



# Gooch & Housego



## PM Fibre-Q

### Polarisation Maintaining 1550nm Fibre-Coupled Acousto-Optic Modulator

T-M200-0.1C2J-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 and as a pulse picker for short pulse, high rep rate fibre lasers.

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

#### Key Features:

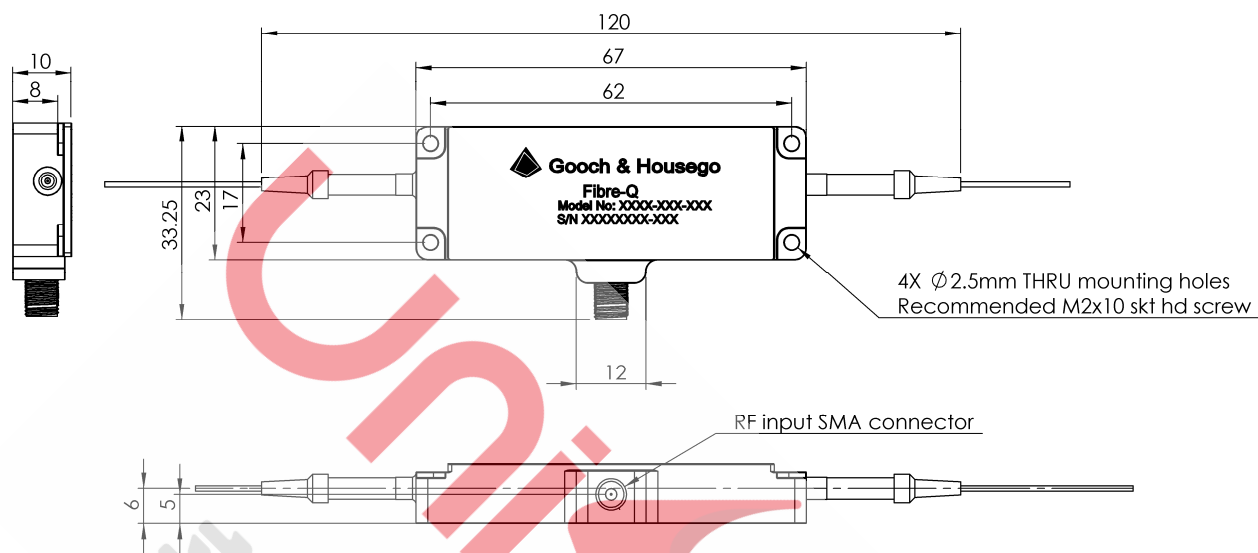
- ☐ Low insertion loss
- ☐ Compact, low profile package
- ☐ Rugged hermetic design
- ☐ Stable performance
- ☐ Custom configurations available

#### Applications:

- ☐ Fibre laser
- ☐ Pulse picker
- ☐ Optical sensing

#### Preliminary Specifications:

Parameter	Unit	Min	Max	Typical	Comments
Interaction material:	-	-	-	-	Tellurium Dioxide
Wavelength:	nm	1530	1565	1550	Other wavelengths available on request
Average optical power handling:	W	-	1	-	
Optical pulse energy:	μJ	-	100	-	Based on 10ns pulse
Insertion Loss (IL):	dB	-	6.0	5.0	At optimum RF power
Polarisation Extinction Ratio (PER):	dB	15	-	20	
Extinction Ratio (ER):	dB	50	-	-	Optical Power out (RF-ON) wrt Power In
Return Loss (RL):	dB	40	-	-	At optimum RF power
Rise-time / fall-time:	ns	-	10	-	Measured between 10% & 90%
Frequency:	Mhz	-	-	200	
VSWR:		-	1.5:1	-	
Input impedance:	Ω	-	-	50	
RF power:	W	-	3	-	
Frequency shift:	MHz	-	-	200	Up-shift (down shift available on request)
Fibre type:	-	-	-	-	Fujikura PM1550 (SM15-PS-U25A)
Fibre length	m	1.5	-	-	900μm black sleeving
Fibre termination:	-	-	-	-	Bare



### 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.