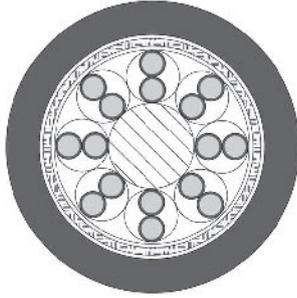


# ROBOFLEX 150,...151,...152,...153 PUR, flame retardant, halogen-free, for torsional stress



## Technical data

- Special TPE-E/PUR robot cable
- Based on DIN VDE 0245, 0250, 0281, 0282
- **Temperature range**  
flexing -40°C to +80°C
- **Nominal voltage**  
up to 0,34 mm<sup>2</sup> 350 V  
0.5 mm<sup>2</sup> and greater U<sub>0</sub>/U 300/500 V
- **Test voltage**  
up to 0,34 mm<sup>2</sup> 1500 V  
0.5 mm<sup>2</sup> and greater 3000 V
- **Insulation resistance**  
min. 20 MΩm x km
- **Max. torsion angle**  
±360°/metre
- **Mutual capacitance**  
core/core approx. 100 nF/km  
core/screen approx. 120 nF/km
- **Minimum bending radius**  
approx. 15x cable Ø

## Cable construction

- Special bare copper, extra-fine wire acc. to DIN VDE 0295 cl. 6 + IEC 60228 cl. 6
- TPE-E core insulation
- Black cores continuous white numbering according to DIN VDE 0293 + gnye
- Special optimised stranding
- High-grade slide wrapping
- **Screened types**
  - Tinned copper twist screen
  - PUR outer sheath
  - Sheath colour: grey (RAL 7001) or black
- **Part nos. 77261-77263, 76158, 70561, 77267, 77268, 76165, 76166, 77424**
  - Core colours DIN 47100
- **Part nos. 71820, 74658, 77264, 75253, 76167**
  - Construction as above, but 0,5 (1,5) mm<sup>2</sup> cores screened with aluminium-coated polyester foil
- **Part no. 72214**
  - Construction as above, but 0,5 mm<sup>2</sup> pair screened with tinned twist screen
- **Part nos. 77265, 77266, 77269, 77270**
  - Construction as above, but 1,0 mm<sup>2</sup> pair only, screened with tinned twist screen
- **Part no. 77469**
  - Construction as above, but
    - 6 cores, 1,5 mm<sup>2</sup>, screened with tinned twist screen
    - 4 pairs, 0,25 mm<sup>2</sup>, screened with tinned twist screen
    - Sheath colour: orange (RAL 2003)

## Properties

- PUR outer sheath, low adhesion, abrasion resistant, halogen-free, resistant to UV, oil, hydrolysis and microbial attack
- PUR sheath, self-extinguishing and flame retardant, test method B according to DIN VDE 0472 part 804 and IEC 60332-1
- The smooth, high-grade core insulation, together with special stranding configuration and slide wrapping ensure long service life under combined bending and torsional stresses

## Application

These cables are specially designed for combined torsional and bending stresses. They are employed both for power supply and for the transmission of control and monitoring signals. Roboflex cables are used in assembly and welding robots, in handling and automation centres, in transport and conveyor equipment, and on turntables and swivel tables. In other words, anywhere where there is no defined cable routing with only alternating bending cycles on a single plane such as in drag chains.

CE= The product is conformed with the EC Low-Voltage Directive 73/23/EEC and 93/68/EEC.

### ROBOFLEX 150

Part No.	No. cores x cross-sec. mm <sup>2</sup>	Outer Ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	AWG-No.
77261	(12 x 0,25)	8,3	59,5	126,0	24
71789	(4 x 1,5)	8,9	81,7	150,0	16
75251	(4 x 2,5)	11,2	164,0	280,0	14
75252	(4 x 4,0)	13,1	222,0	400,0	12
76157	(4 x 6,0)	15,4	305,0	550,0	10
77262	(3 x 2 x 0,14)	5,8	17,0	43,0	26
77263	(4 x 2 x 0,14)	6,9	37,0	75,0	26
76158	(5 x 2 x 0,34)	9,2	65,0	116,0	22
70561	(8 x 2 x 0,34)	10,2	90,0	150,0	22
71820	(4 x 1,5 + 2 x 0,62)	10,5	106,8	195,0	16
74658	(4 x 1,5 + 2 x 0,5)	10,7	95,0	180,0	16
77264	(4 x 1,5 + 2 x 1,0)	11,1	128,0	220,0	16
75253	(4 x 2,5 + 2 x 0,5)	12,5	180,0	270,0	14
72214	(4 x 4,0 + 2 x 0,5)	13,5	260,0	340,0	12
76159	(4 x 4,0 + 2 x 1,0)	14,0	237,0	350,0	12
76160	(4 x 6,0 + 2 x 1,0)	16,0	341,0	500,0	10
77265	(16 x 1,0 + 2 x 1,0)	16,7	197,0	380,0	17
77266	(23 x 1,0 + 2 x 1,0)	17,4	262,0	473,0	17

### ROBOFLEX 152

Part No.	No. cores x cross-sec. mm <sup>2</sup>	Outer Ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	AWG-No.
76161	(4 x 1,5)	8,9	81,7	150,0	16
76162	(4 x 2,5)	11,2	164,0	280,0	14
76163	(4 x 4,0)	13,1	222,0	400,0	12
76164	(4 x 6,0)	15,4	305,0	550,0	10
77267	(3 x 2 x 0,14)	5,8	23,0	43,0	26
77268	(4 x 2 x 0,14)	6,9	26,6	55,0	26
77424	(3 x 2 x 0,25)	7,3	32,0	65,0	24
76165	(5 x 2 x 0,34)	9,2	65,0	116,0	22
76166	(8 x 2 x 0,34)	10,2	90,0	150,0	22
75415	(4 x 1,5 + 2 x 0,5)	10,7	95,0	170,0	16
75416	(4 x 2,5 + 2 x 0,5)	11,8	115,0	220,0	14
75940	(4 x 2,5 + 2 x 1,0)	12,3	147,0	250,0	14
75167	(4 x 4,0 + 2 x 0,5)	13,5	260,0	340,0	12
75417	(4 x 4,0 + 2 x 1,0)	14,0	237,0	350,0	12
75418	(4 x 6,0 + 2 x 1,0)	16,0	341,0	500,0	10
77269	(16 x 1,0 + 2 x 1,0)	16,7	197,0	380,0	17
77270	(23 x 1,0 + 2 x 1,0)	17,4	262,0	473,0	17
77469	(5 x 2,5 + 6 x 1,5 + 4 x 2 x 0,25)	17,3	320,0	460,0	14

Dimensions and specifications may be changed without prior notice.

Continuation ▶