



TM **DE DYNAMIC** Process Equipment

Retractable Housing Pneumatic
SmartDip 420M

SmartDip 420M: Pneumatically Retractable Electrode Housing

SmartDip 420M is a compact retractable electrode housing with pneumatic drive Unit. This metal body model can be implemented in different chemical applications including fermenters and bio-reactors in Bio-pharmaceutical industries. Various type of process connections such as Flange, Triclover, Ingold Fitting and Dairy Fitting are available for mounting on reactor or vessel's side nozzle for in-situ measurement or on a T- connection in pipe line for in-line measurement. The drive unit inserts the measurement sensor into the reaction mass and retracts back to the flushing chamber for cleaning and storage in stand by condition.

About Product:

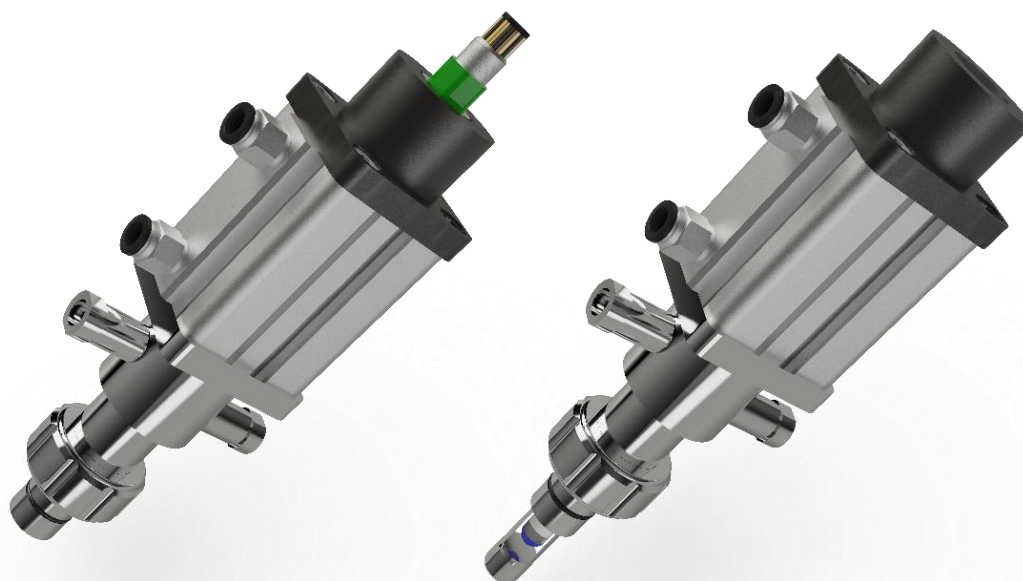
- Available in various material such as SS 316L, SS 904L, Titanium, Hastelloy C22 for wetted parts.
- Available in various sealing material such as EPDM, VITON, KALREZ.
- Various process connections: Flange size ANSI 1.5" and above, Triclover, G1-1/4" Ingold, Dairy Fitting
- Immersion length starting from 40mm and extendable up to 60mm for Ingold fitting
- Stroke length 40mm

Unique Features:

- Compact design suitable for Bio-pharma, food and dairy industries.
- Fits 225mm long electrodes which are more readily available and durable.
- Longer cleaning path for improved CIP-SIP results.
- Short 40mm stroke length for less wear & tear.
- Scrap & Seal assembly for durability of the sealing material.

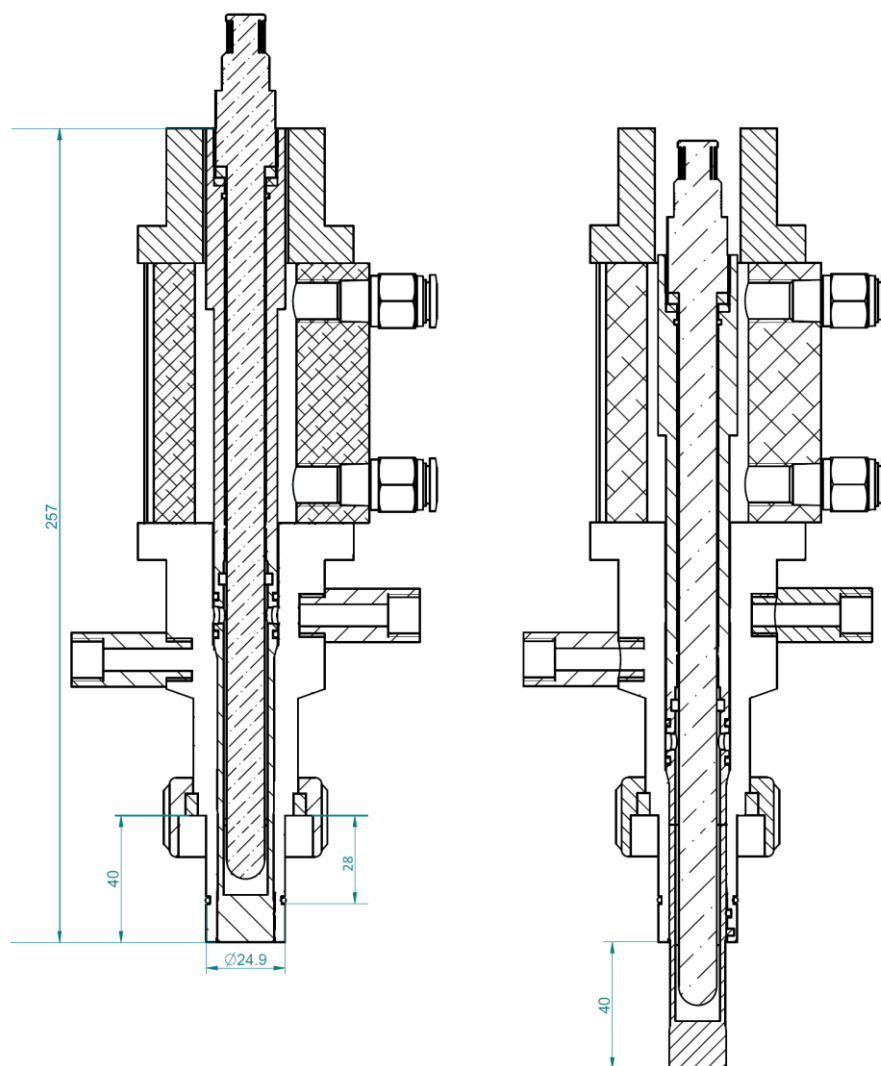
Benefits:

- Quick and easy Sensor cleaning, calibration or maintenance without process interruption.
- Improved accuracy, reliability and life of process sensors such as pH Electrodes.
- Ease of operation and maintenance of measurement point.
- Plug & Use Modular design for ease of installation and maintenance.
- Usable in hazardous areas and awkward positions.
- Can be fully automated with SmartControl Auto control panel.



Specification Sheet:

Model	SmartDip 420M
Pressure	0 to 10 Bar
Process Temperature	-10 to 140 °C
Immersion Length	40 mm (up to 60 mm)
O-ring position	28 mm (up to 48 mm)
pH/DO Sensor Specs	225mm ø12 PG13.5
Wetted Material	SS316L, SS904L, C22 Hastelloy, Titanium
Seals	EPDM, FPM (Viton), FFKM (Kalrez)
Process Connection	Flange ANSI 1.5" and Above, G11/4" Ingold, TriClover, Dairy Fitting
Flushing Port	G1/4" Female
Surface Finish	Ra Value <0.2
Operating Air Pressure	4 to 6 Bar
Limit Switch	Pneumatic/Reed Switch



Application:

- Bio-Pharma
- Food & Beverages
- Dairy Industry

Ordering Code:

SmartDip 420M	_Code	MOC of Wetted Parts		
	1	316L		
	2	904L		
	3	C22		
	4	Titanium		
		_code	MOC of Seals	
		EP	EPDM	
		VI	VITON (FPM)	
		FK	FFKM (Kalrez)	
			_code	Process Connection
			F1	Flange ANSI 1-1/2" #150
			F2	Flange ANSI 2" #150
			F3	Flange ANSI 3" #150
			G	Ingold G1-1/4"
			T1	Triclover ISO DN25/32, DIN DN25/32
			T2	Triclover ISO DN40, DIN DN40/50
			D1	Dairy Fitting DN50
			D2	Dairy Fitting DN60
				_code
				Position Feedback
				RD
				Megnetic Reed Switch
			PN	Pneumatic
			NA	Not Required

Some unique features of SmartDip Retractable Housings:

Stroke length

Unique 40mm short stroke length

1



OUT IN

2

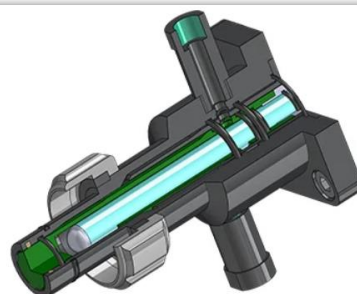
Flushing Chamber

Unique flushing chamber for optimum electrode cleaning

Scarp & Seal

Unique wiper ring with backup seal arrangement for harsh media.

3



INTERCHANGEABLE DRIVE UNIT



Manual
Drive

Pneumatic
Drive

4

Modular Drive Unit

Manual drive unit with ergonomic rotary handle & position interlocks.

Pneumatic drive unit with electrode safety interlock and optional pneumatic or magnetic reed switch feedback.

Also check out our range of **Retractable Housings** for Liquid Analytics...



SmartDip 405M

SmartDip 405M is a retractable electrode housing with pneumatically operated drive Unit. This metal body model can be implemented in harsh chemical applications through flan...



SmartDip 220M

SmartDip 220M is a compact retractable electrode housing with manual drive Unit. This metal body model can be implemented in different chemical applications including ferment...



SmartDip 405P

SmartDip 405P is a retractable electrode housing with pneumatically operated drive Unit. This plastic body model can be implemented in harsh chemical applications through flan...



SmartDip 250M

SmartDip 250M is a manually operated Retractable electrode housing with long immersion lengths and ball valve for isolation. It can fit 120mm long Sensor.



SmartDip 420M

SmartDip 420M is a compact retractable electrode housing with pneumatically operated drive Unit. This metal body model can be implemented in different chemical applicatio...



SmartDip 240M

SmartDip 240M is a compact retractable electrode housing. This version can fit 120mm long sensor. It comes with 1" NPT, Triclover connection.



SmartDip 450M

SmartDip 450M is a pneumatically operated retractable electrode housing with long immersion length and isolation ball valve. This unique model can fit 120mm long sensor.