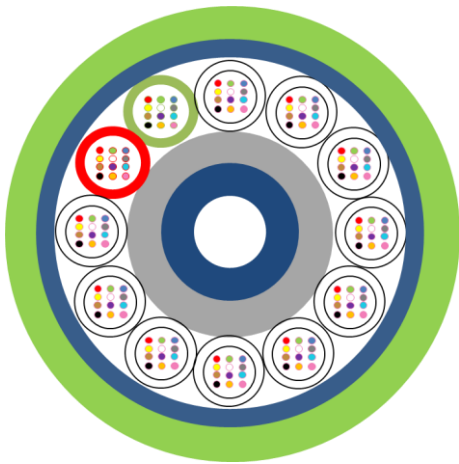# N13: UC^{FIBRE}™ Universal Stranded Loose Tube Non-Metallic Gel-Filled B2ca 9kN Cable

9000N, universal stranded loose tube, B2ca non-metallic cable, up to 144 fibres, glass yarns and FireRes® sheath. VDE: U-DQ(ZN)BH

B2ca CPR · **Cca CPR** · **Dca CPR** · **Eca CPR**

Application and Installation

Universal indoor/outdoor cable for LAN, MAN and WAN backbones
Degree of rodent protection, effective in many cases
This cable is Class-B2ca approved, highly flame retardant.
With its FireRes® LSHF-FR sheathing this cable is ideal for mixed indoor and limited outdoor installation.
It is equally suited for installation in ducts and on trays.

This cable can resist to extreme pulling tensions of up to 9 kN during installation.

Standards

IEC 60794-1, IEC 60794-2, ISO 11801-1, EN 50173-1

Flame Resistance

LSHF (FRNC): IEC 60332-1-2; IEC 60332-3-24; IEC 60754-2; IEC 61034; EN 50399 Class-$B2_{ca}$s1a-d1-a1, Class-C_{ca}, Class D_{ca}; Class E_{ca}

Options

As standard this cable is provided with 12 fibres per tube, as an option other lower fibre counts are possible.

N13: UC^{FIBRE}™ Universal Stranded Loose Tube Non-Metallic Gel-Filled B2ca 9kN Cable

Construction

Central strength member	Ø7.2 mm element consists of ø2.5 mm FRP rod + Glass yarns + HFFR enlargement
Lose tube	ø2.3 mm gel-filled loose tubes, with 12 fibres each, 12 tubes in one layer

Fibre Colour Code	1	Red	7	Brown
	2	Green	8	Violet
	3	Blue	9	Turquoise
	4	Yellow	10	Black
	5	White	11	Orange
	6	Grey	12	Pink

Water blocking	The core is water blocked using swellable tape and tread
Strength member	Glass yarns for rodent protection
Ripcord	Polyester ripcord for easy slitting of the sheath
Sheath	1.5 mm FireRes® sheath, halogen free, flame retardant, UV stabilised, IEC 50290-2-27

Cable Sheath colours	Cable with SM fibres: BendBright^{XS} G.657.A2, BendBright G.657.A1	Yellow, RAL 1018
	Cable with MaxCap-BendBright-OM3	Aqua, RAL 6027
	Cable with MaxCap-BendBright-OM4	Erika-Violet, RAL 4003
	Cable with BendBright WideCap-OM5	Lime-Green

Sheath marking	DRAKA UC^{FIBRE} I/O ST LSHF-FR B2ca-s1-d1-a1 9.0kN <Fibre count><Fibre type><Fibre brand> <Item No><Factory No><Batch Number><Meter mark> U-DQ(ZN)BH <Number of Elements> x <Fibre count per element> <Fibre family> <Mode field diameter> /125 <Transmission Class>

Physical Properties

Attribute	IEC 60794-1-21/22 Method	Limits							
Fibre count	-	12	24	36	48	72	96	144	
Fibre distribution	-	1x12f	2x12f	3x12f	4x12f	6x12f	8x12f	12x12f	
Nominal diameter [mm]	-	15.6	15.6	15.6	15.6	15.6	15.6	15.6	
Nominal weight [kg/km]	-	225	227	230	234	240	246	260	
Short term tensile strength [N]	E1	9000 (fibre strain ≤ 0.6%) (≤ 0.1 dB attenuation change)							
Permanent tensile strength [N]	E1	3000 (fibre strain ≤ 0.2%)							
Crush (compressive strength) [N/100 mm]	E3	4000 (no attenuation change after test)							
Impact [J]	E4	20							
Torsion	E7	5 cycles ± 1 turn							
Kink	E10	The cables do not form a kink when a loop is drawn together to a diameter 12 times the cable nominal diameter							
Minimum Installation bending radius [mm]	E18a	312	312	312	312	312	312	312	
Minimum Permanent bending radius [mm]	E11	156	156	156	156	156	156	156	
Temperature range	F1	Installation -40 °C to 70 °C Operation *) -40 °C to 70 °C Storage -40 °C to 70 °C							
Water penetration	F5	No water on free end							

*) The cables will operate without any attenuation variation (≤0.05 dB) in the temperature interval -30°C to +60°C.

The cables will operate with a maximum attenuation variation of 0.1dB/km in the temperature interval -40°C to +70°C.

Product Codes

Product Code	DoP Number*	Product Description	Fibre Count	Fibre Type	Fibre Data Sheet
		UC^{FIBRE} I/O ST LSHF-FR B2 9.0kN 4x12 OM3B AQ	48	MaxCap-BB-OM3	C31
		UC^{FIBRE} I/O ST LSHF-FR B2 9.0kN 5x12 OM3B AQ	60	MaxCap-BB-OM3	C31
		UC^{FIBRE} I/O ST LSHF-FR B2 9.0kN 6x12 OM3B AQ	72	MaxCap-BB-OM3	C31
		UC^{FIBRE} I/O ST LSHF-FR B2 9.0kN 8x12 OM3B AQ	96	MaxCap-BB-OM3	C31
		UC^{FIBRE} I/O ST LSHF-FR B2 9.0kN 12x12 OM3B AQ	144	MaxCap-BB-OM3	C31
		UC^{FIBRE} I/O ST LSHF-FR B2 9.0kN 3x12 OM4B 4003	36	MaxCap-BB-OM4	C32
		UC^{FIBRE} I/O ST LSHF-FR B2 9.0kN 4x12 OM4B 4003	48	MaxCap-BB-OM4	C32
		UC^{FIBRE} I/O ST LSHF-FR B2 9.0kN 6x12 OM4B 4003	72	MaxCap-BB-OM4	C32
		UC^{FIBRE} I/O ST LSHF-FR B2 9.0kN 8x12 OM4B 4003	96	MaxCap-BB-OM4	C32
		UC^{FIBRE} I/O ST LSHF-FR B2 9.0kN 12x12 OM4B 4003	144	MaxCap-BB-OM4	C32
		UC^{FIBRE} I/O ST LSHF-FR B2 9.0kN 3x12 OM5B LG	36	WideCap-OM5	C39
		UC^{FIBRE} I/O ST LSHF-FR B2 9.0kN 4x12 OM5B LG	48	WideCap-OM5	C39
		UC^{FIBRE} I/O ST LSHF-FR B2 9.0kN 6x12 OM5B LG	72	WideCap-OM5	C39
		UC^{FIBRE} I/O ST LSHF-FR B2 9.0kN 8x12 OM5B LG	96	WideCap-OM5	C39
		UC^{FIBRE} I/O ST LSHF-FR B2 9.0kN 12x12 OM5B LG	144	WideCap-OM5	C39
		UC^{FIBRE} I/O ST LSHF-FR B2 9.0kN 1x12 SM7A1 YL	12	OS2 BendBright G.657.A1	C17
		UC^{FIBRE} I/O ST LSHF-FR B2 9.0kN 2x12 SM7A1 YL	24	OS2 BendBright G.657.A1	C17
		UC^{FIBRE} I/O ST LSHF-FR B2 9.0kN 3x12 SM7A1 YL	36	OS2 BendBright G.657.A1	C17
		UC^{FIBRE} I/O ST LSHF-FR B2 9.0kN 4x12 SM7A1 YL	48	OS2 BendBright G.657.A1	C17
		UC^{FIBRE} I/O ST LSHF-FR B2 9.0kN 5x12 SM7A1 YL	60	OS2 BendBright G.657.A1	C17
		UC^{FIBRE} I/O ST LSHF-FR B2 9.0kN 6x12 SM7A1 YL	72	OS2 BendBright G.657.A1	C17
		UC^{FIBRE} I/O ST LSHF-FR B2 9.0kN 8x12 SM7A1 YL	96	OS2 BendBright G.657.A1	C17
		UC^{FIBRE} I/O ST LSHF-FR B2 9.0kN 12x12 SM7A1 YL	144	OS2 BendBright G.657.A1	C17
		UC^{FIBRE} I/O ST LSHF-FR B2 9.0kN 1x12 SM7B YL	12	OS2 BendBright^{XS} G.657.A2	C24
		UC^{FIBRE} I/O ST LSHF-FR B2 9.0kN 2x12 SM7B YL	24	OS2 BendBright^{XS} G.657.A2	C24
		UC^{FIBRE} I/O ST LSHF-FR B2 9.0kN 3x12 SM7B YL	36	OS2 BendBright^{XS} G.657.A2	C24
		UC^{FIBRE} I/O ST LSHF-FR B2 9.0kN 4x12 SM7B YL	48	OS2 BendBright^{XS} G.657.A2	C24
		UC^{FIBRE} I/O ST LSHF-FR B2 9.0kN 6x12 SM7B YL	72	OS2 BendBright^{XS} G.657.A2	C24
		UC^{FIBRE} I/O ST LSHF-FR B2 9.0kN 8x12 SM7B YL	96	OS2 BendBright^{XS} G.657.A2	C24
		UC^{FIBRE} I/O ST LSHF-FR B2 9.0kN 12x12 SM7B YL	144	OS2 BendBright^{XS} G.657.A2	C24

DoP Numbers are per product code and any DoP number proves CPR approval for the cable. DoP files can be downloaded from the website: www.prysmiangroup.com/cpr