



RECIPROCATING PUMPS

**SERIES HP**

for **INDUSTRIAL GASES**



**Technical features**

- ▶ Compatible with Cold Converter and Thermosyphon storage tanks
- ▶ Low operating noise
- ▶ High reliability

**Applications**

- ▶ Cylinders filling and high pressure accumulation capacities

**Liquids transferred**

- ▶ LIN, LOX, LAR

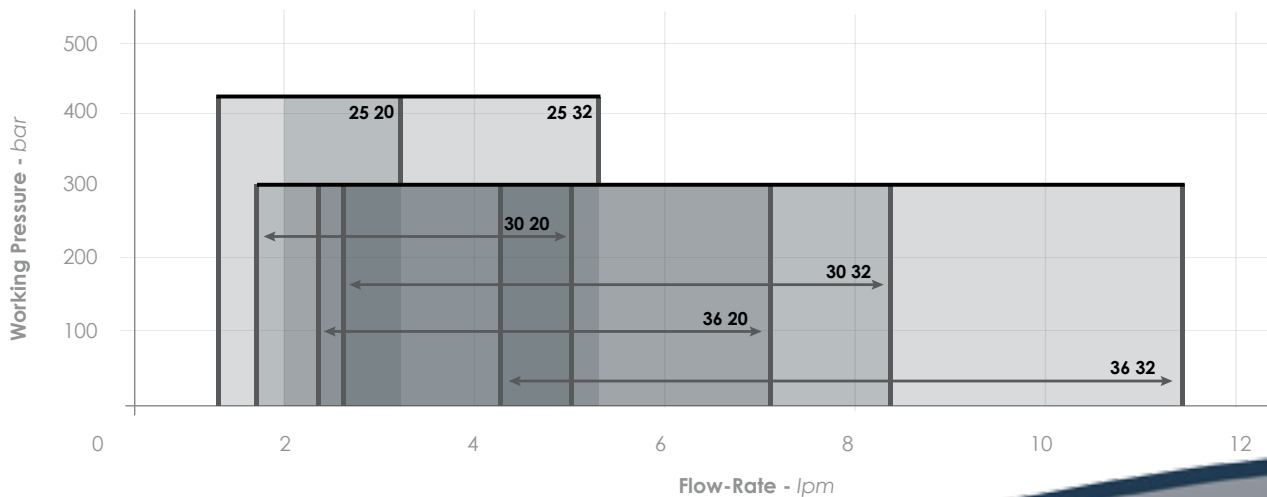
**Crank mechanism**

- ▶ TW3 - Grease Lubrication

**PERFORMANCE**

HP TW3	Piston		Flow-rate				Maximum allowable suction pressure (MASP)		Maximum allowable working pressure (MAWP)		Power installed
	Bore	Stroke	Min 150 rpm		Max 420 rpm						Referred to MAWP
	mm	mm	lpm	gpm	lpm	gpm	bar	psi	bar	psi	kW
Series pump											
HP 25 20	25	20	1,3	0,3	3,5	0,9	16	230	420	6090	3 - 7,5
HP 25 32	25	32	2,0	0,5	5,6	1,5	16	230	420	6090	4 - 11
HP 30 20	30	20	1,8	0,5	5,0	1,3	20	290	300	4350	3 - 7,5
HP 30 32	30	32	2,9	0,8	8,1	2,1	20	290	300	4350	4 - 15
HP 36 20	36	20	2,6	0,7	7,3	1,9	20	290	300	4350	4 - 11
HP 36 32	36	32	4,2	1,1	11,6	3,1	20	290	300	4350	5,5 - 18,5

NPSH required: 1,5 - 1,7 m H<sub>2</sub>O



### Standard supply

- ▶ Hot dipped galvanized steel skid
- ▶ Cryogenic pump
- ▶ Electric motor
- ▶ Transmission by belts and pulleys
- ▶ Pulsation damper

### Standard accessories

- ▶ Suction flexible hose
- ▶ Return flexible hose
- ▶ Low pressure safety valve
- ▶ High pressure safety valve
- ▶ High pressure pneumatic valve for venting
- ▶ Check valve
- ▶ Pressure gauge
- ▶ Pressure switch
- ▶ Temperatur sensor for cool down
- ▶ Temperatur sensor for cavitation
- ▶ Temperatur sensor for leaks detection
- ▶ Phase separator (for Cold converter installations)
- ▶ By-pass valve (for Cold converter installations)

### Optional accessories

- ▶ High pressure pneumatic release valve
- ▶ Configurable for breathable LOX
- ▶ Flushing system with nitrogen gas
- ▶ Electrical control panel
- ▶ 2 speed electric motor
- ▶ Motor suitable for VFD
- ▶ Customized electrical control panel available
- ▶ Completely automated systems available

Average SKID weight:  
**420 kg**

Package overall dimensions  
**200 x 85x 139 cm**

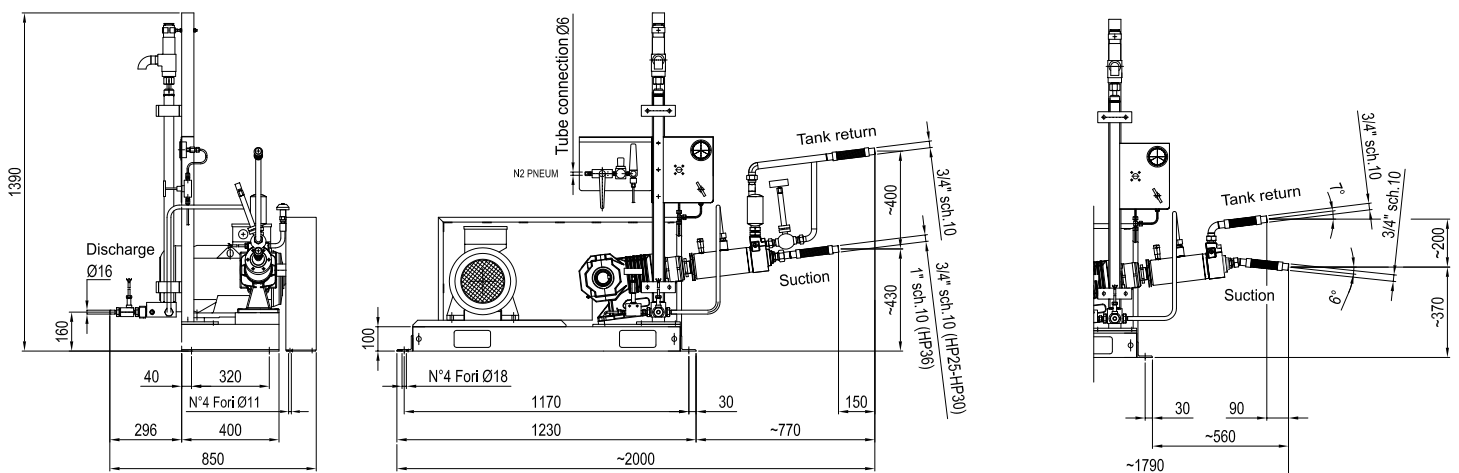
### Tests and controls

- ▶ Dimensional check of each mechanical component before assembling
- ▶ Running test of each pump with LIN before delivery

### Standards

- Designed according to:
- ▶ European Directive 2006/42/CE Machinery
  - ▶ European Directive PED 97/23/CE
  - ▶ EIGA/IGC/CGA guidelines

## GENERAL DIMENSIONS



Coldconverter configuration

Thermosyphon configuration



Certified quality management system

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