

InTrac 798 – retractable housing for CIP and SIP applications

Technical Data



InTrac 798

Short description

With the introduction of the InTrac 798, Mettler-Toledo offers a new retractable housing specially developed for use in the food and pharmaceutical industries. The InTrac 798 takes into consideration today's strict requirements on hygienic equipment design without compromising on operational and maintenance comfort, such as the possibility of unrestricted access to the electrode at all times. This completely new housing, with an ingeniously designed flushing chamber, has undergone testing for hygienic operation by the EHEDG.

The main features of the housing are:

- design according to EHEDG guidelines, optimized for CIP procedures
- complete draining of flushing chamber
- two different immersion depths, 50 mm for pipes and 100 mm for side-mounted installations in vessels or fermenters
- uniform sensor length 120 mm (diameter 12 mm)
- wide variety of dedicated process adaptations for food and pharmaceutical applications
- improved safety standard due to a new integrated electrode detection system
- constant overall unit length independent of electrode position (immersed or retracted).

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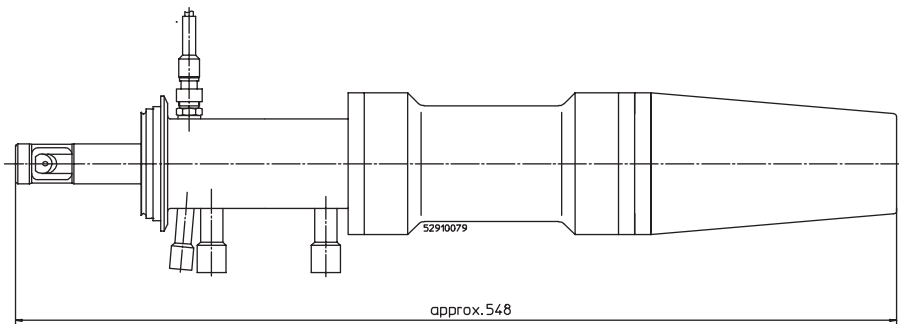
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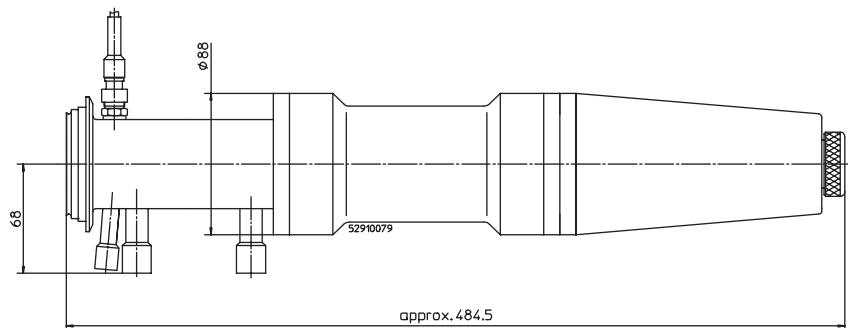
Dimensional drawings InTrac 798

The exact dimensions of the housing depend on the process adaption method chosen. In the following example, the installation is illustrated on the basis of the use of a Tuchenhagen/Varivent adapter. Exact details of the immersion depth are to be found in the section «Process adaptations/dimensional drawings». In order to ensure adequate space for any work on and around the housing, we recommend that an additional clearance of at least 300 mm is allowed for electrode change (see drawing «Dimensions for electrode change» below).

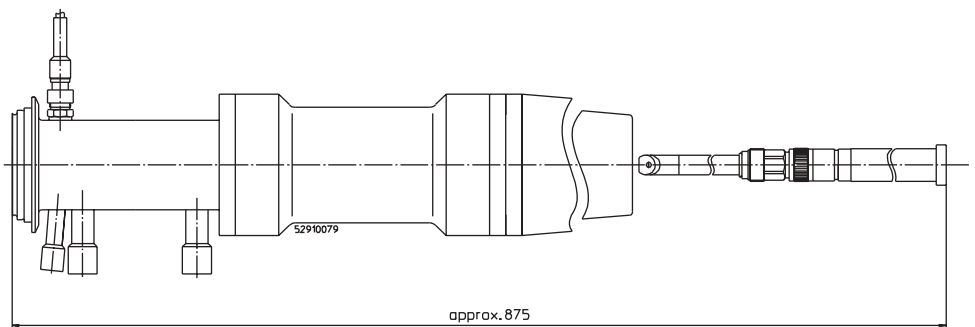
Dimensions in immersed mode (measuring)



Dimensions in retracted mode (maintenance)



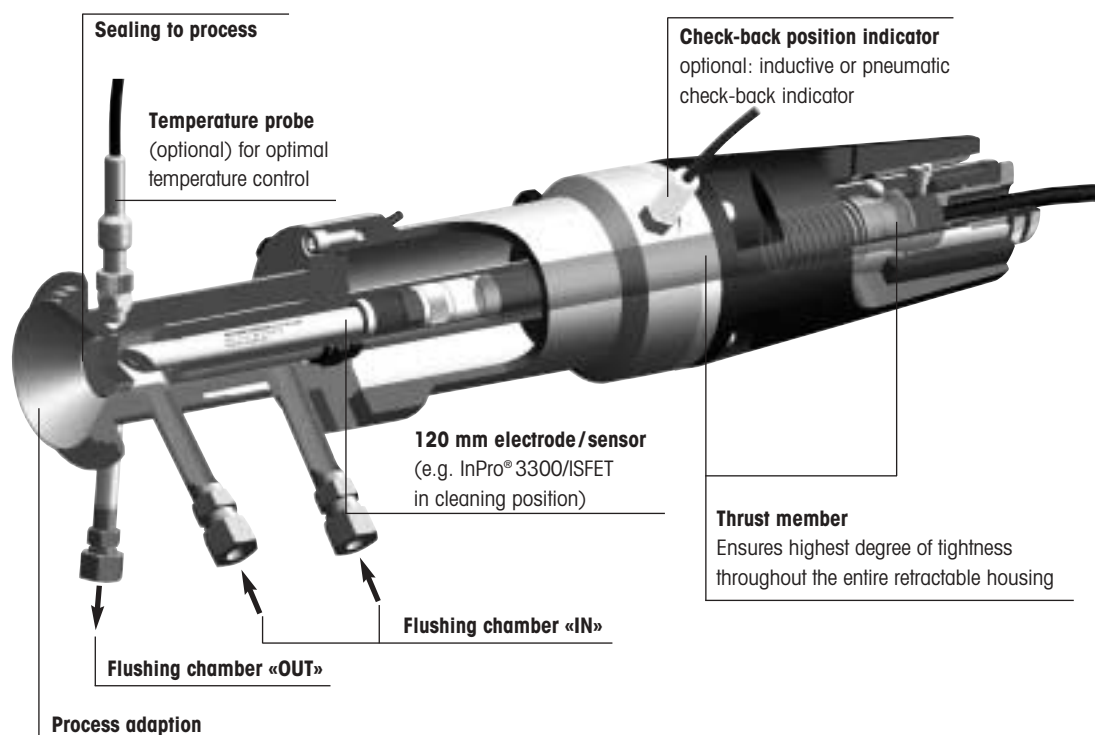
Dimensions for electrode change



Flushing chamber

The InTrac 798 is equipped with a new type of flushing chamber offering the following impressive benefits:

- safe steam-sterilization of the electrode in the flushing chamber
- flange and flushing chamber are one single workpiece, and consequently free of gaps or slits which could give rise to contamination
- complete drainability of flushing chamber
- tested sterile safety of flushing chamber
- verified and certified EHEDG design of the process adaption(s)
- all wetted O-rings made of EPDM-FDA.

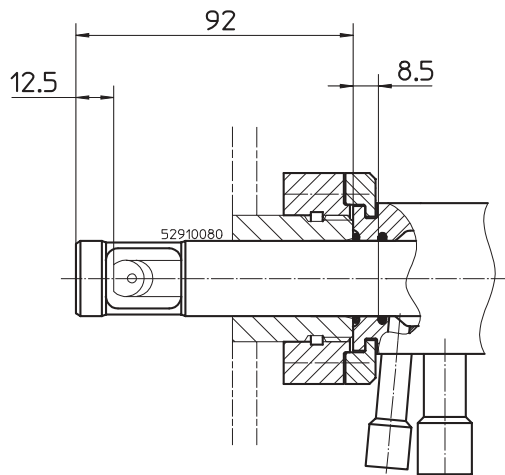


Process adaptations

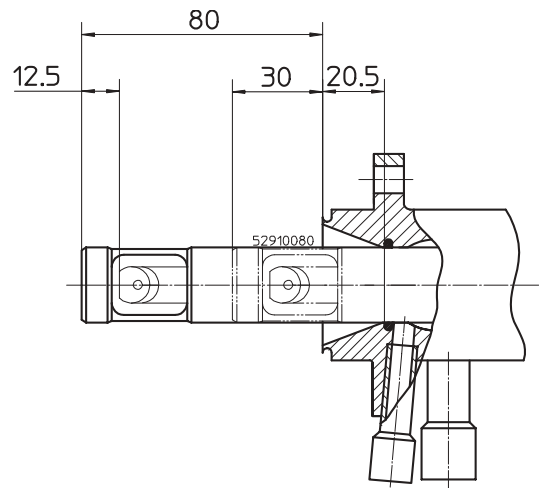
The InTrac 798 consists of a uniform standard housing with the relevant process adaptations. The immersion depths of the immersion tube can deviate depending on which process adaption method is used. The following drawings depict typical adaption methods and the corresponding immersion depths in pipes or vessels.

Dimensional drawings process adaptations / immersion depths

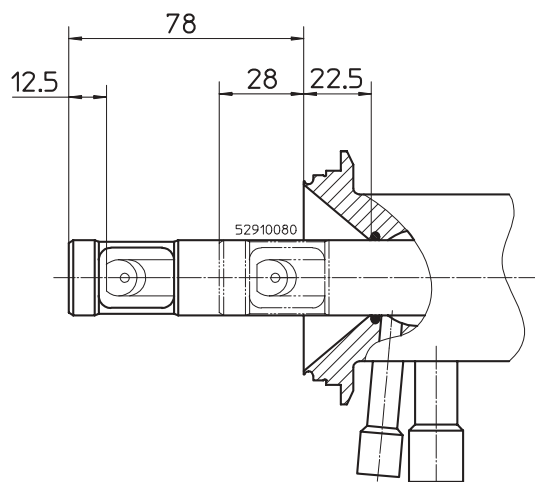
INGOLD DN25 stroke 100 mm



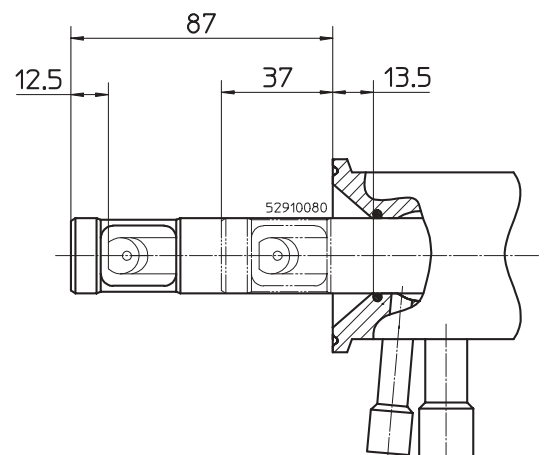
NEUMO DN50 stroke 100 mm (optional 50 mm)



Varivent stroke 100 mm (optional 50 mm)



TriClamp 2" stroke 100 mm (optional 50 mm)



Specifications: retractable housing InTrac 798

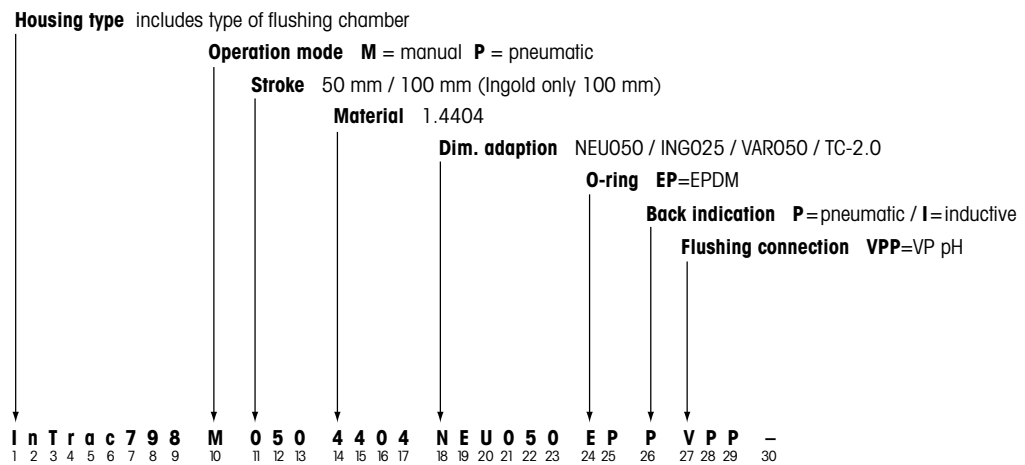
Ambient conditions:	
Temperature	0...70 °C
Process conditions:	
Temperature range	0...140 °C (32...284 °F)
Functional pressure range	InTrac 798 M: 0...5 bar (0...72.50 psi) InTrac 798 P: 0...8 bar (0...116 psi)
Max. permissible pressure	16 bar (232 psi)
Technical details:	
Standard process adapters	Ingold DN25 Neumo DN50 Varivent DN50 TriClamp 2"
Wetted parts	1.4404 PTFE EPDM-FDA
Non-wetted parts	1.4305 PA
Weight	approx. 6.5 kg
Dimensions	length: approx. 490 mm (19.3") in measuring and maintenance position length: 880 mm (34.7") for electrode removal (minimum)
Pneumatic connections	4...8 bar (58...116 psi)
Compressed air quality (ISO 8573-1)	– moisture content, class 4 (water dew point +3 °C/37.5 °F) – particles, class 5 (filter 40 mm/1.57") – max. oil content, class 2 (0.1 mg/m ³) air connections designed for hose 6/4 mm
Flushing connection (water, steam)	2...6 bar (29...87 psi) 2 x connections «IN»: thread G 1/4" female 1 x connection «OUT»: thread G 1/8" female
Check-back position indicator	pneumatic back indication (3/2-way valve); G 1/8" inductive back indication non-EEx, M12 x 1 (both tapped holes integrated)
Pressure domain	According to PED Art. 1, Sec. 2.2: «Pressure» means pressure relative to atmospheric pressure, i.e. gauge pressure. As a consequence, vacuum is designated by a negative value.

Suitable electrodes

Types (pH)	InPro®3100 InPro®3200 InPro®3300 (ISFET)
Length	120 mm (diameter 12 mm) 4.70" (diameter 0.47")
Connector	VP
Certificates	EHEDG 3A 3.1B CE

Due to the current design features of the pressure piece, only pH electrodes from METTLER TOLEDO/INGOLD can be fitted in the housing for the time being. We aim to allow other electrodes and sensors to be installed in the near future.

Nomenclature of the new InTrac 798



The positions (numbers) of the individual code designations are decisive in being able to identify the housing correctly. When ordering, it is therefore imperative to include the complete designation of the housing together with the relative order number.

InTrac 798: standard models

Designation	Order no.
InTrac 798 M 100 4404 ING025 EP _ VPP ___	52 402 764
InTrac 798 P 100 4404 ING025 EP _ VPP ___	52 402 766
InTrac 798 M 100 4404 NEU050 EP _ VPP ___	52 402 768
InTrac 798 M 050 4404 NEU050 EP _ VPP ___	52 402 769
InTrac 798 P 100 4404 NEU050 EP _ VPP ___	52 402 770
InTrac 798 P 050 4404 NEU050 EP _ VPP ___	52 402 771
InTrac 798 M 100 4404 TC-2,0 EP _ VPP ___	52 402 772
InTrac 798 M 050 4404 TC-2,0 EP _ VPP ___	52 402 773
InTrac 798 P 100 4404 TC-2,0 EP _ VPP ___	52 402 774
InTrac 798 P 050 4404 TC-2,0 EP _ VPP ___	52 402 775
InTrac 798 M 100 4404 VAR050 EP _ VPP ___	52 402 776
InTrac 798 M 050 4404 VAR050 EP _ VPP ___	52 402 777
InTrac 798 P 100 4404 VAR050 EP _ VPP ___	52 402 778
InTrac 798 P 050 4404 VAR050 EP _ VPP ___	52 402 779

Please consult your local METTLER TOLEDO representative if the required model is not available as standard.

Accessories

Designation	Order no.
Pt 100-764/5 m	10 1003 104 IG
Pt 1000-764/5 m	10 1003 116 IG
Back indication set non-Ex (2 pcs.), inductive	52 402 398
3/2-way indication valve set (2 pcs.), pneumatic	52 401 324

Spare parts

Designation	Order no.
Sealing set 798 P	52 402 789
Sealing set 798 M	52 402 790
Safety system 798 complete	52 402 791

Documentation

Designation	Order no.
Instruction manual InTrac 798 (3-language edition: English, German, French)	52 402 788

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