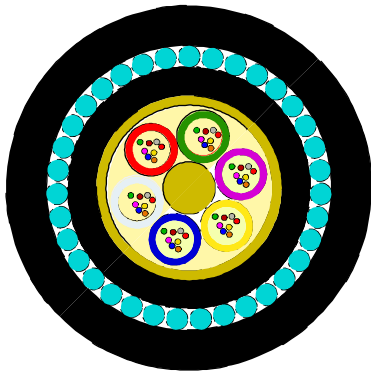


# SM-LEWE

## Cable Design

### Loose Tube Fiber Optic Cable -dry core- Steel wire Armour



- not to scale -

- **Central Strength Member (CSM):** glass fiber reinforced plastic rod (FRP), with plastic oversheathing when needed.
- **Loose Tube:** thermoplastic material, containing up to 12 fibers and filled with a suitable water tightness compound.
- **Filler Elements:** thermoplastic rods, where needed.
- **Stranding:** loose tubes (and fillers), SZ stranded around the CSM.
- **Cable core:** swellable tapes are applied over the stranding.
- **Inner sheath:** PE (Black).
- **Aarmor:** one layer of galvanized steel wires
- **Outer sheath:** PE (Black).

### Configuration

No. of Fibers	No: of Tubes/ fillers	Loose Tube / Filler - Ø [mm]	CSM - Ø [mm]	CSM-Over sheathing - Ø [mm]	Inner sheath thickness [mm]	Aarmor wire thickness [mm]	Outer Sheath Thickness [mm]	Cable Diameter [mm]	Cable Weight [kg/km]	Pulling Force $\Delta\alpha \leq 0.05$ dB [N]
6	1/5	2.1	2.3	-	1.0	1.0	1.4	14.1	300	6000
12	2/4	2.1	2.3	-	1.0	1.0	1.4	14.1	300	6000
24	4/2	2.1	2.3	-	1.0	1.0	1.4	14.1	300	6000
36	6/0	2.1	2.3	-	1.0	1.0	1.4	14.1	300	6000
48	4/2	2.4	2.6	-	1.0	1.0	1.4	15.0	335	6200
72	6/0	2.4	2.6	-	1.0	1.0	1.4	15.0	335	6200
96	8/0	2.4	2.3	4.2	1.0	1.0	1.4	16.6	400	6500
144	12/0	2.4	2.1	7.5	1.0	1.0	1.4	19.9	530	6800

### Application

<b>Temperature Range</b> Transportation & Storage: - 30 to + 70°C Installation: - 10 to + 50°C Operation: - 30 to + 70°C	<b>Minimum Bending Radius</b> - Repeated bending 15 x Cable-Ø - Cable bend: 10 x Cable-Ø
---	--

## Main Mechanical and Environmental Characteristics

Test	Test Standard	Specified Value	Acceptance Criteria
Crush	IEC 60794-1-2-E3	4000 N / 100 mm	$\Delta\alpha \leq 0.10$ dB
Impact	IEC 60794-1-2-E4	30 Nm, R= 200 mm, 3 spots	$\Delta\alpha \leq 0.10$ dB
Repeated Bending	IEC 60794-1-2-E6	R=15x D, 100 cycle	$\Delta\alpha \leq 0.10$ dB
Cable Bend	IEC 60794-1-2-E11	R=10x D	$\Delta\alpha \leq 0.10$ dB
Water Penetration	IEC 60794-1-2-F5B	sample=3m, water column=1m	no water leakage in 24h

All optical measurements at 1550 nm.

## Identification and Packing

### Fiber Colors (acc. to EN187105)

No.	1	2	3	4	5	6	7	8	9	10	11	12
Color	blue	Orange	Green	Brown	Grey	White	Red	Black	Yellow	Violet	Pink	turquoise

### Buffer Tube Colors (acc. to EN187105)

No.	1	2	3	4	5	6	7	8	9	10	11	12
Color	blue	Orange	Green	Brown	Grey	White	Red	Black	Yellow	Violet	Pink	turquoise

### Filler Elements Colors:

All filler elements are uncolored (natural).

### Sheath Color:

The outer sheath color is black.

### Sheath Marking:

The outer sheath is marked in 1 meter intervals as follows:

<b>DRAKA COMTEQ</b> <year of manufacture> <number and type of fiber> <length marking in meter>
--

### Packing:

Wooden drums with protection.

### Delivery Lengths:

Standard delivery lengths are 2 km, 4 km, 6 km with a tolerance of - 1% / + 3%