

Diaphragm type chemical seal for homogenisers

Miniature diaphragm seal for homogeniser-machines

Process connection: wheel flange 95 x 43 x 28 mm



Description

Chemical seals are used when media can falsify the pressure measurements due to high temperature, high viscosity (media in paste form) or their propensity to crystallize.

Chemical seals transmit the process pressure to the measuring instrument, with the chemical seal diaphragm forming a hermetic seal between the medium and measuring instrument.

The wheel-flange connection enables a usage at high pressures and the front flush diaphragm avoids zones, in which medium could crystallize or residues could form. Thus ensuring trouble-free pressure measurement and hygienic cleaning, as required in the food industry, i.g. Homogenizers.

The wetted parts of the Homogenizers are made of stainless steel, and in combination with a pressure gauge or pressure transmitter can be used for pressures reaching 0 ... 100 bar up to 0 ... 600 bar.

The parts in contact with the medium can be manufactured in special materials for particular service conditions.

Features

- o Flush diaphragm at the front
- o For media up to 300°C
- o Assembly over wheel flange 95 x 43 x 28 mm
- o Special materials for extreme service requirements
- o suitable on MSR-apparatuses

Pressure ranges

0 ... 100 bar to 0 ... 600 bar

Rated pressure


max. PN 600

Applications

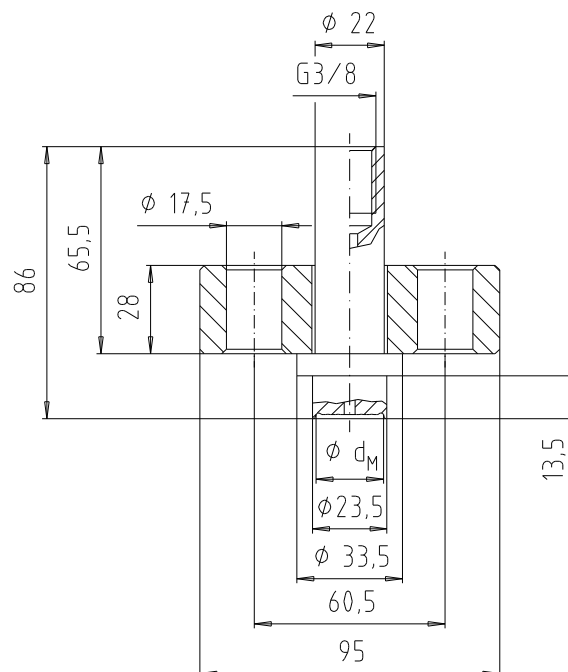
Pharmaceutical, food and beverage industries,
Process engineering

Model: P3022

Technical data

Models	P3022	Optionen
Symbol		
Nominal pressure	PN 600	
Process connection Material	Wheel flange 95 x 43 x 28 rotating Stainless steel 1.4571	
Instrument connection Material	G3/8 female thread to DIN 16 288 Stainless steel 1.4571	Capillary-conduit
Wheel flange Material	95 x 43 x 28 rotating Stainless steel 1.4571	
Diaphragm Material	Stainless steel 1.4571, welded with upper body	Special materials on request

Dimensions (mm)



PN [bar]	Dimensions [mm]
	d_M
600	22

Important notes on the selection of chemical seals

The process pressure to be measured is applied to the measuring instrument by the chemical seal with the aid of a liquid. The chemical seal and measuring instrument can be connected together by capillary lines (length up to max. 15 m) for system related reasons and in order to prevent the exposure of measuring instruments to impermissibly high temperatures. The temperature drop between the instrumentation and control unit and the chemical seal can be several 100° C. Measuring errors resulting from temperature are therefore possible and may be of a magnitude several times the accuracy of the measuring instrument. The particular operating conditions can be taken into account in the manufacture of I&C device-chemical seal combinations.

Matching of the chemical seal and pressure measuring instrument therefore requires expertise, and we shall be pleased to assist you. We recommend you to request our special questionnaire on service conditions and order data.