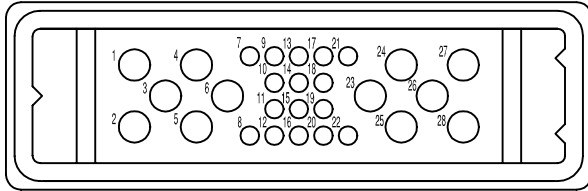
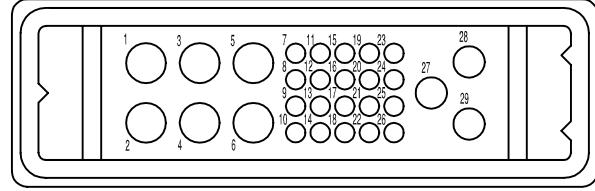


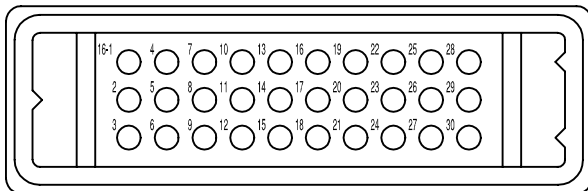
**FACE VIEW OF MALE OR REAR VIEW OF FEMALE**



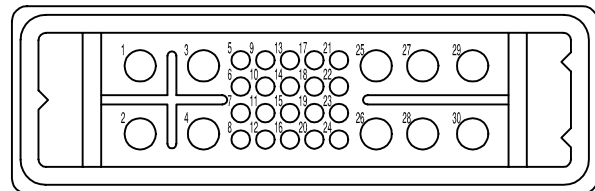
**MIP28W12 VARIANT**  
*12 Size 12 and 16 Size 20 Contacts*



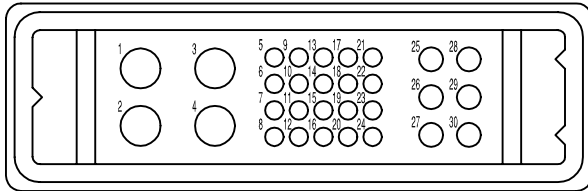
**MIP29W9 VARIANT**  
*3 Size 12, 20 Size 20, 6 Size 8 Contacts*



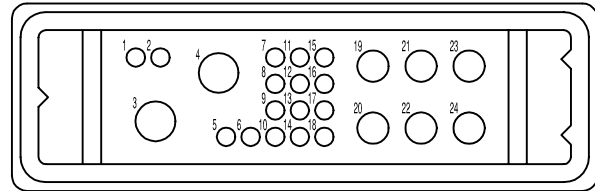
**MIP30 VARIANT**  
*30 Size 16 Contacts*



**MIP30WA10 VARIANT**  
*10 Size 12 and 20 Size 20 Contacts*



**MIP30WB10 VARIANT**  
*4 Size 8, 6 Size 16, 20 Size 20 Contacts*

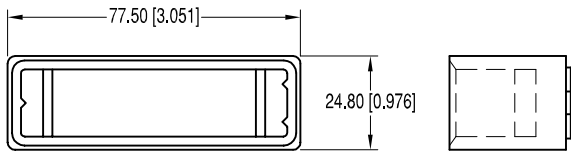
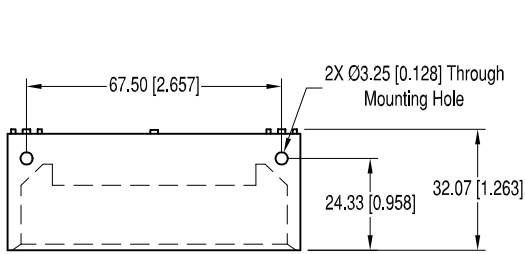


**MIP24W8 VARIANT**  
*2 Size 8 (High performance or standard see page 27), 8 Size 12, 16 Size 20 Contacts*

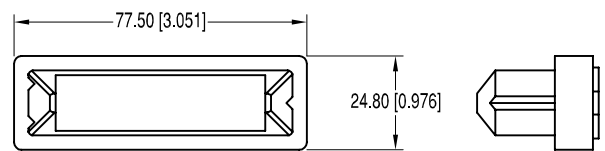
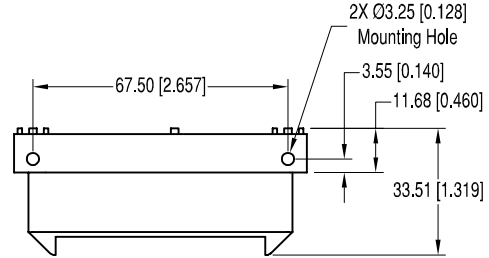
Only available for use with crimp contacts.

Refer to page 8 for Application Specific Arrangements.

**MIP CONNECTOR OUTLINE DIMENSIONS**

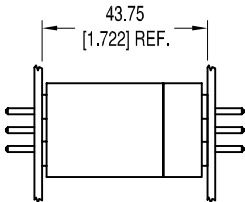


**Male Connector Dimensions**

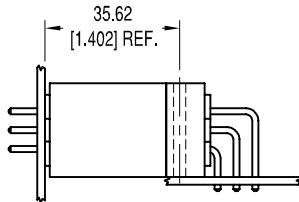


**Female Connector Dimensions**

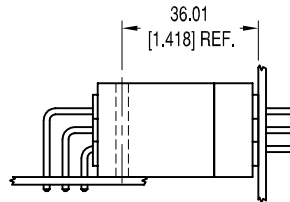
**MIP CONNECTOR MATING DIMENSIONS**



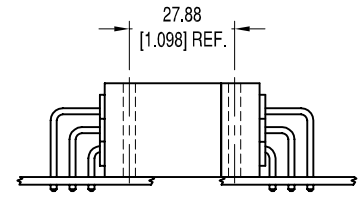
Straight Board Mount  
or Panel Mount  
Female to Straight  
Board Mount or  
Panel Mount Male.



Right Angle Board  
Mount Female to  
Straight Board Mount  
or Panel Mount Male.



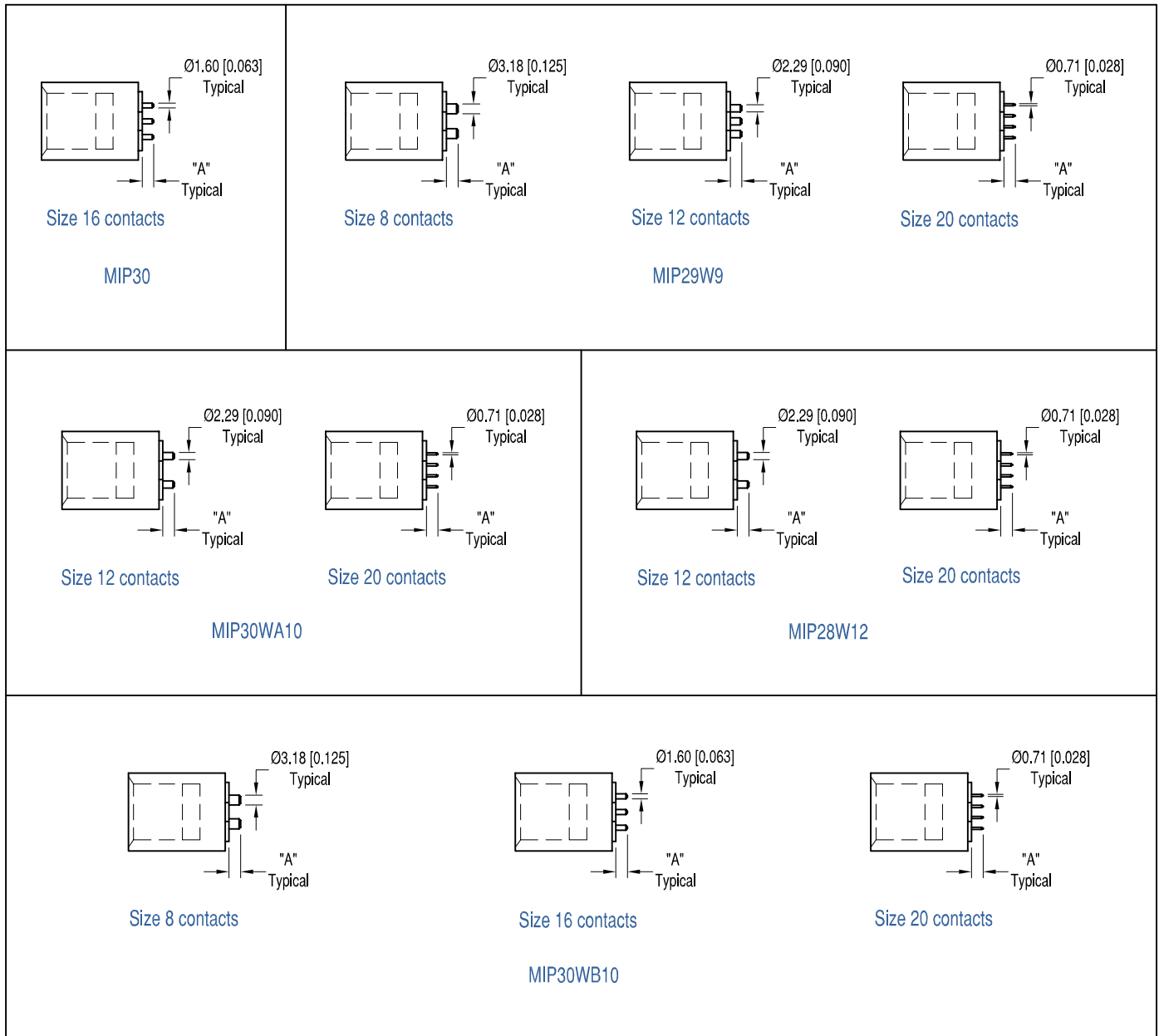
Straight Board Mount  
or Panel Mount  
Female to Right  
Angle Board Mount  
Male.



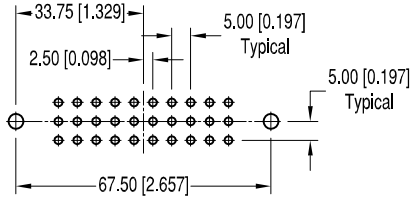
Right Angle Board  
Mount Female to  
Right Angle Board  
Mount Male.

CODE	"A" LENGTH
3	3.71 [0.146]
32	9.58 [0.377]

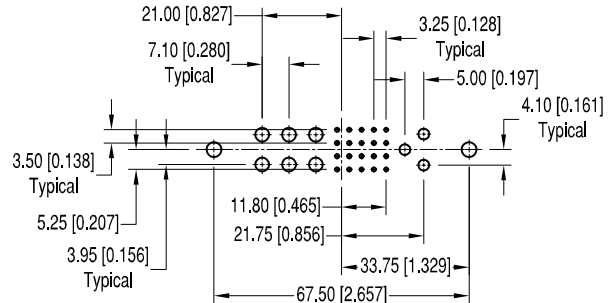
MALE CONNECTOR SHOWN  
FOR REFERENCE ONLY



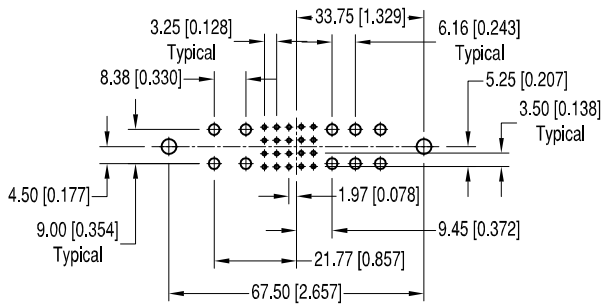
Hole pattern shown is for male connector; use mirror image for female connector.



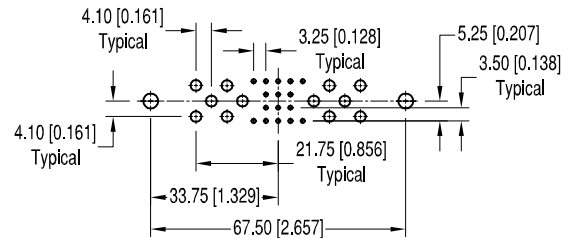
MIP30



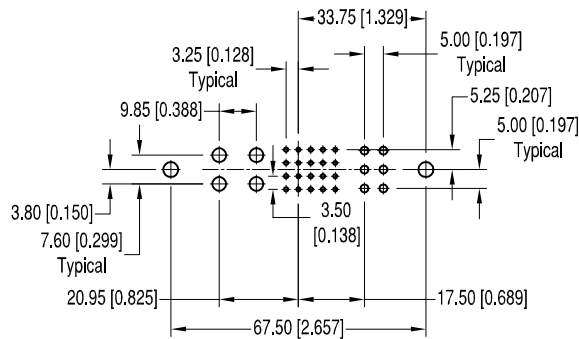
MIP29W9



MIP30WA10



MIP28W12

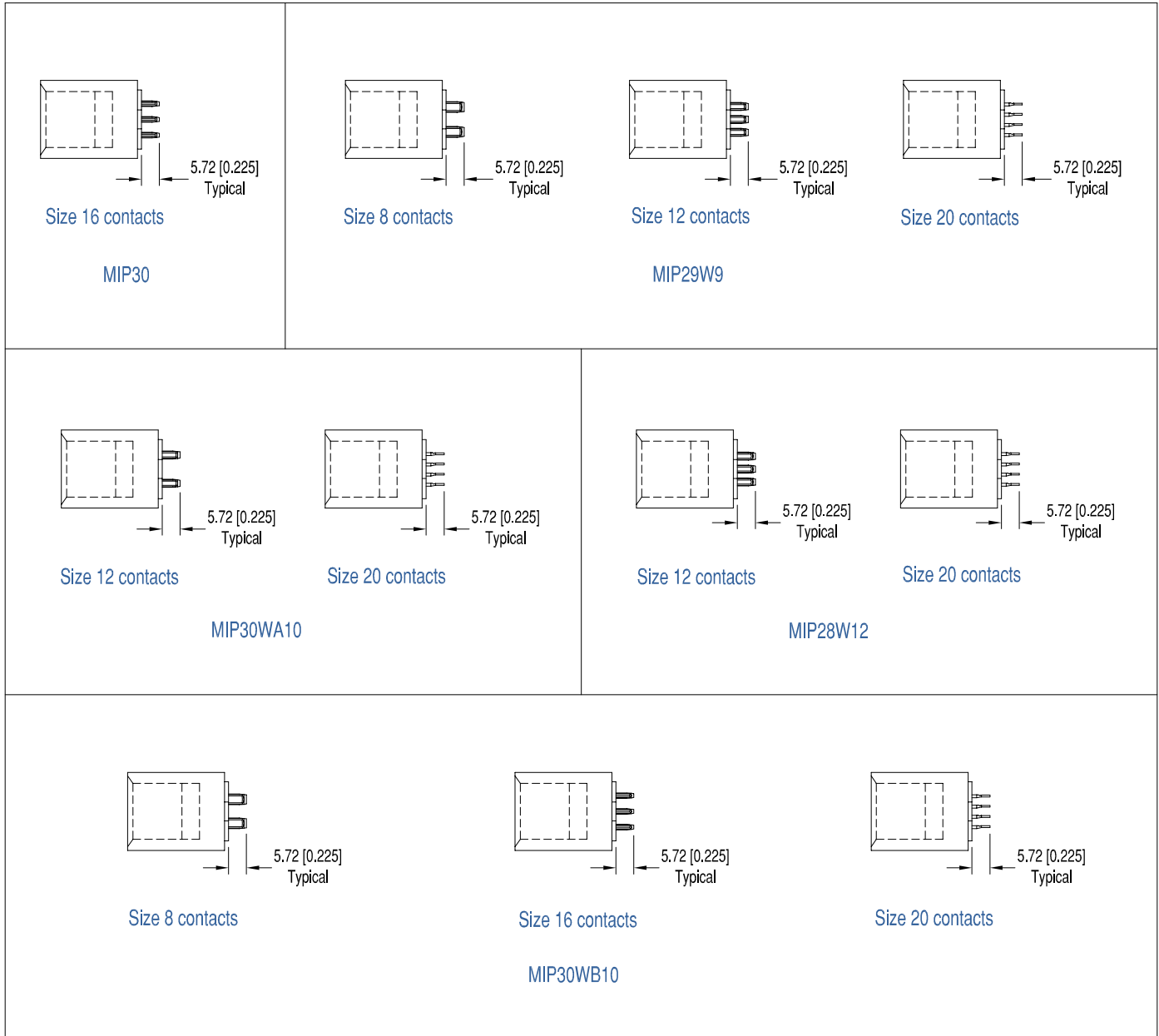


MIP30WB10

Suggest  $\varnothing 1.14 [0.045]$  holes for size 20 straight contact holes.  
 Suggest  $\varnothing 2.11 [0.083]$  holes for size 16 straight contact holes.  
 Suggest  $\varnothing 2.90 [0.114]$  holes for size 12 straight contact holes.  
 Suggest  $\varnothing 3.68 [0.145]$  holes for size 8 straight contact holes.  
 Suggest  $\varnothing 3.96 \pm 0.08 [0.156 \pm 0.003]$  holes for connector mounting holes.

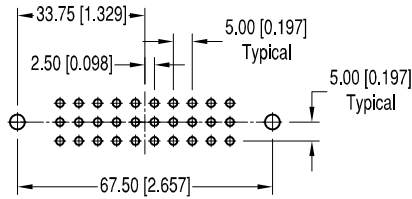
**CONTACT TERMINATION DIMENSIONS**

MALE CONNECTOR SHOWN FOR REFERENCE ONLY

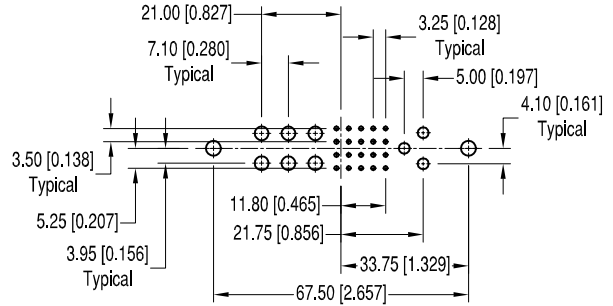


DIMENSIONS ARE IN MILLIMETERS (INCHES).  
ALL DIMENSIONS ARE SUBJECT TO CHANGE.

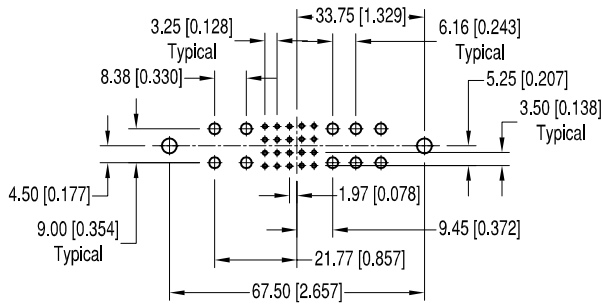
Hole pattern shown is for male connector; use mirror image for female connector.



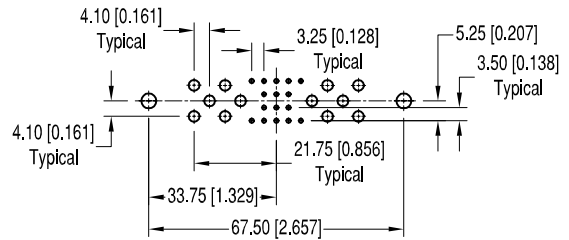
MIP30



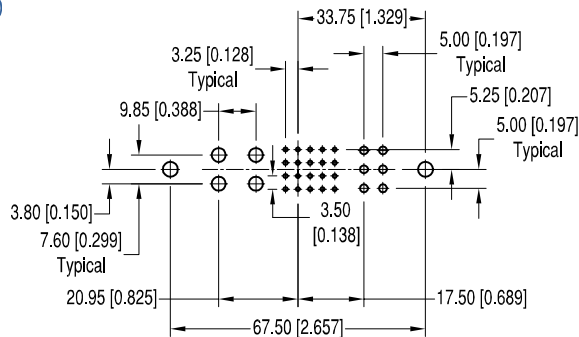
MIP29W9



MIP30WA10

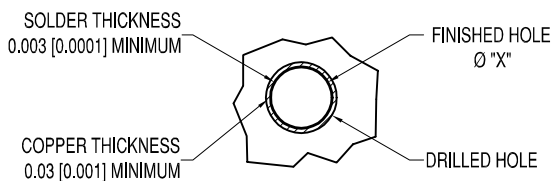


MIP28W12



MIP30WB10

**PRINTED BOARD  
CONTACT HOLE REQUIREMENT**

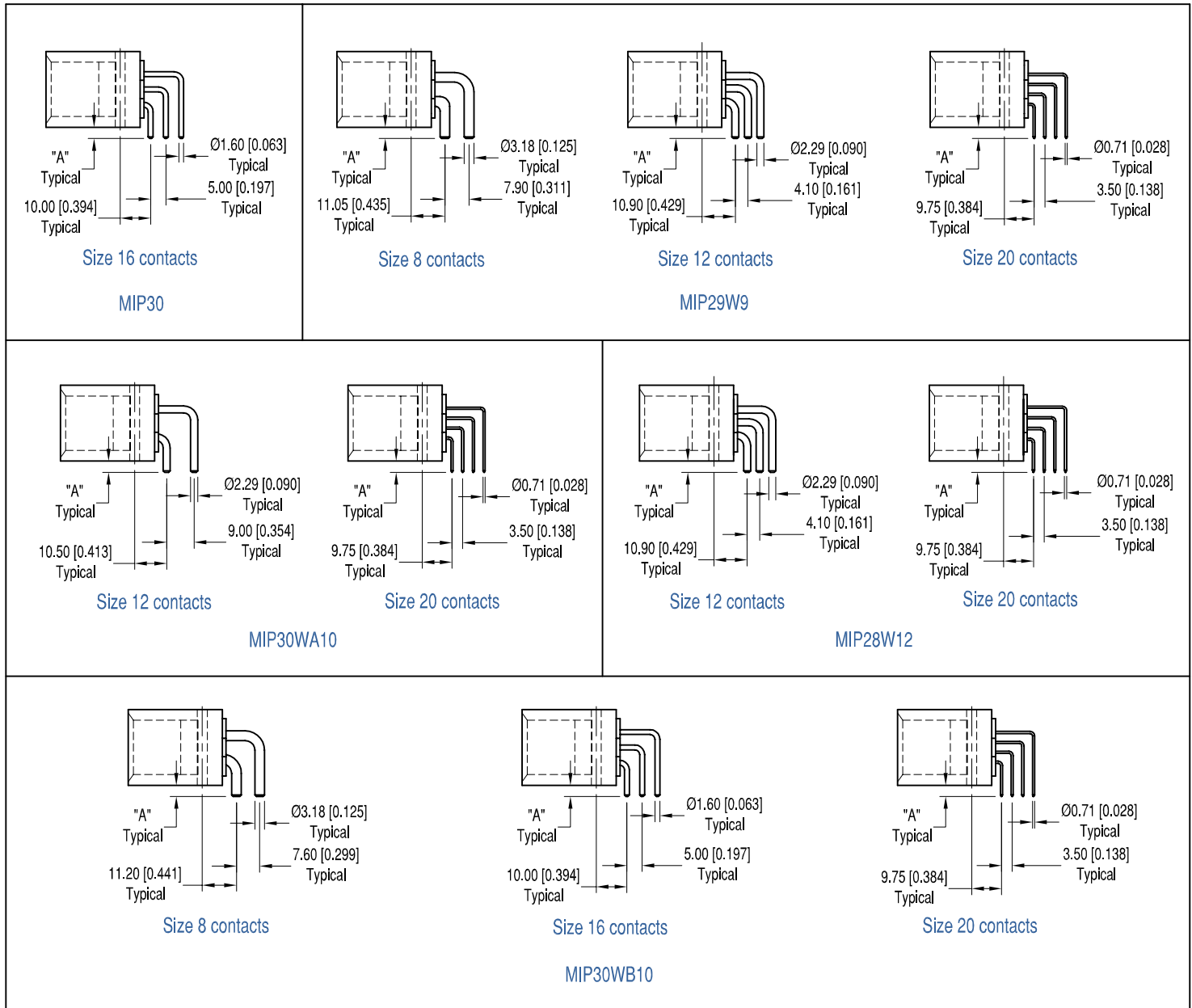


Suggest  $\text{Ø}3.96 \pm 0.08$  [0.156 ± 0.003] holes for connector mounting holes.

CONTACT SIZE	Ø "X"
8	3.02±0.05 [0.119±0.002]
12	2.39±0.05 [0.094±0.002]
16	1.600+0.090-0.060 [0.0630+0.0035-0.0024]
20	1.000+0.090-0.060 [0.0394+0.0035-0.0024]

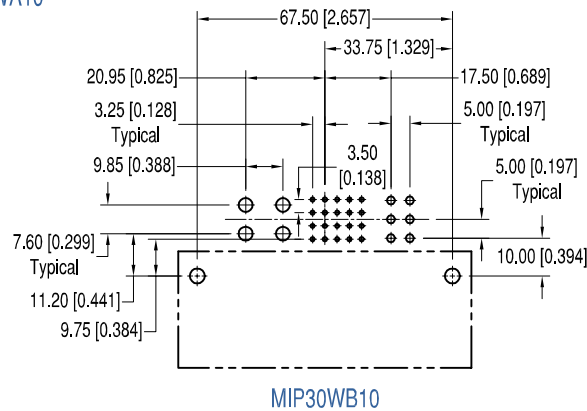
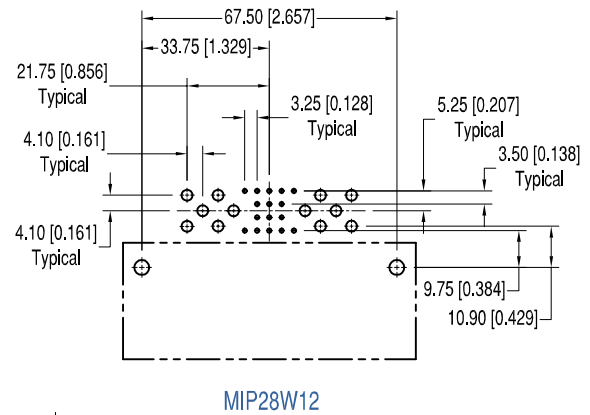
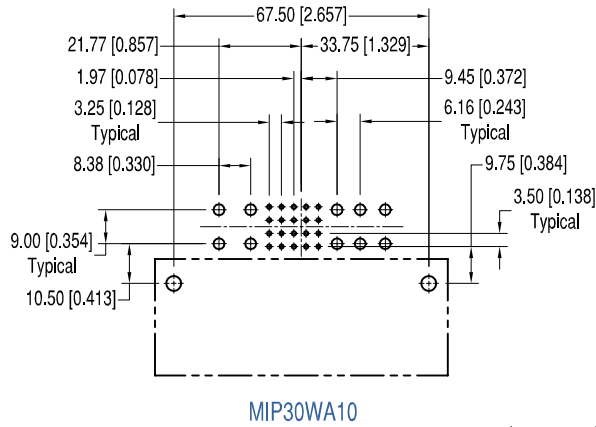
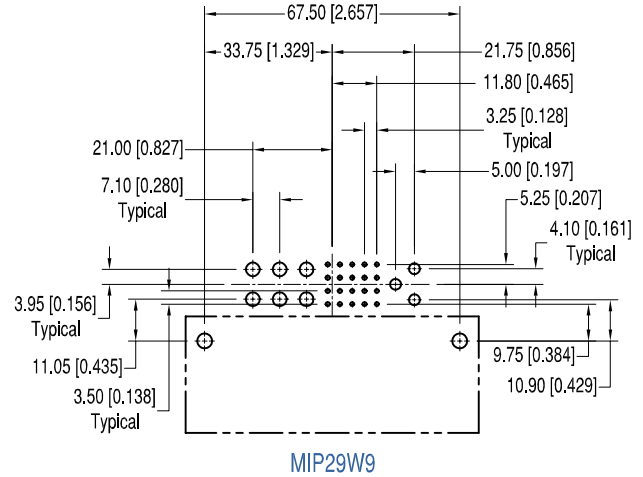
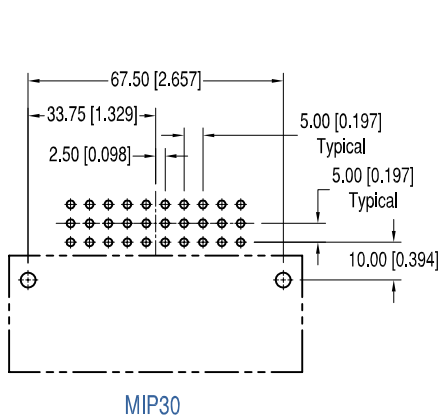
CODE	"A" LENGTH
4	3.71 [0.146]
42	9.58 [0.377]

**MALE CONNECTOR SHOWN  
FOR REFERENCE ONLY**



**DIMENSIONS ARE IN MILLIMETERS (INCHES).  
ALL DIMENSIONS ARE SUBJECT TO CHANGE.**

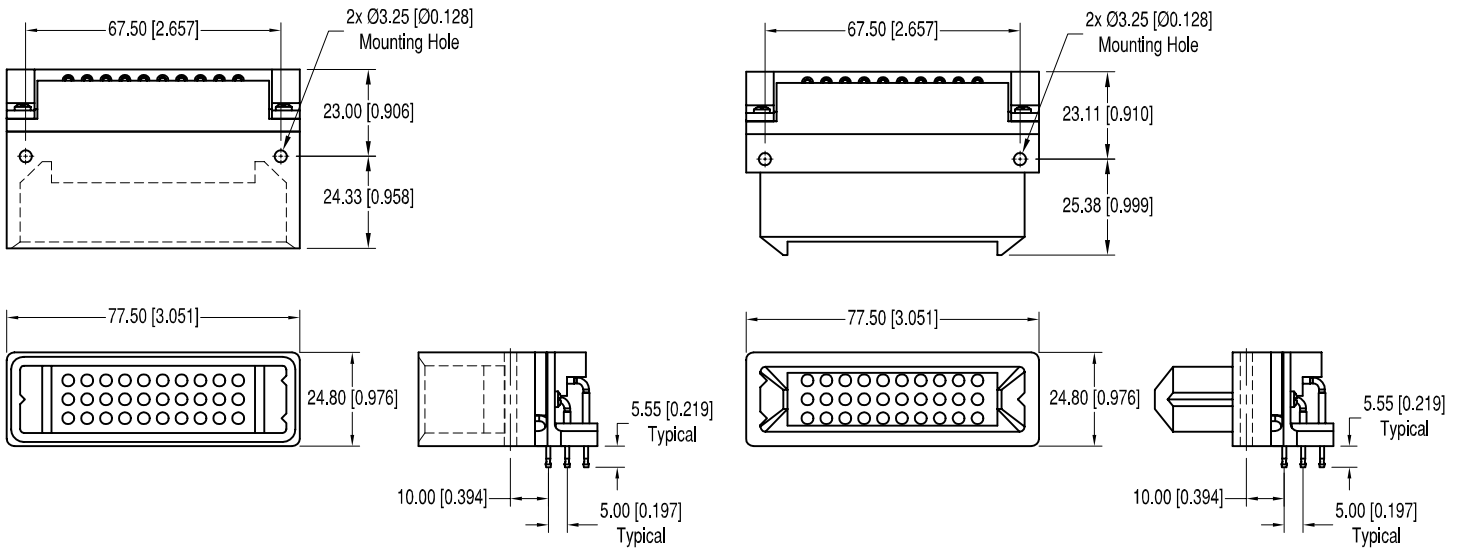
Hole pattern shown is for male connector; use mirror image for female connector.



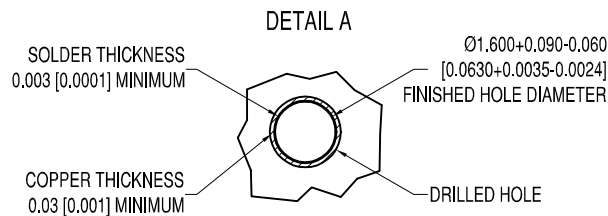
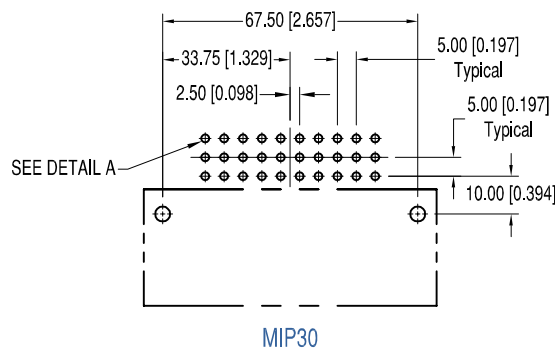
Suggest  $\text{Ø}1.14$  [0.045] holes for size 20 contact holes.  
 Suggest  $\text{Ø}2.11$  [0.083] holes for size 16 contact holes.  
 Suggest  $\text{Ø}2.90$  [0.114] holes for size 12 contact holes.  
 Suggest  $\text{Ø}3.68$  [0.145] holes for size 8 contact holes.  
 Suggest  $\text{Ø}3.96 \pm 0.08$  [0.156  $\pm$  0.003] holes for connector mounting holes.



**CONTACT TERMINATION DIMENSIONS,  
MALE AND FEMALE**



**CONTACT HOLE PATTERN,  
MALE AND FEMALE**



Suggest  $\text{Ø}3.96 \pm 0.08$  [0.156 ± 0.003] holes for connector mounting holes.

**ORDERING INFORMATION – CODE NUMBERING SYSTEM**

Specify Complete Connector By Following Steps 1 Through 8  
Insert "0" When Step Is Not Used

STEP	1	2	3	4	5	6	7	8
	MIP	30	F	93	0	0	A1	

**STEP 1 - Basic Series**  
MIP - Mini-Infinity

**STEP 2 - Connector Variants**

- 21W5 - 2 size 8, 3 size 12, and 16 size 20 contacts  
Only available for use with crimp contacts.
- 28W12 - 12 size 12 and 16 size 20 contacts
- 29W9 - 3 size 12, 20 size 20, and 6 size 8 contacts
- 30 - 30 size 16 contacts
- 30WA10 - 10 size 12 and 20 size 20 contacts
- 30WB10 - 4 size 8, 6 size 16, and 20 size 20 contacts

**STEP 3 - Connector Gender**

- M - Male
- F - Female

**STEP 4 - Type of Contact**

- 0 – Order contacts separately for cable connectors for connection systems 2, 4 and 5.
- 3 – Solder, Straight Printed Board Mount with 3.70 (0.146) tail extension for connection systems 1 and 4.
- 32- Solder, Straight Printed Board Mount with 9.58 (0.377) tail extension for connection systems 1 and 4.
- 4 – Solder, Right Angle Printed Board Mount with 3.70 (0.146) tail extension for connection systems 1, 2, 3 and 7.
- 42- Solder, Right Angle Printed Board Mount with 9.58 (0.377) tail extension for connection systems 1, 2, 3 and 7.
- 63 – Press-Fit, Compliant Termination Right Angle Printed Board Mount, for use with board thicknesses of 2.29 to 4.45 (0.090 to 0.175). With cross bar. Connection systems 1, 2, 3 and 7. Available on connector variant 30 only.
- 93 – Press-Fit, Compliant Termination Straight Printed Board Mount for use with board thicknesses of 2.29 to 4.45 (0.090 to 0.175). Connection systems 1 and 4.

**STEP 5 - Mounting Style**

- 0 – None, mounting screws supplied with board mount connector.
- N – Push-on fasteners supplied installed on board mount connector. Not recommended for code 63 and 93.

**STEP 8 - Special Options**

- Consult Technical Sales
- \* Sequential Mating
- \* Recessed Female Contacts
- \* Customer Specified Contact Arrangement
- \* Other Customer Requirements

**STEP 7 - Contact Plating**

- 0 – Crimp contacts ordered separately
- A1 – Gold flash over nickel on mating end and gold flash over nickel on termination end.
- A2 – Gold flash over nickel on mating end and 5.00 microns (0.000200 inch) solder coat on termination end. Not available with contact types 63 and 93.
- C1 – 0.80 microns (0.000030 inch) gold over nickel on mating end and 0.80 microns (0.000030 inch) gold over nickel on termination end.
- C2 – 0.80 microns (0.000030 inch) gold over nickel on mating end and 5.00 microns (0.000200 inch) solder coat on termination end. Not available with contact types 63 and 93.

**STEP 6 - Panel Mount**

- 0 – None.
- 82 - Panel Mount 1.52 (0.060) panel thickness
- 83 - Panel Mount 2.28 (0.090) panel thickness

**DIMENSIONS ARE IN MILLIMETERS (INCHES).  
ALL DIMENSIONS ARE SUBJECT TO CHANGE.**