

Material Specification

Material: High Quality Carbon Steel, SAE 1022 (Equivalent to ASTM A510); Case hardened and Tempered
Washer: Carbon Steel bonded to 3mm Non-conductive Grey EPDM washer.



Size: Ø # 12 (5.5 mm) X L		Drilling Capacity, mm											
	Ultimate Tensile Breaking Load, kgf [kN]	Thread Type BSD, 14 TPI						Thread Type CSD, 24 TPI					
	1358 [13.3]	6 mm						6 mm					
	Torsion Strength, Nm	L, mm	20	25	40	50	60	65	75	80	115	120	130
	10.9	Clamp Thickness, mm	0-4	0-8	0-18	5-28	10-38	15-45	30-55	30-60	50-90	65-95	75-108
	Single Shear Load, kgf [kN]	Drill Point Length, mm											
	847 [8.3]	8-9 mm											
	¹ Pull Out Load, kN												
	Thickness of Steel member not in contact with head or washer, ga (mm)												
	20 (0.912)	18 (1.214)	16 (1.519)	14 (1.897)	12 (2.657)	10 (3.416)	8 (4.176)	5 (5.314)					
	1.92	2.55	3.20	3.99	5.59	7.19	8.79	11.18					
	² Pull Over Load, kN												
	Thickness of Steel member in contact with head or washer, ga (mm)												
	Washer or Head Dia	26 (0.455)	25 (0.531)	24 (0.607)	22 (0.759)	20 (0.912)							
	16 mm	4.91	5.73	6.56	8.20	9.85							
19 mm	5.84	6.81	7.78	9.72	11.70								

These data are the results of laboratory testing conducted in controlled laboratory environment and conditions. The technical parameters are of ultimate designation. The data tabulated are minimum and/or average values.

¹ Note:

- The Values are based on test sheet of Tensile strength of member not in contact with head or washer, $F_u = 450$ MPa. For Steel with $F_u=350$ MPa, multiply values by 0.78 For Steel with $F_u=310$ MPa, multiply values by 0.68.
- Pull out Load values based upon calculations done in accordance with Section E4 of the AISI S100.
- Load values are based upon testing conducted in accordance with AISI S905. These data are the results of laboratory testing conducted in controlled laboratory environment and conditions.
- AISI S100 recommends a safety factor $\Omega = 3.0$ be applied for ASD, a factor $\Phi = 0.5$ be applied for LRFD design or a factor $\Phi = 0.4$ be applied for LSD design.

² Note:

- The Values are based on test sheet of Tensile strength of member in contact with head or washer, $F_u = 450$ MPa. For Steel with $F_u=350$ MPa, multiply values by 0.78 For Steel with $F_u=310$ MPa, multiply values by 0.68.
- Pull over Load values based upon calculations done in accordance with Section E4 of the AISI S100.
- Load values are based upon testing conducted in accordance with AISI S905. These data are the results of laboratory testing conducted in controlled laboratory environment and conditions.
- AISI S100 recommends a safety factor $\Omega = 3.0$ be applied for ASD, a factor $\Phi = 0.5$ be applied for LRFD design or a factor $\Phi = 0.4$ be applied for LSD design.

Application: Fastening of corrugated steel sheet to substrate steel structure.
 Fastening of side lap joints by using 20 or 25 mm long screws.

