

# Quartz Depolarizers | QDP



**Quartz depolarizers convert linearly polarized input beams to unpolarized beams and are used in front of and the behind of measurement equipment that must avoid polarization.**

- 1N type is made of single optical quartz plate. It has a wider transmission range, but has a larger beam deviation due to the 2 degrees wedge shape.
- 2S type consists of cemented plates of optical quartz and synthetic fused silica. It does not have beam deviation, but the transmission range is not wide as the single type.
- OP type consists of optical contact. It has a wider transmission range, and without beam deviation.
- It is similar to waveplate and mounted in a frame of  $\phi 30\text{mm}$  diameter.

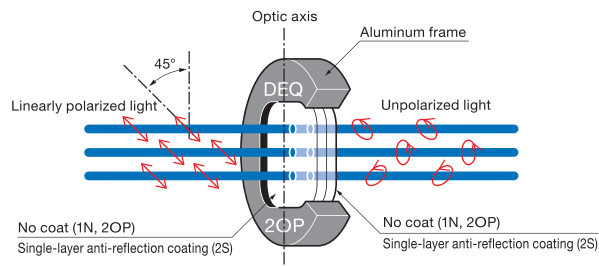


Specifications	
Material	Optical Grade Crystalline Quarts Synthetic fused silica
Material of frame	Aluminum Finishing: Black anodized
Surface Quality (Scratch-Dig)	40-20

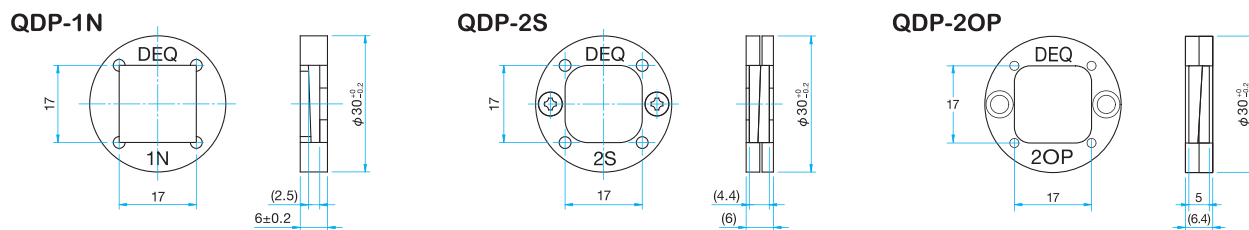
**Attention**

► Be sure to wear laser safety goggles when checking optical path and adjusting optical axis.

**Schematic**



**Outline Drawing**



Specifications				
Part Number	Wavelength Range [nm]	Material	Diameter of Optics [mm]	Laser Damage Threshold* [J/cm <sup>2</sup> ]
<b>QDP-1N</b>	180 – 3500	Optical Grade Crystalline Quarts	2.5 (Maximum)	—
<b>QDP-2S</b>	350 – 2500	Optical Grade Crystalline Quarts Synthetic fused silica	4.4	0.3
<b>QDP-2OP</b>	180 – 3500	Optical Grade Crystalline Quarts	5.0	1

\* Laser pulse width 10ns, repetition frequency 20Hz

**Compatible Optic Mounts**

NPH-30-ARS / NPH-30-ARS

Application Systems

Machine Vision

Manual Positions

Motion Control Products

Optical & Mirror Holder

FA Parts

Measurement & Control

FA Electrical Parts

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