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Flow-through fittings

202810 Series

Brief description

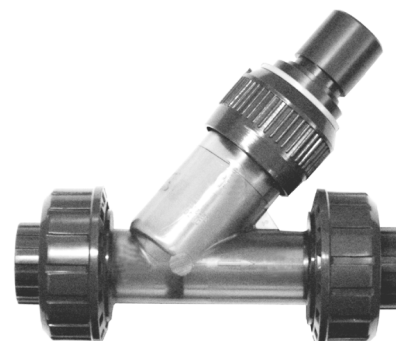
Flow-through fittings are used for holding electrochemical sensors (e.g. pH and redox combination electrodes, glass conductivity cells, compensation thermometers etc.) with a Pg13.5 screw-in thread and 120 mm mounting length. Fitting types for 1 to 3 sensors are available. The fittings are mounted directly in the liquid flow lines, or in a bypass pipe. They protect the built-in sensors against breakage and, because of their special style, enable the correct flow that is required to avoid measurement errors. A variety of mounting options and materials are available, but different versions and materials can also be supplied on request.

When planning the pipelines, the following points have to be taken into account:

- The fittings must be readily accessible so that the sensors, or the fitting itself, can be easily serviced or cleaned at regular intervals.
- Bypass measurements should be given preference; stopcocks should be provided to enable the removal of the sensor.
- Since pH and redox electrodes must not remain dry for a prolonged period during downtimes, constructional provision has to be made to ensure that there is residual liquid in the fitting.
- For systems with raised pressure and temperature levels, the appropriate versions of the fittings and the sensors that are used must be selected.
- The suitability of the materials (e.g. their chemical compatibility) has to be checked by the system designer.



202810/03-104-87-80/000 with optional mounting angle, stainless steel 1.4571, Sales No. 20/00327603



202810/01-970-86

Additional fittings in our range

Type of fitting	Data Sheet
Flow-through fittings	20.2810
Immersion fittings	20.2820
Quick-change fittings	20.2822
Process fittings	20.2825

Flow-through fittings 2DA-G1/2-PP series

Suitable for mounting 1 to 3 sensors with a Pg13.5 thread and 120 mm mounting length.
 The "earthing rod" option enables the grounding of undesirable electric and electrostatic potentials, such as can occur in complex systems and would lead to measurement errors.
 The version with the sample vessel in PP is used in cases where the transparent material polycarbonate (PC) (standard) is unsuitable, such as for processes with strong (sudden) temperature fluctuations, for example.



202810/03-104-87-80/000
 with mounting angle, stainless steel 1.4571,
 Sales No. 20/00327603

Technical data

Materials	housing: polypropylene (PP) sample vessel: polycarbonate (PC) or polypropylene (PP) seals: FPM
Permissible temperature	0 to +90°C Please also note the maximum operating data for the sensor used
Safe pressure	1 bar at +90°C 6 bar at +25°C
Electrode holder	Pg13.5 thread for 1 to 3 sensors (blind grommets are included)
Connection	1/2" pipe A
Protection	IP65, EN 60 529
Weight	0.4kg approx.

Order details

	202810	(1) Basic type flow-through fitting
x	03	(2) Basic type extension for up to 3 sensors
x	104	(3) Process connection connection 1/2" pipe
x	87	(4) Material of body polypropylene (PP)
x	80	(5) Material of sample vessel polycarbonate (PC) (standard)
o	87	polypropylene (PP)
x	000	(5) Extra codes no extra code
o	055	earthing rod

Order code	(1)	(2)	(3)	(4)	(5)	(6)
Order example	202810	/ 03	- 104	- 87	- 080	/ 000

Stock items (delivery: 3 working days after receipt of order)

Device type	Designation	Sales No.
202810/03-104-87-80/000	2DA-G1/2-PP, sample vessel: "transparent", material: polycarbonate (PC)	20/00327603
202810/03-104-87-87/000	2DA-G1/2-PP/PP, sample vessel: "not transparent", material: polypropylene (PP)	20/00351404

Note:

The type code is a type designation, not a modular system.
 If at all possible, please choose the items listed under "Stock items" or "Production items" when ordering.
 Any free combination of individual code features must be technically checked by us and released.
 Please ask us in case of doubt.

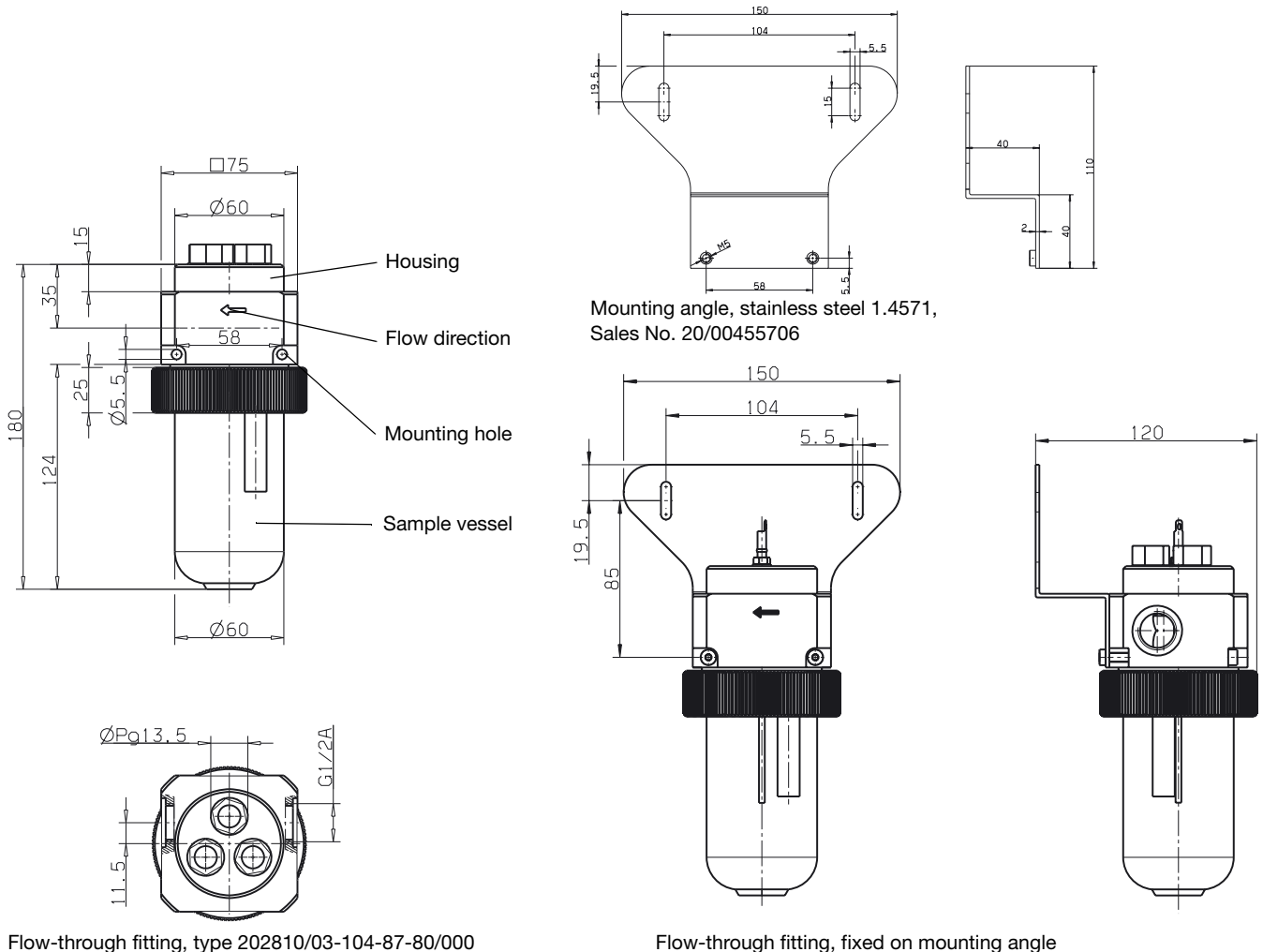
Production items (delivery: 10 working days after receipt of order)

Type	Designation	Sales No.
202810/03-104-87-80/055	2DA-G1/2-PP, sample vessel: "transparent", material: polycarbonate (PC)	20/00362345
202810/03-104-87-87/055	2DA-G1/2-PP/PP, sample vessel: "not transparent", material: polypropylene (PP)	20/00378117

Accessories and spare parts (delivery: 3 working days after receipt of order)

Type	Sales No.
replacement vessel; polycarbonate (PC); including O ring; for Type 202810/03 version since september 2005	20/00417498
replacement vessel; polypropylene (PP); including O ring; for Type 202810/03 version since september 2005	20/00463367
replacement vessel; polypropylene (PP); including O ring; for Type 202810/03 version upto september 2005	20/00417499
KCl reservoir, pressure-tight; to set up an electrolyte bridge, or when using electrodes filled with KCl, for wall mounting	20/00060254
mounting angle, stainless steel 1.4571	20/00455706

Dimensions



Flow-through fitting, type 202810/03-104-87-80/000

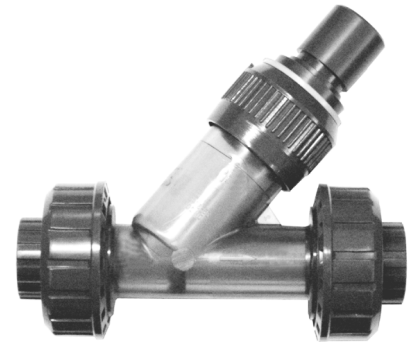
Flow-through fitting, fixed on mounting angle

Type 202810/01 in PVC

Suitable for mounting one sensor with a Pg13.5 thread and a mounting length of 120 mm.

Technical data

Materials	flow-through body: PVC electrode holder: PVC
Permissible temperature of liquid	+0 to +60°C
Electrode holder	Pg13.5 for 1 sensor
Connection	solvent-weld sockets
Protection	IP65, EN 60 529
Weight	approx. 0.34 kg



202810/01-970-86

Order details

	(1) Basic type
	202810 flow-through fitting
x	(2) Basic type extension
	01 for 1 sensor
	(3) Process connection
x	965 inclined position, DN 20
o	966 inclined position, DN 25
o	970 inclined position, DN 20, with screwed butt joint
o	971 inclined position, DN 25, with screwed butt joint
o	967 T-piece, DN 32
o	968 T-piece, DN 40
o	969 T-piece, DN 50
x	(4) Material of body
	86 polyvinylchloride (PVC)



202810/01-968-86

Order code	(1)	(2)	(3)	(4)
Order example	202810	/ 01	- 970	- 86

Available accessories and spare parts

Sales No.	Designation
20/00060254	KCl reservoir, pressure-tight; to arrange an electrolyte bridge, or when using electrodes filled with KCl, for wall mounting

Stock items (delivery: 3 working days after receipt of order)

Typ	Bezeichnung	Verkaufs-Artikel-Nr.
202810/01-965-86	inclined-position fitting, DN20, PVC	20/00056390
202810/01-966-86	inclined-position fitting, DN25, PVC	20/00056389
202810/01-970-86	inclined-position fitting, DN20, with screwed butt joint, PVC	20/00416456
202810/01-971-86	inclined-position fitting, DN25, with screwed butt joint, PVC	20/00416457
202810/01-967-86	T-piece fitting, DN32, PVC	20/00069106
202810/01-968-86	T-piece fitting, DN40, PVC	20/00069105
202810/01-969-86	T-piece fitting, DN50, PVC	20/00069104

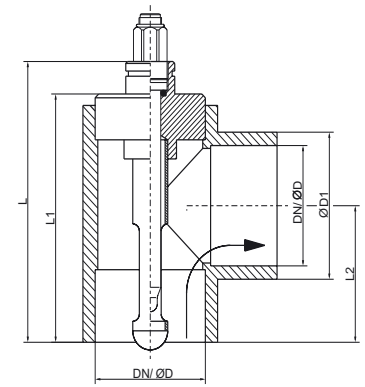
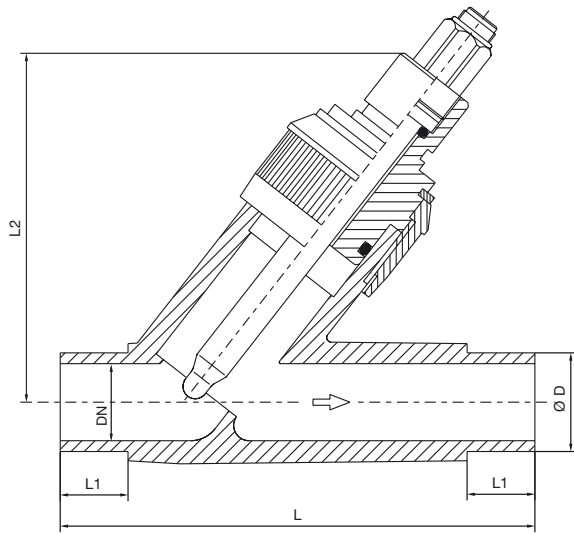
Accessories (delivery: 3 working days after receipt of order)

Typ	Verkaufs-Artikel-Nr.
KCl reservoir, pressure-tight; to set up an electrolyte bridge, or when using electrodes filled with KCl, for wall mounting	20/00060254

Note:

The type code is a type designation, not a modular system.
 If at all possible, please choose the items listed under "Stock items" or "Production items" when ordering.
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Dimensions



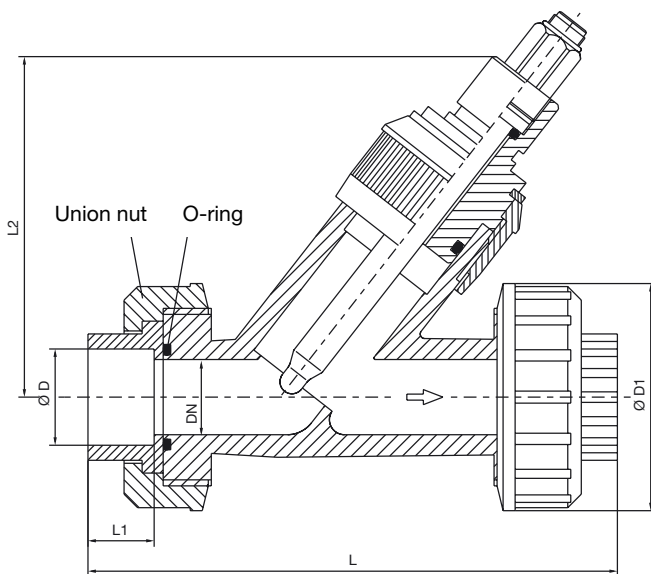
vertical mounting position

Inclined-position version

Type	DN	Ø D	L	L ₁	L ₂
202810/01-965-86	20	25	144	19	110
202810/01-966-86	25	32	154	22	115

T-piece version

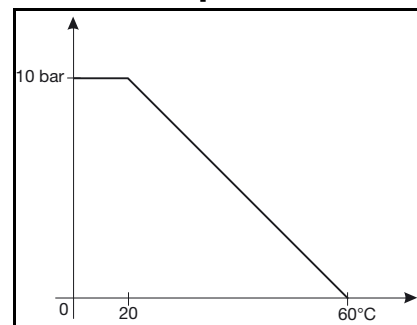
Type	DN	Ø D	Ø D ₁	L	L ₁	L ₂
202810/01-967-86	32	40	51	129	112	47
202810/01-968-86	40	50	62	137	120	59
202810/01-969-86	50	63	77	147	130	72



Inclined-position version with screwed butt joint

Type	DN	Ø D	Ø D ₁	L	L ₁	L ₂
202810/01-970-86	20	25	66	158	19	110
202810/01-971-86	25	32	75	176	22	115

Permitted pressure



Stock items (delivery: 3 working days after receipt of order)

Device type	Designation	Sales No.
202810/03-104-87-80/000	2DA-G1/2-PP, sample vessel: "transparent", material: polycarbonate (PC)	20/00327603
202810/03-104-87-87/000	2DA-G1/2-PP/PP, sample vessel: "not transparent", material: polypropylene (PP)	20/00351404
202810/01-965-86	inclined-position fitting, DN20, PVC	20/00056390
202810/01-966-86	inclined-position fitting, DN25, PVC	20/00056389
202810/01-970-86	inclined-position fitting, DN20, with screwed butt joint, PVC	20/00416456
202810/01-971-86	inclined-position fitting, DN25, with screwed butt joint, PVC	20/00416457
202810/01-967-86	T-piece fitting, DN32, PVC	20/00069106
202810/01-968-86	T-piece fitting, DN40, PVC	20/00069105
202810/01-969-86	T-piece fitting, DN50, PVC	20/00069104

Production items (delivery: 10 working days after receipt of order)

Device type	Designation	Sales No.
202810/03-104-87-80/055	2DA-G1/2-PP, sample vessel: "transparent", material: polycarbonate (PC), with earthing rod	20/00362345
202810/01-966-86	2DA-G1/2-PP/PP, sample vessel: "not transparent", material: polypropylene (PP), with earthing rod	20/00056389

Accessories and spare parts

Type	Sales No.
replacement vessel; polycarbonate (PC); including O ring; for Type 202810/03 version since september 2005	20/00417498
replacement vessel; polypropylene (PP); including O ring; for Type 202810/03 version since september 2005	20/00463367
replacement vessel; polypropylene (PP); including O ring; for Type 202810/03 version upto september 2005	20/00417499
KCl reservoir, pressure-tight; to set up an electrolyte bridge, or when using electrodes filled with KCl, for wall mounting	20/00060254
mounting angle, stainless steel 1.4571	20/00455706