

How to Determine Keyways and Spiders for Jaw Couplings

SPIDER SELECTION PROCEDURE

1. Select a Service Factor (SF) based upon the load classification.

Uniform = SF of 1.00

Moderate Shock = SF of 1.75

Heavy Shock = SF of 2.50

2. Determine design load.

Design Torque = Application Torque (T) x SF

or Design HP = Application HP x SF

$T = (HP(63025))/RPM$

3. Select coupling size that has a HP rating equal to or greater than the design load.

Bore (In.)	Keyway (In.)	Bore (In.)	Keyway (In.)	Bore (In.)	Keyway (In.)
1/2	1/8 x 1/16	1 1/4	1/4 x 1/8	2 1/8	1/2 x 1/4
5/8	3/16 x 3/32	1 3/8	5/16 x 5/32	2 1/4	1/2 x 1/4
3/4	3/16 x 3/32	1 1/2	3/8 x 3/16	2 3/8	5/8 x 5/16
7/8	3/16 x 3/32	1 5/8	3/8 x 3/16	2 1/2	5/8 x 5/16
1	1/4 x 1/8	1 7/8	1/2 x 1/4	2 3/4	5/8 x 5/16
1 1/8	1/4 x 1/8	2	1/2 x 1/4	2 7/8	3/4 x 3/8
				3 3/8	7/8 x 7/16

KEYWAY CHART

Use the coupling's bore diameter to determine the required keyway.

