

ROTATING RIGHT

## MODEL 350Q-5 SINGLE ACTING QUINTUPLEX PUMP



### 350Q-5

A 350 horsepower 5" stroke horizontal quintuplex single acting plunger pump. Available in three fluid end materials at pump speeds up to 360 RPM.

#### **Power End Features:**

- Cast Iron Power Frame
- Forged Steel Crankshaft
- Heavy-Duty, Tapered Roller Crankshaft Bearings
- Precision type, Aluminum Alloy Crankpin Bearings
- Ductile Iron Connecting Rods
- Alloy steel crosshead pins
- Bronze bearing crosshead pin bushings
- Cast iron crossheads with upper/lower oil grooves
- Stainless steel extension rods
- External pressure lubrication
- Rated rod load is 13850 lbs.

#### **Fluid End Features:**

- Alloy steel crosshead pins
- Bronze bearing crosshead pin bushings
- Cast iron crossheads with upper/lower oil grooves
- Stainless steel extension rods
- External pressure lubrication
- Fluid end with bolted type valve covers
- Removable stuffing boxes & glands
- Plungers -Solid Ceramic, or Tungsten Coated
- General Service Plunger Packing

# 350Q-5 Quintuplex Plunger Pump

## Specifications

### Pump Size:

maximum plunger size x stroke length, in.(mm):  
4.000 x 5.000 (101.6 x 127)

**Rated BHP (kW) at 360 RPM:** 350 (261)

**Rated plunger load, pounds (kg):** 13850(6282)

**Maximum discharge pressure: psi (kPa)**

"L" model: 1670 (11511)

"M" model: 3483 (24017)

"H" model: 6000 (41369)

### Crankshaft extension:

Diameter, in.(mm): 4.937 (125.4)

Length, in.(mm): 10.188 (258.8)

Keyway width x depth, in.(mm):

1 1/4 x 5/8 (31.8 x 15.9)

Maximum recommended sheave diameter,

in.(mm): 63 (1346.2)

For larger sizes: **Contact Factory**

### Oil Capacity, gallons (L)

Crankcase: 25.0 (94.63)

### Weight, pump only on

wood shipping skids, pounds (kg): 9000 (4082)

### Standard Materials For Fluid End Bodies:

"L" & "M" models

Cast Nickel-Aluminum-Bronze

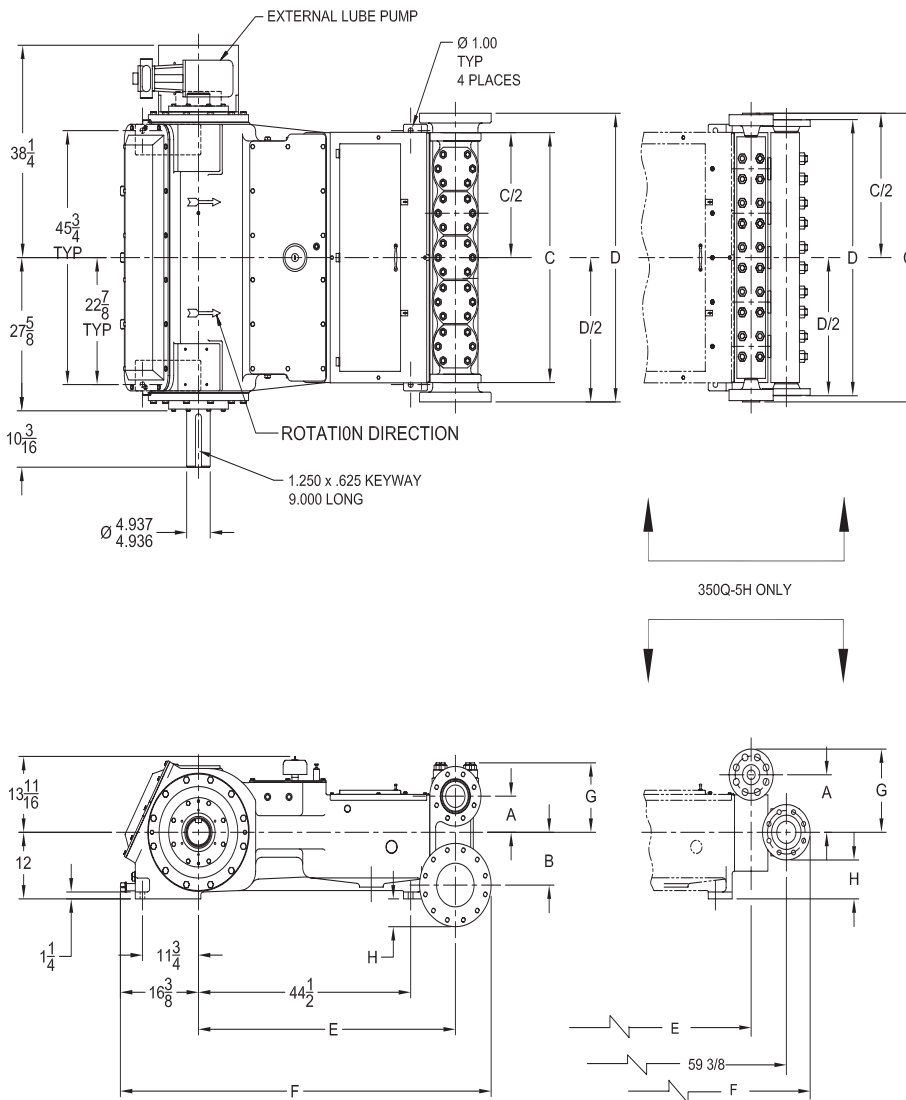
Cast Duplex Stainless Steel

Forged/Plate Carbon Steel

"H" model

Forged Carbon Steel

Forged Nickel-Aluminum-Bronze



Pump Model	Flange Connections		Dimensions (Inches)							
	Discharge Connection Sizes	Suction Connection Sizes	A	B	C	D	E	F	G	H
350Q-5L	4 (101.6)-API 2000 RJ	8 (203.2)-ANSI 300 FF	6 1/2	9 1/2	45	52	53 7/8	77 3/4	12 1/2	5
350Q-5M	3 (76.12)-ANSI 1500 FF	6 (152.4)-ANSI 300 FF	6	8	45 1/2	51 1/2	53 1/2	76 1/8	12 5/8	2 1/4
350Q-5H	2 (50.8)-ANSI 2500 RF	4 (101.6)-ANSI 300 RF	10 3/8	0	52	49 3/4	52	80 3/4	15	7

# 350Q-5 Quintuplex Plunger Pump

## Performance Data

PUMP	English Units					100 RPM		150 RPM		200 RPM		250 RPM		300 RPM		360 RPM	
	Plunger Dia. In.	Plunger Area Sq. In.	BPD per RPM	GPM per RPM	Max. Press. PSI	BPD	GPM	BPD	GPM	BPD	GPM	BPD	GPM	BPD	GPM	BPD	GPM
350Q-5L (Q350-4)	4.000	12.5664	46.6284	1.3600	1102	4663	136.0	6995	204.0	9326	272.0	11658	340.0	13989	408.0	16787	489.6
	3.875	11.7932	43.7597	1.2763	1174	4376	127.6	6564	191.4	8752	255.3	10940	319.1	13128	382.9	15754	459.5
	3.750	11.0447	40.9820	1.1953	1254	4099	119.5	6148	179.3	8197	239.1	10246	298.8	12295	358.6	14754	430.3
	3.625	10.3206	38.2954	1.1169	1342	3830	111.7	5745	167.5	7660	223.4	9574	279.2	11489	335.1	13787	402.1
	3.500	9.6211	35.6999	1.0412	1440	3570	104.1	5355	156.2	7140	208.2	8925	260.3	10710	312.4	12852	374.8
	3.375	8.9462	33.1954	0.9682	1548	3320	96.8	4980	145.2	6640	193.6	8299	242.1	9959	290.5	11951	348.6
350Q-5M (Q350-3)	3.250	8.2958	30.7820	0.8978	1670	3079	89.8	4618	134.7	6157	179.6	7696	224.5	9235	269.3	11082	323.2
	3.125	7.6699	28.4597	0.8301	1806	2846	83.0	4269	124.5	5692	166.0	7115	207.5	8538	249.0	10246	298.8
	3.000	7.0686	26.2285	0.7650	1959	2623	76.5	3935	114.7	5246	153.0	6558	191.2	7869	229.5	9443	275.4
	2.875	6.4918	24.0883	0.7026	2133	2409	70.3	3614	105.4	4818	140.5	6023	175.6	7227	210.8	8672	252.9
	2.750	5.9396	22.0392	0.6428	2332	2204	64.3	3306	96.4	4408	128.6	5510	160.7	6612	192.8	7935	231.4
	2.625	5.4119	20.0812	0.5857	2559	2009	58.6	3013	87.9	4017	117.1	5021	146.4	6025	175.7	7230	210.9
	2.500	4.9087	18.2142	0.5312	2822	1822	53.1	2733	79.7	3643	106.2	4554	132.8	5465	159.4	6558	191.2
	2.375	4.4301	16.4383	0.4795	3126	1644	47.9	2466	71.9	3288	95.9	4110	119.9	4932	143.8	5918	172.6
350Q-5H (Q350-2)	2.250	3.9761	14.7535	0.4303	3483	1476	43.0	2214	64.5	2951	86.1	3689	107.6	4427	129.1	5312	154.9
	2.125	3.5466	13.1598	0.3838	3905	1316	38.4	1974	57.6	2632	76.8	3290	96.0	3948	115.1	4738	138.2
	2.000	3.1416	11.6571	0.3400	4409	1166	34.0	1749	51.0	2332	68.0	2915	85.0	3498	102.0	4197	122.4
	1.875	2.7612	10.2455	0.2988	5016	1025	29.9	1537	44.8	2050	59.8	2562	74.7	3074	89.6	3689	107.6
	1.750	2.4053	8.9250	0.2603	5758	893	26.0	1339	39.0	1785	52.1	2232	65.1	2678	78.1	3213	93.7
	1.625	2.0739	7.6955	0.2245	6000	770	22.4	1155	33.7	1540	44.9	1924	56.1	2309	67.3	2771	80.8
	1.500	1.7671	6.5571	0.1912	6000	656	19.1	984	28.7	1312	38.2	1640	47.8	1968	57.4	2361	68.8
Brake Horsepower Required						98		146		195		243		292		350	

PUMP	Metric Units					100 RPM		150 RPM		200 RPM		250 RPM		300 RPM		360 RPM	
	Plunger Dia. mm	Plunger Area cm <sup>2</sup>	M <sup>3</sup> /Hr per RPM	L/Sec. per RPM	Max. Press. kPa	M <sup>3</sup> /Hr	L/Sec.	M <sup>3</sup> /Hr	L/Sec.	M <sup>3</sup> /Hr	L/Sec.	M <sup>3</sup> /Hr	L/Sec.	M <sup>3</sup> /Hr	L/Sec.	M <sup>3</sup> /Hr	L/Sec.
350Q-5L (Q350-4)	102	81.073	0.3089	0.0858	7599	30.9	8.6	46.3	12.9	61.8	17.2	77.2	21.5	92.7	25.7	111.2	30.9
	98	76.085	0.2899	0.0805	8097	29.0	8.1	43.5	12.1	58.0	16.1	72.5	20.1	87.0	24.2	104.3	29.0
	95	71.256	0.2715	0.0754	8646	27.1	7.5	40.7	11.3	54.3	15.1	67.9	18.9	81.4	22.6	97.7	27.1
	92	66.584	0.2537	0.0705	9253	25.4	7.0	38.0	10.6	50.7	14.1	63.4	17.6	76.1	21.1	91.3	25.4
	89	62.072	0.2365	0.0657	9925	23.6	6.6	35.5	9.9	47.3	13.1	59.1	16.4	70.9	19.7	85.1	23.6
	86	57.717	0.2199	0.0611	10674	22.0	6.1	33.0	9.2	44.0	12.2	55.0	15.3	66.0	18.3	79.2	22.0
350Q-5M (Q350-3)	83	53.521	0.2039	0.0566	11511	20.4	5.7	30.6	8.5	40.8	11.3	51.0	14.2	61.2	17.0	73.4	20.4
	79	49.483	0.1885	0.0524	12450	18.9	5.2	28.3	7.9	37.7	10.5	47.1	13.1	56.6	15.7	67.9	18.9
	76	45.604	0.1737	0.0483	13510	17.4	4.8	26.1	7.2	34.7	9.7	43.4	12.1	52.1	14.5	62.5	17.4
	73	41.883	0.1596	0.0443	14710	16.0	4.4	23.9	6.6	31.9	8.9	39.9	11.1	47.9	13.3	57.4	16.0
	70	38.320	0.1460	0.0406	16077	14.6	4.1	21.9	6.1	29.2	8.1	36.5	10.1	43.8	12.2	52.6	14.6
	67	34.915	0.1330	0.0370	17645	13.3	3.7	20.0	5.5	26.6	7.4	33.3	9.2	39.9	11.1	47.9	13.3
	64	31.669	0.1206	0.0335	19454	12.1	3.4	18.1	5.0	24.1	6.7	30.2	8.4	36.2	10.1	43.4	12.1
	60	28.581	0.1089	0.0302	21555	10.9	3.0	16.3	4.5	21.8	6.0	27.2	7.6	32.7	9.1	39.2	10.9
350Q-5H (Q350-2)	57	25.652	0.0977	0.0271	24017	9.8	2.7	14.7	4.1	19.5	5.4	24.4	6.8	29.3	8.1	35.2	9.8
	54	22.881	0.0872	0.0242	26926	8.7	2.4	13.1	3.6	17.4	4.8	21.8	6.1	26.2	7.3	31.4	8.7
	51	20.268	0.0772	0.0215	30396	7.7	2.1	11.6	3.2	15.4	4.3	19.3	5.4	23.2	6.4	27.8	7.7
	48	17.814	0.0679	0.0189	34584	6.8	1.9	10.2	2.8	13.6	3.8	17.0	4.7	20.4	5.7	24.4	6.8
	44	15.518	0.0591	0.0164	39701	5.9	1.6	8.9	2.5	11.8	3.3	14.8	4.1	17.7	4.9	21.3	5.9
	41	13.380	0.0510	0.0142	41369	5.1	1.4	7.6	2.1	10.2	2.8	12.7	3.5	15.3	4.2	18.4	5.1
	38	11.401	0.0434	0.0121	41369	4.3	1.2	6.5	1.8	8.7	2.4	10.9	3.0	13.0	3.6	15.6	4.3
Kilowatts Required						73		109		145		181		217		261	

For operation below 100 RPM, an auxiliary lubrication system is required.

Volumetric Rate is based on 100% Volumetric Efficiency. Brake Horsepower/Kilowatts Required is based on 90% Mechanical Efficiency.

## Accessories

Rotating Right offers a full line of accessories to ensure long trouble free and safe operation of your multiplex pumps.

### Accessories Include:

- Pulsation Dampeners - Suction & Discharge
- Vibration Shock Switches
- Liquid Level Gauges & Switches
- Pressure Safety Valves
- Plunger Lubricators
- Fire Safety Valves
- High Discharge Pressure Switch
- Condensate Drain
- N.A.C.E. Valving
- Lubricator Level Controller
- API Valves
- Drive Options



## Expendables



With our worldwide buying power Rotating Right is well equipped to provide a wide range of replacement parts & expendables for virtually all multiplex plunger pumps regardless of make or model.

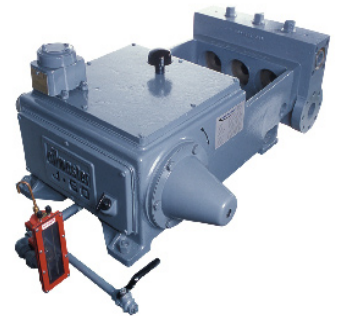


Our expendables inventory includes plungers, packing, brass, valves, bearings, crankshafts, connecting rods and seals.



## Repair & Overhauls

Rotating Right service technicians follow strict quality control procedures for every pump repair and overhaul. The use of consistent and reliable re-manufacturing techniques ensure your equipment is returned to you in "Like New" condition.



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