

**Bushings:** Non ball bearing style units are designed for low speed, light to medium load applications. Bushing surface materials include; Ultra (Acetal plastic with Teflon Additives), CS2 Acetal, and ABS plastic. Insert materials include nylon, stainless steel and carbon steel. Bushing style rollers are ideal for sanitary, rust and corrosion resistance applications.

**Load Capacities:** Load capacities listed are based upon length of the roller (IF), actual load ratings for the bearing, tube deflection and shaft deflection for the materials listed. Calculations for load capacities of precision bearings allow for  $\frac{3}{4}$  of 1 degree of shaft deflection while commercial bearings allow for 1 degree of shaft deflection. ***Shaft deflection will increase as a roller becomes longer and roller loads will decrease substantially as the length of the roller increases. Please note that load capacities listed are for steel shafts. Load ratings for rollers with aluminum shafts must be reduced to 33% of the value listed.***

**Roller Length:** I.F. = Inside Frame distance. This measurement allows 1/16" of free play per side for a total of 1/8" per roller. O.A. = Overall roller length. This is the measurement from bearing hub to bearing hub of the roller. For calculation purposes I.F. - 1/8" = O.A.

### Ordering Information:

Our roller numbering system lists the bearing part number first, the tube part number second and the shaft part number last followed by the roller length.

### Example 1: Standard Roller

Bearing: Precision ABEC-1 bearing in a conductive plastic housing  
Tube: 1.90" outside diameter x .065" wall thickness galvanized steel tube  
Shaft: 7/16" hexagonal carbon steel spring-loaded shaft.  
Length: Must fit a frame measuring 18" inside frame distance (I.F.)  
Max. Load: Roller must be capable of handling a load of 165 lbs. per roller

### Solution:

Find the metal roller page designating 1.90" x .065" – 7/16" Hex - See page 77

Bearing part #: 3A6  
Tube part #: G46  
Shaft part #: C68  
Load per roller: Load capacity chart indicates roller is good up to 237 lbs. per roller  
**Roller part #: 3A6.G46.C68 x 18" I.F.**

### Example 2: Rollers with options – (Grooves, Sprockets, Covers, Finishes, Special Shaft Lengths or Extensions, etc.)

### Solution:

Check Engineering section for specific data, information, or drawings. Inquire with Customer Service.