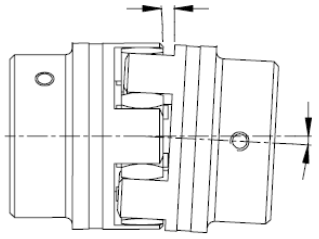
CAUTION!
CHECK YOUR KTR COUPLING ALIGNMENT

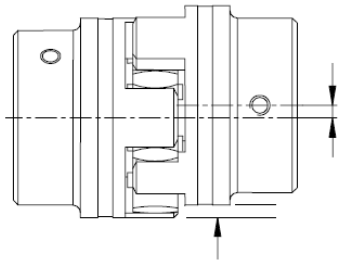
You must check the pump's flexible coupling alignment immediately and then again just before startup. While accurately aligned at the factory, this alignment may shift or twist during shipment. Misalignment will severely shorten the lifespan of your coupling insert. Please check against the maximum displacement figures shown below.

PUMP OPERATING SPEED				1800 RPM		3600 RPM	
KTR COUPLING SIZE	**HUB MAX OUTER DIAMETER**	**SPIDER WIDTH (INSIDE GAP)**	**GAP**	**MAX Parallel**	**MAX Angular**	**MAX Parallel**	**MAX Angular**
24	2.17	0.55	*0.71*	*0.008*	*0.031*	*0.005*	*0.017*
28	2.64	0.59	*0.79*	*0.009*	*0.039*	*0.006*	*0.026*
38	3.15	0.71	*0.94*	*0.010*	*0.051*	*0.007*	*0.035*
42	3.74	0.79	*1.02*	*0.011*	*0.067*	*0.007*	*0.047*
55	4.72	0.87	*1.18*	*0.014*	*0.091*	*0.009*	*0.071*
65	5.31	1.02	*1.38*	*0.015*	*0.102*	*0.010*	*0.087*
75	6.30	1.18	*1.57*	*0.017*	*0.126*	*0.011*	*0.106*
90	7.87	1.34	*1.77*	*0.018*	*0.161*	*0.013*	*0.138*
100	8.86	1.50	*1.97*	*0.019*	*0.181*	**ALL DIMENSIONS IN INCHES**	
110	10.04	1.65	*2.17*	*0.020*	*0.213*		
125	11.42	1.81	*2.36*	*0.021*	*0.248*		

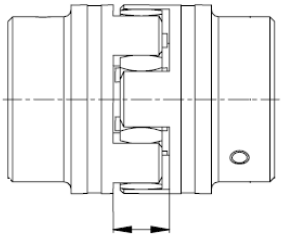
Please remember that these are maximums and must not be reached at the same time. For example, once any percentage of the MAX parallel value is reached, this percentage value must be subtracted from 100% to find out what percentage of the MAX angular value may be used (using 70% of the MAX parallel value allows you 30% of the angular value).



ANGULAR MISALIGNMENT



PARALLEL MISALIGNMENT



GAP

Check your coupling size by measuring the spider width, the maximum hub outer diameter against the values listed, or documentation enclosed with the packing list. Check parallel alignment by placing straightedge across the coupling flanges or using a dial indicator. This should be done at 4 points on the coupling, 90 degrees apart. Check angular misalignment by inserting a feeler gauge or taper gauge at these 4 points or using a dial indicator. Check for coupling GAP minimum while maintaining full engagement of the element. More complete information on proper procedures may be obtained from the factory or by consulting the Hydraulic Institute Standards.

BEFORE STARTING PUMP, MAKE A FINAL CHECK ON THE ALIGNMENT. PROPER ALIGNMENT MEANS ADDED YEARS OF SERVICE.

KTR ROTEX (CURVE JAW TYPE) COUPLING SELECTION TABLE

H.P	OPERATING SPEED								H.P.
	3600	3000	1800	1500	1150	875	700	580	
1/4	ROTEX 24	ROTEX 24	ROTEX 24	ROTEX 24	ROTEX 24	ROTEX 24	ROTEX 24	ROTEX 24	1/4
1/3									1/3
1/2									1/2
3/4									3/4
1									1
1 1/2									1 1/2
2									2
3									3
5							ROTEX 28	ROTEX 28	5
7 1/2						ROTEX 28			7 1/2
10				ROTEX 28	ROTEX 28			ROTEX 38	10
15			ROTEX 28				ROTEX 38		15
20		ROTEX 28				ROTEX 38			20
25	ROTEX 28				ROTEX 38			ROTEX 42	25
30				ROTEX 38			ROTEX 42		30
40			ROTEX 38			ROTEX 42		ROTEX 55	40
50					ROTEX 42		ROTEX 55		50
60		ROTEX 38		ROTEX 42		ROTEX 55		ROTEX 65	60
75	ROTEX 38		ROTEX 42		ROTEX 55		ROTEX 65	ROTEX 75	75
100				ROTEX 55		ROTEX 65	ROTEX 75		100
125		ROTEX 42	ROTEX 55		ROTEX 65	ROTEX 75			125
150	ROTEX 42			ROTEX 65	ROTEX 75				150
200		ROTEX 55	ROTEX 65	ROTEX 75			ROTEX 90	ROTEX 90	200
250	ROTEX 55		ROTEX 75			ROTEX 90			250
300		ROTEX 65			ROTEX 90			ROTEX 100	300
350	ROTEX 65			ROTEX 90			ROTEX 100		350
400		ROTEX 75				ROTEX 100			400
450	ROTEX 75		ROTEX 90		ROTEX 100				450
500								ROTEX 110	500
600							ROTEX 110		600
700				ROTEX 100				ROTEX 125	700
800		ROTEX 90				ROTEX 110			800

SIZE	ROTEX 24	ROTEX 28	ROTEX 38	ROTEX 42	ROTEX 55	ROTEX 65	ROTEX 75	ROTEX 90	ROTEX 100	ROTEX 110	ROTEX 125
MAXIMUM BORE DIAMETER INCHES (mm)	1 1/8 (28)	1 1/2 (38)	1 3/4 (45)	2 1/8 (55)	2 3/4 (70)	2 1/2 (65)	3 3/4 (95)	3 1/2 (90)	4 1/2 (115)	4 7/8 (125)	5 5/8 (145)

NOTES:

1) SHAFT BORE SIZE MAY REQUIRE USING LARGER COUPLING SIZE THAN LISTED. AFTER SELECTING COUPLING, CHECK MAXIMUM BORE DIAMETER REQUIREMENTS FOR PUMP AND DRIVER. REFER TO MOTOR SHAFT DIMENSIONS BY FRAME SIZE IN SECTION 1005 PAGE 354). IF REQUIRED, MOVE TO THE RIGHT UNTIL THE SHAFT SIZES FIT WITHIN THE LIMITS OF THE COUPLING.

2) COUPLING SIZES ROTEX 24 THRU ROTEX 55 ARE SIZED USING INSERT SPIDER DUROMETER OF 98 SHORE A. COUPLING SIZES ROTEX 65 THRU ROTEX 90 ARE SIZED USING INSERT SPIDER DUROMETER OF 95 SHORE A. COUPLING SIZES ROTEX 100 THUR ROTEX 125 ARE SIZED USING INSERT SPIDER DUROMETER OF 64 SHORE D. INSERT SPIDER MATERIAL TO BE URETHANE.

3) ROTEX IS A REGISTERED TRADE MARK OF KTR CORPORATION.

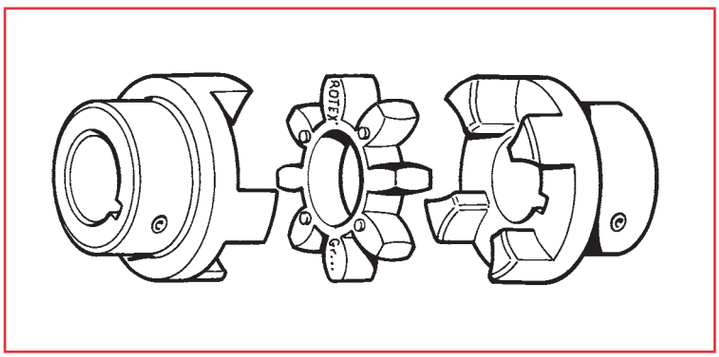
4) OPERATING AND ASSEMBLY INSTRUCTIONS ARE AVAILABLE AT WWW.KTRCORP.COM.

KTR ROTEX (CURVE JAW TYPE) COUPLING ALLIGNMENT DATA

OPERATING SPEED		1500 RPM		1800 RPM		3000 RPM		3600 RPM	
ROTEX SIZE	GAP	MAX Parallel	MAX Angular	MAX Parallel	MAX Angular	MAX Parallel	MAX Angular	MAX Parallel	MAX Angular
24	0.71	0.009	0.033	0.008	0.031	0.006	0.030	0.005	0.017
28	0.79	0.010	0.040	0.009	0.039	0.007	0.033	0.006	0.026
38	0.94	0.011	0.053	0.010	0.051	0.007	0.043	0.007	0.035
42	1.02	0.012	0.070	0.011	0.067	0.008	0.055	0.007	0.047
55	1.18	0.015	0.091	0.014	0.090	0.010	0.079	0.009	0.071
65	1.38	0.016	0.110	0.015	0.102	0.011	0.091	0.010	0.087
75	1.57	0.018	0.130	0.017	0.126	0.013	0.114	0.011	0.106
90	1.77	0.019	0.170	0.018	0.161	0.013	0.150	0.013	0.138
100	1.97	0.020	0.190	0.019	0.181	0.014	0.165	ALL DIMENSIONS IN INCHES	
110	2.17	0.021	0.220	0.020	0.213	0.015	0.197		
125	2.36	0.024	0.250	0.021	0.248				

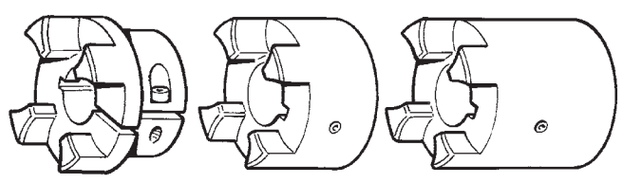
ROTEX® Coupling Features

For over 30 years, the **ROTEX®** curved jaw coupling has provided unmatched reliability and efficiency in the most demanding applications. The vast selection of hub and spider materials, combined with design features such as vibration damping, fail safe and lubrication free, makes the **ROTEX®** coupling an ideal choice for shaft connections.



Hub Materials, Sizes and Styles

- Four standard hub materials to suit every application
  - Cast Aluminum
  - Cast Iron
  - Nodular Iron
  - Steel
- Sixteen coupling sizes
- Bore sizes up to 7.875 inches
- Nominal torque up to 309,750 lb in
- Three hub designs to fit your requirements
  - Regular (low mass)
  - Large (larger bores)
  - Long (extended shaft gaps)



Regular Hub (Cross Clamped) | **Large Hub (Set Screw)** | **Long Hub (Set Screw)**

Lubrication Free

• The non-lubricated design simplifies every application and is ideal for clean environments or difficult access installations.

Fail Safe

• The interlocking jaw design will allow a controlled shutdown should a spider overload failure occur.

Maintenance Free

• The **ROTEX®** coupling does not require any periodic maintenance. Its open design allows a simple visual inspection.

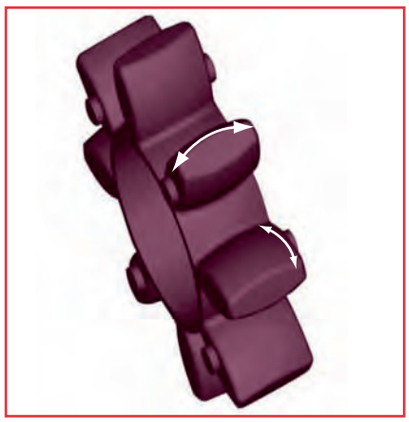
Hub-Shaft Connections

• **ROTEX®** hubs can be ordered in many configurations, such as
  - Straight bore and set screw,
  - Splined bore and cross clamp,
  - Tapered bore and set screw.

ROTEX® Special Spider Materials 1)

Spider Durometer	Spider Color	Spider Material	Admissible Temp. (F)		Material Characteristics
			Continuous	Intermittent	
94 Sh A-T	Blue (2)	Urethane	-60 to +230	-75 to +265	Moisture and hydrolysis resistant, high load damping effect.
64 Sh D-H	Green	Hytrel	-60 to +230	-75 to +265	High temperature resistant, high torsional stiffness.
PA	White	Polyamide	-4 to +230	-22 to +245	High temp. and chemical resistant, high torsional stiffness.

1) Please consult KTR for size availability on special spiders. 2) 94 Sh A-T (Blue) spiders have yellow dots on the end of spider legs.



ROTEX® Spider Design

ROTEX® double crowned spiders are made with high grade urethane or Hytrel® in several hardnesses to suit the vibration or shock absorption needs of your application. The spider materials offer excellent memory to regain shape maintaining the integrity of the coupling.
The double crowned leg design eliminates edge pressure normally caused by angular and parallel misalignments, allowing the spider to outlast the conventional flat design.

Misalignment

• Due to the double crowned spider and concave jaw design, the **ROTEX®** coupling allows angular misalignment without edge pressure.

Excellent Durability

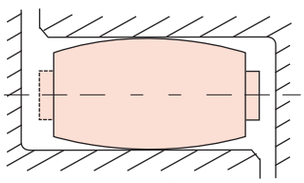
• Urethane and Hytrel® spiders are resistant to most chemicals and higher ambient temperatures for outdoor and industrial environments.

Long Life

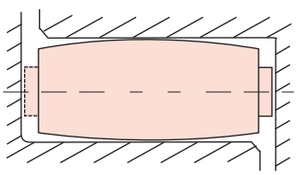
• Spider low mass and special compounding dissipate heat and minimize hysteresis, giving the spider long life and superior performance.

Electrical Isolation

• Urethane spiders prevent electrical surges to be transmitted between driver and driven side.



Unloaded Spider

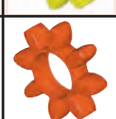


Loaded Spider

Vibration Damping

• A progressive damping effect is accomplished through the **ROTEX®** double crowned design and materials. This design adjusts to the concave hub jaw providing a controlled expansion which absorbs shocks and reduces vibrations. The high grade molded urethane spider offers excellent memory to regain shape after absorbing high shocks.

ROTEX® Standard Spider Materials

Spider Durometer	Image	Spider Color / Material	Admissible Temp. [F] Continuous / Intermittent	Sizes Available
92 Sh A		Yellow / Urethane	-40 to 195 / -55 to 245	19 - 180
98 Sh A 2)		Red / Urethane	-20 to 195 / -40 to 245	19 -180
64 Sh D-F		White 2) / Urethane	-20 to 230 / -20 to 265	24 - 180

1) For sizes 65 and above the durometer is 95 Sh A.
2) White spiders have green dots at the end of spider legs.

• Special Spider materials are available on request.