

DIMENSIONAL STANDARD · ASME B16.5

ASME B16.5 Flange Facing Dimensions

Raised face height by class and raised face diameter, NPS ½–24, with ring-joint links.

This chart gives the **raised face (RF)** dimensions of **ASME B16.5** flanges: the face height for each pressure class and the raised face diameter for NPS ½" to 24". The raised face diameter is the same for every class of a given size.

For ring-type joint (RTJ) flanges, the groove is sized to the ring number — see the ASME B16.20 ring-joint gasket chart. Teshi Group machines RF, FF, RTJ, tongue-and-groove and male-female facings to order.

- RF height** Height of the raised face above the flange face
- R** Outside diameter of the raised face
- FF** Flat face — no raised face; the gasket covers the full face
- RTJ** Ring-type joint — a machined groove for a metal ring gasket

Raised face height by pressure class

Class	RF height in	RF height mm (inch tables)	RF height mm (metric tables)
150 and 300	0.06"	1.6	2
400, 600, 900, 1500 and 2500	0.25"	6.4	7

Raised face diameter R (all classes)

NPS in	DN	R Raised face dia, mm
½"	15	34.9
¾"	20	42.9
1"	25	50.8
1¼"	32	63.5
1½"	40	73.0
2"	50	92.1
2½"	65	104.8
3"	80	127.0
3½"	90	139.7
4"	100	157.2
5"	125	185.7
6"	150	215.9
8"	200	269.9
10"	250	323.8
12"	300	381.0
14"	350	412.8

NPS in	DN	R Raised face dia, mm
16"	400	469.9
18"	450	533.4
20"	500	584.2
24"	600	692.2

Notes

- Inch tables give the raised face height as 0.06" (1.6 mm) for Class 150 and 300 and 0.25" (6.4 mm) for Class 400 and above; metric tables round these to 2 mm and 7 mm.
- Check against the edition of ASME B16.5 you are working to whether the tabulated flange thickness includes the raised face for Class 150 and 300.
- Raised face finish is typically 125–250 μ in Ra (3.2–6.3 μ m) serrated, unless the purchaser specifies otherwise.
- Flat-face flanges are used against cast-iron or non-metallic flanges; the raised face is machined off and a full-face gasket is used.

Reference information compiled from the published standard for convenience. It does not replace the current edition of the governing standard, which takes precedence. Verify critical dimensions before design, purchase or fabrication. Teshi Engineers & Sales Promoters (P) Ltd accepts no liability for errors or omissions. Online version: <https://www.teshigroup.com/dimensional-standards/asme-b16-5-flange-facing-dimensions/>