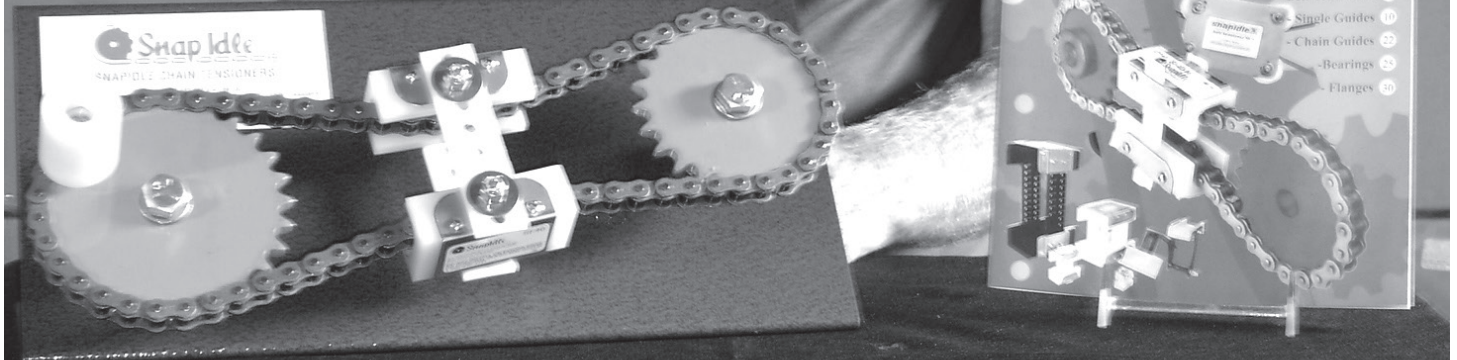


Snapidle™



P.O. Box 38 | Moxee, Washington 98936
(509) 575-6322 | Sales (800) 836-4721 | Fax (509) 575-0890
sales@snapidle.com | www.snapidle.com



Dick & Sandy Rahn of Manufacturers Industrial Co. Cummings, GA had this to say about Snapidle:

"MIC Atlanta has found the Snap Idle chain tensioner to be an extremely effective proven tensioning product. We have seen this product used extensively in industries such as automotive, textile, poultry, food processing, farm equipment, water treatment or virtually any industry needing tensioning for a drive application. The fast and easy installation of the Snap idle has made it the choice over the years for the engineer designing a new chain drive system to the maintenance department which will install the tensioner. Simply stated the Snap idle is the best chain tensioning product on the market today."

Customer Testimonials

DURABILITY and **VERSITILITY**, two words you don't often see together when describing chain tensioners for the Power Transmission Industry however, Snapidle has changed the minds of Distributors around the world because it is just that, **DURABLE** and **VERSATILE**.

The Original and Award winning Free Floating Chain Tensioner just got even better and in the process more versatile. Snapidle chain tensioners are now 100% Stainless Steel & UHMW (plastic) making them suitable for all applications especially food handling equipment, moisture environments, waste water treatment facilities and the lists just keeps growing.

Below is an excerpt from **Allied-Locke Industries, Inc.** catalog of products, page 35

*"The **Snapidle chain tensioner** is easier to install and maintain than the adjustable sprocket tensioner. The Snapidle is generally made out of UHMW-PE and stainless steel hardware with the strap having the option of being stainless steel. It is self-adjusting because of its unique design that allows it to slide up and down the drive chain wherever there is slack. Its reliability and lack of needed maintenance make it the tensioner of choice."*

When asked what he thought of **Snapidle Chain Tensioners**, **George Gephart of Gephart Industrial Sales, Denville New Jersey**, made the following statement:

"The first comment I would tell you about Snapidle Chain Tensioners is the first thing that all of the Engineering PE's tell me, it really works and there is no MATH! The second comment that I always say is that Snapidle will increase your chain life by 10 times, I have sold over 5000 SI-180 units into the worst possible environment, Waste Water (Sewer) Treatment Plants and I have never had a single one fail."

There are over 3,400 industrial wholesalers and distributors worldwide currently marketing our **SNAPIDLE** products. We are rapidly growing our business because Snapidle Tensioners offer the following benefits to you and your customers:

- *FREE FLOATING
- *DAMPENS VIBRATIONS
- *NO IDLERS NEEDED
- *LESS CHAIN OR BELT WEAR
- *LESS SPROCKET OR PULLEY WEAR
- *SIMPLE EASY INSTALLATION
- * LESS BELT SLIPPAGE
- *NO LUBRICATION
- *LESS MAINTENANCE

What all of this means is you can **increase efficiency** while **lowering your operation cost**.

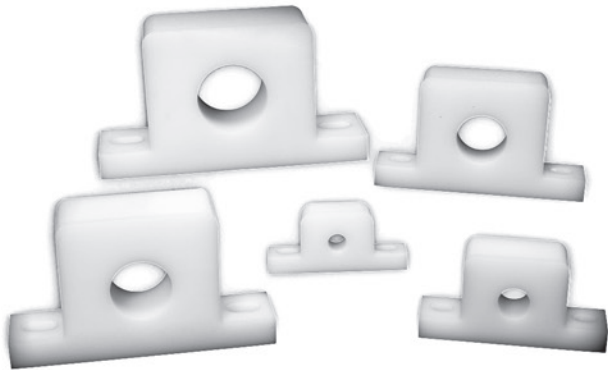
If you decide to join the **SNAPIDLE** family of wholesalers and distributors we promise to provide you the following:

Exceptional Customer Service.....Unique, Patented, High Quality, Proven Products

Support and the Knowledge of an Industry leader



Bearings



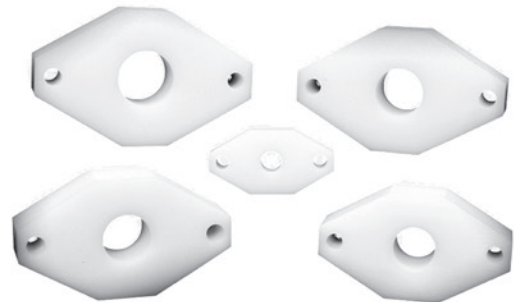
Plastic Pillow Block Bearings



Four Bolt Flange Bearings



Plastic Spherical Bearing Inserts



Two Bolt Flange Bearing

Simple, easy installation

Tough, lightweight

Long-wearing

Non-stick

No lubrication needed

Available in Teflon or UHMW

Custom sizes available

UHMW is food grade

Moisture resistant

Less installation time

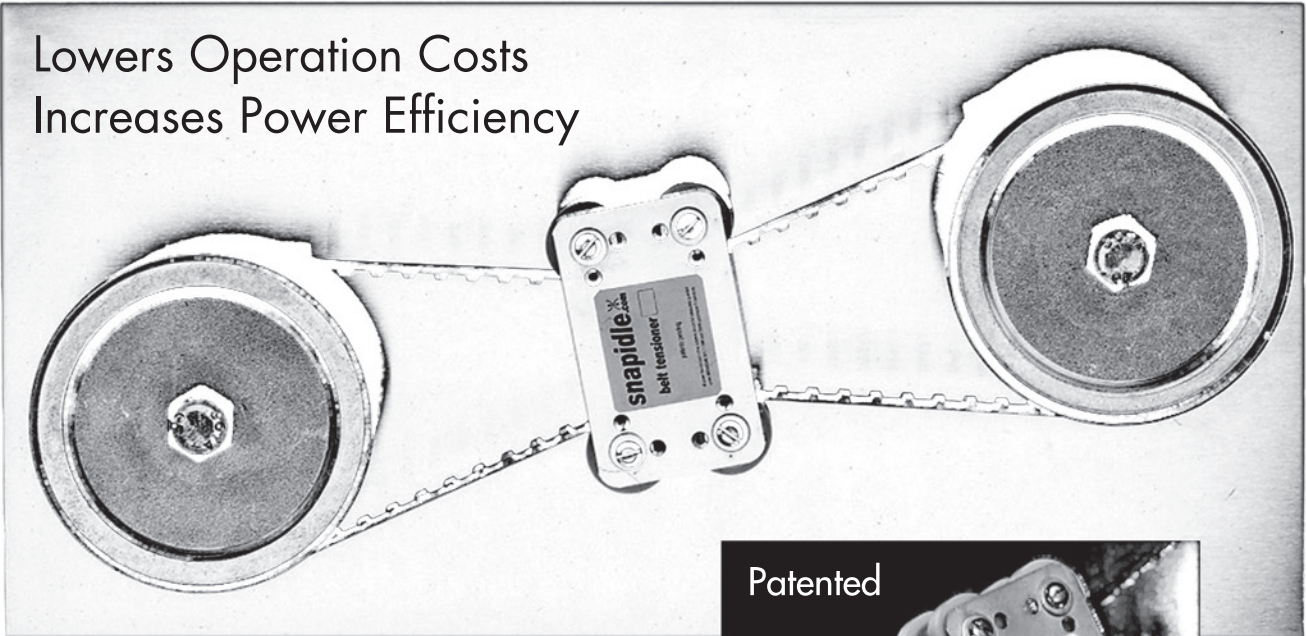
Less maintenance or repair time

Less time = less cost

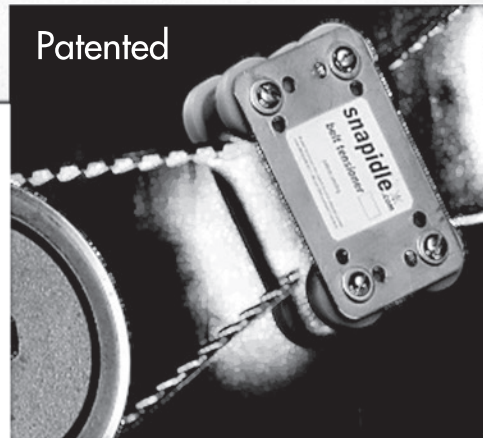


Belt Tensioners

Lowers Operation Costs
Increases Power Efficiency



Patented



Free Floating

Easy installation

Applies direct tension
to drives instantly

Extra wrap utilizes
more pulling power

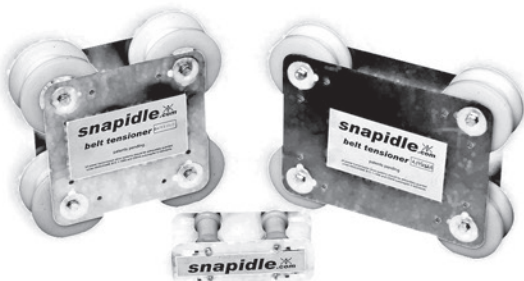
Dampens vibrations

Reduces slippage

Less pulley replacements

Less belt wear

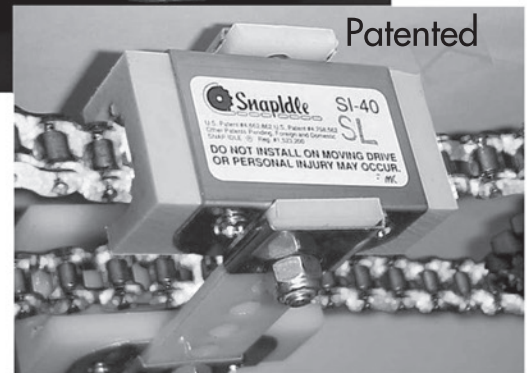
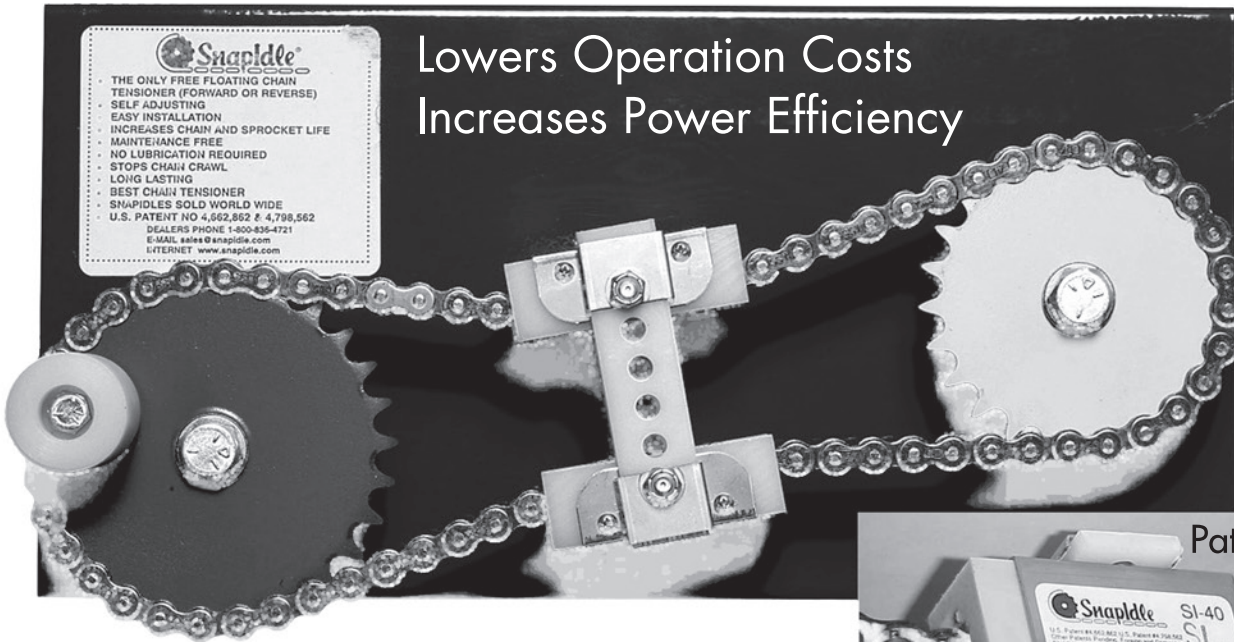
Less maintenance time



Available for ANY belt size



Chain Tensioners



Free Floating

No mounting bolts

No bearings

No tension arm

No idler sprocket

No lubrication

Less installation time

Less sprocket wear

Less chain wear

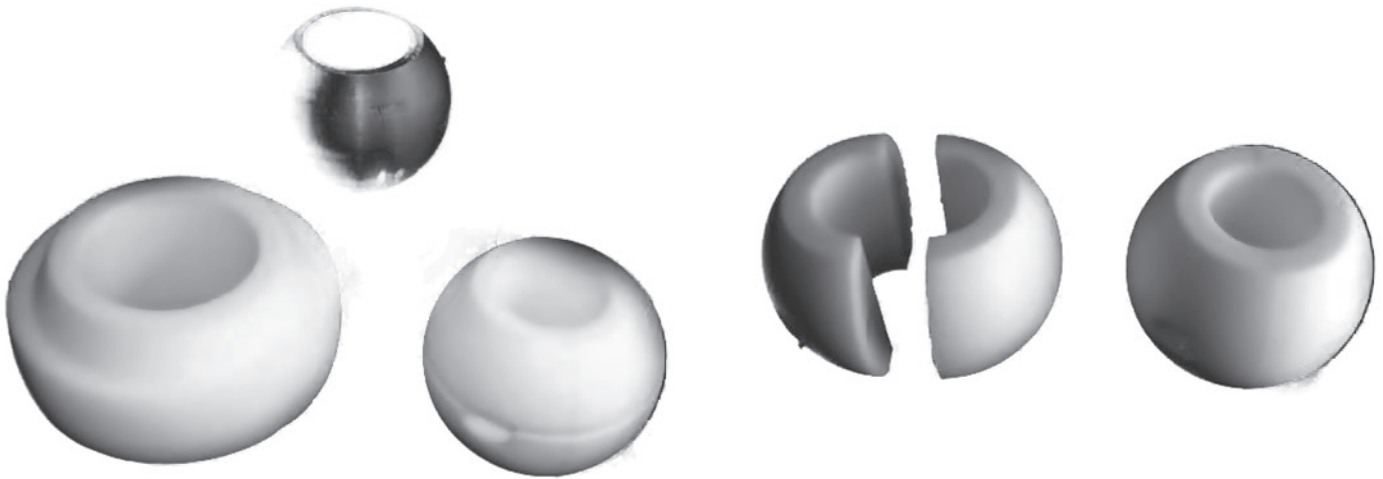
Less maintenance

Less time to adjust

WE CAN
HANDLE ANY SIZE CHAIN



Spherical Bearing /Rollers



Unique patent pending design

Simple, Easy Installation

Lightweight

High Temperature Material
400 degrees

Long Wearing

Non Stick

No Lubrication Needed

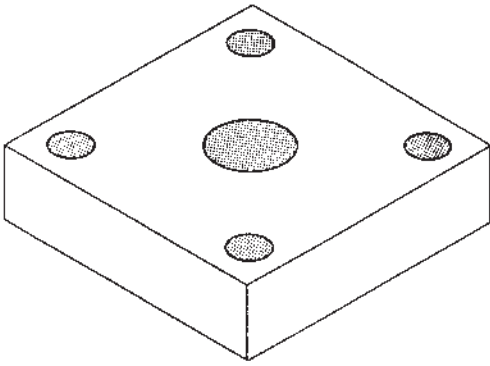
Moisture Resistant

Less Installation Time

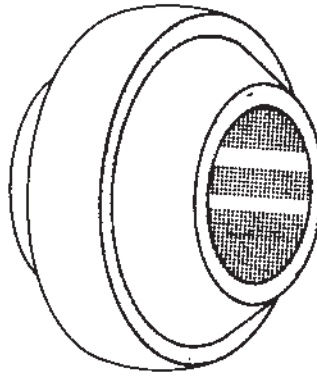
Less Maintenance or
Replacement time

Lowers over all
operational cost

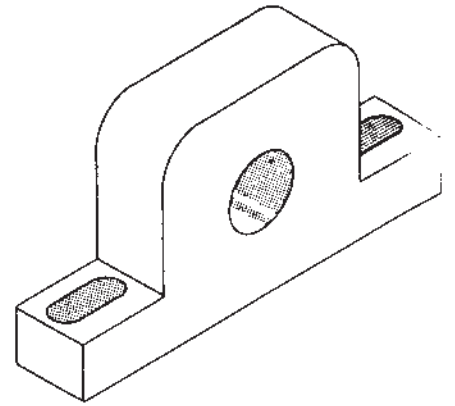
Custom sizes available



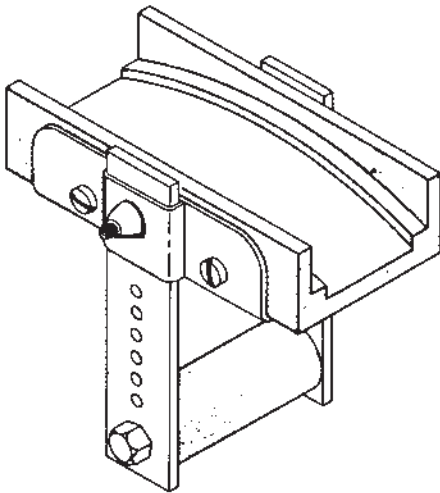
PF Series



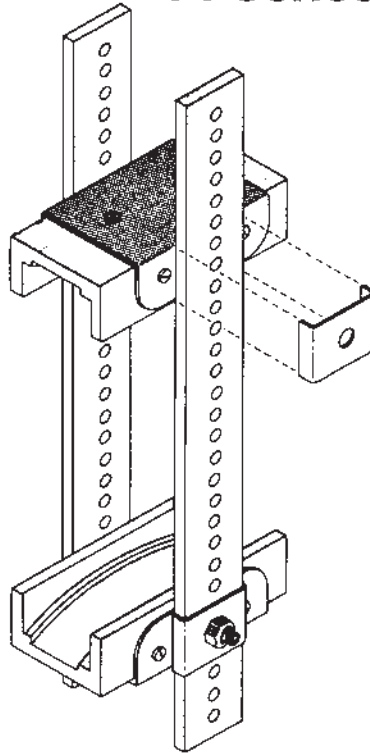
PI Series



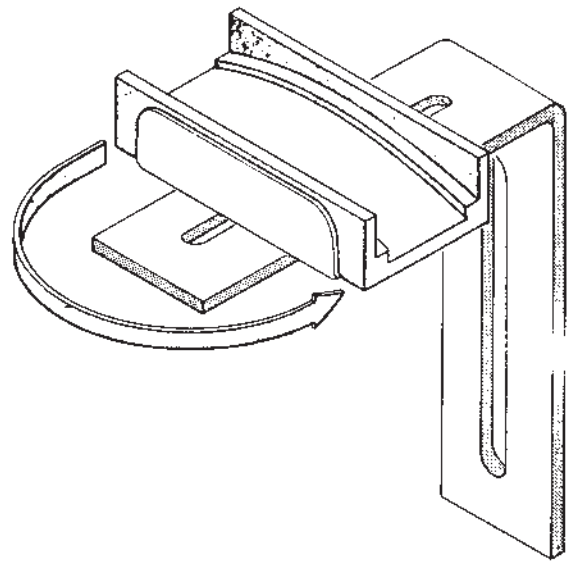
PP Series



SI-SG1



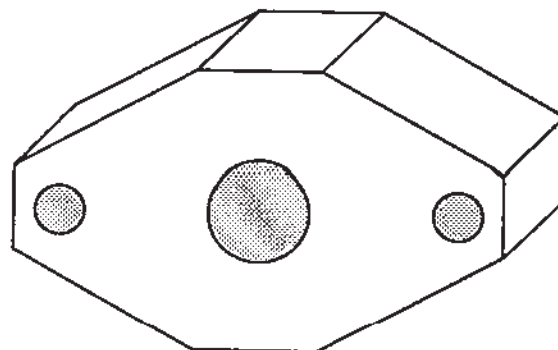
Snapidle



SI-SG2



SNAPIDLE (BT)



PF Series



Chain Rail Wear Strips



Simple, easy installation

Tough, lightweight

Long-wearing

Non-stick

No lubrication needed

UHMW is food grade

Moisture resistant

Less installation time

Less maintenance or repair time

Less time = less cost

Custom sizes available



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TENSIONING & IDLING SYSTEMS

Correct operating tension is an important factor in the satisfactory performance and life of any v-belt or chain drive. As v-belts wear they seat themselves deeper in the sheave grooves. This seating, along with belt stretch lessens the initial tension. The result is slippage and loss in horsepower capacity unless some form of take-up is used to restore and maintain the original tension.

As chains wear they elongate, which results in sway, slap and increased vibration. This puts undue shock into the drive and increases bearing wear. As the chain elongates, it "crawls" out of the sprocket teeth and results in dramatic premature sprocket failure and decreased drive life.

Both v-belt and chain drives wear at an increased rate if they are allowed to run with insufficient tension. Adjustable center distances are the recommended method of maintaining proper tension. In cases of fixed center distances, tensioners and idlers provide the necessary means of take-up. These tensioners and idlers provide a means of obtaining extra belt or chain wrap frequently needed for high ratios, multiple shafts or serpentine drives.

"Traditional" tensioning or idling devices face the following problems:

1. Too much tension in a drive causes excessive belt, chain and bearing wear.
2. Too little tension in a drive allows belt slippage or chain vibration, resulting in loss of power and additional wear.
3. All traditional idlers should be installed on the slack side of the drive.
4. Traditional v-belt idlers should be used on the inside of the belt, which results in a corresponding horsepower loss due to the reduced arc of contact.
5. Idlers used on the outside of a drive should be located approximately 1/3 of the center distance from the small sheave, pulley or sprocket, or the drive will suffer detrimental effects.
6. Chain wrap or pulley wrap must be 120 degrees of the small sprocket or sheave in order to have adequate drive life and in order not to suffer horsepower loss.
7. Traditional idling sprockets add increased wear to the drive.
8. The system must be mounted, maintained and lubricated.

Snapidle® (Chain Tensioners)

Snapidle®'s patented concept induces minimal wear to the chain drive since the chain rides on the side plates. (U.S. Patent No:4,662,862 - 4,798,562. Foreign Patents Pending)

Snapidle® provides a constant amount of tension to the chain drive, increasing drive life. It tensions, guides, quiets, controls and increases both chain and sprocket life. It requires no mounting devices or maintenance and is a benefit to the drive system, not a deterrent. Economical, easy to install, maintenance free, the **Snapidle®** is the answer to the problem of controlling drive chains.

By being able to take up tension through the chain, **Snapidle®** eliminates the need for adjustable center distance drives. All chains may be ordered in even pitches (eliminating half links) since the additional tension may be taken up by the **Snapidle®**.

Since the **Snapidle®** "floats" on the chain drive and actually absorbs shock, it does not add to vibration in the drive. Both sprockets will have the maximum chain wrap possible, thereby increasing chain life (load sharing) and sprocket life (the chain is unable to crawl out of the teeth).

On large chain drives, the expense required to install a tensioning system may be unrealistic. A **Snapidle®** unit at a fraction of the cost of traditional tensioning methods can tension almost any roller chain drive. Many multiple strand drives cannot be tensioned by traditional idling or tensioning systems, but are readily fitted with **Snapidle®** economically.

Hi-Temp Snapidle®

For temperature applications ranging from 200 degrees Fahrenheit to 450 degrees Fahrenheit, the SI-HT series should be considered. With all the benefits of the standard **Snapidle®**, it offers the enhanced benefit of controlling drive chains in extreme temperatures. Where most tensioning systems are not applicable, Hi-Temp **Snapidle®** solves the problem.

Extra-Heavy Snapidle®

In extreme environments, there is the SI-XH series. Dry, dusty and gritty environments (where the chain is usually not lubricated) require a product that can take the punishment. Recommended for the harshest environments and for high speed chain applications, the SI-XH is tougher than the environment.

Self Lubricating Snapidle®

The SI-SL series is recommended where chain lubrication is a problem. The SL **Snapidle®**'s top block contains up to 40% oil... lubricates while tensioning your chain.

Single Guide Snapidle®

Where space is at a premium, especially on serpentine drives, the SI-SG series is easily installed and adjustable. An economical way to adjust tension and control drive systems where the standard **Snapidle®** is not applicable.

SELECTION CONSTRAINTS

VELOCITY LIMITS

Oil bath:	Chain speeds should not exceed 2,500 F.P.M.
Standard lube:	Chain speeds should not exceed 1,800 F.P.M.
Bone dry:	Chain speeds should not exceed 800 F.P.M.

ENVIRONMENT

Temperature: Maximum operating range of any standard **Snapidle®** unit is two hundred degrees F. For temperatures above two hundred degrees F. use the SI-HT Series **Snapidle®**. (Not to exceed 450° F.)

Chemicals: All **Snapidle®** metal is stainless steel.

Environment: In extreme environment (i.e. abrasive grinder dust, foundries, gypsum facilities, dry glass, etc.) especially in a lack of lubrication situation, the wear on the carrier will be greatly enhanced. In the case where the standard **Snapidle®** does not provide adequate life, the SI-XH **Snapidle®** series should be used.

Reversing Drives and Orientation: The **Snapidle®** series has no limitation on the direction of rotation. The **Snapidle®** may be used in any chain drive attitude.

MISALIGNMENT

The **Snapidle®** series can tolerate any misalignment compatible with a roller chain drive and, in most applications, will allow a roller chain drive to operate with a larger misalignment. Misalignments in which the plane of one sprocket is rotated relative to the plane of the second or in which the plane of one sprocket is moved laterally relative to the other sprocket, or a combination of the two, can be tolerated.

SPECIAL APPLICATIONS

For drives not listed in the cross-reference charts, for non-listed chemical applications or for further engineering information: please supply the following information:

1. Type of chain.
2. Manufacture of chain and designation.
3. Sprocket diameters.
4. Horsepower, motor selection and speed.
5. Environment and temperature conditions.
6. If guarded, space criteria.
7. Center distances of drive.

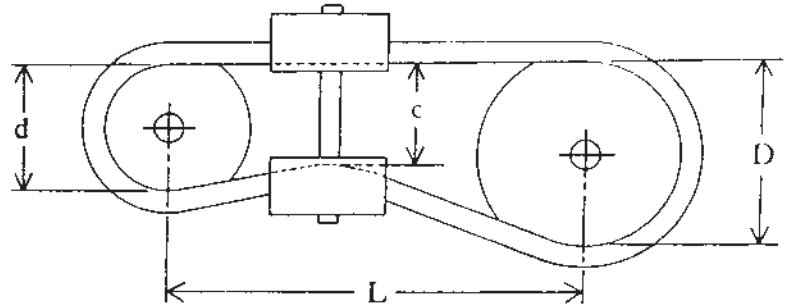
SEND TO:
M.I.C.
Engineering Dept.
P.O. Box 38
Moxee, WA 98936
Fax # (509) 575-0890

— Selection Criteria —

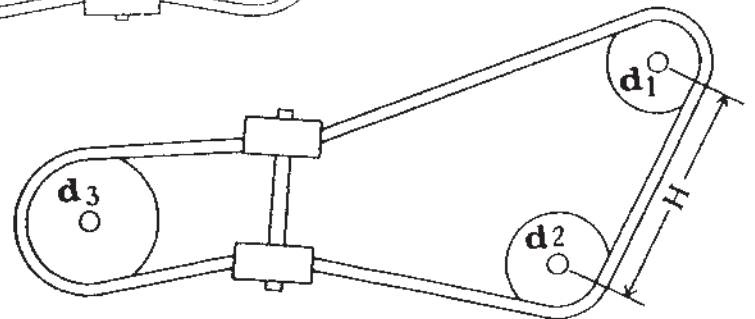
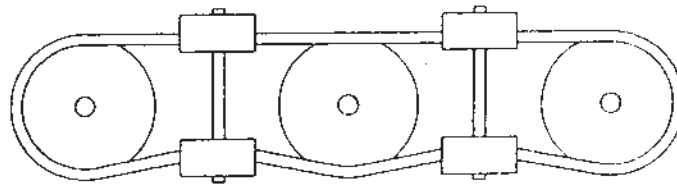
Standard Criteria

- $R_1 = D/d =$ 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

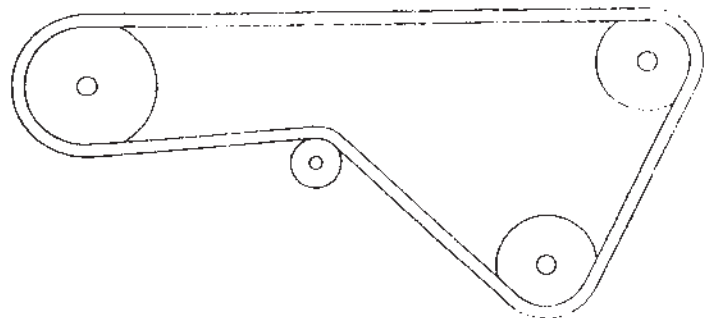
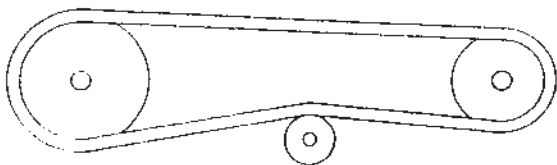


Multiple Sprocket Applications Standard Criteria



If $\frac{H + \frac{d_1 + d_2}{2}}{d_3}$ is not less than 4 use Standard Criteria.

Standard SI not applicable.
Use SI-SG1 or SI-SG2

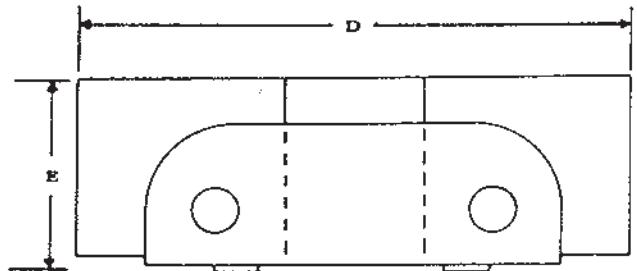
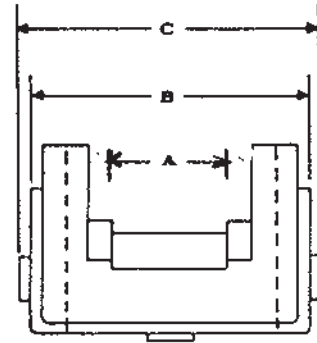


- Engineering Data -

Standard, High-Temp, Extra-Heavy and Self-Lubricating Snapldles

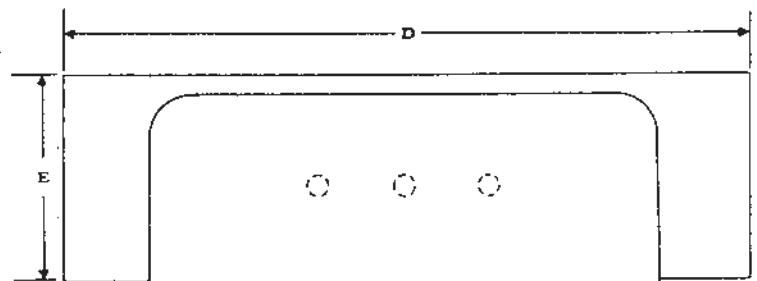
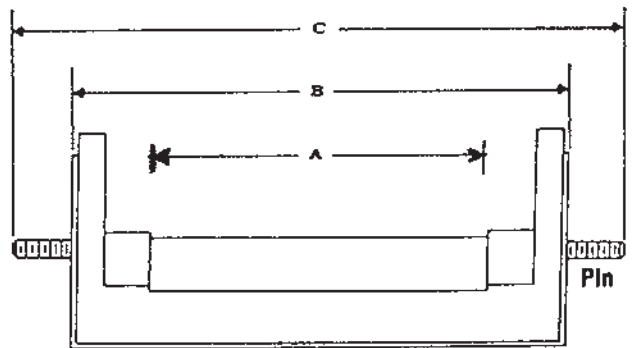
Narrow and Space Saver Snapldle Dimensions

NARROW PROFILE		SPACE SAVER PROFILE		INCHES		
SI#	SI#	A	B	C	D	E
25-N		.312	1.09	1.09	2.50	1.126
35-N		.470	1.09	1.09	2.50	1.126
40-N		.625	1.50	1.68	3.00	1.036
50-N		.750	1.69	1.87	3.50	1.036
	60-N	1.06	1.94	2.50	4.00	1.286
	80-N	1.31	2.31	2.75	4.50	1.286
	100-N	1.56	2.65	3.00	5.00	1.548
	120-N	2.07	3.28	3.75	5.50	1.638
	140-N	2.07	3.28	3.75	5.50	1.638
	160-N	2.44	3.72	4.00	6.50	1.638
	180-N	2.63	4.05	4.50	7.00	1.649

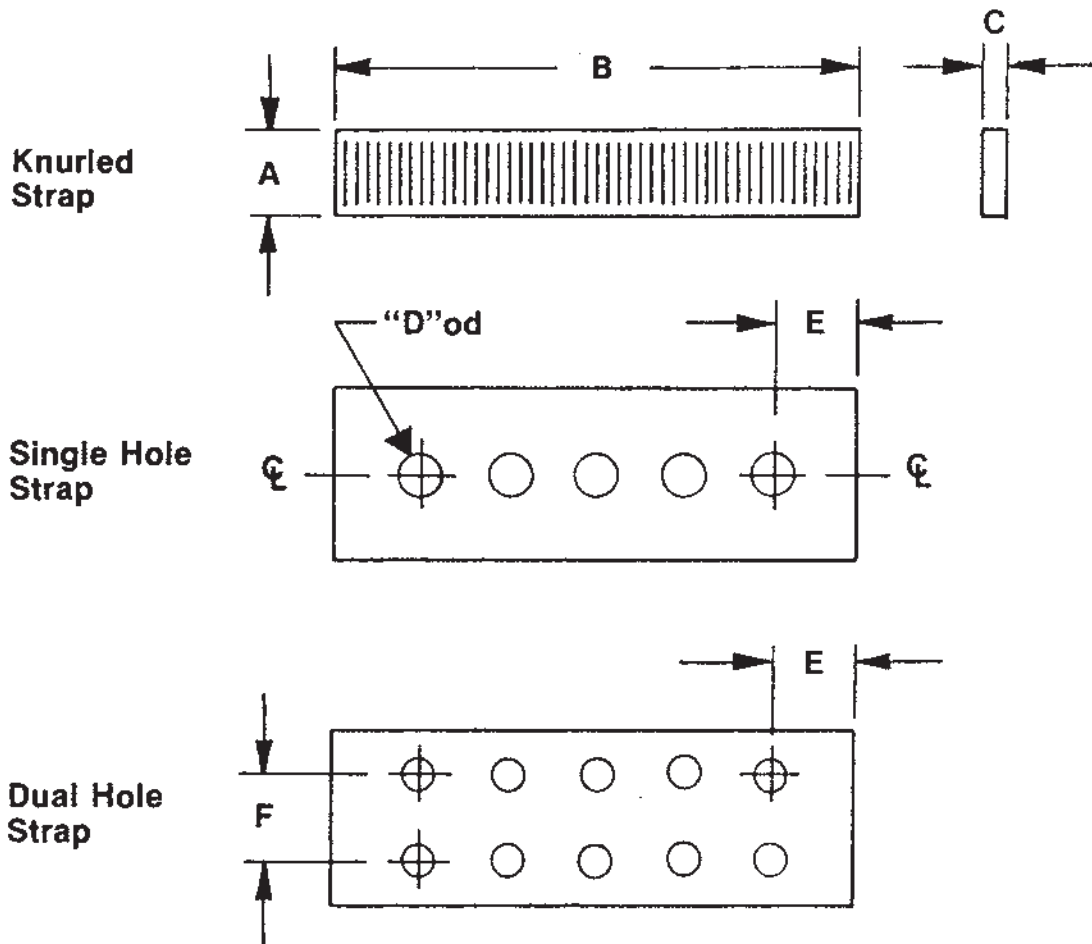


Standard Snapldle Dimensions

SI#	A	B	C	D	E
40	0.62	1.50	2.68	3.00	1.036
50	0.75	1.69	2.87	3.50	1.036
60	1.06	1.94	3.12	4.00	1.036
80	1.31	2.32	3.75	4.50	1.036
100	1.56	2.65	4.06	5.00	1.388
120	2.07	3.40	4.81	5.50	1.638
140	2.07	3.40	4.81	5.50	1.638
160	2.44	3.84	5.25	6.50	1.638
180	2.63	4.18	5.56	7.00	1.649
200	2.91	4.65	6.00	7.50	2.70
240	4.19	6.02	7.37	8.00	2.70



— Engineering Data — SnapIdle Side Straps



Dimension Data

SI#	A	B	C	D	E	F
25-35	.750	12"	.125	N.A.	N.A.	N.A.
40N-50N	.750	12"	.125	N.A.	N.A.	N.A.
40-60	1.00	12"	.187	.290	.50	N.A.
80-120	1.50	16"	.250	.290	.50	N.A.
140-180	3"	16"	.250	.290	.50	1.50
200	3"	24"	.250	.350	.75	1.50
240	3"	36"	.250	.350	.75	1.50

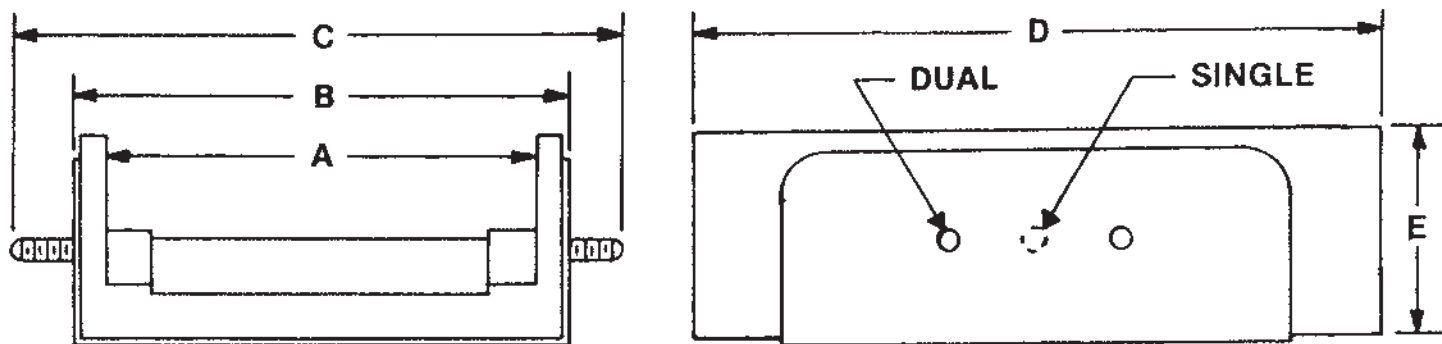
Pin Data

SI #	Length ($\pm .015$ in.)	OD ($\pm .003$ in.)	Threads Per Inch Class 214 (MIL-S-7742)	Maximum Installation Torque Inch lbs.
40-60	0.625	0.250	20	80
80-180	0.750	0.312	18	185
200-240	0.750			

MATERIAL: Stainless Steel

FINISH: Stainless Steel

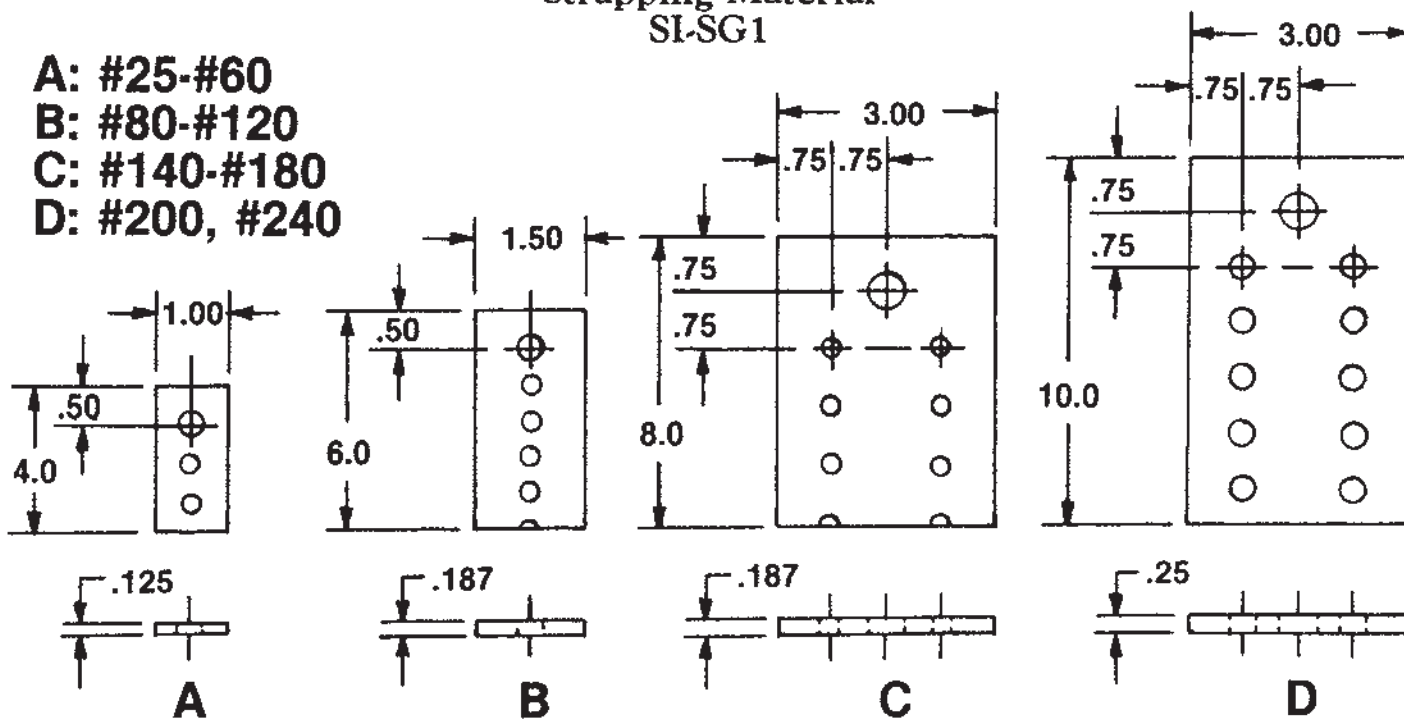
— Engineering Data — SI-SG1



		Dimensions Inches					Dimensions Millimeters				
	SI #	A	B	C	D	E	A	B	C	D	E
Single Pin	40	0.93	1.56	2.81	3.00	1.00	23.8	39.6	71.4	76.2	25.4
	50	1.12	1.75	3.00	3.50	1.00	28.5	44.4	76.2	88.9	25.4
	60	1.37	2.00	3.25	4.00	1.00	34.9	50.8	82.6	101.6	25.4
	80	1.75	2.37	3.37	4.50	1.00	44.4	60.3	85.7	114.3	25.4
	100	2.06	2.68	4.18	5.00	1.25	52.3	68.2	106.3	127.0	28.5
	120	2.68	3.43	4.93	5.50	1.50	68.2	87.3	125.4	139.7	38.1
Dual Pin	140	2.68	3.43	4.93	5.50	1.50	68.2	87.3	125.4	139.7	38.1
	160	3.12	3.87	5.37	6.50	1.50	79.3	98.4	136.5	165.1	38.1
	180	3.43	4.18	5.68	7.00	1.50	87.3	106.3	144.4	177.8	38.1
	200	4.05	4.62	6.12	7.50	2.50	105.4	117.4	155.5	190.5	63.5
	240	5.25	6.00	7.50	8.00	2.50	133.3	152.4	190.5	203.2	63.5

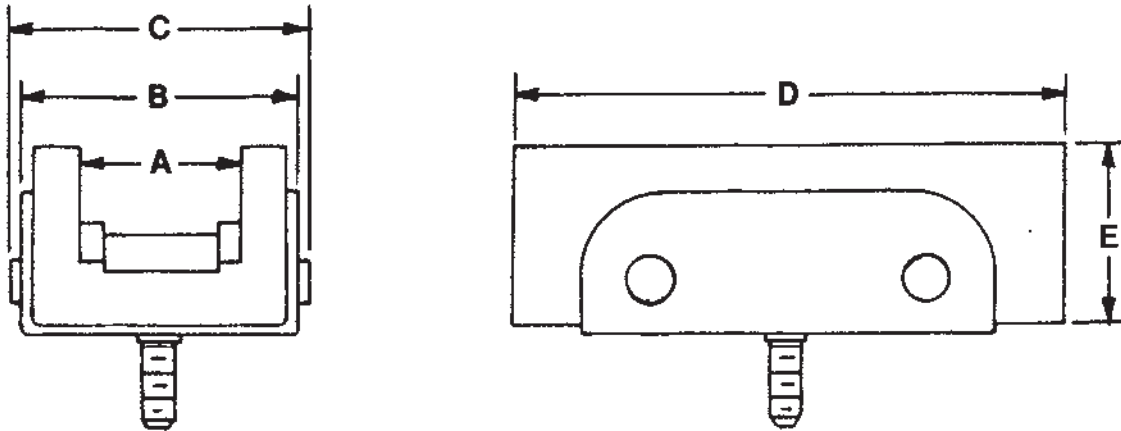
Strapping Material SI-SG1

- A: #25-#60**
- B: #80-#120**
- C: #140-#180**
- D: #200, #240**



NOTE: SI-SG1 will fit any popular arm type tensioning system. This unit would replace the existing sprockets.

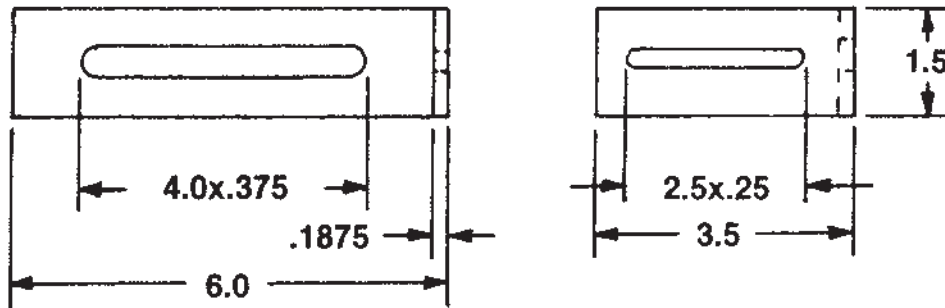
— Engineering Data —
SI-SG2



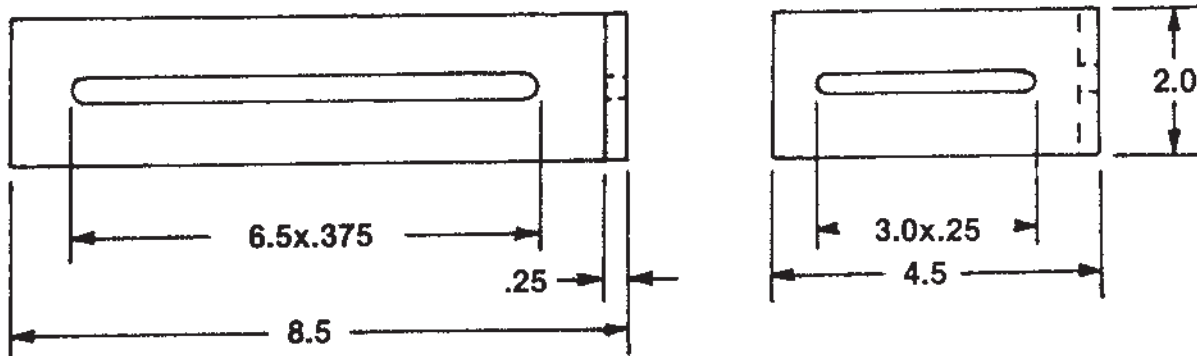
Single Pin

SI #	Dimensions Inches					Dimensions Millimeters				
	A	B	C	D	E	A	B	C	D	E
40	0.93	1.56	2.81	3.00	1.00	23.8	39.6	71.4	76.2	25.4
50	1.12	1.75	3.00	3.50	1.00	28.5	44.4	76.2	88.9	25.4
60	1.37	2.00	3.25	4.00	1.00	34.9	50.8	82.6	101.6	25.4
80	1.75	2.37	3.37	4.50	1.00	44.4	60.3	85.7	114.3	25.4
100	2.06	2.68	4.18	5.00	1.25	52.3	68.2	106.3	127.0	28.5
120	2.68	3.43	4.93	5.50	1.50	68.2	87.3	125.4	139.7	38.1

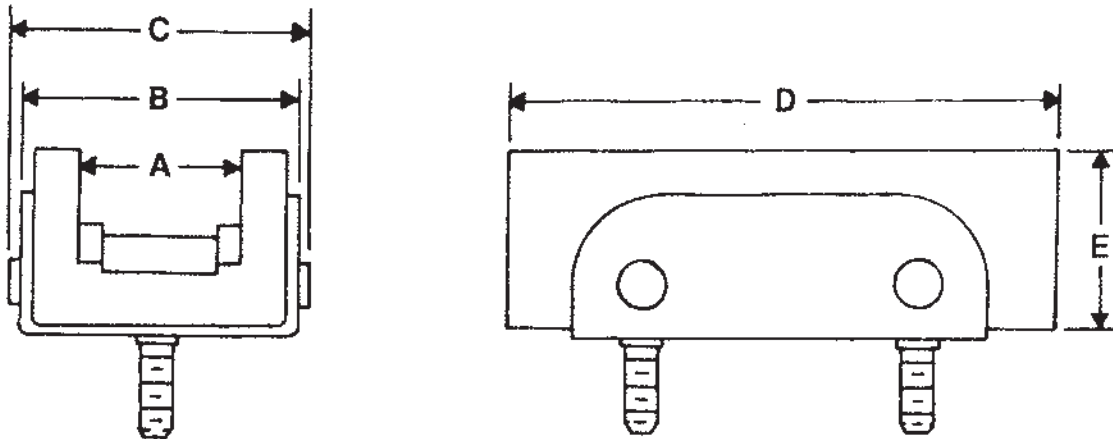
**SI-SG2 BRACKET
SI-25 THRU SI-60**



SI-80 THRU SI-120



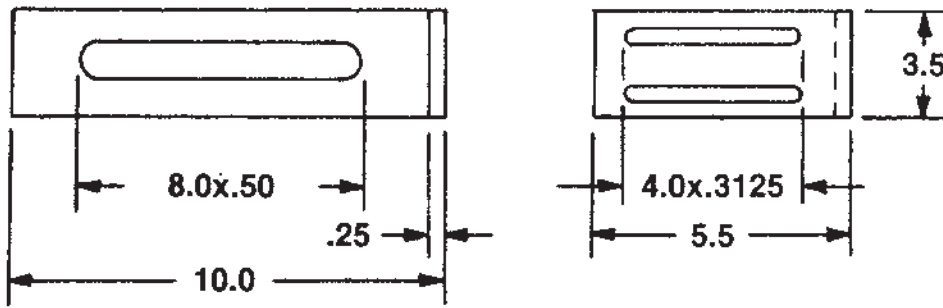
— Engineering Data —
SI-SG2



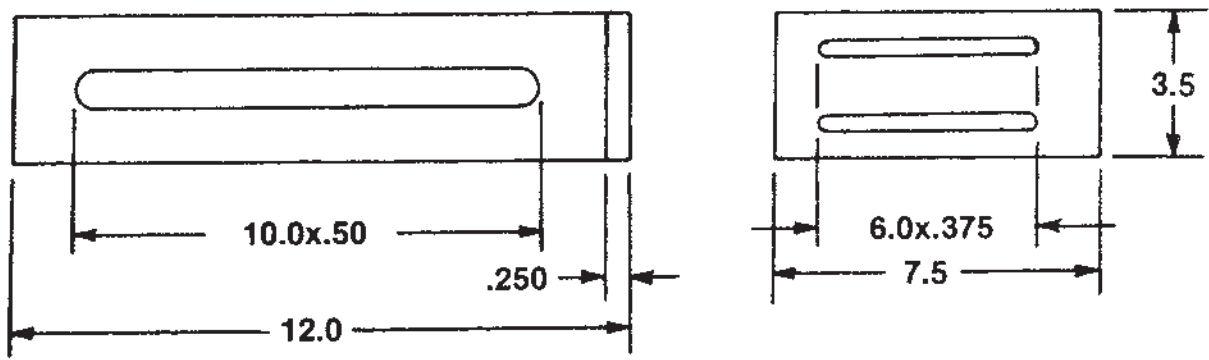
Dual Pin

SI #	Dimensions Inches					Dimensions Millimeters				
	A	B	C	D	E	A	B	C	D	E
140	2.68	3.43	4.93	5.50	1.50	68.2	87.3	125.4	139.7	38.1
160	3.12	3.87	5.37	6.50	1.50	79.3	98.4	136.5	165.1	38.1
180	3.43	4.18	5.68	7.00	1.50	87.3	106.3	144.4	177.8	38.1
200	4.05	4.62	6.12	7.50	2.50	105.4	117.4	155.5	190.5	63.5
240	5.25	6.00	7.50	8.00	2.50	133.3	152.4	190.5	203.2	63.5
...										

**SI-SG2 BRACKET
SI-140 THRU SI-180**



SI-200 THRU SI-240



Ultra-High Molecular Weight Polyethylene (UHMW)

UHMW possesses a unique combination of physical and mechanical properties which enable it to perform well under the most rigorous conditions of wear and environment. It has the highest known impact strength of any thermoplastic presently made, plus high resistance to abrasion against a wide variety of metals. These properties make UHMW an exceptional material for industrial impact, wear and sliding operations. UHMW is FDA compliant and USDA approved for direct contact in food processing applications. For polyethylene to be certified as UHMW the molecular weight of the material must be at least 4 million (4 ppm). UHMW is usually certified at 4-6 million molecular weight. Any material with less than a 4 million molecular weight is either high density or low density (HD or LD) polyethylene. These products are much less expensive to manufacture than UHMW, but the physical properties are correspondingly less. MIC certifies that only polyethylene greater than a 4.2 million molecular weight is used in MIC's UHMW products.

POLYMER PROPERTY TABLES UHMW

MECHANICAL PROPERTIES

PROPERTY	ASTM TEST	UNITS METRIC (US)	TYPICAL VALUES
Specific Gravity	D792	gm/cm ³	0.926-0.934
Tensile Strength @ Yield	D638	MPa (psi)	21 (3100)
Tensile Strength @ Break	D638	MPa (psi)	48 (7000)
Elongation @ Break	D638	%	350
Youngs ("E") Modulus (23°C)	D638	MPa (psi x 10 ⁵)	690 (1.0)
Youngs ("E") Modulus (-269°C)	D638	MPa (psi x 10 ⁵)	2970 (4.3)
Izod Impact Strength (23°C)	D256(1)	J/m (ft-lb/in notch)	140(30)
Izod Impact Strength (-40°C)	D256(1)	J/m (ft-lb/in notch)	100 (21)
Hardness, Shore "D"	D2240	—	62-66
Abrasion Resistance	(2)	—	100
Water Absorption	D570	%	Nil
Relative Solution Viscosity	D4020	dl/gm	2.3-3.5

(1) Izod Impact Strength: Samples have two (15° ± ½°) notches on opposite sides to a depth of 5 mm.

(2) See description of test method — Under Sand-Slurry test results.

THERMAL PROPERTIES

PROPERTY	ASTM TEST	UNITS METRIC (US)	TYPICAL VALUES
Crystalline Melting Range, Powder	Polarizing Microscope	°C (°F)	138-142 (280-289)
Coefficient of Linear Expansion			
20 to 100°C	D696	K ⁻¹	~2 x 10 ⁻⁴
-200 to -100°C	D696	K ⁻¹	~0.5 x 10 ⁻⁴

ELECTRICAL PROPERTIES

PROPERTY	ASTM TEST	UNITS METRIC (US)	TYPICAL VALUES
Volume Resistivity	D257	Ωcm	>5 x 10 ¹⁶
Dielectric Strength	D149	KV/cm (V/mil)	900 (2300)
Dielectric Constant (ε _r)	D150	—	2.30
Dissipation Factor (tan δ)	D150		
at 50 Hz		—	1.9 x 10 ⁻⁴
10 ³ Hz		—	0.5 x 10 ⁻⁴
10 ⁵ Hz		—	2.5 x 10 ⁻⁴

COMPARISON OF DYNAMIC COEFFICIENT OF FRICTION ON POLISHED STEEL

PROPERTY	UHMW	NYLON 6	NYLON 6/6	NYLON/MoS ₂	PTFE	Acetal Copolymer
Dry	.10-.22	.15-.40	.15-.40	.12-.20	.04-.25	.15-.35
Water	.05-.10	.14-.19	.14-.19	.10-.12	.04-.08	.10-.20
Oilq.05-.08	.02-.11	.02-.11	.08-.10	.04-.05	.05-.10	

CHEMICAL RESISTANCE

Test specimens dumb-bell type
 Duration of test 30 days
 A = resistant mechanical properties not appreciably affected

B = limited resistance decrease in yield stress and ultimate tensile strength less than 20%
 C = not resistant decrease in yield stress and ultimate tensile strength greater than 20%

REAGENT	Temperature			REAGENT	Temperature		
	20°C	50°C	80°C		20°C	50°	80°C
I. Inorganic Acids				V. Hydrocarbons & Halogenated Hydrocarbons			
Chromic Acid (80%)	A	A	B	Benzene	B	B	
Hydrochloric Acid (conc.)	A	A	A	Carbon Tetrachloride	B		
Hydrocyanic Acid	A	A		Cyclohexane	A	A	
Hydrofluoric Acid	A	A		Dichloroethylene	C	C	
Nitric Acid (conc.)	C	C	C	Diesel Oil	A	A	B
Nitric Acid (50%)	B	C	C	n-Heptane	A		
Nitric Acid (20%)	A	A	B	Petroleum Ether	A		
Phosphoric Acid (85%)	A	A	A	Trichloroethylene	B	C	
Sulphuric Acid (conc.)	A	C	C	Toluene	B	C	
Sulphuric Acid (75%)	A	B	B	White Spirit	A	B	
				Xylene	B	B	C
II. Alkalis				VI. Alcohols, Ketones, Ester & Amines			
Aqueous Ammonia	A	A		Acetone	A	A	
Potassium Hydroxide Solution	A	A	A	Aniline	A	A	B
Sodium Hydroxide Solution	A	A	A	Benzyl Alcohol	A	A	A
III. Aqueous Solutions of Inorganic Salts				Butyl Alcohol	A	A	
Aluminum Chloride	A	A	A	Cyclohexanol	A	A	A
Ammonium Nitrate	A	A	A	Ethanol	A	A	
Bleaching Powder	A	A	A	Ethyl Acetate	A	A	
Calcium Chloride	A	A	A	Ethylene Glycol	A	A	A
Sodium Carbonate	A	A	A	Glycerine	A	A	A
Sodium Chloride	A	A	A	Lauryl Alcohol	A	A	A
Sodium Hypochlorite	A	A	A	Propyl Alcohol	A	A	A
Zinc Chloride	A	A	A	VII. Miscellaneous			
IV. Organic Acids				Beer/Wine	A	A	A
Acetic Acid (99%)	A	A	B	Detergents in Aqueous Solution	A	A	A
Acetic Acid (10%)	A	A	A	Distilled Water	A	A	A
Butyric Acid	A	A		Hydrogen Peroxide 30% (Perhydrol)	A	A	
Citric Acid	A	A	A	Linseed Oil/Olive Oil	A	A	A
Formic Acid	A	A		Milk	A	A	A
Oleic Acid	A	A	B	Sea Water	A	A	A

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ABRASION RESISTANCE

The abrasion resistance of UHMW is illustrated in the sand-slurry diagram below. These tests were conducted for a period of 7½ hours at a speed of 1750 rpm's. Results for convention wear resistant materials are expressed as a percentage based on the volume of material lost. A carbon steel standard was assigned a value of 100. The lower values represent an increased resistance to abrasion.

SAND-SLURRY TEST RESULTS

UHMW	44	Medium Density Polyethylene	125
AR Steel	52	Phosphor Bronze	190
Polybutylene	56	Polypropylene	190
TFE	72	Phenolic Laminate L.E.	200
304 Stainless Steel	84	Polysulfone	300
Polycarbonate	96	Yellow Brass	400
Carbon Steel	100	Low Density Polyethylene	530
High Density Polyethylene	109	Maple Wood	690
Polyacetal	110	Hard Neoprene	800



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ANSI STANDARD ROLLER CHAIN

Cross Reference Chart

S-I #	ANSI #
#25	(25)
#35	(35)
#40	(25-2, 41, 40, 52)
#50	(35-2, 50)
#60	(40-2, 35-3, 60)
#80	(50-2, 35-4, 80)
#100	(60-2, 40-3, 76, 100)
#120	(80-2, 50-3, 40-4, 120)
#140	(140)
#160	(50-4, 40-5, 160)
#180	(60-3, 180)
#200	(100-2, 60-4, 50-5, 40-6, 200)
#240	(120-2, 140-2, 80-3, 100-3, 60-5, 50-6, 240)

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

#300	(160-2, 180-2, 200-2, 240-2, 120-3, 140-3, 160-3, 80-4, 100-4, 120-4, 140-4) (80-5, 100-5, 60-6, 80-6, 60-8)
#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)

Footnotes

- Note 1. These units must be ordered as follows, the Snapdile# and the ANSI chain that it is to fit.
(i.e. #300 Snapdile to fit 240-2 R.C.)
- Note 2. Allow four weeks for delivery.
- Note 3. See cross reference chart for non-referenced chains.
- Note 4. Side strap lengths all 48."



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ANSI H-SERIES CHAIN

Cross Reference Chart

S-I #	ANSI #
#60	(60-H)
#80	(80-H)
#100	(100-H)
#120	(120-H, 60-2H)
#140	(140-H)
#160	(160-H, 80-2H)
#180	(180-H, 100-2H)
#200	(200-H)
#240	(240-H, 120-2H, 140-2H, 80-3H, 100-3H)

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

#300	(160-2H, 200-2H, 120-3H, 140-3H, 160-3H, 80-4H, 100-4H, 120-4H) (60-5H, 80-5H, 100-5H, 60-6H, 80-6H)
#400	(200-3H, 140-4H, 160-4H, 120-5H, 140-5H, 100-6H, 120-6H)
#500	(200-3H, 200-4H, 160-5H, 140-6H, 160-6H)
#600	(See note #4)

Footnotes

- Note 1. 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.)
- Note 2. Allow four weeks for delivery.
- Note 3. See cross reference chart for non-referenced chains.
- Note 4. Side strap lengths all 48"



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ANSI MILL, CONVEY & ENGINEERING CLASS CHAIN Cross Reference Chart

S-I #	ANSI #
#40	(C-2040, C-2050)
#60	(C20-60)
#80	(C-2080, 3100, CA-550)
#100	(C-2100, 81-X, CA-620)
#120	(C-2120, 3120, 3140, H-62)
#140	(See Non-Referenced Chains)
#160	(C-2160, 3160, H-60, H-74, H-75)
#180	(3180, H-78)
#200	(H-82, 200-H, 2010, 720)
#240	(3125, 3924, H-124, 2814, 2512, 720S, 730)

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

#300	(3618, 4020, 3315, 4824, H-155, H-320, 710)
#400	(See note #4)
#500	(See note #4)
#600	(See note #4)

Footnotes

- Note 1. These units must be ordered as follows, the SnapIdle# and the ANSI chain that it is to fit.
(i.e. #300 SnapIdle to fit H-155)
- Note 2. Allow four weeks for delivery.
- Note 3. See cross reference chart for non-referenced chains.
- Note 4. Side strap lengths all 48"



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BRITISH STANDARD ROLLER CHAIN

Cross Reference Chart

S-I #	ISO-B	BS/DIN #
#35	(06B)	
#40	(08B)	
#50	(10B, 06B-2)	
#60	(12B, 08B-2)	
#80	(16B, 20B, 10B-2)	
#100	(12B-2, 08B-3)	
#120	(24B, 10B-3)	
#160	(28B, 32B, 16B-2, 12B-3)	
#180	(40B, 20B-2)	
#240	(24B-2, 28B-2, 32B-2, 16B-3, 20B-3)	

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

#300	(40B-2, 24B-3, 28B-3, 32B-3)
#400	(See note #4)
#500	(See note #4)
#600	(See note #4)

Footnotes

- Note 1. These units must be ordered as follows, the SnapIdle# and the ISO chain that it is to fit.
(i.e. #300 SnapIdle to fit 32B-3RC)
- Note 2. Allow 4-6 weeks for delivery.
- Note 3. See cross reference chart for non-referenced chains.
- Note 4. Side strap lengths all 32 centimeters.



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NON-REFERENCED CHAINS

Cross Reference Chart

To select the proper Snapldle unit #, take the actual width of the chain (outside of pin to outside of pin) in question and match that width to a Snapldle # that has a *greater* actual cut of chain path. Then add the factor dimension to the actual dimension of the chain in question. If this figure is *less* than the Snapldle # actual cut, then order that Snapldle unit number. If this figure is *greater*, order the next larger Snapldle unit.

S-I#	ACTUAL CUT OF CHAIN PATH		FACTOR	
	Inches	Millimeters	Inches	Millimeters
#25	0.500	12.70	0.062	1.58
#35	0.625	15.87	0.062	1.58
#40	0.938	23.81	0.062	1.58
#50	1.125	28.57	0.062	1.58
#60	1.375	34.92	0.125	3.71
#80	1.750	44.45	0.125	3.17
#100	2.062	52.38	0.125	3.17
#120	2.688	68.26	0.125	3.17
#140	2.688	68.26	0.125	2.17
#160	3.125	79.37	0.188	4.76
#180	3.438	87.31	0.188	4.76
#200	4.05	105.41	0.188	4.76
#240	5.250	133.35	0.188	4.76
*(1) #300	5.25 — 8.00	133.35 — 203.2	0.188	4.76
*(1) #400	8.00 — 12.00	203.20 — 304.8	0.188	4.76
*(1) #500	12.00 — 16.00	304.80 — 406.4	0.188	4.76
*(1) #600	16.00 — 20.00	406.40 — 508.0	0.188	4.76

*1. Snapldle #300, #400, #500 and #600 are assembled to the width of the **chain ordered**. Chain width and/or manufacturer's name and chain designation **must be specified**. 4-6 week delivery on these items.

Safety, Installation and Maintenance

SAFETY STANDARDS

All power transmission drive systems should be adequately guarded under ANSI/ASME B15.1-1984 standards and OSHA, subchapter O standards (Federal Register; vol. 39; no. 125; June 27, 1974; pgs. 23079-23733) or the applicable state or country (outside the U.S.A.) safety standards. The following rules apply to the drive systems, "where breakage of a machine component can result in injury, provision shall be made for appropriate containment of such component. When power transmission apparatus' are stopped for servicing purposes, the power device shall be locked out, in accordance with a generalized procedure, to protect persons exposed to the apparatus from an unexpected start. When component breakage may result in fragments being propelled, the apparatus should be guarded and should be solid, not mesh."

Installation

The drive system power should be disconnected or an interlock activated to avoid accidental startup. **Never install, adjust or maintain a Snapidle when the drive is in operation, or personal injury may occur.** Apply the bottom member and the top member of the **Snapidle** to the upper and lower chain strands. Tension the chain by means of the side straps. **Do not over tension the Snapidle**, this would result in increased wear rate. Enough tension need only be applied to take the slack out of the chain. When in operation, the **Snapidle** will move (hunt) back and forth on the chain periodically. If the proper light tension were applied, the **Snapidle** should tension the chain for the life of the chain or the **Snapidle** unit. Please refer to page 6 first drawing for correct installation. Set the strap length with the drive side chain tight and all the chain slack on the slack side.

Maintenance

The **Snapidle** should be inspected visually under normal drive maintenance procedures in order to verify wear. The **Snapidle** should be replaced before the chain wears through the plastic carriers. This can be determined visually. The **Snapidle** may be retensioned by adjusting the side straps. **Do not perform on a moving drive or personal injury may occur!**

Replacement

M.I.C. recommends the replacement of the entire **Snapidle** unit, **including** the side straps. The side straps will have been subjected to drive stresses and may cause unit failure when carrier replacement is necessary. If replacement carriers are installed with used strapping material, M.I.C. **cannot** warranty the **Snapidle** unit and **strongly** recommends the use of new strapping materials.

IT'S NEW AND IT'S GREAT
SNAPIDLE (BT)
FREE FLOATING BELT TENSIONER



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POSITIONS**

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Email: sales@snapidle.com
Internet: www.snapidle.com

SNAPIDLE BELT TENSIONER FORM

For more information on the Patented Snapidle Belt Tensioner, you may call us at 1-800-836-4721 or fax us at 509-575-0890 with the following information:

Date:

Name:

Company Name:

Phone:

Fax:

1. Length of belt:

2. Type of belt:

3. How many belts and belt width:

4. Diameter of driver pulley:

5. Diameter of driven pulley:

6. Center distance:

7. R.P.M.:

8. Horsepower:

9. What kind of application will this be used on?

10. How many would you like?

BEARING PRODUCTS

Speed and Load Data Plastic Bearing Inserts (PI & PI-BHT Series)

This data applies to UHMW Self-Aligning Inserts in unlubricated conditions. Since the upper operating temperature limits of UHMW bearings are 180° - 200°F, and since this material has a low coefficient of thermal conductivity, PV values must be carefully calculated.

The information in the table below has been calculated so as not to exceed the following limits for UHMW in a bearing application:

Maximum Pressure (P) = 800 lbs./in.² Maximum Velocity (V) = 50 surface feet/minute

It must be noted that for UHMW the combination of PV may not exceed 3,000.

For PV's exceeding 3,000, consult M.I.C. for material recommendations.

If ambient temperatures are low or if the bearing is operating in water or other liquids and is sufficiently cooled, the PV limits may be increased as long as bearing temperature limits are not exceeded. The use of lubrication can potentially increase the operating PV limits by providing a lower coefficient of friction on the bearing.

M.I.C.'s Self-Aligning Inserts are designed to replace a self-aligning ball bearing or roller bearing having a spherical O.D. in the conventional housing. They are self-aligning to the same degree as a steel bearing; therefore, no changes are necessary in existing equipment in order to use these inserts.

Speed/Load Limits of UHMW Plastic Bearing Inserts (Self-Aligning) (PI & PI-BHT Series)

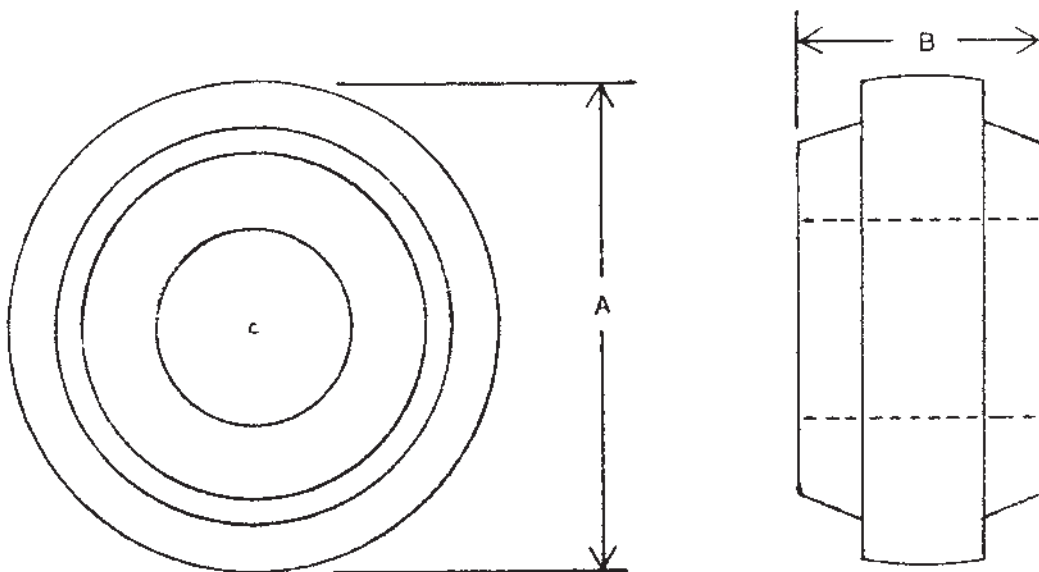
Bearing Bore Size	Maximum Speed (RPM)	Maximum Radial Load Lbs.	Bearing Bore Size	Maximum Speed (RPM)	Maximum Radial Load Lbs.
1/2	350	200	1-7/16	125	833
9/16	300	216	1-1/2	100	1033
5/8	275	233	1-9/16	100	1066
11/16	250	266	1-5/8	100	1100
3/4	225	333	1-11/16	100	1166
13/16	200	366	1-3/4	75	1200
7/8	200	400	1-7/8	75	1266
15/16	175	433	1-15/16	75	1333
1	175	466	2	75	1566
1-1/16	150	600	2-1/8	75	1666
1-1/8	150	633	2-3/16	75	1700
1-3/16	150	666	2-1/4	75	1900
1-1/4	125	733	2-3/8	50	2000
1-5/16	125	766	2-3/8	50	2000
1-3/8	125	800	2-7/16	50	2066

**Interchange Data
Plastic Bearing Inserts (Self-Aligning)
(PI & PI-BHT Series)**

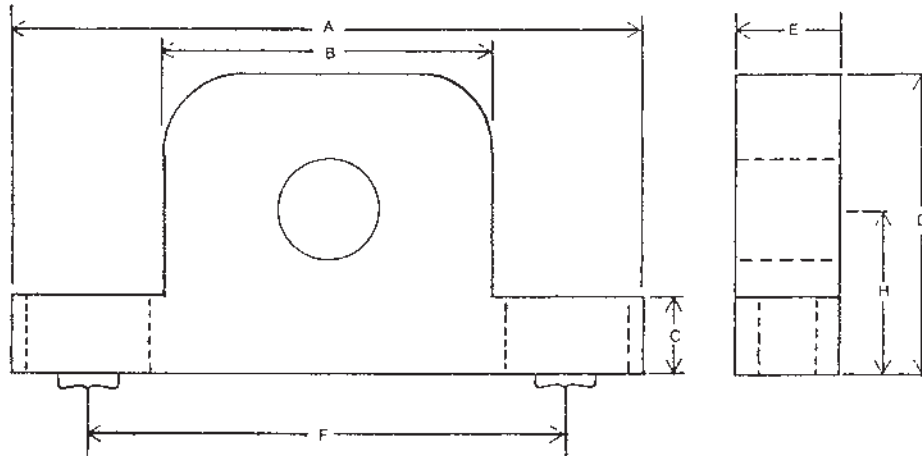
Manufacturer	Series	Exceptions (bore size) (State mfg. name when ordering.)
BCA, Federal	NPS RR, NPS RP, WPS GP, WPS GR, B	
Browning	B100, B150, B200 X, B220 X, B250 X	
Dodge	SC, SL	1/2 thru 11/16, 1-5/8, 2, 2-1/4
Eagle Pitcher	HC200, SA200, SB200, UC200	1/2 thru 5/8
Fafnir	MUB, G KPPB, KLLB, KRRB, G KLLB, G KRRB, GRA PPB, GRA RRB, RA PPB, RA RRB	
Hoover-NSK	RA BTT, RAG BTT, SBG, SB BFF, SBG BFF	
Link-Belt (FMC)	Y N, Y NL, U HL, W UL, WG UL	2
McGill	KMB25	1-3/16, 1-5/8, 2, 2-1/4
Morse-Sealmaster	2, L, 2 D, 2 L	1/2 thru 11/16
SKF	YAR, YET, YEL	

**Dimensional Data
Plastic Bearing Inserts
(PI & PI-BHT Series)**

Bearing No. (Bore Size)	Outside Diameter A	Total Width B
1/2, 9/16, 5/8, 11/16	1.575	1.024
3/4	1.850	1.182
13/16, 7/8, 15/16, 1	2.047	1.182
1-1/16, 1-1/8, 1-3/16	2.441	1.418
1-1/4, 1-5/16, 1-3/8, 1-7/16	2.835	1.496
1-1/2, 1-9/16	3.150	1.732
1-5/8, 1-11/16, 1-3/4	3.346	1.732
1-7/8, 1-15/16	3.543	1.732
2, 2-1/8, 2-3/16	3.937	1.968
2-1/4, 2-3/8, 2-7/16	4.331	2.126



Dimensional Data Plastic Pillow Block Bearings (PP & PP-BHT Series)



(Bore Size) PP Series	Total Length A	Body Length B	Base Height C	Total Height D	Total Width E	Bolt Ctr. Range F	Backing Height H
1/2, 9/16, 5/8, 11/16	4-3/4	2-1/2	5/8	2-3/16	1	2-7/8 to 3-7/8	1-1/16
3/4	5-1/4	2-3/4	5/8	2-1/2	1	3-1/4 to 4-1/4	1-1/4
13/16, 7/8, 15/16, 1	5-1/2	3	3/4	2-3/4	1	3-1/2 to 4-1/2	1-5/16

The pillow block sizes listed above are designed to accommodate 3/8 bolts.

1-1/16, 1-1/8 1-3/16	6-1/4	3-1/2	7/8	3-1/4	1-1/2	4-1/4 to 5-1/4	1-9/16
1-1/4, 1-5/16 1-3/8, 1-7/16	6-1/2	3-3/4	7/8	3-5/8	1-1/2	4-1/2 to 5-1/2	1-13/16
1-1/2 1-9/16	7	4-1/8	7/8	4	1-1/2	4-7/8 to 5-7/8	1-15/16
1-5/8, 1-11/16 1-3/4	7-1/2	4-1/2	7/8	4-1/4	1-1/2	5-1/4 to 6-1/4	2-1/16

The pillow block sizes listed above are designed to accommodate 1/2 bolts.

1-7/8 1-15/16	8	4-3/4	7/8	4-1/2	2	5-3/4 to 6-3/4	2-3/16
2, 2-1/8, 2-3/16	8-3/4	5-1/8	1	5	2	6-1/8 to 7-3/8	2-7/16
2-1/4, 2-3/8 2-7/16	9-1/2	5-7/8	1	5-1/4	2-1/2	6-7/8 to 8-1/8	2-11/16

The pillow block sizes listed above are designed to accommodate 5/8 bolts.

Speed and Load Data Plastic Pillow Block Bearings (PP & PP-BHT Series)

This data applies to UHMW Pillow Block Bearings in unlubricated conditions. Since the upper operating temperature limits of UHMW bearings are 180° - 200°F, and since this material has a low coefficient of thermal conductivity, PV values must be carefully calculated.

The information in the table below has been calculated so as not to exceed the following limits for UHMW in a bearing application:

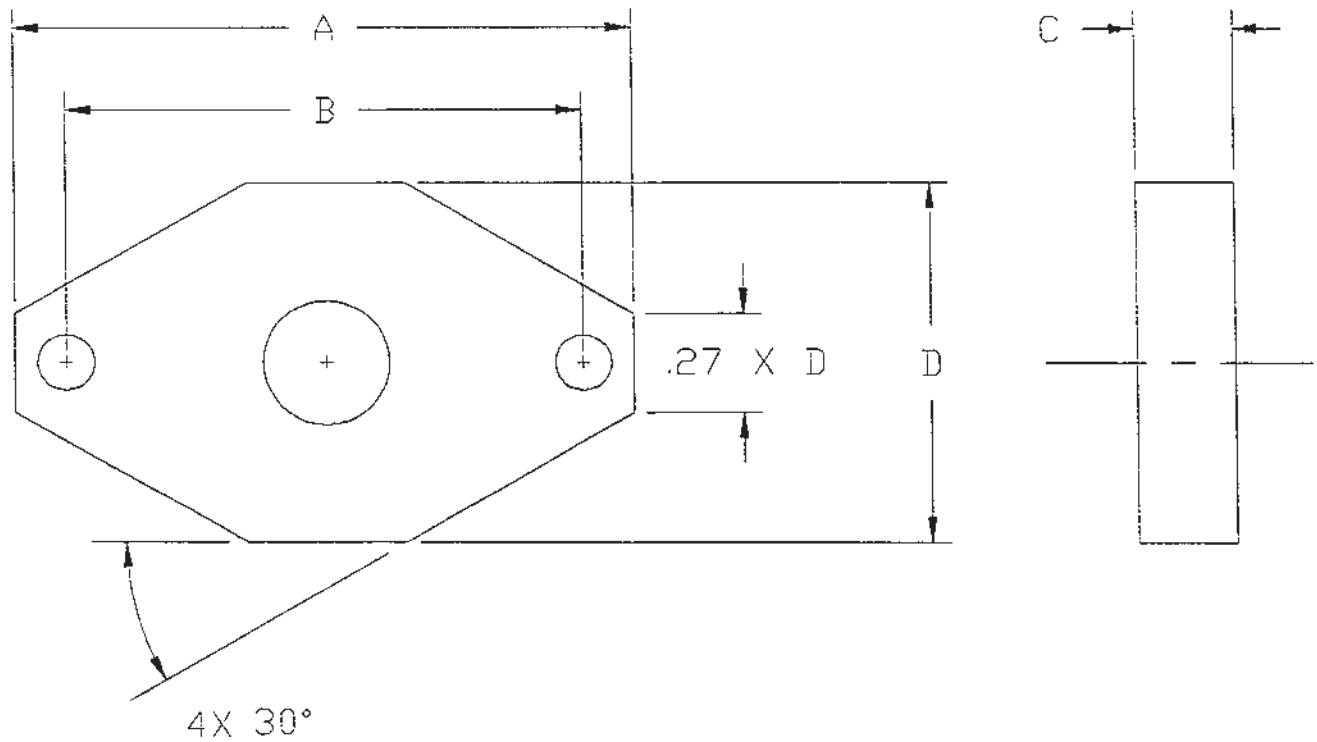
Maximum Pressure (**P**) = 800 lbs./in.² Maximum Velocity (**V**) = 50 surface feet/minute
It must be noted that for UHMW the combination of PV may not exceed 3,000.

For PV's exceeding 3,000, consult M.I.C. for material recommendations.

If ambient temperatures are low or if the bearing is operating in water or other liquids and is sufficiently cooled, the PV limits may be increased as long as bearing temperature limits are not exceeded. The use of lubrication can potentially increase the operating PV limits by providing a lower coefficient of friction on the bearing.

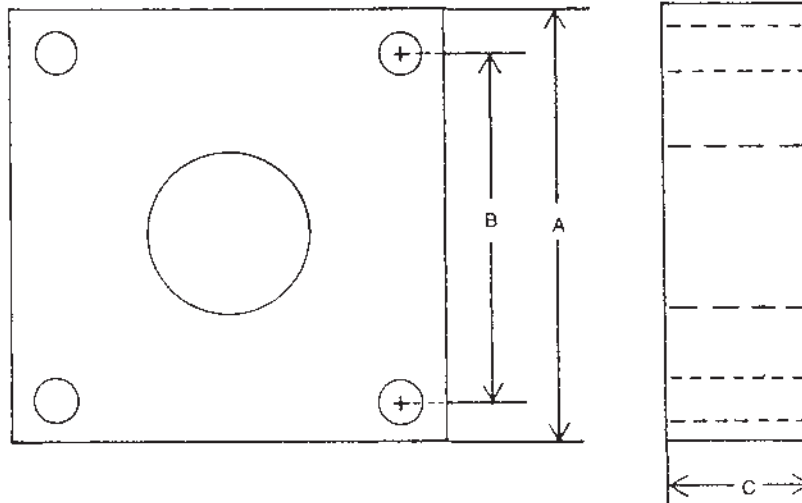
Bearing Bore Size	Maximum Speed (RPM)	Maximum Radial Load Lbs.	Bearing Bore Size	Maximum Speed (RPM)	Maximum Radial Load Lbs.
1/2	380	600	1-7/16	130	2000
9/16	330	666	1-1/2	120	2100
5/8	300	750	1-9/16	120	2183
11/16	270	815	1-5/8	110	2600
3/4	250	900	1-11/16	110	2700
13/16	230	965	1-3/4	100	2800
7/8	210	1050	1-7/8	100	3000
15/16	200	1115	1-15/16	95	3100
1	190	1200	2	95	3200
1-1/16	175	1265	2-1/8	85	3400
1-1/8	165	1350	2-3/16	85	3500
1-3/16	160	1450	2-1/4	80	4500
1-1/4	150	1748	2-3/8	80	4750
1-5/16	140	1830	2-3/8	75	4866
1-3/8	135	1916	2-7/16	75	4866

Dimensional Data
Plastic 2-Bolt Flange Bearing
 (PF & PF-BHT Series)



Shaft Size	A	B	C	D
1/2, 9/16	3 7/8	3	1	2
5/8, 11/16				
3/4	4 13/32	3 17/32	1	2 1/2
13/16, 7/8	4 7/8	3 57/64	1 1/4	2 3/4
15/16, 1				
1 1/16, 1 1/8, 1 3/16, 1 1/4L	5 9/16	4 19/32	1 1/2	3 1/8
1 1/4, 1 5/16 1 3/8, 1 7/16	6 1/8	5 1/8	1 1/2	3 1/2
1 1/2, 1 9/16	6 3/4	5 21/32	1 3/4	4
1 5/8, 1 11/16, 1 3/4	7	5 27/32	1 3/4	4 3/8
1 7/8, 1 15/16 2L	7 7/16	6 3/16	1 3/4	4 1/2
2, 2 1/8, 2 3/16	8 1/2	7 1/4	2	5
2 1/4, 2 3/8, 2 7/16	9 1/4	7 15/16	2	5 1/2

**Dimensional Data
Plastic Four-Bolt Flange Bearings
(PF & PF-BHT Series)**



(Bore Size) PF Series	Total Length and Width A	Bolt Pattern Distance B	Total Thickness C
1/2, 9/16	3	2-1/8	1
5/8, 11/16			
3/4	3-3/8	2-1/2	1
The bearings listed above are designed to accommodate 3/8 bolts.			
13/16, 7/8,			
15/16, 1	3-3/4	2-3/4	1-1/4
1-1/16, 1-1/8			
1-3/16	4-1/4	3-1/4	1-1/2
The bearings listed above are designed to accommodate 7/16 bolts.			
1-1/4, 1-5/16			
1-3/8, 1-7/16	4-3/4	3-5/8	1-1/2
1-1/2,			
1-9/16	5-1/8	4	1-3/4
1-5/8, 1-11/16			
1-3/4	5-1/4	4-1/8	1-3/4
1-7/8			
1-15/16	5-1/2	4-3/8	1-3/4
The bearings listed above are designed to accommodate 1/2 bolts.			
2, 2-1/8,			
2-3/16	6-3/8	5-1/8	1-3/4
2-1/4, 2-3/8			
2-7/16	6-7/8	5-5/8	2

The bearings listed above are designed to accommodate 5/8 bolts.

Speed and Load Data Plastic 2-Bolt & 4-Bolt Flange Bearings (PF & PF-BHT Series)

This data applies to UHMW Four-Bolt Flange Bearings in unlubricated conditions. Since the upper operating temperature limits of UHMW bearings are 180° - 200°F, and since this material has a low coefficient of thermal conductivity, PV values must be carefully calculated.

The information in the table below has been calculated so as not to exceed the following limits for UHMW in a bearing application:

Maximum Pressure (P) = 800 lbs./in.² Maximum Velocity (V) = 50 surface feet/minute
It must be noted that for UHMW the combination of PV may not exceed 3,000.

For PV's exceeding 3,000, consult M.I.C. for material recommendations.

If ambient temperatures are low or if the bearing is operating in water or other liquids and is sufficiently cooled, the PV limits may be increased as long as bearing temperature limits are not exceeded. The use of lubrication can potentially increase the operating PV limits by providing a lower coefficient of friction on the bearing.

Bearing Bore Size	Maximum Speed (RPM)	Maximum Radial Load Lbs.	Bearing Bore Size	Maximum Speed (RPM)	Maximum Radial Load Lbs.
1/2	380	400	1-7/16	130	1700
9/16	330	450	1-1/2	125	2100
5/8	300	500	1-9/16	120	2183
11/16	275	550	1-5/8	115	2266
3/4	250	750	1-11/16	110	2350
13/16	230	800	1-3/4	105	2450
7/8	210	865	1-7/8	100	2616
15/16	200	933	1-15/16	95	2700
1	190	1000	2	95	2800
1-1/16	175	1266	2-1/8	85	2966
1-1/8	160	1350	2-3/16	85	3050
1-3/16	160	1416	2-1/4	80	3600
1-1/4	150	1450	2-3/8	80	3800
1-5/16	140	1565	2-3/8	75	3900
1-3/8	130	1650	2-7/16	60	5860

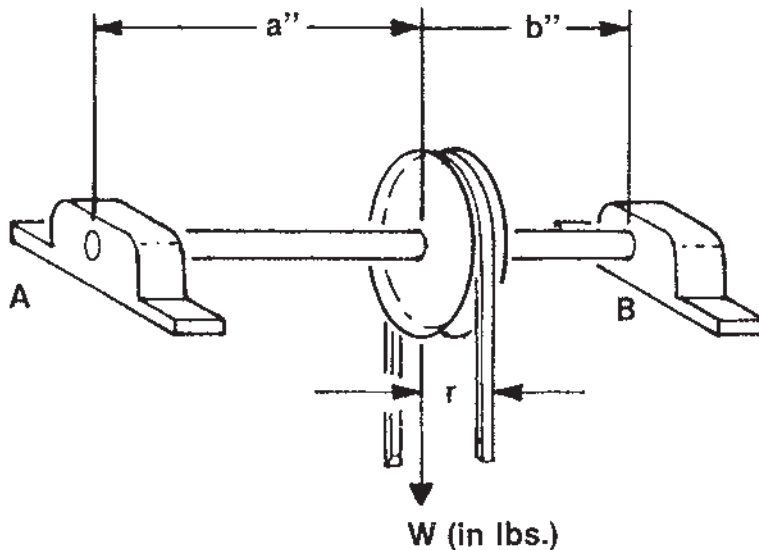
Plastic High Temperature Bearings BHT Series

Most commercial plastic and metallic bearings have operating temperature ranges of approximately 200°F. In the 300°F to 500°F range exotic seals, greases, bearing fits, clearances and housings are required. It is possible to eliminate many of the associated purchasing, installation and maintenance costs associated with these applications by utilizing MIC's BHT series bearings, especially in the case of bearing inserts (PI-BHT). Requiring no lubrication, retro-fitting of existing housings and having operating temperature ranges to 600°F, these bearing products are the economical, simple answers to problem applications in the bakery, paving and processing industries. Utilizing the same dimensional and engineering data of MIC's other bearing products, the BHT series is available in a variety of bore ranges to fit many applications. Machined from pure, virgin high temperature material, these products are new technology solutions to age old industry problems.

BEARING DESIGN INFORMATION

The placement of a drive system in relation to the bearing supporting it can have a significant impact on the life of those bearings. The more evenly a load is distributed over a bearing set, the longer the set will last. Formulas for determining bearing loads are as follows:

DETERMINING APPROXIMATE BEARING LOADS

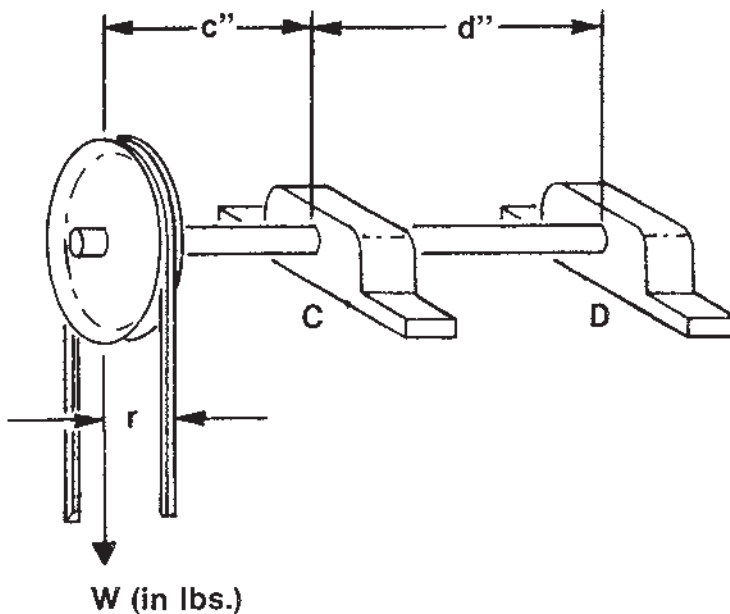


$$A = W \times \frac{b}{a + b}$$

$$B = W \times \frac{a}{a + b}$$

r = Radius ($\frac{1}{2}$ of O.D. of pulley or sprocket)

W = Weight of shafting, sprocket, pulley, chain or belt pull, etc.



$$C = W \times \frac{c + d}{d}$$

$$D = W \times \frac{c}{d}$$

EQUATIONS FOR DETERMINING BEARING LOADS

- L = Total shaft load on bearings (pounds)
- N = Revolutions per minute
- r = Radius at which load acts (inches)
- T = Torque (inch-pounds or foot-pounds) (see below)
- f = 'f' factor from Drive Factor Table (see Drive Factor Table below)

when torque T is in inch-pounds, then: $L = \frac{f \times T}{r}$

when torque T is in foot-pounds, then: $L = \frac{f \times T}{.083 \times r}$

when horsepower is known, then: $L = \frac{f \times \text{HP} \times 63025}{N \times r}$

DRIVE FACTOR TABLE ('f')

Type of Drive	'f' factor
Chain	1.0
Flat-belt — 180° wrap	2.5
Flat-belt — less than 180° wrap	3.0
V-belt	2.0
Wire rope — 45° grooved pulley	2.0
Wire rope — 60° grooved pulley	3.0

After approximate load has been determined (from known data or by using the above formulas), PV value can be calculated.

EQUATIONS FOR DETERMINING PV VALUE

- P = bearing load (psi)
- A = bearing area (square inches)
- L = load on bearing (pounds)
- V = velocity of the shaft (surface feet/minute = SFM)
- RPM = Revolutions per minute of shaft
- D = shaft diameter (inches)
- l = length of bushing through the bore (inches)

PV data for radial bearings:

$$A = D \times l$$

$$P = L/A$$

$$V = (.262) \times D \times \text{RPM}$$

$$PV = P \times V$$

PV VALUE

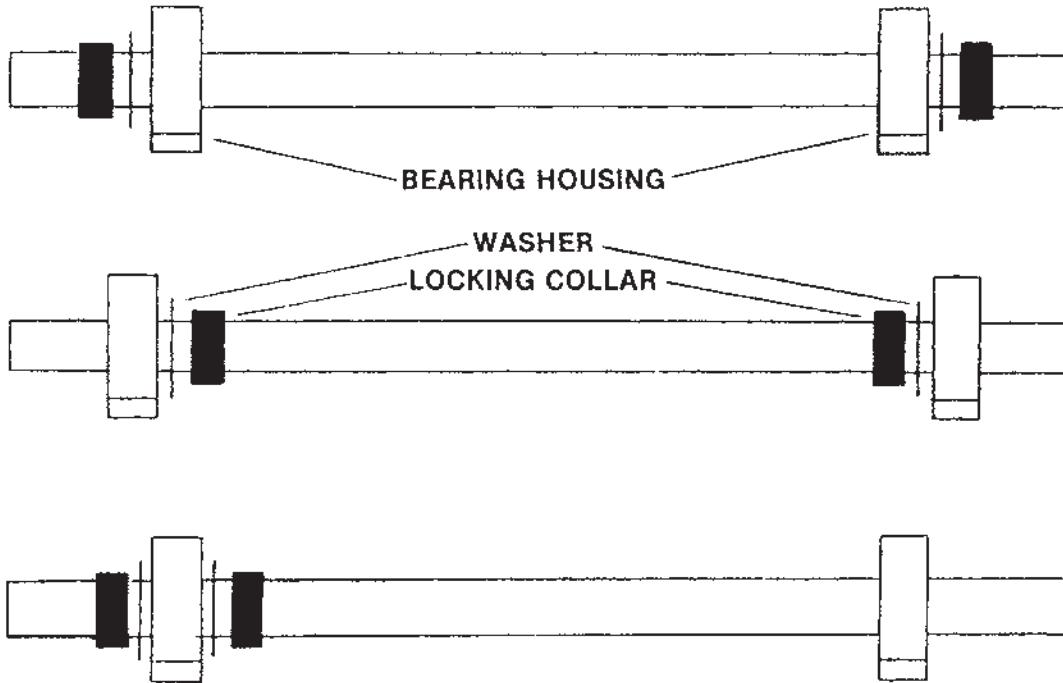
The operating PV of a bearing is actually a measure of temperature. The maximum allowable PV for any situation will vary depending on the thermal and mechanical characteristics of the material selected for the bearing. Because of this, the ambient air temperature of the environment and the corresponding housing temperature is important.

Since heat is the major factor in determining the life of a bearing, the ability to dissipate heat through the shaft with a lubricant or by operation in a spray or bath will reduce bearing failure rate, or increase bearing life.

Another factor in reducing the life of any bearing is chemical action on a material not suited for such an environment. Any abrasives introduced to a bearing will wear away the bearing material and significantly reduce its life. Most plastic materials will absorb some particles of an abrasive to a much greater degree than a metal bearing and therefore reduce the damage done to both the shaft and the bearing, but it will not totally eliminate that wear.

BEARING INSTALLATION

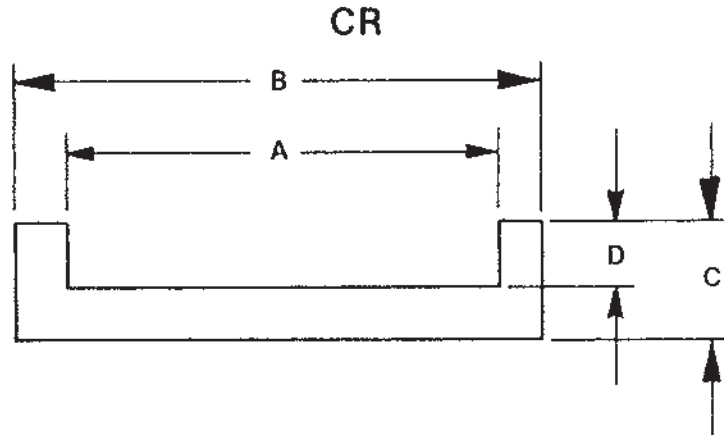
PLASTIC BEARING INSTALLATION



Proper installation **MUST** follow one of the above three diagrams unless used in conjunction with a rolling-element bearing.

UHMW Chain Rail (CR Series)

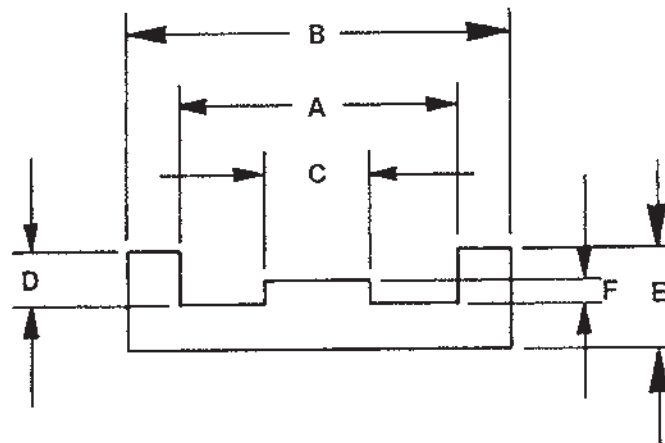
UHMW has found increasing use as a guide rail and wear strip material for chain drive applications. All CR Series Rail is machined from ultra high molecular weight polyethylene for the maximum wear capabilities.



Dimensional Data

Nomenclature	A	B	C	D
CR-35	0.62	0.87	0.37	0.15
CR-40	0.93	1.30	0.37	0.15
CR-50	1.00	1.37	0.37	0.15
CR-60	1.37	1.62	0.37	0.18
CR-80	1.75	2.13	0.50	0.25
CR-100	2.06	2.56	0.62	0.43
CR-120	2.45	2.95	0.75	0.43
CR-140	2.63	3.15	1.00	0.50
CR-160	3.00	3.75	1.50	0.62
CR-180	3.43	4.18	1.50	0.75
CR-200	3.87	4.62	1.50	0.75
CR-240	5.00	6.25	2.00	1.00

CC Series



Dimensional Data

Nomenclature	A	B	C	D	E	F
CC-2040	0.69	1.00	0.25	0.14	0.31	0.08
CC-2050	0.82	1.25	0.31	0.19	0.38	0.10
CC-2060	1.12	1.50	0.44	0.21	0.50	0.12
CC-2080	1.44	2.00	0.56	0.25	0.50	0.13



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DECIMAL AND METRIC EQUIVALENTS

Fractions of an Inch	Equivalents		Fractions of an Inch	Equivalents	
	Inches	Millimeters		Inches	Millimeters
1/64.....	.015625	0.396875	33/64.....	.515625	13.096875
1/32.....	.03125	0.79375	17/32.....	.53125	13.49375
3/64.....	.046875	1.190625	35/64.....	.546875	13.890625
1/16.....	.0625	1.5875	9/16.....	.5625	14.2875
5/64.....	.078125	1.984375	37/64.....	.578125	14.684375
3/32.....	.09375	2.38125	19/32.....	.59375	15.08125
7/64.....	.109375	2.778125	39/64.....	.609375	15.478125
1/8.....	.1250	3.1750	5/8.....	.6250	15.8750
9/64.....	.140625	3.571875	41/64.....	.640625	16.271875
5/32.....	.15625	3.96875	21/32.....	.65625	16.66875
11/64.....	.171875	4.365625	43/64.....	.671875	17.065625
3/16.....	.1875	4.7625	11/16.....	.6875	17.4625
13/64.....	.203125	5.159375	45/64.....	.703125	17.859375
7/32.....	.21875	5.55625	23/32.....	.71875	18.25625
15/64.....	.234375	5.953125	47/64.....	.734375	18.653125
1/4.....	.2500	6.3500	3/4.....	.7500	19.0500
17/64.....	.265625	6.746875	49/64.....	.765625	19.446875
9/32.....	.28125	7.14375	25/32.....	.78125	19.84375
19/64.....	.296875	7.540625	51/64.....	.796875	20.240625
5/16.....	.3125	7.9375	13/16.....	.8125	20.6375
21/64.....	.328125	8.334375	53/64.....	.828125	21.034375
11/32.....	.34375	8.73125	27/32.....	.84375	21.43125
23/64.....	.359375	9.128125	55/64.....	.859375	21.828125
3/8.....	.3750	9.5250	7/8.....	.8750	22.2250
25/64.....	.390625	9.921875	57/64.....	.890625	22.621875
13/32.....	.40625	10.31875	29/32.....	.90625	23.01875
27/64.....	.421875	10.715625	59/64.....	.921875	23.415625
7/16.....	.4375	11.1125	15/16.....	.9375	23.8125
29/64.....	.453125	11.509375	61/64.....	.953125	24.209375
15/32.....	.46875	11.90625	31/32.....	.96875	24.60625
31/64.....	.484375	12.303125	63/64.....	.984375	25.003125
1/2.....	.5000	12.7000	1.....	1.0000	25.4000

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M.I.C. will continue to produce and market innovative, high quality products. M.I.C. recognizes the ethical, social and legal necessity to meet customer demand for safe, reliable and innovative products.

M.I.C.'s responsibility extends far beyond manufacturing, marketing and distribution of M.I.C.'s products. The user of an M.I.C. product will be provided with prompt, convenient, expert, courteous service and parts availability. Product literature will be factual, concise, and easy to understand so that each customer will have adequate data for installation, maintenance and warranties.

M.I.C. will maintain adequate programs for product design, manufacture, testing, quality assurance and service which will exceed existing private and governmental standards for safety, quality and reliability.

M.I.C.'s customers are our most important asset and we believe we must supply our products in a manner which meets legal, moral and ethical grounds of all our customers. No M.I.C. employee is authorized to deviate from this policy.

Return of Goods

M.I.C. will accept the return of any two of its units that have been utilized by a customer for testing purposes at no charge to the customer. The testing period shall not exceed thirty (30) days.

M.I.C. will accept the return of any product found defective in workmanship and will replace the unit, f.o.b. factory.

M.I.C. will accept the return of ten percent (10%) of the prior years' purchases from M.I.C. by a contractual agent or distributor. M.I.C. will accept this return **only** with an off-setting order for the value of the returned goods.

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WARRANTY: All M.I.C. products are warranted against defects in workmanship and materials for one year from date of shipment. This constitutes M.I.C.'s only warranty in connection with M.I.C.'s products, and is in lieu of all other warranties, express or implied, written or oral. **THERE ARE NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE THAT APPLY TO THIS SALE.** No employee, agent, dealer or other person is authorized to give any warranties on behalf of M.I.C., nor to assume for M.I.C. any other liability in connection with any of M.I.C.'s products, except an officer of M.I.C. in a signed statement.

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