



Precision Flexible Shaft Couplings



Flexibility in design and products

www.rocomcorp.com

A SERIES - THE PRECISION GENERAL PURPOSE FLEXIBLE COUPLING

SIX SHORT DOUBLE TAPERED CURVED BEAMS - TWO SETS OF THREE BEAMS FOR ALL TYPES OF OEM PRODUCTS



CLAMP



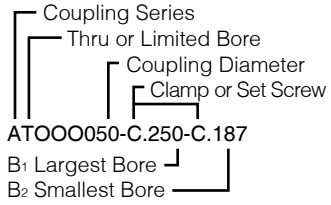
SET SCREW



CUT AWAY VIEW

Notes

1. Nomenclature



For key way, hex bores, nickle plating, stainless steel screws and other standard options see page 4.

2. All THRU BORE couplings have an inside relief so the shafts will not touch the beams at the maximum misalignment ratings. These bores are shown in blue and white.

3. All LIMITED BORE couplings having the same OD have the same ID. The torque, stiffness and inertia are the same for all bores. When the bores are in blue, the maximum shaft penetration is E depth. When one bore is in white it can extend into the flexible area. Torque and wind-up is shown in blue.

4. Any B₁ may be combined with any B₂. The smallest B₂ bores cannot be duplicated in the B₁ column where they are not already shown. The smallest B₁ inside circumferential length determines the misalignment rating.

5. Set screws are 120° apart. All screws are hex socket steel with black oxide finish. The torques are the screw manufacturers maximum ratings. For screw variations see page 4.

6. Coupling material is 2024-T3.51 QQA225/6 aluminum, black anodized to MIL A8625F Type II Class 2.

7. Nickel plating for added corrosion resistance is available for all Rocom couplings. See page 4.

8. G10 phenolic inserts for thermal and electrical isolation are available for all Rocom couplings.

9. Static torque is the maximum torque rating for each B₁ bore. The correct dynamic torque safety factor should be determined by the customer in accordance with acceleration, deceleration, fast reversals, sudden stops, etc.

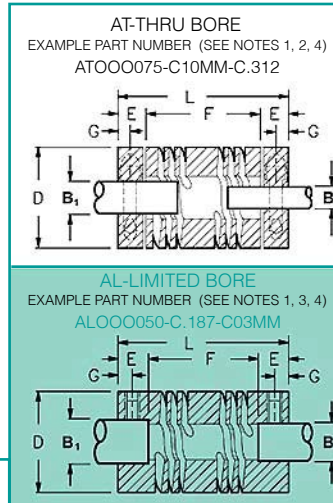
10. Torque and torsional stiffness ratings are at maximum misalignment, not in a straight line.

11. Mass and inertia are calculated with the customer's required B₁ bore and the smallest B₂ bore shown.

12. Clamps are an integral part of the coupling and cannot be removed.

13. The installation procedures shown on page 26 should be followed to insure infinite life.

14. TEST BEFORE YOU BUY. Rocom will furnish samples at no charge for all new OEM designs or for comparative evaluation.

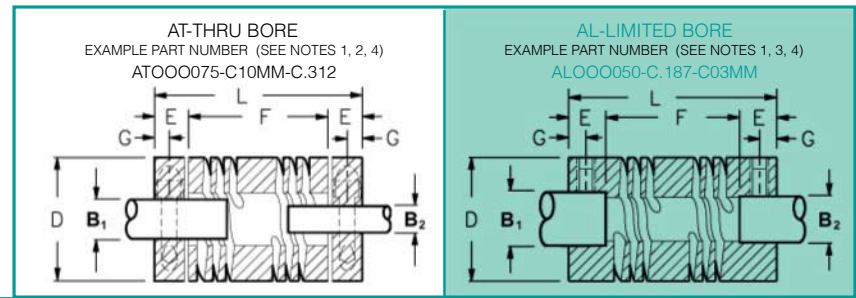


A SERIES PART NUMBER	D MM INCH	L MM INCH	E MM INCH	F MM INCH	G MM INCH	CLAMP MM INCH	SET SCREW MM INCH	MISALIGNMENT SEE DEFINITIONS PAGE 25			B ₁ BORE		B ₂ BORE		STATIC TORQUE		TORSIONAL STIFFNESS		INERTIA		MASS	
								ANGULAR OFFSET DEGREES	PARALLEL OFFSET MM INCH	AXIAL MOTION MM INCH	MM INCH	MM INCH	Nm LB.IN.	LB.IN.	MIN/Nm MIN/LB.IN.	MIN/LB.IN.	10 ⁻³ kgm ²	10 ⁻³ lb.in ²	kg	lb		
ATOOO037 ALOOO037	9.40 .370	14.40 .560	3.80 .150	4.06 .160	2.08 .082	M1.6X.35 0-80 3	M2X.4 2-56 1.8	2°	0.13	± .05	1 2 2.5	0.031 0.062 0.093	0.59 0.57 0.52 0.31	5.2 5.1 4.6 2.7	7.86 7.86 6.00 4.35	68.00 68.00 53.20 38.50	.0000 .0000 .0000 .0000	0.094 0.093 0.092 0.088	0.002 0.002 0.002 0.002	0.004 0.004 0.004 0.004		
ATOOO050 ALOOO050	12.60 .495	19.00 .750	4.40 .175	10.16 .400	2.35 .092	M2X.4 1-72 5	M3X.5 4-40 5	3°	0.18	± .13	2 2.5 3 3	0.062 0.093 0.120 0.125	0.96 0.77 0.61	8.5 6.8 5.4	5.15 6.50 11.75	45.60 57.60 104.00	0.0001 0.0001 0.0001	0.424 0.418 0.396	0.005 0.005 0.005	0.012 0.011 0.009		
ATOOO062 ALOOO062	15.75 .620	22.10 .870	5.08 .200	11.93 .470	2.54 .100	M2X.4 2-56 7	M3X.5 6-32 10	4°	0.20	± .13	2.5 3 3	0.093 0.120 0.125	1.81 1.70 1.47 1.13	16 15 13 10	2.44 2.55 3.41 4.59	21.60 22.56 30.24 41.60	0.0003 0.0003 0.0003 0.0003	1.187 1.182 1.164 1.124	0.010 0.010 0.010 0.009	0.022 0.022 0.021 0.019		

A SERIES - THE PRECISION GENERAL PURPOSE FLEXIBLE COUPLING

SIX SHORT DOUBLE TAPERED CURVED BEAMS - TWO SETS OF THREE BEAMS

FOR ALL TYPES OF OEM PRODUCTS

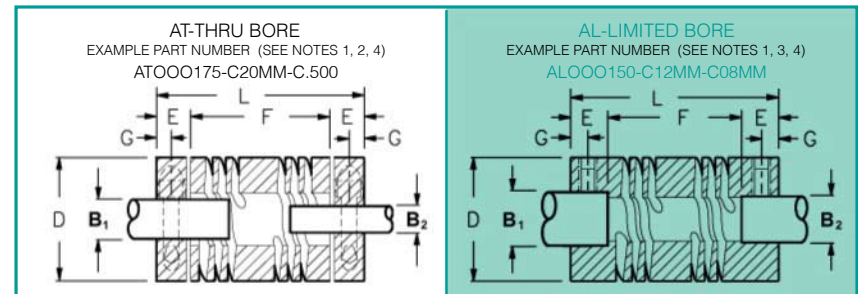


A SERIES PART NUMBER	D MM + .00 - .25 INCH + .000 - .010	L MM ± .38 INCH ± .015	E MM ± .13 INCH ± .005	F MM ± .38 INCH ± .015	G MM ± .13 INCH ± .005	CLAMP SET SCREW		MISALIGNMENT SEE DEFINITIONS PAGE 25			B ₁ BORE		B ₂ BORE		STATIC TORQUE		TORSIONAL STIFFNESS		INERTIA		MASS	
						MM INCH	MM INCH	ANGULAR OFFSET DEGREES	PARALLEL OFFSET MM INCH	AXIAL MOTION MM INCH	MM + .25 - .000 INCH + .001 - .000	MM + .25 - .000 INCH + .001 - .000	Nm LB.IN.	Nm LB.IN.	Nm LB.IN.	LB.IN.	MIN/Nm MIN/LB.IN.	MIN/Nm MIN/LB.IN.	10 ⁻³ kgm ²	10 ⁻³ lb.in ²	kg	lb
THRU BORE LIMITED BORE SEE NOTE 1 SEE NOTE 4						TORQUE MM INCH Nm LB.IN. SEE NOTES 5 - 12																
ATOOO075 ALOOO075	19.00 .745	25.40 1.00	6.09 .240	13.20 .520	2.79 .110	M3X.5 2.1	M4X.7 2.2	5°	0.25	± .25		3 0.120										
ATSOO075 ALSOO075	19.00 .745	22.20 .880	6.09 .240	10.16 .400	2.79 .110	4-40 18	8-32 20	5°	0.005	± .010	5 0.187	5 0.187	2.94	26	0.97	8.64	0.0007	2.392	0.014	0.031		
ATOOO100 ALOOO100	25.4 .995	38.00 1.500	10.66 .420	16.76 .660	5.08 .200	M3X.5 2.1	M5X.8 2.2	5°	0.25	± .25		3 0.125										
ATSOO100 ALSOO100	25.4 .995	31.75 1.250	8.63 .340	14.47 .570	4.06 .160	6-32 34	10-24 36	5°	0.015	± .010	6 0.250	6 0.250	6.18	60	0.45	8.64	0.0039	13.19	0.045	0.098		
ATOOO125 ALOOO125	31.50 1.245	50.80 2.00	10.66 .420	29.46 1.160	5.10 .200	M4X.7 4.6	M6X.1 7.2	5°	0.50	± .38	6 0.250	6 0.250	14.46	128	0.17	1.55	0.0129	44.23	0.097	0.214		
ATSOO125 ALSOO125						5-32 5.9	1/4-20 87	5°	0.020	± .015	8 0.312	8 0.312	12.54	111	0.22	1.96	0.0129	44.09	0.095	0.209		
ATOOO150 ALOOO150	37.70 1.485	60.00 2.37	13.08 .515	34.54 1.34	6.00 .240	M5X.8 9.5	M6X.1 7.2	5°	0.76	± .38	10 0.375	10 0.375	21.47	190	0.10	0.95	0.0319	108.9	0.162	0.357		
ATSOO150 ALSOO150						10-24 77	1/4-20 87	5°	0.030	± .015	13 0.437	13 0.437	20.56	182	0.14	1.24	0.0317	108.4	0.159	0.349		
ATOOO162 ALOOO162	40.90 1.610	63.50 2.50	13.08 .515	37.59 1.47	6.00 .240	M6X.1 16	M6X.1 7.2	5°	0.76	± .38	14 0.500	14 0.500	19.77	175	0.16	1.42	0.0315	107.6	0.154	0.339		
ATSOO162 ALSOO162						1/4-20 200	1/4-20 87	5°	0.030	± .015	16 0.625	16 0.625	18.30	162	0.21	1.86	0.0311	106.3	0.148	0.325		
											18 0.687	18 0.687	16.38	145	0.23	2.03	0.0304	103.9	0.140	0.309		
											20 0.750	20 0.750	27.34	242	0.11	1.00	0.0430	146.8	0.167	0.368		

A SERIES - THE PRECISION GENERAL PURPOSE FLEXIBLE COUPLING

SIX SHORT DOUBLE TAPERED CURVED BEAMS - TWO SETS OF THREE BEAMS

FOR ALL TYPES OF OEM PRODUCTS



A SERIES PART NUMBER	D MM + .00 - .25 INCH + .000 - .010	L MM ± .38 INCH ± .015	E MM ± .13 INCH ± .005	F MM ± .38 INCH ± .015	G MM ± .13 INCH ± .005	CLAMP SCREW		MISALIGNMENT SEE DEFINITIONS PAGE 25			B ₁ BORE		B ₂ BORE		STATIC TORQUE		TORSIONAL STIFFNESS		INERTIA		MASS					
						MM INCH	MM INCH	ANGULAR OFFSET DEGREES	PARALLEL OFFSET MM INCH	AXIAL MOTION MM INCH	MM INCH + .25 - .000	MM INCH + .001 - .000	MM INCH + .25 - .000	MM INCH + .001 - .000	Nm LB.IN.	Nm LB.IN.	MIN/Nm	MIN/LB.IN.	10 ⁻³ kgm ²	10 ⁻³ lb.in ²	kg	lb				
THRU BORE LIMITED BORE	SEE NOTE 1 SEE NOTE 4		SEE NOTE 3			MM INCH	MM INCH				SEE NOTES 2, 3, 4	SEE NOTES 2, 3, 4			SEE NOTES 9 - 10	SEE NOTE 10	SEE NOTE 11	SEE NOTE 11								
ATO00175 AL000175	44.00	66.54	13.08	40.64	6.00	M6X 1 16	M6X 1 7.2	5°	0.90	± .50		10	0.375													
															12	0.437										
															14	0.500	14	0.500	39.09	346	0.07	0.64	0.0648	221.5	0.234	0.516
															16	0.625	16	0.625	36.38	322	0.08	0.72	0.0643	219.7	0.227	0.499
															18	0.687	18	0.687	34.46	305	0.08	0.76	0.0637	217.5	0.220	0.484
															20	0.750	20	0.750	32.54	288	0.09	0.81	0.0628	214.6	0.212	0.467
											22	0.875	22	0.875	30.16	267	0.10	0.89	0.0613	209.5	0.200	0.442				
ATO00200 AL000200	50.00	76.00	13.08	50.29	6.00	M6X 1 16	M6X 1 7.2	5°	0.90	± .50		10	0.375													
															12	0.437										
															14	0.500	14	0.500	45.20	400	0.06	0.53	0.1270	434.0	0.358	0.789
															16	0.625	16	0.625	42.48	376	0.06	0.54	0.1264	431.8	0.349	0.769
															18	0.687	18	0.687	40.00	354	0.06	0.55	0.1256	429.2	0.340	0.750
															20	0.750	20	0.750	37.62	333	0.07	0.61	0.1245	425.6	0.331	0.729
											22	0.875	22	0.875	33.56	297	0.08	0.71	0.1228	419.5	0.318	0.700				
ATO00225 AL000225	56.40	82.50	13.08	56.64	6.00	M6X 1 16	M6X 1 7.2	5°	1.00	± .65		12	0.437													
															14	0.500										
															16	0.625	16	0.625	62.92	618	0.05	0.43	0.2178	744.4	0.486	1.07
															18	0.687	18	0.687	64.18	568	0.05	0.46	0.2171	741.8	0.477	1.05
															20	0.750	20	0.750	61.12	541	0.05	0.48	0.2161	738.4	0.468	1.03
															22	0.875	22	0.875	57.62	510	0.06	0.57	0.2143	732.4	0.455	1.00
											24-25	1.000	24-25	1.000	52.76	467	0.07	0.68	0.2114	722.6	0.437	.963				

B SERIES - PRECISION LIGHT DUTY FLEXIBLE COUPLING

SIX SHORT THIN DOUBLE TAPERED CURVED BEAMS - TWO SETS OF THREE BEAMS

LIGHT RADIAL LOAD FOR PRECISION BEARINGS



CLAMP



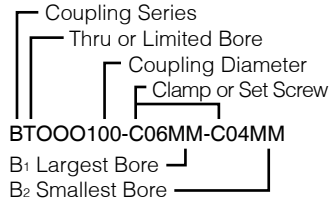
SET SCREW



CUT AWAY VIEW

Notes

1. Nomenclature



For key way, hex bores, nickle plating, stainless steel screws and other standard options see page 4.

2. All THRU BORE couplings have an inside relief so the shafts will not touch the beams at the maximum misalignment ratings. These bores are shown in blue and white.

3. All LIMITED BORE couplings having the same OD have the same ID. The torque, stiffness and inertia are the same for all bores. When the bores are in blue, the maximum shaft penetration is E depth. When one bore is in white it can extend into the flexible area. Torque and wind-up is shown in blue.

4. Any B₁ may be combined with any B₂. The smallest B₂ bores cannot be duplicated in the B₁ column where they are not already shown. The smallest B₁ inside circumferential length determines the misalignment rating.

5. Set screws are 120° apart. All screws are hex socket steel with black oxide finish. The torques are the screw manufacturers maximum ratings. For screw variations see page 4.

6. Coupling material is 2024-T3.51 QQA225/6 aluminum, black anodized to MIL A8625F Type II Class 2.

7. Nickel plating for added corrosion resistance is available for all Rocom couplings. See page 4.

8. G10 phenolic inserts for thermal and electrical isolation are available for all Rocom couplings.

9. Static torque is the maximum torque rating for each B₁ bore. The correct dynamic torque safety factor should be determined by the customer in accordance with acceleration, deceleration, fast reversals, sudden stops, etc.

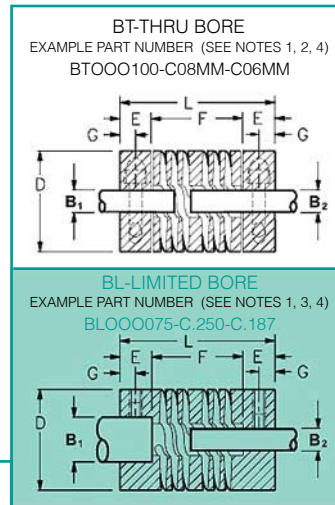
10. Torque and torsional stiffness ratings are at maximum misalignment, not in a straight line.

11. Mass and inertia are calculated with the customer's required B₁ bore and the smallest B₂ bore shown.

12. Clamps are an integral part of the coupling and cannot be removed.

13. The installation procedures shown on page 26 should be followed to insure infinite life.

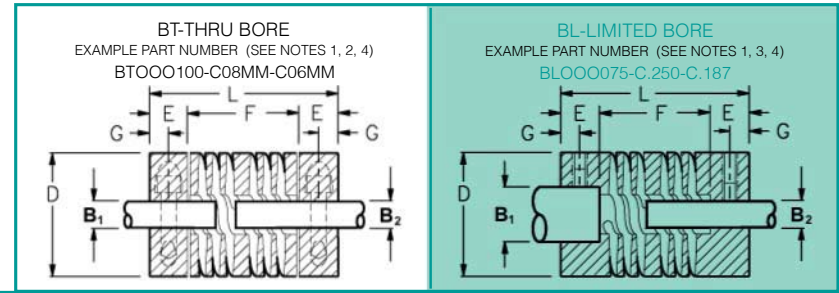
14. TEST BEFORE YOU BUY. Rocom will furnish samples at no charge for all new OEM designs or for comparative evaluation.



B SERIES PART NUMBER	D MM INCH	L MM INCH	E MM INCH	F MM INCH	G MM INCH	CLAMP MM INCH	SET SCREW MM INCH	MISALIGNMENT SEE DEFINITIONS PAGE 25			B ₁ BORE		B ₂ BORE		STATIC TORQUE		TORSIONAL STIFFNESS		INERTIA		MASS													
								ANGULAR OFFSET DEGREES	PARALLEL OFFSET MM INCH	AXIAL MOTION MM INCH	MM INCH	MM INCH	Nm LB.IN.	LB.IN.	MIN/Nm MIN/LB.IN.	MIN/Nm MIN/LB.IN.	10 ⁻³ kgm ²	10 ⁻³ lb.in ²	kg	lb														
BT000037 BLO00037	9.40 .370	12.70 .50	3.80 .150	5.00 .200	1.90 0.075	M1.6X.35 0.29 0-80 3	M2X.4 0.21 2-56 1.8	1.5°	0.05	± .05																								
											3	0.120	3	0.120	0.59	5.2	7.86	68.00	0.000	0.086	0.002	0.004												
											3	0.125	3	0.125	0.57	5.1	7.86	68.00	0.000	0.086	0.002	0.004												
BT000050 BLO00050	12.60 .495	12.70 .50	3.80 .150	5.00 .200	1.90 0.075	M1.6X.35 0.29 0-80 3	M2X.4 0.21 2-56 1.8	3°	0.07	± .07																								
											3	0.120	3	0.120	0.96	8.5	2.68	23.75	0.0001	0.310	0.004	0.009												
											3	0.125	3	0.125	0.77	6.8	2.68	23.75	0.0001	0.310	0.004	0.009												
BT000062 BLO00062	15.75 .620	15.75 .62	4.55 .180	6.60 .260	1.90 0.075	M2X.4 .60 1-72 5	M3X.5 0.92 4-40 5	4°	0.13	± .13																								
											4	0.156	4	0.156	1.58	14.4	2.17	19.20	0.0002	0.832	0.007	0.016												
											5	0.187	5	0.187	1.56	13.8	3.18	21.14	0.0002	0.828	0.007	0.015												

B SERIES - PRECISION LIGHT DUTY FLEXIBLE COUPLING

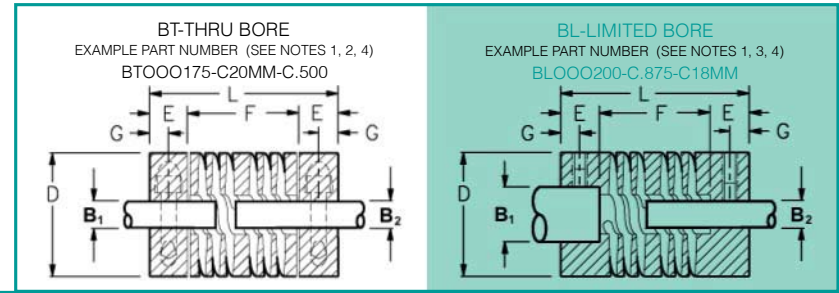
SIX SHORT THIN DOUBLE TAPERED CURVED BEAMS - TWO SETS OF THREE BEAMS
 LIGHT RADIAL LOAD FOR PRECISION BEARINGS



B SERIES PART NUMBER	D MM ± .38 INCH ± .015	L MM ± .13 INCH ± .005	E MM ± .38 INCH ± .015	F MM ± .13 INCH ± .015	G MM ± .13 INCH ± .005	CLAMP SET SCREW		MISALIGNMENT SEE DEFINITIONS PAGE 25			B ₁ BORE		B ₂ BORE		STATIC TORQUE		TORSIONAL STIFFNESS		INERTIA		MASS					
						MM INCH	MM INCH	ANGULAR OFFSET DEGREES	PARALLEL OFFSET MM INCH	AXIAL MOTION MM INCH	MM INCH + .25 - .001 - .000	MM INCH + .25 + .001 - .000	Nm LB.IN. SEE NOTES 9 - 10	Nm LB.IN. SEE NOTE 10	10 ⁻³ kgm ² SEE NOTE 11	10 ⁻³ lb.in ² SEE NOTE 11	kg SEE NOTE 11	lb SEE NOTE 11								
BT000075 BLO00075	19.00	19.00	5.60	7.80	2.40	M2X.4 .60	M3X.5 0.92	5°	0.20	± .13	± .005	2	0.062	2	0.062											
	.745	.75	.220	.310	0.095	2-56	6-32					3	0.120	3	0.120											
						7	10					4	0.156	4	0.156											
												5	0.187	5	0.187	2.71	24	0.98	8.64	0.0007	2.483	0.015	0.032			
												6	0.250	6	0.250	2.26	20	1.19	10.56	0.0007	2.463	0.014	0.031			
												8	0.312	8	0.312	1.81	16	1.37	12.16	0.0007	2.422	0.013	0.029			
BT000100 BLO00100	25.40	25.40	7.10	11.20	3.20	M3X.5 2.1	M4X.7 2.2	5°	0.25	± .25	± .010	3	0.120	3	0.120											
	.995	1.00	.280	.440	0.125	4-40	8-32					3	0.125	3	0.125											
						18	20					4	0.156	4	0.156											
												5	0.187	5	0.187											
												6	0.250	6	0.250	6.21	55	0.45	4.00	0.0026	9.020	0.031	0.067			
												8	0.312	8	0.312	5.54	49	0.51	4.48	0.0026	8.976	0.030	0.065			
BT000125 BLO00125	31.50	31.75	7.87	16.00	3.55	M3X.5 2.1	M5X.8 2.2	5°	0.25	± .30	± .012	5	0.187	5	0.187											
	1.240	1.25	.310	.630	.140	6-32	10-24					6	0.250	6	0.250	13.56	120	0.17	1.51	0.0077	26.33	0.058	0.127			
						34	36					8	0.312	8	0.312	12.65	112	0.20	1.79	0.0077	26.29	0.057	0.125			
												10	0.375	10	0.375	11.64	103	0.24	2.09	0.0077	26.18	0.056	0.122			
												12	0.437	12	0.437	10.85	96	0.26	2.32	0.0076	26.00	0.054	0.119			
												14	0.500	14	0.500	19.50	84	0.33	2.91	0.0075	25.71	0.052	0.114			
BT000150 BLO00150	37.70	38.00	10.16	17.87	4.45	M4X.7 4.6	M5X.8 2.2	5°	0.25	± .30	± .012	6	0.250	6	0.250											
	1.485	1.50	.400	.700	0.175	8-32	10-24					8	0.312	8	0.312											
						59	36					10	0.375	10	0.375	15.82	162	0.14	1.27	0.0193	66.03	0.099	0.218			
												13	0.437	13	0.437	15.48	149	0.16	1.48	0.0193	65.83	0.097	0.214			
												14	0.500	14	0.500	15.25	134	0.21	1.86	0.0192	65.51	0.095	0.209			
												16	0.625	16	0.625	12.65	121	0.25	2.23	0.0190	64.79	0.091	0.201			
BT000162 BLO00162	40.90	41.00	10.41	20.32	5.00	M5X.8 9.5	M5X.8 2.2	5°	0.38	± .38	± .015	18	0.687	18	0.687											
	1.610	1.62	.410	.800	0.195	10-24	10-24					8	0.312	8	0.312											
						77	36					10	0.375	10	0.375											
												12	0.437	12	0.437	20.34	180	0.13	1.11	0.0286	97.83	0.124	0.273			
												14	0.500	14	0.500	19.77	175	0.15	1.35	0.0285	97.43	0.121	0.267			
												16	0.625	16	0.625	18.20	161	0.18	1.56	0.0283	96.59	0.117	0.258			
							18	0.687	18	0.687	17.17	152	0.22	1.98	0.0280	95.65	0.114	0.250								
							20	0.750	20	0.750	15.03	133	0.29	2.56	0.0276	94.37	0.110	0.242								

B SERIES - PRECISION LIGHT DUTY FLEXIBLE COUPLING

SIX SHORT THIN DOUBLE TAPERED CURVED BEAMS - TWO SETS OF THREE BEAMS
 LIGHT RADIAL LOAD FOR PRECISION BEARINGS



B SERIES PART NUMBER	D MM + .00 - .25 INCH + .000 - .010	L MM ± .38 INCH ± .015	E MM ± .13 INCH ± .005	F MM ± .38 INCH ± .015	G MM ± .13 INCH ± .005	CLAMP SCREW		MISALIGNMENT SEE DEFINITIONS PAGE 25			B ₁ BORE		B ₂ BORE		STATIC TORQUE		TORSIONAL STIFFNESS		INERTIA		MASS				
						MM INCH	MM INCH	ANGULAR OFFSET DEGREES	PARALLEL OFFSET MM INCH	AXIAL MOTION MM INCH	MM INCH + .25 - .001 - .000	MM INCH + .25 - .001 - .000	Nm LB.IN. SEE NOTES 9 - 10	Nm LB.IN. SEE NOTE 10	10 ⁻³ kgm ²	10 ⁻³ lb.in ²	kg	lb							
BTOOO175 BLOOO175	44.00	44.50	10.41	23.60	5.00	M5X .8 9.5	M5X .8 2.2	5°	0.38	± .38		10	0.375												
														12	0.437										
														14	0.500	14	0.500	30.05	266	0.07	0.84	0.0418	142.7	0.153	0.338
														16	0.625	16	0.625	26.00	230	0.08	0.93	0.0415	141.8	0.149	0.328
														18	0.687	18	0.687	25.00	221	0.08	1.22	0.0412	140.8	0.145	0.319
														20	0.750	20	0.750	24.18	214	0.09	1.35	0.0408	139.3	0.141	0.310
BTOOO200 BLOOO200	50.00	50.80	10.41	29.97	5.00	M5X .8 9.5	M5X .8 2.2	5°	0.50	± .50		10	0.375												
														12	0.437										
														14	0.500	14	0.500	44.63	395	0.08	0.74	0.0834	284.9	0.239	0.526
														16	0.625	16	0.625	42.93	380	0.09	0.80	0.0829	283.4	0.231	0.510
														18	0.687	18	0.687	40.00	354	0.10	0.92	0.0825	282.0	0.226	0.499
														20	0.750	20	0.750	37.06	328	0.11	0.97	0.0820	280.1	0.221	0.487
BTOOO225 BLOOO225	56.40	57.00	10.41	36.32	5.00	M5X .8 9.5	M5X .8 2.2	5°	.50	± .50		12	0.437												
														14	0.500										
														16	0.625	16	0.625	48.58	430	0.05	0.45	0.1468	501.7	0.323	0.712
														18	0.687	18	0.687	47.57	421	0.06	0.49	0.1457	497.9	0.313	0.690
														20	0.750	20	0.750	44.06	390	0.06	0.54	0.1440	492.2	0.302	0.666
														22	0.875	22	0.875	40.34	357	0.07	0.62	0.1402	479.2	0.283	0.624
										24-25	1.000	24-25	1.000	37.51	332	0.08	0.75	0.1376	470.2	0.272	0.598				

D SERIES - PRECISION HEAVY DUTY FLEXIBLE COUPLING

SIX THICK SHORT DOUBLE TAPERED CURVED BEAMS HAVE MORE SPACE BETWEEN EACH BEAM FOR GREATER MISALIGNMENT



CLAMP



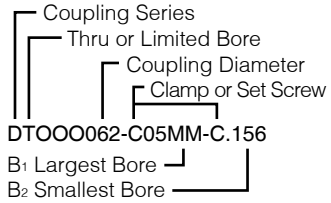
SET SCREW



CUT AWAY VIEW

Notes

1. Nomenclature



For key way, hex bores, nickle plating, stainless steel screws and other standard options see page 4.

2. All THRU BORE couplings have an inside relief so the shafts will not touch the beams at the maximum misalignment ratings. These bores are shown in blue and white.

3. All LIMITED BORE couplings having the same OD have the same ID. The torque, stiffness and inertia are the same for all bores. When the bores are in blue, the maximum shaft penetration is E depth. When one bore is in white it can extend into the flexible area. Torque and wind-up is shown in blue.

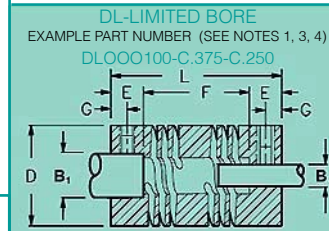
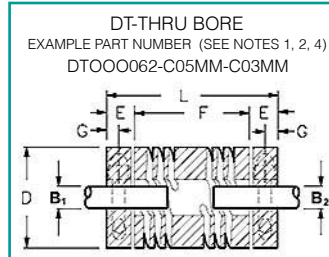
4. Any B₁ may be combined with any B₂. The smallest B₂ bores cannot be duplicated in the B₁ column where they are not already shown. The smallest B₁ inside circumferential length determines the misalignment rating.

5. Set screws are 120° apart. All screws are hex socket steel with black oxide finish. The torques are the screw manufacturers maximum ratings. For screw variations see page 4.

6. Coupling material is 2024-T3.51 QQA225/6 aluminum, black anodized to MIL A8625F Type II Class 2.

7. Nickel plating for added corrosion resistance is available for all Rocom couplings. See page 4.

8. G10 phenolic inserts for thermal and electrical isolation are available for all Rocom couplings.



9. Static torque is the maximum torque rating for each B₁ bore. The correct dynamic torque safety factor should be determined by the customer in accordance with acceleration, deceleration, fast reversals, sudden stops, etc.

10. Torque and torsional stiffness ratings are at maximum misalignment, not in a straight line.

11. Mass and inertia are calculated with the customer's required B₁ bore and the smallest B₂ bore shown.

12. Clamps are an integral part of the coupling and cannot be removed.

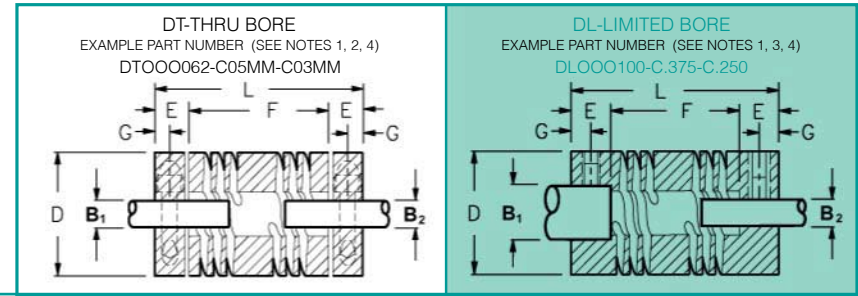
13. The installation procedures shown on page 26 should be followed to insure infinite life.

14. TEST BEFORE YOU BUY. Rocom will furnish samples at no charge for all new OEM designs or for comparative evaluation.

D SERIES PART NUMBER	D MM INCH	L MM INCH	E MM INCH	F MM INCH	G MM INCH	CLAMP MM INCH	SET SCREW MM INCH	MISALIGNMENT SEE DEFINITIONS PAGE 25			B ₁ BORE		B ₂ BORE		STATIC TORQUE		TORSIONAL STIFFNESS		INERTIA		MASS													
								ANGULAR OFFSET DEGREES	PARALLEL OFFSET MM INCH	AXIAL MOTION MM INCH	MM INCH	MM INCH	Nm LB.IN.	Nm LB.IN.	MIN/Nm MIN/LB.IN.	MIN/Nm MIN/LB.IN.	10 ⁻³ kgm ²	10 ⁻³ lb.in ²	kg	lb														
DTOOO050 DLOOO050	12.60 .495	19.00 .75	5.10 .200	8.90 .350	2.35 0.092	M2X.4 .60 1-72 5	M3X.5 0.92 4-40 5	3°	0.18	± .13	± .005																							
DTOOO062 DLOOO062	15.75 .620	22.10 .87	5.58 .220	10.92 .430	2.54 .100	M2X.4 .60 2-56 7	M3X.5 0.92 6-32 10	4°	0.25	± .13	± .005																							
DTOOO075 DLOOO075	19.00 .745	25.40 1.00	6.35 .250	12.70 .500	3.18 .125	M3X.5 2.1 4-40 18	M4X.7 2.2 8-32 20	5°	0.38	± .25	± .010																							

D SERIES - PRECISION HEAVY DUTY FLEXIBLE COUPLING

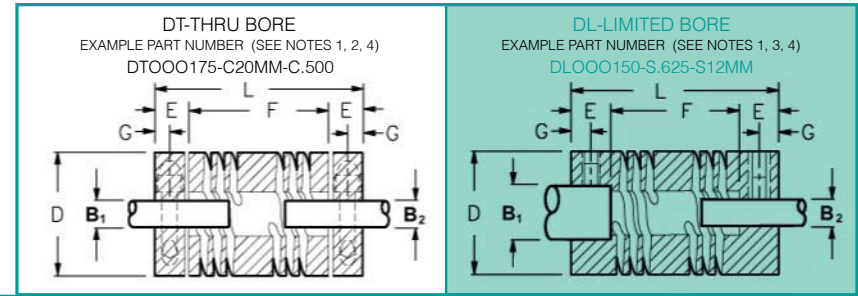
SIX THICK SHORT DOUBLE TAPERED CURVED BEAMS HAVE MORE SPACE BETWEEN EACH BEAM FOR GREATER MISALIGNMENT



D SERIES PART NUMBER	D MM + .00 - .25 INCH + .000 - .010	L MM ± .38 INCH ± .015	E MM ± .13 INCH ± .005	F MM ± .38 INCH ± .015	G MM ± .13 INCH ± .005	CLAMP SET SCREW		MISALIGNMENT SEE DEFINITIONS PAGE 25			B ₁ BORE		B ₂ BORE		STATIC TORQUE		TORSIONAL STIFFNESS		INERTIA		MASS				
						MM INCH TORQUE LB.IN.	MM INCH TORQUE LB.IN.	ANGULAR OFFSET DEGREES	PARALLEL OFFSET MM INCH	AXIAL MOTION MM INCH	MM + .25 - .000	INCH + .001 - .000	MM + .25 - .000	INCH + .001 - .000	Nm LB.IN.	LB.IN.	MIN/Nm	MIN/LB.IN.	10 ⁻³ kgm ²	10 ⁻³ lb.in. ²	kg	lb			
D _{TOOO100} D _{L_{OOO100}}	25.40	38.00	10.66	16.51	5.08	M3X.5 2.1	M5X.8 4.0	7°	0.76	± .50	± .020	3	0.125												
	.995	1.50	.420	.650	.200	6-32 34	10-24 36					4	0.156												
												6	0.250	6	0.250	8.59	76	0.56	4.43	0.0039	13.18	0.044	0.098		
												8	0.312	8	0.312	8.25	73	0.60	5.53	0.0038	13.12	0.043	0.095		
												10	0.375	10	0.375	7.57	67	0.73	6.47	0.0038	13.01	0.042	0.092		
D _{TOOO125} D _{L_{OOO125}}	31.50	50.80	10.66	29.20	5.10	M4X.7 4.6	M5X.8 4.0	10°	1.02	± .50	± .025	5	0.187												
	1.240	2.00	.420	1.150	.200	8-32 59	10-24 36					6	0.250												
												8	0.312	8	0.312	12.20	108	0.30	2.63	0.0124	42.21	0.090	0.199		
												10	0.375	10	0.375	10.96	97	0.36	3.16	0.0123	41.96	0.088	0.193		
												11-12	0.437	11-12	0.437	10.28	91	0.44	3.89	0.0122	41.56	0.085	0.186		
D _{TOOO150} D _{L_{OOO150}}	57.70	60.00	13.08	34.54	6.00	M5X.8 9.5	M6X1 7.2	10°	1.27	± .50	± .020	6	0.250												
	1.485	2.37	.515	1.34	.240	10-24 77	1/4-20 87					8	0.312												
												10	0.375	10	0.375	21.00	186	0.21	1.82	0.0303	103.6	0.154	0.338		
												12	0.437	12	0.437	19.77	175	0.23	2.07	0.0302	103.1	0.150	0.331		
												14	0.500	14	0.500	19.00	168	0.28	2.44	0.0300	102.4	0.146	0.322		
D _{TOOO162} D _{L_{OOO162}}	40.90	63.50	13.08	37.59	6.00	M5X.8 9.5	M6X1 7.2	10°	1.27	± .50	± .020	16	0.625	16	0.625	17.62	156	0.37	3.31	0.0295	100.9	0.140	0.308		
	1.610	2.50	.515	1.47	.240	1/4-20 77	1/4-20 87					6	0.250												
												8	0.312												
												10	0.375												
												12	0.437	12	0.437	29.15	258	0.17	1.53	0.0435	148.7	0.186	0.410		
D _{TOOO175} D _{L_{OOO175}}	44.00	70.00	13.08	40.64	6.00	M5X.8 9.5	M6X1 7.2	10°	1.40	± .65	± .025	14	0.500	14	0.500	36.04	319	0.14	1.22	0.0645	220.5	0.232	0.512		
	1.735	2.75	.515	1.60	.240	1/4-20 77	1/4-20 87					16	0.625	16	0.625	34.35	304	0.17	1.50	0.0639	218.4	0.224	0.494		
												18	0.687	18	0.687	29.26	259	0.20	1.80	0.0632	216.0	0.217	0.478		
												20	0.750	20	0.750	24.40	216	0.26	2.36	0.0622	212.7	0.209	0.461		
												8	0.312												

D SERIES - PRECISION HEAVY DUTY FLEXIBLE COUPLING

SIX THICK SHORT DOUBLE TAPERED CURVED BEAMS HAVE MORE SPACE BETWEEN EACH BEAM FOR GREATER MISALIGNMENT



D SERIES PART NUMBER	D MM + .00 - .25 INCH + .000 - .010	L MM ± .38 INCH ± .015	E MM ± .13 INCH ± .005 SEE NOTE 3	F MM ± .38 INCH ± .015	G MM ± .13 INCH ± .005	CLAMP SCREW		MISALIGNMENT SEE DEFINITIONS PAGE 25			B ₁ BORE		B ₂ BORE		STATIC TORQUE		TORSIONAL STIFFNESS		INERTIA		MASS					
						MM INCH	MM INCH	ANGULAR OFFSET DEGREES	PARALLEL OFFSET MM INCH	AXIAL MOTION MM INCH	MM + .25 - .000 INCH + .001 - .000 SEE NOTES 2, 3, 4	MM + .25 - .000 INCH + .001 - .000 SEE NOTES 2, 3, 4	Nm LB.IN.	Nm LB.IN.	MIN/Nm MIN/LB.IN.	MIN/Nm MIN/LB.IN.	10 ⁻³ kgm ²	10 ⁻³ lb.in ²	kg	lb						
D _{TOOO} 200 D _{L_{OOO}} 200	50.00	76.00	13.08	50.29	6.00	M6X1 16	M6X1 7.2	10°	1.50	± .75		10	0.375													
	1.970	3.00	.515	1.97	.240	1/4-20 200	1/4-20 87				.060	± .030		12	0.437											
														14	0.500											
														16	0.625	16	0.625	41.47	367	0.11	0.95	0.1209	413.3	0.331	0.729	
														18	0.687	18	0.687	40.11	355	0.14	1.25	0.1200	410.2	0.322	0.710	
														20	0.750	20	0.750	38.08	337	0.16	1.45	0.1189	406.2	0.313	0.689	
D _{TOOO} 225 D _{L_{OOO}} 225	56.40	82.50	13.08	56.64	6.00	M6X1 16	M6X1 7.2	10°	1.55	± .75		12	0.437													
	2.220	3.25	.515	2.22	.240	1/4-20 200	1/4-20 87				.060	± .030		14	0.500											
														16	0.625	16	0.625	63.27	560	0.08	0.75	0.2129	727.6	0.472	1.03	
														18	0.687	18	0.687	60.80	538	0.09	0.85	0.2116	723.1	0.460	1.01	
														20	0.750	20	0.750	57.06	505	0.10	0.87	0.2109	720.8	0.454	1.0	
														22	0.875	22	0.875	52.43	464	0.10	0.89	0.2090	714.2	0.440	.970	
										24-25	1.000	24-25	1.000	47.57	421	0.10	0.92	0.2055	702.2	0.421	.927					

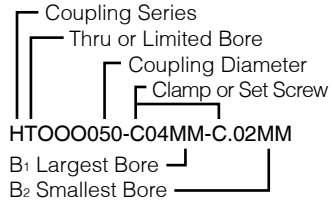
H SERIES - PRECISION, HIGH TORQUE LOW WIND-UP

THREE THICK SHORT DOUBLE TAPERED CURVED BEAMS FOR HIGH TORQUE AND TORSIONAL RIGIDITY, WITH INFINITE LIFE



Notes

1. Nomenclature



For key way, hex bores, nickle plating, stainless steel screws and other standard options see page 4.

2. All THRU BORE couplings have an inside relief so the shafts will not touch the beams at the maximum misalignment ratings. These bores are shown in blue and white.

3. All LIMITED BORE couplings having the same OD have the same ID. The torque, stiffness and inertia are the same for all bores. When the bores are in blue, the maximum shaft penetration is E depth. When one bore is in white it can extend into the flexible area. Torque and wind-up is shown in blue.

4. Any B₁ may be combined with any B₂. The smallest B₂ bores cannot be duplicated in the B₁ column where they are not already shown. The smallest B₁ inside circumferential length determines the misalignment rating.

5. Set screws are 120° apart. All screws are hex socket steel with black oxide finish. The torques are the screw manufacturers maximum ratings. For screw variations see page 4.

6. Coupling material is 2024-T3.51 QQA225/6 aluminum, black anodized to MIL A8625F Type II Class 2.

7. Nickel plating for added corrosion resistance is available for all Rocom couplings. See page 4.

8. G10 phenolic inserts for thermal and electrical isolation are available for all Rocom couplings.

9. Static torque is the maximum torque rating for each B₁ bore. The correct dynamic torque safety factor should be determined by the customer in accordance with acceleration, deceleration, fast reversals, sudden stops, etc.

10. Torque and torsional stiffness ratings are at maximum misalignment, not in a straight line.

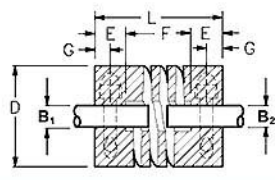
11. Mass and inertia are calculated with the customer's required B₁ bore and the smallest B₂ bore shown.

12. Clamps are an integral part of the coupling and cannot be removed.

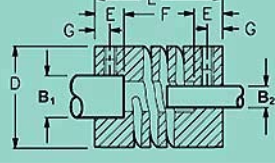
13. The installation procedures shown on page 26 should be followed to insure infinite life.

14. TEST BEFORE YOU BUY. Rocom will furnish samples at no charge for all new OEM designs or for comparative evaluation.

HT-THRU BORE
EXAMPLE PART NUMBER (SEE NOTES 1, 2, 4)
HT000037-C04MM-C02MM



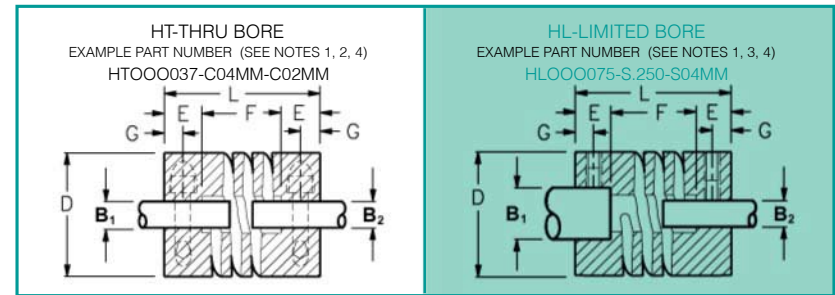
HL-LIMITED BORE
EXAMPLE PART NUMBER (SEE NOTES 1, 3, 4)
HL000075-S.250-S04MM



H SERIES PART NUMBER	D MM INCH	L MM INCH	E MM INCH	F MM INCH	G MM INCH	CLAMP MM INCH	SET SCREW MM INCH	MISALIGNMENT SEE DEFINITIONS PAGE 25			B ₁ BORE		B ₂ BORE		STATIC TORQUE		TORSIONAL STIFFNESS		INERTIA		MASS											
								ANGULAR OFFSET DEGREES	PARALLEL OFFSET MM INCH	AXIAL MOTION MM INCH	MM INCH	MM INCH	Nm LB.IN.	Nm LB.IN.	MIN/Nm MIN/LB.IN.	MIN/Nm MIN/LB.IN.	10 ⁻³ kgm ²	10 ⁻³ lb.in ²	kg	lb												
BTO0037 BLO0037	9.40 .370	12.70 .50	3.80 .150	5.00 .200	1.90 0.075	M1.6X.35 0.29 0-82 3	M2X.4 0.21 2-56 1.8	0.5°	0.02	± .02	± .001	1	0.031																			
												2	0.062																			
												2.5	0.093																			
												3	0.120	3	0.120	0.84	7.42	2.55	22.61	0.0000	0.079	0.002	0.004									
												3	0.125	3	0.125	0.84	7.42	2.55	22.63	0.0000	0.079	0.002	0.004									
4	0.156	4	0.156	0.60	5.32	2.87	25.42	0.0000	0.078	0.002	0.004																					
BTO0050 BLO0050	12.60 .495	12.70 .50	3.80 .150	5.00 .200	1.90 0.075	M1.6X.35 0.29 0-82 3	M2X.4 0.21 2-56 1.8	0.5°	0.04	± .04	± .0015	1	0.031																			
												2	0.062																			
												2.5	0.093																			
												3	0.120	3	0.120	1.41	12.51	1.15	10.21	0.0001	0.267	0.004	0.008									
												3	0.125	3	0.125	1.41	12.51	1.15	10.21	0.0001	0.267	0.004	0.008									
4	0.156	4	0.156	1.16	10.22	1.23	10.86	0.0001	0.266	0.004	0.007																					
5	0.187	5	0.187	0.94	8.34	1.54	13.61	0.0001	0.263	0.003	0.007																					
BTO0062 BLO0062	15.75 .620	15.75 .62	4.55 .180	6.60 .260	1.90 0.075	M2X.4 .60 1-72 5	M3X.5 0.92 4-40 5	0.5°	0.04	± .04	± .0015	2	0.062																			
												2.5	0.093																			
												3	0.120																			
												3	0.125																			
												4	0.156	4	0.156	3.86	34.2	0.65	5.80	0.0002	0.755	0.007	0.014									
5	0.187	5	0.187	3.71	32.8	0.71	6.32	0.0002	0.751	0.006	0.014																					
6	0.250	6	0.250	3.29	29.1	0.98	8.68	0.0002	0.740	0.006	0.013																					

H SERIES - PRECISION, HIGH TORQUE LOW WIND-UP

THREE THICK SHORT DOUBLE TAPERED CURVED BEAMS FOR HIGH TORQUE AND TORSIONAL RIGIDITY, WITH INFINITE LIFE



H SERIES PART NUMBER	D	L	E	F	G	CLAMP SET SCREW		MISALIGNMENT <small>SEE DEFINITIONS PAGE 25</small>			B ₁ BORE		B ₂ BORE		STATIC TORQUE		TORSIONAL STIFFNESS		INERTIA		MASS		
						MM	MM	MM	MM	MM	MM	MM	ANGULAR OFFSET DEGREES	PARALLEL OFFSET MM	AXIAL MOTION MM	MM	INCH	MM	INCH	Nm	LB.IN.	MIN/Nm	MIN/LB.IN.
THRU BORE	+.00	± .38	± .13	± .38	± .13																		
LIMITED BORE	-.25																						
<small>SEE NOTE 1</small>	INCH	INCH	INCH	INCH	INCH																		
<small>SEE NOTE 4</small>	+ .000	± .015	± .005	± .015	± .005																		
	-.010		<small>SEE NOTE 3</small>																				
HT000175 HLO00175	44.00	44.50	11.45	21.60	5.00	M5X.8	M5X.8	1°	0.07	± .07													
						9.5	2.2																
	1.735	1.75	.450	.850	0.195	10-24	77	10-24	0.003	± .003	14	0.500	14	0.500	61.00	540	0.05	0.46	0.0419	143.0	0.155	0.341	
											16	0.625	16	0.625	52.54	465	0.05	0.48	0.0416	142.0	0.149	0.329	
											18	0.687	18	0.687	43.84	388	0.06	0.59	0.0413	141.0	0.146	0.321	
											20	0.750	20	0.750	35.70	316	0.08	0.71	0.0409	139.7	0.141	0.311	
HT000200 HLO00200	50.00	50.80	12.20	26.40	5.00	M5X.8	M5X.8	2°	0.07	± .07													
						9.5	2.2																
	1.970	2.00	.480	1.040	0.195	10-24	77	10-24	0.003	± .003	14	0.500	14	0.500	79.65	705	0.04	0.36	0.0828	282.9	0.239	0.526	
											16	0.625	16	0.625	77.17	683	0.04	0.37	0.0824	281.7	0.233	0.512	
											18	0.687	18	0.687	73.89	654	0.05	0.42	0.0822	280.7	0.229	0.504	
											20	0.750	20	0.750	63.38	561	0.06	0.51	0.0817	279.3	0.224	0.494	
HT000225 HLO00225	56.40	57.00	12.20	32.76	5.00	M5X.8	M5X.8	2°	0.10	± .10													
						9.5	2.2																
	2.220	2.25	.480	1.290	0.195	10-24	77	10-24	0.004	± .004	14	0.500	14	0.500	96.04	850	0.02	0.22	0.1481	506.0	0.341	0.752	
											16	0.625	16	0.625	95.02	841	0.03	0.23	0.1477	504.8	0.335	0.738	
											18	0.687	18	0.687	94.34	835	0.03	0.24	0.1474	503.7	0.330	0.728	
											20	0.750	20	0.750	92.87	822	0.03	0.29	0.1469	502.2	0.326	0.718	