

STUD-TYPE TRACK ROLLERS

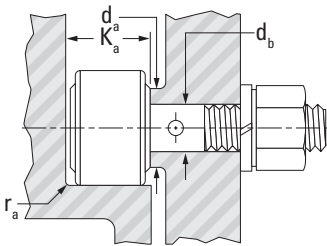
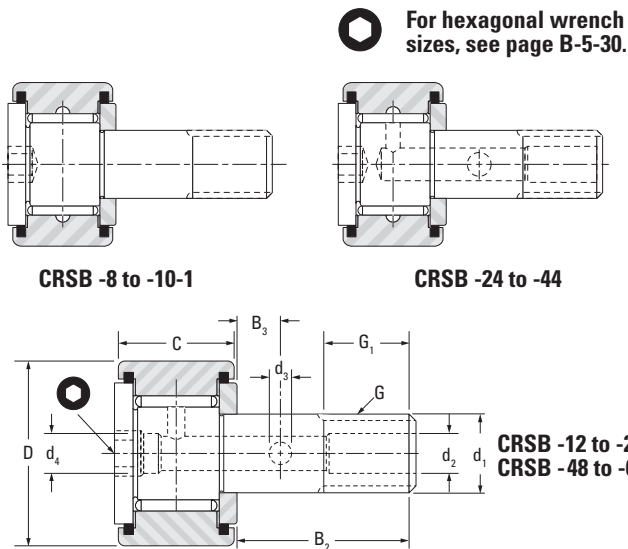
CRSB SERIES

INCH SERIES

- Non-separable, sealed unit with outer ring, full complement of needle rollers, stud seals, self-lubricating resin internal thrust washers and stud-fastened retaining washer.
 - Seals help retain lubricant and exclude foreign matter (CRS Series).
 - Hexagonal wrench socket in stud head for mounting.
 - Re-lubrication via axially drilled hole through stud with cross-drilled holes in stud raceway and shank.
 - Recessed axial hole accepts standard nominal inch drive-type grease lubrication fitting.
 - Lubrication fitting plugs furnished to close off unused holes.
- Tolerance limits for outer diameters of stud and outer ring refer to “single mean diameter.”
 - A close fit between stud and hole required for mounting.
 - Bore dimensions given below result in varying fit (0.025 mm tight to 0.013 mm loose [0.0010 in. tight to 0.0005 in. loose]).
 - Retaining washer should be firmly backed up by flat housing shoulder (perpendicular to the stud axis).
 - Shoulder diameter should be at least same size as minimum clamping diameter listed.
 - May be mounted with two thin lock nuts, or nut and lock washer.

Outer Dia.	d ₁	D	C	B ₂	B ₃	G ₁	d ₄	d ₂	d ₃	G	Bearing Designation
	+0.025 +0.001 0 0	0 0 -0.025 -0.001	0 0 -0.13 -0.005	(nom.)		Min.				UNF	
in	mm in	mm in	mm in	mm in	mm in	mm in	mm in	mm in	mm in	in	
1/2	4.826 0.1900	12.70 0.500	8.74 0.344	12.70 0.500	-	6.35 0.250	-	-	-	10-32	CRSB-8
1/2	4.826 0.1900	12.70 0.500	9.53 0.375	15.88 0.625	-	6.35 0.250	-	-	-	10-32	CRSB-8-1
5/8	6.350 0.2500	15.88 0.625	10.31 0.406	15.90 0.630	-	7.90 0.310	-	-	-	1/4-28	CRSB-10
5/8	7.940 0.3125	15.88 0.625	11.11 0.438	19.10 0.750	-	7.90 0.310	-	-	-	1/4-28	CRSB-10-1
3/4	9.530 0.3750	19.05 0.750	12.70 0.500	22.20 0.880	6.35 0.250	9.50 0.380	-	4.78 0.188	2.39 0.094	3/8-24	CRSB-12
7/8	9.530 0.3750	22.23 0.875	12.70 0.500	22.20 0.880	6.35 0.250	9.50 0.380	-	4.78 0.188	2.39 0.094	3/8-24	CRSB-14
1	11.110 0.4375	25.40 1.000	15.88 0.625	25.40 1.000	6.35 0.250	12.70 0.500	-	4.78 0.188	2.39 0.094	7/16-20	CRSB-16
1 1/8	11.110 0.4375	28.58 1.125	15.88 0.625	25.40 1.000	6.35 0.250	12.70 0.500	-	4.78 0.188	2.39 0.094	7/16-20	CRSB-18
1 1/4	12.700 0.5000	31.75 1.250	19.05 0.750	31.75 1.250	7.92 0.312	15.90 0.630	-	4.78 0.188	2.39 0.094	1/2-20	CRSB-20
1 3/8	12.700 0.5000	34.93 1.375	19.05 0.750	31.80 1.250	7.92 0.312	15.90 0.630	-	4.78 0.188	2.39 0.094	1/2-20	CRSB-22
1 1/2	15.880 0.6250	38.10 1.500	22.23 0.875	38.10 1.500	9.53 0.375	19.10 0.750	-	4.78 0.188	2.39 0.094	5/8-18	CRSB-24
1 5/8	15.880 0.6250	41.28 1.625	22.23 0.875	38.10 1.500	9.53 0.375	19.10 0.750	-	4.78 0.188	2.39 0.094	5/8-18	CRSB-26

⁽¹⁾ UNS instead of UNF threads.
Furnished with lubrication hole in head end of stud and lubrication fitting installed below bottom of hex wrench socket.



NOTE
Clamping torque is based on lubricated threads. If threads are dry, the torque values listed below may be doubled.

Load Rating					Speed Rating Grease	Mounting Dimensions				Clamping Torque	Approx Wt.
As a Bearing		As a Track Roller				d _b	r _{as} max	K _a	d _a		
Dynamic	Static	Dynamic		Static		Bore Dia. For Stud +0.013 0 +0.0005 0	Max.	Min.	Min.		
C	C ₀	C _w	F _{r perm}	F _{0r perm}							
kN lbf	kN lbf	kN lbf	kN lbf	kN lbf	min ⁻¹	mm in	mm in	mm in	mm in	N-m lb-in	kg lbs
4.44 999	4.94 1110	3.07 690	1.20 269	2.87 645	7000	4.826 0.1900	0.25 0.010	10.41 0.410	10.41 0.410	1.69 15	0.01 0.02
4.89 1100	5.60 1260	3.39 762	1.36 305	3.25 731	7000	4.826 0.1900	0.25 0.010	11.20 0.441	10.41 0.410	1.69 15	0.01 0.02
6.05 1360	7.87 1770	4.42 994	2.53 569	6.09 1370	5500	6.350 0.2500	0.38 0.015	11.99 0.472	11.73 0.462	3.95 35	0.02 0.04
6.54 1470	8.72 1960	4.76 1070	2.79 628	6.72 1510	5500	6.350 0.2500	0.38 0.015	12.80 0.504	11.73 0.462	3.95 35	0.02 0.05
10.14 2280	14.68 3300	6.27 1410	2.92 656	6.98 1570	3800	9.525 0.3750	0.38 0.015	14.38 0.566	15.47 0.609	10.73 95	0.03 0.08
10.14 2280	14.68 3300	7.38 1660	4.94 1110	11.88 2670	3800	9.525 0.3750	0.38 0.015	14.38 0.566	15.47 0.609	10.73 95	0.04 0.10
12.99 2920	21.93 4930	8.41 1890	5.60 1260	13.43 3020	2800	11.112 0.4375	0.76 0.030	17.55 0.691	19.84 0.781	28.25 250	0.07 0.16
12.99 2920	21.93 4930	9.43 2120	8.18 1840	17.48 3930	2800	11.112 0.4375	0.76 0.030	17.55 0.691	19.84 0.781	28.25 250	0.09 0.20
23.31 5240	30.29 6810	16.06 3610	7.38 1660	17.75 3990	2700	12.700 0.5000	0.76 0.030	20.73 0.816	24.99 0.984	39.55 350	0.14 0.30
23.31 5240	30.29 6810	17.66 3970	10.45 2350	25.04 5630	2700	12.700 0.5000	0.76 0.030	20.73 0.816	24.99 0.984	39.55 350	0.16 0.35
28.16 6330	40.26 9050	20.15 4530	11.97 2690	28.74 6460	2700	15.872 0.6250	0.76 0.030	23.90 0.941	27.79 1.094	73.45 650	0.24 0.53
28.16 6330	40.26 9050	21.62 4860	15.66 3520	36.08 8110	2300	15.872 0.6250	0.76 0.030	23.90 0.941	27.79 1.094	73.45 650	0.27 0.61

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STUD-TYPE TRACK ROLLERS

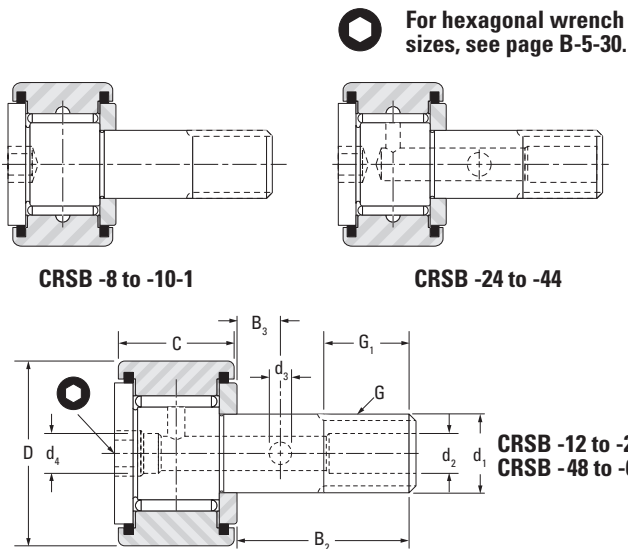
CRSB SERIES

INCH SERIES

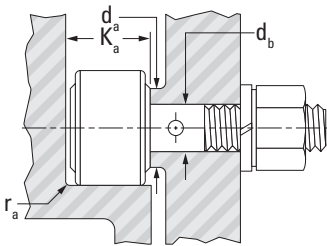
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	+0.025 +0.001 0 0	0 0 -0.025 -0.001	0 0 -0.13 -0.005	(nom.)		Min.				UNF	
in	mm in	mm in	mm in	mm in	mm in	mm in	mm in	mm in	mm in	in	
1 3/4	19.050 0.7500	44.45 1.750	25.40 1.000	44.45 1.750	11.13 0.438	22.20 0.880	-	4.78 0.188	3.18 0.125	3/4-16	CRSB-28
1 7/8	19.050 0.7500	47.63 1.875	25.40 1.000	44.45 1.750	11.13 0.438	22.20 0.880	-	4.78 0.188	3.18 0.125	3/4-16	CRSB-30
2	22.230 0.8750	50.80 2.000	31.75 1.250	50.80 2.000	12.70 0.500	25.40 1.000	-	4.78 0.188	3.18 0.125	7/8-14	CRSB-32
2 1/4	22.230 0.8750	57.15 2.250	31.75 1.250	50.80 2.000	12.70 0.500	25.40 1.000	-	4.78 0.188	3.18 0.125	7/8-14	CRSB-36
2 1/2	25.400 1.0000	63.50 2.500	38.10 1.500	57.20 2.250	14.27 0.562	28.57 1.125	-	4.78 0.188	3.18 0.125	1-14 ⁽¹⁾	CRSB-40
2 3/4	25.400 1.0000	69.85 2.750	38.10 1.500	57.20 2.250	14.27 0.562	28.57 1.125	-	4.78 0.188	3.18 0.125	1-14 ⁽¹⁾	CRSB-44
3	31.750 1.2500	76.20 3.000	44.45 1.750	63.50 2.500	15.88 0.625	31.75 1.250	6.35 0.250	6.35 0.250	3.18 0.125	1 1/4-12	CRSB-48
3 1/4	31.750 1.2500	82.55 3.250	44.45 1.750	63.50 2.500	15.88 0.625	31.75 1.250	6.35 0.250	6.35 0.250	3.18 0.125	1 1/4-12	CRSB-52
3 1/2	34.930 1.3750	88.90 3.500	50.80 2.000	69.90 2.750	17.48 0.688	34.93 1.375	6.35 0.250	6.35 0.250	3.18 0.125	1 3/8-12	CRSB-56
4	38.100 1.5000	101.60 4.000	57.15 2.250	88.90 3.500	19.05 0.750	38.10 1.500	6.35 0.250	6.35 0.250	3.18 0.125	1 1/2-12	CRSB-64
5	50.800 2.0000	127.00 5.000	69.85 2.750	128.57 5.062	22.23 0.875	65.10 2.563	1/4 NPT	1/4 NPT	4.78 0.188	2-12	CRSB-80
6	63.500 2.5000	152.40 6.000	82.55 3.250	152.40 6.000	25.40 1.000	76.20 3.000	1/4 NPT	1/4 NPT	4.78 0.188	2 1/2-12	CRSB-96

⁽¹⁾ UNS instead of UNF threads.
Furnished with lubrication hole in head end of stud and lubrication fitting installed below bottom of hex wrench socket.



For hexagonal wrench sizes, see page B-5-30.



NOTE
Clamping torque is based on lubricated threads. If threads are dry, the torque values listed below may be doubled.

Load Rating					Speed Rating Grease	Mounting Dimensions				Clamping Torque	Approx Wt.
As a Bearing		As a Track Roller				d _b	r _{as max}	K _a	d _a		
Dynamic	Static	Dynamic		Static		Bore Dia. For Stud +0.013 +0.0005 0 0	Max.	Min.	Min.		
C	C ₀	C _w	F _{r perm}	F _{0r perm}							
kN lbf	kN lbf	kN lbf	kN lbf	kN lbf	min ⁻¹	mm in	mm in	mm in	mm in	N-m lb-in	kg lbs
35.50 7980	56.49 12700	25.93 5830	19.04 4280	45.82 10300	1900	19.050 0.7500	1.02 0.040	27.08 1.066	31.75 1.250	141.25 1250	0.38 0.85
35.50 7980	56.49 12700	27.40 6160	23.66 5320	51.15 11500	1900	19.050 0.7500	1.02 0.040	27.08 1.066	31.75 1.250	141.25 1250	0.43 0.95
43.19 9710	75.62 17000	31.89 7170	28.11 6320	62.72 14100	1700	22.225 0.8750	1.27 0.050	33.43 1.316	35.71 1.406	169.5 1500	0.62 1.37
43.19 9710	75.62 17000	34.70 7800	39.86 8960	73.40 16500	1700	22.225 0.8750	1.27 0.050	33.43 1.316	35.71 1.406	169.5 1500	0.76 1.67
58.27 13100	117.43 26400	44.48 10000	54.71 12300	104.09 23400	1400	25.400 1.0000	2.29 0.090	39.78 1.566	42.88 1.688	254.25 2250	1.14 2.50
58.27 13100	117.43 26400	47.15 10600	71.17 16000	116.54 26200	1400	25.400 1.0000	2.29 0.090	39.78 1.566	42.88 1.688	254.25 2250	1.33 2.93
74.29 16700	177.93 40000	51.60 11600	68.50 15400	131.22 29500	990	31.750 1.2500	2.29 0.090	46.13 1.816	53.98 2.125	389.85 3450	1.91 4.20
74.29 16700	177.93 40000	54.71 12300	85.85 19300	147.24 33100	990	31.750 1.2500	2.29 0.090	46.13 1.816	53.98 2.125	389.85 3450	2.18 4.81
109.87 24700	225.52 50700	82.29 18500	94.75 21300	191.27 43000	950	34.925 1.3750	2.29 0.090	52.48 2.066	61.93 2.438	474.6 4200	2.91 6.42
137.89 31000	319.38 71800	98.75 22200	125.88 28300	250.43 56300	780	38.100 1.5000	2.29 0.090	58.83 2.316	71.04 2.797	565 5000	4.29 9.46
210.40 47300	484.86 109000	149.02 33500	171.70 38600	370.09 83200	620	50.800 2.0000	3.18 0.125	73.15 2.880	90.50 3.563	565 5000	8.90 19.60
285.13 64100	578.27 130000	201.06 45200	188.16 42300	436.37 98100	520	63.500 2.5000	3.18 0.125	85.85 3.380	113.51 4.469	565 5000	14.87 32.76