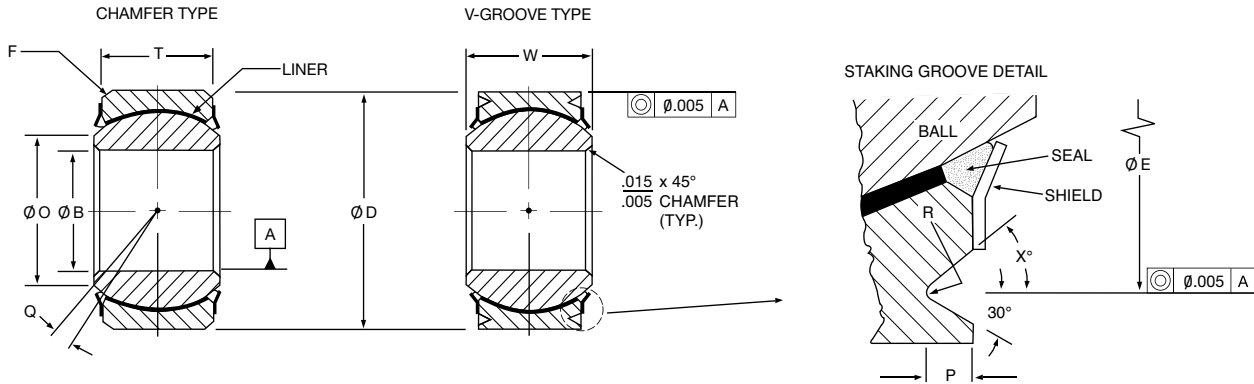


SPHERICAL BEARINGS – Self-Lubricating

Sealed Narrow



Part Number V-Grooved*	(B)	(D)	(W)	(T)	(O)	(F)	(Q)	(E)	(P)	(R)	(X)	No Load Rotational Breakaway Torque	Limit Static Radial Load	Limit Static Axial Load	Dynamic Osc. Radial Load	Weight	
	Bore Diameter	Outside Diameter	Ball Width	Race Width	Shoulder Diameter	Ball Diameter	Race Chamfered x45°	Mis- alignment	Pitch Diam.	Staking Groove Data							Inch - lbs.
	Inch +.0000 -.0005	Inch +.0000 -.0005	Inch +.000 -.002	Inch ±.005	Inch Min.	Inch Ref.	Inch +.000 -.010	Min.	Inch +.000 -.010	Inch +.000 -.015	Inch						
ADB3VN(L)	.1900	.5625	.281	.218	.293	.406	.020	5°	.502	.030	.005-.010	20° min.	0.25-8.0	3975	150	1500	.020
ADB4VN(L)	.2500	.6562	.343	.250	.364	.500	.020	5°	.596	.030	.005-.010	20° min.	0.25-8.0	6040	430	3320	.020
ADB5VN(L)	.3125	.7500	.375	.281	.419	.562	.020	5°	.652	.040	.005-.010	30°	1.0-20.0	8750	700	5460	.030
ADB5VAN(L)	.3125	.7500	.375	.281	.419	.562	—	5°	.662	.040	.005-.010	20°	1.0-20.0	8750	700	5460	.030
ADB6VN(L)	.3750	.8125	.406	.312	.475	.656	.030	4.5°	.714	.040	.010-.020	30°	1.0-20.0	10540	1100	6600	.040
ADB7VN(L)	.4375	.9062	.437	.343	.530	.718	.030	4°	.808	.040	.010-.020	30°	1.0-20.0	13200	1400	8050	.050
ADB8VN(L)	.5000	1.0000	.500	.390	.600	.813	.030	4°	.878	.060	.010-.020	30°	1.0-20.0	17900	2100	10400	.070
ADB9VN(L)	.5625	1.0937	.562	.437	.670	.875	.030	4°	.972	.060	.010-.020	30°	1.0-20.0	23200	3680	13000	.090
ADB10VN(L)	.6250	1.1875	.625	.500	.739	.968	.030	4°	1.065	.060	.010-.020	30°	1.0-20.0	30500	4720	16450	.120
ADB12VN(L)	.7500	1.4375	.750	.593	.920	1.187	.040	4°	1.315	.060	.010-.020	30°	1.0-20.0	46400	6750	23600	.210
ADB14VN(L)	.8750	1.5625	.875	.703	.980	1.312	.040	4°	1.440	.060	.010-.020	30°	1.0-30.0	62200	9350	30250	.270
ADB16VN(L)	1.0000	1.7500	1.000	.797	1.118	1.500	.040	4.5°	1.628	.060	.010-.020	30°	1.0-30.0	82200	12160	38000	.390
ADB18VN(L)	1.1250	2.1250	1.125	.900	1.334	1.750	.040	4°	2.003	.060	.010-.020	30°	1.0-30.0	105880	13500	42350	.720
ADB20VN(L)	1.2500	2.3125	1.250	1.000	1.473	1.937	.040	4°	2.190	.060	.010-.020	30°	1.0-30.0	131230	16930	52490	.930
ADB22VN(L)	1.3750	2.5625	1.375	1.100	1.654	2.156	.040	4°	2.440	.060	.010-.020	30°	1.0-30.0	161700	20750	64680	1.280
ADB24VN(L)	1.5000	2.8125	1.500	1.200	1.794	2.344	.040	4°	2.690	.060	.010-.020	30°	1.0-30.0	192780	24950	77110	1.670

*For chamfered version, delete 'V' from part number.

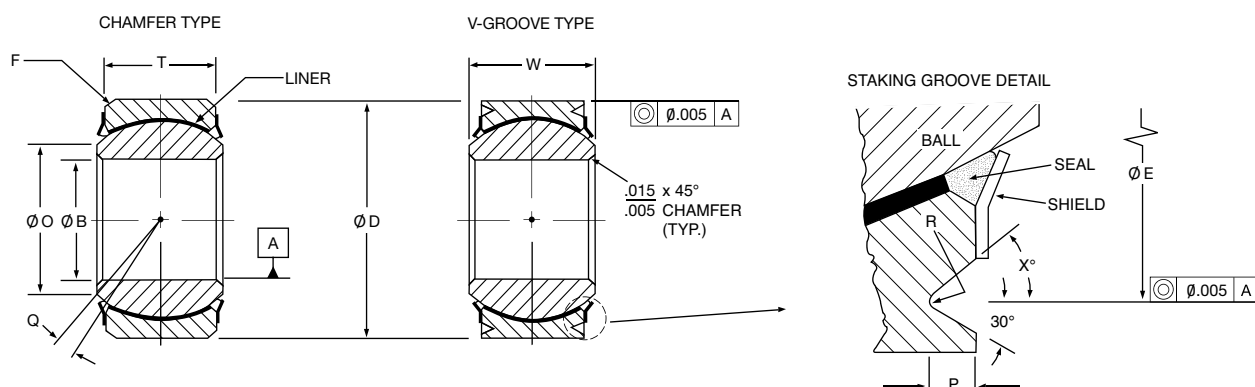
Notes:

- For more information on sealed bearings, see page 70.
- Temperature: Operating temperature range -65° to 325°F. Broader temperature capabilities are achievable.
- Options: Bearings with PH13-8Mo balls will be designated by "13-8" suffix (Example: ADB16VN13-8(L)). For outside race diameter with cadmium plate per AMS-QQ-P-416, Type II, Class 2, add suffix "P" (Example: ADW16VNP(L)).
- Qualification: Liner approved to AS81820.

Materials

Part No.	Ball	Race	Liner
Catalog No.	CRES 440C AMS 5630 Rc55-62	CRES 17-4PH AMS 5643 Rc28-37	PTFE/Fabric Bonded to Race I.D. No Lub. Required
Catalog No. + 13-8	CRES PH13-8Mo AMS 5629 Rc43-47	CRES 17-4PH AMS 5643 Rc28-37	PTFE/Fabric Bonded to Race I.D. No Lub. Required

Sealed Wide



Part Number V-Grooved*	(B)	(D)	(W)	(T)	(O)	Ball Diameter	(F)	(Q)	(E)	(P)	(R)	(X)	No Load Rotational Breakaway Torque	Limit Static Radial Load	Limit Static Axial Load	Dynamic Osc. Radial Load	Weight
	Bore Diameter	Outside Diameter	Ball Width	Race Width	Shoulder Diameter		Race Chamfered x 45°	Mis-alignment	Pitch Diam.	Staking Groove Data							
	Inch	Inch	Inch	Inch	Inch	Inch	Inch	Min.	Inch	Inch	Inch		Inch - lbs.	lbs.	lbs.	lbs.	lbs.
	+ .0000	+ .0000	+ .000	± .005	Min.	Ref.	+ .000		+ .000	+ .000							
	- .0005	- .0005	- .002				- .010		- .010	- .015							
ADW3VN(L)	.1900	.6250	.437	.327	.300	.531	.025	7.5°	.565	.030	.005-.015	20° min.	0.25-8.0	2500	1770	4900	.031
ADW4VN(L)	.2500	.6250	.437	.327	.300	.531	.025	7.5°	.565	.030	.005-.015	20° min.	0.25-8.0	5500	1770	4900	.031
ADW5VN(L)	.3125	.6875	.437	.317	.360	.593	.025	7°	.627	.030	.005-.015	30°	1.0-20.0	9400	1640	6050	.035
ADW6VN(L)	.3750	.8125	.500	.406	.466	.687	.030	4°	.714	.040	.010-.020	30°	1.0-20.0	13700	2630	8310	.060
ADW7VN(L)	.4375	.9375	.562	.442	.537	.781	.030	5°	.839	.040	.010-.020	30°	1.0-20.0	20700	3650	11750	.080
ADW7V52N(L)	.4375	.9062	.562	.442	.537	.781	—	5°	.808	.040	.010-.020	30°	1.0-20.0	19700	3650	11750	.080
ADW8VN(L)	.5000	1.0000	.625	.505	.607	.875	.030	4.5°	.902	.040	.010-.020	30°	1.0-20.0	21400	4970	14950	.100
ADW9VN(L)	.5625	1.1250	.687	.536	.721	1.000	.030	5°	1.027	.040	.010-.020	30°	1.0-20.0	26600	5370	18100	.135
ADW10VN(L)	.6250	1.1875	.750	.567	.747	1.062	.030	6°	1.089	.040	.010-.020	30°	1.0-20.0	29000	6130	20250	.160
ADW12VN(L)	.7500	1.3750	.875	.630	.845	1.250	.040	7.5°	1.253	.060	.010-.020	30°	1.0-20.0	37000	7730	26200	.240
ADW14VN(L)	.8750	1.6250	.875	.755	.995	1.375	.040	3°	1.503	.060	.010-.020	30°	1.0-30.0	65200	10800	33600	.350
ADW16VN(L)	1.0000	2.1250	1.375	1.005	1.269	1.875	.040	6°	2.003	.060	.010-.020	30°	1.0-30.0	104000	19300	56250	.970
ADW18VN(L)	1.1250	2.2500	1.437	1.067	1.338	1.968	.040	7°	2.128	.060	.010-.020	30°	1.0-30.0	142570	19640	57000	1.000
ADW20VN(L)	1.2500	2.3750	1.500	1.130	1.460	2.093	.040	6.5°	2.253	.060	.010-.020	30°	1.0-30.0	159200	21970	63680	1.120
ADW20-5VN(L)	1.2500	2.0000	1.093	.942	1.406	1.781	.040	3°	1.878	.060	.010-.020	30°	1.0-30.0	112360	14890	44940	.564
ADW22VN(L)	1.3750	2.5625	1.687	1.223	1.535	2.281	.040	7.5°	2.440	.060	.010-.020	30°	1.0-30.0	190000	25970	76000	1.390
ADW24VN(L)	1.5000	2.6875	1.687	1.223	1.693	2.390	.040	7°	2.567	.060	.010-.020	30°	1.0-30.0	199000	25970	79640	1.480

*For chamfered version, delete 'V' from part number.

Notes:

- For more information on sealed bearings, see page 70.
- Temperature: Operating temperature range -65° to 325°F. Broader temperature capabilities are achievable.
- Options: Bearings with PH13-8Mo balls will be designated by "13-8" suffix (Example: ADB16VN13-8(L)). For outside race diameter with cadmium plate per AMS-QQ-P-416, Type II, Class 2, add suffix "P" (Example: ADW16VNP(L)).
- Qualification: Liner approved to AS81820.

Materials

Part No.	Ball	Race	Liner
Catalog No.	CRES 440C AMS 5630 Rc55-62	CRES 17-4PH AMS 5643 Rc28-37	PTFE/Fabric Bonded to Race I.D. No Lub. Required
Catalog No. + 13-8	CRES PH13-8Mo AMS 5629 Rc43-47	CRES 17-4PH AMS 5643 Rc28-37	PTFE/Fabric Bonded to Race I.D. No Lub. Required