IsoSeal GGR

Flange insulating gasket for operating temperatures up to 150 °C

Applications	Gas / oil / fuels / water / steam / superheated steam / other media on request	
suitable for flanges according to	EN 1092-1 and DIN 2632-2637	ANSI B 16.5 ANSI B 16.47
Sizes	DN15 to DN900	1/2"-40"
Pressure	up to PN64	Class 150, 300, 600
Sealing principle	Force shunt Carrier material GRP Sealing medium graphite	
Thickness when installed	4mm (Standard) Special dimensions and thicknesses up to 30mm on request. For higher pressure ratings, see IsoSeal D200	

Carrier Material (GRP)

Binder	Epoxy
Material	Glasfilamentgewebe
Color	light green / green

	Unit	*Value*	*Test method*
Thickness	mm	4,0 – 20	
Density	g/cm³	2,0	ISO 1183/A
Tensile strength	MPa	240	ISO 527
Compressive strength	MPa	500 / 350 (23°C / 150°C)	ISO 604
Bending strength	MPa	300 / 200 (120°C / 150°C)	ISO 178
Operating temperature	°C	150	IEC 60216
Maximaltemperatur	°C	180	IEC 60216
Cryogenic	°C	> -60	(others on request)
Breakdown voltage (at 90° parallel to the layering)	Kv	40	ICE 60243
Dielectric strength (1min test voltage, 3 mm thickness)	kV/mm	13	IEC 60243
Water absorption	mg	20	ISO 62/1

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Data Sheet (Page 2 of 2)

Sealing material

Material	Graphite
Color	anthracite

	Unit	*Value*	*Test method*
Thickness	mm	1,5	
Density	g/cm³	1,25	DIN E28090-2
Pressure resistance	MPa	> 45	DIN 52913
Pressing	%	> 20	ASTM F36A
Springback	%	> 12	ASTM F36A
Ascherest	%	≤ 2	DIN 51903
Chloride Content	ppm	≤ 50	
Min. surface pressure	MPa	15	
Max. surface pressure	MPa	120	
Max. continuous temperature	°C	500	

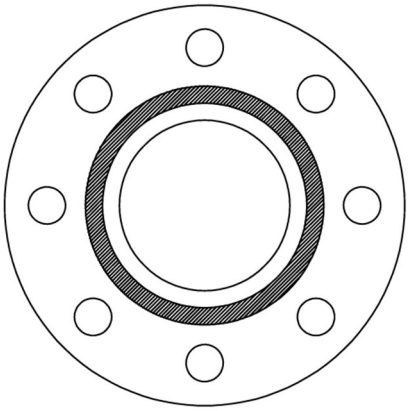
Approvals

DVGW	NG-512BL0367
TA-Luft	MPA Stuttgart Certificate No. 0019/2008
BAM	Oxygen approval up to 100 °C AZ.2-2357/2011

Remarks

Sealing substrates made of **epoxy resin-bonded glass filament laminates** are highly resistant to most chemicals, fuels, oils, water, hot water and water vapour.
Exceptions: Strong alkalis, acids and oxidizing agents.
Expanded graphite has excellent sealing properties, is not subject to media restrictions and is resistant to aging and temperature up to 500 °C and in cryogenic applications to at least -60 °C.

Sketch
for flanges
DN100 PN10-16



As of: January 2025