QCB Bearings

STAINLESS STEEL BEARING UNITS

NBC GROUP LTD

CAT QCB SS 2015-1

QCB® Stainless Bearing Units offer an alternative to QCB® Thermoplastic Bearing Units and are suitable for use in areas subject to frequent washdowns and/or corrosive environments at temperatures up to 120°C

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.

The QCB Stainless steel housing range

SSUCP

Solid base

Available with SCO open & SCC closed end caps

SSUCF

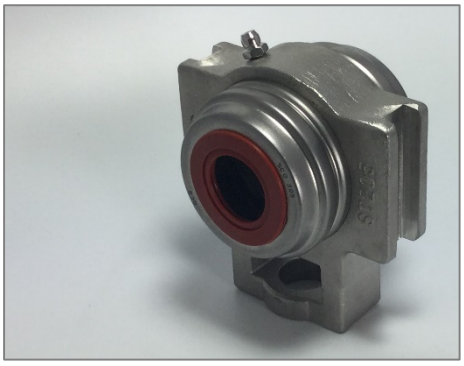
Solid base

Available with SCO open & SCC closed end caps

SSUCFL

Solid base

Available with SCO open & SCC closed end caps

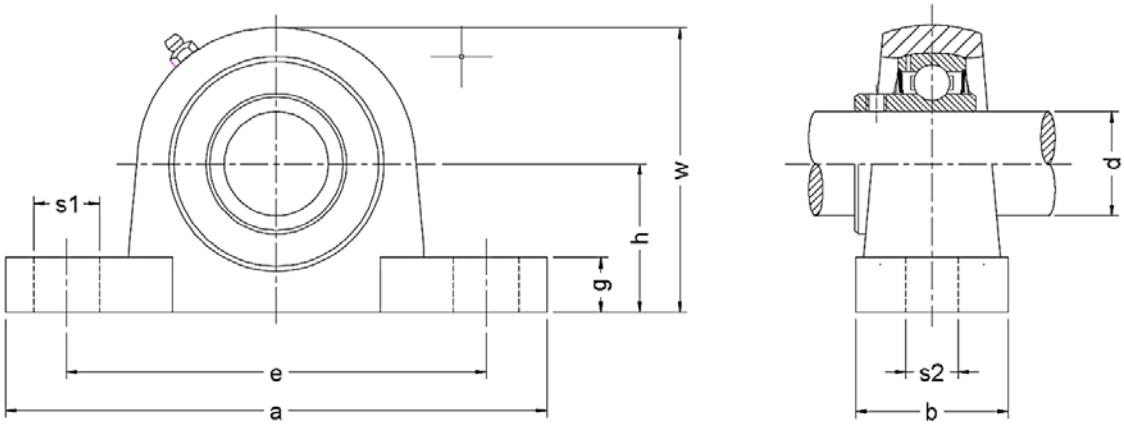


SSUCT

Available with SCO open & SCC closed end caps

Most common metric and imperial inserts held in stock

SSUCP 200 SB Series

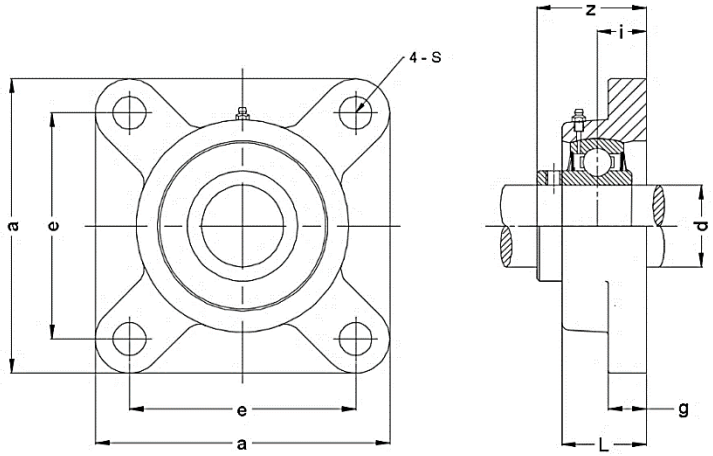


QCB ref	Bearing bore				Dimensions								Bolt size	Weight
					a	h	e	b	g	w	s1	s2		
	mm	inch			mm	mm	mm	mm	mm	mm	mm	mm		kg
SSUCP 201 SB	12			1/2	125.5	33.3	95	37	15	64	19	13	M10	0.65
SSUCP 202 SB	15			5/8										
SSUCP 203 SB	17			11/16										
SSUCP 204 SB	20			3/4										
SSUCP 205 SB	25	7/8	15/16	1	138.5	36.5	105	37.5	16	70.5	19	13	M10	0.79
SSUCP 206 SB	30		1.3/16	1.1/4	164	42.9	121	47	17	83	21	17	M14	1.30
SSUCP 207 SB	35	1.1/4	1.3/8	1.7/16	167	47.6	127	47.5	17.5	93	21	17	M14	1.6
SSUCP 208 SB	40			1.1/2	183	49.2	137	53.5	18	99.5	21	17	M14	2
SSUCP 209 SB	*45*		1.5/8	1.3/4	188	54	146	53.5	20	105.5	21	17	M14	2.3
SSUCP 210 SB	50	1.7/8	1.15/16	2	204	57.2	159	59.5	22	112.5	25	20	M16	2.7
SSUCP 211 SB	*55*		2	2.1/8	217.5	63.5	171	59	23	125	25	20	M16	3.3
SSUCP 212 SB	*60*		2.1/4	2.3/8	239	69.8	184	69	25	136	25	20	M16	4.7
SSUCP 213 SB	*65*			2.1/2	263	76.2	203	69	26.5	149.5	31	25	M20	5.6
SSUCP 214 SB	*70*			2.3/4	263	79.4	210	71	26	154	29	25	M20	7.3
SSUCP 215 SB	*75*			3	272	82.6	217	73	28	161.5	31	25	M20	7.9

Indicates standard stock sizes *Non stock sizes are available to order*

Available with **SCC** Closed and **SCO** Open end caps - Suffix SCC/SCO-Shaft size

SUCF 200 SB Series

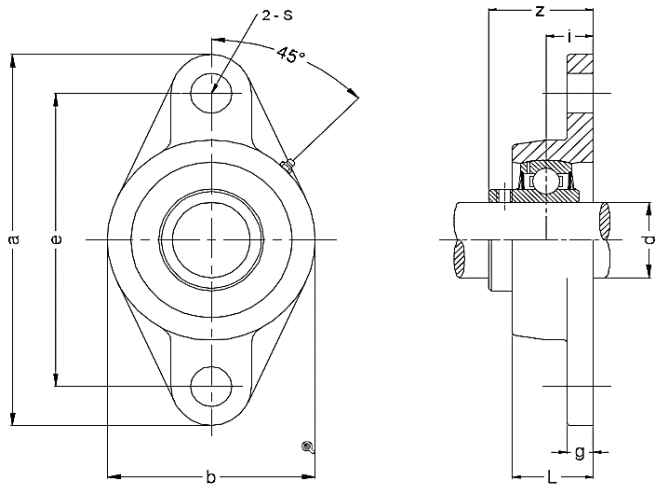


QCB ref	Bearing bore				Dimensions							Bolt size	Weight
					a	e	g	L	i	z	s		
	mm	inch			mm	mm	mm	mm	mm	mm	mm		kg
SSUCF 201 SB	12			1/2	86	64	12	25.5	15	33.3	12	M10	0.58
SSUCF 202 SB	15			5/8									
SSUCF 203 SB	17			11/16									
SSUCF 204 SB	20			3/4									
SSUCF 205 SB	25	7/8	15/16	1	95	70	14	27	16	35.8	12	M10	0.83
SSUCF 206 SB	30		1.3/16	1.1/4	108	83	14	31	18	40.2	12	M10	1.1
SSUCF 207 SB	35	1.1/4	1.3/8	1.7/16	116	92	15.5	34	19	44.4	14	M12	1.6
SSUCF 208 SB	40			1.1/2	129	102	15.5	36	21	51.2	16	M14	1.9
SSUCF 209 SB	*45*		1.5/8	1.3/4	136.5	105	17.5	38	22	52.2	16	M14	2.4
SSUCF 210 SB	50	1.7/8	1.15/16	2	142.5	111	17.5	40	22	54.6	16	M14	2.6
SSUCF 211 SB	*55*		2	2.1/8	161.5	130	19.5	43	25	58.4	19	M16	3.7
SSUCF 212 SB	*60*		2.1/4	2.3/8	175	143	19.5	48	29	68.7	19	M16	4.3
SSUCF 213 SB	*65*			2.1/2	187	149	21.5	49.5	30	69.7	19	M16	5.2
SSUCF 214 SB	*70*			2.3/4	193	152	24	53.5	31	75.4	19	M16	5.8
SSUCF 215 SB	*75*			3	199	159	22.5	55.5	34	78.5	19	M16	6.2

Indicates standard stock sizes *Non stock sizes are available to order*

Available with **SCC** Closed and **SCO** Open end caps - Suffix SCC/SCO-Shaft size

SSUCFL 200 SB Series

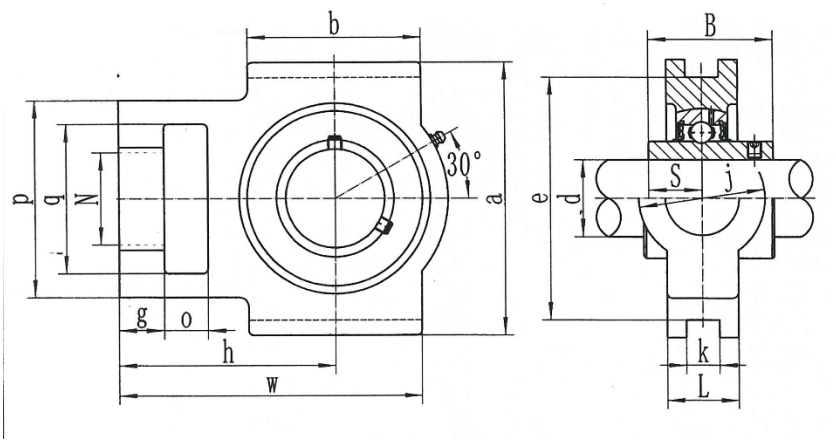


QCB ref	Bearing bore				Dimensions								Bolt size	Weight
					a	e	b	g	L	z	i	S		
	mm	inch			mm	mm	mm	mm	mm	mm	mm	mm		kg
SSUCFL 201 SB	12			1/2	113	90	60.3	12	25.5	33.3	15	12	M10	0.5
SSUCFL 202 SB	15			5/8										
SSUCFL 203 SB	17			11/16										
SSUCFL 204 SB	20			3/4										
SSUCFL 205 SB	25	7/8	15/16	1	125	99	68	13.5	27	35.8	16	16	M14	0.63
SSUCFL 206 SB	30		1.3/16	1.1/4	141	117	79	13.5	31	40.2	18	16	M14	0.85
SSUCFL 207 SB	35	1.1/4	1.3/8	1.7/16	156	130	89	15.5	34	44.4	19	16	M14	1.2
SSUCFL 208 SB	40			1.1/2	172	144	99	15	36	51.2	21	16	M14	1.6
SSUCFL 209 SB	*45*		1.5/8	1.3/4	179	148	107	14.3	38	52.2	22	19	M16	1.9
SSUCFL 210 SB	50	1.7/8	1.15/16	2	189	157	114	15.5	38.5	54.6	22	19	M16	2.3

Indicates standard stock sizes *Non stock sizes are available to order*

Available with **SCC** Closed and **SCO** Open end caps - Suffix SCC/SCO-Shaft size

SSUCT 200 Series

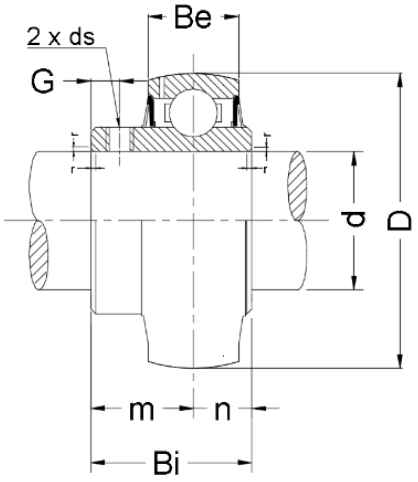


QCB ref	Bearing bore				Dimensions															Weight
					W	h	g	O	b	N	q	p	a	e	j	k	L	B	S	
	mm	inch			mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg
SSUCT 201	12			1/2	94	61	10	16	51	19	32	51	89	76	32	12	21	31	12.7	0.7
SSUCT 202	15			5/8																
SSUCT 203	17			11/16																
SSUCT 204	20			3/4																
SSUCT 205	25	7/8	15/16	1	97	62	10	16	51	19	32	51	89	76	32	12	24	34.1	14.3	0.82
SSUCT 206	30		1.3/16	1.1/4	113	70	11	16	57	22	37	56	101.5	89	36.5	12	27.5	38.1	15.9	1.23
SSUCT 207	35	1.1/4	1.3/8	1.7/16	130	78	14	16	64	22	37	64	102	89	37	12	30	42.9	17.5	1.61
SSUCT 208	40			1.1/2	144	88	17	19	83	29	49	83	114	102	49	16	33	49.2	19	2.34
SSUCT 209	*45*		1.5/8	1.3/4	145.5	87	18	19	83	29	49	83	117	102	49	16	35	49.2	19	2.33
SSUCT 210	50	1.7/8	1.15/16	2	150.5	90	18	19	86	29	49	83	117	102	49.5	16	37	51.6	19	2.48
SSUCT 211	*55*		2	2.1/8	170	106	19	25	95	35	64	101	145	130	64	22	37	55.6	22	3.79
SSUCT 212	*60*		2.1/4	2.3/8	193	119	19.5	32	102	35	64	101.5	144.5	130	63	22	41	65.1	25	4.61

Indicates standard stock sizes *Non stock sizes are available to order*

Available with **SCC** Closed and **SCO** Open end caps - Suffix SCC/SCO-Shaft size

SUC insert dimensions



QCB 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	12			1/2	47	31	17	1.5	12.7	18.3	5	M6x0.75	10.0	6.3	0.21
SUC202	15			5/8											0.2
SUC203	17			11/16											0.18
SUC204	20			3/4											0.17
SUC205	25	7/8	15/16	1	52	34.1	17	1.5	14.3	19.8	5		11.0	7.1	0.23
SUC206	30		1.3/16	1.1/4	62	38.1	19	1.5	15.9	22.2	5		15.2	10.2	0.34
SUC207	35	1.1/4	1.3/8	1.7/16	72	42.9	20	2	17.5	25.4	7	M8x1	20.1	13.9	0.5
SUC208	40			1.1/2	80	49.2	22	2	19	30.2	8		23.0	16.0	0.66
SUC209	*45*		1.5/8	1.3/4	85	49.2	22	2	19	30.2	8		25.6	18.1	0.78
SUC210	50	1.7/8	1.15/16	2	90	51.6	24	2	19	32.6	10	M10x1.25	27.5	20.2	0.91
SUC211	*55*		2	2.1/8	100	55.6	25	2.5	22.2	33.4	10		34.0	25.5	1.31
SUC212	*60*		2.1/4	2.3/8	110	65.1	27	2.5	25.4	39.7	10		41.0	31.5	1.65

Indicates standard stock sizes *Non stock sizes to 75mm / 3" bore are available to minimum order*

SUC 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.

QCB ref	Shaft tolerance			
	j7	h7	h8	h9
SUC 201	6700	5300	3800	1400
SUC 202				
SUC 203				
SUC 204	6000	4800	3400	1200
SUC 205	5600	4000	3000	1000
SUC 206	4500	3400	2400	850
SUC 207	4000	3000	2000	750
SUC 208	3600	2600	1900	670
SUC 209	3200	2400	1700	600
SUC 210	3000	2200	1600	560
SUC 211	2600	2000	1400	500
SUC 212	2400	1800	1200	450

Setscrew tightening torque

The 2 setscrews should be tightened to the appropriate torque figure. Over tightening may result in a fracture developing in the inner ring.

Should the axial load be high, a small dimple in the shaft may improve the locking effect. For best effect the bearings should be mounted against a shoulder in the shaft.

Size	Torque
	Nm
M6	4
M8	8
M10	15

Materials

QCB® Stainless Steel bearing units are made in high quality stainless steel for maximum corrosion resistance.

All pillow blocks and flange units have a solid base and smooth exterior surface restrict the growth of bacteria.

Part		Material	
Bearing insert	Inner & Outer rings	Stainless steel	AISI 440 C
	Balls		
	Cage / retainer		AISI 321
	Flinger seal		
	Set screws		SU 304
	Rubber seals	Nitrile rubber	
Housing	Housing body	Stainless steel	AISI 440 C
	Grease nipple		AISI 304

Food Grade Lubricant

QCB® Stainless Steel SUC inserts are lubricated with KLUBER PARALIQ GA343 grease

Operating temperature range

QCB® Stainless Steel inserts can operate in environments from -30 to + 120C

Other products in the QCB® range include

- QCB® Bearings
- QCB® Thermoplastic bearing units
- QCB® Slewing rings
- QCB® Slewing drives