

Flanged Control Valve 7036

with integrated positioner

1/2" up to 3"



Pneumatically operated control valve with integrated positioner for the control of neutral, slightly aggressive and highly aggressive media. Ideal for steam, gases and liquids.

- Unaffected by lightly contaminated media
- Body completely stainless steel
- PTFE plug seal
- ANSI class VI shutoff
- Integrated positioner
 - pneumatic
 - electro-pneumatic
 - digital
- Working pressure up to 580 psi
- For temperatures from -22°F up to +428°F



Technical Information

Nominal size	1/2" up to 3", 235 psi
Connections	flange acc. ANSI #150
	flange acc. ANSI #300
Nominal pressure	ANSI #150 / ANSI #300
Max. fluid temperature:*	
with metal bonnet	-22°F up to +338°F, opt. -148°F up to +428°F
with plastic bonnet	-22°F up to +275°F
with diaphragm actuator	-22°F up to +392°F, opt. -22°F up to +428°F
Ambient temperature	analog positioner: -22°F up to +140°F digital positioner: +14°F up to +167°F
Viscosity of the fluid	maximum 600 mm ² /s (600cSt, 80°E)
Vacuum	maximum 0.0295 mercury (Hg)
Working pressure for packing underneath	maximum 174 psi
Body dimension	L acc. DIN EN 558-92 (old: DIN 3202-F3)

*: Please consider further temperature versions and limits in technical bulletin 32

Materials

Body	Stainless steel CF8M
Bonnet	Brass chrome plated (actuator Ø 3") Aluminium corrosion protected (actuator Ø 5")
Diaphragm actuator	Stainless steel ASTM A313 304
Actuator springs	Stainless steel ASTM A313 302 (actuator Ø 3", diaph. act.) Spring steel wire C, zinc coated (actuator Ø 5")
Packing	PTFE (carbon filled), spring ASTM A313 302
Valve stem	Stainless steel 316 Ti, roller burnished
Position indicator	PA Trogamid (clear)

Positioner

For technical information of our positioners please refer to the corresponding data sheets.

Cv-Value

Size	Linear					Equal percentage				
	1/2"	3/4"	1"	1 1/4"	1 1/2"	1/2"	3/4"	1"	1 1/4"	1 1/2"
100 %	4.4	10.2	16.2	23.2	31.3	3.5	7	11.6	18.6	29
40 %	1.7	4.1	6.7	9.3	12.8	1.4	2.8	4.6	7	11.6
25 %	1.1	2.6	4.2	-	-	0.9	1.7	3	-	-
15%	-	-	-	-	-	0.5	-	-	-	-
10%	0.5	-	-	-	-	-	-	-	-	-
7,5%	-	-	-	-	-	0.3	-	-	-	-

Admissible Pressures

digital positioner

DN	Pressure	Supply pressure range	Piston Ø	Spring configuration
	psi	psi	inch	Number
1/2"	250	60 - 90	3"	2
3/4"	250	60 - 90	3"	2
1"	250	60 - 90	3"	1
1 1/4"	145	60 - 90	3"	1
1 1/4"	250	45 - 90	5"	2
1 1/2"	85	60 - 90	3"	1
1 1/2"	250	60 - 90	5"	3

p/p-positioner i/p-positioner

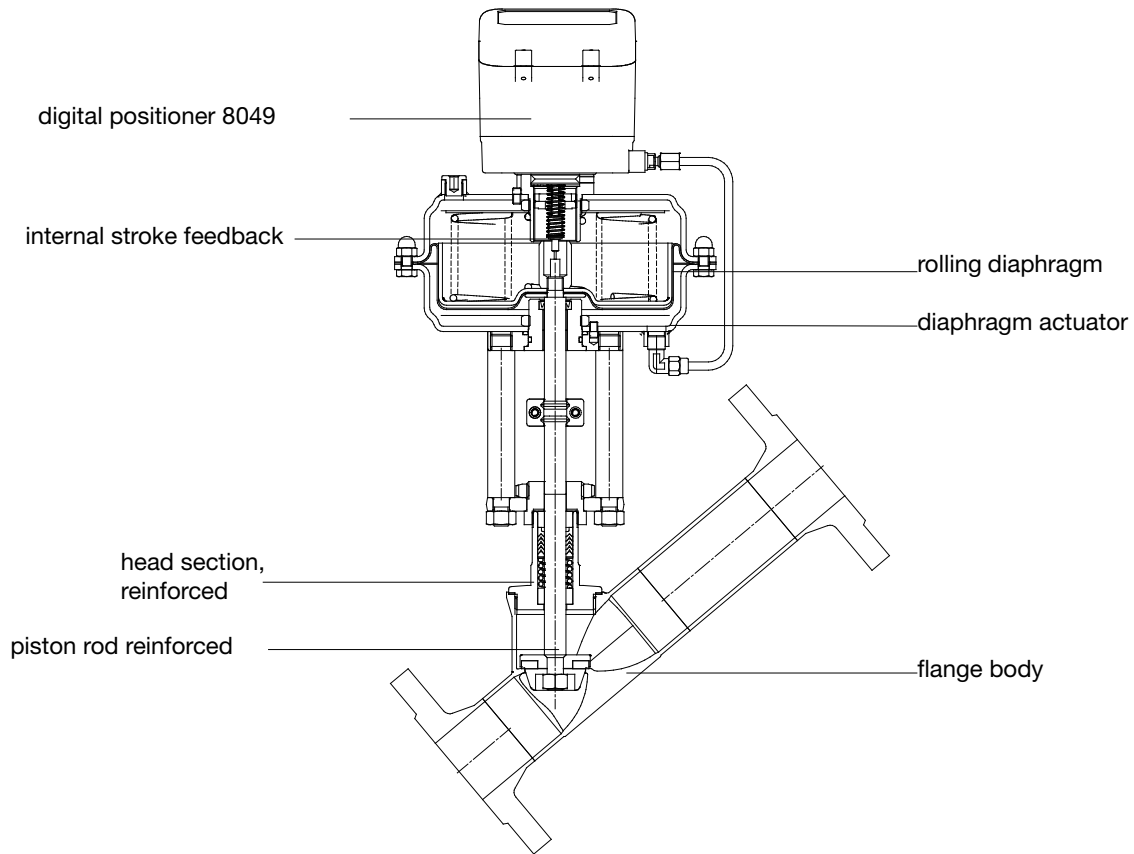
DN	Pressure	Supply pressure Range	Piston Ø	Spring Configuration
	psi	psi	inch	Number
1/2"	250	60 - 90	3"	2
3/4"	250	60 - 90	3"	2
1"	175	60 - 90	3"	1
1 1/4"	100	60 - 90	3"	1
1 1/4"	190	45 - 90	5"	2
1 1/2"	60	60 - 90	3"	1
1 1/2"	160	60 - 90	5"	3

diaphragm actuator, direct pressure range

Size	Maximum pressure (psi)		Supply air (psi)		Diaphragm area inch
	spring range 3 - 15 psi	spring range 6 - 29 psi	spring range 3 - 15 psi	spring range 6 - 29 psi	
1/2"	250	250	17	35	10"
3/4"	250	250	17	35	10"
1"	130	250	17	35	10"
1 1/4"	75	220	17	35	10"
1 1/2"	45	145	17	35	10"
2"	30	85	17	35	10"

Flanged Control Valve 7036

reinforced design



Admissible Pressures

digital positioner

Size	Max. pressure (psi)		Supply pressure range psi	Piston Ø inch	Springs Number
	PTFE	PEEK			
2"	45	-	60 - 90	3"	1
2"	160	60	60 - 90	5"	3
2"	175	75	45 - 90	10"	6
2"	250	145	60 - 90	10"	8 *
2"	250	250	60 - 90	10"	12
2 1/2"	75	-	60 - 90	5"	3
2 1/2"	190	115	60 - 90	10"	12
3"	45	-	60 - 90	5"	3
3"	130	75	60 - 90	10"	12

p/p-positioner i/p-positioner

Size	Differential pressure (psi)	Supply pressure range psi	Piston Ø inch	Springs number
	PTFE			
2"	30	60 - 90	3"	1
2"	85	60 - 90	5"	3
2"	190	60 - 90	10"	10
2"	245	60 - 90	10"	12 *
2 1/2"	135	60 - 90	10"	12
3"	90	60 - 90	10"	12

* spring configuration, standard

Cv-Value

Size	linear			equal percentage		
	2"	2 1/2"	3"	2"	2 1/2"	3"
100%	49.9	60.3	80	39.4	51	68.4
63%	30.2	37.1	-	26.7	33.6	-

Angle Seat Control Valve 7036



with integrated positioner pressure balanced design

DN50 up to DN80, PN40

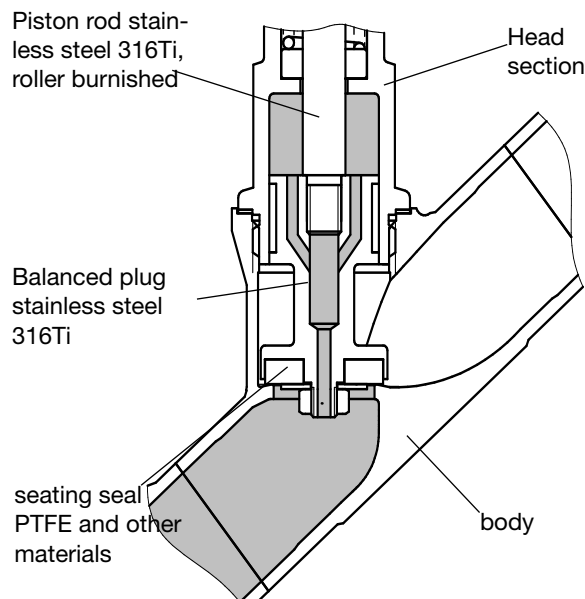
Admissible Differential Pressures

digital positioner

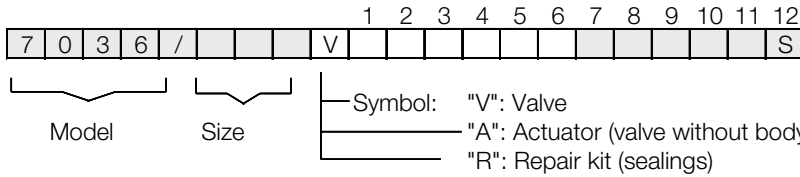
Size	Pressure (PTFE)	Supply pressure range	Piston Ø	Spring configuration
	psi	psi	inch	Number
2"	250	60 - 90	5"	3
2 1/2"	250	60 - 90	5"	3
3"	250	60 - 90	5"	3

p/p- and i/p-positioner

Size	Differential pressure (PTFE)	Supply pressure range	Piston Ø	Springs
	psi	psi	inch	number
2"	250	60 - 90	5"	3
2 1/2"	250	60 - 90	5"	3
3"	250	60 - 90	5"	3



Ordering Number System



1 - 6 : Please quote all 6 sections
 7 - 12: Quote only if required

1.	Body type	2.	Connection	3.	Body materials	4.	Seat materials	5.	Positioner	6.	Actuator, Diameter	7.	Springs
2	flanged control valve Type 7036	C	flange acc. ANSI #150	2	stainless steel CF8M	0	PTFE (Teflon)	6	p/p positioner Type 8047	1	piston Ø 80 mm	-	standard spring
								7	i/p positioner Type 8047	8	piston 3" (NPT)		configuration
								8	i/p positioner and with plug connec. M12x1	9	piston Ø 125 mm	1	spring to open (only with dig. positioner)
								9	Type 8047 as above, but for hazardous location use (II 2 G EEx ib IIC T6) plug connec. M12x1	D	piston 5" (NPT) diaphragm 10"	P	spring set 3-15 psi (10")
								C	dig. positioner, Type 8049, 4 wire			T	6 springs (10")
								R	dig. positioner, Type 8049, 2 wire			W	8 springs (10")
								T	dig. positioner, Type 8049 AS-i version			Y	12 springs (10")
								W	dig. positioner, Type 8049, 2 wire, ex-version				
8.	Characteristic	9.	Packing	10.	Cv-value	11.	Accessories	12.		13.	Seal	14.	Position
-	linear	-	standard	-	full Cv-value	-	without	S	to state if some stations are quoted!	-	standard	0	indicator with position indicator (digital positioner standard)
1	equal percentage	2	packing underneath (vacuum)	1	red. to 40%								
				2	red. to 25%								
				3	red. to 15%								
				4	red. to 7.5%								
				5	red. to 22.5%								
				6	red. to 10%								

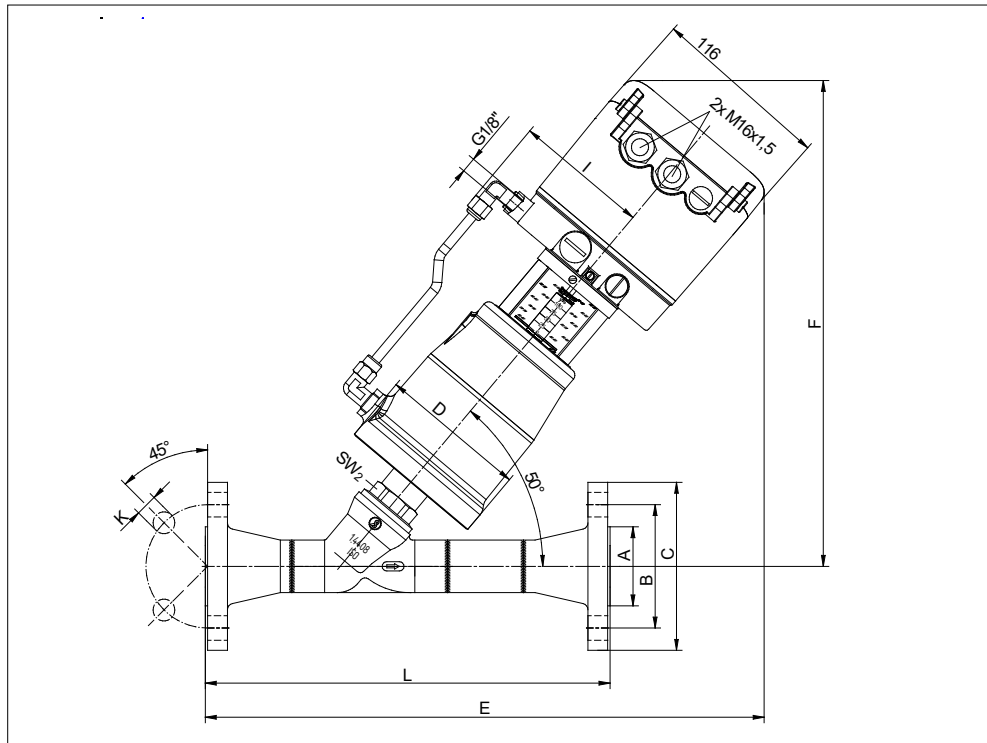
Ordering Example: 7036/020V2C2067-1---S-0
 Flanged control valve with pneumatic positioner, nominal size 3/4", stainless steel body, PTFE sealing, 3" piston, equal percentage characteristic 100 %, with position indicator

reinforced design (from DN50):

Ordering Example: 7036/050V2C20CDT---S-----K
 Flanged control valve Typ 7036 with digital positioner 8049 4-wire, nominal size 2", stainless steel body, PTFE sealing, Ø 10" diaphragm actuator, six springs, linear characteristic, reinforced design

„K“ reinforced design

Dimensions and Weights



digital positioner Type 8049

ASME B16.5 150 lbs

Size	Actuator	I	A	B	C	D	K	Number of borings	L	E	F	SW2	Weight (lbs)
1/2"	3"	3.15	1.37	2.37	3.54	3.86	0.62	4	9.06	13.78	12.01	1.18	13.23
3/4"	3"	3.15	1.69	2.75	3.94	3.86	0.62	4	10.24	13.98	12.2	1.18	14.99
1"	3"	3.15	2	3.13	4.33	3.86	0.62	4	10.24	14.17	12.4	1.18	16.53
1 1/4"	3"	3.15	2.5	3.5	4.53	3.86	0.62	4	11.81	14.76	12.4	1.18	19.18
1 1/4"	5"	4.13	2.5	3.5	4.53	5.75	0.62	4	11.81	15.94	13.58	1.18	25.57
1 1/2"	3"	3.15	2.87	3.88	4.92	3.86	0.62	4	11.81	14.96	12.6	1.18	21.61
1 1/2"	5"	4.13	2.87	3.88	4.92	5.75	0.62	4	11.81	16.14	13.78	1.18	27.34

reinforced design:

Size	Actuator	I	A	B	C	D	K	Number of borings	L	E	F	SW2	pressure balanced			Weight (lbs)
													E	F	SW2	
2"	3"	3.15	3.63	4.75	5.91	3.86	0.75	4	13.78	15.55	13.58	1.26	-	-	-	26.01
2"	5"	4.13	3.63	4.75	5.91	5.75	0.75	4	13.78	16.73	14.76	1.26	17.32	15.16	2.05	31.75
2 1/2"	5"	4.13	4.13	5.5	7.09	5.75	0.75	4	15.75	17.91	14.96	1.61	18.5	15.75	1.42	38.36
3"	5"	4.13	5	6	7.48	5.75	0.75	4	17.72	19.69	14.76	1.61	21.46	16.54	1.81	43.21

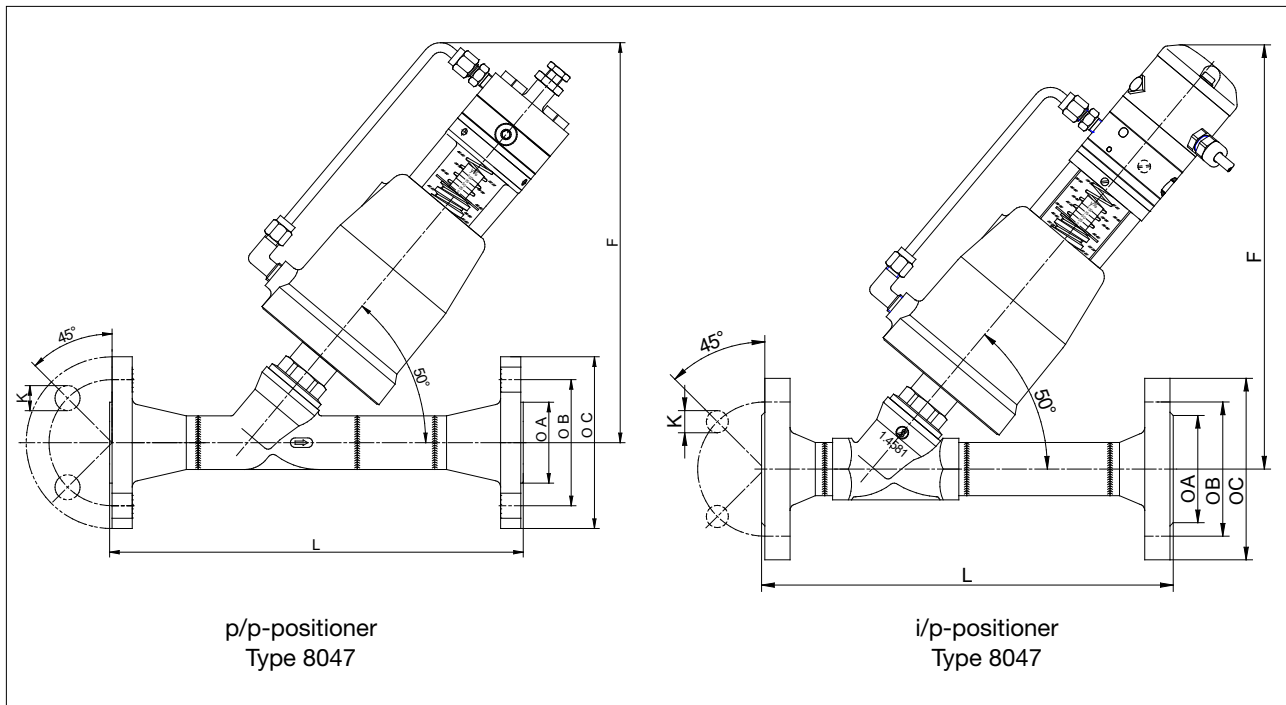
PN40

Size	Actuator	I	A	B	C	D	K	Number of borings	L	E	F	SW2	Weight (lbs)
1/2"	3"	3.15	1.77	2.56	3.74	3.86	0.55	4	9.06	13.78	12.01	1.18	13.23
3/4"	3"	3.15	2.28	2.95	4.13	3.86	0.55	4	10.24	13.98	12.2	1.18	14.99
1"	3"	3.15	2.68	3.35	4.53	3.86	0.55	4	10.24	14.17	12.4	1.18	16.53
1 1/4"	3"	3.15	3.07	3.94	5.51	3.86	0.71	4	11.81	14.76	12.4	1.18	19.18
1 1/4"	5"	4.13	3.07	3.94	5.51	5.75	0.71	4	11.81	15.94	13.58	1.18	25.57
1 1/2"	3"	3.15	3.46	4.33	5.91	3.86	0.71	4	11.81	14.96	12.6	1.18	21.61
1 1/2"	5"	4.13	3.46	4.33	5.91	5.75	0.71	4	11.81	16.14	13.78	1.18	27.34

reinforced design:

Size	Actuator	I	A	B	C	D	K	Number of borings	L	E	F	SW2	pressure balanced			Weight (lbs)
													E	F	SW2	
2"	3"	3.15	4.02	4.92	6.5	3.86	0.71	4	13.78	15.55	13.58	1.26	-	-	-	26.01
2"	5"	4.13	4.02	4.92	6.5	5.75	0.71	4	13.78	16.73	14.76	1.26	16.73	15.16	2.05	31.75
2 1/2"	5"	4.13	4.8	5.71	7.28	5.75	0.71	8	15.75	17.91	14.96	1.61	17.52	15.75	1.42	38.36
3"	5"	4.13	5.43	6.3	7.87	5.75	0.71	8	17.72	19.69	14.76	1.61	21.06	16.54	1.81	43.21

Dimensions and Weights



p/p-positioner
Type 8047

i/p-positioner
Type 8047

ASME B16.5 150 lbs

Size	Actuator	A	B	C	D	K	Number of borings	L	F		H stroke	Weight (lbs)	
									p/p	i/p		p/p	i/p
1/2"	3"	1.37	2.37	3.54	3.86	0.62	4	9.06	9.65	10.24	0.28	11.68	12.35
3/4"	3"	1.69	2.75	3.94	3.86	0.62	4	10.24	9.65	10.24	0.47	13.45	14.11
1"	3"	2	3.13	4.33	3.86	0.62	4	10.24	10.04	10.63	0.63	14.99	15.65
1 1/4"	3"	2.5	3.5	4.53	3.86	0.62	4	11.81	10.63	11.22	0.79	18.52	18.96
1 1/4"	5"	2.5	3.5	4.53	5.75	0.62	4	11.81	11.81	12.4	0.79	24.03	24.69
1 1/2"	3"	2.87	3.88	4.92	3.86	0.62	4	11.81	10.83	11.42	0.91	20.06	20.72
1 1/2"	5"	2.87	3.88	4.92	5.75	0.62	4	11.81	12.01	12.6	0.91	25.79	26.46

reinforced design:

Size	Actuator	A	B	C	D	K	Number of borings	L	F		H stroke	F		Weight (lbs)	
									p/p	i/p		pressure balanced	p/p	i/p	
															p/p
2"	3"	3.63	4.75	5.91	3.86	0.75	4	13.78	11.02	11.61	1.14	-	-	24.47	25.13
2"	5"	3.63	4.75	5.91	5.75	0.75	4	13.78	12.2	12.8	1.14	12.4	13.58	30.2	30.86
2 1/2"	5"	4.13	5.5	7.09	5.75	0.75	4	15.75	12.01	13.19	1.14	12.8	13.98	36.82	37.48
3"	5"	5	6	7.48	5.75	0.75	4	17.72	11.61	13.19	1.14	13.78	14.96	41.67	42.33

PN40

Size	Actuator	A	B	C	D	K	Number of borings	L	F		H stroke	Weight (lbs)	
									p/p	i/p		p/p	i/p
1/2"	3"	1.77	2.56	3.74	3.86	0.55	4	9.06	9.65	10.24	0.28	11.68	12.35
3/4"	3"	2.28	2.95	4.13	3.86	0.55	4	10.24	9.65	10.24	0.47	13.45	14.11
1"	3"	2.68	3.35	4.53	3.86	0.55	4	10.24	10.04	10.63	0.63	14.99	15.65
1 1/4"	3"	3.07	3.94	5.51	3.86	0.71	4	11.81	10.63	11.22	0.79	18.52	18.96
1 1/4"	5"	3.07	3.94	5.51	5.75	0.71	4	11.81	11.81	12.4	0.79	24.03	24.69
1 1/2"	3"	3.46	4.33	5.91	3.86	0.71	4	11.81	10.83	11.42	0.91	20.06	20.72
1 1/2"	5"	3.46	4.33	5.91	5.75	0.71	4	11.81	12.01	12.6	0.91	25.79	26.46

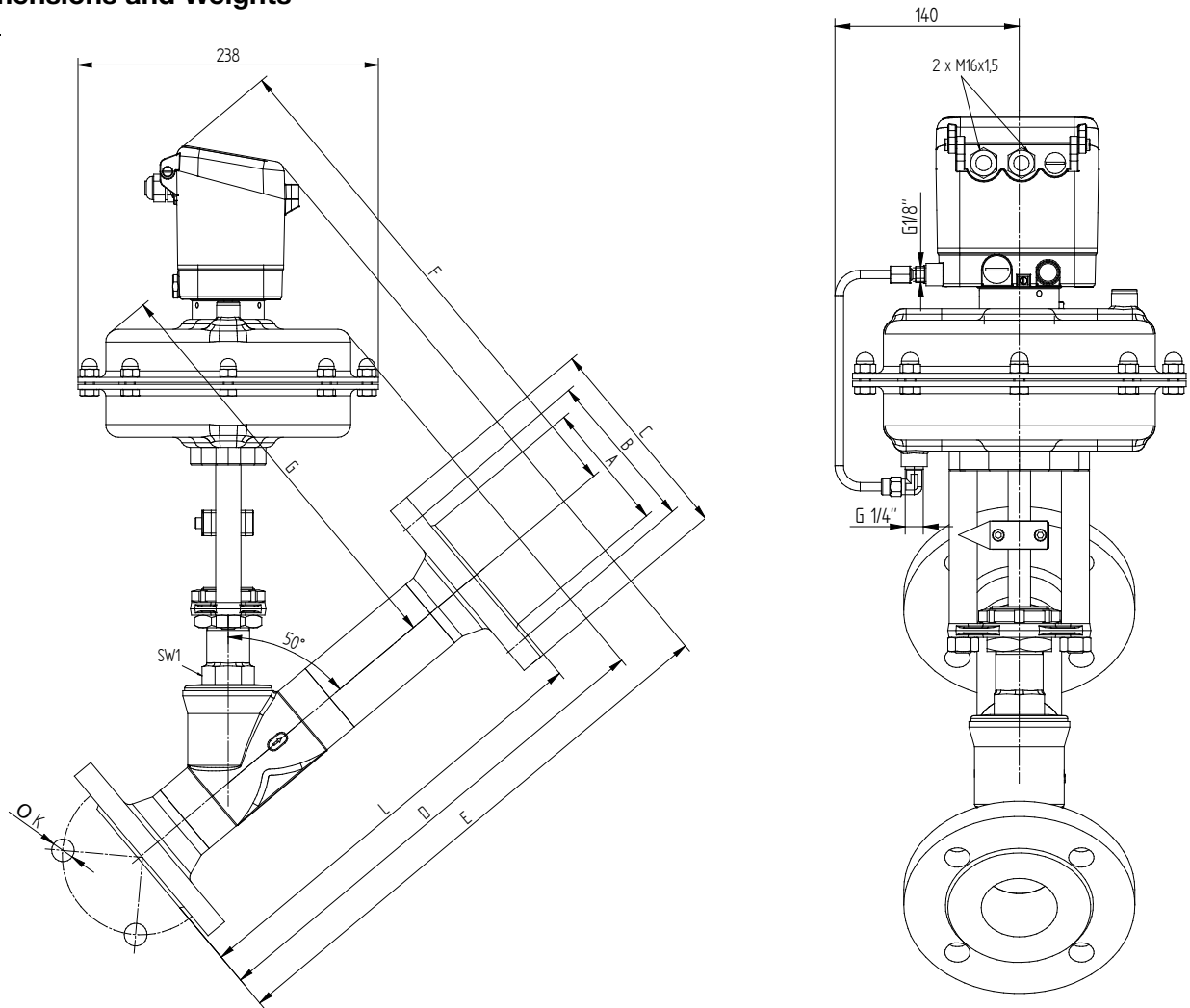
reinforced design:

Size	Actuator	A	B	C	D	K	Number of borings	L	F		H stroke	F		Weight (lbs)	
									p/p	i/p		pressure balanced	p/p	i/p	
															p/p
2"	3"	4.02	4.92	6.5	3.86	0.71	4	13.78	11.02	11.61	1.14	-	-	24.47	25.13
2"	5"	4.02	4.92	6.5	5.75	0.71	4	13.78	12.2	12.8	1.14	12.4	13.58	30.2	30.86
2 1/2"	5"	4.8	5.71	7.28	5.75	0.71	8	15.75	12.01	13.19	1.14	12.8	13.98	36.82	37.48
3"	5"	5.43	6.3	7.87	5.75	0.71	8	17.72	11.61	13.19	1.14	13.78	14.96	41.67	42.33

Flanged Control Valve 7036

reinforced design

Dimensions and Weights



Membrantrieb mit Stellungsregler 8049

ANSI150

DN	A	B	C	D	K	number of	L	D	G	E	F	SW1	Weight (kg)
						borings							
1/2"	1.38	2.38	3.5	3.86	0.62	4	9.06	12.99	11.02	15.16	13.78	1.18	41.23
3/4"	1.69	2.75	3.88	3.86	0.62	4	10.24	13.39	11.42	15.55	14.17	1.18	41.45
1"	2	3.12	4.25	3.86	0.62	4	10.24	13.58	11.81	15.75	14.57	1.18	41.89
1 1/4"	2.5	3.5	4.62	5.75	0.62	4	11.81	14.17	12.2	16.34	15.16	1.18	42.11
1 1/2"	2.88	3.88	5	5.75	0.62	4	11.81	14.57	12.6	16.73	15.55	1.18	42.55
2"	3.62	4.75	6	5.75	0.75	4	13.78	15.75	13.19	17.72	15.16	1.42	43.21
2 1/2"	4.23	5.49	7	5.75	0.75	4	15.75	16.54	13.78	19.29	15.75	1.42	44.09
3"	5	6	7.5	5.75	0.75	4	17.72	18.5	13.66	21.06	16.34	1.61	50.71

PN40

DN	A	B	C	D	K	number of	L	D	G	E	F	SW1	Weight (kg)
						borings							
1/2"	1.77	2.56	3.74	3.86	0.55	4	9.06	12.99	11.02	15.16	13.78	1.18	41.23
3/4"	2.28	2.95	4.13	3.86	0.55	4	10.24	13.39	11.42	15.55	14.17	1.18	41.45
1"	2.68	3.35	4.53	3.86	0.55	4	10.24	13.58	11.81	15.75	14.57	1.18	41.89
1 1/4"	3.07	3.94	5.51	5.75	0.71	4	11.81	14.17	12.2	16.34	15.16	1.18	42.11
1 1/2"	3.46	4.33	5.91	5.75	0.71	4	11.81	14.57	12.6	16.73	15.55	1.18	42.55
2"	4.02	4.92	6.5	5.75	0.71	4	13.78	15.75	13.19	17.52	15.16	1.42	43.21
2 1/2"	4.8	5.71	7.28	5.75	0.71	8	15.75	16.54	13.78	18.31	15.75	1.42	44.09
3"	5.43	6.3	7.87	5.75	0.71	8	17.72	18.5	13.66	20.87	16.34	1.61	50.71

Dimensions in inch

Text and pictures are not binding. We reserve the right, to alter the equipment.