

Low Profile D-Sub Connectors



D-Sub Steckverbinder mit geringer Einbauhöhe

Ordering Code

Bestellschlüssel



FE 09 P 28 S G1 - ...

Series Prefix / *Serienbezeichnung*

No. of Contacts / *Polzahl*

09	15	25	37*
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Shell Size / *Gehäusegröße*

1	2	3	4
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Contact Type / *Kontaktart*

P Pin contacts / *Stiftkontakte*

S Socket contacts / *Buchsenkontakte*

Contact Design / *Kontaktvariante*

Machined contacts / *Gedrehte Kontakte*

1 Straight PCB termination / *Leiterplattenanschluss, gerade*

28 Straight PCB termination / *Leiterplattenanschluss, gerade*

21 Right angled PCB termination / *Leiterplattenanschluss, abgewinkelt*

Machined contacts / *Gedrehte Kontakte*

S Stamped contacts** / *Gestanzte Kontakte***

Performance Classes Available in Accordance with DIN 41652 / *Lieferbare Gütestufen nach DIN 41652*

G1 = 500 Contact cycles / *Steckzyklen* = Performance class 1 / *Gütestufen 1*

G2 = 200 Contact cycles / *Steckzyklen* = Performance class 2 / *Gütestufen 2*

G3 = 50 Contact cycles / *Steckzyklen* = Performance class 3 / *Gütestufen 3*

Modifications / *Modifikationen*



* 37 contacts available in stamped contact design 21S only

* **37-polig nur mit gestanzter Kontaktvariante 21S lieferbar**

** RoHS on request

** **RoHS auf Anfrage**

Pin connectors with dimples / *Stiftsteckverbinder mit Kontaktnoppen*

Due to their low profile, these connectors can be installed in 19" assembly systems in accordance with DIN 41494.

Diese Steckverbinder sind aufgrund ihres geringen Einbaumaßes besonders für 19" Aufbausysteme nach DIN 41494 geeignet.

Technical Data

Technische Daten

Mechanical Data

Mechanische Daten

Mechanical Data <i>Mechanische Daten</i>	
Mating force per signal contact <i>Steckkraft pro Signalkontakt</i>	≤ 3,4 N
Unmating force per signal contact <i>Ziehkraft pro Signalkontakt</i>	≥ 0,2 N

Electrical Data

Elektrische Daten

Electrical Data <i>Elektrische Daten</i>	
Current rating <i>Maximale Stromstärke</i>	5 A
Test voltage between 2 contacts / shell and contact <i>Prüfspannung zwischen 2 Kontakten bzw. Kontakt und Gehäuse</i>	1200 V / 1 min.
Meets transition resistance requirements per contact pair in line with DIN 41652: <i>Erfüllt Übergangswiderstand pro Kontaktpaar nach DIN 41652:</i>	
- Straight contacts / <i>gerade Kontakte</i>	≤ 10 mΩ
- Right angled contacts / <i>abgewinkelte Kontakte</i>	≤ 25 mΩ
Insulation resistance between contacts <i>Isolationswiderstand Kontakt / Kontakt</i>	≥ 5000 MΩ
Volume resistivity <i>Spezifischer Durchgangswiderstand</i>	10 ¹⁶ Ω cm
Dielectric strength <i>Spezifische Durchschlagsfestigkeit</i>	50 kV / mm

Materials and Platings

Materialien und Oberflächen

Materials and Platings <i>Materialien und Oberflächen</i>	
Shell <i>Gehäuse</i>	Steel <i>Stahl</i>
Insulator <i>Isolierkörper</i>	Polyester, glass filled (UL94V-0), grey <i>Polyester, glasfaserverstärkt (UL94V-0), grau</i>
Relative temperature index according to UL 746 B <i>Rel. Temperaturindex nach UL 746 B</i>	130 °C (266 °F)
Heat deflection temperature limit according to DIN 53461 HDT/A <i>Formbeständigkeitstemperatur nach DIN 53461 HDT/A</i>	210 °C (410 °F)
Sub temperature limit <i>Untere Grenztemperatur</i>	-55 °C (-67 °F)
Shell plating (standard) <i>Gehäuseoberfläche (Standard)</i>	Tin plated over nickel, pin connector shell with dimples <i>verzinkt über Nickel, Stiftsteckverbindergehäuse mit Kontaktnoppen</i>
Contact material <i>Kontaktmaterial</i>	Copper alloy <i>Kupfer-Legierung</i>
Stamped contacts <i>Gestanzte Kontakte</i>	Selective gold plating over nickel, termination area tin plated <i>selektiv vergoldet über Nickel, Anschlussbereich verzinkt</i>
Machined contacts <i>Gedrehte Kontakte</i>	Gold plating over nickel <i>vergoldet über Nickel</i>
PCB-snap-in <i>PCB-snap-in</i>	Tin plated <i>verzinkt</i>



Dimensions (Straight PCB Termination)

Abmessungen (Gerader Leiterplattenanschluss)

Ordering and Dimension Example

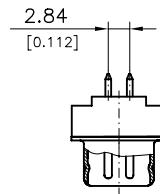
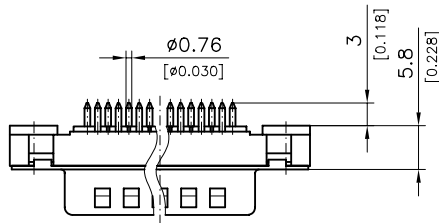
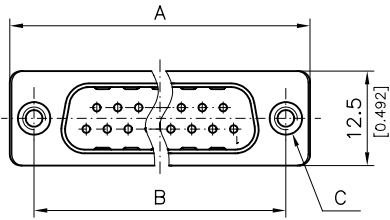
Bestell- und Abmessungsbeispiel

Pin connector, 15 way, contact 28, straight PCB termination, performance class 1, M3 thread, front mounted:

Stiftsteckverbinder, 15-polig, Kontakt 28, gerader Leiterplattenanschluss, Gütestufe 1, Gewinde M3, Montage frontseitig:

FE15P28G1-0791

FE15P28G1-0791



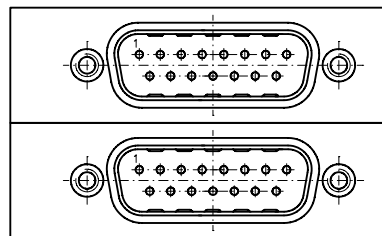
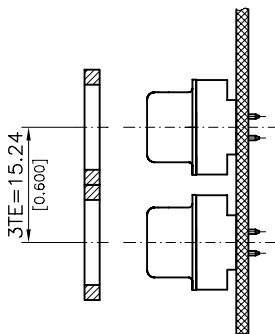
Shell Size <i>Gehäusegröße</i>	No. of Contacts <i>Polzahl</i>	A	B	C	
				4-40 UNC <i>Bestellnummer</i>	M3 <i>Bestellnummer</i>
1	9	30,8 (1.213)	25,0 (0.984)	FE09...-1046	FE09...-0791
2	15	39,1 (1.539)	33,3 (1.311)	FE15...-1046	FE15...-0791
3	25	53,0 (2.087)	47,04 (1.852)	FE25...-1046	FE25...-0791

Mounting Example (Straight PCB Termination)

Einbaubeispiel (Gerader Leiterplattenanschluss)

1 TE = 1 division unit
= 5.08 mm (0.200")

1 TE = 1 Teilungseinheit
= 5,08 mm



Dimensions (Straight PCB Termination with Snap-in Bolts)

Abmessungen (Gerader Leiterplattenanschluss mit Schnappbolzen)

Ordering and Dimension Example

Bestell- und Abmessungsbeispiel

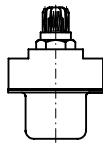
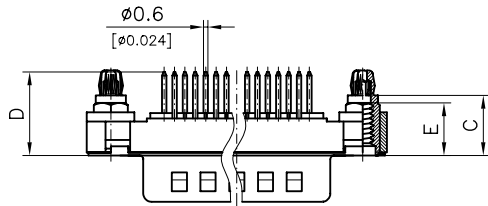
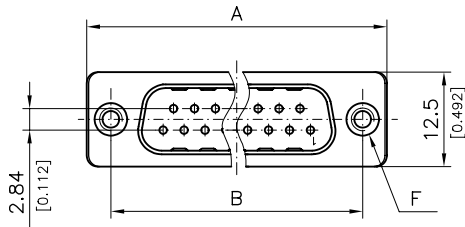
D-Sub pin connector, 15 contacts, contact 1, straight PCB termination, performance class 1, with mounted snap-in bolt for PCBs with 1.6 mm (0.063") thickness, inner thread M3:

D-Sub Stiftsteckverbinder, 15-polig, Kontakt 1, gerader Leiterplattenanschluss, Gütestufe 1, mit montierten Schnappbolzen für Leiterplatten mit 1,6 mm Stärke, Innengewinde M3:

FE15P1G1-1044

FE15P1G1-1044

Shell Size <i>Gehäusegröße</i>	No. of Contacts <i>Polzahl</i>	A	B	C	D	E	F	
							Order Number <i>Bestellnummer</i> 4-40 UNC	M3
1	9	30,8 (1.213)	25,0 (0.984)	7,8 (0.307)	11,05 (0.435)	6,8 (0.268)	FE09...-1045	FE09...-1044
				6,0 (0.236)		—	FE09...-1262	—
2	15	39,1 (1.539)	33,3 (1.311)	7,8 (0.307)	11,05 (0.435)	6,8 (0.268)	FE15...-1045	FE15...-1044
				6,0 (0.236)		—	FE15...-1262	—
3	25	53,0 (2.087)	47,04 (1.852)	7,8 (0.307)	11,05 (0.435)	6,8 (0.268)	FE25...-1045	FE25...-1044
				6,0 (0.236)		—	FE25...-1262	—

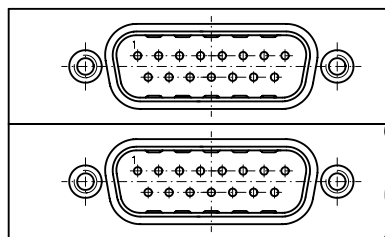
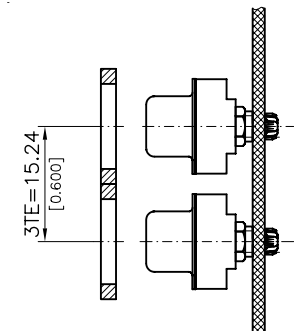


Mounting Example (Straight PCB Termination with Snap-in Bolts)

Einbaubeispiel (Gerader Leiterplattenanschluss mit Schnappbolzen)

1 TE = 1 division unit
= 5.08 mm (0.200")

1 TE = 1 Teilungseinheit
= 5,08 mm



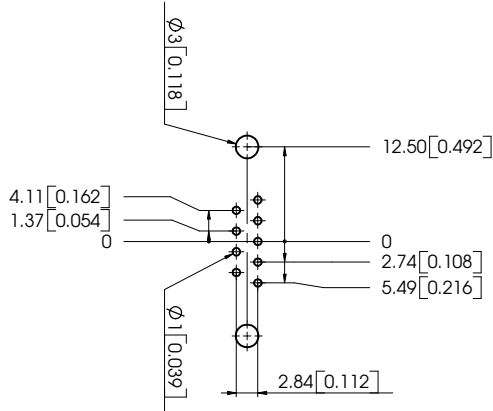


PCB Hole Patterns PCB Thickness 1.6 mm (0.063")

Leiterplattenlochbilder Leiterplattenstärke 1,6 mm

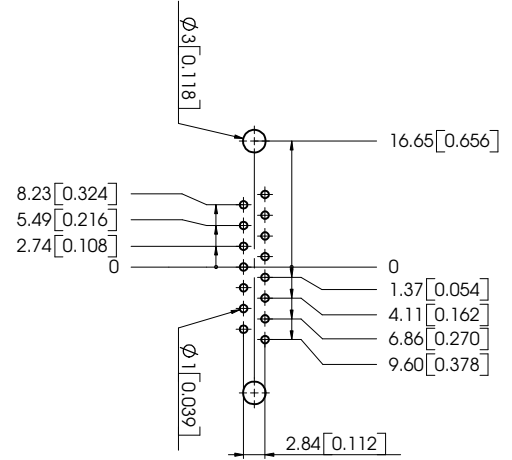
9 Contacts

9-polig



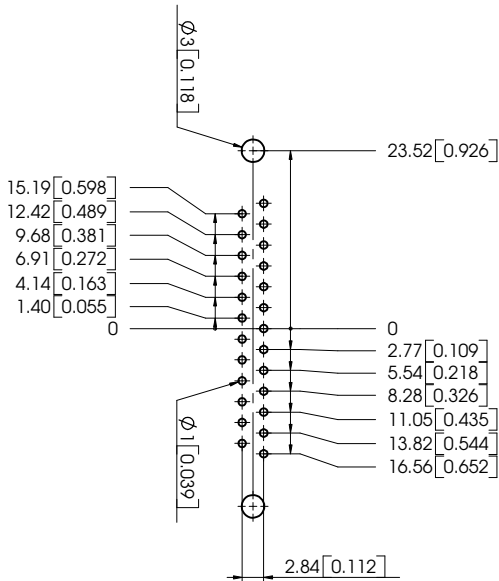
15 Contacts

15-polig



25 Contacts

25-polig



Dimensions (Straight PCB Termination with Latch Lock)

Abmessungen (Gerader Leiterplattenanschluss mit Rastelement)

Ordering Example

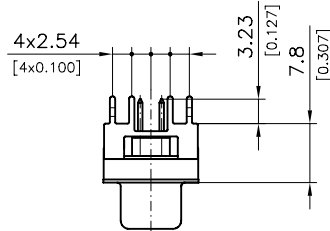
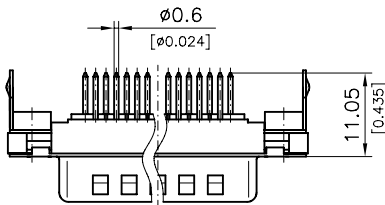
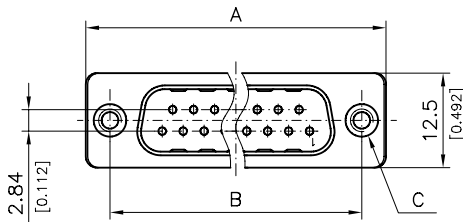
Bestellbeispiel

15 contacts pin connector, performance class 1, straight PCB termination, latch lock, thread M3:

15-poliger Stiftsteckverbinder, gerader Leiterplattenanschluss, Gütestufe 1, Rastelement, Gewinde M3:

FE15P1G1-1047

FE15P1G1-1047



Shell Size <i>Gehäusegröße</i>	No. of Contacts <i>Polzahl</i>	A	B	C	
				Order Number <i>Bestellnummer</i>	
				4-40 UNC	M3
1	9	30,8 (1.213)	25,0 (0.984)	FE09...-1048	FE09...-1047
2	15	39,1 (1.539)	33,3 (1.311)	FE15...-1048	FE15...-1047
3	25	53,0 (2.087)	47,04 (1.852)	FE25...-1048	FE25...-1047

Information / Info:

Further latch lock dimensions available on request.

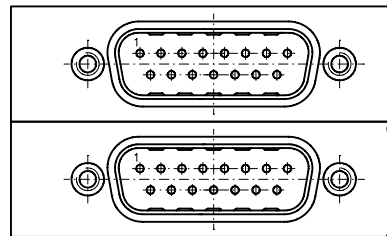
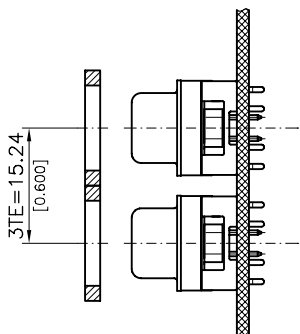
Weitere Rastelementhöhen auf Anfrage.

Mounting Example (Straight PCB Termination with Catch Element)

Einbaubeispiel (Gerader Leiterplattenanschluss mit Rastelement)

1 TE = 1 division unit
= 5.08 mm (0.200")

1 TE = 1 Teilungseinheit
= 5,08 mm



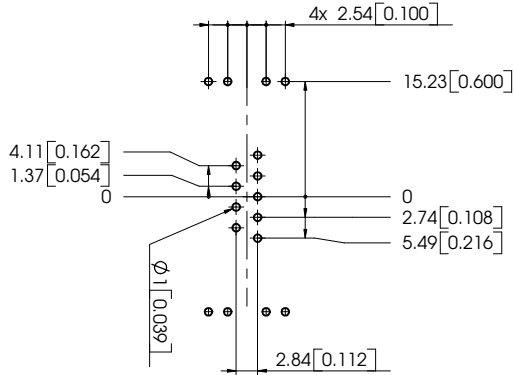


PCB Hole Patterns PCB Thickness 1.6 mm (0.063")

Leiterplattenlochbilder Leiterplattenstärke 1,6 mm

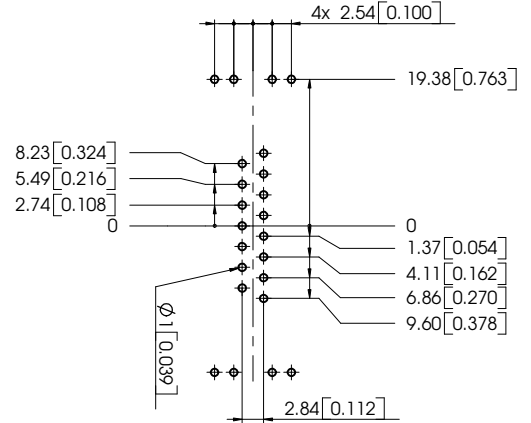
9 Contacts

9-polig



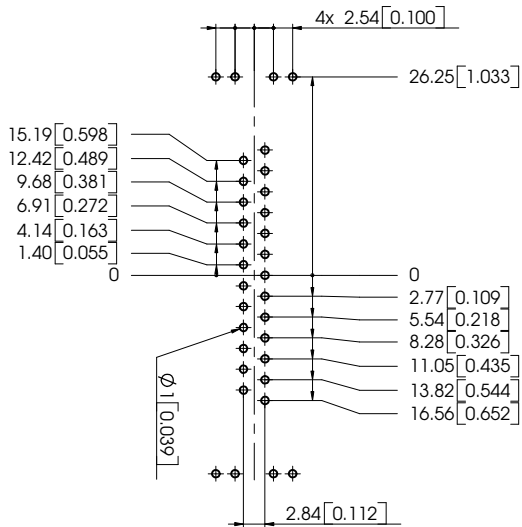
15 Contacts

15-polig



25 Contacts

25-polig



Dimensions (Right Angled PCB Termination)

Abmessungen (Abgewinkelter Leiterplattenanschluss)

Ordering Example

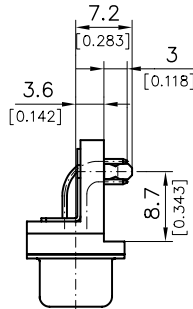
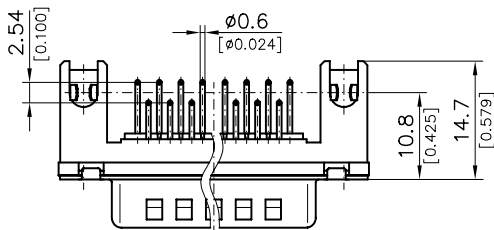
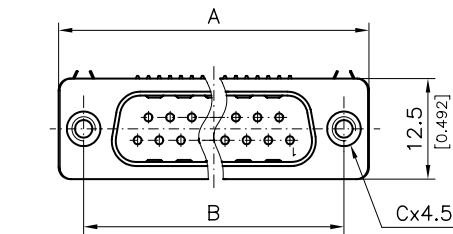
Bestellbeispiel

Pin connector, 15 way, right angled contacts, plastic bracket with snap-in bracket, performance class 1, M3 thread, front mounted:

FE15P21G1-1049

Stiftsteckverbinder, 15-polig, abgewinkelte Kontakte, Kunststoffwinkel mit Snap-in Winkel, Gütestufe 1, Gewinde M3, frontseitige Montage:

FE15P21G1-1049



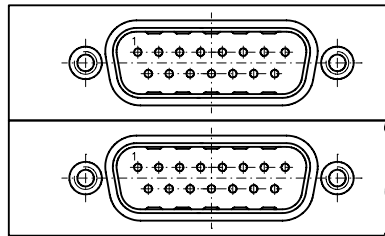
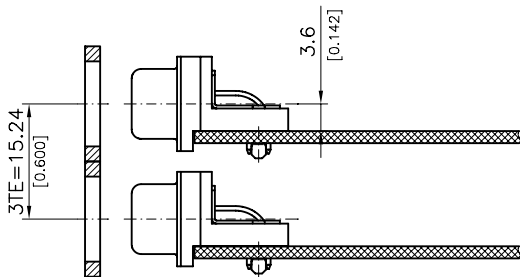
Shell Size <i>Gehäusegröße</i>	No. of Contacts <i>Polzahl</i>	A	B	C	
				Order Number <i>Bestellnummer</i>	
				4-40 UNC	M3
1	9	30,8 (1.213)	25,0 (0.984)	FE09...	FE09...-1049
2	15	39,1 (1.539)	33,3 (1.311)	FE15...	FE15...-1049
3	25	53,0 (2.087)	47,04 (1.852)	FE25...	FE25...-1049
4	37	69,3 (2.728)	63,50 (2.500)	FE37...	FE37...-1049

Mounting Example (Right Angled PCB Termination)

Einbaubeispiel (Abgewinkelter Leiterplattenanschluss)

1 TE = 1 division unit
= 5.08 mm (0.200")

1 TE = 1 Teilungseinheit
= 5,08 mm



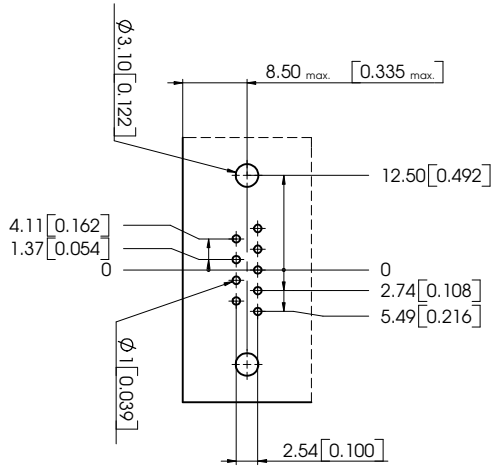


PCB Hole Patterns PCB Thickness 1.6 mm (0.063")

Leiterplattenlochbilder Leiterplattenstärke 1,6 mm

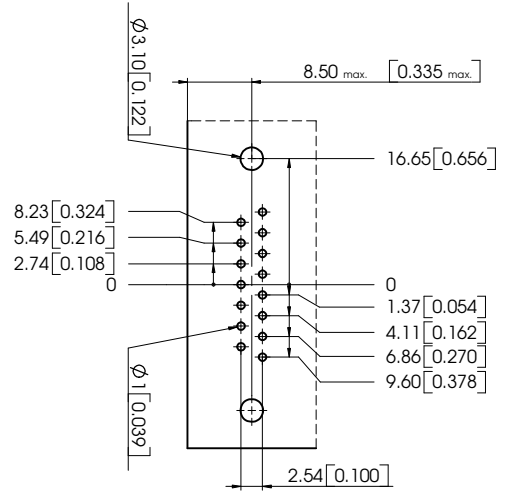
9 Contacts

9-polig



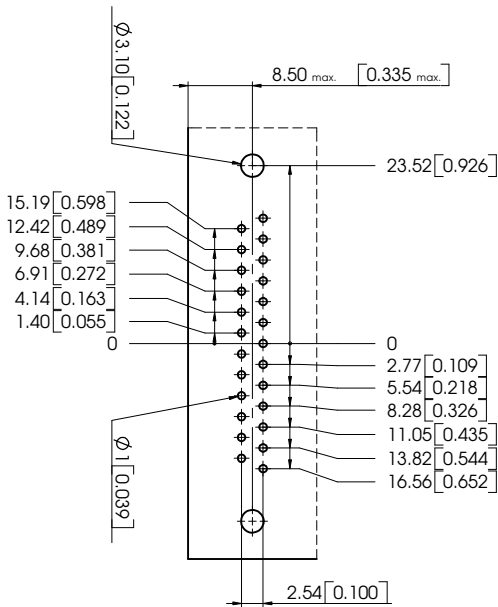
15 Contacts

15-polig



25 Contacts

25-polig



37 Contacts

37-polig

