Optical Fibre from Madison

Belden Indoor/Outdoor Optical Fibre Cable

Madison is proud to announce the supply of the Belden GUMT range of tight buffered optical fibre cables into the Australian market.

Available in all common fibre types and sizes, this product range has been developed especially for use in structured wiring systems. It is ideally suited for campus, building backbone (riser) and horizontal cabling in all fibre and hybrid fibre systems including FTTD and GPON.

The selection of high quality materials and manufacturing techniques makes this non-metallic cable suitable for indoor and outdoor use in both above and below ground applications[1,2]. Water blocking is achieved by the use of dry blocking technology incorporated into the strength and rodent deterrent elements of the cable design.

The OS2 variants of the product use bend insensitive G657. A1 fibre resulting in a single mode cable design that can be installed in tighter spaces and still be backward compatible with standard G652.D fibre[3].

- Halogen free construction (LSZH and FRNC)
- UV stabilized outer jacket
- Water blocked
- Rodent deterrent glass yarns
- Suitable for both indoor and outdoor applications
- Predicted lifetime > 30 years
- Available with either OS2, OM1, OM3 or OM4 fibre
- Colour coded outer jacket to aid in fibre identification.
- RCM compliant

Availability

Supplied by Madison Technologies Pty. Ltd. Common sizes stocked in Brisbane, Sydney, Melbourne and Perth.

Custom sizes and fibre types available subject to MoQ and lead time constraints.

[1] Not suitable for direct burial or sub-marine applications.
[2] For outdoor applications, it is recommended that the cable be used in a "protected" environment such as under eaves/carports/roofing, in ducting, or otherwise protected from weather extremes that may put the cable beyond its intended operating range.

[3] Care should be taken to ensure that fusion splicer settings are correctly set to align and splice G657.A1 fibre

Mechanical Data

No. of Fibres	4	6	12	24
ø nom. (mm)	5.4	5.9	7.6	9.6
Max. pulling tension (N) Short term	400	400	450	650
Energy of Flame (kJ/m)	296	347	622	1082
Weight (kg/km)	26	30	45	65

Mechanical, Physical and/or Environmental Characteristics

Description	Tested according to:	Requirements	According to Family specifications
Storage Temperature Range Installation Temperature Range Operating Temperature Range	IEC 60794-1-22F1	-30 to +70 °C -5 to +50 °C -30 to +70 °C	IEC 60794-2-20
Strippability Secondary coating only Secondary + primary coating		 ≤ 10 cm ≤ 10 mm	
Bending radii for fibres and tight buffers Installation/Operation		>25 mm	
Cable Water Blocking	IEC 60794-1-22-F5	Pass	
Cable Min. Bend Radius Operation (Long term) Cable Min. Bend Radius Installation (Short Term)	IEC 60794-1-21-E11 IEC 60794-1-21-E6	10 x Cable Diam. 20 x Cable Diam.	IEC 60794-2-20
Cable Max. Tensile Strength Operation (Short Term)	IEC 60794-1-21-E1	Refer to Mechanical Data table	IEC 60794-2-20
Cable Max. Crush Resistance Operation (Long Term) Cable Max. Crush Resistance Installation (Short Term)	IEC 60794-1-21-E3	3 kN/m 5 kN/m	IEC 60794-2-20

Safety

	Testing standard	Description/Value
Reaction to fire	IEC 60332-3-24	
Smoke density	IEC 61043-2	
Halogen acid gas content	IEC 60754-1	Zero
Degree of acidity of gases	IEC 60754-2 IEC 60754-2	Min. 4.3 pH Max. 10 µS/mm

Ordering Information

Fibre Description / count	4	6	12	24
62.5/125-OM1	GUMT 104	GUMT 106	GUMT 112	GUMT 124
50/125-OM3 BI	GUMT D04	GUMT D06	GUMT D12	GUMT D24
50/125-OM4 BI	GUMT E04	GUMT E06	GUMT E12	GUMT E24
9/125 ITU G.657A1 BI	GUMT A04	GUMT A06	GUMT A12	GUMT A24
Std. plywood reel (non-refundable)	ø560*336mm 4.25 kg		ø1000*530mm 18 kg	
Std. delivery length	2100 ± 105m			