



TFOCA / TFOCA-II tactical fibre assembly

TFOCA / TFOCA-II Tactical Fibre Cable

2, 4, 6 & 12-channel hermaphroditic TFOCA / TFOCA-II tactical field fibre-optic assembly



MIL-DTL-83526 / TFOCA-II

1,800 N Pull / 440 N/cm Crush

2 / 4 / 6 / 12 Channels

Application

Genderless (hermaphroditic) TFOCA (2/4-ch) and TFOCA-II (4/6/12-ch) tactical field fibre-optic assembly built on MIL-PRF-85045 tight-buffered polyaramid PUR cable for C4ISR defence, OB broadcast, mining and frac spreads.

Typical uses: C4ISR Tactical Defence Communications, PATRIOT / Air-Defence Radar Interconnects, Hydraulic Fracturing (Frac Spread) Telemetry, Outside Broadcast (OB Van) SMPTE/Fibre Links, Emergency Disaster Recovery & Mining

Construction



Cross-section, not to scale

- 1 Bend-insensitive optical fibres
- 2 900 µm tactical elastomeric tight buffer
- 3 High-density polyaramid tensile yarn
- 4 Matte black tactical polyether PUR jacket

Technical data

Typical values

Operating temperature	−46 °C to +85 °C (cable rated −55 °C to +85 °C)	Storage temperature	−57 °C to +85 °C (MIL-STD-810G)
Deployment tensile load	1,800 N (400 lbf) short-term · 600 N long-term	Crush resistance (TIA-455-41)	440 N/cm (2,200 N over 5 cm plate)
Impact resistance (TIA-455-25)	200 impacts at 2.2 N·m	Mating durability	≥ 2,000 mating cycles (hermaphroditic coupling nut)
Min. bend radius	8 × OD dynamic · 4 × OD static (G.657.A2)	Fibre types supported	G.652.D / G.657.A2 SM (9/125) · OM1 (62.5/125) · OM3/OM4 (50/125)
Connector insertion loss	≤ 0.50 dB typical · ≤ 0.75 dB max per mated pair	Optical return loss (UPC)	≥ 50 dB (Single-Mode UPC) · ≥ 30 dB (Multimode)
Cable attenuation (SM)	≤ 0.40 dB/km (1310 nm) · ≤ 0.30 dB/km (1550 nm)	Cable attenuation (MM)	≤ 3.0 dB/km (850 nm) · ≤ 1.0 dB/km (1300 nm)
Ingress protection	IP67 / IP68 (15 m water immersion for 24 h)	Corrosion resistance	500 h salt spray (hard-anodized Al or Zn-Ni)
Fluid & fungus resistance	JP-8 fuel, hydraulic oil, diesel & MIL-STD-810G fungus	Standards	TFOCA / TFOCA-II (MIL-DTL-83526 heritage)

Sizes

12 standard constructions

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

Order designation	Channels & Fibre Mode	Connector Configuration	Std Reel m	Typ. IL dB	Cable OD mm	Cable Wt kg/km	Max Pull N
2 & 4-Channel TFOCA / TFOCA-II Tactical Field Assemblies (5.5–5.8 mm OD) 7 sizes							
☐ TF2-2C-SM-G657-300M	2-Ch Single-Mode G.657.A2	TFOCA-II Plug ↔ TFOCA-II Plug	300	0.45	5.5	28	1,800
☐ TF1-4C-OM1-625-300M	4-Ch Multimode OM1 62.5/125	TFOCA Gen-I ↔ TFOCA Gen-I	300	0.50	5.8	32	1,800
☐ TF2-4C-SM-G657-100M	4-Ch Single-Mode G.657.A2	TFOCA-II Plug ↔ TFOCA-II Plug	100	0.45	5.8	32	1,800
☐ TF2-4C-SM-G657-300M	4-Ch Single-Mode G.657.A2	TFOCA-II Plug ↔ TFOCA-II Plug	300	0.45	5.8	32	1,800
☐ TF2-4C-SM-G657-500M	4-Ch Single-Mode G.657.A2	TFOCA-II Plug ↔ TFOCA-II Plug	500	0.45	5.8	32	1,800
☐ TF2-4C-OM3-50-300M	4-Ch Multimode OM3 10GbE	TFOCA-II Plug ↔ TFOCA-II Plug	300	0.45	5.8	32	1,800
☐ TF2-4C-OM4-50-300M	4-Ch Multimode OM4	TFOCA-II Plug ↔ TFOCA-II Plug	300	0.45	5.8	32	1,800
6 & 12-Channel TFOCA-II High-Density & Shelter Fanout Assemblies 5 sizes							
☐ TF2-6C-SM-G657-300M	6-Ch Single-Mode G.657.A2	TFOCA-II 6Ch ↔ TFOCA-II 6Ch	300	0.50	6.5	40	1,800
☐ TF2-6C-OM3-50-300M	6-Ch Multimode OM3 10GbE	TFOCA-II 6Ch ↔ TFOCA-II 6Ch	300	0.50	6.5	40	1,800
☐ TF2-12C-SM-G657-300M	12-Ch Single-Mode G.657.A2	TFOCA-II 12Ch ↔ TFOCA-II 12Ch	300	0.55	8.0	58	1,800
☐ TF2-4C-SM-LC-FAN-15M	4-Ch SM Shelter Pigtail	TFOCA-II Plug → 4 × LC/UPC	15	0.35	5.8	32	1,800
☐ TF2-12C-SM-LC-FAN-15M	12-Ch SM Shelter Pigtail	TFOCA-II 12Ch → 12 × LC/UPC	15	0.40	8.0	58	1,800

– Field reel assemblies (> 50 m) are supplied on heavy-duty elastomer or military steel backpack/checkout reels with a 2 m accessible connector hub tail.

Standards and approvals

- ✓ MIL-DTL-83526 / TFOCA & TFOCA-II Intermateable
- ✓ MIL-PRF-85045 Tactical Optical Cable Compliant

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

+86 185 9591 3361

Email

info@tebaoflex.com

Web

tebaoflex.com/cables/tfoca-tfoca-ii-hermaphroditic-tactical-field-deployable-fibre-optic-cable-assembly



Typical values for this cable type, based on MIL-DTL-83526 / MIL-PRF-85045 / TIA-568 / ITU-T G.657.A2. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.