

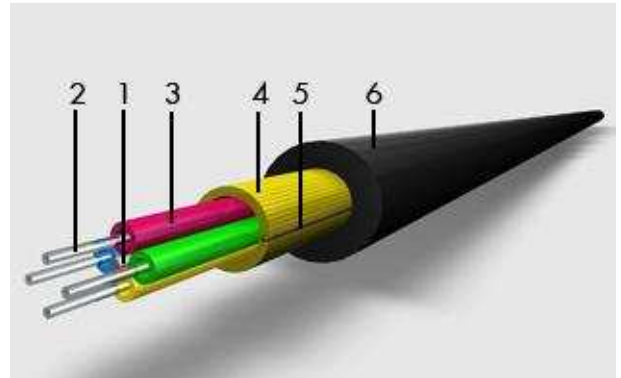
# HUBER+SUHNER DATA SHEET

## FIBER OPTIC CABLE: 04-.../FSN(ZN)Z-...60

### Description

Ruggedised Mobile Field Cable

- Metal free indoor and outdoor cable
- Strain relieved with aramide yarn
- For direct connector assembly
- Ripcord for easy jacked removal
- High chemical resistance against acids/alkalies
- For high mechanical and thermal stability
- Halogen free and non-corrosive fire gases
- Longitudinal and transversal watertight cable
- Improved crush resistance



### Available Types

Fiber count: 2 up to 4 Fibers

### Type of Fiber

Standard: E9, according to IEC 60793-2-50 B1.1 and/or B1.3 and ITU-T G.652D  
 Standard: G50, according to IEC 60793-2-10 A1.1a and ITU-T G.651  
 Standard: G62, according to IEC 60793-2-10 A1.1b

### Standard Colours

Fiber: E9, G50 and G62: transparent  
 Tube: According to colour code  
 Jacket (outer): Black

### Technical Data

#### Construction

Pos.	Description / Material	Size	Options / Notice
1	1 Strength member	0.44 mm	
2	4 Optical fiber	245 / 400 $\mu$ m	Fiber type, buffered
3	Tight tube	0.88 mm	Colour
4	Reinforcement / aramide yarn		Swellable
5	1 Ripcord		Swellable
6	Jacket / TPU flame retardant	6 mm	Colour, inscription
7			
8			

### Mechanical data

Characteristics	Conditions	Tested acc. to	Values
Weight			28 kg/km
Tensile strength	during installation in Service	IEC 60794-1-2 E1	4000 N 2000 N
Minimal bending radius	During installation In service	IEC 60794-1-2 E11	90 mm 60 mm
Crush resistance	During installation In service	IEC 60794-1-2 E3	4000 N/cm 1000 N/cm
Impact resistance	$W_p = 2.25$ J	IEC 60794-1-2 E4	300 impacts
Repeated bending	radius = 30 mm / weight = 10 kg	IEC 60794-1-2 E6	20000 cycles
Flexing	radius = 77 mm / velocity = 2.2 m/s	H+S drag chain test	100000 cycles
Coiling capability	length = 200 m / radius = 120 mm	Spooling capability	5 cycles
Torsion	angle = $\pm 1440^\circ$ / length = 1000 mm	IEC 60794-1-2 E7	3 cycles

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Rev: H

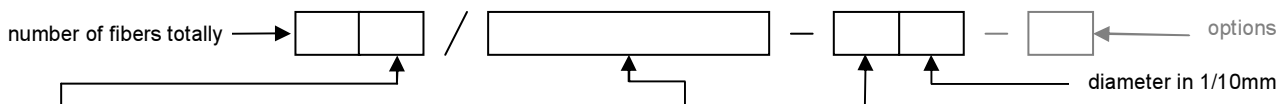
### Environmental Data

Characteristics	Conditions	Tested acc. to	Values
Temperature range	during installation in service in storage	IEC 60794-1-2 F1	-40 °C up to +85 °C -40 °C up to +85 °C -60 °C up to +85 °C
Fire load			0.55 MJ/m
2002/95/EC (RoHS)			compliant
Water penetration	h=1m, 24h, p<3m	IEC 60794-1-2 F5A	passed

Specification For singlemode at 1550nm, for multimode at 1300nm

### Ordering Information

HUBER+SUHNER AG Fiber Optics cable code



fiber code	Datasheet
E9	DOC-0000218069
G50	DOC-0000218051
G62	DOC-0000218060

description  
of cable construction

colour code for outer jacket	
A: red	L: pink
B: green	M: turquoise
C: blue	N: blue (light)
D: orange	O: brown (light)
E: yellow	P: purple
F: white	Q: yellow-green
G: black	R: olive-green
H: grey	T: transparent
I: brown	U: nature (milky or beige)
K: violet	X: other

Cabled fiber attenuation according to IEC60794-1-1 table 1  
and fiber properties according above fiber data sheet

HUBER+SUHNER is certified according to ISO 9001 and ISO 14001

WAIVER  
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