



TM
DE DYNAMIC
Process Equipment

Retractable Housing Pneumatic
SmartDip 405M

SmartDip 405M: Pneumatically Retractable Electrode Housing

SmartDip 405M is a retractable electrode housing with pneumatically operated drive Unit. This version comes with an immersion length of 109mm. This metal body model can be implemented in harsh chemical applications through flange mounting on reactor's side nozzle or on a pipe line through a T-Fitting for in-situ 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.
- Integrated position feedback (Optional)
- Flange size ANSI 2" and above. (Special flange also available)
- Immersion length 109mm.
- Stroke length 40mm
- Final measurement length 149mm extendable up to 249mm with SmartDip 405M-Ex

Unique Features:

- Large flushing path for harsh chemical conditions such as slurry and suspended solids.
- Protective mounting sleeve for 325mm long glass pH electrode.
- Short 40mm stroke length for less wear & tear.
- Scrap & Seal assembly for durability of the sealing material.

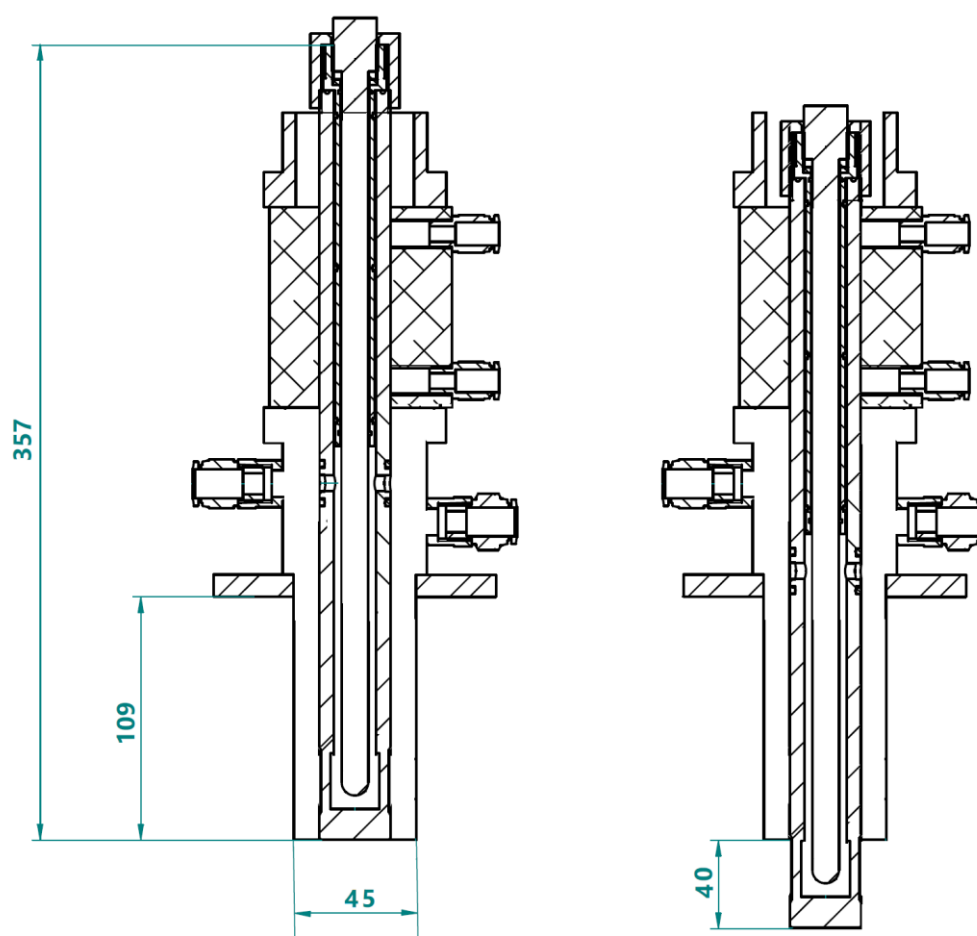
Benefits:

- 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.
- Pneumatic assembly for remote operation
- Usable in hazardous areas and awkward positions.
- Can be fully automated with SmartControl Auto control panel.
- Usable in hazardous areas and awkward positions.



Specification Sheet:

Model	SmartDip 405M
Pressure	0 to 10 Bar
Process Temperature	-10 to 140 °C
Immersion Length	109 mm
O-ring position	NA
pH/DO Sensor Specs	325mm ø12mm PG13.5
Wetted Material	SS316L, SS904L, C22 Hastelloy, Titanium
Seals	EPDM, FPM (Viton), FFKM (Kalrez)
Process Connection	Flange ANSI 2" and Above
Flushing Port	G1/4" Female
Surface Finish	Ra Value <0.3
Operating Air Pressure	4 to 6 Bar
Limit Switch	Pneumatic/Reed Switch



Application:

- Harsh Chemical
- Specialty Chemicals
- Pharmaceutical/API Manufacturing
- Effluent Treatment
- Pulp & Paper Industry
- Power Plant
- Battery Recycling

Ordering Code:

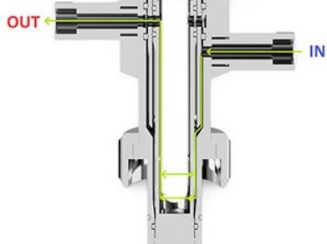
SmartDip 405M	_Code	MOC of Wetted Parts			
SmartDip 405M-Ex					
	1	316L			
	2	904L			
	3	C22			
	4	Titanium			
		_code	MOC of Seals		
		EP	EPDM		
		VI	VITON (FPM)		
		FK	FFKM (Kalrez)		
		_code	Process Connection		
		F2	Flange ANSI 2" #150		
		F3	Flange ANSI 3" #150		
		_code	Position Feedback		
		RD	Magnetic Reed Switch		
		PN	Pneumatic		
		NA	Not Required		

Some unique features of SmartDip Retractable Housings:

Stroke length

Unique 40mm short stroke length

1



2

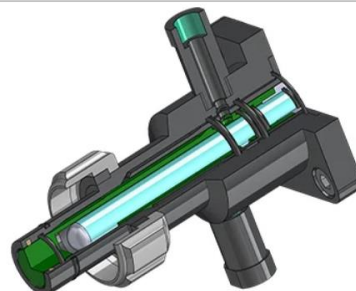
Flushing Chamber

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.

Protective Electrode Sleeve

Unique electrode mounting sleeve to protect the electrode while installation and removal. PUSH-FIT & LOCK assembly for long glass body electrodes. No need to rotate PG 13.5 cap to remove the electrode every time you calibrate.

5



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.