Flange type of nozzle flowmeter  ZPK

Technical data:
- nominal pressure PN6÷PN100
- size of flowmeter DN25÷DN800
- material of flow element (orifice, nozzle):
  - stainless steel 1.4301
- material of construction elements:
  - carbon steel
  - austenic steel
  - stainless steel
- temperature up to 500°C
- material certification
- calculation acc. to PN-EN ISO 5167, ISO/TR 15377

Application:
Nozzle flowmeter is used for flow measurement of liquid medium in close pipeline.
An orifice plate installed in line creates a pressure drop. This difference of pressure is measured via impulse line by differential pressure transmitter. The relationship between the rate of flow and pressure drop is very well known and allows to easily convert measured pressure difference to flow value.
Flowmeters without correction are used for mediums with constant values of pressure and temperature.
For custody transfer measurement it's recommend to use differential pressure transmitters without SQRT characteristic and correction from changes of medium's pressure and temperature. This kind of measurement have to be calculated in dedicated flow counters.
Characteristics:
- high accuracy of measurement in wide range of flow
- resistant for aggressive media
- work in wide range of temp. and pressure

| DN | 25 | 32 | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 500 | 600 | 800 |
|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| A  | 150| 200| 250| 300| 350| 400| 500 | 600 | 800 |
| B  | 150| 165| 185| 210| 245| 285| 330 | 390 | 450 | 570 | 700 | 820 | 940 | 1060| 1300| 1550| 2040|
| H  | 60 | 70 | 80 | 90 | 90 | 90 | 95  | 110 | 115 | 120 | 130 | 145 | 150 | 150 | 180 | 180 | 200 |

Version with straight sections and flanges for screwing

Ordering procedure:

- Type of mounting elements: 14, M22x1.5, other
- Flowelement material: 1.4301 or other
- Material of pipe and flange: P265GH or other
- Nominal pressure PN
- Size DN
- Type of flowelement: K-orifice, D-nozzle, Kkw-square orifice
- Version of flowmeter
Welded type of nozzle flowmeter ZPR

Technical data:
- nominal pressure PN6÷PN100
- size of flowmeter DN25÷DN800
- material of flow element (orifice, nozzle): stainless steel 1.4301
- material of construction elements:
  - carbon steel
  - austenic steel
  - stainless steel
- temperature up to 500°C
- material certification
- calculation acc. to PN-EN ISO 5167, ISO/TR 15377

Application:
Nozzle flowmeter is used for flow measurement of liquid medium in close pipeline. An orifice plate installed in line creates a pressure drop. This difference of pressure is measured via impulse line by differential pressure transmitter. The relationship between the rate of flow and pressure drop is very well known and allows to easily convert measured pressure difference to flow value. Flowmeters without correction are used for mediums with constant values of pressure and temperature. For custody transfer measurement it’s recommend to use differential pressure transmitters without SQRT characteristic and correction from changes of medium’s pressure and temperature. This kind of measurement have to be calculated in dedicated flow counters.

Characteristic:
- high accuracy of measurement in wide range of flow
- resistant for aggressive media
- work in wide range of temp. and pressure

Ordering procedure:

<table>
<thead>
<tr>
<th>ZPR</th>
<th>K</th>
<th>DN100</th>
<th>PN16</th>
<th>P265GH</th>
<th>1.4301</th>
<th>M22x1.5</th>
<th>500</th>
<th>80</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Type of mounting elements: Ø 14, M22x1.5, other
Flowelement material: 1.4301 or other
Material of pipe and flange: P265GH or other
Nominal pressure PN

Version of flowelement: K-orifice, D-nozzle, Kkw-square orifice

Type of flowmeter
Orifice flowmeter with assembling element ZPS

Technical data:
- nominal pressure PN6÷PN100
- size of flowmeter DN25÷DN800
- material of flow element: stainless steel 1.4301
- material of construction elements: carbon steel, austenic steel, stainless steel
- temperature up to 500°C
- material certification
- calculation acc. to PN-EN ISO 5167, ISO/TR 15377

Application:
Measurement based on orifice plate with differential pressure transmitter is most widely used type of flow measurement. It can be used in flow measurement of steam, water and gases.

The biggest advantages of this solution are:
- high accuracy in wide measuring ranges
- applicable to measure flow of neutral and aggressive mediums
- easy calibration

Ordering procedure:
- ZPS
- K
- DN100
- PN16
- P265GH
- 1.4301
- 90°
- M22x1.5

Type of mounting elements: Ø 14, M22x1.5, other
Angle spacing between measuring points
Material of pipe and flange: P265GH or other
Nominal pressure PN
Size DN
Type of flow element: K-orifice, Kkw-square orifice
Version of flowmeter
Venturi flowmeter is used for flow measurement of liquid medium in close pipeline. An orifice plate installed in line creates a pressure drop. This difference of pressure is measured via impulse line by differential pressure transmitter. The relationship between the rate of flow and pressure drop is very well known and allows to easily convert measured pressure difference to flow value.

Flowmeters without correction are used for mediums with constant values of pressure and temperature.

For custody transfer measurement it's recommend to use differential pressure transmitters without SQRT characteristic and correction from changes of medium's pressure and temperature. This kind of measurement have to be calculated in dedicated flow counters.

Characteristic:
- high accuracy of measurement in wide range of flow
- resistant for aggressive media
- work in wide range of temp. and pressure

Application:

Venturi flowmeter is used for flow measurement of liquid medium in close pipeline. An orifice plate installed in line creates a pressure drop. This difference of pressure is measured via impulse line by differential pressure transmitter. The relationship between the rate of flow and pressure drop is very well known and allows to easily convert measured pressure difference to flow value.

Flowmeters without correction are used for mediums with constant values of pressure and temperature. For custody transfer measurement it's recommend to use differential pressure transmitters without SQRT characteristic and correction from changes of medium's pressure and temperature. This kind of measurement have to be calculated in dedicated flow counters.

Characteristic:
- high accuracy of measurement in wide range of flow
- resistant for aggressive media
- work in wide range of temp. and pressure

Technical data:
- nominal pressure PN6÷PN160
- size of flowmeter DN65÷DN800
- material of flow element (orifice, nozzle):
  - stainless steel 1.4301
- material of construction elements:
  - carbon steel
  - austenitic steel
  - stainless steel
- temperature up to 600°C
- material certification
- calculation acc. to PN-EN ISO 5167

Application:

Venturi flowmeter is used for flow measurement of liquid medium in close pipeline. An orifice plate installed in line creates a pressure drop. This difference of pressure is measured via impulse line by differential pressure transmitter. The relationship between the rate of flow and pressure drop is very well known and allows to easily convert measured pressure difference to flow value.

Flowmeters without correction are used for mediums with constant values of pressure and temperature. For custody transfer measurement it's recommend to use differential pressure transmitters without SQRT characteristic and correction from changes of medium's pressure and temperature. This kind of measurement have to be calculated in dedicated flow counters.

Characteristic:
- high accuracy of measurement in wide range of flow
- resistant for aggressive media
- work in wide range of temp. and pressure

Ordering procedure:

- Version of flowmeter
- Size DN
- Nominal pressure PN
- M22x1.5
- Type of mounting elements: ø 14, M22x1.5, other
- Material of pipe and flange: P91 or other

- DN100
- PN63
- P91

Technical data:
- nominal pressure PN6÷PN160
- size of flowmeter DN65÷DN800
- material of flow element (orifice, nozzle):
  - stainless steel 1.4301
- material of construction elements:
  - carbon steel
  - austenitic steel
  - stainless steel
- temperature up to 600°C
- material certification
- calculation acc. to PN-EN ISO 5167