

# EM/EF

Commercial, 2-Piece,  
Metal to Metal



## Rod Ends Industrial/ Commercial

Suitable for many light to heavy duty industrial/mechanical motion transfer applications, the 2-piece metal to metal EM/EF Series offers our most economical design. Ball and body materials are produced from a low carbon steel and are zinc plated with yellow dichromate treatment for extended corrosion resistance. The ball is case hardened for extended wear. This all metal rod end can be operated in a wide range of temperatures. Studded and right or left-handed thread versions are available. Grease fittings are optionally available.

The EM/EF Series is just one of many within our broad line of industrial/commercial rod ends. For full product line detail, contact us for a comprehensive catalog or visit [www.cablecraft.com](http://www.cablecraft.com) and download individual product data sheets and other product information.

### Description:

EM/EF  
Industrial/Commercial Rod Ends  
2-Piece, Metal to Metal

### Applications:

Numerous mechanical motion transfer devices/applications, including:

- Construction equipment
- Lawn and garden
- Truck/bus

### Features:

- 2-piece metal to metal design offers our most economical option
- Suited for higher axial loads where side loading strength is critical
- Can be used in a wide range of temperatures:  
-65°F — 250°F  
(-54°C — 121°C)
- Offered in studded and right or left-handed versions
- Special custom alloy construction available
- Custom assemblies can be built to your specifications
- Meets SAE spec J1120

### Other Related Products:

- EM-T/EF-T Commercial, 2-Piece, PTFE Lined
- EM-M/EF-M Commercial, 2-Piece, Metric SAE J1259



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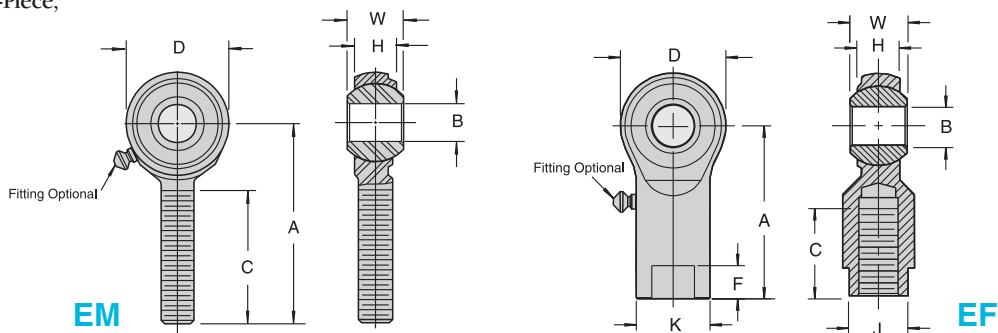
## Material

### Ball

- Low Carbon Steel
- Case Hardened
- Zinc Plated, Yellow Dichromate Treated

### Body

- Low Carbon Steel
- Zinc Plated, Yellow Dichromate Treated



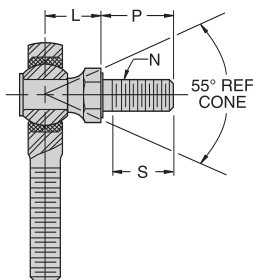
## EM Chart

Part Number		B +.0020 -.0000	W ±.005	H REF	A ±.015	D ±.015	REF	C ±.060	UNF-2A	Ultimate Radial Static Load Capacity (Pounds)	Weight (Pounds)
Right Hand	Left Hand	Ball Bore	Ball Width	Housing Width	Centerline Length	Head Diameter	Ball Diameter	Thread Length	Thread Size		
EM4	EML4	.2500	.375	.281	1.562	.750	.516	1.000	1/4-28	2,510	.043
EM5	EML5	.3125	.437	.344	1.875	.875	.625	1.250	5/16-24	3,430	.073
EM6	EML6	.3750	.500	.406	1.937	1.000	.719	1.250	3/8-24	5,520	.110
EM8	EML8	.5000	.625	.500	2.437	1.312	.938	1.500	1/2-20	8,690	.240
EM10	EML10	.6250	.750	.562	2.625	1.500	1.125	1.625	5/8-18	10,300	.368

## EF Chart

Part Number		B +.0020 -.0000	W ±.005	H REF	A ±.015	D ±.015	K ±.015	J ±.015	F ±.030	REF	C ±.060	UNF-2B	Ultimate Radial Static Load Capacity (Pounds)	Weight (Pounds)
Right Hand	Left Hand	Ball Bore	Ball Width	Housing Width	Centerline Length	Head Diameter	Shank Diameter	Wrench Flat Width	Wrench Flat Length	Ball Diameter	Thread Length	Thread Size		
EF4	EFL4	.2500	.375	.281	1.312	.750	.469	.375	.250	.516	.687	1/4-28	3,470	.062
EF5	EFL5	.3125	.437	.344	1.375	.875	.500	.437	.281	.625	.687	5/16-24	4,680	.081
EF6	EFL6	.3750	.500	.406	1.625	1.000	.687	.562	.312	.719	.812	3/8-24	5,520	.152
EF8	EFL8	.5000	.625	.500	2.125	1.312	.875	.750	.375	.938	1.187	1/2-20	9,460	.324
EF10	EFL10	.6250	.750	.562	2.500	1.500	1.000	.875	.500	1.125	1.406	5/8-18	10,300	.473

Chart Notes: 1. For standard lubrication fitting, add "Z" to suffix. Example: EM10Z  
2. This series is also available in a studded configuration. Specify by adding "S" to suffix. Example: EM10S



## Studded Dimensions

Rod End Bore Size	L REF	P ±.030	S Min. Thread Length	N Thread Size UNF-2A
1/4"	.469	.563	.500	1/4-28
5/16"	.531	.688	.594	5/16-24
3/8"	.625	.875	.781	3/8-24
1/2"	.875	1.125	1.000	1/2-20
5/8"	1.000	1.125	1.000	5/8-18

## WARNING!

Since the manufacturer is unable to determine all applications in which a part may be placed, it is the user's responsibility to determine the suitability of the part for its intended use. This is especially true where safety is a factor. Incorrect application or installation may result in property damage, bodily injury, or death. For technical assistance, call 260-749-5105.

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Cablecraft Motion Controls

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& Control...  
The Cablecraft  
Solution

