

# PROLAC HCP 40-150



## DESCRIPTION

PROLAC HCP is a range of close-coupled centrifugal pumps with hygienic design, suitable for use in the dairy, beverage and food industry in general.

The single-stage horizontal pump has a circular pump casing with axial suction and a tangential discharge. The main pump components are pump casing, impeller, cover, lantern and a shaft which is rigidly coupled to the motor shaft.

## APPLICATION

Due to the choice of materials and its design, PROLAC HCP is appropriate for applications requiring a high level of hygiene, it offers gentle handling of the product and resistance to chemical agents. It is particularly suitable as main process pump in the dairy, beverage, pharmaceutical and cosmetic industries.

## DESIGN AND FEATURES

Prolac HCP is made of a cold-formed stainless steel casing, impeller, mechanical seal, pump cover, lantern and shaft, connected to the motor shaft by mechanical compression.

The motor complies with the IEC standards, it is protected with a stainless steel shroud and provided with the height adjustable hygienic designed legs.

The pump is designed according to the EHEDG recommendations. It can easily be cleaned by CIP/SIP systems without disassembly.

## MECHANICAL SEAL

The PROLAC HCP pump is provided with an internal single mechanical seal. The seal is balanced and has a hygienic design. As standard, the stationary part is in carbon and the rotary part is in silicon carbide, the gaskets are in EPDM.



## OPERATING LIMITS

Nominal Pressure:	1600kPa (16bar)
Temperature range:	-10°C to 120°C
SIP:	140°C (max. 30 min)

## PUMP CHARACTERISTICS

Model:	Prolac HCP	Suction (mm):	50
Type:	40-150	Discharge (mm):	40
Speed (rpm):	3000	Connection type:	DIN 11851
Efficiency (%):	61	Impeller size (mm):	150
Drive power (kW):	2,2		

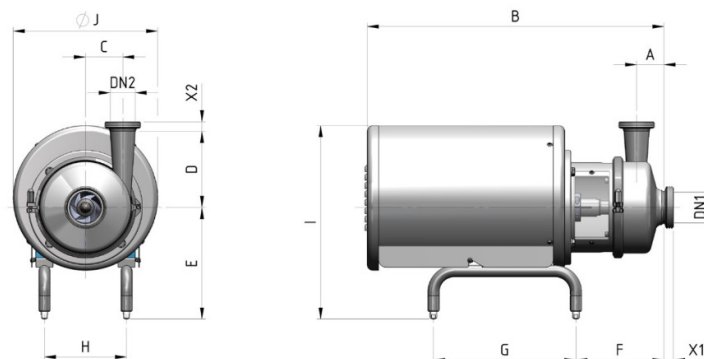
## MATERIALS AND DESIGN

Pump casing:	AISI316L	Motor shroud:	AISI304
Back plate:	AISI316L	Lantern:	AISI304L
Shaft:	AISI316L	Base Plate:	AISI304
Impeller:	AISI316L	Elastomers:	EPDM
Mechanical seal:	Single	Mechanical seal materials:	C/SiC EPDM
Surface finish internal:	Polished Ra ≤ 0,8µm		

## MOTOR SPECIFICATION

Motor vendor:	TECHTOP	Voltage (V):	230/400
Size (kW):	2,2	Efficiency class:	IE3
Rated speed (rpm):	2900	Thermistors:	Yes
Frequency (Hz):	50	Protection class:	IP55
Frame:	90LN		

## DIMENSIONS | HCP40-150



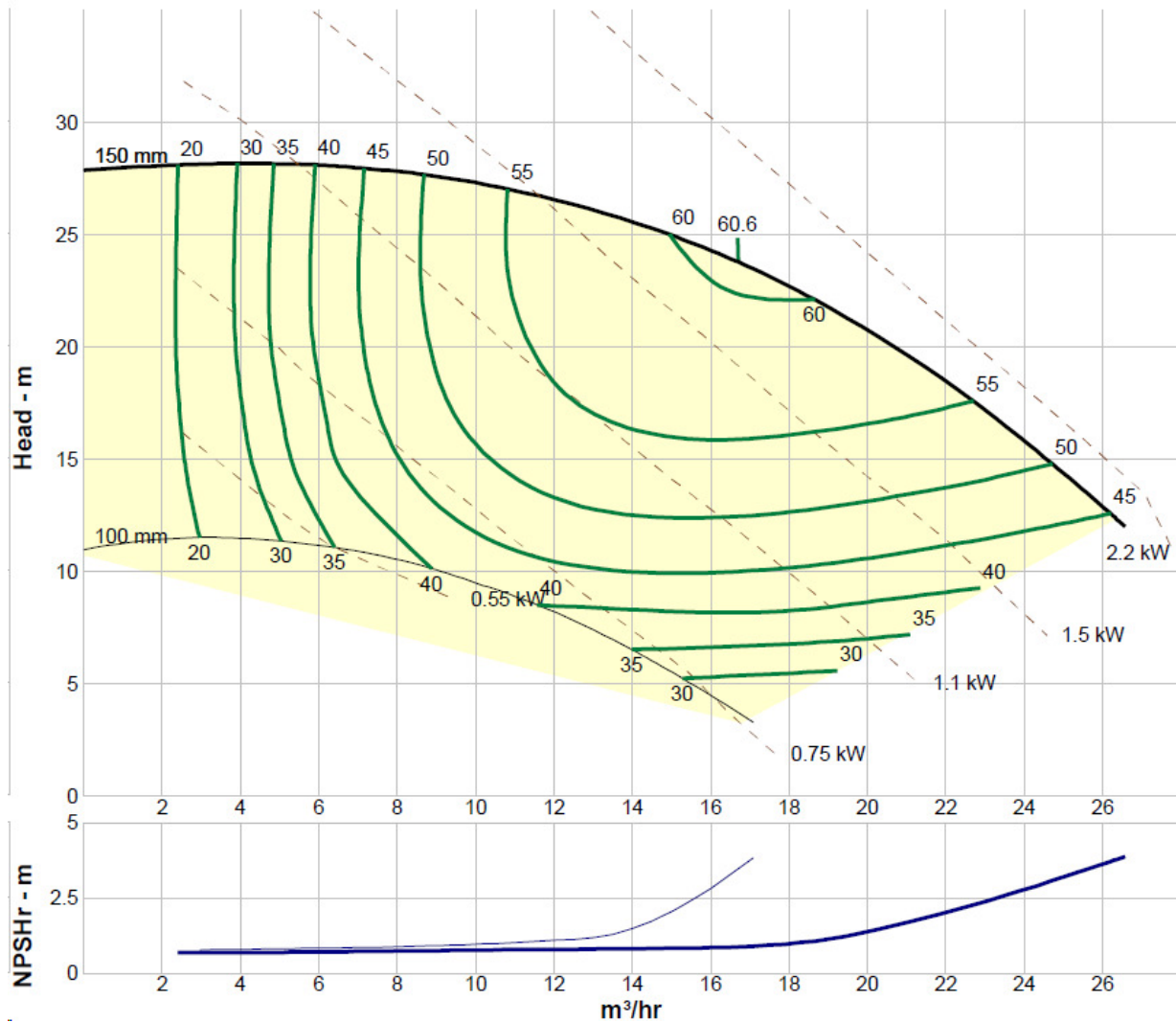
Motor	DN1	DN2	X1	X2	D	A	B	C	E	F	G	H	I	ØJ	kg
90	50	40	22,5	22	140	46,5	545	76	227	171	275	132	405	290	35,5



## PERFORMANCE EVALUATION

Duty	Flow [m <sup>3</sup> /hr]	Head [m]	Efficiency [%]	Power [kW]	NPSHr [m]
Minimum	2,5	13,9	23	0,413	0,95
BEP	16,7	23,8	61	1,78	0,885
Maximum	26,5	12	43	2,03	3,89

## PUMP CURVE



## SPARE PARTS

**Set:**

Artikel number	Description
IN8GC19-2401452	Inoxpa Prolac HCP Seal kit C/SiC/EPDM

**Kit containing:**

Pos.	Description	Qty
08	Mechanical seal C/SiC/EPDM	1
80A	O-ring	1
80	O-ring	1

