

HG

**CHEMICAL INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

HG/T 20607-2009

**PTFE envelope gaskets for use with steel pipe flanges (PN
designated)**

钢制管法兰用聚四氟乙烯包覆垫片(PN系列)

(English Translation)

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1. Scope

1 Scope

This national standard specifies pattern, dimension, and technical requirement and marking of PTFE envelope gasket for use with steel pipe flanges (PN designated).

This Standard is applicable to PTFE envelope gasket for use with steel pipe flange with raised face in nominal pressure of PN6~PN40 and in working temperature of less than or equal to 150 specified in HG/T 20592. °C Note. the use of the asbestos-contained material shall comply with requirements of relevant laws and regulations. When the production and use are containing asbestos material gasket, protective measures shall be adopted, so as to ensure not endanger the person health.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. For dated reference, subsequent amendments (excluding content of corrigenda) to, or revisions of, any of these publications do not apply.

However, Parties to agreements biased on this Code are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. For undated references, the latest edition of the normative document referred to applies.

"Compressed Asbestos Fibre Jointing" GB/T 3985 "Non-metallic PTFE Envelope Gaskets for Pipe Flanges" GB/T 13404 "Steel Pipe Flanges (PN designated)" HG/T 20592
"Specification for selection of Steel Pipe Flanges, Gaskets and Bolting (PN designated)" HG/T 20614 "PTFE Sheets" QB/T 3625 "PTFE Rods" QB/T 3626

3.0.1 According to the type of cutting process, the gasket pattern is consisted of sectioning

type, machining type and fold-packaging type, which are respectively denoted by A-type, B-type and C-type, Figure3.0.1. A-type and B-type are applicable to occasion in nominal

dimension of less than or equal to DN500, B-type is recommended to be adopted; while C-type is applicable to occasion in nominal dimension of greater than or equal to DN350.

3.0.2 Gasket dimension

1 The dimensions of A-type, B-type and C-type gasket comply with the requirements of Table 3.0.2-1 and Table 3.0.2-2.

2 The gasket thickness T shown in Table 3.0.2-1 and Table 3.0.2-2 is recommended

Table 3.0.2-2 Dimension of PTFE Envelope Gaskets (C-type) (mm)

Nominal

dimension

Inside diameter of the coating 1D Outside diameter of the coating 3D mm Outside diameter of the gasket 4D Gasket thickness T Nominal pressure PN 350 377 412 423 438 444 457 474 400 426 469 473 489 495 514 546 450 480 528 528 539 555 564 571 500 530 578 578 594 617 624 628 600 630 679 679 695 734 731 747 Note. The gasket thickness T listed in the table is the recommended gasket thickness. The users may specify other gasket thickness, but that shall be indicated when ordering.

4.0.1 PTFE coating material shall comply with the requirements of FSB-2 and QB/T 3626

specified in QB/T 3625.

4.0.2 The embedded layer or core materials are generally asbestos rubber sheet or non-asbestos fiber sheet. If the user has any special requirement, other appropriate materials may be adopted, but that shall be indicated when ordering.

4.0.3 The dimension tolerances of the inside diameter D1 and outside diameter D4 of the gasket are in accordance with those specified in Table 4.0.3. The coating thickness tolerance is $\pm 0.05\text{mm}$ and the gasket thickness tolerance is $\pm 0.25\text{mm}$.

4.0.4 The coating surface shall be level up, lubricate, buckling deformation-free, even in thickness and disallow defects like perforated hole and slag inclusion.

4.0.5 The compression rate, resilience, stress relaxation rate and seal leakage rate of the gaskets shall comply with the requirements of GB/T 13404.

Table 4.0.3 Dimension Tolerances of Inside Diameter D1 and Outside Diameter D2 of the Gaskets (mm)

Nominal dimension DN ≤ 300 ≥ 350 Inside diameter of the coating 1D ± 1.5 ± 3.0 Outside diameter of the gasket 4D $+1.5$ $+3.0$

5 Marking and packaging

5.0.1

The gaskets shall be packed according to pattern, specification and material respectively; when being delivered, it shall be attached with production quality test certificate. The gaskets shall indicate content specified in 5.0.2 by labels.