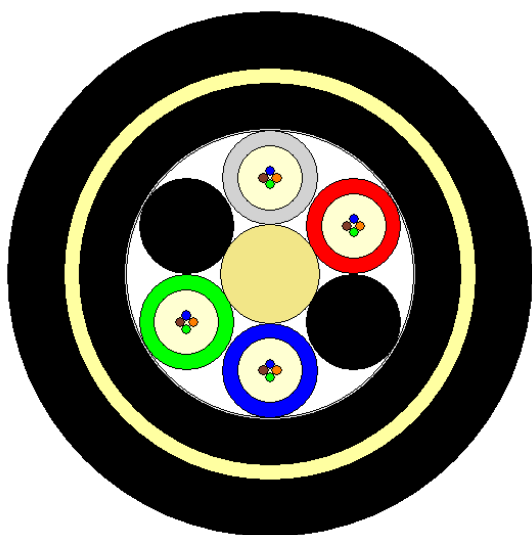


	CABLE DATASHEET Optical Fiber Cables PKP – TELEFONICA –	Cable Code: CDS-587 Date: 26/06/03
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OPTICAL FIBER CABLES FOR DUCT INSTALLATION



- ❑ Dielectric Central Strength Member (CSM) : Fiberglass reinforced plastic
- ❑ Loose tubes containing optical fibers and filled with a suitable filling compound
- ❑ Dummy elements as fillers
- ❑ Loose tubes and fillers are SZ stranded around the central strength member
- ❑ Water-swellaable elements to ensure optical core watertightness (dry core)
- ❑ Black polyethylene inner sheath. Two ripcords are laid below inner sheath
- ❑ Dielectric reinforcement: aramid yarns with water-swellaable elements to ensure watertightness
- ❑ Black polyethylene outer sheath. Two ripcords are laid below outer sheath

CABLE DIMENSIONS AND MAIN CHARACTERISTICS

No. of fibers in cable		16
No. of fibers per tube		4
No. of tubes / fillers		4 / 2
CSM diameter	mm	2.6
Loose tube outer diameter	mm	2.5
Inner / Outer sheath thickness	mm	1.2 / 1.5
Cable diameter	mm	13.8
Cable weight	kg/km	140
Elasticity modulus	kN/mm ²	150
Resistant section	mm ²	9.8
Thermal expansion coefficient	°C ⁻¹	8.4 · 10⁻⁶

IDENTIFICATION

Optical fibers color code:

Fiber No.	Color	Fiber No.	Color
1	Green	3	Blue
2	Red	4	Yellow

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Loose tubes color code:

Tube No.	Color	Tube No.	Color	Tube No.	Color
1	White	3	Black (Filler)	5	Green
2	Red	4	Blue	6	Black (Filler)

MAIN MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

Test	Test standard	Value	Acceptance criteria
Tensile strength	EN 187000 - 501	3,200 N	$\Delta\epsilon_f \leq 0.33 \%$ $\Delta\alpha \leq 0.05 \text{ dB} / 50 \text{ m}$ No damage
Crush	EN 187000 - 504	3,000 N / 100 mm	$\Delta\alpha \leq 0.05 \text{ dB}$ No damage
Impact	EN 187000 - 505	5 J, 3 impacts, 10 mm	$\Delta\alpha \leq 0.05 \text{ dB}$ No damage
Bending radius	EN 187000 - 513	$\geq 15 \cdot \varnothing_{\text{cable}} \text{ (mm)}$ $\geq 250 \text{ mm}$ 5 turns, 3 cycles	$\Delta\alpha \leq 0.05 \text{ dB}$ No damage
Temperature cycling	EN 187000 - 601	-25 to + 70°C (6 cycles)	$\Delta\alpha \leq 0.05 \text{ dB/Km}$
Watertightness	EN 187000 - 605B	1 m water, 14 days	Max. 1m penetration

Rest of characteristics according to TELEFONICA ER.f6.021 Ed. 2

TRANSMISSION CHARACTERISTICS:

SSM fibers

Attenuation at	1310 nm	$\leq 0.40 \text{ dB/km}$
	1550 nm	$\leq 0.25 \text{ dB/km}$

Other characteristics Acc. ITU-T
G652 and Alcatel type 6900

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CABLE SHEATH MARKING

ALCATEL - YYYY - NN F.O. 10 - PKP-E - LLLL

Where

YYYY : Manufacturing year
 NN : Number of fibers in cable
 10 : Type of fibers in cable (10 for SSM acc. to ITU-T G.652)
 LLLL : Length marking (m)