

the ORIGINAL BREWER
UNIVERSAL DRIVE TENSIONER
POSITIONER and IDLERS



www.brewertensioner.com

Tensioners - Positioners

Base Mounted.....3
 Adj. Angle Mounted4
 Floating Mount.....4
 Flange Mount.....5
 Angle Mount.....5
 Automatic Tensioning6
 Shaft Mounted7
 Screw Adjustment.....8
 Slide Adjustment.....8
 Adjustable9
 Heavy Duty10-11

Sprocket Idlers

Timing12
 H.T.D.12
 Bronze Bushed13-14
 Ball Bearing13
 Needle Bearing14
 "A" Style Nylon24-25

V-Pulley Idlers

Bronze Bearing15
 Needle Bearing15
 Ball Bearing15
 Composite Nylon21

Flat Belt Idler Pulleys

Bronze Bearing16
 Needle Bearing16
 Ball Bearing16
 Composite Nylon20

Idler Bushings

Q.D. Needle Bearing.....17
 Q.D. Ball Bearing17
 Tapered Needle Bearing.....18
 Tapered Ball Bearing18

Mounting Adapters

Bore Adapters.....22
 Shoulder Adapters22
 Clevis Adapters.....22

Idler Shafts & Studs

Precision Ground Idler Shafts.....23
 Machined Shoulder Studs.....23

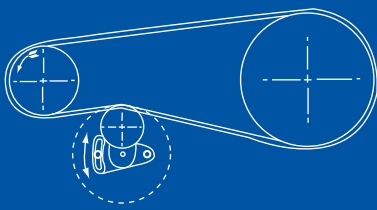
1060 Linear Shafting

Hardened Linear 1060 Shafting.....26

Made to Order

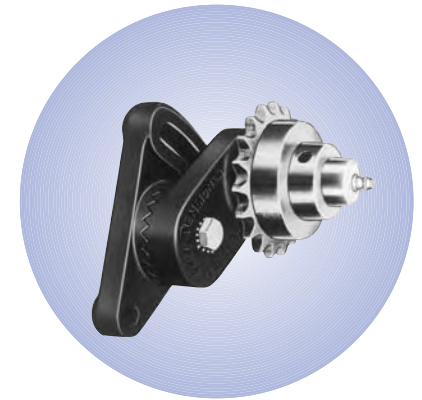
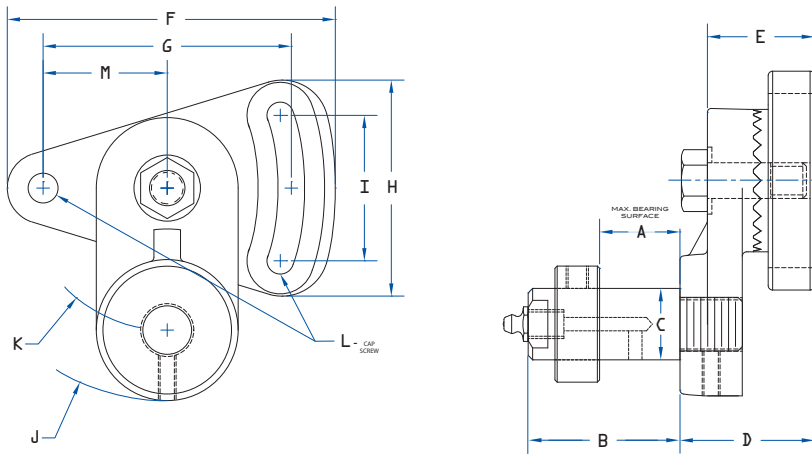
Sheaves, Gears, Timing Pulleys,
 HTD® Sprockets and Roller Chain
 Sprockets.....27





Controlled tensioning eliminates excessive chain vibration and horsepower loss due to belt slippage

FULL 360° CONTROLLED TENSIONING

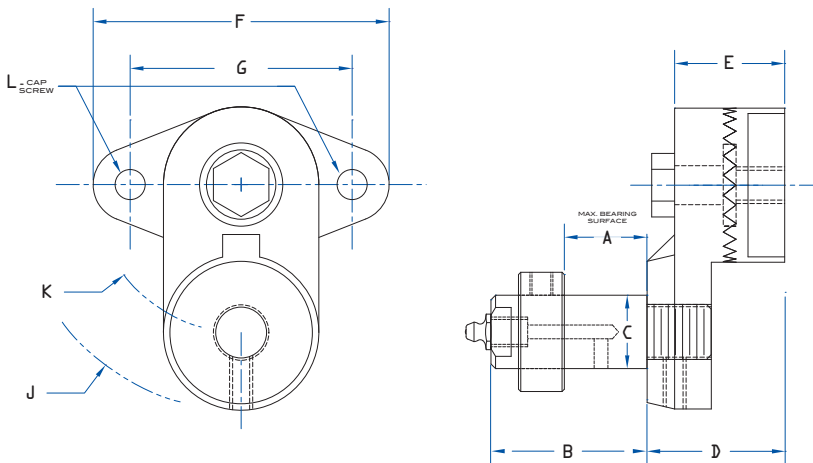


S-Series / Base Mounted Tensioners

Model No.	Use with Shaft No.*	A	B	C	D	E	F	G	H	I	J	K	L	M	App. Wt.
SS	SO-1	1 ¹ / ₁₆ "	1 ¹ / ₂ "	1/2"	1 ¹ / ₁₆ "	1 ¹⁵ / ₁₆ "	2 ²³ / ₃₂ "	2"	1 ³¹ / ₃₂ "	1 ¹ / ₄ "	1 ¹⁹ / ₁₆ "	1"	1/4"	1 ¹⁵ / ₁₆ "	0.42
	SO-2	1 ¹ / ₂ "	2 ¹ / ₈ "												
SM	SO-3	2 ¹ / ₂ "	3 ³ / ₈ "	1"	1 ¹ / ₈ "	1 ¹ / ₂ "	4 ³ / ₈ "	3 ¹ / ₂ "	3 ³ / ₁₆ "	2 ¹ / ₁₆ "	3"	2"	5/8"	1 ¹ / ₄ "	2.62
	SO-4	3 ¹ / ₂ "	4 ¹ / ₈ "												
SL	SO-5	3 ³ / ₄ "	4"	1 ¹ / ₂ "	2 ²³ / ₃₂ "	2 ³ / ₃₂ "	6 ¹⁵ / ₁₆ "	5 ¹ / ₄ "	4 ³ / ₁₆ "	3"	6 ¹ / ₂ "	5"	5/8"	2 ³ / ₈ "	10.13
	SO-6	5 ¹ / ₄ "	6"												

* Idler shaft & set collar not included in tensioner unit. Must be ordered separately.

The Universal Drive Tensioner base mounted series through the use of a rotating arm and adjusting slot permits easy accurately controlled tensioning at any point on a 360° arc, thereby increasing the efficiency and smoothness of operation in chain and belt drives. An added feature is a serrated pad to prevent slippage. Two bolt mounting of the base makes it easily adaptable to most machine frames.

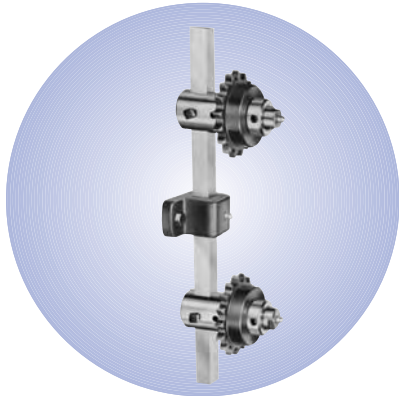


GS-Series / Base Mounted Tensioners

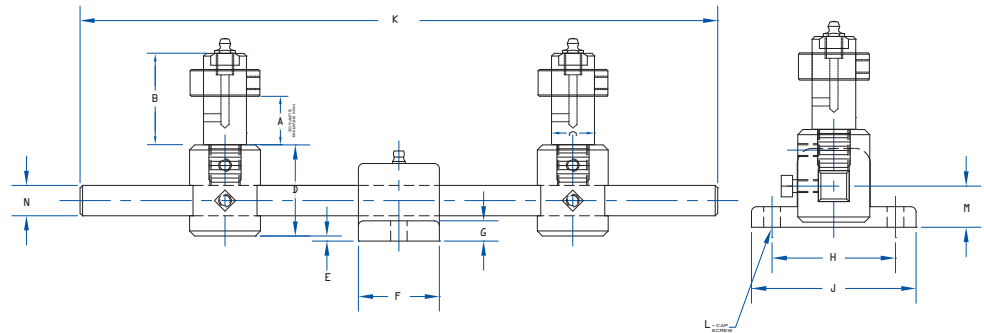
Model No.	Use with Shaft No.*	A	B	C	D	E	F	G	J	K	L	App. Wt.
GSM	SO-2	1 ¹ / ₂ "	2 ¹ / ₈ "									
	SO-3	2 ¹ / ₂ "	3 ³ / ₈ "	1"	1 ¹ / ₈ "	1 ¹ / ₂ "	4"	3"	3"	2"	3/8"	2.76
	SO-4	3 ¹ / ₂ "	4 ¹ / ₈ "									
GSL	SO-5	3 ³ / ₄ "	4"	1 ¹ / ₂ "	2 ¹⁵ / ₁₆ "	2 ¹ / ₈ "	7 ¹ / ₂ "	6"	6 ¹ / ₂ "	5"	5/8"	9.25
	SO-6	5 ¹ / ₄ "	6"									

* Idler shaft & set collar not included in tensioner unit. Must be ordered separately.

This particular single adjusting model incorporates the compactness of a flanged base with the versatility of a rotating arm. Both base and arm have serrated teeth to prevent slippage. As a chain or belt elongates, the arm, which rotates 360°, can be readjusted to restore the original tension.



For Reversible Drives

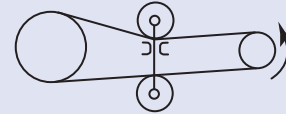
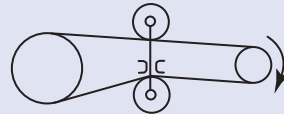


X-Series / Floating Mount Tensioners

The "X" series Universal Drive Tensioners utilize a floating mount principle to permit a straight line pull between driver and driven pulleys regardless of drive direction and yet maintains the initial tension preset for the drive. Floating action allows the tensioner to automatically accommodate the change in geometry when driving direction is reversed.

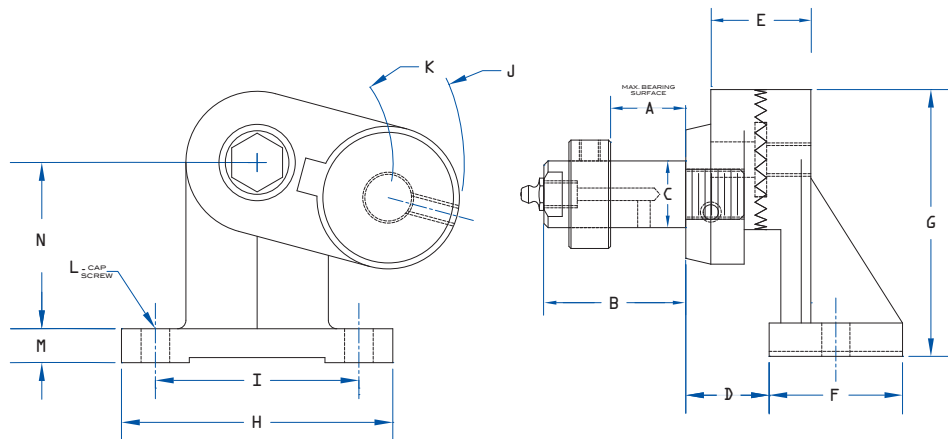
Model No.	Use with Shaft No.*	A	B	C	D	E	F	G	H	J	K	L	M	N	App. Wt.
XM	SO-2	1 1/2"	2 1/8"	1"	2 1/4"	1/8"	2"	1/2"	3"	4"	15 3/4"	3/8"	1"	3/4"	7.31
	SO-3	2 1/2"	3 1/8"												
	SO-4	3 1/2"	4 1/8"												

* Idler shaft & set collar not included in tensioner unit. Must be ordered separately.



RS Series/Adjustable Angle Mounted Tensioners

The RSM tensioner is designed to mount to a flat surface which is horizontal to the drive. Both the angle mount base and the 360° rotating arm have serrated teeth to prevent slippage. When the arm is rotated in the uppermost vertical position -- a 5 inch reach from the bottom of the base to the centerline of the shaft is achieved -- 7 inches is attained when the arm of the TM model (page 5) is used.

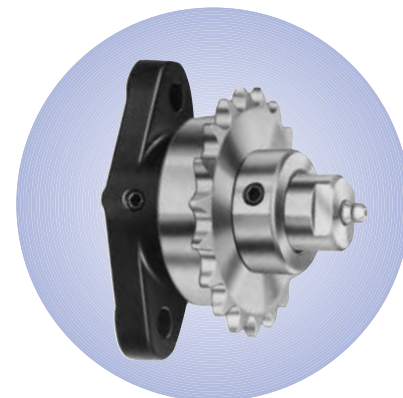
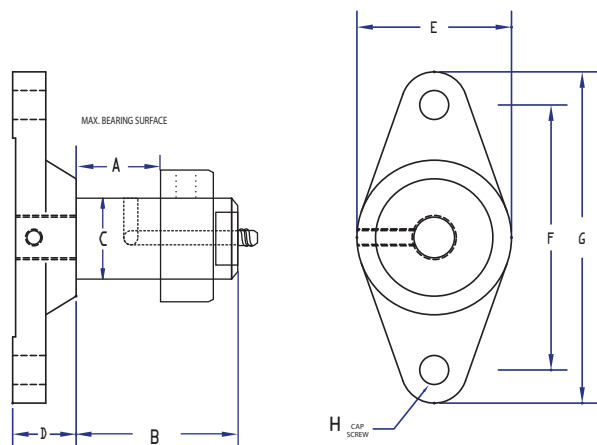


Model No.	Use with Shaft No.*	A	B	C	D	E	F	G	H	I	J	K	L	M	N	App. Wt.
RSM	SO-2	1 1/2"	2 1/8"	1"	1 1/4"	1 1/2"	2"	4"	4"	3"	3"	2"	3/8"	1/2"	2 1/2"	3
	SO-3	2 1/2"	3 1/8"													
	SO-4	3 1/2"	4 1/8"													
RSL	SO-5	3 1/4"	4"	1 1/2"	1 3/4"	2 1/8"	3 1/2"	7 1/8"	7 1/2"	6"	6 1/2"	5"	5/8"	3/4"	5 1/8"	14
	SO-6	5 1/4"	6"													

* Idler shaft & set collar not included in tensioner unit. Must be ordered separately.

"Increase the life of your equipment through smooth drive power with the use of a Universal Drive Tensioner"

ALL MOUNTING SURFACES MACHINED

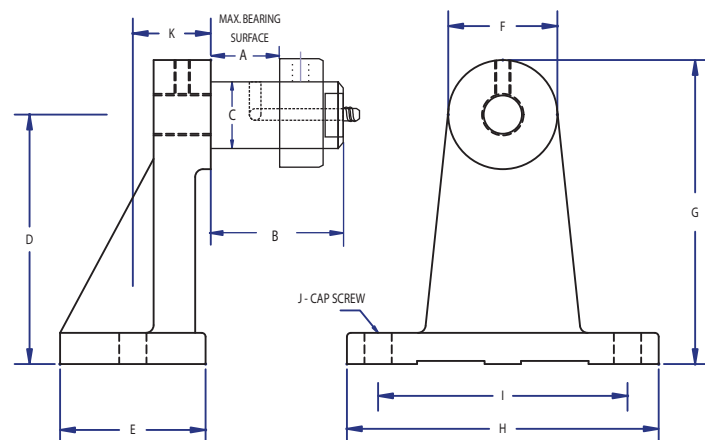


G-Series / Flange Mounted Positioners

The Universal Drive Positioners act as fixed idler brackets to provide necessary support for long chain and belt drives. They may also be used to reverse direction of a sprocket or pulley; or be used in combination with the Universal Drive Tensioner when multiple idlers are needed, but take up required only at one station. The Universal Drive Flanged Positioner is compact and mounts flush to any surface, easily adapting to most machine frames.

Model No.	Use with Shaft No.*	A	B	C	D	E	F	G	H	App. wt.
GS	SO-1	1 1/16"	1 1/2"	1/2"	1/2"	1 1/8"	1 3/4"	2 3/8"	1/4"	0.15
GM	SO-2	1 1/2"	2 7/8"	1"	15/16"	2"	3"	4"	3/8"	0.93
	SO-3	2 1/2"	3 7/8"							
	SO-4	3 1/2"	4 7/8"							
GM 3/4-10	NO-2	1 1/2"	2 7/8"	1"	15/16"	2"	3"	4"	3/8"	0.93
	NO-3	2 1/2"	3 7/8"							
	NO-4	3 1/2"	4 7/8"							
GL	SO-5	3 3/4"	4"	1 1/2"	1 7/16"	3 1/2"	6"	7 1/2"	5/8"	4.5
	SO-6	5 1/4"	6"							

* Idler shaft & set collar not included in tensioner unit. Must be ordered separately.



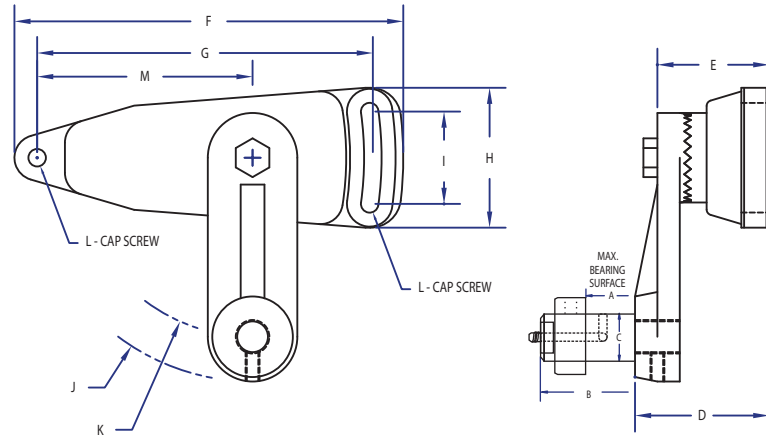
R-Series / Angle Mounted Positioners

The Universal Drive Angle Positioner may be mounted on top of any flat surface and still provide a horizontal positioned idler shaft. One or more Positioners may be used in other varied combinations for best possible drive design.

Model No.	Use with Shaft No.*	A	B	C	D	E	F	G	H	I	J	K	App. wt.
RS	SO-1	1 1/16"	1 1/2"	1/2"	1 1/2"	1 1/8"	1"	2"	2 3/8"	1 3/4"	1/4"	9/16"	0.26
RM	SO-2	1 1/2"	2 7/8"	1"	3"	2"	1 3/4"	3 7/8"	4"	3"	3/8"	1 1/16"	1.75
	SO-3	2 1/2"	3 7/8"										
	SO-4	3 1/2"	4 7/8"										
RM 3/4-10	NO-2	1 1/2"	2 7/8"	1"	3"	2"	1 3/4"	3 7/8"	4"	3"	3/8"	1 1/16"	1.75
	NO-3	2 1/2"	3 7/8"										
	NO-4	3 1/2"	4 7/8"										
RL	SO-5	3 3/4"	4"	1 1/2"	6"	3 1/2"	2 5/8"	7 5/16"	7 1/2"	6"	5/8"	1 7/8"	9.63
	SO-6	5 1/4"	6"										

* Idler shaft & set collar not included in tensioner unit. Must be ordered separately.

IDLER SHAFTS ARE INTERCHANGEABLE WITH ALL TENSIONER & POSITIONER MODELS



T-Series / Spring Loaded Automatic Tensioning

The Universal Drive Tensioner Spring loaded T-series incorporates an adjusting slot for control tensioning and a serrated arm, permitting tensioning at any point on a 360° arc.

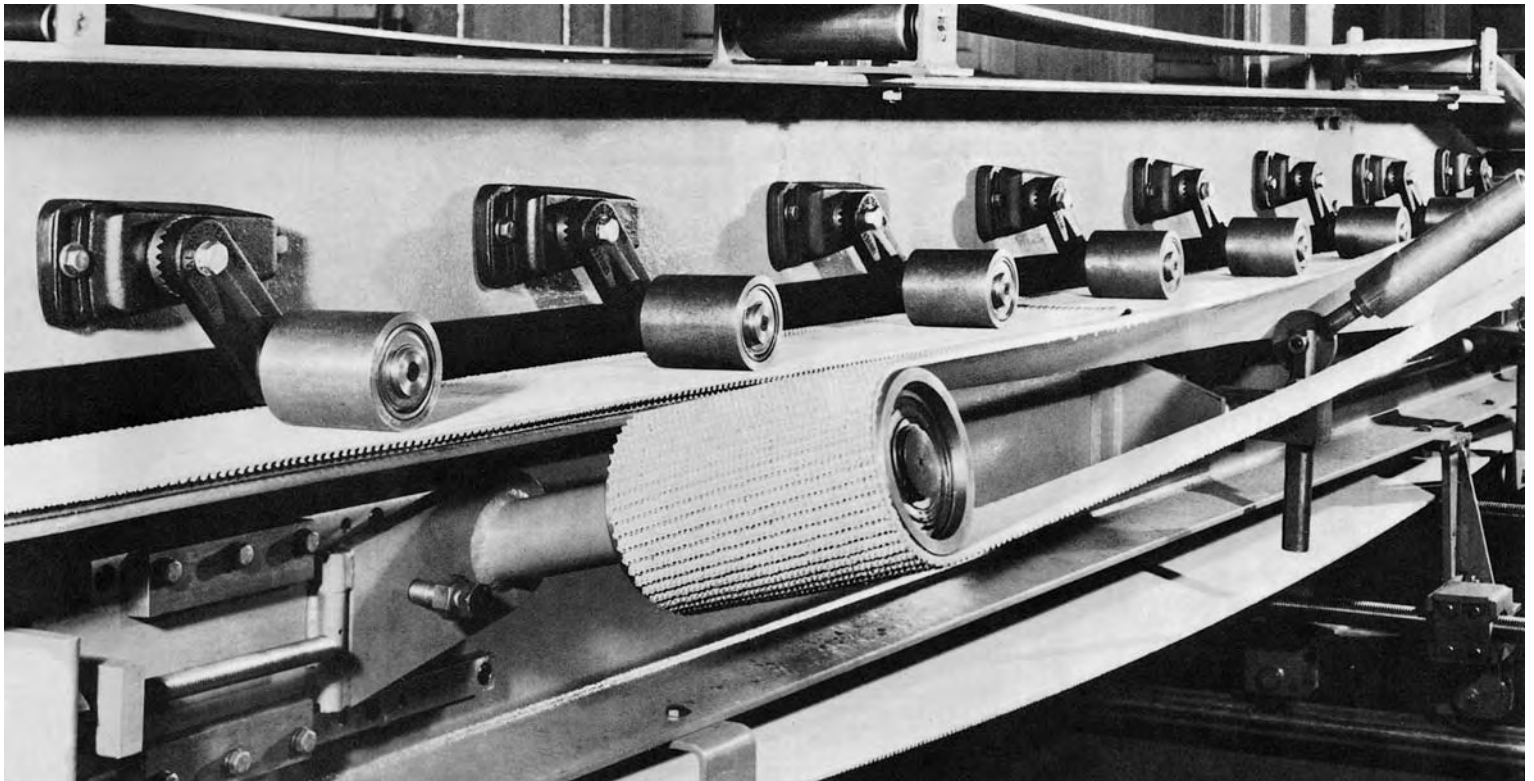
The "T" Series tensioner has a spring for a constant tension which is more practical for pulsating loads. The base is made of high-grade semi-steel casting, incorporating a needle bearing and ball bearing to eliminate binding on overhung loads. A precision cut gear and rack combined with a spring enables the arm to work 90° in either direction.

The standard model will support a 22# load at the idler shaft center. If more capacity is desired, a heavier spring is available to support up to 44# which pivots 45° in either direction.

Model No.	Use with Shaft No.*	A	B	C	D	E	F	G	H	I	J	K	L	M	App. Wt.
TM	SO-2	1 1/2"	2 1/8"	1"	3"	2 1/2"	8 1/16"	7 1/2"	3 7/8"	2 1/16"	5"	4"	3/8"	4 13/16"	6.37
	SO-3	2 1/2"	3 1/8"												
	SO-4	3 1/2"	4 1/8"												

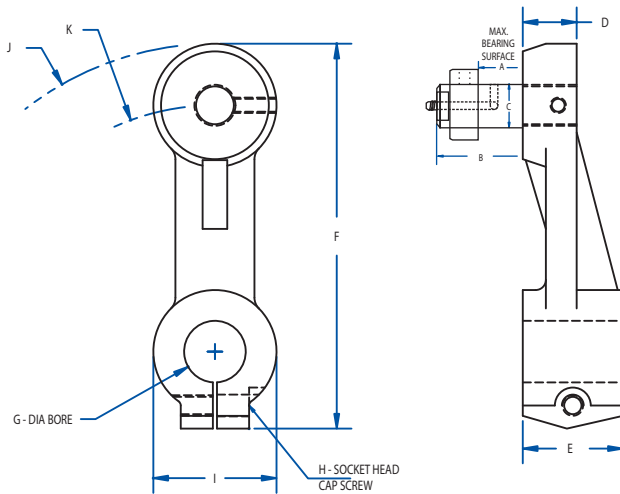
* Idler shaft & set collar not included in tensioner unit. Must be ordered separately.

* Specify either 22 lb. or 44 lb. spring when ordering



Controlled tensioning eliminates shock loading through excessive chain vibration, and horsepower loss through belt slippage

FULL 360° CONTROLLED TENSIONING



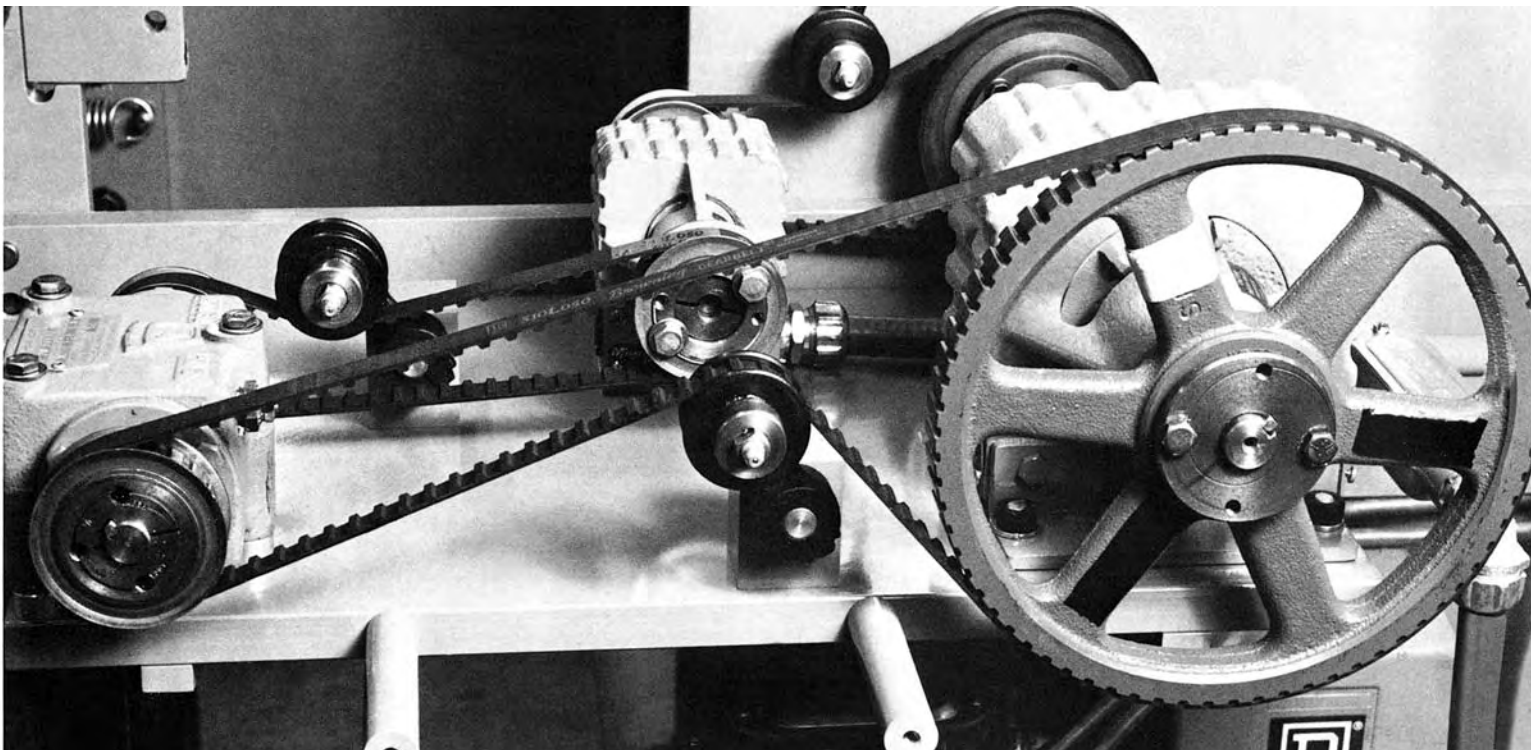
A-Series / Shaft Mounted Tensioners

Model No.	Use with Shaft No.*	A	B	C	D	E	F	G	H	I	J	K	App. Wt.
AS	SO-1	1 1/16"	1 1/2"	1/2"	1/2"	13/16"	3 9/32"	1/2"	10/32"	1 1/8"	2 9/16"	2"	0.3
AM	SO-2	1 1/2"	2 1/8"	1"	7/8"	1 5/8"	6 1/4"	1"	3/8"	2"	5"	4"	2.25
	SO-3	2 1/2"	3 1/8"										
	SO-4	3 1/2"	4 1/8"										
AM 3/4-10	NO-2	1 1/2"	2 1/8"	1"	7/8"	1 5/8"	6 1/4"	1"	3/8"	2"	5"	4"	2.25
	NO-3	2 1/2"	3 1/8"										
	NO-4	3 1/2"	4 1/8"										
AL	SO-5	3 1/4"	4"	1 1/2"	1 5/16"	2 1/16"	9 3/8"	1 1/2"	1/2"	3"	7 1/2"	6"	7.75
	SO-6	5 1/4"	6"										

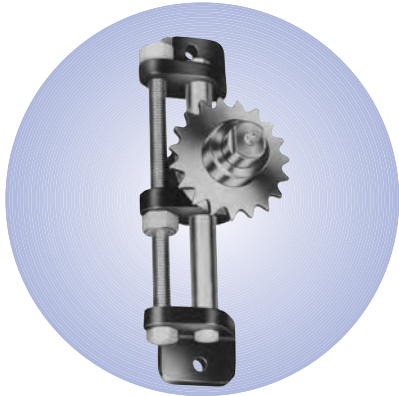
* Idler shaft & set collar not included in tensioner unit. Must be ordered separately.

The Universal Drive Tensioner shaft mounted series is ideal for locations where it is impractical to bolt a tensioner to the frame of a machine. This drive tensioner can be easily located at any point on a shaft; at the same time permitting positioning at any point on a 360° arc.

A split in the base of the arm, along with a locking screw, permits easy movement and tight clamping on the shaft. The shaft mounted tensioner when used in pairs, makes a practical snubber for head and tail pulleys.

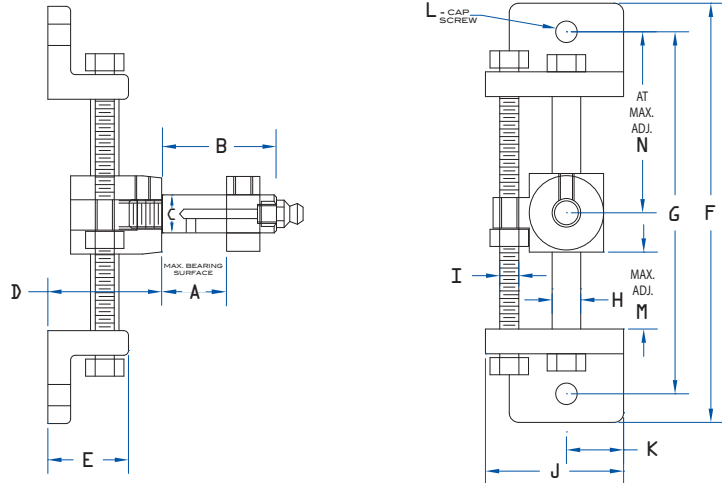


SCREW AND SLIDE ADJUSTMENT



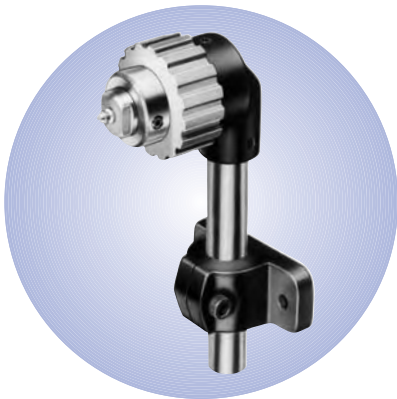
H-Series / Screw Adjustment Tensioners

The H-Series Universal Drive Tensioner is a base mounted screw adjustable unit that provides precision tensioning, positive locking and maintains constant tension at all times. Tension can be precisely controlled. With two bolt mounting for ease of installation.



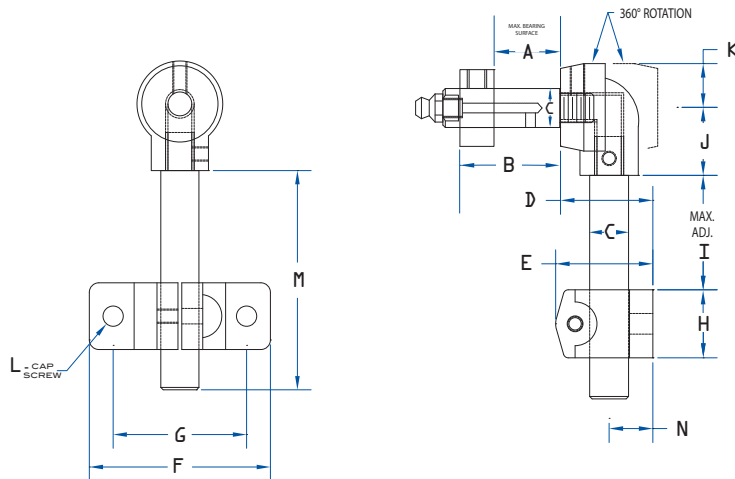
Model No.	Use with Shaft No.*	A	B	C	D	E	F	G	H	I	J	K	L	M	N	App. Wt.
HS	SO-1	1 1/16"	1 1/2"	3/2"	1 1/2"	1 1/16"	5 1/2"	4 3/4"	3/8"	1/4"	1 13/16"	3/4"	1/4"	2"	1 3/8"	0.84
	SO-2	1 1/2"	2 1/8"													
HM	SO-3	2 1/2"	3 3/8"	1"	2 1/2"	1 1/2"	9 3/8"	8 3/8"	3/4"	1/2"	2 3/4"	1"	3/8"	4"	2 3/16"	4.25
	SO-4	3 1/2"	4 1/8"													
HL	SO-5	3 1/4"	4"	1 1/2"	3 3/8"	2 3/8"	16"	14 1/2"	1 1/4"	3/4"	4 3/8"	1 1/4"	5/8"	8"	3 1/4"	15.88
	SO-6	5 1/4"	6"													

* Idler shaft & set collar not included in tensioner unit. Must be ordered separately.



L-Series / Slide Adjustment Tensioners

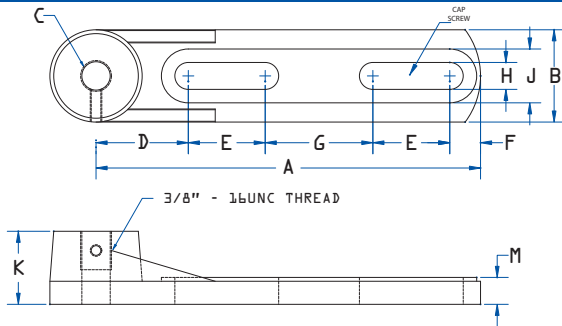
The L-Series Universal Drive Tensioner provides vertical adjustment and a rotating idler head. It is easily base mounted and readily adapts itself as a support for drives with long centers. It can be used as a snubber for head and tail pulleys.



Model No.	Use with Shaft No.*	A	B	C	D	E	F	G	H	I	J	K	L	M	N	App. Wt.
LS	SO-1	1 1/16"	1 1/2"	3/2"	1 1/16"	1 1/4"	2 1/8"	1 1/4"	3/8"	2"	7/8"	3/16"	1/4"	2 1/8"	3 1/16"	0.79
	SO-2	1 1/2"	2 1/8"													
LM	SO-3	2 1/2"	3 3/8"	1"	2 1/8"	2 1/4"	4"	3"	1 11/16"	4"	1 1/4"	1"	3/4"	5 11/16"	1"	4.25
	SO-4	3 1/2"	4 1/8"													
LL	SO-5	3 1/4"	4"	1 1/2"	3 3/8"	3 3/8"	7"	5 3/4"	2 1/2"	8"	2 3/8"	1 1/2"	3/4"	10 1/2"	1 1/2"	15.88
	SO-6	5 1/4"	6"													

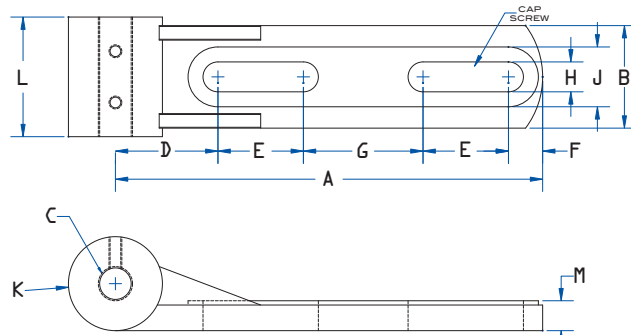
* Idler shaft & set collar not included in tensioner unit. Must be ordered separately.

M-SERIES TENSIONERS USE SO5 AND SO6 SHAFTS



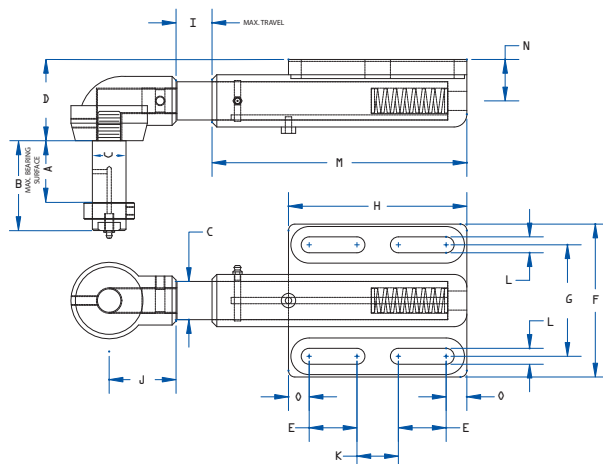
Model No.	Use with Shaft No.*	A	B	C	D	E	F	G	H	J	K	L	M	App.
MVL	SO-5	12 ¹ / ₂ "	3"	1"-14	3"	2 ¹ / ₂ "	1"	3 ¹ / ₂ "	7 ⁷ / ₈ "	1 ¹ / ₄ "	2 ³ / ₈ "	2 ³ / ₄ "	7 ⁷ / ₈ "	10
	SO-6													

* Idler shaft & set collar not included in tensioner unit. Must be ordered separately.



Model No.	Use with Shaft No.*	A	B	C	D	E	F	G	H	J	K	L	M	App.
MHL	SO-5	12 ¹ / ₂ "	3"	1"-14	3"	2 ¹ / ₂ "	1"	3 ¹ / ₂ "	7 ⁷ / ₈ "	1 ¹ / ₄ "	2 ³ / ₈ "	3 ³ / ₂ "	7 ⁷ / ₈ "	11 ¹ / ₂ "
	SO-6													

* Idler shaft & set collar not included in tensioner unit. Must be ordered separately.



Model No.	Use with Shaft No.*	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	App.
MSL	SO-5	3 ¹ / ₄ "	4"	1 ¹ / ₂ "	3 ³ / ₁₆ "	1 ¹ / ₈ "	6"	4 ³ / ₈ "	7"	3"	2 ⁵ / ₈ "	1 ⁵ / ₈ "	5 ¹ / ₈ "	10"	1 ⁵ / ₈ "	13 ¹ / ₁₆ "	18
	SO-6	5 ¹ / ₄ "	6"														

* Idler shaft & set collar not included in tensioner unit. Must be ordered separately.



MVL / Vertical Mount

The MVL Tensioner provides vertical adjustment through the use of slots. The hub is drilled and tapped to accept the SO5 and SO6 shafts. Any of our idlers that take the SO5 and SO6 shafts can then be utilized.



MHL / Horizontal Mount

The MHL Tensioner is mounted horizontally or 90 degrees to the mounting slots. Note that both ends of the hub are tapped. In this way the SO5 and SO6 shafts can be installed on either end of the Hub.

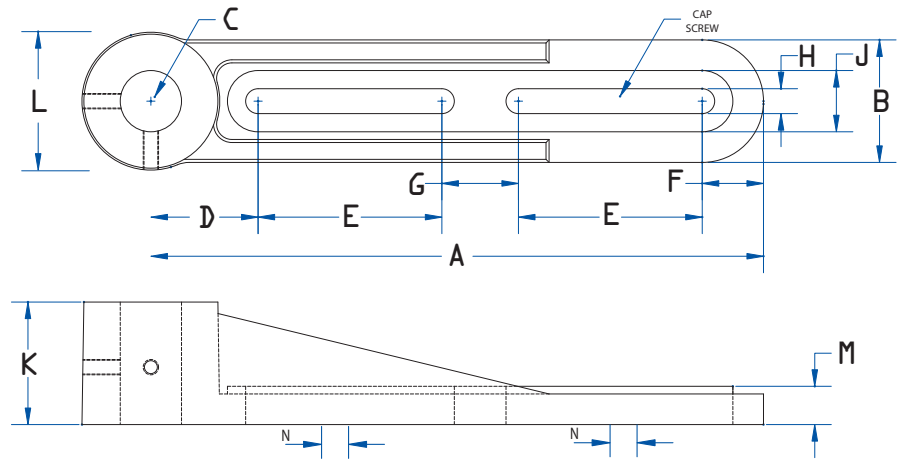


MSL / Spring Loaded

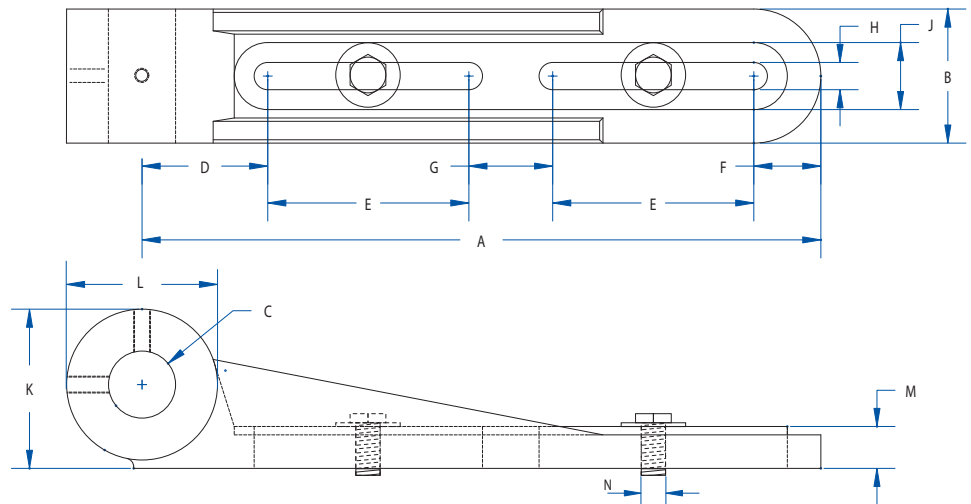
The MSL Tensioner, with a compression spring located in the base casting, is designed for drives with shock and pulsating loads. For every 28 pounds of force applied the spring will compress 1 inch. The tensioner will "cushion" and protect the drive from the damage caused by shock and pulsation. The idler head casting rotates 360 degrees and vertical adjustment is accomplished through 4 slots.



BB1 / Heavy Duty



BB2 / Heavy Duty



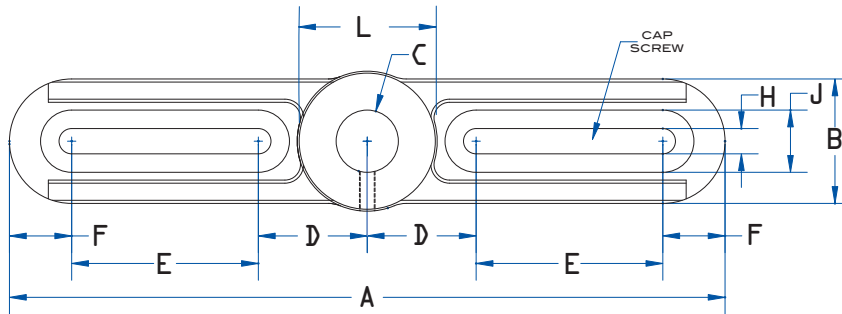
The Brewer Heavy Duty Universal Drive Tensioners are specifically designed to support drives which utilize heavy engineering class chains and belts. All four models are easily mounted to a machine frame with two bolts and thereby are adaptable for use with many different types of heavy conveying equipment. They are vertically adjusted through the use of slots. This vertical adjustment feature provides flexible and precision tensioning, as well as constant

tensioning at all times. A two inch diameter shaft is set screwed into the hub. The stock length of the shaft is 13" and is also available in made-to-order lengths. The shaft on the "BB1" model is aligned to the centerline of the adjusting slots, while the shaft on the "BB2" model is at a 90° angle to the centerline of the adjusting slots. The adjusting slots are on either side of the shaft on the "BB3". On the "BB4", the adjusting slots are parallel to one another.

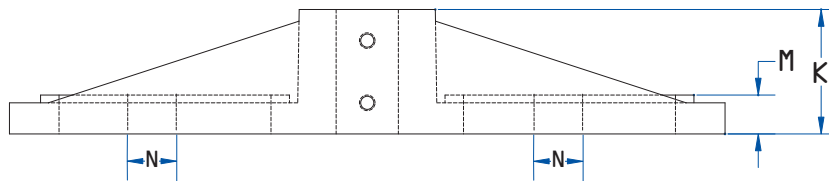
Ground and polished shafts are 2" in diameter

HEAVY DUTY TENSIONERS FOR ENGINEERING CLASS CHAINS

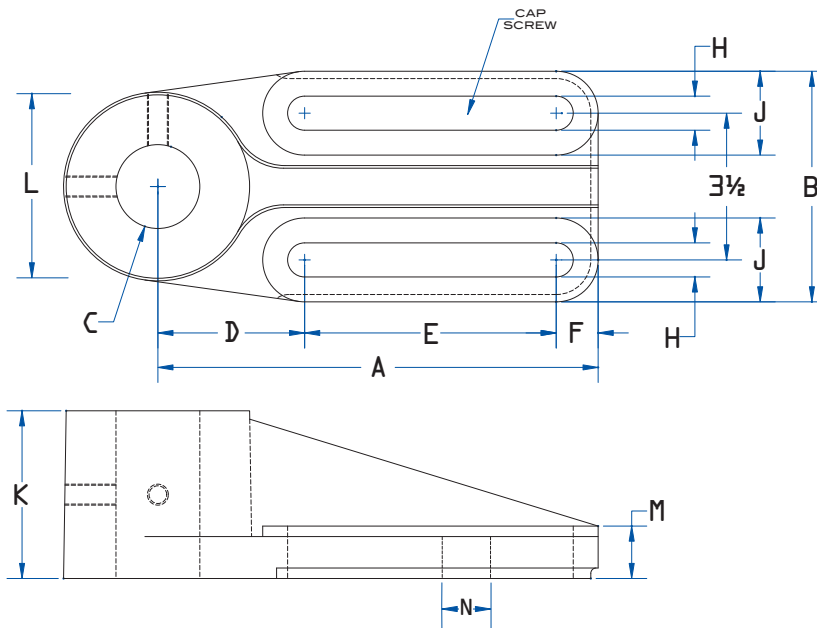
THIRTEEN INCH SHAFT LENGTH FOR BB TENSIONERS



BB3 / Heavy Duty



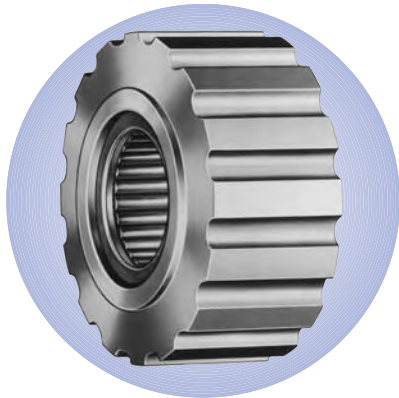
BB4 / Heavy Duty



Model No.	Use with Shaft No.*	A	B	C	D	E	F	G	H	J	K	L	M	N	App. Wt.
BB1	S0-9	20"	4"	2"	3 1/2"	6"	2"	2 1/2"	11/16"	2"	4"	4 1/2"	1 1/4"	3/4"	36.85
BB2	S0-9	20 1/2"	4"	2"	3 1/4"	6"	2"	2 1/2"	11/16"	2"	4 1/4"	4 1/2"	1 1/4"	3/4"	38.95
BB3	S0-9	23"	4"	2"	3 1/2"	6"	2"	---	11/16"	2"	4"	4 1/2"	1 1/4"	3/4"	38.25
BB4	S0-9	10 1/2"	5 1/2"	2"	3 1/2"	6"	1"	---	11/16"	2"	4"	4 1/2"	1 1/4"	3/4"	26.75

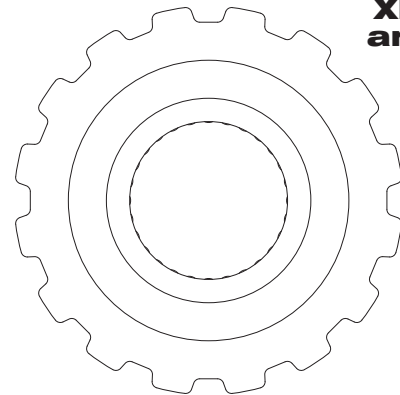
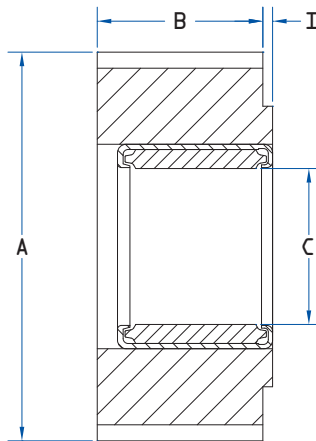
* Idler shaft & set collar not included in tensioner unit. Must be ordered separately.

TIMING AND POWERGRIP IDLERS



Timing Pulley Idlers

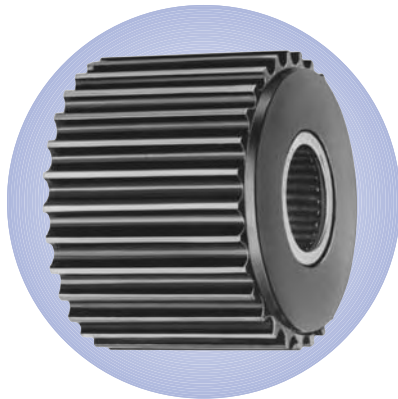
POWERGRIP TIMING SYSTEM



**XL, L, H
and XH**

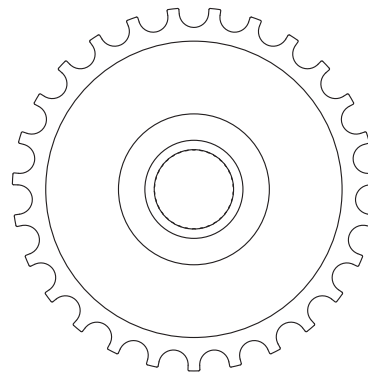
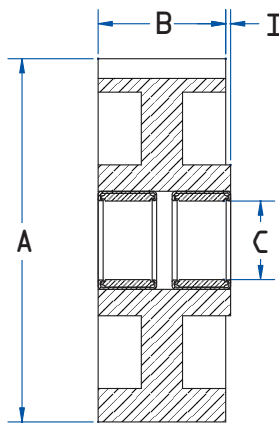
Part No. Needle Bearing*	Pitch	No. Grooves	A	B	C	I	For Use With Idler Shaft Nos.	Needle App. Wt.
24XL05-F	1/8"	24	1.503	1/16"	1/2"	1/16"	S0-1	0.17
18L1-F	3/8"	18	2.121	1 1/16"	1"	1/16"	S0-2	0.65
16H1-F	1/2"	16	2.494	1 1/16"	1"	1/16"	S0-2	0.93
16H2-F	1/2"	16	2.494	2 1/16"	1"	1/16"	S0-3	1.75
18H3-F	1/2"	18	2.812	3 1/16"	1"	1/16"	S0-4	3.68
18XH-F	7/8"	18	4.903	2 1/16"	1"	1/16"	S0-3	4.75
18XH3-F	7/8"	18	4.903	3 1/16"	1"	1/16"	S0-4	6.68

* Available with bronze bearing upon request.



Powergrip Idlers

POWERGRIP H.T.D.® SYSTEM



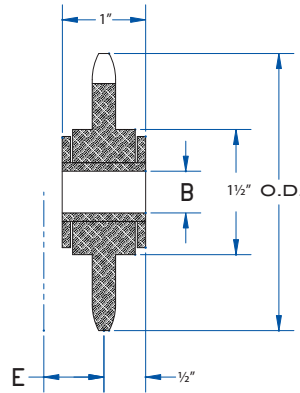
**8 MM
and
14 MM**

Part No. Needle Bearing*	Pitch	No. Grooves	A	B	C	I	For Use With Idler Shaft Nos.	App. Wt.
P19-8M-30F	8MM-30MM	19	1.851"	1 1/16"	1"	1/16"	S02	0.62
P29-8M-50F	8MM-50MM	29	2.859"	2 1/16"	1"	1/16"	S03	2.75
P29-8M-85F	8MM-85MM	29	2.859"	3 1/16"	1"	1/16"	S04	4.5
P27-14M-40F	14MM-40MM	27	4.627"	1 1/8"	1"	1/16"	S03	3.6
P27-14M-55F	14MM-55MM	27	4.627"	2 1/16"	1"	1/16"	S04	4.75
P27-14M-85F	14MM-85MM	27	4.627"	3 1/2"	1"	1/16"	S04	6.25
P31-14M-115F	14MM-115MM	31	5.333"	4 1/4"	1 1/2"	1/16"	S06	11.37

* Available with bronze bearing upon request.

CUT-TOOTH STEEL IDLER SPROCKETS

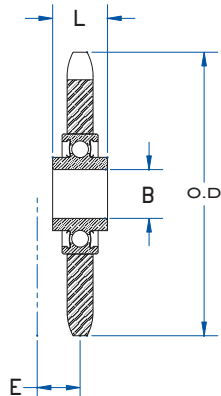
Part No.	Chain Size	No. Teeth	O.D.	B	*E	Wt.	Use with Stud No.
31E20	35	20	2.60	1/2"	0.59	0.53	IS500
							IS165
41E15	41-40	15	2.65	1/2"	0.59	0.58	IS500
							IS165
51E15	50	15	3.32	1/2"	0.72	0.83	IS500
							IS165
61E14	60	14	3.74	1/2"	0.81	1.09	IS500
							IS165



Bronze Bushed Idler Sprockets

Machined steel sprockets with hardened teeth. Hardened & ground steel journals with oil-impregnated sintered bronze bearings. Note: Idler RPM should not exceed 2500 and radial loading should be less than 50 pounds. *Dimension E is minimum space for chain clearance.

Part No.	Chain Size	No. Teeth	O.D.	B	L. Dim.	*E Dim.	Wt.	Use with Stud No.
B3520H	35	20	2.6	.635/.640	0.72	0.438	0.3	IS625
								IS166
B4017H	40	17	2.96	.635/.640	0.72	0.438	0.5	IS625
								IS166
B4018H	40	18	3.14	.635/.640	0.72	0.438	0.5	IS625
								IS166
B5015H	50	15	3.32	.635/.640	0.72	0.563	0.6	IS625
								IS166
B5017H	50	17	3.72	.635/.640	0.72	0.563	0.8	IS625
								IS166
B6013H	60	13	3.49	.635/.640	0.72	0.656	0.8	IS625
								IS166
B6015H	60	15	3.98	.635/.640	0.72	0.656	1.1	IS625
								IS166
B8012H	80	12	4.33	0.75	0.572	0.688	1.5	IS750
								IS167



Ball Bearing Idler Sprocket

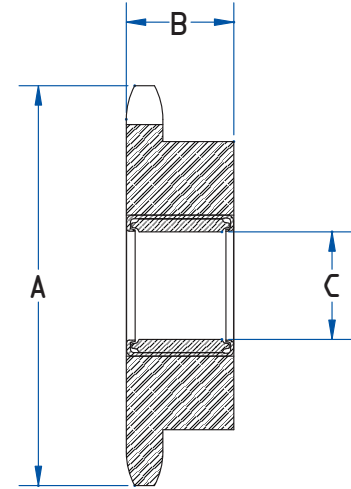
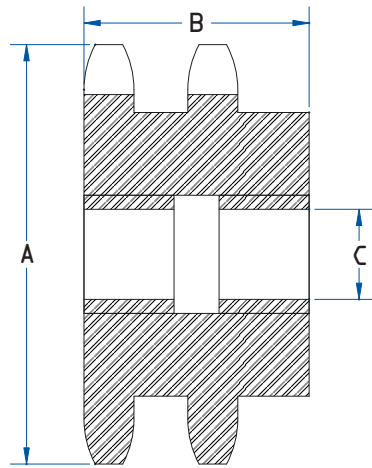
Ball bearing idler sprockets are machined all over with hardened teeth. The ball bearings are precision ground, double-sealed and pre-lubricated.



CUT-TOOTH STEEL IDLER SPROCKETS



NEEDLE BEARING AND BRONZE BUSHED SPROCKET IDLERS/SINGLE & DOUBLE WIDTHS



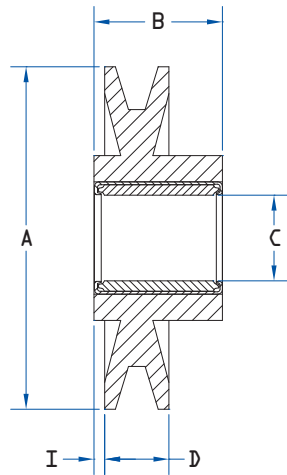
Needle Bearing And Bronze Bushed Type

Part No. Bronze Bearing	Part No. Needle Bearing	A.S.A Chain No.	No. Teeth	Width Strand Chain	A	B	C	For Use With Idler Shaft No.	Bronze App. Wt.	Needle App. Wt.
25B19U	25B19F	25	19	1	1.648	1/2"	1/2"	SO-1	0.15	0.14
35B13U	35B13F	35	13	1	1.75	3/4"	1/2"		0.25	0.24
35B19U	35B19F	35	19	1	2.473	3/4"	1"	SO-2	0.44	0.41
41B19U	41B19F	41	19	1	3.296	1"	1"		1.25	1.2
40B19U	40B19F	40	19	1	3.296	1"	1"		1.28	1.25
50B17U	50B17F	50	17	1	3.719	1"	1"		1.62	1.56
60B11U	60B11F	60	11	1	3.004	1 1/4"	1"		0.9	0.95
60B17U	60B17F	60	17	1	4.462	1 1/4"	1"		3.12	3.06
80B13U	80B13F	80	13	1	4.657	1 1/2"	1"		--	3.4
--	100B11F	100	11	1	5.007	1 7/8"	1 1/2"		--	4.6
--	120B11F	120	11	1	6.008	2 1/8"	1 1/2"	SO-5	--	7.25
--	140B11F	140	11	1	7.01	2 1/4"	1 1/2"		--	11.3
--	160B9F	160	9	1	6.7	2 1/4"	1 1/2"		--	9.6
D35B19U	D35B19F	D35	19	2	2.473	1 1/4"	1"	SO-2	0.78	0.7
D40B19U	D40B19F	D40	19	2	3.296	1 1/2"	1"		2	1.93
D50B17U	D50B17F	D50	17	2	3.719	1 3/4"	1"	SO-3	2.87	2.75
D60B17U	D60B17F	D60	17	2	4.462	2 1/8"	1"	SO-3	5.42	5.25
D80B13U	D80B13F	D80	13	2	4.657	2 1/4"	1"	SO-4	6.42	6.22
--	D100B11F	D100	11	2	5.007	2 7/8"	1 1/2"	SO-5	--	6.75

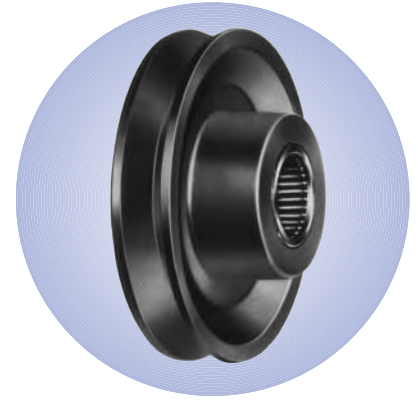
For Single and Multiple Width Drives

ALL MOUNTING SURFACES MACHINED

V BELT PULLEY IDLERS

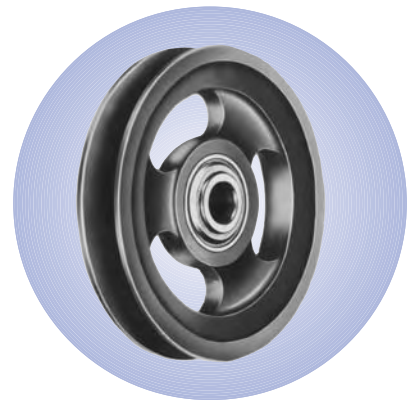
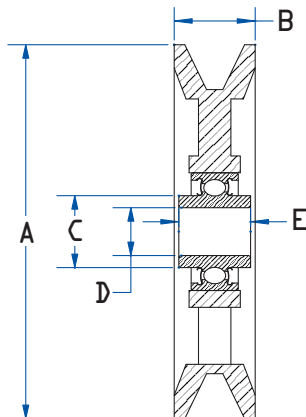


Cast Iron V-Pulley Idlers



Part No. Bronze Bearing	Part No. Needle Bearing	A	B	C	D	I	Belt	For Use With Idler Shaft No.	Bronze App. Wt.	Needle App. Wt.
10U2	10U2F	1 ³ / ₄ "	3 ³ / ₄ "	1 ¹ / ₂ "	9 ⁹ / ₁₆ "	0	0	S01	0.25	0.22
1AU3	1AU3F	3"	1 ¹ / ₂ "	1"	3 ³ / ₄ "	1 ¹ / ₈ "	A	S02	1.31	1.25
1AU4	1AU4F	4"	1 ¹ / ₂ "	1"	3 ³ / ₄ "	1 ¹ / ₈ "	A		1.83	1.72
1BU4	1BU4F	4"	1 ¹ / ₂ "	1"	7 ⁷ / ₈ "	1 ¹ / ₈ "	B		1.87	1.81
1BU5	1BU5F	5"	1 ¹ / ₂ "	1"	7 ⁷ / ₈ "	1 ¹ / ₈ "	B		1.95	2.03
13V3	13V3F	3"	1 ¹ / ₂ "	1"	9 ⁹ / ₁₆ "	1 ¹ / ₈ "	3V		1.28	1.22
13V4	13V4F	4"	1 ¹ / ₂ "	1"	9 ⁹ / ₁₆ "	1 ¹ / ₈ "	3V		1.83	1.72
15V4	15V4F	4"	1 ¹ / ₂ "	1"	13 ¹³ / ₁₆ "	1 ¹ / ₈ "	5V		1.87	1.81
15V5	15V5F	5"	1 ¹ / ₂ "	1"	13 ¹³ / ₁₆ "	1 ¹ / ₈ "	5V		1.95	2.03

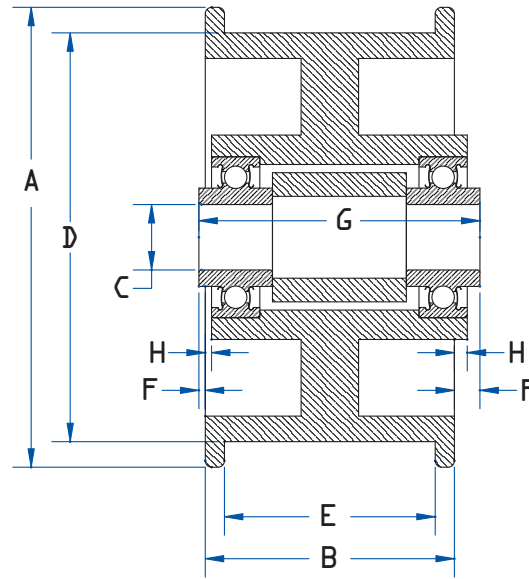
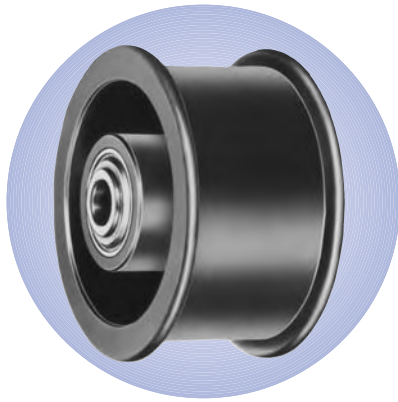
Bronze & Needle Bearing V-Pulley Idlers



Ball Bearing V-Pulley Idlers

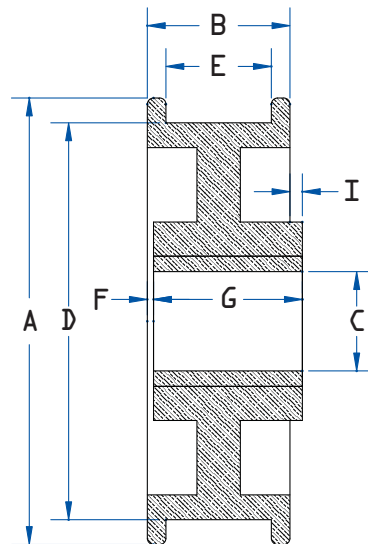
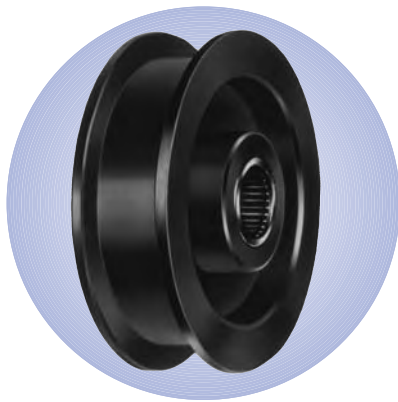
Part No. Ball Bearing	A	B	C	D	E	Belt	For Use With Idler Stud No.	App. Wt.
1AU3B	3"	3 ³ / ₄ "	0.962	.635/.640	0.72	A	IS-166	0.07
1AU4B	4"	3 ³ / ₄ "	0.962	.635/.640	0.72	A		1.3
1BU4B	4"	7 ⁷ / ₈ "	0.962	.635/.640	0.72	B		1.3
1BU5B	5"	7 ⁷ / ₈ "	0.962	.635/.640	0.72	B		1.7
13V3B	3"	9 ⁹ / ₁₆ "	0.962	.635/.640	0.72	3V		0.7
13V4B	4"	9 ⁹ / ₁₆ "	0.962	.635/.640	0.72	3V		1.28
15V4B	4"	13 ¹³ / ₁₆ "	0.962	.635/.640	0.72	5V		1.34
15V5B	5"	13 ¹³ / ₁₆ "	0.962	.635/.640	0.72	5V		1.68

Cast Iron Flat Belt Flanged Pulley Idlers



Ball Bearing Flanged Pulley Idlers

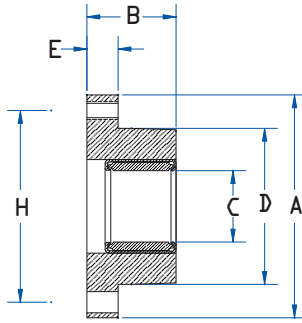
Part No. Ball Bearing	A	B	C	D	E	F	G	H	For Use With Idler Stud No.	App. Wt.
PBB	2 1/2"	7/8"	.635/.640	2 1/4"	1 1/16"	--	0.72	--	IS166	0.48
P1B	4 1/2"	1 1/8"	.635/.640	4"	1 1/8"	1/16"	1 1/4"	1/4"	IS1662	3.2
P2B	4 1/2"	2 1/16"	.635/.640	4"	2 1/16"	1/16"	2 1/4"	1/4"	IS1663	4.3
P3B	4 1/2"	3 1/16"	.635/.640	4"	3 1/16"	1/16"	3 1/4"	1/4"	IS1664	5
P4B	7"	5"	1"	6"	4 1/2"	1 1/8"	4"	1/8"	IS1665	13.45
P6B	7"	6 1/4"	1"	6"	6 1/4"	1 7/8"	5"	1/8"	IS1666	19



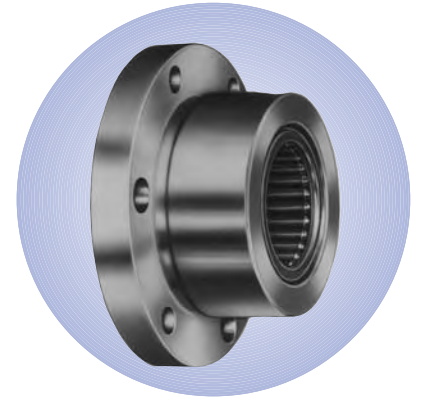
Bronze & Needle Bearing Flanged Pulley Idlers

Part No. Bronze Blushed	Part No. Needle Bearing	A	B	C	D	E	F	G	I	For Use With Idler Shaft Nos.	Bronze App. Wt.	Needle App. Wt.
P00	P00F	1 1/2"	5/8"	1/2"	1 1/4"	7/16"	--	5/8"	--	S01	0.25	0.25
P0	POF	1 1/4"	13/16"	1/2"	1 1/8"	9/16"	0	13/16"	0	S01	0.32	0.31
PB	PBF	2 1/2"	7/8"	1"	2 1/4"	1 1/16"	--	7/8"	--	S02	0.45	0.45
P1	P1F	4 1/2"	1 1/8"	1"	4"	1 1/8"	1/16"	1 1/2"	1/8"	S02	3.12	3
P2	P2F	4 1/2"	2 1/16"	1"	4"	2 1/16"	1/16"	2 1/4"	1/4"	S03	4.75	4.62
P3	P3F	4 1/2"	3 1/16"	1"	4"	3 1/16"	1/16"	3 1/2"	1/8"	S04	6	5.75
P4F		7"	5"	1 1/2"	6"	4 1/2"	1 1/8"	4"	1/8"	S06	--	12.37
P6F		7"	6 1/4"	1 1/2"	6"	6 1/4"	1 7/8"	5"	1/8"	S06	--	17.25

Q.D. IDLER BUSHINGS

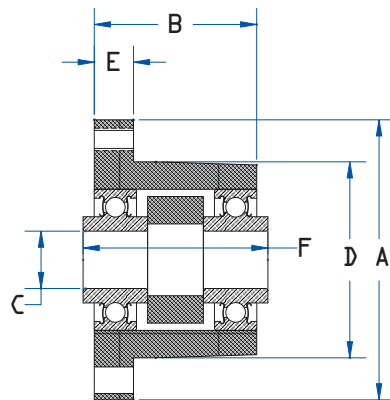


Part No.	A	B	C	D	E	Bold Cir. H	App. Wt.
SH-F	2 ⁵ / ₈ "	1 ⁵ / ₁₆ "	1"	1 ⁷ / ₈ "	7/ ₁₆ "	2 ¹ / ₄ "	0.93
SDS-F	3 ¹ / ₈ "	1 ¹ / ₄ "	1"	2 ³ / ₁₆ "	7/ ₁₆ "	2 ¹¹ / ₁₆ "	1.5
SD-F	3 ¹ / ₈ "	1 ¹³ / ₁₆ "	1"	2 ³ / ₁₆ "	7/ ₁₆ "	2 ¹¹ / ₁₆ "	1.75
SK-F	3 ³ / ₄ "	1 ¹⁵ / ₁₆ "	1"	2 ¹³ / ₁₆ "	9/ ₁₆ "	3 ⁵ / ₁₆ "	3.62
SF-F	4 ⁵ / ₈ "	2 ¹ / ₁₆ "	1 ¹ / ₂ "	3 ¹ / ₈ "	9/ ₁₆ "	3 ⁷ / ₈ "	5.00

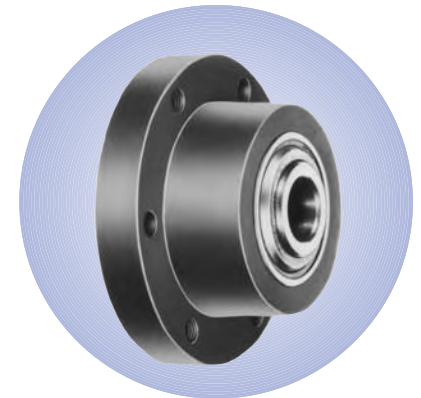


Needle Bearing Universal Q.D. Idler Bushings

For use with any rim accommodates a Q.D. Bushing. Furnished with Needle Bearings and Fasteners.

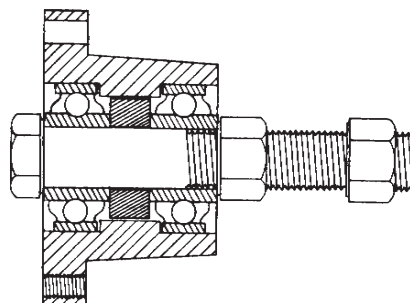


Part No.	A	B	C	D	E	F	App. Wt.
SH-B	2 ⁵ / ₈ "	1 ⁵ / ₁₆ "	.635/.640	1 ⁷ / ₈ "	7/ ₁₆ "	1 ⁹ / ₁₆ "	1.2
SDS-B	3 ¹ / ₈ "	1 ¹ / ₄ "	.635/.640	2 ³ / ₁₆ "	7/ ₁₆ "	1 ¹ / ₂ "	1.5
SD-B	3 ¹ / ₈ "	1 ¹³ / ₁₆ "	.635/.640	2 ³ / ₁₆ "	7/ ₁₆ "	2 ¹ / ₁₆ "	1.7
SK-B	3 ³ / ₄ "	1 ¹⁵ / ₁₆ "	0.750	2 ¹³ / ₁₆ "	9/ ₁₆ "	1 ¹⁵ / ₁₆ "	3
SF-B	4 ⁵ / ₈ "	2 ¹ / ₁₆ "	1.00	3 ¹ / ₈ "	9/ ₁₆ "	2 ¹ / ₁₆ "	3.2



Ball Bearing Universal Q.D. Idler Bushings

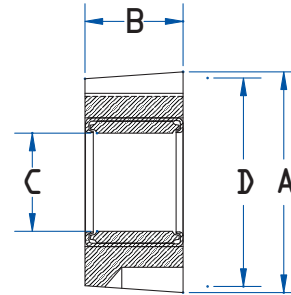
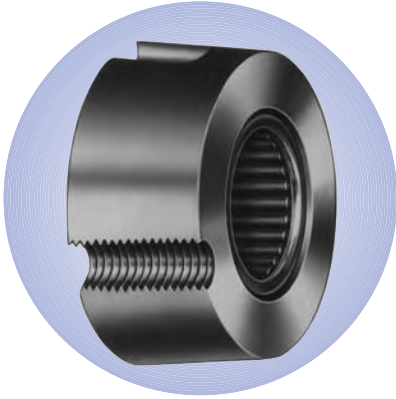
For use with any rim accommodates a Q.D. Bushing. Furnished with Ball Bearings and Fasteners.



Typical Installation

Bolt and nut not included.

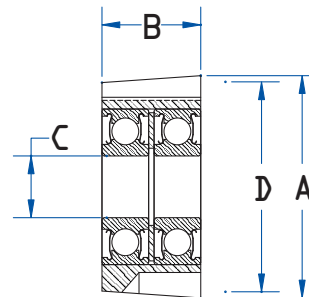
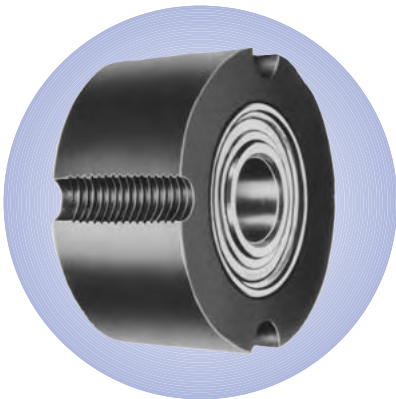
TAPERED IDLER BUSHINGS



Needle Bearing Universal Tapered Idler Bushings

For use with any rim accommodates a Tapered Bushing. Furnished with Needle Bearings and Fasteners.

Part No.	A	B	C	Bold Cir. D	App. Wt.
1610-F	2 ¹ / ₄ "	1"	1"	2 ¹ / ₈ "	0.68
1615-F	2 ¹ / ₄ "	1 ¹ / ₂ "	1"	2 ¹ / ₈ "	1
2012-F	2 ³ / ₄ "	1 ¹ / ₄ "	1"	2 ⁵ / ₈ "	1.5
2517-F	3 ³ / ₈ "	1 ³ / ₄ "	1 ¹ / ₂ "	3 ¹ / ₄ "	2.75



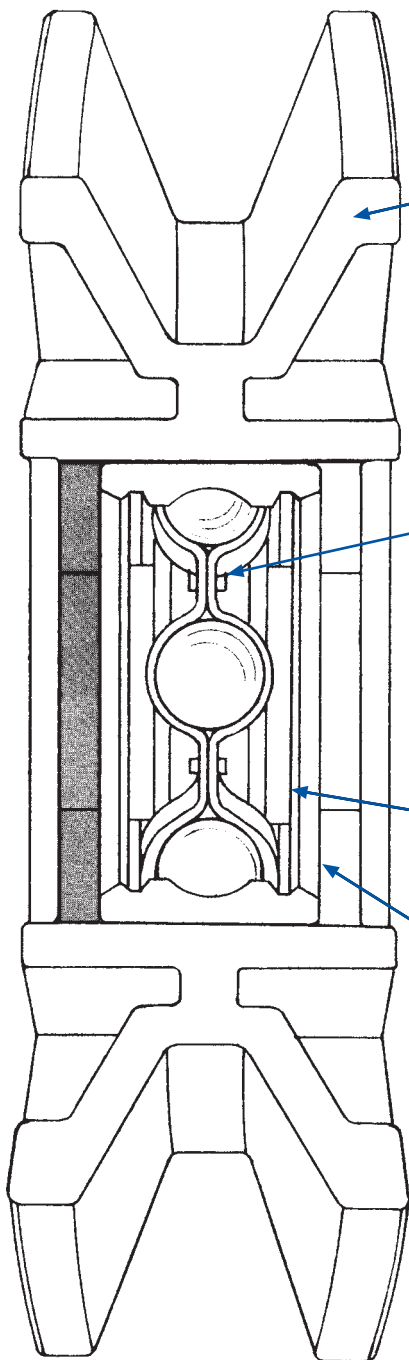
Ball Bearing Universal Tapered Idler Bushings

For use with any rim accommodates a Tapered Bushing. Furnished with Ball Bearings and Fasteners.

Part No.	A	B	C	D	App. Wt.
1610-B	2 ¹ / ₄ "	1"	0.625	2-1/8"	0.9
1615-B	2 ¹ / ₄ "	1 ¹ / ₂ "	0.625	2-1/8"	0.8
2012-B	2 ³ / ₄ "	1 ¹ / ₄ "	0.75	2-5/8"	1.6

BREWER belt idlers are ideally suited for use in power transmission and motion transfer. Available in a wide range of sizes for flat and “V” belt sections, they are perfect for use as high-speed belt idlers on conveyors, packaging machines, agricultural equipment, snow mobiles, tractors, etc. Their light weight requires less energy to start and less energy to run...perfect for “under-the-hood” automotive applications. They are built with extreme accuracy from high quality materials and users can be assured of long trouble-free operations with minimal noise and vibration. BREWER belt idler pulley offer proven durability under heavy loads in toughest environments...year after year!

IMPACT RESISTANT NYLON MATERIAL



1. Molded Pulleys

Molded of high strength, impact resistant nylon material with fiberglass reinforcement, pulleys are abrasion resistant and retain their strength at elevated temperatures. Precision molding technique assures superb concentricity with a significant reduction of lateral and radial runout over conventional pulleys. Symmetrical design provides inherent dynamic balance for smooth and quiet operation. Weep holes are molded in to allow drainage in outdoor applications where pulley are mounted horizontally.

2. Bearings

Precision bearings meet the exacting Annular Bearing Engineers Committee's (A.B.E.C.-1) Standards necessary to obtain the reliability and performance BREWER demands. Standard bearing rings and balls are made from vacuum degassed, high carbon steel which, when hardened and tempered by heat treatment, yields optimum toughness and strength. The raceways are then precision ground to provide years of trouble-free life. Bearing seals are made of synthetic rubber, molded around a flat steel reinforcing ring for rigidity and strength. Flexibility and constant contact force is obtained by a “rubber hinge” effect. This feature allows the seal to continue to be effective, even under nominal axial deflection.

3. Mounting Bushings

A variety of sintered iron alloy adapter bushings is available to facilitate pulley mounting. Included are inch-size bore adapters, extended shoulder bushings and clevis-type mounts. All come factory assembled in the belt idler pulley so that the user only has to order and stock one “ready-to-go” assembly.

4. Retainer

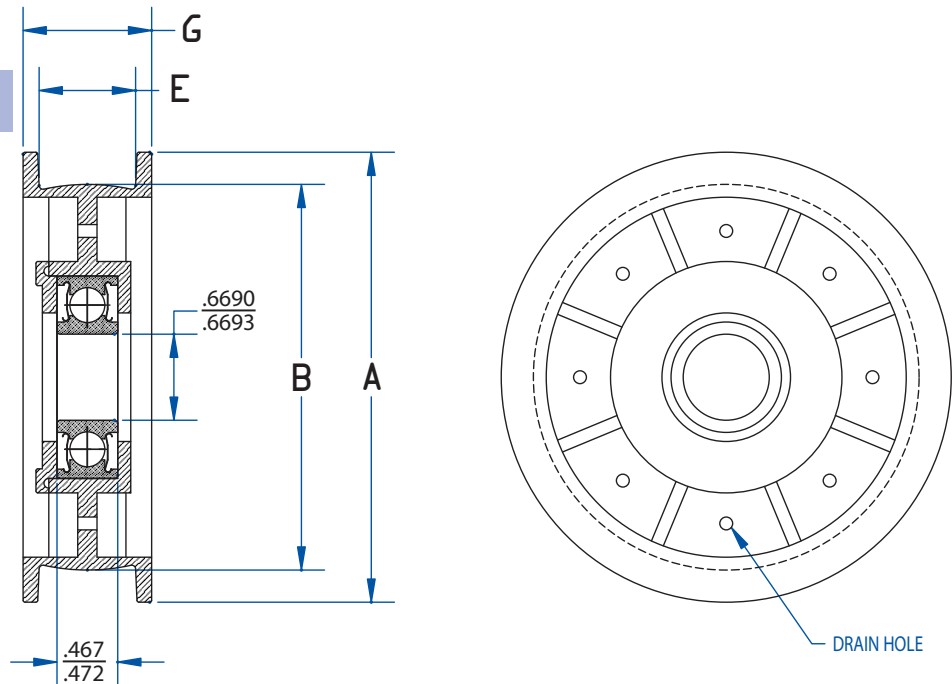
Molded bearing retainer is ultrasonically bonded in position, locked in place over a full 360°, so that there is no possibility of axial movement of the bearing. Likewise, a special built-in “lock” feature prevents the outer race of the ball bearing from rotating in the belt idler housing under load.

COMPOSITE NYLON FLAT BELT FLANGED PULLEY IDLERS



Composite Nylon Flat Belt Flanged Pulley Idlers

Suitable for use with flat belts, cog belts, poly-V and the back side of conventional V-belts, all BREWER Flat Belt idler pulleys feature “crowned” construction. The molded crown helps to center the belt and prevent rubbing against the outside flanges. This arrangement provides maximum support where it’s needed...under the highly stressed center of the belt! A wide range of widths and diameters are available to suit virtually any flat belt idler requirement. Several types of factory-mounted bore adapters are offered (see page 22).

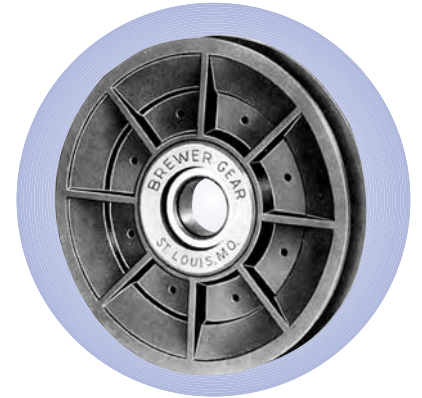


Part No.	Inches			
	A	B	E	G
BF 2001	2.07	1.88	1.38	1.54
BF 2002	2.30	2.00	0.98	1.15
BF 3002	3.00	2.50	1.00	1.31
BF 3501	3.50	3.00	0.75	1.09
BF 3502	3.50	3.00	1.00	1.23
BF 4501	4.50	4.00	1.05	1.39
BF 5501	5.50	5.00	1.00	1.31

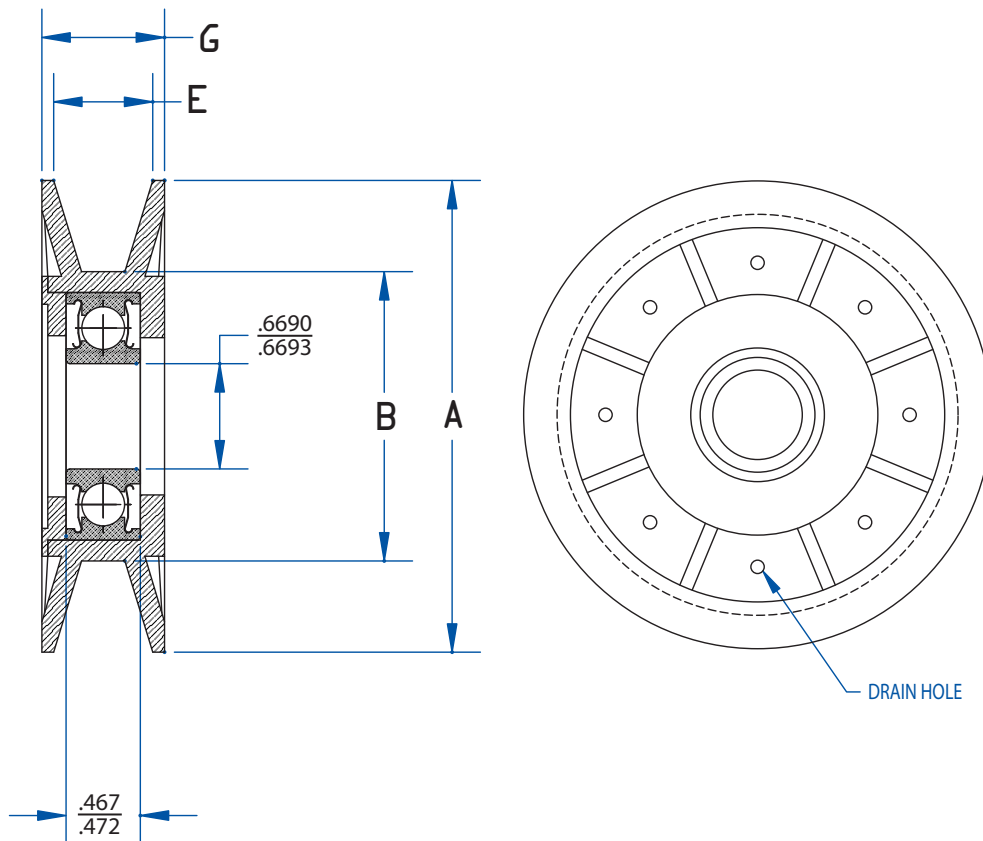
The same pulleys are available with metal hubs, 1/2" and 5/8" bores with keyways and set screws.

COMPOSITE NYLON V-PULLEY IDLERS

Available for use with most popular sizes of V-belts ("O", "A", or "B" sections), BREWER V-belt idler pulleys are provided with a series of radial reinforcing ribs to prevent deformation caused by the wedging action of the belt. The smooth and durable groove surface promotes perfect tracking and insures quiet, long-lived operation. Molded construction provides a bright, attractive appearance that speaks of the high quality of the final product. Versatile bore adapters can be factory-installed to facilitate mounting (see page 22).



Composite Nylon V-Pulley Idlers



Part No.	Inches				Belt Selection Groove Width
	A	B	C	D	
BV 3001	3.00	2.00	0.50	0.70	A
BV 3002	3.00	1.84	0.62	0.81	B
BV 4001	4.00	3.00	0.50	0.70	A
BV 4002	4.00	2.84	0.62	0.81	B
BV 5001	5.00	3.84	0.62	0.81	B

The same pulleys are available with metal hubs, 1/2" and 5/8" bores with keyways and set screws.

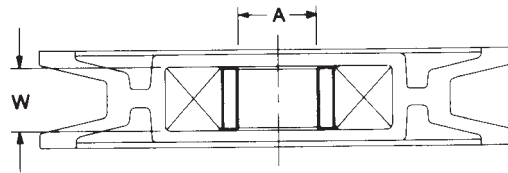
MOUNTING ADAPTERS

Versatile mounting adapters simplify the job of assembly and help to reduce overall cost. Made of high quality sintered iron materials, they are press-fitted in place at the factory so that you need handle only one component...the "finished" belt idler assembly. There's no need to stock lots of separate components and deal with multiple suppliers. Simply order the mounting adapter(s) you need at the same time you order the belt pulley and they will be factory installed without charge.

The three standard types are available in a choice of widths and bore sizes to meet most mounting requirements. However, our flexible tooling approach allows "specials" to be produced quickly and economically... and frequently with little or no tooling charge.

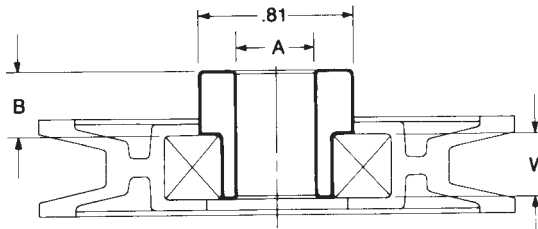
Bore Adapters

Part No.	A	W
AB 0001	.385/.395	0.472
AB 0002	.510/.520	0.472



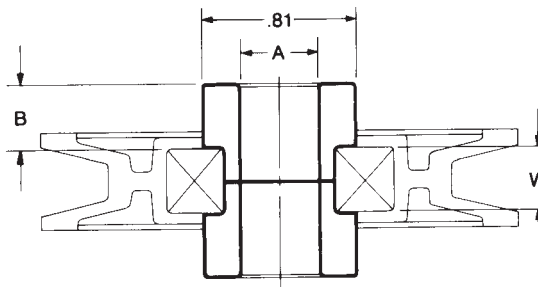
Shoulder Adapters

Part No.	A	B	W
BB 0001	.385/.395	0.26	0.472
BB 0002	.385/.395	0.51	0.472
BB 0003	.385/.395	0.76	0.472
BB 0004	.510/.520	0.26	0.472
BB 0005	.510/.520	0.51	0.472
BB 0006	.510/.520	0.76	0.472
BB 0013	.385/.395	0.14	0.472
BB 0016	.385/.395	0.11	0.472



Clevis Adapters

Part No.	A	B	W
DB 0001	.385/.395	0.26	0.472
DB 0002	.385/.395	0.51	0.472
DB 0003	.385/.395	0.76	0.472
DB 0004	.510/.520	0.26	0.472
DB 0005	.510/.520	0.51	0.472
DB 0006	.510/.520	0.76	0.472
DB 0013	.385/.395	0.08	0.472
DB 0014	.510/.520	0.68	0.472
DB 0015	.315/.325	0.08	0.472
DB 0016	.385/.395	0.17	0.472



PRECISION GROUND IDLER SHAFTS

IDLER SHAFTS INCLUDING SET COLLAR

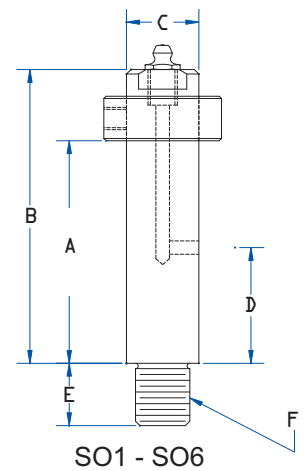
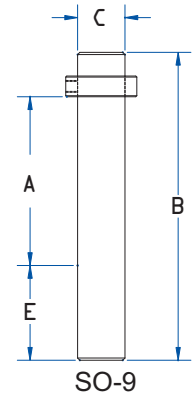
Brewer idler shafts are hardened and ground for maximum Idler life. To insure maximum rigidity, they are shouldered and threaded into units and locked with a set screw.

All Brewer idler shafts are interchangeable with all models, see Product Interchange

Part No.	A	B	C	D	E	F	For use with Model No.	App. Wt.
NO-2	1 1/8"	2 1/8"	1"	5/8"	7/8"	3/4" x 10 THD	AM-3/4"-10	0.75
NO-3	2 1/2"	3 1/8"	1"	1 1/8"	7/8"	3/4" x 10 THD	GM-3/4"-10	0.95
NO-4	3 1/2"	4 1/8"	1"	1 1/8"	7/8"	3/4" x 10 THD	RM-3/4"-10	1.16
NO-5	3 1/4"	4"	1 1/2"	1 1/8"	1 1/16"	1"-8 THD		2.62
NO-6	5 1/4"	6"	1 1/2"	2 1/2"	1 1/16"	1"-THD		3.62*

Part No.	A	B	C	D	E	F	For use with Model No.	App. Wt.
SO-1	1 1/16"	1 1/2"	1/2"	3/8"	7/16"	3/8"x16 THD	SS AS HS LS GS RS	0.16
SO-2	1 1/2"	2 1/8"	1"	5/8"	7/8"	3/4"x16 THD	SM AM HM LM GM RM TM XM	0.75
SO-3	2 1/2"	3 1/8"	1"	1 1/8"	7/8"	3/4"x16 THD	SM AM HM LM GM RM TM XM	0.95
SO-4	3 1/2"	4 1/8"	1"	1 1/8"	7/8"	3/4"x16 THD	SM AM HM LM GM RM TM XM	1.16
SO-5	3 1/4"	4"	1 1/2"	1 1/8"	1 1/16"	1"x14 THD	SL AL HL LL GL RL	2.62
SO-6	5 1/4"	6"	1 1/2"	2 1/2"	1 1/16"	1"x14 THD	SL AL HL LL GL RL	3.62
SO-9*	8"	13"	2"	---	4"	---	BB1 BB2 BB3 BB4	12.57

*Available in made-to-order lengths. Ground but not hardened.

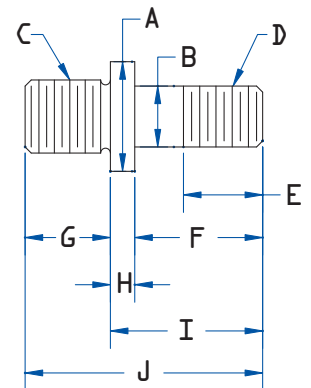


MACHINED SHOULDER STUDS

Steel studs IS-165, IS-166, IS-167, IS-1662, IS-1663 and IS-1664 can be used with ball bearing and bronze bushed sprocket idlers in medium size tensioners where SO2, SO3 and SO4 shafts are used.

Part No.	A	B	C	D	E	F	G	H	I	J	Wt.l
IS-500	1"	1/2"	1/2"-13	1/2"-13	5/8"	1 1/2"	3/8"	1/4"	1 1/4"	2 1/2"	0.24
IS-625	1"	5/8"	1/2"-13	5/8"-11	13/16"	1 1/2"	1"	1/4"	1 1/8"	2 1/8"	0.36
IS-750	1 1/8"	3/4"	5/8"-11	3/4"-10	13/16"	1 1/2"	1 3/16"	3/8"	1 1/4"	2 5/8"	0.48
IS-165	1 1/8"	1/2"	3/4"-16	1/2"-13	5/8"	1 1/2"	7/8"	1/4"	1 1/4"	2 1/8"	0.28
IS-166	1 1/8"	5/8"	3/4"-16	5/8"-11	13/16"	1 1/2"	7/8"	1/4"	1 1/8"	2 1/8"	0.37
IS-167	1 1/8"	3/4"	3/4"-16	3/4"-10	13/16"	1 1/2"	7/8"	3/8"	1 1/4"	2 1/8"	0.48
IS-1662	1 1/8"	3/8"	3/4"-16	5/8"-11	13/16"	2 1/2"	7/8"	1/4"	2 1/4"	3 1/8"	0.58
IS-1663	1 1/8"	5/8"	3/4"-16	5/8"-11	13/16"	3 1/2"	7/8"	1/4"	3 3/4"	4 5/8"	0.66
IS-1664	1 1/8"	5/8"	3/4"-16	5/8"-11	13/16"	4 1/2"	7/8"	1/4"	4 3/4"	5 5/8"	0.75
IS-1665	1 1/8"	1"	1"-14	1"-14	1"	4 1/2"	1 1/2"	1/4"	5 1/2"	6 1/8"	1.65
IS-1666	1 1/8"	1"	1"-14	1"-14	1"	5 1/2"	1 1/2"	1/4"	6 1/4"	7 1/8"	1.95

* Idler shaft & set collar not included in tensioner unit. Must be ordered separately.



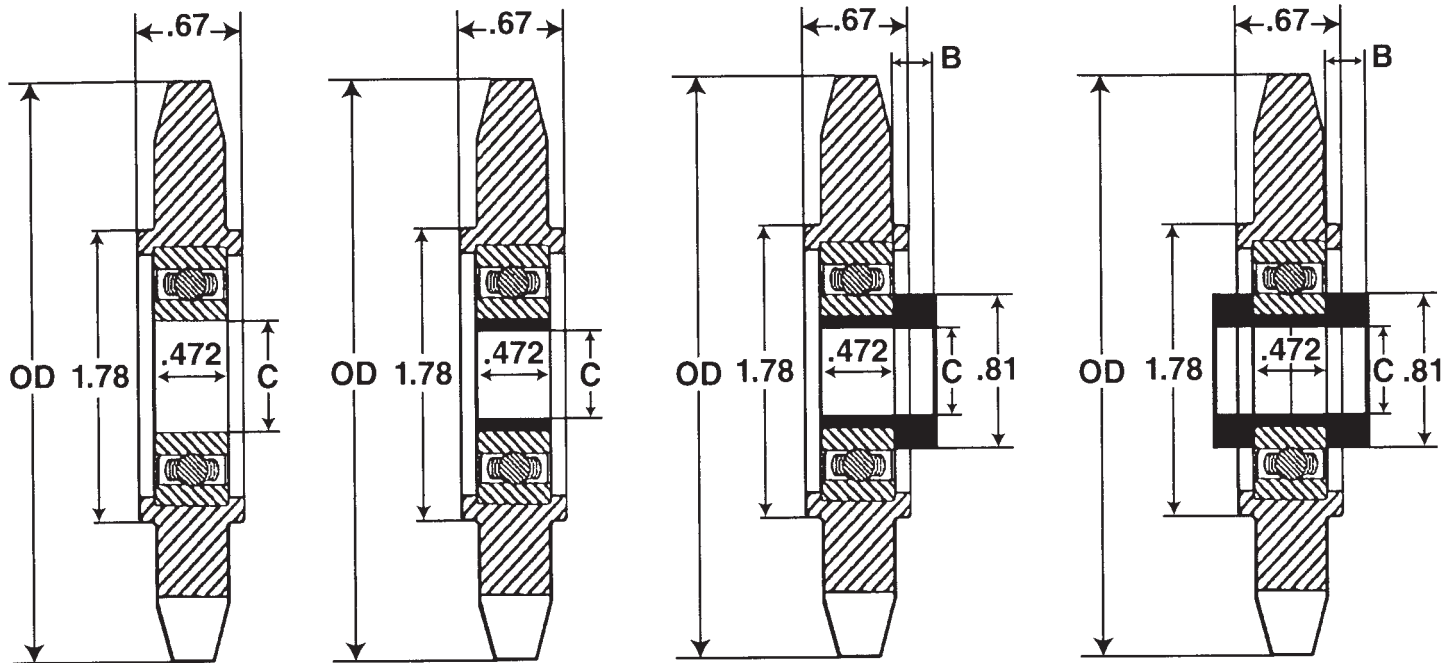
NYLON COMPOSITE IDLER SPROCKETS



Shown above: SM, IS165, BB0005, B4017N

- Lightweight and quiet
- Resists corrosion
- Wear-resistant glass reinforced nylon
- Sealed precision ball bearing-
no lubrication required
- Mounting adapters available
- Can be used with all Brewer medium
sized tensioners through the use of
an adapter & the IS165 stud

NYLON COMPOSITE IDLER SPROCKETS



Composite Idler Sprockets

Part No.	Chain Size	No. Teeth	O.D.	Bore C.
B4017N	40	17	3.00	0.669
B5015N	50	15	3.25	0.669
B6013N	60	13	3.50	0.669

Mounting Adapters

Part No.	B	C	Part No.	B	C
AB0001	--	.385/.395	DB0001	0.26	.385/.395
AB0002	--	.510/.520	DB0002	0.51	.385/.395
BB0001	0.26	.385/.395	DB0003	0.76	.385/.395
BB0002	0.51	.385/.395	DB0004	0.26	.510/.520
BB0003	0.76	.385/.395	DB0005	0.51	.510/.520
BB0004	0.26	.510/.520	DB0006	0.76	.510/.520
BB0005	0.51	.510/.520	DB0013	0.08	.385/.395
BB0006	0.76	.510/.520	DB0014	0.68	.510/.395
BB0013	0.14	.385/.395	DB0015	0.08	.315/.325
BB0016	0.11	.385/.395	DB0016	0.17	.385/.395

Brewer Hardened Linear Shafting Specification Data

- All ends chamfered 1/16 inch @ 45°
- No premium for same day shipments if received by 2 pm CDT*
- All shafting cardboard tubed for protection
- No set up charges on random lengths (max. lengths)
- 1060 C Shafting 58/63RC
- Assembly of pre-drill rails/shafts available for immediate shipment from stock
- Also available from stock Metric 1060 case 6, 8, 10, 12, 16, 20, 25, 30, 40, 50 mm Shafting
- Shafts Cut To Specified Lengths

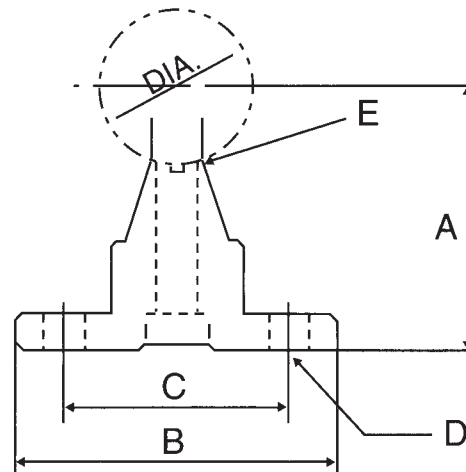
Nominal Diameter	Tolerance Class 1 (L)	Tolerance Class 2 (S)	Weight Per Inch	Maximum Length	Minimum Depth Hardness
1/4	.2495/.2490	.2490/.2485	0.014	158	0.04
3/8	.3745/.3740	.3740/.3735	0.031	158	0.04
1/2	.4995/.4990	.4990/.4985	0.055	158	0.06
5/8	.6245/.6240	.6240/.6235	0.086	158	0.06
3/4	.7495/.7490	.7490/.7485	0.125	158	0.06
7/8	.8745/.8740	N/A	0.17	158	0.06
1	.9995/.9990	.9990/.9985	0.222	158	0.08
1 1/8	1.1245/1.1240	N/A	0.282	158	0.08
1 1/4	1.2495/1.2490	1.2490/1.2485	0.348	158	0.08
1 3/8	1.3745/1.3740	N/A	0.421	158	0.08
1 1/2	1.4994/1.4989	1.4989/1.4984	0.5	158	0.08
1 5/8	1.7495/1.7490	1.7490/1.7485	0.681	158	0.1
2	1.9994/1.9987	1.9987/1.9980	0.89	158	0.1
2 1/2	2.4993/2.4985	2.4985/2.4977	1.39	158	0.1
3	2.9992/2.9983	2.9983/2.9974	2.01	158	0.1
3 1/2	3.4990/3.4980	N/A	2.74	158	0.1
4	3.9988/3.9976	3.9976/3.9964	3.55	158	0.1

Shaft support rail engineering specifications

Type SR-PD shaft support rails with mounting holes-dimensions

Brewer Part Number/Length	Nom. Shaft Dia. (inch)	A ±.001	B	C	D		E		Wt Lbs.
					Bolt	Hole	Screw	Hole	
SR-8-PD-24	1/2	1.125	1 1/2	1	6	0.169	6-32 x 1 1/2	0.169	1.33
SR-10-PD-24	3/8	1.125	1 5/8	1 1/8	8	0.193	8-32 x 7/8	0.193	1.49
SR-12-PD-24	3/4	1.5	1 3/4	1 1/4	10	0.221	10-32 x 1 1/4	0.221	2.1
SR-16-PD-24	1	1.75	2 1/8	1 1/2	14	0.281	1/2-20 x 1 1/2	0.281	2.78
SR-20-PD-24	1 1/4	2.125	2 1/2	1 7/8	18	0.343	3/16-18 x 1 3/4	0.343	4.06
SR-24-PD-24	1 1/2	2.5	3	2 1/4	22	0.343	3/8-16 x 2	0.406	5.84
SR-32-PD-24	2	3.25	3 3/4	2 3/4	28	0.406	1/2-13 x 2 1/2	0.531	9.5

*Hole diameter includes counterbore for rocket head cap screw. Material is aluminum alloy extrusion.



Bearing Series from stock Metric 1060 case 6,8,10,12,16,20,25,30,40,50 MM Shafting

A series prec. ball	PB ADJ	SB support blocks	TWN-ADJ
ADJ series prec. ball	PB0-OPN	SFB	TWN-OPN
DS die sets	SPB	Super	SR rails
OPN series prec. ball	SPB-ADJ	Super OPN	SR-PD rails
PB	SPB-OPN	TWN	LSR low support rails

SHEAVES

SHEAVES — Single and Multiple widths.



GEARS



TIMING PULLEYS and HTD® SPROCKETS

TIMING PULLEYS — 1/5" through 1 1/4" pitch.



SPROCKETS



Brewer can produce gears, sprockets, timing pulleys, & HTD® sprockets, to your specifications.

The Brewer Machine & Gear Company manufacturing plant is equipped with the finest gear cutting and machining equipment, plus a staff of skilled operators and engineers to design and produce power transmission components to your own specifications. Look at this wide range of sizes:

Spur Gears

	Min.	Max.
D.P.	32	1
O.D.	1/2"	72"

Worm Gears

D.P.	16	3
O.D.	1/2"	24"

Sprockets

PITCH	1/8"	1 1/4"
O.D.	1"	72"

Internal Gears

D.P.	20	3
O.D.	4"	36"

Worms

D.P.	32	3
O.D.	6"	36"

Timing Pulleys

PITCH	1/5" xl	1 1/4" xxl
O.D.	1"	24"

Bevel Gears

D.P.	32	3
O.D.	1/2"	12"

Helical Gears

D.P.	32	2 1/2
O.D.	1/2"	24"

HTD® Sprockets

PITCH	8mm	14mm
O.D.	1"	24"

Brewer also offers the following services with fast turn around times and the quality you have come to expect from an industry leader in business since 1944.

- Gearbox repair
- Broaching
- Keying
- CNC turning
- Re-bore/other modifications
- Grinding
- CNC milling
- Splining

Brewer's philosophy has always been and always will be the customer comes first. Our knowledge and expertise will assure you are getting the right product for your application. We not only service you before the sale, we continue to service you after the sale.

WHY USE A DRIVE TENSIONER?

Belts and chains stretch or elongate through usage. As belts wear, the initial tension is lessened and will result in slippage and consequently, horsepower loss; unless a form of take-up is used to restore the belt to its original tension. As chains wear, they are elongated and can result in slapping or increased vibration. This shock loading can also result in added bearing wear. Both chain and belt drives, if allowed to run loose will show an increased rate of wear. The Universal Drive Tensioner was designed to operate in all directions, and adjusts easily as tension requirements change. A properly tensioned drive runs smoother and quieter, delivers maximum horsepower, and wears longer.

The advantages of UNIVERSAL Drive Products

- Low cost take-up for chain and belt drives.
- Idler shafts are interchangeable with all models.
- Idler shafts are hardened and ground for maximum idler life.
- Idler shafts are shouldered and threaded into units and locked with set screw to insure maximum rigidity.
- S & T Series — full 360° positioning. Serrated pad for positive locking. Slot in base to provide precision tensioning as well as additional vertical movement. Rotating arm action for greater adjustment.
- T-Series — Automatic Tensioning.
- H-Series — Screw adjustment and positive locking.
- L-Series — Adjusting & positioning
- Universal Tensioners & Positioners are painted and mounting bolts plated to provide maximum rust protection.
- Idlers — Offered in Needle Bearing, Ball Bearing and Bronze Bushed.
- For single and multiple width drive.

TIPS ON IDLER USAGE

- Tensioning that is too tight causes excessive chain, belt and bearing wear.
- Tensioning that is too loose allows belt slippage or chain vibration, causing wear or loss of horsepower.
- Idlers should be located on the slack side of the drive.
- The use of idlers on the back of Vee belts causes reverse bend, and can reduce the life of the belt. However, when inside idlers are used, the arc of contact is reduced and allowance must be made for horsepower loss.
- The U.D.T. flanged flat face idler pulley can be run on the inside or outside of belt drives, and will produce no additional wear on the sides of Vee belts.
- Chain idlers should be run on the outside of the chain.
- Idler sprockets should have at least 3 teeth engaged with the chain.
- Idlers, when used on the outside of the drive, should be located approximately 1/3 of the center distance from the small pulley or sprocket.
- Idlers, when used on the inside of the drive, should be located approximately 1/3 of the center distance from the large pulley or sprocket.



BREWER MACHINE & GEAR CO.

STOCKING DISTRIBUTORS THROUGHOUT THE U.S. AND CANADA

FOR FURTHER INFORMATION CONTACT YOUR LOCAL POWER TRANSMISSION DISTRIBUTOR

2820 CLARK AVENUE (63103)
P.O. BOX 14726
ST. LOUIS, MO 63178 USA

www.brewertensioner.com