



DATA SHEET	0028100
ÖLFLEX® ROBOT 900 DP	valid from : 21.07.2008

Application

ÖLFLEX® ROBOT 900 DP is a special cable for torsion and bending stresses, e.g. for connecting handling tools to assembly and welding robots, to manipulators as well as for connecting to rotating or tilting tables. They can be used for the transmission of control and monitoring signals or as supply cables. They are among others for use in dry, damp or wet rooms. They may only be installed outdoors in observation of the appropriate temperature range. Usage on motor drum guidance or under a strain of more than 15 N / mm² is not allowed.

ÖLFLEX® ROBOT 900 DP cables are increased oil resistant and at room temperature generally resistant against acids and caustic solutions. The outer sheath of Polyurethane is resistant against high mechanical load, particularly to abrasion and scouring, cut resistant, microbe-proof and hydrolysis resistant. The layer of copper wires is a protection against electrical interference.

Design

Design	in support to HD 21.5 S3 resp. VDE 0281-5, in support to HD 21.13 S1 resp. VDE 0281-13, VDE 0812
Conductor	fine or superfine wire strands of bare copper acc. to IEC 60228 resp. VDE 0295, class 5 or class 6
Core insulation	TPE (Thermoplastic Elastomer)
Core identification	up to 0,34 mm ² : in acc. to DIN 47100 starting at 0,50 mm ² : acc. to VDE 0293-1, with or without gn/ye ground conductor black cores with white numbers acc. to DIN EN 50334 resp. VDE 0293 part 334
Screen	layer of tinned copper wires on slip-wrapping
Outer sheath	Polyurethane compound TMPU acc. to HD 22.10 S2 resp. VDE 0282-10, additional flame retardant

Electrical properties at 20 °C

Nominal voltage	up to 0,34 mm ² : 48 V AC starting at 0,50 mm ² : 300 / 500 V
Peak working voltage	up to 0,34 mm ² : 350 V (not for high-power current purposes)
Test voltage	up to 0,34 mm ² : 1500 V AC starting at 0,50 mm ² : 3000 V AC

Mechanical and thermal properties

Temperature range	for flex. applications -40 °C up to +80 °C max. conductor temperature fixed installation -50 °C up to +80 °C max. conductor temperature
Max. angle of torsion	+/- 180 °/ meter
Min. bending radius	4 x cable diameter for fixed installation 15 x cable diameter for flex. applications
Flammability	flame retardant in acc. to IEC 60332-1-2 resp. VDE 0482-332-1-2
Oil resistance	acc. to IEC 60811-2-1 resp. VDE 0473 part 811-2-1
Tests	acc. to IEC 60811-x-x resp. VDE 0473 part 811-x-x and VDE 0472
EC directive	this cable confirms to ECD 2006/95/EC (low voltage directive).

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