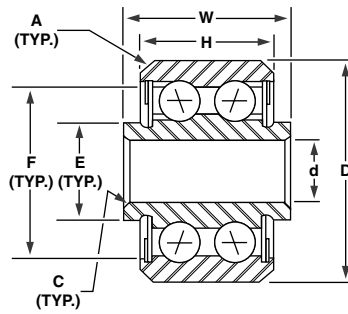




DPP- (AS27644) / MDPP- Series



Full ball complement (no retainers)

Notes:

1. Rings and balls are manufactured from premium quality AISI 52100 chrome steel.
2. Operating temperature range: -65 to +250 °F.
3. All bearings include nonremovable PTFE seals.
4. Bearings are lubricated with MIL-PRF-81322 grease, 80% minimum fill, unless otherwise specified.
5. Contact angles are divergent (‘\ /’).
6. External surfaces (except bore) are cadmium plated per AMS-QQ-P-416. All dimensions apply after plating.
7. Custom sizes, materials, tolerances, radial internal clearances, lubrication, plating, etc., are available upon request.
8. See "Airframe Part Numbering System" on page 5 for correct NHBB nomenclature.
9. All dimensions are in inches, unless otherwise specified.

Refer to the Qualifications and Manufacturing Schedule for a current list of the Precision Division's AS7949 qualifications and manufacturing capabilities.

DPP- (AS27644) — Qualified to SAE AS7949

NHBB BASIC P/N	MS27644 DASH NO.	BORE d	O.D. D	RING WIDTH		BALL COMPLEMENT		RING SHOULDER DIAMETER		RING CHAMFER X 45°		LOAD RATINGS (LBS.)				MAX. AXIAL PLAY	APPROX. WEIGHT	MAX. STARTING TORQUE [^]
				OUTER H	INNER W	NO.	DIA.	OUTER F	INNER E	OUTER A	INNER C	STATIC		DYNAMIC RADIAL ⁺ RING ROTATION				
												RADIAL LIMIT	THRUST LIMIT	INNER	OUTER			
		+0.0000 -0.0005	+0.0000 -0.0005	+0.000 -0.005	+0.000 -0.005			REF.	REF.	+0.015 -0.000	+0.015 -0.000	RADIAL LIMIT	AXIAL LIMIT			LBS.	OZ.-IN.	
DPP3	-3	.1900	.7774	.473	.495	20	5/32	.645	.302	.018	.005	2950	1700	2950	2830	.005	.04	1.0
DPP4	-4	.2500	.9014	.491	.620	22	5/32	.715	.411	.032	.005	5370	1800	3550	3020	.006	.06	1.0
DPP5	-5	.3125	1.2500	.687	.745	22	15/64	1.069	.469	.032	.015	11000	4000	7360	6250	.006	.17	1.5
DPP6	-6	.3750	1.4375	.794	.870	20	9/32	1.222	.551	.032	.015	15760	5300	9690	8120	.006	.26	2.0
DPP8	-8	.5000	1.6875	.856	.932	20	11/32	1.473	.733	.044	.015	23600	7800	14100	11600	.007	.38	3.0
DPP10	-10	.6250	1.9375	.920	.995	24	11/32	1.686	.891	.044	.015	28400	9400	15300	13100	.007	.53	4.5

Radial internal clearance: .0004 to .0010

MDPP- Precision Series

NHBB BASIC P/N	BORE d	O.D. D	RING WIDTH		BALL COMPLEMENT		RING SHOULDER DIAMETER		RING CHAMFER X 45°		LOAD RATINGS (LBS.)				MAX. AXIAL PLAY	APPROX. WEIGHT	MAX. STARTING TORQUE [^]
			OUTER H	INNER W	NO.	DIA.	OUTER F	INNER E	OUTER A	INNER C	STATIC		DYNAMIC RADIAL ⁺ RING ROTATION				
											RADIAL LIMIT	THRUST LIMIT	INNER	OUTER			
	+0.0000 -0.0003	+0.0000 -0.0004	+0.000 -0.005	+0.0000 -0.0025			REF.	REF.	+0.015 -0.000	+0.015 -0.000	RADIAL LIMIT	AXIAL LIMIT			LBS.	OZ.-IN.	
MDPP3	.1900	.7774	.473	.4950	20	5/32	.645	.302	.018	.005	2950	1700	2950	2830	.003	.04	1.0
MDPP4	.2500	.9014	.491	.6200	22	5/32	.715	.411	.032	.005	5370	1800	3550	3020	.003	.06	1.0
MDPP5	.3125	1.2500	.687	.7450	22	15/64	1.069	.469	.032	.015	11000	4000	7360	6250	.003	.17	1.5
MDPP6	.3750	1.4375	.794	.8700	20	9/32	1.222	.551	.032	.015	15760	5300	9690	8120	.003	.26	2.0
MDPP8	.5000	1.6875	.856	.9320	20	11/32	1.473	.733	.044	.015	23600	7800	14100	11600	.003	.38	3.0
MDPP10	.6250	1.9375	.920	.9950	24	11/32	1.686	.891	.044	.015	28400	9400	15300	13100	.003	.53	4.5

Radial internal clearance: .0002 to .0005

⁺Dynamic radial load ratings are for operation up to 250 °F. Reduce load ratings by 20% for 250 to 350 °F operation. Dynamic radial load ratings are based on an average life of 10,000 complete 90° cycles.

[^]Torque limits are for bearings lubricated with MIL-PRF-81322 grease. For bearings lubricated with MIL-PRF-23827, multiply torque limits by a factor of 1.2.