

Squeeze Indicator

for membrane chamber plates

Application

- Detection of the end of the squeezing process
- Location and detection of defects and leaks
- Gas (e.g. air) or liquid (e.g. water, oil) as squeezing medium

Function

- Squeezing indicator working on the basis of the flotation principle shows equilibrium position when no squeezing media is flowing
- As far as the cake can be further compressed the indicator will remain deflected showing that the squeezing process is not yet finished
- At maximum deflection the full cross area of the flow channel is opened
- In case of a membrane plate leak the indicator deflects contrary to all the other indicators and thus locates loss of the squeezing media

Advantages

The squeezing indicator

- Shows the end of cake compression and therefore is minimizing the squeezing respectively cycle time
- Optimises the filter press capacity especially when products often change
- Detects reliable membrane leakage
- Warns of possible plate deformations with potential subsequent production breakdown
- Can be installed in already existing membrane plate packages



Filtration Systems

world wide successful in operation



Squeeze Indicator integrated in the handle of a membrane chamber plate

SQUEEZE INDICATOR
for membrane chamber plates



Description of indicator position during squeezing process

Indication and control of the following process steps:



1

Feed of squeezing media

- Indicator maximal deflected to inflow direction
- Full inflow cross area is opened



2

Filter cake squeezing

- Filter cake compressing
- Squeezing media inflow reduced
- Indicator only partially deflected



3

End of the squeezing

- No flow of squeezing media
- Indicator in equilibrium



4

Membrane leak

- Clear squeezing media flow
- Only this indicator is deflected



5

Discharge of squeezing media

- Indicator in outflow direction maximal deflected
- Complete outflow cross area is opened



Variation of Standard Design

Integrated in plate w/o additional hoses

Special Designs

→ for aggressive media



View window: glass
Core body: Polypropylene

Squeezing pressure at max. 40 °C:

- 16 bar
- 25 bar
- 40 bar



View window: glass
Core body: Aluminium

Squeezing pressure at max. 90 °C:

- 16 bar
- 25 bar
- 40 bar

Standard Design

View window: Polycarbonate
Core body: Polypropylene

Squeezing pressure at max. 40°C:
max 16 bar

Connection for squeezing media:
G 1/2" to max. G 1"

Dimension:
H 140 x B 70 x T 65 mm



JVK
Filtration Systems

JVK Filtration Systems GmbH
Obere Lerch 2 • P.O. Box 60
D-91166 Georgensgmünd

Tel.: +49 (0) 9172 /707-0
Fax: +49 (0) 9172 / 707-77
E-mail: jvk@jvk.de
Internet: www.jvk.de