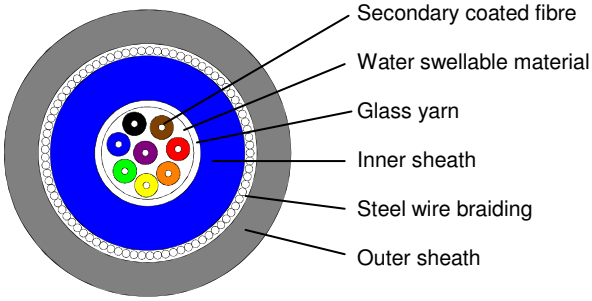
# Armoured and flame retardant AICI-I/O/RM-W

## AICI-I/O/RM-W



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

Optical cable for industrial environments. The cable is suitable for both indoor and outdoor installation. Continiuous submergence in water is not recommended. The outer sheath is made from black UV-stabilized and weather resistant material which is SHF1 classified, 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.




## Weight and dimensions

| Number of fibres | Secondary coating [mm] | Outer diameter [mm] | Weight [kg/km] | Tensile strength* [Inst./oper.] [N] |
|---|---|---|---|---|
| 4 | 0.9 | 8.2 | 90 | 700/250 |
| 8 | 0.9 | 9.4 | 125 | 800/350 |
| 12 | 0.9 | 10.3 | 145 | 1200/500 |
| 24 | 0.9 | 12.0 | 185 | 1700/750 |

## Cable properties

| | |
|---|---|
| ***Tensile strength** (IEC 60794-1-2E1) | |
| Max tensile load during installation | See above |
| Max tensile load during operation | See above |
| **Crush** (IEC 60794-1-2E3) | 2000 N/10cm |
| **Impact** (IEC 60794-1-2E4) | 1 impacts, 25J |
| **Torsion** (IEC 60794-1-2E7) | ± 1 turn/1m |
| **Cable bending** | |
| Minimum bending diameter | 15x outer diameter |
| Cable bend (IEC 60794-1-2E11) | <0.5 dB/ ± 5 turn |
| Flexibility (IEC 60794-1-2E8) | 1000 cycles |

| | |
|---|---|
| **Temperature window** | |
| Operation | -40°C to +70°C |
| Installation | -10°C to +70°C |
| Storage | -40°C to +70°C |
| **Water tightness*** (IEC 60794-1-2F5B) | < 3 m/24 hours |
| **Fire and smoke classifications** | |
| IEC 60332-1 | |
| IEC 60332-3-22 (Cat. A) | |
| IEC 60332-3-24 (Cat. C) | |
| IEC 61034 | |
| IEC 60754-1 | |
| IEC 60754-2 | |
| **Chemical reistance** | |
| Mineral oils IRM 902 (IEC60811-2-1) | - 7 days/23°C<br>- 4 hours/70°C |
| Diesel - IRM 903 (IEC60811-2-1) | - 7 days/23°C<br>- 4 hours/70°C |

*) – Steel wire braiding is not watertight.

## Ordering information

# Armoured and flame retardant AICI-I/O/RM-W

| Part no | Number of fibres | Cabe Type | Fiber type | Fiber data sheet |
|---|---|---|---|---|
| 695420 | 4 | G4-9/125 AICI-I/O RM-W | OS2 Single mode | C03e |
| 695440 | 8 | G8-9/125 AICI-I/O RM-W | OS2 Single mode | C03e |
| 695450 | 12 | G12-9/125 AICI-I/O RM-W | OS2 Single mode | C03e |
| 695480 | 24 | G24-9/125 AICI-I/O RM-W | OS2 Single mode | C03e |
| | | | | |
| 695422 | 4 | G4-50/125 AICI-I/O RM-W | OM2 50/125 multi mode | C23 |
| 695442 | 8 | G8-50/125 AICI-I/O RM-W | OM2 50/125 multi mode | C23 |
| 695452 | 12 | G12-50/125 AICI-I/O RM-W | OM2 50/125 multi mode | C23 |
| 695482 | 24 | G24-50/125 AICI-I/O RM-W | OM2 50/125 multi mode | C23 |
| | | | | |
| | 4 | G4-50/125OM3BB AICI-I/O RM-W | OM3 MaxCap-OM3 | C31 |
| | 8 | G8-50/125OM3BB AICI-I/O RM-W | OM3 MaxCap-OM3 | C31 |
| | 12 | G12-50/125OM3BB AICI-I/O RM-W | OM3 MaxCap-OM3 | C31 |
| | 24 | G24-50/125OM3BB AICI-I/O RM-W | OM3 MaxCap-OM3 | C31 |
| | | | | |
| 695424 | 4 | G4-62.5/125 AICI-I/O RM-W | OM1 62.5/125 multi mode | C02 |
| 695444 | 8 | G8-62.5/125 AICI-I/O RM-W | OM1 62.5/125 multi mode | C02 |
| 695454 | 12 | G12-62.5/125 AICI-I/O RM-W | OM1 62.5/125 multi mode | C02 |
| 695484 | 24 | G24-62.5/125 AICI-I/O RM-W | OM1 62.5/125 multi mode | C02 |

OM4 and other fibre types on request.

**Colour code**

| Fibre no. | Colour | Fibre no. | Colour | Fibre no. | Colour |
|---|---|---|---|---|---|
| 1 | White | 9 | Violet | 17 | Blue + marker |
| 2 | Red | 10 | Turquise | 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 | Turquise + marker |
| 7 | Brown | 15 | Yellow + marker | 23 | Orange + marker |
| 8 | Black | 16 | Green + marker | 24 | Pink + marker |

Standard colour of outer sheath is black.

*We reserve the right to alter this specification without notice.*