

# POBCO® *SnapIdle*® Chain Tensioner

**‘Floating Tensioner’ provides constant tension to chain-drive systems.**

- Easy installation, no special tools needed
- Greater sprocket pulling power
- Less wear on sprocket and chain
- No brackets or mounting bolts
- No idler sprocket
- No bearings
- No lubrication required
- Less maintenance, less costly



## POBCO® SnapIdle® Chain Tensioner

# The ideal way to maintain tension on moving chains.

New 'floating' idler utilizes more pulling power of the sprocket and chain while reducing wear on both.

POBCO® SnapIdle® Chain Tensioners are available in Standard (PSI-ST Series), High Temp. (PSI-HT Series), Extra Heavy (PSI-XH Series), and Single Guide (PSI-SG Series).

These floating tensioners consist of two ULTRA-D saddle blocks which ride on the driven and the slack sides of the chain and are joined by adjustable take-up straps in the chain assembly. They provide constant tension to chain drive systems and they eliminate the need for adjustable center distance drives. By removing the slack from the chain, the maximum drive efficient is maintained by providing full tooth engagement in the sprocket. POBCO SnapIdles "float" on the chain drive, thereby reducing vibration and absorbing shock.

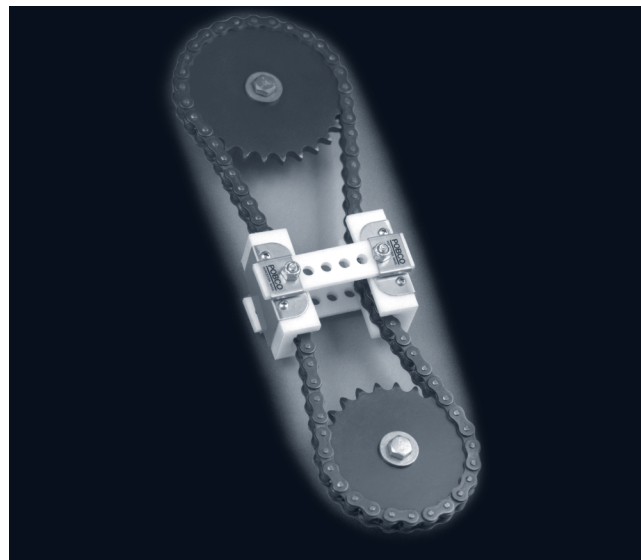
Both sprockets will have the maximum chain wrap possible, thereby increasing chain life (load sharing) and sprocket life (load sharing) and sprocket life (the chain cannot crawl out of the teeth).

The ULTRA-D saddle blocks come complete positioned in 304 stainless steel carriers. The plastic knurled straps for #25 and #35 chain snap into the sides of the saddle blocks via a spring tensioning chain action. These snap fit straps are also available for #40 and #50 chain.

### Selection Considerations

#### STANDARD SNAPIDLE:

Maximum operating temperature 200° F



<b>HIGH-TEMP SNAPIDLE:</b>	Temperature ranges 200-450° F
<b>EXTRA HEAVY SNAPIDLE:</b>	Used in extreme abrasive environments and particularly where there is no lubrication system or where chain speeds are excessive.
<b>SINGLE GUIDE SNAPIDLE:</b>	Used where space is limited, especially on serpentine drive systems
<b>VELOCITY LIMITS:</b>	Chain speeds should not exceed: oil bath: 2500 fpm Standard lube: 1800 fmp No lubricant: 800 fpm
<b>CUSTOM APPLICATIONS</b>	For drives not listed in the cross-reference chart and for chemical considerations, supply the following data: 1) Type of chain; 2) Manufacturer of chain and designation; 3) Sprocket diameters; 4) Horsepower, motor selection and speed; 5) Environment and temperature conditions; 6) If guarded, space criteria; and 7) Center distances of drive.

Additional engineering and dimensional data available.

Ask for Our  
Complete Catalog!

# POBCO® SnapIdle® Chain Tensioner

## ANSI Standard Roller Chain

### Cross Reference Chart

PART NO.	N= Snap Fit Side Straps		To Determine Part Number
	ANSI No.	ISO-B BS/DIN No.	
PSI-	ANSI No.	ISO-B BS/DIN No.	1. For <b>STANDARD</b> add ST to end of No. i.e. For #40 Chain - PSI-40-ST  2. For <b>HIGH TEMP.</b> add HT to end of No. i.e. For #60 Chain - #PSI-60-HT  3. For <b>EXTRA HEAVY</b> add XH to end of No. i.e. For #50 Chain - #PSI-50-XH  4. For <b>SINGLE GUIDE</b> add SG1 or SG2 to end of No. i.e. for #60 Chain - #PSI-60-SG1 or #PSI-60-SG2
#25N	25		
#35N	35	(06B)	
#40 or #40N	(25-2, 41, 40, 52)	(08B)	
#50 or #50N	(35-2, 50)	(10B, 06B-2)	
#60	(40-2, 35-3, 60)	(12B, 08B-2)	
#80	(50-2, 35-4, 80)	(16B, 20B, 10B-2)	
#100	(60-2, 40-3, 76, 100)	(12B-2, 08B-3)	
#120	(80-2, 50-3, 40-4, 120)	(24B, 10B-3)	
#140	140		
#160	(50-4, 40-5, 160)	(28B, 32B, 16B-2, 12B-2)	
#180	(60-3, 180, 100-2)	(40B, 20B-2)	
#200	(120-2, 80-3, 60-4, 50-5, 40-6, 200)		
#240	(140-2, 160-2, 100-3, 80-4, 60-5, 50-6, 240)	(24B-2, 28B-2, 32B-2, 16B, 3, 20B-3)	
#300	(180-2, 200-2, 240-2, 120-3, 140-3, 160-3, 100-4, 120-4, 140-4) (80-5, 100-5, 60-6, 80-6, 60-8)	(40B-2, 24B-3, 28B-3, 32B-3)	
#400	(200-3, 240-3, 160-4, 200-4, 120-5, 140-5, 160-5, 100-6, 120-6) (140-6, 80-8, 100-8, 180-3, 180-4)		
#500	(240-4, 160-6, 120-8, 140-8, 180-5)		
#600	(180-6, 200-6, 240-5, 160-8)		

When ordering #300, #400, #500 and #600 series, please refer to footnotes provided below:

<b>NOTE 1:</b>	These units must be ordered as follows; the SnapIdle # and the ANSI chain that it is to fit. (i.e., #300 SnapIdle to fit 240-2 R.C.)
<b>NOTE 2:</b>	PSI sizes through #60 have strap lengths of 12 inches. PSI sizes #80 through #180 have strap lengths of 16 inches. PSI size #200 has strap length of 24 inches. PSI size #240 has strap length of 36 inches. PSI size #300 has strap length of 48 inches.
<b>NOTE 3:</b>	Allow four weeks for delivery.
<b>NOTE 4:</b>	See cross reference charge for non-referenced chains.

POBCO does not recognize or agree to any terms, conditions, testing, packaging or any other requirements outside our POBCO, Inc. normal and customary terms and conditions. Any deviation from these conditions must be supplied by the customer and received in writing by POBCO, Inc. and agreed to in writing by an authorized POBCO, Inc. representative prior to any order being processed. Addendums to purchase orders are not considered prior approval.

Field testing is the ultimate proof of POBCO products meeting or exceeding your design requirements. POBCO will provide application assistance and will furnish samples for test on your equipment.

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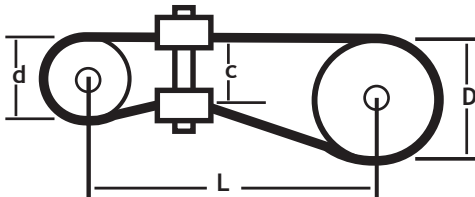
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## Selection Criteria

### Standard Criteria

- $R_1 = D/d =$  Sprocket Ratio
- $R_2 = D/L =$  Drive Aspect Ratio
- $R_3 = c/d =$  Constant Ratio

- $R_1$  must be less than 4
- $R_2$  should be less than or equal to 0.5
- $R_3$  should be less than or equal to 0.85

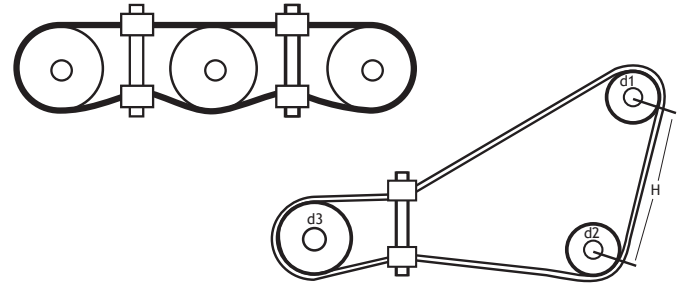


## Multiple Sprocket Applications

### Standard Criteria

$$H + \frac{d_1 + d_2}{2} < d_3$$

If the result is less than 4, use Standard Criteria

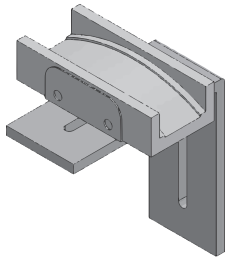


Standard PSI not applicable

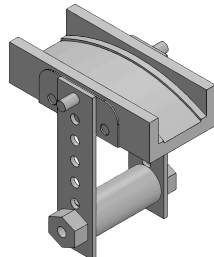
Use PSI- SG1 or PSI-SG2

**SG1** = Single guide equipped with side mount bolts

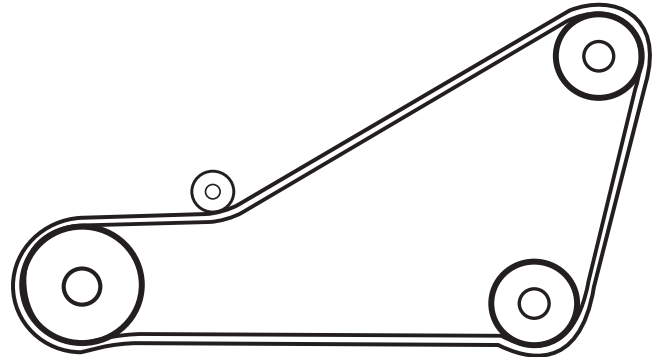
**SG2** = Single guide equipped with bottom mount bolts



PSI-Chain# SG2



PSI-Chain# SG1



## Safety, Installation, Maintenance

OSHA requires that all drive systems be adequately guarded. Never install, adjust or maintain a SnapIdle when the drive is in operation. All power must be disconnected when servicing a SnapIdle. Tension the chain using side straps. Tension only enough to take out the slack in the chain. Never over-tension the SnapIdle since this will cause increased wear. Periodically

visually inspect the SnapIdle to verify wear and replace before the chain wears through the Ultra-D plastic saddle blocks. In replacement of the SnapIdle we recommend also replacing the side straps as they have been subjected to drive stress.

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