

Comparison Chart

CURRENT SENIOR PULLEYS AND OLDER REEVES PULLEYS

HP	rpm	NEMA Frame	Current REEVES Pulley				Old Style 90 Series				Old Style 900 Series				Old Style 20 Series			
			Model	O.D. ²²	Ratio	B.T.W. ²²	Model	O.D. ²²	Ratio	B.T.W. ²²	Model	O.D. ²²	Ratio	B.T.W. ²²	Model	O.D. ²²	Ratio	B.T.W. ²²
1/4	1800	56	5675	5.5	3:1	7/8	95	5-1/2	3:1	7/8	20	6	3:1	1-3/16	20	6	3:1	1-3/16
1/2	1800	56	5675	5.5	3:1	7/8	95	5-1/2	3:1	7/8	20	6	3:1	1-3/16	20	6	3:1	1-3/16
3/4	1800	56	5675	5.5	3:1	7/8	96	6	3:1	1-3/16	906	6	3:1	1-3/16	25	7-1/2	3:1	1-7/16
1	1800	140	7202	7.0	3:1	1-3/16	97	7-1/2	3:1	1-3/16	907-1/2	7-1/2	3:1	1-7/16	28	7-3/4	3:1	1-13/16
1-1/2	1800	140	7202	7.0	3:1	1-3/16	97	7-1/2	3:1	1-3/16	907-1/2	7-1/2	3:1	1-7/16	28	7-3/4	3:1	1-13/16
2	1800	140	7202	7.0	3:1	1-3/16	98	8	3:1	1-7/16	908	8	3:1	1-7/16	28-1/2	10	4:1	1-13/16
							98-1/2	10	4:1	1-13/16					33	11-1/2	3:1	2-3/4
3	1800	180	9205	9.0	3:1	1-13/16	99	9-12	3:1	1-13/16	909-1/2	9-1/2	3:1	2	33	11-1/2	3:1	2-3/4
															55	12-1/2	3:1	2-3/4
5	1800	180	9205	9.0	3:1	1-13/16	910	10	3:1	2	---	---	---	---	55	12-1/2	3:1	2-3/4
															66	13	3:1	2-3/4
7-1/2	1800	210	1110	11	3:1	2-3/4	912	12	3:1	2-3/4	---	---	---	---	66	13	3:1	2-3/4
															77	13	2:1	2-3/4
10	1800	210	1110	11	3:1	2-3/4	912	12	3:1	2-3/4	---	---	---	---	77	13	2:1	2-3/4
15	1800	250	912-15	12	2:1	2-3/4	---	---	---	---	---	---	---	---	---	---	---	---
20	1800	250	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
25	1800	280	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
30	1800	280	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

When applying a new style REEVES VARI-SPEED Motor Pulley (5675, 7202, ...) in a replacement application with an old style REEVES VARI-SPEED Motor Pulley, be sure to take the difference in Pitch Diameters (P.D.) of the two pulleys into consideration. Since the diameters (and P.D.'s) of the two pulleys will be different, the maximum and minimum output speeds will also be different. In addition, the belt width may be different for the same HP on some of the older (900 and 20, 30, 50, 60 70 series) Pulleys.

To determine the correct new style REEVES VARI-SPEED Pulley to replace old style REEVES Pulley:

- Determine the HP, model number, belt top width, thickness and Pitch length, Pitch Diameter of the driven member and type (F.F. pulley on companion sheave), and output speed requirements (A)
- Check the above table for the new style REEVES VARI-SPEED Pulley at the HP required. At the same time, determine if the belt top width is the same for both the new style and old style REEVES VARI-SPEED Pulley. Note if a new belt is required.
- Determine if the new style REEVES VARI-SPEED Pulley will deliver the necessary maximum and minimum speeds for the application when coupled to the existing driven member. (B) (C)
- If the combination of the new style REEVES VARI-SPEED Pulley and the present driven member will deliver the required output speed complete pricing the new style REEVES VARI-SPEED Pulley. If the belt top width dimensions are different, include a new belt.
- If the combination of the new style REEVES VARI-SPEED Pulley and the existing driven member will not deliver the necessary output speeds, select the correct driven member from the Pulley Selection Tables which will note the correct belt pitch length required for the new driven member. Complete pricing of the new style REEVES VARI-SPEED Pulley, driven member and belt (if required). (B)
- Output speeds of the existing equipment can be measured with a tachometer on the output shaft, thru the use of old selection tables (if available) or by calculation.

Formulas to use to calculate maximum and minimum speeds of the existing equipment are:

$$\text{Maximum Output Speed} = \frac{(\text{Motor Speed}) \times (\text{Maximum P.D. of Motor Pulley})}{\text{P.D. of Driven Member}}$$

$$\text{Minimum Output Speed} = \frac{\text{Maximum Output Speed}}{\text{Motor Pulley Ratio}}$$

$$\text{P.D. of Flat Face Pulley} = \text{O.D. of Flat Face Pulley} + (2 \times \text{Belt Thickness} - .250")$$

$$\text{P.D. of Companion Sheave} = \text{O.D. of Companion Sheave} - .250"$$

- B. Output speeds (maximum and minimum) of the driven member, when coupled to a new style REEVES VARI-SPEED Pulley, can be determined from the Pulley Selection Charts. If the P.D. of the driven member is not in the Pulley Selection charts, the maximum and minimum speeds can be calculated using the above formulas. If there are required speeds which cannot be found in the Pulley Selection Charts, the P.D. of the driven member can be calculated as follows.

$$\text{P.D. Required for Maximum Speed} = \frac{(\text{Motor Speed}) \times (\text{Maximum P.D. of Motor Pulley})}{\text{Maximum rpm Required}}$$

Note: If using the above formula, be sure to consider the following:

- The speed range (max. speed + min. speed) is less than an or equal to the ratio of the new style REEVES VARI-SPEED Pulley (3:1)
 - Flat Face Pulleys are generally used for maximum output speed below motor speed and companion sheaves are generally used for maximum output speed above motor speed.
- C. If the existing belt can be used with the new style REEVES VARI-SPEED Motor Pulley, the stops on the motor base may have to be reset to allow the REEVES VARI-SPEED Motor Pulley to be moved approximately 1" to 1-1/2" with respect to the driven member. If allowance for moving the REEVES VARI-SPEED Motor Pulley closer to the driven member is not made, the new drive may not be capable of full speed range.