

1.1.2.9.4 Scatter Shield

Scatter Shield for mounting on front flange of 10K-W / 15K-W, 16K-W and 30K-W to reduce backscattered power.

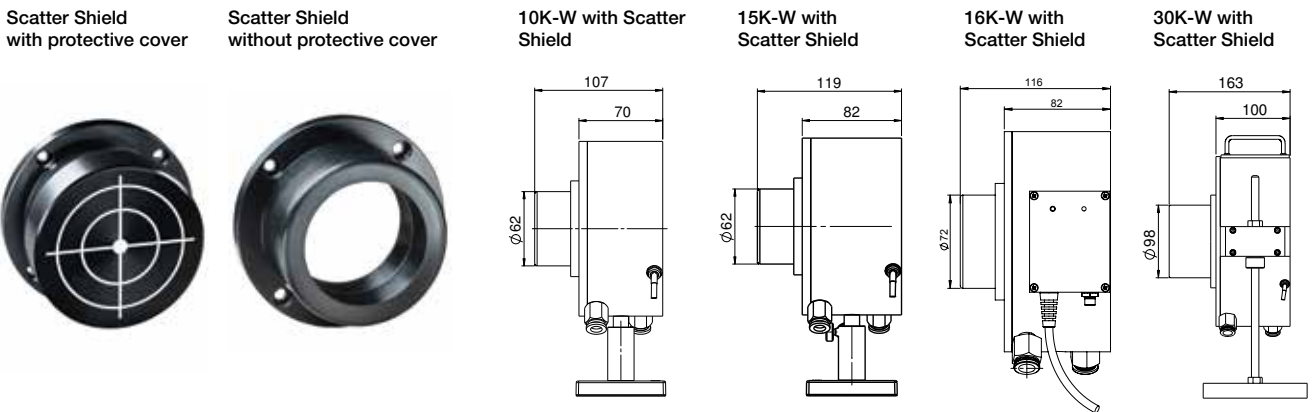
3 to 4% of the light impinging on the 10K-W, 15K-W, 16K-W and 30K-W is backscattered in a diffuse manner. This can cause heating of surrounding surfaces. Scatter Shields are available to greatly reduce this affect. When installed on the front flange of the sensors, they will reduce the backscatter by about 70%.

The shield works in two ways:

1. By absorbing much of the backscattered light.
2. By reflecting some of it back into the sensor where that light is reabsorbed.

Since some of the light is reabsorbed, the power reading is 1-1.5% higher than without the shield, so an additional laser setting is given for use when the shield is mounted to adjust for this difference.

The scatter shield comes with a protective cover with target pattern for alignment that also can be purchased separately, (see page 81).



| Model | 10K-W / 15K-W Scatter Shield | 16K-W Scatter Shield | 30K-W Scatter Shield |
|---------------------------------------|------------------------------|------------------------|-------------------------|
| Wavelength range of use | 0.8 – 2µm | 0.8 – 2µm | 0.8 – 2µm |
| Laser setting with and without shield | with NIRS, without NIR | with NIRS, without NIR | with 107S, without 107 |
| Backscatter with and without shield | with 0.9%, without 3.2% | with 1%, without 3.2% | with 1.4%, without 4.3% |
| Part number | 7Z08295 | 7Z08355 | 7Z08293 |

1.1.2.9.5 Heavy Duty Stand for 10K-W and 15K-W

For sustained use in an upright position, it may be advisable to purchase the heavy duty stand for the 10K-W and 15K-W due to their large size and weight. The heavy duty stand bolts onto existing threads on the rear of the 10K-W and 15K-W.

| Model | Heavy Duty Stand for 10K-W and 15K-W |
|-------------|--------------------------------------|
| Part number | 7Z08330 |

