Power Transmission Components

Actuator Couplings

Duff-Norton provides three coupling types which have been tailored to specific actuator requirements:

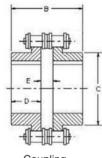


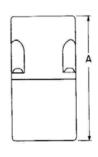
Features

Chain Coupling:

- Integrate well with Duff-Norton mid and larger capacity actuators
- High torque capacities
- Standard ANSI dimensions, straight bore diameters
- Common bore diameters readily available
- Special bore diameters may be custom ordered
- Long service lives
- Easy fit onto the actuator's worm shaft
- Allows for incremental system adjustments







Coupling with cover

Coupling

Cover

Chain Coupling Specifications

		Standard	Maximum	Key Broach						Act. Torque	Coupling	Misalignment (Max)	
Capacity	Part #	Bore***	Bore	Dimensions	A*	В	С	D	E	@ Load**	Torque	Parallel	Angular
2 - 3Ton	CP03-500500	.500"	.875"	.125" x .63"	4.00"	2.53"	1.41"	1.13"	.28"	132	1354	.015	1/2 deg.
3 Ton MS	CP03-625625	.625"	.875"	.125" x .63"	4.00"	2.53"	1.41"	1.13"	.28"	181	1354	.015	1/2 deg.
5 Ton	CP05-750750	.750"	.875"	.1875" x .093"	4.00"	2.53"	1.41"	1.13"	.28"	495	1354	.015	1/2 deg.
10 - 20 Ton	CP20-10001000	1.000"	1.687"	.25" x .125"	5.13"	3.25"	2.50"	1.44"	.38"	2255	4614	.015	1/2 deg.
25 - 35 Ton	CP35-13751375	1.375"	2.000"	.313" x .156"	5.13"	3.75"	2.97"	1.69"	.38"	4400	5969	.015	1/2 deg.
50 Ton	CP50-15001500	1.500"	2.437"	.375" x .1875"	6.38"	4.23"	3.50"	1.88"	.47"	8250	10899	.015	1/2 deg.

^{*}Includes two hubs, four rubber gaskets, chain, and cover

NOTE: Duff-Norton recommends using the cover assembly with the chain coupling

Coupling Selection Guide:

- 1. Flexible couplings are made up of components. Two hubs each with a bore and keyway to match the shafts being coupled and a chain cover (for chain couplings) or a sleeve kit (for gear-type couplings) or a spider (for jaw-type couplings). The bores in the coupling hubs are sized to give an easy fit on actuator worm shafts.
- 2. Determine required coupling torque with this formula: Torque Requirement per Actuator X Number of Actuators to Be Driven by the Coupling
- 3. Verify the required coupling torque. Make sure it's not greater than the maximum rating in the accompanying coupling tables.
- 4. Chain or full-flex gear couplings are recommended for close coupled arrangements.
- 5. Chain or flex-rigid gear couplings are recommended for floating shaft arrangements with the rigid hub (if selected) mounted to the floating shaft.
- 6. For maximum performance, the actuators, shafts, gear boxes and motor should be carefully aligned.

^{**}Based on Anti-backlash actuator torque ratings

^{***}Tolerance for all bores is +.001/-.000

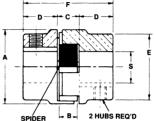
Power Transmission Components

Features

Jaw Coupling:

- Integrate well with Duff-Norton smaller capacity actuators
- Do not require lubrication
- Our Hytrel[®] spiders provide 2 times the torque capability vs. a standard urethane or BUNA[®] spider
- Easy fit onto the actuators worm shaft





Jaw Type Coupling Specifications

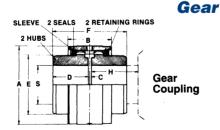
	Part #		Standard	Maximum	Key Broach							Act. Torque	Coupling	Misalignn	nent (Max)
Capacity	Hub#	Spider #	Bore***	Bore	Dimensions	A*	В	С	D	E	F	@ Load **	Torque	Parallel	Angular
1/4 - 1/2 Ton	SK2555H2	SK2555-29S	.375"	.875"	None	1 5/64	7/16	15/32	5/8	1 5/64	1 23/32	23	50	.015	1/2 deg.
1 Ton	SK2402J-H1	SK2402-JS	.375"	.875"	.125" x .63"	1 3/4	15/32	1/2	13/16	1 3/4	2 1/8	60	250	.015	1/2 deg.
2 - 3 Ton	SK2402J-H2	SK2402-JS	.50"	1.687"	.1875" x .0938"	1 3/4	15/32	1/2	13/16	1 3/4	2 1/8	132	250	.015	1/2 deg.

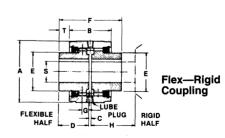
^{*}Includes two hubs, and Hytrel spider

Features

Full-Flex and Flex-Rigid Gear Couplings:

- Give great strength under load due to compact design and construction.
- Allow for incremental system adjustment.





Gear Coupling Performance Specifications

	Part #		Standard	Key Broach								Act. Torque	Coupling	Misalignn	nent (Max)	
Capacity	Sleeve Kit	Flex Hub	Rigid Hub	Bore***	Dimensions	A*	В	С	D	E	F	н	@ Load **	Torque	Parallel	Angular
5 Ton	SK2405S	SK2405H	SK2404H	.0751	.1875" x .0938"	3 5/16	2	1/8	1 1/2	2	3 1/8	2 1/8	495	6300	+	1/2 deg.
10 - 20 Ton	SK2410S	SK2410H	SK2409H	1.001	.25" x .125"	3 5/16	2	1/8	1 1/2	2	3 1/8	2 1/8	2255	6300	+	1/2 deg.
25 - 35 Ton	SK2425S	SK2425H	SK2424H	1.376	.313" x .156"	3 3/4	2 17/32	1/8	1 13/16	2 3/8	3 3/4	2 21/32	4400	18900	+	1/2 deg.
50 Ton	SK2450S	SK2450H	SK2449H	1.501	.375" x .1875"	3 3/4	2 17/32	1/8	1 13/16	2 3/8	3 3/4	2 21/32	8250	18900	+	1/2 deg.
100 Ton	SK2499S	SK2499H	SK2498H	1.751	.50" x .25"	4 3/4	2 9/16	1/8	2 1/16	3 1/4	4 1/4	2 11/16	17600	50000	+	1/2 deg.

^{*}Includes two hubs, gaskets, and sleeve

^{**}Based on Anti-backlash actuator torque ratings

^{***}Tolerance for all bores is +.001/-.000

^{**}Based on Anti-backlash actuator torque ratings

^{***}Tolerance for all bores is +.001/-.000