Basket spreader cable

SYSLTOE-J FO

Fiber-Optic Collector-Basket Spreader Cable



0.6/1 kV PUR collector-basket spreader cable with 18–48 × 2.5 mm² & 6–18 FO

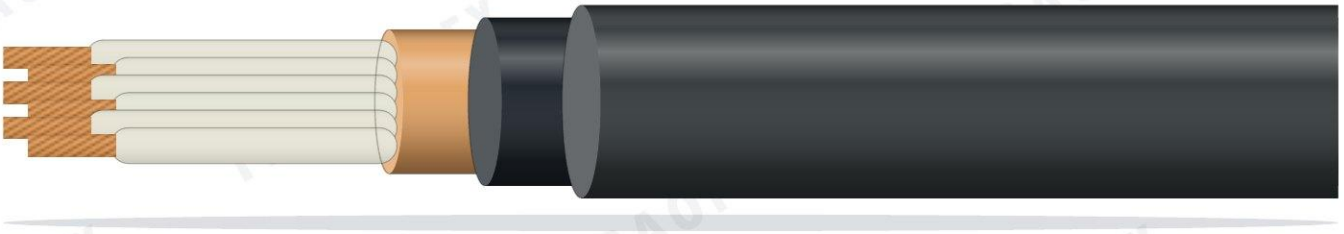
Based on DIN VDE 0250 | **U0/U 0.6/1 kV** | **18–48 × 2.5 + 6–18 FO**

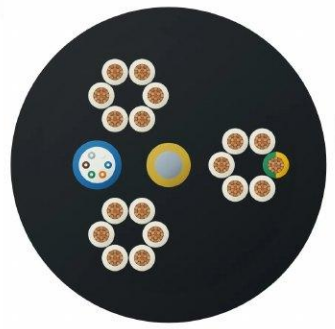
Application

Hybrid 0.6/1 kV power, control and fibre-optic spreader cable for gravity-fed collector baskets (up to 160 m/min and 50 m vertical suspension), pairing Class FS 2.5 mm² copper cores with 6–18 optical fibres, lead-ballast aramid support and black PUR sheath.

Typical uses: Ship-to-shore (STS) container crane gravity collector baskets, Automated stacking cranes (ASC), RMG & RTG spreaders, Camera-, LiDAR- and PLC-equipped twin-lift spreaders, Harbour & intermodal container terminals (down to −40 °C)

Construction





Cross-section, not to scale

1. Extra-fine flexible power conductor
2. Core insulation
3. Integrated optical fibre elements
4. Central ballast & aramid suspension core
5. Outer sheath

Technical data

Typical values

Rated voltage U0/U	0.6/1 kV	**Max. operating voltage**	1.2 kV AC in three-phase systems (0.7/1.2 kV AC · 0.9/1.8 kV DC)
AC test voltage	3.5 kV AC (5 min)	**Power core electrical data (2.5 mm²)**	R20 ≤ 7.98 Ω/km · Ampacity 30 A at 30 °C (VDE 0298-4) · 1 s Isc 0.36 kA
Integrated optical fibre options	6, 12 or 18 fibres: E9/125 µm single-mode (OS2), G50/125 µm multimode (OM2/OM3) or G62.5/125 µm multimode (OM1)	**Ambient temperature, flexing**	−40 to +80 °C
Ambient temperature, fixed	−50 to +80 °C	**Max. conductor temperature**	+90 °C continuous · +250 °C short-circuit
Self-supporting ballast element	Aramid-fibre braid woven around central lead ball cords (safety factor 5 at up to 50 m vertical suspension)	**Operating speed & conductor tensile limit**	Up to 160 m/min hoist speed · max. 15 N/mm² at copper conductors
Collector basket & bending geometry	Free-moving bend radius 161–243 mm (~5 × D per DIN VDE 0298-3); min. basket Ø 30 × D, basket height ≈ 45 × D, CCW lay	**Oil resistance**	DIN EN 60811-404
Weather, UV & ozone	Resistant to ozone, UV radiation and moisture for indoor and outdoor port cranes	**Low-temperature operation**	Cold-resistant down to −40 °C in dynamic basket operation and −50 °C fixed
Standards	Based on DIN VDE 0250 · DIN VDE 0298-3 (bending) · DIN VDE 0298-4 (ampacity) · EN 60811-404	**Standard packing**	Heat-treated seaworthy timber drums with waterproof end caps

Sizes

24 standard constructions

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

Configuration	Power cores n × mm²	Optical fibres count × type	Outer Ø ≈ mm	Min. bend R mm (~5×D)	Min. basket Ø mm (30×D)	Copper wt kg/km	Net weight ≈ kg/km	Current A (30 °C)
E9/125 Single-Mode · 6–18 FO 8 sizes								
☐ SYSLTOE-J FO 18 × 2.5 + 6 E9/125	18 × 2.5	6 × E9/125 (SM)	32.1	161	963	432	1,700	30
☐ SYSLTOE-J FO 24 × 2.5 + 12 E9/125	24 × 2.5	12 × E9/125 (SM)	34.1	171	1,023	576	2,175	30
☐ SYSLTOE-J FO 30 × 2.5 + 6 E9/125	30 × 2.5	6 × E9/125 (SM)	37.5	188	1,125	720	2,724	30
☐ SYSLTOE-J FO 36 × 2.5 + 6 E9/125	36 × 2.5	6 × E9/125 (SM)	39.8	199	1,194	864	3,519	30
☐ SYSLTOE-J FO 36 × 2.5 + 12 E9/125	36 × 2.5	12 × E9/125 (SM)	39.8	199	1,194	864	3,520	30
☐ SYSLTOE-J FO 42 × 2.5 + 12 E9/125	42 × 2.5	12 × E9/125 (SM)	44.3	222	1,329	1,008	4,087	30
☐ SYSLTOE-J FO 48 × 2.5 + 12 E9/125	48 × 2.5	12 × E9/125 (SM)	48.5	243	1,455	1,152	3,937	30
☐ SYSLTOE-J FO 48 × 2.5 + 18 E9/125	48 × 2.5	18 × E9/125 (SM)	48.5	243	1,455	1,152	3,938	30
G50/125 Multimode · 6–18 FO 8 sizes								
☐ SYSLTOE-J FO 18 × 2.5 + 6 G50/125	18 × 2.5	6 × G50/125 (MM)	32.1	161	963	432	1,673	30
☐ SYSLTOE-J FO 24 × 2.5 + 12 G50/125	24 × 2.5	12 × G50/125 (MM)	34.1	171	1,023	576	2,175	30
☐ SYSLTOE-J FO 30 × 2.5 + 6 G50/125	30 × 2.5	6 × G50/125 (MM)	37.5	188	1,125	720	2,724	30
☐ SYSLTOE-J FO 36 × 2.5 + 6 G50/125	36 × 2.5	6 × G50/125 (MM)	39.8	199	1,194	864	3,519	30
☐ SYSLTOE-J FO 36 × 2.5 + 12 G50/125	36 × 2.5	12 × G50/125 (MM)	39.8	199	1,194	864	3,520	30
☐ SYSLTOE-J FO 42 × 2.5 + 12 G50/125	42 × 2.5	12 × G50/125 (MM)	44.3	222	1,329	1,008	4,087	30
☐ SYSLTOE-J FO 48 × 2.5 + 12 G50/125	48 × 2.5	12 × G50/125 (MM)	48.5	243	1,455	1,152	3,937	30
☐ SYSLTOE-J FO 48 × 2.5 + 18 G50/125	48 × 2.5	18 × G50/125 (MM)	48.5	243	1,455	1,152	3,938	30

Configuration	Power cores n × mm²	Optical fibres count × type	Outer Ø ≈ mm	Min. bend R mm (~5×D)	Min. basket Ø mm (30×D)	Copper wt kg/km	Net weight ≈ kg/km	Current A (30 °C)
G62.5/125 Multimode · 6–18 FO 8 sizes								
☐ SYSLTOE-J FO 18 × 2.5 + 6 G62.5/125	18 × 2.5	6 × G62.5/125 (MM)	32.1	161	963	432	1,700	30
☐ SYSLTOE-J FO 24 × 2.5 + 12 G62.5/125	24 × 2.5	12 × G62.5/125 (MM)	34.1	171	1,023	576	2,175	30
☐ SYSLTOE-J FO 30 × 2.5 + 6 G62.5/125	30 × 2.5	6 × G62.5/125 (MM)	37.5	188	1,125	720	2,724	30
☐ SYSLTOE-J FO 36 × 2.5 + 6 G62.5/125	36 × 2.5	6 × G62.5/125 (MM)	39.8	199	1,194	864	3,519	30
☐ SYSLTOE-J FO 36 × 2.5 + 12 G62.5/125	36 × 2.5	12 × G62.5/125 (MM)	39.8	199	1,194	864	3,520	30
☐ SYSLTOE-J FO 42 × 2.5 + 12 G62.5/125	42 × 2.5	12 × G62.5/125 (MM)	44.3	222	1,329	1,008	4,087	30
☐ SYSLTOE-J FO 48 × 2.5 + 12 G62.5/125	48 × 2.5	12 × G62.5/125 (MM)	48.5	243	1,455	1,152	3,937	30
☐ SYSLTOE-J FO 48 × 2.5 + 18 G62.5/125	48 × 2.5	18 × G62.5/125 (MM)	48.5	243	1,455	1,152	3,938	30

- All 24 configurations carry 2.5 mm² Class FS bare copper power/control cores with max. DC resistance R20 = 7.98 Ω/km, nominal single-circuit current rating 30 A in air at 30 °C (DIN VDE 0298-4; apply multicore grouping conversion factor for simultaneously loaded cores), and 1 s short-circuit rating 0.36 kA.
- Free-moving cable bend radius rmin is ~5 × D (161–243 mm per DIN VDE 0298-3); minimum collector-basket diameter is 30 × D (963–1,455 mm) and approximate basket height is 45 × D.

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.

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Web
tebaoflex.com/cables/bskt-xprt-sysltoe-fo-basket-spreader-cable

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