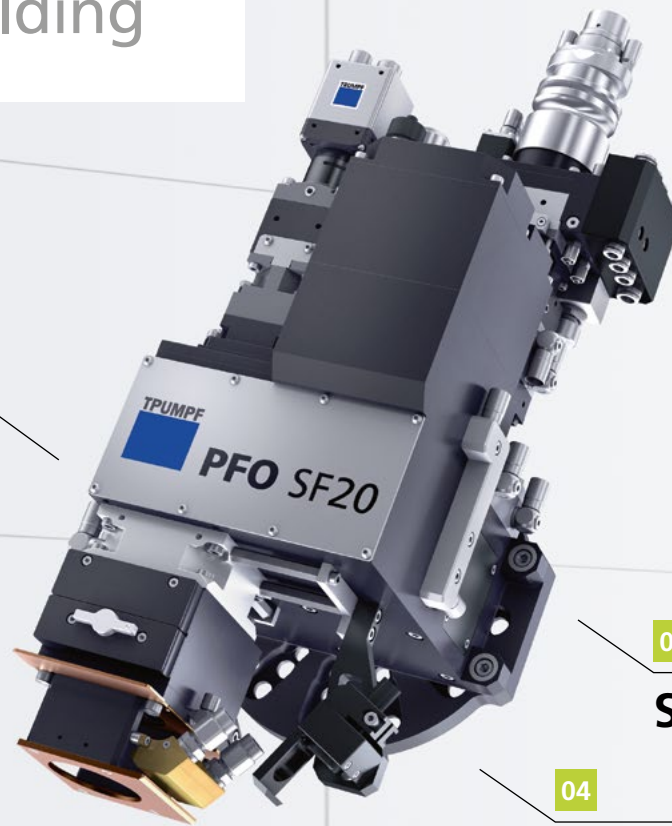


PFO SF small-field scanner

The compact entry-level solution for remote welding



01

Dynamic

02

Compact

03

Smart

04

Flexible

01

Dynamic

More laser power and productivity

The small-field scanner has lightweight mirrors and a new galvo architecture that enables high-frequency mirror movements and short jump times. The maximum laser power that can be used is up to 12 kW. This makes the optics ideal for applications with beam oscillation.

02

Compact

Improved accessibility

Thanks to the remote control unit, the design of the small-field scanner is compact. The small interference contour of the optics improves accessibility to your component. Complex component geometries and confined work areas are thus no longer an obstacle. In this way, the PFO SF can replace a standard focusing optics and at the same time has the extended function of beam oscillation for process optimization.



Reproducible spot welds at a control unit in a small work area.

03

Smart

More security through smart monitoring options

Despite its compact design, you benefit from the same smart monitoring options with the PFO SF as with other programmable focusing optics. Protective glass monitoring gives you transparency on the actual condition of your protective glass for optimal use and replacement. In addition, the cooling water can be monitored. Quality Data Storage enables process-synchronous storage of quality data at component level. TRUMPF Condition Monitoring rounds off the intelligent functions of the optics. The analysis of the condition data enables predictive maintenance.

04

Flexible

Easy to combine with the TRUMPF world of solutions

The PFO SF can be easily combined with the VisionLine family of TRUMPF sensors as well as third-party sensors. In addition, you benefit from other well-known functions such as BrightLine Weld for low-spatter welding, CalibrationLine for power measurement and Smart View.

Technical data

		PFO SF 20	PFO SF 33
Maximum power	kW	8 (cw)	12 (cw)
Available lasers		TruDisk, TruMicro 7000, TruFiber Multiple Mode, TruFiber Single Mode	TruDisk, TruMicro 7000, TruFiber Multiple Mode
Standard collimation	mm	90 (TruDisk, TruMicro 7000 and TruFiber Multiple Mode) 150 200 (TruFiber Single Mode)	140 (TruDisk, TruMicro 7000 and TruFiber Multiple Mode)
Available focal lengths	mm	200 300 400 500 600	
Field size for focal length	mm	f200: 11 × 17 f300: 17 × 25 f400: 22 × 34 f500: 28 × 42 f600: 28 × 42	
Laser light cable type		LLK-D	
Available sensor system		VisionLine Cam/Basic/Detect, CalibrationLine Power and Focus	
Available options		Protective glass monitoring, cooling water monitoring, crossjet, MDE nozzle, various protective gas nozzles, camera monitoring, sensor interface, illumination	
Available software options		TruTops PFO	
Dimensions (W × H × D)	mm	226 × 200 × 198 (scanner head without lens) 120 × 195 × 252 (PFO control unit)	
Weight	kg	Approx. 13 (scanner head) Approx. 4 (PFO control unit)	
Frequency	Hz	up to 865 Hz (at f200, geometry: circle with \varnothing 3.2 mm, 90% contour accuracy)	up to 510 Hz (at f200, geometry: circle with \varnothing 0.8 mm, 90% contour accuracy)

Subject to alteration. Only specifications in our offer and order confirmation are binding.

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