

ARI-ZETRIX®ANSI - Fig. 016 - Double flanged process valve with metallic sealing - Triple offset

ARI-ZETRIX®ANSI - Fig. 018 - Fully lugged process valve with metallic sealing - Triple offset

ARI-ZETRIX®ANSI - Fig. 019 - Butt weld ended process valve with metallic sealing - Triple offset

ARI-ZETRIX®ANSI

with worm gear

- Self-locking
- With variable adjustment

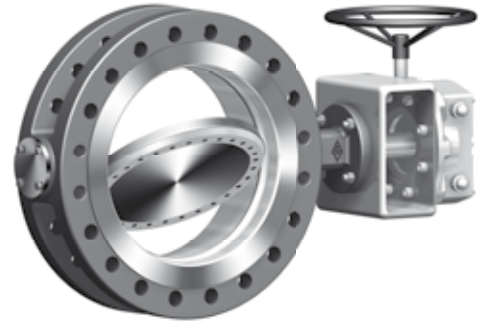
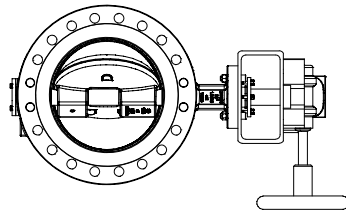


Fig. 016 -
ARI-ZETRIX®ANSI double flange

Page 8

ARI-ZETRIX®ANSI

with electric rotary actuator Auma or Schiebel

- For temporary service S2-15 min.
(or control: Auma S4 25%,
Schiebel S4 40%)
- 400V 50Hz (optional: 230V 50Hz)
- Enclosure IP 67

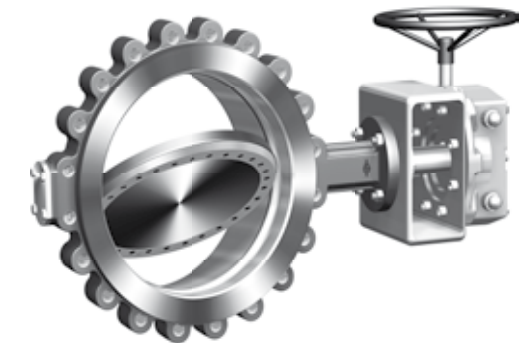
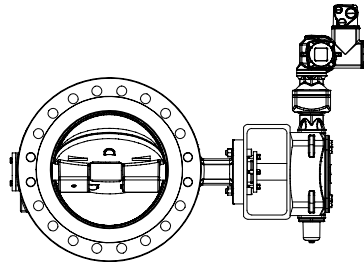


Fig. 018 -
ARI-ZETRIX®ANSI threaded flanged

Page 9

ARI-ZETRIX®ANSI

with pneumatic actuator

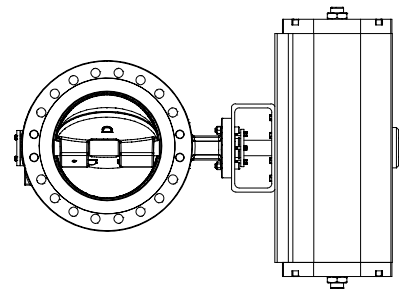
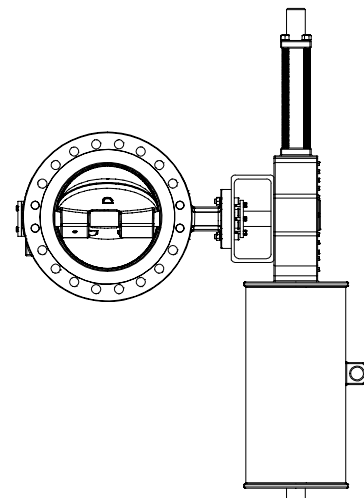


Fig. 019 -
ARI-ZETRIX®ANSI butt weld ends

on request

ARI-ZETRIX®ANSI

with hydraulic actuator



on request

Features:

- Double flange, threaded flange and butt weld ends design
- Cast steel / stainless steel body, one-piece
- Triple offset construction:
Rotary movement (90°) without wear or friction
- Metallic sealing
- Stellite seat (Stellite® 21)
- Continuous stem, hardened bearings
with graphite protector ring
- Blow-out protected stem (optional: acc. to API 609)
- Firesafe acc. to ISO 10479 / API 607
- ATEX
- SIL
- Packing acc. to EN ISO 15848-1/ TA-Luft (optional)

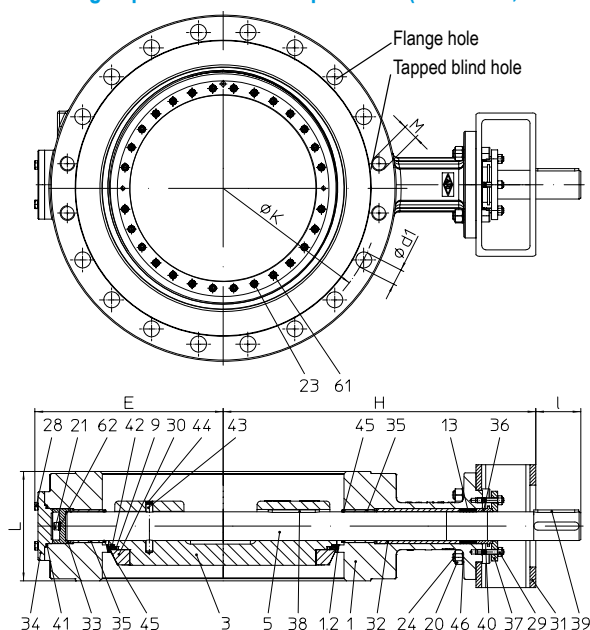
Double flanged process valve - Triple offset (Cast steel, Stainless steel)


Figure	Nominal pressure	Material	Nominal diameter	Disc	Stem
32.016....90	ANSI150	SA216WCB	DN 80-1200 NPS 3"-48"	SA216WCB	SA276Gr.420
35.016....90	ANSI300				

52.016....90	ANSI150	SA351CF8M	DN 80-1200 NPS 3"-48"	SA351CF8M	SA564Gr.630
55.016....90	ANSI300				

Face-to-face dimension series 13 acc. to DIN EN 558 / ISO 5752 / API 609 (short pattern)

Sealing element:	
Graphite / SA240Gr.31803	-20°F up to 801°F
Max. differential pressure:	
• = Nominal pressure	

Actuation arrangement:	
• Worm gear	• Pneumatic actuator
• Electric actuator	• Hydraulic actuator
Test:	
Sealing leakage test:	• DIN EN 12266-1 Leakage rate A

Options on request (refer to page 11)

Parts					
Pos.	Sp.p.	Description	ANSI150 / ANSI300		
			Fig. 32.016 / 35.016....90	Fig. 52.016 / 55.016....90	
1		Body	SA216WCB		SA351CF8M
1.2		Seat	Stellit 21		
3		Disc	SA216WCB		SA351CF8M
5		Stem	SA276Gr.420		SA564Gr.630 - max. 572°F (SA453Gr.660 - max. 801°F on request)
9	x	Lamellar seal ring	Graphite / SA240Gr.31803		
13	x	Packing unit	Graphite		
20		Hexagon nut	8 - A2B		
21		Hexagon socket head screw	A4-70		
23		Hexagon socket head screw	A4-70		
24		Hexagon socket head screw	8.8-A2B		
28		Hexagon screw	A2-70		
29		Hexagon nut	A2		
30		Retaining ring	SA516Gr.60 (nickel plated)		SA240Gr.304
31		Console	SA618Gr.I (galvanized)		
32		Mounting bracket	SA240Gr.304		
33		Axial bearing	SA276Gr.420 (hardened)		SA240Gr.304 (hardened)
34		Bottom flange	SA105		SA240Gr.304
35		Bushing	SA276Gr.420 (hardened)		SA240Gr.304 (hardened)
36		Bushing	SA240Gr.304		
37		Packing box flange	SA240Gr.304		
38 / 39		Parallel key	A4		
40		Stud	A4-70		
41	x	Spiral wounded gasket	Graphite / SA182F321		
42	x	Spiral wounded gasket	Graphite / Hastelloy C276, SB575		
43		Parallel pin	A4-70		
44		Retaining ring	SA276Gr.440B		
45		Bearing protector	Graphite webbing		
46		Spring ring	Spring steel - A2B		
61 / 62		Lock washer pair	A4		
	L Spare parts				

Information / restriction of technical rules need to be observed!

The engineer, designing a system or a plant, is responsible for the selection of the correct valve.

Resistance and fitness must be verified (contact manufacturer for information, refer to Product overview).

DN	80	100	125	150	200	250	300	350	400	450	500	600	700	800	900	1000	1200
NPS	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"	28"	32"	36"	40"	48"

Face-to-face dimension series 13 acc. to DIN EN 558 / API 609 Cat. B (short pattern)

L	(in)	4.5	5	5.5	5.5	6	6.5	7	7.5	8.5	8.75	9	10.5	11.5	12.52	12.99	16.14	18.5
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Dimensions

ANSI 150	H	(in)	11.5	11.34	13.54	13.54	14.61	19.61	21.73	23.15	26.06	26.02	28.03	30.04	32.99	35.28	39.29	41.89	48.98
	E	(in)	5	5.91	7.24	7.28	8.03	9.41	10.51	12.01	13.27	14.96	15.43	18.11	21.18	24.33	26.5	28.82	34.41
	I	(in)	1.77	1.77	2.17	2.17	2.17	2.17	2.56	2.56	3.15	3.15	4.33	4.33	4.72	6.5	6.5	6.5	7.87

ANSI 300	H	(in)	11.5	11.34	13.54	13.54	15.75	22.64	23.66	25.04	26.02	26.81	30	32.24	34.17	39.21	43.03	45.47	50.55
	E	(in)	5	5.91	7.24	7.28	8.46	9.88	11.22	12.48	14.21	15.98	16.38	19.53	22.64	25.55	28.07	31.22	37.36
	I	(in)	1.77	1.77	2.17	2.17	2.56	3.15	3.15	4.33	4.33	4.33	5.12	5.12	6.5	7.87	7.87	7.87	11.02

Standard-flange dimensions / Hexagon screw (Quantity, Thread, Length) per side

ANSI 150	Flange hole	ØK	(in)	6	7.5	8.5	9.5	11.75	14.25	17	18.75	21.24	21.25	25	29.5	34	38.5	42.75	47.25	56
		n x Ød1	(in)	–	4x0.75	4x0.87	4x0.87	4x0.87	8x1.02	8x1.02	8x1.14	12x1.14	12x1.26	16x1.26	16x1.38	24x1.38	24x1.61	28x1.61	32x1.61	36x1.61
		Number of threads	(n)	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	8
	Screw	Thread ^{1) 2)}	(in)	5/8 - 11UNC	5/8 - 11UNC	3/4 - 10UNC	3/4 - 10UNC	3/4 - 10UNC	7/8 - 9UNC	7/8 - 9UNC	1 - 8UNC	1 - 8UNC	1 1/8 - 8UNC	1 1/8 - 8UNC	1 1/4 - 8UNC	1 1/4 - 8UNC	1 1/2 - 8UNC	1 1/2 - 8UNC	1 1/2 - 8UNC	1 1/2 - 8UNC
		Number ¹⁾	(n)	--	4	4	4	4	8	8	8	12	12	16	16	24	24	28	32	36
		Length ¹⁾	(in)	--	3.74	3.74	3.74	3.94	4.33	4.33	4.72	5.12	5.12	5.51	5.51	*	*	*	*	*
		Number ²⁾	(n)	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	8
		Length ²⁾	(in)	1.97	1.97	2.36	2.36	2.36	2.36	2.36	2.76	2.76	2.76	3.15	3.54	*	*	*	*	*
ANSI 300	Flange hole	ØK	(in)	6.63	7.87	9.25	10.63	13	15.25	17.75	20.25	22.5	24.75	27	32	37	41.5	46	45.5	54
		n x Ød1	(in)	4x0.87	4x0.87	4x0.87	8x0.87	8x1.02	12x1.14	12x1.26	16x1.26	16x1.38	20x1.38	20x1.38	20x1.61	24x1.77	24x2.01	28x2.13	28x1.77	28x2.01
		Number of threads	(n)	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	Screw	Thread ^{1) 2)}	(in)	3/4 - 10UNC	3/4 - 10UNC	3/4 - 10UNC	3/4 - 10UNC	7/8 - 9UNC	1 - 8UNC	1 1/8 - 8UNC	1 1/8 - 8UNC	1 1/4 - 8UNC	1 1/4 - 8UNC	1 1/4 - 8UNC	1 1/2 - 8UNC	1 5/8 - 8UNC	1 7/8 - 8UNC	2 - 8UNC	1 5/8 - 8UNC	1 7/8 - 8UNC
		Number ¹⁾	(n)	4	4	4	8	8	12	12	16	16	16	20	20	24	24	28	28	28
		Length ¹⁾	(in)	3.74	3.94	4.13	4.13	4.53	5.12	5.51	5.71	6.3	6.3	6.69	7.87	*	*	*	*	*
		Number ²⁾	(n)	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
		Length ²⁾	(in)	1.97	2.17	2.36	2.36	2.76	3.15	3.54	3.54	3.94	3.94	3.94	4.72	*	*	*	*	*

¹⁾ Hexagon screws / studs for flange holes

²⁾ Hexagon screws for tapped blind hole

³⁾ to be determined by the customer

Weights for double flanged process valve

SA216WCB	ANSI 150	Fig. 32.016...90	(lbs)	73	97	143	143	176	216	289	386	520	672	1001	1168	1929	2628	3344	4652	7224
	ANSI 300	Fig. 35.016...90	(lbs)	73	97	143	143	198	231	401	573	761	849	1153	1834	2604	3677	4482	6290	9350
SA351CF8M	ANSI 150	Fig. 52.016...90	(lbs)	77	101	150	150	185	227	300	397	534	741	1014	1184	1947	2654	3377	4698	7295
	ANSI 300	Fig. 55.016...90	(lbs)	77	101	150	150	212	243	412	584	776	935	1166	1854	2628	3713	4526	6351	9440

Pressure-temperature-ratings

Intermediate values for max. permissible operational pressures can be determined by linear interpolation of the given temperature / pressure chart.

acc. to ANSI	ANSI		-20°F to 100°F	200°F	300°F	400°F	500°F	600°F	650°F	700°F	750°F	800°F
SA216WCB	150	(psi)	285	260	230	200	170	140	125	110	95	80
SA216WCB	300	(psi)	740	680	655	635	605	570	550	530	505	410

acc. to ANSI	ANSI		-20°F to 100°F	200°F	300°F	400°F	500°F	600°F	650°F	700°F	750°F	800°F
SA351CF8M	150	(psi)	275	235	215	195	170	140	125	110	95	80
SA351CF8M	300	(psi)	720	620	560	515	480	450	440	435	425	420

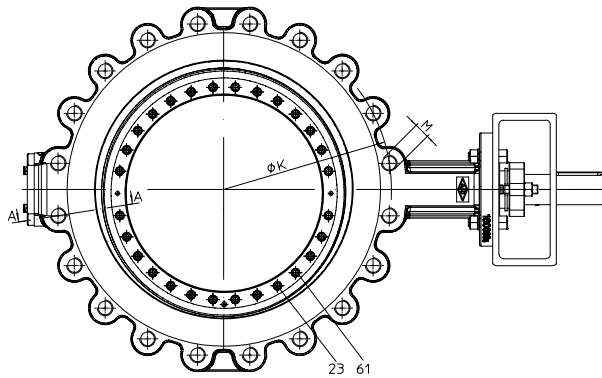
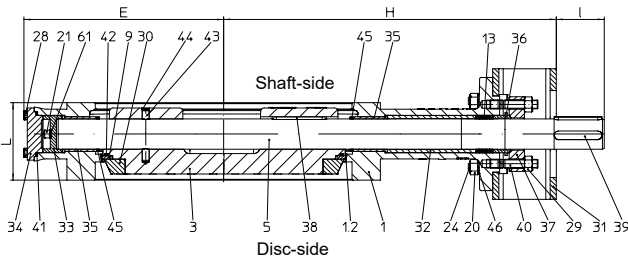
Threaded flange process valve - Triple offset (Cast steel, Stainless steel)


Figure	Nominal pressure	Material	Nominal diameter	Disc	Stem
32.018....90	ANSI150	SA216WCB	DN 80-600 NPS 3"-24"	SA216WCB	SA276Gr.420
35.018....90	ANSI300				

52.018....90	ANSI150	SA351CF8M	DN 80-600 NPS 3"-24"	SA351CF8M	SA564Gr.630
55.018....90	ANSI300				

Face-to-face dimension series 16 acc. to DIN EN 558 / ISO 5752



A-A

Thread depth
shaft-side

Thread depth
disc-side

Sealing element:	
• Graphite / SA240Gr.31803	-20°F up to 801°F
Max. differential pressure:	
• = Nominal pressure	

Actuation arrangement:	
• Worm gear	• Pneumatic actuator
• Electric actuator	• Hydraulic actuator
Test:	
Sealing leakage test:	• DIN EN 12266-1 Leakage rate A

Options on request (refer to page 11)

Parts					
Pos.	Sp.p.	Description	ANSI150 / ANSI300		
			Fig. 32.018 / 35.018....90	Fig. 52.018 / 55.018....90	
1		Body	SA216WCB		SA351CF8M
1.2		Seat	Stellit 21		
3		Disc	SA216WCB		SA351CF8M
5		Stem	SA276Gr.420		SA564Gr.630 max. 572°F (SA453Gr.660 max. 801°F on request)
9	x	Lamellar seal ring	Graphite / SA240Gr.31803		
13	x	Packing unit	Graphite		
20		Hexagon nut	8 - A2B		
21		Hexagon socket head screw	A4-70		
23		Hexagon socket head screw	A4-70		
24		Hexagon socket head screw	8.8-A2B		
28		Hexagon screw	A2-70		
29		Hexagon nut	A2		
30		Retaining ring	SA516Gr.60 (nickel plated)		SA240Gr.304
31		Console	SA618Gr.I (galvanized)		
32		Mounting bracket	SA240Gr.304		
33		Axial bearing	SA276Gr.420 (hardened)		SA240Gr.304 (hardened)
34		Bottom flange	SA105		SA240Gr.304
35		Bushing	SA276Gr.420 (hardened)		SA240Gr.304 (hardened)
36		Bushing	SA240Gr.304		
37		Packing box flange	SA240Gr.304		
38 / 39		Parallel key	A4		
40		Stud	A4-70		
41	x	Spiral wounded gasket (≥ DN250)	Graphite / SA182F321		
42	x	Spiral wounded gasket	Graphite / Hastelloy C276, SB575		
43		Parallel pin	A4-70		
44		Retaining ring	SA276Gr.440B		
45		Bearing protector	Graphite webbing		
46		Spring ring	Spring steel - A2B		
61 / 62		Lock washer pair	A4		
	L Spare parts				

Information / restriction of technical rules need to be observed!

The engineer, designing a system or a plant, is responsible for the selection of the correct valve.

Resistance and fitness must be verified (contact manufacturer for information, refer to Product overview).

DN	80	100	125	150	200	250	300	350	400	450	500	600
NPS	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"

Face-to-face dimension series 16 acc. to DIN EN 558 / ISO 5752													
L	(in)	2.52	2.52	--	2.99	3.5	4.49	4.49	5	5.51	5.98	5.98	7.01

Dimensions														
ANSI 150	H	(in)	11.5	11.34	--	13.54	14.61	19.61	21.73	23.15	26.06	26.02	28.03	30.08
	E	(in)	5.16	6.06	--	7.4	8.31	9.41	10.51	12.01	13.27	14.96	15.43	18.07
	I	(in)	1.77	1.77	--	2.17	2.17	2.17	2.56	2.56	3.15	3.15	4.33	4.33
ANSI 300	H	(in)	11.5	11.34	--	13.54	15.75	22.64	23.66	25.04	26.02	26.81	30	32.24
	E	(in)	5.16	6.06	--	7.4	8.86	9.88	11.22	12.48	14.21	15.98	16.42	19.53
	I	(in)	1.77	1.77	--	2.17	2.56	3.15	3.15	4.33	4.33	4.33	5.12	5.12

Standard-flange dimensions / Threads (Dimensions, Number, Screw depth / length) per side															
ANSI 150	Flange hole	ØK	(in)	6	7.5	-	9.5	11.75	14.25	17	18.75	21.25	22.75	25	29.5
		Total number of threads (M)	(n)	4	8	-	8	8	12	12	12	16	16	20	20
		Thread ^{1) 2)}	(in)	5/8 - 11UNC	5/8 - 11UNC	-	3/4 - 10UNC	3/4 - 10UNC	7/8 - 9UNC	7/8 - 9UNC	1 - 8UNC	1 - 8UNC	1 1/8 - 8UN	1 1/8 - 8UN	1 1/4 - 8UN
	Screw	Number ¹⁾	(n)	4	8	-	8	8	12	12	12	16	16	16	16
		Thread depth disc side ¹⁾	(in)	1.18	1.18	-	1.38	1.57	1.97	1.97	2.36	2.56	2.76	2.76	3.35
		Thread depth shaft side ¹⁾	(in)	1.18	1.18	-	1.38	1.57	1.97	1.97	2.36	2.56	2.76	2.76	3.35
		Number ²⁾	(n)	-	-	-	-	-	-	-	-	-	-	4	4
		Thread depth disc side ²⁾	(in)	-	-	-	-	-	-	-	-	-	-	1.97	3.11
		Thread depth shaft side ²⁾	(in)	-	-	-	-	-	-	-	-	-	-	1.38	1.77
	ANSI 300	Flange hole	ØK	(in)	6.63	7.87	-	10.63	13	15.25	17.75	20.25	22.5	24.75	27
Total number of threads (M)			(n)	8	8	-	12	12	16	16	20	20	24	24	24
Thread ^{1) 2)}			(in)	3/4 - 10UNC	3/4 - 10UNC	-	3/4 - 10UNC	7/8 - 9UNC	1 - 8UNC	1 1/8 - 8UN	1 1/8 - 8UN	1 1/4 - 8UN	1 1/4 - 8UN	1 1/4 - 8UN	1 1/2 - 8UN
Screw		Number ¹⁾	(n)	8	8	-	8	8	12	12	16	16	20	20	20
		Thread depth disc side ¹⁾	(in)	1.18	1.18	-	1.38	1.57	1.97	1.97	2.36	2.56	2.76	2.76	3.07
		Thread depth shaft side ¹⁾	(in)	1.18	1.18	-	1.38	1.57	1.97	1.97	2.36	2.56	2.76	2.76	2.72
		Number ²⁾	(n)	-	-	-	4	4	4	4	4	4	4	4	4
		Thread depth disc side ²⁾	(in)	-	-	-	0.89	1.3	1.42	1.26	0.98	1.5	1.34	1.38	1.73
		Thread depth shaft side ²⁾	(in)	-	-	-	0.77	1.02	1.18	1.02	0.94	1.14	1.34	1.14	1.38

¹⁾ Tapped through hole ²⁾ Tapped blind hole in Shaft area

Caution: Thread sizes 1 ½ 8UN are not tapped all the way through

Weights for threaded flanged process valve															
SA216WCB	ANSI 150	Fig. 32.018....90	(lbs)	53	64	--	99	141	163	267	335	423	487	917	983
		Fig. 35.018....90	(lbs)	53	64	--	99	141	181	326	542	699	783	1089	1715
SA351CF8M	ANSI 300	Fig. 52.018....90	(lbs)	57	68	--	104	150	172	282	348	437	538	930	1010
		Fig. 55.018....90	(lbs)	57	68	--	104	152	190	335	551	714	866	992	1735

Pressure-temperature-ratings	Intermediate values for max. permissible operational pressures can be determined by linear interpolation of the given temperature / pressure chart.												
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acc. to ANSI	ANSI		-20°F to 100°F	200°F	300°F	400°F	500°F	600°F	650°F	700°F	750°F	800°F
SA216WCB	150	(psi)	285	260	230	200	170	140	125	110	95	80
SA216WCB	300	(psi)	740	680	655	635	605	570	550	530	505	410

acc. to ANSI	ANSI		-20°F to 100°F	200°F	300°F	400°F	500°F	600°F	650°F	700°F	750°F	800°F
SA351CF8M	150	(psi)	275	235	215	195	170	140	125	110	95	80
SA351CF8M	300	(psi)	720	620	560	515	480	450	440	435	425	420

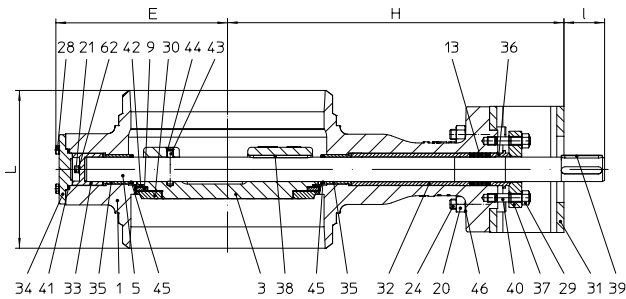
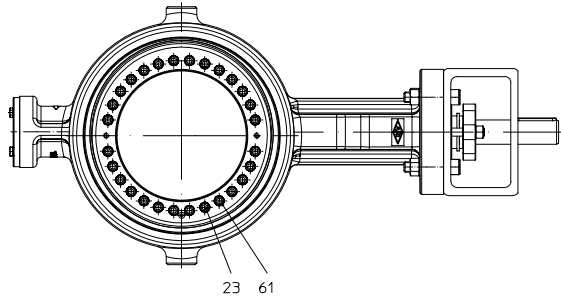
Butt weld ended process valve - Triple offset (Cast steel)


Figure	Nominal pressure	Material	Nominal diameter	Disc	Stem
32.019...90	ANSI 150	SA216WCB	DN 80-600 NPS 3"-24"	SA216WCB	SA276Gr.420
35.019...90	ANSI 300				

Face-to-face dimension series 14 acc. to DIN EN 12982

Sealing element:	
• Graphite / SA240Gr.31803	-20°F up to 801°F
Max. differential pressure:	
• = Nominal pressure	

Actuation arrangement:	
• Worm gear	• Pneumatic actuator
• Electric actuator	• Hydraulic actuator
Test:	
Sealing leakage test:	• DIN EN 12266-1 Leakage rate A

Options on request (refer to page 11)

Parts			
Pos.	Sp.p.	Description	ANSI150 / ANSI300 Fig. 34./35.019
1		Body	SA2016WCB
1.2		Seat	Stellit 21
3		Disc	SA2016WCB
5		Stem	SA276Gr.420
9	x	Lamellar seal ring	Graphite / SA240Gr.31803
13	x	Packing unit	Graphite
20		Hexagon nut	8 - A2B
21		Hexagon socket head screw	A4-70
23		Hexagon socket head screw	A4-70
24		Hexagon socket head screw	8.8-A2B
28		Hexagon screw	A2-70
29		Hexagon nut	A2
30		Retaining ring	SA516Gr.60 (nickel plated)
31		Console	SA618Gr.I (galvanized)
32		Mounting bracket	SA240Gr.304
33		Axial bearing	SA276Gr.420 (hardened)
34		Bottom flange	SA105
35		Bushing	SA276Gr.420 (hardened)
36		Bushing	SA240Gr.304
37		Packing box flange	SA240Gr.304
38 / 39		Parallel key	A4
40		Stud	A4-70
41	x	Spiral wounded gasket (≥ DN250)	Graphite / SA182F321
42	x	Spiral wounded gasket	Graphite / Hastelloy C276, SB575
43		Parallel pin	A4-70
44		Retaining ring	SA276Gr.440B
45		Bearing protector	Graphite webbing
46		Spring ring	Spring steel - A2B
61 / 62		Lock washer pair	A4
L Spare parts			

Information / restriction of technical rules need to be observed!

The engineer, designing a system or a plant, is responsible for the selection of the correct valve.

Resistance and fitness must be verified (contact manufacturer for information, refer to Product overview).

DN	80	100	125	150	200	250	300	350	400	450	500	600
NPS	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"

Face-to-face dimension series 14 acc. to DIN EN 12982													
L	(in)	7.09	7.48	7.87	8.27	9.06	9.84	10.63	11.42	12.2	12.99	13.78	15.35

Dimensions														
ANSI 150	H	(in)	11.5	11.34	13.54	13.54	14.61	19.61	21.73	23.15	26.06	26.02	28.03	30.04
	E	(in)	5.16	6.06	7.4	7.4	8.31	9.45	10.55	12.05	13.31	14.96	15.47	18.11
	I	(in)	1.77	1.77	2.17	2.17	2.17	2.17	2.56	2.56	3.15	3.15	4.33	4.33

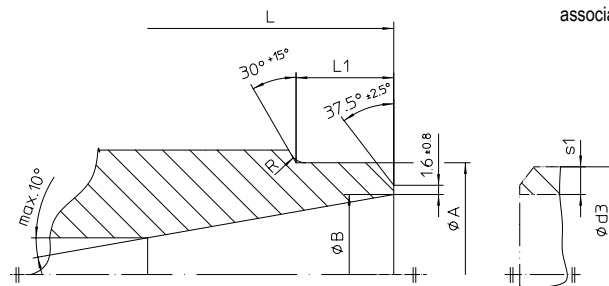
ANSI 300	H	(in)	11.5	11.34	13.54	13.54	15.75	22.64	23.66	25.04	26.02	26.81	30	32.24
	E	(in)	5.16	6.06	7.4	7.4	8.9	9.92	11.22	12.48	14.21	15.98	16.42	19.53
	I	(in)	1.77	1.77	2.17	2.17	2.56	3.15	3.15	4.33	4.33	4.33	5.12	5.12

Butt weld ends according to ASME B16.25													
ØA	(in)	3.58	4.61	5.67	6.77	8.78	10.94	12.95	14.25	16.26	18.27	20.31	24.37
ØB (Schedule No.40)	(in)	3.13 ¹⁾	4.02	5.04	6.06	7.99	10.02	11.93	13.13	15	16.87	18.82	22.62
L1 (similar Figure 2(a))	(in)	0.47	0.55	0.71	0.79	0.79	0.98	1.3	1.77	1.77	1.3	1.57	1.57
Ød3	(in)	3.5	4.5	5.56	6.63	8.63	10.75	12.75	14	16	18	20	24
s1 (Schedule No.40)	(in)	0.19 ¹⁾	0.24	0.26	0.28	0.32	0.36	0.41	0.44	0.5	0.56	0.59	0.69

¹⁾ deviantly Schedule No.30

- ASME B16.25 Figure 2(a)
- Joint preparation acc. to - DIN EN ISO 9692-1
- Customer specific tube wall thickness acc. to ISO 4200
- Shoed ends (on request)
- Further, customer-specific dimensions on request

Edge shaping acc. to DIN EN ISO 5817



associated pipe dimensions: Ød3; s1

Our welded valve products are manufactured using the following materials: SA216WCB

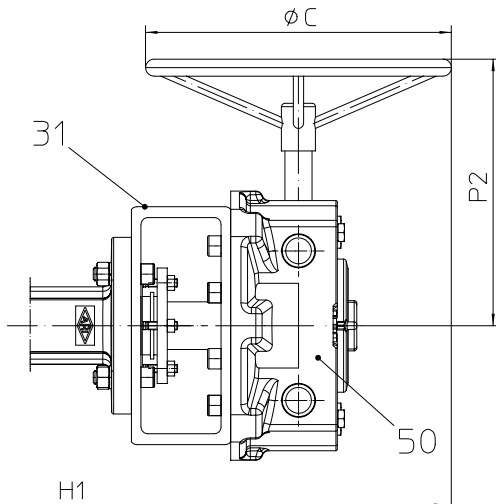
Based on our experience we recommend electric welding process for connecting valves or strainers with tubes or with each other
 Lime based electrodes with an appropriate composite material should be used as filler material for welding.
 Gas welding should be avoided.
 Due to the different material composition and material thickness of valves and tubes, gas welding is more susceptible to produce faults than electric welding (hardness cracks, coarse-grained structure).

DN	80	100	125	150	200	250	300	350	400	450	500	600
NPS	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"

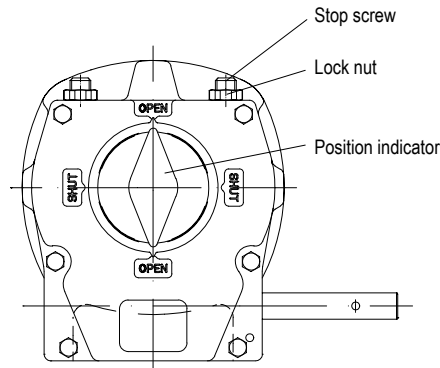
Weights for butt weld ended process valve															
SA216WCB	ANSI 150	Fig. 32.019...90	(lbs)	49	57	79	84	115	148	203	243	355	430	785	926
	ANSI 300	Fig. 35.019...90	(lbs)	49	57	79	84	130	172	249	364	459	564	818	1272

Pressure-temperature-ratings		Intermediate values for max. permissible operational pressures can be determined by linear interpolation of the given temperature / pressure chart.									
------------------------------	--	---	--	--	--	--	--	--	--	--	--

acc. to ANSI	ANSI		-20°F to 100°F	200°F	300°F	400°F	500°F	600°F	650°F	700°F	750°F	800°F
SA216WCB	150	(psi)	285	260	230	200	170	140	125	110	95	80
	300	(psi)	740	680	655	635	605	570	550	530	505	410

ZETRIX® ANSI process valve with worm gear
Typ: AB


- With variable adjustment
- Self-locking
- Fire-safe (FS)



The SHUT-position can be adjusted to $\pm 5^\circ$ by a stop screw.

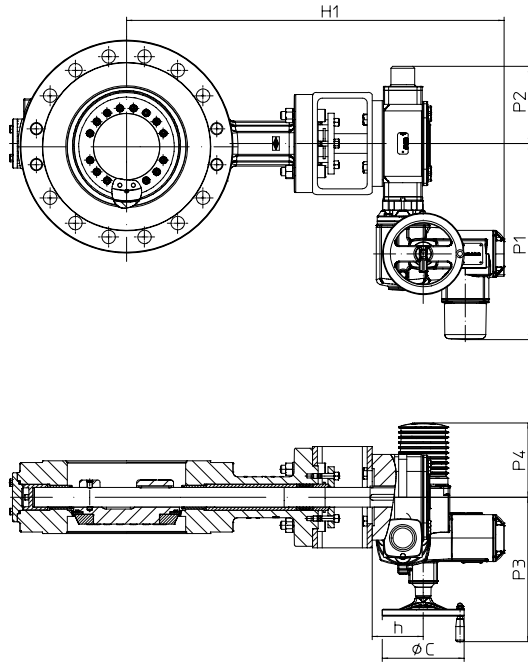
Parts			
Pos.	Sp.p.	Description	Fig. 32/35.016....90; 52/55.016....90; 32/35.018....90; 52/55.018....90; 34/35.019....90
31		Console	SA618Gr.I (zinc coated)
50		Worm gear	
L Spare parts			

DN	80	100	125	150	200	250	300	350	400	450	500	600	700-1200
NPS	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"	28"-48"

Dimensions														
ANSI 150	H1 (to middle of valve)	(in)	15.55	15.55	23.03	23.03	24.09	29.09	33.23	34.65	37.8	43.66	40.04	42.05
	P2	(in)	8.54	8.54	11.69	11.69	11.69	11.69	12.01	12.01	13.62	13.62	16.42	16.42
	ØC	(in)	5.91	5.91	15.75	15.75	15.75	15.75	19.69	19.69	19.69	19.69	19.69	19.69
	Type of gear		AB210 FS	AB215 FS	AB550 FS	AB550 FS	AB550 FS	AB550 FS	AB880 FS	AB880 FS	AB1250 FS	AB1250 FS	AB1950 PR4 FS	AB1950 PR4 FS

ANSI 300	H1 (to middle of valve)	(in)	15.55	15.55	23.03	23.03	27.24	34.37	35.39	37.05	38.03	38.82	42.17	44.41
	P2	(in)	8.54	8.54	11.69	11.69	12.01	13.62	13.62	16.42	16.42	16.42	18.5	18.5
	ØC	(in)	5.91	5.91	15.75	15.75	19.69	19.69	19.69	19.69	19.69	19.69	19.69	19.69
	Type of gear		AB210 FS	AB215 FS	AB550 FS	AB550 FS	AB880 FS	AB1250 FS	AB1250 FS	AB1950 PR4 FS	AB1950 PR4 FS	AB1950 PR4 FS	AB6800 PR4 FS	AB6800 PR6 FS

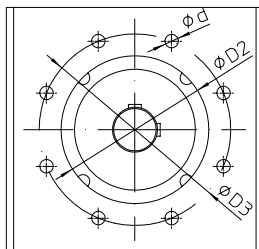
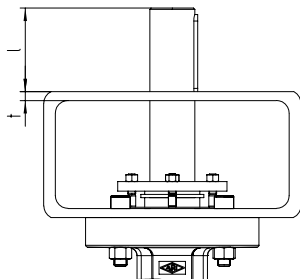
Weights																
SA216WCB	ANSI 150	Fig. 32.016....90 with gear	(lbs)	82	106	161	161	194	234	322	419	580	668	1091	1268	on request
	ANSI 300	Fig. 35.016....90 with gear	(lbs)	82	106	161	161	231	265	461	664	860	972	1338	2019	
	ANSI 150	Fig. 32.018....90 with gear	(lbs)	62	73	--	117	159	163	300	368	483	549	1008	1082	
	ANSI 300	Fig. 35.018....90 with gear	(lbs)	62	73	--	117	174	181	386	633	798	908	1274	1900	
	ANSI 150	Fig. 34.019....90 with gear	(lbs)	57	66	97	101	132	165	225	265	384	459	866	1008	
	ANSI 300	Fig. 35.019....90 with gear	(lbs)	57	66	97	101	152	201	278	392	540	646	983	1437	
SA351CF8M	ANSI 150	Fig. 52.016....90 with gear	(lbs)	86	110	168	168	203	245	333	430	593	681	1105	1283	
	ANSI 300	Fig. 55.016....90 with gear	(lbs)	86	110	168	168	245	276	472	675	875	1010	1351	2039	
	ANSI 150	Fig. 52.018....90 with gear	(lbs)	66	77	--	121	168	172	366	381	496	584	1021	1109	
	ANSI 300	Fig. 55.018....90 with gear	(lbs)	66	77	--	121	185	190	395	642	813	977	1177	1920	

ZETRIX®ANSI process valve with electric rotary actuator


Actuator allocation on request

Type: Auma or Schiebel
• for temporary service S2-15 min. (or control: Auma S4 25%, Schiebel S4 40%) • Enclosure IP 67 • Temperature guard in the motor • Heating
Voltages:
• 400V 50Hz (230V 50Hz) - other voltages on request
Accessories:
- Travel switch - Potentiometer - Auma Matic - Valve positioner 0-10V / 4-20mA - Position-transmitter

For connection refer to terminal connection in the operating instructions of the actuator!

Actuator flange connection EN ISO 5211

ANSI150

DN	80	100	125	150	200	250	300	350	400	450	500	600	700	800	900	1000	1200
NPS	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"	28"	32"	36"	40"	48"
Connection EN ISO 5211	F10		F12				F14		F16	F16	F25		F30	F35	F35	F35	F40
Stem with 2 parallel keys 90°	(in)	0.87	1.1	1.42	1.42	1.42	1.65	1.65	1.89	1.97	2.36	2.76	3.86	4.33	4.72	5.12	6.3
Ø d (Hole-Ø)	(in)	0.43	0.43	0.51	0.51	0.51	0.67	0.67	0.83	0.83	0.67	0.67	0.83	1.3	1.3	1.3	1.54
Ø D2 (Inside-Ø)	(in)	2.76	2.76	3.35	3.35	3.35	3.94	3.94	5.12	5.12	7.87	7.87	9.06	10.24	10.24	10.24	11.81
Ø D3 (Screw-hole circle)	(in)	4.02	4.02	4.92	4.92	4.92	5.51	5.51	6.5	6.5	10	10	11.73	14.02	14.02	14.02	15.98
l	(in)	1.77	1.77	2.17	2.17	2.17	2.56	2.56	3.15	3.15	4.33	4.33	4.72	6.5	6.5	6.5	7.87
t	(in)	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.47	0.47	0.55	0.55	0.55	0.87	0.87	0.87	1.06

ANSI300

DN		80	100	125	150	200	250	300	350	400	450	500	600	700	800	900	1000	1200
NPS		3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"	28"	32"	36"	40"	48"
Connection EN ISO 5211		F10		F12		F14	F16		F25		F25	F30		F35	F40	F40	F40	F48
Stem with 2 parallel keys 90°	(in)	0.87	1.1	1.42	1.42	1.65	1.65	1.89	2.36	2.36	2.36	2.76	3.15	4.33	4.72	5.71	6.3	7.48
Ø d (Hole-Ø)	(in)	0.43	0.43	0.51	0.51	0.67	0.83	0.83	0.67	0.67	0.67	0.83	0.83	1.3	1.54	1.54	1.54	1.54
Ø D2 (Inside-Ø)	(in)	2.76	2.76	3.35	3.35	3.94	5.12	5.12	7.87	7.87	7.87	9.06	9.06	10.24	11.81	11.81	11.81	14.57
Ø D3 (Screw-hole circle)	(in)	4.02	4.02	4.92	4.92	5.51	6.5	6.5	10	10	10	11.73	11.73	14.02	15.98	15.98	15.98	19.02
l	(in)	1.77	1.77	2.17	2.17	2.56	3.15	3.15	4.33	4.33	4.33	5.12	5.12	6.5	7.87	7.87	7.87	11.02
t	(in)	0.31	0.31	0.31	0.31	0.31	0.47	0.47	0.55	0.55	0.55	0.55	0.55	0.87	1.06	1.06	1.06	1.46

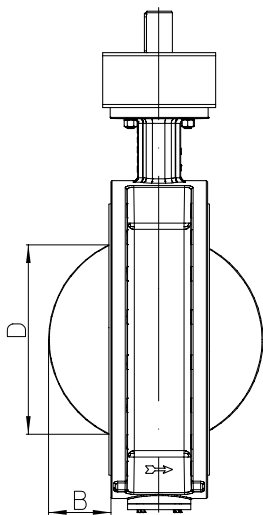
4-square connection on request.

Cv-value / Zeta-value																			
DN			80	100	125	150	200	250	300	350	400	450	500	600	700	800	900	1000	1200
NPS			3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"	28"	32"	36"	40"	48"
ANSI150	Cv-value	(gal/min)	117	222	403	601	1453	2462	3728	4935	6592	9526	10803	15773	29575	40143	46492	57744	81363
	Zeta-value	--	6.54	4.42	3.28	3.05	1.65	1.40	1.27	1.34	1.28	0.98	1.16	1.13	0.59	0.55	0.65	0.65	0.68
ANSI300	Cv-value	(gal/min)	117	222	403	601	1190	2263	3401	4393	5938	8531	9608	14519	27113	34907	43409	51826	72363
	Zeta-value	--	6.54	4.42	3.28	3.05	2.46	1.66	1.52	1.69	1.58	1.23	1.47	1.34	0.71	0.73	0.75	0.81	0.86

Difference between disc outside-diameter and face-to-face for double flange design																		
DN		80	100	125	150	200	250	300	350	400	450	500	600	700	800	900	1000	1200
NPS		3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"	28"	32"	36"	40"	48"
B	(in)	--	--	--	--	1.12	1.71	2.26	3.03	3.44	4.45	5.22	6.52	8.19	9.65	11.14	11.22	13.82
D	(in)	--	--	--	--	4.85	6.67	8.25	10.29	11.87	14.69	16.18	19.8	24.17	28.15	31.38	33.62	40.71

Difference between disc outside-diameter and face-to-face for threaded flange design													
DN		80	100	125	150	200	250	300	350	400	450	500	600
NPS		3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"
B	(in)	0.35	0.83	--	1.5	2.36	2.72	3.5	4.13	5	5.83	6.73	8.39
D	(in)	1.69	2.89	--	4.65	6.63	8.03	9.74	11.52	13.48	15.87	17.48	21.34

Difference between disc outside-diameter and face-to-face for butt weld ends design													
DN		80	100	125	150	200	250	300	350	400	450	500	600
NPS		3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"
B	(in)	--	--	--	--	--	--	0.35	0.91	1.46	2.32	2.72	3.9
D	(in)	--	--	--	--	--	--	3.43	6.34	8.46	11.5	12.87	16.69



Options
- Design acc. to EN ISO 15848-1/ TA-Luft (add. secondary sealing possible with O-rings) - Threaded joint, f. ex. 1/4" with screw connection on the stem extension and/or on the bottom flange (e.g. Test-, buffer-, flushing port) - Full metal sealing ring of 1.4571 for special applications - Blow-out protected stem acc. to API 609 - Toxic sealing (on request) - Heating jacket (on request)

myValve® - Your Valve Sizing-Program.

myValve® is a powerful software tool that not only helps you size your system components; it also gives you instant access to all other data about the selected product, such as order information, spare parts drawings, operating instructions, data sheets, etc., whenever you need it.



Contents:

Module ARI-process valve ZETRIX-calculation

- Sizing of flow quantity Kv, volume flow Q, pressure drop p, sound level; Selecting the valve size with given capacity; Selection of the actuator.
- Calculation of torque for actuators in flow from shaft side and flow from disc side, as well as dynamic torque curves to show the maximum value and the opening angle at which it is reached.

Media:

Integrated media-data bank (more than 160 media) with conditions:

- Vapours / gases
- Steam (saturated and superheated)
- Liquids

Special features:

- Project administration of the calculation and product data incl. spare part drawings concerning to project and tag number.
- Direct output or calculation and product data in PDF format.
- Product data could be taken for a direct order.
- SI- and ANSI-units with direct conversion to another data bank.
- Settings with over pressure or absolute pressure.
- All ARI valves are integrated in a data bank.
- Direct access concerning to the product on data sheets, operating instructions, pressure-temperature-diagram and spare part drawings
- Operation in company networks possible (no complex installations on individually PC's necessary).
- Extensive catalogue extending over several product groups.

System Requirements:

Windows operating systems, Linux, etc.