



# One platform Multiple options

Based on the successful modular platform design of the ICF and ICV Flexline™ family, Danfoss introduces a new range of line components for Industrial Refrigeration, the SVL Flexline™. Flexibility is a key benefit since the entire line of SVL valve inserts, offering five different functions, can be mounted into a single common housing.



# One

**specification**

for the entire valve platform makes selecting the right valve for your application easier. Approved for temperatures of -76°F to +302°F and pressures up to 754 psi. Suitable for all refrigerants, including CO<sub>2</sub>.



# Five

**options**

available for one common housing platform (angle or straight). SVL inserts perform the common functions of stop, hand expansion, check, stop/check, or filter.



# Danfoss SVL Flexline™

## The new flexible range of line components for Industrial Refrigeration

The new SVL Flexline™ offers flexibility, simplicity and efficiency. The backbone of the platform is the common housing which is available as angle or straight. All five function modules: stop, hand expansion, stop/check, check and filter mount in the same housing and have the same high specification making selection, system design and mounting simple and trouble free.

### Benefits from the new SVL Flexline™ platform

One specification makes it very easy to select the right valve for your application.

- Approved for -76 °F to 302 °F and up to 754 psi.
- Suitable for sub-critical CO<sub>2</sub> and heat pump systems.
- Global design and agency approvals.
- Inventory stocked in all regions.

Modular design and shared platform reduces complexity and inventory costs while allowing for fast and easy service.

- Selection of spare parts is easier since fewer SKU's are needed to cover all configurations.
- With multiple applications for a given SKU, inventories will be more flexible and useful.

Common valve housing allows easy and time-saving switch between functions.

- If for some reason, a component has been mounted in the wrong location, the SVL Flexline™ will allow for a quick solution by simply replacing the insert.

### New color coding

The SVL Flexline™ platform features colored seal caps for easy identification of valve function. Red caps for standard and long neck SVA stop valves. Yellow caps for REG-S hand expansion valves and Green caps and markings for SCA-X stop/check valves and CHV-X check valves. Matching color of laser engraved aluminum name tags are also mounted on the valve bonnet.

### Next Generation packing gland

The new packing gland features static and dynamic sealing components that ensure a unique, tight and secure seal throughout the operating conditions covering all approved refrigerants and temperatures in the specification. As a result, the SVL delivers a smooth opening and closing operation, along with very high reliability.

### New specification

The entire SVL Flexline™ platform is covered by one improved specification.

Temperature range:

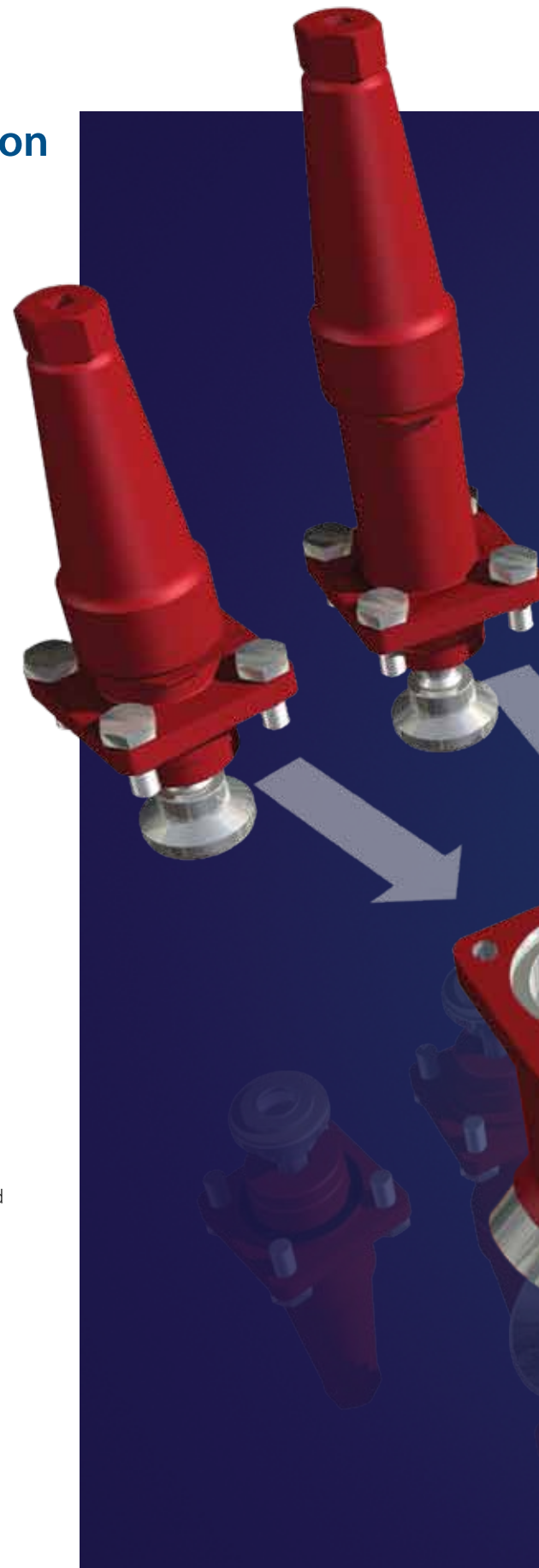
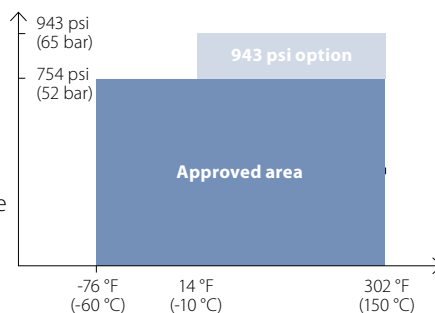
- -76 °F to 302 °F (-60 °C to 150 °C)

Maximum working pressure:

- 754 psi (52 bar)

Valves requiring a maximum working pressure of up to 943 psi (65 bar) within the high temperature range (14 to 302° F / -10 to 150° C) are available. Please contact your local Danfoss sales office.

### New specification





**The new SVL Flexline™ platform**

Valve type		Sizes [in.]
SVA-S/SVA-L	Stop valves	$\frac{3}{8}$ - 8
REG-SA/REG-SB	Hand expansion valves	$\frac{1}{4}$ - 2½
SCA-X	Stop / Check valves	$\frac{1}{2}$ - 5
CHV-X	Check valves	$\frac{1}{2}$ - 5
FIA	Filters	$\frac{1}{2}$ - 8

# SVA stop valves standard and long neck

The SVA stop valves for the new platform are available in standard and long neck versions.

## Packing gland

The new packing gland design is standard for the entire SVL Flexline™ platform. The aluminum gasket placed beneath the packing gland, together with the spring loaded PTFE lip sealing, allows the packing gland to be used with flammable and high pressure refrigerants.

## Primary seal

The primary seal is in contact with the refrigerant. Made of aluminum or PTFE, the seal is compatible with all refrigerants.

## Secondary seal

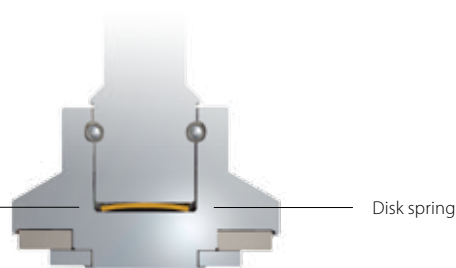
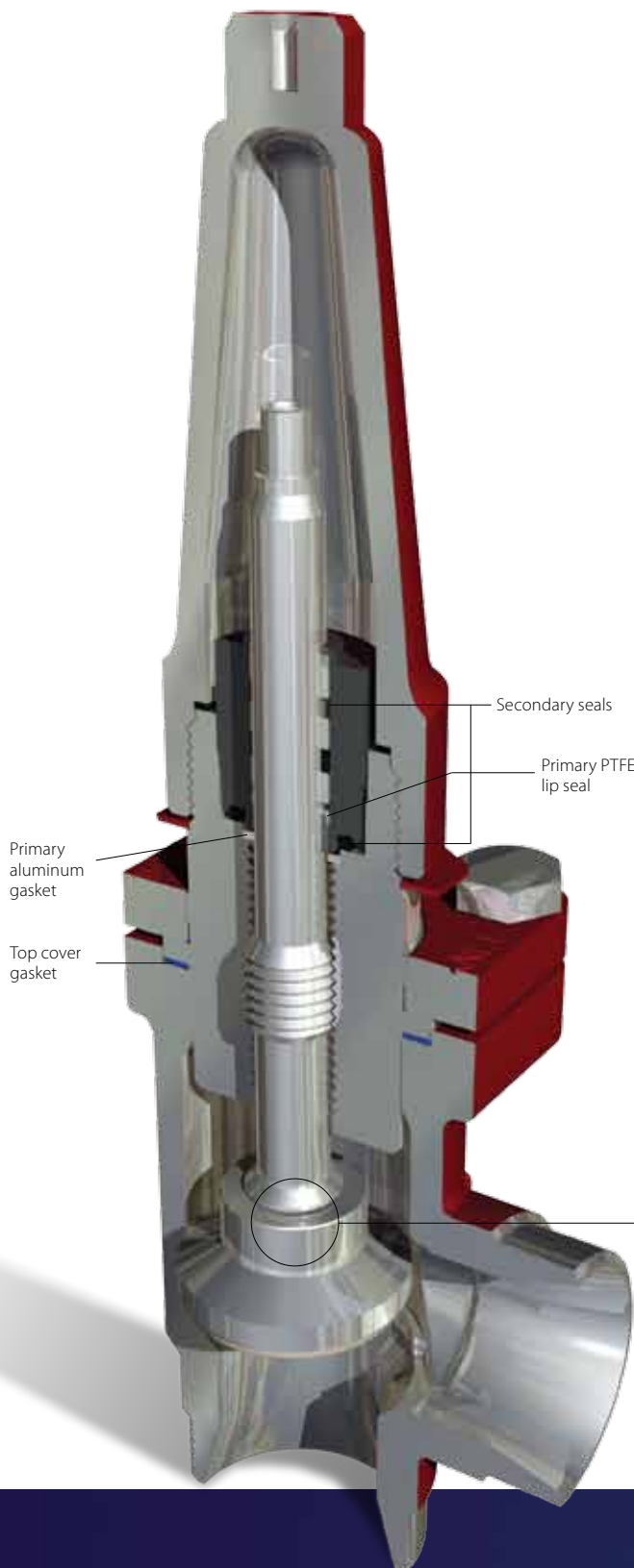
The secondary seal consists of two O-rings.

## Top cover gasket

The new SVA-S and SVA-L stop valve features a flat gasket design similarly used in the SVA-HS platform. The gasket material is non-asbestos fiber, which is proven and well tested from our ICV product line.

## Securing function of cone

A “securing function” has been added to limit the cone spin that can occur due to system vibration, thereby avoiding fatigue wear on the piston assembly.



# REG-S hand expansion valves

The new REG-S hand expansion valves feature an insert design that allows it to be installed in the standard SVL housing.

## Capacity

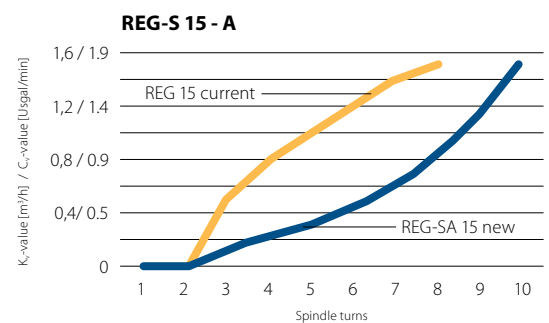
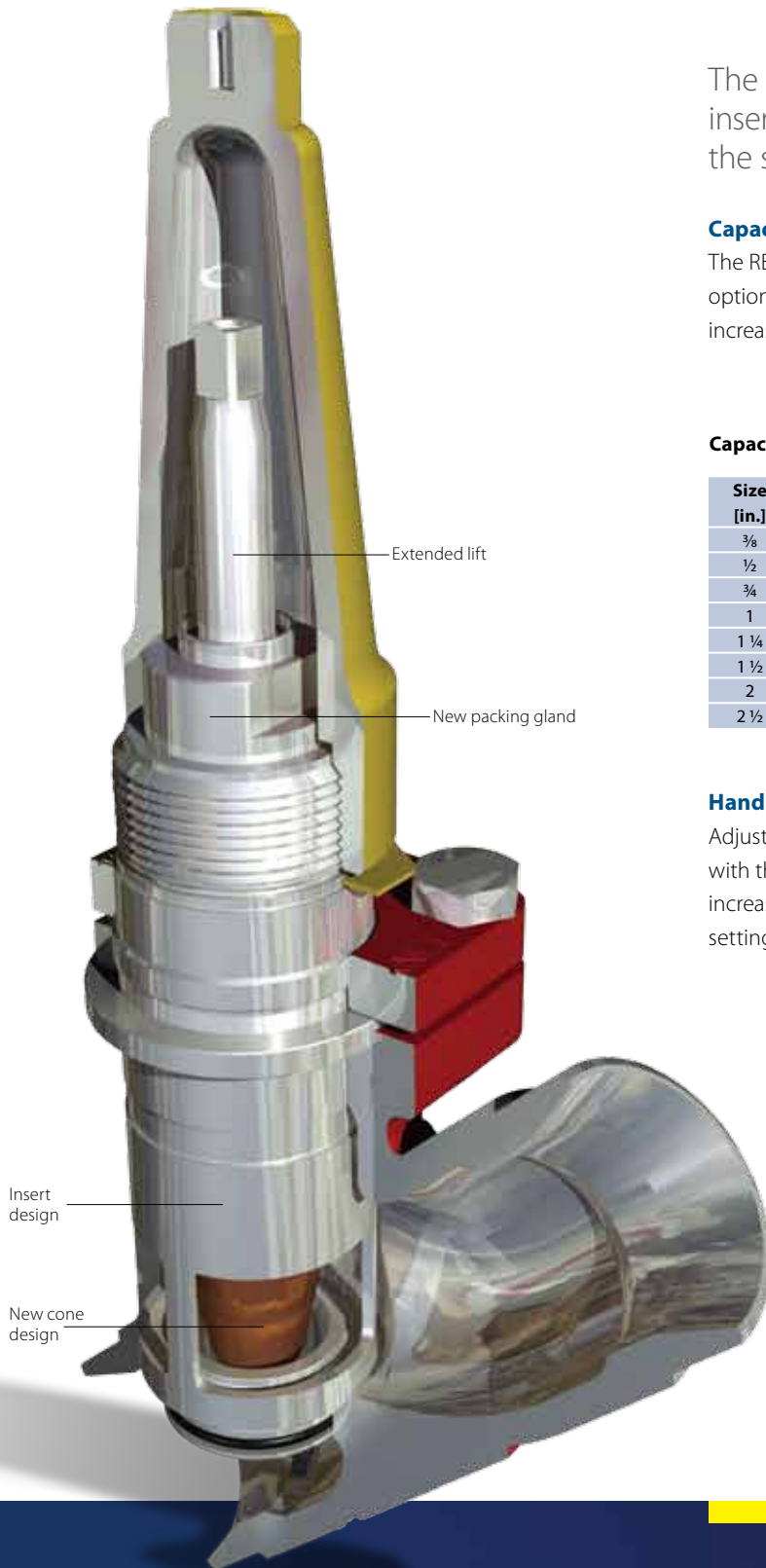
The REG-S valve features newly designed cone profiles that give two options in flow rate to cater to customer's applications. The new increased lift height allows for more precise adjustability.

## Capacity table

Size [in.]	C <sub>v</sub> -value [Usgal/min]	
	REG-SA	REG-SB
3/8	0.18	0.7
1/2	1.75	5.85
3/4	1.75	5.85
1	8.19	23.4
1 1/4	8.19	23.4
1 1/2	8.19	23.4
2	52.6	
2 1/2	93.6	

## Hand expansion performance

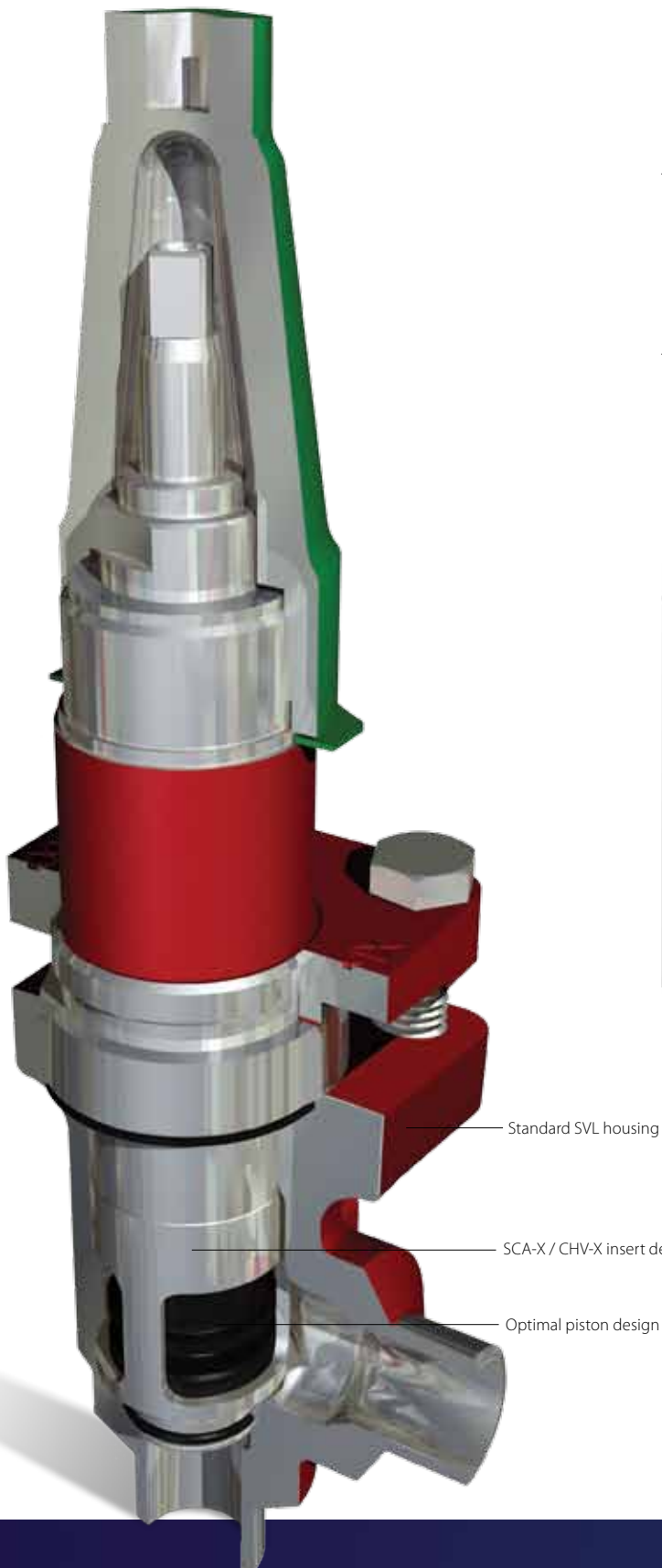
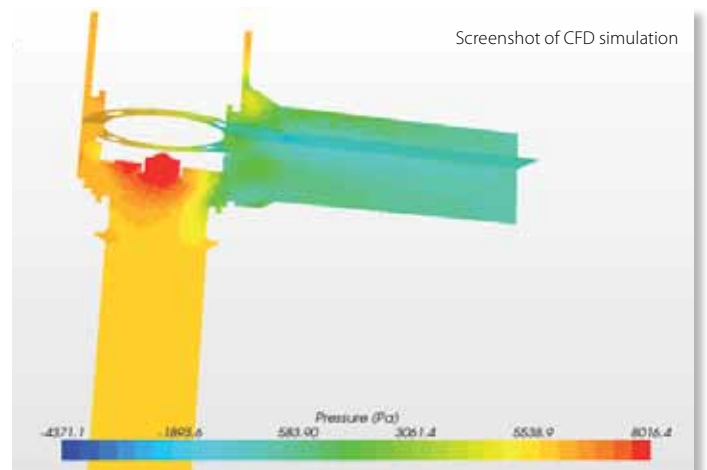
Adjusting the REG-S valve for optimal capacity has been made easier with the new SVL Flexline™ platform. The redesigned cone and increased lifting height enables more precise hand expansion valve settings leading to higher efficiency and more accurate temperatures.



# SCA-X stop check valves CHV-X check valves

The SCA-X and CHV-X valves for the SVL platform are designed with a new fully-assembled insert design that allows them to fit into the standard SVL housing.

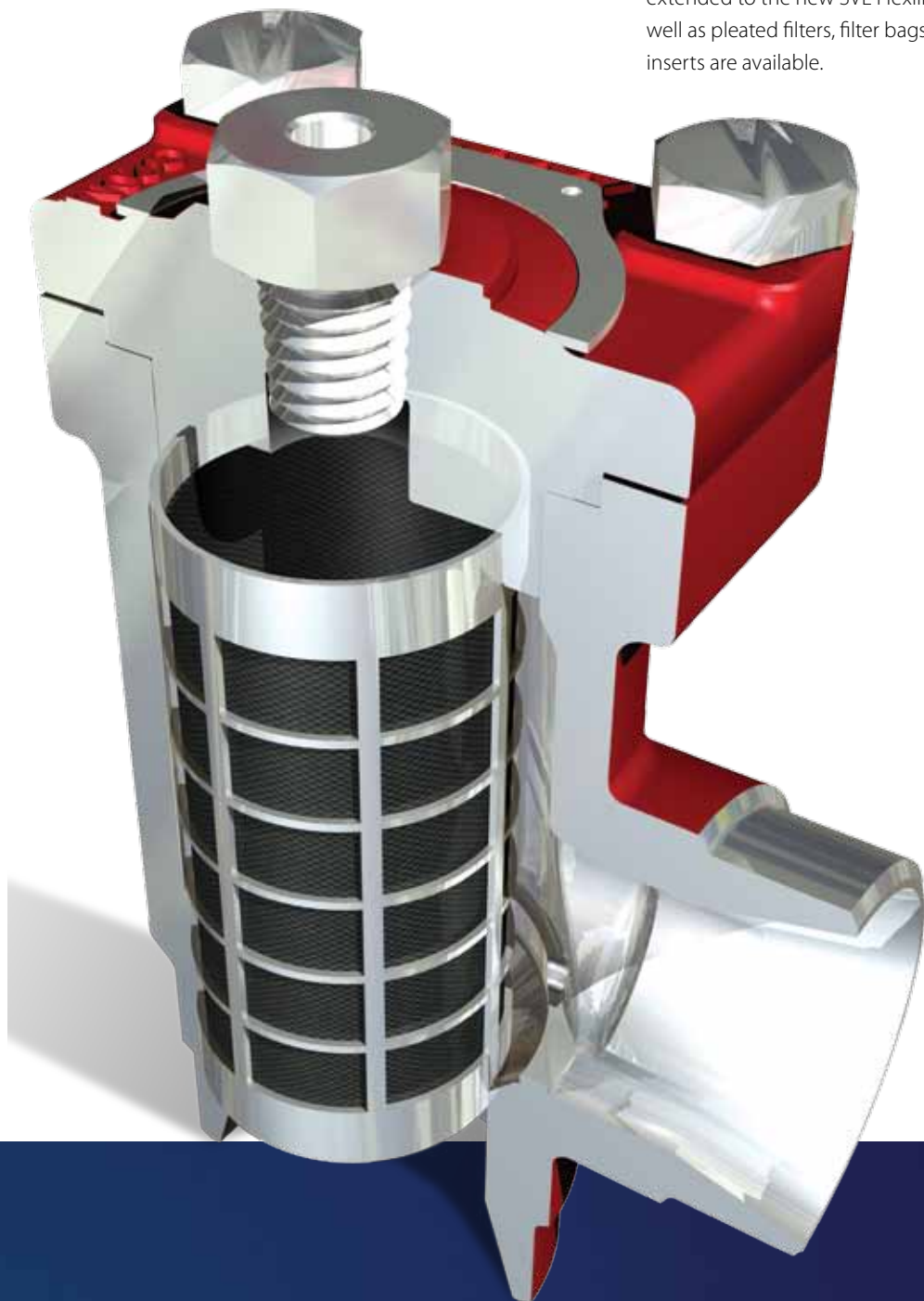
The SCA-X and CHV-X valves feature the same opening characteristics as current models. This was achieved by utilizing advanced computer simulation programs throughout the design process, ensuring a perfect fit. The valves have an extended operating envelope with higher pressure and temperatures capabilities compared to previous designs.



## FIA filters

The FIA filters designed for the SVL Flexline™ platform are identical to the FIA filters in the existing range and upgraded for higher working pressures.

The flexible parts program of the existing FIA filter options have been extended to the new SVL Flexline™ platform. Multiple mesh sizes as well as pleated filters, filter bags, start up elements, and magnetic rod inserts are available.





## Danfoss Flexline™ Simple. Efficient. Flexible.

Designed to offer clever simplicity, timesaving efficiency and advanced flexibility the Flexline™ series includes three popular product categories:



All Flexline™ products are based on a modular design concept. This award winning design will reduce complexity throughout your entire process. From system design, to installation, to commissioning, to servicing, the Flexline™ will make your operation simpler and will lower your total life cycle costs.

Go to [www.danfoss.com/flexline](http://www.danfoss.com/flexline) for more information on the Flexline™ platform.

## Global know-how Local support

Backed by more than 60 years of experience producing valves and controllers for industrial refrigeration applications Danfoss is a solid partner to turn to when you are looking for quality components.

Our global know-how combined with local support offers you the best possible products and service.

[www.danfoss.us/Industrial\\_Refrigeration](http://www.danfoss.us/Industrial_Refrigeration)

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