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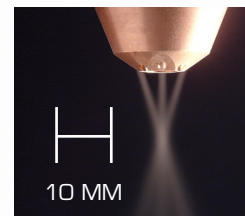
A COLLABORATIVE RESEARCH CENTER

XYZ 3D Three Beam Powder Feed Nozzle

Suited for 3D applications • Tilt-able up to 90 degrees • Multidirectional LMD • Suited for high laser power • Robust layout • High accessibility on the work piece • Good shielding from atmosphere



30MM / 1.18"



TECHNICAL SPECIFICATIONS

Applicable for the following laser beam sources	CO ₂ , Nd:YAG, Diode, Fibre, Disc
Required focal length of the laser beam optics (minimum)	150 mm
Applicable up to a laser power of	3 kW CO ₂ laser, 5 kW other lasers
Applicable for powders with a particle size of	20 - 125 µm
Maximum tilt angle of laser beam axis	90 °
Distance between nozzle tip and work piece	12 - 16 mm
Typical diameter of the powder stream focus (depends on powder particle size)	2 - 3 mm
Single track width	1 - 8 mm
Weight (including flange and adjustment unit)	approx. 3 kg

Contents: Adjusting unit (x-y-z), protection window, powder feeding connections, powder gas stream splitter, cooling water connections, inside coaxial protection gas feeding, nozzle tip, adapter plate to optics if required, short manual

Interfaces: Cooling water of 3-6 l/min (copper cooling circuit), 20-25 °C
Shielding gas of (He/Ar) = 2 -30 l/min

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