



*Image for illustrative purpose only*

## Summary

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Number of contacts Low Voltage	10
Wire Size/AWG	26 - 22
Gender	Standard
Socket / Receptacle	Socket / Receptacle - Free
Locking system	Ratchet
Jacket cable outside diameter [mm]	6.50 - 13.00 mm
Size	2M
Suggested matching part	<a href="#">FGN.2M.310.XLBT</a>
Series	M - Rugged Ratchet coupling

[https://www.lemo.com/int\\_en/solutions/optima/m-ratchet-coupling/phn-2m-310-xlpt.html](https://www.lemo.com/int_en/solutions/optima/m-ratchet-coupling/phn-2m-310-xlpt.html)

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# Technical details

## Electrical Configuration

Number of contacts Low Voltage	10
Contact Termination Low voltage	Crimp
Insert configuration value	2M.310 - 10 Low Voltage
Insulator	L: PEEK
Rated current	8 A
Test voltage (kV rms) Contact-contact	1.8
Test voltage (kV rms) Contact-shell	1.2
Contact Dia.	0.9
Wire Size/AWG	26 - 22
Gender	Standard

## Form & Material

Shell style / Model id	PH - Free receptacle with arctic grip and mold stop
Socket / Receptacle	Free
Housing material	Aluminium (nickel plated [SAE AMS QQ N 290], anthracite color) shell and nut, other pieces bronze/brass
Locking system	Ratchet
Keying	N: 3 keys (beta=165, gamma=30, plug: male contacts, receptacle: female contacts)
Colour	Grey
Weight	12.77 g

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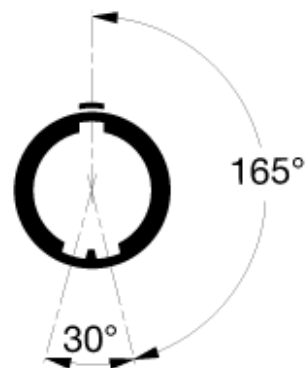
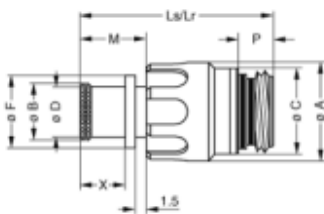
## Environment

Technical domain	Motorsport, Security and Defence, Transportation, Aerospace and UAV
Environmental sealing (IP rating)	IP68
Endurance	3000 mating cycles
Temperature range	-20°C / +200°C (max. temperature valid for short periods of use.)
EMI Shielding EIA 364-66A	$\geq 80$ dB (1 GHz), $\geq 70$ dB (3 GHz), $\geq 58$ dB (6 GHz), $\geq 40$ dB (10 GHz)
Gunfire vibration	25 Hz - 2000 Hz, 3 axis (Apache helicopter)
Humidity (max)	21 days at 95%
Lighting strike EIA 364-76	10K amps - 6 times
Shock Resistance	300 g [ 3 ms]
Thermal shock	5 cycles: -65°C to +150°C
Vibration-Random	37.8 g rms - 3 axes, 4 hr amb [50 Hz - 2000 Hz]
Vibration-Sine	30 g, 3 axes, 12 hr [10 Hz - 2000 Hz]
Salt Spray Corrosion	max. 48 hr

## Cable fixation

Cable termination protection	For overmolding
Fixation type	Mold stop (overmolding)
Jacket cable outside diameter [mm]	6.50 - 13.00 mm

## Drawings



[https://www.lemo.com/int\\_en/solutions/optima/m-ratchet-coupling/phn-2m-310-xlpt.html](https://www.lemo.com/int_en/solutions/optima/m-ratchet-coupling/phn-2m-310-xlpt.html)

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## Dimensions

	A	B	C	D	F	Ls	Lr	M	P	X
mm.	18.9	14	17.2	13	15.5	29	29	10.1	5.3	7.1
in.	0.74	0.55	0.68	0.51	0.61	1.14	1.14	0.4	0.21	0.28

## Recommended By Lemo

### Accessories

Replacement contact	<a href="#">EGN.0M.661.ZZM</a>
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Compatible cap	<a href="#">BGF.2M.200.XAZ</a>
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### Tools

Positionner	<a href="#">DCE.91.090.3MVM</a>
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Extraction tool	<a href="#">DCC.09.05B.LAG</a>
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Crimp tool	<a href="#">DPC.91.701.V</a>
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## CAD

### Documents

Eplan	<a href="#">Download</a>
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[https://www.lemo.com/int\\_en/solutions/optima/m-ratchet-coupling/phn-2m-310-xlpt.html](https://www.lemo.com/int_en/solutions/optima/m-ratchet-coupling/phn-2m-310-xlpt.html)

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