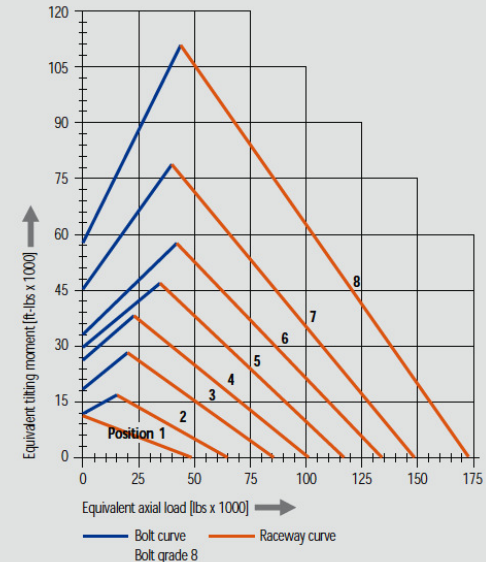
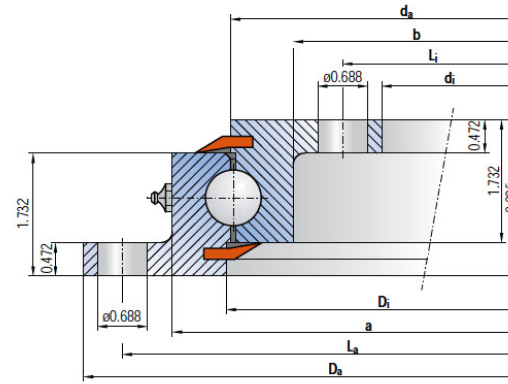


Untoothed

Limiting load diagram for "compressive" loads - Series 920

Drawing number	Position	Dimensions and weight							Mounting holes				Load ratings			
		D_a	d_i	D_i	d_a	a	b	G	L_a	n_a	L_i	n_i	$C_{o \text{ rad}}$	$C_{o \text{ ax}}$	C_{rad}	C_{ax}
		[inch]	[inch]	[inch]	[inch]	[inch]	[inch]	[lb]	[inch]	[-]	[inch]	[-]	[lbs]	[lbs]	[lbs]	[lbs]
90-20 0311/0-37002	1	16.457	8.031	12.421	12.303	13.898	10.591	43	15.35	8	9.130	12	20008	46760	31473	31473
90-20 0413/0-37012	2	20.394	11.969	16.437	16.319	17.835	14.528	53	19.25	8	13.130	12	26527	61822	35070	35070
90-20 0541/0-37022	3	25.512	17.087	21.476	21.358	22.953	19.646	70	24.38	12	18.130	15	34845	81381	38892	39117
90-20 0641/0-37032	4	29.449	21.024	25.413	25.295	26.890	23.583	84	28.38	12	22.130	18	41365	96443	41365	41590
90-20 0741/0-37042	5	33.386	24.961	29.350	29.232	30.827	27.520	101	32.25	15	26.130	18	47659	111505	43613	43838
90-20 0841/0-37052	6	37.323	28.898	33.287	33.169	34.764	31.457	115	36.25	18	30.000	20	54179	126567	45861	46086
90-20 0941/0-37062	7	41.260	32.835	37.224	37.106	38.701	35.394	128	40.13	18	34.000	20	60474	141630	47884	48109
90-20 1091/0-37072	8	47.165	38.740	43.130	43.012	44.606	41.299	150	46.00	18	39.880	24	70140	164111	50357	50582

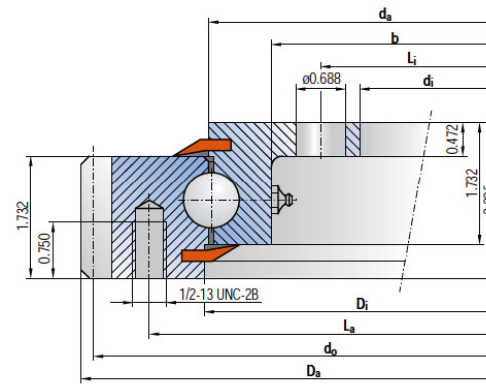


Please adhere strictly to the rules given in the Technical Information section when using above graph!

- Characteristics**
- Robust design for rough mounting structure
 - Cost-optimized design
 - Ideally suitable for applications with low precision requirements
 - For Series 920 precision versions are available

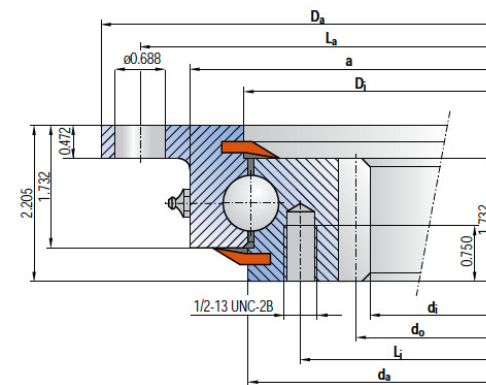
External toothed

Drawing number	Position	Dimensions and weight							Mounting holes				Gearing and tooth forces				Load ratings			
		D_a	d_i	D_i	d_a	b	G	L_a	n_a	L_i	n_i	d_o	P_d	Z	$f_z \text{ norm}$	$f_z \text{ max}$	$C_{o \text{ rad}}$	$C_{o \text{ ax}}$	C_{rad}	C_{ax}
		[inch]	[inch]	[inch]	[inch]	[inch]	[lb]	[inch]	[-]	[inch]	[-]	[inch]	[1/inch]	[-]	[lbs]	[lbs]	[lbs]	[lbs]	[lbs]	[lbs]
91-20 0311/1-37102	1	15.900	8.031	12.421	12.303	10.591	50	14.000	8	9.130	12	15.50	4	62	2540	5800	20008	46760	31473	31473
91-20 0413/1-37112	2	19.900	11.969	16.437	16.319	14.528	67	18.000	8	13.130	12	19.500	4	78	2540	5800	26527	61822	35070	35070
91-20 0541/1-37122	3	25.150	17.087	21.476	21.358	19.646	91	23.250	12	18.130	15	24.750	4	99	2540	5800	34845	81381	38892	39117
91-20 0641/1-37132	4	29.150	21.024	25.413	25.295	23.583	107	27.250	15	22.130	18	28.750	4	115	2540	5800	41365	96443	41365	41590
91-20 0741/1-37142	5	32.900	24.961	29.350	29.232	27.520	130	31.000	18	26.130	18	32.500	4	130	2540	5800	47659	111505	43613	43838
91-20 0841/1-37152	6	37.200	28.898	33.287	33.169	31.457	157	35.000	18	30.000	18	36.667	3	110	3700	7960	54179	126567	45861	46086
91-20 0941/1-37162	7	41.200	32.835	37.224	37.106	35.394	172	38.880	18	34.000	20	40.667	3	122	3700	7960	60474	141630	47884	48109
91-20 1091/1-37172	8	46.867	38.740	43.130	43.012	41.299	201	44.630	20	39.880	24	46.333	3	139	3700	7960	70140	164111	50357	50582



Internal toothed

Drawing number	Position	Dimensions and weight							Mounting holes				Gearing and tooth forces				Load ratings			
		D_a	d_i	D_i	d_a	a	G	L_a	n_a	L_i	n_i	d_o	P_d	Z	$f_z \text{ norm}$	$f_z \text{ max}$	$C_{o \text{ rad}}$	$C_{o \text{ ax}}$	C_{rad}	C_{ax}
		[inch]	[inch]	[inch]	[inch]	[inch]	[lb]	[inch]	[-]	[inch]	[-]	[inch]	[1/inch]	[-]	[lbs]	[lbs]	[lbs]	[lbs]	[lbs]	[lbs]
92-20 0311/1-37202	1	16.457	8.350	12.421	12.303	13.898	47	15.35	8	10.50	12	9.00	4	36	2830	6290	20008	46760	31473	31473
92-20 0413/1-37212	2	20.394	12.850	16.437	16.319	17.835	60	19.25	8	14.88	12	13.25	4	53	2830	6290	26527	61822	35070	35070
92-20 0541/1-37222	3	25.512	17.600	21.476	21.358	22.953	84	24.38	10	19.63	15	18.00	4	72	2830	6290	34845	81381	38892	39117
92-20 0641/1-37232	4	29.449	21.600	25.413	25.295	26.890	99	28.38	12	23.63	18	22.00	4	88	2830	6290	41365	96443	41365	41590
92-20 0741/1-37242	5	33.386	25.600	29.350	29.232	30.827	115	32.25	15	27.63	18	26.00	4	104	2830	6290	47659	111505	43613	43838
92-20 0841/1-37252	6	37.323	29.133	33.287	33.169	34.764	139	36.25	18	31.50	18	29.67	3	89	4080	8940	54179	126567	45861	46086
92-20 0941/1-37262	7	41.260	33.133	37.224	37.106	38.701	152	40.13	18	35.50	20	33.67	3	101	4080	8940	60474	141630	47884	48109
92-20 1091/1-37272	8	47.165	39.133	43.130	43.012	44.606	183	46.00	18	41.50	24	39.67	3	119	4080	8940	70140	164111	50357	50582



Radial clearance: 0 - 0.012 inch
 Axial tilting clearance: 0 - 0.02 inch
 Bearing ring material: C45N
 Gear tooth form: 20-degree stub involute system
 Necessary backlash at the pinion: 0 - 0.006 inch
 4 Taper type grease nipples on the circumference
 Mounting holes equally spaced
 Raceway system supplied pre-lubricated
 Dimensions without tolerances DIN ISO 2768 coarse

Design variants

If you require something different from the standard design, simply replace the last digit of the corresponding drawing number as follows:

- 90-20 0311/0-0700**
- | | |
|---|--|
| 2 | Standard design |
| 1 | = Reduced clearance
radial clearance: 0 - 0.004 inch
axial tilting clearance: 0 - 0.008 inch |
| 4 | = Bearing rings without holes |
| 6 | = Double number of holes |
| 7 | = Backlash-free bearing with preload |