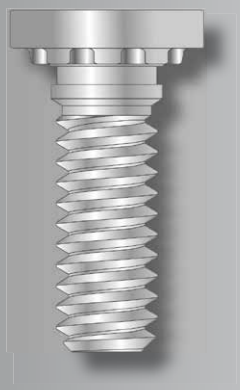
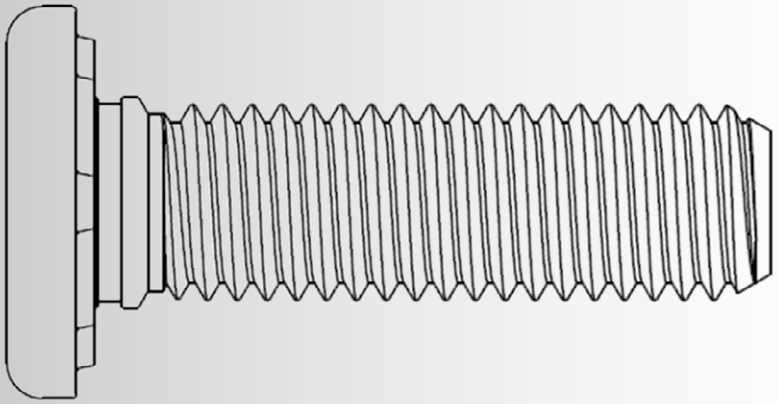
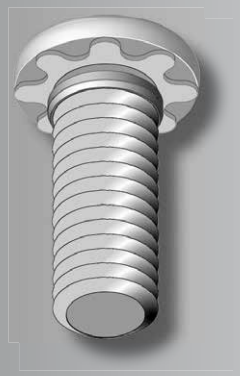
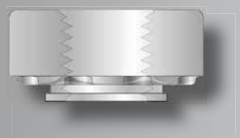
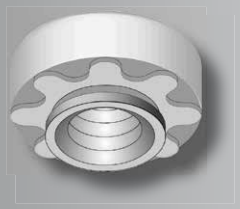
STANLEY®
Engineered Fastening











Octolok® Fasteners

High Performance staking Studs and Nuts

(Metric product range)

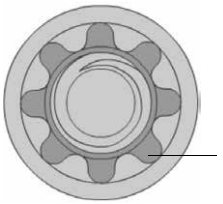
iForm®

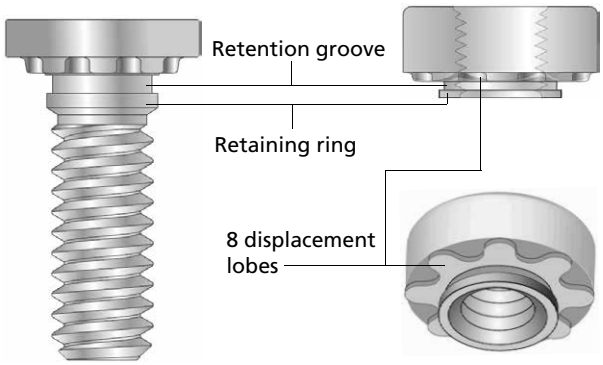
Octolok® High Performance staking Studs and Nuts

Octolok® studs and nuts are Grade strength fasteners designed to provide external or internal threads in the most demanding applications including light gauge sheet materials.

Octolok® fasteners improve quality & reliability, simplify production processes and reduce the cost of assembly. Octolok® fasteners can replace weld-studs and eliminate painting/plating costs.

Octolok® fasteners are placed into drilled or pre-punched holes of a specific diameter recommended for each size fastener. A press applied force drives the 8 lobe forming feature into the application material forcing the material to flow into the fastener retention groove delivering excellent torque-to-turn performance whilst the retaining ring provides superior push-out values. Octolok® fasteners can be placed manually one at a time or the assembly process can be automated.





Octolok® 8 lobe symmetrical configuration

- Superior torque-to-turn & vibration resistance
- Increased push-out value performance
- Utilize existing 6 lobe clinch stud press/tooling

Installation can be automated

- High speed installation reduces assembly cost

Heat treated to SAE standard/ISO class

- High strength can allow reduction in fastener diameter for lower cost assembly

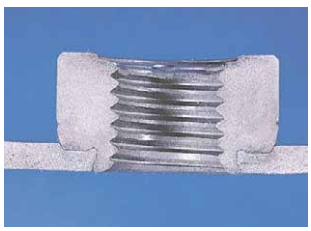
Available in imperial and metric sizes

- Suitable for all markets - manufactured to customer requirements

Available in assorted coatings/finishes

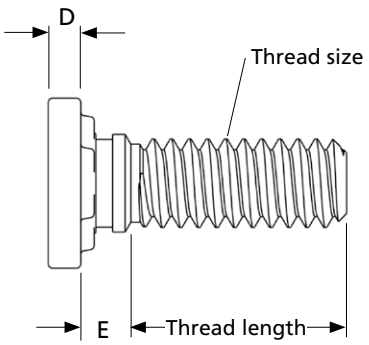
- Ready to use, no re-plating or painting required

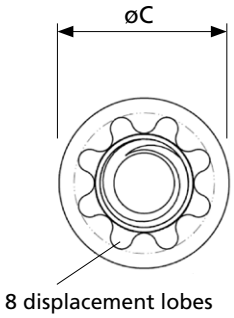
Assembly Applications



Cross section of material flow after completed installation

Octolok® Studs Dimensional & Performance Data





Material: Carbon steel ISO 898-1
Surface: as required

Underhead shape and dimensions controlled by manufacturer to meet performance requirements.

Performance data shown are typical results obtained under laboratory conditions. Tests were conducted after staking studs into low carbon steel with a maximum hardness of Rockwell B70. It is recommended that each application be tested individually for precise values. For performance in materials other than steel, individual testing is a requirement. This data is not to be considered a specification.

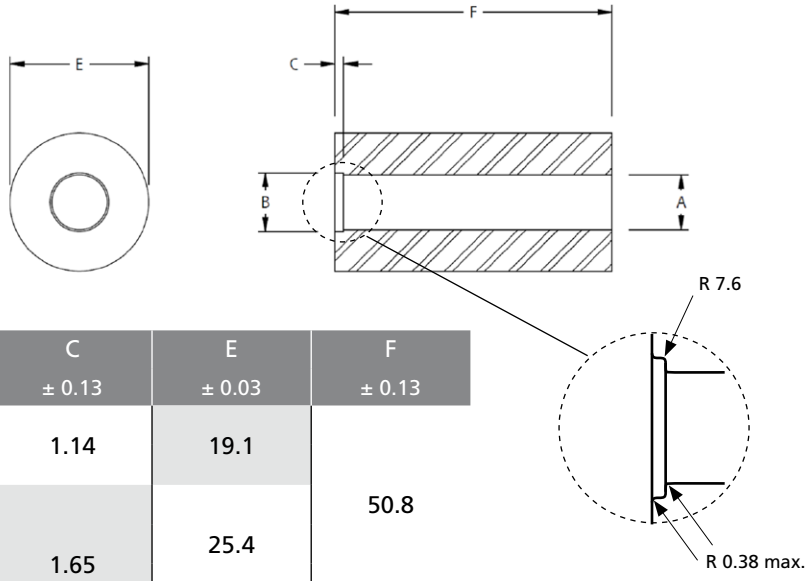
Contact a STANLEY Engineered Fastening application specialist for design assistance.

Thread Size*	øC ± 0.25	D ± 0.13	E ref.	Material Thickness min.	Recommended Hole Size min.	Recommended Hole Size max.	Approx. Staking Force kN	Approx. Pushout kN	Approx. Unsupported Torsional Resistance Nm
M4 x 0.7	7.75	1.40	1.5	1.0	4.68	4.78	13.3	1.07	4.80
			2.3	1.5			16.9	2.33	5.01
M5 x 0.8	8.75	1.75	1.5	1.0	5.68	5.78	13.3	1.12	4.00
			2.3	1.5			16.5	2.28	10.73
M6 x 1.0	11.00	2.10	1.5	1.0	6.68	6.78	20.2	1.46	7.69
			2.3	1.5			25.8	2.63	15.22
			3.4	2.3			26.7	4.92	15.22
M8 x 1.25	15.25	2.80	2.3	1.5	8.68	8.78	35.6	2.47	26.78
			3.4	2.3			42.3	6.27	40.06
			4.6	3.0			45.4	9.33	40.06
M10 x 1.5	19.75	3.50	3.4	2.3	10.68	10.78	66.7	6.09	60.49
			4.6	3.0			73.4	9.08	84.80
M12 x 1.75	20.00	3.80	3.4	2.3	12.68	12.78	73.4	7.47	81.14
			4.6	3.0			77.8	14.32	124.25

all dimensions in mm *Other sizes not shown may be available on request.

Octolok® Clinch Stud Staking Die - Dimensional Data

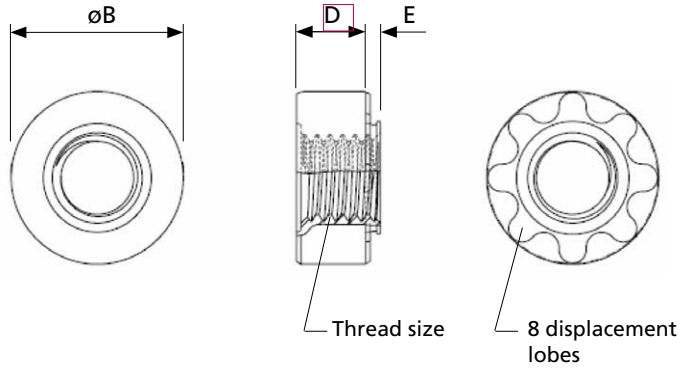
Material: D2 or equivalent
Heat treat: Rc 56-60



Thread Size	A ± 0.03	B ± 0.03	C ± 0.13	E ± 0.03	F ± 0.13
M4	4.11	4.78	1.14	19.1	50.8
M5	5.11	5.78			
M6	6.11	6.78	1.65	25.4	
M8	8.11	8.78			
M10	10.11	10.78			
M12	12.11	12.78		31.8	76.2

all dimensions in mm

Octolok® Nuts Dimensional & Performance Data



Material: Carbon steel ASTM A 583 M
Surface: as required

Underhead shape and dimensions controlled by manufacturer to meet performance requirements.

Performance data shown are typical results obtained under laboratory conditions. Tests were conducted after staking nuts into low carbon steel with a maximum hardness of Rockwell B70. It is recommended that each application be tested individually for precise values. For performance in materials other than steel, individual testing is a requirement. This data is not to be considered a specification.

Contact a STANLEY Engineered Fastening application specialist for design assistance.

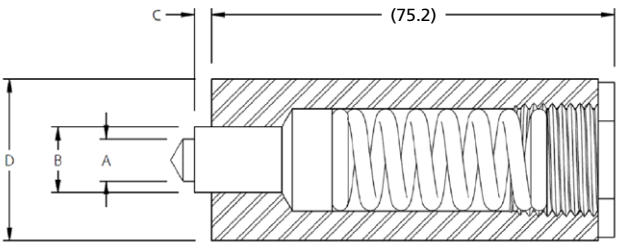
Thread Size*	øB ± 0.13	D ± 0.19	E max.	Material Thickness min.	Recommended Hole Size min.	Recommended Hole Size max.	Approx. Staking Force kN	Approx. Pushout kN	Approx. Unsupported Torsional Resistance Nm
M4 x 0.7	10.16	3.19	1.5	1.5	7.20	7.30	13.3	0.92	6.31
M5 x 0.8	11.30	4.19	1.5	1.5	7.68	7.78	26.7	1.07	12.35
			1.9	1.9			30.2	1.73	21.95
M6 x 1.0	14.10	4.71	1.5	1.5	8.68	8.78	38.7	1.43	19.40
			1.9	1.9			40.0	2.54	21.65
			2.3	2.3			42.3	3.30	33.40
M8 x 1.25	16.64	5.93	1.5	1.5	10.68	10.78	44.5	1.57	21.80
			1.9	1.9			48.9	2.46	43.10
			2.3	2.3			57.8	4.70	55.55
M10 x 1.5	18.42	7.20	2.3	2.3	13.16	13.26	53.4	4.27	58.81
			3.4	3.4			57.8	4.38	67.49
M12 x 1.75	23.88	9.61	2.3	2.3	15.68	15.78	108.3	4.88	77.61
			3.4	3.4			109.0	7.86	127.69

all dimensions in mm *Other sizes not shown may be available on request.

Octolok® Clinch Nut Staking Die - Dimensional Data

Material except for spring: D2 or equivalent
Heat treat: Rc 56-60

Thread Size	A ref.	B ref.	C ± 0.13	D ± 0.03
M4	3.18	6.83	1.52	19.05
M5	4.06	7.37		
M6	4.85	8.33	2.29	
M8	6.58	10.34	3.40	31.75
M10	8.31	12.88		
M12	10.03	15.34		



all dimensions in mm

STANLEY Engineered Fastening

Avdel UK Limited
Stanley House, Works Road
Letchworth Garden City, Hertfordshire SG6 1JY
Tel. +44 (0)1582 900-000 · Fax -001
enquiries2@sbdinc.com

www.StanleyEngineeredFastening.com