



Technical specifications and instructions



Direct-Drive Plunger pumps

Brass Electric models

**4DX10ER, 4DX15ER,
4DX20ER, 4DX27ER,
4DX30ER**

Specifications (*)

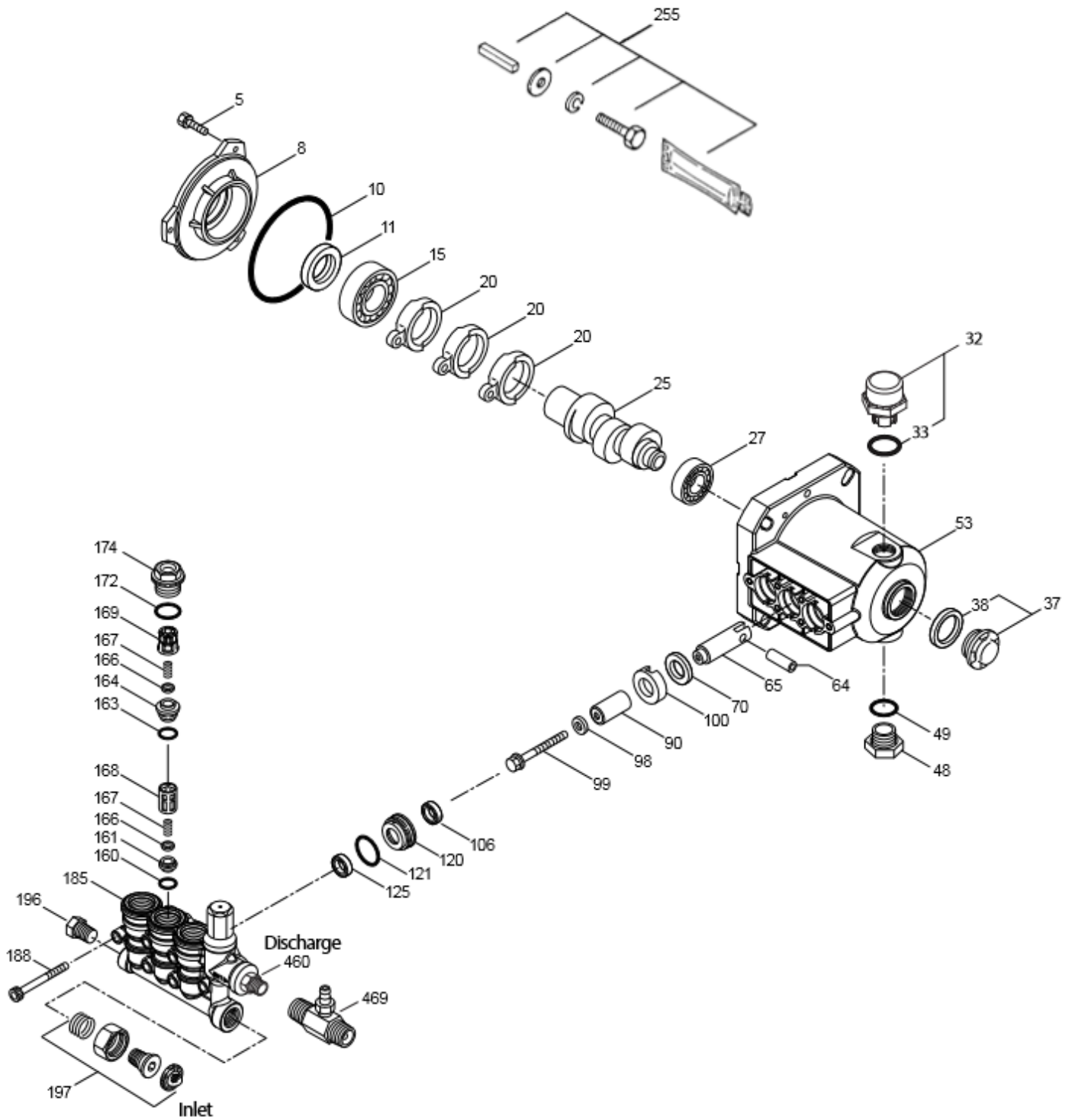
	4DX10ER	4DX15ER	4DX20ER
Flow	3,1 l/min	4,6 l/min	6,2 l/min
Max. discharge pressure	138 bar	138 bar	138 bar
Max. RPM	2800 RPM	2800 RPM	2800 RPM
Stroke	2,0 mm	3,0 mm	4,00 mm
	4DX27ER	4DX30ER	
Flow	8,3 l/min	9,25 l/min	
Max. discharge pressure	138 bar	138 bar	
Max. RPM	2800 RPM	2800 RPM	
Stroke	5,6 mm	6,2 mm	

Common Specifications

Inlet pressure range	flooded to 4 bar
Shaft diameter	15,8 mm
Bore	16 mm
Max. liquid temperature	60° C
Crankcase capacity	0,25 L
Inlet port (standard)	3/8" NPTF
Discharge ports (1)	3/8" NPTM
Weight	4,9 kg
Dimensions	182 x 196 x 158 mm

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

Exploded View



Parts list

Item	Num.	Mat.	Description	Qty	
5	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	1	
15	14488	STL	Bearing, ball, inner	1	
20	547048	TNM	Rod, Connecting	3	
25	132183	CM	Crankshaft, 2800 RPM, 5/8", 2,0 mm	4DX10ER	1
	132185	CM	Crankshaft, 2800 RPM, 5/8", 3,0 mm	4DX15ER	1
	132186	CM	Crankshaft, 2800 RPM, 5/8", 4,0 mm	4DX20ER	1
	132187	CM	Crankshaft, 2800 RPM, 5/8", 5,6 mm	4DX27ER	1
	132188	CM	Crankshaft, 2800 RPM, 5/8", 6,2 mm	4DX30ER	1
27	15710	STL	Bearing, ball, outer	1	
32	549726	-	Cap, vented w/O-ring (rain cap)	1	
33	14179	NBR	O-ring, oil filler cap – 70D	1	
37	92241	-	Gauge, bubble oil w/gasket	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	49801	AL	Crankcase	1	
64	46229	CM	Pin, crosshead	3	
65	132190	BB	Rod, plunger	3	
70	47215	NBR	Seal, oil – 70D	3	
90	542403	CC	Plunger (M16x27)	3	
98	46730	NBR	Washer, seal – 90D	3	
	48394	FPM	Washer, seal – 90D	3	
99	542405	S	Retainer, plunger (M6x35)	3	
100	46233	D	Retainer, seal	3	
106	+ 48222	NBR	Seal, LPS w/S-Spg	3	
	76089	ST2	Seal, LPS w/SS-Spg	3	
120	547357	BB	Case, seal	3	
121	13976	NBR	O-ring, seal case – 70D	3	
	48522	FPM	O-ring, seal case	3	
125	46240	NBR	Seal, HPS w/S	3	
	76088	ST2	Seal, HPS	3	
160	13965	NBR	O-ring, seat, inlet – 70D	3	
	76656	FPM	O-ring, seat, inlet – 70D	3	
161	545177	S	Seat, inlet	3	
163	19285	NBR	O-ring, seat, discharge – 70D	3	
	14166	FPM	O-ring, seat, discharge	3	
164	545178	S	Seat, discharge	3	
166	46764	S	Valve	6	
167	46865	S	Spring	6	
168	543988	PVDF	Retainer, spring, inlet	3	
169	49764	PVDF	Retainer, spring, discharge	3	
172	142807	NBR	O-ring, plug – 90D	3	
	547743	FPM	O-ring, plug	3	
174	547104	BB	Plug, valve (M20x1,5)	3	
185	132192	FBB	Head, manifold w/integral regulator/unloader body	1	
188	549357	STCP R	Screw, HSH (M6x60)	6	
196	22177	BBCP	Plug, accessory	1	
197	941516	BB	Assy, GH, 3/8" NPT	1	

255	30516	STZP R	Assy, bolt mount	1
300	33053	NBR	Kit, seal (incl.98,106,121,125) standard	1
	76453	FPM	Kit, seal (incl.98,106,121,125)	1
310	76978	NBR	Kit, valve (incl. 160,161,163,164,166,167,168,169,172) standard	1
	76463	FPM	Kit, valve (incl. 160,161,163,164,166,167,168,169,172)	1
400	-	-	Regulator/unloader, integral (see individual parts)	1
460	107681	BB	Fitting, discharge	1
469	7231	BB	Injector, chemical, fixed	1

Bold print part numbers are unique to a particular pump model. Italics are optional items. { } Date of latest production change. R Components comply with RoHS directive. + Production parts are different than repair parts.

View 'Tech Bulletins' 002, 024, 036, 043, 055, 074, 083, 086 and 094 for additional information.

Material codes: (not part or part number)

AL	Aluminum	FPM	Fluorocarbon	STL	Steel
BB	Brass	NBR	Medium nitrile (Buna-N)	STZP	Steel / zinc plated
BBCP	Brass Chrome plated	NY	Nylon	TNM	Special high strength
CC	Ceramic	PVDF	Polyvinylidene fluoride		
CM	Chrome-moly	S	304 stainless steel		
D	Acetal	ST2	Special PTFE 2		
FBB	Forged Brass	STCP	Steel / chrome plated		

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

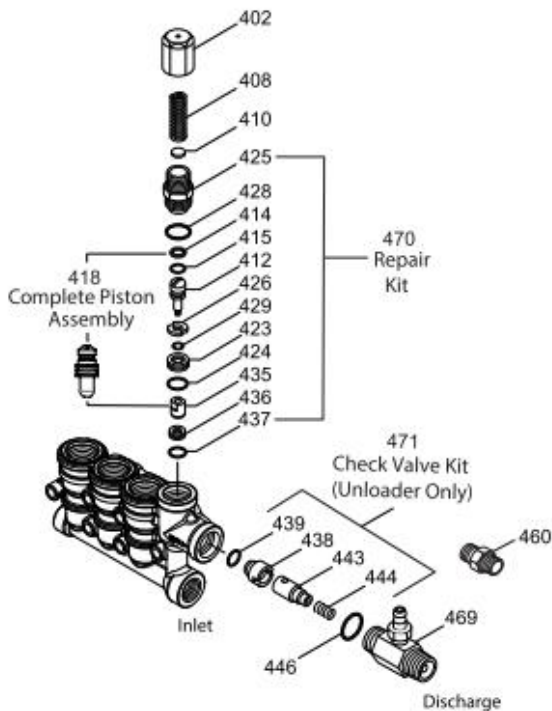
INTEGRAL REGULATOR / UNLOADER

SPECIFICATIONS

Flow	11,7 l/m
PSI range	7-138 bar
Inlet Port	3/8" NPTF
Discharge Port	3/8" NPTM

PARTS LIST

Item	PN	Mat	Description	Qty
401	032088	NY	Handle, adjustable (not shown)	1
402	46570	BB	Cap, adjusting	1
408	33394	STZP 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
	76643	FPM	O-ring, piston stem – 70D	1
418	-	-	Assy, piston included in repair kit	1
423	46249	BB	Retainer, valve	1
424	13966	NBR	O-ring, Valve retainer – outer - 70D	1
	76638	FPM	O-ring, valve retainer – outer – 70D	1
425	46248	BB	Retainer, piston	1
426	46250	S	Washer	1
428	26133	NBR	O-ring, piston retainer – 80D	1
	14320	FPM	O-ring, piston retainer – 75D	1
429	17399	NBR	O-ring, valve retainer (inner) – 80D	1
	14160	FPM	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
	14303	FPM	O-ring, seat – 70D	1
438	46254	NY	Seat, check valve	1
439	13963	NBR	O-ring, seat, check valve – 70D	1
	14303	FPM	O-ring, seat, check valve – 70D	1
443	541060	BB	Valve, check w/O-ring	1
444	45924	S	Spring	1
446	26133	NBR	O-ring, body – 80D	1
	14320	FPM	O-ring, body – 75D	1
460	107681	BB	Fitting, discharge (3/8" NPTM)	1
468	76754	NBR	Kit, O-ring (414,415,424,428,429,437) st	1
	76467	FPM	Kit, O-ring (414,415,424,428,429,437)	1
469	7231	BB	Injector, chemical fixed	1
470	76031	NBR	Kit, repair (418,425,428,436,437) st	1
	76468	FPM	Kit, repair (418,425,428,436,437)	1
471	+76146	NBR	Kit, check valve (438,439,443,444,446) st	1
	76469	FPM	Kit, check valve (438,439,443,444,446) st	1



MODEL 7231 FIXED CHEMICAL INJECTOR

SPECIFICATIONS

GPM	11,7 l/m
Nozzle orifice	1,8 mm
Hose barb	1/4"
Tapped barb	8/32" UNF
Inlet port	M18x1.0
Discharge port	3/8" NPTM
Weight	0,15 kg
Dimensions	52 x 25 x 45 mm

PARTS LIST

Item	PN	Mat	Description	Qty
472	46630	BB	Barb	1
476	-	NBR	O-ring, barb – 70D	1
	-	FPM	O-ring, barb	1
477	-	S	Ball	1
478	-	S	Spring	1
479	46257	S	Orifice	1
480	-	BB	Body	1
483	76176	NBR	Kit, repair (incl. 476,477,478) st	1
	76476	FPM	Kit, repair (incl. 476,477,478)	1

