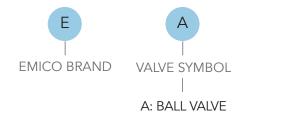


EA-503 & EA-507 CLASS 150 & 300 REDUCED PORT BALL VALVES



F//ICO)FLANGED BALL VALVES - EMICO FIGURE NUMBERING SYSTEM



503 507
SERIES NUMBER
503: CLASS 150 507: CLASS 300



F: A351 CF8M S/S CASTING C: A216 WCB C/S CASTING X: DUPLEX & OTHER SPECIAL MATERIALS

APPLICATIONS

EMICO Flanged ball valves comply with API & ASME / ANSI standards and are suitable for oil & petroleum, LP Gas, petrochemical processing, pulp & paper, general industry. The valves are suitable for handling a variety of fluids in corrosive and non-corrosive applications in oil, petrochemical, chemical, gas, paper, and general processing.



- Reduced Bore
 - Range: 15mm 200mm
- Locking Device: Standard
- Anti static

- ANSI Class 150 & Class 300
- ISO 5211 Mounting Pad
- API 608
- Fire-Safe API 607

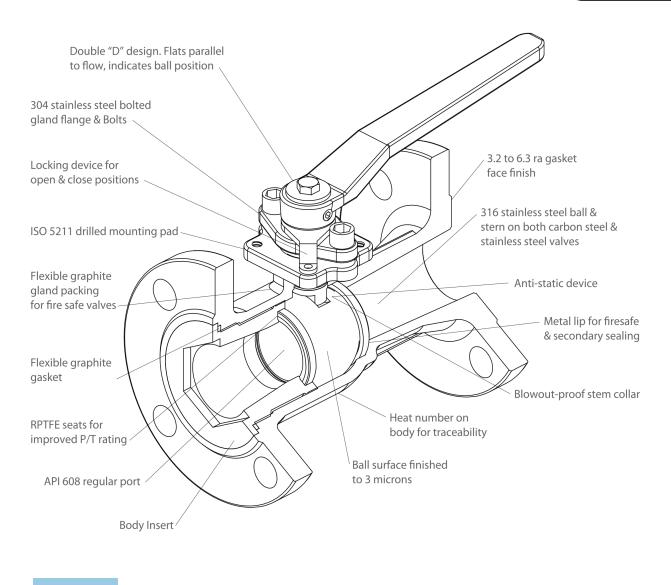
EMICO Flanged Ball Valve Main Technical Specifications	EA-503 Class 150 Reduced Bore	EA-507 Class 300 Reduced Bore
Wall thickness in accordance with B16.34	Yes	Yes
Wall thickness in accordance with API 6D	Yes	Yes
Heavy duty bolt/nut in accordance with B16.34	Yes	Yes
Heavy duty bolt/nut in accordance with API 6D	Yes	Yes
Flange thickness in accordance with B16.5	Yes	Yes
Solid ball	Yes	Yes

Name Plate Details

	FIG	BODY	F. S.	
EMICO	SIZE	TRIM	P/ T	
IS0-9001	CLASS	SEAT	MF' D	

FLANGED BALL VALVES - DESIGN FEATURES

ENICO



DESIGN

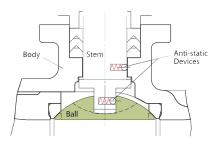
WALL THICKNESS: BODY: TEST, SHELL & SEAT: SEALING: WORKING PRESSURE: FIRE SAFE TEST:

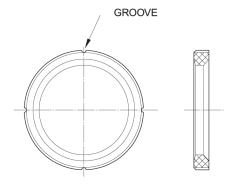
TEMPERATURE RANGE: AGA APPROVALS:



- ASME B16.34, API608
- Castings
- API 598
- Bubble-tight bi-directional
- ASME Class 150 & Class 300
- API 607 Edition 5
- Tested and Certified
- 29° to 232°C
- (i) Manual Shut-off Class 1 AS 4617 - 2004 (Incl. Amd1 & 2) -Certificate No. 8591
- (ii) Automatic Shut-off Valve & Vent Valve Class 1 AS 4629 - 2005 (Incl. Amd1 & 2) -Certificate No. 8590

Quality manufactured & tested under Quality Assurance systems ISO 9001 & 9002





FEATURES

- Anti-Static Plunger Positive earthing of ball and stern to valve body, preventing static electricity build-up.
- **Blowout-Proof Stem** Internally fitted back-seated stem prevents anti-blowout under pressure and also functions as the backseat for stem sealing.
- Locking Device locks valve in open and closed positions to prevent accidental valve operation.
- **Double "D" Stem Design** Ensures lever can only be fitted in line with flow direction for positive open / closed indication.
- ISO 5211 Actuator Mount Integral actuator mounting pad as standard for all modern pneumatic adn elctric actuators.

Stem bearing on 150mm & 200mm valves, reduces side thrust.

- **Bolted Gland Flange** Actuators can be fitted to the valve without disturbing the gland.
- **316SS Corrosion Resistant Trim** For longer valve life.
- 15% Glass Fibre Reinforced PTFE

 For higher pressure / temperature rating. Other seat materials are optionally availabe including Pure PTFE & Carbon-Filled PTFE.
- Pressure Equalising Grooves

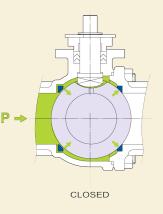
 Ensure efficient sealing at all pressures.

Velocity increases just before valve closure and when the ball is cracked off its seat. At these points, the seats are only partially supported by the ball.

The equalising grooves prevent seat damage from increased line velocity around the unsupported section of the seats. They reduce damage from cold flow (where seats are damaged by extrusion around the ball - a weakness of PTFE under pressure).

Pressure equalising grooves ensure that the upstream seat is free floating. Force acting on the downstream seat is limited to pressure exerted on the surface of the ball only and not the ball plus the upstream seat surfaces combined (piston effect). See sketch below.

Advantage of this feature is lower valve break torque and seat wear.



FEATURES

- Uni-body Design Has no body joints ad minimises leak paths.
- **Testing** All valves have 100% seating and body test.
- Identification Every Body & Cap is Heat Numbered, fully certified and traceable, Month & Year of manufacture on name plate tag.
- **Stock** Repair Kits comprising seats, body seal, gland packing, thrust washer & stem bearing.

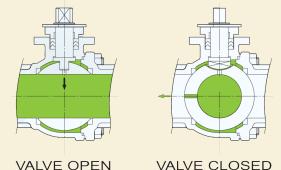
CAVITY PRESSURE RELIEF HOLES:

Heating of volatile fluid trapped in the body cavity can cause pressure build-up, permanently distorting the seats or the ball unless properly relieved with cavity pressure relief holes.

ENICO

Valve Open (standard) - With the valve in the open position, pressure equalisation between the body cavity and the line is achieved by a hole in the ball beneath the stem slot. This is standard on all EMICO ball valves (See sketch below).

Valve Closed (optional) - Internal Pressure equalising vent (hole drilled in upstream side of ball) can be supplied for certain applications e.g. ammonia, chlorine, LPG (See sketch below).



DESIGN & TESTING STANDARDS & SPECIFICATIONS

Pressure / Temperature Rating:	Shell: ASME / ANSI B16.34
	Valve: Valve Seat Materials (page 8)
Shell Wall Thickness:	ASME / ANSI B16.34
Design:	API 608
Face to Face:	ASME / ANSI B16.10
Flange Dimensions:	ASME / ANSI B16.5
Materials:	ASTM
Marking:	MSS SP 25
Valve Testing:	API 598
Fire Safe Testing:	API 607 Edition 5 (ISO 10497-5: 2004)
NACE:	MR0175
Material & Test Certification:	EN 10204 - 2004 3.1

EMICO BALL VALVE FIRE SAFE TO API 607 ED. 5 (ISO 10497-5: 2004)

EMICO EA-503 & EA-507 ball valves have independently witnessed fire tests to API 607 Ed. 5 (ISO 10497-5: 2004). These tests were performed and witnessed by TUV Rheinland, Taiwan.

TYPICAL EMICO FIRE SAFE TEST CERTIFICATES

EMICO fire safe ball valves are designed & manufactured to an approved fire safe tested standard to minimise both external and internal fluid leakages in the event of a plant fire.



FIG. 1 - BALL/BODY CONTACT

- Contact between the ball and the fire safe lip of the body.
- Covers internal leakage.
- All fire safe valves are fitted with flexible graphite body seals and graphite stem packing.

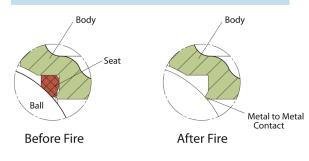
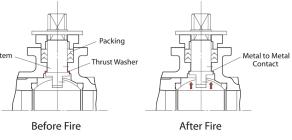


FIG. 2 - STEM/BODY CONTACT

- Contact between the stem shoulder and machined backseat of body.
- Covers external leakage.
- All fire safe valves are fitted with flexible graphite body seals and graphite stem packing.



size: 1" ~ 8"

~ V	/ 0	ertificate Holder:	EAYUAN METAL INDUSTRI	IAL CO LTD
	Ā	BN/ACN No. (if applicable):	N/A	
	٣	lanufacturer:	Eayuan Metal Industrial C	o Ltd
١Z	A	gent (if applicable):	N/A	
-	т	ype of Component:	Type 1 Manual Shut-off Va	alves
begleter	N (1	lodel No. & Description: Refer <u>www.aga.asn.au</u> for more de	EMICO tails)	
	Model	Sizes	Maximum working pressure	Working temperature range
	EA-25A	15mm, 20mm, 25mm, 40mm, 50mm, 65mm, 80mm, 100mm, 150mm, 200mm	1960 kPa	0 °C – 60 °C
	EA-25J	15mm, 20mm, 25mm, 40mm, 50mm, 80mm, 100mm, 150mm, 200mm	4800 kPa	0 °C - 60 °C
	EA-503	20mm, 25mm, 40mm, 50mm, 65mm, 80mm, 100mm, 150mm, 200mm	1960 kPa	0 °C – 60 °C
	EA-507	20mm, 25mm, 40mm, 50mm, 80mm, 100mm, 150mm, 200mm	4800 kPa	0 °C – 60 °C
	This is t	Relevant Standard(s): o certify that the particular COM on (hereafter called the AGA) by r	AS 4617 – 2004 (Incorporating Amendme) PONENT specifically described herein the Certificate Holder named above ha squirements of the AGA's Product Certi	and supplied to The Australian Gas
	This is t Associati assessec Products This Co (i) This Pro (ii) This Gor Cer	kelevant Standard(s): n certity that the particular COMM in phenetiter called the AGA) by t by the AGA to comply with the re- artificate is issued on the ca cartificate is issued on the ca cartificate is the order tables of the Cartificate is the order tables of the AGA resorves the right to careful artificate is the AGA upon request.	(Incorporating Amendment PONENT specifically described herein he Certificate Holder named above has squaments of the AGA's Product Certi repress conditions that: analytic the Rules Governman, repress conditions that conditions that Governman, of the AGA; and here Cattlicate Holder undertakes to surrend conditions to the Certificate Holder and the Ra- metricate Holder undertakes to surrend	and supplied to The Australian Gas ins been subject to "Uppetesting" and flattering of the subject to "Uppetesting" and the subject
	This is t Associati assessed Products This Ce (i) This Ce (ii) This (iii) This Gor Ces Client I	kelevant Standard(s): o orthy that the particular CDM to (hereafter called the AGA) by (by the AGA to orthogo with the re- artificate is issued on the ex- actificate issued on the ex- actificate inside understate to be act Certification Scheme (hereafter the AGA upon request. AGA exerva the right to cared to trificate to the AGA upon request. Manager	(Incorporating Amendment PONENT specifically described herein has certificate Holder named above here spress conditions that: and the AGA's Postace Certi- spress conditions that: and the Rules Governing): the AGA and his Contricted Holder undertakes to surrend Amendment Holder Strategies and amendment Holder Amendment Holder Amendment Holder Amendment Holder Amendment Holder Certificate Holder Certificate Rules	and supplied to The Australian Gis is been subject to "type-testing" and the field of the type-testing Gis function Scheme for type-testing Gis functions Scheme for type-testing Gis functions Scheme for type-testing Composition Scheme for the type-testing type-testing Gis functions Scheme for the type-testing Gis functions
	This is t Associati assessed Products This Ce (i) This Ce (ii) This (iii) This Gor Ces Client I	kelevant Standard(s): n certity that the particular COMM in phenetiter called the AGA) by t by the AGA to comply with the re- artificate is issued on the ca cartificate is issued on the ca cartificate is the order tables of the Cartificate is the order tables of the AGA resorves the right to careful artificate is the AGA upon request.	(Incorporating Amendment PONENT specifically described herein has certificate Holder named above here spress conditions that: and the AGA's Postace Certi- spress conditions that: and the Rules Governing): the AGA and his Contricted Holder undertakes to surrend Amendment Holder Strategies and amendment Holder Amendment Holder Amendment Holder Amendment Holder Amendment Holder Certificate Holder Certificate Rules	and supplied to The Austrahin Gas been subject to "type-testing" and the subject to "type-testing" and the subject to "type-testing" and the subject to type-testing and type-testing and type-testing and type-te
	This is it it Associati assesses This Cd (i) This Cd (ii) This Cd (iii) This Go Cer Client I Certifica	kelevant Standard(s): o orthy that the particular CDM to (hereafter called the AGA) by (by the AGA to orthogo with the re- artificate is issued on the ex- actificate issued on the ex- actificate inside understate to be act Certification Scheme (hereafter the AGA upon request. AGA exerva the right to cared to trificate to the AGA upon request. Manager	(Incorporating Amendment PONENT specifically described herein the Certificate Holder named above has squarements of the AGA's Product Cert (spess conditions that: orable the Rakes downing); of the AGA; and his Certificate in accordance with the R Agartificate Holder undertakes to surrender Certificate Roberts B Certificate No:	and supplied to The Austrahin Gas bound solutions to the the found of the solution solutions to the the solution solutions to the solutions to



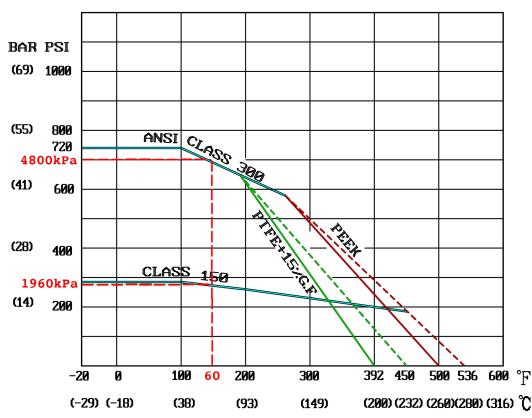
Certificate No: AGA 8591 G EA-503/EA-507 EA-25A/EA-25J

MANUAL VALVE TAG PLATE DATA

	0	Certificate Holder:	EAYUAN METAL INDUSTRI	
	V/			AL COLID
AGA™	2	ABN/ACN No. (if applicable)		
		lanufacturer:	Eayuan Metal Industrial Co	Ltd
JAS-ANZ	4	Igent (if applicable):	N/A	
JAS ANZ	1	ype of Component:	Class 1 Automatic Shut-off	Valves and Vent Valves
Ç		Nodel No. & Description: Refer <u>www.aga.asn.au</u> for more d	EMICO letails)	
	Model FA-25A	Sizes 15mm, 20mm, 25mm, 40mm,	Maximum working pressure	Working temperature range
		50mm, 65mm, 80mm, 100mm, 150mm, 200mm	1960 kPa	0 °C – 60 °C
	EA-25J	15mm, 20mm, 25mm, 40mm, 50mm, 80mm, 100mm, 150mm, 200mm	4800 kPa	0 °C − 60 °C
	EA-503	20mm, 25mm, 40mm, 50mm, 65mm, 80mm, 100mm, 150mm, 200mm	1960 kPa	0 °C - 60 °C
	EA-507	20mm, 25mm, 40mm, 50mm, 80mm, 100mm, 150mm, 200mm	4800 kPa	0 °C - 60 °C
		Solenoid options: - Burkert 6519 or 651 - Power-Genex ESV-S		, ALS-500M2, ALS-200M2
	This is t Associati assessed	on (hereafter called the AGA) by by the AGA to comply with the r	AS 4629 – 2005 (Incorporating Amendmen PONENT specifically described herein in the Certificate Holder named above has equirements of the AGA's Product Certifi	and supplied to The Australian Gas been subject to "type-testing" and
	This is t Associati assessed Products	c certify that the particular COM on (hereafter called the AGA) by by the AGA to comply with the r	(Incorporating Amendmen PONENT specifically described herein the Certificate Holder named above has equirements of the AGA's Product Certifi	and supplied to The Australian Gas been subject to "type-testing" and cation Scheme for Type Tested Gas
	This is t Associati assessed Products This Ce (i) The	o certify that the particular COM on (hereafter called the AGA) by by the AGA to comply with the r ertificate is issued on the er	(Incorporating Amendmen IPONENT specifically described herein, the Certificate Holder named above has equirements of the AGA's Product Certifi xpress conditions that: comply with the Rules Governing The AG	and supplied to The Australian Gat been subject to "type-testing" and cation Scheme for Type Tested Gat MARCENTY ANS AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND
	This is t Associati assessed Products This Co (i) The Pro	o certify that the particular COM on (hereafter called the AGA) by I by the AGA to comply with the r ertificate is issued on the et	(Incorporating Amendmen IPONENT specifically described herein i the Certificate Holder ramed above has equirements of the AGA's Product Certifi xpress conditions that: comply with the Rules Governing The AG er called the Rules Governing);	and supplied to The Australian Gat been subject to "type-testing" and cation Scheme for Type Tested Gat WAGGES VS
	This is t Associati assessed Products This Ce (i) This (ii) This (iii) This Gor	o certify that the particular COM on (hereafter called the AGA) by by the AGA to comply with the r artificate is issued on the ex- certificate Holder undertakes to duct Certificate Holder undertakes to duct Certificate remains the property AGA reserves the right to cancel	(Incorporating Amendmen IPONENT specifically described herein i the Certificate Holder ramed above has equirements of the AGA's Product Certifi xpress conditions that: comply with the Rules Governing The AG er called the Rules Governing);	And supplied to The Australian Gal been subject to "type-testing" and cation Scheme for Type Tested Gar WARRS WARROW WARROW WARROW Uppe-induced Uppe-induced Uppe-induced
	This is t Associati assessed Products This Ce (i) This (ii) This (iii) This Gor	o certify that the particular COM on (hereafter called the AGA) by by the AGA to comply with the r certificate issued on the ex certificate Holder undetailets to duct Certification Scheme (hereaft s Certificate remains the property AGA reserves the right to cancel erring, and in such an event the	(Incorporating Amendment IDONETY specifically described harmin, the Certificate Holder maned above has equirements of the AGA's Product Certific express conditions that: comply with the fluides Governing): of the AGA; and this Certificate in accordance with the Ru- Certificate Holder undertakes to surrende	And supplied to The Australian Gal been subject to "type-testing" and cation Scheme for Type Tested Gal NS NS the the
	This is t Association Products This Co (i) This (ii) This (iii) This Cor	o certify that the particular COM on (hereafter called the AGA) by by the AGA to comply with the r certificate issued on the ex certificate Holder undetailets to duct Certification Scheme (hereaft s Certificate remains the property AGA reserves the right to cancel erring, and in such an event the	(Incorporating Amendment IPONENT specifically described harmin, the Certificate Holder maned above has equirements of the AGA's Product Certific express conditions that: comply with the futures Governing): of the AGA; and this Certificate in accordance with the Ru Certificate Holder undertakes to surrende	nd supplied to The Australian Ga been address to "Spore testing" and address Scheme for Types Tested Ga Weight Scheme for Types Tested Ga Weight Scheme for Types Types Tested Ga Weight Scheme for Types Ty
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	AGA Ce	ertificate No.	AS 4629-2005 (Am AGA 8590 G Valves, Class 1 es, Class 1	udt. 1 & 2)				
	Valve Model: EA- 254	A	03 _507 _C	F				
\bigcirc	Flanged Ends:	Class 15	0 Class 300					
\bigcirc	Serial No:	M/Y:	P/T: 19604800) /0~60°C				
	c/w Emico Actuator: EA-SR							
	Solenoid: 6519 6518 Limit Switch: ALS- 400M		GP	3000				
	Supplied by: BAZYALVE 03 9764 1149							

AUTOMATIC SHUT-OFF AND VENT VALVE TAG PLATE DATA



PRESSURE & TEMPERATURE DETAILS

ADDITIONAL EA-503 CLASS 150 BALL VALVE DETAILS

Maximum pressure over working temperature range:For standard valve:0kPa @ 232°CAs AGA-tested valve:1,960kPa@ 60°C

Maximum pressure over working temperature range:For standard valve:38°C @ 2,000kPaAs AGA-tested valve:60°C @ 1,960kPa

Type of valve:Ball valveClass of Automatic shut-off valve:Class 1

ADDITIONAL EA-507 CLASS 300 BALL VALVE DETAILS

Maximum pressure over working temperature range:For standard valve:0kPa @ 232°CAs AGA-tested valve:4,800kPa @ 60°C

Maximum pressure over working temperature range:For standard valve:38°C @ 5,000kPaAs AGA-tested valve:60°C @ 4,800kPa

Type of valve:Ball valveClass of Automatic shut-off valve:Class 1

KEY

Solid Lines -Continuous Temperature

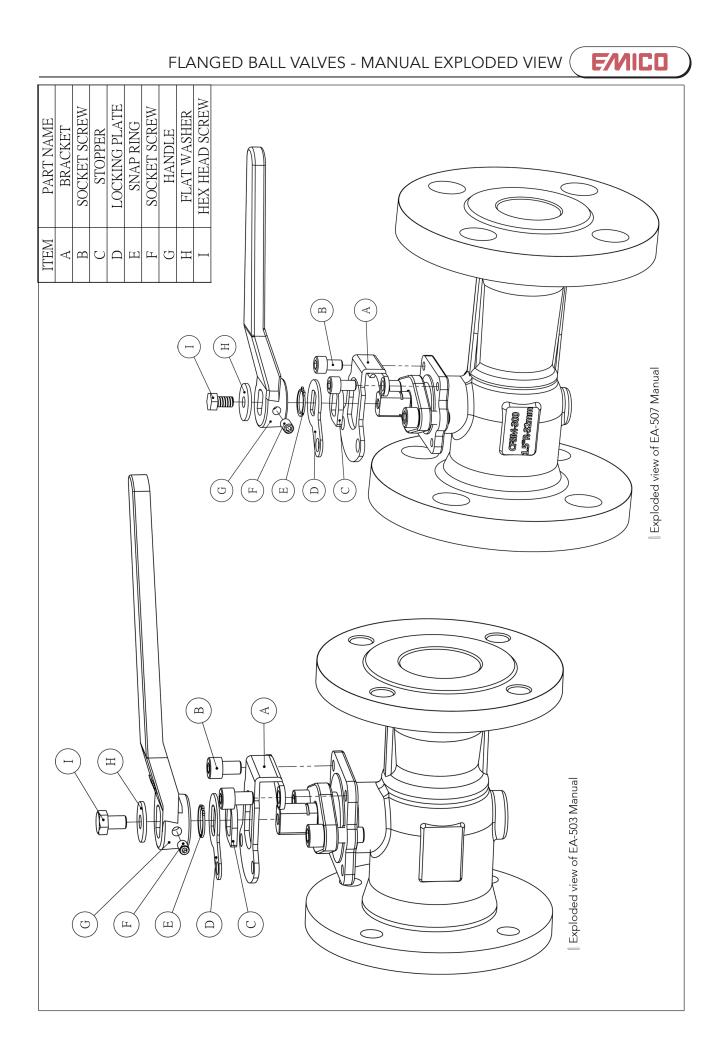
Dotted Lines -Intermittent/Peak Temperature

Red-dashed Lines -AGA valve product testing

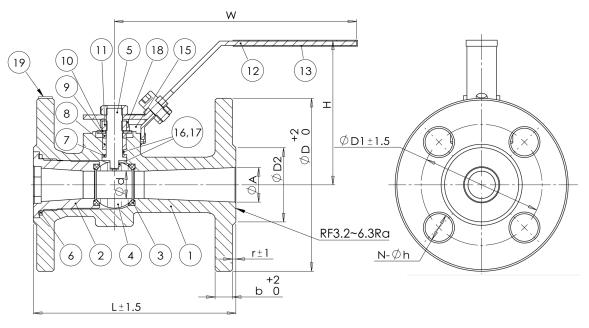
APPLICABLE FIG: EA503 (150LB) / EA507 (300LB)

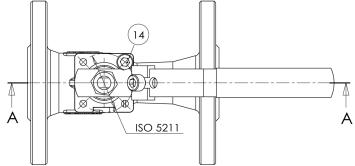
1960kPa @ 60°C (EA-503 / Class 150)

4800kPa @ 60°C (EA-507 / Class 300)



FMICO) FLANGED BALL VALVES - FIG. NO. EA503 CLASS 150



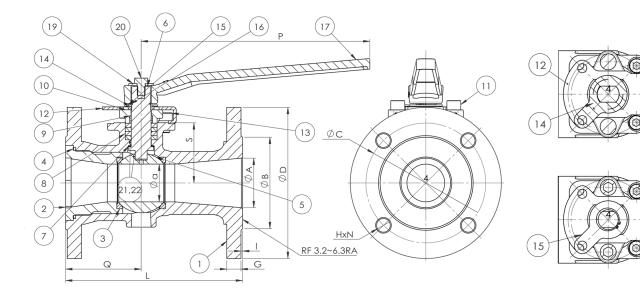


ITEM	DESCRIPTION	MATERIAL	Q'ty
1	BODY	A216-WCB A351-CF8M A352-LCC	1
2	SEAT RETAINER	A216-WCB A351-CF8M A352-LCC	: 1
3	SEATS	PTFE+15%GF	2
4	BALL	A351-CF8M	1
5	STEM	A276-316	1
6	JOINT GASKET	GRAPHITE	1
7	GASKET	PTFE+15%GF	1
8	PACKING	GRAPHITE	1
9	GLAND RING	A276-304	1
10	BELLEVILLE SPRING WASHER	A240-301	2
11	LEVER NUT	A276-304	2
12	HANDLE	A240-304	1
13	PLASTIC COVER	VINYL	1
14	SOCKET HEAD SCREW	F593 304	1
15	SPACER	A276-304	1
16	STATIC DEVICE	A276-316	2
17	SPRING	A276-316	2
18	LOCKING TAB	A240-304	1
19	TAG	A240-304	1

SIZ	Έ	d	А	D2	D1	D	b	r	L	N-Φh	W	Н	ISO5211
3/4	4"	15.8	20	42.9	69.9	100	8.9	2	117	4-16	140	83	F03

FLANGED BALL VALVES - FIG. NO. EA503 CLASS 150 (FMICO

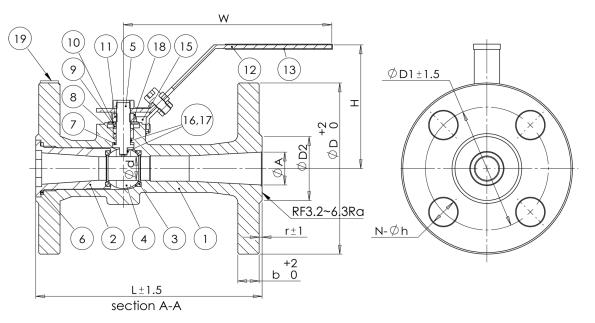
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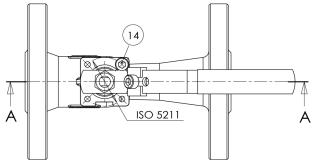


ITEM	PART NAME	MATERIAL	QTY
22	Spring	A276-316	2
21	Static Device	A276-316	2
20	Hexnagonal Screw	SS304	1
19	Flat Washer	SS304	1
18	Socket Screw	C.STEEL	1
17	Handle	A216-WCB	1
16	Snap Ring	SS420	1
15	Stop Plate	SS304	1
14	Locking Plate	SS304	1
13	Sockethead Screw	SS304	2
12	Bracket	SS304	1
11	Sockethead Screw	SS304	2
10	Gland Flange	A351-CF8	1
9	Stem Bearing	PTFE	1
8	Packing	GRAPHITE	1
7	Gasket	PTFE + 15% GF	1
6	Stem	A276-316	1
54	Ball	A351-CF8M	1
	Body Seal	GRAPHITE	1
3	Seat	PTFE + 15% GF	2
2	Set Retainer	A216-WCB A351-CF8M A352-LCC	1
1	Body	A216-WCB A351-CF8M A352-LCC	1

SIZE	а	Α	В	С	D	G		L	Н	N	Р	Q	S	ISO5211
1"	20	25	50.8	79.4	110	9.6	2	127	16	4	135	50.8	38.5	F05
1-1/2"	32	38	73	98.4	125	12.7	2	165	16	4	160	66	50.6	F05
2"	38	50	92.1	120.7	150	14.3	2	178	19	4	230	76	60.5	F07
2-1/2"	50	65	104.8	139.7	180	15.9	2	190	19	4	230	81	67.4	F07
3"	58	80	127	152.4	190	17.5	2	203	19	4	350	92.2	89.9	F10
4"	76	100	157.2	190.5	230	22.3	2	229	19	8	350	96.6	108.7	F10
6"	111	150	215.9	241.3	280	23.9	2	267	22	8	400	133.6	140	F10
8"	144	200	269.9	298.5	345	27	2	292	22	8	800	146	182	F12

F/NICO)FLANGED BALL VALVES - FIG. NO. EA507 CLASS 300

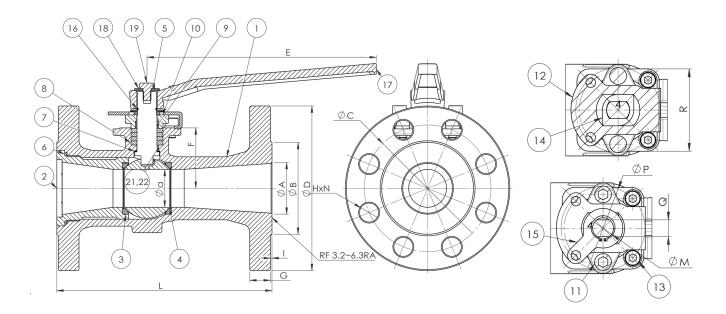




ITEM	DESCRIPTION	MATERIAL	Q'ty
1	BODY	A216-WCB A351-CF8M A352-LCC	1
2	SEAT RETAINER	A216-WCB A351-CF8M A352-LCC	1
3	SEATS	PTFE+15%GF	2
4	BALL	A351-CF8M	1
5	STEM	A276-316	1
6	JOINT GASKET	GRAPHITE	1
7	GASKET	PTFE+15%GF	1
8	PACKING	GRAPHITE	1
9	GLAND RING	A276-304	1
10	BELLEVILLE SPRING WASHER	A240-301	2
11	LEVER NUT	A276-304	2
12	HANDLE	A240-304	1
13	PLASTIC COVER	VINYL	1
14	SOCKET HEAD SCREW	F593 304	1
15	SPACER	A276-304	1
16	STATIC DEVICE	A276-316	2
17	SPRING	A276-316	2
18	LOCKING TAB	A240-304	1
19	TAG	A240-304	1

SIZE	d	А	D2	D1	D	b	r	L	N-Φh	W	н	ISO5211
3/4"	15.8	22	42.9	82.6	115	14.3	2	152	4-19	140	83	F03

FLANGED BALL VALVES - FIG. NO. EA507 CLASS 300 (F/MICO



ITEM	PART NAME	MATERIAL	QTY
22	Spring	A276-316	2
21	Static Device	A276-316	2
20	Socket Screw	STEEL	1
19	Hexnagonal Screw	SS304	1
18	Flat Washer	SS304	1
17	Handle	A216-WCB	1
16	Snap Ring	SS420	1
15	Stop Plate	SS304	1
14	Locking Plate	SS304	1
13	Sockethead Screw	SS304	2
12	Bracket	SS304	1
11	Sockethead Screw	SS304	2
10	Gland Flange	SS304	1
9	Stem Bearing	PTFE	1
8	Packing	GRAPHITE	1
7	Gasket	PTFE + 15% GF	1
6	Body Seal	GRAPHITE	1
5	Stem	A276-316 (4"&6"&8" 17-4PH)	1
4	Ball	A351-CF8M	1
3	Seat	PTFE + 15% GF	2
3 2 1	Set Retainer	A216-WCB A351-CF8M A352-LCC	1
1	Body	A216-WCB A351-CF8M A352-LCC	1

SIZE	а	А	В	С	D	Е	F	G	HxN	Ι	L	М	Р	Q	R	ISO5211
1"	20	25	50.8	88.9	125	135	38.5	15.9	19x4	2	165	12	50	8	48	F04
1-1/2"	32	38	73	98.4	155	160	50.6	19.1	22x4	2	190	15	50	10	48	F05
2"	38	50	92.1	127	165	230	60.5	20.7	19x8	2	216	19	70	14	68	F07
3"	58	80	127	168.3	210	350	89.9	27	22x8	2	282	24	102	16	96	F10
4"	76	100	157.2	200	255	350	108.7	30.2	22x8	2	305	24	102	16	96	F10
6"	111	150	215.9	269.9	320	400	160	35	22x12	2	403	30	102	20	92	F10
8"	144	200	269.9	330.2	380	800	182	39.7	25x12	2	419	38	125	26	115	F12

FMICO) FLANGED BALL VALVES - ACTUATION EXPLODED VIEW

ITEM PART NAME	
A BODY	
B ADAPTER	
C FLAT WASHER	THEFT
D HEX HEAD SCREW	
E BRACKET	K)
F ACTUATOR	
G HEX HEAD SCREW	
H FLAT WASHER	
I SOLENOID VALVE	
J HEX HEAD SCREW	
K LIMIT SWITCH	
Exploded view of EA - 503 Actuated —>	
	(F)
	E (E)
G G	
(H)	B
G	
(T) (F)	
(F)	
	← Exploded view of EA - 507 Actuated
	ITEM PART NAME
H B B	A BODY
(G) (A)	B ADAPTER
(G) (A)	C FLAT WASHER
	D HEX HEAD SCREW
	E BRACKET
	F ACTUATOR
	H FLAT WASHER
	I DRIVE SLEEVE
	J SOLENOID VALVE
	K HEX HEAD SCREW
	L LIMIT SWITCH
	-

FLANGED BALL VALVES - ACTUATION (F//ICO

FEATURES

- Emico fire-safe uni-body flanged ball valves fitted with Spring Return pneumatic actuators.
- Valves have actuators sized for full rated line pressure (Class150 / Class 300) and based on 550 kPa air supply.
- Actuators sized for 500 kPa & 600 kPa also available.
- Mounting brackets and drive couplings manufactured in stainless steel.
- Valve/actuator mounting can be easily removed for gland packing adjustment.
- Drive couplings have stainless steel folddown locking tabs to secure gland nut against loosening.
- EMICO valves have ISO 5211 mounting pads for actuation.
- Actuators have Namur-standard air connections and accessory mounts. Also available for piped connections.
- "Bolt-on" accessories include solenoid valve & limit switch.



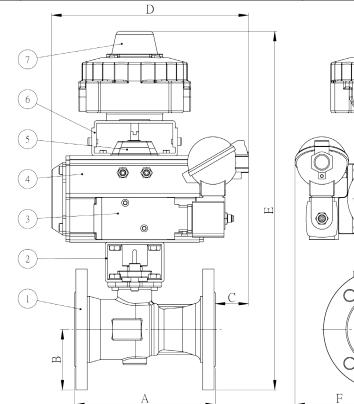
Valve Size (mm)	EMICO Fig. No.	Valve Nett Break Torque	Valve Size (mm)	EMICO Fig. No.	Valve Nett Break Torque
15	EA - 503		15	EA - 507	
20	EA - 503	3.14 Nm	20	EA - 507	4.28 Nm
25	EA - 503	7.42 Nm	25	EA - 507	9.5 Nm
40	EA - 503	15.83 Nm	40	EA - 507	17.67 Nm
50	EA - 503	27.38 Nm	50	EA - 507	30.77 Nm
65	EA - 503	39 Nm			
80	EA - 503	48.75 Nm	80	EA - 507	57.37 Nm
100	EA - 503	73.14 Nm	100	EA - 507	114.03 Nm
150	EA - 503	182.88 Nm	150	EA - 507	222.32 Nm
200	EA - 503	307.78 Nm	200	EA - 507	360.06 Nm

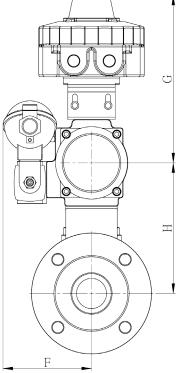
TORQUE DETAILS

REFER TO EMICO TECNICAL BULLETIN NO. 8591- 04/18 29TH MAY 2017 FOR AGA AUTOMATIC SHUT-OFF & VENT VALVE CLASS 1 DETAILS

FMICD FLANGED BALL VALVES - ACTUATION

ltem	Description	Material
1	EMICO Ball Valve, Uni-Body, Reduced Bore Flanged	CS WCB, SS CF8M, Other
2	Mounting Bracket (Valve / Actuator)	S/S to 50mm, Plated M/S above
3	3/2 Way Solenoid Valve	Polyamide, Aluminium, Stainless Steel
4	EMICO Spring Return Pneumatic Actuator	Al. Alloy
5	Visual Position Indicator	ABS
6	Mounting Bracket (Limit Switch / Actuator)	Steel (Powder Coated)
7	Limit Switch	Al. Alloy





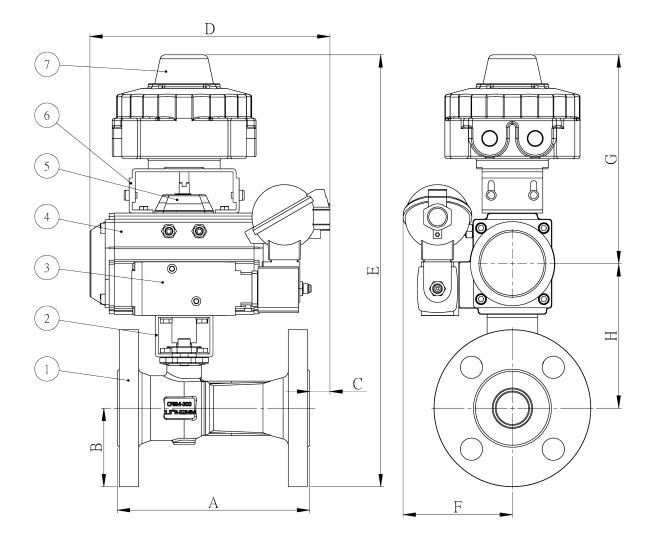
EMICO BALL VALVE (REDUCED BORE)		SPR RTN ACTUATOR	SOL VALVE	LIMIT SWITCH	DIMENSIONS (mm)								
PART NO.	SIZE	EMICO PART NO.	(BURKERT/ POWER-										
	(mm)	INU.	GENEX)		А	В	С	D	E	F	G	Н	
	20	EA-SR52/10		ALS-400M2/ ALS-500M2/ ALS-200M2/ LSB-3000	117	50	73.8	217	354.9	96.5	192.1	103.8	
	25	EA-SR63/11	TYPE 6519/ TYPE 6518/ ESV-S		127	54	85.4	228	361.6	96.5	192.1	115.5	
EA-503	40	EA-SR75/11			165	63.5	45	237	411.2	108	206.1	141.6	
Class 150	50	EA-SR92/10			178	76	42	249	450.6	112	210.6	164.1	
	65	EA-SR92/11	237 3		190	90	35	276	479.5	182.9	214.6	174.9	
	80	EA-SR105/10			203	95	33.2	280	543	187.7	222.3	225.4	
	100	EA-SR125/10			229	114.5	18.6	302	603.3	198.2	233.6	255.2	
	150	EA-SR160/11	TYPE		267	139.5	95.6	458	701.6	210.7	254.6	307.5	
	200	EA-SR190/10	6518										

*Note: Quick Exhaust Valve (QEV) included where applicable

*Note: Actuator default sizing based on 5.5 bar (80psi)

FLANGED STEEL BALL VALVES - ACTUATION (F/MICO

EMICO BALL VALVE (FULL BORE)		SPR RTN ACTUATOR	SOL VALVE	LIMIT SWITCH	DIMENSIONS (mm)							
PART NO.	SIZE	EMICO PART	(BURKERT/									
	(mm)	NO.	POWER- GENEX)		А	В	С	D	E	F	G	Н
	20	EA-SR52/10	TYPE 6519/ TYPE 6518/ ESV-S	ALS-400M2/ ALS-500M2/ ALS-200M2/	152	57.5	50.8	217	353.4	96.5	192.1	103.8
EA-507 Class 300	25	EA-SR63/11			165	62.5	85.4	228	387.1	170.7	200.1	124.5
Clu33 500	40	EA-SR83/10			190	77.5	20	237	426.2	108	206.1	142.6
	50	EA-SR92/10		LSB-3000	215.9	82.5	18.6	276	466.1	182.9	214.6	169.1
	80	EA-SR125/10	TYPE		282.4	105	20.4	280	554	187.7	222.6	226.4
	100	EA-SR140/10	6518		305	127.5	15.4	398	634.3	200.7	242.1	264.7
	150	EA-SR160/11			403	160	95.4	458	743.1	210.7	254.6	328.5
	200	EA-SR210/11										



*Note: Quick Exhaust Valve (QEV) included where applicable

*Note: Actuator default sizing based on 5.5 bar (80psi)



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