

BVA

Butterfly Valves

BVA-1
Edition 07-08



Hauck, a product brand
of the Elster Group



- Automatic or manual control
- Cast iron body for long life
- Wide flow range
- Accurate and repeatable for quick flow control
- Available in 11 sizes for air, hot air or fuel gas
- Ideal for individual burner or zone control
- Easy to read valve position dial plate

Hauck Butterfly Valves control the flow of low pressure combustion air or fuel gas to burner systems. Two versions of the valve are available; the BVA series for ambient services and most fuel gases; and the BVA-H series for preheated air applications up to 800°F (425°C). The valves are ideal for individual burner or zone control and can be used as a trim valve to balance individual burners.

Hauck BVA valves utilize maximum port openings for high flow rates. An easily read dial plate helps the operator maintain settings from burner to burner. Settings can be easily duplicated allowing quick return to previous flow rates.

The BVA is available in both automatic and manual control models. The manual 100 series valves are equipped with a short control lever and a thumbscrew to easily set and lock valve position. The automatic 400 series valves come with tapped and threaded bolt locations for the addition of a control motor.

BVA valves are NPT threaded in the 1" to 6" sizes. In addition, there are 6", 8" and 10" flanged valves with RPM flanges. The 1000 series is a manual valve, while the 4000 series is an automatic linked drive valve. The 5000 series is an automatic direct drive valve.



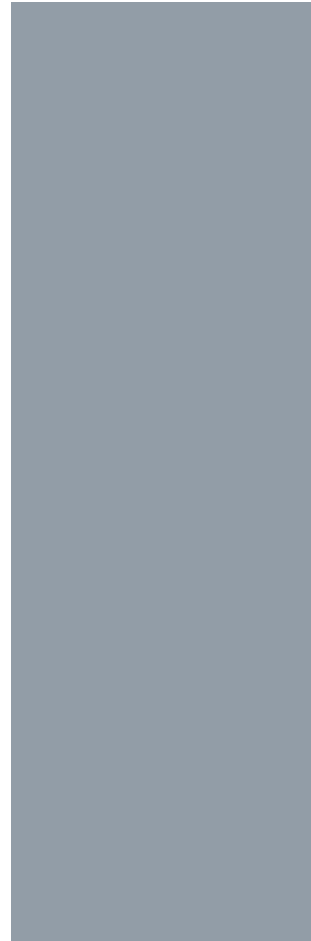
BVA with Adjustable Radius Control Lever

BVA 100 and 400 series valves are constructed of a cast iron body with a steel valve disc, brass shaft and viton shaft seals.

BVA-H 100 and 400 series are constructed of a cast iron body, stainless steel valve disc and stainless steel shaft. A zinc plated steel retaining nut and packing ensure a high temperature shaft seal.

BVA 1000 and 4000 flanged series are constructed of a welded steel body, steel valve disc and brass shaft.

Hauck can provide a bracket and linkage for the BVA to be used with almost any control motor or actuator. Consult Hauck.



Wafer butterfly valves from 6" to 22" are also available. See WBVH-1 for additional information.

For additional information on this product, visit our website at:

www.hauckburner.com

Hauck Manufacturing Company
POB 90
Lebanon, PA 17042

T +1 717-272-3051
F +1 717-273-9882
info@hauckburner.com

Hauck, a product brand
of the Elster Group



Copyright © 2008 Elster Group



BVA BUTTERFLY VALVES

Air

Valve Model	Pipe Size (NPT)	Wide Open Valve Capacity Air (scfh)			70° Open Valve Capacity Air (scfh)			Valve Leakage @ Fully Closed Position & 1psig Upstream Static Pressure Air (scfh)
		0.5" w.c.Δp	1 osi Δp	C _v	0.5" w.c.Δp	1 osi Δp	C _v	
BVA 110/410	1"	892	1690	28	776	1440	25	≤ 45
BVA 112/412	1¼"	1970	3720	62	1430	2630	45	≤ 105
BVA 115/415	1½"	3580	6640	113	2340	4340	74	≤ 130
BVA 120/420	2"	6320	11800	199	4080	7500	129	≤ 150
BVA 125/425	2½"	10200	18400	322	5310	9770	167	≤ 190
BVA 130/430	3"	12900	23700	405	8000	14600	252	≤ 210
BVA 140/440	4"	29000	53000	913	13900	26000	437	≤ 240
BVA 160/460	6"	95300	182000	3040	36200	68600	1150	≤ 455
BVA 1060/4060	6" FLG	75200	141600	2370	31900	59800	1005	≤ 710
BVA 1080/4080	8" FLG	185000	345000	5770	61000	115000	1910	≤ 710
BVA 1100/4100	10" FLG	242000	451000	7630	98200	182000	3070	≤ 710

Natural Gas

Valve Model	Pipe Size (NPT)	Wide Open Valve Capacity Natural Gas (scfh)			70° Open Valve Capacity Natural Gas (scfh)			Valve Leakage @ Fully Closed Position & 1psig Upstream Static Pressure Nat. Gas (scfh)
		0.5" w.c.Δp	1 osi Δp	C _v	0.5" w.c.Δp	1 osi Δp	C _v	
BVA 110/410	1"	1150	2180	28	1000	1860	25	≤ 60
BVA 112/412	1¼"	2550	4800	62	1840	3400	45	≤ 140
BVA 115/415	1½"	4600	8570	113	3000	5600	74	≤ 95
BVA 120/420	2"	8200	15200	199	5270	9680	129	≤ 195
BVA 125/425	2½"	13200	23900	322	6860	12600	167	≤ 115
BVA 130/430	3"	16600	30700	405	10300	18800	252	≤ 275
BVA 140/440	4"	37500	68400	913	17900	33500	437	≤ 310
BVA 160/460	6"	123000	235000	3040	46800	88600	1150	≤ 590

Notes:

1. Capacities based on air @ 1.0 s.g. and natural gas @ 0.60 s.g., and 60°F fluid temperature.
2. Δp measured across valve.
3. Maximum inlet pressure is 5 psig, maximum operating temperature is 250°F.
4. 1xx and 1xxx series are manual valves with a short lever and locking screw; 4xx and 4xxx are automatic valves with a long lever and linkage connector.
5. For applications requiring a control motor mounting bracket, specify the motor model number when ordering.

(Hot air BVA-H valve capacities on reverse side.)

In accordance with Hauck's commitment to Total Quality Improvement, Hauck reserves the right to change the specifications of products without prior notice.

BVA-H SERIES (Hot Air To 800°F)

Valve Model	Pipe Size (NPT)	70° Open Valve Capacity Air (scfh)						C _v	Valve Leakage @ Fully Closed Position & 1psig Upstream Static Pressure Air 60°F (scfh)
		0.5" wc Δp			1 osi Δp				
		400°F	600°F	800°F	400°F	600°F	800°F		
BVA-H 110/410	1"	596	537	493	1080	975	894	24	≤ 305
BVA-H 112/412	1¼"	1090	984	903	2080	1880	1720	44	≤ 445
BVA-H 115/415	1½"	1680	1510	1390	3080	2780	2550	68	≤ 470
BVA-H 120/420	2"	2700	2430	2230	4920	4430	4070	109	≤ 705
BVA-H 125/425	2½"	3360	3030	2770	6290	5660	5200	136	≤ 925
BVA-H 130/430	3"	5570	5020	4600	10500	9490	8700	226	≤ 1470
BVA-H 140/440	4"	9810	8840	8100	18400	16600	15200	400	≤ 2930
BVA-H 160/460	6"	23300	21000	19300	43000	38800	35600	943	≤ 5330

Valve Model	Pipe Size (NPT)	Wide Open Valve Capacity Air (scfh)						C _v	Valve Leakage @ Fully Closed Position & 1psig Upstream Static Pressure Air 60°F (scfh)
		0.5" wc Δp			1 osi Δp				
		400°F	600°F	800°F	400°F	600°F	800°F		
BVA-H 110/410	1"	743	669	614	1350	1220	1110	30	≤ 305
BVA-H 112/412	1¼"	1660	1500	1380	3120	2800	2580	67	≤ 445
BVA-H 115/415	1½"	3000	2700	2480	5620	5070	4640	121	≤ 470
BVA-H 120/420	2"	4550	4100	3760	8420	7580	6950	184	≤ 705
BVA-H 125/425	2½"	8310	7500	6870	15200	13700	12600	336	≤ 925
BVA-H 130/430	3"	11300	10200	9360	21000	18900	17300	459	≤ 1470
BVA-H 140/440	4"	25000	22500	20600	45800	41250	37800	1000	≤ 2930
BVA-H 160/460	6"	96600	87000	79800	179000	161000	147000	3900	≤ 5330

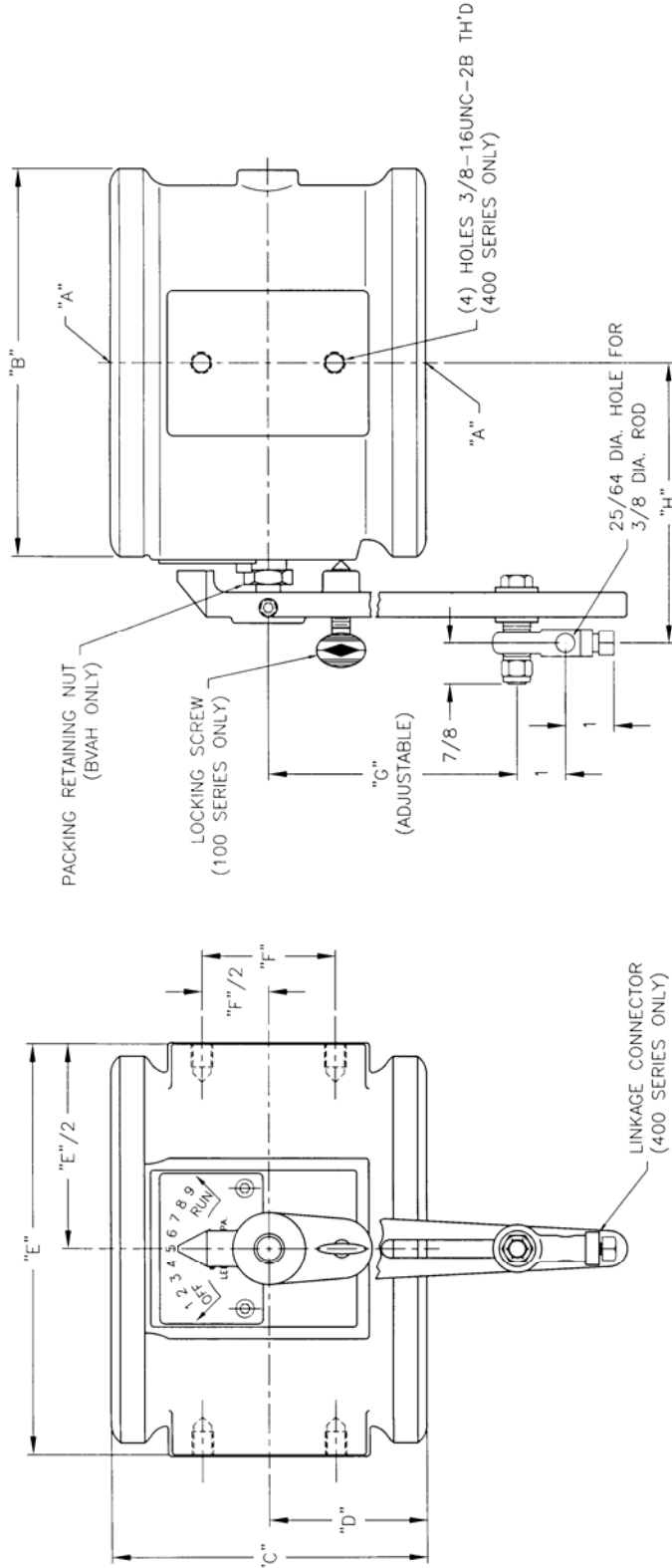
Notes:

1. Capacities based on air at specified temperature.
2. Δp is measured across valve.
3. Maximum inlet pressure is 5 psig.
4. 1xx and 1xxx are manual operation valves with a short lever; 4xx and 4xxx series are automatic valves with a long lever and linkage connector.
5. For applications that require a control motor mounting bracket, specify the motor model number when ordering.
6. Maximum operating temperature is 800°F.



DIMENSIONS

BVA BUTTERFLY VALVES 100 & 400 SERIES



MODEL NO.	A	B	C	D	E	F	G	H	APPROX. NET WT.
BVA110	1 NPT	1 15/16	3	1 1/2	—	—	—	—	2.5 LB
BVA112	1 1/4 NPT	2 3/8	3 1/8	1 9/16	—	—	—	—	2.7 LB
BVA115/415	1 1/2 NPT	2 5/8	3 1/8	1 9/16	3 3/8	15/16	1 3/4 - 4 3/4	3 3/8	4.0 LB
BVA120/420	2 NPT	3	3 1/4	1 5/8	3 3/4	1 1/8	1 3/4 - 4 3/4	3 5/8	4.8 LB
BVA125/425	2 1/2 NPT	3 3/4	4 5/16	2 5/32	4 1/2	1 3/8	1 3/4 - 4 3/4	3 13/16	8.2 LB
BVA130/430	3 NPT	4 1/2	4 13/16	2 1/4	5	1 3/4	2 1/2 - 6	4 5/16	12 LB
BVA140/440	4 NPT	5 1/2	5	2 7/16	6 1/8	2 1/4	2 1/2 - 6	4 13/16	16 LB
BVA160/460	6 NPT	8	6 1/2	3 1/4	8 1/2	2 3/4	2 1/2 - 6	5 13/16	29 LB

NOTE:

- 100 SERIES IS MANUAL OPERATION;
400 SERIES IS AUTOMATIC OPERATION
- FOR HOT AIR BUTTERFLY VALVE, ADD 'H' TO MODEL NO., E.G., BVAH125.

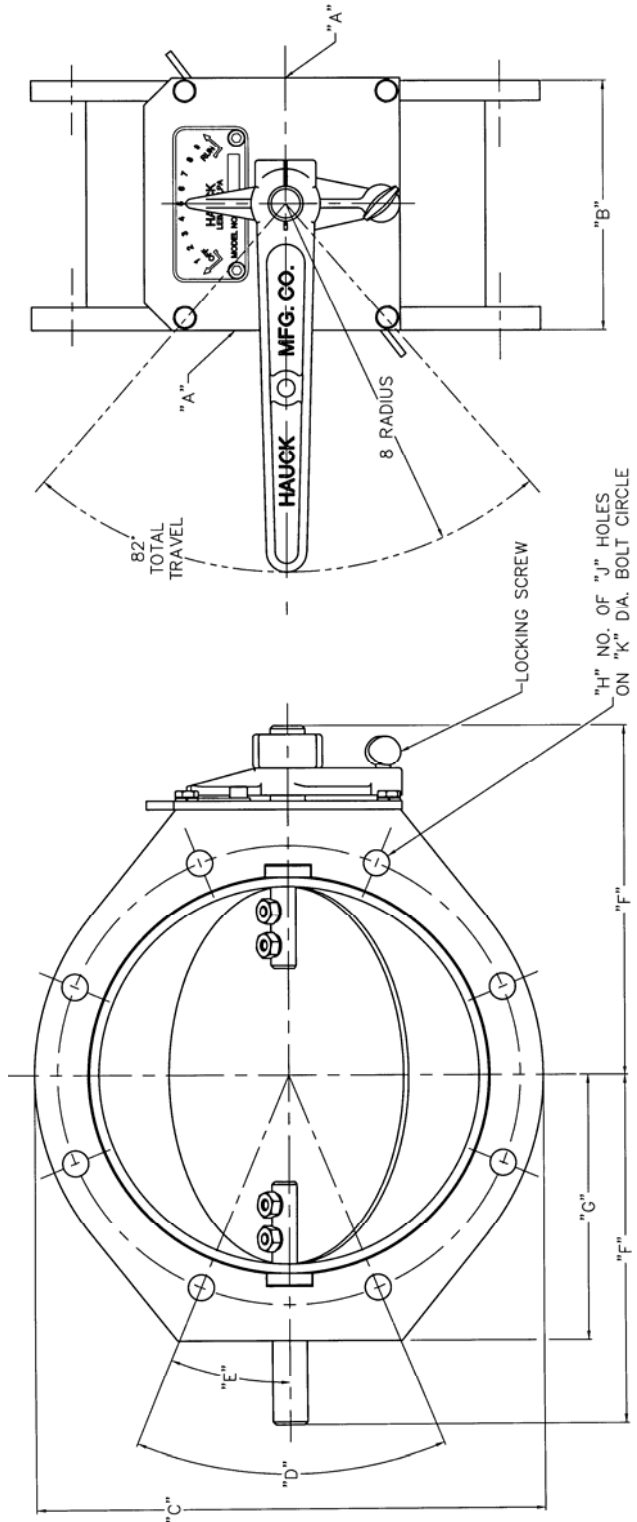
Y3307
(NOT TO SCALE)

(See Reverse Side For Metric Dimensions)



DIMENSIONS

BVA BUTTERFLY VALVES MANUAL BVA1060C – BVA1100C



MODEL NO.	A	B	C	D	E	F	G	H	J	K	APPROX. NET WT.
BVA1060C	6 RPM	4	9	45°	22 1/2"	6 7/16	4 3/4	8	1/2-13 UNC-2B	7 7/8	19 LB
BVA1080C	8 RPM	5 1/2	11	45°	22 1/2"	7 7/16	5 3/4	8	9/16 DIA.	10	27 LB
BVA1100C	10 RPM	5 1/2	14	30°	15"	8 9/16	6 13/16	12	11/16 DIA.	12 1/4	36 LB

Y7824
(NOT TO SCALE)

(See Reverse Side For Metric Dimensions)

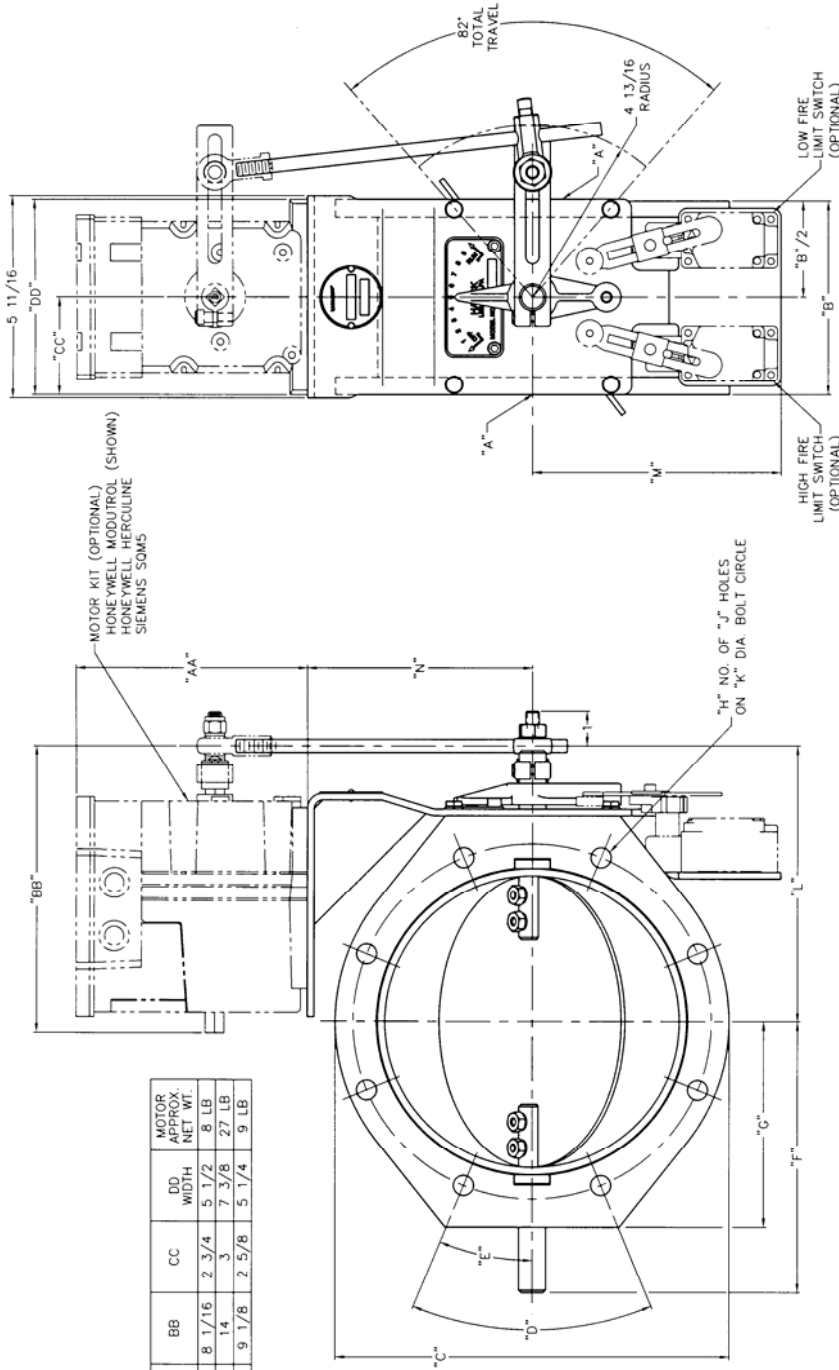
In accordance with Hauck's commitment to Total Quality Improvement, Hauck reserves the right to change the specifications of products without prior notice.

HAUCK MANUFACTURING CO., P.O. Box 90 Lebanon, PA 17042-0090 717-272-3051



DIMENSIONS

BVA BUTTERFLY VALVES AUTOMATIC LINKED DRIVE BVA4060C – BVA4100C



MOTOR KIT	AA HEIGHT	BB WIDTH	CC WIDTH	DD WIDTH	MOTOR APPROX. NET WT.
MODUTROL	6 7/16	8 1/16	2 3/4	5 1/2	8 LB
HERCULINE	5 7/8	14	3	7 3/8	27 LB
SOM5	6	9 1/8	2 5/8	5 1/4	9 LB

MODEL NO.	A	B	C	D	E	F	G	H	J	K	L	M	N	VALVE APPROX. NET WT.
BVA4060C	6 RPM	4	9	45	22 1/2"	6 5/8	4 3/4	8	1/2-13 UNC-2B	7 7/8	7 5/16	7 3/4	6 5/16	23 LB
BVA4080C	8 RPM	5 1/2	11	45	22 1/2"	7 5/8	5 3/4	8	9/16 DIA.	10	7 3/4	6 15/16	6 5/16	30 LB
BVA4100C	10 RPM	5 1/2	14	30	15"	8 11/16	6 13/16	12	11/16 DIA.	12 1/4	8 13/16	7 15/16	7 13/16	40 LB

Y7825
(NOT TO SCALE)

(See Reverse Side For Metric Dimensions)

In accordance with Hauck's commitment to Total Quality Improvement, Hauck reserves the right to change the specifications of products without prior notice.

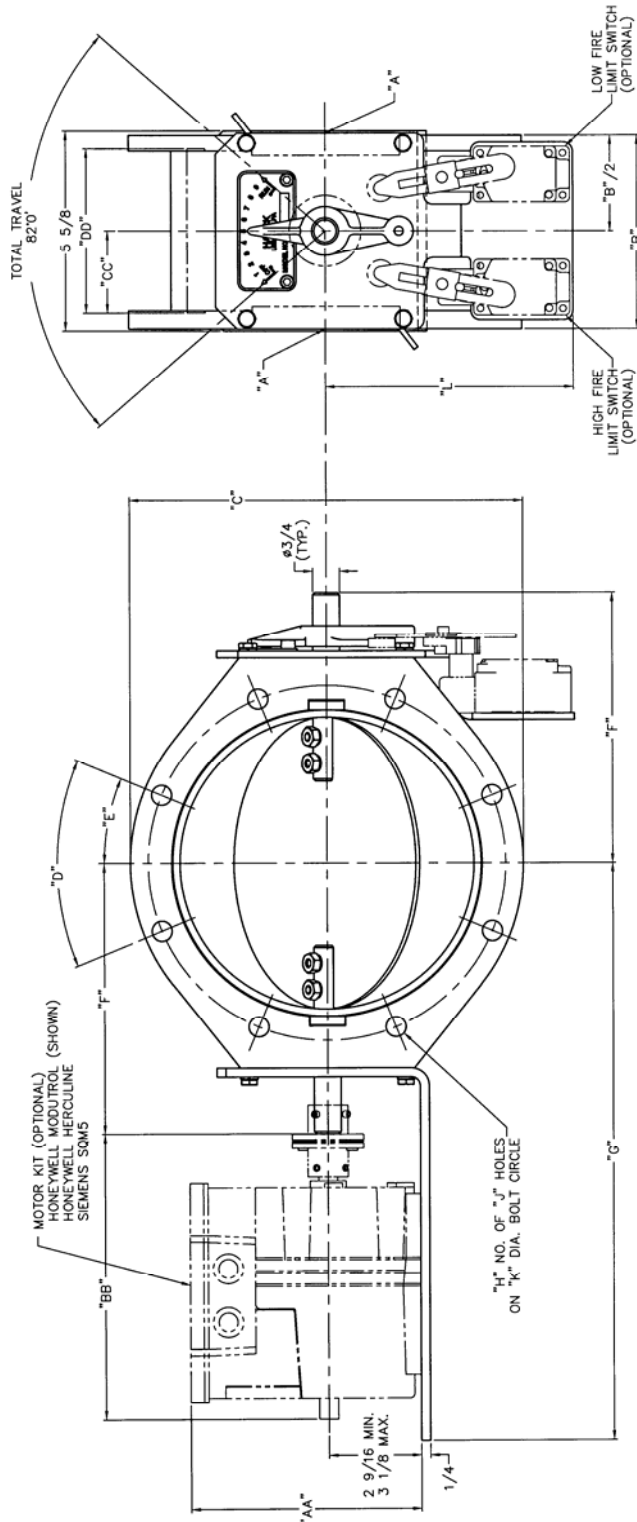
HAUCK MANUFACTURING CO., P.O. Box 90 Lebanon, PA 17042-0090 717-272-3051



DIMENSIONS

BVA BUTTERFLY VALVES AUTOMATIC DIRECT DRIVE BVA5060 – BVA5100

MOTOR KIT	AA HEIGHT	BB	CC	DD WIDTH	MOTOR APPROX. NET WT.
MODUTROL	6 7/16	8 1/16	2 3/4	5 1/2	8 LB
HERCULENE	5 7/8	14 1/4	3	7 3/8	27 LB
SOM5	5 1/4	9 3/8	2 5/8	5 1/4	9 LB



MODEL NO.	A	B	C	D	E	F	G	H	J	K	L	VALVE APPROX. NET WT.
BVA5060	6 RPM	4	9	45°	22 1/2"	6 5/8	15 1/4	8	1/2-13 UNC-2B	7 7/8	7 3/4	25 LB
BVA5080	8 RPM	5 1/2	11	45°	22 1/2"	7 5/8	16 5/16	8	9/16 DIA.	10	6 15/16	33 LB
BVA5100	10 RPM	5 1/2	14	30°	15"	8 11/16	17 5/16	12	11/16 DIA.	12 1/4	7 15/16	43 LB

Y7826
(NOT TO SCALE)

(See Reverse Side For Metric Dimensions)

In accordance with Hauck's commitment to Total Quality Improvement, Hauck reserves the right to change the specifications of products without prior notice.

HAUCK MANUFACTURING CO., P.O. Box 90 Lebanon, PA 17042-0090 717-272-3051