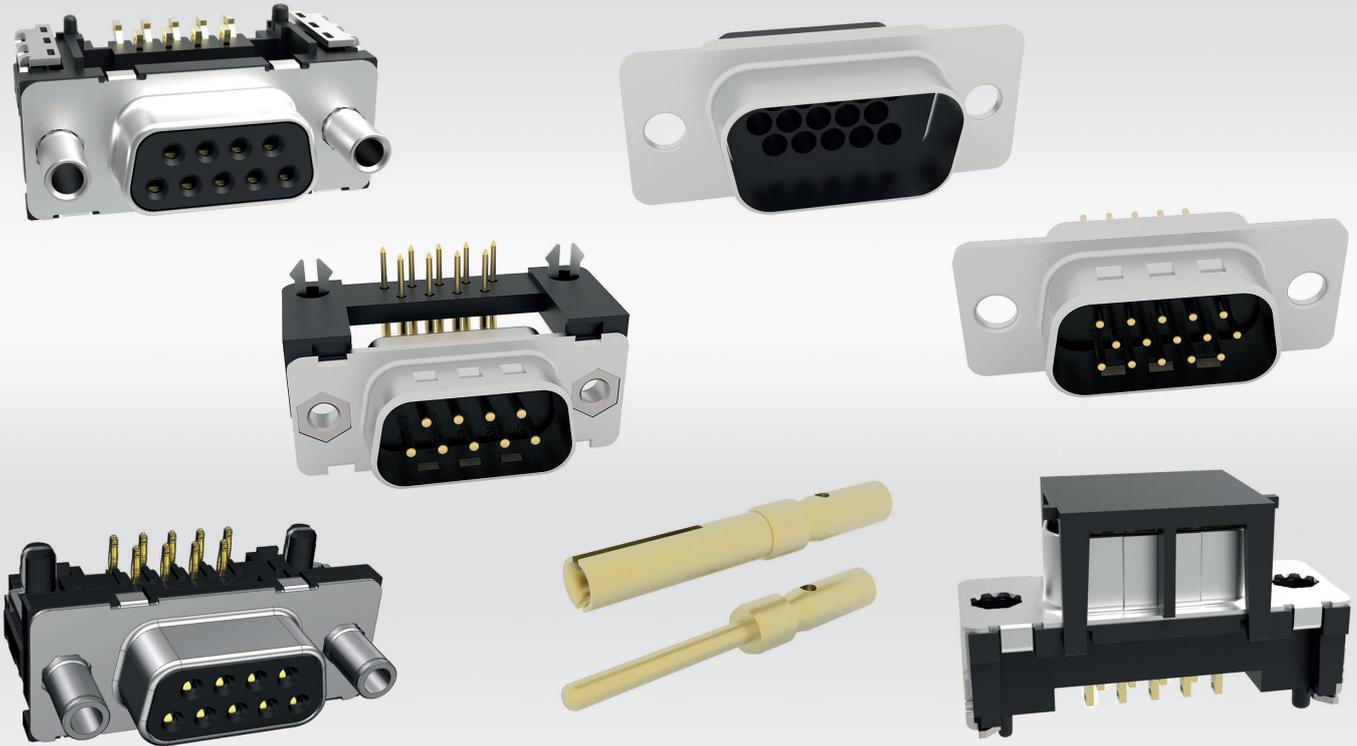


D-Sub

D-Sub connectors in various designs



Innovative D-Sub connectors with special customer benefits:

- Quick Lock: innovative push-pull locking system for D-Sub hoods with a simple adaptation for retrofitting at every D-Sub device interface
- 600 V D-Sub connectors for compact and economical power applications
- 360 ° EMI / RFI D-Sub full metal hoods with shock / vibration and torsion proof Strain relief and shield connection using a crimp flange / crimp sleeve system

Most extensive D-Sub program

- D-Sub connectors for PCB mounting:
180 ° soldering with Boardlock or Comblock;
Solder 90 ° with plastic bracket or with metal bracket
- TMC series: High Performance PCB connectors with standard and with mixed layout in 3 connection types: SMT, THR, Pressfit
- D-Sub connectors for cable assembly: IDC, crimp, hand solder
- Mixed layout D-Sub: soldering 90 ° and 180 °, crimp, hand soldering and high-current contacts
- High Density D-Sub: Crimp, hand solder, 180 ° soldering and 180 ° soldering
- DualPort D-Sub connectors
- Filter D-Sub that eliminate EMC interferences
- D-Sub plastic hoods in black or metallized for shielding requirements
- 360 ° EMI / RFI-D-Sub full metal hoods for high requirements
- Accessories: EMC and dust protection caps, hexagon threaded screws, seals, cable bushings and cable grommets

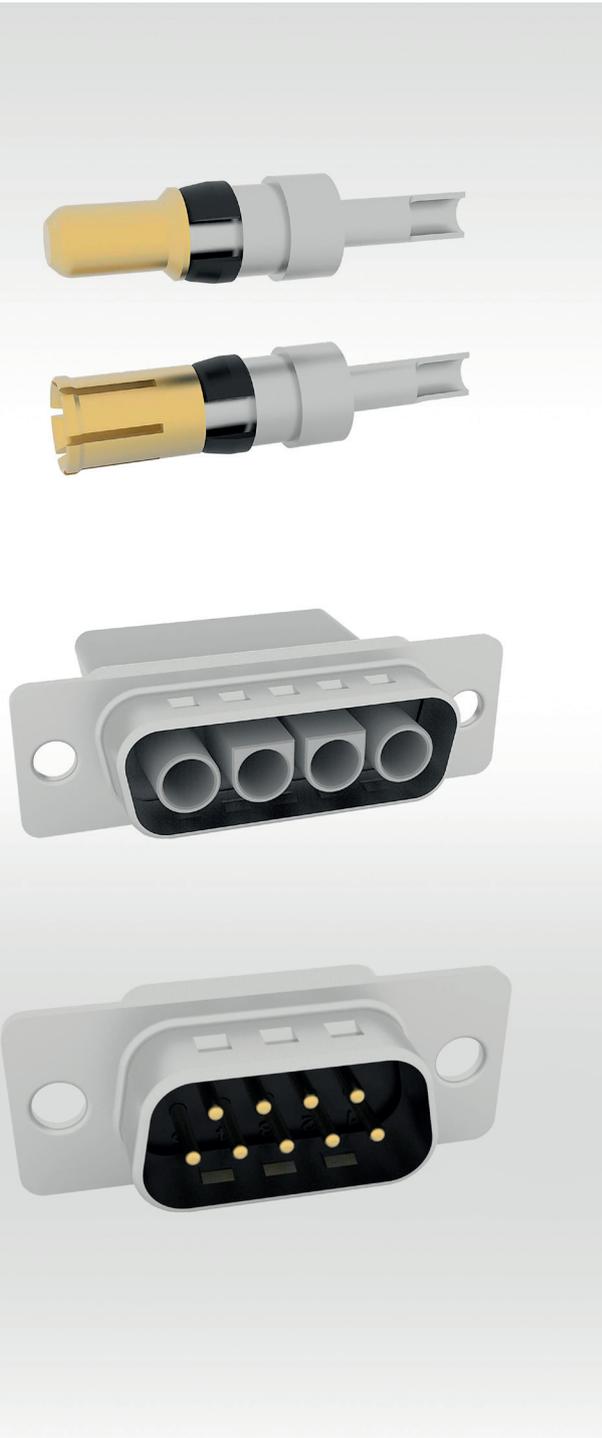
Technical data

Insulator	Thermoplast UL 94 V-0
Contacts	Cu and brass alloy
Contact surface	Hard gold plated over Ni barrier layer
Housing	Steel tin- or Zn-plated or passivated
Mating and unmating force	0,3 - 0,7 N
Clearance and creepage distance	≥ 0,9 mm acc. to VDE 0110
Test voltage	1 KV / AC
Resistance	≤ 10 mΩ
Insulation resistance	≥ 5 GΩ
Current rating D-Sub	machined: 7 A / stamped: 5 A
Current rating HD D-Sub	machined: 3 A / stamped: 1 A
Temperature range	-55 °C to +125 °C
Mechanical lifetime	G1 = 500 mating cycles G2 = 250 mating cycles G3 = 50 mating cycles

D-Sub cable connection

Reliable D-Sub connectors for cable assemblies

D-Sub



Standard D-Sub:

Crimp connectors with machined crimp contacts with 4-point crimp as functionally reliable solution for demanding applications

Crimp connectors with stamped crimp contacts on reel are the economical solution for multiple assemblies

IDC connectors Low profile for tight installation spaces

IDC connectors with insulation displacement double contact for increased requirements
Solder cup connectors with standard or extended solder connection for easier handling when soldering

Wire wrap connectors

Fastening accessories: through hole, thread UNC 4-40 or M3 on the connection or Mating side

Mixed Layout D-Sub: crimp and hand solder connectors, crimp and solder cup power contacts

600 V-D-Sub: Crimp connectors as well as turned and stamped crimp contacts

High Density D-Sub: Crimp and solder cup connectors, stamped and turned Crimp contacts

Filter-D-Sub: Cable soldering and soldering cup connectors as well as wire wrap connectors

600 V D-Sub: Crimp connectors as well as turned and punched crimp contacts

High Density D-Sub: crimp and solder cup connectors, stamped and machined crimp contacts

Filter D-Sub: Cable soldering and soldering cup and wire wrap connector

Technical data

Nominal current D-Sub	machined: 7 A / stamped: 5 A
Nominal current HD D-Sub	machined: 3 A / stamped: 1 A
Test voltage	1 KV / AC
Resistance	≤ 10 mΩ
Insulation resistance	≥ 5 GΩ
Clearance and creepage distance	≥ 0,9 mm acc. to VDE 0110
Mating and unmating force	0,3 - 0,7 N
Temperature range	-55 °C bis +125 °C
Insulator	Thermoplast UL 94-VO
Contacts	Cu and brass alloy gold-plated
Housing	Steel tin- or Zn-plated or passivated
Mechanical lifetime	G1 = 500 mating cycles
	G2 = 250 mating cycles
	G3 = 50 mating cycles

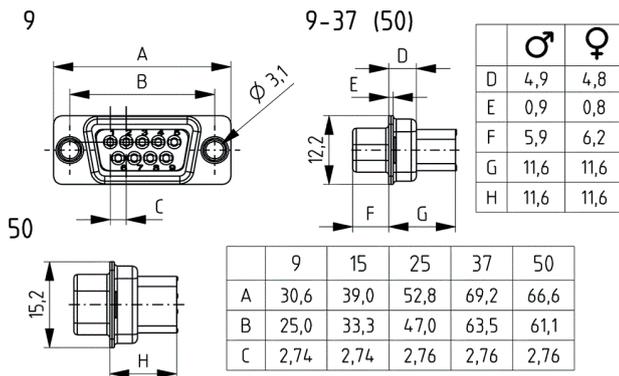


Crimp connector

Without contacts

- Stamped or machined crimp contacts insertable
- Insulator flame-retardant acc. to UL 94 V-0
- Fully compatible to market standard

Dimensions



Technical data (mutual data on pages 81 & 82)

Nominal current	machined: 7 A / stamped: 5 A
Contact resistance	≤ 10 m Ω
Test voltage	1 KV / AC
Temperature range	-55° C to +125° C

Order information

CSDT09P	Pin 9-pole
CSDT15P	Pin 15-pole
CSDT25P	Pin 25-pole
CSDT37P	Pin 37-pole
CSDT50P	Pin 50-pole
CST09S	Socket 9-pole
CST15S	Socket 15-pole
CST25S	Socket 25-pole
CST37S	Socket 37-pole
CST50S	Socket 50-pole

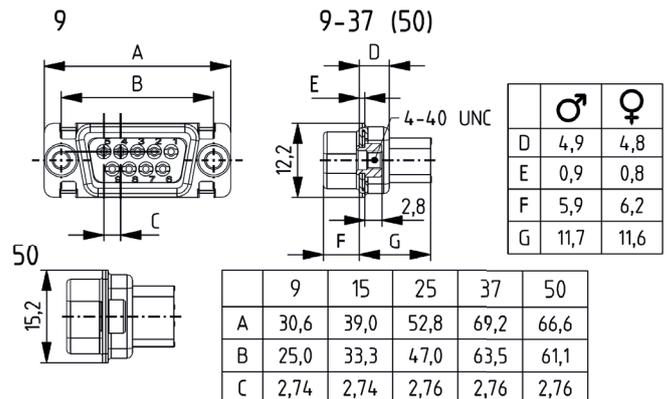


Crimp connector with threaded rivet

Threaded rivet on termination side

- Stamped or machined crimp contacts insertable
- Insulator flame-retardant acc. to UL 94 V-0
- Threaded rivet UNC 4-40 or M3 on termination side
- Fully compatible to market standard

Dimensions



Technical data (mutual data on pages 81 & 82)

Nominal current	machined: 7 A / stamped: 5 A
Contact resistance	≤ 10 m Ω
Test voltage	1 KV / AC
Temperature range	-55° C to +125° C

Order information

CG42DT09P	Pin 9-pole UNC
CG42DT15P	Pin 15-pole UNC
CG42DT25P	Pin 25-pole UNC
CG42DT37P	Pin 37-pole UNC
CG42DT50P	Pin 50-pole UNC
CG42T09S	Socket 9-pole UNC
CG42T15S	Socket 15-pole UNC
CG42T25S	Socket 25-pole UNC
CG42T37S	Socket 37-pole UNC
CG42T50S	Socket 50-pole UNC

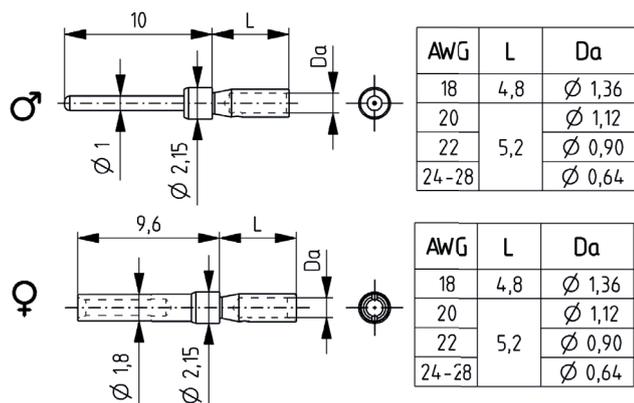


D-Sub Crimp contacts

Machined versions

- Machined precision contacts from Cu-alloy
- Fully gold-plated over a Ni-barrier layer
- Various surfaces for different lifetime requirements
- Highest quality and lifetime because of defined contact zone
- Conductor cross-sections: AWG 18-AWG 28
- Fully compatible to standard contact

Dimensions

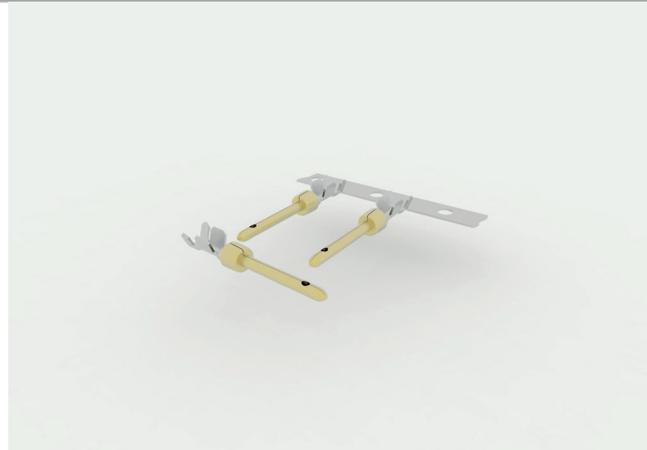


Technical data (mutual data on pages 81 & 82)

Nominal current	max. 7 A
Wire size	AWG 18 - AWG 28
Contact resistance	≤10 mΩ
Material	Cu-alloy gold-plated

Order information

C051800Gx	Crimp contact pin AWG 18 Gx: G1 / G2 / G3
C052000Gx	Crimp contact pin AWG 20 Gx: G1 / G2 / G3
C052200Gx	Crimp contact pin AWG 22 Gx: G1 / G2 / G3
C052400Gx	Crimp contact pin AWG 24 Gx: G1 / G2 / G3
C061800Gx	Crimp contact socket AWG 18 Gx: G1 / G2 / G3
C062000Gx	Crimp contact socket AWG 20 Gx: G1 / G2 / G3
C062200Gx	Crimp contact socket AWG 22 Gx: G1 / G2 / G3
C062400Gx	Crimp contact socket AWG 24 Gx: G1 / G2 / G3

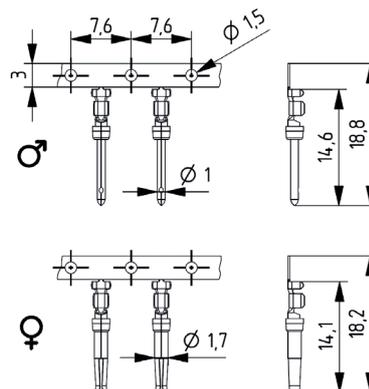


D-Sub Crimp contacts

Stamped versions

- Stamped precision contacts from Cu-alloy
- Fully gold-plated over a Ni-barrier layer
- Various surfaces for different lifetime requirements
- Highest quality and lifetime because of defined contact zone
- Conductor cross-sections: AWG 20 -AWG 32
- Approved by leading crimp machine producers
- 3 VPE: coil 10.000 / coil 500 / pack 100
- Various directions for unrolling

Dimensions



Technical data (mutual data on pages 81 & 82)

Nominal current	5 A
Wire size	AWG 20 -32
Contact resistance	≤10 mΩ
Material	Cu-alloy gold-plated

Order information

C1520GLGxT	Pin AWG 20 -24 coil 10000 contacts
C1524GLGxT	Pin AWG 24 -28 coil 10000 contacts
C1528GLGxT	Pin AWG 28 -32 coil 10000 contacts
C1620GLGxT	Socket AWG 20 -24 coil 10000 contacts
C1624GLGxT	Socket AWG 24 -28 coil 10000 contacts
C1628GLGxT	Socket AWG 28 -32 coil 10000 contacts
C1520SLGxT	Pin AWG 20 -24 coil 500 contacts
C15200GxT100	Pin AWG 20 -24 pack. 100 contacts
C1620SLGxT	Socket AWG 20 -24 coil 500 contacts
C16200GxT100	Socket AWG 20 -24 pack 100 contacts

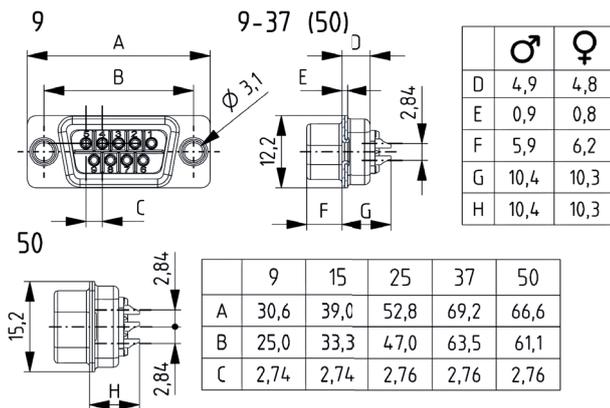


Solder cup connection

With stamped or machined contacts

- Machined precision contacts fully gold-plated
- Stamped precision contacts selectively gold-plated and connection tin-plated
- Suitable for wire sizes up to AWG 20
- Highest quality and lifetime because of defined contact area

Dimensions



Technical data (mutual data on pages 81 & 82)

Nominal current	machined: 7 A / stamped: 5 A
Contact resistance	≤10 mΩ
Test voltage	1 KV / AC
Temperature range	-55° C to +125° C

Order information

SDT0951Gx	Pin 9-pole Gx:G1/G2/G3 Stamped: 151Gx
SDT1551Gx	Pin 15-pole Gx:G1/G2/G3 Stamped: 151Gx
SDT2551Gx	Pin 25-pole Gx:G1/G2/G3 Stamped: 151Gx
SDT3751Gx	Pin 37-pole Gx:G1/G2/G3 Stamped: 151Gx
SDT5051Gx	Pin 50-pole Gx:G1/G2/G3 Stamped: 151Gx
ST0961Gx	Socket 9-pole Gx:G1/G2/G3 Stamped: 161Gx
ST1561Gx	Socket 15-pole Gx:G1/G2/G3 Stamped: 161Gx
ST2561Gx	Socket 25-pole Gx:G1/G2/G3 Stamped: 161Gx
ST3761Gx	Socket 37-pole Gx:G1/G2/G3 Stamped: 161Gx
ST5061Gx	Socket 50-pole Gx:G1/G2/G3 Stamped: 161Gx

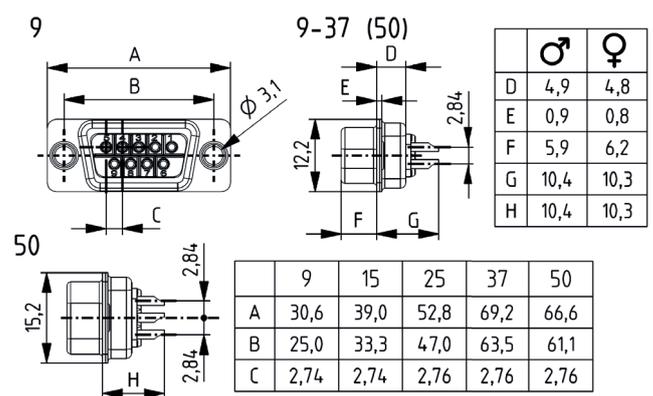


Long solder cup connection

With machined contacts

- Machined precision contacts fully gold-plated
- Suitable for conductor diameters up to AWG 20
- Highest quality and lifetime because of defined contact zone
- Fully compatible to standard contact

Dimensions



Technical data (mutual data on pages 81 & 82)

Nominal current	Machined contacts: 7 A
Contact resistance	≤10 mΩ
Insulation resistance	≥10 GΩ
Clearance and creepage	≥1 mm acc. to VDE 0110

Order information

SDT09512Gx	Pin 9-pole Gx:G1/G2/G3
SDT15512Gx	Pin 15-pole Gx:G1/G2/G3
SDT25512Gx	Pin 25-pole Gx:G1/G2/G3
SDT37512Gx	Pin 37-pole Gx:G1/G2/G3
SDT50512Gx	Pin 50-pole Gx:G1/G2/G3
ST09612Gx	Socket 9-pole Gx:G1/G2/G3
ST15612Gx	Socket 15-pole Gx:G1/G2/G3
ST25612Gx	Socket 25-pole Gx:G1/G2/G3
ST37612Gx	Socket 37-pole Gx:G1/G2/G3
ST50612Gx	Socket 50-pole Gx:G1/G2/G3

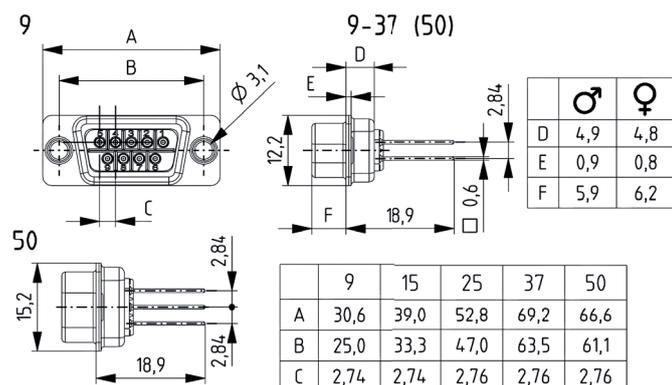


Wire Wrap connection

With machined contacts

- Machined precision contacts from copper alloy
- Fully gold-plated over a Ni-barrier layer
- Highest quality and lifetime because of defined contact zone
- Version with 3 coils: item No. example SDT0955G2
- Version with 2 coils: item No. example SDT0952G2

Dimensions



Technical data (mutual data on pages 81 & 82)

Nominal current	Machined contacts: 7 A
Contact resistance	≤10 mΩ
Test voltage	1 KV / AC
Temperature range	-55° C to +125° C

Order information

SDT0955Gx	Pin 9-pole Gx:G1/G2/G3
SDT1555Gx	Pin 15-pole Gx:G1/G2/G3
SDT2555Gx	Pin 25-pole Gx:G1/G2/G3
SDT3755Gx	Pin 37-pole Gx:G1/G2/G3
SDT5055Gx	Pin 50-pole Gx:G1/G2/G3
ST0965Gx	Socket 9-pole Gx:G1/G2/G3
ST1565Gx	Socket 15-pole Gx:G1/G2/G3
ST2565Gx	Socket 25-pole Gx:G1/G2/G3
ST3765Gx	Socket 37-pole Gx:G1/G2/G3
ST5065Gx	Socket 50-pole Gx:G1/G2/G3

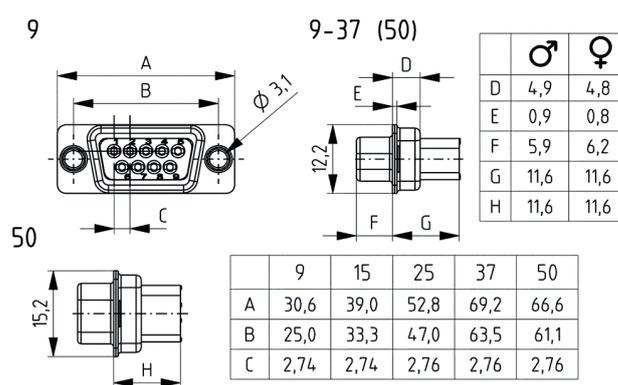


Crimp connectors for vacuum

Without contacts

- Insulator with very low outgassing
- Insulator flame-retardant acc. to UL 94 V-0
- Shell made of stainless steel
- Stamped or machined crimp contacts insertable
- Fully compatible to market standard

Dimensions



Technical data (mutual data on pages 81 & 82)

Nominal current	machined: 7 A / stamped: 5 A
Contact resistance	≤10 mΩ
Test voltage	1 KV / AC
Temperature range	-55° C to +125° C

Order information

CSDT09PV	Pin 9-pole
CSDT15PV	Pin 15-pole
CSDT25PV	Pin 25-pole
CSDT37PV	Pin 37-pole
CSDT50PV	Pin 50-pole
CST09SV	Socket 9-pole
CST15SV	Socket 15-pole
CST25SV	Socket 25-pole
CST37SV	Socket 37-pole
CST50SV	Socket 50-pole

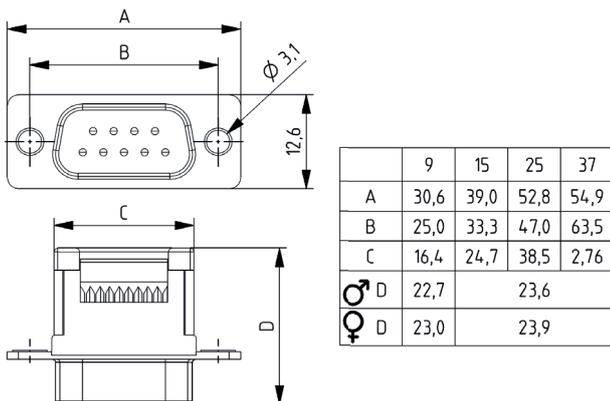


IDC connectors

With double-contacting

- Safe double-contacting
- High-quality edition with stamped contacts
- UL-approval
- Shell tin-plated
- Suitable in case of difficult contacting in insulation displacement area

Dimensions



Technical data (mutual data on pages 81 & 82)

Nominal current	AWG 24: 1,5 A / AWG 26: 1 A
Test voltage	1 KV / AC
Temperature range	-20° C to +105° C
Plastic material	Thermoplast UL 94 V-0

Order information

IKDT09154G075	Pin 9-pole
IKDT15154G075	Pin 15-pole
IKDT25154G075	Pin 25-pole
IKDT37154G075	Pin 37-pole
IKDT50154G075	Pin 50-pole
IKT09164G075	Socket 9-pole
IKT15164G075	Socket 15-pole
IKT25164G075	Socket 25-pole
IKT37164G075	Socket 37-pole
IKT50164G075	Socket 50-pole

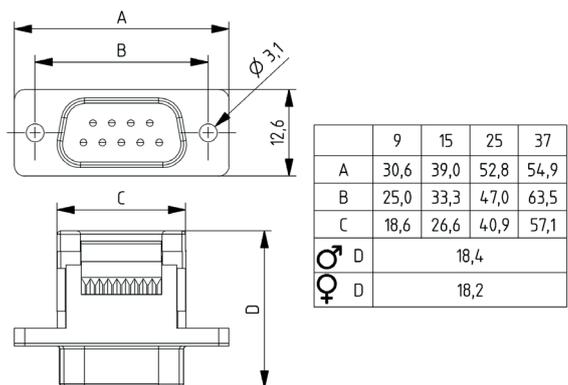


IDC connectors

Suitable for many standard hoods

- Standard connector
- Shell tin-plated
- Quality class 3
- With strain relief clamp
- Available with threaded rivet upon request

Dimensions



Technical data (mutual data on pages 81 & 82)

Nominal current	1 A
Test voltage	500 V / AC
Temperature range	-55° C to +105° C
Plastic material	Thermoplast UL 94 V-0

Order information

IDT09154G3	Pin 9-pole
IDT15154G3	Pin 15-pole
IDT25154G3	Pin 25-pole
IDT37154G3	Pin 37-pole
IDT50154G3	Pin 50-pole
IT09164G3	Socket 9-pole
IT15164G3	Socket 15-pole
IT25164G3	Socket 25-pole
IT37164G3	Socket 37-pole
IT50164G3	Socket 50-pole

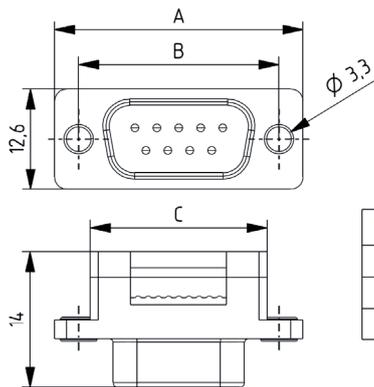


IDC connectors Low Profile

With stamped contacts

- High-quality design with stamped contacts
- UL-approval
- Shell tin-plated
- With strain relief clamp
- Available with threaded rivet upon request

Dimensions



	9	15	25	37
A	30,6	39,0	52,8	54,9
B	25,0	33,3	47,0	63,5
C	16,4	24,7	38,5	2,76

Technical data (mutual data on pages 81 & 82)

Nominal current	1 A
Test voltage	500 V / AC
Temperature range	-55° C to +105° C
Plastic material	Thermoplast UL 94 V-0

Order information

ISDT09154G3	Pin 9-pole
ISDT15154G3	Pin 15-pole
ISDT25154G3	Pin 25-pole
ISDT37154G3	Pin 37-pole
ISDT50154G3	Pin 50-pole
IST09164G3	Socket 9-pole
IST15164G3	Socket 15-pole
IST25164G3	Socket 25-pole
IST37164G3	Socket 37-pole
IST50164G3	Socket 50-pole

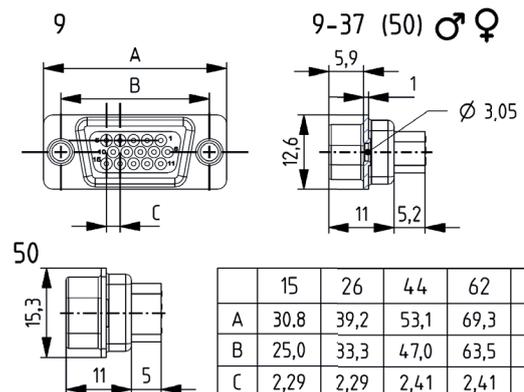


High Density crimp connectors

Without contacts

- Stamped or machined crimp contacts insertable
- Insulator flame-retardant acc. to UL 94 V-0
- Fully compatible to market standard

Dimensions



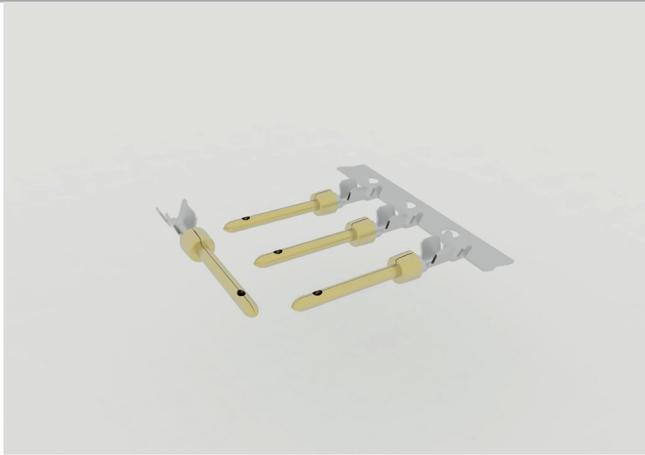
	15	26	44	62	78
A	30,8	39,2	53,1	69,3	67
B	25,0	33,3	47,0	63,5	61,1
C	2,29	2,29	2,41	2,41	2,41

Technical data (mutual data on pages 81 & 82)

Nominal current	3 A
Contact resistance	≤20 mΩ
Test voltage	1 KV / AC
Temperature range	-55° C to +125° C

Order information

CHDT15P	Pin 15-pole
CHDT26P	Pin 26-pole
CHDT44P	Pin 44-pole
CHDT62P	Pin 62-pole
CHDT78P	Pin 78-pole
CHT15S	Socket 15-pole
CHT26S	Socket 26-pole
CHT44S	Socket 44-pole
CHT62S	Socket 62-pole
CHT78S	Socket 78-pole

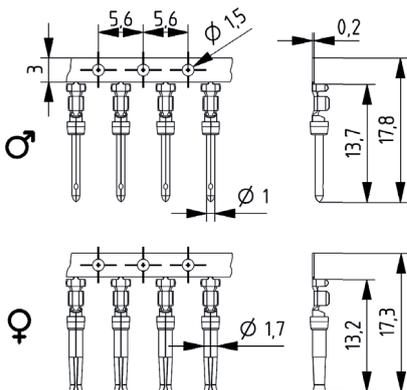


High Density crimp contacts

Stamped versions

- Precision contacts from Cu-alloy
- Safe locking in High Density Crimp connector
- Selectively gold-plated
- Surfaces for 200 mating cycles (G2) and for 50 mating cycles (G3)
- Conductor diameter: AWG 24-28

Dimensions



Technical data (mutual data on pages 81 & 82)

Nominal current	1 A
Wire size	AWG 24 -28
Material	Cu-alloy gold-plated

Order information

CHD1524GLG3T	Crimp contact pin coil 10000 contacts
CHD1524SLG3T	Crimp contact pin coil 500 contacts
CHD1624GLG3T	Crimp contact socket coil 500 contacts
CHD1624SLG3T	Crimp contact socket coil 500 contacts
CHD1524GLG2T	Crimp contact pin coil 10000 contacts
CHD1624GLG2T	Crimp contact socket coil 10000 contacts

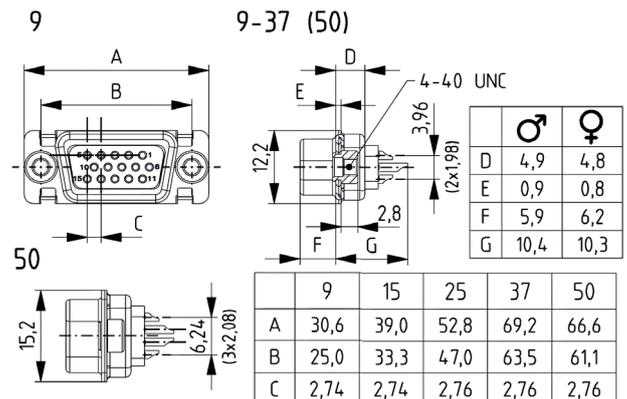


High density solder cup connection

With stamped or machined contacts

- Machined precision contacts from copper alloy fully gold-plated
- Stamped precision contacts in copper alloy gold-plated and termination tin-plated
- Suitable for conductor diameter up to AWG 22
- Highest quality and lifetime because of defined contact area

Dimensions



Technical data (mutual data on pages 81 & 82)

Nominal current	3 A
Contact resistance	≤ 20 m Ω
Insulation resistance	≥ 5 G Ω
Test voltage	1 KV / AC

Order information

HDT1551Gx	Pin 15-pole Gx:G1/G2/G3 Stamped: 151Gx
HDT2651Gx	Pin 26-pole Gx:G1/G2/G3 Stamped: 151Gx
HDT4451Gx	Pin 44-pole Gx:G1/G2/G3 Stamped: 151Gx
HDT6251Gx	Pin 62-pole Gx:G1/G2/G3 Stamped: 151Gx
HDT7851Gx	Pin 78-pole Gx:G1/G2/G3 Stamped: 151Gx
HT1561Gx	Socket 15-pole Gx:G1/G2/G3 Stamped: 161Gx
HT2661Gx	Socket 26-pole Gx:G1/G2/G3 Stamped: 161Gx
HT4461Gx	Socket 44-pole Gx:G1/G2/G3 Stamped: 161Gx
HT6261Gx	Socket 62-pole Gx:G1/G2/G3 Stamped: 161Gx
HT7861Gx	Socket 78-pole Gx:G1/G2/G3 Stamped: 161Gx

D-Sub PCB connection

Reliable D-Sub connectors for PCB applications

D-Sub



Versions with solder connection 180°

- Machined contacts for high current carrying capacity
- Solid mounting accessories for safe and effective grounding
- Various mounting accessories

Boardlock with internal thread UNC or M3 and snap-in locking clip

Combilock with threaded bolt UNC or M3 and snap-in locking clip

Threaded rivet UNC or M3

Through hole

Versions with solder connection 90°

- Machined contacts for high current carrying capacity
- Full metal mounting accessories for safe and effective grounding
- Plastic brackets with different mounting accessories

Internal thread UNC or M3 as well as earthing clip and snap-in locking clip

Threaded bolt UNC or M3 as well as earthing clip

Through hole and earthing clip

Through hole

- Solid metal bracket with different mounting accessories

Internal thread UNC or M3 as well as earthing clip and snap-in locking clip

Threaded bolt UNC or M3 as well as earthing clip

Through hole and earthing clip

Through hole

Technical data

Nominal current D-Sub	machined: 7 A / stamped: 5 A
Nominal current HD D-Sub	machined: 3 A / stamped: 1 A
Test voltage	1 KV / AC
Resistance	≤ 10 mΩ
Insulation resistance	≥ 5 GΩ
Clearance and creepage distance	≥ 0,9 mm acc. to VDE 0110
Mating and unmating force	0,3 - 0,7 N
Temperature range	-55 °C to +125 °C
Insulator	Thermoplast UL 94-V0
Contacts	Cu and brass alloy gold-plated
Metal shell	Steel tin- or Zn-plated or passivated
Mechanical lifetime	G1 = 500 mating cycles
	G2 = 250 mating cycles
	G3 = 50 mating cycles

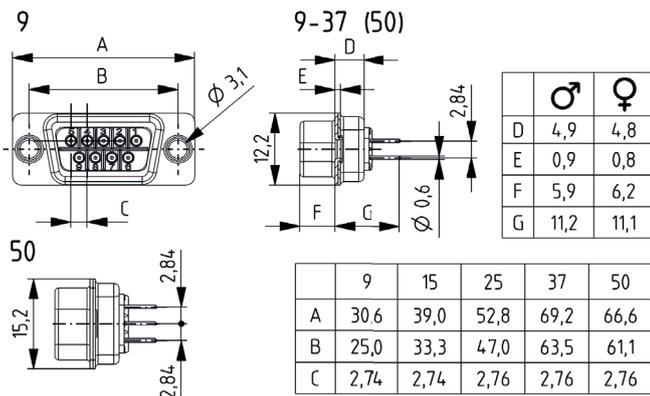


D-Sub connectors solder pin 180°

With machined contacts

- Machined precision contacts fully gold-plated over a nickel barrier layer
- High current carrying capacity due to machined contacts
- Highest quality and lifetime because of defined contact zone
- Will be delivered with shell tin-plated
- Thermoplast UL 94 V-0

Dimensions



Technical data (mutual data on pages 81 & 90)

Current carrying capacity	Machined contacts: 7 A
R contact /R insulation	≤10 mΩ/ ≥10 GΩ
Test voltage	1 KV / AC
Temperature range	-55° C to +125° C

Order information

SDT0952Gx	Pin 9-pole Gx:G1 / G2 / G3
SDT1552Gx	Pin 20-pole Gx:G1 / G2 / G3
SDT2552Gx	Pin 25-pole Gx:G1 / G2 / G3
SDT3752Gx	Pin 37-pole Gx:G1 / G2 / G3
SDT5052Gx	Pin 50-pole Gx:G1 / G2 / G3
ST0962Gx	Socket 9-pole Gx:G1 / G2 / G3
ST1562Gx	Socket 15-pole Gx:G1 / G2 / G3
ST2562Gx	Socket 25-pole Gx:G1 / G2 / G3
ST3762Gx	Socket 37-pole Gx:G1 / G2 / G3
ST5062Gx	Socket 50-pole Gx:G1 / G2 / G3

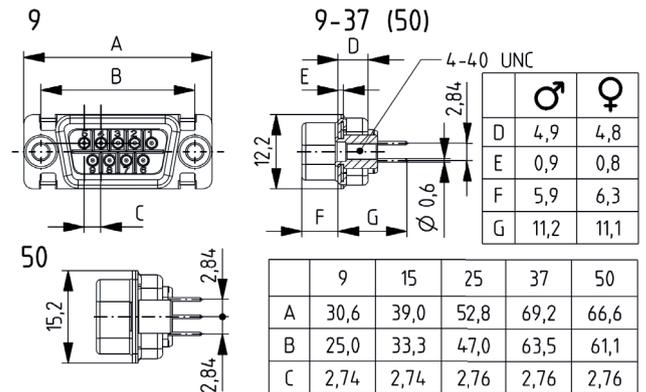


D-Sub connectors solder pin 180°

With machined contacts and threaded rivet

- Machined precision contacts fully gold-plated over a nickel barrier layer
- Threaded rivet on the connection side with thread UNC or M3
- 2 rivet heights: 5.5: Index G45 / 2.8: Index G42
- Highest quality and lifetime because of defined contact zone
- Will be delivered with shell tin-plated
- High current carrying capacity due to machined contacts
- Thermoplast UL 94 V-0

Dimensions



Technical data (mutual data on pages 81 & 90)

Current carrying capacity	7 A
R contact /R insulation	≤10 mΩ/ ≥10 GΩ
Test voltage	1 KV / AC
Temperature range	-55° C to +125° C

Order information

G45DT0952Gx	Pin 9-pole UNC Gx: G1 / G2 / G3
G45DT1552Gx	Pin 15-pole UNC Gx: G1 / G2 / G3
G45DT2552Gx	Pin 25-pole UNC Gx: G1 / G2 / G3
G45DT3752Gx	Pin 37-pole UNC Gx: G1 / G2 / G3
G45DT5052Gx	Pin 50-pole UNC Gx: G1 / G2 / G3
G45T0962Gx	Socket 9-pole UNC Gx: G1 / G2 / G3
G45T1562Gx	Socket 15-pole UNC Gx: G1 / G2 / G3
G45T2562Gx	Socket 25-pole UNC Gx: G1 / G2 / G3
G45T3762Gx	Socket 37-pole UNC Gx: G1 / G2 / G3
G45T5062Gx	Socket 50-pole UNC Gx: G1 / G2 / G3

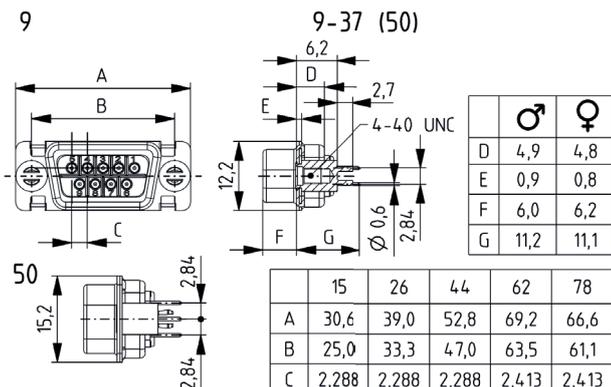


Boardlock solder pin 180°

With machined contacts

- Boardlock: fastening clip and threaded bolt in one
- Connector snapped-in on the board, fixed, 4-40 UNC (or M3) thread for mounting
- Therefore safe and efficient board assembly possible
- High quality, precisely machined clip bolts
- Effektive grounding with massive mounting bolts
- Machined contacts completely gold-plated over Ni barrier layer
- High current rating due to machined contacts
- Thermoplast UL 94 V-0

Dimensions



Technical data (mutual data on pages 81 & 90)

Current carrying capacity	7 A
R contact /R insulation	≤10 mΩ/ ≥10 GΩ
Test voltage	1 KV / AC
Temperature range	-55° C to +125° C

Order information

BL4DT0952Gx	Pin 9-pole UNC Gx: G1/G2/G3
BL4DT1552Gx	Pin 15-pole UNC Gx: G1/G2/G3
BL4DT2552Gx	Pin 25-pole UNC Gx: G1/G2/G3
BL4DT3752Gx	Pin 37-pole UNC Gx: G1/G2/G3
BL4DT5052Gx	Pin 50-pole UNC Gx: G1/G2/G3
BL4T0962Gx	Socket 9-pole UNC Gx: G1/G2/G3
BL4T1562Gx	Socket 15-pole UNC Gx: G1/G2/G3
BL4T2562Gx	Socket 25-pole UNC Gx: G1/G2/G3
BL4T3762Gx	Socket 37-pole UNC Gx: G1/G2/G3
BL4T5062Gx	Socket 50-pole UNC Gx: G1/G2/G3

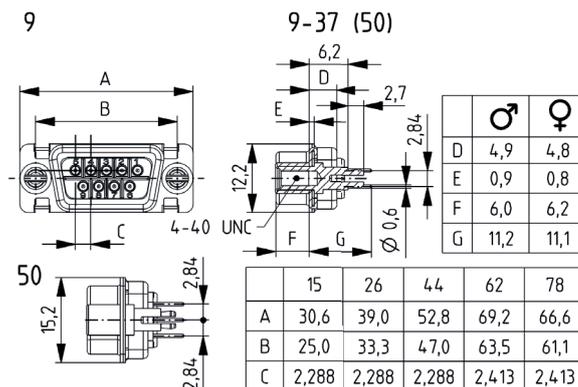


Combilock solder pin 180°

With machined contacts

- Combilock: fastening clip, spacer and threaded bolt in one
- Integrated threaded bolt UNC or M3
- Safe and efficient board assembly with snap-in clip
- High quality, precisely machined clip bolts
- Effektive grounding with massive mounting bolts
- Machined contacts completely gold-plated over Ni
- High current carrying capacity due to machined contacts
- Thermoplast UL 94 V-0

Dimensions



Technical data (mutual data on pages 81 & 90)

Current carrying capacity	7 A
R contact /R insulation	≤10 mΩ/ ≥10 GΩ
Test voltage	1 KV / AC
Temperature range	-55° C to +125° C

Order information

B4DT0952Gx	Pin 9-pole UNC Gx: G1/G2/G3
B4DT1552Gx	Pin 15-pole UNC Gx: G1/G2/G3
B4DT2552Gx	Pin 25-pole UNC Gx: G1/G2/G3
B4DT3752Gx	Pin 37-pole UNC Gx: G1/G2/G3
B4DT5052Gx	Pin 50-pole UNC Gx: G1/G2/G3
B4T0962Gx	Socket 9-pole UNC Gx: G1/G2/G3
B4T1562Gx	Socket 15-pole UNC Gx: G1/G2/G3
B4T2562Gx	Socket 25-pole UNC Gx: G1/G2/G3
B4T3762Gx	Socket 37-pole UNC Gx: G1/G2/G3
B4T5062Gx	Socket 50-pole UNC Gx: G1/G2/G3

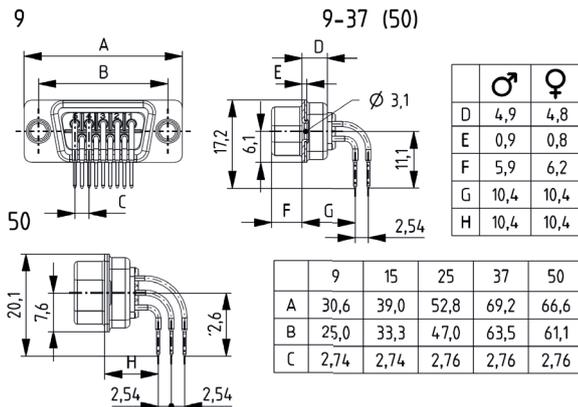


D-Sub connector solder pin 90°

With machined contacts

- European Standard grid dimension
- Machined precision contacts from copper alloy
- Fully gold-plated over nickel barrier layer
- Highest quality and lifetime because of defined contact area
- Thermoplast UL 94 V-0

Dimensions



Technical data (mutual data on pages 81 & 90)

Current carrying capacity	7 A
R contact / R insulation	≤10mΩ / ≥10GΩ
Test voltage	1 KV / AC
Temperature range	-55° C to +125° C

Order information

SDT0956Gx	Pin 9-pole UNC Gx:G1 / G2 / G3
SDT1556Gx	Pin 15-pole UNC Gx:G1 / G2 / G3
SDT2556Gx	Pin 25-pole UNC Gx:G1 / G2 / G3
SDT3756Gx	Pin 37-pole UNC Gx:G1 / G2 / G3
SDT5056Gx	Pin 50-pole UNC Gx:G1 / G2 / G3
ST0966Gx	Socket 9-pole UNC Gx:G1 / G2 / G3
ST1566Gx	Socket 15-pole UNC Gx:G1 / G2 / G3
ST2566Gx	Socket 25-pole UNC Gx:G1 / G2 / G3
ST3766Gx	Socket 37-pole UNC Gx:G1 / G2 / G3
ST5066Gx	Socket 50-pole UNC Gx:G1 / G2 / G3

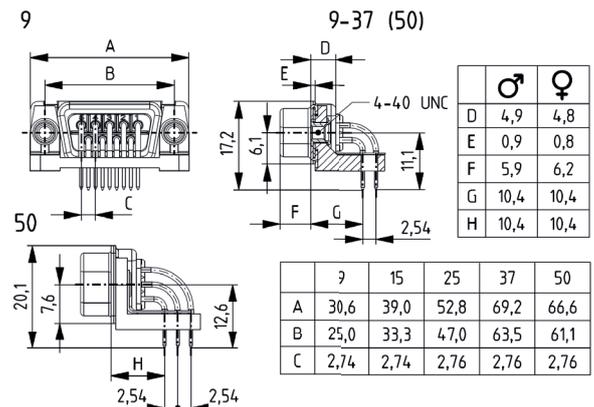


Solder pin 90°

Machined contacts with plastic and grounding bracket

- Metal grounding bracket with though hole for ground connection
- Ground connection and mounting with screw + nut
- Integrated, non-protruding UNC 4-40 or M3 thread
- Plastic bracket with positioning plate
- For problem-free insertion on the board
- Thermoplast UL 94 V-0

Dimensions



Technical data (mutual data on pages 81 & 90)

Current carrying capacity	7 A
R contact / R insulation	≤10mΩ / ≥10GΩ
Test voltage	1 KV / AC
Temperature range	-55° C to +125° C

Order information

SDT0956GxE4B	Pin 9-pole UNC Gx: G1/G2/G3
SDT1556GxE4B	Pin 15-pole UNC Gx:G1 / G2 / G3
SDT2556GxE4B	Pin 25-pole UNC Gx:G1 / G2 / G3
SDT3756GxE4B	Pin 37-pole UNC Gx:G1 / G2 / G3
SDT5056GxE4B	Pin 50-pole UNC Gx:G1 / G2 / G3
ST0966GxE4B	Socket 9-pole UNC Gx:G1 / G2 / G3
ST1566GxE4B	Socket 15-pole UNC Gx:G1 / G2 / G3
ST2566GxE4B	Socket 25-pole UNC Gx:G1 / G2 / G3
ST3766GxE4B	Socket 37-pole UNC Gx:G1 / G2 / G3
ST5066GxE4B	Socket 50-pole UNC Gx:G1 / G2 / G3

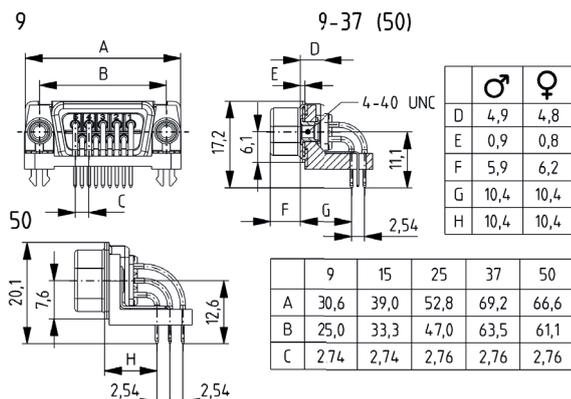


Solder pin 90°

Machined contacts with plastic bracket and grounding clip

- Plastic bracket and grounding bracket plus locking clip
- Board mounting and ground connection in one
- Integrated, non-protruding UNC 4-40 or M3 thread
- For effective mounting
- Plastic bracket with positioning plate
- For easy insertion on the board
- Machined precision contacts
- Thermoplast UL 94 V-0

Dimensions



Technical data (mutual data on pages 81 & 90)

Current carrying capacity	7 A
R contact / R insulation	≤10 mΩ / ≥10 GΩ
Test voltage	1 KV / AC
Temperature range	-55° C to +125° C

Order information

SDT0956GxR4B	Pin 9-pole UNC Gx: G1/G2/G3
SDT1556GxR4B	Pin 15-pole UNC Gx: G1/G2/G3
SDT2556GxR4B	Pin 25-pole UNC Gx: G1/G2/G3
SDT3756GxR4B	Pin 37-pole UNC Gx: G1/G2/G3
SDT5056GxR4B	Pin 50-pole UNC Gx: G1/G2/G3
ST0966GxR4B	Socket 9-pole UNC Gx: G1/G2/G3
ST1566GxR4B	Socket 15-pole UNC Gx: G1/G2/G3
ST2566GxR4B	Socket 25-pole UNC Gx: G1/G2/G3
ST3766GxR4B	Socket 37-pole UNC Gx: G1/G2/G3
ST5066GxR4B	Socket 50-pole UNC Gx: G1/G2/G3

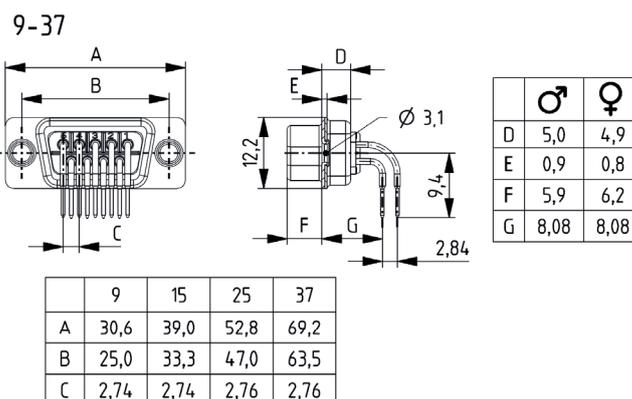


D-Sub connector solder pin 90°

With machined contacts 8.08 mm/.318 inch footprint

- Machined precision contacts
- High current carrying capacity due to machined contacts
- Shell tin-plated
- Thermoplast UL 94 V-0

Dimensions



Technical data (mutual data on pages 81 & 90)

Current carrying capacity	7 A
R contact / R insulation	≤10 mΩ / ≥10 GΩ
Test voltage	1 KV / AC
Temperature range	-55° C to +125° C

Order information

SDT09568Gx	Pin 9-pole UNC Gx: G1/G2/G3
SDT15568Gx	Pin 15-pole UNC Gx: G1/G2/G3
SDT25568Gx	Pin 25-pole UNC Gx: G1/G2/G3
SDT37568Gx	Pin 37-pole UNC Gx: G1/G2/G3
SDT50568Gx	Pin 50-pole UNC Gx: G1/G2/G3
ST09668Gx	Socket 9-pole UNC Gx: G1/G2/G3
ST15668Gx	Socket 15-pole UNC Gx: G1/G2/G3
ST25668Gx	Socket 25-pole UNC Gx: G1/G2/G3
ST37668Gx	Socket 37-pole UNC Gx: G1/G2/G3
ST50668Gx	Socket 50-pole UNC Gx: G1/G2/G3

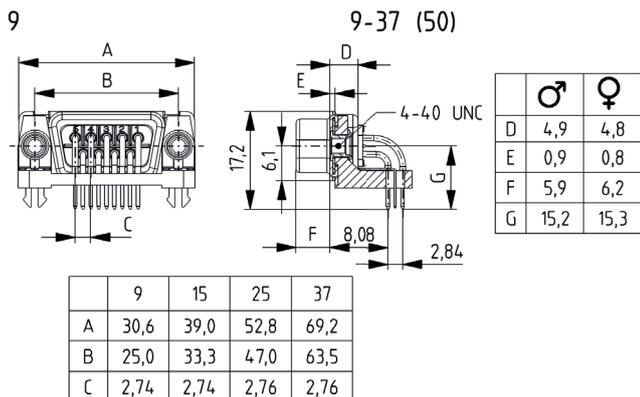


D-Sub connector solder pin 90°

With machined contacts 8.08 mm/.318 inch footprint

- Installation height 6.3 acc. to US standard
- Machined precision contacts
- High current carrying capacity due to machined contacts
- With plastic bracket and grounding bracket plus locking clip
- Easy safe mounting with snap-in board lock
- Effektive grounding with metal grounding bracket
- Optional UNC 4-40 or M3 thread
- Thermoplast UL 94 V-0

Dimensions

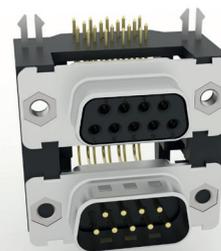


Technical data (mutual data on pages 81 & 90)

Current carrying capacity	7 A
R contact /R insulation	≤10 mΩ/ ≥10 GΩ
Test voltage	1 KV / AC
Temperature range	-55° C to +125° C

Order information

SDT09568GxR4B	Pin 9-pole UNC Gx: G1 / G2 / G3
SDT15568GxR4B	Pin 15-pole UNC Gx: G1 / G2 / G3
SDT25568GxR4B	Pin 25-pole UNC Gx: G1 / G2 / G3
SDT37568GxR4B	Pin 37-pole UNC Gx: G1 / G2 / G3
SDT50568GxR4B	Pin 50-pole UNC Gx: G1 / G2 / G3
ST09668GxR4B	Socket 9-pole UNC Gx: G1/G2/G3
ST15668GxR4B	Socket 15-pole UNC Gx: G1/G2/G3
ST25668GxR4B	Socket 25-pole UNC Gx: G1/G2/G3
ST37668GxR4B	Socket 37-pole UNC Gx: G1/G2/G3
ST50668GxR4B	Socket 50-pole UNC Gx: G1/G2/G3

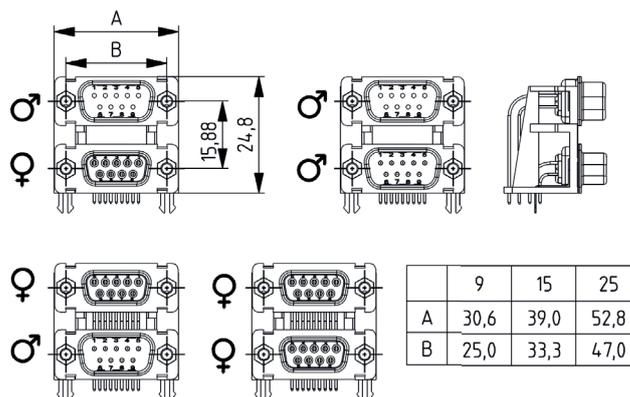


D-Sub dual port connectors

With stamped contacts

- Space advantage with two connectors on almost the same board area
- Many combination possibilities
- Height 15,88 mm. Special dimensions upon request
- Insulator tested acc. to UL 94-V0
- Quality class 3

Dimensions



Technical data (mutual data on pages 81 & 90)

Current carrying capacity	1 A
R contact /R insulation	≤30 mΩ/ ≥1 GΩ
Test voltage	1 KV / AC
Temperature range	-30° C to +105° C

Order information

DP09P09PR4B	Pin - Pin 9-pole
DP15P15PR4B	Pin - Pin 15-pole
DP25P25PR4B	Pin - Pin 25-pole
DP09S09SR4B	Socket - Socket 9-pole
DP15S15SR4B	Socket - Socket 15-pole
DP25S25SR4B	Socket - Socket 25-pole
DP09P09SR4B	Pin - Socket 9-pole
DP15P15SR4B	Pin - Socket 15-pole
DP25P25SR4B	Pin - Socket 25-pole
DP09S09PR4B	Socket - Pin 9-pole

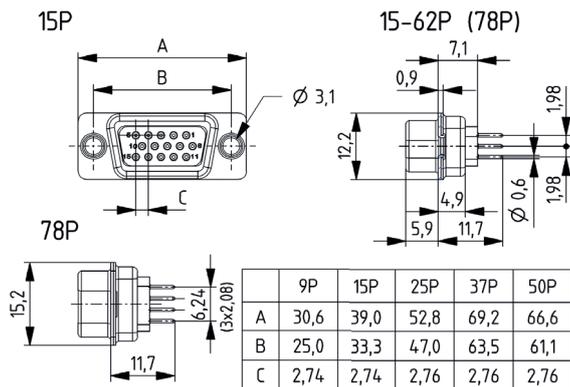


High Density solder pin 180°

With machined contacts

- Machined precision contacts
- Fully gold-plated over nickel barrier layer
- Highest quality and lifetime because of defined contact zone
- Thermoplast UL 94 V-0

Dimensions



Technical data (mutual data on pages 81 & 90)

Current carrying capacity	3 A
R contact /R insulation	≤20 mΩ/ ≥5 GΩ
Test voltage	1 KV / AC
Temperature range	-55° C to +125° C

Order information

HDT1552Gx	Pin 15-pole Gx: G1/G2/G3
HDT2652Gx	Pin 26-pole Gx: G1/G2/G3
HDT4452Gx	Pin 44-pole Gx: G1/G2/G3
HDT6252Gx	Pin 62-pole Gx: G1/G2/G3
HDT7852Gx	Pin 78-pole Gx: G1/G2/G3
HT1562Gx	Socket 15-pole Gx: G1/G2/G3
HT2662Gx	Socket 26-pole Gx: G1/G2/G3
HT4462Gx	Socket 44-pole Gx: G1/G2/G3
HT6262Gx	Socket 62-pole Gx: G1/G2/G3
HT7862Gx	Socket 78-pole Gx: G1/G2/G3

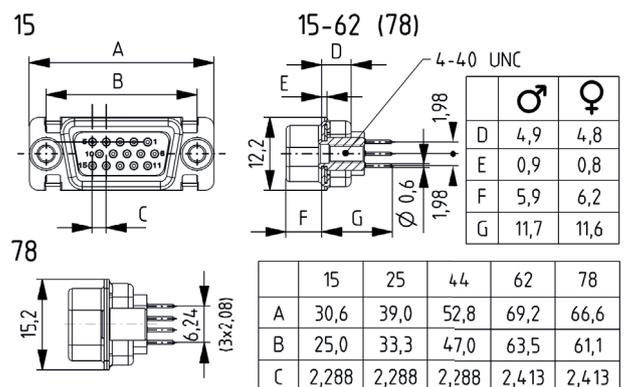


High Density Boardlock solder pin 180°

With machined contacts

- Boardlock: fastening clip and spacer with threads in one
- Boardlock: fastening clip and spacer with threads in one
- Safe and efficient board assembly with snap-in clip
- Effective grounding due to solid mounting bolts
- High-quality, precisely machined clip bolts
- Machined contacts completely gold-plated over Ni
- High current carrying capacity due to machined contacts
- Thermoplast UL 94-V0

Dimensions



Technical data (mutual data on pages 81 & 90)

Current carrying capacity	3A
R contact /R insulation	≤20 mΩ/ ≥5 GΩ
Test voltage	1 KV / AC
Temperature range	-55° C to +125° C

Order information

BL4HDT1552Gx	Pin 15-pole Gx: G1/G2/G3
BL4HDT2652Gx	Pin 26-pole Gx: G1/G2/G3
BL4HDT4452Gx	Pin 44-pole Gx: G1/G2/G3
BL4HDT6252Gx	Pin 62-pole Gx: G1/G2/G3
BL4HDT7852Gx	Pin 78-pole Gx: G1/G2/G3
BL4HT1562Gx	Socket 15-pole Gx: G1/G2/G3
BL4HT2662Gx	Socket 26-pole Gx: G1/G2/G3
BL4HT4462Gx	Socket 44-pole Gx: G1/G2/G3
BL4HT6262Gx	Socket 62-pole Gx: G1/G2/G3
BL4HT7862Gx	Socket 78-pole Gx: G1/G2/G3

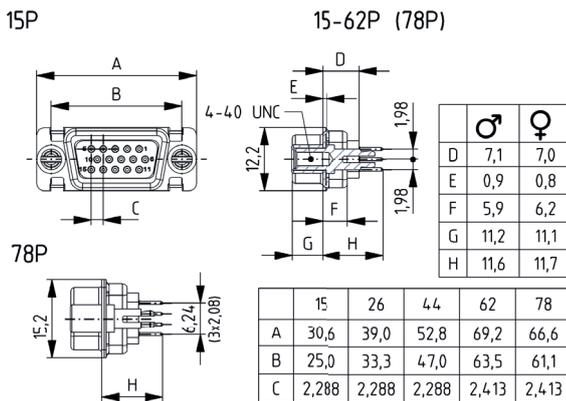


High Density Combilock solder pin 180°

With machined contacts

- Fastening clip, spacer and threaded bolt in one
- Effective grounding with massive Combilock bolt
- Safe and efficient board assembly with snap-in clip
- High quality, precisely machined clip bolts
- Machined contacts completely gold-plated over Ni
- Thread UNC or M3
- Thermoplast UL 94 V-0

Dimensions



Technical data (mutual data on pages 81 & 90)

Current carrying capacity	3A
R contact /R insulation	≤20 mΩ/ ≥5 GΩ
Test voltage	1 KV / AC
Temperature range	-55° C to +125° C

Order information

B4HDT1552Gx	Pin 15-pole Gx: G1/G2/G3
B4HDT2652Gx	Pin 26-pole Gx: G1/G2/G3
B4HDT4452Gx	Pin 44-pole Gx: G1/G2/G3
B4HDT6252Gx	Pin 62-pole Gx: G1/G2/G3
B4HDT7852Gx	Pin 78-pole Gx: G1/G2/G3
B4HT1562Gx	Socket 15-pole Gx: G1/G2/G3
B4HT2662Gx	Socket 26-pole Gx: G1/G2/G3
B4HT4462Gx	Socket 44-pole Gx: G1/G2/G3
B4HT6262Gx	Socket 62-pole Gx: G1/G2/G3
B4HT7862Gx	Socket 78-pole Gx: G1/G2/G3

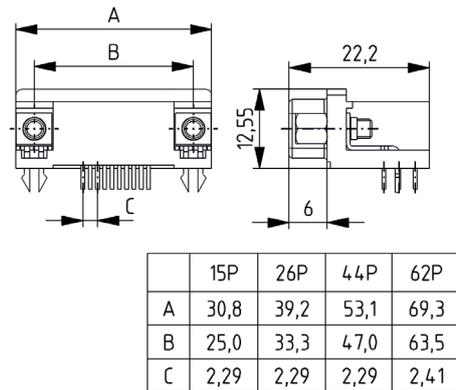


High Density solder pin 90°

With stamped contacts

- High Density connectors offer a ca. 60% higher contact density than Standard D-Sub connectors
- Stamped, selectively refined contacts in quality class 3
- Mounted with plastic bracket, grounding clip and UNC 4-40 thread
- Tin-plated metal housing
- Thermoplast UL 94 V-0

Dimensions



Technical data (mutual data on pages 81 & 90)

Current carrying capacity	1 A
R contact /R insulation	≤30 mΩ/ ≥1 GΩ
Test voltage	1 KV / AC
Temperature range	-55° C to +125° C

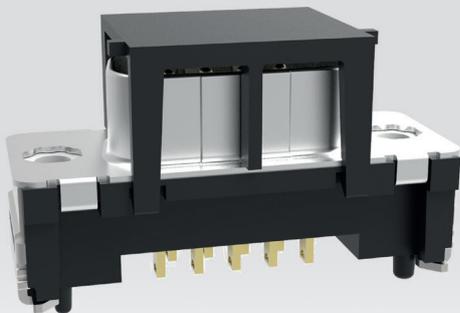
Order information

HDT1556G3	Pin 15-pole UNC
HDT2656G3	Pin 26-pole UNC
HDT4456G3	Pin 44-pole UNC
HDT6256G3	Pin 62-pole UNC
HDT7856G3	Pin 78-pole UNC
HT1566G3	Socket 15-pole UNC
HT2666G3	Socket 26-pole UNC
HT4466G3	Socket 44-pole UNC
HT6266G3	Socket 62-pole UNC
HT7866G3	Socket 78-pole UNC

TMC

High Performance PCB D-Sub

D-Sub



With 4 connection types suitable for every application

Pressfit: For use in backplanes and PCBs
with solderless termination

SMT: For applications in modern printed circuit board applications
with fully automatic SMT assembly and soldering process

THR: Cost reduction through redesign of THT solutions
for the fully automatic SMT assembly and soldering process

THT: For standard designs in the wave soldering process with different
mounting options

Technical data

Nominal signal current	9:5,7 A / 15:4,8 A / 25 :4,4 A / 37:3,9 A
Test voltage	1 KV / AC
Contact resistance	≤ 25 mΩ
Insulation resistance	≥ 5 GΩ
Creepage and clearance	≥ 0,9 mm nach VDE 0110
Mating force max.	9:30 N / 15:50 N / 25:83 N / 37: 123 N
Unmating force min.	9:3,3 N / 15:4,5 N / 25:7,8 N / 37: 11 N
Unmating force max.	9:20 N / 15:50 N / 25:56 N / 37: 82 N
Temperature range	-55 °C bis +125 °C
Mechanical lifetime	≥ 250 mating cycles
Insulator	Thermoplast UL 94-VO
Contacts	Cu alloy mating area gold-plated / termination area tin-plated
Metal bracket	Cu alloy tin-plated
Metallgehäuse	Steel tin-plated
UL approval	E465059

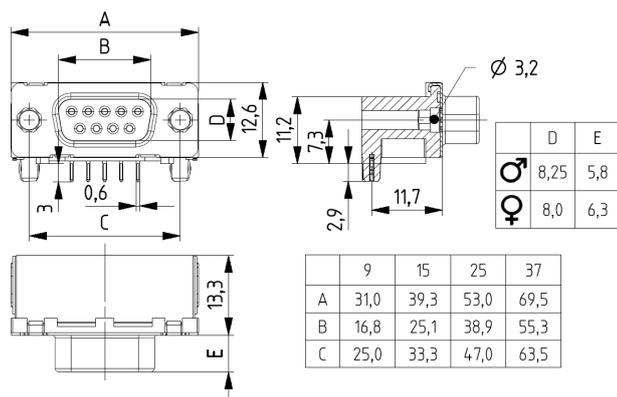


TMC D-Sub Pressfit 90 ° Standard through hole

Installation height 7.3 mm

- Design according to IEC 802-3 (DIN 41 652)
- Standard with installation height 7.3 mm
- Angled Pressfit connection
- Certified elastic pressfit zone
- Gripper surface integrated for automatic pick & place- Through hole \varnothing 3.2
- Types of pin and socket
- Pole number: 9/15/15/37
- UL approval

Dimensions



Technical data (mutual data on pages 81 & 98)

Current rating	3,5 A
R Contact /R Insulation	$\leq 25 \text{ m}\Omega / \geq 5 \text{ G}\Omega$
Test voltage	1 KV / AC
Temperature range	-55° C bis +125° C

Order information

174424	TMCP 9 EE 8-ST 237 E2 094
174425	TMCP 15 EE 8-ST 237 E2 094
174426	TMCP 25 EE 8-ST 237 E2 094
174427	TMCP 37 EE 8-ST 237 E2 094
174448	TMCS 9 EE 8-ST 237 E2 094
174449	TMCS 15 EE 8-ST 237 E2 094
174450	TMCS 25 EE 8-ST 237 E2 094
174451	TMCS 37 EE 8-ST 237 E2 094

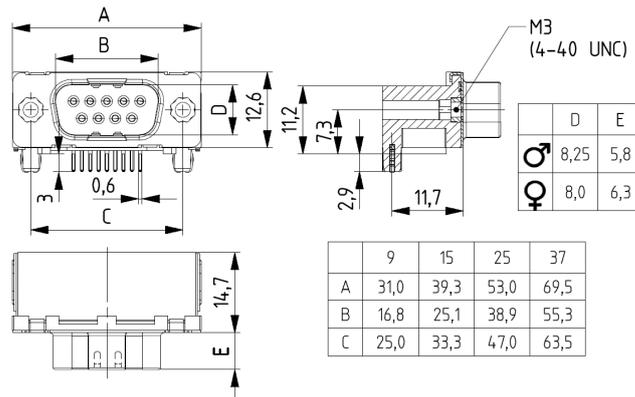


TMC D-Sub Pressfit 90° Standard thread

Installation height 7.3 mm

- Design according to IEC 802-3 (DIN 41 652)
- Standard with installation height 7.3 mm
- Angled Pressfit connection
- Thread UNC 4-40 or M3
- Types of pin and socket
- Pole number: 9/15/25/37
- UL approval

Dimensions



Technical data (mutual data on pages 81 & 98)

Current rating	3,5 A
R Contact /R Insulation	$\leq 25 \text{ m}\Omega / \geq 5 \text{ G}\Omega$
Test voltage	1 KV / AC
Temperature range	-55° C bis +125° C

Order information

154208	TMCP 9 EE 8-ST 237 E2 VM #4 094
154192	TMCP 15 EE 8-ST 237 E2 VM #4 094
154196	TMCP 25 EE 8-ST 237 E2 VM #4 094
154200	TMCP 37 EE 8-ST 237 E2 VM #4 094
154236	TMCS 9 EE 8-ST 237 E2 VM #4 094
154240	TMCS 15 EE 8-ST 8-ST 237 E2 VM #4 094
154244	TMCS 25 EE 8-ST 8-ST 237 E2 VM #4 094
154248	TMCS 37 EE 8-ST 237 E2 VM #4 094

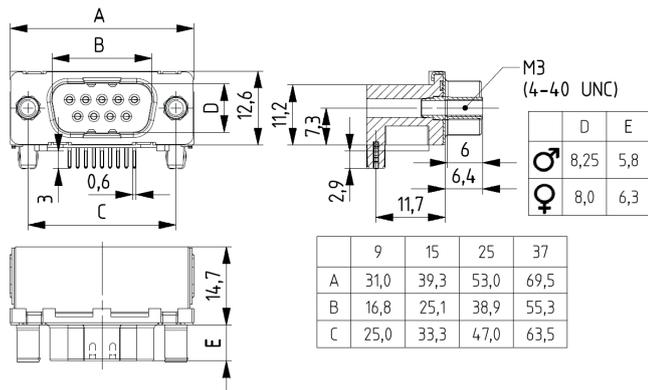


TMC D-Sub Pressfit 90 ° Standard threaded bolt

Installation height 7.3 mm

- Design according to IEC 802-3 (DIN 41 652)
- Standard with installation height 7.3 mm
- Angled Pressfit connection
- Elastic certified Pressfit zone
- Threaded bolt UNC 4-40 or M3
- Pole number: 9/15/15/37
- UL approval
- Tray packaging

Dimensions



Technical data (mutual data on pages 81 & 98)

Current rating	3,5 A
R Contact /R Insulation	≤25 mΩ/ ≥5 GΩ
Test voltage	1 KV / AC
Temperature range	-55° C bis +125° C

Order information

154222	TMCP 9 EE 8-ST 237 E2 VK #4
154226	TMCP 15 EE 8-ST 237 E2 VK #4
154230	TMCP 25 EE 8-ST 237 E2 VK #4
154234	TMCP 37 EE 8-ST 237 E2 VK #4
154270	TMCS 9 EE 8-ST 237 E2 VK #4
154274	TMCS 15 EE 8-ST 237 E2 VK #4
154278	TMCS 25 EE 8-ST 237 E2 VK #4
154282	TMCS 37 EE 8-ST 237 E2 VK #4

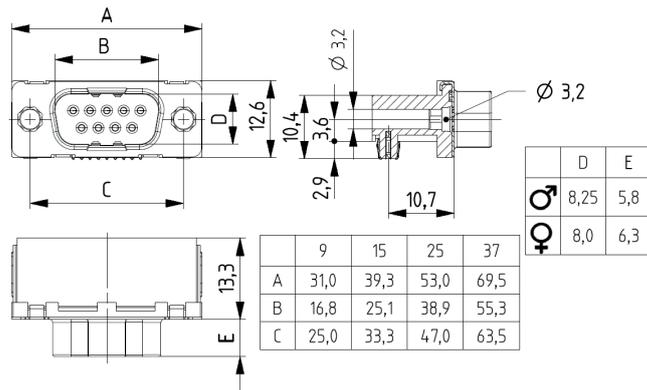


TMC D-Sub Pressfit 90° Eurostyle through hole

Installation height 3.6 mm

- Design according to IEC 802-3 (DIN 41 652)
- Eurostyle with installation height 3.6 mm
- Angled Pressfit connection
- Certified elastic pressfit zone
- Gripper surface integrated for automatic pick & place
- Through hole Ø 3.2
- Pole number: 9/15/15/37
- UL approval

Dimensions



Technical data (mutual data on pages 81 & 98)

Current rating	3,5 A
R Contact /R Insulation	≤25 mΩ/ ≥5 GΩ
Test voltage	1 KV / AC
Temperature range	-55° C bis +125° C

Order information

174412	TMCP 9 EE 8-EU 237 E2 094
174413	TMCP 15 EE 8-EU 237 E2 094
174414	TMCP 25 EE 8-EU 237 E2 094
174415	TMCP 37 EE 8-EU 237 E2 094
174436	TMCS 9 EE 8-EU 237 E2 094
174437	TMCS 15 EE 8-EU 237 E2 094
174438	TMCS 25 EE 8-EU 237 E2 094
174439	TMCS 37 EE 8-EU 237 E2 094

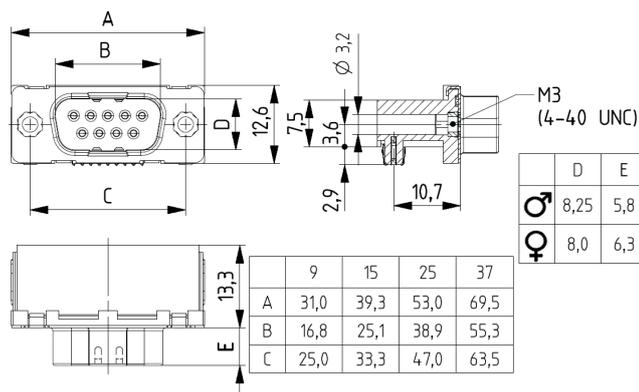


TMC D-Sub Pressfit 90° Eurostyle thread

Installation height 3.6 mm

- Design according to IEC 802-3 (DIN 41 652)
- Eurostyle with installation height 3.6 mm
- Angled Pressfit connection
- Elastic certified insertion zone
- Gripper surface integrated for automatic pick & place
- Thread UNC 4-40 or M3
- Pole number: 9/15/15/37
- UL approval

Dimensions



Technical data (mutual data on pages 81 & 98)

Current rating	3,5 A
R Contact /R Insulation	≤25 mΩ/ ≥5 GΩ
Test voltage	1 KV / AC
Temperature range	-55° C bis +125° C

Order information

154124	TMCP 9 EE 8-EU 237 E2 VM #4
154128	TMCP 15 EE 8-EU 237 E2 VM #4
154132	TMCP 25 EE 8-EU 237 E2 VM #4
154136	TMCP 37 EE 8-EU 237 E2 VM #4
154172	TMCS 9 EE 8-EU 237 E2 VM #4
154176	TMCS 15 EE 8-EU 237 E2 VM #4
154180	TMCS 25 EE 8-EU 237 E2 VM #4
154184	TMCS 37 EE 8-EU 237 E2 VM #4

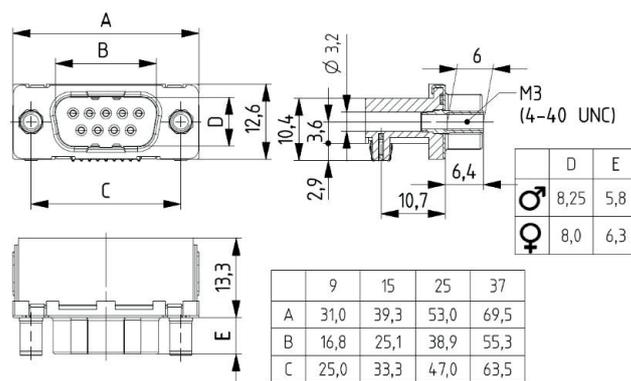


TMC D-Sub Pressfit 90° Eurostyle threaded bolt

Installation height 3.6 mm

- Design according to IEC 802-3 (DIN 41 652)
- Eurostyle with installation height 3.6 mm
- Right angle Pressfit connection
- Elastic certified pressfit zone
- Pressfit clip for secure fixing
- Male and female in size 9/15/25/37
- Threaded bolt UNC 4-40 or M3
- UL approval E465059

Dimensions



Technical data (mutual data on pages 81 & 98)

Current rating	3,5 A
R Contact/R Insulation	≤25 mΩ/ ≥5 GΩ
Test voltage	1 KV / AC
Temperature range	-55° C to +125° C

Order information

154126	TMCP 9 EE 8-EU 237 E2 VK#4
154130	TMCP 15 EE 8-EU 237 E2 VK#4
154134	TMCP 25 EE 8-EU 237 E2 VK#4
154138	TMCP 37 EE 8-EU 237 E2 VK#4
154174	TMCS 9 EE 8-EU 237 E2 VK#4
154178	TMCS 15 EE 8-EU 237 E2 VK#4
154182	TMCS 25 EE 8-EU 237 E2 VK#4
154186	TMCS 37 EE 8-EU 237 E2 VK#4

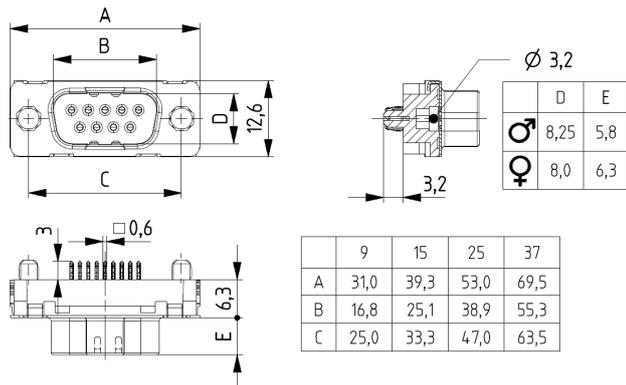


TMC D-Sub Pressfit 180 ° Standard through hole

Installation height 6.3 mm

- Design according to IEC 802-3 (DIN 41 652)
- Standard with installation height 6.3 mm
- Straight Pressfit connection
- Elastic certified pressfit zone
- Strain relief and grounding clip with Pressfit connection
- Through hole \varnothing 3.2
- Pole number: 9/15/25/37
- UL approval

Dimensions



Technical data (mutual data on pages 81 & 98)

Current rating	3,5 A
R Contact /R Insulation	$\leq 25 \text{ m}\Omega / \geq 5 \text{ G}\Omega$
Test voltage	1 KV / AC
Temperature range	-55° C bis +125° C

Order information

194057	TMCP 9 EE 3,0 8-63 237 E2 172
194370	TMCP 15 EE 3,0 8-63 237 E2 172
194375	TMCP 25 EE 3,0 8-63 237 E2 172
194113	TMCP 37 EE 3,0 8-63 237 E2 172
194061	TMCS 9 EE 3,0 8-63 237 E2 172
194380	TMCS 15 EE 3,0 8-63 237 E2 172
194385	TMCS 25 EE 3,0 8-63 237 E2 172
194390	TMCS 37 EE 3,0 8-63 237 E2 172

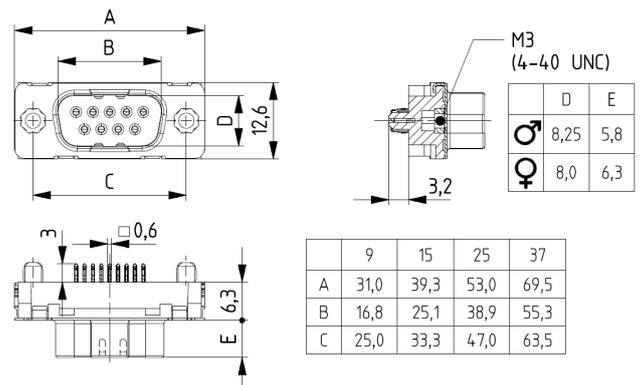


TMC D-Sub Pressfit 180 ° Standard thread

Installation height 6.3 mm

- Design according to IEC 802-3 (DIN 41 652)
- Standard with installation height 6.3 mm
- Straight Pressfit connection
- Certified elastic pressfit zone
- Strain relief and grounding clip with pressfit connection
- Thread UNC 4-40 or M3
- Pole number: 9/15/25/37
- UL approval

Dimensions



Technical data (mutual data on pages 81 & 98)

Current rating	3,5 A
R Contact /R Insulation	$\leq 25 \text{ m}\Omega / \geq 5 \text{ G}\Omega$
Test voltage	1 KV / AC
Temperature range	-55° C bis +125° C

Order information

194055	TMCP 9 EE 3,0 8-63 * 237 E2 * VM#4 * TRAY J 0
194373	TMCP 15 EE 3,0 8-63 * 237 E2 * VM#4 * TRAY J 0
194378	TMCP 25 EE 3,0 8-63 * 237 E2 * VM#4 * TRAY J 0
194115	TMCP 37 EE 3,0 8-63 * 237 E2 * VM#4 * TRAY J 0
194059	TMCS 9 EE 3,0 8-63 * 237 E2 * VM#4 * TRAY J 0
194383	TMCS 15 EE 3,0 8-63 * 237 E2 * VM#4 * TRAY J 0
194388	TMCS 25 EE 3,0 8-63 * 237 E2 * VM#4 * TRAY J 0
194395	TMCS 37 EE 3,0 8-63 * 237 E2 * VM#4 * TRAY J 0

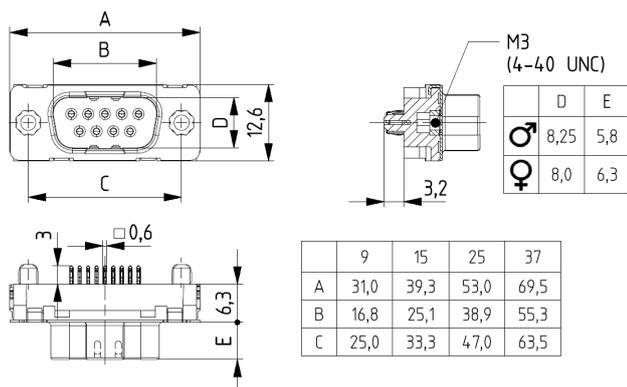


TMC D-Sub Pressfit 180 ° standard threaded bolt

Installation height 6.3 mm

- Design according to IEC 802-3 (DIN 41 652)
- Standard with installation height 6.3 mm
- Straight Pressfit connection
- Elastic certified insertion zone
- Strain relief and grounding clip with Pressfit connection
- Threaded bolt UNC 4-40 or M3
- Pole number: 9/15/25/37
- UL approval

Dimensions



Technical data (mutual data on pages 81 & 98)

Current rating	3,5 A
R Contact /R Insulation	≤25 mΩ/ ≥5 GΩ
Test voltage	1 KV / AC
Temperature range	-55° C bis +125° C

Order information

194055	TMCP 9 EE 3,0 8-63 237 E2 VM#4
194373	TMCP 15 EE 3,0 8-63 237 E2 VM#4
194378	TMCP 25 EE 3,0 8-63 237 E2 VM#4
194115	TMCP 37 EE 3,0 8-63 237 E2 VM#4
194059	TMCS 9 EE 3,0 8-63 237 E2 VM#4
194383	TMCS 15 EE 3,0 8-63 237 E2 VM#4
194388	TMCS 25 EE 3,0 8-63 237 E2 VM#4
194395	TMCS 37 EE 3,0 8-63 237 E2 VM#4

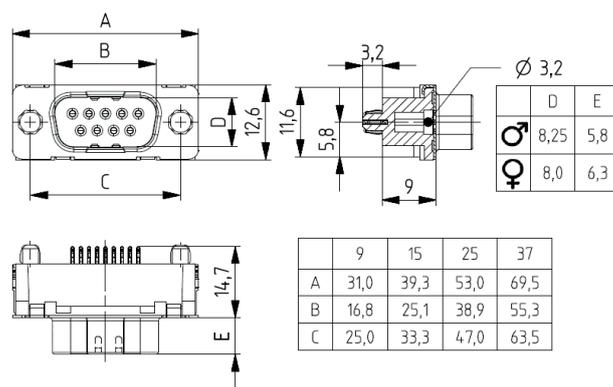


TMC D-Sub Pressfit 180 ° High through hole

Installation height 9.0 mm

- Design according to IEC 802-3 (DIN 41 652)
- High with installation height 9.0 mm
- Straight pressfit connection
- Elastic certified pressfit zone
- Strain relief and grounding clip with Pressfit connection
- Through hole Ø 3.2
- Pole number: 9/15/25/37
- UL approval

Dimensions



Technical data (mutual data on pages 81 & 98)

Current rating	3,5 A
R Contact /R Insulation	≤25 mΩ/ ≥5 GΩ
Test voltage	1 KV / AC
Temperature range	-55° C bis +125° C

Order information

194897	TMCP 9 EE 3,0 8-63 237 E2 172
194902	TMCP 15 EE 3,0 8-63 237 E2 172
194907	TMCP 25 EE 3,0 8-63 237 E2 172
194912	TMCP 37 EE 3,0 8-63 237 E2 172
194917	TMCS 9 EE 3,0 8-63 237 E2 172
194922	TMCS 15 EE 3,0 8-63 237 E2 172
194927	TMCS 25 EE 3,0 8-63 237 E2 172
194932	TMCS 37 EE 3,0 8-63 237 E2 172

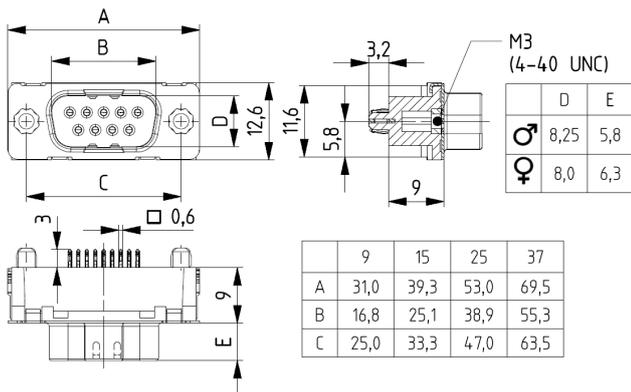


TMC D-Sub Pressfit 180 ° High Thread

Installation height 9.0 mm

- Design according to IEC 802-3 (DIN 41 652)
- High with installation height 9.0 mm
- Straight pressfit connection
- Elastic certified pressfit zone
- Strain relief and grounding clip with Pressfit connection
- Pressfit Clip absorbs forces when inserting and pulling
- Thread UNC 4-40 or M3
- Types of pin and socket

Dimensions



Technical data (mutual data on pages 81 & 98)

Current rating	3,5 A
R Contact /R Insulation	≤25 mΩ/ ≥5 GΩ
Test voltage	1 KV / AC
Temperature range	-55° C bis +125° C

Order information

194899	TMCP 9 EE 3,0 8-90 237 E2 VM#4
194904	TMCP 15 EE 3,0 8-90 237 E2 VM#4
194909	TMCP 25 EE 3,0 8-90 237 E2 VM#4
194913	TMCP 37 EE 3,0 8-90 237 E2 VM#4
194919	TMCS 9 EE 3,0 8-90 237 E2 VM#4
194924	TMCS 15 EE 3,0 8-90 237 E2 VM#4
194929	TMCS 25 EE 3,0 8-90 237 E2 VM#4
194934	TMCS 37 EE 3,0 8-90 237 E2 VM#4

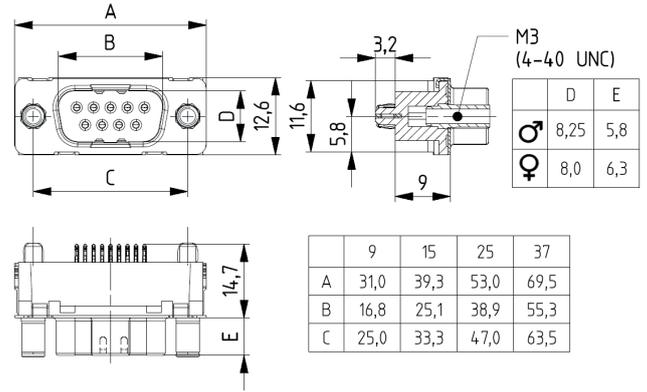


TMC D-Sub Pressfit 180 ° High threaded bolt

Installation height 9.0 mm

- Design according to IEC 802-3 (DIN 41 652)
- High with installation height 9.0 mm
- Straight pressfit connection
- Certified elastic pressfit zone
- Strain relief and grounding clip with pressfit connection
- Thread UNC 4-40 or M3
- Pole number: 9/15/25/37
- UL approval

Dimensions



Technical data (mutual data on pages 81 & 98)

Current rating	3,5 A
R Contact /R Insulation	≤25 mΩ/ ≥5 GΩ
Test voltage	1 KV / AC
Temperature range	-55° C bis +125° C

Order information

194899	TMCP 9 EE 3,0 8-90 * 237 E2 * VK#4 * TRAY J 0
194904	TMCP 15 EE 3,0 8-90 * 237 E2 * VK#4 * TRAY J 0
194909	TMCP 25 EE 3,0 8-90 * 237 E2 * VK#4 * TRAY J 0
194913	TMCP 37 EE 3,0 8-90 * 237 E2 * VK#4 * TRAY J 0
194919	TMCS 9 EE 3,0 8-90* 237 E2 * VK#4 * TRAY J 0
194924	TMCS 15 EE 3,0 8-90 * 237 E2 * VK#4 * TRAY J 0
194929	TMCS 25 EE 3,0 8-90 * 237 E2 * VK#4 * TRAY J 0
194934	TMCS 37 EE 3,0 8-90 * 237 E2 * VK#4 * TRAY J 0

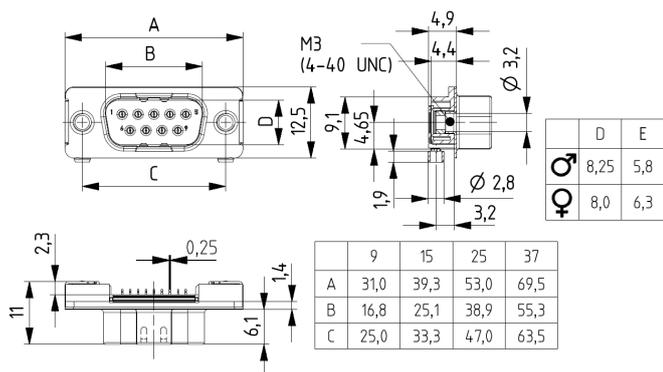


TMC D-Sub SMT Slimline 90°

Ultrathin design 9 poles

- Mating face according to IEC 802-3 (DIN 41 652)
- Installation width 4.65 mm saves 67% of PCB area
- Dual-leaf spring contact for maximum contact safety
- Right angle SMT connection
- Suitable for all common SMT soldering processes
- Additional solder anchors absorb mechanical stress
- Automatic pick & place due to integrated gripper surface
- Tape & reel packaging

Dimensions



Technical data (mutual data on pages 81 & 98)

Current rating	4 A
R Contact/R Insulation	≤25 mΩ/ ≥5 GΩ
Test voltage	1 KV / AC
Temperature range	-55° C bis +125° C

Order information

494137	TMCP 9 SMD * 8-SL * 237 E-SL
484836	TMCP 9 SMD * 8-SL * 237 E-SL *** VM #4
484835	TMCP 9 SMD * 8-SL * 237 E-SL *** VM M3
494138	TMCS 9 SMD * 8-SL * 237 E-SL
484834	TMCS 9 SMD * 8-SL * 237 E-SL *** VM #4
484833	TMCS 9 SMD * 8-SL * 237 E-SL *** VM M3

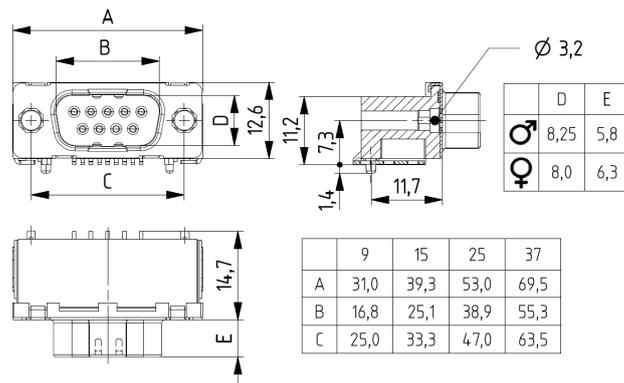


TMC D-Sub SMT 90° Standard Through Hole

Installation height 7.3 mm

- Design acc. to IEC 802-3 (DIN 41 652)
- Standard with installation height 7,3 mm
- Right angle SMT connection
- Design suitable for all common SMT soldering processes
- Gripper surface integrated for automatic pick&place
- Through hole Ø 3,2
- Types of pin and socket in pole number: 9/15/15/37
- UL approval

Dimensions



Technical data (mutual data on pages 81 & 98)

Current rating	3,5 A
R Contact/R Insulation	≤25 mΩ/ ≥5 GΩ
Test voltage	1 KV / AC
Temperature range	-55° C bis +125° C

Order information

174416	TMCP 9 SMD * 8-ST * 237 E2 * 094 * TRAY J 0
174417	TMCP 15 SMD * 8-ST * 237 E2 * 094 * TRAY J 0
174418	TMCP 25 SMD * 8-ST * 237 E2 * 094 * TRAY J 0
174419	TMCP 37 SMD * 8-ST * 237 E2 * 094 * TRAY J 0
174440	TMCS 9 SMD * 8-ST * 237 E2 * 094 * TRAY J 0
117441	TMCS 15 SMD * 8-ST * 237 E2 * 094 * TRAY J 0
174442	TMCS 25 SMD * 8-ST * 237 E2 * 094 * TRAY J 0
174443	TMCS 37 SMD * 8-ST * 237 E2 * 094 * TRAY J 0

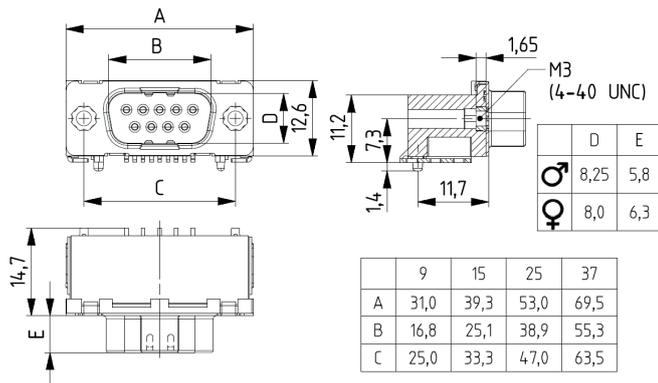


TMC D-Sub SMT 90° Standard Thread

Installation height 7.3 mm

- Design according to IEC 802-3 (DIN 41 652)
- Standard with installation height 7.3 mm
- Right angle SMT connection
- Design suitable for all common SMT soldering processes
- Gripper surface integrated for automatic pick & place
- Thread UNC 4-40 or M3
- Pole number: 9/15/15/37
- UL approval

Dimensions



Technical data (mutual data on pages 81 & 98)

Current rating	3,5 A
R Contact/R Insulation	≤25 mΩ/ ≥5 GΩ
Test voltage	1 KV / AC
Temperature range	-55° C bis +125° C

Order information

154188	TMCP 9 SMD 8-ST 237 E2 VM #4 094 TRAY
154192	TMCP 15 SMD 8-ST 237 E2 VM #4 094 TRAY
154196	TMCP 25 SMD 8-ST 237 E2 VM #4 094 TRAY
154200	TMCP 37 SMD 8-ST 237 E2 VM #4 094 TRAY
154236	TMCS 9 SMD 8-ST 237 E2 VM #4 094 TRAY
154240	TMCS 15 SMD 8-ST 237 E2 VM #4 094 TRAY
154244	TMCS 25 SMD 8-ST 237 E2 VM #4 094 TRAY
154248	TMCS 37 SMD 8-ST 237 E2 VM #4 094 TRAY

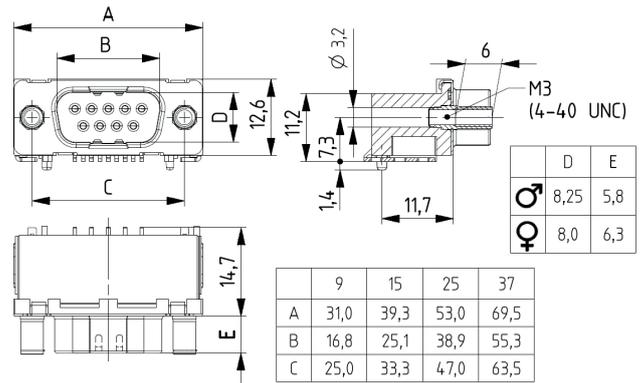


TMC D-Sub SMT 90° Standard Threaded Bolt

Installation height 7.3 mm

- Design according to IEC 802-3 (DIN 41 652)
- Standard with installation height 7.3 mm
- Angled SMT connection
- Design suitable for all common SMT soldering processes
- Gripper surface integrated for automatic pick & place
- Threaded bolt UNC 4-40 or M3
- Pole number: 9/15/15/37
- UL approval

Dimensions



Technical data (mutual data on pages 81 & 98)

Current rating	3,5 A
R Contact/R Insulation	≤25 mΩ/ ≥5 GΩ
Test voltage	1 KV / AC
Temperature range	-55° C bis +125° C

Order information

154190	TMCP 9 SMD 8-ST 237 E2 VK #4 094 TRAY
154194	TMCP 15 SMD 8-ST 237 E2 VK #4 094 TRAY
154198	TMCP 25 SMD 8-ST 237 E2 VK #4 094 TRAY
154202	TMCP 37 SMD 8-ST 237 E2 VK #4 094 TRAY
154238	TMCS 9 SMD 8-ST 237 E2 VK #4 094 TRAY
154242	TMCS 15 SMD 8-ST 237 E2 VK #4 094 TRAY
154246	TMCS 25 SMD 8-ST 237 E2 VK #4 094 TRAY
154250	TMCS 37 SMD 8-ST 237 E2 VK #4 094 TRAY

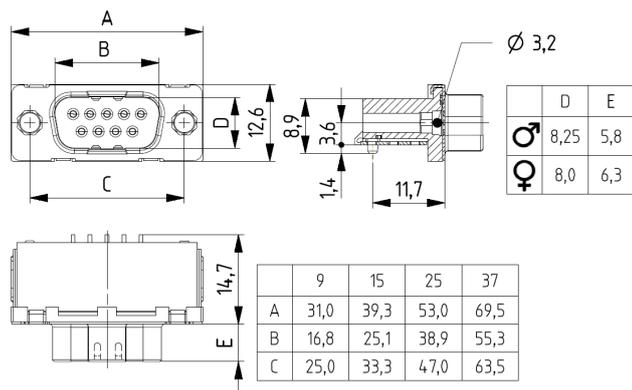


TMC D-Sub SMT 90° Eurostyle Through Hole

Installation height 3.6 mm

- Design according to IEC 802-3 (DIN 41 652)
- Eurostyle with installation height 3.6 mm
- Angled SMT connection
- Design suitable for all common SMT soldering processes
- Gripper surface integrated for automatic pick & place
- Through hole \varnothing 3,2
- Pole number: 9/15/15/37
- UL approval

Dimensions



Technical data (mutual data on pages 81 & 98)

Current rating	3,5 A
R Contact/R Insulation	$\leq 25 \text{ m}\Omega / \geq 5 \text{ G}\Omega$
Test voltage	1 KV / AC
Temperature range	-55° C bis +125° C

Order information

174501	TMCP 9 SMD * 8-EU * 237 E2 * 094 * TRAY J 0
117405	TMCP 15 SMD * 8-EU * 237 E2 * 094 * TRAY J 0
174406	TMCP 25 SMD * 8-EU * 237 E2 * 094 * TRAY J 0
174407	TMCP 37 SMD * 8-EU * 237 E2 * 094 * TRAY J 0
174428	TMCS 9 SMD * 8-EU * 237 E2 * 094 * TRAY J 0
174429	TMCS 15 SMD * 8-EU * 237 E2 * 094 * TRAY J 0
174430	TMCS 25 SMD * 8-EU * 237 E2 * 094 * TRAY J 0
174431	TMCS 37 SMD * 8-EU * 237 E2 * 094 * TRAY J 0

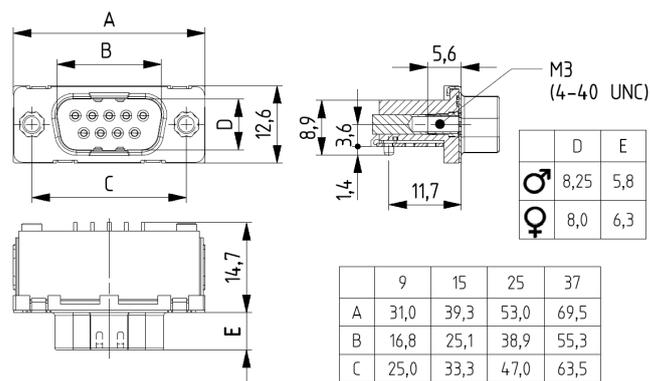


TMC D-Sub SMT 90° Eurostyle Thread

Installation height 3.6 mm

- Design according to IEC 802-3 (DIN 41 652)
- Eurostyle with installation height 3.6 mm
- Angled SMT connection
- Design suitable for all common SMT soldering processes
- Gripper surface integrated for automatic pick & place
- Thread UNC 4-40 or M3
- Pole number: 9/15/15/37
- UL approval

Dimensions



Technical data (mutual data on pages 81 & 98)

Current rating	3,5 A
R Contact/R Insulation	$\leq 25 \text{ m}\Omega / \geq 5 \text{ G}\Omega$
Test voltage	1 KV / AC
Temperature range	-55° C bis +125° C

Order information

204769	TMCP 9 SMD 8-EU 237 E2* VM #4 094 TRAY
204770	TMCP 15 SMD 8-EU 237 E2* VM #4 094 TRAY
204771	TMCP 25 SMD 8-EU 237 E2* VM #4 094 TRAY
204772	TMCP 37 SMD 8-EU 237 E2* VM #4 094 TRAY
204773	TMCS 9 SMD 8-EU 237 E2* VM #4 094 TRAY
204774	TMCS 15 SMD 8-EU 237 E2* VM #4 094 TRAY
204775	TMCS 25 SMD 8-EU 237 E2* VM #4 094 TRAY
204776	TMCS 37 SMD 8-EU 237 E2* VM #4 094 TRAY
214776	TMCP 9 SMD 8-EU 237 E2* VM #4 094 T&R
214647	TMCS 9 SMD 8-EU 237 E2* VM #4 094 T&R

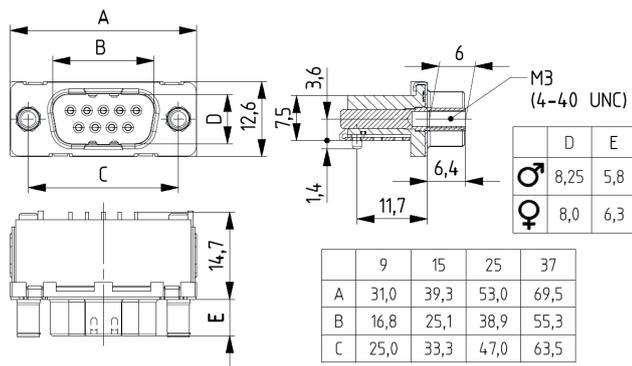


TMC D-Sub SMT 90° Eurostyle Threaded Bolt

Installation height 3.6 mm

- Design according to IEC 802-3 (DIN 41 652)
- Eurostyle with installation height 3.6 mm
- Angled SMT connection
- Design suitable for all common SMT soldering processes
- Gripper surface integrated for automatic pick & place
- Threaded bolt UNC 4-40 or M3
- Pole number: 9/15/15/37
- UL approval

Dimensions



Technical data (mutual data on pages 81 & 98)

Current rating	3,5 A
R Contact/R Insulation	≤25 mΩ/ ≥5 GΩ
Test voltage	1 KV / AC
Temperature range	-55° C bis +125° C

Order information

154094	TMCP 9 SMD 8-EU 237 E2 VKL #4 094 TRAY
154098	TMCP 15 SMD 8-EU 237 E2 VKL #4 094 TRAY
154102	TMCP 25 SMD 8-EU 237 E2 VKL #4 094 TRAY
154106	TMCP 37 SMD 8-EU 237 E2 VKL #4 094 TRAY
154142	TMCS 9 SMD 8-EU 237 E2 VKL #4 094 TRAY
154146	TMCS 15 SMD 8-EU 237 E2 VKL #4 094 TRAY
154150	TMCS 25 SMD 8-EU 237 E2 VKL #4 094 TRAY
154154	TMCS 37 SMD 8-EU 237 E2 VKL #4 094 TRAY

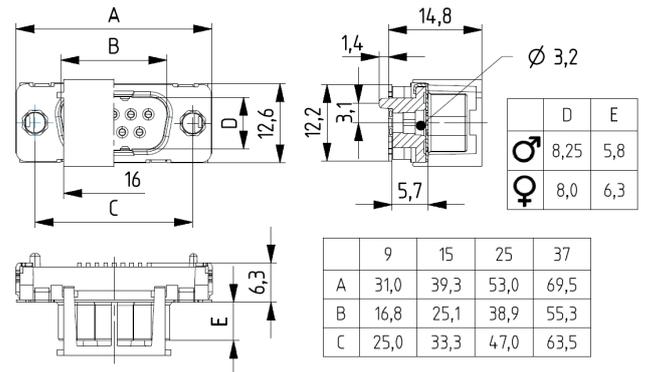


TMC D-Sub SMT 180° Standard Through Hole

Installation height 6.3 mm

- Design according to IEC 802-3 (DIN 41 652)
- Standard with installation height 6.3 mm
- Straight SMT connection
- Design suitable for all common SMT soldering processes
- Vacuum pick-up cap pre-equipped for automatic pick & place
- Through hole Ø 3,2
- Pole number: 9/15/25/37
- UL approval

Dimensions



Technical data (mutual data on pages 81 & 98)

Current rating	3,5 A
R Contact/R Insulation	≤25 mΩ/ ≥5 GΩ
Test voltage	1 KV / AC
Temperature range	-55° C bis +125° C

Order information

174385	TMCP 9 SMD * 8-63 * 237 E2 112 TRAY J 0
174386	TMCP 15 SMD * 8-63 * 237 E2 112 TRAY J 0
174387	TMCP 25 SMD * 8-63 * 237 E2 112 TRAY J 0
174388	TMCP 37 SMD * 8-63 * 237 E2 112 TRAY J 0
174389	TMCS 9 SMD * 8-63 * 237 E2 112 TRAY J 0
174390	TMCS 15 SMD * 8-63 * 237 E2 112 TRAY J 0
174391	TMCS 25 SMD * 8-63 * 237 E2 112 TRAY J 0
174392	TMCS 37 SMD * 8-63 * 237 E2 112 TRAY J 0

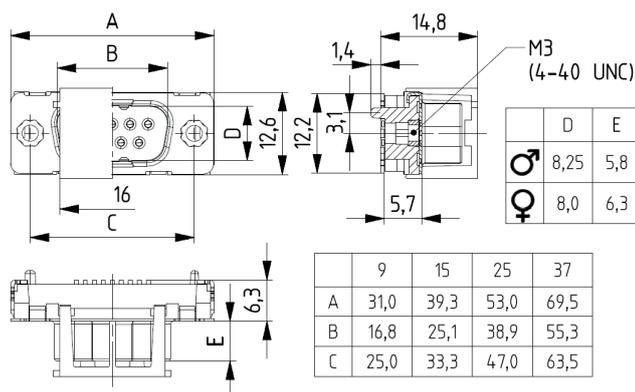


TMC D-Sub SMT 180° Standard Thread

Installation height 6.3 mm

- Design according to IEC 802-3 (DIN 41 652)
- Standard with installation height 6.3 mm
- Straight SMT connection
- Design suitable for all common SMT soldering processes
- Vacuum pick-up cap pre-equipped for automatic pick & place
- Thread UNC 4-40 or M3
- Pole number: 9/15/25/37
- UL approval

Dimensions



Technical data (mutual data on pages 81 & 98)

Current rating	3,5 A
R Contact/R Insulation	≤25 mΩ/ ≥5 GΩ
Test voltage	1 KV / AC
Temperature range	-55° C bis +125° C

Order information

164005	TMCP 9 SMD * 8-63 * 237 E2 * 112 * TRAY J 0
164006	TMCP 15 SMD * 8-63 * 237 E2 * 112 * TRAY J 0
164007	TMCP 25 SMD * 8-63 * 237 E2 * 112 * TRAY J 0
164008	TMCP 37 SMD * 8-63 * 237 E2 * 112 * TRAY J 0
164021	TMCS 9 SMD * 8-63 * 237 E2 * 112 * TRAY J 0
164022	TMCS 15 SMD * 8-63 * 237 E2 * 112 * TRAY J 0
164023	TMCS 25 SMD * 8-63 * 237 E2 * 112 * TRAY J 0
164024	TMCS 37 SMD * 8-63 * 237 E2 * 112 * TRAY J 0

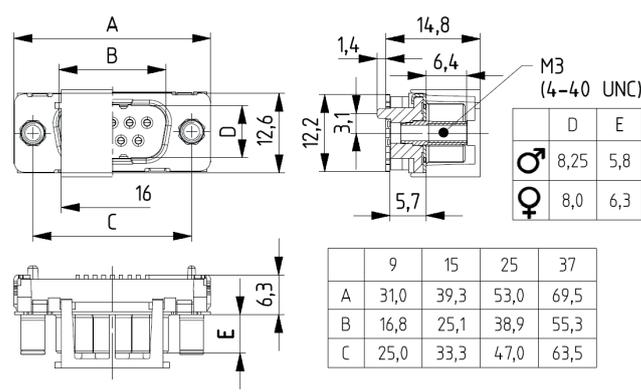


TMC D-Sub SMT 180° Standard Threaded Bolt

Installation height 6,3 mm

- Design according to IEC 802-3 (DIN 41 652)
- Eurostyle with installation height 3.6 mm
- Straight SMT connection
- Design suitable for all common SMT soldering processes
- Tray or tube packing with vacuum pick-up cap pre-equipped
- Threaded bolt UNC 4-40 or M3
- Pole number: 9/15/15/37
- UL approval

Dimensions

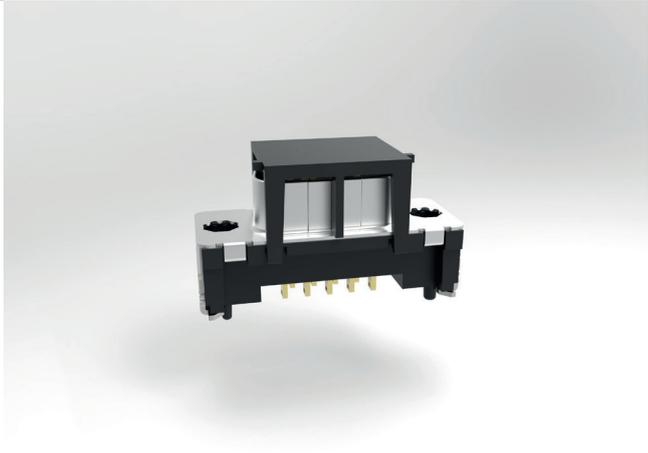


Technical data (mutual data on pages 81 & 98)

Current rating	3,5 A
R Contact/R Insulation	≤25 mΩ/ ≥5 GΩ
Test voltage	1 KV / AC
Temperature range	-55° C bis +125° C

Order information

204263	TMCP 9 SMD * 8-63 * 237 E2 * VK#4 * TRAY J 0
164014	TMCP 15 SMD * 8-63 * 237 E2 * VK#4 * TRAY J 0
164015	TMCP 25 SMD * 8-63 * 237 E2 * VK#4 * TRAY J 0
164016	TMCP 37 SMD * 8-63 * 237 E2 * VK#4 * TRAY J 0
204264	TMCS 9 SMD * 8-63 * 237 E2 * VK#4 * TRAY J 0
164030	TMCS 15 SMD * 8-63 * 237 E2 * VK#4 * TRAY J 0
164031	TMCS 25 SMD * 8-63 * 237 E2 * VK#4 * TRAY J 0
164032	TMCS 37 SMD * 8-63 * 237 E2 * VK#4 * TRAY J 0
194251	TMCP 9 SMD * 8-63 * 237 E2 * VK#4 * TRAY J 0
194271	TMCS 9 SMD * 8-63 * 237 E2 * VK#4 * TRAY J 0

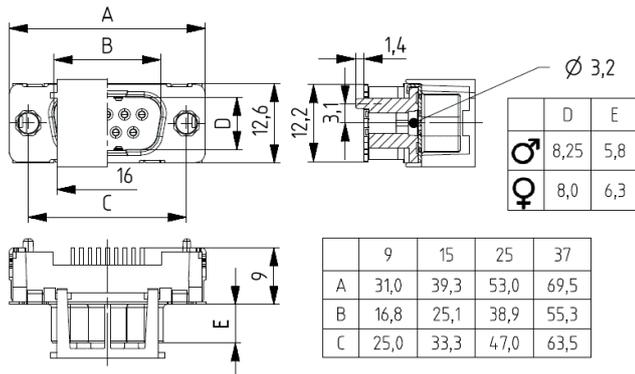


TMC D-Sub SMT 180° High Through Hole

Installation height 9 mm

- Design according to IEC 802-3 (DIN 41 652)
- High with installation height 9 mm
- Straight SMT connection
- Design suitable for all common SMT soldering processes
- Design suitable for all common SMT soldering processes
- Through hole \varnothing 3,2
- Pole number: 9/15/25/37
- UL approval

Dimensions



Technical data (mutual data on pages 81 & 98)

Current rating	3,5 A
R Contact/R Insulation	$\leq 25 \text{ m}\Omega / \geq 5 \text{ G}\Omega$
Test voltage	1 KV / AC
Temperature range	-55° C bis +125° C

Order information

194290	TMCP 9 SMD * 8-90 * 237 E2 * 112 * TRAY J 0
194300	TMCP 15 SMD * 8-90 * 237 E2 * 112 * TRAY J 0
194310	TMCP 25 SMD * 8-90 * 237 E2 * 112 * TRAY J 0
194320	TMCP 37 SMD * 8-90 * 237 E2 * 112 * TRAY J 0
194330	TMCS 9 SMD * 8-90 * 237 E2 * 112 * TRAY J 0
194340	TMCS 15 SMD * 8-90 * 237 E2 * 112 * TRAY J 0
194350	TMCS 25 SMD * 8-90 * 237 E2 * 112 * TRAY J 0
194360	TMCS 37 SMD * 8-90 * 237 E2 * 112 * TRAY J 0

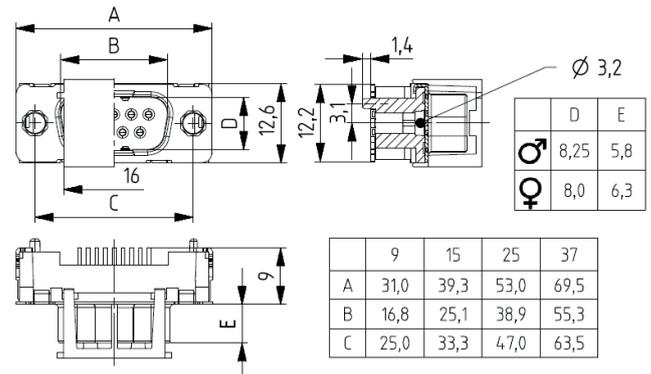


TMC D-Sub SMT 180° High Thread

Installation height 9 mm

- Design according to IEC 802-3 (DIN 41 652)
- High with installation height 9 mm
- Straight SMT connection
- Design suitable for all common SMT soldering processes
- Vacuum pick-up cap pre-equipped for automatic pick & place
- Thread UNC 4-40 or M3
- Pole number: 9/15/25/37
- UL approval

Dimensions

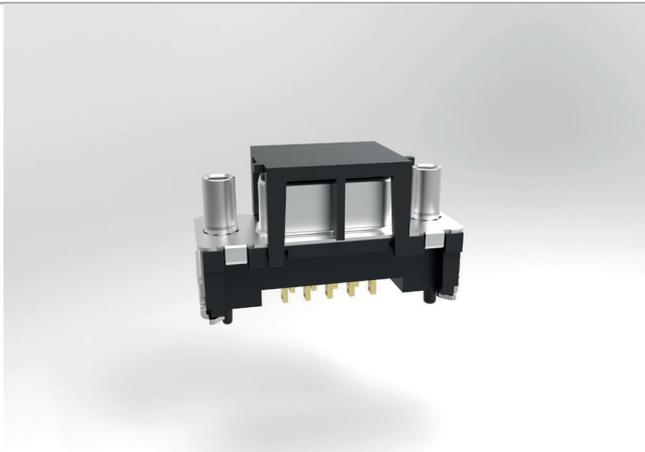


Technical data (mutual data on pages 81 & 98)

Current rating	3,5 A
R Contact/R Insulation	$\leq 25 \text{ m}\Omega / \geq 5 \text{ G}\Omega$
Test voltage	1 KV / AC
Temperature range	-55° C bis +125° C

Order information

164005	TMCP 9 SMD * 8-63 * 237 E2 * 112 * TRAY J 0
164006	TMCP 15 SMD * 8-63 * 237 E2 * 112 * TRAY J 0
164007	TMCP 25 SMD * 8-63 * 237 E2 * 112 * TRAY J 0
164008	TMCP 37 SMD * 8-63 * 237 E2 * 112 * TRAY J 0
164021	TMCS 9 SMD * 8-63 * 237 E2 * 112 * TRAY J 0
164022	TMCS 15 SMD * 8-63 * 237 E2 * 112 * TRAY J 0
164023	TMCS 25 SMD * 8-63 * 237 E2 * 112 * TRAY J 0
164024	TMCS 37 SMD * 8-63 * 237 E2 * 112 * TRAY J 0

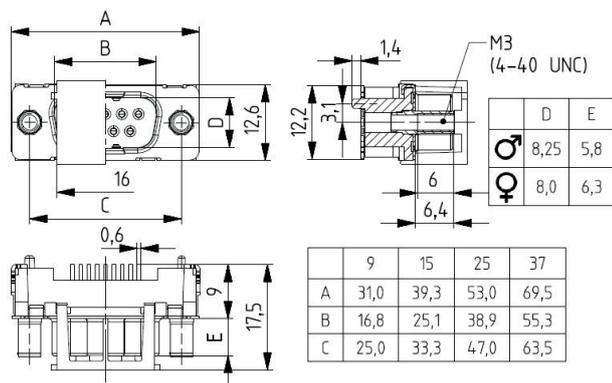


TMC D-Sub SMT 180° High Threaded Bolt

Installation height 9 mm

- Design according to IEC 802-3 (DIN 41 652)
- High with installation height 9 mm
- Straight SMT connection
- Design suitable for all common SMT soldering processes
- Vacuum pick-up cap pre-equipped for automatic pick & place
- Threaded bolt UNC 4-40 or M3
- Pole number: 9/15/15/37
- UL approval

Dimensions



Technical data (mutual data on pages 81 & 98)

Current rating	3,5 A
R Contact/R Insulation	≤25 mΩ/ ≥5 GΩ
Test voltage	1 KV / AC
Temperature range	-55° C bis +125° C

Order information

164005	TMCP 9 SMD * 8-63 * 237 E2 112 TRAY J 0
164006	TMCP 15 SMD * 8-63 * 237 E2 112 TRAY J 0
164007	TMCP 25 SMD * 8-63 * 237 E2 112 TRAY J 0
164008	TMCP 37 SMD * 8-63 * 237 E2 112 TRAY J 0
164021	TMCS 9 SMD * 8-63 * 237 E2 112 TRAY J 0
164022	TMCS 15 SMD * 8-63 * 237 E2 112 TRAY J 0
164023	TMCS 25 SMD * 8-63 * 237 E2 112 TRAY J 0
164024	TMCS 37 SMD * 8-63 * 237 E2 112 TRAY J 0

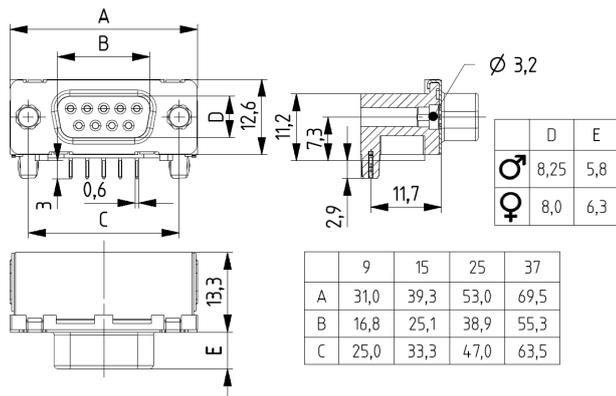


TMC D-Sub THR 90° Standard Through Hole

Installation height 7.3 mm

- Design according to IEC 802-3 (DIN 41 652)
- Standard with installation height 7.3 mm
- Angled THR (Thru Hole Reflow) connection
- Design suitable for all common SMT soldering processes
- Gripper surface integrated for automatic pick & place
- Through hole \varnothing 3.2
- UL approval

Dimensions



Technical data (mutual data on pages 81 & 98)

Current rating	3,5 A
R Contact/R Insulation	$\leq 25 \text{ m}\Omega / \geq 5 \text{ G}\Omega$
Test voltage	1 KV / AC
Temperature range	-55° C bis +125° C

Order information

204467	TMCP 9 THR 8-ST 237 E2 112 TRAY
204473	TMCP 15 THR 8-ST 237 E2 112 TRAY
204479	TMCP 25 THR 8-ST 237 E2 112 TRAY
204485	TMCP 37 THR 8-ST 237 E2 112 TRAY
204515	TMCS 9 THR 8-ST 237 E2 112 TRAY
204521	TMCS 15 THR 8-ST 237 E2 112 TRAY
204527	TMCS 25 THR 8-ST 237 E2 112 TRAY
204533	TMCS 37 THR 8-ST 237 E2 112 TRAY

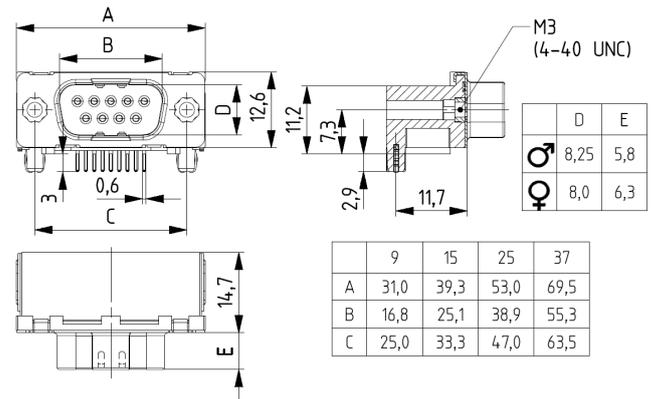


TMC D-SubTHR 90° Standard Thread

Installation height 7.3 mm

- Design according to IEC 802-3 (DIN 41 652)
- Standard with installation height 7.3 mm
- Angled THR (Thru Hole Reflow) connection
- Design suitable for all common SMT soldering processes
- Gripper surface integrated for automatic pick & place
- Thread UNC 4-40 or M3
- UL approval

Dimensions



Technical data (mutual data on pages 81 & 98)

Current rating	3,5 A
R Contact/R Insulation	$\leq 25 \text{ m}\Omega / \geq 5 \text{ G}\Omega$
Test voltage	1 KV / AC
Temperature range	-55° C bis +125° C

Order information

204464	TMCP 9 THR 8-ST 237 E2 #4 094 TRAY
204470	TMCP 15 THR 8-ST 237 E2 #4 094 TRAY
204476	TMCP 25 THR 8-ST 237 E2 #4 094 TRAY
204482	TMCP 37 THR 8-ST 237 E2 #4 094 TRAY
204512	TMCS 9 THR 8-ST 237 E2 #4 094TRAY
204518	TMCS 15 THR 8-ST 237 E2 #4 094 TRAY
204524	TMCS 25 THR 8-ST 237 E2 #4 094 TRAY
204530	TMCS 37 THR 8-ST 237 E2 #4 094 TRAY

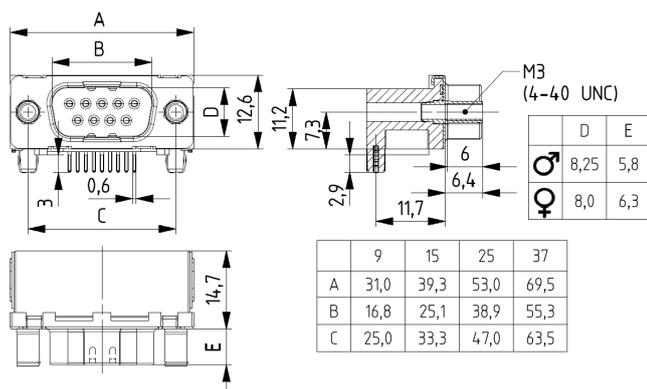


TMC D-Sub THR 90° Standard Threaded Bolt

Installation height 7.3 mm

- Design according to IEC 802-3 (DIN 41 652)
- Standard with installation height 7.3 mm
- Angled THR (Thru Hole Reflow) connection
- Design suitable for all common SMT soldering processes
- Gripper surface integrated for automatic pick & place
- Threaded bolt UNC 4-40 or M3
- Pole number: 9/15/15/37
- UL approval

Dimensions



Technical data (mutual data on pages 81 & 98)

Current rating	3,5 A
R Contact/R Insulation	≤25 mΩ/ ≥5 GΩ
Test voltage	1 KV / AC
Temperature range	-55° C bis +125° C

Order information

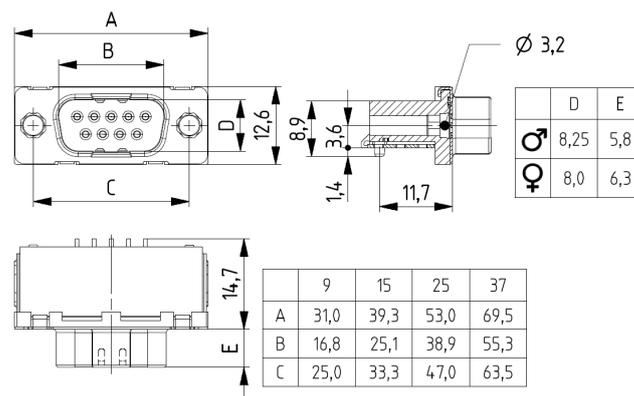
204466	TMCP 9 THR 8-ST 237 E2 VK#4 094 TRAY
204472	TMCP 15 THR 8-ST 237 E2 VK#4 094 TRAY
204478	TMCP 25 THR 8-ST 237 E2 VK#4 094 TRAY
204484	TMCP 37 THR 8-ST 237 E2 VK#4 094 TRAY
204514	TMCS 9 THR 8-ST 237 E2 VK#4 094TRAY
204520	TMCS 15 THR 8-ST 237 E2 VK#4 094 TRAY
204526	TMCS 25 THR 8-ST 237 E2 VK#4 094 TRAY
204532	TMCS 37 THR 8-ST 237 E2 VK#4 094 TRAY



TMC D-Sub THR 90° Eurostyle Through Hole Installation height 3.6 mm

- Design according to IEC 802-3 (DIN 41 652)
- Eurostyle with installation height 3.6 mm
- Angled THR (Thru Hole Reflow) connection
- Design suitable for all common SMT soldering processes
- Gripper surface integrated for automatic pick & place
- Through hole Ø 3.2
- Pole number: 9/15/15/37

Dimensions



Technical data (mutual data on pages 81 & 98)

Current rating	3,5 A
R Contact/R Insulation	≤25 mΩ/ ≥5 GΩ
Test voltage	1 KV / AC
Temperature range	-55° C bis +125° C

Order information

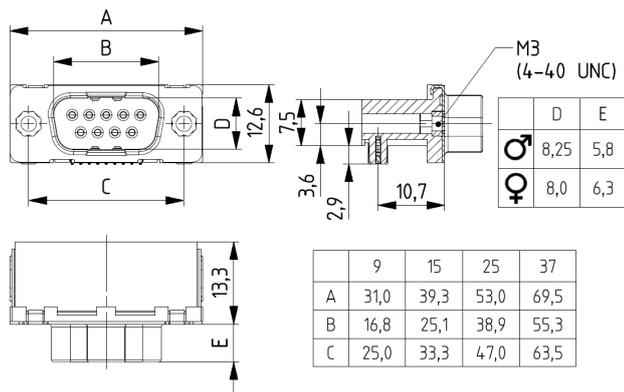
204443	TMCP 9 THR 8-EU 237 E2 112 TRAY
204473	TMCP 15 THR 8-EU 237 E2 112 TRAY
204455	TMCP 25 THR 8-EU 237 E2 112 TRAY
204423	TMCP 37 THR 8-EU 237 E2 112 TRAY
204491	TMCS 9 THR 8-EU 237 E2 112 TRAY
204497	TMCS 15 THR 8-EU 237 E2 112 TRAY
204503	TMCS 25 THR 8-EU 237 E2 112 TRAY
204509	TMCS 37 THR 8-EU 237 E2 112 TRAY



TMC D-Sub THR 90° Eurostyle Thread Installation height 3.6 mm

- Design according to IEC 802-3 (DIN 41 652)
- Eurostyle with installation height 3.6 mm
- Angled SMT connection
- Design suitable for all common SMT soldering processes
- Gripper surface integrated for automatic pick & place
- Thread UNC 4-40 or M3
- Pole number: 9/15/15/37

Dimensions

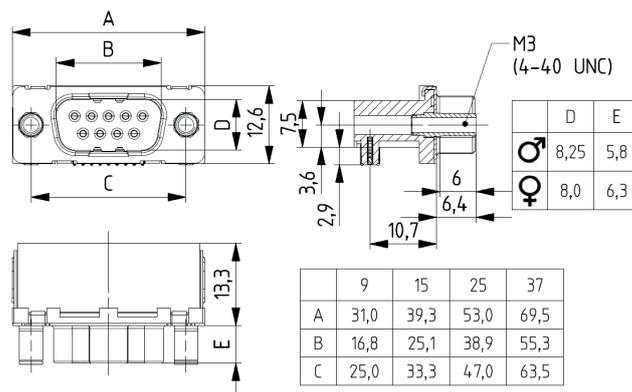


TMC D-Sub THR 90° Eurostyle Threaded Bolt

Installation height 3.6 mm

- Design according to IEC 802-3 (DIN 41 652)
- Eurostyle with installation height 3.6 mm
- Angled THR (Thru Hole Reflow) connection
- Design suitable for all common SMT soldering processes
- ripper surface integrated for automatic pick & place
- Threaded bolt UNC 4-40 or M3
- Pole number: 9/15/15/37
- UL approval

Dimensions



Technical data (mutual data on pages 81 & 98)

Current rating	3,5 A
R Contact/R Insulation	≤25 mΩ/ ≥5 GΩ
Test voltage	1 KV / AC
Temperature range	-55° C bis +125° C

Order information

204440	TMCP 9 THR 8-EU 237 E2 #4 094 TRAY
204446	TMCP 15 THR 8-EU 237 E2 #4 094 TRAY
204452	TMCP 25 THR 8-EU 237 E2 #4 094 TRAY
204458	TMCP 37 THR 8-EU 237 E2 #4 094 TRAY
204488	TMCS 9 THR 8-EU 237 E2 #4 094TRAY
204494	TMCS 15 THR 8-EU 237 E2 #4 094 TRAY
204500	TMCS 25 THR 8-EU 237 E2 #4 094 TRAY
204506	TMCS 37 THR 8-EU 237 E2 #4 094 TRAY

Technical data (mutual data on pages 81 & 98)

Current rating	3,5 A
R Contact/R Insulation	≤25 mΩ/ ≥5 GΩ
Test voltage	1 KV / AC
Temperature range	-55° C bis +125° C

Order information

204440	TMCP 9 THR 8-EU 237 E2 #4 094 TRAY
204446	TMCP 15 THR 8-EU 237 E2 #4 094 TRAY
204452	TMCP 25 THR 8-EU 237 E2 #4 094 TRAY
204458	TMCP 37 THR 8-EU 237 E2 #4 094 TRAY
204488	TMCS 9 THR 8-EU 237 E2 #4 094TRAY
204494	TMCS 15 THR 8-EU 237 E2 #4 094 TRAY
204500	TMCS 25 THR 8-EU 237 E2 #4 094 TRAY
204506	TMCS 37 THR 8-EU 237 E2 #4 094 TRAY

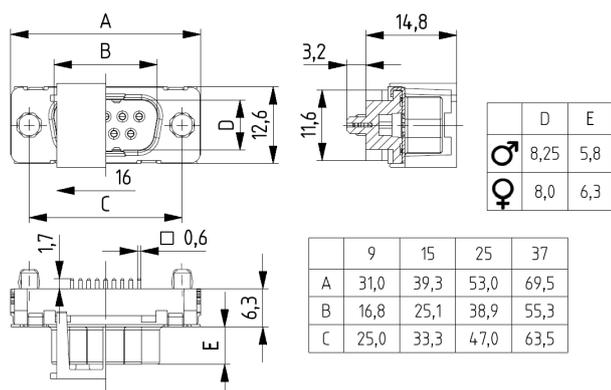


TMC D-Sub THR 180° Standard Through Hole

Installation height 6.3 mm

- Design according to IEC 802-3 (DIN 41 652)
- Standard with installation height 6.3 mm
- Straight THR (Thru Hole Reflow) connection
- Design suitable for all common SMT soldering processes
- Vacuum pick-up cap pre-equipped for automatic pick & place
- Through hole \varnothing 3,2
- Pole number: 9/15/15/37
- UL approval

Dimensions



Technical data (mutual data on pages 81 & 98)

Current rating	3,5 A
R Contact/R Insulation	$\leq 25 \text{ m}\Omega / \geq 5 \text{ G}\Omega$
Test voltage	1 KV / AC
Temperature range	-55° C bis +125° C

Order information

204903	TMCP 9 THR 8-63 237 E2 112 TRAY
204862	TMCP 15 THR 8-63 237 E2 112 TRAY
204875	TMCP 25 THR 8-63 237 E2 112 TRAY
234888	TMCP 37 THR 8-63 237 E2 112 TRAY
204918	TMCS 9 THR 8-63 237 E2 112 TRAY
234901	TMCS 15 THR 8-63 237 E2 112 TRAY
204914	TMCS 25 THR 8-63 237 E2 112 TRAY
204927	TMCS 37 THR 8-63 237 E2 112 TRAY

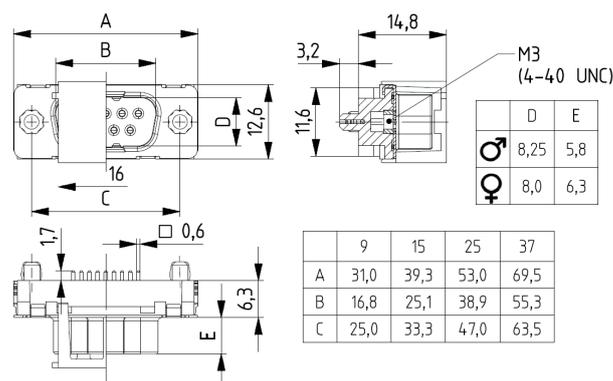


TMC D-Sub THR 180° Standard Thread

Installation height 6.3 mm

- Design according to IEC 802-3 (DIN 41 652)
- Standard with installation height 6.3 mm
- Straight THR (Thru Hole Reflow) connection
- Design suitable for all common SMT soldering processes
- Vacuum pick-up cap pre-equipped for automatic pick & place
- Thread UNC 4-40 or M3
- Pole number: 9/15/15/37
- UL approval

Dimensions



Technical data (mutual data on pages 81 & 98)

Current rating	3,5 A
R Contact/R Insulation	$\leq 25 \text{ m}\Omega / \geq 5 \text{ G}\Omega$
Test voltage	1 KV / AC
Temperature range	-55° C bis +125° C

Order information

204905	TMCP 9 THR 8-63 237 E2 #4 094TRAY
234171	TMCP 15 THR 8-63 237 E2 #4 094 TRAY
234172	TMCP 25 THR 8-63 237 E2 #4 094 TRAY
234890	TMCP 37 THR 8-63 237 E2 #4 094 TRAY
204920	TMCS 9 THR 8-63 237 E2 #4 094 TRAY
234903	TMCS 15 THR 8-63 237 E2 #4 094 TRAY
234916	TMCS 25 THR 8-63 237 E2 #4 094 TRAY
234929	TMCS 37 THR 8-63 237 E2 #4 094 TRAY

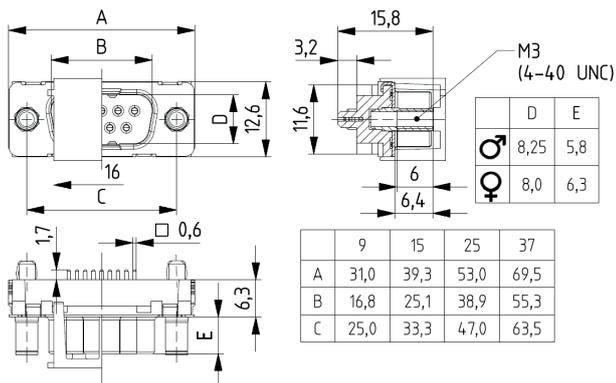


TMC D-Sub THR 180° Standard Threaded Bolt

Installation height 6.3 mm

- Design according to IEC 802-3 (DIN 41 652)
- Standard with installation height 6.3 mm
- Straight THR (Thru Hole Reflow) connection
- Design suitable for all common SMT soldering processes
- Vacuum pick-up cap pre-equipped for automatic pick & place
- Threaded bolt UNC 4-40 or M3
- Pole number: 9/15/15/37
- UL approval

Dimensions



Technical data (mutual data on pages 81 & 98)

Current rating	3,5 A
R Contact/R Insulation	≤25 mΩ/ ≥5 GΩ
Test voltage	1 KV / AC
Temperature range	-55° C bis +125° C

Order information

204907	TMCP 9 THR 8-63 237 E2 VK #4 094 TRAY
234866	TMCP 15 THR 8-63 237 E2 VK #4 094 TRAY
234567	TMCP 25 THR 8-63 237 E2 VK #4 094 TRAY
234892	TMCP 37 THR 8-63 237 E2 VK #4 094 TRAY
204922	TMCS 9 THR 8-63 237 E2 VK #4 094TRAY
234905	TMCS 15 THR 8-63 237 E2 VK #4 094 TRAY
234918	TMCS 25 THR 8-63 237 E2 VK #4 094 TRAY
234931	TMCS 37 THR 8-63 237 E2 VK #4 094 TRAY

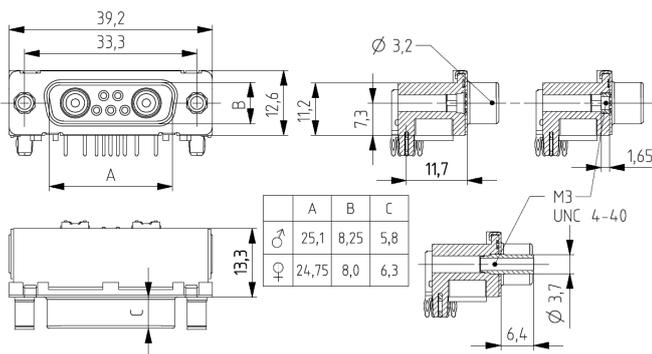


TMC High Power D-Sub Pressfit 90 °

Stamped contacts and installation height 7.3 mm

- Economical High Power application on backplanes and PCBs
- Right angle pressfit connection with an installation height of 7.3 mm
- Elastic certified pressfit zone
- No soldering errors, flux problems, no cleaning process and no thermal stress
- The pressfit zone ensures a gas-tight connection
- Allows assembly on both sides of the panel
- Pole configuration: 7W2
- Thread or threaded bolt UNC 4-40 oder M3

Dimensions



Technical data (mutual data on pages 81 & 98)

Current rating	25 A
R Contact /R Insulation	≤25 mΩ/ ≥5 GΩ
Test voltage	1 KV / AC
Temperature range	-55° C bis +125° C

Order information

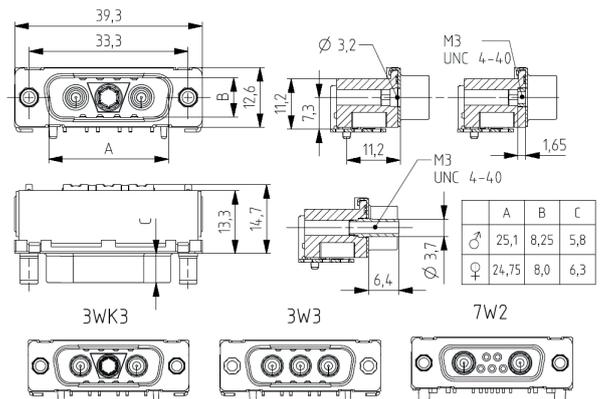
224341	7W2 Male through hole
224343	7W2 Male UNC
224342	7W2 Male threaded bolt UNC
214306	7W2 Female through hole
204782	7W2 Female UNC
214305	7W2 Female threaded bolt UNC



TMC High Power D-Sub SMT 90°

- Cost optimisation for high power D-Sub application on SMT PCB
- Standard with installation height 7.3 mm
- Right angle SMT connection
- Design suitable for all common SMT soldering processes
- Gripper surface integrated for automatic pick & place
- Through hole ø 3.2 or thread or threaded bolt UNC 4-40 or M3
- Tray packaging
- UL approval

Dimensions

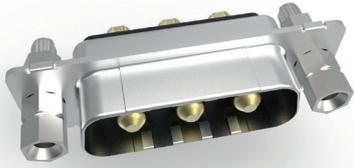


Technical data (mutual data on pages 81 & 98)

Current rating	25 A
R Contact/R Insulation	≤25 mΩ/ ≥5 GΩ
Test voltage	1 KV / AC
Temperature range	-55° C bis +125° C

Order information

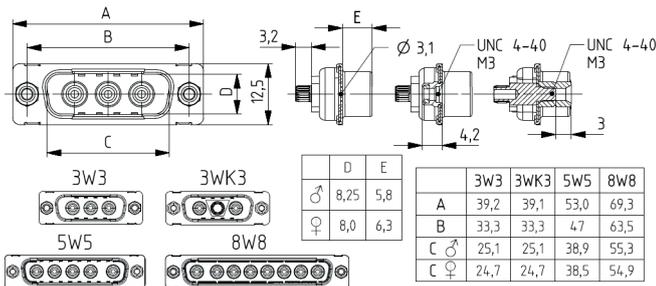
224330	7W2 Male ø 3,2 224263 7W2 Female ø 3,2
224333	7W2 Male UNC 204794 7W2 Female UNC
224331	7W2 Male bolt UNC 224264 7W2 Female bolt UNC
244244	3W3 Male ø 3,2 244254 3W3 Female ø 3,2
244247	3W3 Male UNC 244257 3W3 Female UNC
244245	3W3 Male bolt UNC 244255 3W3 Female bolt UNC
244249	3WK3 Male ø 3,2 244259 3W3 Female ø 3,2
244252	3WK3 Male UNC 244262 3WK3 Female UNC
244250	3WK3 Male bolt UNC 244260 3WK3 Female bolt UNC



TMC High Power D-Sub Pressfit 180°

- Economical High Power application on backplanes and PCBs
- Straight pressfit connection with an installation height of 6.3 mm
- Elastic certified pressfit zone
- No soldering errors, flux problems, no cleaning process and no thermal stress
- Machined contacts allow for high current rating
- Pressfit fastening /ground bolt with thread or threaded bolt UNC or M3
- Pole configuration: 3W3 / 3WK3 / 5W5 / 8W8
- Thread UNC 4-40 or M3

Dimensions



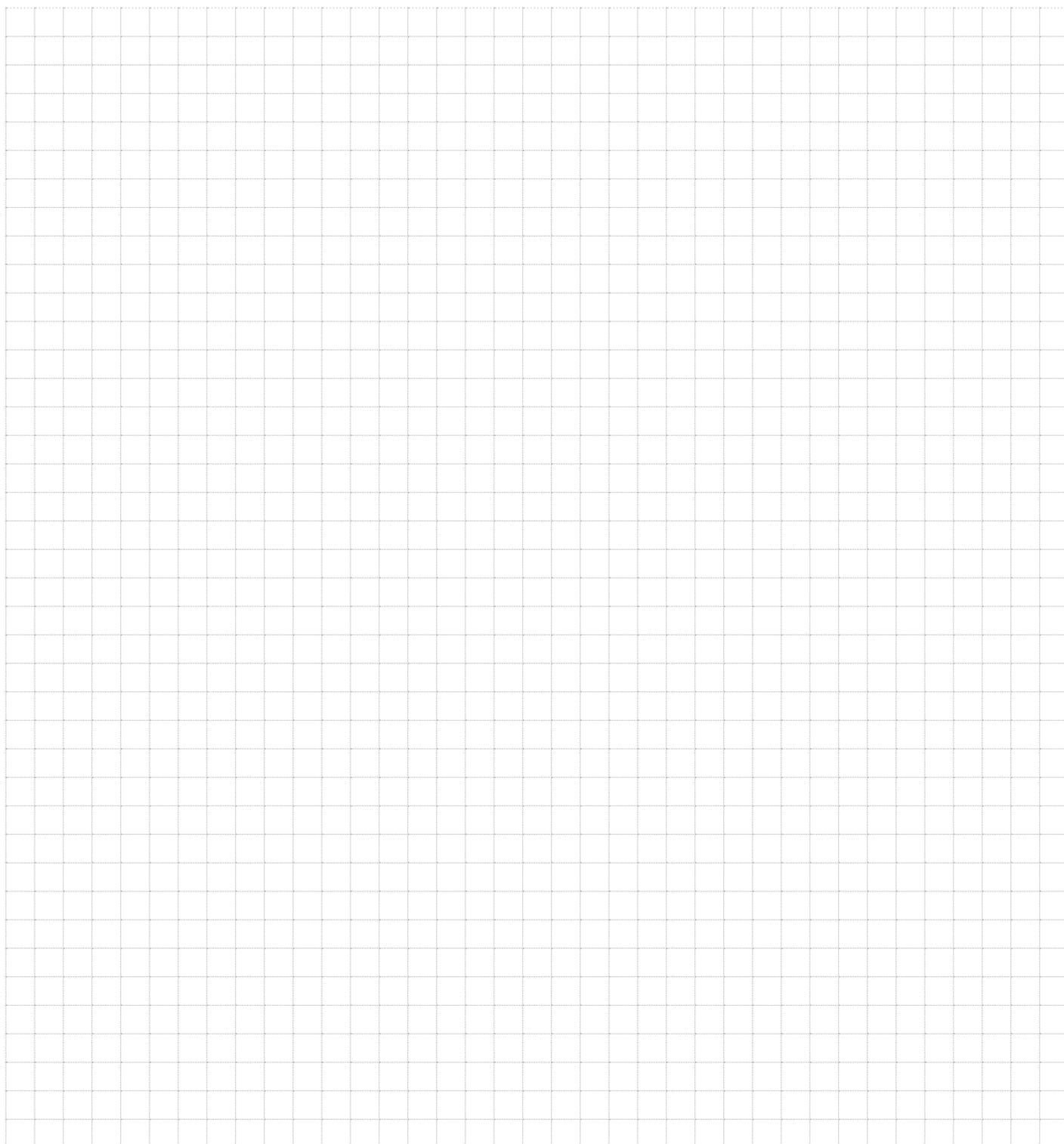
Technical data (mutual data on pages 81 & 98)

Current rating	30 A
R Contact /R Insulation	≤25 mΩ/ ≥5 GΩ
Test voltage	1 KV / AC
Temperature range	-55° C bis +125° C

Order information

134435	3W3 Male UNC 134451 3W3 Female UNC
134439	3WK3 Male UNC 134455 3WK3 FemaleUNC
134443	5W5 MaleUNC 134459 5W5 Female UNC
134447	8W8 Male UNC 134463 8W8 Female UNC
134499	3W3 Male bolt UNC 134509 3W3 Female bolt UNC
134501	3WK3 Male bolt UNC 134511 3WK3 Female bolt UNC
134505	5W5 Male bolt UNC 134515 5W5 Female bolt UNC
134507	8W8 Male bolt UNC 134517 8W8 Female bolt UNC

Your notes



Mxed Layout D-Sub Connectors

Reliable with machined contacts and solid mounting accessories

D-Sub



Mixed Layout Connectors for pure high power or mixed (signal / high power) solutions

Machined contacts for high current rating

Mixed layout contact configuration:

size 1: 2W2C

size 2: 3W3, 3W3C, 7W2

size 3: 5W5, 13W3, 17W2

size 4: 8W8, 21W4

For the PCB connection

- Connectors with solder pin 180 ° and 90 °
- Boardlock solder pin 180 ° connector for secure mounting and grounding
- Combilock solder pin 180 ° connector for secure mounting and grounding
- Right angle connectors with solid metal bracket and locking clip for secure grounding

For the cable connection

- Crimp connectors with signal crimp contacts in machined or stamped design
- High power crimp contacts from 10 A to 40 A;
- Hand solder connectors with signal hand solder contacts in machined version
- High power hand solder contacts from 10 A to 40 A.

Technical data

Current rating signal contacts	7 A
Current rating high power contacts	10 A / 20 A / 30 A / 40 A (depends om termination style)
Contact R / Insulation R signal contacts	≤ 10 mΩ / ≥ 5 GΩ
Contact R / Insulation R high power contacts	≤ 1 mΩ / ≥ 5 GΩ
Test voltage	1 kV / AC
Temperature range	-55° C to +125° C
Insulator	Thermoplast UL 94-V0
Contacts	Cu alloy gold-plated
Boardlock / Combilock	Cu alloy tin-plated
Metal bracket	St tin-plated
Mechanical lifetime	G1: 500 mating cycles G2: 250 mating cycles

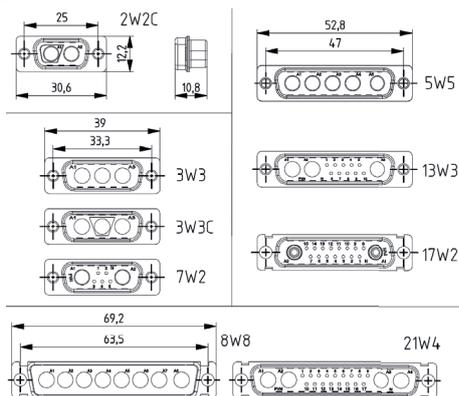


Mixed Layout crimp connectors

Without contacts

- D-Sub Mixed Layout crimp connectors
- Versions with threaded rivet upon request
- Signal crimp contacts in machined edition from AWG 18-AWG 28
- Signal crimp contacts in stamped edition from AWG 20-AWG 32
- High voltage crimp contacts in machined edition from 10 A to 40 A
- Fully compatible to market standard

Dimensions



Technical data (mutual data on pages 81 & 120)

Test voltage	1 KV / AC
Insulation resistance	≥5 GΩ
Temperature range	-55° C to +125° C
Plastic material	Thermoplast UL 94 V-0

Order information

PDT2W2CP	Pin I PT2W2CS socket
PDT3W3P	Pin I PT3W3S socket
PDT3W3CP	Pin I PT3W3CS socket
PDT7W2P	Pin I PT7W2S socket
PDT5W5P	Pin I PT5W5S socket
PDT13W3P	Pin I PT13W3S socket
PDT17W2P	Pin I PT17W2S socket
PDT8W8P	Pin I PT8W8S socket
PDT21W4P	Pin I PT21W4S socket

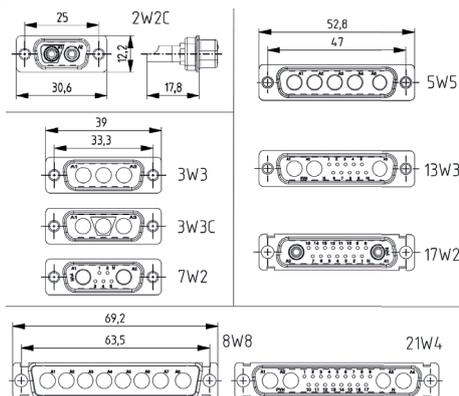


Mixed Layout solder cup connectors

With power contacts

- Machined contacts with high current carrying capacity
- Signal contacts equipped
- Signal contacts and high power contacts equipped
- Power solder cup contacts available separately
- Fully compatible to market standard

Dimensions



Technical data (mutual data on pages 81 & 120)

Nominal current signal	7 A
Nominal current power	10 A / 20 A / 40 A
Temperature range	-55° C to +125° C
Plastic material	Thermoplast UL 94 V-0

Order information

PDT2W2CP1zGx	Pin I PT2W2CS1zGx socket
PDT3W3P1zGx	Pin I PT3W3CS1zGx socket
PDT3W3CP1zGx	Pin I PT3W3CS1zGx socket
PDT7W2P1zGx	Pin I PT7W2S1zGx socket
PDT5W5P1zGx	Pin I PT5W5CS1zGx socket
PDT13W3P1zGx	Pin I PT13W3S1zGx socket
PDT17W2P1zGx	Pin I PT17W2S1zGx socket
PDT8W8P1zGx	Pin I PT8W8S1zGx socket
PDT21W4P1zGx	Pin I PT21W4S1zGx socket
1z:10/12/14 Gx: G1/G2/G3	

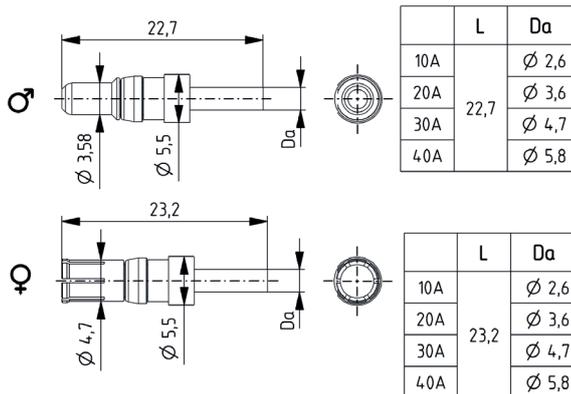


High power contacts crimp connection

For the use in D-Sub Mixed Layout connectors

- Currents: 10 A / 20 A / 30 A / 40
- Machined precision contacts from Cu-alloy
- Hard gold-plated over Ni-barrier layer
- Various surfaces for different lifetime requirements
- Highest quality and lifetime because of defined contact zone

Dimensions



Technical data (mutual data on pages 81 & 120)

Nominal current	10 A / 20 A / 40 A
AWG 10 A / 20 A / 30 A / 40 A	16 - 20 / 12 - 14 / 10 - 12 / 8 - 10
R passage/ R isolation	≤1 mΩ / 10 GΩ
Insulation resistance	10 G Ω

Order information

P5310Gx	Crimp pin 10 A Gx: G1/G2/G3
P5320Gx	Crimp pin 20 A Gx: G1/G2/G3
P5330Gx	Crimp pin 30 A Gx: G1/G2/G3
P5340Gx	Crimp pin 40 A Gx: G1/G2/G3
P6310Gx	Crimp socket 10 A Gx: G1/G2/G3
P6320Gx	Crimp socket 20 A Gx: G1/G2/G3
P6330Gx	Crimp socket 30 A Gx: G1/G2/G3
P6340Gx	Crimp socket 40 A Gx: G1/G2/G3

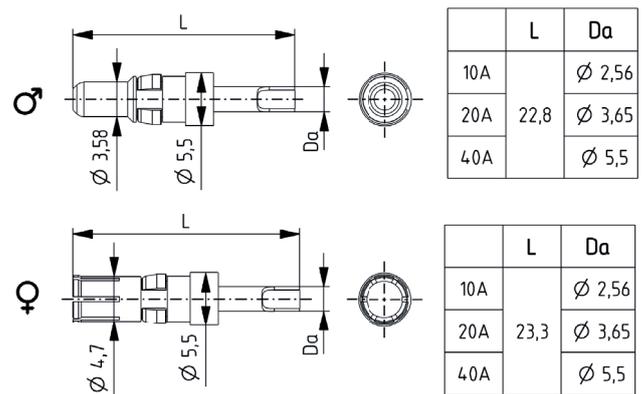


High power contacts solder cup connection

For the use in D-Sub Mixed Layout connectors

- Currents: 10 A / 20 A / 40 A
- Machined precision contacts from Cu-alloy
- Mating area gold-plated and connection area tin-plated
- Various surfaces for different lifetime requirements
- Highest quality and lifetime because of defined contact zone

Dimensions



Technical data (mutual data on pages 81 & 120)

Nominal current	10 A / 20 A / 40 A
AWG 10 A / 20 A / 40 A	16 - 20 / 12 - 14 / 8 - 10
R passage/ R isolation	≤1 mΩ / 10 GΩ
Insulation resistance	10 GΩ

Order information

P5110Gx	Hand soldering pin 10 A Gx: G1 / G2 / G3
P5120Gx	Hand soldering pin 20 A Gx: G1 / G2 / G3
P5140Gx	Hand soldering pin 40 A Gx: G1 / G2 / G3
P6110Gx	Hand soldering socket 10 A Gx: G1 / G2 / G3
P6120Gx	Hand soldering socket 20 A Gx: G1 / G2 / G3
P6140Gx	Hand soldering socket 40 A Gx: G1 / G2 / G3

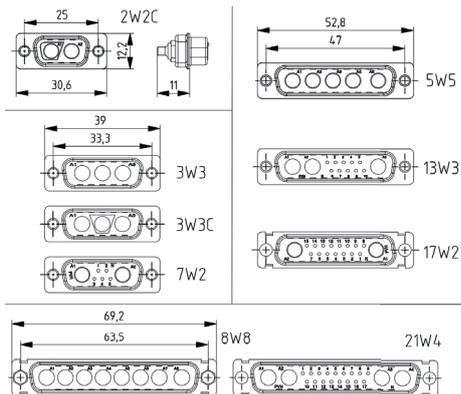


Mixed Layout solder pin 180°

With machined solder pin contacts

- D-Sub Mixed Layout with machined signal solder pins 180°
- D-Sub Mixed Layout with machined signal solder and high power pins 180°
- High power pins 180° with current rating 20 A and 40 A

Dimensions



Technical data (mutual data on pages 81 & 120)

Nominal current signal	7 A
Nominal current high power	20 A or 40 A
Test voltage	1 kV / AC
Temperature range	-55 °C to +125 °C

Order information

PDT2W2CP2zGx	Male PT2W2CS2zGx Female
PDT3W3P2xGx	Male PT3W3CS2zGx Female
PDT3W3CP2xGx	Male PT3W3CS2zGx Female
PDT7W2P2xGx	Male PT7W2S2zGx Female
PDT5W5P2xGx	Male PT5W5CS2zGx Female
PDT13W3P2xGx	Male PT13W3S2zGx Female
PDT17W2P2xGx	Male PT17W2S2zGx Female
PDT8W8P2xGx	Male PT8W8S2zGx Female
PDT21W4P2xGx	Male PT21W4S2zGx Female
2z: 20/22/24 Gx: G1 /G2/G3	

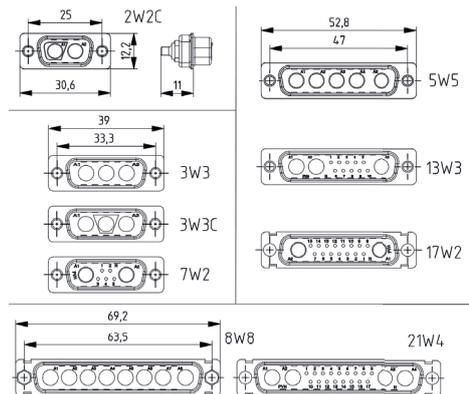


Mixed Layout Boardlock solder pin 180°

With machined solder pin contacts

- Mixed Layout with straight solder pins
- Boardlock: fastening clip and spacer with threads in one
- Connector is snapped onto PCB, fixed and has a UNC thread
- This enables safe and efficient PCB assembly
- Effective grounding due to solid Boardlock bolt
- High current rating due to machined contacts
- Versions only equipped with signal contacts
- Versions equipped with signal and high power contacts

Dimensions



Technical data (mutual data on pages 81 & 120)

Nominal current signal	7 A
Nominal current high power	20 A or 40 A
Test voltage	1 kV / AC
Temperature range	-55 °C to +125 °C

Order information

PDT2W2CP2zGxB4	Male PT2W2CS2zGx Female
PDT3W3P2xGxB4	Male PT3W3CS2zGx Female
PDT3W3CP2xGxB4	Male PT3W3CS2zGx Female
PDT7W2P2xGxB4	Male PT7W2S2zGx Female
PDT5W5P2xGxB4	Male PT5W5CS2zGx Female
PDT13W3P2xGxB4	Male PT13W3S2zGx Female
PDT17W2P2xGxB4	Male PT17W2S2zGx Female
PDT8W8P2xGxB4	Male PT8W8S2zGx Female
PDT21W4P2xGxB4	Male PT21W4S2zGx Female
2z: 20/22/24 Gx: G1 /G2/G3	

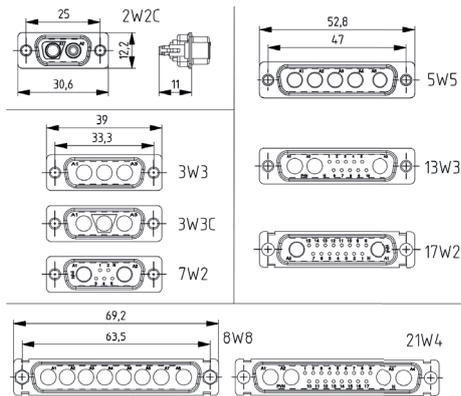


Mixed Layout Combilock solder pin 180°

With machined solder pin contacts

- Mixed Layout with straight solder pins
- Boardlock: fastening clip, spacer and threaded bolt in one
- Connector is snapped onto PCB, fixed and has a UNC thread
- This enables safe and efficient PCB assembly
- Effective grounding due to solid Boardlock bolt
- High current rating due to machined contacts
- Versions only equipped with signal contacts (index 20)
- Versions equipped with signal and high power contacts (index 22/24)

Dimensions



Technical data (mutual data on pages 81 & 120)

Nominal current signal	7 A
Nominal current high power	20 A or 40 A
Test voltage	1 kV / AC
Temperature range	-55 °C to +125 °C

Order information

PDT2W2CP2zGxC4	Male PT2W2CS2zGx Female
PDT3W3P2xGxC4	Male PT3W3CS2zGx Female
PDT3W3CP2xGxC4	Male PT3W3CS2zGx Female
PDT7W2P2xGxC4	Male PT7W2S2zGx Female
PDT5W5P2xGxC4	Male PT5W5CS2zGx Female
PDT13W3P2xGxC4	Male PT13W3S2zGx Female
PDT17W2P2xGxC4	Male PT17W2S2zGx Female
PDT8W8P2xGxC4	Male PT8W8S2zGx Female
PDT21W4P2xGxC4	Male PT21W4S2zGx Female
2z: 20/22/24 Gx: G1 /G2/G3	

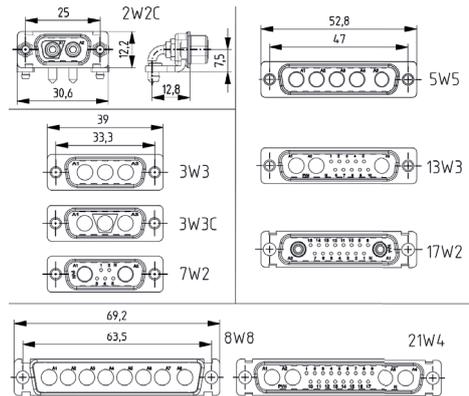


Mixed Layout solder pin 90°

Metal bracket with threaded rivet and locking clip

- Right angle signal contacts in machined version
- High current rating due to machined contacts
- Metal bracket with threaded rivet UNC 4-40 or M3 and metal locking clip
- Secure and easy assembly due to snap-in locking clip
- Metal bracket achieves safe effective grounding
- D-Sub Mixed Layout connectors with signal contacts
- D-Sub Mixed Layout connectors with signal contacts + special contacts

Dimensions



Technical data (mutual data on pages 81 & 120)

Nominal current signal	7 A
Nominal current high power	20 A or 40 A
Test voltage	1 kV / AC
Temperature range	-55 °C to +125 °C

Order information

PDT2W2CP6zGxR48	Male PT2W2CS6zGxR48 Female
PDT3W3P6zGxR48	Male PT3W3CS6zGxR48 Female
PDT3W3CP6zGxR48	Male PT3W3CS6zGxR48 Female
PDT7W2P6zGxR48	Male PT7W2S6zGxR48 Female
PDT5W5P6zGxR48	Male PT5W5CS6zGxR48 Female
PDT13W3P6zGxR48	Male PT13W3S6zGxR48 Female
PDT17W2P6zGxR48	Male PT17W2S6zGxR48 Female
PDT8W8P6zGxR48	Male PT6W8S6zGxR48 Female
PDT21W4P6zGxR48	Male PT21W4S6zGxR48 Female
6z: 60/62/64 Gx: G1 /G2/G3	

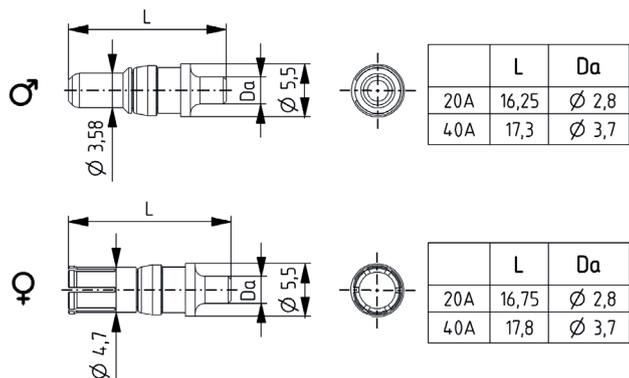


High power contacts solder pin 180°

Machined contacts

- Machined precision contacts of Cu-alloy
- Fully gold-plated with Ni barrier layer
- Various surfaces for different lifetime requirements
- Highest quality and lifetime due to defined contact zone
- Current carrying capacity: 20 A and 40 A

Dimensions



Technical data (mutual data on pages 81 & 120)

Current rating	20 A or 40 A
Resistance	≤1 mΩ
Insulation resistance	≥10 GΩ
Temperature range	-55 °C to +125 °C

Order information

P5220Gx	Male 20 A Gx:G1/G2 /G3
P5240Gx	Male 40 A Gx:G1/G2 /G3
P6220Gx	Female 20 A Gx:G1/G2 /G3
P6240Gx	Female 20 A Gx:G1/G2 /G3

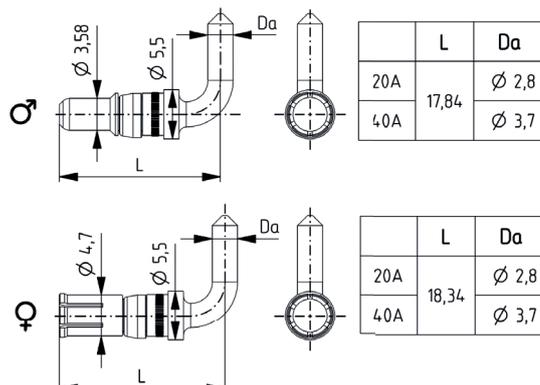


High power contacts solder pin 90°

Machined contacts

- Current rating:20 A/40 A
- Machined contacts made from Cu alloy
- Mating area gold-plated over Ni barrier layer and termination area tin-plated
- Various platings for different lifetime requirements
- Highest quality and mechanical lifetime due to defined contact area
- For the application in D-Sub Mixed Layout connectors

Dimensions



Technical data (mutual data on pages 81 & 120)

Current rating	20 A or 40 A
Resistance	≤1 mΩ
Insulation resistance	≥10 GΩ
Temperature range	-55 °C to +125 °C

Order information

P5620Gx	Male 20A Gx:G1/G2/G3
P5640Gx	Male 40A Gx: G1/G2/G3
P6620Gx	Female 20A Gx: G1/G2/G3
P6640Gx	Female 40A Gx: G1/G2/G3

D-Sub 600V Power

Compact with high current carrying capacity

D-Sub



The 600V D-Sub connector range was developed by Provertha especially for compact power applications with vibration-proof and easy fast cable assembly. This is achieved by new, especially developed snap-in crimp contacts and the matching crimp connectors for the snap-in locking plus the use of Quick-Lock D-Sub-hoods with the innovative Push-Pull quick latching and easy one-hand operation.

In the 4-pole connector system, the socket version is touch-proof according to VDE 0110.

The Power D-Sub connectors are designed for direct field assembly with machined crimp contacts and crimp tools.

The 600V Power D-Subs are ideal for applications in electrical drives, in car painting facilities and robots.

Technical data

Nominal voltage	630 V
Overvoltage category	I:2,5kV and II:4kV acc. to IEC 60 664
Minimum clearance distance	2.5 kV:≥1,5 mm and 4 kV:≥ 3 mm
Minimum creepage distance	≥ 1,8 mm
Degree of pollution	1
Nominal current	machined: 20 A / stamped: 16 A
Mechanical lifetime	machined: 250 / stamped: 20 mating cycles
Temperature range	-55° C to + 125° C
UL file	E465059
Insulator	Thermoplast UL 94-V0
Contacts	Cu alloy gold-plated
Housing	St tin-plated
Wire size	machined: AWG 20-12 / stamped: AWG 20-14

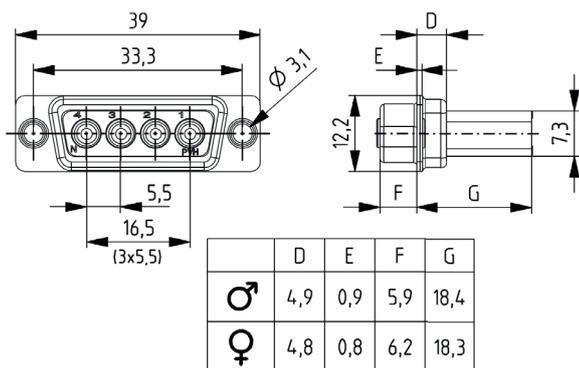


D-Sub 600V Power crimp connectors

For machined or stamped contacts

- Compact design
- Female version touch-proof acc. to VDE 0110
- Cable connector with reliable crimp technology for the wire connection
- Machined crimp contacts for high current rating up to 20A
- Stamped crimp contacts for serial manufacturing
- Hand crimp tool and positioner direct available
- Vibration-proof quick locking with the Quick Lock hoods

Dimensions

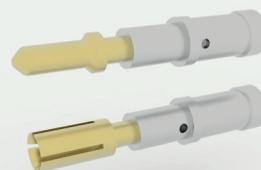


Technical data (mutual data on pages 81 & 126)

Nominal voltage	630 V
Rated surge voltage	Overtoltage category I: 2,5 kV/ II: 4 kV
Nominal current	machined: 20 A / stamped: 18 A
Temperature range	-55 °C to +125 °C

Order information

MDT4W4P30	Crimp connector male for machined contacts
MDT4W4P40	Crimp connector male for stamped contacts
MT4W4S30	Crimp connector female for machined contacts
MT4W4S40	Crimp connector female for stamped contacts

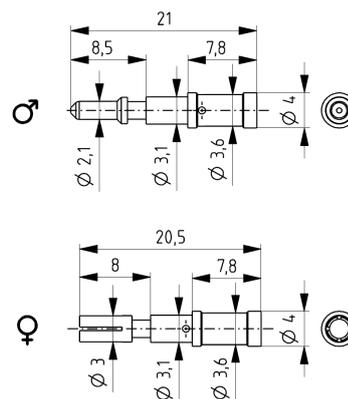


D-Sub 600V Power crimp contacts

Machined and stamped versions

- Machined crimp contacts for high current rating up to 20A
- Machined crimp contacts with 4 point crimp for high reliability
- Stamped crimp contacts for serial manufacturing
- Hand crimp tool and positioner direct available

Dimensions



Technical data (mutual data on pages 81 & 126)

Current rating	machined: 20 A /stamped: 18 A
Wire size	machined:AWG 20 - 12 / stamped: AWG 20 - 14
Mating cycles	machined: 200 / stamped: 20
Material	Cu alloy gold-plated /stamped: tin-plated

Order information

C0512G2	Crimp contact machined male AWG 8 - 12
C0612G2	Crimp contact machined female AWG 8 - 12
C0516G2	Crimp contact machined male AWG 16 - 20
C0616G2	Crimp contact machined female AWG 16 - 20
C1516T	Crimp contact stamped male AWG 14 - 20
C1616T	Crimp contact stamped female AWG 14 - 20

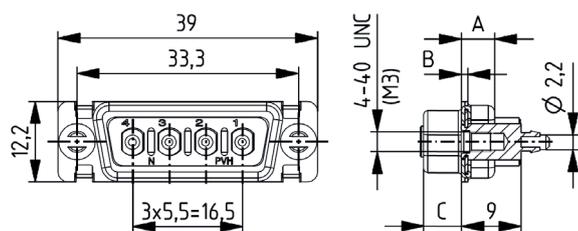


D-Sub Connectors 600V Power solder pin 180°

With machined contacts

- Male and female version
- Straight machined solder pin contacts for high current rating
- Contacts gold-plated with Ni barrier layer
- Solid mounting bolt for safe absorption of the mating and unmating forces
- Boardlock for safe positioning and fixing on the PCB
- Panel cut-out complies with the 15-pole D-Sub

Dimensions



	A	B	C
♂	4,9	0,9	5,9
♀	4,8	0,8	6,2

Technical data (mutual data on pages 81 & 126)

Nominal voltage	630 V
Rated surge voltage	Overvoltage category I: 2,5 kV/ II: 4 kV
Nominal current	20 A
Temperature range	-55 °C to +125 °C

Order information

MDT4W4P22G2B4	Male UNC
MT4W4S22G2B4	Female UNC
MDT4W4P22G2B3	Male M3
MT4W4S22G2B3	Female M3

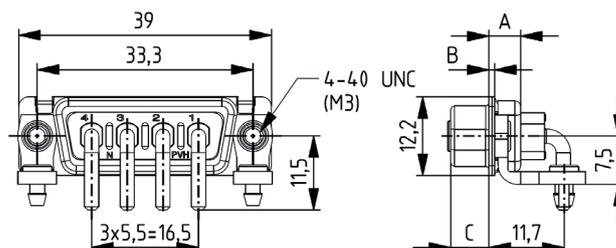


D-Sub Connectors 600V Power solder pin 90°

With machined contacts

- Male and female version
- Angled machined solder pin contacts for high current rating
- Contacts gold-plated with Ni barrier layer
- Solid metal bracket for safe absorption of the mating and unmating forces
- Boardlock for safe positioning and fixing on the PCB
- Metal bracket version with through hole Ø3.4 for M3 screw fastening
- Panel cut-out complies with the 15-pole D-Sub
- Thread UNC or M3

Dimensions



	A	B	C
♂	4,9	0,9	5,9
♀	4,8	0,8	6,4

Technical data (mutual data on pages 81 & 126)

Nominal voltage	630 V
Rated surge voltage	Overvoltage category I: 2,5 kV/ II: 4 kV
Nominal current	20 A
Temperature range	-55 °C to +125 °C

Order information

MDT4W4P62G2R48	Male UNC boardlock
MT4W4S62G2R48	Female UNC boardlock
MDT4W4P62G2R38	Male M3 boardlock
MT4W4S62G2R38	Female M3 boardlock
MDT4W4P62G248	Male UNC through hole Ø3,4
MT4W4S62G248	Female UNC through hole Ø3,4
MDT4W4P62G238	Male M3 through hole Ø3,4
MT4W4S62G238	Female M3 through hole Ø3,4

Your notes

A large grid of graph paper for taking notes, consisting of 20 columns and 30 rows of small squares.

Waterproof D-Sub

Economical solutions with compact dimensions

D-Sub



The waterproof D-Sub connectors meet the highest protection class IP 67 requirements in applications where dust and splash water occur and the function of connectors that are not specially protected is impaired. The very resistant special potting compound enables the use in many application areas. These connectors are designed with machined precision contacts for high current carrying capacity. The connectors have the same mounting cut-out and identical external dimensions as the standard D-Sub connector.

Technical data

Nominal current	machined: 7 A
Test voltage	1 KV / AC
Contact resistance	≤ 10 mΩ
Insulation resistance	≥ 5 GΩ
Clearance and creepage distance	≥ 0,9 mm acc. to VDE 0110
Mating and unmating force	0,3 - 0,7 N per contact
Temperature range	-55 °C to +125 °C
Insulator	Thermoplast UL 94-V0
Contacts	Cu and brass alloy gold-plated
Metal shell	Steel tin- or Zn-plated or passivated
Mechanical lifetime	G1 = 500 mating cycles G2 = 250 mating cycles G3 = 50 mating cycles
Protection class	IP 67

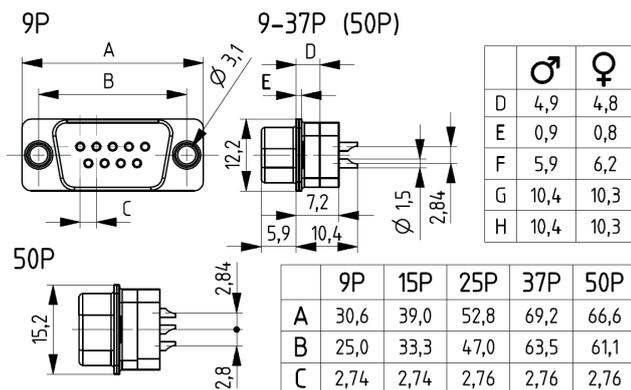


IP 67 D-Sub solder cup

with machined contacts

- High-quality casting compound resistant to many liquids
- Sealed against gases and liquids
- Machined precision contacts Cu alloy
- Integrated solder-stop
- Fully gold-plated over Nickel barrier layer
- Suitable for conductor diameter up to AWG 20
- Highest quality and lifetime because of defined contact area
- Outer dimensions according to standard version

Dimensions



Technical data (mutual data on pages 81 & 130)

Nominal current	Machined contacts: 7 A
Contact / Insulation resistance	≤10 mΩ/ ≥10 GΩ

Order information

SDT09512GxV	Male 9-pole Gx:G1/G2/G3
SDT15512GxV	Male 15-pole Gx:G1/G2/G3
SDT25512GxV	Male 25-pole Gx:G1/G2/G3
SDT37512GxV	Male 37-pole Gx:G1/G2/G3
SDT50512GxV	Male 50-pole Gx:G1/G2/G3
ST09612GxV	Female 9-pole Gx:G1/G2/G3
ST15612GxV	Female 15-pole Gx:G1/G2/G3
ST25612GxV	Female 25-pole Gx:G1/G2/G3
ST37612GxV	Female 37-pole Gx:G1/G2/G3
ST50612GxV	Female 50-pole Gx:G1/G2/G3

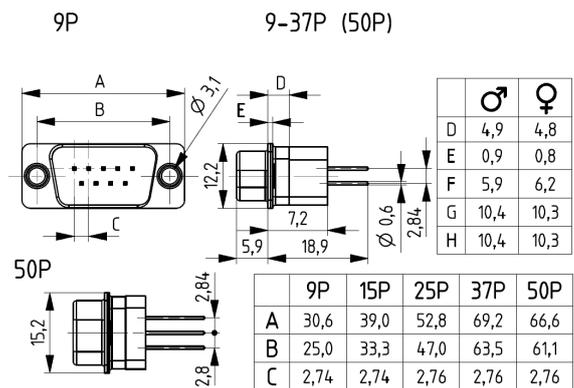


IP 67 D-Sub WireWrap

with machined contacts

- High-quality casting compound resistant to many liquids
- Sealed against gases and liquids
- Machined precision contacts Cu alloy
- Fully gold-plated over Nickel barrier layer
- Highest quality and lifetime because of defined contact area
- Standard accessories can be used
- Outer dimensions according to standard version

Dimensions



Technical data (mutual data on pages 81 & 130)

Nominal current	Machined contacts: 7 A
Contact / Insulation resistance	≤10 mΩ/ ≥10 GΩ

Order information

SDT0955GxV	Male 9-pole Gx:G1/G2/G3
SDT1555GxV	Male 15-pole Gx:G1/G2/G3
SDT2555GxV	Male 25-pole Gx:G1/G2/G3
SDT3755GxV	Male 37-pole Gx:G1/G2/G3
SDT50512GxV	Male 50-pole Gx:G1/G2/G3
ST0965GxV	Female 9-pole Gx:G1/G2/G3
ST1565GxV	Female 15-pole Gx:G1/G2/G3
ST2565GxV	Female 25-pole Gx:G1/G2/G3
ST3765GxV	Female 37-pole Gx:G1/G2/G3
ST5065GxV	Female 50-pole Gx:G1/G2/G3

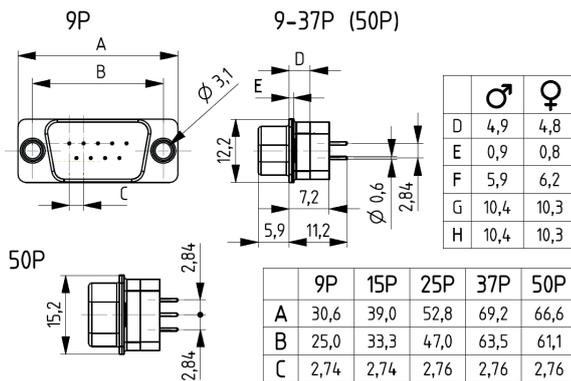


IP 67 D-Sub Solder pin 180°

with machined contacts

- High-quality casting compound resistant to many liquids
- Sealed against gases and liquids
- Machined precision contacts Cu alloy
- Fully gold-plated over Nickel barrier layer
- Highest quality and lifetime because of defined contact area
- Standard Zubehör einsetzbar
- Outer dimensions according to standard version

Dimensions



Technical data (mutual data on pages 81 & 130)

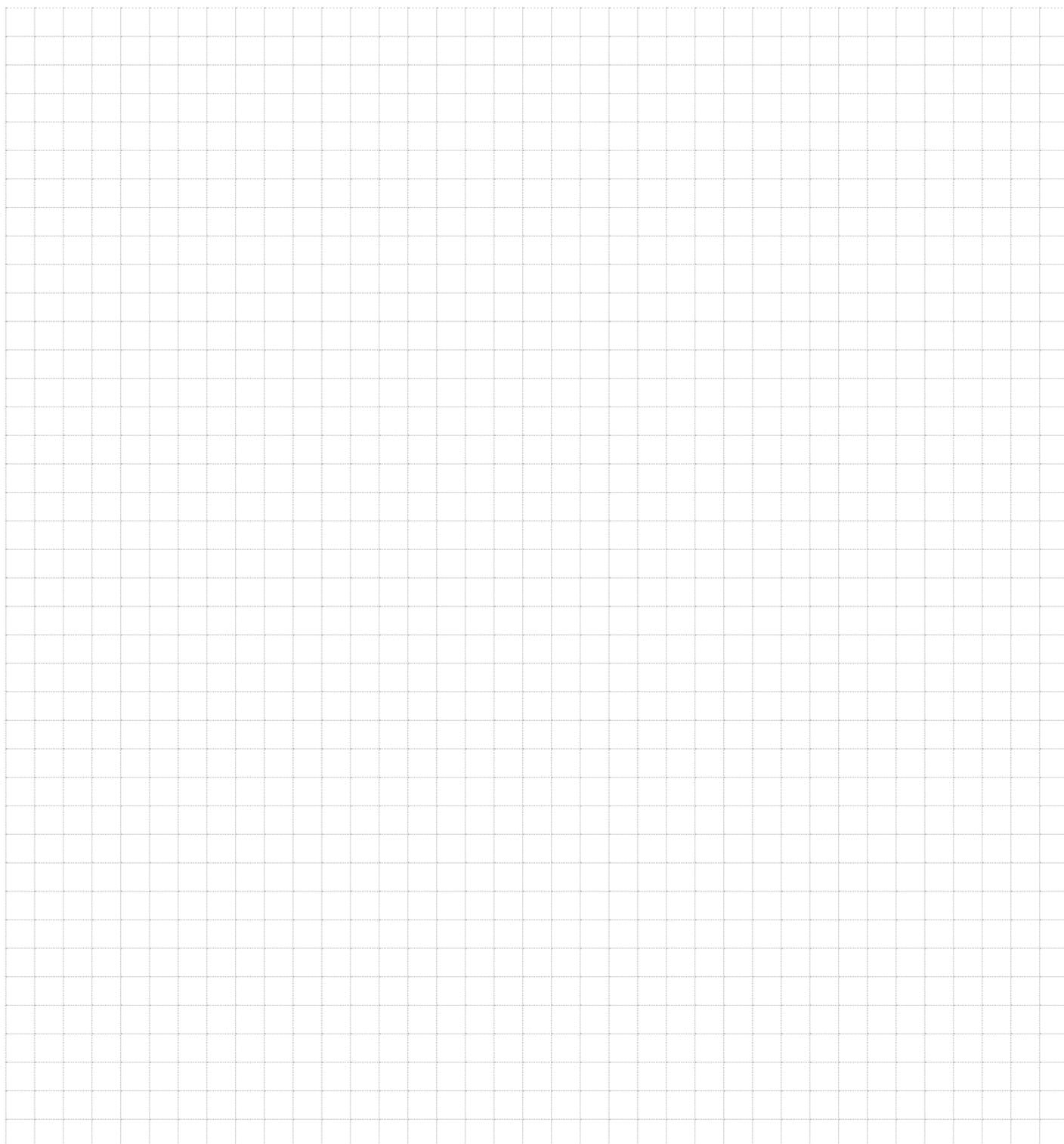
Nominal current Machined contacts: 7 A

Contact / Insulation resistance $\leq 10 \text{ m}\Omega / \geq 10 \text{ G}\Omega$

Order information

SDT0952GxV	Male 9-pole Gx:G1/G2/G3
SDT1552GxV	Male 15-pole Gx:G1/G2/G3
SDT2552GxV	Male 25-pole Gx:G1/G2/G3
SDT3752GxV	Male 37-pole Gx:G1/G2/G3
SDT5052GxV	Male 50-pole Gx:G1/G2/G3
ST0962GxV	Female 9-pole Gx:G1/G2/G3
ST1562GxV	Female 15-pole Gx:G1/G2/G3
ST2562GxV	Female 25-pole Gx:G1/G2/G3
ST3762GxV	Female 37-pole Gx:G1/G2/G3
ST5062GxV	Female 50-pole Gx:G1/G2/G3

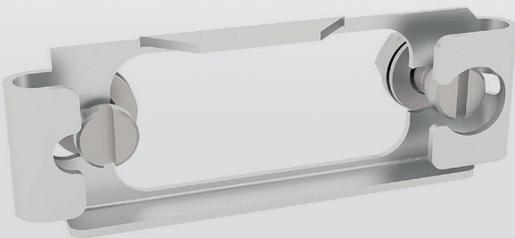
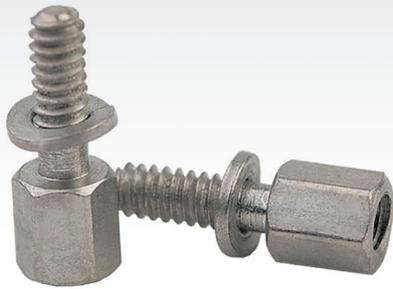
Your notes



D-Sub accessories

EMC-protection plus mounting and locking accessories

D-Sub



For the interference-free closure of open D-Sub interfaces, full-metal EMC blind flanges and plastic caps with a special shield coating are available.

Versions with a fastening clip and transparent versions are applicable for the dust protection.

For locking the D-Sub interfaces, the following editions are applicable alternatively to the screw lock:

- Plunger pins for the Quick Lock Push Pull quick locking system
- Slide lock
- Clip lock
- Screw lock without hood

For the safe mounting of the D-Sub connectors at front panels and case walls, female screw locks are available as sets including spring washer, spacers and nut in various lengths and outer/inner thread combinations.

A female screw lock with captive spring washer is predestined for the vibration-proof mounting.

Technical data

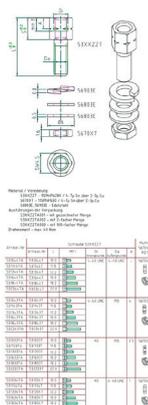
See each product



Hexagonal screws

- Various lengths
- Packaging as complete set: 2 hexagonal screws, spacer, spring washer and nuts
- Packaging as loose parts in separate plastic bags for each article

Dimensions



Technical data (mutual data on pages 81 & 134)

Hexagonal screw St tin-plated

Order information

531044TA002	L=10 / inside: UNC / outside: UNC
531144TA002	L=11 / inside: UNC / outside: UNC
531344TA002	L=13 / inside: UNC / outside: UNC
531644TA002	L=16 / inside: UNC / outside: UNC
531844TA002	L=18 / inside: UNC / outside: UNC
532244TA002	L=22 / inside: UNC / outside: UNC
531033TA002	L=10 / inside: M3 / outside: M3
531043TA002	L=10 / inside: UNC / outside: M3
531034TA002	L=10 / inside: M3 / outside: UNC

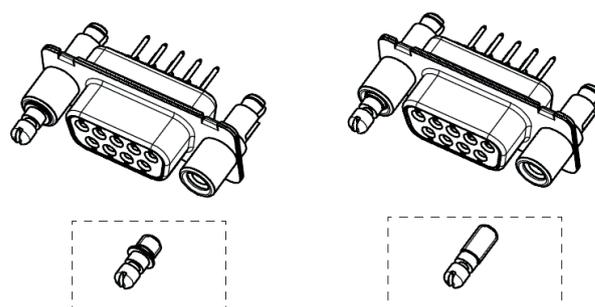


Quick Lock pins variant A

Extension set for D-Sub interface with threaded bolt

- Versions with thread UNC 4-40 or M3
- Versions with or without stop

Dimensions



Technical data (mutual data on pages 81 & 134)

Quick Lock pin Steel tin-plated

Order information

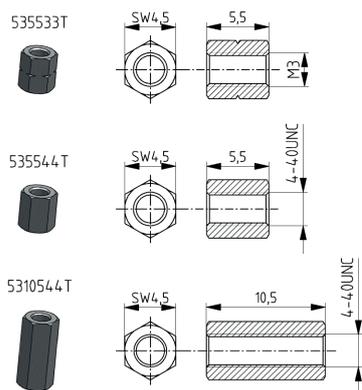
104T002	Set UNC 4-40
104M3T002	Set M3
103T002	Set UNC 4-40 with stop for mounting height 6 mm



Hexagonal threaded bolts

- Various lengths: 5.5/10.5
- Thread: UNC 4-40 or M3

Dimensions



Technical data (mutual data on pages 81 & 134)

Material Steel tin-plated

Order information

535544T	L = 5,5 UNC
535533T	L = 5,5 M3
5310544T	L = 10,5 UNC

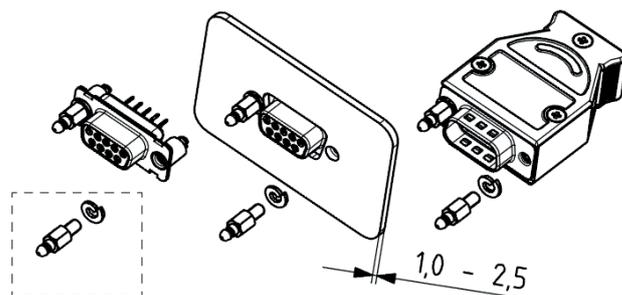


Quick Lock pins variant B

Extension set for D-Sub interface with thread on the connection side

- Versions with thread UNC 4-40 or M3
- Versions for different wall thicknesses up to 5 mm
- Versions with plunger pin short (K = 3) or long (K = 7)
- Set with 2 pins, 2 spring washers and 2 ring washers

Dimensions



Technical data (mutual data on pages 81 & 134)

Quick Lock pin Steel tin-plated

Order information

104TA002	Set UNC 4-40
104M3TA002	Set M3
104T1002	Set UNC 4-40 wall thickness S 1-1.3
104M3T1002	Set M3 wall wall thickness S 1-1.3
104T15002	Set UNC 4-40 wall wall thickness S 1,5 -1.8
104M3T15002	Set M3 wall wall thickness S 1.5-1.8
104T17002	Set UNC 4-40 wall wall thickness S 1.7-2
104M3T17002	Set M3 wall wall thickness S 1.7-2
104T22002	Set UNC 4-40 wall wall thickness S 2.2- 2.5
104M3T22002	Set M3 wall wall thickness S 2.2-2.5

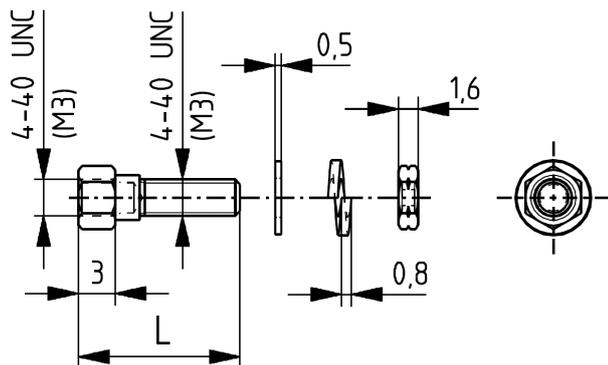


Hexagonal screws for case assembly

With screw, washer, spring washer and nut

- Outer thread/inner thread editions: UNC 4-40/ UNC 4-40 , UNC 4-40/M3, M3/UNC 4-40, M3/M3
- Width across flats: SW 4.5 or SW 5
- Head height: 5 mm
- Screw lengths from 8.5 mm to 13.2 mm
- Packed as set with 2 screw, washer, spring washer and nuts in one bag
<space>Bulk packaging with screw, washer, spring washer and nut as loose parts in bags

Dimensions



Technical data (mutual data on pages 81 & 134)

Hexagonal threaded bolt Steel tin-plated

Order information

5385S43TA002	L=8.5 int.UNC/ext.M3 Set/000:bulk
5385S33TA002	L=8.5 int.M3/ext.M3 Set/000:bulk
5395S44TA002	L=9.5 int.UNC/ext.UNC Set/000:bulk
5395S43TA002	L=9.5 int.UNC/ext.M3 Set/000:bulk
5395S34TA002	L=9.5 int.M3/ext.UNC Set/000:bulk
5395S33TA002	L=9.5 int.M3/ext.M3 Set/000:bulk
5311S44TA002	L=11 int.UNC/ext.UNC Set/000:bulk
5311S33TA002	L=11 int.M3/ext.M3 Set/000:bulk
5313S44TA002	L=13.2 int.UNC/ext.UNC Set/000:bulk
5313S33TA002	L=13.2 int.M3/ext.M3 Set/000:bulk

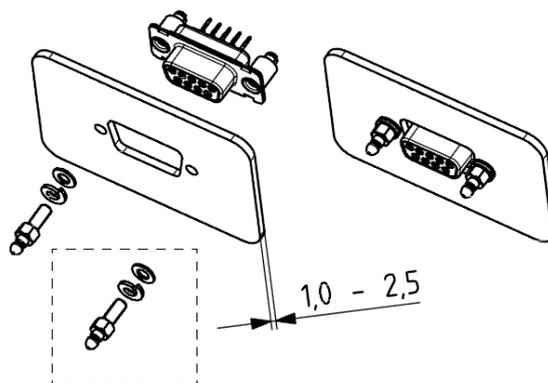


Quick Lock pins variant C

Extension set for D-Sub interface with through hole

- Versions with thread M3
- Versions for different wall thicknesses (S) up to 2,5 mm

Dimensions



Technical data (mutual data on pages 81 & 134)

Plunger pin Steel tin-plated

Order information

103M3TA002	Set M3 D-Sub front panel mounting
103M3TKA002	Set M3 D-Sub front panel mounting
113M3TA002	Set M3 D-Sub front panel mounting
103M3T1002	Set M3 D-Sub rear panel mounting
103M3TK1002	Set M3 D-Sub rear panel mounting
113M3T12002	Set M3 D-Sub rear panel mounting

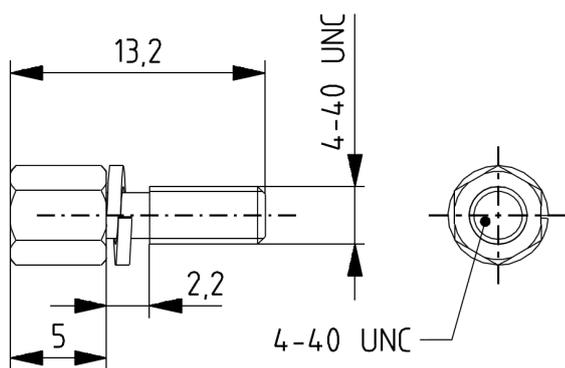


Hexagonal screw for case assembly

With captively mounted spring washer

- For applications at case wall
- Protection against self-loosening at vibration by spring washer
- Thread: UNC 4-40

Dimensions



Technical data (mutual data on pages 81 & 134)

Material Steel tin-plated

Order information

531344FT UNC

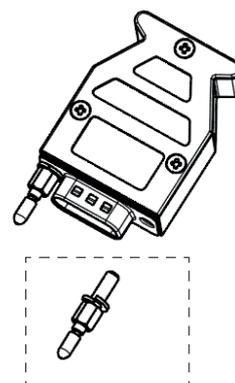


Quick Lock pins variant D

Extension set for plastic hoods Series 07

- Quick Lock pins with self-cutting thread
- Application in plastic hoods for push/clip locking Series 07
- Set with 2 plunger pins and 2 spring washers

Dimensions

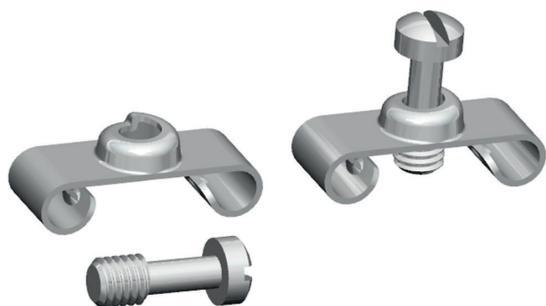


Technical data (mutual data on pages 81 & 134)

Plunger pin Steel tin-plated

Order information

114TK002 Set

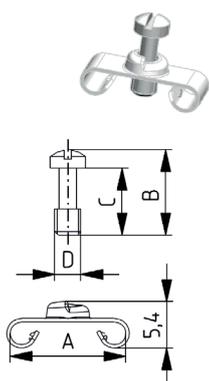


Screw latching

As a set or single parts

- Screw latching for application without hood
- Fixed captively with holding bracket
- UNC 4-40 or M3 thread
- 2 surfaces: Z-version: zinc-plated / T-version: tin-plated

Dimensions



	D	A	B	C
50	4-40 UNC	15,8	9,2	6,7
9-37	4-40 UNC	13,2	9,2	6,7
50	M3	15,8	9,8	7,7
50	4-40 UNC	15,8	9,8	7,7
9-37	M3	13,2	9,8	7,7
9-37	4-40 UNC	13,2	9,8	7,7

Technical data (mutual data on pages 81 & 134)

Locking screw/bracket Steel zinc-plated or tin-plated

Order information

529370T002	9-37-pole UNC tin-plated as set/000: single parts
52050T002	50-pole UNC tin-plated as set/000: single parts
529370TM3002	9-37-pole M3 tin-plated as set/000: single parts
52050TM3002	50-pole M3 tin-plated as set/000: single parts
529370Z002	9-37-pole UNC tin-plated as set/000: single parts
52050Z002	50-pole UNC tin-plated as set/000: single parts
529370ZM3002	9-37-pole M3 tin-plated as set/000: single parts
52050ZM3002	50-pole M3 tin-plated as set/000: single parts

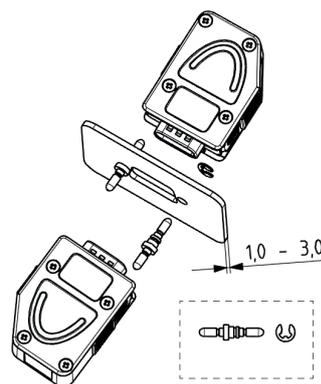


Quick Lock pins variant E

Extension set für hood-hood thru bulkhead

- Versions for different wall thicknesses up to max. 2,5 mm
- Pin with contour on both sides for mating from front and rear side
- Set with 2 pins and 2 spring washers

Dimensions



Technical data (mutual data on pages 81 & 134)

Quick Lock pin Steel tin-plated

Order information

114TF125002	Set wall thickness 1,25
114TF15002	Set wall thickness 1,5
114TF2002	Set wall thickness 2
114TF22002	Set wall thickness 2,2
114TF25002	Set wall thickness 2,5
114TF3002	Set wall thickness 3

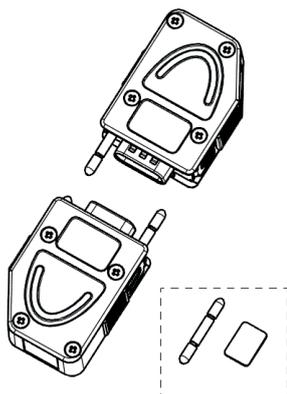


Quick Lock pins variant F

Extension set for connection hood-hood

- Version for flying connection of 2 hoods
- Coding for safe plugging

Dimensions



Technical data (mutual data on pages 81 & 134)

Quick Lock pin	Steel tin-plated
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Order information

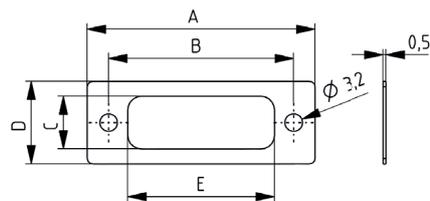
113TF002	Set
----------	-----



Sealing flanges made of silicon

- Silicon flange sealing for protection against moisture
- 09- to 50-pole
- Excellent fit for all D-Sub connectors

Dimensions



	09	15	25	37	50
A	33,0	41,0	55,0	72,0	70,0
B	25,0	33,3	47,0	63,5	61,1
C	9,6				12,4
D	15,0				18,0
E	18,2	26,4	40,2	56,6	54,2

Technical data (mutual data on pages 81 & 134)

Material	VMQ
Temperature range	- 60° - 230° C

Order information

SF09	9-pole
SF15	15-pole
SF25	25-pole
SF37	37-pole
SF50	50-pole

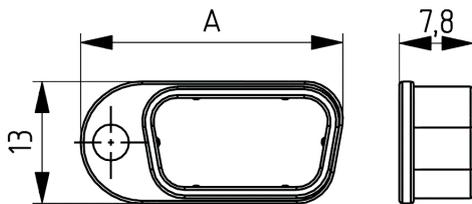


Protection Caps Plastic Black

Black version with eyelet attachment

- Protection against dust and humidity
- High-class, very sturdy plastic
- 09 bis 37 polig lieferbar
- With eyelet attachment for mounting a chain

Dimensions



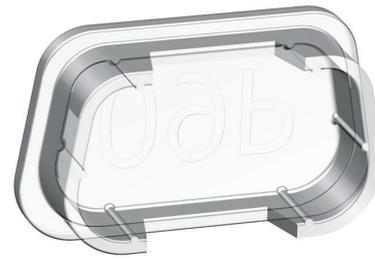
	SKB09x	SKB15x	SKB25x	SKB37x
A	27,6	36,0	49,6	65,6

Technical data (mutual data on pages 81 & 134)

Material Thermoplast

Order information

SKB09P	9-pole for D-Sub male
SKB15P	15-pole for D-Sub male
SKB25P	25-pole for D-Sub male
SKB37P	37-pole for D-Sub male
SKB09S	9-pole for D-Sub female
SKB15S	15-pole for D-Sub female
SKB25S	25-pole for D-Sub female
SKB37S	37-pole for D-Sub female

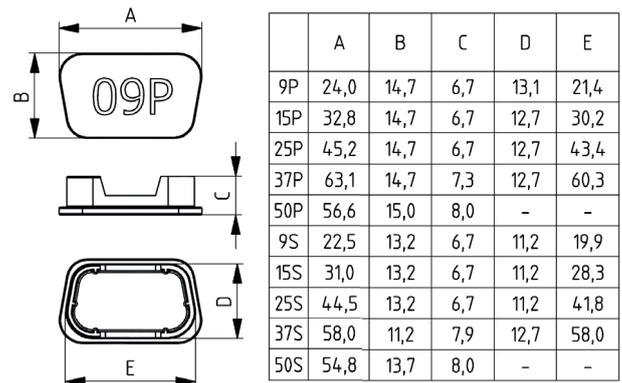


Protection Caps

Transparent version

- Protection against dust and humidity
- Transparent plastic
- Economical solution

Dimensions



Technical data (mutual data on pages 81 & 134)

Material Thermoplast

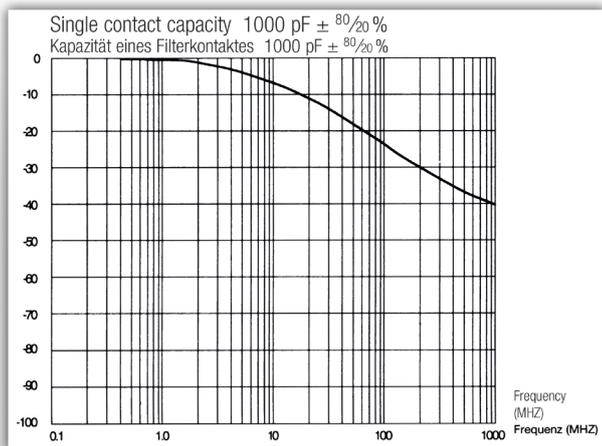
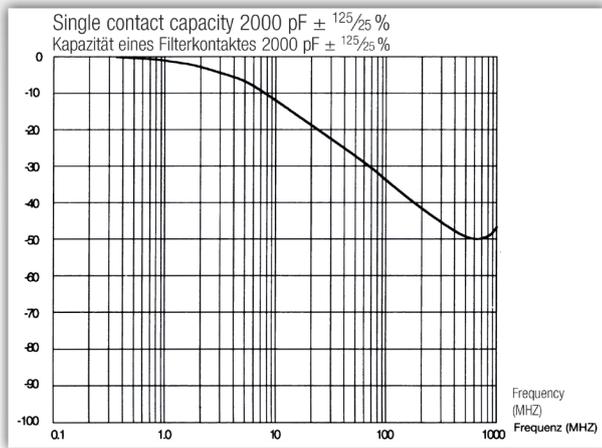
Order information

SKT09P	9-pole for D-Sub male
SKT15P	15-pole for D-Sub male
SKT25P	25-pole for D-Sub male
SKT37P	37-pole for D-Sub male
SKT50P	50-pole for D-Sub male
SKT09S	9-pole for D-Sub female
SKT15S	15-pole for D-Sub female
SKT25S	25-pole for D-Sub female
SKT37S	37-pole for D-Sub female
SKT50S	50-pole for D-Sub female

D-Sub Filter connectors

For filtering interferences for an optimal signal transmission

D-Sub



D-Sub filter connectors suppress interference of the input signals at the D-Sub device interface. PROVERTHA offers the range of filter connectors with filter capacitors for the suppression of crosstalk and harmonics, which act as low-pass filters. The cost-effective solution for the suppression of disturbances

at high frequencies with lower attenuation requirements, the series of ferrite-equipped filter connectors.

- High quality filtering with feedthrough capacitors
- 100% assured quality through individual testing of each connector
- Selective filter assembly in the connector possible.
- Dimensionally identical to standard plugs and the installation dimension remains the same
- Our standard accessories can be used without restrictions
- Capacitance values ??from 2pF to 2000 pF available
- RF density, closed metal back
- High attenuation values ??up to 50 dB
- Different types of connections: solder cup or cable solder, WireWrap plus solder pin 180 ° and solder pin 90 °

Technical data

Nominal voltage	100 V DC (Var 01: 2000pF: 50 V DC)
Test voltage	200 V DC (Var 01: 2000pF: 125 V DC)
Nominal current	≤ 5 A DC
Insulation resistance	≥ 1 G Ω at 25 °C
Temperature range	-25 °C to +85 °C
Mechanical lifetime	G1: 500 / G2: 250 / G3: 50 mating cycles
Variant 01 2000 pF Tol.	+80% / -20%
Variant 02 1000 pF Tol.	+80% / -20%
Variant 09 2 pF Tol.	+0% / -100% (without filter pins)

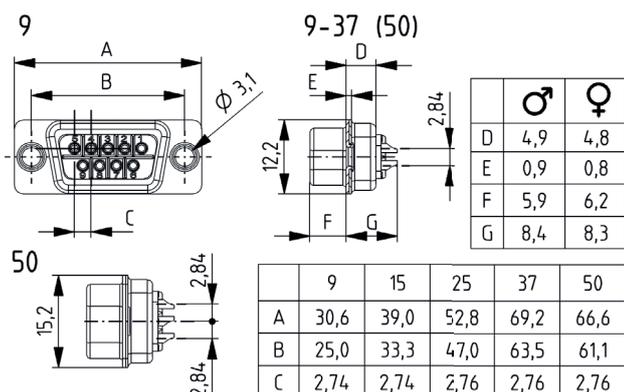


Filter connectors

With solder cup connection

- Chip capacitor filtration 1000 pF
- Standard D-SUB dimensions
- Inexpensive edition
- Quality class 3

Dimensions



Technical data (mutual data on pages 81 & 142)

Nominal temperature	-25° C to + 85° C
Nominal voltage	100VDC (Var Nr. 01 (2000pF) = 50VDC)
Test voltage	200VDC (Var Nr. 01 (2000pF) = 125VDC)
Nominal current	5 A DC Max.

Order information

F0209151G3T	Pin 9-pole
F0215151G3T	Pin 15-pole
F0225151G3T	Pin 25-pole
F0237151G3T	Pin 37-pole
F0209161G3T	Socket 9-pole
F0215161G3T	Socket 15-pole
F0225161G3T	Socket 25-pole
F0237161G3T	Socket 37-pole

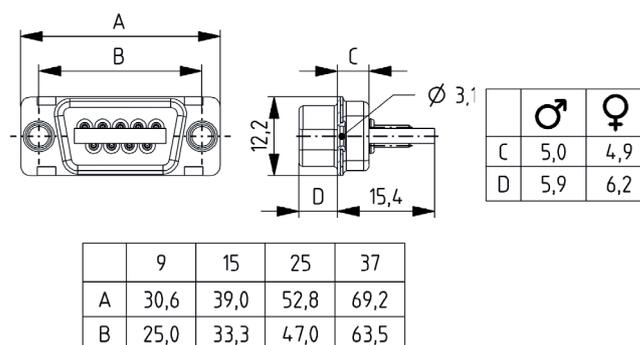


Filter connectors

For cable soldering technology (PCB)

- High-quality filtering with feedthrough capacitors
- Capacity value: 1000 pF (2 pF to 2000 pF upon request)
- RF-tight sealed metal rear side
- High attenuation values up to 50 dB
- Fully assembled soldering terminal
- Optimal soldering of small wire cross-sections too
- Compact structure; fits into D-Sub hoods

Dimensions



Technical data (mutual data on pages 81 & 142)

Nominal temperature	-25° C to +85° C
Nominal voltage	100 VDC (Variation Nr. 01 (2000 pF = 50 VDC))
Test voltage	200 VDC (Variation Nr. 01 (2000 pF = 125 VDC))
Nominal current	5 A DC max.

Order information

F020951Gx	Pin 9-pole Gx: G1/G2/G3
F021551Gx	Pin 15-pole Gx: G1/G2/G3
F022551Gx	Pin 25-pole Gx: G1/G2/G3
F023751Gx	Pin 37-pole Gx: G1/G2/G3
F020961Gx	Socket 9-pole Gx: G1/G2/G3
F021561Gx	Socket 15-pole Gx: G1/G2/G3
F022561Gx	Socket 25-pole Gx: G1/G2/G3
F023761Gx	Socket 37-pole Gx: G1/G2/G3

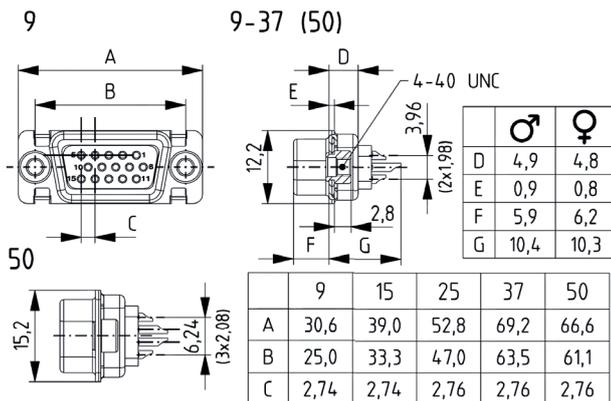


Filter connectors

Wire Wrap connection

- High quality filtering with feedthrough capacitors
- Capacity value: 1000 pF (2 pF to 2000 pF upon request)
- RF-tight sealed metal rear side
- High attenuation values up to 50 dB
- High-precision machined Wire Wrap contacts
- 3-winded Wire Wrap

Dimensions



Technical data (mutual data on pages 81 & 142)

Nominal temperature	-25° C to + 85° C
Nominal voltage	100VDC (Var. Nr. 01 (2000pF) = 50VDC)
Test voltage	200VDC (Var. Nr. 01 (2000pF) = 125VDC)
Nominal current	5 A DC max.

Order information

F020955Gx	Pin 9-pole Gx: G1/G2/G3
F021555Gx	Pin 15-pole Gx: G1/G2/G3
F022555Gx	Pin 25-pole Gx: G1/G2/G3
F023755Gx	Pin 37-pole Gx: G1/G2/G3
F020965Gx	Socket 9-pole Gx: G1/G2/G3
F021565Gx	Socket 15-pole Gx: G1/G2/G3
F022565Gx	Socket 25-pole Gx: G1/G2/G3
F023765Gx	Socket 37-pole Gx: G1/G2/G3

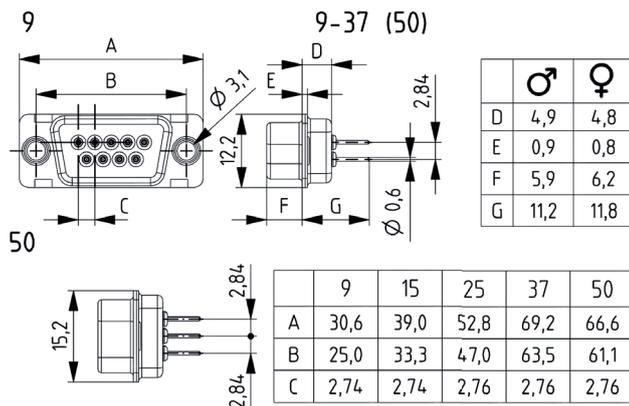


Filter connectors solder pin 180°

Machined contacts and 1000 pF

- High quality filtering with feedthrough capacitors
- Capacity value: 1000 pF (2 pF to 2000 pF upon request)
- Machined precision contacts
- Selective filtering of the contacts in the connector possible upon request
- RF-tight sealed metal rear side
- High attenuation up to 50 dB
- 100 % guaranteed quality due to single examination of each connector
- Installation dimensions of standard connectors

Dimensions



Technical data (mutual data on pages 81 & 142)

Nominal voltage	100 VDC (Variation Nr. 01 (2000 pF) = 50 VDC)
Test voltage	200 VDC (Variation Nr. 01 (2000 pF) = 125 VDC)
Nominal current	5 A DC max.
Insulation resistance	1 GΩmin. @ 25° C

Order information

F020952Gx	Pin 9-pole Gx:G1 / G2 / G3
F021552Gx	Pin 15-pole Gx:G1 / G2 / G3
F022552Gx	Pin 25-pole Gx:G1 / G2 / G3
F023752Gx	Pin 37-pole Gx:G1 / G2 / G3
F025052Gx	Pin 50-pole Gx:G1 / G2 / G3
F020962Gx	Socket 9-pole Gx:G1 / G2 / G3
F021562Gx	Socket 15-pole Gx:G1 / G2 / G3
F022562Gx	Socket 25-pole Gx:G1 / G2 / G3
F023762Gx	Socket 37-pole Gx:G1 / G2 / G3
F025062Gx	Socket 50-pole Gx:G1 / G2 / G3

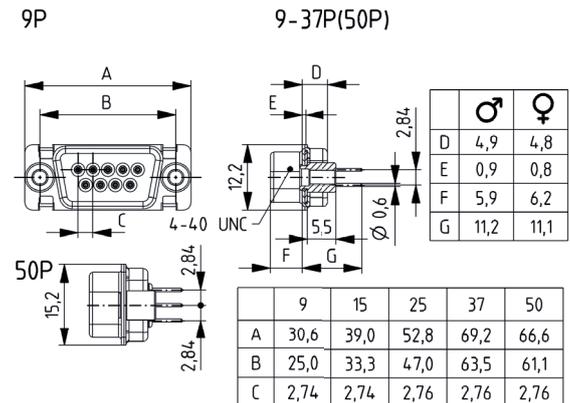


Filter connectors solder pin 180°

Threaded rivet UNC 4-40 or M3

- High quality filtering with feedthrough capacitors
- Capacity value: 1000 pF (2 pF to 2000 pF upon request)
- Selective filtering of the contacts in the connector possible upon request
- Machined precision contacts
- RF-tight sealed metal rear side
- High attenuation up to 50 dB
- 100 % guaranteed quality due to single examination of each connector
- Installation dimensions of standard connectors

Dimensions



Technical data (mutual data on pages 81 & 142)

Nominal voltage	100 VDC (Variation Nr. 01 (2000 pF) = 50 VDC)
Test voltage	200 VDC (Variation Nr. 01 (2000 pF) = 125 VDC)
Nominal current	5 A DC max.
Insulation resistance	1 GΩmin. @ 25° C

Order information

F020952Gx4	Pin 9-pole UNC Gx:G1 / G2 / G3
F021552Gx4	Pin 15-pole UNC Gx:G1 / G2 / G3
F022552Gx4	Pin 25-pole UNC Gx:G1 / G2 / G3
F023752Gx4	Pin 37-pole UNC Gx:G1 / G2 / G3
F025052Gx4	Pin 50-pole UNC Gx:G1 / G2 / G3
F020962Gx4	Socket 9-pole UNC Gx:G1 / G2 / G3
F021562Gx4	Socket 15-pole UNC Gx:G1 / G2 / G3
F022562Gx4	Socket 25-pole UNC Gx:G1 / G2 / G3
F023762Gx4	Socket 37-pole UNC Gx:G1 / G2 / G3
F025062Gx4	Socket 50-pole UNC Gx:G1 / G2 / G3

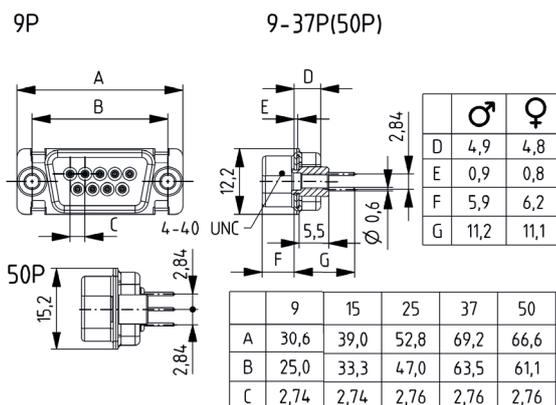


Filter connectors Boardlock

Snap-in mounting/grounding clip with inner thread

- High quality filtering with feedthrough capacitors
- Capacity value: 1000 pF (2 pF to 2000 pF upon request)
- Selective filtering of the contacts in the connector possible upon request
- Boardlock with snap-in fastening clip and thread UNC 4-40 or M3
- Boardlock for PCB thickness 1.6 mm with safe grounding
- RF-tight sealed metal rear side
- High attenuation up to 50 dB
- 100 % guaranteed quality due to single examination of each connector

Dimensions



Technical data (mutual data on pages 81 & 142)

Nominal voltage	100 VDC (Variation Nr. 01 (2000 pF) = 50 VDC)
Test voltage	200 VDC (Variation Nr. 01 (2000 pF) = 125 VDC)
Nominal current	5 A DC max.
Insulation resistance	1 GΩmin. @ 25° C

Order information

BL4F020952Gx	Pin 9-pole UNC Gx:G1 / G2 / G3
BL4F021552Gx	Pin 15-pole UNC Gx:G1 / G2 / G3
BL4F022552Gx	Pin 25-pole UNC Gx:G1 / G2 / G3
BL4F023752Gx	Pin 37-pole UNC Gx:G1 / G2 / G3
BL4F025052Gx	Pin 50-pole UNC Gx:G1 / G2 / G3
BL4F020962Gx	Socket 9-pole UNC Gx:G1 / G2 / G3
BL4F021562Gx	Socket 15-pole UNC Gx:G1 / G2 / G3
BL4F022562Gx	Socket 25-pole UNC Gx:G1 / G2 / G3
BL4F023762Gx	Socket 37-pole UNC Gx:G1 / G2 / G3
BL4F025062Gx	Socket 50-pole UNC Gx:G1 / G2 / G3

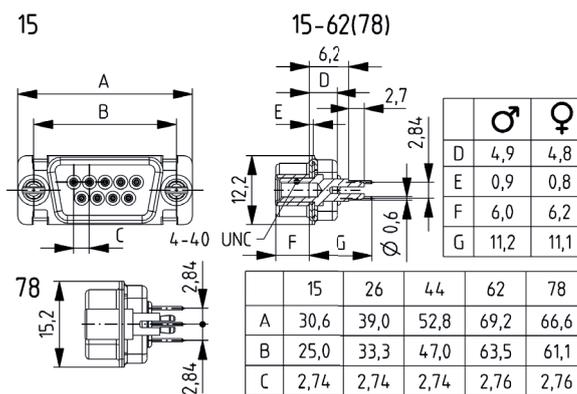


Filter connectors Combilock

Snap-in mounting/grounding clip and threaded bolt

- High quality filtering with feedthrough capacitors
- Capacity value: 1000 pF (2 pF to 2000 pF upon request)
- Selective filtering of the contacts in the connector possible upon request
- High attenuation up to 50 dB
- Combilock with snap-in fastening clip and threaded sleeve UNC 4-40 or M3
- Combilock for PCB thickness 1.6 mm with safe grounding
- 100 % guaranteed quality due to single examination of each connector
- Installation dimensions of standard connectors

Dimensions



Technical data (mutual data on pages 81 & 142)

Nominal voltage	100 VDC (Variation Nr. 01 (2000 pF) = 50 VDC)
Test voltage	200 VDC (Variation Nr. 01 (2000 pF) = 125 VDC)
Nominal current	5 A DC max.
Insulation resistance	1 GΩmin. @ 25° C

Order information

B4F020952Gx	Pin 9-pole UNC Gx:G1 / G2 / G3
B4F021552Gx	Pin 15-pole UNC Gx:G1 / G2 / G3
B4F022552Gx	Pin 25-pole UNC Gx:G1 / G2 / G3
B4F023752Gx	Pin 37-pole UNC Gx:G1 / G2 / G3
B4F025052Gx	Pin 50-pole UNC Gx:G1 / G2 / G3
B4F020962Gx	Socket 9-pole UNC Gx:G1 / G2 / G3
B4F021562Gx	Socket 15-pole UNC Gx:G1 / G2 / G3
B4F022562Gx	Socket 25-pole UNC Gx:G1 / G2 / G3
B4F023762Gx	Socket 37-pole UNC Gx:G1 / G2 / G3
B4F025062Gx	Socket 50-pole UNC Gx:G1 / G2 / G3

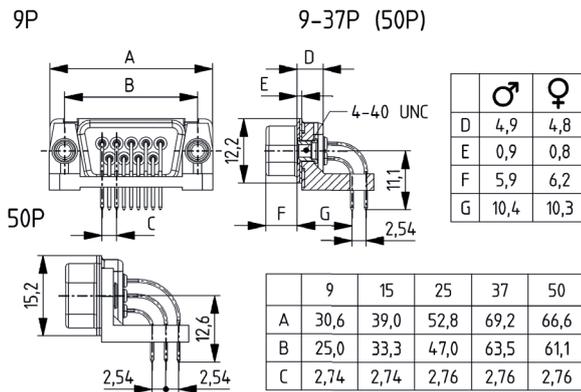


Filter connectors with solder pins 90°

With plastic bracket

- D-Sub filter connectors with filtered signal contacts with angled solder pins
- Capacity value: 1000 pF (2 pF to 2000 pF upon request)
- Machined precision contacts
- Selective filtering of the contacts in the connector possible upon request
- RF-tight sealed metal rear side
- High attenuation up to 50 dB
- 100 % guaranteed quality due to single examination of each connector
- Installation dimensions of standard connectors

Dimensions

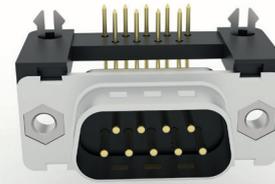


Technical data (mutual data on pages 81 & 142)

Pole numbers	9, 15, 25, 37, 50
Nominal temperature	-25° C to + 85° C
Nominal voltage	100 VDC (Variation Nr. 01 (2000 pF) = 50 VDC)
Test voltage	200 VDC (Variation Nr. 01 (2000 pF) = 125 VDC)

Order information

F020956GxE4B	Pin 9-pole UNC Gx:G1 / G2 / G3
F021556GxE4B	Pin 15-pole UNC Gx:G1 / G2 / G3
F022556GxE4B	Pin 25-pole UNC Gx:G1 / G2 / G3
F023756GxE4B	Pin 37-pole UNC Gx:G1 / G2 / G3
F025056GxE4B	Pin 50-pole UNC Gx:G1 / G2 / G3
F020966GxE4B	Socket 9-pole UNC Gx:G1 / G2 / G3
F021556GxE4B	Socket 15-pole UNC Gx:G1 / G2 / G3
F022566GxE4B	Socket 25-pole UNC Gx:G1 / G2 / G3
F023766GxE4B	Socket 37-pole UNC Gx:G1 / G2 / G3
F025066GxE4B	Socket 50-pole UNC Gx:G1 / G2 / G3

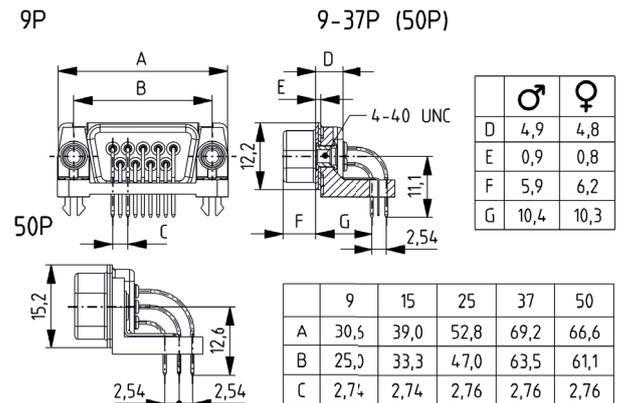


Filter connectors solder pin 90°

With plastic bracket, grounding clip and inside thread

- D-Sub filter connectors with filtered signal contacts
- Angled solder pins in high-quality machined edition
- Snap-in clip for safe effective ground connection
- 100 % guaranteed quality due to single examination of each connector
- High attenuation up to 50 dB
- RF-tight sealed metal rear side

Dimensions



Technical data (mutual data on pages 81 & 142)

Pole numbers	9, 15, 25, 37, 50
Nominal temperature	-25° C to + 85° C
Nominal voltage	100 VDC (Variation Nr. 01 (2000 pF) = 50 VDC)
Test voltage	200 VDC (Variation Nr. 01 (2000 pF) = 125 VDC)

Order information

F020956GxR4B	Pin 9-pole UNC Gx:G1 / G2 / G3
F021556GxR4B	Pin 15-pole UNC Gx:G1 / G2 / G3
F022556GxR4B	Pin 25-pole UNC Gx:G1 / G2 / G3
F023756GxR4B	Pin 37-pole UNC Gx:G1 / G2 / G3
F025056GxR4B	Pin 50-pole UNC Gx:G1 / G2 / G3
F020966GxR4B	Socket 9-pole UNC Gx:G1 / G2 / G3
F021556GxR4B	Socket 15-pole UNC Gx:G1 / G2 / G3
F022566GxR4B	Socket 25-pole UNC Gx:G1 / G2 / G3
F023766GxR4B	Socket 37-pole UNC Gx:G1 / G2 / G3
F025066GxR4B	Socket 50-pole UNC Gx:G1 / G2 / G3

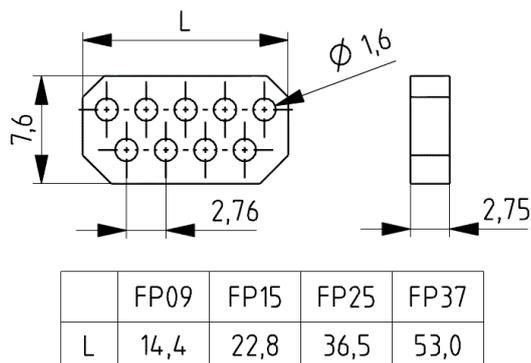


Ferrite plates

For D-Sub connectors

- Subsequent shielding against electromagnetic interferences
- For subsequent assembly at D-Sub connector
- Pole numbers: 9 / 15 / 25 / 37

Dimensions



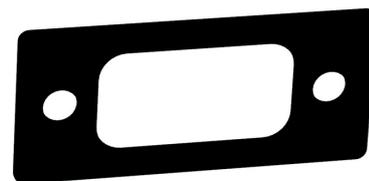
Technical data (mutual data on pages 81 & 142)

Dampening values

1 MHz	0,5 dB
10 MHz	1 dB
100 MHz	3 dB

Order information

FP09	9-pole
FP15	15-pole
FP25	25-pole
FP37	37-pole

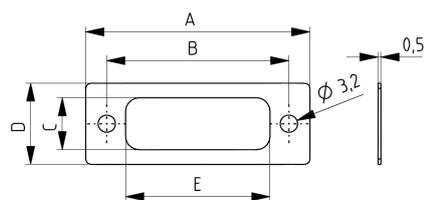


RF flange seal

For D-Sub connectors

- Good RF-shielding of the D-Sub panel cut-outs at cases
- For optimal sealing between connector and frame
- Extremely low contact resistance

Dimensions



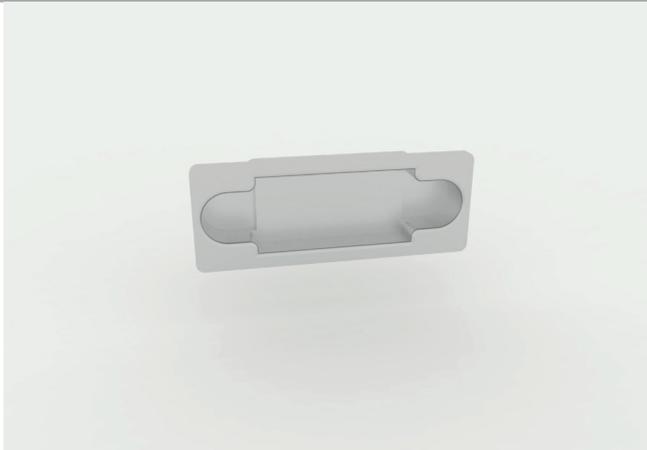
	DF09	DF15	DF25	DF37	DF50
A	33,0	41,0	55,0	72,0	70,0
B	25,0	33,3	47,0	63,5	61,1
C	9,6				12,4
D	15,0				18,0
E	18,2	26,4	40,2	56,6	54,2

Technical data (mutual data on pages 81 & 142)

Material	Silicon (nickel-graphite filled)
Temperature range	-55 ° C to +200 ° C

Order information

DF09	9-pole
DF15	15-pole
DF25	25-pole
DF37	37-pole
DF50	50-pole

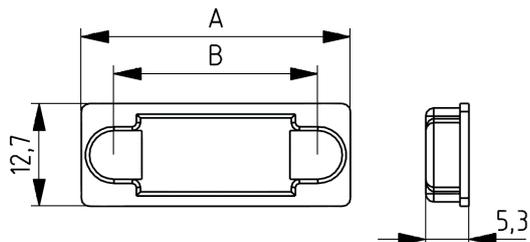


RF shielding cap

For D-Sub interfaces

- Protection from RF radiation at open interfaces
- 50 µm electromagnetical shielding coating
- UL-listed plastic
- Pole number: 9 / 15 / 25

Dimensions



	KF09	KF15	KF25
A	32,8	41,2	55,7
B	25,0	33,3	47,0

Technical data (mutual data on pages 81 & 142)

Temperature range	- 35° C to + 85°C
Attenuation 100 MHz	87 dB
Attenuation 1000 MHz	52 dB
Material	UL Thermoplast

Order information

KF09P	Cap pin 9-pole
KF15P	Cap pin 15-pole
KF25P	Cap pin 25-pole
KF09S	Cap socket 9-pole
KF15S	Cap socket 15-pole
KF25S	Cap socket 25-pole

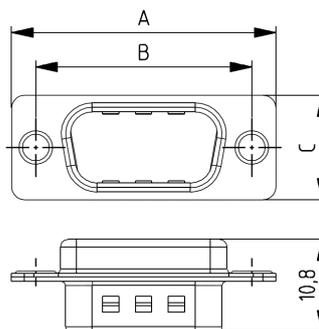


EMC blind flange

Protection of the D-Sub interface

- Exact closing of open D-Sub interface
- Protection of the D-Sub interface against EMI/RFI interferences
- Versions available from 9- to 50-pole
- Versions for D-Sub connector pin and socket

Dimensions



	A	B	C
9	30,6	25,0	12,2
15	39,0	33,3	
25	52,8	47,0	
37	69,2	63,5	15,2
50	66,6	61,1	

Technical data (mutual data on pages 81 & 142)

Blind flange	Steel tin-plated
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Order information

AK09P	for D-Sub pin 9-pole
AK15P	for D-Sub pin 15-pole
AK25P	for D-Sub pin 25-pole
AK37P	for D-Sub pin 37-pole
AK50P	for D-Sub pin 50-pole
AK09S	for D-Sub socket 9-pole
AK15S	for D-Sub socket 15-pole
AK25S	for D-Sub socket 25-pole
AK37S	for D-Sub socket 37-pole
AK50S	for D-Sub socket 50-pole

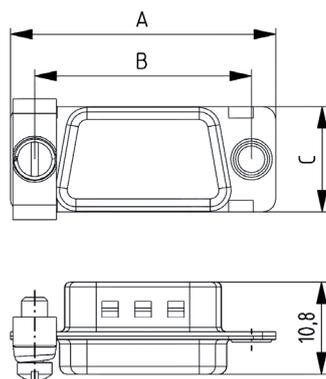


EMC protection cap

With screw-locking

- EMC protection of the D-Sub interface
- Exact closing of the D-Sub interface
- Captive by means of screw locking UNC 4-30 (4) or M3 (3)

Dimensions



	A	B	C
9	30,6	25,0	12,2
15	39,0	33,3	
25	52,8	47,0	
37	69,2	63,5	15,2
50	66,6	61,1	

Technical data (mutual data on pages 81 & 142)

Blind flange	Steel tin-plated/nickel-plated
Bracket	Steel tin-plated
Locking screw	Steel tin-plated

Order information

AK09P4	for D-Sub socket 9-pole UNC
AK15P4	for D-Sub socket 15-pole UNC
AK25P4	for D-Sub socket 25-pole UNC
AK37P4	for D-Sub socket 37-pole UNC
AK50P4	for D-Sub socket 50-pole UNC
AK09S4	for D-Sub pin 9-pole UNC
AK15S4	for D-Sub pin 15-pole UNC
AK25S4	for D-Sub pin 25-pole UNC
AK37S4	for D-Sub pin 37-pole UNC
AK50S4	for D-Sub pin 50-pole UNC