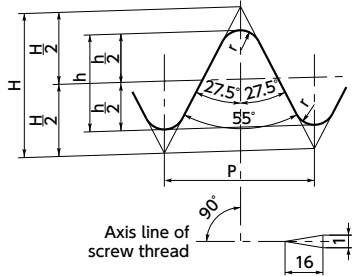


Taper Pipe Threads

Excerpts from JIS B 0203:1999

Basic profile: formula and basic dimensions of taper pipe threads

Basic profile applicable to taper male screws and taper female screws



Thick solid line shows basic profile.

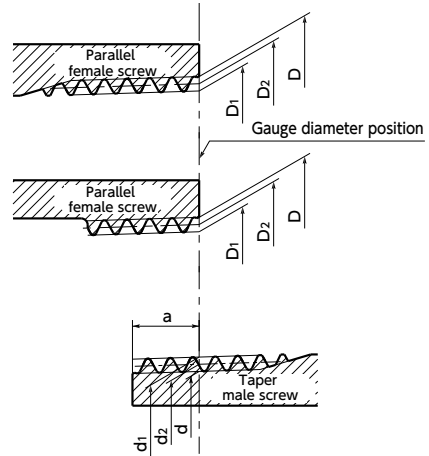
$$p = \frac{25.4}{n}$$

$$H = 0.960\ 237\ P$$

$$h = 0.640\ 327\ P$$

$$r = 0.137\ 278\ P$$

Fitting of taper male screw with taper female screw or parallel female screw



Unit: mm

*1 Nominal Diameter of Thread	Screw Thread				Gauge diameter			Gauge diameter position		
	Number of screw threads (per 25.4 mm)	Pitch	Height of screw thread	Radius	Male Screw			Male Screw		Female Screw
					Outside diameter d	Effective diameter d ₂	Root diameter d ₁	From pipe end Reference length	Tolerance in axial line direction	Pipe edge Tolerance in axial line direction
	n	P (Reference)	h	r or r'	Root diameter D	Effective diameter D ₂	Inside diameter D ₁	a	b	c
R ¹ / ₁₆	28	0.9071	0.581	0.12	7.723	7.142	6.561	3.97	±0.91	±1.13
R ¹ / ₈	28	0.9071	0.581	0.12	9.728	9.147	8.566	3.97	±0.91	±1.13
R ¹ / ₄	19	1.3368	0.856	0.18	13.157	12.301	11.445	6.01	±1.34	±1.67
R ³ / ₈	19	1.3368	0.856	0.18	16.662	15.806	14.950	6.35	±1.34	±1.67
R ¹ / ₂	14	1.8143	1.162	0.25	20.955	19.793	18.631	8.16	±1.81	±2.27
R ³ / ₄	14	1.8143	1.162	0.25	26.441	25.279	24.117	9.53	±1.81	±2.27
R1	11	2.3091	1.479	0.32	33.249	31.770	30.291	10.39	±2.31	±2.89
R ¹ / ₄	11	2.3091	1.479	0.32	41.910	40.431	38.952	12.70	±2.31	±2.89
R ¹ / ₂	11	2.3091	1.479	0.32	47.803	46.324	44.845	12.70	±2.31	±2.89

*1 This nominal diameter is for taper male screws. For taper female screws and parallel females screws, the symbol R shall be changed to Rc or Rp.