

High Volume Pressure Booster Pump Submittal Data

FW0542 1020
Supersedes 0319

Job or Customer	
Engineer	
Contractor	
Submitted by	Date
Approved by	Date
Specification Reference	
Quote Date	Quote Number



CJ101 SERIES

For continuous-duty high flow, pressure boosting applications such as increasing water pressure from city mains or private water systems. Units are not self-priming but will lift water up to 25 ft. with foot valve and pump suction piping filled

with water. Heavy-duty cast-iron body, low lead brass or thermoplastic impellers, and mechanical seal with stainless steel, Buna N and carbon-silicon carbide parts. F&W 3450 RPM motor. NEMA 56J frame with threaded shaft.

Quantity	Model Number	System Discharge Pressure (PSI)	Flow (GPM)	System Inlet Pressure (PSI)	Volts	Phase	Comments

PUMP PERFORMANCE

CJ101 SERIES CENTRIFUGAL PUMPS, LOW LEAD BRASS IMPELLERS														MAX. PRESS. PSI	*MAX. CASE PRESS.	*MAX. LIQUID TEMP.	
MODEL NO.			HP	STAGES	LIFT FT.	Discharge Pressure PSI											
1 PHASE	3 PHASE	LESS MOTOR				10	20	30	40	50	60	70	80				90
CAPACITY U.S. GPM																	
CJ101B071AB CJ101B071TAB	CJ101B073AB CJ101B073TAB	CJ101B0710AB	3/4	2	5 15 25	39 38 31	34 33 29	29 26 23	21 18 12	5					54	160psig	200° F
CJ101B101AB CJ101B101TAB	CJ101B103AB CJ101B103TAB	CJ101B1010AB	1	2	5 15 25	42 40 32	38 36 31	33 31 28	26 24 21	18 14					62	160psig	200° F
CJ101B151AB CJ101B151TAB	CJ101B153AB CJ101B153TAB	CJ101B1510AB	1 1/2	2	5 15 25	48 44 34	44 42 33	39 37 32	34 31 29	27 24 20	17 10				69	160psig	200° F
CJ101B201AB CJ101B201TAB	CJ101B203AB CJ101B203TAB	CJ101B2010AB	2	2	5 15 25	56 50 37	52 49 36	47 45 35	41 39 34	34 31 27	24 19				70	160psig	200° F
CJ101C201AB CJ101C201TAB	CJ101C203AB CJ101C203TAB		2	3	5 15 25	49 45 35	47 44 34	43 42 33	40 39 32	36 35 31	32 31 29	28 26 23	22 19 15	12	98	160psig	200° F
CJ101C301AB CJ101C301TAB	CJ101C303AB Δ CJ101C303TAB		3	3	5 15 25	56 50 37	54 49 36	51 48 36	48 46 35	44 42 34	39 37 33	33 31 29	27 24 20	18	95	160psig	200° F

Δ Less than 50% US content



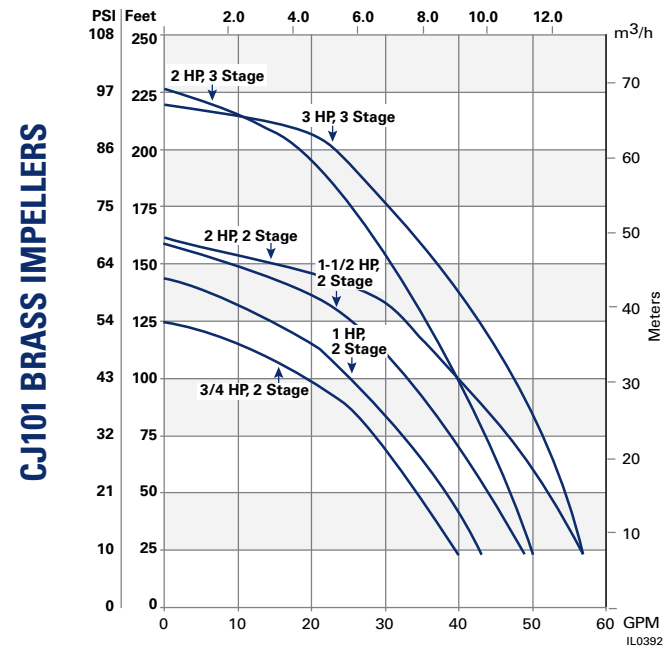
High Volume Pressure Booster Pump

PUMP PERFORMANCE

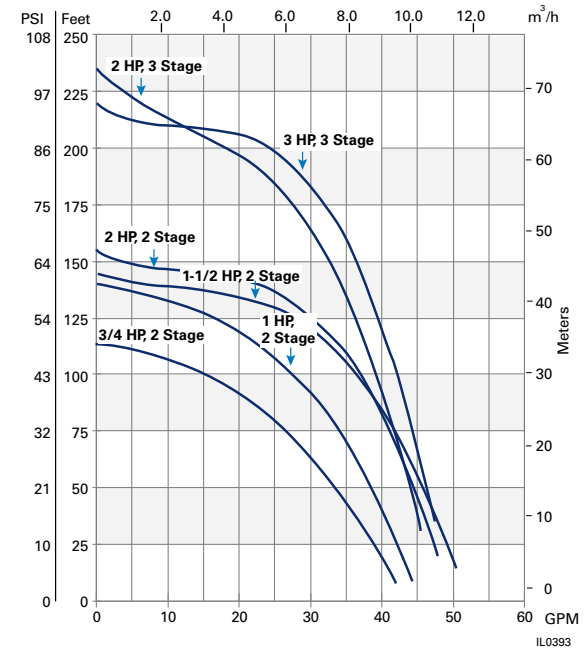
CJ101 SERIES CENTRIFUGAL PUMPS, PLASTIC IMPELLERS																
MODEL NO.		HP	STAGES	LIFT FT.	Discharge Pressure PSI									MAX. PRESS. PSI	*MAX. CASE PRESS.	*MAX. LIQUID TEMP.
1 PHASE	3 PHASE				10	20	30	40	50	60	70	80	90			
CAPACITY U.S. GPM																
CJ101P071	CJ101P073	3/4	2	5 15 25	41 38 32	35 32 29	28 26 22	20 13						49	160psig	160° F
CJ101P101	CJ101P103	1	2	5 15 25	45 42 35	40 39 33	35 33 26	28 22 15						60	160psig	160° F
CJ101P151	CJ101P153	1 1/2	2	5 15 25	54 48 37	50 46 35	44 42 33	38 35 28	28 23 17					61	160psig	160° F
CJ101P201	CJ101P203	2	2	5 15 25	55 49 37	52 47 36	47 45 33	41 39 32	34 30 26	23 17				67	160psig	160° F
CJ101D201	CJ101D203	2	3	5 15 25	44 26 26	44 26 24	44 24 24	41 24 24	37 22 20	32 20 15	28 22 11	22 16		101	160psig	160° F
	CJ101D303	3	3	5 15 25	54 48 36	52 47 36	50 46 36	47 45 35	44 42 33	39 37 31	33 30 27	25 22 19	15	95	160psig	160° F

*Do not exceed the maximum case pressure and maximum liquid temperature rating of the pump. Performance shown for 60Hz models. 50 Hz models also available. Suction and Discharge Tappings 1-1/2" X 1-1/4"

PERFORMANCE CURVES

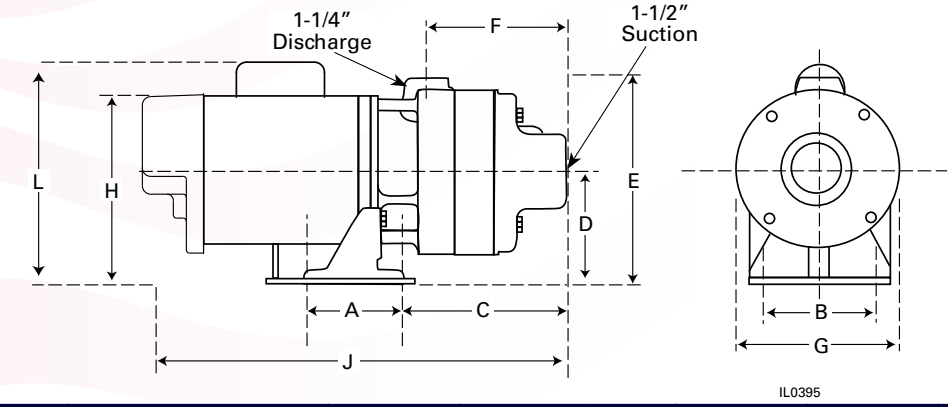


CJ101 THERMOPLASTIC IMPELLERS



High Volume Pressure Booster Pump

PUMP DIMENSIONS 60 HZ



HP	Dimensions in Inches										Ship Wt. Lbs.
	A	B	C	D	E	F	G	H	J	L	
3/4	4	4-5/8	7-9/16	5-1/4	9-1/4	6-1/4	7	8-1/2	17-7/8	-	67
1	4	4-5/8	7-9/16	5-1/4	9-1/4	6-1/4	7	8-1/2	18-3/8	-	71
1-1/2	4	4-5/8	7-9/16	5-1/4	9-1/4	6-1/4	7	8-1/2	19	-	73
2	4	4-5/8	7-9/16	5-1/4	9-1/4	6-1/4	7	8-1/2	19-1/2	-	79
2	4	4-5/8	9-7/16	5-1/4	9-1/4	8-1/8	7	8-1/2	21-3/8	-	92
3	4	4-5/8	9-7/16	5-1/4	9-1/4	8-1/8	7	8-1/2	21-3/8	10-5/8	93

(*) Three Stage

PUMP DATA

Flow Range 1.5 - 51 GPM
 Pressure Boost Range 48 - 95 PSI
 Liquid Temperature (Low lead brass Impellers) 34° F to 200° F
 Liquid Temperature (Plastic impellers) 34° F to 160° F
 Maximum Case Pressure 160 PSI



Agency Approvals
 Duty Cycle Continuous
 Pumping Medium Clear Water
 Service/Repair Information Pump and Motor Field Serviceable

MOTOR DATA

HP	Full Load Amps		Locked-Rotor Torque (Starting Torque) In-Lbs.	Single Phase				3 Phase						
				S.F.	Max. Amb.	Max. Amb. @ SF before Overload Tripping	Breakdown Torque In-Lbs.	Peak Output Power		S.F.	Max. Amb.	Breakdown Torque In-Lbs.	Peak Output Power	
								HP	kW				HP	kW
3/4	14.0	7.0	29	1.5	65° C/149° F	70° C/158° F	42	2.1	1.6	1.5	65° C	49	2.3	1.7
1	18.0	9.0	48	1.4	65° C/149° F	66° C/151° F	52	2.5	1.9	1.4	65° C	74	3.5	2.6
1.5	21.0	10.5	59	1.3	65° C/149° F	66° C/151° F	76	3.8	2.8	1.3	65° C	90	4.3	3.2
2	25.0	12.5	63	1.25	65° C/149° F	66° C/151° F	80	4.0	3.0	1.25	65° C	112	5.3	4.0
3	-	13.5	65	1.0	65° C/149° F	66° C/151° F	95	4.5	3.4	1.0	65° C	125	5.9	4.4



Motor
 All CJ101 single phase (with ODP motors) pumps feature Flint & Walling's Service Plus 56 frame NEMA J, single or dual voltage ODP motors with permanently lubricated double ball bearing.
 Single or three phase options
 TEFC motors available on select models.

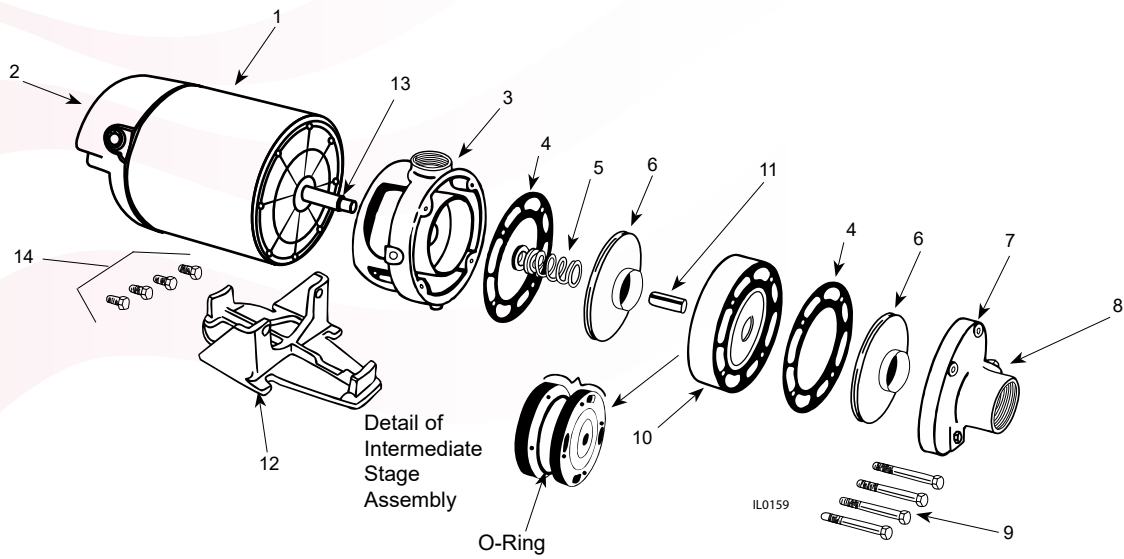
Open Drip Proof (ODP) motor voltage
 CJ101 Single Phase: 1/3 through 2 HP - 115/230V;
 3 HP - 230V, 60HZ
 Three Phase: 1/2 through 2 HP - 208-230V/460V, 50/60HZ
 3 HP - 208-230/460V; 60HZ

Totally Enclosed Fan Cooled (TEFC) motor voltage
 Single Phase: 1/2 through 3 HP - 115/230V 60/50HZ
 Three Phase: 1/2 through 3 HP - 208-230/460V 60/50HZ



High Volume Pressure Booster Pump

CONSTRUCTION MATERIALS - PUMP AND MOTOR



ITEM NO.	DESCRIPTION	MATERIALS
1	Motor Shell	Zinc-Clad Steel
2	Motor Access Cover	Valox
3	Mounting Ring	Cast Iron
4	Gasket	Lexide
5	Mechanical Seal Assembly	Carbon-silicon carbide, stainless steel spring and Buna-N
6	Impeller, Low Lead Brass	Low Lead Brass
6	Impeller, Plastic	Celcon
7	Suction Body w/Clearance Ring	Cast Iron
8	1/4" Plug	Plated Steel
9	3/8 x 3-1/4" Pump thru Bolts (2 stage units)	Plated Steel
9	3/8 x 5" Pump thru Bolts (3 stage units)	Plated Steel
10	Intermediate Stage w/Suction & Hub Clearance Ring	Cast Iron
11	Spacer Sleeve	Cast Iron
12	Base	Cast Iron
13	Pump Shaft	416 Stainless Steel
14	3/8 x 3/4" Motor Mounting Ring Bolts	Plated Steel

