

Simply the best.

Our FESTOONFLEX and TROMMELFLEX PUR cables are better than all the rest.



Prysmian
Group

Easy to manage

Thanks to their pliable characteristics, optimised diameter and outstanding bending radius, the cables are extremely easy to handle also under pressing circumstances.

Hangs tough

Top-notch quality in all materials and details makes the mechanical performance unsurpassable even in the harshest of environments.

Speed demons

Both cables put their foot to the floor and can reach impressive speeds.



Our FESTOONFLEX and TROMMELFLEX PUR cables are better than all the rest.

If you want cables that have proven to stand the test of time, choose the real deal. FESTOONFLEX PUR-HF festoon system cables and TROMMELFLEX PUR-HF reeling cables perform completely flawless even under the severest of conditions. These ingenious innovations are archetypal examples on German art of engineering. Decades of track records show these Prysmian originals aren't any one hit wonders.

FESTOON- & TROMMELFLEX PUR-HF

Application

FESTOONFLEX PUR-HF can be used as an energy and control cable in festoon systems, whereas TROMMELFLEX PUR-HF is a flexible low voltage reeling cable. Both can handle severe conditions, frequent bending and high mechanical stresses.

The cables are also suitable for other applications such as cable drag chains, machine tools, transportation systems and materials handling systems. In addition, both cables have performance against fire acc. to IEC 60332-1.

MAIN FEATURES

- ✓ Flexible and easy to work with
- ✓ Robust – can handle high mechanical stress
- ✓ Suitable to work even under harsh conditions
- ✓ Flame retardant acc. to IEC 60332-1
- ✓ High speed: FESTOONFLEX 210 m/min (for festoon) and TROMMELFLEX 180 m/min (for reeling)



FESTOONFLEX PUR-HF



FESTOONFLEX PUR-HF / C-PUR-HF	
Global data	
Brand	FESTOONFLEX PUR-HF / C-PUR-HF
Type designation	D12Y11Y-J/O
Construction characteristics	
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: white with black numbers
Core arrangement	Cores twisted with short length of lay around central element
Screen over inner sheath (Version C-PUR-HF)	Braid of tinned copper wires
Outer sheath	Polyurethane, halogen free, flame retardant
Outer sheath colour	Black
Electrical parameters	
Rated voltage	0.6/1 kV (600/1000 V)
Max. permissible operating voltage AC	0.7/1.2 kV
Max. permissible operating voltage DC	0.9/1.8 kV
AC test voltage – main cores	2.5 kV (5 Min.)
Current Carrying Capacity	Acc. to DIN VDE 0298-4

FESTOONFLEX C-PUR-HF



FESTOONFLEX PUR-HF / C-PUR-HF	
Chemical parameters	
Performance against fire	Acc. to IEC 60332-1
Thermal parameters	
Max. operating temperature of the 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	15 N/mm ²
Torsional stress +/-	25 °/m
Bending radii min.	6 x D
Travel speed	<ul style="list-style-type: none"> - In festoon systems: up to 210 m/min - For reeling operation: up to 60 m/min; - In chain systems: up to 210 m/min (note: trouble free operation is influenced by several factors, among all the chain length. For long chain system we recommend to operate at lower speed)

FESTOONFLEX PUR-HF										
Number of cores x cross section	Part number	Conductor diameter max. mm	Outer diameter		Bending radius free moving min. mm	Weight (approx.) kg/km	Permissible tensile force max. N	Conductor resistance at 20 °C max. Ω/km	Current carrying capacity (2) A	Short Circuit Current (conductor) kA
			min. mm	max mm						
D12Y11Y-0 power cables, single core										
1x16	20165443	5	8.5	9.5	57	170	240	1.21	104	2.29
1x25	20156874	6.2	9.9	11.1	67	270	370	0.7839	138	3.58
1x35	20154575	7.8	11.7	12.9	77	380	520	0.554	170	5.01
1x50	20154574	8.9	13.9	15.1	91	530	750	0.386	212	7.15
1x70	20154573	11.1	16.2	17.4	104	740	1050	0.272	263	10.01
1x95	20166593	12.6	17.9	19.1	115	940	1420	0.206	316	13.59
1x120	20156873	14.8	20.2	21.5	130	1200	1800	0.161	370	17.16
1x150	20317364	16	21.8	23.2	139	1490	2250	0.129	424	21.45
1x185	20280063	17.7	24.3	25.7	154	1830	2770	0.106	484	26.46

FESTOONFLEX PUR-HF

Number of cores x cross section	Part number	Conductor diameter max. mm	Outer diameter		Bending radius free moving min. mm	Weight (approx.) 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
			min. mm	max mm						
D12Y11Y-0 power cables, three core										
3x1.5	20180089	1.5	6.5	7.5	45	115	60	13.3	24	0.21
3x2.5	20156877	2	8.5	9.5	57	130	110	7.98	32	0.36
D12Y11Y-J power cables, four core										
4x1.5	20181632	1.5	8.1	9.1	55	120	90	13.3	24	0.21
4x2.5	20156878	2	9.2	10.2	61	160	150	7.98	32	0.36
4x4	20160347	2.6	10.3	11.5	69	230	240	4.95	43	0.57
4x6	20181633	3.2	12.1	13.2	80	320	360	3.3	56	0.86
4x10	20154577	4	15	16.2	97	520	600	1.91	78	1.43
4x16	20156879	5	17.7	18.9	113	750	960	1.21	104	2.29
4x25	20160348	6.2	21.1	22.5	135	1160	1500	0.7839	138	3.58
4x35	20181634	7.8	25.8	27.4	164	1650	2100	0.554	170	5.01
4x50	20173551	9.6	31	33	198	2410	3000	0.386	212	7.15
4x70	20181635	11.1	38.1	40.6	244	3070	4200	0.272	263	10.01
4x95	20181636	12.6	42	44.5	267	4150	5700	0.206	316	13.59
D12Y11Y-J power cables, five core										
5x1.5	20317247	1.5	8	9	54	150	110	13.3	24	0.21
5x2.5	20300566	2	9.8	11	66	180	180	7.98	32	0.36
5x4	20154579	2.6	11.6	12.7	77	290	300	4.95	43	0.57
5x6	20154578	3.2	14	15.2	91	420	450	3.3	56	0.86
5x10	-	4	16.2	17.5	105	630	750	1.91	78	1.43
5x16	20166492	5	19.4	20.6	124	920	1200	1.21	104	2.29
5x25	20283291	6.2	23.2	24.5	148	1380	1870	0.7839	138	3.58
D12Y11Y-J control cables, five core										
7x1.5	20180090	1.5	9	10	60	220	150	13.3	24	0.21
12x1.5	20181631	1.5	14.3	15.5	93	320	270	13.3	24	0.21
18x1.5	20154580	1.5	14.5	15.7	94	380	400	13.3	24	0.21
24x1.5	20157942	1.5	16.5	17.8	107	500	540	13.3	24	0.21
30x1.5	-	1.5	19.6	21	126	680	670	13.3	24	0.21
36x1.5	-	1.5	21.1	22.5	135	770	810	13.3	24	0.21
7x2.5	20166594	2	11.5	12.7	76	250	260	7.98	32	0.36
12x2.5	20160349	2	16.5	17.7	106	460	450	7.98	32	0.36
18x2.5	20149380	2	16.7	17.9	107	580	670	7.98	32	0.36
24x2.5	20149192	2	19.2	20.4	122	760	900	7.98	32	0.36
30x2.5	20194975	2	24.9	26.5	159	1080	1120	7.98	32	0.36
36x2.5	-	2	25.9	27.5	165	1300	1350	7.98	32	0.36

(1) Nominal current carrying capacity for rubber cables installed free in air, at 30 °C ambient temperature (see also technical annexes). For articles without part number the values shown are approximate, and need to be confirmed in case of order.

FESTOONFLEX C-PUR-HF

Number of cores x cross section	Part number	Conductor diameter max. mm	Outer diameter		Bending radius free moving min. mm	Weight (approx.) 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
			min. mm	max mm						
D12YC11Y-0 screened power cables, single core										
1x25	20313614	6.2	10.3	11.5	69	330	370	0.7839	138	3.58
1x35	20161370	7.8	12.3	13.5	81	430	520	0.554	170	5.01
1x50	20165441	8.9	15.4	16.6	100	610	750	0.386	212	7.15
1x70	20157795	11.1	17	18.3	110	810	1050	0.272	263	10.01
1x95	20181637	12.6	18.9	20.1	121	1030	1420	0.206	316	13.59
1x120	20156875	14.8	21.4	22.8	137	1320	1800	0.161	370	17.16
1x150	20313467	16	23.1	24.5	147	1650	2250	0.129	424	21.45
1x185	20313615	17.7	25.5	27.2	163	2000	2770	0.106	484	26.46
1x240	20313469	20.2	28.5	30.1	181	2490	3600	0.0801	567	34.32
D12YC11Y-J screened power cables, four core										
4x1,5	20270300	1.5	10.8	12	72	240	90	13.3	24	0.21
4x2,5	20166386	2	12.1	13.2	80	250	150	7.98	32	0.36
4x4	20181638	2.6	13.6	14.7	89	330	240	4.95	43	0.57
4x6	20161501	3.2	15.1	16.3	98	420	360	3.3	56	0.86
4x10	20232151	4	18.4	19.6	118	640	600	1.91	78	1.43
4x16	20166385	5	21.2	22.5	136	940	960	1.21	104	2.29
4x25	20228274	6.2	24.5	26.2	157	1360	1500	0.7839	138	3.58
4x35	20168451	7.8	29.6	31.6	190	1870	2100	0.554	170	5.01
4x50	20181639	9.6	35.1	37.6	226	2560	3000	0.386	212	7.15
D12YC11Y-J screened power cables, five core										
5x1,5	-	1.5	10.9	12.1	73	250	110	13.3	24	0.21
5x2,5	20234135	2	12.8	14	84	280	180	7.98	32	0.36
5x4	-	2.6	13.8	15	90	345	300	4.95	43	0.57
D12YC11Y-J screened control cables										
7x1,5	20166387	1.5	10.9	12.1	73	220	150	13.3	24	0.21
12x1,5	20156247	1.5	15	16.2	97	360	270	13.3	24	0.21
18x1,5	20157796	1.5	15	16.2	97	420	400	13.3	24	0.21
12x2,5	20164197	2	17.4	18.6	112	530	450	7.98	32	0.36
18x2,5	20176437	2	17.5	18.8	113	650	670	7.98	32	0.36
D12YC11Y-0 overall screened control pairs										
3x(2x1,5)	-	1.5	16.5	17.8	107	350	130	13.3	24	0.21
4x(2x1)	-	1.3	15.3	16.5	99	310	120	19.5	19	0.14
4x(2x1,5)	-	1.5	17.2	18.5	111	385	180	13.3	24	0.21

FESTOONFLEX C-PUR-HF

Number of cores x cross section	Part number	Conductor diameter max. mm	Outer diameter		Bending radius free moving min. mm	Weight (approx.) 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
			min. mm	max mm						
D12Y11Y-0 individually screened control pairs										
4x(2x1)C	20161461	1.3	15.9	17.1	103	350	120	19.5	19	0.14
6x(2x1)C	20160120	1.3	19	20.3	122	480	180	19.5	19	0.14
9x(2x1)C	20194976	1.3	23.6	25	150	721	270	19.5	19	0.14
2x(2x1,5)C	20164892	1.5	15.2	16.4	98	280	90	13.3	24	0.21
2x(2x2,5)C	-	2	17.2	18.5	111	340	150	7.98	32	0.36
3x(2x1,5)C	20156880	1.5	17.2	18.5	111	350	130	13.3	24	0.21
3x(2x2,5)C	20280062	2	17.5	18.8	113	390	220	7.98	32	0.36

For articles without part number the values shown are approximate, and need to be confirmed in case of order.

(2) Nominal current carrying capacity for rubber cables installed free in air, at 30°C ambient temperature (see also technical appendixes).

TROMMELFLEX PUR-HF



TROMMELFLEX PUR-HF	
Global data	
Brand	TROMMELFLEX PUR-HF
Type designation	D12Y11YU11Y-J/O
Construction characteristics	
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
Torsion protection	Open braiding of support
Outer sheath	Polyurethane, halogen free, flame retardant
Outer sheath colour	Black
Electrical parameters	
Rated voltage	0.6/1 kV (600/1000 V)
Max. permissible operating voltage AC	0.7/1.2 kV
Max. permissible operating voltage DC	0.9/1.8 kV
AC test voltage – main cores	2.5 kV (5 Min.)
Current Carrying Capacity	Acc. to DIN VDE 0298-4

TROMMELFLEX PUR-HF	
Chemical parameters	
Performance against fire	Acc. to IEC 60332-1
Thermal parameters	
Max. operating temperature of the 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 ²
Torsional stress +/-	50 °/m
Bending radii min.	6 x D
Travel speed	<ul style="list-style-type: none"> - Reeling operation: no restriction (for speed beyond 180 m/min please consult the manufacturer) - Festoon system: up to 180 m/min

TROMMELFLEX PUR-HF										
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 (approx.) 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	20298910	1.5	12	13.2	79	230	260	13.3	23	0.21
12x1.5	20224159	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	20194516	1.5	19	20.2	121	600	900	13.3	23	0.21
30x1.5	20300561	1.5	21.1	22.5	135	750	1120	13.3	23	0.21
7x2.5	20290595	2	13.5	14.7	88	310	430	7.98	30	0.36
12x2.5	20181296	2	18.9	20.1	121	550	750	7.98	30	0.36
18x2.5	20267171	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	20197804	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	20290594	2	11.1	12.2	74	200	250	7.98	30	0.36
4x4	20224160	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	20281655	4.1	17.4	18.6	112	600	1000	1.91	74	1.43
4x16	20217922	5.1	20	21.4	128	850	1600	1.21	99	2.29
4x25	20149378	6.2	23.5	24.9	149	1230	2500	0.7839	131	3.58
4x35	20156715	7.8	28.5	30.2	181	1760	3500	0.554	162	5.01
D12Y11YU11Y-J power cables, five core design										
5x1.5	20225872	1.5	10.6	11.7	71	170	180	13.3	23	0.21
5x2.5	20300565	2	11.8	13	78	230	310	7.98	30	0.36
5x4	20300562	2.5	13.3	14.5	87	330	500	4.95	41	0.57
5x6	20259253	3.1	16.4	17.6	106	480	750	3.3	53	0.86
5x10	20215779	4.1	18.7	19.9	119	720	1250	1.91	74	1.43
5x16	20300563	5.1	21.7	23	139	1030	2000	1.21	99	2.29
5x25	-	6.2	28.2	29.8	179	1500	3120	0.7839	131	3.58
5x35	-	7.8	31	33	198	2140	4370	0.554	162	5.01
D12Y11YU11Y-J combined control cables										
4x6+4x(2x1.5)C	20228008	3.1	23.1	24.5	147	870	600	3.3	53	0.86
4x16+2x(4x1.5)C	20171151	5.1	24.7	26.3	158	1140	1600	1.21	99	2.29
4x35+2x(4x1.5)C	20173747	7.5	31.5	33.5	201	1950	3500	0.554	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.

COMMITTED TO QUALITY

German Art of Engineering.

"Having total control over everything – from choice in raw materials to designing, manufacturing, testing and transporting – right here in Germany, we're able to guarantee our customers highest possible quality in all that we do."

Tobias Hoeft, Head of Sales OEM, Prysmian Group Germany

We've been making cables in Germany for more than 160 years. During all this time we've done what Germans do best: provided customers and communities worldwide with products and solutions based on state-of-the-art technology, consistent excellence in execution and in-depth understanding of the needs of an evolving market. At our disposal we have both Centres of Excellence with highly-developed R&D teams and cable plants all across the country, making sure that we deliver the highest quality with service beyond the ordinary and within set timeframes.

It is not for nothing that German Art of Engineering is well-known throughout the world.

Do you want to know more?

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