

- > Operating voltage from 10 kVDC to 15 kVDC
- > Operating current up to 13 A
- > 2 5 HV contacts
- > For cable sizes AWG 26-14



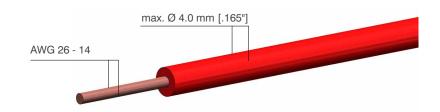
# **General characteristics and technical data Series MC**

Housing	
Locking system	threaded coupling
Mounting type (panel mount connector)	4-hole flange
Housing material basis / adapter	brass (CuZn)
Surface plating	nickel (Ni)
Protection class (mated connector)	IP60 (IP65 on request)
Operating temperature	-30°C to +80°C

Contacts 1.6 mm	
Termination method	solder / crimp
Rated current	13 A
Contact resistance	≤ 5 mΩ
Contact diameter	1.6 mm [.063"]
Wire size (AWG / cross section)	AWG 26 - 14 (0.14 mm² - 2.5 mm²)
Contact material	brass (CuZn)
Contact plating	silver (Ag) / gold (Au)
Mating cycles	≥ 1,000

Insulation inserts	
Number of contacts	2, 3, 4, 5
Insulation material	PTFE / POM
CTI value	600
Flammability class PTFE	UL94 V-0
Flammability class POM	UL94 HB
Operating temperature PTFE	-50°C to +200°C
Operating temperature POM	-30°C to +120°C
Insulating material group PTFE / POM	I (DIN IEC 60664)

#### Suitable cable dimensions (single wire)



### *Type MC507* **5-pole 10 kVDC**



#### Plug, cable mount / Receptacle, panel mount / Receptacle, coupling, cable mount

Electrical values		Characteristics	
Operating voltage (DC)	10 kV	Number of pins	5
Test voltage (DC)	15 kV	Insulation material	POM
Rated current	13 A		

#### Type / Version / Part number

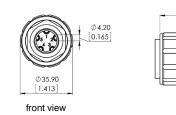
#### Picture / Drawing

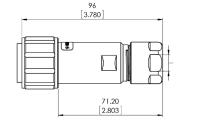
#### **KS-MC507**

Plug, cable mount with integrated cable gland

Part no. Clamping range 5005030A 6.5 - 8 mm [.256" - .315"] 5005030B 8 - 9.5 mm [.315" - .374"] 5005030C 9.5 - 11 mm [.374" - .433"] 5005030D 11 - 12.5 mm [.433" - .492"] 5005030E 12.5 - 14 mm [.492" - .551"]







#### **KS-MC507**

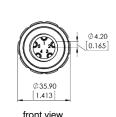
Plug, cable mount with adapter M20/M25 for external cable gland

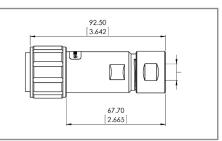
 Part no.
 Connecting thread

 5005030M
 M20 x 1.5

 5005030N
 M25 x 1.5



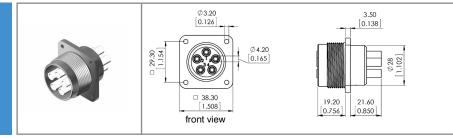




#### **GB-MC507**

Receptacle, panel mount

Part no. 5005010R



#### KBI-MC507

Receptacle, coupling, cable mount with integrated cable gland

 Part no.
 Clamping range

 5005042A
 6.5 - 8 mm [.256" - .315"]

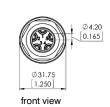
 5005042B
 8 - 9.5 mm [.315" - .374"]

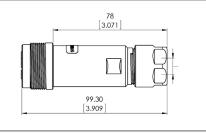
 5005042C
 9.5 - 11 mm [.374" - .433"]

 5005042D
 11 - 12.5 mm [.433" - .492"]

 5005042E
 12.5 - 14 mm [.492" - .551"]







#### KBI-MC507

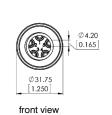
Receptacle, coupling, cable mount with adapter M20/M25 for external cable gland

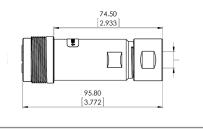
 Part no.
 Connecting thread

 5005042M
 M20 x 1.5

 5005042N
 M25 x 1.5





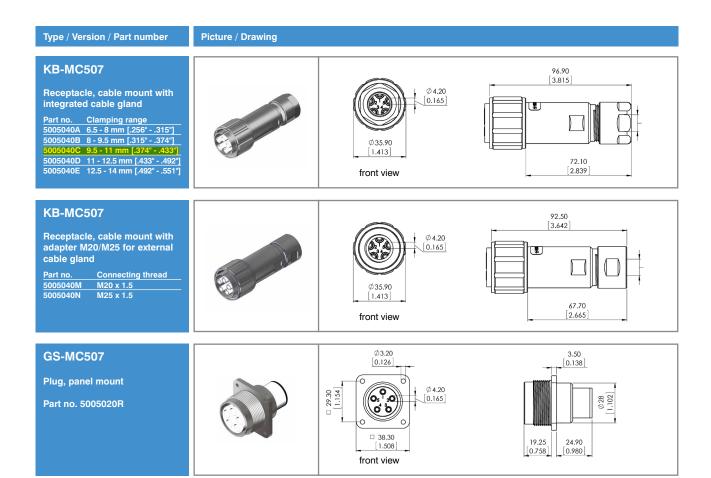




Contacts, cable glands and accessories on pages 96-98 Mounting instructions on pages 99-110 drawing - dimensions in mm [inch]



#### Receptacle, cable mount / Plug, panel mount



Contacts, cable glands and accessories on pages 96-98 Mounting instructions on pages 99-110

drawing - dimensions in mm [inch]

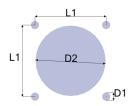


### **Assembly Instructions Series MC - type 207-507** receptacle, panel mount



Part as supplied

Shrinking tubes (1), female contacts (2), connector housing (3)



Panel cut out

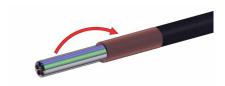
Туре	L1 mm	D1 mm	D2 mm
	[inch]	[inch]	[inch]
GB 207 / 307 / 407	26.90	3.00	26.00
	[1.059"]	[.118"]	[1.024"]
GB 507	29.30	3.00	29.00
	[1.154"]	[.118"]	[1.142"]



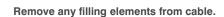
Carefully remove cable jacket.

Туре	L2 mm [inch]
GB 207 / 307 / 407 / 507	min. 45 [1.772"]

Do not damage metal shield braid



Fold back shield braid.





Remove dielectric insulation of single wires (L3 = 5 - 8 mm [.197" - .315"]).

7.



Crimp or solder one female contact (2) on each conductor.

For soldering: Tin-solder must not remain on contact surface!



Put shrinking tubes (1) on insulation tubes on rear side of connector housing (3).



Slide contacts (2) completely into insulation tubes until contacts snap into place.

Pull gently to check that contacts are correctly located and remain in position.

10.



Shrink tubes - shrinking temperature 110°C.

11.



Assembly finished.

# Assembly Instructions Series MC - type 207-507 plug, panel mount

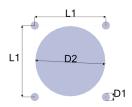






Part as supplied.
Male contacts (1), connector housing (2)

2.



Panel cut out

Туре	L1 mm	D1 mm	D2 mm
	[inch]	[inch]	[inch]
GS 207 / 307 / 407	26.90	3.00	26.00
	[1.059"]	[.118"]	[1.024"]
GS 507	29.30	3.00	29.00
	[1.154"]	[.118"]	[1.142"]

3.

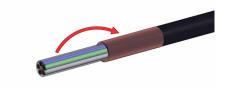


Carefully remove cable jacket.

Туре	L2 mm [inch]
GS 207 / 307 / 407 / 507	min. 45 [1.772"]

Do not damage metal shield braid





Fold back shield braid.

**5.** 



Remove any filling elements from cable.

6.



Remove dielectric insulation of single wires (L3 = 5 - 8 mm [.197" - .315"]).

**7.** 



Crimp or solder one male contact (1) on each conductor.

For soldering: Tin-solder must not remain on contact surface!

8.



# Slide contacts (1) completely into connector shell (2) until contacts snap into place.

Pull gently to check that contacts are correctly located and remain in position.

9.



Assembly finished.



# **Assembly Instructions Series MC - type 207-507** plug, cable mount







Fix shield braid with tape.

#### Part as supplied

Male contacts (1), cap (2), sealing insert (3), screw joint (4), basis (5), threaded pin (6), insulation insert (7).







Remove any filling elements from cable.

Place cap (2), sealing insert (3), screw joint (4) and basis (5) onto cable.





Remove dielectric insulation (L3 = 5-8 mm [.197" - .315"]).

Remove cable jacket.

Туре	L1 mm [inch]	L2 mm [inch]
KS 207 / 307 / 407 / 507	50 [1.968"]	35 [1.377"]



1 Do not damage metal shield braid



Fold back shield braid over jacket.



Crimp or solder female contacts (1) on conductor. for soldering: Tin-solder must not remain on contact surface.

# Assembly Instructions Series MC - type 207-507 plug, cable mount







Slide contacts completely into insulation insert (7) until contacts snap into place.

Pull gently to check that contacts are correctly located and remain in position.

**13** 



Insert sealing (3) completely and screw cap (2) onto basis (5).

Cable gland type	SW 1	SW 2
KS 207 / 307 / 407	23	26
KS 507	26	26

Tightening torque is 7 Nm

10.



Remove tape and place basis (5) onto insulation insert (7)

14



Assembly finished.

11.



Secure insulation insert (7) with threaded pin (6), then screw joint (4) onto basis (5).

**12.** 



Widen shield braid.



## **Assembly Instructions Series MC - type 207-507** receptacle cable mount & coupling







Fix shield braid with tape.

#### Part as supplied.

Female contacts (1), cap (2), sealing insert (3), screw joint (4), basis (5), threaded pin (6), insulation insert (7).







Remove any filling elements from cable.

Place cap (2), sealing insert (3), screw joint (4) and basis (5) onto cable







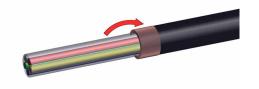
Remove dielectric insulation (L3 = 5-8 mm [.197" - .315"]).

Remove cable jacket.

Туре	L1 mm [inch]	L2 mm [inch]
KS 207 / 307 / 407 / 507	50 [1.968"]	35 [1.377"]



1 Do not damage metal shield braid.



Fold back shield braid over jacket.



Crimp or solder female contacts (1) on conductor. ⚠ For soldering: Tin-solder must not remain on contact surface.

# Assembly Instructions Series MC - type 207-507 receptacle cable mount & coupling



9.



Slide female contacts completely into insulation insert until contacts snap into place.

Pull gently to check that contacts are correctly located and remain in position.

13



Insert sealing (3) completely and screw cap (2) onto basis (5).

Cable gland type	SW 1	SW 2
KB 207 / 307 / 407	23	26
KB 507	26	26

Tightening torque is 7 Nm

10.



Remove tape and place basis (5) onto insulation insert (7)

14



Assembly finished.

11.



Secure insulation insert (7) with threaded pin (6), then screw joint (4) onto basis (5).

**12.** 



Widen shield braid.