



Technical specifications and instructions



5CP Plunger Pump

Standard Model

5CP3120

5CP3120CSS

Gearbox Model

5CP3120CSSG1

Specifications (*)

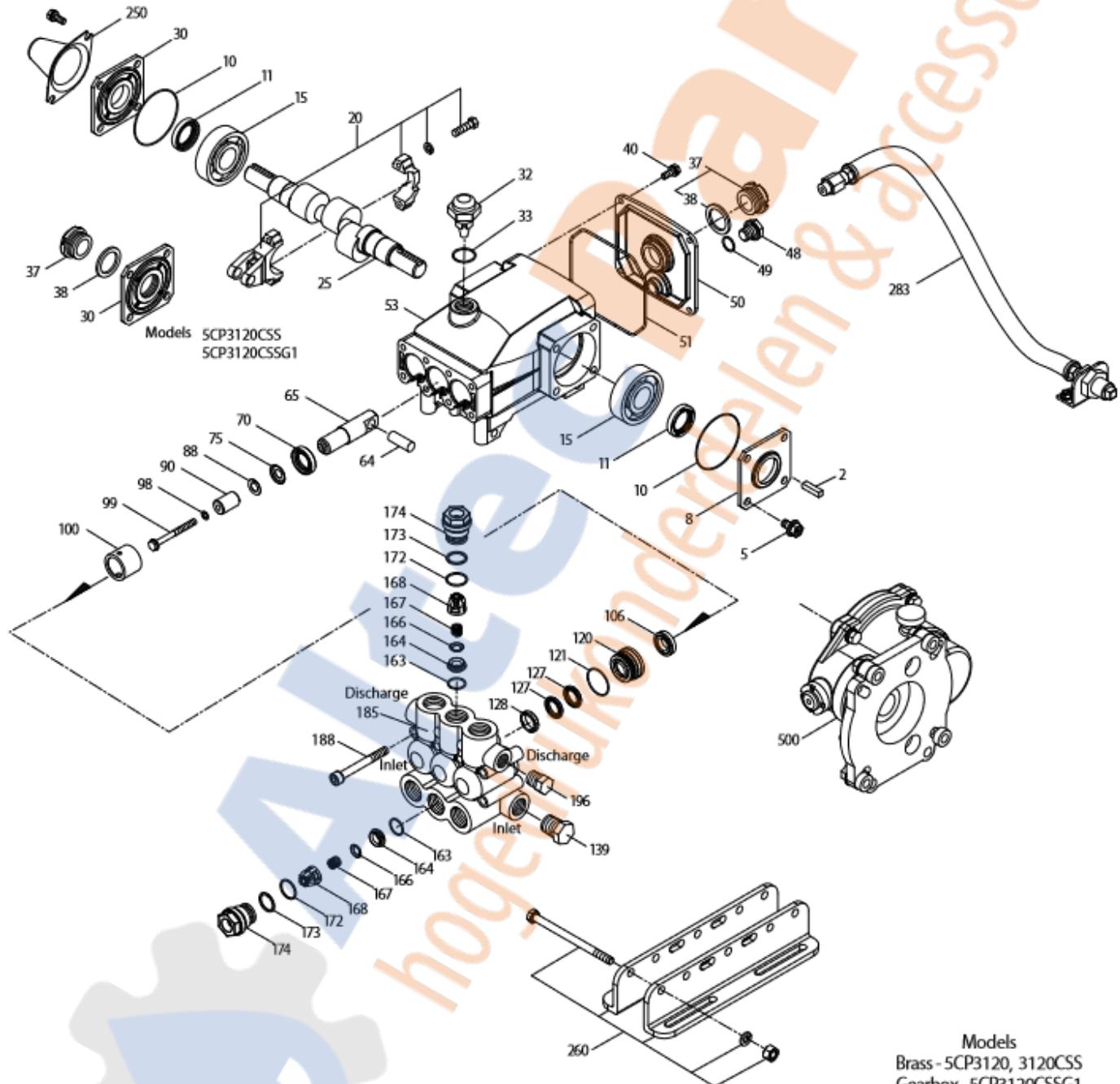
| | Model 5CP3120 | Model 5CP3120CSS | Model 5CP3120CSSG1 |
|-----------------------|----------------------|-------------------------|---------------------------|
| Flow | 15 l/min | 15 l/min | 17 l/min |
| Pressure range | 7 to 245 bar | 7 to 245 bar | 7 to 245 bar |
| RPM pump | 1420 RPM | 1420 RPM | 1645 RPM |
| RPM motor | - | - | 3353 RPM |
| Stroke | 18 mm | 18 mm | 18 mm |
| Weight | 9 kg | 9 kg | 12 kg |
| Dimensions | 277 x 254 x 147 mm | 277 x 218 x 147 mm | 284 x 291 x 163 mm |

Common specifications

| | |
|------------------------------------|-------------|
| Inlet pressure range | -2 to 4 bar |
| Bore | 16 mm |
| Crankcase capacity | 0,50 L |
| Standard liquid temperature | 71° C |
| Inlet ports (2) | 1/2" NPTF |
| Discharge ports (2) | 3/8" NPTF |
| Shaft diameter | 20 mm |

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

Exploded View



Models
Brass - 5CP3120, 3120CSS
Gearbox - 5CP3120CSSG1
October 2019

Parts list

| It. | Num. | Mat. | Num. | Mat. | Description | Qt | |
|-----|--------------|------------|---------------------|------------|---|--------------------|---|
| | | | 5CP3120CSS | | | | |
| | | | 5CP3120CSSG1 | | | | |
| 2 | 30057 | STL | 30057 | STL | Key (M6x6x25) | 1 | |
| 5 | 126542 | STCP R | 126542 | STCP R | Screw, HHC sems (M8x16) | 8-8-4 | |
| 8 | 46910 | AL | 46910 | AL | Cover, bearing | 2-1-0 | |
| 10 | 14028 | NBR | 14028 | NBR | O-ring, bearing cover – 70D | 2-2-1 | |
| 11 | 43222 | NBR | 43222 | NBR | Seal, oil, crankshaft – 70D | 2-1-0 | |
| 15 | 14480 | STL | 14480 | STL | Bearing, ball | 2-2-2 | |
| 20 | 48742 | TNM | 48742 | TNM | Rod, connecting assy {10/01} | 3 | |
| 25 | 46928 | FCM | - | - | Crankshaft, M18, dual end | 1 | |
| | - | - | 48233 | FCM | Crankshaft, M18, single end | 1 | |
| 30 | - | - | 49776 | AL | Cover, bearing blind (after 12/10) | 1 | |
| | - | - | 48224 | AL | Cover, bearing blind – 5CP3120G1 (prior to 12/10) | 1 | |
| 32 | 46798 | - | 46798 | - | Cap, oil filler, domed | 1 | |
| 33 | 14179 | NBR | 14179 | NBR | O-ring, oil filler cap – 70D | 1 | |
| 37 | 92241 | PC | 92241 | PC | Gauge, oil, bubble w/gasket – 80D | 1-2-2 | |
| 38 | 44428 | NBR | 44428 | NBR | Gasket, flat, oil gauge – 80D | 1-2-2 | |
| 40 | 125824 | STCP R | 125824 | STCP R | Screw, HHC sems (M6x16) | 4 | |
| 48 | 25625 | STCP | 25625 | STCP | Plug, drain (1/4"x19BSP) | 1 | |
| 49 | 23170 | NBR | 23170 | NBR | O-ring, drain plug – 70D | 1 | |
| 50 | 46940 | AL | 46940 | AL | Cover, rear | 1 | |
| 51 | 14044 | NBR | 14044 | NBR | O-ring, rear cover | 1 | |
| 53 | 48617 | AL | 48617 | AL | Crankcase | 1 | |
| 64 | 46746 | CM | 46746 | CM | Pin, crosshead | 3 | |
| 65 | 48458 | BBNP | 48458 | BBNP | Rod, plunger | 3 | |
| 70 | 46838 | NBR | 46838 | NBR | Seal, oil, crankcase – 70D | 3 | |
| 75 | 43900 | S | 43900 | S | Slinger, barrier | 3 | |
| 88 | 45697 | S | 45697 | S | Washer, keyhole (M18x10) | 3 | |
| 90 | 46884 | CC | 46884 | CC | Plunger (M16x50) | 3 | |
| 98 | 46730 | NBR | 46730 | NBR | Washer, seal – 90D | 3 | |
| | 48394 | FPM | 48394 | FPM | Washer, seal – 90D | 3 | |
| # | 48432 | EPDM | # | 48432 | EPDM | Washer, seal | 3 |
| 99 | + 48201 | SS | + 48201 | SS | Retainer, plunger w/stud (M6) | 3 | |
| 100 | 46749 | PVDF | 46749 | PVDF | Retainer, seal | 3 | |
| 106 | 43316 | NBR | 43316 | NBR | Seal, LPS w/S-Spg | 3 | |
| | 106660 | FPM | 106660 | FPM | Seal, LPS w/S-Spg | 3 | |
| # | 49134 | EPDM | # | 49134 | EPDM | Seal, LPS w/S-Spg | 3 |
| | 76316 | ST2 | 76316 | ST2 | Seal, LPS w/S-Spg | 3 | |
| 120 | 46888 | BB | 46888 | BB | Case, seal (press-in-style) | 3 | |
| 121 | 13978 | NBR | 13978 | NBR | O-ring, seal case – 70D | 3 | |
| | 14329 | FPM | 14329 | FPM | O-ring, seal case | 3 | |
| # | 48904 | EPDM | # | 48904 | EPDM | O-ring, seal case | 3 |
| 127 | 43319 | SNG | 43319 | SNG | V-packing | 6 | |
| | 46287 | HT | 46287 | HT | V-packing | 6 | |
| 128 | 46618 | NY | 46618 | NY | Adapter, male | 3 | |
| 139 | 22179 | BBCP | 22179 | BBCP | Plug, inlet (1/2" NPTM) | 1 | |
| 163 | 17547 | NBR | 17547 | NBR | O-ring, seat – 85D | 6 | |
| | 11685 | FPM | 11685 | FPM | O-ring, seat – 85D | 6 | |
| # | 46648 | EPDM | # | 46648 | EPDM | O-ring, seat – 70D | 6 |
| 164 | 45790 | S | 45790 | S | Seat | 6 | |
| 166 | 46429 | S | 46429 | S | Valve | 6 | |
| 167 | 43750 | S | 43750 | S | Spring | 6 | |
| 168 | + 44565 | PVDF | + 44565 | PVDF | Retainer, spring | 6 | |
| 172 | 17549 | NBR | 17549 | NBR | O-ring, valve plug – 70D | 6 | |

| | | | | | |
|---------|--------------------|---------|--------|---|---|
| 26996 | FPM | 26996 | FPM | O-ring, valve plug – 70D | 6 |
| # 49133 | EPDM | # 49133 | EPDM | O-ring, valve plug | 6 |
| 173 | 48365 D | 48365 | D | Back-up-ring, valve plug | 6 |
| 174 | 45900 BB | 45900 | BB | Plug, valve | 6 |
| 185 | 46886 FBB | 46886 | FBB | Manifold, head | 1 |
| 188 | 126513 STCP R | 126513 | STCP R | Screw, HSH (M8x70) | 8 |
| 196 | 22187 BBCP | 22187 | BBCP | Plug, discharge (3/8" NPTM) | 1 |
| 250 | 118672 STCP | - | - | Protector, shaft | 1 |
| 255 | 30243 STZP | 30243 | STZP | Mount, direct | 1 |
| 260 | 30611 STZP R | 30611 | STZP R | Mount, rail, assy (4.22") | 1 |
| | 30613 STZP R | 30613 | STZP R | Mount, rail, assy (5.02") | 1 |
| | 76513 STZP R | 76513 | STZP R | Mount, rail, assy (5.52") | 1 |
| 265 | 30659 - | - | - | Kit, complete mounting (incl. 30611, 30633, 118672)(belt drive only) | 1 |
| 283 | 34334 - | 34334 | - | Kit, oil drain (3/8" x 24") (see individual data sheet) | 1 |
| 299 | 814843 FBB | 814843 | FBB | Head, complete | 1 |
| 300 | 33629 NBR | 33629 | NBR | Kit, seal (incls: 98, 106, 121, 127, 128) standard | 1 |
| | 31340 FPM* | 31340 | FPM* | Kit, seal (incls: 98, 106, 121, 127, 128) | 1 |
| | 31665 HT | 31665 | HT | Kit, seal (incls: 98, 106, 121, 127, 128) | 1 |
| # 31730 | EPDM* | # 31730 | EPDM* | Kit, seal (incls: 98, 106, 121, 127, 128) | 1 |
| | 76556 STHT | 76556 | STHT | Kit, seal (incls: 98, 106, 120, 121, 127, 128) | 1 |
| 310 | 33060 NBR | 33060 | NBR | Kit, valve (incls: 163, 164, 166, 167, 168, 172, 173) standard | 2 |
| | 31345 FPM | 31345 | FPM | Kit, valve (incls: 163, 164, 166, 167, 168, 172, 173) | 2 |
| # 31735 | EPDM | # 31735 | EPDM | Kit, valve (incls: 163, 164, 166, 167, 168, 172, 173) | 2 |
| 500 | - - | 8076 | - | Gearbox (see individual data sheet) | 1 |

Bold print numbers are unique to a particular pump model. Italics are optional items. { } Date of latest production change.

Silicone oil/grease required. + Production parts are different than repair parts. R Components comply with RoHS directive.

* Review individual parts in each kit for material code identification.

See 'Tech Bulletins' 024, 036, 043, 053, 060, 061, 064, 073, 074, 078 and 083 for additional information.

Material codes: (not part or part number)

| | | | | | |
|------|-------------------------------|------|----------------------------|------|-------------------------|
| AL | Aluminum | FCM | Forged chrome-moly | SS | 316 stainless steel |
| BB | Brass | FPM | Fluorocarbon | ST2 | Special blend PTFE grey |
| BBCP | Brass / chrome plated | HT | Hi-Temp (EPDM alternative) | STCP | Steel / chrome plated |
| BBNP | Brass nickel plated | NBR | Medium nitrile (Buna-N) | STHT | Special PTFE High temp |
| CC | Ceramic | NY | Nylon | STL | Steel |
| CM | Chrome-moly | PC | Poly Carbonate | STZP | Steel / zinc plated |
| D | Ectal | PVDF | Polyvinylidene fluoride | TNM | Special high strength |
| EPDM | Ethylene propylene diene mon. | S | 304 stainless steel | | |
| FBB | Forged brass | SNG | Special blend (Buna) | | |