iTherm®

Cavity Gate Insert with Bushing

DATA SHEET

HTS

Cavity Gate Insert with Bushing

01 Cooling Power

DESIGN APPROACH

- Optimal cooling of overheated surfaces in the nozzle area.
- Homogeneous cooling of the working surface.
- Circular shape of cooling channels for maximum efficiency.

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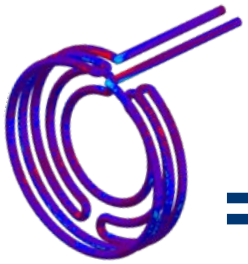
THERMAL ANALYSIS AND SIMULATION



- Low standard deviation of the temperature field.
- Small pressure differences between the inlet and outlet of the cooling medium.
- High Reynolds number, high turbulence, optimal heat transfer.

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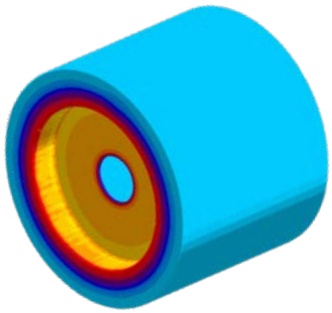
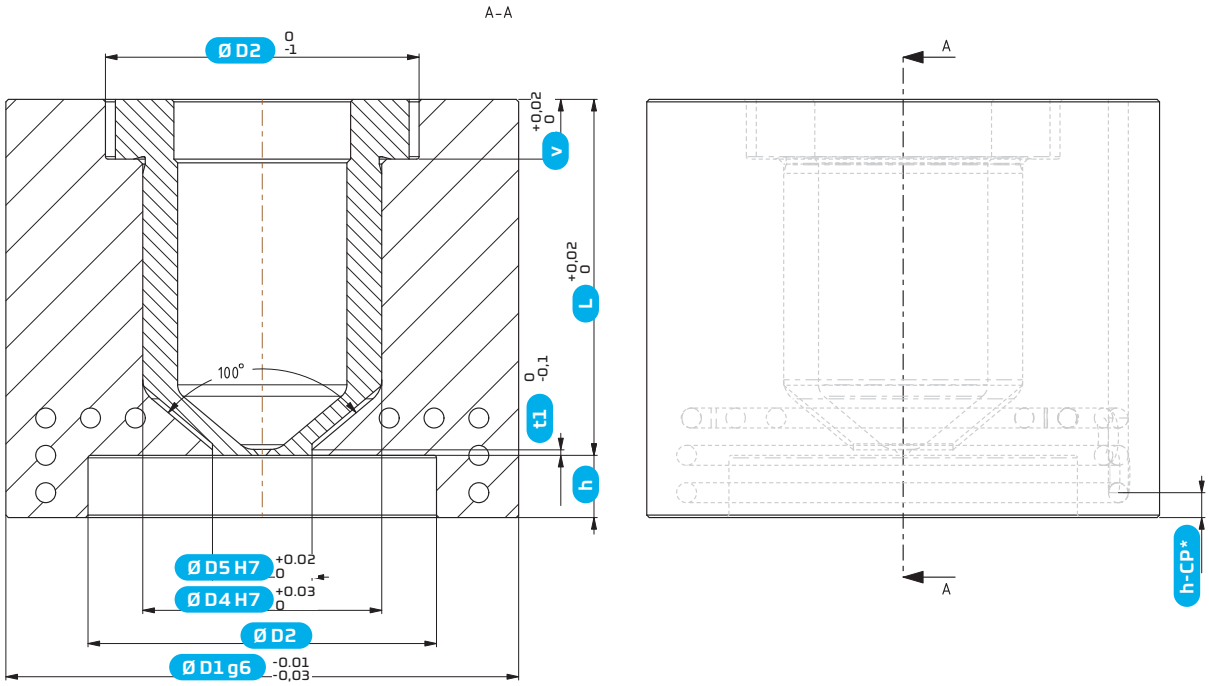
CAVITY GATE INSERT WITH BUSHING



COOLING POWER OPTIONS

- 10 W/m²
- 15 W/m²
- 25 W/m²

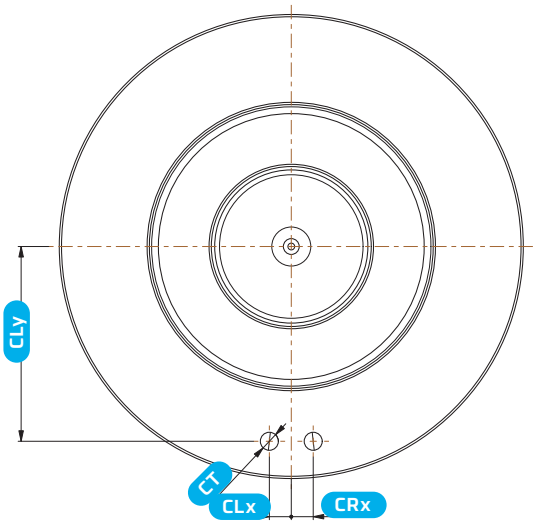
02 Dimensional parameters



*The dimension changes based on the cooling power input

Name	D1	D2	D3	D4	D5	v	t1	h	L range
20BCA	55	48	35	28	16	5	2,3	5-45	50-100
22BCA	58	52	38	32	16	5	2,3	5-45	50-120
26BCA	65	56	45	36	16	5	2,3	5-45	50-120
32BCA	70	62	50	42	20	9	3,3	5-45	60-120
38BCA	79	68	59	48	26	12	4,3	5-45	60-120
44BCA	84	74	64	54	32	12	5,3	5-45	60-120
50BCA	92	80	72	60	38	12	6,3	5-45	60-120

03 Connection holes



Name	CLx	CRx	CLy	CT
20BCA	0-24	0-24	0-24	1/16" NPT - 1/2"NPT or G1/16" - G1/2"
22BCA	0-26	0-26	0-26	1/16" NPT - 1/2"NPT or G1/16" - G1/2"
26BCA	0-29	0-29	0-29	1/16" NPT - 1/2"NPT or G1/16" - G1/2"
32BCA	0-32	0-32	0-32	1/16" NPT - 1/2"NPT or G1/16" - G1/2"
38BCA	0-36	0-36	0-36	1/16" NPT - 1/2"NPT or G1/16" - G1/2"
44BCA	0-39	0-39	0-39	1/16" NPT - 1/2"NPT or G1/16" - G1/2"
50BCA	0-43	0-43	0-43	1/16" NPT - 1/2"NPT or G1/16" - G1/2"