

# High Pressure at Low Capacity

## LKH-110 and LKH-120 Multi-Stage Centrifugal Pump

### Application

LKH-110 is a highly efficient and economical multi-stage centrifugal pump, which meets the requirements of sanitary and gentle product treatment and chemical resistance. LKH-110 is available in 3 sizes, LKH-112, -113, -114 for 2, 3 and 4 stages.

### Standard design

LKH-110 consist of a motor, stub shaft with key, mechanical compression coupling, adaptor, backplate, impellers, pump casing, intermediate casing (3 or 4 stage), pump cover, impeller screw and shaft seal.

LKH-110 is designed for CIP with emphasis on large internal roundings and cleanable seals.

### Shaft seals

LKH-110 can be fitted with two types of mechanical seals:

- Single internal seal.
- Flushed seal.

Both seal types have stationary seal rings of silicon carbide and rotating seal rings of carbon or silicon carbide.

The secondary seal of the flushed seal is a long lasting lip seal.

### Materials

Product wetted steel parts	Acid-resistant steel, AISI 316L
Other steel parts:	Stainless steel, AISI 304
Product wetted seals:	EPDM.
Other O-rings:	EPDM.
Finish:	Polished $\leq 32Ra$ and 3A approved.

### Technical data

#### Max. outlet pressure, LKH-110/P, LKH-120/P:

- Limited by the strength of the pump casing: 580 PSI (40 bar) temperature < 104° F.
- Limited by the strength of the pump casing: 290 PSI (20 bar) temperature > 104° F.

Temperature range: . . . . . 14°F to +284 °F (EPDM).  
 Water pressure: . . . . . Normally atmospheric, . . . . . max. 15 PSI (flushed seal).  
 Water consumption: . . . . . 0.066 -0.13 US GPM (flushed seal)  
 Noise level (at 3.3 ft: . . . . . 60-80 dB (A).



LKH-114

### Versions

	LKH-110	LKH-110/P	LKH-120/P
Inlet pressure	<145 PSI	>145 PSI	-
Motor	Standard	Special	Special
Back Plate	Standard	Reinforced	Standard
Shaft seal	C/SIC or SIC/SIC	SIC/SIC	SIC/SIC or SIC/C

### Motor

Standard C-Face, foot mounted motor according to NEMA standard at 3500. Standard efficiency, insulation Class F.

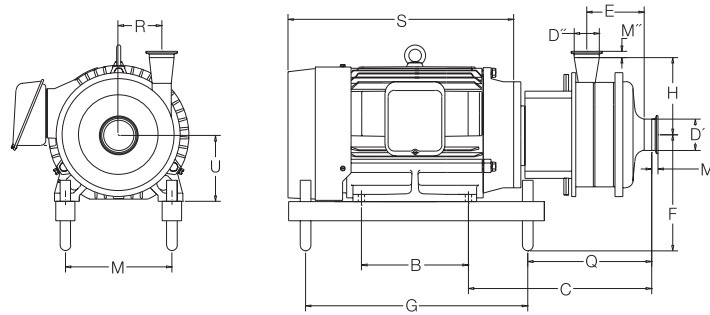
### Voltage and frequency

3 phase, 60 Hz, 230-460v standard. Other voltages and frequencies available upon request.

### Hp

Horsepower requirements based on flow curves.

Dimensions (in)



LKH-112

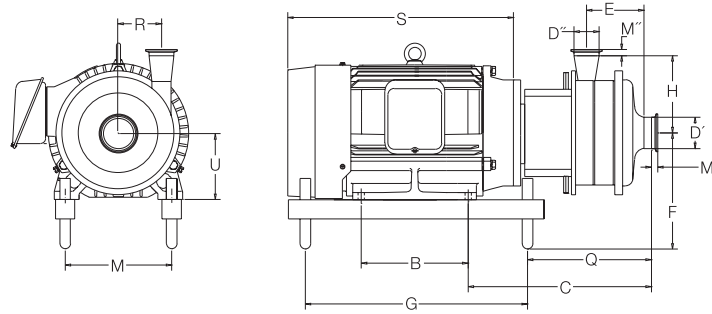
Size	Motor			
	5 Hp	7.5 Hp	10 Hp	15 Hp
B	4.50	5.50	7.00	8.25
C	6.50	7.13	7.40	7.32
E	2.99	2.99	2.99	2.99
F	8.35	8.35	9.13	9.13
G	10.30	14.20	14.20	19.00
H	5.51	5.51	5.51	5.51
M	7.50	8.50	8.50	10.00
Q	8.86	10.87	11.14	12.64
R	3.39	3.39	3.39	3.39
S	12.00	14.60	16.10	18.70
U	5.83	5.83	6.61	6.61
Weight (lbs)	146.00	197.00	222.00	315.00

LKH-113

Size	Motor		
	10 Hp	15 Hp	20 Hp
B	7.00	8.25	10.00
C	9.06	8.98	8.98
E	4.65	4.65	4.65
F	9.13	9.13	10.08
G	14.20	19.00	19.00
H	5.51	5.51	5.51
M	8.50	10.00	10.00
Q	12.80	14.29	14.29
R	3.39	3.39	3.39
S	16.10	18.70	19.40
U	6.61	6.61	7.56
Weight (lbs)	238.00	331.00	381.00

LKH-114

Size	Motor			
	15 Hp	20 Hp	25 Hp	30 Hp
B	8.25	10.00	9.50	11.00
C	10.59	10.59	11.77	11.77
E	6.26	6.26	6.26	6.26
F	9.13	10.08	10.83	10.83
G	19.00	19.00	20.00	20.00
H	5.51	5.51	5.51	5.51
M	10.00	10.00	11.00	11.00
Q	12.64	12.64	14.49	14.49
R	3.39	3.39	3.39	3.39
S	18.70	19.40	23.90	23.90
U	6.61	7.56	8.35	8.35
Weight (lbs)	347.00	397.00	478.00	509.00



LKH-122/P

(in)	Sterling-motor	
	hp	
	40/50/60	
A	9.69	
B	12.01	
C	16.18	
E	3.27	
F min.	10.24	
F max.	15.16	
G	21.02	
H	10.43	
K	26.5	
M	12.52	
P min.	26.02	
P max.	30.94	
Q	10.16	
R	4.45	
S	27.56	
T	7.87	
U	8.66	
Z min.	23.03	
Z max.	27.95	
Weight (lbs)	816/816/860	

LKH-124/P

	Sterling-motor	
	hp	
	40/50/60	75/100
A	9.69	15.31
B	12.01	12.2/13.7
C	14.65	16.69
E	7.76	7.76
F min.	10.24	15.79
F max.	15.16	18.19
G	21.02	25.2
H	10.43	10.43
J	12.52	15.98
K	26.5	29.65
P min.	26.02	31.93
P max.	30.94	34.33
Q	20.67	24.33
R	4.45	4.45
S	27.56	33/35
T	7.87	9.8
U	8.66	
Z min.	23.03	29.4/30.6
Z max.	27.95	31.8/33
Weight (lbs)	891/891/935	1274/1307

LKH-123/P

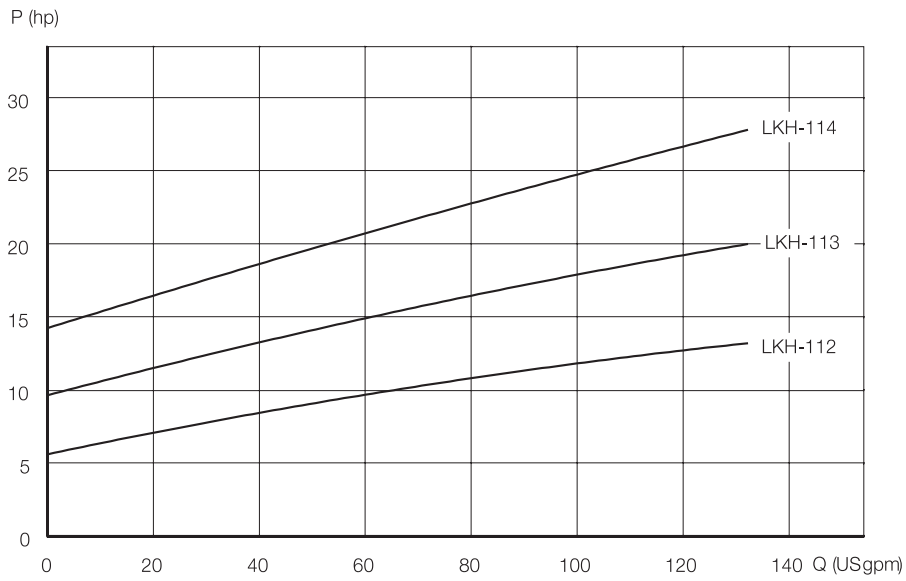
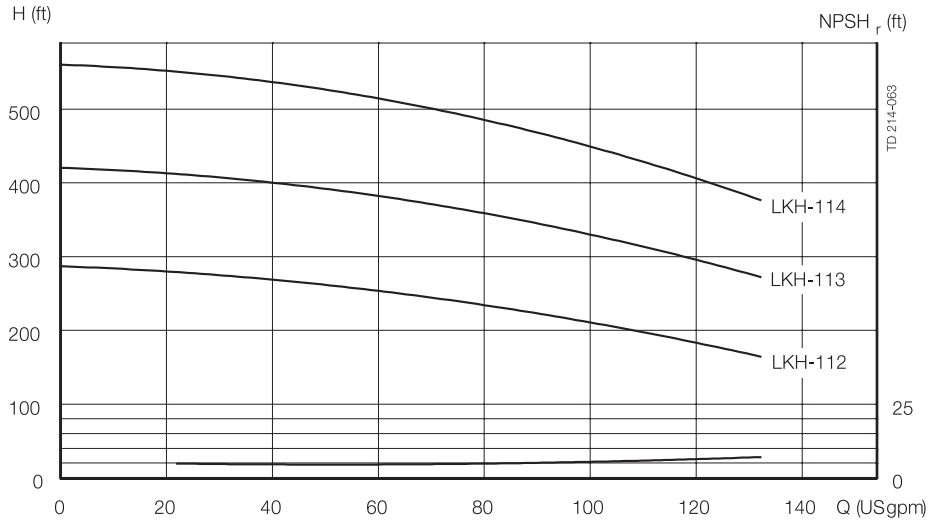
(in)	Sterling-motor	
	hp	
	40/50/60	75/100
A	9.69	15.31
B	12.01	12.2/13.7
C	18.46	16.69
E	5.55	7.76
F min.	10.24	15.79
F max.	15.16	18.19
G	21.02	25.2
H	10.43	10.43
K	26.5	15.98
M	12.52	29.65
P min.	26.02	31.93
P max.	30.94	34.33
Q	12.44	24.33
R	4.45	4.45
S	27.56	33/35
T	7.87	9.8
U	8.66	
Z min.	23.03	29.4/30.6
Z max.	27.95	31.8/33
Weight (lbs)	853/853/897	1274/1307

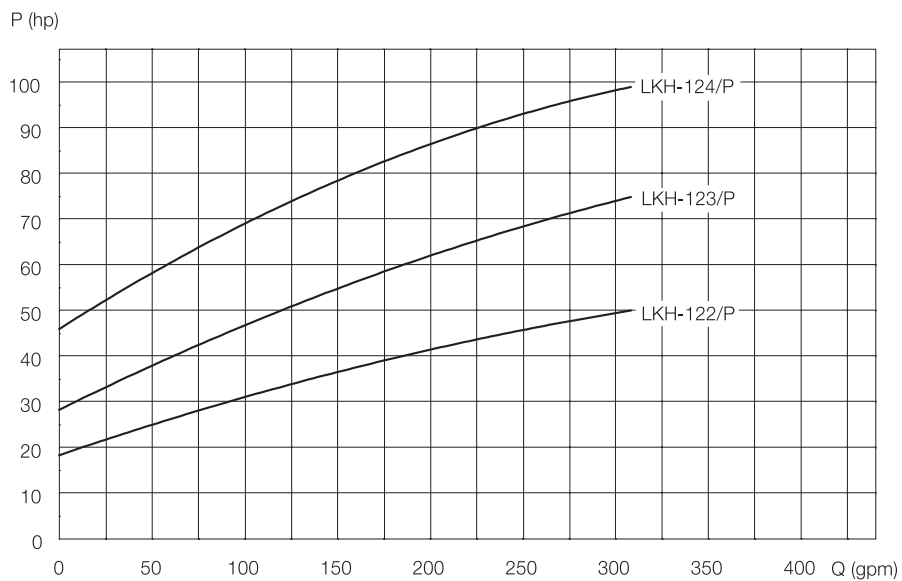
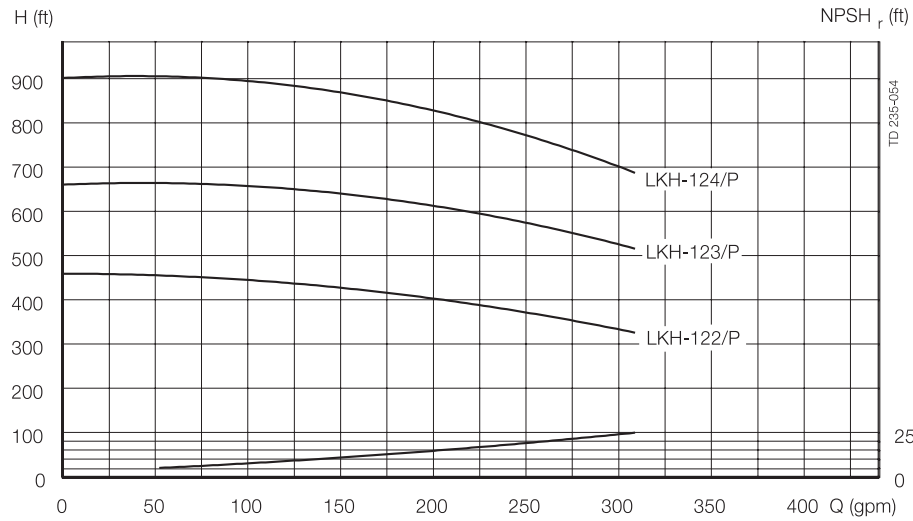
Connections (in)

LKH-112, LKH-113, LKH-114

DI 2"	Tri-Clamp
DII 1½"	
M I	0.827
M II	0.827

Volumetric Flow





**Options Equipment**

- Special motor for inlet pressure higher than 10 bar.
- Motor for other voltage and/or frequency
- Flushed shaft seal.
- Impeller with reduced diameter.
- Counter flanges, seal rings and bolts for flanged connections (industrial version).

**Material grades**

- Product wetted seals of Buna (NBR), or Fluorinated rubber (FPM).
- Rotating seal ring material in Silicon Carbide.
- Surface roughness, product wetted parts: unpolished, 32Ra, micro inches (0.8 mm), or higher finishes

**Ordering**

Please state the following when ordering:

- If the inlet pressure is higher than 145 PSI it is necessary to order a special version with a modified motor and a stronger backplate. Use the following designation:
  - LKH-110: Inlet pressure (0-145 PSI)
  - LKH-110/P: Inlet pressure > 145 PSI
- Pump size.
- Version, sanitary or industrial.
- Connections.
- Impeller diameter.
- Motor size.
- Voltage and frequency.
- Flow, pressure and temperature.
- Density and viscosity of the product.
- Options.