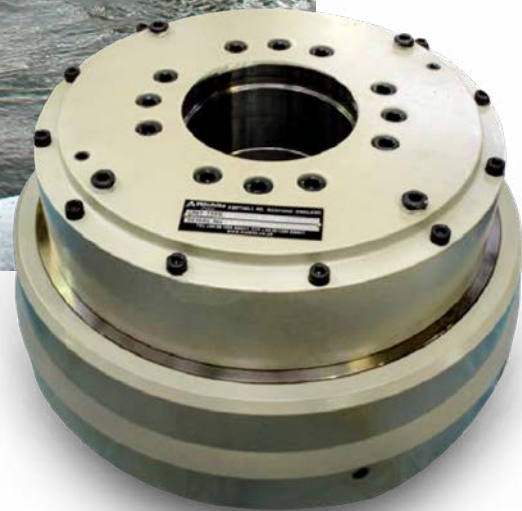




**Model HC (Dry)  
Pneumatically  
or Hydraulically  
Actuated  
Clutches**





## Model HC (Dry)

The Model HC (Dry Lining) clutches are designed to be used in either an end of shaft or through shaft mounting configuration. The use of 24 bar hydraulic actuation and multiple dry organic lined friction plates provides a clutch range with very high torque capability relative to overall diameter. The end result is a clutch that is compact dimensionally, whilst providing high torque solutions in the smallest envelope space.

The Model HC(D) clutches are provided with an internally splined outer drive ring for bolting to the users driving or driven member. The clutch can also be supplied without an external drive ring to allow for customers to incorporate the external drive spline within a component of their own manufacture. This possibility enables designs where minimal axial space is desirable, by allowing the clutch to fit within the customers driving or driven component.

Actuation pressure may come from either a pneumatic or hydraulic source. This pressure may be introduced through an axial hole provided at the shaft centreline, or, in the case of end shaft mounts, it may be introduced through a separate manifold.

All Torque transmitting members are designed to provide for continuous heavy duty industrial service. Hubs and drive rings are fully hardened and manufactured from high quality alloy steel forgings. Disc pack cores are designed using extra-heavy plate thicknesses to maximise torque and heat capacity.

Friction materials designed to provide for high thermal load acceptance and smooth engagement performance.

The clutch range is designed for use in harsh external environments benefitting from a completely enclosed design and incorporating a dust / water ingress seal between the rotating components. This makes it ideal for applications open to the elements. Optional 2 pack epoxy paint finishes provide additional protection and can be specified if required.

Winch connect / disconnect drives, conveyor or mill drives and multi-speed transmissions are but a few of the applications for the model HC/HCD dry lined clutch range.

## Operational Data

Clutch Model	Dynamic <sup>1)</sup> Torque (Nm)	Static <sup>1)</sup> Torque (Nm)	Actuator Volume (cm <sup>3</sup> )	Weight Outer (kg)	Weight Inner (kg)	MR <sup>2</sup> Outer (kgm <sup>2</sup> )	MR <sup>2</sup> Inner (kgm <sup>2</sup> )	Maximum <sup>2)</sup> RPM
HC-8-6	11,540	18,642	72	8	28	0.05	0.05	2600
HC-10-6	15,736	25,421	120	16.5	41.1	0.29	0.35	2200
HC-13-6	58,750	67,788	230	39	100	0.38	1.61	1700
HC-15-6	68,191	110,156	311	148	87	3.20	4	1450
HC-18-6	119,597	193,196	508	120	210	8	5.8	1200
HC-20-6	160,513	259,289	836	195	375	15.50	11.40	1100

1) Torque values specified are based upon an actuation pressure of 24bar hydraulic.

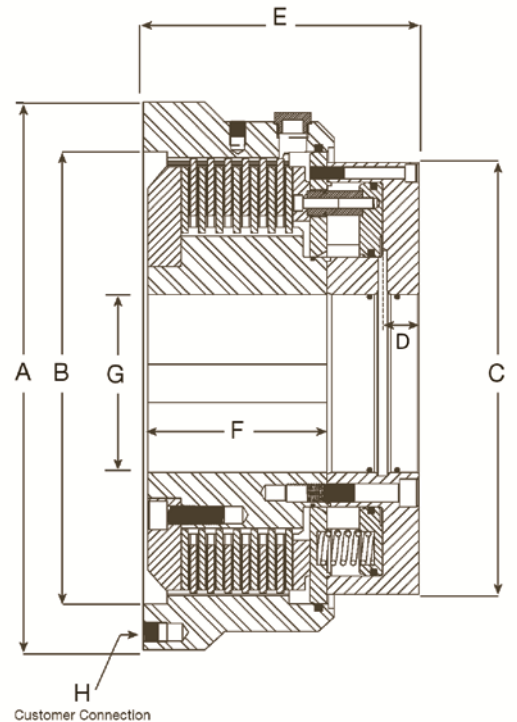
2) For maximum allowable clutch dynamic engaging speed, consult Wichita.



## Dimensional Data

Clutch Model	A	B	C	D	E	F	Max. Bore G	Connection Threads H
HC-8-6	257	222	211	13	150	108	76	12 x M10
HC-10-6	298	264	249	14.2	166	117	100	12 x M10
HC-13-6	430	365	351	18.3	213	129	150	24 x M20
HC-15-6	513	418	400	19.8	240	157	165	24 x M24
HC-18-6	600	495	473	38	290	188	200	36 x M20
HC-20-6	660	546	524	44.4	312	201	230	36 x M24

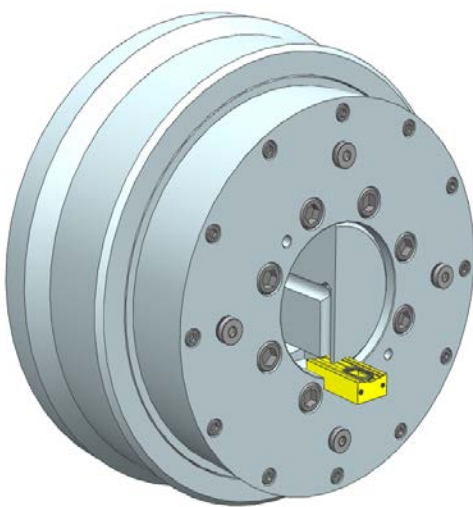
Dimensions subject to change without notice. Use certified drawings only for final layouts.



Customer Connection

Standard 'through shaft' oil feed for actuation. 'O' ring sealing on shaft.

## Actuation Oil Supply Options:



### Patented "Insert Seal Key"

- Can be fitted after the unit is secured on the shaft
- Minimum axial space required



### Direct Cylinder Hose Feed

- Cross drilled shaft and hoses

## Wichita Clutch Facilities

### North America

#### USA

2800 Fisher Road  
Wichita Falls, TX 76302 - USA  
940-723-3400

*Pneumatic Clutches  
and Brakes*

### Europe

#### United Kingdom

Amphill Road  
Bedford MK42 9RD - England  
+44 (0) 1234 350311

*Pneumatic Clutches  
and Brakes*

### Asia Pacific

#### Australia

+61 2 9894 0133

#### China

+86 21 5169-9255

#### Hong Kong

+852 2615 9313

#### Singapore

+65 6487 4464

#### Taiwan

+886 2 2577 8156

#### Thailand

+66 2322 5527

## The Brands of Altra Industrial Motion

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[www.ameridrives.com](http://www.ameridrives.com)

**Bibby Turboflex**  
[www.bibbyturboflex.com](http://www.bibbyturboflex.com)

**Guardian Couplings**  
[www.guardiancouplings.com](http://www.guardiancouplings.com)

**Huco**  
[www.huco.com](http://www.huco.com)

**Lamiflex Couplings**  
[www.lamiflexcouplings.com](http://www.lamiflexcouplings.com)

**Stromag**  
[www.stromag.com](http://www.stromag.com)

**TB Wood's**  
[www.tbwoods.com](http://www.tbwoods.com)

### Geared Cam Limit Switches

**Stromag**  
[www.stromag.com](http://www.stromag.com)

### Electric Clutches & Brakes

**Inertia Dynamics**  
[www.idicb.com](http://www.idicb.com)

**Matrix**  
[www.matrix-international.com](http://www.matrix-international.com)

**Stromag**  
[www.stromag.com](http://www.stromag.com)

**Warner Electric**  
[www.warnerelectric.com](http://www.warnerelectric.com)

### Linear Products

**Warner Linear**  
[www.warnerlinear.com](http://www.warnerlinear.com)

### Engineered Bearing Assemblies

**Kilian**  
[www.kilianbearings.com](http://www.kilianbearings.com)

### Heavy Duty Clutches & Brakes

**Industrial Clutch**  
[www.indclutch.com](http://www.indclutch.com)

**Twiflex**  
[www.twiflex.com](http://www.twiflex.com)

**Stromag**  
[www.stromag.com](http://www.stromag.com)

**Svendborg Brakes**  
[www.svendborg-brakes.com](http://www.svendborg-brakes.com)

**Wichita Clutch**  
[www.wichitacutch.com](http://www.wichitacutch.com)

### Belted Drives

**TB Wood's**  
[www.tbwoods.com](http://www.tbwoods.com)

### Gearing

**Bauer Gear Motor**  
[www.bauergears.com](http://www.bauergears.com)

**Boston Gear**  
[www.bostongear.com](http://www.bostongear.com)

**Delroyd Worm Gear**  
[www.delroyd.com](http://www.delroyd.com)

**Nuttall Gear**  
[www.nuttallgear.com](http://www.nuttallgear.com)

### Overrunning Clutches

**Formsprag Clutch**  
[www.formsprag.com](http://www.formsprag.com)

**Marland Clutch**  
[www.marland.com](http://www.marland.com)

**Stieber**  
[www.stieberclutch.com](http://www.stieberclutch.com)

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