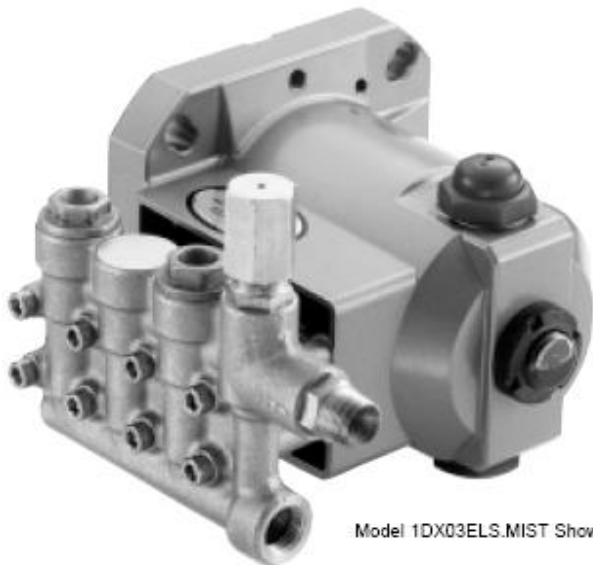




Technical specifications and instructions



Model 1DX03ELS.MIST Shown

Misting Pump Direct-drive

Models

1DX03ELS.MIST

1DX015ELS.MIST

Specifications (*)

| | 1DX03ELS.MIST | 1DX015ELS.MIST |
|-----------------------------------|----------------------|-----------------------|
| Flow | 1 l/min | 0.5 l/min |
| Maximum discharge pressure | 7 to 100 bar | 7 to 100 bar |
| Stroke (single plunger) | 2.0 mm | 2.0 mm |

Common Specifications

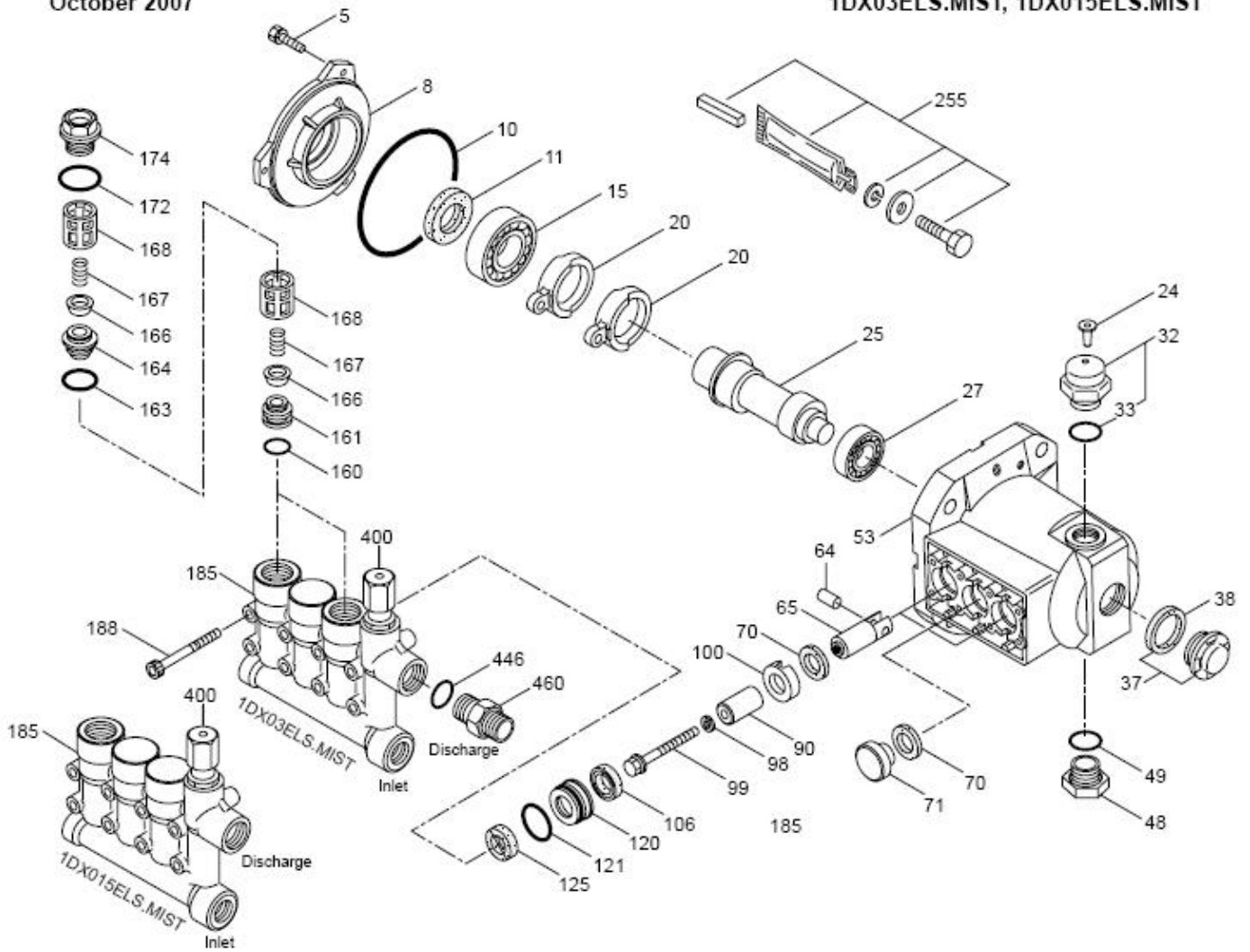
| | |
|--------------------------------|--------------------|
| Maximum RPM | 1450 RPM |
| Inlet pressure range | flooded to 4 bar |
| Bore | 16 mm |
| Max. liquid temperature | 60°C |
| Crankcase capacity | 0,25 L |
| Inlet port | 3/8" NPTF |
| Discharge port | 3/8" NPTF |
| Shaft diameter | 15.8 mm hollow |
| Weight (pump only) | 4,9 kg |
| Dimensions (pump only) | 203 x 197 x 160 mm |

(*) Abnormalities permitted only after consultation and written confirmation from Cat Pumps.

Exploded View

October 2007

1DX03ELS.MIST, 1DX015ELS.MIST



February 2012

Parts list

| Item | Num. | Mat. | Description | Qty |
|------|--------|--------|---|-----|
| 5 | 547161 | STCP | Screw, HH (M6x14) | 3 |
| | 549360 | STCP R | Screw, HH (M6x14) | 3 |
| 8 | 547153 | AL | Cover, bearing | 1 |
| 10 | 14041 | NBR | O-ring, bearing cover – 70D | 1 |
| 11 | 55337 | NBR | Seal, oil – 70D | 1 |
| 15 | 14488 | STL | Bearing, ball | 1 |
| 20 | 547048 | TNM | Rod, Connecting | 2/1 |
| 24 | 549608 | LDPE | Plug, oil cap (remove before startup) | 1 |
| 25 | 548879 | CM | Crankshaft, 1725 RPM, 5/8", 2.0 mm | 1 |
| 27 | 13832 | STL | Bearing, ball | 1 |
| 32 | 547961 | RTP | Cap, oil filler w/O-ring | 1 |
| 33 | 14179 | NBR | O-ring, oil filler cap – 70D | 1 |
| 37 | 92241 | - | Gauge, bubble oil w/gasket – 80D | 1 |
| 38 | 44428 | NBR | Gasket, flat flex., oil gauge – 80D | 1 |
| 48 | 44842 | NY | Plug, drain | 1 |
| 49 | 14179 | NBR | O-ring, drain plug – 70D | 1 |
| 53 | 542407 | AL | Crankcase | 1 |
| 64 | 46229 | CM | Pin, crosshead | 2/1 |
| 65 | 542402 | BBCP | Rod, plunger | 2/1 |
| 70 | 47215 | NBR | Seal, oil – 70D | 3 |
| 71 | 548331 | BB | Retainer, oil seal | 1/2 |
| 90 | 542403 | CC | Plunger (M16x27) | 2/1 |
| 98 | 46730 | NBR | Washer, seal – 90D | 2/1 |
| 99 | 542405 | S | Retainer, plunger (M6 x 35) | 2/1 |
| 100 | 46233 | NY | Retainer, seal | 2/1 |
| 106 | 48222 | NBR | Seal, LPS w/S-Spg – 85D | 2/1 |
| 120 | 547357 | BB | Case, seal | 2/1 |
| 121 | 13976 | NBR | O-ring, seal case – 70D | 2/1 |
| 125 | 46240 | NBR | Seal, HPS w/S | 2/1 |
| 160 | 13965 | NBR | O-ring, inlet valve seat – 70D | 2/1 |
| 161 | 545177 | S | Seat, inlet | 2/1 |
| 163 | 19285 | NBR | O-ring, seat – 70D | 2/1 |
| 164 | 545178 | S | Seat, discharge | 2/1 |
| 166 | 46764 | S | Valve | 4/2 |
| 167 | 46865 | S | Spring | 4/2 |
| 168 | 543988 | PVDF | Retainer, spring | 4/2 |
| 172 | 142807 | NBR | O-ring, plug – 70D | 2/1 |
| 174 | 46759 | BB | Plug, valve (M20 x 1.5) | 2/1 |
| 185 | 49524 | BB | Head, manifold w/Modular Reg. Body (03ELS) | 1 |
| | 549002 | BB | Head, Manifold w/Modular Reg. Body (015ELS) | 1 |
| 188 | 542406 | STZP | Screw, HSH (M6x60) | 8 |
| | 549357 | STCP R | Screw, HSH (M6x60) | 8 |
| 255 | 30516 | STZP | Assy, bolt mount | 1 |
| | 126543 | STCP R | Screw, HH (3/8" – 16UNC x 1-3/8") | 4 |
| | 30980 | STZP R | Washer, flat (3/8") | 4 |
| | 30921 | STZP R | Lockwasher (3/8") | 4 |
| | 34050 | STL | Key (3/16 x 3/16 x 27HD) | 1 |
| 283 | 990394 | - | Kit, oil drain (not shown) | 1 |
| 300 | 76054 | NBR | Kit, seal (incl. 98,106,121,125) (03ELS) | 1 |
| | 76053 | NBR | Kit, seal (incl. 98,106,121,125) (015ELS) | 1 |
| 310 | 76058 | NBR | Kit, valve (incl. 160,161,163,164,166,167,168,172) (03ELS) | 1 |
| | 76057 | NBR | Kit, valve (incl. 160,161,163,164,166,167,168,172) (015ELS) | 1 |
| 400 | - | - | Regulator, modular (see indiv. Parts) | 1 |
| 446 | 13969 | NBR | O-ring, discharge fitting – 70D | 1 |
| 460 | 107681 | BB | Fitting, discharge (3/8" NPTM) | 1 |

Italics are optional items. R Components comply with RoHS directive.
See 'Tech Bulletins' 002, 024, 036, 043, 055, 074 and 083 for additional information.

Material codes: (not part or part number)

| | | | | | |
|------|-----------------------|------|--------------------------|------|-----------------------|
| AL | Aluminum | LDPE | Low density polyethylene | S | 304 stainless steel |
| BB | Brass | NBR | Medium nitrile (Buna-N) | STCP | Steel / chrome plated |
| BBCP | Brass / chrome plated | NY | Nylon | STL | Steel |
| CC | Ceramic | PVDF | Polyvinylidene fluoride | STZP | Steel / zinc plated |
| CM | Chrome-moly | RTP | Reinforced composite | TNM | Special high strength |

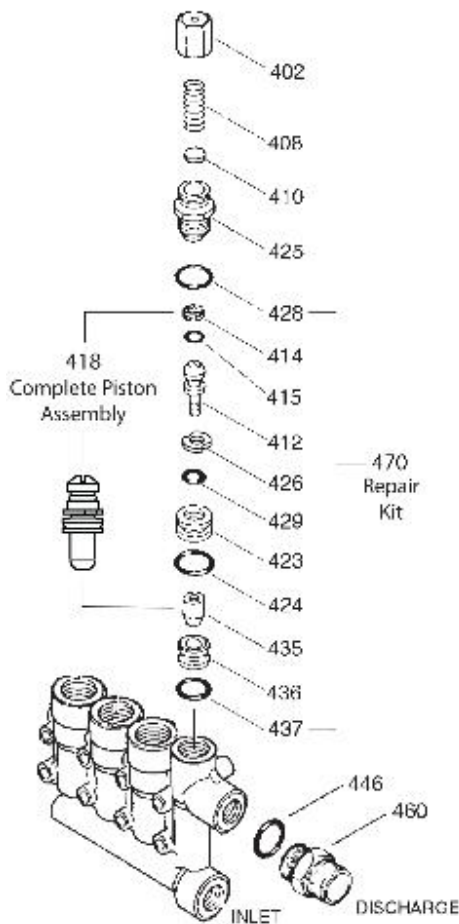
Integral regulator

Specifications

| | |
|-----------------------|-------------|
| Flow | 1.14 l/min |
| Pressure range | 7 to 85 bar |
| Discharge port | 3/8" NPTM |

Parts list

| Item | Num. | Mat. | Description | Qty |
|------|--------|--------|--|-----|
| 402 | 46570 | BB | Cap, adjusting | 1 |
| 408 | 549924 | STCP R | Spring, pressure | 1 |
| 410 | 549352 | STCP R | Retainer, spring | 1 |
| 412 | 46251 | BB | Stem, piston | 1 |
| 414 | 28338 | PTFE | Back-up-ring, piston stem | 1 |
| 415 | 22056 | NBR | O-ring, piston stem – 70D | 1 |
| 418 | - | BB | Assy, piston (included in repair kit) | 1 |
| 423 | 46249 | BB | Retainer, valve | 1 |
| 424 | 13966 | NBR | O-ring, valve retainer (outer) – 70D | 1 |
| 425 | 46248 | BB | Retainer, piston | 1 |
| 426 | 46250 | S | Washer | 1 |
| 428 | 13969 | NBR | O-ring, piston retainer – 70D | 1 |
| 429 | 17399 | NBR | O-ring, valve retainer (inner) – 80D | 1 |
| 435 | 548193 | S | Valve | 1 |
| 436 | 46253 | S | Seat | 1 |
| 437 | 13963 | NBR | O-ring, seat – 70D | 1 |
| 468 | 33099 | NBR | Kit, O-ring (incl. 414, 415, 428, 429, 431, 441) | 1 |
| 470 | 31088 | NBR | Kit, repair (incl. 412, 431, 436, 441) | 1 |



Italics are optional items. R Components comply with RoHS directive.

Material codes

| | | | |
|------|------------------------------|------|-----------------------|
| BB | Brass | S | 304 stainless steel |
| NBR | Medium Nitrile (Buna-N) | STCP | Steel / chrome plated |
| PTFE | Pure Polytetrafluoroethylene | | |