

CONNECTING SYSTEM

AC 166 - G



■ Appliance Couples (EN 60 320) Plugs and Sockets, 3way

Approvals						
Nominal Cross-Section mm ²	2,5	2,5	2,5	2,5	14 AWG 16 amp.	2,5
Voltage Rating V	250	250	250/400	250	600	250

■ AC 166 GST/3 and AC GBU/3

3 pole plug and socket connectors. Live parts are provided with insulating bushes protecting against unintended touch both when parts are plugged-in and in an unplugged state. Insulating bushes are moulded with polarizing profiles which safely prevent any faulty plugging.

These plug and socket connectors are compatible with the most common system.

■ Appliance Couples according to EN 60 320

Plug and socket connectors AC 166 - G are approved as "appliance couples" according to EN 60 320 / IEC 320 as well as according to EN 61 984 (engaged and disengaged under load). When using additional latches they may also be used in installation systems (VDE 0628).

■ **Black, White and Coral Red** : Standard coding: "G"

■ **Pebble Grey** : Special coding: "G"

■ **Strain Reliefs, Covers** - see page 49.

■ **Connecting Links, Protecting Caps** - see page 64.

■ Complete Unit

All kind of plugs and sockets can also be supplied as complete units with a strain relief already assembled. Quotation upon request.

■ Technical Data

Mouldings: Polyamide 6/6, black, white, coral red or pebble grey

Continuous working temp.: 100° C

Short-time temperature: 160° C

Contact Parts: Brass, tinned

Screws: M 3 x 6 mm

Steel, zinc plated, chromed

⌚ max. 0.5 Nm

Current Rating: to EN 60 320 : 16 A / 250 V / T 70

to EN 61 984 : 16 A / 250 V / T 70

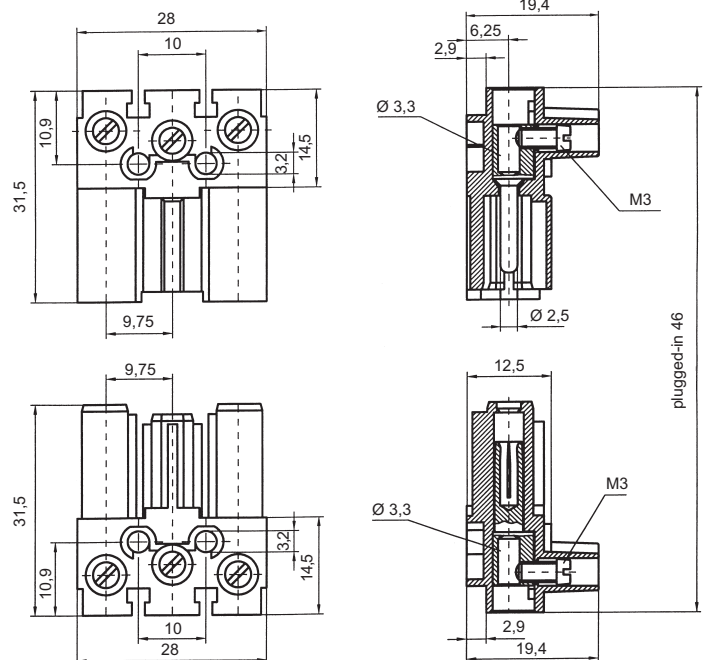
Upper Limit Temp.: to EN 61 984 : 110 °

Conductor Size: 0.5 to 4 mm²

Stripping Length: 7 mm

Protection Class: IP 20

IP 40 - when plugged-in



AC 166 GST/3, Plugs				AC 166 GBU/3, Sockets			
List No./ No. of Ways	Order No.	Kgs. per 100 Pcs.	Packing Unit	List No./ No. of Ways	Order No.	Kgs. per 100 Pcs.	Packing Unit
AC 166 GS/3 white	16 20 53	1,18	200	AC 166 GBU/3 white	16 50 53	1,23	200
AC 166 GS/3 black	16 20 63	1,18	200	AC 166 GBU/3 black	16 50 63	1,23	200
AC 166 GS/3 pebble grey	16 20 03	1,18	200	AC 166 GBU/3 pebble grey	16 50 03	1,23	200

CONNECTING SYSTEM

AC 166 - G



■ Appliance Couples (EN 60 320) Plugs and Sockets, 3way, flat

Approvals										
Nominal Cross-Section mm ²	1,5 / 2,5				1,5 / 2,5		14 AWG 16 amp.			
Voltage Rating V	250				250		600			

■ Appliance Couples

Plug and socket connectors AC 166 - "G" - flat are intended to be used as appliance couples to EN 60 320/ IEC 320 for mains connection and according to EN 61 984 (connected and disconnected under load). When using additional latches (page 64) they may also be used in installation systems (VDE 0628).

Mouldings are halogen-free, self-extinguishing and low fuming, so that they are especially suited to be used with type LSOH and LSF cables.

■ AC 166 GSTF/3 and AC 166 GBUF/3

Because of their low overall height these flat plug and socket connectors are especially designed to be installed in cramped cavities, behind furniture, in mounting rails or, to be combined with distributing blocks.

In order to make installation easier, these plug and socket connectors are supplied as unassembled piece parts consisting of plug, resp. socket inserts, bottom plate, cover and 2 screws.

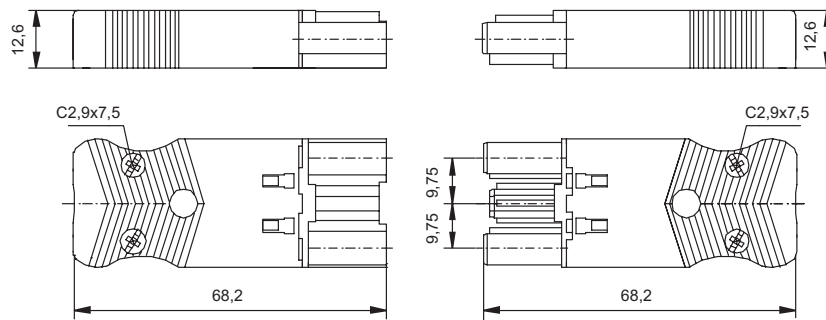
■ Strain Reliefs

<i>AC 166 GSTF / AC 166 GBUF /</i>	<i>Conductor Sizes</i>	<i>Round Conductors H05VV</i>
315	3 x 1.5 mm ²	Ø 7.5 - 8.8 mm
325	3 x 2.5 mm ²	Ø 9,0 - 10.5 mm

Conductors of size < 1.5 mm² upon request.

■ Technical Data

Mouldings:	Polyamide 6/6, black or white Continuous working temp. 100° C Short-time temperature 160° C
Plugs and Sockets:	Brass, tinned
Clamping Screws:	M 3 x 4,5 mm Steel, zinc plated, chromed ⌚ max. 0.3 Nm
Moulding Screws:	C 2,9 x 7,5 mm Steel, zinc plated, chromed ⌚ max. 0.4 Nm
Current Rating:	to EN 60 320 : 16 A / 250 V at T 70 to EN 61 984 : 16 A / 250 V at T 70
Upper Limit Temp.:	110 °C
Conductor Size:	1,5 mm ² / 2.5 mm ²
Stripping Length:	7 mm
Dismantling Length:	32 mm
Protection Class:	IP 20 IP 40 - when plugged-in

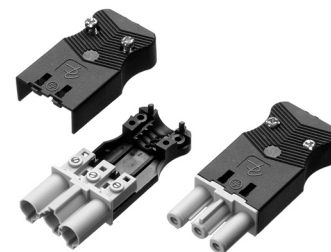


AC 166 GSTF/3 - Plugs flat			AC 166 GBUF/3 - Sockets flat			Packing Unit
List No./ No. of Ways	Order No.	Kgs. per 100 Pcs.	List No./ No. of Ways	Order No.	Kgs. per 100 Pcs.	
AC 166 GSTF/ 315 white	16 24 53	1,95	AC 166 GBUF/ 315 white	16 54 53	2,05	200
AC 166 GSTF/ 315 black	16 24 63	1,95	AC 166 GBUF/ 315 black	16 54 63	2,05	200
AC 166 GSTF/ 325 white	16 26 53	1,95	AC 166 GBUF/ 325 white	16 56 53	2,05	200
AC 166 GSTF/ 325 black	16 26 63	1,95	AC 166 GBUF/ 325 black	16 56 63	2,05	200

CONNECTING SYSTEM

AC 166 - G

■ Appliance Couples (EN 60 320) Plugs and Sockets, 3way, flat Coding Variants



Approvals													
Nominal Cross Section mm ²	1,5 / 2,5												
Voltage Rating V	250												

■ Coding for a Safe Plugging

The entire AC 166 series is fitted with a mechanical coding system that prevents any faulty plugging. Each pole does only have one matching plug and socket to plug in.

■ Separate Circuits with Earth Conductor

Safe separation of different circuits (f.i. computer mains supply) is achieved by use of a mechanical coding which is different from the other network. There are four different mechanical codings with earth connection available: Nos. 1, 2, 3 or 6.

■ Colour Coding

For applications where mechanical coding cannot be made, colour differentiation, however, is necessary, we do have coding no. 1 in black, white and coral red available.

■ Control Circuits without Earth Conductor

In order to also separate control circuits from each other as well as from mains conductors in a clear and safe way, we recommend to use plug and socket connectors with mechanical coding variants no. 4, 5, 7 or 9 of brown, pastel blue, dark grey or yellow colour.

■ Plugs – Sockets – Conductors

Plugs and sockets with special codings do in any other respect correspond with the standard types in black and white colour shown on page 51.

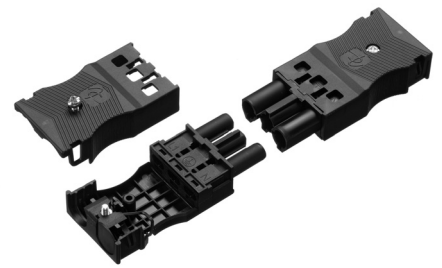
GST		Coding No. 1 black, white, coral red
GBU		
GST		Coding No. 2 pebble grey
GBU		
GST		Coding No. 3 light red
GBU		
GST		Coding No. 4 brown
GBU		
GST		Coding No. 5 pastel blue (f.i. dimmer outputs)
GBU		
GST		Coding No. 6 green
GBU		
GST		Coding No. 7 dark grey (protection class II)
GBU		
GST		Coding No. 9 yellow (f.i. motion detectors)
GBU		

AC 166 GSTF/ 3 - Plugs flat Black Housing - (white upon Request)			AC 166 GBUF/ 3 - Sockets flat Black Housing - (white upon Request)			Packing Unit
List No./ No. of Ways	Order No.	Kgs per 100 Pcs.	List No./ No. of Ways	Order No.	Kgs per 100 Pcs.	
AC 166 GSTF/ 315 coral red	16 24 63 X	1,95	AC 166 GBUF/ 315 coral red	16 54 63 X	2,05	200
AC 166 GSTF/ 315 pebble grey	16 24 63 K	1,95	AC 166 GBUF/ 315 pebble grey	16 54 63 K	2,05	200
AC 166 GSTF/ 315 light red	16 24 63 R	1,95	AC 166 GBUF/ 315 light red	16 54 63 R	2,05	200
AC 166 GSTF/ 315 brown	16 24 63 B	1,95	AC 166 GBUF/ 315 brown	16 54 63 B	2,05	200
AC 166 GSTF/ 315 pastel blue	16 24 63 P	1,95	AC 166 GBUF/ 315 pastel blue	16 54 63 P	2,05	200
AC 166 GSTF/ 315 green	16 24 63 G	1,95	AC 166 GBUF/ 315 green	16 54 63 G	2,05	200
AC 166 GSTF/ 315 dark grey	16 24 63 D	1,95	AC 166 GBUF/ 315 dark grey	16 54 63 D	2,05	200
AC 166 GSTF/ 315 yellow	16 24 63 Y	1,95	AC 166 GBUF/ 315 yellow	16 54 63 Y	2,05	200

CONNECTING SYSTEM

AC 166 - G

■ Appliance Couples (EN 60 320) Plugs and Sockets, 3way, flat with Spring Clamping Terminals



Approvals														
Nominal Cross Section mm ²	1,5 / 2,5													
Voltage Rating V	250													

Plug and socket connectors AC 166 „G“ are intended to be used according to EN 61 984 (VDE 0627) (connecting and disconnecting under load). When using additional latches they are also suited to be used in installation systems (VDE 0628) as well as for “not easily accessible areas” (IEC 61 535 / VDE 0606 part 200).

Wire connection is made by screwless spring clamping terminals both for solid wires, and for flexible wires either with ferrules or with sealed wire ends.

Mouldings are halogen-free, self-extinguishing and low fuming, so that they are especially suited to be used with type LSOH and LSF cables.

■ AC 166 GSTPF/3 and AC 166 GBUPF/3

Because of their low overall height these flat plug and socket connectors are especially designed to be installed in cramped cavities, in mounting rails or, to be combined with distributing blocks.

Quick wiring by spring clamping terminals. Providing two spring clamping terminals per pole as well as two cable entries, these connectors allow looping through of sheathed cables.

These plug and socket connectors are supplied as unassembled piece parts consisting of plug, resp. socket inserts, bottom plate with strain relief bridge, cover and screws.

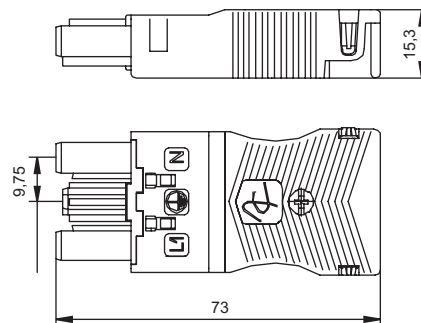
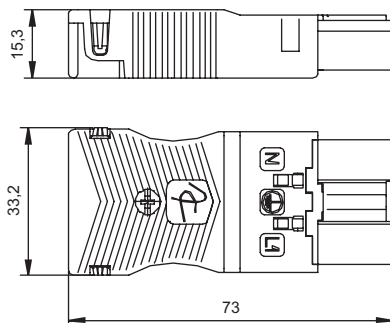
Suitable for two type HO5VV-F round conductors from size Ø 6.5 up to including Ø 10.5 mm. For different conductor types retaining force and Ø upon request

Latches AC 166 VSF: see page 62.

■ Technical Data

Mouldings:	Polyamide 6/6, black, white or coral red * Continuous working temp.: 100 °C Short-time 160 °C
Plugs and Sockets:	Brass, tinned
Clamping Spring::	Spring steel
ZEL-Screw:	M 3 x 12 mm Steel, zinc plated, chromed ⌀ max. 0,5 Nm
Housing Screw:	C 2,9 x 7,5 mm Steel, zinc plated, chromed ⌀ max. 0,4 Nm
Current Rating:	to EN 61 984 16 A / 250 V at T 70 °C)
Upper Limit Temp.:	to EN 61 984 : 110 °C
Conductor Size:	solid and flexible cables, sealed: 0.5 - 2.5 mm ² flexible cables with ferrules: 0.5 - 1.5 mm ²
Stripping Length:	8 -9 mm
Dismantling Length:	35 mm
Protection Class:	IP 20 IP 40 - when plugged-in

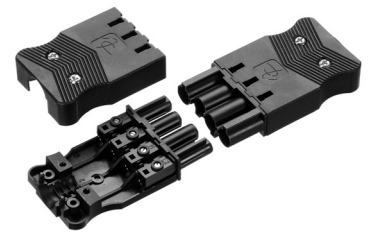
* Coral-red upon request



AC 166 GSTPF/ 3 - Plugs flat			AC 166 GBUPF/ 3 - Sockets flat			
List No./ No.of Ways	Order-No.	Kgs. per 100 Pcs.	List No./ No.of Waysl	Order-No.	Kgs. per 100 Pcs.	Packing Unit
AC 166 GSTPF/ 3 white	16 25 53	2,10	AC 166 GBUPF/ 3 white	16 55 53	2,15	200
AC 166 GSTPF/ 3 black	16 25 63	2,10	AC 166 GBUPF/ 3 black	16 55 63	2,15	200

CONNECTING SYSTEM

AC 166 - G



■ Appliance Couples Plugs and Sockets, 4way, flat

Approvals									applied for		
Nominal Cross Section	mm ²	1,5 / 2,5			1,5 / 2,5			14 AWG 16 amp.			
Voltage Rating	V	400			400			600			

■ Plug and Socket Devices according to EN 61 984

Connectors of the AC 166 "G" series are approved as plug and socket devices according to EN 61 984. They may be connected and disconnected under load. When using additional latches (page 64) they may also be used in installation systems (VDE 0628).

Mouldings are halogen-free, self-extinguishing and low fuming, so that they are especially suited to be used with type LSOH and LSF cables.

■ AC 166 GSTF/4 and AC 166 GBUF/4

Because of their low overall height these flat plug and socket connectors are especially designed to be installed in cramped cavities, in mounting rails or, to be combined with distributing blocks.

These plug and socket connectors are supplied as un-assembled piece parts consisting of plug, resp. socket inserts, bottom plate, cover and 2 screws.

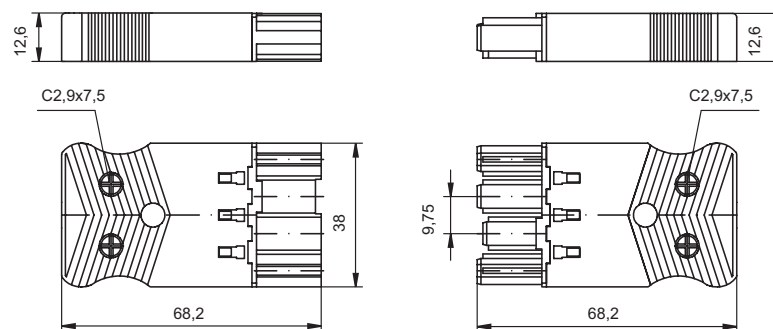
■ Conductor Sizes and Strain Reliefs

<u>AC 166 GSTF / AC 166 GBUF /</u>	<u>Conductor Sizes</u>	<u>Round Conductors H05VV</u>
415	4 x 1.5 mm ²	Ø 8.5 - 9.5 mm
425	4 x 2.5 mm ²	Ø10.0 - 11.5 mm

Conductors of size < 1.5 mm² upon request.

■ Technical Data

Mouldings:	Polyamide 6/6, black or white Continuous working temp.: 100° C Short-time temperature: 160° C
Plugs and Sockets:	Brass, tinned
Clamping Screws:	M 3 x 4.5 mm Steel, zinc plated, chromed ⌚ max. 0.3 Nm
Moulding Screws:	C 2.9 x 13 mm Steel, zinc plated, chromed ⌚ max. 0.4 Nm
Current Rating:	to EN 61 984 : 16 A / 400 V at 70 °C
Upper Limit Temp.:	110 °C
Conductor Size:	1.5 mm ² / 2.5 mm ²
Stripping Length:	7 mm
Dismantling Length:	35 mm
Protection Class:	IP 20 IP 40 - when plugged-in



AC 166 GSTF/ 4 - Plugs flat			AC 166 GBUF/ 4 - Sockets flat			
List No./ No. of Ways	Order No.	Kgs. per 100 Pcs.	List No./ No. of Ways	Order No.	Kgs per 100 Pcs.	Packing Unit
AC 166 GSTF/ 415 white	16 24 54	2,53	AC 166 GBUF/ 415 white	16 54 54	2,68	150
AC 166 GSTF/ 415 black	16 24 64	2,53	AC 166 GBUF/ 415 black	16 54 64	2,68	150
AC 166 GSTF/ 425 white	16 26 54	2,53	AC 166 GBUF/ 425 white	16 56 54	2,68	150
AC 166 GSTF/ 425 black	16 26 64	2,53	AC 166 GBUF/ 425 black	16 56 64	2,68	150

CONNECTING SYSTEM

AC 166 - G



■ Appliance Couples Plugs and Sockets, 5way, flat

Approvals											
Nominal Cross Section mm ²	1,5 / 2,5				1,5 / 2,5			14 AWG 16 amp.			
Voltage Rating V	400				400			600			

■ Plug and Socket Devices according to EN 61 984

Connectors of the AC 166 "G" series are approved as plug and socket devices according to EN 61 984. They may be connected and disconnected under load. When using additional latches (page 62) they may also be used in installation systems (VDE 0628).

Mouldings are halogen-free, self-extinguishing and low fuming, so that they are especially suited to be used with type LSOH and LSF cables.

■ AC 166 GSTF/5 and AC 166 GBUF/5

Because of their low overall height these flat plug and socket connectors are especially designed to be installed in cramped cavities, behind furniture, in mounting rails or, to be combined with distributing blocks.

These plug and socket connectors are supplied as un-assembled piece parts consisting of plug, resp. socket inserts, bottom plate, cover and 2 screws.

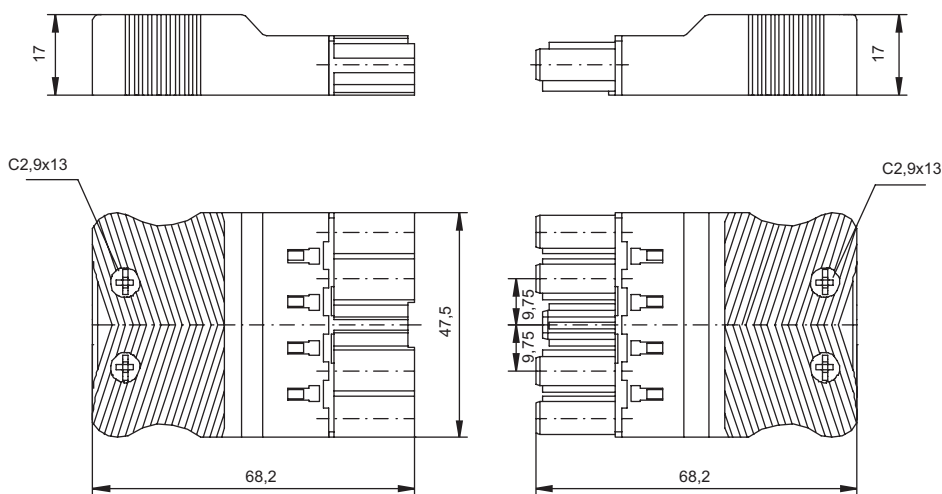
■ Conductor Sizes and Strain Relief

AC 166 GSTF / AC 166 GBUF /	Conductor Sizes	Round Conductors H05VV
515	5 x 1.5 mm ²	Ø 9.5 - 11.0 mm
525	5 x 2.5 mm ²	Ø 11.0 - 12.5 mm

Conductors of size < 1.5 mm² upon request.

■ Technical Data

Mouldings:	Polyamide 6/6, black or white Continuous working temp.: 100° C Short-time temperature: 160° C
Plugs and Sockets:	Brass, tinned
Clamping Screws:	M 3 x 4.5 mm Steel, zinc plated, chromed ⌚ max. 0.3 Nm
Moulding Screws:	C 2.9 x 13 mm Steel, zinc plated, chromed ⌚ max. 0.4 Nm
Current Rating:	to EN 61 984 : 16 A / 400 V at T 70
Upper Limit Temp.:	to EN 61 984 : 110 °C
Conductor Size:	1.5 mm ² / 2.5 mm ²
Stripping Length:	7 mm
Dismantling Length:	45 mm
Protection Class:	IP 20 IP 40 - when plugged-in



AC 166 GSTF/ 5 - Plugs flat			AC 166 GBUF/ 5 - Sockets flat			
List No./ No. of Ways	Order No.	Kgs. per 100 Pcs.	List No./ No. of Ways	Order No.	Kgs per 100 Pcs.	Packing Unit
AC 166 GSTF/ 515 white	16 24 55	2,95	AC 166 GBUF/ 515 white	16 54 55	3,12	100
AC 166 GSTF/ 515 black	16 24 65	2,95	AC 166 GBUF/ 515 black	16 54 65	3,12	100
AC 166 GSTF/ 525 white	16 26 55	2,95	AC 166 GBUF/ 525 white	16 56 55	3,12	100
AC 166 GSTF/ 525 black	16 26 65	2,95	AC 166 GBUF/ 525 black	16 56 65	3,12	100



CONNECTING SYSTEM

AC 166 - G

■ Connecting Cables and Extension Cables (EN 60 320) 3 x 1.5 mm² and 3 x 2.5 mm²



Approvals													
Nominal Cross-Section mm ²	1,5 / 2,5												
Voltage Rating V	250												

PVC sheathed H05VV-F with fine-stranded conductors to VDE 0250 and VDE 0281, part 402, pre-fabricated as cord sets with connectors of our "G" series. When additionally using an interlocking device (see page 64), these conductors can be used in installation systems (VDE 0628).

Other conductors upon request.

■ AC 166 ALCGS, Connecting Cables, Plugs ■ AC 166 ALCGB, Connecting Cables, Sockets

Cables on one side with plug or socket and on the other side with ferrules. Sealed wire ends upon request.

■ AC 166 VLCCG, Extension Cables

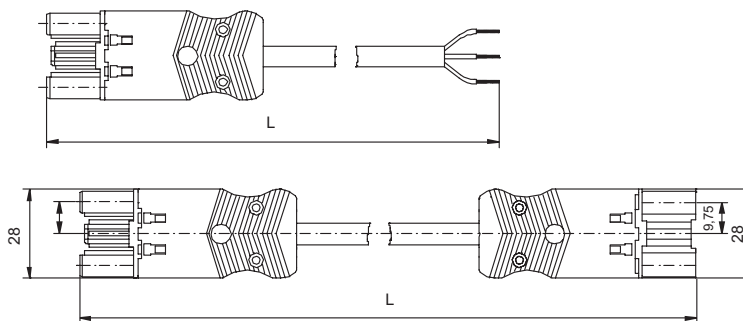
Cables on one side with plug and on the other with socket.

■ Lengths (Dimension L):

Connecting and extension cables are available in whole metres 1m to 8 m long. Further lengths upon request.

■ Technical Data

Mouldings:	Polyamide 6/6, black or white Continuous working temp. 100° C Short-time temperature 160° C
Contacts:	Brass, tinned
Current Rating:	to EN 60 320 : 16 A / 250 V at T 70 °C to EN 61 984 : 16 A / 250 V at T 70 °C
Upper Limit Temp. of Mouldings:	110 °C
Conductors:	3 x 1.5 mm ² / 2.5 mm ² Continuous working temp.: 70 °C
Stripping Length:	7 mm
Dismantling Length:	32 mm
Protection Class:	IP 20 IP 40 - when plugged-in



AC 166 ALCGS, Connecting Cables with Plug 3 x 1,5 mm ² and 3 x 2,5 mm ²			AC 166 ALCGB, Connecting Cables with Socket 3 x 1,5 mm ² and 3 x 2,5 mm ²			
List No./No. of Ways Conductor Size/Length	Order No. white	Order No. black	List No./No. of Ways Conductor Size/Length	Order No. white	Order No. black	Packing Unit
AC 166 ALCGS/315 100	16 27 53 10	16 27 63 10	AC 166 ALCGB/315 100	16 57 53 10	16 57 63 10	75/150
AC 166 ALCGS/315 ...	16 27 53 **	16 27 63 **	AC 166 ALCGB/315 ...	16 57 53 **	16 57 63 **	upon request
AC 166 ALCGS/325 100	16 27 73 10	16 27 83 10	AC 166 ALCGB/325 100	16 57 73 10	16 57 83 10	75/150
AC 166 ALCGS/325 ...	16 27 73 **	16 27 83 **	AC 166 ALCGB/325 ...	16 57 73 **	16 57 83 **	upon request

AC 166 VLCCG, Extension Cables 3 x 1,5 mm ² and 3 x 2,5 mm ²			
List No./No. of Ways Conductor Size/Length	Order No. white	Order No. black	Packing Unit
AC 166 VLCCG/315 100	16 47 53 10	16 47 63 10	75/150
AC 166 VLCCG/315 ...	16 47 53 **	16 47 63 **	upon request
AC 166 VLCCG/325 100	16 47 73 10	16 47 83 10	75/150
AC 166 VLCCG/325 ...	16 47 73 **	16 47 83 **	upon request

... Please enter the required length in cm.
** Please enter the required length in dm.



CONNECTING SYSTEM

AC 166 - G

■ Connecting Cables and Extension Cables

4 x 1.5 mm² and 4 x 2.5 mm²



Approvals														
Nominal Cross-Section mm ²	1,5 / 2,5													
Voltage Rating V	400													

PVC sheathed H05VV-F with fine-stranded conductors to VDE 0250 and VDE 0281, part 402, pre-fabricated as cord sets with connectors of our "G"-series.
Other conductors upon request.

■ AC 166 ALCGS, Connecting Cables, Plugs

■ AC 166 ALCGB, Connecting Cables, Sockets

Cables on one side with plug or socket and on the other side with ferrules. Sealed wire ends upon request.

■ AC 166 VLCCG, Extension Cables

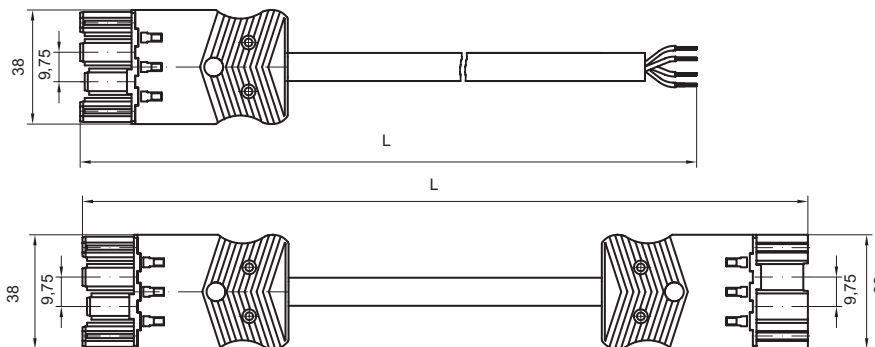
Cables on one side with plug and on the other side with socket.

■ Lengths (Dimension L)

Connecting and extension cables are available in whole metres 1 m to 8 m long. Further lengths upon request.

■ Technical Data

Mouldings:	Polyamide 6/6, black or white Continuous working temp.: 100° C Short-time 160° C
Contacts:	Brass, tinned
Current Rating:	to EN 60 320 : 16 A / 250 V at T 70 °C to EN 61 984 : 16 A / 250 V at T 70 °C
Upper Limit Temp. of Mouldings:	110 °C
Conductors:	4 x 1,5 mm ² / 2,5 mm ² Continuous working temp.: 70 °C
Stripping Length:	7 mm
Dismantling Length:	35 mm
Protection Class:	IP 20 IP 40 - when plugged-in



AC 166 ALCGS, Connecting Cables with Plug 4 x 1,5 mm ² and 4 x 2,5 mm ²			AC 166 ALCGB, Connecting Cables with Socket 4 x 1,5 mm ² and 4 x 2,5 mm ²			
List No./No. of Ways Conductor Size/Length	Order No. white	Order No. black	List No./No. of Ways/ Conductor Size/Length	Order No. white	Order No. black	Packing Unit
AC 166 ALCGS/415 100	16 27 54 10	16 27 64 10	AC 166 ALCGB/415 100	16 57 54 10	16 57 64 10	30
AC 166 ALCGS/415 ...	16 27 54 **	16 27 64 **	AC 166 ALCGB/415 ...	16 57 54 **	16 57 64 **	upon request
AC 166 ALCGS/425 100	16 27 74 10	16 27 84 10	AC 166 ALCGB/425 100	16 57 74 10	16 57 84 10	30
AC 166 ALCGS/425 ...	16 27 74 **	16 27 84 **	AC 166 ALCGB/425 ...	16 57 74 **	16 57 84 **	upon request

AC 166 VLCCG, Extension Cables 4 x 1,5 mm ² and 4 x 2,5 mm ²			
List No./No. of Ways Conductor Size/Length	Order No. white	Order No. black	Packing Unit
AC 166 VLCCG/415 100	16 47 54 10	16 47 64 10	30
AC 166 VLCCG/415 ...	16 47 54 **	16 47 64 **	upon request
AC 166 VLCCG/425 100	16 47 74 10	16 47 84 10	30
AC 166 VLCCG/425 ...	16 47 74 **	16 47 84 **	upon request

... Please enter the required length in cm.
** Please enter the required length in dm.



CONNECTING SYSTEM

AC 166 - G



■ Connecting Cables and Extension Cables

5 x 1.5 mm² and 5 x 2.5 mm²

Approvals														
Nominal Cross-Section mm ²	1.5 / 2.5													
Voltage Rating V	400													

PVC sheathed H05VV-F with fine-stranded conductors to VDE 0250 and VDE 0281, part 402, pre-fabricated as cord sets with connectors of our "G" series. Other conductors upon request.

■ AC 166 ALCGS, Connecting Cables, Plugs

■ AC 166 ALCGB, Connecting Cables, Sockets

Cables on one side with plug or socket and on the other side with ferrules. Sealed wire ends upon request.

■ AC 166 VLCCG, Extension Cables

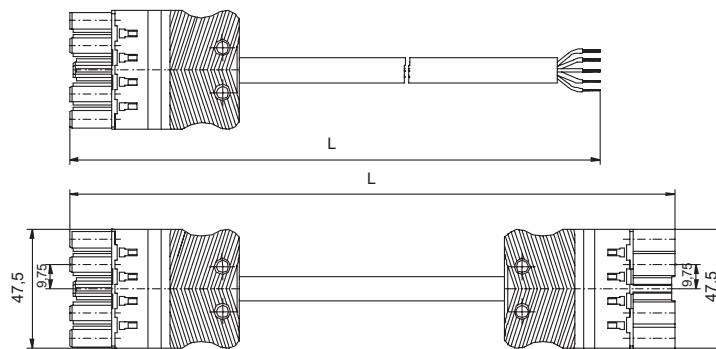
Cables on one side with plug and on the other with socket.

■ Lengths (Dimension L):

Connecting and extension cables are available in whole metres 1 m to 8 m long. Further lengths upon request.

■ Technical Data

Mouldings:	Polyamide 6/6, black or white Continuous working temp. 100° C Short-time temperature 160° C
Contacts:	Brass, tinned
Current Rating:	to EN 60 320 : 16 A / 250 V at T 70 °C to EN 61 984 : 16 A / 250 V at T 70 °C
Upper Limit Temp. of Mouldings:	110 °C
Conductors:	5 x 1.5 mm ² / 2.5 mm ² Continuous working temp.: 70 °C
Stripping Length:	7 mm
Dismantling Length:	45 mm
Protection Class:	IP 20 IP 40 - when plugged-in



AC 166 ALCGS, Connecting Cables with Plug 5 x 1,5 mm ² and 5 x 2,5 mm ²			AC 166 ALCGB, Connecting Cables with Socket 5 x 1,5 mm ² and 5 x 2,5 mm ²			
List No./No.of Ways Conductor Size/Length	Order No. white	Order No. black	List No./No.of Ways/ Conductor Size/Length	Order No. white	Order No. black	Packing Unit
AC 166 ALCGS/515 100	16 27 55 10	16 27 65 10	AC 166 ALCGB/515 100	16 57 55 10	16 57 65 10	30
AC 166 ALCGS/515 ...	16 27 55 **	16 27 65 **	AC 166 ALCGB/515 ...	16 57 55 **	16 57 65 **	upon request
AC 166 ALCGS/525 100	16 27 75 10	16 27 85 10	AC 166 ALCGB/525 100	16 57 75 10	16 57 85 10	30
AC 166 ALCGS/525 ...	16 27 75 **	16 27 85 **	AC 166 ALCGB/525 ...	16 57 75 **	16 57 85 **	upon request

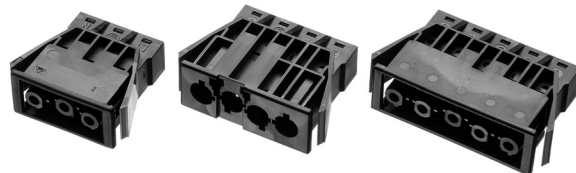
AC 166 VLCCG, Extension Cables 5 x 1,5 mm ² and 5 x 2,5 mm ²			
List No./No.of Ways Conductor Size/Length	Order No. white	Order No. black	Packing Unit
AC 166 VLCCG/515 100	16 47 55 10	16 47 65 10	30
AC 166 VLCCG/515 ...	16 47 55 **	16 47 65 **	upon request
AC 166 VLCCG/525 100	16 47 75 10	16 47 85 10	30
AC 166 VLCCG/525 ...	16 47 75 **	16 47 85 **	upon request

... Please enter the required length in cm.
** Please enter the required length in dm.



CONNECTING SYSTEM

AC 166 - G



Built-in Plugs and Built-in Sockets 3, 4 and 5way (EN 60 320)

Approvals						
Nominal Cross-Section mm ²	2,5	2,5	2,5	2,5	14 AWG 16 amp.	2,5
Voltage Rating V	250/400	250	400	250	600	250

* 5way: applied for

Plug and socket connectors to be installed in luminaires, appliances and other housings with 0.5 - 1.2 mm wall thickness. (Other thicknesses upon request.) They are simply pushed into a housing cutout and are fixed. Wire connection is made by screwless spring clamping terminals for solid wires, resp. for sealed wire ends.

Appliance Couples according to VDE 0627

3 pole plug and socket connectors AC 166 - G are approved as "appliance couples" according to EN 60 320 / IEC 320 for mains connection and can be connected and disconnected under load according to EN 61 984. When using additional latches they are also suited to be used in installation systems (VDE 0628).

AC 166 GEST, Built-in Plugs G-Series

Built-in plugs (with plug pins), 3, 4 and 5 pole - provide mains supply to the receiver connected.

AC 166 GEBU, Built-in Sockets G-Series

Built-in sockets (with sockets sleeves). 3, 4 and 5 pole - to branch off circuit connection to another receiver.

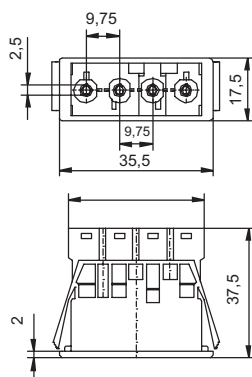
Protecting caps - please see page 64.

Latches - please see page 64.

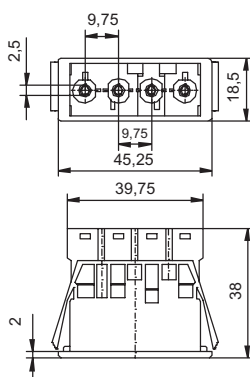
Technical Data

Mouldings:	Polyamide 6/6, black, white or coral red Continuous working temp.: 100° C Short-time temperature: 160° C
Plugs and Sockets:	Brass, tinned
Current Rating:	to EN 60 320 : 16 A / 250 V at T 70 °C to EN 61 984 : 3way : 16 A / 250 V at T 70 °C 4way : 16 A / 400 V at T 70 °C 5way : 16 A / 400 V at T 70 °C
Upper Limit Temp.:	110 °C
Conductor Size:	solid and flexible cables, sealed: 0.5 - 2.5 mm ² flexible cables with ferrules: 0.5 - 1.5 mm ²
Stripping Length:	8 - 9 mm
Housing Cutout:	3way : 33 x 15.6 mm 4way : 42.75 x 16.6 mm 5way : 52.90 x 16.6 mm
Protection Class:	IP 20 IP 40 - when plugged-in

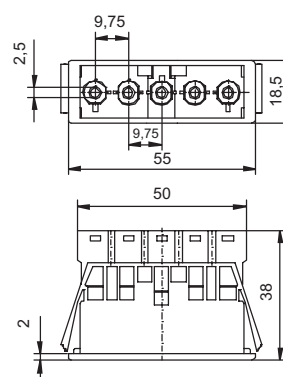
3way



4way



5way



AC 166 GEST, Built-in Plugs G-Series				AC 166 GEBU, Built-in Sockets G-Series			
List No./ No. of Ways	Order No.	Kgs. per 100 Pcs.	Packing Unit	List No./ No. of Ways	Order No.	Kgs per 100 Pcs.	Packing Unit
AC 166 GEST/3 white	16 87 53	1,63	200	AC 166 GEBU/3 white	16 88 53	1,70	200
AC 166 GEST/3 black	16 87 63	1,63	200	AC 166 GEBU/3 black	16 88 63	1,70	200
AC 166 GEST/3 coral red	16 87 X3	1,63	200	AC 166 GEBU/3 coral red	16 88 X3	1,70	200
AC 166 GEST/4 white	16 87 54	2,02	150	AC 166 GEBU/4 white	16 88 54	2,08	150
AC 166 GEST/4 black	16 87 64	2,02	150	AC 166 GEBU/4 black	16 88 64	2,08	150
AC 166 GEST/5 white	16 87 55	2,63	100	AC 166 GEBU/5 white	16 88 55	2,70	100
AC 166 GEST/5 black	16 87 65	2,63	100	AC 166 GEBU/5 black	16 88 65	2,70	100

CONNECTING SYSTEM

AC 166 - G

- Appliance Couples (EN 60 320)
- Built-in Plugs, Built-in Sockets, 3way
- Coding Variants



Approvals														
Nominal Cross Section mm ²	1,5 / 2,5													
Voltage Rating V	250													

Built-in plugs and built-in sockets with coding variants consist of a black or a white frame and coloured plug resp. socket inserts. For correspondingly coded sockets (mains supply) and plugs (output) please see page 52.

■ Coding for a safe Plugging

A coding scheme as well as explanatory notes on optical and mechanical codings and their use are given on page 52.

- AC 166 GESTBV, Built-in Plugs
- AC 166 GEBUBV, Built-in Sockets

Plug and socket connectors to be installed in luminaires, appliances and other housings with 0.5 - 1.5 mm wall thickness. They are simply pushed into a housing cutout size 33 x 15.6 mm and are fixed.

Type GESTKV / GEBUKV for 1.5 - 2.5 mm wall thickness upon request.

Connection is made by one screw terminal per pole for wire sizes 0.5 - 2.5 mm².

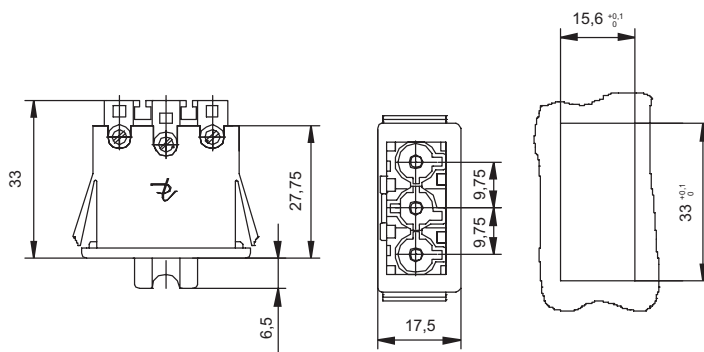
■ Interlocking according to VDE 0628

Interlocking of built-in plugs and sockets conforming to standards is made by moulded latches.

Special version without interlocking upon request.

■ Technical Data

Mouldings:	Polyamide 6.6, Continuous working temp.: 100°C Short-time 160°C
Plugs and Sockets:	Brass, tinned M 3 x 4.5
Screws:	Steel, zinc plated, chromed ⌀ max. 0,3 Nm
Current Rating:	to EN 60 320 : 16 A / 250 V at T 70 °C to EN 61 984 : 16 A / 250 V at T 70 °C
Upper Limit Temp.:	to EN 61 984 : 110 °C
Conductor Size:	0.5 to 2.5 mm ²
Stripping Length:	7 mm
Protection Class:	IP 20 IP 40 - when plugged-in



AC 166 GESTBV/ 3 Black Frame - (white upon Request)			AC 166 GEBUBV/ 3 Black Frame - (white upon Request)			Packing Unit
List No./No. of Ways/ Insert Colour	Order No.	Kgs. per 100 Pcs.	List No./No. of Ways/ Insert Colour	Order No.	Kgs. per 100 Pcs.	
AC 166 GESTBV/ 3 coral red	16 82 63 X	1,20	AC 166 GEBUBV/ 3 coral red	16 83 63 X	1,31	200
AC 166 GESTBV/ 3 pebble grey	16 82 63 K	1,20	AC 166 GEBUBV/ 3 pebble grey	16 83 63 K	1,31	200
AC 166 GESTBV/ 3 light red	16 82 63 R	1,20	AC 166 GEBUBV/ 3 light red	16 83 63 R	1,31	200
AC 166 GESTBV/ 3 brown	16 82 63 B	1,20	AC 166 GEBUBV/ 3 brown	16 83 63 B	1,31	200
AC 166 GESTBV/ 3 pastel blue	16 82 63 P	1,20	AC 166 GEBUBV/ 3 pastel blue	16 83 63 P	1,31	200
AC 166 GESTBV/ 3 green	16 82 63 G	1,20	AC 166 GEBUBV/ 3 green	16 83 63 G	1,31	200
AC 166 GESTBV/ 3 dark grey	16 82 63 D	1,20	AC 166 GEBUBV/ 3 dark grey	16 83 63 D	1,31	200
AC 166 GESTBV/ 3 yellow	16 82 63 Y	1,20	AC 166 GEBUBV/ 3 yellow	16 83 63 Y	1,31	200

CONNECTING SYSTEM

AC 166 - G

■ Distributing Block, 3way (EN 60 320)



Approvals														
Nominal Cross Section mm ²														
Voltage Rating	V	250												

Distributing block for branching off 3 pole plug and socket connectors of the G-Series.

1 Input terminal: Plug, 3-pole
2 Output terminals: Sockets, 3-pole

■ With Locking

When making installation according to VDE 0628, connecting elements have to be interlocked. The distributing block provides moulded hooks to lock one input and one output terminal. Locking of the 2nd output terminal (luminaires connection) is made during installation either by plug or by a built-in socket with locking device.

■ Technical Data

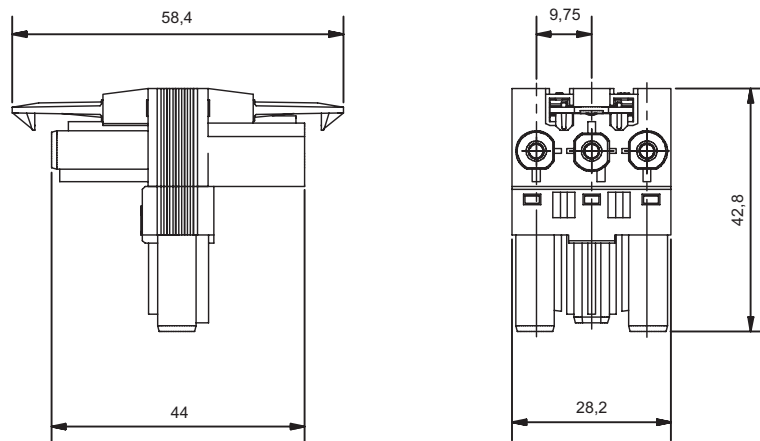
Mouldings: Polyamide 6/6 white or black
Continuous working temp.: 100° C
Short-time temperature: 160° C

Plugs and Sockets: Brass, tinned

Current Rating: to EN 60 320 : 16 A / 250 V at T 70 °C
to EN 61 984 : 16 A / 250 V at T 70 °C

Upper Limit Temp.: 110 °C

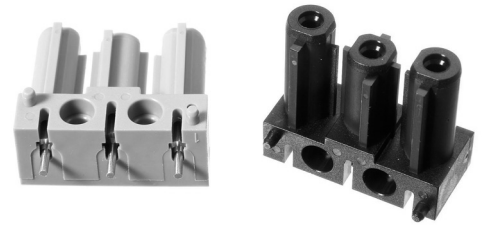
Protection Class: IP 20
IP 40 - when plugged-in



List No./ No. of Ways	Order No.	Kgs. per 100 Pcs.	Packing Unit
AC 166 GVT 3/3 white	16 71 53	1,05	100
AC 166 GVT 3/3 black	16 71 63	1,05	100



CONNECTING SYSTEM AC 166 - G



■ Inserts, 3- and 4way Solder Connection vertical

Approvals											
Nominal Cross Section mm ²	1,5 / 2,5				2,5						
Voltage Rating V	250				250						

Connectors to be soldered on pc-boards of electronic ballasts, transformers, light control, alarm and signalling devices.

That vertical type is designed for soldering from the top down into the pc-board. There is no additional fixing provided.

■ Plug-in 'Connectors according to EN 61 984

Plug and socket connectors AC 166-G are approved according to EN 61 984 (engaged and disengaged under load) as well as according to VDE 0628 (use in installation systems).

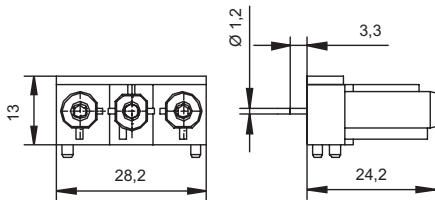
- Black + White : Standard coding "G"
- Pebble Grey (3way only) : Special coding "G"

■ Latches

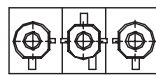
When making installations to VDE 0628, contact making plugs have to be provided with latches. Upon request.

■ Technical Data

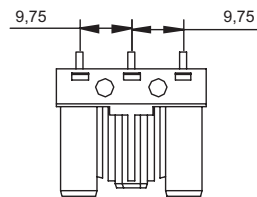
Mouldings:	Polyamide 6/6, black, white or pebble grey - cover black only Continuous working temp.: 100° C short-time 160° C
Inserts and Solder contact:	Brass, tinned
Current Rating:	to EN 60 320: 16 A / 250 V at T 70 °C to EN 61 984: 16 A / 250 V at T 70 °C
Upper Limit Temp.:	to EN 61 984 : 110 °C
Length of Solder Pin:	3.3 mm
Fixing Hole Diameter:	1.4 mm



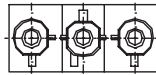
Coding No. 1



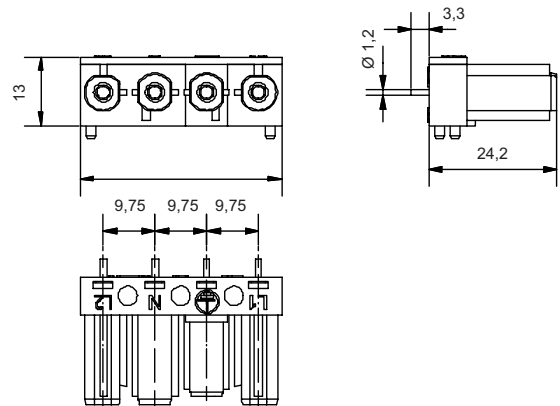
white / black



Coding No. 2



pebble grey



List No./ No. of Ways	Order No.	Kgs. per 100 Pcs.	Packing Unit
AC 166 GBULV/ 3 white	16 93 53	0,75	200
AC 166 GBULV/ 3 black	16 96 63	0,75	200
AC 166 GBULV/ 3 pebble grey	16 93 03	0,75	200
AC 166 GBULV/ 4 white	16 93 54	1,00	150
AC 166 GBULV/ 4 black	16 93 64	1,00	150