



MS21447 (CHRS SERIES)

Integral Stud Type

Crowned

General Information

The **CHRS** Series **Integral Stud Type** airframe bearings are manufactured in accordance with **MS21447** standards. The outer races on the CHRS Series are **Crowned**. The bearings consist of an inner stud, outer race, needle rollers, end washer, and if required seals. Relubrication holes and fittings are optional as shown below. For corrosion protection the outer race is hard-chrome plated while all other exposed surfaces are cadmium or zinc-nickel plated. Consult our Engineering Department for special variations.

Coding Example:

MS21447-8F20 AG = Cam Follower needle bearing 1.1250" roller, stud, sealed with crown radius on the O.D. Lubrication in flanged end of stud. 1.250 grip length 1.672 stud length without cotter pin hole, with Mil-G-23827 grease.

- G = Mil-G-81322 grease; no designator = Mil-G-23827 grease.
- A = No cotter pin hole (Not required for type T) Omit for cotter pin hole.
- Grip length in .0625 inch increments.
- Bearing
 - F = Lubrication in flanged end of stud.
 - T = Lubrication in threaded end of stud. No cotter pin hole.
 - R = Bearing without lubrication.
- Stud diameter in 0.0625" increments.
- Document number.

Dimensional Data (inches)

SMITH Bearing® Number	MS Bearing Number	A Stud Dia. +.0000 -0.0015	B Roller O.D. +.0010 -0.0005	C Roller Width +.000 -0.005	D (Min)	S Thread Length	Thread Size	P Cotter Pin Hole Dia.	T Track Contact Length (Min)	J Dia. (Ref)	Track Capacity 40HRC (lbf)	Limit Load Rating (lbf)	Load Rating As A Track Roller (lbf)	Housing Bore Diameter For Stud	
														Max	Min
CHRS1	MS21447-3	0.1900	0.5000	0.281	0.211	0.344	10-32	0.070	0.230	None	385	790	395	0.1905	0.1900
CHRS2	MS21447-4	0.2500	0.6875	0.281	0.224	0.344	1/4-28	0.076	0.230	0.076	525	940	470	0.2505	0.2500
CHRS3	MS21447-5	0.3125	0.7500	0.344	0.234	0.359	5/16-24	0.076	0.290	0.076	725	1,660	830	0.3125	0.3120
CHRS4	MS21447-6	0.3750	0.8750	0.469	0.265	0.359	3/8-24	0.106	0.380	0.106	1,100	2,720	1,360	0.3755	0.3750
CHRS5	MS21447-7	0.4375	1.0000	0.531	0.283	0.422	7/16-20	0.106	0.430	0.106	1,425	3,860	1,930	0.4375	0.4370
CHRS6	MS21447-8	0.5000	1.1250	0.656	0.314	0.422	1/2-20	0.106	0.530	0.106	1,975	6,080	3,040	0.5005	0.5000