

INCH-POUND

A-A-55600B  
20 September 2007  
SUPERSEDING  
A-A-55600A  
25 January 1996

## COMMERCIAL ITEM DESCRIPTION

BEARINGS, ROLLER, CYLINDRICAL, SINGLE ROW  
OF ROLLERS, TWO ROLLER RETAINING RIBS ON  
INNER RING, TWO ROLLER RETAINING RIBS ON  
OUTER RING, TWO DIRECTION LOCATING

The General Services Administration has authorized the use of this commercial item description for all federal agencies.

1. **SCOPE.** This commercial item description (CID) covers the requirements for cylindrical roller bearings, single row of rollers, two roller retaining ribs on inner ring, two roller retaining ribs on outer ring, two direction locating.

2. **CLASSIFICATION.** The cylindrical roller bearings shall be classified by the sizes, cage materials, and precision tolerances listed below:

Size - bearing dimensions (see table I and figure 1)

Cage materials (see table II)

Precision tolerances (see table III)

### 3. SALIENT CHARACTERISTICS

3.1 Dimensions. The bearings shall be of the dimensions corresponding to the dash number in table I and the bore, outside diameter, overall width, and shaft housing and fillet radius corresponding to figure 1 (see 7.3(b)).

Beneficial comments, recommendations, additions, deletions, clarifications, etc. and any data that may improve this document should be sent to: STDZNMGT@dla.mil or Defense Supply Center Richmond (DSCR), ATTN: DSCR-VEB, 8000 Jefferson Davis Highway, Richmond, VA 23297-5616.

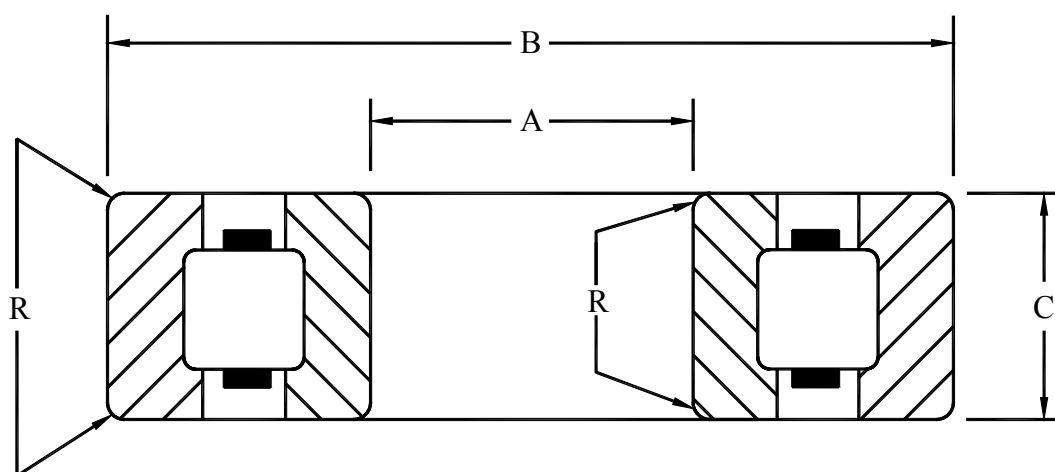
A-A-55600B

TABLE I. Dimensional requirements.

Dash no.	A Bore (mm)	B Outside diameter (mm)	C Overall width (mm)	R Shaft & housing fillet radius (mm)	Recommended shoulder diameter		Load rating (lbs.)		Interchangeable specification
					Shaft (mm)	Housing (mm)			
				Max.	Min.	Max.	Dynamic	Static	
01	17	40	12	0.025	0.84	1.44	1,750	1,550	MS19079-1
02	17	47	14	0.040	0.90	1.67	2,600	2,360	MS19079-2
03	20	52	15	0.040	1.02	1.97	3,300	2,600	MS19079-3
04	25	52	15	0.040	1.22	1.86	2,000	1,850	MS19079-4
05	25	62	17	0.040	1.25	2.20	4,350	3,300	MS19079-5
06	30	62	18	0.040	1.42	2.24	3,600	3,400	MS19079-6
07	30	72	19	0.040	1.50	2.55	5,700	4,450	MS19079-7
08	35	72	17	0.040	1.66	2.61	5,150	4,200	MS19079-8
09	35	80	21	0.060	1.73	2.83	6,950	5,600	MS19079-9
10	40	80	18	0.040	1.87	2.86	6,750	6,550	MS19079-10
11	40	90	23	0.060	1.94	3.19	8,400	6,700	MS19079-11
12	45	95	19	0.040	2.08	3.06	7,100	6,000	MS19079-12
13	45	100	25	0.060	2.20	3.54	12,300	9,800	MS19079-13
14	50	110	27	0.080	2.42	3.90	14,700	12,300	MS19079-14
15	55	100	21	0.060	2.52	3.60	8,500	7,450	MS19079-15
16	55	120	29	0.080	2.65	4.25	16,800	13,700	MS19079-16
17	60	110	22	0.060	2.73	3.96	10,700	9,000	MS19079-17
18	60	130	31	0.080	2.88	4.61	18,700	15,300	MS19079-18
19	65	120	23	0.060	3.00	4.32	11,400	10,400	MS19079-19
20	65	140	33	0.080	3.11	4.96	21,000	17,100	MS19079-20
21	70	125	24	0.060	3.19	4.50	11,400	10,400	MS19079-21
22	70	150	35	0.080	3.32	5.31	23,200	19,000	MS19079-22
23	75	130	25	0.060	3.37	4.68	13,900	12,600	MS19079-23
24	75	160	37	0.080	3.57	5.67	27,700	23,200	MS19079-24
25	80	140	26	0.080	3.60	5.05	19,400	13,800	MS19079-25
26	80	170	39	0.090	3.70	6.02	27,700	23,200	MS19079-26
27	85	150	28	0.080	3.85	5.40	18,100	16,100	MS19079-27
28	85	180	41	0.100	4.04	6.38	33,400	27,700	MS19079-28

TABLE I. Dimensional requirements - Continued.

Dash no.	A Bore (mm)	B Outside diameter (mm)	C Overall width (mm)	R Shaft & housing fillet radius (mm) Max.	Recommended shoulder diameter		Load rating (lbs.)		Interchangeable specification
					Shaft (mm) Min.	Housing (mm) Max.	Dynamic	Static	
29	90	190	43	0.100	4.25	6.73	38,000	29,600	MS19079-29
30	95	200	45	0.100	4.54	7.09	41,000	34,500	MS19079-30
31	100	215	47	0.100	4.83	7.62	47,600	40,200	MS19079-31

FIGURE 1. Dimensions.

3.2 Cage. The cage shall be one of the coded options in table II (see 7.3(c)).

TABLE II. Cage materials.

Cage code	Material type
A	Manufacturer's standard
B	Brass
M	Machined brass
N	Non-metallic
J	Steel

A-A-55600B

3.3 Precision tolerance. The bearing precision tolerance level shall be RBEC-1 as defined in ABMA 20, "Radial Bearings of Ball, Cylindrical Roller and Spherical Roller Types, Metric Design". The associated radial internal clearance shall be one of the coded options listed in table III (see 7.3(d)).

TABLE III. Precision tolerance requirements.

Code	Tolerance class	Radial internal clearance
C2	RBEC-1	Group 2 (less than normal)
C0		Group N (normal)
C3		Group 3 (greater than normal)
C4		Group 4 (greater than 3)

### 3.4 Material.

3.4.1 Rings and rollers. Rings and rollers shall be made of chromium-alloy steel 52100 (UNS G52986) conforming to SAE-AMS 6440, "Steel, Bars, Forgings, and Tubing 1.45Cr (0.93 - 1.05C) (SAE 52100) For Bearing Applications". The hardness of rings and rollers shall be 58 to 66 RC in accordance with ASTM E 18, "Standard Test Methods for Rockwell Hardness and Rockwell Superficial Hardness of Metallic Materials".

3.5 Load ratings. Basic load ratings shall be calculated using the method specified in ABMA 11, "Load Ratings and Fatigue Life for Roller Bearings".

## 4. REGULATORY REQUIREMENTS

4.1 Recovered materials. The offeror/contractor is encouraged to use recovered materials to the maximum extent practicable, in accordance with paragraph 23.403 of the Federal Acquisition Regulation (FAR).

## 5. PRODUCT CONFORMANCE PROVISIONS

5.1 Product conformance. The products provided shall meet the salient characteristics of this CID, conform to the producer's own drawings, specifications, standards, and quality assurance practices, and be the same product offered for sale in the commercial marketplace. The government reserves the right to require proof of such conformance.

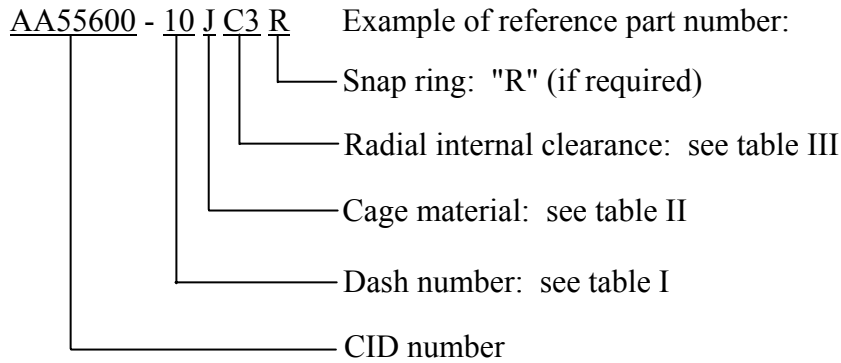
5.2 Market acceptability. The product offered must have been previously sold either to the government or on the commercial market.

## 6. PACKAGING

6.1 Preservation, packing, and marking. Preservation, packing, and marking shall be as specified in the acquisition order (see 7.3(e)).

## 7. NOTES

7.1 Part or identification number (PIN). The following PIN procedure is for government purposes and does not constitute a requirement for the contractor.



AA55600-10JC3R indicates: bore diameter 40 mm, outside diameter 80 mm, overall width 18 mm; steel cage; greater than normal radial internal clearance; with snap ring.

## 7.2 Sources of documents.

7.2.1 ABMA standards. Copies of ABMA standards may be obtained from the American Bearing Manufacturers Association, 2025 M Street NW, Suite 800, Washington, DC 20036. Electronic copies of ABMA standards may be obtained from <http://www.abma-dc.org/>.

7.2.2 ASTM standards. Copies of ASTM standards may be obtained from ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959. Electronic copies of ASTM standards may be obtained from <http://www.astm.org/>.

7.2.3 SAE standards. Copies of SAE standards may be obtained from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001. Electronic copies of SAE standards may be obtained from <http://www.sae.org/>.

7.3 Ordering data. The acquisition order should specify the following:

- CID document number, revision, and CID PIN.
- Bearing size (see 3.1).
- Cage material type (see 3.2).
- Precision tolerance requirement (see 3.3).
- Preservation, packing, and marking requirements (see 6.1).

7.4 Subject term (key word) listing.

brass  
cage  
chromium-alloy steel  
RBEC-1

A-A-55600B

MILITARY INTERESTS:

Custodians:

Army - AT

Navy - OS

Air Force - 11

Review Activities:

Navy - MC, SH

CIVIL AGENCY  
COORDINATING ACTIVITY:

GSA - FSS

Preparing Activity:

DLA - GS4

(Project 3110-2007-005)

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST database at <http://assist.daps.dla.mil>.