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Westfield Fasteners Product Specification:

Rivet Nuts - Flat Head, Part Hexagonal Shank, Closed Type

This product guide contains the specification for blind rivet nuts with a flat head, part hexagonal shank and a closed end: a stock item available from Westfield Fasteners.

Product Description

Flat head rivet nuts give the best strength and stability, as they spread the load over a greater surface area. The hexagonal body shape will prevent the nut from turning within an appropriate sized hexagonal hole in the host material. The part hexagonal shank will have a slightly reduced torque loading in comparison to the full hexagonal bodied rivet nuts. The closed end enables the rivet nut to be water tight, so that the fixing point is sealed and can prevent liquids and gases from leaking or entering. Commonly used in white goods, electrical enclosures, indoor and outdoor electronic signs, automotive, aerospace, rail and HVAC general metal constructions.

Blind rivet nuts are used for attachments into sheet metals and thin metal gauge parts, such as panels, tubes and castings. The riveted nut will then allow you to attach and detach components easily using the correct sized bolt. The larger sized rivet nuts can clamp together multiple layers of materials. Blind rivet nuts are also known as riv nuts, blind nuts and nutserts.

Install by inserting the rivet nut into a correctly sized and shaped hole within the sheet material. Compress the rivet nut using a pneumatic powered or hand rivet nut tool, which grips it firmly to the sheet material. In the compression process, the thinner walled section without the thread collapses to form a collar on the blind side of the sheet material. This prevents the nut from being pulled back though the hole and fixes it securely to the sheet material.

Like blind rivets, blind rivet nuts do not require access to the back of the material, the strength of the riveted joint will vary for each application, as factors such as the material strengths, the diameter of the rivet nut, the spacing between the rivet nuts will all effect the final shear and tensile strengths.

Product Information

See the table below for dimensions for sizes from M3 to M12, along with information on grip range, pre-drilled hole sizes, tensile strength and tightening torque. The tightening torque specifications are guide values depending on the material of the original component and must be checked by testing the component.

The grip range is the total thickness of the materials to be joined.

This type of rivet nut is available in A2 and A4 Stainless Steel. A2 will provides good corrosion and oxidation resistance for both indoor and outdoors. A4 is marine grade, which offer better corrosion and oxidation resistance and is best for wet and salty environments.

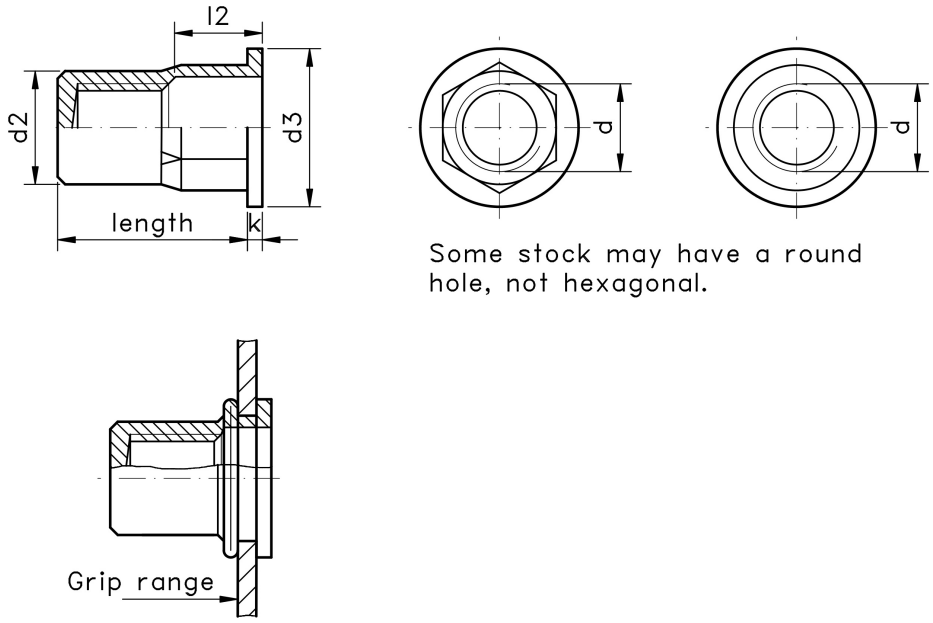

Figure 1: Blind rivet nut with a Flat Head, Part Hexagonal Shank, Closed Type

Table 1: Dimensions & Tolerances (mm) for Stainless Steel Variants

d1	l1	d2	k	l2	e	Clamp Area	Shear Force (N)	Tensile Strength (N)	Drive Size
3	15.5	4.9	0.75	4.3	5.3	0.5 - 2.5	900	3900	SW 4.9
4	16.5	5.9	1	4.8	6.5	0.5 - 3.0	1500	6800	SW 5.9
5	19	6.9	1	6.5	7.6	0.5 - 3.0	2000	11500	SW 6.9
6	22	8.9	1.5	7	10	0.5 - 3.0	3000	16500	SW 8.9
8	26.5	10.9	1.5	7.8	12.4	0.5 - 3.0	4400	25000	SW 10.9
10	28.5	12.9	2	9.7	14.7	0.5 - 3.0	5000	32000	SW 12.9
12	33.5	15.9	2	10.5	17.6	3.0 - 6.0	6500	34000	SW 15.9