

HG

CHEMICAL INDUSTRY STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

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**Non-metallic flat gaskets for use with steel pipe flanges (Class
designated)**

钢制管法兰非金属平垫片(Class系列)

(English Translation)

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3.0.1 Material category

The materials of the non-metallic flat gaskets for use with steel pipe flanges contain.

1 Natural rubber, neoprene, styrene-butadiene rubber, chemigum, ethylene propylene

diene copolymer and viton;

manufacturer's brand shall be indicated. The applicable pressure, temperature and maximum (PxT) value of the gaskets shall be determined according to the working condition.

3.0.3 Working Conditions

Working conditions of the nonmetallic flat gaskets shall meet the requirements of Table

3.0.3.

Table 3.0.3 Working Conditions of Non-metallic Flat Gaskets

Classification Name Standard Code name

Application Range

Maximum (pxT) (MPax°C)

Nominal pressureClass

Working temperature (°C)

Rubber

Natural rubber

NR 150 -50-+80 60

Neoprene CR 150 -20-+100 60

Chemigum NBR 150 -20- +110 60

Styrene-butadiene rubber SBR 150 -20-+90 60

Ethylene propylene diene copolymer EPDM 150 -30-+140 90

Viton FKM 150 -20-+200 90

Asbestos rubber

Paronite GB/T 3985

XB350

150 -40-+300 650 XB450

Oil-resisting paronite GB/T 539 NY400

Non asbestos fiber rubber

Non asbestos fiber rubber pressing-a

Inorganic fiber b NAS ≤ 300

-40-+290-d

Organic fiber -40-+200

-d

Teflon

PTFE sheet QB/T 3625 PTFE

-50-+100

Expansion PTFE sheet/strip b.c ePTFE

-200-+200-d

Stuffing modified PTFE sheet RPTFE ≤ 300

Flexible graphite sheets

Reinforced flexible graphite sheet-e

JB/T 6628

JB/T 7758.2 RSB ≤ 600

-240-+650(used in oxidative medium. -240 -
+450)

High-temperature mica

High-temperature mica composite plate ≤ 600 -196-+900

Note: 1 Reinforced flexible graphite sheet is compounded by stainless steel impacting or punch drying plate and expanded graphite particle. And stainless steel impacting or punch drying plate plays a role in enhancement.

Table 4.0.2-1 The Dimension Ff-type Gasket for Use with Flat Face Flange Class150 (PN20) (mm)

Nominal dimension Inside diameter of the gasketa DI

Outside diameter of the gasket

D2

Number of bolt hole n (piece)

Diameter of bolt hole L

Diameter of bolt-hole center circle

Gasket thicknessb T DN NPS

15 21 22 89 4 16 60.3

1.5c

20 411 27 98 4 16 69.9

25 1 34 108 4 16 79.4

32 411 43 117 4 16 88.9

40 211 49 127 4 16 98.4

50 2 61 152 4 18 120.7

65 212 77 178 4 18 139.7

80 3 89 191 4 18 152.4

100 4 115 229 8 18 190.5

125 5 141 254 8 22 215.9

150 6 169 279 8 22 241.3

200 8 220 343 8 22 298.5

250 10 273 406 12 26 362.0

300 12 324 483 12 26 431.8

350 14 356 533 12 30 476.3

3d

400 16 407 597 16 30 539.8

450 18 458 635 16 33 577.9

500 20 508 699 20 33 635.0

600 24 610 813 20 36 749.3 a D1 is the maximum inside diameter of the gasket. The other diameters of the internal diameters gasket may be determined by the user, but it shall be indicated at the order time.

b Gasket thickness T listed in the table is recommended gasket thickness.

c Rubber blanket thickness is larger than or equal to 1.5mm.

d Rubber blanket thickness is larger than or equal to 3mm.

(Continued) (mm)

Nominal dimension Inside diameter of the gasket a

DI

Outside diameter of the gasket D2

Nominal pressure Class

Gasket thickness b

Wrapping width b DN NPS

125 5 140 196.0 215.0 240.0

1.5

150 6 169 221.5 250.0 265.0

200 8 220 278.5 306.0 319.0

250 10 273 338.0 360.5 399.0

300 12 324 408.0 421.0 456

350 14 356 449.5 484.5 491

400 16 407 513.0 538.5 564.0

450 18 458 548.0 595.5 612

500 20 508 605.0 653.0 682.0

600 24 610 716.5 774.0 790.0 a D1 is the maximum inside diameter of the gasket. The