



# Gooch & Housego



## PM Fibre-Q

### Polarisation Maintaining 1060nm Fibre-Coupled Acousto-Optic Modulator

T-M150-0.4C2G-3-F2P

Gooch & Housego specialise in providing optical components for high power fibre laser and amplifier systems. In-house control of critical manufacturing processes, from crystalline material selection and orientation, cutting, polishing and AR coating through to fibre coupling, ensure our components are of the highest optical quality.

The 'Fibre-Q' Acousto-Optic Modulator is designed for use in pulsed fibre laser amplifier systems. Giving optimum performance in demanding applications, such as material processing.

In addition to the standard product shown, custom configurations are available for specialised applications.

#### Key Features:

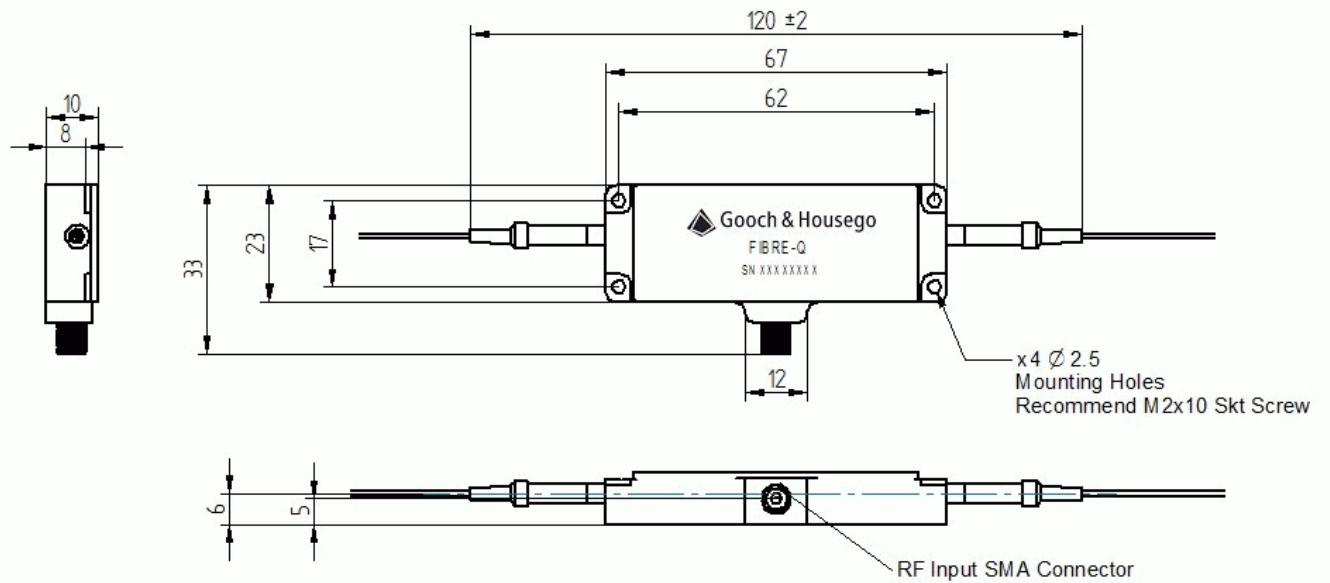
- Low insertion loss
- Compact, low profile package
- Rugged hermetic design
- Stable performance
- Custom configurations available

#### Applications:

- Fibre laser
- Fibre amplifier
- Pulse picker

## General Specifications

Parameter	Unit	Min	Max	Typical	Comments
Interaction material:	-	-	-	-	Tellurium Dioxide
Wavelength:	nm	1030	1090	1060	Other wavelengths available on request
Average optical power handling:	W	-	5	-	
Peak (pulse) optical power handling:	kW	-	30	-	Dependent on pulse width
Insertion loss:	dB	-	2.5	2	
Polarisation extinction ratio	dB	18	-	20	
Extinction ratio (1 <sup>st</sup> order on / off)	dB	50	-	-	
Return Loss (RF ON / RF OFF)	dB	40	-	-	
Rise-time / fall-time: (10% - 90%)	ns	-	30	-	
Frequency:	MHz	-	-	150	
VSWR:	-	-	1.2:1	-	
Input impedance:	$\Omega$	-	-	50	
RF power:	W	-	2	-	Absolute maximum rating. Higher power will cause damage.
Frequency shift:	MHz	-	-	150	Upshift
Fibre type:	-	-	-	-	Fujikura PM980 (SM98-PS-U25A)
Fibre length	m	1.5	-	-	900 $\mu$ m PVDF sleeving
Fibre termination:	-	-	-	-	Bare fibre



General Tolerance : ± 1mm

### Other Gooch & Housego products which may be of interest:

Our extensive range of components for fibre laser applications includes:

- Isolators
- High power multimode combiners
- Combiners with all types of signal feedthrough fibre
- Ultra low ratio tap couplers
- WDMs for combining signals with red pointer lasers

Please send your specifications to [sales@goochandhousego.com](mailto:sales@goochandhousego.com) or contact your local sales representative to discuss your requirements.