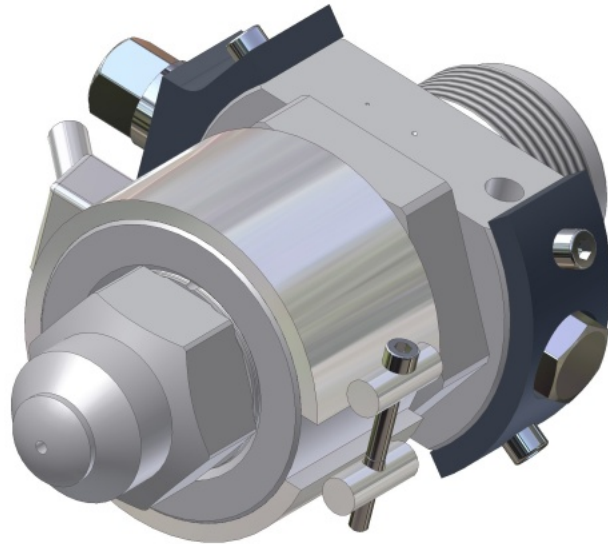


Machine filter nozzle (gap principle) type F with or without rinsing capability



Applications:

Thermoplastics (not applicable for PVC)

Design variants:

Machine nozzle with or without rinsing system

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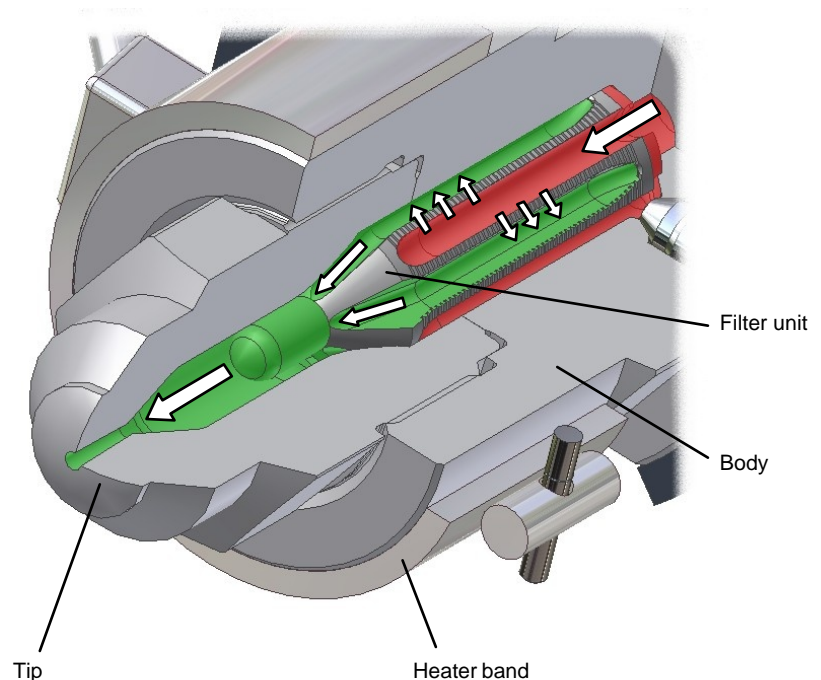
Technical description

Filter nozzles are being increasingly used for processing thermoplastics in injection moulding machines. Clean melts, free of foreign particles, are absolutely necessary for the trouble-free and economic production of injection moulded articles. For the injection moulding of plastics, Herzog AG has developed a melt filter which is characterised by its compact and simple design. This filter can be integrated in practically all the nozzle types of our range. The melt filter can be assembled and prepared for operation in the shortest possible time. The Herzog® melt filter is based on the so-called "gap principle". The comb-type gap geometry prevents very thin and fairly long foreign particles from slipping through.

Function

The melt transported from the plastifying unit to the filter nozzle is kept plastic by the nozzle heating strip; fundamentally, we recommend control of the nozzle temperature.

The melt is fed via generously dimensioned feed ducts (green) to the filter gaps and flows through them. Foreign particles which are larger than the gap depth are held back in the guide duct. The filtered melt flows on via outlet ducts to the injection mould.



Area of application

With herzog® filter nozzles practically all thermoplastics can be processed. The nozzle size selection depends on the injection rate ($\text{cm}^3/\text{sec.}$).

Note:

Values and measurements in this documentation refer to standard applications.

Criteria for Filter nozzle type F

- Trouble free injection molding
- No blockage due to foreign bodies in the mould or the hot duct
- Process safety during moulding
- Simple cleaning on the machine
- Good self-cleaning effects
- No material deposits in "dead corners".

What speaks for Herzog

- Nozzle activity is the core business
- Many years market presence
- Design and assemblies matching today's requirements
- Development of special applications
- Fast delivery
- Service performance

Nozzle design variants

The melt filter can be integrated into two design variants:

Nozzle with flushing closure system

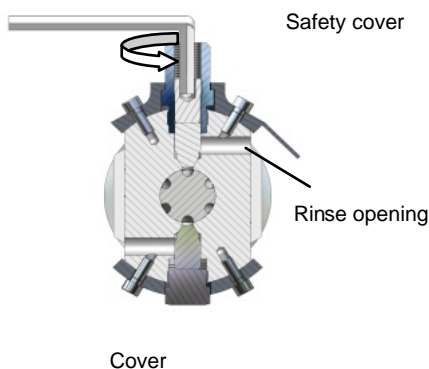
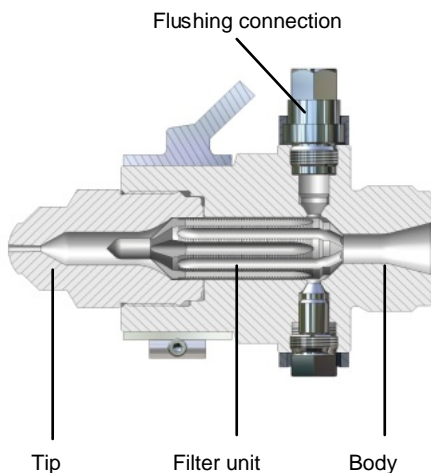
Where there are a large number of foreign particles, the nozzle with the flushing closure unit is used. Frequent cleaning is necessary.

The filter is cleaned between two injection cycles without removal or dismantling. A closure unit is opened with a hexagon key. By spraying into the open air, or by normal injection with nozzle present, the melt flow in the filter is bypassed via the opened closure unit. The impurities are entrained and removed through the side flushing opening. The filter has been cleaned.

Nozzle without flushing closure system

The nozzle without flushing closure unit is recommended where foreign bodies in the melt are only to be infrequently expected (preventive measures when hot duct is used).

The filter is cleaned between two injection cycles by dismantling the nozzle head. With the expulsion of the plastic melt, the filter is also brought into the open. The filter and the hole in the nozzle can be cleaned by blowing the heated plastic with air while simultaneously pulling the plastic with tongs.



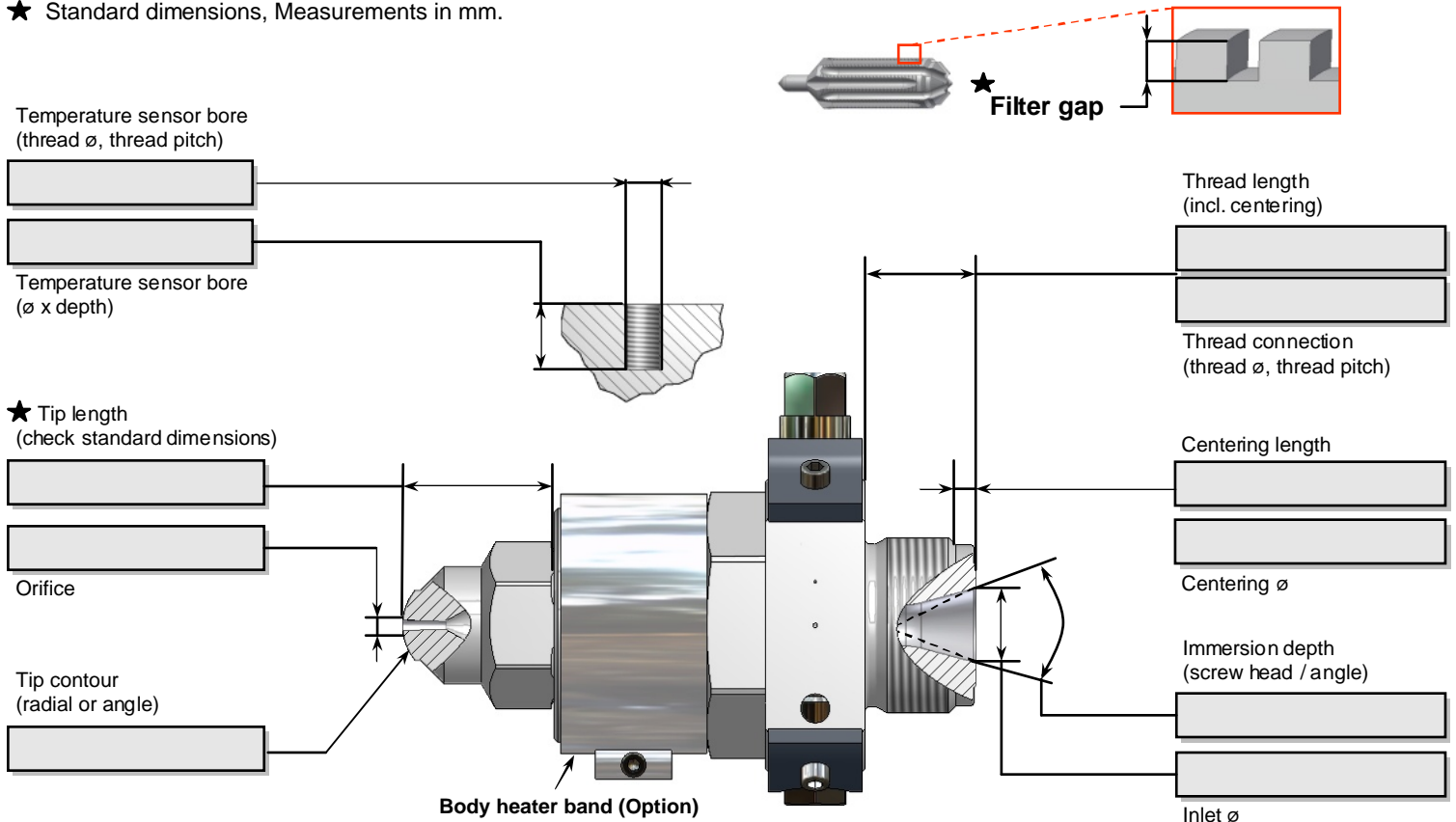
Dimension sheet for enquiries	or orders	Machine filter nozzle (gap principle) type F
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Company:
Street:
City/Zip:
Country:

Contact person:
Tel.:
Fax:
E-Mail:

Operating data and standard dimensions		F0		F1		F2	
max. injection rate cm ³ / s based on Polystyrene (PS)	Hohlraum, Volumen (cm ³) in der Düse	80 - 100	20	500	50	1600	130
approx. screw diameter in mm		20 - 25		25 - 50		50 - 100	
max. injection pressure at temperature		2000 bar at 400°C					
standard tip length (other dimensions on request)		25 mm		50 mm		55 mm	
Filter gap		0,3 mm		0,5 mm		0,8 mm	
body length; without thread and tip length		75 mm		105 mm		105 mm	
heater band dimensions (inside ø * max. length)		ø50 x 38 / 350 W		ø80 x 50 / 1250 W		ø90 x 70 / 1075 W	

★ Standard dimensions, Measurements in mm.



Nozzle size: F0 F1 F2

Machine type (when known):

Nozzle **with** flushing unit

Nozzle **without** flushing unit

Optionen

Temperature sensor - type J (FeCuNi)	Yes <input type="checkbox"/>
Body heater band	Yes <input type="checkbox"/>

Note:

- Technical modifications reserved.
- We need additional information for requirements, which vary from our standard range e.g. drawing sample. Our customer services will be pleased to help you.