MQ40 High power AOM

Water cooled AOM for 1540-1570 nm lasers

• 1.56 µm design • Linear Polarization
• Water cooling • High efficiency

This AO Modulator is a water cooled AOM to be used with high power linearly polarized lasers 1560 nm. The high quality grade fused silica combined with a high top surface finishing and hard coating with low reflectivity, together with a unique and innovative low stress design, offer low insertion losses and a high damage threshold.

Specifications

	MQ40
Material	Fused silica Longitudinal
Acoustic Velocity	V = 5960 m/s (L)
Optical Wavelength range	1540-1570 nm
Transmission	> 99.5 % with hard V-coating
Optical Input / Output polarizations	Linear ⊥
Aperture	2 x 2 mm²
Carrier frequency / Frequency shift	40.68 MHz
Operating mode	Bragg
Separation angle (orders 0-1)	10.6 mrd
Diffraction efficiency (with TEM00 beam, $M^2 \leq 1.1$)	> 80 % (typ 85%) @ P_{RF} 40 W > 75 % (typ 80%) @ P_{RF} 30 W
Rise/Fall time	110 ns/mm (L)
Max optical peak power density	> 500 MW/cm²
Input impedance	Nom 50 Ω
V.S.W.R.	Nom < 1.2/1
RF Power	< 40 W
RF Connector	SMA
Thermal Security Interlock / Connector	SMC
Heat exchange	Water cooling – Nom 250 ml / min @20°C
Water Chamber	Standard = Aluminium Option = Stainless Steel
Optical path length	46 mm
Size / Weight	(Lxlxh) 52.2 x 62 x 37.5 mm^3 / 350 g
Operating Temperature	10 to 40 °C

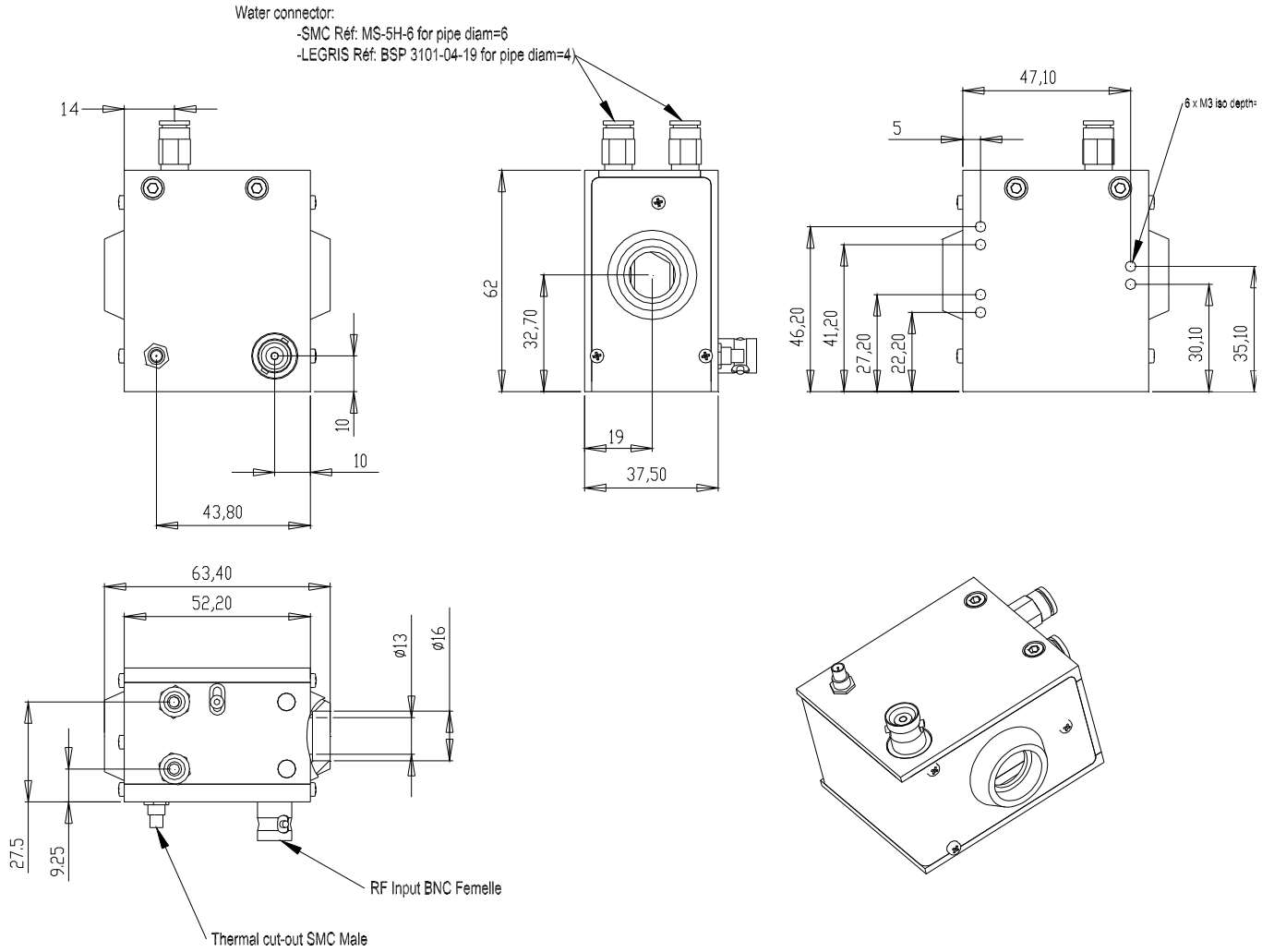
AA Sa 18, rue Nicolas Appert 91898 ORSAY France
Tel : +33 (0)1 76 91 50 12 – Fax : +33 (0)1 76 91 50 31 – www.aaoptoelectronic.com
QUANTA TECH 116 West, 23rd Street - Suite 500 New York, NY 10011 USA
Tel: 646 375 2452 - Fax: 866 978 2682 – www.quanta-tech.com

MQ40-A2-L1560-WSc

Y = (aperture, mm) **= 2**

Outline Drawing

Sizes in mm



AA Sa 18, rue Nicolas Appert 91898 ORSAY France
Tel : +33 (0)1 76 91 50 12 – Fax : +33 (0)1 76 91 50 31 – www.aaoptoelectronic.com
QUANTA TECH 116 West, 23rd Street - Suite 500 New York, NY 10011 USA
Tel: 646 375 2452 - Fax: 866 978 2682 – www.quanta-tech.com