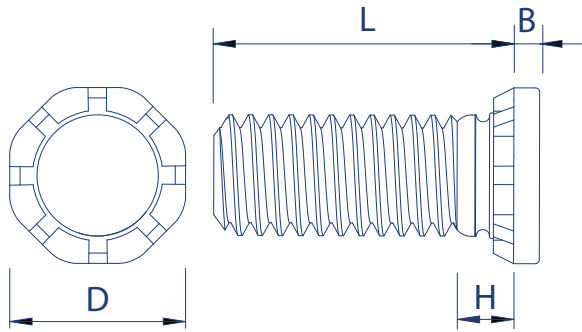


TR Hank® Self-Clinch Hi Strength Studs



Zinc Plated Steel : TR-HFH | Stainless Steel : TR-HFHS



Metric Dimensions

Thread size	M5	M6	M8	M10
D ±0.25	7.8	9.4	12.5	15.7
H max	2.7	2.8	3.5	4.1
B max	1.14	1.27	1.78	2.29
Min rec sheet thickness	1.3	1.5	2	2.3
Hole +0.13 -0.0	5	6	8	10
Min distance to edge of sheet	10.7	11.5	12.7	13.7

Preferred Range

Thread size x Pitch	M5 x 0.8	M6 x 1	M8 x 1.25	M10 x 1.5	
Length ±0.4	10	•			
	12				
	15	•	•	•	
	16			•	
	18			•	
	20		•	•	•
	25		•	•	•
	30		•	•	•
	35		•	•	•
	40		•	•	•
	45				
	50			•	•

TR Hank® Self-Clinch Hi Strength Studs



Metric Performance Data: TR-HFH					
Thread		M5	M6	M8	M10
Test sheet thickness	Aluminium	1.5	1.5	2.3	2.4
	Steel				
Test sheet hardness (HRB)	Aluminium	15	43	39	39
	Steel	65	59	58	58
Installation (kN)	Aluminium	14	30	36	41
	Steel	27	34	45	55
Pushout (N)	Aluminium	805	1280	1750	2450
	Steel	1550	1780	2210	3475
Torque-out (Nm)	Aluminium	5.4	14.5	30.1	36
	Steel	7.7	14.5	30.1	49.5

Metric Performance Data: TR-HFHS					
Thread		M5	M6	M8	M10
Test sheet thickness	Aluminium	1.62	1.62	2.23	2.3
	Steel	1.5	1.6	2.48	2.3
Test sheet hardness (HRB)	Aluminium	35	35	44	44
	Steel	54	45	43	44
Installation (kN)	Aluminium	13	15.5	24.5	34
	Steel	22.5	25	38	47
Pushout (N)	Aluminium	805	1280	1700	2450
	Steel	1505	1780	2200	3500
Torque-out (Nm)	Aluminium	5.4	11.5	21	36.5
	Steel	6.5	11.5	21	36.5

These tests have been conducted in laboratory conditions, these figures should therefore be used for guidance only.

All data is correct to the best of our knowledge, however TR cannot be held responsible for any errors or omissions.

HFH - Recommended for use in steel or aluminium sheets: HRB 85 or less.
HFHS - Recommended for use in steel or aluminium sheets: HRB 70 or less.