































Fiber Optic Cables

Indoor Cables























Characteristics

											
PATCHline Simplex	3_1_1										
											
PATCHline Duplex	3_1_2										
											
PATCHline Duplex +	3_1_2										
											
KONlan	3_1_41										
											
KONlan mini semi tight/tight	3_1_45 / 3_1_46										

Indoor-/Outdoor Cables

								
BRUniversal 150/250	1) 3_9_1 / 3_9_2							
								
BRUniversal 300/600/900	1) 3_9_3 / 3_9_5 / 3_9_4							

Outdoor Cables

							
BRUclean 150/250	1) 3_2_1 / 3_2_2						
							
BRUclean 300/600/900	1) 3_2_3 / 3_2_5 / 3_2_4						
							
BRUclean 900 Jumbo	3_2_9						
							
BRUsteel	3_7_4						

1) Cables with corrugated steel tape or aluminium tape on request

Depends on the selected type!

Metallic Ropes with Integrated Optical Fibers on request.

Technical data

FO Cable Types		Data sheet number	According to VDE	Tensile strength short term [N]	Cable Ø [mm]	Max. number of fibers	Combustion energy [MJ/m]	Weight [kg/km]
PATCHline Simplex		3_1_1	J-V(ZN)H	260	2.1	1	0.09	5.0
					2.8		0.14	9.0
PATCHline Duplex		3_1_2	J-V(ZN)H	450	4.2x2.1	2	0.28	9.7
		3_1_2	J-V(ZN)H	450	5.6x2.8	2	0.31	19.3
PATCHline Duplex+		3_1_2	AT-V(ZN)HH	450	5.3x3.1	2	0.36	30
		3_1_2	AT-V(ZN)HH	550	6.6x3.8	2	0.53	35
KONlan		3_1_41	AT-V(ZN)HH	500–1000	7.2–13.2	12	0.74–1.63	35–170
KONlan mini	semi tight	3_1_45	J-V(ZN)H	1500	6.3–7.2	12	0.41–0.64	33–45
	tight	3_1_46	J-V(ZN)H	1500	6.3–7.2	12	0.41–0.64	33–45
BRUniversal	150	3_9_1	J/A-DQ(ZN)BH	2000	7.5–7.8	24	1.0	55–60
	250	3_9_2	J/A-DQ(ZN)BH	3000	9.8–10.1	24	1.5	
BRUniversal	300	3_9_3	J/A-DQ(ZN)BH	5000	11.7–16.8	288	2.9–6.0	150–330
	600	3_9_5	J/A-DQ(ZN)BH	8000	12.6–19.0	288	3.0–6.1	180–380
	900	3_9_4	J/A-DQ(ZN)BH	11000	13.3–19.5	288	3.1–6.2	210–430
BRUclean	150	3_2_1	A-DQ(ZN)B2Y	2000	7.5–7.8	24	–	60–65
	250	3_2_2	A-DQ(ZN)B2Y	3000	9.6–9.9	24	–	90–100
BRUclean	300	3_2_3	A-DQ(ZN)B2Y	5000	11.1–16.6	288	–	115–250
	600	3_2_5	A-DQ(ZN)B2Y	8000	12.4–17.2	288	–	135–270
	900	3_2_4	A-DQ(ZN)B2Y	11000	12.7–17.3	288	–	190–300
BRUclean	900 Jumbo	3_2_9	A-DQ(ZN)B2Y	11000	17.9–20.6	432	–	340–370
BRUsteel		3_7_4	–	800–1300	3.4–4.9	8	–	18–45












































Other versions, sheath colours and/or sheath material on request.

Colour Code

for fibers and tight and semi tight buffered fibers as well as loose tubes

Standard Fiber Colour Code of Brugg Kabel AG





(Colour Code based on Swisscom document 6PHETOP_1069_00E_1)

 1 red	 2 green	 3 yellow	 4 blue	 5 white	 6 violet	 7 orange	 8 black	 9 grey	 10 brown	 11 pink	 12 turquoise
 13 red/ 1 stripe	 14 green/ 1 stripe	 15 yellow/ 1 stripe	 16 blue/ 1 stripe	 17 white/ 1 stripe	 18 violet/ 1 stripe	 19 orange/ 1 stripe	 20 transparent/ 1 stripe	 21 grey/ 1 stripe	 22 brown/ 1 stripe	 23 pink/ 1 stripe	 24 turquoise/ 1 stripe
 25 red/ 2 stripe	 26 green/ 2 stripes	 27 yellow/ 2 stripes	 28 blue/ 2 stripes	 29 white/ 2 stripes	 30 violet/ 2 stripes	 31 orange/ 2 stripes	 32 transparent/ 2 stripes	 33 grey/ 2 stripes	 34 brown/ 2 stripes	 35 pink/ 2 stripes	 36 turquoise/ 2 stripes
 37 red	 38 green	 39 yellow									 48 * turquoise
 49 red	 50 green										 60 ** turquoise

* Colour code on request / ** Colour code on request

Standard Loose Tube Colour Code of Brugg Kabel AG

Code Swisscom 6PHETOP_1069_00E_1

No.		Stranded cables
1		red
2		green
following		natural
filler		black

Fiber selection

Various standard fiber grades for singlemode- and multimode-fibers are available. Details see data sheets 2_1_2x and 2_1_3x. Further fiber qualities or special fiber types on request.

Icons

Cable with high tensile strength



The maximum tensile strength is over 3000 N (300 daN).

Cable with a flame-retardant and halogen-free sheath, IEC 60332-3 cat. C



The sheath is self-extinguishing, flame-retardant and halogen-free. In a fire case no toxic or corrosive gases will be produced.

Cable having a high crush resistance



Crush resistance of up to 400 N/cm (long term). The load won't irreversibly affect the optical characteristics of the fiber nor damage the cable.

Metallic armored cable



Cable with increased mechanical and/or chemical resistance.

Longitudinal water-tight



If the sheath is damaged, water will not spread along the core.

Rodent protection



Standard rodent protected cable.

Rodent protection



Cable with enhanced rodent protection.

Rodent protection



Cable with excellent rodent protection.

Non-metallic cable



No metals are used in the cable and therefore it requires neither to be grounded nor shielded. Communication via optical fiber cables is insensitive to electromagnetic fields.

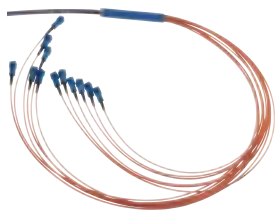
Cable under fire conditions



Cable with circuit integrity under fire conditions for a certain time period depend on system itself as well as prior consultation with the manufacturer.

Accessories

FIBER-QUICK
for central loose tube cable



FIBER-QUICK
for stranded loose tube cable



FIBER-QUICK	FQM 12F	FQM 24F	FQM 24F IP 67	FQ 12F	FQ 24F	FQ 48F
Connectors	all types	all types	all types	all types	all types	all types
Max. number of fibers	12	24	24	12	24	48
Max. cable diameter	mm 12	14	11	14	20	27
over all \varnothing incl. pulling grip \varnothing	mm 32	45	37	45	62	62

FIBER-PATCH 1U-FV



FIBER-PATCH 1U-S



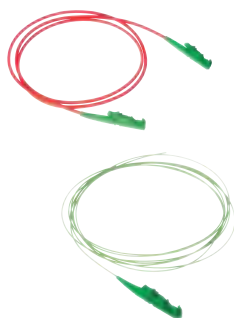
FIBER-PATCH K



PATCH PANEL	FIBER-PATCH 1U-FV	FIBER-PATCH 1U-S	FIBER-PATCH K
Connectors	all types	all types	all types
Max. number of connectors*	6-24	6-24	144
19" Joints	1U	1U	4U

* Depends on connector type

Patchcords and pigtails



Joint boxes for wall-mounting



Joints



You see the complete accessories assortment at the accessories catalog.