

### **Features**

- Available in 3A, 10A, 16A, 6B, 10B, 16B, and 24B sizes
- Heavy-duty metal housings in polyester powder-coated die-cast aluminum alloy or self-extinguishing thermoplastic housing
- Single locking system (one lever locked on two pegs) or double locking system (two levers locked on four pegs)
- Mechanical duration of 500 cycles
- Operating temperatures from -40 to 125°C [-40 to 257°F]
- IP65 degree of protection with enclosure when coupled
- Conforms with EN61984, VDE 0110, VDE 0627, and UL 1977 standards
- UL and CE approvals

### Housings

#### Hoods

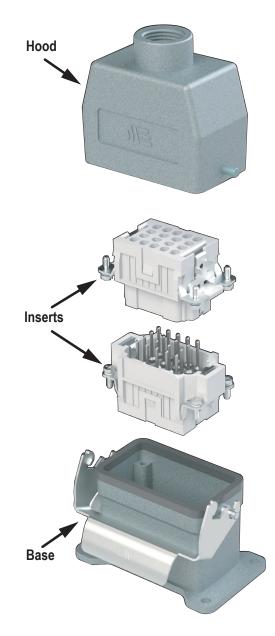
- Available with top entry and side entry cable passages
- Standard profiles
- Threaded cable passages with NPT threads
- Stainless steel or thermoplastic locking pegs

#### Bases, Couplers, and Covers

- Surface- and bulkhead-mounted bases
- Seal gaskets made of anti-aging, oil-resistant and fuel-resistant vinyl nitrile elastomer
- Locking levers made of galvanized steel or self-extinguishing glass-filled thermoplastic; guarantees perfect closing and sealing

#### Inserts

- Self-extinguishing thermoplastic reinforced with glass fibers
- Asymmetric guide rails prevent incorrect coupling
- Captive installation screws allow for easy and secure installation to bases and hoods
- Laser-printed or molded terminal/contact positions on both sides of insert
- Copper alloy contacts with hard silver plating available with
- stainless steel captive screw terminal or machined crimp contact
- Wide contact surface for ground terminals
- IP20 without enclosures
- Suitable for stranded and solid conductors



#### Agency Approvals

• UL Recognized File number E307105 • CE



To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.



## **General Characteristics**

#### Application Examples

- Electronic machinery
- Robots
- Control equipment
- Power connections
- Control and signal circuits
- Packaging machinery
- Theatrical applications
- Industrial equipment
- Electrical panels

#### Inserts

METEcon multi-wire connectors require one male and one female insert. The inserts are available in multiple pole configurations from 2-poles plus ground up to 108-poles plus ground and with termination sizes ranging from 26 to 12 AWG, 10 to 80 Amps.

METEcon inserts are made of UL 94 V-0 rated selfextinguishing thermoplastic resin rated at a maximum temperature of 125°C (257°F). The inserts are available in screw terminal and crimp-style contact block connections. The contacts are copper alloy with a hard silver-plated alloy. The plastic insulators are numbered on both sides by laser printing or molding in accordance with EN 60068-2-70.

- Suitable for use with alternating current (AC) or direct current (DC)
- Leading protective ground
- Polarized for correct mating
- Interchangeable for male and female inserts in hoods and bases
- Captive screws
- Exception: 3A has housing/hood specifically for female or for male.

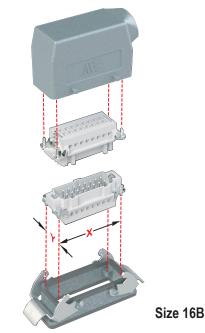
#### Housings

The housings for the METEcon multi-wire connectors consist of a hood that mates with a base or a coupler.

They are made of die-cast aluminum with a polyester powder finish or from self-extinguishing thermoplastic and are suitable for use in industrial applications.

A single- or double-lever locking system assures coupling stability and protection against accidental opening. The locking system is comprised of stainless steel or glassfilled thermoplastic levers, with compatible interlocking pegs.

### Size and Identification



The size of each type of connector is determined by the distance between the center points of the four installation screws. These four points are common to both the insert and the housing. This is indicated by "X"-"Y" in the illustration above.

The table below lists the size identification and the actual X-Y distance for each type of connector offered.

Size	Distance X-Y
3A	21 x 21mm* [0.83 x 0.83in]
10A	49.5 x 16mm [1.95 x 0.63in]
16A	66 x 16mm [2.60 x 0.63in]
6B	44 x 27mm [1.73 x 1.06in]
10B	57 x 27mm [2.24 x 1.06in]
16B	77.5 x 27mm [3.05 x 1.06in]
24B	104 x 27mm [4.09 x 1.06in]

\* The center distance cannot be given because the 3A inserts have only one screw: 21 x 21 indicates the size of the sectioned insert.

### **Conductor Termination**

#### Overview

Two types of conductor termination are available for METEcon inserts:

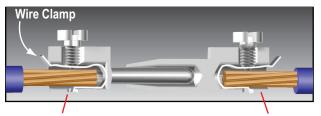
- Screw terminations
- Crimp terminations

#### Screw Terminations

Screw terminations consist of contacts made of silver-plated copper alloy and are incorporated with a wire clamp (with the exception of the size 3A inserts and size 24B with 80A contacts) for firmly securing the conductors. The screw terminals use stainless steel captive screws and meet VDE 0609 / EN 60999 standards.

Proper conductor installation requires no special preparation when using inserts with the wire clamp terminals (no wire ferrules). The table below lists the current rating, maximum wire gauge, and stripping lengths.

Current Rating	Max Wir	Stripping Length	
	(mm ²)	AWG	AWG      mm [n]        14      7 [0.28]
10A	2.5	14	7 [0.28]
16A	2.5	14	7 [0.28]
35A	6.0	10	7 [0.28]
16/80A	2.5/16	14/6	7.5 [0.3] / 14 [0.55]



Wire ferrules not necessary.

Wire ferrules can be used.

#### Screw Terminals with Clamps

The value of tensile strength of conductors in accordance with the dimensions of the screws and the wires are shown in the following table:

Wire Gauge mm² [AWG]	1.5 [16]	2.5 [14]	4 [12]	6 [10]	10 [8]	16 [6]
Size of Screw	M3	M3	M3.5	M4	M4	M6
Tensile Strength of Stranded Wire (N)	40	50	60	80	90	100

Increasing the tightening torque does not necessarily improve the contact resistance. The screw torques are selected according to standard EN 60999-1, to provide excellent mechanical, thermal, and electrical behavior. The conductor or terminal may be damaged if the recommended values are significantly exceeded.

	Insert Screw Specifications								
Insert Size	Screw Type	Screw Size	Tightening Torque N·m [in-lb]	Recommended Screwdriver Size	Recommended Screwdriver Part Number				
3A	10 Amp Terminal Installation Ground	M3 M3.5	0.50 [4.4]	0.4 x 2.5	TW-SD-VSL-2				
10A, 16A	16 Amp Terminal Installation Ground	M3 M4	0.50 [4.4]	0.5 x 3.0	TW-SD-SL-1				
6B, 10B	16 Amp Terminal Installation	M3	0.50 [4.4]	Ph 0 - 0.8 x 4	TW-SD-VSL-3				
	Ground	M4	1.2	Ph 2 1.0 x 5.5	TW-SD-VSL-4				
	35 Amp Terminal	M4	[10.6]	Ph 1 - 0.8 x 4					
16B	16 Amp Terminal	M3	0.50	Ph 0 - 0.8 x 4	TW-SD-VSL-3				
	Installation		[4.4]						
	Ground	M4	1.2 [10.6]	Ph 2 1.0 x 5.5					
24B	80 Amp Terminal	M6	1.5 mm² [16 AWG] 1.2 [10.6] 2.5 mm² [14 AWG] 2 [17.7] 4-16 mm² [12-6 AWG] 3 12-6 cl	1.0 x 5.5	<u>TW-SD-VSL-4</u>				
	16 Amp Terminal Installation	М3	[26.6] 0.50 [4.4]	Ph 0 - 0.8 x 4	TW-SD-VSL-3				
	Ground	M4	1.2 [10.6]	Ph 2 1.0 x 5.5	TW-SD-VSL-4				

#### **Crimp Terminations**

Crimp terminations consist of contacts made of silver-plated copper alloy. Crimp terminations are accomplished by applying a crimp contact to the conductor by means of a crimping tool. Crimp contacts are available in several sizes:

10 amp, 26-14 AWG ; 16 amp, 26-12 AWG

A perfect crimp connection is gas-tight, corrosion-free, and is equal to a cold weld of the parts being connected. Wires to be connected must be carefully matched with the correct wire size of crimp contacts.

The requirements for crimp connectors are depicted in IEC 60352, part 2.

Note: Low currents and voltages:

METEcon standard contacts (screw and crimp) have a silverplated surface. This metal has excellent conductive properties. During the contact's lifetime, the silver surface generates a black oxide layer due to its affinity to sulphur (always present in the atmosphere). This layer is conductive smooth and very thin and is partly interrupted when the contacts are mated and non mated, thus guaranteeing very low contact resistances. In the case of very low current or voltage, small changes to the transmitted signal may be encountered.





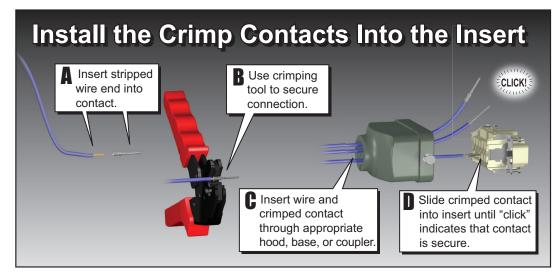
### **Crimp Contact to Insert Installation**

Proper installation of the crimp contacts is important for a good electrical and mechanical connection. The following steps will ensure correct installation.

#### Step 1: Select the Crimp Contacts

Select a crimp contact based on the rating of the Insert you are using; 10 or 16 amps; the gender (male or female), and the gauge of wire being used.

#### Step 2:

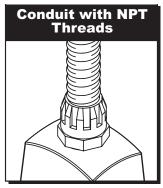


#### Step 3: Install the Insert into the Housing

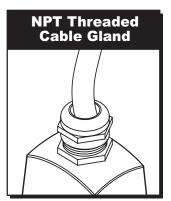
Now that the crimp contacts are installed, the Insert can be placed into the housing by aligning the corner installation screws of the insert with the screw holes located in the corners of the housing. Tighten the screws according to the tightening torques listed in the Insert Screw Specifications table in this document.

#### Wire Entry Connection

METEcon openings for easy conduit and cable terminations. The openings come in NPT threaded sizes 3/8", 1/2", or 3/4".



Secures NPT threaded flexible conduit directly to the housing.



For securing a cable to the housing, use an NPT threaded cable gland.



### **Standards**

The Inserts are designed and manufactured to conform with EN 61984, (IEC 61984), VDE 0627, and UL 1977/CSA C22.2 182.3 standards. They are certified and labeled with the cULus and CE marks. The connectors are therefore in conformance with both European/International and American systems. This permits them to be used in a wider range of applications worldwide.

- EN 61984 Connectors safety requirements and tests
- VDE 0627 Connectors (DIN VDE 0627)
- EN 60664-1 Insulation coordination for equipment within low-voltage systems
- VDE 0110 Table 4 concerning clearance and creepage distances
- EN 60512 Connectors for electronic equipment, tests, and measurements
- UL 1977 Component connectors for use in data, signal, control, and power applications
- CSA.C22.2 No. 182.3 Special use attachment, plugs, receptacles, and connectors
- EN 60529 Degree of protection provided by enclosures (IP degree)
- EN 60423 Conduits for electrical purposes. Outside diameters of conduits for electrical installations and thread for conduits and fittings

### **Directives and Declarations**

#### LVD Directive

Directive 2006/95/EC of the European Parliament and of the council of 12 December 2006 on the harmonization of the laws of Members States relating to electrical equipment designed for use within certain voltage limits.

**RoHS** Directive

Directive 2011/65/EU and amendment (EU) 2015/863 restricts the use of the following ten substances:

Lead (Pb)

Mercury (Hg)

Cadmium (Cd)

Hexavalent chromium (Cr6+)

Polybrominated biphenyls (PBB)

Polybrominated diphenyl ether (PBDE)

Bis(2-ethylhexyl) phthalate (DEHP)

Butyl benzyl phthalate (BBP)

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EEC and 2000/21/EC.

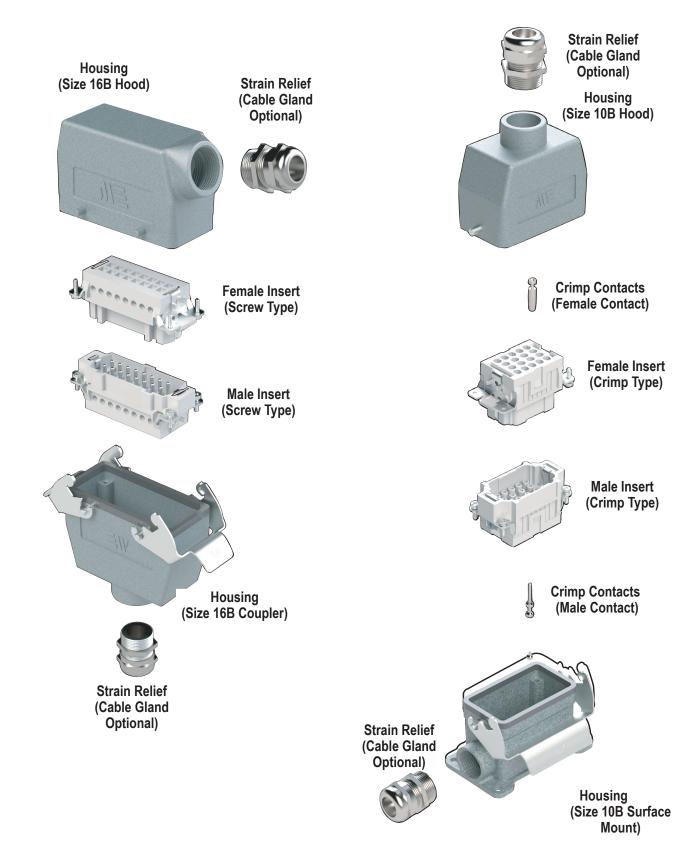
WARNING - ACCORDING TO EN 61984, CONNECTORS SHOULD NOT BE COUPLED AND DECOUPLED UNDER ELECTRICAL LOAD.

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### Screw Terminal Basic Assembly

## **Crimp Contact Basic Assembly**





## METEGON<sup>®</sup> Multi-Wire Connectors **Specifications**

Version Signal : Sign			Те	chnical Charact	eristics				
ULCSA Rated Voltage*      000 VAC/DC        Maximum Rated Current      Power 80A/ Signal: 16A      16A      10A        EN 61864 (2001-11) Pollution Dargee 3/ (Voltage AC/DC      680/ V400/ 680/ 400/      500/ 680/ 400/      500/ 680/ 400/      250/ 680/ 400/        Continuous Current Carrying Capacity      Refer to Electrical Engineering sector charts      1      4k/        Insulation Resistance      ≥ 10 <sup>10</sup> P00/ P00/subcontel      2      1        Temperature Range      -40 to 120°C (-40 to 25°F)      -      1      1        Pair Poirt      P065      -      -      1      1        Degree Protection      With Housing      1920      -      -      1      <		Connector	Size			24B			
Maximum Rated Current      Power: 80A / Signal: 16A      16A      10A        EN 61984 (2001-1) Polution Degree Di Continuous Current Carrying Capacity      Rated Voltage AC/DC      680V / 460V      500V      250V        Maximum Rated Current Carrying Capacity      Refer to Electical Engineering section charts      AtV      AtV        Material      PBT      Polycarbonate      Polycarbonate      Polycarbonate        Tomporature Range      -40 to 125°C (40 to 25°F)      Polycarbonate      Polycarbonate        Material      PBT      Polycarbonate      Polycarbonate        Material      UL VA V0      UL VA V0      UL VA V0        Degree Protection      With Housing      IPS2      Polycarbonate        Material      Screw Terminals      √      NA      NA      NA        Viotage & current)      Signal 1:0:25      NA      NA      NA      NA        Screw Terminal      Mar?      Signal 1:0:25      NA      NA      NA      NA        Viotage & current)      Signal 1:1:25      NA      NA      NA      NA        Screw Terminal      mm?      Signal 1:1:41      NA		Number of Poles		4+8+PE	24+PE	46+PE	64+PE	108+PE	
EN 61984 (2001-11) Pollution Degree 3      Rated Voltage AC/DC impulse Withstand Voltage      690// 400// 8// 6//      500// 6// 6//      250// 6// 6//      250// 6//        Impulse Withstand Voltage Current Carrying Capacity      Refer to Electrical Engineering section charts      Impulse Withstand (%// 6//      4// 6//      4// 7//        Insulation Resistance      210" Ω      Polycarbonate      Polycarbonate        Material      PBT      Polycarbonate      Polycarbonate        Page Protection      With Housing      IP20      IP20        Mechanical Working Life      500 Cycles      Conductor Crimp Contacts      N/A      N/A      N/A        Temprature Reside Current Temmination      Screw Terminals      √      N/A      N/A      N/A        Material      mm*      Signal 5 1/0      S/ / Sm0      S/ / Sm0      Signal 5 1/0      S/ / Sm0        Screw Terminal Wire Size      mm*      Signal 5 1/0      S 1/0      S 1/0      S 3//0      S 3//0        Screw Terminal Wire Size      mm*      Signal 5 1/0      S 1/0      S N/A      N/A      N/A        Screw Terminal Wire Size      mm*      N/A      Signal 7.1      S 1/0		UL/CSA Rated Voltag	ge*	600 VAC/VDC					
FN 61984 (2001-11) (voltage)      impulse Withstand (voltage)      6k// 6k/      6k/      4k/        Continuous Current Carrying Capacity      Refer to Electrical Engineering section charts        Insulation Resistance      > 10 <sup>10</sup> Ω        Poigration Resistance      PBT      Polycarbonate        Temperature Range      10 <sup>10</sup> Ω      Polycarbonate        PBT      Polycarbonate        Polycarbonate        Part Importance Range        Polycarbonate        Polycarbo		Maximum Rated Cur	rent	Power: 80A / Signal: 16A		16A	1	0A	
Pollution Degree 3      Impulse Withstand Overage      BKV / 6KV      EKV      4KV        Continuous Current Carrying Capacity      Refer to Electrical Engineering section charts        Insulation Resistance      > 10% 0        Material      PBT      Polycarbonate        Temperature Range      -40 to 125°C [-40 to 257°F]        Degree Protection      With Housing		EN 64084 (2004 44)	Rated Voltage AC/DC	690V / 400V	500V		250V		
Insulation Resistance      ≥ 10 <sup>™</sup> Ω        Material      PBT      Petroperature        Temperature Range      -40 to 125°C [40 to 25°F]		Pollution Degree 3		8kV / 6kV		6kV	4	kV	
Material      PBT      Polycarbonate        Temperature Range      -40 to 125°C [.40 to 257°F]		Continuous Current	Carrying Capacity		Refer to Elec	ctrical Engineering secti	on charts		
Temperature Range	rts	Insulation Resistanc	e			≥ 10 <sup>10</sup> Ω			
Temperature Range	nse	Material		PBT			Polycarbonate		
Degree Protection      With Housing      IP20        Mechanical Working Life      500 Cycles        Conductor Termination      Screw Terminals      √      N/A      N/A      N/A        Material      Material      N/A      N/A      √      √      N/A        Minimum Recommended Load (Vidge & current)      Signal ≤ 1.0.25      N/A      N/A      N/A      N/A        Contact Resistance      Power 15.16      102.5      N/A      N/A      N/A      N/A        Screw Terminal Wire Size      mm²      Signal 10.2.0      ≤ 1mΩ      ≤ 3mΩ      ≤ 3mΩ        Screw Terminal Wire Size      M/G      Signal 1.0.2.5      N/A      N/A      N/A        Screw Terminal Wire Size      mm²      Signal 1.0.2.5      N/A      N/A      N/A        Screw Terminal Tightening Test Torque Minibil      Signal 1.0.2.5      N/A      N/A      N/A        Screw Terminal Stripping Length (mm)      Signal 7.5      7      N/A      N/A      N/A        Screw Terminal Stripping Length (mm)      Signal 7.5      7      N/A      N/A      N/A        Screw Terminal		Temperature Range			-40	to 125°C [-40 to 257°F	]		
Degree Protection Mechanical Working Life      IP20        Mechanical Working Life      500 Cycles        Conductor Termination      Screw Terminals      \vee \vee \vee \vee \vee \vee \vee \vee		Flammability				UL 94 V-0			
Mechanical Working Life      S00 Cycles        Conductor Termination      Screw Terminals      √      √      N/A      N/A      N/A        Material      Material      Marcel Load (rimp Contacts      N/A      N/A      N/A      N/A      N/A        Material      Material      Marcel Load (rimp Contacts      Signal 5 1mΩ Power 50.3mΩ      ≤ 1mΩ      ≤ 1mΩ      ≤ 3mΩ      ≤ 3mΩ        Screw Terminal Wire Size      mm²      Signal 5 1mΩ Power 10.3·0.25      Sinn      N/A      N/A      N/A      N/A        Screw Terminal Wire Size      mm²      Signal 10.2.5      N/A      N/A      N/A      N/A        Screw Terminal Wire Size      mm²      Signal: 10.2.5 mm? [16.4WG] 2 [17.7]      Signal: 10.2.5 mm? [16.4WG] 2 [17.7]      N/A      N/A      N/A        Screw Terminal Stripping Length (mm)      Signal 7.5 2 [26.6]      7      N/A      N/A      N/A        Screw Terminal Stripping Length (mm)      Signal 7.5 2 [26.6]      7      N/A      N/A      N/A        Mice Size      ma²      N/A      N/A      N/A      N/A      N/A      N/A        Screw Termi		Dogroo Protoction	With Housing			IP65			
Conductor Termination      Screw Terminals      √      √      N/A      N/A      N/A      N/A        Material      Material      Material      Material      Material      √      √      √      √      √        Minimum Recommended Load (Viage & current)      Signal ≤ 1mΩ      S 1mΩ      ≤ 3mΩ      ≤ 3mΩ      ≤ 3mΩ      S 3mQ        Contact Resistance      Power \$0,3mΩ      ≤ 1mΩ      ≤ 1mΩ      ≤ 3mΩ      ≤ 3mQ        Screw Terminal Wire Size      mm²      Signal 10.2.5      1.0.2.5      N/A      N/A      N/A        Screw Terminal Wire Size      mm²      Signal 8.16.4      18.14      N/A      N/A      N/A        Screw Terminal Tightening Test Torque      Signal 10.2.5      0.5      N/A      N/A      N/A        Screw Terminal Tightening Test Torque      Signal 10.2.5      N/A      N/A      N/A      N/A        Screw Terminal Tightening Test Torque      Signal 10.2.5      N/A      N/A      N/A      N/A        Screw Terminal Striping Length (mm)      N/A      N/A      N/A      N/A      N/A      N/A <td< th=""><th></th><th>Degree Protection</th><th>Without Housing</th><th></th><th></th><th>IP20</th><th></th><th></th></td<>		Degree Protection	Without Housing			IP20			
Conductor Trimp Contacts      N/A      N/A      N/A      N/A      N/A      N/A        Material      Hard-silver plated cooper alloy      N/A      Hard-silver plated cooper alloy      V      V      V        Minimum Recommended Load (voltage & current)      Signal ≤ 1mΩ Power s0.3mΩ      ≤ 1mΩ      ≤ 3mΩ      ≤ 3mΩ      ≤ 3mΩ      ≤ 3mΩ        Contact Resistance      m <sup>m<sup>2</sup></sup> Signal 10.2.5      1.0-2.5      N/A      N/A      N/A        Screw Terminal Wire Size      m <sup>2</sup> Signal 10.2.5      1.0-2.5      N/A      N/A      N/A        Screw Terminal Wire Size      m <sup>2</sup> Signal 10.2.5      1.0-2.5      N/A      N/A      N/A        Screw Terminal Wire Size      m <sup>2</sup> Signal 10.2.5      1.0-2.5      N/A      N/A      N/A        Screw Terminal Wire Size      m <sup>2</sup> Signal 7.5      1.0.2.5      N/A      N/A      N/A        Screw Terminal Stripping Length (mm)      Signal 7.5      7      N/A      N/A      N/A        Screw Terminal Wire Size      m <sup>2</sup> N/A      N/A      N/A      0.14-2.5      0.14-2.5		Mechanical Working	Life			500 Cycles			
Material      Material      Hard-silver plated copper alloy        Minimum Recommended Load (voltage & current)      Signal 5 1mΩ Power 50.3mΩ      ≤ 1mΩ      ≤ 3mΩ      ≤ 3mΩ      ≤ 3mΩ        Contact Resistance      Signal 10 - 2.5 Power 15 - 16      1.0 - 2.5      N/A      N/A      N/A        Screw Terminal Wire Size      mm²      Signal 10 - 2.5 Power 15 - 16      1.0 - 2.5      N/A      N/A      N/A        Screw Terminal Wire Size      mm²      Signal 10 - 2.5 Power 15 - 16      1.0 - 2.5      N/A      N/A      N/A        Screw Terminal Wire Size      mm²      Signal 10 - 2.5 Power 15 - 16      1.0 - 2.5      N/A      N/A      N/A        Screw Terminal Wire Size      mm²      Signal 10 - 2.5 Power 15 - 16      1.0 - 2.5      N/A      N/A      N/A        Screw Terminal Tightening Test Torque Mm [16:14 AWG] 2.5 mm² [16:4WG] 2.5 mm² [14:4WG] 2.5 mm² [14:4WG] 3 [26:6]      0.5 Power 14      N/A      N/A      N/A        Screw Terminal Striping Length (mm)      Signal 7.5 Power 14      7      N/A      N/A        Crimp Terminal Wire Size      mm²      N/A      N/A      N/A      2.6 - 14      26 - 14        Crimp Term		Conductor	Screw Terminals	$\checkmark$	$\checkmark$	N/A	N/A	N/A	
Minimum Recommended Load (voltage & current)    Signal ≤ 1mΩ Power 50.3mΩ    ≤ 1mΩ    ≤ 3mΩ    ≤ 3mΩ    ≤ 3mΩ      Contact Resistance    mm²    Signal 10.25 Power 10.3mΩ    10.25    N/A    N/A    N/A      Screw Terminal Wire Size    mm²    Signal 10.125 Power 10.66    10.2.5    N/A    N/A    N/A      Screw Terminal Wire Size    mm²    Signal 10.12 Power 10.6    10.2.5    N/A    N/A    N/A      Screw Terminal Wire Size    mm²    Signal 10.12 Power 10.6    10.2.5    N/A    N/A    N/A      Screw Terminal Wire Size    mm²    N/A    Signal 10.2 Power    N/A    N/A    N/A      Screw Terminal Wire Size    mm²    N/A    Signal 10.2 Power    N/A    N/A    N/A      Screw Terminal Wire Size    mm²    N/A    N/A    N/A    N/A    N/A    N/A      Screw Terminal Wire Size    mm²    N/A    N/A    N/A    N/A    N/A    N/A      Screw Terminal Wire Size    mm²    N/A    N/A    N/A    N/A    N/A    N/A      Screw Terminal Wire Size    mm²    N/A    N		Termination	Crimp Contacts	N/A	N/A	$\checkmark$	$\checkmark$	$\checkmark$	
Image: Streew Terminal Wire Size      mm²      Signal ≤ 1mΩ      ≤ 1mΩ      ≤ 3mΩ      ≤ 3mΩ      ≤ 3mΩ        Screw Terminal Wire Size      mm²      Signal 10.2.5      10.2.5      N/A      N/A      N/A        Screw Terminal Wire Size      mm²      Signal 10.2.5      10.2.5      N/A      N/A      N/A        Screw Terminal Wire Size      mm²      Signal: 1.0.2.5      1.0.2.5      N/A      N/A      N/A        Screw Terminal Wire Size      mm²      Signal: 1.0.2.5      N/A      N/A      N/A        Screw Terminal Wire Size      mm²      Signal: 1.0.2.5      N/A      N/A      N/A        Screw Terminal Tipht=ning Test Torque      .0.5 (4.4)      Power      0.5      N/A      N/A      N/A        1.0.2.5 mm² (16.14.4WG)      0.5      .0.4      N/A      N/A      N/A      N/A        Screw Terminal Tipht=ning Length (mm)      Signal 7.5      .0.5      N/A      N/A      N/A        Signal T.5      N/A      N/A      N/A      0.14-2.5      0.14-2.5        Wire Size      mm²      N/A      N/A      N/A		Material	Hard-silver plated copper alloy						
Power s0.3mΩ      S Im12      S 3m12      S 3m12 <ths< th=""><th></th><th colspan="2"></th><th colspan="5">5V / 5mA AC/DC</th></ths<>				5V / 5mA AC/DC					
Screw Terminal Wire Size  mm <sup>m</sup> Power 15 - 16 N/A  I.0-2.5  N/A  N/A  N/A    AWG  Signal 18 - 14 Power 16 - 6  18 - 14  N/A  N/A  N/A    screw Terminal Tightening Test Torque N <sup>m</sup> [in/b]  Signal: 1.0-25 mm <sup>2</sup> [18-14 AWG] 0.5 [4,4] Power: 1.5 mm <sup>2</sup> [16 AWG] 2.5 mm <sup>2</sup> [16 AWG] 2.5 mm <sup>2</sup> [16 AWG] 3 [26.6]  0.5  N/A  N/A  N/A    Screw Terminal Stripping Length (mm)  Signal 7.5 3 [26.6]  0.5  N/A  N/A  N/A    Screw Terminal Stripping Length (mm)  Signal 7.5 Power 14  7  N/A  N/A  N/A    Crimp Terminal Wire Size  mm <sup>2</sup> AWG  N/A  N/A  0.14 - 1.0  0.14 - 2.5  0.14 - 2.5    Material  Engree of Protection Length (mm)  Signal 7.5 N/A  7  N/A  N/A  N/A    Locking Element  Material  N/A  N/A  N/A  26 - 12  26 - 14  26 - 14    Housings Seal  N/A  N/A  N/A  N/A  N/A  8  8    Pegree of Protection Acc. to EN 60529 coupled) NEMA 250, 50E  IP65  IP65  IP65		Contact Resistance			≤ 1mΩ	≤ 1mΩ	≤ 3mΩ	≤ 3mΩ	
Secrew Terminal Tightwise      AWG      Organization      18-14      N/A      N/A      N/A        Screw Terminal Tightwise      Signal: 1.0-2.5 mm² [18-14 AWG] 0.5 [4.4] Power: 1.5 mm² [16 AWG] 1.0.10 0 1.2 [0.6] 2.5 mm² [14 AWG] 2.5 mm² [14 AWG] 3 [26.6]      0.5 [4.4] Power: 1.5 mm² [16 AWG] 3 [26.6]      N/A      N/A      N/A      N/A        Screw Terminal Striping Length (mm)      Signal 7.5 N/A      7      N/A      N/A      N/A        Crimp Terminal Wire Size      mm² N/A      N/A      N/A      0.14-1.0      0.14-2.5      0.14-2.5        Material      mm² N/A      N/A      N/A      N/A      0.14-2.5      0.14-2.5        Locking Element      Material      N/A      N/A      N/A      0.14-2.5      0.14-2.5        Locking Element      N/A      N/A      N/A      N/A      8      8        Material      Locking Element      Carbon steel      NBR (Nitrile)      Vector Steel			mm²		1.0 - 2.5	N/A	N/A	N/A	
Screw Terminal Tightening Test Torque  1.0-2.5 mm²[18.14 AWG] 0.5 [4.4] Power:  0.5  N/A  N/A  N/A    N/m [in:lb]			AWG		18 - 14	N/A	N/A	N/A	
Screw Terminal Stripping Lengtr (min)      Power 14      1      N/A      N/A      N/A        Crimp Terminal Wire Size      mm²      N/A      N/A      0.14 - 1.0      0.14 - 2.5      0.14 - 2.5        AWG      N/A      N/A      N/A      0.14 - 1.0      0.14 - 2.5      0.14 - 2.5        Trimp Terminal Stripping Length (mm)      N/A      N/A      N/A      26 - 12      26 - 14      26 - 14        Material      Crimp Terminal Stripping Length (mm)      N/A      N/A      7.5      8      8        Locking Element      Locking Seal      Carbon steel      Die cast aluminum alloy      V      V        Degree of Protection Acc. to EN 60529 (coupled) NEMA 250, UL 50, 50E      IP65      IP65      IP65        Temperature Range      -40 to 125°C [-40 to 257°F]      V      V      IVA      IVA	Contacts			1.0-2.5 mm <sup>2</sup> [18-14 AWG] 0.5 [4.4] Power: 1.5 mm <sup>2</sup> [16 AWG] 1.2 [10.6] 2.5 mm <sup>2</sup> [14 AWG] 2 [17.7] 4-16 mm <sup>2</sup> [12-6 AWG]		N/A	N/A	N/A	
Wire Size  AWG  N/A  N/A  26 - 12  26 - 14  26 - 14    Crimp Terminal Stripping Length (mm)  N/A  N/A  N/A  7.5  8  8    Material  Locking Element  Carbon steel  Die cast aluminum alloy    Housings Seal  Degree of Protection Acc. to EN 60529 (coupled) NEMA 250, UL50, 50E  IP65    Image: Terminal Stripping Length (mm)  Image: Terminal Stripping Length (mm)  N/A  N/A  N/A  7.5  8  8    Material  Carbon Steel  Die cast aluminum alloy  Carbon Steel  Carbon Steel  Carbon Steel  Carbon Steel    Housings Seal  Degree of Protection Acc. to EN 60529 (coupled) NEMA 250, UL50, 50E  IP65  IP65    Terminal Stripping Length (mm)  -40 to 125°C [-40 to 257°F]  Carbon Steel		Screw Terminal Strip	oping Length (mm)		7	N/A	N/A	N/A	
Image: Note of the product of the			mm²	N/A	N/A	0.14 - 1.0	0.14-2.5	0.14 - 2.5	
Material    Die cast aluminum alloy      Locking Element    Carbon steel      Housings Seal    NBR (Nitrile)      Degree of Protection Acc. to EN 60529 (coupled) NEMA 250, UL50, 50E    IP65      Temperature Range    -40 to 125°C [-40 to 257°F]		Wire Size	AWG	N/A	N/A	26 - 12	26 - 14	26 - 14	
So big of so bi		Crimp Terminal Strip	oping Length (mm)	N/A			8	8	
Volume    Locking Element    Carbon steel      Housings Seal    NBR (Nitrile)      Degree of Protection Acc. to EN 60529 (coupled) NEMA 250, UL50, 50E    IP65      Temperature Range    -40 to 125°C [-40 to 257°F]      Thread    NPT ASME B1.20.1	10	Material			D	ie cast aluminum alloy			
Housings Seal  NBR (Nitrile)    Degree of Protection Acc. to EN 60529 (coupled) NEMA 250, UL50, 50E  IP65    Temperature Range  -40 to 125°C [-40 to 257°F]    Thread  NPT ASME B1.20.1	ers	Locking Element		Carbon steel					
Degree of Protection Acc. to EN 60529 (coupled) NEMA 250, UL50, 50E  IP65    Temperature Range  -40 to 125°C [-40 to 257°F]    Thread  NPT ASME B1.20.1	oH n Dupl	Housings Seal				NBR (Nitrile)			
Temperature Range      -40 to 125°C [-40 to 257°F]        Thread      NPT ASME B1.20.1	ninun tes/Co Cove					IP65			
Thread NPT ASME B1.20.1	Alun Bas	Temperature Range			-40	to 125°C [-40 to 257°F	]		
	<u>`</u>	Thread				NPT ASME B1.20.1			

\* Connectors should not be coupled and decoupled under electrical load.

1-800-633-0405

## METEGON<sup>®</sup> Multi-Wire Connectors Size 24B



29113



29112



29024



290253046

290243046





290253064

290243064



290253108

290243108

			24B Insert	S		
	No. of Poles	8+4+PE	24+PE	46+PE	64+PE	108+PE
Incort	Rated Voltage	600 VAC/VDC	600 VAC/VDC	600 VAC/VDC	600 VAC/VDC	600 VAC/VDC
Insert Type	Max. Rated Current	80 amp (4-pole), 16 amp (8-pole)	16 amp	16 amp	10 amp	10 amp
	Termination Type	Screw Terminals	Screw Terminals	Crimp Contacts	Crimp Contacts	Crimp Contacts
	Part Number	<u>29113</u>	<u>29025</u>	<u>290253046</u>	<u>290253064</u>	<u>290253108</u>
	Price	\$18.50	\$11.00	\$12.50	\$13.00	\$17.00
Male	Drawing Link	PDF	PDF	PDF	PDF	PDF
mare	Crimp Contact Size*	N/A	N/A	16 Amp METE 14106xxx series	10 Amp METE 14104xx series	10 Amp METE 14104xx series
	Weight g [oz]	141.98 [5.01]	126.55 [4.46]	75.75 [2.67]	62.60 [2.21]	67.86 [2.39]
	Part Number	<u>29112</u>	<u>29024</u>	<u>290243046</u>	<u>290243064</u>	<u>290243108</u>
	Price	\$21.00	\$10.50	\$15.50	\$13.50	\$18.00
Female	Drawing Link	PDF	PDF	PDF	PDF	PDF
i enlare	Crimp Contact Size*	N/A	N/A	16 Amp METE 14105xxx series	10 Amp METE 14103xx series	10 Amp METE 14103xx series
	Weight g [oz]	136.99 [4.83]	135.63 [4.78]	91.63 [3.23]	76.20 [2.69]	84.37 [2.98]

\* Crimp contacts must be purchased separately. The XXX represents wire AWG. See Accessories section for complete part numbers.

1-800-633-0405



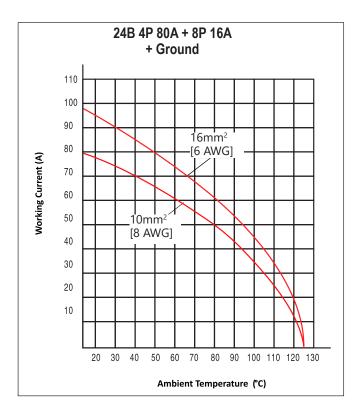
## **Multi-Wire Connectors Size 24B**

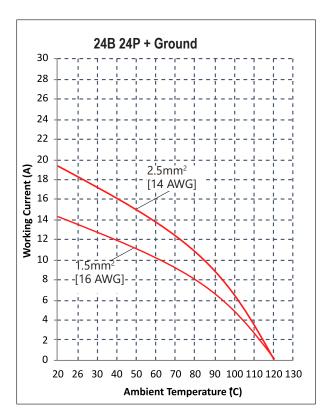


		24B Hoods a	nd Housings				
	Housing Component	Threaded Opening	Part Number		Works With	Weight g [oz]	Drawing Link
S	Hood, Top Entry, (2-Peg), Aluminum	(1) 3/4 NPT threaded hole	<u>293742905</u>	\$11.50	METE size 24B single lever connector housings	193.69 [6.83]	PDF
2 Pegs	Hood, Side Entry, (2-Peg), Aluminum	(1) 3/4 NPT threaded hole	<u>293732905</u>	\$11.00	METE size 24B single lever connector housings	201.40 [7.10]	<u>PDF</u>
Lever /	Surface Mount, Side Entry, (Single Lever), Aluminum	(1) 3/4 NPT threaded hole	<u>293712905S</u>	\$23.00	METE size 24B 2-peg connector housings	283.95 [10.02]	<u>PDF</u>
Single L	Bulkhead Base, (Single Lever), Aluminum	N/A	<u>29370S</u>	\$12.00	METE size 24B 2-peg connector housings	140.62 [4.96]	<u>PDF</u>
S	Coupler, Top Entry, (Single Lever), Aluminum	(1) 3/4 NPT threaded hole	<u>293762905S</u>	\$18.00	METE size 24B 2-peg connector housings	243.58 [8.59]	<u>PDF</u>
	Hood, Top Entry, (4-Peg), Aluminum	(1) 3/4 NPT threaded hole	<u>291652905</u>	\$11.00	METE size 24B double lever connector housings	192.78 [6.80]	<u>PDF</u>
st	Hood, Side Entry, (4-Peg), Aluminum	(1) 3/4 NPT threaded hole	<u>290452905</u>	\$9.00	METE size 24B double lever connector housings	199.13 [7.02]	PDF
/ 4 Pegs	Surface Mount, Side Entry, (Double Lever), Aluminum	(1) 3/4 NPT threaded hole	<u>290582905S</u>	\$18.00	METE size 24B 4-peg connector housings	285.77 [10.08]	PDF
Lever / 4	Bulkhead Base, (Double Lever), Aluminum	N/A	<u>29044S</u>	\$9.00	METE size 24B 4-peg connector housings	142.43 [5.02]	PDF
Double I	Coupler, Top Entry, (Double Lever), Aluminum	(1) 3/4 NPT threaded hole	<u>291702905S</u>	\$19.00	METE size 24B 4-peg connector housings	248.57 [8.77]	PDF
ğ	Cover, (4-Peg), Plastic	N/A	<u>29652</u>	\$2.00	METE size 24B double lever connector housings	21.77 [0.77]	PDF
	Cover, (Double Level), Plastic	N/A	<u>29655S</u>	\$5.50	METE size 24B 4-peg connector housings	78.02 [2.75]	<u>PDF</u>

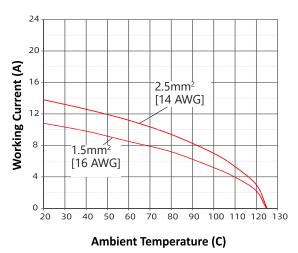


## **Electrical Engineering Data - Load Diagrams**

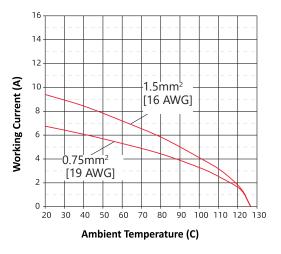




24B 46P + Ground

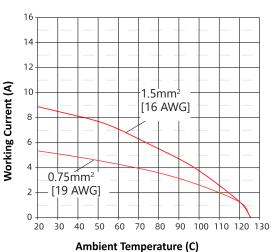


24B 64P + Ground





## **Electrical Engineering Data - Load Diagrams**



24B 108P + Ground



## Multi-Wire Connectors Accessories

### Crimp Contacts - 10 and 16 Amp

Crimp contacts are made of hard silver-plated alloy. Wires to be connected must be carefully matched with the correct wire size of crimp contacts. Crimp contacts should be installed using a crimping tool.

10 Amp Crimp Contacts - 100/Pack									
Male	Price	Weight g [oz]	Female	Price	Weight g [oz]	Wire Gauge mm <sup>2</sup> [AWG]	Stripping Length		
<u>14104164</u>	\$40.00	71.67 [2.53]	<u>14103164</u>	\$45.00	68.95 [2.43]	0.14-0.37 [26-22]			
14104264	\$40.00	70.31 [2.48]	<u>14103264</u>	\$45.00	68.49 [2.42]	0.5 [20]	_		
14104364	\$40.00	67.59 [2.38]	<u>14103364</u>	\$45.00	67.13 [2.37]	0.75 [18]	8mm [0.31in]		
14104564	\$40.00	66.23 [2.34]	<u>14103564</u>	\$45.00	66.68 [2.35]	1.5 [16]	[0.5111]		
14104664	\$40.00	61.60 [2.17]	<u>14103664</u>	\$45.00	62.60 [2.21]	2.5 [14]	1		



**Male Crimp Contact** 

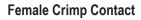






### **Male Crimp Contact**

	16 Amp Crimp Contacts - 100/Pack									
Male	Price	Weight g [oz]	Female	Price	Weight g [oz]	Wire Gauge mm <sup>2</sup> [AWG]	Stripping Length			
<u>14106164</u>	\$35.50	120.43 [4.25]	<u>14105164</u>	\$40.00	156.95 [5.54]	0.14-0.37 [26-22]				
14106264	\$35.50	135.17 [4.77]	<u>14105264</u>	\$40.00	162.84 [5.74]	0.5 [20]				
<u>14106364</u>	\$35.50	131.09 [4.62]	<u>14105364</u>	\$40.00	146.51 [5.17]	0.75 [18]	7.5mm			
<u>14106564</u>	\$35.50	131.32 [4.63]	<u>14105564</u>	\$40.00	152.86 [5.39]	1.5 [16]	[0.29in]			
<u>14106664</u>	\$35.50	139.71 [4.93]	<u>14105664</u>	\$40.00	166.47 [5.87]	2.5 [14]				
<u>14106864</u>	\$35.50	136.53 [4.82]	<u>14105864</u>	\$40.00	154.68 [5.46]	4.0 [12]				



Crimp Contact Tools									
Part Number	Price	Qty	Description	Weight [lb]					
ZP-MC-CT1	\$775.00		Crimping tool w/die set and locator	1.593					
ZP-MC-CT2	\$112.00		Crimping tool w/die set only, no locator	0.814					
ZP-MC-RT1	\$116.00		Removal tool for 10A contacts	0.081					
<u>ZP-MC-RT2</u>	\$105.00		Removal tool for 16A contacts	0.086					





ZP-MC-CT2





ZP-MC-RT2