

# 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 +392°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: +5°F up to +140°F digital positioner: +14°F up to +167°F
Viscosity of the fluid	maximum 600 mm <sup>2</sup> /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

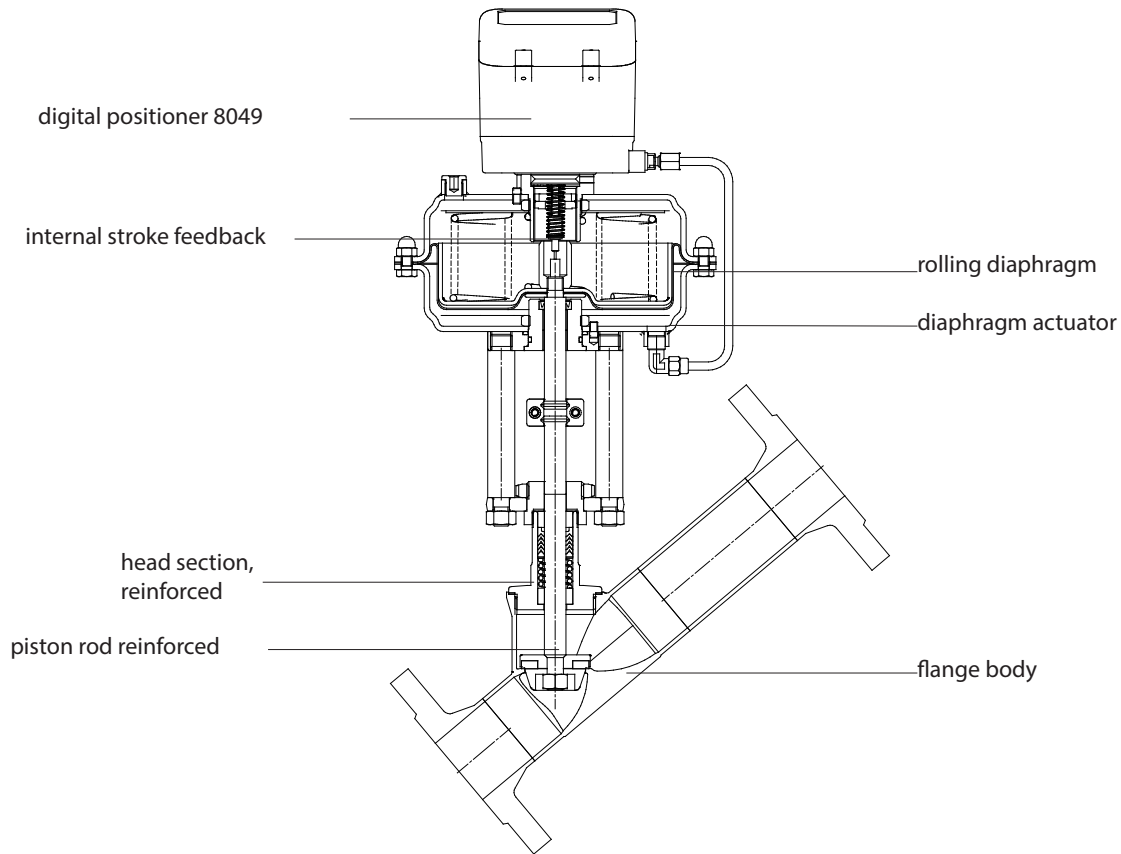
### diaphragm actuator, direct pressure range

Size	Maximum pressure (psi)		Supply air (psi)		Diaphragm area inch
	3 - 15 psi	6 - 29 psi	3 - 15 psi	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

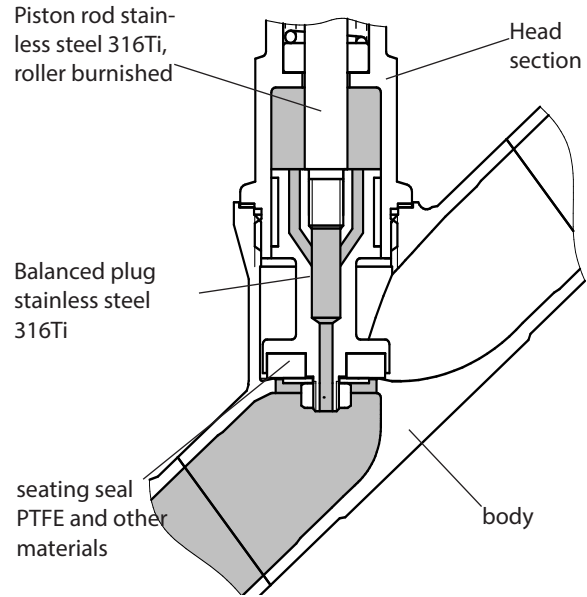
## Admissible Differential Pressures

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

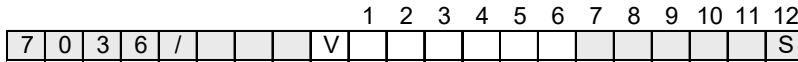
Size	Differential pressure (PTFE)	Supply pressure range	Piston Ø	Springs
	psi	psi	inch	number
2"	250	60 - 90	5"	3
2 1/2"	250	60 - 90	5"	3
3"	250	60 - 90	5"	3



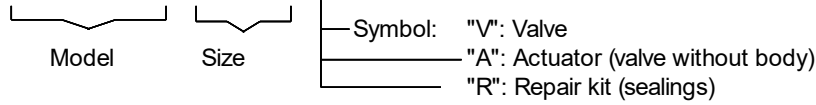
# Flanged Control Valve 7036



## Ordering Number System



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

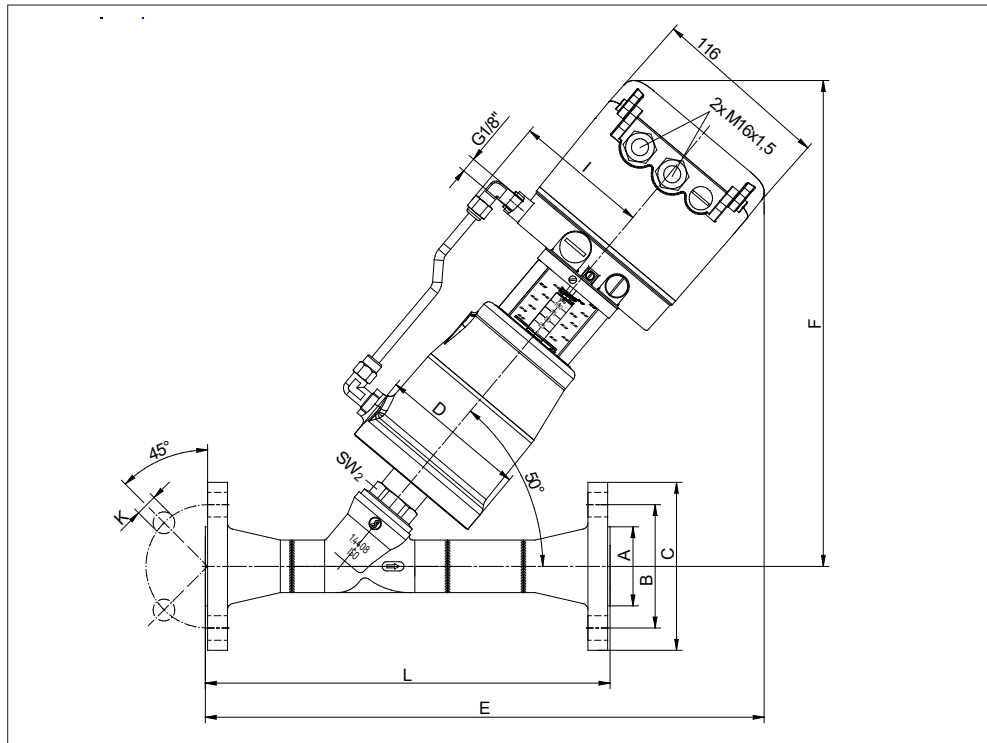


1.	Body type	2.	Connection	3.	Body materials	4.	Seat materials	5.	Positioner	6.	Actuator, Diameter	7.	Springs
2	flanged control valve Type 7036	C	flange acc. ANSI #150	2	stainless steel CF8M	0	PTFE (Teflon)	6	p/p positioner Type 8047	1	piston Ø 80 mm	-	standard spring
								7	i/p positioner Type 8047	8	piston 3" (NPT)		configuration spring to open
								8	i/p positioner and with plug connec. M12x1 Type 8047	9	piston Ø 125 mm	1	(only with dig. positioner)
								9	as above, but for hazardous location use (II 2 G EEx ib IIC T6) plug connec. M12x1 Type 8047	D	piston 5" (NPT)		spring set
								C	dig. positioner, Type 8049, 4 wire		10"	P	3-15 psi (10")
								R	dig. positioner, Type 8049, 2 wire			T	6 springs (10")
								T	dig. positioner, Type 8049 AS-i version			W	8 springs (10")
								W	dig. positioner, Type 8049, 2 wire, ex-version			Y	12 springs (10")
								K	digital positioner type 8049 ExPro-FM with base plate in stainless steel; Ta = +14°F to +167°F; IS Class I Division 1, Groups A, B, C, D; T4 Entity; Class I Zone 0 AEx ia IIC T4 Entity, IP65				
								Y	digital positioner type 8049 ExPro-FM with base plate in stainless steel; Ta = +14°F to +167°F; NI Class I Division 2, Groups A, B, C, D; T4 NIFW, IP65				
8.	Characteristic	9.	Packing	10.	Cv-value	11.	Accessories	12.		13.	Seal	14.	Position
-	linear equal percentage	-	standard packing underneath (vacuum)	-	full Cv-value red. to 40%	-	without	S	to state if some stations are quoted!	-	standard	0	indicator with position indicator (digital positioner standard)
1		2		1	red. to 25%								
				2	red. to 15%								
				3	red. to 7.5%								
				4	red. to 22.5%								
				5	red. to 10%								
				6									

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

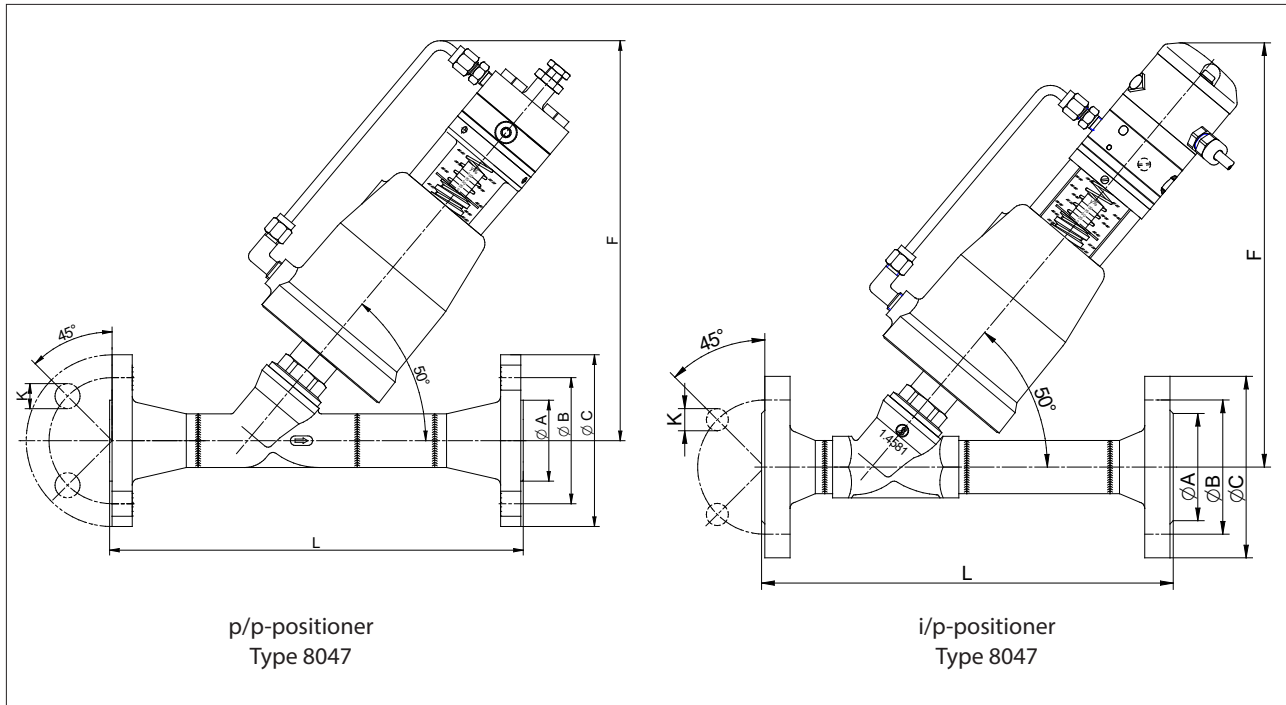
PN40

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



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	i/p	p/p	i/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

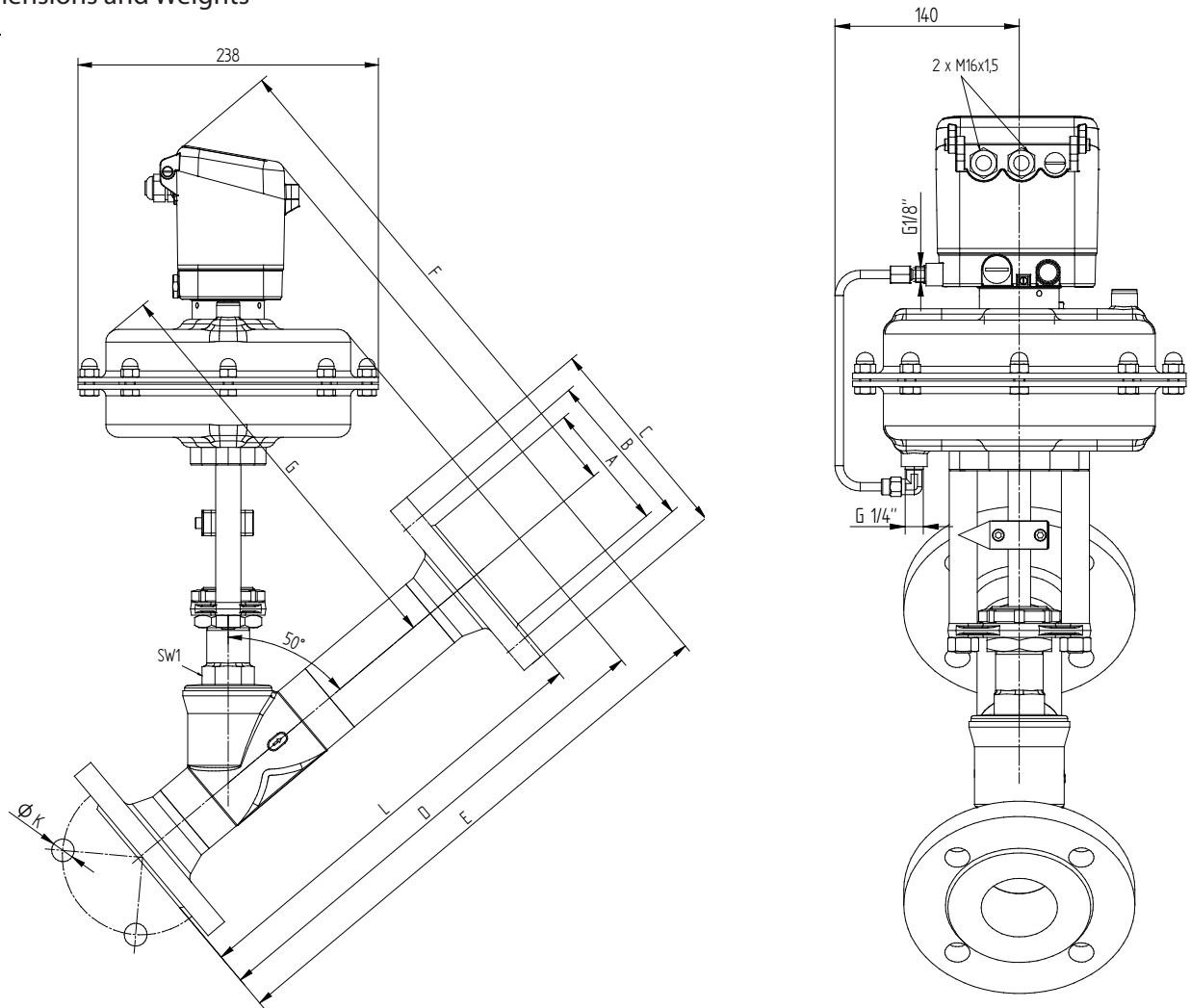
reinforced design:

Size	Actuator	A	B	C	D	K	Number of borings	L	F		H stroke	F		Weight (lbs)	
									p/p	i/p		pressure balanced	i/p	p/p	i/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.