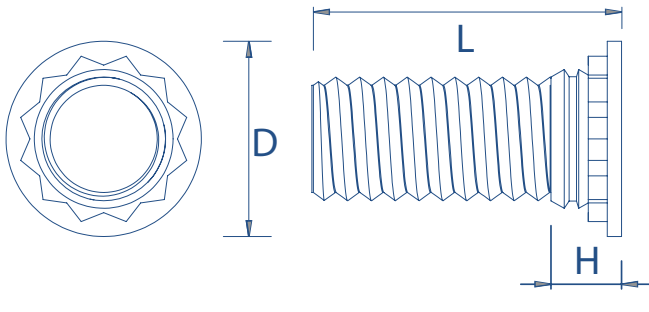


TR Hank® Self-Clinch Flush Head Studs



Plated Steel : TR-FH | Stainless Steel : TR-FHS | 400 Series Stainless Steel : TR-FH4 |
*Aluminium Alloy : TR-FHA



Metric Dimensions

Thread size	M2	M2.5	M3	M3.5	M4	M5	M6	M8
D ±0.4	3.5	4.1	4.6	5.3	5.9	6.5	8.2	9.6
H max	1.95	1.95	2.1	2.2	2.4	2.7	3.0	3.7
Min sheet thickness	1	1	1	1	1	1	1.6	2.4
Hole +0.08 -0.0	2	2.5	3.0	3.5	4.0	5.0	6.0	8.0
Min distance to edge of sheet	5.2	5.4	5.6	6.4	7.2	7.2	7.9	9.6

Preferred Range

Thread size x Pitch	M2 x 0.4	M2.5 x 0.45	M3 x 0.5	M3.5 x 0.6	M4 x 0.7	M5 x 0.8	M6 x 1.0	M8 x 1.25
5			•					
6	•	•	•		•			
8	•	•	•	•	•	•	•	
10	•	•	•	•	•	•	•	•
12	•	•	•	•	•	•	•	•
15	•	•	•	•	•	•	•	•
16	•		•	•	•	•	•	•
18	•	•	•		•	•	•	•
20	•	•	•		•	•	•	•
22			•		•	•	•	•
25			•		•	•	•	•
28					•	•	•	•
30			•		•	•	•	•
35			•		•	•	•	•
38					•	•	•	•
40					•	•	•	•
45					•		•	•
50					•	•	•	•

TR Hank® Self-Clinch Flush Head Studs



Metric Performance Data: TR-FH4

Thread Metric	M3	M4	M5	M6
Test sheet data (mm)	1.5 ST/ST	1.5 ST/ST	1.5 ST/ST	1.5 ST/ST
Installation (kN)	41	51	54	71
Pushout (N)	2230	3300	3600	4210
Torque-out (Nm)	1.8	6.6	10.8	15.9
Pull through (N)	3300	8010	10020	14950

Metric Performance Data: TR-FHS

Thread Metric	M2.5	M3	M4	M5	M6	M8
Sheet thickness (mm)	1.5	1.5	1.5	1.5	2.5	2.5
Installation (kN)	13.5	14.7	26	32	44	49.9
Torsional resistance (Nm)	0.8	1.4	2.9	6.4	10	17
Pushout (N)	740	820	1790	2000	2500	2800
Pull through (N)	1800	2450	4800	6000	10600	13600

Metric Performance Data: TR-FH

Thread Metric	M2	M2.5	M3	M3.5	M4	M5	M6	M8
Sheet thickness (mm)	1.5	1.5	1.5	1.5	1.5	1.5	2.5	2.5
Installation (kN)	9.0	11	14.7	22.3	28	33.5	45	45
Torsional resistance (Nm)	0.45	1	1.7	2.8	4.3	6.8	12	19.5
Pushout (N)	700	740	820	1335	1800	2100	2600	2900
Pull through (N)	1700	2800	3900	3780	5700	6300	11400	15500

*Aluminium Alloy available on request

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.

FH4 - Recommended for use in stainless steel sheets: HRB 92 or less.
 FHS - Recommended for use in steel or aluminium sheets: HRB 70 or less.
 FH - Recommended for use in steel or aluminium sheets: HRB 80 or less.