

HEAVY DUTY CONNECTORS

FOR LIGHTENING QUICK INDUSTRIAL CONNECTIONS



GENERAL SPECIFICATIONS FOR MULTIPOLE INDUSTRIAL CONNECTORS

INSERTS:

- Made from self-extinguishing glass fibre reinforced thermoplastic resin UL 94 V0, GMT 960°.
- Temperature range from -40° C to +125° C.
- Silver plated brass contacts to ensure low contact resistance.
- The screw terminals are provided with captive screws in stainless steel to prevent corrosion.
- Contact number (pin) marking by laser printing or moulding.
- Suitable for use with alternate or direct current
- Polarized by provision of asymmetric guide rails hence preventing incorrect mating.
- Inter changeability for male and female inserts in hoods and housing
- Captive screws with anti-loosening washers for fitting into the enclosure.
- Rated for mechanical working life equal to or greater than 500 mating cycles.
- Connection technologies possible include : screw terminals, crimp terminals and screw terminals housed in terminal blocks.
- Manufactured in conformity with EN 61984, VDE 0110, VDE 0627 standards.
- Certified and identified with UL, CSA & CE Marking.

TYPES OF CONDUCTOR TERMINATIONS:

- Screw terminals with wire protector
- Crimp terminals
- Screw terminals with Terminal Block

ENCLOSURES:

- Available in two parts 1. Hoods 2. Housings.
- Housings available in bulk head mounting design or surface mounting design.
- Die cast aluminium alloy body with epoxy-polyester powder coated finish or self-extinguishing thermoplastic body (square type).
- High resistance to impact and mechanical stress.
- Special sealing gaskets made from anti-ageing, oil-resistant and fuel resistant vinyl nitrile elastomer
- Monoblock galvanized steel or stainless steel or self extinguishing glass filled thermoplastic material closure levers guarantee a perfect closure and sealing.
- Two types of Locking arrangements, single (with one lever) or double (with 2 levers).
- IP65 Degree of protection (EN 60529)
- Electrical connection with protective ground via contact with mounting surface.
- Available with or without spring-loaded lockable metal covers or mobile covers.
- The enclosures are provided with riveted stainless steel pegs which ensure structural stability and prevent corrosion.
- Enclosures for 500 V are provided with two tabs which ensure that inserts of 830 V rating can not be fixed into them.

CABLE GLANDS:

Cable Glands with Pg threads in nickel plated brass offer IP 65 protection.

(Can be replaced with Controlwell's range of IP 68 Standard Cable Glands with Pg or Metric threads.)

CODE PINS:

Code pins protect against incorrect mating of similar series inserts.

REMARKS:

- All of the components of Multipole Industrial Connectors are RoHS compliant in accordance with European Directive 2002/95/EC
- Connectors should not be coupled and de-coupled under electrical load.

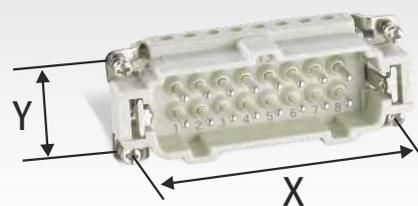
ENCLOSURE SELECTION

A large number of permutations and combinations are possible between the inserts and enclosures.

To ease the task of enclosure selection the enclosures are divided into the following types, which indicate the housing space inside them.

Enclosure Type	Housing space for inserts with screw fixing center distance x-y (mm)
3A	21 x 21 *
10A	49 x 16
16A	66 x 16
32A	66 x 40 (2 inserts)
6B	44 x 27
10B	57 x 27
16B	77 x 27
24B	104 x 27
32B	77 x 62 (2 inserts)
48B	104 x 62 (2 inserts)

* The screw fixing center distance cannot be given because this insert has only one screw.
21 x 21 indicates the size of sectioned inserts.



COMPACT SQUARE TYPE MALE INSERTS



These smaller 3A size square male inserts are available in 21 x 21 mm size and provide a most compact connection. These inserts are available from 3 pole to 12 pole configurations.

Technical Details :

Insulation Material	Polycarbonate
Contact Material	Silver-Plated Copper Alloy
Wire Size	0.5 - 2.5 sq.mm
Flammability	UL 94 V0
Temperature Range	-40° C to +125° C
Approvals	UL CE RoHS

Male Inserts

Cat. No. Male Insert	No. of Poles	Current Rating Amp	Voltage Rating Volt	Wire Size sq.mm	Connection Type
W03MT/10A3	3 + ⊕	10	230 / 400	0.5 - 2.5	Screw
W04MT/10A3	4 + ⊕	10	230 / 400	0.5 - 2.5	Screw
W05MCC/16A3	5 + ⊕	16	230 / 400	0.14 - 2.5	Crimp Contact
W07MCC/10A3/250	7 + ⊕	10	250	0.14 - 2.5	Crimp Contact
W08MCC/10A3	8	10	50	0.14 - 2.5	Crimp Contact
W12MCC/10A3	12+ ⊕	10	400	0.14 - 2.5	Crimp Contact

COMPACT SQUARE TYPE FEMALE INSERTS



These smaller 3A size square female inserts are available in 21 x 21 mm size and provide a most compact connection. These inserts are available from 3 pole to 12 pole configurations.

Technical Details :

Insulation Material	Polycarbonate
Contact Material	Silver-Plated Copper Alloy
Wire Size	0.5 - 2.5 sq.mm
Flammability	UL 94 V0
Temperature Range	-40° C to +125° C
Approvals	UL CE RoHS

Female Inserts

Cat. No. Female Insert	No. of Poles	Current Rating Amp	Voltage Rating Volt	Wire Size sq.mm	Connection Type
W03FT/10A3	3 + ⊕	10	230 / 400	0.5 - 2.5	Screw
W04FT/10A3	4 + ⊕	10	230 / 400	0.5 - 2.5	Screw
W05FCC/16A3	5 + ⊕	16	230 / 400	0.14 - 2.5	Crimp Contact
W07FCC/10A3/250	7 + ⊕	10	250	0.14 - 2.5	Crimp Contact
W08FCC/10A3	8	10	50	0.14 - 2.5	Crimp Contact
W12FCC/10A3	12+ ⊕	10	400	0.14 - 2.5	Crimp Contact

COMPACT SQUARE TYPE HOODS



These hoods are suitable for housing compact square type male or female inserts. They are available with options of top wire entry, side wire entry and top wire entry with lever for cable to cable connection.

Technical Details :

Material	Die cast Alluminium alloy Thermoplastic- Polyamide
Protection Class	IP 65
Voltage	For Inserts upto 500V
Thread	Pg, Metric
Gasket	Vinyl Nitrite Elastomer (NBR)
Size of Enclosure	3A / 21 x 21

Cat. No. Plastic	Cat. No. Metal	Cable Gland Size	Type of Wire Entry
W03/4CTPP11	W03/4CTMP11	Pg 11	Top
W03/4CSPP11	W03/4CSMP11	Pg 11	Side
W03/4CTPLP11	W03/4CTMLP11	Pg 11	Top Entry with Lever
W03/4CTPM20	W03/4CTMM20	M 20 X 1.5	Top
W03/4CSPM20	W03/4CSMM20	M 20 X 1.5	Side
W03/4CTPLM20	W03/4CTMLM20	M 20 X 1.5	Top Entry with Lever

COMPACT SQUARE TYPE SURFACE MOUNT HOUSINGS

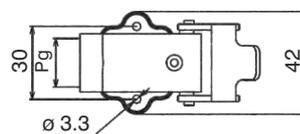


These surface mount housings are suitable for housing compact square type male or female inserts. They are available with side wire entry option only.

Technical Details :

Material	Die cast Alluminium alloy Thermoplastic- Polyamide
Protection Class	IP 65
Voltage	For Inserts upto 500V
Thread	Pg, Metric
Gasket	Vinyl Nitrite Elastomer (NBR)
Size of Enclosure	3A / 21 x 21

Dimensions (mm)



Cat. No. Plastic	Cat. No. Metal	Cable Gland Size
W03/4HSPP11	W03/4HSMP11	Pg 11
W03/4HSPM20	W03/4HSMM20	M 20 x 1.5

COMPACT SQUARE TYPE BULK HEAD MOUNT HOUSINGS

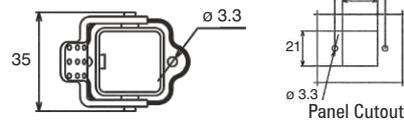


These bulk head mounting type straight housings are suitable for hoods which are connected perpendicular to the mounting surface. They can house male or female compact square type inserts.

Technical Details :

Material	Die cast Alluminium alloy Thermoplastic- Polyamide
Protection Class	IP 65
Voltage	For Inserts upto 500V
Gasket	Vinyl Nitrite Elastomer (NBR)
Size of Enclosure	3A / 21 x 21

Dimensions (mm)



Cat. No. Plastic

W03/4HBSP

Cat. No. Metal

W03/4HBSPM

COMPACT SQUARE TYPE BULK HEAD MOUNT RIGHT ANGLED HOUSINGS

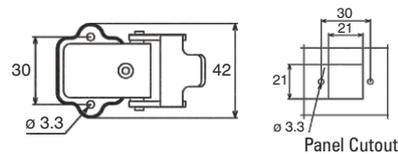


These bulk head mounting type right angled housings are suitable for hoods which are connected parallel to the mounting surface. They can house male or female compact square type inserts.

Technical Details :

Material	Die cast Alluminium alloy Thermoplastic- Polyamide
Protection Class	IP 65
Voltage	For Inserts upto 500V
Gasket	Vinyl Nitrite Elastomer (NBR)
Size of Enclosure	3A / 21 x 21

Dimensions (mm)



Cat. No. Plastic

W03/4HBRP

Cat. No. Metal

W03/4HBRPM

SCREW TERMINAL TYPE RECTANGULAR MALE AND FEMALE INSERTS



Male



Female

These inserts are available from 4 to 48 poles. These are polarized to prevent incorrect coupling between the male and the female inserts. The screw terminals are provided with wire protectors to prevent damage to the conductors.

Technical Details :

Insulation Material	Polycarbonate
Contact Material	Silver Plated Copper Alloy
Flammability	UL 94 V0
Temperature Range	-40° C to +125° C
Approvals	UL CE RoHS CCC

Male Inserts

Cat. No.	No. of Poles + ⊕	Current Rating Amp		Voltage Rating Volt		Wire Size sq.mm		Enclosure Size (mm)	Suitable Enclosure Type
		Pins 1-4	Pins 5-6	Pins 1-4	Pins 5-6	Pins 1-4	Pins 5-6		
W04MT/80B16	4	80		500		1.5 - 16.0		77 x 27	16B
W06MT/16B6	6	16		500		0.5 - 4.0		44 x 27	6B
W06MT/35B16	6	35		830		1.5 - 6.0		77 x 27	16B
W10MT/16A10	10	16		250		0.5 - 4.0		49 x 16	10A
W10MT/16B10	10	16		500		0.5 - 4.0		57 x 27	10B
W16MT/16A16	16	16		250		0.5 - 4.0		66 x 16	16A
W16MT/16B16	16	16		500		0.5 - 4.0		77 x 27	16B
W24MT/16B24	24	16		500		0.5 - 4.0		104 x 27	24B
W32MT/16B32	32	16		500		0.5 - 4.0		77 x 62	32B
W48MT/16B48	48	16		500		0.5 - 4.0		104 x 62	48B
W4/2MT/(80/16)B16	6 (4+2)	Pins 1-4	Pins 5-6	Pins 1-4	Pins 5-6	Pins 1-4	Pins 5-6	77 x 27	16B
		80	16	500	830	1.5 - 16.0	0.5 - 4.0		
W4/8MT/(80/16)B24	12 (4+8)	Pins 1-4	Pins 5-12	Pins 1-4	Pins 5-12	Pins 1-4	Pins 5-12	104 x 27	24B
		80	16	500	830	1.5 - 16.0	0.5 - 4.0		

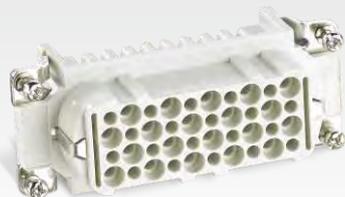
Female Inserts

Cat. No.	No. of Poles + ⊕	Current Rating Amp		Voltage Rating Volt		Wire Size sq.mm		Enclosure Size (mm)	Suitable Enclosure Type
		Pins 1-4	Pins 5-6	Pins 1-4	Pins 5-6	Pins 1-4	Pins 5-6		
W04FT/80B16	4	80		500		1.5 - 16.0		77 x 27	16B
W06FT/16B6	6	16		500		0.5 - 4.0		44 x 27	6B
W06FT/35B16	6	35		830		1.5 - 6.0		77 x 27	16B
W10FT/16A10	10	16		250		0.5 - 4.0		49 x 16	10A
W10FT/16B10	10	16		500		0.5 - 4.0		57 x 27	10B
W16FT/16A16	16	16		250		0.5 - 4.0		66 x 16	16A
W16FT/16B16	16	16		500		0.5 - 4.0		77 x 27	16B
W24FT/16B24	24	16		500		0.5 - 4.0		104 x 27	24B
W32FT/16B32	32	16		500		0.5 - 4.0		77 x 62	32B
W48FT/16B48	48	16		500		0.5 - 4.0		104 x 62	48B
W4/2FT/(80/16)B16	6 (4+2)	Pins 1-4	Pins 5-6	Pins 1-4	Pins 5-6	Pins 1-4	Pins 5-6	77 x 27	16B
		80	16	500	830	1.5 - 16.0	0.5 - 4.0		
W4/8FT/(80/16)B24	12 (4+8)	Pins 1-4	Pins 5-12	Pins 1-4	Pins 5-12	Pins 1-4	Pins 5-12	104 x 27	24B
		80	16	500	830	1.5 - 16.0	0.5 - 4.0		

RECTANGULAR MALE AND FEMALE CONTACT CARRIERS FOR CRIMP CONTACTS



Male



Female

These inserts are available from 6 to 216 poles. These are polarized to prevent incorrect coupling between the male and the female inserts. The conductors need to be crimped with appropriate female crimp contacts and then made to enter the insert where they are held in place with the help of a flexible locking device.

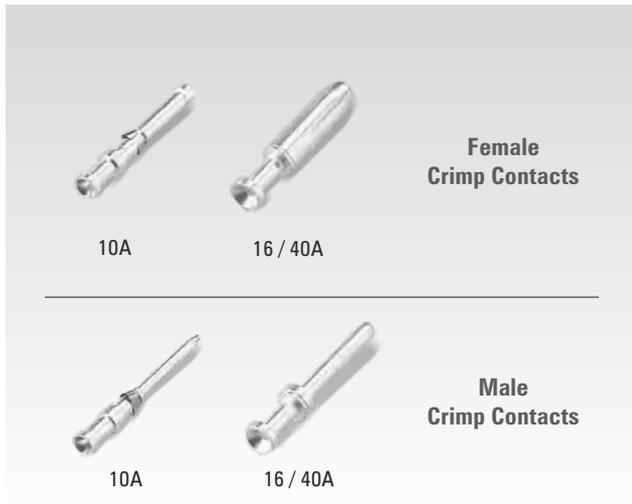
Technical Details :

Insulation Material	Polycarbonate
Contact Material	Silver Plated Copper Alloy
Flammability	UL 94 V0
Temperature Range	-40° C to +125° C
Approvals	UL CE

Cat. No.	No. of Poles + ⊕	Current Rating Amp	Voltage Rating Volt	Enclosure Size (mm)	Suitable Enclosure Type
W06MCC/16B6	6	16	500	44 x 27	6B
W10MCC/16B10	10	16	500	57 x 27	10B
W15MCC/10A10	15	10	250	49 x 16	10A
W24MCC/10B6	24	10	250	44 x 27	6B
W24MCC/16B24	24	16	500	104 x 27	24B
W25MCC/10A16	25	10	250	66 x 16	16A
W32MCC/16B16	32	16	500	77 x 27	16B
W40MCC/10B16	40	10	250	77 x 27	16B
W42MCC/10B10	42	10	250	57 x 27	10B
W46MCC/16B24	46	16	500	104 x 27	24B
W64MCC/10B24	64	10	250	104 x 27	24B
W72MCC/10B16	72	10	250	77 x 27	16B
W108MCC/10B24	108	10	250	104 x 27	24B
W216MCC/10B48	216	10	250	104 x 62	48B

Cat. No.	No. of Poles + ⊕	Current Rating Amp	Voltage Rating Volt	Enclosure Size (mm)	Suitable Enclosure Type
W06FCC/16B6	6	16	500	44 x 27	6B
W10FCC/16B10	10	16	500	57 x 27	10B
W15FCC/10A10	15	10	250	49 x 16	10A
W24FCC/10B6	24	10	250	44 x 27	6B
W24FCC/16B24	24	16	500	104 x 27	24B
W25FCC/10A16	25	10	250	66 x 16	16A
W32FCC/16B16	32	16	500	77 x 27	16B
W40FCC/10B16	40	10	250	77 x 27	16B
W42FCC/10B10	42	10	250	57 x 27	10B
W46FCC/16B24	46	16	500	104 x 27	24B
W64FCC/10B24	64	10	250	104 x 27	24B
W72FCC/10B16	72	10	250	77 x 27	16B
W108FCC/10B24	108	10	250	104 x 27	24B
W216FCC/10B48	216	10	250	104 x 62	48B

MALE AND FEMALE CRIMP CONTACTS FOR CONTACTS CARRIERS



These male and female crimp contacts are available in 10 Amp and 16 Amp versions. The 10 Amp crimp contacts are suitable for conductor size upto 2.5 sq.mm. and the 16 Amp crimp contact are suitable for conductor size upto 4 sq.mm.

Technical Details :

Material	Turned / Machined Copper Alloy
Surface Material	Hard Silver Hard Gold on request
Current Capacity	10 A, 16 A & 40 A

Female Crimp Contacts - Turned

Cat. No.	Current Capacity Amp	Wire Size in sq.mm	Stripping Length mm
WFCT0.5/10A	10	0.5	8
WFCT0.75/10A	10	0.75	8
WFCT1.0/10A	10	1.0	8
WFCT1.5/10A	10	1.5	8
WFCT2.50/10A	10	2.5	6
WFCT0.37/16A	16	0.37	7.5
WFCT0.5/16A	16	0.5	7.5
WFCT0.75/16A	16	0.75	7.5
WFCT1.0/16A	16	1.0	7.5
WFCT1.5/16A	16	1.5	7.5
WFCT2.5/16A	16	2.5	7.5
WFCT4.0/16A	16	4.0	7.5
WFCT6.0/40A	40	4.0	9.6

Male Crimp Contacts - Turned

Cat. No.	Current Capacity Amp	Wire Size in sq.mm	Stripping Length mm
WMCT0.5/10A	10	0.5	8
WMCT0.75/10A	10	0.75	8
WMCT1.0/10A	10	1.0	8
WMCT1.5/10A	10	1.5	8
WMCT2.50/10A	10	2.5	6
WMCT0.37/16A	16	0.37	7.5
WMCT0.5/16A	16	0.5	7.5
WMCT0.75/16A	16	0.75	7.5
WMCT1.0/16A	16	1.0	7.5
WMCT1.5/16A	16	1.5	7.5
WMCT2.5/16A	16	2.5	7.5
WMCT4.0/16A	16	4.0	7.5
WMCT6.0/40A	40	4.0	9.6

HOODS - STANDARD / HIGH CONSTRUCTION TOP ENTRY - WITH 2 PEGS / 1 LEVER



These hoods are suitable for conductors which run perpendicular to the surface on which the appropriate hood and housing are mounted. The spring loaded single locking system ensures a perfect mating between the male and the female inserts while providing them with IP 66 protection.

Technical Details :

Material	Powder Coated Die cast Alluminium alloy
Protection Class	IP 66
Voltage	For Inserts upto 500 V
Thread	Pg, Metric
Gasket	Vinyl Nitrile Elastomer (NBR)

Cat. No. For Hood with 2 Pegs	Cat. No. For Hood with 1 Lever	Enclosure Type	Enclosure Size (mm)	Cable Gland Size
W06CT1P16/B6	WR06CT1P16/B6	6B	44 x 27	Pg 16
W06CT1M20/B6	-	6B	44 x 27	M 20 x 1.5
W10CT1M20/A10	-	10A	49 x 16	M 20 x 1.5
W10CT1P16/B10	WR10CT1P16/B10	10B	57 x 27	Pg 16
W16CT1P16/A16	-	16A	66 x 16	Pg 16
W16CT1M20/A16	-	16A	66 x 16	M 20 x 1.5
W16CT1M25/A16	-	16A	66 x 16	M 25 x 1.5
W16CT1P21/B16	WR16CT1P21/B16	16B	77 x 27	Pg 21
W16CT1M25/B16	-	16B	77 x 27	M 25 x 1.5
W24CT1P21/B24	-	24B	104 x 27	Pg 21
W24CT1M25/B24	-	24B	104 x 27	M 25 x 1.5
W24CT1M32/B24	WR24CT1M32/B24	24B	104 x 27	M 32 x 1.5

Cat. No. For High Const. With Fitting	Cat. No. For High Const. Without Fitting	Enclosure Type	Enclosure Size (mm)	Cable Gland Size
W06HCT1P21/B6	-	6B	44 x 27	Pg 21
-	W16HCT1M25/A16W	16A	66 x 16	M 25 x 1.5
-	W16HCT1P29/B16W	16B	77 x 27	Pg 29
-	W16HCT1M32/B16W	16B	77 x 27	M 32 x 1.5
W16HCT1M40/B16	-	16B	77 x 27	M 40 x 1.5
W32HCT1P36/B32	-	32B	77 x 62	Pg 36
W48HCT1P36/B48	-	48B	104 x 62	Pg 36
W48HCT1M50/B48	-	48B	104 x 62	M 50 x 1.5



HOODS - STANDARD / HIGH CONSTRUCTION TOP ENTRY - WITH 4 PEGS / 2 LEVER



These hoods are suitable for conductors which run perpendicular to the surface on which the appropriate hood and housing are mounted. The spring loaded double locking system ensures a perfect mating between the male and the female inserts even if accidentally one of the locks opens up.

Technical Details :

Material	Die cast Alluminium alloy
Protection Class	IP 66
Voltage	For Inserts upto 830 V
Thread	Pg, Metric
Gasket	Vinyl Nitrile Elastomer (NBR)

Cat. No. For Hood with 4 Pegs	Cat. No. For Hood with 2 Lever	Enclosure Type	Enclosure Size (mm)	Cable Gland Size
W10CT2M20/B10	-	10B	57 x 27	M 20 x 1.5
W10CT2P16/B10	WR10CT2P16/B10	10B	57 x 27	Pg 16
W16CT2P21/B16	WR16CT2P21/B16	16B	77 x 27	Pg 21
W16CT2M25/B16	WR16CT2M25/B16	16B	77 x 27	M 25 x 1.5
W24CT2P21/B24	-	24B	104 x 27	Pg 21
W24CT2P29/B24	WR24CT2P29/B24	24B	104 x 27	Pg 29
W24CT2M32/B24	-	24B	104 x 27	M 32 x 1.5

Cat. No. For High Const. With Fitting	Cat. No. For High Const. Without Fitting	Enclosure Type	Enclosure Size (mm)	Cable Gland Size
-	W16HCT2M25X2/B16W	16B	77 x 27	2 x M25 x 1.5
W24HCT2M32/B24	-	24B	104 x 27	M 32 x 1.5
-	W24HCT2M32X2/B24W	24B	104 x 27	2 x M32 x 1.5
-	W24HCT2P29/B24W	24B	104 x 27	Pg 29
W32HCT2P29/B32	-	32B	77 x 62	Pg 29
-	W32HCT2M32/A32W	32A	66 x 40	M 32 x 1.5



HOODS - STANDARD / HIGH CONSTRUCTION SIDE ENTRY - WITH 2 PEGS



These hoods are suitable for conductors which run parallel to the surface on which the appropriate hood and housing are mounted. The spring loaded single locking system ensures a perfect mating between the male and the female inserts while providing them with IP 65 protection.

Technical Details :

Material	Die cast Alluminium alloy
Protection Class	IP 66
Voltage	For Inserts upto 500 V
Thread	Pg, Metric
Gasket	Vinyl Nitrile Elastomer (NBR)

Cat. No.	Enclosure Type	Enclosure Size (mm)	Cable Gland Size
W06CS1P16/B6	6B	44 x 27	Pg 16
W06CS1M20/B6	6B	44 x 27	M 20 x 1.5
W10CS1P16/A10	10A	49 x 16	Pg 16
W10CS1P16/B10	10B	57 x 27	Pg 16
W10CS1M25/B10	10B	57 x 27	M 25 x 1.5
W16CS1P16/A16	16A	66 x 16	Pg 16
W16CS1P21/B16	16B	77 x 27	Pg 21
W16CS1P29/B16	16B	77 x 27	Pg 29
W16CS1M20/A16	16A	66 x 16	M 20 x 1.5
W16CS1M25/B16	16B	77 x 27	M 25 x 1.5
W24CS1P21/B24	24B	104 x 27	Pg 21
W24CS1P29/B24	24B	104 x 27	Pg 29
W24CS1M32/B24	24B	104 x 27	M 32 x 1.5

Cat. No. For High Const. With Fitting	Cat. No. For High Const. Without Fitting	Enclosure Type	Enclosure Size (mm)	Cable Gland Size
W16HCS1P21/B16	-	16B	77 x 27	Pg 21
-	W16HCS1M25/A16W	16A	66 x 16	M 25 x 1.5
W16HCS1M32/B16	-	16B	77 x 27	M 32 x 1.5
W24HCS1P29/B24	W24HCS1P29/B24W	24B	104 x 27	Pg 29
W32HCS1P29/B32	W32HCS1P29/B32W	32B	77 x 62	Pg 29
W32HCS1P36/B32	-	32B	77 x 62	Pg 36
W48HCS1P29/B48	-	48B	104 x 62	Pg 29
W48HCS1P36/B48	-	48B	104 x 62	Pg 36
-	W48HCS1P42/B48W	48B	104 x 62	Pg 42



HOODS - STANDARD / HIGH CONSTRUCTION SIDE ENTRY - WITH 4 PEGS



These hoods are suitable for conductors which run parallel to the surface on which the appropriate hood and housing are mounted. The spring loaded double locking system ensures a perfect mating between the male and the female inserts even if accidentally one of the locks opens up.

Technical Details :

Material	Die cast Alluminium alloy
Protection Class	IP 66
Voltage	For Inserts upto 830 V
Thread	Pg, Metric
Gasket	Vinyl Nitrile Elastomer (NBR)

Cat. No.	Enclosure Type	Enclosure Size (mm)	Cable Gland Size
W10CS2P16/B10	10B	57 x 27	Pg 16
W10CS2M20/B10	10B	57 x 27	M 20 x 1.5
W10CS2M25/B10	10B	57 x 27	M 25 x 1.5
W16CS2P21/B16	16B	77 x 27	Pg 21
W16CS2M25/B16	16B	77 x 27	M 25 x 1.5
W24CS2P21/B24	24B	104 x 27	Pg 21
W24CS2P29/B24	24B	104 x 27	Pg 29
W24CS2M32/B24	24B	104 x 27	M 32 x 1.5
W32CS2P21/A32	32A	66 x 40	Pg 21
W32CS2M32/A32	32A	66 x 40	M 32 x 1.5

Cat. No. For High Const. With Fitting	Cat. No. For High Const. Without Fitting	Enclosure Type	Enclosure Size (mm)	Cable Gland Size
W10HCS2M32/B10	-	10B	57 x 27	M 32 x 1.5
W16HCS2M32/B16	-	16B	77 x 27	M 32 x 1.5
-	W24HCS2M32/B24W	24B	104 x 27	M 32 x 1.5
W32HCS2P29/B32	-	32B	77 x 62	Pg 29



SURFACE MOUNT HOUSINGS WITH 1 LEVER / 1 LEVER WITH COVER

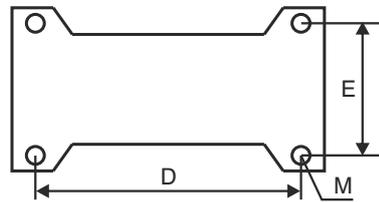


Surface mount type housings are used where a cable terminates into the male or female insert housed inside it. i.e. It is mounted on a plain surface with a cable coming into the housing via a cable gland mounted on the body of the housing. In housings with covers, the cover closes over the opening of the housing when the hood is disconnected from the housing. In this case a single lock mechanism ensures IP 66 class protection to the inserts after mating with the appropriate hood. High construction housings are also available on request.

Technical Details :

Material	Die cast Alluminium alloy
Protection Class	IP 66
Voltage	For Inserts upto 500 V
Thread	Pg, Metric
Gasket	Vinyl Nitrile Elastomer (NBR)

Hole Drilling Dimension



Surface Mount Housing with 1 Lever

Cat. No.	Enclosure Type	Enclosure Size (mm)	Cable Gland Size	D (mm)	E (mm)	M (Ømm)
W06HS1P16/B6	6B	44 x 27	Pg 16	70	40	4.5
W06HS1M20/B6	6B	44 x 27	M 20 x 1.5	70	40	4.5
W10HS1P16/A10	10A	49 x 16	Pg 16	48	40	3.5
W10HS1P16/B10	10B	57 x 27	Pg 16	82	40	4.5
W16HS1P21/A16	16A	66 x 16	Pg 21	64	40	3.5
W16HS1P21/B16	16B	77 x 27	Pg 21	105	45	4.5
W16HS1M25/A16	16A	66 x 16	M 25x 1.5	64	40	3.5
W16HS1M25/B16	16B	77 x 27	M 25x 1.5	105	45	4.5
W24HS1P21/B24	24B	104 x 27	Pg 21	132	45	4.5
W32HS1P29/B32	32B	77 x 62	Pg 29	112	67	5.5
W48HS1P29x2/B48	48B	104 x 62	Pg 29 x 2	111	106	4.5

Surface Mount Housing with 1 Lever & Cover

Cat. No.	Enclosure Type	Enclosure Size (mm)	Cable Gland Size	D (mm)	E (mm)	M (Ømm)
W06HSC1P16/B6	6B	44 x 27	Pg 16	70	40	4.5
W06HSC1M20/B6	6B	44 x 27	M 20 x 1.5	70	40	4.5
W10HSC1P16/B10	10B	57 x 27	Pg 16	82	40	4.5
W16HSC1M25/A16	16A	66 x 16	M 25 x 1.5	64	40	3.5
W16HSC1P21/B16	16B	77 x 27	Pg 21	105	45	4.5
W24HSC1P21/B24	24B	104 x 27	Pg 21	132	45	4.5
W32HSC1P29/B32	32B	77 x 62	Pg 29	112	67	5.5
W32HSC1P36/B32	32B	77 x 62	Pg 36	112	67	5.5

SURFACE MOUNT HOUSINGS - 2 LEVER / 4 PEGS STANDARD / HIGH CONSTRUCTION

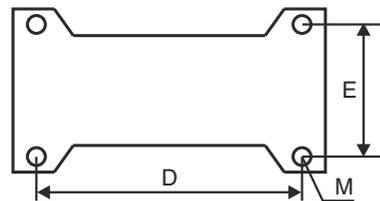


Surface mount type housings are used where a cable terminates into the male or female insert housed inside it. i.e. It is mounted on a plain surface with a cable coming into the housing via a cable gland mounted on the body of the housing. In this case the double locking mechanism ensures IP 66 class protection to the inserts even if one of the locks accidentally opens up.

Technical Details :

Material	Die cast Alluminium alloy
Protection Class	IP 66
Voltage	For Inserts upto 500 V
Thread	Pg, Metric
Gasket	Vinyl Nitrile Elastomer (NBR)

Hole Drilling Dimension



Cat. No. For Housing with 2 Levers	Cat. No. For Housing with 4 Pegs	Enclosure Type	Enclosure Size (mm)	Cable Gland Size	D (mm)	E (mm)	M (Ømm)
W10HS2P16/B10	-	10B	57 x 27	Pg 16	82	40	4.5
W10HS2M20/B10	WR10HS2M20/B10	10B	57 x 27	M 20 x 1.5	82	40	4.5
W16HS2P21/B16	-	16B	77 x 27	Pg 21	105	45	4.5
W24HS2M25/B24	-	24B	104 x 27	M 25 x 1.5	132	45	4.5
W24HS2P21/B24	-	24B	104 x 27	Pg 21	132	45	4.5
W32HS2P29/A32	-	32A	66 x 40	Pg 29	94	46	5.5
W32HS2M32/A32	-	32A	66 x 40	M 32 x 1.5	94	46	5.5
W32HS2P36/B32	-	32B	77 x 62	Pg 36	112	67	5.5

Cat. No. For High Construction Housing with 2 Levers	Cat. No. For Housing with 4 Pegs & Cover	Enclosure Type	Enclosure Size (mm)	Cable Gland Size	D (mm)	E (mm)	M (Ømm)
W10HHS2M32X2/B10	-	10B	57 x 27	M 32 x 1.5	82	40	4.5
W16HHS2M40X2/B16	-	16B	77 x 27	M 40 x 1.5	105	45	4.5
-	WR32HSC2P21/A32	A32	66 x 40	Pg 21	94	46	5.5

BULK HEAD MOUNT HOUSINGS - WITH 1 LEVER & 1 LEVER & COVER

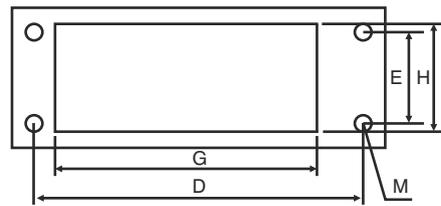


Bulk head mount housings are mounted over cut-outs in the electrical control panels where the conductors approach the inserts fixed inside the housings through the cut-outs. In this case the bulk head mount housings are provided with a hinged cover which closes over the housing in the absence of the hood to be mounted on it.

Technical Details :

Material	Die cast Alluminium alloy
Protection Class	IP 66
Voltage	For Inserts upto 500 V
Gasket	Vinyl Nitrile Elastomer (NBR)

Panel Cutout



Bulk Head Mount Housings with 1 Lever

Bulk Head Mount Housings with 1 Level

Cat. No.	Enclosure Type	Enclosure Size (mm)	D (mm)	E (mm)	G (mm)	H (mm)	M (Ømm)
W06HB1/B6	6B	44 x 27	70	32	53	36	4.5
W10HB1/A10	10A	49 x 16	70	17.5	57	24	3.5
W10HB1/B10	10B	57 x 27	83	32	66.5	36	4.5
W16HB1/A16	16A	66 x 16	86	17.5	73	24	3.5
W16HB1/B16	16B	77 x 27	103	32	86.5	36	4.5
W24HB1/B24	24B	104 x 27	130	32	113	36	4.5
W32HB1/B32	32B	77 x 62	110	65	87.5	76.5	5.5
W48HB1/B48	48B	104 x 62	148	70	122.5	79.5	5.5

Bulk Head Mount Housings with 1 Level & Cover

Cat. No.	Enclosure Type	Enclosure Size (mm)	D (mm)	E (mm)	G (mm)	H (mm)	M (Ømm)
W06HBC1/B6	6B	44 x 27	70	32	53	36	4.5
W10HBC1/A10	10A	49 x 16	70	17.5	57	24	3.5
W10HBC1/B10	10B	57 x 27	83	32	66.5	36	4.5
W16HBC1/A16	16A	66 x 16	86	17.5	73	24	3.5
W16HBC1/B16	16B	77 x 27	103	32	86.5	36	4.5
W24HBC1/B24	24B	104 x 27	130	32	113	36	4.5
W32HBC1/B32	32B	77 x 62	110	65	87.5	76.5	5.5
W48HBC1/B48	48B	104 x 62	148	70	122.5	79.5	5.5

BULK HEAD MOUNT HOUSINGS WITH 2 LEVERS / 4 PEGS AND GASKET

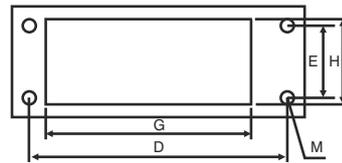


In this case the bulk head mount housings are provided with double locking mechanisms which ensure IP 65 class protection even in the case of one lock accidentally opening up.

Technical Details :

Material	Die cast Aluminium alloy
Protection Class	IP 66
Voltage	For Inserts upto 500 V
Gasket	Vinyl Nitrile Elastomer (NBR)

Panel Cutout



Cat. No. For Housing with 2 Levers	Cat. No. For Housing with 4 Pegs	Cat. No. For Housing with 4 Pegs & Cover	Enclosure Type	Enclosure Size (mm)	D (mm)	E (mm)	G (mm)	H (mm)	M (Ømm)
W10HB2/B10	WR10HB2/B10	-	10B	57 x 27	83	32	66.5	36	4.5
W16HB2/B16	WR16HB2/B16	-	16B	77 x 27	103	32	86.5	36	4.5
W24HB2/B24	-	WR24HBC2/B24	24B	104 x 27	130	32	113	36	4.5
W32HB2/A32	-	-	32A	66 x 40	92	42	75	58.6	4.5
W32HB2/B32	-	-	32B	77 x 62	110	65	87.5	76.5	5.5

METAL CABLE GLANDS FOR MULTIPOLE INDUSTRIAL CONNECTOR



These cable glands provide IP 65 protection and are available in a wide range of Pg threads. For Metric threaded enclosures Controlwell's range of standard cable glands can be utilized. For complete list of cable glands with Metric & Pg threads refer pages 4 to 8 of this catalogue.

Technical Details :

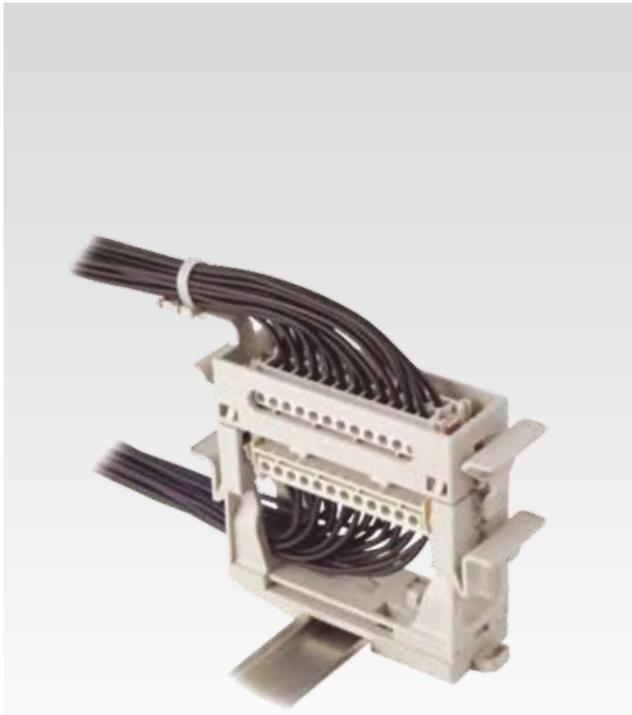
Material	Nickel-Plated Brass
Washer	Zinc-Plated Steel
Gasket	Elastomer
Protection Class	IP 65
Threads	Pg, Metric

Cat. No.	Size	 (mm)	Cable Clamping Range (mm)
WCG03	Pg 11	18	7 - 12
WCG04	Pg 13.5	20	7 - 12
WCG05	Pg 16	22	7 - 14.5
WCG06	Pg 21	28	9.5 - 18.5
WCG07	Pg 29	37	17.5 - 26.5
WCG08	Pg 36	47	23.5 - 32.5
WCG09	Pg 42	54	29.5 - 38.5
WCGM20	M 20 x 1.5	20	3.5 - 12.5

Application:

- For MIC Hoods and Housings with Pg & Metric Threads.
- For other sealed enclosures and boxes to protect parts of mechanism and equipment from external influence

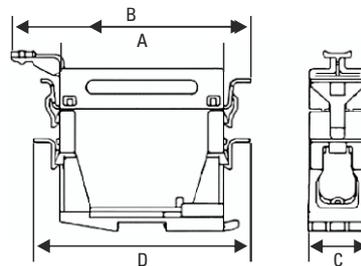
DIN RAIL SUPPORTS FOR INSERTS SIZE "B"



DIN Rail supports are used for housing of high connection density contact carriers or inserts within control cabinets / panels. No tools are needed for installing these products. The inserts / contact carriers can be snapped into the DIN Rail supports with hands. Also the DIN Rail supports can be snapped on to the DIN Rails without tools. These DIN Rail supports are fully cross compatible with inserts of other makes. The inserts and hence the contacts are fully secured by locking the male inserts with the female inserts. This is achieved by using locking levers.

Technical Details :

Material	Polycarbonate
Colour	Grey
Flammability	UL-94 V0
Mounting on	DIN 35 Rail (7.5 mm & 15 mm Deep)
Approvals	CE RoHS



Cat. No.	Enclosure Type	Enclosure Size (mm)	A (mm)	B (mm)	C (mm)	D (mm)
WDIN/B06	6B	44 x 27	57	113.3	42	146
WDIN/B10	10B	57 x 27	70	126	42	146
WDIN/B16	16B	77 x 27	90.6	146.3	42	146
WDIN/B24	24B	104 x 27	117	173	42	146

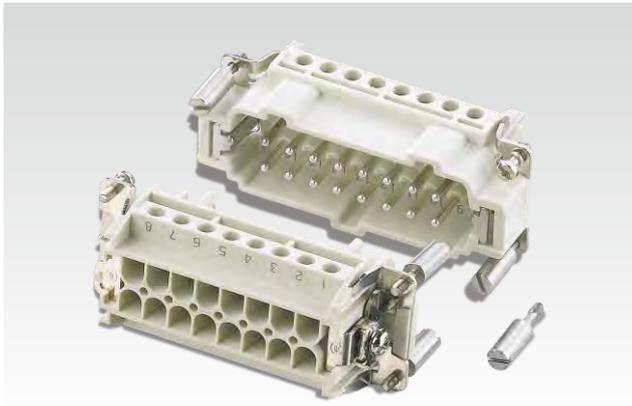
Top Support Assembly



Base Support Assembly



SINGLE CODE PINS

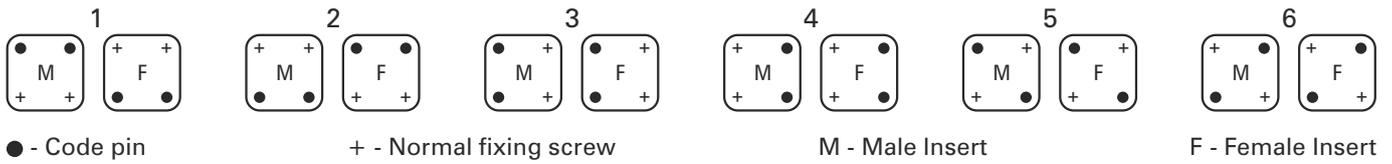


In various applications a bank (group) of male or female identical connectors are placed side by side. In such applications it is difficult to couple the connectors in the right sequence.

Coding pins are used to prevent such false coupling possibilities. Coding pins are used in place of normal insert fixing screws. In this way coupling of correct connectors is ensured.

Single code pins offer coding possibilities for a maximum of 6 identical connectors placed side by side.

Application with single code pins for 6 connectors side by side



Cat. No.	Type	Material		
WCPS	Single Code Pin	Zinc Plated Steel		

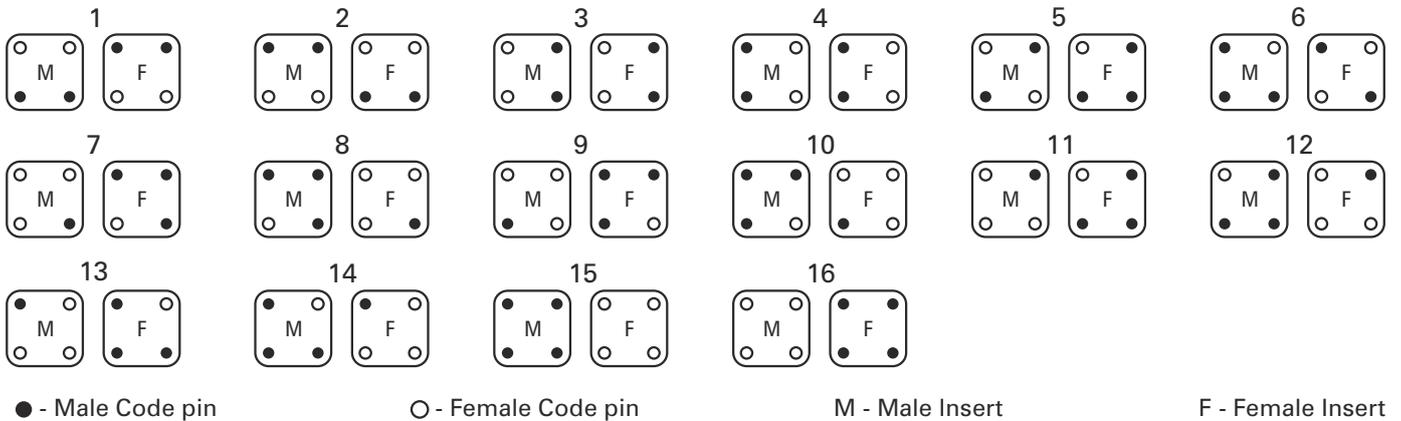
DOUBLE CODE PINS



Coding pins are used to prevent false coupling between male & female inserts. To codify more than 6 identical connectors placed besides each other it is necessary to use double code pins.

Double code pins are available in a combination of Male & Female code pins. By using Double code pins a maximum of 16 identical connectors can be codified.

Application with double code pin for 16 connectors side by side



Cat. No.	Type	Material		
WCPDM	Double Code Pin Male	Zinc Plated Steel		
WCPDF	Double Code Pin Female	Zinc Plated Steel		

COVERS FOR HOUSINGS *

In case housings with hinged covers are not procured initially, the covers can be separately purchased and retro fitted onto the housings. These covers help maintain the IP protection grade by closing onto the housings when the hoods are disconnected from the housings.



* Available on Request.

Cat. No.	Description	Enclosure Type	Enclosure Size (mm)
W03/4CFM/A3	Metal cover with Gasket for Female Insert	A3	21 x 21
W03/4CMM/A3W	Metal cover without Gasket for Male Insert	A3	21 x 21
WCP1/B6W	Metal cover with 2 Pegs for B6 size without gasket	B6	44 x 27
WCP/B10W	Metal cover with 4 Pegs for B10 size without gasket	B10	57 x 27
WCP/B16W	Metal cover with 4 Pegs for B16 size without gasket	B16	77 x 27
WCP/B24W	Metal cover with 4 Pegs for B24 size without gasket	B24	104 x 27
WCP/A32W	Metal cover with 4 Pegs for A32 size without gasket	B32	77 x 62
WCL/B16	Metal cover with 2 levers & gasket for B16 size	B16	77 x 27
WCL/B24	Metal cover with 2 levers & gasket for B24 size	B24	104 x 27

POWER INTERFACE 2 POLE SOCKET FOR GERMANY & ITALY

WSG/1

(2000.3013.0)

These 2 pole 250V, 16 Amp F Type sockets are suitable to be used as per German and Italian standards. These sockets have two earth clips on the top & bottom side and is available in 99 x 40 mm size.



SPECIAL CRIMPING HAND TOOLS FOR TURNED CRIMP CONTACTS

WCT

(8500.6251.0)

Economical crimping tool for turned contacts with ratchet for

- 1) Wire section 0.5 - 6 sq.mm
- 2) Contact Dia 1.6 (10 A)
Dia 2.5 (16 A)
Dia 4 (40 A)



HI-TECH SOLUTIONS FOR CABLE PROTECTION IN MOTION

Controlwell presents a vast range of cable drag chains in glass fibre reinforced polyamide.

These drag chains are available in a wide range of basic designs like:

- **Open Type**
- **Semi Enclosed Type**
- **Fully Enclosed Type**
- **Sliding Type**

With the introduction of 'SABIN' cable drag chains which offer speeds as high as 15 m/s, noise as low as 30 dB and extremely low mote, Controlwell is one of the few suppliers across India to be able to offer solutions for sensitive environments.

SABIN chains are available in a wide range of basic designs like:

- **Open Type**
- **Fully Enclosed Type**
- **Sliding Type**

We at Controlwell work along with you to design and deploy solutions for all your needs of cable protection in motion.