

TruControl MS™ Valve

The Media-Separated Valve that has it all



CONTENTS

Introduction	02
Great Performance at small Space	03
TruControl MS™ Valve	04
Options	06
Innovative Valve Technology for your Dispense Application	07
Applications Food industry	08
Application in other sectors	10
Overview	11

Great Performance at small Space

They are synonymous with a spirit of development, strong performance and the highest quality – the market-leading process and all-media valves of the Buschjost brand. We have been developing and producing high-quality valve technology for decades and also supply the manufacturers of professional coffee machines.

As one of the first suppliers of compact polymer valves, we already demonstrated our feel for the trends in the food and beverage industry a good 20 years ago – with success: valves made of high-performance plastic have largely displaced their metal predecessors and have proven themselves over many years. True to our motto "Breakthrough Engineering for a better world", our team is constantly working on improving our portfolio,

always based on comprehensive technical know-how and taking into account specific customer requirements – your requirements.

How can the service life of a coffee machine be increased with the most cost-efficient operation possible? How can the cleaning effort be reduced to further increase the availability of the machine? And how can a compact size be combined with

the widest possible selection of coffee specialities and beverage variations? Our valves are the answer to these questions and enable the efficient and cost-effective operation of professional coffee machines – see for yourself!

Breakthrough Engineering for a Better World

Norgren is part of global engineering organisation IMI plc. IMI is at the forefront of delivering the solutions we need in a changing world and is focused on **creating tremendous value by solving key industry problems** in attractive markets and employing the best.

Norgren has a proud history of creating innovative engineering solutions in precise motion control and fluid technology, and we collaborate with our customers across more than 50 countries in critical areas such as Factory Automation, Material Handling, Rail, Energy, Process Control, Life Science and Commercial Vehicles.

From improving speed, productivity, reliability and efficiency of equipment, to generating significant energy and cost savings, or lowering total cost of ownership across many industries, Norgren's high-quality solutions are designed to help customers pursue progress, achieve new goals and overcome problems.

With market-leading industry expertise, we offer the capability, resources, engineering intelligence and global support infrastructure to tackle the largest project demands.

Our world-class portfolio of fluid and motion control products include Norgren, Bimba, Buschjost, FAS, Herion, Kloehn and Maxseal. Supplied either individually or combined into powerful customised solutions to meet customer needs.

NEW: Media-separated solenoid valves for professional coffee machines

The 83154 series is the latest generation of compact polymer valves, enables both cost-effective and efficient operation of professional coffee machines and sets completely new standards compared to the technology commonly available on the market:

- » The new valve generation convinces with its **media-separated design**: since the chamber of the plunger is not flushed by the media used, lime deposits and other residues are a thing of the past.
- » As simple as it is unique: an **innovative interlinking technology** enables customised configurations, tailored to your individual application.
- » **Globally valid certifications** according to NSF 169, UL 429, EC No. 1935/2004 and IEC 60335-1 ensure smooth approval processes.

Media-separated design

Easy handling, no additional accessories

Globally valid certifications

Low service and maintenance requirements

High performance in a small installation space

Innovative interlinking technology

Safe use at operating pressures up to 15 bar

NSF

UL US

CE UK CA

Breakthrough engineering you can count on.

TruControl MS™

The media-separated valve that has it all.



Media-separated

- Food grade separation membrane
- Ease of rinsibility
- No metals in contact with media



Interlinkable

- Enables customizable configurations
- Quick and easy linking mechanism
- No need for hoses or accessories



Powerful

- High operating pressures up to 15 bar
- Back pressure proof up to 4 bar
- Withstands media temperatures 1-130° C



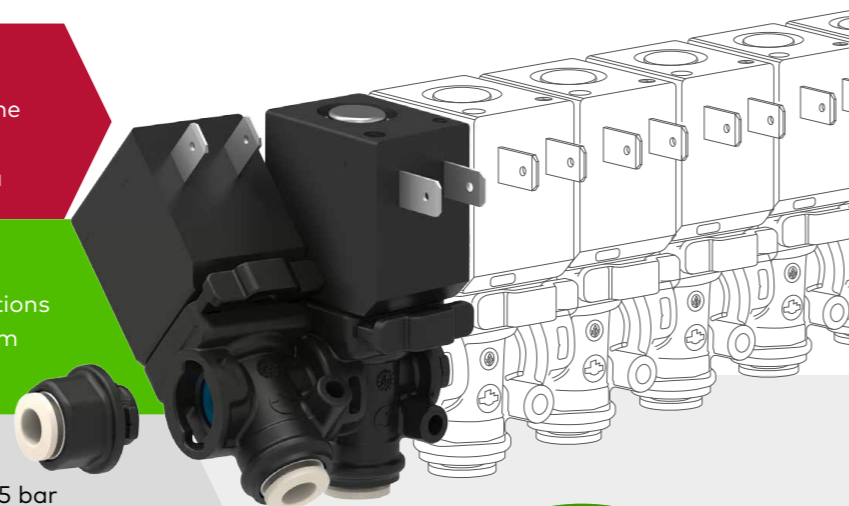
Durable

- Long-lasting polymer material
- Limescale and corrosion resistant
- Low service and maintenance



Compact

- Small footprint for diverse applications
- Seat orifice: 2.5mm (up to 15 bar)
- Seat orifice: 3.5mm (up to 5 bar)



"We supply our customers with the best-possible valve technology – both for their existing as well as their future designs."

Ashlee Anderson, Product Manager Dispense Technology at Norgren



Media-separated, space-saving, low-maintenance: the new generation of Buschjost solenoid valves

Developing professional coffee machines is all about durability, availability and efficiency. As a supplier of high-quality valve technology for professional coffee machines, we understand our customers' needs and know exactly what questions you ask when developing your machines: How can the service life of a coffee machine be increased while operating it as cost-effectively as possible?

How can the amount of cleaning be reduced to further increase the availability of the machine? And how can a compact size work with the widest possible selection of coffee specialities and drink variations?

Our latest generation of media-separated solenoid valves, the TruControl MS™ valve, provides the answer to these questions.

Based on extensive know-how, many years of experience in the food and beverage business and awareness of current industry trends, our new valves facilitate the efficient and cost-effective operation of professional coffee machines and set completely new standards compared to standard market technology – see for yourself!

Impressive advantages – compared with standard market technology

	Media-separated design	Optimised availability	Global certifications	Linking mechanism	Small footprint	15 bar operating pressure
New valve generation	✓	✓	✓	✓	✓	✓
Standard market technology	✗	✗	✗	✗	✓	✓

Options

Solenoids



9830 9837 9840 9827

Performance



2/2-way valve 3/2-way valve Aggregating & dispensing function

Connections



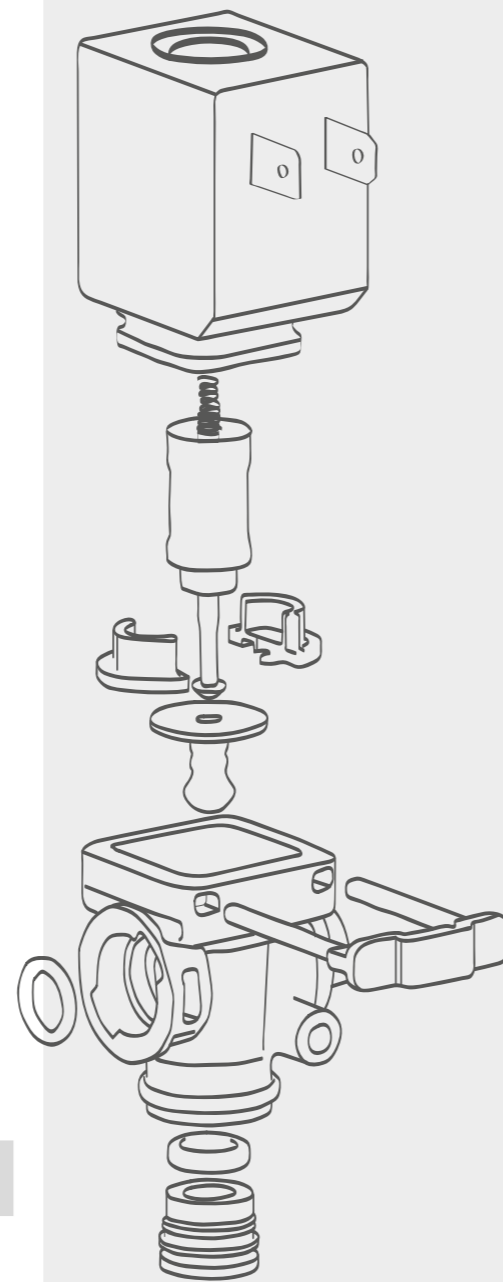
Compression fitting Hose connectors Push-in fitting Interface

Option

Accessories



Interlinkable Single valve Interface Pressure gauges



Innovative Valve Technology for your Dispense Application

Numerous valves are installed in professional coffee machines. Individually or interlinked, they form various paths via which the media used are controlled.

Thanks to their robust construction and the use of high-quality materials such as PPSU and PPS, Buschjost valves are particularly durable. In addition, they are corrosion-resistant and insensitive to limescale and other contamination – properties that significantly reduce the effort required for service and maintenance.

Depending on the design, Buschjost valves control a wide variety of media, ranging from steam and water – often underestimated

because the different degrees of hardness can place great stress on the components – to milk, syrup and flavours.

Thanks to an innovative interlinking technology that is as simple as it is unique, several individual valves can be connected directly to each other without the need for additional accessories – the space required inside the machine is reduced and potential leakage points are kept to a minimum. Positive side effect: without additional fittings, hoses or sealing materials, both costs and storage space are saved.

Product	Description	Media separation	Connection				ND (mm)*								Voltage		Material			
			Compression fitting	Push-in fitting	Hose connectors	Interface	1.2	1.5	1.8	2.2	2.5	3.5	4.5	6.0	a.c.**	d.c.				
	Series 83150 2/2-way single valve		.	.																
	Series 83153 2/2-way valve (interlinkable)				.															
	Special design 8591352 3/2-way single valve		.	.																
	Special design 8590440 2/2-way valve (interlinkable)																			
	Series 8590820 3/2-way valve (interlinkable)																			
	Special design 8591410 3/2-way valve																			
	TruControl™ 2/2-way valve (interlinkable)		.	.																PPSU (polyphenyl sulphone)
Customised solutions																				
	4-fold manifold																			Lead-free brass / stainless steel
Valves for water treatment																				
	Series 84070/84080 2/2-way valves																			PA12-GF50 (polyamide)

* NPT/imperial size ports available on request

** With rectifier

Applications Food industry

Soft drink machines

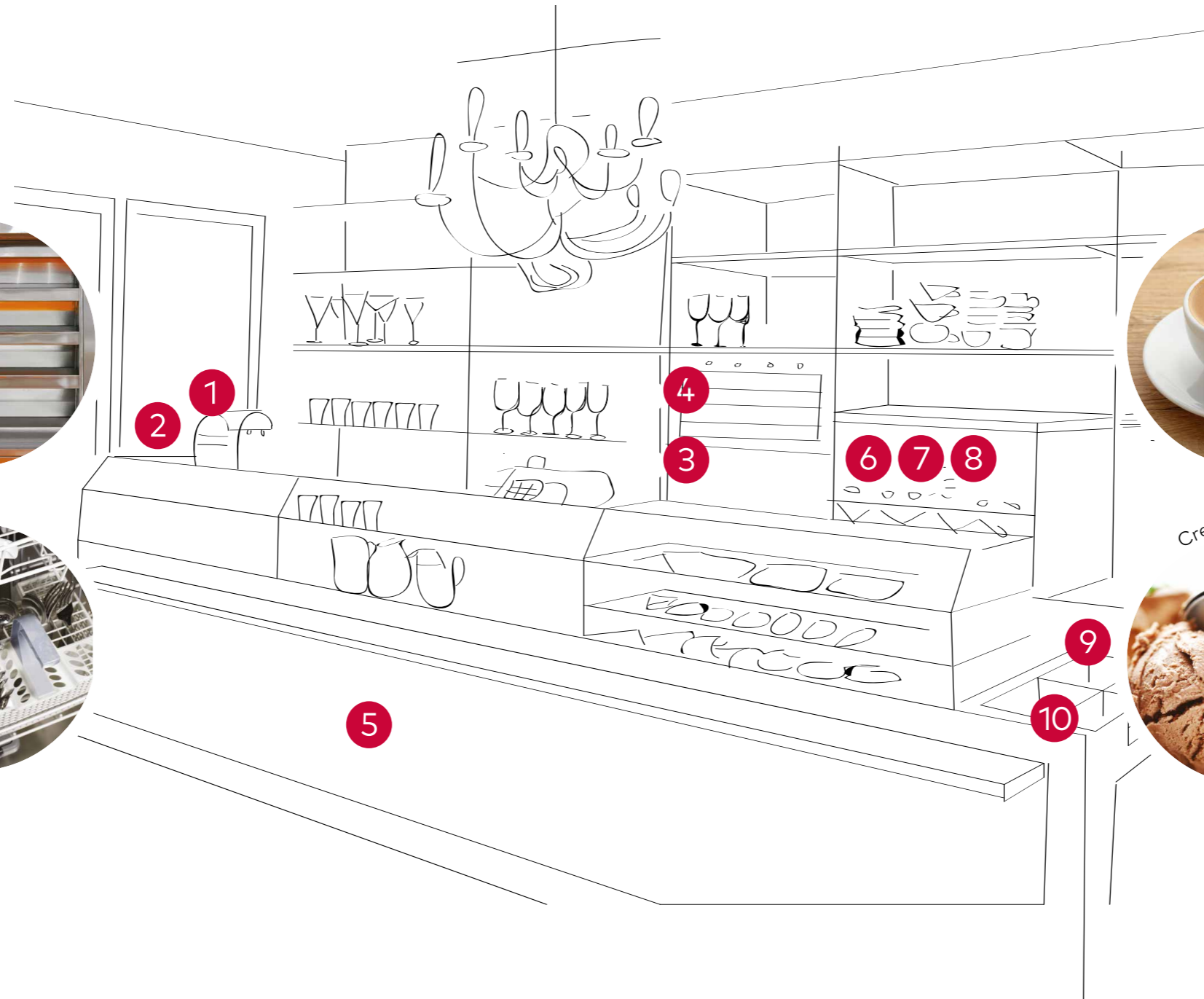
Vending machines

Drinking water dispenser

Professional coffee machines

Cold & hot water devices

Cream- & ice machines



Application in other sectors



Professional coffee machines

Overview

Innovated, media-separated design

While the chamber of the plunger of standard solenoid valves is flushed by the media used, the TruControl MS™ Valve features a media-separated design based on an innovative and patent pending diaphragm.

In a nutshell: your benefits as a user

- » **One fits all – a standard solution for all applications**
Whether water or steam, milk, syrup or flavouring: the new valve generation is suitable for many different media, which significantly reduces parts complexity – both within the coffee machine as well as for storage.
- » **Low degree of contamination:**
The media-separated design ensures efficient valve cleaning: the media used

do not enter the chamber of the plunger, so it remains free of limescale caused by water and steam as well as sticky residues caused by milk or syrup, which significantly increases the service life. In addition, the low amount of dead space in the valve design also ensures a reduction in the degree of contamination.

- » **Suitable for high operating pressures:**
The valve works with operating pressures up to 15 bar, covering all applications in professional coffee machines.

Interlinking technology offers many benefits

The new valve generation features a low dead space connection mechanism that is as simple as it is unique: the interlinking of individual valves reduces potential leakage points to a minimum and at the same time makes installation and maintenance much quicker.

In a nutshell: your benefits as a user

- » **No connecting elements required between valves:**
The individual valves are simply inserted into each other, so there is no need to install hoses, fittings and other accessories and leakages are prevented. Positive side effect: reducing additional equipment not only saves costs, but also storage space.
- » **Individual design and easy handling:**
The linking mechanism is individually configured and tailored to the specific application – up to seven individual valves can be connected. Interlinking does not require any tools, nor does the maintenance of wear parts.

- » **Small footprint:**
Coffee machines are becoming increasingly compact, so the TruControl MS™ Valve generation is also designed to save space.
- » **Optimised coffee machine availability:**
The media-separated solenoid valves are both robust and durable, so they require significantly less service and maintenance than their standard market counterparts. This greatly reduces downtime.

Globally valid approvals and certifications

Tried and tested – the Buschjost brand stands for safety and the highest quality. That's why the media-separated solenoid valves are subjected to numerous checks and tests; various certifications are being prepared.

In a nutshell: your benefits as a user

- » **Globally valid certifications ensure smooth approval processes:**
The new valve generation will be certified according to the following guidelines:



In the future, the new valve generation can be used in a wide variety of regional markets around the world. For original equipment manufacturers, approval processes of their own machines will therefore become much easier.

Coffee & Hot Drinks



Ice cream



Agriculture



Beverage Dispensing



Vertical Farming



Dental & Medical



Paints & Chemicals



Wellbeing & Sanitation



Inkjet Printing



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Incorporating



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