Valmet
FORWARD

A solution for each and every process challenge

Valmet's flow control solutions from Valmet Flow Control Industrial LLC

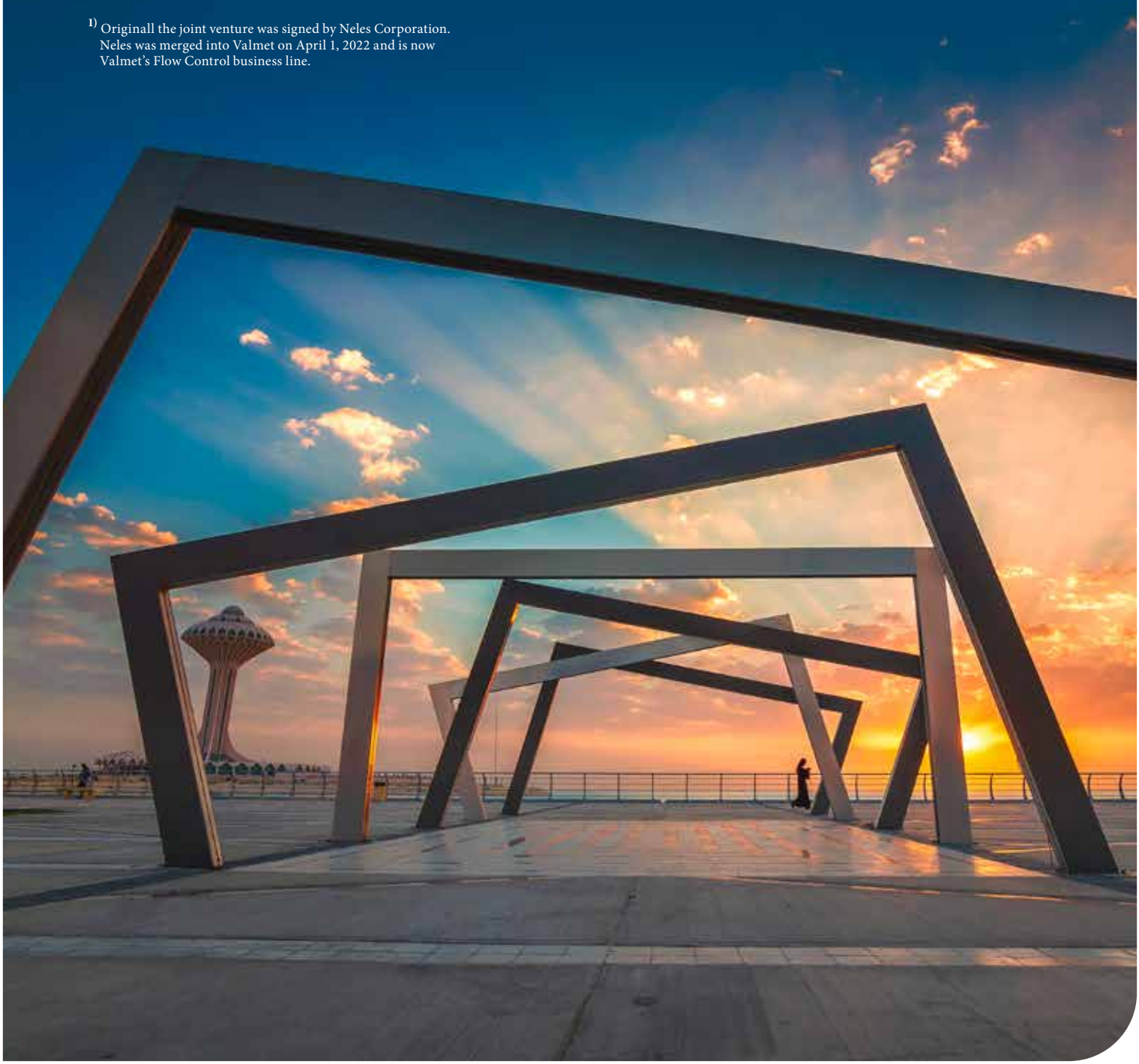
Valmet Flow Control Industrial LLC is a joint venture industrial operation, between Valmet and Industrial Systems Group, Saudi Arabia. Our business has grown over the past 30 years thanks to referrals from our broad global client base.

This joint venture between Valmet's Flow Control business line [1)], and and Industrial Systems Group based in Dammam, Saudi Arabia, provides support to our clients in Saudi Arabia and across the Middle East. In addition to the manufacturing of parts and top-works for valves, operations are concentrated on regional sales and a wide range of testing functions, application engineering services, and valve services and troubleshooting. The site also acts as a training center for customer plant personnel.

The operations in Dammam have been rapidly developing to continuously provide an ever-increasing portfolio of services. In addition to an increased spare parts inventory in stock, the site has built strong testing capabilities for both Valmet valves and smart products.

Planned developments for the near future include further expansion of the site's capabilities, including the assembly of bare-shaft valves.

[1)] Originall the joint venture was signed by Neles Corporation. Neles was merged into Valmet on April 1, 2022 and is now Valmet's Flow Control business line.



Innovative solutions for process industries

Valmet now offers an extensive flow control portfolio of industry-leading valves, valve automation solutions and related services, including the renowned Neles, Neles Easyflow, Jamesbury, Stonel, Valvcon and Flowrox solutions. We help our customers to improve their process performance and reliability to ensure safe flow of materials.

We specialize in mission-critical valves for emergency isolation; control and on-off service, especially in critical and demanding applications. Our metal seating technology and soft seating technology is perhaps the best available worldwide. Control valves ensure a leakage rate as per ANSI class IV and the on-off valve designs ensure leakage rate better than class V (metal seated designs).

Our installed base in Saudi Arabia includes our complete product offering, including valves, actuators, positioners, controllers, limit switches, other instrumentation accessories and performance management systems.

Our products and target applications in brief:

Products:

- Ball valves
- Butterfly valves
- Segment (V-ball) valves
- Rotary plug (control) valves
- Globe (control) valves
- Pneumatic actuators
- Positioners (analog and digital)
- Knife gate valves
- Pinch valves
- Peristaltic Pumps

Target applications:

- Control valves
- Automated on-off valves
- Emergency isolation valves
- Actuators and controls
- Intelligent positioners

Designed to perform

The selection of the right valves and accessories in demanding and often critical applications in oil and gas, metals and mining, paper or energy industry applications is often a matter of both business performance and the efficiency, safety and reliability of process itself.

Our valves and all related products and services are always created with the customer's process and business in mind. We design and deliver solutions that enhance performance and ensure process safety and reliability. They provide innovative, fundamentally simple construction, operation and maintenance features to optimize process performance atthe lowest cost.

Each device and solution is based on our extensive industry experience and knowhow. Our dedicated people, from sales to services, are committed to delivering the results our customers expect from us, and more.

Nelprof™

Valve sizing and selection software

- Digital tool for control, on/off and safety valve sizing and selection
- Allows you to select the right valve and valve actuator for your application
- With inbuilt expert system that guides you through the selection process with notes and warnings
- Enables analysis and comparison of control valve performance before installation
- Helps to choose the right valve size and type with optimal actuator to reduce process variability and ensure the best process performance
- On-off module that enables the selection of all intelligent metal and soft-seated on-off and emergency valve assemblies
- The SIL module is the first safety integrity level tool on the market, enabling safety integrity level evaluation for the whole valve assembly, including valve, actuator, positioner and pneumatic components when needed

Ensuring performance

To help you optimize performance and reliability, we approach each process and application as a specific challenge. Reliable performance requires more than just high-quality control, on-off and ESD valves. All valve solutions, including the used accessories and intelligent control devices, are throroughly tested and supported by dedicated services designed to ensure optimal life cycle performance.

Testing capabilities

We have an extensive quality assurance program covering all manufacturing activities. All components or valve units are tested before delivery. For modulating control valves the testing includes control performance for the verification of every delivered valve unit.

Basic testing includes hydrostatic, seat leakage and functional testing. Advanced computer-based test rigs have been provided for these valve testing activities. A special feature in our test facilities is our high-pressure gas test and top-of-range industrial cryogenic laboratory.

Ensuring process safety and reliability

In addition to our robust and reliable valves, we offer a range of products and services designed to ensure the desired performance of critical valves across their entire life cycle. For instance, the Neles ValvGuard™ intelligent safety solenoid and PST system helps monitor and ensure the full functionality of critical, yet often idle, emergency shutdown (ESD) and venting valves.

Valve controls

We offer a unique range of reliable and easy-to-use solutions to control your valves.

With the help of our products you can fulfill end user requirements for control, emergency shutdown and on-off valve applications. Our products will ensure the best possible valve performance and compliance with environmental regulations.

Our valve automatoin offering ranges from limit switches to high performance intelligent valve controllers such as the Neles NDX™ and ND9000™, with third generation diagnostics. Our competitive valve control solutions allow you to get the best possible performance from your valves.

Rotary Control Valves

Available with Q-Trim, S-Disc and Q2-Trim for severe service

Intelligent positioner with on line diagnostic capabilities

- Neles NDX
- Neles ND9000

Robust and reliable actuator

- QP-series diaphgram actuator
- B-series piston actuator

Wide range of valve types

- Easy selection

Certified emission performance

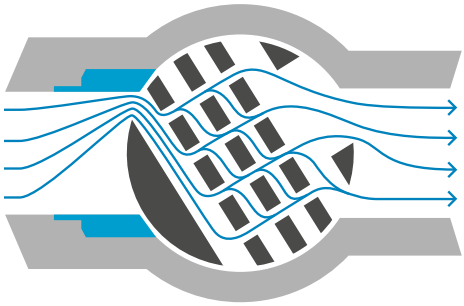
Setting the standard for rotary control valves

→ Designed and manufactured by Valmet
→ Single source responsiblity
→ Fully tested performance

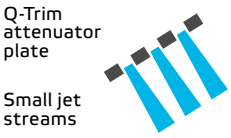
Rotary control valves combine superior controllability and wide rangeability with optional top-notch cavitation and noise abatement. High capacity provides an ideal solution for debottlenecking, and a smaller body size requires less piping support. Versatility in terms of installation direction saves space on site. Our rotary control valves offer excellent long-lasting fugitive emission control and suitability for dirty, erosive and extreme temperatures as standard.

Field proven results in severe applications

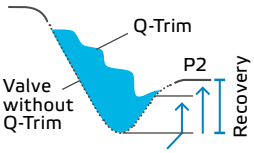
Neles Q-Trim – Multistaged pressure control with wide control range



Flow division

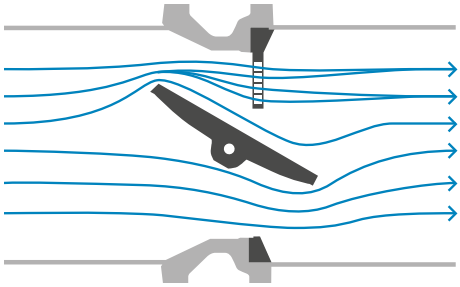


Pressure staging

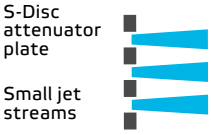


Self-flushing

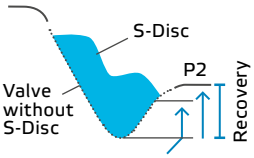
Neles S-Disc – Enhancing eccentric disc capabilities



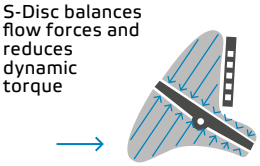
Flow division



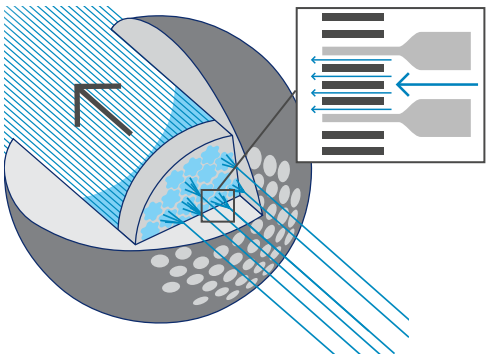
Pressure staging



Dynamic torque



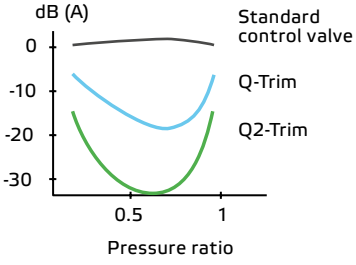
Neles Q2-Trim – Perfecting rotary valve noise reduction



Neles Q2-Trim takes the patented Q-Trim technology to a new level. The technology combines various techniques:

- Pressure staging
- Flow division
- Peak frequency shifting
- Velocity control

Noise reduction



Linear Control Valves

Available with Tendril and Omega trims for severe service

Actuator

- Field reversible diaphragm actuator – VD-series
- Fail safe piston actuator – VC-series
- Piston spring return and double acting actuator – VB-series

Certified emission packing

- Extension bonnet
- Bellows extension bonnet

Intelligent positioner

- Neles NDX
- Neles ND9000

Valve

- Various trim constructions
- Hardened and corrosion resistant trim materials

New generation globe and angle valves

→ Innovative and fundamentally simple construction
→ Smart technology seamlessly integrated
→ Specially designed for process industry needs

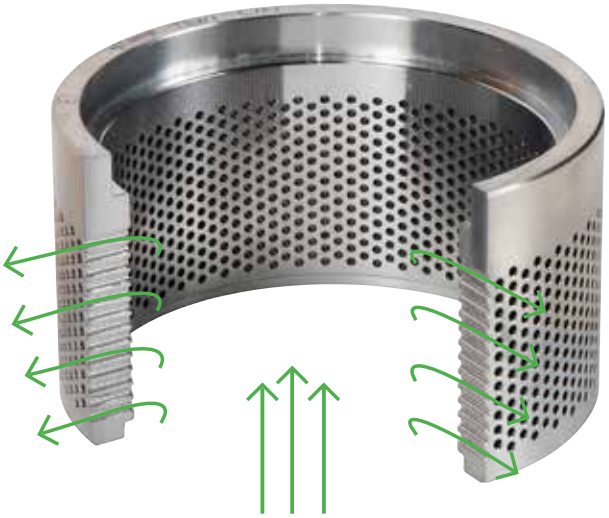
Linear control valves combine modern, innovative design to the traditional strong points of the linear control valve construction. Fundamentally simple design makes the valve robust, and integration to the latest generation smart control valve positioners makes it easy to use. It is also easy to adapt the unit to different applications. Even in the toughest process conditions, there are solutions that ensure maximum reliability and performance.

Effective noise and cavitation control for demanding applications

Tendril

Multihole trim

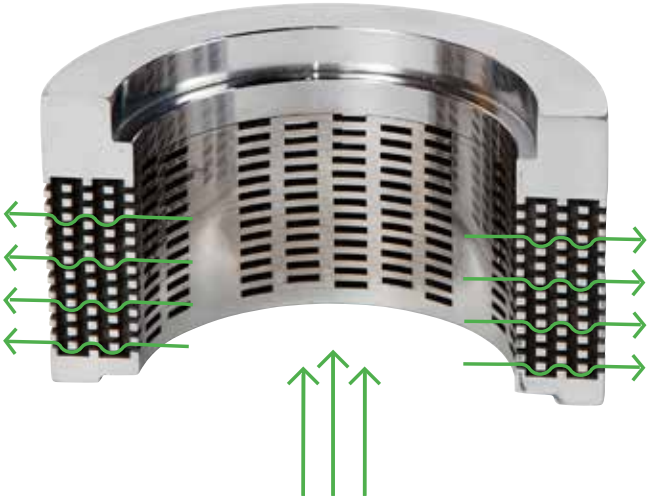
- Multihole for both balanced and unbalanced models
- Flow division by multihole flow channels
- Velocity and pressure control by individual flow paths
- Preventing exit jet interaction



Omega

Multistage, multiturn trim

- Multistage, multiturn construction
- Controlling trim velocity by multistaged, multiturn 2- or 3-dimensional flow passage
- Flow division by multiple flow channels
- Sudden expansion and contraction in individual flow path
- Preventing exit jet interaction
- Enhancing noise and cavitation reduction by optimising the number of turns in the trim



Rotary control valves

Control valves					
Product	**Series**	**Design**	**Specifications**	**Service**	**Bulletin**
Neles™ V-port segment valves 	RA, RE -series	Wafer, flanged **Options:** Reduced Cv trims, Q-Trims	**Size:** DN 25 – 800 / 1" – 32" **Pressure:** ASME 150 – 600 / PN10 – 100 **Temperature:** -52 to + 425 ºC / -60 to +797 ºF **Body:** CF8M, WCB, CG8M Titanium, Hastelloy C, SMO **Tightness:** Class IV ~ VI 10xISO Rate D, Rate D	General, demand-ing/ erosive, severe, fire safe, low emission	3R21, 3R24
Neles Finetrol™ eccentric plug valves 	FC, FG & FL -series	Flanged, eccentric rotary plug valve **Options:** Reduced Cv trims, Q-Trims, cryogenic	**Size:** DN 25 – 300 / 1" – 12"" **Pressure:** PN 10 – 100 / ASME 150 – 600 **Temperature:** -200 to +450 ºC / -320 to +842 ºF **Body:** CF8M, WCC **Tightness:** Class IV ~ VI	General, severe, SIL, fire safe, low emission	5FT20, 5FT22
Neles high performance triple eccentric disc valves 	L12, L6, LW & LG, L1 & L2 -series	Wafer, lugged, double flanged **Options:** Heat traced, flow balancing trim, cryogenic, high flow capacity, great controllability range	**Size:** DN80 – 2200 / 3" – 88" **Pressure:** ASME 150 – 600 / PN10 – 100 **Temperature:** -200 to +650 ºC / -320 to +1200 ºF **Body:** CF8M, WCB, LCC, 5A, Monel See other body materials from bulletin **Tightness:** Up to ISO Rate A, API 598 & Class VI	General, moderate SIL, fire safe, low emission	2L121, 2L1220, 2LW20, 2L621, 2LBF20, 8QD20, 2SL120
Neles RotaryGlobe™ 	ZX -series	Flanged, rotary globe control valve **Options:** Balanced anti-cavitation and low noise, different CV and LIN/EQ trims	**Size:** ½" – 4" / DN 15" – 100" **Pressure:** ASME 150 – 1500 / PN 10 – 100 **Temperature:** -80 to +425 ºC / -110 to +797 ºF **Body:** CF8M, WCC **Tightness:** Class III ~ IV	General, severe, fire safe, low emission	1RG20
Neles top entry rotary valves 	T5 -series	Reduced port, flanged, weldends **Options:** Q-Trim, Q2-Trim, different Cv-trims, cryogenic	**Size:** DN 25 – 800 / 1" – 32" **Pressure:** DN 15" – 100" / ½" – 4" **Temperature:** -200 to +600 ºC / -320 to +1110 ºF **Body:** CF8M, WCB **Tightness:** Class V ~ VI	Heavy duty	1T520
Neles E-series ceramic valves 	E2 & E6 -series	Reduced port, wafer, lugged **Options:** Different Cv-trims	**Size:** DN 25 – 200 / 1" – 8" **Pressure:** ASME 150 – 300 / PN 10 – 40 **Temperature:** -40 to +425 ºC / -40 to +800 ºF **Body:** Stainless steel / Magnesia, partially stabilized Zirconia (Mg – PS2) Metal Matrix Composite (MMC) **Tightness:** ISO rate D, Class V	Erosive applica-tions	1E220

Globe control valves

Globe control valves				
Product	**Series**	**Design**	**Specifications**	**Bulletin**
Neles GU -series globe control valves 	GU -series	Globe unbalanced, top guided type Single seated, flanged, butt & socket weld	**Size:** DN15 – 150 / ½" – 6" **Pressure:** ASME 150 – 2500 / PN10 – 320 / JIS 10K – 20K **Temperature:** -200 to +593 ºC / -320 to +1053 ºF **Body:** WCB, CF8M **Tightness:** ANSI Class IV ~ VI **Trim:** SS410, SS420, SS316, SS316 + Alloy 6, etc.	4GV21
Neles GB -series globe control valves 	GB -series	Globe balanced, single seated, cage-guided High capaity and heavy duty balanced, flanged, butt & socket weld	**Size:** DN 50 – 900 (2" – 36") **Pressure:** ASME 150 – 2500 / PN10 – 320 / JIS 10K – 20K **Temperature:** -200 to +593 ºC / -320 to +1053 ºF **Body:** WCB, CF8M **Tightness:** ANSI Class IV ~ V **Trim:** SS410, SS420, SS316, SS316 + Alloy 6, etc.	4GV25
Neles GM -series globe control valves 	GM -series	Globe Omega trim, multi-stage type Flanged, butt & socket weld	**Size:** DN 50 – 900 (2" – 36") **Pressure:** ASME 150 – 2500 /PN10 – 320 / JIS 10K – 20K **Temperature:** -200 to +593 ºC / -320 to +1053 ºF **Body:** WCB, CF8M **Tightness:** ANSI Class IV ~ VI **Trim:** SS420, SS316 + Alloy 6, etc.	4GV20
Neles A-series globe control valves 	AU, AB, AM -series	Angle pattern valves Angle, top-guided, cage-guided, Tendril™, Omega™ trim, flanged, butt & socket weld	**Size:** DN15 – 1200 / ½" – 48" **Pressure:** ASME 150 – 2500 / PN10 – 320 **Temperature:** -200 to +593 ºC / -320 to +1053 ºF **Body:** WCB, CF8M **Tightness:** ANSI Class IV ~ VI **Trim:** SS410, SS420, SS316, SS316 + Alloy 6, etc.	4GV23
Neles GW -series globe control valves 	GW -series	Globe 3-way, diverting/ mixing type Flanged, butt & socket weld	**Size:** DN25 – 250 / 1" – 10" **Pressure:** ASME 150 – 600 / PN10 – 100 **Temperature:** -29 to +425 ºC / -20 to +797 ºF **Body:** WCB, CF8M **Tightness:** ANSI Class II ~ IV **Trim:** SS410, SS316, SS316 + Alloy 6, etc.	4GV24

On-off valves

On-off valves					
Product	**Series**	**Design**	**Specifications**	**Service**	**Bulletin**
Neles X-series ball valves 	XA, XB, XC, XU, XT -series Seat supported XG, XM, XH -series Trunnion mounted	Full or reduced port, metal and soft seats **Options:** Steam jacket, cryogenic and high temperature, catalyst handling, coal gasification, polymer service, oxygen service, Q-Trim, Q2-Trim	**Size:** DN25 – 600 / 1" – 24" For larger sizes, see bulletin **Pressure:** ASME 150 – 900 / PN 10 – 160 **Temperature:** -200 to +600 ºC / -320 to +1110 ºF **Body:** CF8M, WCB See other body materials from bulletin **Tightness:** ANSI Class IV ~ VI	General	1X22, 1X23, 1X26, 1X27, 1XH20
Neles M-series ball valves 	M1, M2 -series Seat supported and trunnion mounted	Full bore, metal and soft seats **Options:** Black and green liqour applications	**Size:** DN 25 – 600 / 1" – 24" **Pressure:** ASME 150 – 300 / PN 10 – 40 **Temperature:** -50 to +250 ºC / -60 to +480 ºF **Body:** CF8M, CG8M **Tightness:** ISO rate D metal seats, Bubble tight with soft seats	General in P&P industry	1M120, 1M220
Neles soft seated ball valves 	6D-series	Full bore valve, trunnion supported ball design, off-center split body design	**Size:** DN 50 – 600 / 2" – 24" **Pressure:** ASME 150 – 300 (larger class rating on request) **Temperature:** -29 ºC to +200 ºC / -20 ºF to +392 ºF **Body:** WCB or CF8M **Tightness:** No visible leakage as per API 6D, API 598, ISO 5208 Rate-A	Demanding applica-tions	16D20
Neles D-series ball valve 	D2C, D2D, D1F -series	Full or reduced port, stemball construction **Options:** Steam jacket, cryogenic and high temperature, catalyst handling, Q-Trim, Q2-Trim	**Size:** D1F: DN50 – 600 / 2" – 28" D2: DN700 – 900 / 28" – 36" **Pressure:** ASME 150 – 600 / PN 10 – 100 **Temperature:** -200 to +600 ºC / -320 to +1110 ºF **Body:** CF8M, WCB See other body materials from bulletin **Tightness:** Class V ~ VI	Demanding applica-tions	1D21
Neles high performance triple eccentric disc valves 	L12, L6, LW & LG, L1 & L2 -series	Wafer, lugged, double flanged **Options:** High tightness, erosion resistant version, cryogenic and high temperature, high cycling	**Size:** DN80 – 2200 / 3" – 88" **Pressure:** ASME 150 – 600 / PN10 – 100 **Temperature:** -200 to +650 ºC / -320 to +1200 ºF **Body:** CF8M, WCB, LCC, 5A, Monel See other body materials from bulletin **Tightness:** Up to ISO Rate A, API 598 & Class VI	General, moderate SIL, fire safe, low emission	2L121, 2L1220, 2LW20, 2L621, 2LBF20, 8QD20, 2SL120
V-port segmented ball valves 	RE -series	Flanged	**Size:** DN 300 – 800 / 12" – 32" **Pressure:** ASME 150 – 300/ DN 10 – 40 **Temperature:** -52 to +315 ºC /-60 to +599 ºF **Body:** CF8M, WCB, CG8M, Titanium, Hastelloy C, SMO **Tightness:** ISO 5208 Rate D with metal seat, Rate C with soft seat	General	3R27

ESD valves

ESD valves						
Product	**Series**	**Design**	**Specifications**		**Service**	**Bulletin**
Neles X-series ball valves 	XA, XB, XC, XU, XT -series Seat supported	Full or reduced bore, metal seats **Options:** Cryogenic, high temp.	**Size:** **Pressure:** **Temperature:** **Body:** **Tightness:**	DN25 – 600 / 1" – 24" For larger sizes, see bulletin ASME 150 – 900 / PN10 – 160 -200 to +600 ºC / -330 to +1110 ºF CF8M, WCB See other body materials from bulletin Class IV ~ VI	High MTBF, SIL 3 certified	1X22, 1X23, 1X26, 1X27, 1XH20, 9VG921, CB058
	XG, XM, XH -series Trunnion mounted					
Neles D-series ball valves 	D2C, D2D, D1F -series	Full or reduced port, stemball construction **Options:** Cryogenic, high temp.	**Size:** **Pressure:** **Temperature:** **Body:** **Tightness:**	D1F: DN50 – 700 / 2" – 28" D2: DN700 – 900 / 28" – 36" ASME 150 – 600 / PN 10 – 100 -200 to +600 ºC / -330 to +1110 ºF CF8M, WCB, LCC Class V ~ VI	High MTBF, SIL 3 certified	1D21, 9VG921, CB058
Neles top entry rotary valves 	T5-series	Reduced or full port, flanged, weldends **Options:** Cryogenic, high temp.	**Size:** **Pressure:** **Temperature:** **Body:** **Tightness:**	DN 25 – 400 / 1" – 16" ASME 150 – 600 / PN 10 – 40 -200 to +600 ºC / -320 to +1110 ºF CF8M, WCB See other body materials from bulletin Class IV ~ VI	High MTBF, SIL 3 certified	1T520, 9VG921, CB058
Neles high performance triple eccentric disc valves 	L6, LW & LG, L1 & L2 -series	Wafer, lugged, double flanged **Options:** High tightness, cryogenic, high temp.	**Size:** **Pressure:** **Temperature:** **Body:** **Tightness:**	DN80 – 2200 / 3" – 88" ASME 150 – 2500 / PN 10 – 400 -200 to +650 ºC / -320 to +1200 ºF CF8M, WCB, LCC, 5A, Monel See other body materials from bulletin Up to ISO Rate A, API 598 & Class VI	High MTBF, SIL 3 certified	CB058, 2LBF20

Engineered valve solutions

Engineered valve solutions					
Product	**Series**	**Specifications**		**Service**	**Bulletin**
Neles lever valves 	BH-series	**Size:** **Pressure:** **Body:** **Temperature:**	DN 200 – 1600 / 8" – 64" ASME 150 – 300 / PN10 – 40 Carbon steel -29 to +280 ºC / -20 to +536 ºF	Valve opens at precise pressure differential without use of separate monitoring. Air separation, chemical plants, cement and steel, industry, safety valve	2BH20
Neles cryogenic butterfly valves 	BWX -series	**Size:** **Pressure:** **Body:** **Temperature:**	DN 100 – DN 600 / 4" – 24" ASME 600 / PN63 Stainless steel special material -200 to +470 ºC / -320 to +880 ºF	Cryogenic and high temperature LNG applications, air separation, nitrogen, helium and hydrogen	2BWX20

Valve controllers

Valve controllers					
Product	**Series**	**Design**	**Specifications**		**Bulletin**
Neles NDX™ Intelligent valve controllers 	NDX1510 -series	Compact	**Power:** **Pressure:** **Temperature:** **Communication:**	Taken from the 4 to 20 mA, control signal 1.4 – 8.0 bar / 20 – 115 psi -40 to +85 ºC / -40 to +185 ºF HART	7NDX22, 7NDX23
	NDX1511/ NDX2511 -series	Standard			
	NDX1512/ NDX2512 -series	Explosion proof			
Neles ND9000™ Intelligent valve controllers 	ND9100 -series	Standard	**Power:** **Pressure:** **Temperature:** **Communication:**	Taken from the 4 to 20 mA, control signal or fieldbus powered 1.4 – 8 bar / 20 – 115 psi -53 to + 85 ºC / -63 to +185 ºF HART, Profibus PA, FOUNDATION Fieldbus	7ND9021, CB058
	ND9200 -series	Explosion proof			
	ND9300 -series	Stainless steel enclosure intrinsically safe and explosion proof			
	ND9400 -series	Stainless steel intrinsically safe			

Valve controllers

Valve controllers				
Product	**Series**	**Design**	**Specifications**	**Bulletin**
Neles ValvGuard™ VG9000 intelligent safety solenoids 	VG9200 -series	Standard epoxy coated anodised aluminium alloy enclosure, intrinsically safe and explosion proof	**Input:** FOUNDATION Fieldbus + 0/24 VDC, 4/20 mA, 0/24 VDC with RCI9H2 **Pressure:** 3.0 – 7.5 bar / 44 – 109 psi **Temperature:** -40 to +85 ºC /-40 to +185 ºF **Communication:** FOUNDATION Fieldbus, HART **Safety:** TÜV SIL 3 approved partial stroke testing system for emergency shutdown valves	9VG921, CB058
	VG9300 -series	Full 316 stainless steel enclosure, intrinsically safe and explosion proof		
Neles ValvGuard VG9PST partial stroke testing device used with external solenoid valve 	VG9200 -series	Standard epoxy coated anodised aluminium alloy enclosure, intrinsically safe and explosion proof	**Input:** 8-20 mA **Pressure:** 3.0 – 7.5 bar / 44 – 109 psi **Temperature:** -40 to +85 ºC / -40 to +185 ºF **Communication:** HART	9VG921, CB058
	VG9300 -series	Full 316 stainless steel enclosure, intrinsically safe and explosion proof		
Neles Local Control Panel LCP9H 	LCP9H -series	Stainless steel or aluminum alloy enclosure, intrinsically safe and explosion proof	**Input:** Loop powered (mA) through VG9000 or separate 24VDC power supply **Temperature:** -20 to +85 ºC (Ex ia, ic, eb mb) / -20 to +65 ºC (Ex d) **Communication:** Proprietary serial communication with VG9000	9LCP20
Neles smart on/off monitoring 	Axiom™ on/off valve controller	On/off-monitoring with integrated solenoid valves	Features according to industry needs	

Pneumatic actuators

Pneumatic actuators					
Product	**Series**	**Design**	**Specifications**		**Bulletin**
Neles B1-series 	B1C & B1J -series	Pneumatic rotary cylinder actuator **Options:** Manual and hydraulic overdrives, lockout devices, high-cycle, fire protection	**Pressure input:** **Pressure output:** **Temperature:** **Action:**	2.8 – 10 bar / 40 – 140 psi Torque: 28 – 100000 Nm / 21 – 73800 ft-lb -55 to 120 ºC / -67 to +250 ºF B1C-double acting, B1J-spring return	6B20, CB058
Neles N1-series scotch yoke actuators 	N1 -series	Pneumatic or hydraulic rotary cylinder actuator, scotch yoke type **Options:** Manual and hydraulic overdrives, fire protection	**Spring return model:** **Double acting model:** **Temperature:** **Action:**	Spring nominal, 25 Nm – 147425 Nm, 18 lb ft – 108735 ft-lb Air break @ 4.0 barg / 58 psi: 26 Nm – 218765 Nm, 19 lb ft – 161353 ft-lb Air break @ 4.0 barg / 58 psi: 71 Nm – 311333 Nm, 52 ft-lb – 229627 ft-lb Normal -20º to +80 ºC, High -20º to +125 ºC Double acting, spring return	6N120, CB058
Neles VD-series linear diaphragm actuators 	VD -series	Pneumatic diaphragm actuator for linear valves **Options:** Handwheel for manual operation, volume tank	**Pressure input:** **Pressure output:** **Temperature:** **Action:**	3.0 – 4.2 bar / 44 – 60 psi Thrust: 1890 – 22800 N / 424 – 5125 ft-lb -55 to +85 ºC /-67 to +185 ºF Spring return	6VD20, CB058
Neles VB-series linear cylinder actuators 	VBC & VBD/R -series	Pneumatic cylinder actuator for linear valves **Options:** Handwheel for manual operation, Volume tank or buil-in volume chamber	**Pressure input:** **Pressure output:** **Temperature:** **Action:**	2.8 – 10 bar / 40 – 140 psi Thrust: 16823 – 78160 N / 3781 – 17571 ft-lb -55 to +120 ºC /-67 to +250 ºF VBC-double acting, VBD/R-spring return	6VB20, CB058
Neles VC-series linear cylinder actuators 	VC -series	Pneumatic cylinder actu-ator for linear valves **Options:** Handwheel for manual operation, volume tank or built-in volume chamber	**Pressure input:** **Pressure output:** **Temperature:** **Action:**	2.0 – 10 bar / 29- 145 psi Thrust: 27480 – 264860 N / 6177 – 59542 ft-lb -30 to +85 ºC /-22 to +185 ºF Double acting	6CA20, CB058

Analog positioners

Analog positioners				
Product	**Series**	**Design**	**Specifications**	**Bulletin**
Neles pneumatic positioner 	NP700 -series	Pneumatic positioner	**Input:** 0.2 – 1 bar, 20 – 200 kPa, 3 – 15 psi 3.0 – 7.5 bar / 44 – 109 psi **Split:** 0.2 – 0.6 bar, 0.6 bar – 1 bar, 3 – 9 psig, 9 – 15 psig **Temperature:** -40 to +90 ºC / -40 to +200 ºF **Vibration:** < 1%	9VG921, CB058
Neles electro-pneumatic positioner 	NE700 -series	Electropneumatic positioner	**Input:** 4 – 20 mA, 0 – 20 mA **Split:** 4 – 12 mA, 12 – 20 mA **Temperature:** -25 to +120 ºC / -15 to +248 ºF **Vibration:** < 1%	7NENP20, CB058

Limit switches

Limit switches				
Product	**Series**	**Design**	**Specifications**	**Bulletin**
Stonel™ Quartz™ 	QX, QN, QG-series	Valve position feedbackfor rotary valves / actuators. General purpose, nonincendive, intrinsically safe, explosion proof	**Switch type:** Solid state proximity, reed, mechanical micro, VCT **Tempature:** -40 to +80 ºC / -40 to +176 ºF **Communication:** FOUNDATION Fieldbus, AS-Interface	7QZ22, CB058
Stonel Eclipse™ 	EC, EN, EG -series	Valve position feedback for rotary valves / actuators. General purpose, nonincendive, intrinsically safe	**Switch type:** Solid state proximity, VCT **Tempature:** -40 to +80 ºC / -40 to +176 ºF **Communication:** AS-Interface, DeviceNet, Wireless Link	7ECL21, 7EC20, CB058
Stonel Prism™ 	PI-series	On/off valve controller with integral solenoid for sanitary diaphragm and angle valves. General purpose, nonincendive, intrinsically safe. Available with Wireless Link	**Switch type:** Solid state proximity sensors **Tempature:** -20 to +60 ºC / -4 to +140 ºF **Communication:** DeviceNet, AS-Interface	7PI21, CB058
Stonel Hawkeye™ 	HK, HX -series	Valve position feedback for linear valves/actuators. General purpose, nonincendive, intrinsically safe, explosion proof	**Switch type:** SST solid state sensors **Tempature:** -40 to +80 ºC / -40 to +176 ºF	7HK21, 7HX21, CB058

Valve options

Noise and cavitation control for rotary valves					
Product	**Series**	**Design**	**Specifications**	**Service**	**Bulletin**
Neles S-Disc™ 	L-series	Flow balancing trim	**Sizes:** 3" – 80" **Pressure:** ASME 150 – 600 **Temperature:** -200 to +600 ºC	Gas and liquid services, moderate dP and wide temperature range, large sizes	2SL120
Neles Q-Disc™ 	L-series	Flow balancing and noise attenuating trim	**Sizes:** 3" - 12" **Pressure:** ASME 150 - 300 **Temperature:** -200 to +600 ºC	Gas and liquid services, moderate dP and wide temperature range	8QD20
Neles Q-Trim™ 	Ball valves: D, X, T and M -series V-ported segment valves: R-series Eccentric rotary plug valves: FC-series	Versatile rotary	**Sizes:** 2" – 36" **Pressure:** ASME 150 – 600 **Temperature:** -200 to +600 ºC	Gas and liquid services, clean and dirty fluids, wide dP and temperature range	8Q20
Neles QLM-Trim™ 	D-series	Enhanced cavitation elimination	**Sizes:** 2" – 36" **Pressure:** ASME 150 – 1500 **Temperature:** -200 to +600 ºC	Gas and liquid service, clean and dirty fluids, wide dP and temperature range	8Q20
Neles Q2-Trim™ 	D, X and T -series	Enhanced noise elimination	**Sizes:** 2" – 16" **Pressure:** ASME 150 – 600 **Temperature:** -200 to +600 ºC	Gas services clean fluids, wide dP and temperature range	8Q220
Neles balanced trim 	ZX-series	Balanced trim for high pressure difference and noise reduction	**Sizes:** ½" – 4" **Pressure:** ASME 150 – 1500 **Temperature:** -80 to +425 ºC	Gas and liquid services, wide temperature and dP range, clean services, small sizes, low Cv	1RG20

Threaded-end ball valves

Threaded-end ball valves				
Product	**Series**	**Sizes**	**Specifications**	**Bulletin**
Jamesbury standard port ball valves 	4000 -series	½" – 1" (DN15 – 25)	**Pressure:** Max. 2500 psi (172 bar) **Temperature:** Max. 500 ºF (260 ºC) **Body/Trim:**[1] Carbon steel, 316SS, Monel, Hastelloy C	B105-1
		1¼" – 2" (DN32 – 50)	**Pressure:** 2250 psi (155 bar) **Temperature:** Max. 500 ºF (260 ºC) **Body/Trim:**[1] Carbon steel, 316SS, Monel, Hastelloy C	
		2½" (DN65)	**Pressure:** Max. 1000 psi (69 bar) **Temperature:** Max. 500 ºF (260 ºC) **Body/Trim:**[1] Carbon steel, 316SS, Monel, Hastelloy C	
Jamesbury full port ball valves	4000 -series	½" – 3/4" (DN15 – 20)	**Pressure:** Max. 2500 psi (172 bar) **Temperature:** Max. 500 ºF (260 ºC) **Body/Trim:**[1] Carbon steel, 316SS, Monel, Hastelloy C	B105-1
		1" – 1½" (DN25 – 40)	**Pressure:** 2250 psi (155 bar) **Temperature:** Max. 500 ºF (260 ºC) **Body/Trim:**[1] Carbon steel, 316SS, Monel, Hastelloy C	
		2" (DN50)	**Pressure:** Max. 1000 psi (69 bar) **Temperature:** Max. 500 ºF (260 ºC) **Body/Trim:**[1] Carbon steel, 316SS, Monel, Hastelloy C	
Jamesbury standard port ball valves 	Eliminator -series	¼" – 2" (DN8 – 50)	**Pressure:** CWP: Max. 2000 psi (138 bar) / ASME Class 600: Max. 1480 psi (102 bar) **Temperature:** Max. 500 ºF (260 ºC) **Body/Trim:**[1] Carbon steel, 316SS, Monel, Hastelloy C	B101-2
Jamesbury Clincher™ standard port ball valves 	2000 -series	¼" – 2" (DN8 – 50)	**Pressure:** Max. 800 psi (55 bar) **Temperature:** Max. 500 ºF (260 ºC) **Body/Trim:**[1] Carbon steel, 316SS, Brass	B102-1
Jamesbury threaded-end ball valves 	A-style	¼" – 2" (DN8 – 50)	**Pressure:** Max. 2000 psi (138 bar) **Temperature:** Max. 500 ºF (260 ºC) **Body/Trim:**[1] Carbon steel, 316SS, Monel, Hastelloy C	B100-1

[1] Consult factory for specific material availability.
Monel is a registered trademark of Special Metals Corporation. Hastelloy is a registered trademark of Haynes International, Inc.

Flanged ball valves

Flanged ball valves					
Product	**Series**	**Sizes**	**Specifications**		**Bulletin**
Jamesbury™ standard port ball valves 	7000 -series	½" – 20" (DN15 – 500)	**Pressure:** **Temperature:** **Body/Trim:**[1]	Class 150, 300 Max. 500 ºF (260 ºC) Carbon steel, 316SS, Alloy 20, Monel, Hastelloy C	B107-1
Jamesbury full port ball valves	9000 -series	½" – 24" (DN15 – 600)	**Pressure:** **Temperature:** **Body/Trim:**[1]	Class 150, 300 Max. 500 ºF (260 ºC) Carbon steel, 316SS, Alloy 20, Monel, Hastelloy C	B107-2

Special service ball valves

Special service ball valves: FM-approved electric interlocking valves (FM figure 1051)					
Product	**Series**	**Sizes**	**Specifications**		**Bulletin**
Jamesbury electric interlocking valves 	2000 -series	½" – 2" (DN15 – 50)	**Pressure:** **Temperature:** **Body/Trim:**[1]	Max. 400 psi (27 bar) Max. 250 ºF (121 ºC) Carbon steel, 316SS	B131-1
	Eliminator, A-style and 4000 -series	¼" – 2" (DN8 – 50)	**Pressure:** **Temperature:** **Body/Trim:**[1]	Max. 2250 psi (155 bar) Max. 250 ºF (121 ºC) Carbon steel, 316SS	B131-1
Jamesbury ANSI Class 150 electric interlocking valves	7000 -series	½" – 6" (DN15 – 150)	**Pressure:** **Temperature:** **Body/Trim:**[1]	Max. 285 psi (19 bar) Max. 250 ºF (121 ºC) Carbon steel, 316SS	B131-1
Jamesbury ANSI Class 300 electric interlocking valves	7000 -series	½" – 6" (DN15 – 150)	**Pressure:** **Temperature:** **Body/Trim:**[1]	Max. 740 psi (51 bar) Max. 250 ºF (121 ºC) Carbon steel, 316SS	B131-1

Special service ball valves: FM-approved safety shut-off & vent valves (FM figure 1052)					
Product	**Series**	**Sizes**	**Specifications**		**Bulletin**
Jamesbury safety shut-off valves 	Eliminator, A-style 4000-series	¼" – 2" (DN8 – 50)	**Pressure:** **Temperature:** **Body/Trim:**[1]	Max. 1200 psi (83 bar) Max. 300 ºF (149 ºC) Carbon steel, 316SS	B131-2
	7000-series	½" – 8" (DN15 – 200)	**Pressure:** **Temperature:** **Body/Trim:**[1]	Max. 285 psi (19 bar) Max. 300 ºF (149 ºC) Carbon steel, 316SS	B131-2
	9000-series	½" – 6" (DN15 – 150)	**Pressure:** **Temperature:** **Body/Trim:**[1]	Max. 285 psi (19 bar) Max. 300 ºF (149 ºC) Carbon steel, 316SS	

[1] Consult factory for specific material availability.

Special service ball valves

Special service ball valves: FM-approved emergency shut-off heat activated valves (FM figure 1075)

Product	Series	Sizes	Specifications		Bulletin
Jamesbury safety shut-off heat activated valves 	2000 -series	½" – 1½" (DN 15 – 40)	**Pressure:** **Temperature:** **Body/Trim:**[1]	Max. 800 psi (55 bar) Max. 500 ºF (260 ºC) Carbon steel, 316SS	B132-1
	7150 -series	½" – 1" (DN15 – 25)	**Pressure:** **Temperature:** **Body/Trim:**[1]	Max. 285 psi (19 bar) Class 150 Max. 500 ºF (260 ºC) Carbon steel, 316SS	
	9000 -series	½" – 1" (DN15 – 25)	**Pressure:** **Temperature:** **Body/Trim:**[1]	Max. 740 psi (51 bar), Class 300 Max. 500 ºF (260 ºC) Carbon steel, 316SS	
	Eliminator -series	¼" – 1¼" (DN8 – 32)	**Pressure:** **Temperature:** **Body/Trim:**[1]	Max. 2000 psi (138 bar) Max. 500 ºF (260 ºC) Carbon steel, 316SS	B132-1

Special service ball valves: CSA approved gas shut-off & vent valves (CSA figure 1057)

Product	Series	Sizes	Specifications		Bulletin
Jamesbury gas shut-off & vent valves 	Eliminator and 4000 -series	¼" – 2" (DN8 – 50)	**Pressure:** **Temperature:** **Body/Trim:**[1]	Max. 200 psi (14 bar) Min. -40 ºF (-40 ºC) Carbon steel, 316SS	B131-4
	7000 -series	½" – 8" (DN15 – 200)	**Pressure:** **Temperature:** **Body/Trim:**[1]	Max. 285 psi (19 bar) Class 150 Min. -60 ºF (-51 ºC) Carbon steel, 316SS	B131-4
	9000 -series	½" – 6" (DN15 – 150)	**Pressure:** **Temperature:** **Body/Trim:**[1]	200 psi (14 bar) Min. -60 ºF (-51 ºC) Carbon steel, 316SS	B131-4

Special service ball valves: EN 161 approved safety shut-off & vent valves

Product	Series	Sizes	Specifications		Bulletin
Jamesbury safety shut-off & vent valves 	4000 -series	½" – 2" (DN15 - 50)	**Pressure:** **Temperature:** **Body/Trim:**[1]	Max. 16 bar 60 ºC Carbon steel, 316SS	B131-5
	7000 -series	½" – 6" (DN15 – 150)	**Pressure:** **Temperature:** **Body/Trim:**[1]	Max. 16 bar 60 ºC Carbon steel, 316SS	B131-5
	9000 -series	½" – 6" (DN15 – 150)	**Pressure:** **Temperature:** **Body/Trim:**[1]	Max. 16 bar 60 ºC Carbon steel, 316SS	B131-5

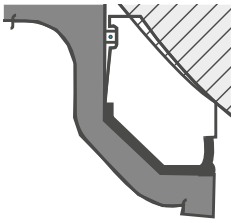
Special service ball valves: 3-way flanged ball valves

Product	Sizes	Specifications		Bulletin
Jamesbury 3-way flanged ball valves 	2" – 12" (DN50 – 300)	**Pressure:** **Temperature:** **Body/Trim:**[1]	Max. 285 psi (19 bar) 300 ºF (149 ºC) Carbon steel, 316SS	B114-1
Jamesbury bottom ported 3-way flanged ball valves	2" – 8" (DN50 – 200)	**Pressure:** **Temperature:** **Body/Trim:**[1]	Max. 285 psi (19 bar) 300 ºF (149 ºC) Carbon steel, 316SS	B114-2

[1] Consult factory for specific material availability.

Special service ball valves

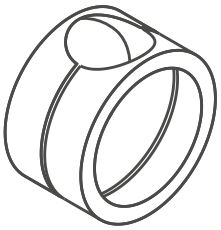
Barrier seat ball valves



Provides superior performance in handling media involving scale and solid build-up in the valve. Such applications include green and white liquor in pulp mill recovery, oxygen lines in steel mill BOP lines and handling potash fertilizers. Flexible-lip design adjusts for changes in pressure, temperature and wear.

Bulletin: B151-5

Cavity fillers



Cavity fillers are available for full-bore valves. The fillers are TFE and used for sanitary applications and in processes where cross contamination is a concern. Food processing, pharma-chemicals, cosmetics, paints, solvents, finishes and dyes are typical applications where fillers are employed.

Steam jacketed ball valves

Series 7000 & 9000 flanged ball valves are available with a bolt on 2 piece steam jacket.

Bulletin: B151-3

Steam service ball valves

Standard Jamesbury ball valves are an excellent choice for on-off plant steam service.

Bulletin: B150-1

Chlorine service ball valves

For both producers and users of chlorine, the unique, flexible-lip design of these valves not only provides tight shut-off, but also flexes and vents chlorine safely to the high-pressure side of the valve when pressure builds up. Valves are constructed of special materials, cleaned and prepared for chlorine service.

Bulletin: B150-2

Oxygen service ball valves

A complete line of valves is available for oxygen applications, ranging from air separation to basic oxygen steel furnace systems. To ensure these valves are compatible with oxygen, stringent material cleaning, handling, assembly and packaging procedures are carefully followed.

Bulletin: B150-3

Vacuum service ball valves

Jamesbury offers both standard and specially prepared valves for vacuum systems. Proven valve designs coupled with resilient seat materials minimize out-gassing and the need for additional valves for applications below 2x10-2 torr.

Bulletin: B150-4

Hydrogen peroxide ball valves

Uniquely designed and prepared to handle the fluid properties of hydrogen peroxide, and keep decomposition to a minimum.

Bulletin: B150-5

Double block and bleed valves (DBB)

Valves with non-cavity relieving seats prevent pressurized media from both sides of the valve from entering the body cavity to allow sampling or bleeding. External cavity relief is required for DBB constructions.

Bulletin: B151-1

Ball valve accessories

Ball valve accessories					
Product	**Series**	**Sizes**	**Specifications**		**Bulletin**
Jamesbury Emission-Pak™ assembly standard bore valves 	For 7000 -series	½ – 8″ (DN15 – 200)	**Pressure:** **Temperature:** **Body/Trim:**[1]	Class 150, 300 Max. 500 ºF (260 ºC) Carbon steel, stainless steel, other alloys	B107-1
Emission-Pak assembly full bore valves	For 9000 -series	½ – 6″ (DN15 – 150)	**Pressure:** **Temperature:** **Body/Trim:**[1]	Class 150, 300 Max. 500 ºF (260 ºC) Carbon steel, stainless steel, other alloys	B107-2

[1] Consult factory for specific material availability.

Spring-return handles

Jamesbury Torq-Handle™ spring-return handles offer reliable, automatic opening and closing of manual valves in a piping system. Remains in position as long as it's held firmly by hand. Returns to predetermined position when released. Also available with fusible or electrothermal links.

Bulletin: B160-1

Limit switches

Available for most ¼" – 6" (DN8 – 150) manually operated ball and butterfly valves whenever indication of valve position is required. Applications include control of signaling devices and panel lights. Available for FM, CSA, NEMA 4, NEMA 7 and ATEX/IECEx applications.

High-performance Wafer-Sphere™ butterfly valves

High-performance Wafer-Sphere butterfly valves				
Product	**Series**	**Sizes**	**Specifications**	**Bulletin**
Jamesbury ANSI class 150 butterfly valves 	815 -series	2½" – 30" (DN65 – 750)	**Design:** Wafer/Lugged **Pressure:** Max. 285 psi (19.6 bar) **Temperature:** Max. 500 ºF (260 ºC) **Body/Trim:**[1] Carbon steel, 316SS, Alloy 20, 254SMO®, Monel, Hastelloy C **Seat:** Teflon®, Xtreme, UHMW	W101-6
		2½" – 60" (DN65 – 1500)		
	F815 -series	3" – 30" (DN80 – 750)	**Design:** Wafer/Lugged **Pressure:** Max. 285 psi (19.6 bar) **Temperature:** Max. 500 ºF (260 ºC) **Body/Trim:**[1] Carbon steel, 316SS, Alloy 20, 254SMO®, Monel, Hastelloy C **Seat:** 316SS/PTFE, 316SS/XT	W101-6
		3" – 60" (DN80 – 1500)		
Jamesbury ANSI class 300 butterfly valves	830 -series	3" – 30" (DN80 – 750)	**Design:** Wafer/Lugged **Pressure:** Max. 740 psi (51 bar) **Temperature:** Max. 500 ºF (260 ºC) **Body/Trim:**[1] Carbon steel, 316SS, Alloy 20, 254SMO®, Monel, Hastelloy C **Seat:** Teflon®, Xtreme, UHMW	W101-6
		3" – 36" (DN80 – 900)		
	F830 -series	3" – 30" (DN80 – 750)	**Design:** Wafer/Lugged **Pressure:** Max. 740 psi (51 bar) **Temperature:** Max. 500 ºF (260 ºC) **Body/Trim:**[1] Carbon steel, 316SS, Alloy 20, 254SMO®, Monel, Hastelloy C **Seat:** 316SS/PTFE, 316SS/XT	W101-6
		3" – 36" (DN80 – 900)		
Jamesbury ANSI class 600 butterfly valves	860 -series	3" – 24" (DN80 – 600)	**Design:** Wafer/Lugged **Pressure:** 1480 psi (102 bar) **Temperature:** 500 ºF (260 ºC) **Body/Trim:**[1] Carbon steel, 316SS **Seat:** Xtreme	W104-1
	F860 -series	3" – 24" (DN80 – 600)	**Design:** Wafer/Lugged **Pressure:** 1480 psi (102 bar) **Temperature:** 500 ºF (260 ºC) **Body/Trim:**[1] Carbon steel, 316SS **Seat:** 316SS/PTFE	W101-6
Jamesbury ANSI class 150 butterfly valves 	835 -series	30" – 60" (DN750 – 1500)	**Design:** Lugged **Pressure:** Max. 100 psi (6.9bar) **Temperature:** Max. 500 ºF (260 ºC) **Body/Trim:**[1] Carbon steel, 316SS, Alloy 20, 254SMO®, Monel, Hastelloy C **Seat:** Teflon®, Xtreme	W105-1
	F835 -series	30" – 60" (DN750 – 1500)	**Design:** Lugged **Pressure:** Max. 100 psi (6.9bar) **Temperature:** Max. 500 ºF (260 ºC) **Body/Trim:**[1] Carbon steel, 316SS, Alloy 20, 254SMO®,Monel, Hastelloy C316SS/PTFE **Seat:**	W105-1

Teflon is a registered trademark of E.I. du Pont de Nemours and Company.
254SMO is a registered trademark of Avesta Sheffield.

[1] Consult factory for specific material availability.

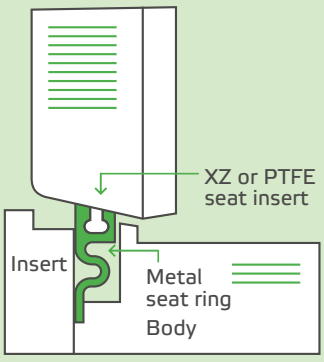
High-performance Wafer-Sphere butterfly valves

High-performance Wafer-Sphere butterfly valves					
Product	**Series**	**Sizes**	**Specifications**		**Bulletin**
Jamesbury ANSI class 150 cryogenic service butterfly valves 	K815 -series	3″ – 12″ (DN80 – 300)	**Design:** **Pressure:** **Temperature:** **Body/Trim:**[1] **Seat:**	Wafer/Lugged Max. 275 psi (19 bar) -320 to +100 ºF (-196 to +38 ºC) 316SS, Monel 316SS/PTFE	W130-1
		14″ – 30″ (DN350 – 750)	**Design:** **Pressure:** **Temperature:** **Body/Trim:**[1] **Seat:**	Wafer/Lugged Max. 275 psi (19 bar) -320 to +100 ºF (-196 to +38 ºC) 316SS, Monel KEL-F	
Jamesbury ANSI class 300 cryogenic service butterfly valves	K830 -series	3″ – 12″ (DN80 – 300)	**Design:** **Pressure:** **Temperature:** **Body/Trim:**[1] **Seat:**	Wafer/Lugged Max. 720 psi (49.6 bar) -320 to +100 ºF (-196 to +38 ºC) 316SS, Monel 316SS/PTFE	W130-1
		14″ – 30″ (DN350 – 750)	**Design:** **Pressure:** **Temperature:** **Body/Trim:**[1] **Seat:**	Wafer/Lugged Max. 720 psi (49.6 bar) -320 to +100 ºF (-196 to +38 ºC) 316SS, Monel KEL-F	
Jamesbury ANSI class 600 cryogenic service butterfly valves	K860 -series	3″ – 12″ (DN80 – 300)	**Design:** **Pressure:** **Temperature:** **Body/Trim:**[1] **Seat:**	Wafer/Lugged Max.1440 psi (99.3 bar) -320 to +100 ºF (-196 to +38 ºC) 316SS, Monel 316SS/PTFE	W130-1

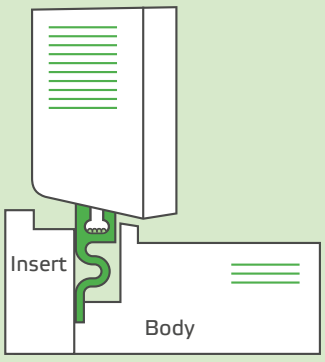
Jamesbury Wafer-Sphere Fire-Tite butterfly valves

Wafer-Sphere Fire-Tite valves offer outstanding advantages in providing reliable operation in normal service and when fire strikes. Specifically developed for use in such industries as petroleum refining and distribution, chemical, marine and others.

Wafer-Sphere Fire-Tite valves offer outstanding advantages in providing reliable operation in normal service and when fire strikes. Specifically developed for use in such industries as petroleum refining and distribution, chemical, marine and others.



Before fire



During and after fire

Special service butterfly valves

High-cycle butterfly valves

Testing indicates that a combination of components – including Xtreme seats, filled enhanced PTFE shaft seals, metal-backed/fabric-lined shaft bearings, PEEK-filled PTFE thrust bearings, and bearing seals – will yield significantly longer life than standard configuration valves.

Steam service butterfly valves

Wafer-Sphere butterfly valves are well-suited for a wide variety of on-off saturated steam applications up to 450 psi.

Bulletin: W150-1

Chlorine service

Wafer-Sphere valves are available specially prepared for chlorine service.

Bulletin: W150-2

Oxygen service butterfly valves

A complete line of valves is available for oxygen applications, ranging from air separation to basic oxygen steel furnace systems. To ensure these valves are compatible with oxygen, rigid material cleaning, handling, assembly and packaging procedures are carefully followed.

Bulletin: W150-3

Vacuum service butterfly valves

The standard Wafer-Sphere valve is capable of vacuum service of 2x10-2 Torr. For high-vacuum service, its specially cleaned seat and packing assure a leakage rate of no more than 1x10-5 standard cc/sec. of helium. When required, valves can be certified with a helium mass spectrometer.

Bulletin: W150-4

Jacketed butterfly valves

Wafer-Sphere high-performance butterfly valves are available with welded or bolt-on jackets.

Bulletin: W151-3

Hydrogen peroxide butterfly valves

Wafer-Sphere uniquely designed and prepared to handle the fluid properties of hydrogen peroxide, and keep decomposition to a minimum.

Bulletin: B150-5

Electric, pneumatic & manual actuators

Pneumatic actuators

Product	Series	Design	Specifications		Bulletin
Jamesbury Valv-Powr™ VPVL actuators 	Model D	Pneumatic rack & pinion	**Action:** **Input:** **Torque output:**	Double acting 40 – 116 psi (2.7 – 8.0 bar) 6.8 – 4582 ft-lb (9.2 – 6212 N·m	A111-5
			Action: **Input:** **Torque output:**	Spring return 60 – 116 psi (4.1 – 8.0 bar) 4.4 – 1627 ft-lb (5.9 – 2207 N·m)	
Jamesbury Quadra-Powr™ X spring-diaphragm actuator 	QPX -series	Pneumatic diaphragm	**Action:** **Input:** **Torque output:**	Spring return 20 – 100 psi (1.4 – 6.9 bar) 11 – 587 ft-lb (15 – 796 N·m)	A110-4

Electric, pneumatic & manual actuators

Manual actuators

Product	Series	Design	Specifications		Bulletin
Jamesbury manual actuators 	MGR -series	Manual gear operated actuator	**Action:** **Input voltages:** **Torque output:**	Handwheel 12 – 107 ft-lb (16 – 145 N·m) 111 – 19177 ft-lb (150 – 26000 N·m)	A100-3

Electric actuators

Product	Series	Design	Specifications		Bulletin
Valvcon™ electric actuators 	V-series	Electric actuator	**Action:** **Input voltages:** **Torque output:**	Reversing 115/230 VAC 150 – 3000 in·lb (17 – 339 N·m)	V200-1
Valvcon continuous-duty electric actuators 	ADC -series	Continuous-duty electric, with optional back-up power	**Action:** **Input voltages:** **Torque output:**	Reversing 24/115/230 VAC, 12/24 VDC 150 – 3000 in·lb (17 – 339 N·m)	V201-1 V201-2
Valvcon electric actuators 	LCU -series	Electric	**Action:** **Input voltages:** **Torque output:**	Unidirectional 24/115/230 VAC, 12/24 VDC 150 – 600 in·lb (17 – 68 N·m)	V202-1
Valvcon electric actuators 	LCR -series	Electric	**Action:** **Input voltages:** **Torque output:**	Reversing 24/115/230 VAC, 12/24 VDC 150 – 600 in·lb (17 – 68 N·m)	V203-1

Pinch valves

Flowrox™ pinch valves						
Product	**Series**	**Design**	**Specifications**		**Application**	**Bulletin**
Flowrox pinch valves 	PVE-series Enclosed body	The enclosed body valve is the most common body type for Flowrox pinch valves. Its enclosed design prevents premature sleeve deterioration and protects the sleeve from the environment, making it extremely safe to operate.	**Size:** **Pressure:** **Pressure range:**	DN 25 – 600 ASME 1" – 24" 0 – 100 bar Bigger sizes upon request	Flowrox pinch valves for shut off and control applications involving abrasive or corrosive slurries, powders or granular substances. The rubber sleeve is the only wearing part.	4PV20
Flowrox pinch valves 	PV-series Open body	The open body pinch valve is designed for non-hazardous media, lower pressures, and operating temperatures. This design isolates vibration and tolerates minor misalignments of the pipeline. It is also light-weight and easy to service.	**Size:** **Pressure:** **Pressure range:**	DN 80 – 600 ASME 3" – 24" 0 – 25 bar Bigger sizes upon request	Flowrox pinch valves for shut off and control applications involving abrasive or corrosive slurries, powders or granular substances. The rubber sleeve is the only wearing part.	4PV20
Flowrox pinch valves 	PVG-series	Flowrox PVG is a robust pinch valve with strong metal body, single-sided simple closing mechanism. Through its reliability and structure, offers substantial savings based on improved performance.	**Size:** **Pressure:** **Pressure range:**	DN 50 – 250 ASME 2" – 10" 0 – 10 bar Bigger sizes upon request	Designed for shut off applications involving pressure resistance, heat, abrasion, corrosion and aggressive slurries.	4PV21
Flowrox pinch valves 	PVEG -series	The PVEG is a robust yet compact and light-weight pinch valve made of polyamide blend with single-sided closing mechanism.	**Size:** **Pressure:** **Pressure range:**	DN 50 – 150 ASME 2" – 6" 0 – 10 bar Bigger sizes upon request	Applicable for industries that require bubble tight shut-off involving aggressive slurries, abrasion, corrosion, and pressure resistance.	4PV21

Flowrox™ – Industry leading products with new identity.
They now have a fresh new look that has been aligned with the rest of Valmet's industry leading offering.

Slurry knife gate valves

Flowrox slurry knife gate valves					
Product	**Series**	**Design**	**Specifications**	**Application**	**Bulletin**
Flowrox slurry knife gate valves 	SKW-series Slurry wafer knife gate valve	Featuring integrated load distribution ring that prevents over compression during installation. Designed with one-piece body and universal tower design allowing for actuator interchangeability.	**Size:** DN50 – 600 **Pressure:** ASME 2” – 24” **Pressure range:** 0 – 10 bar **Materials:** Several seat material options	Flowrox slurry knife gate valves are designed for heavy duty purposes to isolate flow, even in the most demanding process conditions. The bi-directional flow tolerates back-flow and elastomer sleeves on both sides of the gate provide tight shut off.	4SK20
Flowrox slurry knife gate valves 	SKF-series Slurry flanged knife gate valve		**Size:** DN80 – 1500 **Pressure:** ASME 2” – 24” **Pressure range:** 0 – 10 bar **Materials:** Several seat material options		
Flowrox slurry knife gate valves 	SKH-series Slurry high pressure knife gate valve		**Size:** DN80 – 600 **Pressure:** ASME 3” – 12” **Pressure range:** 0 – 20 bar		

Segment valves

Neles egment valves					
Product	**Series**	**Design**	**Specifications**	**Application**	**Bulletin**
Neles segment valves 	R-series Cv-element Q-elements (noise)	Pre-engineered segment types and materials acc to industry mediums. Control and on/off applications	**Size:** DN 25 – 800 **Pressure:** ASME 1” – 32” DIN, ASME, JIS-ratings **Materials:** Metal and soft seated	Benchmark control performance for minerals processing. Provides constant gain over wide control range	

Peristaltic pumps

Flowrox peristaltic pumps						
Product	**Series**	**Design**	**Specifications**		**Application**	**Bulletin**
Flowrox hose pumps 	LPP-T -series	Flowrox LPP pumps incorporate an advanced rolling design, which eliminates friction, maximizes hose life, and lowers energy consumption.	**Size:**	DN32,40,50,65,80,100	Flowrox heavy duty hose pumps are designed for the toughest industrial applications such as thickener underflow, heavy duty slurry transfer, tailings transfer, sampling and dosing	4LPPT20
Flowrox hose pumps 	LPP-D -series		**Size:**	DN15,20,25		4LPPD20
Flowrox metering pumps 	FXM -series	Accurate metering: Positive displacement provides same output on every cycle	**Size:** **Volume:** **Pressure:** **Temperature:** **Suction lift:**	2 and 3 0 – 0,84 m^3/h Up to 8,6 bar / 124 psi Up to 46 ºC / 115 ºF 0 – 8 m / 0 – 26 ft capability	Chemical dosing applications that require accurate metering	4FXM20

Actuators

Neles actuators						
Product	**Series**	**Design**	**Specifications**		**Application**	**Bulletin**
Neles actuators 	B1-series	Designed for ISO 5211/1 when Neles linkages are utilized	**Torque:**	From 25 Nm to 120 000 Nm for maximum supply pressure of 10 bar	Suits an extensive range of minerals processing applications	6B20
Neles actuators 	V-series	Applications up to 260 ºC / 500 ºF High performance Xtreme seat materials Low emission stem seals	**Thrust:** **Temperature:** **Pressure:**	1890 – 264 860 N -55 to +120 ºC Range up to 10 bar	Multi springs with a rolling diaphragm design for precise control application and heavy duty severe application	VD: 6DA20 VB: 6VB20 VC: 6CA20

Plant life cycle flow control services

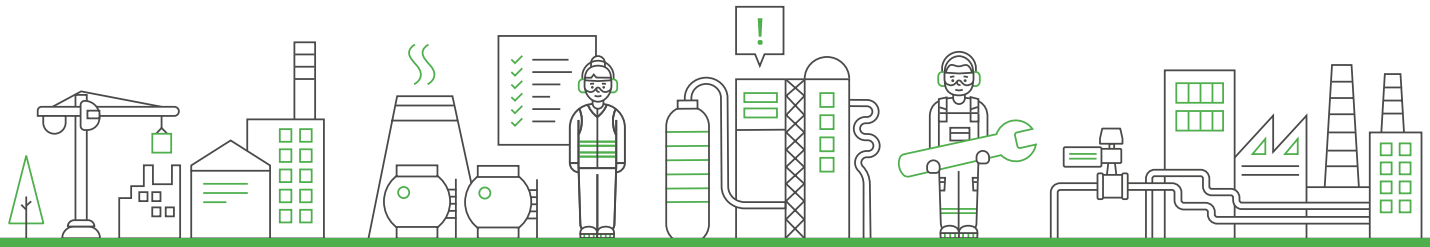
Our knowledge, people and solutions are with you each step of the way for safety performance, risk mitigation and plant reliability.

Project and start-up services

Availability and performance services

Shutdown services

Modernization and upgrade services



→ Start-up → Operations & maintenance → Turnarounds → Modernization

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We apply a vast amount of industry, process, application and product knowledge into every customer relationship. Our technicians work in partnership with you to develop programs and provide services that meet your specific requirements.

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Valmet Flow Control Industrial LLC
12th Street, Dammam 2nd Industrial City,
PO Box 34508, Zip Code 31478,
Dammam, Saudi Arabia
T +966138345861
F +966138123278
sales.saudiarabia@valmet.com
valmet.com/flowcontrol