

TECH BULLETIN 134



Piston and Plunger Pumps Crankcase Capacities

To ensure long service life from your Cat Pumps drive end, the appropriate oil level must be maintained. The tables below show the required oil volume for each series of pump. The oil level must be filled to the red dot on the bubble sight glass on the pump's crankcase. On 60 frame pumps, use the dipstick near the back of the crankcase to check the oil level.

PISTON PUMPS

| PUMP FRAME | OIL CAPACITIES | |
|-------------|----------------|--------|
| | Ounces | Liters |
| 3FR Piston | 10 | 0.30 |
| 4FR Piston | 21 | 0.62 |
| 5FR Piston | 21 | 0.62 |
| 10FR Piston | 40 | 1.18 |
| 25FR Piston | 84 | 2.48 |
| 60FR Piston | 321.2 | 9.50 |

PLUNGER PUMPS

| PUMP FRAME | OIL CAPACITIES | |
|--------------------|----------------|--------|
| | Ounces | Liters |
| 3FR Plunger | 15 | 0.44 |
| 5FR Plunger | 18 | 0.53 |
| 7FR, 8FR Plunger | 25 | 0.74 |
| 15FR, 18FR Plunger | 42.6 | 1.26 |
| 25FR, 28FR Plunger | 84 | 2.48 |
| 35FR, 38FR Plunger | 134.4 | 3.97 |
| 60FR, 68FR Plunger | 321.2 | 9.50 |
| 150FR Plunger** | 22.4 gallon | 85.00 |

* No longer in production

** Use Cat Pumps ISO 100 special formula premium grade

PLUNGER – DIRECT DRIVE PUMPS

| PUMP FRAME | OIL CAPACITIES | |
|--------------------|----------------|--------|
| | Ounces | Liters |
| 1CX Plunger | 2.03 | 0.06 |
| 1DX Series * | 8.5 | 0.25 |
| 2DX Series * | 8.5 | 0.25 |
| 2SF, 2SFX Series | 10.1 | 0.30 |
| 2SFSEEL Series | 10.1 | 0.30 |
| 2SFQSEEL Series | 10.1 | 0.30 |
| 2SFP Series | 10.1 | 0.30 |
| 3DX, 3DNX Series * | 8.5 | 0.25 |
| 3SP, 3SPX Series * | 10.15 | 0.30 |
| 4DX, 4DNX Series | 8.5 | 0.25 |
| 4DX03ELR | 8.5 | 0.25 |
| 4HP Series * | 22.6 | 0.67 |
| 4SF Series* | 23.66 | 0.70 |
| 4SP, 4SPX Series | 10.1 | 0.30 |
| 5DX Series * | 22.6 | 0.67 |
| 5SP Series | 13.5 | 0.40 |
| 6DX Series * | 22.6 | 0.67 |
| 66DX Series | 18 | 0.53 |
| 67DX Series | 13.5 | 0.40 |

CP MODEL PUMPS

| PUMP FRAME | OIL CAPACITIES | |
|-------------|----------------|--------|
| | Ounces | Liters |
| 3CP Plunger | 12 | 0.35 |
| 5CP Plunger | 17 | 0.50 |
| 7CP Plunger | 38.9 | 1.15 |

NOTE: Check the oil level and quality daily. A black oil color can indicate old, worn oil, overheating of the oil, or incorrect oil. Milky-white oil color is an indication that water has leaked from the pump manifold and contaminated the oil. Service the pump as soon as possible.

Cat Pumps recommends the use of its ISO 68 high-pressure hydraulic pump oil. Custom-blended and specially-formulated to meet exacting specifications, this premium-grade, petroleum-based oil contains an advanced additive package to protect against wear, oxidation, rust, and corrosion, and is proven to maximize the life of Cat Pumps products. For best results, perform an initial oil change after the first 50 hours of operation and every 500 hours thereafter.

Cat Pumps

Technical Services Department

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