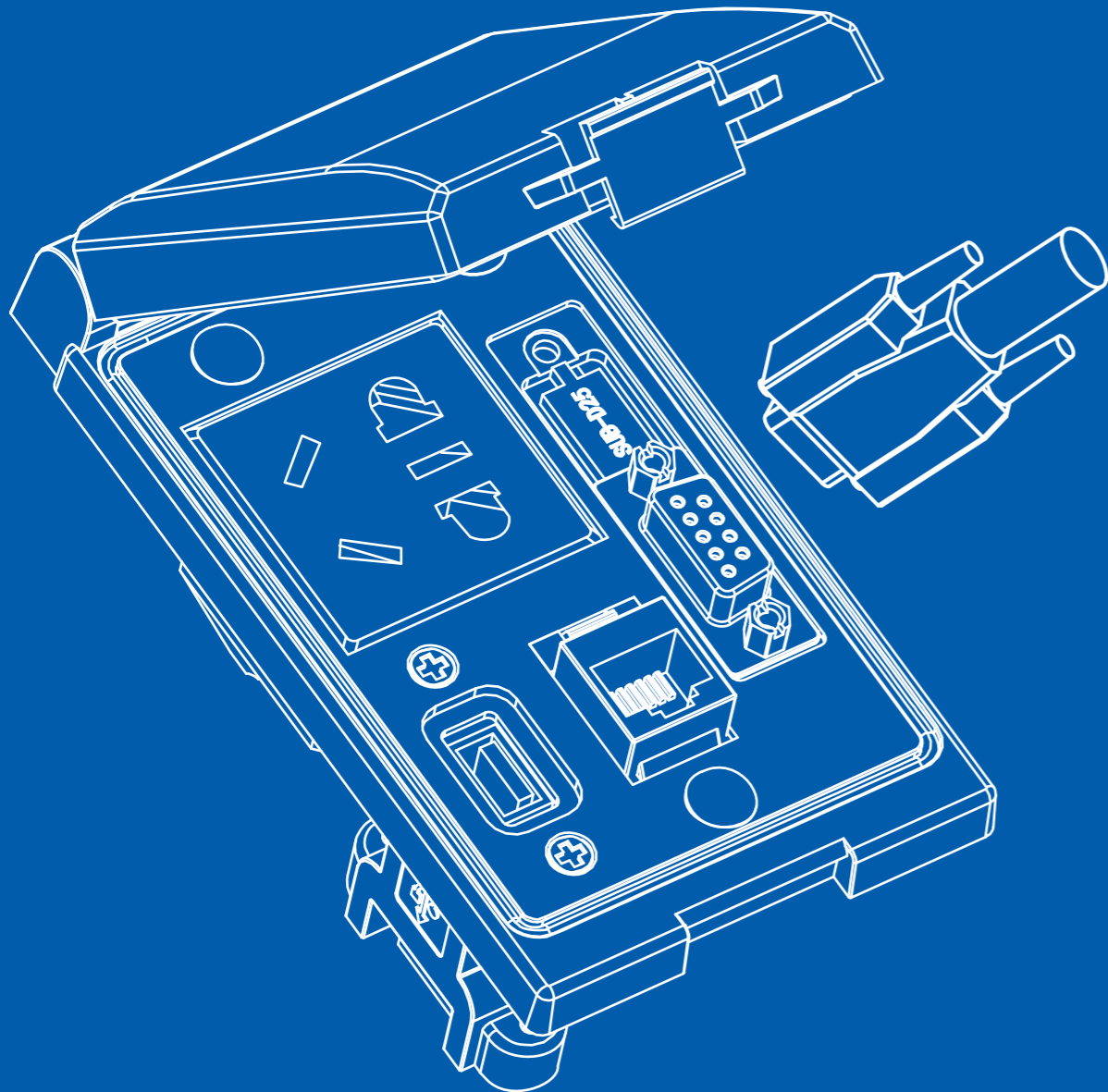


08

COMMUNICATION PANEL



COMMUNICATION PANEL

- 8.1 D-Sub connector
- 8.2 RJ45&USB flange interface
- 8.3 Front debug panel

D-SUB 9/15 Pin connector

Technical Data

Supply voltage	30V AC/DC
Current per contact (40°C)	2A
Temperature range	- 25... + 85 °C
Wiring method	Crimp terminal (See the table below for cold pressing needles)

Shielded Size: Size1G Male 180°	Type	Suppression	Ordering code	Part No.
Wire diameter: 6...8.7 mm	Solder	9-pole	FMK1G-109-MS	900009
		15-pole	FMK1G-315-MS	900315
	Crimp	9-pole	FMK1G-109-MC	900109

Shielded Size: Size1G Female 180°	Type	Suppression	Ordering code	Part No.
Wire diameter: 6...8.7 mm	Solder	9-pole	FMK1G-109-FS	901009
		15-pole	FMK1G-315-FS	901315
	Crimp	9-pole	FMK1G-109-FC	902009

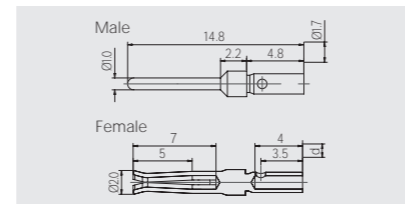
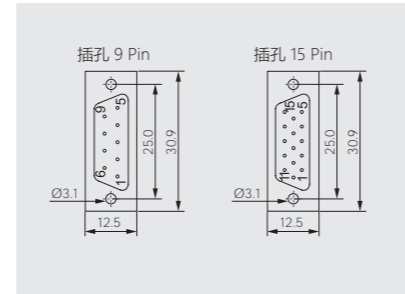
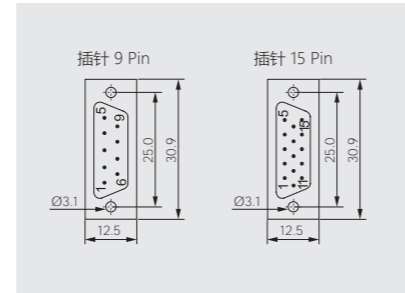
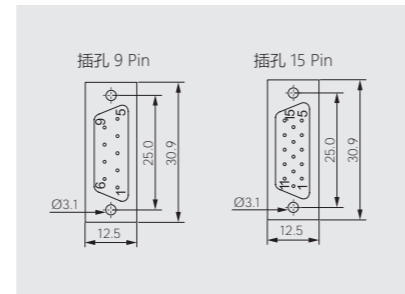
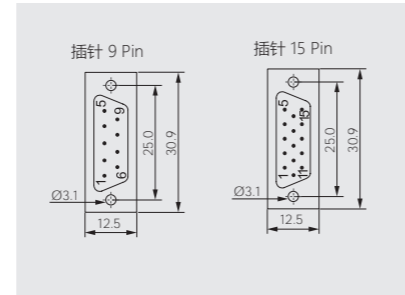
Shielded Size: Size1 Male 45°	Type	Suppression	Ordering code	Part No.
Wire diameter: 6...8.7 mm	Solder	9-pole	FMK1-109-MS	910009
		15-pole	FMK1-315-MS	910315
	Crimp	9-pole	FMK1-109-MC	910109

Shielded Size: Size1 Female 45°	Type	Suppression	Ordering code	Part No.
Wire diameter: 6...8.7 mm	Solder	9-pole	FMK1-109-FS	911009
		15-pole	FMK1-315-FS	911315
	Crimp	9-pole	FMK1-109-FC	912009

Crimp contacts

Technical data	Wire	AWG	Machined Contacts (100 pieces/pu)	Part No.
Material: Copper alloy silver /Gold-plated			Type	
Contact resistance: ≤ 4 mΩ	0.09-0.25mm ²	AWG26-22	DAM-13	09670005576
Terminal: Crimp terminal	0.25-0.56mm ²	AWG22-20	DAM-33	09670008576
	0.09-0.25mm ²	AWG26-22	DAF-13	09670005476
	0.25-0.56mm ²	AWG22-20	DAF-33	09670008476

Circuit diagram



D-SUB 15 Pin connector

Technical Data

Supply voltage	30V AC/DC
Current per contact (40°C)	2A
Temperature range	- 25... + 85 °C
Wiring method	Crimp terminal (See the table below for cold pressing needles)

Shielded Size: Size2G Male 180°	Type	Suppression	Ordering code	Part No.
Wire diameter: 8...11 mm	Solder	15-pole	FMK2G-215-MS	900015
		15-pole	FMK2G-215-MC	900115

Shielded Size: Size2G Female 180°	Type	Suppression	Ordering code	Part No.
Wire diameter: 8...11 mm	Solder	15-pole	FMK2G-215-FS	901015
		15-pole	FMK2G-215-FC	902015

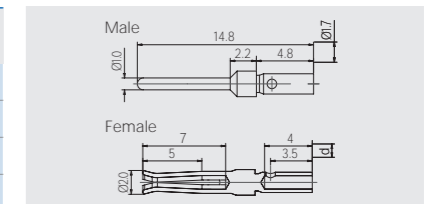
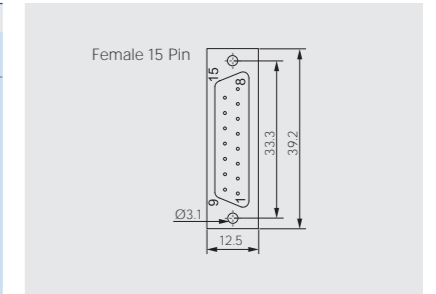
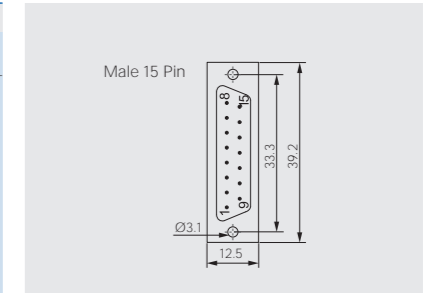
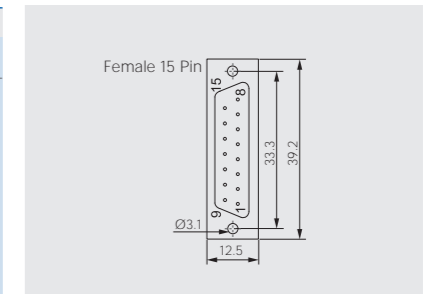
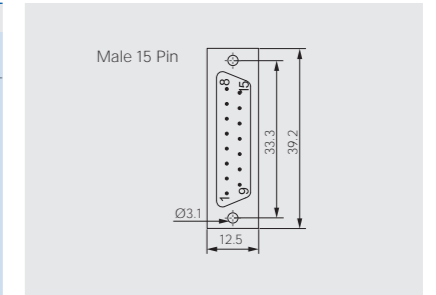
Shielded Size: Size2 Male 45°	Type	Suppression	Ordering code	Part No.
Wire diameter: 8...11 mm	Solder	15-pole	FMK2-215-MS	910015
		15-pole	FMK2-215-MC	910115

Shielded Size: Size1 Female 45°	Type	Suppression	Ordering code	Part No.
Wire diameter: 8...11 mm	Solder	15-pole	FMK2-215-FS	911015
		15-pole	FMK2-215-FC	912015

Crimp contacts

Technical data	Wire	AWG	Machined Contacts (100 pieces/pu)	Part No.
Material: Copper alloy silver /Gold-plated			Type	
Contact resistance: ≤ 4 mΩ	0.09-0.25mm ²	AWG26-22	DAM-13	09670005576
Terminal: Crimp terminal	0.25-0.56mm ²	AWG22-20	DAM-33	09670008576
	0.09-0.25mm ²	AWG26-22	DAF-13	09670005476
	0.25-0.56mm ²	AWG22-20	DAF-33	09670008476


Circuit diagram





D-SUB 25Pin connector


Technical Data

Supply voltage	30V AC/DC
Current per contact (40°C)	2A
Temperature range	- 25...+ 85 °C
Wiring method	Crimp terminal (See the table below for cold pressing needles)



Shielded Size: Size3G Male 180° Wire diameter: 8...11 mm	Type	Suppression	Ordering code	Part No.
	Solder	25-pole	FMK3G-225-MS	900025
	Crimp	25-pole	FMK3G-225-MC	900125

Shielded Size: Size3G Female 180° Wire diameter: 8...11 mm	Type	Suppression	Ordering code	Part No.
	Solder	25-pole	FMK3G-225-FS	901025
	Crimp	25-pole	FMK3G-225-FC	902025

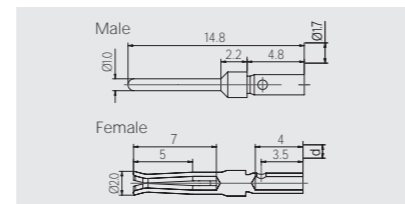
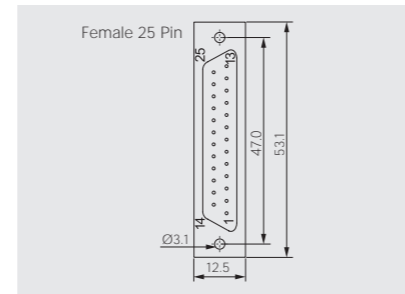
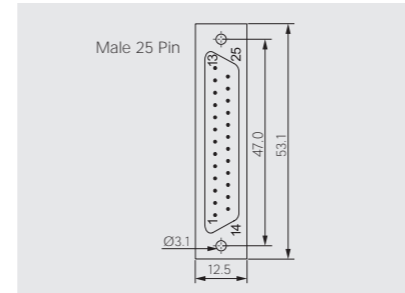
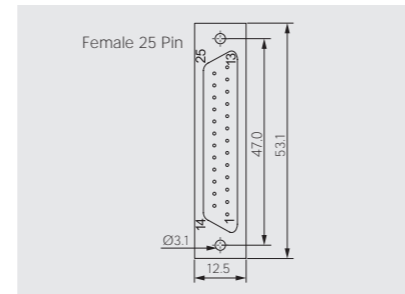
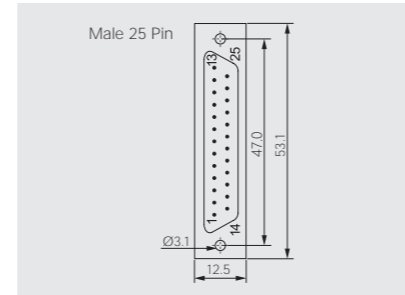
Shielded Size: Size3 Male 45° Wire diameter: 8...11 mm	Type	Suppression	Ordering code	Part No.
	Solder	25-pole	FMK3-225-MS	910025
	Crimp	25-pole	FMK3-225-MC	910125

Shielded Size: Size3 Female 45° Wire diameter: 8...11 mm	Type	Suppression	Ordering code	Part No.
	Solder	25-pole	FMK3-225-FS	911025
	Crimp	25-pole	FMK3-225-FC	912025

Crimp contacts

Technical data	Wire	AWG	Machined Contacts (100 pieces/pu) Type	Part No.
Material: Copper alloy silver /Gold-plated Contact resistance: ≤ 4 mΩ Terminal: Crimp terminal	0.09-0.25mm²	AWG26-22	DAM-13	09670005576
	0.25-0.56mm²	AWG22-20	DAM-33	09670008576
	0.09-0.25mm²	AWG26-22	DAF-13	09670005476
	0.25-0.56mm²	AWG22-20	DAF-33	09670008476


Circuit diagram





D-SUB 37Pin connector


Technical Data

Supply voltage	30V AC/DC
Current per contact (40°C)	2A
Temperature range	- 25...+ 85 °C
Wiring method	Crimp terminal (See the table below for cold pressing needles)



Shielded Size: Size4G Male 180° Wire diameter: 8...11 mm	Type	Suppression	Ordering code	Part No.
	Solder	37-pole	FMK4G-237-MS	900037
	Crimp	37-pole	FMK4G-237-MC	900137

Shielded Size: Size4G Female 180° Wire diameter: 8...11 mm	Type	Suppression	Ordering code	Part No.
	Solder	37-pole	FMK4G-237-FS	901037
	Crimp	37-pole	FMK4G-237-FC	902037

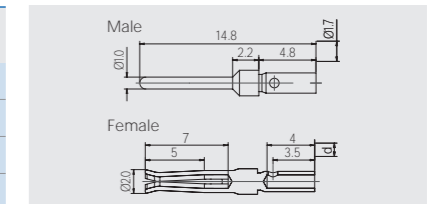
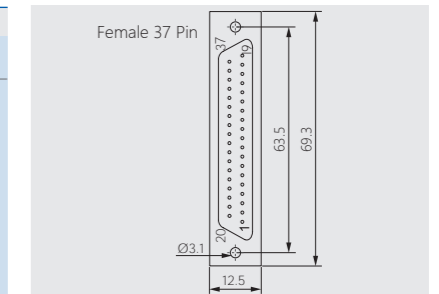
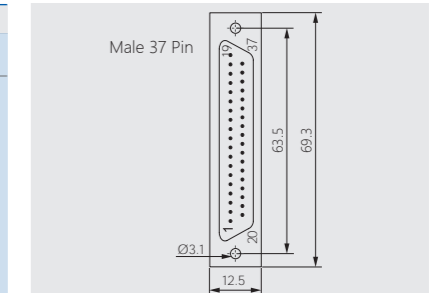
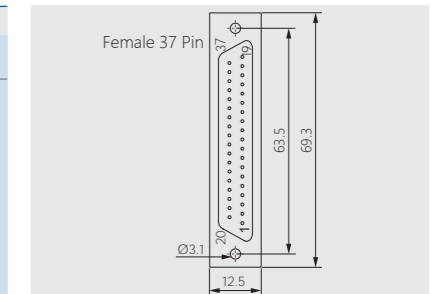
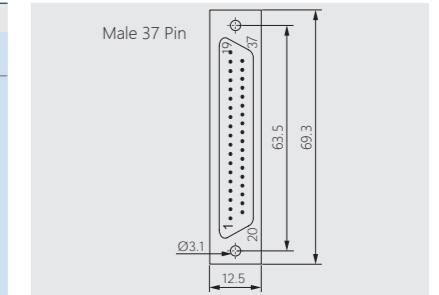
Shielded Size: Size4 Male 45° Wire diameter: 8...11 mm	Type	Suppression	Ordering code	Part No.
	Solder	37-pole	FMK4-237-MS	910037
	Crimp	37-pole	FMK4-237-MC	910137

Shielded Size: Size4 Female 45° Wire diameter: 8...11 mm	Type	Suppression	Ordering code	Part No.
	Solder	37-pole	FMK4-237-FS	911037
	Crimp	37-pole	FMK4-237-FC	912037

Crimp contacts

Technical data	Wire	AWG	Machined Contacts (100 pieces/pu) Type	Part No.
Material: Copper alloy silver /Gold-plated Contact resistance: ≤ 4 mΩ Terminal: Crimp terminal	0.09-0.25mm²	AWG26-22	DAM-13	09670005576
	0.25-0.56mm²	AWG22-20	DAM-33	09670008576
	0.09-0.25mm²	AWG26-22	DAF-13	09670005476
	0.25-0.56mm²	AWG22-20	DAF-33	09670008476

Circuit diagram



D-SUB 50Pin connector

D-SUB 25 Pin bus connector

Technical Data

Supply voltage	30V AC/DC
Current per contact (40°C)	2A
Temperature range	- 25...+ 85 °C
Wiring method	Crimp terminal (See the table below for cold pressing needles)

Shielded Size: Size5G Male 180° Wire diameter: 8...11 mm	Type	Suppression	Ordering code	Part No.
	Solder	50-pole	FMK5G-350-MS	900050
	Crimp	50-pole	FMK5G-350-MC	900150

Shielded Size: Size5G Female 180° Wire diameter: 8...11 mm	Type	Suppression	Ordering code	Part No.
	Solder	50-pole	FMK5G-350-FS	901050
	Crimp	50-pole	FMK5G-350-FC	902050

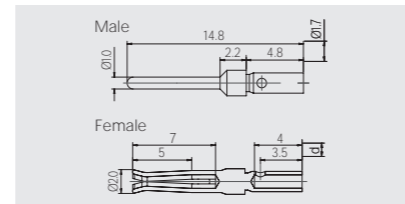
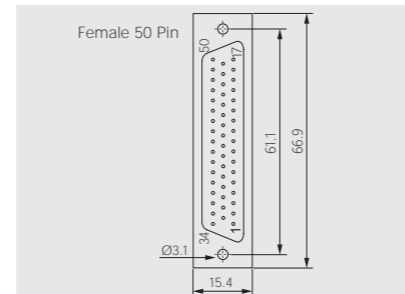
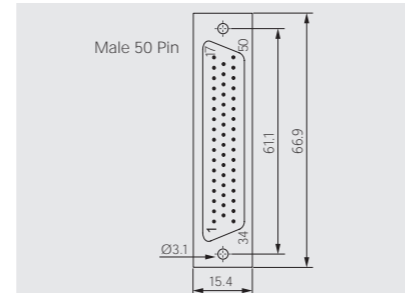
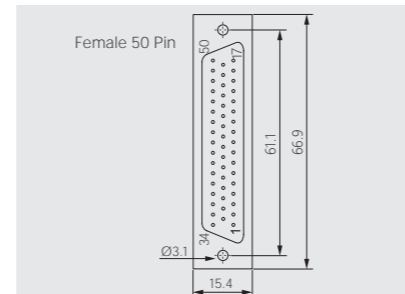
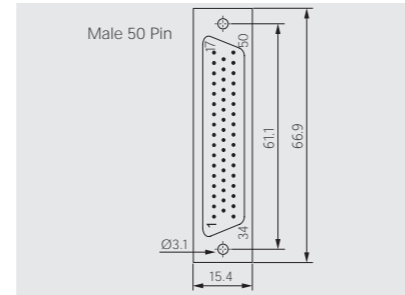
Shielded Size: Size5 Male 45° Wire diameter: 8...11 mm	Type	Suppression	Ordering code	Part No.
	Solder	50-pole	FMK5-350-MS	910050
	Crimp	50-pole	FMK5-350-MC	910150

Shielded Size: Size5 Female 45° Wire diameter: 8...11 mm	Type	Suppression	Ordering code	Part No.
	Solder	50-pole	FMK5-350-FS	911050
	Crimp	50-pole	FMK5-350-FC	912050

Crimp contacts

Technical data	Wire	AWG	Machined Contacts (100 pieces/pu) Type	Part No.
Material: Copper alloy silver /Gold-plated Contact resistance: ≤ 4 mΩ Terminal: Crimp terminal	0.09-0.25mm ²	AWG26-22	DAM-13	09670005576
	0.25-0.56mm ²	AWG22-20	DAM-33	09670008576
	0.09-0.25mm ²	AWG26-22	DAF-13	09670005476
	0.25-0.56mm ²	AWG22-20	DAF-33	09670008476

Circuit diagram



Technical Data

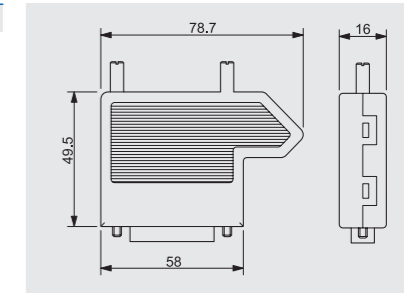
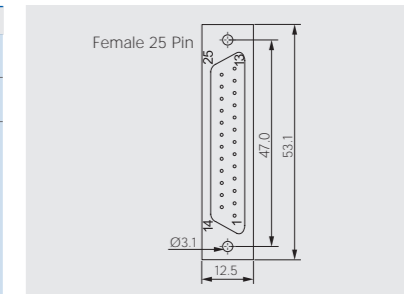
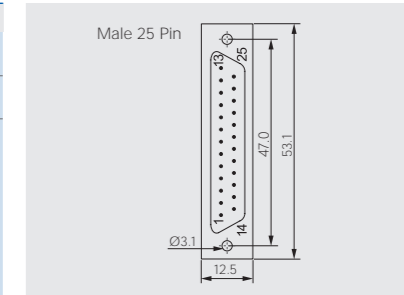
Supply voltage	50V AC/DC
Current per contact (40°C)	1A
Temperature range	- 20...+ 75 °C
Wiring method	With screw terminals

Shielded With screw terminals Male 45° Wire diameter: 4...10 mm	Suppression	Specification	Ordering code	Part No.
	25-pole	M3	FMK3G-225-MP	955251
	25-pole	VC-40	FMK3G-225-MP-A	955253
	25-pole	M2.6	FMK3G-225-MP-B	955255

Shielded With screw terminals Female 45° Wire diameter: 4...10 mm	Suppression	Specification	Ordering code	Part No.
	25-pole	M3	FMK3G-225-FP	955252
	25-pole	VC-40	FMK3G-225-FP-A	955254
	25-pole	M2.6	FMK3G-225-FP-B	955256

Suppression	Specification	Ordering code	Part No.

Circuit diagram

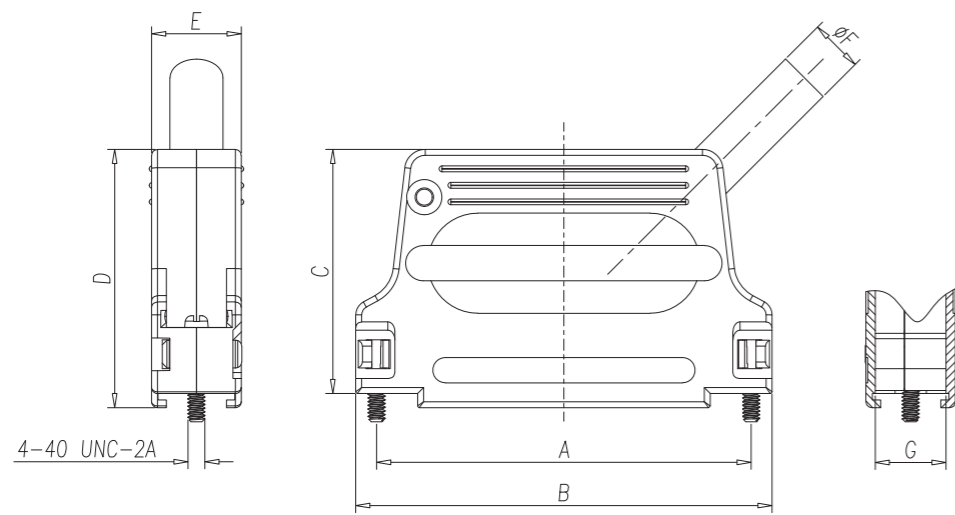


D-SUB connector shell

Technical Data

Rated voltage	Zinc die-cast, nickel plated
Temperature range	-35°C... +100°C (-67°F... +212°F)
max.torque *	40 Ncm (0.295 ft.lb.)

45° cable outlet



SIZE1

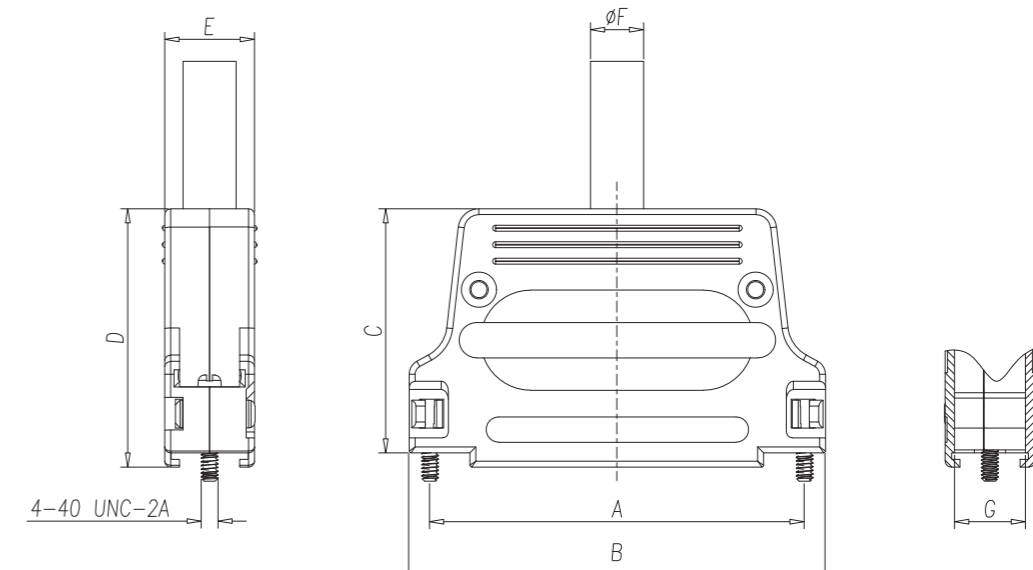
Shell size	Shell	A	B	C	D	E	F	G
SIZE1	1 / 9	25.0	32.0	40.0	42.5	15.0	3.0 - 9.5	12.0
SIZE2	2 / 15	33.3	40.3	41.4	43.8	15.0	3.0 - 12.5	12.0
SIZE3	3 / 25	47.0	54.3	41.4	43.8	15.2	3.0 - 12.5	12.0
SIZE4	4 / 37	63.5	70.6	41.4	43.8	15.2	3.0 - 12.5	12.0
SIZE5	5 / 50	61.1	68.2	41.4	43.8	18.5	3.0 - 15.0	15.4

D-SUB connector shell

Technical Data


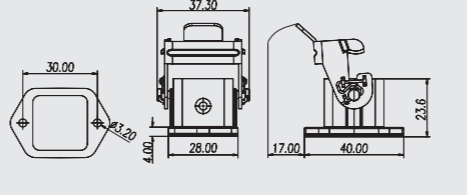

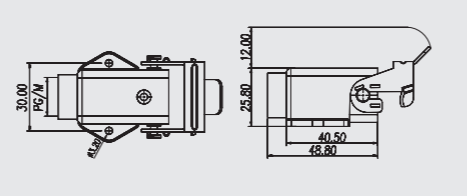

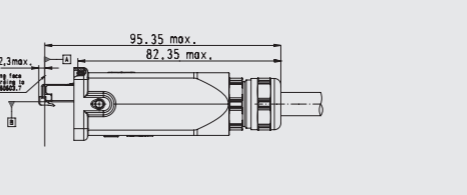

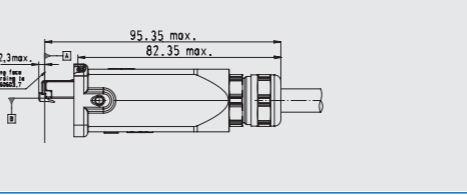

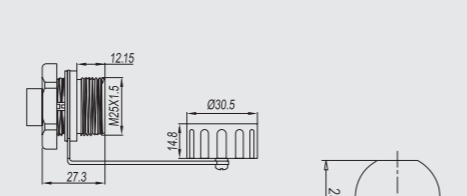

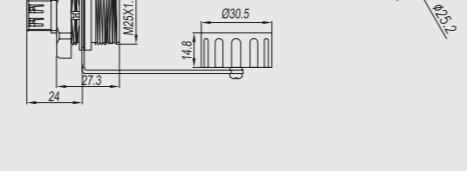
Rated voltage	Zinc die-cast, nickel plated
Temperature range	-35°C... +100°C (-67°F... +212°F)
max.torque *	40 Ncm (0.295 ft.lb.)

180° cable outlet



Shell size	Shell	A	B	C	D	E	F	G
SIZE1	1 / 9	25.0	32.0	40.0	42.5	15.0	3.0 - 9.5	12.0
SIZE2	2 / 15	33.3	40.3	41.4	43.8	15.0	3.0 - 12.5	12.0
SIZE3	3 / 25	47.0	54.3	41.4	43.8	15.2	3.0 - 12.5	12.0
SIZE4	4 / 37	63.5	70.6	41.4	43.8	15.2	3.0 - 12.5	12.0
SIZE5	5 / 50	61.1	68.2	41.4	43.8	18.5	3.0 - 15.0	15.4

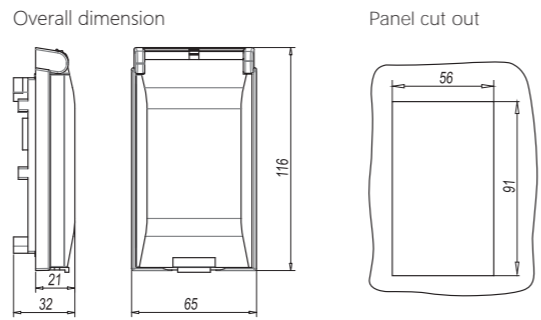
Dimensions (mm)

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RJ45 panel base (clasp type) Panel feed through	9452151103					
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Identification	Part No.					
RJ45 panel base (clasp type) Panel feed through	9452151108					
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Identification	Part No.					
RJ45 4-pin male plug (hand-held type)	9451151100					
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Identification	Part No.					
RJ45 8-pin male plug (hand-held type)	9451151108					
	<table border="1"> <thead> <tr> <th>Identification</th> <th>Part No.</th> </tr> </thead> <tbody> <tr> <td>RJ45 straight-through dual network port socket RJ45 female socket straight dual ethernet ports</td> <td>999091</td> </tr> </tbody> </table>	Identification	Part No.	RJ45 straight-through dual network port socket RJ45 female socket straight dual ethernet ports	999091	
Identification	Part No.					
RJ45 straight-through dual network port socket RJ45 female socket straight dual ethernet ports	999091					
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Identification	Part No.					
USB2.0 female seat USB2.0 female socket	999101					

Front debug panel



Other information
Housing frame and cover: Plastic PC + ABS
Ambient temperature: -5...+55°C
Degree of protection: IP54
Storing temperature : -20...+60°C



Installation process



Front debug panel



Selection of control chart



Part No. : 9145209	Part No. : 9145209U	Part No. : 9145209EU
National standard power socket, RJ45 network port, USB and D-SUB-9	Universal socket, RJ45 network port, USB and D-SUB-9	European standard power socket, RJ45 network port, USB and D-SUB-9

Number of ports

Part No.	Type	10A power socket	RJ45 network port	USB	D-SUB-9	D-SUB-15(Three rows)	D-SUB-25
9145209	FAS-PURD-1	1	1	1	1	/	/
9145215	FAS-PURD-2	1	1	1	/	1	/
9145225	FAS-PURD-3	1	1	1	/	/	1
9145200	FAS-PRU	1	1	1	/	/	/
9145000	FAS-PR	1	1	/	/	/	/
9100000	FAS-P	1	/	/	/	/	/
9045209	FAS-URD-1	/	2	1	1	/	/
9045215	FAS-URD-2	/	2	1	/	1	/
9045225	FAS-URD-3	/	2	1	/	/	1
9045200	FAS-RU	/	1	1	/	/	/
9045309	FAS-RUD-1	/	1	1	1	/	/
9045415	FAS-RUD-2	/	1	1	/	1	/
9045325	FAS-RUD-4	/	1	1	/	/	1



Note: The suffix of the order number is added "U" to indicate that the power socket in the communication panel is a 10A universal socket. Example: 9145209U, FAS-PURD-1U
The suffix of the order number is added "EU", indicating that the power socket in the communication panel is a 16A European standard socket. Example: 9145209EU, FAS-PURD-1EU