

BANDED THRUST BEARINGS

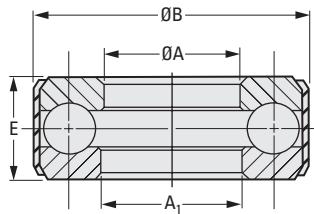


BANDED ASSEMBLY
GROOVED RACE
OIL HOLE

PHONE: 516.328.3300 • FAX: 516.326.8827 • WWW.SDP-SI.COM

> MATERIAL:

- Band - Low Carbon Steel
- Balls & Washer - 52100 Chrome Steel



INCH COMPONENT

Catalog Number	A Shaft Dia.	B O.D.	E Width	Load Rating lbf		A ₁	Max.* Speed rpm
				Dynamic	Static		
S9912Y-TB050121	.500	1.219	.563	3850	5600	.531	7000
S9912Y-TB056121	.563	1.219	.563	3850	5600	.594	7000
S9912Y-TB062134	.625	1.344	.563	4100	6700	.656	6000
S9912Y-TB068134	.688	1.344	.563	4100	6700	.719	6000
S9912Y-TB075146	.750	1.469	.563	4250	7300	.781	5500
S9912Y-TB081146	.813	1.469	.563	4250	7300	.844	5500
S9912Y-TB087184	.875	1.844	.625	6600	12200	.906	4100
S9912Y-TB093184	.938	1.844	.625	6600	12200	.969	4100
S9912Y-TB100196	1.000	1.969	.625	6700	13100	1.031	3800
S9912Y-TB106196	1.063	1.969	.625	6700	13100	1.094	3800
S9912Y-TB112209	1.125	2.094	.625	6900	14000	1.156	3600
S9912Y-TB118209	1.188	2.094	.625	6900	14000	1.219	3600
S9912Y-TB125234	1.250	2.344	.625	7200	15700	1.281	3200
S9912Y-TB131234	1.313	2.344	.625	7200	15700	1.344	3200
S9912Y-TB137246	1.375	2.469	.625	7300	16600	1.406	3000
S9912Y-TB143246	1.438	2.469	.625	7300	16600	1.469	3000
S9912Y-TB150259	1.500	2.594	.625	7700	18300	1.531	2800

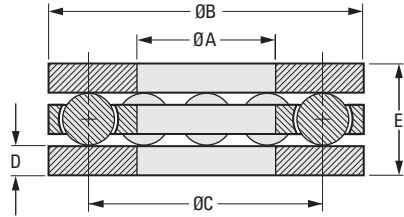
* Speed limit shown is for oil lubrication.

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MATERIAL:

- Balls** - 440C Stainless Steel, Hardened to Rc 58-65
- Retainer** - Molded Nylon, for 250°F Max.
- Washer** - 410 Stainless Steel, Hardened to Rc 38-42

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INCH COMPONENT

Catalog Number (Complete Bearing Set)	A Dia.		B Dia.		C Ball Circle Dia.	D Washer		E Total Bearing Thickness
	Bore	Tolerance	O.D.	Tolerance		Thk.	Tolerance	
A 7Z 7-012ST	1/8	.128 – .133	7/16	.430 – .437	9/32	.050	± .002	.190 – .196
A 7Z 7-018ST	3/16	.191 – .195	1/2	.492 – .499	11/32	.050	± .002	.190 – .196
A 7Z 7-025ST	1/4	.253 – .258	9/16	.555 – .562	13/32	.050	± .002	.190 – .196
A 7Z 7-031ST	5/16	.316 – .321	5/8	.617 – .624	15/32	.050	± .002	.190 – .196
A 7Z 7-037ST	3/8	.378 – .383	13/16	.805 – .812	19/32	.062	± .002	.254 – .253
A 7Z 7-043ST	7/16	.441 – .446	7/8	.867 – .874	21/32	.062	± .002	.254 – .253
A 7Z 7-050ST	1/2	.503 – .508	15/16	.930 – .937	23/32	.062	± .002	.254 – .253
A 7Z 7-056ST	9/16	.566 – .571	1	.992 – .999	25/32	.062	± .002	.254 – .253
A 7Z 7-062ST	5/8	.628 – .635	1-1/8	1.115 – 1.124	7/8	.093	± .003	.336 – .348
A 7Z 7-068ST	11/16	.691 – .698	1-3/16	1.178 – 1.187	15/16	.093	± .003	.336 – .348
A 7Z 7-075ST	3/4	.753 – .760	1-1/4	1.240 – 1.249	1	.093	± .003	.336 – .348
A 7Z 7-081ST	13/16	.816 – .823	1-5/16	1.303 – 1.312	1-1/16	.093	± .003	.336 – .348
A 7Z 7-087ST	7/8	.878 – .885	1-3/8	1.365 – 1.374	1-1/8	.093	± .003	.336 – .348
A 7Z 7-093ST	15/16	.941 – .950	1-9/16	1.551 – 1.562	1-1/4	.125	± .005	.427 – .447
A 7Z 7-100ST	1	1.003 – 1.012	1-5/8	1.613 – 1.624	1-5/16	.125	± .005	.427 – .447
A 7Z 7-112ST	1-1/8	1.128 – 1.137	1-3/4	1.738 – 1.749	1-7/16	.125	± .005	.427 – .447
A 7Z 7-125ST	1-1/4	1.253 – 1.262	1-7/8	1.863 – 1.874	1-9/16	.125	± .005	.427 – .447
A 7Z 7-150ST	1-1/2	1.503 – 1.512	2-1/8	2.113 – 2.124	1-13/16	.125	± .005	.427 – .447

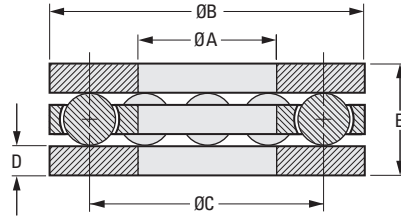
Catalog Number Ref. (Complete Bearing Set)	No. of Balls	Size of Balls ± .0001	Load Rating lbf		Additional Bearing Components Used on Complete Thrust Bearing	
			15 rpm	100 rpm	Retainer & Balls	Washer
A 7Z 7-012ST	6	.0938	84	44	A 7M 7-012ST	A 7Y 7-012
A 7Z 7-018ST	7	.0938	88	48	A 7M 7-018ST	A 7Y 7-018
A 7Z 7-025ST	8	.0938	92	49	A 7M 7-025ST	A 7Y 7-025
A 7Z 7-031ST	9	.0938	95	40	A 7M 7-031ST	A 7Y 7-031
A 7Z 7-037ST	6	.1250	123	65	A 7M 7-037ST	A 7Y 7-037
A 7Z 7-043ST	7	.1250	133	70	A 7M 7-043ST	A 7Y 7-043
A 7Z 7-050ST	8	.1250	140	74	A 7M 7-050ST	A 7Y 7-050
A 7Z 7-056ST	9	.1250	149	79	A 7M 7-056ST	A 7Y 7-056
A 7Z 7-062ST	6	.1563	175	93	A 7M 7-062ST	A 7Y 7-062
A 7Z 7-068ST	7	.1563	191	101	A 7M 7-068ST	A 7Y 7-068
A 7Z 7-075ST	8	.1563	205	108	A 7M 7-075ST	A 7Y 7-075
A 7Z 7-081ST	9	.1563	220	116	A 7M 7-081ST	A 7Y 7-081
A 7Z 7-087ST	10	.1563	196	122	A 7M 7-087ST	A 7Y 7-087
A 7Z 7-093ST	9	.1875	268	143	A 7M 7-093ST	A 7Y 7-093
A 7Z 7-100ST	10	.1875	321	170	A 7M 7-100ST	A 7Y 7-100
A 7Z 7-112ST	12	.1875	352	187	A 7M 7-112ST	A 7Y 7-112
A 7Z 7-125ST	14	.1875	381	202	A 7M 7-125ST	A 7Y 7-125
A 7Z 7-150ST	14	.1875	365	194	A 7M 7-150ST	A 7Y 7-150

NOTE: Load rating @ 900 rpm approximately 50% of those @ 100 rpm. Other data available.

► MATERIAL:

- Balls** - S.A.E 1018 Steel, Hardened to Rc 60 Min.
- Retainer** - Molded Nylon, for 250°F Max.
- Washer** - CR1075 Steel, Hardened to Rc 59-61

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INCH COMPONENT

Catalog Number (Complete Bearing Set)	A Dia.		B		C Ball Circle Dia.	D Washer		E Total Bearing Thickness
	Bore	Tolerance	O.D.	Tolerance		Thk.	Tolerance	
A 7Z 7-012	1/8	.128 – .133	7/16	.430 – .437	9/32	.050	± .002	.190 – .196
A 7Z 7-018	3/16	.191 – .195	1/2	.492 – .499	11/32	.050	± .002	.190 – .196
A 7Z 7-025	1/4	.253 – .258	9/16	.555 – .562	13/32	.050	± .002	.190 – .196
A 7Z 7-031	5/16	.316 – .321	5/8	.617 – .624	15/32	.050	± .002	.190 – .196
A 7Z 7-037	3/8	.378 – .383	13/16	.805 – .812	19/32	.062	± .002	.254 – .253
A 7Z 7-043	7/16	.441 – .446	7/8	.867 – .874	21/32	.062	± .002	.254 – .253
A 7Z 7-050	1/2	.503 – .508	15/16	.930 – .937	23/32	.062	± .002	.254 – .253
A 7Z 7-056	9/16	.566 – .571	1	.992 – .999	25/32	.062	± .002	.254 – .253
A 7Z 7-062	5/8	.628 – .635	1-1/8	1.115 – 1.124	7/8	.093	± .003	.336 – .348
A 7Z 7-068	11/16	.691 – .698	1-3/16	1.178 – 1.187	15/16	.093	± .003	.336 – .348
A 7Z 7-075	3/4	.753 – .760	1-1/4	1.240 – 1.249	1	.093	± .003	.336 – .348
A 7Z 7-081	13/16	.816 – .823	1-5/16	1.303 – 1.312	1-1/16	.093	± .003	.336 – .348
A 7Z 7-087	7/8	.878 – .885	1-3/8	1.365 – 1.374	1-1/8	.093	± .003	.336 – .348
A 7Z 7-093	15/16	.941 – .950	1-9/16	1.551 – 1.562	1-1/4	.125	± .005	.427 – .447
A 7Z 7-100	1	1.003 – 1.012	1-5/8	1.613 – 1.624	1-5/16	.125	± .005	.427 – .447
A 7Z 7-112	1-1/8	1.128 – 1.137	1-3/4	1.738 – 1.749	1-7/16	.125	± .005	.427 – .447
A 7Z 7-125	1-1/4	1.253 – 1.262	1-7/8	1.863 – 1.874	1-9/16	.125	± .005	.427 – .447
A 7Z 7-150	1-1/2	1.503 – 1.512	2-1/8	2.113 – 2.124	1-13/16	.125	± .005	.427 – .447

Catalog Number Ref. (Complete Bearing Set)	No. of Balls	Size of Balls ± .0001	Load Rating lbf		Additional Bearing Components Used on Complete Thrust Bearing	
			15 rpm	100 rpm	Retainer & Balls	Washer
A 7Z 7-012	6	.0938	120	63	A 7M 7-012	A 7Q 7-012
A 7Z 7-018	7	.0938	126	70	A 7M 7-018	A 7Q 7-018
A 7Z 7-025	8	.0938	131	69	A 7M 7-025	A 7Q 7-025
A 7Z 7-031	9	.0938	136	72	A 7M 7-031	A 7Q 7-031
A 7Z 7-037	6	.1250	175	93	A 7M 7-037	A 7Q 7-037
A 7Z 7-043	7	.1250	190	101	A 7M 7-043	A 7Q 7-043
A 7Z 7-050	8	.1250	201	106	A 7M 7-050	A 7Q 7-050
A 7Z 7-056	9	.1250	213	113	A 7M 7-056	A 7Q 7-056
A 7Z 7-062	6	.1563	251	133	A 7M 7-062	A 7Q 7-062
A 7Z 7-068	7	.1563	273	145	A 7M 7-068	A 7Q 7-068
A 7Z 7-075	8	.1563	293	155	A 7M 7-075	A 7Q 7-075
A 7Z 7-081	9	.1563	314	166	A 7M 7-081	A 7Q 7-081
A 7Z 7-087	10	.1563	328	174	A 7M 7-087	A 7Q 7-087
A 7Z 7-093	9	.1875	384	204	A 7M 7-093	A 7Q 7-093
A 7Z 7-100	10	.1875	459	243	A 7M 7-100	A 7Q 7-100
A 7Z 7-112	12	.1875	504	267	A 7M 7-112	A 7Q 7-112
A 7Z 7-125	14	.1875	545	289	A 7M 7-125	A 7Q 7-125
A 7Z 7-150	14	.1875	522	277	A 7M 7-150	A 7Q 7-150

NOTE: Load rating @ 900 rpm approximately 50% of those @ 100 rpm. Other data available.



THRUST WASHERS • GENERAL PURPOSE POLYMER



ECONOMICAL
ISO 3547-1

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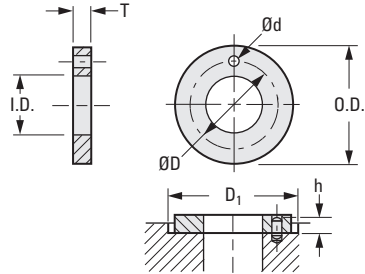
› **MATERIAL:**
G300® Polymer

› **OPERATING TEMPERATURE:**
Continuous: -40°F to +266°F
Intermittent: +428°F

› **FEATURES:**
Maintenance-free.
Dry running.
High wear resistance.
Resistant to dust and dirt.
Vibration damping.

› **SPECIFICATIONS:**
Tensile Strength at 68° F: 30,400 psi
Compressive Strength: 11,300 psi
Coefficient of Friction (dynamic against steel): .08 – .15
PV Value, max. (dry): 12,000 psi x fpm

Other sizes available upon request.



INCH COMPONENT

Catalog Number	I.D. +.010 -.000	O.D. +.000 -.010	T Thickness +.000 -.002	D Dia. ± .005	d Dia. +.015 +.005	h +.008 -.000	D ₁ +.005 -.000
S99GGT-038063040	.375	.625	.0400	*	*	*	.625
S99GGT-050088059	.500	.875	.0585	.692	.067	.040	.875
S99GGT-063113059	.625	1.125	.0585	.880	.099	.040	1.125
S99GGT-075125059	.750	1.250	.0585	1.005	.099	.040	1.250
S99GGT-088150059	.875	1.500	.0585	1.192	.130	.040	1.500
S99GGT-100175059	1.000	1.750	.0585	1.380	.130	.040	1.750

* No hole

HIGH LOAD
HIGH-SPEED

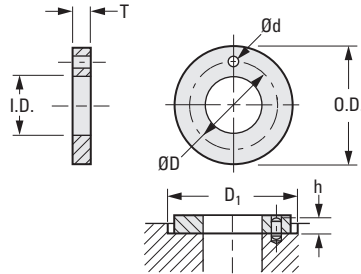
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► **MATERIAL:**
T500® Polymer

► **OPERATING TEMPERATURE:**
Continuous: -148°F to +482°F
Intermittent: +599°F

► **FEATURES:**
High compression.
Chemical-resistant.
Very low moisture absorption.
Great wear resistance.

► **SPECIFICATIONS:**
Tensile Strength at 68° F: 24,600 psi
Compressive Strength: 14,500 psi
Coefficient of Friction (dynamic against steel): .090 – .270
PV Value, max. (dry): 37,700 psi x fpm



INCH COMPONENT

Catalog Number	I.D. +.010 -.000	O.D. +.000 -.010	T Thickness +.000 -.002	D Dia. ± .005	d Dia. +.015 +.005	h +.008 -.000	D ₁ +.005 -.000
S99GTT-050088059	.500	.875	.0585	.692	.067	.040	.875
S99GTT-063113059	.625	1.125	.0585	.880	.099	.040	1.125
S99GTT-075125059	.750	1.250	.0585	1.005	.099	.040	1.250
S99GTT-088138059	.875	1.375	.0585	1.125	.130	.040	1.375
S99GTT-088150059	.875	1.500	.0585	1.192	.130	.040	1.500
S99GTT-100175059	1.000	1.750	.0585	1.380	.130	.040	1.750
S99GTT-113163059	1.125	1.625	.0585	*	*	*	1.625
S99GTT-125213059	1.250	2.125	.0585	1.692	.161	.040	2.125
S99GTT-175275059	1.750	2.750	.0585	2.255	.192	.040	2.750
S99GTT-200300090	2.000	3.000	.0895	2.505	.192	.040	3.000

* No hole

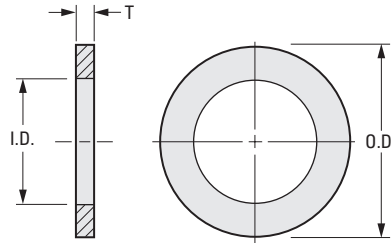
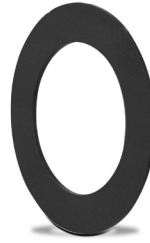
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› **MATERIAL:**
M250® Polymer

› **OPERATING TEMPERATURE:**
-40°F to +176°F

› **SHORT-TERM TEMPERATURE:**
+338°F Max.

› **SPECIFICATIONS:**
Tensile Strength: at 68°F (16240 psi)
Coefficient of friction, dynamic against steel: 0.1-0.3 μ



INCH COMPONENT

Catalog Number	Nom. I.D.	I.D.		O.D.		T
		Max.	Min.	Max.	Min.	
S99GMT-025062090	1/4	.2609	.2550	.6200	.6094	.0900
S99GMT-031069080	5/16	.3271	.3189	.6874	.6767	.0900
S99GMT-038075090	3/8	.3850	.3780	.7409	.7394	.0900
S99GMT-050082090	1/2	.5101	.5030	.8200	.8070	.0900
S99GMT-063100094	5/8	.6371	.6300	1.0000	.9870	.0940
S99GMT-075106094	3/4	.7675	.7600	1.0630	1.0500	.0940
S99GMT-100150125	1	1.0200	1.0100	1.5000	1.4843	.1250
S99GMT-125214098	1-1/4	1.2998	1.2900	2.1400	2.1220	.0980
S99GMT-150250125	1-1/2	1.6000	1.5500	2.6000	2.5500	.1250