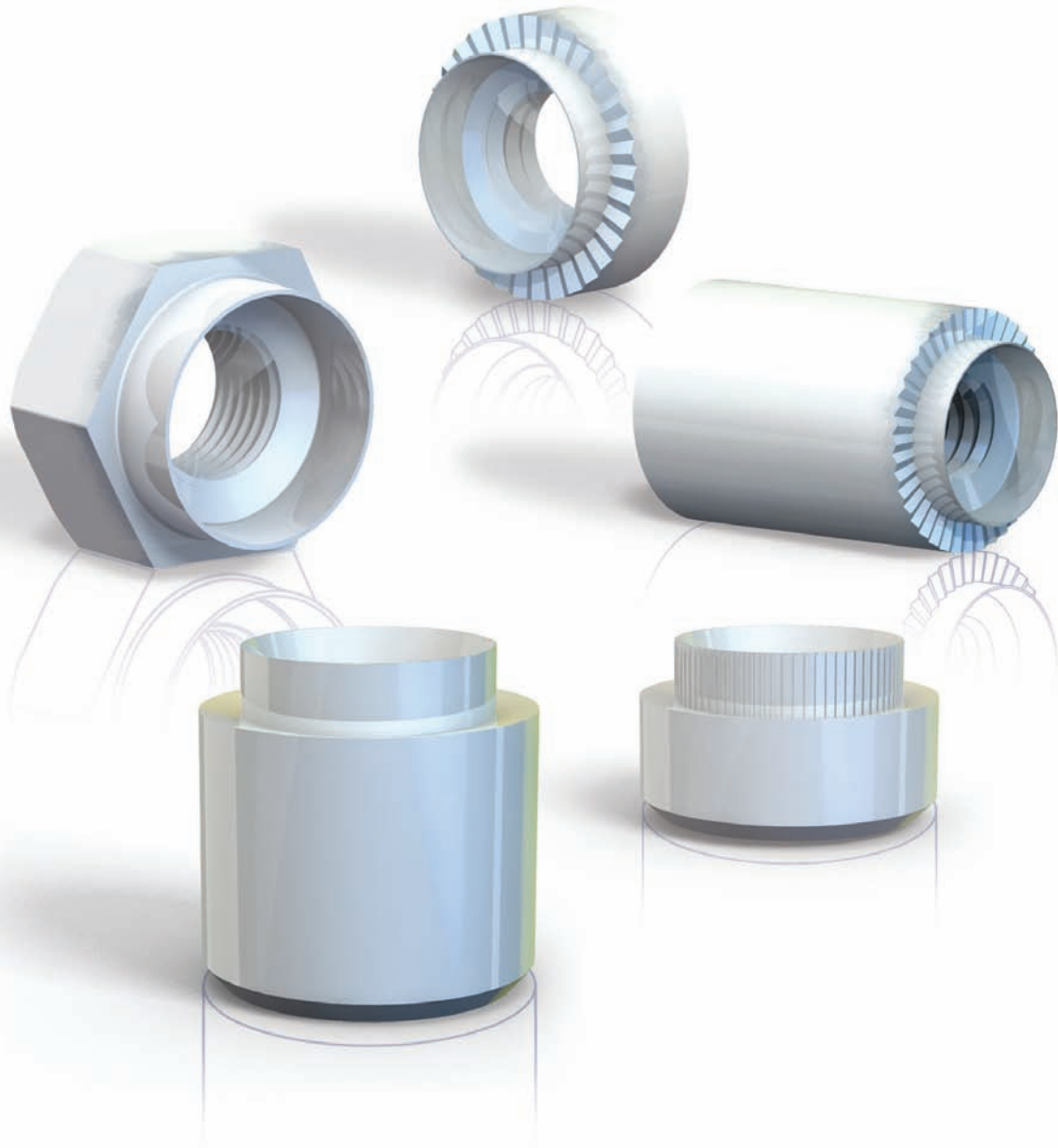


TR FASTENINGS

TR Hank® Rivet Bushes



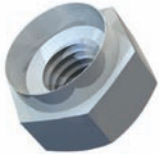
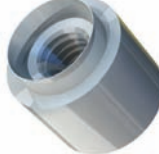
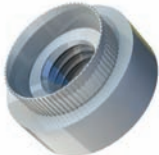

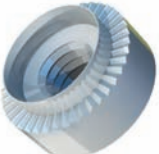

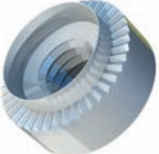
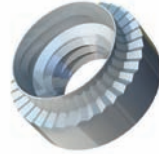
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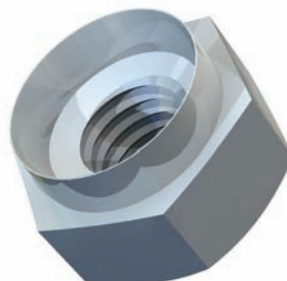
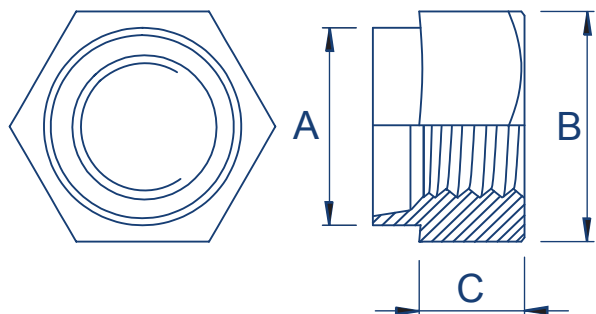
Standard Wire Gauge Sizes

SWG	To cover sheet thickness (mm)
24	0.4 - 0.6
22	0.7 - 0.8
20	0.9 - 1.0
18	1.1 - 1.4
16	1.5 - 1.7
14	1.8 - 2.2
12	2.3 - 2.8
10	2.9 - 3.4
8	3.5 - 4.2
6	4.3 - 5.1
4	6

TR Hank® Rivet Bushes Hexagonal (HX)



Steel/Zinc & Clear (TC1) | Steel/Self Finish (SF) | Stainless Steel/Self Finish (SF)



Metric Dimensions

Thread form		M2.5	M3	M3.5	M4	M5	M6	M8	M10	M12
Diameter of spigot +0.00 -0.13mm	A	5.54	5.54	6.73	6.73	7.92	9.52	12.70	15.87	19.05
Width across flats ±0.15mm	B	7.92	7.92	7.92	7.92	9.52	11.10	14.27	19.05	22.22
Depth of body ±0.13mm	C	3.17	3.17	3.17	3.17	3.81	5.08	6.35	7.62	10.16
Recommended hole size +0.05 -0.00mm		5.54	5.54	6.73	6.73	7.92	9.52	12.70	15.87	19.05

Imperial/Unified Dimensions

Thread form	BSW/F	-	1/8"	-	5/32"	3/16"	1/4"	5/16"	3/8"	1/2"
	BA	8	6	4	3	2	0	-	-	-
	UNC	2	4	6	8	10	1/4"	5/16"	3/8"	1/2"
	UNF	2	4	6	8	10	1/4"	5/16"	3/8"	1/2"
Diameter of spigot +0.00 -0.05"	A	.218	.218	.265	.265	.312	.375	.500	.625	.750
Width across flats +0.010"	B	.312	.312	.312	.312	.375	.437	.562	.750	.875
Depth of body ±0.005"	C	.125	.125	.125	.125	.150	.200	.250	.300	.400
Recommended hole size +0.002 -0.000"		.218	.218	.265	.265	.312	.375	.500	.625	.750

All Imperial/Unified sizes are non-preferred - please enquire for availability

Other materials and finishes are available upon request

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

How to specify part numbers for Hank® Hexagonal Rivet Bushes:

Thread (M2.5) Style (HX) Material (Steel) to suit (4swg) Finish (Zinc & Clear)

M2.5 Hexagon Rivet Bush in steel to suit 4swg Zinc & Clear = M2.5/HXST04/TC1

Thread (2UNC) Style (HX) Material (Steel) to suit (4swg) Finish (Zinc & Clear)

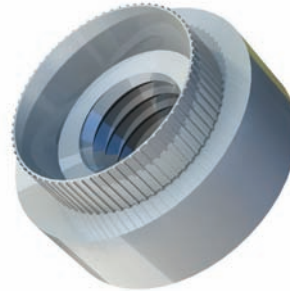
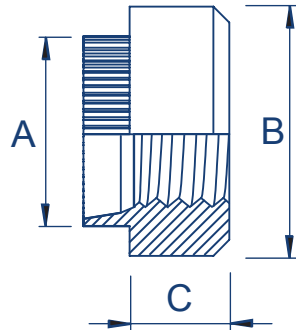
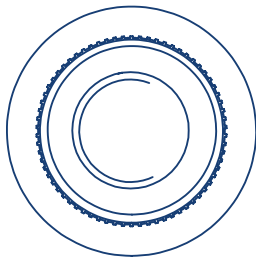
2UNC Hexagon Rivet Bush in steel to suit 4swg Zinc & Clear = 2UNC/HXST04/TC1



TR Hank® Rivet Bushes Serrated Spigot (RH)



Steel/Zinc & Clear (TC1) | Steel/Self Finish (SF) | Stainless Steel/Self Finish (SF)



Metric Dimensions

Thread form		M2.5	M3	M3.5	M4	M5	M6	M8	M10	M12
Diameter of spigot +0.00 -0.13mm	A	5.54	5.54	6.73	6.73	7.92	9.52	12.70	15.87	19.05
Diameter across body ±0.15mm	B	7.92	7.92	9.52	9.52	11.10	12.70	15.87	19.05	25.40
Depth of body ±0.13mm	C	3.17	3.17	3.17	3.17	3.81	5.08	6.35	7.62	10.16
Recommended hole size +0.05 -0.00mm		5.54	5.54	6.73	6.73	7.92	9.52	12.70	15.87	19.05

Imperial/Unified Dimensions

Thread form	BSW/F	-	1/8"	-	5/32"	3/16"	1/4"	5/16"	3/8"	1/2"
	BA	8	6	4	3	2	0	-	-	-
	UNC	2	4	6	8	10	1/4"	5/16"	3/8"	1/2"
	UNF	2	4	6	8	10	1/4"	5/16"	3/8"	1/2"
Diameter of spigot +0.00 -0.05"	A	.218	.218	.265	.265	.312	.375	.500	.625	.750
Diameter across body +0.010"	B	.312	.312	.375	.375	.437	.500	.625	.750	1.000
Depth of body ±0.005"	C	.125	.125	.125	.125	.150	.200	.250	.300	.400
Recommended hole size +0.002 -0.000"		.218	.218	.265	.265	.312	.375	.500	.625	.750

All Imperial/Unified sizes are non-preferred - please enquire for availability

Other materials and finishes are available upon request

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

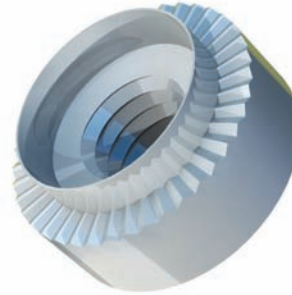
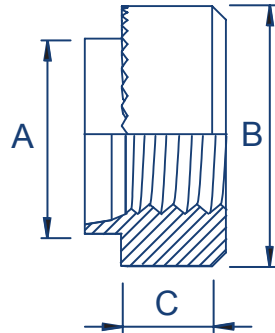
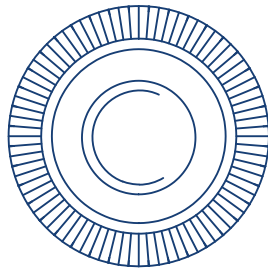
How to specify part numbers for Hank® Serrated Spigot Rivet Bushes:
 Thread (M2.5) Style (RH) Material (Steel) to suit (4swg) Finish (Zinc & Clear)
 M2.5 Serrated Spigot Rivet Bush in steel to suit 4swg Zinc & Clear = M2.5/RHST04/TC1
 Thread (2UNC) Style (RH) Material (Steel) to suit (4swg) Finish (Zinc & Clear)
 2UNC Serrated Spigot Rivet Bush in steel to suit 4swg Zinc & Clear = 2UNC/RHST04/TC1



TR Hank® Rivet Bushes Serrated Face (RH S/FACE)



Steel/Zinc & Clear (TC1) | Steel/Self Finish (SF) | Stainless Steel/Self Finish (SF)



Metric Dimensions

Thread form		M2.5	M3	M3.5	M4	M5	M6	M8	M10	M12
Diameter of spigot +0.00 -0.13mm	A	5.54	5.54	6.73	6.73	7.92	9.52	12.70	15.87	19.05
Diameter across body ±0.15mm	B	7.92	7.92	9.52	9.52	11.10	12.70	15.87	19.05	25.40
Depth of body ±0.13mm	C	3.17	3.17	3.17	3.17	3.81	5.08	6.35	7.62	10.16
Recommended hole size +0.05 -0.00mm		5.54	5.54	6.73	6.73	7.92	9.52	12.70	15.87	19.05

Imperial/Unified Dimensions

Thread form	BSW/F	-	1/8"	-	5/32"	3/16"	1/4"	5/16"	3/8"	1/2"
	BA	8	6	4	3	2	0	-	-	-
	UNC	2	4	6	8	10	1/4"	5/16"	3/8"	1/2"
	UNF	2	4	6	8	10	1/4"	5/16"	3/8"	1/2"
Diameter of spigot +0.00 -0.05"	A	.218	.218	.265	.265	.312	.375	.500	.625	.750
Diameter across body +0.010"	B	.312	.312	.375	.375	.437	.500	.625	.750	1.000
Depth of body ±0.005"	C	.125	.125	.125	.125	.150	.200	.250	.300	.400
Recommended hole size +0.002 -0.000"		.218	.218	.265	.265	.312	.375	.500	.625	.750

All Imperial/Unified sizes are non-preferred - please enquire for availability

Other materials and finishes are available upon request

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

How to specify part numbers for Hank® Serrated Face Rivet Bushes:

Thread (M2.5) Style (RH) Material (Steel) to suit (4swg) Finish (Zinc & Clear) Type (Serrated Face)

M2.5 Serrated Face Rivet Bush in steel to suit 4swg Zinc & Clear = M2.5/RHST04/TC1/S/FACE

Thread (2UNC) Style (RH) Material (Steel) to suit (4swg) Finish (Self Finish) Type (Serrated Face)

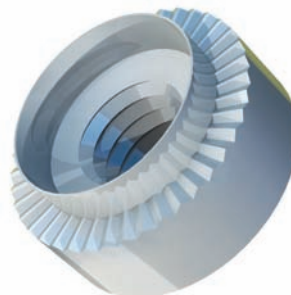
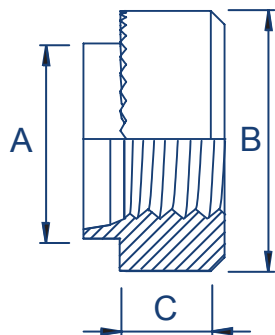
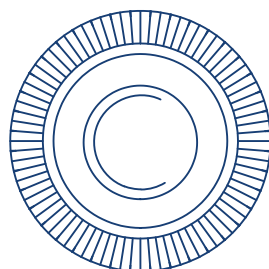
2UNC Serrated Face Rivet Bush in steel to suit 4swg Self Finish = 2UNC/RHST04/SF/S/FACE



TR Hank® Rivet Bushes Mini Sert (RM)



Steel/Zinc & Clear (TC1) | Steel/Self Finish (SF) | Stainless Steel/Self Finish (SF)



Metric Dimensions

Thread form		M2	M2.5	M3	M3.5	M4	M5	M6	M8	M10	M12
Diameter of spigot +0.00 -0.13mm	A	3.50	4.19	4.19	5.41	5.41	6.40	7.70	9.70	12.70	15.87
Diameter across body ±0.15mm	B	5.00	5.50	5.50	7.00	7.00	8.50	10.00	12.00	16.00	19.00
Depth of body ±0.13mm	C	2.30	2.80	2.80	3.20	3.20	3.80	5.10	6.50	7.60	10.20
Recommended hole size +0.05 -0.00mm		3.50	4.19	4.19	5.41	5.41	6.40	7.70	9.70	12.70	15.87

Imperial/Unified Dimensions

Thread form	BSW/F	-	-	1/8"	-	5-32"	3/16"	1/4"	5/16"	3/8"	1/2"
	BA	8	-	6	4	3	2	0	-	-	-
	UNC	2	-	4	6	8	10	1/4"	5/16"	3/8"	1/2"
	UNF	2	-	4	6	8	10	1/4"	5/16"	3/8"	1/2"
Diameter of spigot +0.00 -0.05"	A	.138	.165	.165	.213	.213	.252	.303	.382	.500	.625
Diameter across body +0.010"	B	.197	.217	.217	.276	.276	.335	.394	.472	.625	.750
Depth of body ±0.005"	C	.091	.110	.110	.126	.126	.150	.201	.265	.300	.400
Recommended hole size +0.002 -0.000"		.138	.165	.165	.213	.213	.252	.303	.382	.500	.625

All Imperial/Unified sizes are non-preferred - please enquire for availability

Other materials and finishes are available upon request

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

Please note: when ordering Mini Serts please ensure that the sheet thickness the part is being applied to is expressed in mm and NOT swg

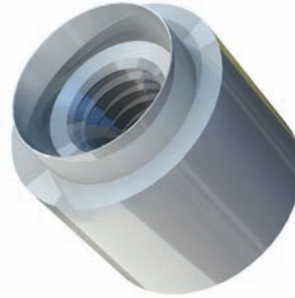
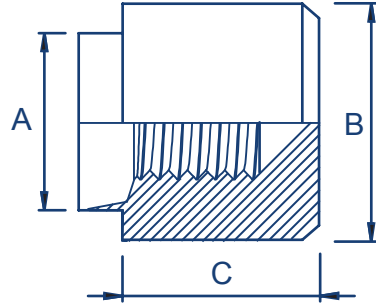
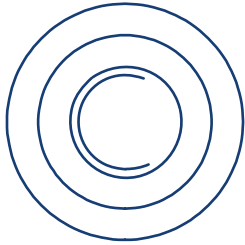
How to specify part numbers for Hank® Mini Sert Rivet Bushes:
 Thread (M2.5) Style (RM) Material (Steel) to suit (3.0mm) Finish (Zinc & Clear)
 M2.5 Mini Sert Rivet Bush in steel to suit 3.0mm Zinc & Clear = M2.5/RMST30/TC1
 Thread (2UNC) Style (RM) Material (Steel) to suit (3.0mm) Finish (Zinc & Clear)
 2UNC Mini Sert Rivet Bush in steel to suit 3.0mm Zinc & Clear = 2UNC/RMST30/TC1



TR Hank® Rivet Bushes Tank Bush (TA)



Steel/Zinc & Clear (TC1) | Steel/Self Finish (SF) | Stainless Steel/Self Finish (SF)



Metric Dimensions

Thread form		M3	M4	M5	M6	M8	M10	M12
Diameter of spigot +0.00 -0.13mm	A	5.54	6.73	7.92	9.52	12.70	15.87	19.05
Diameter across body ±0.15mm	B	7.92	9.52	11.10	12.70	15.87	19.05	25.40
Depth of body ±0.13mm	C	8.61	8.97	9.32	10.57	11.89	16.50	19.05
Recommended hole size +0.05 -0.00mm		5.54	6.73	7.92	9.52	12.70	15.87	19.05

Imperial/Unified Dimensions

Thread form	BSW/F	1/8"	5/32	3/16"	1/4"	5/16"	3/8"	1/2"
	BA	6	4	2	0	-	-	-
	UNC	4	6 + 8	10	1/4"	5/16"	3/8"	1/2"
	UNF	4	6 + 8	10	1/4"	5/16"	3/8"	1/2"
Diameter of spigot +0.00 -0.05"	A	.218	.265	.312	.375	.500	.625	.750
Diameter across body +0.010"	B	.312	.375	.437	.500	.625	.750	1.000
Depth of body ±0.005"	C	.339	.353	.367	.416	.468	.650	.750
Recommended hole size +0.002 -0.000"		.218	.265	.312	.375	.500	.625	.750

All Imperial/Unified sizes are non-preferred - please enquire for availability
Other materials and finishes are available upon request
All data is correct to the best of our knowledge, however TR cannot be held responsible for any errors or omissions.

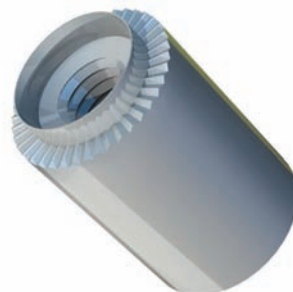
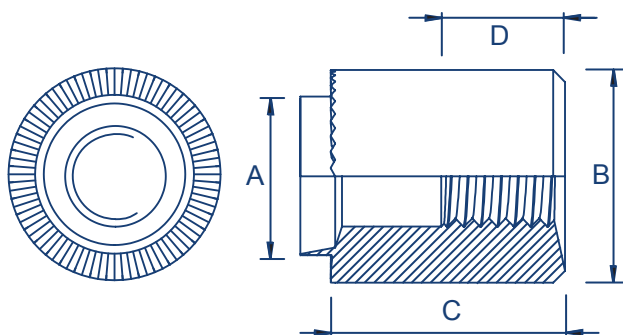
How to specify part numbers for Hank® Tank Bushes:
Thread (M2.5) Style (TA) Material (Steel) to suit (4swg) Finish (Zinc & Clear)
M2.5 Tank Rivet Bush in steel to suit 4swg Zinc & Clear = M2.5/TAST04/TC1
Thread (2UNC) Style (TA) Material (Steel) to suit (4swg) Finish (Zinc & Clear)
2UNC Tank Rivet Bush in steel to suit 4swg Zinc & Clear = 2UNC/TAST04/TC1



TR Hank® Rivet Bushes Serrated Face Standoff (RF)



Steel/Zinc & Clear (TC1) | Steel/Self Finish (SF) | Stainless Steel/Self Finish (SF)



Metric Dimensions

Thread form		M2.5	M3	M3.5	M4	M5	M6	M8	M10	M12
Diameter of spigot +0.00 -0.13mm	A	5.54	5.54	6.73	6.73	7.92	9.52	12.70	15.87	19.05
Diameter of body ±0.15mm	B	7.92	7.92	9.52	9.52	11.10	12.70	15.87	19.05	25.40
Recommended hole size +0.05 -0.00mm		5.54	5.54	6.73	6.73	7.92	9.52	12.70	15.87	19.05
Length of body ±0.13mm	C	To customer requirements								
Length of body ±0.13mm	C	8-10mm		11-13mm		14-16mm		14-22mm		
Depth of c/bore	D	3.0mm Nom		6.0mm Nom		9.0mm Nom		12.0mm Nom		

Imperial/Unified Dimensions

Thread form	BSW/F	-	1/8"	-	5/32"	3/16"	1/4"	5/16"	3/82	1/2"
	BA	8	6	4	3	2	0	-	-	-
	UNC	2	4	6	8	10	1/4"	5/16"	3/8"	1/2"
	UNF	2	4	6	8	10	1/4"	5/16"	3/8"	1/2"
Diameter of spigot +0.000 -0.005	A	.218	.218	.265	.265	.312	.375	.500	.625	.750
Diameter of body +0.010	B	.312	.312	.375	.375	.437	.500	.625	.750	1.000
Recommended hole size +0.05 -0.00mm		.218	.218	.265	.265	.312	.375	.500	.625	.750
Length of body ±0.005"	C	To customer requirements								
Length of body ±0.005"	C	8-10mm		11-13mm		14-16mm		14-22mm		
Depth of c/bore	D	3.0mm Nom		6.0mm Nom		9.0mm Nom		12.0mm Nom		

All Imperial/Unified sizes are non-preferred - please enquire for availability
Other materials and finishes are available upon request

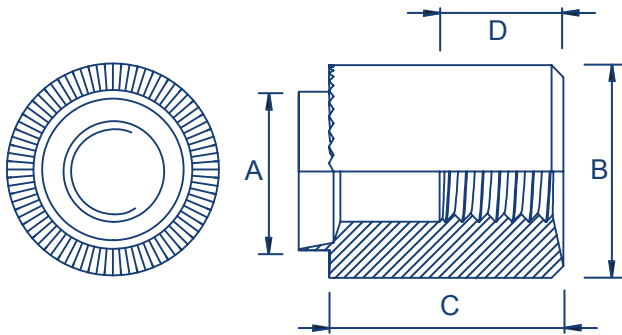
How to specify part numbers for Hank® Serrated Face Rivet Bush Standoffs:
Thread (M2.5) Length (3mm) Style (RF) Material (Steel) to suit (4swg) Finish (Zinc & Clear)
M2.5 x 3mm Serrated Rivet Bush Standoff in steel to suit 4swg Zinc & Clear = M2.5/3/RFST04/TC1
Thread (2UNC) Length (3/16") Style (RF) Material (Steel) to suit (4swg) Finish (Zinc & Clear)
2UNC x 3/16" Serrated Rivet Bush Standoff in steel to suit 4swg Zinc & Clear = 2UNC/0.188/RFST04/TC1



TR Hank® Rivet Bushes Serrated Face Mini Standoff (MF)



Steel/Zinc & Clear (TC1) | Steel/Self Finish (SF) | Stainless Steel/Self Finish (SF)



Metric Dimensions

Thread form		M2.5	M3	M3.5	M4	M5	M6	M8	M10	M12
Diameter of spigot +0.00 -0.13mm	A	4.19	4.19	5.41	5.41	6.40	7.70	9.70	12.70	15.87
Diameter of body ±0.15mm	B	5.50	5.50	7.00	7.00	8.50	10.00	12.00	16.00	19.00
Recommended hole size +0.05 -0.00mm		4.19	4.19	5.41	5.41	6.40	7.70	9.70	12.70	15.87
Length of body ±0.13mm	C	To customer requirements								
Length of body ±0.13mm	C	8-10mm		11-13mm		14-16mm		14-22mm		
Depth of c/bore	D	3.0mm Nom		6.0mm Nom		9.0mm Nom		12.0mm Nom		

Imperial/Unified Dimensions

Thread form	BSW/F	-	1/8"	-	5/32"	3/16"	1/4"	5/16"	3/8"	1/2"
	BA	-	6	4	3	2	0	-	-	-
	UNC	-	4	6	8	10	1/4"	5/16"	3/8"	1/2"
	UNF	-	4	6	8	10	1/4"	5/16"	3/8"	1/2"
Diameter of spigot +0.000 -0.005	A	.165	.165	.213	.213	.252	.303	.382	.500	.625
Diameter of body +0.010	B	.217	.217	.276	.276	.335	.394	.472	.625	.750
Recommended hole size +0.05 -0.00mm		.165	.165	.213	.213	.252	.303	.382	.500	.625
Length of body ±0.005"	C	To customer requirements								
Length of body ±0.005"	C	8-10mm		11-13mm		14-16mm		14-22mm		
Depth of c/bore	D	3.0mm Nom		6.0mm Nom		9.0mm Nom		12.0mm Nom		

All Imperial/Unified sizes are non-preferred - please enquire for availability
Other materials and finishes are available upon request

How to specify part numbers for Hank® Serrated Rivet Bush Mini Standoff:

Thread (M2.5) Length (3mm) Style (MF) Material (Steel) to suit (4swg) Finish (Zinc & Clear)

M2.5 x 3mm Serrated Rivet Bush Mini Standoff in steel to suit 4swg Zinc & Clear = M2.5/3/MFST04/TC1

Thread (2UNC) Length (3/16") Style (MF) Material (Steel) to suit (4swg) Finish (Zinc & Clear)

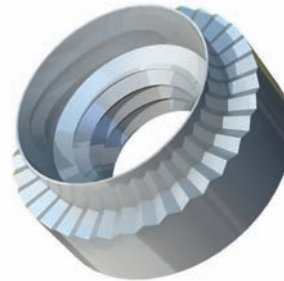
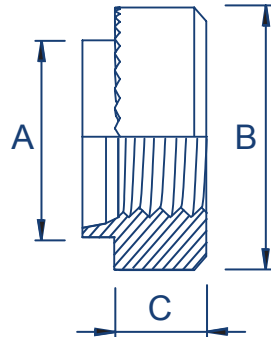
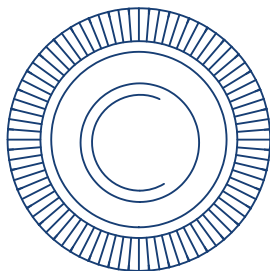
2UNC x 3/16" Serrated Rivet Bush Mini Standoff in steel to suit 4swg Zinc & Clear = 2UNC/0.188/MFST04/TC1



TR Hank® Rivet Bushes Swage Nut (XX)



Steel/Zinc & Clear (TC1) | Steel/Self Finish (SF) | Stainless Steel/Self Finish (SF)



Metric Dimensions

Thread		M3	M4	M5	M6	M8
Diameter of spigot +0.00 -0.13mm	A	4.24	5.38	6.35	8.70	10.44
Body diameter ±0.15mm	B	6.35	7.92	8.70	11.20	12.65
Depth of body ±0.13mm	C	1.5	2.0	2.0	4.0	5.5
Recommended hole size +0.05 -0.00mm		4.25	5.40	6.40	8.75	10.50

Imperial/Unified Dimensions

Thread		4 UNC	6 UNC	8 UNC	10 UNC	1/4" UNC	5/16" UNC
Diameter of spigot +0.000" -0.005"mm	A	0.165	0.187	0.212	0.250	0.343	0.411
Body diameter ±0.010"	B	0.250	0.280	0.312	0.343	0.440	0.5
Depth of body ±0.005"	C	0.070	0.070	0.090	0.090	0.170	0.23
Recommended hole size +0.002" -0.000"		0.166	0.188	0.213	0.251	0.344	0.413

All Imperial/Unified sizes are non-preferred - please enquire for availability

Other materials and finishes are available upon request

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

How to specify part numbers for Hank® Swage Nuts:
 Thread (M3) Style (XX) Material (Steel) to suit (16swg) Finish (Zinc & Clear)
 M3 Swage nut in steel to suit 16swg Zinc & Clear = M3/XXST16/TC1
 Thread (4UNC) Style (XX) Material (Steel) to suit (16swg) Finish (Zinc & Clear)
 4UNC Swage nut in steel to suit 16swg Zinc & Clear = 4UNC/XXST16/TC1



TR PRODUCT RANGE Overview



Standard Fasteners

We stock and supply a vast range of standard fasteners to DIN, ISO & ANSI standards including:

Machine screws, self-tapping screws, threadforming screws, socket products, nuts and washers.



TR Branded Products

Our own range of fastener solutions for specific industries and applications, including:

Fasteners for sheet metal, fasteners for plastic, security fasteners, thread-locking nuts and micro-diameter fasteners from M0.6



Special Manufacture

Our factories in Europe and Asia produce bar turned and cold formed fasteners from 0.6mm diameter up to 12mm diameter specifically to customer drawing. In addition, our global network of approved sub-contractors allows us to offer practically any size of turned, cold-formed, pressed or moulded components. We can supply components in steel, stainless steel, aluminium, brass and many exotic materials such as titanium.



Other Components

For customers we supply via a Vendor Managed Inventory system such as Direct Line Feed we can include non-fastener products as part of the supply agreement. We can supply practically any high-volume, low-cost component including: cables, clips, plastic parts, connectors, switches, springs, batteries, hinges, levers, handles, brackets, hooks, pins, keys, spacers and stays plus much more.

