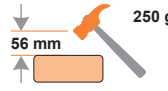
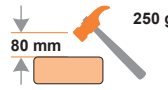
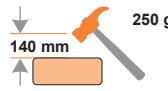
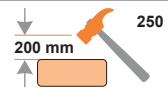

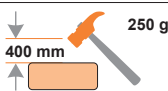
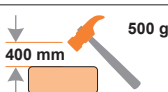
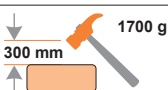
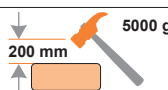
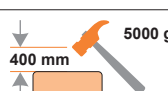
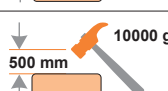


IK code: Protection against mechanical shock

In electrical engineering, the IK shock resistance level (also IK code, IK marking, IK protection class) is a measure of the resistance of components to impact and shock stress. According to EN 50102 and EN 62262, or internationally according to IEC 62262, it describes the degree of protection provided by enclosures for electrical equipment against external mechanical stresses. In reference to the considerably earlier standardized protection class (IP, abbreviated international protection), the letter K is phonetically derived from the French casser, meaning to break.

The test is performed with a pendulum hammer, alternatively up to IK07 with a spring hammer or above IK07 with a free-fall hammer. The test procedure is specified in the standards EN 60068-2-75 (or VDE 0468-2-75) and IEC 60068-2-75.

Impact strength classification						
IK code	Impact energy	Graphic symbol	Short description	Definition	Hammer material	Corner radius Hammer
IK 00	-	-	No protection	-	-	-
IK 01	0,14 J		Protection against impacts with an impact energy from 0.14 up to 0.7 joules	Defines a light blow with the hand/fist or a tool	Polyamide	10 mm
IK 02	0,20 J					
IK 03	0,35 J					
IK 04	0,50 J					
IK 05	0,70 J					
IK 06	1,0 J		Protection against impacts with an impact energy of up to 1 joule	Defines a blow with a 250 g tool from a distance of 400 mm	Polyamide	10 mm
IK 07	2,0 J		Protection against impacts with an impact energy of up to 2 joule	Defines a blow with a 500 g tool from a distance of 400 mm	Steel	25 mm
IK 08	5,0 J		Protection against impacts with an impact energy of up to 5 joule	Defines a blow with a 1700 g tool from a distance of 300 mm	Steel	25 mm
IK 09	10,0 J		Protection against impacts with an impact energy of up to 10 joule	Defines a blow with a 5000 g tool from a distance of 200 mm	Steel	50 mm
IK 10	20,0 J		Protection against impacts with an impact energy of up to 20 joule	Defines a blow with a 5000 g tool from a distance of 400 mm	Steel	50 mm
IK 11	50,0 J		Protection against impacts with an impact energy of up to 50 joule	Defines a blow with a 10000 g tool from a distance of 500 mm	Steel	50 mm

Product overview - Impact and shock resistance

„Protection against mechanical shock“													
Article no.	Image	Description	IK 01	IK 02	IK 03	IK 04	IK 05	IK 06	IK 07	IK 08	IK 09	IK 10	IK 11
MP-F22.50		Impact-test Hammer with the five selectable impact energies 0,20, 0,35, 0,50, 0,70 and 1,00 J		●	●	●	●	●					
MP-F22.20		Impact-test Hammer with the impact energy 2,00 J							●				
MP-F40.28		Pendulum Impact Tester to test the mechanical strength with impact energies from 0,14 to 1,0 J.	●	●	●	●	●	●					
MP-F60.10		Impact element with the impact energy 5,00 J								●			
MP-F60.20		Impact element with the impact energy 10,00 J									●		
MP-F60.30		Impact element with the impact energy 20,00 J										●	
MP-F60.40		Impact element with the impact energy 50,00 J											●