Machine nozzle for GIT Type GM (GasInjectionTechnology)



Applications: thermoplastics (not suitable for PVC)

Gas module: without return gassing

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Technical description

Under GasInjectionTechnology GIT one understands gas delivery in the core of the injected part. Principally one differentiates between two different types of injection process:

- Gas injection in the mold (see mold injectors)
- Gas delivery via the machine nozzle (theme of this documentation)

How does it work?

The gas searches the easiest way through the soft core of the injected part and displaces the mass until the cavity is filled out.

Since the initial attempts with Gas / Water injection technology, the company Herzog AG has successfully set itself apart with gas induction components (injectors and machine nozzles).

The machine nozzle is used where gas induction is to be required at the sprue bushing. This has the advantage that no adjustments must be made at the mold. The resulting opening in the injected part from the gas can be closed by post-injection.

Note:

Values and dimensions in this documentation refer to standard applications.

Arguments for the machine nozzle Type GM

Advantages

Cost reduction

- Shorter cycle times
- Material saving
- Closing force reduction

Quality improvements

- Even shrinking
- Reduced internal stresses
- Substantially less delay
- Injected parts without sunken areas

Design

Increased configuration possibilites

Assured gassing via the machine nozzle by the core of the bushing

- Shorter cycle times increased productivity
- Process reliability and repeatability
- Problem-free installation in a short time
- Good self-cleaning effect
- Compact design
- Interchange ability of all parts
- Easy to dismantle
- Available as shut-off nozzle option

What speaks for Herzog

- Nozzle activity as core business
- Long standing market presence
- · Product development and interpretation of today's requirement profiles
- Development of special applications
- Short reaction time (supplies from stock)
- Service

GIT replacement tip for machine shut-off nozzles



Combining the gas tip extension with the machine shut-off nozzle additionally provides all the advantages of using a precise shut-off nozzle (see shut-off nozzle range for more details) as well as enabling gas injection.



Dimension sheet for Enquiry		or order		Machine nozzle Type GM				
Company:			Г	Contact person:				
Street				Tel ·				
City / Zip:			F	Fax:				
Country:				E-Mail:				
Operating data and standard dimension			L					
Max. injection rate cm ³ /s based on Polyst			3500					
Approx. screw diameter in mm	,		up to approx. 120					
Contact force in kN			180					
Max. injection pressure / temperature			3000 bar / 400°C					
Body length; without thread and tip lengt			97 mm					
Heater band dimensions (inside ø * max. I	ength)	cable 3m		ø70 x 80 / 700 Watt (230 V)				
Tip length (Other dimensions on request)				16 / 26 mm				
Optional Variant without tip - Customer sp	ecific	tip dimensions		T				
a max. thread Ø						30		
b max. thread length mci. centering						10		
Dimension required (mm)		Ten (thre	nper ad ø å	rature sensor bore & pitch)			Thread length (incl. centering)	
	-				. 1			
	\langle				· · · · · ·		-	
		Te	mpe	erature sensor bore			Thread connection	
	Ç) (ø	x de	epth)			(thread ø & pitch)	
Tip length (check standard dimensions)				—G 1/8"			Centering length	
								
Tip orifice						$\overline{\mathbf{x}}$	Centering ø	
					·			
Tin profile						+/	Immersion depth	
(Radius or angle)								
							-	
							_	
							Inlet ø	
				Inlet ø	_	Option	nal Variant without tip	
Machine type (when known):						,		
				Centering ø	I <u></u>			
Option								
Temperature sensor - Type J (FeCuNi)	yes	s 🗌	Thread ø (max. 3	30)			
	-				-	<u>ا ا ا</u>		
Note:				Thus ad law with suit	4h a			
• Technical modifications reserved.					ulout centerin	.9		
 We need additional information for our standard range e.g. drawing sa 	requi mole	rements, which vary f	trom	n []				
will be pleased to help you.							,←───→	
				Thread length in	cl. centering (r	nax. 25)		

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