

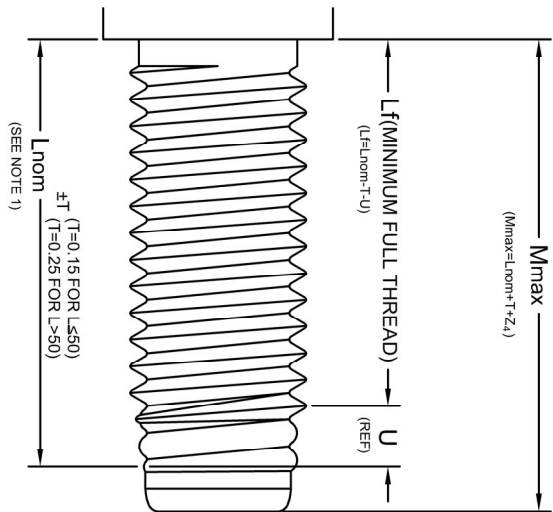
**CRITICAL DESIGN INFORMATION**  
**START EVERY DESIGN BY FINDING "Lnom"**

IF "Lnom" IS NOT GIVEN ON THE CUSTOMER DRAWING, USE EITHER THE MAXIMUM LENGTH (Mmax) OR MINIMUM FULL THREAD LENGTH (Lf) FROM THE CUSTOMER DRAWING TO CALCULATE IT USING ONE OF THE FOLLOWING EQUATIONS

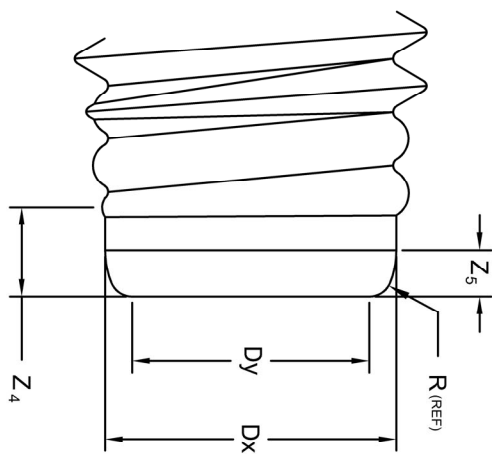
PREFERRED:  $Lnom = Mmax - Z4 - T$   
 SECONDARY:  $Lnom = Lf + U + T$

T = 0.15 FOR PARTS SHORTER THAN OR EQUAL TO 50mm  
 T = 0.25 FOR PARTS LONGER THAN 50mm

**Lnom MUST BE ON EVERY PART AND BLANK DRAWING**  
**DO NOT CHANGE ANY DIMENSION GIVEN WITHOUT CONSULTING MAThread**



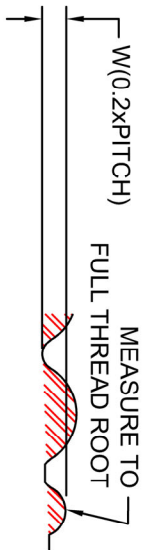
FINISHED PART DIMENSIONS  
 Z<sub>5</sub>, D<sub>x</sub> & U MUST  
 NOT BE USED TO DESIGN  
 THE BLANK!



INSPECTION INFORMATION:

PARTS SHALL BE INSPECTED PER SECTION 7:

- Lnom ON ROLLED PART IS MEASURED TO THE POINT ON THE LEAD THREAD WHERE IT FIRST REACHES A HEIGHT OF "w" (0.2xPITCH) WHEN MEASURED FROM THE ROOT OF STANDARD PROFILE THREAD.  
 (see sketch above) NOTE THAT TOLERANCE ON Lnom ON THREAD-ROLLED PARTS, IS DIFFERENT THAN TOLERANCE ON HEADED PARTS.
- MATpoint SHALL HAVE A MINIMUM OF 1.0 COMPLETE TURN OF RADUSED THREAD. THREAD MUST BE FULLY FORMED, WITH NO UNDER FILL (FLATS, FISSURES) AT PEAK OF THREAD, WHEN VIEWED IN THE DESIGNATED INSPECTION POSITION, THREE COMPLETE RADUSED THREAD PROFILES MUST BE VISIBLE.
- APPROPRIATE "GO" GAGE MUST COMPLETELY PASS OVER MATpoint SECTION OF THREAD WITH MINIMAL DRAG BEFORE PLATING. GAGE MUST HAVE MINOR DIAMETER VERIFIED TO ANSI/ASME B1.16M-1984 BEFORE USE.
- LAST TURN OF LEAD THREAD MUST HAVE ESSENTIALLY LINEAR REDUCTION IN HEIGHT AND SMOOTH CONTOUR SIMILAR TO FULL HEIGHT RADIUS THREAD



FINE THREAD

COARSE THREAD

THREAD SIZE & PITCH	R REF	Dy MAX	Z <sub>5</sub> MIN	Dx MAX	Z <sub>4</sub> MAX	W +0.01 -0.01	U REF
M4x.7	1.2	2.7	0.50	3.17	1.08	0.14	1.50
M5x.8	1.5	3.4	0.60	4.03	1.37	0.16	1.80
M6x1.0	1.8	4.0	0.75	4.80	1.45	0.20	2.30
M8x1.25	2.3	5.5	1.00	6.54	1.90	0.25	2.80
M10x1.5	2.8	6.8	1.25	8.23	2.51	0.30	3.40
M12x1.75	3.3	8.2	1.50	9.95	3.12	0.35	4.00
M14x2.0	4.1	9.6	1.75	11.72	3.38	0.40	4.50
M16x2.0	4.7	10.9	2.00	13.72	3.64	0.40	4.50
<b>DIMENSIONS ARE IN MILLIMETERS (mm)</b>							
M8x1.0	2.5	6.0	1.00	6.81	1.90	0.20	2.30
M10x1.25	3.0	7.5	1.25	8.54	2.28	0.25	2.80
M12x1.5	3.5	8.8	1.50	10.26	2.76	0.30	3.40
M14x1.5	4.3	10.8	1.75	12.26	3.17	0.30	3.40
M16x1.5	4.9	12.8	2.00	14.26	3.56	0.30	3.40

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