## NOMENCLATURE

Accessories for your every need. To complement our line of Timken spherical roller bearings, we offer bearing sleeves and locking devices in a wide range of sizes. These accessories are manufactured to the same quality standards as our bearings, ensuring a secure fit to straight and stepped shafts. Available in sizes up to 1000mm, bearing sleeves are available in two distinct designs: assembled adapter sleeves and withdrawal sleeves.

## **ADAPTER SLEEVES**

Timken adapter sleeves are used in conjunction with a nut and locking device to mount a tapered bore bearing onto a straight shaft using a pull-type fit. Smaller size assemblies (20 mm [0.78.in] -200 mm [12 in.] shaft) commonly use simple nuts, whereas larger assemblies (sizes >200 mm (12 in.)) may use HMV hydraulic nuts to assist in mounting. The chart below outlines our part number nomenclature, which is consistent with the world standards for adapter sleeves.

### TABLE X. METRIC ADAPTER SLEEVES (H, OH) FOR **METRIC SHAFTS SIZES ARE SUPPLIED WITH** CORRESPONDING LOCKNUT AND LOCKING DEVICE

Sleeve	Locknut	Locking Device
H standard metric/ OH hydraulic assist	KM, KML, HM	MB, MBL, MS

### TABLE X. METRIC ADAPTER SLEEVES (HA, HE) FOR **INCH SHAFTS SIZES ARE SUPPLIED WITH** CORRESPONDING LOCKNUT AND LOCKING DEVICE

Sleeve	Locknut	Locking Device
HE standard inch (English Standard) HA standard inch (American standard	K  \/  K  \/	MB, MBL

### TABLE X. INCH ADAPTER SLEEVES (SNW, SNP) FOR INCH SHAFTS SIZES ARE SUPPLIED WITH CORRESPONDING LOCKNUT AND LOCKING DEVICE

Assembly	Sleeve Locknut		Locking Device	
SNW	S	N, AN	W	
SNP	S	N	Р	

SNW assembly consists of a sleeve, locknut and lockwasher. SNP assembly consists of a sleeve, locknut and lockplate.

# WITHDRAWAL SLEEVES

Withdrawal sleeves feature a push-type mounting arrangement and a locking device (i.e., locknut or lockplate) to secure a bearing to a shaft. This design is not as widely used as the adapter sleeve assembly and it does require the use of a specially designed dismounting nut. Timken's part number nomenclature for withdrawal sleeves also conforms to industry-accepted standards. Nuts are not supplied with the withdrawal sleeve and must be ordered separately. The dismounting of large assemblies can be eased by using a hydraulic nut (HMV).

### TABLE X. METRIC WITHDRAWAL SLEEVE FOR **METRIC SHAFT SIZES**

Sleeve	Dismounting Nut	Hydraulic Nut
AH standard metric/AOH hydraulic assist	KM, HM	HMV

### TABLE X. INCH WITHDRAWAL SLEEVE FOR **INCH SHAFT SIZES**

Sleeve	Locknut	Lockwasher/Plate	Dismounting Nut
SK	N, AN	W, P	AN, ARN, RN, N

### **LOCKING DEVICE**

Timken offers a wide range of locknuts to locate bearing assemblies on application shafts. Sometimes referred to as shaft or withdrawal nuts they are used to secure the assembly onto, and sometimes aid with the removal from, the shaft.

### LOCKWASHERS (MB, MBL AND W)

Locking washers are designed to secure the relative movement of a properly positioned locknut, so that a bearing and adapter sleeve remains tightly fitted to a shaft or a bearing remains secure against a shaft shoulder. The tab in the bore of the washer engages a keyway in the shaft or slot in the adapter sleeve. There are tabs on the O.D. of the washer that can be bent over into slots on the circumference of the locknut. Locking washers are used with locknuts in the KM and KML series as well as for the locknuts with inch dimensions in the N and AN series.

## **LOCKPLATES (MS AND P)**

Lockplates are bolted onto the outboard face of the locknut and fit into a keyway machined in the shaft or a slot in the adapter sleeve.

- MS series are mounted on metric shafts sizes with HM locknuts
- P series are to be mounted on metric shafts sizes with N locknuts.

To learn more about our spherical roller bearing accessories, contact your Timken sales representative. Standard suffixes and prefixes are found after page 117.