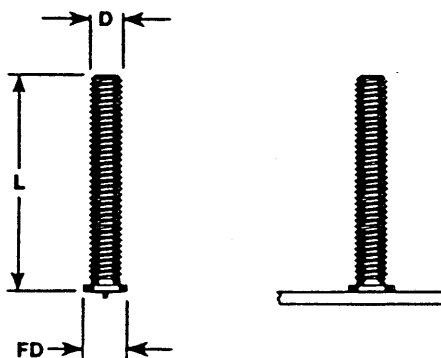


FLANGED

STUD		
D	FD	MIN L
2-56	.156	.250
4-40	.187	.250
6-32	.218	.250
8-32	.250	.250
10-32	.250	.250
10-24	.250	.250
1/4-20	.312	.375
5/16-18	.380	.500
3/8-16	.437	.500



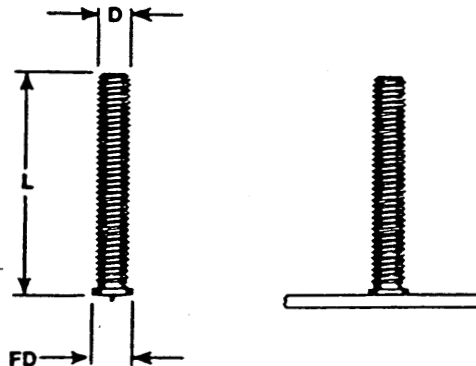
Note: Above dimensions will vary due to manufacturer's tolerances.
Metric sizes also available.

MATERIAL	LOW CARBON STEEL C-0.23% Max. P - 0.04% max. Mn - 0.90% max. S - 0.05% max.	STAINLESS STEEL AISI grade - 302/304/305 Other grades available upon request.
MECHANICAL PROPERTIES	Tensile 60,000 psi (min.) Yield 50,000 psi (min.)	Values for various alloys available upon request
PLATING	Copper plating is standard.	Does not apply to Stainless.
ANNEALING	Studs are annealed upon request	Studs are annealed upon request

MATERIAL	ALUMINUM Alloy — 1100, 5000 & 6000 series Other alloys available upon request.	BRASS Alloy — (lead free) 70-30 std. Other alloys available upon request.
MECHANICAL PROPERTIES	Values for various alloys available upon request	Values for various alloys available upon request

SMALL FLANGED

STUD		
D	FD	MIN L
4-40	.142	.250
6-32	.168	.250
8-32	.194	.250
10-32	.220	.250
10-24	.220	.250
1/4-20	.280	.375
5/16-18	.355	.500
3/8-16	.418	.500



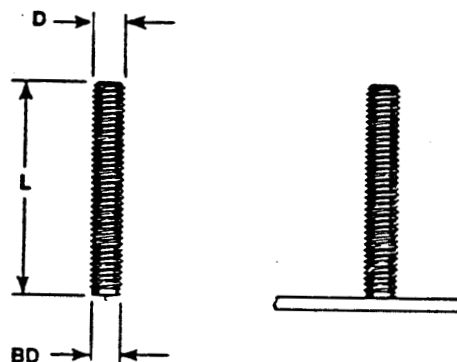
Note: Above dimensions will vary due to manufacturer's tolerances.
Metric sizes also available.

MATERIAL	LOW CARBON STEEL C-0.23% Max. P - 0.04% max. Mn - 0.90% max. S - 0.05% max.	STAINLESS STEEL AISI grade - 302/304/305 Other grades available upon request.
MECHANICAL PROPERTIES	Tensile 60,000 psi (min.) Yield 50,000 psi (min.)	Values for various alloys available upon request
PLATING	Copper plating is standard.	Does not apply to Stainless.
ANNEALING	Studs are annealed upon request	Studs are annealed upon request

MATERIAL	ALUMINUM Alloy — 1100, 5000 & 6000 series Other alloys available upon request.	BRASS Alloy — (lead free) 70-30 std. Other alloys available upon request.
MECHANICAL PROPERTIES	Values for various alloys available upon request	Values for various alloys available upon request

NON FLANGED

STUD		
D	MAX BD	MIN L
4-40	.111	.250
6-32	.137	.250
8-32	.163	.250
10-32	.189	.250
10-24	.189	.250
1/4-20	.249	.375
5/16-18	.311	.500
3/8-16	.374	.500



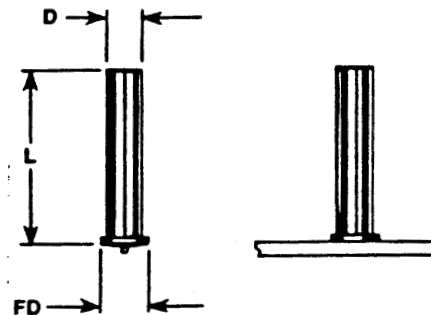
Note: Above dimensions will vary due to manufacturer's tolerances.
Metric sizes also available.

MATERIAL	LOW CARBON STEEL C-0.23% Max. P - 0.04% max. Mn - 0.90% max. S - 0.05% max.	STAINLESS STEEL AISI grade - 302/304/305 Other grades available upon request.
MECHANICAL PROPERTIES	Tensile 60,000 psi (min.) Yield 50,000 psi (min.)	Values for various alloys available upon request
PLATING	Copper plating is standard.	Does not apply to Stainless.
ANNEALING	Studs are annealed upon request	Studs are annealed upon request

MATERIAL	ALUMINUM Alloy — 1100, 5000 & 6000 series Other alloys available upon request.	BRASS Alloy — (lead free) 70-30 std. Other alloys available upon request.
MECHANICAL PROPERTIES	Values for various alloys available upon request	Values for various alloys available upon request

FLANGED — NO THREAD

STUD		
D	FD	MIN L
3/32	.187	.250
.115	.218	.250
1/8	.218	.250
.141	.250	.250
5/32	.250	.250
.161	.250	.250
3/16	.250	.250
.217	.312	.250
1/4	.325	.250
.273	.375	.375
5/16	.375	.500
3/8	.445	.500



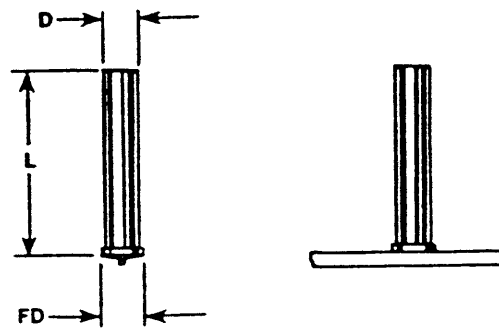
Note: Above dimensions will vary due to manufacturer's tolerances

MATERIAL	LOW CARBON STEEL C-0.23% Max. P - 0.04% max. Mn - 0.90% max. S - 0.05% max.	STAINLESS STEEL AISI grade - 302/304/305 Other grades available upon request.
MECHANICAL PROPERTIES	Tensile 60,000 psi (min.) Yield 50,000 psi (min.)	Values for various alloys available upon request
PLATING	Copper plating is standard.	Does not apply to Stainless.
ANNEALING	Studs are annealed upon request	Studs are annealed upon request

MATERIAL	ALUMINUM Alloy — 1100, 5000 & 6000 series Other alloys available upon request.	BRASS Alloy — (lead free) 70-30 std. Other alloys available upon request.
MECHANICAL PROPERTIES	Values for various alloys available upon request	Values for various alloys available upon request

SMALL FLANGED — NO THREAD

STUD		
D	FD	MIN L
3/32	.124	.250
.115	.145	.250
1/8	.155	.250
.141	.171	.250
5/32	.186	.250
.161	.191	.250
3/16	.218	.250
.217	.247	.250
1/4	.280	.375
.273	.303	.375
5/16	.343	.500



Note: Above dimensions will vary due to manufacturer's tolerances

MATERIAL	LOW CARBON STEEL C-0.23% Max. P - 0.04% max. Mn - 0.90% max. S - 0.05% max.	STAINLESS STEEL AISI grade - 302/304/305 Other grades available upon request.
MECHANICAL PROPERTIES	Tensile 60,000 psi (min.) Yield 50,000 psi (min.)	Values for various alloys available upon request
PLATING	Copper plating is standard.	Does not apply to Stainless.
ANNEALING	Studs are annealed upon request	Studs are annealed upon request

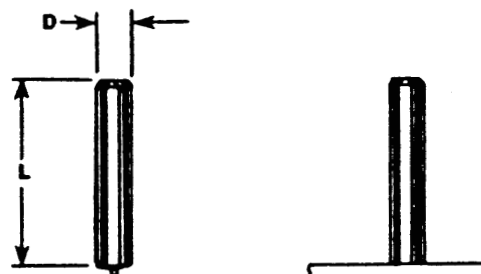
MATERIAL	ALUMINUM Alloy — 1100, 5000 & 6000 series Other alloys available upon request.	BRASS Alloy — (lead free) 70-30 std. Other alloys available upon request.
MECHANICAL PROPERTIES	Values for various alloys available upon request	Values for various alloys available upon request

CD STUDS

CD NF-NT

NON FLANGED — NO THREAD

STUD	
D	MIN L
	3/32
	.250
.115	.250
	1/8
	.250
.141	.250
	5/32
	.250
.161	.250
	3/16
	.250
.217	.250
	1/4
	.375
.273	.375
	5/16
	.500



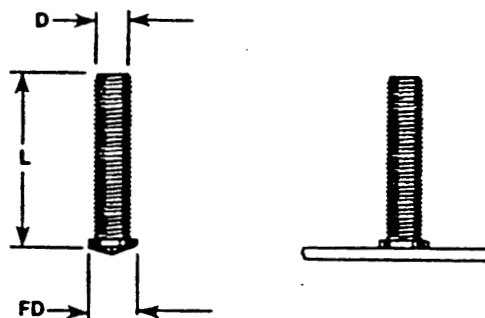
Note: Above dimensions will vary due to manufacturer's tolerances

MATERIAL	LOW CARBON STEEL C-0.23% Max. P - 0.04% max. Mn - 0.90% max. S - 0.05% max.	STAINLESS STEEL AISI grade - 302/304/305 Other grades available upon request.
MECHANICAL PROPERTIES	Tensile 60,000 psi (min.) Yield 50,000 psi (min.)	Values for various alloys available upon request
PLATING	Copper plating is standard.	Does not apply to Stainless.
ANNEALING	Studs are annealed upon request	Studs are annealed upon request

MATERIAL	ALUMINUM Alloy — 1100, 5000 & 6000 series Other alloys available upon request.	BRASS Alloy — (lead free) 70-30 std. Other alloys available upon request.
MECHANICAL PROPERTIES	Values for various alloys available upon request	Values for various alloys available upon request

DRAWN ARC

STUD		
D	FD	MIN L
4-40	.142	.250
6-32	.168	.250
8-32	.194	.250
10-32	.220	.250
10-24	.220	.250
1/4-20	.280	.375
5/16-18	.355	.500



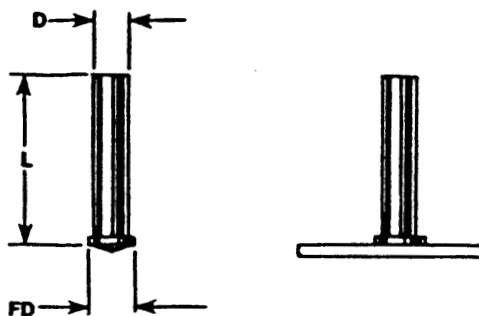
Note: Above dimensions will vary due to manufacturer's tolerances

MATERIAL	LOW CARBON STEEL C-0.23% Max. P - 0.04% max. Mn - 0.90% max. S - 0.05% max.	STAINLESS STEEL AISI grade - 302/304/305 Other grades available upon request.
MECHANICAL PROPERTIES	Tensile 60,000 psi (min.) Yield 50,000 psi (min.)	Values for various alloys available upon request
PLATING	Copper plating is standard.	Does not apply to Stainless.
ANNEALING	Studs are annealed upon request	Studs are annealed upon request

MATERIAL	ALUMINUM Alloy — 1100, 5000 & 6000 series Other alloys available upon request.	BRASS Alloy — (lead free) 70-30 std. Other alloys available upon request.
MECHANICAL PROPERTIES	Values for various alloys available upon request	Values for various alloys available upon request

DRAWN ARC — NO THREAD

STUD		
D	FD	MIN L
3/32	.143	.190
.115	.171	.190
1/8	.156	.190
.141	.195	.190
5/32	.221	.190
.161	.221	.190
3/16	.221	.190
.217	.281	.190
1/4	.281	.250

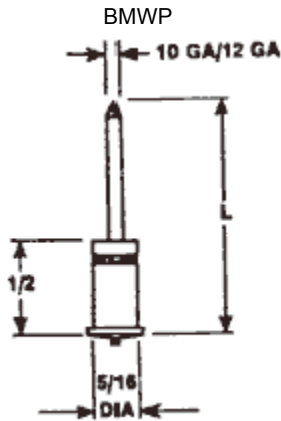


Note: Above dimensions will vary due to manufacturer's tolerances

MATERIAL	LOW CARBON STEEL C-0.23% Max. P - 0.04% max. Mn - 0.90% max. S - 0.05% max.	STAINLESS STEEL AISI grade - 302/304/305 Other grades available upon request.
MECHANICAL PROPERTIES	Tensile 60,000 psi (min.) Yield 50,000 psi (min.)	Values for various alloys available upon request
PLATING	Copper plating is standard.	Does not apply to Stainless.
ANNEALING	Studs are annealed upon request	Studs are annealed upon request

MATERIAL	ALUMINUM Alloy — 1100, 5000 & 6000 series Other alloys available upon request.	BRASS Alloy — (lead free) 70-30 std. Other alloys available upon request.
MECHANICAL PROPERTIES	Values for various alloys available upon request	Values for various alloys available upon request

BI-METALLIC CD STUDS



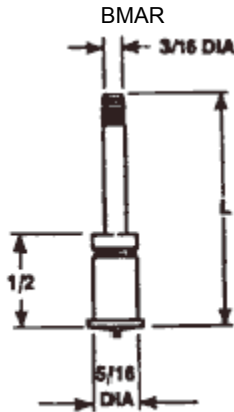
PIN BI - METALLIC STUD

MATERIAL: Pin - 10 GA (.135 Dia.) Stainless Steel
 12 GA (.105 Dia.) Stainless Steel
 Base - Aluminum (5000 Series)

WASHER: Self-locking washers are available in a variety of sizes, shapes and materials.

TO ORDER OR SPECIFY, GIVE:

1. Product Code BMWP
2. Length L



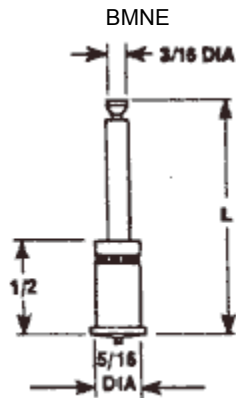
ANNULAR RING BI-METALLIC STUD

MATERIAL: Pin-Stainless Steel
 Base-Aluminum (5000 Series)

CAP: The cap for use with this stud is the WCN AR CAP annular ring cap.

TO ORDER OR SPECIFY, GIVE:

1. Product Code BMAR
2. Length L



NOTCHED END BI-METALLIC STUD

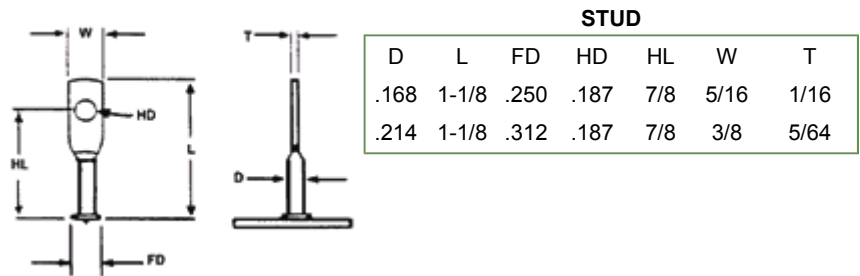
MATERIAL: Pin-Stainless Steel
 Base- Aluminum (5000 Series)

WASHER: The washer for use with this stud is the WAK notched end key hole slotted washer.

TO ORDER OR SPECIFY, GIVE:

1. Product Code BMNE
2. Length L

CD FLANGED-ACOUSTICAL HANGER (LAGGING STUD)



STUD

D	L	FD	HD	HL	W	T
.168	1-1/8	.250	.187	7/8	5/16	1/16
.214	1-1/8	.312	.187	7/8	3/8	5/64

MATERIAL:	LOW CARBON STEEL C-0.23% max. P-0.04% max. Mn - 0.90% max S-0.05% max.	STAINLESS STEEL AISI grade - 302/304/305 std. Other grades available upon request.
MECHANICAL PROPERTIES:	Tensile 60,000 psi (min.) Yield 50,000 psi (min.) Elongation 20% (in 2 inches)	Values for various grades available upon request.
PLANTING:	Copper plating is standard.	Does not apply to Stainless.
ANNEALING:	Studs are annealed where required.	Studs are annealed where required.
MATERIAL:	ALUMINIUM ALLOY - 1100 & 5000 series Other alloys available upon request	
MECHANICAL PROPERTIES:	Values for various alloys available upon request.	

TO ORDER OR SPECIFY, GIVE:

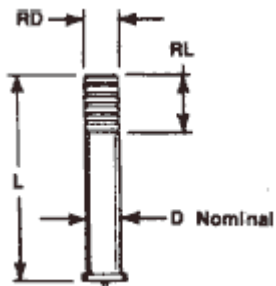
1 Product Code..... CD F-AH

2 Diameter..... D

3 Length..... L

4 Material.....

CD FLANGED ANNULAR RING (NAVY)

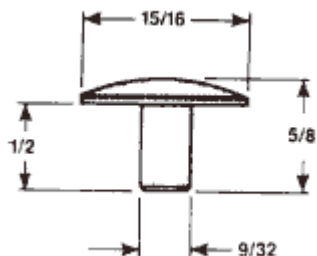


STUD			
NOM. D	MIN. L	RD	RL
1/8	3/4	.122	.312
3/16	3/4	.175	.312

MATERIAL: LOW CARBON STEEL CONFORMS TO MIL - S - 24149 TYPE: VI CLASS:III	STAINLESS STEEL CONFORMS TO MIL - S - 24149 TYPE: VIII CLASS: III
MECHANICAL PROPERTIES: Tensile 60,000 psi (min.) Yield 50,000 psi (min.) Elongation 20% (in 2 inches)	Values for various grades available upon request.
PLATING: Copper plating is standard.	Does not apply to Stainless.

TO ORDER OR SPECIFY, GIVE:

- 1 Product Code..... CD F-AR
- 2 Diameter..... D
- 3 Length..... L
- 4 Material.....



MCAL "Mushroom CAP" Aluminium	
STUD SIZE	CAP PART NO.
3/16	MCAL - 625-875

NOTE: AR CAP is sold separately. Not a component part of stud.

CD STUDS

SPECIAL CAPACITOR DISCHARGE WELD STUDS

From an .060" diameter no-thread CD stud to a 7/16" hex CD stud, IC can furnish a special CD stud to meet your precision fastening requirements. The illustrations below indicate just a few of the possible configurations in which CD studs can be manufactured. These illustrations however do not

represent any standard IC in-stock product line. If you require a special configuration CD stud for your application, please submit a sketch or drawing with dimensions and material requirements to IC for a quote.

