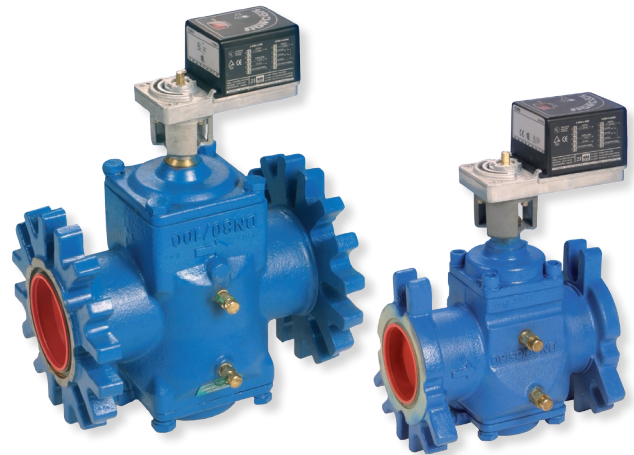


FlowCon SM 50-150mm

Dynamic Self Balancing Control Valve



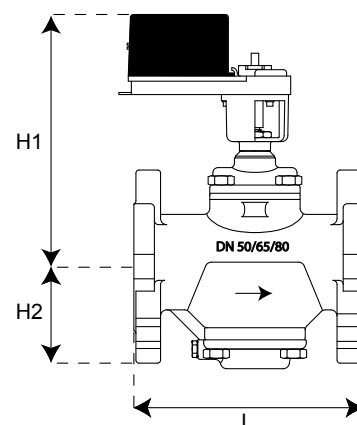
SPECIFICATIONS

Pressure rating:	4000 kPa, 580 psi
Temperature rating, media:	-20°C to +120°C, -4°F to +248°F
Temperature rating, ambient:	-10°C to +54°C, +14°F to +131°F
Material:	
- Diaphragm:	Hydrogenated acrylonitrile-butadiene-rubber
- Body:	Ductile iron ASTM A536-65T, Class 60-45-18
- Internal components:	Stainless steel
- End connection:	Univeral flange connections which can be used with both ISO and ANSI
- O-rings:	EPDM
Body tappings:	1/4" ISO
Maximum close off pressure:	700 kPa, 101 psi
Maximum operational ΔP:	400 kPaD, 58 psid

DIMENSIONS AND WEIGHTS (NOMINAL) (measured in mm unless noted)

Model no.	Size	L	H1	H2	Weight ¹ (kgs.)
SM.3.X	50	224	246	95	13,0
	65				
	80				
SM.4.X	80	320	290	135	34,0
	100				
SM.5.X	125	422	338	180	61,0
	150				

Note 1: Weight includes valve and actuator.



FLOW RATE TABLE

Model no.	Size		Control range		Maximum setting			Minimum setting			Shut-off leakage
	mm	inch	kPaD	psid	l/sec	l/hr	GPM	l/sec	l/hr	GPM	
SM.3.0	50	2"	35-400	5.1-58	4,16	15.000	66,0	1,48	5.310	23,4	Leakage<0.2% of Cvs, Cvs=17.2 GPM
	65	2 1/2"									
	80	3"									
SM.3.1	50	2"	35-400	5.1-58	7,15	25.700	113	2,57	9.240	40,7	Leakage<0.2% of Cvs, Cvs=33.6 GPM
	65	2 1/2"									
	80	3"									
SM.3.2	60	2"	80-400	11.6-58	9,88	35.600	157	3,55	12.800	56,3	Leakage<0.2% of Cvs, Cvs=33.6 GPM
	65	2 1/2"									
	80	3"									
SM.4.1	80	3"	35-400	5.1-58	9,38	33.800	149	3,49	12.600	55,4	Leakage<0.2% of Cvs, Cvs=66.4 GPM
	100	4"									
SM.4.2	80	3"	60-400	8.7-58	14,2	51.000	225	4,73	17.000	75,0	Leakage<0.2% of Cvs, Cvs=66.4 GPM
	100	4"									
SM.5.1	125	5"	35-400	5.1-58	23,3	83.800	369	6,48	23.300	103	Leakage<0.2% of Cvs, Cvs=133.6 GPM
	150	6"									
SM.5.2	125	5"	60-400	8.7-58	29,5	106.000	468	7,10	25.600	113	Leakage<0.2% of Cvs, Cvs=133.6 GPM
	150	6"									

MODEL NUMBER SELECTION²

Insert valve body size:

3=50-80mm, 2"-3" **4**=80-100mm, 3"-4" **5**=125-150mm, 5"-6"

Insert dP control range:

0=35-400 kPaD, 5.1-58 psid (SM.3 only)

1=35-400 kPaD, 5.1-58 psid

2=60/80-400 kPaD, 8.7/11.6-58 psid

Insert p/t plug requirements:

B=p/t plugs (standard)

Insert actuator selection:

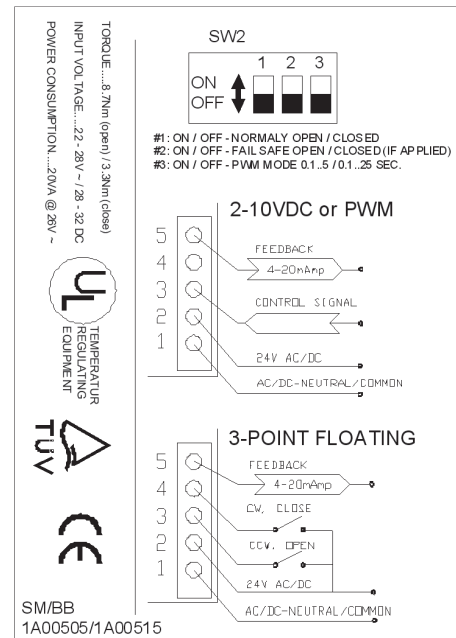
3=display **4**=fail safe and display

Example: SM.3.1.B.4=SM 2"-3" body for 5.1-58 psid with p/t plugs and failsafe actuator with display.

Note 2: Model no. and pressure range are indicated on label affixed to body.

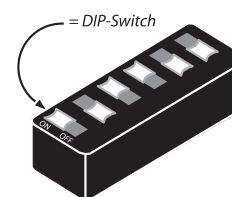
ACTUATOR SPECIFICATIONS

Supply voltage:	22-28V AC or 28-32V DC
Power consumption:	20VA @ 26V AC
Frequency:	50/60 HZ
Control input:	2-10V DC 4-20mA 3-point floating PWM
Position output:	2-10V DC 4-20mA
Turn time:	150 seconds (from closed to fully open valve)
Electrical connection:	15mm grommet connection
Direction of rotation:	Bi-directional
Humidity rating:	Fully coated electronic board
Housing material:	Aluminium
Housing insulation:	IP42



FLOW RATE SETTING - VALVE SIZE DN50-DN80

Maximum Flow Rate									Maximum Flow Rate DIP Switch Settings						Stem Rotations From Closed
Valve size: DN50-DN80 · 2"-3"															
35-400 kPaD 5.1-58 psid			35-400 kPaD 5.1-58 psid			80-400 kPaD 11.6-58 psid									
SM.3.0			SM.3.1			SM.3.2									
l/sec	l/hr	GPM	l/sec	l/hr	GPM	l/sec	l/hr	GPM	1	2	3	4	5	6	Rotations
1.48	5310	23.4	2.57	9240	40.7	3.55	12800	56.3	ON	ON	ON	ON	ON	ON	1
1.58	5700	25.1	2.81	10100	44.6	3.85	13900	61.0	OFF	ON	ON	ON	ON	ON	1.1
1.69	6080	26.8	3.05	11000	48.4	4.13	14900	65.6	ON	OFF	ON	ON	ON	ON	1.2
1.79	6460	28.5	3.27	11800	51.9	4.41	15900	69.9	OFF	OFF	ON	ON	ON	ON	1.3
1.90	6830	30.1	3.48	12500	55.3	4.67	16800	74.0	ON	ON	OFF	ON	ON	ON	1.4
2.00	7190	31.7	3.69	13300	58.5	4.92	17700	78.0	OFF	ON	OFF	ON	ON	ON	1.5
2.09	7540	33.2	3.88	14000	61.5	5.16	18600	81.8	ON	OFF	OFF	ON	ON	ON	1.6
2.19	7880	34.7	4.06	14600	64.3	5.38	19400	85.4	OFF	OFF	OFF	ON	ON	ON	1.7
2.28	8210	36.2	4.23	15200	67.0	5.60	20200	88.8	ON	ON	ON	OFF	ON	ON	1.8
2.37	8540	37.6	4.39	15800	69.6	5.81	20900	92.1	OFF	ON	ON	OFF	ON	ON	1.9
2.46	8860	39.0	4.54	16300	72.0	6.01	21600	95.3	ON	OFF	ON	OFF	ON	ON	2
2.55	9170	40.4	4.68	16900	74.3	6.19	22300	98	OFF	OFF	ON	OFF	ON	ON	2.1
2.63	9470	41.7	4.82	17300	76.4	6.37	22900	101	ON	ON	OFF	OFF	ON	ON	2.2
2.71	9770	43.0	4.94	17800	78.4	6.54	23600	104	OFF	ON	OFF	OFF	ON	ON	2.3
2.79	10100	44.3	5.06	18200	80.3	6.70	24100	106	ON	OFF	OFF	OFF	ON	ON	2.4
2.87	10300	45.5	5.17	18600	82.1	6.86	24700	109	OFF	OFF	OFF	OFF	ON	ON	2.5
2.94	10600	46.7	5.28	19000	83.7	7.00	25200	111	ON	ON	ON	ON	OFF	ON	2.6
3.02	10900	47.9	5.37	19300	85.2	7.14	25700	113	OFF	ON	ON	ON	OFF	ON	2.7
3.09	11100	49.0	5.47	19700	86.7	7.27	26200	115	ON	OFF	ON	ON	OFF	ON	2.8
3.16	11400	50.1	5.55	20000	88.0	7.40	26600	117	OFF	OFF	ON	ON	OFF	ON	2.9
3.22	11600	51.1	5.63	20300	89.3	7.52	27100	119	ON	ON	OFF	ON	OFF	ON	3
3.29	11800	52.1	5.70	20500	90.5	7.63	27500	121	OFF	ON	OFF	ON	OFF	ON	3.1
3.35	12100	53.1	5.77	20800	91.6	7.74	27900	123	ON	OFF	OFF	ON	OFF	ON	3.2
3.41	12300	54.0	5.84	21000	92.6	7.84	28200	124	OFF	OFF	OFF	ON	OFF	ON	3.3
3.46	12500	54.9	5.90	21200	93.5	7.94	28600	126	ON	ON	ON	OFF	OFF	ON	3.4
3.52	12700	55.8	5.95	21400	94.4	8.03	28900	127	OFF	ON	ON	OFF	OFF	ON	3.5
3.57	12900	56.6	6.01	21600	95.3	8.12	29200	129	ON	OFF	ON	OFF	OFF	ON	3.6
3.62	13000	57.4	6.06	21800	96.1	8.20	29500	130	OFF	OFF	ON	OFF	OFF	ON	3.7
3.67	13200	58.2	6.10	22000	96.8	8.28	29800	131	ON	ON	OFF	OFF	OFF	ON	3.8
3.72	13400	58.9	6.15	22100	97.5	8.36	30100	133	OFF	ON	OFF	OFF	OFF	ON	3.9
3.76	13500	59.6	6.19	22300	98.2	8.44	30400	134	ON	OFF	OFF	OFF	OFF	ON	4
3.80	13700	60.3	6.23	22400	98.9	8.51	30600	135	OFF	OFF	OFF	OFF	OFF	ON	4.1
3.84	13800	60.9	6.27	22600	100	8.58	30900	136	ON	ON	ON	ON	ON	OFF	4.2
3.88	14000	61.5	6.31	22700	100	8.65	31100	137	OFF	ON	ON	ON	ON	OFF	4.3
3.91	14100	62.0	6.35	22900	101	8.72	31400	138	ON	OFF	ON	ON	ON	OFF	4.4
3.94	14200	62.5	6.39	23000	101	8.78	31600	139	OFF	OFF	ON	ON	ON	OFF	4.5
3.97	14300	63.0	6.42	23100	102	8.85	31900	140	ON	ON	OFF	ON	ON	OFF	4.6
4.00	14400	63.4	6.46	23300	102	8.91	32100	141	OFF	ON	OFF	ON	ON	OFF	4.7
4.03	14500	63.9	6.50	23400	103	8.98	32300	142	ON	OFF	OFF	ON	ON	OFF	4.8
4.05	14600	64.2	6.54	23500	104	9.04	32600	143	OFF	OFF	OFF	ON	ON	OFF	4.9
4.07	14700	64.6	6.58	23700	104	9.11	32800	144	ON	ON	ON	OFF	ON	OFF	5
4.09	14700	64.9	6.62	23800	105	9.18	33000	146	OFF	ON	ON	OFF	ON	OFF	5.1
4.11	14800	65.1	6.67	24000	106	9.25	33300	147	ON	OFF	ON	OFF	ON	OFF	5.2
4.12	14800	65.3	6.72	24200	107	9.32	33500	148	OFF	OFF	ON	OFF	ON	OFF	5.3
4.13	14900	65.5	6.77	24400	107	9.39	33800	149	ON	ON	OFF	OFF	ON	OFF	5.4
4.14	14900	65.7	6.82	24600	108	9.46	34100	150	OFF	ON	OFF	OFF	ON	OFF	5.5
4.15	14900	65.8	6.88	24800	109	9.54	34300	151	ON	OFF	OFF	OFF	ON	OFF	5.6
4.15	15000	65.9	6.94	25000	110	9.62	34600	153	OFF	OFF	OFF	OFF	ON	OFF	5.7
4.16	15000	65.9	7.01	25200	111	9.70	34900	154	ON	ON	ON	ON	OFF	OFF	5.8
4.16	15000	66.0	7.08	25500	112	9.79	35300	155	OFF	ON	ON	ON	OFF	OFF	5.9
4.16	15000	66.0	7.15	25700	113	9.88	35600	157	ON	OFF	ON	ON	OFF	OFF	6



Example illustrated above:

ON-OFF-ON-ON-OFF-OFF

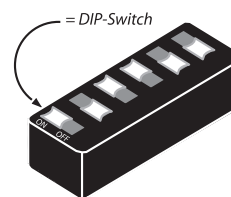
which gives a max flow of:

SM.3.0 - 4.16 l/sec,
SM.3.1 - 7.15 l/sec and
SM.3.2 - 9.88 l/sec
(rotation 6.0).

Accuracy: Greatest of either $\pm 5\%$ of controlled flow rate or $\pm 2\%$ of maximum flow rate.

FLOW RATE SETTING - VALVE SIZE DN80 AND DN100

Maximum Flow Rate						Maximum Flow Rate DIP Switch Settings							Stem Rotations From Closed
Valve size: DN80 and DN100 · 3"-4"													
35-400 kPaD 5.1-58 psid			60-400 kPaD 8.7-58 psid										
SM.4.1			SM.4.2										
l/sec	l/hr	GPM	l/sec	l/hr	GPM	1	2	3	4	5	6	Rotations	
3.49	12600	55.4	4.73	17000	75.0	ON	ON	ON	ON	ON	ON	1	
3.88	14000	61.6	5.29	19000	83.9	OFF	ON	ON	ON	ON	ON	1.1	
4.26	15300	67.5	5.82	21000	92	ON	OFF	ON	ON	ON	ON	1.2	
4.61	16600	73.1	6.33	22800	100	OFF	OFF	ON	ON	ON	ON	1.3	
4.94	17800	78.4	6.82	24500	108	ON	ON	OFF	ON	ON	ON	1.4	
5.26	18900	83.4	7.28	26200	115	OFF	ON	OFF	ON	ON	ON	1.5	
5.56	20000	88.2	7.72	27800	122	ON	OFF	OFF	ON	ON	ON	1.6	
5.84	21000	92.7	8.14	29300	129	OFF	OFF	OFF	ON	ON	ON	1.7	
6.11	22000	97	8.54	30700	135	ON	ON	ON	OFF	ON	ON	1.8	
6.36	22900	101	8.91	32100	141	OFF	ON	ON	OFF	ON	ON	1.9	
6.60	23800	105	9.27	33400	147	ON	OFF	ON	OFF	ON	ON	2	
6.82	24600	108	9.61	34600	152	OFF	OFF	ON	OFF	ON	ON	2.1	
7.03	25300	112	9.93	35700	157	ON	ON	OFF	OFF	ON	ON	2.2	
7.23	26000	115	10.2	36800	162	OFF	ON	OFF	OFF	ON	ON	2.3	
7.41	26700	117	10.5	37800	167	ON	OFF	OFF	OFF	ON	ON	2.4	
7.58	27300	120	10.8	38800	171	OFF	OFF	OFF	OFF	ON	ON	2.5	
7.73	27800	123	11.0	39700	175	ON	ON	ON	ON	OFF	ON	2.6	
7.88	28400	125	11.3	40500	179	OFF	ON	ON	ON	OFF	ON	2.7	
8.01	28800	127	11.5	41300	182	ON	OFF	ON	ON	OFF	ON	2.8	
8.14	29300	129	11.7	42000	185	OFF	OFF	ON	ON	OFF	ON	2.9	
8.25	29700	131	11.9	42700	188	ON	ON	OFF	ON	OFF	ON	3	
8.35	30100	132	12.0	43400	191	OFF	ON	OFF	ON	OFF	ON	3.1	
8.45	30400	134	12.2	43900	194	ON	OFF	OFF	ON	OFF	ON	3.2	
8.53	30700	135	12.4	44500	196	OFF	OFF	OFF	ON	OFF	ON	3.3	
8.61	31000	137	12.5	45000	198	ON	ON	ON	OFF	OFF	ON	3.4	
8.68	31300	138	12.6	45500	200	OFF	ON	ON	OFF	OFF	ON	3.5	
8.74	31500	139	12.7	45900	202	ON	OFF	ON	OFF	OFF	ON	3.6	
8.80	31700	140	12.9	46300	204	OFF	OFF	ON	OFF	OFF	ON	3.7	
8.85	31900	140	13.0	46700	206	ON	ON	OFF	OFF	OFF	ON	3.8	
8.90	32000	141	13.1	47000	207	OFF	ON	OFF	OFF	OFF	ON	3.9	
8.93	32200	142	13.1	47300	208	ON	OFF	OFF	OFF	OFF	ON	4	
8.97	32300	142	13.2	47600	210	OFF	OFF	OFF	OFF	OFF	ON	4.1	
9.00	32400	143	13.3	47800	211	ON	ON	ON	ON	ON	OFF	4.2	
9.03	32500	143	13.4	48100	212	OFF	ON	ON	ON	ON	OFF	4.3	
9.05	32600	144	13.4	48300	213	ON	OFF	ON	ON	ON	OFF	4.4	
9.07	32600	144	13.5	48500	214	OFF	OFF	ON	ON	ON	OFF	4.5	
9.09	32700	144	13.5	48700	214	ON	ON	OFF	ON	ON	OFF	4.6	
9.10	32800	144	13.6	48800	215	OFF	ON	OFF	ON	ON	OFF	4.7	
9.12	32800	145	13.6	49000	216	ON	OFF	OFF	ON	ON	OFF	4.8	
9.13	32900	145	13.7	49200	217	OFF	OFF	OFF	ON	ON	OFF	4.9	
9.15	32900	145	13.7	49300	217	ON	ON	ON	OFF	ON	OFF	5	
9.16	33000	145	13.7	49500	218	OFF	ON	ON	OFF	ON	OFF	5.1	
9.18	33000	146	13.8	49600	219	ON	OFF	ON	OFF	ON	OFF	5.2	
9.19	33100	146	13.8	49800	219	OFF	OFF	ON	OFF	ON	OFF	5.3	
9.21	33200	146	13.9	49900	220	ON	ON	OFF	OFF	ON	OFF	5.4	
9.23	33200	146	13.9	50100	221	OFF	ON	OFF	OFF	ON	OFF	5.5	
9.25	33300	147	14.0	50200	221	ON	OFF	OFF	OFF	ON	OFF	5.6	
9.28	33400	147	14.0	50400	222	OFF	OFF	OFF	OFF	ON	OFF	5.7	
9.31	33500	148	14.1	50600	223	ON	ON	ON	ON	OFF	OFF	5.8	
9.34	33600	148	14.1	50800	224	OFF	ON	ON	ON	OFF	OFF	5.9	
9.38	33800	149	14.2	51000	225	ON	OFF	ON	ON	OFF	OFF	6	



Example illustrated above:

ON-OFF-ON-ON-OFF-OFF

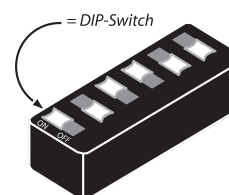
which gives a max flow of:

SM.4.1 - 9.38 l/sec and
SM.4.2 - 14.2 l/sec
(rotation 6.0).

Accuracy: Greatest of either ±5% of controlled flow rate or ±2% of maximum flow rate.

FLOW RATE SETTING - VALVE SIZE DN125 AND DN150

Maximum Flow Rate						Maximum Flow Rate DIP Switch Settings							Stem Rotations From Closed
Valve size: DN125 and DN150 · 5"-6"													
35-400 kPaD 5.1-58 psid			60-400 kPaD 8.7-58 psid										
SM.5.1			SM.5.2										
l/sec	l/hr	GPM	l/sec	l/hr	GPM	1	2	3	4	5	6	Rotations	
6.48	23300	103	7.10	25600	113	ON	ON	ON	ON	ON	ON	1	
7.24	26100	115	8.06	29000	128	OFF	ON	ON	ON	ON	ON	1.1	
7.98	28700	127	8.98	32300	142	ON	OFF	ON	ON	ON	ON	1.2	
8.69	31300	138	9.87	35500	157	OFF	OFF	ON	ON	ON	ON	1.3	
9.39	33800	149	10.7	38600	170	ON	ON	OFF	ON	ON	ON	1.4	
10.1	36200	160	11.6	41600	183	OFF	ON	OFF	ON	ON	ON	1.5	
10.7	38600	170	12.4	44500	196	ON	OFF	OFF	ON	ON	ON	1.6	
11.4	40900	180	13.1	47300	208	OFF	OFF	OFF	ON	ON	ON	1.7	
12.0	43100	190	13.9	50000	220	ON	ON	ON	OFF	ON	ON	1.8	
12.6	45200	199	14.6	52600	232	OFF	ON	ON	OFF	ON	ON	1.9	
13.1	47300	208	15.3	55100	243	ON	OFF	ON	OFF	ON	ON	2	
13.7	49300	217	16.0	57500	253	OFF	OFF	ON	OFF	ON	ON	2.1	
14.2	51200	226	16.6	59800	264	ON	ON	OFF	OFF	ON	ON	2.2	
14.7	53100	234	17.2	62100	274	OFF	ON	OFF	OFF	ON	ON	2.3	
15.3	54900	242	17.8	64200	283	ON	OFF	OFF	OFF	ON	ON	2.4	
15.7	56600	250	18.4	66300	292	OFF	OFF	OFF	OFF	ON	ON	2.5	
16.2	58300	257	19.0	68300	301	ON	ON	ON	ON	OFF	ON	2.6	
16.6	59900	264	19.5	70200	309	OFF	ON	ON	ON	OFF	ON	2.7	
17.1	61500	271	20.0	72100	317	ON	OFF	ON	ON	OFF	ON	2.8	
17.5	63000	277	20.5	73800	325	OFF	OFF	ON	ON	OFF	ON	2.9	
17.9	64400	284	21.0	75500	333	ON	ON	OFF	ON	OFF	ON	3	
18.3	65800	290	21.4	77200	340	OFF	ON	OFF	ON	OFF	ON	3.1	
18.6	67100	295	21.9	78700	347	ON	OFF	OFF	ON	OFF	ON	3.2	
19.0	68300	301	22.3	80200	353	OFF	OFF	OFF	ON	OFF	ON	3.3	
19.3	69500	306	22.7	81700	360	ON	ON	ON	OFF	OFF	ON	3.4	
19.6	70700	311	23.1	83100	366	OFF	ON	ON	OFF	OFF	ON	3.5	
19.9	71700	316	23.4	84400	372	ON	OFF	ON	OFF	OFF	ON	3.6	
20.2	72800	321	23.8	85700	377	OFF	OFF	ON	OFF	OFF	ON	3.7	
20.5	73800	325	24.1	86900	383	ON	ON	OFF	OFF	OFF	ON	3.8	
20.7	74700	329	24.5	88100	388	OFF	ON	OFF	OFF	OFF	ON	3.9	
21.0	75600	333	24.8	89200	393	ON	OFF	OFF	OFF	OFF	ON	4	
21.2	76400	337	25.1	90300	398	OFF	OFF	OFF	OFF	OFF	ON	4.1	
21.4	77200	340	25.4	91400	403	ON	ON	ON	ON	ON	OFF	4.2	
21.6	77900	343	25.7	92400	407	OFF	ON	ON	ON	ON	OFF	4.3	
21.8	78600	346	25.9	93400	411	ON	OFF	ON	ON	ON	OFF	4.4	
22.0	79200	349	26.2	94300	415	OFF	OFF	ON	ON	ON	OFF	4.5	
22.2	79800	352	26.5	95200	420	ON	ON	OFF	ON	ON	OFF	4.6	
22.3	80300	354	26.7	96100	423	OFF	ON	OFF	ON	ON	OFF	4.7	
22.5	80800	356	26.9	97000	427	ON	OFF	OFF	ON	ON	OFF	4.8	
22.6	81300	358	27.2	97800	431	OFF	OFF	OFF	ON	ON	OFF	4.9	
22.7	81700	360	27.4	98600	435	ON	ON	ON	OFF	ON	OFF	5	
22.8	82100	362	27.6	99400	438	OFF	ON	ON	OFF	ON	OFF	5.1	
22.9	82400	363	27.8	100000	442	ON	OFF	ON	OFF	ON	OFF	5.2	
23.0	82700	364	28.1	101000	445	OFF	OFF	ON	OFF	ON	OFF	5.3	
23.0	83000	366	28.3	102000	448	ON	ON	OFF	OFF	ON	OFF	5.4	
23.1	83200	367	28.5	102000	452	OFF	ON	OFF	OFF	ON	OFF	5.5	
23.2	83400	367	28.7	103000	455	ON	OFF	OFF	OFF	ON	OFF	5.6	
23.2	83500	368	28.9	104000	458	OFF	OFF	OFF	OFF	ON	OFF	5.7	
23.2	83600	368	29.1	105000	461	ON	ON	ON	ON	OFF	OFF	5.8	
23.3	83700	369	29.3	105000	465	OFF	ON	ON	ON	OFF	OFF	5.9	
23.3	83800	369	29.5	106000	468	ON	OFF	ON	ON	OFF	OFF	6	



Example illustrated above:

ON-OFF-ON-ON-OFF-OFF

which gives a max flow of:

SM.5.1 - 23.3 l/sec and

SM.5.2 - 29.5 l/sec

(rotation 6.0).

Accuracy: Greatest of either ±5% of controlled flow rate or ±2% of maximum flow rate.

GENERAL DESCRIPTION

The SM Series are self balancing dynamic flow control valves that are pressure independent, two-way, modulating to accept digital or analog input signals. The valves accept 2-10V DC, 4-20 mA, digital 3-point floating or PWM input signals. Each valve has an adjustable maximum flow rate setting to enable flow limitation and balancing to the coils or zones that the valves are controlling.

All SM actuators are microprocessor based with a self-calibrating feature.

The valve is of the wafer style for fitting between flanges. They are available in three different valve bodies for flange connections.

GENERAL SPECIFICATIONS

1. PRESSURE INDEPENDENT DYNAMIC CONTROL VALVE FLOWCON SM

- 1.1. Contractor shall install dynamic control valves where indicated in drawings.
- 1.2. Valve shall be an electronic, dynamic, modulating, 2-way control device.
- 1.3. Dynamic control valve shall accurately control flow, independent of system pressure fluctuation.
- 1.4. Maximum flow setting shall be adjustable to 51 different settings within the range of the valve size.

2. VALVE ACTUATOR

- 2.1. Valve actuator housing shall be rated to IP42.
- 2.2. Actuator shall be driven by a 22-28V AC / 28-32V DC motor and shall accept 2-10V DC, 4-20 mA, 3-point floating or pulse width modulation electric signal and shall include resistor to facilitate any of these signals.
- 2.3. Actuator shall be capable of providing 4-20 mA or 2-10V DC feedback signal to the control system.
- 2.4. Optional fail safe system to power valve to either open or closed position from any position in case of power failure shall be available.
- 2.5. External LED read-out of current valve position and maximum valve position setting shall be standard.

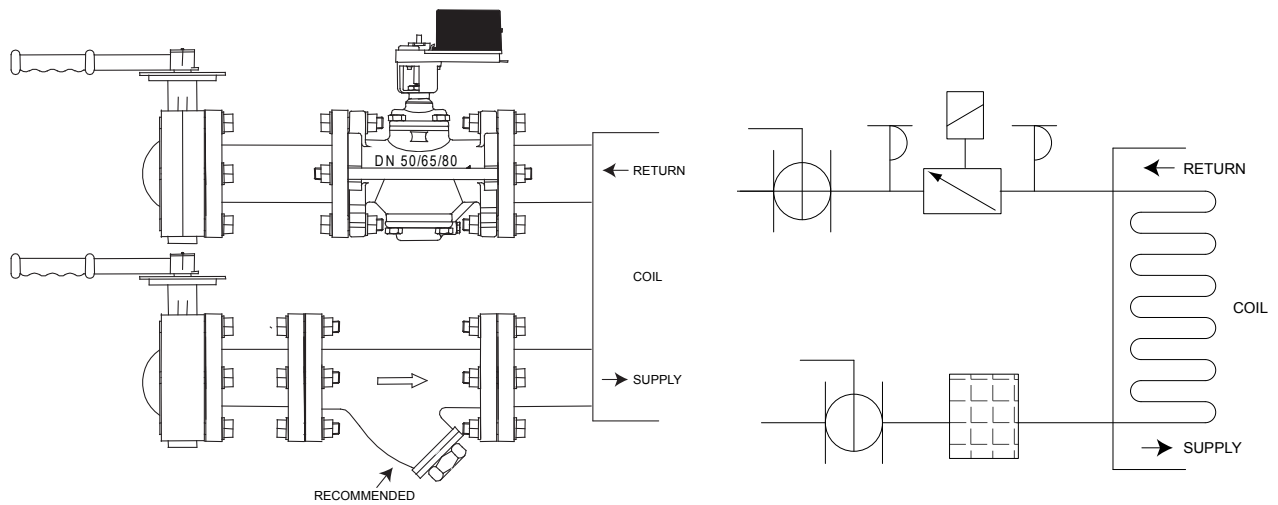
3. VALVE HOUSING

- 3.1. Housing shall be constructed of ductile iron ASTM A536-65T, Class 60-45-18 rated at no less than 4000 kPa static pressure and +120°C.
- 3.2. Dual pressure/temperature test plugs for verifying accuracy of flow performance shall be provided on for all valve sizes.
- 3.3. Identification tags shall be available for all valves; tags shall be indelibly marked with part number, production date and pressure differential range. Tags shall be of aluminum and in size 50mm x 25mm.

4. FLOW REGULATOR / AUTOMATIC BALANCING UNIT

- 4.1. Flow regulation unit shall consist of stainless steel and hydrogenated acrylonitrile butadiene rubber and shall be capable of controlling flow within $\pm 5\%$ rated flow rate or $\pm 2\%$ of maximum flow rate.
- 4.2. Flow regulation unit shall be accessible for change-out or maintenance.

APPLICATION AND SCHEMATIC EXAMPLE



UPDATES

For latest updates please see www.flowcon.com

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