

1020100	DATA SHEET	
Valid from: 06.04.2021	ÖLFLEX® SERVO 728 CY	

Application

ÖLFLEX® SERVO 728 CY cables are signal cables for servo motors designed for the European and North American market, for occasional flexible use and fixed installation subject to normal mechanical load conditions.

They are also suitable for use in dry, damp or wet areas.

If using outdoors, observe the indicated temperature range and use with UV protection.

They are increased resistant to oils and at room temperature largely resistant to acids and alkalis.

They are suitable for occasional, non-automated movements. The maximum tensile load is 15 N/mm^2 of conductor cross-section during installation and operation. Compulsory guidance is not permitted.

The screening braid protects against interference from electrical fields.

Application range:

analogue and incremental encoders in servo drives, measurement, control and electrical application, industrial machinery and plant engineering

Use acc. to UL: PVC sheathed cable for internal wiring or external interconnection of electronic equipment.

Use acc. to CSA: PVC sheathed cable for internal wiring or external interconnection of electronic equipment with or without mechanical load conditions.

Design

Design	acc. to UL 758, Style 2464 and based on EN 50288-7
Approvals	UL AWM Style 2464 acc. to UL 758 (File No. E63634) cRU AWM I A/B II A/B acc. to C22.2 No.210-15 (File No. E63634)
Conductor	tinned copper stranded
Core isolation	Polypropylen-based compound
Core identification	coloured, details see below
Screen (dimension dependent)	braid of tinned copper wires, coverage = 85% (nominal value)
Outer sheath	PVC- based compound (UL/CSA 80°C rating) Colour: Green, similar RAL 6018

Electrical properties

Nominal voltage	EN: 30 V UL/CSA: 300 V
Test voltage	core / core: 2000 V core / screen: 2000 V

Mechanical and thermal properties

Min. bending radius	occasional flexing: 15 x outer diameter fixed installation: 6 x outer diameter
Temperature range	occasional flexing (EN): -5 °C up to +70 °C max. conductor temp. occasional flexing (UL/CSA): -5 °C up to +80 °C max. conductor temp. fixed installation (EN): -40 °C up to +80 °C max. conductor temp. fixed installation (UL/CSA): up to +80 °C max. conductor temp.

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Flammability	flame retardant acc. to IEC 60332-1-2 resp. EN 60332-1-2 UL: Vertical flame test VW-1 CSA: FT1
Oil resistance	acc. to EN 50290-2-22, TM54
Tests	acc. to IEC 60811 resp. EN 60811, VDE 0472, EN 50395, UL 1581
EU Directives	These cables are conform to the EU-Directive 2011/65/EU (RoHS, Restriction of the use of certain hazardous substances). As this product is designed for appropriate use in a voltage range of 30 V, it is not subject to the Low Voltage Directive 2014/35/EU.

Core-Identification-Code for ÖLFLEX® SERVO 728 CY

1020100	Dimension: 10 x 0.14 + 2 x 0.5 Cores: 0.14 mm ² : WH; BN; GN; YE; GY; PK; BU; RD; BK; VT Pair: 0.5 mm ² : (WH+BN) Overall screen: Tinned copper braid, coverage = 85 % (nominal value)
1020101	Dimension: 10 x 0.14 + 4 x 0.5 Cores: 0.14 mm ² : WH; BN; GN; YE; GY; PK; BU; RD; BK; VT Cores: 0.5 mm ² : WH; BN; BU; BK Overall screen: Tinned copper braid, coverage = 85 % (nominal value)
1020102	Dimension: 15 x 0.14 + 4 x 0.5 Cores: 0.14 mm ² : GY; PK; BU; RD; BK; VT; GY/PK; RD/BU; WH/GN; BN/GN; WH/YE; YE/BN; WH/GY; GY/BN; WH/PK Cores: 0.5 mm ² : WH; BN; GN; YE Overall screen: Tinned copper braid, coverage = 85 % (nominal value)
1020133	Dimension: 4 x 2 x 0.14 + 4 x 0.5 Pairs: 0.14 mm ² : (RD+BK); (BN+GN); (YE+VT); (GY+PK) Cores: 0.5 mm ² : WH; BU; WH/GN; BN/GN Overall screen: Tinned copper braid, coverage = 85 % (nominal value)
1020134	Dimension: 7 x 2 x 0.14 + 2 x 0.5 Pairs: 0.14 mm ² : (WH+BN); (GN+YE); (GY+PK); (BU+RD); (BK+VT); (GY/PK+RD/BU); (WH/GN+BN/GN) Cores: 0.5 mm ² : WH; BN Overall screen: Tinned copper braid, coverage = 85 % (nominal value)

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1020110 Dimension: **4 x 2 x 0.34 + 4 x 0.5**

Pairs: 0.34 mm²: (BN+BK); (RD+OG); (YE+GN); (BU+VT)

Cores: 0.5 mm²: BU/WH; BK/WH; RD/WH; YE/WH

Overall screen: Tinned copper braid, coverage = 85 % (nominal value)

1020120 Dimension: **4 x 2 x 0.25 + 2 x 0.5**

Pairs: 0.25 mm²: (BN+GN); (GY+PK); (BU+VT); (RD+BK)

Cores: 0.5 mm²: WH; BN

Overall screen: Drain wire, tinned copper wire strands

Tinned copper braid, coverage = 85 % (nominal value)

1020121 Dimension: **4 x 2 x 0.25 + 2 x 1.0**

Pairs: 0.25 mm²: (BN+GN); (GY+PK); (BU+VT); (RD+BK)

Cores: 1.0 mm²: WH; BN

Overall screen: Drain wire: Tinned copper wire strands

Tinned copper braid, coverage = 85 % (nominal value)

1020140 Dimension: **5 x 2 x 0.25**

Pairs: 0.25 mm²: (WH+BN); (GN+YE); (GY+PK); (BU+RD); (BK+VT)

Overall screen: Tinned copper braid, coverage = 85 % (nominal value)

1020141 Dimension: **6 x 2 x 0.25**

Pairs: 0.25 mm²: (WH+BN); (GN+YE); (GY+PK); (BU+RD); (BK+VT); (GY/PK+RD/BU)

Overall screen: Tinned copper braid, coverage = 85 % (nominal value)

1020111 Dimension: **3 x (2 x 0.14) + 4 x 0.14 + 2 x 0.5**

Pairs: 0.14 mm²: (YE+GN); (BK+BN); (RD+OG)

Pair shield: Drain wire, tinned copper wire strands

Wrapping of tinned copper wires

Covering: Polyolefin

Pair: 0.5 mm²: (BN/RD+BN/BU)

Cores: 4-conductor bundle 0.14 mm²: GY; BU; WH/YE; WH/BK

Overall screen: Tinned copper braid, coverage = 85 % (nominal value)

1020135 Dimension: **3 x (2 x 0.14) + 4 x 0.14 + 2 x 0.5 + 4 x 0.22**

Pairs: 0.14 mm²: (YE+GN); (BK+BN); (RD+OG)

Pair shield: Drain wire, tinned copper wire strands

Wrapping of tinned copper wires

Covering: Polyolefin

Pair: 0.5mm²: (BN/RD+BN/BU)

Cores: 4-conductor bundle 0.14 mm²: GY; BU; WH/YE; WH/BK

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Cores: 4-conductor bundle 0.22 mm²: BN/YE; BN/GY; GN/BK; GN/RD

Overall screen: Tinned copper braid, coverage = 85 % (nominal value)

1020122 Dimension: **4 x 2 x 0.14 + 4x1 + (4 x 0.14)**

Cores: 4-conductor bundle 0.14 mm²: YE/BK; BU/BK; GN/BK; RD/BK
Wrapping of tinned copper wires

Cores: 1 mm²: WH; BN/GN; WH/GN; BU

Pairs: 0.14mm²: (RD+BK); (BN+GN); (YE+VT); (GY+PK)

Overall screen: Tinned copper braid, coverage = 85 % (nominal value)

1020130 Dimension: **3 x (2 x 0.14) + 2 x (0.5)**

Pairs: 0.14 mm²: (YE+GN); (RD+BU); (GY+PK)
Pair shield: Drain wire, tinned copper wire strands
Wrapping of tinned copper wires
Covering: Polyolefin

Cores: 0.5 mm²: WH, BN
Core shield: Wrapping of tinned copper wires
Covering: Polyolefin

Overall screen: Tinned copper braid, coverage = 85 % (nominal value)

1020131 Dimension: **3 x (2 x 0.14) + (3 x 0.14)**

Pairs: 0.14 mm²: (BK+YE); (BK+GN); (BK+RD)

Screen: tinned copper braid

Cores: 3-conductor bundle 0.14 mm²: BK; GY; PK
Screen: tinned copper braid

1020132 Dimension: **4 x (2 x 0.14) + (2 x 1)**

Pairs: 0.14 mm²: (BK+YE); (BK+GN); (BK+RD); (BK+BU)

Screen: tinned copper braid

Pair: 1 mm²: (BK+WH)
Screen: tinned copper braid

1020136 Dimension: **3 x (2 x 0.14) + (2 x 0.5)**

Pairs: 0.14 mm²: (BK+YE); (BK+GN); (BK+RD)

Screen: tinned copper braid

Pair: 0.5 mm²: (BK+WH)
Screen: tinned copper braid

1020142 Dimension: **5 x 2 x 22 AWG**

Pairs: 22AWG: (BK+WH/BK); (RD+WH/RD); (GN+WH/GN); (GR+WH/GR); (OR+WH/OR)

Overall screen: Tinned copper braid, coverage = 85 % (nominal value)

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