

DN 15 ... DN 400; PN6



Advantages / Benefits

- ▶ Easy System integration by Easy LINK provides low cost of ownership
- ▶ Compact design
- ▶ Easy commissioning due to multi-language, menu-guided operation
- ▶ Volumetric flow measurement with two totalizers
- ▶ Standard options:
2 Alarm relays
Pulse output on relay reed
Power supply 115/230 VAC
9 VDC battery version
- ▶ Wetted parts of PVDF and ceramic with FPM/EPDM-gaskets
- ▶ Also available with remote sensor and panel and wall mounted transmitter

Design

The paddle-wheel flow transmitter for continuous flow measurement and batch control is specially designed for use in neutral and slightly aggressive, solid-free liquids.

The transmitter 8025 is a compact unit with integrated sensor or a remote mounted sensor 8020 with panel- or wall mounted transmitter. The transmitter produces a 4...20 mA standard signal proportional to the flow and provides a freely adjustable pulse output. Both signals can easily be transmitted and processed.

The display and menu-guided operating elements allow a customized adjustment of all measuring parameters:

- multi-language
- various engineering units
- customized measuring ranges
- teaching mode; simulation mode

A specially designed fitting system ensures simple installation of the devices into all pipes.

Flow Transmitter

- 4...20 mA standard output signal
- Pulse output (NPN, PNP or reed),
- Local flow display,
- 2 totalizers display,
- 2 programmable thresholds (option)

Flow Switch

- 2 programmable thresholds

Stand Alone (Battery)

- Battery powered,
- 2 totalizers display,
- Local flow display,

Batch Controller

- 2 totalizers display,
- 2 programmable thresholds
- 3 Dosing modes:
Local
External (via binary inputs)
Time proportional (via PLC)

Applications

Flow Measurement & Dosing Control

Liquids in food industry

Chemical industry (non hazardous applications)

Water treatment and process technology

Industrial waste water treatment

Auxiliary plants

Ideal system solutions for filling systems

bürkert
Easy Fluid Control Systems

Digital Flow Transmitter

Type 8025

for continuous flow measurement and batch control

Design

The compact flow transmitter combines a flow sensor and an electronic board with display in an IP65 enclosure.

The sensor part consists of a transducer and an open-cell paddle-wheel.

The transmitter component converts the measured signal and displays the actual value. The output signals are provided via a 4-pole cable plug or via cable gland PG 13.5.

Principle of operation

When liquid flows through the pipe, the paddle-wheel is set in rotation inducing a measuring frequency in the transducer, which is proportional to the flow.

The flow transmitter 8025 can receive an optional power supply 230/115 VAC and is also available with 9 VDC battery power supply.

The transmitter measures a flow rate from 0.3m/s (1 ft/s).



Installation

The recommended In- and Outflow straight pipe length should respect 10xD in and 3xD out.

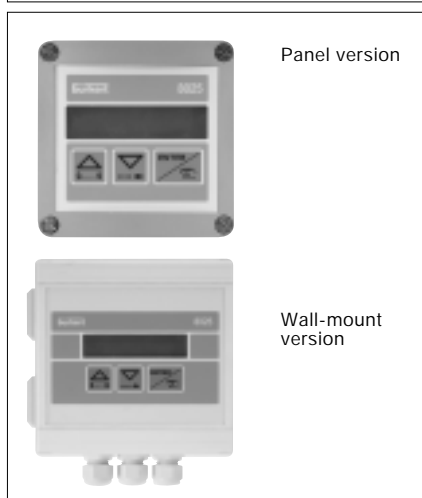
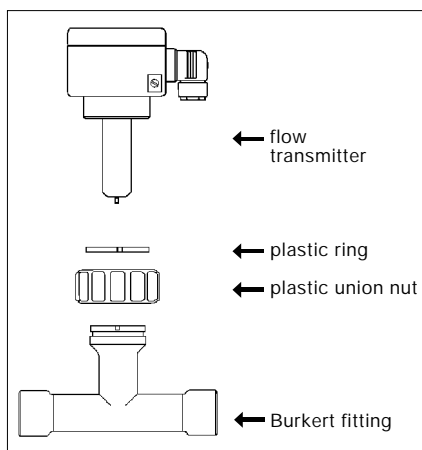
According to pipe's design, necessary distances can be bigger or use a flow conditioner to obtain the best accuracy.

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

The flow transmitter can be installed in either horizontal or vertical pipes.

The suitable pipe size is selected using the diagram on the next page. Pressure and temperature ratings must be respected according to the selected fitting material (see next page).

The flow transmitter is not designed for gas flow measurement.



Operation / Commissioning

The device can be calibrated by means of the K-factor, or via the Teach-In function.

Customized adjustments, such as measuring range, engineering units, pulse output and filter are carried out on site.

for continuous flow measurement and batch control

Examples of fitting selection

The suitable pipe size is selected using the diagram below.

Example 1:
 Specification of nominal flow: 10 m³/h
 Ideal flow velocity: 2...3 m/s
 For these specifications, the diagram indicates a pipe size of DN 40.

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".

Pressure-Temperature-Diagram for plastics

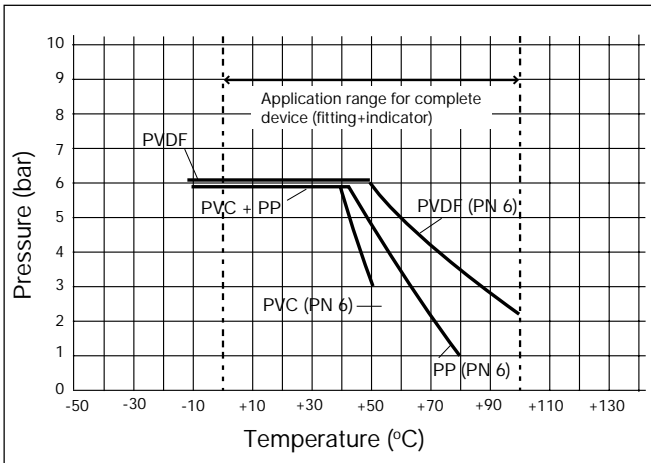
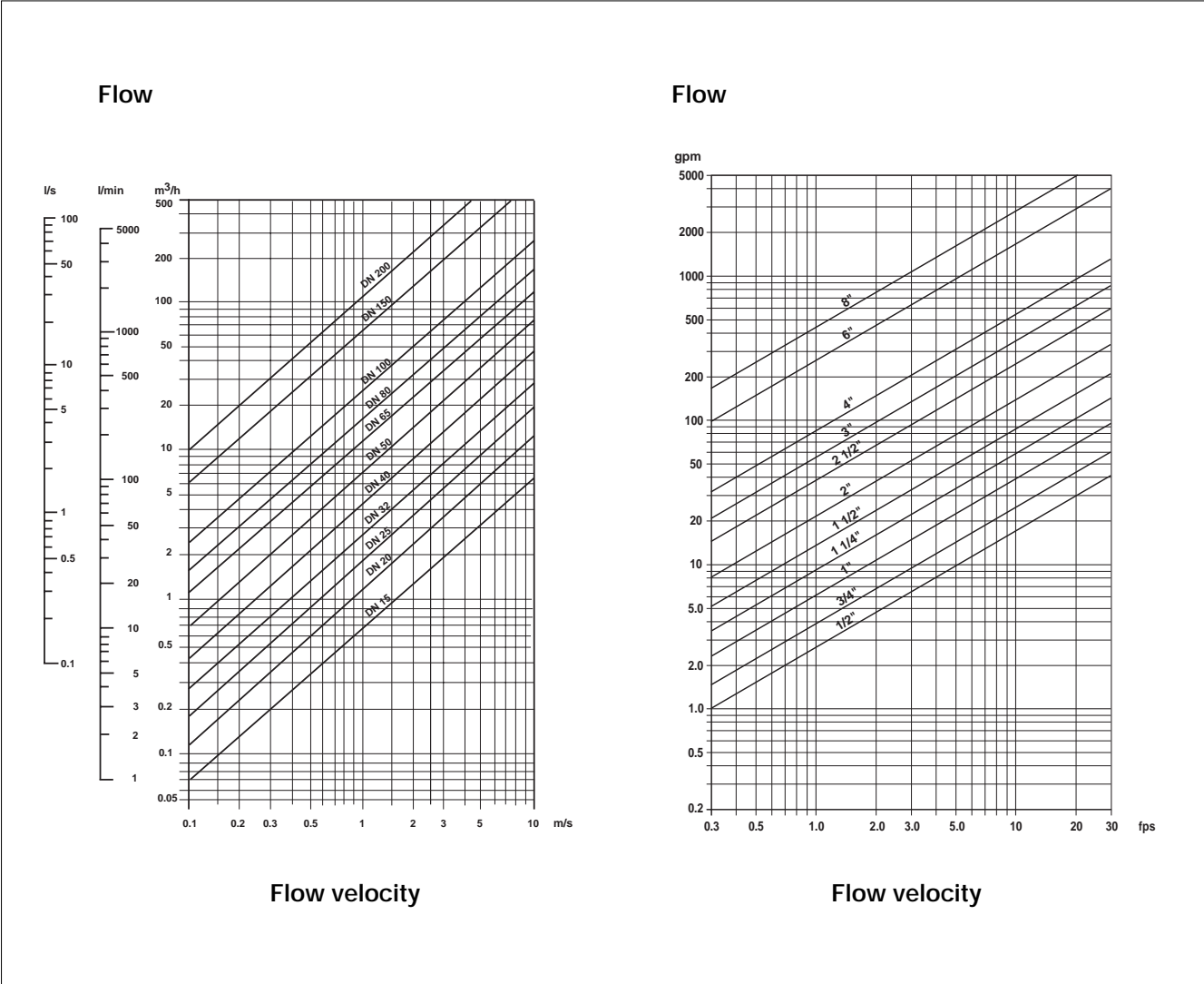


Diagram Flow-Pipe Size-Velocity



for continuous flow measurement and batch control

Operation and display

The operation is specified according to two or three levels:

Flow Transmitter :

► Indication in operating mode

- flow
- output current
- main totalizer
- daily totalizer and reset function

► Parameter definition

- language
- engineering units
- K-factor / Teach-In function
- measuring range 4...20 mA
- pulse output
- relay (option)
- filter
- reset of main totalizer

► Test

- alteration of basic adjustment (offset, span)
- frequency test of sensor
- flow simulation (dry-run test operation)

Batch Controller :

► Indication in operating mode

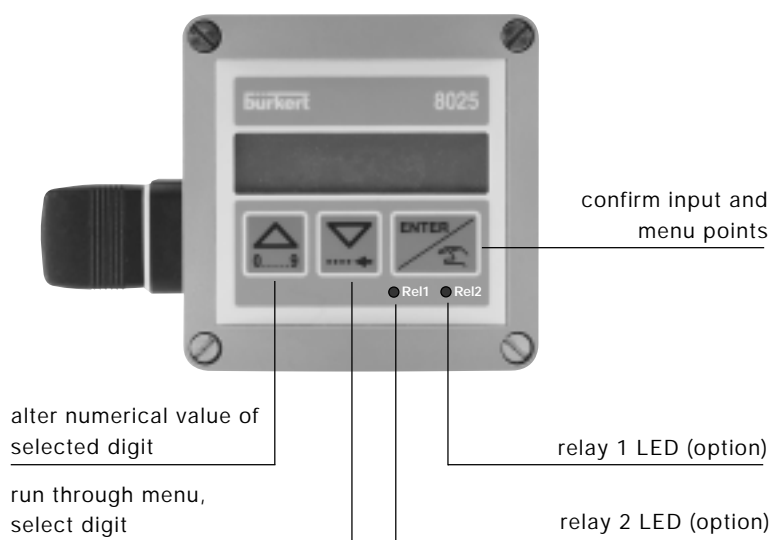
- main and daily totalizers and reset function
- dosing amount
- dosing mode
- flow

► Parameter definition

- language
- engineering units
- K-factor / Teach-In function
- selection of batching mode
- over-run correction
- alarm
- function mode of relays
- reset of main totalizer

► Test

- display of state of binary inputs
- relay test
- frequency test of sensor



Flow Switch :

► Indication in operating mode

- flow

► Parameter definition

- language
- engineering units
- K-factor / Teach-In function
- relay
- filter

► Test

- frequency test of sensor
- flow simulation (dry-run test operation)

Stand Alone (Battery) :

► Indication in operating mode

- main and daily totalizers with reset function
- flow

► Parameter definition

- language
- engineering units
- K-factor / Teach-In function
- filter
- reset of main totalizer

Technical data

General data

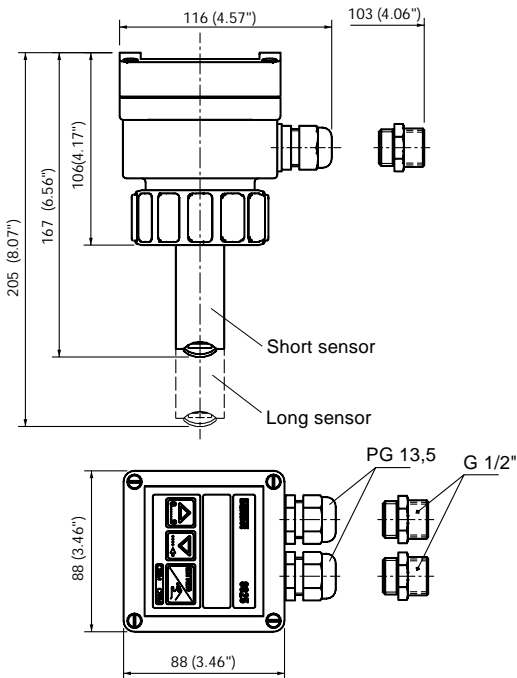
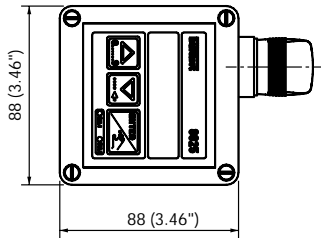
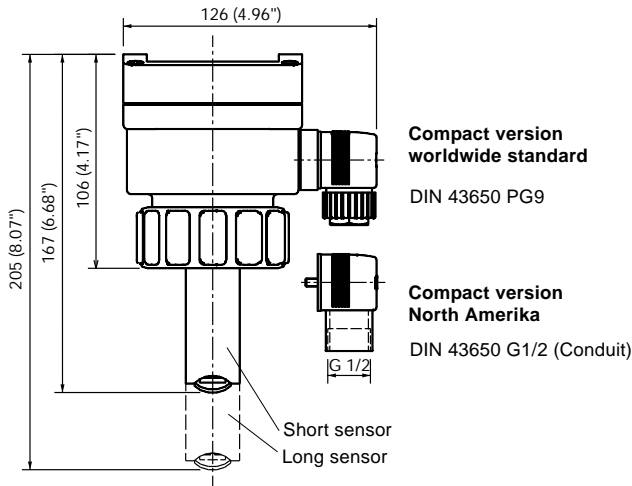
Pipe diameter	as from DN 15 (for more detailed information, please see chapter fittings)	
Measuring range	with Hall sensor: 0.3 to 10 m/s (1.0 fps to 33 fps) with Coil sensor: 0.5 to 10 m/s (1.6 to 32.8 fps)	
Measuring error	1. With In-line calibration (Teach-In): $\leq \pm 0.5\%$ o.F.S. (at 10 m/s) * 2. With standard mean K-factor: $\leq \pm (0.5\%$ o.F.S. + 2.5% o.R.) *	
Linearity	$\leq \pm 0.5\%$ o.F.S. (at 10 m/s) *	
Repeatability	0.4% o.R. *	
Fluid temperature max. (Coil version)	PVC: 50°C (122°F); PP: 80°C (176°F); PVDF: 100°C (212°F); Stainless steel and brass: 100°C (212°F)	
Fluid temperature max. (Hall version)	PVC: 50°C (122°F); PP: 80°C (176°F); PVDF: 80°C (176°F); Stainless steel and brass: 80°C (176°F)	
Ambient temperature	0 to 60°C (32 to 140°F)	
Storage temperature	0 to 60°C (32 to 140°F)	
Pressure class plastic and metal fitting	PN 6	
Enclosure	IP 65 compact, panel and wall-mount version (panel version IP20 in the cabinet inside)	
Sensor holder	PVDF	
Paddle-wheel	PVDF	
Axis and bearing	Ceramic	
O-rings	FPM/EPDM	
Housing	PC (compact and panel version), ABS (wall-mount version)	
Front plate foil	Polyester	
Specific data Flow Transmitter		
Voltage supply	12...30 VDC Option: 115/230 VAC power supply	
Output signal	4...20 mA	
Load	max. 900 Ω at 30V max. 500 Ω at 24V max. 100 Ω at 15V max. 800 Ω with power supply 115/230 VAC	
Pulse output	Open collector NPN and PNP, 0...30 V, 100 mA, protected Option: relay Reed closing 0,1 sec., opening depending on flow rate 0,1 sec. min. max. 34 V, 0,2 A	
Relay output (option)	2 relays, freely programmable, 3 A, 230 V	
Specific data Flow Switch		
Voltage supply	12...30 VDC Option: 115/230 VAC power supply	
Relay output	freely programmable, 3 A, 230 V	
Specific data Batch Controller		
Voltage supply	12...30 VDC Option: 115/230 VAC power supply	
Digital inputs	4 inputs, 5...30 VDC	
Digital output	1 input, Open collector NPN and PNP, 0...30 V, 100 mA, protected	
Relay output	2 relays, freely programmable, 3 A, 230 V	
Specific data Stand Alone (Battery)		
Voltage supply	9 VDC battery supply	
Autonomy	3...4 years with lithium batteries 1...2 years with standard batteries	

* Under reference conditions, i.e. measuring fluid = water, ambient and water temperature = 20 °C, applying the minimum inlet and outlet pipe straights, matched inside pipe dimensions
o.R. = of reading
o.F.S. = of full scale (10 m/s)

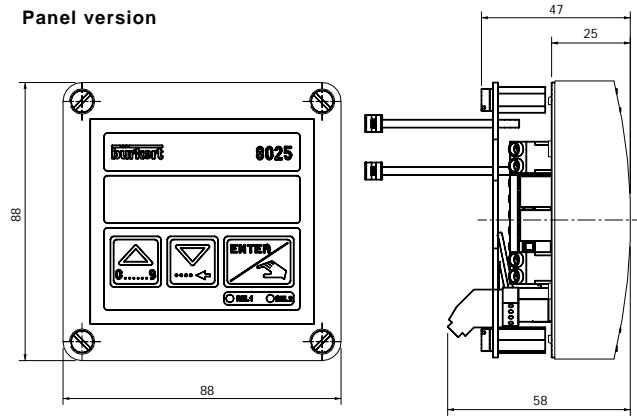
for continuous flow measurement and batch control

Dimensions in mm

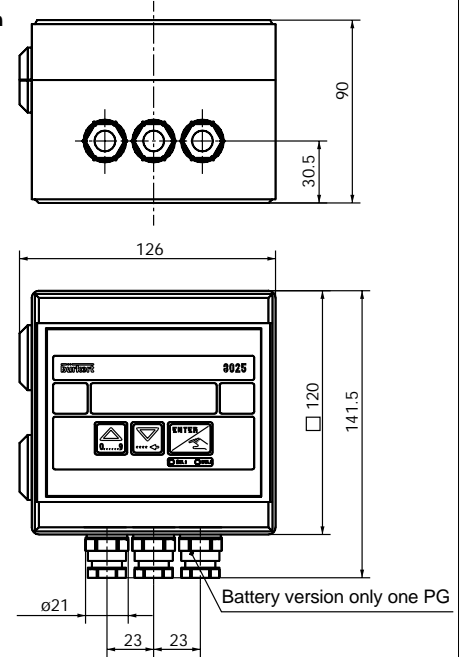
Compact version



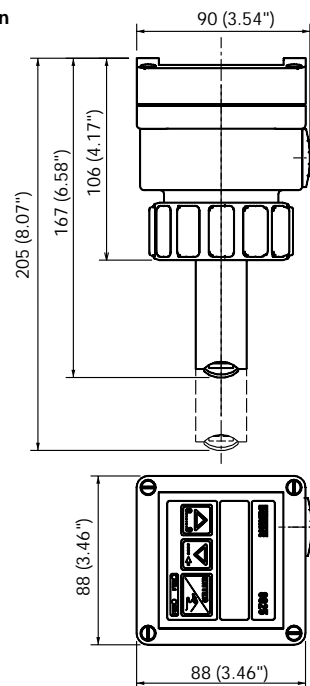
Panel version



Wall-mount version

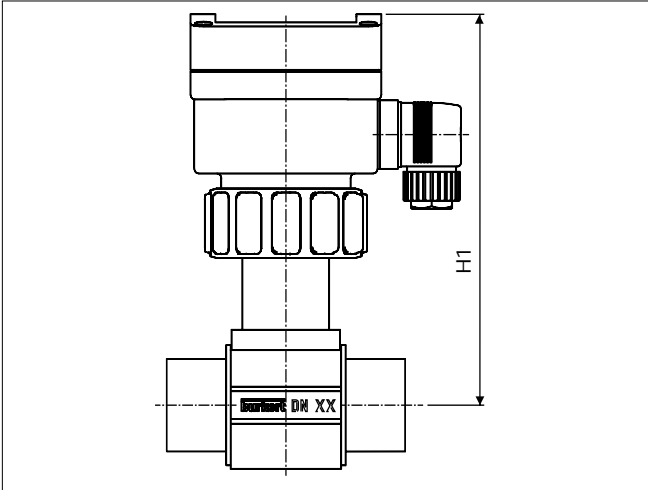


Battery version



for continuous flow measurement and batch control

Dimensions [mm] - Fittings S020, DN 15 - 50

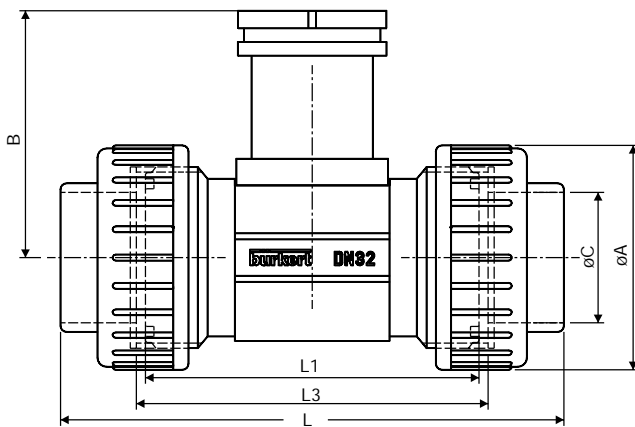


Variable Dimensions [mm]

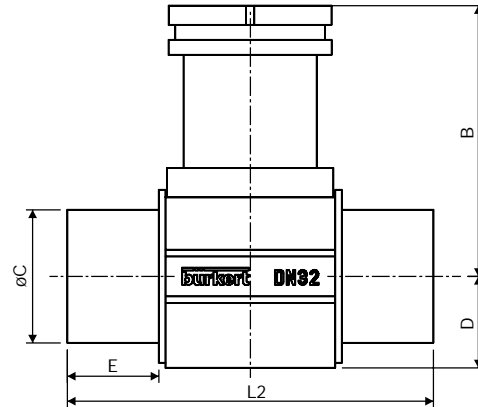
DN	H 4
15	173
20	171
25	171
32	177
40	178
50	184

Applicable for all fitting materials
DN 15 ...50 sizes and process
connections.

True union - PVC, PP, PVDF



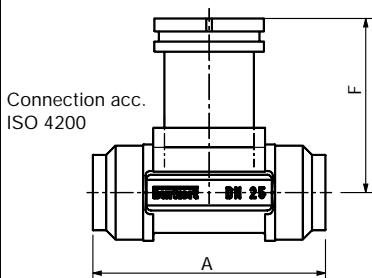
Solvent spigot - PVC, PP, PVDF



True union										Solvent spigot					
B	øA	L			øC			L1	L3	DN	D	L2		E	
		DIN	ANSI	JIS	(DIN)	(ANSI)*	(JIS)*					PVC	PP/PVDF	PVC	PP/PVDF
80.4	43	128	130.0	129	20	21.3	18.40	90	96	15	17.5	90	85	16.5	14
77.8	53	144	145.6	145	25	26.7	26.45	100	106	20	17.5	100	92	20.0	16
78.0	60	160	161.4	161	32	33.4	32.55	110	116	25	21.5	110	95	23.0	18
81.4	74	168	170.0	169	40	42.2	38.60	110	116	32	27.5	110	100	27.5	20
85.2	83	188	190.2	190	50	48.3	48.70	120	127	40	31.5	120	106	30.0	23
91.5	103	212	213.6	213	63	60.3	60.80	130	136	50	39.5	130	110	37.0	27

* only for PVC with true union

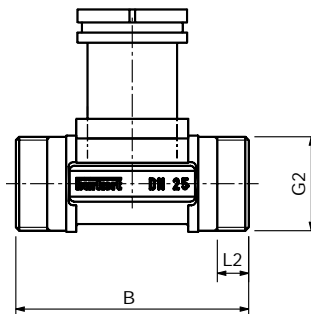
Weld ends - Stainless steel



Connection acc.
ISO 4200

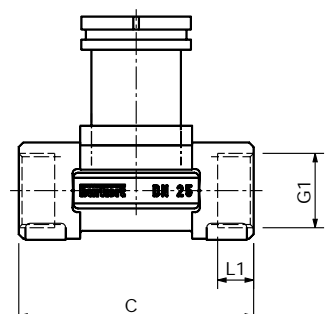
Material Stainless steel:
DIN 1.4404; BS 316L

Male threaded port -
Stainless steel / Brass



Material Stainless steel:
DIN 1.4404; BS 316L

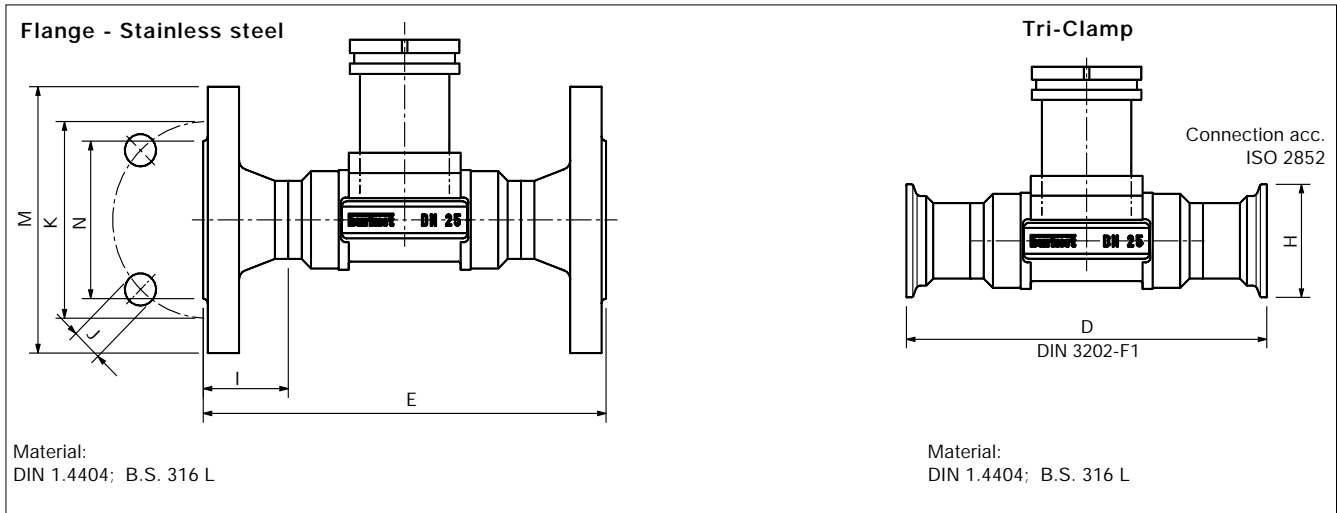
Female threaded port
Stainless steel / Brass -



Material Stainless steel:
DIN 1.4404; BS 316L

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Dimensions [mm] - Fittings S020, DN 15 - 50



Variable dimensions [mm] for Weld ends, Male threaded port, Female threaded port, Flange, Tri-Clamp

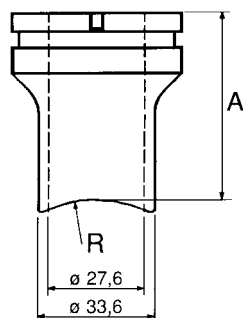
DN	Weld ends		Length dimensions							Thread				Tri-Clamp H	Flange dimensions					
	ø out-side	Wall-thickness	A	B	C	D	E (DIN) (ANSI)	E (JIS)	F	G1	L1	G2	L2		Norm*	I	J	K	M	N
15	21.3	1.6	84	84	85	130	130	140	80.3	G 1/2	16.0	G3/4	11.5	DIN	23.5	4x14.0	65.0	95	45.0	
										NPT 1/2	17.0			ANSI	23.5	4x15.8	60.3	89	34.9	
										Rc 1/2	15.0			JIS	23.5	4x15.0	70.0	95	51.0	
20	26.9	1.6	94	94	95	150	150	152	77.8	G 3/4	17.0	G 1	13.5	DIN	28.5	4x14.0	75.0	105	58.0	
										NPT 3/4	18.3			ANSI	28.5	4x15.8	69.8	99	42.9	
										Rc 3/4	16.3			JIS	28.5	4x15.0	75.0	100	56.0	
25	33.7	2.0	104	104	105	160	160	165	78.0	G 1	23.5	G 1/14	14.0	DIN	28.5	4x14.0	85.0	115	68.0	
										NPT 1	18.0			ANSI	28.5	4x15.8	79.4	108	50.8	
										Rc 1	18.0			JIS	28.5	4x19.0	90.0	125	67.0	
32	42.4	2.0	119	119	120	180	180	178	81.6	G 1 1/4	23.5	G 1/2	18.0	DIN	31.0	4x18.0	100.0	140	78.0	
										NPT 1 1/4	21.0			ANSI	31.0	4x15.8	88.9	117	63.5	
										Rc	21.0			JIS	31.0	4x19.0	100.0	135	76.0	
40	48.3	2.0	129	129	130	200	200	190	85.4	G 1 1/2	23.5	M55x2	19.0	DIN	36.0	4x18.0	110.0	150	88.0	
										NPT 1 1/2	20.0			ANSI	36.0	4x15.8	98.4	127	73.0	
										Rc 1 1/2	19.0			JIS	36.0	4x19.0	105.0	140	81.0	
50	60.3	2.6	149	149	150	230	230	216	91.5	G 2	27.5	M64x2	20.0	DIN	41.0	4x18.0	125.0	165	102.0	
										NPT 2	24.0			ANSI	41.0	4x19.0	120.6	152	92.1	
										Rc 2	24.0			JIS	41.0	4x19.0	120.0	155	96.0	

* Flange: DIN 2501/2633, length according to DIN 3202-F1;
ANSI B16-5-1988, length according to DIN 3202-F1
JIS 10K, length according to ANSI B16-10

Dimensions [mm] - Fittings DN 65 - 350

Weld-o-let fittings with radius - Stainless steel

Material: 1.4404 (DIN),
316L (B.S.)



Variable Dimensions [mm]

DN	A	R
65	54.52	36.65
80	53.07	44.45
100	50.71	57.15
125	48.24	70.65
150	45.73	84.15
200	41.01	109.55
250	73.64	136.55
350	63.94	177.80

Note:

Short sensor version for: DN 65 - DN 200
Long sensor version for: DN 250 - DN 350

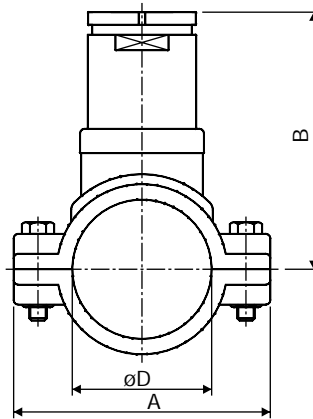
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Dimensions [mm] - Fittings DN 65 - 400

Saddle - PP

Body material: PP/PVC
 Seal material: EPDM

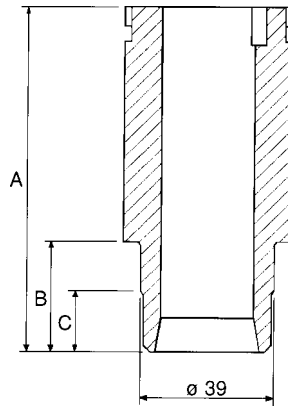
Note: These saddle fittings require the long sensor version of the flow indicator 8025 for all DN.



Variable Dimensions [mm]

DN	A	B	øD
50	116	111.1	63
65	129	110.0	75
80	144	113.9	90
100	166	118.7	110
110	181	115.5	125
125	196	121.5	140
150	216	131.5	160
200	290	174.0	225

Weld-o-let fittings - PE, PP, PVDF



Variable Dimensions [mm]

DN	A	PE		PP		PVDF	
		B	C	B	C	B	C
65	72.5	13	---	13	---	10.4	---
80	72.5	15.6	---	15.6	---	12.5	---
100	72.5	19	5	19	5	15.2	6
150	102	27.7	10	27.7	10	---	---
200	102	38.9	16	38.9	16	---	---
250	102	48.4	21	48.4	21	---	---
300	102	61.3	28	61.3	28	---	---
350	102	61.3	28	61.3	28	---	---
400	102	69.1	31,5	---	---	---	---

Note:

Short sensor version for: DN 65 - DN 100
 Long sensor version for: DN 150 - DN 400



for continuous flow measurement and batch control

Ordering Data for Flow Transmitter Type 8025 Compact Version

Flow transmitter	Supply	Gasket	Sensor	Cable entry	Item-No.
FLOW TRANSMITTER 8025 COMPACT VERSION STANDARD TYPES WORLDWIDE					
8025 with 4...20 mA, 2 relays, pulse output, 2 totalizers	12-30 VDC	FPM	Hall short	2xPG 13,5	418 778 Q
8025 with 4...20 mA, pulse output, 2 totalizers	12-30 VDC	FPM	Hall short	DIN 43650 PG9	418 762 G
8025 with 4...20 mA, 2 relays, pulse output, 2 totalizers	230 VAC	FPM	Hall short	2xPG 13,5	418 431 M
8025 with 4...20 mA, pulse output, 2 totalizers	230 VAC	FPM	Hall short	2xPG 13,5	418 423 M
8025 with 4...20 mA, pulse output relay reed, 2 totalizers	12-30 VDC	FPM	Hall short	2xPG 13,5	418 407 W
8025 with 4...20 mA, pulse output relay reed, 2 totalizers	230 VAC	FPM	Hall short	2xPG 13,5	418 439 V
STANDARD TYPES (FULL FUNCTION, WITHOUT RELAY)					
8025 with 4...20 mA, pulse output, 2 totalizers	12-30 VDC	FPM	Hall long	DIN 43650 PG9	418 763 H
8025 with 4...20 mA, pulse output, 2 totalizers	12-30 VDC	FPM	Coil short	DIN 43650 PG9	418 764 A
8025 with 4...20 mA, pulse output, 2 totalizers	12-30 VDC	FPM	Coil long	DIN 43650 PG9	418 765 B
8025 with 4...20 mA, pulse output, 2 totalizers	12-30 VDC	EPDM	Hall short	DIN 43650 PG9	418 766 C
8025 with 4...20 mA, pulse output, 2 totalizers	12-30 VDC	EPDM	Hall long	DIN 43650 PG9	418 767 D
8025 with 4...20 mA, pulse output, 2 totalizers	12-30 VDC	EPDM	Coil short	DIN 43650 PG9	418 768 N
8025 with 4...20 mA, pulse output, 2 totalizers	12-30 VDC	EPDM	Coil long	DIN 43650 PG9	418 769 P
8025 with 4...20 mA, pulse output, 2 totalizers	12-30 VDC	FPM	Hall short	PG 13,5	418 802 S
8025 with 4...20 mA, pulse output, 2 totalizers	12-30 VDC	FPM	Hall long	PG 13,5	418 803 T
8025 with 4...20 mA, pulse output, 2 totalizers	12-30 VDC	FPM	Coil short	PG 13,5	418 804 U
8025 with 4...20 mA, pulse output, 2 totalizers	12-30 VDC	FPM	Coil long	PG 13,5	418 805 V
8025 with 4...20 mA, pulse output, 2 totalizers	12-30 VDC	EPDM	Hall short	PG 13,5	418 806 W
8025 with 4...20 mA, pulse output, 2 totalizers	12-30 VDC	EPDM	Hall long	PG 13,5	418 807 X
8025 with 4...20 mA, pulse output, 2 totalizers	12-30 VDC	EPDM	Coil short	PG 13,5	418 808 G
8025 with 4...20 mA, pulse output, 2 totalizers	12-30 VDC	EPDM	Coil long	PG 13,5	418 809 H
8025 with 4...20 mA, pulse output, 2 totalizers	230 VAC	FPM	Hall long	2xPG 13,5	418 424 N
8025 with 4...20 mA, pulse output, 2 totalizers	230 VAC	FPM	Coil short	2xPG 13,5	418 425 P
8025 with 4...20 mA, pulse output, 2 totalizers	230 VAC	FPM	Coil long	2xPG 13,5	418 426 Q
8025 with 4...20 mA, pulse output, 2 totalizers	230 VAC	EPDM	Hall short	2xPG 13,5	418 427 R
8025 with 4...20 mA, pulse output, 2 totalizers	230 VAC	EPDM	Hall long	2xPG 13,5	418 428 S
8025 with 4...20 mA, pulse output, 2 totalizers	230 VAC	EPDM	Coil short	2xPG 13,5	418 429 T
8025 with 4...20 mA, pulse output, 2 totalizers	230 VAC	EPDM	Coil long	2xPG 13,5	418 430 Y
STANDARD TYPES (FULL FUNCTION, WITHOUT RELAY)					
8025 with 4...20 mA, pulse output relay reed, 2 totalizers	12-30 VDC	FPM	Hall long	2xPG 13,5	418 408 F
8025 with 4...20 mA, pulse output relay reed, 2 totalizers	12-30 VDC	FPM	Coil short	2xPG 13,5	418 409 G
8025 with 4...20 mA, pulse output relay reed, 2 totalizers	12-30 VDC	FPM	Coil long	2xPG 13,5	418 410 U
8025 with 4...20 mA, pulse output relay reed, 2 totalizers	12-30 VDC	EPDM	Hall short	2xPG 13,5	418 411 R
8025 with 4...20 mA, pulse output relay reed, 2 totalizers	12-30 VDC	EPDM	Hall long	2xPG 13,5	418 412 J
8025 with 4...20 mA, pulse output relay reed, 2 totalizers	12-30 VDC	EPDM	Coil short	2xPG 13,5	418 413 K
8025 with 4...20 mA, pulse output relay reed, 2 totalizers	12-30 VDC	EPDM	Coil long	2xPG 13,5	418 414 L
8025 with 4...20 mA, pulse output relay reed, 2 totalizers	230 VAC	FPM	Hall long	2xPG 13,5	418 440 A
8025 with 4...20 mA, pulse output relay reed, 2 totalizers	230 VAC	FPM	Coil short	2xPG 13,5	418 441 X
8025 with 4...20 mA, pulse output relay reed, 2 totalizers	230 VAC	FPM	Coil long	2xPG 13,5	418 442 Y
8025 with 4...20 mA, pulse output relay reed, 2 totalizers	230 VAC	EPDM	Hall short	2xPG 13,5	418 443 Z
8025 with 4...20 mA, pulse output relay reed, 2 totalizers	230 VAC	EPDM	Hall long	2xPG 13,5	418 444 S
8025 with 4...20 mA, pulse output relay reed, 2 totalizers	230 VAC	EPDM	Coil short	2xPG 13,5	418 445 T
8025 with 4...20 mA, pulse output relay reed, 2 totalizers	230 VAC	EPDM	Coil long	2xPG 13,5	418 446 U
STANDARD TYPES (FULL FUNCTION, WITH RELAY)					
8025 with 4...20 mA, pulse output, 2 totalizers	12-30 VDC	FPM	Hall long	2xPG 13,5	418 779 R
8025 with 4...20 mA, pulse output, 2 totalizers	12-30 VDC	FPM	Coil short	2xPG 13,5	418 780 F
8025 with 4...20 mA, pulse output, 2 totalizers	12-30 VDC	FPM	Coil long	2xPG 13,5	418 781 U
8025 with 4...20 mA, pulse output, 2 totalizers	12-30 VDC	EPDM	Hall short	2xPG 13,5	418 782 V
8025 with 4...20 mA, pulse output, 2 totalizers	12-30 VDC	EPDM	Hall long	2xPG 13,5	418 783 W
8025 with 4...20 mA, pulse output, 2 totalizers	12-30 VDC	EPDM	Coil short	2xPG 13,5	418 784 X
8025 with 4...20 mA, pulse output, 2 totalizers	12-30 VDC	EPDM	Coil long	2xPG 13,5	418 785 Y
8025 with 4...20 mA, pulse output, 2 totalizers	230 VAC	FPM	Hall long	2xPG 13,5	418 432 N
8025 with 4...20 mA, pulse output, 2 totalizers	230 VAC	FPM	Coil short	2xPG 13,5	418 433 P
8025 with 4...20 mA, pulse output, 2 totalizers	230 VAC	FPM	Coil long	2xPG 13,5	418 434 Q
8025 with 4...20 mA, pulse output, 2 totalizers	230 VAC	EPDM	Hall short	2xPG 13,5	418 435 R
8025 with 4...20 mA, pulse output, 2 totalizers	230 VAC	EPDM	Hall long	2xPG 13,5	418 436 J
8025 with 4...20 mA, pulse output, 2 totalizers	230 VAC	EPDM	Coil short	2xPG 13,5	418 437 K
8025 with 4...20 mA, pulse output, 2 totalizers	230 VAC	EPDM	Coil long	2xPG 13,5	418 438 U
FLOW TRANSMITTER 8025 COMPACT VERSION NORTH AMERICA STANDARD TYPES NORTH AMERICA					
8025 with 4...20 mA, 2 relays, pulse output, 2 totalizers	12-30 VDC	FPM	Hall short	2xG 1/2"	418 786 Z
8025 with 4...20 mA, pulse output, 2 totalizers	12-30 VDC	FPM	Hall short	DIN 43650 G 1/2"	418 770 L
8025 with 4...20 mA, 2 relays, pulse output, 2 totalizers	115 VAC	FPM	Hall short	2xG 1/2"	418 455 V
8025 with 4...20 mA, pulse output, 2 totalizers	115 VAC	FPM	Hall short	2xG 1/2"	418 447 V
8025 with 4...20 mA, pulse output relay reed, 2 totalizers	12-30 VDC	FPM	Hall short	2xG1/2"	418 415 M
8025 with 4...20 mA, pulse output relay reed, 2 totalizers	115 VAC	FPM	Hall short	2xG1/2"	418 463 V

for continuous flow measurement and batch control

Ordering Data for Flow Transmitter Type 8025 Compact Version

Flow transmitter	Supply	Gasket	Sensor	Cable entry	Item-No.
STANDARD TYPES NORTH AMERICA (FULL FUNCTION WITHOUT RELAY)					
8025 with 4...20 mA, pulse output, 2 totalizers	12-30 VDC	FPM	Hall long	DIN 43650 G 1/2"	418 771 H
8025 with 4...20 mA, pulse output, 2 totalizers	12-30 VDC	FPM	Coil short	DIN 43650 G 1/2"	418 772 A
8025 with 4...20 mA, pulse output, 2 totalizers	12-30 VDC	FPM	Coil long	DIN 43650 G 1/2"	418 773 B
8025 with 4...20 mA, pulse output, 2 totalizers	12-30 VDC	EPDM	Hall short	DIN 43650 G 1/2"	418 774 C
8025 with 4...20 mA, pulse output, 2 totalizers	12-30 VDC	EPDM	Hall long	DIN 43650 G 1/2"	418 775 D
8025 with 4...20 mA, pulse output, 2 totalizers	12-30 VDC	EPDM	Coil short	DIN 43650 G 1/2"	418 776 E
8025 with 4...20 mA, pulse output, 2 totalizers	12-30 VDC	EPDM	Coil long	DIN 43650 G 1/2"	418 777 F
8025 with 4...20 mA, pulse output, 2 totalizers	115 VAC	FPM	Hall long	2xG 1/2"	418 448 E
8025 with 4...20 mA, pulse output, 2 totalizers	115 VAC	FPM	Coil short	2xG 1/2"	418 449 F
8025 with 4...20 mA, pulse output, 2 totalizers	115 VAC	FPM	Coil long	2xG 1/2"	418 450 C
8025 with 4...20 mA, pulse output, 2 totalizers	115 VAC	EPDM	Hall short	2xG 1/2"	418 451 Z
8025 with 4...20 mA, pulse output, 2 totalizers	115 VAC	EPDM	Hall long	2xG 1/2"	418 452 S
8025 with 4...20 mA, pulse output, 2 totalizers	115 VAC	EPDM	Coil short	2xG 1/2"	418 453 T
8025 with 4...20 mA, pulse output, 2 totalizers	115 VAC	EPDM	Coil long	2xG 1/2"	418 454 U
STANDARD TYPES NORTH AMERICA (FULL FUNCTION WITHOUT RELAY)					
8025 with 4...20 mA, pulse output relay reed, 2 totalizers	12-30 VDC	FPM	Hall long	2xG1/2"	418 416 N
8025 with 4...20 mA, pulse output relay reed, 2 totalizers	12-30 VDC	FPM	Coil short	2xG1/2"	418 417 P
8025 with 4...20 mA, pulse output relay reed, 2 totalizers	12-30 VDC	FPM	Coil long	2xG1/2"	418 418 Y
8025 with 4...20 mA, pulse output relay reed, 2 totalizers	12-30 VDC	EPDM	Hall short	2xG1/2"	418 419 Z
8025 with 4...20 mA, pulse output relay reed, 2 totalizers	12-30 VDC	EPDM	Hall long	2xG1/2"	418 420 W
8025 with 4...20 mA, pulse output relay reed, 2 totalizers	12-30 VDC	EPDM	Coil short	2xG1/2"	418 421 K
8025 with 4...20 mA, pulse output relay reed, 2 totalizers	12-30 VDC	EPDM	Coil long	2xG1/2"	418 422 L
8025 with 4...20 mA, pulse output relay reed, 2 totalizers	115 VAC	FPM	Hall long	2xG1/2"	418 464 W
8025 with 4...20 mA, pulse output relay reed, 2 totalizers	115 VAC	FPM	Coil short	2xG1/2"	418 465 X
8025 with 4...20 mA, pulse output relay reed, 2 totalizers	115 VAC	FPM	Coil long	2xG1/2"	418 466 Y
8025 with 4...20 mA, pulse output relay reed, 2 totalizers	115 VAC	EPDM	Hall short	2xG1/2"	418 467 Z
8025 with 4...20 mA, pulse output relay reed, 2 totalizers	115 VAC	EPDM	Hall long	2xG1/2"	418 468 A
8025 with 4...20 mA, pulse output relay reed, 2 totalizers	115 VAC	EPDM	Coil short	2xG1/2"	418 469 B
8025 with 4...20 mA, pulse output relay reed, 2 totalizers	115 VAC	EPDM	Coil long	2xG1/2"	418 470 G
STANDARD TYPES NORTH AMERICA (FULL FUNCTION WITH RELAY)					
8025 with 4...20 mA, pulse output, 2 totalizers	12-30 VDC	FPM	Hall long	2xG 1/2"	418 787 S
8025 with 4...20 mA, pulse output, 2 totalizers	12-30 VDC	FPM	Coil short	2xG 1/2"	418 788 B
8025 with 4...20 mA, pulse output, 2 totalizers	12-30 VDC	FPM	Coil long	2xG 1/2"	418 789 C
8025 with 4...20 mA, pulse output, 2 totalizers	12-30 VDC	EPDM	Hall short	2xG 1/2"	418 790 H
8025 with 4...20 mA, pulse output, 2 totalizers	12-30 VDC	EPDM	Hall long	2xG 1/2"	418 791 W
8025 with 4...20 mA, pulse output, 2 totalizers	12-30 VDC	EPDM	Coil short	2xG 1/2"	418 792 X
8025 with 4...20 mA, pulse output, 2 totalizers	12-30 VDC	EPDM	Coil long	2xG 1/2"	418 793 Y
8025 with 4...20 mA, pulse output, 2 totalizers	115 VAC	FPM	Hall long	2xG 1/2"	418 456 W
8025 with 4...20 mA, pulse output, 2 totalizers	115 VAC	FPM	Coil short	2xG 1/2"	418 457 Y
8025 with 4...20 mA, pulse output, 2 totalizers	115 VAC	FPM	Coil long	2xG 1/2"	418 458 G
8025 with 4...20 mA, pulse output, 2 totalizers	115 VAC	EPDM	Hall short	2xG 1/2"	418 459 H
8025 with 4...20 mA, pulse output, 2 totalizers	115 VAC	EPDM	Hall long	2xG 1/2"	418 460 E
8025 with 4...20 mA, pulse output, 2 totalizers	115 VAC	EPDM	Coil short	2xG 1/2"	418 461 T
8025 with 4...20 mA, pulse output, 2 totalizers	115 VAC	EPDM	Coil long	2xG 1/2"	418 462 U

Ordering Data for Flow Transmitter Type 8025 Panel and Wall-mount Version

FLOW TRANSMITTER 8025 PANEL VERSION					
STANDARD TYPES					
8025 with 4...20 mA, 2 relays, pulse output, 2 totalizers	12-30 VDC		8020/8030	Terminals	418 994 J
8025 with 4...20 mA, pulse output, 2 totalizers	12-30 VDC		8020/8030	Terminals	418 992 Q
8025 with 4...20 mA, pulse output relay reed, 2 totalizers	12-30 VDC		8020/8030	Terminals	418 395 Z
8025 with 4...20 mA, 2 relays	12-30 VDC		8020/8030	Terminals	425 492 A
FLOW TRANSMITTER 8025 WALL-MOUNT VERSION					
STANDARD TYPES					
8025 with 4...20 mA, 2 relays, pulse output, 2 totalizers	12-30 VDC		8020/8030	3xPG 9	418 396 S
8025 with 4...20 mA, pulse output, 2 totalizers	12-30 VDC		8020/8030	3xPG 9	418 397 T
8025 with 4...20 mA, 2 relays, pulse output, 2 totalizers	230 VAC		8020/8030	3xPG 9	418 399 D
8025 with 4...20 mA, pulse output, 2 totalizers	230 VAC		8020/8030	3xPG 9	418 400 B
8025 with 4...20 mA, pulse output relay reed, 2 totalizers	12-30 VDC		8020/8030	3xPG 9	418 398 C
8025 with 4...20 mA, pulse output relay reed, 2 totalizers	230 VAC		8020/8030	3xPG 9	418 401 Y
8025 with 4...20 mA, 2 relays	12-30 VDC		8020/8030	3xPG 9	425 493 B
8025 with 4...20 mA, 2 relays	115-230 VAC		8020/8030	3xPG 9	425 494 C

for continuous flow measurement and batch control

Ordering Data for Batch Controller Type 8025

Batch controller	Supply	Gasket	Sensor	Cable entry	Item-No.
BATCH CONTROLLER 8025 COMPACT VERSION STANDARD TYPES					
8025 batch, 2 relays, 2 totalizers	12-30 VDC	FPM	Hall short	2xPG 13,5	419 520 T
8025 batch, 2 relays, 2 totalizers	230 VAC	FPM	Hall short	2xPG 13,5	419 521 Q
STANDARD TYPES (FULL FUNCTION)					
8025 batch, 2 relays, 2 totalizers	12-30 VDC	FPM	Hall long	2xPG 13,5	419 522 R
8025 batch, 2 relays, 2 totalizers	12-30 VDC	FPM	Coil short	2xPG 13,5	419 523 J
8025 batch, 2 relays, 2 totalizers	12-30 VDC	FPM	Coil long	2xPG 13,5	419 524 K
8025 batch, 2 relays, 2 totalizers	12-30 VDC	EPDM	Hall short	2xPG 13,5	419 525 L
8025 batch, 2 relays, 2 totalizers	12-30 VDC	EPDM	Hall long	2xPG 13,5	419 526 M
8025 batch, 2 relays, 2 totalizers	12-30 VDC	EPDM	Coil short	2xPG 13,5	419 527 N
8025 batch, 2 relays, 2 totalizers	12-30 VDC	EPDM	Coil long	2xPG 13,5	419 528 X
8025 batch, 2 relays, 2 totalizers	230 VAC	FPM	Hall long	2xPG 13,5	419 529 Y
8025 batch, 2 relays, 2 totalizers	230 VAC	FPM	Coil short	2xPG 13,5	419 530 V
8025 batch, 2 relays, 2 totalizers	230 VAC	FPM	Coil long	2xPG 13,5	419 531 J
8025 batch, 2 relays, 2 totalizers	230 VAC	EPDM	Hall short	2xPG 13,5	419 532 K
8025 batch, 2 relays, 2 totalizers	230 VAC	EPDM	Hall long	2xPG 13,5	419 533 L
8025 batch, 2 relays, 2 totalizers	230 VAC	EPDM	Coil short	2xPG 13,5	419 534 M
8025 batch, 2 relays, 2 totalizers	230 VAC	EPDM	Coil long	2xPG 13,5	419 535 N
BATCH CONTROLLER 8025 COMPACT VERSION NORTH AMERICA STANDARD TYPES NORTH AMERICA					
8025 batch, 2 relays, 2 totalizers	12-30 VDC	FPM	Hall short	2xG 1/2"	419 545 Y
8025 batch, 2 relays, 2 totalizers	115 VAC	FPM	Hall short	2xG 1/2"	419 546 Z
8025 batch, 2 relays, 2 totalizers	115 VAC	FPM	Hall long	2xG 1/2"	419 547 S
8025 batch, 2 relays, 2 totalizers	115 VAC	FPM	Coil short	2xG 1/2"	419 548 B
8025 batch, 2 relays, 2 totalizers	115 VAC	FPM	Coil long	2xG 1/2"	419 549 C
8025 batch, 2 relays, 2 totalizers	115 VAC	EPDM	Hall short	2xG 1/2"	419 550 H
8025 batch, 2 relays, 2 totalizers	115 VAC	EPDM	Hall long	2xG 1/2"	419 551 W
8025 batch, 2 relays, 2 totalizers	115 VAC	EPDM	Coil short	2xG 1/2"	419 552 X
8025 batch, 2 relays, 2 totalizers	115 VAC	EPDM	Coil long	2xG 1/2"	419 553 Y
8025 batch, 2 relays, 2 totalizers	115 VAC	FPM	Hall long	2xG1/2"	419 554 Z
8025 batch, 2 relays, 2 totalizers	115 VAC	FPM	Coil short	2xG1/2"	419 555 S
8025 batch, 2 relays, 2 totalizers	115 VAC	FPM	Coil long	2xG1/2"	419 556 T
8025 batch, 2 relays, 2 totalizers	115 VAC	EPDM	Hall short	2xG1/2"	419 557 U
8025 batch, 2 relays, 2 totalizers	115 VAC	EPDM	Hall long	2xG1/2"	419 558 D
8025 batch, 2 relays, 2 totalizers	115 VAC	EPDM	Coil short	2xG1/2"	419 559 E
8025 batch, 2 relays, 2 totalizers	115 VAC	EPDM	Coil long	2xG1/2"	419 560 B
BATCH CONTROLLER 8025 PANEL VERSION					
8025 batch, 2 relays, 2 totalizers	12-30 VDC			Terminals	419 536 P
BATCH CONTROLLER 8025 WALL-MOUNT VERSION					
8025 batch, 2 relays, 2 totalizers	12-30 VDC			3xPG 9	419 539 S
8025 batch, 2 relays, 2 totalizers	230 VAC			3xPG 9	419 542 V

Ordering Data for Battery Powered Flow Indicator Totalizer Type 8025

Flow transmitter	Supply	Gasket	Sensor	Cable entry	Item-No.
FLOW INDICATOR-TOTALIZER COMPACT VERSION					
8025 flow display, 2 totalizers	batteries 9 VDC	FPM	coil short	none	418403S
8025 flow display, 2 totalizers	batteries 9 VDC	EPDM	coil short	none	418404T
8025 flow display, 2 totalizers	batteries 9 VDC	FPM	coil long	none	418405U
8025 flow display, 2 totalizers	batteries 9 VDC	EPDM	coil long	none	418406V
FLOW INDICATOR-TOTALIZER WALL-MOUNT VERSION					
8025 flow display, 2 totalizers, enclosure IP65	batteries 9 VDC			PG9	418402Z

Ordering Data for Flow Sensor Type 8020 Connectable to Flow Transmitter / Batch Controller Type 8025 in Panel or Wall-mount Version

Flow sensor	Power supply	Gasket	Sensor	Cable entry	Item-No.
FLOW SENSOR 8020 STANDARD TYPES					
8020 with coil, connectable to 8025	none	FPM	Coil short	DIN 43650 PG9	419583P
8020 with coil, connectable to 8025	none	EPDM	Coil short	DIN 43650 PG9	419584Q
8020 with coil, connectable to 8025	none	FPM	Coil long	DIN 43650 PG9	419585R
8020 with coil, connectable to 8025	none	EPDM	Coil long	DIN 43650 PG9	419586J
8020 with Hall sensor, only connectable to 8025	from 8025	FPM	Hall short	DIN 43650 PG9	419591P
8020 with Hall sensor, only connectable to 8025	from 8025	EPDM	Hall short	DIN 43650 PG9	419592Q
8020 with Hall sensor, only connectable to 8025	from 8025	FPM	Hall long	DIN 43650 PG9	419593R
8020 with Hall sensor, only connectable to 8025	from 8025	EPDM	Hall long	DIN 43650 PG9	419594J

for continuous flow measurement and batch control

Ordering Data of Stainless Steel Fittings Type S020

Diameters	Materials	Item-No.
SS - Female G-Threaded Ports		
DN 15	SS, FPM	428 736 Y
DN 20	SS, FPM	428 737 Z
DN 25	SS, FPM	428 738 A
DN 32	SS, FPM	428 739 B
DN 40	SS, FPM	428 740 Q
DN 50	SS, FPM	428 741 D
SS - Female NPT-Threaded Ports		
DN 15	SS, FPM	428 742 E
DN 20	SS, FPM	428 743 F
DN 25	SS, FPM	428 744 G
DN 32	SS, FPM	428 745 H
DN 40	SS, FPM	428 746 A
DN 50	SS, FPM	428 747 B
SS - Female ISO7 (JIS) Threaded Ports		
DN 15	SS, FPM	428 748 L
DN 20	SS, FPM	428 749 M
DN 25	SS, FPM	428 750 J
DN 32	SS, FPM	428 751 F
DN 40	SS, FPM	428 752 G
DN 50	SS, FPM	428 753 H
SS- Male G Threaded Ports		
DN 15	SS, FPM	428 754 A
DN 20	SS, FPM	428 755 B
DN 25	SS, FPM	428 756 C
DN 32	SS, FPM	428 757 D
DN 40	SS, FPM	428 758 N
DN 50	SS, FPM	428 759 P
SS - Weld Ends		
DN 15	SS, FPM	428 760 L
DN 20	SS, FPM	428 761 H
DN 25	SS, FPM	428 762 A
DN 32	SS, FPM	428 763 B
DN 40	SS, FPM	428 764 C
DN 50	SS, FPM	428 765 D
SS - Tri-Clamp (ISO 2852)		
DN 15	SS, FPM	428 766 E
DN 20	SS, FPM	428 767 F
DN 25	SS, FPM	428 768 Q
DN 32	SS, FPM	428 769 R
DN 40	SS, FPM	428 770 N
DN 50	SS, FPM	428 771 B
SS - DIN Flanges (DIN 2501)		
DN 15	SS, FPM	428 772 C
DN 20	SS, FPM	428 773 D
DN 25	SS, FPM	428 774 E
DN 32	SS, FPM	428 775 F
DN 40	SS, FPM	428 776 G
DN 50	SS, FPM	428 777 H
SS - Flanges (JIS 10K)		
DN 15	SS, FPM	431 053 J
DN 20	SS, FPM	431 054 K
DN 25	SS, FPM	431 055 L
DN 32	SS, FPM	431 056 M
DN 40	SS, FPM	431 057 N
DN 50	SS, FPM	431 058 X

Diameters	Materials	Item-No.
SS - ANSI Flanges (ANSI B16-5-1988)		
DN 15	SS, FPM	428 778 J
DN 20	SS, FPM	428 779 K
DN 25	SS, FPM	428 780 H
DN 32	SS, FPM	428 781 W
DN 40	SS, FPM	428 782 X
DN 50	SS, FPM	428 783 Y
SS - Weld-o-let		
DN 65	SS	418 112 M
DN 80	SS	418 113 N
DN 100	SS	418 114 P
DN 125	SS	418 115 Q
DN 150	SS	418 116 R
DN 200	SS	418 117 J
DN 250	SS	418 756 A
DN 300	SS	420 070 G
DN 350	SS	416 637 R

Ordering Data of Brass Fittings Type S020

Diameters	Materials	Item-No.
Brass - Female G-Threaded Ports		
DN 15	Brass, FPM	428 712 Y
DN 20	Brass, FPM	428 713 Z
DN 25	Brass, FPM	428 714 S
DN 32	Brass, FPM	428 715 T
DN 40	Brass, FPM	428 716 U
DN 50	Brass, FPM	428 717 V
Brass - Female NPT-Threaded Ports		
DN 15	Brass, FPM	428 718 E
DN 20	Brass, FPM	428 719 F
DN 25	Brass, FPM	428 720 C
DN 32	Brass, FPM	428 721 Z
DN 40	Brass, FPM	428 722 S
DN 50	Brass, FPM	428 723 T
Brass - Female ISO7 (JIS) Threaded Ports		
DN 15	Brass, FPM	428 724 U
DN 20	Brass, FPM	428 725 V
DN 25	Brass, FPM	428 726 W
DN 32	Brass, FPM	428 727 X
DN 40	Brass, FPM	428 728 G
DN 50	Brass, FPM	428 729 H
Brass - Male G/metric Threaded Ports		
DN 15	Brass, FPM	428 730 E
DN 20	Brass, FPM	428 731 T
DN 25	Brass, FPM	428 732 U
DN 32	Brass, FPM	428 733 V
DN 40	Brass, FPM	428 734 W
DN 50	Brass, FPM	428 735 X

Ordering Data of Plastic Fittings Type S020

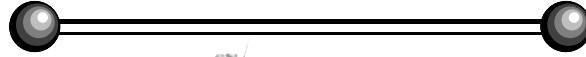
Diameters	Materials	Item-No.
PVC - True union ISO		
DN 15	PVC, FPM	428 670 J
DN 20	PVC, FPM	428 671 F
DN 25	PVC, FPM	428 672 G
DN 32	PVC, FPM	428 673 H
DN 40	PVC, FPM	428 674 A
DN 50	PVC, FPM	428 675 B
PVC - True union ASTM		
1/2"	PVC, FPM	428 682 T
3/4"	PVC, FPM	428 683 U
1"	PVC, FPM	428 684 V
1" 1/4"	PVC, FPM	428 685 W
1" 3/4"	PVC, FPM	428 686 X
2"	PVC, FPM	428 687 Y
PVC - True union JIS		
DN 15	PVC, FPM	429 078 H
DN 20	PVC, FPM	429 079 A
DN 25	PVC, FPM	429 080 Y
DN 32	PVC, FPM	429 081 M
DN 40	PVC, FPM	429 082 N
DN 50	PVC, FPM	429 083 P
PVC - Solvent Spigot		
DN 15	PVC, FPM	428 676 C
DN 20	PVC, FPM	428 677 D
DN 25	PVC, FPM	428 678 N
DN 32	PVC, FPM	428 679 P
DN 40	PVC, FPM	428 680 D
DN 50	PVC, FPM	428 681 S
PE - Weld-o-let		
DN 65	PE	418 642 G
DN 80	PE	418 643 H
DN 100	PE	418 644 A
DN 150	PE	418 645 B
DN 200	PE	418 646 C
DN 250	PE	418 647 D
DN 300	PE	418 648 N
DN 350	PE	418 649 P
DN 400	PE	418 598 V

Diameters	Materials	Item-No.
PP - True Union with Threaded Port		
DN 15	PP, FPM	428 688 H
DN 20	PP, FPM	428 689 A
DN 25	PP, FPM	428 690 F
DN 32	PP, FPM	428 691 U
DN 40	PP, FPM	428 692 V
DN 50	PP, FPM	428 693 W
PP - Weld Ends		
DN 15	PP, FPM	428 694 X
DN 20	PP, FPM	428 695 Y
DN 25	PP, FPM	428 696 Z
DN 32	PP, FPM	428 697 S
DN 40	PP, FPM	428 698 B
DN 50	PP, FPM	428 699 C
PP - Weld-o-let		
DN 65	PP	418 650 L
DN 80	PP	418 651 H
DN 100	PP	418 652 A
DN 150	PP	418 653 B
DN 200	PP	418 654 C
DN 250	PP	418 655 D
DN 300	PP	418 656 E
DN 350	PP	418 657 F
PP - Saddle		
DN 50	PP, PVC, FPM	425 138 N
DN 65	PP, PVC, FPM	425 139 P
DN 80	PP, PVC, FPM	425 140 U
DN 100	PP, PVC, FPM	425 141 R
DN 110	PP, PVC, FPM	425 142 J
DN 125	PP, PVC, FPM	425 143 K
DN 150	PP, PVC, FPM	425 144 L
DN 200	PP, PVC, FPM	425 416 D
PVDF - True Union with Threaded Port		
DN 15	PVDF, FPM	428 700 R
DN 20	PVDF, FPM	428 701 E
DN 25	PVDF, FPM	428 702 F
DN 32	PVDF, FPM	428 703 G
DN 40	PVDF, FPM	428 704 H
DN 50	PVDF, FPM	428 705 A
PVDF - Weld Ends		
DN 15	PVDF, FPM	428 706 B
DN 20	PVDF, FPM	428 707 C
DN 25	PVDF, FPM	428 708 M
DN 32	PVDF, FPM	428 709 N
DN 40	PVDF, FPM	428 710 A
DN 50	PVDF, FPM	428 711 X
PVDF - Weld-o-let		
DN 65	PVDF	418 658 Q
DN 80	PVDF	418 659 R
DN 100	PVDF	418 660 N

Easy Flow Control



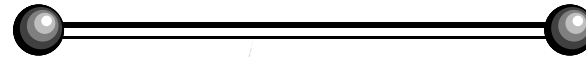
Easy Continuous Pneumatic Control



up to -70 %



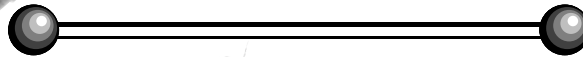
Easy Continuous Solenoid Control



up to -75 %



Easy ON/OFF Control



up to -65 %



Easy Batch Control



Easy Batch Control



up to **-60 %**



Easy Batch Control



up to **-50 %**



Easy Batch Control



up to **-80 %**

