



# FREUDENBERG XPRESS® QUALITY IN RECORD TIME

FREUDENBERG  
SEALING TECHNOLOGIES

 **FREUDENBERG**  
INNOVATING TOGETHER

# REPAIR DEMANDS, SMALL SERIES, PROTOTYPING

## QUICK SERVICE FOR YOUR SEALING AND FORMED PARTS DEMANDS

### TYPICAL EXAMPLES FOR STANDARD SEALS



Piston guides made of laminated fabric



Wipers (e.g. NBR) with aluminum housing



Compact piston seals made of NBR/PU/POM



FX\*-NI 150 elastomer rod seal



FX\*-LF 300 reduced friction rod seal made of PU



O-rings (e.g. EPDM or NBR)

**Tailor-made, economical and fast.** Freudenberg Xpress minimizes your downtime and maximizes your flexibility. We manufacture machined seals, adapted seals, customized gaskets and formed parts for you – as individual pieces or in economical small series.

#### For this, we have only one ideal: the original!

Freudenberg Xpress sites are located right in the middle of our production plants worldwide. In this way, you benefit directly from more than 165 years of manufacturing know-how and the rigorous quality control of our series production.

With the original materials and sealing lip geometries, we achieve the quality of a series product.

#### What this means for you: No tradeoffs with regard to the safety of your seal – even when time is of the essence.

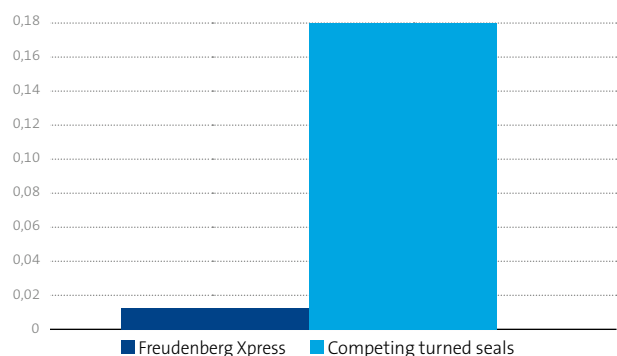
How you can reach us: A worldwide network of Freudenberg Xpress contact partners are available for you from only a short distance away. Extremely fast delivery is available because we offer more than 15 production facilities, warehouses and service centers throughout Europe, North America, South America and Asia.

Urgent spare parts orders can be delivered to the desired location within 24 hours.

#### BENEFITS AT A GLANCE

- Original profiles and materials from the series production
- Customized solutions with standard profiles
- Fast delivery for your repair needs – if necessary within 24 hours
- Economical small batch series manufacturing
- Long service life due to unique material characteristics and manufacturing processes

#### LEAKAGE (G) PER 1,000 DOUBLE STROKES



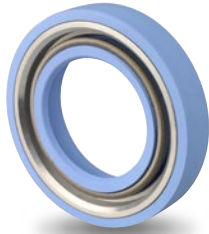
**Test conditions:** 400 bar (5800 psi); 100 °C (212 °F); 0.3 m/s; 50,000 double strokes

**Numerous studies prove:** Freudenberg Xpress achieves the best leakage values compared to the competition.

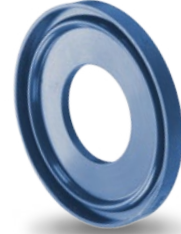
\*FX designates lathe cut original type series parts

# ORIGINAL MATERIALS AND PROFILES FOR THE FOOD AND PHARMACEUTICAL INDUSTRY

## A SOLUTION FOR EVERY INDUSTRY SECTOR



RMS Rapid Machined Simmerring  
made of Fluoroprene XP



Clamp Seal  
made of Fluoroprene XP

**Freudenberg Xpress** provides highly resistant seals and formed parts for the special requirements of the process industry. Our seals can withstand the fatty media, high temperatures, and pressures that are common in the food and pharmaceutical industries. Freudenberg Xpress offers proven solutions even for those with aggressive cleaning media contact. The materials that come into contact with food or pharmaceuticals conform to FDA guidelines and are approved in accordance with global standards such as USP and NSF.

**The blue universal material 75 Fluoroprene® XP 41** is the best solution for applications with polar, nonpolar, fatty and aggressive CIP/SIP cleaning media. Freudenberg Xpress offers many product variants made from this unique material. For applications with less aggressive media the black 70 EPDM 291 is an excellent alternative.

## CUSTOMIZED SEALS FOR HEAVY INDUSTRY

### ORIGINAL MERKEL DESIGNS AND MATERIALS

**Freudenberg offers 10 product lines for heavy industry** applications that are currently available in the fast delivery service – continuous, cut or precision-joined.

The basic rings come from the series production. Guide belts and V-shaped packings are cut to measure and supplied open. A specially developed joining method allows individual diameter specifications for wipers, deflectors and radial shaft seals.



Merkel Radiamatic RPM 41  
Radial shaft seal, particularly  
suitable for working rolls in  
steel works



Merkel Enviromatic EA\*  
Innovative deflector, re-  
places V-rings in demanding  
applications



Merkel Guivex SBK and KBK, as well  
as the types SB and KB. Guide belts  
made of laminated fabric



Merkel P 6\* and P 9\*  
Wipers with support elements or with  
additional sealing function



Merkel EK and ES robust V-shaped  
packing seal sets, particularly for  
cylinders in existing installations

\*Delivery time upon request

# CUSTOMER-SPECIFIC SEALS AND FORMED PARTS

"EVERYTHING IS POSSIBLE" IS THE GUIDING THEME HERE

## TYPICAL EXAMPLES FOR FORMED PARTS



Pigs (pipe-cleaning devices)



Diaphragms



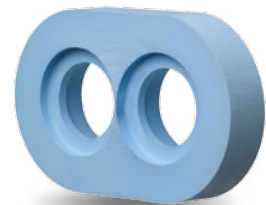
Formed parts made of PU



Formed parts made of PU



Formed parts made of POM



Formed parts made of Fluoroprene XP

**Freudenberg Xpress** not only offers standard seals, but also customer-specific seals and formed parts.

Machined seals are an interesting alternative, especially when production of a series tool is too expensive or due to the special design production is not even possible. In the case of newly developed parts, the threshold ranges is often a critical factor that has to be checked. Prototyping with the Freudenberg Xpress service not only saves time but money as well, since no tools are required for the creation of different functioning models.

Our experts are able to manufacture your individual solution, based on a drawing, sample or technical discussion. Formed parts can be manufactured from elastomeric materials such as EPDM, NBR, HNBR, FKM or Fluoroprene XP, polyurethanes as well as from plastics such as POM or PU.

Product modifications are no problem for us either. For example, the dead spaces of lip seals can be lined with silicone in order to allow for use in the food industry. The adherence of production residues and the formation of microfilms are thereby excluded.

### YOUR BENEFITS AT A GLANCE

- Unique turning and milling techniques allow the realization of individual designs
- Not using series tools saves costs
- Prototyping
- Reproduction based on a drawing or sample
- Numerous materials
- Highly competent consulting services





# FREUDENBERG XPRESS® SERVICE CENTER

Freudenberg Xpress has a number of service centers throughout multiple countries, in order to provide you with fast local availability. Please inquire about a service center close to you under **freudenbergxpress-de@fst.com**. More service center can also be found on **<https://www.fst.com/top/locations>**.

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