

ASR

Single Row Self Alining Bearing

2023/03/22

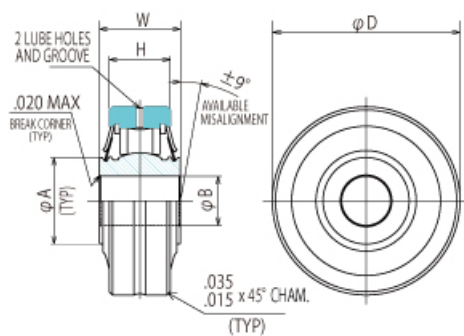
Feature of a Product

Self Alining

Material

(P/N)	OUTER RING	INNER RING	ROLLER	SHIELD	SEAL
ASR	52100 Cadmium Plated	52100 Cadmium Plate	52100	300 or 400 CRES	PTFE/Glass
ASR-CR	440C Cadmium Plated	440C Cadmium Plate	440C	300 or 400 CRES	PTFE/Glass

Overall View



Part Number

ASR **XX** **CR** **H** **R** **-1** **-A** **-Q**
 Basic Part No. Bore Dia. (Code in Multiples of 1/16 Inches) Basic Part No. "Q" indicates AMS-QQ-P-416 Ty.II, Cl.2

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material Code (See material List) Dimensional variables

Absence of "H" Indicates MIL-PRF-81322 GREASE
"H" Indicates MIL-PRF-23827 Grease

Absence of "R" or "P" Indicates Standard Clearance
"R" Indicates Reduced Clearance
"P" Indicates Preload

Dimension

Part No.	B +.0000/-0.0005 [Inch]	D +.000/-0.050 [Inch]	W +.000/-0.005 [Inch]	H +.000/-0.015 [Inch]	A ±.005 [Inch]	P°lower limit
ASR3-1	0.1900	1.0000	0.500	0.344	0.420	10.0
ASR3-1A	0.1900	1.0000	0.500	0.344	0.420	10.0
ASR4-1	0.2500	1.0000	0.500	0.344	0.420	10.0
ASR4-1A	0.2500	1.0000	0.500	0.344	0.420	10.0
ASR4-2A	0.2500	0.7500	0.313	0.250	0.384	5.0
ASR4-3A	0.2500	0.8750	0.313	0.250	0.520	5.0
ASR4-4A	0.2500	0.9014	0.484	0.335	0.380	10.0
ASR5-1	0.3125	1.2500	0.588	0.375	0.550	10.0
ASR5-1A	0.3125	1.2500	0.558	0.375	0.550	10.0
ASR6-1	0.3750	1.4375	0.620	0.469	0.660	10.0
ASR6-1A	0.3750	1.4375	0.620	0.469	0.660	10.0
ASR6-2A	0.3750	0.8750	0.313	0.250	0.520	5.0
ASR6-3A	0.3750	1.5000	0.660	0.578	0.800	5.0
ASR7-1	0.4375	1.5000	0.812	0.625	0.660	10.0
ASR7-1A	0.4375	1.5000	0.812	0.625	0.660	10.0
ASR8-1	0.5000	1.6250	0.750	0.687	0.810	2.5
ASR8-1A	0.5000	1.6250	0.750	0.687	0.810	2.5
ASR9-2A	0.5625	1.6250	0.750	0.687	0.810	2.5
ASR10-2A	0.6250	1.1250	0.313	0.250	0.770	3.5
ASR10-3A	0.6250	1.1250	0.375	0.315	0.770	3.5
ASR16-2A	1.0000	2.0000	0.812	0.625	1.325	5.0
ASR22-2A	1.3750	2.7500	0.650	0.500	1.860	1.0
ASR3CR-1	0.1900	1.0000	0.500	0.344	0.420	10.0
ASR3CR-1A	0.1900	1.0000	0.500	0.344	0.420	10.0
ASR4CR-1	0.2500	1.0000	0.500	0.344	0.420	10.0
ASR4CR-1A	0.2500	1.0000	0.500	0.344	0.420	10.0

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ASR4CR-2A	0.2500	0.7500	0.313	0.250	0.384	5.0
ASR4CR-3A	0.2500	0.8750	0.313	0.250	0.520	5.0
ASR4CR-4A	0.2500	0.9014	0.484	0.335	0.380	10.0
ASR5CR-1	0.3125	1.2500	0.588	0.375	0.550	10.0
ASR5CR-1A	0.3125	1.2500	0.558	0.375	0.550	10.0
ASR6CR-1	0.3750	1.4375	0.620	0.469	0.660	10.0
ASR6CR-1A	0.3750	1.4375	0.620	0.469	0.660	10.0
ASR6CR-2A	0.3750	0.8750	0.313	0.250	0.520	5.0
ASR6CR-3A	0.3750	1.5000	0.660	0.578	0.800	5.0
ASR7CR-1	0.4375	1.5000	0.812	0.625	0.660	10.0
ASR7CR-1A	0.4375	1.5000	0.812	0.625	0.660	10.0
ASR8CR-1	0.5000	1.6250	0.750	0.687	0.810	2.5
ASR8CR-1A	0.5000	1.6250	0.750	0.687	0.810	2.5
ASR9CR-2A	0.5625	1.6250	0.750	0.687	0.810	2.5
ASR10CR-2A	0.6250	1.1250	0.313	0.250	0.770	3.5
ASR10CR-3A	0.6250	1.1250	0.375	0.315	0.770	3.5
ASR16CR-2A	1.0000	2.0000	0.812	0.625	1.325	5.0
ASR22CR-2A	1.3750	2.7500	0.650	0.500	1.860	1.0

Part No.	LIMIT LOAD RATING RADIAL [LBS]	LIMIT LOAD RATING AXIAL [LBS]	DYNAMIC LOAD RATING RADIAL [LBS]	NET WEIGHT [LBS]	INTERNAL FIT STANDARD RADIAL CLEARANCE lower limit [Inch]	INTERNAL FIT STANDARD RADIAL CLEARANCE upper limit [Inch]	INTERNAL FIT REDUCED RADIAL CLEARANCE lower limit [Inch]
ASR3-1	3000	300	2650	0.07	0.0006	0.0014	
ASR3-1A	3000	300	2650	0.07	0.0006	0.0014	0.0002
ASR4-1	3000	300	2650	0.06	0.0006	0.0014	
ASR4-1A	3000	300	2650	0.06	0.0006	0.0014	0.0002
ASR4-2A	1200	120	1000	0.03	0.0006	0.0014	0.0002
ASR4-3A	2060	200	1710	0.04	0.0006	0.0014	0.0002
ASR4-4A	1900	190	1580	0.05	0.0006	0.0014	0.0002
ASR5-1	4210	420	3490	0.12	0.0006	0.0014	
ASR5-1A	4210	420	3490	0.12	0.0006	0.0014	0.0002
ASR6-1	6160	610	5120	0.17	0.0006	0.0014	
ASR6-1A	6160	610	5120	0.17	0.0006	0.0014	0.0002
ASR6-2A	2060	200	1710	0.04	0.0006	0.0014	0.0002
ASR6-3A	8890	880	7380	0.16	0.0006	0.0014	0.0002
ASR7-1	7900	790	6550	0.30	0.0006	0.0014	
ASR7-1A	7900	790	6550	0.30	0.0006	0.0014	0.0002
ASR8-1	11000	1100	9240	0.37	0.0006	0.0014	

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ASR8-1	11900	1190	9940	0.37	0.0006	0.0014	
ASR8-1A	11900	1190	9940	0.37	0.0006	0.0014	0.0002
ASR9-2A	11900	1190	9940	0.35	0.0006	0.0014	0.0002
ASR10-2A	2130	210	1760	0.05	0.0006	0.0014	0.0002
ASR10-3A	3920	390	3260	0.06	0.0006	0.0014	0.0002
ASR16-2A	14900	1490	12300	0.48	0.0006	0.0014	0.0002
ASR22-2A	17900	1790	14800	0.64	0.0008	0.0016	0.0004
ASR3CR-1	3000	300	2650	0.07	0.0006	0.0014	
ASR3CR-1A	3000	300	2650	0.07	0.0006	0.0014	0.0002
ASR4CR-1	3000	300	2650	0.06	0.0006	0.0014	
ASR4CR-1A	3000	300	2650	0.06	0.0006	0.0014	0.0002
ASR4CR-2A	1200	120	1000	0.03	0.0006	0.0014	0.0002
ASR4CR-3A	2060	200	1710	0.04	0.0006	0.0014	0.0002
ASR4CR-4A	1900	190	1580	0.05	0.0006	0.0014	0.0002
ASR5CR-1	4210	420	3490	0.12	0.0006	0.0014	
ASR5CR-1A	4210	420	3490	0.12	0.0006	0.0014	0.0002
ASR6CR-1	6160	610	5120	0.17	0.0006	0.0014	
ASR6CR-1A	6160	610	5120	0.17	0.0006	0.0014	0.0002
ASR6CR-2A	2060	200	1710	0.04	0.0006	0.0014	0.0002
ASR6CR-3A	8890	880	7380	0.16	0.0006	0.0014	0.0002
ASR7CR-1	7900	790	6550	0.30	0.0006	0.0014	
ASR7CR-1A	7900	790	6550	0.30	0.0006	0.0014	0.0002
ASR8CR-1	11900	1190	9940	0.37	0.0006	0.0014	
ASR8CR-1A	11900	1190	9940	0.37	0.0006	0.0014	0.0002
ASR9CR-2A	11900	1190	9940	0.35	0.0006	0.0014	0.0002
ASR10CR-2A	2130	210	1760	0.05	0.0006	0.0014	0.0002
ASR10CR-3A	3920	390	3260	0.06	0.0006	0.0014	0.0002
ASR16CR-2A	14900	1490	12300	0.48	0.0006	0.0014	0.0002

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Part No.	INTERNAL FIT REDUCED RADIAL CLEARANCE upper limit [Inch]	INTERNAL FIT PRELOAD RADIAL lower limit [LBS]	INTERNAL FIT PRELOAD RADIAL upper limit [LBS]	MS NO.	(Memo)			
ASR22CR-2A	17900	1790	14800	0.64	0.0008	0.0016	0.0004	
ASR3-1					MS21431-3			
ASR3-1A	0.0010	0	120					
ASR4-1					MS21431-4			
ASR4-1A	0.0010	0	120					
ASR4-2A	0.0010	0	48					
ASR4-3A	0.0010	0	82					
ASR4-4A	0.0010	0	76					
ASR5-1					MS24431-5			
ASR5-1A	0.0010	0	168					
ASR6-1					MS21431-6			
ASR6-1A	0.0010	0	246					
ASR6-2A	0.0010	0	82					
ASR6-3A	0.0010	0	356					
ASR7-1					MS21431-7			
ASR7-1A	0.0010	0	316					
ASR8-1					MS21431-8			
ASR8-1A	0.0010	0	476					
ASR9-2A	0.0010	0	476					
ASR10-2A	0.0010	0	85					
ASR10-3A	0.0010	0	157					
ASR16-2A	0.0010	0	596					
ASR22-2A	0.0012	0	716				*D: tolerance Inch: +.0000/- .0007	
ASR3CR-1					MS21431-3			
ASR3CR-1A	0.0010	0	120					
ASR4CR-1					MS21431-4			

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ASR4CR-1A	0.0010	0	120		
ASR4CR-2A	0.0010	0	48		
ASR4CR-3A	0.0010	0	82		
ASR4CR-4A	0.0010	0	76		
ASR5CR-1				MS24431-5	
ASR5CR-1A	0.0010	0	168		
ASR6CR-1				MS21431-6	
ASR6CR-1A	0.0010	0	246		
ASR6CR-2A	0.0010	0	82		
ASR6CR-3A	0.0010	0	356		
ASR7CR-1				MS21431-7	
ASR7CR-1A	0.0010	0	316		
ASR8CR-1				MS21431-8	
ASR8CR-1A	0.0010	0	476		
ASR9CR-2A	0.0010	0	476		
ASR10CR-2A	0.0010	0	85		
ASR10CR-3A	0.0010	0	157		
ASR16CR-2A	0.0010	0	596		
ASR22CR-2A	0.0012	0	716		

Notes

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1. Shaded area indicates AS Bearings to AS8914.
2. For load capacities on all-stainless bearing (CR-series) consult MinebeaMitsumi engineering department.
3. Plating: Exposed surfaces except bore.