



Image for illustrative purpose only

Summary

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[f series](#)

[See video assembly instructions](#)

Number of contacts Low Voltage	5
Wire Size/AWG	24 - 20
Gender	Standard
Plug	Plug - Straight
Locking system	Push-pull
Jacket cable outside diameter [mm]	3.80 - 10.70 mm
Size	1F
Series	F - Rugged Push-Pull

https://www.lemo.com/int_en/solutions/optima/f-rugged-push-pull/fgn-1f-305-clc.html

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Technical details

Electrical Configuration

Number of contacts Low Voltage	5
Contact Termination Low voltage	Crimp
R (max)	4.8 mOhm
Insert configuration value	1F.305 - 5 Low Voltage
Insulator	L: PEEK (UL 94 / V-0/1.5)
Rated current	9 A
Vtest (contact-contact)	1300 V (AC), 1840 V (DC)
Vtest (contact-shell)	1550 V (AC), 2200 V (DC)
Contact retention	30 N
Max. Conductor	0.5 mm ² (AWG 20)
Min. Conductor	0.25 mm ² (AWG 24)
Bucket Dia.	1.1 mm (0.043in)
Contact Dia.	0.9 mm (0.035in)
Wire Size/AWG	24 - 20
Gender	Standard

Form & Material

Shell style / Model id	FG - Straight plug
Plug	Straight
Housing material	Brass (chrome plated [SAE AMS 2460]) shell and nut, other pieces brass
Locking system	Push-pull
Keying	3 keys (beta=165, gamma=30, plug: male contacts, receptacle: female contacts)
Weight	11.74 g

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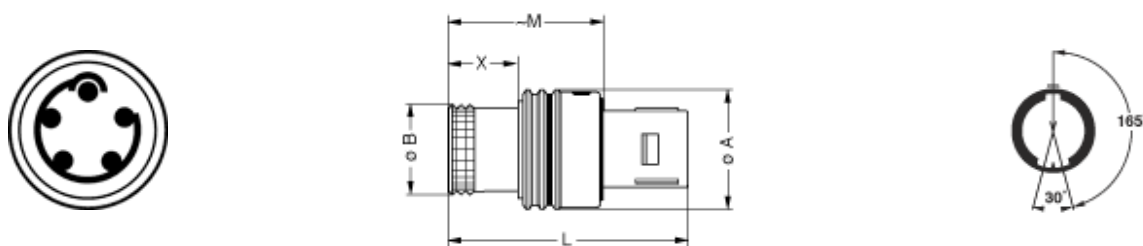
Environment

Technical domain	Motorsport, Security and Defence
Environmental sealing (IP rating)	IP67
Endurance	5000 mating cycles
Temperature range	-55°C / +200°C (max. temperature valid for short periods of use.)
Climatic Category	50/175/21 (Aluminium shell)
Humidity (max)	<=95% [at 60 deg C /140 F]
Shock Resistance	100 g [6 ms]
Vibration	15 g [10 Hz - 2000 Hz]
Salt Spray Corrosion	>1000 hr

Cable fixation

Cable termination protection	Heatshrink
Fixation type	Heatshrink
Jacket cable outside diameter [mm]	3.80 - 10.70 mm

Drawings



Dimensions

	M	A	B	L	X
mm.	17.9	14	10.7	27.8	8
in.	0.7	0.55	0.42	1.09	0.31

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Recommended By Lemo

Accessories

Replacement contact	FGG.0B.560.ZZC
Compatible cap	BFG.1F.100.XAZ

Tools

Positionner	DCE.91.090.BVC
Extraction tool	DCC.09.05B.LAG
Crimp tool	DPC.91.701.V

CAD

Documents

Eplan	Download
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Cables

Cable PartNumber	Material	Colour	Cable image
CMN.05.T20.057PGZE		grey	
CMN.05.T20.057PNZE			
CMN.05.T20.057QGZE	TPR (medical)	Grey	
CMN.05.T22.051QGZE	TPR (medical)	Grey	
150250	PVC	Grey	
250500	PVC	Grey	
50090	PVC	Black	
50140	PVC	Grey	

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