

General Purpose Clutches

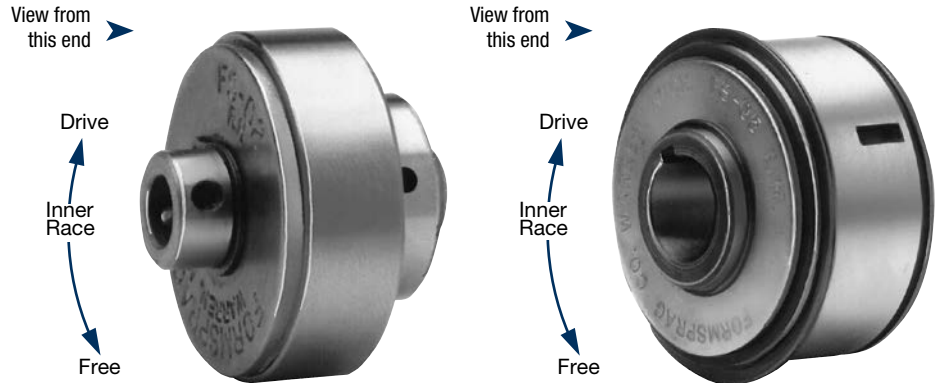
FS 02, 04, 05

Overrunning, Indexing, Backstopping Sleeve Bearing Supported, Sprag Clutches

These small clutches are ideal for use in all types of small machines and precision instruments and may be used for overrunning, indexing and backstopping applications. They are sleeve bearing supported clutches. Typical mounting arrangement for FS Series clutches is shown below.

FS 02 through 05 clutches are shipped from the factory lubricated for life with Fiske Brothers Lubriplate Low-Temp grease.

For further information, see *Installation and Maintenance Bulletin A-3003, P-222-16 (FS-02 and FS-04) or No. 2221, P-222-13 (FS-05)*.



Right Hand rotation shown. (Left Hand opposite).
Specify direction of rotation when ordering.

Model FS-02, FS-04

Models FS-02 and FS-04 are secured to the Shaft by a roll pin provided with the clutch. Both the hub and the O.D. of the outer race are ground to close limits and may be used to mount attaching parts.

Model FS-05

Model FS-05 is driven from the shaft by a .125" key. Parts should be mounted on the ground O.D. of the clutch. Snap rings and Woodruff key are provided.

Specifications

| Size | Torque Capacity lb.ft. (Nm) | Overrunning Speed Max. RPM | | Resistance after run-in lb.ft. (Nm) | Lubrication | Shipping Weight lb. (kg) |
|------|-----------------------------------|-------------------------------|------------|--|-------------|--------------------------------|
| | | Inner Race | Outer Race | | | |
| 02 | 4.5 (6) | 3,450 | 2,400 | .02 (.027) | Grease | .187 (.08) |
| 04 | 17 (23) | 2,800 | 2,400 | .02 (.027) | Grease | .312 (.14) |
| 05 | 30 (41) | 1,800 | 900 | .05 (.067) | Grease | .812 (.37) |

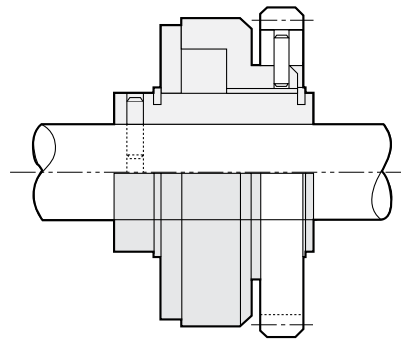
Notes:

Check key and shaft stress before making final clutch selection since this may determine the maximum allowable drive torque capacity.

Specify direction of rotation when ordering.

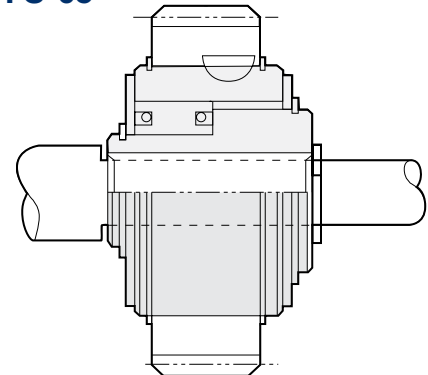
Typical Mounting Arrangements

FS-02



The Model FS 02 and 04 must be axially restrained by a Roll Pin (supplied) through the shaft.

FS-05



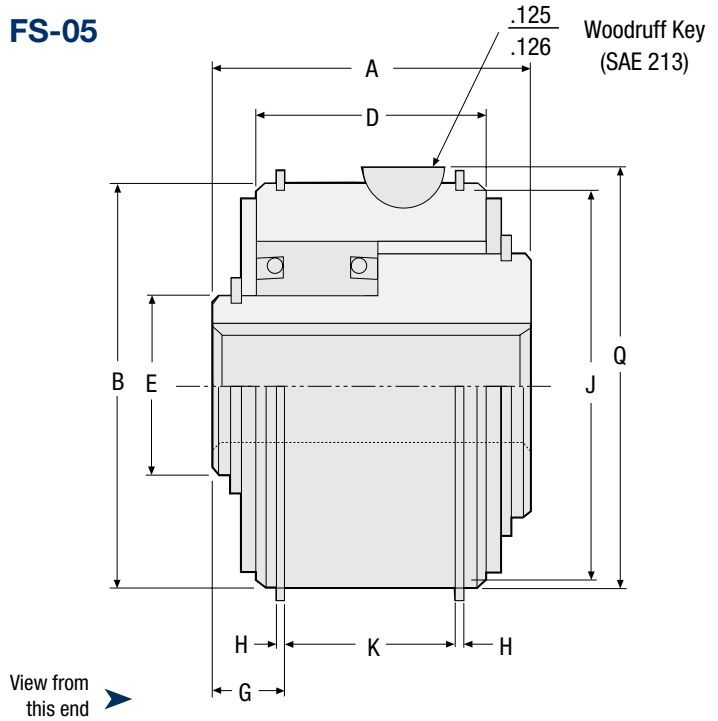
The Model FS 05 must be axially restrained by customer supplied snap ring, set collar, spacer, etc.

FS-02 and FS-04



* Roll pin furnished.

FS-05



Bore sizes and keyseats** inches (mm) (Metric bore also available)

| Size | Bore Size | Keyseat | Bore Range | |
|------|---------------------------|-----------------------------|-----------------|-----------------|
| | | | Min. | Max. |
| 02 | .250 (6.35) | roll pin | .250 (6.35) | .250 (6.35) |
| | | roll pin | | |
| 04 | .375/.500 (9.53/12.70) | roll pin | .375 (.953) | .625 (15.88) |
| | | roll pin | | |
| 05 | .625 (15.88) | 1/8 x 1/16 (3.18 x 1.59) | .500 (12.70) | .630 (16.0) |

** For Bore Sizes/Shaft Tolerances, see page 126.

Dimensions inches (mm)

| Size | A | B | C | D | E | F | G | H | J | K (Max.) | L | M | N | P | Q (Max.) |
|------|-----------------|------------------------------|------------------------------|-----------------|----------------|----------------|--------------------------|--------------------------|------------------------------|---------------------------|----------------|----------------|----------------|----------------|----------------------------|
| 02 | 1.06 (27.00) | 1.250/1.249 (31.75/31.71) | .750/.749 (19.05/19.02) | .390 (9.9) | .429 (10.9) | .250 (6.35) | — | — | — | — | .109 (2.76) | .093 (2.36) | .140 (3.56) | .343 (8.71) | — |
| 04 | 1.13 (28.60) | 1.626/1.624 (41.28/41.24) | 1.125/1.124 (28.58/28.55) | .375 (9.5) | .796 (20.2) | .250 (6.35) | — | — | — | — | .125 (3.18) | .125 (3.18) | .156 (3.96) | .359 (9.12) | — |
| 05 | 1.40 (35.70) | 1.937/1.936 (49.20/49.17) | — | 1.000 (25.4) | .953 (24.2) | — | .284/.388 (7.22/9.85) | .056/.076 (1.42/1.93) | 1.866/1.856 (47.40/47.14) | .750 Max. (19.05 Max.) | — | — | — | — | 2.015 Max. (51.18 Max.) |