

INCH-POUND

MS87968A
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SUPERSEDING
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05 July 1984

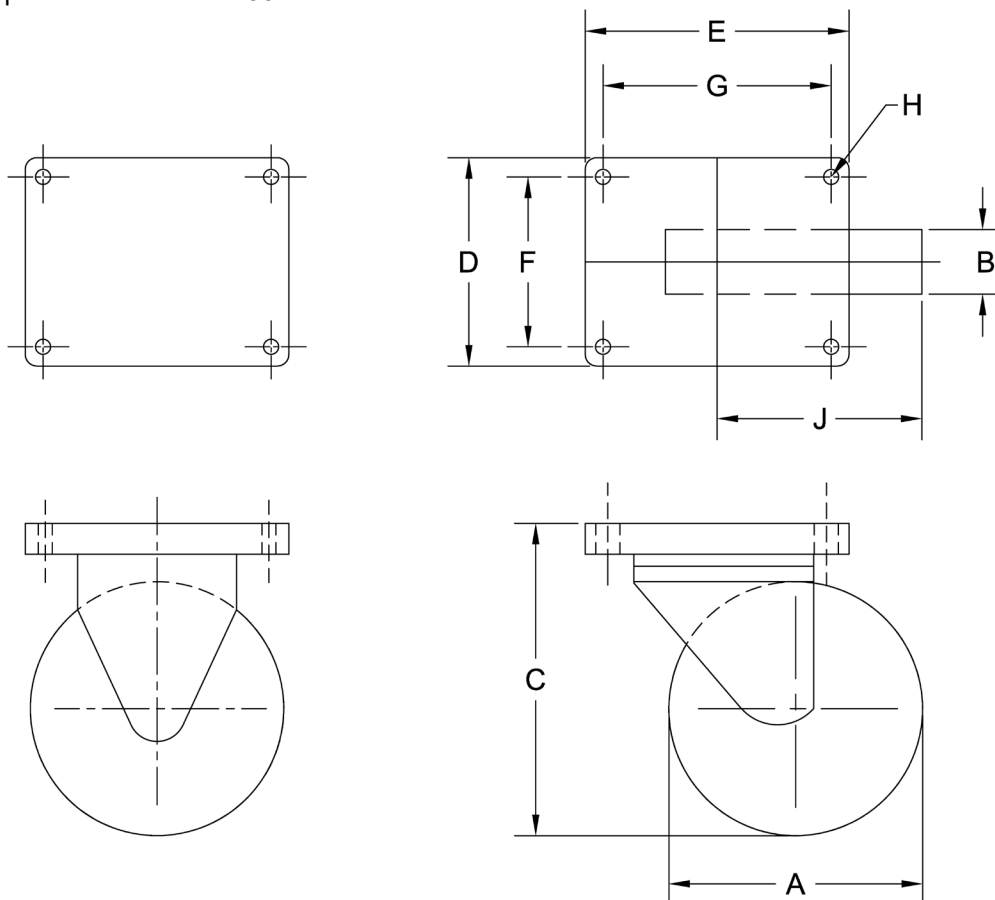
DETAIL SPECIFICATION SHEET

CASTERS, RIGID AND SWIVEL INDUSTRIAL DUTY

Inactive for new design after 19 December 1997.

This specification sheet is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification sheet and specification ASME-B56.11.1.



RIGID

SWIVEL

AMSC N/A

DISTRIBUTION STATEMENT A: Approved for public release; Distribution is unlimited.

FSC 5340



TABLE I. Dimensions and Dash Numbers.

DASH NO	CLASS 1/	WHEEL DIA (NOM)	THREAD WIDTH (NOM)	OVERALL HEIGHT	MOUNTING PLATE OVERALL SIZE	HOLE SPACINGS FOR THE MOUNTING PLATE	MOUNTING BOLT DIA	SWIVEL RADIUS (MAX)
		A	B	C	D X E	F X G	H	J
01	1 LIGHT DUTY 75 TO 145 LBS	2.0	0.812	2.625	1.250 X 2.125	0.8120 X 1.562	0.188	2.00
02		3.0	0.812	3.188	2.750 X 3.750	1.750 X 3.000	0.250	2.75
03		4.0	0.938	4.750				3.75
04		5.0	0.938	5.750				4.00
05	2 LIGHT MEDIUM DUTY 125 TO 280 LBS	3.0	1.25	3.750 or 4.188	2.750 X 3.750 or 3.125 X 4.125	1.750 X 2.875 or 2.375 X 3.438	0.312	3.0
06		3.5		4.500 or 4.750				3.25
07		4.0		5.062				3.75
08		5.0		6.125				4.25
09 10	3 MEDIUM DUTY 200 TO 575 LBS	4.0	1.50	5.312 or 5.625	4.000 X 4.750	SLOTTED HOLES 2.625 X 3.625 TO 3.000 X 3.000	0.375	4.00
11		5.0		6.188 or 6.438				4.75
12		6.0		7.375				5.50
13	4 HEAVY MEDIUM DUTY 300 TO 1050 LBS	4.0	2	5.562	5.000 X 5.500	SLOTTED HOLES 2.625 X 3.625 TO 3.000 X 3.000	0.375	4.00
14		5.0		6.312 or 6.500				4.50
15		6.0		7.375 Or 8.000				5.75
16		8.0		9.375 or 10.000				7.25
17	5 HEAVY DUTY 540 TO 2200 LBS	6.0	2.50	7.625 or 8.125	5.000 X 7.000	SLOTTED HOLES 2.438 X 4.938 TO 3.375 X 5.250	0.500	6.25
18		8.0		10.25 or 10.62				7.25
19				12.25				8.50
20		10.0	3	14.50				10.25
21		12.0						

1/ See Table II for Load Carrying Capacity

TABLE II. Load Capacity for Wheel Diameters.

CLASS	WHEEL DIAMETER INCHES (NOM)	WHEEL STYLE 1	WHEEL STYLE 2	WHEEL STYLE 3	WHEEL STYLE 4	WHEEL STYLE 5	WHEEL STYLE 6	WHEEL STYLE 7	WHEEL STYLE 8
		LBS MIN	LBS MIN	LBS MIN	LBS MIN	LBS MIN	LBS MIN	LBS MIN	LBS MIN
1 LIGHT 75 TO 145 LBS	2 3 4 5				100 125 135 145	75 100 110 125	100 125 135 145		
2 LIGHT MEDIUM 145 TO 280 LBS	3 3.5 4 5			- 165 165 165	210 225 255 280	125 140 165 190	210 225 255 280	- 225 250 280	
3 MEDIUM 200 TO 575 LBS	3 4 5 6	- 375 440 430	- 200 240 280	- - 240 280	- 300 350 400	- 200 240 280	- 425 500 575	- - 360 420	- 400 480 560
4 MEDIUM HEAVY 300 TO 1050 LBS	4 5 6 8	500 580 640 675	300 350 410 500	- - 410 500	400 450 560 600	300 325 400 475	550 700 850 1050	- - 610 750	500 700 820 1000
5 HEAVY 540 TO 2200 LBS	5 6 8 10 12	- 800 850 940 1240	- 540 670 790 1140	- - 670 790 1140			- 1200 1400 1650 2100	- - 1000 1180 1710	- 1100 1340 1580 2100

REQUIREMENTS:

Material. Casters in all classes shall be made from steel, cast iron or aluminum. The mounting plate shall be made of forged or flat rolled sheet steel not less than 0.170 inch thick, with no sharp corners.

Finish. Except for aluminum, exterior metal surfaces of the casters shall be cadmium plated, or zinc coated. Casters should also be painted, lacquered or enameled when specified.

Threads. Threads for axle bolts and nuts shall be in accordance with FED-STD-H28/2.

Types. Type I, rigid casters of this type consist of a non-swiveling caster assembly and a wheel assembly in accordance with ASME-B56.11.1. Type II, swivel casters of this type shall consist of a flat

mounting plate, a swivel assembly, a horn assembly and wheel assembly in accordance with ASME-B56.11.1.

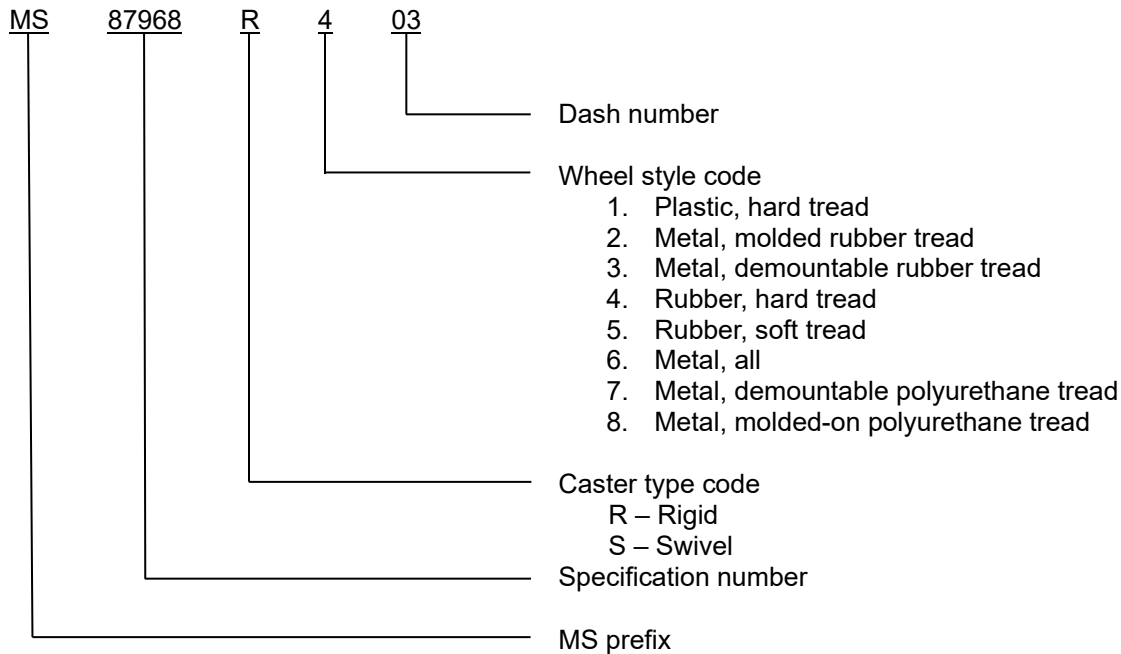
Tolerance. Mounting plate overall size ± 0.25 .

Hole Spacing – Light duty, light medium duty ± 0.016 .
 Medium duty, heavy medium duty ± 0.031 .
 Heavy duty ± 0.250 .

Overall height – Wheel diameter 2" to 5" ± 0.062 .
 Wheel diameter 6" to 5" ± 0.125 .
 Wheel diameter 10" to 12" ± 0.250 .

Mounting bolt diameter – Normal commercial tolerance.

Part or identifying Number (PIN). The part number consists of the basic MS Sheet number followed by the caster type code, wheel style code and dash number taken from Table I.



MS87968S403 indicates swivel type caster; rubber, hard tread; light duty; wheel diameter 4.0; tread width 0.938; overall height 4.750; mounting plate size 2.750 x 3.750; hole spacing for mounting plates 1.750 x 3.000; mounting bolt diameter 0.250; swivel radius 3.75.

NOTES:

1. Dimensions are in inches.
2. Referenced documents shall be of the issue in effect on date of invitations for bids, or request for proposal, except that referenced adopted industry documents shall give the date of the issue adopted.
3. For design feature purposes, this standard takes precedence over procurement documents referenced herein.

Reference documents. in addition to ASME-B56.11.1, this document references the following:

FED-STD-H28/2

Changes from previous issue. The margins of this specification are marked with vertical lines to indicate where changes from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the previous issue.

CONCLUDING MATERIAL

Custodians:

Army - AR

Navy - YD

Air Force – 71

DLA - CC

Review activities:

Army – CE, CR4, GL

Preparing Activity:

DLA – CC

(Project 5340-2025-015)

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 Online database at <https://assist.dla.mil>.