MQ40 High power AOM

Water cooled AOM for 1064 nm lasers

• 1.06 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 1030, 1064 or 1080 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	1030-1080 nm
Transmission	> 99.5 % with hard V-coating
Optical Input / Output polarizations	Linear ⊥
Aperture	2 x 2 or 3 x 3 mm²
Carrier frequency / Frequency shift	40.68 MHz
Operating mode	Bragg
Separation angle (orders 0-1)	7.1 mrd
Diffraction efficiency (with TEM00 beam, $M^2 \leq 1.1$)	Nom 85 % for version 2x2 mm² Nom 80 % for version 3x3 mm²
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	Nom 20 Watts for version 2x2 mm² Nom 30 Watts for version 3x3 mm²
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 mm³ / 350 g
Operating Temperature	10 to 40 °C

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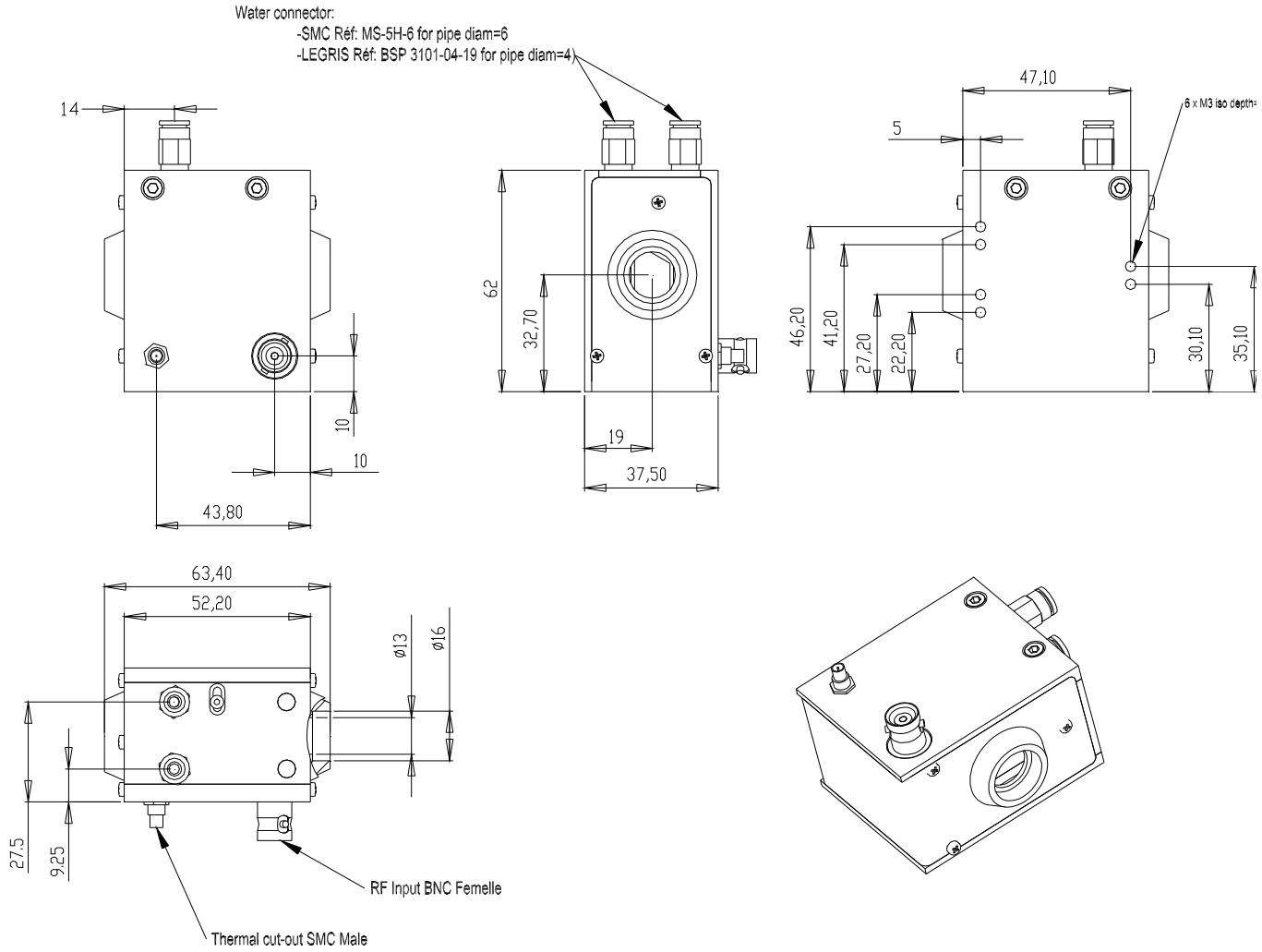
MQ40-Ay-L1064-W(I)

Y = (aperture, mm) **= 2, 3**

I = option stainless steel

Outline Drawing

Sizes in mm



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