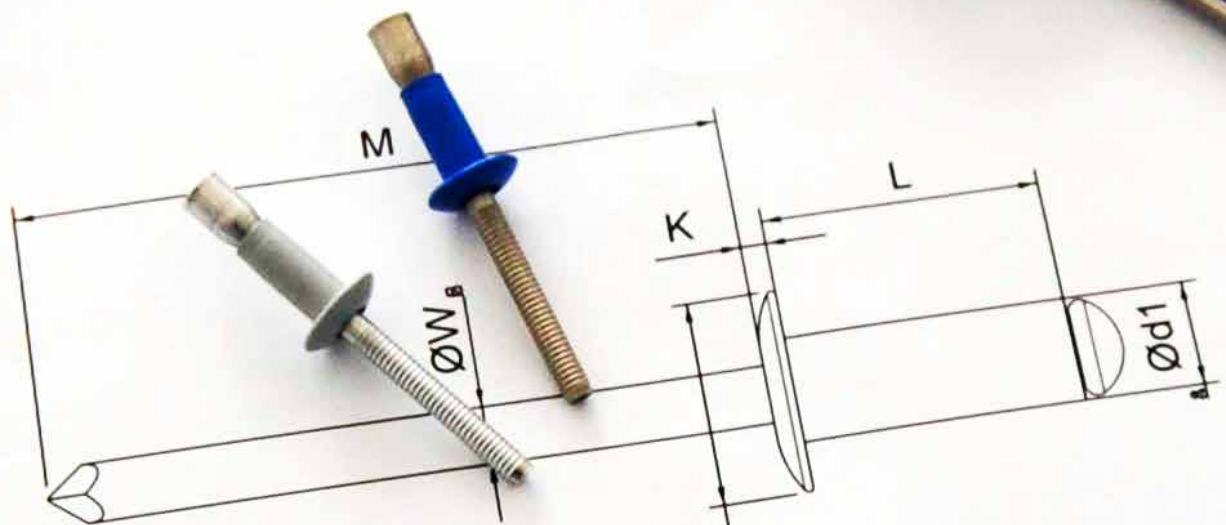


# Structural rivet guide

BRALO fixing products



GUIDE FOR THE CORRECT FIXING AND INSPECTION  
OF BRALO STRUCTURAL RIVETS



# STRUCTURAL RIVET GUIDE



## BRALO fixing products

If you need a structural rivet in your application, you must select the type of rivet and consider these factors and tips:

1 MATERIALS TO BE RIVETED

2 HEAD SHAPE

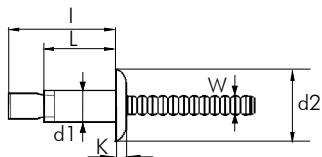
3 RIVET DIAMETER

4 THICKNESS

5 RESISTANCE NEEDED

See the rivet tables on the next page.

Rivet dimensions:



6 CORRECT NOSEPIECE



Structural rivets will be fixed with BRALO riveters: BM-164, BT-20 BNT-4 and BNT-5.

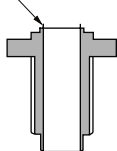
To ensure the correct function of the Structural rivet, it is essential to install the appropriate nosepiece according to the riveter in advance.

Nosepiece # 984 for BM-164

Nosepiece # G and J for BT-20

Nosepiece # 983 for BNT-4 and BNT-5

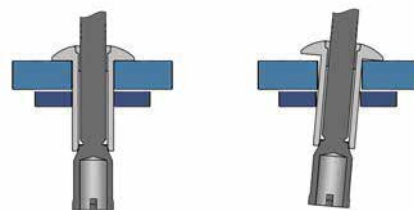
Seal tab



Structural rivets need special nosepiece and jaws

### DRILL PREPARATION

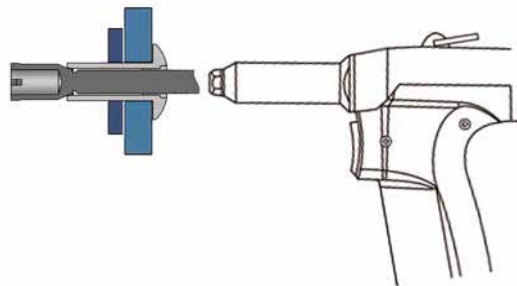
- 1.- Drill the recommended hole in the table.
- 2.- The drill must be uniform for an optimal fixation.



Drill not uniform

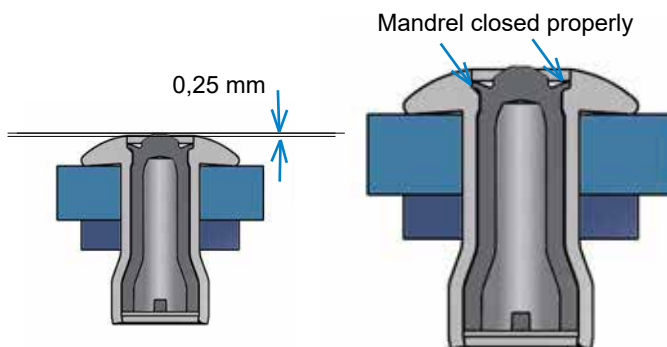
### RIVETING PROCESS

- 1.- Place the special nosepiece on the machine.
- 2.- Make sure that the rivet head is located on the surface to be riveted and that the riveter is positioned at right angles to the application.



### RIVET INSPECTION

Once the rivet is fixed, we can inspect the breakage of the stem, which may protrude from the rivet head by a maximum of 0.25 mm. The maximum refers to the distance between the rivet head surface and the stem break.



# STRUCTURAL RIVET GUIDE







## BRALO fixing products

At BRALO we manufacture structural rivets in aluminum, steel and stainless steel. See structural rivet tables for a correct choice:





- BODY: Aluminium Al Mg 5
- MANDREL: Aluminium



d1 Ø mm	L Nominal mm		d2 Ø mm	K mm	W Ø mm	I Máx. mm				REFERENCE
		mm					E MIN. mm MÁX	(N)	(N)	
4,8	10,3	4,90-5,10	9,70	1,80	3,00	18,5	1,5 - 6,8	2900	2550	G1801004810
	13,5					24,0	1,5 - 11,0			G1801004813
6,5	14,0	6,60-7,00	13,00	2,50	4,00	25,0	1,0 - 9,5	6000	4200	G1801006514
	20,0					35,0	2,0 - 16,0			G1801006520





- BODY: Aluminium Al Mg 5
- MANDREL: Aluminium



d1 Ø mm	L Nominal mm		d2 Ø mm	K mm	W Ø mm	I Máx. mm				REFERENCE
		mm					E MIN. mm MÁX	(N)	(N)	
4,8	12,3	4,90-5,10	9,70	1,80	3,00	20,0	3,2 - 8,4	2900	2550	G1802004812
	6,5	16,5	6,60-7,00	10,60	2,00	4,00	26,5	3,0 - 12,0	6000	4200





- BODY: Steel 8 µ
- MANDREL: Steel 8 µ



d1 Ø mm	L Nominal mm		d2 Ø mm	K mm	W Ø mm	I Máx. mm				REFERENCE
		mm					E MIN. mm MÁX	(N)	(N)	
4,8	10,3	4,90-5,10	9,70	1,80	3,00	18,5	1,5 - 6,8	5100	3900	G1821004810
		13,5				24,0	1,5 - 11,0			G1821004813
6,5	14,0	6,60-7,00	13,00	2,50	4,00	25,0	2,0 - 9,5	11200	8800	G1821006514
		20,0				35,0	2,0 - 16,0			G1821006520
		22,5				37,0	6,0 - 18,0			G1821006522
9,7	22,0	9,90-10,4	20,00	3,70	5,90	36,2	3,0 - 15,5	26300	17500	G1821009722





- BODY: Steel 8 µ
- MANDREL: Steel 8 µ



d1 Ø mm	L Nominal mm		d2 Ø mm	K mm	W Ø mm	I Máx. mm				REFERENCE
		mm					E MIN. mm MÁX	(N)	(N)	
4,8	12,3	4,90-5,10	8,70	1,80	3,00	20,0	3,2 - 8,4	5100	3900	G1826004810
		16,5				26,3	3,2 - 12,2			G1826004813
6,5	16,5	6,60-7,00	10,60	2,50	4,00	26,5	3,0 - 12,0	11200	8800	G1826006514
		22,0				35,5	6,0 - 18,0			G1826006520





- BODY: Inox AISI 304
- MANDREL: Inox AISI 304



d1 Ø mm	L Nominal mm		d2 Ø mm	K mm	W Ø mm	I Máx. mm				REFERENCE
		mm					E MIN. mm MÁX	(N)	(N)	
4,8	10,3	4,90-5,10	8,70	1,80	3,00	18,5	1,5 - 6,8	5800	5000	G1827004812
		13,5				24,0	1,5 - 11,0			G1827004816
6,5	14,0	6,60-7,00	10,60	2,50	4,00	25,0	1,0 - 9,5	9900	8100	G1827006516
		20,0				35,0	2,0 - 16,0			G1827006522

- BODY: Inox AISI 304
- MANDREL: Inox AISI 304



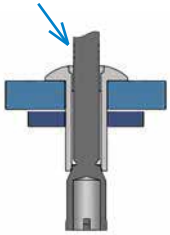
d1 Ø mm	L Nominal mm		d2 Ø mm	K mm	W Ø mm	I Máx. mm				REFERENCE
		mm					E MIN. mm MÁX	(N)	(N)	
4,8	12,3	4,90-5,10	8,70	1,80	3,00	20,0	3,2 - 8,4	5100	3900	G1827004812
		16,5				26,3	3,2 - 12,2			G1827004816
6,5	16,5	6,60-7,00	10,60	2,50	4,00	26,5	3,0 - 12,0	9900	8100	G1827006516
		22,5				35,5	6,0 - 18,0			G1827006522

# Structural rivet guide

## BRALO fixing products

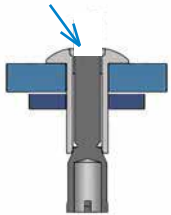
8

### PROBLEM RESOLUTION



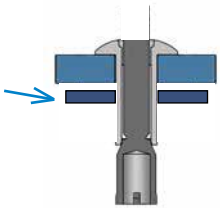
If the mandrel protrudes too far from the head.

1. Check the nosepiece used is not the correct one.
2. Check the size of the drill, it is too big.



If the mandrel does not go through the head sufficiently and does not close

1. Check the nosepiece used is not the correct one.
2. Check thickness, rivet does not fit application thickness.



If the application parts are loose after riveting.

1. Check the size of the drill, it is too big.
2. Check thickness, rivet does not fit application thickness.
3. Check if the space between the pieces is too large.
4. Check the strength of the machine.
5. Make sure the hole in the back piece is larger than the front piece.

