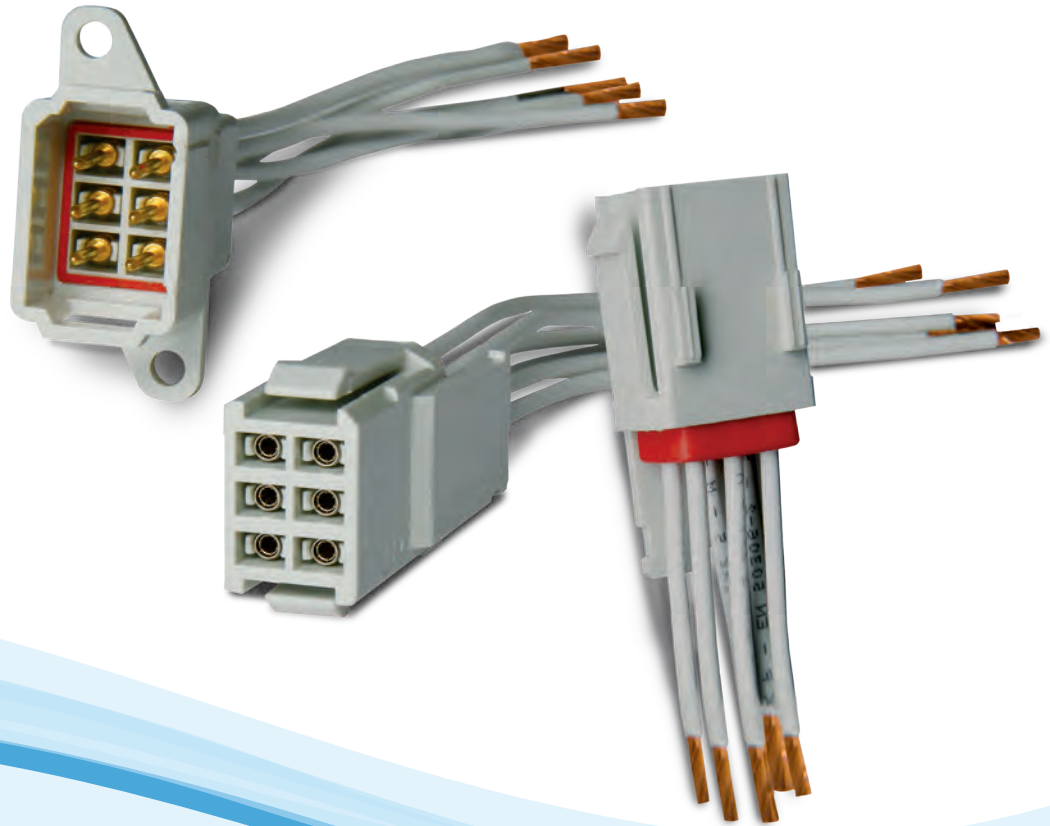


REP SERIES

High Reliability Rectangular Plastic Connectors



- ▶ **Fire & Smoke standards compliance**
- ▶ **High Performance and safe connector**
- ▶ **Cost saving solution**
- ▶ **IP66 & IP67 sealing**

HIGH RELIABILITY

The REP connector is a multi pole sealed rectangular plastic connector which enables a quick and secure connection of any type of embedded equipment in a wide range of applications such as sensors, brakes, lighting, air conditioning, communication of any market: Industry, Railway, Test & Measurement, Automotive, Public Work equipment and Defence.

The connector uses the proven Hypertac® hyperboloid contact technology which guarantees excellent reliability, even under high levels of shock and vibration and allows up to 500 mating cycles and high current rating up to 18 A.

FLEXIBLE DESIGN

The REP connector range offers two main versions: with crimp termination contacts for cable harness applications and with straight or bent termination contacts for PCB mount applications. Both versions are available in 3 layouts: 2, 6 and 12 ways and the connectors can also be delivered as a complete and tested pre-cabled solution according to customers' specifications.

EASY OF USE

Only one contact can be used for cross section cables 0.5 mm² to 2.5 mm² (24-12AWG) according to NFF 63-808 and EN 50-306 standards. No specific tool is required, with consequent reduction of supply chain, maintenance and cabling costs. Furthermore, for easy mounting, the connector includes polarized guides and provides several configurations: cable to cable, clips, front and back panel mount.

TECHNICAL CHARACTERISTIC

ELECTRICAL		MECHANICAL & MATERIAL	
Contacts	Ø 1.5 mm (size 16)	Contact retention force	> 70 N
Withstanding voltage	2725V (EN-50124-1)	Mating cycles	> 500 cycles
Insulation resistance	≥ 5 x 10 ³ M	Coding	3 configurations
Contact resistance	≤2.50 mΩ	Polarisation	180°
Voltage rating	230 V (EN-50124-1) pollution degree 3 > 400 V with plastic dummy contact	Weight (equipped with contacts)	2 ways: 17.3 g 6 ways: 35.5 g 12 ways: 62.8 g
Current rating	18 A	Insulator	Grey Thermoplastic (black for REP 4--)
Contact plating	gold over nickel plating	Seal & grommet	Silicone
ENVIRONMENTAL			
Temperature range	-55° +110° C for REP 1-- & 2-- 250° C for REP 4--	Vibration resistance	EN 61-373 cat. 2 (on boggie)
Salt spray	> 96 hours (ASTM-B-117)	Fire & Smoke	NF F 16-101: I2 F1 NF F 16-102: Exigence 4
Environmental level	IP66, IP67		EN ISO 11925-2: 30s
Fluid resistance	Cleaning substances, gasoil, acid, basis, oxalic acid		UNI CEI 11170-3: Prospetto 2 UL 94: V0

ORDERING INFORMATION



1 ▶ CONNECTOR FAMILY

2 ▶ LAYOUT

- 102** PLUG - 2 SOCKET CONTACTS **106** PLUG - 6 SOCKET CONTACTS **112** PLUG - 12 SOCKET CONTACTS
- 202** RECEPTACLE - 2 PIN CONTACTS **206** RECEPTACLE - 6 PIN CONTACTS **212** RECEPTACLE - 12 PIN CONTACTS
- 402** RECEPTACLE FOR PCB OR PANEL MOUNT - 2 PIN CONTACTS
- 406** RECEPTACLE FOR PCB OR PANEL MOUNT - 6 PIN CONTACTS
- 412** RECEPTACLE FOR PCB OR PANEL MOUNT - 12 PIN CONTACTS

3 ▶ PART - POLARITY

- 03** PLUG WITHOUT CONTACT **04** RECEPTACLE WITHOUT CONTACT **12** FEMALE PLUG WITH CONTACTS
- 23** MALE RECEPTACLE WITH CONTACTS **27** MALE RECEPTACLE WITH TINNED CONTACTS
- 2B** MALE RECEPTACLE WITH RoHS TINNED CONTACTS

4 ▶ TERMINATION STYLE

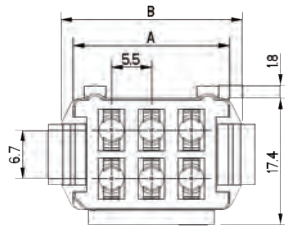
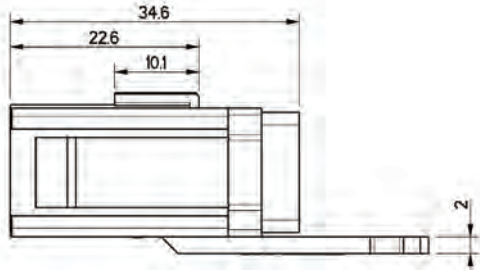
- 00** WITHOUT CONTACT
- 10** BENT TERMINATION CONTACT FOR REP 402, 406 AND 412
- 20** CRIMP CONTACT 24-12 AWG FOR REP 102, 106, 112, 202, 206 AND 212
- 30** STRAIGHT TERMINATION CONTACT FOR REP 402, 406 AND 412

5 ▶ ACCESSORIES

- 00** WITHOUT ACCESSORY
- 01** FILLER PLUG FOR REP 102, 106, 112, 202, 206 AND 212
- 02** PLASTIC DUMMY CONTACT FOR REP 102, 106, 112, 202, 206 AND 212
- 03** BRACKET FOR PANEL MOUNTING FOR REP 202, 206 AND 212
- 04** SPACER FOR STRAIGHT TERMINATION CONTACT FOR REP 402, 406 AND 412

DRAWINGS & DIMENSIONS

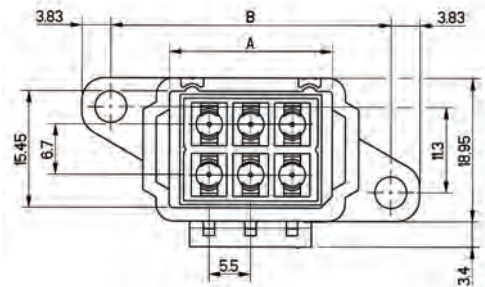
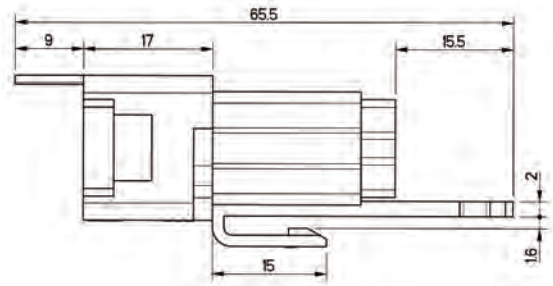
Female Plug, Crimp Termination



REP 1--	A	B
REP 102	10.5	14.0
REP 106	21.5	25.0
REP 112	38.0	41.5

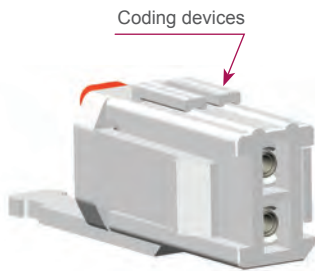
Dimensions are in mm

Male Receptacle, Crimp Termination



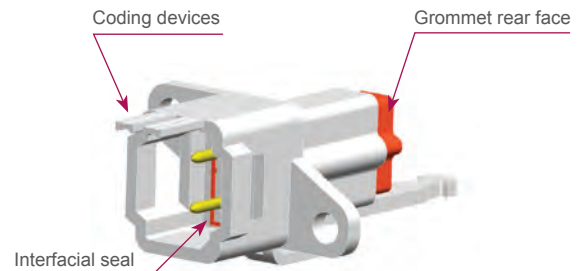
REP 2--	A	B
REP 202	10.65	26.1
REP 206	21.65	37.1
REP 212	38.15	53.6

Dimensions are in mm



REP 102

2 Ways

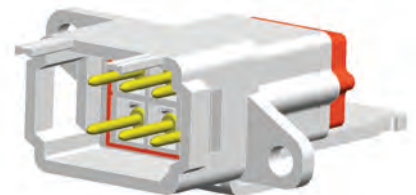


REP 202



REP 106

6 Ways

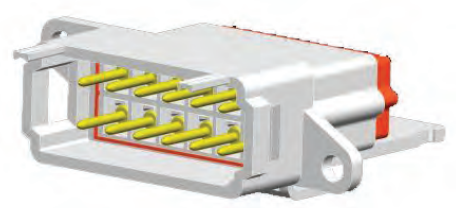


REP 206



REP 112

12 Ways

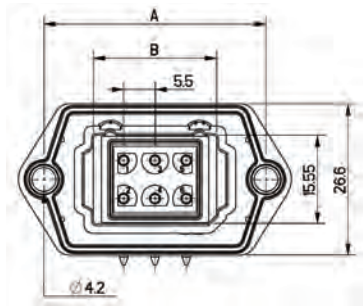
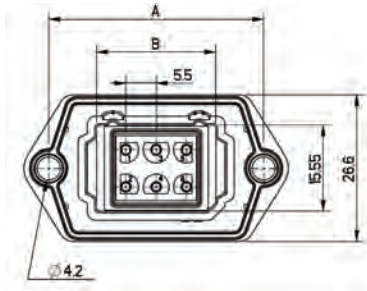
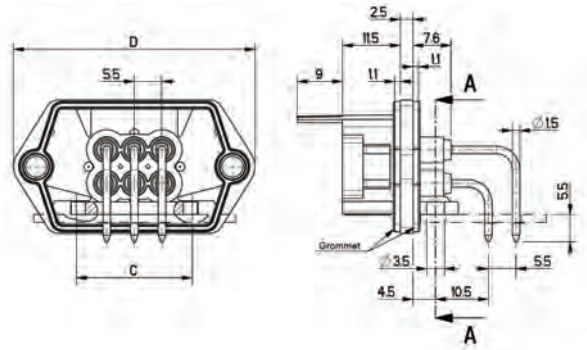
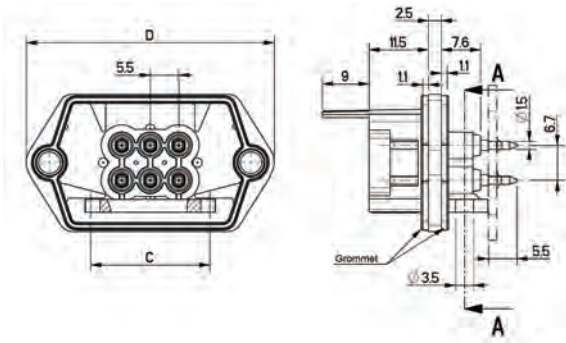


REP 212

DRAWINGS & DIMENSIONS

Male Receptacle, Straight Termination

Male Receptacle, Bent Termination



REP 4--	A	B	C	D
REP 402	28.0	10.65	12.0	37.0
REP 406	39.0	21.65	23.0	48.0
REP 412	55.5	38.15	39.5	64.5

Dimensions are in mm

2 Ways



REP 402



6 Ways



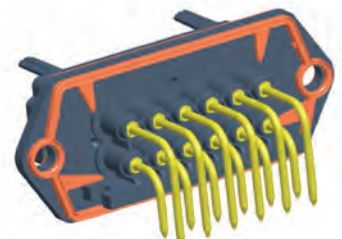
REP 406



12 Ways

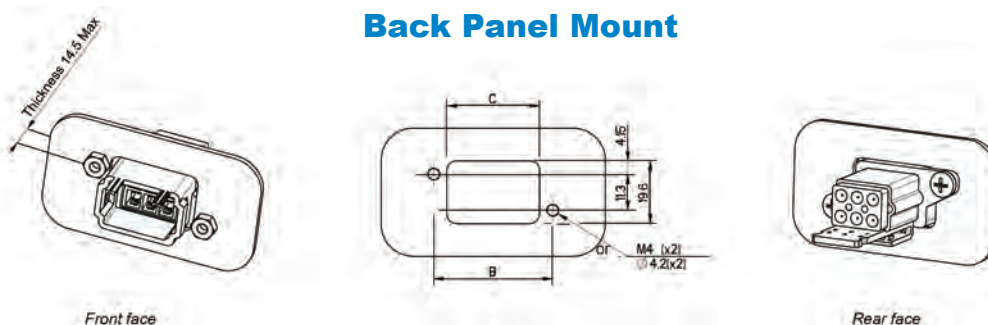


REP 412

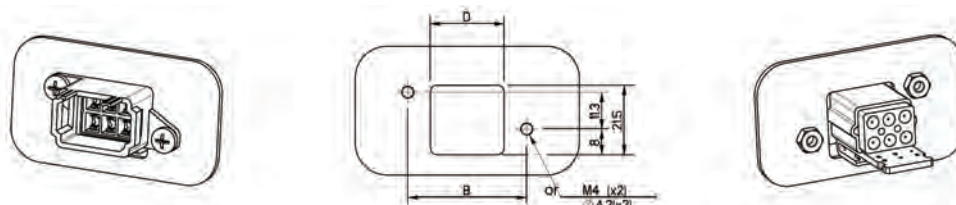


PANEL MOUNTING FOR REP 202, 206 AND 212

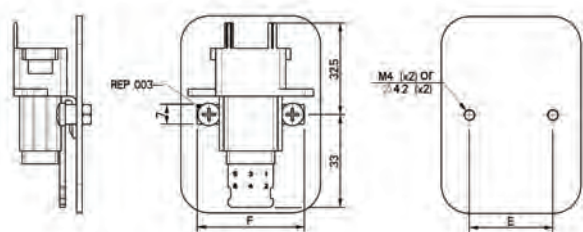
Back Panel Mount



Front Panel Mount



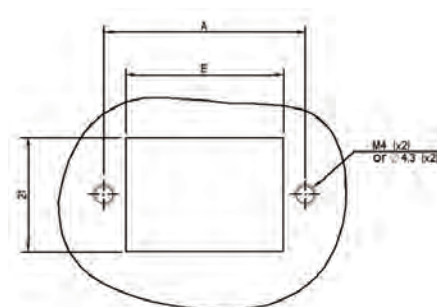
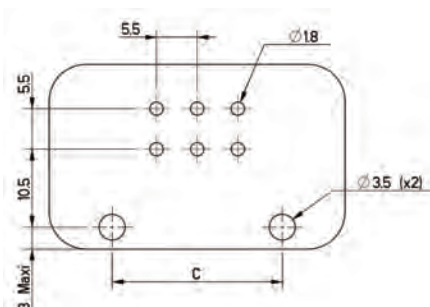
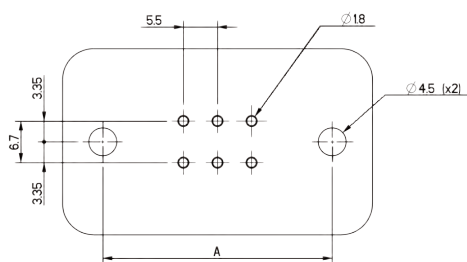
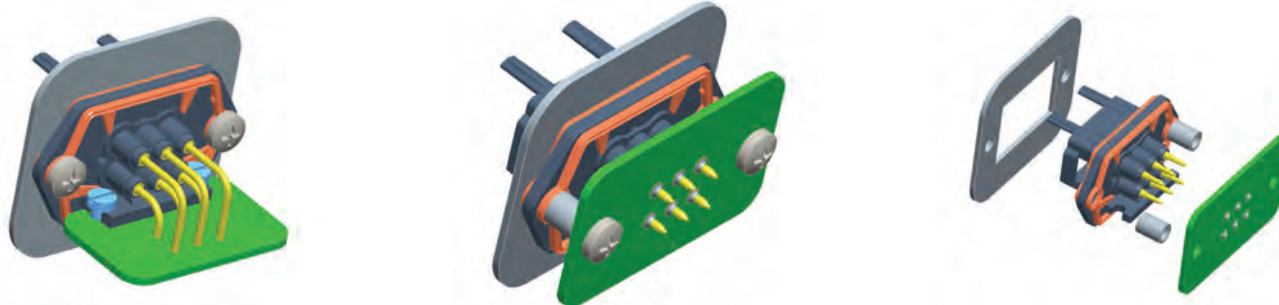
Panel Preparation detail with REP-003xx accessory



REP 2--	B	C	D	E	F
REP 202	26.1	18.0	12.0	18.7	27.2
REP 206	37.1	29.0	23.0	29.7	38.2
REP 212	53.6	45.5	39.5	46.2	54.7

Dimensions are in mm

PANEL MOUNTING FOR REP 402, 406 AND 412

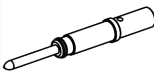
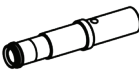


REP 4--	A	C	E
REP 402	28.0	12.0	18.0
REP 406	39.0	23.0	29.0
REP 412	55.5	39.5	45.5

PCB thickness > 4 mm

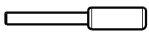
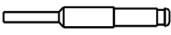
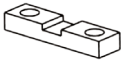
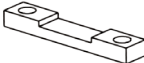
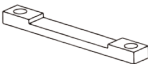

Dimensions are in mm

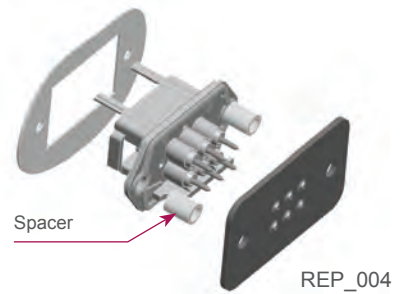
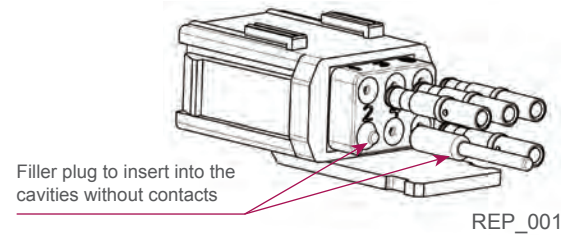
CONTACTS

CONTACTS			CRIMPING TOOL			EXTRACTION TOOL
Part Number	Type	PIN dia. (size)	Crimpin tool	Tool Turret	Position & Wire section	P/N
0151071-20-OG*	Pin 	1.5 mm (16)	Astro-tool TGV 101 or Daniels FT8	TGV 202 red or SH 463 red	4 - 0.25 mm ² to 0.34 mm ² (23AWG) 4 - 0.50 mm ² to 0.60 mm ² (20AWG) 5 - 0.50 mm ² to 1 mm ² (18AWG) 6 - 1.34 mm ² to 1.50 mm ² (16AWG) 7 - 1.82 mm ² to 2.61 mm ² (14-12AWG)	SD-015000012
0151832-20-N1*	Socket 					

* Crimp contacts for layout 102, 106, 112, 202, 206 and 212

ACCESSORIES

PART NUMBER	DESCRIPTION
REP_001	 Filler plug
REP_002	 Plastic dummy contact to use > 400V
REP_003-02	 Bracket for panel mounting, 2 way connector
REP_003-06	 Bracket for panel mounting, 6 way connector
REP_003-12	 Bracket for panel mounting, 12 way connector
REP_004	 Spacer for straight termination contact



MAIN APPLICATIONS



Industry



Railway



Truck



Test & Measurement



Marine



Automotive



Civil Avionics



Public Work Equipment

smiths connectors

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