

## External Hybrid Fibre / 2xCu Conductor Cable

The External Hybrid cable design integrates 2 PVC insulated flexible copper conductors and 250 µm buffered fibres in a gel-filled loose tube construction, comprising up to 24 fibres (up to 12 fibres per tube). Designed for visual monitoring systems, long distance data transmission and remote power within a single cable.

The nylon jacket provides a termite resistant layer whilst the UV stabilized Polyethylene sacrificial sheath adds robustness and protects the nylon from the rigors of installation. Surface printing includes sequential length marking at one-metre intervals.

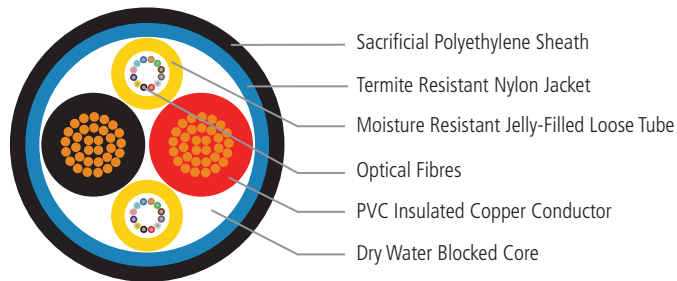
### Features

- Hybrid (Fibre + Copper conductor)
- Up to 24 fibres
- 2x PVC Insulated flexible conductors
- Robust design with protected Termite Resistance
- RoHS 3 (EU Directive 2015/863)
- **Made in Australia**

### Applications

- IP Security cameras
- ‘Smart Pole’ and ‘Smart Lighting’
- Outdoor digital signage / infrastructure, WAP and IoT
- Intelligent transportation Infrastructure

### Cable Components



### Fibre Specifications

FIBRE DESIGNATOR*	FIBRE TYPE	TUBE COLOUR	MAX. ATTENUATION (CABLED) (dB/km)			
			1310 NM	1550 NM	850 NM	1300 NM
D	Single-mode (ITU G.652.D)	Yellow	≤ 0.36	≤ 0.22	N/A	N/A
5	Multimode OM4 50 µm	Aqua	N/A	N/A	≤ 3.0	≤ 1.0

## External Hybrid Fibre / 2xCu Conductor Cable

### Mechanical Data - Cable

CABLE TYPE	PART NUMBER	FIBRE COUNT	TUBE DIAMETER	CABLE NOM. DIAMETER	CABLE NOM. WEIGHT	MAX TENSILE	MIN BEND RADIUS (MM)		CRUSH	IMPACT
			(MM)	(MM)	(KG/KM)	(KN)	UNDER LOAD (20 X OD)	NO LOAD (10 X OD)	(KN/100 MM)	(KG.M)
External Hybrid Fibre / 2xCu Conductor Cable	K3MQ*TPA2/2BK	2	2.0	9	110	1	180	90	2	1
	K3MQ*TPA2/4BK	4								
	K3MQ*TPA2/6BK	6								
	K3MQ*TPA2/12BK	12								
	K3MQ*TPA2/24BK	24								

\* Represents fibre type in the Fibre Specification table on previous page.  
Other jacket colours available upon request.

### Copper Conductor Specifications

SPECIFICATION	UNIT	VALUE
Insulated Conductors	each	36/0.32 PACW V90 PVC, 60V DC (24V AC)
Nominal Area of each Conductor	mm <sup>2</sup>	2.9
Nominal Insulated Conductor Diameter	mm	3.0
Resistance	Ω/km	6.4

PVC insulation colour for identification - Red and Black.

### Qualifications

GOVERNING BODY	STANDARD CODE	COMPONENT
AS/CA	S008	Cable
IEC	60794	Cable
Standards Australia	AS 1049	Materials
IEC	60793	Fibre
ITU-T	G.652 / G.657.A1 / G.651.1	Fibre
TIA	598-D	Fibre
AS	3808	Insulation - Copper
AS/NZS	1125	Copper

### Temperature Specifications

TEMPERATURE RANGE	
Installation	-10°C to +60°C
Operation	-20°C to +70°C
Storage	-20°C to +70°C

Contact AFL for additional information or cable design assistance