

# iTherm® Distributor Round

## TECHNICAL DATA SHEET

### 1 DESCRIPTION

iTherm® Round Distributor is single-body HPDC component with specially designed internal conformal cooling system. It is used to improve heat extraction from biscuit and casting channel, resulting in faster biscuit solidification.

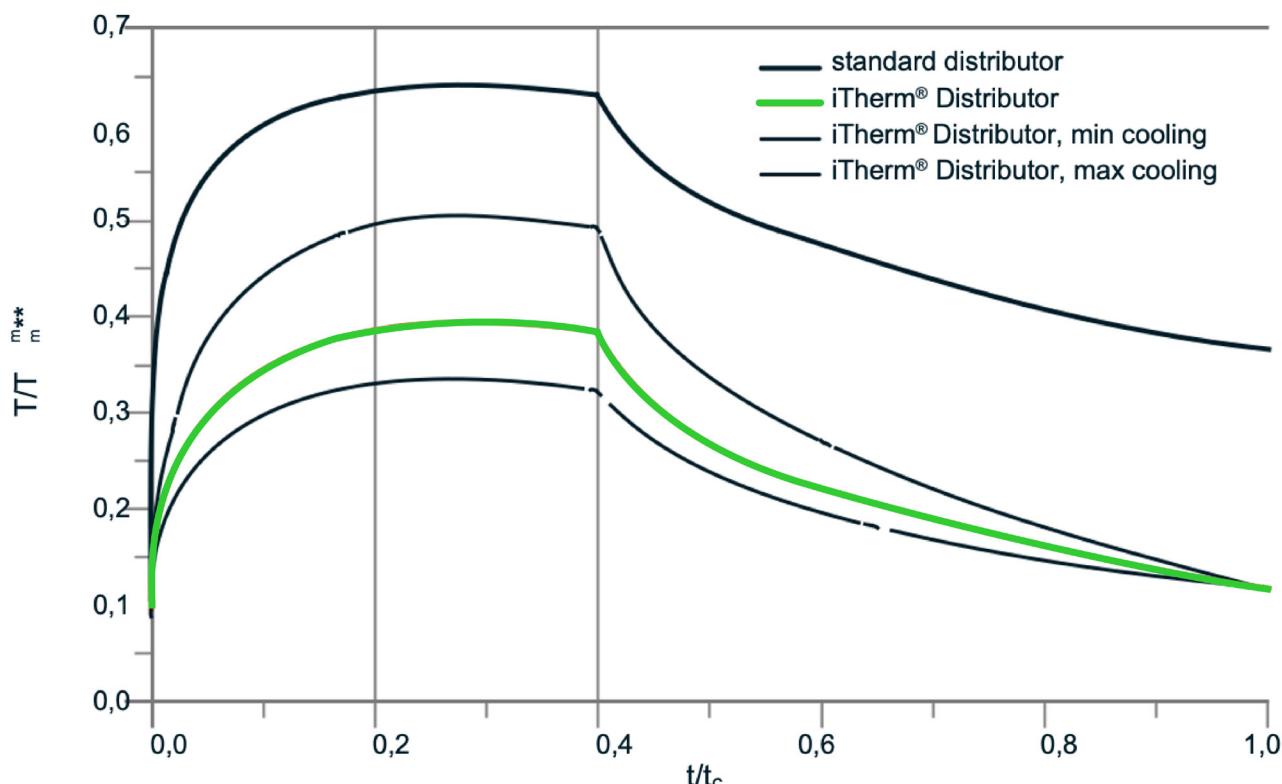


### 2 MAIN ADVANTAGES

- More freedom designing cooling channels
- Even heat distribution on working surface
- Faster biscuit solidification
- Cycle time reduction

### 3 GRAPH (conventional vs. iTherm®)

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

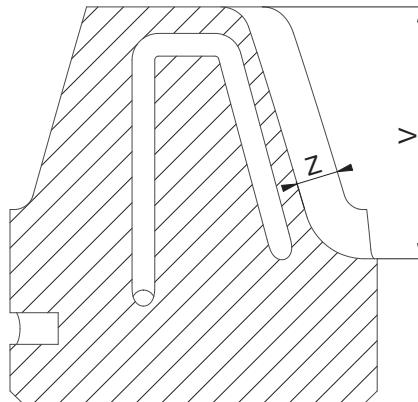
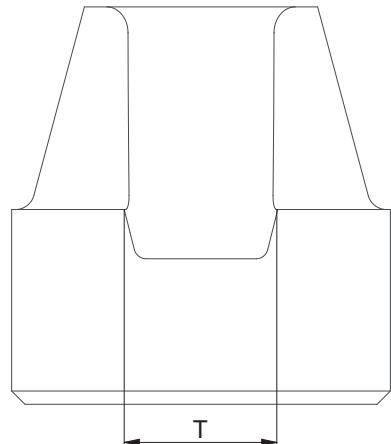
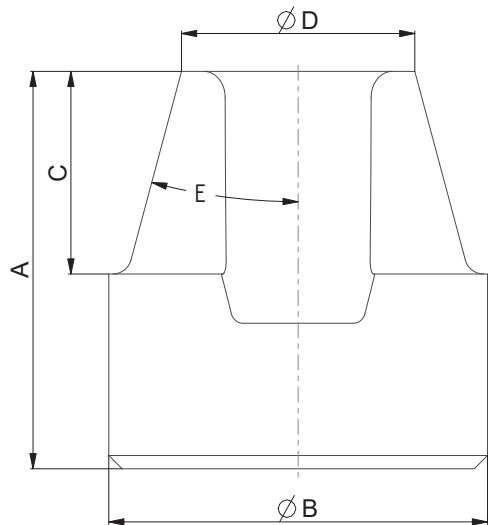


\*\*  $T/T_{\min}$  is iTherm® Distributor surface temperature normalized with temperature of molten aluminium

# iTherm® Distributor Round

## TECHNICAL SPECIFICATIONS

### 1 GENERAL DIMENSIONS



Dimension	Limits
A	80 - 250
$\varnothing$ B	80 - 250
C	50 - 200
$\varnothing$ D	50 - 200
E	1 - 15
T	0 - 100
V	0 - 40
Z	0 - (C+30)

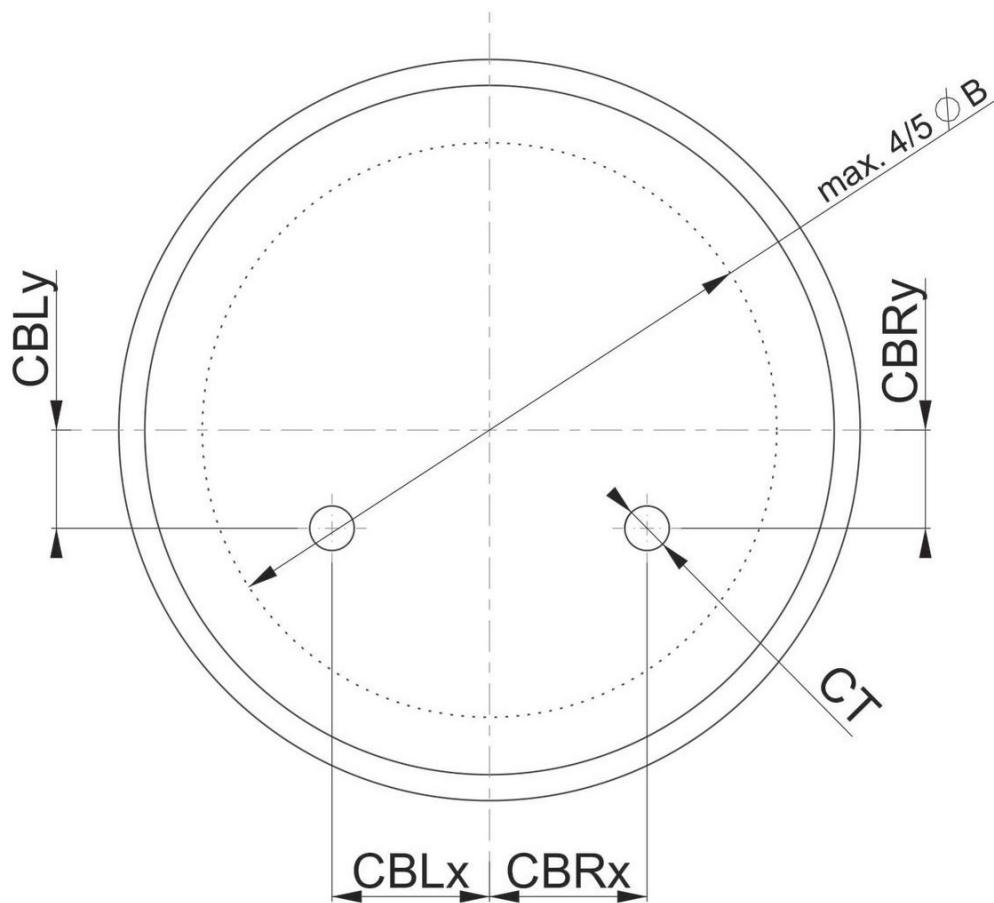
All dimensions are in mm

# iTherm® Distributor Round

## TECHNICAL SPECIFICATIONS

### 1 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.



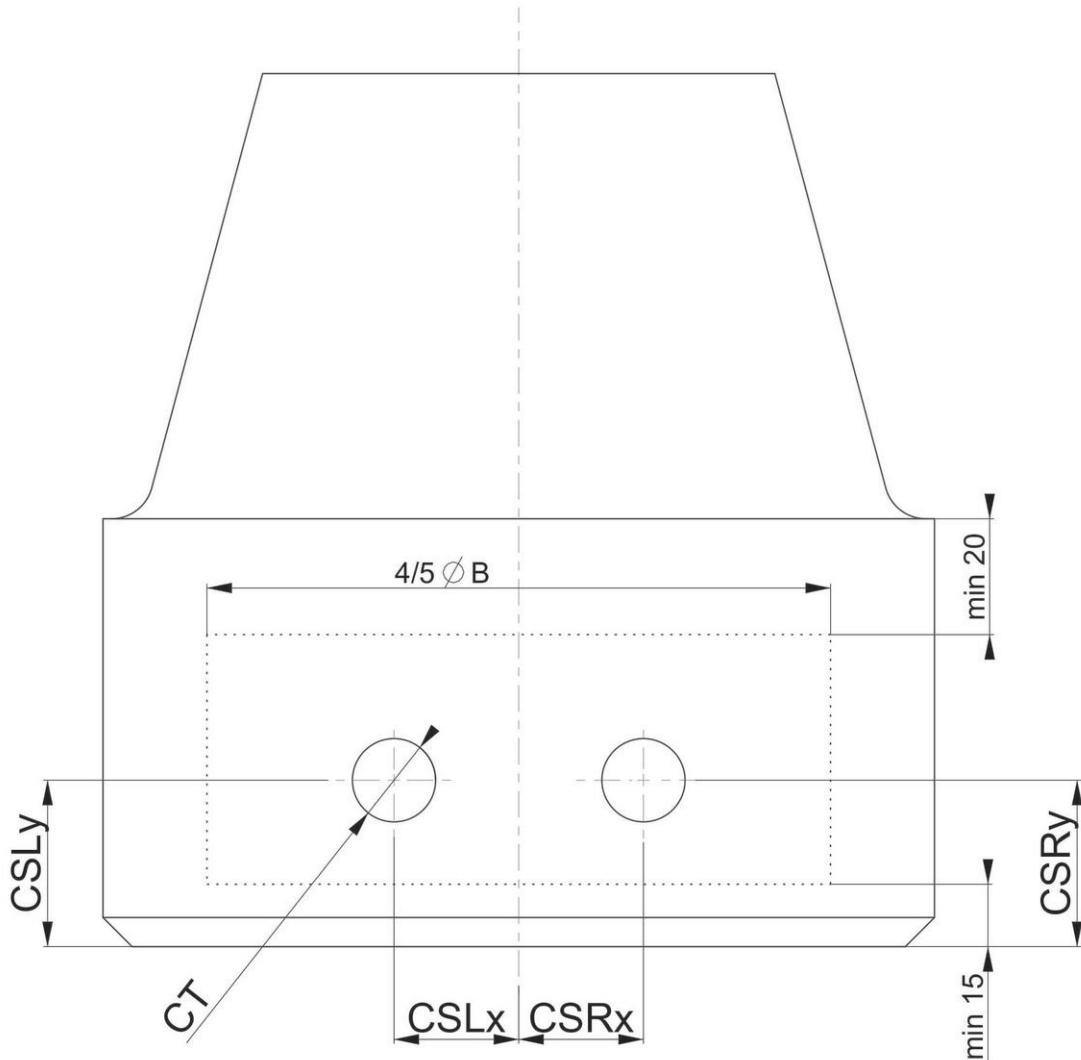
Dimension	Limits
CBLx	0 - ( $\theta B/4$ )
CBRx	0 - ( $\theta B/4$ )
CBLy	0 - ( $\theta B/4$ )
CBRy	0 - ( $\theta B/4$ )
CT	1/4 NPT, 3/8 NPT, 5/8 NPT, G1/2

All dimensions are in mm

# iTherm® Distributor Round

## TECHNICAL SPECIFICATIONS

### 2 CONNECTION HOLES (SIDE)



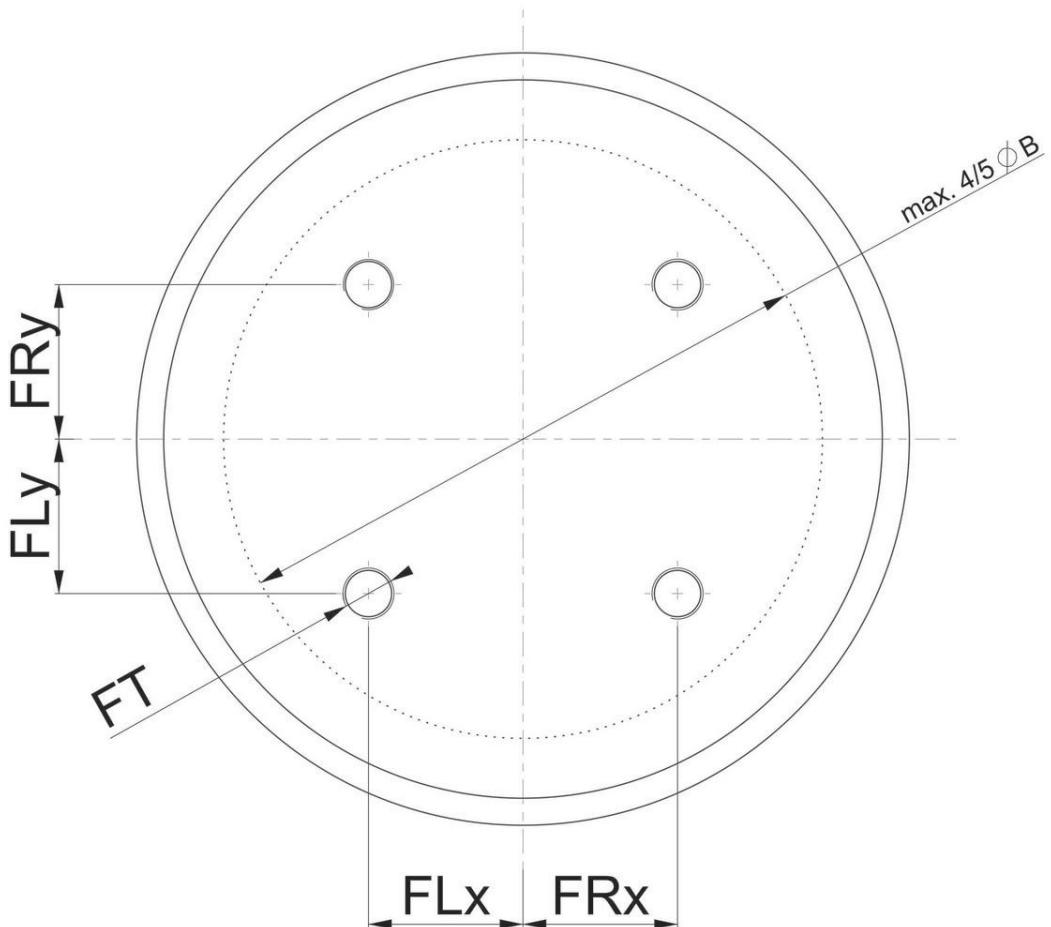
Dimension	Limits
CSLx	0 - (40B/10)
CSRx	0 - (40B/10)
CSLy	15 - (A - C - 20)
CSRy	15 - (A - C - 20)
CT	1/4 NPT, 3/8 NPT, 5/8 NPT, G1/2

All dimensions are in mm

# iTherm® Distributor Round

## TECHNICAL SPECIFICATIONS

### 3 FIXING HOLES



Dimension	Limits
FLx	0 – ( $\emptyset B/4$ )
FRx	0 – ( $\emptyset B/4$ )
FLy	(0 – ( $\emptyset B/4$ ))
FRy	(0 – ( $\emptyset B/4$ ))
FT	M10, M12, M14, M16, M18, M20, $\frac{1}{4}$ -20 UNC, 3/8-16 UNC, 5/8-11 UNC, $\frac{3}{4}$ -10 UNC
FZ	0 – 40

All dimensions are in mm

## 4 MATERIAL

- iTherm® Flat Distributors are made using forged or rolled tool steel blocks produced in EU.
- Most often used grades are 1.2343/H11, 1.2344/H13, 1.2367, Uddeholm Dievar.
- Based on specific customer need, other steel grades can be used.

## 5 DELIVERY CONDITIONS

- HEAT TREATED
- HARDNESS between 42 and 48 HRC
- MACHINED TO FINAL DIMENSION
- NITRIDED

**Do you need a slightly different  
design or component?**

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