

# DATA SHEET

## SAE BELL HOUSING AND COUPLERS

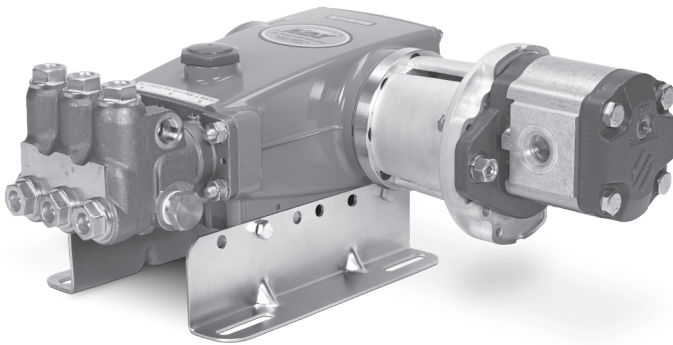


**Hydraulic  
Bell Housing Models:**

**76SAEB2.15FR, 76SAEB4.15FR**

**Flexible Coupling  
Model:**

**8387**



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

### FEATURES

- Optimal alignment reduces side-loading for quiet, trouble-free operation
- Compact direct mounting reduces space requirement
- Cast from lightweight, high-strength aluminum alloy
- Ease of assembly reduces fabrication costs
- Slotted housing allow easy access to coupler screws
- Available as a complete drive package for fast and convenient assembly
- Designed to fit 15 and 18 frame pumps

## PARTS LIST

### Bell Housing Assembly

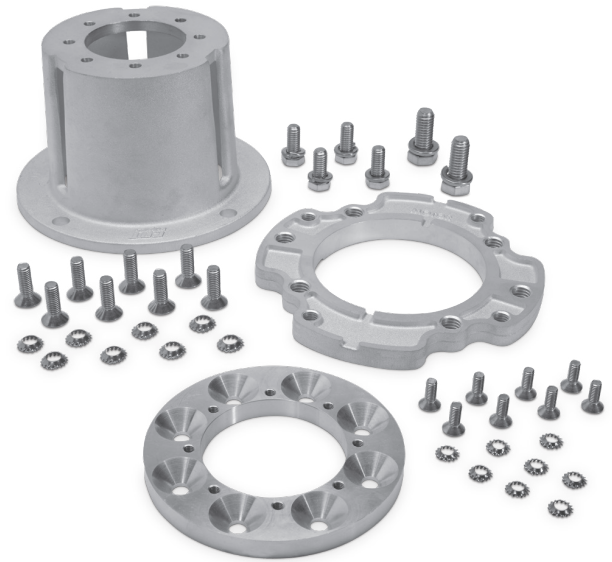
Pump Series	Models	SAE Type	Bell Housing Assembly
15 & 18FR	All 15 & 18FR Models	B2	76SAEB2.15FR
		B4	76SAEB4.15FR

Bell housing assembly includes bell housing and mounting hardware, flange adapter with screws, hydraulic adapter plate and screws.

#### SAE TYPE:

B2 = SAE "B" 2 Bolt, 4" Pilot

B4 = SAE "B" 4 Bolt, 4" Pilot



### 8387 Flexible Coupler Assembly

Pump Series	SAE Type	Flex Coupler Assy	Shaft to Shaft	Torque Rating	Weight
15 & 18FR	B2, B4	8387	30mm x 7/8"	150 ft/lbs	3.53 lbs

#### PART NUMBERS

Coupler Half, Motor – 7/8" Shaft, 1/4" Keyway	32012
Coupler Half, Pump – 30mm Shaft, 8mm Keyway	38278
Spyder (Light Green)	991903
Key, Pump	30067



### Rail Assembly

Pump Series	Height to Shaft Center	Part Number
15 & 18FR	5.7"	30613
	6.2"	76513

See pump Data Sheet for rail dimensions.



# INSTALLATION

## Hydraulic bell housing and flexible coupling

1. Separate the parts which are included in the hydraulic bell housing assembly package and/or flexible coupler assembly package. Both assemblies are offered in separate kits to cover the various pump models.

**Note:** This pump series requires an additional flange adapter to be installed between the pump and hydraulic bell housing.

2. Remove four (4) hex head combination (HHC) screws from bearing cover and use new HHC screws from bell housing assembly.
3. Position flange adapter with countersunk holes facing away from pump. Install M8 conical lock washer to each M8 screw. Apply Loctite® 242® to the threads of the screws and torque to specifications per chart.
4. On the pump side, slide the small end of the hydraulic bell housing over the pump shaft with the Cat Pumps logo facing up and positioned 22° from the top.
5. Install M6 conical lock washer to each M6 screw. Apply Loctite® 242® to the threads of the screws and torque to specifications per chart.
6. Apply a light film of anti-seize lubricant to pump shaft.
7. Separate M30 pump half of the flexible coupling and slide onto the pump shaft with pump key. Align inner face of coupler flush with end of crankshaft.

8. Apply a light film of anti-seize lubricant to motor shaft.
9. Install motor key (as supplied with motor) onto motor shaft keyway.
10. On the motor side, slide 7/8" motor half of the flexible coupling onto motor shaft.
11. Install spyder onto motor side of flexible coupling.
12. Position adapter plate to the hydraulic bell housing with the cast word "PUMP" facing the pump and located at the top.
13. Insert four (4) 3/8" screws and lock washers from the pump side. Torque to specifications per chart.
14. Mount motor with coupling half onto pump shaft with coupling half, lining up the two halves.
15. Insert two (2) or (4) screws and lock washers through motor mounting holes and hand thread into adapter flange. Torque to specifications per chart.
16. Through the opening at the top of 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 M6 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.

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## Torque Specifications Chart

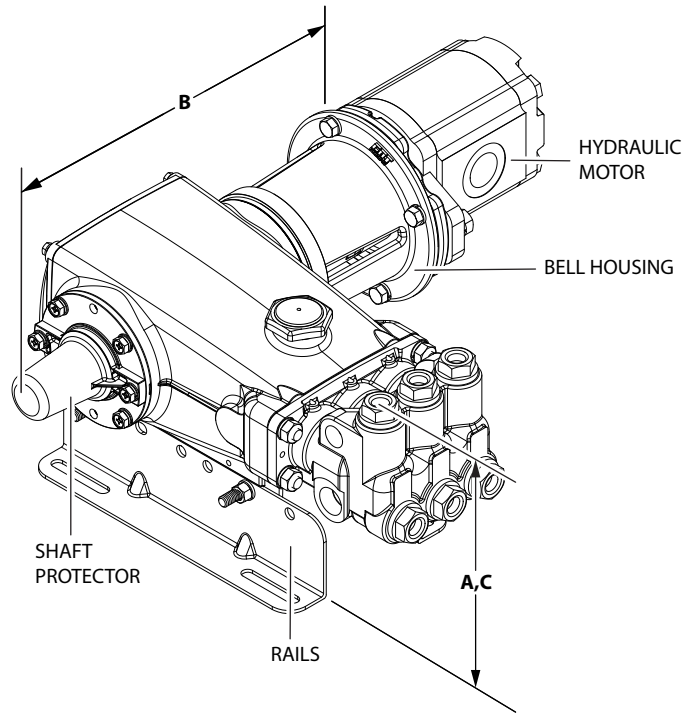
Screw	Size	Tool	in/lbs.	ft/lbs.	Nm.
Flange Adapter to Pump	M8	5mm allen	115	9.6	13
Bell Housing to Flange Adapter	M6	4mm allen	50	4.2	5.7
Adapter Plate to Bell Housing	3/8"	9/16" wrench	150	12.5	17
Motor to Adapter Plate to Motor	1/2"	3/4" wrench	300	25	34
Flexible Coupler Clamping Screws	M8	6mm allen	300	25	34

## DIMENSIONAL DRAWINGS

### Pump and Bell Housing

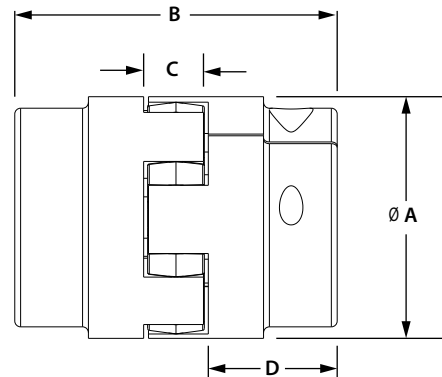
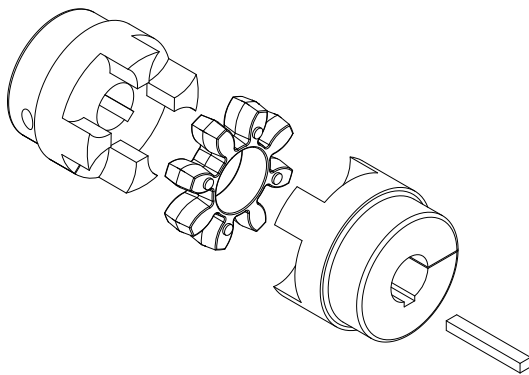
Rail Set PN	A (height)		B (width)		C (height)	
	30613	8.60"	218mm	15.88"	403mm	9.1"
76513						

Overall width will vary pending hydraulic motor selection.



### Flexible Coupling Assembly

Model	A		B		C		D	
8387	2.56"	65mm	3.47"	88mm	0.77"	19.6mm	1.35"	34.3mm



#### ⚠ 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/cautions-warnings](http://www.catpumps.com/cautions-warnings) or can be requested directly from Cat Pumps.

#### WARRANTY

View the Limited Warranty on-line at [www.catpumps.com/warranty](http://www.catpumps.com/warranty).