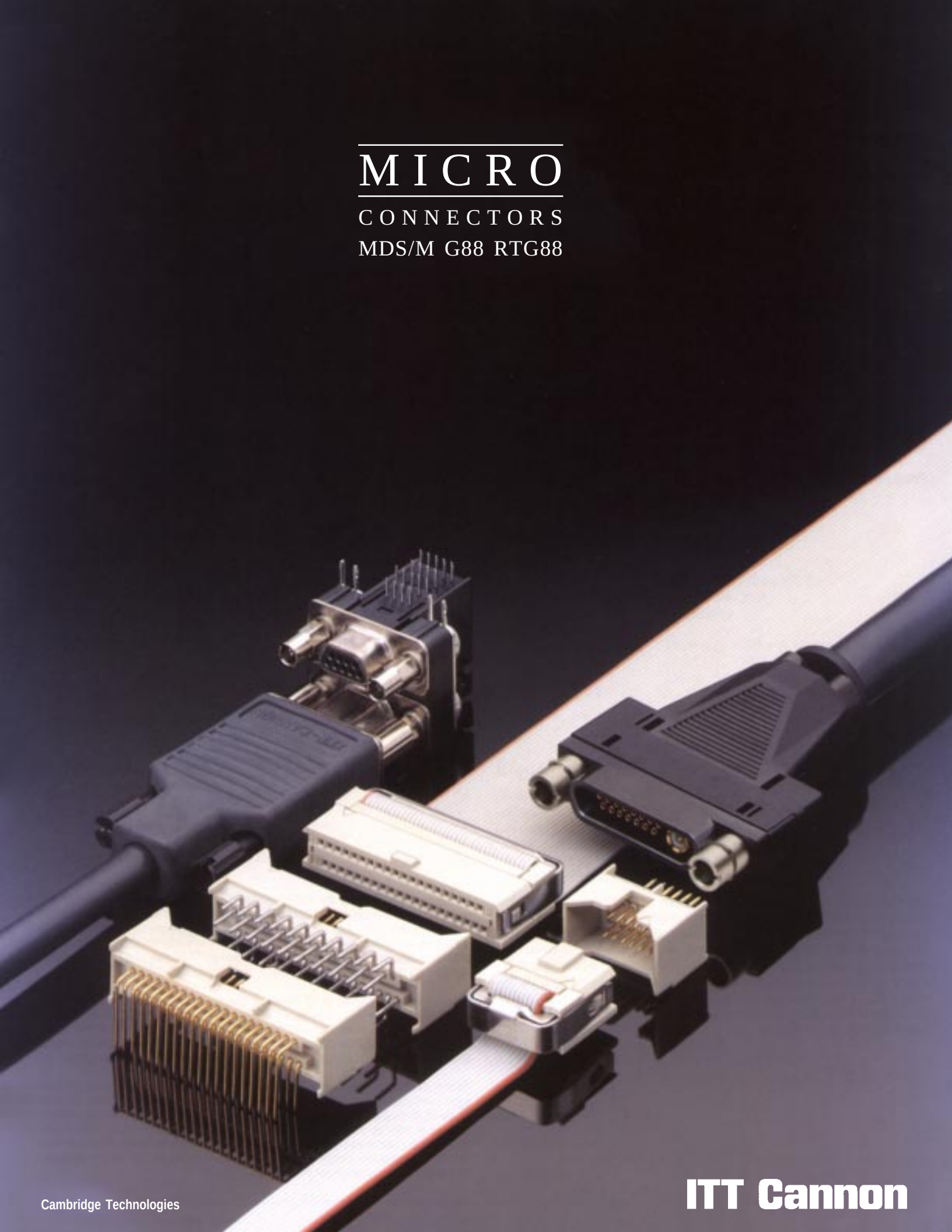
MICRO

CONNECTORS

MDS/M G88 RTG88



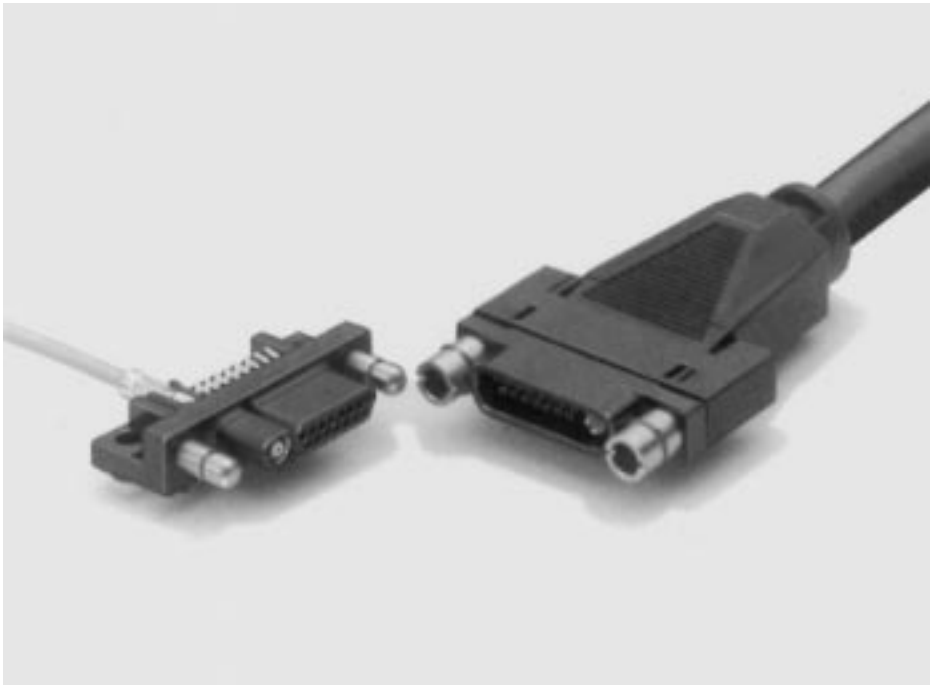
Cambridge Technologies

ITT Cannon

Contents

with combined contact arrangement

The MICRO MDS connector from ITT Cannon offers a combined contact arrangement. In addition to 15 signal contacts it features a coaxial contact. The contacts for crimp termination are easily inserted into the connector by simple snap-in action. A junction shell performs strain relief.



Technical Data

Insulator	PPS, black
Contacts	Copper beryllium (CuBe)
Contact finish	PdNi, gold flash
	Termination area tinned (SnPb)
Termination type	Crimp technique:
	Wire size 0.05 - 0.14 mm^2 (AWG 30 - 26)
	Outer cable dia. 1.0 mm
	Soldering:
	Solder pin 90° for pc boards 1.6 mm
	with hole dia. 0.6 mm

Electrical Data

Dielectric withstanding voltage	min. 350 Vrms
Current rating	2.5 A / 25°C; 1.5 A / 70°C
Contact resistance	max. 20 mΩ (crimp contact)
	35 mΩ (solder pin 90°)
Insulator resistance	min. 5000 MΩ

Coaxial Contacts

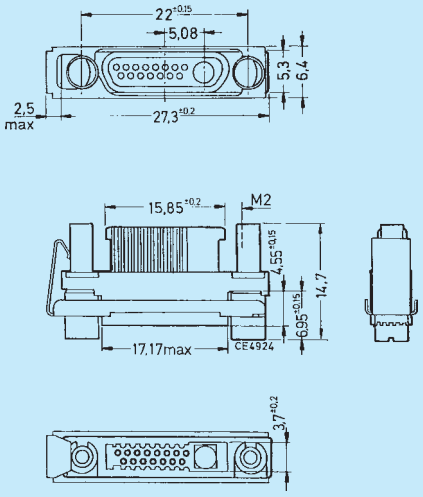
Characteristic impedance	50 Ω
Normal frequency	1 GHz
Voltage standing wave ratio (VSWR)	< 1.4
Contact resistance	<10 mΩ
Termination type	crimping (with cable RG 178)
	soldering (with cable RG 178, RG316)

Socket Connector

MDS 120 122-2

Contacts to be ordered separately - see page 11

Packaging units:
VS1 - 25 pieces
VS2 - 100 pieces

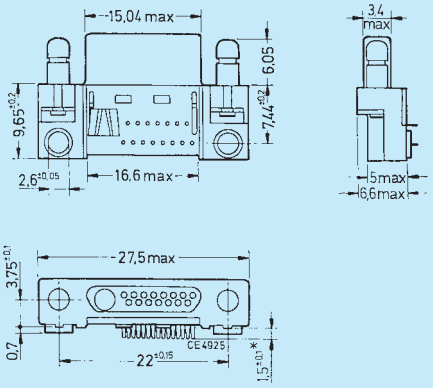


Pin Connector

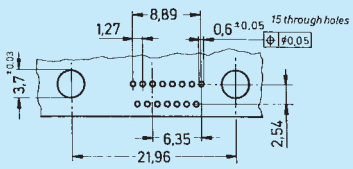
MDS 120 122-3

Coaxial contacts for coaxial cables RG 178 and RG 316 to be ordered separately - see page 11

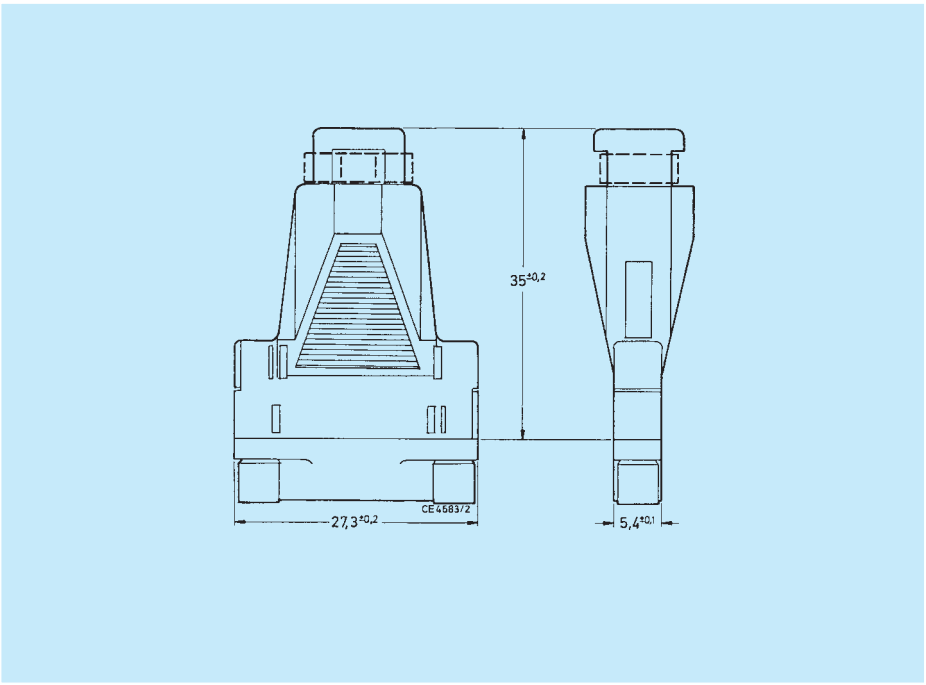
Packaging units:
VS1 - 25 pieces
VS2 - 100 pieces



PC Board



Junction Shell for MDS 120 122-2



Order Reference

MDS - 21 E 07 - VS1 - *

Series

No. of contacts

Junction shell
E - unshielded
ES - shielded (upon request

Cables
06 - outer dia. 5 - 6 mm
07 - outer dia. 6 - 7 mm
08 - outer dia. 7 - 8 mm
09 - outer dia. 8 - 9 mm

Packaging
VS1 - 25 pieces
VS2 - 100 pieces

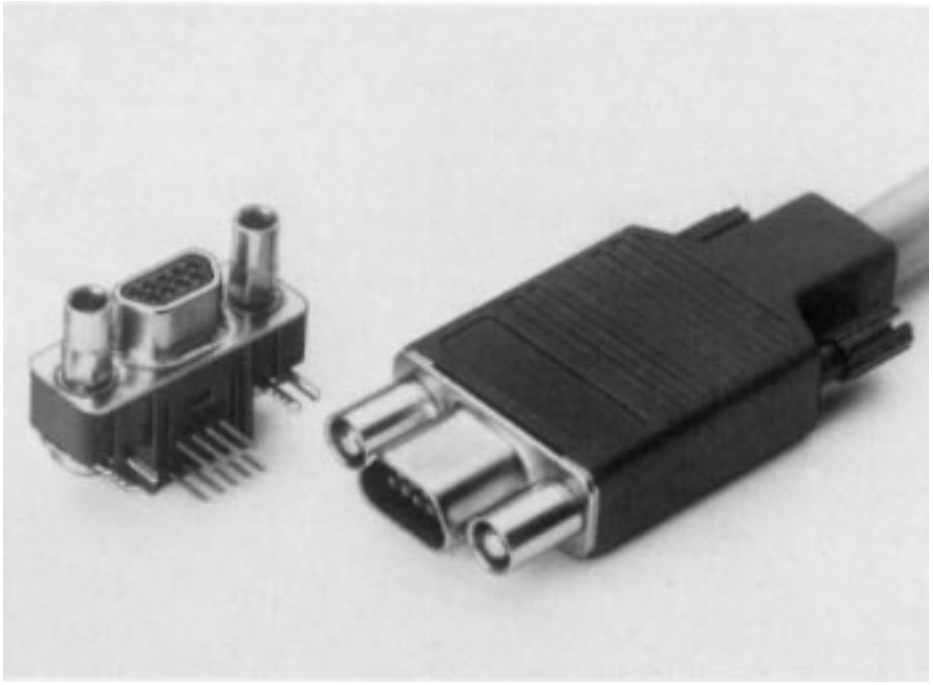
Modification

MICRO MDSM

Shielded Connectors

MICRO MDSM is the ITT Cannon designation for a shielded interface connector in its Microminiature series. It is ideally suited for applications with specific requirements to the shielding, e.g. components for telecommunications and computers.

The MDSM connector is suitable for modern solder methods, e.g. IR reflow and vapor phase soldering. It is available with crimp contacts (sockets only) as a cable connecting receptacle. Or with 90° solder pins as a pcb connector. The contacts are spaced at 1.27 mm, the solder pins at 1.27 x 2.54 mm. Different locking devices are available - see page 12.



Technical Data

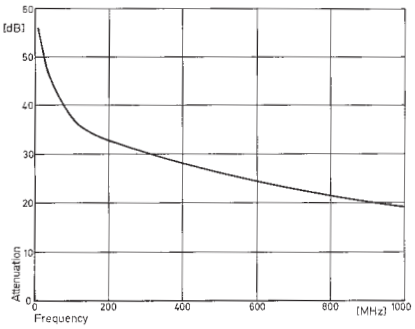
Insulator	Thermoplast, UL94V-0
Contact guiding plate	PA, high temperature resistant
Shell	Steel, tinned and nickel plated
Contacts	Copper alloy
Contact finish	PdNi, gold flash
Contact termination area	Tin (SnPb)
Wire size	AWG 30 - 26
Insulation dia.	0.95 mm max
Contact spacing	1.27 mm
Contact number	9, 15, 25
Temperature range acc. DIN IEC 68 Part 1	-55 / 125°C

Electrical Data

Current rating	2.5 A / 25°C
Test voltage	350 Vrms
Contact resistance	20 mΩ max (crimp version)
	35 mΩ max (pcb version)
Insulation resistance	5000 MΩ min

Shielding Effectiveness

Frequency MHz	Attenuation dB
10	56
30	47
159	34
500	26
750	22
1000	19



Shielded Connectors

Order Reference

MDSM - 9 P E - Z7 - VR - *

Series

Number of contacts
9, 15, 25

Contact type
P - Pin (with solder pin only)
S - Socket (with crimp termination only)

Termination method
C - Crimp termination (contacts to be ordered separately)
E - Solder pin 90°, spacing 1,27 x 2,54 mm (Pin connector only)

Mounting method
Z7 - Locking screw 1)
Z10 - Screw for wall thickness 1,5 mm 1)
Z11 - Screw, long, blank 2)
Z12 - Screw for wall thickness 1,0 mm 1)
Z24 - Quick disconnect 2)
Z33 - Locking screw, short
Z34 - Screw, short, for wall thickness 1,5 mm
Z35 - Screw, short, for wall thickness 1,0 mm
Z40 - Screw, long, insulated, M 1,6
Z41 - Locking screw, universal
Z42 - Screw, uinversal, for wall thickness 1,5 mm
Z43 - Screw, uinversal, for wall thickness 1,0 mm

Packaging
VR - Tube packaging (not for termination method C)
VS1 - 100 pieces

Modification
Please consult factory

1) for pin connectors only
2) for socket connectors only (cable connecting receptacle)
3) for pcb connector only

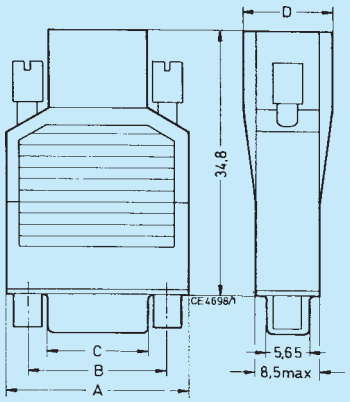
Tube packaging (VR)
A tube contains the following numbers of MDSM connectors:

No. of contacts	No. of connectors
9	25
15	22
25	17

Ordering MDS/MDSM connectors
Tube loaded connectors can only be supplied in the quantity per tube shown above or in multiples thereof. Other quantities cannot be supplied.This also applies when ordering VS1.

Cable Connector

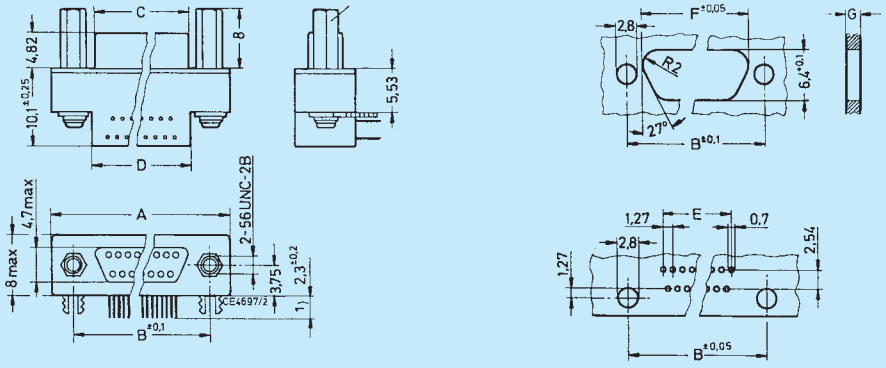
Socket contacts see page ...



No of contacts	Designation	Dimensions A max	B ± 0,1	C ± 0,1	D ± 0,2
9	**MDSM-9SC-Z11-VS-1**	19,9	14,35	9,45	8
15	**MDSM-15SC-Z11-VS-1**	23,7	18,16	13,25	8
25	**MDSM-25SC-Z11-VS-1**	30,05	24,5	19,6	8

PCB Connector 90°

with pin contacts

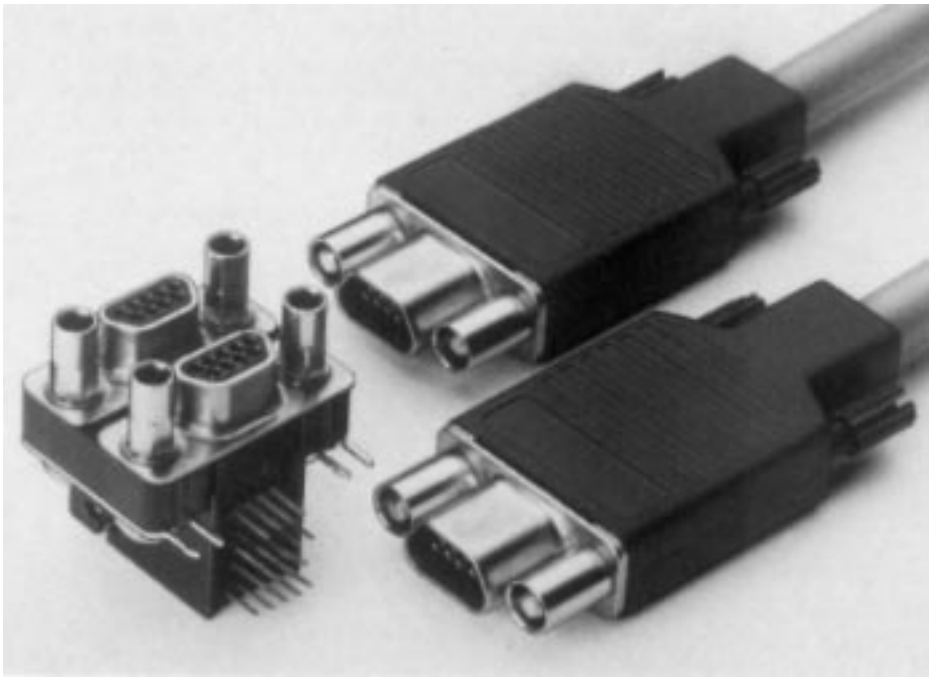


No of contacts	Designation	Dimensions A max	B	C max	D max	E	F	G -Z7	-Z10	-Z12
9	**MDSM-9PE-Z**-VR**	19,9	14,35	8,6	9,0	5,08	10,24	0,00**	1,5	1,0
15	**MDSM-15PE-Z**-VR**	23,7	18,16	12,4	12,8	8,89	14,00	0,00**	1,5	1,0
25	**MDSM-25PE-Z**-VR**	30,05	24,5	18,8	19,15	15,24	20,35	0,00**	1,5	1,0

Doubledecker

This connector version offers higher packaging density. The MDSM Doubledecker provides twice the number of contacts in only 30% extra space.

Two Standard MDSM cable connectors with the corresponding number of contacts mate with the MDSM Doubledecker. The MDSM Doubledecker is available with pin contacts only.



Technical Data

Insulator	Thermoplast, UL94V-0
Contact guiding plate	PA, high temperature resistant
Shell	Steel, tinned and nickel plated
Contacts	Copper alloy
Contact finish	PdNi, gold flash
Contact termination area	tinned (SnPb)
Contact spacing	1.27 mm
Contact number	18, 30
Temperature range acc. DIN IEC 68 Part 1	-55 / 125°C

Electrical Data

Current rating	2.5 A / 25°C (row 1, 2)
	1.8 A / 25°C (row 3, 4)
Test voltage	350 Vrms
Contact resistance	crimp version:
	20 mΩ max
	pcb version:
	35 mΩ max (row 1, 2)
	55 mΩ max. (row 3, 4)
Insulation resistance	5000 MΩ min

Doubledecker

Order Reference

MDSM - 18 P E - Z7 - VR

Series

Number of contacts
18, 30

Contact type
P - Pin

Termination method
E - Solder pin 90°, spacing 1,27 x 2,54 mm
with rivet nut and grounding tab

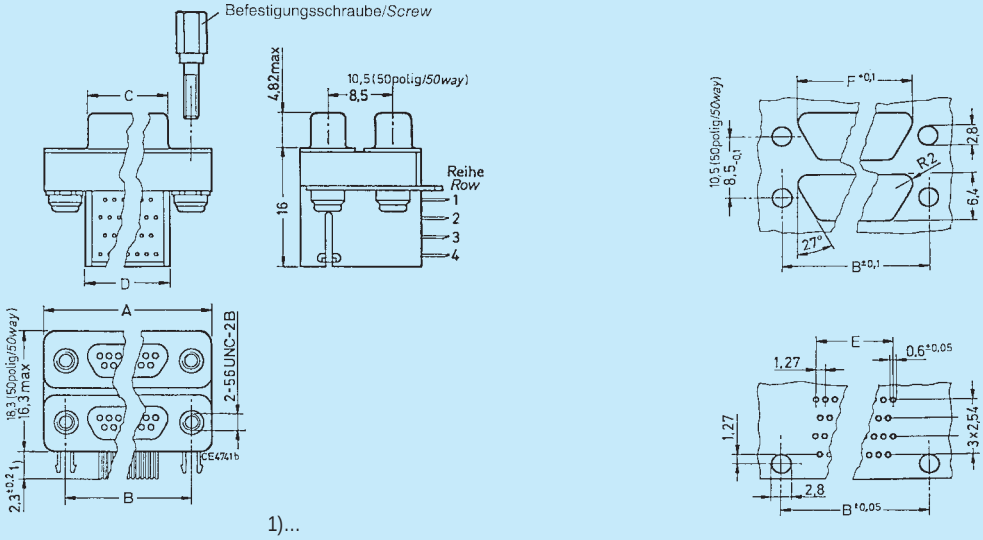
Mounting method*
Z7 - Locking screw
Z10 - Screw for wall thickness 1,5 mm
Z12 - Screw for wall thickness 1,0 mm
* Additional mounting methods on page 12

Packaging
VR - Tube packaging (not for termination method C)

Tube packaging (VR)
A tube contains the following numbers of MDSM connectors:

No. of contacts	No. of connectors
9	25
15	22

Ordering MDS/MDSM connectors
Tube loaded connectors can only be supplied in the quantity per tube shown above or in multiples thereof. Other quantities cannot be supplied.This also applies when ordering VS1.



1)...

No of contacts	Designation	Dimensions A max	B	C max	D max	E	F + 0,05
18	**MDSM-18PE-Z**-VR**	19,9	14,35	8,6	9,0	5,08	10,24
30	**MDSM-30PE-Z**-VR**	23,7	18,16	12,4	12,8	8,89	14,00

Signal Contacts (MDS and MDSM)

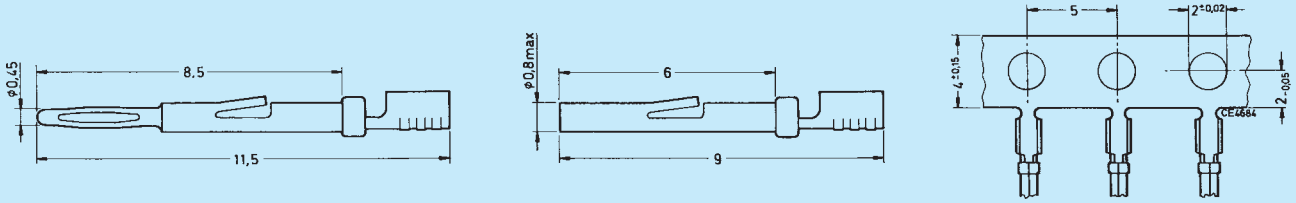
on reels / 1000 pieces (TS)

MDS-P-TS	Pin contact (for MDS coaxial connectors only)
MDS-S-TS	Socket contact for MDS coaxial connectors and MDSM connectors)

on reels / 10 000 pieces (RL)

MDS-P-RL	Pin contact (for MDS coaxial connectors only)
MDS-S-RL	Socket contact (for MDS coaxial connectors and MDSM connectors)

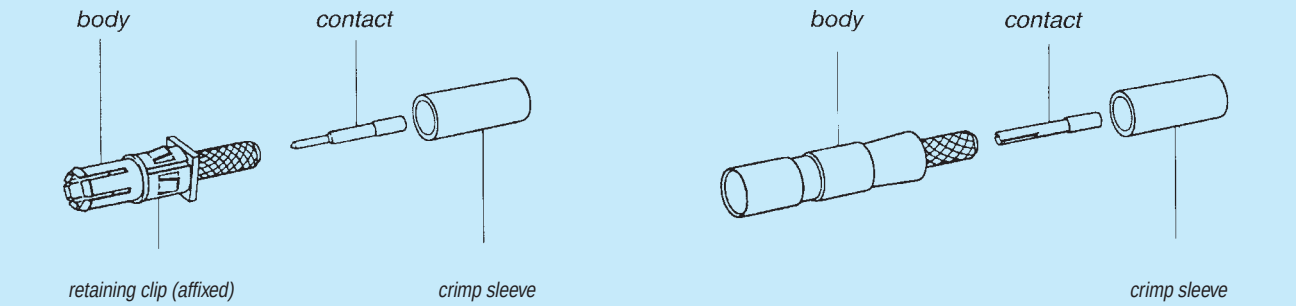
The contacts (1.2 mm PdNi with 0.1 mm Au over 0.5 mm Ni) are tin plated in the crimp area.
Wire size AWG 28 - 26 (0.09 - 0.14 mm^2).



Coaxial Contacts (MDS only)

not assembled, to be delivered in component parts

MDS 120 122-1	Pin contact, solder termination
MDS 120 122-5	Pin contact, crimp termination
MDS 120 122-0	Socket contact, solder termination
MDS 120 122-4	Socket contact, crimp termination



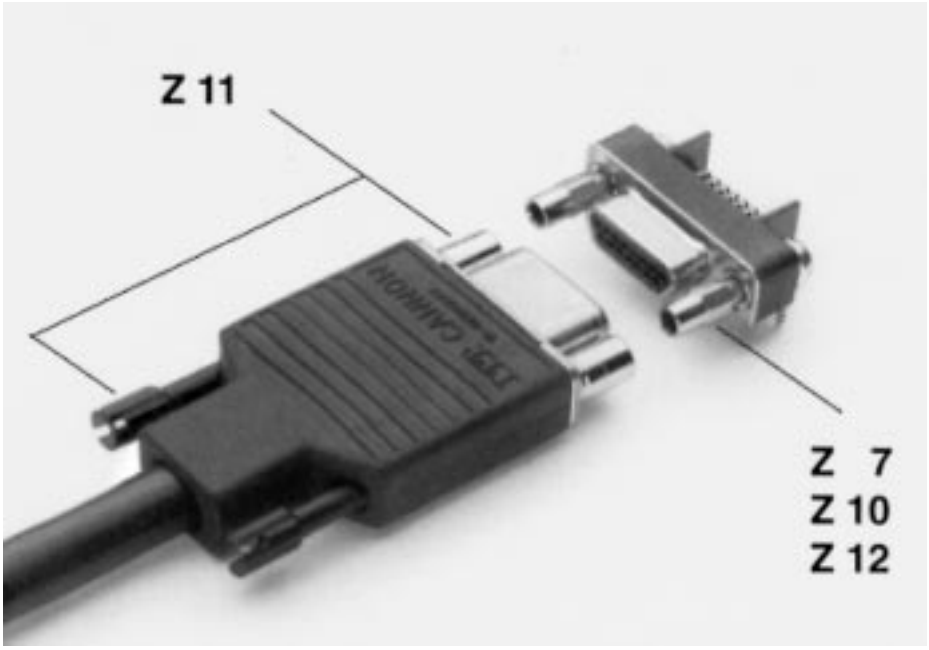
Pin contact

Socket contact

Screw locking

for cable connectors (socket side)
Z11 Screw, long, blank
Z40 Screw, long, with insulation, M 1.6

for pcb connectors (pin side)
Z7 Locking screw
Z10 Screw for wall thickness 1.5 mm
Z12 Screw for wall thickness 1 mm
Z33 Locking screw, short
Z34 Screw, short, for wall thickness 1.5 mm
Z35 Screw, short, for wall thickness 1 mm
Z41 Locking screw, universal*
Z42 Screw, universal, for wall thickness 1.5 mm
Z43 Screw, universal, for wall thickness 1 mm

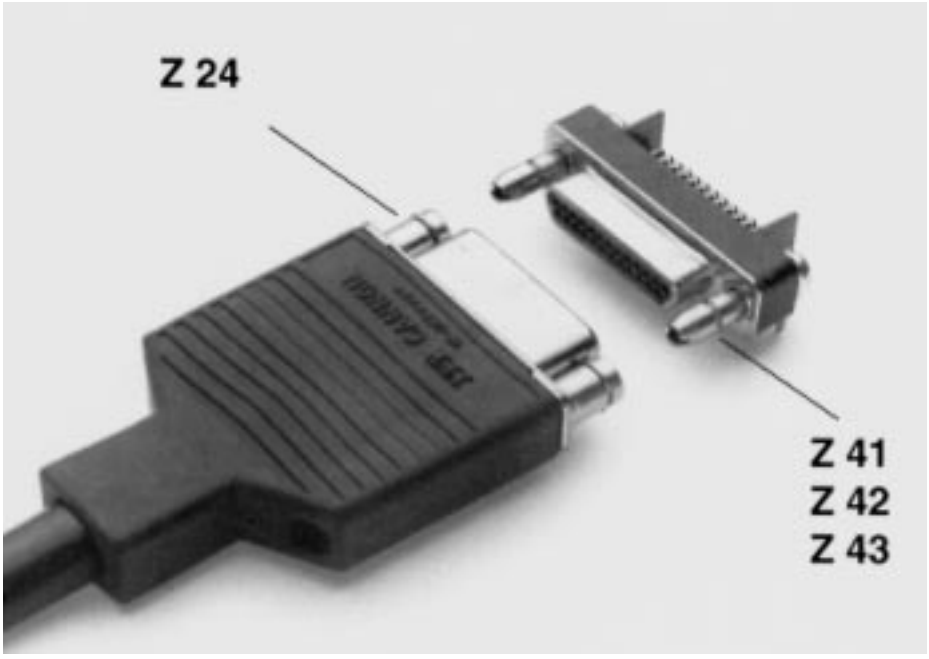


Push Pull

for cable connectors (socket side)
Z24 Quick disconnect

for pcb connectors (pin side)
Z41 Locking pin*
Z42 Screw, universal, for wall thickness 1.5 mm*
Z43 Screw, universal, for wall thickness 1 mm*

*Universal locking for Z24 and Z40



with straight solder pins

Due to customer requirements connectors MDSM-9PE-Z** with 90° termination are not suitable for all applications. There is great interest for a MDSM version with straight terminations. To fulfill market requirements the following connector versions and tools were developped:

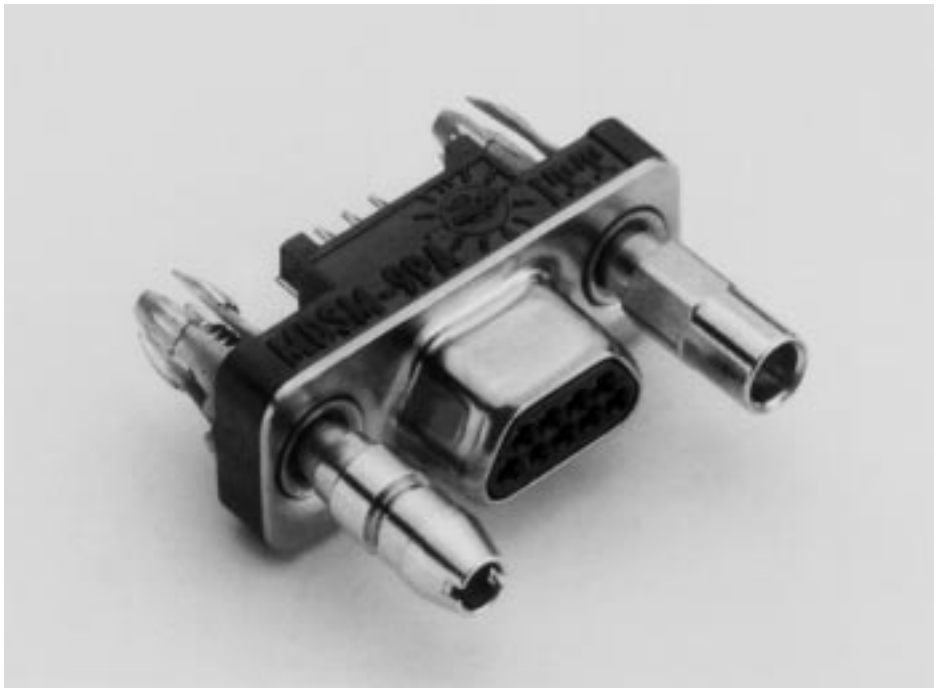
MDSM-9PA-Z7/Z10 and MDSM-9PA-Z41/Z42 with straight terminations and pcb locking.

Typical Applications
SSA band and disk drives, SSA distribution panels, bar code readers, mobile telecommunications and medical equipment.

Locking of PC Board
The mating and unmating forces are concentrated on to an integrated PCB locking, after the connector has been mounted on a pc board.

Please note:
The standard screw locking which is being used for MDSM-9PE-Z10 do **not** apply to MDSMA-9PA .

The MDSM-9PA screws require a shorter thread.



MDSM-9PA Connector optionally with push-pull or screw locking

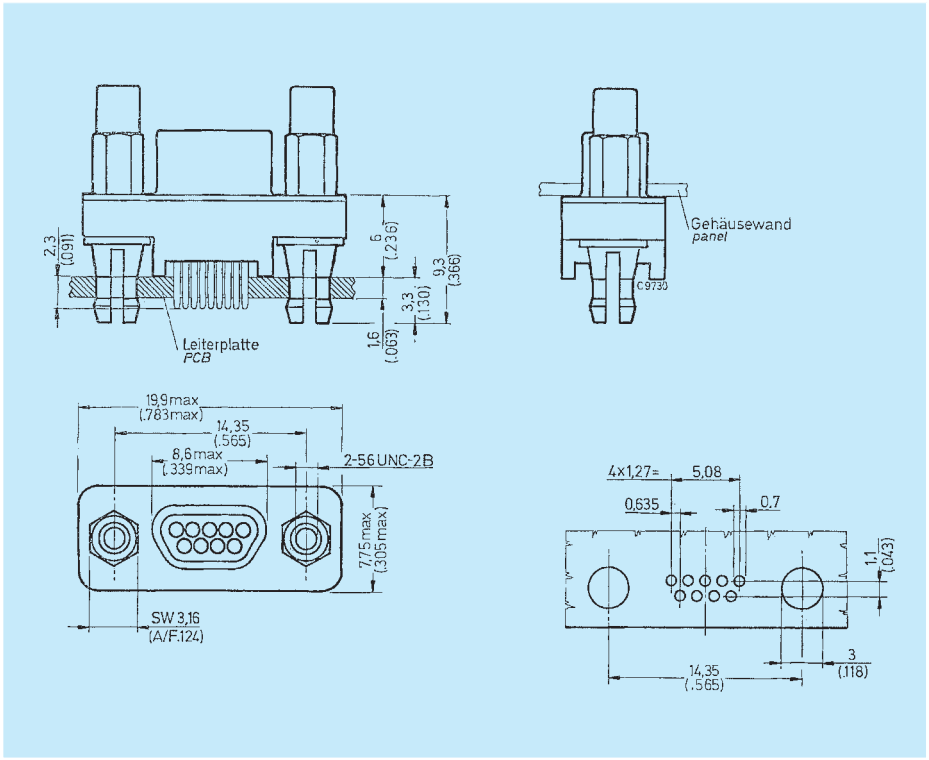
Technical Data

Insulator	Thermoplast, UL 94V-0
Shell	Steel, zinc / nickel plated
Contacts	Copper alloy
Contact finish	PdNi, gold flash
Contact termination	tinned
Wire size	AWG 30 - 26
Contact spacing	1,27 mm
Contact number	9
Temperature range acc to DIN IEC 68 part 1	-55 / 125°C

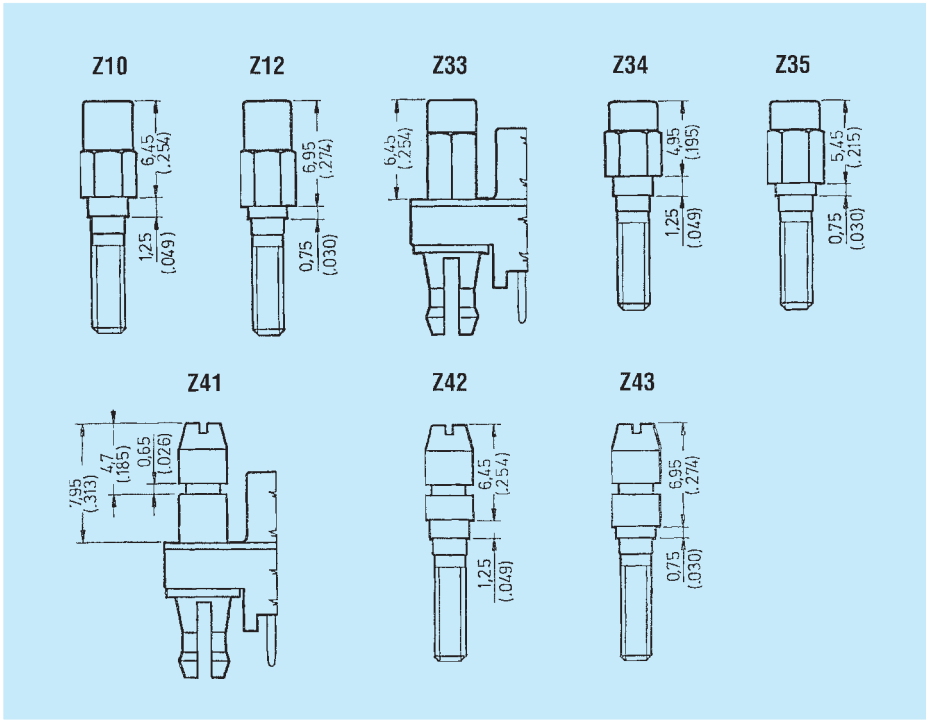
Electrical Data

Current rating	1,5 A / 55°C
Voltage rating	350 Vrms
Contact resistance	20 mΩ max
IInsulation resistance	5000 MΩ

Dimensions



Mounting Methods

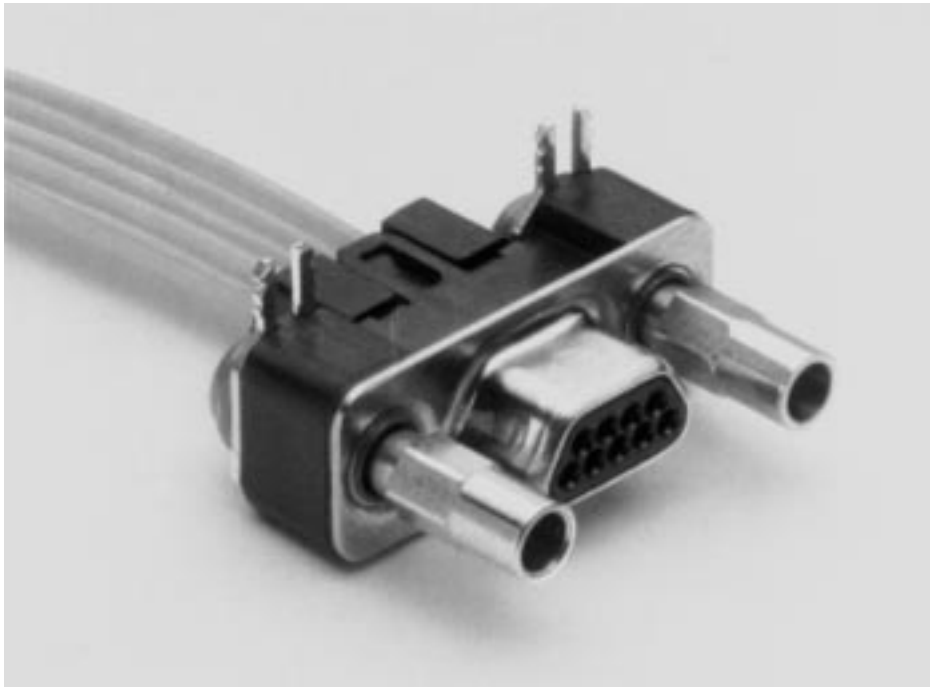


with crimp contacts, for panel mounting

The market shows great interest for a MDSM Inline receptacle with pin contacts for crimp termination. To fulfill this requirements the following connector versions and tools have been developped to accomodate pin contacts crimped to wire sizes AWG 30 - 26:

- **MDSM- 9PC-Z7/Z10-O- VS1**
- **MDSM-9PC-Z42-O-VS1**

Contacts
Contacts MDS-S-TS (1000 contacts / reel) or MDS-S-RL (10.000 contacts / reel) to be ordered separately.



MDSM-9PC Connector with screw locking

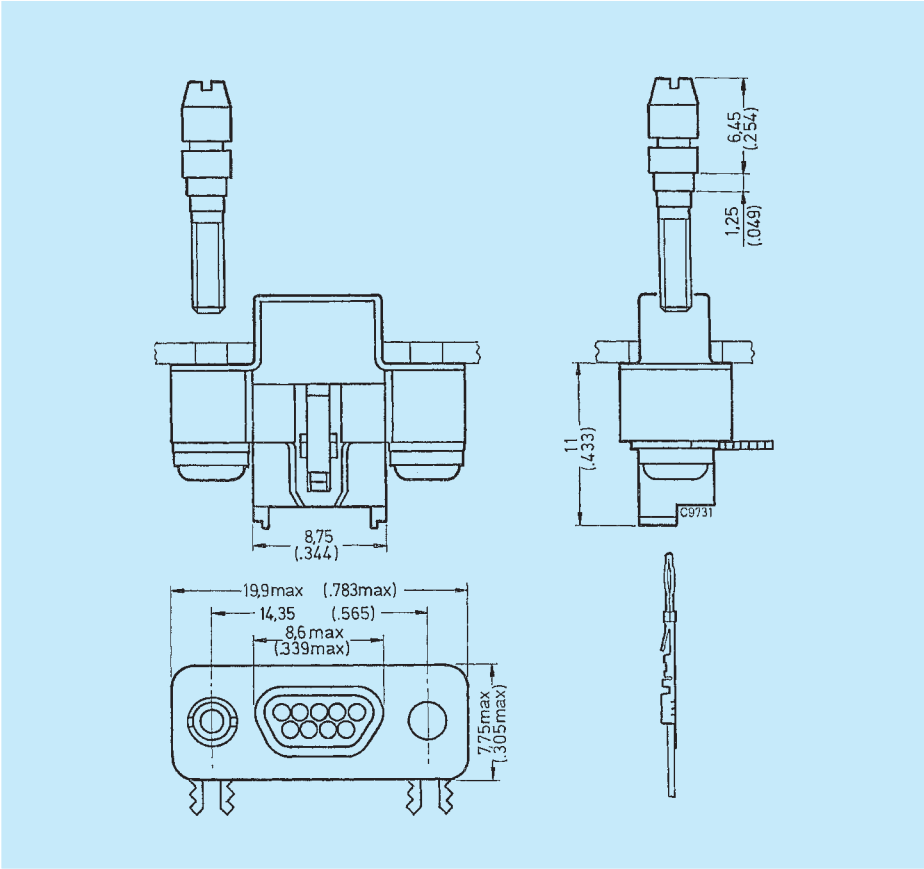
Technical Data

Insulator	Thermoplast, UL 94V-0
Shell	Steel, Ni/Zn
Contacts	Copper alloy
Contact finish	PdNi, gold flash
Contact termination	tinned
Wire size	AWG 30 - 26
Contact spacing	1,27 mm
Contact number	9
Temperature range acc to DIN IEC 68 part 1	-55 / 125°C

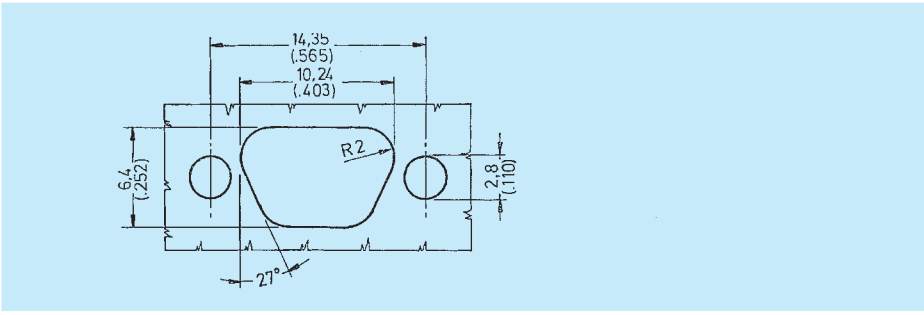
Electrical Data

Current rating	2,0 A / 55°C
Voltage rating	350 Veff
Contact resistance	20 mΩ max
Insulation resistance	5000 MΩ

Dimensions



Panel Cutout



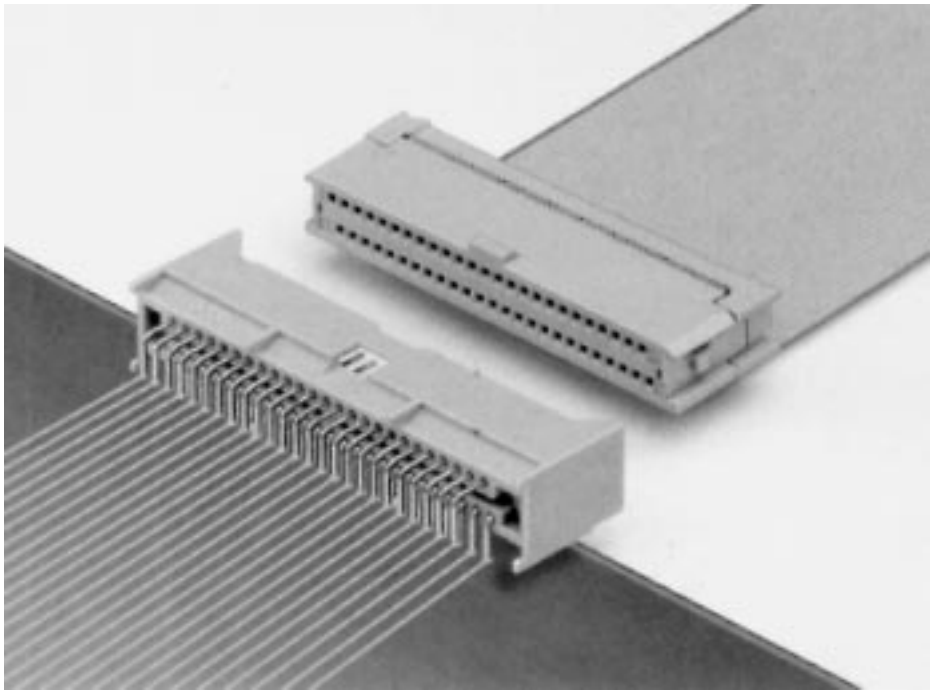
MICRO Speedy G88

for flat ribbon cable, spacing 0.635 mm

The receptacle is designed for solderless termination of ribbon cables with wire size 0.06 mm^2 (AWG 30) and conductor spacing 0.635 mm in miniaturized systems.

The headers offer straight or 90° solder pins which are directly soldered into pc boards. Contact spacing is 1.27 mm at a row distance of 2.54 mm. The contacts are available with selective gold plating acc. to performance class 1, 2 or 3 and thus meets the requirements of DIN 41651.

Together with MICRO Speedy RTG88B (double-row pcb connector) and MICRO Speedy RTG88C (four-row pcb connector,) MICRO Speedy G88 offers an excellent interconnection system for pcb/pcb and pcb/cable applications.



Technical Data

Insulator	Polyester GF, grey, UL94V-0
Contacts	Header: brass
	Receptacle: copper alloy
Contact finishes	Contact area selectively hard gold plated over nickel
	Termination area tinned
Termination method	Header:
	Solder pin, straight/90°
	Receptacle IDC
Socket termination	0.06 mm^2 (AWG 30)
Spacing of contacts	1.27 mm / 2.54"
Number of contacts	max. 64
Temperature range acc. to DIN IE 68 Part 1	-55 / 125°C

Electrical Data

Current rating	1 A / 25°C; 0.7 A / 70°C
Test voltage	350 Vrms
Contact resistance	20 mΩ max.
Insulation resistance	5000 MΩ min.

Receptacle

Order Reference

G 88 D 50 P 7 M K A L - *

Series

Type

Contact arrangement
Double row

Number of contacts
max 64

Insulator
P - Polyester GF

Type of connector
7 - with strain relief

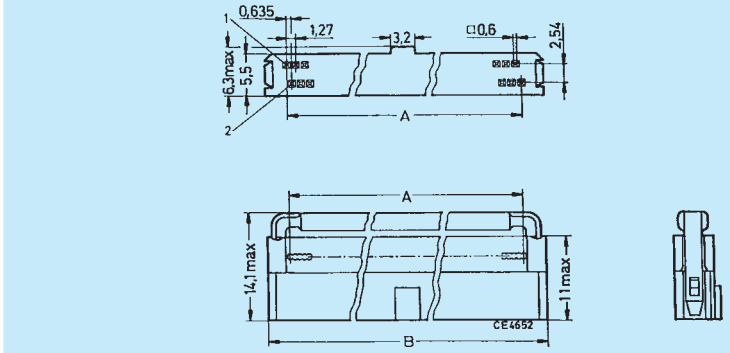
Contact spacing
M - 1,27 mm

Termination method
K - IDC termination

Mounting method
A - without mounting

Colour
L - Grey

Modification
Please consult factory



No of contacts	Designation	Dimensions A	B
12	**G88D12P7MKAL**	6,985	12,67
20	**G88D20P7MKAL**	212,065	17,75
34	**G88D34P7MKAL**	20,955	26,64
40	**G88D40P7MKAL**	24,765	30,45
50	**G88D50P7MKAL**	31,115	36,80
64	**G88D64P7MKAL**	40,005	45,69

Header

Order Reference

G 88 D 50 P 9 M B1 A L - *

Series

Type

Contact arrangement
Double row

Number of contacts
max 64

Insulator
P - Polyester GF
C - Polyamide GF

Type of connector
9 - without locking device

Contact spacing
M - 1,27 mm
N - 1,27/2,54 mm 1)

Termination method
B1 - Solder pin, straight
E1 - Solder pin 90°

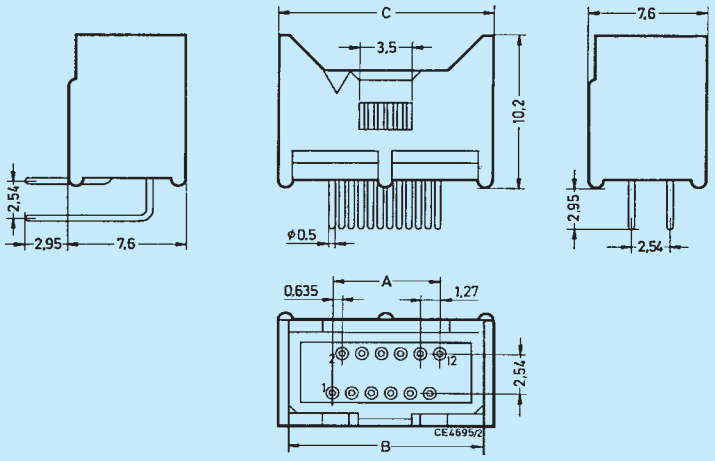
Mounting method
A - without mounting, low profile
T - with peg

Colour
L - Grey

Modification
Please consult factory

1) Only for mounting method A and termination method B1 and E1

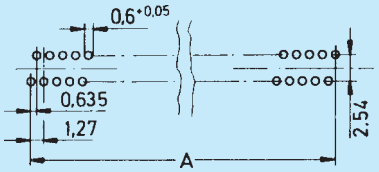
Low Profile Header, straight and 90°



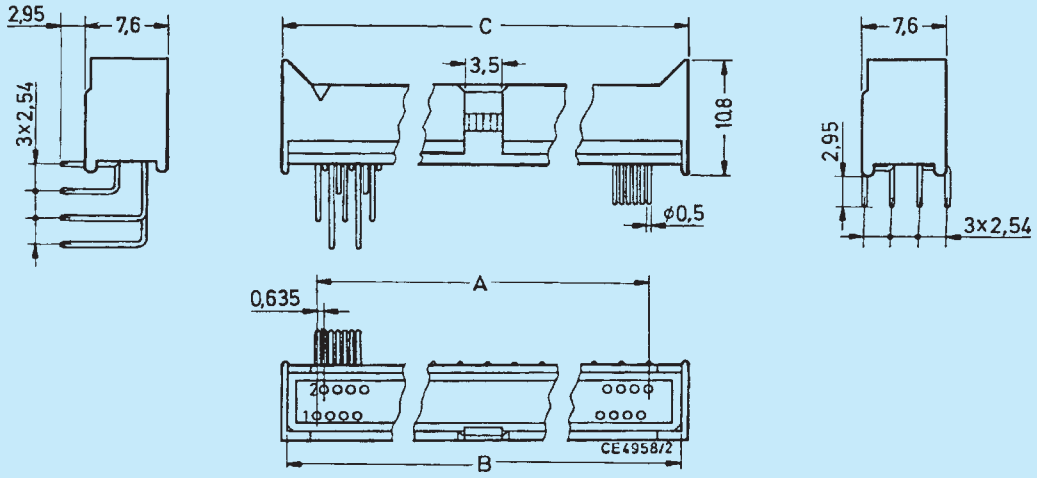
Number of contacts	Designation solder pin, straight	solder pin 90°	Dimensions A	B + 0,1	C max
12	**G88D12P9MB1AL**	**G88D12P9ME1AL**	6,985	12,87	14,00
20	**G88D20P9MB1AL**	**G88D20P9ME1AL**	10,065	17,95	19,10
34	**G88D34P9MB1AL**	**G88D34P9ME1AL**	20,955	26,85	28,00
40	**G88D40P9MB1AL**	**G88D40P9ME1AL**	24,795	30,65	31,80
50	**G88D50P9MB1AL**	**G88D50P9ME1AL**	31,115	37,00	38,15
64	**G88D64P9MB1AL**	**-**	40,005	45,90	47,00

Hole Pattern

for straight and 90° solder pins
Spacing 1,27 mm

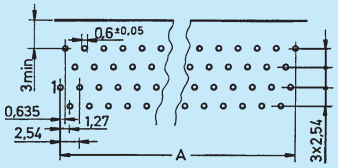


Low Profile Header, straight and 90°

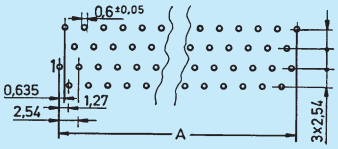


Number of contacts	Designation solder pin, straight	solder pin 90°	Dimensions A	B + 0,1	C max
20	**G88D20P9NB1AL**	**G88D20P9NE1AL**	10,065	17,95	19,10
34	**G88D34P9NB1AL**	**G88D34P9NE1AL**	20,955	26,85	28,00
40	**G88D40P9NB1AL**	**-**	24,795	30,65	31,80
50	**G88D50P9NB1AL**	**G88D50P9NE1AL**	31,115	37,00	38,15
64	**G88D64P9NB1AL**	**-**	40,005	45,90	47,00

Hole Pattern



for 90° solder pins



for straight solder pins

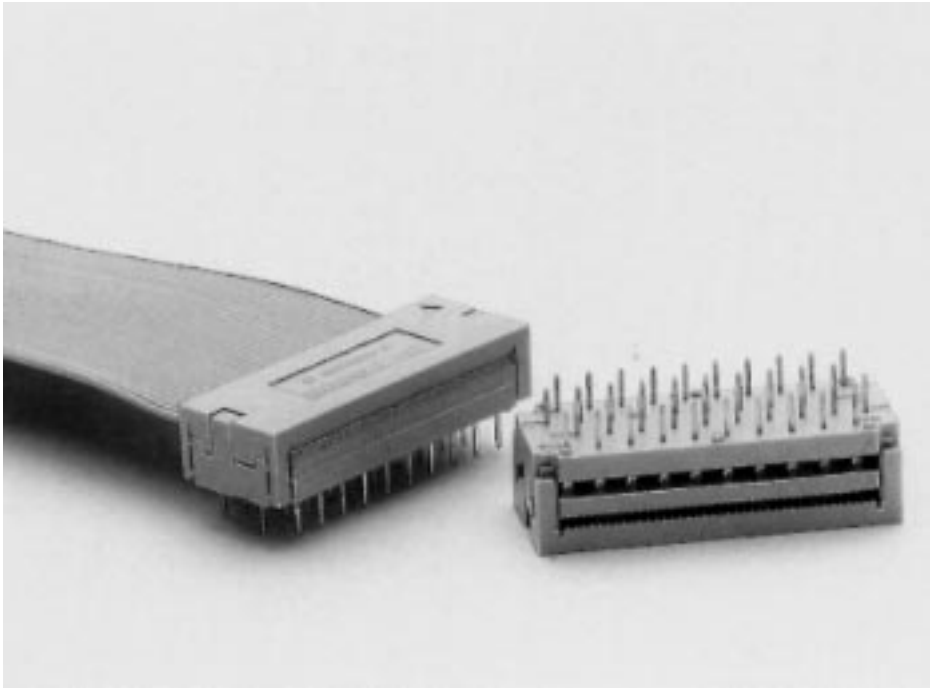
MICRO Speedy RTG88B

for flat ribbon cables, spacing 0.635 mm

MICRO Speedy RTG88B from ITT Cannon is a four-row pbc connector for IDC termination. The staggered contacts are spaced at 1.27 mm offering space savings of up to 60% compared to 2.54 mm pitch.

The upper connector part features a pre snap-in facility thus enabling simple and safe handling. An additional cable guidance ensures exact termination of ribbon cables. Suitable are ribbon cables with conductors size 0.057 mm^2 (AWG 30) spaced at 0.635 mm.

Together with MICRO Speedy RTG88C (double-row pcb connector) and MICRO Speedy G88 (header and receptacle, spacing 1.27 mm) Micro Speedy RTG88B offers an excellent interconnection system for pcb/pcb and pcb/cable applications.



Technical Data

Insulator	Polyester GF, grey, UL94V-0
Contacts	Copper alloy
Contact finishes	Tin over nickel
Number of contacts	40, 50
Spacing of contacts	1.27 mm / 2.54 "
Termination method	IDC
Wire size	AWG 30 (0.06 mm^2)
Temperature range acc. to DIN IE 68 Part 1	-55 / 125°C

Electrical Data

Current rating	1 A / 25°C; 0.7 A / 70°C
Test voltage	350 Vrms
Contact resistance	20 mΩ max.
Insulation resistance	5000 MΩ min.

PCB Connector, 4-row

Order Reference

RTG88 B 40 L L - *

Series

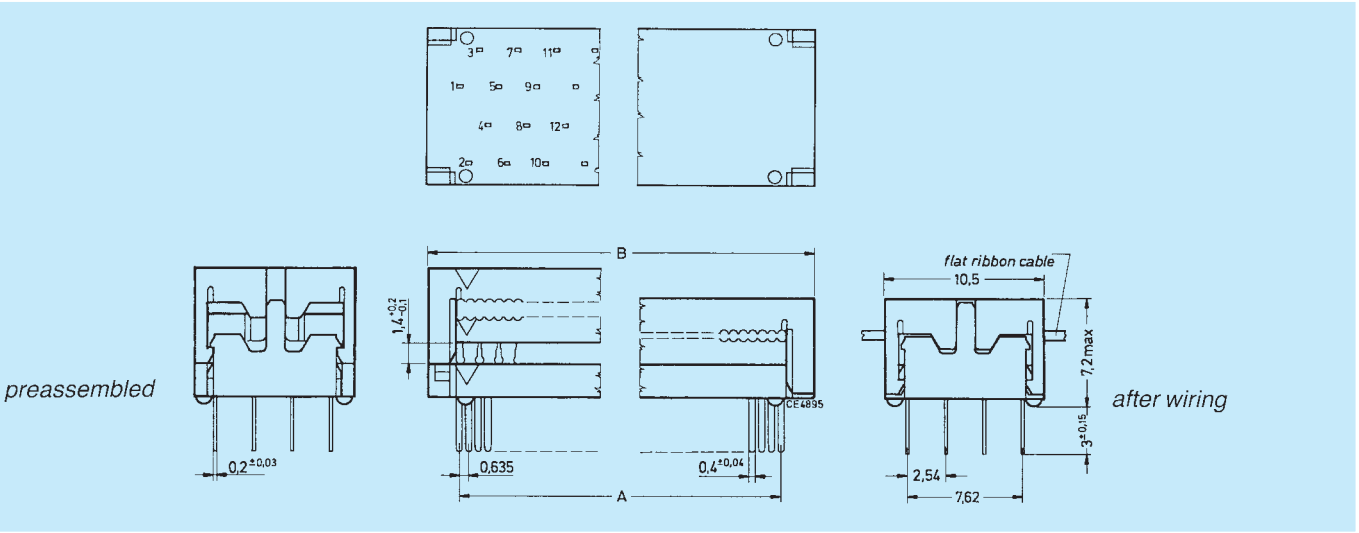
Connector type
B - PCB Connector, four row

Number of contacts
max 64

Termination method / Size
L - IDC / AWG 30

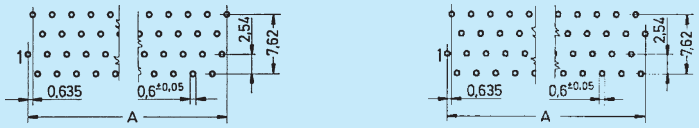
Colour
L - Grey

Modification
Please consult factory



No of contacts	Designation	Dimensions A	B max
40	**RTG88B40LL**	24,765	29,2
50	**RTG88B50LL**	31,115	35,6

Hole Pattern



40-way 50-way

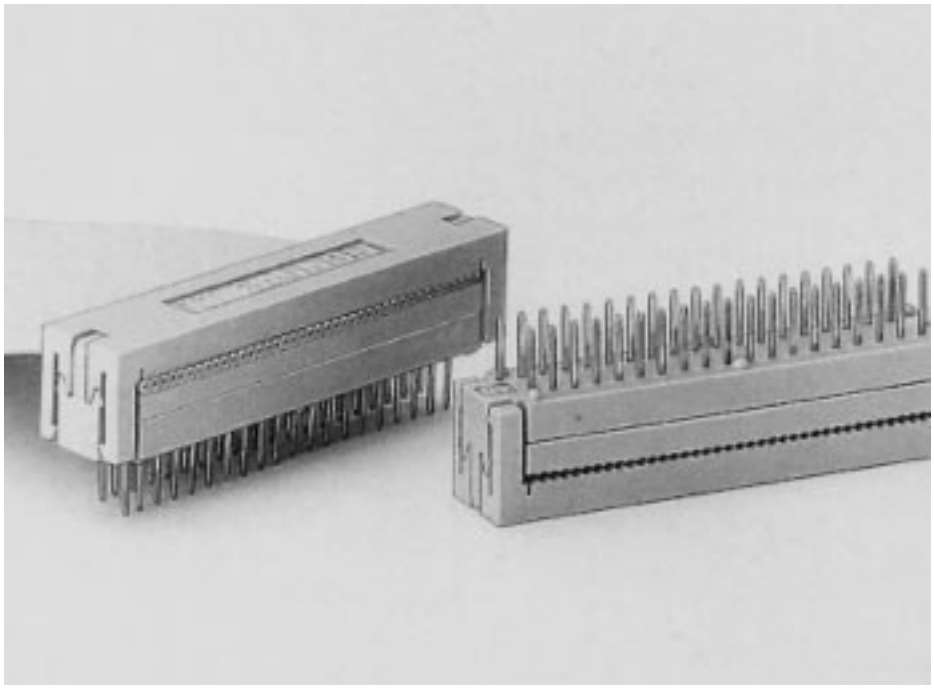
MICRO Speedy RTG88C

for flat ribbon cables, spacing 0.635 mm

MICRO Speedy RTG88C from ITT Cannon is a two-row pbc connector for IDC termination. The staggered contacts are spaced at 1.27 mm offering space savings of up to 60% compared to 2.54 mm pitch.

The upper connector part features a pre snap-in facility thus enabling simple and safe handling. An additional cable guidance ensures exact termination of ribbon cables. Suitable are ribbon cables with conductors size 0.057 mm^2 (AWG 30) spaced at 0.635 mm.

Together with MICRO Speedy RTG88B (four-row pcb connector) and MICRO Speedy G88 (header and receptacle, spacing 1.27 mm) Micro Speedy RTG88C offers an excellent interconnection system for pcb/pcb and pcb/cable applications.



Technical Data

Insulator	Polyester GF, grey, UL94V-0
Contacts	Copper alloy
Contact finishes	Tin over nickel
Number of contacts	20, 34, 40, 50
Spacing of contacts	1.27 mm / 2.54"
Termination method	IDC
Wire size	AWG 30 (0.06 mm^2)
Temperature range acc. to DIN IE 68 Part 1	-55 / 125°C

Electrical Data

Current rating	1 A / 25°C; 0.7 A / 70°C
Test voltage	350 Vrms
Contact resistance	20 mΩ max.
Insulation resistance	5000 MΩ min.

PCB Transition connector,
double- row

Order Reference

RTG88 C 40 L L - *

Series

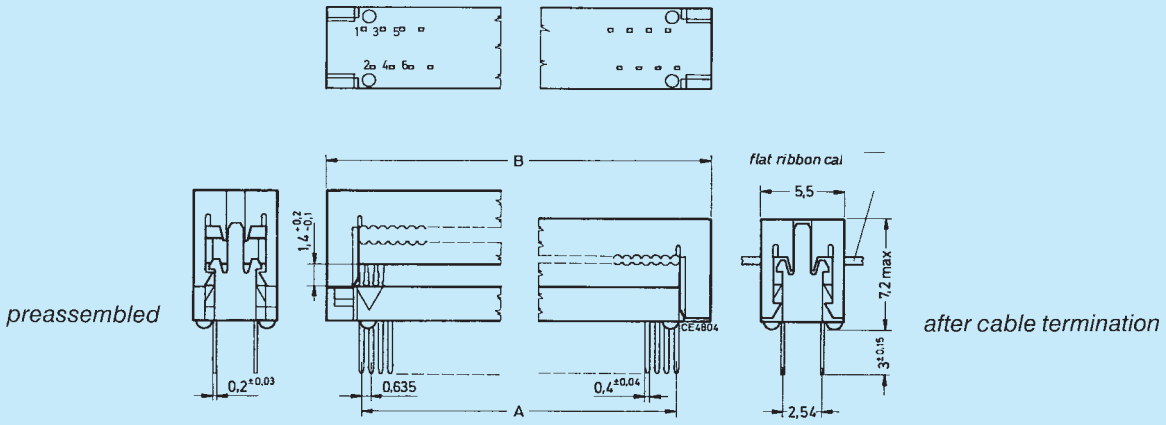
Connector type
C - PCB Transition connector, double- row

Number of contacts
max 64

Termination method / Size
L - IDC / AWG 30

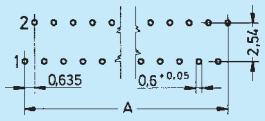
Colour
L - Grey

Modification
Please consult factory



No of contacts	Designation	Dimensions A	B max
20	**RTG88C20LL**	12,065	16,5
34	**RTG88C34LL**	20,955	25,4
40	**RTG88C40LL**	24,765	29,2
50	**RTG88C50LL**	31,115	35,6

Hole Pattern



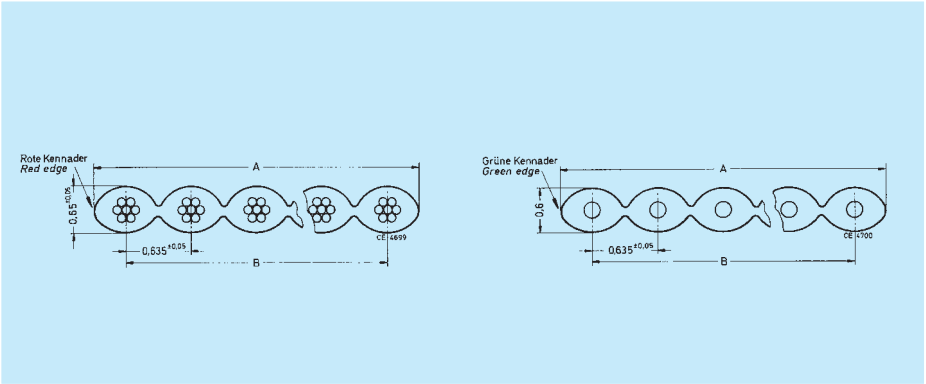
Technical Data

Stranded conductor

Temperature	105°C
Voltage rating	150 V
Insulation resistance	min. $10^{10}\ \Omega$
Insulation	PVC
Conductor	stranded, AWG 30 (7/38), tinned copper
Impedance	75 Ω
Capacitance	80 pf/m
Propagation delay	4.5 ns/m
Crosstalk	NE 9.6%
	FE 2.8%
Spacing	0.635 mm

Solid conductor

Temperature	150°C
Voltage rating	150 V
Insulation resistance	min. $10^{10}\ \Omega$ / 3 m
Insulation	Teflon FEP
Conductor	solid, AWG 30, silver plated copper
Impedance	88 Ω
Capacitance	49 pf/m
Propagation delay	4.3ns/m
Crosstalk	NE 8.1%
	FE 2.3%
Spacing	0.635 mm



Stranded conductor

Solid conductor

No. of conductors	A	B
12	7,62 ± 0,15	6,99 ± 0,15
16	10,16 ± 0,15	9,53 ± 0,15
20	12,70 ± 0,15	12,07 ± 0,15
26	16,51 ± 0,15	15,88 ± 0,15
34	21,59 ± 0,15	20,96 ± 0,15
40	25,40 ± 0,2	24,77 ± 0,2
50	31,75 ± 0,2	31,12 ± 0,2
60	38,10 ± 0,2	37,47 ± 0,2
64	40,64 ± 0,2	40,01 ± 0,2

	MDS	MDSM
Stranded wire		
Conductors	Copper, tinned AWG 26 / 7 x 0,160 mm AWG 28 / 7 x 0,127 mm AWG 30 / 7 x 0,102 mm	Copper, tinned AWG 26 / 7 x 0,160 mm AWG 28 / 7 x 0,127 mm (Standard) AWG 30 / 7 x 0,102 mm
Insulation	PVC, PP or HDPE, Outer dia. max. 0,9 mm	
Wall thickness	AWG 26: generally min. 0,140 mm AWG 28: generally min. 0,152 mm AWG 30: generally min. 0,200 mm	
	for all: min. permissible thickness at any position .127 mm	
Cable		
Shielding	–	Shielding braid, tinned copper, coverage min. 80%
Insulation	PVC	PVC
Wall thickness	0.61 mm min. at any position	0.56 mm min. at any position* 0.76 mm min. at any position**
Outer diameter	Table A	Table B
Temperature range	-40 / 80°C	-40 / 80°C
Operating voltage	300 Vrms	300 Vrms
Test voltage	1000 Vrms min.	1000 Vrms min.
Conductor resistance	240 Ω/km	240 Ω/km

* Cable with 9 wires or 5 twisted pairs
** Cable with more than 9 wires or more than 5 twisted pairs

Table A

Strands	Contacts	Outer dia. mm max.	min.
9	9	6,0	4,0
15	15	7,0	5,0
25	25	9,0	5,0

Table B

Strands	Outer dia. mm max.
9	5,7
15	6,7
25	7,9

Tools

for MICRO MDS and MDSM

Hand crimp tool (for reeled contacts)	CCTS-MDS
Semi-automatic stripper / crimper	ACT 2500-MDS
Insertion tool	CIT-MDS
Extraction tool pin contact (MDS only)	CET-MDS-P
Extraction tool socket contact (MDS only)	CET-MDS-S
Other tools	see assembly instruction

for MICRO Speedy G88

Hand lever press	CHP-420
Pneumatic press	CPP-460
Die (for both presses)	CT121086-3075
Hand crimp tool	SCT-G88

for MICRO Speedy RTG88B

Hand lever press	CHP-420
Pneumatic press	CCP-460
Die plate	CT121086-3324

for MICRO Speedy RTG88C

Hand lever press	CHP-420
Pneumatic press	CCP-460
Die plate	CT121086-3289