

## TROMMELFLEX PUR-HF D12Y11YU11Y: low voltage reeling cables PUR sheathed



### Application

Flexible low voltage reeling cable for application under high mechanical stresses.

### Global data

Brand TROMMELFLEX PUR-HF  
Type designation D12Y11YU11Y-J/O

### Design features

Conductor Plain copper, flexible class 5 acc. to DIN EN 60228 / DIN VDE 0295  
Insulation Halogen free compound, based on polyester  
Core identification Up to 5 cores: colored in accordance with DIN VDE 0293-308  
From 6 cores: natural color with black numbers  
Core arrangement Central textile carrier unit; cores twisted with short length of lay  
Inner sheath Polyurethan, halogen free, flame retardant  
Reinforcement Open braiding of support  
Outer sheath Polyurethane, halogen free, flame retardant, opaque;  
Colour: black  
Marking White imprint:  
TROMMELFLEX PUR-HF -J/-O (number of cores) x (cross-section) (week/year)

### Electrical parameters

Rated voltage 0.6/1 kV (600/1000V)  
Max. permissible operating voltage AC 0.7/1.2 kV  
Max. permissible operating voltage DC 0.9/1.8 kV  
AC Test Voltage 4 kV (5 Min.)  
Current Carrying Capacity description Acc. to DIN VDE 0298-4

### Chemical parameters

Resistance to fire Similar to IEC 60332-1  
Water resistance The cables are suitable for permanent use in water (no drinking water) up to 50 meter diving depth.

### Thermal parameters

Max. permissible temperature at conductor 90 °C  
Max. short circuit temperature of the conductor 250 °C  
Ambient temperature for fixed installation min -50 °C ; max +80 °C  
Ambient temperature in fully flexible operation min -40 °C ; max +80 °C

### Mechanical parameters

Max. tensile load on the conductor 25 N/mm<sup>2</sup>  
Torsional stress ± 50 °/m  
Min. bending radius 6 x D (Proved by flexing tests acc. to HD 22.2 part 3.1)  
Travel speed - Reeling operation: no restriction (for speed beyond 180 m/min please consult the manufacturer);  
- Festoon system: up to 180 m/min.

Number of cores x cross section	Part number	Conductor diameter max. mm	Outer diameter min. mm	Outer diameter max. mm	Bending radius free moving min. mm	Weight (ca.) kg/km	Permissible tensile force max. N	Conductor resistance at 20°C max. Ω/km	Current carrying capacity (1) A	Short Circuit Current (conductor) kA
D12Y11YU11Y-J Control cables										
7x1,5		1.5	12	13.2	79	230	260	13.3	23	0.21
12x1,5		1.5	15.5	16.7	100	360	450	13.3	23	0.21
18x1,5	20165499	1.5	16.9	18.1	109	470	670	13.3	23	0.21
24x1,5		1.5	19	20.2	121	600	900	13.3	23	0.21
30x1,5		1.5	21.1	22.5	135	750	1120	13.3	23	0.21
7x2,5		2	13.5	14.7	88	310	430	7.98	30	0.36
12x2,5		2	18.9	20.1	121	550	750	7.98	30	0.36
18x2,5		2	19.2	20.4	122	670	1120	7.98	30	0.36
24x2,5	20160534	2	21.5	22.9	137	870	1500	7.98	30	0.36
30x2,5		2	24.4	26	156	1090	1870	7.98	30	0.36
36x2,5	20140743	2	27.4	29	174	1410	2250	7.98	30	0.36
D12Y11YU11Y-J power cables, four core design										
4x1,5		1.5	10	11.2	67	150	150	13.3	23	0.21
4x2,5		2	11.1	12.2	74	200	250	7.98	30	0.36
4x4		2.5	12.3	13.5	81	280	400	4.95	41	0.57
4x6	20161503	3.1	14.1	15.2	92	370	600	3.3	53	0.86
4x10		4.1	17.4	18.6	112	600	1000	1.91	74	1.43
4x16		5.1	20	21.4	128	850	1600	1.21	99	2.29
4x25	20149378	6.2	23.5	24.9	149	1230	2500	0.78	131	3.58
4x35	20156715	7.8	28.5	30.2	181	1760	3500	0.55	162	5.01
D12Y11YU11Y-J power cables, five core design										
5x1,5		1.5	10.6	11.7	71	170	180	13.3	23	0.21
5x2,5		2	11.8	13	78	230	310	7.98	30	0.36
5x4		2.5	13.3	14.5	87	330	500	4.95	41	0.57
5x6		3.1	16.4	17.6	106	480	750	3.3	53	0.86
5x10		4.1	18.7	19.9	119	720	1250	1.91	74	1.43
5x16		5.1	21.7	23.0	139	1030	2000	1.21	99	2.29
5x25		6.2	28.2	29.8	179	1500	3120	0.78	131	3.58
5x35		7.8	31	33	198	2140	4370	0.55	162	5.01

(1) Nominal current carrying capacity for rubber cables laid on a surface, at 30°C ambient temperature (see also VDE 0298-4, Table 15). For articles without part number the values shown are approximate, and need to be confirmed in case of order.