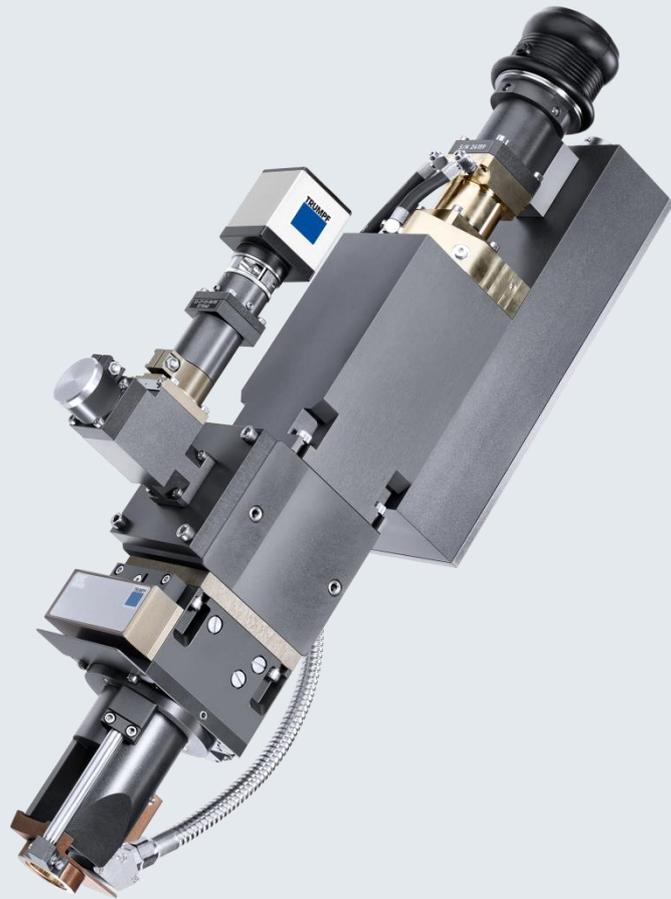


BEO D70 focusing optics

Programmable
Motorized
Focusing



01

Focal position

03

Remote Services

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Intelligently monitored

04

Flexible use

Focal position

User friendly control and programming

With the programmable motorized focusing (PMF), the processing optics BEO D70 has the option of adjusting the focal position of the laser in the Z direction using a motor. The desired focal position can be easily entered in the TruControl or via a defined external fieldbus signal. With this, the PMF enables a quick change between applications with different focal positions or with different focal diameters on the workpiece.

Intelligently monitored

Position monitoring and fault diagnosis

Its many sensors monitor all of the important operating values of the PMF. This counts especially for the position of the collimation lens, as it determines the focal position. The integrated temperature and scattered light monitoring increase the robustness of the optics against back reflection. If an operational value is outside the permissible range, you get a message in TruControl containing information on the cause of the malfunction and its elimination.

Remote Services

For optimal availability

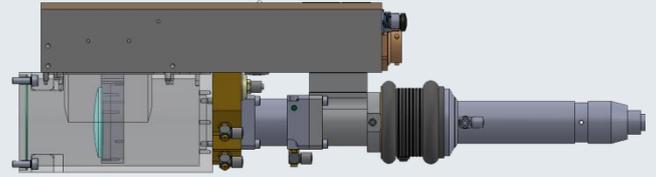
If a malfunction occurs and you need assistance to eliminate it, then get in touch with TRUMPF Remote Services. With your agreement, TRUMPF service experts can read and change the status of your focusing optics and your laser through a secure remote access. In most cases, production can be resumed without an on-site service mission. The downtimes are therefore reduced to a minimum and the availability of your system is optimized.

Flexible use

With all TRUMPF solid-state lasers

The BEO D70 focusing optics with programmable motorized focusing is compatible with all TRUMPF solid-state lasers. It is equipped with a broadband coating as a standard feature so that it can be used flexibly with continuous wave (cw) disk, fiber and diode lasers.

Motorized positioning of the collimation lens (PMF module)



Input of the focal position using the TruControl laser software



Technical data of the programmable motorized focusing

Available lasers	TruDisk, TruDiode, TruFiber, TruPulse (NA 0,1)
Maximum laser power	≤ 4 kW at 100% operating time, ≤ 8 kW at 75% operating time over a period of 15 min
Wavelength	930 nm - 1070 nm
Focal length of collimation	$f_c = 200 / 175 / 150 / 100 \text{ mm}^*$
Focal length of lens	$f = 600 / 560 / 500 / 400 / 300 / 280 / 220 / 200 / 175 / 150 / 100 \text{ mm}$
Travel range position of collimation lens	Depending on the focal length of collimation: maximal -10 mm to +20 mm
Positioning accuracy collimation lens	0.0125 mm
Protection class	IP54
Control	Position specification using TruControl or via fieldbus
Monitoring of the following operating values	Setting of the collimation lens, scattered light in the optics, optics temperature, condensation, pressure (purgung gas), blank temperature
Dimensions (W x H x T)	74 x 268 x 126 mm
Weight	3.1 kg

* Other focal lengths of collimation are possible upon request