



Furnished complete with:
Ball Bearings, Cap Screws, Stud Bolts and Nuts

Browning® Idler Bushings provide Idlers in the following products:

SHEAVES

FHP
Multiple
Poly-V
358

HARDENED AND STANDARD SPROCKETS

Single
Double
Triple

GEARBELT PULLEYS GEARS



Available for H, P1, Q1 and R1 Bore Items.

TABLE No. 1

SPECIFICATIONS

PART NUMBER	DIMENSIONS												TAPPED HOLES		DRILLED HOLES		APPROX. WT. Lbs.
	O.D.	B.C.	D	B	O.L.	B.L.	H & Y	L	P	U	R	X	NO.	SIZE	No.	SIZE	
*IDH1 - 1/2	2 1/2"	2"	1.625"	1/2"	2 9/16"	2 1/4"	5/16"	1 1/4"	1"	1/4"	1/8"	7/8"	2	1/4" - 20	2	5/16"	.9
*IDP1 - 5/8	3"	2 7/16"	1.937"	5/8"	3 41/64"	3 1/4"	29/64"	1 19/16"	1 5/16"	13/32"	7/32"	1 9/16"	2	5/16" - 18	3	3/8"	1.9
*IDQ1 - 3/4	4 1/8"	3 3/8"	2.875"	3/4"	4 7/32"	3 3/4"	15/32"	2 1/2"	1 1/4"	17/32"	7/32"	1 3/4"	2	3/8" - 16	3	7/16"	5.5
*IDQ1 - 1	4 1/8"	3 3/8"	2.875"	1"	4 39/64"	4"	39/64"	2 1/2"	1 1/2"	17/32"	7/32"	1 3/4"	2	3/8" - 16	3	7/16"	5.9
IDR1 - 1 1/2	5 3/8"	4 5/8"	4.000"	1 1/2"	6 1/2"	5 1/2"	1"	2 7/8"	2 5/8"	5/8"	1/4"	2"	2	3/8" - 16	3	7/16"	14.1

*These sizes fit H, P, Q, and Q1 Drive Tighteners shown on pages I-2, I-3 and I-4.

NOTE-Mount Stud Bolt in either direction.

LOAD RATINGS - IDLER BUSHINGS

TABLE No. 2

PART No.	RADIAL LOAD CAPACITY IN POUNDS BASED ON 2500 HOURS AVERAGE LIFE AT RPM SHOWN							
	100	500	1000	1500	2000	2500	3000	3500
IDH1 - 1/2	1518	1016	854	772	718	678	648	624
IDP1 - 5/8	1518	1016	854	772	718	678	648	624
IDQ1 - 3/4	3320	2222	1868	1688	1568	1486	1420	1366
IDQ1 - 1	3554	2378	2000	1806	1680	1590	1518	1462
IDR1 - 1 1/2	8326	5570	4684	4232	3936	3726	3560	3424

AVERAGE LIFE FACTORS

Radial Load Capacities shown for NEEDLE BEARING IDLERS and IDLER BUSHINGS are based on 2500 Hours Average Life. If another average life is desired, these ratings must be modified by factors as follows:

500 Hours - 1.71	4000 Hours - .85	9000 Hours - .65
1000 Hours - 1.36	5000 Hours - .79	10000 Hours - .63
1500 Hours - 1.19	6000 Hours - .75	15000 Hours - .55
2000 Hours - 1.07	7000 Hours - .71	20000 Hours - .50
3000 Hours - .94	8000 Hours - .68	

BROWNING® DRIVE TIGHTENERS AND IDLERS

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 original tension.

As chains wear they elongate, which results in sway or slap and increased vibration. This puts undue shock into the drive and increases bearing wear.

Both V-belt and chain drives wear at an increased rate if allowed to run with insufficient tension. Adjustment of center distance is the best method of maintaining proper tension. In cases of fixed centers, BROWNING® Drive Tighteners and Idlers provide the necessary means of take up. The BROWNING Drive Tighteners also provide a means of obtaining extra belt or chain wrap frequently needed for extremely high ratios, multiple shaft or serpentine drives.

Careful consideration must be given to the following when using idlers:

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 idlers should be used on the slack side of the drive.
4. V-belt drive idlers should be used on the inside of the belt. Allowance should be made for horsepower loss due to the reduced arc of contact.
5. Where necessary to use V-belt drive idlers on the outside of the belt, the reverse bending will reduce belt life.
6. Flat face pulley idlers can be used on either inside or outside of the belt.
7. Sprocket idlers should be used on the outside of chain drives, and with at least three teeth engaged in the chain.
8. Idlers used on the inside of a drive should be located approximately 1/3 of the center distance from the large sheave, pulley or sprocket.
9. 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.