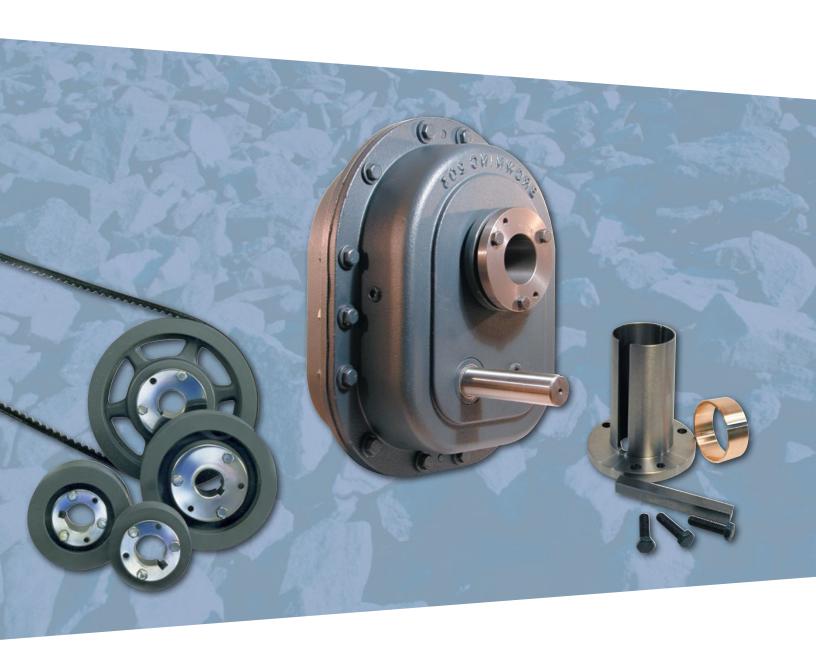
# Browning®

# TorqTaper® Plus Shaft Mounted Reducers



A Regal Brand



Browning® gearboxes are designed with a systematic approach for maximum life in rugged industrial environments.

# **Heavy-Duty Components**

The Browning TorqTaper® Plus speed reducer is built around AGMA class 12 gearing and employs tapered roller bearings on all shafts.

# **Enhanced Sealing System**

Since contaminants are constantly on the attack against oil seals and lubricants, the TorqTaper Plus is protected by a patented triple seal system that extends the life of the bearings and gears.

## **Patented Mounting System**

The TorqTaper Plus mounting system is based on a single tapered bushing for straightforward, errorfree installation and removal. This system requires no special tools and is designed for simplicity in limited work spaces. These design features work in concert to help provide you with maximum uptime and minimal maintenance.

# **Innovative Input Configurations**

TorqTaper Plus shaft mounted speed reducers are also available with c-face and hydraulic input configurations for use in a variety of applications.

# **Easy Reducer Interchange:**

- Determine Competitive Part Number
- Determine Reducer Ratio
- Determine Motor HP
- Select Browning reducer for interchange
- Select Components
- Bushing

- Torque Arm
- High Or Low Motor Base
- Motor Mount
- Belt Guard
- Belt drive may be selected with catalog #9242

# Follow these instructions to select a new Browning Shaft Mount Reducer for your application or interchange with your current reducer

# TO SELECT A REDUCER BY MOTOR HP, SERVICE FACTOR AND OUTPUT SPEED:

Go to the Selection Chart.

# For Class I Service Factor selections:

Select the row with the Motor HP for your application.

Go across the row to the column with the output RPM of your application.

Go to the column header to locate the Reducer Case Size.

#### For Class II Service Factor selections:

Multiply the Motor HP by 1.4 and select the reducer using the Factored Motor HP.

# For Class III Service Factor selections:

Multiply the Motor HP by 2.0 and select the reducer using the Factored Motor HP.

If the Factored Motor HP is between given Motor HP sizes, use the next larger Motor HP to select the reducer.

For example: 3 HP Motor @ Class II Service Factor. 3 x 1.4 = 4.2 Factored Motor HP. Use the 5 HP line to select a reducer.

NOTE: Yellow shaded areas require a Fan Kit. Go to the Part Number Chart to obtain the complete part numbers required.

Select the row with the Reducer Case Size determined from the Selection Chart.

Go across the row to select the required parts for the application.

**REDUCER:** Complete the reducer part number by adding the ratio to the end of the part number.

For an Output RPM between 5 and 50, select a 35:1 ratio.

For an Output RPM between 51 and 80, select a 25:1 ratio.

For an Output RPM between 81 and 130, select a 15:1 ratio.

For an Output RPM between 131 and 200, select a 9:1 ratio.

For an Output RPM between 201 and 400, select a 5:1 ratio.

**BUSHING:** Complete the bushing part number by adding the shaft size to the end of the part number.

Shaft size is designated by 3 digits: First digit is whole number in inches of the shaft diameter.

The second and third digits are the fractional number of the shaft diameter in 16ths of an inch. For example: A 1.4375" (17/16") shaft would be

represented as 107.

**TORQUE ARM:** Required on shaft mount applications to react to the driven torque.

**BACKSTOP:** If required. Refer to any applicable safety rules and regulations.

**MOTOR MOUNT:** Low Base will provide shorter belt drive center distances. High Base will provide longer belt drive center distances.

**BELT GUARD:** If required. Refer to any applicable safety rules and regulations.

**FAN KIT:** If required by Selection Chart.

**INPUT SHAFT DIAMETER FOR DRIVEN BUSHING:** Use to select bushing to mount driven sheave of a belt drive.

# To select a reducer to interchange with your current reducer:

Go to the Part Number Chart.

Select the manufacturer of your current reducer from one of the far right columns.

Go across the row to obtain the complete part numbers to interchange this reducer.

Contact Application Engineering at 800-626-2093 or at www.RegalPTS.com for assistance.

		10	07	11	115				
Motor HP	Motor kW	Min Output RPM	Max Output RPM	Min Output RPM	Max Output RPM				
1/4	0.19	5	400						
1/3	0.25	5	400						
1/2	0.38	5	400						
3/4	0.57	8	400	6	7				
1	0.76	10	400	7	9				
1 1/2	1.14	16	400	11	15				
2	1.51	21	400	15	20				
3	2.27	32	400	23	31				
5	3.79	55	400	39	54				
71/2	5.68	84	400	59	83				
10	7.57	115	400	81	114				
15	11.4			131	400				
20	15.1			245	400				
25	18.9			338	400				
30	22.7								
40	30.3								
50	37.9								
60	45.4								
75	56.8		CO	NTACT AF	PLICATIO				
100	75.7		GE	AR REDU	CER SELEC				
125	94.6								
150	114								
200	151								
250	186								
300	224								
350	261								
400	298								
450	336								
500	373								
600	447								

Part Number Chart											
Reducer Case Size	Reducer Complete part numberby adding ratio (05,09,15,25,35)	Bushing Complete part number by adding shaft size (ex. 107 1 7/16)	Torque Arm	Backstop	Motor Base Height	MotorMount	Fan Kit	Input Shaft Diameter for DriveN Bushing	Replaces Falk* Quadrive* Complete part number by adding ratio (05,09,15,25,35)	Replaces Dodge* 1X1 Complete part number by adding ratio (05,09,15,25,35)	
107	107SMTP	107TBP	107TAP-H	107BSP	High Base LowBase	MMS107H; MMA107-115; MB107-115 MMS107L:MMA107-115:MB107-115		0.750	4107J	TXT1	
115	115SMTP	115TBP	115TAP-H	115-203BSP	High Base Low Base	MMS115H; MMA107-115; MB107-115 MMS115L; MMA107-115; MB107-115		1.125	4115JR	TXT2	
203	203SMTP	203TBP	203TAP-H	115-203BSP	High Base Low Base	MMS203H; MMA203; MB203-207 MMS203L; MMA203; MB203-207		1.250	4203JR	TXT3	
207	207SMTP	207TBP	207TAP-H	207BSP	High Base Low Base	MMS207H; MMA207; MB203-207 MMS207L; MMA207; MB203-207		1.438	4207JR	TXT4	
215	215SMTP	215TBP	215TAP-H	215-307BSP	High Base Low Base	MMS215H; MMA215; MB215-307 MMS215L; MMA215; M B215-307		1.875	4215JR	TXT5	
307	307SMTP	307TBP	307TAP-H	215-307BSP	High Base Low Base	MMS307H; MMA307; MB215-307 MMS307L; MMA307; MB215-307	307FKP	2.000	4307JR	TXT6	
315	315SMTP	315TBP	315TAP-H	315BSP	High Base Low Base	MMS315H; MMA315; MB315 MMS315L; MMA315; MB315	315FKP	2.125	4315JR	TXT7	
407	407SMTPB	407TBPB	407TAP-HB	407BSP	High Base	MMS407H; MMA407-415; MB407-415	407FKPB	2.125	4407JR	TXT8	
415	415SMTPB	415TBPB	415TAP-HB	415BSP	High Base	MMS415H; MMA407-415; MB407-415	415FKPB	2.375	4415JR	TXT9	
507	507SMTPB	507TBPB	507TAP-HB	507BSP	High Base	MMS507H; MMA507-608; MB507-608	507FKPB	2.625	4507JR	TXT10	
608	608SMTPB	608TBPB	608TAP-HB	608BSP	High Base	MMS507H; MMA507-608; MB507-608	608FKPB	2.688	4608JR	TXT12	
800	800SMTP	800TBP	800TAP-H	800BSP	High Base	MMS800H; MMA800; MB800	800FKP	2.938		TXT14	

203		20	)7	215		307		315		407		415		507		608		800	
Min Output RPM	Max Output RPM																		
-																			
5	5																		
5	6		_																
6 9	10 14	5 5	5 8																
13	22	8	12	5	7														
22	38	14	21	8	13	5	7												
34	58	21	33	13	20	7	12	6	6	5	5								
47	80	28	46	17	27	10	16	8	9	5	7	5	5						
81	130	43	80	26	42	15	25	12	14	8	11	5	8						
121	244	61	120	35	61	20	34	15	19	10	14	7	9	5	6				
160	337	81	159	45	80	25	44	19	24	13	18	9	12	6	8	5	5		
215	400	104	215	56	103	31	55	24	30	16	23	11	15	7	10	5	6		
328	400	247	327	90	246	44	89	32	43	21	31	15	20	10	14	6	9		
		341	400	131	340	59	130	40	58	26	39	19	25	12	18	8	11	5	5
				241	400	75	240	49	74	32	48	23	31	15	22	10	14	6	7
N ENGINEERING FOR A		338	400	103	200	62	103	41	61	29	40	19	28	12	18	8	9		
TION IN T	HIS RANC	ĴΕ.				281	400	96	280	55	95	39	54	25	38	16	24	10	12
						395	400	257	394	75	256	52	74	32	51	21	31	13	15
								335	400	191	334	68	190	41	67	25	40	16	20
										318	400	169	317	62	101	36	61	21	26
																		27	32
																		33	38
																		39	44
																		45	50
																		51	56
																		57	68
																		69	80

**Selection Chart** 



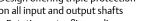
**AGMA Class 12 Gearing** and Tapered Roller Bearings Helical gearing is cut to AGMA Class 12 and keyed to all shafts. All shafts utilize tapered roller bearings.





**Single Bushing System** 

TorqTaper® Plus features a patented, reversible, single bushing system that easily installs from either side of the reducer. The bushing system includes an optional end cap cover and stabilizer ring to reduce shaft mount wobble, prolonging gearbox life.



- Rotating outer flinger slings away contaminants
- V-ring face seal with a grease-filled labyrinth
- Final protective layer spring loaded, doublelipped contact seal



## Additional Features and Benefits:

- C-face and hydraulic TorqTaper Plus reducers eliminate belt quards, belt drives and motor mounts
- Increased horsepower ratings allow downsizing in many applications
- Available in a wide variety of ratios: 5, 9, 15, 25 and 35:1
- Improved backstop design uses an inner race for easy installation and removal
- Increased input shaft diameters; higher overhung load ratings
- All three versions of the standard shaft mount convert to a screw conveyor drive using stock components
- Standard two-year warranty

Browning

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www.regalbeloit.com