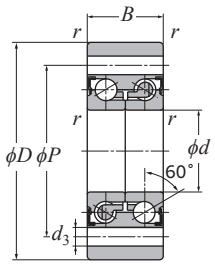
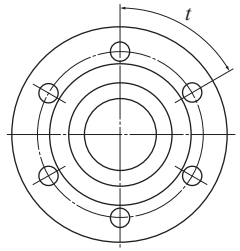
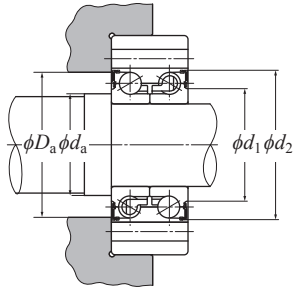
ULTAGE Double-row thrust angular contact ball bearing unit BSTU LLX type







Dynamic equivalent radial load

$P_a = XF_r + YF_a$

e	$F_a/F_r \le e$		$F_a/F_r > e$	
	X	Y	X	Y
2.17	1.90	0.55	0.92	1

Static equivalent radial load

$P_{0a} = F_a + 3.98\,F_r$

Contact angle 60° *d* 20–100 mm

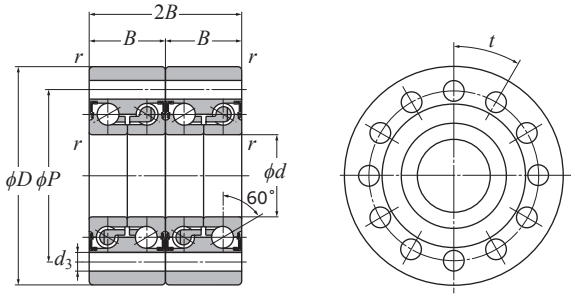
Part number	Boundary dimensions mm						Basic load ratings dynamic kN	static kN	dynamic kgf	static kgf	Allowable axial load kN	kgf	Allowable speed min^{-1} grease lubrication	Reference dimensions mm		Abutment and fillet dimensions mm		Outer ring mounting bolt		Preload N	kgf	Mass kg	Bearing friction torque N·m	Axial rigidity N/μm	Moment rigidity N·m/mrad	Inertia of inner ring $kg·cm^2$	Part number
	d	D	B	$r_{s\,min}$ [1]	P	d_3	C_a	C_{0a}	C_a	C_{0a}	(static)			d_1	d_2	D_a max	d_a min	Screws	Quantity × t			(approx.)	(approx.)				
BSTU2068LLX	20	68	28	0.6	53	6.8	31.0	48.0	3 200	4 900	24.0	2 450	6 000	30.1	43	42	26	M6	4×90°	2 100	215	0.60	0.2	675	150	0.25	BSTU2068LLX
BSTU2575LLX	25	75	28	0.6	58	6.8	34.0	58.0	3 450	5 950	28.5	2 910	5 000	36.1	49	48	32	M6	4×90°	2 400	245	0.72	0.3	790	230	0.45	BSTU2575LLX
BSTU3080LLX	30	80	28	0.6	63	6.8	36.5	68.5	3 700	6 950	33.0	3 350	4 500	41.1	54	53	37	M6	6×60°	2 700	275	0.78	0.3	900	315	0.68	BSTU3080LLX
BSTU30100LLX	30	100	38	0.6	80	8.8	73.5	121	7 500	12 400	61.5	6 250	4 000	47.1	65	64	39	M8	8×45°	4 800	490	1.71	0.8	1 040	500	1.99	BSTU30100LLX
BSTU40100LLX	40	100	34	0.6	80	8.8	52.0	106	5 300	10 800	50.5	5 150	3 500	54.1	68.9	68	49	M8	4×90°	3 200	325	1.46	0.4	1 050	610	2.16	BSTU40100LLX
BSTU40115LLX	40	115	46	0.6	94	8.8	89.0	167	9 050	17 000	82.5	8 400	3 200	61.1	80.2	80	52	M8	12×30°	5 800	590	2.57	1.0	1 260	960	5.52	BSTU40115LLX
BSTU90190LLX	90	190	55	0.6	165	11	158	415	16 100	42 000	195	19 900	1 700	116.1	138.7	137	104	M10	8×45°	8 200	835	7.95	1.5	2 010	4 700	60.0	BSTU90190LLX
BSTU100200LLX	100	200	55	0.6	175	11	160	435	16 300	44 500	205	20 900	1 500	128.1	150.7	150	116	M10	8×45°	8 800	895	8.47	1.7	2 130	5 800	83.8	BSTU100200LLX

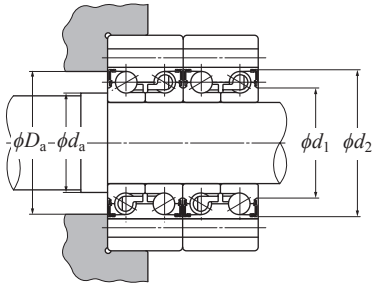
1) Minimum allowable value for corner radius dimension *r*.

Ball Screw Support Bearings Dimension Tables NTN

Ball Screw Support Bearings

ULTAGE Double-row thrust angular contact ball bearing unit
BSTU LLX D2 type





Dynamic equivalent radial load

$P_a = XF_r + YF_a$

e	$F_a/F_r \le e$		$F_a/F_r > e$	
	X	Y	X	Y
2.17	—	—	0.92	1

Static equivalent radial load

$P_{0a} = F_a + 3.98\,F_r$

Contact angle 60° *d* 20–40 mm

Part number	Boundary dimensions mm						Basic load ratings dynamic kN	static kN	dynamic kgf	static kgf	Allowable axial load kN	kgf	Allowable speed min^{-1} grease lubrication	Reference dimensions mm		Abutment and fillet dimensions mm		Outer ring mounting bolt		Preload N	kgf	Mass kg	Bearing friction torque N·m	Axial rigidity N/μm	Moment rigidity N·m/mrad	Inertia of inner ring $kg \cdot cm^2$	Part number
	d	D	$2B$	$r_{s\,min}$ [1]	P	d_3	C_a	C_{0a}	C_a	C_{0a}	(static)			d_1	d_2	D_a max	d_a min	Screws	Quantity × t			(approx.)	(approx.)				
BSTU2068LLXD2	20	68	56	0.6	53	6.8	50.5	96.0	5 150	9 800	48.0	4 900	6 000	30.1	43	42	26	M6	8×45°	4 200	430	1.20	0.5	1 350	340	0.50	BSTU2068LLXD2
BSTU2575LLXD2	25	75	56	0.6	58	6.8	55.0	116	5 600	11 900	57.0	5 820	5 000	36.1	49	48	32	M6	8×45°	4 800	490	1.44	0.5	1 580	510	0.90	BSTU2575LLXD2
BSTU3080LLXD2	30	80	56	0.6	63	6.8	59.0	137	6 000	13 900	65.0	6 700	4 500	41.1	54	53	37	M6	12×30°	5 400	550	1.56	0.6	1 800	690	1.36	BSTU3080LLXD2
BSTU40100LLXD2	40	100	68	0.6	80	8.8	84.0	212	8 600	21 600	101	10 300	3 500	54.1	68.9	68	49	M8	8×45°	6 350	650	2.92	0.8	2 100	1 310	4.32	BSTU40100LLXD2
BSTU40115LLXD2	40	115	92	0.6	94	8.8	144	335	14 700	34 000	165	16 800	3 200	61.1	80.2	80	52	M8	12×30°	11 600	1 180	5.14	2.0	2 520	2 150	11.0	BSTU40115LLXD2

1) Minimum allowable value for corner radius dimension *r*.

Ball Screw Support Bearings

Ball Screw Support Bearings Dimension Tables NTN

Ball Screw Support Bearings