DATA SHEET

NEMA BELL HOUSING AND FLEXIBLE COUPLERS



Bell Housing Models:

76215.15FR, 76256.15FR, 76286.15FR

Flexible Coupling Models:

8382, 8383, 8388



Bell housing and flexible coupling assembly shown with Model 660 and electric motor. Pump and motor sold separately.

FEATURES

- Eliminates belt selection, sizing and adjusting.
- Compact direct mounting feature reduces space required for belts or gearbox drive assemblies.
- · Insulates against heat transfer.
- Special urethane flexible spyder designed for extended life with high temperature and high RPM.
- Complete assembled units from Cat Pumps includes pump, shaft protector, bell housing, flange adapter, flexible coupler, mounting hardware and motor.
- Designed to fit 15 and 18 frame pumps

PARTS LIST

8388 Flexible Coupler Assembly

Motor Frame	Flex Coupler Assy	Shaft to Shaft	Torque Rating	Weight				
213/215TC	8388	3388 M30 to 1-3/8"		6.28 lbs				
PART NUMBERS								
Coupler Half, Motor – 1-3/8" Shaft, 5/16" Keyway								
Coupler Half, Pump – 30mm Shaft, 8mm Keyway								
ple)	31544							
Key, Pump								
	213/215TC 1BERS If, Motor – 1-3 If, Pump – 30r	Coupler Assy 213/215TC 8388 1BERS If, Motor – 1-3/8" Shaft, 5, 1, 1, 1, 2, 2, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	Coupler	Coupler				



Pump Series	Motor Frame	Flex Coupler Assy	Shaft to Shaft	Torque Rating	Weight				
15 & 18FR	254/256TC	8382	M30 to 1-5/8"	150 ft/lbs	5.91 lbs				
PART NUM	PART NUMBERS								
Coupler Ha	31543								
Coupler Ha	99	96672							
Spyder (Pui	rple)	3	1544						
Key, Pump				990036					

8383 Flexible Coupler Assembly

Pump Series	Motor Frame	Flex Coupler Assy	Shaft to Shaft	Torque Rating	Weight				
15 & 18FR	284/286TC	8383	M30 to 1-7/8"	225 ft/lbs	9.65 lbs				
PART NUMBERS									
Coupler Ha	lf, Motor – 1-7	996693							
Coupler Ha	lf, Pump – 30r	99	96692						
Spyder (Pu	rple)	996694							
Key, Pump		990036							

Bell Housing Assembly

Pump Series	Models	NEMA Type	Bell Housing Assembly
15 & 18FR	All 15 & 18FR Models	213/215TC	76215.15FR
		254/256TC	76256.15FR
		284/286TC	76286.15FR

76215.15FR & 76256.15FR include bell housing and mounting hardware. **76286.15FR** includes bell housing, flange adapter and mounting hardware.





INSTALLATION

NEMA bell housing and flexible coupling

- Separate the parts included in the bell housing assembly package and/ or flexible coupler assembly package. Both assemblies offer separate kits to cover the various motor frames and pump models.
- 2. Remove bearing cover screws from either side of pump and discard screws. New screws supplied with bell housing assembly.
- From the side where the screws have been removed, slide the small end of the bell housing over the pump shaft with the Cat Pumps logo facing up and positioned 22° from the top.
- 4. Use the new conical lock washers and screws as supplied in the bell housing assembly. Install eight (8) conical lock washers onto the eight (8) M8 screws. Apply Loctite® 242® to the threads of the screws and torque to specifications per chart.
- 5. Apply a light film of anti-seize lubricant to the pump shaft.
- 6. Install key into pump shaft.
- 7. Separate the pump M30 half of the flexible coupling and slide onto the pump shaft. Align inner face of coupler flush with end of crankshaft.
- 8. On the 213/215T and 254/256T frames, there is no flange adapter.

- 9. On the 284/286T frame, mount flange adapter with raised and finished surface away from motor. Apply Loctite® 242® to the threads of the four (4) 1/2" screws and torque to specifications per chart.
- 10. Apply a light film of anti-seize lubricant to the motor shaft.
- 11. Install motor key (as supplied with motor) into motor keyway.
- 12. Slide the 1-3/8", 1-5/8" or 1-7/8" half (motor side) of the flexible coupling with spyder onto the electric motor shaft.
- 13. Mount pump/bell housing/coupling half assembly to motor shaft with coupling half. Ensure the two halves are properly aligned.
- 14. Install four (4) lock washers onto four (4) 1/2" screws. Apply Loctite® 242® to the threads of the screws and thread into bell housing, torque to specifications per chart.
- 15. Through the opening at the top of the bell housing adjust coupler spacing so small knobs on spyder just barely contact each coupler half. Rotate coupling halves so the two (2) clamping screws are facing up. Use a 6mm Allen wrench and torque to specifications per chart.

NOTE: Flexible coupler halves should not contact each other. Ensure there is a small gap between coupler halves.

Loctite and 242 are registered trademarks of the Henkel Corporation.

Torque Specifications Chart

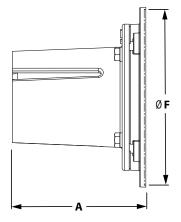
Screw	Size	Tool	in/lbs	ft/lbs	Nm
Bell Housing to Pump	M8	M5 Allen	115	9.6	13
Bell Housing to Motor	1/2"	3/4" Hex Wrench	300	25	34
Adapter Plate to Motor (76286.15FR)	1/2"	3/8" Allen	300	25	34
Flexible Coupler Clamping Screws	M8	M6 Allen	300	25	34
	M10	M8 Allen	600	50	68

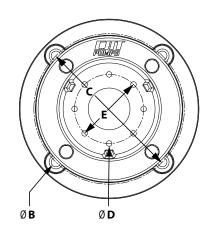
DIMENSIONAL DRAWINGS

Bell Housing Assemblies

Model	Motor Frame	Α	Ø B	C (BC)	QTY	Ø D	E (BC)	QTY	Ø F
76215.15FR	213/215TC	5.92"	.565"	7.25"	4	.335"	4.13"	8	8.50"
76256.15FR	254/256TC	6.92"	.565"	7.25"	4	.335"	4.13"	8	8.50"
76286.15FR	284/286TC	7.87"	.565"	9.00"	4	.335"	4.13"	8	10.50"

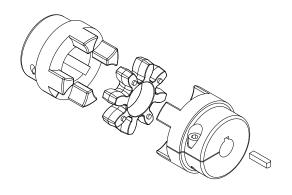
76286.15FR

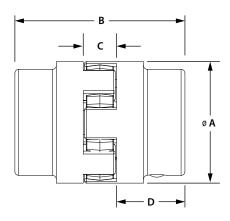




Flexible Coupling Assemblies

Model	ø A	В	С	D
8382	3.15"	4.41"	.86"	1.77"
8383	3.15"	4.41"	.86"	1.77"
8388	3.74"	4.96"	1.02"	1.97"





△ 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

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

CAT PUMPS 1681 94th Lane N.E., Minneapolis, MN 55449-4324 P: (763) 780-5440 F: (763) 780-2958 E: techsupport@catpumps.com www.catpumps.com