

# 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°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.

Model: P3024

#### **Technical Data**

Model	P3024			Options
Design				
Nominal pressure	PN 25	PN 25	PN 25	PN 40
Process connection	Loser Spannflansch ( 6 Bohrungen ø 7 mm, Lochkreis ø 70 mm ) DN 48			
Gauge connection	G1/2 acc. to DIN 16 288	G1/2acc.toDIN 16 288 90°turnable 180°	G1/2acc.to DIN 16 288 90°and vibration	capillary tube, cooling element
with pipe bow	without	or fixed	dampening	
Material	stainless steel, 1.4571	stainless steel, 1.4571	stainless steel, 1.4571	
Main body with tubus				stainless steel 1.4404, 1.4435
Material	stainless steel 1.4571			1.4541, Monel, PFA+ECTFE 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

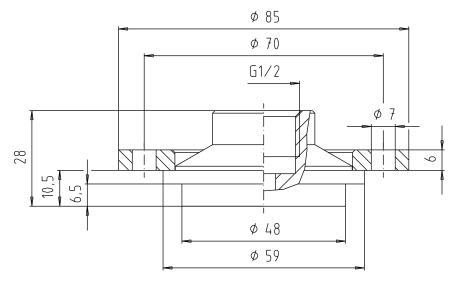
### Important notice for chemical seals selection

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 m) capillary tube. The devices may have different temperatures of more than 100 °. 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!

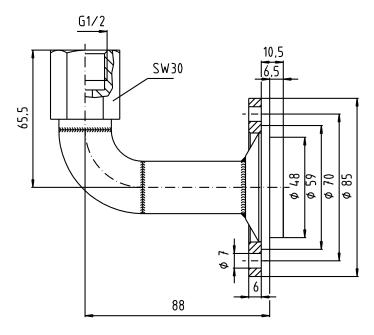
#### **Dimensions**

#### Standard model

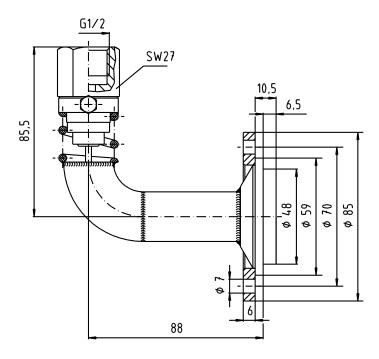


## **Dimensions**

## Model with pipe bow 90°



Model with pipe bow 90° 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.

Subject to technical changes