

ÖLFLEX® 409 P 2X1

Article No.: 1311902

Power and control cable; 2X1; U_0/U : 300/500 V; PUR; Core identification: Numbers; UL recognized; Flexible



Details

Benefits

- Durable, resistant product thanks to the outer jacket PUR material that is resistant to abrasions, notches and cuts.
- UL/CSA certification according to technical data enables the product to be used on the North American market.
- Product with multiple certifications enables universal use and reduces the variety of parts, thus guaranteeing logistics savings.
- Operating voltage of 1000 V according to UL, permitted for North America.

Application

- For universal use for wiring machine-internal and cross-plant control circuits.
- Typical areas of application are industrial machinery, machine tools and transfer lines.
- For fixed installation and occasional flexing without tensile strain.
- Can be used in dry, wet and especially in harsh and oily environments.
- The PUR outer jacket withstands high mechanical stress.
- The PUR outer jacket is resistant to mineral oil-based lubricants and highly resistant to chemicals.
- Suitable for outdoor use.

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	ÖLFLEX®
Product type	Power and control cable
Copper index	129 lb/10000 ft
Industry segment	Assembly Machines Healthcare & Pharma Lifts & Elevators

Electrical parameters

Nominal voltage	U_0/U : 300/500 V AC rms according to IEC
Rated voltage	1000 V AC rms according to cRU AWM 1000 V AC rms according to UL AWM
test voltage	4 kV
Current rating according to	VDE 0298-4

Product design

Cable dimension	2X1
Nominal cross section conductor (mm ²)	1 mm ²
Conductor material	Bare Copper

Conductor design	IEC 60228 class 5: fine-wire
Including protective ground	No
Number of cores	2
Stranding type	Layered Stranding
Interstice-filling functional layer	Yes
Shielded	No
Nominal outer diameter	0.283 in
Cable form	Round
Core insulation base material	Polyvinylchloride
Conductor insulation basic material, short form	PVC
Basic material of outer jacket	Polyurethane
Base material of outer sheath, shortname	PUR
Outer jacket color	black
Colour outer sheath RAL code	RAL 9005
Core identification	Numbers
Conductor color code	EN 50334 VDE 0293-1

Product features

Application area	Flexible Fixed Installation
Minimum bending radius, stationary	4 x outer diameter
Minimum bending radius in inch, fixed installation	1.134 in
Minimum bending radius, occasionally moved	12.5 x outer diameter
Minimum bending radius in mm, occasionally moved	3.543 in
Temperature, fixed installation	-40 °C to 80 °C max. conductor temperature

Temperature, occasionally moved	-5 °C to 80 °C max. conductor temperature according to UL AWM -5 °C to 70 °C max. conductor temperature according to IEC -5 °C to 80 °C max. conductor temperature according to CSA AWM
Storage temperature max.	-25 °C
Storage temperature maximum	55 °C
Flame-retardant	Yes
Flame retardance according to	IEC 60332-1-2 UL VW-1 CSA FT1
UV-resistant	Yes
UV-resistant according to	EN ISO 4892-2, method A (color change permitted) EN 50618 EN 50620
weather resistant	Yes
Ozone-resistant	Yes
ozone resistant according to	EN 50396, method B
Chemical resistant	Yes
Hydrolysis-resistant	Yes
Halogenfree	No
Oil resistant	Yes
Oil resistance according to	EN 50363-10-2
PWIS-free	Yes
PWIS-free according to	VDMA 24364-B2-L

Certifications and standards

CE marking	Yes
EAC certified	Yes
EAC certification number	EAЭC N RU Д-DE.АЮ64.В.00130/20
UL recognized	Yes
UL AWM certification	20234 according to UL 758 (e-file number: E63634) 11009 according to UL 758 (e-file number: E63634)

UL listed	No
cUR recognized	Yes
cUR certification	AWM II A according to CSA C22.2 No. 210 (e-file number: E63634) AWM I B according to CSA C22.2 No. 210 (e-file number: E63634) AWM II B according to CSA C22.2 No. 210 (e-file number: E63634) AWM I A according to CSA C22.2 No. 210 (e-file number: E63634)
cUL listed	No
CSA certified	No
VDE certified	No
HAR-certified	No
Resistance to flame propagation tested according to UN/ECE-R118	No
Ecolab certified	No

ÖLFLEX® 409 P

Article No.	Name	Number of cores	Including protective ground	Nominal cross section conductor (mm ²)	Nominal outer diameter	Copper index
1311103	ÖLFLEX® 409 P 3G0,75	3	Yes	0.75 mm ²	0.276 in	145.1 lb/10000 ft
1311104	ÖLFLEX® 409 P 4G0,75	4	Yes	0.75 mm ²	0.295 in	193.5 lb/10000 ft
1311105	ÖLFLEX® 409 P 5G0,75	5	Yes	0.75 mm ²	0.319 in	241.9 lb/10000 ft
1311107	ÖLFLEX® 409 P 7G0,75	7	Yes	0.75 mm ²	0.343 in	338.6 lb/10000 ft
1311110	ÖLFLEX® 409 P 10G0,75	10	Yes	0.75 mm ²	0.417 in	483.8 lb/10000 ft
1311112	ÖLFLEX® 409 P 12G0,75	12	Yes	0.75 mm ²	0.429 in	580.5 lb/10000 ft
1311118	ÖLFLEX® 409 P 18G0,75	18	Yes	0.75 mm ²	0.496 in	870.8 lb/10000 ft
1311125	ÖLFLEX® 409 P 25G0,75	25	Yes	0.75 mm ²	0.563 in	1209.4 lb/10000 ft
1311203	ÖLFLEX® 409 P 3G1	3	Yes	1 mm ²	0.287 in	193.5 lb/10000 ft
1311204	ÖLFLEX® 409 P 4G1	4	Yes	1 mm ²	0.307 in	258 lb/10000 ft
1311205	ÖLFLEX® 409 P 5G1	5	Yes	1 mm ²	0.335 in	322.5 lb/10000 ft
1311207	ÖLFLEX® 409 P 7G1	7	Yes	1 mm ²	0.354 in	451.5 lb/10000 ft
1311210	ÖLFLEX® 409 P 10G1	10	Yes	1 mm ²	0.441 in	645 lb/10000 ft
1311212	ÖLFLEX® 409 P 12G1	12	Yes	1 mm ²	0.453 in	774 lb/10000 ft
1311218	ÖLFLEX® 409 P 18G1	18	Yes	1 mm ²	0.524 in	1161 lb/10000 ft
1311225	ÖLFLEX® 409 P 25G1	25	Yes	1 mm ²	0.598 in	1612.6 lb/10000 ft
1311303	ÖLFLEX® 409 P 3G1,5	3	Yes	1.5 mm ²	0.315 in	290.3 lb/10000 ft
1311304	ÖLFLEX® 409 P 4G1,5	4	Yes	1.5 mm ²	0.339 in	387 lb/10000 ft
1311305	ÖLFLEX® 409 P 5G1,5	5	Yes	1.5 mm ²	0.366 in	483.8 lb/10000 ft
1311307	ÖLFLEX® 409 P 7G1,5	7	Yes	1.5 mm ²	0.394 in	677.3 lb/10000 ft
1311312	ÖLFLEX® 409 P 12G1,5	12	Yes	1.5 mm ²	0.504 in	1161.04 lb/10000 ft
1311318	ÖLFLEX® 409 P 18G1,5	18	Yes	1.5 mm ²	0.583 in	1741.6 lb/10000 ft
1311325	ÖLFLEX® 409 P 25G1,5	25	Yes	1.5 mm ²	0.677 in	2418.8 lb/10000 ft
1311403	ÖLFLEX® 409 P 3G2,5	3	Yes	2.5 mm ²	0.366 in	483.8 lb/10000 ft
1311404	ÖLFLEX® 409 P 4G2,5	4	Yes	2.5 mm ²	0.394 in	645 lb/10000 ft
1311405	ÖLFLEX® 409 P 5G2,5	5	Yes	2.5 mm ²	0.429 in	806.3 lb/10000 ft
1311407	ÖLFLEX® 409 P 7G2,5	7	Yes	2.5 mm ²	0.465 in	1128.8 lb/10000 ft
1311412	ÖLFLEX® 409 P 12G2,5	12	Yes	2.5 mm ²	0.602 in	1935.1 lb/10000 ft
1311504	ÖLFLEX® 409 P 4G4	4	Yes	4 mm ²	0.457 in	1032.03 lb/10000 ft
1311505	ÖLFLEX® 409 P 5G4	5	Yes	4 mm ²	0.5 in	1290 lb/10000 ft

Article No.	Name	Number of cores	Including protective ground	Nominal cross section conductor (mm ²)	Nominal outer diameter	Copper index
1311604	ÖLFLEX® 409 P 4G6	4	Yes	6 mm ²	0.528 in	1548.1 lb/10000 ft
1311605	ÖLFLEX® 409 P 5G6	5	Yes	6 mm ²	0.579 in	1935.1 lb/10000 ft
1311704	ÖLFLEX® 409 P 4G10	4	Yes	10 mm ²	0.669 in	2580.1 lb/10000 ft
1311705	ÖLFLEX® 409 P 5G10	5	Yes	10 mm ²	0.736 in	3225.1 lb/10000 ft
1311804	ÖLFLEX® 409 P 4G16	4	Yes	16 mm ²	0.772 in	4128.2 lb/10000 ft
1311805	ÖLFLEX® 409 P 5G16	5	Yes	16 mm ²	0.874 in	5160.2 lb/10000 ft
1311852	ÖLFLEX® 409 P 2X0,75	2	No	0.75 mm ²	0.272 in	96.8 lb/10000 ft
1311902	ÖLFLEX® 409 P 2X1	2	No	1 mm ²	0.283 in	129 lb/10000 ft
1311952	ÖLFLEX® 409 P 2X1,5	2	No	1.5 mm ²	0.307 in	193.5 lb/10000 ft

V1.1