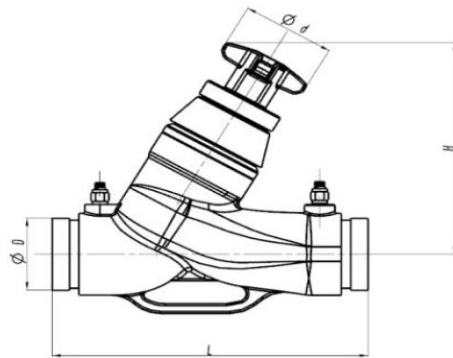


FEATURES

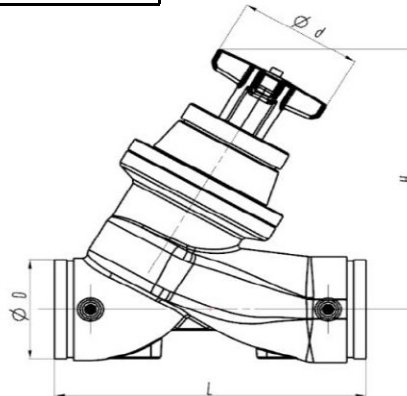
- Accurate and precise flow measurement
- Accurate and precise flow balancing
- Positive shut-off
- "Y" Pattern Globe style design
- Multi-turn, 360° handwheel Built in memory stop

SPECIFICATIONS

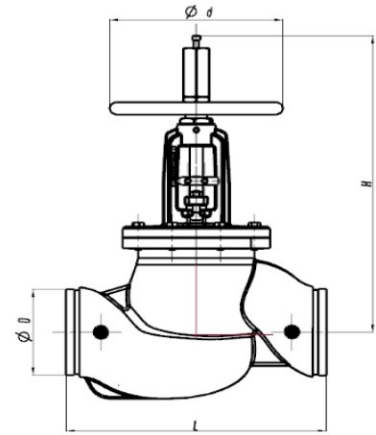
Pressure Ratings:	235 psi / 16 bar (PN 16)
Temperature Ratings:	14°F to 248°F (-10°C to 120°C)
Body:	Ductile Iron
End Connections:	ANSI 300# Grooved
Stem:	Stainless Steel (AISI 420)
Seat Seal	EPDM Perox
Handwheel:	2-1/2" to 6", Polyamide Plastic with 30% Glass Fiber; 8" to 12", Ductile Iron



2-1/2" to 4" (DN 65 to 100)



5", 6" & 8" (DN 125 to 200)



10" to 12" (DN 250 to 300)

NOMINAL DIMENSIONS & WEIGHTS

MODEL	SIZE			L	H	D	Handwheel Diameter d	WEIGHT		Handwheel Turns	Valve Selection Guide	
	in	mm						lbs	kg		Nominal Range of Flow	
											GPM	LPM
STVG-2-1/2	2.5"	65	in	11.42	8.50	2.875	3.35	23.8	10.8	8	39 - 87	148 - 329
			mm	290	216	73.0	85					
STVG-3	3.0"	80	in	12.20	8.86	3.500	3.35	30.9	14.0	8	87 - 125	329 - 473
			mm	310	225	88.9	85					
STVG-4	4.0"	100	in	13.78	13.19	4.500	3.35	60.0	27.2	8	125 - 213	473 - 806
			mm	350	335	114.3	85					
STVG-5	5.0"	125	in	15.75	14.57	5.563	6.18	121.3	55.0	10	213 - 300	806 - 1136
			mm	400	370	141.3	157					
STVG-6	6.0"	150	in	18.90	15.98	6.625	6.18	140.7	63.8	10	300 - 450	1136 - 1703
			mm	480	406	168.3	157					
STVG-8	8.0"	200	in	23.62	30.04	8.625	15.75	218.3	99.0	12	450 - 760	1703 - 2877
			mm	600	763	219.1	400					
STVG-10	10.0"	250	in	28.74	35.12	10.750	15.75	445.3	202.0	12	760 - 920	2877 - 3483
			mm	730	892	273.0	400					
STVG-12	12.0"	300	in	33.46	37.24	12.750	15.75	683.4	310.0	14	920 - 1500	3483 - 5678
			mm	850	946	323.9	400					

Optional features and accessories available for this Macon product are an extra charge, and not included in the standard model price.

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Section: Components Bulletin-MB-STVG-0915.05

Flow Coefficient Values - Model STVG - 2.50" to 12.00"

Flow coefficient values (Cv's) at various handwheel settings								
Handwheel Setting	2-1/2" DN 65	3" DN 80	4" DN 100	5" DN 125	6" DN 150	8" DN 200	10" DN 250	12" DN 300
1.00	8	17	24	81	52	126	250	298
1.25	10	20	27	97	56	162	303	346
1.50	12	22	29	113	59	198	354	452
1.75	15	25	32	129	62	233	399	448
2.00	19	27	35	143	66	274	444	499
2.25	24	30	38	158	70	316	480	553
2.50	30	33	31	171	74	360	513	618
2.75	36	36	48	184	78	401	543	682
3.00	42	40	55	197	81	437	574	750
3.25	47	45	64	209	84	466	605	819
3.50	53	51	73	223	87	488	635	887
3.75	57	58	84	235	92	508	668	946
4.00	62	64	95	247	99	528	697	995
4.25	66	71	106	259	111	547	722	1025
4.50	70	77	116	271	124	569	745	1045
4.75	74	84	127	282	138	589	764	1064
5.00	77	90	137	294	150	610	780	1091
5.25	80	97	147	305	158	631	792	1131
5.50	82	104	157	317	164	650	802	1183
5.75	84	110	167	327	169	667	810	1231
6.00	85	115	177	338	175	682	817	1273
6.25	87	121	188	347	183	692	825	1303
6.50	88	125	197	355	194	700	833	1320
6.75	89	128	206	362	211	707	839	1332
7.00	89	131	213	368	233	716	846	1343
7.25	90	133	219	374	261	727	852	1356
7.50	91	134	223	379	292	740	858	1371
7.75	92	135	226	384	323	754	864	1384
8.00	93	136	229	390	349	767	872	1395
8.25				396	369	780	881	1400
8.50				403	382	791	892	1404
8.75				410	394	799	901	1412
9.00				415	408	802	908	1430
9.25				418	424	801	912	1457
9.50				419	444	798	915	1491
9.75				419	466	795	917	1526
10.00				419	489	796	922	1554
10.25						803	929	1567
10.50						813	939	1570
10.75						824	949	1568
11.00						834	960	1565
11.25						840	969	1565
11.50						842	976	1567
11.75						843	983	1571
12.00						843	989	1575
12.25								1578
12.50								1581
12.75								1584
13.00								1588
13.25								1592
13.50								1598
13.75								1605
14.00								1611

Valve is fully open

Correction for Liquids

Applies to liquids other than water. Correct the measured flow (q) by the density (γ) according to this formula. See Figure 4

Sizing a Balancing Valve

When the differential pressure and design flow are known, use this formula to calculate Cv value. See Figure 5

Figure 4
Actual Flow = $\frac{q_{CBI}}{\sqrt{\gamma}}$

Figure 5
 $C_v = 1.52 \frac{q}{\sqrt{\Delta p}}$
 q in GPM, Δp in Ft. of H₂O

$C_v = \frac{q}{\sqrt{\Delta p}}$
 q in GPM, √p in PSI

Installation Recommendations for GROOVED END VALVE CONNECTIONS

Grease the pipe ends, valve ends and rubber gasket lip with grease, graphite paste or similar grease. Slip the rubber gasket over the pipe end of each joint. Slide the gasket past the grooves. Position the grooved end valve between the pipe ends and slide the gaskets back into the central spanned position.

All products have a flow direction arrow. Make sure that it is pointing in the direction of the flow. Apply grease on the outside of the gasket. Install housing clamps over the gasket - insert bolts and nuts.

Tighten nuts evenly, using socket or other wrench. Tighten so that housing clamps come together evenly. The connection is complete when housing clamps meet metal to metal. Further tightening of bolts is not necessary.

Pre-assemble large diameter multi-segment housing clamps loosely and install them as half-housings. Take up evenly from top to bottom on alternate bolts.

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