

IEC 309 HP TECHNICAL CHARACTERISTICS

New range of plugs and socket-outlets meeting the dimensional, construction/performance and safety requisites defined by the international Standards IEC 60309-1 and IEC 60309-2, subsequently assimilated at European level as EN 60309-1 and EN 60309-2.

The new IEC 309 HP range expands GEWISS's assortment of 16A and 32A straight plugs and straight connectors and 10° flush-mounting socket-outlets, with IP44 and IP66/IP67 degrees of protection, both in the fast and fast wiring versions. Socket-outlets and straight mobile plugs with IP68/IP69 degrees of protection too.

TECHNICAL CHARACTERISTICS						
Rated current (In)	Rated frequency	Rated voltage (Un)	Permissible overload	No. of operations carried out	Breaking capacity at 1.1 Un	Insulation resistance
16 A	50/60 Hz 100 - 300 Hz	> 50 to 690 V transformer	22 A	> 5000	20 A	> 10 MΩ
32 A	> 300 - 500 Hz direct current		42 A	> 2000	40 A	

MECHANICAL AND PHYSICAL CHARACTERISTICS				
Operating temperature	Degree of protection (IP)	Impact resistance	Heat resistance	Resistance to abnormal heat and fire
			Thermo-pressure with ball	Glow wire test
-25°C ; +40°C	Mobile versions*: IP44 and IP66/IP67/IP68/IP69	IK08	125°C (active parts) 80°C (passive parts)	850°C (active parts) 650°C (passive parts)
	Flush-mounting versions: IP44 and IP66/IP67			

(*) Although the international product standard IEC60 309 does not currently require it, these products have been voluntarily subjected to tests with degrees of protection higher than IP66/IP67.

IP68: 2 bar/6 h according to EN 60529 standard after aging test in conformity with EN 60309 standards.

IP69: according to IEC 60529 standard after aging test in conformity with EN 60309 standards.

HIGH PERFORMANCE MATERIALS

The technopolymers and thickness used for the parts made of insulating material guarantee a high degree of mechanical and chemical agent resistance, suitable for every type of use. All the products are made from halogen-free materials in accordance with EN50267-2-2, to ensure the utmost safety for people and equipment. The holes and plug pins of the new HP socket-outlets and plugs are surface-treated as standard with nickel-plating to ensure full protection against aggressive agents and corrosion. The SAFE-LOCK system is made with reinforced technopolymer to guarantee optimum abrasion resistance and a long lifespan, eliminating the problem of corrosion on metal closure systems.

The springs of the closure covers are in stainless steel.

BEHAVIOUR WITH CHEMICAL AND ATMOSPHERIC AGENTS										
Saline solution	Acids		Bases		Solvents				Mineral oil	UV rays
	Concentrated	Diluted	Concentrated	Diluted	Hexane	Benzol	Acetone	Alcohol		
Resistant	Not resistant	Limited resistance	Limited resistance	Resistant	Resistant	Resistant	Resistant	Resistant	Resistant	Resistant

IEC 309 HP TECHNICAL CHARACTERISTICS

Rated voltage (Un)	Frequency	Poles	Reference h.	IDENTIFICATION COLOUR	FIELDS OF USE
100 - 130V	50/60Hz	2P + $\frac{1}{2}$	4	   Yellow	Standard uses
		3P + $\frac{1}{2}$	4		
		3P + N + $\frac{1}{2}$	4		
200 - 250V	50/60Hz	2P + $\frac{1}{2}$	6	   Blue	
		3P + $\frac{1}{2}$	9		
		3P + N + $\frac{1}{2}$	9		
380 - 415V	50/60Hz	2P + $\frac{1}{2}$	9	   Red	
		3P + $\frac{1}{2}$	6		
346 - 415V	50/60Hz	3P + N + $\frac{1}{2}$	6		
480 - 500V	50/60Hz	2P + $\frac{1}{2}$	7	   Black	Uses with particular voltages
		3P + $\frac{1}{2}$	7		
		3P + N + $\frac{1}{2}$	7		
600 - 690V	50/60Hz	3P + $\frac{1}{2}$	5	  Black	
		3P + N + $\frac{1}{2}$	5		
> 50V	100 - 300 Hz	2P + $\frac{1}{2}$	10	   Green	Use with high frequencies
		3P + $\frac{1}{2}$	10		
		3P + N + $\frac{1}{2}$	10		
> 50V	> 300 - 500 Hz	2P + $\frac{1}{2}$	2	   Green	
		3P + $\frac{1}{2}$	2		
		3P + N + $\frac{1}{2}$	2		
440 - 460V	60Hz	3P + $\frac{1}{2}$	11	  Red	Marine, port and naval installations
		3P + N + $\frac{1}{2}$	11		
380V / 440V	50Hz/60Hz	3P + $\frac{1}{2}$	3	  Red	Refrigerated containers
		3P + N + $\frac{1}{2}$	3		
transf.	50/60Hz	2P + $\frac{1}{2}$	12	  Grey	Isolation transformers
		3P + $\frac{1}{2}$	12		
> 50 - 250V	D.C.	2P + $\frac{1}{2}$	3	 Grey	Use in direct current
> 250V	D.C.	2P + $\frac{1}{2}$	8	 Grey	

WIRING INFORMATION

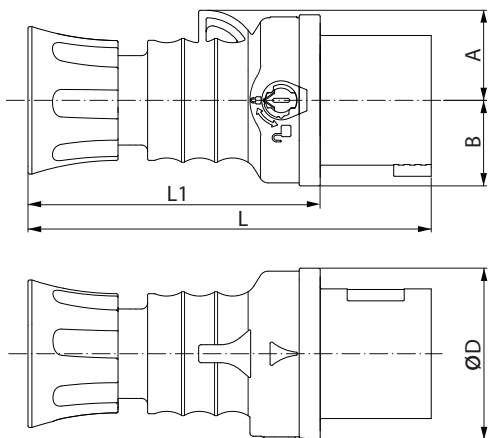
TIGHTENING CAPACITY OF THE TERMINALS * (mm ²)				
Rated current (In)	Flexible cables		Rigid or stranded cables	
	MIN.	MAX.	MIN.	MAX.
16 A	1	2.5	1.5	4
32 A	2.5	6	2.5	10

(*) NB: valid for socket-outlets and plugs with both spring terminals and screw terminals.

TIGHTENING CAPACITY OF THE CABLE FASTENER CLAMP * (mm)			
Rated current (In)	No. poles	MIN.	MAX.
16 A	2P + $\frac{1}{2}$	7.5	13.8
	3P + $\frac{1}{2}$	7.5	13.8
	3P + N + $\frac{1}{2}$	9.2	19.9
32 A	2P + $\frac{1}{2}$	9.2	19.9
	3P + $\frac{1}{2}$	9.2	19.9
	3P + N + $\frac{1}{2}$	9.2	19.9

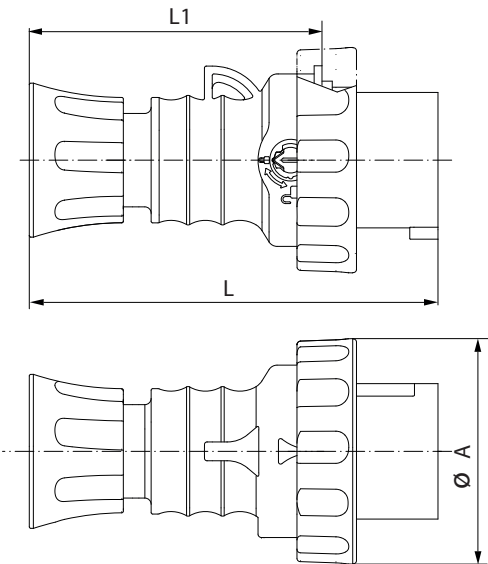
(*) NB: these values refer to flexible, rigid and stranded cables.

STRAIGHT PLUGS - IP44



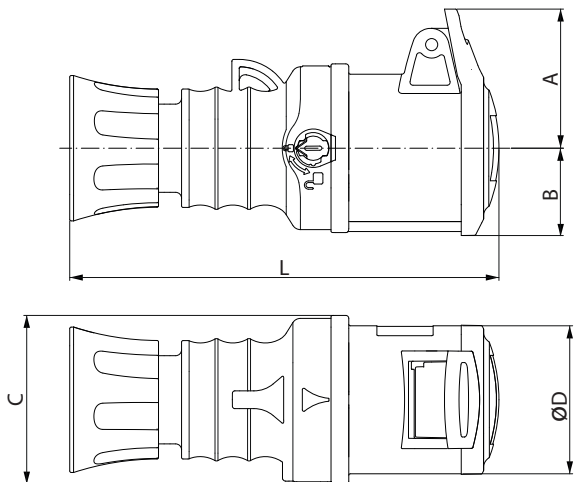
Type		A	B	D	L	L1
16A	2P + $\frac{1}{2}$	30	28.5	57	134	97
	3P + $\frac{1}{2}$	34	32	62	134	97
	3P+N+ $\frac{1}{2}$	38	36	68	153	115
32A	2P + $\frac{1}{2}$	40	41.5	71	162	115
	3P + $\frac{1}{2}$	40	41.5	71	162	115
	3P+N+ $\frac{1}{2}$	45	42	75	176	130

STRAIGHT PLUGS - IP66 / IP67 / IP68 / IP69



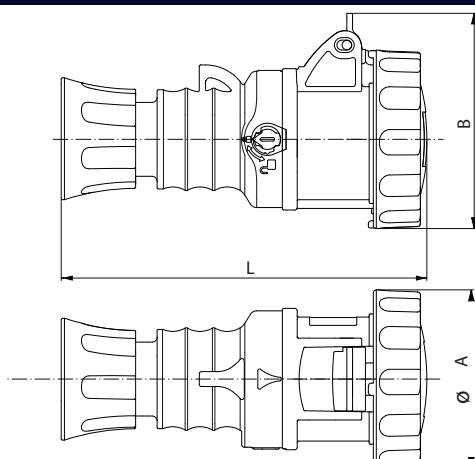
Type		A	L	L1
16A	2P + $\frac{1}{2}$	72	130	96
	3P + $\frac{1}{2}$	81	130.5	96.5
	3P+N+ $\frac{1}{2}$	88	150	116
32A	2P + $\frac{1}{2}$	93	158	114
	3P + $\frac{1}{2}$	93	158	114
	3P+N+ $\frac{1}{2}$	101	170	127

STRAIGHT CONNECTORS - IP44



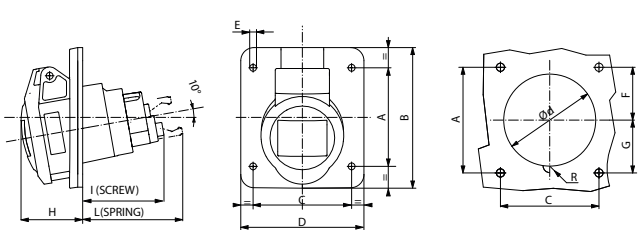
Type		A	B	C	D	L
16A	2P + $\frac{1}{2}$	47	29.5	57	50	148
	3P + $\frac{1}{2}$	50	32	62	55.5	148
	3P+N+ $\frac{1}{2}$	56.5	35.5	68	62.5	165
32A	2P + $\frac{1}{2}$	59	39	71	64.5	176
	3P + $\frac{1}{2}$	59	39	71	64.5	176
	3P+N+ $\frac{1}{2}$	62	42	75	70.5	190

STRAIGHT CONNECTORS - IP66 / IP67 / IP68 / IP69



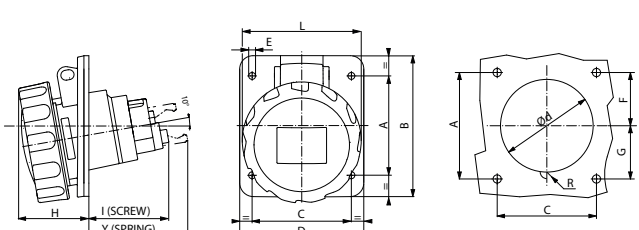
Type		A	B	L
16A	2P + $\frac{1}{2}$	72	87	148
	3P + $\frac{1}{2}$	81	95	148
	3P+N+ $\frac{1}{2}$	88	102.5	167
32A	2P + $\frac{1}{2}$	93	108	178
	3P + $\frac{1}{2}$	93	108	178
	3P+N+ $\frac{1}{2}$	101	116	189

10° FLUSH-MOUNTING SOCKET-OUTLETS - IP44



Type		A	B	C	D	E	F	G	H	I	L	ød	R
16A	2P + $\frac{1}{2}$	60	85	60	75	4.2	38	22	37.5	49.5	61	56	-
	3P + $\frac{1}{2}$	60	85	60	75	4.2	35	25	37	51.5	61	62	-
	3P+N+ $\frac{1}{2}$	60	85	60	75	4.2	29	31	39.5	49	60	65	8
32A	2P + $\frac{1}{2}$	70	95	60	80	4.2	32	38	46.5	60	68	68	8
	3P + $\frac{1}{2}$	70	95	60	80	4.2	32	38	46.5	60	68	68	8
	3P+N+ $\frac{1}{2}$	70	95	60	80	4.2	29.5	40.5	48.5	60	68	74	8

10° FLUSH-MOUNTING SOCKET-OUTLETS - IP66 / IP67



Type		A	B	C	D	E	F	G	H	I	L	Y	ød	R
16A	2P + $\frac{1}{2}$	60	85	60	75	4.2	38	22	42.5	48	72	60	56	-
	3P + $\frac{1}{2}$	60	85	60	75	4.2	35	25	43	50.5	81	60	62	-
	3P+N+ $\frac{1}{2}$	60	85	60	75	4.2	29	31	44.5	48.5	88	60	66	5
32A	2P + $\frac{1}{2}$	70	95	60	80	4.2	32	38	51	60.5	93	68.5	68	7
	3P + $\frac{1}{2}$	70	95	60	80	4.2	32	38	51	60.5	93	68.5	68	7
	3P+N+ $\frac{1}{2}$	70	95	60	80	4.2	29.5	40.5	53	60.5	101	68.5	74	7

60 / 61 / 62 / 63 / 64 - PLUGS, SOCKET-OUTLETS AND MULTIPLIERS IEC 309

A range of removable mobile and fixed plugs and socket-outlets for industrial use, complying with the dimensional and performance standards unified at international level (IEC 60309) and assimilated by the European Standards (EN 60309) and Italian Standards (CEI 23-12). Equipped with an extra pilot contact (CP) for creating an electric interlock on socket-outlet and plug versions with a rated current of 63 and 125A. They supplement the range of 90° fixed plugs and 10° and 90° socket-outlets. Elastic sockets and plugs obtained from solid brass bar, type Pt. CuZn40Pb2 (Cu 58%, Zn 40%, Pb 2%); anti-loosening terminals with unlosable screws, and built-in cable clamp with anti-abrasion cable gland.

The range of multipliers, adapters and shunts should be considered an integral part of the system, since they are products suitable only for temporary, mobile installations and connections, and not for permanent applications. Furthermore, the range cannot be used in areas with a fire hazard.

TECHNICAL DATA AND COMPLIANCE WITH STANDARDS

Reference Standards	Rated voltage Un (V)	Rated current In (A)	Permissible overload (A)	Total number of operations	Breaking capacity at 1.1 Un (A)	Impact resistance at ambient temperature (IK code)	Insulation resistance (MΩ)	Resistance to abnormal heat and fire	
								Thermo-pressure with ball (°C)	Glow wire test (°C)
CEI 23-12 / 1	from 24 to 500	16	22	> 5000	20	IK 08	> 10	125 (active parts) 80 (passive parts)	850 (active parts) 650 (passive parts)
CEI 23-12 / 2		32	42	> 2000	40				
EN 60309-1 / 2		63	–	> 2000	79				
IEC 60309-1 / 2		125	–	> 500	156				

BEHAVIOUR WITH CHEMICAL AND ATMOSPHERIC AGENTS

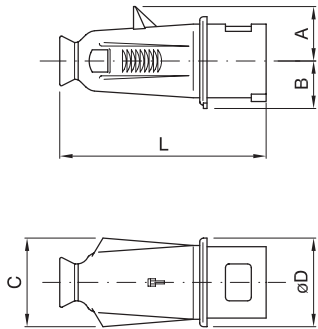
Saline solution	Acids		Bases		Solvents				Mineral oil	UV rays
	Concentrated	Diluted	Concentrated	Diluted	Hexane	Benzol	Acetone	Alcohol		
Resistant	Not resistant	Limited resistance	Limited resistance	Resistant	Resistant	Resistant	Resistant	Resistant	Resistant	Resistant

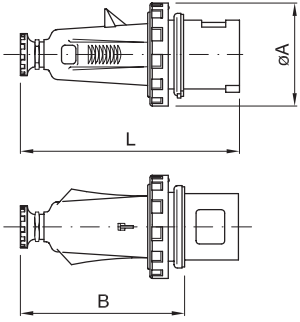
TERMINAL CLAMPING CAPACITY (mm²)					
Rated current of the socket-outlet or plug	Flexible cables		Rigid or stranded cables		Possibility of clamping several wires in the same terminal
	min	max	min	max	
16A	1	2.5	1.5	4	Up to 2 flexible cables with total section not exceeding the clamping capacity
32A	2.5	6	2.5	10	
63A	6	16	6	25	
125A	16	50	25	70	

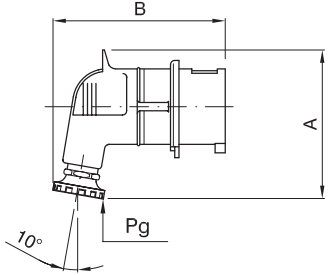
APPLICATION FIELDS				
Sector	Environment	Typical system	Rated currents of the socket-outlets (A)	Recommended installation
Commercial	Data processing centres	Connection of "big" processors with $I_{\Delta n} > 3.5$ mA	16	Flush-mounting IP44
	Public entertainment premises	Stage light connection	16 - 32	
Industrial	Maintenance departments	Connection of movable and portable user	16 - 32	Surface-mounting IP67 On Q-DIN IP65
	Production departments	Connection of tool and process machines	63 - 125	Surface-mounting IP67
	Chemical industry			
Building industry	Construction and demolition sites	Distribution boards	16 - 32 - 63	On Q-BOX ACS
		Socket-outlet boards	16 - 32	On Q-DIN ACS
Agriculture	Greenhouses	Movable sprayers and pumps	16	Surface-mounting IP67 On Q-DIN IP55
	Stables	Connection of fixed and movable machinery	16 - 32 - 63	
Tourism	Campsites	Power outlet in service areas	16 - 32	On terminal 68 Q-MC range
	Tourist harbours		16 - 125	

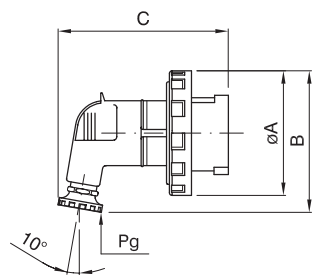
EXTERNAL CABLE SECTION					
Rated current In (A)	No. poles	Diameters allowed by Standard IEC 309		Diameters allowed by GEWISS IEC 309 range	
		Min. (mm)	Max. (mm)	Min. (mm)	Max. (mm)
16	2P+ $\frac{1}{2}$	7,5	12,6	7,5	13,2
	3P+ $\frac{1}{2}$	8,2	13,8	8,2	14,3
	3P+N+ $\frac{1}{2}$	9,2	15,2	9,2	15,6
32	2P+ $\frac{1}{2}$	11,0	16,1	11,0	19,6
	3P+ $\frac{1}{2}$	12,3	17,9	12,3	19,6
	3P+N+ $\frac{1}{2}$	13,3	19,9	13,3	21,6
63	2P+ $\frac{1}{2}$	16,1	24,7	16,1	37,0
	3P+ $\frac{1}{2}$	17,9	27,0	17,9	37,0
	3P+N+ $\frac{1}{2}$	19,9	29,9	19,9	37,0
125	3P+ $\frac{1}{2}$	27,0	42,6	27,0	49,0
	3P+N+ $\frac{1}{2}$	29,9	in study phase	29,9	49,0

DIMENSION TABLES

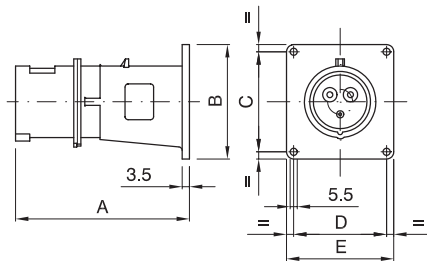
PROTECTED STRAIGHT MOBILE PLUGS - IP44						
						
	TYPE	A	B	C	D	L
16 A	2P + $\frac{1}{2}$	30	28,5	56	51	125
	3P + $\frac{1}{2}$	34	32	60	56	125
	3P + N + $\frac{1}{2}$	38	36	66	63	137
32 A	2P + $\frac{1}{2}$	40	38,5	66	65	157
	3P + $\frac{1}{2}$	40	38,5	66	65	157
	3P + N + $\frac{1}{2}$	45	42	71	71	157

WATERTIGHT STRAIGHT MOBILE PLUGS - IP67						
						
	TYPE	A	B	L	Pg	
16 A	2P + $\frac{1}{2}$	73	105	138	16	
	3P + $\frac{1}{2}$	81	113	147	16	
	3P + N + $\frac{1}{2}$	89	125	158	16	
32 A	2P + $\frac{1}{2}$	95	135	177	21	
	3P + $\frac{1}{2}$	95	135	177	21	
	3P + N + $\frac{1}{2}$	102	135	177	21	
63 A	2P + $\frac{1}{2}$	113	167	228	36	
	3P + $\frac{1}{2}$	113	167	228	36	
	3P + N + $\frac{1}{2}$	113	167	228	36	
125 A	3P + $\frac{1}{2}$	130	230	300	48	
	3P + N + $\frac{1}{2}$	130	230	300	48	

PROTECTED 90° MOBILE PLUGS - IP44					
					
	TYPE	A	B	Pg	
16 A	2P + $\frac{1}{2}$	88	105	16	
	3P + $\frac{1}{2}$	94	108	16	
	3P + N + $\frac{1}{2}$	101	119	16	
32 A	2P + $\frac{1}{2}$	113	129	21	
	3P + $\frac{1}{2}$	113	129	21	
	3P + N + $\frac{1}{2}$	121	140	21	

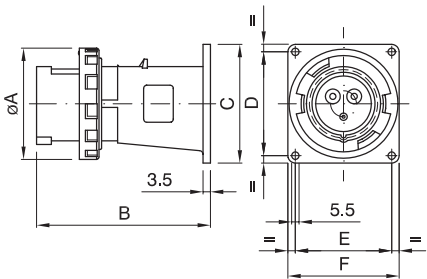
WATERTIGHT 90° MOBILE PLUGS - IP67					
					
	TYPE	A	B	C	Pg
16 A	2P + $\frac{1}{2}$	73	95	105	16
	3P + $\frac{1}{2}$	80	100	108	16
	3P + N + $\frac{1}{2}$	88	107	119	16
32 A	2P + $\frac{1}{2}$	95	121	129	21
	3P + $\frac{1}{2}$	95	121	129	21
	3P + N + $\frac{1}{2}$	102	127	140	21

FLUSH-MOUNTING PROTECTED FIXED PLUGS - IP44



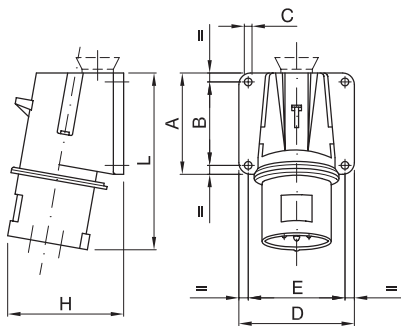
	TYPE	A	B	C	D	E
16 A	2P + $\pm$	116	85	60	60	75
	3P + $\pm$	121	85	60	60	75
	3P + N + $\pm$	131	85	60	60	75
32 A	2P + $\pm$	140	95	70	60	80
	3P + $\pm$	140	95	70	60	80
	3P + N + $\pm$	152	95	70	60	80

FLUSH-MOUNTING WATERTIGHT FIXED PLUGS - IP67



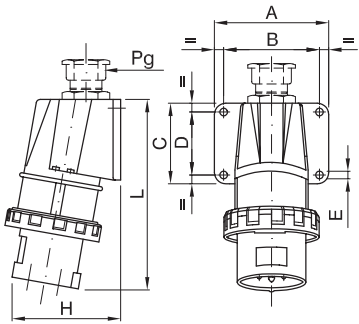
	TYPE	A	B	C	D	E	F
16 A	2P + $\pm$	73	116	85	60	60	75
	3P + $\pm$	81	121	85	60	60	75
	3P + N + $\pm$	89	131	85	60	60	75
32 A	2P + $\pm$	95	140	95	70	60	80
	3P + $\pm$	95	140	95	70	60	80
	3P + N + $\pm$	102	152	95	70	60	80

SURFACE-MOUNTING PROTECTED 90° FIXED PLUGS - IP44



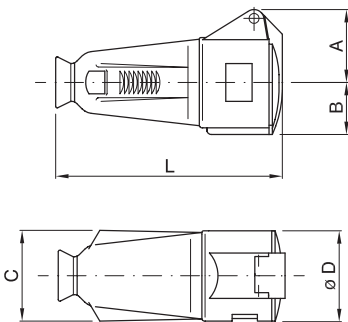
	TYPE	A	B	C	D	E	H	L
16 A	2P + $\pm$	60	47	6,5	75	62	78	106
	3P + $\pm$	65	52	6,5	80	67	86	110
	3P + N + $\pm$	75	62	6,5	85	72	90	122
32 A	2P + $\pm$	80	67	6,5	90	77	93	135
	3P + $\pm$	80	67	6,5	90	77	93	135
	3P + N + $\pm$	80	67	6,5	90	77	103	135

SURFACE-MOUNTING WATERTIGHT 90° FIXED PLUGS - IP67



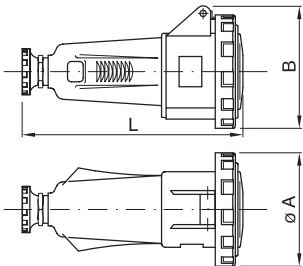
	TYPE	A	B	C	D	E	H	L	Pg
16 A	2P + $\pm$	75	62	60	47	6,5	83	115	21
	3P + $\pm$	82	67	65	52	6,5	98	120	21
	3P + N + $\pm$	90	72	75	62	6,5	105	130	21
32 A	2P + $\pm$	95	77	80	67	6,5	115	145	21
	3P + $\pm$	95	77	80	67	6,5	115	145	21
	3P + N + $\pm$	105	77	80	67	6,5	122	145	21
63 A	2P + $\pm$	115	95	90	70	6,5	135	200	36
	3P + $\pm$	115	95	90	70	6,5	135	200	36
	3P + N + $\pm$	115	95	90	70	6,5	135	200	36
125 A	3P + $\pm$	140	120	140	120	6,5	150	280	48
	3P + N + $\pm$	140	120	140	120	6,5	150	280	48

PROTECTED STRAIGHT MOBILE SOCKET-OUTLETS -IP44



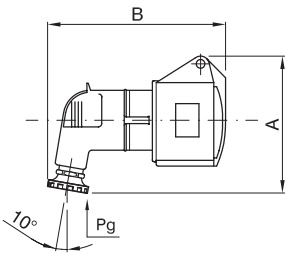
	TYPE	A	B	C	D	L
16 A	2P + $\frac{1}{16}$	40,5	28,5	56	51	132
	3P + $\frac{1}{16}$	43	32	60	56	132
	3P + N + $\frac{1}{16}$	47	36	66	63	144
32 A	2P + $\frac{1}{16}$	48	38,5	66	65	164
	3P + $\frac{1}{16}$	48	38,5	66	65	164
	3P + N + $\frac{1}{16}$	51	42	71	71	164

WATERTIGHT STRAIGHT MOBILE SOCKET-OUTLETS -IP67



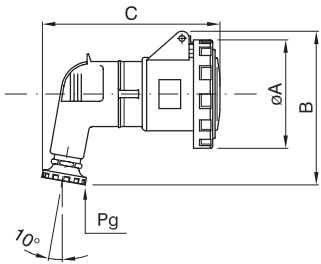
	TYPE	A	B	L	Pg
16 A	2P + $\frac{1}{16}$	73	82	157	16
	3P + $\frac{1}{16}$	81	90	163	16
	3P + N + $\frac{1}{16}$	89	98	175	16
32 A	2P + $\frac{1}{16}$	95	103	195	21
	3P + $\frac{1}{16}$	95	103	195	21
	3P + N + $\frac{1}{16}$	102	110	195	21
63 A	2P + $\frac{1}{16}$	113	118	248	36
	3P + $\frac{1}{16}$	113	118	248	36
	3P + N + $\frac{1}{16}$	113	118	248	36
125 A	3P + $\frac{1}{16}$	130	130	320	48
	3P + N + $\frac{1}{16}$	130	130	320	48

PROTECTED 90° MOBILE SOCKET-OUTLETS -IP44



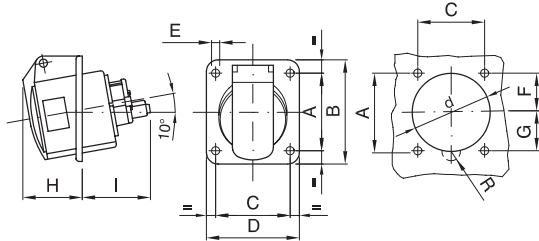
	TYPE	A	B	Pg
16 A	2P + $\frac{1}{16}$	99	113	16
	3P + $\frac{1}{16}$	103	116	16
	3P + N + $\frac{1}{16}$	110	127	16
32 A	2P + $\frac{1}{16}$	121	138	21
	3P + $\frac{1}{16}$	121	138	21
	3P + N + $\frac{1}{16}$	127	149	21

WATERTIGHT 90° MOBILE SOCKET-OUTLETS -IP67



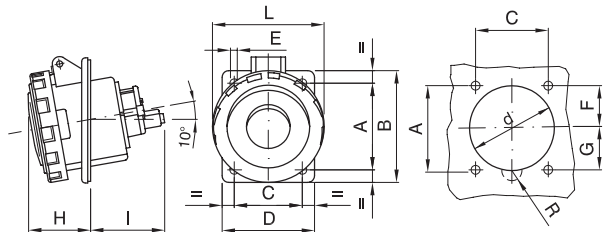
	TYPE	A	B	C	Pg
16 A	2P + $\frac{1}{16}$	73	102	123	16
	3P + $\frac{1}{16}$	80	108	126	16
	3P + N + $\frac{1}{16}$	88	115	137	16
32 A	2P + $\frac{1}{16}$	95	128	148	21
	3P + $\frac{1}{16}$	95	128	148	21
	3P + N + $\frac{1}{16}$	102	135	159	21

FLUSH-MOUNTING PROTECTED 10° FIXED SOCKET-OUTLETS -IP44



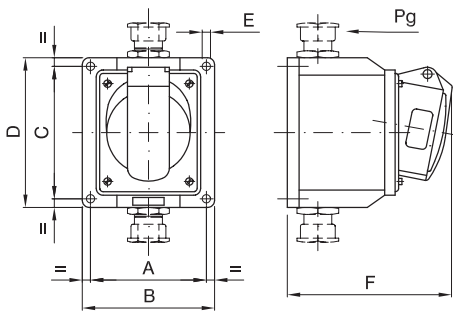
	TYPE	A	B	C	D	E	F	G	H	I	Ø d	R
16 A	2P + $\frac{1}{2}$											
	(flangia piccola)	47	62	47	62	5,5	23,5	23,5	32	48	56	-
	2P + $\frac{1}{2}$	60	85	60	75	5,5	38	22	34	50	56	-
	3P + $\frac{1}{2}$	60	85	60	75	5,5	35	25	33	50	62	-
	3P + N + $\frac{1}{2}$	60	85	60	75	5,5	29	31	35	50	65	8
32 A	2P + $\frac{1}{2}$	70	95	60	80	5,5	32	38	43	65	68	8
	3P + $\frac{1}{2}$	70	95	60	80	5,5	32	38	43	65	68	8
	3P + N + $\frac{1}{2}$	70	95	60	80	5,5	29,5	40,5	43	65	74	8

FLUSH-MOUNTING WATERTIGHT 10° FIXED SOCKET-OUTLETS -IP67



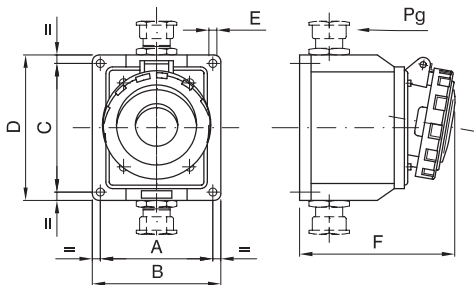
	TYPE	A	B	C	D	E	F	G	H	I	L	R	d
16 A	2P + $\frac{1}{2}$	60	85	60	75	5,5	38	22	40	48	73	-	56
	3P + $\frac{1}{2}$	60	85	60	75	5,5	35	25	42	48	81	-	62
	3P + N + $\frac{1}{2}$	60	85	60	75	5,5	29	31	42	48	89	5	66
32 A	2P + $\frac{1}{2}$	70	95	60	80	5,5	32	38	47	63	95	7	68
	3P + $\frac{1}{2}$	70	95	60	80	5,5	32	38	47	63	95	7	68
	3P + N + $\frac{1}{2}$	70	95	60	80	5,5	29,5	40,5	48	63	102	7	74
63 A	2P + $\frac{1}{2}$	85	110	80	100	6	41	44	61	93	113	11	84
	3P + $\frac{1}{2}$	85	110	80	100	6	41	44	61	93	113	11	84
	3P + N + $\frac{1}{2}$	85	110	80	100	6	41	44	61	93	113	11	84
125 A	3P + $\frac{1}{2}$	90	114	90	114	6	43	47	80	130	130	13	95
	3P + N + $\frac{1}{2}$	90	114	90	114	6	43	47	80	130	130	13	95

SURFACE-MOUNTING PROTECTED 10° FIXED SOCKET-OUTLETS -IP44



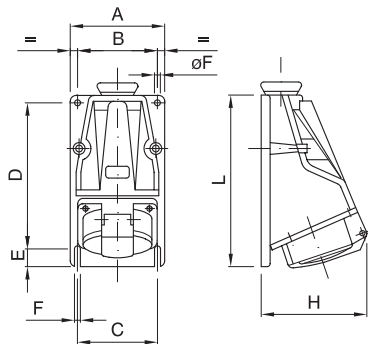
	TYPE	A	B	C	D	E	F	Pg
16 A	2P + $\frac{1}{2}$	75	90	95	110	6,2	105	21
	3P + $\frac{1}{2}$	75	90	95	110	6,2	107	21
	3P + N + $\frac{1}{2}$	75	90	95	110	6,2	109	21
32 A	2P + $\frac{1}{2}$	90	105	105	120	6,2	125	21
	3P + $\frac{1}{2}$	90	105	105	120	6,2	125	21
	3P + N + $\frac{1}{2}$	90	105	105	120	6,2	125	21

SURFACE-MOUNTING WATERTIGHT 10° FIXED SOCKET-OUTLETS -IP67



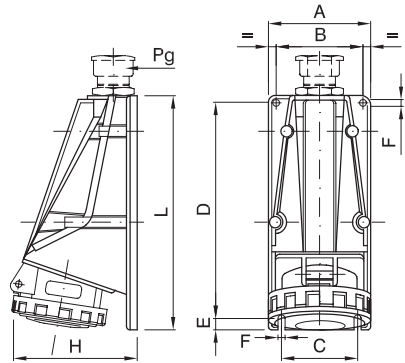
	TYPE	A	B	C	D	E	F	Pg
16 A	2P + $\frac{1}{2}$	75	90	95	110	6,2	113	21
	3P + $\frac{1}{2}$	75	90	95	110	6,2	115	21
	3P + N + $\frac{1}{2}$	75	90	95	110	6,2	115	21
32 A	2P + $\frac{1}{2}$	90	105	105	120	6,2	130	21
	3P + $\frac{1}{2}$	90	105	105	120	6,2	130	21
	3P + N + $\frac{1}{2}$	90	105	105	120	6,2	130	21
63 A	2P + $\frac{1}{2}$	100	115	125	140	6,2	173	36
	3P + $\frac{1}{2}$	100	115	125	140	6,2	173	36
	3P + N + $\frac{1}{2}$	100	115	125	140	6,2	173	36

SURFACE-MOUNTING PROTECTED 90° FIXED SOCKET-OUTLETS -IP44



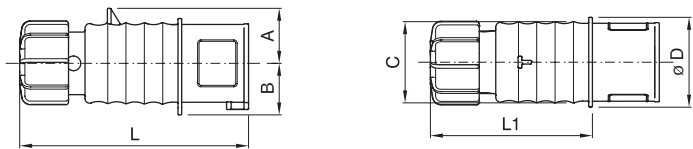
	TYPE	A	B	C	D	E	F	H	L
16 A	2P + $\frac{1}{2}$	90	70	70	138	15	6	93	160
	3P + $\frac{1}{2}$	90	70	70	138	15	6	98	160
	3P + N + $\frac{1}{2}$	90	70	70	138	15	6	103	160
32 A	2P + $\frac{1}{2}$	105	85	85	148	15	6	110	170
	3P + $\frac{1}{2}$	105	85	85	148	15	6	110	170
	3P + N + $\frac{1}{2}$	105	85	85	148	15	6	115	170

SURFACE-MOUNTING WATERTIGHT 90° FIXED SOCKET-OUTLETS -IP67



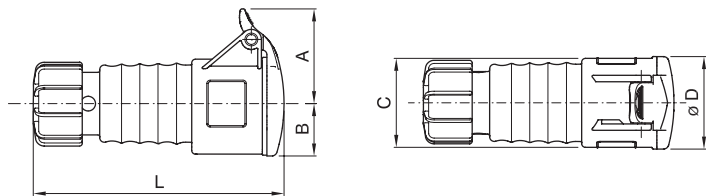
	TYPE	A	B	C	D	E	F	H	L	Pg
16 A	2P + $\frac{1}{2}$	90	70	70	138	15	6	95	160	21
	3P + $\frac{1}{2}$	90	70	70	138	15	6	100	160	21
	3P + N + $\frac{1}{2}$	90	70	70	138	15	6	105	160	21
32 A	2P + $\frac{1}{2}$	105	85	85	148	15	6	113	170	21
	3P + $\frac{1}{2}$	105	85	85	148	15	6	113	170	21
	3P + N + $\frac{1}{2}$	105	85	85	148	15	6	118	170	21
63 A	2P + $\frac{1}{2}$	115	95	80	230	15	6	140	255	36
	3P + $\frac{1}{2}$	115	95	80	230	15	6	140	255	36
	3P + N + $\frac{1}{2}$	115	95	80	230	15	6	140	255	36
125 A	2P + $\frac{1}{2}$	132	110	90	275	15	6	160	300	48
	3P + $\frac{1}{2}$	132	110	90	275	15	6	160	300	48

PROTECTED STRAIGHT MOBILE PLUGS - IP44



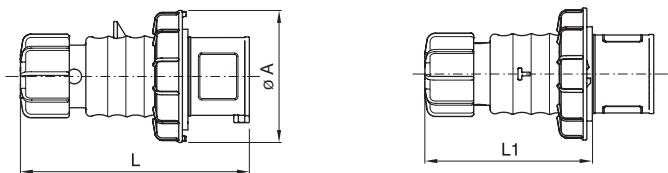
	Type	A	B	C	D	L	L1
16A	2P+ $\frac{1}{2}$	30	28	45	49	125	89
16A	3P+ $\frac{1}{2}$	34	32	80	88	125	89
16A	3P+N+ $\frac{1}{2}$	37	36	55	62	137	100

PROTECTED STRAIGHT MOBILE SOCKET-OUTLETS - IP44



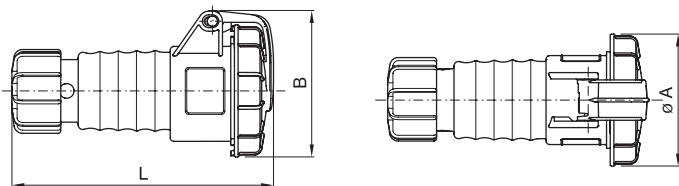
	Type	A	B	C	D	L
16A	2P+ $\frac{1}{2}$	52	29	49	51	137
16A	3P+ $\frac{1}{2}$	54	32	55	57	137
16A	3P+N+ $\frac{1}{2}$	58	36	62	66	149

WATERTIGHT STRAIGHT MOBILE PLUGS - IP67



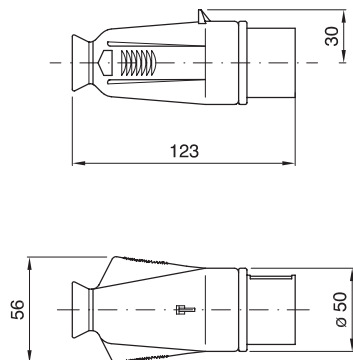
	Type	A	L	L1
16A	2P+ $\frac{1}{2}$	72	125	91
16A	3P+ $\frac{1}{2}$	80	125	91
16A	3P+N+ $\frac{1}{2}$	88	137	103

WATERTIGHT STRAIGHT MOBILE SOCKET-OUTLETS - IP67



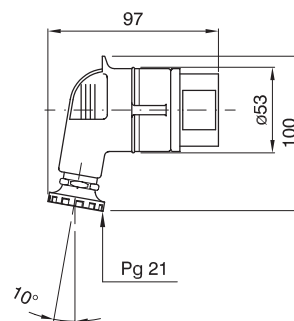
	Type	A	B	L
16A	2P+ $\frac{1}{2}$	72	80	143
16A	3P+ $\frac{1}{2}$	80	88	143
16A	3P+N+ $\frac{1}{2}$	88	96	155

EXTRA LOW VOLTAGE PROTECTED STRAIGHT MOBILE PLUGS - IP44



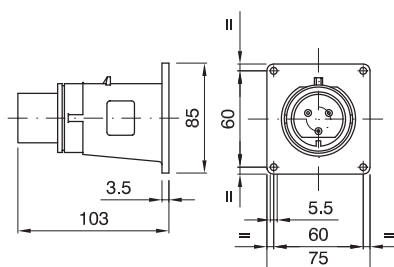
Dimensions valid for all versions

EXTRA LOW VOLTAGE PROTECTED 90° MOBILE PLUGS - IP44



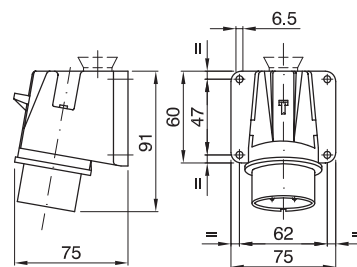
Dimensions valid for all versions

EXTRA LOW VOLTAGE FLUSH-MOUNTING PROTECTED FIXED PLUGS - IP44



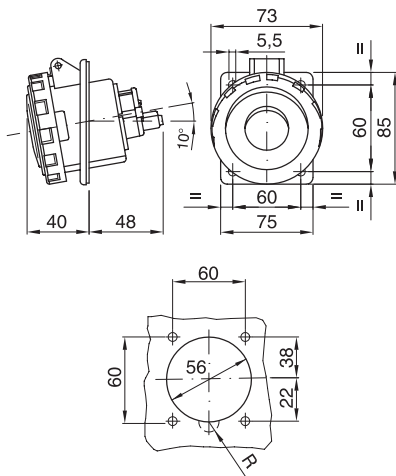
Dimensions valid for all versions

EXTRA LOW VOLTAGE SURFACE-MOUNTING PROTECTED 90° FIXED PLUGS - IP44

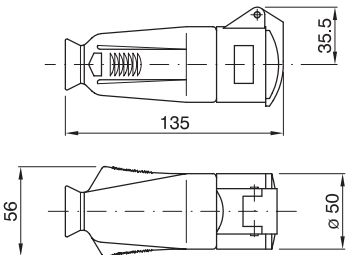


Dimensions valid for all versions

EXTRA LOW VOLTAGE WATERTIGHT -IP67

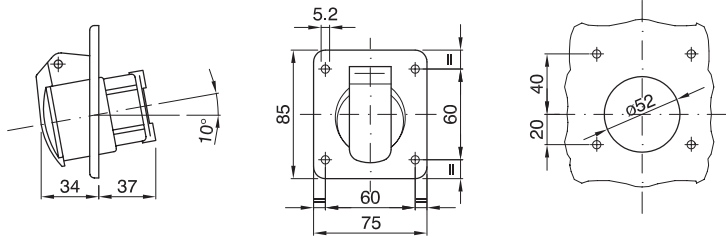


EXTRA LOW VOLTAGE PROTECTED STRAIGHT MOBILE SOCKET-OUTLETS -IP44

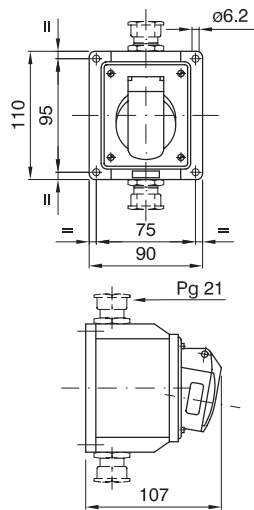


Dimensions valid for all versions

EXTRA LOW VOLTAGE PROTECTED -IP44

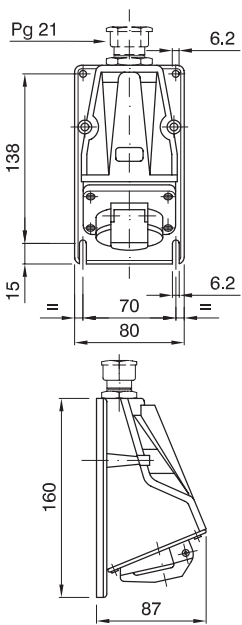


EXTRA LOW VOLTAGE SURFACE-MOUNTING PROTECTED 10° FIXED SOCKET-OUTLETS -IP44



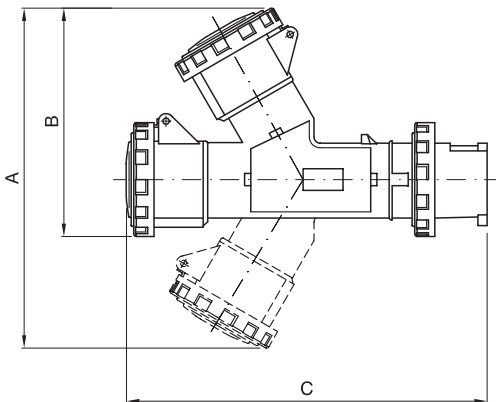
Dimensions valid for all versions

EXTRA LOW VOLTAGE SURFACE-MOUNTING PROTECTED 90° FIXED SOCKET-OUTLETS -IP44



Dimensions valid for all versions

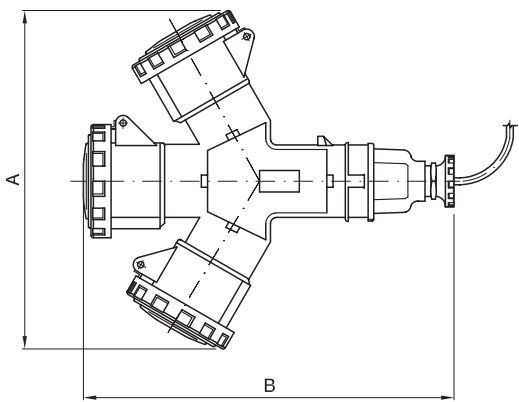
MOBILE WATERTIGHT MULTIPLIERS -IP67



CODE	A	B	C	No. OUT-PUTS
GW 64 008	218	146	235	2
GW 64 010				
GW 64 009		156	246	
GW 64 011				
GW 64 012	218	166	258	3
GW 64 014				
GW 64 022			235	
GW 64 024				
GW 64 023	230			
GW 64 025			246	
GW 64 027				
GW 64 027				

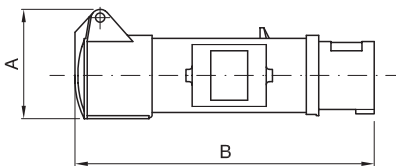
CODE	A	C	No. OUT-PUTS
GW 64 026	242	258	3
GW 64 028			
GW 64 059	245	260	
GW 64 060			
GW 64 062	235	265	
GW 64 063	250	280	
GW 64 064	255	295	
GW 64 061	280	305	
GW 64 065	295	370	
GW 64 068	270	270	

MOBILE MULTIPLIERS WITH WATERTIGHT CABLE AND PLUG -IP67



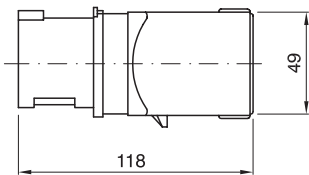
CODE	A	B
GW 64 050	218	254
GW 64 052		
GW 64 051		
GW 64 053	230	262
GW 64 055		
GW 64 054	242	277
GW 64 056		

PROTECTED MOBILE PHASE INVERTER ADAPTERS



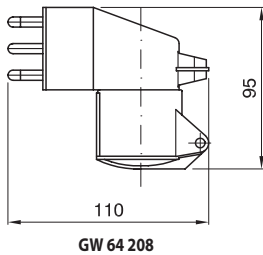
CODE	A	B
GW 64 066	76	196
GW 64 067	83	196

MOBILE SYSTEM ADAPTERS (FROM INDUSTRIAL TO DOMESTIC)

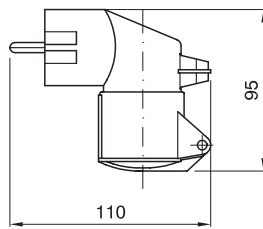


CODE	A
GW 64 203	118
GW 64 204	
GW 64 206	
GW 64 210	
GW 64 211	
GW 64 212	
GW 64 215	123
GW 64 207	
GW 64 216	
GW 64 217	

MOBILE SYSTEM ADAPTERS (FROM DOMESTIC TO INDUSTRIAL)

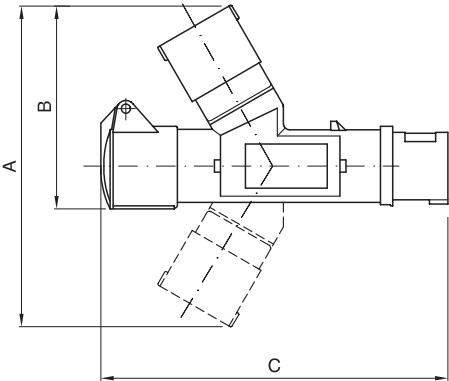


GW 64 208



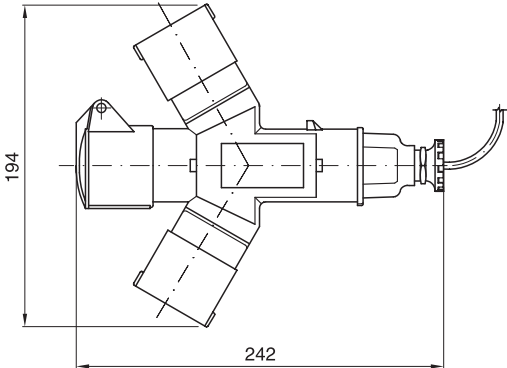
GW 64 209

MOBILE SYSTEM ADAPTER SHUNTS WITH PLUG



CODE	A	B	C	No. OUTPUTS
GW 64 221		125	233	2
GW 64 222				
GW 64 223				
GW 64 226		134	245	
GW 64 227				
GW 64 228				
GW 64 231	194		233	3
GW 64 232				
GW 64 236	202		245	
GW 64 237				

MOBILE SYSTEM ADAPTER SHUNTS WITH CABLE AND PLUG



CODE	A	B
GW 64 263	194	242
GW 64 265		
GW 64 256	202	254