QCB Bearings

THERMOPLASTIC BEARING UNITS

QCB® Thermoplastic Bearing Units

CAT TP 2017 E Ver1

NBC Group Ltd

NBC GROUP LTD

In the interest of continuing improvement, NBC Group Ltd reserves the right to modify any product or specification without prior notice. All weights and measures are approximate and for guidance only.

QCB® THERMOPLASTIC HOUSINGS

QCB® bearing housings are made of PBT high-grade glass-filled thermoplastic polyester and are completely interchangeable with conventional cast-iron housings, resulting in a maintenance free housing with excellent mechanical strength, stiffness and dimensional stability that will never rust or corrode.

Developed for use where high standards of cleanliness are important or a significant amount of liquid is present such as in the food and beverage industries. The smooth housing surfaces are much more hygienic that equivalent cast-iron units whose rough surfaces can harbour objectionable dirt, mould and bacteria.

NO PLATING OR COATING TO CHIP OR PEEL

Coated or plated cast-iron housings can scratch, chip and peel. The very act of installation can damage the finish to be removed around the edges of the bolts. Because QBC® Thermoplastic housings are solid PBT, coatings are not required for protection. And even if they are scratched or chipped there is no vulnerable cast-iron to be exposed.

QCB® THERMOPLASTIC HOUSINGS ARE DURABLE

With a tensile strength of 17 300 psi, and the ability to be pressure washed with hot water, QCB® Thermoplastic housings will stand up to the toughest applications.

ALL OTHER PARTS STAINLESS STEEL

To maximise corrosion resistance, not only is the bearing completely stainless, but so are the bolt inserts and grease nipples (suffix –N). Inserts are filled with a high-quality (FDA Approved) food-grade grease (suffix -6)

USED IN MANY INDUSTRIES

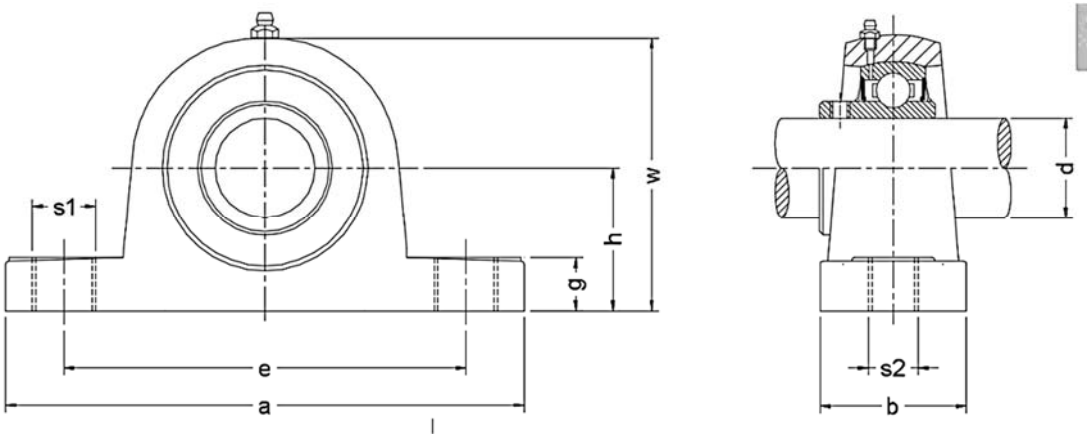
Because of their corrosion resistant and non-magnetic properties, QCB® Thermoplastic housings find application in a wide variety of industries including food processing; canning; bottling; pharmaceutical; chemical processing and other general industrial applications.

A COMPLETE RANGE

QCB® Thermoplastic bearings are available in a wide range of styles and sizes, with inch, metric or even **plastic inserts**. Snap-on **closed-end covers** are supplied as standard with **through shaft** style and **back seals** available as an optional extra (where applicable).

PPL 200 Series

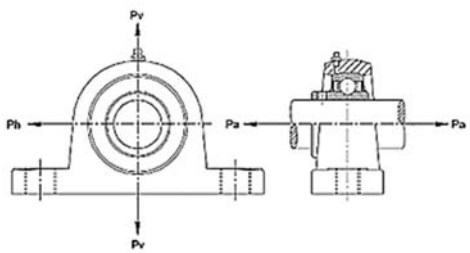
Thermoplastic PBT pillow block housing
supplied standard with SUC insert and closed cover



NBC ref	Bearing bore		Dimensions								Weight	Bolt size	Tightening torque
	mm	inch	h mm	a mm	e mm	b mm	s1 mm	s2 mm	g mm	w mm	kg		Nm
PPL 201 SS N6	12	1/2	33.3	127	95	38	14	11	14.2	65.5	0.12	M10	18
PPL 202 SS N6	15	9/16; 5/8											
PPL 203 SS N6	17	11/16											
PPL 204 SS N6	20	3/4											
PPL 205 SS N6	25	13/16; 7/8; 15/16; 1	36.5	140.5	105	38	14	11	14.5	71	0.14	M10	25
PPL 206 SS N6	30	1.1/16; 1.1/8; 1.3/16; 1.1/4	42.9	163	119	46	18	14	17.8	84	0.20	M12	30
PPL 207 SS N6	35	1.1/4; 1.5/16; 1.3/8; 1.7/16	47.6	168	127	48	18	14	18	94.5	0.25	M12	35
PPL 208 SS N6	40	1.1/2; 1.9/16	49.2	184	137	54	18	14	19.5	99	0.36	M12	45
PPL 209 SS N6	45	1.5/8; 1.11/16; 1.3/4	54	192	146	54	20	17	23	106	0.45	M16	50
PPL 210 SS N6	50	1.13/16; 1.7/8; 1.15/16; 2	57.2	206	159	60	20	17	23	114	0.55	M16	55

Ordering information: PPL 204-12 SS N6 supplied standard with closed cover

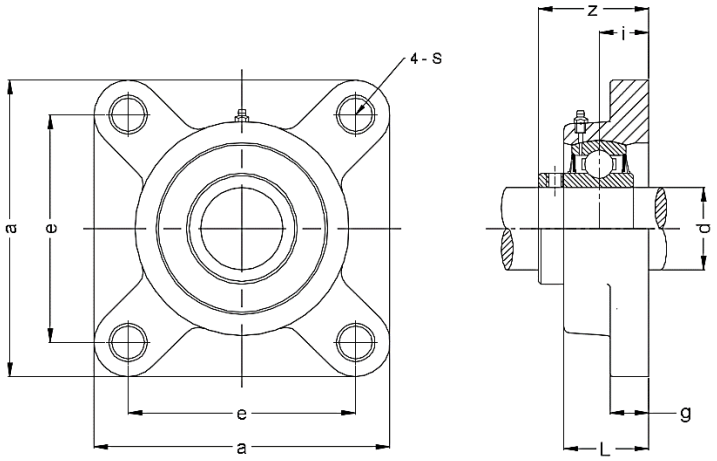
- Optional SSB insert and back seal for additional protection (*Suffix –A*)
- Optional open cover (*Order insert size -OPN*)



Load mode	Breaking load of housings (KN)						
	204	205	206	207	208	209	210
P_h	8.8	13.7	12.65	12.75	13.1	13.36	13.85
P_v	7.7	10	10.6	10.8	11.1	11.4	11.75
P_a	5	8.1	5.75	7.5	8.5	8.95	9.55

FPL 200 Series

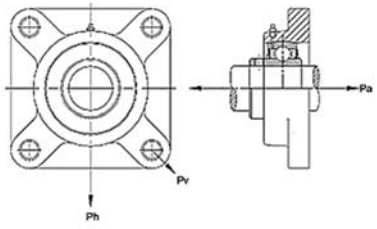
Thermoplastic PBT 4 Bolt flange housing
supplied standard with SUC insert and closed cover



NBC ref	Bearing bore		Dimensions							Weight	Bolt size	Tightening torque
			a	e	g	l	s	z	i			
	mm	inch	mm	mm	mm	mm	mm	mm	mm	kg		Nm
FPL 201 SS N6	12	1/2	86	63.5	13.4	27.8	11	36.3	18	0.12	M10	18
FPL 202 SS N6	15	9/16; 5/8	86	63.5	13.4	27.8	11	36.3	18	0.12	M10	18
FPL 203 SS N6	17	11/16	86	63.5	13.4	27.8	11	36.3	18	0.12	M10	18
FPL 204 SS N6	20	3/4	86	63.5	13.4	27.8	11	36.3	18	0.12	M10	18
FPL 205 SS N6	25	13/16; 7/8; 15/16; 1	95	70	14	28	11	36.7	17	0.15	M10	25
FPL 206 SS N6	30	1.1/16; 1.1/8; 1.3/16; 1.1/4	107	83	14.3	31.5	11	41.4	19.2	0.18	M10	30
FPL 207 SS N6	35	1.1/4; 1.5/16; 1.3/8; 1.7/16	118	92	15.5	34.8	13	46.9	21.5	0.26	M12	35
FPL 208 SS N6	40	1.1/2; 1.9/16	130	102	17	37.5	14	53.2	23	0.33	M12	40
FPL 209 SS N6	45	1.5/8; 1.11/16; 1.3/4	137	105	19	41	17	54.2	24	0.42	M16	45
FPL 210 SS N6	50	1.13/16; 1.7/8; 1.15/16; 2	143	111	21	43	17	57.6	25	0.51	M16	50

Ordering information: FPL 204-12 SS N6 supplied standard with closed cover

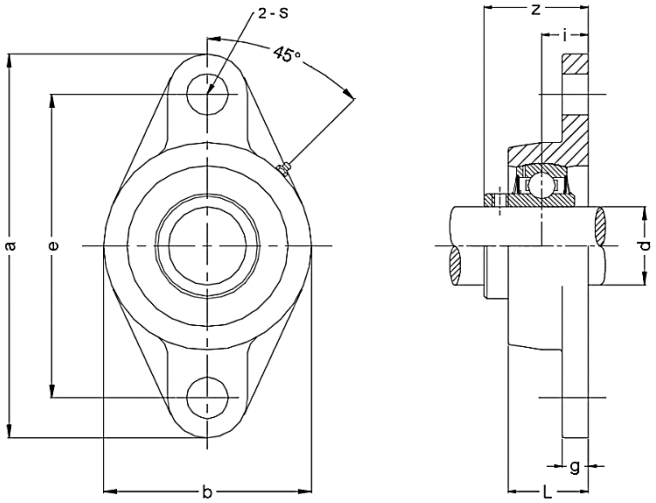
- Optional SSB insert and back seal for additional protection (*Suffix –A*)
- Optional open cover (*Order insert size -OPN*)



Load mode	Breaking load of housings (KN)						
	204	205	206	207	208	209	210
P_h	15.95	13	18	18.5	19.1	19.35	19.65
P_v	10.25	12.15	17.7	18.5	19.25	19.35	19.62
P_a	3.65	3.35	3.35	3.52	3.79	3.85	3.99

NFL 200 Series

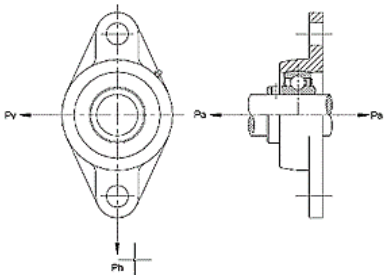
Thermoplastic 2 Bolt flange housing
supplied standard with SUC insert and closed cover



NBC ref	Bearing bore		Dimensions								Weight	Bolt size	Tightening torque
			a	e	b	g	l	s	z	i			
	mm	inch	mm	mm	mm	mm	mm	mm	mm	mm	kg		Nm
NFL-201	12	1/2	113	90	65	11.4	26.5	11	33.7	15.4	0.08	M10	18
NFL-202	15	9/16; 5/8	113	90	65	11.4	26.5	11	33.7	15.4	0.08	M10	18
NFL-203	17	11/16	113	90	65	11.4	26.5	11	33.7	15.4	0.08	M10	18
NFL-204	20	3/4	113	90	65	11.4	26.5	11	33.7	15.4	0.08	M10	18
NFL-205	25	13/16; 7/8; 15/16; 1	131	99	69.5	13.5	29.1	11	36.7	17	0.1	M10	25
NFL-206	30	1.1/16; 1.1/8; 1.3/16; 1.1/4	148	117	80	13.3	30.5	11	41.2	19	0.13	M10	30
NFL-207	35	1.1/4; 1.5/16; 1.3/8; 1.7/16	164	130	90	16.1	32.8	13	43.4	18	0.16	M12	35
NFL-208	40	1.1/2; 1.9/16	176	144	100	20	37.5	14	51.7	21.5	0.24	M12	40
NFL-209	45	1.5/8; 1.11/16; 1.3/4	188.5	148.5	108	21	41	17	54.2	24	0.32	M16	45
NFL-210	50	1.13/16; 1.7/8; 1.15/16; 2	197	157	115	21	43	17	57.6	25	0.42	M16	50

Ordering information: NFL 204-12 SS N6 supplied standard with closed cover

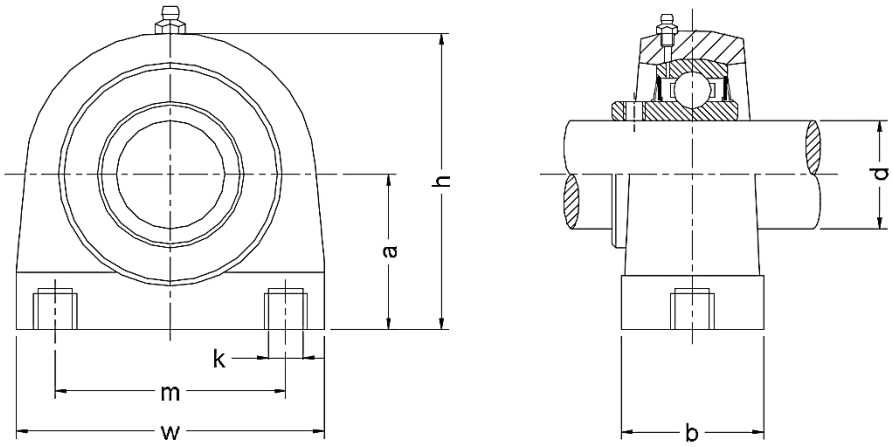
- Optional SSB insert and back seal for additional protection (*Suffix –A*)
- Optional open cover (*Order insert size -OPN*)



Load mode	Breaking load of housings (KN)						
	204	205	206	207	208	209	210
P_h	11.75	11.37	16.45	16.9	17.35	17.6	17.95
P_v	11	13.85	13.35	13.95	14.05	14.3	14.55
P_a	8.5	11.1	14.2	14.9	15.15	15.35	15.65

UCPL 200 Series

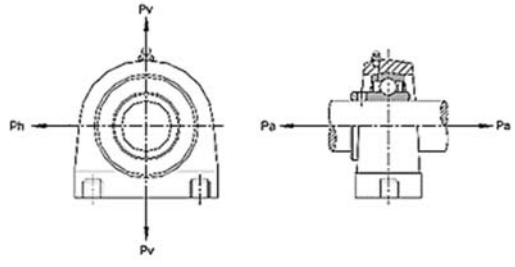
Thermoplastic short base pillow block housing
supplied standard with SUC insert and closed cover



NBC ref	Bearing bore		Dimensions					Weight	Bolt size	Tightening torque
			a	b	h	m	w			
	mm	inch	mm	mm	mm	mm	mm	kg		Nm
UCPL 201 SS N6	12	1/2	33.3	34.5	66	50.8	72.8	0.13	M8	18
UCPL 202 SS N6	15	9/16; 5/8	33.3	34.5	66	50.8	72.8	0.13	M8	18
UCPL 203 SS N6	17	11/16	33.3	34.5	66	50.8	72.8	0.13	M10	18
UCPL 204 SS N6	20	3/4	33.3	34.5	66	50.8	72.8	0.13	M10	18
UCPL 205 SS N6	25	13/16; 7/8; 15/16; 1	36.5	39.5	73.5	50.8	76.2	0.15	M10	25
UCPL 206 SS N6	30	1.1/16; 1.1/8; 1.3/16; 1.1/4	42.9	42.5	84	76.2	101	0.24	M10	30
UCPL 207 SS N6	35	1.1/4; 1.5/16; 1.3/8; 1.7/16	47.6	47.5	95	82.6	110	0.28	M12	35
UCPL 208 SS N6	40	1.1/2; 1.9/16	49.2	48	100.5	88.9	120	0.39	M12	45
UCPL 209 SS N6	45	1.5/8; 1.11/16; 1.3/4	54	50	108.5	95.3	124	0.47	M16	50
UCPL 210 SS N6	50	1.13/16; 1.7/8; 1.15/16; 2	57.2	54	115	101.6	135	0.56	M16	55

Ordering information: UCPL 204-12 SS N6 supplied standard with closed cover

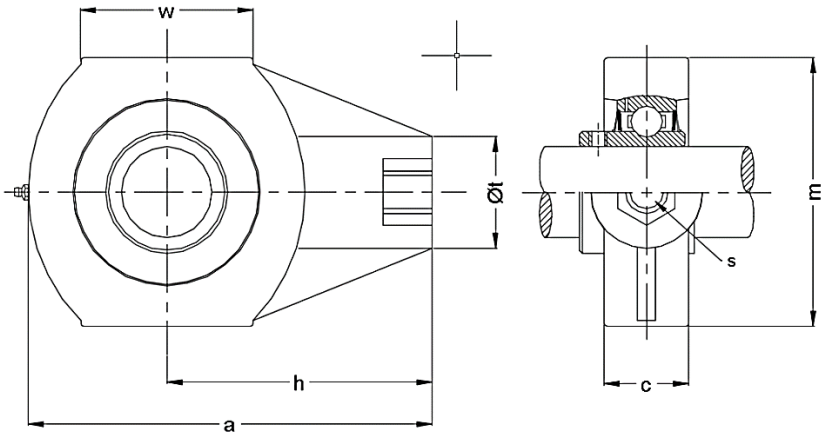
- Optional SSB insert and back seal for additional protection (*Suffix –A*)
- Optional open cover (*Order insert size -OPN*)



Load mode	Breaking load of housings (N)						
	204	205	206	207	208	209	210
P_h	8.21	8.54	10.37	12.15	12.2	12.9	13.85
P_v	6.9	7	6.58	8.08	9.1	1.4	11.05
P_a	2.98	2.85	4.95	8.16	9.8	10.7	11.36

HPL 200 Series

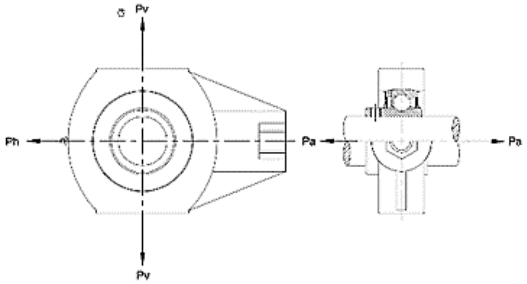
Thermoplastic hanger unit with AISI 440 Stainless steel SUC insert



NBC ref	Bearing bore		Dimensions							Weight
			a	c	h	m	s	t	w	
	mm	inch	mm	mm	mm	mm	mm	mm	mm	kg
HPL 201 SS N6	12	1/2	99	27.5	63.5	65	M16	36	47	0.15
HPL 202 SS N6	15	9/16; 5/8	99	27.5	63.5	65	M16	36	47	0.15
HPL 203 SS N6	17	11/16	99	27.5	63.5	65	M16	36	47	0.15
HPL 204 SS N6	20	3/4	99	27.5	63.5	65	M16	36	47	0.15
HPL 205 SS N6	25	13/16; 7/8; 15/16; 1	99	27.5	63.5	74	M16	36	47	0.16
HPL 206 SS N6	30	1.1/16; 1.1/8; 1.3/16; 1.1/4	125	34.5	76	90	M16	40	63	0.21
HPL 207 SS N6	35	1.1/4; 1.5/16; 1.3/8; 1.7/16	125	34.5	76	90	M16	40	63	0.25
HPL 208 SS N6	40	1.1/2; 1.9/16	140	34.5	85	100	M16	40	80	0.36
HPL 209 SS N6	45	1.5/8; 1.11/16; 1.3/4	149	40	90	110	M20	50	85	0.45
HPL 210 SS N6	50	1.13/16; 1.7/8; 1.15/16; 2	149	40	90	110	M20	50	85	0.49

Ordering information: HPL 204-12 SS N6 supplied standard with closed cover

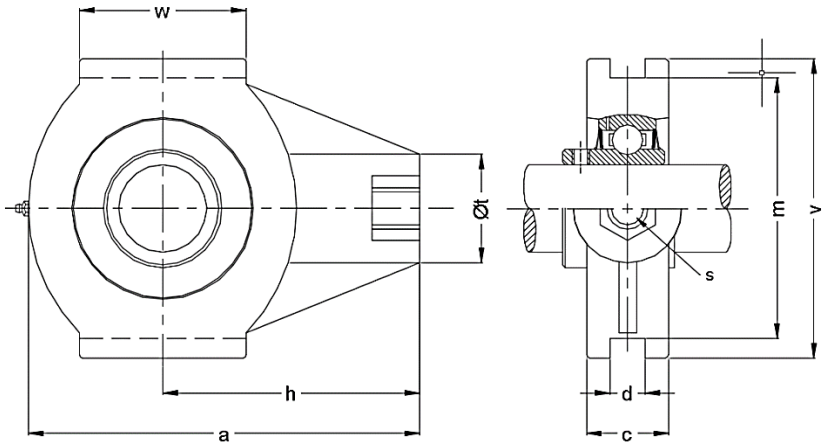
- Optional SSB insert and back seal for additional protection (*Suffix –A*)
- Optional open cover (*Order insert size -OPN*)



Load mode	Breaking load of housings (KN)						
	204	205	206	207	208	209	210
P_h	14.8	15.5	15.8	16.5	17.3	18.2	18.8
P_v	3.9	4.5	5.1	6.5	7.5	8.7	9.7
P_a	8.5	10.3	10.9	11.3	12.1	12.9	13.5

TPL 200 Series

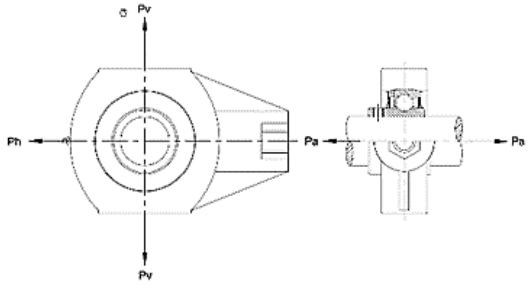
Thermoplastic take up unit with AISI 440 Stainless steel SUC insert



NBC ref	Bearing bore		Dimensions									Weight
			a	c	d	h	m	s	t	v	w	
	mm	inch	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg
TPL 201 SS N6	12	1/2	99	27.5	12	64	76	M16	36	88	47	0.16
TPL 202 SS N6	15	9/16; 5/8	99	27.5	12	64	76	M16	36	88	47	0.16
TPL 203 SS N6	17	11/16	99	27.5	12	64	76	M16	36	88	47	0.16
TPL 204 SS N6	20	3/4	99	27.5	12	64	76	M16	36	88	47	0.16
TPL 205 SS N6	25	13/16; 7/8; 15/16; 1	99	27.5	12	64	76	M16	36	88	47	0.17
TPL 206 SS N6	30	1.1/16; 1.1/8; 1.3/16; 1.1/4	125	34.5	12	76	89	M16	40	102	63	0.22
TPL 207 SS N6	35	1.1/4; 1.5/16; 1.3/8; 1.7/16	125	34.5	12	76	89	M16	40	102	63	0.26
TPL 208 SS N6	40	1.1/2; 1.9/16	140	34.5	16	85	102	M16	40	114	80	0.38
TPL 209 SS N6	45	1.5/8; 1.11/16; 1.3/4	149	40	16	90	102	M20	50	117	85	0.48
TPL 210 SS N6	50	1.13/16; 1.7/8; 1.15/16; 2	149	40	16	90	102	M20	50	117	85	0.52

Ordering information: TPL 204-12 SS N6 supplied standard with closed cover

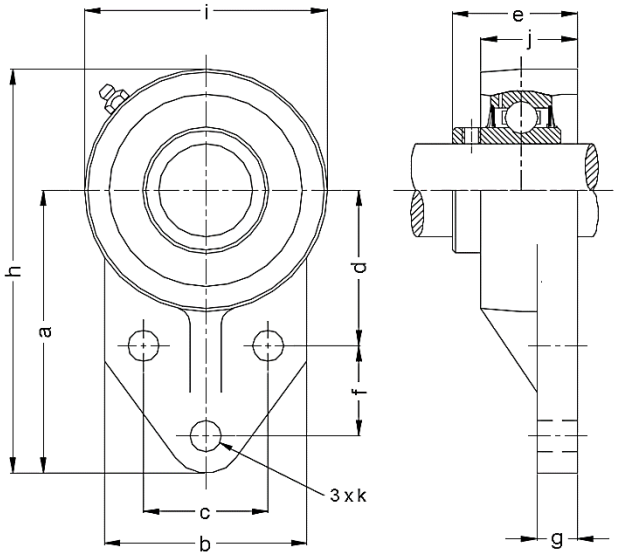
- Optional SSB insert and back seal for additional protection (*Suffix –A*)
- Optional open cover (*Order insert size -OPN*)



Load mode	Breaking load of housings (KN)						
	204	205	206	207	208	209	210
P_h	14.8	15.5	15.8	16.5	17.3	18.2	18.8
P_v	3.9	4.5	5.1	6.5	7.5	8.7	9.7
P_a	8.5	10.3	10.9	11.3	12.1	12.9	13.5

FBL 200 Series

Thermoplastic flange bracket housing with AISI 440 Stainless steel SUC insert



NBC ref	Bearing bore		Dimensions											Weight	Max Torque	
			a	b	c	d	e	f	g	h	i	j	k			
	mm	inch	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg	Bolt ϕ	Nm
FBL 201 SS N6	12	1/2	76.2	62	38.1	42.9	33.7	22.2	11.4	108	63.5	26.5	10.7	0.1	M10	18
FBL 202 SS N6	15	9/16; 5/8	76.2	62	38.1	42.9	33.7	22.2	11.4	108	63.5	26.5	10.7	0.1	M10	18
FBL 203 SS N6	17	11/16	76.2	62	38.1	42.9	33.7	22.2	11.4	108	63.5	26.5	10.7	0.1	M10	18
FBL 204 SS N6	20	3/4	76.2	62	38.1	42.9	33.7	22.2	11.4	108	63.5	26.5	10.7	0.1	M10	18
FBL 205 SS N6	25	13/16; 7/8; 15/16; 1	85.7	63.5	41.3	46	41.2	28.6	11.4	120.6	70	32	10.7	0.12	M10	25
FBL 206 SS N6	30	.1/16; 1.1/8; 1.3/16; 1.1/4	96.5	76	47.6	52.4	41.5	31.8	13.3	138.5	83	34	10.7	0.16	M10	30
FBL 207 SS N6	35	.1/4; 1.5/16; 1.3/8; 1.7/1	109.5	89	50.8	60.3	47.1	31.8	16.1	157	95	36.5	13.1	0.18	M12	35

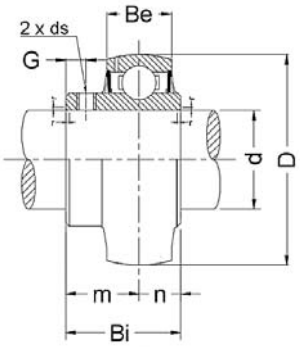
Ordering information: FBL 204-12 SS N6 supplied standard with closed cover

- Optional SSB insert and back seal for additional protection (*Suffix –A*)
- Optional open cover (*Order insert size -OPN*)

Load mode	Breaking load of housings (KN)			
	204	205	206	207
P_m	7.2	9.1	12.2	12.9
P_h	9.2	11.1	11.8	11.9
P_v	2.6	2.8	2.9	3.1

SUC insert dimensions

Food grade grease standard

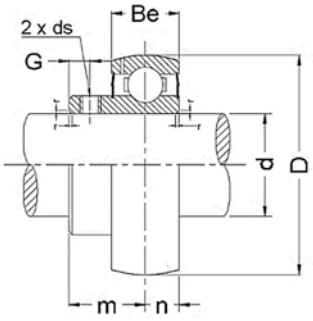


NBC ref	Bearing bore		Dimensions								Dynamic	Static	Weight
			D	Bi	Be	r	n	m	G	ds	C	Co	
	mm	inch	mm	mm	mm	mm	mm	mm	mm	mm	KN	KN	kg
SUC201-08		1/2	47	31	17	1.5	12.7	18.3	5		10	6.3	0.21
SUC201	**12**		47	31	17	1.5	12.7	18.3	5		**10**	**6.3**	**0.21**
SUC202-09		9/16	47	31	17	1.5	12.7	18.3	5		10	6.3	0.2
SUC202	**15**		47	31	17	1.5	12.7	18.3	5		**10**	**6.3**	**0.2**
SUC202-10		5/8	47	31	17	1.5	12.7	18.3	5		10	6.3	0.2
SUC203	**17**		47	31	17	1.5	12.7	18.3	5		**10**	**6.3**	**0.18**
SUC203-11		11/16	47	31	17	1.5	12.7	18.3	5		10	6.3	0.18
SUC204-12		3/4	47	31	17	1.5	12.7	18.3	5		10	6.3	0.17
SUC204	**20**		47	31	17	1.5	12.7	18.3	5		**10**	**6.3**	**0.17**
SUC205-13		13/16	52	34.1	17	1.5	14.3	19.8	5	M6x0.75	11	7.1	0.23
SUC205-14		7/8	52	34.1	17	1.5	14.3	19.8	5		11	7.1	0.23
SUC205-15		15/16	52	34.1	17	1.5	14.3	19.8	5		11	7.1	0.23
SUC205	**25**		**52**	**34.1**	**17**	**1.5**	**14.3**	**19.8**	**5**		**11**	**7.1**	**0.23**
SUC205-16		1	52	34.1	17	1.5	14.3	19.8	5		11	7.1	0.23
SUC206-17		1.1/16	62	38.1	19	1.5	15.9	22.2	5		15.2	10.2	0.34
SUC206-18		1.1/8	62	38.1	19	1.5	15.9	22.2	5		15.2	10.2	0.34
SUC206-19		1.3/16	62	38.1	19	1.5	15.9	22.2	5		15.2	10.2	0.34
SUC206	**30**		**62**	**38.1**	**19**	**1.5**	**15.9**	**22.2**	**5**		**15.2**	**10.2**	**0.34**
SUC206-20		1.1/4	62	38.1	19	1.5	15.9	22.2	5		15.2	10.2	0.34
SUC207-20		1.1/4	72	42.9	20	1.5	17.5	25.4	7		20.1	13.9	0.5
SUC207-21		1.5/16	72	42.9	20	1.5	17.5	25.4	7		20.1	13.9	0.5
SUC207-22		1.3/8	72	42.9	20	1.5	17.5	25.4	7		20.1	13.9	0.5
SUC207	**35**		**72**	**42.9**	**20**	**1.5**	**17.5**	**25.4**	**7**		**20.1**	**13.9**	**0.5**
SUC207-23		1.7/16	72	42.9	20	1.5	17.5	25.4	7		20.1	13.9	0.5
SUC208-24		1.1/2	80	49.2	22	2	19	30.2	8		23	16	0.66
SUC208-25		1.9/16	80	49.2	22	2	19	30.2	8	M8x1	23	16	0.66
SUC208	**40**		**80**	**49.2**	**22**	**2**	**19**	**30.2**	**8**		**23**	**16**	**0.66**
SUC209-26		1.5/8	85	49.2	22	2	19	30.2	8		25.6	18.1	0.78
SUC209-27		1.11/16	85	49.2	22	2	19	30.2	8		25.6	18.1	0.78
SUC209-28		1.3/4	85	49.2	22	2	19	30.2	8		25.6	18.1	0.78
SUC209	**45**		**85**	**49.2**	**22**	**2**	**19**	**30.2**	**8**		**25.6**	**18.1**	**0.78**
SUC210-29		1.13/16	90	51.6	24	2	19	32.6	10		27.5	20.2	0.91
SUC210-30		1.7/8	90	51.6	24	2	19	32.6	10		27.5	20.2	0.91
SUC210-31		1.15/16	90	51.6	24	2	19	32.6	10	M10x1.25	27.5	20.2	0.91
SUC210	**50**		**90**	**51.6**	**24**	**2**	**19**	**32.6**	**10**		**27.5**	**20.2**	**0.91**
SUC210-32		2	90	51.6	24	2	19	32.6	10		27.5	20.2	0.91

SSB Flatback insert dimensions

Food grade grease standard

Used in conjunction with back seals



NBC ref	Bearing bore		Dimensions								Dynamic	Static	Weight
			D	Bi	Be	r	n	m	G	ds	C	Co	
	mm	inch	mm	mm	mm	mm	mm	mm	mm	mm	KN	KN	kg
SSB201-08		1/2	47	22	12	1	6	16	4		7.5	4.54	0.1
SSB201	**12**		**47**	**22**	**12**	**1**	**6**	**16**	**4**		**7.5**	**4.54**	**0.09**
SSB202-09		9/16	47	22	12	1	6	16	4		7.5	4.54	0.08
SSB202	**15**		**47**	**22**	**12**	**1**	**6**	**16**	**4**		**7.5**	**4.54**	**0.08**
SSB202-10		5/8	47	22	12	1	6	16	4		7.5	4.54	0.08
SSB203	**17**		**47**	**22**	**12**	**1**	**6**	**16**	**4**		**7.5**	**4.54**	**0.08**
SSB203-11		11/16	47	22	12	1	6	16	4		7.5	4.54	0.08
SSB204-12		3/4	47	25	14	1.5	7	18	5		10	6.3	0.13
SSB204	**20**	**3/4**	**47**	**25**	**14**	**1.5**	**7**	**18**	**5**	M6x0.75	**10**	**6.3**	**0.13**
SSB205-14		7/8	52	27	15	1.5	7.5	19.5	5		11	7.1	0.18
SSB205-15		15/16	52	27	15	1.5	7.5	19.5	5		11	7.1	0.17
SSB205	**25**		**52**	**27**	**15**	**1.5**	**7.5**	**19.5**	**5**		**11**	**7.1**	**0.16**
SSB205-16		1	52	27	15	1.5	7.5	19.5	5		11	7.1	0.16
SSB206-18		1.1/8	62	30	16	1.5	8	22	6		15.2	10.2	0.26
SSB206-19		1.3/16	62	30	16	1.5	8	22	6		15.2	10.2	0.26
SSB206	**30**		**62**	**30**	**16**	**1.5**	**8**	**22**	**6**		**15.2**	**10.2**	**0.26**
SSB206-20		1.1/4	62	30	16	1.5	8	22	6		15.2	10.2	0.26
SSB207-20		1.1/4	72	32	17	2	8.5	23.5	7		20.1	13.9	0.4
SSB207-21		1.5/16	72	32	17	2	8.5	23.5	7		20.1	13.9	0.4
SSB207-22		1.3/8	72	32	17	2	8.5	23.5	7		20.1	13.9	0.4
SSB207	**35**		**72**	**32**	**17**	**2**	**8.5**	**23.5**	**7**		**20.1**	**13.9**	**0.4**
SSB207-23		1.7/16	72	32	17	2	8.5	23.5	7		20.1	13.9	0.4
SSB208-24		1.1/2	80	34	18	2	9	25	8		23	16	0.6
SSB208-25		1.9/16	80	34	18	2	9	25	8	M8x1	23	16	0.6
SSB208	**40**		**80**	**34**	**18**	**2**	**9**	**25**	**8**		**23**	**16**	**0.6**
SSB209-26		1.5/8	85	41.2	19	2	10.2	31	9		25.6	18.1	0.8
SSB209-27		1.11/16	85	41.2	19	2	10.2	31	9		25.6	18.1	0.8
SSB209-28		1.3/4	85	41.2	19	2	10.2	31	9		25.6	18.1	0.8
SSB209	**45**		**85**	**41.2**	**19**	**2**	**10.2**	**31**	**9**		**25.6**	**18.1**	**0.8**
SSB210-30		1.7/8	90	43.5	20	2	10.9	32.6	9		27.5	20.2	0.95
SSB210-31		1.15/16	90	43.5	20	2	10.9	32.6	9		27.5	20.2	0.95
SSB210	**50**		90	43.5	20	2	10.9	32.6	9	M10x1.25	27.5	20.2	0.95
SSB210-32		2	90	43.5	20	2	10.9	32.6	9		27.5	20.2	0.95

End covers & back seals

End covers in closed and open style are made in FDA approved SR50 plastic. Standard nitrile rubber seals with stainless steel springs allow through shaft access.

The covers are fitted by snapping them into the matching housing groves. To remove a sharp object (such as a screwdriver) may be required. Frequent removal may result in damage.

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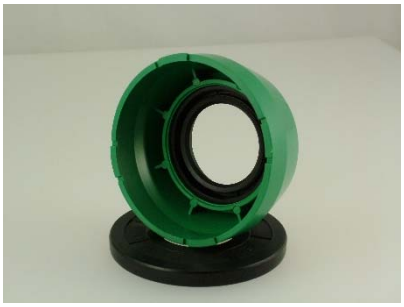

Bearing bore		Dimensions					
		K	N	L	M	D	b
mm	inch	mm	mm	mm	mm	mm	mm
12	1/2	32	7	23	50	52	6
15	9/16; 5/8	32	7	23	50	52	6
17	11/16	32	7	23	50	52	6
20	3/4	32	7	23	50	52	6
25	13/16; 7/8; 15/16; 1	37	7	25	55	62	6
30	1.1/16; 1.1/8; 1.3/16; 1.1/4	42	7	30	64	72	6
35	1.1/4; 1.5/16; 1.3/8; 1.7/16	47	7	32	74.5	82	6
40	1.1/2; 1.9/16	52	7	37	84	88	6
45	1.5/8; 1.11/16; 1.3/4	57	7	41	89	93	6
50	1.13/16; 1.7/8; 1.15/16; 2	62	7	47	94	98	6

Back seals need only to be pressed firmly into the machines groove in the housing.

Brg	Seal dimensions		
	d	b	D
	mm	mm	mm
204	20	6	52
205	25	6	62
206	30	6	72
207	35	6	82
208	40	6	88
209	45	6	93
210	50	6	98

Setscrew tightening torque

The 2 setscrews should be tightened to the appropriate torque figure. Over-tightening may result in cracks developing in the inner ring. Should the axial load be high, a small dimple in the shaft may improve the locking effect. Consider mounting against a shoulder in the shaft.

Size	Torque
	Nm
M6	4
M8	8
M10	15

Insert limiting speeds

The limiting speed of any ball bearing insert is, for practical purposes, determined by the quality of fit between the inner ring and the shaft.

NBC ref	Shaft tolerance			
	j7	h7	h8	h9
SUC201	6700	5300	3800	1400
SUC202				
SUC203				
SUC204	6000	4800	3400	1200
SUC205	5600	4000	3000	1000
SUC206	4500	3400	2400	850
SUC207	4000	3000	2000	750
SUC208	3600	2600	1900	670
SUC209	3200	2400	1700	600
SUC210	3000	2200	1600	560
SUC211	2600	2000	1400	500
SUC212	2400	1800	1200	450
SUC213	2200	1700	1100	430
SUC214	2200	1600	1100	400
SUC215	2000	1500	1000	380

PLASTIC BEARING INSERTS

A full range of plastic bearing inserts is stocked.

These can run at slow speed while completely immersed in liquid, but at restricted load carrying capacity.

BEARING HOUSING MATERIAL PROPERTIES

Properties	Unit	Test method	
Mechanical			
Tensile strength at yield	MPa	ASTM D 638	12
Elongation at yield	%	ASTM D 638	3
Elongation at break	%	ASTM D 638	1125
Tensile modulus	N/mm^2	ASTM D 638	8 000
Flexural yield strength	MPa	ASTM D 790	29
Flexural modulus	MPa	ASTM D 790	29
Notched IZOD impact strength	J/m	ASTM D 256	100
Hardness H358/10	N/mm^2	DIN 53456	104
H358/60	N/mm^2	DIN 53456	101
Rockwell	-	ASTM D 785	L102

Properties	Unit	Test method	
Thermal			
Melting point	°C		225
Oxygen index	%	ASTM D 2863	19
UL flammability	-	UL 94	HB
Heat resistance Vicat Method B	°C	ASTM D 1525	210-215
Thermal conductivity	W/m^2C	ASTM C 177	0.19

Properties	Unit	Test method	
Physical			
Density	gr/cm^3	DIN 53479	1.53
Water absorption 24hrs; 23 °C	%	ASTM D 570	0.5
Mould shrinkage flow	%		0.4

Properties	Unit	Test method	
Electrical			
Dielectric constant at 1 MHz		IEC 250	3.8
Dielectric strength	KV/mm	VDE 0303/2	34
Volume resistivity	Ohm.cm	VDE 0303/2	$>10^{15}$
Surface resistivity	Ohm	VDE 0303/3	$>10^{15}$

BEARING HOUSING CHEMICAL RESISTANCE

Chemical	°C	Test duration (days)	% Retained strength
ACIDS			
10% Hydrochloric acid	23	30	89
	23	90	85
	23	180	82
10% Sulphuric acid	23	30	97
	23	90	94
	23	180	90
36% Sulphuric (battery) acid	23	30	97
	23	180	96
	66	30	84
	66	180	35
10% Acetic acid	23	30	89
	23	180	88
BASES			
5% Potassium hydroxide	23	30	88
	23	90	10
10% Sodium hydroxide	23	30	Brittle
	23	90	Brittle
10% Ammonium hydroxide	23	30	96
	23	90	87
	23	180	58
Organic solvents			
Ethyl alcohol	23	30	99
	23	90	96
	23	180	94
Methyl alcohol	23	30	91
	23	90	82
	23	180	76
Isopropyl alcohol	23	30	100
	23	180	100
Isopropyl alcohol & water (50:50)	23	30	98
	23	90	97
	23	180	93
Turpentine	23	30	92
	23	180	66
Acetone	23	30	90
	23	90	74
	23	180	63

QCB Bearings THERMOPLASTIC BEARING UNITS

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