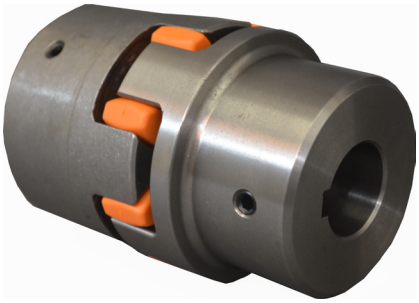
KTR ROTEX® 90 Series

FEATURES

- ***High-Quality Spider Design***
- ***Handles the Most Demanding Applications***
- ***Max Torque of 119,485 in-lb.***
- ***Allows for Different Bore Diameters***
- ***No Maintenance***
- ***Requires Three Individual Part Numbers***
- ***Easy Assembly***
- ***Wide Variety of Sizes***



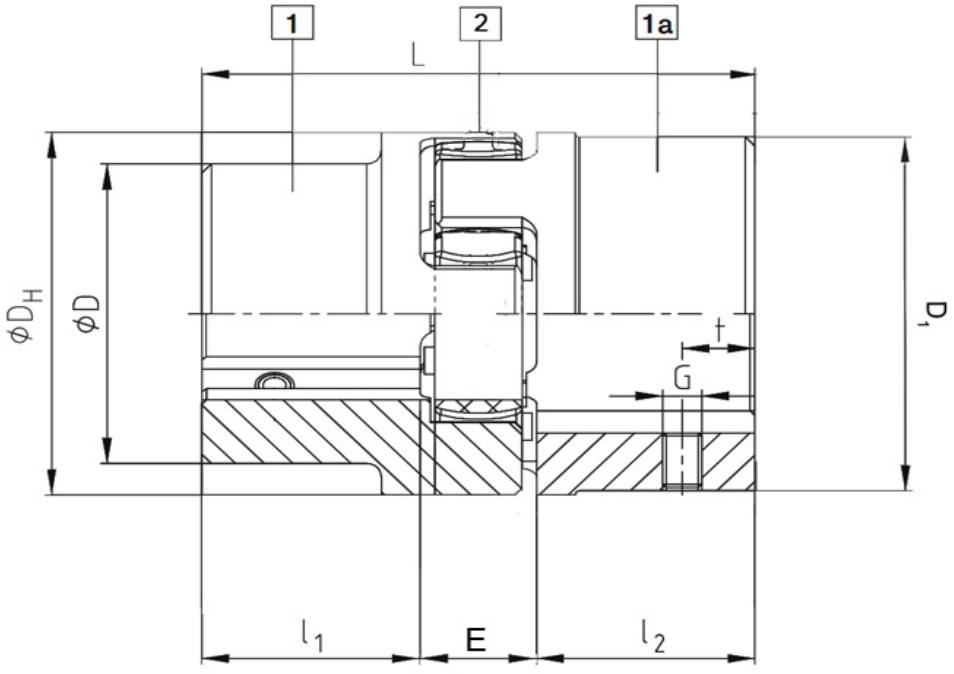
DESCRIPTION

ROTEX® couplings are deigned 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



L011400

Inch Bores

Item	Bore Diameter (in)	Keyway (in)	Hub Design	Outside Diameter D_H, D, D_1 (in)	Length Thru Bore "l_1, l_2" (in)	Coupling Length "L" (in)	Setscrew Torque (in-lb)	t (in)	E (in)	G	Material
KTR-BA020903074100	1 5/8	3/8	1	7.87, 6.30, -	3.94	9.65	354	1.18	1.77	M12	Cast Iron
KTR-BA020903074200	1 11/16	3/8	1	7.87, 6.30, -	3.94	9.65	354	1.18	1.77	M12	Cast Iron
KTR-BA020903074400	1 3/4	3/8	1	7.87, 6.30, -	3.94	9.65	354	1.18	1.77	M12	Cast Iron
KTR-BA020903074402	1 3/4	7/16	1	7.87, 6.30, -	3.94	9.65	354	1.18	1.77	M12	Cast Iron
KTR-BA020903074600	1 13/16	1/2	1	7.87, 6.30, -	3.94	9.65	354	1.18	1.77	M12	Cast Iron
KTR-BA020903074700	1 7/8	1/2	1	7.87, 6.30, -	3.94	9.65	354	1.18	1.77	M12	Cast Iron
KTR-BA020903074900	1 15/16	1/2	1	7.87, 6.30, -	3.94	9.65	354	1.18	1.77	M12	Cast Iron
KTR-BA020903075000	2	1/2	1	7.87, 6.30, -	3.94	9.65	354	1.18	1.77	M12	Cast Iron
KTR-BA020903075200	2 1/16	1/2	1	7.87, 6.30, -	3.94	9.65	354	1.18	1.77	M12	Cast Iron
KTR-BA020903075300	2 1/8	1/2	1	7.87, 6.30, -	3.94	9.65	354	1.18	1.77	M12	Cast Iron
KTR-BA020903075500	2 3/16	1/2	1	7.87, 6.30, -	3.94	9.65	354	1.18	1.77	M12	Cast Iron
KTR-BA020903075700	2 1/4	1/2	1	7.87, 6.30, -	3.94	9.65	354	1.18	1.77	M12	Cast Iron
KTR-BA020903076000	2 3/8	5/8	1	7.87, 6.30, -	3.94	9.65	354	1.18	1.77	M12	Cast Iron
KTR-BA020903076600	2 5/8	5/8	1	7.87, 6.30, -	3.94	9.65	354	1.18	1.77	M12	Cast Iron
KTR-BA020903077300	2 7/8	3/4	1	7.87, 6.30, -	3.94	9.65	354	1.18	1.77	M12	Cast Iron
KTR-BA020903077400	2 15/16	3/4	1	7.87, 6.30, -	3.94	9.65	354	1.18	1.77	M12	Cast Iron
KTR-BA020903077600	3	3/4	1	7.87, 6.30, -	3.94	9.65	354	1.18	1.77	M12	Cast Iron
KTR-BA020903077900	3 1/8	3/4	1	7.87, 6.30, -	3.94	9.65	354	1.18	1.77	M12	Cast Iron
KTR-BA020903078200	3 1/4	3/4	1	7.87, 6.30, -	3.94	9.65	354	1.18	1.77	M12	Cast Iron
KTR-BA020903078500	3 3/8	7/8	1	7.87, 6.30, -	3.94	9.65	354	1.18	1.77	M12	Cast Iron
KTR-BA020903078800	3 1/2	7/8	1	7.87, 6.30, -	3.94	9.65	354	1.18	1.77	M12	Cast Iron
KTR-BA020903079200	3 5/8	7/8	1	7.87, 6.30, -	3.94	9.65	354	1.18	1.77	M12	Cast Iron
KTR-BA020903079500	3 3/4	3/4	1	7.87, 6.30, -	3.94	9.65	354	1.18	1.77	M12	Cast Iron

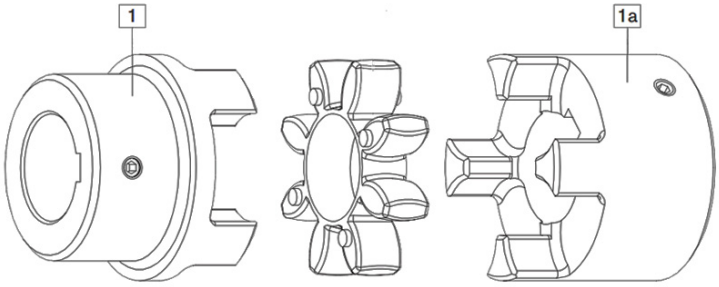
Metric Bores

Item	Bore Diameter (mm)	Keyway (mm)	Hub Design	Outside Diameter D_H, D, D_1 (in)	Length Thru Bore "l_1 l_2" (mm)	Coupling Length "L" (mm)	Setscrew Torque (Nm)	t (mm)	E (mm)	G	Material
KTR-BA020903004000	40	12	1	200, 160, -	100	245	40	30	45	M12	Cast Iron
KTR-BA020903004200	42	12	1	200, 160, -	100	245	40	30	45	M12	Cast Iron
KTR-BA020903004500	45	14	1	200, 160, -	100	245	40	30	45	M12	Cast Iron
KTR-BA020903004800	48	14	1	200, 160, -	100	245	40	30	45	M12	Cast Iron
KTR-BA020903005000	50	14	1	200, 160, -	100	245	40	30	45	M12	Cast Iron
KTR-BA020903005500	55	16	1	200, 160, -	100	245	40	30	45	M12	Cast Iron
KTR-BA020903006000	60	18	1	200, 160, -	100	245	40	30	45	M12	Cast Iron
KTR-BA020903006500	65	18	1	200, 160, -	100	245	40	30	45	M12	Cast Iron
KTR-BA020903007000	70	20	1	200, 160, -	100	245	40	30	45	M12	Cast Iron
KTR-BA020903007500	75	20	1	200, 160, -	100	245	40	30	45	M12	Cast Iron
KTR-BA020903008000	80	22	1	200, 160, -	100	245	40	30	45	M12	Cast Iron
KTR-BA020903008500	85	22	1	200, 160, -	100	245	40	30	45	M12	Cast Iron
KTR-BA020903009000	90	25	1	200, 160, -	100	245	40	30	45	M12	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-020901000045	Orange	T-PUR	92 Shore-A,	3300	21,241.78	42,480	-50ºC to +120ºC
KTR-020901000042	Purple	T-PUR	98 Shore-A	3300	31,862.68	63,720	-50ºC to +120ºC
KTR-020901000020	Green	T-PUR	64 Shore-D	3300	39,828.35	79,650	-50ºC to +120ºC
KTR-020901000088	White	Polyamide	-	-	55,759.69	111,523	-20ºC to +130ºC

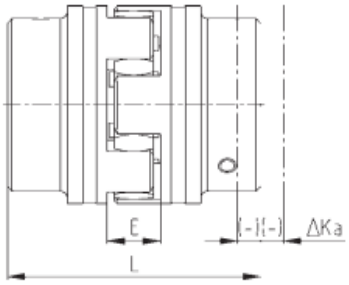
HUB DIAGRAM



Standard Hub | Spider | Large Hub

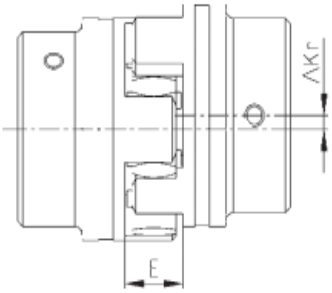
SHAFT MISALIGNMENT

Axial Misalignment ΔKa

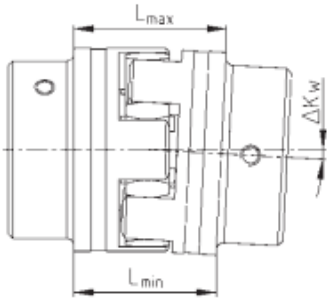


$L_{max.} = L + \Delta Ka$

Parallel Misalignment ΔKr



Angular Misalignment ΔKw [degrees]



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

ROTEX® Size	14	19	24	28	38	42	48	55	65	75	90
Max. Axial Misalignment ΔKa [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 ΔKr [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 ΔKw [Degree]	1.1	1.0	0.8	0.9	0.9	1.0	1.1	1.1	1.1	1.1	1.2
ΔKw [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 +180ºC. For other operating parameters, please ask for KTR-Norm 20,240 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.