





VALQUA No. 8590 Series / 6590 Series / 7590 Series / M590 Series

Non-Asbestos Spiral Wound Gaskets use Non-Asbestos inorganic paper, VALQUAFOIL™ (expanded graphite) and VALFLON® (PTFE) tape as filler materials, and exhibit good elasticity by means of a V-shaped hoop.

These gaskets are suitable at joints for pipe flanges, heat exchangers, towers & tanks, valve bonnets and other equipment that handle high temperature & high pressure fluids used in various industries including oil refining, chemical, power, gas and shipbuilding.

("VALQUAFOIL™ " is a registered trademark in Japan for its expanded graphite of NIPPON VALQUA)

("VALFLON®" is a registered trademark in Japan for its fluororesin products of NIPPON VALQUA)

Name	Filler material	Basic type	With inner ring	With outer ring	With inner & outer ring
					
CLEANTIGHT®	Non-Asbestos inorganic paper	No.8590	No.8592	No.8591	No.8596
BLACKTIGHT™	VALQUAFOIL™ tape	No.6590	No.6592	No.6591 <sup>(1)</sup>	No.6596
WHITETIGHT™	VALFLON® tape	No.7590	No.7592	No.7591 <sup>(1)</sup>	No.7596
Mica filler products	Mica tape	No.M590	No.M592	No.M591	No.M596

Note(1) Since No.6591 and No.7591 may cause radial buckling in the inner diameter side depending on service conditions, employ gaskets with inner & outer rings as much as possible.



CLEANTIGHT®

VALQUA No. 8590 Series

These Spiral Wound Gaskets use non-asbestos based inorganic paper instead of conventional asbestos filler, and are more economical compared to other products employing non-asbestos fillers (VALQUAFOIL™ or VALFLON®).

Features

- ▶ They have heat resistance comparable to that of asbestos fillers.
- ▶ They can be used with the same design as conventional asbestos spiral wound gaskets.
- ▶ Products that comply with nuclear power specifications are also available.



BLACKTIGHT™

VALQUA No. 6590 Series

Using pure graphite (expanded graphite) sealing material, VALQUAFOIL™, as filler material, these Spiral Wound Gaskets have excellent sealing properties and also respond well to heat and pressure cycles.

Features

- ▶ Excellent air tightness that significantly improves sealing performance for gas and vacuums.
- ▶ Responds well to heat and pressure cycles, which reduces the frequency of retightening.
- ▶ They also have excellent radiation resistance (products complying with nuclear power specifications are available).
- ▶ They exhibit excellent sealing properties at very low temperatures. (No.6596VC type has been developed for cryogenic use. Further information is available upon request.)

Applications

These gaskets are particularly best suited for use in handling high temperature & high pressure steam, as well as cryogenic fluids such as LNG, liquid nitrogen and liquid hydrogen.



WHITETIGHT™

VALQUA No. 7590 Series

Using VALFLON® (PTFE) tape having excellent chemicals resistance as filler material, these Spiral Wound Gaskets are more effective than other filler materials in sealing corrosive fluids and air tightness, thus are suitable as gas and vacuum seals.

Features

- ▶ Together with excellent corrosion resistance and a suitable selection of hoop materials, they can be applied to almost all fields of fluid applications.
- ▶ Excellent air tightness significantly improves sealing performance against gas and vacuums.

Applications

Particularly suitable as gaskets for corrosive fluid seals and oxygen as well as for gas and vacuum seals.



Mica filler products

VALQUA No. M590 Series

These spiral wound gaskets are made of special clothless mica filler containing minimal organic constituents like rubber and has excellent heat resistance. Please use graphite tape line added spiral wound gaskets for places in which greater sealability is required

Features

- ▶ Maximum service temperature is 750°C.
- ▶ By optimizing the shape of mica particle, sufficient filler strength is acquired, eliminating the need for cloth reinforcement and the like.

Applications

For HTS (Heat transfer salt) application or high temperature application up to 750°C

Ordering Information

Please specify the following to place an order for these products:

1. Product number	4. Presence of special specification	7. Quantity
2. Material	5. Nominal pressure, Nominal diameter	
3. Shape	6. Operating temperature, Fluid	

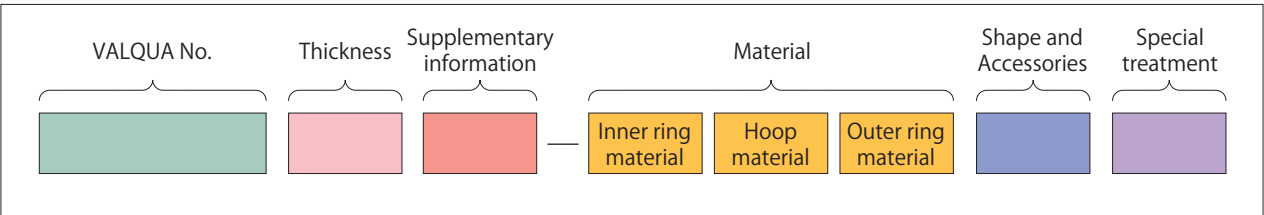
VALQUA No.						Thickness <sup>(1)</sup>		Supplementary information	
Classification	Types	BLACKTIGHT™	WHITETIGHT™	CLEANTIGHT®	Mica filler products	Nominal thickness	Code	Content	Code
	Filler material	VALQUAFOIL™ tape	VALFLON® tape	Non-Asbestos inorganic paper	Mica tape				
	Basic type	6590	7590	8590	M590	1.6 mm	P	Graphite tape line added	L <sup>(2)</sup>
	With outer ring	6591	7591	8591	M591	3.2 mm	T		
	With inner ring	6592	7592	8592	M592	4.5 mm	V	Graphite tape line added with special requirements incorporated	S <sup>(2)</sup>
	With outer & inner ring	6596	7596	8596	M596	4.8 mm	M	Cryogenic Temperature service	C <sup>(3)</sup>
						6.4 mm	W		
						Others	X	Others	—

Note (1) 4.5, 4.8, 6.4mm are available for mica filler products

Note (2) Available for CLEANTIGHT® and mica filler products

(3) Available for BLACKTIGHT™ only

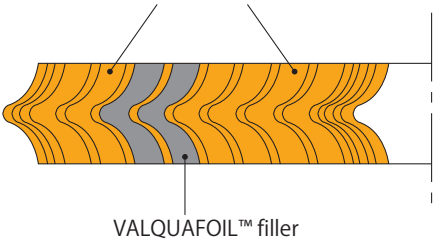
Please refer to the following guide if necessary:



Material						Shape and Accessories		Special treatment	
Inner ring material		Hoop material		Outer ring material					
Content	Code	Content	Code	Content	Code	Content	Code	Content	Code
SUS304	E	SUS304	E	SUS304	E	Basic model	Z	Without Special treatment	Z
SUS304L	L	SUS304L	L	SUS304L	L				
SUS310S	O	SUS310S	O	SUS310S	O				
SUS316	G	SUS316	G	SUS316	G	Basic model + Handle	B	Nuclear application	E
SUS316L	H	SUS316L	H	SUS316L	H				
SUS317L	Q	SUS317L	Q	SUS317L	Q				
SUS321	J	SUS321	J	SUS321	J	Basic model + Rib(s) heat exchanger application	Y	Pitting corrosion-preventive finish	C
SUS347	K	SUS347	K	SUS347	K				
SUS410	R	SUS410	R	SUS410	R				
SUS430	U	SUS430	U	SUS430	U	Basic model + Hanger	H	Degreased	B
Monel 400	M	Monel 400	M	Monel 400	M				
Nickel 201	N	Nickel 201	N	Nickel 201	N				
Titanium TP340	T	Titanium TR270	T	Titanium TP340	T	Irregular shape without accessories	E	Other special treatment （ Also includes combinations for the above special treatments ）	X
Incoloy 800	W	Incoloy 800	W	Incoloy 800	W				
Inconel 600	Y	Inconel 600	Y	Inconel 600	Y				
Aluminum	A	Aluminum	A	Aluminum	A	Other special shapes	X		
Low CS	S	Hastelloy C276	V	Low CS	S				
Hastelloy C276	V	Copper	C	Hastelloy C276	V				
Others	X	Others	X	Others	X				
Not applicable	Z			Not applicable	Z				

▼Spiral wound gaskets with lines

Non-asbestos inorganic filler or Mica filler



By winding VALQUAFOIL™ filler in the middle of inorganic fillers, these spiral Wound Gaskets have enhanced gas sealability with increased compatibility with flanges. Further, the inner filler and outer filler shuts off the oxygen supply, inhibiting the oxidation of VALQUAFOIL™ under oxidizing conditions and makes it possible to be used in high temperatures.

▼ Combination of special treatments and each product

VALQUA No.	Names	Nuclear application (Code E)	Pitting corrosion preventive finish (Code C)	Degreased (Code B)
6590	BLACKTIGHT™	○	Standard	○
7590	WHITETIGHT™	×	×	○
8590	CLEANTIGHT®	○	○	○
M590	Mica filler products	×	○	○

○ Available  
× Unavailable