

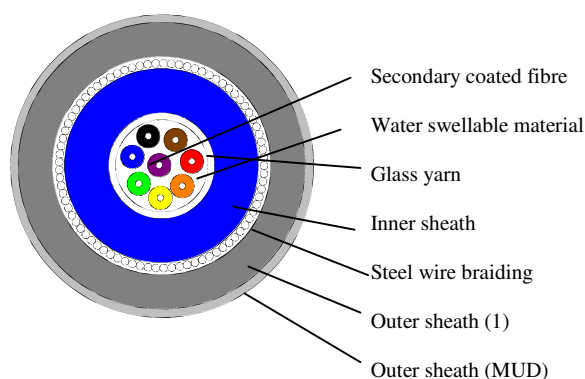
## Flame retardant optical fibre cable, AICI-I/O/RM/C-W, MUD PROTECTED

### Armoured industrial cable AICI-I/O/RM/C-W



Indoor and outdoor  
Flame retardant and halogen free  
Steel wire braiding  
Tight buffer  
MUD PROTECTED

Optical cable for industrial environments. The cable is suitable for both indoor and outdoor installation. Continuous submergence in water is not recommended. Outer sheath (1) is made from black UV-stabilized and weather resistant material and may be exposed for shorter periods to fluids such as diesel and mineral oils. The resistance to these fluids is according to IEC60811-2-1. The cable is reinforced with a steel wire braiding between the two sheaths. Strength elements of glass yarn around the cable core allow easy installation of long lengths. The 0.9 mm tight buffer is easy to strip allowing fast and reliable splicing and connector mounting. Each fibre is colour coded for easy identification. The outer sheath is marked to show fibre type and cable type.



An additional outer sheath is added for improved oil- and MUD protection. The outer sheath is DARK GREY.

### Weight and dimensions

Number of fibres	Secondary coating	Outer diameter	Weight	Tensile strength* [Inst./oper.]
	[mm]	[mm]	[kg/km]	[N]
4	0.9	10.2	140	700/250
8	0.9	11.4	165	800/350
12	0.9	12.4	195	1200/500
24	0.9	14.0	240	1700/750

### Cable properties

<b>*Tensile strength</b> (IEC 60794-1-2E1)		<b>Temperature window</b>	
Max tensile load during installation	See above	Operation	-40°C to +70°C
Max tensile load during operation	See above	Installation	-10°C to +70°C
		Storage	-40°C to +70°C
<b>Crush</b> (IEC 60794-1-2E3)	2000 N/10cm	<b>Water tightness*</b> (IEC 60794-1-2F5B)	< 3 m/24 hours
<b>Impact</b> (IEC 60794-1-2E4)	1 impacts, 25J	<b>Fire and smoke classifications</b>	
<b>Torsion</b> (IEC 60794-1-2E7)	± 1 turn/1m	IEC 60332-1	
<b>Cable bending</b>		IEC 60332-3-22 (Cat. A)	
Minimum bending diameter	15x outer diameter	IEC 60332-3-24 (Cat. C)	
Cable bend (IEC 60794-1-2E11)	<0.5 dB/ ± 5 turn	IEC 61034	
Flexibility (IEC 60794-1-2E8)	1000 cycles	IEC 60754-1	
		<b>Chemical resistance</b>	
		Mineral oils IRM 902 (IEC60811-2-1)	- 7 days /100°C
		Diesel - IRM 903 (IEC60811-2-1)	- 7 days/100°C

\*) – Steel wire braiding is not watertight.

## Ordering information

Part no	Number of fibres	Cable Type	Fiber type	Stock Item	Fiber data sheet
20116218	4	G4-9/125 AICI-I/O/RM/C-W	OS2 Single mode(G652D)	-	C03e
*	8	G8-9/125 AICI-I/O/RM/C-W	OS2 Single mode(G652D)	-	C03e
*	12	G12-9/125 AICI-I/O/RM/C-W	OS2 Single mode(G652D)	-	C03e
*	24	G24-9/125 AICI-I/O/RM/C-W	OS2 Single mode(G652D)	-	C03e
*	4	G4-50/125 AICI-I/O/RM/C-W	OM2 50/125 multi mode	-	C23
*	8	G8-50/125 AICI-I/O/RM/C-W	OM2 50/125 multi mode	-	C23
886926	12	G12-50/125 AICI-I/O/RM/C-W	OM2 50/125 multi mode	-	C23
*	24	G24-50/125 AICI-I/O/RM/C-W	OM2 50/125 multi mode	-	C23
*	4	G4-50/125OM3 AICI-I/O/RM/C-W	OM3 MaxCap-OM3	-	C31
*	8	G8-50/125OM3 AICI-I/O/RM/C-W	OM3 MaxCap-OM3	-	C31
*	12	G12-50/125OM3 AICI-I/O/RM/C-W	OM3 MaxCap-OM3	-	C31
*	24	G24-50/125OM3 AICI-I/O/RM/C-W	OM3 MaxCap-OM3	-	C31
886701	4	G4-62.5/125 AICI-I/O/RM/C-W	OM1 62.5/125 multi mode	-	C02
886774	8	G8-62.5/125 AICI-I/O/RM/C-W	OM1 62.5/125 multi mode	-	C02
*	12	G12-62.5/125 AICI-I/O/RM/C-W	OM1 62.5/125 multi mode	-	C02
*	24	G24-62.5/125 AICI-I/O/RM/C-W	OM1 62.5/125 multi mode	-	C02

Other fibre types/qualities on request(for example OM4)

\*) Part numbers will be given on request. On inquiries or orders, please refer to datasheet number D92aici-mud\_e22.doc

## Colour code

Fibre no.	Colour	Fibre no.	Colour	Fibre no.	Colour
1	White	9	Violet	17	Blue + marker
2	Red	10	Turquoise	18	Grey + marker
3	Yellow	11	Orange	19	Brown + marker
4	Green	12	Pink	20	Light Blue + marker
5	Blue	13	White + marker	21	Violet + marker
6	Grey	14	Red + marker	22	Turquoise + marker
7	Brown	15	Yellow + marker	23	Orange + marker
8	Black	16	Green + marker	24	Pink + marker

The outer sheath is as standard dark grey.



**THORNE &  
DERRICK**  
INTERNATIONAL

**Thorne & Derrick**  
+44 (0) 191 410 4292  
[www.powerandcables.com](http://www.powerandcables.com)