



BARNES™
MOLDING SOLUTIONS

HOT RUNNER TECHNOLOGY

M22 Signature Line Product Catalog

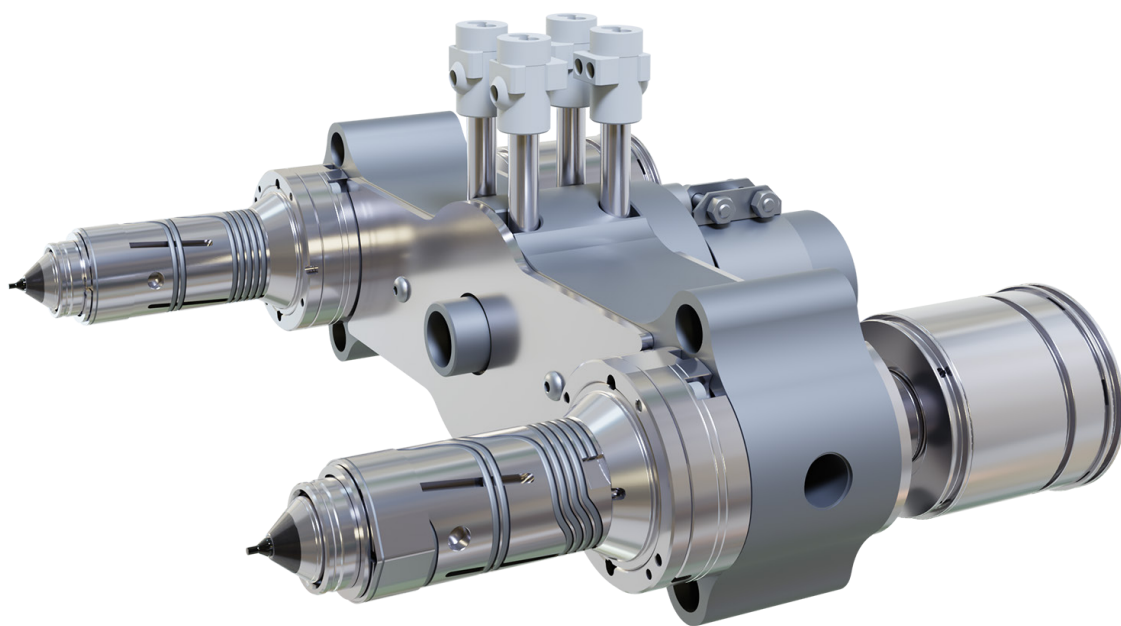




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Hot Runner Technology

This catalog gives an overview of the latest product, including descriptions, dimensions and technical data. The text next to the graphics gives additional instructions on the use of the product. If available, options are explained with pictures and text. All available accessories for this product are specified. Where necessary, a separate chapter gives the information and important technical data.

General Description of the Nozzle

Hot runner nozzles are the connection to the cavity. They either gate directly into the part or into a sub runner which will feed into the cavity.

General Description of M22 Nozzle Series

This is a standard Molding solutions Nozzle.

Target Group

The target groups of this product catalog are mold designers, toolmakers, molders and service technicians. They will find the needed information in the relevant chapters.

Applied Standards and Norms

- DIN EN IEC/IEEE 82079-1 Edition 2 Creation of usage information for products
- Standard and norms for Technical drawings

Tolerances and Customer Graphics

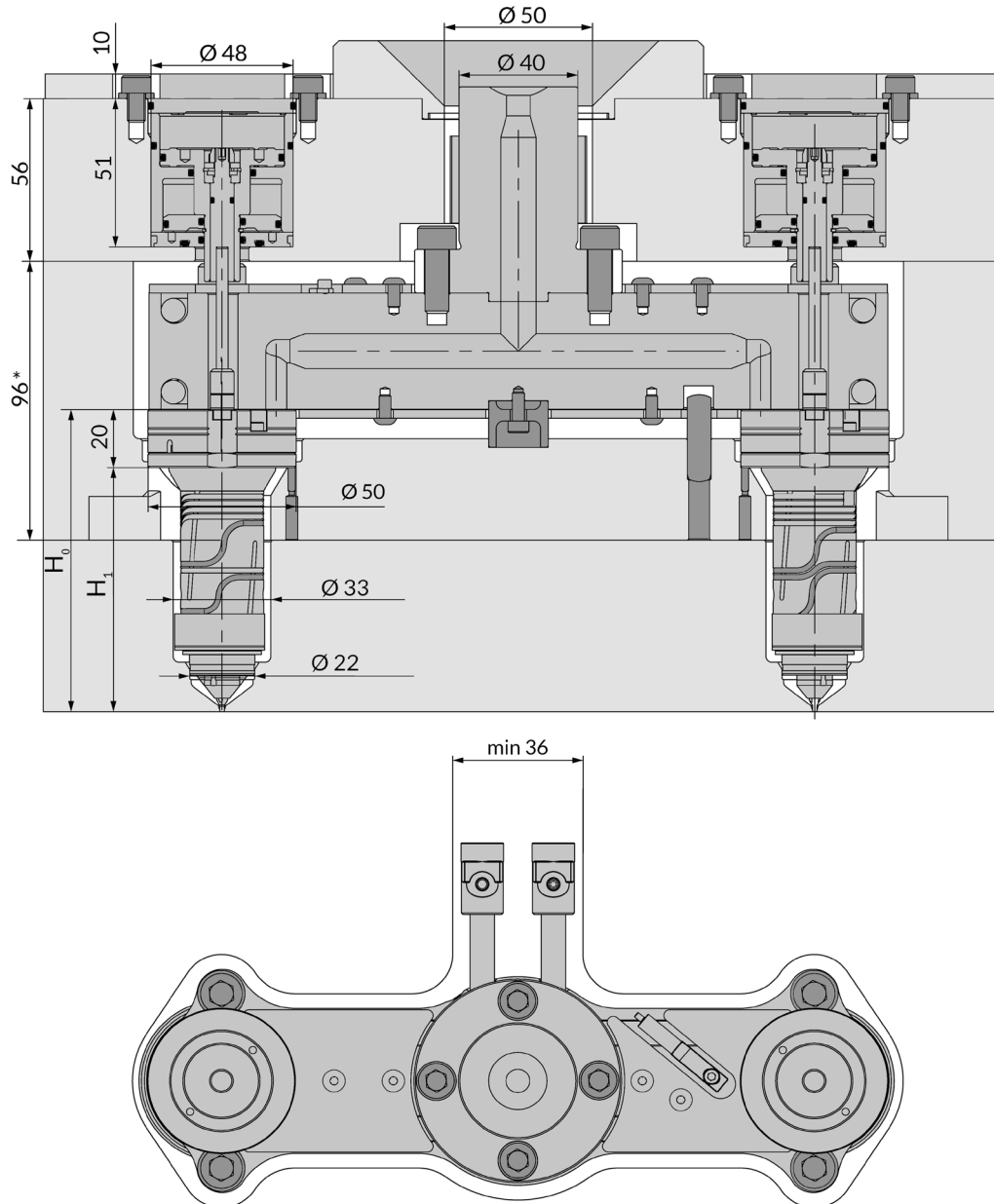
The product catalog gives a general information about the product. For tolerances and other details, use the customer drawings. There you find the detailed information.



Illustrations simplified, schematically drawn and not to scale. All dimensions in mm.

Bolt Down Manifold

The following picture shows the standard design, components and dimensions.



*

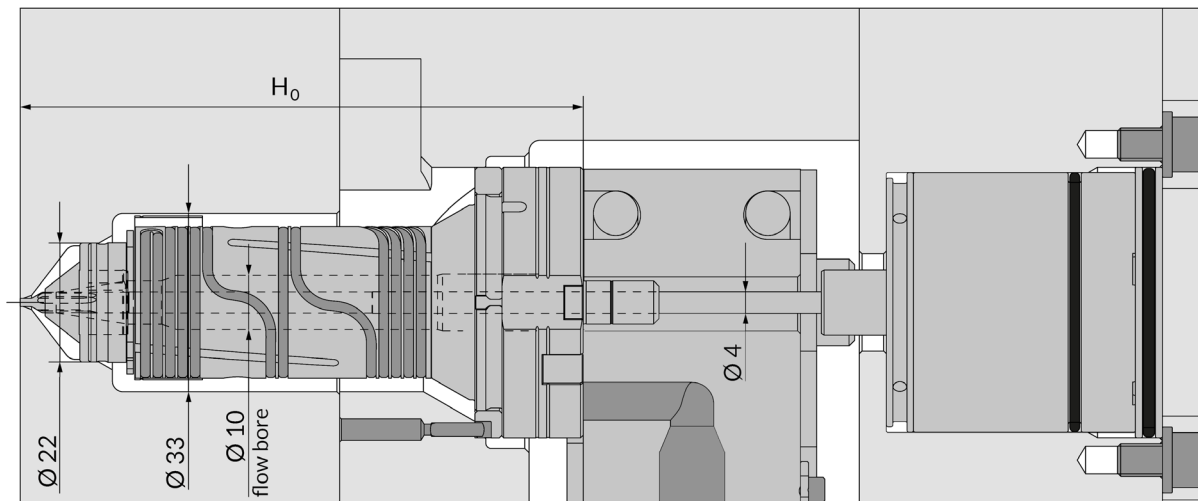
Manifold block height depending to H₁.



Illustrations simplified, schematically drawn and not to scale. All dimensions in mm.

Available Actuator PS 48.2 pneumatic

The following standard actuator is available. Other actuators can be used on request.



Technical Data

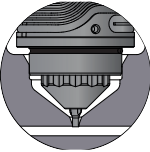
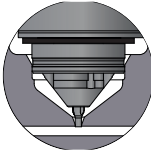
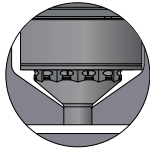
Pressure:
6 bar (87 psi)
Min/Max Close Forces:
F open max = 1347 N
F close max = 1415 N
Stroke:
12 mm



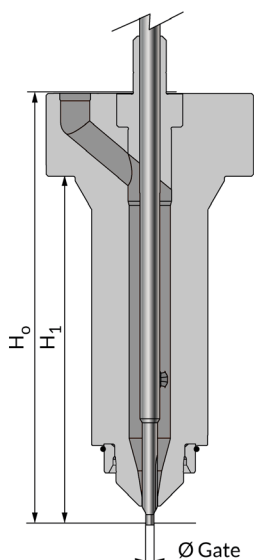
Illustrations simplified, schematically drawn and not to scale. All dimensions in mm.

Schematic view A - P, A - SE and A - EP

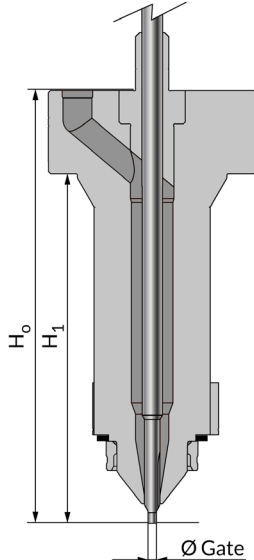
Valve gate - Straight pin

A - P - Standard	A - SE - Special Execution	A - EP - Standard
		
Gate diameter	Gate diameter	Gate diameter
Ø 1,0 - 1,2 - 1,5 - 1,8 - 2,0 - 2,5 - 2,9	Ø 1,0 - 1,2 - 1,5 - 1,8 - 2,0 - 2,5 - 2,9	Ø 1,5 - 2,0 - 2,5

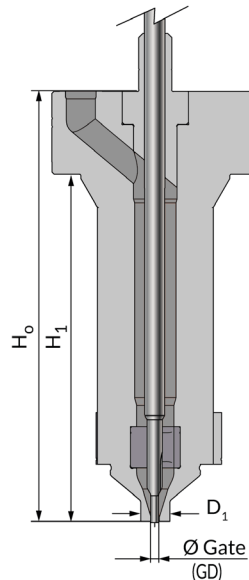
A - P



A - SE



A - EP



MCN-22-50_A-P22			
H ₀	H ₁	Code	DTE Watt
104	84	MCN-22-50_A-P22-104	500 W
129	109	MCN-22-50_A-P22-129	550 W
154	134	MCN-22-50_A-P22-154	550 W
179	159	MCN-22-50_A-P22-179	600 W
204	184	MCN-22-50_A-P22-204	600 W
229	209	MCN-22-50_A-P22-229	350 W + 500 W
254	234	MCN-22-50_A-P22-254	350 W + 500 W
279	259	MCN-22-50_A-P22-279	350 W + 500 W
304	284	MCN-22-50_A-P22-304	350 W + 500 W
329	309	MCN-22-50_A-P22-329	350 W + 500 W
354	334	MCN-22-50_A-P22-354	350 W + 500 W

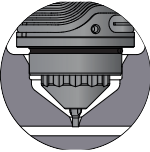
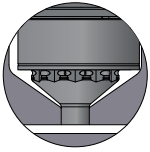
MSN-22-50_A-SE22			
H ₀	H ₁	Code	DTE Watt
79	59	MSN-22-50_A-SE22-079	400 W
104	84	MSN-22-50_A-SE22-104	500 W
129	109	MSN-22-50_A-SE22-129	550 W
154	134	MSN-22-50_A-SE22-154	600 W
179	159	MSN-22-50_A-SE22-179	600 W
204	184	MSN-22-50_A-SE22-204	600 W
229	209	MSN-22-50_A-SE22-229	600 W
254	234	MSN-22-50_A-SE22-254	600 W

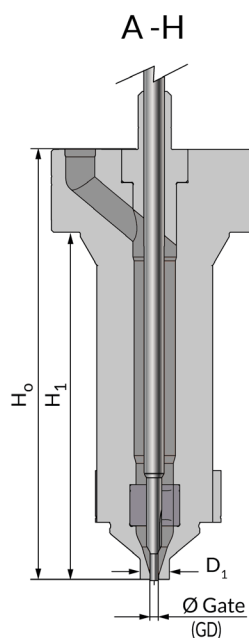
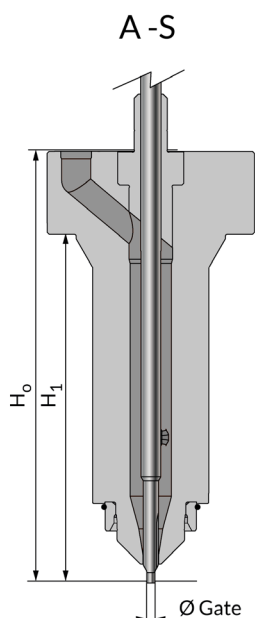
MCN-22-50_A-EP_D1			
H ₀	H ₁	Code	DTE Watt
104	84	MCN-22-50_A-EP-7_(GD)-104	500 W
129	109	MCN-22-50_A-EP-7_(GD)-129	550 W
154	134	MCN-22-50_A-EP-7_(GD)-154	550 W
179	159	MCN-22-50_A-EP-7_(GD)-179	600 W
204	184	MCN-22-50_A-EP-7_(GD)-204	600 W
229	209	MCN-22-50_A-EP-7_(GD)-229	600 W + 500 W
254	234	MCN-22-50_A-EP-7_(GD)-254	600 W + 500 W
279	259	MCN-22-50_A-EP-7_(GD)-279	600 W + 500 W
304	284	MCN-22-50_A-EP-7_(GD)-304	600 W + 500 W
329	309	MCN-22-50_A-EP-7_(GD)-329	600 W + 500 W
354	334	MCN-22-50_A-EP-7_(GD)-354	600 W + 500 W



Illustrations simplified, schematically drawn and not to scale. All dimensions in mm.

Schematic view A - S and A - H

Valve gate - Straight pin	
A - S - Standard	A - H - Standard
	
Gate diameter	Gate diameter
Ø 1,0 - 1,2 - 1,5 - 1,8 - 2,0 - 2,5 - 2,9	Ø 1,5 - 2,0 - 2,5



MCN-22-50_A-S22			
H_0	H_1	Code	DTE Watt
104	84	MCN-22-50_A-S22-104	500 W
129	109	MCN-22-50_A-S22-129	550 W
154	134	MCN-22-50_A-S22-154	550 W
179	159	MCN-22-50_A-S22-179	600 W
204	184	MCN-22-50_A-S22-204	600 W
229	209	MCN-22-50_A-S22-229	350 W + 500 W
254	234	MCN-22-50_A-S22-254	350 W + 500 W
279	259	MCN-22-50_A-S22-279	350 W + 500 W
304	284	MCN-22-50_A-S22-304	350 W + 500 W
329	309	MCN-22-50_A-S22-329	350 W + 500 W
354	334	MCN-22-50_A-S22-354	350 W + 500 W

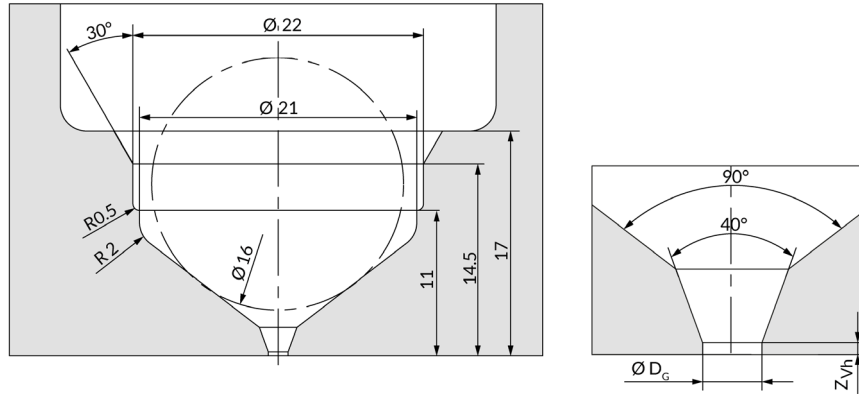
MCN-22-50_A-H-D1			
H_0	H_1	Code	DTE Watt
104	84	MCN-22-50_A-H-7_(GD)-104	500 W
129	109	MCN-22-50_A-H-7_(GD)-129	550 W
154	134	MCN-22-50_A-H-7_(GD)-154	550 W
179	159	MCN-22-50_A-H-7_(GD)-179	600 W
204	184	MCN-22-50_A-H-7_(GD)-204	600 W
229	209	MCN-22-50_A-H-7_(GD)-229	600 W + 500 W
254	234	MCN-22-50_A-H-7_(GD)-254	600 W + 500 W
279	259	MCN-22-50_A-H-7_(GD)-279	600 W + 500 W
304	284	MCN-22-50_A-H-7_(GD)-304	600 W + 500 W
329	309	MCN-22-50_A-H-7_(GD)-329	600 W + 500 W
354	334	MCN-22-50_A-H-7_(GD)-354	600 W + 500 W



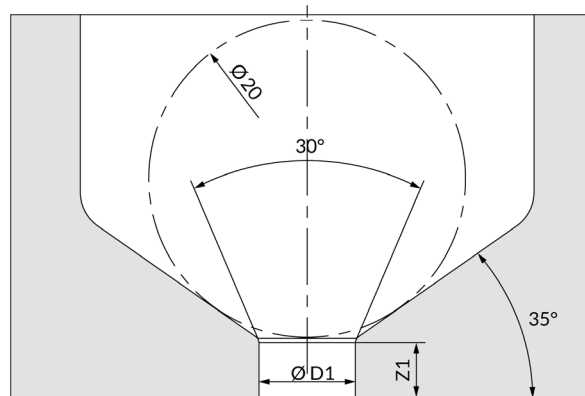
Illustrations simplified, schematically drawn and not to scale. All dimensions in mm.
Dimensions for reference only. Reference system drawing for complete dimensions prior to machining gate detail in mold.

Cutout Dimensions MCN-A-P / MSN-A-SE

The following pictures shows the cutout dimensions for this nozzle.



Cutout Dimensions MCN-A-EP



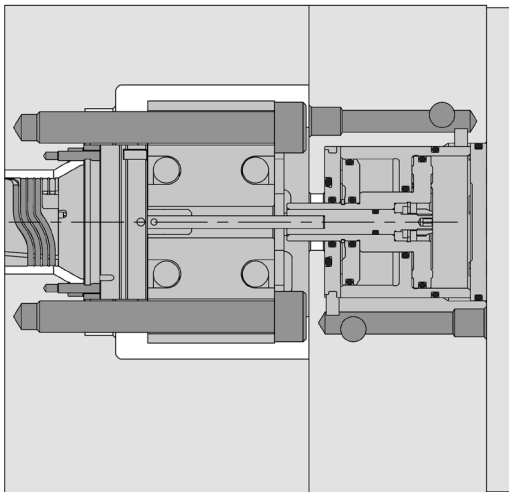
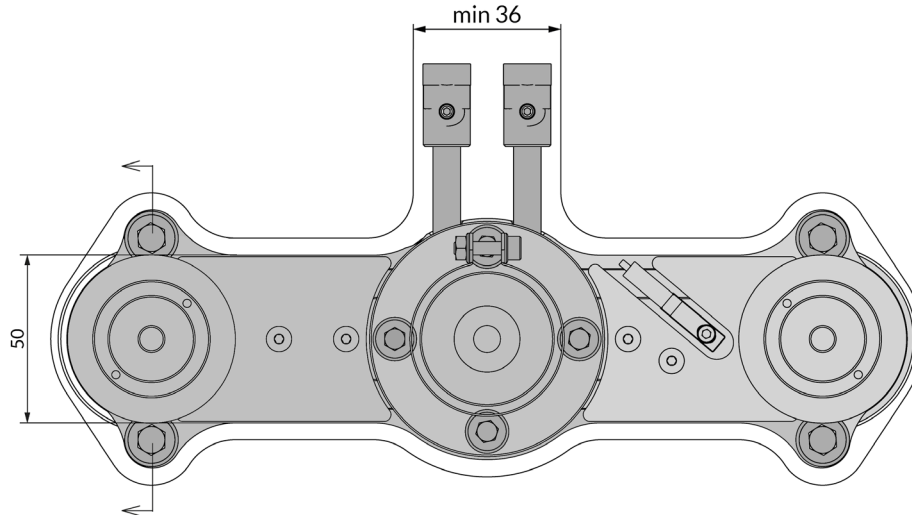
Abbr.	Written out
Dg	Gate Diameter
Zvh	Cylindrical Gate height
D1	Tip Diameter
Z1	Tip contact length



Illustrations simplified, schematically drawn and not to scale. All dimensions in mm.

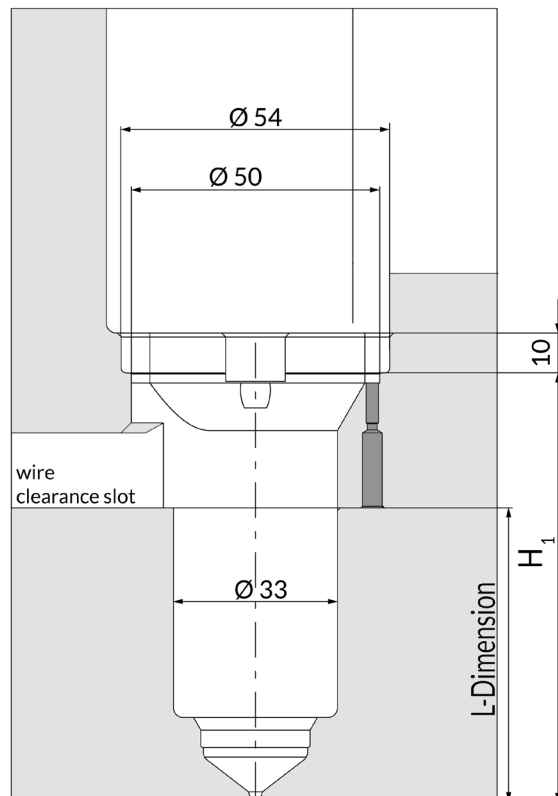
Nozzle overview

The actuator PS 48.2 is used for this nozzle.



Technical Data

Pressure:
6 bar (87 psi)
Min/Max Close Forces:
F open max = 1347 N
F close max = 1415 N
Stroke:
12 mm





Contact

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