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COMTRONIC GMBH - VERBINDUNGSTECHNIK

MICRO-D OVERVIEW

comtronic

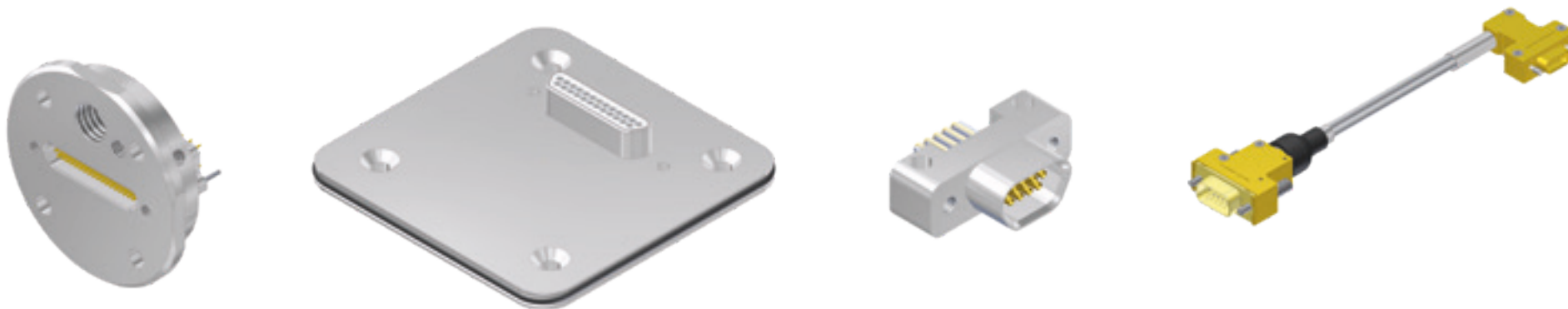
Comtronic Micro-D connectors are compliant with MIL-PRF-83513 and ESCC 3401/ff

Materials and finishes		Electrical	
Connector shell	Aluminium alloy 6061 in accordance with SAE AMS-QQ-A-250/11:	Insulation resistance	5.000 MOhm between contacts and connector shell
Plating	Code: C2: cadmium with yellow chromate conversion coating in accordance with SAE-AMS-QQ-P-416, type II, class 3 Code N1: electroless nickel in accordance with ASTM B733 Code O2: gold plated in accordance with ASTM B488 over electroless nickel in accordance with ASTM B733-90 Other platings on request	Dielectric withstanding	At sea level: 600 volts ac, rms 60 Hz no evidence of breakdown or flashover At 70,000 feet: 150 volts ac, rms 60 Hz no evidence of breakdown or flashover
Insulator, transition blocks, connector shell, plastic	PEEK Liquid crystal polymer, 30% glass-filled	Contact resistance	@ 2.5 amps test current, voltage drop #26AWG wires 65mV max #25AWG solid wires 60mV max.
Contacts	Beryllium copper, gold plated in accordance with ASTM B 488 type II class 1.27	Current capability	3.0 amperes in continuous duty operation from -55° C to +150° C
Interfacial sealing	Fluorosilicone rubber in accordance with MIL-R-25988		
Mounting hardware	Stainless steel, 300 series, passivated in accordance with SAE AMS 2700		
Potting	Epoxy resin, hysol EE4215/HD3561		
Pin Contact, TwistPin	Beryllium copper, gold plated in accordance with ASTM B 488 type II class 1.27		

Comtronic Micro-D connectors are compliant with MIL-PRF-83513 and ESCC 3401/ff

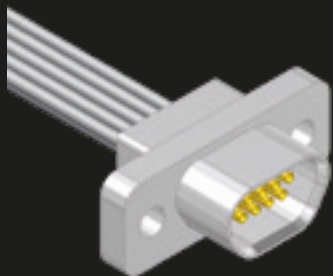
Mechanical		Environmental	
Contact engaging and separation force	Max. 6.0 ounces per contact	Temperature range	-55°C to 200°C
Connector mating and unmating force	Maximum mating and unmating force equal to 10 ounces times the number of contacts	Vibration	No discontinuity longer than 1 microsecond 10 Hz to 2000 Hz, amplitude of 20 g peak
Durability	Min. 500 cycles of mating and unmating	Shock	No discontinuity longer than 1 microsecond at an amplitude of 50 g peak
Contact retention	5 pound axial load for a minimum of 5 seconds		

Comtronic develops your perfect connector solution. A wide variety of machining, well educated, experienced and motivated team enables us to be flexible, fast and reliable.



Lead wire termination

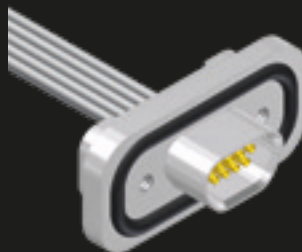
CMK...6C7
lead wire



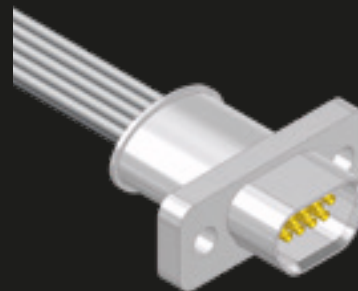
CMK...-S
solder cups



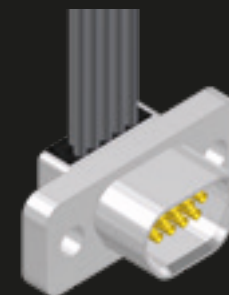
CMKIP...6C7
watertight IP67



CMKIB...6C7
integrated backshell



CMKRT...6C7
lead wire 90° right angled

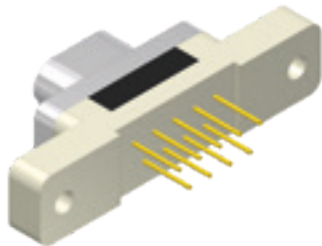


PCB mounting

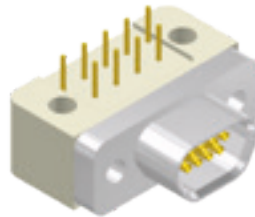
CMK...5L4
solid wire 25AWG



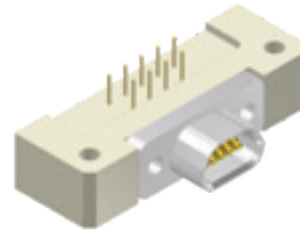
CMK...-STI
straight mount



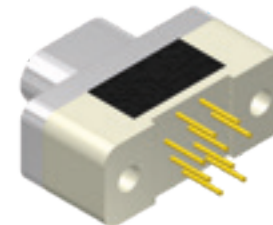
CMK...RTI
right angled



CMK...BR
right angled
2 row



CMK...CSTI
straight
narrow pitch



CMKIP...5L5
solid wire 25AWG



Special shapes

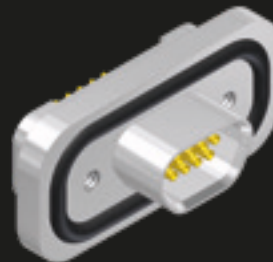
CMKH...5L4
hermetically
sealed



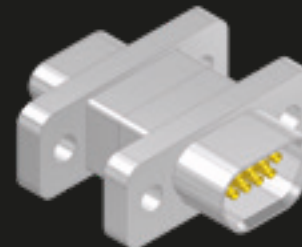
CMKIBG...
integrated backshell
„Ground spring“



CMKIPE...
conductive
O-Ring



CMKS...
Saver

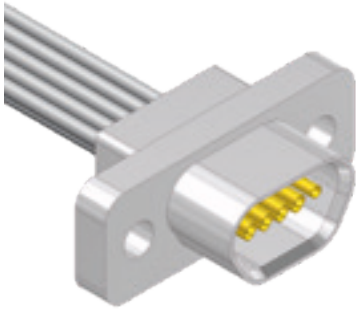


CMKA...
Adaptor, space wire

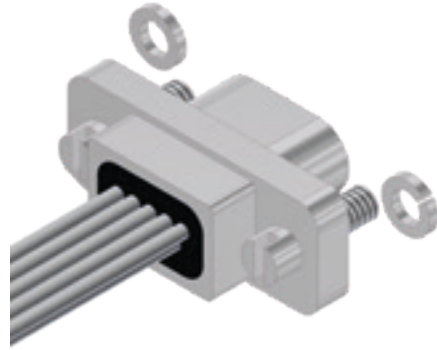


Mounting hardware for Micro-D connectors

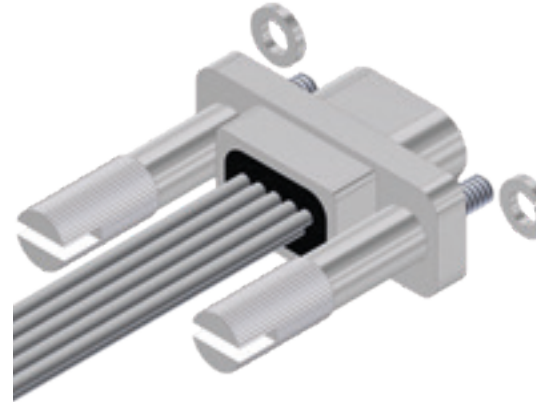
thru hole
P/N Code „B“



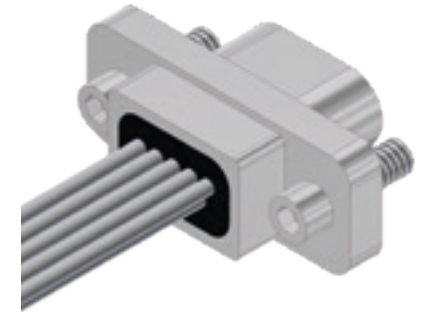
slot head
P/N Code „L“



slot head
P/N Code „LL“



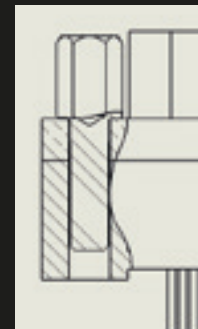
hex head
P/N Code „R“



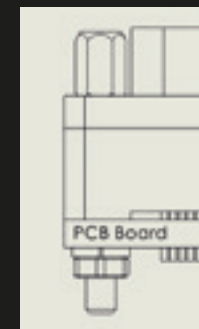
JACKPOST

JACKPOST

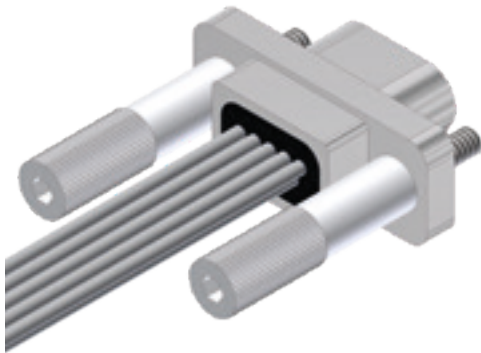
P/N Code „P“



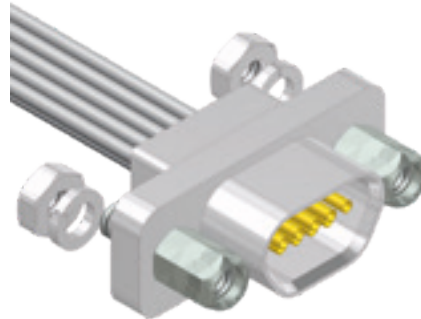
PCB 1,6mm
P/N Code „P1“



hex head
P/N Code „RL“



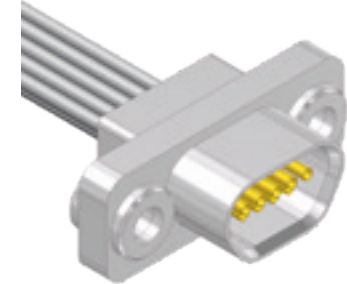
jackpost
P/N Code „P“



integrated thread
P/N Code „H“

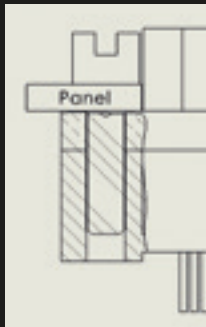


float mount
P/N Code „F“



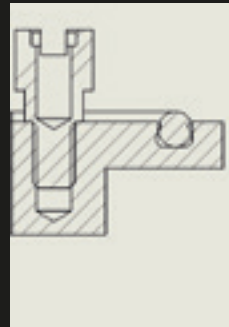
JACKPOST BOX MOUNT

wall thickness:
0,8; 1,6; 2,4mm
P/N Code „T1“; „T2“; „T3“



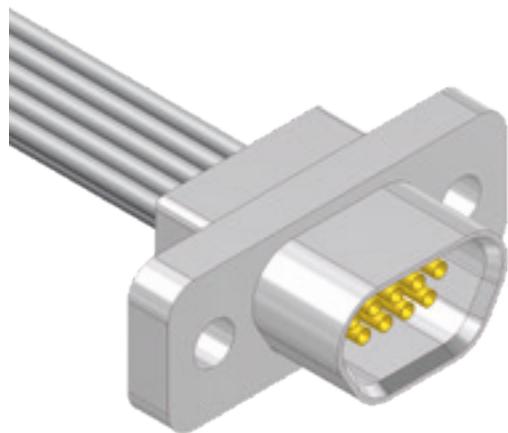
JACKPOST BOX MOUNT

tight connectors
P/N Code „T1“; „T2“; „T3“

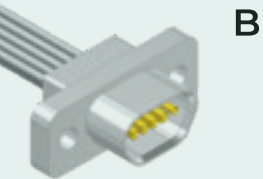


Lead wire metal shell acc. MIL-PRF-83513

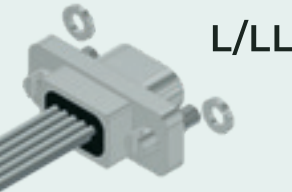
CMK...6C7



Hardware options



no hardware



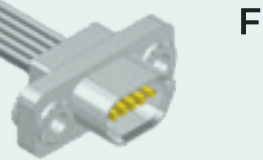
slot head



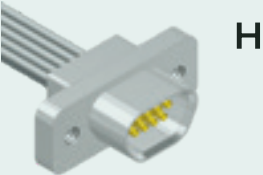
hex head



jackpost



float mount



integr. thread

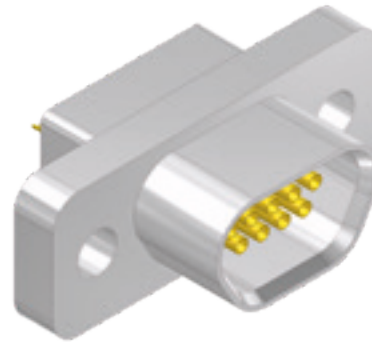
THIS SERIES IS FULLY COMPLIANT WITH MIL-PRF-83513

Serie CMK	Termination	P/N code		Color
Surface:	wires MIL-16878	E 19	ET 19	2 yellow
Cadmium C2	AWG22	2C	2D	7 color code MIL-STD-681
Nickel N1	AWG24	4C	4D	NEMA HP3, HP4
	AWG26	6C	6D	10 colors repeating
	AWG28	8C	8D	
Please select hardware options	wires MIL-22759			
	AWG26	6G		
No. of contacts:	Standard			
9-, 15-, 21-, 25-, 31-, 37-, 51-, 69-, 100-position	18" (457 mm), 36" (914 mm), 54" (1371 mm), 72" (1850 mm)			
Male „P“, female „S“				

expl. partnumber: CMK - N1 - P - 09P - 6C7 - Length in inch

Solder cup metal shell acc. MIL-PRF-83513

CMK...-S



THIS SERIES IS FULLY COMPLIANT WITH MIL-PRF-83513

Serie CMK

Surface:
Cadmium C2
Nickel N1

Please select hardware
options

No. of contacts:
9-, 15-, 21-, 25-, 31-, 37-, 51-,
69-, 100-position

Male „P“, female „S“

Termination

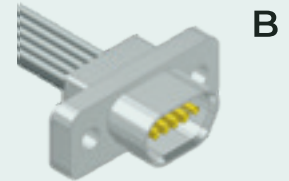
solder cup
AWG26

P/N code

S

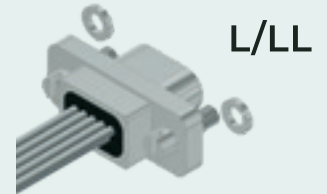
expl. partnumber: CMK - N1 - P - 09P - S

Hardware options



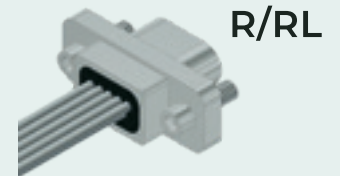
B

no hardware



L/LL

slot head



R/RL

hex head



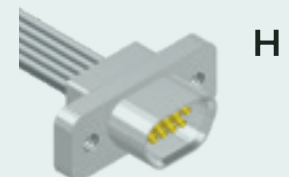
P

jackpost



F

float mount

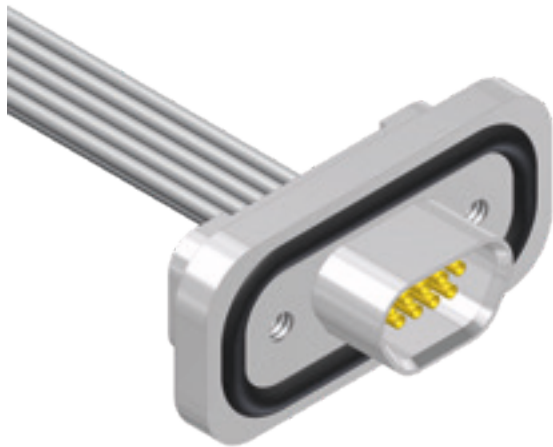


H

integr. thread

Lead wire metal shell IP67

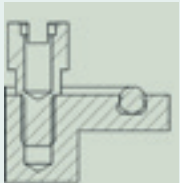
CMKIP...6C7



Serie CMKIP	Termination	P/N code		Color
Surface:	wires MIL-16878	E 19	ET 19	2 yellow
Cadmium C2	AWG22	2C	2D	7 color code MIL-STD-681
Nickel N1	AWG24	4C	4D	NEMA HP3, HP4
Please select hardware options	AWG26	6C	6D	10 colors repeating
	AWG28	8C	8D	
	wires MIL-22759			
No. of contacts:	AWG26	6G		
9-, 15-, 21-, 25-, 31-, 37-, 51-, 69-, 100-position	Standard			
	18" (457 mm), 36" (914 mm), 54" (1371 mm), 72" (1850 mm)			
Male „P“, female „S“				

expl. partnumber: CMKIP - N1 - P - 09P - 6C7 - Length in inch

T1
T2
T3



box mount

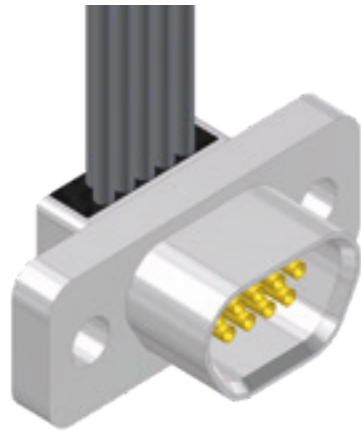


H

integr. thread

Lead wire metal shell right angled

CMKRT...6C7



Serie CMKRT

Surface:
Cadmium C2
Nickel N1

Please select hardware
options

No. of contacts:
9-, 15-, 21-, 25-, 31-, 37-, 51-,
69-, 100-position

Male „P“, female „S“

Termination

wires MIL-16878
AWG22
AWG24
AWG26
AWG28
wires MIL-22759
AWG26

Standard
18" (457 mm), 36" (914 mm),
54" (1371 mm), 72" (1850 mm)

P/N code

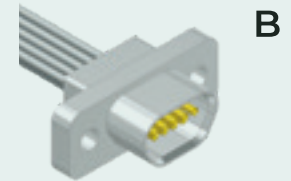
E 19	ET 19
2C	2D
4C	4D
6C	6D
8C	8D
6G	

Color

2 yellow
7 color code MIL-STD-681
NEMA HP3, HP4
10 colors repeating

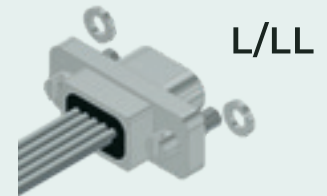
expl. partnumber: CMKRT - N1 - P - 09P - 6C7 - Length in inch

Hardware options



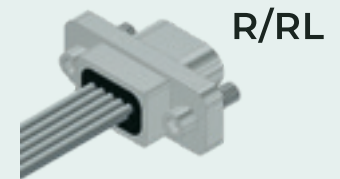
B

no hardware



L/LL

slot head



R/RL

hex head



P

jackpost



F

float mount

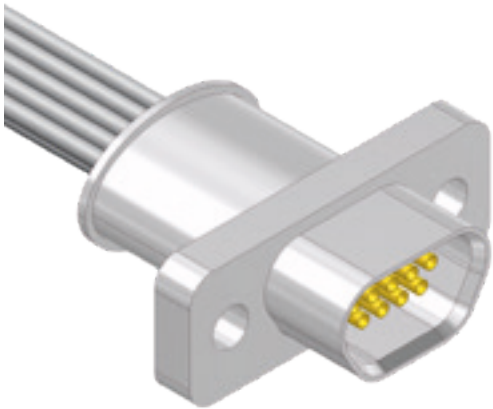


H

integr. thread

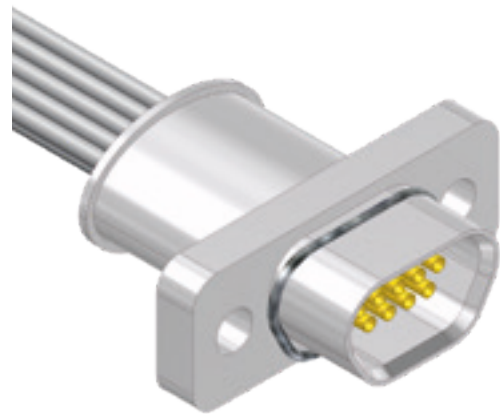
Integrated backshell

CMKIB...6C7

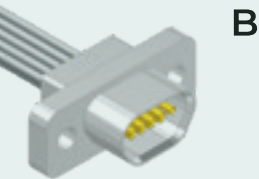


Ground spring pin only

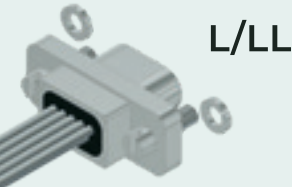
CMKIBG...6C7



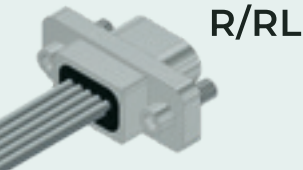
Hardware options



no hardware



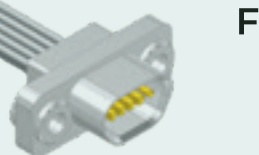
slot head



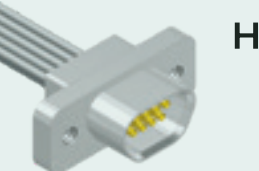
hex head



jackpost



float mount



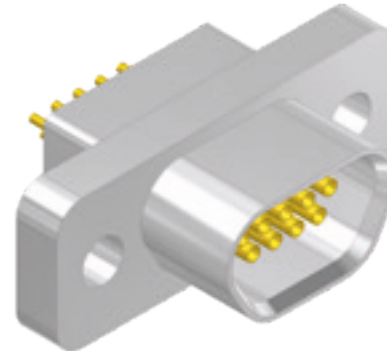
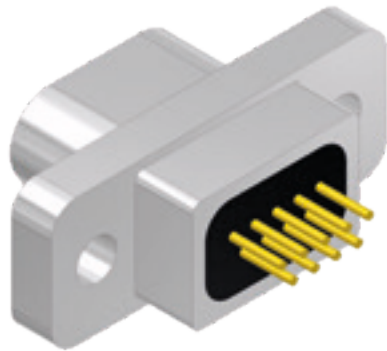
integr. thread

Serie CMKIB	Termination	P/N code		Color
Surface:	wires MIL-16878	E 19	ET 19	2 yellow
Cadmium C2	AWG22	2C	2D	7 color code MIL-STD-681
Nickel N1	AWG24	4C	4D	NEMA HP3, HP4
	AWG26	6C	6D	10 colors repeating
	AWG28	8C	8D	
Please select hardware options	wires MIL-22759			
	AWG26	6G		
No. of contacts:	Standard			
9-, 15-, 21-, 25-, 31-, 37-, 51-, 69-, 100-position	18" (457 mm), 36" (914 mm), 54" (1371 mm), 72" (1850 mm)			
Male „P“, female „S“				

expl. partnumber: CMKIB - N1 - P - 09P - 6C7 - Length in inch

Solid wire metal shell acc. MIL-PRF-83513

CMK...- 5L4



THIS SERIES IS FULLY COMPLIANT WITH MIL-PRF-83513

Serie CMK

Surface:
Cadmium C2
Nickel N1

Please select hardware
options

No. of contacts:
9-, 15-, 21-, 25-, 31-, 37-, 51-,
69-, 100-position

Male „P“, female „S“

Termination

solid wire
AWG25
gold plated

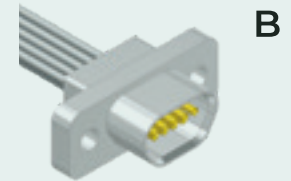
Standard
3mm

P/N code

5L4

expl. partnumber: CMK - N1 - P - 09P - 5L4

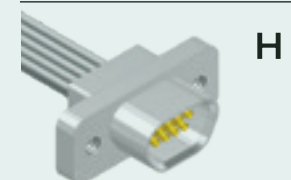
Hardware options



no hardware



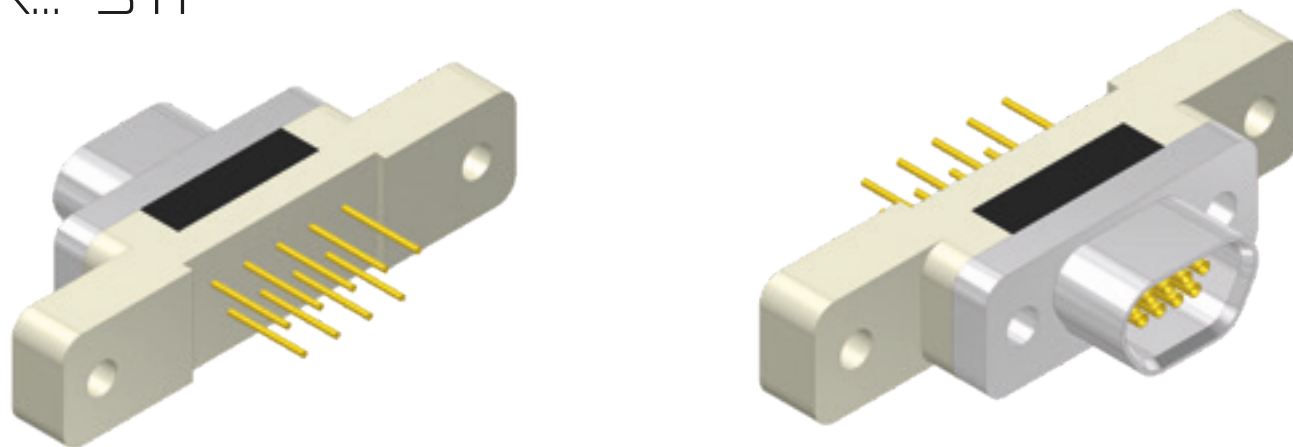
jackpost



integr. thread

Straight PCB metal shell mounting acc. MIL-PRF-83513

CMK...- STI



Hardware options

THIS SERIES IS FULLY COMPLIANT WITH MIL-PRF-83513

Serie CMK

Surface:
Cadmium C2
Nickel N1

Please select hardware
options

No. of contacts:
9-, 15-, 21-, 25-, 31-, 37-, 51-,
69-, 100-position

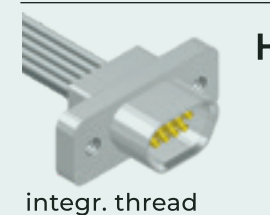
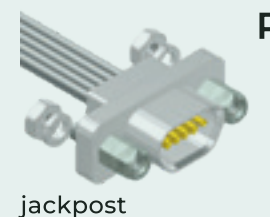
Male „P“, female „S“

Termination

PCB mounting
AWG25
gold plated

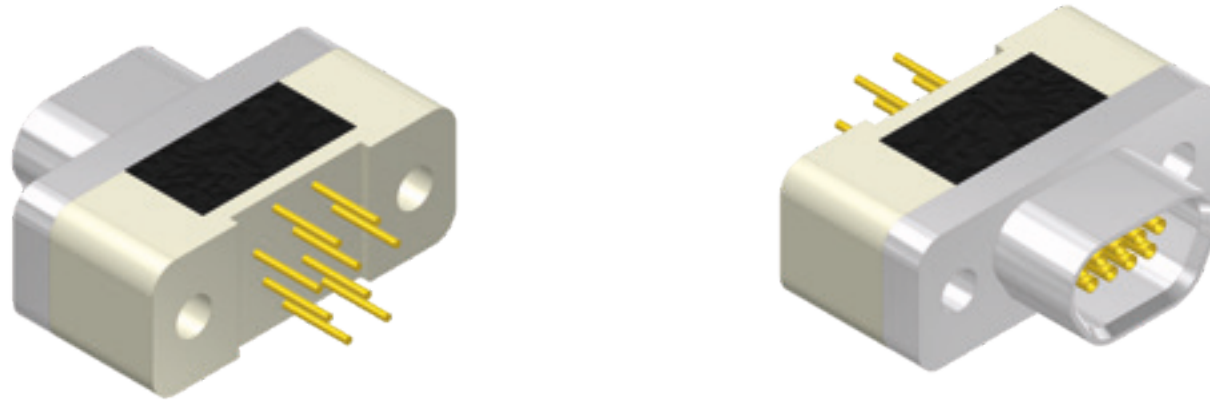
Standard
3mm

expl. partnumber: CMK - N1 - P - 09P - STI



Narrow pitch metal shell straight for PCB mounting acc MIL-PRF-83513

CMK...- CSTI



THIS SERIES IS FULLY COMPLIANT WITH MIL-PRF-83513

Serie CMK

Surface:
Cadmium C2
Nickel N1

Please select hardware
options

No. of contacts:
9-, 15-, 21-, 25-, 31-, 37-, 51-,
69-, 100-position

Male „P“, female „S“

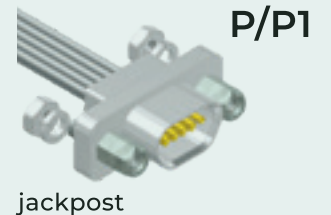
Termination

PCB mounting
AWG25
gold plated

Standard
3mm

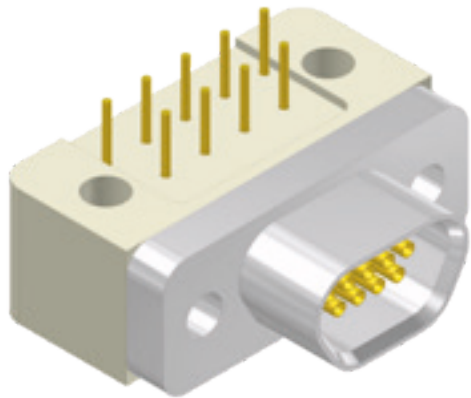
expl. partnumber: CMK - N1 - P - 09P - CSTI

Hardware options



Right angled metal shell PCB mounting acc. MIL-PRF-83513

CMK...- RTI



Hardware options

THIS SERIES IS FULLY COMPLIANT WITH MIL-PRF-83513

Serie CMK

Surface:
Cadmium C2
Nickel N1

Please select hardware
options

No. of contacts:
9-, 15-, 21-, 25-, 31-, 37-, 51-,
69-, 100-position

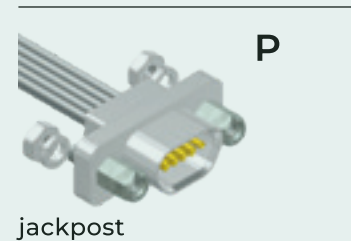
Male „P“, female „S“

Termination

PCB mounting
AWG25
gold plated

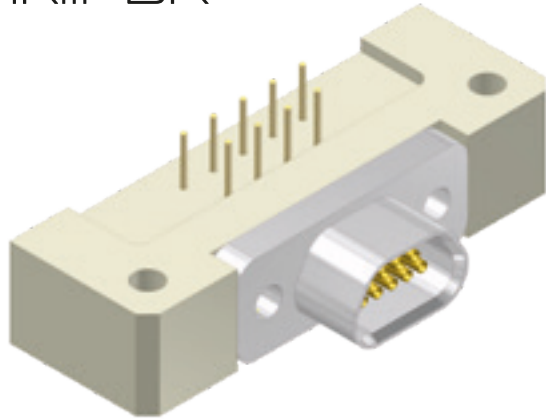
Standard
3 mm

expl. partnumber: CMK - N1 - P - 09P - RTI



Right angled metal shell PCB mounting

CMK...- BR



Serie CMK

Surface:
Cadmium C2
Nickel N1

Please select hardware
options

No. of contacts:
9-, 15-, 21-, 25-, 31-, 37-, 51-,
69-, 100-position

Male „P“, female „S“

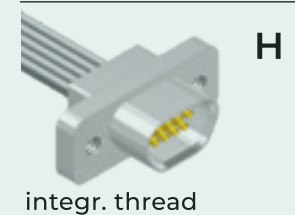
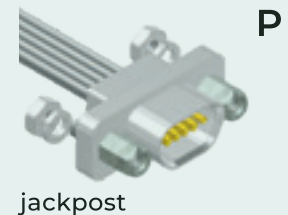
Termination

PCB mounting
AWG25
gold plated

Standard
3mm

expl. partnumber: CMK - N1 - P - 09P - BR

Hardware options



Solid wire metal shell IP67

CMKIP...- SL4



Hardware options

Serie CMKIP

Surface:
Cadmium C2
Nickel N1

Please select hardware
options

No. of contacts:
9-, 15-, 21-, 25-, 31-, 37-, 51-,
69-, 100-position

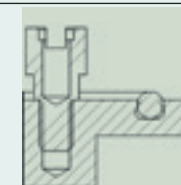
Male „P“, female „S“

Termination

PCB mounting
AWG25
gold plated

Standard
3mm

T1
T2
T3



float mount



H

integr. thread

expl. partnumber: CMKIP - N1 - P - 09P - 54

Hermetically sealed

CMKH...- 5L4



Serie CMKH

Surface:
Cadmium C2
Nickel N1

Please select hardware
options

No. of contacts:
9-, 15-, 21-, 25-, 31-, 37-, 51-,
69-, 100-position

Male „P“, female „S“

Termination

PCB mounting
AWG25
gold plated

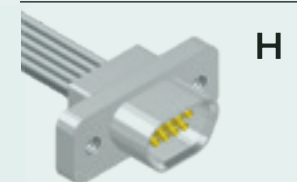
Standard
3mm

expl. partnumber: CMKH - N1 - P - 09P - 5L4

Hardware options



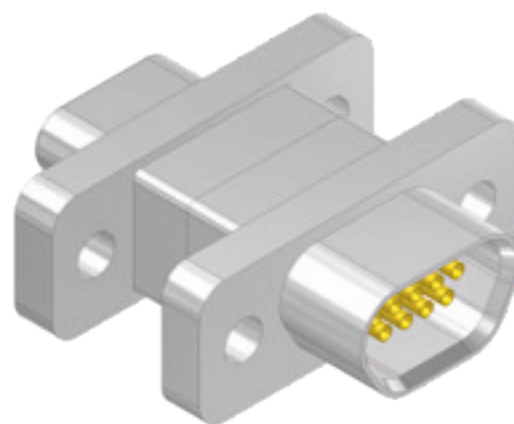
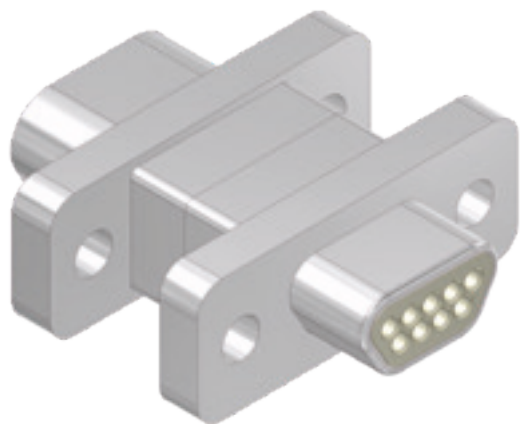
jackpost



integr. thread

Connector Saver

CMKS...



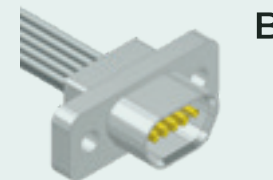
Serie CMKS

Surface:
Cadmium C2
Nickel N1

Please select hardware
options

No. of contacts:
9-, 15-, 21-, 25-, 31-, 37-, 51-,
69-, 100-position

Hardware options



B

no hardware



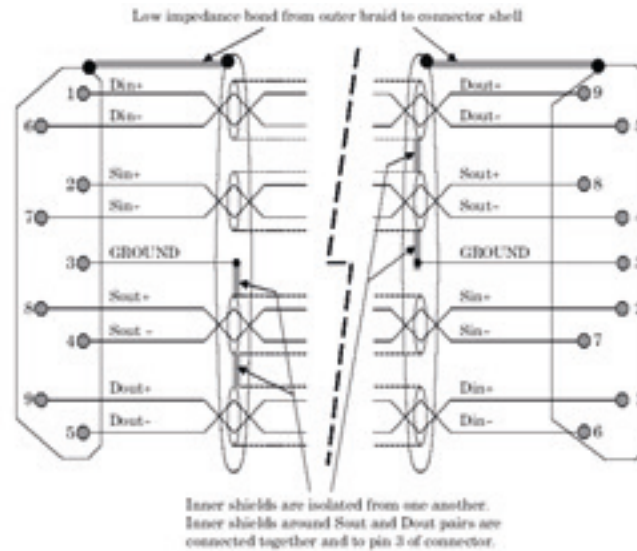
P

jackpost

expl. partnumber: CMKS - N1 - P - 09

Adaptor, hermetically sealed, Spacewire layout

CMKA...



Serie CMKA

Surface:
Cadmium
Nickel N1

Please select hardware
options

No. of contacts:
9-position

expl. partnumber: CMKA - N1 - P - 09

Hardware options



jackpost



integr. thread

Mounting hardware acc. M83513 for plastic and metal shell 9-51 way

„L“ JACKSCREW

short



acc. M83513/05-05

long



M83513/05-06

„P“ " JACKPOST



acc. M83513/05-07

„R“ HEX HEAD

short



acc. M83513/05-02

long



M83513/05-03

THIS SERIES IS FULLY COMPLIANT WITH MIL-PRF-83513

No of contacts 9-51 male/female

thread 2-56UNC

Material

- Stainless steel passivated

Mounting hardware acc. M83513 for plastic and metal shell 100 way

„L“ JACKSCREW

short



acc. M83513/05-15

long



M83513/05-16

„P“ " JACKPOST



acc. M83513/05-17

„R“ HEX HEAD

short



acc. M83513/05-12

long



M83513/05-13

THIS SERIES IS FULLY COMPLIANT WITH MIL-PRF-83513

No of contacts 100 male/female

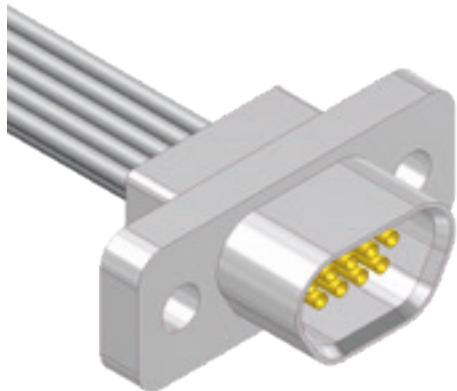
thread: 4-40UNC

Material

- Stainless steel passivated

Narrow Profile Series CMD (plastic) acc. MIL-PRF-83513

CMD.....6C7

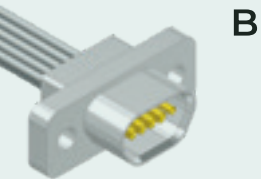


THE PLASTIC SERIES IS FULLY COMPLIANT WITH MIL-PRF-83513

Serie CMD	Termination	P/N code		Color
Material:	wires MIL-16878	E 19	ET 19	2 yellow
Peek P2	AWG26	6C	6D	7 color code MIL-STD-681
	AWG28	8C	8D	NEMA HP3, HP4
				10 colors repeating
Please select hardware options				
No. of contacts:	Standard			
9-, 15-, 21-, 25-, 31-, 37-, 51-position	18" (457 mm), 36" (914 mm), 54" (1371 mm), 72" (1850 mm)			
Male „P“, female „S“				

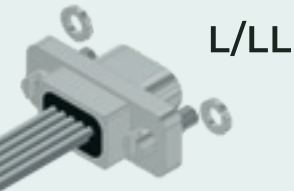
expl. partnumber: CMD - N1 - P - 09P - 6C7 - Length in inch

Hardware options



B

no hardware



L/LL

slot head



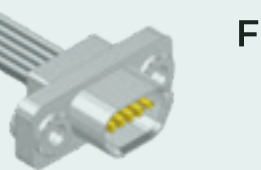
R/RL

hex head



P

jackpost



F

float mount

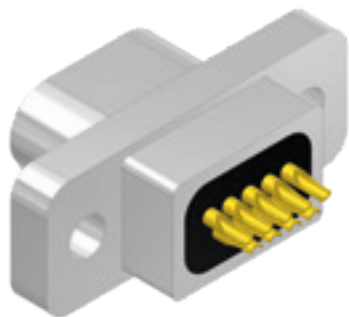


H

integr. thread

Narrow Profile Series CMD (plastic) acc. MIL-PRF-83513

CMD...S SOLDER CUP



THE PLASTIC SERIES IS FULLY COMPLIANT WITH MIL-PRF-83513

Serie CMD

Termination

P/N code

Material:
Peek P2

Solder cups
AWG26

S

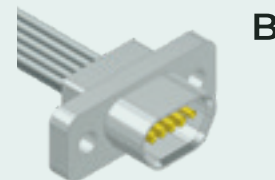
Please select hardware
options

No. of contacts:
9-, 15-, 21-, 25-, 31-, 37-,
51-position

Male „P“, female „S“

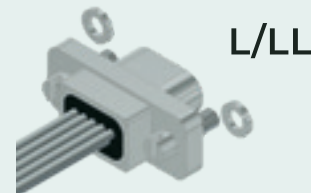
expl. partnumber: CMD - P1 - P - 09P - S

Hardware options



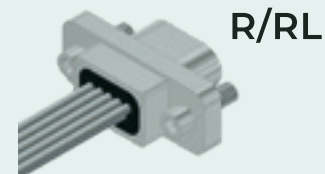
B

no hardware



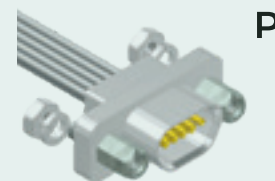
L/LL

slot head



R/RL

hex head



P

jackpost



F

float mount

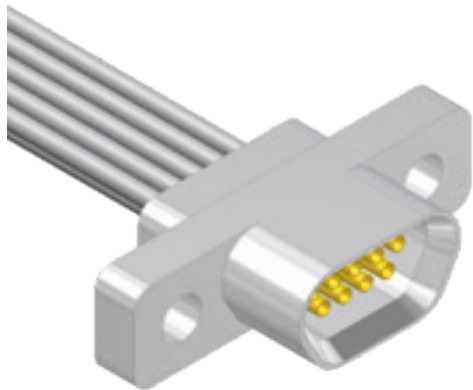


H

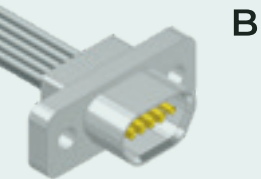
integr. thread

Narrow Profile Series CMD metal shell

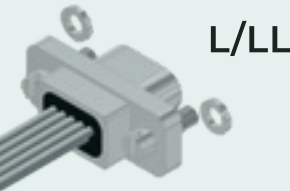
CMD-M1 LEAD WIRE



Hardware options



no hardware



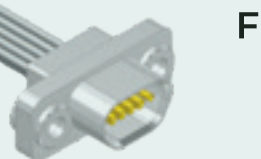
slot head



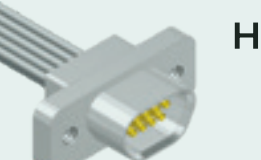
hex head



jackpost



float mount



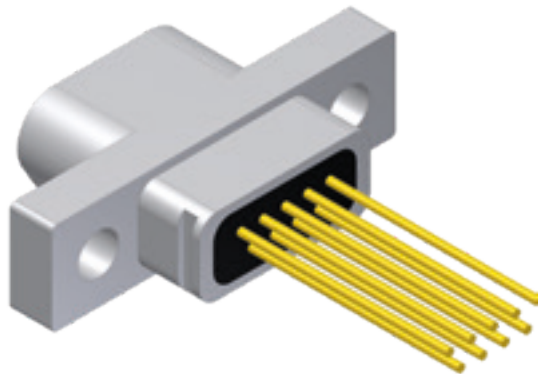
integr. thread

Serie CMD-M1	Termination	P/N code		Color
Material: Nickel N1	wires MIL-16878 AWG26 AWG28	E 19 6C 8C	ET 19 6D 8D	2 yellow 7 color code MIL-STD-681 NEMA HP3, HP4 10 colors repeating
Please select hardware options				
No. of contacts: 9-, 15-, 21-, 25-, 31-, 37-, 51-, 69-, 100-position	Standard 18" (457 mm), 36" (914 mm), 54" (1371 mm), 72" (1850 mm)			
Male „P“, female „S“				

expl. partnumber: CMD - N1 - P - 09P - 6C7 - Length in inch

Narrow Profile Series CMD metal shell

CMD-M1...5L4 SOLID WIRE



Serie CMD-M1

Plating:
Nickel N1

Please select hardware
options

No. Of contacts:
9-, 15-, 21-, 25-, 31-, 37-,
51-position

Male „P“, female „S“

Termination

Solid wires
AWG25
gold plated

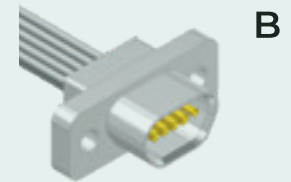
Standard
3mm

P/N code

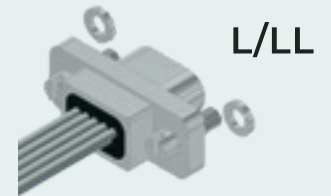
5L4 3 mm only

expl. partnumber: CMD-M1 - N1 - P - 09P - 5L4

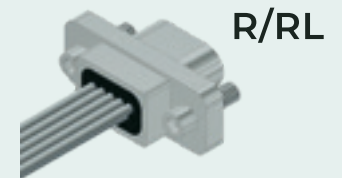
Hardware options



no hardware



slot head



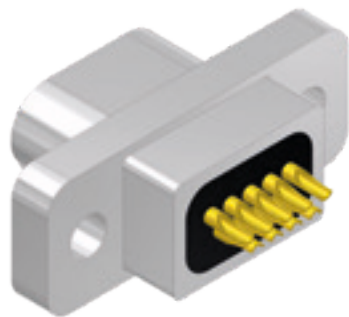
hex head



jackpost

Narrow Profile Series CMD metal shell

CMD-M1...S SOLDER CUP



THE PLASTIC SERIES IS FULLY COMPLIANT WITH MIL-PRF-83513

Serie CMD-M1

Termination

P/N code

Material:
Peek P1
Nickel N1

Solder cups
AWG26

S

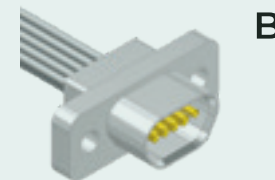
Please select hardware
options

No. of contacts:
9-, 15-, 21-, 25-, 31-, 37-,
51-position

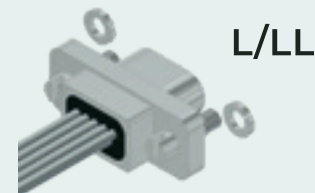
Male „P“, female „S“

expl. partnumber: CMD-M1 - N1 - P - 09P - S

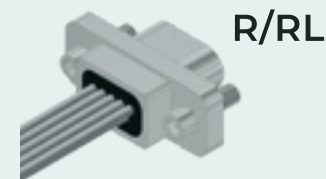
Hardware options



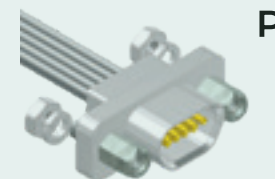
no hardware



slot head



hex head



jackpost



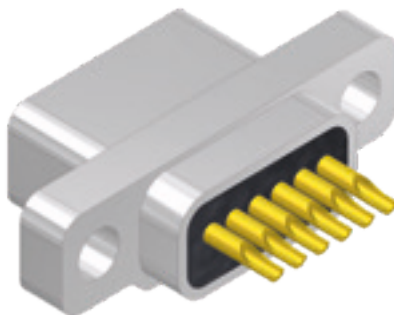
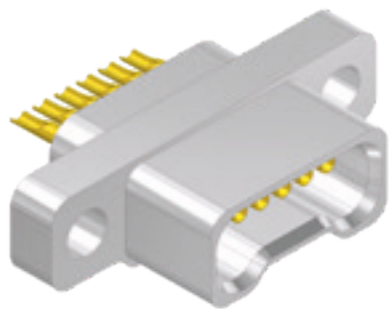
float mount



integr. thread

CMKN (single row)

CMKN...S SOLDER CUPS



Serie CMKN

Plating:
Nickel N1

Termination

Solder cups
AWG26

P/N code

S

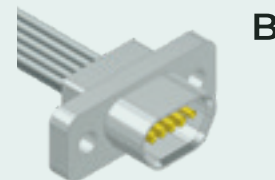
Please select hardware
options

No. Of contacts:
4-, 6-, 15-position
other on request

Male „P“, female „S“

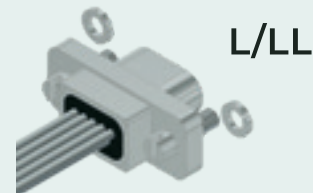
expl. partnumber: CMKN - N1 - P - 09P - S

Hardware options



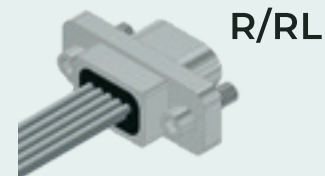
B

no hardware



L/LL

slot head



R/RL

hex head



P

jackpost



F

float mount



H

integr. thread

Comtronic narrow backshells

BSM...



Comtronic standard backshells

BS...

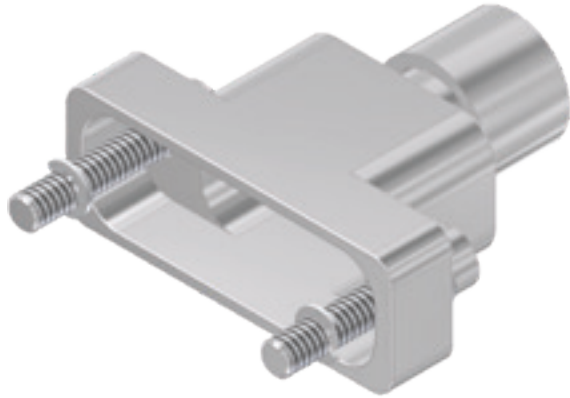


- Saves weight and volume up to 30% in combination with modified Micro-D
- Cable entry size customer specification
- Straight, right angled or 45° angled
- Plating nickel and gold

- Compatible with all MIL-PRF-83513 Micro-D connectors
- Different shapes, straight, 90° angled, 45° angled
- Different cable entries available
- Plating nickel and gold

Comtronic crimp backshells

BSC...



- Compatible with all MIL-PRF-83513 Micro-D connectors
- One piece design with shield crimp
- Different cable entries available
- Plating nickel and gold



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