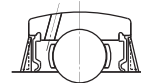
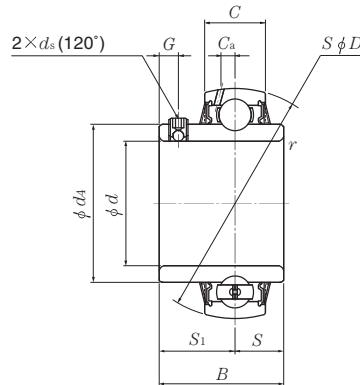
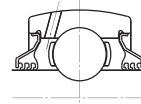


## Ball bearings Set screw type



Standard: Seal + Slinger

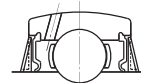
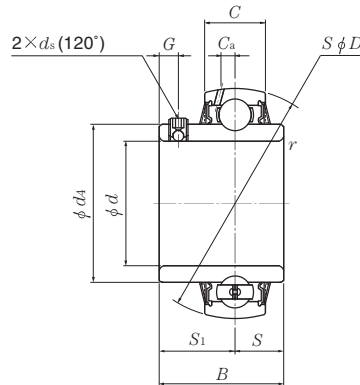
Triple Sealed  
UCxxD1LLJ  
Example : UC305D1LLJ

Shaft dia. mm inch	Bearing number	Nominal dimensions										
		$d$	$D$	$B$	$C$	$r_s$ mm min.	$S$	inch $S_1$	$G$	$d_s$	$d_4$	$C_a$
<b>25</b>	<b>UC305D1</b>	<b>25</b>	<b>62</b>	<b>38</b>	<b>20</b>	<b>1.5</b>	<b>15</b>	<b>23</b>	<b>6</b>	<b>M6×0.75</b>	<b>36.8</b>	<b>5.0</b>
$1\frac{3}{16}$	<b>UC305-013D1</b>	0.8125										
$\frac{7}{8}$	<b>UC305-014D1</b>	0.8750										
$1\frac{5}{16}$	<b>UC305-015D1</b>	0.9375	2.4409	1.4961	0.7874	0.059	0.591	0.906	0.236	$\frac{1}{4}$ -28UNF	1.4488	0.197
<b>1</b>	<b>UC305-100D1</b>	1.0000										
<b>30</b>	<b>UC306D1</b>	<b>30</b>	<b>72</b>	<b>43</b>	<b>23</b>	<b>1.5</b>	<b>17</b>	<b>26</b>	<b>6</b>	<b>M6×0.75</b>	<b>44.9</b>	<b>5.6</b>
$1\frac{1}{16}$	<b>UC306-101D1</b>	1.0625										
$1\frac{1}{8}$	<b>UC306-102D1</b>	1.1250	2.8346	1.6929	0.9055	0.059	0.669	1.024	0.236	$\frac{1}{4}$ -28UNF	1.7677	0.220
$1\frac{3}{16}$	<b>UC306-103D1</b>	1.1875										
<b>35</b>	<b>UC307D1</b>	<b>35</b>	<b>80</b>	<b>48</b>	<b>25</b>	<b>2</b>	<b>19</b>	<b>29</b>	<b>8</b>	<b>M8×1</b>	<b>49.4</b>	<b>5.7</b>
$1\frac{1}{4}$	<b>UC307-104D1</b>	1.2500										
$1\frac{5}{16}$	<b>UC307-105D1</b>	1.3125	3.1496	1.8898	0.9843	0.079	0.748	1.142	0.315	$\frac{5}{16}$ -24UNF	1.9449	0.224
$1\frac{3}{8}$	<b>UC307-106D1</b>	1.3750										
$1\frac{7}{16}$	<b>UC307-107D1</b>	1.4375										
<b>40</b>	<b>UC308D1</b>	<b>40</b>	<b>90</b>	<b>52</b>	<b>27</b>	<b>2</b>	<b>19</b>	<b>33</b>	<b>10</b>	<b>M10×1.25</b>	<b>56</b>	<b>6.1</b>
$1\frac{1}{2}$	<b>UC308-108D1</b>	1.5000	3.5433	2.0472	1.0630	0.079	0.748	1.299	0.394	$\frac{3}{8}$ -24UNF	2.2047	0.240
$1\frac{9}{16}$	<b>UC308-109D1</b>	1.5625										
<b>45</b>	<b>UC309D1</b>	<b>45</b>	<b>100</b>	<b>57</b>	<b>29</b>	<b>2</b>	<b>22</b>	<b>35</b>	<b>10</b>	<b>M10×1.25</b>	<b>63.5</b>	<b>7.1</b>
$1\frac{5}{8}$	<b>UC309-110D1</b>	1.6250										
$1\frac{11}{16}$	<b>UC309-111D1</b>	1.6875	3.9370	2.2441	1.1417	0.079	0.866	1.378	0.394	$\frac{3}{8}$ -24UNF	2.5000	0.280
$1\frac{3}{4}$	<b>UC309-112D1</b>	1.7500										
<b>50</b>	<b>UC310D1</b>	<b>50</b>	<b>110</b>	<b>61</b>	<b>32</b>	<b>2.5</b>	<b>22</b>	<b>39</b>	<b>12</b>	<b>M12×1.5</b>	<b>70.6</b>	<b>7.9</b>
$1\frac{13}{16}$	<b>UC310-113D1</b>	1.8125										
$1\frac{7}{8}$	<b>UC310-114D1</b>	1.8750	4.3307	2.4016	1.2598	0.098	0.866	1.535	0.472	$\frac{1}{2}$ -20UNF	2.7795	0.311
$1\frac{15}{16}$	<b>UC310-115D1</b>	1.9375										
<b>55</b>	<b>UC311D1</b>	<b>55</b>	<b>120</b>	<b>66</b>	<b>34</b>	<b>2.5</b>	<b>25</b>	<b>41</b>	<b>12</b>	<b>M12×1.5</b>	<b>76.6</b>	<b>8.5</b>
<b>2</b>	<b>UC311-200D1</b>	2.0000										
$2\frac{1}{16}$	<b>UC311-201D1</b>	2.0625	4.7244	2.5984	1.3386	0.098	0.984	1.614	0.472	$\frac{1}{2}$ -20UNF	3.0157	0.335
$2\frac{1}{8}$	<b>UC311-202D1</b>	2.1250										
$2\frac{3}{16}$	<b>UC311-203D1</b>	2.1875										

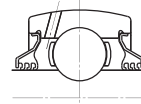
Remarks: 1) For inch series bearings, the  $f_0$  factor for calculating equivalent radial load is the same as the metric series.

Basic load ratings		Factor <sup>1)</sup>	Mass (approx.)
N dynamic $C_i$	lbf static $C_{or}$	$f_0$	kg lb
21 200	10 900	12.6	0.35
			0.88
4 750	2 460		0.84
			0.79
			0.77
26 700	15 000	13.3	0.56
			1.34
6 000	3 400		1.28
			1.23
33 500	19 100	13.1	0.70
			1.70
			1.63
7 500	4 300		1.57
			1.50
40 500	24 000	13.2	0.96
			2.23
9 150	5 400		2.14
53 000	32 000	13.1	1.28
			3.06
11 900	7 200		2.98
			2.87
62 000	38 500	13.2	1.68
			3.95
13 900	8 600		3.84
			3.70
71 500	45 000	13.2	2.08
			4.96
			4.81
16 100	10 100		4.67
			4.50

## Ball bearings Set screw type



Standard: Seal + Slinger



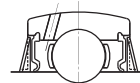
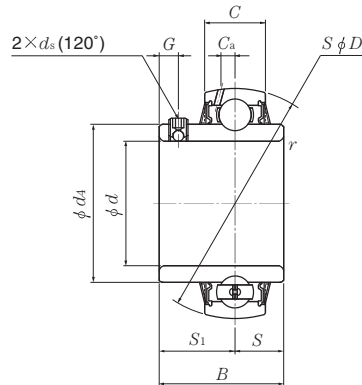
Triple Sealed  
UCxxD1LLJ  
Example : UC305D1LLJ

Shaft dia. mm inch	Bearing number	Nominal dimensions										
		$d$	$D$	$B$	$C$	$r_s$ mm min.	$S$	inch $S_1$	$G$	$ds$	$d_4$	$C_a$
<b>60</b>	<b>UC312D1</b>	<b>60</b>	<b>130</b>	<b>71</b>	<b>36</b>	<b>2.5</b>	<b>26</b>	<b>45</b>	<b>12</b>	<b>M12×1.5</b>	<b>82.7</b>	<b>9.0</b>
<b>2 1/4</b>	<b>UC312-204D1</b>	2.2500										
<b>2 5/16</b>	<b>UC312-205D1</b>	2.3125	5.1181	2.7953	1.4173	0.098	1.024	1.772	0.472	1/2-20UNF	3.2559	0.354
<b>2 3/8</b>	<b>UC312-206D1</b>	2.3750										
<b>2 7/16</b>	<b>UC312-207D1</b>	2.4375										
<b>65</b>	<b>UC313D1</b>	<b>65</b>	<b>140</b>	<b>75</b>	<b>39</b>	<b>2.5</b>	<b>30</b>	<b>45</b>	<b>12</b>	<b>M12×1.5</b>	<b>88.2</b>	<b>9.4</b>
<b>2 1/2</b>	<b>UC313-208D1</b>	2.5000	5.5118	2.9528	1.5354	0.098	1.181	1.772	0.472	1/2-20UNF	3.4724	0.370
<b>2 9/16</b>	<b>UC313-209D1</b>	2.5625										
<b>70</b>	<b>UC314D1</b>	<b>70</b>	<b>150</b>	<b>78</b>	<b>41</b>	<b>2.5</b>	<b>33</b>	<b>45</b>	<b>12</b>	<b>M12×1.5</b>	<b>94.8</b>	<b>10</b>
<b>2 5/8</b>	<b>UC314-210D1</b>	2.6250										
<b>2 11/16</b>	<b>UC314-211D1</b>	2.6875	5.9055	3.0709	1.6142	0.098	1.299	1.772	0.472	1/2-20UNF	3.7323	0.394
<b>2 3/4</b>	<b>UC314-212D1</b>	2.7500										
<b>75</b>	<b>UC315D1</b>	<b>75</b>	<b>160</b>	<b>82</b>	<b>43</b>	<b>2.5</b>	<b>32</b>	<b>50</b>	<b>14</b>	<b>M14×1.5</b>	<b>101.3</b>	<b>10.5</b>
<b>2 13/16</b>	<b>UC315-213D1</b>	2.8125										
<b>2 7/8</b>	<b>UC315-214D1</b>	2.8750	6.2992	3.2283	1.6929	0.098	1.260	1.969	0.551	9/16-18UNF	3.9882	0.413
<b>2 15/16</b>	<b>UC315-215D1</b>	2.9375										
<b>3</b>	<b>UC315-300D1</b>	3.0000										
<b>80</b>	<b>UC316D1</b>	<b>80</b>	<b>170</b>	<b>86</b>	<b>45</b>	<b>2.5</b>	<b>34</b>	<b>52</b>	<b>14</b>	<b>M14×1.5</b>	<b>107.9</b>	<b>11.1</b>
<b>3 1/16</b>	<b>UC316-301D1</b>	3.0625										
<b>3 1/8</b>	<b>UC316-302D1</b>	3.1250	6.6929	3.3858	1.7717	0.098	1.339	2.047	0.551	9/16-18UNF	4.2480	0.437
<b>3 3/16</b>	<b>UC316-303D1</b>	3.1875										
<b>85</b>	<b>UC317D1</b>	<b>85</b>	<b>180</b>	<b>96</b>	<b>47</b>	<b>3</b>	<b>40</b>	<b>56</b>	<b>16</b>	<b>M16×1.5</b>	<b>114.4</b>	<b>11.5</b>
<b>3 1/4</b>	<b>UC317-304D1</b>	3.2500										
<b>3 5/16</b>	<b>UC317-305D1</b>	3.3125	7.0866	3.7795	1.8504	0.118	1.575	2.205	0.630	5/8-18UNF	4.5039	0.453
<b>3 7/16</b>	<b>UC317-307D1</b>	3.4375										
<b>90</b>	<b>UC318D1</b>	<b>90</b>	<b>190</b>	<b>96</b>	<b>49</b>	<b>3</b>	<b>40</b>	<b>56</b>	<b>16</b>	<b>M16×1.5</b>	<b>120.9</b>	<b>12.2</b>
<b>3 7/16</b>	<b>UC318-307D1</b>	3.4375	7.4803	3.7795	1.9291	0.118	1.575	2.205	0.630	5/8-18UNF	4.7598	0.480
<b>3 1/2</b>	<b>UC318-308D1</b>	3.5000										

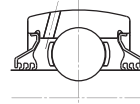
Remarks: 1) For inch series bearings, the  $f_0$  factor for calculating equivalent radial load is the same as the metric series.

Basic load ratings		Factor <sup>1)</sup>	Mass (approx.)
N dynamic $C_i$	lbf static $C_{or}$	$f_0$	kg lb
82 000	52 000	13.2	2.60
			6.06
18 400	11 700		5.89
			5.68
			5.51
92 500	60 000	13.2	3.25
			7.36
20 800	13 400		7.14
104 000	68 000	13.2	3.86
			9.06
23 400	15 300		8.82
			8.60
113 000	77 000	13.2	4.70
			11.0
25 500	17 400		10.7
			10.5
			10.2
123 000	86 500	13.3	5.60
			12.6
27 600	19 500		12.3
			12.1
133 000	97 000	13.3	6.70
			15.2
29 800	21 800		14.9
			14.2
143 000	107 000	13.3	7.60
			17.3
32 000	24 100		16.9

## Ball bearings Set screw type



Standard: Seal + Slinger

Triple Sealed  
UCxxD1LLJ  
Example : UC305D1LLJ

Shaft dia.	Bearing number	Nominal dimensions										
		<i>d</i>	<i>D</i>	<i>B</i>	<i>C</i>	<i>r<sub>s</sub></i> mm min.	<i>S</i>	<i>S<sub>1</sub></i> inch	<i>G</i>	<i>ds</i>	<i>d<sub>4</sub></i>	<i>C<sub>a</sub></i>
<b>95</b>	<b>UC319D1</b>	95	200	103	51	3	41	62	16	M16×1.5	127.5	12.7
<b>3<sup>5</sup>/<sub>8</sub></b>	<b>UC319-310D1</b>	3.6250										
<b>3<sup>11</sup>/<sub>16</sub></b>	<b>UC319-311D1</b>	3.6875	7.8740	4.0551	2.0079	0.118	1.614	2.441	0.630	5/8-18UNF	5.0197	0.5
<b>3<sup>3</sup>/<sub>4</sub></b>	<b>UC319-312D1</b>	3.7500										
<b>100</b>	<b>UC320D1</b>	100	215	108	55	3	42	66	18	M18×1.5	135.6	14
<b>3<sup>13</sup>/<sub>16</sub></b>	<b>UC320-313D1</b>	3.8125										
<b>3<sup>7</sup>/<sub>8</sub></b>	<b>UC320-314D1</b>	3.8750	8.4646	4.2520	2.1654	0.118	1.654	2.598	0.709	5/8-18UNF	5.3386	0.551
<b>3<sup>15</sup>/<sub>16</sub></b>	<b>UC320-315D1</b>	3.9375										
<b>4</b>	<b>UC320-400D1</b>	4.0000										
<b>105</b>	<b>UC321D1</b>	105	225	112	57	3	44	68	18	M18×1.5	142.1	14.6
<b>110</b>	<b>UC322D1</b>	110	240	117	59	3	46	71	18	M18×1.5	151.7	15.6
<b>120</b>	<b>UC324D1</b>	120	260	126	63	3	51	75	18	M18×1.5	165.2	15.5
<b>130</b>	<b>UC326D1</b>	130	280	135	67	4	54	81	20	M20×1.5	178.3	16.6
<b>140</b>	<b>UC328D1</b>	140	300	145	71	4	59	86	20	M20×1.5	190.4	17.8

Remarks: 1) For inch series bearings, the  $f_0$  factor for calculating equivalent radial load is the same as the metric series.

Basic load ratings		Factor <sup>1)</sup>	Mass (approx.)
N dynamic $C_i$	lbf static $C_{or}$	$f_0$	kg lb
153 000	119 000	13.3	8.70
			19.9
34 500	26 600		19.5
			19.1
173 000	141 000	13.2	10.8
			24.7
39 000	31 500		24.2
			23.8
			23.4
184 000	153 000	13.2	12.2
205 000	179 000	13.1	14.3
207 000	185 000	13.5	18.5
229 000	214 000	13.6	23.0
253 000	246 000	13.6	28.5