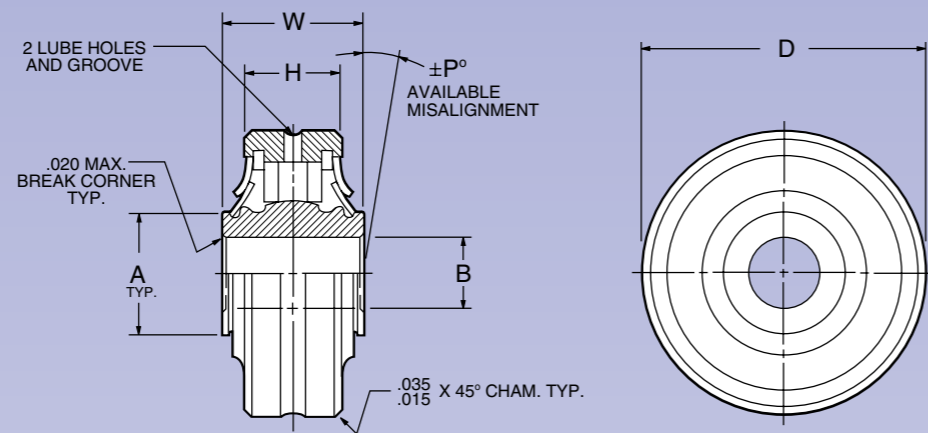
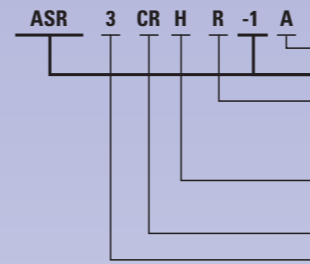


Single Row Self-Aligning Bearing

ASR Series MS21431



NMB PART NUMBER SYSTEM



SEE NOTE 3
 BASIC PART NUMBER
 ABSENCE OF "R" OR "P" INDICATES STANDARD CLEARANCE
 "R" INDICATES REDUCED CLEARANCE
 "P" INDICATES PRELOAD
 ABSENCE OF "H" INDICATES MIL-G-81322 GREASE
 "H" INDICATES MIL-G-23827 GREASE
 MATERIAL CODE (SEE MATERIAL LIST)
 BORE DIA. (CODE IN MULTIPLES OF 1/16 INCHES)

MS PART NUMBER SYSTEM



NMB BASIC PART NO.	B +0.0000 -0.0005 (0) (-0.0127)	D +0.0000 -0.0005 (0) (-0.0127)	W +0.000 -0.005 (0) (-0.127)	H +0.000 -0.005 (0) (-0.127)	A ±0.005 (±0.127)	P° MIN.
ASR3-1	.1900 (4.8260)	1.0000 (25.4000)	.500 (12.700)	.344 (8.738)	.420 (10.668)	10
ASR3-1A	.1900 (4.8260)	1.0000 (25.4000)	.500 (12.700)	.344 (8.738)	.420 (10.668)	10
ASR4-1	.2500 (6.3500)	1.0000 (25.4000)	.500 (12.700)	.344 (8.738)	.420 (10.668)	10
ASR4-1A	.2500 (6.3500)	1.0000 (25.4000)	.500 (12.700)	.344 (8.738)	.420 (10.668)	10
ASR4-2A	.2500 (6.3500)	.7500 (19.0500)	.313 (7.950)	.250 (6.350)	.384 (9.754)	5
ASR4-3A	.2500 (6.3500)	.8750 (22.2250)	.313 (7.950)	.250 (6.350)	.520 (13.208)	5
ASR4-4A	.2500 (6.3500)	.9014 (22.8956)	.484 (12.294)	.335 (8.509)	.380 (9.652)	10
ASR5-1	.3125 (7.9375)	1.2500 (31.7500)	.588 (14.935)	.375 (9.525)	.550 (13.970)	10
ASR5-1A	.3125 (7.9375)	1.2500 (31.7500)	.588 (14.173)	.375 (9.525)	.550 (13.970)	10
ASR6-1	.3750 (9.5250)	1.4375 (36.5125)	.620 (15.748)	.469 (11.913)	.660 (16.764)	10
ASR6-1A	.3750 (9.5250)	1.4375 (36.5125)	.620 (15.748)	.469 (11.913)	.660 (16.764)	10

LIMIT LOAD RATING		DYNAMIC LOAD RATING RADIAL LBS (daN)	NET WEIGHT LBS (kg)	INTERNAL FIT			MS NO.
RADIAL LBS (daN)	AXIAL LBS (daN)			STANDARD RADIAL CLEARANCE	REDUCED RADIAL CLEARANCE	PRELOAD RADIAL LBS (daN)	
3,000 (1,334)	300 (133)	2,650 (1,178)	.07 (0.032)	.0006-.0014 (0.015-0.036)			MS21431-3
3,000 (1,334)	300 (133)	2,650 (1,178)	.07 (0.032)	.0006-.0014 (0.015-0.036)	.0002-.0010 (0.005-0.025)	0-120 (0-53)	
3,000 (1,334)	300 (133)	2,650 (1,178)	.06 (0.027)	.0006-.0014 (0.015-0.036)			MS21431-4
3,000 (1,334)	300 (133)	2,650 (1,178)	.06 (0.027)	.0006-.0014 (0.015-0.036)	.0002-.0010 (0.005-0.025)	0-120 (0-53)	
1,200 (533)	120 (53)	1,000 (445)	.03 (0.014)	.0006-.0014 (0.015-0.036)	.0002-.0010 (0.005-0.025)	0-48 (0-21)	
2,060 (916)	200 (89)	1,710 (760)	.04 (0.018)	.0006-.0014 (0.015-0.036)	.0002-.0010 (0.005-0.025)	0-82 (0-37)	
1,900 (845)	190 (84)	1,580 (702)	.05 (0.023)	.0006-.0014 (0.015-0.036)	.0002-.0010 (0.005-0.025)	0-76 (0-34)	
4,210 (1,871)	420 (187)	3,490 (1,551)	.12 (0.054)	.0006-.0014 (0.015-0.036)			MS21431-5
4,210 (1,871)	420 (187)	3,490 (1,551)	.12 (0.054)	.0006-.0014 (0.015-0.036)	.0002-.0010 (0.005-0.025)	0-168 (0-75)	
6,160 (2,738)	610 (271)	5,120 (2,276)	.17 (0.077)	.0006-.0014 (0.015-0.036)			MS21431-6
6,160 (2,738)	610 (271)	5,120 (2,276)	.17 (0.077)	.0006-.0014 (0.015-0.036)	.0002-.0010 (0.005-0.025)	0-246 (0-110)	

FIGURES IN PARENTHESES () INDICATE METRIC VALUES

NOTES

- Shaded areas indicate MS bearings to MIL-B-8914.
- For load capacities on all-stainless bearings (CR-series) consult NMB engineering department.
- Letter suffix indicates dimensional variables.
- For roundness of O.D & I.D refer to Table of Roundness Limits in the Engineering Data (page 44).
- Plating : Exposed surfaces except bore.

- For other than standard plating add the following suffix to the Basic Part Number:
Q = QQ-P-416, Type II, Class 2 (example: ASR3-1A-Q)
- Revision Pending - parts will be plated in accordance to latest MS revision.

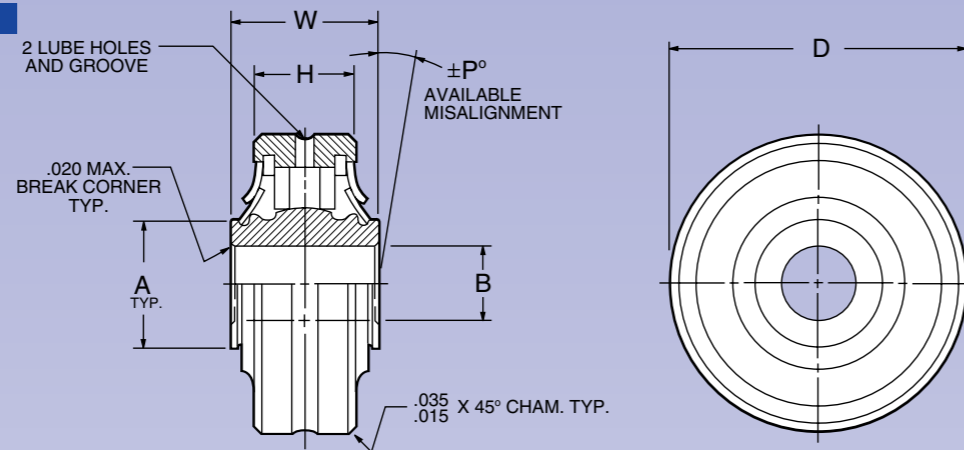
MATERIALS

DESIGNATION	OUTER RING	INNER RING	ROLLER	SHEILD	SEAL
BASIC PART No.	52100 STEEL Cadmium Plated (QQ-P-416, Type I, Class 2)	52100 STEEL Cadmium Plated (QQ-P-416, Type I, Class 2)	52100 STEEL		
BASIC PART No.+"CR"	440C CRES Cadmium Plated (QQ-P-416, Type II, Class 2)	440C CRES Cadmium Plated (QQ-P-416, Type II, Class 2)	440C CRES	300 or 400 SERIES CRES	PTFE/GLASS
MS BEARING	52100 STEEL Cadmium Plated (QQ-P-416, Type I, Class 2)	52100 STEEL Cadmium Plated (QQ-P-416, Type I, Class 2)	52100 STEEL		

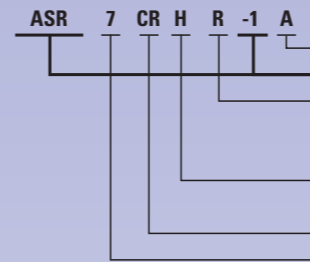
NMB reserves the right to change specifications and other information included in this catalog without notice.

Single Row Self-Aligning Bearing

ASR Series MS21431



NMB PART NUMBER SYSTEM



SEE NOTE 3
 BASIC PART NUMBER
 ABSENCE OF "R" OR "P" INDICATES STANDARD CLEARANCE
 "R" INDICATES REDUCED CLEARANCE
 "P" INDICATES PRELOAD
 ABSENCE OF "H" INDICATES MIL-G-81322 GREASE
 "H" INDICATES MIL-G-23827 GREASE
 MATERIAL CODE (SEE MATERIAL LIST)
 BORE DIA. (CODE IN MULTIPLES OF 1/16 INCHES)

MS PART NUMBER SYSTEM



NMB BASIC PART NO.	B +0.0000 -0.0005 (0 -0.0127)	D +0.0000 -0.0005 (0 -0.0127)	W +0.000 -0.005 (0 -0.127)	H +0.000 -0.005 (0 -0.127)	A ±0.005 (±0.127)	P° MIN.
ASR6-2A	.3750 (9.5250)	.8750 (22.2250)	.313 (7.950)	.250 (6.350)	.520 (13.208)	5
ASR6-3A	.3750 (9.5250)	1.5000 (38.1000)	.660 (16.764)	.578 (14.681)	.800 (20.320)	5
ASR7-1	.4375 (11.1125)	1.5000 (38.1000)	.812 (20.625)	.625 (15.875)	.660 (16.764)	10
ASR7-1A	.4375 (11.1125)	1.5000 (38.1000)	.812 (20.625)	.625 (15.875)	.660 (16.764)	10
ASR8-1	.5000 (12.7000)	1.6250 (41.2750)	.750 (19.050)	.687 (17.450)	.810 (20.574)	2.5
ASR8-1A	.5000 (12.7000)	1.6250 (41.2750)	.750 (19.050)	.687 (17.450)	.810 (20.574)	2.5
ASR9-2A	.5625 (14.2875)	1.6250 (41.2750)	.750 (19.050)	.687 (17.450)	.810 (20.574)	2.5
ASR10-2A	.6250 (15.8750)	1.1250 (28.5750)	.313 (7.950)	.250 (6.350)	.770 (19.558)	3.5
ASR10-3A	.6250 (15.8750)	1.1250 (28.5750)	.375 (9.525)	.315 (8.001)	.770 (19.558)	3.5
ASR16-2A	1.0000 (25.4000)	2.0000 (50.8000)	.812 (20.625)	.625 (15.875)	1.325 (33.655)	5
ASR22-2A	1.3750 (34.9250)	2.7500* (69.8500)	.650 (16.510)	.500 (12.700)	1.860 (47.244)	1

*tolerance +.0000 0
-.0007 (-0.0178)

LIMIT LOAD RATING		DYNAMIC LOAD RATING RADIAL LBS (daN)	NET WEIGHT LBS (kg)	INTERNAL FIT			MS NO.
RADIAL LBS (daN)	AXIAL LBS (daN)			STANDARD RADIAL CLEARANCE	REDUCED RADIAL CLEARANCE	PRELOAD RADIAL LBS (daN)	
2,060 (916)	200 (89)	1,710 (760)	.04 (0.018)	.0006-.0014 (0.015-0.036)	.0002-.0010 (0.005-0.025)	0-82 (0-37)	
8,890 (3,952)	880 (391)	7,380 (3,281)	.16 (0.073)	.0006-.0014 (0.015-0.036)	.0002-.0010 (0.005-0.025)	0-356 (0-158)	
7,900 (3,512)	790 (351)	6,550 (2,912)	.30 (0.136)	.0006-.0014 (0.015-0.036)			MS21431-7
7,900 (3,512)	790 (351)	6,550 (2,912)	.30 (0.136)	.0006-.0014 (0.015-0.036)	.0002-.0010 (0.005-0.025)	0-316 (0-140)	
11,900 (5,290)	1,190 (529)	9,940 (4,419)	.37 (0.168)	.0006-.0014 (0.015-0.036)			MS21431-8
11,900 (5,290)	1,190 (529)	9,940 (4,419)	.37 (0.168)	.0006-.0014 (0.015-0.036)	.0002-.0010 (0.005-0.025)	0-476 (0-212)	
11,900 (5,290)	1,190 (529)	9,940 (4,419)	.35 (0.159)	.0006-.0014 (0.015-0.036)	.0002-.0010 (0.005-0.025)	0-476 (0-212)	
2,130 (947)	210 (93)	1,760 (782)	.05 (0.023)	.0006-.0014 (0.015-0.036)	.0002-.0010 (0.005-0.025)	0-85 (0-38)	
3,920 (1,743)	390 (173)	3,260 (1,449)	.06 (0.027)	.0006-.0014 (0.015-0.036)	.0002-.0010 (0.005-0.025)	0-157 (0-70)	
14,900 (6,623)	1,490 (662)	12,300 (5,468)	.48 (0.218)	.0006-.0014 (0.015-0.036)	.0002-.0010 (0.005-0.025)	0-596 (0-265)	
17,900 (7,957)	1,790 (796)	14,800 (6,579)	.64 (0.290)	.0008-.0016 (0.020-0.041)	.0004-.0012 (0.010-0.031)	0-716 (0-318)	

FIGURES IN PARENTHESES () INDICATE METRIC VALUES

NOTES

- Shaded areas indicate MS bearings to MIL-B-8914.
- For load capacities on all-stainless bearings (CR-series) consult NMB engineering department.
- Letter suffix indicates dimensional variables.
- For roundness of O.D & I.D refer to Table of Roundness Limits in the Engineering Data (page 44).
- Plating : Exposed surfaces except bore.

- For other than standard plating add the following suffix to the Basic Part Number:
Q = QQ-P-416, Type II, Class 2 (example: ASR7-1A-Q)
- Revision Pending - parts will be plated in accordance to latest MS revision.

MATERIALS

DESIGNATION	OUTER RING	INNER RING	ROLLER	SHIELD	SEAL
BASIC PART No.	52100 STEEL Cadmium Plated (QQ-P-416, Type I, Class 2)	52100 STEEL Cadmium Plated (QQ-P-416, Type I, Class 2)	52100 STEEL		
BASIC PART No.+"CR" 	440C CRES Cadmium Plated (QQ-P-416, Type II, Class 2)	440C CRES Cadmium Plated (QQ-P-416, Type II, Class 2)	440C CRES	300 or 400 SERIES CRES	PTFE/GLASS
MS BEARING	52100 STEEL Cadmium Plated (QQ-P-416, Type I, Class 2)	52100 STEEL Cadmium Plated (QQ-P-416, Type I, Class 2)	52100 STEEL		

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