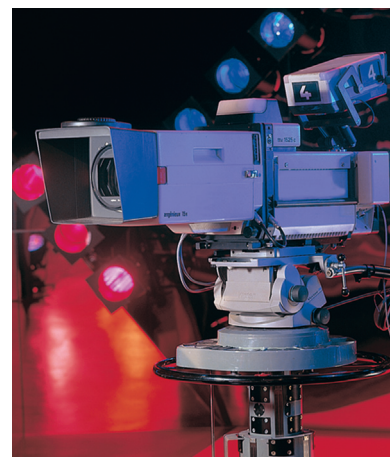
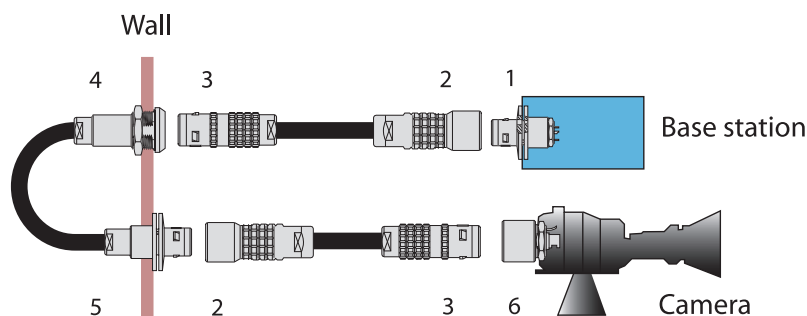
The LEMO 4M series of triaxial connectors are equipped with housings developed for use in harsh environments. The wide range of models is designed to meet the varied requirements of the television and entertainment industries. Similar in construction to the E series, 4M connectors have a high degree of protection rated at IP66 in accordance with standard IEC 529 for mated connectors (up to IP68 if assembled to special instructions). In addition the outer shells are provided with a mechanical guide to prevent any connector rotation thereby avoiding any interruption of signals. The 4M.650 is a BBC standard connector for studio and outside broadcast cameras.

Features/Benefits

- 4M.650 is a UK industry standard TRIAX connector for broadcast cameras
- Designed for harsh environments
- Rated to IP66/8 standard
- Outer shells designed to prevent any connector or contact rotation
- Quick connect/release system
- Range of housings
- Outstanding reliability >1000 mating cycle capability

TYPICAL LAYOUT

Studio

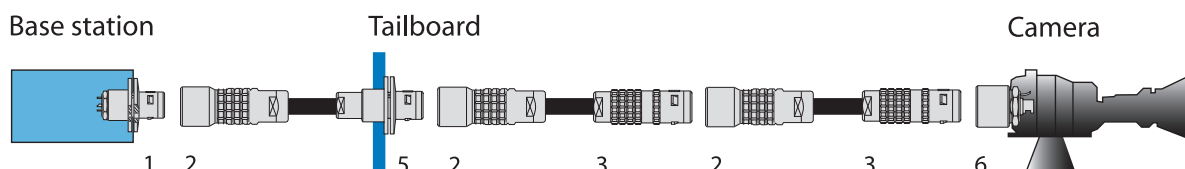


KEY*

- 1 FBD.4M.650.CTL
- 2 PHG.4M.650.CTAC11Z + GMA.4B.010.DR
- 3 FGG.4M.650.CTLC11Z + GMA.4B.010.DJ
- 4 PKG.4M.650.CTAC 11
- 5 FBB.4M.650.CTLC11
- 6 EHM.4M.650.CTA

* These part numbers are the most common for 11mm Triax

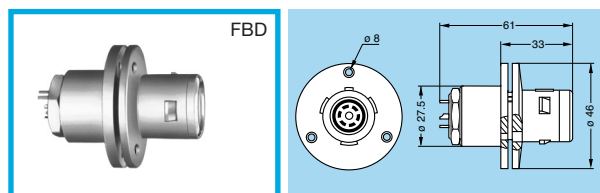
OB Van



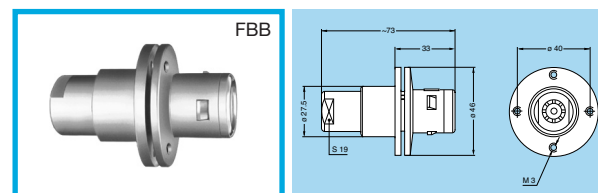
CONNECTOR STYLES

All dimensions are in mm

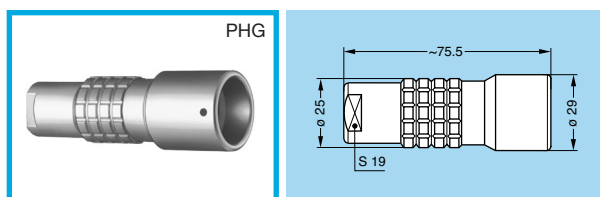
FBD Straight plug with round flange (screw fixing)



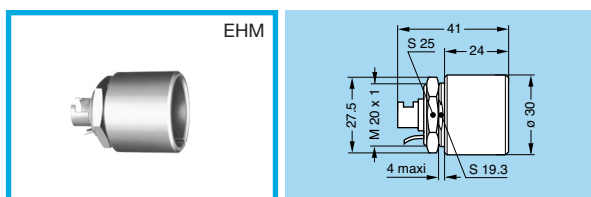
FBB Straight plug with round flange & collet (screw fixing)



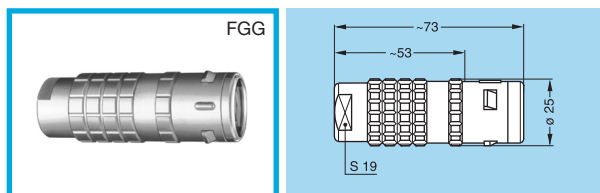
PHG Free socket with cable collet



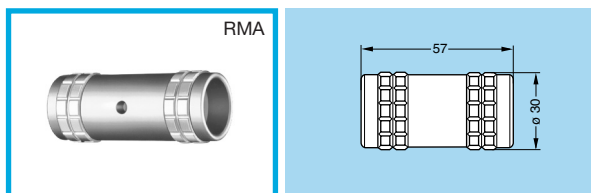
EHM Fixed socket with tag, visible shell



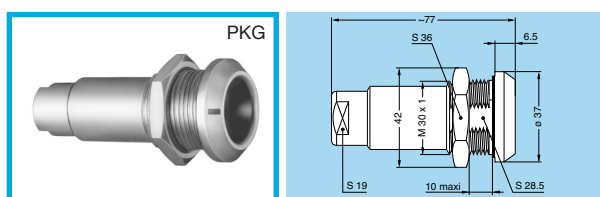
FGG Straight plug with cable collet



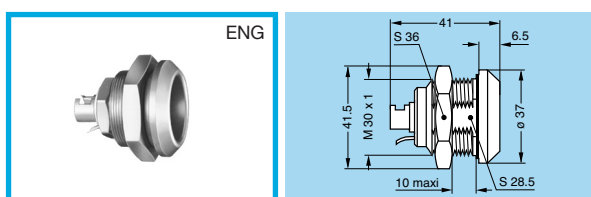
RMA Free coupler



PKG Fixed socket, nut fixing with cable collet

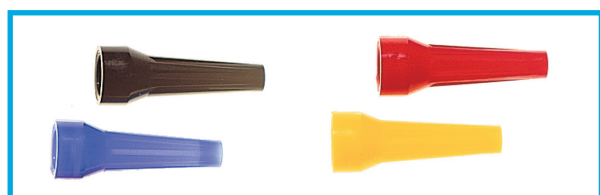


ENG Fixed socket with tag, nut fixing



ACCESSORIES

Strain relief



The cable entry of plug and socket models with cable collets can be protected by a sleeve made of polyurethane. This accessory can be supplied according to the part numbers opposite.

Note: Material is Polyurethane (Desmopan 786) and has a working temperature of -40°C + 80°C (-40°F + 176°F)

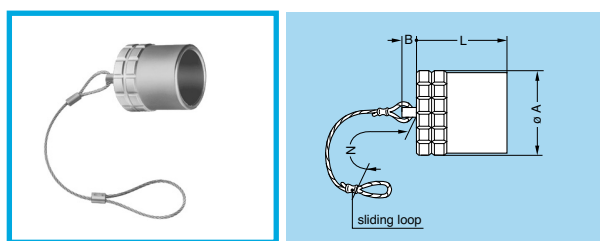
Part number ¹	Strain relief (mm)		Cable dia. (mm)	
	A	L	max.	min.
GMA.4B.080.D-	8.0	60	9.0	8.0
GMA.4B.010.D-	10.0	60	10.9	10.0
GMA.4B.011.D-	11.0	60	11.9	11.0
GMA.4B.012.D-	12.0	60	13.0	12.0
GMA.4B.013.D-	13.5	60	14.5	13.5

Ref.	Colour
A	Blue
B	White
G	Grey
J	Yellow
M	Brown
N	Black
R	Red
S	Orange
V	Green

¹Select colour of strain relief by adding letter from table on right to the end of the part number.

! Remember to add a 'Z' in the variant position of your connector code to accommodate the strain relief (see page 4).

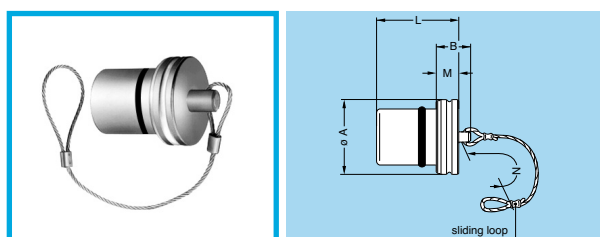
Plug cap



Part number	'O' ring material	Dimensions (mm)				Weight (g)
		A	B	L	N	
BFG.4K.100.NAS	Silicone rubber	29.0	10	24.5	120	37
BFG.4K.100.NAV	FPM (Viton®)	29.0	10	24.5	120	37

Note: Body material: Brass (UNS C 38500), nickel plated (Ni 3µm)

Cap for free sockets



Part number	'O' ring material	Dimensions (mm)				Weight (g)
		A	B	L	N	
BRF.4K.200.NAS	Silicone rubber	30	20	30.5	120	37
BRF.4K.200.NAV	FPM (Viton®)	30	20	30.5	120	37

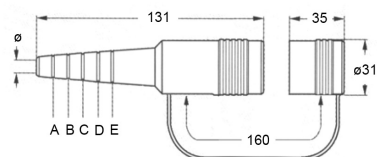
Note: Body material: Brass (UNS C 38500), nickel plated (Ni 3µm)

Accessories continued

Protective Boots

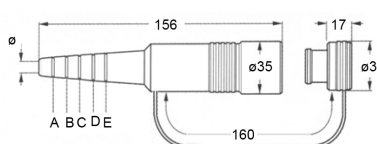
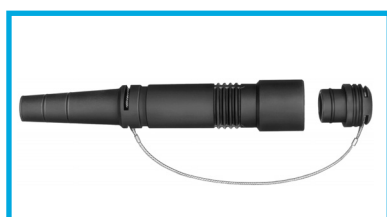
FGG Style Protective boot

All dimensions are in mm



Part number	Connector style	Section	Cable dia.	
			Min.	Max.
GMF.4K.080.EANZ	FGG	--	8.0	8.9
		A	9.0	9.9
		B	10.0	11.4
		C	11.5	12.9
		D	13.0	14.9
		E	15.0	16.5

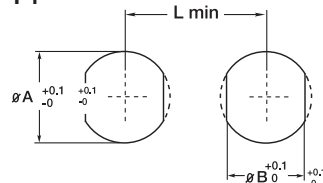
PHG Style Protective boot



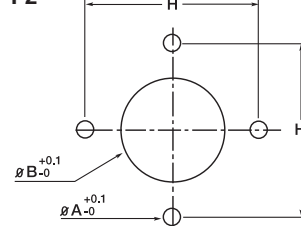
Part number	Connector style	Section	Cable dia.	
			Min.	Max.
GMP.4K.080.EANZ	PHG	--	8.0	8.9
		A	9.0	9.9
		B	10.0	11.4
		C	11.5	12.9
		D	13.0	14.9
		E	15.0	16.5

PCB cut-outs

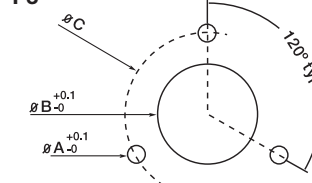
P1



P2



P3



All dimensions are in mm

Model	P1			P2			P3		
	A	B	L	A	B	H	A	B	C
EHM	20.2	19.5	32.0						
ENG-PKG	30.2	28.7	43.0						
FBB				3.1	27.7	40.0			
FBD							5.0	27.7	35.0

Part number example

Model: See previous page	FGG	4M	650	C	T	L	C	11		Variant ¹
Series: 4M										Collet size
Type: 650 = Triaxial 50 Ω 675 = Triaxial 75 Ω (on request)										Cable fixing type: C / K = cable collet
Housing: C = chrome plated brass										Contact type: A = male solder L = female solder M = female - female
Insulator: T = PTFE										

Note: As a Broadcast standard, plugs are fitted with female contacts and sockets with male contacts. On request all plugs can be fitted with male contacts and sockets with female. Sockets have gold plated earthing crown.

¹ A 'Z' in the variant position of the part number indicates the model is fitted with a nut for accommodating a strain relief. The strain relief is ordered separately (see 'Accessories' section for part number).

FGG.4M.650.CTL C11

Straight plug with key (G) and cable collet, series 4M, triaxial 50 Ω type, chrome plated brass shell, PTFE Insulators, female solder contact, C type collet for a 11mm cable.

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