

# HYDRAULICS

## Pump & Cylinder Matching Guide

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After selecting cylinder, use matching guide to select pump with sufficient oil capacity to fully extend cylinder.

Enerpac Model	Item No.	P802	P392	P392ALSS	P80	P142	P39	P462	PATG1102N & PATG1105N	PA133	PUJ1200B & PUJ1201B	ZE3308SB	ZE4308MB & ZE4308LB	ZA4208MX	
		3KD31	6W462	1MTF3	4Z481	6W461	4Z480	4PU57	1Z907 & 5ZL44	4Z482 (36)	4ZC75 & 5ZL45	6BU67	6BU65 & 6BU66	1MTF4	
Number of Handle Strokes per Inch of Cylinder Plunger Travel		No Load\ Load	No Load\ Load	No Load\ Load	No Load\ Load	No Load\ Load	No Load\ Load	No Load\ Load	No Load\ Load	No Load\ Load	No Load\ Load	No Load\ Load	No Load\ Load	No Load\ Load	
Seconds per Inch of Cylinder Plunger Travel															
RC-50	3KD48	1\7	2\7	2\7	1\7	5\18	7\7	1\3	1.0\5.9	1.2\7.4	—	—	—	—	
RC-51	3KD49	1\7	2\7	2\7	1\7	5\18	7\7	1\3	1.0\5.9	1.2\7.4	—	—	—	—	
RC-53	4Z483	1\7	2\7	2\7	1\7	5\18	7\7	1\3	1.0\5.9	1.2\7.4	—	—	—	—	
RC-53NV	1MTF2	1\7	2\7	2\7	1\7	5\18	7\7	1\3	1.0\5.9	1.2\7.4	—	—	—	—	
RC-55	4Z484	1\7	2\7	2\7	1\7	5\18	7\7	1\3	1.0\5.9	1.2\7.4	—	—	—	—	
RC-57	3KD50	1\7	2\7	2\7	1\7	5\18	7\7	1\3	1.0\5.9	1.2\7.4	—	—	—	—	
RC-59	3KD51	1\7	2\7	2\7	1\7	5\18	7\7	1\3	1.0\5.9	1.2\7.4	—	—	—	—	
RC-101	3KD42	1\15	4\15	4\15	2\15	11\41	14\14	1\8	2.2\13.4	2.7\16.8	—	—	—	—	
RC-102	4Z485	1\15	4\15	4\15	2\15	11\41	14\14	1\8	2.2\13.4	2.7\16.8	—	—	—	—	
RC-102NV	1MTF1	1\15	4\15	4\15	2\15	11\41	14\14	1\8	2.2\13.4	2.7\16.8	—	—	—	—	
RC-104	6Z783	1\15	4\15	4\15	2\15	11\41	14\14	1\8	2.2\13.4	2.7\16.8	—	—	—	—	
RC-106	4Z486	1\15	4\15	4\15	2\15	11\41	14\14	1\8	2.2\13.4	2.7\16.8	—	—	—	—	
RC-106NV	1MTF9	1\15	4\15	4\15	2\15	11\41	14\14	1\8	2.2\13.4	2.7\16.8	—	—	—	—	
RC-108	3KD43	1\15	4\15	4\15	2\15	11\41	14\14	1\8	2.2\13.4	2.7\16.8	—	—	—	—	
RC-1010	4Z487	1\15	4\15	4\15	2\15	—	14\14	1\8	2.2\13.4	2.7\16.8	—	—	—	—	
RC-152	3KD44	1\21	5\21	5\21	3\21	—	20\20	1\11	3.1\18.8	3.8\23.6	0.949.4	0.794.5	—	—	
RC-154	5ZL46	1\21	5\21	5\21	3\21	—	20\20	1\11	3.1\18.8	3.8\23.6	0.949.4	0.794.5	—	—	
RC-156	6W463	1\21	5\21	5\21	3\21	—	20\20	1\11	3.1\18.8	3.8\23.6	0.949.4	0.794.5	—	—	
RC-158	5ZL47	1\21	5\21	5\21	3\21	—	20\20	1\11	3.1\18.8	3.8\23.6	0.949.4	0.794.5	—	—	
RC-1510	6W464	1\21	5\21	5\21	3\21	—	20\20	1\11	3.1\18.8	3.8\23.6	0.949.4	0.794.5	—	—	
RC-251	5ZL48	2\34	8\34	8\34	5\34	—	33\33	1\18	5.2\30.9	6.2\38.6	1.5\15.5	1.3\7.4	44\5.2	36\3.9	
RC-252	3KD45	2\34	8\34	8\34	5\34	—	33\33	1\18	5.2\30.9	6.2\38.6	1.5\15.5	1.3\7.4	44\5.2	36\3.9	
RC-254	3KD46	2\34	8\34	8\34	5\34	—	33\33	1\18	5.2\30.9	6.2\38.6	1.5\15.5	1.3\7.4	44\5.2	36\3.9	
RC-256	4Z488	2\34	8\34	8\34	5\34	—	33\33	1\18	5.2\30.9	6.2\38.6	1.5\15.5	1.3\7.4	44\5.2	36\3.9	
RC-258	3KD47	2\34	8\34	8\34	5\34	—	—	1\18	5.2\30.9	—	1.5\15.5	1.3\7.4	44\5.2	36\3.9	
RC-2510	6W473	2\34	—	—	5\34	—	—	1\18	5.2\30.9	—	1.5\15.5	1.3\7.4	44\5.2	36\3.9	
RC-308	5ZL49	3\43	—	—	7\43	—	—	1\23	6.5\39.0	7.8\48.7	1.9\19.5	1.6\9.3	56\6.5	46\4.9	
RC-502	5ZL50	5\73	—	—	—	—	—	2\38	11.0\66.3	—	3.3\33.2	2.8\15.8	95\11.1	78\8.3	
RC-504	5ZL51	5\73	—	—	—	—	—	2\38	11.0\66.3	—	3.3\33.2	2.8\15.8	95\11.1	78\8.3	
RC-506	4Z489	5\73	—	—	—	—	—	2\38	11.0\66.3	—	3.3\33.2	2.8\15.8	95\11.1	78\8.3	
RCH-121H	6Z269	1\18	4\18	4\18	3\18	—	19\19	1\10	2.76\16.56	4.2\20.8	0.83\8.3	—	—	—	
RCH-123	3KD54	1\18	4\18	4\18	3\18	—	19\19	1\10	2.76\16.56	4.2\20.8	0.83\8.3	—	—	—	
RCH-202	6Z270	2\18	7\32	7\32	3\19	—	18\18	1\17	4.73\28.38	7.1\35.4	1.4\14.2	1.2\6.8	—	—	
RCH-206	5ZL52	2\18	7\32	7\32	3\19	—	18\18	1\17	4.73\28.38	7.1\35.4	1.4\14.2	1.2\6.8	—	—	
RCH-302	6Z271	3\48	10\43	10\43	7\43	—	—	1\23	6.5\39.0	7.8\48.7	1.9\19.5	1.6\9.3	56\6.5	46\4.9	
RCH-306	5ZL53	3\48	10\43	10\43	7\43	—	—	1\23	6.5\39.0	7.8\48.7	1.9\19.5	1.6\9.3	56\6.5	46\4.9	
RCH-603	5ZL54	—	—	—	—	—	—	2\44	12.7\76.38	—	3.3\24.9	2.8\16.2	1\13	96\9.8	
RCH-606	5ZL55	—	—	—	—	—	—	2\44	12.7\76.38	—	3.3\24.9	2.8\16.2	1\13	96\9.8	
RCS-101	6Z066	1\15	4\15	4\15	2\15	11\41	14\14	1\8	2.2\13.4	2.7\16.8	0.67\6.7	—	—	—	
RCS-201	6Z067	2\30	7\30	7\30	5\30	—	28\28	1\17	4.43\26.58	6.7\33.3	1.3\13.3	—	—	—	
RCS-302	6Z068	3\43	10\43	10\43	7\43	—	41\41	1\23	6.5\39.0	7.8\48.7	1.9\19.5	1.6\9.3	56\6.5	46\4.9	
RCS-502	6Z272	5\73	—	—	—	—	—	2\32	11.0\66.3	13.3\82.9	3.3\33.2	2.8\15.8	95\11.1	78\8.3	
RSM-50	6Z782	1\7	2\7	2\7	1\7	5\18	7\7	1\3	1.0\5.9	1.2\7.4	—	—	—	—	
RSM-100	3KD55	1\15	4\15	4\15	2\15	11\41	14\14	1\8	2.2\13.4	2.7\16.8	0.67\6.7	—	—	—	
RSM-200	3KD56	2\30	7\30	7\30	5\30	—	28\28	1\17	4.43\26.58	6.7\33.3	1.3\13.3	1.1\6.4	—	—	
RSM-300	6W466	3\43	10\43	10\43	7\43	—	41\41	1\23	6.5\39.0	7.8\48.7	1.9\19.5	1.6\9.3	—	—	
RSM-500	6W467	—	—	—	—	—	—	2\38	11.0\66.3	13.3\82.9	3.3\33.2	2.8\15.8	—	—	
RSM-750	5ZL57	—	—	—	—	—	—	2\55	15.9\95.9	19.1\119.3	4.8\47.7	4.0\22.7	—	—	
RSM-1000	5ZL56	—	—	—	—	—	—	3\71	20.6\123.9	24.8\154.7	6.2\61.9	5.2\29.5	—	—	
WR-5	3KD94	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	
WR-15	3KD93	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	
RAC-1006	4PU58	9\137	—	—	—	—	—	3\71	—	—	—	—	1.8\20.7	1.5\15.5	
RAC-304	4PU59	3\43	10\43	10\43	7\43	—	—	1\23	—	—	—	—	56\6.5	46\4.9	
RAC-306	4PU60	3\43	10\43	10\43	7\43	—	—	1\23	—	—	—	—	56\6.5	46\4.9	
RAC-504	4PU61	5\73	16\73	16\73	11\73	—	—	2\38	—	—	—	—	95\11.1	78\8.3	
RAC-506	4PU62	5\73	—	—	11\73	—	—	2\38	—	—	—	—	95\11.1	78\8.3	
RCS-1002	4PU63	9\137	30\137	30\137	21\137	—	—	3\71	—	—	—	—	—	—	

Note: (—) Means that pump is not recommended with cylinder due to insufficient pump oil capacity, too much oil flow per inch of plunger travel, or too many pump handle strokes for convenience. Electric pumps' speed based on 60 Hz. Air pumps' speed based on 100 psi compressed air pressure.

Power Source	Enerpac Model	Item No.	5-Ton Cylinder No Load\ Load	10-Ton Cylinder No Load\ Load	15-Ton Cylinder No Load\ Load	25-Ton Cylinder No Load\ Load	30-Ton Cylinder No Load\ Load	50-Ton Cylinder No Load\ Load	75-Ton Cylinder No Load\ Load	100-Ton Cylinder No Load\ Load
<b>Number of Handle Strokes per Inch of Cylinder Plunger Travel</b>										
Hand (Composite)	P802	3KD31	1\7	1\15	1\21	2\34	3\43	5\73	—	—
Hand (Composite)	P392	6W462	2\7	4\15	5\21	8\34	10\43	16\73	—	—
Hand (Steel)	P80	4Z481	1\7	2\15	3\21	5\34	7\43	11\73	—	—
Hand (Composite)	P142	6W461	5\18	11\41	—	—	—	—	—	—
Hand (Steel)	P39	4Z480	7\7	14\14	20\20	—	—	—	—	—
Hand (Steel)	P462	4PU57	1\3	1\8	1\11	1\18	1\23	2\38	2\55	—
<b>Seconds per Inch of Cylinder Plunger Travel</b>										
Air (Turbo)	PATG1102N	1Z907	1.0\5.9	2.2\13.4	3.1\18.8	5.2\30.9	6.5\39.0	11.0\66.3	15.9\95.5	—
Air (Turbo)	PATG1105N	5ZL44	1.0\5.9	2.2\13.4	3.1\18.8	5.2\30.9	6.5\39.0	11.0\66.3	15.9\95.5	—
Air	PA133	4Z482	1.2\7.4	2.7\16.8	3.8\23.6	6.2\38.6	7.8\48.7	—	19.1\119.3	—
Electric (1/2 HP)	PUJ1200B	4ZC75	—	—	1.3\9.4	1.5\15.5	1.9\19.5	3.3\33.2	4.8\47.7	—
Electric (1/2 HP)	PUJ1201B	5ZL45	—	—	1.3\9.4	1.5\15.5	1.9\19.5	3.3\33.2	4.8\47.7	—
Electric (1 HP)	ZE3308SB	6BU67	—	—	0.79\4.5	6.9\7.7	8.7\9.7	1.5\16.6	2.1\23.9	2.8\30.9
Electric (1.7 HP)	ZU4308MB	6BU65	—	—	—	—	—	44\5.2	56\6.5	95\11.1
Electric (1.7 HP)	ZU4308LB	6BU66	—	—	—	—	—	44\5.2	56\6.5	95\11.1