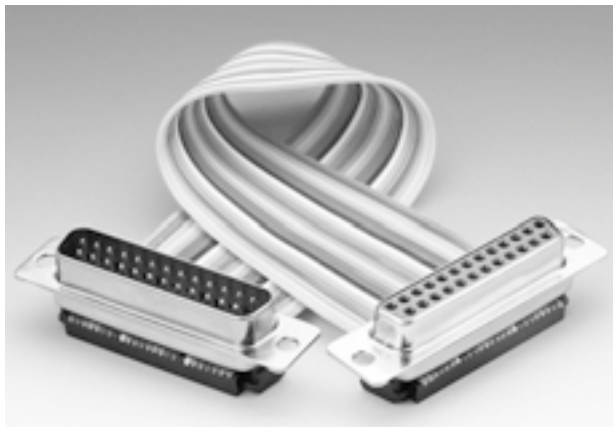




Trapezoidal connectors Series TMC

Subminiature D built according to MIL-C-24 308
with insulation displacement termination for flat ribbon cables



General

The series TMC-SK connectors have on their termination side insulation displacement contacts. Their ends cut through the insulation of the flat ribbon cable and make high-pressure contact with the conductors.

This allows for a single process to connect up to 37 conductors without a prior stripping.

Series TMC-SK connectors used in conjunction with ribbon cable constitute a reliable and economic terminating system for electrical connections.

On the mating side the trapezoidal design provides the proven protective collar for physical protection of the contact elements against twisting and human contact. When the connectors are fitted into the ERNI Series KSG-185 cable housings with the screw locking system, a reliable interface is the result.

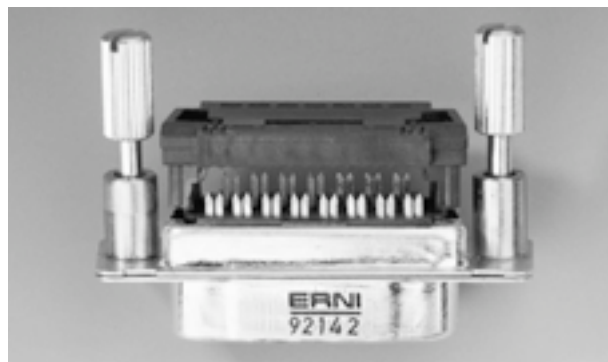
A metallized connector housing version is available for applications with screened cables.

Main feature

- 4 housing sizes for 9, 15, 25 and 37 pins are available
- Simultaneous contact of up to 37 conductors in a single process
- No stripping because the insulation displacement contacts cut through the insulation
- Suitable for all conventional flat ribbon cables at a pitch of 1.27 mm
- With the tension relief clamp 90° and 180° cable entry configurations to the mating level are possible
- Accessories integrated into the connector are available, e. g. threaded bolts for screw locking
- Series TMC-SK insulation displacement connectors fit Series KSG 185 connector housings

Accessories

Application problems can also be efficiently solved with the integrated accessories available from ERNI. This entails inte-



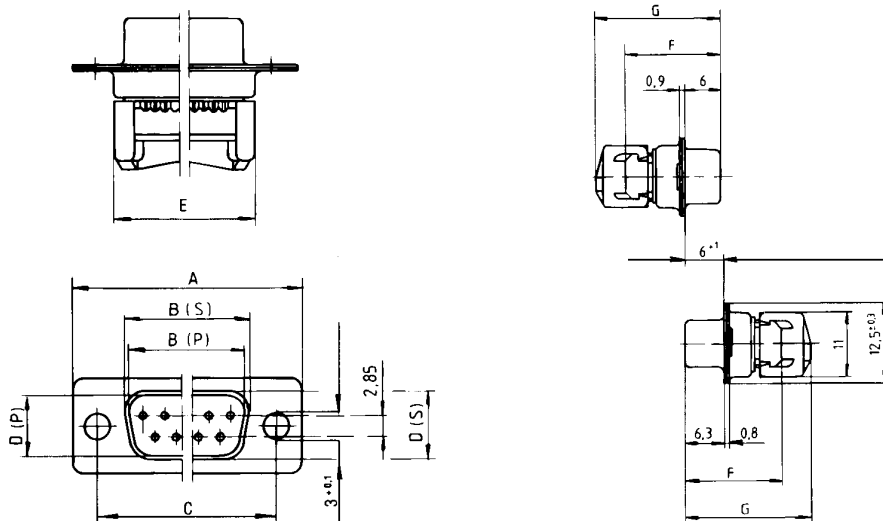
Screw locking parts for reliable interface locking. The screws necessary for locking are held in the riveted guide bolts. The screws are only tightened up after the mating process.

Electrical and mechanical data Serie TMC-SK

Versions	TMC-SK male and female connector
Number of pins	2-rows of 9, 15, 25, 37
Temperature range	-55°...+125°
Permissible humidity	Annual average ≤ 80% max. 100%
Creepage and clearance	≥ 0,9 mm
Working current	1,0 A max.
Test voltage	780 V _{eff}
Contact resistance	≤ 15mΩ
Insulation resistance	≥ 5000 mΩ
Shock profness	up to 50 g

Versions	TMC-SK male and female connector
Shock and vibration profness	No discontinuity at 20 g and 10...2000 Hz
Metal protective collar	Tinned steel MR St4, 1 ⁺¹ μm Ni, 8 ² μm Sn
Moulding	PBT 30% GV
Inflammability of the plastic	Non flammable as per UL V-0
Service life	Performance level 207 ≥ 200 mating cycles
Contact force per female element	0,2 N

Dimensional drawings male and female connectors TMC-P/TMC-S



Versions	A mm±0,3	B mm±0,15	C mm±0,1	D mm+0,2	E mm±0,2	F without strain relief mm±0,15	G without strain relief mm±0,2
TMC-P-9 SK TMC-S-9 SK	30,8 30,8	16,7 16,35	25 25	8,3 7,8	19,4 19,4	16,1 16,2	25,9 26,0
TMC-P-15 SK TMC-S-15 SK	39,1 39,1	25,2 24,65	33,3 33,3	8,3 7,8	27,7 27,7	16,1 16,2	25,9 26,0
TMC-P-25 SK TMC-S-25 SK	53 53	38,95 38,4	47 47	8,3 7,8	41,4 41,4	16,1 16,2	25,9 26,0
TMC-P-37 SK TMC-S-37 SK	69,3 69,3	55,4 54,85	63,5 63,5	8,3 7,8	57,9 57,9	16,1 16,2	25,9 26,0

Ordering details for male and female connectors

	Male connectors				Female connectors			
	TMC-P-....SK <i>Performance Level 207</i>				TMC-S-....SK <i>Performance Level 207</i>			
								
Number of pins	09	15	25	37	09	15	25	37
Standard	<i>Standard version</i>				<i>Standard version</i>			
	013572	013574	013576	013578	013573	013575	013577	013579

Ordering details for accessories

Strain relief

	Strain relief for TMC-P and TMC-S			
Number of pins	9	15	25	37
	004687	004688	004689	004690

Screw locking accessories (for all TMC standard version connectors)

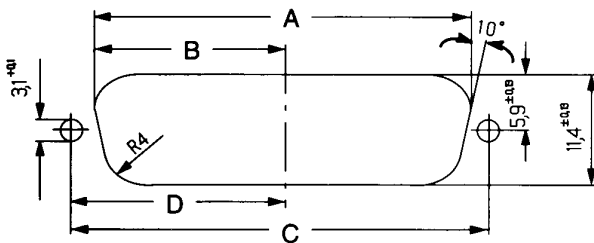
Knurled screw #4/40 <i>Each set comprises 2 screws and retainers.</i>		Threaded bolt #4/40 <i>Each set comprises 2 threaded bolts, spring washers and nuts.</i>	
	Set		Set for assembly without board 434831
	434830		Set for assembly with board 2 mm thick 434832
			Set for assembly with board 3 mm thick 434833

Hand tool and device for assembling cable

Type	Part no.	Type	Part no.
Hand tool with various accessories Complete set in a case	424623	Standard assembly device Use on toggle lever press	523026

Assembly Details

Assembly cutout and dimension tables



Number of pins	A +0,2	B +0,2	C ±0,1	D ±0,1
9	20,5	10,25	25	12,5
15	28,8	14,4	33,3	16,65
25	42,5	21,25	47	23,5
37	59,1	29,55	63,5	31,75

Various applications

