Nostro Identificativo tipo Materiale:23

Technical data sheet(Rev.Nov.2019)

FASIT HT/BA-GL

(Particolari/Guarnizioni realizzate con processo di taglio da lastra con queste caratteristiche)

Composition: Glass fibres, aramid fibers, inorganic fillers, NBR binder.

General properties and application

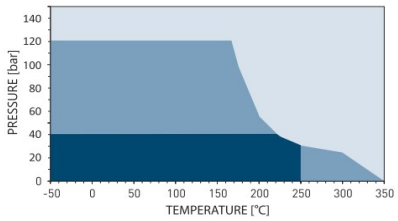
Fasit HT/Ba-GL combines excellent thermal and chemical resistence with outstanding mechanical properties, especially bolt torque retention. Is particularly suited for gas and steam supplies, heating systems, pumps and compressors.

Thecnica data: (typical values thicness 2.0 mm)

Compressibility:	ASTM F36/J	7	%
Recovery:	ASTM F36/J	55	%
Tensile strenght	ASTM F152	11	MPa
Stress resistance – 16h, 300°C, 50 Mpa – 16h,175°C, 50MPa	DIN 52913	 33 38	 Mpa MPa
Specific leak rate	DIN 3535/6	0,03	mg/(s m)
Thicness increase: – Oil IRM 903, 5 h, 150°C – ASTM FUEL B, 5h, 23°C	ASTM F146	 3 5	 % %
Max operating conditions – peak temperature – Continuous temperature – continuos temperature with steam		 440 350 250	 °C °C °C
Pressure		120	bar
Compression modulus -At room temperature:E(KSW) -At elevated temperature:E(KSW/200°C)	DIN28090-2	 % %	 6,9 7,9
Percentage creep relaxation -At room temperature:E(KSW) -At elevated temperature:E(KSW/200°C)	DIN28090-2	 % %	 3,3 1,2
Density	DIN28090-1	g/cm3	1,8

P-T DIAGRAM

EN 1514-1, Type IBC, PN 40, DIN 28091-2 / 3.8, 2.0 mm



- General suitability - Under common installation practices and chemical compatibility.
- Conditional suitability - Appropriate measures ensure maximum performance for joint design and gasket installation. Technical consultation is recommended.
- Limited suitability - Technical consultation is mandatory.

Optional: antistick 2AS (One side) or 4AS (double side) or graphite

NOTE UTILIZZO CON IDROGENO:

I principali materiali sono idonei all'utilizzo con gas idrogeno a livello di compatibilità chimica. Il parametro critico è rappresentato dalla capacità di tenuta in quanto, a causa delle piccole dimensioni delle molecole di idrogeno, queste possono attraversare la guarnizione sfruttando la porosità del materiale. Pertanto in queste applicazioni un adeguato serraggio della guarnizione riveste un'importanza fondamentale e deve essere parametrizzato alla classe di tenuta richiesta e alla pressione del fluido. Anche la geometria della guarnizione può influire sull'effettiva tenuta: si consiglia quindi di eseguire test specifici sul campo e di ridurre se possibile lo spessore. Consigliamo un rapporto tra larghezza della fascia e spessore della guarnizione pari o superiore a 4.

http://www.laguarnizione.it/php/it/istruzioni.php

Temperature and pressure represent maximum values and should not be used simultaneously. They are given only for guidance, since they depend not only on the type of gasket material but olso on the assembly condictions. Very important factors are:thickness of material, nature of service medium, type of flange, surface stress. Steam application requires special consideration. The recommendations made are intended to be a guideline for selectiopn of suitable gasket quality Because the function and durability of the products depend upon a number of factors, the data mey be used to support any warranty claims.

ATTENZIONE: Valori ricavati da test eseguiti su normale giunto flangiato dove la superficie di appoggio è molto maggiore dello spessore. Per guarnizioni dalla fascia piccolina (Esempio raccorderia, ...) occorre fare i test sul campo.

Values derived from tests performed on a normal flanged joint where the surface of the support is much greater than the thickness. For small-band gaskets (for example fittings, ...), specific application tests must be performed.

OMOLOGAZIONI

I manufatti da noi realizzati sono ottenuti con processo di taglio a freddo che non altera le proprietà chimico/fisiche del materiale. E' però un processo industriale NON asettico che può lasciare traccia di polveri (Talco, ...) che non ne alterano le proprietà. Si rende quindi necessaria la pulizia/sterilizzaione prima del suo utilizzo dove necessario.

ATTENZIONE: Le guarnizioni ed i nostri manufatti in genere non sono dispositivi di sicurezza. Ove siano presenti pericoli per la sicurezza delle persone (alte pressioni,alte temperature, fluidi pericolosi, ...) prevedere dispositivi aggiuntivi di sicurezza certificati.

E' compito del progettista dell'impianto scegliere il tipo di materiale adeguato e valutare eventuali pericoli di rottura del manufatto (Guarnizione, bandella, paracolpi, ...) e prevenirli.

Seguono le omologazioni disponibili:

DIN-DVGW DIN3535-6 **Pulire e sterilizzare il manufatto prima dell'utilizzo**
DIN30653 (Occorre concordare marchiatura) **Pulire e sterilizzare il manufatto prima dell'utilizzo**
RE 1935/2004 and GMP for use in gasket for pipe Classification 4 (very small contact area and relatively short contact time) Ther material and articles with natural and synthetic rubber for food contact are tested in accordance with BfR Directive XXI. it is determined in what area (Classification 1 to 4) the material is used. Gasket for pipes are classified in category 4 (see BfR directive XXI - category 4, point 2.3.1 definition. **(DISPONIBILE PROSSIMAMENTE) RE.2026/2006 (G.M.P.)** Al fine di poter garantire il giusto processo produttivo richiesto dai regolamenti europei per i materiali a contatto con alimenti in fase d'ordine occorre sempre indicare che il materiale richiesto è per contatto con alimenti. In assenza di tale richiesta esplicita non verranno eseguiti i necessari controlli per garantire il processo e la tracciabilità della lavorazione. **Pulire e sterilizzare il manufatto prima dell'utilizzo**
BAM (Oxygen) Il trattamento/sgrassatura della guarnizione previsto dalla normativa per ossigeno deve essere effettuato dall'utilizzatore finale.
TA-LUFT(VDI2440)
API 607
Germanischer Lloyd
WRAS
ISO 10497
TZW ELL
ABS
BS 7531 Grade X
Fire Safe Test ISO 10497
DNV GL

NOTE SULLE OMOLOGAZIONI IN GENERE AL SEGUENTE LINK:
https://st.laguarnizione.it/?ID=DOC0003

DICHIARAZIONI GENERICHE (Reach, Rosh,EUDR , BPA free, ...) Al seguente link:
https://st.laguarnizione.it/?ID=DOC0004

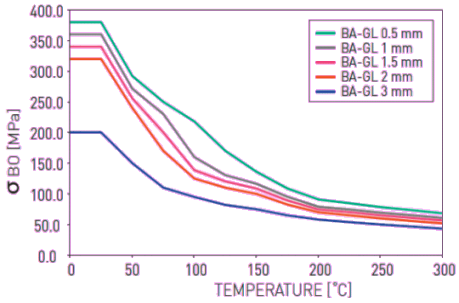
COMPATIBILITY

Acetamide	+	Dioxane	−	Oleic acid	+
Acetic acid, 10%	+	Diphyl (Dowtherm A)	+	Oleum (Sulfuric acid, fuming)	−
Acetic acid, 100% (Glacial)	−	Esters	?	Oxalic acid	?
Acetone	?	Ethane (gas)	+	Oxygen (gas)	+
Acetonitrile	−	Ethers	?	Palmitic acid	+
Acetylene (gas)	+	Ethyl acetate	?	Paraffin oil	+
Acid chlorides	−	Ethyl alcohol (Ethanol)	+	Pentane	+
Acrylic acid	?	Ethyl cellulose	?	Perchloroethylene	−
Acrylonitrile	−	Ethyl chloride (gas)	−	Petroleum (Crude oil)	+
Adipic acid	+	Ethylene (gas)	+	Phenol (Carbolic acid)	−
Air (gas)	+	Ethylene glycol	+	Phosphoric acid, 40%	?
Alcohols	+	Formaldehyde (Formalin)	?	Phosphoric acid, 85%	−
Aldehydes	?	Formamide	?	Phthalic acid	+
Alum	+	Formic acid, 10%	+	Potassium acetate	+
Aluminium acetate	+	Formic acid, 85%	?	Potassium bicarbonate	+
Aluminium chlorate	?	Formic acid, 100%	−	Potassium carbonate	+
Aluminium chloride	?	Freon-12 (R-12)	+	Potassium chloride	+
Aluminium sulfate	?	Freon-134a (R-134a)	+	Potassium cyanide	+
Amines	−	Freon-22 (R-22)	?	Potassium dichromate	?
Ammonia (gas)	?	Fruit juices	+	Potassium hydroxide	?
Ammonium bicarbonate	+	Fuel oil	+	Potassium iodide	+
Ammonium chloride	+	Gasoline	+	Potassium nitrate	+
Ammonium hydroxide	+	Gelatin	+	Potassium permanganate	?
Amyl acetate	?	Glycerine (Glycerol)	+	Propane (gas)	+
Anhydrides	?	Glycols	+	Propylene (gas)	+
Aniline	−	Helium (gas)	+	Pyridine	−
Anisole	?	Heptane	+	Salicylic acid	?
Argon (gas)	+	Hydraulic oil (Glycol based)	+	Seawater/brine	+
Asphalt	+	Hydraulic oil (Mineral type)	+	Silicones (oil/grease)	+
Barium chloride	+	Hydraulic oil (Phosphate ester based)	?	Soaps	+
Benzaldehyde	−	Hydrazine	−	Sodium aluminate	+
Benzene	+	Hydrocarbons	+	Sodium bicarbonate	+
Benzoic acid	?	Hydrochloric acid, 10%	?	Sodium bisulfite	+
Bio-diesel	+	Hydrochloric acid, 37%	−	Sodium carbonate	+
Bio-ethanol	+	Hydrofluoric acid, 10%	−	Sodium chloride	+
Black liquor	?	Hydrofluoric acid, 48%	−	Sodium cyanide	+
Borax	+	Hydrogen (gas)	+	Sodium hydroxide	?
Boric acid	+	Iron sulfate	+	Sodium hypochlorite (Bleach)	?
Butadiene (gas)	+	Isobutane (gas)	+	Sodium silicate (Water glass)	+
Butane (gas)	+	Isooctane	+	Sodium sulfate	+
Butyl alcohol (Butanol)	+	Isoprene	+	Sodium sulfide	+
Butyric acid	+	Isopropyl alcohol (Isopropanol)	+	Starch	+
Calcium chloride	+	Kerosene	+	Steam	+
Calcium hydroxide	+	Ketones	?	Stearic acid	+
Carbon dioxide (gas)	+	Lactic acid	?	Styrene	?
Carbon monoxide (gas)	+	Lead acetate	+	Sugars	+
Cellosolve	?	Lead arsenate	+	Sulfur	?
Chlorine (gas)	−	Magnesium sulfate	+	Sulfur dioxide (gas)	?
Chlorine (in water)	−	Maleic acid	?	Sulfuric acid, 20%	−
Chlorobenzene	?	Malic acid	?	Sulfuric acid, 98%	−
Chloroform	−	Methane (gas)	+	Sulfuryl chloride	−
Chloroprene	?	Methyl alcohol (Methanol)	+	Tar	+
Chlorosilanes	−	Methyl chloride (gas)	?	Tartaric acid	?
Chromic acid	−	Methylene dichloride	?	Tetrahydrofuran (THF)	−
Citric acid	?	Methyl ethyl ketone (MEK)	?	Titanium tetrachloride	−
Copper acetate	+	N-Methyl-pyrrolidone (NMP)	?	Toluene	+
Copper sulfate	+	Milk	+	2,4-Toluenediisocyanate	?
Creosote	?	Mineral oil (ASTM no.1)	+	Transformer oil (Mineral type)	+
Cresols (Cresylic acid)	−	Motor oil	+	Trichloroethylene	−
Cyclohexane	+	Naphtha	+	Vinegar	+
Cyclohexanol	+	Nitric acid, 10%	−	Vinyl chloride (gas)	−
Cyclohexanone	?	Nitric acid, 65%	−	Vinylidene chloride	−
Decalin	+	Nitrobenzene	−	Water	+
Dextrin	+	Nitrogen (gas)	+	White spirits	+
Dibenzyl ether	?	Nitrous gases (NOx)	?	Xylenes	+
Dibutyl phthalate	?	Octane	+	Xylenol	−
Dimethylacetamide (DMA)	?	Oils (Essential)	+	Zinc sulfate	+
Dimethylformamide (DMF)	?	Oils (Vegetable)	+		

All information and data quoted are based upon decades of experience in the production and operation of sealing elements. This data may not be used to support any warranty claims. With its publication this latest edition supersedes all previous issues and is subject to change without further notice.

σ_{BO} DIAGRAM

DIN 28090-1



σ_{B0} diagrams represent σ_{B0} values for different gasket material thicknesses. These values indicate the maximum in-service compressive pressures which can be applied on the gasket area involved without destructing or damaging the gasket material.

P-T diagrams indicate the maximum permissible combination of internal pressure and service temperature which can be simultaneously applied for a given gasket according its material type, thickness, size and tightness class. Given the wide variety of gasket applications and service conditions, these values should only be regarded as guidance for the proper gasket assembly. In general, thinner gaskets exhibit better P-T properties.

CHEMICAL RESISTANCE CHART

The recommendations made here are intended as a guideline for the selection of a suitable gasket type. As the function and durability of products are dependent upon a number of factors, the data may not be used to support any warranty claims.

\+ Recommended
? Recommendation depends on operating conditions
− Not recommended