



Image for illustrative purpose only

Summary

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f series

Number of contacts Low Voltage	5
Wire Size/AWG	24 - 20
Gender	Standard
Socket / Receptacle	Socket / Receptacle - Fixed Panel Rear Mounted
Locking system	Push-pull
Panel Drill Hole	M13
Jacket cable outside diameter [mm]	3.80 - 10.70 mm
Size	1F
Suggested matching part	FGN.1F.305.XLC
Series	F - Rugged Push-Pull

https://www.lemo.com/int_en/solutions/optima/f-rugged-push-pull/pen-1f-305-xlm.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	PE - Straight receptacle, nut fixing (back panel mounting)
Socket / Receptacle	Fixed Panel Rear Mounted
Housing material	Aluminium (nickel plated [SAE AMS QQ N 290], anthracite color) shell and nut, other pieces bronze/brass
Locking system	Push-pull
Keying	3 keys (beta=165, gamma=30, plug: male contacts, receptacle: female contacts)
Colour	Grey
Weight	8.12 g
Panel Drill Hole	M13

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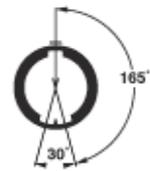
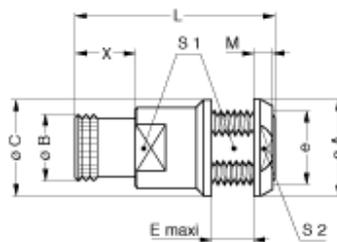
Environment

Technical domain	Motorsport, Security and Defence
Environmental sealing (IP rating)	IP67
Endurance	1000 mating cycles
Temperature range	-15°C / +200°C (max. temperature valid for short periods of use.)
Climatic Category	15/200/21 (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	max. 48 hr

Cable fixation

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

Drawings



Dimensions

	S2	S1	A	B	C	e	E	L	M	X
mm.	14	11.5	17	10.7	17	M13x0.75	6.2	26.7	3.2	8
in.	0.55	0.45	0.67	0.42	0.67		0.24	1.05	0.13	0.31

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Recommended By Lemo

Accessories

Replacement contact [EGG.0B.660.ZZM](#)

Tools

Spanner 2 [DCM.65.140.AZ](#)

Positionner [DCE.91.090.BVM](#)

Extraction tool [DCC.09.05B.LAG](#)

Crimp tool [DPC.91.701.V](#)

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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