



# Singlemode Expanded Beam System

SINGLEMODE EXPANDED BEAM SYSTEM

- Fully Sealed Ruggedised Hermaphroditic Connectors
- Singlemode 9/125 Fibre
- 1 to 4 Channel Configurations
- Rugged Military Specification Deployable Cable
- Available as Patchcords & Pigtailed Bulkheads
- Accessories include Patchpanels, Cable Reels & Loopbacks



The PMD expanded beam fibre optic system has been designed for use in the most demanding harsh environment applications including military tactical communications, outside broadcast, petrochemical plant, mining, and offshore systems.



The system consists of a ruggedised fibre optic cable assembly supplied on a high quality deployable reel terminated with free plugs, and pigtailed D-hole mount bulkhead connectors. The connectors utilise advanced expanded beam technology to ensure reliable optical performance in the most extreme environmental conditions, and feature hermaphroditic coupling, fully sealed shell and rubber covered grip ring. The connector is easily cleaned and requires no maintenance.

Standard cable lengths are 50m, 100m and 150m. These can be daisy-chained for longer transmission distances. Custom cable lengths can also be supplied.

The PMD expanded beam system offers high performance, flexibility and cost effectiveness for all critical field deployable harsh environment communication systems.

Ein Vertriebsprodukt von:

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# Singlemode Expanded Beam System Outline Specifications

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## Connector Performance:

Insertion Loss	9/125 Fibre at 1310nm / 1550nm: -1.5dB maximum
Return Loss	>-30dB
Durability	2000 Matings minimum
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +85°C
Water Immersion	1m
Free Fall Resistance	500 Falls from 1.2m height
Crush Resistance	3000N
Corrosion Resistance	500 Hours salt spray
Cable Retention	2000N

All tests compliant with BS EN 186000-1

## Cable Performance:

Diameter	1 & 2 Core: 5.0mm / 4 Core: 5.5mm
Weight	1 & 2 Core: 25kg/km / 4 Core: 28kg/km
Tensile Load (short term)	2000N Maximum
Operating Temperature	-55°C to +85°C DEF STAN 60-1 (Part 3) Clause 16.13
Storage Temperature	-70°C to +85°C
Crush Resistance	200N/cm DEF STAN 60-1 (Part 3) Clause 15.1
Impact Resistance	1Kg / 100 Impacts DEF STAN 60-1 (Part 3) Clause 15. 2
Minimum Bend Radius	10X Sheath Diameter
Sheath Colour	Matt Black

## Fibre Characteristics:

Fibre Type	Attenuation dB/km		Dispersion ps/nm.km		RI
	1310nm	1550nm	1310nm	1550nm	
9/125 OS1	0.38	0.25	3.5	18.0	1.470

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