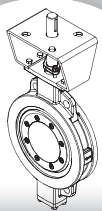


JIRCA

INTERNATIONAL S.P.A.



PRODUCT GUIDE

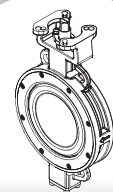


501M series - Triple Eccentric Metal Seated Butterfly Valves

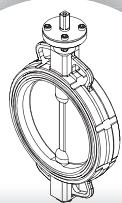
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401N series - Double Eccentric Butterfly Valves



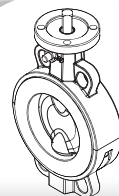
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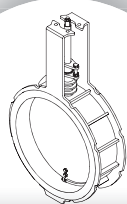
301 / 301E series - Butterfly Valves with rubber seat

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301TSS 301TT series - Butterfly Valves with PTFE lined



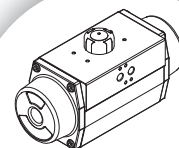
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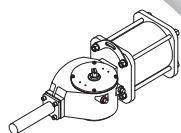
HT600 series - Damper valves for high temperature

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AP / APM series - Pneumatic Rotary Actuators



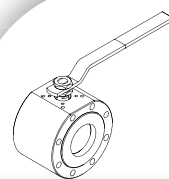
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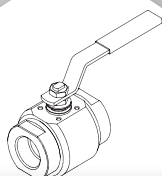
APG series - Schotch Yoke Pneumatic Actuators

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S10 series - Wafer Flat Body Ball Valves



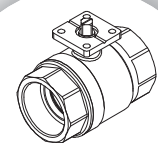
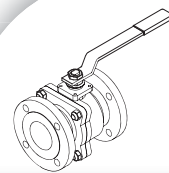
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S20 series - Two-pieces 800 p.s.i. Ball Valves

p. 9-10

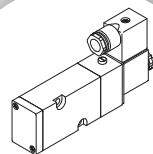
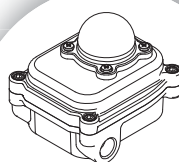
S30 series - Split Body Ball Valves / **S30T series** - Trunnion Ball Valves



S40, S50, S60, S70, S80 series - Threaded actuated and manual ball valves p. 10-11

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MBX Series - Limit Switch Box



SVS Series - Solenoid valve 5/2 or 3/2 way

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ACCESSORIES



Sirca International SpA was founded in the late seventies, and started doing business as a manufacturer of complete automation and pneumatic regulation systems.

Our flagship product is rotating pneumatic quarter-turn actuators which are compact, lightweight and highly reliable.

Subsequently, our company entered the Italian market with the production and sale of rubber-seated butterfly valves, double eccentric butterfly valves, ball valves and check valves.

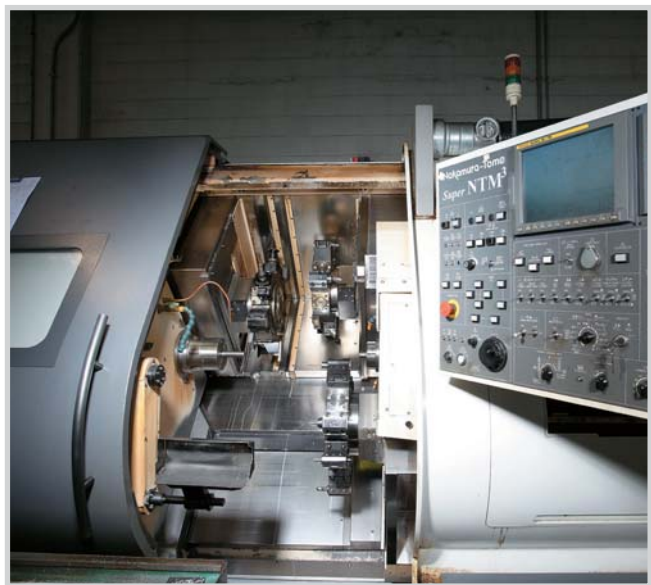
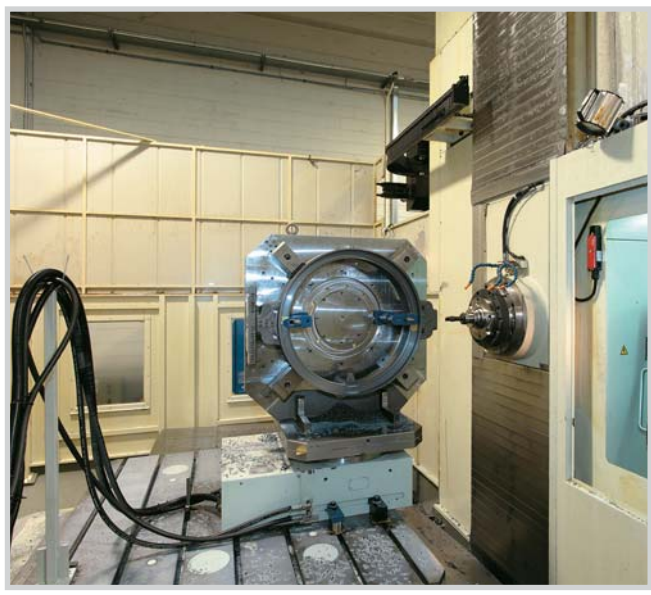
In time at Sirca International we began marketing and producing accessories to actuate, control and regulate valves. These were installed on our own valves and actuators in order to offer our customers complete “assemblies” that are capable of meeting the most varied system requirements.

Beginning in the 1990s, our company began looking at foreign markets and in a short time we started exporting more than 60% of our production.

This type of market development requires continuous product innovation as well as continuous effort to maintain product competitiveness and quality.

With this motivation and these objectives, with the arrival of the new millenium we at Sirca International began designing and producing the triple eccentric butterfly valve metal-seated that are currently top of the range of the valves produced at Sirca.

The main strong points of Sirca International SpA lie in our product quality, competitive price, large warehouse stocks and in the reliability of our services. These confirm our status as a Leading Company on the national and international markets.



Production site

Accuracy in producing valve and pneumatic actuator components is fundamental. And it is for this reason that at Sirca International we have a large stock of top-of-the-range CNC machines with CAD-CAM technology. Amongst the machine tools we use are automatic saws, twin-spindle lathes, with double/triple tower and horizontal machining centres.



Coordinate Measuring Machine.
CMM



Optical emission spectrometer.
PMI testing (Positive Material Identification)



Coating thickness gauges.
For coating thickness measurement on metals.



Hardness testing machine.
Metal and rubber materials.



Vertical idraulic test machine.
For butterfly and ball valves.



Leack test machine.
For pneumatic rotary actuators.

501M series Triple Eccentric Metal Seated Butterfly Valves



Size range	2.1/2" ÷ 56" (DN65 ÷ DN1400)
Type	Wafer, Lug, Double flanged , Butt welding
Design	ASME B16.34, EN 12516-2, EN 593
Face to face	API 609, EN 558, ANSI B16.10
Operating temperature	-196°C + 815°C (-320 °F ÷ +1500 °F)
Pressure ratings	ASME class 150, 300, 600, PN10 ÷ PN160 – bidirectional
Flange drilling	ASME B16.5, ASME B16.47 series A, EN1092-1
Testing	API 598, API 6D, EN 12266-1
Leakage class	Rate "A" - No leakage – according to EN 12266-1
Standard materials	Body: Carbon Steel, Stainles Steel, Al/Bronze Body seat: Stellite® (overlay welding) Disc: Carbon Steel, Stainles Steel, Al/Bronze Stem: AISI 420, AISI 630, NITRONIC 50
Applications	High pressure, High temperature, Critical service, Cryogenic Service
Certifications	2014/68/UE PED, 2014/34/UE ATEX, Fire Safe API 607, ISO 10497, API 6FA CU TR 10 – CU TR 32, GOST-R



Size range	3" ÷ 56" (DN80 ÷ DN1400)
Type	Wafer, Lug, Double flanged on request
Design	ASME B16.34, EN 12516-2, EN 593
Face to face	API 609, EN 558
Operating temperature	-40°C + 220°C (-40 °F ÷ +428 °F)
Pressure ratings	ASME class 150 - bidirectional
Flange drilling	ASME B16.5, ASME B16.47 series A, EN1092-1
Testing	API 598, EN 12266-1
Leakage class	Rate "A" - No leakage – according to EN 12266-1
Standard materials	Body: Ductile Iron, Carbon Steel, Stainless Steel Disc: Ductile Iron, Carbon Steel, Stainless Steel Stem: AISI 304, AISI 316, AISI 630 Seat: PTFE + Carbographe INCONEL 625 LCF on request for metal to metal seated
Applications	Chemical and Pharmaceutical industries, systems for solvent recovery, other applications with compatible materials to working conditions
Certifications	2014/68/UE PED, 2014/34/UE ATEX, Fire Safe API 607, ISO 10497, API 6FA (on request) SIL - IEC 61508, IEC 61511, GOST-R, CU TR 10 – CU TR 32



301 series Butterfly Valves with rubber seat

Size range	1.1/2" ÷ 40" (DN40 ÷ DN1000)
Type	Wafer, Lug, Double flanged
Face to face dimension	EN 558 series 20
Top flange	ISO 5211
Max working pressure	20 bar - bidirectional
Flange drilling	PN6, PN10, PN16 / ANSI class 150
Operating temperature	-20 °C ÷ +160 °C (-4 °F ÷ +320 °F)
Standard materials	Body: Ductile Iron, Carbon Steel, Stainless Steel, Al/Bronze, F51 Disc: Ductile Iron, Carbon Steel, Stainless Steel, Al/Bronze Stem: AISI 316, AISI 420, AISI 630, MONEL K Seat: NBR, EPDM, EPDM HT, VITON, more (all seats have inside a metal ring reinforcement)
Leakage class	Rate "A" - No leakage – according to EN 12266-1
Applications	Liquids or gases in industrial environments, plants, water treatment, vacuum, other applications with compatible materials to working conditions
Certifications	2014/68/UE PED, 2014/34/UE ATEX, SIL IEC 61508 - IEC 61511 GOST-R, CU TR 10 – CU TR 32, TA-Luft, DIN EN 13774 DVGW



301E series Butterfly Valves with rubber seat

Size range	1.1/2" ÷ 20" (DN40 ÷ DN500)
Type	Wafer, Lug
Face to face dimension	EN 558 series 20
Top flange	ISO 5211
Max working pressure	16 bar - bidirectional
Flange drilling	PN10, PN16 / ANSI 150
Operating temperature	-20 °C ÷ +100 °C with NBR seat -20 °C ÷ +120 °C with EPDM seat
Standard materials	Body: Cast Iron Disc: Ductile Iron, Stainless Steel Stem: AISI 316, AISI 420, AISI 630 Seat: NBR, EPDM (the seat is fitted on the valve body)
Leakage class	Rate "A" - No leakage – according to EN 12266-1
Applications	Liquids or gases in industrial environments, generic plants, water treatment, other applications with compatible materials to working conditions
Certifications	2014/68/UE PED - 2014/34/UE ATEX - SIL - IEC 61508, IEC 61511 GOST-R, CU TR 10 – CU TR 32



301TSS series Butterfly Valves with PTFE lined

Size range	1.1/2" ÷ 16" (DN40 ÷ DN400)
Type	Wafer, Lug
Face to face dimension	EN 558 series 20
Top flange	ISO 5211
Max working pressure	10 bar - bidirectional
Flange drilling	PN6, PN10, PN16, ANSI class 150
Operating temperature	-20 °C ÷ +130 °C (-4 °F ÷ +266 °F) other on request
Standard materials	Body: Ductile Iron, Carbon Steel, Stainless Steel, Disc: Stainless steel Stem: AISI 316, AISI 630, Seat: PTFE liner thickness 1,6 mm + EPDM (all seats have inside an aluminum ring reinforcement)
Leakage class	Rate "A" - No leakage – according to EN 12266-1
Applications	Pharmaceutical, Chemical and Food industries, Naval installation, other applications with compatible materials to working conditions
Certifications	2014/68/UE PED - 2014/34/UE ATEX - SIL - IEC 61508, IEC 61511 GOST-R, CU TR 10 – CU TR 32

301TT series Butterfly Valves with PTFE lined

Size range	1.1/2" ÷ 12" (DN40 ÷ DN300)
Type	Wafer, Lug
Face to face dimension	EN 558 series 20
Top flange	ISO 5211
Max working pressure	10 bar - bidirectional
Flange drilling	PN10, PN16, ANSI150
Operating temperature	-20 °C ÷ +150 °C (-4 °F ÷ +302 °F)
Standard materials	Body: Ductile iron GGG40.3 Disc: Stainless Steel CF8M + PTFE Stem: AISI 316 Seat: PTFE liner thickness 3 mm min + Silicon
Leakage class	Rate "A" - No leakage – according to EN 12266-1
Applications	Highly corrosive fluids, toxic media, Pharmaceutical, Chemical and Food industries, Naval installation, other applications with compatible materials to working conditions
Certifications	2014/68/UE PED, 2014/34/UE ATEX, SIL IEC 61508 - IEC 61511 GOST-R, CU TR 10 – CU TR 32

HT600 series Damper valves for high temperature

Size range	2" ÷ 72" (DN50 ÷ DN1800)
Type	Wafer, Flanged
Face to face dimension	EN 558 series 16 for DN50÷500, series 20 for DN600÷1800
Top flange	ISO 5211
Max working pressure	2 bar - bidirectional
Flange drilling	PN6, PN10, PN16, ANSI class 150
Operating temperature	-20 °C ÷ +600 °C (-4 °F ÷ +1112 °F)
Standard materials	Body: Carbon Steel, Stainless Steel, Disc: Carbon Steel, Stainless Steel Stem: AISI 316, AISI 630 Seal: Metal to metal
Max leakage class	Class II - ASME B16.104
Applications	For interception and control of fumes, steam and air with high temperatures
Certifications	2014/34/UE ATEX - SIL - IEC 61508, IEC 61511 GOST-R, CU TR 10 – CU TR 32



AP/APM series Pneumatic Rotary Actuators

Series	AP / APM DA Double Acting / SA Single Acting
Size range	AP0 ÷ AP12 (Ø32mm to Ø330mm)
Stroke	90° with single travel adjustment $\pm 3^\circ$ (AP series) 90° with double travel adjustment $\pm 5^\circ$ (APM series)
Pressure range	2 bar ÷ 8 bar for Double Acting 3 bar ÷ 8 bar for Single Acting
Torque range	2,4 ÷ 7500 Nm (21,4 ÷ 66875 lbf.in)
Operating temperature	-20 °C ÷ +80 °C (-4 °F ÷ +175 °F) standard
Design reference	UNI EN 15714-3, ISO 5211, VDI / VDE 3845
Flange interface	ISO 5211
Stem connection	Square or polygonal shape ISO 5211
Interface for pilot valve	NAMUR type
Accessories flange	VDI / VDE 3845, UNI EN 15714-3
Standard materials	Body: Aluminum alloy extrude bar Cap and piston: Die casting aluminum alloy Stem: Carbon Steel nickel plated
Applications	They find their best application for actuation of quarter turn valves, such as: ball valve, butterfly valve, plug valve
Certifications	2014/34/UE ATEX, SIL IEC 61508 - IEC 61511 GOST-R, CU TR 10 – CU TR 32

APG series Schotch Yoke Pneumatic Actuators



Series	APG, single or double cylinder DA Double Acting / SA Single Acting
Size range	APG200 – APG250 (Ø200mm - Ø250mm)
Stroke	90° with std adjustment $\pm 5^\circ$
Pressure range	3 bar ÷ 7 bar for Double Acting
Torque range	658 Nm ÷ 7400 Nm
Operating temperature	-20 °C ÷ +80 °C (-4 °F ÷ +175 °F) standard
Design reference	ISO 5211 - VDI / VDE 3845
Flange interface	ISO 5211
Stem connection	Round with key
Air connection	1/4" GAS
Accessories flange	VDI / VDE 3845 - UNI EN 15714-3
Standard materials	They find their best application for actuation of quarter turn valves, such as: ball valve, butterfly valve, plug valve.
Applications	They find their best application for actuation of quarter turn valves, such as: ball valve, butterfly valve, plug valve
Certifications	2014/34/UE ATEX, SIL IEC 61508 - IEC 61511 GOST-R, CU TR 10 – CU TR 32

S10 series Wafer Flat Body Ball Valves

Size range	1/2" ÷ 8" (DN15 ÷ DN200) full bore
Type	Wafer
Design	ASME B16.34, EN 12516-2, ISO 14313
Face to face dimension	EN 558 series 100
Top flange	ISO 5211
Max working pressure	40 bar bidirectional
Flange drilling	PN6, PN10, PN16, PN25, PN 40, ANSI class 150, class 300
Operating temperature	-20 °C ÷ +200 °C (-4 °F ÷ +392 °F)
Standard materials	Body: Carbon Steel, Stainless Steel Ball: AISI 304, CF8M Stem: AISI 304, AISI 316 Seat: PTFE + fiber glass, PTFE + carbographe
Leakage class	Rate "A" - No leakage – according to EN 12266-1
Applications	Air, gas, liquids free from impurities for industrial environments, plants, waters treatment, other applications with compatible materials to working conditions
Certifications	2014/68/UE PED, 2014/34/UE ATEX, Fire Safe API 607, ISO 10497, API 6FA SIL - IEC 61508, IEC 61511, GOST-R, CU TR 10 – CU TR 32, DIN EN 13774 DVGW



S20 series Two-pieces 800 p.s.i. Ball Valves

Size range	1/4" ÷ 2.1/2" (DN08 ÷ DN65) full bore and reduced bore
Type	2-pieces, from bar
Design	ASME B16.34, EN 12516-2, ISO 14313, DIN 3202 M3
Top flange	ISO 5211
Max working pressure	800 p.s.i. (55 bar) bidirectional
End type	Threaded: ISO 228-1 GAS, ASME B1.20.1 NPT Butt welding: with nipples ASME B36.10 sch. 80 Socketed welding: ASME B16.11
Operating temperature	-20 °C ÷ +200 °C (-4 °F ÷ +392 °F)
Standard materials	Body: Carbon Steel, Stainless Steel Ball: AISI 304, CF8M Stem: AISI 304, AISI 316 Seat: PTFE + fiber glass, PTFE + carbographe
Leakage class	Rate "A" - No leakage – according to EN 12266-1
Applications	Air, gas, liquids free from impurities, chemical agents in each field, other applications with compatible materials to working conditions
Certifications	2014/68/UE PED, 2014/34/UE ATEX, Fire Safe API 607, ISO 10497, API 6FA SIL - IEC 61508, IEC 61511, GOST-R, CU TR 10 – CU TR 32



S30 series Split Body Ball Valves

Size range	1/2" ÷ 8" (DN15 ÷ DN200) full bore
Type	Split body from bar or casting
Design	ASME B16.34, EN 12516-2, ISO 14313, EN 1759-1
Top flange	ISO 5211
Max working pressure	20 bar bidirectional
Flange drilling	PN10, PN16, PN25, PN40, ANSI class 150, 300
Operating temperature	-20 °C ÷ +200 °C (-4 °F ÷ +392 °F)
Standard materials	Body: Carbon Steel, Stainless Steel Ball: AISI 304, CF8M Stem: AISI 304, AISI 316 Seat: PTFE + fiber glass, PTFE + carbographe
Leakage class	Rate "A" - No leakage – according to EN 12266-1
Applications	Air, gas, liquids free from impurities, chemical agents in each field, other applications with compatible materials to working conditions
Certifications	2014/68/UE PED, 2014/34/UE ATEX, Fire Safe API 607, ISO 10497, API 6FA GOST-R, CU TR 10 – CU TR 32, DIN EN 13774 DVGW





S30T series Threaded actuated and manual ball valves

Size range	1" ÷ 24" (DN25 ÷ DN600)
Type	Trunnion ball valves
Design	API 6D (ISO14313); ASME B16.34 Face to Face: API 6D, ASME B16.10, EN 558-1 Raised Face: ASME B16.5, EN 1092-1
Top flange	According to ISO 5211
Max working pressure	From 20 bar for ANSI150 class to 420 bar for ANSI2500 class
Flange drilling	ASME B16.5, EN 1092-1
Operating temperature	Standard: -29 °C ÷ +200 °C (-20,2 °F ÷ +392 °F)
Standard materials	Body: ASTM A352 LF2+ENP or AISI A 182 F316L Ball: ASTM A352 LF2+ENP or AISI A 182 F316L Seat+Insert: ASTM A352 LF2+ENP or AISI A 182 F316L / DEVLON Stem: AISI 4140+ENP or AISI A 182 F316L
Leakage class	NO leakage class (API 6D, API 598)
Applications	Air, gas, liquids free from impurities, chemical agents in each field, Other applications with compatible materials to working conditions
Standard Certifications	PED 2014/68/UE ATEX 2014/34/UE Design FIRE SAFE API 607, ISO 10497, API 6FA



S40/S40M series Threaded actuated and manual ball valves

Size range	1/4" ÷ 4" (DN08 ÷ DN100) full bore
Type	2-pieces with handle or with flange for automation
Top flange	ISO 5211
Max working pressure	16 ÷ 40 bar bidirectional
End type	Threaded ISO 228-1 GAS
Operating temperature	-20 °C ÷ +120 °C (-4 °F ÷ +248 °F)
Standard materials	Body: Brass nickel plated Ball: Brass nickel plated Stem: Brass Seat: PTFE
Applications	Mounting into fixed pipe system for each type of hydraulic system, heating services, pneumatic.
Certifications	97/23/CE PED, 94/9/CE ATEX, GOST-R, CU TR 10 – CU TR 32, TA-Luft



S50/S50M series Threaded actuated and manual ball valves

Size range	1/4" ÷ 3" (DN08 ÷ DN80) full bore
Type	2-pieces with handle or with flange for automation
Top flange	ISO 5211
Max working pressure	40 bar bidirectional
End type	Threaded: ISO 228-1 GAS ASME B1.20.1 NPT on request
Operating temperature	-25 °C ÷ +200 °C (-13 °F ÷ +392 °F)
Standard materials	Body: Stainless Steel CF8M Ball: Stainless Steel CF8M Stem: AISI 304 Seat: PTFE + fiber glass
Applications	Mounting into fixed pipe system for each type of hydraulic system, heating services, pneumatic
Certifications	97/23/CE PED - 94/9/CE ATEX, GOST-R, CU TR 10 – CU TR 32 - TA-Luft

S60/S60M series Threaded actuated and manual ball valves

Size range	1/4" ÷ 4" (DN08 ÷ DN100) full bore
Type	3-pieces with handle or with flange for automation
Top flange	ISO 5211
Max working pressure	40 bar bidirectional
End type	Threaded: ISO 228-1 GAS ASME B1.20.1 NPT on request Socket weld ASME B16.11 -25 °C ÷ +200 °C (-13 °F ÷ +392 °F)
Temperature range	Body: Stainless Steel CF8M
Standard materials	Ball: Stainless Steel CF8M Stem: AISI 304 Seat: PTFE + fiber glass
Leakage class	Rate "A" - No leakage – according to EN 12266-1
Applications	Mounting into fixed pipe system for each type of hydraulic system, heating services, pneumatic
Certifications	97/23/CE PED - 94/9/CE ATEX, GOST-R, CU TR 10 – CU TR 32 - TA-Luft



S70/S70M series Threaded actuated and manual ball valves

Size range	1/4" ÷ 2" (DN08 ÷ DN50) full bore
Type	3-ways "L" with handle or with flange for automation
Top flange	ISO 5211
Max working pressure	40 bar bidirectional
End type	Threaded ISO 228-1 GAS
Operating temperature	-20 °C ÷ +120 °C (-4 °F ÷ +392 °F)
Standard materials	Body: Stainless Steel CF8M Ball: Stainless Steel CF8M Stem: AISI 304 Seat: PTFE + fiber glass
Applications	Mounting into fixed pipe system for each type of hydraulic system, heating services, pneumatic
Certifications	97/23/CE PED, 94/9/CE ATEX, GOST-R, CU TR 10 – CU TR 32



S80/S80M series Threaded actuated and manual ball valves

Size range	1/4" ÷ 2" (DN08 ÷ DN50) full bore
Type	3-ways "L" with handle or with flange for automation
Top flange	ISO 5211
Max working pressure	30 bar bidirectional
End type	Threaded ISO 228-1 GAS
Operating temperature	-20 °C ÷ +120 °C (-4 °F ÷ +248 °F)
Standard materials	Body: Brass nickel plated Ball: Brass nickel plated Stem: Brass nickel plated Seat: PTFE
Applications	Mounting into fixed pipe system for each type of hydraulic system, heating services, pneumatic
Certifications	97/23/CE PED, 94/9/CE ATEX, GOST-R, CU TR 10 – CU TR 32, TA-Luft





MBX series Limit Switch Box

Models	MBX10EM2 with mechanical switches MBX20EX2 with mechanical explosion-proof switches MBX3_PN_ with intrinsically safety proximity switches MBX4_PN_ with amplifier proximity switches MBX50MP2 with pneumatic switches
Construction	Suitable for indoor and outdoor installation
Operating temperature	-25 °C ÷ +85 °C (-13 °F ÷ +185 °F) Lower and higher temperature available on request
Weight	0,95 kg (2.09 lbs)
Enclosure grade	IP 67
Bracket	VDI / VDE 3845, UNI EN 15714-3
Cable entries	Two cable entry M20x1,5 Different entries cable available on request
Standard materials	Body: Die casting aluminum Cover: Die casting aluminum Stem: AISI 303
Applications	Compact limit switch box, designed for safe and hazardous areas, provides a visual and electrical remote position feedback on automated valves with 90° of rotation
Certifications	94/9/CE ATEX (some models only), SIL IEC 61508 - IEC 61511 GOST-R, CU TR 10 – CU TR 32, TA-Luft

SVS series Solenoid valve 5/2 or 3/2 way



Models	Single or double solenoid
Construction	Suitable for indoor and outdoor installation
Temperature range	-20 °C ÷ +70 °C (-4 °F ÷ +158 °F)
Weight	0,310 ÷ 0,400 kg (0,683 ÷ 0,881 lbs)
Protection	IP 65
Fluid	Filtered air
Acting	Internal piloted
Port size	In = Out = 1/4" GAS or NPT
Connection	NAMUR
Body materials	Aluminum alloy
Accessories	Solenoid, LED standard connector, adapter plate for use as 3/2 regulator exhaust silencer
Solenoid specification	
Standard voltage	AC220V, AC110V, AC24V, DC24V, DC12V
Temperature range	-20 °C ÷ +50 °C (-4 °F ÷ +122 °F)
Activating time	0,05 sec and below
Protection	IP 65

MULTI-POSITION HAND LEVER



ELECTRO-PNEUMATIC Positioner 4 ÷ 20 mA signal



GEAR BOX



PNEUMATIC POSITIONER



DISENGAGEABLE GEAR BOX



ELECTRIC ACTUATORS





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