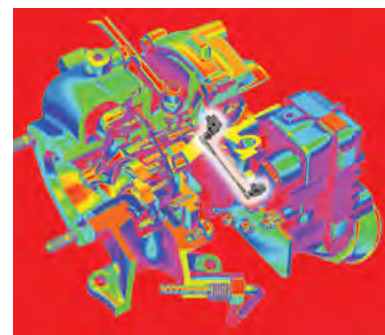
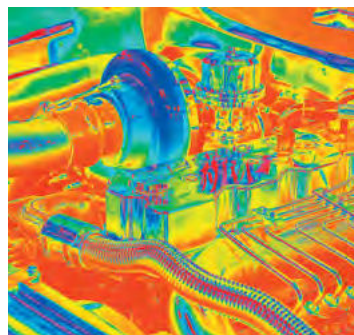


# **HOT** Race™ Rod Ends

High-Temp  
Rod Ends/  
Linkages



**Cablecraft®**  
Motion Controls



**Connecting a World  
in Motion**

# High-Temp Rod Ends/Linkages



New HOT-Race™ High Temperature Rod Ends and Linkages are now available from Cablecraft Motion Controls. HP Series rod-ends are designed to operate in high cycle, low to moderate load applications, demanding superior thermal stability, at high operating temperatures, and resistance to harsh environments.

Capable of withstanding temperatures from 450° F to 650° F, potentially reducing or eliminating the need for heat shielding. In commercial/passenger vehicle turbocharger applications, Exhaust Gas Recovery Systems (EGRS), and other temperature elevated applications; overall system costs can often be significantly reduced.

The assemblies are suited for applications requiring low friction, low moisture absorption and extended wear. The design is also chemical resistant and survives in high vibration environments.

The HP Series is the latest addition to our broad line of linkage products and motion control solutions. For full product line detail, contact us for a comprehensive catalog or visit [www.cablecraft.com](http://www.cablecraft.com) to download individual product data sheets and other product information.

## Description

- Industrial precision rod ends
- Design for high temperature operation
- Qualified for high performance capability in dirt, vibration, and long cycle life

## Design/Applications

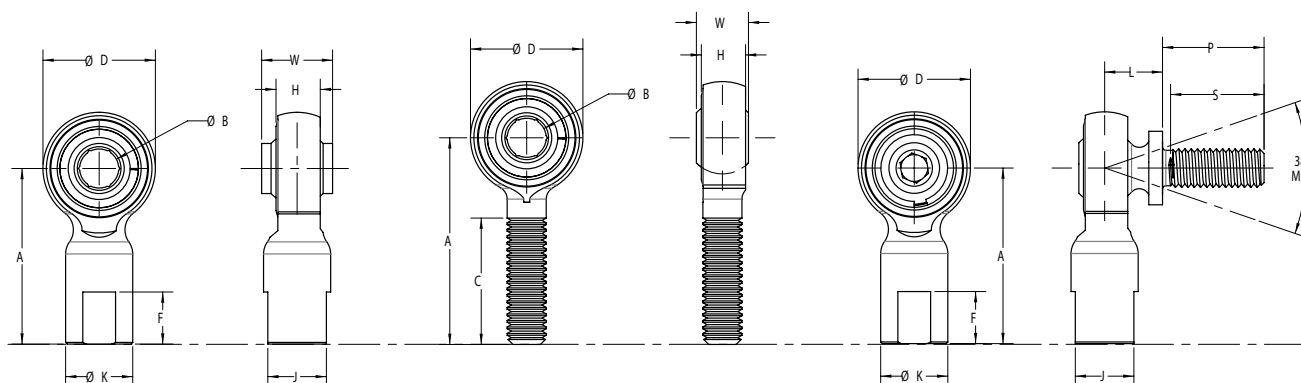
- Engine controls
- Heating controls and switches
- Precision positioning and linkages
- Sensor controls and linkages
- Exhaust systems
- Hybrid vehicles

## Benefits

- High temperature resistance race material
- Stainless components for corrosion resistance
- Self lubricating
- Withstands chemical and vibration
- Wear resistant
- Custom designed assemblies

## Specifications

- 450°F to 650°F operating temperature



### DIMENSIONAL DETAIL

Part Number		Thread Size	B	W	H	A	D	K	J	F	K	C
			+0.0020 -0.0000	+0.005 -0.005	Ref	+0.015 -0.015	+0.015 -0.015	+0.015 -0.015	+0.015 -0.015	+0.030 -0.030	Ref	+0.060 -0.060
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
HPF3	HPFL3	10-32 UNF-2A	0.25	0.429	0.268	1.062	0.68	0.405	0.354	0.315	0.437	0.512
HPM3	HPML3	10-32 UNF-2A	0.25	0.429	0.268	1.25	0.68	-	-	-	0.437	0.75
HPF4	HPFL4	1/4-28 UNF-2A	0.25	0.429	0.268	1.062	0.68	0.405	0.354	0.315	0.437	0.512
HPM4	HPML4	1/4-28 UNF-2A	0.25	0.429	0.268	1.25	0.68	-	-	-	0.437	0.75
HPF5M	HPFL5M	M5 x 0.8-6H	6	10.9	6.8	27	17.3	10.3	9	8	11.1	13
HPM5M	HPML5M	M5 x 0.8-6H	6	10.9	6.8	27	17.3	-	-	-	11.1	19
HPF6M	HPFL6M	M6 x 1.0-6H	6	10.9	6.8	27	17.3	10.3	9	8	11.1	13
HPM6M	HPML6M	M6 x 1.0-6H	6	10.9	6.8	27	17.3	-	-	-	11.1	19

### STUD DETAIL

Part Number	N	L	P	S
	Thread Size	Ref	+0.030 -0.030	Thread Length (min)
HPF3S	10-32 UNF-2A	0.35	0.551	0.488
HPF4S	1/4-28 UNF-2A	0.35	0.551	0.488
HPF5MS	M5 x 0.8-6H	8.9	14	12.4
HPF6MS	M6 x 1.0-6H	8.9	14	12.4

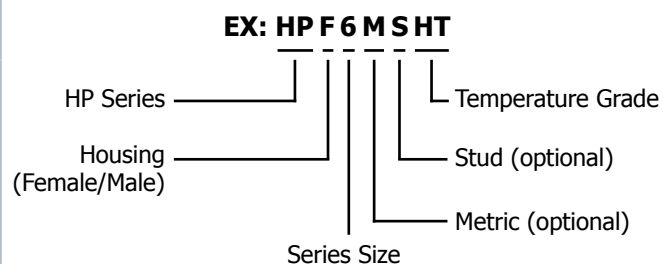
### LOADING CHARACTERISTICS

Part Number	Ultimate Radial Static Load Capacity (lbs)	Weight (oz)
HPFx	2470	0.64

### OPERATIONAL TEMPERATURE

Temperature Designation			
MT	450°F	232°C	Mid Grade
ET	575°F	302°C	Enhanced Grade
HT	650°F	343°C	High Grade

### PART NUMBER DEFINITION



## About Us

- Cablecraft Motion Controls is a leader in mechanical control assemblies
- We provide solutions: extensive engineering expertise and highly flexible lean manufacturing environment have produced a wide range of cost effective motion control solutions for OEM industrial, commercial, and high-performance applications



## Products

- Mechanical push-pull and pull-only control cables
- Ball joints, rod ends, and spherical bearings
- Custom linkage and cable assemblies
- Hand and foot controls



**Cablecraft**<sup>®</sup>  
Motion Controls

2110 Summit Street  
New Haven, Indiana USA 46774  
Tel 260 749-5105 Fax 260 749-5677

2789 Old Belleville Road  
St. Matthews, South Carolina USA 29135  
Tel 803 655-7300 Fax 803 874-3558

**www.cablecraft.com**

Diplocks Way-South Road  
Hailsham, E. Sussex BN27 3JF, England  
Tel (011-44) 1323-841510  
Fax (011-44) 1323-845848

**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.