



The Premium Pump for Higher Pressure

Alfa Laval LKHI Centrifugal Pump for 16 bar Inlet Pressure

Application

The LKHI pump is a highly efficient and economical centrifugal pump, specially designed for inlet pressures up to 16 bar. LKHI meets the requirements of sanitary and gentle product treatment and chemical resistance, and is available in nine sizes, LKHI-10, -15, -20, -25, -35, -40, -45, -50, -60.

Standard Design

The LKHI pump is designed for CIP-cleaning with emphasis on large internal roundings and easily cleanable seals.

LKHI is a sanitary pump with a stainless steel shroud for protection of the motor. The complete unit is supported on four adjustable stainless steel legs.

Shaft seals

LKHI 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:

1. Silicon carbide/carbon for inlet pressure up to 10 bar.
2. Silicon carbide/silicon carbide for inlet pressure higher than 10 bar.

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



TECHNICAL DATA

Product wetted steel parts: W. 1.4404 (316L).
Other steel parts: Stainless steel.
Product wetted seals: EPDM.
Other O-rings: EPDM.
Finish: Semi-bright.

Connections for flushed shaft seal:

6 mm tube/Rp 1/8"

Motor

Foot-flanged motor according to the IEC metric standard, 2 poles = 3000/3600 rpm. at 50/60 Hz, IP 55 (with drain hole with labyrinth plug), insulation class F.

Motor types:

Inlet pressure 0-10 bar: .Standard motor with a fixed ball bearing on drive side.

Inlet pressure 10-16 bar: .Special motor with a fixed angular-contact ball bearing on drive side.

Motor sizes

50 Hz: 1.5 - 30.0 kW.
60 Hz: 1.75 - 35.0 kW

OPERATING DATA

Pressure

Max. inlet pressure: 1600 kPa (16 bar).
Water pressure: Normally atmospheric.
(max. 1 bar).

Temperature

Temperature range: -10°C to +140°C (EPDM).

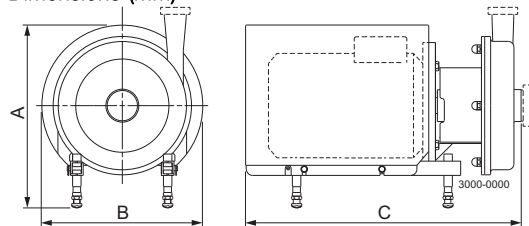
Water consumption

Water consumption: 0.25 -0.5 l/min.
(Flushed seal)

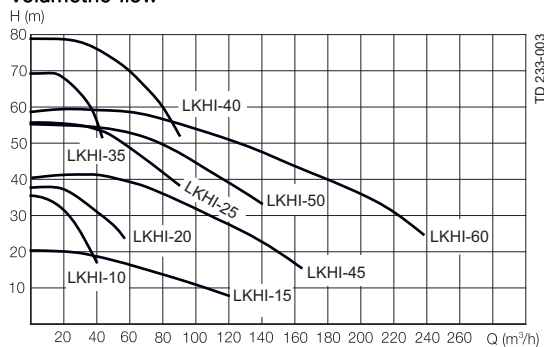
Noise

Noise level (at 1 m): 60 - 80 dB (A).
Noise level (at 3 ft.): 60 - 80 dB (A).

Dimensions (mm)



Volumetric flow



	LKHI-10				LKHI-15				LKHI-20			
Motor kW	1.5	2.2	3	4	3	4	5.5	2.2	3	4	5.5/7.5	
A min.	346	346	357	383	357	383	380	346	357	383	380	
A max.	432	432	467	496	467	492	513	432	467	496	513	
B	288	288	323	359	323	359	383	288	323	359	383	
C	483	483	538	548	574	584	662	496	550	560	638	

	LKHI-25			LKHI-35			LKHI-40		
Motor kW	5.5/7.5	11/15	4	5.5/7.5	11/15	7.5	11/15/18.5	22	
A min.	383	485	383	380	490	383	485	533	
A max.	380	490	496	513	607	380	490	546	
B	383	485	359	383	485	383	485	533	
C	649	850	556	634	835	644	845	910	

	LKHI-45			LKHI-50			LKHI-60			
Motor kW	4	5.5/7.5	11/15	5.5/7.5	11/15/18.5	22	5.5/7.5	11/15/18.5	22	30
A min.	383	380	490	380	490	546	380	490	546	661
A max.	496	513	607	513	607	671	513	607	671	786
B	359	383	485	383	485	534	383	485	534	673
C	585	663	864	657	858	922	736	937	1001	1139

Options

- A. Impeller with reduced diameter.
- B. Impeller screw.
- C. Motor for other voltage and/or frequency.
- D. 1500 rpm. motor.
- E. Motor with increased safety/flame proof motor.
- F. Flushed shaft seal.
- G. Seals in Nitrile (NBR) or Fluorinated rubber (FPM).
- H. Surface roughness, product wetted parts: $R_a \leq 0.8 \mu\text{m}$.
- I. Seal faces in SIC/SIC (Silicon Carbide).

Ordering

Please state the following when ordering:

- Pump size.
- Pressure.
- Connections
- Impeller diameter.
- Motor size.
- Single or flushed shaft seal.
- Optional extras.

Note!

- The curves for LKHI are the same as those for LKH.
- For further details, see also Instruction Manual, ESE00700.

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