



SoCare®

SCB-XR Series

Cross Roller Bearing





SCB-XR Series

↘ No Gear

Introduction

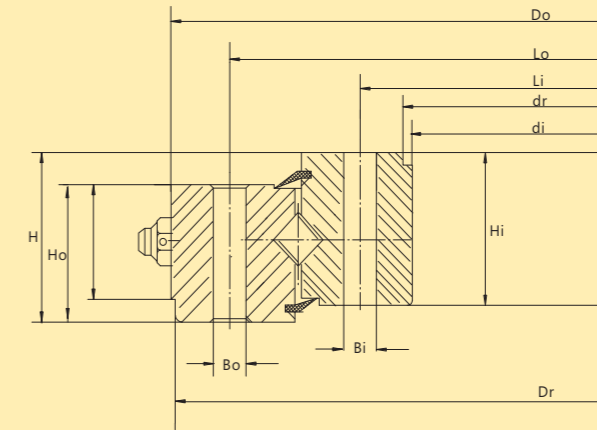
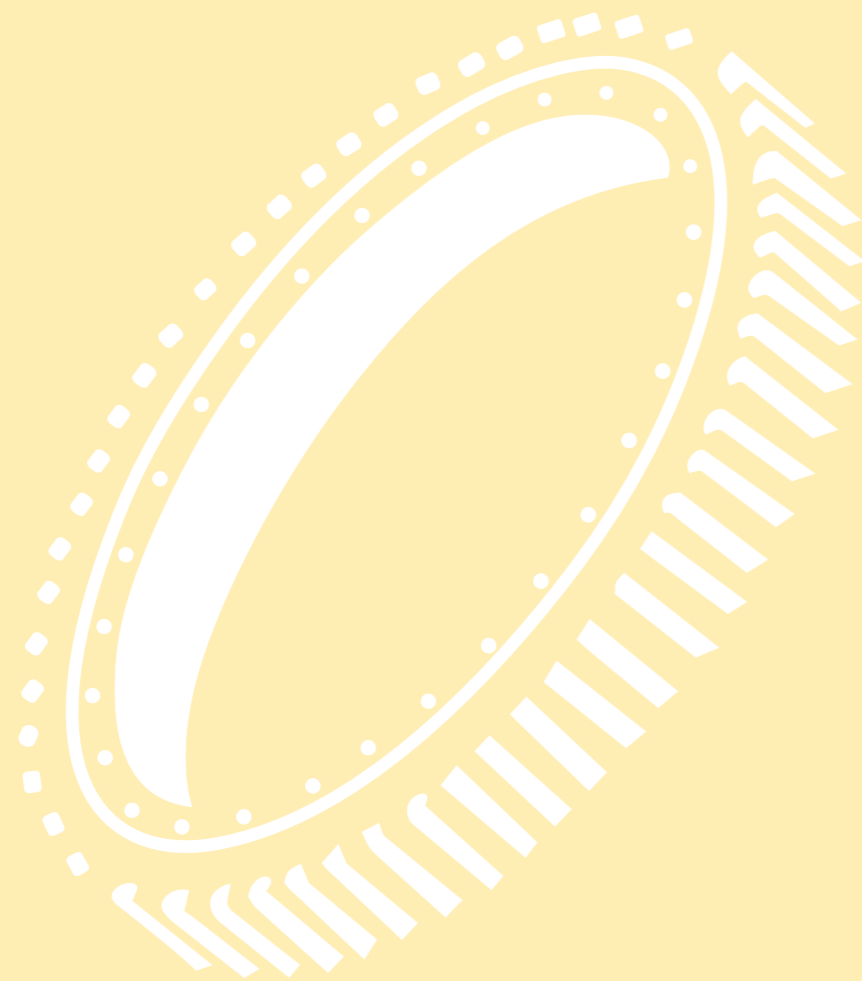
SCB-XR cross roller bearings
 Provides higher level of stiffness while not increasing rotational torque
 OD size range up : 11"-209"

Construction

- Cylindrical rollers in V shaped rolling path
- Rollers in alternating axis of rotation
- Sealed
- Ring Configuration:
 - Non geared
 - External gear
 - Internal gear
- Grease fittings for lubrication

Applications

- Robotics
- Military
- Machine tools
- Radar
- Satellite



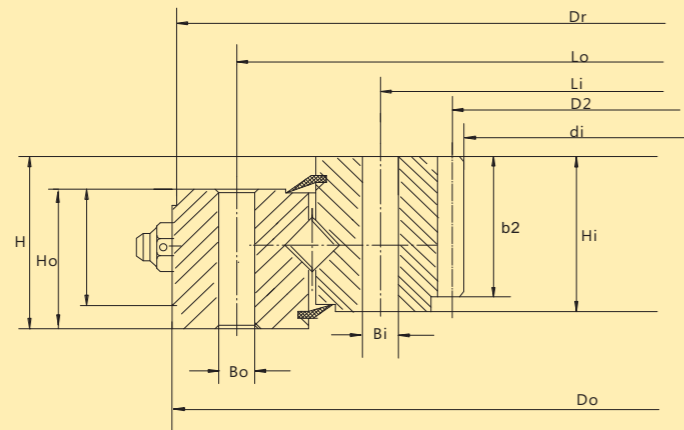
SOCARE® No.	KAYDON® No.	OUTLINE DIMENSIONS(IN) AND WEIGHT(LBS)						
		Do	di	H	Hi/Ho	Dr	dr	G(LBS) Approx.
SCB-XR300	16318001	11.811	5.512	1.417	1.181	-	-	30
SCB-XR403	16319001	15.886	9.055	2.165	1.772/1.850	-	-	65
SCB-XR695	16320001	27.362	18.779	3.031	2.520/2.244	27.283	18.897	185
SCB-XR897	16321001	35.312	26.625	2.953	2.863	35.251	26.750	325
SCB-XR1175	16322001	46.250	34.250	4.250	3.880	-	34.380	765
SCB-XR1432	16323001	56.380	46.770	3.820	3.470/3.430	56.295	46.850	710
SCB-XR2159	16324001	85.000	74.000	3.750	3.250	84.880	74.120	1,190
SCB-XR2413	16325001	95.000	82.000	4.000	3.500	94.875	82.063	1,660
SCB-XR3350	16326001	131.890	112.205	7.874	6.496/7.087	131.250	120.866	6,500
SCB-XR4030	16327001	158.661	140.945	8.819	6.654	-	-	6,400

SOCARE® No.	KAYDON® No.	MOUNTING HOLES						Moment Rating Crm (ft-lbs)
		OUTER RING			INNER RING			
		Lo	no	Bo	Li	ni	Bi	
SCB-XR300	16318001	10.630	6	M16*2	6.693	6	M16*2	7,530
SCB-XR403	16319001	14.094	24	0.512	10.197	24	0.512	20,140
SCB-XR695	16320001	25.197	28	0.709	20.000	28	0.709	65,660
SCB-XR897	16321001	34.000	24	1/2-13	29.000	24	0.590	116,170
SCB-XR1175	16322001	44.000	28	1-8	36.250	28	1.063	425,900
SCB-XR1432	16323001	40.000	36	0.813	33.875	36	3/4-16	482,960
SCB-XR2159	16324001	83.000	42	0.938	76.000	42	0.938	956,430
SCB-XR2413	16325001	93.000	48	1.063	85.000	48	1.063	1,450,300
SCB-XR3350	16326001	127.559	40	M36*3	116.535	40	1.496	4,185,500
SCB-XR4030	16327001	155.315	92	1.654	144.291	92	1.654	4,879,900

Contact SoCare® about custom features, configurations and construction.
 (mounting holes, materials, coating, internal clearance)



Internal Gear



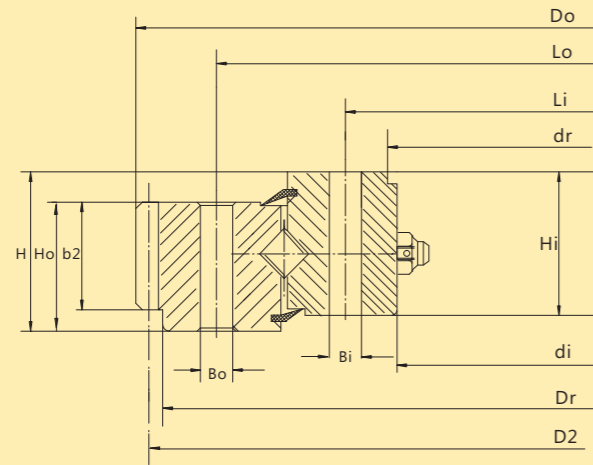
SOCARE® No.	KAYDON® No.	OUTLINE DIMENSIONS(IN)						Gear Data INV.STUB,α=20°					
		Do	di	H	Hi/Ho	Dr	dr	D2 (in)	Pd/m (in)	Z2	b2 (in)	X2	Tooth Form
SCB-XRN678	16328001	26.700	18.667	2.500	2.000	-	-	19.000	6	114	2.000	0	FD
SCB-XRN914	16329001	36.000	24.160	3.880	3.380	-	-	24.800	2.5	62	3.380	0	SD
SCB-XRN1054	16330001	41.500	30.320	4.190	3.370/4.000	-	32.360	30.800	2.5	77	3.500	-.4	FD
SCB-XRN1066	16331001	41.970	30.828	3.350	2.560/2.950	41.929	-	31.102	<10>	79	2.950	-.625	FD
SCB-XRN1390	16332001	54.740	44.400	4.500	3.750/4.130	-	46.380	45.200	2.5	113	3.750	0	FD
SCB-XRN2002	16333001	78.819	62.913	5.906	4.921	-	65.157	63.307	<12>	134	4.528	-.5	FD
SCB-XRN2896	16334001	114.000	95.000	6.000	5.500	-	97.500	96.000	2	192	5.000	0	FD
SCB-XRN3085	16335001	121.496	97.717	6.772	6.299	-	-	98.268	<24>	104	6.299	-.708	FD
SCB-XRN3607	16336001	142.000	123.200	6.000	5.500	-	-	124.00	2	248	5.500	0	FD

SOCARE® No.	KAYDON® No.	MOUNTING HOLES						WEIGHT G Approx. (lbs)	Max Gear Tooth Loading Fz (lbs)	Moment Rating Crm (ft-lbs)
		OUTER RING			INNER RING					
		Lo	no	Bo	Li	ni	Bi			
SCB-XRN678	16328001	24.500	18	1/2-13	20.500	18	1/2-13	130	6,345	65,430
SCB-XRN914	16329001	33.250	24	0.813	27.250	30	3/4-10	465	27,300	213,180
SCB-XRN1054	16330001	40.000	36	0.807	33.500	36	3/4-16	510	27,600	362,220
SCB-XRN1066	16331001	39.961	24	M20*2.5	34.646	24	M20*2.5	400	22,820	211,160
SCB-XRN1390	16332001	53.000	36	0.922	48.000	36	7/8-14	500	28,600	460,450
SCB-XRN2002	16333001	76.575	48	1.181	67.520	48	1.181	2,050	40,350	1,315,740
SCB-XRN2896	16334001	111.000	48	1.063	100.000	48	1-8	4,250	54,550	2,389,570
SCB-XRN3085	16335001	117.795	72	1.535	105.512	72	1.535	6,080	134,720	3,797,780
SCB-XRN3607	16336001	139.000	72	1.063	128.000	72	1.063	5,370	50,440	4,057,130

Contact SoCare® about custom features, configurations and construction.
(mounting holes, materials, coating, internal clearance)



External Gear



SOCARE® No.	KAYDON® No.	OUTLINE DIMENSIONS (IN)							Gear Data INV.STUB, α=20°				
		Do	di	H	Hi/Ho	Dr	dr	D2 (in)	Pd/m (in)	Z2	b2 (in)	X2	Tooth Form
SCB-XRE406	16337001	16.000	9.190	2.170	1.770/1.850	14.880	9.250	15.600	5	78	1.460	0	FD
SCB-XRE592	16338001	23.333	13.750	2.750	2.500	-	-	23.000	6	138	2.500	0	SD
SCB-XRE695	16339001	27.362	18.780	3.030	2.520/2.240	26.380	18.900	26.969	<5>	137	1.650	0	FD
SCB-XRE854	16340001	33.627	26.535	2.205	1.752	-	-	33.071	<8>	105	1.752	0	FD
SCB-XRE922	16341001	36.333	24.500	4.690	4.310/3.880	35.500	24.625	36.000	6	216	4.000	0	FD
SCB-XRE1144	16342001	45.050	34.180	3.930	3.360/3.470	42.840	34.250	43.701	<10>	111	2.580	+0.713	FD
SCB-XRE1296	16343001	51.040	40.000	4.000	3.500	-	-	50.400	2.5	126	3.500	0	SD
SCB-XRE1604	16344001	63.150	47.480	5.118	4.409	61.063	47.559	61.811	<10>	157	3.346	+0.750	FD
SCB-XRE1791	16345001	70.510	53.540	5.040	4.330	-	-	68.346	<14>	124	4.330	+1.15	FD
SCB-XRE2181	16346001	85.866	75.250	3.300	2.800	-	-	85.333	3	256	2.800	0	SD
SCB-XRE2557	16347001	100.667	84.000	6.500	6.500/4.000	98.750	84.250	100.00	3	300	6.000	0	FD
SCB-XRE4060	16348001	159.843	141.732	6.142	5.748	-	-	158.11	<16>	251	5.748	+0.500	FD
SCB-XRE5330	16349001	209.843	188.583	7.047	6.417/6.024	206.299	188.858	206.929	<18>	292	6.102	+1.15	FD

Contact SoCare® about custom features, configurations and construction.
(mounting holes, materials, coating, internal clearance)

SOCARE® No.	KAYDON® No.	MOUNTING HOLES						WEIGHT G Approx. (lbs)	Max Gear Tooth Loading Fz (lbs)	Moment Rating Crm (ft-lbs)
		OUTER RING			INNER RING					
		Lo	no	Bo	Li	ni	Bi			
SCB-XRE406	16337001	14.094	24	0.562	10.197	24	0.562	55	4,320	13,190
SCB-XRE592	16338001	20.875	12	0.688	15.375	12	0.688	175	7,430	69,470
SCB-XRE695	16339001	25.197	18	0.688	20.000	18	0.688	180	5,725	65,660
SCB-XRE854	16340001	30.906	36	M12*1.75	27.480	40	0.551	140	9,130	77,600
SCB-XRE922	16341001	33.625	24	0.813	26.125	24	0.813	580	12,700	274,290
SCB-XRE1144	16342001	41.338	24	0.866	35.826	24	0.866	470	15,490	223,060
SCB-XRE1296	16343001	48.200	36	0.813	41.800	36	0.813	680	24,380	396,330
SCB-XRE1604	16344001	58.819	36	1.023	50.394	36	1.023	1,420	20,640	861,070
SCB-XRE1791	16345001	65.354	42	1.063	55.906	42	1.063	1,460	36,690	801,340
SCB-XRE2181	16346001	82.750	48	0.813	77.250	48	0.813	920	18,280	686,710
SCB-XRE2557	16347001	95.000	48	1-8	87.000	48	1.063	3,240	32,030	1,557,670
SCB-XRE2181	16346001	154.528	100	1.299	144.685	100	1.299	5,480	67,650	4,874,640
SCB-XRE2557	16347001	202.362	100	1.299	191.339	100	1.299	9,750	81,360	8,903,140

Contact SoCare® about custom features, configurations and construction.
(mounting holes, materials, coating, internal clearance)