Round PUR festoon cables

C-PUR-HF (D12YC11Y)

0.6/1 kV Screened PUR Crane Festoon Cable

Screened halogen-free PUR crane festoon & drag-chain cable (single-core, power & pairs)

0.6/1 kV | **D12YC11Y-J/O** | **85% Cu Braid Screen**

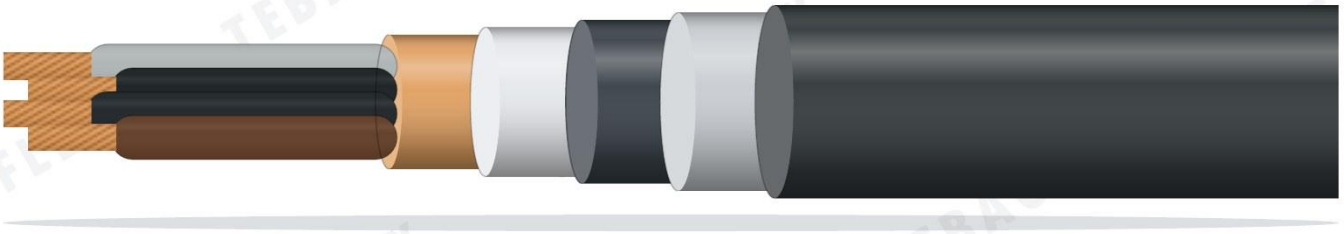


Application

High-speed 0.6/1 kV screened halogen-free PUR festoon and drag-chain cable (C-PUR-HF (D12YC11Y) / D12YC11Y-J/O) with Class 5 copper conductors, polyester-based insulation, inner PUR sheath, tinned copper braid screen and hydrolysis-resistant PUR jacket.

Typical uses: Ship-to-shore (STS) & RMG container cranes, Inverter-fed hoist & trolley power loops, High-speed drag-chain gantry systems, Steelworks, ports & bulk handling, Submersible & wet-basin gantry bridges, Encoder, resolver & fieldbus crane loops

Construction





Cross-section, not to scale

1	Conductor	DIN EN IEC 60228 / DIN VDE 0295 Class 5
2	Central textile carrier	
3	Core insulation	
4	Inner sheath	
5	Tinned copper braid screen	
6	Outer sheath	

Technical data

Typical values

Rated voltage U0/U	0.6/1 kV (max. AC 0.7/1.2 kV · DC 0.9/1.8 kV)	AC test voltage	2.5 kV (5 min)
EMC screen construction	Braid of tinned copper wires over inner sheath (overall or individually screened pairs)	Current rating basis	DIN VDE 0298-4 at 30 °C ambient in free air
Max. conductor operating temperature	+90 °C	Max. short-circuit temperature (≤ 5 s)	+250 °C
Ambient temperature — flexing / mobile	-40 to +80 °C	Ambient temperature — fixed installation	-50 to +80 °C
Max. travel speed	Festoon up to 210–240 m/min · Drag chain up to 210 m/min · Reeling up to 60 m/min	Max. tensile load on conductor	15 N/mm²
Max. torsional stress	± 25 °/m	Min. bending radius	6 × D fixed · 6 × D (up to 8 × D) flexing
Standards	DIN VDE 0250-1 (D12YC11Y-J/O) · DIN EN IEC 60228 (VDE 0295 Class 5) · DIN VDE 0293-308	Standard packing	500 m on wooden drums or custom cut crane festoon sets

Sizes

40 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Order designation -J	Order designation -O	Cores × mm²	AWG ≈	OD min mm	OD max mm	Copper kg/km	Weight ≈ kg/km	Min. bend R mm	Max. pull N
Single-core 25–300 mm² 10 sizes									
☐ C-PUR-HF (D12YC11Y) 1G25	C-PUR-HF (D12YC11Y) 1×25	1 × 25	4	10.3	11.5	310	330	69	370
☐ C-PUR-HF (D12YC11Y) 1G35	C-PUR-HF (D12YC11Y) 1×35	1 × 35	2	12.3	13.5	406	430	81	520
☐ C-PUR-HF (D12YC11Y) 1G50	C-PUR-HF (D12YC11Y) 1×50	1 × 50	1	15.4	16.6	550	610	100	750
☐ C-PUR-HF (D12YC11Y) 1G70	C-PUR-HF (D12YC11Y) 1×70	1 × 70	2/0	17.0	18.3	747	810	110	1,050
☐ C-PUR-HF (D12YC11Y) 1G95	C-PUR-HF (D12YC11Y) 1×95	1 × 95	3/0	18.9	20.1	1,012	1,030	121	1,420
☐ C-PUR-HF (D12YC11Y) 1G120	C-PUR-HF (D12YC11Y) 1×120	1 × 120	4/0	21.4	22.8	1,306	1,320	137	1,800
☐ C-PUR-HF (D12YC11Y) 1G150	C-PUR-HF (D12YC11Y) 1×150	1 × 150	300 kcmil	23.1	24.5	1,613	1,650	147	2,250
☐ C-PUR-HF (D12YC11Y) 1G185	C-PUR-HF (D12YC11Y) 1×185	1 × 185	350 kcmil	25.5	27.2	1,903	2,000	163	2,770
☐ C-PUR-HF (D12YC11Y) 1G240	C-PUR-HF (D12YC11Y) 1×240	1 × 240	500 kcmil	28.5	30.1	2,440	2,490	181	3,600
☐ C-PUR-HF (D12YC11Y) 1G300	C-PUR-HF (D12YC11Y) 1×300	1 × 300	600 kcmil	31.6	33.6	3,040	3,200	202	4,500
Control 1.5–2.5 mm² 10 sizes									
☐ C-PUR-HF (D12YC11Y) 2G1.5	C-PUR-HF (D12YC11Y) 2×1.5	2 × 1.5	16	9.4	11.4	74	140	68	45
☐ C-PUR-HF (D12YC11Y)-J 4G1.5	C-PUR-HF (D12YC11Y)-O 4×1.5	4 × 1.5	16	10.8	12.0	118	240	72	90
☐ C-PUR-HF (D12YC11Y)-J 5G1.5	C-PUR-HF (D12YC11Y)-O 5×1.5	5 × 1.5	16	10.9	12.1	132	250	73	110
☐ C-PUR-HF (D12YC11Y)-J 7G1.5	C-PUR-HF (D12YC11Y)-O 7×1.5	7 × 1.5	16	10.9	12.1	192	220	73	150
☐ C-PUR-HF (D12YC11Y)-J 12G1.5	C-PUR-HF (D12YC11Y)-O 12×1.5	12 × 1.5	16	15.0	16.2	250	360	97	270
☐ C-PUR-HF (D12YC11Y)-J 18G1.5	C-PUR-HF (D12YC11Y)-O 18×1.5	18 × 1.5	16	15.0	16.2	341	420	97	400
☐ C-PUR-HF (D12YC11Y)-J 4G2.5	C-PUR-HF (D12YC11Y)-O 4×2.5	4 × 2.5	14	12.1	13.2	157	250	80	150
☐ C-PUR-HF (D12YC11Y)-J 5G2.5	C-PUR-HF (D12YC11Y)-O 5×2.5	5 × 2.5	14	12.8	14.0	190	280	84	180
☐ C-PUR-HF (D12YC11Y)-J 12G2.5	C-PUR-HF (D12YC11Y)-O 12×2.5	12 × 2.5	14	17.4	18.6	370	530	112	450
☐ C-PUR-HF (D12YC11Y)-J 18G2.5	C-PUR-HF (D12YC11Y)-O 18×2.5	18 × 2.5	14	17.5	18.8	621	650	113	670
Power 4–70 mm² 10 sizes									
☐ C-PUR-HF (D12YC11Y)-J 4G4	C-PUR-HF (D12YC11Y)-O 4×4	4 × 4	12	13.6	14.7	221	330	89	240
☐ C-PUR-HF (D12YC11Y)-J 5G4	C-PUR-HF (D12YC11Y)-O 5×4	5 × 4	12	13.8	15.0	277	345	90	300
☐ C-PUR-HF (D12YC11Y)-J 4G6	C-PUR-HF (D12YC11Y)-O 4×6	4 × 6	10	15.1	16.3	300	420	98	360
☐ C-PUR-HF (D12YC11Y)-J 4G10	C-PUR-HF (D12YC11Y)-O 4×10	4 × 10	8	18.4	19.6	454	640	118	600

Order designation -J	Order designation -O	Cores × mm²	AWG ≈	OD min mm	OD max mm	Copper kg/km	Weight ≈ kg/km	Min. bend R mm	Max. pull N
C-PUR-HF (D12YC11Y)-J 4G16	C-PUR-HF (D12YC11Y)-O 4×16	4 × 16	6	21.2	22.5	694	940	136	960
C-PUR-HF (D12YC11Y)-J 5G16	C-PUR-HF (D12YC11Y)-O 5×16	5 × 16	6	22.6	25.6	864	1,149	154	1,200
C-PUR-HF (D12YC11Y)-J 4G25	C-PUR-HF (D12YC11Y)-O 4×25	4 × 25	4	24.5	26.2	1,050	1,360	157	1,500
C-PUR-HF (D12YC11Y)-J 4G35	C-PUR-HF (D12YC11Y)-O 4×35	4 × 35	2	29.6	31.6	1,444	1,870	190	2,100
C-PUR-HF (D12YC11Y)-J 4G50	C-PUR-HF (D12YC11Y)-O 4×50	4 × 50	1	35.1	37.6	2,124	2,560	226	3,000
C-PUR-HF (D12YC11Y)-J 4G70	C-PUR-HF (D12YC11Y)-O 4×70	4 × 70	2/0	41.8	44.5	2,910	3,070	267	4,200
Overall-screened pairs 3 sizes									
C-PUR-HF (D12YC11Y) 4×(2×1)	C-PUR-HF (D12YC11Y) 4×(2×1)	4 × (2 × 1)	18	15.3	16.5	140	310	99	120
C-PUR-HF (D12YC11Y) 3×(2×1.5)	C-PUR-HF (D12YC11Y) 3×(2×1.5)	3 × (2 × 1.5)	16	16.5	17.8	153	350	107	130
C-PUR-HF (D12YC11Y) 4×(2×1.5)	C-PUR-HF (D12YC11Y) 4×(2×1.5)	4 × (2 × 1.5)	16	17.2	18.5	237	385	111	180
Individually screened pairs (C) 7 sizes									
PUR-HF Festoon 4×(2×1)C	PUR-HF Festoon 4×(2×1)C	4 × (2 × 1)C	18	15.9	17.1	206	350	103	120
PUR-HF Festoon 6×(2×1)C	PUR-HF Festoon 6×(2×1)C	6 × (2 × 1)C	18	19.0	20.3	265	480	122	180
PUR-HF Festoon 9×(2×1)C	PUR-HF Festoon 9×(2×1)C	9 × (2 × 1)C	18	23.6	25.0	398	721	150	270
PUR-HF Festoon 2×(2×1.5)C	PUR-HF Festoon 2×(2×1.5)C	2 × (2 × 1.5)C	16	15.2	16.4	193	280	98	90
PUR-HF Festoon 3×(2×1.5)C	PUR-HF Festoon 3×(2×1.5)C	3 × (2 × 1.5)C	16	17.2	18.5	221	350	111	130
PUR-HF Festoon 2×(2×2.5)C	PUR-HF Festoon 2×(2×2.5)C	2 × (2 × 2.5)C	14	17.2	18.5	215	340	111	150
PUR-HF Festoon 3×(2×2.5)C	PUR-HF Festoon 3×(2×2.5)C	3 × (2 × 2.5)C	14	17.5	18.8	245	390	113	220

– Min. bend R (mm) is stated at 6 × D for free-moving festoon and drag-chain operation; Max. pull (N) is permanent tensile force Fzp at 15 N/mm².

Electrical & conductor data

17 sizes

Cross-section mm²	AWG ≈	Stranding IEC 60228	Max. conductor resistance 20 °C, Ω/km	Current rating in air 30 °C, A	Short-circuit 1 s kA	Used in
1	18	Class 5	19.5	19	0.14	4×(2×1), 4–9×(2×1)C
1.5	16	Class 5	13.3	24	0.21	2×1.5–18G1.5, 2–4×(2×1.5)
2.5	14	Class 5	7.98	32	0.36	4G2.5–18G2.5, 2–3×(2×2.5)C
4	12	Class 5	4.95	43	0.57	4G4, 5G4
6	10	Class 5	3.3	56	0.86	4G6
10	8	Class 5	1.91	78	1.43	4G10
16	6	Class 5	1.21	104	2.29	4G16, 5G16
25	4	Class 5	0.7839	138	3.58	1×25, 4G25
35	2	Class 5	0.554	170	5.01	1×35, 4G35
50	1	Class 5	0.386	212	7.15	1×50, 4G50
70	2/0	Class 5	0.272	263	10.01	1×70, 4G70
95	3/0	Class 5	0.206	316	13.59	1×95
120	4/0	Class 5	0.161	370	17.16	1×120
150	300 kcmil	Class 5	0.129	424	21.45	1×150
185	350 kcmil	Class 5	0.106	484	26.46	1×185
240	500 kcmil	Class 5	0.0801	567	34.32	1×240
300	600 kcmil	Class 5	0.0641	649	42.9	1×300

– Current ratings are for rubber/PUR cables installed free in air at 30 °C ambient temperature per DIN VDE 0298-4.

Standards and approvals

Certifications

Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone
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Email
info@tebaoflex.com

Web
tebaoflex.com/cables/festoonflex-c-pur-hf-screened-cable

Typical values for this cable type, based on DIN VDE 0250-1 (D12YC11Y). Values for your order are confirmed in the quotation. Subject to change without notice.
Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.