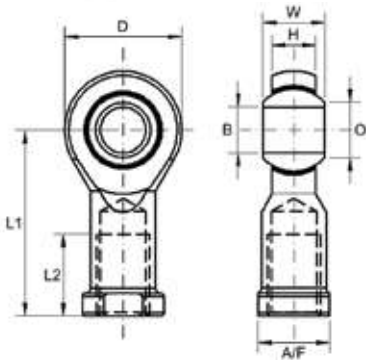




FEMALE ROD ENDS



**FS SERIES: FS - FSS - FS SS**

**Description:**

FS Series is our 3-piece steel on steel range of male rod ends incorporating a high strength PTFE bronze mesh between the ball and the liner material, suitable for high shock loads and medium to heavy mechanical load applications requiring low friction, available in both metric and imperial bore thread sizes, they do not require maintenance.

**Material Specifications:**

Housing: Steel 230M07Pb and forged 080M46, zinc plated and clear trivalent passivate and stainless steel 303L and forged 304. Inner Ring: Steel 070M20 zinc plated and clear trivalent passivate. Liner: High strength PTFE bronze mesh composite. Ball: Bearing steel 100Cr6, heat treated, polished & electroless nickel plated and stainless steel 440C

**Features:**

Metric & imperial thread & bore sizes, low friction, high shock loads. Extended wear life No maintenance Studded and stainless steel options.

**Possible Applications:**

Medium/heavy industrial/mechanical applications Construction equipment Agricultural equipment Motor sport and recreational vehicles requiring high precision motion control.

**Temperature Range:**

-200°C to +260°C

**Specification:**

ELV & RoHS compliant

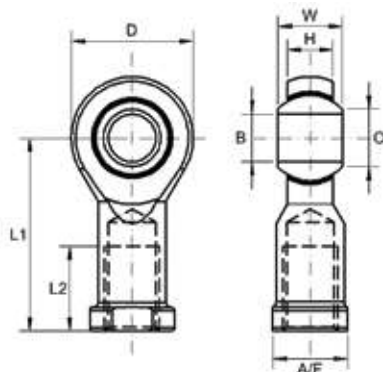
**Interchange table**

Dunlop	Rose	Aurora	Askubal	SKF	Asahi	IKO	Fluro
FS-M (metric)	MFC	MW-M-T and MG-M-T	KI-P	SIKB-F	JAF-EC	PHS-EC	GISW
FS (imperial)	RFC	MW-T and MG-T	-	-	PHSB-EC	-	

Note: Manufacturers part numbers are used for descriptive purposes only and may not be direct equivalent products.



**FS SERIES: MAINTENANCE FREE ROD ENDS WITH FEMALE THREAD (METRIC)**



- Housing:** Steel 230M07Pb (Sizes M05 – M12)  
Forged 080M46 (Sizes M14 – M25)  
Zinc Plated and Clear Trivalent Passivate
- Inner Ring:** Steel 070M20, Zinc Plated and Clear Trivalent Passivate
- Ball:** Bearing Steel 100Cr6, Hardened and Electro-less Nickel Plated
- Liner:** High strength PTFE composite
- Specification:** ELV and RoHS Compliant



Part No. Right Hand	Part No. Left Hand	Bore Size	Thread	W	H	D	L1	L2	O	AF	Static Load Rating (Newtons) Radial
FS-M05	FSL-M05	5	M8X0.80	8	6.00	18	27	10	7.70	9	8000
FS-M06-5	FSL-M06-5	5	M6X1.00	9	6.75	20	30	12	8.90	11	8900
FS-M06	FSL-M06	6	M6X1.00	9	6.75	20	30	12	8.90	11	8900
FS-M08-6	FSL-M08-6	6	M8X1.25	12	9.00	24	36	16	10.40	13	14,100
FS-M08-6C	FSL-M08-6C	6	M8X1.00	12	9.00	24	36	16	10.40	13	14,100
FS-M08	FSL-M08	8	M8X1.25	12	9.00	24	36	16	10.40	13	14,100
FS-M08C	FSL-M08C	8	M8X1.00	12	9.00	24	36	16	10.40	13	14,100
FS-M10-8	FSL-M10-8	8	M10X1.50	14	10.50	28	43	20	12.90	17	19,300
FS-M10-8C	FSL-M10-8C	8	M10X1.25	14	10.50	28	43	20	12.90	17	19,300
FS-M10	FSL-M10	10	M10X1.50	14	10.50	28	43	20	12.90	17	19,300
FS-M10C	FSL-M10C	10	M10X1.25	14	10.50	28	43	20	12.90	17	19,300
FS-M12-10	FSL-M12-10	10	M12X1.75	16	12.00	32	50	22	15.40	19	23,600
FS-M12-10C	FSL-M12-10C	10	M12X1.25	16	12.00	32	50	22	15.40	19	23,600
FS-M12	FSL-M12	12	M12X1.75	16	12.00	32	50	22	15.40	19	23,600
FS-M12C	FSL-M12C	12	M12X1.25	16	12.00	32	50	22	15.40	19	23,600
FS-M14-12	FSL-M14-12	12	M14X2.00	19	13.50	36	57	25	16.80	22	29,200
FS-M14-12C	FSL-M14-12C	12	M14X1.50	19	13.50	36	57	25	16.80	22	29,200
FS-M14	FSL-M14	14	M14X2.00	19	13.50	36	57	25	16.80	22	29,200
FS-M14C	FSL-M14C	14	M14X1.50	19	13.50	36	57	25	16.80	22	29,200
FS-M16-14	FSL-M16-14	14	M16X2.00	21	15.00	42	64	28	19.30	22	32,100
FS-M16-14C	FSL-M16-14C	14	M16X1.50	21	15.00	42	64	28	19.30	22	32,100
FS-M16	FSL-M16	16	M16X2.00	21	15.00	42	64	28	19.30	22	32,100
FS-M16C	FSL-M16C	16	M16X1.50	21	15.00	42	64	28	19.30	22	32,100
FS-M18-16C	FSL-M18-16C	16	M18X1.50	23	16.50	46	71	32	21.80	27	38,400
FS-M18C	FSL-M18C	18	M18X1.50	23	16.50	46	71	32	21.80	27	38,400
FS-M20-18	FSL-M20-18	18	M20X2.50	25	18.00	50	77	33	24.30	32	45,000
FS-M20-18C	FSL-M20-18 C	18	M20X1.50	25	18.00	50	77	33	24.30	32	45,000
FS-M20	FSL-M20	20	M20X2.50	25	18.00	50	77	33	24.30	32	45,000
FS-M20C	FSL-M20C	20	M20X1.50	25	18.00	50	77	33	24.30	32	45,000
FS-M22-20	FSL-M22-20	20	M22X1.50	28	20.00	54	84	37	25.80	32	52,750
FS-M22	FSL-M22	22	M22X1.50	28	20.00	54	84	37	25.80	32	52,750
FS-M25-20	FSL-M25-20	20	M24X2.00	31	22.00	60	94	42	29.60	36	62,000
FS-M25	FSL-M25	25	M24X2.00	31	22.00	60	94	42	29.60	36	62,000

For stainless steel add 'SS' to part no. For example 'FS-M05 SS'

## Materials

**DUNLOP** rod ends, spherical bearings, ball joints and clevises are available in a wide range of materials, steel, stainless steel and aluminium housings, nylon, PTFE and bronze races and steel, stainless steel and Bronze balls. Please refer to table below.

### Housings

- Steel 230M07PB is used for all general purpose applications and are zinc plated and white-blue passivate (silver/clear finish) that conforms with RoHS directives on banned substances and ELV 2000/53/EC and are trivalent. Other plating colours and options are available, please refer to our 'Plating options section on page 14.
- Alloy steel, gives extreme load carrying capacity, extended wear life and high shock load resistance.
- Stainless steel 303L offers excellent corrosion resistance, other stainless steel materials such as 304 and 316 are available to order, please discuss with our sales or engineering departments.
- Aluminium A6026 also has corrosion resistance and weight reduction for lighter applications.

### Races

- Nylon races are glass fibre reinforced and are suitable for extended high cycling use in heavy applications, also excellent in damp or wet environments.
- PTFE races provide zero backlash, smooth movement and can withstand extreme temperature conditions -200°C to + 260°C, and are suitable for use in high cycling use in heavy applications.
- Bronze design races SAE660 are suitable for low speed high duty loading, general purpose applications.

### Spherical balls

- Steel 100Cr6 spherical balls are produced from high quality bearing steel and are heat treated and hardened to HRC 58-62 and electroless nickel plated.
- Stainless steel 440C spherical balls offer excellent corrosion resistance.
- Alloy steel, gives extreme load carrying capacity, extended wear life and high shock load resistance.
- Bronze SAE660 spherical balls are suitable for applications that require the pin or shaft fitted through the bore to rotate.

We reserve the right to vary the materials shown in the interest of product replacement or improvement.

Product Series	Housing Material	Housing Plating	Race Material	Ball/Ball Stud material	Ball Plating
MP / FP	230M07PB	ZINC WHITE/BLUE PASSIVATE	GR-NYLON	100CR6	ELECTROLESS NICKEL
MP-SS / FP-SS	303L	NOT PLATED	GR-NYLON	440C	NOT PLATED
MB / FB	230M07PB	ZINC WHITE/BLUE PASSIVATE	SAE660	100CR6	ELECTROLESS NICKEL
MB-SS / FB-SS	303L	NOT PLATED	SAE660	440C	NOT PLATED
MH / FH	230M07PB	ZINC WHITE/BLUE PASSIVATE	POLYURETHANE	230M07PB	NITROTEC
MH-SS / FH-SS	303L	NOT PLATED	POLYURETHANE	440C	NOT PLATED
MS / FS	230M07PB	ZINC WHITE/BLUE PASSIVATE	230M07PB / PTFE FABRIC	100CR6	ELECTROLESS NICKEL
MS-SS / FS-SS	303L	NOT PLATED	304L / PTFE FABRIC	440C	NOT PLATED
MSX / FSX	708M40	ZINC WHITE/BLUE PASSIVATE	230M07PB / PTFE MESH	100Cr6	ELECTROLESS NICKEL
MSX-MS / FSX-MS	17-4PH	N/A	17-4PH	440C	N/A
MX / FX	817M40	PHOSPHATED	N/A	100Cr6	PHOSPHATED