

# H2000 Pneumatic Overload Clutches

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## Section Contents

FEATURES .....	54
OPERATING PRINCIPLES .....	54
SELECTION .....	55
HOW TO ORDER.....	55
RATINGS AND DIMENSIONS .....	56
GENERAL INFORMATION .....	61
TORQUE CURVES .....	62

# H2000 Pneumatic Overload Clutches    POR Series

## Features

- “In-Flight” torque control offers precise pneumatic torque control
- Remotely adjustable for starting and overrunning loads
- Bi-directional operation
- Single position indexing
- Automatic reset
- Through-shaft design
- Limit switch actuating mechanism
- Clamp collar for secure mounting
- Hardened parts for long clutch life
- Internal needle roller thrust bearings
- Lubrication fittings
- Sealed from environmental contamination
- Electroless nickel finish and stainless steel hardware for superior corrosion resistance
- Interchanges HOR Series

## Operating Principles

The POR Series H2000 is a pneumatic, ball detent style overload release clutch. It has been designed to provide accurate and dependable torque disconnect protection for mechanical power transmission equipment. Torque is transmitted through the clutch in one of two paths, (Refer to Figure 1).

Torque transmission between the balls and housing is the key to the disengagement of the clutch. The balls are forced into the pockets of the housing by an axial load generated by an



air cylinder. This axial load determines the torque capacity of the clutch. Increasing or decreasing the air pressure provides a means for remotely controlled precise “in-flight” torque adjustment. When a torque overload condition occurs, the balls roll out of the pockets and free wheel much as a ball thrust bearing. This rolling action increases the efficiency in which the clutch operates and reduces any fluctuation of torque setting due to frictional changes, (Refer to Figure 2).

The clutch has been designed with an internal valving mechanism. During an overload condition, the air is purged instantaneously from the cylinder.

The movement of the air cylinder during disengagement can be used to trip a limit switch and signal a torque overload condition. The drive should be shut down immediately and the source of the overload determined and cleared. The drive can then be restarted.

To engage the clutch, reapply air pressure and jog the drive until the clutch engages. Adjust the release torque by increasing the air pressure supplied to the clutch to reach the desired torque value. The clutch is now ready for normal operation.

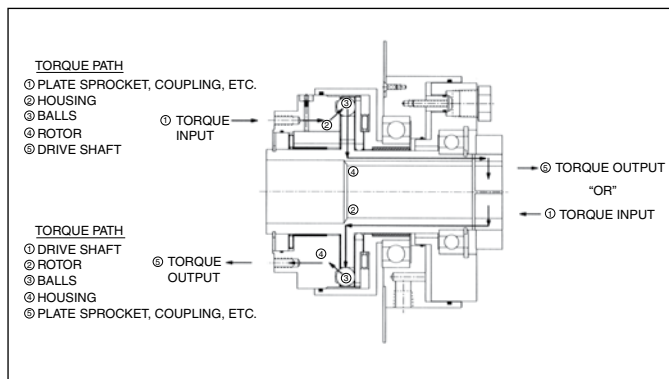


Figure 1

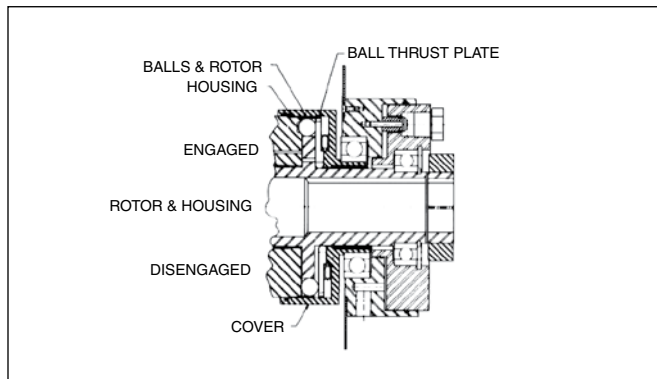


Figure 2

# H2000 Pneumatic Overload Clutches POR Series

## Selection

- Determine the overload release torque by one of these methods:

- Use the torque formula with horsepower and RPM specific to the selected clutch location. A service factor may be required for high inertia starts, reversing or peak load conditions, (refer to Page 98 for service factor information. For average applications, a service factor "SF" of 1.25 is recommended):

$$\text{Torque (Lb. In.)} = \frac{\text{HP} \times 63025}{\text{RPM}} \times \text{SF}$$

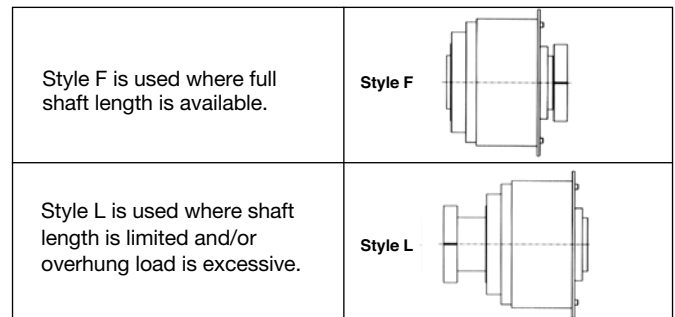
- Determine the "weak link" in the drive train, (i.e., chain, reducer, belt or shaft). Select an overload release torque below the "weak link's" maximum torque rating.
  - Physically measure the drive torque with a torque wrench and size accordingly.
- Determine the bore size(s) and keyway(s):
    - Shaft size at the clutch location determines the clutch bore.
    - Shaft size at the coupling location determines the coupling bore, (if applicable).
  - Choose the appropriate Style (See Figure 3) based upon the drive layout and available space.
  - Refer to the Basic Selection Chart for the appropriate clutch size. Determine the approximate start-up and running air pressures for the application.
  - Refer to Part Numbering System to complete selection.

**Basic Selection Chart**

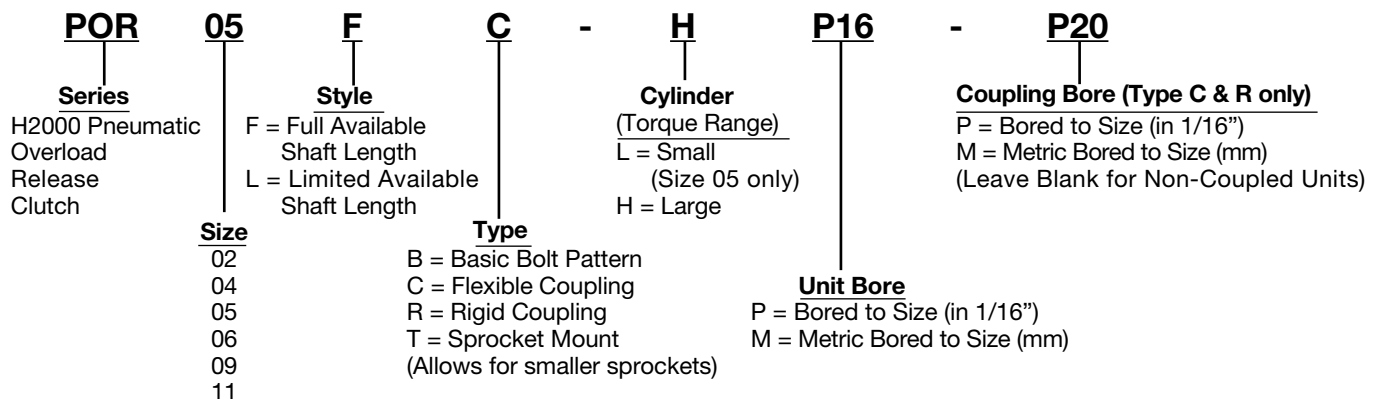
Clutch Size	Max.* Bore (In.)	Torque Code	Torque Range (Lb.-In.)	Max. RPM
02	0.750	H	120-470	3,600
04	1.187	H	400-1,400	1,800
05	1.750	L	850-2900	1,800
		H	1,350-4,700	
06	2.125	L	1,000-4,050	1,200
		H	2,800-7,800	
09	3.125	H	5,800-17,800	1,200
11	3.250	H	8,200-33,000	1,200

\*Larger bores may require flat keys (supplied with unit).

**Figure 3**



## POR Series Part Numbering System



## How to Order

When ordering a POR Series H2000 Overload Clutch, please include code letters for series, size, style, type, torque range, unit bore and coupling bore (if applicable). Not all combinations are possible. Please refer to Pages 54-57 for details.

### Example:

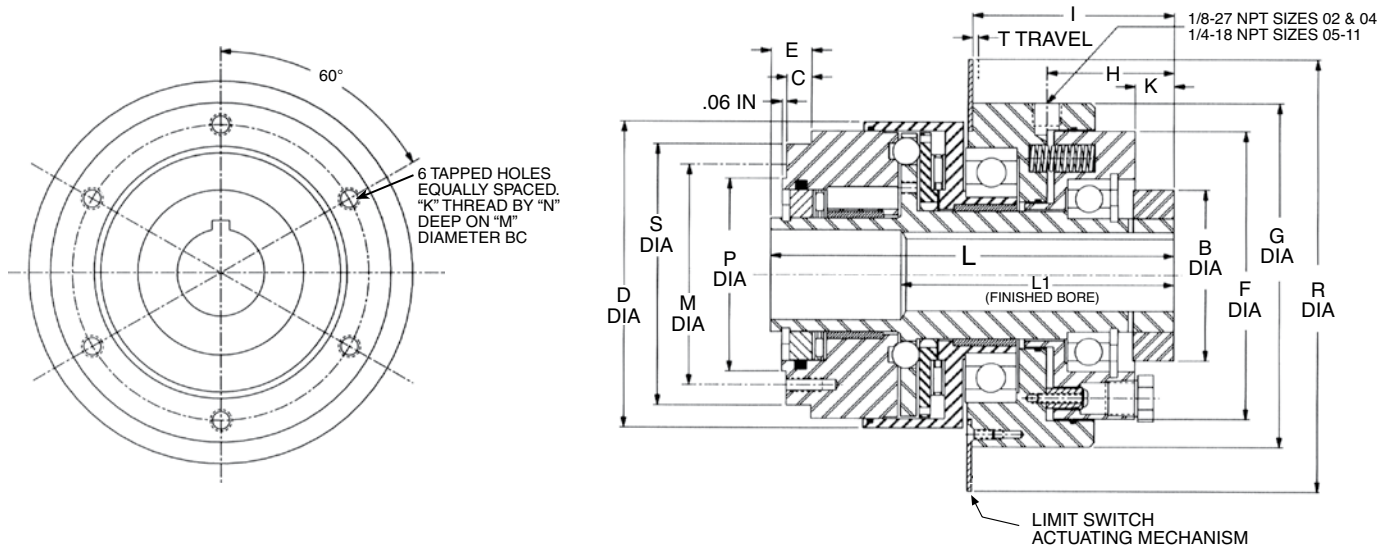
Required size, 05 POR Series H2000 Overload Clutch, full available shaft length, flexible coupling, large torque range, with a one inch unit bore and a one inch coupling bore:

**POR** **05** **F** **C** **-** **H** **P16** **-** **P20** (Only include second bore "P20" if clutch is a coupling style)

# H2000 Pneumatic Overload Clutches POR Series

## Style F

### Type B Basic Sprocket Mounting



All Dimensions in Inches

Clutch Size	B	C	D	E	F	G	H	I	K	L	L1	P +.000/-0.002	R	S	T	Weight (Lbs.)
02	1.75	0.29	2.81	0.45	3.50	3.88	1.84	2.19	0.56	4.47	2.95	1.781	5.81	2.63	.060	5.0
04	2.38	0.35	4.25	0.56	4.00	4.75	1.76	2.79	0.54	5.57	3.77	2.688	7.25	3.63	.078	11.6
05	3.50	0.43	5.87	0.70	6.25	6.63	2.87	3.33	0.77	6.88	4.57	3.625	8.88	5.00	.110	28.3
06	4.25	0.50	7.13	0.80	7.25	7.75	3.00	3.54	0.72	7.42	5.00	4.000	10.12	5.56	.128	41.0
09	5.75	1.03	9.50	1.40	9.25	10.00	3.87	4.63	1.03	9.75	6.30	5.750	12.50	7.56	.165	98.5
11	6.00	1.28	11.62	1.65	11.50	12.25	4.50	5.20	1.25	11.25	7.44	6.500	14.62	9.00	.183	155

#### Mounting Detail

Clutch Size	Thread Depth N	Thread Size K	Bolt Centers M
02	0.38	8-32	2.125
04	0.50	10-24	3.062
05	0.75	5/16-18	4.250
06	0.81	3/8-16	4.750
09	0.88	7/16-14	6.625
11	1.00	5/8-11	7.750

#### Clutch Bores

Clutch Size	Bores (inch)	
	Max. (1)	Max. (2)
02	0.6250	0.7500
04	1.1250	1.1875
05	1.5625	1.6250
06	2.0000	2.1250
09	2.8750	3.1250
11	3.1250	3.2500

Refer to Page 96 for a complete list of bore codes.

(1) Square Key

(2) Flat Key

#### Ratings

Clutch Size	Torque Code	Torque Range (Lb. In.)	Max. RPM	WR2* (Lb-In <sup>2</sup> )
02	H	120 - 470	3,600	3.3
04	H	400-1,400	1,800	18.6
05	L	850-2,900	1,800	80.0
	H	1,350-4,700		
06	L	1,000-4,050	1,200	175
	H	2,800-7,800		
09	H	5,800-17,800	1,200	805
11	H	8,200-33,000	1,200	1,863

\*Estimated with maximum bores.

Clutches are shipped set for the minimum torque value for the selected range.

Refer to Page 55 for ordering information.

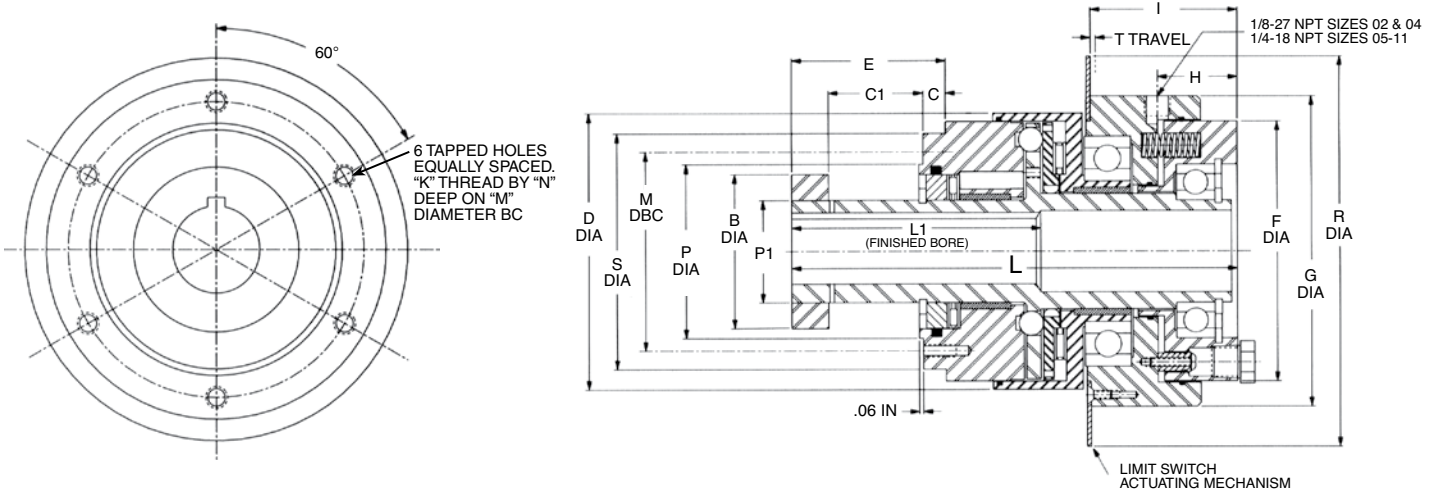
#### Minimum Number of Teeth Adaptable to Type B Clutches

Clutch Size	Type	Standard Chain Size and Pitch						
		#25 1/4 Pitch	#35 3/8 Pitch	#40 1/2 Pitch	#50 5/8 Pitch	#60 3/4 Pitch	#80 1 Pitch	#100 1-1/4 Pitch
02	B	39	27	22	—	—	—	—
04	B	51	35	28	23	—	—	—
05	B	69	47	36	30	26	—	—
06	B	76	52	40	33	28	—	—
09	B	101	68	52	43	36	28	24
11	B	119	80	61	50	43	33	27

# H2000 Overload Clutches POR Series

## Style L

### Type B Basic Sprocket Mounting



All Dimensions in Inches

Clutch Size	B	C	C1	D	E	F	G	H	I	L	L1	P +.000/-0.002	P1		R	S	T	Weight (Lbs.)
													Min.	Max.				
02	1.75	0.29	1.00	2.81	1.79	3.50	3.88	1.28	1.63	5.24	3.00	1.781	0.9843	0.9847	5.81	2.63	.060	5.2
04	2.38	0.35	1.44	4.25	2.35	4.00	4.75	1.22	2.25	6.83	3.81	2.688	1.5728	1.5738	7.25	3.63	.078	11.9
05	3.50	0.43	1.54	5.87	2.72	6.25	6.63	2.10	2.60	8.12	4.66	3.625	2.3623	2.3628	8.88	5.00	.110	28.9
06	4.25	0.50	2.25	7.13	3.50	7.25	7.75	2.28	2.82	9.40	5.46	4.000	2.7560	2.7566	10.12	5.56	.128	42.3
09	5.75	1.03	2.50	9.50	4.53	9.25	10.00	2.84	3.60	11.85	7.22	5.750	3.9350	3.9370	12.50	7.56	.165	103
11	6.50	1.28	2.63	11.62	5.28	11.50	12.25	3.25	3.95	13.63	8.16	6.500	4.7220	4.7240	14.62	9.00	.183	160

Mounting Detail

Clutch Size	Thread Depth N	Thread Size K	Bolt Centers M
02	0.38	8-32	2.125
04	0.50	10-24	3.062
05	0.75	5/16-18	4.250
06	0.81	3/8-16	4.750
09	0.88	7/16-14	6.625
11	1.00	5/8-11	7.750

Clutch Bores

Clutch Size	Bores (inch)	
	Max. (1)	Max. (2)
02	0.6250	0.7500
04	1.1250	1.1875
05	1.7500	—
06	2.0000	2.1250
09	2.8750	3.1250
11	3.1250	3.2500

Refer to Page 96 for a complete list of bore codes.

- (1) Square Key  
(2) Flat Key

Ratings

Clutch Size	Torque Code	Torque Range (Lb. In.)	Max. RPM	WR <sup>2*</sup> (Lb-In <sup>2</sup> )
02	H	120 - 470	3,600	3.4
04	H	400-1,400	1,800	18.9
05	L	850-2,900	1,800	81.7
	H	1,350-4,700		
06	L	1,000-4,050	1,200	178
	H	2,800-7,800		
09	H	5,800-17,800	1,200	820
11	H	8,200-33,000	1,200	1,889

\*Estimated with maximum bores.

Clutches are shipped set for the minimum torque value for the selected range.

Refer to Page 55 for ordering information.

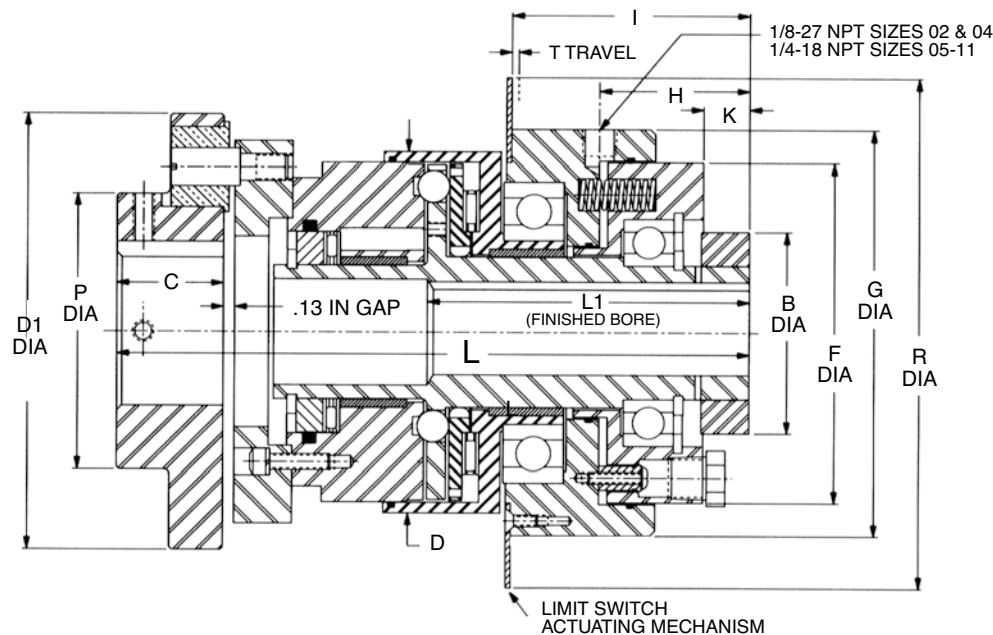
Minimum Number of Teeth Adaptable to Type B Clutches

Clutch Size	Type	Standard Chain Size and Pitch						
		#25 1/4 Pitch	#35 3/8 Pitch	#40 1/2 Pitch	#50 5/8 Pitch	#60 3/4 Pitch	#80 1 Pitch	#100 1-1/4 Pitch
02	B	39	27	22	—	—	—	—
04	B	51	35	28	23	—	—	—
05	B	69	47	36	30	26	—	—
06	B	76	52	40	33	28	—	—
09	B	101	68	52	43	36	28	24
11	B	119	80	61	50	43	33	27

# H2000 Pneumatic Overload Clutches    POR Series

## Style F

### Type C Flexible Coupling



**All Dimensions in Inches**

Clutch Size	B	C	D	D1	F	G	H	I	K	L	L1	P	R	T	Parallel Offset	Angular Misalignment	Weight (Lbs.)
02	1.75	1.25	2.81	3.94	3.50	3.88	1.84	2.19	0.56	6.44	2.95	2.50	5.81	.060	.012	1°	8.6
04	2.38	1.25	4.25	5.13	4.00	4.75	1.76	2.79	0.54	7.42	3.77	3.25	7.25	.078	.016	1°	18.5
05	3.50	2.38	5.87	6.88	6.25	6.63	2.87	3.33	0.77	10.62	4.57	3.88	8.88	.110	.027	1°	47.2
06	4.25	2.88	7.13	8.13	7.25	7.75	3.00	3.54	0.72	11.94	5.00	4.25	10.12	.128	.045	1°	79.7
09	5.75	4.00	9.50	11.13	9.25	10.00	3.87	4.63	1.03	15.25	6.30	6.13	12.50	.165	.045	1°	174
11	6.00	4.50	11.62	14.00	11.50	12.25	4.50	5.20	1.25	17.26	7.44	7.50	14.62	.183	.045	1°	289

Parallel and angular misalignment are proportionally reduced when both are present.

### Torque Range Ratings

Clutch Size	Torque Code	Torque Range (Lb. In.)	Max. RPM	WR <sup>2*</sup> (Lb-In <sup>2</sup> )
02	H	120 - 470	3,600	9.6
04	H	400-1,400	1,800	39.5
05	L	850-2,900	1,800	192
	H	1,350-4,700		
06	L	1,000-4,050	1,200	458
	H	2,800-7,800		
09	H	5,800-17,800	1,200	1,975
11	H	8,200-33,000	1,200	5,083

\*Estimated with maximum bores.

Clutches are shipped set for the minimum torque value for the selected range.

### Clutch and Coupling Bores

Clutch Size	Type	Bores (inch)	
		Max. (1)	Max. (2)
02	Clutch	0.6250	0.7500
	Coupling	1.1875	—
04	Clutch	1.1250	1.1875
	Coupling	1.8750	—
05	Clutch	1.5625	1.6250
	Coupling	2.3125	2.3750
06	Clutch	2.0000	2.1250
	Coupling	2.6250	2.7500
09	Clutch	2.8750	3.1250
	Coupling	4.0000	4.1250
11	Clutch	3.1250	3.2500
	Coupling	4.6250	5.0000

Refer to Page 96 for a complete list of bore codes.

(1) Square Key

(2) Flat Key

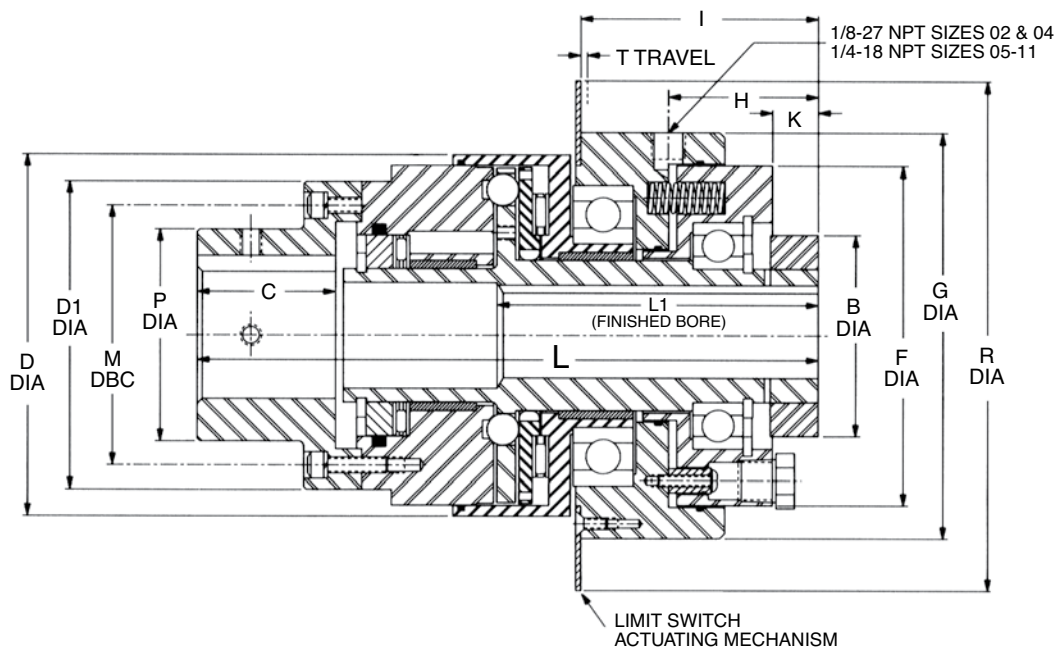
Refer to Page 55 for ordering information.



# H2000 Overload Clutches POR Series

## Style F

### Type R Rigid Coupling



All Dimensions in Inches

Clutch Size	B	C	D	D1	F	G	H	I	K	L	L1	M	P	R	T	Weight (Lbs.)
02	1.75	0.75	2.81	2.63	3.50	3.88	1.84	2.19	0.56	5.31	2.95	2.125	1.38	5.81	.060	5.8
04	2.38	1.62	4.25	3.63	4.00	4.75	1.76	2.79	0.54	7.29	3.77	3.062	2.50	7.25	.078	13.9
05	3.50	2.13	5.87	5.00	6.25	6.63	2.87	3.33	0.77	9.11	4.57	4.250	3.31	8.88	.110	33.6
06	4.25	2.20	7.13	5.56	7.25	7.75	3.00	3.54	0.72	9.71	5.00	4.750	3.50	10.12	.128	48.6
09	5.75	3.34	9.50	7.56	9.25	10.00	3.87	4.63	1.03	13.18	6.30	6.625	5.25	12.50	.165	118
11	6.00	3.96	11.62	9.00	11.50	12.25	4.50	5.20	1.25	15.30	7.44	7.750	7.50	14.62	.183	184

### Ratings

Clutch Size	Torque Code	Torque Range (Lb. In.)	Max. RPM	WR <sup>2*</sup> (Lb-In <sup>2</sup> )
02	H	120 - 470	3,600	4.0
04	H	400-1,400	1,800	22.6
05	L	850-2,900	1,800	97.0
	H	1,350-4,700		
06	L	1,000-4,050	1,200	205
	H	2,800-7,800		
09	H	5,800-17,800	1,200	945
11	H	8,200-33,000	1,200	2,158

\*Estimated with maximum bores.

Clutches are shipped set for the minimum torque value for the selected range.

### Clutch and Coupling Bores

Clutch Size	Type	Bores	
		Max. (1)	Max. (2)
02	Clutch	0.6250	0.7500
	Coupling	0.7500	—
04	Clutch	1.1250	1.1875
	Coupling	1.6250	1.6875
05	Clutch	1.5625	1.6250
	Coupling	2.1250	2.2500
06	Clutch	2.0000	2.1250
	Coupling	2.2500	2.3125
09	Clutch	2.8750	3.1250
	Coupling	3.3750	3.5000
11	Clutch	3.1250	3.2500
	Coupling	4.0000	4.1250

Refer to Page 96 for a complete list of bore codes.

(1) Square Key

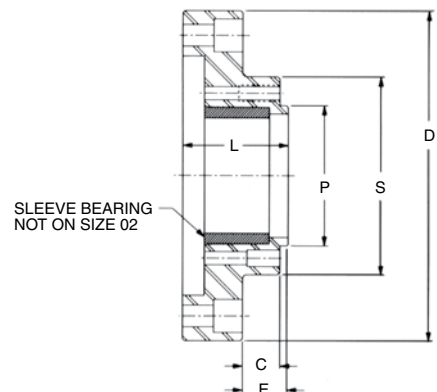
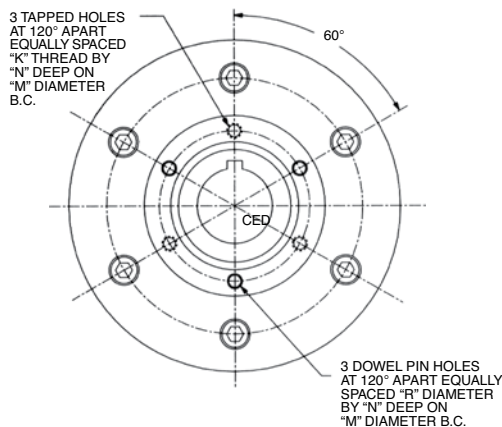
(2) Flat Key

Refer to Page 55 for ordering information.

# H2000 Pneumatic Overload Clutches    POR Series

## Style T Adapter Mounts to Existing Housing Bolt Pattern

Type T Sprocket, Pulley, Sheave, or Gear Mount



All Dimensions in Inches

Clutch Size	C	D	E	K	L	M	N	P +.000/-0.002	R	S	WR <sup>2</sup> (Lb.-In. <sup>2</sup> )	Weight (Lbs.)
02	0.28	2.63	0.40	#8-32	0.71	1.422	.38	1.094	—	1.75	0.5	0.5
04	0.34	3.63	0.63	#8-32	1.02	2.250	.38	1.922	3/16	2.58	2.0	1.0
05	0.47	5.00	0.59	1/4-20	1.26	3.219	.50	2.750	1/4	3.66	12	3.0
06	0.69	5.56	0.81	1/4-20	1.55	3.406	.50	2.938	1/4	3.90	25	5.4
09	0.88	7.56	1.00	3/8-16	2.00	5.094	.75	4.344	3/8	5.84	93	11
11	1.02	9.00	1.14	3/8-16	2.32	5.938	.75	5.188	1/2	6.69	241	19

Mounting bolts must be minimum 160,000 PSI tensile, Rc 36-43.  
Dowel pins must be minimum 150,000 PSI shear, Rc 50-58 core hardness.

### Minimum Number of Teeth Adaptable to Type T Clutches Type T Clutches Allow for the Use of Smaller Sprockets

Clutch Size	Type	Standard Chain Size and Pitch						
		#25 1/4 Pitch	#35 3/8 Pitch	#40 1/2 Pitch	#50 5/8 Pitch	#60 3/4 Pitch	#80 1 Pitch	#100 1-1/4 Pitch
02	T	27	19	15	—	—	—	—
04	T	37	26	20	17	—	—	—
05	T	50	35	27	23	19	—	—
06	T	54	37	29	24	20	16	14
09	T	79	54	41	34	29	23	19
11	T	90	61	47	38	32	25	21

The Type T adapter may be ordered separately or factory mounted to the POR Series Clutches shown on Pages 56 and 57, by specifying Type T.



### Limit Switches

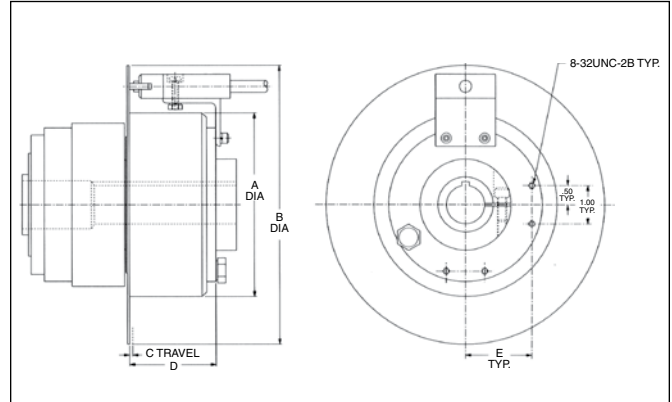
The POR Series H2000 clutch is an automatic reset device. It is important that the drive be shut down immediately upon a torque overload condition. The switch should be able to operate within the disengagement travel of the clutch. Upon an overload, the cylinder of the clutch will move to actuate the limit switch and shut down the drive. An oversized metallic plate provides a means for sensing movement from both ends and for utilizing a precision proximity switch.

As an option, Boston Gear offers a limit switch kit which mounts directly to the clutch. There are two sets of tapped holes on the face of the piston for mounting two limit switches. One switch may be used for your pneumatic control unit and the other switch may be used for the motor control. The motor control switch is used to open the circuit to the motor during a torque overload condition. The switch should be wired in its normally closed condition and in parallel with the JOG button of the motor control. This will permit the drive to be started in the event the clutch has stopped with the limit switch circuit in an open state.

The kit comes complete with a mechanical limit switch, mounting bracket and mounting hardware. Figure 4 shows the limit switch kits available for the POR Series H2000. Before using this switch in your circuit, verify that the electrical ratings meet your requirements.

**Figure 4**  
**Limit Switch Kit**

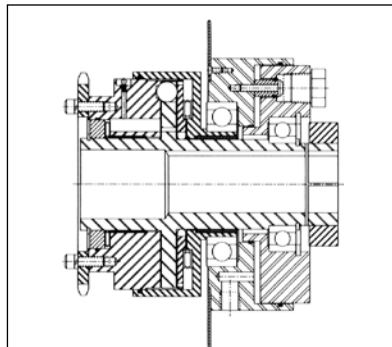
Clutch Size	Item Code
02 & 04	76493
05 & 06	76494
09 & 11	17571



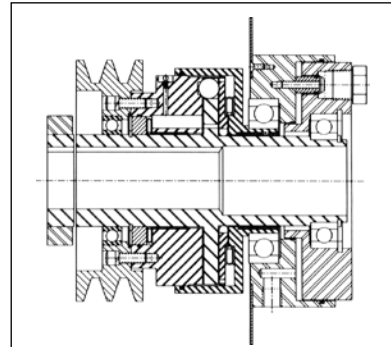
Clutch Size	A	B	C	D	E
02	3.88	5.81	.060	1.63	1.50
04	4.75	7.25	.078	2.25	1.73
05	6.63	8.88	.110	2.60	2.63
06	7.75	10.12	.128	2.82	3.06
09	10.00	12.50	.165	3.60	4.00
11	12.25	14.62	.183	3.95	5.00

Consult factory for ordering information.

**Figure 5**  
**Suggested Mounting Arrangements**



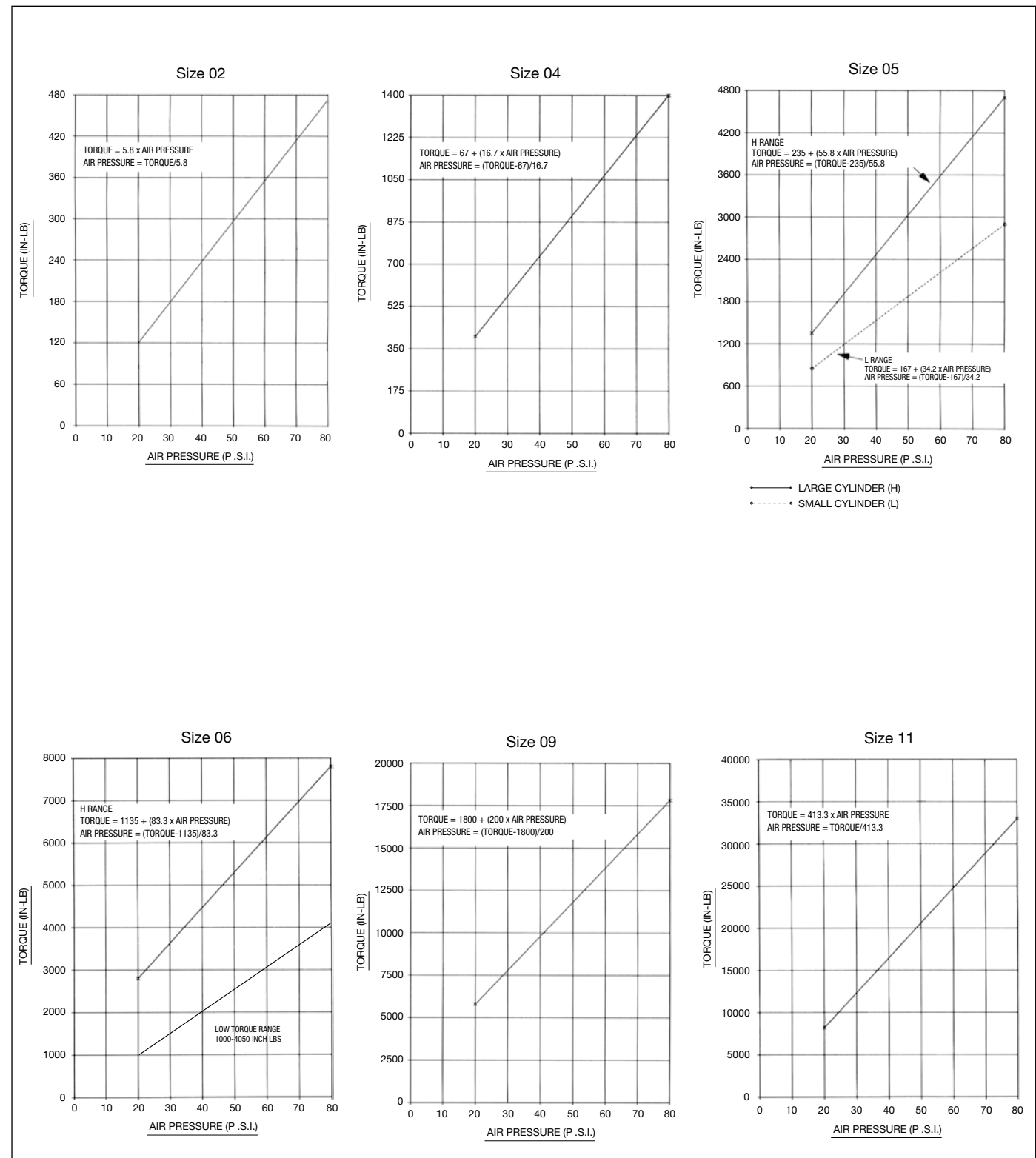
**Type B, Style F**  
**with Sprocket Mounted**



**Type B, Style L**  
**with Sheave Mounted**

# H2000 Pneumatic Overload Clutches

## Torque Curves



# Pneumatic Overload Disconnect Clutches PDC Series

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## Section Contents

FEATURES .....	64
OPERATING PRINCIPLES .....	64
SELECTION .....	65
HOW TO ORDER.....	65
DIMENSIONS .....	66

# Pneumatic Overload Disconnect Clutches PDC Series

## Features

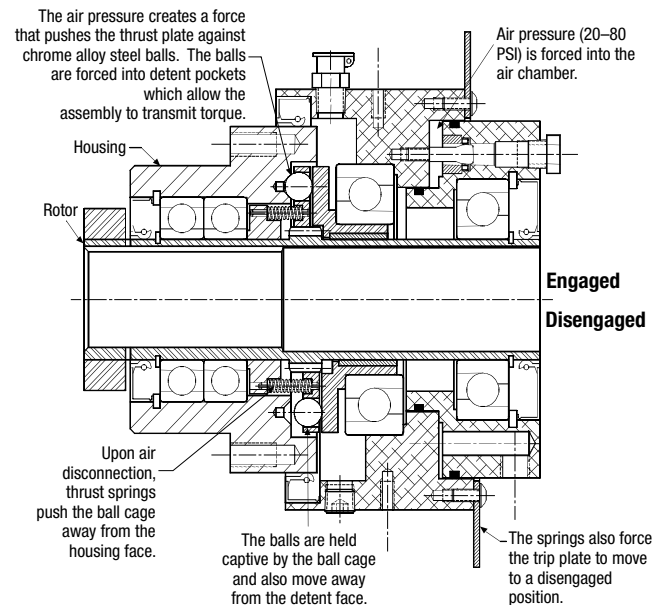
- “In-Flight” torque control offers precise pneumatic torque control
- Nickel plated and stainless steel exterior for superior corrosion resistance
- Completely sealed design
- Remotely adjustable for starting and overrunning loads
- Accurate and dependable disconnection, +/- 5% of torque setting
- Single position ball detent
- Provides maximum radial capacity, eliminating sprocket mounted bearings
- Dual radial ball bearings
- Internal valve
- Through shaft design
- Bi-directional operation
- Single position indexing
- Automatic reset
- Limit switch actuation mechanism
- Clamp collar for secure mounting
- Hardened parts for long clutch life
- Sealed from environmental contamination

The Boston Gear PDC Series Pneumatic Torque Limiting Disconnect Clutch is unique from other pneumatic clutches on the market today. Along with providing the expected protection from overloads in your equipment, it also allows the rotation of the two halves when the air is off and exhausted from the clutch.

The PDC clutches are completely sealed from the atmosphere and other harmful contaminants and all exterior surfaces are nickel plated for corrosion resistance and wash down service. Angular contact ball bearings are used in the units to provide added thrust capacity. Since many of these clutches are used with timing belt pulleys or sprockets, we have designed the unit with two radial ball bearings to provide support to the pulley or sprocket.

## Operating principles

The Boston Gear PDC Series Pneumatic Disconnect Clutch is a ball detent air actuated device. It has been designed to provide accurate and dependable torque overload protection for mechanical power transmission equipment. It has also been designed to provide a remote disconnection of the drive when the air supply is removed. The following diagram demonstrates the engaged and disengaged functions.



The top half of the view shows the unit in an engaged condition. 20 to 80 psi of shop air is forced into the air chamber. That air pressure exerts a force on a hardened thrust plate that pushes against six chrome alloy steel balls. The balls are forced into detent pockets, which allow the assembly to transmit torque. Increasing or decreasing the air pressure remotely controls precision “in flight” torque adjustment. The machinery can still be in operation when the torque rating is being adjusted. When a torque overload occurs, the housing and rotor rotate independently of each other. The balls roll out of their detents and a limit switch actuating plate moves forward to trip a limit switch and signal a torque overload condition. The drive should be shut down immediately and the source of the overload determined and cleared. To re-engage the clutch, re-apply the air pressure and jog the drive until the clutch engages. The PDC Series is a single position device. The unit will re-engage every 360° in the same location every time.

The bottom half of the view shows the unit in a disengaged condition. When air is disconnected, internal springs push the ball cage away from detent face of the housing. The balls are held captive by the ball cage so they also move away from the detent face. At this point, the unit is free to rotate in a disengaged condition. The main components that transmit torque are not in contact with each other.

# Pneumatic Overload Disconnect Clutches PDC Series

## Selection

1. Determine overload release torque by one of these methods:

- a. Use the torque formula with horsepower and RPM specific to the selected clutch location. A service factor may be required for high inertia starts, reversing or peak load conditions, (refer to Page 98 for service factor information. For average applications, a service factor "SF" of 1.25 is recommended):

$$\text{Torque (Lb. In.)} = \frac{\text{HP} \times 63025}{\text{RPM}} \times \text{SF}$$

- b. Determine the "weak link" in the drive train, (i.e. chain, reducer, belt or shaft). Select an overload release torque that is below the "weak link's" maximum torque rating.
  - c. Physically measure the drive torque with a torque wrench and size accordingly.
2. Determine the bore size:
    - a. Shaft size at the clutch location determines the clutch bore.
  3. Refer to the Basic Selection Chart for the appropriate clutch size. Determine the approximate start-up and running air pressures for the application.
  4. Refer to Pages 66 and 67 for ratings, dimensions and types.
  5. Refer to Part Numbering System to complete selection.

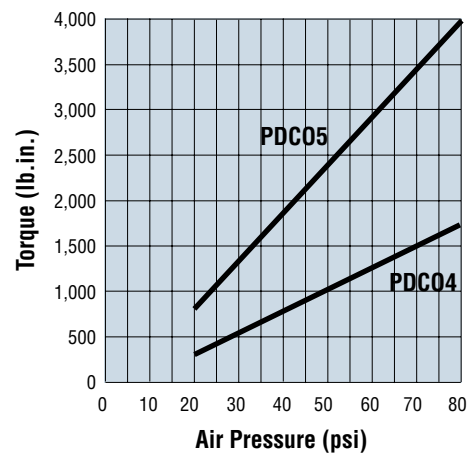
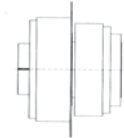
Basic Selection Chart

Clutch Size	Max.* Bore (In.)	Torque Code	Torque Range (Lb.-In.)	Max. RPM
04	1.1875	H	300-1,700	1,800
05	1.7500	H	820-4,000	1,800

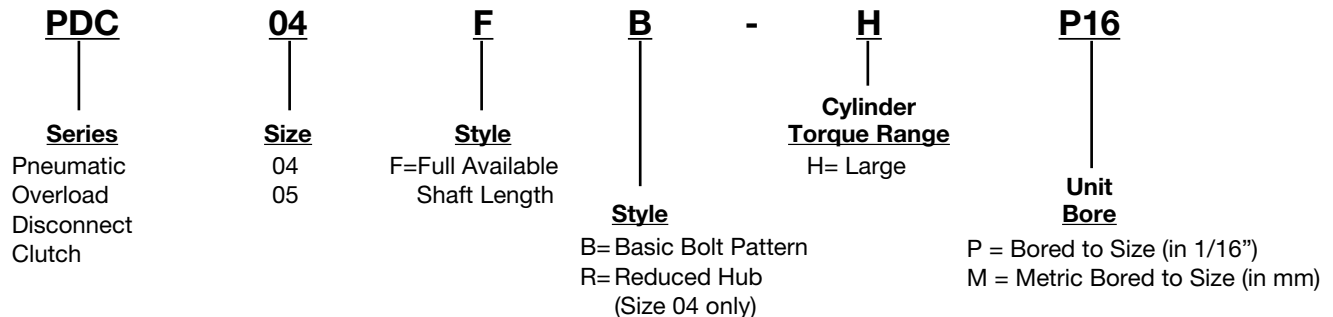
\*Larger bores may require flat keys (supplied with unit)

Style F is used where full shaft length is available.

Style F



## PDC Series Part Numbering System



## How to Order

When ordering a PDC Series Overload Clutch, please include code letters/numbers for series, size, type, torque range, and unit bore.

### Example:

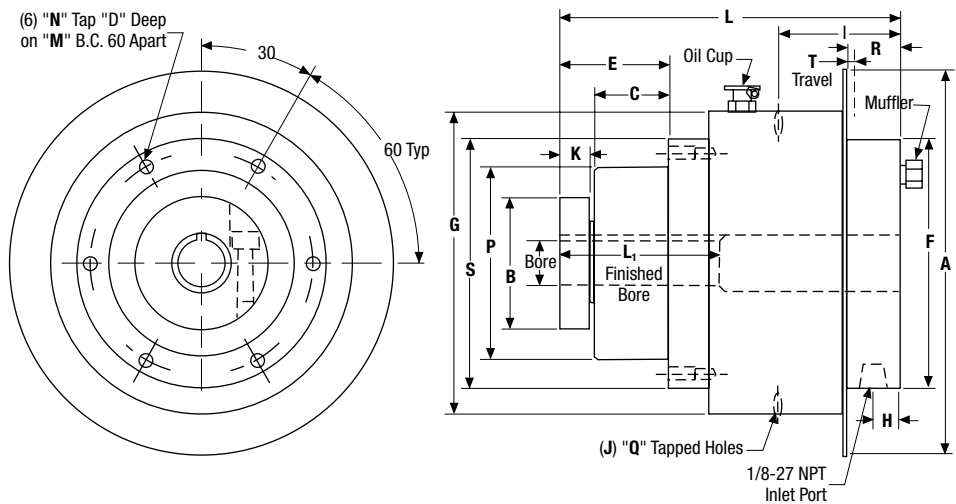
Required Size 04 PDC series Overload Clutch, full available shaft length, basic mount, large torque range with a one inch bore.

PDC 04 F B - H P16

# Pneumatic Overload Disconnect Clutches PDC Series

## Style F

### Type B Basic Hub Design



All Dimensions in Inches

Clutch Size	A	B	C	D	E	F	G	H	I	J	K
04	7.00	2.38	1.36	.63	2.00	4.67	5.50	.34	2.20	3	.56
05	8.00	3.38	1.14	.94	1.98	5.92	6.58	.50	2.20	4	.75

Clutch Bores

Clutch Size	L	L1	M	N	P +.000/- .002	Q	R	S	T
04	6.20	2.70	4.062	5/16-18	3.500	1/4-20	.95	4.53	.13
05	7.18	3.22	4.750	3/8-16	4.125	10-24	1.16	5.25	.15

Clutch Size	Bores (inch)	
	Max. (1)	Max. (2)
04	1.1250	1.1875
05	1.6250	1.7500

Refer to Page 96 for a complete list of bore codes.

- (1) Square Key
- (2) Flat Key

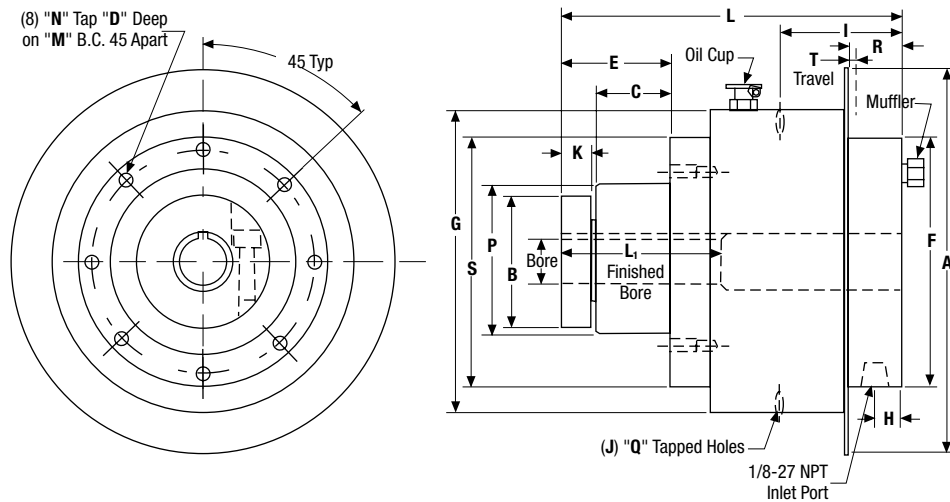
Refer to Page 65 for ordering information



# Pneumatic Overload Disconnect Clutches PDC Series

## Style F

### Type R Reduced Hub Design



All Dimensions in Inches

Clutch Size	A	B	C	D	E	F	G	H	I	J	K
04	7.00	2.38	1.36	.56	2.00	4.67	5.50	.34	2.20	3	.56

Clutch Bores

Clutch Size	L	L1	M	N	P +.000/- .002	Q	R	S	T
04	6.20	2.70	3.312	8-32	3.000	1/4-20	.95	4.53	.13

Clutch Size	Bores (inch)	
	Max. (1)	Max. (2)
04	1.1250	1.1875

Refer to Page 96 for a complete list of bore codes.

- (1) Square Key
- (2) Flat Key

Refer to Page 65 for ordering information

# Pneumatic Overload Disconnect Clutches

## Torque Limiter Application Data

Fax To 800-816-5608

Please select your product intent below and provide as much application information as possible.

### 1. Application:

- ☐ New
- ☐ Existing
  - Replacement Model # \_\_\_\_\_

### 2. Power transmission requirements at clutch location:

- ☐ RPM \_\_\_\_\_
- ☐ Limiting Torque Level \_\_\_\_\_

### 3. Type:

- ☐ Mechanical (Spring Loaded)
- ☐ Pneumatic

### 4. Type:

- ☐ Fully Automatic Re-Engagement
- ☐ Manual (Free Wheeling)
- ☐ Semi Automatic (ORC model only)

### 5. Method of Torque Transmission:

- ☐ Flexible Coupling
  - ☐ Rigid Coupling
  - ☐ Sprocket Mount
- Sprocket Size and Tooth Count \_\_\_\_\_

### 6. Bore Size:

- ☐ Sprocket Mount (Clutch Bore) \_\_\_\_\_
- ☐ Coupling Mount (Clutch Bore) \_\_\_\_\_  
(Coupling Bore) \_\_\_\_\_

### 7. Shut Down Method:

- ☐ Prox Plate
- ☐ Pin Style (ORC only)
- ☐ None Required

Name: \_\_\_\_\_

Phone # \_\_\_\_\_

Fax # \_\_\_\_\_

Company \_\_\_\_\_

E-Mail \_\_\_\_\_

Use the space below to note any relevant application data or to detail your question.

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