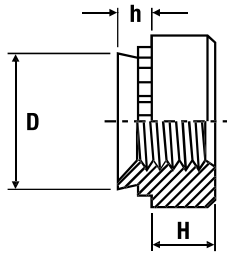
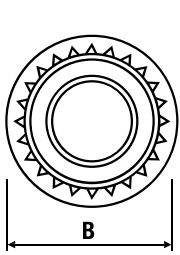


# Nut TR-S/TR-CLS/TR-CLA/TR-SP4/TR-SP2



## Metric Dimensions (TR-S/TR-CLS/TR-SP4/TR-SP2)

Zinc Plated Steel: TR-S | Stainless Steel: TR-CLS | Aluminium: TR-CLA  
400 Series Stainless Steel: TR-SP4 | A286 Stainless Steel: TR-SP2

Thread	M2, M2.5, M3			M3alt			M3.5			M4			
	Shank code	0	1	2	0	1	2	0	1	2	0	1	2
D max.	4.20			4.73			4.73			5.38			
B ±0.2	6.35			7.1			7.1			7.95			
H ±0.25	1.5			1.5			1.5			2.0			
h max.	0.77	0.97	1.38	0.77	0.97	1.38	0.77	0.97	1.38	0.77	0.97	1.38	2.21
Min. sheet thickness	0.8	1.0	1.4	0.8	1.0	1.4	0.8	1.0	1.4	0.8	1.0	1.4	2.3
Recommended hole size +0.08	4.22			4.75			4.75			5.41			
Min. distance to edge of sheet	4.8			5.6			5.6			6.9			

Thread	M5				M6					M8			M10		M12
	Shank code	0	1	2	3	00	0	1	2	3	1	2	3	1	2
D max.	6.33				8.73					10.47			13.97		16.95
B ±0.2	8.75				11.10					12.65			17.35		20.55
H ±0.25	2.0				4.08					5.47			7.48		8.5
h max.	0.77	0.97	1.38	2.21	0.89	1.15	1.38	2.21	3.05	1.38	2.21	3.05	2.21	3.05	3.05
Min. sheet thickness	0.8	1.0	1.4	2.3	0.92	1.2	1.4	2.3	3.2	1.4	2.3	3.2	2.3	3.2	3.2
Recommended hole size +0.08	6.35				8.75					10.5			14.0		17.0
Min. distance to edge of sheet	7.1				8.6					9.7			13.5		16.0

## Metric Dimensions (TR-CLA)

Thread	M2		M3		M3.5		M4		M5		M6	
	Shank code	1	2	1	2	1	2	1	2	1	2	1
D max.	4.22		4.73		5.38		5.97		7.47		8.72	
B ±0.2	6.3		6.3		7.1		7.9		9.5		11.05	
H ±0.25	1.5		2.0		2.0		3.0		3.8		4.08	
h max.	0.98	1.38	0.98	1.38	0.98	1.38	0.98	1.38	0.98	1.38	1.38	2.21
Min. sheet thickness	1.0	1.4	1.0	1.4	1.0	1.4	1.0	1.4	1.0	1.4	1.4	2.3
Recommended hole size +0.08	4.25		4.75		5.4		6.0		7.5		8.75	
Min. distance to edge of sheet	4.8		5.6		6.9		7.1		7.9		8.6	



# Nut TR-S/TR-CLS/TR-CLA/TR-SP4/TR-SP2

## Metric Performance Data (TR-S/TR-CLS)

Thread	M2, M2.5			M3				M3alt			M3.5			M4			
Test material	Steel																
Shank code	0	1	2	0	1	2	3	0	1	2	0	1	2	0	1	2	3
Installation (kN)	11.2 - 15.6			11.2 - 15.6				13.4 - 26.7			13.4 - 26.7			18 - 27			
Torque-out (Nm)	1.5	1.75	2.0	1.5	1.75	2.0	2.1	1.8	2.4	2.4	1.8	2.4	2.4	3.0	4.0	5.0	4.2
Push-out (N)	480	560	1020	480	560	1020	1110	485	575	1200	485	575	1200	495	650	1255	1300

Thread	M5				M6			M8			M10		M12	
Test material	Steel													
Shank code	0	1	2	3	1	2	3	1	2	3	1	2	1	
Installation (kN)	18 - 38				27 - 36			27 - 36			32 - 50		33 - 49	
Torque-out (Nm)	3.7	4.5	6.9	6.0	17.1	17.1	16.4	18.8	20.4	18.1	36.1	36.1	73.9	
Push-out (N)	535	801	1115	1500	1765	1765	1755	1870	1870	1860	2021	2021	3065	

TR-S - Recommended for use in sheet hardness: HRB 80 or less  
 TR-CLS - Recommended for use in sheet hardness: HRB 70 or less

TR-CLA - Recommended for use in sheet hardness: HRB 50 or less  
 TR-SP4/SP2 - Recommended for use in sheet hardness: HRB 90 or less

