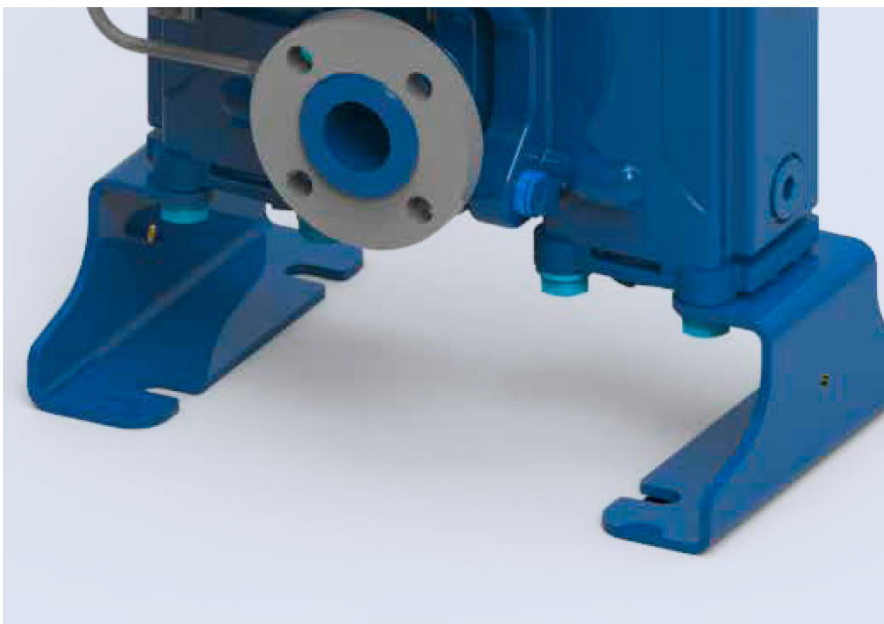




BOLLFILTER Duplex Type BFD



Modern, unique, versatile

THE TASK

Efficiency, profitability and environmental sustainability

Efficiency, profitability and environmental sustainability are increasingly setting the requirements for liquid/solid separation filter technology in all areas of industry. The primary consideration is protecting high-value capital plant from damage caused by system contamination.

This requires efficient technical solutions which minimize the capital, operational and maintenance costs.

The duplex filter type BFD meets all these requirements optimally by unique concepts for the filtration of:

Water



Fuel oil



Lubricant



Alkaline cleaner and chemicals



Machining coolants



THE CONCEPT

An universal series - optimally variable



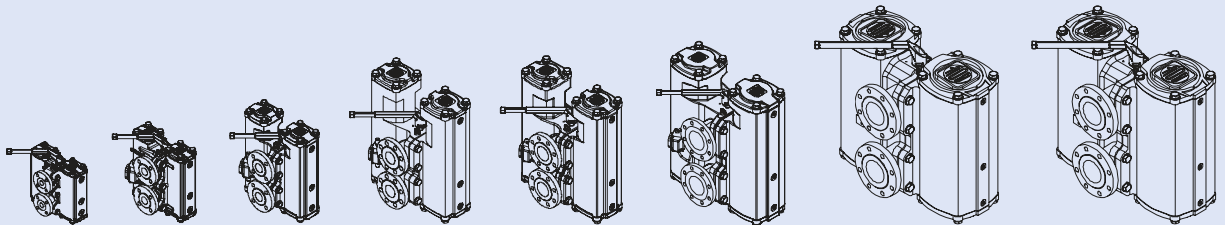
The requirements laid down for a modern double filter are optimized in the design of the new BFD as a result of the versatile concept. In addition, the BFD series combines the utmost levels of economy with operational safety, thanks to:

- Innovative detailed solutions
- Flexible, tailor-made modular construction
- Functionality that sets new standards.

With 60 variants and the available housing materials (ductile iron, cast steel or stainless steel), the BFD series provides a flexible filter solution. The flexibility of the BFD series is enhanced by compliance with the requirements of:

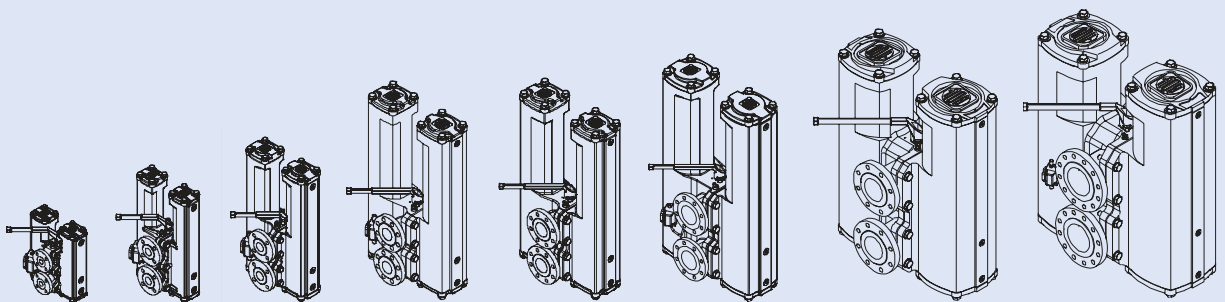
- AD 2000
- EN 13445
- 2014 / 68 / EU
- ASME SECT. VIII DIV. 1
- API 614 und
- U-stamp.

BFD – Short construction: NOMINAL WIDTHS AND HOUSING MATERIALS



In-/Outlet	DN 25	DN 40	DN 50	DN 65	DN 80	DN 100	DN 125	DN 150
Ductile iron	PN 40	PN 40	PN 40	PN 40	PN 40	PN 40	PN 16	PN 16
Cast steel	PN 32	PN 32	PN 32	-	PN 32	PN 32	PN 16	PN 16
Cast stainless steel	PN 32	PN 32	PN 32	-	PN 32	PN 32	PN 16	PN 16

BFD – Long construction: NOMINAL WIDTHS AND HOUSING MATERIALS



In/Outlet	DN 25	DN 40	DN 50	DN 65	DN 80	DN 100	DN 125	DN 150
Ductile iron	PN 40	PN 40	PN 40	PN 40	PN 40	PN 40	PN 16	PN 16
Cast steel	PN 32	PN 32	PN 32	-	PN 32	PN 32	PN 16	PN 16
Cast stainless steel	PN 32	PN 32	PN 32	-	PN 32	PN 32	PN 16	PN 16

Approximate design in the case of $\Delta p^{\text{clean}} = 0,35 \text{ bar}/5,1 \text{ psi}$ with glass fibre elements*

Volume flow	Viscosity	DN 25	DN 40	DN 50	DN 65	DN 80	DN 100	DN 125	DN 150
lpm/gpm (US)	30 cSt	65/17	190/50	245/65	480/127	715/189	1045/276	1870/494	2710/716
lpm/gpm (US)	40 cSt	60/16	175/46	225/59	430/114	650/172	935/247	1710/452	2450/647
lpm/gpm (US)	50 cSt	55/14	160/42	200/53	395/104	595/157	850/225	1580/417	2270/600

* in the case of star pleated elements with stainless steel mesh, approx. 30 % higher volume flow

THE SOLUTION

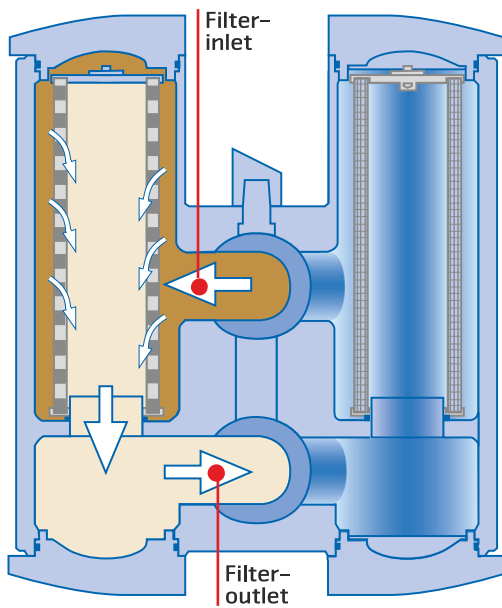
Unique construction – perfect function

Process safety by means of filtration is absolutely fundamental to filtration technology. On the other hand, the aim is also to achieve optimum economy of the process. For this purpose, in addition to a constant flow cross-section in the housing, which avoids unnecessary pressure losses, the new High Flow (HF) generation of filter elements has been developed. This is characterized by low pressure loss, high dirt-absorbing capacity and high throughput.

Configuration example 1:

short housing,

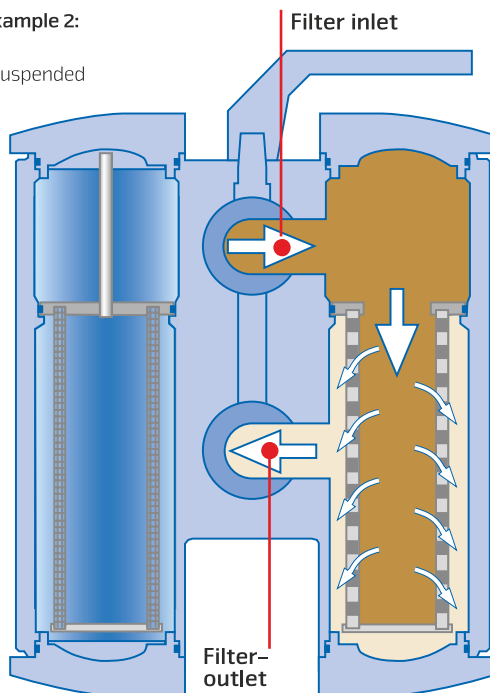
Star pleated element, standing



Configuration example 2:

short housing,

Basket element, suspended



The standing or suspended design of the filter elements underlines the flexibility of the BFD Double Filter series.

Depending upon the process requirement, disposable elements or filter media, which can be regenerated, are used.

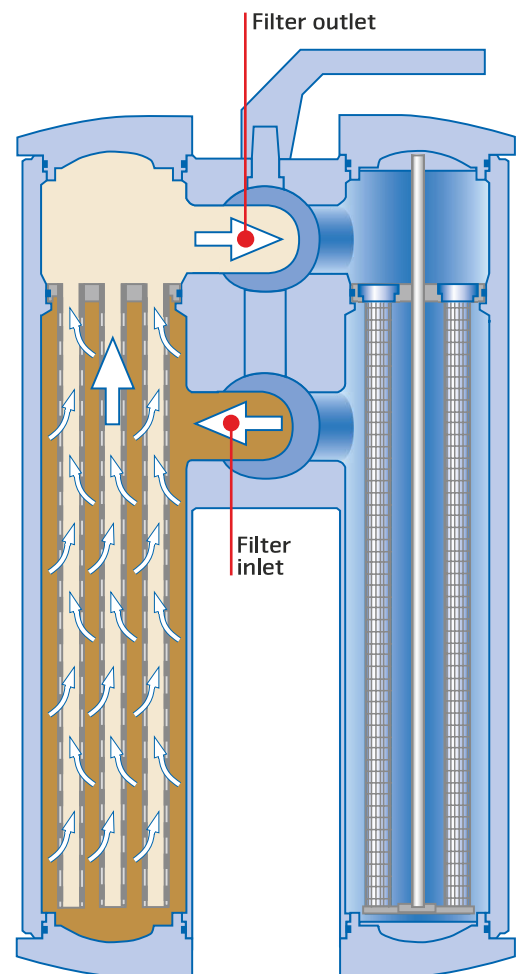
In practical use, the following features of the BFD Double Filter series are especially convincing:

- The compact construction allows for installation in confined spaces
- Minimal pressure losses occur, thanks to filtration areas being optimized for the application and the constant cross-section from inlet to outlet
- The lower housing cover facilitates maintenance, also on the clean side of the filter element
- Thanks to its good accessibility, the filter remains fixed in the pipe when the seal on the ball valve is changed

Configuration example 3:

long housing,

Candle element suspended



THE ADVANTAGES

Efficient operation – reduced costs

Efficiency in the process and functionality in operation and maintenance add up to a number of advantages for the user, which overall lead to a clear reduction in operating costs:

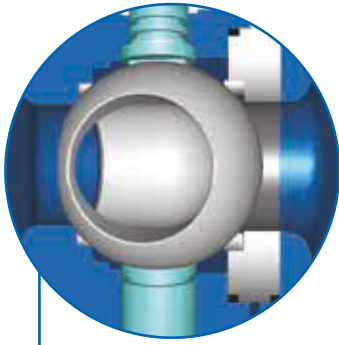
- The 60 basic variants of the series allow for the most economic design in each case
- The two-part housing reduces expenditure on maintenance
- The innovative construction minimizes wear on parts and the risk of faults and thus increases the availability of the whole plant



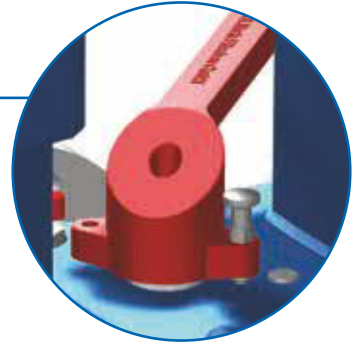
The BOLLFILTER Type BFD unites modern industrial design with standard-setting technology

THE DETAILS

Trend setting innovations as a standard equipment



Smooth running and leakage-free switch-over ball valve for surge-free switch over.
Ball with L-bore

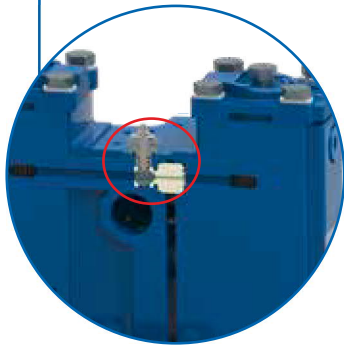


Switch-over safety device locks the switch lever in the end/final position and prevents uncontrolled switching

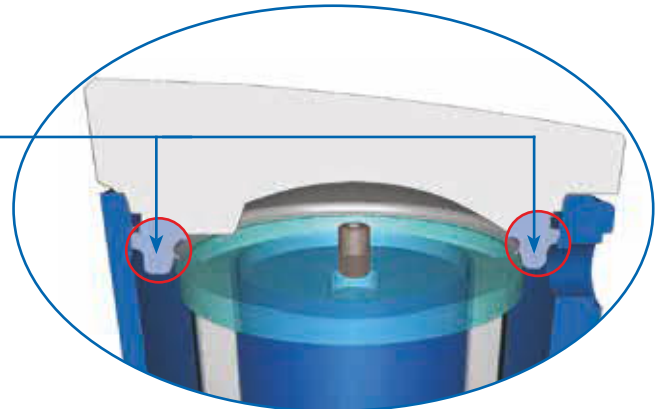


Available with a range of filter elements: basket element, disposable element, candle element or star pleated element (from left to right)

Integrated pressure balance prevents both leakage and damage



The upmost process safety is assured by the shape and self centring design of the cover



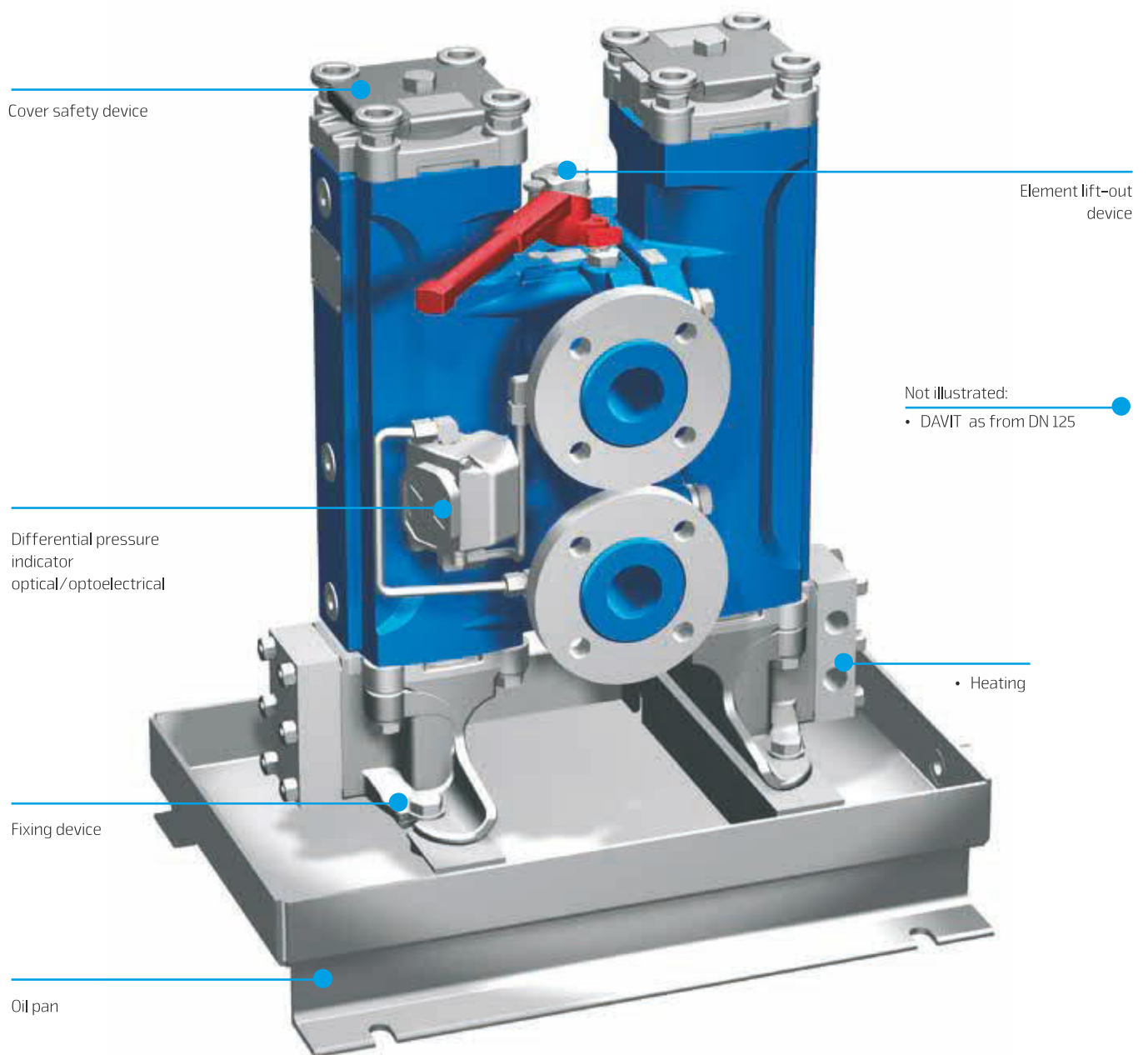
Data and facts at a glance

BOLLFILTER Type BFD	
Operational area	Filtration of water, lubricating oil, coolants, alkaline washing solutions, chemicals
Nominal coupling flange	25 – 150 mm, ANSI 1" - 6"
Housing material	Ductile iron, cast stainless steel, additionally nickel-plated lining in water filters
Maximum flow rate	3000 lpm / 925 gpm (US)
Filter element types	basket element, disposable element, candle element, star pleated element
Filter fineness	3 Micron - 5 mm
Element collapse pressure	10 bar / 145 psi

THE ACCESSORIES

Effective and useful

With the optional accessory parts, users can supplement their chosen configuration of the BOLLFILTER Type BFD.



SERVICE NETWORK

Maximum customer orientation for maximum satisfaction

BOLL & KIRCH continues to prove its strengths as a manufacturer and supplier of filters long after the product has been delivered. As a leading international supplier of marine and industrial filters for filtering fuels, lubricants, coolants and water with a global network of sales and service centers in five continents, BOLL & KIRCH has at its fingertips the, ideal

logistical basis for providing perfect customer support. Naturally, users of the BOLLFILTER Duplex Type BFD also benefit from the advantages this worldwide network provides – swift delivery, faster availability of technical support and a trouble-free supply of replacement parts.



Contact:

Boll & Kirch Filterbau GmbH
Siemensstraße 10-14
50170 Kerpen
Tel: +49 2273 562 0
E-Mail: info@bollfilter.com
www.bollfilter.com

