

Si₃N₄ Silicon Nitride Bearings

The Best Ceramic Bearing Material

- **FDA Approved/Caustic Washdown Resistant**
- **Light Weight/High Speeds/Low Friction**
- **High Temperature/Over 1000F**
- **Chemically Inert/Corrosion Resistant**
- **Superior Thermal Shock Resistance**
- **Excellent Wear and Abrasion Resistance**
- **Excellent Fracture Toughness**
- **Mechanical Fatigue and Creep Resistance**
- **Non-Magnetic/High Electrical Resistivity**
- **Excellent Oxidation Resistance**

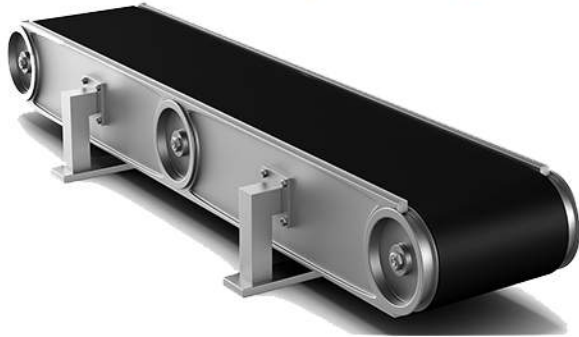




FDA/Caustic Washdown/High Pressure Washing



Food Process - Dairy - Poultry - Bio/Pharmaceutical Process and Packaging



**High Speed Conveyors & Take-Offs
General Designs & FDA/Caustic Washdown**

Filling & Canning Lines



Space



Air & Naval



Vacuum Systems



Cleanroom & Semiconductor

Engineering Data Full Compliment Silicon Nitride Bearings



Full Compliment Silicon Nitride (Si_3N_4) bearings do not require lubrication. Since the material is non-porous like steel balls, Silicon Nitride Balls allow for near frictionless operation. Unlike steel balls, they do not generate heat which needs to be regulated by lubricants.



On average, a full silicon nitride ceramic bearing will outlast a standard steel bearing by 5-10 times plus.



Full Compliment Silicon Nitride Bearings are inert to chemicals, fluids and are excellent candidates for submerged applications - both fresh and salt water. They are completely corrosion resistant. Therefore they are used widely in food process and packaging machinery worldwide where caustic foaming agents are routinely employed.



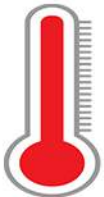
Full Compliment Silicon Nitride Bearings are USDA, FDA and 3A Dairy Compliant.



Because Silicon Nitride Bearings are near frictionless, are 40% lighter than steel balls and do not generate heat, they offer exceptional energy efficiency and savings.



Full Compliment Silicon Nitride Bearings are non-magnetic



Full Compliment Silicon Nitride can operate in frozen applications and can withstand over 1500F operating temps

All Si3N4 Deep Groove Ball Bearings

To add PTFE Protective Shields add 2PS to the part Number Ex. 684SiPS

Bearing NO.	Dimension(mm)				Weight	
	ID	OD	Width	r(min)	(kg)	
						Si3N4
683Si	3	7	2	0.1		0.00013
693Si		8	3	0.15		0.00025
603Si		9	3	0.15		0.0004
623Si		10	4	0.15		0.0007
633Si		13	5	0.15		0.0014
684Si	4	9	2.5	0.1		0.0003
694Si		11	4	0.15		0.0007
604Si		12	4	0.2		0.0009
624Si		13	5	0.2		0.0013
634Si		16	5	0.3		0.0022
685Si	5	11	3	0.15		0.0005
695Si		13	4	0.2		0.001
605Si		14	5	0.2		0.0015
625Si		16	5	0.3		0.0021
635Si		19	6	0.3		0.0036
686Si	6	13	3.5	0.15		0.0008
696Si		15	5	0.2		0.0016
606Si		17	6	0.3		0.0025
626Si		19	6	0.3		0.0034
636Si		22	7	0.3		0.0058
687Si	7	14	3.5	0.15		0.0009
697Si		17	5	0.3		0.0022
607Si		19	6	0.3		0.0032
627Si		22	7	0.3		0.0053
637Si		26	9	0.3		0.01
688Si	8	16	4	0.2		0.0014
698Si		19	6	0.3		0.003
608Si		22	7	0.3		0.005
628Si		24	8	0.3		0.0072
638Si		28	9	0.3		0.012
689Si	9	17	4	0.2		0.0015
699Si		20	6	0.3		0.0035
609Si		24	7	0.3		0.006
629Si		26	8	0.3		0.0081
639Si		30	10	0.6		0.015
6800Si	10	19	5	0.3		0.0021
6900Si		22	6	0.3		0.0038
6000Si		26	8	0.3		0.0075
6200Si		30	9	0.6		0.013
6300Si		35	11	0.6		0.022
6801Si		21	5	0.3		0.0025
6901Si		24	6	0.3		0.0042

All Si3N4 Deep Groove Ball Bearings

To add PTFE Protective Shields add 2PS to the part Number Ex. 6803SiPS

16001Si	12	28	7	0.3		0.0079
6001Si	12	28	8	0.3		0.0092
6201Si		32	10	0.6		0.015
6301Si		37	12	1		0.025
6802Si	15	24	5	0.3		0.0029
6902Si		28	7	0.3		0.0063
16002Si		32	8	0.3		0.011
6002Si		32	9	0.3		0.013
6202Si		35	11	0.6		0.019
6302Si	42	13	1		0.035	
6803Si	15	26	5	0.3		0.0029
6903Si		30	7	0.3		0.0071
16003Si		35	8	0.3		0.014
6003Si		35	10	0.3		0.017
6203Si		40	12	0.6		0.028
6303Si		47	14	1		0.047
6403Si		62	17	1.1		0.11
6804Si	17	32	7	0.3		0.007
6904Si		37	9	0.3		0.015
16004Si		42	8	0.3		0.02
6004Si		42	12	0.6		0.028
6204Si		47	14	1		0.045
6304Si		52	15	1.1		0.06
6404Si		72	19	1.1		0.17
6805Si		20	37	7	0.3	
6905Si	42		9	0.3		0.018
16005Si	47		8	0.3		0.025
6005Si	47		12	0.6		0.033
6205Si	52		15	1		0.054
6305Si	62		17	1.1		0.098
6405Si	80		21	1.5		0.22
6806Si	25	42	7	0.3		0.01
6906Si		47	9	0.3		0.022
16006Si		55	9	0.3		0.036
6006Si		55	13	1		0.048
6206Si		62	16	1		0.083
6306Si		72	19	1.1		0.14
6406Si		90	23	1.5		0.31
6807Si	30	47	7	0.3		0.011
6907Si		55	10	0.6		0.031
16007Si		62	9	0.3		0.045
6007Si		62	14	1		0.063
6207Si		72	17	1.1		0.12
6307Si	35	80	21	1.5		0.19
6407Si		100	25	1.5		0.4
6808Si		52	7	0.3		0.013
6908Si		62	12	0.6		0.05

All Si3N4 Deep Groove Ball Bearings

To add PTFE Protective Shields add 2PS to the part Number Ex. 6412SiPS

16008Si	40	68	9	0.3	0.05
6008Si		68	15	1	0.08
6208Si		80	18	1.1	0.15
6308Si		90	23	1.5	0.27
6408Si		110	27	2	0.513
6809Si	45	58	7	0.3	0.016
6909Si		68	12	0.6	0.053
16009Si		75	10	0.6	0.07
6009Si		75	16	1	0.1
6209Si		85	19	1.1	0.175
6309Si		100	25	1.5	0.345
6409Si	120	29	2	0.64	
6810Si	50	65	7	0.3	0.021
6910Si		72	12	0.6	0.06
16010Si		80	10	0.6	0.07
6010Si		80	16	1	0.11
6210Si		90	20	1.1	0.19
6310Si		110	27	2	0.44
6410Si		130	31	2.1	0.78
6811Si	55	72	9	0.3	0.03
6911Si		80	13	1	0.08
16011Si		90	11	0.6	0.11
6011Si		90	18	1.1	0.16
6211Si		100	21	1.5	0.26
6311Si		120	29	2	0.57
6411Si		140	33	2.1	0.95
6812Si	60	78	10	0.3	0.04
6912Si		85	13	1	0.08
16012Si		95	11	0.6	0.12
6012Si		95	18	1.1	0.17
6212Si		110	22	1.5	0.33
6312Si		130	31	2.1	0.72
6412Si		150	35	2.1	1.15
6813Si	65	85	10	0.6	0.05
6913Si		90	13	1	0.09
16013Si		100	11	0.6	0.13
6013Si		100	18	1.1	0.18
6213Si		120	23	1.5	0.42
6313Si	70	140	33	2.1	0.88
6814Si		90	10	0.6	0.056
6914Si		100	16	1	0.15
16014Si		110	13	0.6	0.18
6014Si		110	20	1.1	0.25
6214Si		125	24	1.5	0.45
6314Si		150	35	2.1	1.07
6815Si	70	95	10	0.6	0.06
6915Si		105	16	1	0.15

All Si3N4 Deep Groove Ball Bearings

To add PTFE Protective Shields add 2PS to the part Number Ex. 6018siPS

16015Si	75	115	13	0.6	0.19
6015Si		115	20	1.1	0.27
6215Si		130	25	1.5	0.5
6816Si	80	100	10	0.6	0.063
6916Si		110	16	1	0.16
16016Si		125	14	0.6	0.26
6016Si		125	22	1.1	0.36
6216Si	85	140	26	2	0.59
6817Si		110	13	1	0.11
6917Si		120	18	1.1	0.23
16017Si		130	14	0.6	0.27
6017Si		130	22	1.1	0.38
6217Si	90	150	28	2	0.73
6818Si		115	13	1	0.12
6918Si		125	18	1.1	0.24
16018Si		140	16	1	0.36
6018Si	95	140	24	1.5	0.5
6819Si		120	13	1	0.12
6919Si		130	18	1.1	0.25
16019Si		145	16	1	0.38
6019Si	100	145	24	1.5	0.51
6820Si		125	13	1	0.13
6920Si		140	20	1.1	0.35
16020Si		150	16	1	0.39
6020Si	105	150	24	1.5	0.54
6821Si		130	13	1	0.14
6921Si		145	20	1.1	0.36
6822Si	110	140	16	1	0.21
6922Si		150	20	1.1	0.37
6824Si	120	150	16	1	0.22

All Si3N4 Ceramic Angular Contact Ball Bearings

To add PTFE Protective Shields add 2PS to the part Number Ex. 7000SiPS

Bearing NO	Dimension (mm)					Weight	
	ID	OD	Width	r(min)	r1(min)	(kg)	
							Si3N4
7900Si	10	22	6	0.3	0.15		0.0038
7000Si		26	8	0.3	0.15		0.0075
7200Si		30	9	0.6	0.3		0.013
7300Si		35	11	0.6	0.3		0.022
7901Si	12	24	6	0.3	0.15		0.0042
7001Si		28	8	0.3	0.15		0.0092
7201Si		32	10	0.6	0.3		0.015
7301Si		37	12	1	0.6		0.025
7902Si	15	28	7	0.3	0.15		0.0063
7002Si		32	9	0.3	0.15		0.013
7202Si		35	11	0.6	0.3		0.019
7302Si		42	13	1	0.6		0.035
7903Si	17	30	7	0.3	0.15		0.0071
7003Si		35	10	0.3	0.15		0.017
7203Si		40	12	0.6	0.3		0.028
7303Si		47	14	1	0.6		0.047
7904Si	20	37	9	0.3	0.15		0.015
7004Si		42	12	0.6	0.3		0.028
7204Si		47	14	1	0.6		0.045
7304Si		52	15	1.1	0.6		0.06
7905Si	25	42	9	0.3	0.15		0.018
7005Si		47	12	0.6	0.3		0.033
7205Si		52	15	1	0.6		0.054
7305Si		62	17	1.1	0.6		0.098
7906Si	30	47	9	0.3	0.15		0.022
7006Si		55	13	1	0.6		0.048
7206Si		62	16	1	0.6		0.083
7306Si		72	19	1.1	0.6		0.14
7907Si	35	55	10	0.6	0.3		0.031
7007Si		62	14	1	0.6		0.063
7207Si		72	17	1.1	0.6		0.12
7307Si		80	21	1.5	1		0.19
7908Si	40	62	12	0.6	0.3		0.05
7008Si		68	15	1	0.6		0.08
7208Si		80	18	1.1	0.6		0.15
7308Si		90	23	1.5	1		0.27
7909Si	45	68	12	0.6	0.3		0.053
7009Si		75	16	1	0.6		0.1
7209Si		85	19	1.1	0.6		0.175
7309Si		100	25	1.5	1		0.345
7910Si		72	12	0.6	0.3		0.06
7010Si		80	16	1	0.6		0.11

All Si3N4 Ceramic Angular Contact Ball Bearings

To add PTFE Protective Shields add 2PS to the part Number Ex. 7012SiPS

7210Si	50	90	20	1.1	0.6		0.19
7310Si		110	27	2	1		0.44
7911Si	55	80	13	1	0.6		0.08
7011Si		90	18	1.1	0.6		0.16
7211Si		100	21	1.5	1		0.26
7311Si		120	29	2	1		0.57
7912Si		85	13	1	0.6		0.08
7012Si	60	95	18	1.1	0.6		0.17
7212Si		110	22	1.5	1		0.33
7312Si		130	31	2.1	1.1		0.72
7913Si		90	13	1	0.6		0.09
7013Si	65	100	18	1.1	0.6		0.18
7213Si		120	23	1.5	1		0.42
7313Si		140	33	2.1	1.1		0.88
7914Si		100	16	1	0.6		0.15
7014Si	70	110	20	1.1	0.6		0.25
7214Si		125	24	1.5	1		0.45
7314Si		150	35	2.1	1.1		1.07
7915Si	75	105	16	1	0.6		0.15
7015Si		115	20	1.1	0.6		0.27
7215Si		130	25	1.5	1		0.5
7916Si	80	110	16	1	0.6		0.16
7016Si		125	22	1.1	0.6		0.36
7216Si		140	26	2	1		0.59
7017Si	85	130	22	1.1	0.6		0.38
7217Si		150	28	2	1		0.73
7918Si	90	125	18	1.1	0.6		0.24
7018Si		140	24	1.5	1		0.5
7919Si	95	130	18	1.1	0.6		0.25
7019Si		145	24	1.5	1		0.51
7920Si	100	140	20	1.1	0.6		0.35
7020Si		150	24	1.5	1		0.54
7921Si	105	145	20	1.1	0.6		0.36
7922Si	110	150	20	1.1	0.6		0.37

All Si3N4 Ceramic Spherical Bearings

Bearing NO.	Dimension(mm)								Weight(kg)	
	d	D	B	S	C	r/min	G	ds		Si3N4
UC201Si	12	47	31	12.7	17	0.6	4.5	M6 x 1		0.09
UC202Si	15	47	31	12.7	17	0.6	4.5	M6 x 1		0.08
UC203Si	17	47	31	12.7	17	0.6	4.5	M6 x 1		0.07
UC204Si	20	47	31	12.7	17	1	4.5	M6 x 1		0.07
UC205Si	25	52	34.1	14.3	17V	1	5	M6 x 1		0.09
UC206Si	30	62	38.1	15.9	19	1	5	M6 x 1		0.14
UC207Si	35	72	42.9	17.5	20	1.1	6	M8 x 1		0.21
UC208Si	40	80	49.2	19	21	1.1	8	M8 x 1		0.29
UC209Si	45	85	49.2	19	22	1.1	8	M8 x 1		0.3
UC210Si	50	90	51.6	19	24	1.1	9	M10 x 1		0.34
UC211Si	55	100	55.6	22.2	25	1.5	9	M10 x 1		0.48
UC212Si	60	110	65.1	25.4	27	1.5	10	M10 x 1		0.64
UC213Si	65	120	65.1	25.4	27	1.5	10	M10 x 1		0.8
UC214Si	70	125	74.6	30.2	29	1.5	12	M12 x 1.25		0.89
UC215Si	75	130	77.8	33.3	30	1.5	12	M12 x 1.25		0.99
UC216Si	80	140	82.6	33.3	33	2	14	M12 x 1.25		1.16
UC217Si	85	150	85.7	34.1	36	2	14	M12 x 1.25		1.39
UC218Si	90	160	96	39.7	37	2	14	M12 x 1.25		1.76
	100	180	108	42	41	2	14	M12 x 1.25		1.85

All Si3N4 Ceramic Thrust Ball Bearings

Bearing NO.	Dimension(mm)				Weight(kg)	
	ID	OD	Height	r(min)		Si3N4
51100Si	10	24	9	0.3		0.0078
51200Si		26	11	0.6		0.011
51101Si	12	26	9	0.3		0.009
51201Si		28	11	0.6		0.013
51102Si	15	28	9	0.3		0.0094
51202Si		32	12	0.6		0.018
51103Si	17	30	9	0.3		0.01
51203Si		35	12	0.6		0.021
51104Si	20	35	10	0.3		0.015
51204Si		40	14	0.6		0.032
51105Si	25	42	11	0.6		0.023
51205Si		47	15	0.6		0.046
51106Si	30	47	11	0.6		0.026
51206Si		52	16	0.6		0.056
51107Si	35	52	12	0.6		0.033
51207Si		62	18	1		0.086
51108Si	40	60	13	0.6		0.049
51208Si		68	19	1		0.11
51109Si	45	65	14	0.6		0.059
51209Si		73	20	1		0.13
51110Si	50	70	14	0.6		0.063
51210Si		78	22	1		0.16
51111Si	55	78	16	0.6		0.093
51211Si		90	25	1		0.25
51112Si	60	85	17	1		0.12
51212Si		95	26	1		0.28
51113Si	65	90	18	1		0.13
51213Si		100	27	1		0.31
51114Si	70	95	18	1		0.14
51214Si		105	27	1		0.33
51115Si	75	100	19	1		0.16
51215Si		110	27	1		0.35
51116Si	80	105	19	1		0.17
51216Si		115	28	1		0.38
51117Si	85	110	19	1		0.18
51217Si		125	31	1		0.5
51118Si	90	120	22	1		0.27
51218Si		135	35	1.1		0.69
51120Si	100	135	25	1		0.39
51220Si		150	38	1.1		0.92
51122Si	110	145	25	1		0.43
51124Si	120	155	25	1		0.46

LM76

FDA/WashDown Compliant - Corrosion Resistant

Bearing Units



CERAMICSPEED

LM76

US Distributor: 1-800-513-3163 www.FDABEARINGS.com

A Bearing Unit Tougher Than the Rest

In the food and beverage industry reliability is everything. Production stops cost money. Lots of it. Planned or unplanned. Therefore the demand for longer lasting production equipment, which can live up to the large demands for hygiene and food safety from the food and beverage industry is increasing.

Top Quality - Minimal Maintenance

CeramicSpeed Bearing Units are produced in polyurethane and have a very smooth and rounded surface, which makes it impossible for e.g. bacteria and water to penetrate the unit. The Bearing Units endure frequent wash downs. The reduced cost of maintenance due to no need for re-lubrication make them the obvious choice for in particular the food and beverage industry.

To make CeramicSpeed Bearing Units the best in the market we have fitted them with the highest quality of hybrid ball bearings with premium-quality ceramic (Si₃N₄) balls, which are 2 times harder and 4 times smoother than steel.

Why Choose Bearing Units with Hybrid Ball Bearings?

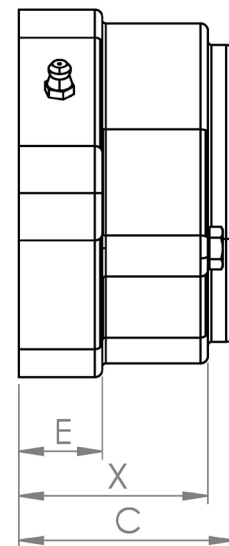
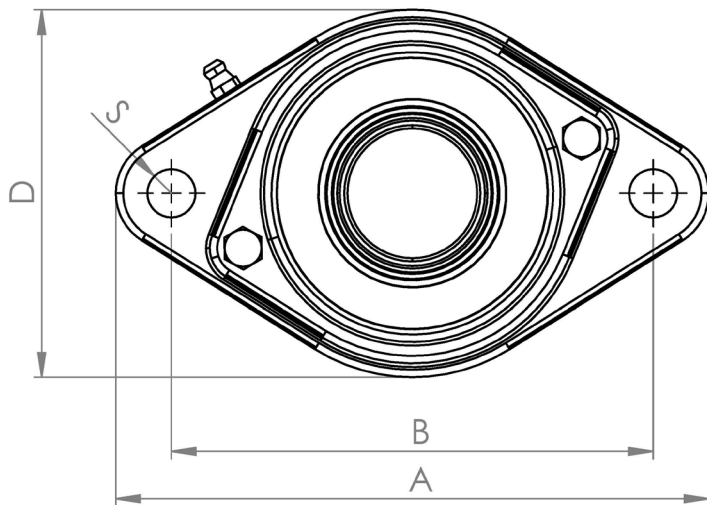
- Extremely long service life
- FDA-approved
- Always stainless rings
- Very tolerant towards temperature extremes -30°C and up to + 100°
- Very hygienically
- Standard dimensions
- Minimal maintenance

Hygienically and extremely durable

We produce the Bearing Units both with FDA approved grease and our self-developed SLT, which is ideal for very harsh environments and if the maintenance is difficult. A Bearing Unit with SLT is extremely durable and a maintenance free solution for demanding productions in many industries.

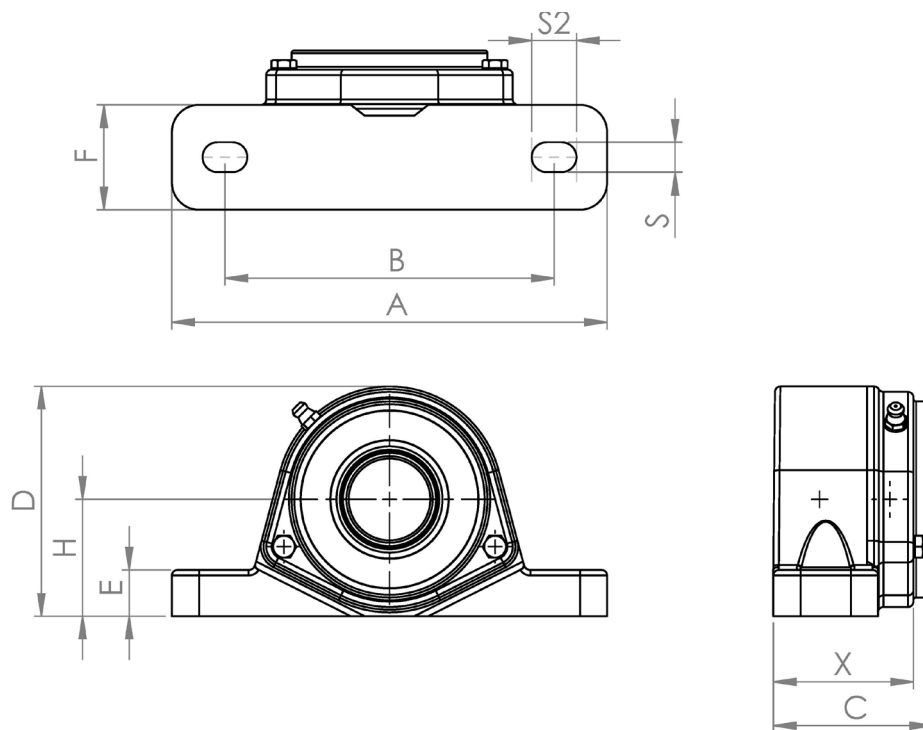
F2 Bearing Unit

Item no.	Designation	A	B	C	D	E	S	X
100851	Corrotec 020 NG 20 F20/CSB Closed	116	90	51	75	22,5	9	43
102473	Corrotec 020 NG 20 F21/CSB Open	116	90	51	75	22,5	9	43
100852	Corrotec 025 NG 25 F20/CSB Closed	123	99	52	79	22,5	9	44
100853	Corrotec 025 NG 25 F21/CSB Open	123	99	52	79	22,5	9	44
100856	Corrotec 030 NG 30 F21/CSB Open	145	117	58	90	22,5	11	48
100857	Corrotec 030 NG 30 F20/CSB Closed	145	117	58	90	22,5	11	48
100860	Corrotec 035 NG 35 F21/CSB Open	160	130	60	99	22,5	13,5	50
100861	Corrotec 035 NG 35 F20/CSB Closed	160	130	60	99	22,5	13,5	50
100862	Corrotec 040 NG 40 F20/CSB Closed	174	144	65	110	22,5	13,5	56
100863	Corrotec 040 NG 40 F21/CSB Open	174	144	65	110	22,5	13,5	56
107562	Corrotec 050 NG 50 F20/CSB Closed	197	157	70	125	26,5	17,5	58
107563	Corrotec 050 NG 50 F21/CSB Open	197	157	70	125	26,5	17,5	58



SF2 Bearing Unit

Item no.	Designation	A	B	C	D	E	F	H	S	X
107564	Corrotec 020 NG 20 SF21/CSB Open	127	95	52	67	14	33,5	33,3	9	43
107565	Corrotec 020 NG 20 SF20/CSB Closed	127	95	52	67	14	33,5	33,3	9	43
107567	Corrotec 025 NG 25 SF21/CSB Open	140	105	53	73	15	34,5	36,5	9	44
107566	Corrotec 025 NG 25 SF20/CSB Closed	140	105	53	73	15	34,5	36,5	9	44
107413	Corrotec 030 NG 30 SF21/CSB Open	160	121	59	85	17	38,5	42,9	11	48
107568	Corrotec 030 NG 30 SF20/CSB Closed	160	121	59	85	17	38,5	42,9	11	48
102130	Corrotec 035 NG 35 SF21/CSB Open	167	127	60	93	18	38,5	47,6	13	52
107570	Corrotec 035 NG 35 SF20/CSB Closed	167	127	60	93	18	38,5	47,6	13	52
100865	Corrotec 040 NG 40 SF21/CSB Open	184	137	66	100	18	42,5	49,2	13	54
107571	Corrotec 040 NG 40 SF20/CSB Closed	184	137	66	100	18	42,5	49,2	13	54



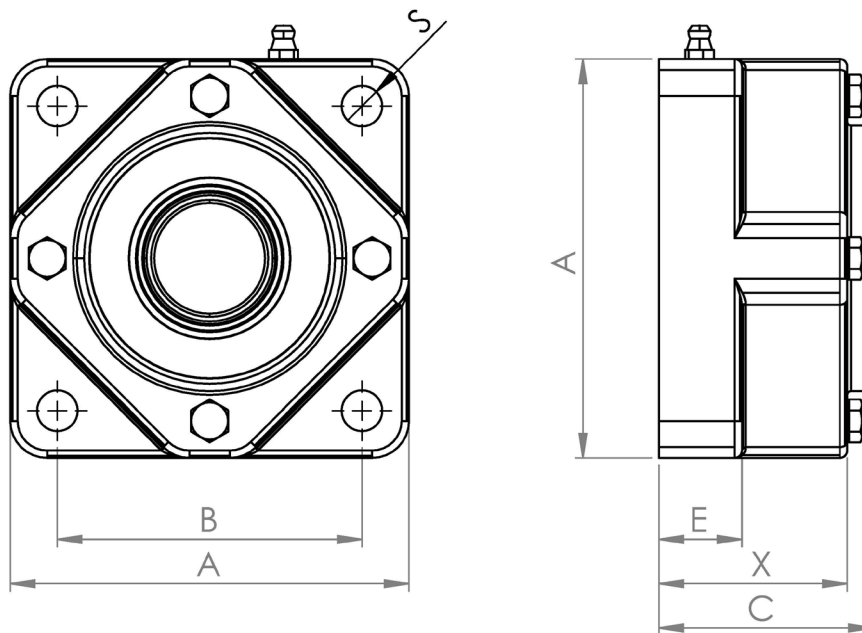
F4 Bearing Unit

Item no.	Designation	A	B	C	E	S	X
107558	Corrotec 020 NG 20 F40/CSB	86	63,5	51	22,5	9	43
107559	Corrotec 020 NG 20 F41/CSB Open	86	63,5	51	22,5	9	43
100854	Corrotec 025 NG 25 F40/CSB	95	70	52	22,5	9	44
100855	Corrotec 025 NG 25 F41/CSB Open	95	70	52	22,5	9	44
100858	Corrotec 030 NG 30 F40/CSB	108	82,5	58	22,5	11	48
100859	Corrotec 030 NG 30 F41/CSB Open	108	82,5	58	22,5	11	48
107525	Corrotec 035 NG 35 F40/CSB	118	92	60	22,5	13,5	50
107526	Corrotec 035 NG 35 F41/CSB Open	118	92	60	22,5	13,5	50
100864	Corrotec 040 NG 40 F40/CSB	130	101,5	65	22,5	13,5	56
107560	Corrotec 040 NG 40 F41/CSB Open	130	101,5	65	22,5	13,5	56
107561	Corrotec 050 NG 50 F40/CSB	143	111	70	26,5	16	58
102205	Corrotec 050 NG 50 F41/CSB Open	143	111	70	26,5	16	58

Additional cost for SLT:

ID20-ID30: 280 kr

ID35-ID50: 350kr



LM76

US Distributor: 1-800-513-3163 www.FDABEARINGS.com

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