



M8 industrial sensor-actuator cordset

M8 Sensor Actuator Cordset

IEC 61076-2-104 overmoulded 3/4/6/8-pin M8×1 PUR drag-chain sensor cordset

IEC 61076-2-104

3/4/6/8-Pin M8

IP67 / IP69K

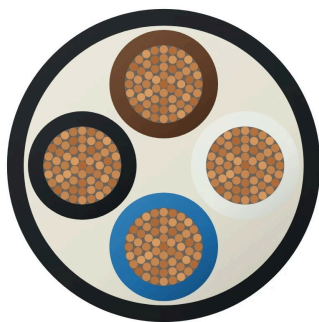
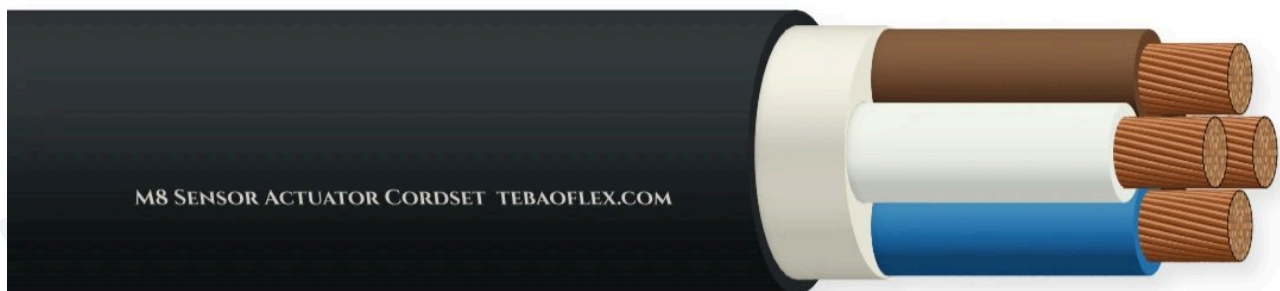


Application

Factory-overmoulded M8×1 sensor and actuator cordset to IEC 61076-2-104 and UL 2238, in 3-, 4-, 6- and 8-pole straight or 90° angled builds (with optional PNP/NPN LEDs) on 5-million-cycle halogen-free PUR drag-chain cable.

Typical uses: Robotic End-of-Arm Tooling, Compact I/O & Valve Islands, Semiconductor & Packaging Lines, Machine Tool Coolant Zones, Automated Guided Vehicles (AGV)

Construction



Cross-section, not to scale

- 1 Extra-fine Class 6 copper conductors
- 2 Halogen-free PP core insulation
- 3 Optional 360° EMC copper braid
- 4 Drag-chain polyether PUR-HF jacket
- 5 M8×1 coupling nut & gold contacts
- 6 Segmented TPU overmould & LED window

Technical data

Typical values

Rated voltage (IEC)	60 V AC/DC (3/4-pin) · 30 V AC/DC (6/8-pin)	Rated current at 40 °C	4.0 A (3/4-pin, 0.34 mm ²) · 1.5 A (6/8-pin, 0.25 mm ²)
Contact resistance	≤ 5 mΩ (gold-plated CuZn contacts)	Insulation resistance	≥ 100 MΩ at 500 V DC
Test voltage	1.5 kV AC (3/4-pin) · 0.8 kV AC (6/8-pin)	Fixed operating temperature	−40 °C to +85 °C (cable & connector)
Drag-chain flexing range	−25 °C to +80 °C	UL AWM rating	+80 °C / 300 V (UL Style 20549)
Drag-chain endurance	≥ 5,000,000 bending cycles at 10 × OD	Torsional endurance	± 180°/m (robotic applications)
Min. bend radius	5 × OD (fixed) · 10 × OD (drag chain)	Tightening torque	0.4 Nm (M8×1 hex knurled nut)
Mating durability	≥ 100 mating cycles (IEC 61076-2-104)	Ingress protection	IP67 / IP68 (1 m, 24 h) / IP69K (mated)
Oil & coolant resistance	DIN EN 60811-404 / UL Oil Res I & II	Halogen-free & flame	IEC 60754-1/2 & IEC 60332-1-2 / UL FT2
Welding spark & UV	Weld-slag resistant polyether PUR	Standards	IEC 61076-2-104 (A-coded & B-coded)
Standard packing	Individually bagged with barcoded part/test label; 25/50 pcs per carton		

Sizes

15 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Order designation	Head Type & Termination	Poles & Cores	Length m	Cable OD mm	Copper kg/km	Cable Wt kg/km	Flex R mm
Single-Ended M8 Sensor Pigtailes (Straight, 90° & LED) 8 sizes							
☐ M8-3P-F-STR-2M-PUR	Female Straight → Flying Leads	3-Pin (3×0.34 mm ²)	2.0	4.1	9.8	24	41
☐ M8-3P-F-STR-5M-PUR	Female Straight → Flying Leads	3-Pin (3×0.34 mm ²)	5.0	4.1	9.8	24	41
☐ M8-3P-F-ANG-2M-PUR	Female 90° Angled → Flying Leads	3-Pin (3×0.34 mm ²)	2.0	4.1	9.8	24	41
☐ M8-3P-F-LED-5M-PUR	Female 90° PNP 2×LED → Flying Leads	3-Pin (3×0.34 mm ²)	5.0	4.1	9.8	24	41
☐ M8-4P-F-STR-2M-PUR	Female Straight → Flying Leads	4-Pin (4×0.34 mm ²)	2.0	4.5	13.1	30	45
☐ M8-4P-F-STR-5M-PUR	Female Straight → Flying Leads	4-Pin (4×0.34 mm ²)	5.0	4.5	13.1	30	45
☐ M8-4P-F-STR-10M-PUR	Female Straight → Flying Leads	4-Pin (4×0.34 mm ²)	10.0	4.5	13.1	30	45
☐ M8-4P-F-ANG-5M-PUR	Female 90° Angled → Flying Leads	4-Pin (4×0.34 mm ²)	5.0	4.5	13.1	30	45
Double-Ended M8 Extensions, Shielded & Multi-Pin Builds 7 sizes							
☐ M8-3P-MF-DE-1M-PUR	M8 Male Straight ↔ M8 Female Straight	3-Pin (3×0.34 mm ²)	1.0	4.1	9.8	24	41
☐ M8-4P-MF-DE-2M-PUR	M8 Male Straight ↔ M8 Female Straight	4-Pin (4×0.34 mm ²)	2.0	4.5	13.1	30	45
☐ M8-4P-MF-DE-5M-PUR	M8 Male Straight ↔ M8 Female 90°	4-Pin (4×0.34 mm ²)	5.0	4.5	13.1	30	45
☐ M8-4P-M12A-2M-PUR	M8 Female Straight ↔ M12 Male A-Coded	4-Pin (4×0.34 mm ²)	2.0	4.5	13.1	30	45
☐ M8-4P-F-SHD-5M-PUR	360° EMC Shielded Female → Flying Leads	4-Pin (4×0.34 mm ² Shielded)	5.0	5.0	21.5	39	50
☐ M8-6P-F-STR-5M-PUR	Female Straight → Flying Leads	6-Pin (6×0.25 mm ²)	5.0	5.1	14.4	36	51
☐ M8-8P-F-STR-5M-PUR	Female Straight → Flying Leads	8-Pin (8×0.25 mm ²)	5.0	5.6	19.2	44	56

– Custom assembly lengths from 0.2 m to 50 m, V4A 316L stainless-steel food/pharma nuts, and weld-slag irradiated TPE jackets available on request.

Standards and approvals

- ✓ IEC 61076-2-104 M8 Interface Compliant
- ✓ UL 2238 / UL AWM Style 20549 (80 °C, 300 V)

Certifications



Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone

+86 185 9591 3361

Email

info@tebaoflex.com

Web

tebaoflex.com/cables/m8-sensor-actuator-cordset



Typical values for this cable type, based on IEC 61076-2-104 / EN 60947-5-2 / UL 2238. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.