

Technical Guide

INDICES VK®

VK® vandal resistance rating

Indice VK®	1 st position	2 nd position	(3 rd position)
0	< 10 joules	no protection	no protection
1	10 joules (*)	standard fastenings	flame resistance
2	20 joules (*)	vandal-resistant fastenings (or secure closure)	graffiti resistance
3	50 joules (*)	rip-out resistant	increased UV resistance (tropicalization)
4	80 joules	rip-out-resistant + standard fastenings	resistance to marine environment
5	100 joules	rip-out-resistant + vandal-resistant fastenings	-
6	120 joules	anti-ligature + vandal-resistant fastenings	-
7	150 joules	-	-

By virtue of their characteristics, anti-ligature luminaires are also rip-out-resistant.

The figure in the 3rd position is optional.

* Standardized values as per EN 62262: see IK rating

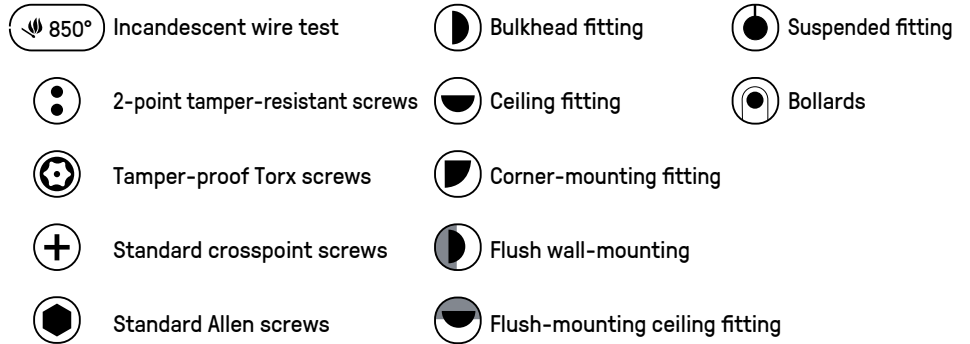
INDICES IK

NF EN 62262 standard IK rating 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 joules	0,50 kg : 400 mm
IK 8 / 5 joules	1,70 kg : 300 mm
IK 9 / 10 joules	5 kg : 200 mm
IK 10 / 20 joules	5 kg : 400 mm
IK 11 / 50 joules	10 kg : 500 mm
IK 11+ / 80 joules	10 kg : 800 mm
IK 11++ / 100 joules	15 kg : 800 mm
IK 11++ / 120 joules	20 kg : 800 mm
IK 11++ / 150 joules	25 kg : 800 mm

The EN 62262 standard provides for a maximum resistance of IK11 = 50 joules.

















PICTOGRAMS



IP RATINGS




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 vertical water drops
IP 2_		Protected against solid bodies larger than 12.5 mm (e.g. finger)	IP _2		Protected against water drops 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 rain 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 directions
IP 5_		Protected against dust	IP _5		Protected against low-pressure water jets from any direction using a lance
IP 6_		Totally protected against dust	IP _6		Protected against high-pressure water jets from any direction
			IP _7		Protected against the effects of immersion
			IP _8		Equipment submersible under specified conditions

IK and VK ratings, please see catalogue pages 256.

CLASSIFICATIONS OF ELECTRICAL APPLIANCES

	Class I	Luminaire with functional insulation and with metal parts earthed. Earth connection obligatory.
	Class II	Luminaire with double or increased insulation of the active parts. No earth connection.
	Class III	Class II luminaire with additional protection achieved by powering from an SELV supply (Safety Extra-Low Voltage, U < 50 V AC).