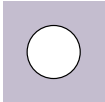


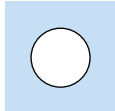
IP RATINGS


EN 60598 standard

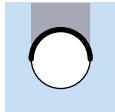
1st figure:
Protection against penetration by solid objects and contact with live parts.


2nd figure:
Protection against liquid penetration.

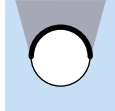
IP 0 .  No protection


IP . 0  No protection


IP 1 .  Protected against solid bodies larger than 50 mm (e.g. hand contact)


IP . 1  Protected against vertically-falling water drops

IP 2 .  Protected against solid bodies larger than 12 mm (e.g. finger)

IP . 2  Protected against dripping water up to 15° from the vertical

IP 3 .  Protected against solid bodies larger than 2.5 mm (e.g. tools, wires)

IP . 3  Protected against water falling as spray up to 60° from the vertical

IP 4 .  Protected against solid bodies larger than 1 mm (e.g. fine tools, nails)

IP . 4  Protected against water splashing from any direction

IP 5 .  Protected against dust

IP . 5  Protected against water projected by a nozzle from any direction

IP 6 .  Totally protected against dust

IP . 6  Protected against water projected in powerful jets from any direction

IP . 7  Protected against the effects of immersion

IP . 8  Equipment submersible under specified conditions

IK INDEX

EN 62262 standard

IK index for resistance to mechanical impacts

Impact resistance	Mass / Drop height
IK 1 / 0.140 joule	0.25 kg: 56 mm
IK 2 / 0.20 joule	0.25 kg: 80 mm
IK 3 / 0.35 joule	0.25 kg: 140 mm
IK 4 / 0.50 joule	0.25 kg: 200 mm
IK 5 / 0.70 joule	0.25 kg: 280 mm
IK 6 / 1 joule	0.25 kg: 400 mm
IK 7 / 2 joule	0.50 kg: 400 mm
IK 8 / 5 joule	1.70 kg: 300 mm
IK 9 / 10 joule	5 kg: 200 mm
IK 10 / 20 joule	5 kg: 400 mm
IK 10+ / 50 joule	10 kg: 500 mm
IK 10+ / 80 joule	10 kg: 800 mm
IK 10+ / 120 joule	15 kg: 800 mm
IK 10+ / 160 joule	20 kg: 800 mm
IK 10+ / 200 joule	25 kg: 800 mm

The EN 62262 standard provides for a maximum resistance of IK10 = 20 joule, with the possibility of extending the test up to 50 joule.

VK® INDEX

VK® vandal resistance index

VK® index	1st position	2nd position	(3rd position)
0	< 10 joule	no protection	no protection
1	10 joule *	standard fastenings	flame resistance
2	20 joule *	anti-vandal fastenings (or secure closure)	graffiti resistance
3	50 joule *	rip-out resistant	increased UV resistance (tropicalization)
4	80 joule	anti-rip-out + standard fastenings	resistant to marine environment
5	120 joule	rip-out resistant + anti-vandal fastenings	-
6	160 joule	anti ligature + anti-vandal fastenings	-
7	200 joule	-	-
8	-	-	-
9	-	-	-

*By virtue of their characteristics, anti ligature luminaires are also anti rip-out.
The figure in the 3rd position is optional.*

** Standardized values as per EN 62262: see IK index*