

FLUID CONTROL CATALOGUE



The Product Catalogue contains the valves and systems of our standard range.

The technical information provided describes the normal condition of our products. For detailed technical data please see the corresponding data sheets. These are available on request or may be downloaded from:

www.norgren.com

www.buschjost.com

www.fas.ch

The customer is responsible for checking all information relating to suitability for the intended purpose. The end of the normal service life of wearing parts will not be construed as a defect.

Our policy is one of continuous research and development. We therefore reserve the right to amend without notice the specifications given in this document.

FLUID CONTROL SOLUTIONS

GLOBAL BRANDS CREATING GLOBAL ADVANTAGE

Norgren is a global company engineering advantage for customers in both fluid and motion control technologies.

Norgren Fluid Controls focuses its energy and resources on **valves, pumps and fluid control solutions.**

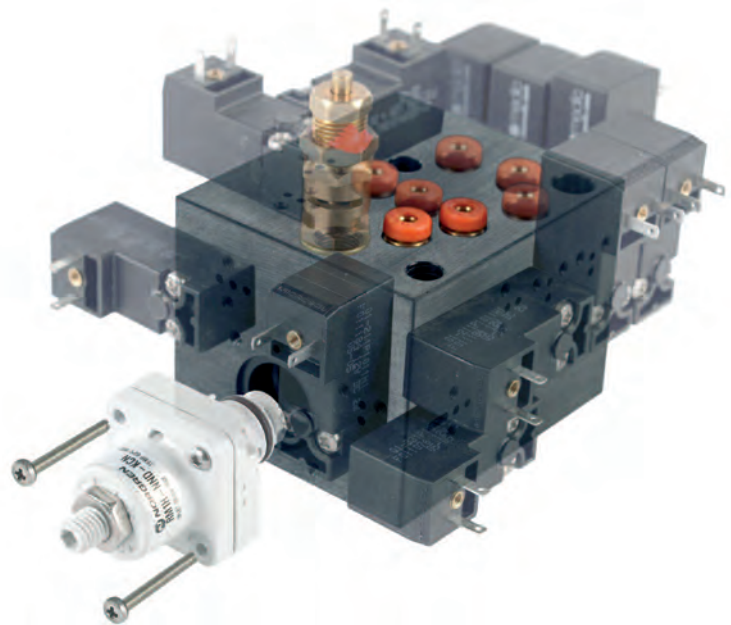
The well-established and proven brands within this Group include:

» Buschjost » FAS » KIP » Kloehn

Combining these brands into one organisation provides our customers with unrivaled resources, expertise, and breadth of product range to enable them to source any fluid control solution from one capable global supplier, represented in all the world's major regions.

Norgren Fluid Controls solutions can create competitive advantage for you by increasing your sales and market share, and reducing your total cost of ownership.

ENGINEERING THAT MAKES A DIFFERENCE



PROVEN TECHNICAL SOLUTIONS

Our engineers are dedicated to the development of solenoid valves, process valves, precision liquid handling technologies, and customised manifolds & solutions.

Fully equipped clean room facilities, in several locations, meet the specific needs of demanding market sectors such as Life Sciences and semiconductor manufacturing.

Our manufacturing locations in Germany, Switzerland and the USA enable us to stay close to our customers, and take advantage of local technological expertise. The Norgren Fluid Controls facility in Geneva, for example, that develops sophisticated miniature valve solutions, draws heavily on the miniaturisation and precision traditions of the Swiss watch-making industry.

As a subsidiary of IMI plc, and part of the global Norgren group, we provide our customers worldwide with the reassurance of dealing with an established global supplier. This gives financial strength and security, and all the advantages of a global sales and service network.

UNDERSTANDING YOUR NEEDS

» CLOSE PARTNERSHIPS

Our dedicated engineers work directly with your engineers to provide design advice and assistance, develop customised solutions, and get your new concepts to market faster.

» SECTOR AND APPLICATION EXPERTISE

Many decades of industry-specific experience means we speak your language, and understand your operating environment.

» QUALITY AND CERTIFICATION

Products and processes conform to ISO 9001, ISO/TS 16949, KTA 1401, APQP, ATEX, DB A1, FDA, NSF, UL, VDA. Selected production facilities include GMP compliant assembly areas and Class 10,000 clean rooms.

CREATING IDEAS THAT WORK HARDER



» DELIVERY LEAD TIMES

A choice of flexible delivery arrangements can meet individual needs. Customised supply chain solutions include Kanban and just-in-time deliveries.

» COMPREHENSIVE SIZE RANGE

From 8 mm FAS miniature solenoid valves to 200 mm Buschjost process valves.

» HIGH SPEED

Response times as low as 3 ms for sorting machines, inkjet printing etc.

» HIGH VACUUM

10^{-6} Torr (10^{-9} bar) or even lower, with a leak rate of 10^{-8} mbar l/sec.

» HIGH PRESSURE

Pressure range going up to 250 bar.

» HIGH FLOW-TO-SIZE RATIO

Highly compact solutions with no compromise on performance.

» MEDIA SEPARATED VALVES

Comprehensive range featuring industry leading flow-to-size ratio and small or no dead volume. For use with ultra pure or corrosive media.

» PROPORTIONAL TECHNOLOGY

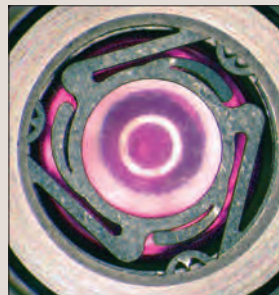
High flow precision and high repeatability combined with space, weight and power savings.

» LAMINATED MANIFOLD TECHNOLOGY

Norgren's expertise in thermal, diffusion and solvent bonding processes allow manifolding in acrylic and other high-grade polymers, and a precise alignment of fluidic pathways as small as 250 μ m.

» SYRINGE AND SYRINGE PUMP TECHNOLOGY

Superior design and manufacturing processes allow longer lifetimes, high precision, and high accuracy for dispense down to nanoliters.



Solenoid Valves without Differential Pressure



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Air Preparation Equipment (FRL)



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Solenoid Valves with Differential Pressure



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Fittings



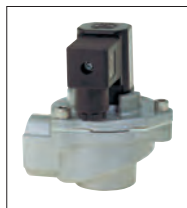
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Flatprop 16 mm	C, A	Ms, SS	224	84180 NEW	G	Ms	142
Intersol 22 mm	A	PA	22	84190 NEW	G	1.4408	168
Microsol 15 mm	A	PPS/PA, SS	18	84200	F	GS	64
Picosol 10 mm	A	PPS	14	84220	F	GS/Rg	68
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82480*	G	1.4408	166	84890	SW	1.4581	180
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82540*	G	Ms	32	85120	F	GG/Rg	60
82560*	G	1.4408	72	85140	F	1.4581	82
82580	G	Ms	138	85200	F	GS	64
82590 NEW	G	1.4408	74	85220	F	GS/Rg	68
82610 NEW	G	1.4408	76	85240	F	1.4581	88
82660 NEW	G	Ms	36	85300*	G	Ms	108
82670 NEW	G	1.4408	78	85320*	G	Ms	112
82710*	G	Ms	140	85640	F	1.4581	92
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* NPT-connection available, ♦ = Sealed core tube (less susceptible to contaminated fluids)

A = Subbase
 C = Cartridge
 F = Flange connection
 G = Internal thread
 RS = Tube connection
 SW = Welded ends

Al = Aluminium
 GFK = Glass filled nylon
 GG = Grey cast iron
 GG/Rg = Grey cast iron / gunmetal seat
 GS = Cast steel
 Ms = Brass
 Msv = Nickel plated brass
 PBT = Polybutylene terephthalate

Pk = Polycarbonate
 PVC = Polyvinylchloride
 PVDF = Polyvinylidene fluoride
 Rg = Gun metal
 SS = Stainless steel
 Zg = Zinc alloy
 1.4581 / 1.4408 = Stainless steel