Gooch & Housego

PM WDM

The G&H Fused PM WDM, combines multiple wavelengths of light in PM Fibre whilst maintaining polarisation. G&H proprietary PM manufacturing technology provides low loss, with high polarisation extinction ratio. The all fibre construction offers excellent reliability and high power handling characteristics.

These high performance parts are available in many wavelength configurations, housing, fibre and connector options and can therefore be readily specified in a wide variety of applications, enabling rapid design cycles and new project builds.

In common with all PM components, it is necessary to launch into either the slow or the fast axis to maintain polarisation. For the G&H PM WDM, specifications are based on slow axis launch, although fast axis versions are also available if requested

Key Features:

- Low Loss
- High PER
- High power handling
- PM PANDA Fibre on all ports
- Slow Axis operation as standard
- Fast Axis operation available on request

Applications:

- Pump signal WDM for EDFA
- Fibre lasers
- Instrumentation

Contact: sales@goochandhousego.com www.goochandhousego.com

Optical Specifications

Wavelength[5]			Available Housing	CH1 Insertion Loss[1] (dB)	CH2 Insertion Loss[1] (dB)	CH1 PER[6]	CH2 PER[6]
CH1	**CH2**	**Spacing**		Max (Typ)	Max (Typ)		
780-1200nm	780-1200nm	50-100nm	3	1.0 (0.5)	1.0 (0.5)	>15dB	>15dB
780-1200nm	780-1200nm	>100nm	3	0.7 (0.3)	0.7 (0.3)	>17dB	>17dB
900-1100nm[2]	1450 - 1600nm	-	3	0.3[2] (0.2)	0.5 (0.2)	>17dB[2]	>20dB
1300 - 1600nm	1300 - 1600nm	50-100nm	3	1.0 (0.5)	1.0 (0.5)	>17dB	>17dB
1300 - 1600nm	1300 - 1600nm	>100nm	3	0.7 (0.3)	0.7 (0.3)	>20dB	>20dB

1. Insertion loss specified at centre wavelength and room temperature.
2. 900-1100nm wavelength range may be below the 2nd order mode cut-off for the fibre used to manufacture this product type. Performance specified for single-mode incident on this path.
3. Custom specifications available on request
4. For wavelength spacing <50nm, please contact the sales office.
5. For wavelengths <780nm contact sales
6. Stated value may not be guaranteed for some wavelength combinations

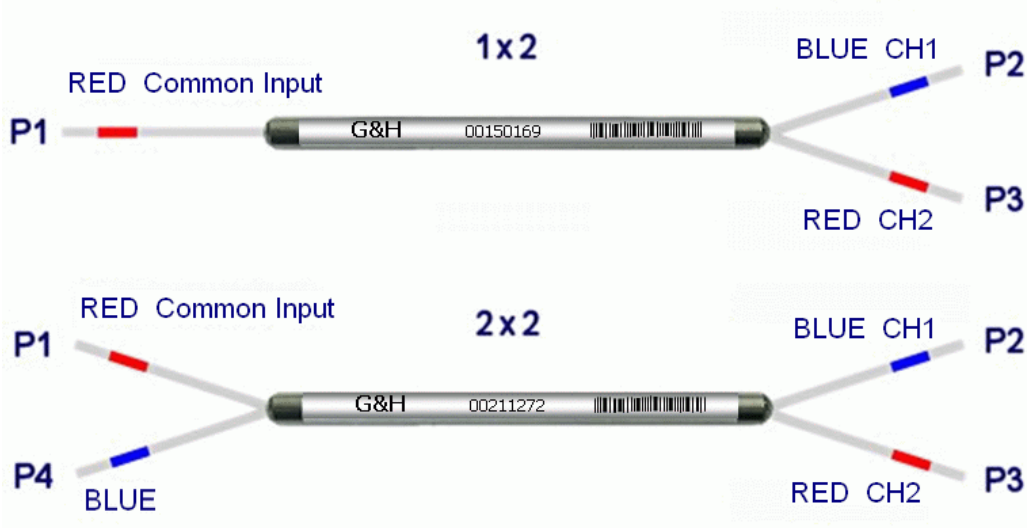
Parameter	Specification	Unit
Return Loss/Directivity [1]	55	dB
Pigtail Tensile Load	5	N
Optical Power Handling [2 & 3]	4	W
Operating / Storage Temperature Range	–5 to +75 / -40 to +85	°C
Fibre Type	PM PANDA Fibre	

1. Measured reference port P3 input for signal wavelength, P2 input for pump wavelength and P1 input for signal and pump wavelengths.
2. For operation at powers of greater than 4W the component housing and fibre must be adequately heat-sunk (for additional information contact G&H Sales). Components intended for high power operation are only available in the 2x2 configuration. Component performance and reliability under high power must be determined within the customer system.
3. The performance and reliability of optical connectors is not guaranteed for optical powers of greater than 1W.
4. For connectorised component, operating temperature range is –5 to +75°C.

Housing Option

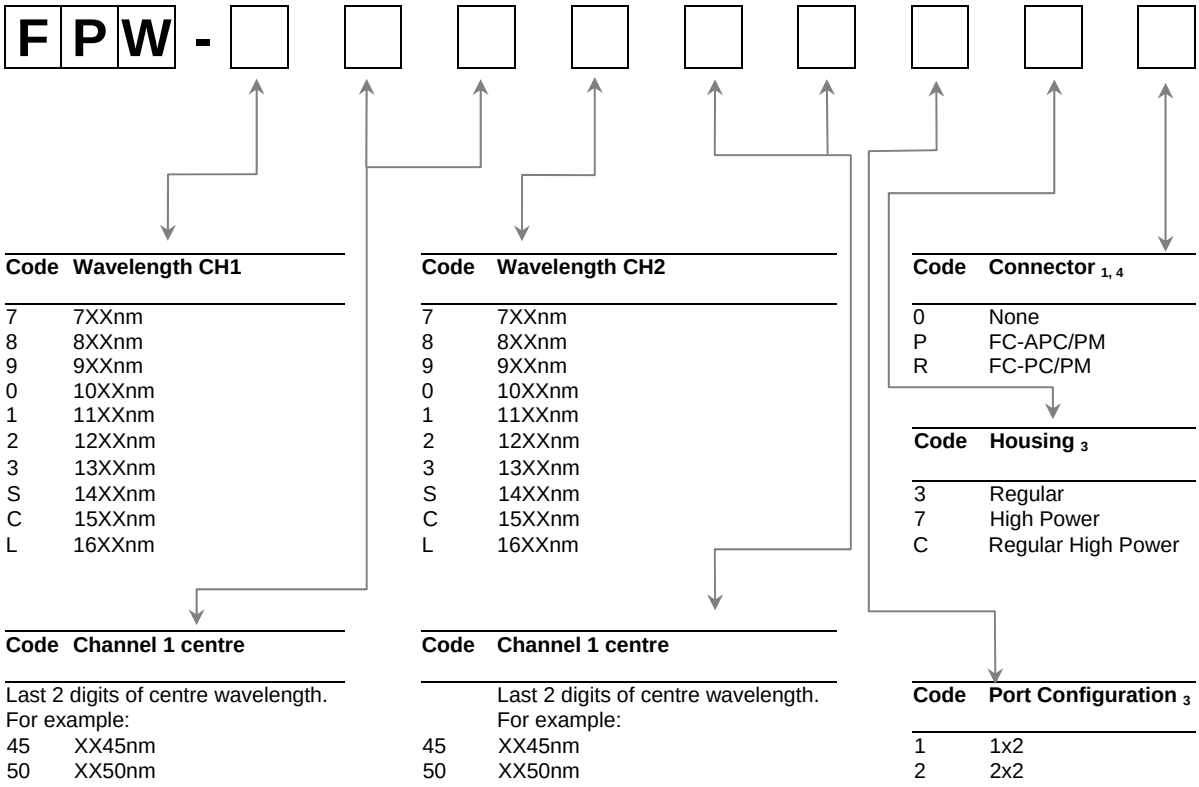
Housing Code	Description	Max Dimensions (mm)	Pigtail
3	Regular	3.0 (∅) x 85 (L max)	Primary-coated fibre
7	High Power	5 (W) x 5 (H) x 85 (L max)	Primary-coated fibre
C	Regular High Power	3.0 (Ø) x 85 (L max)	Primary-coated fibre

Configuration



Ordering Code Information

Sample: FPW-980060110 (Fused Fibre WDM, 980/1060, 1x2, 1m pigtails, No connectors)



1. Insertion loss in specification table does not include connector losses.
2. Pigtail length 1m (minimum). Further pigtail lengths available on request. Where connectorised, pigtail length is to the connector face.
3. 7 & C not available in 1x2 Port Configuration. For more information contact G&H Sales.
4. To request connectors please contact G&H Sales.

PM Products are manufactured using 250µm PANDA PM fibre. 400µm PANDA PM fibre is available at wavelengths higher than 1400nm.