



DATA SHEET	0036080
ÖLFLEX® ROBUST FD 776 C	valid from : 14.02.2008

Application

ÖLFLEX® ROBUST FD 776 C cables are high flexible feedback cable/sensor leads for resolved and shaft encoder for the control of servo motors. Especially for use in power chains, automatic manipulators and in permanently moved machine parts. For use in dry, damp, wet locations. Inside & outdoor. Usage on motor drum guidance or under a strain of more than 15 N/mm² is not allowed. ÖLFLEX® ROBUST FD 776 C cables are increased bio-oil and water resistant and at room temperature generally resistant against diluted acids and caustics solutions, certain oils, greases and waxes, based on vegetable-, animal-, mineral- or synthetics. The special TPE outer sheath is resistant against ordinary mechanical abuse, extraordinary hydrolysis resistance, when in contact with cold, warm or hot water or water based fluids. Therefore this cable is predestinated for usage in metal processing machine tools using water based fluids and bio degradable oils. In/on devices, apparatus, machines for farming, food processing, beverage, pharmaceuticals, body care industry, composting and sewage plants. In textile -fibre production sides, in areas where the cable is exposed to periodic cleaning procedures (i.e. by steam cleaners, pressure washers). Use in commercial and household locations. In order to avoid any interference of the signals all pairs, indicated by "D", are pairwise screened by a spiral of tinned copper wires. The overall screen represents an effective protection against electrical interference. (0036 084 additional have a stranded drain wire under the screen).

ÖLFLEX® ROBUST FD 776 C cables are not intended for low voltage purpose, therefore not under the scope of the ECD 2006/95/EC (low voltage directive).

Technical data

Conductor	bare copper, superfine wire strand in accordance to IEC 60 228 that is VDE 0295, class 6
Design	in support to VDE 0812 and VDE 0281
Core insulation	TPE (Thermoplastic Elastomer)
Core ident code	0036 080: [3x(2x0,14D12Y)+2x(0,5D12Y)] C 0,14mm ² pairs: GN-YE, RD-BU, GY-PK. 0,5mm ² cores: WH, BN. 0036 081: [3x(2x0,14D)+2x0,5 +4x0,14+4x0,23] C 0,14mm ² pairs: YE-GN, BK-BN, RD-OR. 0,14mm ² cores: GY, BU, WHYE, WHBK. 0,23mm ² cores: BNYE, BNGY, GNBK, GNRD. 0,5mm ² cores: BNRD, BNBU. 0036 082: [4x(2x0,14)+4x0,5] C 0,14mm ² pairs: RD-BK, BN-GN, YE-VT, GY-PK. 0,5mm ² cores: WH, BU, WHGN, BNGN 0036 083: [10x0,14+2x0,5] C 0,14mm ² cores: WH, BN, GN, YE, GY, PK, BU, RD, BK, VT. 0,5mm ² cores: WH, BN. 0036 084: [4x(2x0,25)+2x1,0] C 0,25mm ² pairs: RD-BK, BN-GN, GY-PK, BU-VT. 1,0mm ² cores: WH, BN. 0036 085: [4x(2x0,38)+4x0,5] C 0,38mm ² : pairs: RD-OR, BU-VT, BK-BN, YE-GN. 0,5mm ² cores: BKWH, RDWH, BUWH, YEW.
Screen	braid of tinned copper, coverage = 85 % (nominal value) or (D) layer of tinned copper wires
Outer sheath	Lapp P4/11 Thermoplastic Elastomere (TPE), flame retardant, black
Rated voltage	< 50 V AC; < 75 V DC (not for low voltage purpose)

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Peak working voltage 350 V Upp

Test voltage A-A: 2000 V AC
 A-S: 1000V AC

Temp. range for flexible use -30 up to +80° C max. conductor temperature

Min. bending radius flex. use 12 x cable diameter

Tests in acc. to VDE 0472 and IEC 60 811-x.x that is VDE 0473

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