



Industrie Service

*Flexitallic*

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The above organization is hereby entitled, on the basis of certificate No. 14 03 9041 004 and the appendant test report, to affix the certification body's certification mark shown below to the following product (see description below).



The product satisfies the following requirements

– "TA Luft" the German Clean Air Requirements – (leak detection)

The product is thus considered to be high-quality in accordance with the above mentioned requirements. The precondition for this is the use of flange systems made of steel which achieve or exceed the minimum stress-to-seal during installation and which are operated below the maximum permissible temperature and the maximum permissible internal pressure. The parameters for this (stress-to-seal, temperature and internal pressure) are given below.

The basis of this approval is the test procedure of TÜV Anlagen- und Umwelttechnik (TÜV plant and environmental technology) and VDI (Association of German Engineers) 2440, here the November 2000 version. This involves testing the performance of flange gaskets with regard to their tightness and observance of specific leak rates in accordance with VDI 2440 [ $\lambda \leq 10^{-4}$  mbar x l/(s x m);  $\sigma = 30$  MPa;  $\Delta p = 1$  bar]. In addition to this, the gasket meets the requirements of the pressure equipment directive (PED) guidelines 97/23/EG.

**Product description:**

"SIGMA 588" flat gasket (identification colour white) for static use, based on PTFE (Polytetrafluorethylen) with fillers.

gasket thickness, uncompressed:	2 mm
operating pressure:	max. 40 bar
operating temperature:	max. 230 °C
stress-to-seal in the case of VDI 2440:	30 MPa

**Note:**

The permissible internal pressure decreases as the nominal bore increases while the residual stress-to-seal remains unchanged. Additional pipe forces must not lead to an inadmissible reducing of the stress on the gasket.

This certificate is valid until **March 2017**.  
Annual monitoring of production.

Munich, 19 March 2014

TÜV SÜD Industrie Service GmbH  
Institute for Plastics

e. g. Schweizer

