

Universal Cable UC2000 ..

Optical Fibre Data Transmission Cables acc. to DIN/VDE 0888

General Information

Application

The tight buffered Single Cable or **Duplex Cable** (J-V(ZN)H ..) is suitable for flexible connection (Patch Cable) as well as for fixed installation. The **Duplex-Flat** design (J-V(ZN)HH ..) is surrounded by an additional sheath, improving the cable's robustness e.g. against crush, warranting equal tensile strength. As **Distribution Cable** we offer the tight buffered FO cable with upto 24 fibres. The compact construction allows high tensile force at small dimensions and typical application as double patch cable for two optical connections with 4 fibres each (also called Mini-Breakout-Cable). The classic **Breakout-Cable** with single sheathed elements typically contains upto 16 single cables, which can easily be mounted to usual connectors (e.g. gluing with Hotmelt or two compound cement).

The **FO Indoor Cable** with central tube is suitable for all applications in buildings' rising areas and in floor cabling. The compact structure leads to large scale integration and easy handling. If more than 24 fibres are required, cables with stranded 12 fibre loose tubes are an economic solution. Fibre numbers up to 72 are usual, even higher numbers are available. Also this cable is suitable for all installation applications in buildings but it is predestined for rising chambers.

The **FO Indoor/Outdoor Cable** with central tube is suitable for all applications in buildings' rising areas and subscriber line. It enables the abandonment of a transit from an outdoor cable to an indoor cable, because the indoor distributor can be connected directly to any location. The universal indoor/outdoor cable is also available with fibre numbers beyond 24. In this case cables with stranded loose tubes are an economic solution. Fibre numbers up to 72 are common, even higher numbers are available. As classical cable for duct and direct buried laying the **A-DQ(ZN)2Y** represents an economic solution for outdoor application. Version **A-DQ(ZN)B2Y** additionally offers metal free rodent protection.

Storage

Fibre optic cables for indoor use have to be stored in a dry area and have to be protected from direct UV radiation. The cable ends have to be sealed. The cable on the drum must be covered in a suitable way in order to prevent formation of condensed water.

Installation

The installation of fibre optic cables for indoor use has to be effected respecting the admissible maximum tensile stress, the installation temperature range and the minimum bending radius. The installation equipment may not allow bending beneath specified minimum bending radius - not even with maximum tensile stress.

Binding or fixing of the cable with cable clamps or binders must be carried out without pinching the cable, i.e. without local transverse pressure. Lubricants and grease of low quality can damage the outer sheath of the cable.

Universal Cable UC2000 ..

Optical Fibre Data Transmission Cables acc. to DIN/VDE 0888

General Information

General construction

Fibre

Fibre material	Germanium doped silica
Primary coating	Double layer UV hardened acrylate
Process	PCVD
Core	The secondary coating of the tight buffered fibre consists of Polyamide or FRNC-Polymer. The secondary coating of the tubes is out of PBTP.
Strength members	In order to relieve the tension, aramide or glass rovings are used.
Sheath materials	The FO indoor and outdoor cables are manufactured with halogen free, flame retardant copolymer according to DIN VDE 0207 Part 24 Type HM2. FO outdoor cables have a sheath out of polyethylene PE and if necessary a protective cover out of polyamide PA.
Sheath marking	Cable manufacturer, DRAKA MC - type designation including dimensions and number of fibres, "FRNC" at halogen free, flame retardant sheathes with the safety class of the fire propagation.

Cable Designations

UC2000 T 2 G 50/125 FRNC FLEX		
	FRNC-C	Cable fire propagation class IEC 60332-3 C
	FRNC	Cable fire propagation class IEC 60332-1
	PE	Outer sheath polyethylene
	... FLEX	cables with tight buffer
	G	graded index fibre 50/125 or 62,5/125;
	E	single mode fibre 9/125
	n	number of fibres
S		Single single cable
T		Twin duplex cable with bridge
F		Flat (duplex cable with add. sheath)
D		Distribution (distribution cable with compact structure = Mini-Break-Out)
B		Break-Out (robust cable with sheathed single elements)
CT		Central Tube cable with central tube
ST		Stranded Tube cable with loose tube
xx-A		Armoured (non metallic rodent protection)
xx-A+		Armoured heavily (non metallic rodent protection)
UC2000 Universal Cable 2000 MHz*		
Cables with a one letter code contain 0.9 mm coated fibres (tight or semi tight buffer).		
Cables with a two letter code contain tubes filled with jelly.		

*) The designation allows classification of the cable into the product range **Universal Cabling System**® of DRAKA MC and does not imply the reachable bandwidth in any case.

Universal Cable UC2000 ..

Optical Fibre Data Transmission Cables acc. to DIN/VDE 0888

General Information

Cable Designations according to DIN VDE 0888 Part 4										
1	2	3	4	5	6	7	8	9	10	11
										* Bandwidth in MHz*km ** Dispersion in ps/nm*km
										Wavelength B = 850 nm F = 1300 nm H = 1550 nm
										Attenuation dB/km
										Sheath diameter in µm
										* Core diameter in ? m ** Mode field diameter in ? m
										G = graded index fibre E = single mode fibre
										Number of fibres
										Sheath material Y = Polyvinylchloride PVC H = halogen free, flame retardant Polymer FRNC 2Y = Polyethylene PE 4Y = Polyamide PA 11Y = Polyurethane PUR
										(ZN) = strength members (ZN)B = strength members and non metallic rodent protection
										V = tight buffer (also semi tight buffer) W = single fibre loose tube, jelly filled D = multi fibre loose tube, jelly filled
										J- = indoor cable A-/J- = universal purpose A- = outdoor cable

* for graded index fibres ** for singlemode fibres