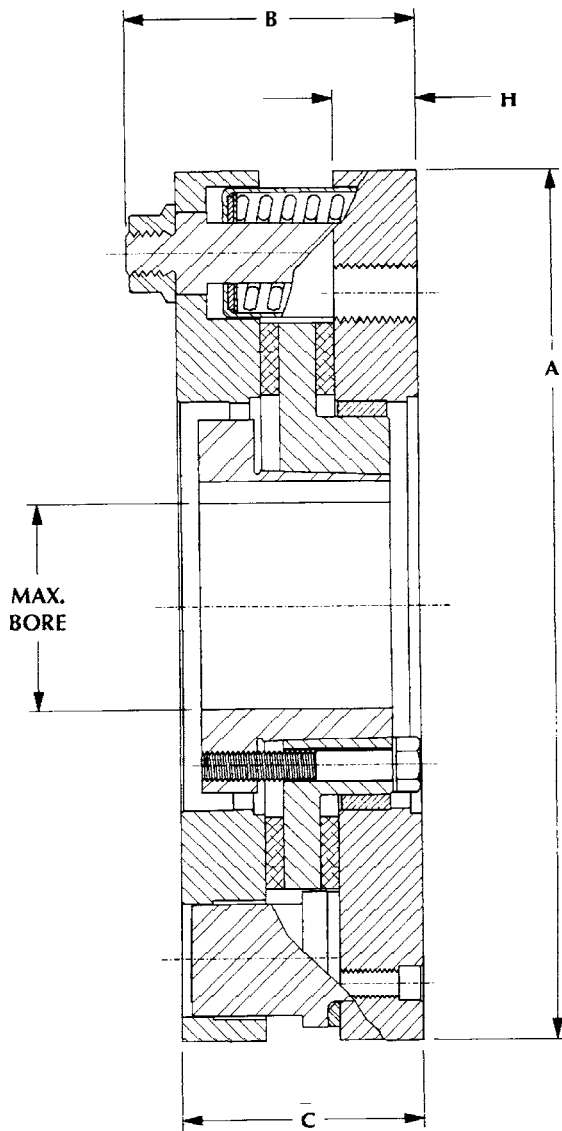
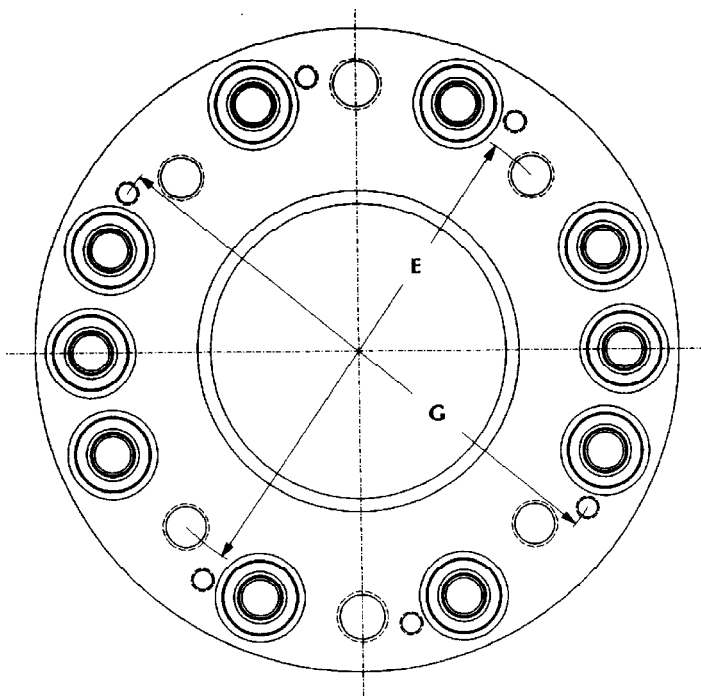


# SLQ Torque Limiter Series

- *Single disc*
- *QD bushing mounted*



PT Tech has other model torque limiters for applications requiring greater torque capacity within the same diameter as the SLQ series. Data sheets available upon request.



1441 WOLF CREEK TRAIL, P.O. BOX 305  
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## SLQ TORQUE LIMITER SERIES

Visit us on the internet at [www.pttech.com](http://www.pttech.com)

DIMENSIONAL DATA <sup>1</sup>					Table #1	
SLQ CLUTCH SIZE		15	19	28	35	
<b>A</b>	Outside Diameter <sub>2</sub>	inches <i>mm</i>	9.055 <i>230</i>	11.024 <i>280</i>	14.370 <i>365</i>	17.480 <i>444</i>
<b>B</b>	Overall Length	inches <i>mm</i>	2.95 <i>74.9</i>	2.95 <i>74.9</i>	3.25 <i>82.5</i>	4.5 <i>114.3</i>
<b>C</b>	Length of Body	inches <i>mm</i>	2.47 <i>62.5</i>	2.47 <i>62.5</i>	2.77 <i>70.3</i>	2.87 <i>72.9</i>
<b>E</b>	Bolt circle (for Centaflex Coupling)	inches <i>mm</i> Bolt Qty & Size	6.496 <i>165</i> 3-M16	8.464 <i>215</i> 4-M20	11.024 <i>280</i> 4-M20	
<b>G</b>	Bolt Circle (For Renold Hi-Tec Coupling) <sup>4</sup>	inches <i>mm</i> Bolt Qty & Size	8.374 <i>212.7</i> 6-M10	9.528 <i>242</i> 6-M10	13.307 <i>338</i> 10-M12 <sup>3</sup>	12.748 <i>323.8</i> 10-M12
<b>H</b>	Usable Thread Depth	inches <i>mm</i>	.85 <i>21.6</i>	.85 <i>21.6</i>	1.15 <i>29.2</i>	1.25 <i>31.8</i>
	QD Bushing	Size	SK	SF	E	J
	Max Bore - Sq Key <sup>5</sup>	inches <i>mm</i>	2.125 <i>55</i>	2.25 <i>60</i>	2.875 <i>75</i>	3.81 <i>100</i>
	Max Bore - Shallow Key <sup>6</sup>	inches	2.50	2.88	3.50	4.50

<sup>1</sup> All dimensions subject to change without notice.

<sup>2</sup> OD Tolerance = + .000 - .001" (+0.00 - .025mm)

<sup>3</sup> 6 holes on 8 hole pattern key.

<sup>4</sup> Consult PT Tech.

<sup>5</sup> Metric key meets ISO standards. They are rectangular in shape.

<sup>6</sup> No metric equivalent QD bushings available.

PERFORMANCE DATA					Table #2
SLQ CLUTCH SIZE		15	19	28	35
<b>Maximum Torque</b>	lb-ft <i>Nm</i>	438 <i>594</i>	950 <i>1288</i>	2096 <i>2842</i>	3828 <i>5192</i>
<b>No. of Spring Cup Bolts</b>		<b>6</b>	<b>10</b>	<b>16</b>	<b>22</b>
Torque per spring cup bolt	lb-ft <i>Nm</i>	73 <i>99</i>	95 <i>128</i>	131 <i>177</i>	174 <i>236</i>
	RED				
	BLUE	44 <i>60</i>	57 <i>77</i>	79 <i>107</i>	104 <i>141</i>
	WHITE	31 <i>42</i>	40 <i>54</i>	55 <i>74</i>	73 <i>99</i>
	SILVER	12 <i>16</i>	16 <i>21</i>	22 <i>29</i>	29 <i>40</i>
<b>Maximum Speed</b>	RPM	3600	3000	2500	2000
<b>Inertia Total</b>	lb-ft <sup>2</sup> <i>kgm<sup>2</sup></i>	2.32 <i>.0977</i>	5.1 <i>.2147</i>	16.94 <i>.7133</i>	40.32 <i>1.699</i>
<b>Inertia Output</b>	lb-ft <sup>2</sup> <i>kgm<sup>2</sup></i>	.16 <i>.0067</i>	.43 <i>.0181</i>	1.75 <i>.0737</i>	6.81 <i>.287</i>
<b>Weight</b>	lbs <i>kg</i>	27 <i>12.3</i>	45 <i>20.5</i>	84 <i>38.2</i>	169 <i>76.85</i>

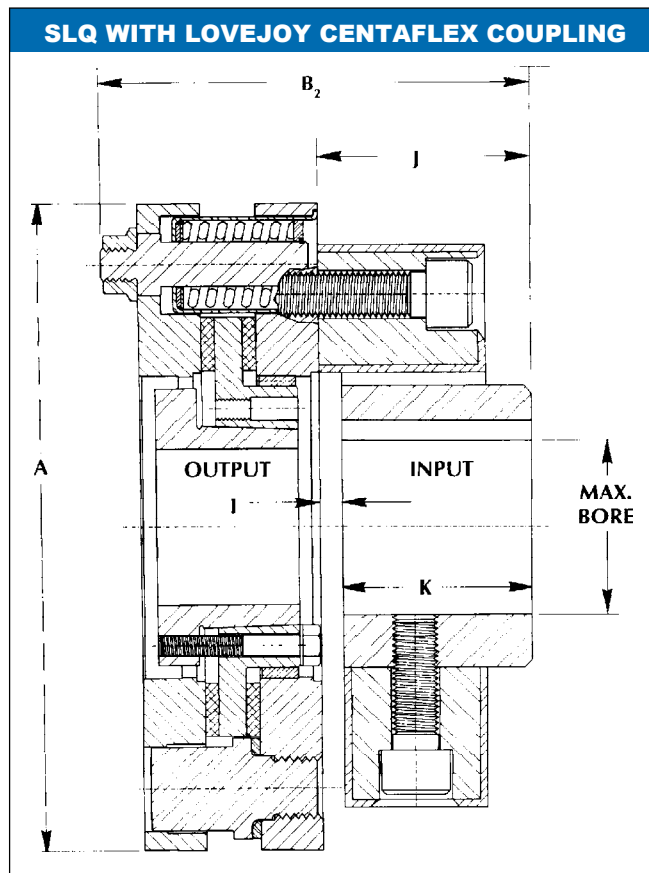


Table #3

SLQ CLUTCH SIZE			
SLQ SERIES	15	19	28
<b>A</b> Outside Dia.	in. 9.055 mm 230	in. 11.024 mm 280	in. 14.370 mm 365
<b>B<sub>2</sub></b> Overall Length	in. 5.86 mm 148.8	in. 6.41 mm 162.8	in. 7.20 mm 182.9
<b>I</b> D.B.S.E.*	in. .31 mm 7.9	in. .31 mm 7.9	in. .31 mm 7.9
<b>J</b> Coupling Length	in. 2.91 mm 73.9	in. 3.46 mm 87.9	in. 4.25 mm 108.0
<b>K</b> Hub Length	in. 2.60 mm 66.0	in. 3.15 mm 80.0	in. 3.94 mm 100.1
<b>Max Bore</b>	in. 2.44 mm 62	in. 3.13 mm 80	in. 4.25 mm 108
<b>Centaflex Coupling Size**</b>	30	140	250

\* D.B.S.E. = Distance Between Shaft Ends

\*\* Refer to Lovejoy Centaflex Model 1 Rubber Coupling for all sizes  
Lovejoy Mfg. National Sales Office, (630) 852-0500

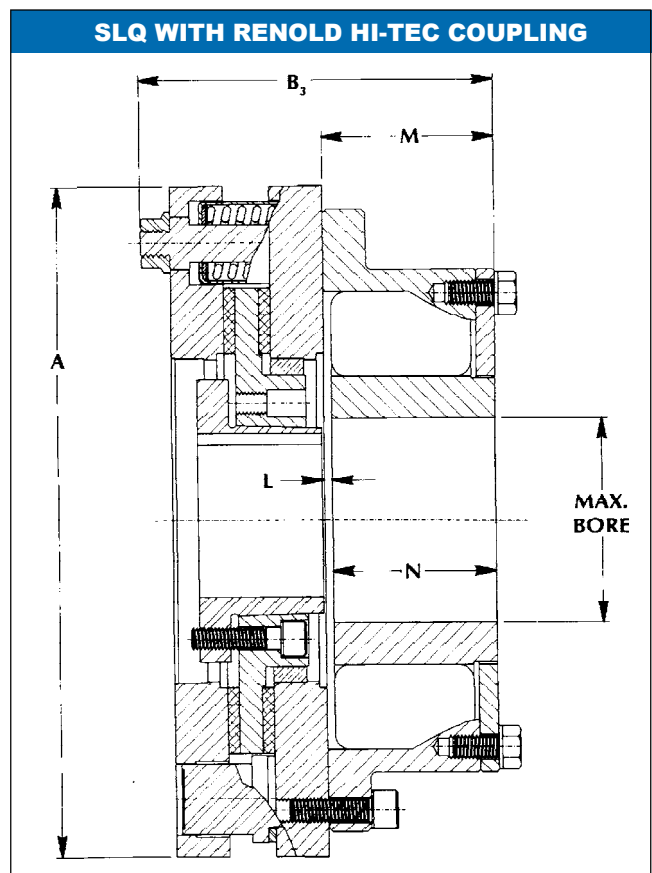
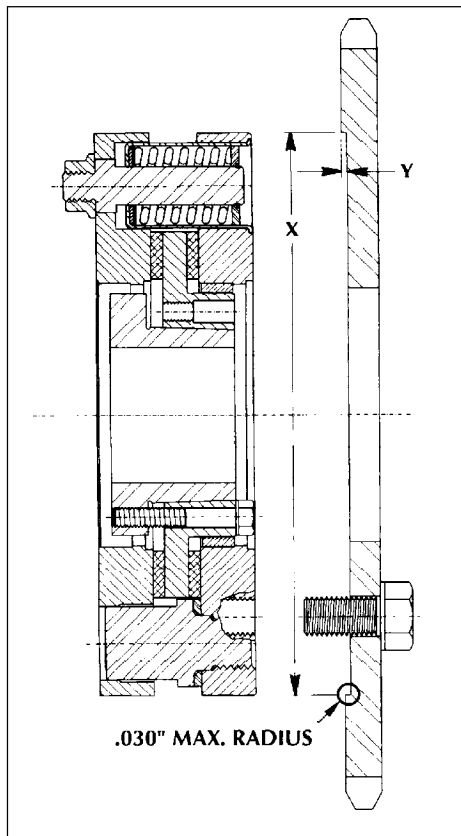


Table #4

SLQ CLUTCH SIZE				
SLQ SERIES	15	19	28	35
<b>A</b> Outside Dia.	in. 9.055 mm 230	in. 11.024 mm 280	in. 14.370 mm 365	in. 17.480 mm 444
<b>B<sub>3</sub></b> Overall Length	in. 5.45 mm 138.4	in. 5.70 mm 144.8	in. 7.12 mm 180.9	in. 8.38 mm 212.7
<b>L</b> D.B.S.E.*	in. .125 mm 3.2	in. .125 mm 3.2	in. .125 mm 3.2	in. .125 mm 3.2
<b>M</b> Coupling Length	in. 2.500 mm 63.5	in. 2.750 mm 69.9	in. 3.875 mm 98.4	in. 3.875 mm 98.4
<b>N</b> Hub Length	in. 2.374 mm 60.3	in. 2.625 mm 66.7	in. 3.75 mm 95.2	in. 3.75 mm 95.2
<b>Max Bore</b>	in. 2.95 mm 75	in. 3.35 mm 85	in. 4.50 mm 115	in. 4.50 mm 115
<b>Renold Hi-Tec Coupling Size* and part no.</b>	+P 75 U10351/01	+P 85 U10352/02	+P 115 U10354/04	+P 115 U10377/00

\* D.B.S.E. = Distance Between Shaft Ends

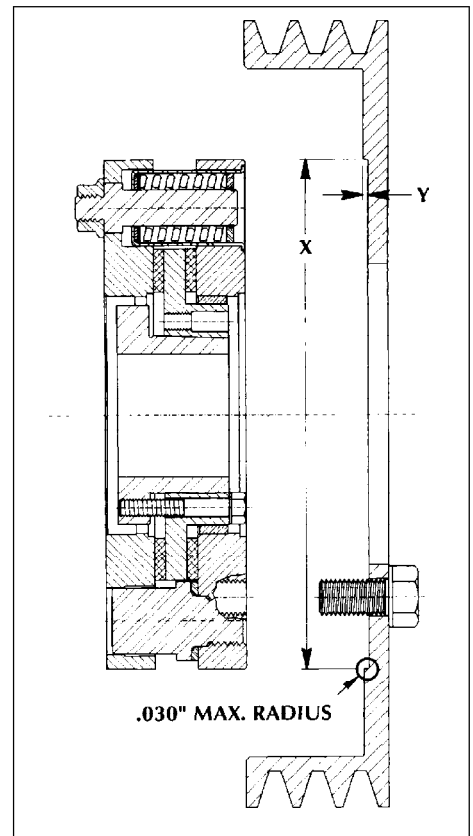
\*\* Refer to Renold Hi-Tec Coupling Flex Half for all sizes  
Renold Hi-Tec Engineering Co., 1-800-850-8141



PILOTING INFORMATION		
CLUTCH SIZE	X *	Y
15	9.056	.125
19	11.025	.125
28	14.371	.125
35	17.481	.125

\* +.001 - .000

Use either bolt circle (see dimensions E and G, front page) to secure sprocket or pulley to clutch input flange.



### Preliminary Selection Procedure\*

- Determine running torque ( $T_R$ ):**  
 $T_R = (HP \times 5250) / RPM$
- Determine max torque:**  
 This information can be obtained from motor manufacturer. Typically, NEMA "B" motors have a max torque that is 250% greater than  $T_R$ .
- Determine torque setting ( $T_S$ ):**  
 $T_S = \text{max torque} \times 1.50$
- Preliminary selection based on:**
  - Torque setting ( $T_S$ )
  - Bore requirement
  - Max speed
- Consult PT Tech to correctly match application energy requirement and clutch energy capacity.
- For diesel or turbine applications consult PT Tech.

\* This procedure is strictly intended as a general guideline. Consult PT Tech to finalize selection.

### Application Engineering Assistance

PT Tech has analyzed hundreds of drive systems in many types of equipment and industries. Our torque control expertise is available to our customers at no charge to help engineer possible torque protection.

PT Tech can provide a computerized report that analyzes your drive system and helps determine the need for torque protection. The computer generates a torque analysis graph comparing the maximum torque in the drive system, with and without a TLC torque limiter, under various jam conditions.

Also, PT Tech has developed a unique torque test stand that can simulate shockloads generated by the inertia of motors up to 2500 HP.



**WARRANTY:** PT Tech guarantees all its products will leave the factory in good condition. PT Tech warrants its products against defects in workmanship and material for a period of 365 days (one year) after shipment. Adjustments under this warranty will be made only after completion of inspection of the part or product in PT Tech's factory. PT Tech's liability under the warranty shall extend only to the replacement or correction of any defective part or product determined by PT Tech's inspection as not conforming to this warranty. Under no circumstances shall PT Tech be liable for consequential or incidental damages. This warranty shall not apply to any product which shall have been repaired or altered without PT Tech's knowledge and consent or operated or installed contrary to PT Tech's instruction or subjected to misuse, improper maintenance, or damaged by accident or negligence.

**PERFORMANCE ASSURANCE:** Rated torque and speeds are provided by PT Tech to assist the buyer in selecting the proper product. In addition, engineering assistance is offered by PT Tech for design and application of custom designed drives. Since the actual performance characteristics of the buyer's equipment cannot be completely analyzed nor duplicated in laboratory tests, performance assurance of all PT Tech products in the buyer's applications is the responsibility of the buyer. Performance assurance is usually accomplished through manufacture of a prototype by PT Tech and a test or qualification program on the part of the buyer. Rotating equipment is potentially dangerous and should be properly guarded. The user should check all applicable safety codes in his area and provide suitable guards.