



# CLUTCHES ..... & BRAKES

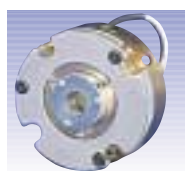


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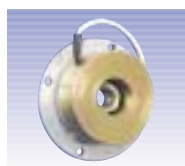
# Contents

Inertia Dynamics Brakes and Clutches from Huco are specifically designed to give exceptionally high torque to size ratio. Requiring little or no maintenance after installation, these units include long-life friction materials and are corrosion protected for greater durability.

Typical applications include: Copiers and printers, packaging and labelling machinery, medical equipment, conveyors, postal sorters / readers, document feeders and textile machinery. In addition to the extensive standard range, custom made solutions can also be produced for specific original equipment applications.



**Flange Mounted Spring Applied Brakes**      **Type FSB**      **3**



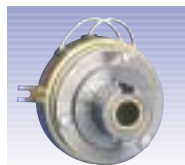
**Flange Mounted Spring Applied Brakes**      **Type FSBR**      **3**



**Power On Brakes**      **Type FB**      **4**



**Flange Mounted Clutches**      **Type FL/FO**      **4**



**Shaft Mounted Clutches**      **Type SL/SO**      **5**

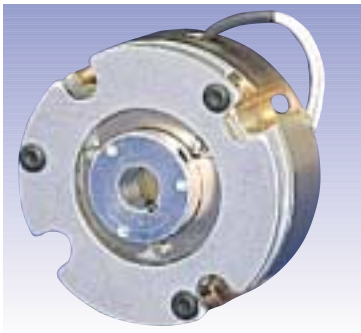


**Wrap Spring Clutches & Brakes**      **Type ISC25/50**      **6**



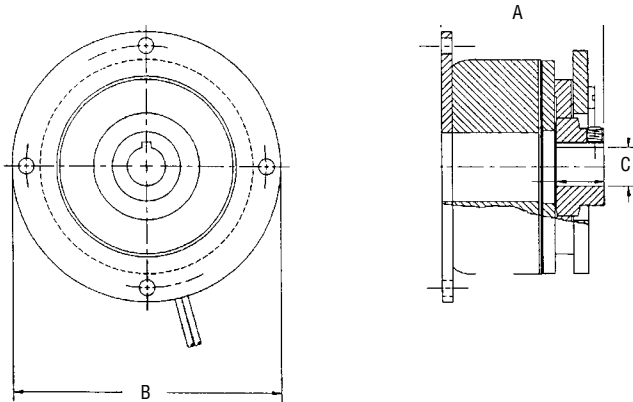
**Wrap Spring Clutches & Brakes**      **Type ICB**      **7**

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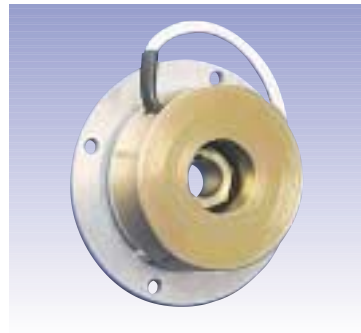
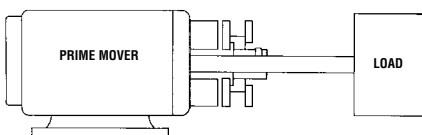
## Type FSB

Flange mounted spring applied brakes are designed to decelerate or hold inertial loads when the voltage is switched off, either intentionally or accidentally, if there is a power failure. The flange mounting is suitable for connection to a motor or fastening to a bulkhead.



Model Number	Static Torque N-m	Hub Style	A Max. (Style 1)	A Max. (Style 2)	B Max	C Bore
FSB001	.113	Square Drive	23	-	35	5H9
FSB003	.339	Square Drive	27	-	45	6H9 8H9
FSB007	.791	Hex Drive Zero Backlash	-	36	62	6H9 8H9
FSB015	1.69	Hex Drive Zero Backlash	-	36	62	6H9 8H9
FSB035	3.95	Hex Drive Zero Backlash	-	54	89	10H9 15H9
FSB050	5.65	Hex Drive Zero Backlash	-	54	89	15H9 17H9
FSB100	11.3	Hex Drive	-	59	134	15H9 17H9

Available as: 90V.D.C. • 24V.D.C. • 12V.D.C. • 120V.A.C.

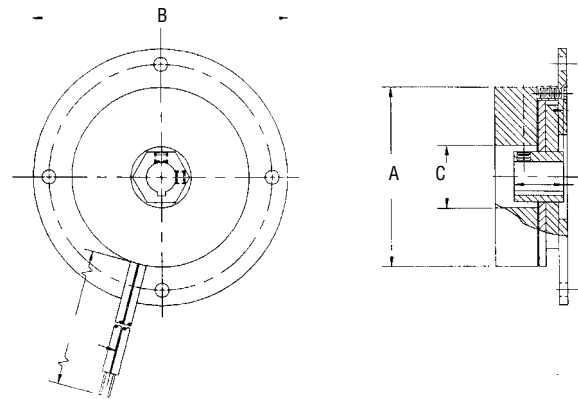


## Type FSBR

Manual release available

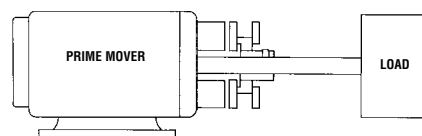


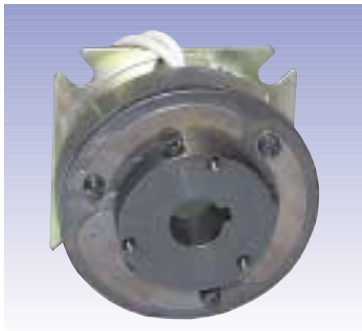
Type FSBR spring applied brakes provide the solution where space is restricted and a shorter axial length is required. When mounted, the armature hub is installed on the shaft first, then the brake is installed over the hub and attached to the motor.



Model Number	Static Torque N-m	Hub Style	A Max	B Max	C Bore
FSBR007	.791	Hex Drive Only	58	83	6H9 8H9
FSBR015	1.69	Hex Drive Only	61	83	8H9 10H9
FSBR035	3.95	Hex Drive Only	72	89	10H9 15H9
FSBR050	5.65	Hex Drive Only	72	89	15H9 17H9
FSBR100	11.3	Hex Drive Only	102	134	15H9 17H9

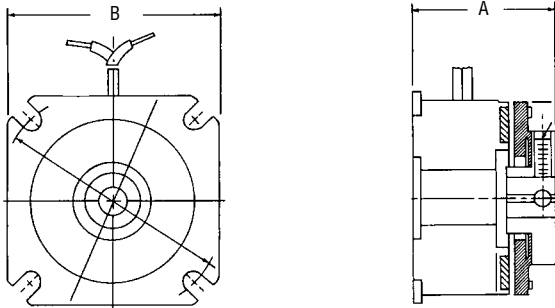
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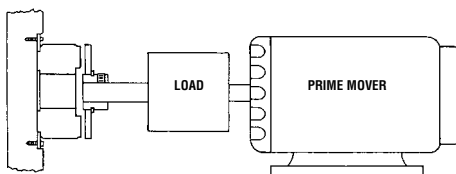
## Type FB

FB series power-on brakes are used to stop or hold a load that is coupled to the armature hub assembly. The armature hub is attached to the load shaft. The field assembly is mounted to a bulkhead that is perpendicular to the shaft.



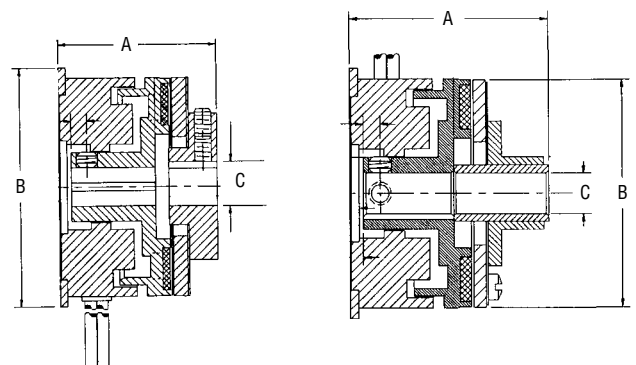
Model Number	Static Torque N-m	A Max	B Max	C Nom
FB08	.28	1	1	5H9
FB11	.68	1	1.3	6H9 8H9
FB15	1.1	1.4	1.6	8H9 10H9
FB17	1.7	1.3	2	8H9 10H9
FB19	2.8	1.4	2	10H9
FB22	5.6	1.8	2.4	10H9
FB26	9	1.9	2.7	10H9 15H9
FB30	14	2	3.3	15H9 17H9
FB42	28	2.3	4.3	17H9 20H9 25H9

Available as: 90V.D.C. • 24V.D.C. • 12V.D.C.



## Type FO/FL

FO series power-on clutches are used to couple two in-line shafts. FL series are used to couple parallel shafts. Both feature a field assembly with a flange suitable for bulkhead mounting perpendicular to the shaft.

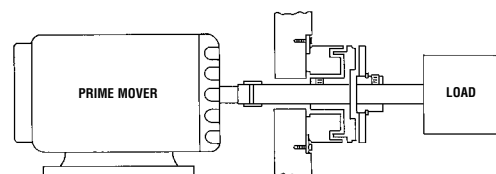


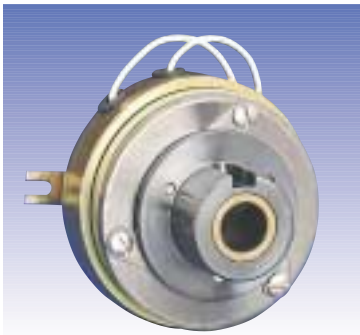
Type FO

Type FL

Model Number	Static Torque N-m	A Max (FO)	A Max (FL)	B Max	C Nom
F008	.28	23	31	23	5H9
F011	.68	26	32	30	6H9 8H9
F015	1.13	34	37	39	8H9 10H9
F017	1.70	35	40	46	8H9 10H9
F019	2.83	34	43	51	10H9
F022	5.65	45	49	58	10H9
F026	9.04	47	56	68	10H9 15H9
F030	14.12	49	66	84	15H9 17H9
F042	28.24	58	90	109	17H9 20H9 25H9

Available as: 90V.D.C. • 24V.D.C. • 12V.D.C.

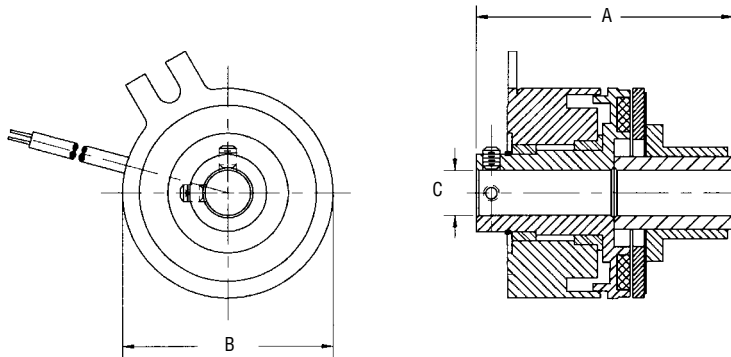




## Type SL

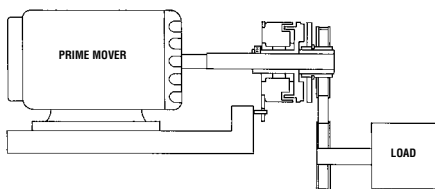
- Also available with ball bearing armature and field assemblies (Type BSL)

SL series power-on clutches are used to couple two parallel shafts. The armature hub assembly is mounted to the same shaft as the rotor assembly. The armature hub accommodates a pulley, gear, sprocket, etc., to transmit torque to the second shaft. The field assembly is mounted on the shaft and retained by a loose fitting pin or bracket through the anti-rotation tab.



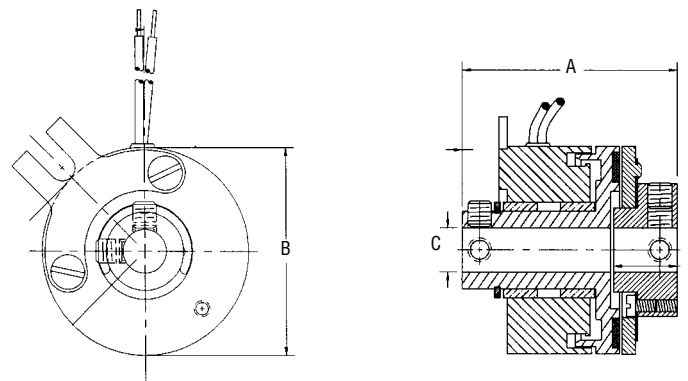
Model Number	Static Torque N-m	A Max	B Max	C Nom
SL08	.28	35	23	5H9
SL11	.68	36	30	6H9 8H9
SL15	1.13	44	39	8H9 10H9
SL17	1.70	47	46	8H9 10H9
SL19	2.83	50	51	10H9
SL22	5.65	55	58	10H9
SL26	9.04	63	68	10H9 15H9
SL30	14.12	72	84	15H9 17H9
SL42	28.24	98	109	17H9 20H9 25H9

Available as: 90V.D.C. • 24V.D.C. • 12V.D.C.



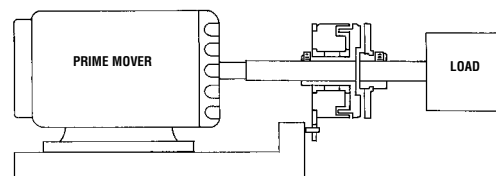
## Type SO

SO series power-on clutch couplings are used to couple two in-line shafts. The armature hub assembly is mounted onto the load shaft and the rotor assembly mounted on the input shaft and retained by a loose fitting pin or bracket through the anti-rotation tab.



Model Number	Static Torque N-m	A Max	B Max	C Nom
S008	0.28	27	22.936	5H9
S011	0.68	30	29.464	6H9 8H9
S015	1.13	41	38.100	8H9 10H9
S017	1.70	41	45.212	8H9 10H9
S019	2.83	41	50.800	10H9
S022	5.65	51	57.404	10H9
S026	9.04	54	67.183	10H9 15H9
S030	14.12	55	83.007	15H9 17H9
S042	28.24	66	108.458	17H9 20H9 25H9

Available as: 90V.D.C. • 24V.D.C. • 12V.D.C.



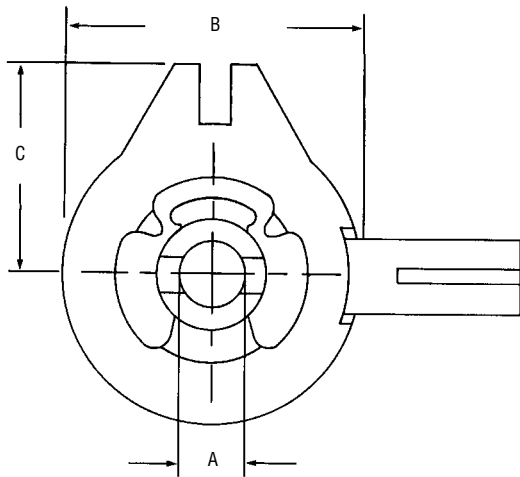


**ISC25**

The ISC25 shaft mounted clutch offers 25 lb.-in. (2.8Nm) of torque. It provides consistency, repeatability, and long life. Engagement and disengagement are virtually instantaneous.

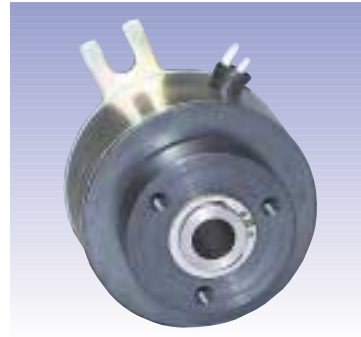
**The ISC25 features:**

- High torque to size ratio
- Generates little contaminants
- Positive engagement
- Integral electrical connector



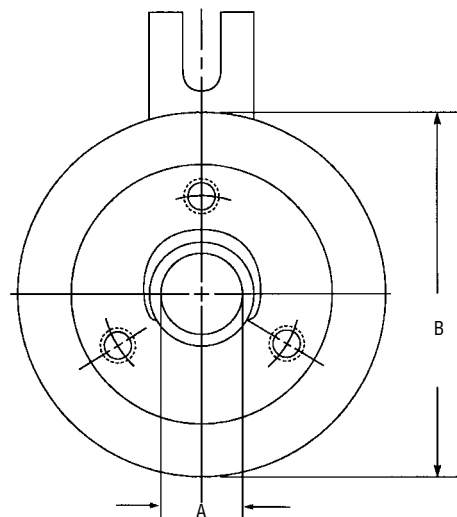
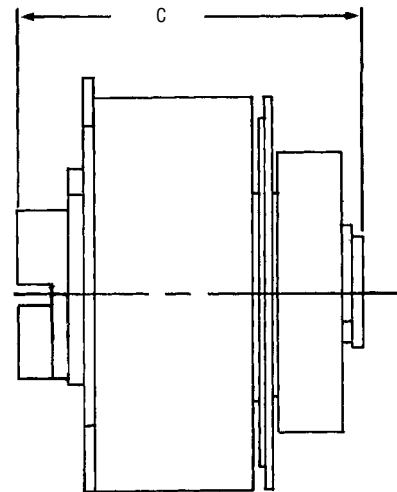
Model Number	Static Torque N-m	A Bore Dia.	B Max	C Max
ISC25	2.8	6mm	29.46	20.83

Available as: 90V.D.C. • 24V.D.C. • 12V.D.C.



**ISC50**

The ISC50 shaft mounted clutch provides 50 lb.-in. (5.6) of torque. It has the same benefits as our ISC25 model clutch and can accommodate shaft diameters up to 10mm.



Model Number	Static Torque N-m	A Bore Dia.	B Max	C
ISC50	5.6	8mm 10mm	45.2	38.7 - 39.2

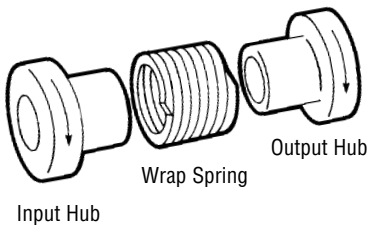
Available as: 90V.D.C. • 24V.D.C. • 12V.D.C.



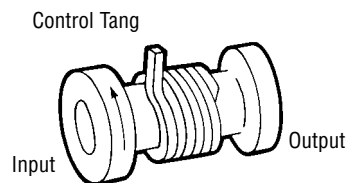
## Model ICB

### Principles of Operation

The three basic parts in the wrap spring clutch are the input hub, output hub, and spring. The inside diameter of the spring is slightly smaller than the outside diameter of the two hubs. Rotation at the input hub in the direction of the arrow engages the spring and positively locks the two hubs together.



Adding a control tang allows the spring to be disengaged, allowing the input hub to overrun.

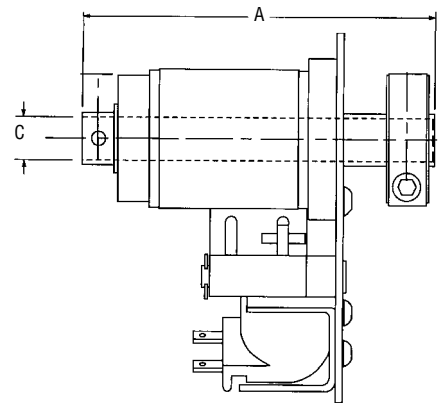
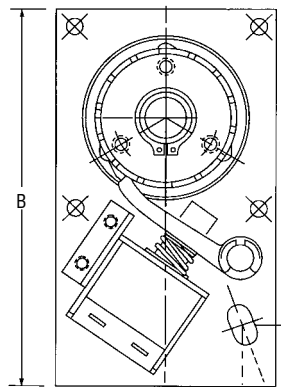


- Easy-mount one piece construction
- Stop - start with smooth, accurate positioning
- Rapid indexing with no cumulative error

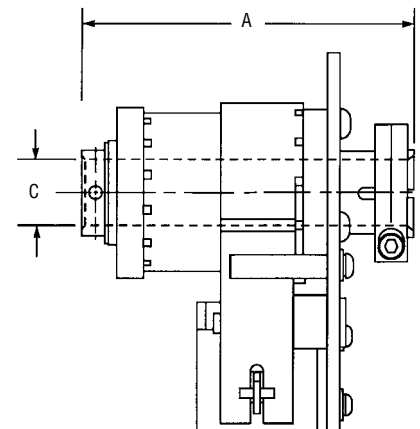
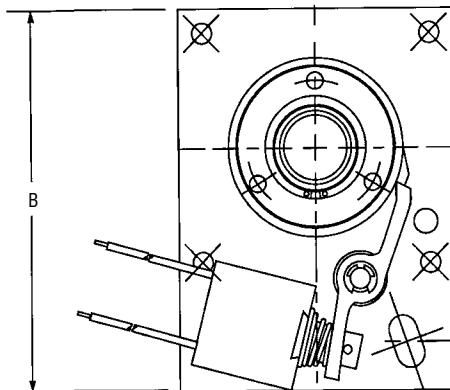
The ICB clutch brake is designed to stop and start a load, stopping in the same position in each cycle without any cumulative error. Collars are available with one, two or four stops - allowing single, half or quarter revolution indexing.

Model Number	Static Torque N-m	A Nom	B Nom	C Bore
ICB - 2	2.8	63	86	6.01 - 6.08
ICB - 4	13.5	86	104	10.01 - 10.08
ICB - 5	28	111	116	12.01 - 12.08
ICB - 6	56	127	146	20.01 - 20.08 25.01 - 25.08
ICB - 8	280	181	178	35.01 - 35.08 40.01 - 40.08

Available as: 90V.D.C. • 24V.D.C. • 12V.D.C. • 120V.A.C. 60 HZ



## Model ICB 2, 4, 5



## Model ICB 6, 8



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