

VALQUA No. MF300 / GF300 / SF300

These gaskets have excellent chemical resistance, heat resistance, are easy to handle and do not harden easily because these gaskets use PTFE as binders. The gaskets do not contain any rubber, and retightening is possible since deterioration with age and hardening does not occur.



BRIGHTHYPER™

VALQUA No.
MF300

With using special methods and materials, these non asbestos sheet gaskets have enhanced brightness level and chemical resistance. These are applicable for both acid and alkali, and have long-term stability for high temperature like GF300 and SF300.

Suitable fluids	Water, seawater, hot water, steam, air, aqueous solution of strong alkaline salt, oils, alcohol, aliphatic solvent and its vapor, air, and general gases
Unsuitable fluids	Polymerizable monomer
Applications	Joint sections of cover flanges and nozzles and the like for pipe flanges, valve bonnets, towers & tanks, ovens, pressure vessels and heat exchangers used in various factories including power stations, oil refineries, steel plants and shipyards
Dimensions	〈Width × Length〉 (mm) 1270 × 1270 (t1.5, t3.0) 〈Color type〉 white 〈Print color〉 no-printed



■ Design data ■

▼Recommended tightening stress

Tightening stress is defined as the pressure required under standard conditions without consideration to the opening force due to internal fluid.

Fluid	Recommended tightening stress (MPa)
Liquid	25.5
Gas	35.0

▼Available ranges

Temperature and pressure classifications show individual service limits.

Temperature (°C)	Pressure (MPa)
-200~300	3.5

▼m,y values

The m, y values for Compressed Fiber Sheets defined in Appendix G of JIS B 8265 can be applied to the m, y values of High Performance Non-Asbestos Sheets.

Thickness (mm)	Gasket factor "m"	Minimum design seating stress "y" (N/mm ²)
3.0	2.00	11.0
1.5	2.75	25.5
1.0	3.50	44.8

Features

- ▶ Free from hardening deterioration and aging due to heat.
- ▶ Retightening is possible as no hardening occurs.
- ▶ Applicable to a wider variety of fluids compared to other Compressed Fiber Sheet.
- ▶ No sticking to flanges.



BLACKHYPER™

VALQUA No.
GF300

The use of flexible resin binders results in improved properties against brittleness and damages compared to expanded graphite sheet gaskets.

Unsuitable fluids

Oxidizing acids and substances susceptible to burn such as oxygen, polymerizable monomer, strong alkali, gas susceptible to burn and toxic gas

Applications

Joint sections of cover flanges and nozzles and the like for pipe flanges, valve bonnets, towers & tanks, ovens, pressure vessels and heat exchangers used in various factories including power stations, oil refineries, steel plants and shipyards

Dimensions

<Width × Length> (mm)
1270 × 1270 (t1.0, t1.5)
1500 × 1500 (t2.0, t3.0)
<Color type> black
<Print color> black



WHITEHYPER™

VALQUA No.
SF300

WHITEHYPER™ can provide the same performance as GF300 and because it has no black material it is good for using when white lines are preferable and has a wide range of other applications.

Unsuitable fluids

Polymerizable monomer, strong alkali, and toxic gas

Applications

Connection Joint sections of cover flanges and nozzles and the like for pipe flanges, and valve bonnets, of cover flanges and nozzles in towers & tanks, ovens, pressure vessels and heat exchangers used in various factories including power stations, oil refineries, iron works steel plants, and shipyards

Dimensions

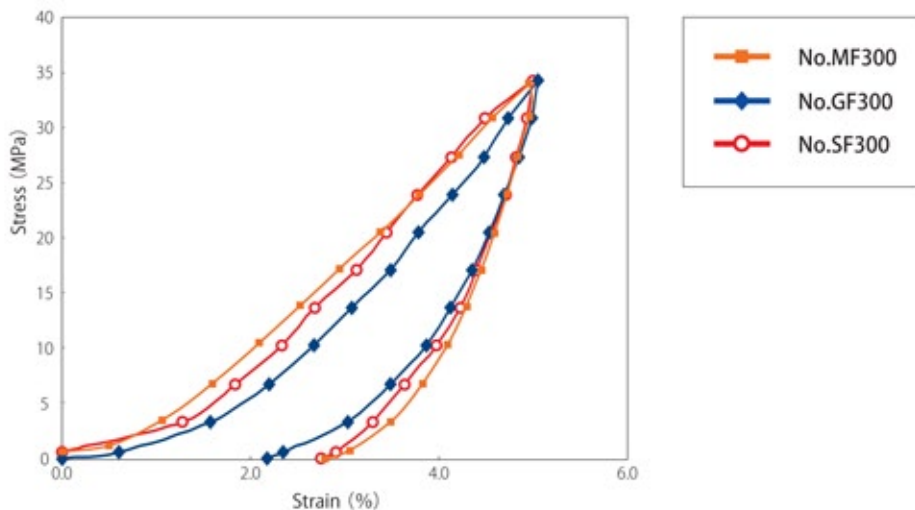
<Width × Length> (mm)
1000 × 1000 (t1.5)
1270 × 1270 (t2.0, t3.0)
<Color type> off-white
<Print color> green



食 Conforms to the Food Sanitation Act and standards for food and additives

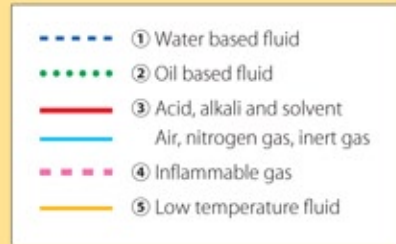
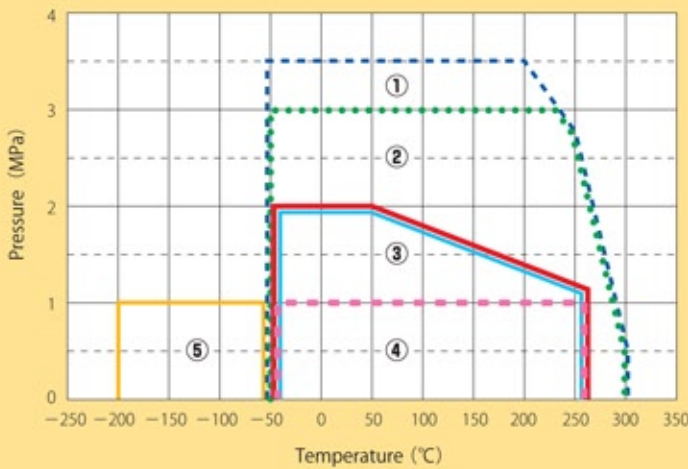
Stress strain characteristics of High Performance Non-Asbestos Sheet

(Dimension of test piece: JIS 10K 25A t=1.5mm)



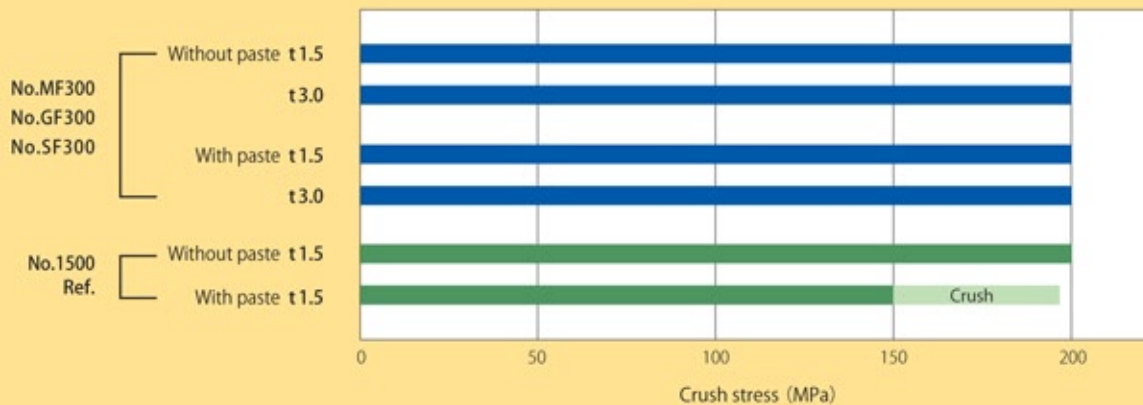
VALQUA No. MF300 / GF300 / SF300

Available ranges per fluid



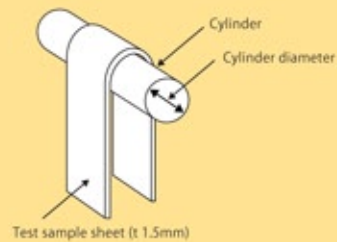
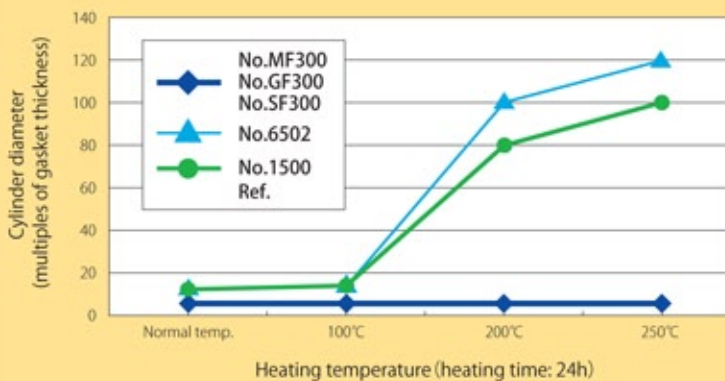
Remark When using gas application, we recommend applying gasket paste to the flange and the inner diameter section before applying a tightening stress of about 35 MPa. When using gasket paste, please use NEW VALFLON® paste. Please note, No.6 and No.6M are not suitable.

Crush strength comparison



Remark Tested by applying a recommended paste to the surface of each product. No.MF300, GF300, SF300 : NEW VALFLON® Paste. No.1500 : SEAL PASTE™

Comparison of high temperature hardening properties



A heated sheet is wound around a cylinder with a specified diameter to check the occurrences of "cracks".

VALQUA No. 6502 / 6500 / 6500AC / 6503 / 6503AC

Compressed Non-Asbestos Fiber Sheets are rolled and vulcanized sheet type gasket materials, in which special rubber binders and a small amount of filler material are mixed with organic and inorganic fibers.

**BLACK SUPER™**

VALQUA No.
6502

Calendered gasket material made of selected synthetic organic, inorganic fibers and carbon fiber bonded with special rubber binder using the minimum required amount of organic fiber. It has a wide range of other applications.

Unsuitable fluids	Strong acid, strong alkali, and various solvents, inflammable gas, gas susceptible to burn and toxic gas
Applications	Joint areas of steam lines, pipe flanges, valve bonnets and other equipment used in oil refineries and chemical industries
Dimensions	<p>〈Width × Length〉 (mm) 1270 × 1270, 1270 × 3810, 2540 × 3810, 3048 × 3810</p> <p>〈Thickness〉 (mm) 0.5, 0.8, 1.0, 1.5, 2.0, 3.0</p> <p>〈Color type〉 gray 〈Print color〉 black</p>

**Compressed Non-Asbestos Fiber Sheet for general use**

VALQUA No.
6500

These are suitable to be used as Non-asbestos gaskets for pipe flanges and equipment in various industries. The adaptability of these sheets for water apparatus has been confirmed based on JIS S 3200-7.

Unsuitable fluids	Strong acid, strong alkali, and various solvents, inflammable gas, gas susceptible to burn and toxic gas
Applications	Pipe flanges, valve bonnets and other equipment used in various industries including oil refineries, chemical industries and ship-yards
Dimensions	<p>〈Width × Length〉 (mm) 1270 × 1270, 1270 × 3810, 2540 × 3810, 3048 × 3810</p> <p>〈Thickness〉 (mm) 0.4, 0.5, 0.8, 1.0, 1.5, 2.0, 3.0</p> <p>〈Color type〉 blue 〈Print color〉 black</p>

**Anti-corrosion Compressed Non-Asbestos Fiber Sheet**

VALQUA No.
6500AC

With reduced amounts of leachable chloride, these Compressed Fiber Sheets have corrosion suppression effect when stainless steel flanges are used for water or water solutions. Surface finishing reduces sticking to the flange.

Unsuitable fluids	Strong acid, strong alkali, and various solvents, inflammable gas, gas susceptible to burn and toxic gas
Applications	Stainless steel pipe flanges, valve bonnets and other equipment used in various industries requiring corrosion resistance.
Dimensions	<p>〈Width × Length〉 (mm) 1270 × 1270, 1270 × 3810, 2540 × 3810</p> <p>〈Thickness〉 (mm) 1.0, 1.5, 2.0, 3.0</p> <p>〈Color type〉 blue 〈Print color〉 orange</p>

VALQUA No. 6502 / 6500 / 6500AC / 6503 / 6503AC



White Compressed Non-Asbestos Fiber Sheet

VALQUA No.
6503

Since black components are removed in the Compressed Fiber Sheet, these gaskets are suitable to be used for applications where inclusion of black foreign substances into the fluid should be avoided.

Unsuitable fluids Strong acid, strong alkali, and various solvents, inflammable gas, gas susceptible to burn and toxic gas

Applications Applications should be avoided in which black foreign substances are included into process fluids, such as in petrochemical industry.

Dimensions <Width × Length> (mm)
1270 × 1270, 1270 × 3810, 2540 × 3810, 3048 × 3810
<Thickness> (mm)
0.5, 0.8, 1.0, 1.5, 2.0, 3.0
<Color type> white
<Print color> green



Anti-corrosion white Compressed Non-Asbestos Fiber Sheet

VALQUA No.
6503AC

With reduced amount of leachable chloride, these white Compressed Fiber Sheets have corrosion suppression effect on stainless steel flanges. Surface finishing reduces sticking to the flange

Unsuitable fluids Strong acid, strong alkali, and various solvents, inflammable gas, gas susceptible to burn and toxic gas

Applications Pipe flanges, valve bonnets and other equipment used in various industries requiring corrosion resistance for white applications.

Dimensions <Width × Length> (mm)
1270 × 1270, 1270 × 3810, 2540 × 3810
<Thickness> (mm)
0.5, 0.8, 1.0, 1.5, 2.0, 3.0
<Color type> white
<Print color> orange

■ Design data ■

▼Recommended tightening stress

Tightening stress is defined as a pressure required under standard conditions without consideration for the opening force due to internal fluid.

Fluid	Recommended tightening stress (MPa)
Liquid	25.5
Gas	40.0

▼m,y values

The m, y values for Compressed Fiber Sheets defined in the Appendix G of JIS B 8265 can be applied to the m, y values of Compressed Non-Asbestos Fiber Sheets.

Thickness (mm)	Gasket factor "m"	Minimum design seating stress "y" (N/mm ²)
3.0	2.00	11.0
1.5	2.75	25.5
1.0	3.50	44.8

▼Available ranges

Temperature and pressure classifications show individual service limits.

VALQUA No.	Temperature (°C) ⁽¹⁾	Pressure (MPa)		
		Water based	Oil based ⁽²⁾	Gas
6500 / 6500AC	-50~183	3.0	3.0	1.0
6502 / 6503 / 6503AC	-50~214	3.0	3.0	1.0

Notes (1) For service conditions exceeding 100°C, please refer to the notes on page 10.

(2) Regarding oil gas, solvent and corrosive fluid, separate consultation is required