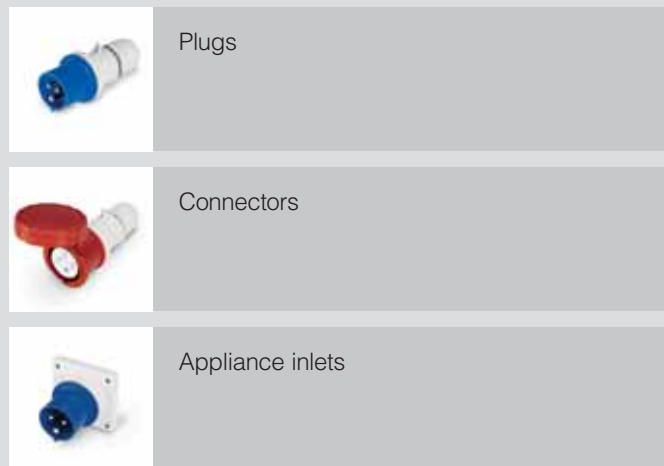


> INDUSTRIAL PLUGS AND SOCKETS



> VERSIONS



Plugs

Connectors

Appliance inlets

> REFERENCE STANDARDS

EN 60309-1
Plugs, socket-outlets and couplers for industrial purposes
Part 1: general requirements

EN 60309-2
Plugs, socket-outlets and couplers for industrial purposes
Part 2: dimensional interchangeability requirements for pin and contact-tube accessories.

> QUALITY MARKS



> TECHNICAL CHARACTERISTICS

Rated current:	16A - 32A - 63A - 125A
Rated voltage:	100÷690V~
Frequency:	c.c - 50÷500Hz
Insulating voltage:	500/690V~
Protection degree:	IP44 - IP66/IP67
Operating temperature according to the reference standard:	-25°C+40°C
Max operating temperature:	60°C
Glow Wire test:	650°C/850°C
Material:	Engineering plastic
IK degree at 20°C:	IK08
Cable inlets:	Cable gland
Halogen free:	Yes
Terminals:	Screw (16A-32A-63A-125A) Insulation perforating (16A)
Safe-in device:	16A

> BEHAVIOUR WITH CHEMICAL AND ATMOSPHERIC AGENTS

Saline solution	Acids		Bases		Solvents				Mineral oil	UV rays
	Concentrated	Diluted	Concentrated	Diluted	Hexane	Benzol	Acetone	Alcohol		
Resistant	Limited Resistance	Resistant	Resistant	Resistant	Not Resistant	Not Resistant	Not Resistant	Limited Resistance	Resistant	Limited Resistance

> WIRING AND INSTALLATION

Wiring capacity of the terminals (mm²)

Rated voltage	Rated current (A)	Plugs, connectors and appliance inlets		Socket outlets	
		Min	Max	Min	Max
Over 50V	16A	1	2,5	1,5	4
	32A	2,5	6	2,5	10
	63A	6	16	6	25
	125A	16	50	25	70

Max. cable size accepted by the cable clamp:

Rated current (A)	Outside Ø mm	
	Min	Max
16A	8	15
32A	11,5	21
63A	7	31
125A	26	48

> APPLICATION EXAMPLES





Lid equipped with special tab to facilitate single-hand opening.



IP66/IP67 socket cover equipped with slots to facilitate and improve closure of the socket.



"Snap-on" device with stainless steel spring to guarantee frequent opening/closing (possibility to inspect the terminals).



External cable stay with tulip clamping having IP66/IP67 cable gland functions (the device is used on both IP44 and IP66/IP67 products).



Insertion of the conductor with insulation into the perforating terminal.



Insulation piercing terminal made in highly elastic phosphor bronze.



Closure of insulation piercing.



Socket/plug module with screw terminals.

> THE "SAFE-IN" SAFETY DEVICE

The "SAFE-IN" safety device assembled on the 16A industrial sockets is the most innovative element of the new OPTIMA Series.

The "SAFE-IN" device works like the protection installed on household sockets, i.e., by means of an appropriate shutter, it closes the input of the socket contact tubes and prevents accidental and voluntary contact of live parts of the socket with slim objects, such as screwdrivers or wires. This protection offers an additional safety guarantee, in addition to that already provided by the spring-loaded cover assembled on the mobile sockets.

> SAFETY LEVEL OF THE OPTIMA SERIES SOCKETS

The OPTIMA Series sockets with the "SAFE-IN" safety device guarantee a higher level of safety in comparison with ordinary industrial sockets, especially in environments where there may be children present or people who have not been trained about electrical dangers (public areas, amusement parks, campgrounds, open markets, etc.).

Dangerous situations, such as the important examples illustrated in the figure to the side, can be resolved thanks to the new OPTIMA Series sockets equipped with the "SAFE-IN" safety device.

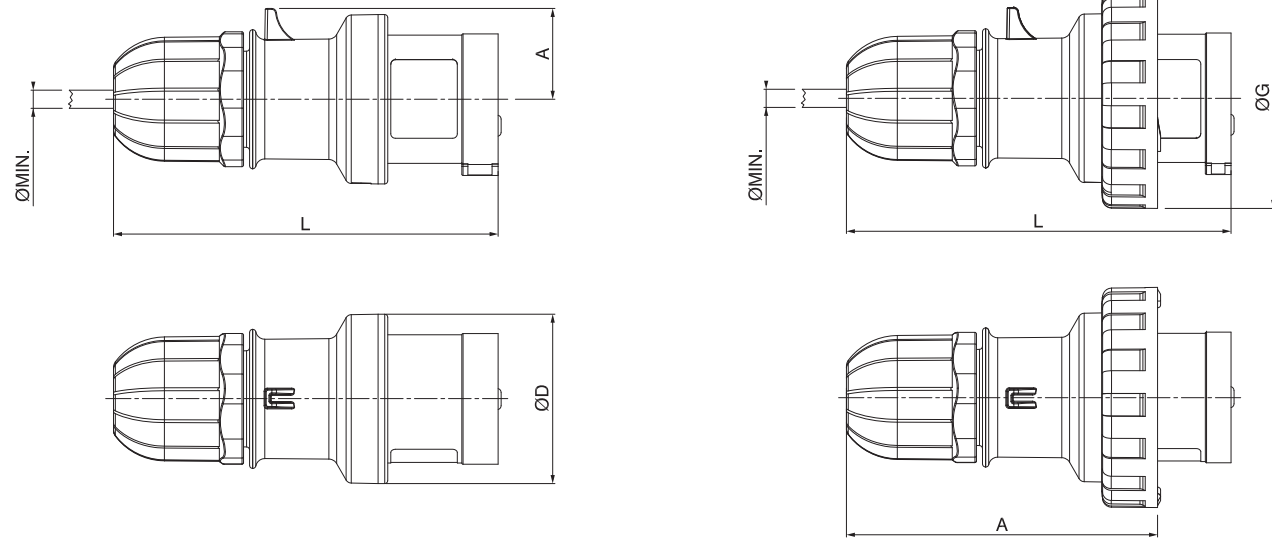
> POTENTIALLY DANGEROUS SITUATIONS



Connector tube protective shutter for greater safety against direct contacts. (The SAFE-IN safety device).

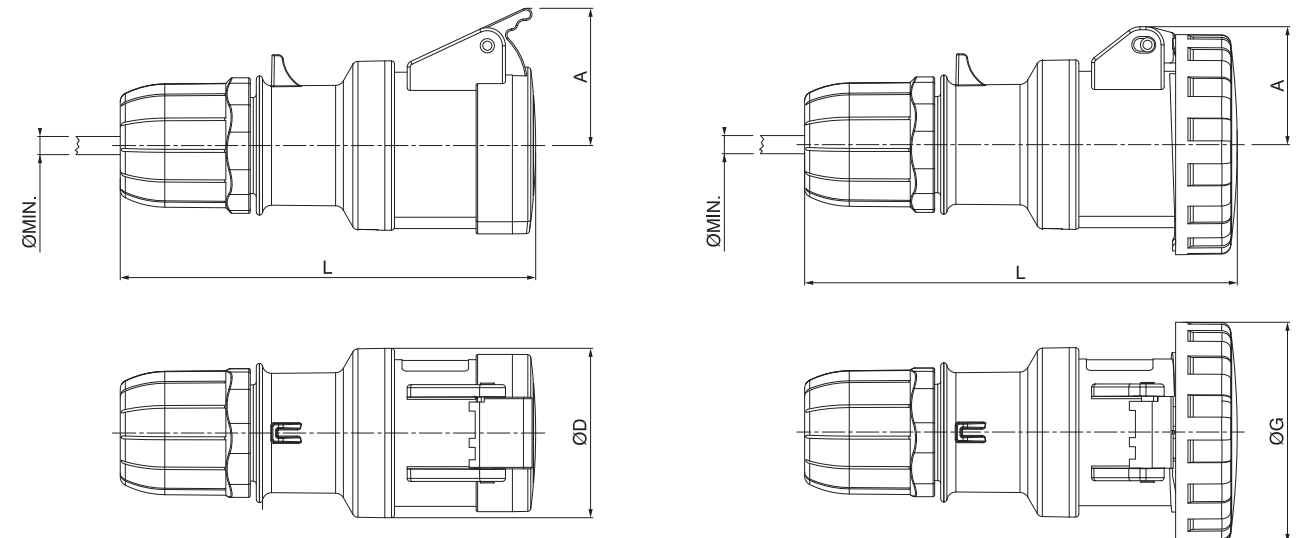
> DIMENSIONS

PLUGS



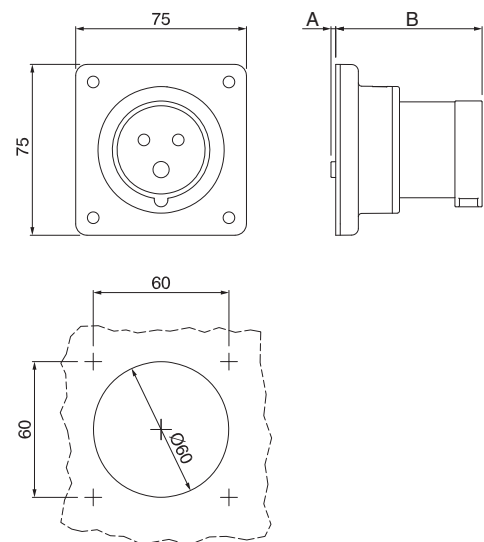
IP44					IP66/IP67						
	A	Ø D	L Min	Ø Min		A	Ø G	L Min	Ø Min		
16A	2P+E	30	56	128	6	16A	2P+E	103	73	128	6
	3P+E	34	60	135	6		3P+E	110	81	135	6
	3P+N+E	38	65	153	9		3P+N+E	129	88	153	9
32A	2P+E	40	65	162	9	32A	2P+E	131	93	162	9
	3P+E	40	65	162	9		3P+E	131	93	162	9
	3P+N+E	45	73	176	13		3P+N+E	145	101	176	13
63A						63A	160	112	220	17	
125A						125A	202	128	272	26	

CONNECTORS



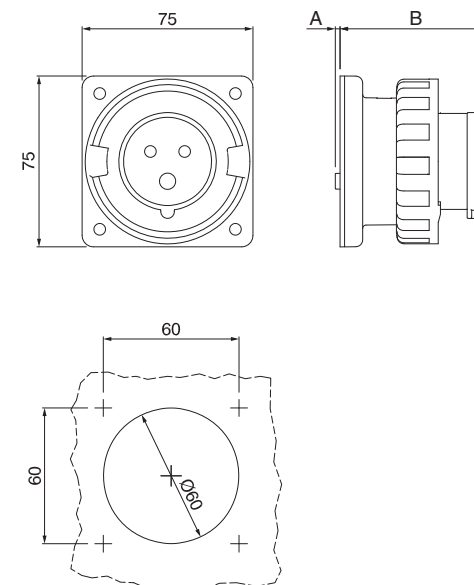
IP44					IP66/IP67						
	A	Ø D	L Min	Ø Min		A	Ø G	L Min	Ø Min		
16A	2P+E	46	56	138	6	16A	2P+E	39	73	141	6
	3P+E	49	60	145	6		3P+E	43	81	148	6
	3P+N+E	54	65	165	9		3P+N+E	51	88	168	9
32A	2P+E	54	65	175	9	32A	2P+E	56	93	178	9
	3P+E	54	65	175	9		3P+E	56	93	178	9
	3P+N+E	59	73	190	13		3P+N+E	52	101	195	13
63A						63A	57,5	112	230	17	
125A						125A	64,25	128	288	26	

APPLIANCE INLETS - IP44



IP44			A	B
16A	2P+E		2	65
	3P+E		2	65
	3P+N+E		2	65
32A	2P+E		19	73
	3P+E		19	73
	3P+N+E		19	73

APPLIANCE INLETS - IP66/IP67



IP66/IP67			A	B
16A	2P+E		2	65
	3P+E		2	65
	3P+N+E		2	65
32A	2P+E		19	73
	3P+E		19	73
	3P+N+E		19	73

(Dimensions in mm)

(Dimensions in mm)