



1030 | 1040 | 1047 | 1053 | 1054 | 1064 nm

Fibre laser • Yb:YAB/YAG • Nd:glass • Nd:YAG/YVO4/YLF

NIR 1030-1064 nm

Coating types



- VAR
- DAR
- TAR
- BBAR
- MAR
- WAR



VAR

λ [nm]	AR (0°); R <	method	AR (45°); R <	method
1064	0.1%	EBE	0.6%	EBE
	0.05-0.1%*	low loss	0.1-0.6%*	low loss
		IBS		IBS

* depending on price, substrate size and laser power



- HR
- DHR
- BBHR
- MHR
- WHR
- Metal



HR

λ [nm]	HR (0°); R >	method	HR (45°); R >	method
1030	99.7%	high power	99.5%	high power
	99.85%	standard	99.8%	standard
	99.9xxx%*	low loss	99.9xxx%*	low loss
1053	99.85%	EBE	99.8%	EBE
1064	99.7%	high power	99.5%	high power
	99.9%	standard	99.8%	standard
	99.9xxx%*	low loss	99.9xxx%*	low loss

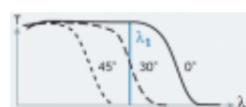
* 99.9xxx% means that we can optimize the reflection/transmission to your needs. The coating price results from the chosen grade of reflection/difficulty, see estimated multiplier:



- TFP
- CP
- BBPOL

TFP

λ [nm]	AOI	method
1064	Tp > 95%, Ts < 5%	45° cube
	Tp > 99%, Ts < 1%	45°
	Tp > 95%, Ts < 2%	Brewster
	Tp > 99%, Ts < 0.1%	Brewster





VA		method
λ [nm]	$0^\circ \rightarrow 45^\circ$; T =	
1064	95% \rightarrow 1%	EBE
	95% \rightarrow 1%	non-shifting IAD

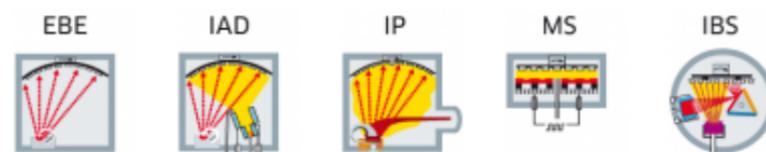


LIDT for HR 1064 nm / 0° with different methods

method	LIDT - pulsed (10 ns, 1 Hz) energy per effective beam area	LIDT - cw (depending on cooling) power per effective beam diameter
EBE, high power	> 80 J / cm ²	> 10 kW / cm
EBE, standard	> 40 J / cm ²	> 10 kW / cm
IBS	> 40 J / cm ²	> 100 kW / cm

All values are given for standard coatings. Customized coatings available for all types.

Coating methods available:



Examples

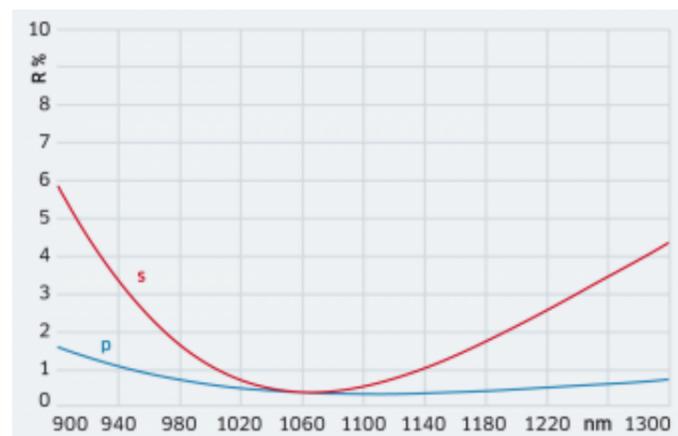
If not mentioned otherwise, all values and diagrams are given

... for the standard substrate material used in the described wavelength area (mostly Fused Silica or CaF₂).

... without consideration of the rear surface.

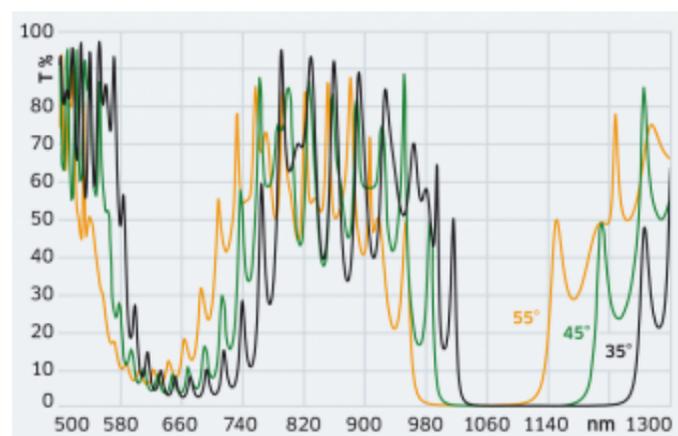
... with EBE coating technique for a good cost-performance ratio.

Customized coatings are available for all types.



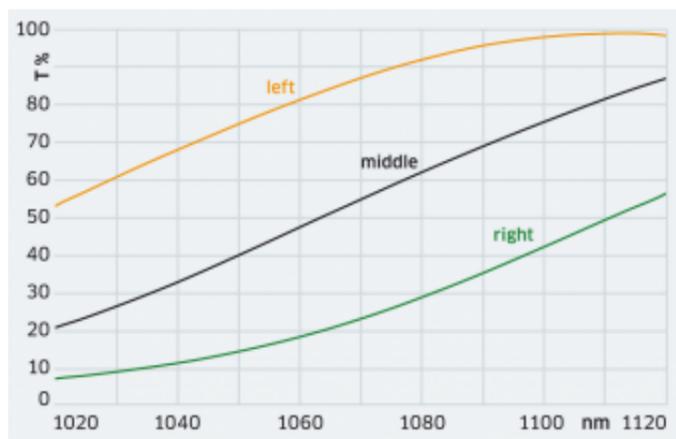
[B-07674]

AR 1064 nm 1030-106 / 45° low polarizing
 1064 nm: $R_u < 0.6\%$; $IRs-Rpl < 0.4\%$



[B-06544]

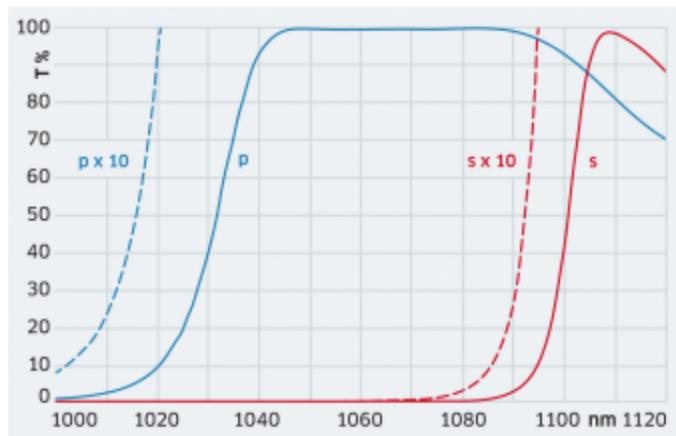
R > 80% 633 nm HR 1064 nm / 45 ± 10° Type 3
 633 nm: $R > 80\%$; 1064 nm: $R_{avg} > 99.7\%$



[B-05981]

GOC 1064 nm / 0°

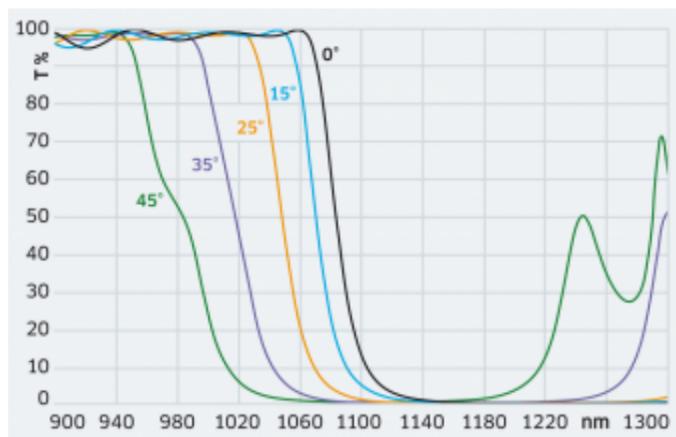
1064 nm: T 25-75% min. variation on substrate (IAD-coating). Find here more details about Gradient Output Coupler GOC.



[B-11324]

TFP 1064 nm / 55.4°

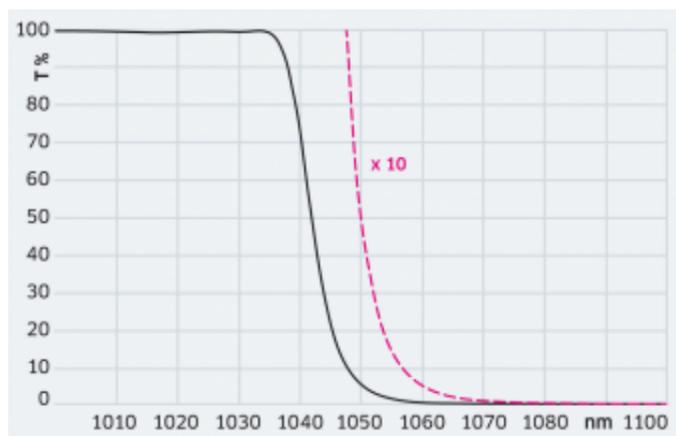
1064 nm: Tp > 99%, Ts < 0.1% (IBS-coating)



[B-00431-01]

VA 1064 nm / 0-45° T 95-1%

1064 nm: 0° -> 45°; T= 95% -> 1%



[B-06240]

HT 1030 nm HR 1064 nm / 0°

1030 nm: R < 1.3%; 1064 nm: R > 99.4% (IBS-coating)