



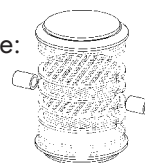
CALISTOR® WATER COOLED HEAT EXCHANGERS FOR SEMICONDUCTORS PRESSPACK MOUNTING



- HIGHER VOLUMETRIC ELECTRICAL POWER FROM SEMICONDUCTOR AT FULL CURRENT RATING
- IMPROVEMENT OF POWER SEMICONDUCTOR THERMAL PROTECTION
- VOLUME SAVING
- WEIGHT REDUCTION
- SCALING DOWN OF HYDRAULIC PUMP

MAIN CHARACTERISTICS

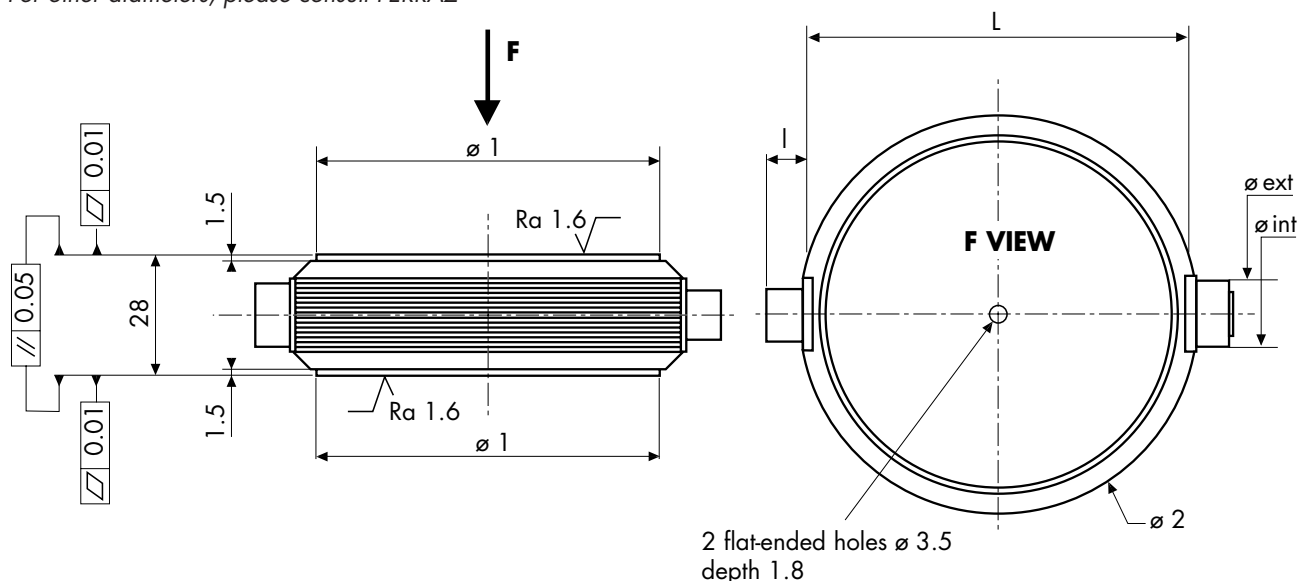
LARGE POWER LOSSES DISSIPATION	up to 2kW per side (Ø80)
VERY LOW THERMAL RESISTANCE	as low as $R_{th} = 6^{\circ}\text{C}/\text{kW}$ (Ø80)
IMPROVED THERMAL EXCHANGE IN SMALL VOLUME	Patented brased inner structure: grids network
ALUMINIUM DESIGN	Lightness of component
STAINLESS STEEL OR TITANIUM MADE ENDS	Depending on applications
PRESSURE DROP	0.12 bar at 6 liter/min flow rate
TO LARGE AND VERY LARGE POWER SEMICONDUCTOR.....	Press pack components
ADAPTED DESIGN CALISTOR 50 and CALISTOR 80	Centering holes SCR diameter from 50 to 100 mm
CLAMPING FORCES PROOF	up to 10 tons (Ø80)
CALISTOR® CUSTOMIZATION	Connecting lugs water inlet and outlet axial or lateral



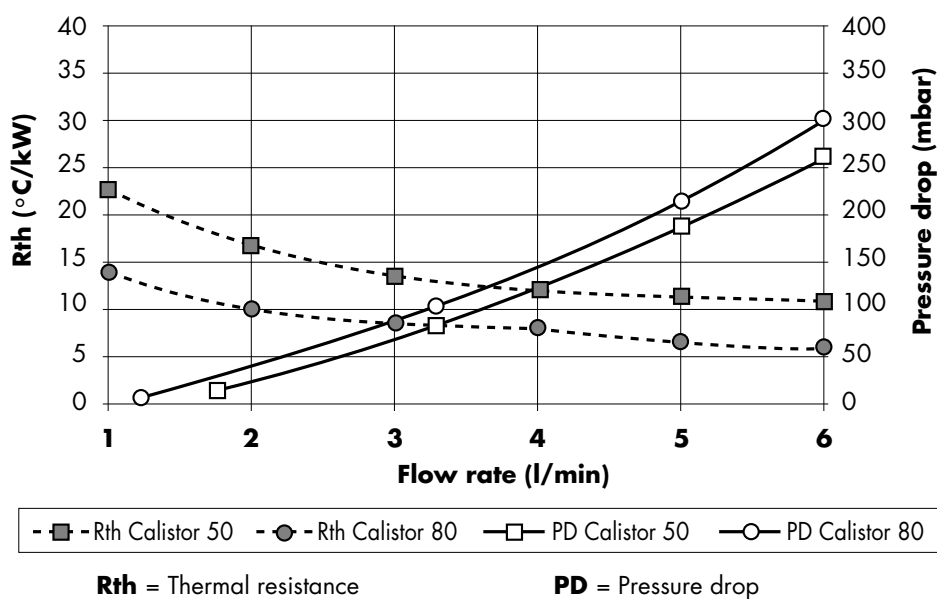
PRODUCT	CALISTOR 50	CALISTOR 80
ø 1	49	79
ø 2	60	90
L	58	88
Weight (g)	150	330

For other diameters, please consult FERRAZ

NOZZLE TYPE	SLOTTED	THREADED
ø Ext	10	Cylindrical 3/8"
ø Int	7.5	8
l	14.5	10



THERMAL AND HYDRAULIC FEATURES



In steady state conditions

Rth = Thermal resistance

PD = Pressure drop

TEST CONDITIONS

- CALISTOR 50 pressed under 2.2 tons load
- CALISTOR 80 pressed under 4 tons load
- Dissipated power: 1 500 W per side, double sided cooling
- No thermal grease used
- Deionized water circuit
- 20°C Inlet water temperature

FERRAZ

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