

Inch-size rectangular Multi-connector
NO. of connecting tubes: 10

KDM series

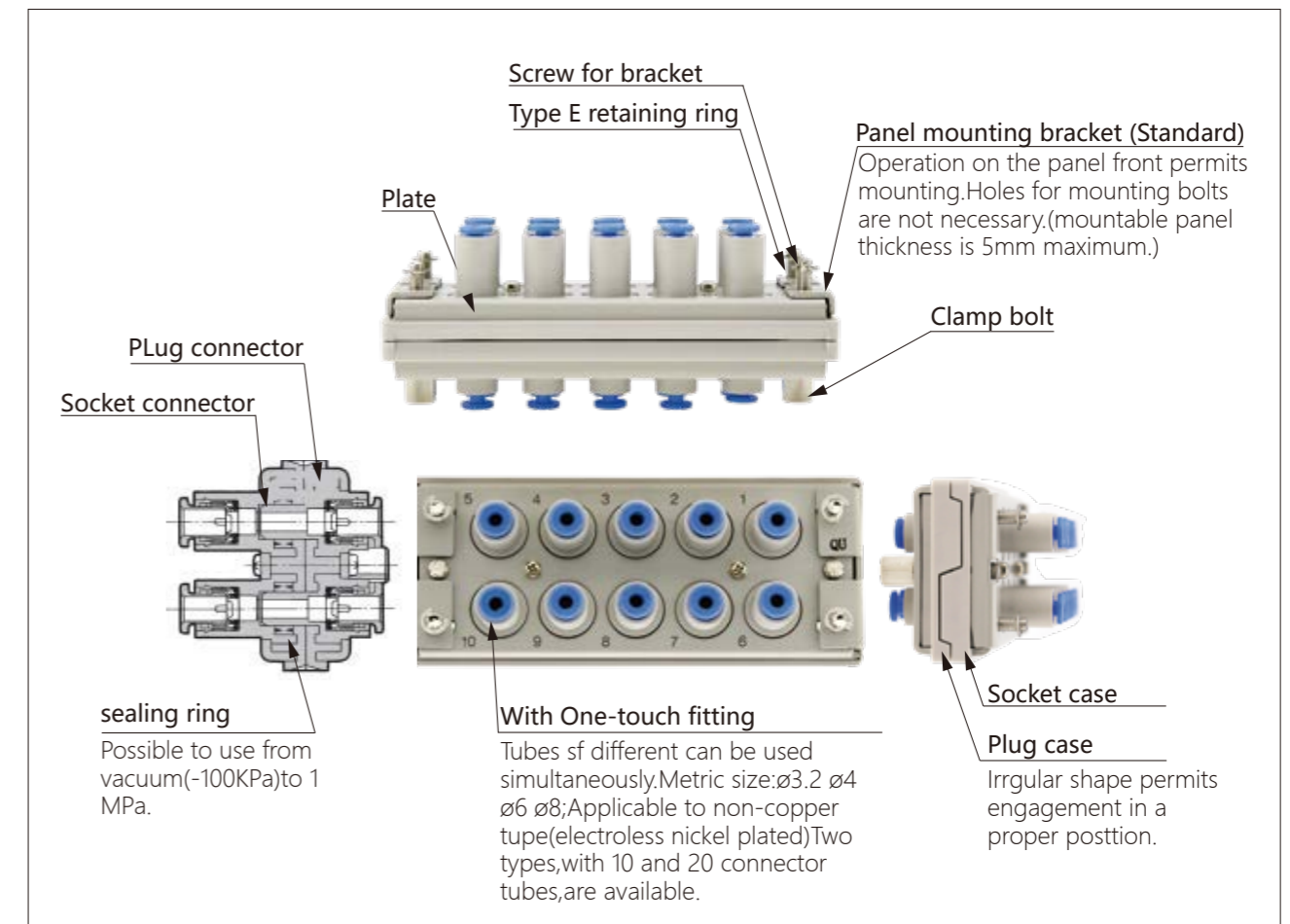


Gas/Electric docking pane



The gas/electric quick change module is convenient for separate handling of panels or mechanical devices and replacement of spare units.

- Installation space is greatly reduced**
 The installation space is much more compact than using straight through pipes for installation with multiple panels.
- Fast assembly and disassembly of joints**
 Multiple pipes can be assembled and disassembled together, and the pipes will not be mistakenly arranged, and the installation time is greatly reduced.
- Fast tube connection**
 Due to the quick-change connector, the piping work hours are greatly reduced.



Gas/electric docking pane

KDM connecting pipes: 10, 20



KDM20



KDM10

Suitable for tube material

Tube material	Nylon, soft nylon, polyurethane
Tube material	ø3.2,ø4,ø6,ø8

Specification

Use fluid	Air
Maximum working pressure	1.0MPa
Use vacuum pressure	-100kPa
Pressure test pressure	1.5MPa
Ambient temperature and fluid temperature	-5~60°C (When not frozen)

Tube outer diameter	Ordering code	NO.of connecting pipes (10 pieces)	Ordering code	NO.of connecting pipes (20 pieces)	Mounting bracket model(see for options:)	
	Part number		Part number		Figure 1 (10 pieces)	Figure 2 (20 pieces)
ø3.2	8A1001		8A2001		8A1000	8A2000
	KDM10-23		KDM20-23			
ø4	8A1021		8A2021		KDM-G	KDM-H
	KDM10-04		KDM20-04			
ø6	8A1041		8A2041			
	KDM10-06		KDM20-06			
ø8	8A1061		8A2061			
	KDM10-08		KDM20-08			

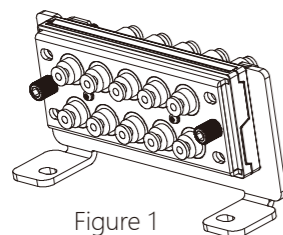


Figure 1

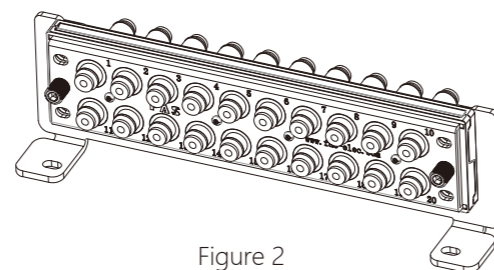


Figure 2

Material of main parts

Plug case, socket case	POM	
Plate, bracket	SPCC plated	
Plug connector Socket connector	Body	PBT.C3604BD electroless nickel plating (In the case of ø8)
	Chuck	SUS304
	Guide	SUS304, C3604BD electroless nickel plating, POM (In the case of ø8)
	Collet,release button	POM
	Guide	NBR
Clamp bolt, screw for bracket, cross-recessed head machine screw	SWRM nickel plated	
Type E retaining ring SUS304 clamp bolt	SUS304	

Part number

Number of connecting pipes	Tube outer diameter	Type		Color of release button
		Plug side	Socket side	
10	ø3.2	KDM10P-23	KDM10S-23	Blue
	ø4	KDM10P-04	KDM10S-04	
	ø6	KDM10P-06	KDM10S-06	
	ø8	KDM10P-08	KDM10S-08	
20	ø3.2	KDM20P-23	KDM20S-23	Blue
	ø4	KDM20P-04	KDM20S-04	
	ø6	KDM20P-06	KDM20S-06	
	ø8	KDM20P-08	KDM20S-08	

Gas/electric docking pane

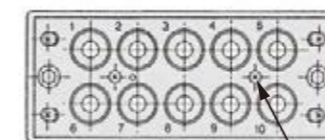
The size of plug connector and socket connector are mixed

The rectangular gas/electric quick-change module can replace the joint at any position, so it is possible to mix the sizes of the pipes.

Part number

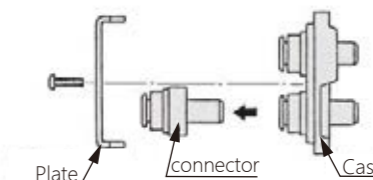
Connector type	Tube outer diameter	Type	Color of release button
Plug connector Socket connector	ø3.2	KDMP-23	Blue
	ø4	KDMP-04	
	ø6	KDMP-06	
	ø8	KDMP-08	
Plug connector Socket connector (with seal)	ø3.2	KDMS-23	Blue
	ø4	KDMS-04	
	ø6	KDMS-06	
	ø8	KDMS-08	

(1) Remove the plate from the cover by loosening the small screw on the cross-groove pan head with a Phillips screwdriver.



Phillips pan head screw

(2) After replacing the connector at any position, install the board on the cover with a Phillips screwdriver.

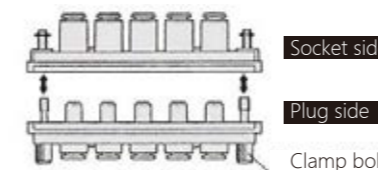


Plate, connector, Case

Caution

Separation

Loosen the fastening screw, and the plug side is separated from the socket side.



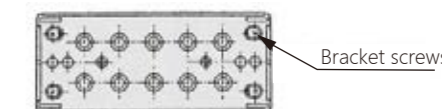
Socket side

Plug side

Clamp bolt

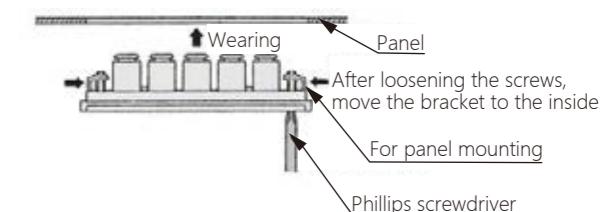
Panel mounting

(1) Use a Phillips screwdriver (JS No. 2) to loosen the 4 screws on the side of the socket until the bracket touches the upper elastic retaining ring.



Bracket screws

(2) Move the panel mounting bracket to the inside (Move the frame screw in the direction of the long hole) and install the connector on the panel mounting hole. (See panel mounting holes: Outline dimension drawing)



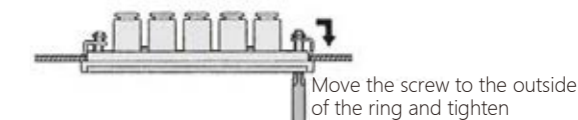
Wearing, Panel

After loosening the screws, move the bracket to the inside.

For panel mounting

Phillips screwdriver

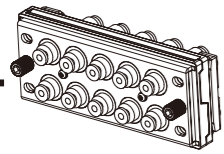
(3) After moving the bracket screws to the outside, tighten the screws with a Phillips screwdriver. Secure the socket cover.



Move the screw to the outside of the ring and tighten

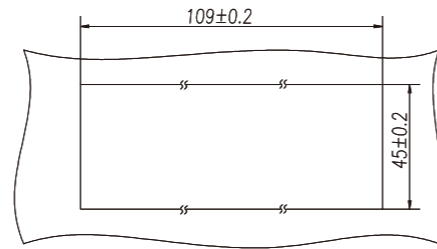
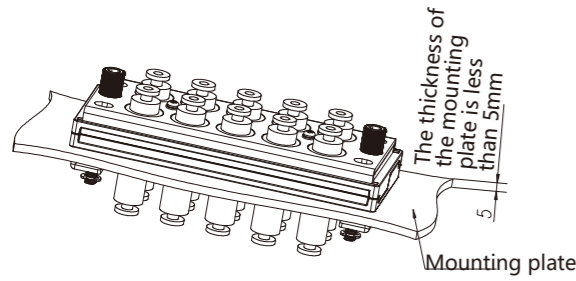
(4) Loosen the bracket screws until the bracket hits the upper elastic stop, then move the bracket to the inside to remove the connector from the faceplate.

Gas/electric docking pane

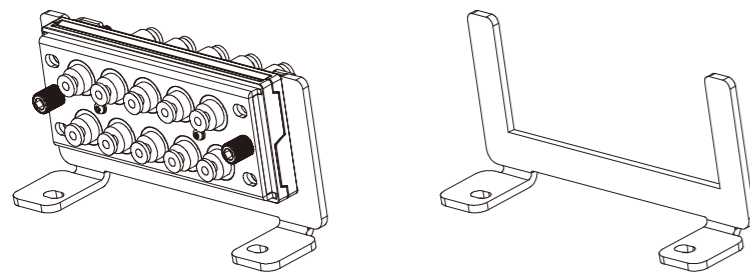


Dimensions

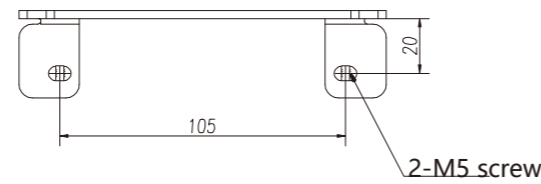
KDM10 installation diagram and dimensions:



Mounting plate opening

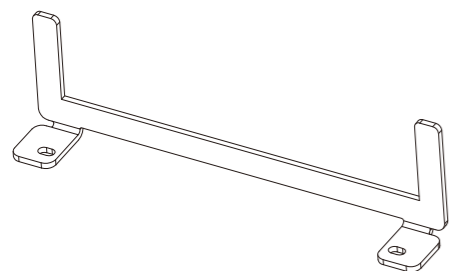
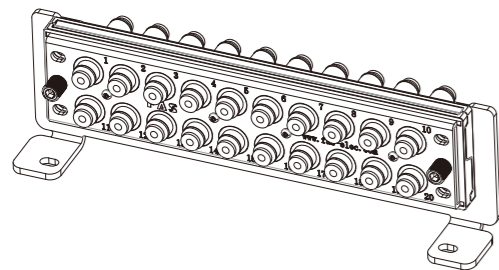


Mounting bracket model:8A1000

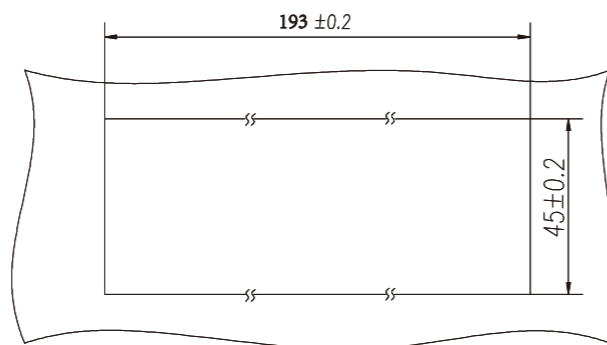


2-M5 screw

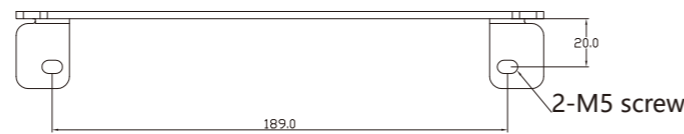
KDM20 installation diagram and dimensions:



Mounting bracket model:8A2000



Mounting plate opening



2-M5 screw

Inch-size rectangular Multi-connector




Identification	Type	Part No.	Drawing	Dimensions in mm
<p>F M</p>	H6B-M2-M H6B-M2-F	09140061000 09140061001 <small>Note: Modules should be ordered separately Reference (6.0.08)</small>		
Can be adapted to 2 standard modules				
<p>F M</p>	H10B-M3-M H10B-M3-F	09140101000 09140101001 <small>Note: Modules should be ordered separately Reference (6.0.08)</small>		
Can be adapted to 3 standard modules				
<p>F M</p>	H16B-M4-M H16B-M4-F	09140161000 09140161001 <small>Note: Modules should be ordered separately Reference (6.0.08)</small>		
Can be adapted to 4 standard modules				
<p>F M</p>	H24B-M6-M H24B-M6-F	09140241000 09140241001 <small>Note: Modules should be ordered separately Reference (6.0.08)</small>		
Can be adapted to 6 standard modules				






Type	Size	a	b	e	f
H6B		86	69	54.5	84
H10B		99	82	67.5	97
H16B		119.5	102.5	88	117.5
H24B		146	129	114.5	144






Distance for electrical and F.O. contacts max. 27 mm ; for pneumatic contacts max. 26.5 mm






Note: Related module, pin selection configuration reference (6.0.08-6.0.12)



HM module connector

Product Series	HM-001-M or F	HM-001C-M or F	HM-002-M or F	HM-002C-M or F	HM-S02-M or F
Modules	Wiring method: Axial crimping 	Wiring method: Cold pressure needle crimping 	Wiring method: Axial crimping 	Wiring method: Cold pressure needle crimping 	Wiring method: Axial crimping 
Rated current	200A	200A	100A	100A	40A
Rated voltage	1000V	1000V	1000V	1000V	1000V
Wire gauge	Part No. HM-001-MD 25-40 mm ² 40-70 mm ² 25-40 mm ² 40-70 mm ²	See the next page for 200A pin specifications	Part No. HM-002-MD 10-25 mm ² 16-35 mm ² 10-25 mm ² 16-35 mm ²	See next page for 100A pin specifications	Part No. HM-S02-MD 2.5-8 mm ² 6-10 mm ² 2.5-8 mm ² 6-10 mm ²
Number of connector pins	1 Pin	1 Pin	2 Pin	2 Pin	2 Pin



Product Series	HM-S02C-M or F	HM-003-M or F	HM-3/4-M or F	HM-004-M or F	HM-006-M or F
Modules	Wiring method: Cold pressure needle crimping 	Wiring method: Cold pressure needle crimping 	Wiring method: Cold pressure needle crimping 	Wiring method: Cold pressure needle crimping 	Wiring method: Cold pressure needle crimping 
Rated current	40A	40A	40A/10A	40A	16A
Rated voltage	1000V	690V	400V/250V	830V	500V
Wire gauge	See the next page for 40A pin specifications	See the next page for 40A pin specifications	See the next page for 40A/10A pin specifications	See the next page for 40A pin specifications	See the next page for 16A pin specifications
Number of connector pins	2 Pin	3 Pin	3/4 Pin	4 Pin	6 Pin

Product Series	HM-F06-M or F	HM-008-M or F	HM-012-M or F	HM-017-M or F	HM-020-M or F
Modules	Wiring method: Cold pressure needle crimping 	Wiring method: Cold pressure needle crimping 	Wiring method: Cold pressure needle crimping 	Wiring method: Cold pressure needle crimping 	Wiring method: Cold pressure needle crimping 
Rated current	16A	16A	10A	10A	16A
Rated voltage	830V	400V	250V	160V	500V
Wire gauge	See the next page for 16A pin specifications	See the next page for 16A pin specifications	See the next page for 10A pin specifications	See the next page for 10A pin specifications	See the next page for 16A pin specifications
Number of connector pins	6 Pin	8 Pin	12 Pin	17 Pin	20 Pin

Product Series	HM-005-M or F	HM-025-M or F	HM-D Sub-M or F	HM-D Sub1-M or F	HM-DM
Modules	Wiring method: Shrapnel crimping/Quick crimping 	Wiring method: Cold pressure needle crimping 	Wiring method: Cold pressure needle crimping 	Wiring method: Screw crimping 	Dummy module 
Rated current	16A	5A	5A		
Rated voltage	400V	50V	50V		
Wire gauge	See the next page for 16A pin specifications	See the next page for 5A pin specifications	See the next page for 5A pin specifications	RS 485, DP bus	
Number of connector pins	5 Pin	25 Pin	9 Pin	4 Pin	


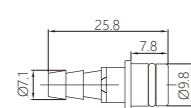

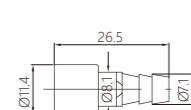

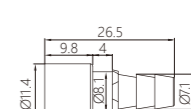
Product Series	HM-RJ45-M or F	HM-M8-M or F	HM-Q2-M or F	QX-004-M or F	QX-008-M or F
Communication module		Wiring method: Cold pressure needle crimping 	Installation frame 	Wiring method: Cold pressure needle crimping 	Wiring method: Cold pressure needle crimping 
Rated current		10A		10A	5A
Parameter	Cat.5e 100Mbps Cat.6a 10Gbps	Cat.6a 10Gbps	With QX-004-M or F, QX-008-M or F supporting use	Cat.5e 100Mbps	Cat.6a 10Gbps
Wire gauge		See the next page for 10A pin specifications		See the next page for 10A pin specifications	See the next page for 5A pin specifications
Number of connector pins	4 or 8 Pin	8 Pin		4 Pin	8 Pin

Pneumatic contacts

Product Series	HM-PA2	HM-PA3
Pneumatic module		
	Pneumatic module 2 way Applicable 6mm gas nozzle, see specifications on the next page	Pneumatic module 3 way Applicable to 1.6/3/4mm gas nozzle, see specifications on the next page


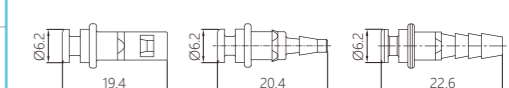



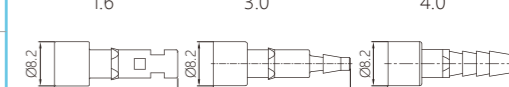
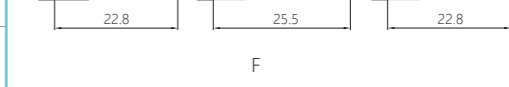


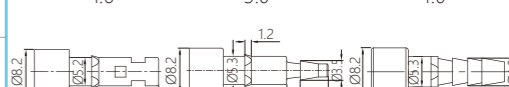
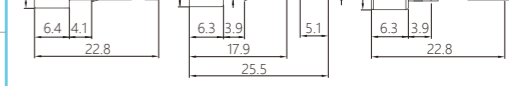

Pneumatic contacts

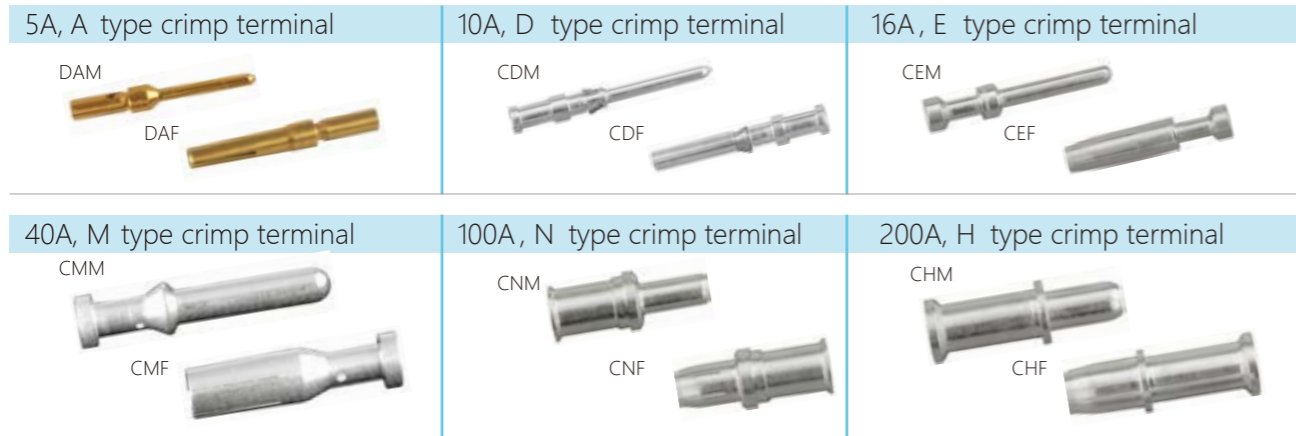
For tube internal diameter Ø6.0mm

	Describe	ID (mm)	Type	Part No.	Drawing (mm)
	Male pneumatic contacts	Ø6.0	PENU-PA2-6.0M	09140006174	M 
	Female pneumatic contacts	Ø6.0	PENU-PA2-6.0F	09140006274	F 
	Female pneumatic contacts With shut off	Ø6.0	PENU-PA2-6.0FW	09140006279	

Pneumatic contacts

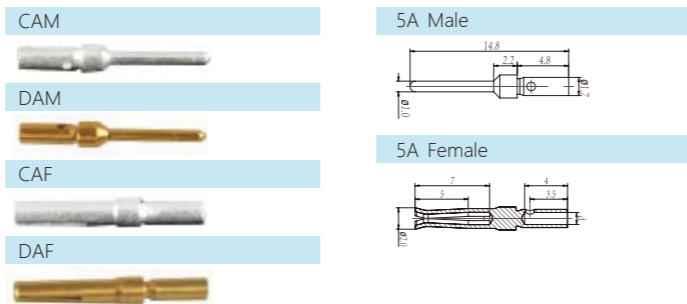
For tube internal diameter Ø1.6-4.0mm

	Describe	ID (mm)	Type	Part No.	Drawing (mm)
	Male pneumatic contacts	Ø1.6	PENU-PA3-1.6M	09140006151	1.6 3.0 4.0 
		Ø3.0	PENU-PA3-3.0M	09140006152	
		Ø4.0	PENU-PA3-4.0M	09140006153	M 
	Female pneumatic contacts	Ø1.6	PENU-PA3-1.6F	09140006251	1.6 3.0 4.0 
		Ø3.0	PENU-PA3-3.0F	09140006252	
		Ø4.0	PENU-PA3-4.0F	09140006253	F 
	Female pneumatic contacts With shut off	Ø1.6	PENU-PA3-1.6FW	09140006256	1.6 3.0 4.0 
		Ø3.0	PENU-PA3-3.0FW	09140006257	
		Ø4.0	PENU-PA3-4.0FW	09140006258	



5A Contacts

Technical data
Material: Copper, hard silver / gold plated
Contact resistance: $\leq 4m\Omega$
Termination methods: Crimp connection

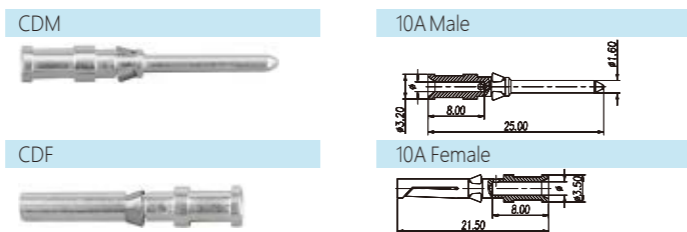


Wire diameter (mm ²)	AWG	Wiring length (mm)	Crimp contacts, silver-plated		Crimp contacts, gold-plated	
			Type	Part No.	Type	Part No.
0.13-0.33mm ²	26-22	5.0mm	CAM-13	09670005566	DAM-13	09670005576
0.33-0.52mm ²	22-20	5.0mm	CAM-33	09670008566	DAM-33	09670008576

Wire diameter (mm ²)	AWG	Wiring length (mm)	Crimp contacts, silver-plated		Crimp contacts, gold-plated	
			Type	Part No.	Type	Part No.
0.13-0.33mm ²	26-22	5.0mm	CAF-13	09670005466	DAF-13	09670005476
0.33-0.52mm ²	22-20	5.0mm	CAF-33	09670008466	DAF-33	09670008476

10A Crimp contacts, silver-plated

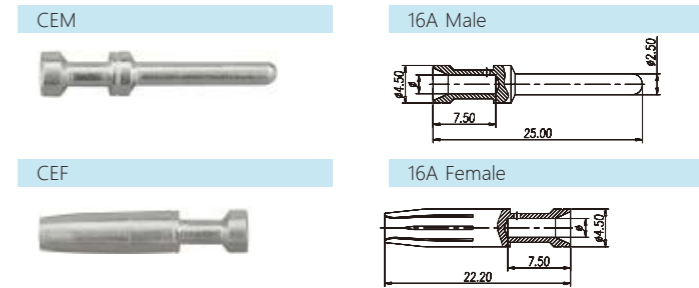
Technical data
Material: Copper, hard silver / gold plated
Contact resistance: $\leq 3m\Omega$
Termination methods: Crimp connection



Wire diameter (mm ²)	Wiring length (mm)		Male insert		Female insert	
			Type	Part No.	Type	Part No.
0.14-0.37	AWG26-22	8.0mm	CDM-0.37	09150006104	CDF-0.37	09150006204
0.5	AWG20	8.0mm	CDM-0.5	09150006103	CDF-0.5	09150006203
0.75	AWG18	8.0mm	CDM-0.75	09150006105	CDF-0.75	09150006205
1.0	AWG18	8.0mm	CDM-1.0	09150006102	CDF-1.0	09150006202
1.5	AWG16	8.0mm	CDM-1.5	09150006101	CDF-1.5	09150006201
2.5	AWG14	8.0mm	CDM-2.5	09150006106	CDF-2.5	09150006206

16A Crimp contacts, silver-plated

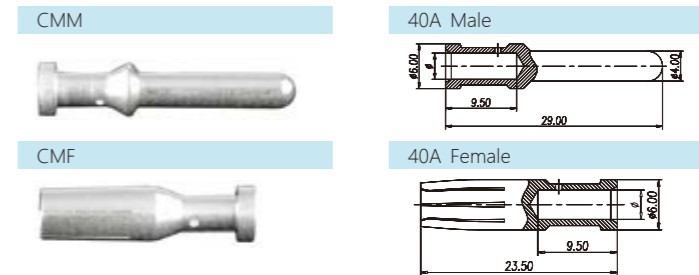
Technical data
Material: Copper, hard silver
Contact resistance: $\leq 1m\Omega$
Termination methods: Crimp connection



Wire diameter (mm ²)	Wiring length (mm)		Male insert		Female insert	
			Type	Part No.	Type	Part No.
0.14-0.37	AWG26-22	7.5mm	CEM-0.37	09330006127	CEF-0.37	09330006227
0.5	AWG20	7.5mm	CEM-0.5	09330006121	CEF-0.5	09330006221
0.75	AWG18	7.5mm	CEM-0.75	09330006114	CEF-0.75	09330006214
1.0	AWG18	7.5mm	CEM-1.0	09330006105	CEF-1.0	09330006205
1.5	AWG16	7.5mm	CEM-1.5	09330006104	CEF-1.5	09330006204
2.5	AWG14	7.5mm	CEM-2.5	09330006102	CEF-2.5	09330006202
4.0	AWG12	7.5mm	CEM-4.0	09330006107	CEF-4.0	09330006207

40A contacts

Technical data
Material: Copper, hard silver / gold plated
Contact resistance: $\leq 4m\Omega$
Termination methods: Crimp connection



Wire diameter (mm ²)	Wiring length (mm)		Silver-plated cold pressing needle	
			Type	Type
1.5	AWG16	8.0mm	CMM-1.5	09320006104
2.5	AWG14	8.0mm	CMM-2.5	09320006105
4.0	AWG12	8.0mm	CMM-4.0	09320006107
6.0	AWG10	8.0mm	CMM-6.0	09320006108
10.0	AWG7	8.0mm	CMM-10	09320006109

Wire diameter (mm ²)	Wiring length (mm)		Silver-plated cold pressing needle	
			Type	Type
1.5	AWG16	8.0mm	CMF-1.5	09320006204
2.5	AWG14	8.0mm	CMF-2.5	09320006205
4.0	AWG12	8.0mm	CMF-4.0	09320006207
6.0	AWG10	8.0mm	CMF-6.0	09320006208
10.0	AWG7	8.0mm	CMF-10	09320006209

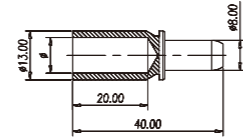
100A contacts

Technical data
 Material: Copper, hard silver / gold plated
 Contact resistance: $\leq 1m\Omega$
 Termination methods: Crimp connection

CNM



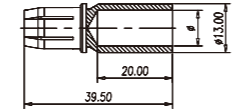
100A Male



CNF



100A Female



Wire diameter (mm ²)	Ø	Wiring length (mm)	Silver-plated cold pressing needle	
			Type	Part No.
10	4.3	19	CNM-10	09110006114
16	5.5	19	CNM-16	09110006116
25	7	19	CNM-25	09110006125
35	8.2	19	CNM-35	09110006135

Wire diameter (mm ²)	Ø	Wiring length (mm)	Silver-plated cold pressing needle	
			Type	Part No.
10	4.3	19	CNF-10	09110006214
16	5.5	19	CNF-16	09110006216
25	7	19	CNF-25	09110006225
35	8.2	19	CNF-35	09110006235

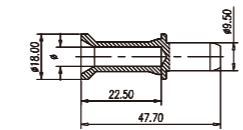
200A contacts

Technical data
 Material: Copper, hard silver / gold plated
 Contact resistance: $\leq 4m\Omega$
 Termination methods: Crimp connection

CHM



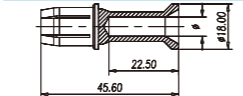
200A Male



CHF



200A Female

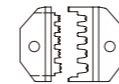


Wire diameter (mm ²)	Ø	Wiring length (mm)	Silver-plated cold pressing needle	
			Type	Part No.
25	7	22.5	CHM-25	09110006120
35	8.2	22.5	CHM-35	09110006121
50	10	22.5	CHM-50	09110006122
70	11.5	22.5	CHM-70	09110006123

Wire diameter (mm ²)	Ø	Wiring length (mm)	Silver-plated cold pressing needle	
			Type	Part No.
25	7	22.5	CHF-25	09110006220
35	8.2	22.5	CHF-35	09110006221
50	10	22.5	CHF-50	09110006222
70	11.5	22.5	CHF-70	09110006223

TOOL

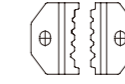
Crimping tool
 Wire gage: 0.5-4.0mm²
 For HD/HDD/HEE/HK/HM inserts



Jaw crescent

Part No. 09000001001

Crimping tool (Jaw hexagonal)
 Wire gage: 6.0-10.0mm²
 For HD/HDD/HEE/HK/HM inserts



Part No. 09000001002

Removal tool
 For HEE series



Part No. 09000002001

Removal tool
 For HEEE series



Part No. 09000002002

Removal tool
 For D-Sub pin crimp contacts series
 For 5A inserts



Part No. 09000002004

Removal tool
 For CMM/CMF series



Part No. 09000002003

Removal tool
 For HD/HDD series



Part No. 09000003001

Crimping tool
 For D-Sub pin crimp contacts series
 For 5A inserts



Part No. 09000099991