



Housings

Different processes have different requirements for sensors to provide an accurate and reliable measurement. Being in contact with the media is the most important one. In order to meet the different requirements, Hamilton has developed various kinds of housings and armatures: static, retractable, pressurizable, pneumatic, manual, weld-in and hygienic sockets.

No matter what type of housing is needed for a pipe or a vessel, on the following pages the right one for each application can be found.

Distribuito da:

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FlexiFit



The FlexiFit housings are designed for 120 mm sensors in different kinds of industries. A variety of process connections ensure the usability in the chemical industry as well as in hygienic processes. All FlexiFit have EPDM o-rings and the electropolished surface quality ($R_a < 0.4 \mu\text{m}$) quality is shown on a certificate. They are suitable for autoclavation, CIP and SIP procedures.

Benefits

- ▶ Easy installation and handling
- ▶ Various o-ring positions available
- ▶ Hygienic design

Ordering Information

Type	Process Connection	Ref
FlexiFit Bio	G 1¼	237331-OP
FlexiFit U Bio	G 1¼	237380-OP
FlexiFit TC 150-33	TC 1.5"	237341
FlexiFit VV-0	Varivent®	237344
FlexiFit VV-15	Varivent®	237345

U = Unprotected
TC = Triclamp



Specifications

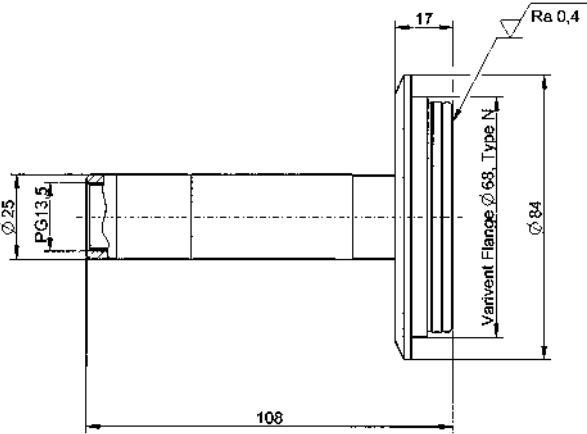
Wetted parts	Stainless Steel 1.4435
O-ring material	EPDM
O-ring position	22 to 55 mm (G 1¼)
Pressure range (relative to ambient)	0 to 6 bar
Temperature range	-10 to 140 °C
Sensor thread	PG 13.5
Sensor a-length	120 mm
Surface finish	$R_a < 0.4 \mu\text{m}$ (N5 electropolished)

For more specifications see www.hamiltoncompany.com

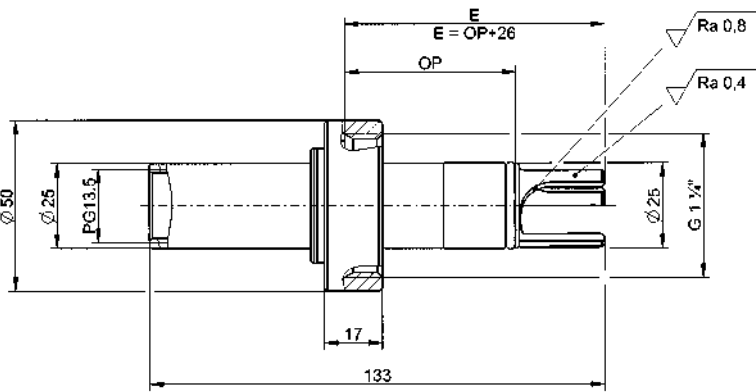
Other designs and materials available on request

Dimensional drawing / FlexiFit

all dimensions in mm



FlexiFit VV-0



FlexiFit Bio

Accessories



- **Service Kit FlexiFit Bio** Ref 237366
- **Service Kit FFKM** Ref 237319
- **Service Kit FKM** Ref 237219
- **Service Kit RetractoFit PEEK** Ref 237388

Safety Socket see page 152

RetractoFit



The RetractoFit is a retractable armature designed for 225 mm sensors in industrial applications. It allows the operator to mount and dismount sensors while the process is running. Safe sensor handling during process is guaranteed because insertion into the vessel without a sensor is impossible so is removal while in the measuring position. It is easy to use and maintain: only one press on the red button is needed to move the sensor into or out of the process. All o-rings can easily be replaced by the operator without special tools. The RetractoFit is available in different versions.

When the housing with an Arc sensor, VisiFerm mA, VisiTrace mA and protective sleeve the aperture (hole) in the protective sleeve must be enlarged or the housing has to be used without the protective sleeve. Wireless adapters on top of Arc sensors can only be used without the protective sleeve.

Benefits

- ▶ Integral safety mechanism
- ▶ Sensor can be withdrawn from the process for cleaning, calibration or replacement
- ▶ Easy maintenance
- ▶ 3.1 material certificate included

Ordering Information

Type	Process Connection	Ref
RetractoFit	G 1¼	237240
RetractoFit PEEK 25	G 1¼	237490



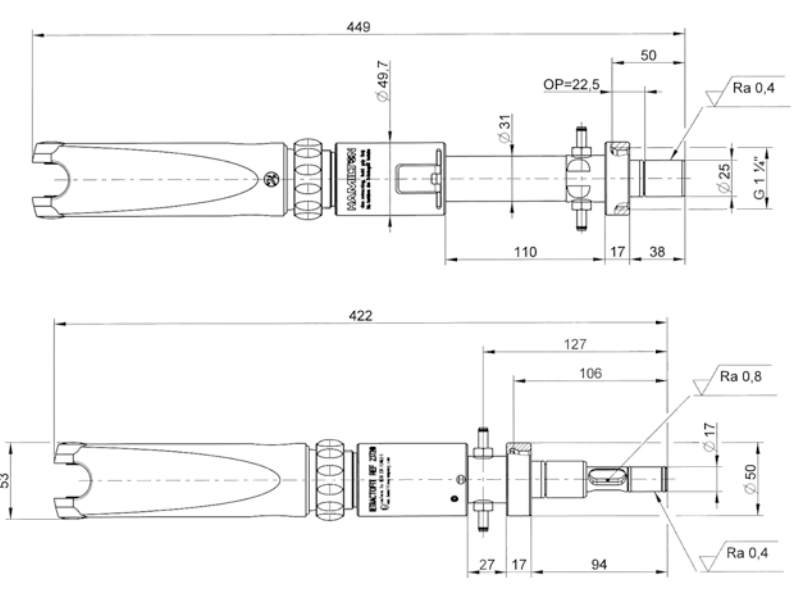
Specifications

Wetted parts	RetractoFit: Stainless Steel 1.4571 RetractoFit PEEK: PEEK (FDA approved)
O-ring material	FKM
O-ring position	RetractoFit: 22.5 mm RetractoFit PEEK: 25 mm
Pressure range (relative to ambient)	0 to 6 bar
Temperature range	-10 to 130 °C
Sensor thread	PG 13.5
Sensor a-length	225 mm
Surface finish	RetractoFit: Ra < 0.4 µm (N5 electropolished)

For more specifications see www.hamiltoncompany.com

Dimensional drawings / RetractoFit

all dimensions in mm



Accessories



- **Service Kit RetractoFit** Ref 237239
- **FFKM Kit RetractoFit** Ref 237339

Safety Socket see page 152

RetractoFit Bio



The RetractoFit Bio is a retractable housing designed for 225 mm sensors in hygienic applications in the biotechnology, food & beverage and the pharmaceutical industry. It allows the operator to mount and dismount sensors while the process is running. Safe sensor handling during the process is guaranteed because insertion into a vessel without sensor is impossible so is removal while in the measuring position. It is easy to use and maintain: only one press on the red button is needed to move the sensor into or out of the process. All o-rings can be easily be replaced by the operator without special tools.

“**Did you know...** that the RetractoFit Bio has a special rinsing chamber with angled connections for cleaning solutions and special inlet construction guarantees an entire cleaning of the chamber through a swirl effect”

Benefits

- ▶ Integral safety mechanism
- ▶ Sensor can be withdrawn from the process for cleaning, calibration or replacement
- ▶ Special hygienic design of cleaning chamber
- ▶ Easy maintenance

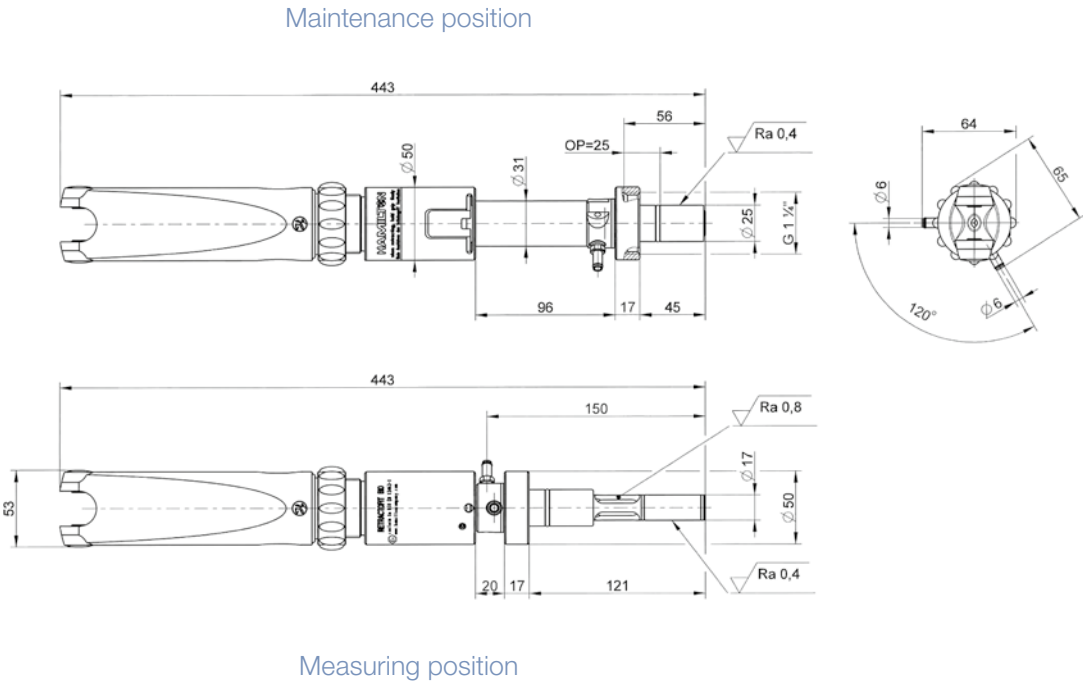


Specifications	
Wetted parts	Stainless Steel 1.4435
O-ring material	EPDM
O-ring position	22 mm and 55 mm
Pressure range (relative to ambient)	0 to 6 bar
Temperature range	-10 to 140 °C
Sensor thread	PG 13.5
Sensor a-length	225 mm
Surface finish	Ra < 0.4 µm (N5 electropolished)

For more specifications see www.hamiltoncompany.com

Dimensional drawings / RetractoFit Bio 25

all dimensions in mm



Ordering Information

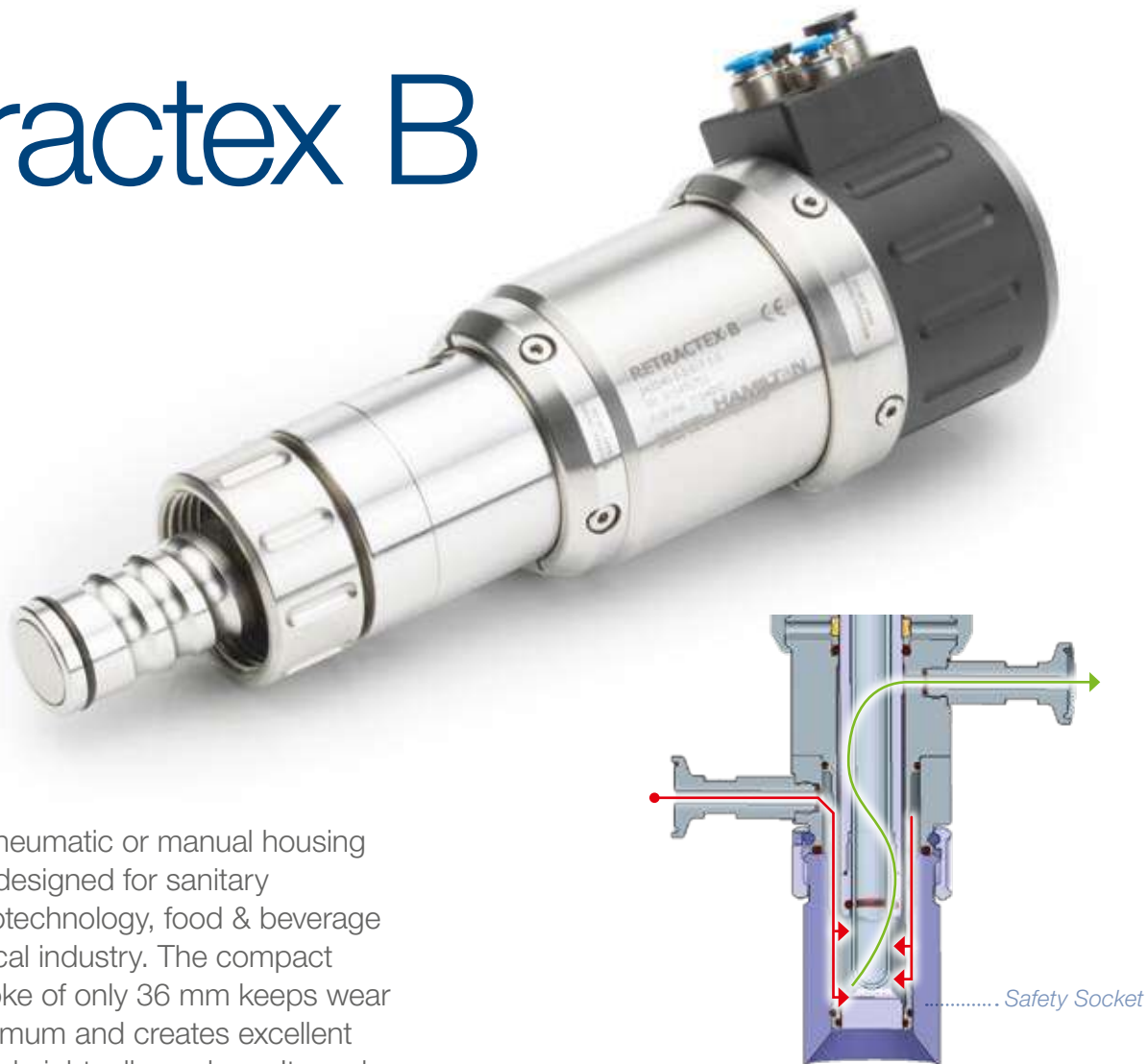
Type	Process Connection	Ref
RetractoFit Bio 25	G 1 1/4	237480
RetractoFit Bio 55	G 1 1/4	237440

Accessories

- **FDA Service Kit** Ref 237338

- **Safety Socket** see page 152

Retractex B



The retractable pneumatic or manual housing Retractex B was designed for sanitary applications in biotechnology, food & beverage and pharmaceutical industry. The compact design with a stroke of only 36 mm keeps wear on seals to a minimum and creates excellent reliability – day and night, all year long. It can be cleaned easily and thoroughly in place, including the space between the socket and rinsing chamber. The Retractex B with its patented HyCIP cleaning principle offers the best available cleaning efficiency for Ingold sockets (G 1¼”).

It is designed for 12 mm sensors and is equipped with several safety features (e.g. no sensor – no insertion, window to check seals for leakage etc.) to provide operator safety. It is available with various process connections that can be used with all vessels used in these branches.



How does the HyCIP process connection work?

In cleaning position, the sensor can be cleaned and sterilized together with all wetted seals. In the HyCIP connection the cleaning solution is directed between armature and socket up to the process seal so the most remote parts of the chamber are rinsed. Thus HyCIP housings are unmatched for their cleaning performance of the sensor and of all relevant seals.

Benefits

- ▶ Extremely compact design
- ▶ Integrated safety concept- no sensor – no insertion
- ▶ Very low maintenance
- ▶ Sterile safety and unique cleaning efficiency with HyCIP

Specifications

Wetted parts	Stainless Steel 1.4404
O-ring material	EPDM or FKM
O-ring position	25 mm, 50 mm and 55 mm
Pressure range (relative to ambient)	0 to 16 bar (120 °C), 10 bar (140 °C)
Temperature range	-10 to 140 °C
Sensor a-length	225 mm
Surface finish	R _a < 0.8 µm (N6)

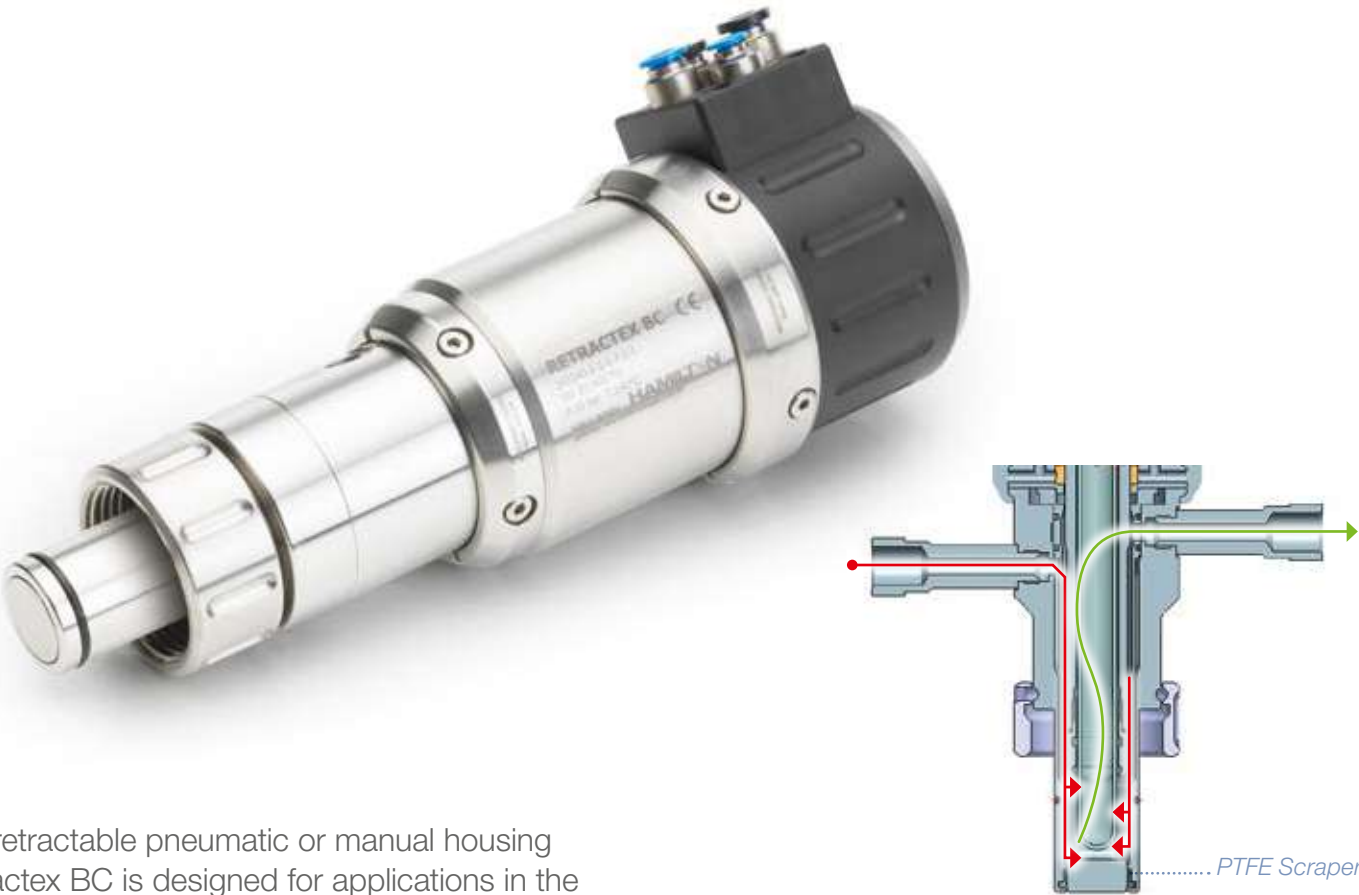
For more specifications see www.hamiltoncompany.com

Ordering Information

Retractable Housing: Retractex B (hygienic)

243240	Retractex B (pneumatic)				
243275	Retractex B M (manual)				
	Code	Material (wetted parts)			
	1	Stainless Steel 1.4404			
	0	special			
	Code	Sealing Material (wetted sealings)			
	1	EPDM/FDA USP class VI			
	2	FKM			
	0	special			
	Code	Sensor			
	1	225 mm PG13,5			
	0	special			
	Code	Process Connection			
	1	Ingold (G 1¼") o-Ring Position 28 mm			
	2	Varivent N DN 40-125			
	3	TriClamp 1,5" (OD Ø 50,5 mm)			
	4	TriClamp 2" (OD Ø 64 mm)			
	5	NEUMO BioControl 50			
	6	DIN 11851 DN50			
	7	HyCIP for Ingold (G 1¼") o-Ring Position 25 mm			
	8	HyCIP for Ingold (G 1¼") o-Ring Position 50 mm			
	9	HyCIP for Ingold (G 1¼") o-Ring Position 55 mm			
	Code	Cleaning Connection			
	1	G ½" thread female			
	2	G ¼" thread female			
	3	¼" NPT female			
	4	TriClamp ¾" Ø 4 mm			
	9	TriClamp ¾" Ø 10,3 mm (Sartorius)			
	0	special			
	Code	Position switch			
	1	pneumatic / without for manual			
	0	special			
Ref					← Order Code

Retractex BC Steel



The retractable pneumatic or manual housing Retractex BC is designed for applications in the chemical industry. The compact design with a stroke of only 36 mm keeps wear on seals to a minimum and creates to excellent reliability – day and night, all year long. It can be cleaned easily and thoroughly in place. It is designed for 12 mm sensors and is equipped with several safety features (e.g. no sensor – no insertion, window to check seals for leakage etc.) to provide operator safety. The Retractex BC comes with a G 1¼” process connection and is available with two different o-ring positions.

Cleaning of the Retractex BC?

In cleaning position, the sensor can be cleaned while the process is running. The advantage of the insertion tube is the short way for insertion. A PTFE scraper with o-ring guarantees that dirt stays outside of the armature and does not harm the o-ring.

Benefits

- ▶ Extremely compact design
- ▶ Integrated safety concept- no sensor – no insertion
- ▶ Very low maintenance



Specifications

Wetted parts	Stainless Steel 1.4404 or 2.4602
O-ring material	EPDM or FKM or FFKM
Pressure range (relative to ambient)	0 to 16 bar (120 °C), 10 bar (140 °C)
Temperature range	-10 to 140 °C
Sensor a-length	225 mm
Surface finish	R _a < 0.8 µm (N6)

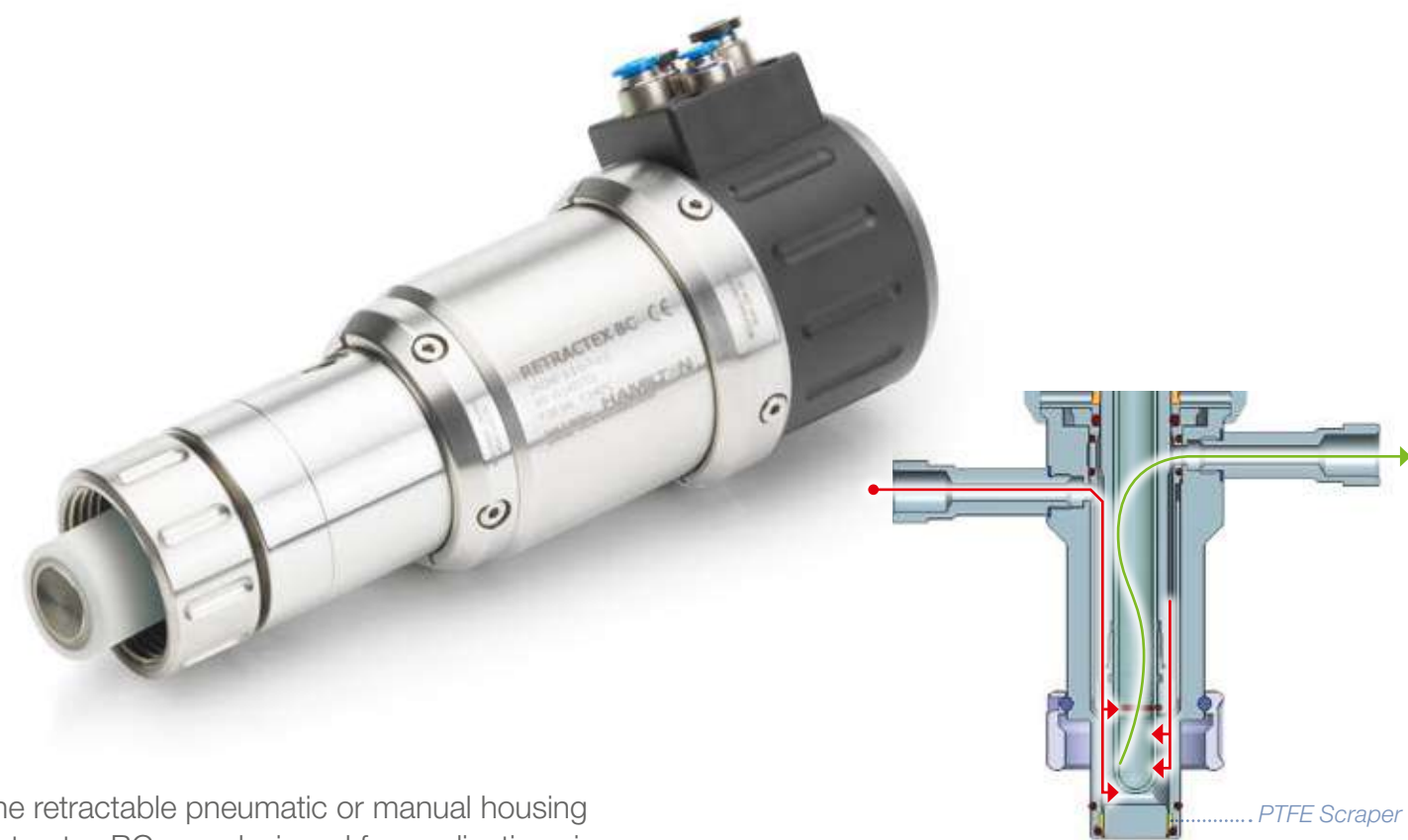
For more specifications see www.hamiltoncompany.com

Ordering Information

Retractable Housing: Retractex BC Steel

237730	Retractex BC Steel (pneumatic)				
237735	Retractex BC Steel M (manual)				
	Code	Material (wetted parts)			
	1	Stainless Steel 1.4404			
	2	Stainless Steel 2.4602			
	0	special			
	Code	Sealing Material (wetted sealings)			
	1	EPDM/FDA USP VI			
	2	FKM			
	3	FFKM			
	Code	Sensor			
	1	225 mm PG13,5			
	0	special			
	Code	Process Connection			
	1	Ingold (G 1¼”) o-Ring Position 28 mm			
	2	Ingold (G 1¼”) o-Ring Position 50 mm			
	0	special			
	Code	Cleaning Connection			
	1	G ⅛” thread female			
	2	G ¼” thread female			
	3	¼” NPT female			
	Code	Position switch			
	1	pneumatic			
	0	special			
Ref					← Order Code

Retractex BC Plastic



The retractable pneumatic or manual housing Retractex BC was designed for applications in the chemical industry. The compact design with a stroke of only 36 mm keeps wear on seals to a minimum and creates excellent reliability – day and night, all year long. It can be cleaned easily and thoroughly in place. It is designed for 12 mm sensors and is equipped with several safety features (e.g. no sensor – no insertion, window to check seals for leakage etc.) to provide operator safety. The Retractex BC comes with a G 1¼” process connection and is available with two different o-ring positions.

Cleaning of the Retractex BC?

In cleaning position, the sensor can be cleaned while the process is running. The advantage of the insertion tube is the short way for insertion. A PTFE scraper with o-ring guarantees that dirt stays outside of the armature and does not harm the o-ring.

Benefits

- ▶ Extremely compact design
- ▶ Integrated safety concept- no sensor – no insertion
- ▶ Very low maintenance
- ▶ Easy installation of the pneumatic armature with color coded connectors
- ▶ Choice of 3 different plastics



Specifications

Wetted parts	PVDF or PEEK or PP
O-ring material	EPDM or FKM or FFKM
Pressure range (relative to ambient)	0 to 16 bar (120 °C), 10 bar (140 °C)
Temperature range	-10 to 140 °C
Sensor a-length	225 mm
Surface finish	R _a < 0.8 µm (N6)

For more specifications see www.hamiltoncompany.com

Ordering Information

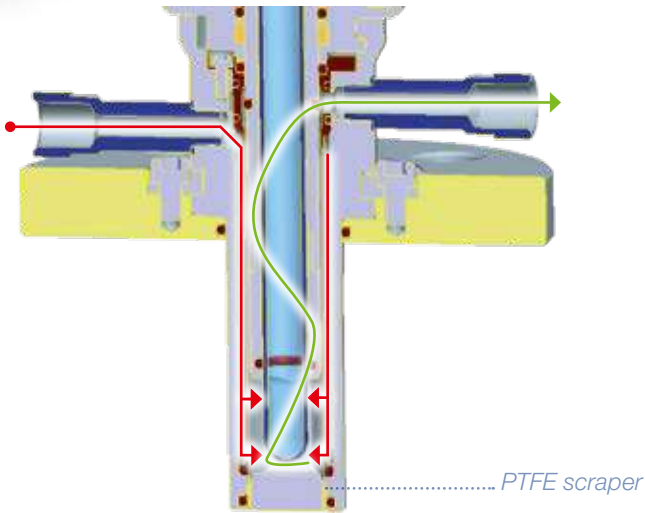
Retractable Housing: Retractex BC Plastic

237740	Retractex BC Plastic (pneumatic)				
237745	Retractex BC Plastic M (manual)				
	Code	Material (wetted parts)			
	1	PP			
	2	PVDF / Stainless Steel 2.4602			
	3	PEEK			
	0	special			
	Code	Sealing Material (wetted sealings)			
	1	EPDM/FDA USP VI			
	2	FKM			
	3	FFKM			
	0	special			
	Code	Sensor			
	1	225 mm PG13,5			
	0	special			
	Code	Process Connection			
	1	Ingold (G 1¼”) o-Ring Position 25 mm			
	0	special			
	Code	Cleaning Connection			
	1	G 1/8” thread female			
	2	G 1/4” thread female			
	3	1/4” NPT female			
	0	special			
	Code	Position switch			
	1	pneumatic / without for manual			
	0	special			
Ref					← Order Code

Retractex C Steel



The retractable pneumatic or manual housing Retractex C was designed for applications in the chemical industry. The compact design with a stroke of only 36 mm keeps wear on seals to a minimum and creates to excellent reliability – day and night, all year long. It can be cleaned easily and thoroughly in place. It is designed for 12 mm sensors and is equipped with several safety features (e.g. no sensor – no insertion, window to check seals for leakage etc.) to provide operator safety. It is available with various process connections that can be used with all vessels used in this branch.



Cleaning of the Retractex C?

In cleaning position, the sensor can be cleaned while the process is running. The advantage of the insertion tube is the short way for insertion. A PTFE scraper with o-ring guarantees that dirt stays outside of the armature and does not harm the o-ring.



Benefits

- ▶ Extremely compact design
- ▶ Integrated safety concept- no sensor – no insertion
- ▶ Very low maintenance
- ▶ Easy installation of the pneumatic armature with color coded connectors

Specifications

Wetted parts	Stainless Steel 1.4404 or 2.4602
O-ring material	EPDM or FKM or FFKM
Pressure range (relative to ambient)	0 to 16 bar (120 °C), 10 bar (140 °C)
Temperature range	-10 to 140 °C
Sensor a-length	225 mm
Surface finish	R _a < 0.8 µm (N6)

For more specifications see www.hamiltoncompany.com

Ordering Information

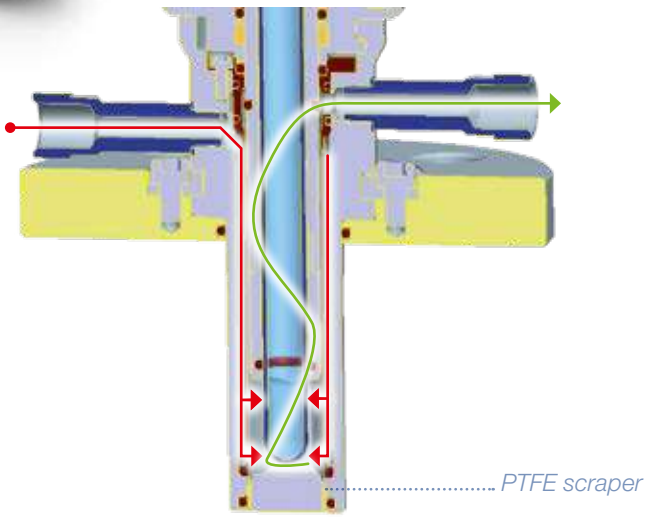
Retractex C Steel

243200	Retractex C Steel (pneumatic)				
243255	Retractex C Steel M (manual)				
	Code		Material (wetted parts)		
	1		Stainless Steel 1.4404		
	2		Stainless Steel 2.4602		
	0		special		
	Code		Sealing Material (wetted sealings)		
	1		EPDM / USP class VI		
	2		FKM		
	3		FFKM		
	0		special		
	Code		Sensor		
	1		225 mm PG13,5		
	0		special		
	Code		Process Connection		
	1		Flange DN32 PN16		
	2		Flange DN40 PN16		
	3		Flange DN50 PN16		
	4		Flange ANSI 1¼" 150lbs		
	5		Flange ANSI 1½" 150lbs		
	6		Flange ANSI 2" 150lbs		
	7		NPT M 1¼"		
	8		TriClamp 2"		
	0		special		
	Code		Cleaning Connection		
	1		G ⅛" thread female		
	2		G ¼" thread female		
	3		¼" NPT female		
	0		special		
	Code		Position switch		
	1		pneumatic / without for manual		
	0		special		
Ref					← Order Code

Retractex C Plastic



The retractable pneumatic or manual housing Retractex C was designed for applications in the chemical industry. The compact design with a stroke of only 36 mm keeps wear on seals to a minimum and creates excellent reliability – day and night, all year long. It can be cleaned easily and thoroughly in place. It is designed for 12 mm sensors and is equipped with several safety features (e.g. no sensor – no insertion, window to check seals for leakage etc.) to provide operator safety. It is available with various process connections that can be used with all vessels used in this branch.



Cleaning of the Retractex C?

In cleaning position, the sensor can be cleaned while the process is running. The advantage of the insertion tube is the short way for insertion. A PTFE scraper with o-ring guarantees that dirt stays outside of the armature and does not harm the o-ring.



Benefits

- ▶ Extremely compact design
- ▶ Integrated safety concept- no sensor – no insertion
- ▶ Very low maintenance
- ▶ Easy installation of the pneumatic armature with color coded connectors
- ▶ Choice of 3 different plastics

Specifications

Wetted parts	PVDF or PEEK or PP
O-ring material	EPDM or FKM or FFKM
Pressure range (relative to ambient)	0 to 16 bar (120 °C), 10 bar (140 °C)
Temperature range	-10 to 140 °C
Sensor a-length	225 mm
Surface finish	R _a < 0.8 µm (N6)

For more specifications see www.hamiltoncompany.com

Ordering Information

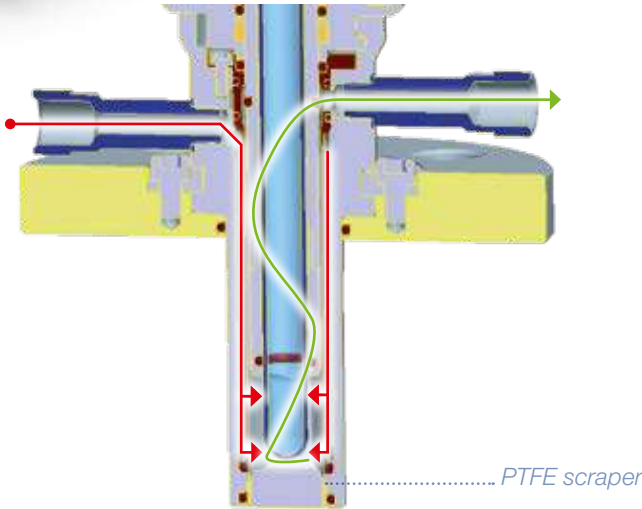
Retractable Housing: Retractex C Plastic

243220	Retractex C Plastic (pneumatic)				
243265	Retractex C Plastic M (manual)				
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	2	PVDF / Stainless Steel 2.4602			
	3	PEEK			
	0	special			
	Code	Sealing Material (wetted sealings)			
	1	EPDM / FDA USP class VI			
	2	FKM			
	3	FFKM			
	0	special			
	Code	Sensor			
	1	225 mm PG13,5			
	0	special			
	Code	Process Connection			
	1	Flange DN50			
	2	Flange ANSI 2"			
	3	NPT M 1¼"			
	0	special			
	Code	Cleaning Connection			
	1	G ⅛" thread female			
	2	G ¼" thread female			
	3	¼" NPT female			
	0	special			
	Code	Position switch			
	1	pneumatic / without for manual			
	0	special			
Ref					← Order Code

Retractex C Steel LT



The retractable pneumatic or manual housing Retractex C was designed for applications in the chemical industry. The compact design with a stroke of only 36 mm with an insertion depth up to 207 mm keeps wear on seals to a minimum and creates excellent reliability – day and night, all year long. It can be cleaned easily and thoroughly in place. It is designed for 12 mm sensors and is equipped with several safety features (e.g. no sensor – no insertion, window to check seals for leakage etc.) to provide operator safety. It is available with various process connections that can be used with all vessels used in this branch.



Cleaning of the Retractex C?

In cleaning position, the sensor can be cleaned while the process is running. The advantage of the insertion tube is the short way for insertion. A PTFE scraper with o-ring guarantees that dirt stays outside of the armature and does not harm the o-ring.



Benefits

- ▶ Extremely compact design (only 36 mm travel of insertion tube with an insertion depth of 207 mm)
- ▶ Integrated safety concept- no sensor – no insertion
- ▶ Very low maintenance
- ▶ Easy installation of the pneumatic armature with color coded connectors

Specifications

Wetted parts	Stainless steel 1.4404 or 2.4602
O-ring material	EPDM or FKM or FFKM
Pressure range (relative to ambient)	0 to 16 bar (120 °C), 10 bar (140 °C)
Temperature range	-10 to 140 °C
Sensor a-length	325 mm
Surface finish	R _a < 0.8 µm (N6)

For more specifications see www.hamiltoncompany.com

Ordering Information

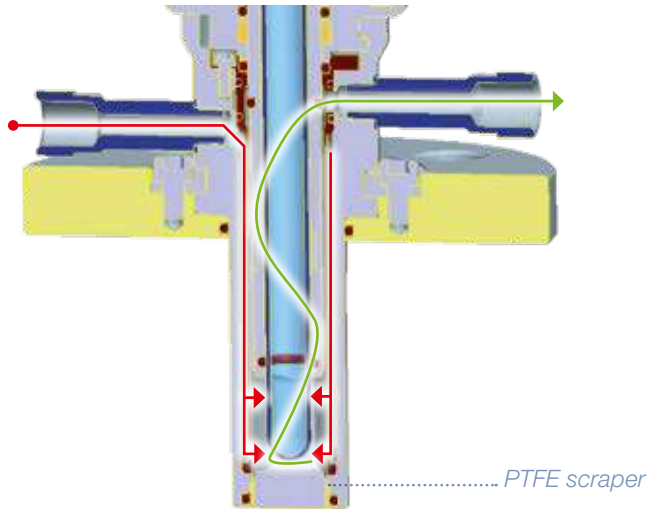
Retractable Housing: Retractex C Steel LT

243210	Retractex C Steel LT (pneumatic)						
243260	Retractex C Steel LT M (manual)						
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Retractex C Plastic LT



The retractable pneumatic or manual housing Retractex C was designed for applications in the chemical industry. The compact design with a stroke of only 36 mm with an insertion depth up to 207 mm keeps wear on seals to a minimum and creates excellent reliability – day and night, all year long. It can be cleaned easily and thoroughly in place. It is designed for 12 mm sensors and is equipped with several safety features (e.g. no sensor – no insertion, window to check seals for leakage etc.) to provide operator safety. It is available with various process connections that can be used with all vessels used in this branch.



Cleaning of the Retractex C?

In cleaning position, the sensor can be cleaned while the process is running. The advantage of the insertion tube is the short way for insertion. A PTFE scraper with o-ring guarantees that dirt stays outside of the armature and does not harm the o-ring.

Benefits

- ▶ Extremely compact design (only 36 mm travel of insertion tube with an insertion depth of 207 mm)
- ▶ Integrated safety concept- no sensor – no insertion
- ▶ Very low maintenance
- ▶ Easy installation of the pneumatic armature with color coded connectors

Specifications

Wetted parts	PVDF or PEEK
O-ring material	EPDM or FKM or FFKM
Pressure range (relative to ambient)	0 to 16 bar (120 °C), 10 bar (140 °C)
Temperature range	-10 to 140 °C
Sensor a-length	325 mm
Surface finish	R _a < 0.8 µm (N6)

For more specifications see www.hamiltoncompany.com

Ordering Information

Retractable Housing: Retractex C Plastic LT

243230	Retractex C Plastic LT (pneumatic)	
243270	Retractex C Plastic LT M (manual)	
	Code	Material (wetted parts)
	1	PVDF / Stainless Steel 2.4602
	2	PEEK
	0	special
	Code	Sealing Material (wetted sealings)
	1	EPDM / FDA USP class VI
	2	FKM
	3	FFKM
	Code	Sensor
	1	325mm PG13,5
	0	special
	Code	Process Connection
	1	Flange DN50
	2	Flange ANSI 2"
	0	special
	Code	Cleaning Connection
	1	G 1/8" thread female
	2	G 1/4" thread female
	0	special
	Code	Position switch
	1	pneumatic / without for manual
	0	special
Ref		← Order Code

MasterFit



The MasterFit is a housing for pressurizable pH sensors like the ChemoTrode types. The pressurization ensures a constant outflow of electrolyte. This helps to prevent clogging of the diaphragm and poisoning of the electrolyte. The MasterFit can be used in a huge variety of applications mainly in the chemical industry.

The pressure inside the MasterFit can be controlled via a built-in manometer. Furthermore the liquid level of the electrode can be controlled through the coated glass body of the armature at any time.

Benefits

- ▶ Sealing feature prevents loss of pressure caused by soiling
- ▶ Pressure reduction on disassembly
- ▶ Various o-ring positions available
- ▶ Easy maintenance

Ordering Information

Type	Process Connection	Ref
MasterFit 120	G 1¼	237200-OP
MasterFit 150	G 1¼	237225-OP
MasterFit 250	G 1¼	237245-30



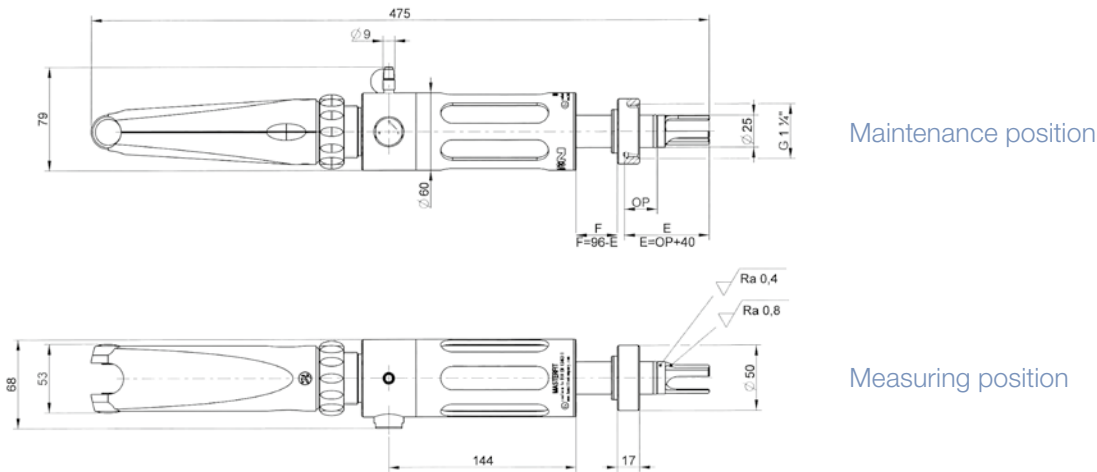
Specifications

Wetted parts	Stainless Steel 1.4435
O-ring material	EPDM
O-ring position	22 to 55 mm
Pressure range (relative to ambient)	0 to 6 bar
Temperature range	-10 to 130 °C
Sensor a-length	120, 150, 200 mm
Surface finish	R _a < 0.8 µm (N6)

For more specifications see www.hamiltoncompany.com

Dimensional drawings / MasterFit 120

all dimensions in mm



Type	A (armature insertion depth)	B (total length)
MasterFit 120	40 mm	475 mm
MasterFit 150	70 mm	505 mm
MasterFit 250	170 mm	605 mm

Accessories



- **Pressure Adapter** Ref 237252
- **Service Kit for MasterFit** Ref 237229
- **FFKM Kit for MasterFit** Ref 237319
- **Flange Adapter for MasterFit*** Ref 237910
- **Safety Socket** see page 152

*The Flange Adapter is used with a MasterFit 120 and a sensor with a shaft length of 150 mm

RetractoMaster



The RetractoMaster is a retractable housing for pressurizable sensors like the ChemoTrode. The pressurization ensures a constant outflow of electrolyte. This helps to prevent clogging of the diaphragm and poisoning of the electrolyte. It allows the operator to mount and dismount the sensors while the process is running. The pressure inside the RetrctoMaster can be controlled via a built-in manometer. Only one press on the red button is needed to move the sensor into or out of the process. Safe sensor handling during process is guaranteed because insertion into a vessel without the sensor is impossible so is removal while in measuring position. O-rings can easily be replaced without special tools. Furthermore the liquid level of the electrode can be controlled through the coated glass body of the armature at any time. The RetractoMaster can be used in a huge variety of applications mainly in the chemical industry.

Benefits

- ▶ Sensor can be withdrawn from the process for cleaning, calibration or replacement
- ▶ Easy maintenance
- ▶ Long life time of the sensor due to pressurization of the sensor and the possibility to remove it while the process is running.
- ▶ 3.1 certificate included

Ordering Information

Type	Process Connection	Ref
RetractoMaster	G 1 1/4	237250

Specifications

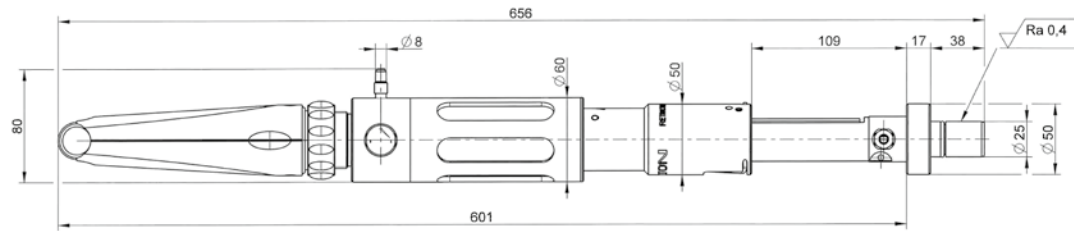
Wetted parts	Stainless Steel 1.4571
O-ring material	FKM
O-ring position	22.5 mm
Pressure range (relative to ambient)	0 to 6 bar
Temperature range	-10 to 130 °C
Sensor a-length	250 mm
Surface finish	R _a < 0.4 µm (N5)

For more specifications see www.hamiltoncompany.com

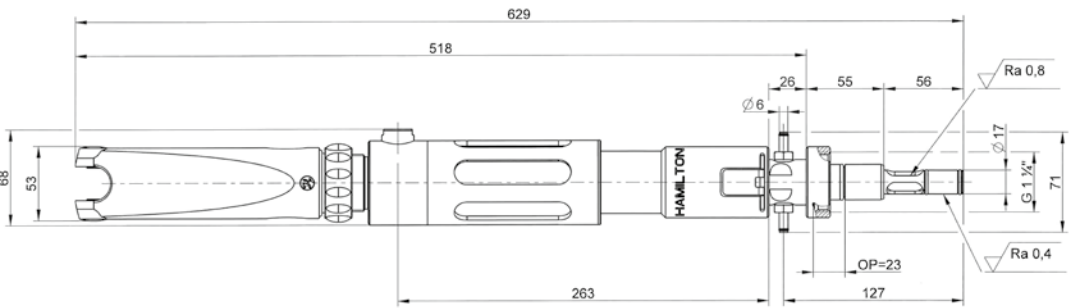
Dimensional drawings

all dimensions in mm

Maintenance position



Measuring position



Accessories



• **Pressure Adapter** Ref 237252

Safety Socket see page 152

Safety Socket



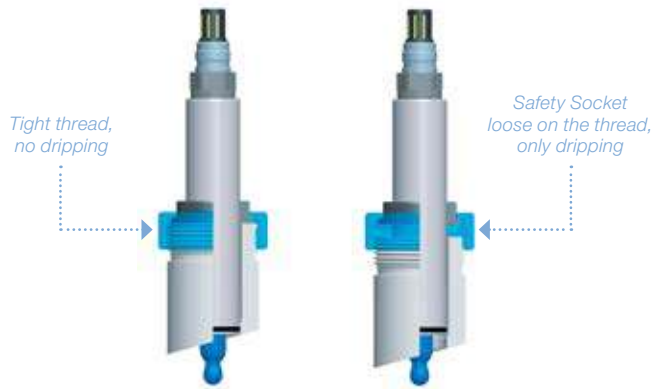
The Safety Sockets are hygienic weld-in sockets suitable for hygienic armatures like the FlexiFit Bio. They are available for 3 different o-ring positions to cover different standards. Furthermore you can choose between two kinds of stainless steel and two different angles.

The Safety Socket narrows at the o-ring positions and it seals only if the o-ring of the armature is exactly at the right place. If the process is under pressure, a dripping process medium can be a strong hint that the armature should not be loosened entirely. Therefore the Safety Socket is suited for a wide variety of applications and installations.

Benefits

- ▶ Safety design, leakage before total release of the armature
- ▶ Hygienic surface finish
- ▶ 3 different o-ring positions and two different stainless steels available

O-ring sealing position



Specifications

Wetted parts	Stainless Steel 1.4435, 1.4404 or 1.4571
O-ring material for blind plug	EPDM
Pressure range (relative to ambient)	0 to 50 bar
Temperature range	-30 to 160 °C
Process connection	G 1 1/4
Surface finish	R _a < 0.4 µm (N5)

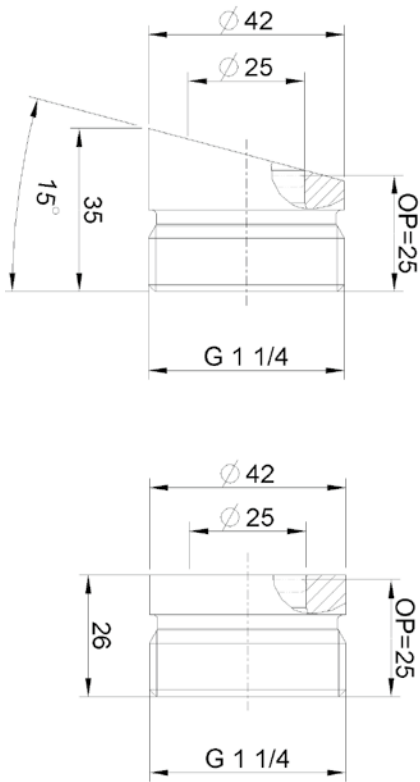
For more specifications see www.hamiltoncompany.com

Ordering Information

Type	Steel	Angle	OP	Ref
Safety Socket	1.4404	15	25	242570
Safety Socket	1.4404	15	50	242571
Safety Socket	1.4404	15	55	242572
Safety Socket	1.4404	0	25	242573
Safety Socket	1.4404	0	50	242574
Safety Socket	1.4404	0	55	242575
Safety Socket	1.4435	15	25	242576
Safety Socket	1.4435	15	50	242577
Safety Socket	1.4435	15	55	242578
Safety Socket	1.4435	0	25	242579
Safety Socket	1.4435	0	50	242580
Safety Socket	1.4435	0	55	242581
Weld in socket without safety feature	1.4571	15	25	237202

Dimensional drawings

all dimensions in mm



Accessories



- Blind plug 1.4404-25 Ref 242560
- Blind plug 1.4404-50 Ref 242562
- Blind plug 1.4404-55 Ref 242564
- Blind plug 1.4435-25 Ref 242565
- Blind plug 1.4435-50 Ref 242567
- Blind plug 1.4435-55 Ref 242569
- Blind Plug 1.4571-25 Ref 237230

Hygienic Socket



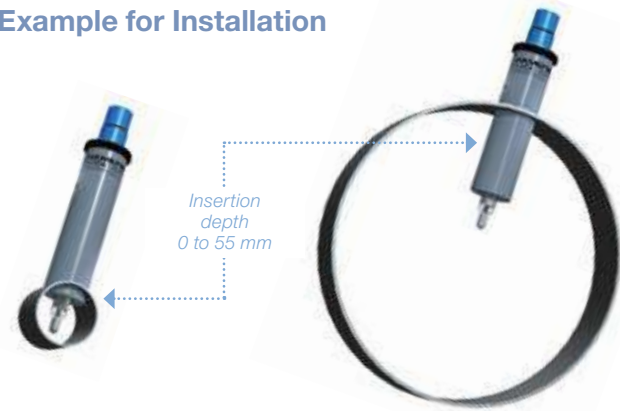
The Hygienic Socket with its space saving design and simple sterilization is ideal to weld in fermenters or small pipes. The advantages are numerous for many other applications in tanks or pipes for water treatment and in the pharmaceutical and chemical industries.

It is designed for 120 mm sensors and developed for easy installation and maintenance, improve the cleaning process and increase safety. Two “Live Guard” openings provide an indication of sealing failures. The sensor insertion depth can be varied for DO sensors by using the Hamilton DO Adapter.

Benefits

- ▶ Hygienic design because complete sensor installation with only one wetted o-ring
- ▶ Space saving
- ▶ Cost saving: Socket and Housing all in one
- ▶ Low maintenance and easy replacement of o-ring

Example for Installation



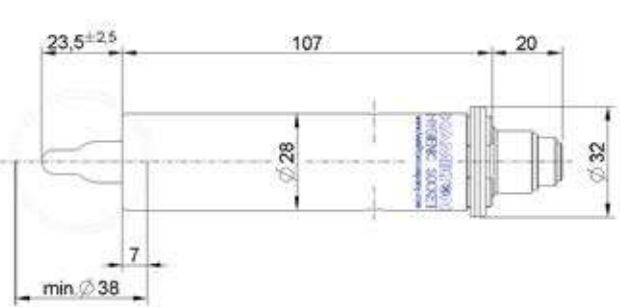
Specifications

Wetted parts	Stainless Steel 1.4435 or 1.4404 or 1.4571 or 2.4602
O-ring material	EPDM
Pressure range (relative to ambient)	0 to 16 bar
Temperature range	-10 to 140 °C
Sensor thread	PG 13,5
Sensor a-length	120 mm
Surface finish	R _a < 0.4 µm (N5)

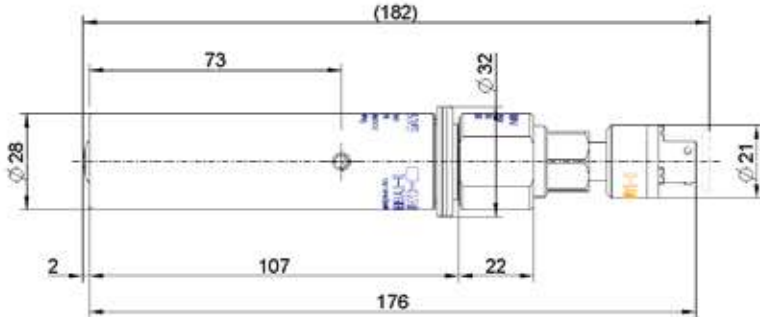
For more specifications see www.hamiltoncompany.com

Dimensional drawings

all dimensions in mm



Hygienic socket with a pH sensor



Hygienic socket with DO adapter and oxygen sensor

Ordering Information

Type	Ref
Hygienic Socket 1.4404	242535
Hygienic Socket 1.4435	242545
Hygienic Socket 1.4571	242548
Hygienic Socket 2.4602	242550

Accessories



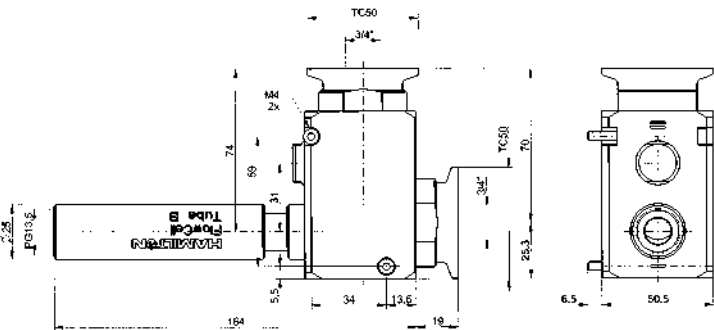
- Hygienic Socket DO Adapter Ref 242538
- Replacment Kit Seal Pusher Ref 242532
- O-ring set EPDM Ref 242595
- Sensor Dummy 96 mm Ref 242540
- Sensor Dummy 117 mm Ref 242563
- O-ring set FKM Ref 242596
- O-ring set Silicone Ref 242597
- O-ring set FFKM Ref 242598

FlowCell/XL



Hamilton Flow-Through Cells are designed for measuring one or two parameters at a time. Possible combinations are pH/DO and pH/Conductivity. The measurement is done in bypasses when inline measurement is not possible due to small pipe dimensions. Application fields are biotechnology, water treatment and power plants, where reliable measurements have to be carried out in ion-weak media. There are two different sizes of the flow cells available.

Dimensional drawings / 242590 all dimensions in mm





- Benefits
- Flexible design for one or two measuring points
 - PEEK insert of high chemical resistance
 - Low dead volume
 - Self draining
 - Internal aseptic clamp pipe connection

Specifications	
Wetted parts	Stainless Steel 1.4435, PEEK
O-ring material for blind plug	EPDM
Pressure range (relative to ambient)	0 to 16 bar
Temperature range	-10 to 140 °C
Sensor thread	PG 13.5
Sensor a-length	120 mm
Process connection	TC 25, TC 50, Swagelok

For more specifications see www.hamiltoncompany.com

Ordering Information

Flow Cell			
242585	Code	Measuring position	
	1	only pH or Conducell UPW	
	2	only Conductivity or Oxygen	
	3	pH and Conductivity or Oxygen	
	4	Conductivity and Oxygen	
	0	special	
		Code	Pipe Connection
		1	TC25 ¼"
		2	TC25 ⅜"
		3	TC25 ½"
		4	Swagelok 6 mm
		5	Swagelok 10 mm *
		6	Swagelok ¼"
		7	Swagelok ⅜" *
		8	Swagelok ½" *
		0	special
		Code	o-ring material
		1	EPDM
		2	FFKM (two measuring positions)
		3	FFKM (one measuring position)
		0	special
242585 -			← Order Code

Flow Cell XL					
242590	Code Measuring position				
	1	only pH or Conducell UPW			
	2	only Conductivity or Oxygen			
	3	pH and Conductivity or Oxygen			
	4	Conductivity and Oxygen			
	0	special			
		Code Pipe Connection			
		1	TC50 ¾"		
		2	TC50 1"		
		3	TC50 1.5" *		
		0	special		
			Code o-ring material		
			1	EPDM	
			2	FFKM (two measuring positions)	
			3	FFKM (one measuring position)	
			0	special	
242590 -			← Order Code		

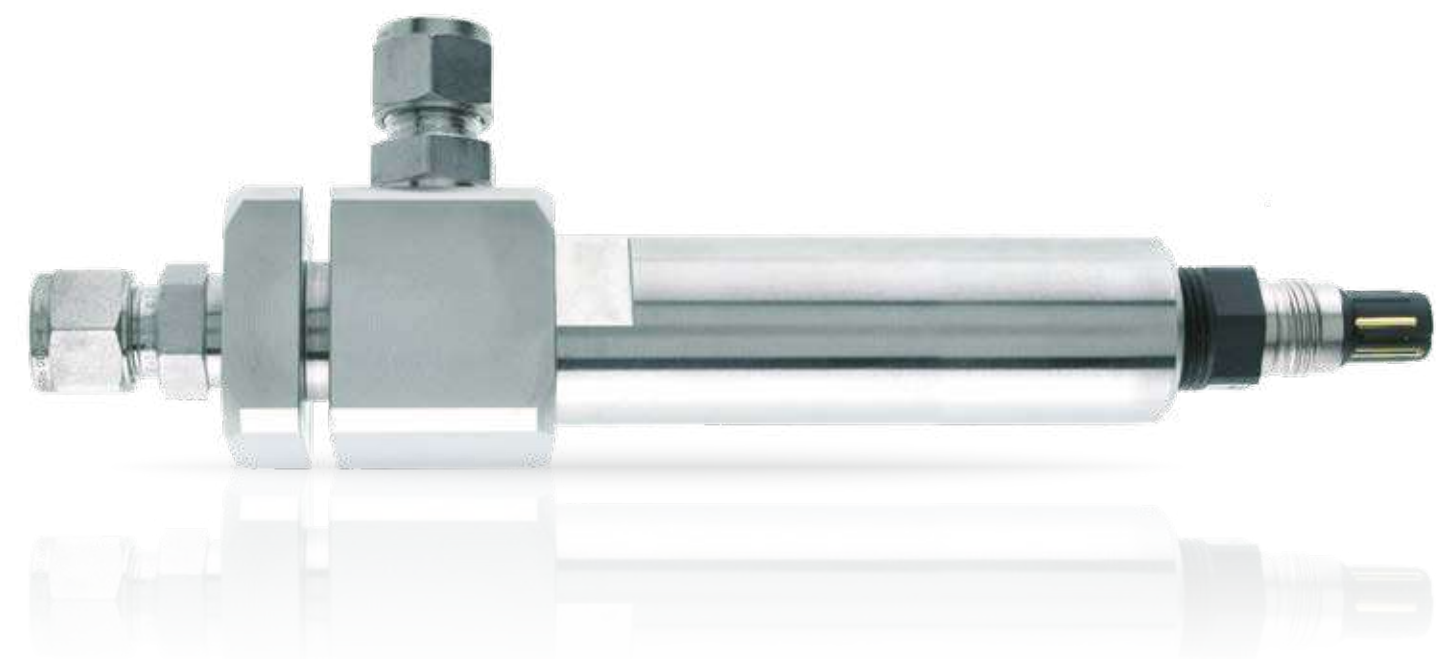
*Not self draining



Accessories

- **O-ring kit Flow Cell**
Ref 237387
- **O-ring kit Flow Cell XL**
Ref 237390
- **Sensor Dummy**
96 mm Ref 242540
117 mm Ref 242563

FlexiFlow SL 10



The FlexiFlow is a flow-through cell. It can be used in all cases where pH or oxygen must be reliably measured in ion-weak media including coolant piping in power generating stations.

The sample is fed into the cell from the bottom at a low flow speed, and out of the cell again at the side. A groove cut into the FlexiFlow allows it to easily be attached anywhere with commercially available screws.

Benefits

- ▶ Compact design
- ▶ Easy to attach to a plate
- ▶ For use in small pipes where sensors cannot be inserted directly
- ▶ Self draining

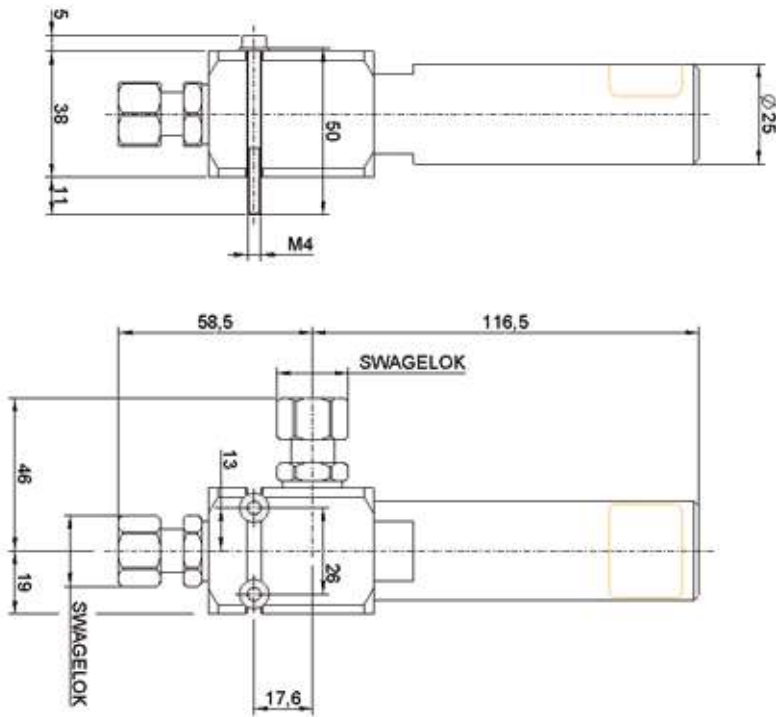
Specifications

Wetted parts	Stainless Steel 1.4435
O-ring material	EPDM
Pressure range (relative to ambient)	0 to 16 bar
Temperature range	-10 to 130 °C
Sensor thread	PG 13,5
Sensor a-length	120 mm
Process connection	Swagelok 10 mm

For more specifications see www.hamiltoncompany.com

Dimensional drawings

all dimensions in mm



Ordering Information

Type	Ref
FlexiFlow SL 10	237340