

Flow fittings

- Universal fitting for INSERTION measuring devices
- Wide range of materials and process connections
- For pipe diameters DN15 to 350 mm
- Metal up to 16 bar
- Plastic up to 10 bar

**Example
S020 PVC**



The fitting can be used to connect any INSERTION device for a measurement in the pipe. i.e. sensors, indicators and controllers for flow, pH, oxidation reduction potential (O.R.P) and conductivity measurement. The fitting is available for flowmeter having a G 2" or a clamp connection.

Technical Data

General data

Pipe diameter

G 2" flowmeter connection ver. DN06 to DN400¹⁾

Clamp flowmeter connection ver. DN32 to DN100

Fitting process connections

Metal	Internal or external thread, weld ends, clamp or flange
Plastic	True union, spigot or external thread

Materials

G 2" flowmeter connection ver.

Seal	FKM or EPDM
Body & adapter	Brass (CuZn39Pb2) & stainless steel (316L -1.4404), all in stainless steel (316L -1.4404) or all in PVC, PP, PVDF, PE
Clamp flowmeter connection ver.	Stainless steel 316L

Surface finish

Clamp flowmeter conn. ver. Ra < 0.8 µm

Medium data

Medium temperature	0 to 50°C (32 to 122°F) for fitting in PVC
	0 to 80°C (32 to 176°F) for fitting in PP
	-15 to 100°C (5 to 212°F) for fitting in PVDF
	-15 to 160°C (5 to 320°F) for fitting in stainless steel or brass

Temperature limits may depend on the inserted device. Refer to the relevant data sheet or instruction manual and the pressure/temperature diagram of the fluid on next page. If the temperature ranges given for the adapter and the inserted device are different, use the most restrictive range

Medium pressure (max.)

Metal	PN16 (232.16 PSI)
Plastic	PN10 (145.1 PSI)

Pressure limits may depend on the inserted device. Refer to the relevant data sheet or instruction manual and the pressure/temperature diagram of the fluid on next page. If the pressure ranges given for the adapter and the inserted device are different, use the most restrictive range

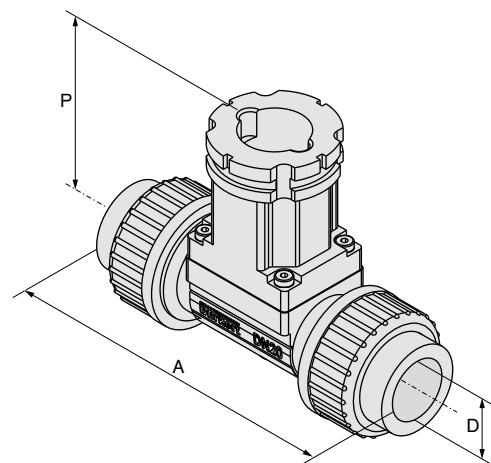
Environment

Ambient temperature Temperature limits may depend on the inserted device. Refer to the relevant data sheet or instruction manual for more details

Approvals

Approval/Certificate on request	3.1 certificate
	2.2 certificate
	Surface finish certificate
	Calibration certificate
	FDA (with EPDM seal) - stainless steel fitting only

Dimensions [mm] (see datasheet for more details)



True union process connection

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

DN [mm]	P [mm]	A [mm]	D [mm]
15	80.4	128.0	20.00
20	77.8	144.0	25.00
25	78.0	160.0	32.00
32	81.4	168.0	40.00
40	85.2	188.0	50.00
50	91.5	212.0	63.00

Note: short sensor version

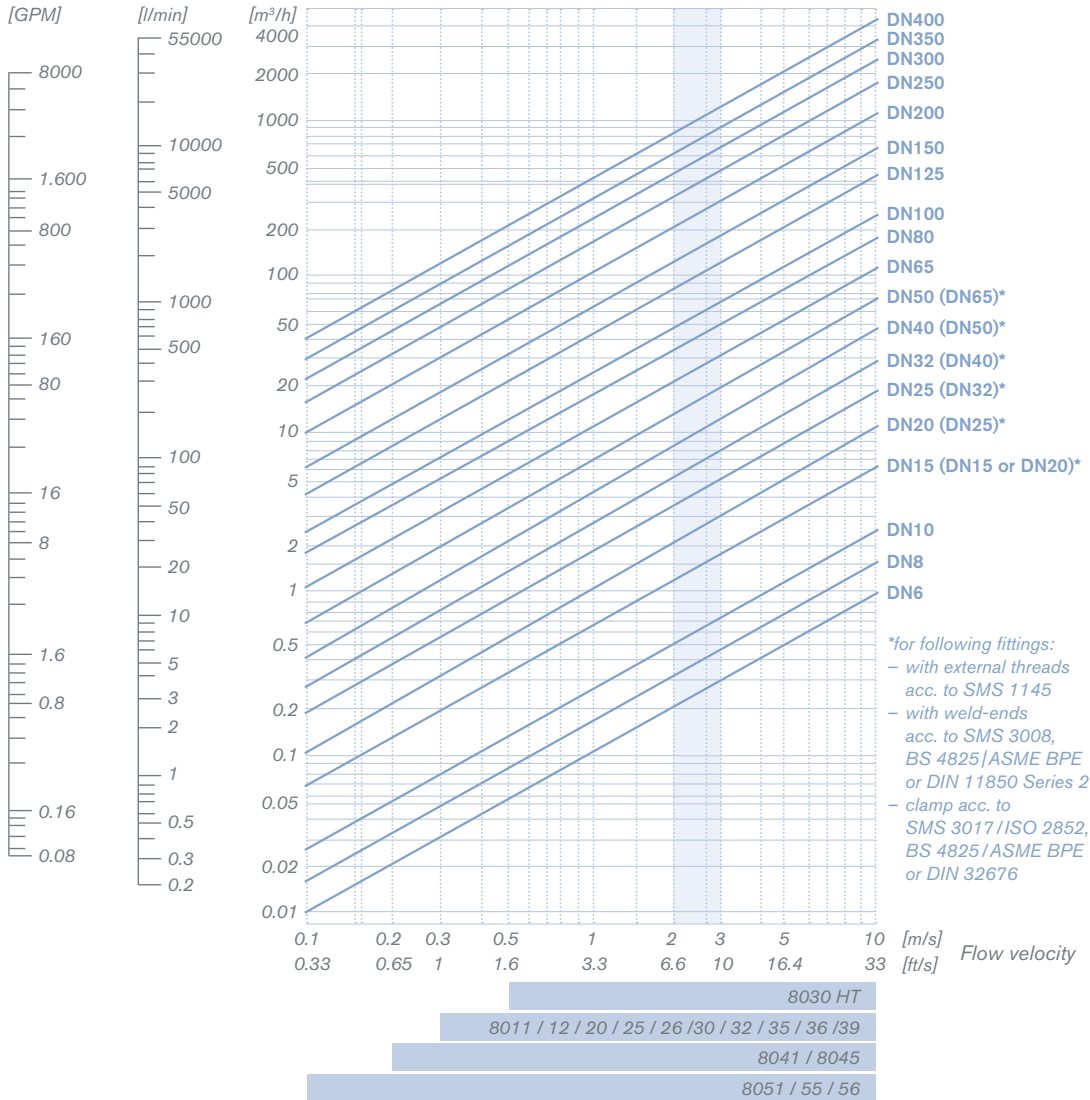
Selection Help – Flow Velocity Considerations

Depending on the sensor type, the right flow rate has to be chosen to get the best accuracy. The higher the flow velocity, the lower the measurement error, but the higher the pressure loss. The following chart will help

you find the correct fitting diameter for your application depending on flow velocity and sensor technology. Pipes for fluids similar to water are generally designed for an average flow velocity of approx. 2 to 3 m/s or 6-10 ft/s.

Flow rate

Diagram for nominal diameter selection

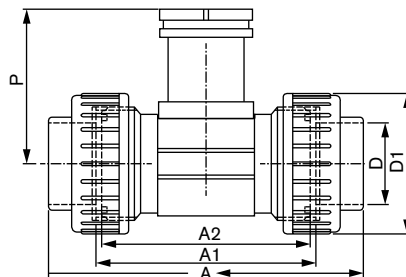


True union process connection

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

DN [mm]	P [mm]	A [mm]	A1 [mm]	A2 [mm]	D [mm]	D1 [mm]
15	80.4	128.0	96	90	20.00	43
20	77.8	144.0	106	100	25.00	53
25	78.0	160.0	116	110	32.00	60
32	81.4	168.0	116	110	40.00	74
40	85.2	188.0	127	120	50.00	83
50	91.5	212.0	136	130	63.00	103

Note: short sensor version

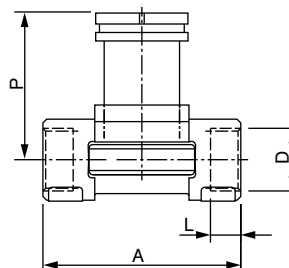


Internal thread process connection

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

DN [mm]	P [mm]	A [mm]	D [inch]	L [mm]
15	80.3	84.0	G 1/2	16.0
20	77.8	94.0	G 3/4	17.0
25	78.0	104.0	G 1	23.5
32	81.6	119.0	G 1 1/4	23.5
40	85.4	129.0	G 1 1/2	23.5
50	91.5	148.5	G 2	27.5

Note: short sensor version



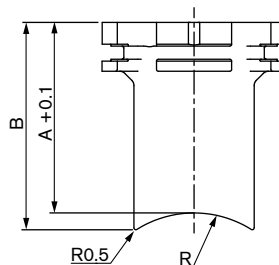
Welding socket with radius

in stainless steel (316L - 1.4404)

DN [mm]	A [mm]	B [mm]	R [mm]
50	56.6	61.6	30.2
65	54.5	58.6	36.7
80	53.1	56.4	44.5
100	50.7	53.2	57.2
125	48.2	50.3	70.7
150	45.7	47.4	84.2
200	41.0	42.3	109.6
250	36.6	37.7	136.6
300	31.8	32.9	162.0
350	27.1	28.2	177.8

Note: sensor version:

- short for DN50 - DN200
- long for DN250 - DN350

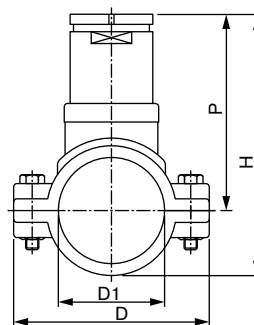


Saddle

in PP & PVC

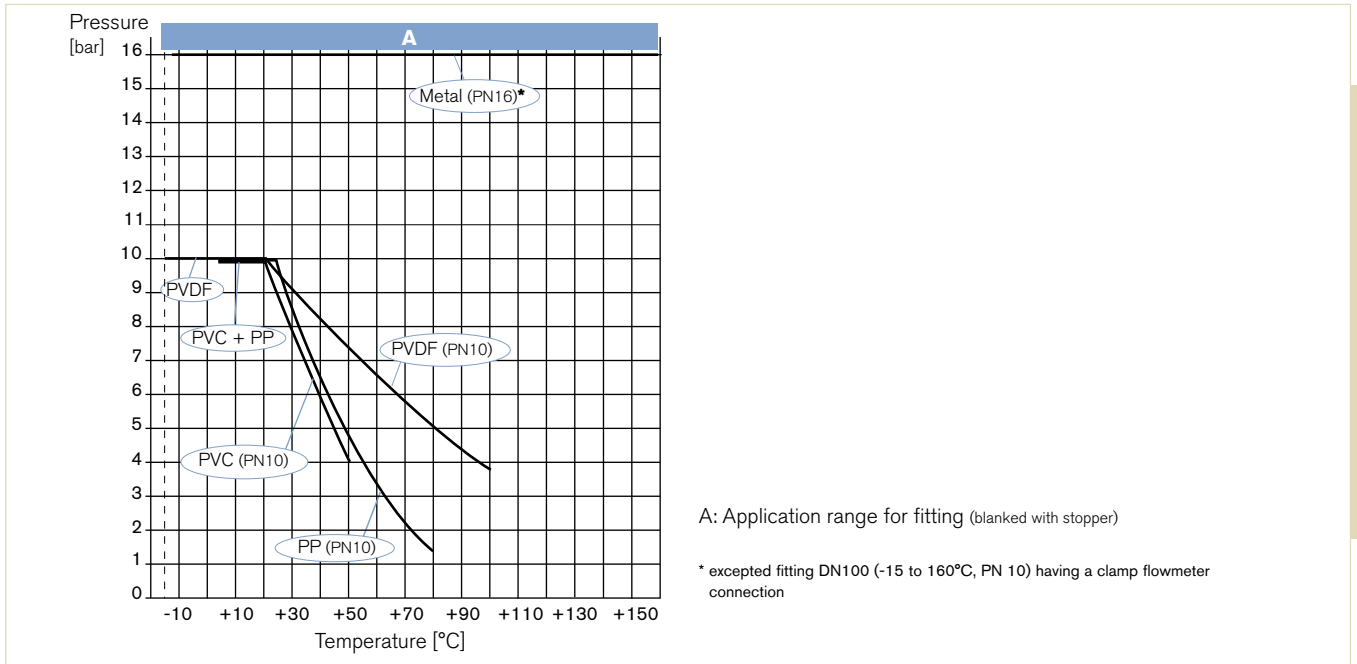
DN [mm]	P [mm]	H [mm]	D [mm]	D1 [mm]
50	116.0	155	116	63
65	115.0	160	129	75
80	119.0	171	144	90
100	124.0	187	166	110
110	120.0	191	181	125
125	127.0	205	196	140
150	137.0	225	216	160
180	161.0	271	266	200
200	173.0	291	290	225

Note: long sensor version








Body material: PP & PVC adapter
Seal material: EPDM

Pressure/temperature diagram



Ordering Chart

Size DN [mm]	PVC (DIN) true union, FKM	Brass G internal thread, FKM	Item no. Stainless G internal thread, FKM	Stainless steel welding tab	PP saddle EPDM
					
S020 (for 8026, 8041, 8045)					
15	428 670	428 712	428 736		
20	428 671	428 713	428 737		
25	428 672	428 714	428 738		
32	428 673	428 715	428 739		
40	428 674	428 716	428 740		
50	428 675	428 717	428 741	418 111	425 138
65				418 112	425 139
80				418 113	425 140
100				418 114	425 141
125				418 115	425 143
150				418 116	425 144
200				418 117	425 416
250				418 756	
300				420 070	
350				416 637	

Short sensor Long sensor