



Thin Disks Gain Medium

	TD12-7-HD	TD12-7+	TD20-7+	TD25-7+
Gain medium	Yb:YAG			
Doping concentration	7%			
Surface quality		5/4x0.04 (imperfection of the final surface) by ISO 10110-7		
Thickness	215 µm	130 µm or 215 µm		
Shape unpumped	8-10 m concave	Plane (>50 m concave) or 4 m concave		
Wedge	0.05°			
Free aperture	8 mm		14 mm	17 mm
AR coating	R@1030 nm, 0°<0.15%, R@940 nm, 969 nm <0.5%			
HR coating	R@1030 nm, 0°>99.9%, R@940 nm, 969 nm >99,5%			
Optical axis of the disk	Orthogonal to base +/-0.15° depending on wedge orientation			
Maximum pump power	4 kW/cm ² (with top-hat pump profile and in fluorescence mode only; in laser operation as a rule of thumb, the damage threshold increases by the actual extracted laser power with respect to the pump spot area.)			
Damage threshold	4.7~7.6 J/cm ² (10 ns pulses, for 10 k pulses, tested by Institute of Technical Physics (DLR), only tested for TD12-7 HD/+ version)			
Standard pump spot diameter	3.2 mm	5.0 mm	10.0 mm	15.0 mm
	For various customer requests, the spec needs to be discussed at the time of ordering			
Suitable pumpmodule	TDM1.1		TDM3, TDM10	TDM10, TDM30
Diopter variation when pumping	Gradient: -0.001/(m W) for pumpspot diameter of 3 mm	Not available	Not available	Not available



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