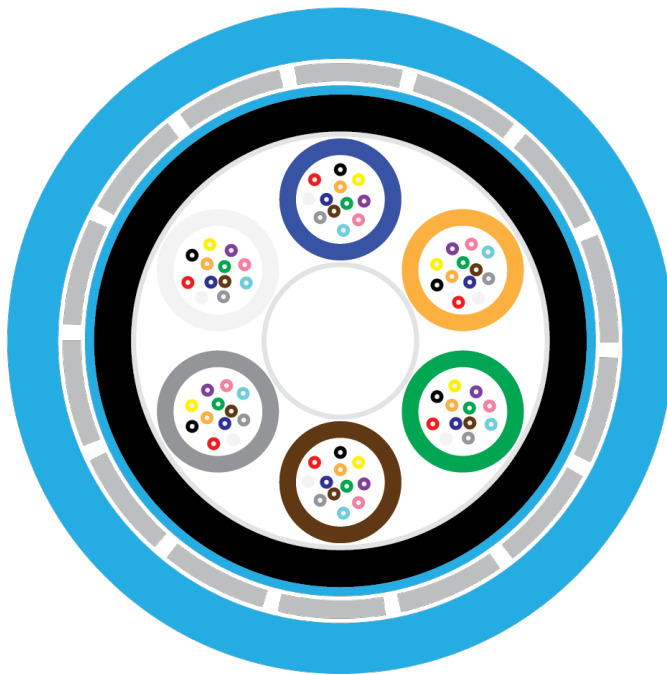




A Hexatronic
Group Company



GRP Armoured Loose Tube Cable

GRP & Nylon LT 6-288 fibers G652.D TIA598

Features

- Up to 288 fibers
- Slim yet very durable armoured design
- Suitable for direct bury or pulling through duct
- Excellent optical performance with low loss G652.D fibers
- A dry cable design - easy to prepare and identify fibers
- Dielectric armoured design
- High crush resistance
- UV stabilised materials
- Rodent and termite proof design

Application

The outdoor GRP and nylon loose-tube cable series combines state of the art installation performance, ultra-low attenuation and a high mechanical and environmental performance.

The cable type is typically used in transport applications such as terrestrial long-haul or metro networks where a low attenuation, high performance optical cable is required.

The protected armoured design is suited to areas where resistance to termites and resistance to rodents are prime concerns.

Design

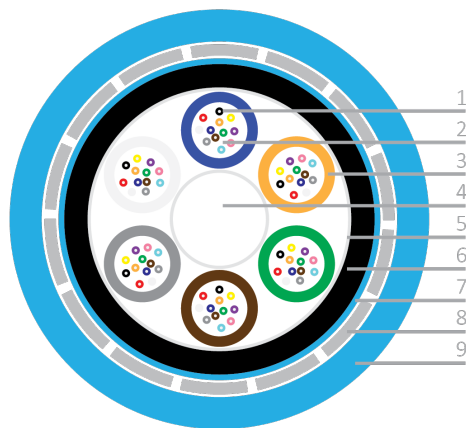
The cables are based on a dry waterblocked concentric core, slim loose tube design with up to 24 tubes per cable.

The cables have one or two layers of protective SZ laid tubes made of a robust PBT compound where each tube has 12 fibers. (excluding 6f)

The tubes are sheathed by inner HDPE and Nylon sheaths, protected by GRP rods, and jacketed in a sacrificial outer sheath.

The design facilitates easy fiber preparation and mid-span access.

Product Information



- 1 Primary coated fiber: Silica, acrylate
- 2 Filler: Thixotropic gel
- 3 Loose tube: Polybutylene terephthalate
- 4 Central strength member: Glass fiber reinforced plastic
- 5 Wrapping: Water blocking yarns
- 6 Inner sheath: High density polyethylene
- 7 Inner jacket: PA 12
- 8 Armour: Glass fiber reinforced plastic
- 9 Outer sheath: High density polyethylene

Black fillers can replace tubes.

Ripcords are included beneath the inner and outer sheaths.
CSM is up-coated in black PE where necessary

Technical Information

Product Color	Blue sheath
Color Code	TIA598
Temperature, Operation [°C]	-30 to +70
Temperature, Storage [°C]	-30 to +70
Temperature, Installation [°C]	0 to +50
Fiber Type	G652D
Attenuation @Wavelength [nm]	1310/1550
Maximum Attenuation [dB/km]	0.4/0.3
Conformance	Temperature Range: IEC 60794-1-22-F1 Cable Bending Radius: IEC 60794-1-21-E11 A & B Tensile Force: IEC 60794-1-21-E1 Impact Resistance: IEC 60794-1-21-E4 Crush Resistance: IEC 60794-1-21-E3A Torsion Resistance: IEC 60794-1-21-E7 Kink Resistance: IEC 60794-1-21-E10 Water Penetration: IEC 60794-1-22-F5B Materials: AS 1049
Marking	The sheath is indelibly printed every metre in a contrasting colour using the hot foil Indentation Method. The marking includes the manufacturer, part number, manufacturing date, batch number and metre marking. Customer printing is available by special order.
Ordering Information	Standard drum lengths: 2, 4 km ±10%

Technical Details

TIA-598 Fibers and Tubes	1	2	3	4	5	6	7	8	9	10	11	12
	Blue	Orange	Green	Brown	Slate	White	Red	Black	Yellow	Violet	Rose	Aqua
	13	14	15	16	17	18	19	20	21	22	23	24
	Blue	Orange	Green	Brown	Slate	White	Red	Clear	Yellow	Violet	Rose	Aqua

TIA 598 Color Code Chart

Articles 10

Article name	Color	No. of Fibers	Layout	Bend Radius [mm]	Tensile Force, Installation [N]	Crush [N/100 mm]	Impact [J]	Torsion [°]	Diameter Ø [mm]	Weight [kg/km]
GRP/PA 6F G652D TIA OSA-FSM-006LTGRP	Blue	6	1x6 (5 fillers)	280	4000	4000	20	±180, 5kg, 2m 10 cycles	14.0 ±5%	170
GRP/PA 12F G652D TIA OSA-FSM-012LTGRP	Blue	12	1x12 (5 fillers)	280	4000	4000	20	±180, 5kg, 2m 10 cycles	14.0 ±5%	170
GRP/PA 24F G652D TIA OSA-FSM-024LTGRP	Blue	24	2x12 (4 fillers)	280	4000	4000	20	±180, 5kg, 2m 10 cycles	14.0 ±5%	170
GRP/PA 48F G652D TIA OSA-FSM-048LTGRP	Blue	48	4x12 (2 fillers)	280	4000	4000	20	±180, 5kg, 2m 10 cycles	14.0 ±5%	170
GRP/PA 72F G652D TIA OSA-FSM-072LTGRP	Blue	72	6x12	280	4000	4000	20	±180, 5kg, 2m 10 cycles	14.0 ±5%	170
GRP/PA 96F G652D TIA OSA-FSM-096LTGRP	Blue	96	8x12	310	4000	4000	20	±180, 5kg, 2m 10 cycles	15.5 ±5%	205
GRP/PA 144F G652D TIA OSA-FSM-144LTGRP	Blue	144	12x12	360	4000	4000	20	±180, 5kg, 2m 10 cycles	18.0 ±5%	265
GRP/PA 192F G652D TIA OSA-FSM-192LTGRP	Blue	192	6x12 + 10x12	380	6000	4000	20	±180, 5kg, 2m 10 cycles	19.0 ±5%	310
GRP/PA 240F G652D TIA OSA-FSM-240LTGRP	Blue	240	7x12 / 13x12	390	4000	4000	20	±180, 5kg, 2m 10 cycles	20.0 ±5%	320
GRP/PA 288F G652D TIA OSA-FSM-288LTGRP	Blue	288	9x12 / 15x12	420	4000	4000	20	±180, 5kg, 2m 10 cycles	20.5 ±5%	320