

FEATURES

- **High-Quality Spider Design**
- **Handles the Most Demanding Applications**
- **Max Torque of 31,198 in-lb.**
- **Allows for Different Bore Diameters**
- **No Maintenance**
- **Requires Three Individual Part Numbers**
- **Easy Assembly**
- **Wide Variety of Sizes**



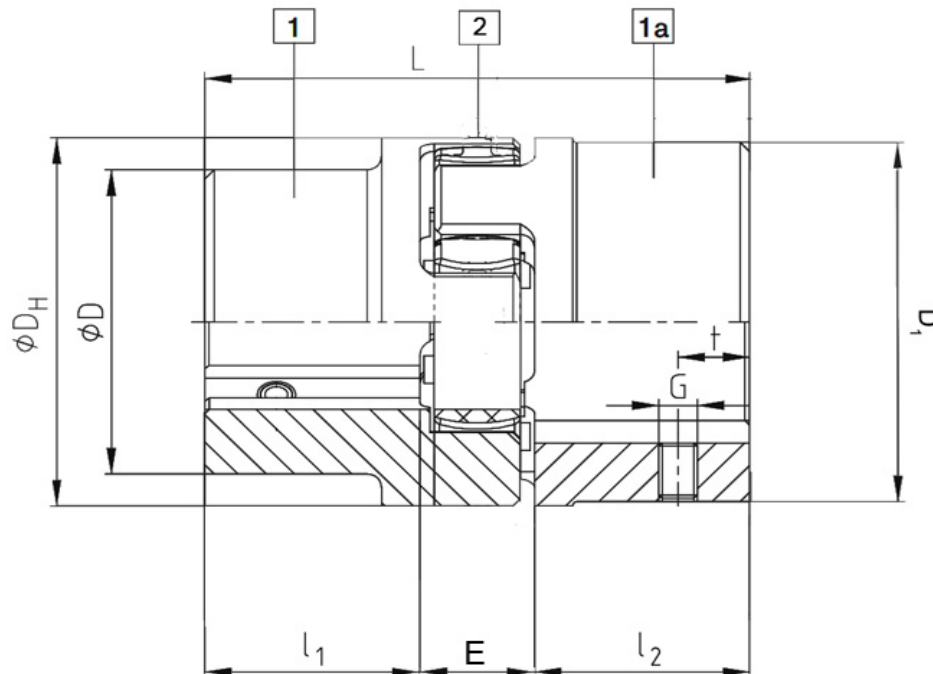
DESCRIPTION

ROTEX® couplings are designed to transmit torque between drive and driven components via curved jaw hubs and elastomeric elements commonly known as spiders. The combination between these components provides dampening and accommodation for misalignments. This product is available in a variety of metals, elastomers and mounting configurations to meet your specific needs.

Ordering Guideline: There are three individual part numbers you will need for a complete coupler (i.e., 2 Hubs and 1 Spider). Please choose the hub sizes that match the criteria for your application. In addition to the hubs, you will need to choose a spider, from the spider section.

Customization options are available; allow Anaheim Automation to specify the coupling designed for your application!

DIMENSIONS



L011398

## Inch Bores

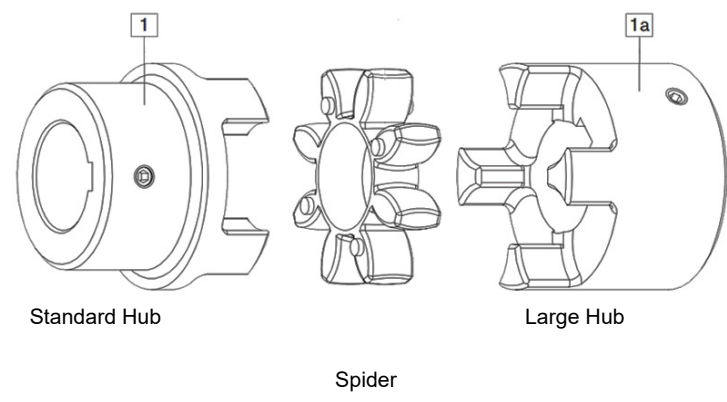
Item	Bore Diameter (in)	Keyway (in)	Hub Design	Outside Diameter D <sub>H</sub> , D <sub>1</sub> , D <sub>2</sub> (in)	Length Thru Bore "L <sub>1</sub>   L <sub>2</sub> " (in)	Coupling Length "L" (in)	Setscrew Torque (in-lb)	t (in)	E (in)	G	Material
KTR-BA020653072200	7/8	3/16	1	5.31, 4.53, -	2.95	7.28	150	0.79	1.37	M10	Cast Iron
KTR-BA020653072202	7/8	1/4	1	5.31, 4.53, -	2.95	7.28	150	0.79	1.37	M10	Cast Iron
KTR-BA020653072211	7/8	No Key	1	5.31, 4.53, -	2.95	7.28	150	0.79	1.37	M10	Cast Iron
KTR-BA020653072300	15/16	1/4	1	5.31, 4.53, -	2.95	7.28	150	0.79	1.37	M10	Cast Iron
KTR-BA020653072500	1	1/4	1	5.31, 4.53, -	2.95	7.28	150	0.79	1.37	M10	Cast Iron
KTR-BA020653072502	1	3/16	1	5.31, 4.53, -	2.95	7.28	150	0.79	1.37	M10	Cast Iron
KTR-BA020653072600	1 1/16	1/4	1	5.31, 4.53, -	2.95	7.28	150	0.79	1.37	M10	Cast Iron
KTR-BA020653072800	1 1/4	1/4	1	5.31, 4.53, -	2.95	7.28	150	0.79	1.37	M10	Cast Iron
KTR-BA020653073000	1 3/16	1/4	1	5.31, 4.53, -	2.95	7.28	150	0.79	1.37	M10	Cast Iron
KTR-BA020653073100	1 1/4	1/4	1	5.31, 4.53, -	2.95	7.28	150	0.79	1.37	M10	Cast Iron
KTR-BA020653073102	1 1/4	5/16	1	5.31, 4.53, -	2.95	7.28	150	0.79	1.37	M10	Cast Iron
KTR-BA020653073300	1 5/16	5/16	1	5.31, 4.53, -	2.95	7.28	150	0.79	1.37	M10	Cast Iron
KTR-BA020653073400	1 3/8	5/16	1	5.31, 4.53, -	2.95	7.28	150	0.79	1.37	M10	Cast Iron
KTR-BA020653073401	1 3/8	3/8	1	5.31, 4.53, -	2.95	7.28	150	0.79	1.37	M10	Cast Iron
KTR-BA02065307360	1 7/16	3/8	1	5.31, 4.53, -	2.95	7.28	150	0.79	1.37	M10	Cast Iron
KTR-BA020653073800	1 1/2	3/8	1	5.31, 4.53, -	2.95	7.28	150	0.79	1.37	M10	Cast Iron
KTR-BA020653073802	1 1/2	5/16	1	5.31, 4.53, -	2.95	7.28	150	0.79	1.37	M10	Cast Iron
KTR-BA020653073900	1 9/16	3/8	1	5.31, 4.53, -	2.95	7.28	150	0.79	1.37	M10	Cast Iron
KTR-BA020653074100	1 5/8	3/8	1	5.31, 4.53, -	2.95	7.28	150	0.79	1.37	M10	Cast Iron
KTR-BA020653074200	1 11/16	3/8	1	5.31, 4.53, -	2.95	7.28	150	0.79	1.37	M10	Cast Iron
KTR-BA020653074400	1 3/4	3/8	1	5.31, 4.53, -	2.95	7.28	150	0.79	1.37	M10	Cast Iron
KTR-BA020653074402	1 3/4	7/16	1	5.31, 4.53, -	2.95	7.28	150	0.79	1.37	M10	Cast Iron
KTR-BA020653074600	1 3/4	1/2	1	5.31, 4.53, -	2.95	7.28	150	0.79	1.37	M10	Cast Iron
KTR-BA020653074700	1 13/16	1/2	1	5.31, 4.53, -	2.95	7.28	150	0.79	1.37	M10	Cast Iron
KTR-BA020653074900	1 7/8	1/2	1	5.31, 4.53, -	2.95	7.28	150	0.79	1.37	M10	Cast Iron
KTR-BA020653075000	1 15/16	1/2	1	5.31, 4.53, -	2.95	7.28	150	0.79	1.37	M10	Cast Iron
KTR-BA020653075200	2	1/2	1	5.31, 4.53, -	2.95	7.28	150	0.79	1.37	M10	Cast Iron
KTR-BA020653075300	2 1/16	1/2	1	5.31, 4.53, -	2.95	7.28	150	0.79	1.37	M10	Cast Iron
KTR-BA020653075500	2 1/8	1/2	1	5.31, 4.53, -	2.95	7.28	150	0.79	1.37	M10	Cast Iron
KTR-BA020653075700	2 3/16	1/2	1	5.31, 4.53, -	2.95	7.28	150	0.79	1.37	M10	Cast Iron
KTR-BA020653076000	2 1/4	5/8	1	5.31, 4.53, -	2.95	7.28	150	0.79	1.37	M10	Cast Iron
KTR-BA020653076600	2 3/8	5/8	1	5.31, 4.53, -	2.95	7.28	150	0.79	1.37	M10	Cast Iron

### Metric Bores

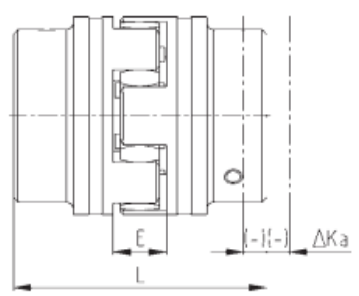
Item	Bore Diameter (mm)	Keyway (mm)	Hub Design	Outside Diameter D <sub>H</sub> , D, D <sub>1</sub> (mm)	Length Thru Bore "L <sub>1</sub> , L <sub>2</sub> " (mm)	Coupling Length "L" (mm)	Setscrew Torque (Nm)	t (mm)	E (mm)	G	Material
KTR-BA020553002200	22	6	1	135, 115, -	75	185	17	20	35	M10	Cast Iron
KTR-BA020553002400	24	8	1	135, 115, -	75	185	17	20	35	M10	Cast Iron
KTR-BA020553002500	25	8	1	135, 115, -	75	185	17	20	35	M10	Cast Iron
KTR-BA020553002800	28	8	1	135, 115, -	75	185	17	20	35	M10	Cast Iron
KTR-BA020553003000	30	8	1	135, 115, -	75	185	17	20	35	M10	Cast Iron
KTR-BA020553003200	32	10	1	135, 115, -	75	185	17	20	35	M10	Cast Iron
KTR-BA020553003500	35	10	1	135, 115, -	75	185	17	20	35	M10	Cast Iron
KTR-BA020553003800	38	10	1	135, 115, -	75	185	17	20	35	M10	Cast Iron
KTR-BA020553004000	40	12	1	135, 115, -	75	185	17	20	35	M10	Cast Iron
KTR-BA020553004200	42	12	1	135, 115, -	75	185	17	20	35	M10	Cast Iron
KTR-BA020553004500	45	14	1	135, 115, -	75	185	17	20	35	M10	Cast Iron
KTR-BA020553004800	48	14	1	135, 115, -	75	185	17	20	35	M10	Cast Iron
KTR-BA020553005000	50	14	1	135, 115, -	75	185	17	20	35	M10	Cast Iron
KTR-BA020553005500	55	16	1	135, 115, -	75	185	17	20	35	M10	Cast Iron
KTR-BA020553006000	60	18	1	135, 115, -	75	185	17	20	35	M10	Cast Iron
KTR-BA020553106500	65	18	1	135, 115, -	75	185	17	20	35	M10	Cast Iron
KTR-BA020553107000	70	20	1	135, 115, -	75	185	17	20	35	M10	Cast Iron

### Spiders

Item	Color	Material	Type/ Hardness	Max Speed (rpm)	Rated Torque (in-lb)	Max Torque (in-lb)	Temperature Rating for Continuous Use
KTR-020651000045	Orange	T-PUR	92 Shore-A,	4950	5531.71	11060	-50°C to +120°C
KTR-020651000042	Purple	T-PUR	95/98 Shore-A	4950	8319.70	16630	-50°C to +120°C
KTR-020651000020	Green	T-PUR	64 Shore-D	4950	10,399.62	20790	-50°C to +120°C
KTR-020651000088	White	Polyamide	-	-	14,559.47	29120	-20°C to +130°C

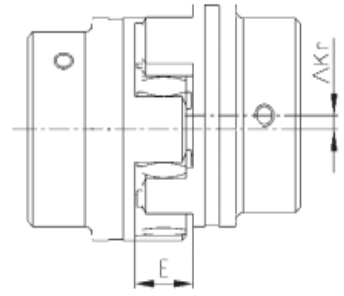


Axial Misalignment  $\Delta Ka$

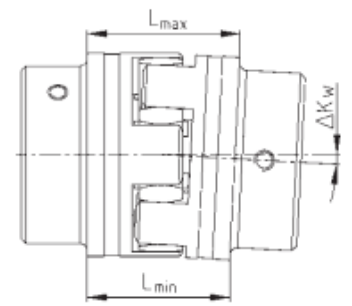


$$L_{max} = L + \Delta Ka$$

Parallel Misalignment  $\Delta Kr$



Angular Misalignment  $\Delta Kw$  [degrees]



$$\Delta Kw [in] = L_{max} - L_{min}$$

ROTEX® Size	14	19	24	28	38	42	48	55	65	75	90
Max. Axial Misalignment $\Delta Ka$ [in]	-0.02 +0.04	-0.02 +0.05	-0.02 +0.06	-0.03 +0.06	-0.03 +0.07	-0.04 +0.08	-0.04 +0.08	-0.04 +0.09	-0.04 +0.10	-0.06 +0.12	-0.06 +0.13
Max. Parallel Misalignment at n=1,800 rpm $\Delta Kr$ [in]	0.006	0.007	0.008	0.009	0.010	0.011	0.013	0.014	0.015	0.017	0.018
Max. Angular Misalignment at n=1,800 rpm $\Delta Kw$ [Degree]	1.1	1.0	0.8	0.9	0.9	1.0	1.1	1.1	1.1	1.1	1.2
$\Delta Kw$ [in]	0.024	0.029	0.031	0.031	0.051	0.067	0.079	0.090	0.102	0.126	0.161

The above misalignment figures for ROTEX® couplings are standard values, taking into account the load of the coupling up to the rated torque  $T_{KN}$  and an operating speed  $n = 1,800$  RPM along with an ambient temperature of  $+180^{\circ}C$ . For other operating parameters, please ask for KTR-Norm 20240 on misalignments for ROTEX®. The maximum angular and parallel misalignments must not be used concurrently. For example; 70% of the maximum parallel value allows 30% of the maximum angular value. Also, care should be taken to accurately maintain the distance dimension "E", allowing for axial clearance of the coupling while in operation. In case of an axial thrust, the dimension "L" must be taken as a minimum dimension in order to keep the spider free from pressure against the face. Detailed installation instructions are available at [www.ktr.com](http://www.ktr.com).