## Diaphragm type chemical seal

## for paper machinery (cellulose industry)

process connection: DN 48

## description

The necessity of chemical seals is given, when measuring errors can occur due to a high viscousity (pastry) or cristaline growth in the measured media

Chemical seals submit the process pressure to the pressure gauge. The measured media and the pressure gauge are hermetically separated by the diaphragm of the chemical seal.

Different types of process connections make diaphragm type chemical seals to the specialized solution for the requirements of paper machinery and cellulose industry.

The wetted parts of these chemical seals are made of stainless steel. In connection with a Bourdon type pressure gauge they are made for the measuring range between $0 . . .0,6$ bar up to $0 . . .40$ bar.

For specialized requirements other materials for wetted parts are available.

In case of overflow of maximum nominal pressure a specially shaped diaphragm design prevents damage from the chemical seal diaphragm.


## Special features

- various process connections
- for measured media of up to $400^{\circ} \mathrm{C}$
- Overflow protection by diaphragm shape
- with or without vibration dampening
- spezial materials for specialized requirements
- adaptable to MSR-devices


## Pressure ranges

0 ... 0,6 bar up to 0 ... 40 bar

## Nominal pressure

PN 25 or. (PN 40 )

## Applications

Paper and cellulose industry; process technology; Chemical industry.

Technical Data

| Model | P3024 |  |  | Options |
| :---: | :---: | :---: | :---: | :---: |
| Design |  |  |  |  |
| Nominal pressure | PN 25 | PN 25 | PN 25 | PN 40 |
| Process connection | Loser Spannflansch ( 6 Bohrungen $\varnothing 7 \mathrm{~mm}$, Lochkreis $\varnothing 70 \mathrm{~mm}$ ) DN 48 |  |  |  |
| Gauge connection <br> with pipe bow <br> Material | G1/2 acc. to <br> DIN 16288 <br> without <br> stainless steel, 1.4571 | G1/2acc.toDIN 16288 $90^{\circ}$ turnable $180^{\circ}$ or fixed stainless steel, 1.4571 | G1/2acc.to DIN 16288 $90^{\circ}$ and vibration dampening <br> stainless steel, 1.4571 | capillary tube, cooling element |
| Main body with tubus <br> Material | stainless steel 1.4571 |  |  | stainless steel <br> 1.4404, 1.4435 <br> 1.4541, <br> Monel, <br> PFA+ECTFE <br> coating |
| diaphragm material | stainless steel 1.4571, with tubus welded |  |  | spezial materials like main body |
| Tubus length | 6,5 mm |  |  | 17 mm or special length |
| tension flange | steel, nickel plated |  |  | st. steel 1.4571 |

## Important notice for chemical seals selection

the measured process pressure is transmitted by the chemical seal via a special liquid. The chemical seal and the pressure gauge can be connected by a long ( $>1 \mathrm{~m}$ ) capillary tube. The devices may have different temperatures of more than $100^{\circ}$. Display errors can occur due to these temperature differences, which are much higher than the accuracy of the pressure gauge.
The setup of chemical seal and pressure gauge must be made very carefully. We would be pleased to support you!

## Dimensions

## Standard model



## Dimensions

## Model with pipe bow $90^{\circ}$



Model with pipe bow $90^{\circ}$ and vibration dampening (not for liquid filled pressure gauges > NG 100)


## Ordering information:

Model / Process connection (size/norm) / Material (wetted parts) / gauge connection / type of liquid filled / Connection to the pressure gauge / operating conditions acc. to questionaire.

