



Technical data

- Special TPE-E/PUR adapted to DIN VDE 0250 / DIN VDE 0285-525-1 / DIN EN 50525-1
- **Temperature range**
flexing -30°C to +80°C
fixed installation -40°C to +80°C
- **Nominal voltage**
up to 0,34 mm² 350 V (operating peak voltage)
from 0,5 mm² U₀/U 300/500 V
- **Test voltage**
up to 0,34 mm² 1,5 kV, 5 minutes
from 0,5 mm² 3,0 kV, 5 minutes
- **Mutual capacitance**
core/core approx. 100 nF/km
core/screen approx. 120 nF/km
- **Inductance approx.**
0,69 mH/km
- **Minimum bending radius**
7,5x cable Ø

Cable structure

- Bare copper, stranded to DIN VDE 0295 and IEC 60228, fine or extra fine wires, cl.5 or cl.6, BS 6360 cl.5 or 6, up to 0,34 mm² cl.5, above 0,5 mm² cl.6
- Special core insulation, PP
- Cores coded up to 0,34 mm² according DIN 47100 above 0,5 mm² black cores with continuous white numbering acc. to DIN VDE 0293
- GN-YE conductor, 3 cores and above in the outer layer
- Cores stranded in layers with optimal lay-length
- Special separating foil
- Cable structure C-type, cu-screen of helically wound, approx. 85-95% coverage
- Outer sheath, special polyurethane
- Sheath colour black (RAL 9005)
- with meter marking

Properties

- High flexibility at low temperatures
- High abrasion resistance
- Loadable under torsion stress ±360°/meter
- Low adhesion
- **Resistant to**
Microbes and rotting
Oxygen and ozone
Vibrations
UV-radiation
- **Largely resistant to**
Oil and fats resistant
- AWG sizes are approximate equivalent values. The actual cross-section is in mm²

Application

These special robotic control and signal cables specially designed for torsion and bending stresses in robots and connecting handling tools.

EMC = Electromagnetic compatibility

To optimize the EMC features we recommend a large round contact of the copper braiding on both ends.

CE= The product is conformed with the EC Low-Voltage Directive 2006/95/EC.

ROBOFLEX® 2001

Part no.	No. cores x cross-sec. mm ²	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
25459	7 x 0,25	5,8	16,8	48,0	24
25439	12 x 0,25	7,6	28,8	71,0	24
25460	25 x 0,25	10,6	60,0	143,0	24
25461	2 x 0,34	4,0	6,6	28,0	22
25462	3 x 0,34	4,0	9,8	34,0	22
25440	7 x 0,34	5,7	22,8	51,0	22
25449	12 x 0,34	8,3	39,2	69,0	22
25463	12 G 0,5	10,4	57,8	90,0	20
25519	16 G 0,5	11,6	76,8	277,0	20
25464	18 G 0,5	12,7	86,4	121,0	20
25465	25 G 0,5	14,2	120,0	256,0	20
25466	4 G 0,75	6,0	28,8	63,0	19
25450	7 G 0,75	7,9	50,4	96,0	19
25467	12 G 0,75	11,5	84,4	171,0	19
25468	14 G 0,75	12,8	100,8	200,0	19
25469	2 x 1	5,5	19,2	48,0	18
25470	3 G 1	6,0	29,0	60,0	18
25471	4 G 1	6,3	38,4	78,0	18
25472	7 G 1	8,5	67,2	131,0	18
25473	12 G 1	12,5	115,2	216,0	18
25474	18 G 1	15,4	172,8	306,0	18
25475	25 G 1	17,4	240,0	432,0	18
25476	34 G 1	21,3	326,4	569,0	18
25477	41 G 1	23,2	393,6	694,0	18
25520	3 G 1,5	6,9	43,2	94,0	16
25529	4 G 1,5	7,9	57,6	107,0	16
25559	5 G 1,5	8,6	72,0	121,0	16
25509	8 G 1,5	11,1	115,2	292,0	16
25478	12 G 1,5	15,5	172,8	356,0	16
25479	18 G 1,5	19,3	259,2	445,0	16
25480	25 G 1,5	21,8	360,0	636,0	16
25481	3 G 2,5	8,4	72,0	136,0	14
25482	4 G 2,5	9,1	96,0	170,0	14
25483	3 G 4	10,3	116,0	227,0	12
25530	4 G 4	11,2	153,6	261,0	12
25510	4 G 6	14,1	230,4	341,0	10
25484	3 G 10	15,6	288,0	518,0	8
25485	3 G 16	18,2	460,8	722,0	6
25486	3 G 25	22,9	720,0	1180,0	4
25487	3 G 35	26,5	1008,0	1600,0	2

ROBOFLEX® 2001-C

Part no.	No. cores x cross-sec. mm ²	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
25539	10 x 0,14	7,8	34,2	62,0	26
25488	12 x 0,14	7,8	42,1	95,0	26
25489	18 x 0,14	9,7	54,5	120,0	26
25490	25 x 0,14	10,9	69,0	158,0	26
25491	12 x 0,25	8,3	59,5	126,0	24
25492	18 x 0,25	10,1	80,0	164,0	24
25493	25 x 0,25	11,1	103,0	215,0	24
25494	12 x 0,34	8,8	78,0	160,0	22
25495	18 x 0,34	10,8	101,0	210,0	22
25496	25 x 0,34	12,0	158,0	305,0	22
25497	12 G 0,5	11,2	117,0	175,0	20
25498	18 G 0,5	13,6	160,0	231,0	20
25499	25 G 0,5	14,8	255,0	347,0	20
25500	12 G 0,75	11,8	155,0	220,0	19
25501	18 G 0,75	15,0	210,0	305,0	19
25502	25 G 0,75	16,6	275,0	415,0	19
705462	3 G 1	6,3	76,0	90,0	18
25503	12 G 1	13,0	190,0	265,0	18
25504	18 G 1	16,1	245,0	390,0	18
25505	25 G 1	18,1	345,0	540,0	18
25506	12 G 1,5	16,2	260,0	345,0	16
25507	18 G 1,5	20,3	370,0	485,0	16
25508	25 G 1,5	22,5	498,0	710,0	16

Dimensions and specifications may be changed without prior notice. (RH01)