

UNI-MAG™

Thread forming screw for magnesium applications

Specifically engineered as an optimum assembly solution for magnesium alloys and other ductile materials, UNI-MAG™ features a unique circular thread that efficiently deforms ductile materials so tapping process is no longer required and assembly flaws are eliminated.

Features & Benefits

- Thread forming capabilities in magnesium material
- Eliminates boss cracking, chips and debris in miniature pilot hole applications
- Miniaturization compatibility
- Higher failure torque and lower installation torque with higher safety margin
- Optimizes assembly efficiency and reusability
- Superior thread engagement

Material : Carbon steel and stainless steel.

Head Type : Available in any head style.

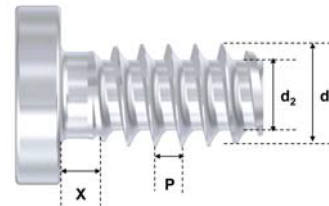
Point Type : Available in any point type.

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

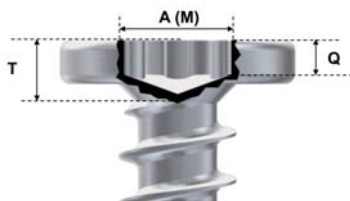


Fastener Dimensions

Part Name	Major Diameter d_1	Minor Diameter d_2	Thread Pitch P	Thread Runout X
	mm	mm	mm	mm
UM-08	0.83	0.62	0.35	0.35
UM-10	1.03	0.79	0.40	0.40
UM-12	1.23	0.96	0.45	0.45
UM-14	1.43	1.14	0.50	0.50
UM-16	1.63	1.31	0.55	0.55
UM-18	1.83	1.48	0.60	0.60
UM-20	2.05	1.68	0.65	0.65
UM-22	2.25	1.84	0.70	0.70
UM-25	2.55	2.09	0.80	0.80
UM-30	3.05	2.47	1.00	1.00

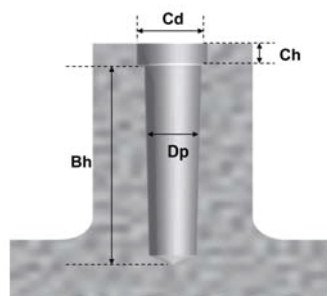


Recess Dimensions



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
UM-08	3IP	1.17	0.30	0.45	#00	1.65	0.56	0.84
UM-10	3IP	1.17	0.30	0.45	#0	1.65	0.56	0.84
UM-12	3IP	1.17	0.35	0.50	#0	1.65	0.56	0.84
UM-14	3IP	1.17	0.35	0.50	#0	1.65	0.56	0.84
UM-16	5IP	1.45	0.50	0.65	#0	1.90	0.81	1.10
UM-18	6IP	1.75	0.50	0.65	#0	2.10	1.01	1.31
UM-20	6IP	1.75	0.65	0.85	#0	2.10	1.01	1.31
UM-22	6IP	1.75	0.65	0.85	#0	2.20	1.41	1.06
UM-25	8IP	2.40	0.93	1.10	#0	2.20	1.06	1.41
UM-30	10IP	2.82	1.10	1.30	#1	3.20	1.70	2.10

Recommended Pilot Hole Size



Part Name	Nominal Diameter d_t	Pilot Hole Size (Min) D_p	Pilot Hole Size (Max) D_p	Counter Bore Depth Ch	Counter Bore Diameter (Min) Cd	Counter Bore Diameter (Max) Cd	Boss Height Bh
	mm	mm	mm	mm	mm	mm	mm
UM-08	0.83	0.66	0.70	0.35	0.85	0.88	Thread length + 1 pitch
UM-10	1.03	0.84	0.89	0.40	1.05	1.08	
UM-12	1.23	1.01	1.07	0.45	1.25	1.28	
UM-14	1.43	1.19	1.25	0.50	1.45	1.48	
UM-16	1.63	1.37	1.44	0.55	1.65	1.68	
UM-18	1.83	1.55	1.62	0.60	1.85	1.88	
UM-20	2.05	1.75	1.83	0.65	2.07	2.10	
UM-22	2.25	1.93	2.01	0.70	2.27	2.30	
UM-25	2.55	2.18	2.27	0.80	2.57	2.60	
UM-30	3.05	2.58	2.70	1.00	3.07	3.10	

Manufacturing Range

Part Name	Nominal Diameter	Nominal Length				
		mm				
UM-08	0.80	2.00	3.00			
UM-10	1.00	2.00	3.00			
UM-12	1.20	2.00	3.00			
UM-14	1.40	2.00	3.00	4.00	5.00	
UM-16	1.60		3.00	4.00	5.00	
UM-18	1.80		3.00	4.00	5.00	
UM-20	2.00		3.00	4.00	5.00	6.00
UM-22	2.20		3.00	4.00	5.00	6.00
UM-25	2.50		3.00	4.00	5.00	6.00
UM-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-MAG™ is a registered trademark of Unisteel.



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