



FIBRE OPTIC ASSEMBLIES

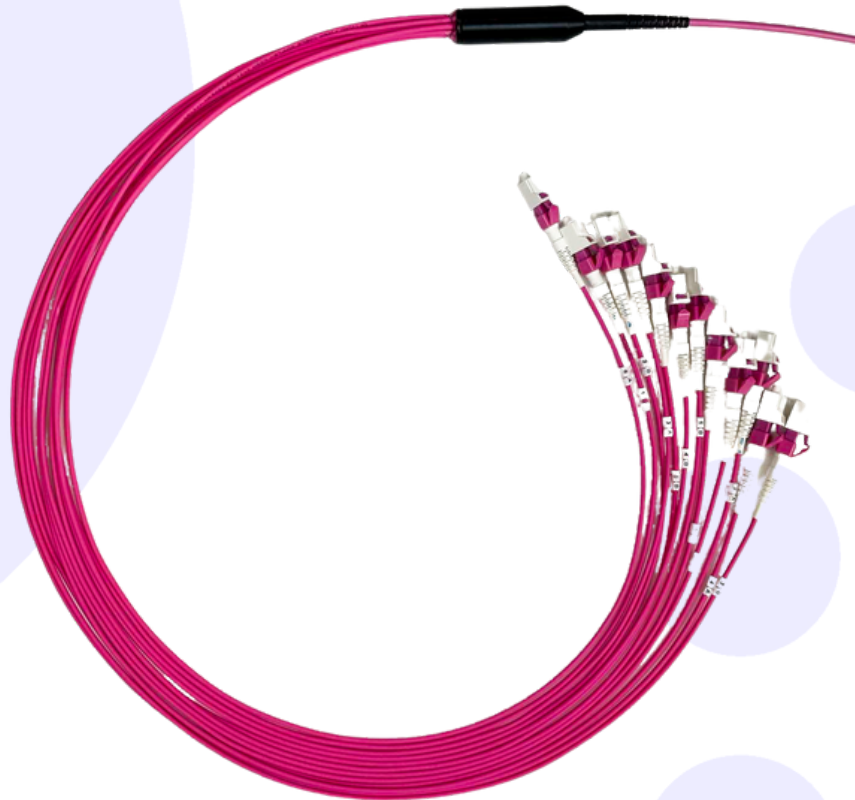
PRE-TERMINATED HYDRA ASSEMBLIES

SM

OM3

OM4

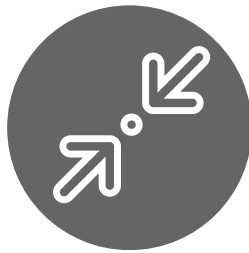
OM5



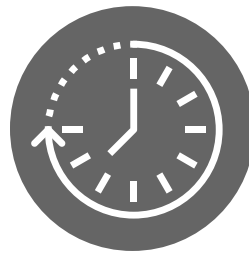
Small diameter cables housing up to 24 fibres inside a single breakout unit, fitted with 2mm ruggedised tails.



Bespoke UK
Manufacture



Compact Cables
housing up to 24F



Reduced
Installation Time



Ideal for Data
Centre Routing

fibre optic assembly specialists

VERSION 1 MARCH 2024



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PRE-TERMINATED HYDRA ASSEMBLIES



Our pre-terminated Hydra assemblies offer a versatile, space-saving solution that is ideally suited for Data Centre application for multi-fibre patching. A compact dry Loose Tube style, with ruggedised 2mm tails and two layers of Aramid Yarn within the cable construction, these cables provide durability and protection in demanding environments.

Our 24 fibre Hydra assemblies offer a high-density solution, able to deliver the capabilities of 12 Duplex patch leads within a single 3mm cable.

Available in Single-mode and Multimode, all of our pre-terminated assemblies are manufactured in our dedicated UK facility, custom made to your specifications.

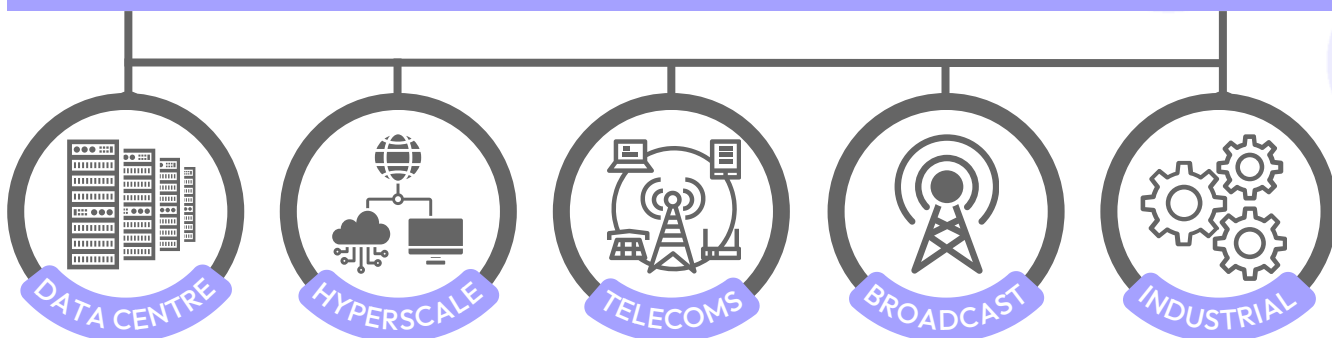
FEATURES

- ✓ **UK Manufacture:**
Bespoke design, high precision, consistent quality and fast turnaround.
- ✓ **Ruggedised Tails:**
Enabling direct point to point patching.
- ✓ **Small Micro Cable:**
Easier for routing within cabinet and cable tray environments.
- ✓ **Colour Coded Cables:**
For easy fibre identification.
- ✓ **CPR - Eca to B2ca Rated:**
Available with fire rated cable.

BENEFITS

- ✓ **Suited to Data Centres:**
3mm single jacket for patching or robust 5mm double jacket for backbone routing.
- ✓ **Reduced Installation Time:**
Pre-termination eliminates field termination or splicing, saving time and labour costs.
- ✓ **Custom Made & Fast Turnaround:**
Factory terminated connectors provide lowest guaranteed losses.
- ✓ **Increased Density Gains:**
A 24F Hydra provides the same patching as 12 Duplex Leads, but in a single 3mm cable.
- ✓ **Simplified Cabling:**
Fewer cables to route, providing a clean and more organised setup.

APPLICATIONS



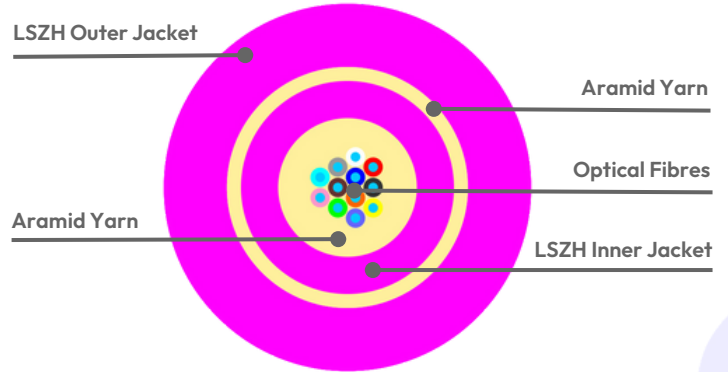
PRE-TERMINATED HYDRA ASSEMBLIES



NB: Construction of double jacketed Hydra

CABLE CONSTRUCTION

- Loose Tube style (dry).
- Multiple 250µm fibres.
- 2 layers of Aramid Yarn protection (double jacketed option).
- 3mm inner jacket LSZH.
- 4.5mm outer jacket (optional).
- CPR - Eca - B2ca.



SPECIFICATIONS

Element	Characteristics
Fibre Mode & Colour	Single-mode: Yellow Multimode: OM3: Aqua, OM4: Heather Violet, OM5: Lime Green
Fibre Count	2, 4, 8, 12, 16, 24
Connector Options	Simplex: LC, SC, E2000, FC, ST, MU Uniboot: LC, MDC, SN & CS Polish: UPC & APC
Cable (LSZH)	3mm Single Jacket, 4.5mm Double Jacket (optional)
	Nominal weight: 30-35 (kg/km)
Crush Resistance (N)	1000N/100mm ²
Bend Radius (mm)	Install: 20D, Static: 10D
Temperature Range	-20 ~ +60°C

Connector Type	IL Typical	IL Maximum	Return Loss
Single-mode UPC	<0.25dB	<0.35dB	≥50dB
Single-mode APC	<0.25dB	<0.35dB	≥60dB
Multimode UPC & APC	<0.25dB	<0.50dB	≥25dB



PRE-TERMINATED HYDRA ASSEMBLIES



FIBRE OPTIC ASSEMBLIES

FIBRE SPECIFICATIONS

Fibre Mode	Fast Ethernet	1000Base-SX	10GBase-SR	40GBase-SR4	100GBase-SR10
Multimode OM3	2km	800m	300m	100m	100m
Multimode OM4	2km	1100m	400m	150m	150m
Multimode OM5	2km	1100m	400m	150m	150m
Single-mode	40km	100km	40km	40km	40km

Fibre Mode	Core/Cladding (µm)	Wavelength	Maximum Attenuation
Multimode OM3	50/125	850-nm	3.0dB/km
		1300-nm	1.5dB/km
Multimode OM4	50/125	850-nm	3.0dB/km
		1300-nm	1.5dB/km
Multimode OM5	50/125	850-nm	3.0dB/km
		923-nm	2.3dB/km
		1300-nm	1.5dB/km
Single-mode	9/125	1310-nm	1.0dB/km
		1550-nm	0.5dB/km

BREAKOUT STYLE

- S-Line 14mm diameter with 2mm tails.
- Tails lengths from 0.3m to 3.0m.
- Tails contain one or two fibres.
- Simplex connectors for single fibre tails.
- Uniboot options for two fibre tails.



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PROTECTION OPTIONS

Non-Staggered Tails

Option	Pull Force
Braided sleeve with pulling eye	50N
PVC sleeve with pulling eye	30N

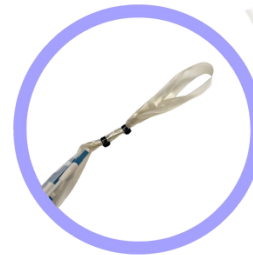
Staggered Tails

Option	Pull Force
Braided sleeve with pulling eye	50N
PVC sleeve with pulling eye	30N
Clear tube (28mm widest point)	200N*
Reinforced tube (35mm widest point)	200N*

*Requires 20mm cable gland fitted behind breakout



Braided sleeve



PVC sleeve



Clear tube



Reinforced tube

