Fluorocarbon Resin Sheet Gasket

VALFLON Sheet Gasket

VALQUA No. 7020/7026/7010-EX/7010/7GP61/7GP61S/7GP66/7GP66S

These are sheet gaskets made of VALFLON (PTFE) with excellent chemical resistant and non-stick properties. (VALFLON is a registered trademark in Japan for its fluorocarbon resin products of NIPPON VALQUA.)

VALQUALON Gasket / Black VALQUALON Gasket



VALOUA No. **7020** 食

Features

In order to improve the cold flow (creep phenomenon), which is a weakness of PTFE, inorganic filler material is mixed into these gaskets. Provided with heat resistance, chemicals resistance, and anti-cold flow property, they are suited for lines handling various chemicals (high concentrated hot sulfuric acid, hot nitric acid,

Unsuitable fluids

Highly concentrated alkali such as sodium hydroxide, hydrofluoric acid, polymerizable monomer, etc.

Main component Color

PTFE, silica Beige

VALQUA No. **7026** 食

Features

Similar to other companion products, No.7020, No.7026 gaskets have excellent heat resistance, chemicals resistance, and anti-cold flow properties, so that they are suited for lines handling various chemi-

Unsuitable fluids

Oxidizing acids such as highly concentrated hot sulfuric acid and hot nitric acid, polymerizable monomer, etc.

Main component

Color

PTFE, carbon Black

New VALFLON Gasket / VALFLON Gasket



▲No.7010

VALQUA No. **7010-EX** (2)

Features

No.7010-EX gaskets are made of "NEW VALFLON" material that has improved creep phenomenon, while maintaining the PTFE's excellent heat resistance, chemicals resistance, and non-stick properties. Thus, they have a long service life for heat cycles, contributing to extending the operating life of gaskets.

Unsuitable fluids Main component Color

Polymerizable monomer, etc. PTFE

White

VALOUA No. **7010** 食

Features

These gaskets are made by punching virgin PTFE sheet. As these gaskets are liable to cause cold flow, the gaskets should be installed in grooves or tongue and groove flanges in principle. PTFE

Main component Color

White



$\begin{array}{l} \text{VALQUA No. } \textbf{7GP61 (Sheet)} \, / \, \, \textbf{7GP66 (Gasket)} \\ \text{VALQUA No. } \textbf{7GP61S (Sheet)} \, / \, \, \textbf{7GP66S (Gasket)} \end{array} \textcircled{\$}$

Features

These highly flexible sheets have a specially made mesh construction, while taking advantage of the PTFE's excellent chemicals resistance and heat resistance properties.

Main component Color

PTFE White

Design data

■ Allowable ranges ■

- / morrable ranges -				
VALQUA No.	Temperature (℃)	Pressure (MPa)		
7020	-200~200	4.0		
7026	200. 9200			
7010(1)	−50~100	1.0		
7010-EX	−50~150	1.0		
7GP66/7GP66S	-240~260	2.0		

Note(1) For No.7010, grooved flanges should be used in principle. Remark Temperature and pressure show individual service limits.

	■ Dimensions ■					
	VALQUA No.	Nominal thickness (mm)	Size (mm)			
	7020	1.0, 1.5	1000×1000			
7020	7020	2.0, 3.0	1270×1270			
	7026	1.5, 2.0, 3.0	1270×1270			
	7010	1.0, 1.5, 2.0, 3.0	Max. OD 1300			
	7010-EX	1.5, 3.0	Max. OD 1100			
	7GP61/7GP61S	0.5, 1.0, 1.5	1500×1500			
	7GP66/7GP66S	2.0, 3.0	Max. OD 1450			

■ Design Criteria ■

		-1.1		Minimum design seating stress	Recommended tightening stress (MPa)(1)		
V	/ALQUA No.	Thickness (mm)	Gasket factor"m"	" y " (N/mm²)	Liquid	Gas	
		1.0	3.5	24.5	20.0	24.5	
	7020	1.5	3.2	22.5			
7026	2.0	3.0	19.6	20.0	24.3		
		3.0	2.5	19.0			
7010 ⁽²⁾		1.0, 1.5	3.0	19.6			
	7010-EX	2.0	2.5	14.7	10.0	15.0	
7010-EX	/U10-EX	3.0	2.0	14.7			
70	GP66/7GP66S	0.5~3.0	2.5	19.6	20.0	24.5	

Notes (1) The recommended tightening stress is the pressure required under standard conditions without consideration to the endforce due to internal fluid. It is the stress on the contact area of the gasket.

For No.7010, grooved flanges should be used in principle.

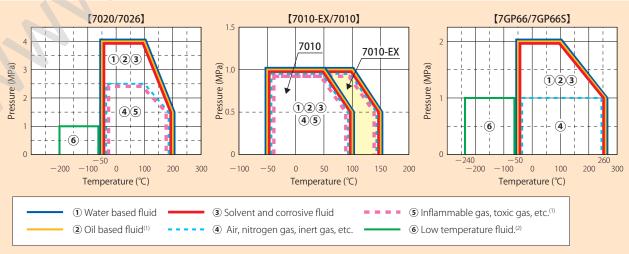
Remark The m, y values of VALFLON Gaskets are the same as those of fluororesin gaskets specified in JIS B 2206. However, the values listed for No. 7010, No. 7010-EX, No. 7GP66 and No. 7GP66S are our recommendations.

■ Characteristic Values of VALFLON Gaskets ■

Items		7020 7		70	026 7010		0-EX	7010		7GP66		Remark
Thickness (mm)		1.5	3.0	1.5	3.0	1.5	3.0	1.5	3.0	1.5	3.0	_
Tensile strength (MPa)		15.6	15.8	24.2	23.2	26.4	24.2	30.2	27.3	24.0	18.4	
Compressibility (34.3MPa)		4	5	4	5	20	12	19	12	69	71	JIS R 3453
Recovery (34.3MPa)		69	54	67	63	63	48	51	64	15	16	
Density	(kg/m³)	2330	2300	2070	2070	2210	2200	2170	2180	620	670	_
Creep relaxation	100°C×22h	37.2	55.0	42.8	60.8	63.7	79.6	75.9	88.4	51.9	68.3	JIS R 3453
(20.6MPa)(%)	200°C×22h	66.7	81.0	79.3	85.5	86.0	90.8	92.4	97.3	59.3	75.3	JIS K 5455
Sealability ⁽¹⁾ (Pa·m³/s)Without paste		1.7×10 ⁻⁴	or below	2.8>	< 10-4	_						

Note (1) Sealability test criteria: JIS 10K50A, Internal pressure He 1.0MPa, Tightening stress 25.5Mpa, Thickness 1.5mm Remark The above values are measurements, and not regulatory values.

■ Allowable ranges per fluid ■



Notes (1) Application of 7GP66 or 7GP66S to inflammable gas or toxic gas is not recommended.

(2) Application of 7010-EX or 7010 to low temperature fluids is not recommended.