

UNI-ALLOY™

Thread forming screw for aluminium and zinc alloy applications

Recommended for use in aluminium and zinc alloy materials, the symmetrical thread profile of UNI-ALLOY™ allows efficient material deformation without the risk of thread stripping; and optimizes assembly efficiency and reusability.

Features & Benefits

- Eliminates boss cracking, chips and debris in miniature pilot hole applications
- Miniaturization compatibility
- Higher failure torque level and lower installation torque with higher safety margin
- Optimized assembly efficiency and reusability
- Superior thread engagement



Material : Carbon steel and stainless steel.

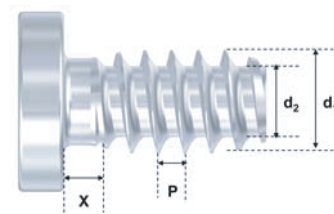
Head Type : Available in any head style.

Point Type : Available in any point type.

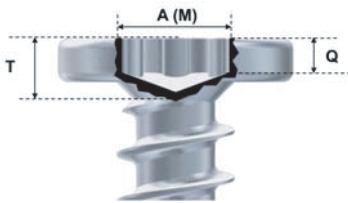
Recess : TORX®, TORX PLUS®, MICROSTIX® & JCIS Cross. Other recesses are available upon request.

Fastener Dimensions

Part Name	Major Diameter d_1	Minor Diameter d_2	Thread Pitch P	Thread Runout X
	mm	mm	mm	mm
UA-08	0.80	0.62	0.20	0.20
UA-10	1.00	0.78	0.20	0.20
UA-12	1.20	0.93	0.25	0.25
UA-14	1.40	1.09	0.30	0.30
UA-16	1.60	1.24	0.35	0.35
UA-18	1.80	1.40	0.40	0.40
UA-20	2.00	1.55	0.45	0.45
UA-22	2.20	1.71	0.50	0.50
UA-25	2.50	1.94	0.60	0.60
UA-26	2.60	2.02	0.60	0.60
UA-30	3.00	2.33	0.70	0.70

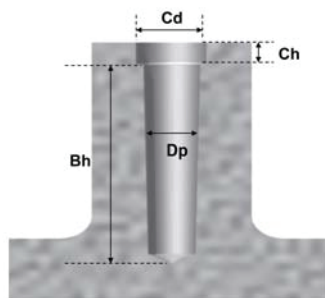


Recess Dimensions



Part Name	TORX PLUS®				JCIS Cross			
	Recess Size	Width A	Penetration Depth (Min) Q	Penetration Depth (Max) Q	Recess Size	Width M	Total Recess Depth (Min) T	Total Recess Depth (Max) T
		mm	mm	mm		mm	mm	mm
UA-08	3IP	1.17	0.30	0.45	#00	1.65	0.56	0.84
UA-10	3IP	1.17	0.30	0.45	#00	1.65	0.56	0.84
UA-12	3IP	1.17	0.35	0.50	#0	1.65	0.56	0.84
UA-14	3IP	1.17	0.35	0.50	#0	1.65	0.56	0.84
UA-16	5IP	1.45	0.50	0.65	#0	1.90	0.81	1.10
UA-18	6IP	1.75	0.50	0.65	#0	2.10	1.01	1.31
UA-20	6IP	1.75	0.65	0.85	#0	2.10	1.01	1.31
UA-22	6IP	1.75	0.65	0.85	#0	2.20	1.41	1.06
UA-25	8IP	2.40	0.93	1.10	#0	2.20	1.06	1.41
UA-26	8IP	2.40	0.93	1.10	#0	2.20	1.06	1.41
UA-30	10IP	2.82	1.10	1.30	#1	3.20	1.70	2.10

Recommended Pilot Hole Size



Part Name	Nominal Diameter d_1	Pilot Hole Size (Min) D_p	Pilot Hole Size (Max) D_p	Counter Bore Depth C_h	Counter Bore Diameter (Min) C_d	Counter Bore Diameter (Max) C_d	Boss Height B_h
	mm	mm	mm	mm	mm	mm	mm
UA-08	0.80	0.66	0.69	0.20	0.82	0.85	Thread length + 1 pitch
UA-10	1.00	0.82	0.87	0.20	1.02	1.05	
UA-12	1.20	0.98	1.04	0.25	1.22	1.25	
UA-14	1.40	1.15	1.21	0.30	1.42	1.45	
UA-16	1.60	1.31	1.38	0.35	1.62	1.65	
UA-18	1.80	1.48	1.56	0.40	1.82	1.85	
UA-20	2.00	1.64	1.73	0.45	2.02	2.05	
UA-22	2.20	1.80	1.90	0.50	2.22	2.25	
UA-25	2.50	2.05	2.16	0.60	2.52	2.55	
UA-26	2.60	2.13	2.25	0.60	2.62	2.65	
UA-30	3.00	2.46	2.60	0.70	3.02	3.05	

Manufacturing Range

Part Name	Nominal Diameter	Nominal Length				
		mm				
UA-08	0.80	2.00	3.00			
UA-10	1.00	2.00	3.00			
UA-12	1.20	2.00	3.00			
UA-14	1.40	2.00	3.00	4.00	5.00	
UA-16	1.60		3.00	4.00	5.00	
UA-18	1.80		3.00	4.00	5.00	
UA-20	2.00		3.00	4.00	5.00	
UA-22	2.20		3.00	4.00	5.00	6.00
UA-25	2.50		3.00	4.00	5.00	6.00
UA-26	2.60		3.00	4.00	5.00	6.00
UA-30	3.00		3.00	4.00	5.00	6.00

Product Length Tolerance

±0.25

Initial product testing is recommended for optimum performance during assembly. For more information, please contact your nearest Unisteel representative.

UNI-ALLOY™ is a registered trademark of Unisteel.



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