



Technical specifications and instructions



Direct drive Plunger Pump

Models

1CX013R

1CX025R

1CX050R

Specifications (*)

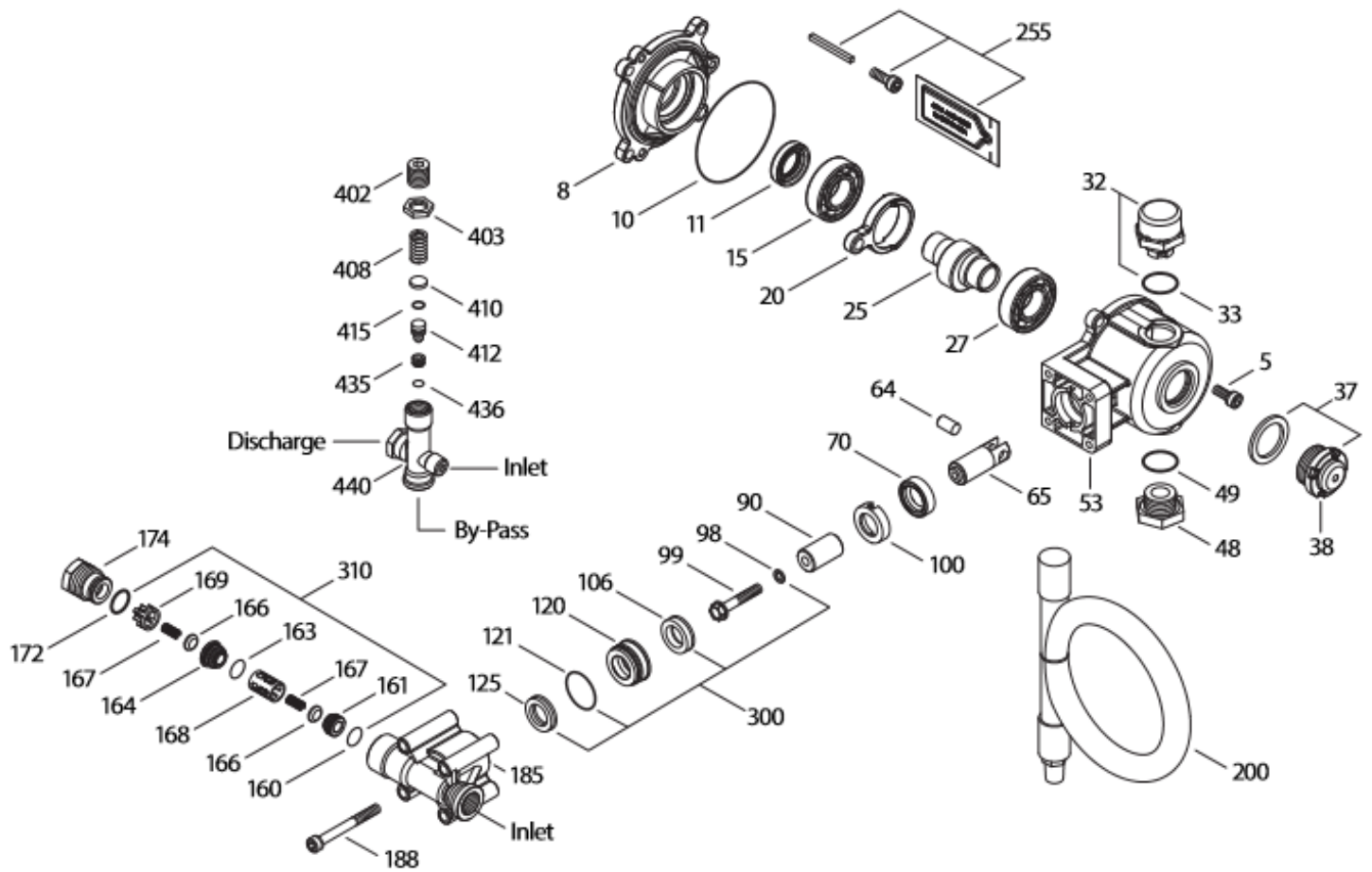
	1CX013R	1CX025R	1CX050R
Flow	0,4 l/min	0.8 l/min	1,5 l/min
Pressure range	6,9 to 69 bar	6,9 to 69 bar	6,9 to 69 bar
Stroke (single plunger)	2.0 mm	3.3 mm	6.3 mm

Common Specifications

Maximum RPM	1420 RPM
Inlet pressure range	flooded to 4 bar
Bore	16 mm
Max. liquid temperature	60°C
Crankcase capacity	0,06 L
Inlet port	3/8" NPTF
Discharge port	1/4" NPTF
By-pass port	1/4" NPTF
Shaft diameter	12.7 mm
Weight (pump only)	1,56 kg
Dimensions (pump only)	92 x 130 x 174 mm

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

Exploded View



Parts list

Item	Num.	Mat.	Description	Qty
2	76059	STL	Key (1/8 sq x 1.5") (included in 30555)	1
5	180318	STCP R	Screw, bearing cover (M6x14)	3
8	49563	AL	Cover, bearing	1
10	14035	NBR	O-ring, bearing cover – 70D	1
11	49565	NBR	Seal, oil – 70D	1
15	47862	STL	Bearing, inner ball	1
20	49566	TNM	Rod, Connecting	1
25	49560	STL	Crankshaft – 1CX050R, 6.3 mm	1
	49602	STL	Crankshaft – 1CX013R, 2.0 mm	1
	49598	STL	Crankshaft – 1CX025R, 3.3 mm	1
27	47862	STL	Bearing, outer ball	1
32	129254	ABS	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	49554	AL	Crankcase	1
64	46229	CM	Pin, crosshead	1
65	542402	BB	Rod, plunger	1
70	47215	NBR	Seal, oil – 70D	1
90	542403	CC	Plunger (M16x27)	1
98	46730	NBR	Washer, seal – 90D	1
99	542405	S	Retainer, plunger (M6 x 35)	1
100	46233	D	Retainer, seal	1
106	48222	NBR	Seal, LPS w/S-Spg	1
	76089	ST2	Seal, LPS w/SS-Spg	1
120	547357	BB	Case, seal	1
121	13976	NBR	O-ring, seal case – 70D	1
125	46240	NBR	Seal, HPS w/S	1
	76088	ST2	Seal, HPS	1
160	13965	NBR	O-ring, inlet seat – 70D	1
161	545177	S	Seat, inlet	1
163	19285	NBR	O-ring, discharge seat – 70D	1
164	545178	S	Seat, discharge	1
166	46764	S	Valve	2
167	46865	S	Spring	2
168	543988	PVDF	Retainer, inlet spring	1
169	49569	PVDF	Retainer, discharge spring	1
172	11346	NBR	O-ring, discharge fitting – 70D	1
174	49572	BB	Plug, valve with 1/4' NPTF port, O-ring	1
185	49515	BB	Head, manifold	1
188	89953	STCP	Screw, HSH (M6x55)	4
200	76225	-	Hose, Pulse (3/8" x 24")	1
255	30555	STZP R	Assy, bolt mount	1
300	76063	NBR	Kit, seal (incl. 98,106,121,125)	1
310	76033	NBR	Kit, valve (incl. 160,161,163,164,166,167,168,169,172)	1
400	7561	BB	Regulator	1
402	49681	BB	Adjuster, pressure	1
403	49682	BB	Nut, locking	1
408	49876	STZP	Spring, coil	1
410	549352	STCP R	Retainer, spring	1
412	49877	S	Stem, piston	1
415	14759	NBR	O-ring, piston stem	1
435	49878	S	Seat	1

436	25300	NBR	O-ring, seat – 70D	1
440	-	BB	Body	1
468	31555	NBR	<i>Kit, o-ring (incl. 172, 415, 436)</i>	1

Bold part numbers are unique to a particular pump model. Italics are optional items.

R Components comply with RoHS directive.

See 'Tech Bulletins' 024, 036, 043, 074 and 083 for additional information.

Material codes: (not part or part number)

ABS	ABS plastic	NBR	Medium nitrile (Buna-N)	STHT	Special PTFE high strength
AL	Aluminum	NY	Nylon	STL	Steel
BB	Brass	PVDF	Polyvinylidene fluoride	STZP	Steel / zinc plated
CC	Ceramic	S	304SS	TNM	Special high strength
CM	Chrome-Moly	ST2	Special PTFE 2		
D	Acetal	STCP	Steel / chrome plated		

Note: Pump is shipped with two black caps w/O-rings for shipping purposes. Remove black cap w/O-ring on top of pump and replace with loose red cap w/O-ring as supplied in box.