Flexure Pivoit Bearings from Automotion Components

Flexural pivot bearings are limited rotation bearings for applications that do not allow lubrication but also require precision, repeatability and infi nite life.

Angle of rotations are graded into three series:

- Series 10 - ± 15° (mainly for light loads)
- Series 20 - ± 7.5° (mainly for medium-heavy loads)
- Series 10 - ± 3.7° (mainly for heavy loads)

They have a range of torsional stiffness depending on the bearing diameter. The bearing consistes of two stainless steel sleeves held in position by three leaf springs on two planes. There is no contact between the sleeves (eliminating friction) and the springs provide the pivotal action which is inherently self centring and requires no lubrication.

Material

The sleeves in a Flexure Pivot bearing are made from 416 Stainless Steel. The spring and core are made from Stainless Steel (410 and 420) with a braze alloy (AMS4765).

Special pivot bearings can be manufactured with angle of rotation up to ± 50° and for heavy loads.

Single Ended Pivot Bearings

Here one end is fixed and the other end is free to rotate - this type is used most widely as they support overhung loads.

Single Ended Pivot Bearings are frictionless with infi nite ligt (see our technical graphs for life cycle curves).

Double Ended Pivot Bearings

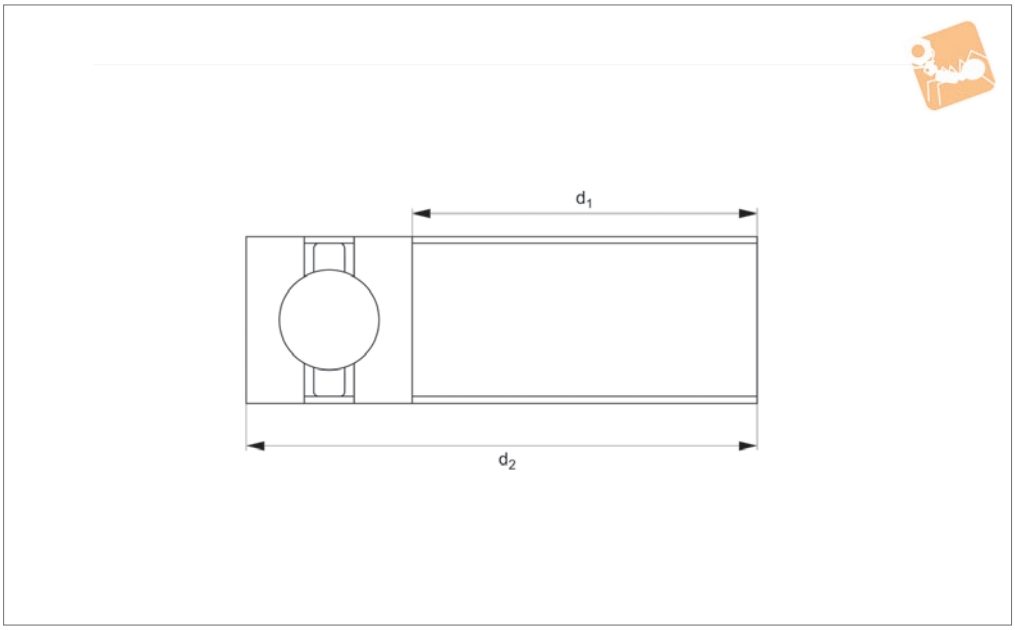
In these applications both ends are fi xed and the centre of the bearing is free to rotate - this supports suspended loads.

Double Ended Pivot Bearings are frictionless with infi nite ligt (see our technical graphs for life cycle curves).

Split Bearing - Slim

slim bearing type

R4200



Material
Corrosion resistant split bearing rings. Ball bearings retained in plastic cage.

Tips
Our split bearings are compatable with most other manufacturers and are very cost competitive. Please ask us to ‚cross reference' if required.

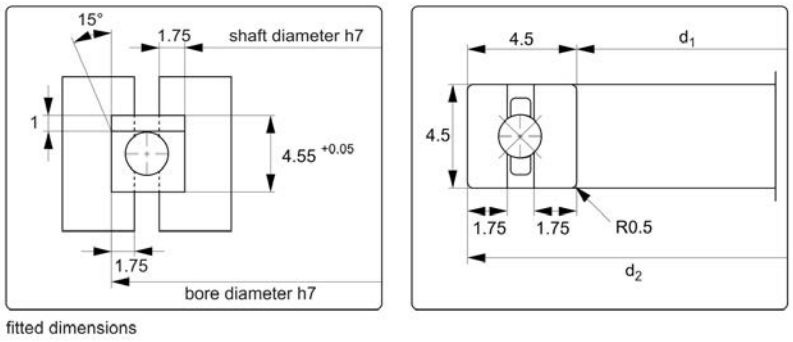
Order No.	d_1 inch	d_1 mm	d_2 mm	Dyn. load $C_{ax.}$ kN max.	Dyn. load $C_{rad.}$ kN max.	Static load $C_{0\ ax.}$ kN max.	Static load $C_{0\ rad.}$ kN max.	Speed rpm max.	Weight kg
R4200.040	4	101.60	120.65	9.3	8.5	37.0	14.7	1500	0.18
R4200.042	4¼	107.95	127.00	9.6	8.7	39.5	15.8	1410	0.19
R4200.045	4½	114.30	133.35	9.7	8.8	41.0	16.5	1340	0.20
R4200.047	4¾	120.65	139.70	10.0	9.0	44.0	17.5	1270	0.21
R4200.050	5	127.00	146.05	10.10	9.1	45.5	18.2	1200	0.22
R4200.055	5½	139.70	158.75	10.60	9.6	51.0	20.3	1090	0.24
R4200.060	6	152.40	171.45	10.90	9.8	55.0	22.1	1000	0.26
R4200.065	6½	165.10	184.15	11.20	10.1	60.0	23.9	920	0.28
R4200.070	7	177.80	196.85	11.50	10.4	64.0	25.5	860	0.30
R4200.075	7½	190.50	209.55	11.70	10.6	68.0	27.5	800	0.32
R4200.080	8	203.20	222.25	12.00	10.9	73.0	29.0	750	0.34
R4200.085	8½	215.90	234.95	12.20	11.1	77.0	31.0	710	0.36
R4200.090	9	228.60	247.65	12.50	11.3	82.0	32.5	670	0.38
R4200.095	9½	241.30	260.35	12.80	11.6	87.0	35.0	630	0.39
R4200.100	10	254.00	273.05	13.00	11.8	91.0	36.5	600	0.41
R4200.105	10½	266.70	285.75	13.30	12.0	96.0	38.5	570	0.43
R4200.110	11	279.40	298.45	13.50	12.2	100.0	40.0	550	0.45
R4200.115	11½	292.10	311.15	13.70	12.4	105.0	42.0	520	0.47
R4200.120	12	304.80	323.85	13.90	12.6	109.0	43.5	500	0.49
R4200.130	13	330.20	349.25	14.30	12.9	118.0	47.0	460	0.53
R4200.140	14	355.60	374.65	14.70	13.3	127.0	51.0	430	0.56
R4200.150	15	381.00	400.05	15.10	13.6	136.0	54.0	400	0.60
R4200.160	16	406.40	425.45	15.40	13.9	145.0	58.0	380	0.64
R4200.170	17	431.80	450.85	15.70	14.2	154.0	62.0	350	0.68
R4200.180	18	457.20	476.25	16.10	14.5	163.0	65.0	330	0.72
R4200.190	19	482.60	501.65	16.40	14.8	172.0	69.0	320	0.76
R4200.200	20	508.00	527.05	16.70	15.1	181.0	72.0	300	0.79
R4200.210	21	533.40	552.45	17.00	15.4	190.0	76.0	290	0.83
R4200.220	22	558.80	577.85	17.30	15.6	199.0	79.0	270	0.87
R4200.230	23	584.20	603.25	17.60	15.9	208.0	83.0	260	0.91
R4200.240	24	609.60	628.65	17.90	16.1	217.0	87.0	250	0.95
R4200.250	25	635.00	654.05	18.10	16.4	226.0	90.0	240	0.98
R4200.260	26	660.40	679.45	18.40	16.6	235.0	94.0	230	1.02
R4200.270	27	685.80	704.85	18.70	16.9	245.0	98.0	220	1.06

Order No.	d_1 inch	d_1 mm	d_2 mm	Dyn. load $C_{ax.}$ kN max.	Dyn. load $C_{rad.}$ kN max.	Static load $C_{0\ ax.}$ kN max.	Static load $C_{0\ rad.}$ kN max.	Speed rpm max.	Weight kg
R4200.280	28	711.20	730.25	18.90	17.1	255.0	101.0	210	1.10
R4200.290	29	736.60	755.65	19.10	17.3	260.0	105.0	210	1.14
R4200.300	30	762.00	781.05	19.30	17.5	270.0	108.0	200	1.18
R4200.310	31	787.40	806.45	19.60	17.7	280.0	112.0	190	1.22
R4200.320	32	812.80	831.85	19.80	17.9	290.0	116.0	190	1.26
R4200.330	33	838.20	857.25	20.00	18.1	300.0	119.0	180	1.30
R4200.340	34	863.60	882.65	31.0	18.5	305.0	123.0	180	1.34

Split Bearing - Supra Slim

thin ring bearing type

R4204.1



Material
Corrosion resistant split bearing rings.
Ball bearings retained in plastic cage.

Technical Notes
Please specify:
- bearing ring material required
- ball bearing material required
- ball cage material required.
See previous page for options.

Tips
Our split bearings are compatable with most other manufacturers and are very cost competitive. Please ask us to ‚cross reference' if required.

Smaller sizes on previous page.

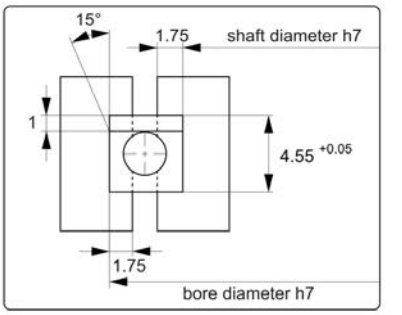
Order No.	d_1	d_2	Strength dyn. C N	Strength dyn. C_0 N	Weight kg
R4204.310	310	319	4.680	18.740	0.121
R4204.320	320	329	4.740	19.340	0.125
R4204.330	330	339	4.800	19.930	0.129
R4204.340	340	349	4.860	20.530	0.133
R4204.350	350	359	4.920	21.120	0.137
R4204.360	360	369	4.970	21.720	0.141
R4204.370	370	379	5.030	22.310	0.145
R4204.380	380	389	5.090	22.910	0.149
R4204.390	390	399	5.140	23.500	0.153
R4204.400	400	409	5.200	24.100	0.157
R4204.410	410	419	5.240	24.700	0.161
R4204.420	420	429	5.290	25.290	0.165
R4204.430	430	439	5.330	25.900	0.169
R4204.440	440	449	5.380	26.480	0.173
R4204.450	450	459	5.420	27.070	0.177
R4204.460	460	469	5.460	27.670	0.181
R4204.470	470	479	5.510	28.260	0.185
R4204.480	480	489	5.550	28.860	0.189
R4204.490	490	499	5.600	29.450	0.193
R4204.500	500	509	5.640	30.050	0.197
R4204.510	510	519	5.680	30.900	0.201
R4204.520	520	529	5.730	31.500	0.205
R4204.530	530	539	5.770	32.100	0.209
R4204.540	540	549	5.820	32.700	0.213
R4204.550	550	559	5.860	33.300	0.217
R4204.560	560	569	5.900	33.900	0.221
R4204.570	570	579	5.950	34.500	0.225
R4204.580	580	589	5.990	35.100	0.229
R4204.590	590	599	6.040	35.700	0.233
R4204.600	600	609	6.080	36.300	0.237
R4204.610	610	619	6.130	36.900	0.241

Order No.	d_1	d_2	Strength dyn. C N	Strength dyn. C_0 N	Weight kg
R4204.620	620	629	6.180	37.500	0.245
R4204.630	630	639	6.230	38.100	0.249
R4204.640	640	649	6.280	38.700	0.253

Split Bearing - Supra Slim

thin ring bearing type

R4204



Material

Corrosion resistant split bearing rings.
Ball bearings retained in plastic cage.

Technical Notes

Please specify:
- bearing ring material required
- ball bearing material required
- ball cage material required.

See previous page for options.

Tips

Our split bearings are compatable with most other manufacturers and are very cost competitive. Please ask us to ‚cross reference' if required.

Larger sizes on next page.

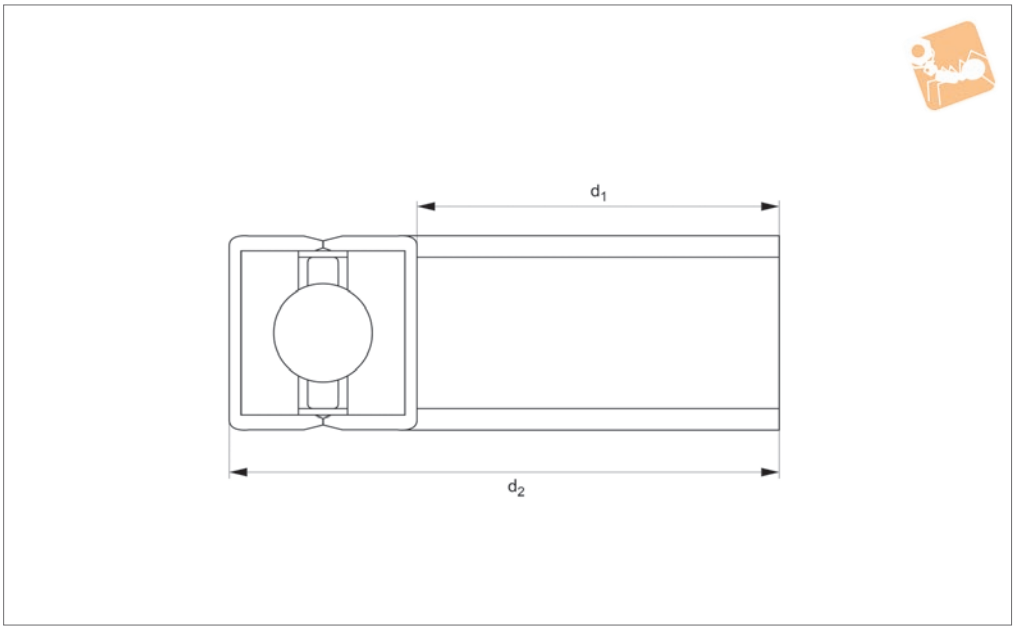
Order No.	d_1	d_2	Strength dyn. C N	Strength dyn. C_0 N	Weight kg
R4204.035	35	44	2.180	2.280	0.014
R4204.040	40	49	2.270	2.570	0.016
R4204.045	45	54	2.360	2.850	0.018
R4204.050	50	59	2.450	3.140	0.020
R4204.055	55	64	2.540	3.420	0.022
R4204.060	60	69	2.630	3.710	0.024
R4204.065	65	74	2.720	3.990	0.025
R4204.070	70	79	2.810	4.310	0.027
R4204.075	75	84	2.870	4.600	0.029
R4204.080	80	89	2.930	4.890	0.031
R4204.085	85	94	2.990	5.180	0.033
R4204.090	90	99	3.050	5.500	0.035
R4204.095	95	104	3.110	5.790	0.037
R4204.100	100	109	3.170	6.080	0.039
R4204.110	110	119	3.260	6.660	0.043
R4204.120	120	129	3.360	7.240	0.047
R4204.130	130	139	3.450	7.910	0.051
R4204.140	140	149	3.550	8.500	0.055
R4204.150	150	159	3.640	9.080	0.059
R4204.160	160	169	3.720	9.670	0.062
R4204.170	170	179	3.810	10.260	0.066
R4204.180	180	189	3.890	10.920	0.070
R4204.190	190	199	3.980	11.500	0.074
R4204.200	200	209	4.060	12.100	0.078
R4204.210	210	219	4.120	12.690	0.082
R4204.220	220	229	4.170	13.280	0.086
R4204.230	230	239	4.230	13.870	0.090
R4204.240	240	249	4.290	14.580	0.094
R4204.250	250	259	4.350	15.170	0.098
R4204.260	260	269	4.400	15.770	0.102
R4204.270	270	279	4.460	16.360	0.106

Order No.	d_1	d_2	Strength dyn. C N	Strength dyn. C_0 N	Weight kg
R4204.280	280	289	4.520	16.960	0.110
R4204.290	290	299	4.570	17.550	0.113
R4204.300	300	309	4.630	18.150	0.117

Split Bearing - Slim

slim bearing type

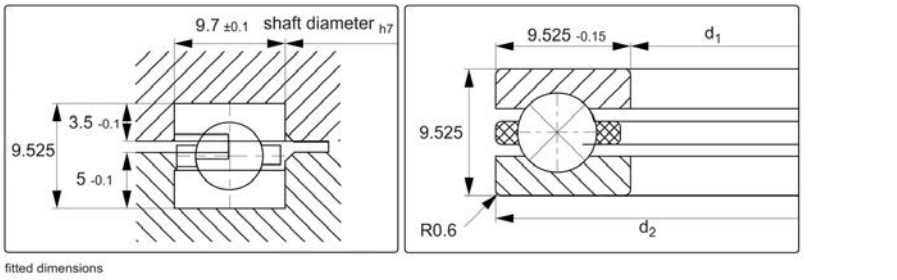
R4205



Material
Corrosion resistant split bearing rings. Ball bearings retained in plastic cage.

Tips
Our split bearings are compatable with most other manufacturers and are very cost competitive. Please ask us to ‚cross reference' if required.

Order No.	d_1 & d_3 mm	d_2 mm	d_4 mm	Dyn. load $C_{ax.}$ kN max.	Dyn. load $C_{rad.}$ kN max.	Speed $min.^{-1}$ max.	Static load $C_{0\ ax.}$ kN max.	Static load $C_{0\ rad.}$ kN max.	Weight kg
R4205.070	175.0	199.65	199.5	10.4	9.4	870	57.6	23.0	0.32
R4205.075	187.7	212.35	212.20	10.5	9.5	810	61.2	24.8	0.34
R4205.080	200.4	225.05	224.9	10.8	9.8	760	65.7	26.1	0.36
R4205.085	213.1	237.75	237.6	11.0	10.0	720	69.3	27.9	0.38
R4205.090	225.8	250.45	250.3	11.3	10.2	680	73.8	29.3	0.41
R4205.095	238.5	263.15	263.0	11.5	10.4	640	78.3	31.5	0.43
R4205.100	251.2	275.85	275.7	11.7	10.6	610	81.9	32.9	0.45
R4205.105	263.9	288.55	288.4	12.0	10.8	580	86.4	34.7	0.47
R4205.110	276.6	301.25	301.1	12.2	11.0	550	90.0	36.0	0.50
R4205.115	289.3	313.95	313.8	12.3	11.2	530	94.5	37.8	0.52
R4205.120	302.0	326.65	326.5	12.5	11.3	510	98.1	39.2	0.54
R4205.130	327.4	352.05	351.9	12.9	11.6	470	106.2	42.3	0.59
R4205.140	352.8	377.45	377.3	13.2	12.0	430	114.3	45.9	0.63
R4205.150	378.2	402.85	402.7	13.6	12.2	400	122.4	48.6	0.68
R4205.160	403.6	428.25	428.1	13.9	12.5	380	130.5	52.2	0.72
R4205.170	429.0	453.65	453.5	14.1	12.8	360	138.6	55.8	0.77
R4205.180	454.4	479.05	478.9	14.5	13.0	340	146.7	58.5	0.81
R4205.190	479.8	504.45	504.3	14.8	13.3	320	154.8	62.1	0.86
R4205.200	505.2	529.85	529.7	15.0	13.6	300	162.9	64.8	0.90
R4205.210	530.6	555.25	555.1	15.3	13.9	290	171.0	68.4	0.95
R4205.220	556.0	580.65	580.5	15.6	14.0	270	179.1	71.1	0.99
R4205.230	581.4	606.05	605.9	15.8	14.3	260	187.2	74.7	1.04
R4205.240	606.8	631.45	631.3	16.1	14.5	250	195.3	78.3	1.08
R4205.250	632.2	656.85	656.7	16.3	14.8	240	203.4	81.0	1.13
R4205.260	657.6	682.25	682.1	16.6	14.9	230	211.5	84.6	1.17
R4205.270	683.0	707.65	707.5	16.8	15.2	220	220.5	88.2	1.22
R4205.280	708.4	733.05	732.9	17.0	15.4	220	229.50	90.9	1.26
R4205.290	733.8	758.45	758.3	17.2	15.6	210	234.0	94.5	1.31
R4205.300	759.2	783.85	783.7	17.4	15.8	200	243.0	97.2	1.35
R4205.310	784.6	809.25	809.1	17.6	15.9	190	252.0	100.8	1.40
R4205.320	810.0	834.65	834.5	17.8	16.1	190	261.0	104.4	1.44
R4205.330	835.4	860.05	859.9	18.0	16.3	180	270.0	107.1	1.49
R4205.340	863.6	885.45	885.3	18.3	18.5	180	274.5	110.7	1.53



fitted dimensions

R4208

Material
Corrosion resistant, hardened steel bearing ring and balls 1,4304.
Ball cage - polyamide 12 plastic.

Technical Notes
Preferred sizes.

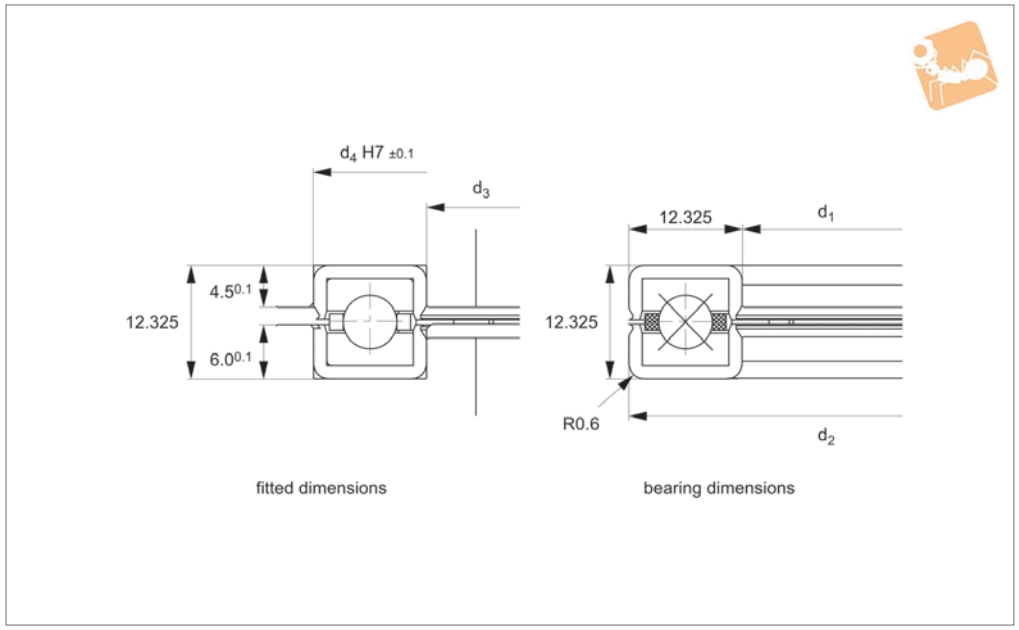
Tips
Our split bearings are compatable with most other manufacturers and are very cost competitive. Please ask us to ‚cross reference' if required.

Order No.	d_1 inch	d_1 mm	d_2 mm	Dyn. load $C_{ax.}$ kN max.	Speed $min.^{-1}$ max.	Static load $C_{0\ ax.}$ kN max.	Weight kg
R4208.070	7	177.80	196.85	18.7	860	128.0	0.30
R4208.075	7½	190.50	209.55	19.0	800	136.0	0.32
R4208.080	8	203.20	222.25	19.5	750	146.0	0.34
R4208.085	8½	215.90	234.95	19.8	710	154.0	0.36
R4208.090	9	228.60	247.65	20.3	670	164.0	0.38
R4208.095	9½	241.30	260.35	20.8	630	174.0	0.39
R4208.100	10	254.00	273.05	21.1	600	182.0	0.41
R4208.105	10½	266.70	285.75	21.6	570	192.0	0.43
R4208.110	11	279.40	298.45	21.9	550	200.0	0.45
R4208.115	11½	292.10	311.15	22.3	520	210.0	0.47
R4208.120	12	304.80	323.85	22.6	500	218.0	0.49
R4208.130	13	330.20	349.25	23.2	460	236.0	0.53
R4208.140	14	355.60	374.65	23.9	430	254.0	0.56
R4208.150	15	381.00	400.05	24.5	400	272.0	0.60
R4208.160	16	406.40	425.45	25.0	380	290.0	0.64
R4208.170	17	431.80	450.85	25.5	350	308.0	0.68
R4208.180	18	457.20	476.25	26.2	330	326.0	0.72
R4208.190	19	482.60	501.65	26.7	320	344.0	0.76
R4208.200	20	508.00	527.05	27.1	300	362.0	0.79
R4208.210	21	533.40	552.45	27.6	290	380.0	0.83
R4208.220	22	558.80	577.85	28.1	270	398.0	0.87
R4208.230	23	584.20	603.25	28.6	260	416.0	0.91
R4208.240	24	609.60	628.65	29.1	250	434.0	0.95
R4208.250	25	635.00	654.05	29.4	240	452.0	0.98
R4208.260	26	660.40	679.45	29.9	230	470.0	1.02
R4208.270	27	685.80	704.85	30.4	220	490.0	1.06
R4208.280	28	711.20	730.25	30.7	210	510.0	1.10
R4208.290	29	736.60	755.65	31.0	210	520.0	1.14
R4208.300	30	762.00	781.05	31.4	200	540.0	1.18
R4208.310	31	787.40	806.45	31.9	190	560.0	1.22

Split Bearing - Slim

ball thrust bearing type

Order No.	d_1 inch	d_1 mm	d_2 mm	Dyn. load $C_{ax.}$ kN max.	Speed $min.^{-1}$ max.	Static load $C_{0\ ax.}$ kN max.	Weight kg
R4208.320	32	812.80	831.85	32.2	190	580.0	1.26
R4208.330	33	838.20	857.25	32.5	180	600.0	1.30
R4208.340	34	863.60	882.65	33.0	180	610.0	1.34



R4209

Material
Corrosion resistant, hardened steel bearing ring and balls 1,4304.
Ball cage - polyamide 12 plastic.

Technical Notes
Metric preferred sizes.

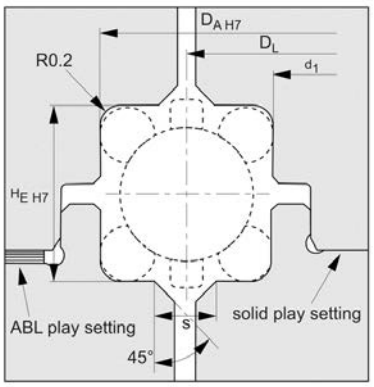
Tips
Our split bearings are compatable with most other manufacturers and are very cost competitive. Please ask us to ‚cross reference' if required.

Order No.	d_1 & d_3 mm	d_2 mm	d_4 mm	Dyn. load $C_{ax.}$ kN max.	Speed min.$^{-1}$ max.	Static load $C_{0\ ax.}$ kN max.	Weight kg
R4209.070	175.0	199.65	200.0	16.8	870	115.2	0.32
R4209.075	187.7	212.35	212.7	17.1	810	122.4	0.34
R4209.080	200.4	225.05	225.4	17.6	760	131.4	0.36
R4209.085	213.1	237.75	238.1	17.8	720	138.6	0.38
R4209.090	225.8	250.45	250.8	18.3	680	147.6	0.41
R4209.095	238.5	263.15	263.5	18.7	640	156.6	0.43
R4209.100	251.2	275.85	276.2	19.0	610	163.8	0.45
R4209.105	263.9	288.55	288.9	19.4	580	172.8	0.47
R4209.110	276.6	301.25	301.6	19.7	550	180.0	0.50
R4209.115	289.3	313.95	314.3	20.0	530	189.0	0.52
R4209.120	302.0	326.65	327.0	20.3	510	196.2	0.54
R4209.130	327.4	352.05	352.4	20.9	470	212.4	0.59
R4209.140	352.8	377.45	377.8	21.5	430	228.6	0.63
R4209.150	378.2	402.85	403.2	22.1	400	244.8	0.68
R4209.160	403.6	428.25	428.6	22.5	380	261.0	0.72
R4209.170	429.0	453.65	454.0	23.0	360	277.2	0.77
R4209.180	454.4	479.05	479.4	23.6	340	293.4	0.81
R4209.190	479.8	504.45	504.8	24.0	320	309.6	0.86
R4209.200	505.2	529.85	530.2	24.1	300	325.8	0.90
R4209.210	530.6	555.25	555.6	24.8	290	342.0	0.95
R4209.220	556.0	580.65	581.0	25.3	270	358.2	0.99
R4209.230	581.4	606.05	606.4	25.7	260	374.4	1.04
R4209.240	606.8	631.45	631.8	26.2	250	390.6	1.08
R4209.250	632.2	656.85	657.2	26.5	240	406.8	1.13
R4209.260	657.6	682.25	682.6	26.9	230	423.0	1.17
R4209.270	683.0	707.65	708.0	27.4	220	441.0	1.22
R4209.280	708.4	733.05	733.4	27.6	220	459.0	1.26
R4209.290	733.8	758.45	758.8	27.9	210	468.0	1.31
R4209.300	759.2	783.85	784.2	28.3	200	486.0	1.35
R4209.310	784.6	809.25	809.6	28.7	190	504.0	1.40

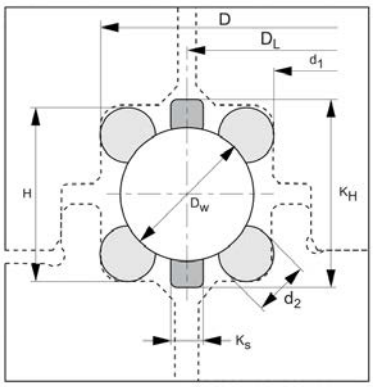
Split Bearing - Slim

ball thrust bearing type

Order No.	d_1 & d_3 mm	d_2 mm	d_4 mm	Dyn. load $C_{ax.}$ kN max.	Speed $min.^{-1}$ max.	Static load $C_{0\ ax.}$ kN max.	Weight kg
R4209.320	810.0	834.65	835.0	29.0	190	522.0	1.44
R4209.330	835.4	860.05	860.4	29.3	180	540.0	1.49
R4209.340	860.8	885.45	885.8	29.7	180	549.0	1.53



fitted dimensions



R4222.1

Material
Hardened corrosion resistant steel wire and ball bearings (in plastic cage).

Technical Notes
Play in the bearings can be adjusted via the surface-solid settings or can be set by matching with spacers.

Tips
Our wire bearings are compatable with most other manufacturers and are very cost competitive. Please ask us to ‚cross reference' if required.

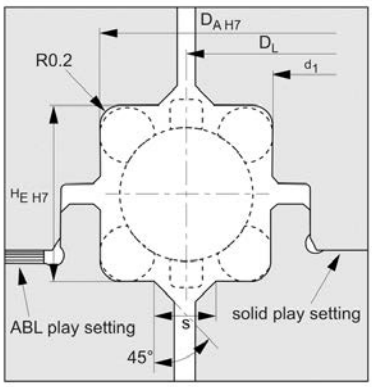
Smaller sizes on previous page.

Order No.	d	D_L	h	Dyn. load C kN max.	Dyn. load C_0 kN max.	Weight g
R4222.1025	1013	1025	12	38.4	348.5	1.85
R4222.1050	1038	1050	12	38.9	357.0	1.89
R4222.1075	1063	1075	12	39.3	365.5	1.94
R4222.1100	1088	1100	12	39.8	374.0	1.98
R4222.1125	1113	1125	12	40.2	382.5	2.03
R4222.1150	1138	1150	12	40.7	391.0	2.07
R4222.1175	1163	1175	12	41.1	399.5	2.12
R4222.1200	1188	1200	12	41.6	408.0	2.16
R4222.1225	1213	1225	12	42.0	416.5	2.21
R4222.1250	1238	1250	12	42.4	425.0	2.25
R4222.1275	1263	1275	12	42.8	433.5	2.30
R4222.1300	1288	1300	12	43.3	442.0	2.34
R4222.1325	1313	1325	12	43.7	450.5	2.39
R4222.1350	1338	1350	12	44.1	459.0	2.43
R4222.1375	1363	1375	12	44.5	467.5	2.48
R4222.1400	1388	1400	12	44.9	476.0	2.52
R4222.1425	1413	1425	12	45.3	484.5	2.57
R4222.1450	1438	1450	12	45.7	493.0	2.61
R4222.1475	1463	1475	12	46.1	501.5	2.66
R4222.1500	1488	1500	12	46.5	510.0	2.70
R4222.1525	1513	1525	12	46.9	518.5	2.75
R4222.1550	1538	1550	12	47.2	527.0	2.79
R4222.1575	1563	1575	12	47.6	535.5	2.84
R4222.1600	1588	1600	12	48.0	544.0	2.90
R4222.1625	1613	1625	12	48.4	554.5	2.93
R4222.1650	1638	1650	12	48.7	561.0	2.97
R4222.1675	1663	1675	12	49.1	569.5	3.02

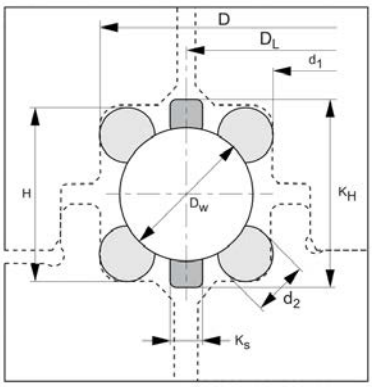
Ball Bearing - Wire

metric, groundway raceway

R4222



fitted dimensions



Material

Hardened corrosion resistant steel wire and ball bearings (in plastic cage).

Technical Notes

Play in the bearings can be adjusted via the surface-solid settings or can be set by matching with spacers.

Tips

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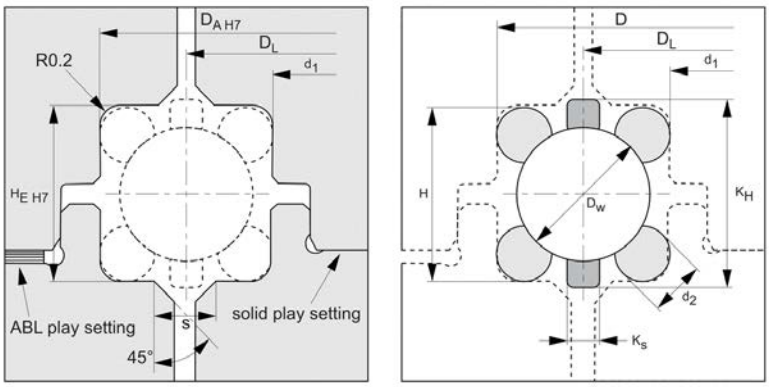
Larger sizes on next page.

Order No.	d	D_L	h	Dyn. load C kN max.	Dyn. load C_0 kN max.	Weight g
R4222.100	88	100	12	12.0	34.0	0.18
R4222.125	113	125	12	13.4	42.5	0.23
R4222.150	138	150	12	14.7	51.0	0.27
R4222.175	163	175	12	15.9	59.5	0.32
R4222.200	188	200	12	17.0	68.0	0.36
R4222.225	213	225	12	18.0	76.5	0.41
R4222.250	238	250	12	19.0	85.0	0.45
R4222.275	263	275	12	19.9	93.5	0.50
R4222.300	288	300	12	20.8	102.0	0.54
R4222.325	313	325	12	21.6	110.5	0.59
R4222.350	338	350	12	22.4	119.0	0.63
R4222.375	363	375	12	23.2	127.5	0.68
R4222.400	388	400	12	24.0	136.0	0.72
R4222.425	413	425	12	24.7	144.5	0.77
R4222.450	438	450	12	25.5	153.0	0.81
R4222.475	463	475	12	26.2	161.5	0.86
R4222.500	488	500	12	26.8	170.0	0.90
R4222.525	513	525	12	27.5	178.5	0.95
R4222.550	538	550	12	28.1	187.0	0.99
R4222.575	563	575	12	28.8	195.5	1.04
R4222.600	588	600	12	29.4	204.0	1.08
R4222.625	613	625	12	30.0	212.5	1.13
R4222.650	638	650	12	30.6	221.0	1.17
R4222.675	663	675	12	31.2	229.5	1.22
R4222.700	688	700	12	31.7	238.0	1.26
R4222.725	713	725	12	32.3	246.5	1.31
R4222.750	738	750	12	32.9	255.0	1.35
R4222.775	763	775	12	33.4	263.5	1.40
R4222.800	788	800	12	33.9	272.0	1.44
R4222.825	813	825	12	34.5	280.5	1.49
R4222.850	838	850	12	35.0	289.0	1.53

Order No.	d	D_L	h	Dyn. load C kN max.	Dyn. load C_0 kN max.	Weight g
R4222.875	863	875	12	35.5	297.5	1.58
R4222.900	888	900	12	36.0	306.0	1.62
R4222.925	913	925	12	36.5	314.5	1.67
R4222.950	938	950	12	37.0	323.0	1.71
R4222.975	963	975	12	37.5	331.5	1.76
R4222.1000	988	1000	12	37.9	340.0	1.80

Ball Bearing - Wire
imperial, ground raceway

R4224.1



fitted dimensions

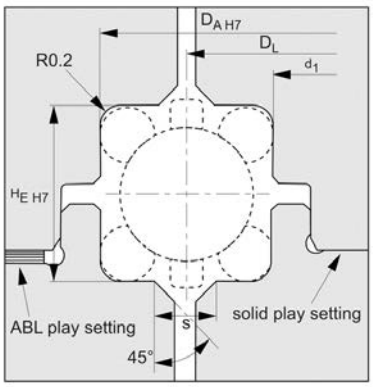
Material
Hardened corrosion resistant steel wire and ball bearings (in plastic cage).

Technical Notes
Play in the bearings can be adjusted via the surface-solid settings or can be set by matching with spacers.

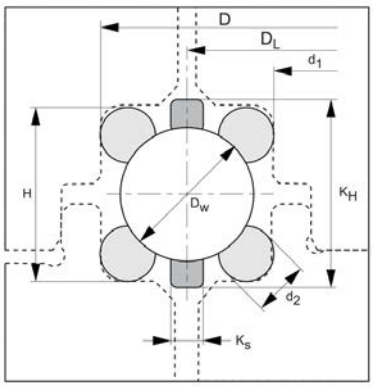
Tips
Our wire bearings are compatable with most other manufacturers and are very cost competitive. Please ask us to ‚cross reference' if required.

Smaller sizes on previous page.

Order No.	d	H inch	H mm	Dyn. load C kN max.	Dyn. load C_0 kN max.	Weight kg
R4224.1025	1012.05	0.51	12.95	46.4	317.8	2.15
R4224.1050	1037.05	0.51	12.95	47.0	325.5	2.21
R4224.1075	1062.05	0.51	12.95	47.5	333.3	2.26
R4224.1100	1087.05	0.51	12.95	48.1	341.0	2.31
R4224.1125	1112.05	0.51	12.95	48.6	348.8	2.36
R4224.1150	1137.05	0.51	12.95	49.2	356.5	2.42
R4224.1175	1162.05	0.51	12.95	49.7	364.3	2.47
R4224.1200	1187.05	0.51	12.95	50.2	372.0	2.52
R4224.1225	1212.05	0.51	12.95	50.8	379.8	2.57
R4224.1250	1237.05	0.51	12.95	51.3	387.5	2.63
R4224.1275	1262.05	0.51	12.95	51.8	395.3	2.68
R4224.1300	1287.05	0.51	12.95	52.3	403.0	2.73
R4224.1325	1312.05	0.51	12.95	52.8	410.8	2.78
R4224.1350	1337.05	0.51	12.95	53.3	418.5	2.84
R4224.1375	1362.05	0.51	12.95	53.8	426.3	2.89
R4224.1400	1387.05	0.51	12.95	54.3	434.0	2.94
R4224.1425	1412.05	0.51	12.95	54.7	441.8	2.99
R4224.1450	1437.05	0.51	12.95	55.2	449.5	3.05
R4224.1475	1462.05	0.51	12.95	55.7	457.3	3.10
R4224.1500	1487.05	0.51	12.95	56.2	465.0	3.15
R4224.1525	1512.05	0.51	12.95	56.6	472.8	3.20
R4224.1550	1537.05	0.51	12.95	57.1	480.5	3.26
R4224.1575	1562.05	0.51	12.95	57.5	488.3	3.31
R4224.1600	1587.05	0.51	12.95	58.0	496.0	3.36
R4224.1625	1612.05	0.51	12.95	58.5	503.8	3.41
R4224.1650	1637.05	0.51	12.95	58.9	511.5	3.47
R4224.1675	1662.05	0.51	12.95	59.3	519.3	3.52



fitted dimensions



R4224

Material
Hardened corrosion resistant steel wire and ball bearings (in plastic cage).

Technical Notes
Play in the bearings can be adjusted via the surface-solid settings or can be set by matching with spacers.

Tips
Our wire bearings are compatable with most other manufacturers and are very cost competitive. Please ask us to ‚cross reference' if required.

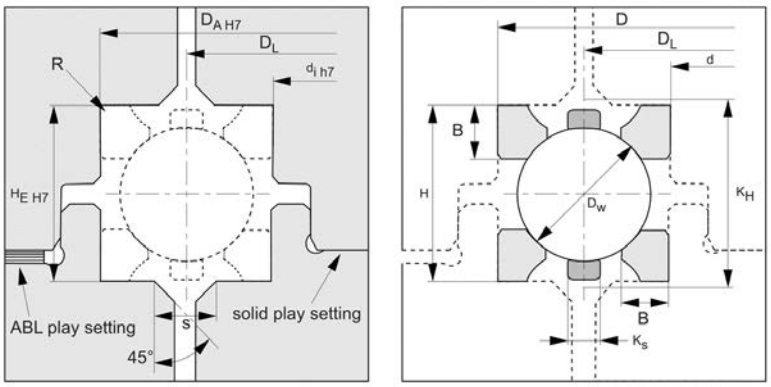
Larger sizes on next page.

Order No.	d	H inch	H mm	Dyn. load C kN max.	Dyn. load C_0 kN max.	Weight kg
R4224.100	87.05	0.51	12.95	14.5	31.0	0.21
R4224.125	112.05	0.51	12.95	16.2	38.8	0.26
R4224.150	137.05	0.51	12.95	17.8	46.5	0.32
R4224.175	162.05	0.51	12.95	19.2	54.3	0.37
R4224.200	187.05	0.51	12.95	20.5	62.0	0.42
R4224.225	212.05	0.51	12.95	21.8	69.8	0.47
R4224.250	237.05	0.51	12.95	22.9	77.5	0.53
R4224.275	262.05	0.51	12.95	24.0	85.3	0.58
R4224.300	287.05	0.51	12.95	25.1	93.0	0.63
R4224.325	312.05	0.51	12.95	26.1	100.8	0.68
R4224.350	337.05	0.51	12.95	27.1	108.5	0.74
R4224.375	362.05	0.51	12.95	28.1	116.3	0.79
R4224.400	387.05	0.51	12.95	29.0	124.0	0.84
R4224.425	412.05	0.51	12.95	29.9	131.8	0.89
R4224.450	437.05	0.51	12.95	30.8	139.5	0.95
R4224.475	462.05	0.51	12.95	31.6	147.3	1.00
R4224.500	487.05	0.51	12.95	32.4	155.0	1.05
R4224.525	512.05	0.51	12.95	33.2	162.8	1.10
R4224.550	537.05	0.51	12.95	34.0	170.5	1.16
R4224.575	562.05	0.51	12.95	34.8	178.3	1.21
R4224.600	587.05	0.51	12.95	35.5	185.0	1.26
R4224.625	612.05	0.51	12.95	36.3	193.8	1.31
R4224.650	637.05	0.51	12.95	37.0	201.5	1.37
R4224.675	662.05	0.51	12.95	37.7	209.3	1.42
R4224.700	687.05	0.51	12.95	38.4	217.0	1.47
R4224.725	712.05	0.51	12.95	39.0	224.8	1.52
R4224.750	737.05	0.51	12.95	39.7	232.5	1.58
R4224.775	762.05	0.51	12.95	40.4	240.3	1.63
R4224.800	787.05	0.51	12.95	41.0	248.0	1.68
R4224.825	812.05	0.51	12.95	41.6	255.8	1.73
R4224.850	837.05	0.51	12.95	42.3	263.5	1.79

Ball Bearing - Wire

imperial, ground raceway

Order No.	d	H inch	H mm	Dyn. load C kN max.	Dyn. load C_0 kN max.	Weight kg
R4224.875	862.05	0.51	12.95	42.9	271.3	1.84
R4224.900	887.05	0.51	12.95	43.5	279.0	1.89
R4224.925	912.05	0.51	12.95	44.1	286.8	1.94
R4224.950	937.05	0.51	12.95	44.7	294.5	2.00
R4224.975	962.05	0.51	12.95	45.3	302.3	2.05
R4224.1000	987.05	0.51	12.95	45.9	310.0	2.10



fitted dimensions

R4230.1

Material
Hardened corrosion resistant steel wire and ball bearings (in plastic cage).

Technical Notes
Play in the bearings can be adjusted via the surface-solid settings or can be set by matching with spacers.

Tips
Our wire bearings are compatable with most other manufacturers and are very cost competitive. Please ask us to ‚cross reference' if required.

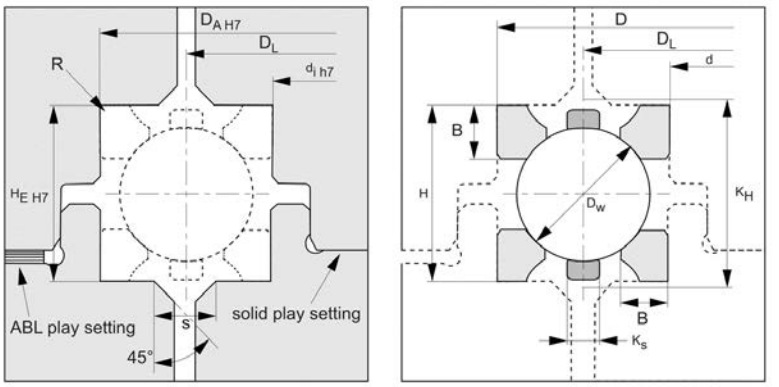
Smaller sizes on previous page.

Order No.	d	D_L	h	Load C_0 kN	Dyn. load C kN max.	Weight kg
R4230.300	289	300	13	96.0	26.0	0.56
R4230.310	299	310	13	99.2	26.4	0.58
R4230.320	309	320	13	102.4	26.8	0.60
R4230.330	319	330	13	105.6	27.2	0.61
R4230.340	329	340	13	108.8	27.7	0.63
R4230.350	339	350	13	112.0	28.1	0.65
R4230.360	349	360	13	115.2	28.5	0.67
R4230.370	359	370	13	118.4	28.9	0.69
R4230.380	369	380	13	121.6	29.2	0.71
R4230.390	379	390	13	124.8	29.6	0.73
R4230.400	389	400	13	128.0	30.0	0.74
R4230.410	399	410	13	131.2	30.4	0.76
R4230.420	409	420	13	134.4	30.8	0.78
R4230.430	419	430	13	137.6	31.1	0.80
R4230.440	429	440	13	140.8	31.5	0.82
R4230.450	439	450	13	144.0	31.8	0.84
R4230.460	449	460	13	147.2	32.2	0.86
R4230.470	459	470	13	150.4	32.5	0.87
R4230.480	469	480	13	153.6	32.9	0.89
R4230.490	479	490	13	156.8	33.2	0.91
R4230.500	489	500	13	160.0	33.5	0.93
R4230.510	499	510	13	163.2	33.9	0.95
R4230.520	509	520	13	166.4	34.2	0.97
R4230.530	519	530	13	169.6	34.5	0.99

Ball Bearing - Wire, Duo Profile

duo-profile, drawn raceway

R4230



fitted dimensions

Material

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Technical Notes

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Tips

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Larger sizes on next page.

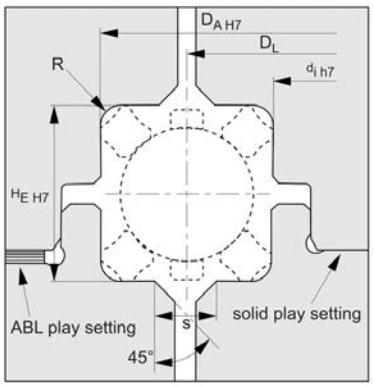
Order No.	d	D_L	h	Load C_0 kN	Dyn. load C kN max.	Weight kg
R4230.100	89	100	13	32.0	15.0	0.19
R4230.105	94	105	13	33.6	15.4	0.20
R4230.110	99	110	13	35.2	15.7	0.21
R4230.115	104	115	13	36.8	16.1	0.21
R4230.120	109	120	13	38.4	16.4	0.22
R4230.125	114	125	13	40.0	16.8	0.23
R4230.130	119	130	13	41.6	17.1	0.24
R4230.135	124	135	13	43.2	17.4	0.25
R4230.140	129	140	13	44.8	17.7	0.26
R4230.145	134	145	13	46.4	18.1	0.27
R4230.150	139	150	13	48.0	18.4	0.28
R4230.155	144	155	13	49.6	18.7	0.29
R4230.160	149	160	13	51.2	19.0	0.30
R4230.165	154	165	13	52.8	19.3	0.31
R4230.170	159	170	13	54.4	19.6	0.32
R4230.175	164	175	13	56.0	19.9	0.33
R4230.180	169	180	13	57.6	20.1	0.34
R4230.185	174	185	13	59.2	20.4	0.34
R4230.190	179	190	13	60.8	20.7	0.35
R4230.195	184	195	13	62.4	21.0	0.36
R4230.200	189	200	13	64.0	21.2	0.37
R4230.205	194	205	13	65.6	21.5	0.38
R4230.210	199	210	13	67.2	21.7	0.39
R4230.215	204	215	13	68.8	22.0	0.40
R4230.220	209	220	13	70.4	22.3	0.41
R4230.225	214	225	13	72.0	22.5	0.42
R4230.230	219	230	13	73.6	22.8	0.43
R4230.235	224	235	13	75.2	23.0	0.44
R4230.240	229	240	13	76.8	23.2	0.45
R4230.245	234	245	13	78.4	23.5	0.46
R4230.250	239	250	13	80.0	23.7	0.47

Order No.	d	D_L	h	Load C_0 kN	Dyn. load C kN max.	Weight kg
R4230.255	244	255	13	81.6	24.0	0.47
R4230.260	249	260	13	83.2	24.2	0.48
R4230.265	254	265	13	84.8	24.4	0.49
R4230.270	259	270	13	86.4	24.7	0.50
R4230.275	264	275	13	88.0	24.9	0.51
R4230.280	269	280	13	89.6	25.1	0.52
R4230.285	274	285	13	91.2	25.3	0.53
R4230.290	279	290	13	92.8	25.6	0.54
R4230.295	284	295	13	94.4	25.8	0.55

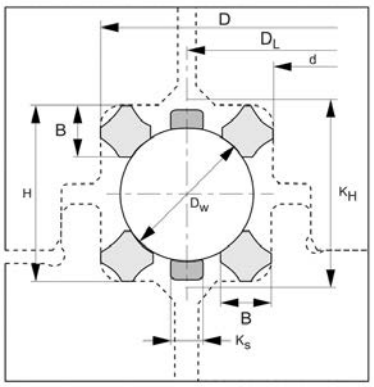
Ball Bearing - Wire, Duplex Profile

duplex profile, drawn raceway

R4240.1



fitted dimensions



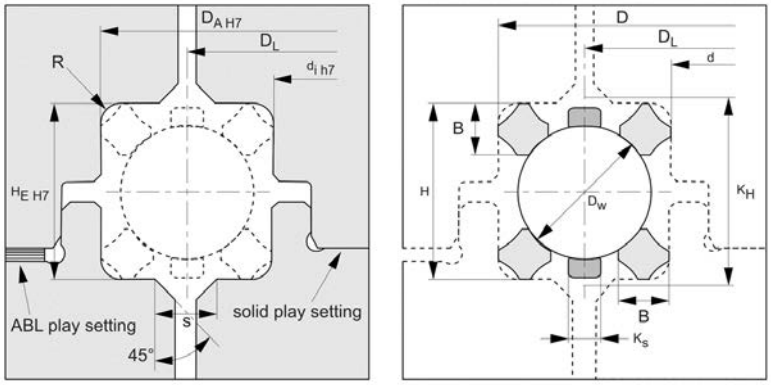
Material
Hardened corrosion resistant steel wire and ball bearings (in plastic cage).

Technical Notes
Play in the bearings can be adjusted via the surface-solid settings or can be set by matching with spacers.

Tips
Our wire bearings are compatable with most other manufacturers and are very cost competitive. Please ask us to ‚cross reference' if required.

Smaller sizes on previous page.

Order No.	d	D_L	h	Dyn. load C kN max.	Dyn. load C_0 kN max.	Weight kg
R4240.0300	287.05	300	12.95	26.0	96.0	0.59
R4240.0310	297.05	310	12.95	26.4	99.2	0.61
R4240.0320	307.05	320	12.95	26.8	102.4	0.63
R4240.0330	317.05	330	12.95	27.2	105.6	0.65
R4240.0340	327.05	340	12.95	27.7	108.8	0.67
R4240.0350	337.05	350	12.95	28.1	112.0	0.69
R4240.0360	347.05	360	12.95	28.5	115.2	0.71
R4240.0370	357.05	370	12.95	28.9	118.4	0.73
R4240.0380	367.05	380	12.95	29.2	121.6	0.75
R4240.0390	377.05	390	12.95	29.6	124.8	0.76
R4240.0400	387.05	400	12.95	30.0	128.0	0.78
R4240.0410	397.05	410	12.95	30.4	131.2	0.80
R4240.0420	407.05	420	12.95	30.8	134.4	0.82
R4240.0430	417.05	430	12.95	31.1	137.6	0.84
R4240.0440	427.05	440	12.95	31.5	140.8	0.86
R4240.0450	437.05	450	12.95	31.8	144.0	0.88
R4240.0460	447.05	460	12.95	32.2	147.2	0.90
R4240.0470	457.05	470	12.95	32.5	150.4	0.92
R4240.0480	467.05	480	12.95	32.9	153.6	0.96
R4240.0490	477.05	490	12.95	33.2	156.8	0.96
R4240.0500	487.05	500	12.95	33.5	160.0	0.98
R4240.0510	497.05	510	12.95	33.9	163.2	1.00
R4240.0520	507.05	520	12.95	34.2	166.4	1.04
R4240.0530	517.05	530	12.95	34.5	169.6	1.04



fitted dimensions

R4240

Material
Hardened corrosion resistant steel wire and ball bearings (in plastic cage).

Technical Notes
Play in the bearings can be adjusted via the surface-solid settings or can be set by matching with spacers.

Tips
Our wire bearings are compatable with most other manufacturers and are very cost competitive. Please ask us to ‚cross reference' if required.

Larger sizes on next page.

Order No.	d	D_L	h	Dyn. load C kN max.	Dyn. load C_0 kN max.	Weight kg
R4240.0100	87.05	100	12.95	15.0	32.0	0.20
R4240.0105	92.05	105	12.95	15.4	33.6	0.21
R4240.0110	97.05	110	12.95	15.7	35.2	0.22
R4240.0115	102.05	115	12.95	16.1	36.8	0.23
R4240.0120	107.05	120	12.95	16.4	38.4	0.24
R4240.0125	112.05	125	12.95	16.8	40.0	0.25
R4240.0130	117.05	130	12.95	17.1	41.6	0.26
R4240.0135	122.05	135	12.95	17.4	43.2	0.27
R4240.0140	127.05	140	12.95	17.7	44.8	0.27
R4240.0145	132.05	145	12.95	18.1	46.4	0.28
R4240.0150	137.05	150	12.95	18.4	48.0	0.29
R4240.0155	142.05	155	12.95	18.7	49.6	0.30
R4240.0160	147.05	160	12.95	19.0	51.2	0.31
R4240.0165	152.05	165	12.95	19.3	52.8	0.32
R4240.0170	157.05	170	12.95	19.6	54.4	0.33
R4240.0175	162.05	175	12.95	19.9	56.0	0.34
R4240.0180	167.05	180	12.95	20.1	57.6	0.35
R4240.0185	172.05	185	12.95	20.4	59.2	0.36
R4240.0190	177.05	190	12.95	20.7	60.8	0.37
R4240.0195	182.05	195	12.95	21.0	62.4	0.38
R4240.0200	187.05	200	12.95	21.2	64.0	0.39
R4240.0205	192.05	205	12.95	21.5	65.6	0.40
R4240.0210	197.05	210	12.95	21.7	67.2	0.41
R4240.0215	202.05	215	12.95	22.0	68.8	0.42
R4240.0220	207.05	220	12.95	22.3	70.4	0.43
R4240.0225	212.05	225	12.95	22.5	72.0	0.44
R4240.0230	217.05	230	12.95	22.8	73.6	0.45
R4240.0235	222.05	235	12.95	23.0	75.2	0.46
R4240.0240	227.05	240	12.95	23.2	76.8	0.47
R4240.0245	232.05	245	12.95	23.5	78.4	0.48
R4240.0250	237.05	250	12.95	23.7	80.0	0.49

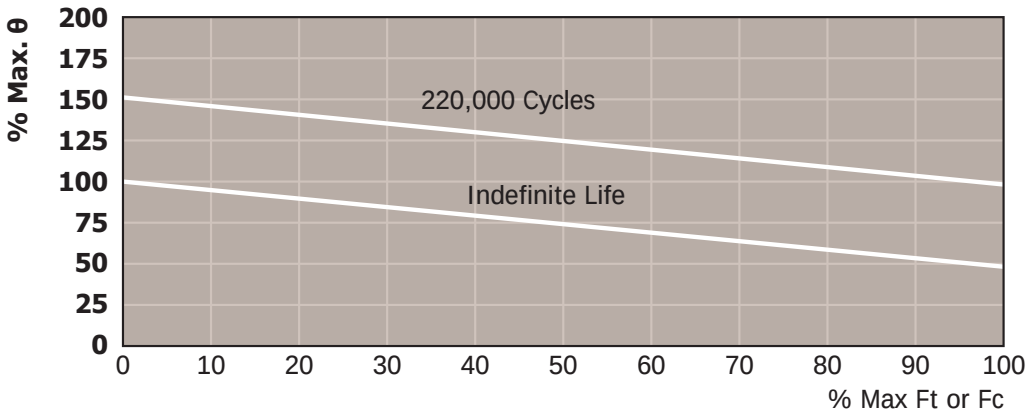
Ball Bearing - Wire, Duplex Profile

duplex profile, drawn raceway

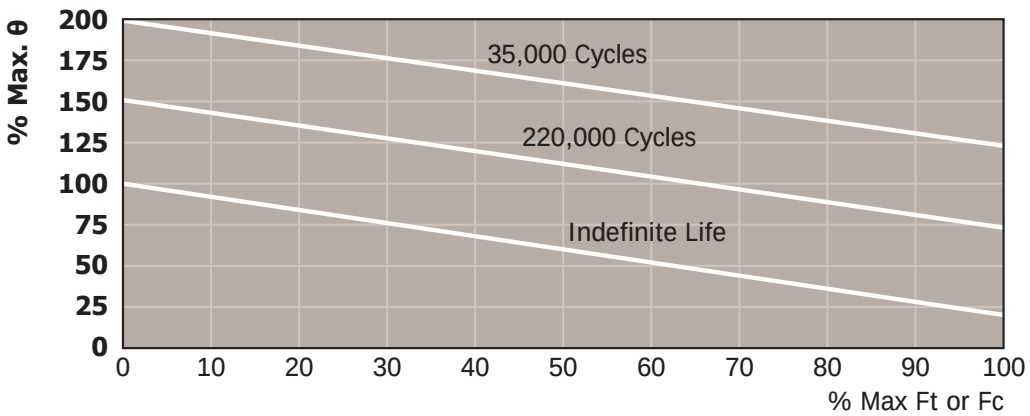
Order No.	d	D_L	h	Dyn. load C kN max.	Dyn. load C_0 kN max.	Weight kg
R4240.0255	242.05	255	12.95	24.0	81.6	0.50
R4240.0260	247.05	260	12.95	24.2	83.2	0.51
R4240.0265	252.05	265	12.95	24.4	84.8	0.52
R4240.0270	257.05	270	12.95	24.7	86.4	0.53
R4240.0275	262.05	275	12.95	24.9	88.0	0.54
R4240.0280	267.05	280	12.95	25.1	89.6	0.55
R4240.0285	272.05	285	12.95	25.3	91.2	0.56
R4240.0290	277.05	290	12.95	25.6	92.8	0.57
R4240.0295	282.05	295	12.95	25.8	94.4	0.58

The cycle life of the bearings is based on the fatigue limit of the springs. The graphs below show the life expectancy for Torsional Spring Rates for Series 10, 20 and 30. Max θ shows the angle of deflection. This is the deflection angle from the null position, which can be positive or negative.

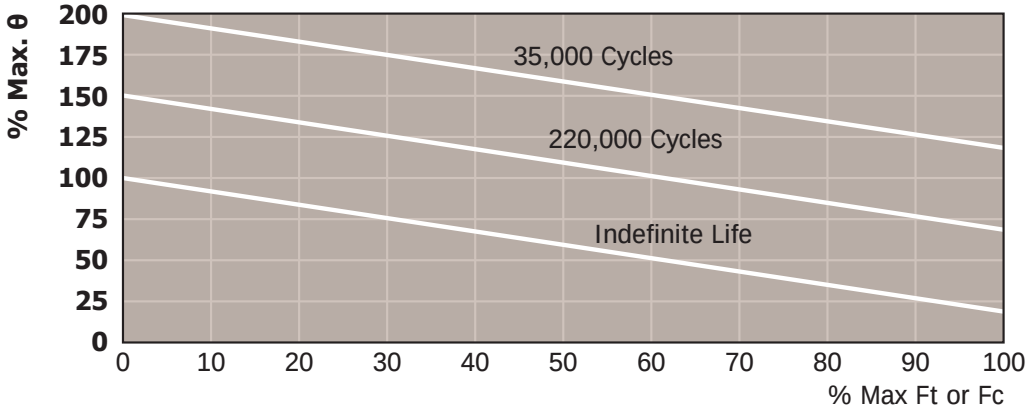
Series 10 - Max t ± 15.0°



Series 20 - Max θ ± 7.5°



Series 30 - Max θ ± 3.7°



Flexure Pivot Bearings from Automotion Components