

**UNITRONIC® FD CP plus A 10X0,25**
**Article No.:** 11139613

Low-frequency data cable; 10X0.25; Conductor color code: DIN 47100; PUR; Shielded; UL recognized; Cable chain



## Details

### Benefits

- The combination of the very robust cable design and the wide temperature range in which it can be used provides a wide range of applications..
- Durable, resistant product thanks to the outer jacket PUR material that is resistant to abrasions, notches and cuts.
- Low-capacitance conductor insulation for long transmission paths or higher data transmission rates.
- Ideal protection against electromagnetic interference thanks to copper shielding braiding with a high degree of coverage.
- Relatively small bending radii thanks to highly flexible cable design.
- UL certification according to technical data enables the product to be used on the North American market.

### Application

- Can be used universally at machine interfaces for many applications for data and signal transmission in the low-frequency range.
- Especially for environments where electromagnetic compatibility (EMC) is required.
- Cable design enables flexible, constantly flexing use in industrial robots (without torsional stress) and handling devices.

- The cable design allows flexible, continuously flexing use in moving machine parts and in the cable chain.
- Cable design also suitable for torsion applications in wind turbines.
- Can be used in dry, damp and, especially, harsh and oily environments.
- The PUR outer jacket is resistant to mineral oil-based lubricants and highly resistant to chemicals.
- Suitable for outdoor use in Europe.
- Flexible use at temperatures down to -40°C.

**Notes**

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

If applicable, the prices are solid metal prices without additional charges and VAT. Sales only to business customers.

Unless specified otherwise, the product values shown are rated values at room temperature. You can receive additional values, such as tolerances, upon request if they are available and have been released for publication.

The absence of PWIS raw materials does not protect against the potential risk of contamination with substances that interfere with the paint wetting during subsequent handling of the product(s) during transport, storage or further processing after delivery.

**Remarks**

Technical Data

**General information**

Brand	UNITRONIC®
Product type	Low-frequency data cable
Copper index	362.19 lb/10000 ft
Industry segment	Assembly Machines Construction Machinery Healthcare & Pharma Intralogistics & Material handling Lifts & Elevators Machine Tools Packaging Robotics Ships & boats

**Electrical parameters**

Maximum operating voltage (not for power transmission)	500 V
Test voltage conductor/conductor	1.5 kV
Test voltage conductor/shielding	1.5 kV

**Product design**

Cable dimension	10X0.25
Nominal cross section conductor (mm <sup>2</sup> )	0.25 mm <sup>2</sup>
Nominal cross section conductor (AWG)	24 AWG
Conductor material	Bare Copper
Conductor design	extra-fine wire
Including protective ground	No
Number of cores	10
Stranding type	Layered Stranding
Shielded	Yes
Type of overall shielding	Tin-plated copper braiding
Nominal outer diameter	0.299 in
Cable form	Round
Core insulation base material	Polyolefin
Conductor insulation basic material, short form	PO
Basic material of outer jacket	Polyurethane
Base material of outer sheath, shortname	PUR
Outer jacket color	gray
Core identification	Colors
Conductor color code	DIN 47100

**Product features**

Application area	Cable chain Flexible
For permanent bending	Yes
For torsional load	No
Minimum bending radius, stationary	4 x outer diameter

Minimum bending radius in inch, fixed installation	1.197 in
Minimum bending radius, dynamic continuously flexing	7.5 x outer diameter
Minimum bending radius in inch, dynamic continuously flexing	2.244 in
Minimum bending radius, occasionally moved	7.5 x outer diameter
Minimum bending radius in mm, occasionally moved	2.244 in
Maximum bending cycles	5,000,000
Maximum travel distance	16.404 ft
Maximum speed unsupported	9.843 ft/s
Maximum acceleration	9.843 ft/s <sup>2</sup>
Temperature, fixed installation	-40 °C to +80 °C max. conductor temperature according to UL AWM
temperature, dynamic permanently moved	-40 °C to +80 °C max. conductor temperature according to UL AWM
Flame-retardant	Yes
Flame retardance according to	IEC 60332-1-2
UV-resistant	Yes
UV-resistant according to	DIN EN ISO 4892-2 method A
weather resistant	Yes
Weather-resistant according to	ISO 4892-2
Ozone-resistant	Yes
ozone resistant according to	EN 50396, method B
Halogenfree	Yes
Halogen-free according to	VDE 0472-815
Oil resistant	Yes
Oil resistance according to	EN 50363-10-2
PWIS-free	Yes
PWIS-free according to	VDMA 24364-B2-L
Mechanically resistant	Yes

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**Certifications and standards**

CE marking	Yes
UL recognized	Yes
UL AWM certification	21576 according to UL 758 (e-file number: E63634)
UL listed	No
cUR recognized	Yes
cUR certification	AWM I A according to CSA C22.2 No. 210 (80°C, 300V) (e-file number: E63634) AWM I B according to CSA C22.2 No. 210 (80°C, 300V) (e-file number: E63634) AWM II A according to CSA C22.2 No. 210 (80°C, 300V) (e-file number: E63634) AWM II B according to CSA C22.2 No. 210 (80°C, 300V) (e-file number: E63634)
cUL listed	No
CSA certified	No
VDE certified	No
DNV-certified	No

**UNITRONIC® FD CP plus A**

Article No.	Name	Number of cores	Nominal cross section conductor (mm <sup>2</sup> )	Nominal outer diameter	Copper index
11139600	UNITRONIC® FD CP plus A 3X0,14	3	0.14 mm <sup>2</sup>	0.177 in	94.75 lb/10000 ft
11139601	UNITRONIC® FD CP plus A 4X0,14	4	0.14 mm <sup>2</sup>	0.189 in	104.16 lb/10000 ft
11139602	UNITRONIC® FD CP plus A 5X0,14	5	0.14 mm <sup>2</sup>	0.201 in	122.97 lb/10000 ft
11139603	UNITRONIC® FD CP plus A 7X0,14	7	0.14 mm <sup>2</sup>	0.224 in	186.81 lb/10000 ft
11139604	UNITRONIC® FD CP plus A 10X0,14	10	0.14 mm <sup>2</sup>	0.264 in	264.08 lb/10000 ft
11139605	UNITRONIC® FD CP plus A 14X0,14	14	0.14 mm <sup>2</sup>	0.268 in	304.4 lb/10000 ft
11139606	UNITRONIC® FD CP plus A 18X0,14	18	0.14 mm <sup>2</sup>	0.291 in	363.54 lb/10000 ft
11139607	UNITRONIC® FD CP plus A 25X0,14	25	0.14 mm <sup>2</sup>	0.35 in	459.63 lb/10000 ft
11139608	UNITRONIC® FD CP plus A 2X0,25	2	0.25 mm <sup>2</sup>	0.185 in	100.12 lb/10000 ft
11139609	UNITRONIC® FD CP plus A 3X0,25	3	0.25 mm <sup>2</sup>	0.193 in	126.33 lb/10000 ft
11139610	UNITRONIC® FD CP plus A 4X0,25	4	0.25 mm <sup>2</sup>	0.209 in	143.13 lb/10000 ft
11139611	UNITRONIC® FD CP plus A 5X0,25	5	0.25 mm <sup>2</sup>	0.22 in	208.31 lb/10000 ft
11139612	UNITRONIC® FD CP plus A 7X0,25	7	0.25 mm <sup>2</sup>	0.252 in	266.1 lb/10000 ft
11139613	UNITRONIC® FD CP plus A 10X0,25	10	0.25 mm <sup>2</sup>	0.299 in	362.19 lb/10000 ft
11139614	UNITRONIC® FD CP plus A 14X0,25	14	0.25 mm <sup>2</sup>	0.311 in	431.4 lb/10000 ft
11139615	UNITRONIC® FD CP plus A 18X0,25	18	0.25 mm <sup>2</sup>	0.339 in	526.82 lb/10000 ft
11139616	UNITRONIC® FD CP plus A 25X0,25	25	0.25 mm <sup>2</sup>	0.409 in	678.69 lb/10000 ft
11139617	UNITRONIC® FD CP plus A 2X0,34	2	0.34 mm <sup>2</sup>	0.201 in	121.63 lb/10000 ft
11139618	UNITRONIC® FD CP plus A 3X0,34	3	0.34 mm <sup>2</sup>	0.213 in	192.85 lb/10000 ft
11139619	UNITRONIC® FD CP plus A 4X0,34	4	0.34 mm <sup>2</sup>	0.228 in	239.89 lb/10000 ft
11139620	UNITRONIC® FD CP plus A 5X0,34	5	0.34 mm <sup>2</sup>	0.244 in	262.74 lb/10000 ft
11139621	UNITRONIC® FD CP plus A 7X0,34	7	0.34 mm <sup>2</sup>	0.28 in	354.13 lb/10000 ft
11139622	UNITRONIC® FD CP plus A 10X0,34	10	0.34 mm <sup>2</sup>	0.339 in	452.91 lb/10000 ft
11139623	UNITRONIC® FD CP plus A 14X0,34	14	0.34 mm <sup>2</sup>	0.346 in	576.55 lb/10000 ft
11139624	UNITRONIC® FD CP plus A 18X0,34	18	0.34 mm <sup>2</sup>	0.386 in	669.95 lb/10000 ft
11139625	UNITRONIC® FD CP plus A 25X0,34	25	0.34 mm <sup>2</sup>	0.465 in	1041.55 lb/10000 ft
11139626	UNITRONIC® FD CP plus A 2X0,14	2	0.14 mm <sup>2</sup>	0.169 in	75.26 lb/10000 ft

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