

FlexLift

Low-profile pumping unit

APPLICATIONS

- Wells located in agricultural areas using overhead irrigation
- Wells near developed areas that would benefit from lower visibility

BENEFITS

- Delivers easy installation and maintenance
- Provides long service life of more than 25 years with proper maintenance
- Reduces operating height 10–15 ft

FEATURES

- High-load dual taper bearings for the roller assemblies
- High-capacity gear reducer designed far beyond API requirements
- Large, low-speed shaft for long life and increased counterbalance support
- Field-serviceable gear reducer design with bolt-on cranks

The FlexLift* low profile pumping unit is designed for applications where pump height is a critical concern. For locations with overhead irrigation systems, locations that are highly visible to the public, or locations with other conditions that would benefit from a low profile, the FlexLift unit is an optimal solution that offers many of the same benefits as a conventional pumping unit.



The primary differences between FlexLift pumping units and conventional units are:

- the structure of the FlexLift unit uses a uniquely designed crank arm, along with a belt and roller assembly, to provide the lowest possible overhead height
- the carrier bar is supported by the two belts instead of a wireline bridle assembly.

Main Specifications[†]

Model	F114-173-64	F160-173-74	F228-246-86	F320-246-86	F320-256-100	
Basic parameters	Rated polished rod capacity, lbf	17,300	17,300	24,600	24,600	25,600
	Stroke length, in	64	74	86	86	100
	Model	114D	160D	228D	320D	320D
	Rated torque, in.lbf	114,000	160,000	228,000	320,000	320,000
Gear reducer		Divided-flow type, two-stage, involute gearing				
	Reducing ratio	29.818	28.506	28.873	28.807	28.807
	Oil storage quantity, galUS	29	37	42.8	75	75
	Lubricant	ISO VG 150 gear lubrication oil in winter, ISO VG 220 gear lubrication oil in summer				
	Big pulley diameter, in	30	36	36	44	44
	Pulley groove type	4C	4C	4C	5C	5C
Balance assembly	Weight of crank counterweight, lbs	1,114 × 4	1,114 × 4	1,767 × 4	1,767 × 4	1,767 × 4
	Weight of aux. weight, lbs	335 × 8	331 × 8	472 × 8	472 × 8	472 × 8
	Weight of crank, lbs	2,002 × 2	2,242 × 2	3,406 × 2	3,309 × 2	3,731 × 2
	Fixed type of main base	Cross bars (levers)				
	Approx. total weight, lbs (e.g., prime mover)	26,032	28,292	36,788	39,000	40,029
	Overall dimensions Length × width × height, in	305.9 × 88.2 × 110.9	323.3 × 88.4 × 122.9	357.6 × 88.0 × 138.2	357.6 × 88.0 × 138.2	382.7 × 88.0 × 156.3

[†]The specifications provided are subject to change without notice and may vary according to modifications requested.

Counterbalance Data

Model	F114-173-64			F160-173-74			F228-246-86			F320-246-86			F320-256-100		
Maximum Stroke, in	64	54	44	74	64	54	86	74	62	86	74	62	100	86	74
Cranks Only, lbf	2120	2513	3085	3388	3917	4643	4072	4732	5648	3932	4570	5454	4342	5049	5868
2 weights, lbf	4791	5678	6969	6059	6588	7314	8159	9482	11317	8019	9319	11123	8429	9801	11391
2 weights and 2 Aux. weights, lbf	5588	6623	8128	6856	7385	8111	9255	10756	12838	9115	10593	12643	9525	11076	12872
2 weights 4 Aux. weights, lbf	6385	7567	9287	7653	8182	8908	10351	12030	14358	10211	11867	14164	10621	12350	14353
4 weights, lbf	7462	8844	10854	8730	9259	9985	12246	14232	16986	12106	14069	16792	12516	14553	16914
4 weights and 4 Aux. weights, lbf	9056	10852	13172	10324	10853	11579	14438	16779	20027	14298	16617	29833	14708	17102	19876
4 weights and 8 Aux. weights, lbf	10650	12368	15491	11918	12447	13173	16630	19327	23067	16490	19164	22873	16900	19651	22838

Dimensional Data, in

Model	A	B	C	D	E	F	H max	K	M	N	X	Y	T
F114-173-64	277.56	28.35	22.5	64.02	58.19	83.86	110.87	55.12	104.06	14.17	22.84	94.72	25.59
F160-173-74	297.05	31.43	20.2	74.02	64.17	83.86	122.91	59.06	127.17	14.17	21.46	89.17	29.53
F228-246-86	323.82	37.36	24.6	85.98	70.87	88.03	138.23	68.11	136.61	14.17	29.92	49.8	33.46
F320-246-86	323.82	37.36	24.6	85.98	70.87	88.03	138.23	68.11	136.61	14.17	29.92	99.8	37.4
F320-256-100	344.29	42.06	28.7	100	78.98	88.03	156.3	75.98	156.54	14.17	29.92	96.42	37.4

