

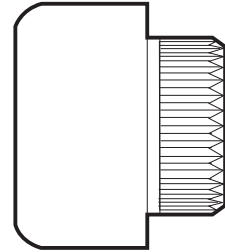
ANCHOR[®] RIVET BUSH

IDEAL FOR INSTALLATION INTO MATERIAL TOO THIN TO ACCOMMODATE A TRADITIONAL CLINCH FASTENER. ALSO APPROPRIATE FOR INSTALLATION INTO HIGH-STRENGTH MATERIALS.



ANCHOR[®] RIVET BUSH

The ANCHOR[®] RIVET BUSH (ARB) is a captive threaded bush designed to suit a wide range of sheet thicknesses. Its serrated shank when riveted, achieves high torque and push out resistance. A standoff version (ARBSO) allows the body length to be specified, thus providing a captive threaded spacer.



ADVANTAGES

- Ideal for both thinner and harder sheet metals
- Ideal for light alloys, aluminum, magnesium etc.
- Can be installed by hand or automatic methods
- Suitable for use in punched or drilled holes
- Can be used for sheet thicknesses up to 6mm
- Can be used to join two sheets together

DESIGN GUIDE

HOLE SIZE IN SHEET

Holes may be punched or drilled and a tolerance of -0.00 +0.1mm should be maintained.

INSTALLATION

To reduce the projection on the reverse side of the sheet it is essential that the correct design of riveting punch is always used (see Assembly Punch data). For consistent results a press is recommended, however small quantities may be installed using hand tools.

STAND OFF TYPES

Where minimum projection is not essential there are performance advantages in specifying the next larger shank code.

DIRECTION OF LOAD

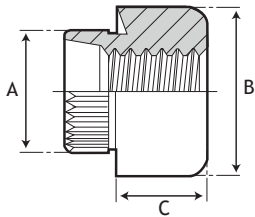
Although the mating component can be fastened to either side of the bush, maximum performance will be achieved when fastening to the riveted shank side.

ANCHOR[®] RIVET BUSH

TECHNICAL DATA

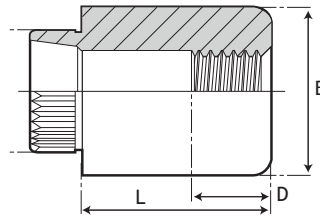
BUSHES

Product Code ARB



STAND OFFS

Product Code ARBSO



STANDARD MATERIAL - Mild Steel (S)

STANDARD FINISH - Zinc & Clear Trivalent Passivation (Z)

Other materials and finishes possible on quotation.

DIMENSIONS

Internal thread sizes		Dia.of Shank A mm	Dia.of Body B mm	Depth of Body C mm	Thread Length D ARBSO	Rec Hole Size -0.00+0.10 mm
Unified	ISO Metric					
4	2.5/3	5.8	7.9	3.2	3.3	5.90
6	3.5	6.9	9.5	3.8	3.9	6.95
8	4	6.9	9.5	3.8	3.9	6.95
10	5	8.3	11.1	4.4	4.6	8.35
1/4	6	9.5	12.7	5.7	5.9	9.65
5/16	8	13.0	15.9	6.4	6.5	13.10
3/8-7/16	10	15.4	19.1	7.6	7.9	15.50
1/2	12	19.4	25.4	10.2	10.4	19.50

ARBSO – LENGTHS AVAILABLE ('L')

Length	3	4	5	6	8	10	12	14	16	18	20	25
Shank code	001	003	004	006	008	010	012	013	014			
Sheet thickness	0.5-0.6	0.7-0.8	0.9-1.0	1.1-1.3	1.4-1.6	1.7-1.9	2.0-2.2	2.3-2.5	2.6-2.8			
Shank code	016	017	018	019	020	022	023	024	026			
Sheet thickness	2.9-3.1	10swg	3.2-3.4	3.5-3.7	3.8-4.0	4.1-4.3	4.4-4.6	4.7-4.9	5.0-6.0			

HOW TO SPECIFY

Product code	ARB-M4-008-S-Z
Thread size	ARB-M4-008-S-Z
Shank code	ARB-M4-008-S-Z
Material code	ARB-M4-008-S-Z
Finish	ARB-M4-008-S-Z

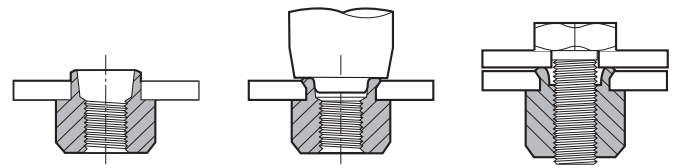
Product code	ARBSO-M4-008-S-12MM-Z
Thread size	ARBSO-M4-008-S-12MM-Z
Shank code	ARBSO-M4-008-S-12MM-Z
Material code	ARBSO-M4-008-S-12MM-Z
Length	ARBSO-M4-008-S-12MM-Z
Finish	ARBSO-M4-008-S-12MM-Z

ANCHOR[®] RIVET BUSH

ANCHOR[®] RIVET BUSHES can be installed using both an “impact” and A “squeeze” action, allowing both hand and machine installation. Sheet hardness is not critical as the bush deforms rather than the Sheet, during installation.

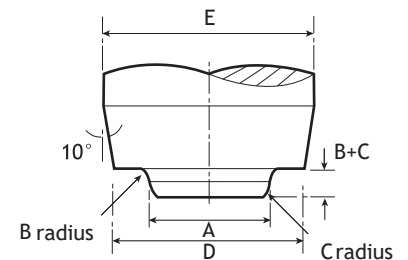
METHOD OF ASSEMBLY

1. Punch a hole in the metal sheet to the size recommended in our technical data table.
Deburring of the hole is not recommended.
2. Insert the serrated shank through the hole in the sheet.
3. Using the profiled punch detailed below, rivet the shank, spreading and flattening it onto the face of the sheet.



PUNCH DETAIL

Thread Size		ARB & ARBSO PUNCH				
Unified	Metric	A mm	B mm	C mm	D mm	E mm
4	M2.5/M3	4.3	0.5	0.5	7.1	12.0
6/8	M3.5/M4	5.3	0.6	0.5	8.7	12.0
10	M5	6.8	0.8	0.5	10.3	16.0
1/4	M6	8.0	0.9	0.6	11.9	16.0
5/16	M8	11.1	1.0	0.6	15.5	19.0
3/8 / 7/16	M10	13.5	1.1	0.6	18.3	19.0
1/2	M12	17.1	1.3	0.6	22.2	25.0



Punch material 1% C/Mn Steel (Silver Steel)
Water quench pilot end from 820°C,
Temper at 260°C

PERFORMANCE DATA

ARB METRIC

Thread Size	Cold Rolled Steel		Aluminum	
	Pushout (N)	Torque-out (Nm)	Pushout (N)	Torque-out (Nm)
M2.5 / M3	1100	3.0	800	2.1
M3.5 / M4	1600	6.0	1100	4.5
M5	2500	9.0	1700	6.8
M6	4000	16.0	2850	11.5
M8	5500	24.0	3800	16.2
M10	6800	40.0	4200	28.5
M12	7500	60.0	5500	42.5

Tests conducted using a Steel Rivet Bush - 008 shank code into 1.5mm sheet. For unified values see equivalent metric size.

Note: The above values are averages when correct installation is performed. Variations in holes size, material and installation will affect these results. For specific advice we strongly recommend consultation with your Bulten Technology Centre.