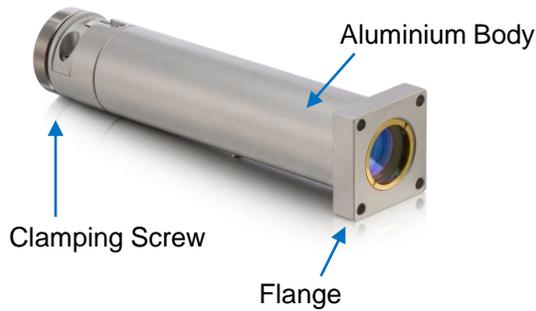


# TruPulse nano Accessories datasheet



## Collimators

We offer a range of collimators for use with TruPulse nano Fiber Lasers compatible with variants from 20W to 200W. These are used to collimate the native, divergent beam output from the TruPulse ILLK to provide a beam diameter that matches the user's scanner choice. These units attach to the ILLK output and will give a fixed output beam diameter in the range of 3-10mm. Collimators are available with a flange interface that serves as an accurate opto-mechanical datum or in a flangeless form where a simpler clam shell clamping arrangement is preferred.

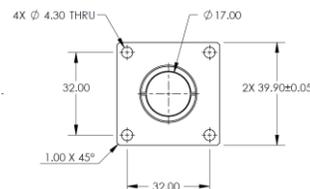
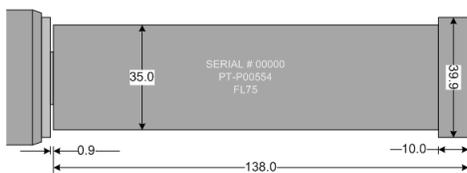


Cylindrical collimator



Collimator options			F30	F50	F75	F100
Typical beam diameter mm +/- 20%			3.0	5.0	7.5	10.0
Output Divergence (mrad) typ. ± 20%	M <sup>2</sup> < 1.6	"Z" Type	0.59	0.35	0.23	0.18
Pointing Error (mrad)			≤ 6.0	≤ 3.6	≤ 2.4	≤ 1.8
Design wavelength = 1064nm						

Mechanical Outline		F30	F50	F75	F100
Collimator length (mm)		95.2	112.0	138.0	167.5
Clamp region diameter (mm)		35.0 (+0.00, -0.05)			



## Optical Specification

Parameter	Value*
Maximum Input divergence (1/e <sup>2</sup> full angle)	Max 120 mrad (matched to TruPulse specification)
Beam offset	≤ diameter / 10
Transmission	>95% @ 1064nm, >50% @ 650nm

\*When using flange front face as a design reference plane

Environmental conditions	Operating	Storage
Temperature	0 to 50°C	-10 to 60°C
Humidity (non condensing)	5-85% RH	0 – 95% RH

Accessory Ordering	Description	Part	Edmund Part
<p>These collimators can be ordered as accessories for any of the TruPulse nano product family without any need for factory configuration.</p>	F30 (Flanged)	PT-P00577	18316
	F30 (Cylindrical)	PT-P00614	18312
	F50 (Flanged)	PT-P00553	18317
	F50 (Cylindrical)	PT-P00615	18313
	F75 (Flanged)	PT-P00554	18318
	F75 (Cylindrical)	PT-P00616	18314
	F100 (Flanged)	PT-P00555	18319
	F100 (Cylindrical)	PT-P00617	18315

## + Cable, Break-Out Board & Other Accessories

Type		Part No.	Edmund Part	Description
300W Power Supply Unit (24VDC)		PT-E02368	18311	300W (100-240VAC, 50-60Hz to 24VDC) single-phase mains power supply unit for use with TruPulse nano lasers up to 50W average power
600W Power Supply Unit (24VDC)		PT-E02369	18310	600W (100-240VAC, 50-60HZ to 24VDC) single-phase mains power supply unit for use with TruPulse nano lasers with average power in the range of 70W-100W average power

### Terms and Conditions

All product information is believed to be accurate and subject to change without notice. A complete product specification will be issued on request and also at time of order acknowledgement. The user assumes all risks and liability whatsoever in connection with the use of the product and its application. These lasers are designed as products for incorporation or integration into other equipment.