

【Consultation】



I purchased a water faucet to attach to a water pipe. In the manual for the faucet, the screw thread standard is "PJ 1/2". What type of standard is this screw thread? And what type of internal thread can I attach to this faucet?

【Answer】

PJ threads are specified in the JIS standard "B 2061 Water faucet" and used for water pipe faucets. Basically, it is used in combination with a parallel internal screw thread for taper pipe threads Rp (PS). Please see the explanation below for more details.



PJ thread portion



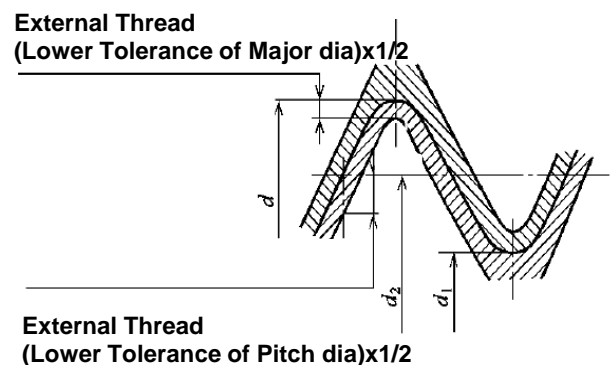
【Explanation】

1) What is a PJ thread?

External parallel threads are necessary to adjust the distance and direction of rotation from the building wall when attaching faucets, such as flanged faucets or two-legged wall-mounted mixer faucets, on pipe fittings.

However, external parallel pipe threads cannot be fixed with the internal taper pipe threads of a pipe fitting, so a slightly small sized external parallel threads, called "PJ threads", are adopted for the connection.

<Thread shape of a water faucet



2) The PJ thread standard is as follows.

Dimensional tolerance of water faucet mounting threads JIS B 2016

Unit mm

Type of threads	Nominal size	Major diameter d			Pitch diameter d2			Minor diameter d1		
		Basic dia.	Upper Tolerance	Lower Tolerance	Basic dia.	Upper Tolerance	Lower Tolerance	Basic dia.	Upper Tolerance	Lower Tolerance
PJ 1/2	13	20.955	-0.25	-0.534	19.793	-0.25	-0.534	18.631	-0.25	-0.534
PJ 3/4	20	26.441	-0.25	-0.534	25.279	-0.25	-0.534	24.117	-0.25	-0.534
PJ 1	25	33.249	-0.25	-0.610	31.770	-0.25	-0.610	30.291	-0.25	-0.610

Remarks :The water faucet mounting threads are represented using the "PJ" symbol. Example PJ 1/2, PJ 3/4

【Advice】

The PJ threads are mainly used for the external thread portion of a faucet in combination with internal parallel pipe threads Rp (PS). The positioning of the PJ thread and length of the assembled thread can be adjusted.

However, it will be necessary to wrap the pipe thread with a seal tape to prevent leakage. Also, in practice, it seems to be used in combination with internal parallel pipe threads G (PF) and internal taper pipe threads Rc (PT). The assembly needs to be done carefully to prevent leakage after installation.