DATA SHEET INDUSTRIAL CLUTCH



7CP Plunger Pumps: 34971



Pump Model 7CP6170 shown (Pump and mounting rails sold separately)

SPECIFICATIONS	U.S. Measure	Metric Measure
Clutch Grooves	8	8
Shaft Size	0.945"	24 mm
Pitch Diameter	7.3"	185 mm
Belt Type	Poly-V, L-Style, 8 Ribs	Poly-V, L-Style, 8 Ribs
Torque	75 ft-lbs	101.7 Nm
Watts	44	44
Amps	3.6	3.6
Power Required	12 VDC	12 VDC
Weight (1 Pulley)	13.0 lbs	5.89 kg
Dimensions	7.3 x 2.07"	185 x 52.6 mm

FEATURES

- Special E-coating offers 3 to 6 times better corrosion resistant finish.
- Special bearings with unique grease offer consistent viscosity at high-temperatures and water resistance for harsh environments.
- Projection welded coil and plate offer extra durability in heavy vibration applications.
- High-strength forged rotor, hub and armature offer maximum torque and long life.

SELECTION: Select the clutch to match the pump shaft size and belt torque rating.

INSTALLATION:

- 1. Remove the four bearing cover screws on pump and discard.
- 2. Line up the clutch plate with the bearing cover screw holes with the *dish side out*. Secure with the four supplied plate screws (M8 x 16) and torque to 115 in-lbs (9.4 ft-lbs).

Do not use pump bearing cover screws.

- 3. Mount the coil assembly onto the clutch plate and secure with the four supplied coil assembly screws (1/4" 20 x %") and torque to 55 in-lbs (44 ft-lbs).
- 4. Lubricate the pump shaft with antiseize lubricant and insert the key into the pump shaft.
- 5. Slide the rotor and armature assembly over shaft. Be certain keyway of pump is aligned with armature keyway.
- 6. Slide flat washer (M8) over shaft screw. Apply Loctite® 242® to theads of shaft screw and torque to 115 in-lbs (9.4 ft-lbs).
- Check that there is an adequate grounded connection to the coil assembly plate, then connect the lead wire to the positive side of the electric circuit.
- 8. Engage and disengage the clutch to assure proper functioning. If full load is required initially from the pump, allow clutch to engage 20–50 cycles to adequately burnish before commencing normal operation.

NOTE: Follow standard belt mounting and center distance procedures to determine drive pulley size, speed and horsepower per belt.

OPERATION: The clutch works with a flow switch, pressure switch or a manual on/off switch installed in the system and connected to a 12V DC power supply. When the trigger gun is released or the unit is manually turned off, a signal is sent to the clutch to disengage and cease pump operation. When operation resumes by opening the trigger gun or manually turning the system on, the clutch will engage, starting the pump and resuming full operation.

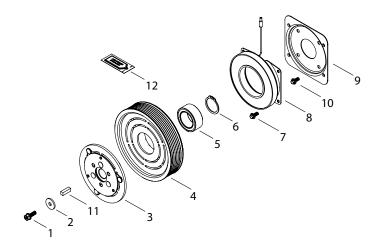
Loctite and 242 are registered trademarks of Henkel Corporation.

PARTS LIST

ITEM	P/N	MATL	DESCRIPTION	QTY
1	126544	STCP R	Screw, Shaft, HH (M8 x 25)	1
2	126579	STZP	Washer, Flat (M8)	1
3	_	_	Armature	1
4	_	_	Rotor	1
5	_	_	Bearing	1
6	_	_	Ring, Snap	1
7	_	STZP	Screw, Coil Assembly	4
8	_	_	Assembly, Coil	1
9	34694	STZP	Plate, Clutch	1
10	34935	STZP	Screw, Plate (M8 x 16 x 1.25)	4
11	30067	STL	Key (M8 x 7.5 x 25)	1
12			Lubricant, Antiseize	1

R Components comply with RoHS Directive. Material Codes (Not Part of Part No.): S=304SS STCP=Steel/Chrome Plated STL=Steel STZP=Steel/Zinc Plated

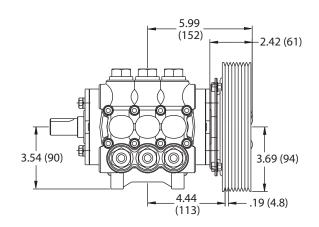
EXPLODED VIEW

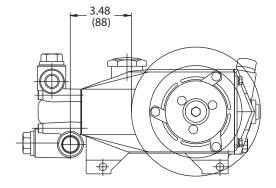


TROUBLESHOOTING

Clutch will not engage	Check positive and ground connections.Check for 12V DC.	
Squealing belt(s)	 Check belt slippage or belt tension. 	
Short belt life	Check side-to-side alignment and belt tension.	
Excessive noise when clutch disengaged	Worn bearing, replace clutch assembly.	
Clutch cycling	 Check for adequate voltage. Worn rotor or discolored rotor surface, replace clutch assembly. 	
Scraping noise when clutch engaged and/or	Check alignment of coil and rotor assembly.	

DIMENSIONAL





▲ CAUTIONS AND WARNINGS

All high-pressure systems require a primary pressure regulating device (i.e. regulator, unloader) and a secondary pressure relief device (i.e. pop-off valve, relief valve). Failure to install such relief devices could result in personal injury or damage to pump or property. Cat Pumps does not assume any liability or responsibility for the operation of a customer's high-pressure system. Read all CAUTIONS and WARNINGS before commencing service or operation of any high-pressure system. The CAUTIONS and WARNINGS are included in each Service Manual and with each Accessory Data sheet. CAUTIONS and WARNINGS can also be viewed online at www.catpumps.com/dynamic-literature/cautions-and-warnings or can be requested directly from Cat Pumps.

WARRANTY

 $View the {\it Limited Warranty} on line at www.catpumps.com/literature/cat-pumps-limited-warranty}$