

BLINDMATE MULTIPOLE CONNECTORS AGV SERIES

- AUTOMATIC BATTERY CHARGING
 - RACK AND PANEL
- POWER & COMMUNICATIONS APPLICATIONS
- UNINTERRUPTIBLE POWER SUPPLY

35 Amps up to 105 Amps - 600 Vac/dc
UP TO 10 SIGNAL CONTACTS
5 Amp - 120 Vac/dc



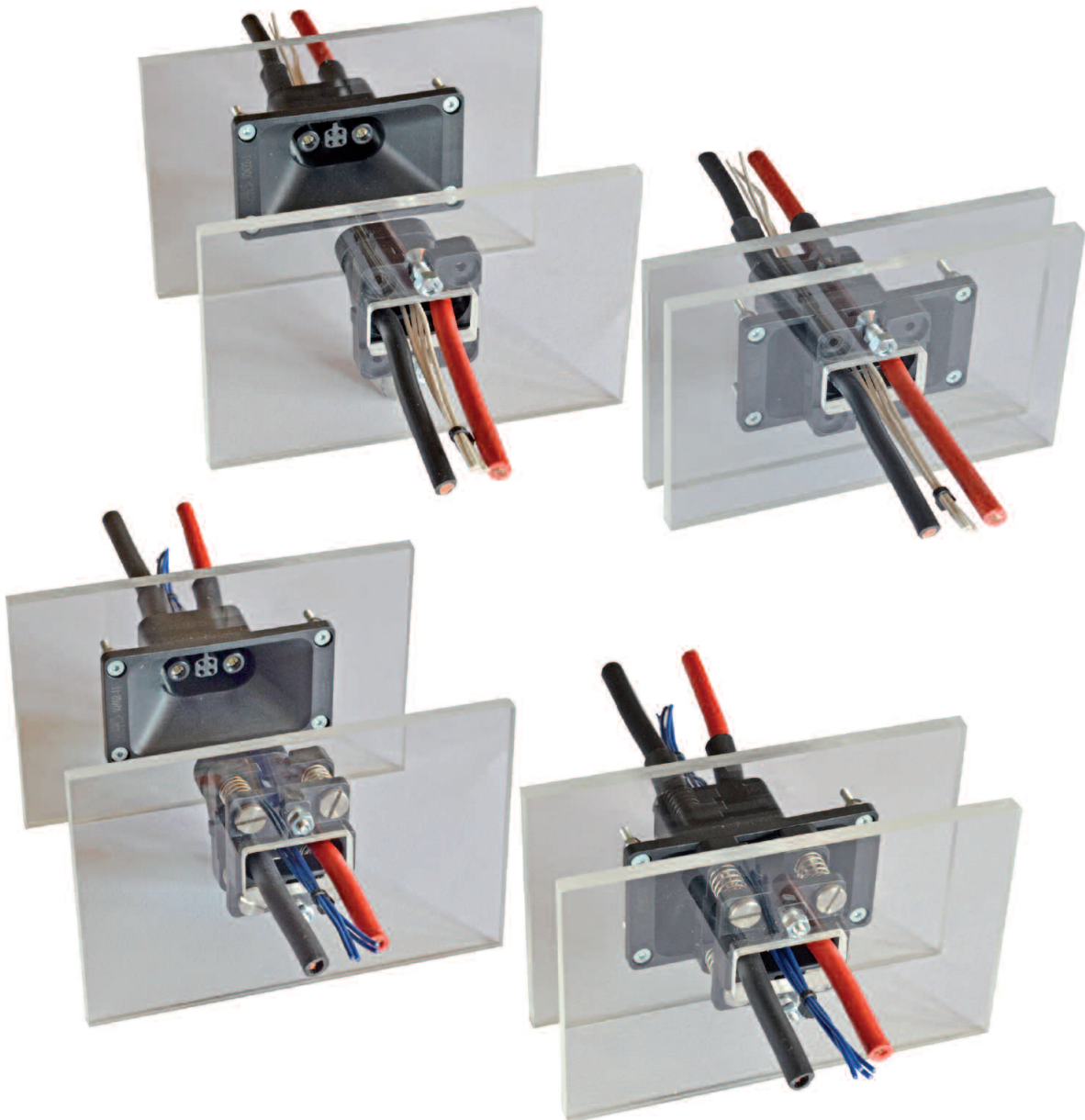
DISTRIBUTED BY



New GRID POWER Blindmate Connectors offer ideal solution for panel - to - panel, bulkhead - to bulkhead or rack mount applications that require the power and signal connectors capable to correct misalignments in either axis.

FEATURES

- High mating cycle design to make connection performance good
 - High reliability LIN/CROWN contacts technology, high mating cycles and hot swapping support
 - Provide first mating/last breaking and last mating/first breaking for road protection
 - Precise blind guide for performance guarantees automatic charging connection



Series 921 - 924 - 941 - 945

PRODUCT SPECIFICATIONS

Contact Size AWG (mm ²)	6 (16)	8 (10)	12 (3,5)	20 (0,5 - 0,75)
Current rating (Amperes)	105	75	35	5
Voltage rating (Volts AC/DC)	600	600	600	120
Insulating withstanding voltage (Volts/AC)	1.500	1.500	1.500	1.000
Crimping hole diameter (mm)	5,7	4,6	2,4	1,2
Extract force (gram)	400 - 800	400 - 800	280 - 300	50 - 280
Contact resistance (mΩ)	≤ 0,7	≤ 0,75	≤ 5	≤ 5
Insulating resistance (MΩ)	1.000			
Mechanical life (cycles)	> 10.000			
Operating temp. Range (°C)	> 40 to + 125 °C			
RoHS - REACH	Certified			
UL - CUL	Under Certification			
TÜV - CE	Under Certification			
Waterproof rating	SERIES 924: IP68 mated with rubber ring and gasket SERIES 921 - 941 - 945: IP64			

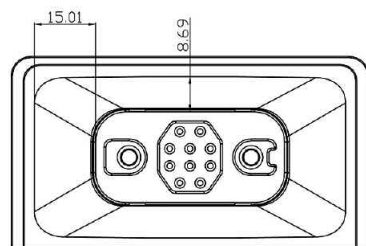
PRODUCT MATERIAL

HOUSING		CONTACT	
Plastic Resin	PBT (Black)	Contact Base	Copper alloy
Ring and Gasket	Silicon Rubber	Spring material	Stainless steel
Flammability	UL94-V-0	Contact Plating	Ag - Au
Glow Wire	960 (GWFI) / 800 (GWIT)	Clip material	BeCu

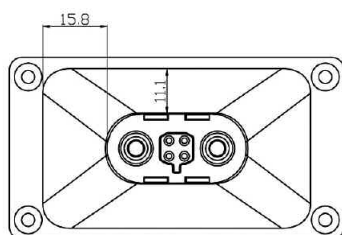
MECHANICAL MISALIGNMENT ALLOWANCE

MISALIGNMENT ALLOWS UNITS (PLUG & SOCKET) TO SELF-ALIGN DURING BLINDMATE RACK & PANEL APPLICATIONS

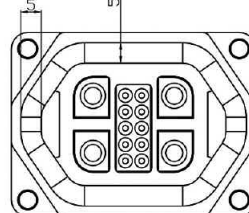
HOUSING SERIES	921	924	941	945
VERTICAL (mm)	8,7	11	5	8,7
ORIZONTAL (mm)	15	5	5	15



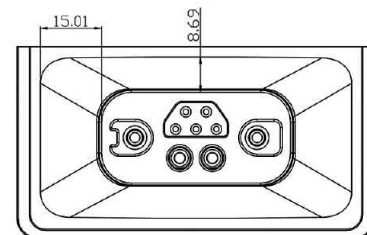
921XX-XX



924XX-XX



941XX-XX



945XX-XX

HOUSINGS

ORDERING DEFINITION:

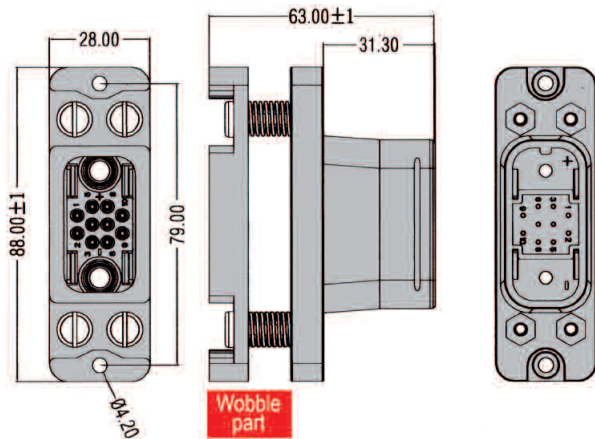
- HOUSING PLUG REQUIRES MALE POWER AND SIGNAL CONTACT
- HOUSING SOCKET REQUIRES FEMALE POWER AND SIGNAL CONTACTS
- POWER AND SIGNAL CONTACTS MUST BE ORDERED SEPARATELY
- ONLY SOCKETS PART. Nr. 92102-11 AND 94502-11 ARE SUPPLIED WITH POWER CONTACTS FOR TERMINAL LUGS MOUNTED INTO HOUSINGS

SERIES 921

Part Nr. 92101-02

PLUG MALE

2 POWER + 10 SIGNAL CONTACTS WITH WOBBLE NO RUBBER RING

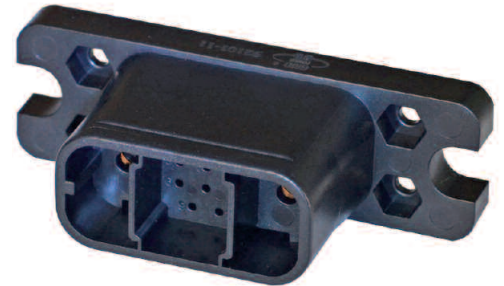
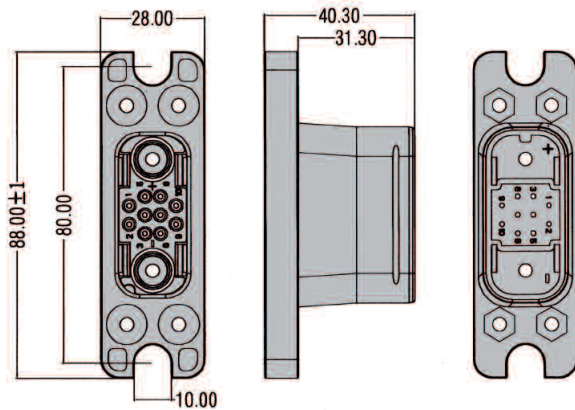


Note: To be matched with: 92102-12 / 92102-13

Part Nr. 92101-12

PLUG MALE

2 POWER + 10 SIGNAL CONTACTS NO WOBBLE NO RUBBER RING

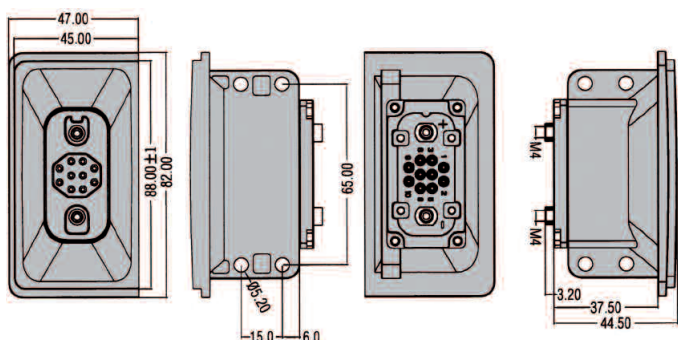


Note: To be matched with: 92102-12 / 92102-13

Part Nr. 92102-13

SOCKET FEMALE

2 POWER CONTACTS INNER SCREW + 10 SIGNAL CONTACTS NO WOBBLE NO RUBBER RING



Note:

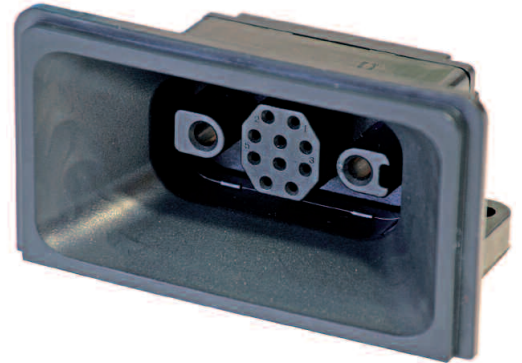
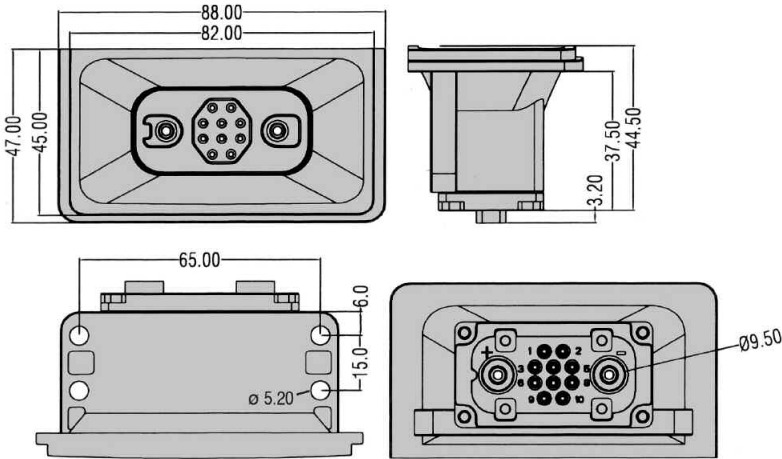
- Screws M4 not included
- 2 female power contacts assembled into housings
- To be matched with: 92101-02 / 92101-12

SERIES 921

Part Nr. 92102-12

SOCKET FEMALE

2 POWER + 10 SIGNAL CONTACTS NO WOBBLE NO RUBBER RING



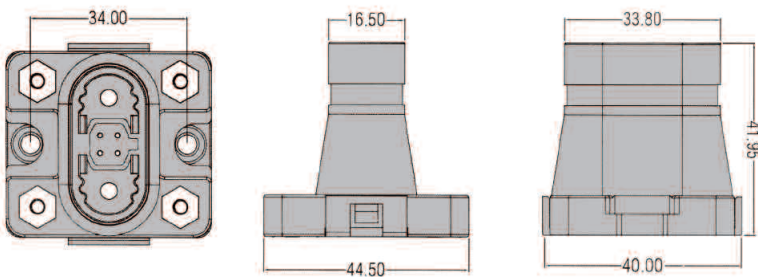
Note: To be matched with: 92101-12 / 92101-02

SERIES 924

Part Nr. 92401-12

PLUG MALE

2 POWER + 4 SIGNAL CONTACTS NO WOBBLE NO RUBBER RING

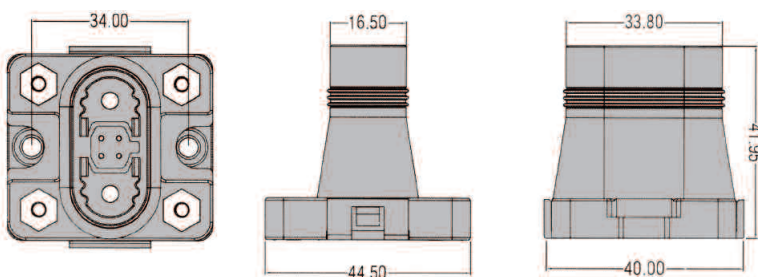


Note: To be matched with: 92402-12 / 92432-12

Part Nr. 92421-12

PLUG MALE

2 POWER + 4 SIGNAL CONTACTS NO WOBBLE WITH RUBBER RING



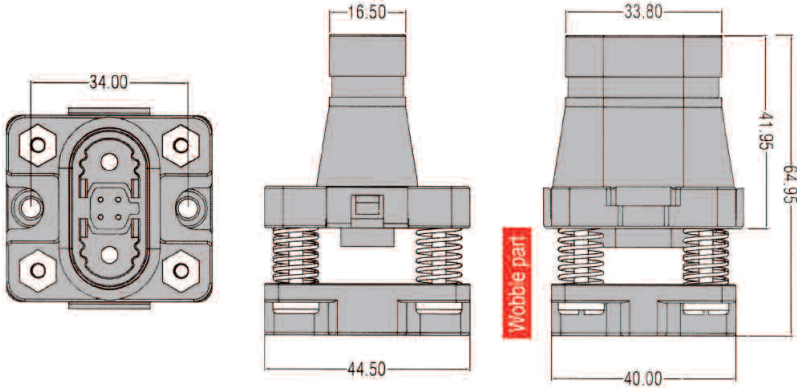
Note: To be matched with: 92422-12

SERIES 924

Part Nr. 92401-02

PLUG MALE

2 POWER + 4 SIGNAL CONTACTS WITH WOBBLE NO RUBBER RING

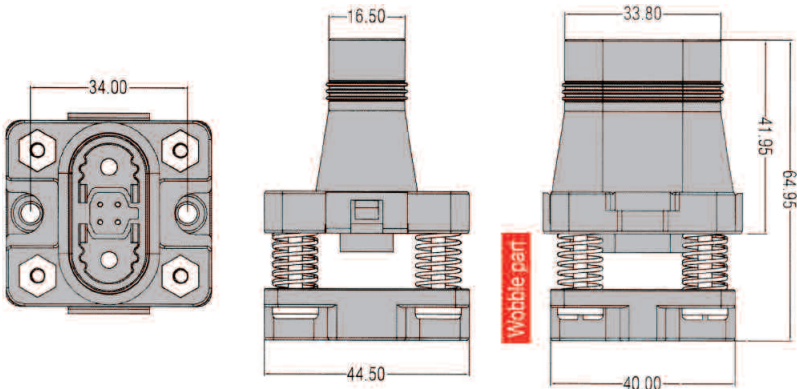


Note: To be matched with: 92402-12 / 92432-12

Part Nr. 92421-02

PLUG MALE

2 POWER + 4 SIGNAL CONTACTS WITH WOBBLE WITH RUBBER RING

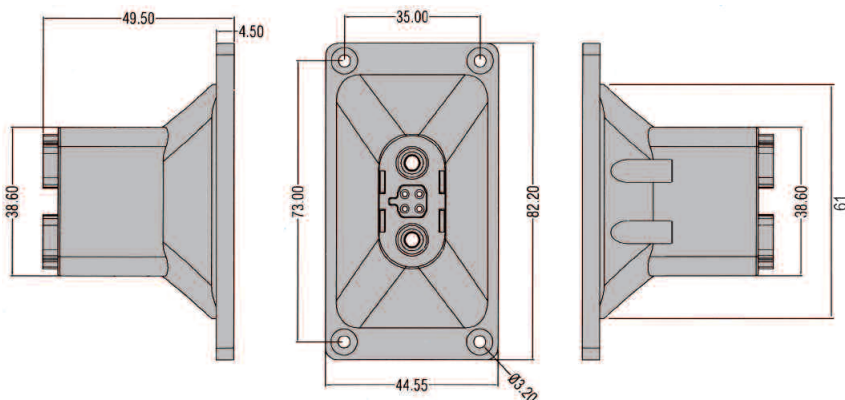


Note: To be matched with: 92422-12

Part Nr. 92402-12

SOCKET FEMALE

2 POWER + 4 SIGNAL CONTACTS NO RUBBER GASKET NO T-FOOT



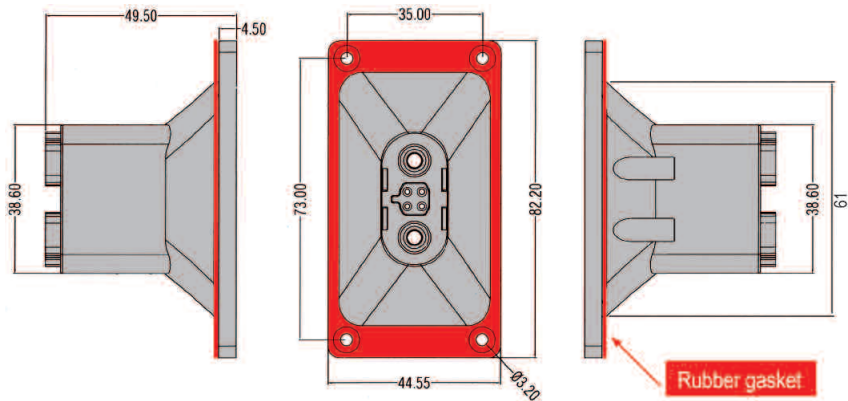
Note: To be matched with: 92401-12 / 92401-02

SERIES 924

Part Nr. 92422-12

SOCKET FEMALE

2 POWER + 4 SIGNAL CONTACTS WITH RUBBER GASKET NO T-FOOT

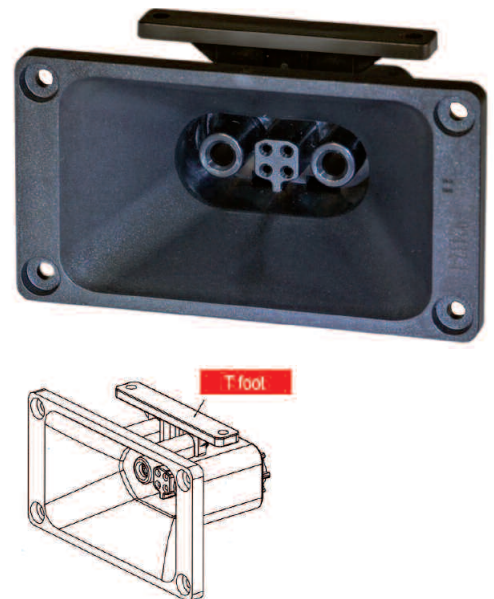
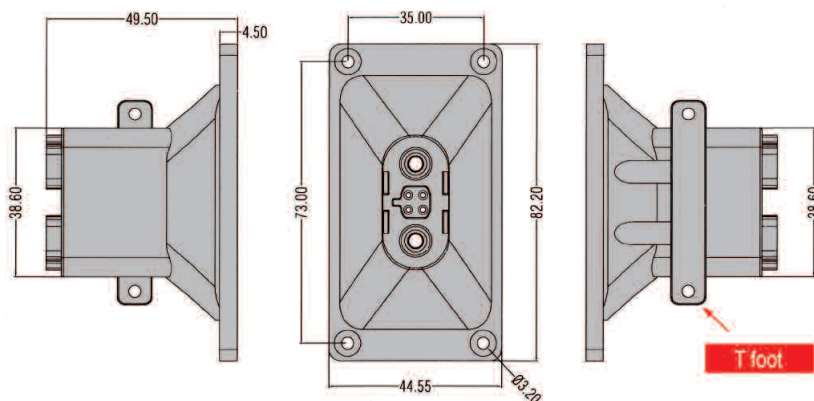


Note: To be matched with: 92421-12

Part Nr. 92432-12

SOCKET FEMALE

2 POWER + 4 SIGNAL CONTACTS NO RUBBER GASKET WITH T-FOOT



Note: To be matched with: 92401-12 / 92401-02

SERIES 941

Part Nr. 94101-12

PLUG MALE

4 POWER + 10 SIGNAL CONTACTS

NO WOBBLE

NO RUBBER RING



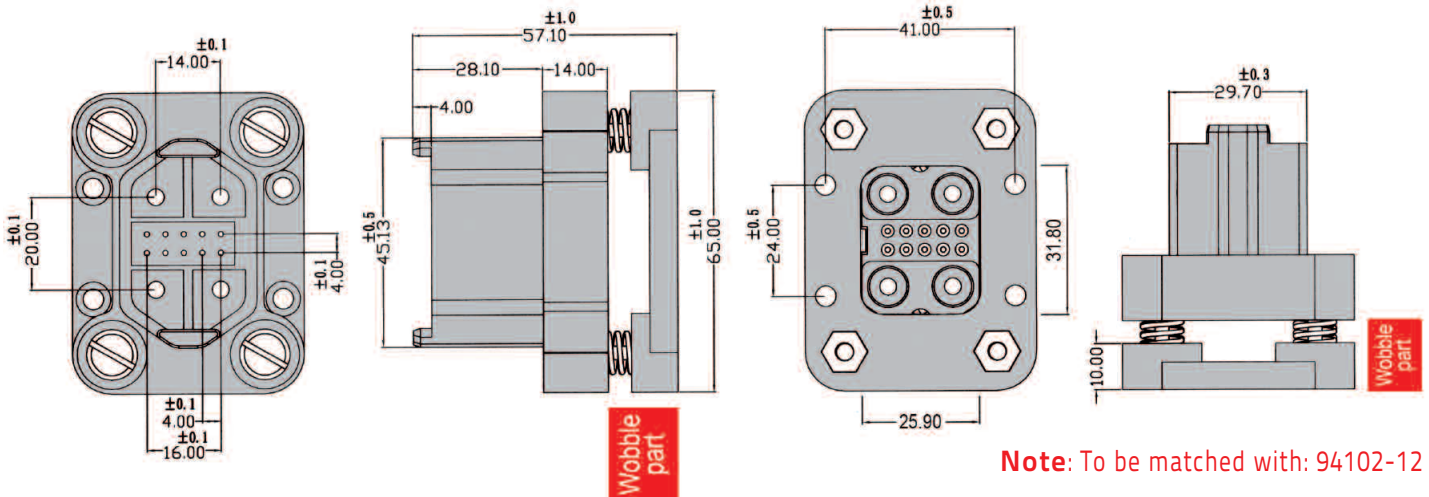
Part Nr. 94101-02

PLUG MALE

4 POWER + 10 SIGNAL CONTACTS

WITH WOBBLE

NO RUBBER RING



Note: To be matched with: 94102-12

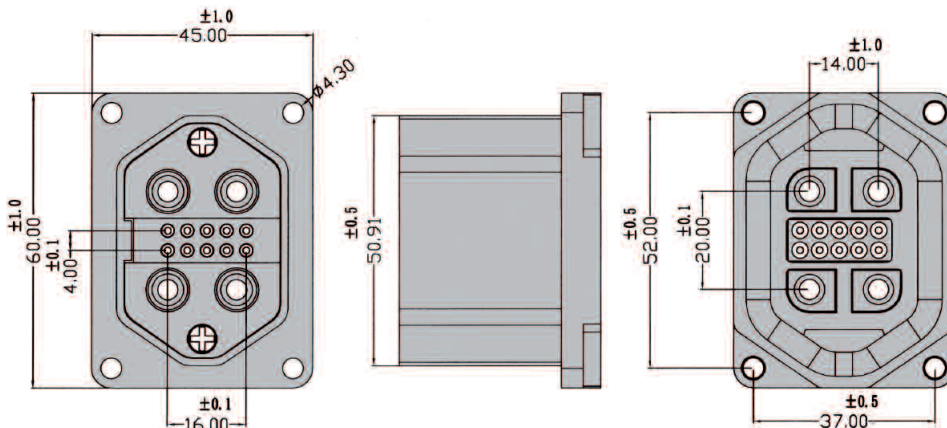
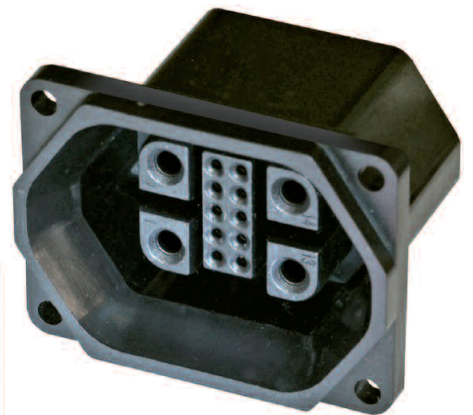
Part Nr. 94102-12

SOCKET FEMALE

4 POWER + 10 SIGNAL CONTACTS

NO WOBBLE

NO RUBBER GASKET



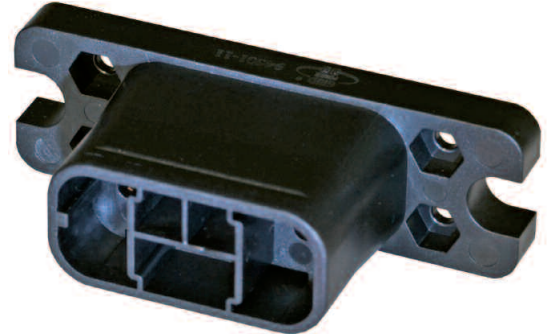
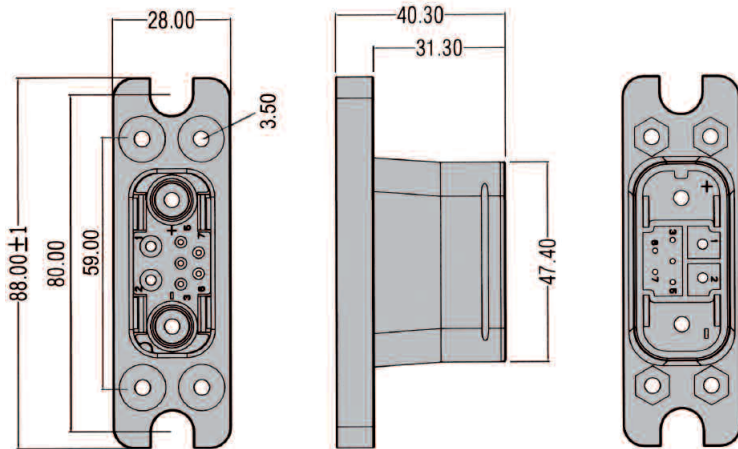
Note: To be matched with: 94101-12
94101-02

SERIES 945

Part Nr. 94501-12

PLUG MALE

2 POWER (AWG6 OR 8) +2 POWERS (AWG12) + 5 SIGNAL CONTACTS NO WOBBLE NO RUBBER RING

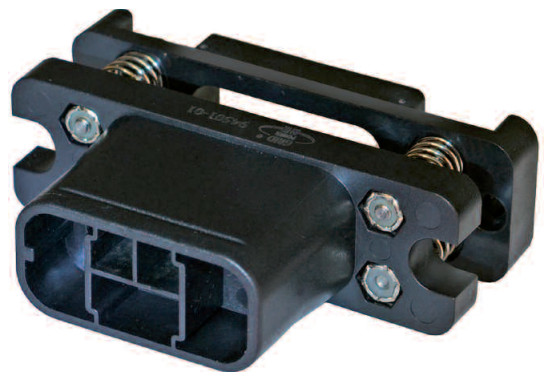
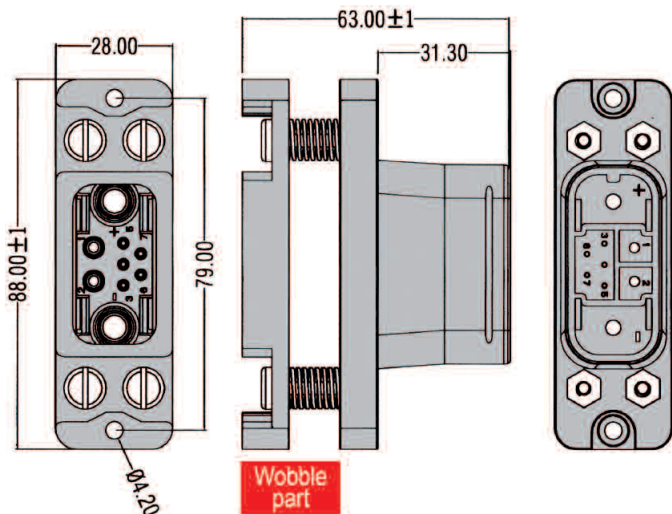


Note: To be matched with: 94502-12 / 94502-13

Part Nr. 94501-02

PLUG MALE

2 POWERS (AWG6 OR 8) +2 POWERS (AWG12) + 5 SIGNAL CONTACTS WITH WOBBLE NO RUBBER RING



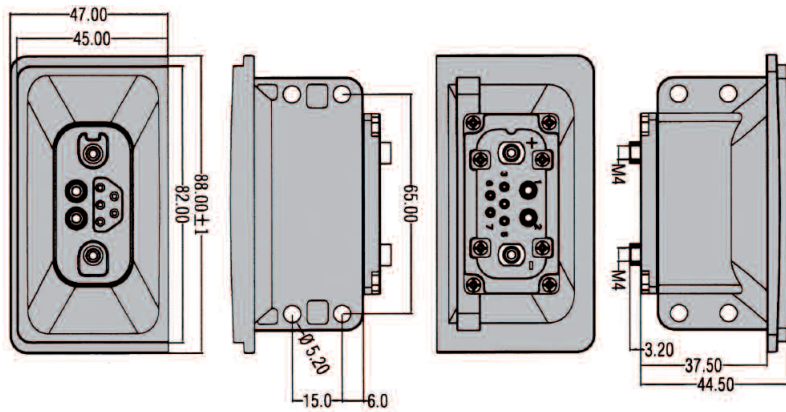
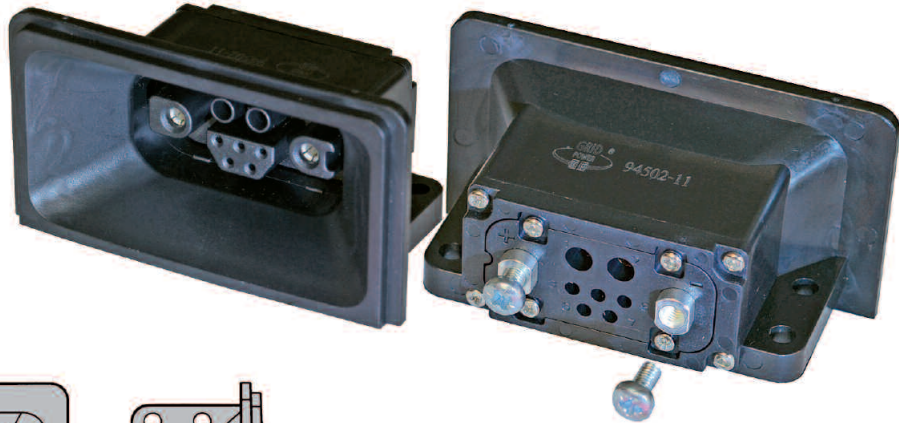
Note: To be matched with: 94502-12 / 94502-13

SERIES 945

Part Nr. 94502-13

SOCKET FEMALE

2 POWER CONTACTS (INNER SCREW) +
2 POWER (AWG12) +
5 SIGNAL CONTACTS
NO WOBBLE NO RUBBER RING



Note:

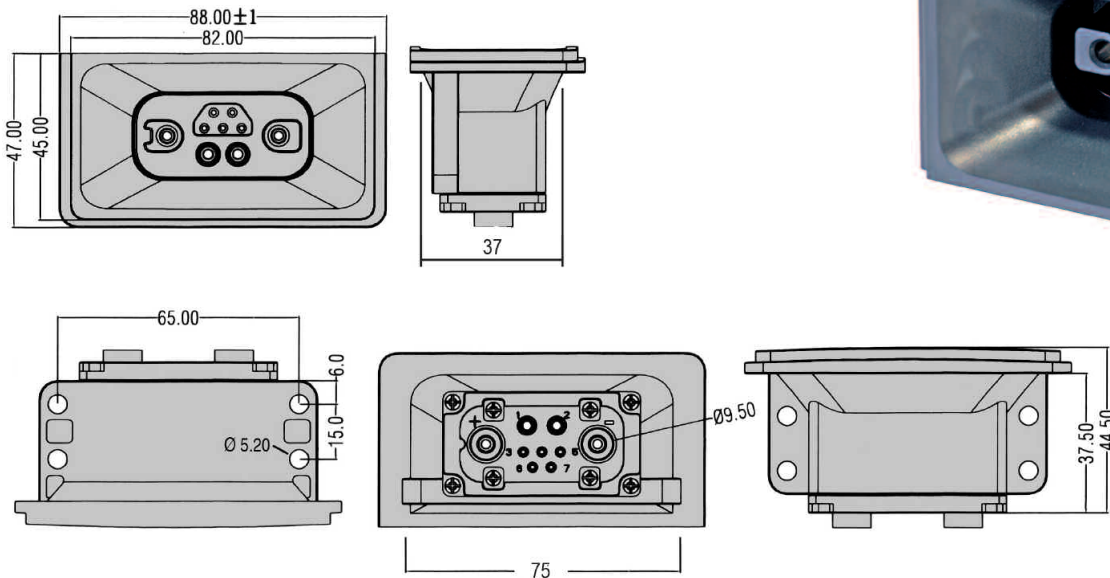
To be matched with: 94501-12 / 94501-02

2 female power contacts (AWG6)
mounted into housings

Part Nr. 94502-12

SOCKET FEMALE

2 POWER (AWG 6 OR 8) + 2 POWER (AWG 12) + 5 SIGNAL CONTACTS
NO WOBBLE NO RUBBER RING



Note: To be matched with: 94501-12 / 94501-02

HIGH POWER CONTACTS (SILVER PLATED)

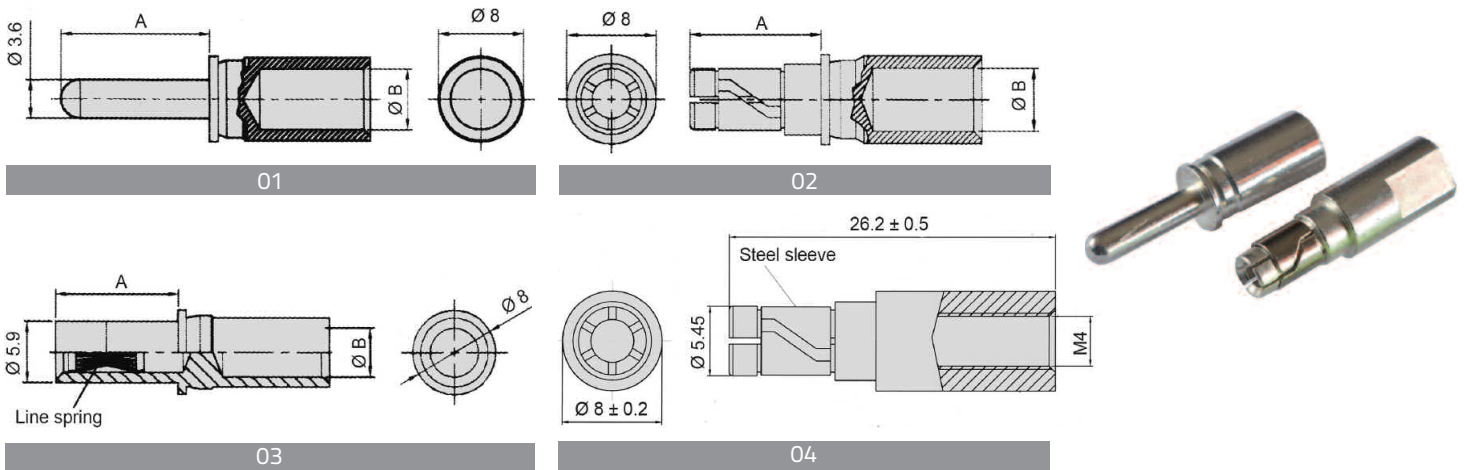
Dis.	Part Nr.	Description	Size AWG (mm ²)	A (mm)	B (mm)
01	GP8YAG-07M	MALE	6 (16)	14,1	5,7
01	GP8YAG-07L	MALE	6 (16)	16	5,7
01	Z8YAGS-12,7	MALE	8 (10)	12,7	4,6
01	Z8YAGS	MALE	8 (10)	14,1	4,6
01	Z8YAGL-15,6	MALE	8 (10)	15,6	4,6
02	GP8YAG-07F	FEMALE	6 (16)	11,8	5,7
03	K8YAG-01	FEMALE	8 (10)	15,6	4,6
04	GP8YAG-M4	FEMALE	6 (16)	11,8	M4

Notes:

Dis. 02: 'HIGH CURRENT CONTACT' MADE WITH HIGH CONDUCTIVITY COPPER ALLOY AND EXTENDED

Dis. 03: LIN/CROWN CONTACT FOR LOW INSERTION - EXTRACTION FORCES

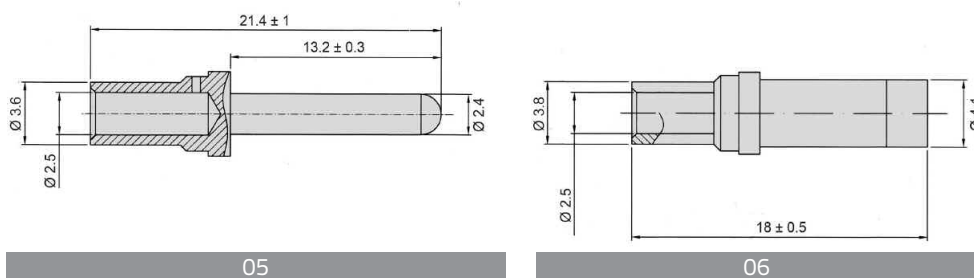
Dis. 04: CONTACTS PRE ASSEMBLED INTO HOUSINGS 92102-12 AND 94502-13



LOW POWER CONTACTS (SILVER PLATED)

ONLY FOR HOUSINGS Part Nr. 94501 AND 94502

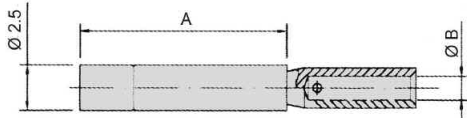
Dis.	Part Nr.	Description	Size AWG (mm ²)	A (mm)	B (mm)
05	Z12YAGS-2,5	MALE	12 (3,5-4)	13,2	2,5
06	K12YAG-2,5-G	FEMALE	12 (3,5-4)	11,5	2,5



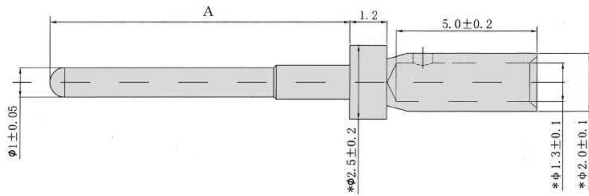
SIGNAL CONTACTS GOLD PLATED STANDARD MALE-FEMALE CONTACTS (NO BULGE)

Dis.	Part Nr.	Description	Size AWG (mm ²)	A (mm)	B (mm)
06	K20YAU-01	FEMALE	20 /0,5-0,75	11,5	1,3
07	Z20YAUS	MALE	20 /0,5-0,75	10,2	1,3
07	Z20YAUM	MALE	20 /0,5-0,75	11,5	1,3
07	Z20YAUL	MALE	20 /0,5-0,75	13,5	1,3

Note: MALE - FEMALE CONTACTS EXTRACTABLE WHEN INSERTED INTO HOUSINGS (SEE "TOOL" SECTION)



06



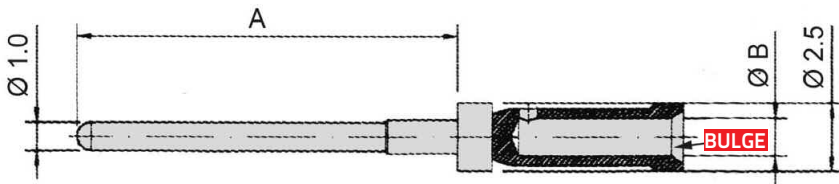
07



SPECIAL MALE CONTACTS (WITH BULGE)

Dis.	Part Nr.	Description	Size AWG (mm ²)	A (mm)	B (mm)
08	Z20YAUM-T	MALE	20 /0,5-0,75	11,5	1,3
08	Z20YAUL-T	MALE	20 /0,5-0,75	13,5	1,3
08	Z20YAUL-15,3	MALE	20 /0,5-0,75	15,3	1,3

Note: NOT EXTRACTABLE WHEN INSERTED INTO HOUSINGS



08

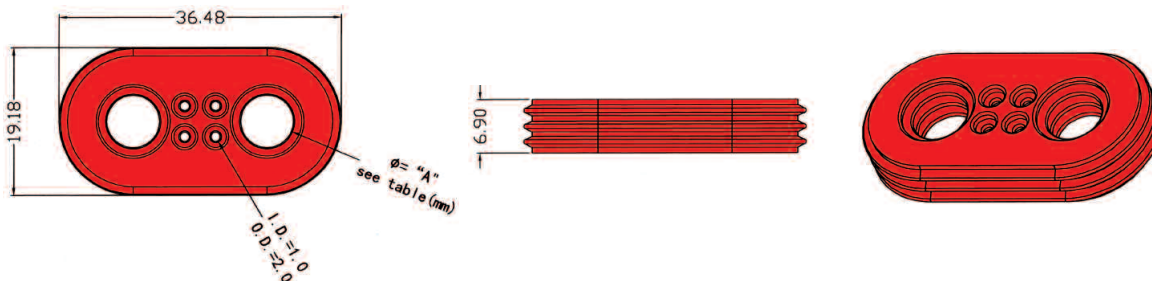


ACCESSORIES AND SPARE PART

REAR RUBBER RING FOR CABLES

It can be used for connectors PLUG Series 924 to achieve environmental protection IP68

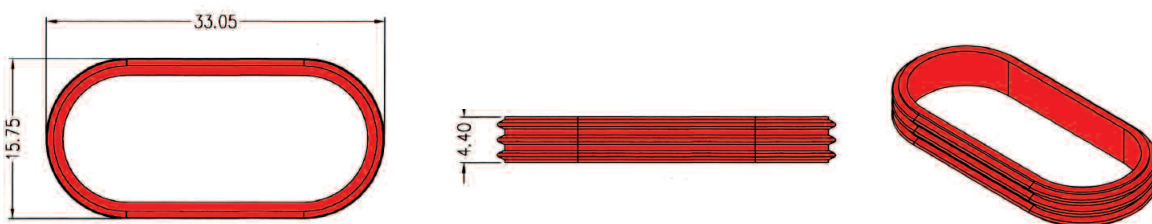
Part Nr.	Wire Size	Color	Ø A
92421-01-RD6	6 AWG	red	I.D 7.5 / O.D. 9.2
92421-01-RD8	8 AWG	red	I.D 5.1 / O.D. 6.8



FRONT RUBBER RING

It can be used for connectors PLUG Series 924 to achieve environmental protection IP68

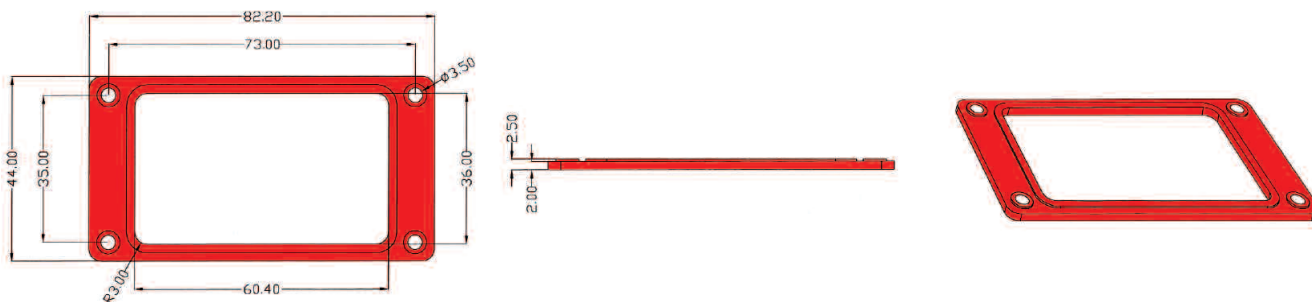
Part Nr.	Color
92421-RD	red



PANEL RUBBER GASKET

It can be used for connectors SOCKET Series 924 to achieve environmental protection IP68

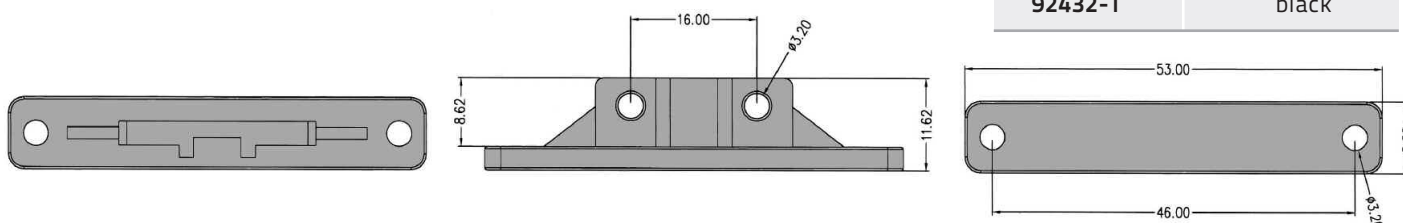
Part Nr.	Color
92422-RD	red



T-FOOT BRACKET

It can be used for connectors SOCKET Series 924

Part Nr.	Color
92432-T	black



■ CRIMPING TOOLS

HAND CRIMPING TOOLS - 4 INDENTS
FOR AWG 12 (3,5 - 4 mm²)
AND AWG 20 (0,5 - 0,75 mm²) CONTACTS

Part number: W2A



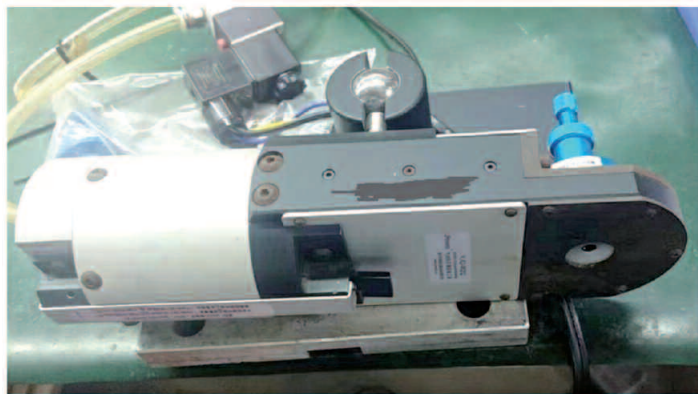
FOR HIGH PRODUCTION VOLUME
ARE ALSO AVAILABLE SEMI AUTOMATIC
PNEUMATIC CRIMPING TOOLS WITH:
4 INDENTS OR EXAGONAL DIES SHAPE LIKE:



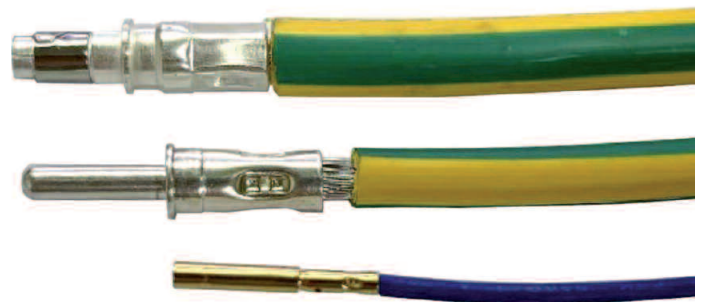
8 / 12 / 4 indents crimping tool



6 / 4 way crimping tool



20 / 4 indents crimping tool



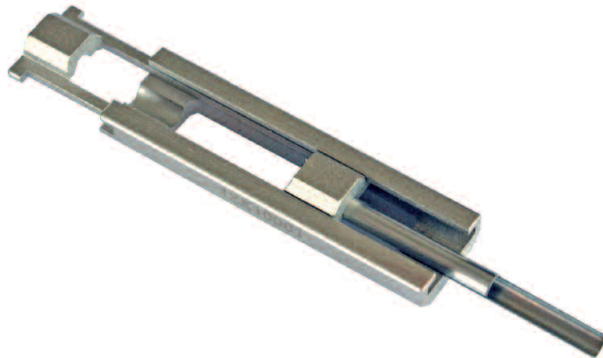
6 / 8 / 20 crimping shapes

EXTRACTION TOOLS AND PROCEDURE

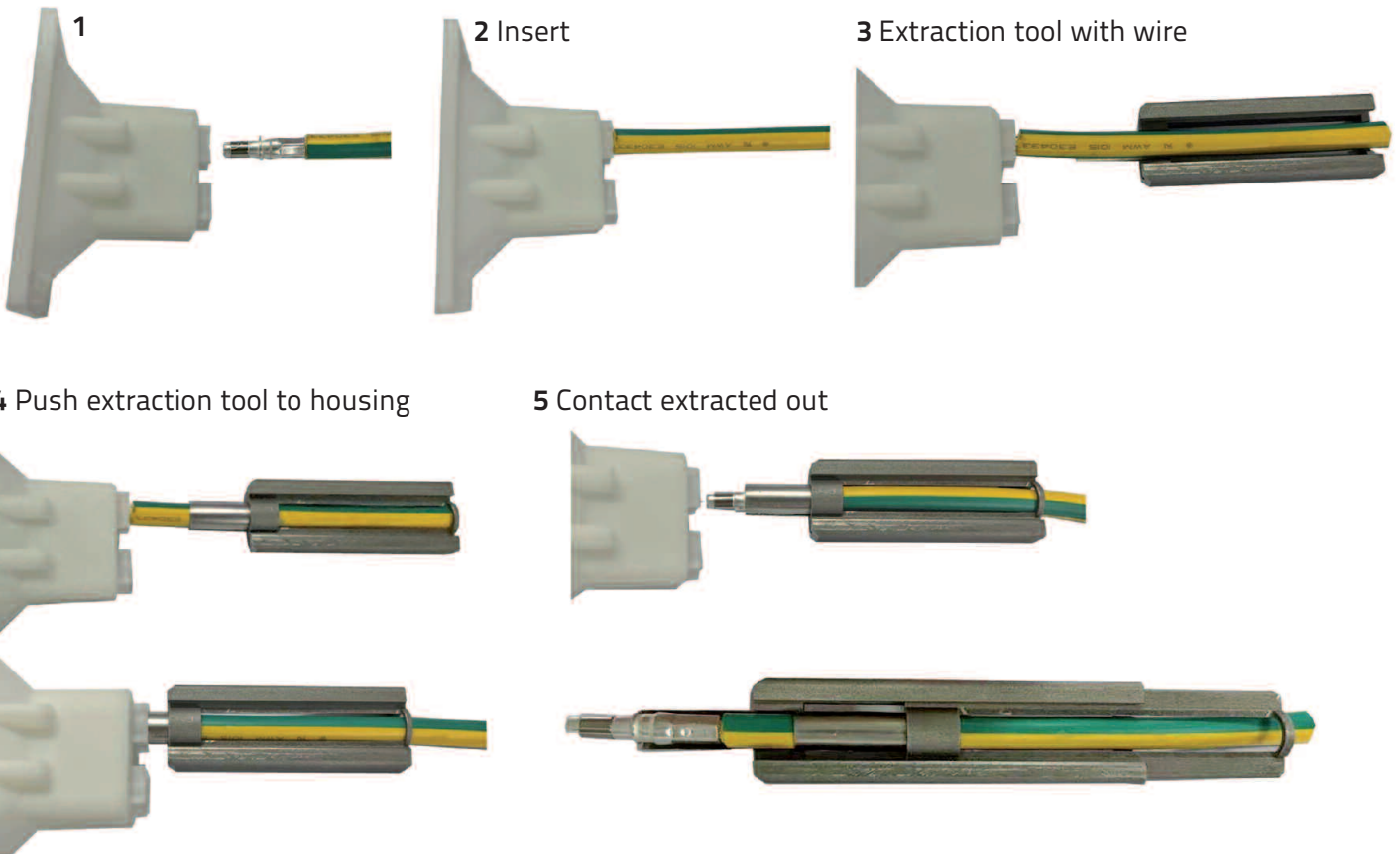
FOR POWER CONTACTS
 AWG 6 (16 mm²)
 AND AWG 8 (10 mm²)
 Part number: 6 x 10001



FOR LOW POWER CONTACTS
 AWG 12 (3,5 - 4 mm²)
 Part number: 12 x 10001

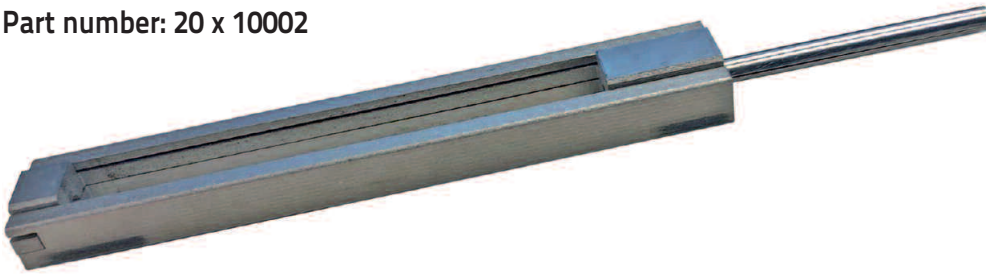


POWER CONTACT EXTRACTION PROCEDURE



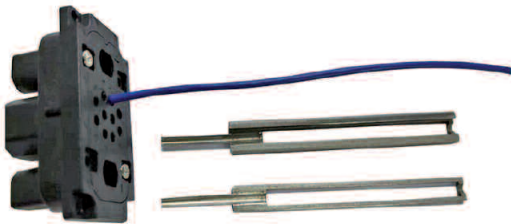
EXTRACTION TOOLS AND PROCEDURE

FOR SIGNAL CONTACTS AWG 20
ONLY FOR CONTACTS
Part number: 20 x 10002



SIGNAL CONTACT EXTRACTION PROCEDURE

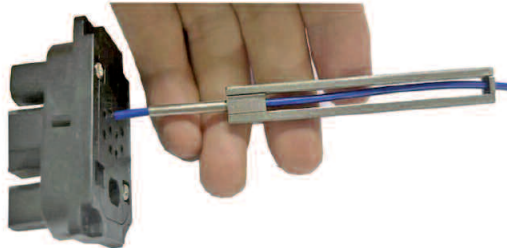
1



2 Put cable onto tool



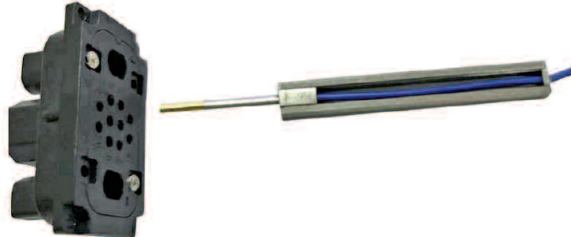
3 Move extraction tool to housing



4 Tool in housing



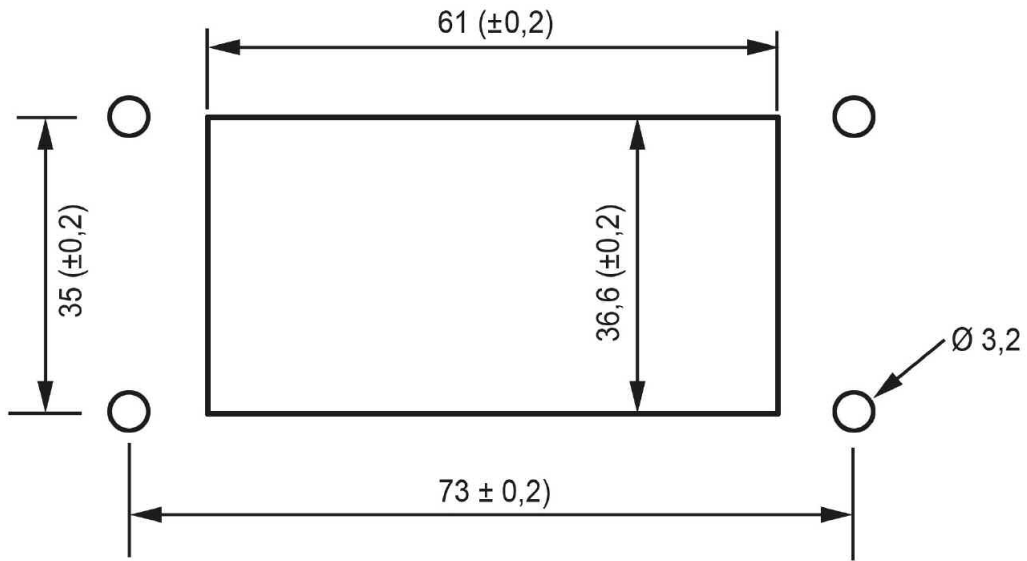
5 Contact extracted out



RECOMMENDED PANEL CUTOUT FOR SOCKETS:

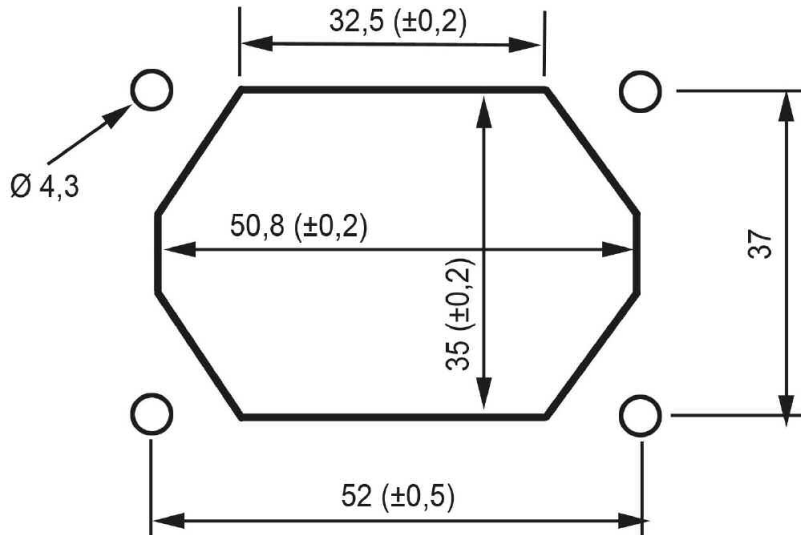
SERIES 924

PART NUMBERS
 92402-12
 92422-12
 92432-12



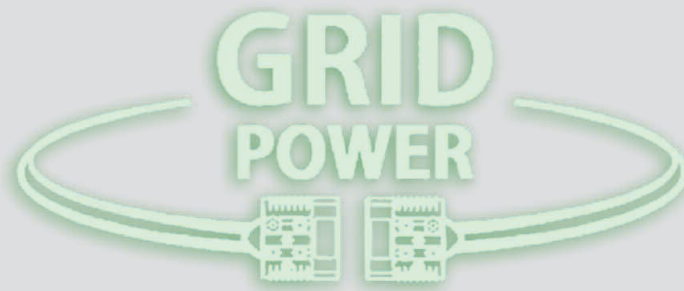
SERIES 941

PART NUMBERS
 94102-12



Dimensions: mm

NOTES



GRID POWER ADDITIONAL PRODUCTS

DIN
80 - 160 - 320 - 640



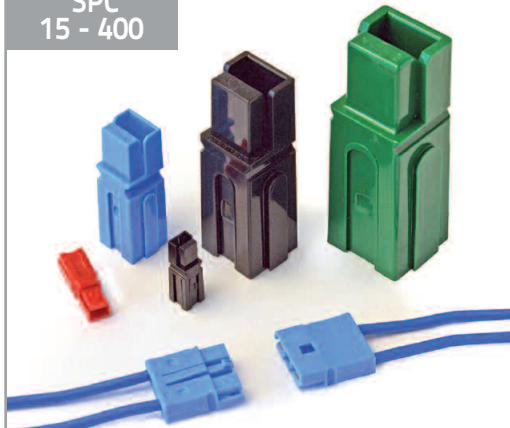
MPC
50-120-175-350



GPX - GPE
80 - 160 - 320



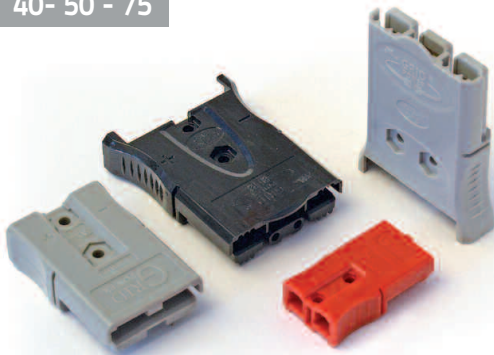
SPC
15 - 400



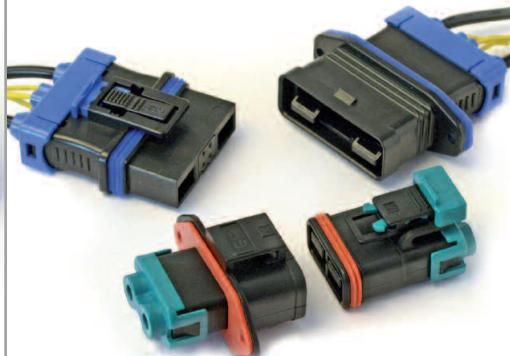
ESC
GRD / GRD-M



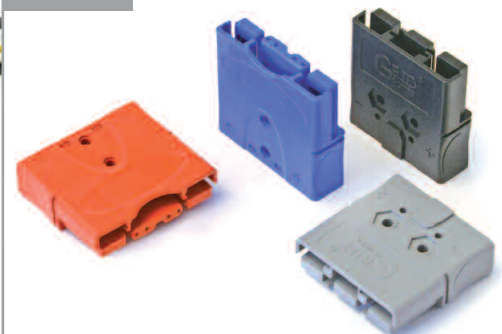
GPS
40- 50 - 75



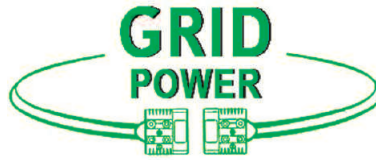
PSF
75 - 90



PS 70



Your Best High Power Connectors Choice



COMPANY PROFILE

GRID POWER CONNECTORS CO. LTD was set up in the years 2000 covering more than 3000 square meters plant located in High-Tech Industrial Area in Shenzhen (China).

A second factory of approx. 9000 square meters, located in Huizhou City (China) at about 90 Km from former Plant in Shenzhen is working since January 2024.

GRID POWER is a high-tech enterprise which is focusing on connectors development and production.

Millions of connectors and contacts are made per year in the range between 10A to 640A.

The terminals mainly adopt flat-contact technology, but also pins and sockets are made to fit the new connector requirements.

The core of the Company is people-oriented, cultivate all round innovative technical talents, set up a rapid response team to adapt to the market, dedicated to provide a high-power connection system supporting the overall solution.

Currently we are carrying forward the fully automated production process and moving forward to industry 4.0.

Certified ISO 9001-2020



Shenzhen Head Office and Factory



Huizhou Head Office and Factory



GRID POWER DISTRIBUTION CENTER:



- BATTERY CAPACITY
- DASHBOARD LCD DISPLAYS
- CONTACTORS FOR DC CURRENT
 - CONVERTERS DC/DC
 - POWER CONNECTORS
- CONTROLLERS FOR AC MOTORS



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