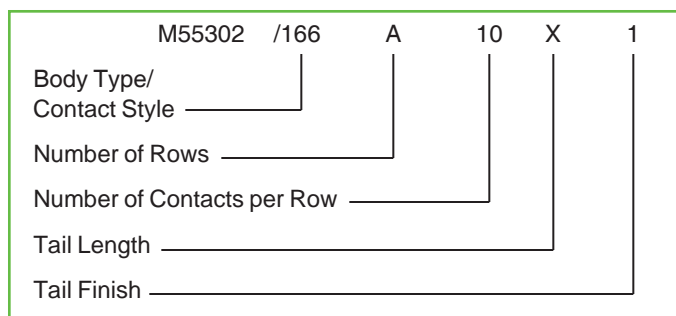


Low Mating Force Rectangular Connectors

how to order (military types)

MB, DB, PC Connectors Military Part Number Ordering Procedure

Example part number M55302/166A10X1 is shown as follows:



Body Type/Contact Style

- /166 designates MB-P (Mother Board, Printed Circuit Board Termination)
- /167 designates MB-W (Mother Board, Wire-wrap Contacts)
- /168 designates PC (Printed Circuit, 90° Printed Circuit Board Termination)
- /170 designates DB (Daughter Board, 90° Printed Circuit Board Termination)

Number of Rows

- A – 2 Rows
- B – 3 Rows
- C – 4 Rows

Number of Contacts per Row

Contact counts per row range from 10 to 100
(Only 2 digits permitted in this space; for 100 contacts per row, use 00)

Tail Length

MB-P (PCB Termination)*	MB-W** (Wire-wrap)
W – .222 ±.025	
X – .300 ±.025	Y – .700 ±.025
Y – .145 ±.025	Z – .542 ±.025
Z – .113 ±.025	

DB*	PC*
X – .300 ±.025	Y – .150 +.035 –.025
Y – .150 ±.025	
Z – .120 ±.025	Z – .095 +.035 –.025

* Reference "J" Dimension on all connector drawings in this catalog.

** For MB-W only: Reference "H" Dimension on connector drawing on page 8.

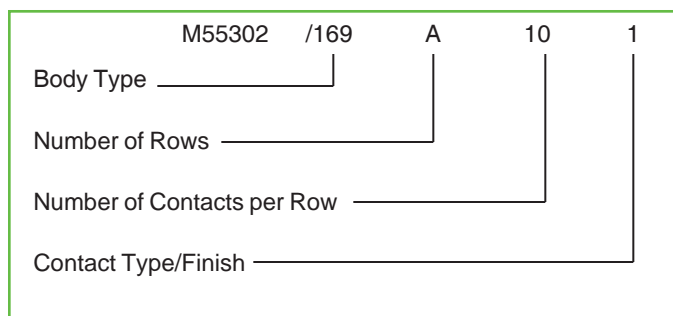
Tail Finish

- 1 Tin lead per MIL-P-81728, 50 to 70% tin, .0001 min. thick over copper
- 2 Gold per MIL-G-45204, type II, grade C, class 00 (01 for MB-W) over nickel per QQ-N-290



IO Connectors Military Part Number Ordering Procedure

Example part number M55302/169A101 is shown as follows:



Body Type

- /169 designates IO (Input/Output)
(Contact type/finish is last digit of IO part number - see list of options below)

Number of Rows

- A – 2 Rows
- B – 3 Rows
- C – 4 Rows

Number of Contacts per Row

Contact counts per row range from 10 to 100
(Only 2 digits permitted in this space; for 100 contacts per row, use 00)

Contact Type/Finish

- 1 Crimp contact – Tin lead per MIL-P-81728, 50 to 70% tin, .0001 min. thick over copper
- 2 Crimp contact – Gold per MIL-G-45204, type II, grade C, class 1 over copper
- 3 Connectors supplied less contacts
- 4 PCB contacts installed with .145 ±.025 stickout – Tin lead per MIL-P-81728, 50 to 70% tin, .0001 min. thick over copper (Reference "J" Dimension on connector drawing on page 16).

To Order I O Contacts

(For use with connectors less contacts)

M55302/171-1

_____ suffix designates crimp well finish

Crimp well finish

- 1 Crimp contact – Tin lead per MIL-P-81728, 50 to 70% tin, .0001 min. thick over copper
- 2 Crimp contact – Gold per MIL-G-45204, type II, grade C class 1 over copper

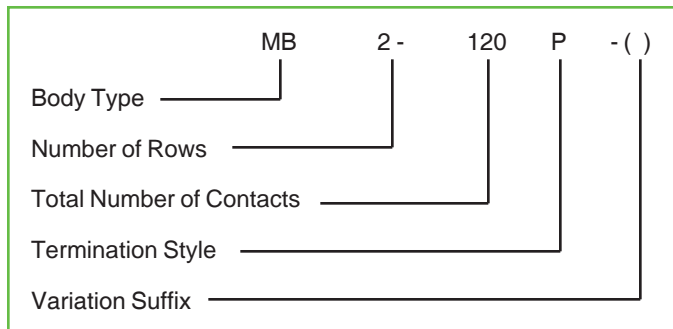
To order Accessories, see page 5.

Low Mating Force Rectangular Connectors

how to order (commercial types)

MB, DB, I/O, PC Connectors Proprietary Part Number Ordering Procedure

Example part number MB2-120P- () is shown as follows:



Body Type

MB designates Mother Board
DB designates Daughter Board
I/O designates Input/Output
PC designates Printed Circuit

Number of Rows

2, 3 or 4 rows

Total Number of Contacts

See Contact Arrangements, pages 8 and 9

Standard Termination Style

(Stickout values below apply to "J" dimension referenced on individual connector catalog pages).

MBX-XXXP	Straight PCB stud, .021 dia, .113 ±.025 stickout, Sn/Ni plate
MBX-XXXW	Solderless wrap, .025 sq., .507 ±.025 stickout, Sn/Ni plate
DBX-XXXP	90° PCB stud, .021 dia, .085 ±.025 stickout, Sn/Ni plate
IOX-XXXC	Crimp, rear removable contact, size 22D wire well, Sn/Ni plate
IOX-XXXP	PCB stud, .021 dia, .145 ±.025 stickout, Sn/Ni plate
PCX-XXXP	90° PCB stud, .021 dia., .095 ^{+.035} / _{-.025} stickout Sn/Ni plate

LEGEND:

Sn/Ni designates Tin over Nickel
Au/Ni designates Gold over Nickel
Au/Cu designates Gold over Copper



SnPb/Cu designates Tin-Lead over Copper

Variation Suffix

(Stickout values below apply to "J" dimension referenced on individual connector catalog pages.)

(700)	Gold plate in accordance with MIL-G-45204, type II, .000030 min. thick gold (.000050 for solderless wrap) over .000050 min. thick nickel (standard termination length)
(701)	Gold plate in accordance with MIL-G-45204, type II, .000050 min. thick gold over .00015 min. thick copper (standard termination length)
(702)	PCB stud stickout of .145, Sn/Ni plate, MB-P
(703)	Au/Ni [same as (700)], PCB stud stickout of .145, MB-P
(704)	Au/Cu [same as (701)], PCB stud stickout of .145, MB-P
(705)	90° PCB stud, .120 stickout. Sn/Ni plate, DB
(706)	Au/Ni [same as (700)], 90° PCB stud .120 stickout, DB
(707)	Au/Cu [same as (701)], 90° PCB .120 stickout, DB
(709)	PCB stud stickout of .300 DB (90°), .300 MB-P & .335 IO-P, Sn/Ni plate
(710)	Solderless wrap, .025 sq., .665 stickout, Sn/Ni plate, MB-W
(711)	Solderless wrap, .025 sq., .665 stickout, Au/Ni, [same as (700)], MB-W
(713)	PCB stud stickout of .060, Sn/Ni plate, IO-P
(714)	90° PCB stud stickout of .150, Sn/Ni plate, PC & DB
(715)	Solderless wrap, .025 sq., .665 stickout, Au/Cu [same as (701)], MB-W
(716)	90° PCB stud stickout of .085 matte tin, DB
(717)	90° PCB stud stickout of .095 matte tin, PC
(718)	90° PCB stud stickout of .120 matte tin, DB
(719)	PCB stud stickout of .300 MB-P & .335 IO-P, matte tin
(720)	PCB stud stickout of .060 matte tin, IO-P
(721)	PCB stud stickout of .500, Sn/Ni plate, IO-P
(722)	PCB stud stickout of .356 matte tin, MB-P
(723)	PCB stud stickout of .192, Sn/Ni plate, MB-P
(724)	90° PCB stud stickout of .095, RTV potted rear, Sn/Ni plate, PC
(725)	90° PCB stud stickout of .120, RTV potted rear, Sn/Ni plate, DB
(726)	90° PCB stud stickout of .150, RTV potted rear, Sn/Ni plate, PC & DB
(727)	PCB stud stickout of .145, RTV potted rear, Sn/Ni plate, MB-P
(728)	PCB stud stickout of .145, Au/Ni, [same as (700)], RTV potted rear, MB-P
(729)	90° PCB stud stickout of .120, Au/Ni, [same as (700)], RTV potted rear, DB
(730)	90° PCB stud stickout of .150, Au/Ni, [same as (700) above], PC and DB
(731)	PCB stud stickout of .145, matte tin, MB-P

Variation Suffixes continued on next page.

Low Mating Force Rectangular Connectors

how to order (commercial types)/accessories

MB, DB, I/O, PC Connectors Proprietary Part Number Ordering Procedure Variation Suffix, cont.

(732)	PCB stud stickout of .300 DB (90°), .300 MB-P and .335 IO-P, Au/Cu [same as (701)],	(750)	PCB stud stickout of .172 termination, Au/Ni, [same as (700)], RTV potted rear, MB-P
(733)	PCB stud stickout of .421, matte tin, MB-P	(751)	90° PCB stud stickout of .150, Sn/Ni, epoxy potted rear, PC
(734)	Solderless wrap .025 sq.; .665 stickout, Au/Ni, [same as (700)], RTV potted rear, MB-W	(752)	Au/Ni, epoxy potted rear, standard termination length
(735)	RTV potted rear, standard termination length, Au/Ni, [same as (700)]	(753)	Solderless wrap .025 sq.; .665 stickout, Au/Ni, [same as (700)], epoxy potted rear, MB-W
(736)	RTV potted rear, standard termination length, Sn/Ni [use (724) for PC]	(754)	PCB stud stickout of .172 termination, SnPb/Cu (MIL-Spec), MB-P
(737)	PCB stud stickout of .300 DB (90°), .300 MB-P and .335 IO-P, Au/Ni, [same as (700)], RTV potted rear	(757)	PCB stud, .391 stickout, matte tin, MB-P
(738)	PCB stud stickout of .192 SnPb/Cu (Mil-Spec), MB-P	(758)	PCB stud, .172 stickout, Au/Ni, [same as (700)], epoxy potted rear, MB-P
(739)	PCB stud stickout of .300 DB (90°), .300 MB-P and .335 IO-P; RTV potted rear, Sn/Ni	(760)	PCB stud, .192 stickout, Au/Ni (Mil-Spec), MB-P
(740)	Solderless wrap .025 sq.; .665 stickout, Sn/Ni, RTV potted rear, MB-W	(761)	90° PCB stud, .120 stickout, Sn/Ni, epoxy potted rear, DB
(741)	Solderless wrap .025 sq.; .280 stickout, Au/Ni, [same as (700)], MB-W	(762)	PCB stud, .145 stickout, Au/Ni (Mil-Spec), epoxy potted rear, MB-P
(742)	PCB .145, Au/Ni, [same as (700)], epoxy potted rear, MB-P	(763)	PCB stud, .145 stickout, SnPb/Cu (Mil-Spec), epoxy potted rear, MB-P
(743)	90° PCB .120, Au/Ni, [same as (700)], epoxy potted rear, DB	(764)	90° PCB stud, .150 stickout, SnPb/Cu (Mil-Spec), epoxy potted rear, DB & PC
(744)	90° PCB .120, Au/Ni, [same as (700)], (MIL-Spec), epoxy potted rear, DB	(765)	PCB stud, stickout of .300 DB (90°), .300 MB-P, SnPb/Cu (Mil-Spec), epoxy potted rear
(746)	90° PCB .120, SnPb/Cu, (MIL-Spec), epoxy potted rear, DB	(766)	90° PCB stud, .120 stickout, Au/Ni (Mil-Spec), epoxy potted rear, DB
(747)	PCB stud stickout of .200, Sn/Ni, IO-P	(767)	PCB stud, .192 stickout, Au/Ni (Mil-Spec), epoxy potted rear, MB-P
(748)	PCB stud stickout of .145, Sn/Ni, epoxy potted rear, MB-P	(768)	PCB stud, .172 stickout, Au/Ni (Mil-Spec), MB-P
(749)	PCB, epoxy potted rear, standard termination length, Sn/Ni	(769)	90° PCB stud, .200 stickout, Au/Ni (Mil-Spec), DB
		(770)	90° PCB stud, .260 stickout, Au/Ni (Mil-Spec), DB
		(773)	90° PCB stud, .150 stickout, Au/Ni (Mil-Spec), RTV potted rear, PC & DB

Accessories

Amphenol® Low Mating Force Connectors are shipped less accessory items.

Accessories may be ordered by either military or proprietary part numbers shown below:

Accessory Item	Series	Military Part Number	Proprietary Part Number	Qty. Required
Polarization Keys	MB, DB, IO, PC	M55302/78-02	10-285422-2	4*
Locking/Mounting Bushing	MB	M55302/172-01	10-411196-3	2
Alternate Length Bushing (Longer)	MB	M55302/172-02	10-411196-5	2
Locking Bushing	PC	M55302/172-05	10-411196-4	2
Locking Screw, Plain	IO	M55302/172-04	10-502599	2
Locking Screw, Slotted	IO	-	10-502599-1	2
Locking Screw, Slotted (Low Profile)	IO	M55302/172-03	10-502599-2	2
Test Probe Kit	MB, DB, IO, PC	-	11-10400-22	1**

See pages 24-29 for more detailed information on these accessory items and how they are assembled into connectors.

* 4 Keys required per connector half, if used
** One kit per connector gender is recommended