Thread tolerancecalculator

Metric ISO thread DIN 13

This thread tolerance calculator allows you to calculate the limit dimensions for the outer, core and flank diameters immediately with a given thread designation and thread tolerance.

Male

Thread designation: M72x0.75

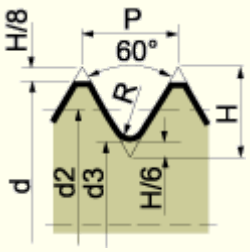
Valid thread designation: M1.. M68 or thread diameter x standard pitch

Tolerance field: 6g

Valid tolerance field: Accuracy level 4..8 and tolerance position a.. H

Calculate

Nominal profile



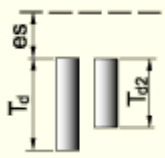
Basic profile according to DIN ISO 68-1

External thread nominal dimensions	
Nominal diameter (d)	72 mm
Slope (P)	0.75 mm
Height of the profile triangle (H)	0.6495 mm
Edge diameter (d2)	71.513 mm
Core diameter (d3)	71.08 mm
Slope angle (β)	0.191 degrees

Radius at the thread base	
Rmin	0.095 mm
Rmax	0.108 mm

Tolerance field

Position to the zero line



Tolerances according to DIN ISO 965-1	
upper dimension (it)	22 microns
Outer diameter tolerance (Td)	140 microns
Edge diameter tolerance (Td2)	118 microns

Limit dimensions of the external thread			
	Outer diameter (d)	Flank diameter (d2)	Core diameter (d3)
Maximum	71.978 mm	71.491 mm	71.058 mm

Minimum	71.838 mm	71.373 mm	70.911 mm

Core cross-sections	
Core cross-section (Ad3)	3968 mm2
Voltage cross-section (As)	3992 mm2

Printversion

Female

Thread designation: M72x0.75

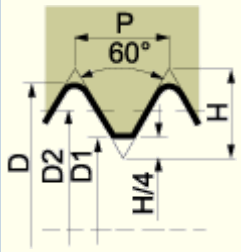
Valid thread designation: M1.. M68 or thread diameter x standard pitch

Tolerance field: 6H

Valid tolerance field: Accuracy level 4..8 and tolerance position G.. H

Calculate

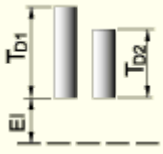
Nominal profile



Basic profile
according to DIN ISO 68-1

Internal thread nominal dimensions	
Nominal diameter (D)	72 mm
Slope (P)	0.75 mm
Height of the profile triangle (H)	0.6495 mm
Edge diameter (D2)	71.513 mm
Core diameter (D1)	71.188 mm
Slope angle (β)	0.191 degrees

Tolerance field
Position to the zero line



Tolerances according to DIN ISO 965-1	
lower dimension (EI)	0 µm
Core diameter tolerance (TD1)	190 µm
Edge diameter tolerance (TD2)	160 µm

Limit dimensions of the internal thread			
	Outer diameter (D)	Flank diameter (D2)	Core diameter (D1)
Maximum		71.673 mm	71.378 mm
Minimum	72 mm	71.513 mm	71.188 mm

Printversion

We assume no liability for the correctness of the calculated data!

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