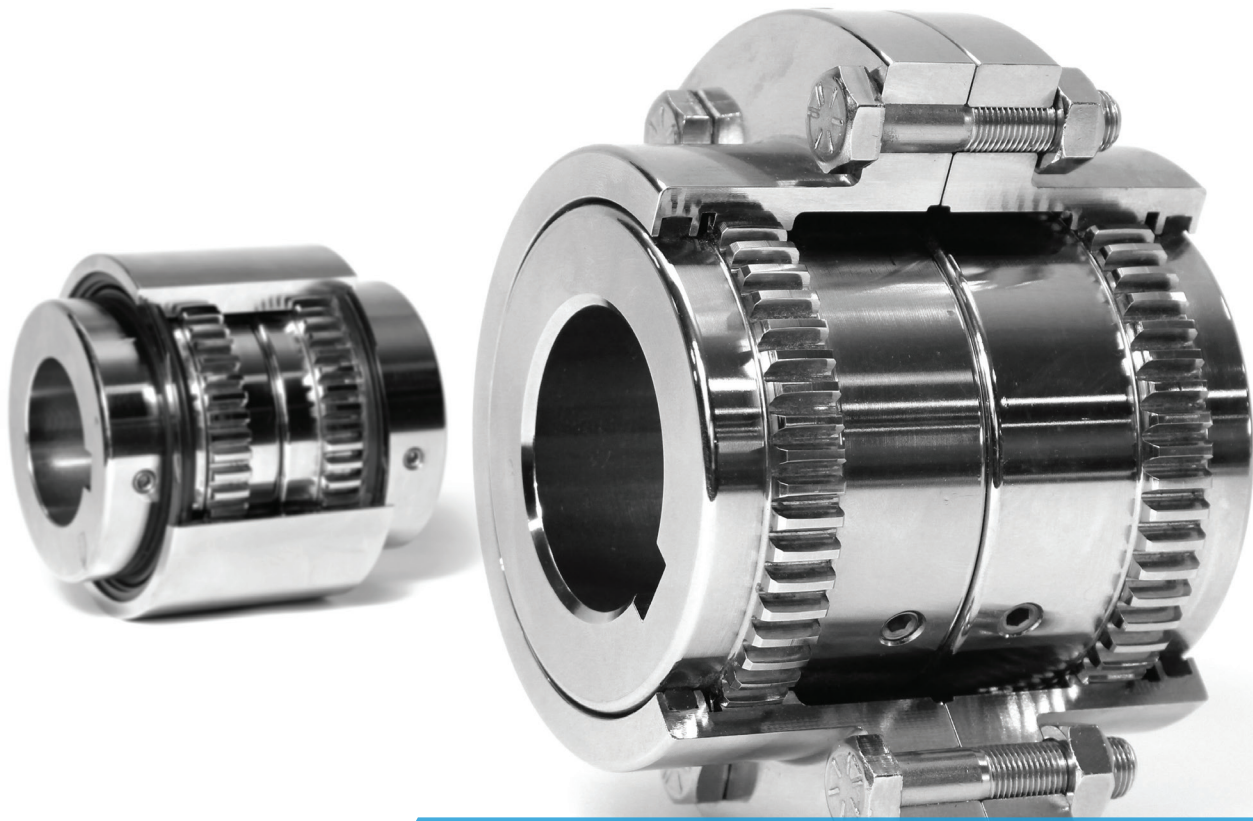


**SYSTEM**  
COMPONENTS, INC.



Powerork<sup>®</sup> GEAR COUPLING

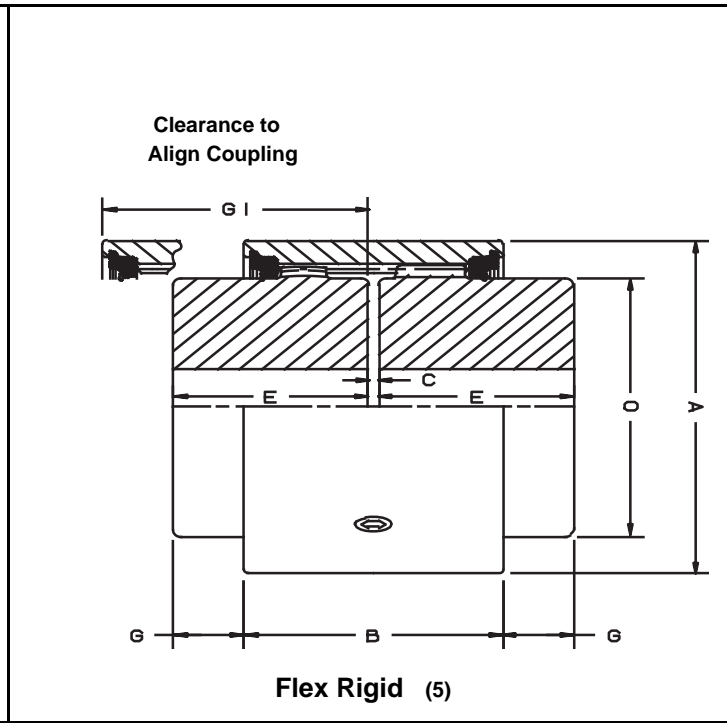
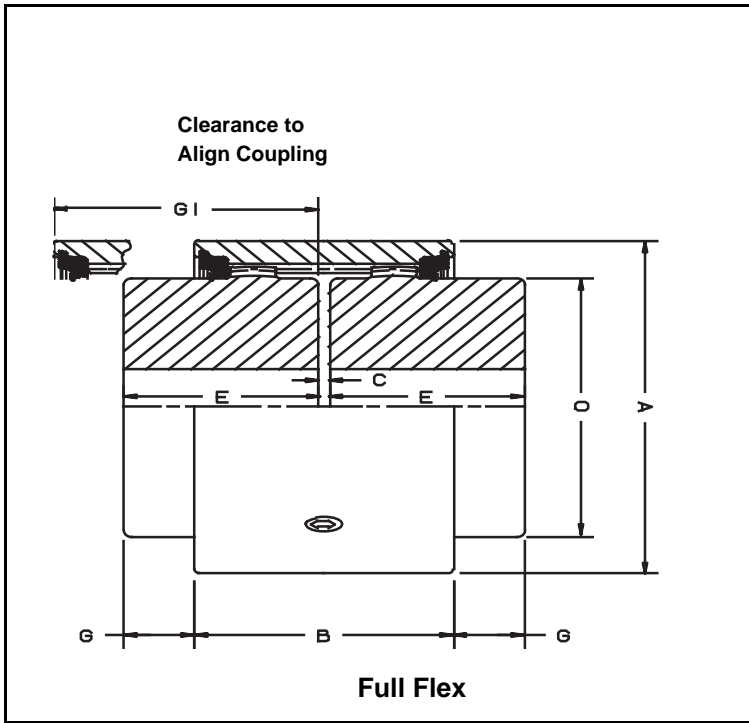
1635 Stieve Drive, South Haven, MI 49090

P: 269-637-2191 F: 269-637-8377

[sci-couplings.com](http://sci-couplings.com)

# POWERTORK®

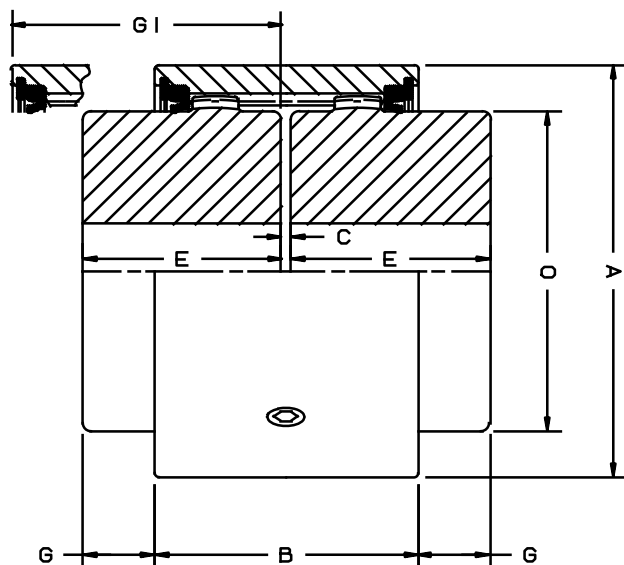
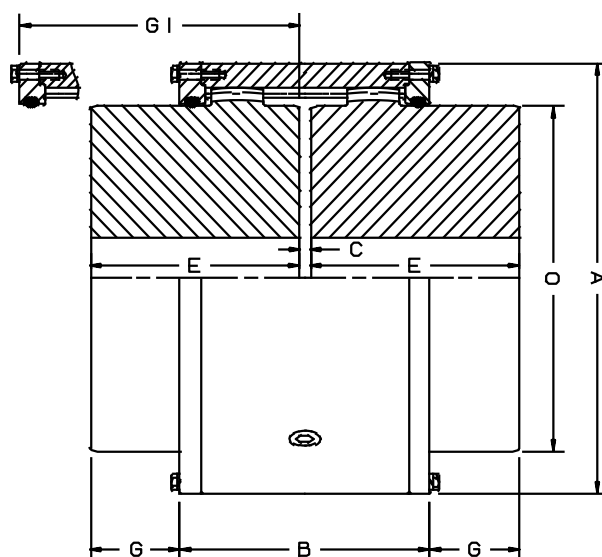
## Series "S" Continuous Sleeve Type Gear Coupling.



Series S	Size	6	8	10	12	15	20	25	30	35	40	45
Rating (HP/100 RPM)	(3)	4.5	7.0	15.5	22	31	51	90	152	240	360	530
Torque Capacity (IN-LBS x 10 <sup>3</sup> )		2.84	4.41	9.77	13.9	19.5	32.1	56.7	96	151	227	334
Maximum Speed (RPM)	(1)	19000	16000	12600	11500	11000	8800	7500	6600	5800	4900	4400
Flex or Rigid Hub	Maximum Bore	1.06	1.31	1.63	1.94	2.13	2.75	3.25	3.75	4.25	5.00	5.50
	Standard Keyway	1/4 x 1/8	5/16 x 5/32	3/8 x 3/16	1/2 x 1/4	1/2 x 1/4	5/8 x 5/16	3/4 x 3/8	7/8 x 7/16	1 x 1/2	1-1/4 x 5/8	1-1/4 x 5/8
Flex or Rigid Hub	Maximum Bore	1.13	1.38	1.75	2.06	2.31	2.88	3.38	3.88	4.50	5.25	5.75
	Reduced Depth Keyway	1/4 x 3/32	5/16 x 1/8	3/8 x 1/8	1/2 x 3/16	5/8 x 3/16	3/4 x 3/16	7/8 x 5/16	1 x 3/8	1 x 3/8	1-1/4 x 7/16	1-1/2 x 1/2
Maximum Metric Bore (mm)		25	33	42	51	57	73	87	100	114	137	150
Parallel Offset Capacity		.009	.009	.015	.015	.039	.045	.057	.065	.078	.082	.094
A		2.38	2.81	3.44	3.94	4.13	5.13	6.03	6.84	7.88	9.13	10.41
B		1.41	1.41	1.84	1.84	2.78	3.23	3.88	4.53	5.41	5.59	6.66
C		.09	.09	.09	.09	.13	.13	.19	.19	.25	.25	.31
E		1.18	1.41	1.57	1.77	1.94	2.44	3.03	3.59	4.19	4.75	5.31
G		.52	.75	.69	.90	.61	.89	1.19	1.42	1.61	2.08	2.14
G1		1.50	1.50	1.88	1.94	2.91	3.31	4.06	4.72	5.66	5.84	6.97
O		1.58	1.97	2.36	2.80	3.05	3.97	4.65	5.20	5.91	7.09	7.87
Rough Stock Bore		-	-	-	-	-	-	-	-	-	2.09	2.25
Weight Solid Hubs (LBS) (2)		2.0	3.3	6.1	8.7	11.5	21.5	38	57	90	137	196
Grease (4)	Weight (LB-OZ.)	0-.09	0-.31	0-.34	0-.38	0-.88	0-1.63	0-2.81	0-4.63	0-6.44	0-9.5	1-3
	Volume (Pints)	.006	.019	.020	.022	.063	.13	.19	.31	.41	.56	1.03

**Notes:**

- (1) Maximum speed without dynamic balancing 60% of values shown.
- (2) Weights are for full flex or flex rigid couplings. Weights are approximate.
- (3) Load ratings / torque capacities are based on full 1° misalignment per gear mesh. Selection service factors are required. See Data Sheet DS110.
- (4) Lubrication values are for full flex or flex rigid couplings. Maximum angular misalignment 1 1/2° per gear mesh. For optimum performance, combined angular and offset misalignment should not exceed 3/4° per gear mesh. Application requirements in excess of 3/4° misalignment per flex half coupling should be referred to SCI.
- (5) Flex rigid configuration should be purchased as an assembly from SCI to ensure proper fit.
- (6) Larger sizes available upon request.

**POWERTORK®****Series "S" Continuous Sleeve Type Gear Coupling.****Standard Seal Type****Bolt on End Ring Type**

Series S	Size	50	55	60	70
Rating (HP/100 RPM)	(3)	710	925	1200	1850
Torque Capacity (IN-LBS x 10 <sup>3</sup> )		447	583	756	1166
Maximum Speed (RPM)	(1)	3950	3700	3250	2680
Flex or Rigid Hub	Maximum Bore	6.88	7.75	8.75	10.38
	Standard Keyway	1-3/4 x 3/4	2 x 3/4	2 x 3/4	2-1/2 x 7/8
Flex or Rigid Hub	Maximum Bore	7.13	8.00	9.00	10.63
	Reduced Depth Keyway	1-3/4 x 5/8	2 x 5/8	2 x 5/8	2-1/2 x 3/4
Maximum Metric Bore (mm)		186	206	230	275
Parallel Offset Capacity		.069	.072	.100	.116
A		11.56	12.59	13.88	16.94
B		7.75	8.13	10.38	11.63
C		.31	.31	.31	.38
E		6.03	6.63	7.41	8.69
G		2.31	2.72	2.38	3.06
G1		8.06	8.44	10.69	12.01
O		9.50	10.50	11.50	13.50
Rough Stock Bore		2.25	2.75	3.00	4.00

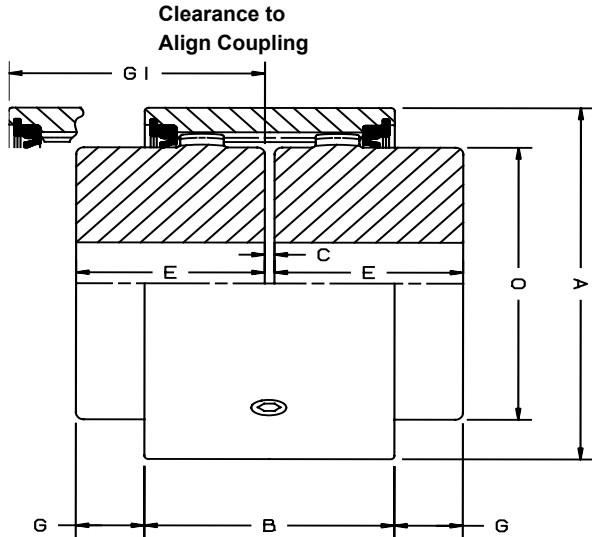
40	45	50	55	60	70
380	500	710	925	1200	1850
240	315	447	583	756	1166
4820	4390	3950	3700	3250	2680
5.50	6.00	6.88	7.75	8.75	10.38
1-1/4 x 5/8	1-1/2 x 3/4	1-3/4 x 3/4	2 x 3/4	2 x 3/4	2-1/2 x 7/8
5.88	6.50	7.13	8.00	9.00	10.63
1-1/2 x 1/2	1-1/2 x 1/2	1-3/4 x 5/8	2 x 5/8	2 x 5/8	2-1/2 x 3/4
137	150	186	206	230	275
.051	.062	.069	.072	.100	.116
9.25	10.56	11.88	12.75	14.00	17.25
5.90	6.57	7.20	7.52	9.25	10.41
.25	.31	.31	.31	.31	.38
4.75	5.31	6.03	6.63	7.41	8.69
1.93	2.18	2.59	3.02	2.94	3.67
6.15	6.88	7.51	7.83	9.56	10.79
7.75	8.50	9.50	10.50	11.63	13.50
2.09	2.25	2.25	2.75	3.00	4.00

**Notes:**

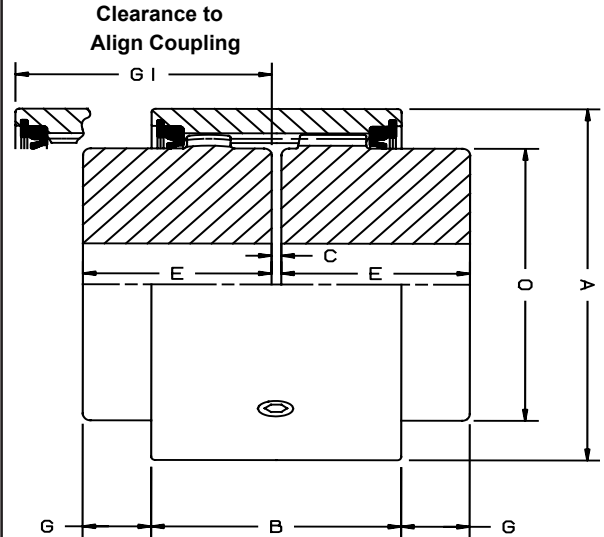
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- (6) Larger sizes available upon request.

# POWERTORK®

## Series "S" Continuous Sleeve Stainless Steel Type Gear Coupling.



**Full Flex**



**Flex Rigid (5)**

Series S		Size	6	8	10
Rating (HP/100 RPM)	(3)		2.9	4.5	9.9
Torque Capacity (IN·LBS x 10 <sup>3</sup> )			1.82	2.82	6.25
Maximum Speed (RPM)	(1)		19000	16000	12600
Flex or Rigid Hub	Maximum Bore		1.06	1.31	1.63
	Standard Keyway		1/4 x 1/8	5/16 x 5/32	3/8 x 3/16
Hub	Maximum Bore		1.13	1.38	1.75
	Reduced Depth Keyway		1/4 x 3/32	5/16 x 1/8	3/8 x 1/8
Parallel Offset Capacity			.009	.009	.015
A			2.38	2.81	3.44
B			1.41	1.41	1.84
C			.09	.09	.09
E			1.19	1.41	1.56
G			.53	.75	.69
G1			1.50	1.50	1.88
O			1.56	1.97	2.38
Rough Stock Bore			-	-	-
Weight Solid Hubs (LBS)	(2)		2.0	3.3	6.1
Grease (4)	Weight (LB-OZ.)		0-.09	0-.31	0-.34
	Volume (Pints)		.006	.019	.020

### Ratings Based on 316 Stainless Steel

*Larger Sizes*

*Available*

*Upon Request.*

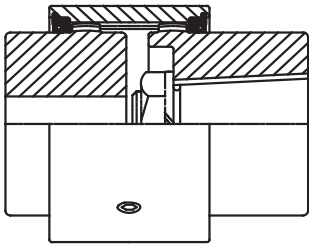
*Contact SCI*

**Notes:**

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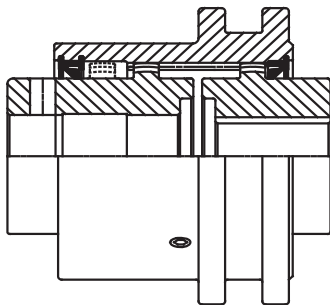
# OTHER COUPLINGS AVAILABLE

## SERIES "S"



### o Mill Motor Couplings

Used frequently in many mill applications, taper bored mill motor hubs allow for rapid mounting and removal without damaging the shaft or bore. Hubs are available to suit standard AISE mill motor frames or can be produced to suit non standard tapers.



### o Cutout Couplings

Pairs of cutout couplings are commonly used on dual drives, having an auxiliary prime mover (usually an engine or turbine) for emergency use. The changeover is performed at standstill by disengaging the coupling on the primary driver and engaging the coupling on the standby drive. With one cutout coupling, a unidirectional drive can be disconnected to permit partial System reversal. The first unit of a tandem drive can be similarly cut out.

### o Floating Shaft Couplings

Floating shaft couplings accommodate applications having an increased distance between shaft ends. The offset misalignment capacity of the coupling increases proportionately with the increased shaft separation. Removal of the shaft is performed by removing the seals and sliding the rigid hub further on the shaft.

