

TYPE CODES FOR OPTICAL FIBER CABLES ACC. TO THE DIN / VDE 0888-3

The German standardization institutes of DIN & VDE use a set of letter codes for the designation of the cables .

For optical cables, the relevant standard is DIN VDE 0888. Variants of designations are used by institutions like Deutsche Telekom and German Railways .

We use the limited abbreviations in the below summary which are typical ones in today's world fiber optic cable market but they are not limited with above indicated ones

In the following tables the meaning of these codes is explained as a brief summary.

Cable designation, reference DIN / VDE 0888-3

Abbreviation	Product designation	Explanation
A-	Outdoor cable	
J-	Indoor cable	
U-	Universal cable I / O cable	Not part of the VDE 0888
AT-	Breakout Cable	
Secondary buffering		
B	Multifiber loose tube,unfilled	Dry Loose tube with water swellable yarns
K	Slotted Core	Generally used for ribbon fibers
V	Tight buffer or semitight buffer	VDE make no distinction between the different variants of buffer
W	Filled loose tube with 1 fibre only	Very rarely used or not used furthermore
D	Filled loose tube with several fibres	
F	Water resistive Jelly Filled Core	Core filling compound
Q	Water resistive Dry Core	Mostly water swellable tapes or yarns
S	Metal element in the cable core	Mostly steel wire as central strength member
Sheathing		
ZN	Non-metallic Yarn reinforcement	Mostly aramid yarns
BN	Non-metallic armouring	Armouring with glass rowings against rodent attacks
L	Aluminium tape	Mostly laminated with plastic material in the outer sheath
SG	Armouring with smooth steel tape	2 x smooth steel tapes mostly helically overlapped on each other
SR	Armouring with corrugated steel tape	According to German railways, not in VDE
R	Armouring with steel wires	Several steel wires are used on the inner sheath of the cables
(..ZN)	Number of non-metallic anti buckling and strength members in the jacket	Mostly 2 x rounded or flat fiber reinforced plastics ,embedded radially in the outer jacket of the cables
(..ZM)	Number of metallic anti buckling and strength members in the jacket	Mostly 2 rounded steel wires ,embedded radially in the outer jacket of the cables
Y	PVC sheath	
2Y	PE sheath	
4Y	PA sheath	
9Y	PP sheath	
11Y	PUR sheath	
H	Halogen free, fire retardant sheath	
Number of fibers		
n	Number of fibers	
n x m	Number of tubes x number of fibers in each tube	

Abbreviation	Type of fibers and transmission properties	Examples
Enn / mmm	Singlemode Fibers with modefield / cladding diameters in μm	E9/125 for G.652 fibers and E10/125 for G.655 / 656 fibers
Gnn / mmm	Multimode Fibers With core diameter / cladding diameters in μm	G50/125 for OM2,OM3 and OM4 . G62,5/125 for OM1 fibers
aaaB aaaF aaaF aaaH	Attenuation coefficient in db / km	At 850 nm for multimode fibers At 1300 nm for multimode fibers At 1310 nm for singlemode fibers At 1550 nm for singlemode fibers
bb	Bandwidth in MHz x km for multimode fibers and dispersion coefficient in ps/(nm · km) for singlemode fibers	
Constructional		
LG	Stranding in layers	
rr	Cable outer Jacket Color	BL- for black and OR-for orange etc.

Designation	Explanation
J-V(ZN)H 8x1 E9/125 0,36F3 + 0 ,22H17 YL	Indoor cable with 8 tightly buffered fibers and with halogenfree sheathing and yarn reinforcing under the sheath. The cable has total of 8 fibers which is a single mode fiber. The cable has an attenuation value of ≤ 0.36 dB/km at 1310 nm. At this wavelength the dispersion is (less than) 3 ps/km · nm. The values at 1550 nm is 0.22 dB/km and 17 ps/km · nm respectively. Yellow outer sheath color.
A-DQ(ZN)SR(2Y) 4x12 G50/125 2,5B1500 + 0,6F500 LG BL	Outdoor cable with filled loose tube and swellable dry water blocking in the core with polyethylene sheathing. Yarn reinforcement under the corrugated steel tape armour . The cable has 4 tubes with 12 fibers in each tube to a total of 48 fibers cable which is multimode 50 mic.. The cable has an attenuation of $\leq 2,5$ dB/km at 850 nm; and a bandwidth of ≥ 1500 MHz · km at 850 nm. At 1300 nm the values are 0,6 dB/km and 500 MHz · km respectively. Stranded Cable with black in color jacket color and FRP as CSM