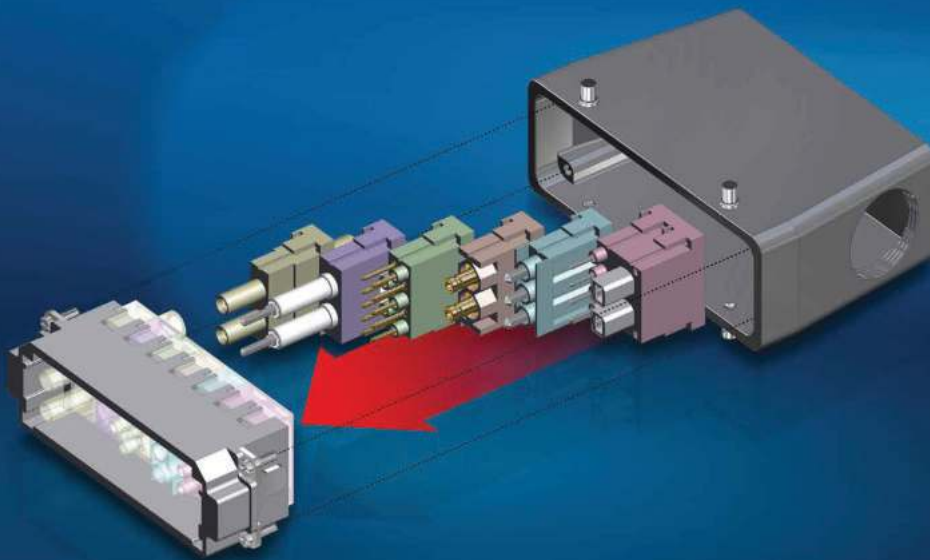





MOD Serie

System components



- Modules
- Module frames
- Industrial connector housings
- Contacts
- Screwed cable glands
- Tools


High voltage modules


Picture	Description	Part Number	Operating voltage	Contact size	Wire size
	HiPro HV module plug, 2-pole	6111111	12 kVDC	2.5 mm choose contacts from page 176	AWG 20 – 12 0.5 – 4.0 mm ²
	HiPro HV module socket, 2-pole	6111112			
	PTFE-1 module plug, 1-pole	6580000	12 kVDC	2.7 mm contacts included	AWG 14 2.5 mm ²
	PTFE-1 module socket, 1-pole	6580100			
	PTFE-2 module plug, 2-pole	6580010	12 kVDC	2.7 mm contacts included	AWG 14 2.5 mm ²
	PTFE-2 module socket, 2-pole	6580110			

Low voltage modules


Picture	Description	Part Number	Operating voltage	Contact size	Wire size
	20-pole plug module	6575051	63 V	1.0 mm choose contacts from page 178	0.09 – 0.5 mm ² AWG 28 – 20
	20-pole socket module	6575061			
	10-pole plug module	6575070	400 V	1.6 mm choose contacts from page 179	0.14 – 2.5 mm ² AWG 26 - 14
	10-pole socket module	6575080			
	5-pole plug module	6575065	400 V	2.5 mm choose contacts from page 180	0.5 – 4.0 mm ² AWG 20 - 12
	5-pole socket module	6575075			
	3-pole plug module	6575062	630 V	3.6 mm choose contacts from page 181	1.5 – 10.0 mm ² AWG 16 – 8
	3-pole socket module	6575063			


KOAX module

Picture	Description	Part Number	Operating voltage	Wire size
	3-pole KOAX plug module	6575072	250 V	RG 58, 174 179, 316
	3-pole KOAX socket module	6575082		

 **Contacts:** page 182

RJ45 module

Picture	Description	Part Number
	RJ45 plug module CAT5e / USB type 2 + 4 male signal contacts 1.6 mm (AWG 26 – 14)	4100007
	RJ45 socket module CAT5e / USB type 2 + 4 female signal contacts 1.6 mm (AWG 26 – 14)	4200007

 **Contacts:** page 183

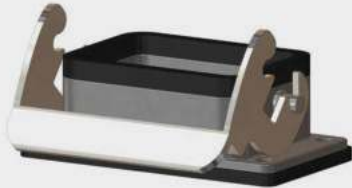
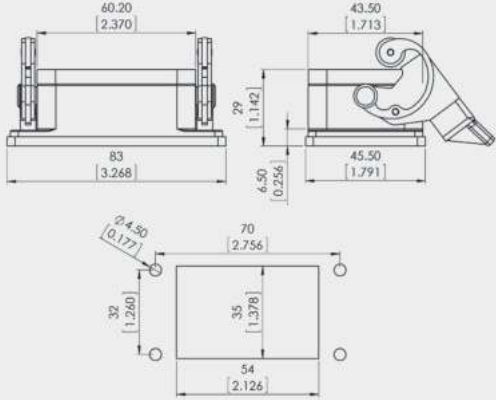

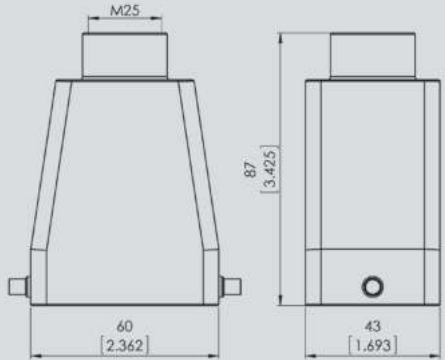

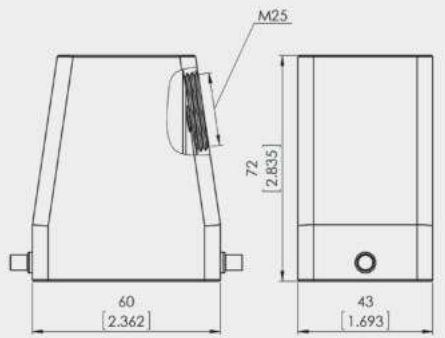
Pneumatic modules - single shut-off

Picture	Description	Part Number	Number of contacts
	Pneumatic plug module ST-1PN-M hose size 2.5 mm	6580201	1
	Pneumatic socket module BU-1PN-M hose size 2.5 mm – with shut-off	6580251	
	Pneumatic plug module ST-1PN-M hose size 4.0 mm	6580204	
	Pneumatic socket module BU-1PN-M hose size 4.0 mm – with shut-off	6580254	
	Pneumatic plug module ST-2PN-M hose size 2.5 mm	6580202	2
	Pneumatic socket module BU-2PN-M hose size 2.5 mm – with shut-off	6580252	
	Pneumatic plug module ST-2PN-M hose size 4.0 mm	6580205	
	Pneumatic socket module BU-2PN-M hose size 4.0 mm – with shut-off	6580255	


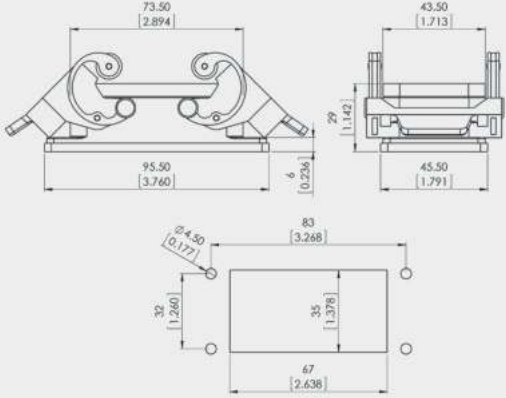

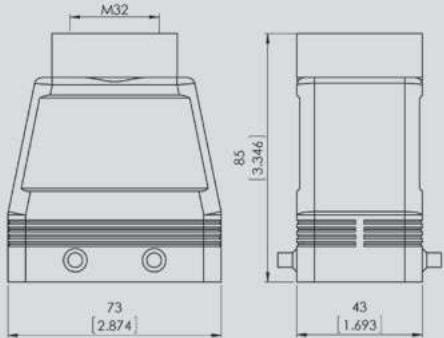

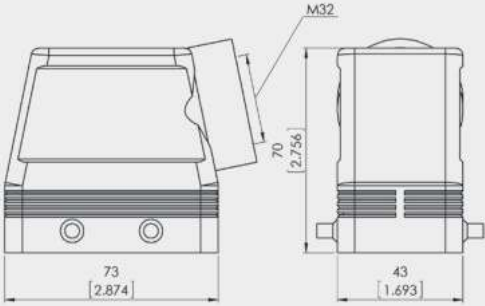
Frames for plug and socket modules

Picture	Description	Part Number
	Module frame for plug modules Size: 2 modules	6575043
	Module frame for receptacle modules Size: 2 modules	6575033
	Module frame for plug modules Size: 3 modules	6575042
	Module frame for receptacle modules Size: 3 modules	6575032
	Module frame for plug modules Size: 5 modules	6575040
	Module frame for receptacle modules Size: 5 modules	6575030
	Module frame for plug modules Size: 7 modules	6575045
	Module frame for receptacle modules Size: 7 modules	6575035


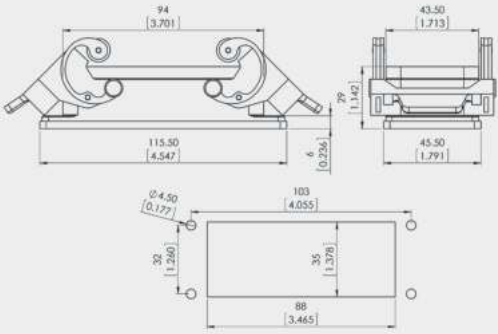
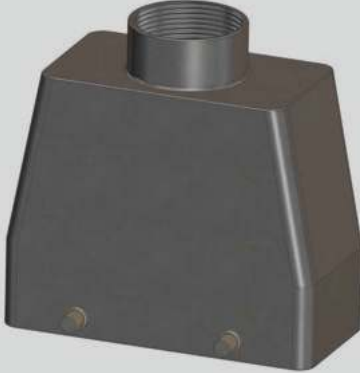
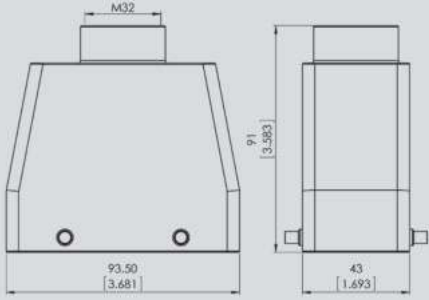

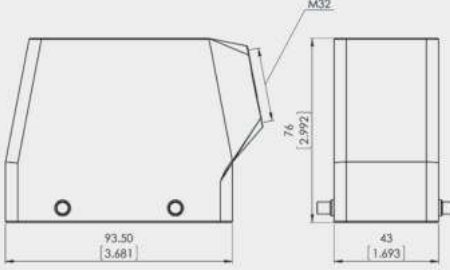
Housings for 2 module frames

Picture	Description / Part Number	Drawing
	<p>Panel mount housing 2M/ LB</p> <p>for 2 modules frame 1-lever-locking system</p> <p>Part no. 6575158</p>	
	<p>Hood, top entry 2M/ HB/ AO/ M25/ LB</p> <p>for 2 modules frame cable top entry connecting thread M25 1-lever-locking system</p> <p>Part no. 6574931</p> <p>choose screwed cable gland from page 185</p>	
	<p>Hood, side entry 2M/ HB/ AS/ M25/ LB</p> <p>for 2 modules frame cable side entry 90° connecting thread M25 1-lever-locking system</p> <p>Part no. 6574930</p> <p>choose screwed cable gland from page 185</p>	


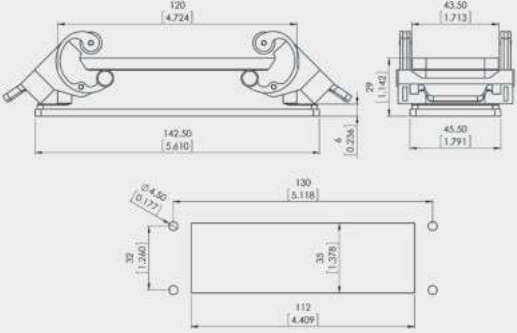

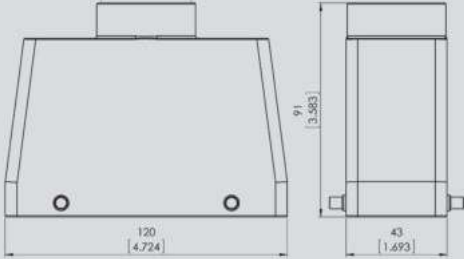
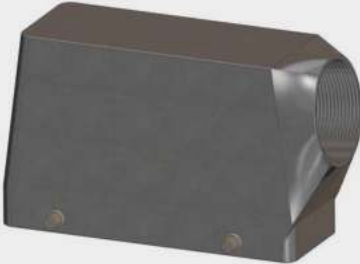
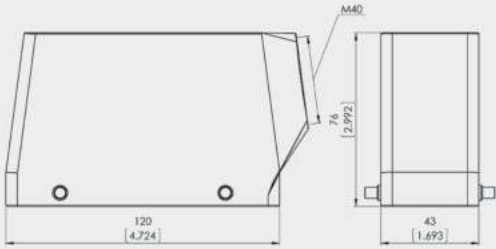
Housings for 3 module frames

Picture	Description / Part Number	Drawing
	<p>Panel mount housing 3M/QB</p> <p>for 3 modules frame 2-lever-locking system</p> <p>Part no. 6575159</p>	
	<p>Hood, top entry 3M/ HB/ AO/ M32/ QB</p> <p>for 3 modules frame cable top entry connecting thread M32 2-lever-locking system</p> <p>Part no. 6574802 choose screwed cable gland from page 185</p>	
	<p>Hood, side entry 3M/ HB/ AS/ M32/ QB</p> <p>for 3 modules frame cable side entry 90° connecting thread M32 2-lever-locking system</p> <p>Part no. 6574807 choose screwed cable gland from page 185</p>	

Housings for 5 module frames

Picture	Description / Part Number	Drawing
	<p>Panel mount housing 5M/ QB</p> <p>for 5 modules frame 2-lever-locking system</p> <p>Part no. 6575161</p>	
	<p>Hood, top entry 5M/ HB/ AO/ M32/ QB</p> <p>for 5 modules frame cable top entry connecting thread M32 2-lever-locking system</p> <p>Part no. 6575147 choose screwed cable gland from page 185</p>	
	<p>Hood, side entry 5M/ HB/ AS/ M32/ QB</p> <p>for 5 modules frame cable side entry 90° connecting thread M32 2-lever-locking system</p> <p>Part no. 6574833 choose screwed cable gland from page 185</p>	

Housings for 7 module frames

Picture	Description / Part Number	Drawing
	<p>Panel mount housing 7M/ QB</p> <p>for 7 modules frame 2-lever-locking system</p> <p>Part no. 6575162</p>	
	<p>Hood, top entry 7M/ HB/ AO/ M40/ QB</p> <p>for 7 modules frame cable top entry connecting thread M40 2-lever-locking system</p> <p>Part no. 6575163 choose screwed cable gland from page 185</p>	
	<p>Hood, side entry 7M/ HB/ AS/ M40/ QB</p> <p>for 7 modules frame cable side entry 90° connecting thread M40 2-lever-locking system</p> <p>Part no. 6574829 choose screwed cable gland from page 185</p>	

HiPro HV module



plug module
part no. 6111111



socket module
part no. 6111112

General characteristics	Value
Number of contacts	2
Termination method	crimp / solder
Wire size	AWG 20 – 12 (0.5 – 4.0 mm ²)
Flammability	UL94 V-0
Electrical characteristics	Value
Rated voltage	12 kV DC
Pollution degree	1
Material group	1
Test voltage	18 kV DC
Contact resistance	≤ 2 mΩ
Insulation resistance	≥ 10 ¹⁰ Ω
Climatical characteristics	Value
Rated temperature	-40°C to +125°C
Mechanical characteristics	Value
Mating cycles	≥ 500
Materials	
Insert (module)	PA 6.6 GF
Contacts	CuZn (brass)
Contacts surface plating	Ag (silver)

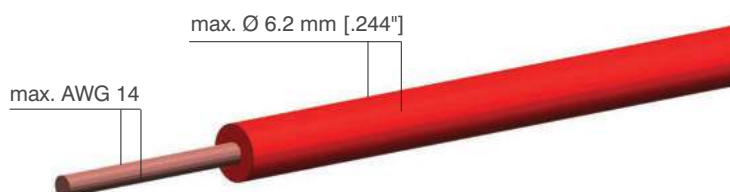
Male contacts

Part no.	Description	Cross section in mm ² (D)	AWG (D)	Picture / Drawing
6575087	male contact 2.5 mm / AWG 20	0.5	20	
6575089	male contact 2.5 mm / AWG 18	0.75 - 1.0	18	
6575092	male contact 2.5 mm / AWG 16	1.5	16	
6575094	male contact 2.5 mm / AWG 14	2.5	14	
6575091	male contact 2.5 mm / AWG 12	4.0	12	

Female contacts

Part no.	Description	Cross section in mm ² (D)	AWG (D)	Picture / Drawing
6575108	female contact 2.5 mm / AWG 20	0.5	20	
6575111	female contact 2.5 mm / AWG 18	0.75 - 1.0	18	
6575102	female contact 2.5 mm / AWG 16	1.5	16	
6575104	female contact 2.5 mm / AWG 14	2.5	14	
6575113	female contact 2.5 mm / AWG 12	4.0	12	

Suitable cable dimensions (single wire)



PTFE HV module 1-pole



plug module
part no. 6580000



plug module
part no. 6580050



socket module
part no. 6580100



socket module
part no. 6580150

General characteristics	Value
Number of contacts	1
Termination method	solder
Termination size	AWG 14 (2.5 mm ²)
Contact diameter	2.7 mm
Flammability	UL94 V-0
Electrical characteristics	Value
Rated voltage	12 kV DC
Pollution degree	1
Material group	1
Test voltage	18 kV DC
Contact resistance	300 μΩ
Climatical characteristics	Value
Rated temperature	-40°C to +125°C
Mechanical characteristics	Value
Mating cycles	≥ 100,000
Materials	
Insert (module)	PA 6.6 GF
Insulator	PTFE
Contacts	CuZn (brass)
Contacts surface plating	Ag (silver)

PTFE HV module 2-pole



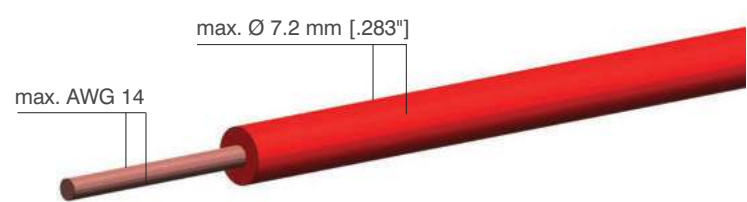
plug module
part no. 6580010



socket module
part no. 6580110

General characteristics	Value
Number of contacts	2
Termination method	solder
Termination size	AWG 14 (2.5 mm ²)
Contact diameter	2.7 mm
Flammability	UL94 V-0
Electrical characteristics	Value
Rated voltage	12 kV DC
Pollution degree	1
Material group	1
Test voltage	18 kV DC
Contact resistance	300 μΩ
Climatical characteristics	Value
Rated temperature	-40°C to +125°C
Mechanical characteristics	Value
Mating cycles	≥ 100,000
Materials	
Insert (module)	PA 6.6 GF
Insulator	PTFE
Contacts	CuZn (brass)
Contacts surface plating	Ag (silver)

Suitable cable dimensions (single wire)



20-pole module



plug module
part no. 6575051



socket module
part no. 6575061

General characteristics	Value
Number of contacts	20
Termination method	crimp / solder
Termination size	AWG 28 – 20 (0.09 – 0.5 mm ²)
Flammability	UL94 V-0
Electrical characteristics	Value
Rated voltage	63 V
Pollution degree	3
Overvoltage category	III
Material group	II
Rated impulse withstand voltage	4 kV
Contact resistance	≤ 5 mΩ
Insulation resistance	≥ 10 ¹² Ω
Climatical characteristics	Value
Rated temperature	-40°C to +125°C
Mechanical characteristics	Value
Mating cycles	≥ 500
Materials	
Insert (module)	PA 6.6 GF
Male contacts	CuZn (brass)
Female contacts	CuSn (bronze)
Contacts surface plating	Au (oold)

Male contacts

Part no.	Description	Cross section in mm ² (D)	AWG (D)	Picture / Drawing
6575114	male contact AU 1.0 mm / AWG 28 - 24	0.09 - 0.25	28 - 24	
6575137	male contact AU 1.0 mm / AWG 24 - 20	0.25 - 0.5	24 - 20	

Female contacts

Part no.	Description	Cross section in mm ² (D)	AWG (D)	Picture / Drawing
6575115	female contact AU 1.0 mm / AWG 28 - 24	0.09 - 0.25	28 - 24	
6575136	female contact AU 1.0 mm / AWG 24 - 20	0.25 - 0.5	24 - 20	

10-pole module



plug module
part no. 6575070



socket module
part no. 6575080

General characteristics	Value
Number of contacts	10
Termination method	crimp / solder
Termination size	AWG 26 – 14 (0.14 – 2.5 mm ²)
Flammability	UL94 V-0
Electrical characteristics	Value
Rated voltage	400 V
Pollution degree	3
Overvoltage category	III
Material group	II
Rated impulse withstand voltage	6 kV
Contact resistance	≤ 5 mΩ
Insulation resistance	≥ 10 ¹⁰ Ω
Climatical characteristics	Value
Rated temperature	-40°C to +100°C
Mechanical characteristics	Value
Mating cycles	≥ 500
Materials	
Insert (module)	PA 6.6 GF
Contacts	CuZn (brass)
Contacts surface plating	Ag (silver) / Au (gold)

Male contacts

Part no.	Description	Cross section in mm ² (D)	AWG (D)	Silver plated	Gold plated	Picture / Drawing
6575085	male contact 1.6 mm / AWG 26 - 22	0.14 - 0.37	26 - 22	•		
6575086	male contact 1.6 mm / AWG 20	0.5	20	•		
6575088	male contact 1.6 mm / AWG 20 - 16	0.75 - 1.0	20 - 16	•		
6575090	male contact 1.6 mm / AWG 16 - 15	1.5	16 - 15	•		
6575083	male contact 1.6 mm / AWG 14	2.5	14	•		
6575118	male contact AU 1.6 mm / AWG 26 - 22	0.14 - 0.37	26 - 22		•	
6575121	male contact AU 1.6 mm / AWG 20	0.5	20		•	
6575116	male contact AU 1.6 mm / AWG 20 - 16	0.75 - 1.0	20 - 16		•	
6575124	male contact AU 1.6 mm / AWG 16 - 15	1.5	16 - 15		•	
6575125	male contact AU 1.6 mm / AWG 14	2.5	14		•	

Female contacts

Part no.	Description	Cross section in mm ² (D)	AWG (D)	Silver plated	Gold plated	Picture / Drawing
6575095	female contact 1.6 mm / AWG 26 - 22	0.14 - 0.37	26 - 22	•		
6575107	female contact 1.6 mm / AWG 20	0.5	20	•		
6575098	female contact 1.6 mm / AWG 20 - 16	0.75 - 1.0	20 - 16	•		
6575100	female contact 1.6 mm / AWG 16 - 15	1.5	16 - 15	•		
6575084	female contact 1.6 mm / AWG 14	2.5	14	•		
6575127	female contact AU 1.6 mm / AWG 26 - 22	0.14 - 0.37	26 - 22		•	
6575131	female contact AU 1.6 mm / AWG 20	0.5	20		•	
6575117	female contact AU 1.6 mm / AWG 20 - 16	0.75 - 1.0	20 - 16		•	
6575132	female contact AU 1.6 mm / AWG 16 - 15	1.5	16 - 15		•	
6575133	female contact AU 1.6 mm / AWG 14	2.5	14		•	

5-pole module



plug module
part no. 6575065



socket module
part no. 6575075

General characteristics	Value
Number of contacts	5
Termination method	crimp / solder
Termination size	AWG 20 – 12 (0.5 – 4.0 mm ²)
Flammability	UL94 V-0
Electrical characteristics	Value
Rated voltage	400 V
Pollution degree	3
Overvoltage category	III
Material group	II
Rated impulse withstand voltage	6 kV
Contact resistance	≤ 2 mΩ
Insulation resistance	≥ 10 ¹⁰ Ω
Climatical characteristics	Value
Rated temperature	-40°C to +125°C
Mechanical characteristics	Value
Mating cycles	≥ 500
Materials	
Insert (module)	PA 6.6 GF
Contacts	CuZn (brass)
Contacts surface plating	Ag (silver)

Male contacts

Part no.	Description	Cross section in mm ² (D)	AWG (D)	Picture / Drawing
6575087	male contact 2.5 mm / AWG 20	0.5	20	
6575089	male contact 2.5 mm / AWG 18	0.75 - 1.0	18	
6575092	male contact 2.5 mm / AWG 16	1.5	16	
6575094	male contact 2.5 mm / AWG 14	2.5	14	
6575091	male contact 2.5 mm / AWG 12	4.0	12	

Female contacts

Part no.	Description	Cross section in mm ² (D)	AWG (D)	Picture / Drawing
6575108	female contact 2.5 mm / AWG 20	0.5	20	
6575111	female contact 2.5 mm / AWG 18	0.75 - 1.0	18	
6575102	female contact 2.5 mm / AWG 16	1.5	16	
6575104	female contact 2.5 mm / AWG 14	2.5	14	
6575113	female contact 2.5 mm / AWG 12	4.0	12	

3-pole module



plug module
part no. 6575062



socket module
part no. 6575063

General characteristics	Value
Number of contacts	3
Termination method	crimp / solder
Termination size	AWG 16 – 8 (1.5 – 10.0 mm ²)
Flammability	UL94 V-0
Electrical characteristics	Value
Rated voltage	630 V
Pollution degree	3
Overvoltage category	III
Material group	II
Rated impulse withstand voltage	8 kV
Contact resistance	≤ 1 mΩ
Insulation resistance	≥ 10 ¹⁰ Ω
Climatical characteristics	Value
Rated temperature	-40°C to +125°C
Mechanical characteristics	Value
Mating cycles	≥ 500
Materials	
Insert (module)	PA 6.6 GF
Contacts	CuZn (brass)
Contacts surface plating	Ag (silver)

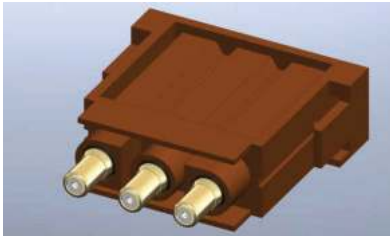
Male contacts

Part no.	Description	Cross section in mm ² (D)	AWG (D)	Picture / Drawing
6575099	male contact 3.6 mm / AWG 16	1.5	16	
6575106	male contact 3.6 mm / AWG 14	2.5	14	
6575093	male contact 3.6 mm / AWG 12	4.0	12	
6575139	male contact 3.6 mm / AWG 10	6.0	10	
6575096	male contact 3.6 mm / AWG 8	10.0	8	

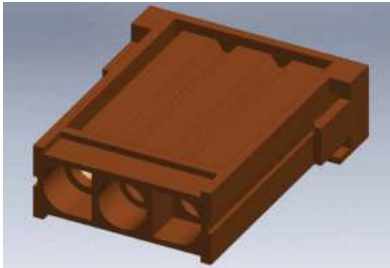
Female contacts

Part no.	Description	Cross section in mm ² (D)	AWG (D)	Picture / Drawing
6575109	female contact 3.6 mm / AWG 16	1.5	16	
6575105	female contact 3.6 mm / AWG 14	2.5	14	
6575103	female contact 3.6 mm / AWG 12	4.0	12	
6575138	female contact 3.6 mm / AWG 10	6.0	10	
6575097	female contact 3.6 mm / AWG 8	10.0	8	

KOAX module



plug module
part no. 6575072



socket module
part no. 6575082

General characteristics	Value
Number of contacts	3
Termination method	crimp, solder
Termination size	RG 58, 174, 179, 316
Flammability	UL94 V-0
Electrical characteristics	Value
Rated voltage	250 V
Pollution degree	3
Overvoltage category	III
Material group	II
Impedance	50 Ω
Frequency range	2 GHz
Climatical characteristics	Value
Rated temperature	-40°C to +125°C
Mechanical characteristics	Value
Mating cycles	≥ 500
Materials	
Insert (module)	PA 6.6 GF
Module color	russet
Contacts surface plating	Au (gold)

Male contacts

Part no.	Description	for cable size	Picture / Drawing
6575141	male coax contact RG 58	RG 58	
6575110	male coax contact RG 174, 179, 316	RG 174, 179, 316	

Female contacts

Part no.	Description	for cable size	Picture / Drawing
6575142	female coax contact RG 58	RG 58	
6575112	female coax contact RG 174, 179, 316	RG 174, 179, 316	

Dimensions and stripping lengths

Type	L [mm]	D [mm]	E [mm]	F [mm]	G [mm]	Drawing
contacts (male/ female) for RG 58	26.3	3.2	9.5	7.9	2	
contacts (male/ female) for RG 174, 179, 316	23.6	1.7	7.9	6.3	2	

RJ45 module



plug module
part no. 4100007



socket module
part no. 4200007

General characteristics	Value RJ45 contacts	Value power contacts
Number of contacts	8 + shield	4
Termination method	plug	crimp
Termination size		AWG 26 – 14 (0.14 – 2.5 mm ²)
Flammability	UL94 V-0	
Electrical characteristics	Value	
Rated voltage	30 V	400 V
Rated current	1 A	10A
Data transmission rate	100 Mbit/s	
Transfer response	In acc. with category 5 (CAT 5)	
Climatical characteristics	Value	
Rated temperature	-20°C to +80°C	
Mechanical characteristics	Value	
Mating cycles	≥ 500	
Materials	Value	
Insert (module)	PA 6.6 GF	
Contacts		CuZn (brass)
Contacts surface plating		Ag (silver) / Au (gold)

Male contacts

Part no.	Description	Cross section in mm ² (D)	AWG	silver plated	gold plated	Picture / Drawing
6575085	male contact 1.6 mm / AWG 26 - 22	0.14 - 0.37	26 - 22	•		
6575086	male contact 1.6 mm / AWG 20	0.5	20	•		
6575088	male contact 1.6 mm / AWG 20 - 16	0.75 - 1.0	20 - 16	•		
6575090	male contact 1.6 mm / AWG 16 - 15	1.5	16 - 15	•		
6575083	male contact 1.6 mm / AWG 14	2.5	14	•		
6575118	male contact AU 1.6 mm / AWG 26 - 22	0.14 - 0.37	26 - 22		•	
6575121	male contact AU 1.6 mm / AWG 20	0.5	20		•	
6575116	male contact AU 1.6 mm / AWG 20 - 16	0.75 - 1.0	20 - 16		•	
6575124	male contact AU 1.6 mm / AWG 16 - 15	1.5	16 - 15		•	
6575125	male contact AU 1.6 mm / AWG 14	2.5	14		•	

Female contacts

Part no.	Description	Cross section in mm ² (D)	AWG	silver plated	gold plated	Picture / Drawing
6575095	female contact 1.6 mm / AWG 26 - 22	0.14 - 0.37	26 - 22	•		
6575107	female contact 1.6 mm / AWG 20	0.5	20	•		
6575098	female contact 1.6 mm / AWG 20 - 16	0.75 - 1.0	20 - 16	•		
6575100	female contact 1.6 mm / AWG 16 - 15	1.5	16 - 15	•		
6575084	female contact 1.6 mm / AWG 14	2.5	14	•		
6575127	female contact AU 1.6 mm / AWG 26 - 22	0.14 - 0.37	26 - 22		•	
6575131	female contact AU 1.6 mm / AWG 20	0.5	20		•	
6575117	female contact AU 1.6 mm / AWG 20 - 16	0.75 - 1.0	20 - 16		•	
6575132	female contact AU 1.6 mm / AWG 16 - 15	1.5	16 - 15		•	
6575133	female contact AU 1.6 mm / AWG 14	2.5	14		•	

Pneumatic modules for hose size 2.5 mm

Pneumatic module	
plug module part no. 6580201	
socket module part no. 6580251	
plug module part no. 6580202	
socket module part no. 6580252	


General characteristics	Value
Number of contacts	1, 2
Termination method	hose connection
Hose size (inner diameter)	2.5 mm
Flammability	UL94 V-0
Technical characteristics	Value
Operating pressure	8 bar with PTFE hose
Contact travel (feed path)	4 mm
Shut-off	one-sided (on socket module)
Recommended hose material	PTFE
Climatical characteristics	Value
Rated temperature	-20°C to +100°C
Mechanical characteristics	Value
Mating cycles	≥ 5000
Materials	
Insert (module)	PA 6.6 GF
Contacts	CuZn (brass)

Pneumatic modules for hose size 4.0 mm

Pneumatic module	
plug module part no. 6580204	
socket module part no. 6580254	
plug module part no. 6580205	
socket module part no. 6580255	

General characteristics	Value
Number of contacts	1, 2
Termination method	hose connection
Hose size (inner diameter)	4.0 mm
Flammability	UL94 V-0
Technical characteristics	Value
Operating pressure	8 bar with PTFE hose
Contact travel (feed path)	4 mm
Shut-off	one-sided (on socket module)
Recommended tube material	PTFE
Climatical characteristics	Value
Rated temperature	-20°C to +100°C
Mechanical characteristics	Value
Mating cycles	≥ 5000
Materials	
Insert (module)	PA 6.6 GF
Contacts	CuZn (brass)

Screwed cable glands

Picture	Description	Part number	Clamping range in mm (D)
	KV M25x1.5, 9 – 16 mm	1674119	9 – 16
	KV M25x1.5, 13 – 18 mm	1674117	13 – 18
	KV M32x1.5, 13 – 20 mm	1674082	13 – 20
	KV M32x1.5, 18 – 25 mm	1674078	18 – 25
	KV M40x1.5, 20 – 26 mm	1674072	20 – 26

Tools

Description	Part number
Extracting tool for contacts 1.0 mm	3000000
Extracting tool for contacts 1.6 mm	3000001
Extracting tool for contacts 2.5 mm	3000003
Extracting tool for contacts 3.6 mm	3000004
Removal tool for modules	3000006
Crimping tool for contacts 1.0 mm	3000019
Crimping tool for contacts 1.6 / 2.5 mm	3000015
Crimping tool for contacts 3.6 mm	3000020