Faraday isolator

DESCRIPTION

Faraday optical isolator is a passive optical device that only allows unidirectional light to pass through. It is generally composed of TGG crystal or glass, external magnetic field, polarizer, and polarizer. Its working principle: for the normal incident signal light, becomes linearly polarized light after passing through the polarizer. TGG crystal or glass together with the external magnetic field rotates the polarization direction of the signal light by 45 degrees (Faraday effect of magneto-optical crystal) and just makes its low loss pass through the polarizer placed at 45 degrees with the polarizer. For the reverse light, when the linearly polarized light from the polarizer passes through the TGG crystal, the deflection direction also rotates 45 degrees to the right, so that the polarization direction of the reverse light is orthogonal to the polarizer direction, completely blocking the transmission of the reflected light. The isolator without polarizer and polarizer is called the Faraday rotator. The function of the Faraday optical isolator is to prevent the adverse effects of backward transmitted light in the optical path on the light source and optical path system due to various reasons.

FEATURES

- High isolation
- Low insertion loss
- Multiple transparent holes
- Multi wavelength available
- Controllable output polarization

APPLICATIONS

- Film locked laser
- Semiconductor laser
- Optical measuring equipment
- Optical parametric oscillator
- Seed light amplification laser

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PARAMETER

Model	Central Wavelength	Clear Aperture	Isolation @25℃	Transmissivity @25℃	Polariser	Damage threshold @10ns	Package type
CL-ISO-532-5	532nm	5mm	＞30dB	＞90%	PBS Cube	10J/cm^2	2#
CL-ISO-633-2.5	633nm	2.5mm	＞30dB	＞90%	PBS Cube	10J/cm^2	1#
CL-ISO-633-5	633nm	5mm	＞30dB	＞90%	PBS Cube	10J/cm^2	1#
CL-ISO-780-2.5	780nm	2.5mm	＞30dB	＞90%	PBS Cube	10J/cm^2	1#
CL-ISO-780-5	780nm	5mm	＞30dB	＞90%	PBS Cube	10J/cm^2	2#
CL-ISO-785-2.5	785nm	2.5mm	＞30dB	＞90%	PBS Cube	10J/cm^2	1#
CL-ISO-785-5	785nm	5mm	＞30dB	＞90%	PBS Cube	10J/cm^2	2#
CL-ISO-920-5	920nm	5mm	＞30dB	＞95%	PBS Cube	10J/cm^2	5#
CL- ISO-1030-2.5	1030nm	2.5mm	＞30dB	＞90%	PBS Cube	10J/cm^2	3#
CL-ISO-1030-5	1030nm	5mm	＞30dB	＞90%	PBS Cube	10J/cm^2	3#
CL-ISO-1064-2.5	1064nm	2.5mm	＞30dB	＞90%	PBS Cube	10J/cm^2	3#
CL-ISO-1064-5	1064nm	5mm	＞30dB	＞90%	PBS Cube	10J/cm^2	3#
CL-ISO-1064-8	1064nm	8mm	＞30dB	＞90%	PBS Cube	10J/cm^2	4#

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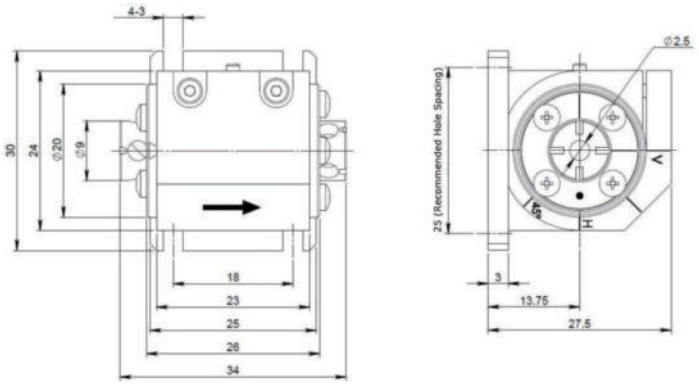
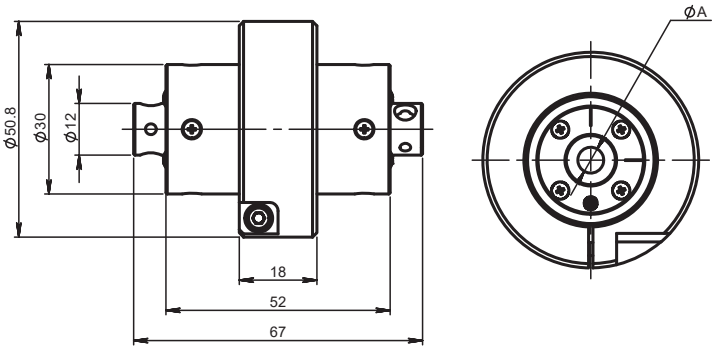
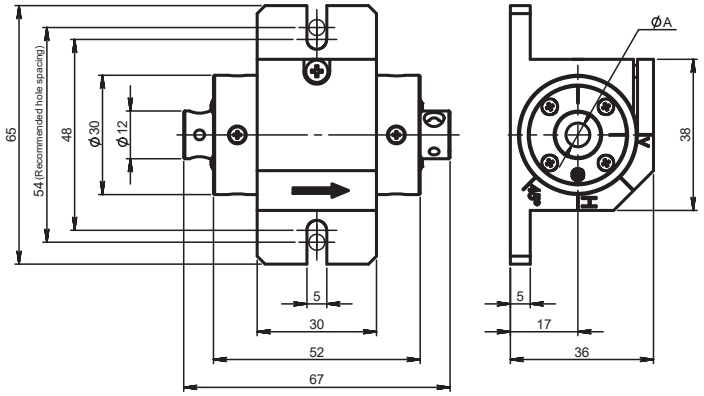
STRUCTURE DIAGRAM



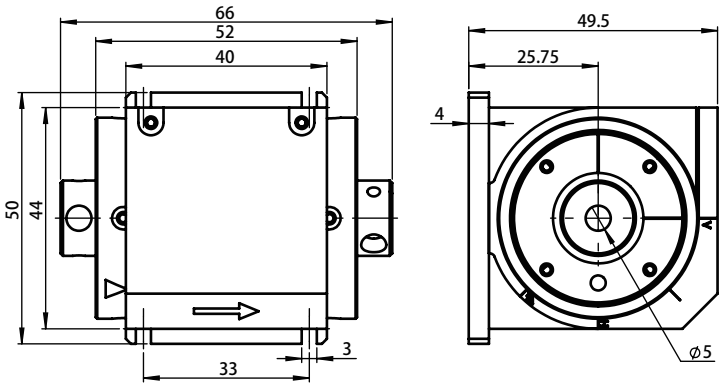
1# Packaged isolator



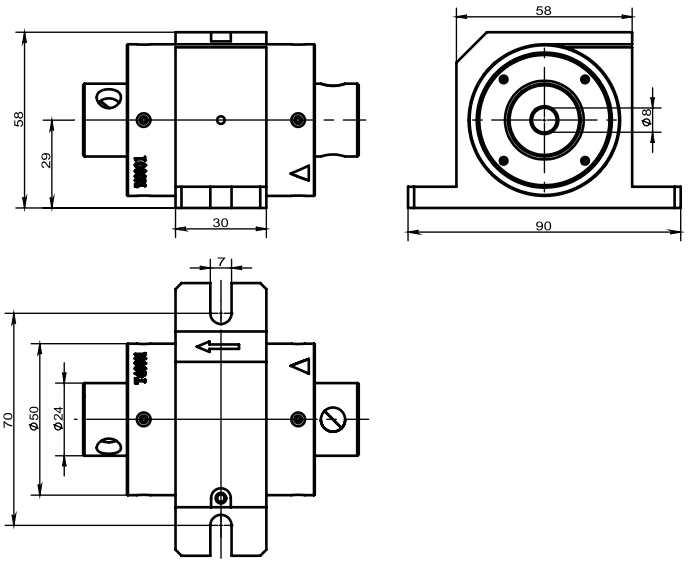
2# Package isolator (standard adapter)



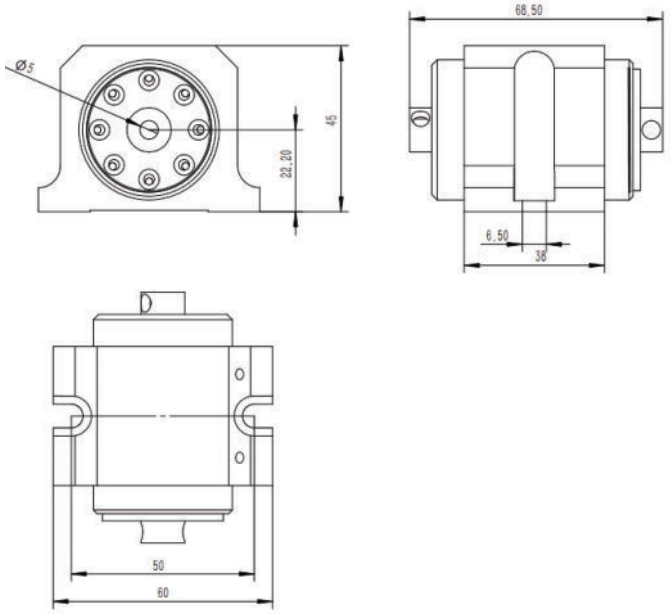
2# Package isolator (optional fixed base)



3# Packaged isolator



4# Packaged isolator



5# Packaged isolator

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