

IFI NOTES:

1. This specification is under the jurisdiction of the IFI Standards and Technical Practices Committee and directly under the Technical Committee of IFI's Division I. This is the first metric edition of this standard.
2. There are no ISO standards for this product at this time.

1. Scope

1.1 This standard establishes the dimensional, mechanical, and performance requirements of metric multi-grip flush break, positive lock pull mandrel self-plugging blind rivets suitable for use in joining the component parts of assemblies of varying grip range where structural integrity is a design requirement.

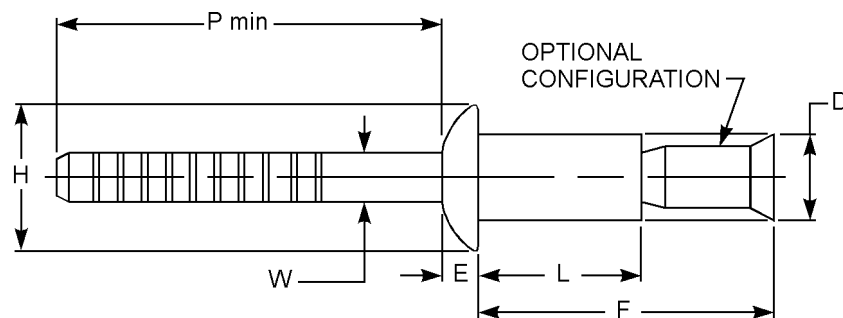


Table 1 Dimensions of Metric Regular and Large Multi-Grip Protruding Head Flush Break Pull Mandrel Self-Plugging Blind Rivets

Rivet Series No.	Nom Rivet Size	D		H		E	H		E	F	P	W		L
		Body Dia		Style 1 — Regular Head			Style 2 — Large Head			Blind Side Protru-sion	Mandrel Protru-sion	Mandrel Shank Dia		Rivet Body Length
				Head Dia		Head Height	Head Dia		Head Height					
		Max	Min	Max	Min	Max	Max	Min	Max	Max	Min	Max	Min	Max
6	4.8	4.90	4.67	10.15	9.01	2.28	13.45	12.69	2.66	L + 10.81	25.4	3.05	2.89	See Table 2
8	6.3	6.60	6.45	13.45	12.18	2.97	—	—	—	L + 15.86	25.4	4.11	3.88	
See Note										3				

NOTES:

1. All dimensions are in millimeters.
2. For application data see Table 2.
3. When computing the blind side protrusion (F), the max length of rivet body (L) as given in Table 2 for the applicable grip shall be used. Minimum blind side clearance may be calculated by subtracting the actual grip (G), (i.e., total thickness of the material being joined) from the specified blind side protrusion (F). F – G is the recommended minimum blind side clearance, however, because of its unique design, when setting this type of rivet, less blind side clearance may be possible in some applications. When less than the recommended minimum blind side clearance is a design requirement, it is suggested the rivet manufacturer be consulted.

Note: Special nosepiece may be required.

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Table 2 Application Data for Metric Protruding Head Multi-Grip Flush Break Pull Mandrel Self-Plugging Blind Rivets

Rivet Series No.	Nominal Rivet Size	Recommended Drill Size	Recommended Hole Size		Rivet No.	Grip Range	Rivet Body Length L
			Max	Min			Max
6	4.8	4.91	5.18	4.92	64	1.57-6.35	10.56
					67	5.43-11.09	14.64
8	6.3	6.63	7.0	6.63	86	2.03-9.52	14.11
					810	8.88-15.86	20.46
See Note		3			2		

NOTES:

1. All dimensions are in millimeters.
2. The first numeral in the rivet number designates the rivet series number, the last one or two numerals give the maximum grip in 1.57 mm which the rivet is capable of joining.
3. Recommended drill sizes are those which normally produce holes within the specified hole size limits.

1.2 Definitions

1.2.1 Blind Rivet. A blind rivet is a blind fastener which has a self-contained mechanical, or other feature which permits the formation of an upset on the blind end of the rivet and expansion of the rivet shank during rivet setting to join the component parts of an assembly.

1.2.2 Multi-grip flush break positive lock blind rivets are pull mandrel type blind rivets where during the setting operation the mandrel is pulled into the rivet body and breaks essentially flush with the top of the rivet head. Because the break plane of the mandrel occurs above the junction of the rivet shank and head, the shear plane(s) of the joint will occur through rivet shank and mandrel. Multi-grip means the rivet has the design capability to join component parts having a broad range of thicknesses. Positive lock means that during rivet setting an intentional deformation occurs in the rivet mandrel and/or body, which provides a mechanical resistance to mandrel removal from the rivet body.

1.2.3 Definitions of other terms used in this standard are given in IFI-110/550, *Glossary of Terms Relating to Blind Rivets*.

2. Designations

2.1 Styles. The two basic styles of multi-grip flush break pull mandrel self-plugging blind rivets are designated as protruding head and 100 deg flush head.

2.2 Grades. The material combinations of multi-grip flush break pull mandrel self-plugging blind rivets are designated as grades, with each material combination representing a different combination of rivet body material and mandrel material as given in Table 5.

2.3 Design. The design of multi-grip flush break pull mandrel self-plugging blind rivets shall be in accordance with the practice of the manufacturer.

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