

1. Scope

1.1. Scope. This standard establishes the dimensional, mechanical, and performance requirements for metric structural splitting self-plugging pull mandrel blind rivets suitable for use in engineering assemblies where load transmitting capability by the rivet is a design requirement.

1.2 Definitions

1.2.1 Blind Rivet. A blind rivet is a blind fastener which has a self-contained mechanical, chemical 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 A structural splitting self-plugging pull mandrel blind rivet (hereinafter called rivet) is a two-piece assembly consisting of a rivet body and a mandrel. During the setting operation, the mandrel is pulled against and into the rivet body causing the rivet blind end to split axially into three or more segments. The mandrel breaks at a point within or above the rivet head with the entrapped length of the mandrel being retained in the rivet body.

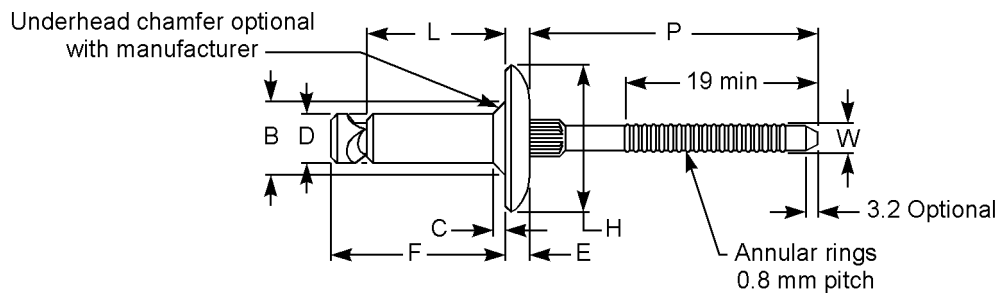


Table 1 Dimensions of Regular and Large Head Metric Structural Splitting Self-Plugging Pull Mandrel Blind Rivets

Rivet Series No.	Nom Rivet Size	D		H		E		H		E		B	C	W	P	F
		Body Dia		Style 1 — Regular Head				Style 2 — Large Head				Hole Filling Chamfer	Chamfer Length	Mandrel Dia	Mandrel Protru-sion	Blind Side Protru-sion
				Head Dia		Head Height		Head Dia		Head Height						
		Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Max	Nom
6	4.8	4.85	4.70	10.29	9.53	2.62	2.11	14.91	13.64	2.62	2.11	5.11	0.89	2.95	25	L + 3.2
8	6.3	6.48	6.30	13.59	12.32	3.20	2.69	19.69	18.42	3.20	2.69	6.83	1.14	3.84	25	L + 4.2

NOTES:

- All dimensions are in millimeters.
- For application data, see Table 2.
- Maximum body diameter may be increased by 0.03 mm within 2.5 mm of underside of head.
- When computing the blind side protrusion (F), the maximum length of rivet (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 to be joined), from the specified blind side protrusion (F). (Example: To join two plates, each 2.5 mm thick, with a No. 6 rivet, a No. 64 rivet would be used. Minimum blind side clearance necessary to permit proper rivet setting would be $L + 3.2 - G$, which is $15.3 + 3.2 - 5.0$, and equals 13.5 mm).

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Table 2 Application Data for Metric Protruding Head Style Structural Splitting Self-Plugging Pull Mandrel Blind Rivets

Rivet Series No.	Nom Rivet Size	Recommended Metric Drill Size	Recommended Hole Size		Rivet No.	Grip Range	Rivet Length L
			Max	Min			Max
6	4.2	4.9	4.98	4.88	61	0.8 to 1.6	10.6
					62	1.7 to 3.2	12.2
					63	3.3 to 4.8	13.8
					64	4.9 to 6.4	15.3
					65	6.5 to 7.9	16.9
					66	8.0 to 9.5	18.5
					67	9.6 to 11.1	20.1
					68	11.2 to 12.7	21.7
					69	12.8 to 14.3	23.3
					610	14.4 to 15.9	24.9
					611	16.0 to 17.5	26.5
					612	17.6 to 19.1	28.0
8	6.3	6.5	6.63	6.53	82	1.7 to 3.2	13.2
					83	3.3 to 4.8	14.8
					84	4.9 to 6.4	16.4
					85	6.5 to 7.9	18.0
					86	8.0 to 9.5	19.6
					87	9.6 to 11.1	21.2
					88	11.2 to 12.7	22.8
					89	12.8 to 14.3	24.3
					810	14.4 to 15.9	25.9
					811	16.0 to 17.5	27.5
					812	17.6 to 19.1	29.1
					813	19.2 to 20.6	30.7
					814	20.7 to 22.2	32.3
					815	22.3 to 23.8	33.9
					816	23.9 to 25.4	35.5

NOTES:

1. All dimensions are in millimeters.
2. Recommended drill sizes are those which normally produce holes within the specified hole size limits.

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 rivets are designated as protruding head and flush head. Protruding head rivets are available in two styles designated as regular head and large head. Flush head rivets are available in one style designated as 100 degree countersunk head.

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