

ENGINEERING  
TOMORROW



# One Flexline™ platform Multiple options

**100+**

applications covered  
with flexible,  
timesaving and  
simple modularity.



[www.danfoss.com/flexline](http://www.danfoss.com/flexline)

# Apply intelligent modularity

## Benefit from **increased flexibility**

The Flexline™ platform is synonymous of flexibility within industrial refrigeration components. Based on a modular design concept each product features a variety of benefits, including flexible selection, easy installation and maintenance. As there is no functionality in the housing changing the function of a valve is a simple swapping of the insert.

The road to sustainability with the Flexline™ is clear as lower life cycle cost and emissions derived from leaks are further reduced thanks to its innovative design and carefully engineered valve ports. With Danfoss you benefit from a single supplier that facilitates the whole process from start to finish. By using our Flexline™ platform you get an intelligent and cost-efficient modular solution that is approved for all refrigerants in all global markets. And which will provide you with clever simplicity, time saving efficiency and advanced flexibility.

## WHAT'S IN IT FOR...

### Facility owners

Flexline™ is the ideal choice if system safety and reliability is top priority. The carefully designed components are corrosion resistant and able to reduce leaks by up to 75%. It ensures precise temperature control for increased food safety. Moreover, you benefit from reduced down-time as service is easily carried out thanks to drop-in service modules. The compact components are all approved for future high-pressure refrigerants.

### Consulting engineers

Enjoy simple and timesaving selection with the intelligent modularity of Flexline™, suitable for a wide range of applications and refrigerants. A direct weld eliminates pipe flanges to increase system safety just as precise control of critical applications ensures optimal running conditions at all times. You also benefit from energy efficient performance due to a reduced pressure drop. Finally, our software tools, 3D drawings and technical calculations make for simple and accurate selection.

### Installers and technicians

With Flexline™ you are able to cover a wide range of functions and applications with minimal inventory. Just a few code numbers ensure easy selection of the right component for repairs and service. The plug and play modules are easy to handle due to their low weight and compact design and enable easy onsite modifications. Also, a direct-weld design ensures a perfect fit with no leakage and consequently optimal performance of the Flexline™ components in the system.

### OEMs

Reduce your inventory by switching to Flexline™ and gain maximum flexibility in the process. The components with low pressure drop are suitable for all common refrigerants, including CO<sub>2</sub>, and approved for future high-pressure refrigerants. Thanks to the compact design of the Flexline™ family system design becomes much more flexible and engineered packages compact and easy to install. Just as the plug and play concept enables easy and time saving installation.

### Distributors/wholesalers

When you switch to Flexline™ you benefit from a significant stock reduction while offering customers greater flexibility. Fewer code numbers and a user-friendly selection tool make selection of the right product for the application in question much easier – allowing you to support and guide customers in the best possible way. All Flexline™ components are approved for high-pressure refrigerants to ensure future-proof solutions.



# Line Components

## – SVL Flexline™

Flexibility above all characterises the SVL Flexline™ line components. Using just two basic valve houses – a straightway and an angleway – the platform offers 5 different functions. The line components have been designed to meet all industrial refrigeration requirements. They cover a temperature range from -60°C to 150°C (-76 °F to 302 °F), and handle working pressures up to 52 bar (754 psi). The clever simplicity and advanced flexibility of the line components offer easy and timesaving selection reducing high levels of stock. SVL Flexline™ line components are available in stainless steel. Especially if hygiene really matters and corrosion is a real risk due to the harshness of the environment, stainless steel is your ideal choice for refrigeration systems. Line components are available as: stop valves, regulating valves, stop/check valves, check valves and filters.



- 1 housing for all functions
- 6 interchangeable function modules
- 60% lower stock . One valve for all refrigerants
- 6 modules with 5 functions
- Available in stainless steel

# Control Valves

## – ICV Flexline™

The ICV Flexline™ family consists of ICM motor control and ICS piloted controlled servo valves and the 2 step servo-operated ICLX valves. All the ICV valve variants are based on one common valve body to offer outstanding flexibility. The modular concept of the ICV Flexline™ greatly facilitates the building of a valve that offers energy savings and reduction of down-time. All valves are designed for a maximum working pressure of 52 bar (754 psi) and efficiently handle CO<sub>2</sub> and future high pressure refrigerants. As a result you are guaranteed that your needs are accommodated by a reliable, safe and green solution – both now and in the future.



- 1 housing for all functions
- 75% less leak potential
- Higher accuracy
- Lower pressure drop

# Complete Valve Station

## – ICF Flexline™

Advanced flexibility and timesaving efficiency are characteristics of the ICF Flexline™ valve station. The multi-ported control solution offers savings in several areas by substituting a string of valves with just one valve station. Consisting of a valve housing and a maximum of four or six function modules the valve station is a true plug and play solution and easily installed. Moreover, it covers 90% of all applications in just four basic configurations and allows for more than 50 special configurations. The ICF valve station is designed for both low- and high-pressure refrigerants and can be used in liquid lines, compressor injection lines and hot gas lines.



- 3 housings for all functions
- 20% lower installation cost
- Fits 90% of all applications from only 4 basic configurations
- Smart regulation with the ICM motorized valve

# Danfoss Industrial Refrigeration

## A world of expertise at the click of a button

Turn to Danfoss if you want to combine quality components with expert knowhow and support. Try out these free tools, designed to make your work much easier.



### Coolselector® 2 – New calculation software for Industrial Refrigeration

Coolselector®2 is your brand new Danfoss calculation and selection software designed to make selection processes for all industrial refrigeration projects easier and less time consuming. Coolselector® 2 is a unique calculation and support tool for contractors and system designers, offering complete pressure drop calculations, analysis of pipe and valve design and the ability to generate performance reports. It replaces the well-known DIRcalc™ software and offers several new functionalities.



### IDanfoss IR app

The free IR App gives you a spare parts tool, which makes it easy for you to find the spare part number for a given Danfoss industrial refrigeration valve. It also presents all the products and benefits of the SVL Flexline™ range – with a fun game thrown in as well.



### Download 3D CAD symbols

From our online product catalogue on our website, you can download 3D CAD symbols and illustrations to help you when designing refrigeration plants.



### IR application tool

With this interactive PowerPoint slideshow, you can explore all the details of a two-stage ammonia plant. You will find detailed cut-away drawings and information on the valves in the installation along with links to videos, literature and product animations.



### Application handbook

The Application Handbook is designed to help you every step of the way when working with industrial refrigeration systems. Among many other things, it contains examples of how to select control methods for different refrigeration systems, their design and which components to choose.

Visit [www.danfoss.com/IR-tools](http://www.danfoss.com/IR-tools) and find all the tools you need.