

No. 014

## Size comparison of pipes and pipe threads

specification

[Question]

What is a pipe tap PT 15A???

[Answer]

"15A" is the size defined for steel tubes for piping.

You will know the sizes of the correspondent pipe threads by looking at the sizes of the pipes.

The size of the correspondent pipe threads of 15A pipe is

PT1/2-14(Rc1/2-14)

## [Guide]

Pipes are made of a wide variety of materials like galvanized steel, black steel, copper, cast iron, concrete, and various plastics such as ABS, PVC, CPVC, polyethylene, polybutylene and more.

Pipes are identified by DN "diameter nominal" names that are loosely related to the actual dimensions. For instance, a 2" galvanized steel pipe has an inside diameter of about 60.5mm and an outside diameter of about 66.7mm.

The metric designations conform to International Standards Organization (ISO) usage and apply to all plumbing, natural gas, heating oil, and miscellaneous piping used in buildings.

In America the plumbing pipe size is referred to as nominal pipe size or NPS "Nominal Pipe Size". The use of NPS does not conform to American Standard pipe designations where the term NPS means "National Pipe Thread Straight".

In the chart below, sizes of the steel tubes for piping are expressed either by "A" the Nominal Diameter or "B" the Pipe Thread Size and both are available.

"B" is easier to understand as the sizes correspond with those of pipe threads and pipe taps. "A" corresponds with the nominal size of the pipe outside diameter. (Please refer to the following table.)

Size 15A is shown in the "A" column on the chart below for pipe nominal diameter and is equal to the pipe thread size shown in column "B" of the chat below.

The correspondent tapered pipe tap is PT1/2-14 (Rc1/2-14).

Please refer to the following comparative table.

Comparative table of "Size of the steel tubes for piping" and "Size of the tapered pipe taps" (partially extracted)

Size		Outer			Size		Outer		
Α	В	diameter (mm)	•	oondent d size	Α	В	diameter (mm)	Correspondent thread size	
6	1/8	10.5	R 1/8	PT 1/8	65	2'1/2	76.3	R 2'1/2	PT 2'1/2
8	1/4	13.8	R 1/4	PT 1/4	80	3'	89.1	R 3'	PT 3'
10	3/8	17.3	R 3/8	PT 3/8	90	3'1/2	101.6	-	PT 3'1/2
15	1/2	21.7	R 1/2	PT 1/2	100	4'	114.3	R 4'	PT 4'
20	3/4	27.2	R 3/4	PT 3/4	125	5'	139.8	R 5'	PT 5'
25	1'	34.0	R 1'	PT 1'	150	6'	165.2	R 6'	PT 6'
32	1'1/4	42.7	R 1'1/4	PT 1'1/4	200	8'	216.3	R 8'	PT 8'
40	1'1/2	48.6	R 1'1/2	PT 1'1/2	250	10'	267.4	R 10'	PT 10'
50	2'	60.5	R 2	PT 2	300	12'	318.5	R 12'	PT 12'

Note: Be careful with stainless steel pipe and the carbon steel pipe for boiler and cooling unit applications.

These are defined in the exclusive comparative table.