

Specialist for Pumping Technology

# SPI Heavy Duty Vertical Inline API 610 Process Pump



### Ruhrpumpen is an innovative and efficient centrifugal pump technology company and offers operators of Pump Systems, a wide range of quality products.

Ruhrpumpen is committed to global excellence with a complete range of Pumps, Fire Pump packages and related products, such as Decoking Systems and Tools to support the core markets, namely Oil & Gas, Petrochemical, Power, Heavy Industry applications, Mining and Water services.

The broad product line complies with the most demanding quality specifications and go beyond stringent industry standards such as API, ANSI, Hydraulic Institute, Underwriter's Laboraties, Factory Mutual and ISO 9001.

Ruhrpumpen's quality program and in-house foundry, along with the latest testing equipment, ensures that the pumps we manufacture will provide long operating life, even under the most severe conditions.

## **SPI Pumps**

The SPI is a vertical inline, single stage, single suction centrifugal pump accordance to API 610, latest Edition with mechanical seal chamber in accordance with API 682.

The pump is suitable for being directly mounted into the piping without the need of a foundation.

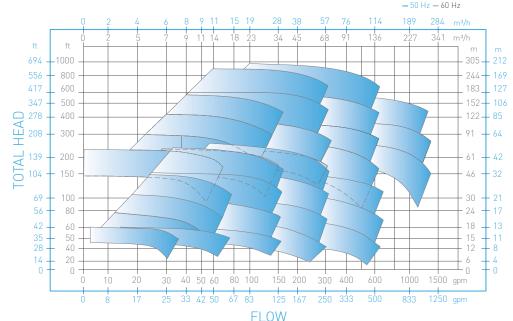
The SPI pumps are designed to handle a wide range of process fluids and has one of the broadest hydraulic coverages in the industry.

Qualified specialists in all departments ensure that the pumps and equipment from our facilities are able to operate under the most severe conditions.

Intensive research and development ensures that the products of Ruhrpumpen are continuously improved to meet the latest technical requirements.

# **Selection Chart**

SPI Various Poles



### **Characteristics**

Antifriction bearings are

angular contact bearings

designed with a

25,000hr. Double

suction pressure

applications

minimum B10 life of

are available for high

#### 1 SHAFT

Large shaft design results in deflections at the mechanical seal less than 0.002 in. This results in maximized seal life and minimized vibrations ensuring a long lasting, smooth running pump

3 SEAL Mechanical seal chamber dimensions in full compliance with API 610 and API 682

**2** BEARINGS

SIZE 19 pump sizes from 1 1/2" to 8" discharge nozzles. Built in accordance with API 610.

4

5 CASING Double volute casings are standard for sizes greater than 3" nozzles.(except 4x4x12 & 4x4x15 are single volute)

\*Images for general arrangement use only, not certified for construction.

6

SUPPORT

Foundation support

is possible with the

integral foot-plate

#### **SPI Performance Data**

Capacity	2.5 to 615 m³/h	11 to 2,700 U.S. gpm
Head	15 to 290 m	52 to 950 ft
Speed	up to 3600 RPM	
Temperature	up to 260 °C	500 °F
MAWP	up to 40 bar	600 psi

Note: For Pump operation outside this range, please contact a Ruhrpumpen representative.

### Description

Heavy Duty Vertical In-Line

- Heavy duty process design according to API 610 latest edition (OH3 type)
- Vertical arrangement
- Process design
- Radially split, vertical inline centrifugal pump
- Single stage
- Separate bearing frame
- Single suction, dynamically balanced, closed impeller.
- Foot mounted
- Single & Double volute casings, depending on size
- Thrust compensation by balance holes.
- Side-Side inline nozzle arrangement.
- Other materials on request.

### **Design Features**

- Heavy duty process design according to API 610 latest edition (OH3 type).
- Separate bearing bracket to absorb all pump thrusts.
- Replaceable wear rings for casing and impeller.

### **Applications**

- Petroleum Refining
- Production and Distribution
- Petrochemical
- Chemical
- Process Industry



CORPORACION

**Ruhrpumpen Plants** 

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