

Designed for

demanding environments



Bearing design

NG waterproof flange bearing units are designed for the food industry and other industries with continuously stringent demands on material resistance and an easy-to-clean design. To reduce the risk of bacteria growth the design is characterised by a smooth surface and rounded corners.

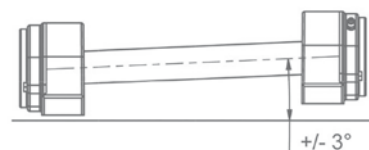
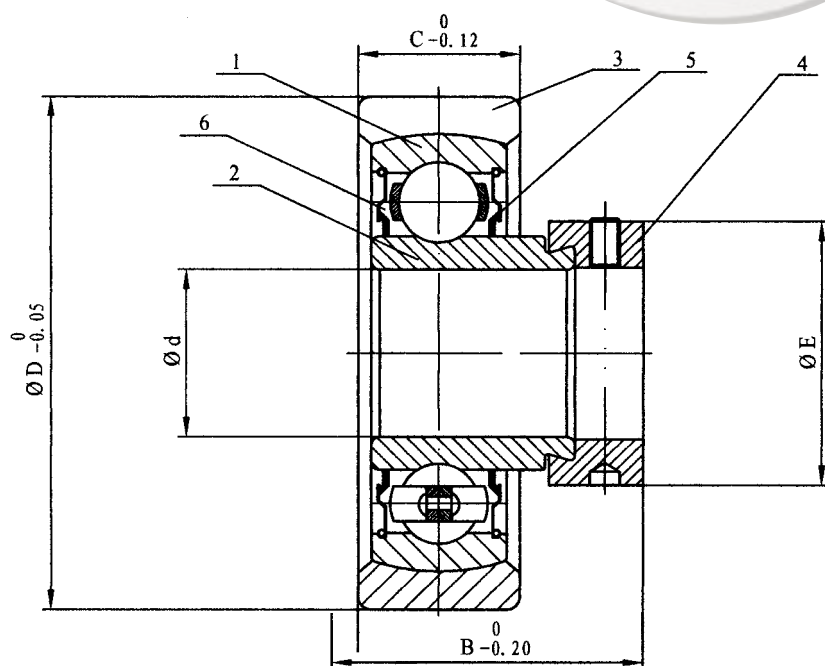
An oil seal ring with a stainless steel spring ensures that water cannot penetrate the housing. The bearings are maintenance free and resistant to all cleaning products and to most chemicals. The protection is IP66 & IP67 ensuring that the products can be cleaned from all directions. IP68 and IP69K on request.

Features and advantages:

- Compact and strong flange house with the cover bolted to the bearing housing
 - The flange housing is made of Baydur, which is of extreme stability and strength
 - Grease nipple of stainless steel for optimal food grade grease filling, prevents condensation in the bearing housing
 - The flange housing is mounted with a spherical NG lifetime lubricated ball bearing with eccentric locking collar
 - Self-aligning
 - Measurements are similar to market standards
 - The flange housing can be mounted in all angles
 - Stainless spherical radial insert bearings for an easy and precise assembly
 - The flange housing is heat resistant from -30 to +100°C
 - Insert bearings are lubricated with NSF H1 reg. grease according to DIN 51825, Halal, Kosher etc.
 - Private label available
- FDA food grade acc. to the framework of regulation 21 CFR 175.300
 - EU food grade according to (EC) No.1935/2004
 - The flange bearings are USDA accepted and meets the NSF/ANSI/3-A 14159-1-2010 standard



Technical specifications & drawings



The construction permits a misalignment of the bearing, of up to $\pm 3^\circ$

Technical specifications

1. Outer ring	AISI 440 B Stainless steel
2. Inner ring	AISI 440 B Stainless steel
3. Cover ring	AISI 440 B Stainless steel
4. Eccentric collar	AISI 304 Stainless steel
5. Sealings	NBR + AISI 304 Stainless steel
6. Grease	FM 222 Mobil grease
Operating temperature: -30°C to $+100^\circ\text{C}$	

NG spherical radial insert bearing with:

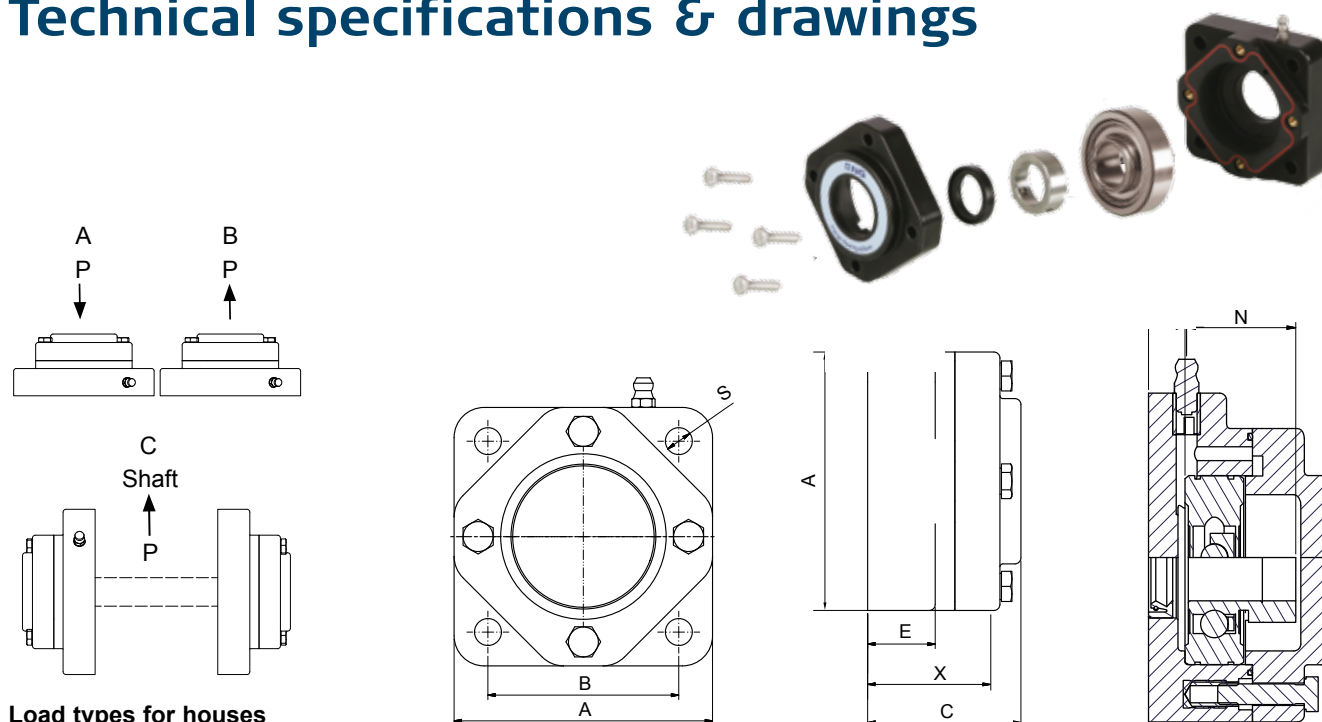
- Stainless steel inner ring
- Adjustable stainless cover ring
- Stainless steel eccentric locking collar
- Stainless steel P-sealings

Technical specifications	NG 20	NG 25	NG 30	NG 35	NG 40	NG 50	NG 60
d [mm]	20.00	25.00	30.00	35.00	40.00	50.00	60.00
D [mm]	55.00	62.00	72.00	80.00	90.00	100.00	120.00
B [mm]	31.50	32.00	37.20	40.00	45.20	46.50	55.30
C [mm]	16.00	17.00	21.00	21.00	25.00	26.00	28.00
E [mm]	33.00	37.50	44.00	51.00	58.00	70.00	83.50
m [kg]	0.24	0.31	0.49	0.64	0.89	1.07	1.78
Cr [kN]	9.88	10.78	14.97	19.75	22.71	30.01	35.28
Cor [kN]	6.20	6.98	10.04	13.67	15.94	22.53	26.18
m (mass); Cr (basic dynamic load, radial); Cor (basic static load, radial)							

F4 4-bolt flange bearing units



Technical specifications & drawings



Load types for houses

Type F4	Item no. closed cover	Item no. open cover	A	B	C	E	S	X	i	n	N	Weight [kg]	Max load [kN] (Houses)		
													Type A	Type B	Type C
Ø20 mm	NG20F40	NG20F41	86	63.5	51	22.5	9	43	11	0.5	31	0.52	9.16	17.44	33.57
Ø25 mm	NG25F40	NG25F41	95	70	52	22.5	9	44	11	0.5	31.5	0.63	8.48	25.89	34.41
Ø30 mm	NG30F40	NG30F41	108	82.5	58	22.5	11	48	11	0.5	36.7	0.91	9.35	25.30	37.65
Ø35 mm	NG35F40	NG35F41	118	92	60	22.5	13	50	11	0.5	39.4	1.10	9.17	21.54	64.72
Ø40 mm	NG40F40	NG40F41	130	101.5	65	22.5	13	56	11	0.5	44.7	1.50	8.82	27.67	83.17
Ø50 mm	NG50F40	NG50F41	143	111	70	26.5	16	58	12	0.5	46	1.84	8.83	40.27	112.39
Ø60 mm	NG60F40	NG60F41	175	143	82	28.5	18	70	15	0.5	54.8	3.09	9.09	51.08	136.79

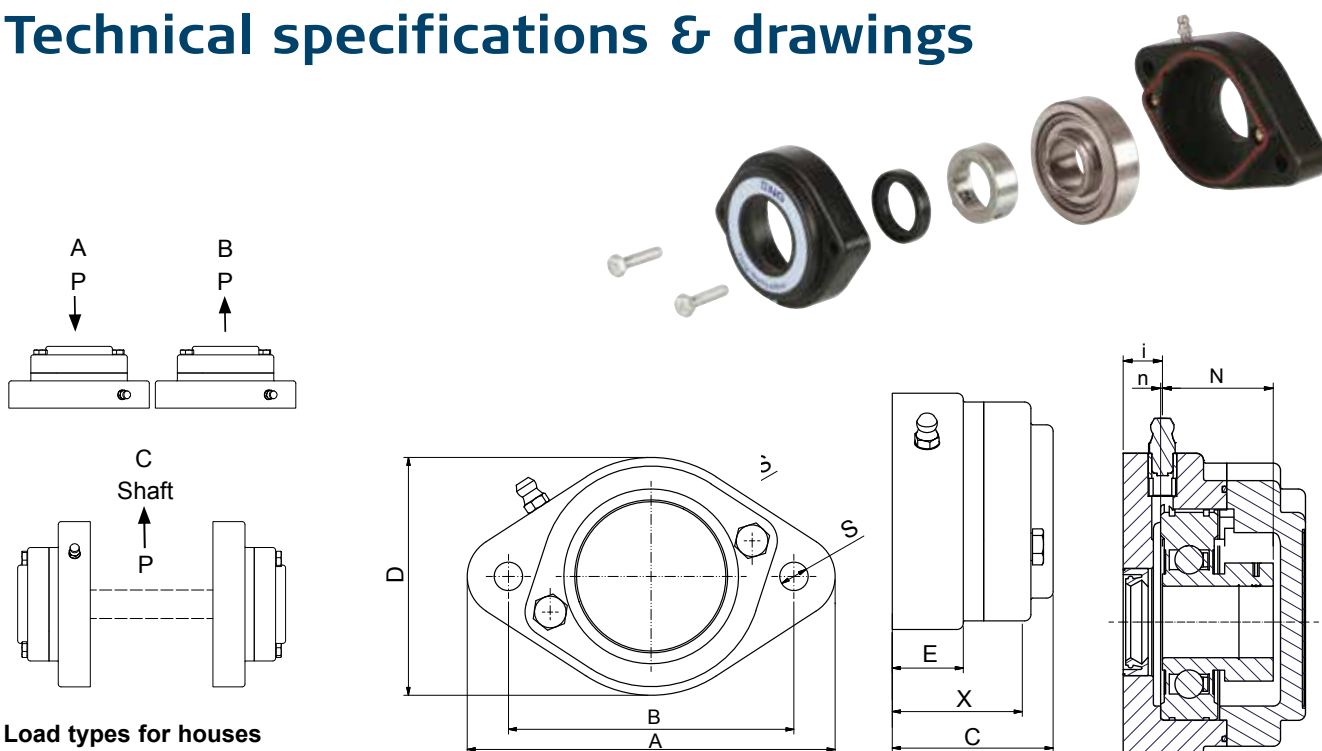
All measurements are in millimeters.

When ordering please use the catalogue numbers.

F2 2-bolt flange bearing units



Technical specifications & drawings



Type F2	Item no. closed cover	Item no. open cover	A	B	C	D	E	S	X	i	n	N	Weight [kg]	Max load [kN] (Houses)		
														Type A	Type B	Type C
Ø20 mm	NG20F20	NG20F21	116	90	51	75	22.5	9	43	11	0.5	31	0.43	4.58	19.75	29.15
Ø25 mm	NG25F20	NG25F21	123	99	52	79	22.5	9	44	11	0.5	31.5	0.51	4.09	20.11	22.51
Ø30 mm	NG30F20	NG30F21	145	117	58	90	22.5	11	48	11	0.5	36.7	0.77	4.65	11.26	27.24
Ø35 mm	NG35F20	NG35F21	160	130	60	99	22.5	13	50	11	0.5	39.4	0.99	4.98	12.31	27.52
Ø40 mm	NG40F20	NG40F21	174	144	65	110	22.5	13	56	11	0.5	44.7	1.30	3.69	12.80	35.07
Ø50 mm	NG50F20	NG50F21	197	157	70	125	26.5	17.5	58	12	0.5	46	1.60	4.58	16.11	44.96
Ø60 mm	NG60F20	NG60F21	250	202	82	152	28.5	22	70	15	0.5	54.8	2.82	4.68	20.43	54.72

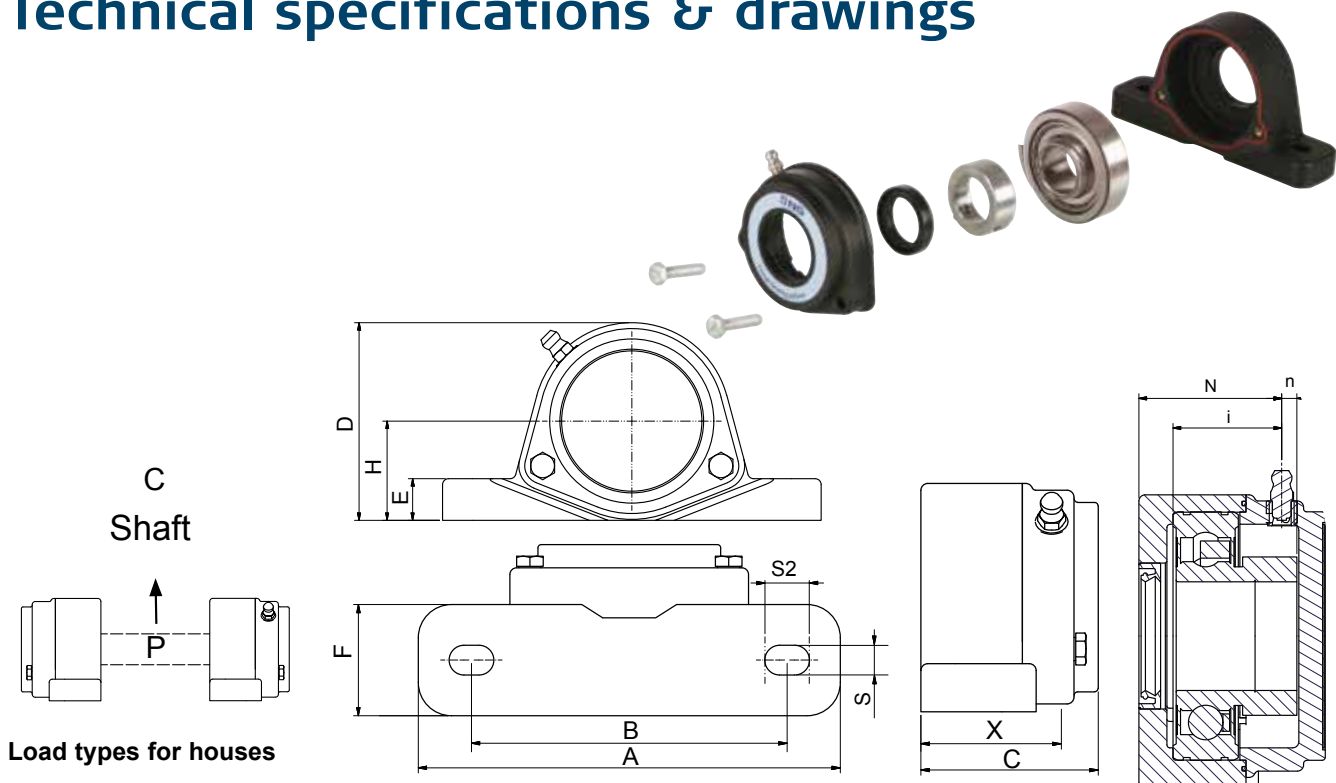
All measurements are in millimeters. When ordering please use the catalogue numbers.

SF2

2-bolt pillow block bearing units



Technical specifications & drawings



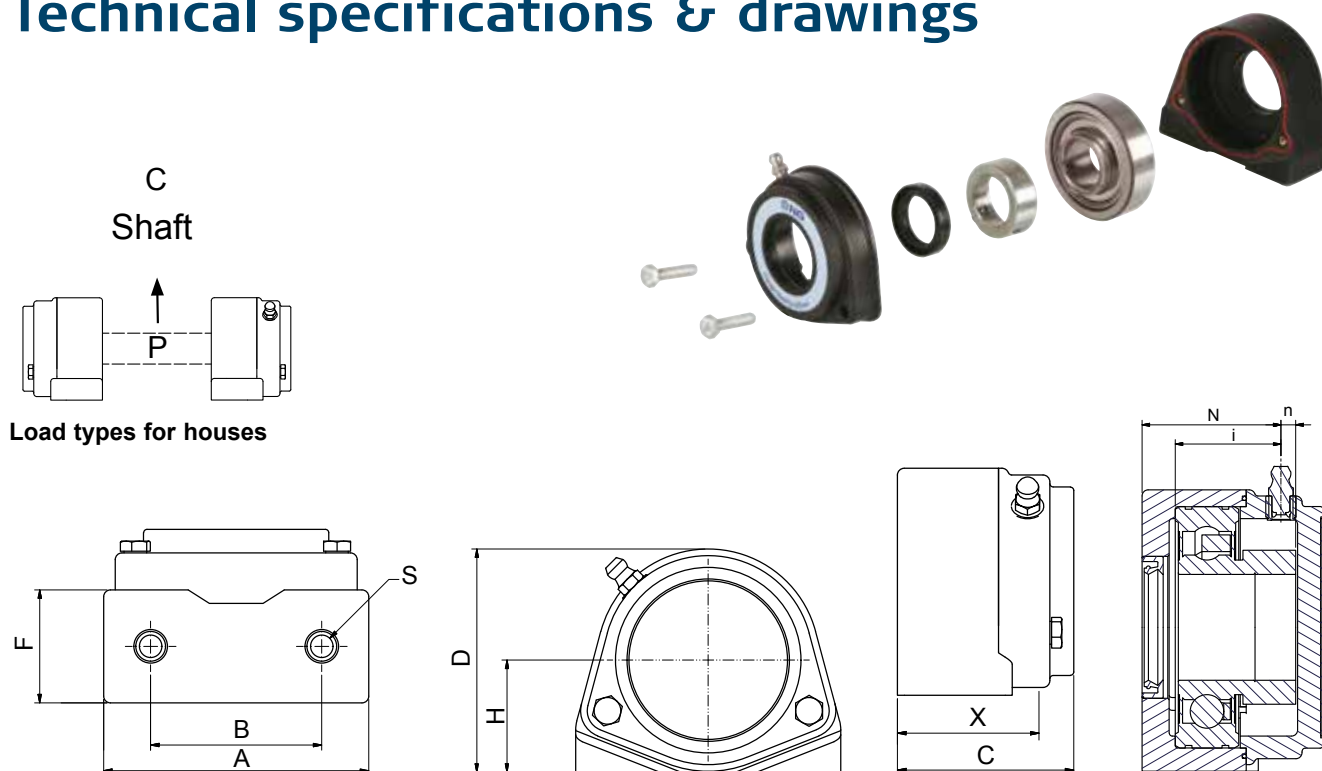
Type SF2	Item no. closed cover	Item no. open cover	A	B	C	D	E	F	H	S	S2	X	i	n	N	Weight [kg]	Max load [kN] (Houses)
																	Type C
Ø20 mm	NG20SF20	NG20SF21	127	95	52	67	14	33.5	33.3	9	13.5	43	27	4.5	38	0.42	12.49
Ø25 mm	NG25SF20	NG25SF21	140	105	53	73	15	34.5	36.5	9	13.5	44	28	4.0	39	0.51	11.38
Ø30 mm	NG30SF20	NG30SF21	160	121	59	85	17	38.5	42.9	11	16.5	48	34	3.2	45	0.77	17.21
Ø35 mm	NG35SF20	NG35SF21	167	127	60	93	18	38.5	47.6	13	19.5	52	35	4.9	46	0.93	14.67
Ø40 mm	NG40SF20	NG40SF21	184	137	66	100	18	42.5	49.2	13	19.5	54	40	52	51	1.30	19.42

All measurements are in millimeters. When ordering please use the catalogue numbers.

S2 2-bolt pillow block bearing units with thread



Technical specifications & drawings



Type S2	Item no. closed cover	Item no. open cover	A	B	C	D	F	H	S	X	i	n	N	Weight [kg]	Max load [kN] (Houses) Type C
Ø20 mm	NG20S20	NG20S21	79	50.8	52	67	33.5	33.3	M8	38	27	4.5	31	0.40	21.71
Ø25 mm	NG25S20	NG25S21	87	50.8	53	73	34.5	36.5	M8	39	28	4.0	31.5	0.50	17.41
Ø30 mm	NG30S20	NG30S21	100	76.2	59	85	38.5	42.9	M10	45	34	3.2	36.7	0.80	23.97
Ø35 mm	NG35S20	NG35S21	110	82.6	60	93	38.5	47.6	M12	52	35	4.9	46	0.94	22.08
Ø40 mm	NG40S20	NG40S21	122	88.9	66	100	42.5	49.2	M12	58	40	5.2	51	1.30	26.96

All measurements are in millimeters.

When ordering please use the catalogue numbers.

Mounting instructions



After removing the cover and the eccentric collar, push the bearing carefully onto the shaft without using any tools.



Slide the eccentric ring on the shaft and turn it until it is inside the recess of the bearing. Then tighten the eccentric ring to the shaft by turning it clockwise. Be sure to use correct tools.



The eccentric ring is locked by tapping carefully with a punch in the hole of the eccentric ring. The grub screw is only to be tightened slightly. Be sure to use correct tools. When ensured, that the O-ring is seated correctly in the O-ring channel, the cover can be mounted.



On top of the housing is a stainless steel grease nipple installed for food grade grease filling. After installation of the housing, fill it with grease to lubricate the double lip seal and to prevent condensation and water intrusion. To be sure the housing is completely filled with grease, rotate the shaft while filling, and continue until the grease penetrates the oil seal ring.

BJ-Gear A/S

Niels Bohrs Vej 47
DK-8660 Skanderborg
Denmark
VAT No. DK10166470

Phone: +45 87 40 80 80
Fax: +45 87 40 80 81
Email: bj@bj-gear.com
Website: www.bj-gear.com

bj·gear

dedicated gear drive solutions