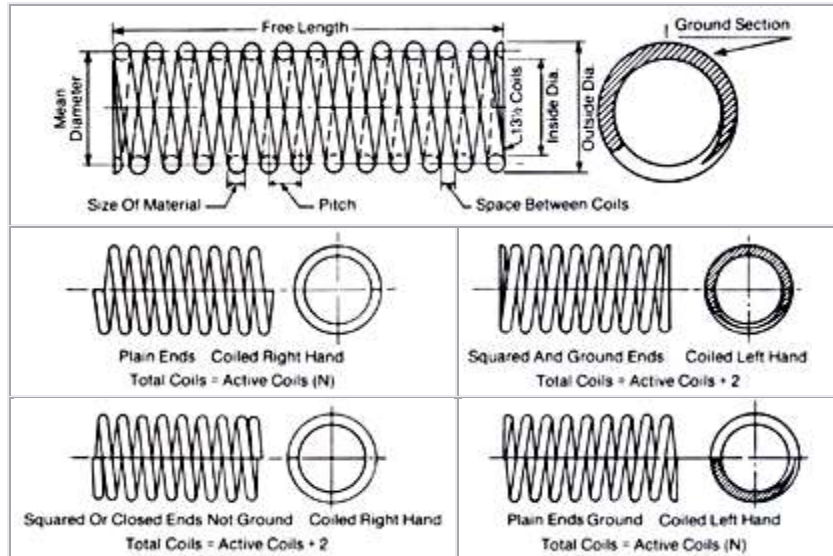


### Specifications for Compression Springs

In ordering give the following information as completely as possible:

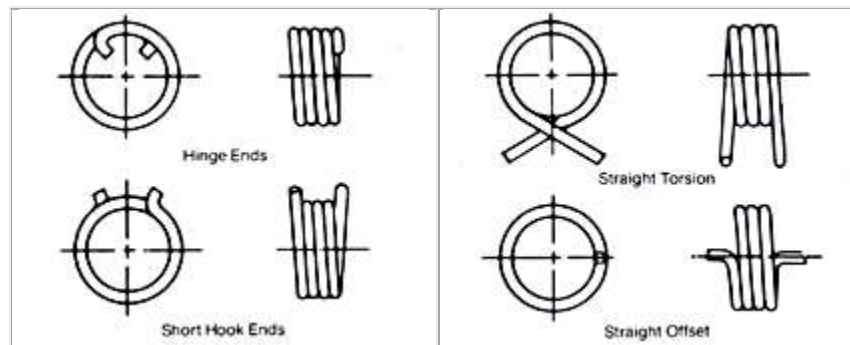
- Free Length, Maximum, Minimum
- Controlling Diameter, Outside Diameter Maximum. Inside Diameter Minimum. Pitch Diameter. Works Inside (Dia. Hole). Works Over (Dia. Shaft).
- Number of Coils.
- Wire Size. Decimal size if possible.
- Material, Kind and Grade.
- Loads at deflected positions.
- Style of Ends, (See Illustration).
- Right or Left Hand Wound.
- Finish, Plain unless otherwise specified.
- Maximum Solid Length.
- Frequency of Compression.



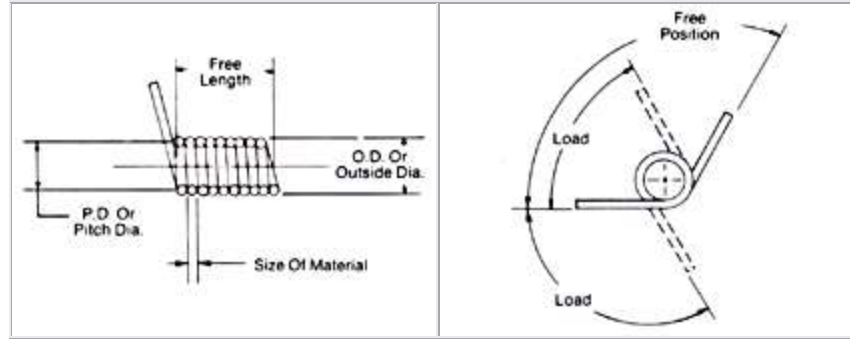
### Specifications for Torsion Springs

In ordering give the following information as completely as possible:

- Inside or Outside Diameter.
- If spring works on a rod, give size of same, as spring must not bind when wound up to its limit of travel.
- Free Length and number of coils. If spring cannot increase in length as wound up, allow sufficient space between coils.
- Right or Left Hand Wound.
- Wire Size. Decimal size if possible.



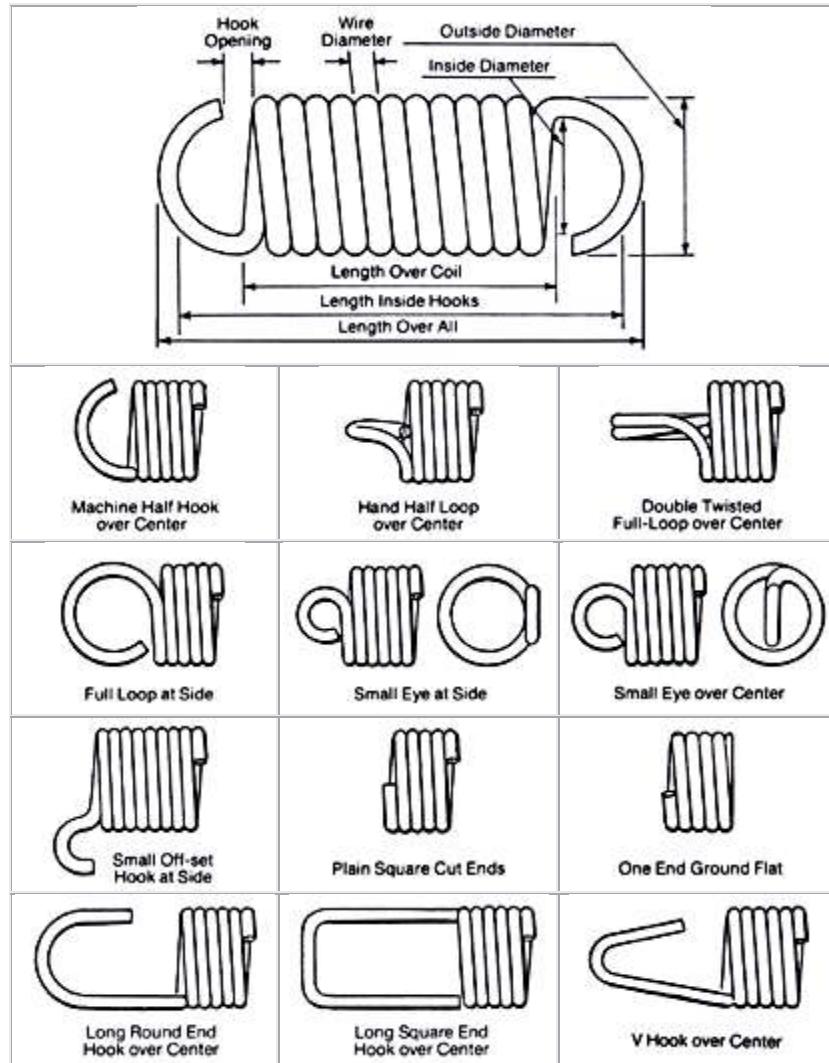
- Material, Kind and Grade.
- Style of Ends, (See Illustration).
- Number of turns deflection to hold given load and radius of loaded arm. This length may be the length of the arm, or the arm may be attached to a movable machine member, in which case the length to point of application of load is given.
- Finish, Plain unless otherwise specified.



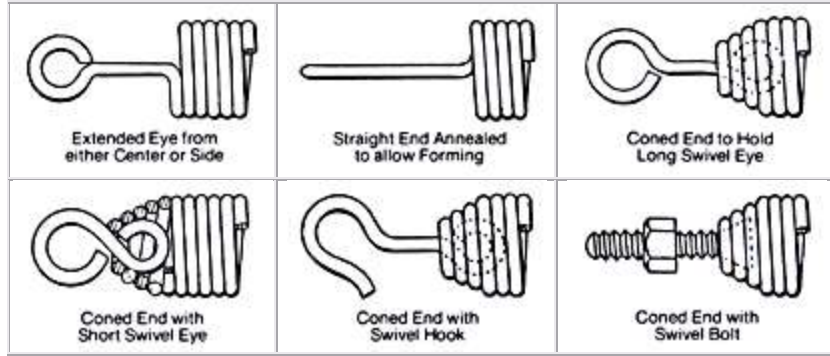
### Specifications for Extension Springs

In ordering give the following information as completely as possible:

- Length, Maximum, Minimum (Over all, Over coil, Inside Hooks).
- Controlling Diameter: Outside Diameter Maximum. Inside Diameter Minimum.
- Wire Size. Decimal size if possible.
- Material, Kind and Grade.
- Number of Coils.
- Style of Ends, (See Illustration).
- Right or Left Hand Wound.
- Finish, Plain unless otherwise specified.
- Load Required, Length Inside Hooks (Length of Coil if wire size not specified).
- Maximum Extended Length (Over all, Over coil, Inside Hooks).
- Deflection or Distance of Travel.
- Frequency of Extension.
- Is Position of Ends important? (making the ends of springs



bear a definite relation to each other usually adds to the cost of manufacture.)



**Coil Direction**

To Determine Coil Direction, hold with Axis of Spring on Horizontal Plane. Angle of coil from top to bottom determines direction.

