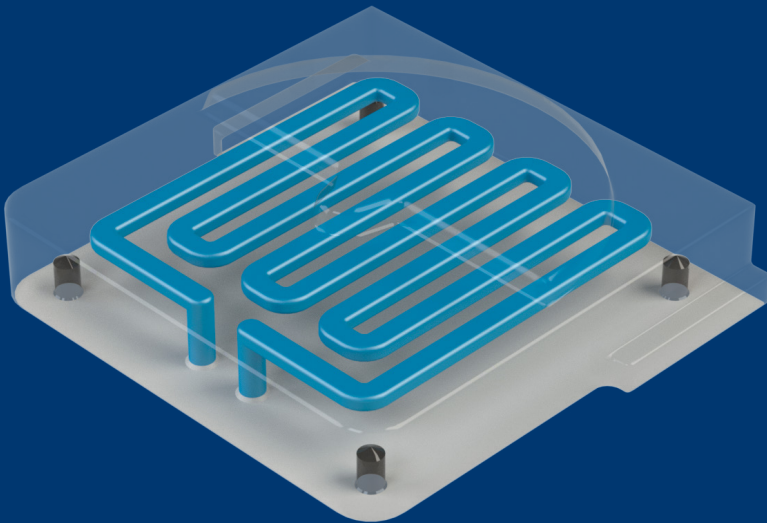




Products & Services > Die Casting
> iTherm® Distributor / Shot block

DATA SHEET

iTherm® Flat Distributor



iTherm® Flat Distributor

DESCRIPTION

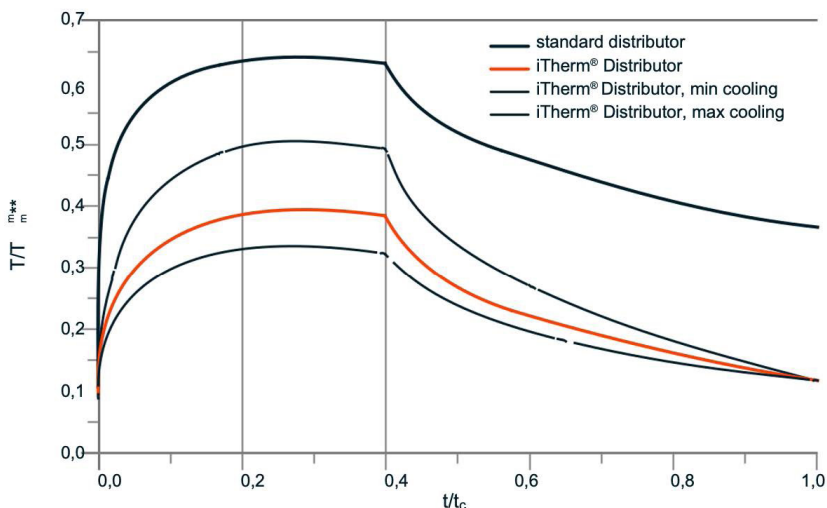
iTherm® Distributor is an ultimate solution in thermal effectiveness. It is a highly innovative conformal cooling single-body solution and a proven-performer applied where optimum process solutions are required.

MAIN ADVANTAGES

- The distributor has integrated conformal-cooling system which assures highest cooling effectiveness, a component specially designed for reduction of cycle time.
- As single body only has two connectors for cooling water, there is no leakage possible.

GRAPH (conventional vs. iTherm®)

iTherm® Distributor presents an optimum solution for stable process operation, and reduction of cycle time in HPDC.

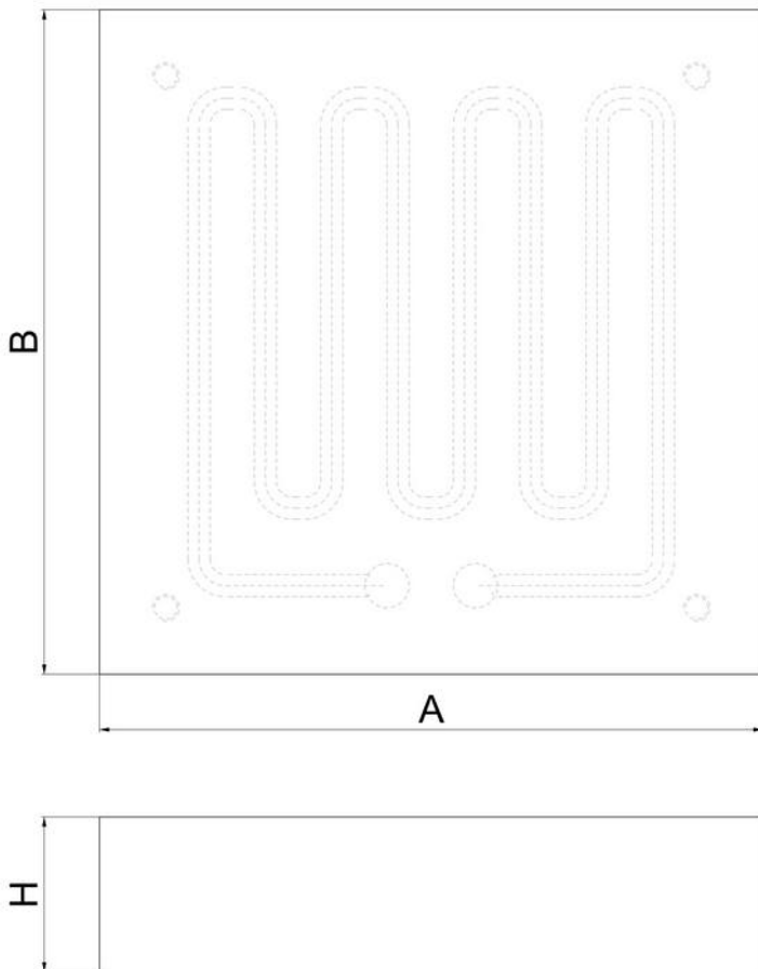


Thermal Characteristics of the iTherm® Distributor shows significant improvement in cooling effectiveness compared to conventional distributors. iTherm® Distributor, together with iTherm® Piston and Shot Sleeve, forms a critical part of iTherm® Casting Set, which is particularly designed for cycle time improvement in HPDC. A complete thermal optimization using FEA can be delivered for iTherm® Distributor when ordered as part of the iTherm® Casting Set.

** T/T_{min} is iTherm® Distributor surface temperature normalized with temperature of molten aluminium

iTherm® Flat Distributor

GENERAL DIMENSIONS



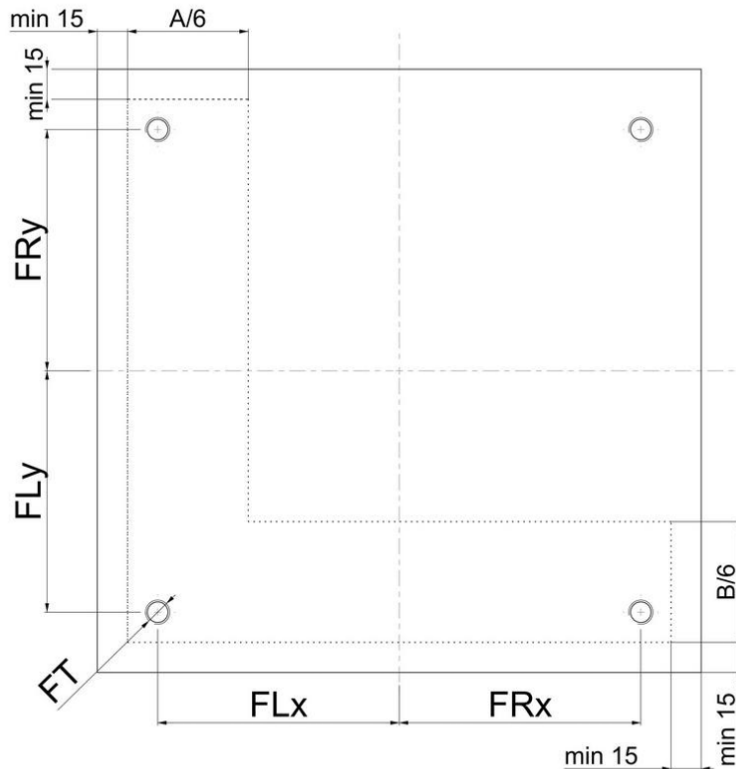
| Dimensions | Limits |
|------------|-----------|
| A | 100 - 400 |
| B | 100 - 400 |
| H | 30 - 130 |

All dimensions are in mm

iTherm® Flat Distributor

CONNECTION HOLES (BOTTOM)

Connection holes can be positioned on bottom of distributor or on side of distributor. Both options are limited depending on dimensions of distributor. Limits are shown below.

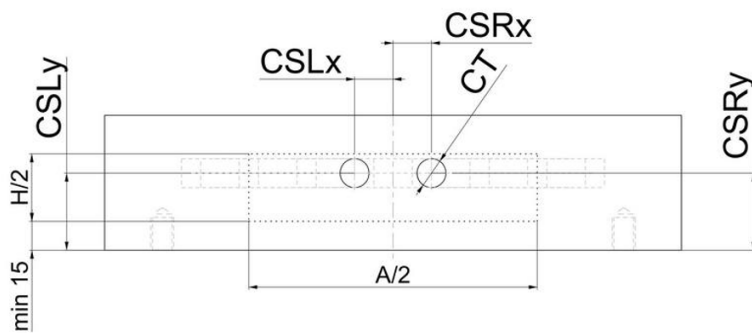


| Dimensions | Limits |
|------------|--|
| CBLx | 0-A/4 |
| CBRx | 0-A/4 |
| CBLy | 15-(15+B/6) |
| CBRy | 15-(15+B/6) |
| CT | 1/4 NPT, 3/8 NPT, 1/2 NPT, 5/8 NPT, G1/4, G3/8, G1/2, G5/8 |

All dimensions are in mm

iTherm® Flat Distributor

CONNECTION HOLES (SIDE)

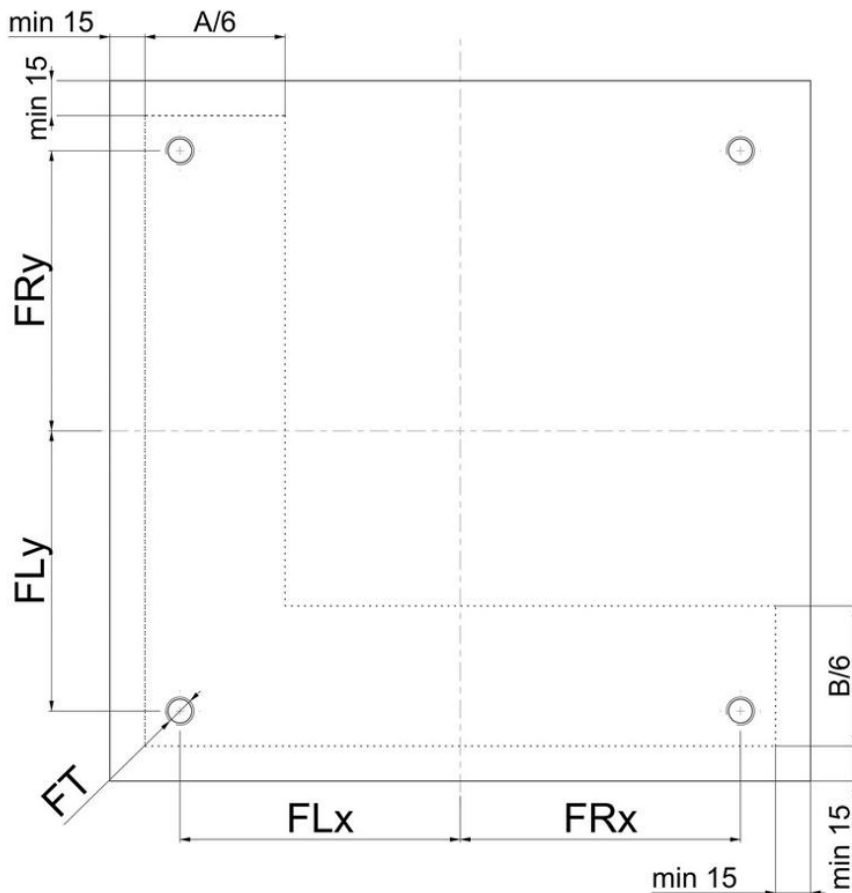


| Dimensions | Limits |
|------------|---|
| $CSLx$ | $0-A/4$ |
| $CSRx$ | $0-A/4$ |
| $CSLy$ | $15-(15+H/2)$ |
| $CSRy$ | $15-(15+H/2)$ |
| CT | $1/4$ NPT, $3/8$ NPT, $1/2$ NPT, $5/8$ NPT, $G1/4$, $G3/8$, $G1/2$, $G5/8$ |

All dimensions are in mm

iTherm® Flat Distributor

FIXING HOLES



| Dimensions | Limits |
|------------|--|
| FLx | 0 - (A/2 - 15) |
| FRx | 0 - (A/2 - 15) |
| FLy | (A-15-A/6) - (A - 15) |
| FRy | (A-15-A/6) - (A - 15) |
| FT | M10, M12, M14, M16, M18, M20, 1/4-20 UNC, 3/8-16 UNC, 5/8 - 11 UNC, 3/4 - 10 UNC |
| FZ | 0 - H/2 |

All dimensions are in mm

iTherm® Flat Distributor**MATERIAL**

A selection of material and material hardness is possible. Customer can choose between different types of hot work tool steel and material hardness per customer request. Additionally selection of surface nitriding is an option.

Do you need a slightly different design or component?

We got you covered.

Contact our die casting professionals and we will do our best to match your requirements. You can count on us to support you through each step of performance improvement.

sales@hts-ic.com