

**[Question]**



Can you tell if "G" internal parallel pipe threads are the same as "PF"? Which type of pipe taps should I use, "G taps" or "PF taps"? Please explain the difference between "G" and "PF" taps.

**[Answer]**

The internal parallel threads "G" is basically the same as "PF". The symbol of the threads have been changed from "PF" to "G". (Note: The "B" class internal threads defined in "PF" standard was obsolete for the "G" standard) YAMAWA "PF taps" and "G taps" for parallel pipe threads have different overall and thread lengths, but have the same class of fit in the thread form, so you can use these taps for both internal parallel pipe threads, "PF" and "G".



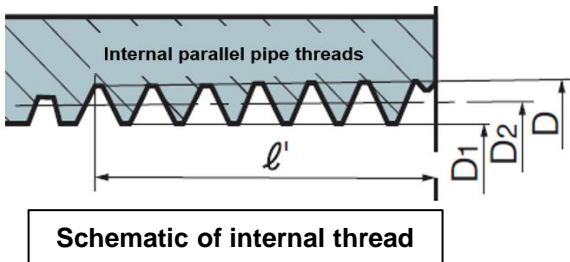
※The relationship between external threads and dies for G and PF is explained in bag full of wisdom No.059.

**[Description]**



"PF" is a symbol defined in the old JIS standard for internal parallel pipe threads. The symbol "G" is in the current JIS standard. (Note: The "B" class internal threads defined in "PF" standard was obsolete for the "G" standard) Please refer to the table below. As you can see, the internal parallel pipe threads "PF 1/2-14" and "G1/2-14" are the same in all dimensions.

In the market, the class A of "PF" or "G" internal thread class is usually specified. The "PF" class B is rarely used.

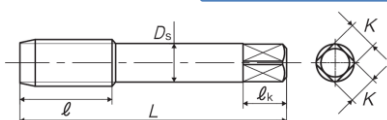


Unit : mm

Standard of Internal threads	Old JIS PF1/2 – 14(A Class)			Current JIS G 1/2 – 14	
	Basic diameter	Tolerance		Basic diameter	Tolerance
D Minor Dia	20.955	~ 0	➔	20.955	~ 0
D2 Pitch Dia	19.793	+0.142 0		19.793	+0.142 0
D1 Minor Dia	18.631	+0.541 0		18.631	+0.541 0
Standard of Internal threads	Old JIS PF1/2 – 14(B Class)			Current JIS G 1/2 – 14	
	Basic diameter	Tolerance		non-standard	
D Minor Dia	20.955	~ 0	➔	non-standard	
D2 Pitch Dia	19.793	+0.284 0			
D1 Minor Dia	18.631	+0.541 0			



YAMAWA "PF taps" and "G taps" for parallel pipe threads are different in overall length and thread part length, but the same in the thread class II (Class 2). Please refer to the table below for comparison of the taps' dimensions and thread tolerances for the size "1/2-14".



Unit : mm

Product	Size	overall length (L)	Thread Length (ℓ)	Shank diameter (Ds)	Size of square (k)	Length of square (ℓk)	Major Dia.		Pitch Dia.		Minor Dia.	
							Basic Size	Tolerance	Basic Size	Tolerance	Basic Size	Tolerance
Hand Tap	PF1/2-14	80	35	18	14	17	20.955	~ +0.115	19.793	+0.055 +0.025	18.631	+0.055 ~
Hand Tap	G1/2-14	87	26	18	14	17	20.955	~ +0.115	19.793	+0.055 +0.025	18.631	+0.055 ~