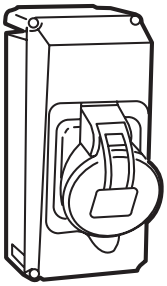
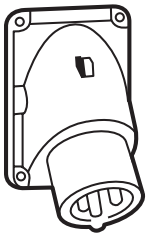
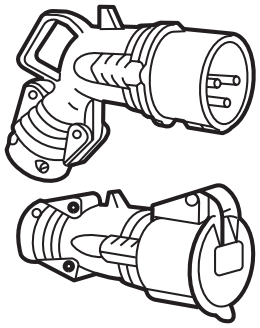
87045 LIMOGES Cedex
Telephone : + 33 5 55 06 87 87 - Fax : + 33 5 55 06 88 88

IP 44 and IP 66/67 plugs, mobile sockets, socket outlets and appliance inlets

Cat. Nos. : 519 XX - 520 XX - 521 XX - 522 XX - 523 XX - 524 XX 525 XX - 527 XX - 528 XX - 529 XX - 535 XX - 536 XX 537 XX - 538 XX - 539 XX - 591 XX

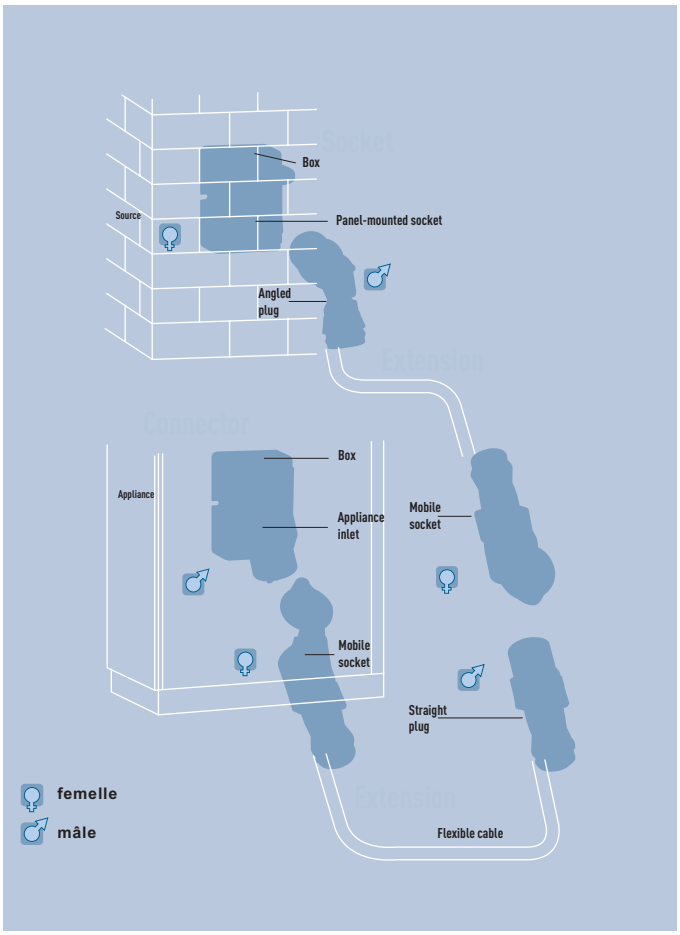




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2. Range . . . . . .2 to 6
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4. Technical characteristics . . . . . .6 to 7
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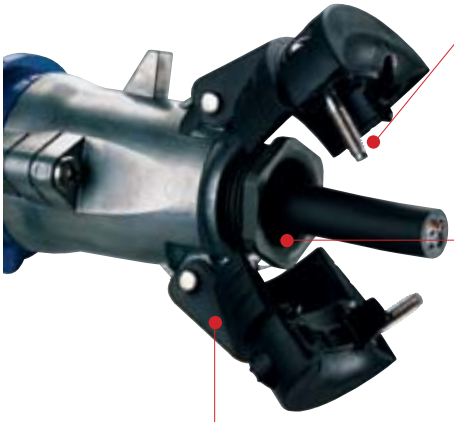
1. GENERAL CHARACTERISTICS

Three materials available : metal, plastic, rubber
16 to 63 A IP 44
Integrated cable gland on the entire range IP66/67 from 63A to 125A.
Captive slotted connecting screws
Captive external screws, stainless steel
Direct through connection range, facilitating the replacement of the old Martin Lunel stock.
Nickel-plated brass pins and contact sleeves.



Plugs and mobile sockets

- Plastic in ELV
- Plastic, metal, rubber in 16/32 IP44
- Plastic, rubber in 63A IP44
- Plastic in 63A/25A IP66/67
- Accept various types of Ø of cable thanks to the cut-out seal ring provided with cable gland.



Secure cable clamping is guaranteed by the powerful, uniform grip provided by two half clamps around the entire outside of the cable.

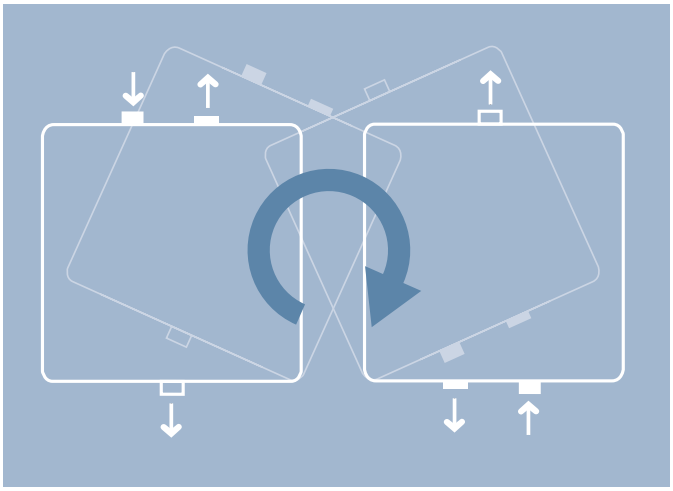
1. GENERAL CHARACTERISTICS *(continued)*

Socket outlet and box

The panel-mounted socket outlet may be installed directly on a wall of a box or enclosure, after the cut-out or drill hole has been made.
It comes with a flat seal whose dimensions allow the weatherproofint to be maintained with the enclosure to which it is fixed.
Surface-mounted socket outlet assembled from panel-mounted socket and box (simple power supply or through wiring).
Some 63A and 125A surface mounting sockets are delivred already fitted.

Box for surface mounting installation
Most of the boxes are reversible, what this allows the wire to enter and /or leave upward or below..

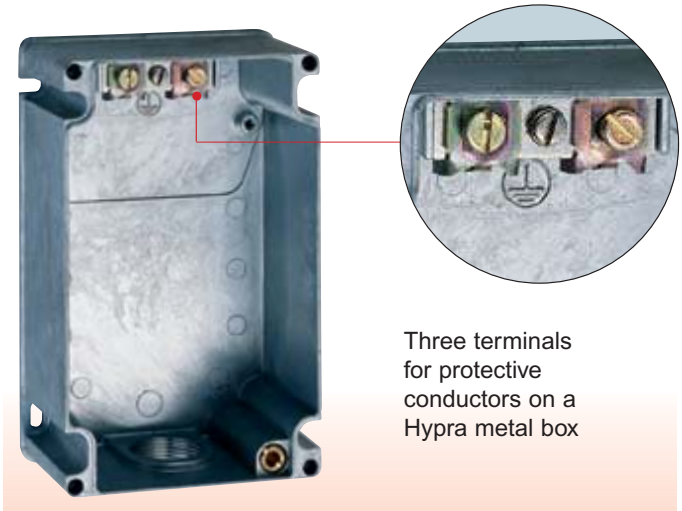
In order to facilitate the installion of these boxes, the fixing centres are engraved on the back of the box.



IMPORTANT :

The metal boxes with through wiring are fitted with three terminals for protective conductors :

- One is for the protective conductor coming from the power supply.
- The second is for a branch connection with a protective conductor intended for another use.
- The third is intended to be connected to the socket outlet (plug supplied).



Three terminals for protective conductors on a Hypra metal box

2. RANGE

• IP44

Panel mounting sockets

				inclined panel mounting sockets		panel mounting sockets (70x70)
				Metal	Plastic	Plastic
ELV	20/25V~	16A	2P		524 01	
			3P		524 02	
		32A	2P		525 01	
			3P		525 02	
	40/50V~	16A	2P		524 03	
			3P		524 04	
		32A	2P		525 03	
			3P		525 04	
	24/50V=	16A	2P		524 05	
		32A	2P		525 05	
LV	100 to 130V~	16A	2P+E		519 20	519 19
		32A	2P+E			519 21
		63A	2P+E		535 22	
	200 to 250V~	16A	2P+E	520 32	520 22	520 18
			3P+E	520 33	520 23	520 19
			3P+E	520 34	520 24	520 20
		32A	2P+E	527 32		527 18
			3P+E	527 33		527 19
			3P+E	527 34		527 20
		63A	2P+E	536 32	536 22	
			3P+E		536 23	
			3P+E		536 24	
	380 to 415V~	16A	2P+E	522 32	522 22	522 18
			3P+E	522 33	522 23	522 19
			3P+E	522 34	522 24	522 20
		32A	2P+E	529 32		529 18
			3P+E	529 33		529 19
			3P+E	529 34		529 20
		63A	3P+E	538 33	538 23	
			3P+E	538 34	538 24	
	480 to 500V~	16A	3P+E		523 20	523 19
		32A	3P+E			523 59

Note : Use a pilot wire in 63 A

2. RANGE

Simple surface mounting sockets

				Metal	Plastic
ELV	20/25V⎓	16A	2P		524 01 + 524 19
			3P		524 02 + 524 19
		32A	2P		525 01 + 524 19
			3P		525 02 + 524 19
	40/50V⎓	16A	2P		524 03 + 524 19
			3P		524 04 + 524 19
		32A	2P		525 03 + 524 19
			3P		525 04 + 524 19
	24/50V=	16A	2P		524 05 + 524 19
		32A	2P		525 05 + 524 19
LV	100 to 130V⎓	16A	2P+E		519 20 + 520 29
		32A	2P+E		519 21 + 529 40
			3P+E		
		63A	2P+E		
	200 to 250V⎓	16A	2P+E	520 32 + 520 39	520 22 + 520 29
			3P+E	520 33 + 522 39	520 23 + 522 29
			3P+N+E	520 34 + 522 39	520 24 + 522 29
		32A	2P+E	527 32 + 529 39	527 18 + 529 40
			3P+E	527 33 + 529 39	527 19 + 529 40
			3P+N+E	527 34 + 529 39	527 20 + 529 40
		63A	2P+E	537 32	537 22
			3P+E		536 33
			3P+N+E		536 34
	380 to 415V⎓	16A	2P+E	522 32 + 520 39	522 22 + 520 29
			3P+E	522 33 + 522 39	522 23 + 522 29
			3P+N+E	522 34 + 522 39	522 24 + 522 29
		32A	2P+E	529 32 + 529 39	529 18 + 529 40
			3P+E	529 33 + 529 39	529 19 + 529 40
			3P+N+E	529 34 + 529 39	529 20 + 529 40
		63A	3P+E	537 33	537 23
			3P+N+E	537 34	537 24
	480 to 500V⎓	16A	3P+E		523 20 + 522 29
		32A	3P+E		523 59 + 529 40

Note : Use a pilot wire in 63A

2. RANGE *(continued)*

Through wiring surface mounting sockets

				Metal	Plastic
LV	100 TO 130V⎓	16A	2P+E		519 20 + 520 89
		32A	2P+E		519 21 + 529 90
		63A	2P+E		535 22 + 538 89
	200 to 250V⎓	16A	2P+E	520 32 + 520 99	520 22 + 520 89
			3P+E	520 33 + 522 99	520 23 + 522 89
			3P+N+E	520 34 + 522 99	520 24 + 522 89
		32A	2P+E	527 32 + 529 99	527 18 + 529 90
			3P+E	527 33 + 529 99	527 19 + 529 90
			3P+N+E	527 34 + 529 99	527 20 + 529 90
		63A	2P+E	536 32 + 538 99	536 22 + 53 889
			3P+E		536 23 + 538 89
			3P+N+E		536 24 + 538 89
	380 to 415V⎓	16A	2P+E	522 32 + 520 39	522 22 + 520 89
			3P+E	522 33 + 522 39	522 23 + 522 89
			3P+N+E	522 34 + 522 39	522 24 + 522 89
		32A	2P+E	529 32 + 529 39	529 18 + 529 90
			3P+E	529 33 + 529 39	529 19 + 529 90
			3P+N+E	529 34 + 529 39	529 20 + 529 90
		63A	3P+E	538 33 + 538 99	538 23 + 538 89
			3P+N+E	538 34 + 538 99	538 24 + 538 89
	480 to 500V⎓	16A	3P+E		523 20 + 522 29
		32A	3P+E		523 59 + 529 40

Note : Use a pilot wire in 63A

2. RANGE *(continued)*

Straight plugs

				Metal	Plastic	Rubber
ELV	20/25V~	16A	2P		524 21	524 41
			3P		524 22	524 42
		32A	2P		525 21	525 41
			3P		525 22	
	40/50V~	16A	2P		524 23	524 43
			3P		524 24	524 44
		32A	2P		525 25	525 43
			3P		525 24	525 44
	24/50V=	16A	2P		524 25	524 45
		32A	2P		525 25	525 45
LV	100 to 130V~	16A	2P+E		519 40	
		32A	2P+E		519 42	
		63A	2P+E		535 42	
	200 to 250V~	16A	2P+E	521 42	520 42	520 52
			3P+E		520 43	520 53
			3P+N+E		520 44	520 54
		32A	2P+E		527 42	527 52
			3P+E		527 43	527 53
			3P+N+E		527 44	527 54
		63A	2P+E		536 42	536 52
			3P+E		536 43	
			3P+N+E		536 44	
	380 to 415V~	16A	2P+E		522 42	522 52
			3P+E	521 43	522 43	522 53
			3P+N+E	521 44	522 44	522 54
		32A	2P+E		529 42	529 52
			3P+E	528 43	529 43	529 53
			3P+N+E	528 44	529 44	529 54
		63A	3P+E		538 43	538 53
			3P+N+E		538 44	538 54
	480 to 500V~	16A	3P+E		523 21	
		32A	3P+E		523 61	

Note : Use a pilot wire in 63A

2. RANGE *(continued)*

Angled plugs

				Metal	Plastic	Rubber
ELV	20/25V~	16A	2P		524 41	
			3P		524 42	
		32A	2P		525 41	
			3P			
	40/50V~	16A	2P		524 43	
			3P		524 44	
		32A	2P		525 43	
			3P		525 44	
	24/50V=	16A	2P		524 45	
		32A	2P		525 45	
LV	200 to 250V~	16A	2P+E	520 72	520 62	521 52
			3P+E		520 63	
			3P+N+E		520 64	
		32A	2P+E	527 72	527 62	
			3P+E		527 63	
			3P+N+E		527 64	
		63A	2P+E	536 72		
			3P+E			
			3P+N+E			
	380 to 415V~	16A	2P+E		522 62	
			3P+E	522 73	522 63	521 53
			3P+N+E	522 74	522 64	521 54
		32A	2P+E		529 62	
			3P+E	529 73	529 63	528 53
			3P+N+E	529 74	529 64	528 54
		63A	3P+E	538 73		538 63
			3P+N+E	538 74		538 64

Note : Use a pilot wire in 63A

2. RANGE *(continued)*

Mobile sockets*

				Plastic	Rubber
ELV	20/25V~	16A	2P	524 61	524 81
			3P	524 62	524 82
		32A	2P	525 61	525 81
			3P	525 62	
	40/50V~	16A	2P		524 83
			3P		524 84
		32A	2P	525 63	525 83
			3P	525 64	525 84
	24/50V=	16A	2P		524 85
		32A	2P		
LV	100 to 130V~	16A	2P+E	519 80	
		32A	2P+E	519 82	
		63A	2P+E	535 82	
	200 to 250V~	16A	2P+E	520 82	520 92
			3P+E	520 83	520 93
			3P+N+E	520 84	520 94
		32A	2P+E	527 82	527 92
			3P+E	527 83	527 93
			3P+N+E	527 84	527 94
		63A	2P+E	536 82	536 92
			3P+E	536 83	
			3P+N+E	536 84	
	380 to 415V~	16A	2P+E	522 82	522 92
			3P+E	522 83	522 93
			3P+N+E	522 84	522 94
		32A	2P+E	529 82	529 92
			3P+E	529 83	529 93
			3P+N+E	529 84	529 94
		63A	3P+E	538 83	538 93
			3P+N+E	538 84	538 94
	480 to 500V~	16A	3P+E	523 22	
		32A	3P+E	523 62	

*Use a pilot wire in 63A.

2. RANGE *(continued)*

Panel appliance inlets*

				Metal	Plastic
LV	100 to 130V~	16A	2P+E		519 70
		32A	2P+E		519 72
		63A	2P+E		
	200 to 250V~	16A	2P+E	521 62	521 72
			3P+E		520 73
			3P+N+E		520 74
		32A	2P+E	528 62	528 72
			3P+E		527 73
			3P+N+E		527 74
		63A	2P+E		537 72
			3P+E		
			3P+N+E		
	380 to 415V~	16A	2P+E		522 72
			3P+E	521 63	521 73
			3P+N+E	521 64	521 74
		32A	2P+E		529 72
			3P+E	528 63	528 73
			3P+N+E	528 64	528 74
		63A	3P+E	537 63	537 73
			3P+N+E	537 64	537 74

Surface appliance inlets*

				Metal	Plastic
BT	100 to 130V~	16A	2P+E		519 70 + 520 79
		32A	2P+E		519 72 + 529 79
		63A	2P+E		
	200 to 250V~	16A	2P+E	521 62 + 520 69	521 72 + 520 79
			3P+E		520 73 + 522 79
			3P+N+E		520 74 + 522 79
		32A	2P+E	528 62 + 529 69	528 72 + 529 79
			3P+E		527 73 + 529 79
			3P+N+E		527 74 + 529 79
		63A	2P+E		537 72 + 538 79
			3P+E		
			3P+N+E		
	380 to 415V~	16A	2P+E		522 72 + 520 79
			3P+E	521 63 + 522 69	521 73 + 522 79
			3P+N+E	521 64 + 522 69	521 74 + 522 79
		32A	2P+E		529 72 + 529 79
			3P+E	528 63 + 529 39	528 73 + 529 79
			3P+N+E	528 64 + 529 69	528 74 + 529 79
		63A	3P+E	537 63 + 538 69	537 73 + 538 79
			3P+N+E	537 64 + 538 69	537 74 + 538 79

2. RANGE *(continued)*

• IP66/67 63/125A offer

Use a pilot wire in 63 and 125A

			Panel mounting sockets	Simple surface mounting sockets	Through wiring surface mounting sockets	Straight plugs	Mobile sockets	Panel appliance inlet	Surface appliance inlet
200 to 250V~	63A	2P+E	536 26	536 36	536 26 + 538 89	536 46	536 86	537 76	
		3P+E	536 27	536 37	536 27 + 538 89	536 47	536 87		
		3P+N+E	536 28	536 38	536 28 + 538 89	536 48	536 88		
380 to 415V~	63A	3P+E	538 27	538 37	538 27 + 538 89	538 47	538 87	537 77	
		3P+N+E	538 28	538 38	538 28 + 538 89	538 48	538 88	537 78	
	125A	3P+E	591 12	591 02		591 22	591 32	591 42	591 44
		3P+N+E	591 13	591 03		591 23	591 33	591 43	591 45
480 to 500V~	63A	3P+E	537 27	537 37	537 27 + 538 89	537 47	537 87		

The 16/32A IP66/67 - 55 products are detailed in the F00130FR or EN/xx technical data sheet

• Direct through connection

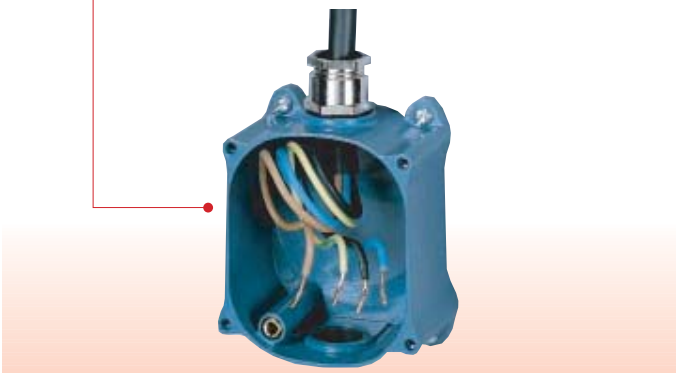
Plastic Hypra direct through-connection panel-mounted socket



Metal Hypra direct through-connection panel-mounted socket



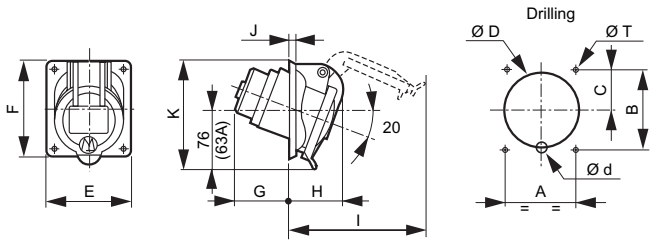
16 or 32 A IP 44 Hypra direct through-connection panel-mounted sockets are fitted on your old boxes for Martin Lunel sockets or are used to replace an old Martin Lunel panel-mounted socket.



Cab. end	Ref.	
Metal	Plastic	
		16 A panel-mounted sockets
		To replace Martin Lunel 10 A
		200/250 V~
	521 79	1 2 P + E
		380/415 V~
	521 80	1 3 P + E
		To replace Martin Lunel 16 A
		200/250 V~
521 92	**521 82**	1 2 P + E
	521 81	1 3 P + E
		380/415 V~
521 93	**521 83**	1 3 P + E
521 94	**521 84**	1 3 P + N + E
521 98		1 **Spacer** for fitting replacement 16 A sockets on combinaison switches with Martin Lunel pin arrangement catalogue no. 54606/07 Supplied with 2 seals and screws.
		32 A panel-mounted sockets
Metal	Plastic	
		To replace Martin Lunel 32 A
		200/250 V~
528 92	528 82	1 2 P + E
528 81		1 3 P + E
		380/415 V~
528 93	**528 83**	1 3 P + E
528 94	**528 84**	1 3 P+N+E
		Branch connection terminal block for replacement 32 A surface-mounted sockets
528 29		5 Can be adapted for the bottom of surface-mounted socket boxes with a Martin Lunel pin arrangement.

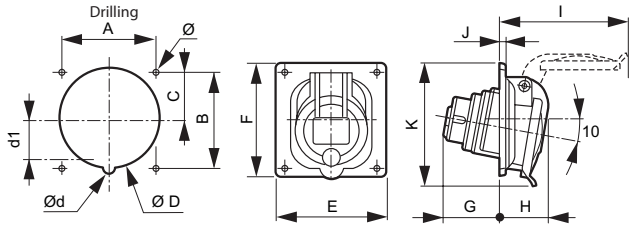
3. DIMENSIONS

IP 44 16 and 63A LV - 16 and 32A ELV panel-mounted sockets (inclined)



	Material	Weight (kg)	Drill hole A	B	C	øD	ød	øT	Dimensions E	F	G	H	I	J	K
LV 16 A															
2 P + ⏚	Plastic	0.110	52	60	28	55	14.5	4.2	64	72	41	40	94	5.5	78.5
	Metal	0.340													
3 P + ⏚	Plastic	0.140	60	70	31	63.5	14.5	5.2	74	84	44	40	98	5.5	88
	Metal	0.405													
3P + N + ⏚	Plastic	0.165	60	70	33	70.6	-	5.2	80	84	44	44	110	5.5	93
	Metal	0.450													
LV 63 A															
2 P + ⏚	Plastic	0.600	77	85	-	92	-	6.5	106	106	98	70	160	6	129
	Metal	0.950													
3 P + ⏚	Plastic	0.640	77	85	-	92	-	6.5	106	106	98	70	160	6	129
	Metal	1.000													
3P + N + ⏚	Plastic	0.700	77	85	-	92	-	6.5	106	106	98	70	160	6	129
	Metal	1.200													
ELV 16 A															
2 P	Plastic	0.120	52	60	30	55	-	4.2	64	33	47	40	94	5.5	78.5
ELV 32 A															
2 P	Plastic	0.120	52	60	30	55	-	4.2	64	33	47	40	94	5.5	78.5

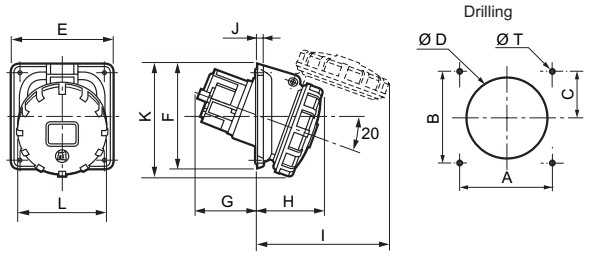
Panel mounting sockets 70x70 16/ 32A IP44



	Weight (kg)	A	B	C	Ø D	Ø d	d1	E	F	G	H	I	J	K	Ø
LV 16 A															
2 P + ⏚	0.110	70	70	35	76.2	/	/	84	84	37	36	89	4.5	88	4.2
3 P + ⏚	0.140	70	70	35	76.2	/	/	84	84	43	36	97	4.5	89	4.2
3 P + N + ⏚	0.165	70	70	35	76.2	/	/	84	84	43	37	106	4.5	91	4.2
LV 32 A															
2 P + ⏚	0.220	70	70	35	76.2	/	/	84	94	54	45	117	4.5	100	4.2
3 P + ⏚	0.220	70	70	35	76.2	/	/	84	94	54	45	117	4.5	100	4.2
3 P + N + ⏚	0.255	70	70	35	76.2	8	36	84	94	54	46	125	4.5	102	4.2

3. DIMENSIONS *(continued)*

Panel mounting sockets IP 66/67 63 and 125A



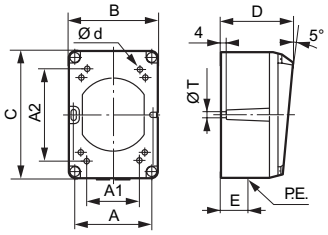
	Weight (kg)	Drill hole A	B	C	øD	ød	øT	Dimensions E	F	G	H	I	J	K	L
LV 63 A															
2 P + ⏚	0.680	77	85	42.5	92	-	6.5	106	106	98	79	158	6	127	113.5
3 P + ⏚	0.710	77	85	42.5	92	-	6.5	106	106	98	79	158	6	127	113.5
3 P + N + ⏚	0.770	77	85	42.5	92	-	6.5	106	106	98	79	158	6	127	113.5
LV 125 A															
3 P + ⏚	1.400	124	124	62	120	-	6.5	146	146	84	93	182	8	157	131
3 P + N + ⏚	1.550	124	124	62	120	-	6.5	146	146	84	93	182	8	157	131

Note : The surface mounting sockets are achieved with the assembling of the panel mounting socket and the box.

3. DIMENSIONS *(continued)*

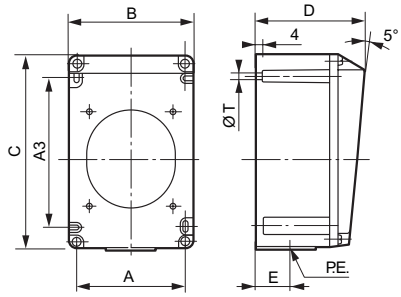
Simple plastic/metal box for panel mounting sockets LV and ELV 16/32A.

LV 16 A, ELV 16 and 32 A



Fix A1 and A2
Blind optional fixing points Metal boxes fitted with :
- 2 connected earth terminals and 1 outside terminal.
- 1 sleeve for metal socket's ground pin.

LV 32 A

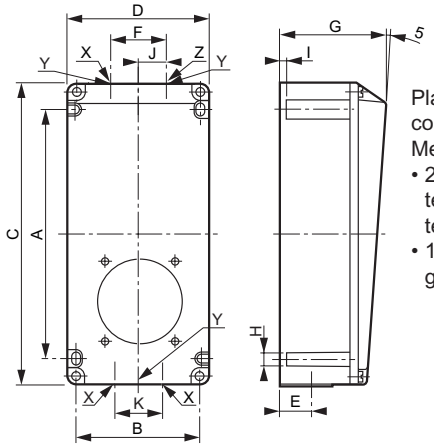


Blind optional fixing points Metal boxes fitted with :
- 2 connected earth terminals and 1 outside terminal.
- 1 sleeve for metal socket's ground pin.

Reversible boxes → / Panel-mounted sockets ↓	Material	Weight (kg)	Fixing A1	A2	Ød	A	A3	ØT	Dimensions (mm) B	C	D	E	P.E.
IP 44 - LV 16 A													
2P+E	Plastic	0.115	51	68	4.2	64	-	5.3	74	106	58	20	M 20
	Metal	0.400											
3P+E	Plastic	0.160	68	68	4.2	85	-	5.3	96	122	60	22	M 20
	Metal	0.520											
3P+E+N	Plastic	0.160	68	68	4.2	85	-	5.3	96	122	60	22	M 20
	Metal	0.520											
IP 44 - LV 32 A													
2P+E	Plastic	0.340	-	-	-	90	125	5.3	102	162	90	26	M 25
	Metal	0.910											
3P+E	Plastic	0.340	-	-	-	90	125	5.3	102	162	90	26	M 25
	Metal	0.910											
3P+E+N	Plastic	0.340	-	-	-	90	125	5.3	102	162	90	26	M 25
	Metal	0.910											
IP 44 - ELV 16 A / 32 A													
2P	Plastic	0.115	51	68	4.2	64	-	5.3	74	106	58	20	M 25

3. DIMENSIONS *(continued)*

Metal or plastic through wiring box for 16/32/63A panel mounting socket

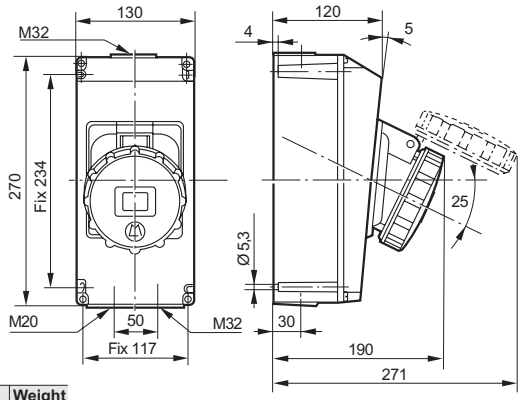


Plastic boxes fitted with 2 connected earth terminals Metal boxes fitted with :
- 2 connected earth terminals ans 1 outside terminal.
- 1 sleeve for metal socket's ground pin.

Reversible boxes → / Panel-mounted sockets ↓	Material	Wt (kg)	Fixings A	B	H	Dimensions C	D	E	F	G	I	J	K	X	Y	Z
16 A																
2 P + ⏚	Plastic	0.330	145	74	5.3	182	86	22	34	75	4	-	-	-	M 20	-
	Metal	0.830														
3 P + ⏚	Plastic	0.440	175	88	5.3	212	100	22	40	77	4	-	-	-	M 20	-
	Metal	0.980														
3 P + N + ⏚	Plastic	0.440	175	88	5.3	212	100	22	40	77	4	-	-	-	M 20	-
	Metal	0.980														
32 A																
2 P + ⏚	Plastic	0.670	234	117	5.3	270	130	30	50	110	4	-	-	-	M 25	-
	Metal	1.730														
3 P + ⏚	Plastic	0.670	234	117	5.3	270	130	30	50	110	4	-	-	-	M 25	-
	Metal	1.730														
3 P + N + ⏚	Plastic	0.670	234	117	5.3	270	130	30	50	110	4	-	-	-	M 25	-
	Metal	1.730														
63 A																
2 P + ⏚	Plastic	2.000	260	152	6.3	300	170	40	-	150	8	50	70	M 32	-	M 20
	Metal	4.300		157												
3 P + ⏚	Plastic	2.000	260	152	6.3	300	170	40	-	150	8	50	70	M 32	-	M 20
	Metal	4.300		157												
3 P + N + ⏚	Plastic	2.000	260	152	6.3	300	170	40	-	150	8	50	70	M 32	-	M 20
	Metal	4.300		157												

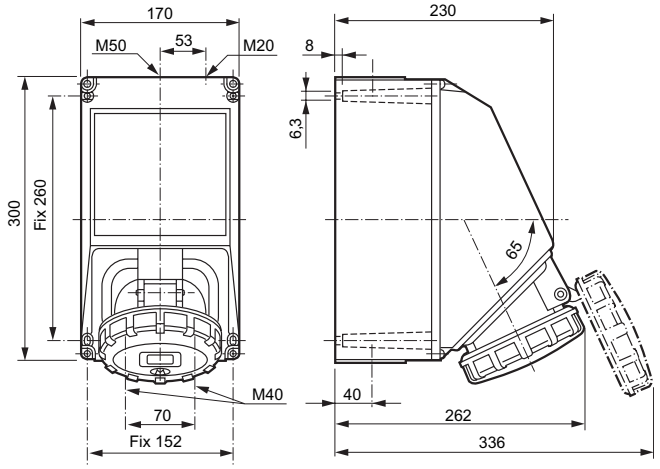
3. DIMENSIONS *(continued)*

IP 66/67 - LV 63 A surface mounting sockets



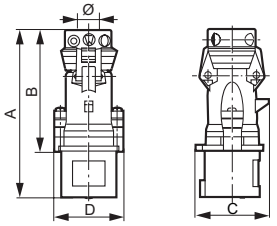
	Weight (kg)
63 A	
2 P + ⏚	1.600
3 P + ⏚	1.650
3 P + N + ⏚	1.700

IP 66/67 - LV 125A surface mounting sockets

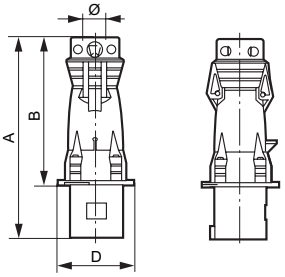


	Weight (kg)
125 A	
3 P + ⏚	3.5
3 P + N + ⏚	3.7

Straight plugs IP44 LV and ELV 16/32 A



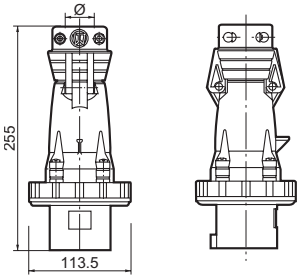
Straight plugs LV 63 A



	Material	Weight (kg)	Dimensions A	B	C	D	Clamping/Grip Ø
LV 16 A							
2 P + ⏚	Plastic	0.150	135	100	57	55	8 to 15
	Metal	0.365					
	Rubber	0.205	135	100	60	61	8 to 15
3 P + ⏚	Plastic	0.175	139	103	65	60	8 to 15
	Metal	0.425					
	Rubber	0.260	139	103	68	66	8 to 15
3 P + N + ⏚	Plastic	0,210	154	118	73	66	10 to 18
	Metal	0.535					
	Rubber	0.300	154	118	77	72	10 to 18
LV **32 A**							
2 P + ⏚	Plastic	0.260	164	119	78	70,5	10 to 18
	Metal	0.645					
	Rubber	0.360	164	119	81	76,5	10 to 18
3 P + ⏚	Plastic	0.260	164	119	78	70,5	12 to 22
	Metal	0,645					
	Rubber	0.360	164	119	81	76,5	12 to 22
3 P + N + ⏚	Plastic	0.300	170	125	86	77	12 to 22
	Metal	0.685					
	Rubber	0.415	170	125	89	83	12 to 22
LV 63 A							
2 P + ⏚	Plastic	0.580	255	188.5	-	102	16 to 26
	Rubber	0.900	255	188.5	-	110	16 to 26
3 P + ⏚	Plastic	0.640	255	188.5	-	102	18.5 to 29
	Rubber	0.980	255	188.5	-	110	18.5 to 29
3 P + N + ⏚	Plastic	0.700	255	188.5	-	102	20.5 to 32
	Rubber	1.050	255	188.5	-	110	20.5 to 32
ELV 16 A							
2 P	Plastic	0.180	142	107	62	55	8.5 to 22
ELV **32 A**							
2 P	Plastic	0.180	142	107	62	55	8.5 to 22

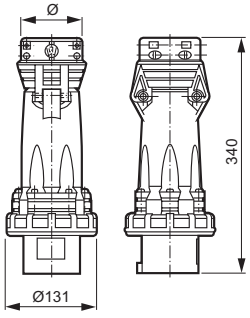
• IP 66/67

Straight plugs LV 63 A



	Weight (kg)	Clamping/Grip Ø
63 A		
2 P+ ⏚	0.620	16 to 26
3 P+ ⏚	0.680	18.5 to 29
3 P+N+ ⏚	0.750	20.5 to 32

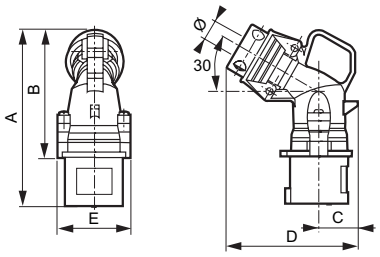
Straight plugs LV 125 A



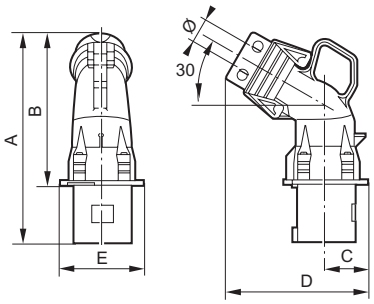
	Weight (kg)	Clamping/Grip Ø
125 A		
3 P+ ⏚	1.5	24 to 48
3 P+N+ ⏚	1.7	28 to 48

3. DIMENSIONS *(suite)*

Angled plugs IP 44 - LV and ELV 16 and 32A



Angled plugs IP 44 - LV 63A

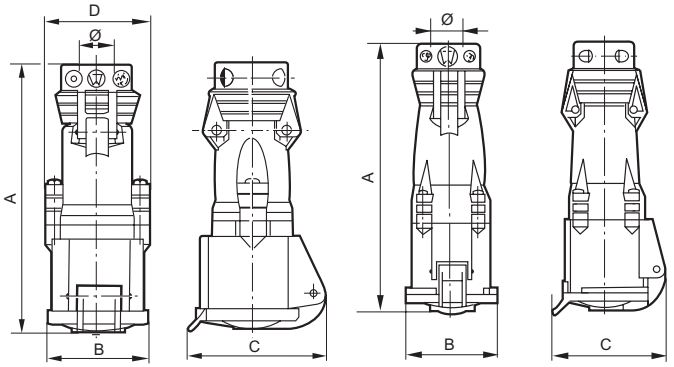


	Material	Weight (kg)	Dimensions A	B	C	D	E	Clamping/Grip Ø
LV 16 A								
2 P + ⏚	Plastic	0.145						
	Metal	0.395	136	100	29.5	100	55	8 to 15
	Rubber	0.230	136	100	29.5	100	61	8 to 15
3 P + ⏚	Plastic	0.185						
	Metal	0.455	141	105	33.5	105	60	8 to 15
	Rubber	0.290	141	105	33.5	105	66	8 to 15
3 P + N + ⏚	Plastic	0.220						
	Metal	0.565	150	114	37.5	114	66	10 to 18
	Rubber	0.330	150	114	37.5	114	72	10 to 18
LV 32 A								
2 P + ⏚	Plastic	0.275						
	Metal	0.745	161	116	39.5	116	70,5	10 to 18
	Rubber	0.390	161	116	39.5	116	76,5	10 to 18
3 P + ⏚	Plastic	0.275						
	Metal	0.745	161	116	39.5	116	70,5	12 to 22
	Rubber	0.390	161	116	39.5	116	76,5	12 to 22
3 P + N + ⏚	Plastic	0.320						
	Metal	0.790	167	122	44.5	122	77	12 to 22
	Rubber	0.435	167	122	44.5	122	83	12 to 22
LV 63 A								
2 P + ⏚	Metal	1.000	243,5	177	51	168	102	16 to 26
3 P + ⏚	Metal	1.150	243,5	177	51	168	102	18.5 to 29
	Rubber	1.030	243,5	177	51	168	110	18.5 to 29
3 P + N + ⏚	Metal	1.250	243,5	177	51	168	102	20.5 to 32
	Rubber	1.100	243,5	177	51	168	110	20.5 to 32
ELV 16 A								
2 P	Rubber	0.250	131	107	30	107	61	8.5 to 22
ELV 32 A								
2 P	Rubber	0.250	131	107	30	107	61	8.5 to 22

3.DIMENSIONS *(continued)*

Mobile sockets IP 44 - LV and ELV 16 /32A and LV 63A

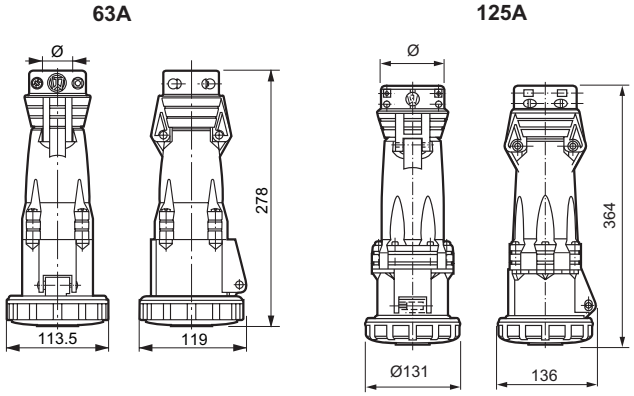
16/32A **63A**



	Material	Weight (kg)	Dimensions A	B	C	D	Clamping/Grip Ø
LV 16 A							
2 P + ⏚	Plastic	0.170	147	54.5	74	55	8 to 15
	Rubber	0.250	147	58	74	61	8 to 15
3 P + ⏚	Plastic	0.200	151	61.5	81	60	8 to 15
	Rubber	0.285	151	65	81	66	8 to 15
3 P + N + ⏚	Plastic	0.245	172	69.5	90	66	10 to 18
	Rubber	0.335	172	72.5	90	72	10 to 18
LV 32 A							
2 P + ⏚	Plastic	0.300	177	71	93	70.5	10 to 18
	Rubber	0.400	177	74.5	93	76.5	10 to 18
3 P + ⏚	Plastic	0.300	177	71	93	70.5	12 to 22
	Rubber	0.400	177	74.5	93	76.5	12 to 22
3 P + N + ⏚	Plastic	0.350	183	77.5	100	77	12 to 22
	Rubber	0.475	183	80.5	100	83	12 to 22
LV 63 A							
2 P + ⏚	Plastic	0.700	273	96	119	-	16 to 26
	Rubber	1.200	273	110	124	-	16 to 26
3 P + ⏚	Plastic	0.770	273	96	119	-	18.5 to 29
	Rubber	1.300	273	110	124	-	18.5 to 29
3 P + N + ⏚	Plastic	0.830	273	96	119	-	20.5 to 32
	Rubber	1.400	273	110	124	-	20.5 to 32
ELV 16 A							
2 P	Plastic	0.190	148	54.5	74	55	8.5 to 22
ELV 32 A							
2 P	Rubber	0.240	148	58	74	61	8.5 to 22

Mobile sockets IP 66/67 - LV 63 and 125A

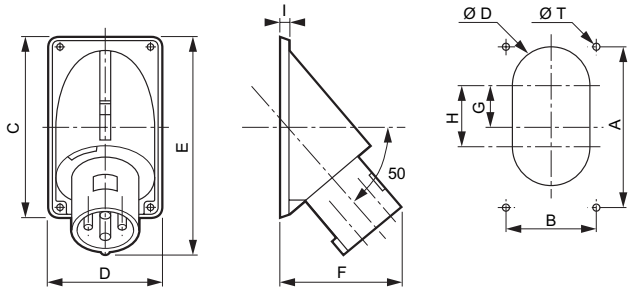
63A **125A**



	63A		125A	
	Weight	**ø Clamping Grip**	**Weight**	**ø Clamping Grip**
2P+E	0.780	16 to 26		
3P+E	0.850	18.5 to 29	1.8	24 to 48
3P+N+E	0.910	20.5 to 32	2	28 to 48

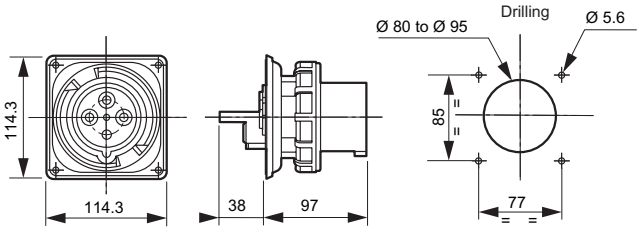
3. DIMENIONS *(continued)*

Plastic and/or metal panel appliance inlets LV 16/32A IP44



	Material	Wt (kg)	Drill holes A	B	øT	øD	G	Dimensions H	C	D	E	F	I
LV 16 A													
2 P + ⏚	Plastic	0.140	94	62	4.5	40	-	-	104	72	121	78	6
	Metal	0.530											
3 P + ⏚	Plastic	0.160	109	83	4.5	40	-	-	120	94	135	86	6
	Metal	0.630											
3 P + N + ⏚	Plastic	0.190	109	83	4.5	40	-	-	120	94	139	86	6
	Metal	0.690											
LV 32 A													
2 P + ⏚	Plastic	0.280	149	90	5.5	40	-	-	160	101	176	111	6
	Metal	0.950											
3 P + ⏚	Plastic	0.280	149	90	5.5	40	-	-	160	101	176	111	6
	Metal	0.950											
3 P + N + ⏚	Plastic	0.320	149	90	5.5	40	-	-	160	101	174	108	6
	Metal	1.000											
LV 63 A													
2 P + ⏚	Plastic	0.560	163	93	6.5	80	42	62	183	113	221	120	8
3 P + ⏚	Plastic	0.630	163	93	6.5	80	42	62	183	113	221	120	8
	Metal	2.230											
3 P + N + ⏚	Plastic	0.690	163	93	6,5	80	42	62	183	113	221	120	8
	Metal	2.450											

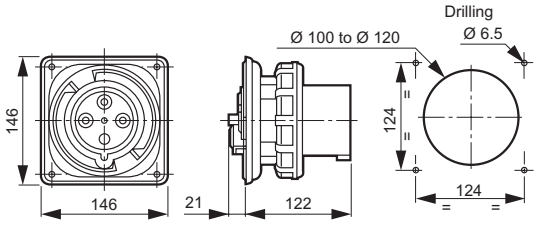
IP 66/67 LV 63A plastic straight appliance inlets IP 66/67 LV 63A



	Weight (kg)
2 P + ⏚	0.490
3 P + ⏚	0.548
3 P + N + ⏚	0.610

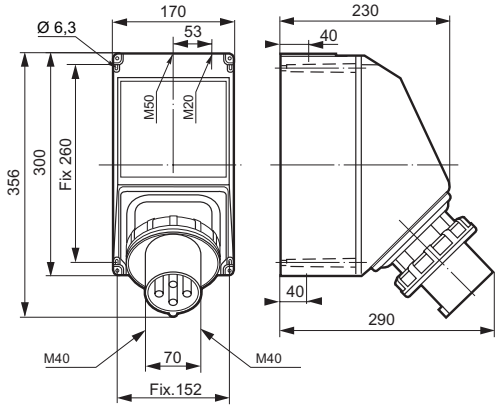
Nb : Can be fixed on the box 538 89.

IP66/67 LV 125A straight appliance inlets



	Weight (kg)
3 P + ⏚	1.00
3 P + N + ⏚	1.15

Plastic IP 66/67 LV 125A surface appliance inlets

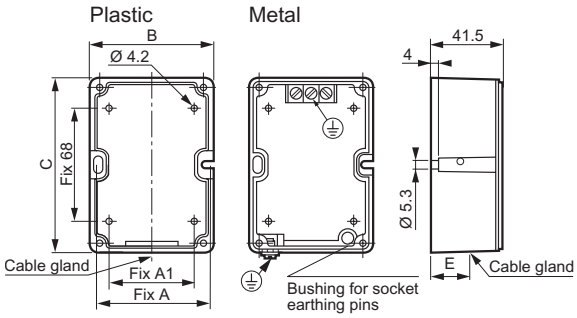


	Weight (kg)
3 P + ⏚	2.6
3 P + N + ⏚	2.7

Nota : The surface mounting appliance inlets are achieved with the assembling of the panel appliance inlets and the box.
(See dimension on next page).

3. DIMENSIONS *(continued)*

LV 16 A

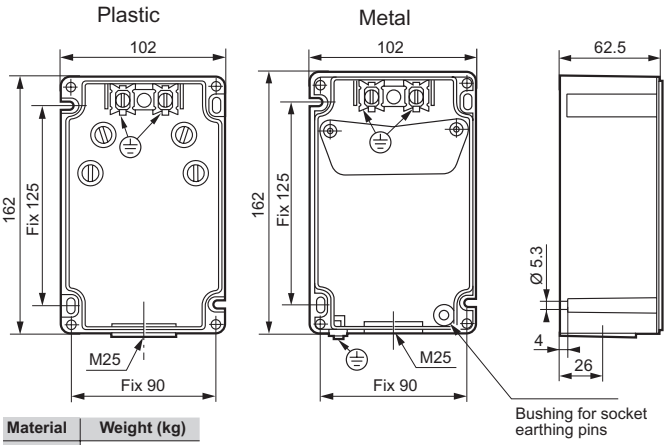


Fix A1 and Fix 68 :
Blind optional fixing points

	Material	Weight (kg)	A	A1	B	C	E	CG Cable gland
2 P + ⏚	Plastic	0.085	64	51	74	106	20	M20
	Metal	0.250					22	
3 P + ⏚	Plastic	0.110	85	68	96	122	22	M20
3 P+N+⏚	Metal	0.360						

LV 32 A

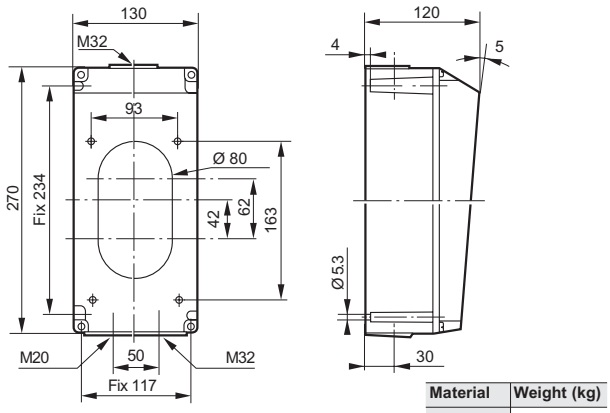
Fitted with 2 connected earth terminals and 1 outside terminal on metal box.



Material	Weight (kg)
Plastic	0.240
Metal	0.650

LV 63 A

Fitted with 2 connected earth terminals and 1 outside terminal on a metal box.



Material	Weight (kg)
Plastic	0.67
Metal	1.73

4. TECHNICAL CHARACTERISTICS

4.1 Glow wire resistance
- 850°C active parts
- 650°C housing

4.2 Dielectric rigidity
3 000V 50Hz

4.3 Temperatures of use
- From - 50°C to + 100°C if and only if the products are wired above - 20°C and no mechanical contraints below - 25°C.

4.4 UV resistance
- No change to colour or material.
  Dose rate : 550 W/m²
- Test duration : 168 hours
- Infrared and ultraviolet filter in order to get as close to the solar spectrum as possible.

4.5 Ageing test
Thermoplastic material :
7-day ageing at 80°C - no cracks in the material
Flap spring strength :
5.000 opening/closing cycles are carried out - conforming result
Seal strength :
Conforming result : no dust or water in the IP 66/67 products after 10 days of ageing at + 70°C.

4.6. Material characteristics (plastic)

	Main material	Locking ring
Aqueous solutions		
Cold water	++	++
Warm water	+	-
Vapour	-	--
Saltwater 5 %	+	+
Hydrogen peroxide	-	-
Water + detergent	++	
Water + surfactants	+	
Formic aldehide	++	++
Alcohols		
Ethanol	++	++
Methyl alcohol	+	-
Propanol	++	+
Butyl alcohol	++	+
Glycols		
Ethylene glycol	-	++
Carbolic acids	--	
Cresols	-	
Bases		
Ammoniac	+	+
Sodium hydroxide	+	--
Sodium hypochlorite (bleach 12°)	+	-
Potassium hydroxide	+	+
Oxydizing strong acids		
Concentrated acetic acid	--	+
Nitric acid 5 %	-	-
Sulfuric acid 10 %	-	+
Muriatic acid 30 %	-	+
Perchloric acid 70 %	-	
Hydrofluoric acid 70 %	--	
Chromic acid 50 %	--	-
Phosphoric acid 30 %	-	
Weak acids		
Diluted acetic acid < 25 %	-	+
Citric acid	+	+
Lactic acid	-	+

4.6. Material characteristics (plastic) *(suite)*

	Main material	Locking ring
Formic acid	--	-
Uric acid	++	
Oils and lubricants - Animal origin		
Lard	++	++
Butter, cream	++	++
Oils and lubricants - Vegetal origin		
Linseed oil	++	++
Peanut / Olive	++	++
Castor oil	++	++
Glycerin	++	
Oils and lubricants - Mineral origin		
Paraffin	++	++
Engine oil	++	+
Silicone oil	+	++
Cutting oil	++	++
Hydraulic fluid	++	++
Hydrocarbons		
Unlead petrol	++	++
Diesel oil	++	++
Kerosen	++	++
White spirit	++	+
Chlorinated solvents		
Trichlorœthylene	+	-
Trichlorœthane	++	--
Perchlorœthylene	++	-
Methyl chloride	-	--
Carbon tetrachloride	+	-
Chloroform	+	-
Aromatic solvents		
Benzen	++	+
Toluene	++	+
Xylene	++	+
Alphatic solvents		
Hexane	++	+
Fluoride solvents		
Trichlofluoridmethan	--	
Ketones		
Acetone	+	+
Methyl Etyl Ketone	+	+
Ethyl acetate	+	+
Turpens		
Turpentine	+	-

Resistance to chemical agents at ambient temperature according to risks of exposure with spraying.
(++) excellent resistance (continue exposure)
(+) good resistance (durable exposure)
(-) limited resistance (possible short exposure)
(--) light resistance (exposure to avoid)

5. CONNECTION

5.1 Connection capacity

Type	Current	Size of cable (mm ≤)	Type of cable
Panel and Surface mounting Sockets	16/32 A ELV	4 to 10	Rigid
	16 A	1.5 to 4	Rigid
	32 A	2.5 to 10	Rigid
	63 A	6 to 25	Rigid
	125 A	25 to 70	Rigid
Appliance inlets	16/32 A ELV	4 to 10	Rigid
	16 A	1 to 2.5	Rigid
	32 A	2.5 to 6	Rigid
	63 A	6 to 16	Rigid
	125 A	16 to 50	Rigid
Plugs and Mobile sockets	16/32 A ELV	4 to 10	flexible
	16 A	1 to 2.5	flexible
	32 A	2.5 to 6	flexible
	63 A	6 to 16	flexible
	125 A	16 to 50	flexible

Pilot cable

	63A / 125A	Cable
Panel mounting and surface mounting sockets	2.5 to 10	rigid
Appliance inlets	2.5 to 6	rigid
Plugs and mobile sockets	2.5 to 6	flexible

5.2 Tightening torque of the screw terminals

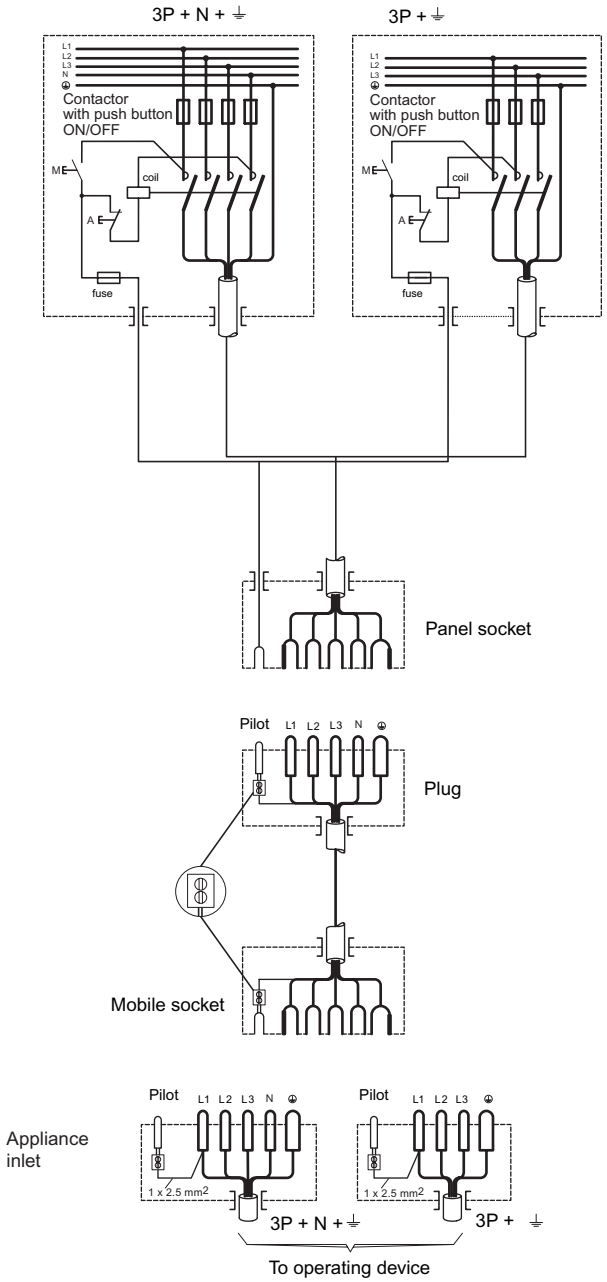
- 16/32A ELV : from 1 to 1.2 Nm
- 16A LV : from 0.7 to 1 Nm
- 32A LV : from 0.7 to 1 Nm
- 63A LV : from 2 to 2.2 Nm for phase and earth from 0.7 to 1 Nm for pilot cable
- 125A LV : from 3 to 4 Nm pour phase and earth from 0.7 to 1 Nm for pilot cable.

6. WIRING DIAGRAM

Example of wiring diagram

Pilot cable system :

The guide wire is a control conductor used with the power conductor. If it is interrupted, it causes the breaking of the power circuit via a contactor. This arrangement provides an electrical solution to the requirement for breaking circuits greater than 32A (decree dated 14/11/88). An additional (shorter) pin is therefore added to the various models of socket to perform this “guide wire” function.
The “guide wire” solution nonetheless remains restricting in terms of both its implementation (requirement for special cables) and its cost (power contactor).

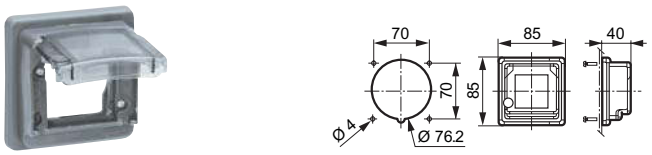


7. STANDARDS AND DECREE

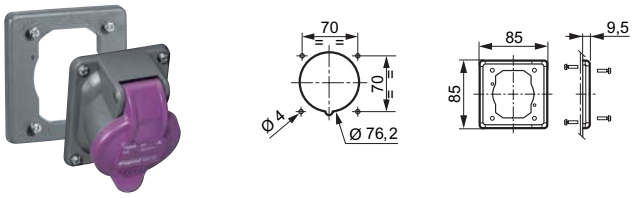
- IEC 60309-1 and NF EN 60309-1 (design rules)
- IEC 60309-2 and NF EN 60309-2 (dimensions rules)
- IEC 60529 and NF EN 60529 (IP)
- IEC 62262 and NF EN 62262 (IK)
- Decree of 14/11/88

8. ACCESSORIES

IP 55 adaptator frame for Mosaic mechanism
(except for specific projection).
Cat. No. : 539 49



Adaptator plate for ELV sockets
(possible fixing on pre-drilled Hypra combined units)
Cat. No. : 521 19



Blanking caps
Made of rubber material.
Appliance inlets and plugs



		Cat. Nos.
16A	2P+E	521 25
	3P+E	521 26
	3P+N+E	521 27
32A	2P+E	521 27
	3P+E	
	3P+N+E	527 99
63A	2P+E	536 99
	3P+E	
	3P+N+E	