

INSPECTION INFORMATION:

1. 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 THE THREAD. (see sketch above)
2. MAThread SHALL HAVE A MINIMUM OF 1.5 COMPLETE TURNS OF RADIUSED THREAD. THREAD MUST BE FULLY FORMED, WITH NO UNDER FILL (FLATS, FISSURES) AT PEAK OF THREAD. WHEN VIEWED IN THE DESIGNATED INSPECTION POSITION, FOUR COMPLETE RADIUSED THREAD PROFILES MUST BE VISIBLE.
3. APPROPRIATE "GO" GAGE MUST COMPLETELY PASS OVER MAThread SECTION OF THREAD WITH MINIMAL DRAG BEFORE PLATING. GAGE MUST HAVE MINOR DIAMETER VERIFIED TO ANSI/ASME B1.16-1984 BEFORE USE.
4. "Z3" MUST BE MEASURED TO TANGENT POINT OF 'R', USING MAThread APPROVED RADIUS CHART FROM POINT "W" TO TANGENT.

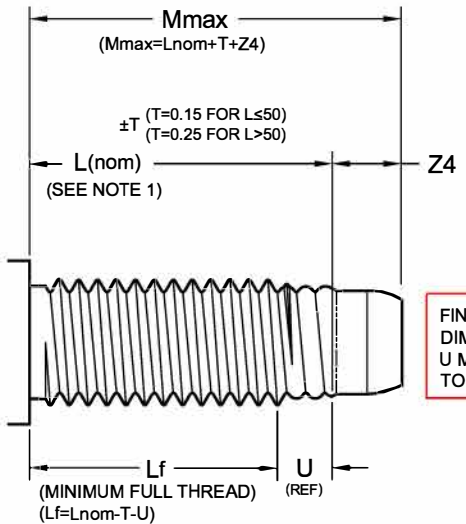
CRITICAL DESIGN INFORMATION
START EVERY DESIGN BY FINDING "Lnom"

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

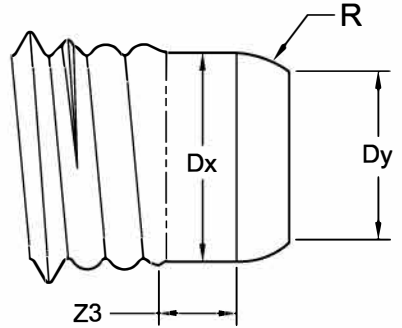
PREFERRED: $Lnom = Mmax - Z4 - T$
 SECONDARY: $Lnom = Lf + U + T$

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

Lnom MUST BE ON EVERY PART DRAWING
DO NOT CHANGE ANY DIMENSION GIVEN WITHOUT CONSULTING MATHREAD



FINISHED PART DIMENSIONS Z3, Dx, & U MUST NOT BE USED TO DESIGN THE BLANK!



(SEE NOTE 4)

	R	Dy	W	Dx	Z ₃	Z ₄	U RE
	1.5	2.7	0.14	3.170	1.0	2.0	2.1
	1.9	3.4	0.16	3.954	1.2	2.5	2.4
	2.3	4.1	0.20	4.800	1.7	3.0	3.0
	3.0	5.4	0.25	6.540	2.4	4.3	3.8
	3.8	6.8	0.30	8.143	2.9	5.5	4.5
	4.6	8.2	0.35	9.950	3.7	6.6	5.3
	5.4	9.6	0.40	11.604	4.0	7.9	6.0
	6.0	11.5	0.40	13.720	4.2	7.9	6.0
	1.9	5.7	0.20	6.810	2.2	4.1	3.0
	2.4	7.0	0.25	8.470	2.8	5.3	3.8
	2.9	8.5	0.30	10.260	2.8	6.5	4.5
	3.7	9.8	0.30	12.260	4.6	8.5	4.5
	4.2	11.2	0.30	14.143	5.8	10.5	4.5

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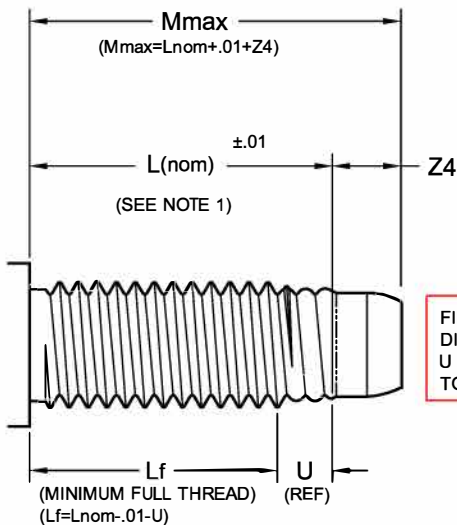
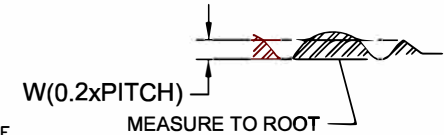
IF "Lnom" IS NOT GIVEN ON THE CUSTOMER DRAWING, USE EITHER THE MAXIMUM LENGTH (Mmax) OR MINIMUM FULL THREAD LENGTH (Lf) FROM THE CUSTOMER DRAWING TO CALCULATE IT USING ONE OF THE FOLLOWING EQUATIONS

PREFERRED: $L_{nom} = M_{max} - Z_4 - .01$
SECONDARY: $L_{nom} = L_f + U + .01$

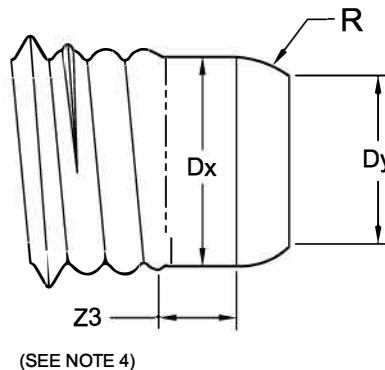
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INSPECTION INFORMATION:

1. 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 THE THREAD. (see sketch above)
2. MATHread SHALL HAVE A MINIMUM OF 1.5 COMPLETE TURNS OF RADIUSED THREAD. THREAD MUST BE FULLY FORMED, WITH NO UNDER FILL (FLATS, FISSURES) AT PEAK OF THREAD. WHEN VIEWED IN THE DESIGNATED INSPECTION POSITION, FOUR COMPLETE RADIUSED THREAD PROFILES MUST BE VISIBLE.
3. APPROPRIATE "GO" GAGE MUST COMPLETELY PASS OVER MATHread SECTION OF THREAD WITH MINIMAL DRAG BEFORE PLATING. GAGE MUST HAVE MINOR DIAMETER VERIFIED TO ANSI/ASME B1.2-1983 BEFORE USE.
4. "Z3" MUST BE MEASURED TO TANGENT POINT OF 'R', USING MATHread APPROVED RADIUS CHART FROM POINT "W" TO TANGENT.



FINISHED PART DIMENSIONS Z3, Dx, & U MUST NOT BE USED TO DESIGN THE BLANK!



	R	Dy	W	Dx	Z ₃	Z ₄	U
	.080	.154	.0100	.189	.065	.150	.150
	.100	.190	.0111	.245	.085	.200	.167
	.120	.205	.0125	.301	.105	.240	.188
	.145	.220	.0143	.352	.130	.300	.214
	.175	.260	.0154	.409	.160	.350	.231
	.205	.275	.0167	.464	.190	.410	.250
	.245	.290	.0182	.519	.230	.480	.273
	0.10	.174	.0071	.204	.090	.150	.108
	0.12	.217	.0083	.259	.120	.200	.125
	0.16	.272	.0083	.326	.135	.250	.125
	0.18	.325	.0100	.375	.160	.275	.150
	0.21	.365	.0100	.442	.190	.338	.150
	0.24	.414	.0111	.494	.220	.384	.167
	0.27	.474	.0111	.557	.260	.446	.167

CRITICAL DESIGN INFORMATION

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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: $L_{nom} = M_{max} - Z_4 - T$
 SECONDARY: $L_{nom} = L_f + U + T$

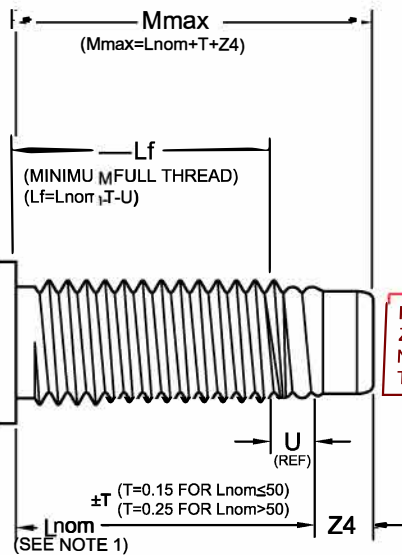
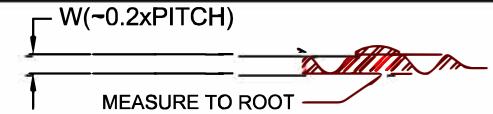
T = 0.15 FOR Lnom SHORTER THAN OR EQUAL TO 50mm
 T = 0.25 FOR Lnom GREATER THAN 50mm

Lnom MUST BE ON EVERY PART DRAWING

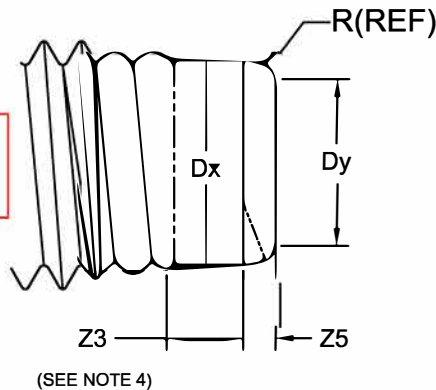
DO NOT CHANGE ANY DIMENSION GIVEN WITHOUT CONSULTING MATHREAD

INSPECTION INFORMATION:

1. Lnom ON ROLLED PART IS MEASURED TO THE POINT ON THE LEAD THREAD WHERE IT APPROXIMATELY REACHES A HEIGHT OF 'W' (-0.2xPITCH) WHEN MEASURED FROM THE ROOT OF THE THREAD. (see sketch above)
2. MATpoint SHALL HAVE A MINIMUM OF 1.0 COMPLETE TURN OF RADIUSED 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 RADIUSED THREAD PROFILES MUST BE VISIBLE.
3. 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 B1.16-1984 BEFORE USE.
4. "Z3" MUST BE MEASURED TO TANGENT POINT OF 'R', USING MATHread APPROVED RADIUS CHART FROM POINT "W" TO TANGENT



FINISHED PART DIMENSIONS Z5, Z3, Dx, & U MUST NOT BE USED TO DESIGN THE BLANK!



	R	Dy	W	Dx	Z ₃	Z ₄	Z ₅	U
	1.2	2.7	0.14	3.170	1.20	2.40	0.50	1.5
	1.5	3.4	0.16			2.50	0.60	1.8
	1.8	4.0	0.20	4.800		2.85	0.75	2.3
		5.5	0.25	6	2.10	3.90	1.00	2.8
	2.8	6.8	0.30		2.60	4.65	1.25	3.4
	3.3	8.2	0.35	9	3.15	5.65	1.50	4.0
	4.1	9.6	0.40	11.4	3.68	6.43	1.75	4.5
	4.7	10.9	0.40	13.609	4.10	7.10	2.00	4.5
	5.2	12.2	0.50	15.057	4.40	8.50	2.75	5.6
	6.0	13.3	0.50	17.172		8.80	3.12	5.6
	2.5	6.0	0.20	6.8		3.90	1.00	2.3
	3.0	7.5	0.25			4.85	1.25	2.8
	3.5	8.8	0.30	10.260		6.00	1.50	3.4
	4.3	10.8	0.30	12.260		6.55	1.75	3.4
	4.9	12.8	0.30			7.20	2.00	3.4
	5.4	13.7	0.30	16.260		8.50	2.75	3.4

CRITICAL DESIGN INFORMATION

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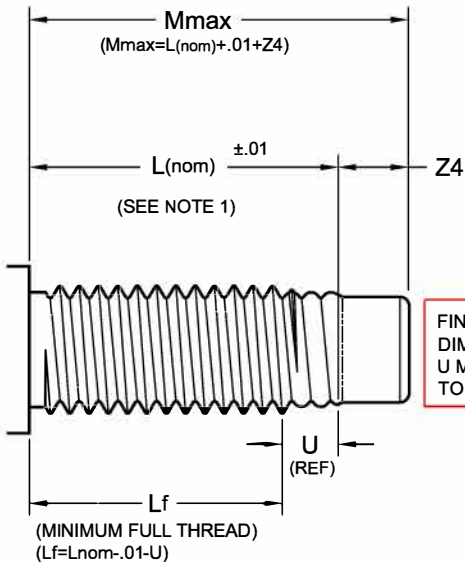
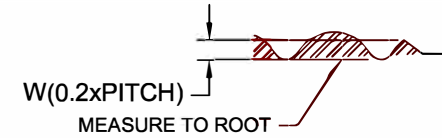
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PREFERRED: $L_{nom} = M_{max} - Z_4 - .01$
 SECONDARY: $L_{nom} = L_f + U + .01$

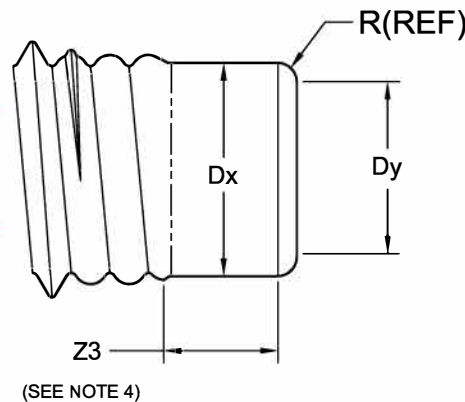
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4. "Z3" MUST BE MEASURED TO TANGENT POINT OF 'R', USING MATHREAD APPROVED RADIUS CHART FROM POINT "W" TO TANGENT.



FINISHED PART DIMENSIONS Z3, Dx, & U MUST NOT BE USED TO DESIGN THE BLANK!



	R	Dy	W	Dx	Z ₃	Z ₄	U
	0.02	.154	.0100	.189 .193	.065	.100	.150
	0.03	.190	.0111	.245 .249	.085	.130	.167
	0.05	.205	.0125	.301 .305	.115	.180	.188
	0.07	.220	.0143	.352 .356	.135	.220	.214
	0.08	.260	.0154	.409 .413	.165	.260	.231
	0.10	.275	.0167	.464 .468	.180	.295	.250
	0.12	.290	.0182	.519 .523	.215	.350	.273
	0.02	.174	.0071	.204 .208	.093	.150	.108
	0.03	.217	.0083	.259 .263	.117	.195	.125
	0.04	.272	.0083	.322 .326	.180	.276	.125
	0.06	.325	.0100	.375 .379	.197	.295	.150
	0.07	.365	.0100	.438 .442	.240	.358	.150
	0.09	.414	.0111	.494 .498	.275	.404	.167
	0.10	.474	.0111	.557 .561	.308	.466	.167

CRITICAL DESIGN INFORMATION

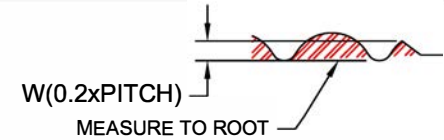
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PREFERRED: $L_{nom} = M_{max} - Z_4 - T$
 SECONDARY: $L_{nom} = L_f + U + T$

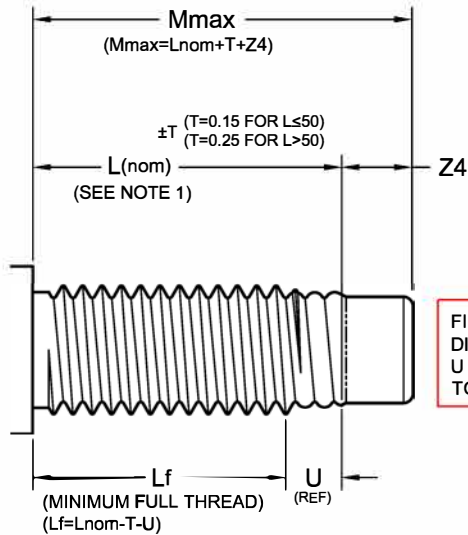
$T = 0.15$ FOR PARTS SHORTER OR EQUAL TO 50mm
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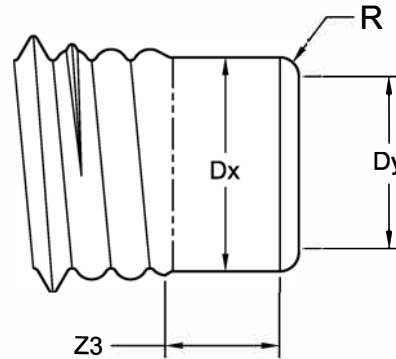


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FINISHED PART
DIMENSIONS Z3, Dx, &
U MUST NOT BE USED
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(SEE NOTE 4)

	R	Dy		Dx	Z ₃	Z ₄	U
	0.2	2.8	0.14	3.170	1.50	2.20	2.1
	0.4	3.2	0.16	3.954	1.80	2.60	2.4
	0.5	3.9	0.20	4.800	2.00	3.10	3.0
	0.7	5.1	0.25	6.447	2.70	4.20	3.8
	1.5	5.3	0.30	8.230	3.20	5.50	4.5
	2.0	6.0	0.35	9.880	4.20	6.60	5.3
	2.5	6.7	0.40	11.720	5.00	7.90	6.0
	3.0	8.7	0.40	13.720	6.00	9.90	6.0
	0.7	5.9	0.20	6.810	2.70	4.20	3.0
	1.5	6.2	0.25	8.447	3.20	5.50	3.8
	2.0	6.9	0.30	10.260	4.20	6.60	4.5
	2.5	8.0	0.30	12.143	5.00	7.90	4.5
	3.0	11.9	0.30	14.260	6.00	9.90	4.5