

Type 8034  
CompactType 8034  
Panel-mounted

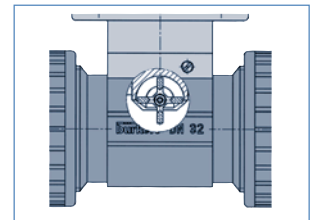
Type 8034 can be combined with...

**Type 8030**  
Flow sensor

- Economic integration in pipe systems without any additional piping
- Adjustable flow range with standard scales for high flexibility
- Compact version or remote version
- 1.5 V battery version or power supply 12–30 VDC (for panel version only)
- Fitting available for plastic, brass and stainless steel

The paddle-wheel flow rate indicator 8034 for continuous flow measurement is specially designed for use in neutral and slightly aggressive, solid free liquids. The device is available in three models: compact, panel or wall mount version. The measuring principle is based on a local velocity measurement. When liquid flows through the pipe, the paddle-wheel is set in rotation producing a measuring frequency in the coil or

hall transducer, which is proportional to the flow. The flow rate indicator can measure a flow rate as from 1.0 ft/s (0.3 m/s) up to max. 32.8 ft/s (10 m/s). The speed of flow is converted into volume per time showed at the analog display, e.g. l/h, m<sup>3</sup>/h or gallons per minute (GPM). A large range of standardized scales compatible to the sizes of the ROTAMETERS is available.



Fitting-Data	
<b>Pipe diameter</b>	1/4" (DN 6) up to 2 1/2" (DN 65)
<b>Measuring range</b>	1.0 f/s (0.3 m/s) to 32.8 to ft/s (10 m/s) as from 0.13 GPM (DN 6 pipe 1.6 f/s flow velocity)
<b>Fitting</b>	Type S030 INLINE - Stainless steel, brass, PVC, PP, PVDF (see corresp. data sheet)

Medium data	
<b>Medium temperature (max.)</b>	
Stainless steel, brass, PVDF	212°F (100°C)
PVC	122°F (50°C)
PP	179°F (80°C)
<b>Fluid pressure (max.)</b>	
	140 PSI (PN10) (with plastic fitting)
	230 PSI (PN16) (with metal fitting)
<b>Fluid solide particles rate</b>	max. 1%
<b>Viscosity</b>	max. 300 cSt.

Electronic module data	
<b>Accuracy</b>	± 10% of reading (1.0 – 6.6 f/s) ± 4% of reading (6.6 – 32.8 f/s)
<b>Repeatability</b>	± 1% of reading

Electronic module data (continued)	
<b>Voltage supply</b>	
Compact, wall version	2 batteries 1.5 VDC (Type LR14)
Panel version	12-30 VDC (external power supply)
<b>Sensor</b>	
Compact, wall version	Coil sensor
Panel version	Hall low power sensor
<b>Display</b>	White background, red pointer, and black scale
<b>Materials</b>	
Electronic Housing	PC
Seal	FKM/ EPDM
Axis and bearing	Ceramic
Sensor and paddle-wheel	PVDF

General data	
<b>Ambient temperature</b>	32 to 140°F (0 to 60°C)
<b>Remote sensor connection cable</b>	
Cross-section	max. 1.5 mm <sup>2</sup>
<b>Recommend length</b>	
Wall version	Coil sensor: Max. 33 ft.
Panel version	Hall sensor: Max. 165 ft.
<b>Protection class</b>	IP65

<sup>1)</sup> Under reference conditions, i.e. measuring fluid is water, ambient temperature and water temperature are of 20°C, the minimum inlet and outlet pipe lengths are applied and the dimensions of the pipes are matching.

**Design**

The compact flow indicator 8034 combines a INLINE fitting S030 and an electronic module SE34 with an analogue display in a IP65 enclosure. The sensor part consist of an insertion coil transducer and an open-cell paddle-wheel. The electronics converts the measured signal and displays the actual flow rate. This version is supplied by two 1.5 V battery.

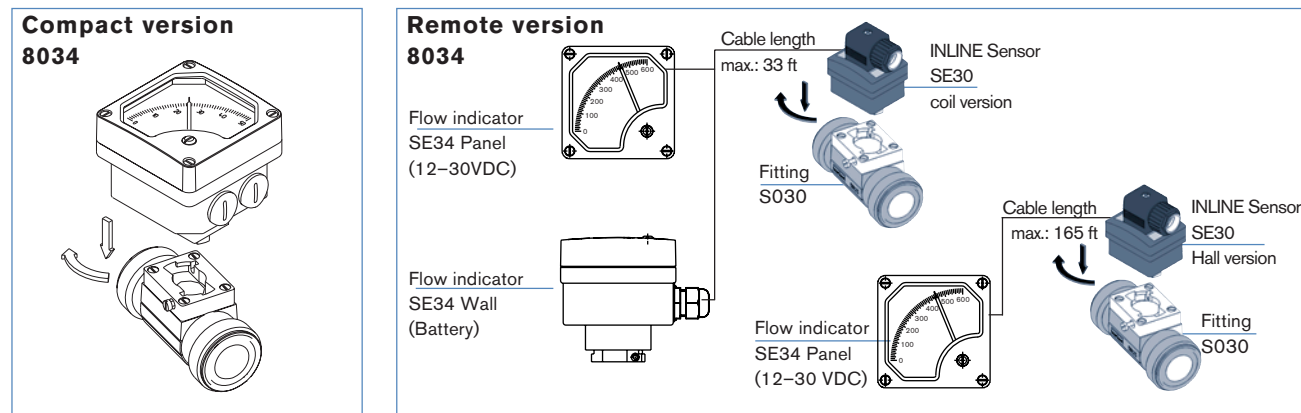
The panel version consists of an electronic module SE34 integrated in a front-cover. The associated separate flow sensor is a 8030 (Electronic SE30 + fitting S030) with coil or hall transducer. This version is supplied by an external 12-30 VDC power supply.

The wall-mount version consist of an electronic module SE34 in a IP65 enclosure. The associated flow sensor is a 8030 (Electronic SE30 + fitting S030) with coil transducer. This version is supplied by two 1.5 V battery.

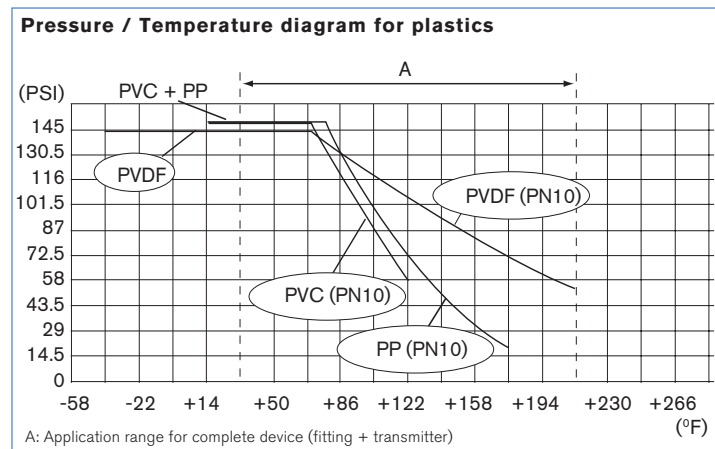
The above described remote version allows a maximum shielded cable length between displays electronics and sensor as follow:

- 33 feet for battery version
- 165 feet for 12-30 VDC-version with mounted Hall sensor version

Burkert quarter-turn INLINE fitting S030 ensures simple installation of the sensor into pipes from DN 6 to DN 65.



**Diagrams**



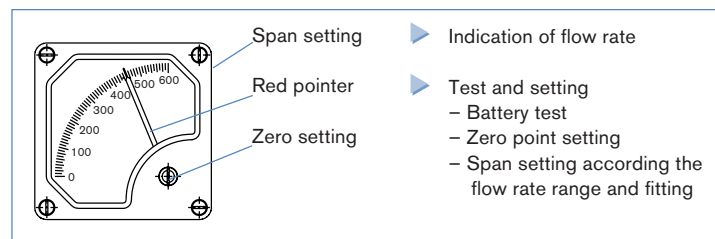
**Installation**

The 8034 flow rate indicator can easily be installed into any Burkert inline fitting system (S030). The minimum straight upstream (10xDN) and downstream (3xDN) distances must be observed. According to pipe's design, necessary distances can be bigger.

The flow rate indicator can be installed in either horizontal or vertical pipes. The suitable pipe size is selected using diagram Flow/Velocity/DN. Pressure and temperature ratings must be respected according to the selected fitting material.

The flow sensor is not designed for gas flow measurement.

**Operation and display**



**Operation / Commisioning**

The electronic module must be factory calibrated according to the flow range (scale, unit) and the used fitting type (DN, K-factor) before shipping.

## Ordering chart – Make your Own Analog flow indicator 8034

### Housing SE34 for compact and remote Type 8034

Description	Compact 2 x 1.5 VDC	Wall 2 x 1.5 VDC	Panel 12–30VDC
Flow indicator SE34, FKM seal, no scale	551 700 L	551 701 H	551 702 A

### Available units

(included in housing SE34)

GPM	l/h	m <sup>3</sup> /h
x 0.1	x 0.1	x 0.1
GPM	l/h	m <sup>3</sup> /h
GPM	l/h	m <sup>3</sup> /h
x 10	x 10	x 10
	l/h	%
x 100		
DN .....		
0 .....	K: .....	
DN .....		
0 .....	K: .....	

### Scale for compact or remote Type 8034

Scale	Item no.
0–50	551 689 D
0–100	551 690 A
0–160	551 693 Z
0–250	551 692 Y
0–400	551 694 S
0–600	551 688 C



The selected unit has to be stuck on the scale.

### Compact flow indicator Type 8034

A compact flow indicator Type 8034 consists of:

- 1– Compact electronic module SE34 with standard scale according to the required max. flow rate
- 2– INLINE fitting S030 (DN 6 – DN 65) (Refer to corresponding data sheet)

### INLINE flow sensor Type SE30 for 8034 remote version (Panel or Wall)

Description	Power supply	Cable connector	Item no.
INLINE flow sensor SE30 with coil sensor	None	DIN 43650	423 912 C
INLINE flow sensor SE30 with Hall sensor "Low Power"	from SE34	DIN 43650	423 914 E

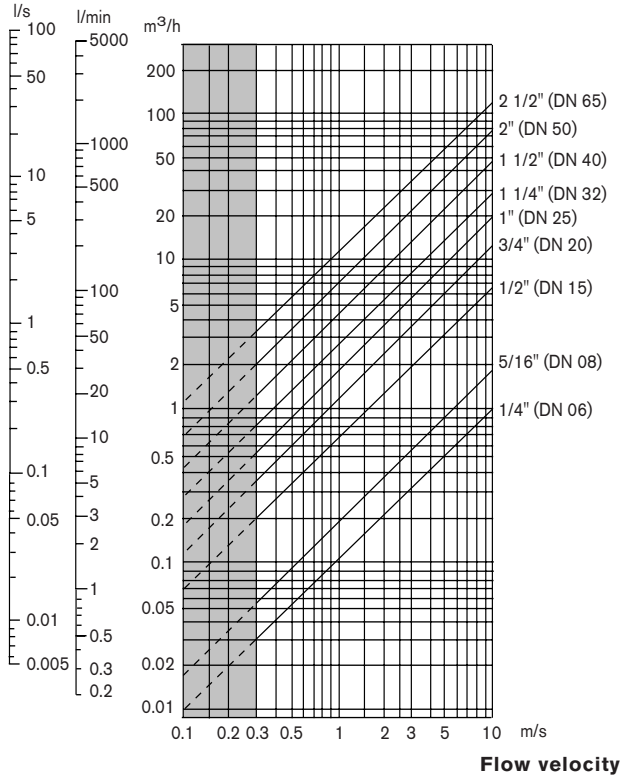
**Note:** 1) Compact electronic module SE34, remote electronic module SE34, electronic module SE30 and fitting S030 has to be ordered separately.

2) Burkert will create ONE assembly part number to insure necessary calibration.

**Selection of fitting / pipe size**

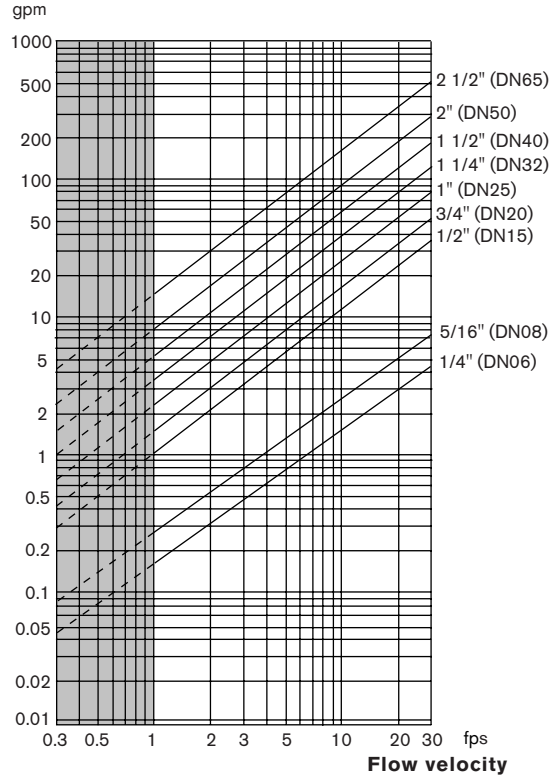
**Example 1:** – Specification of nominal flow: 10m<sup>3</sup>/h  
 – Ideal flow velocity: 2–3 m/s  
 – For these specifications, the diagram indicates a pipe size of DN 40

**Flow rate**



**Example 2:** – Specification of nominal flow: 50 gpm  
 – Ideal flow velocity: 8 fps  
 – For these specifications, the diagram indicates a pipe size of 1 1/2"

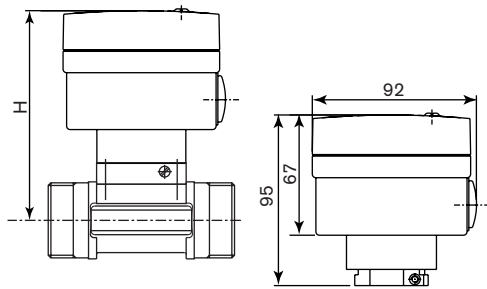
**Flow rate**



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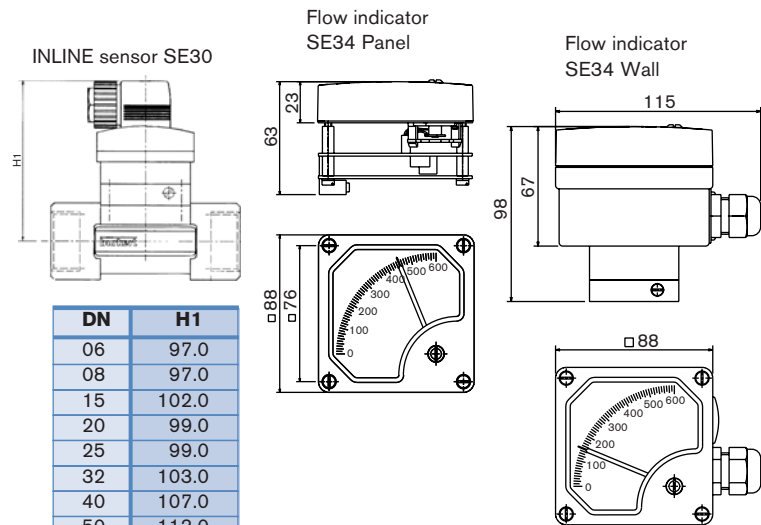
**Dimensions [mm]**

**Compact version 8034**



DN	H
06	117.0
08	117.0
15	122.0
20	119.0
25	119.0
32	123.0
40	127.0
50	134.0
65	134.0

**Remote version 8034**



DN	H1
06	97.0
08	97.0
15	102.0
20	99.0
25	99.0
32	103.0
40	107.0
50	113.0
65	113.0

In case of special application conditions, please consult for advice.

We reserve the right to make technical changes without notice.

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