



LASERMET LTD

laser safety solutions



Type L04



Type L05



Type L07



Type L08



Type LGF



Type LGM



Type EL



Type ES



Type 9162



Type BML



Type KBL

Laser Alignment Eyewear

Laser alignment eyewear is designed for use with visible lasers (ie lasers emitting between 400 & 700 nm*) to protect the wearer from the laser beam whilst allowing them to see the spot from the beam for purposes of alignment. This differentiates it from standard protective eyewear which generally does not allow such visibility of the beam spot. Alignment eyewear is tested to EN 208 and specified using R numbers as shown below. In order to provide the combination of protection and beam visibility, the power (or energy) of the laser must be balanced with the R number of the eyewear. This is shown in the table below.

Laser Power (for CW lasers)	Laser Energy (for pulsed lasers)	Required R Number for Alignment Eyewear
1 - 10 mW	0.2 - 2 μ J	R1
10 - 100 mW	2 - 20 μ J	R2
0.1 - 1 W	20 - 200 μ J	R3
1 - 10 W	0.2 - 2 mJ	R4

The R numbers are specified at particular wavelengths or wavelength ranges which must be matched with the laser you are using. Look through the table of available filters overleaf or call our sales department for assistance.

* Lasers outside this wavelength range will normally have a co-axial low power visible beam for alignment purposes.

Alignment Wavelength (nm)	EN 208 Markings	Filter Code	Frame Styles	Other Wavelengths covered (nm)	EN 207 Markings			VLT (%)
					D	I	R	
400 - 520	R2	GL-280	BML, KBL	-				26
442	R2	LV-49	L04, L07, L08	190 - 441	2	2	2	88
488 – 532	R2	GL-270	BML, KBL	-				22
488	R2	LV-69	L07, L08	190 - 487	2	2	2	84
488	R3	LV-59	L07, L08	190 - 487	3	3	3	76
488	R3	LV-98	L07, L08	-				24
515	R3							
488	R4	LV-15	L07, L08	-				10
515	R4							
515	R1	LV-36	L07, L08	190 - 514	1	1	1	69
515	R3	LV-56	L04, L07, L08	-				65
520	R2	LV-P07	9162					56
532	R2	LV-74	L04, L07, L08	-				50
532	R3	LV-64	L07, L08	190 - 531	3	3	3	40
532	R3	LV-54	L07, L08	190 - 531 1064	3 5	3 6	3 6	25
540 – 650	R1	GL-290	BML, KBL	-				10
600 - 700	R2	GL-300	BML, KBL	-				32
620 - 644	R1	LV-P03	9162	-				49
630 – 635	R1	GL-260	EL, ES	-				40
644	R2	LV-P04	9162	665 - 685	4	4	4	42
630 - 690	R1	LV-81	L07	-				35
630 - 690	R2	LV-82	L07	-				25
660 - 669	R1	GL-240	LGF, LGM	-				55
670 - 680	R2							
670	R1	LV-P08	9162	-				77

The order code is the Filter code with the frame style inserted in the middle (eg GL-LGM-240).

Lasermet offer a full range of laser safety products and services.

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