



Inline sensor-fitting with paddle wheel for flow measurement

- DN 06 to DN 65
- Wide range of materials and type of process connections available to ideally fit to the individual applications and process conditions
- Closed pipe system, sensor inside fitting
- Quarter-turn technology
- Transmitter available for Indication, Monitoring, Transmitting, On/Off control, Batch control



Product variants described in the data sheet may differ from the product presentation and description.

Can be combined with



Type SE30
Transmitter for Inline sensor-fitting



Type SE32
Transmitter for Inline sensor-fitting



Type SE35
Transmitter or batch controller for Inline sensor-fitting



Type SE36
ELEMENT transmitter for Inline sensor fitting



Type 8611
eCONTROL - Universal controller

Type description

The sensor-fitting Type S030 has a built-in paddle wheel to measure the flow rate and is especially designed for use with neutral, slightly aggressive, solid free liquids.

The compact sensor-fitting (S030) must be equipped with a Bürkert transmitter (Type SE30, SE30 Ex, SE32, SE35, SE36 or 8611) quickly and easily connected together by a bayonet catch.

The Bürkert "Inline quarter-turn" technology is a construction ensuring a leakage free operation.

The paddle wheel rotation (permanent magnets included in the wheels) is detected contactless through the sensor-fitting wall. The transmitter can be snapped-on or removed without opening the pipe or interrupting the process.

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1. General technical data

Note:

In the range of sensor fittings, there are specific ones for the measurement of flow rates at high temperature and pressure. These are the S030-HT models, which can only be used with the SE30 transmitter in the high temperature variant (SE30-HT).

Product properties

Material

Make sure the device materials are compatible with the fluid you are using.

Detailed information can be found in chapter [“3.1. Bürkert resistApp” on page 6](#).

Detailed information on the materials can be found in chapter [“3.2. Material specifications” on page 7](#).

Non wetted parts

Screw Stainless steel (316L - 1.4404)

Wetted parts

Body, sensor armature Stainless steel (316L - 1.4404), brass (CuZn₃₉Pb₂), PVC, PP or PVDF (depending on the sensor fitting variant Type S030)

Axis Ceramics (Al₂O₃)

Bearing • Ceramics (Al₂O₃)

• Iglidur® (only for S030-HT variant)

Paddle wheel • PVDF

• Stainless steel (316L - 1.4404) (only for S030-HT variant)

• PP on request

Sensor-fitting body Stainless steel (316L - 1.4404), brass (CuZn₃₉Pb₂), PVC, PP or PVDF (depending on the sensor fitting variant Type S030)

Seal FKM or EPDM (depending on the sensor fitting variant Type S030)

Detailed information can be found in chapter [“11.4. Ordering chart” on page 20](#).

Compatibility • Bürkert flow transmitter Type SE30, SE30 Ex, SE32, SE35, SE36, batch controller SE35 or 8611 Universal controller

• Bürkert flow transmitter Type SE30-HT (only for S030-HT variants)

Pipe diameter DN 06...DN 65

Dimensions Detailed information can be found in chapter [“4. Dimensions” on page 8](#).

Measuring range Flow rate: 0.5...1200 l/min (0.13...317 gpm)

Performance data

Measurement deviation • Teach-In (via a remote transmitter): ± 1 % of the measured value¹⁾ at teach flow rate value

• Standard K-factor: ± 2.5 % of the measured value¹⁾

Linearity ± 0.5 % of full scale¹⁾

Repeatability ± 0.4 % of the measured value¹⁾

Medium data

Fluid Clean, neutral or slightly aggressive, solid-free liquids

Fluid temperature For sensor-fitting in:

• PVC: 0...+50 °C (+32...+122 °F)

• PP: 0...+80 °C (+32...+176 °F)

• PVDF, stainless steel or brass: -15...+100 °C (+5...+212 °F)

• Stainless steel (S030-HT variant): -15...+125 °C (+5...+257 °F)

Fluid pressure For sensor-fitting in:

• Plastic max. PN 10

• Metal: max. PN 16

• Stainless steel (S030-HT variant):

– max. PN 40 (for -15...+90 °C (+5...+194 °F) temperature range)

– max. PN 25 (for +90...+125 °C (+194...+257 °F) temperature range)

Detailed information can be found in chapter [“5.1. Pressure temperature diagram” on page 13](#).

Viscosity Max. 300 cSt.

Rate of solid particles Max. 1 %

Maximum particle size 0.5 mm

Flow velocity • 0.3...10 m/s

• 0.5...10 m/s (only for S030-HT variant)

Detailed information can be found in chapter [“6.2. Selection of the nominal diameter” on page 15](#).

Process/Pipe connection & communication

Measuring devices connection Bürkert bayonet catch

Pipe connection For sensor-fitting in:

- Plastic: true union with nut and solvent/fusion socket, spigot or external thread
- Metal: internal or external thread, weld ends, clamp or flange
- Stainless (S030-HT variant): internal or external thread, weld ends (clamp or flange on request)

Approvals and Certificates

Directives

CE directive The applied standards, which verify conformity with the EU Directives, can be found on the EU Type Examination Certificate and/or the EU Declaration of conformity (if applicable)

Pressure equipment directive Complying with Article 4, Paragraph 1 of 2014/68/EU directive. Detailed information on the pressure equipment directive can be found in chapter [“2.2. Pressure equipment directive” on page 6](#).

Certificate Certificates must be ordered separately. Detailed information can be found in chapter [“11.5. Ordering chart accessories” on page 22](#)

- Inspection certificate 3.1 (according to EN-ISO 10204)
- Test report 2.2 (according to EN-ISO 10204)
- Certification of Conformity for the surface Quality (DIN4762-DIN4768-ISO/4287/1)
- 3 points Flow calibration certificate
- FDA declaration of conformity (see chapter [“2.1. Certificates” on page 6](#))

Environment and installation

Ambient temperature Operation and storage: for sensor-fitting in

- PVC: -15...+60 °C (+5...+122 °F)
- PP: -15...+80 °C (+5...+176 °F)
- PVDF, stainless steel or brass: -15...+100 °C (+5...+212 °F)

Temperature limits may depend on the used transmitter. Refer to the relevant data sheet or instruction manual for more details.

1.) Under reference conditions i.e. measuring fluid = water, ambient and water temperature = 20 °C (68 °F), while maintaining the minimum inlet and outlet distances and the appropriate internal diameters of the pipes.

2. Approvals

2.1. Certificates

Note:

The specific Inline sensor fittings (S030-HT) for the measurement of flow rates at high temperature and pressure is not covered by this certificat.

Certificate	Description
FDA	Food contact The variants with the body and the sensor armature made of PVDF or stainless steel materials, the paddle wheel made of PVDF material and the seal made of FKM or EPDM materials comply in their composition with the Code of Federal Regulations published by the FDA (Food and Drug Administration, USA).

2.2. Pressure equipment directive

The device conforms to article 4, paragraph 1 of the pressure equipment directive 2014/68/EU under the following conditions:

Device used on a pipe

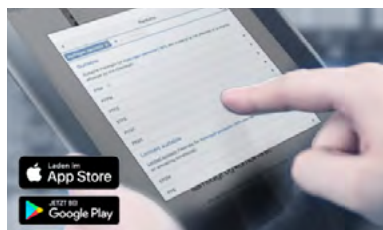
Note:

- The data in the table is independent of the chemical compatibility of the material and the fluid.
- PS = maximum admissible pressure (in bar), DN = nominal diameter of the pipe

Type of fluid	Conditions
Fluid group 1, article 4, paragraph 1.c.i	$DN \leq 25$
Fluid group 2, article 4, paragraph 1.c.i	$DN \leq 32$ or $PS \cdot DN \leq 1000$
Fluid group 1, article 4, paragraph 1.c.ii	$DN \leq 25$ or $PS \cdot DN \leq 2000$
Fluid group 2, article 4, paragraph 1.c.ii	$DN \leq 200$ or $PS \leq 10$ or $PS \cdot DN \leq 5000$

3. Materials

3.1. Bürkert resistApp



Bürkert resistApp – Chemical Resistance Chart

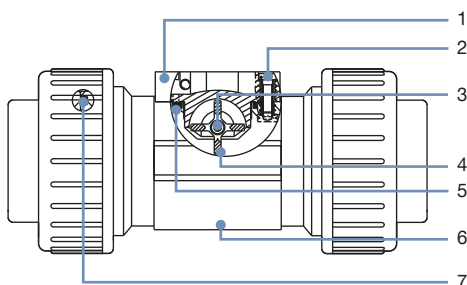
You want to ensure the reliability and durability of the materials in your individual application case? Verify your combination of media and materials on our website or in our resistApp.

[Start Chemical Resistance Check](#)

3.2. Material specifications

Note:

The following picture describes the Inline sensor-fitting with a process true union connection with nut and solvent/fusion socket, but this also applies to all variants of process connection.



No.	Element	Material
1	Sensor armature	Stainless steel
2	Screws	Stainless steel
3	Axis and bearings	• Axis in ceramics (Al_2O_3) • Bearings in: – ceramics (Al_2O_3) – Iglidur® (only for S030-HT variant)
4	Paddle wheel	• PVDF • Stainless steel (only for S030-HT variant)
5	Seal	FKM or EPDM (depending on S030 variant)
6	Sensor-fitting body	• Stainless steel (316L - 1.4404), brass ($\text{CuZn}_{39}\text{Pb}_2$), PVC, PP, PVDF (depending on S030 variant) • Stainless steel (316L - 1.4404) (only for S030-HT)
7	Seals	FKM or EPDM (depending on S030 variant and only for True union connection with nut and solvent/fusion socket)

4. Dimensions

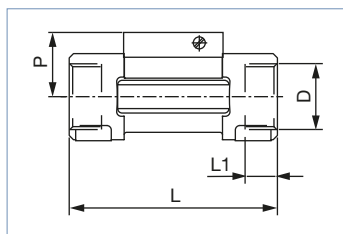
4.1. Metal sensor-fitting

Internal thread connection

Note:

Dimensions in mm, unless otherwise stated

G, NPT or Rc in stainless steel (316L - 1.4404) or brass (CuZn₃₉Pb₂)



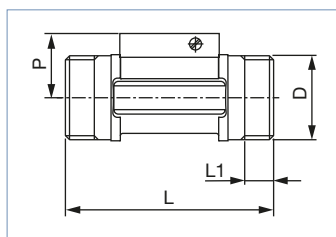
DN	P	L	L1	D [inch]
15	34.5	84.0	16.0	G ½
			17.0	NPT ½
			15.0	Rc ½
20	32.0	94.0	17.0	G ¾
			18.3	NPT ¾
			16.3	Rc ¾
25	32.2	104.0	23.5	G 1
			18.0	NPT 1
			18.0	Rc 1
32	35.8	119.0	23.5	G 1 ¼
			21.0	NPT 1 ¼
			21.0	Rc 1 ¼
40	39.6	129.0	23.5	G 1 ½
			20.0	NPT 1 ½
			19.0	Rc 1 ½
50	45.7	148.5	27.5	G 2
			24.0	NPT 2
			24.0	Rc 2

External thread connection

Note:

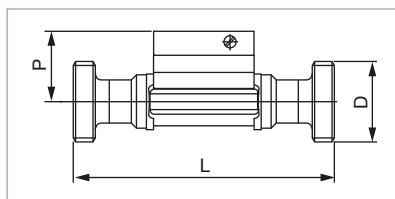
Dimensions in mm, unless otherwise stated

G, NPT or Rc in stainless steel (316L - 1.4404) or brass (CuZn₃₉Pb₂)



DN	P	L	L1	D [inch]
06	29.5	90.0	14.0	G ½
08	29.5	90.0	14.0	G, NPT or Rc ½
15	34.5	84.0	11.5	G ¾
20	32.0	94.0	13.5	G 1
25	32.2	104.0	14.0	G 1 ¼
32	35.8	119.0	18.0	G 1 ½

SMS 1145 in stainless steel (316L - 1.4404)

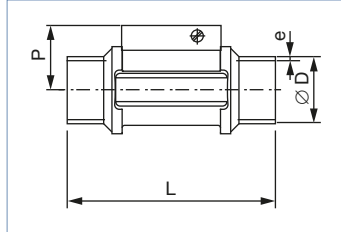


DN	P	L	D
25	32.0	130	Rd 40x 1/6"
40	35.8	164	Rd 60x 1/6"
50	39.6	173	Rd 70x 1/6"

Weld spigot connection**Note:**

Dimensions in mm, unless otherwise stated

EN ISO 1127/ISO 4200/DIN 11866 series B, SMS 3008, BS 4825-1/ASME BPE/DIN 11866 series C or DIN 11850 series 2/DIN 11866 series A/ DIN EN 10357 series A in stainless steel (316L - 1.4404)



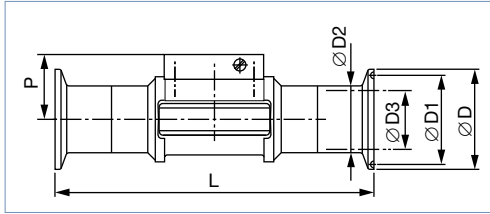
DN	P	Standard	L	øD	e
08	–	EN ISO 1127/ISO 4200/DIN 11866 series B	–	–	–
	–	SMS 3008	–	–	–
	–	ASME BPE/DIN 11866 series C	–	–	–
	29.5	DIN 11850 series 2/DIN 11866 series A/ DIN EN 10357 series A	96.0	13.00	1.50
15	34.5	EN ISO 1127/ISO 4200/DIN 11866 series B	84.0	21.30	1.60
	–	SMS 3008	–	–	–
	–	ASME BPE/DIN 11866 series C	–	–	–
	34.5	DIN 11850 series 2/DIN 11866 series A/ DIN EN 10357 series A	84.0	19.0	1.50
20	32.0	EN ISO 1127/ISO 4200/DIN 11866 series B	94.0	26.9	1.60
	–	SMS 3008	–	–	–
	34.5	ASME BPE/DIN 11866 series C	84.0	19.05	1.65
	34.5	DIN 11850 series 2/DIN 11866 series A/ DIN EN 10357 series A	84.0	23.00	1.50
25	32.2	EN ISO 1127/ISO 4200/DIN 11866 series B	104.0	33.70	2.00
	32.0	SMS 3008	94.0	25.00	1.20
	32.0	BS 4825-1/ASME BPE/DIN 11866 series C	94.0	25.40	1.65
	32.0	DIN 11850 series 2/DIN 11866 series A/ DIN EN 10357 series A	94.0	29.00	1.50
32	35.8	EN ISO 1127/ISO 4200/DIN 11866 series B	119.0	42.40	2.00
	–	SMS 3008	–	–	–
	32.2	BS 4825-1/ASME BPE/DIN 11866 series C	104.0	32.00	1.65
	32.2	DIN 11850 series 2/DIN 11866 series A/ DIN EN 10357 series A	104.0	35.00	1.50
40	39.6	EN ISO 1127/ISO 4200/DIN 11866 series B	129.0	48.30	2.00
	35.8	SMS 3008	119.0	38.00	1.20
	35.8	BS 4825-1/ASME BPE/DIN 11866 series C	119.0	38.10	1.65
	35.8	DIN 11850 series 2/DIN 11866 series A/ DIN EN 10357 series A	119.0	41.00	1.50
50	45.7	EN ISO 1127/ISO 4200/DIN 11866 series B	148.5	60.30	2.60
	39.6	SMS 3008	128.0	51.00	1.20
	39.6	BS 4825-1/ASME BPE/DIN 11866 series C	128.0	50.80	1.65
	39.6	DIN 11850 series 2/DIN 11866 series A/ DIN EN 10357 series A	128.0	53.00	1.50
65	–	EN ISO 1127/ISO 4200/DIN 11866 series B	–	–	–
	45.7	SMS 3008	147.0	63.50	1.60
	45.7	BS 4825-1/ASME BPE/DIN 11866 series C	147.0	63.50	1.65
	–	DIN 11850 series 2/DIN 11866 series A/ DIN EN 10357 series A	–	–	–

Clamp connection

Note:

Dimensions in mm, unless otherwise stated

DIN 32676 series B, SMS 3017^{1.)}, BS 4825-3/ASME BPE^{1.)} or DIN 32676 series A in stainless steel (316L - 1.4404)



DN	P	Standard	L	øD	øD1	øD2	øD3
08	–	DIN 32676 series B ^{2.)}	–	–	–	–	–
	–	SMS 3017	–	–	–	–	–
	–	ASME BPE	–	–	–	–	–
	29.5	DIN 32676 series A	125	34.0	27.5	13.00	10.00
15	34.5	DIN 32676 series B ^{2.)}	130	34.0	27.5	21.30	18.10
	–	SMS 3017	–	–	–	–	–
	–	ASME BPE	–	–	–	–	–
	29.5	DIN 32676 series A	119	34.0	27.5	19.00	16.00
20	32.0	DIN 32676 series B	150	50.5	43.5	26.90	23.70
	–	SMS 3017	–	–	–	–	–
	34.5	ASME BPE	119	25.0	19.6	19.05	15.75
	34.5	DIN 32676 series A	119	34.0	27.5	23.00	20.00
25	32.2	DIN 32676 series B	160	50.5	43.5	33.70	29.70
	32.0	SMS 3017	129	50.5	43.5	25.00	22.60
	32.0	BS 4825-3/ASME BPE	129	50.5	43.5	25.40	22.10
	32.0	DIN 32676 series A	136	50.5	43.5	29.00	26.00
32	35.8	DIN 32676 series B	180	50.5	43.5	42.40	38.40
	–	SMS 3017	–	–	–	–	–
	–	BS 4825-3/ASME BPE	–	–	–	–	–
	–	DIN 32676 series A	–	–	–	–	–
40	39.6	DIN 32676 series B	200	64.0	56.5	48.30	44.30
	35.8	SMS 3017	161	50.5	43.5	38.00	35.60
	35.8	BS 4825-3/ASME BPE	161	50.5	43.5	38.10	34.80
	35.8	DIN 32676 series A	161	50.5	43.5	41.00	38.00
50	45.7	DIN 32676 series B	230	77.5	70.5	60.30	55.10
	39.6	SMS 3017	192	64.0	56.5	51.00	48.60
	39.6	BS 4825-3/ASME BPE	192	64.0	56.5	50.80	47.50
	39.6	DIN 32676 series A	170	64.0	56.5	53.00	50.00
65	–	DIN 32676 series B	–	–	–	–	–
	45.7	SMS 3017	216	77.5	70.5	63.50	60.3
	45.7	BS 4825-3/ASME BPE	216	77.5	70.5	63.50	60.2
	–	DIN 32676 series A	–	–	–	–	–

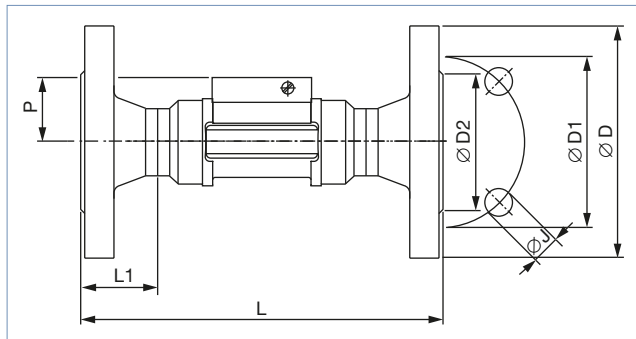
1.) Available with internal surface finish Ra < 0.8 µm

2.) Similar to DIN 32676 series B, but with clamp connection 34.0

Flange connection**Note:**

Dimensions in mm, unless otherwise stated

EN1092-1/B1/PN 16, ANSI B16-5 or JIS 10 K in stainless steel (316L - 1.4404)

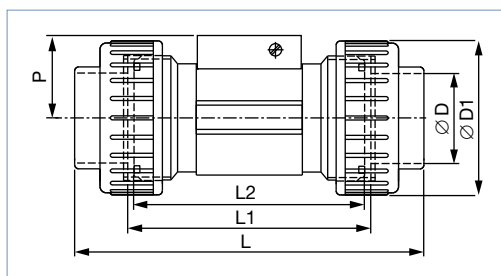


DN	P	Standard	L	L1	øD	øD1	øD2	øJ
15	34.5	EN	130	23.5	95.0	65.0	45.0	4 × 14.0
		ANSI	130		89.0	60.3	34.9	4 × 15.8
		JIS	152		95.0	70.0	51.0	4 × 15.0
20	32.0	EN	150	28.5	105.0	75.0	58.0	4 × 14.0
		ANSI	150		99.0	69.8	42.9	4 × 15.8
		JIS	178		100.0	75.0	56.0	4 × 15.0
25	32.2	EN	160	28.5	115.0	85.0	68.0	4 × 14.0
		ANSI	160		108.0	79.4	50.8	4 × 15.8
		JIS	216		125.0	90.0	67.0	4 × 19.0
32	35.8	EN	180	31.0	140.0	100.0	78.0	4 × 18.0
		ANSI	180		117.0	88.9	63.5	4 × 15.8
		JIS	229		135.0	100.0	76.0	4 × 19.0
40	39.6	EN	200	36.0	150.0	110.0	88.0	4 × 18.0
		ANSI	200		127.0	98.4	73.0	4 × 15.8
		JIS	241		140.0	105.0	81.0	4 × 19.0
50	45.7	EN	230	41.0	165.0	125.0	102.0	4 × 18.0
		ANSI	230		152.0	120.6	92.1	4 × 19.0
		JIS	267		155.0	120.0	96.0	4 × 19.0

4.2. Plastic sensor-fitting**True union connection with nut and solvent/fusion socket****Note:**

Dimensions in mm, unless otherwise stated

DIN 8063, ASTM D 1785/76 or JIS K in PVC DIN 16962 in PP or ISO 10931 in PVDF



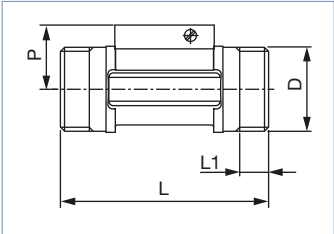
DN	P	Standard	L	L1	L2	øD	øD1
08 ^{1.)}	29.5	DIN/ISO	122.0	92	90	12.00	–
		ASTM	–			–	–
		JIS	–			–	–
15	34.5	DIN/ISO	128.0	96	90	20.00	43
		ASTM	130.0			21.30	
		JIS	129.0			18.40	
20	32.0	DIN/ISO	144.0	106	100	25.00	53
		ASTM	145.6			26.70	
		JIS	145.0			26.45	
25	32.2	DIN/ISO	160.0	116	110	32.00	60
		ASTM	161.4			33.40	
		JIS	161.0			32.55	
32	35.8	DIN/ISO	168.0	116	110	40.00	74
		ASTM	170.0			42.20	
		JIS	169.0			38.60	
40	39.6	DIN/ISO	188.0	127	120	50.00	83
		ASTM	190.2			48.30	
		JIS	190.0			48.70	
50	45.7	DIN/ISO	212.0	136	130	63.00	103
		ASTM	213.6			60.30	
		JIS	213.0			60.80	

1.) Only available in PVC

External thread connection

Note:
Dimensions in mm, unless otherwise stated

G, NPT or Rc in PVC (only DN 06 and DN 08) or PVDF (only DN 08)

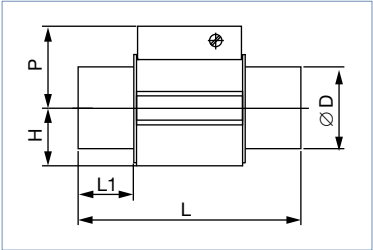


DN	P	L	L1	D [inch]
06	29.5	90.0	14.0	G ½
08	29.5	90.0	14.0	G, NPT or Rc ½

Solvent/fusion spigot connection

Note:
Dimensions in mm, unless otherwise stated

DIN 8063 in PVC, DIN 16962 in PP or ISO 10931 in PVDF

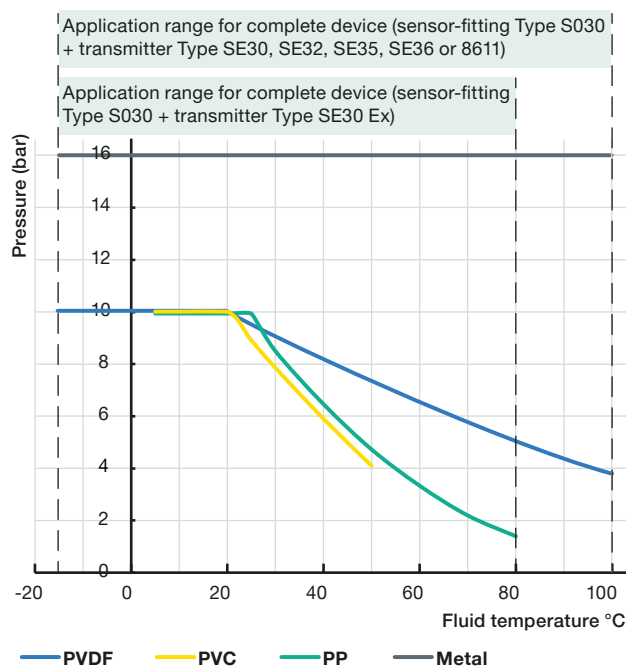


DN	P	Standard	H	L	L1	øD
15	34.5	DIN 8063	17.5	90	16.5	20
		DIN 16962		85	14.0	
		DIN 10931		85	14.0	
20	32.0	DIN 8063	17.5	100	20.0	25
		DIN 16962		92	16.0	
		DIN 10931		92	16.0	
25	32.2	DIN 8063	21.5	110	23.0	32
		DIN 16962		95	18.0	
		DIN 10931		95	18.0	
32	35.8	DIN 8063	27.5	110	27.5	40
		DIN 16962		100	20.0	
		DIN 10931		100	20.0	
40	39.6	DIN 8063	31.5	120	30.0	50
		DIN 16962		106	23.0	
		DIN 10931		106	23.0	
50	45.7	DIN 8063	39.5	130	37.0	63
		DIN 16962		110	27.0	
		DIN 10931		110	27.0	

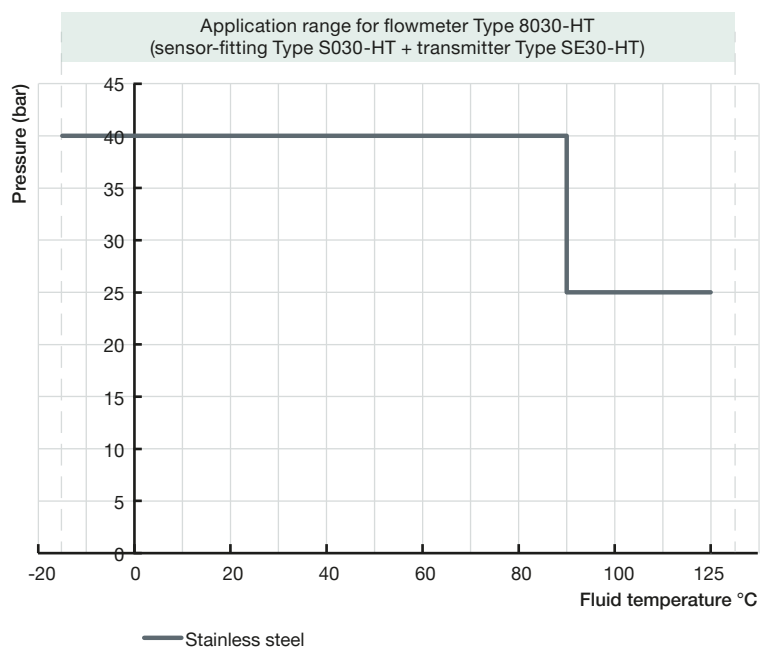
5. Performance specifications

5.1. Pressure temperature diagram

With sensor-fitting S030 standard



With sensor-fitting S030-HT



6. Product installation

6.1. Installation notes

Note:

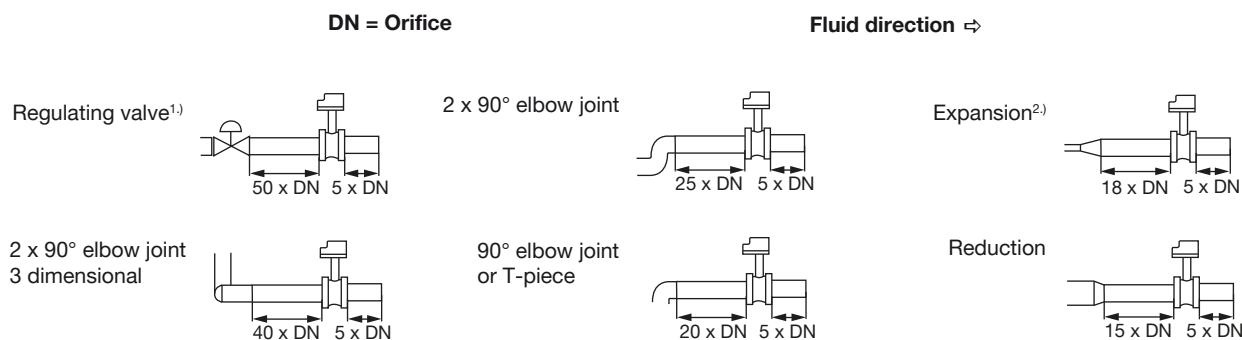
The device is not suitable for use in gaseous media and steam.

Minimum straight upstream and downstream distances must be observed. According to the pipe's design, necessary distances can be bigger or use a flow conditioner to obtain the best accuracy.

For more information, please refer to EN ISO 5167-1.

EN ISO 5167-1 prescribes the straight inlet and outlet distances that must be complied with when installing fittings in pipe lines in order to achieve calm flow conditions. The most important layouts that could lead to turbulence in the flow are shown below, together with the associated prescribed minimum inlet and outlet distances.

Make sure that the measuring conditions at the point of measurement are calm and problem-free.

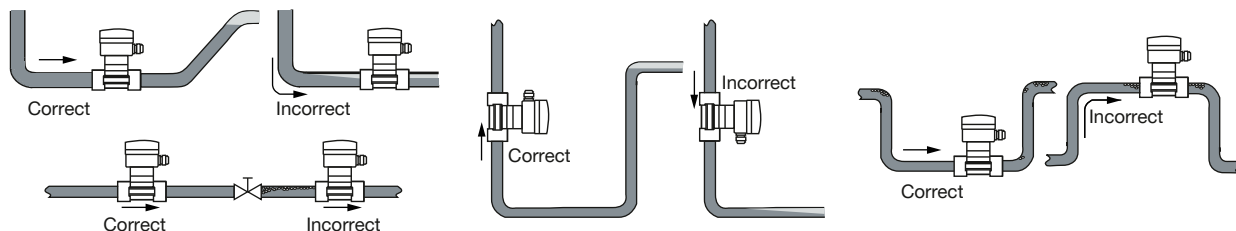


1.) If the valve cannot be mounted after the measuring device, the minimal distances have to be respected.

2.) If an expansion cannot be avoided, the minimal distances have to be respected.
Please note minimum flow velocity

The complete measuring device can be installed into either horizontal or vertical pipes.

Important criteria for this are; ensure that the measurement pipe is fully filled and that the measurement pipe is air bubble free.



Pressure and temperature ratings must be respected according to the selected sensor-fitting material. The suitable pipe size is selected using the diagram for selecting the nominal diameter of the sensor-fitting.

See chapter [“6.2. Selection of the nominal diameter”](#) on page 15.

6.2. Selection of the nominal diameter

The following graph is used to determine the DN of the pipe and the fitting appropriate to the application, according to the fluid velocity and the flow rate. On the chart, the intersection of flow rate and flow velocity gives the appropriate diameter.

Note:

For the sensor fittings listed below, the corresponding nominal size in the bracket must be used:

- External threads according to SMS 1145
- Weld ends according to SMS 3008, BS4825-1/ASME BPE/DIN 11866 series C or DIN 11850 series 2/DIN 11866 series A/ DIN EN 10357 series A
- Clamp according to SMS 3017, BS 4825-3/ASME BPE or DIN 32676 series A.

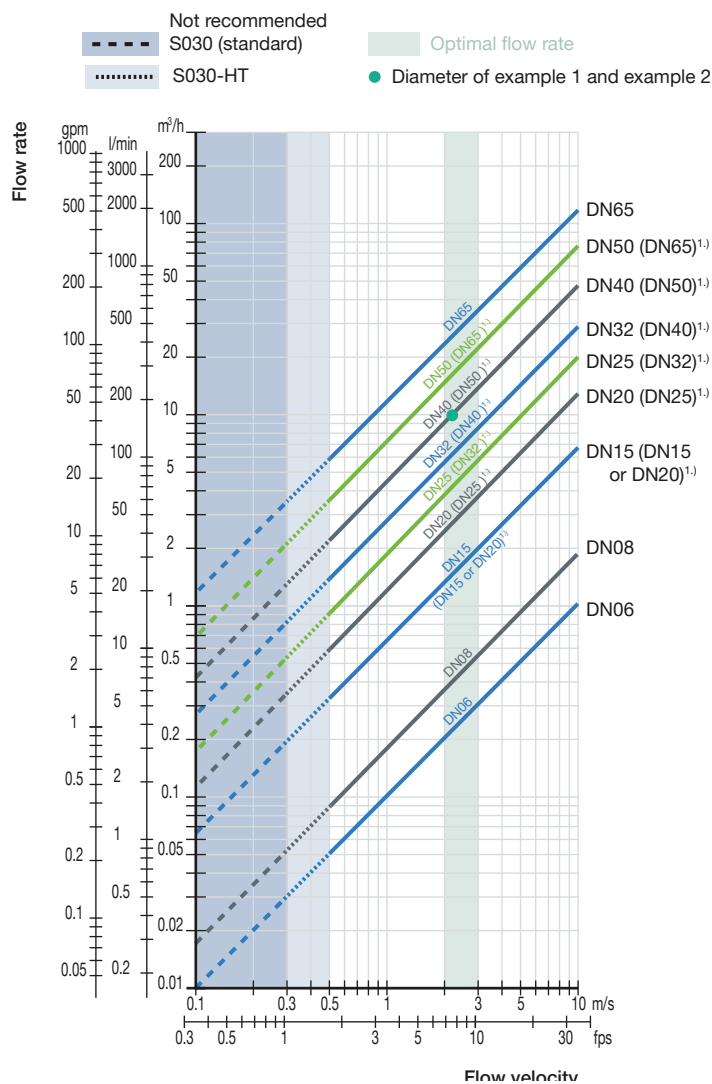
For all other [sensor] fittings, the corresponding nominal diameter without bracket applies.

Example 1:

- nominal flow: 10 m³/h
 - optimal flow rate: 2...3 m/s
- Result: Select a pipe size of DN 40

Example 2 with external threads according to SMS 1145:

- nominal flow: 10 m³/h
 - optimal flow rate: 2...3 m/s
- Result: Select a pipe size of DN 50



1.) See note at the beginning of this chapter.

7. Product operation

7.1. Measuring principle

When liquid flows through the pipe, the paddle wheel with 4 inserted magnets is set in rotation producing a frequency signal in the transducer (Hall sensor) of the mounted transmitter. The rotation is detected contactless through the sensor-fitting wall. The frequency signal is proportional to the flow velocity of the fluid.

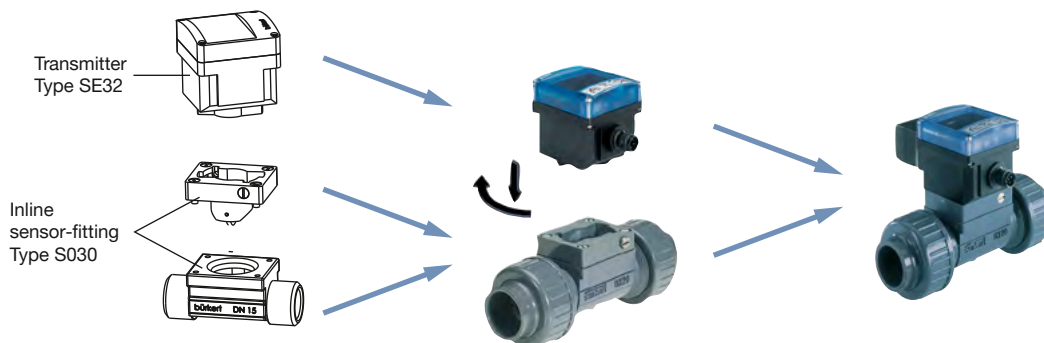
8. Product design and assembly

8.1. Product assembly

Note:

- A complete device to measure the flow rate is made up of a Inline sensor-fitting Type S030 with paddle wheel and a transmitter Type SE30, SE30 Ex, SE32, SE35, SE36 or 8611.
- The Bürkert Inline sensor-fitting Type S030 ensures simple installation into pipes from DN 06...DN 65. The transmitter Type SE30, SE30 Ex, SE32, SE35, SE36 or 8611 can easily be installed into any sensor-fitting system Type S030, by means of a bayonet fastening.
- The drawing shows the assembly of a Inline sensor-fitting Type S030 with a process true union connection with nut and solvent/fusion socket and a transmitter Type SE32 (Type S030 + Type SE32 = Type 8032). This also applies to all variants of process connection and compatible type of transmitter.

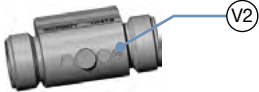
See **Data sheet Type 8030** ▶ Inline flowmeter, **Data sheet Type 8032** ▶ Flowmeter/threshold detector, **Data sheet Type 8035** ▶ Inline flowmeter or batch controller, **Data sheet Type 8036** ▶ Inline flowmeter, ELEMENT design or **Data sheet Type 8611** ▶ eCONTROL - Universal controller for more information.



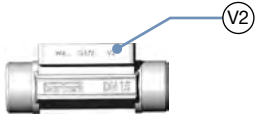
9. Product accessories

Note:
Since March 2012, the Type S030 Inline sensor-fittings in DN 15 and DN 20 exist in two variants with different K factors. Detailed information can be found in the user manual in chapter K factor, see **Type S030 ▶Type S030-HT ▶**.
The second variant is identified by the marking “v2”.
This “v2” marking can be found:

- on the bottom of the DN 15 or DN 20 Inline sensor-fitting in plastic



- on the side of the DN 15 or DN 20 Inline sensor-fitting in metal



Accessories	No.	Description
An exploded view diagram showing three components: a sensor holder (1), two O-rings (2 and 3), and a sensor fitting. The O-rings are shown being inserted into the sensor holder. The sensor fitting is shown below. A blue line points from a circle containing '1.' to the O-rings.	1	Sensor holder
	2	O-ring set for metal sensor-fitting
	3	O-ring set for plastic sensor-fitting (O-Ring for process connection and seal ^{1.)} for sensor holder).
1.) Depending on sensor holder variant: flat seal to use for holder with groove (old variant, no more available for sale), O-Ring to use for holder with lug (variant “v2”)		

10. Networking and combination with other Bürkert products

Example:



1.) Only for SE30Ex: depending on the category, to be used with an intrinsic safety barrier with NAMUR input

11. Ordering information

11.1. Bürkert eShop



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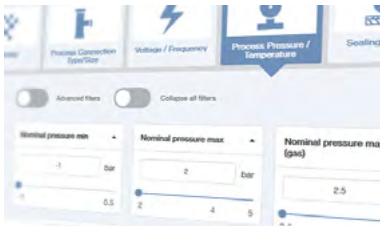
11.2. Recommendation regarding product selection

A complete device to measure the flow rate is made up of a compact Inline sensor-fitting (Type S030) with paddle wheel and a transmitter (Type SE30, SE30 Ex, SE32, SE35, SE36 or 8611).

Two different components must be ordered in order to select a complete device. The following information is required:

- **Article no.** of the desired flow transmitter (see **Data sheet Type 8030** ►, **Data sheet Type 8032** ►, **Data sheet Type 8035** ►, **Data sheet Type 8036** ► or **Data sheet Type 8611** ►)
- **Article no.** of the selected S030 Inline sensor-fitting (see chapter “**11.4. Ordering chart**” on page 20)

11.3. Bürkert product filter



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11.4. Ordering chart

Metal sensor-fitting

Standard	Article no.									
	DN 06 ^{1.)} - 1/4"	DN 06 ^{1.)} - 1/2"	DN 08 ^{1.)} - 1/2"	DN 15	DN 20	DN 25	DN 32	DN 40	DN 50	DN 65
Brass - with PVDF paddle wheel - Fluid temperature max. 100 °C, PN 16										
FKM seal										
Internal thread connection										
G	–	–	–	423980	423981	423982	423983	423984	423985	–
NPT	–	–	–	423986	423987	423988	423989	423990	423991	–
Rc	–	–	–	423992	423993	423994	423995	423996	423997	–
External thread connection										
G	552557	552527	444023	423998	423999	424000	424001	–	–	–
NPT	–	–	449182	–	–	–	–	–	–	–
Rc	–	–	448668	–	–	–	–	–	–	–
Stainless steel - with PVDF paddle wheel - Fluid temperature max. 100 °C, PN 16										
FKM seal										
Internal thread connection										
G	–	–	–	424004	424005	424006	424007	424008	424009	–
NPT	–	–	–	424010	424011	424012	424013	424014	424015	–
Rc	–	–	–	424016	424017	424018	424019	424020	424021	–
External thread connection										
G	552733	552559	444029	424022	424023	424024	424025	–	–	–
NPT	–	–	449050	–	–	–	–	–	–	–
Rc	–	–	448669	–	–	–	–	–	–	–
Weld end spigot connection										
EN ISO 1127/ ISO 4200/ DIN 11866 series B	–	–	552845 ^{3.)}	424028	424029	424030	424031	424032	424033	–
Clamp connection										
DIN 32676 series B	–	–	–	424034 ^{4.)}	424035	424036	424037	424038	424039	–
Flange connection										
EN 1092-1/B1/ PN 16	–	–	–	424040	424041	424042	424043	424044	424045	–
ANSI B16-5	–	–	–	424046	424047	424048	424049	424050	424051	–
JIS 10K	–	–	–	430108	430109	430110	430111	430112	430113	–
EPDM seal										
External thread connection										
SMS 1145	–	–	–	–	–	443306	–	443307	443308	–
Weld end spigot connection										
SMS 3008	–	–	–	–	–	443298	–	443299	443300	443374 ^{6.)}
BS 4825-1/ ASME BPE/ DIN 11866 series C	–	–	–	–	443369 ^{5.)}	443370	443371	443372	443373	443374
DIN 11850 series 2/ DIN 11866 series A/ DIN EN 10357 series A	–	–	551788	551789	551790	551791	–	551792	551793	–
Clamp connection										
SMS 3017	–	–	–	–	–	443302	–	443303	443304	443399 ^{6.)}
SMS 3017 ^{2.)}	–	–	–	–	–	443387	–	443388	443389	443720 ^{6.)}
BS 4825-3/ ASME BPE	–	–	–	–	443395 ^{5.)}	443396	–	443397	443398	443399
BS 4825-3/ ASME BPE ^{2.)}	–	–	–	–	443400	443717	–	443718	443719	443720

Standard	Article no.									
	DN 06 ^{1.)} - ¼"	DN 06 ^{1.)} - ½"	DN 08 ^{1.)} - ½"	DN 15	DN 20	DN 25	DN 32	DN 40	DN 50	DN 65
DIN 32676 series A	–	–	551794  4.)	551795  4.)	551796 	551797 	–	551798 	551799 	–
Stainless steel - with PVDF paddle wheel - Fluid temperature max. 100 °C, PN 40										
FKM seal										
Internal thread connection										
G	–	–	–	427138 	425737 	425729 	427152 	427153 	427154 	–

1.) External thread

2.) Internal surface finish Ra < 0.8 µm

3.) EPDM seal

4.) Refer to clamp with D dimensions of 34 mm (see chapter "Clamp connection" on page 10)

5.) DN 20 (¾") only available in ASME BPE

6.) Refer to ASME BPE

Further versions on request



Process connection

External thread connection: Metric in mm

Plastic sensor-fitting

Standard	Article no.									
	DN 06 ^{1.)} - ¼"	DN 06 ^{1.)} - ½"	DN 08 ^{1.)} - ½"	DN 15	DN 20	DN 25	DN 32	DN 40	DN 50	DN 65
PVC - with PVDF paddle wheel - Fluid temperature max. 50 °C, PN 10										
FKM seal										
True union connection with nut and solvent socket										
DIN 8063	–	–	444022 	423938 	423939 	423940 	423941 	423942 	423943 	–
ASTM D 1785/76	–	–	–	423950 	423951 	423952 	423953 	423954 	423955 	–
JIS K	–	–	–	429072 	429073 	429074 	429075 	429076 	429077 	–
External thread connection										
G	–	552560 	444025 	–	–	–	–	–	–	–
Solvent spigot connection										
DIN 8063	–	–	–	423944 	423945 	423946 	423947 	423948 	423949 	–
True union connection with nut and without socket										
–	–	–	–	430734 	430735 	430736 	430737 	430738 	430739 	–
EPDM seal										
True union connection with nut and without socket										
–	–	–	–	430740 	430741 	430742 	430743 	430744 	430745 	–
PP - with PVDF paddle wheel - Fluid temperature max. 80 °C, PN 10										
FKM seal										
True union connection with nut and fusion socket										
DIN 16962	–	–	–	423956 	423957 	423958 	423959 	423960 	423961 	–
Fusion spigot connection										
DIN 16962	–	–	–	423962 	423963 	423964 	423965 	423966 	423967 	–
PVDF - with PVDF paddle wheel - Fluid temperature max. 100 °C, PN 10										
FKM seal										
True union connection with nut and fusion socket										
ISO 10931	–	–	–	423968 	423969 	423970 	423971 	423972 	423973 	–
External thread connection										
ISO 10931	–	–	444028 	–	–	–	–	–	–	–
Fusion spigot connection										
ISO 10931	–	–	–	423974 	423975 	423976 	423977 	423978 	423979 	–

1.) External thread

Stainless steel sensor-fitting (S030-HT variant)**Note:**

Only to be mounted with transmitter Type SE30 in variant High Temperature (Type SE30-HT). This combination results in the High Temperature variant flowmeter (Type 8030-HT). See **Data sheet Type 8030** ►

Standard	Article no.							
	DN 06 ^{1.)} - 1/4"	DN 08 ^{1.)} - 1/2"	DN 15	DN 20	DN 25	DN 32	DN 40	DN 50
With stainless steel paddle wheel - Fluid temperature max. 125 °C, PN 25 (max. 90 °C, PN 40)								
FKM seal								
Internal thread connection								
G	–	–	449726 𐀀	449727 𐀀	449728 𐀀	449729 𐀀	449730 𐀀	449731 𐀀
NPT	–	–	449733 𐀀	449734 𐀀	449735 𐀀	449736 𐀀	449737 𐀀	449738 𐀀
Rc	–	–	449740 𐀀	449741 𐀀	449742 𐀀	449743 𐀀	449744 𐀀	449745 𐀀
External thread connection								
G	552735 𐀀	449725 𐀀	–	–	–	–	–	–
NPT	–	449732 𐀀	–	–	–	–	–	–
Rc	–	449739 𐀀	–	–	–	–	–	–
Weld end connection								
EN ISO 1127/ISO 4200/DIN 11866 series B	–	–	551757 𐀀	551758 𐀀	551759 𐀀	551760 𐀀	551761 𐀀	551762 𐀀

1.) External thread

Further versions on request	
 Material EPDM seal	 Process connection Clamp or flange

11.5. Ordering chart accessories**Note:**

Since March 2012, the Type S030 Inline sensor-fittings in DN 15 and DN 20 exist in two variants, with different K factors. The second variant is identified by the marking "v2".

See chapter **"9. Product accessories"** on page 17.

Description	Article no.
Sensor holder	
Stainless steel with paddle wheel (PVDF), seal (FKM), screws and certificate for DN 06, DN 08, DN 15 v2 and DN 20 v2	448678 𐀀
Stainless steel with paddle wheel (PVDF), seal (FKM), screws and certificate for DN 15 (except DN 15 v2 and DN 20 v2)...DN 65	432306 𐀀
Stainless steel with paddle wheel (PVDF), seal (EPDM), screws and certificate for DN 15 (except DN 15 v2 and DN 20 v2)...DN 65	432305 𐀀
Stainless steel with paddle wheel (PVDF), seal (EPDM), screws and certificate, Ra int. <0.8 µm for DN 15 (except DN 15 v2 and DN 20 v2)...DN 65	434149 𐀀
Stainless steel with paddle wheel (PP), seal (EPDM), screws and certificate for DN 06, DN 08, DN 15 v2 and DN 20 v2	554896 𐀀
Stainless steel with paddle wheel (PP), seal (EPDM), screws and certificate for DN 15 (except DN 15 v2 and DN 20 v2)...DN 65	449425 𐀀
Brass with paddle wheel (PVDF), seal (FKM), screws and certificate for DN 06, DN 08, DN 15 v2 and DN 20 v2	448677 𐀀
Brass with paddle wheel (PVDF), seal (FKM), screws and certificate for DN 15 (except DN 15 v2 and DN 20 v2)...DN 65	432304 𐀀
Brass with paddle wheel (PVDF), seal (EPDM), screws and certificate for DN 15 (except DN 15 v2 and DN 20 v2)...DN 65	432303 𐀀
Brass with paddle wheel (PP), seal (EPDM), screws and certificate for DN 15 (except DN 15 v2 and DN 20 v2)...DN 65	449866 𐀀
PVC with paddle wheel (PVDF), seal (FKM), screws and certificate for DN 06, DN 08, DN 15 v2 and DN 20 v2	448674 𐀀
PVC with paddle wheel (PVDF), seal (FKM), screws and certificate for DN 15 (except DN 15 v2 and DN 20 v2)...DN 65	432298 𐀀
PVC with paddle wheel (PVDF), seal (EPDM), screws and certificate for DN 15 (except DN 15 v2 and DN 20 v2)...DN 65	432297 𐀀
PVC with paddle wheel (PP), seal (EPDM), screws and certificate for DN 15 (except DN 15 v2 and DN 20 v2)...DN 65	443982 𐀀
PP with paddle wheel (PVDF), seal (FKM), screws and certificate for DN 15...DN 65	432300 𐀀
PP with paddle wheel (PVDF), seal (EPDM), screws and certificate for DN 15...DN 65	432299 𐀀
PP with paddle wheel (PP), seal (FKM), screws and certificate for DN 15...DN 65	552881 𐀀

PP with paddle wheel (PP), seal (EPDM), screws and certificate for DN 15...DN 65	443983 
PVDF with paddle wheel (PVDF), seal (FKM), screws and certificate for DN 06, DN 08, DN 15 v2 and DN 20 v2	448676 
PVDF with paddle wheel (PVDF), seal (FKM), screws and certificate for DN 15 (except DN 15 v2 and DN 20 v2)...DN 65	432302 
PVDF with paddle wheel (PVDF), seal (EPDM), screws and certificate for DN 15 (except DN 15 v2 and DN 20 v2)...DN 65	432301 
Sensor holder for variant High Temperature	
Stainless steel with paddle wheel (stainless steel), seal (FKM) and screws for DN 15 (except DN 15 v2 and DN 20 v2)...DN 50	551764 
Stainless steel with paddle wheel (stainless steel), seal (FKM) and screws for DN 06, DN 08, DN 15 v2 and DN 20 v2	449723 
Stainless steel with paddle wheel (stainless steel), seal (EPDM) and screws for DN 15 (except DN 15 v2 and DN 20 v2)...DN 50	551763 
Stainless steel with paddle wheel (stainless steel), seal (EPDM) and screws for DN 06, DN 08, DN 15 v2 and DN 20 v2	449724 
O-ring set	
O-ring in FKM for fitting in metal, DN 06...DN 65	426340 
O-ring in EPDM for fitting in metal, DN 06...DN 65	426341 
O-ring in FKM for fitting in plastic, DN 08	448679 
O-ring in FKM for fitting in plastic, DN 15	431555 
O-ring in FKM for fitting in plastic, DN 20	431556 
O-ring in FKM for fitting in plastic, DN 25	431557 
O-ring in FKM for fitting in plastic, DN 32	431558 
O-ring in FKM for fitting in plastic, DN 40	431559 
O-ring in FKM for fitting in plastic, DN 50	431560 
O-ring in EPDM for fitting in plastic, DN 08	448680 
O-ring in EPDM for fitting in plastic, DN 15	431561 
O-ring in EPDM for fitting in plastic, DN 20	431562 
O-ring in EPDM for fitting in plastic, DN 25	431563 
O-ring in EPDM for fitting in plastic, DN 32	431564 
O-ring in EPDM for fitting in plastic, DN 40	431565 
O-ring in EPDM for fitting in plastic, DN 50	431566 
Approvals and certificates	
3 points flow calibration certificat ^{1.)}	550676 
Inspection certificate 3.1 (according to EN-ISO 10204)	803723 
Test report 2.2 (according to EN-ISO 10204)	803722 
Certification of Conformity for the surface Quality (DIN4762-DIN4768-ISO/4287/1)	804175 
FDA declaration of conformity	803724 

1.) S030 combined with the plugged-in flow transmitter, only for DN ≤ 200

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