# Flexitallic

#### PRODUCT DATASHEET

# FLEXPRO<sup>™</sup> STYLE PN

Flexpro<sup>™</sup> Style PN is a high performance semi-metallic gasket designed for use on male-female and tonguegroove flanged connections.



This Data Sheet refers to the material as supplied. The information contained herein is given in good faith, but no liability will be accepted by the Company in relation to same.

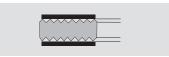
We reserve the right to change the details given on this Data Sheet as additional information is acquired. Customers requiring the latest version of this Data Sheet should contact our Applications Engineering

The information given and, in particular, any parameters, should be used for guidance purposes only. The Company does not give any warranty that the product will be suitable for the use intended by the customer.

#### **Health & Safety**

For further Health and Safety information please see the relevant Material Safety Datasheets or contact Flexitallic UK Ltd.





Flexpro™ Style PN is comprised of a concentrically serrated solid metal core with a soft, conformable sealing material bonded to both faces. The soft material provides low stress gasket seating and the strong metal core provides rigidity and blowout resistance. The serration profile on the metal core enhances sealing performance by inducing stress concentrations on the sealing surfaces.

## Service:

Flexpro™ Style PN gaskets have been successfully used for many years and are suitable for use in a wide range of sealing applications, most notably heat exchangers. They are capable of providing high integrity seals in most demanding environments, even in load compromised situations. Gasket metallurgy, serration profile and facing material selection can be tailored to suit specific applications. Typical applications include HP and superheated steam, high pressure hydrocarbon and chemical service.

Maximum recommended temperature: 1000°C (1830°F)

Maximum recommended pressure: ASME B16.5 2500#

#### **Materials:**

Facing material: Flexicarb, Thermiculite<sup>®</sup>, Sigma<sup>®</sup>, Silver.

Serrrated metallic core\*\*: Austenitic stainless steels, high-temp alloy grades.

\*Material combination dependent on application.

\*\*Other, customer specified materials may be available on request.

## **Availability:**

Gasket size: Up to 5000mm

Thickness range: 2.5mm to 5.0mm

Other thicknesses may be available on request or may be used when design contraints dictate.

\*\*\*Also available in various pass bar configurations to suit partition rib arrangement on heat exchangers.

Please contact Applications Engineering Department for applications outside these parameters.

# **Typical Physical Properties of Facing Foil:**

ASME 'Y' Factor	17.2 Mpa (2500 psi)
ASME 'm' Factor	2.0
PVRC 'a'	0.33
RVRC 'Gs'	14 psi

The above physical properties are applicable for standard serration profile core faced with 0.5mm, 1g/cc Flexicarb foil.

Gasket factors to EN13555 for design calculations to EN1591 are available on request.





# **PRODUCT DATASHEET**

# **Health & Safety:**

Because of the processes which take place during manufacture, the product is believed to present no health and safety hazard and, under normal handling and use it is unlikely that the product will give rise to significant levels of exposure to constituent materials.

Flexpro<sup>TM</sup> is a semi metallic laminate containing exfoliated graphite reinforced with aserrated metallic core.

Under harsh mechanical treatment (e.g. high speed abrasion) the constituents may give rise to irritant dusts which, in extreme cases of exposure, could lead to more serious respiratory problems. Occupational exposure to such dusts should therefore be minimised and kept below relevant national exposure limits. Good standards of hygiene should be applied during gasket cutting operations and off-cuts should be disposed of by transfer to a site appropriately licensed to accept industrial materials of this nature.

Graphite is combustible. At elevated temperatures or in a sustained fire, toxic fumes may be produced.

The material is conductive. Graphite debris or dust should not be allowed to penetrate electrical equipment.

The metallic core is selected for the particular application and is machine finished to remove sharp edge or burr so that ppe are kept to a minimum.

For further Health and Safety information please see the relevant Material Safety Datasheet or contact Flexitallic UK Ltd.

