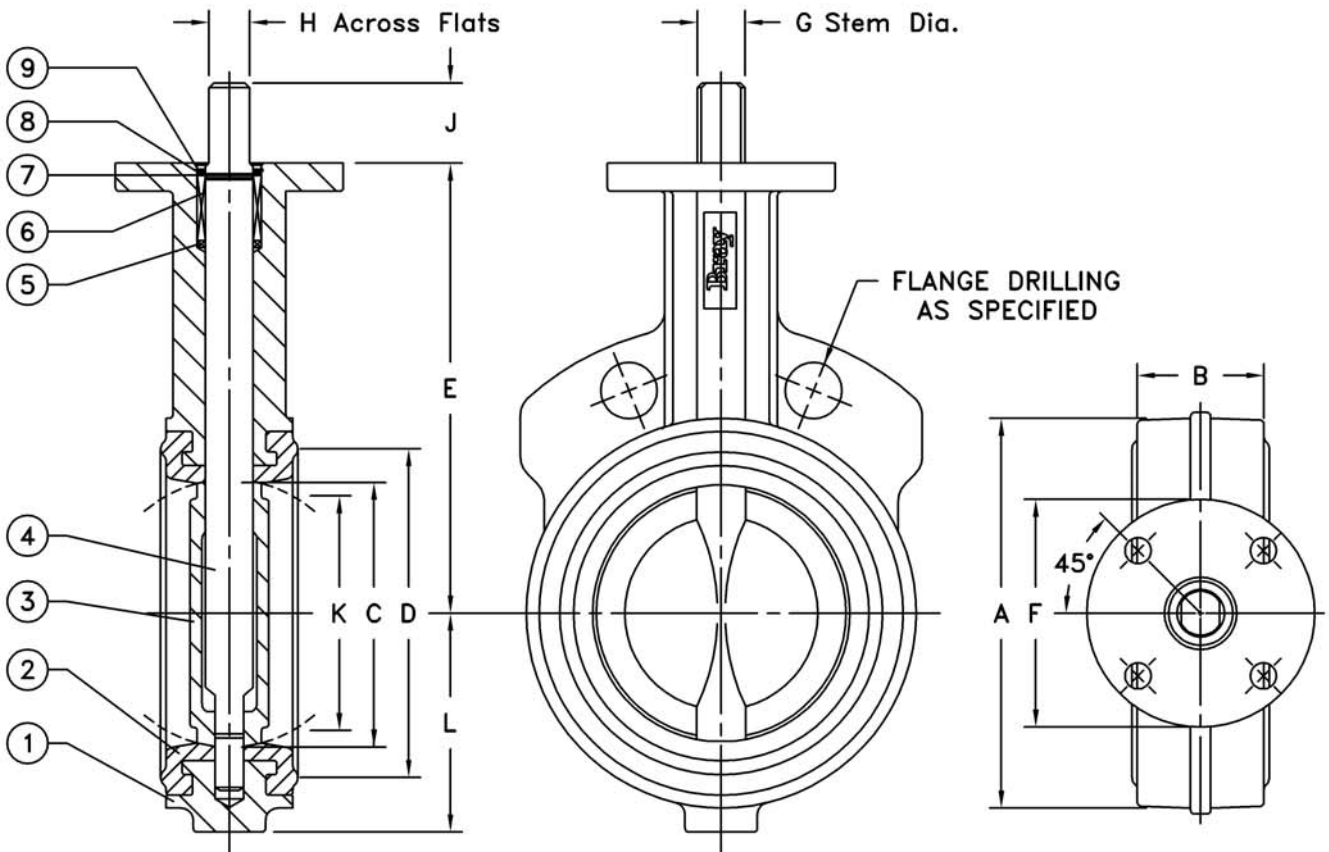


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Valve Size	A	B	C	D	E	F	Top Plate BC	Drilling No. of Holes	Hole Diameter	G	H	J	K	L	Adapter Code	Weight (kg)
50	94	43	51	72	140	90	70	4	9.5	14	10	32	33	56	A	3.0
65	106	46	64	85	152	90	70	4	9.5	14	10	32	49	63	A	3.9
80	124	46	76	102	159	90	70	4	9.5	14	10	32	65	71	A	4.3
100	154	52	102	131	178	90	70	4	9.5	16	11	32	91	86	B	5.4
125	181	56	127	156	190	90	70	4	9.5	19	13	32	118	102	C	7.3
150	206	56	146	178	203	90	70	4	9.5	19	13	32	138	115	C	9.1
200	267	60	197	241	241	150	125	4	14	22	16	32	189	146	D	15.9
250	324	68	248	291	273	150	125	4	14	30	22	50	242	181	E	22.7
300	378	78	298	342	311	150	125	4	14	30	22	50	291	206	E	39.5

Note: K dim is disc chordal dimension at valve face.



9	RETAINING RING	1			
8	THRUST WASHER	1			
7	STEM RETAINER	2			
6	BUSHING	1			
5	PACKING	1			
4	STEM	1			
3	DISC	1			
2	SEAT	1			
1	BODY	1			

ITEM No.	NAME	No. REQUIRED	SERIES/PART No.	MATERIAL	SPECIFICATION/REMARKS
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Valve Size \_\_\_\_\_ Flg. Drilling \_\_\_\_\_  
 Pressure Rating \_\_\_\_\_  
 Customer/Project \_\_\_\_\_  
 Inq./P.O. No. \_\_\_\_\_  
 Bray Order No. \_\_\_\_\_  
 Certified Correct By \_\_\_\_\_ Date \_\_\_\_\_



The High Performance Company

**BRAY CONTROLS (UK) LTD.**

A Subsidiary of BRAY INTERNATIONAL, Inc.

PARTS LIST AND DIMENSIONS (Metric)  
 BUTTERFLY VALVE, SERIES 30  
 SIZES 50 - 300mm

Series	Size	Part No.	Material Trim Code	Drawing No.
				ES12A-0012

**Bray**

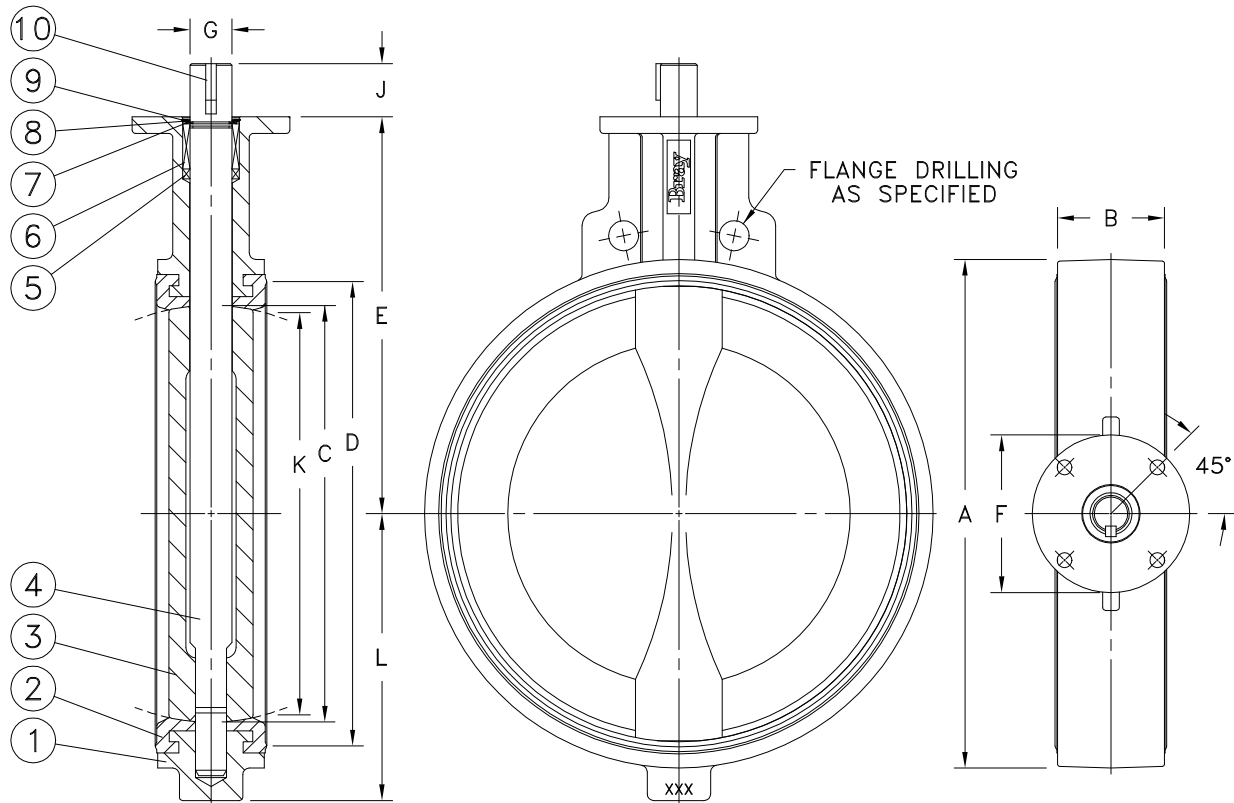
**SERIES 30**  
**ES12A-0013**  
**Date: June 1993**

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Valve Size	A	B	C	D	E	F	Top BC	Plate No. of Holes	Drilling Hole Diameter	G	J	Key Size	K	L	Adapter Code	Weight (kg)
350	430	78	337	388	346	150	125	4	14	35	51	10x10	331	238	F	53.5
400	484	102	387	442	375	150	125	4	14	35	51	10x10	377	273	F	83.9
450	537	108	438	495	406	210	165	4	21	50	64	12x10	428	305	G	96.2
500	591	127	489	548	438	210	165	4	21	50	64	12x10	475	348	G	139.0

Note: K dim is disc chordal dimension at valve face.



10	KEY	1			
9	RETAINING RING	1			
8	THRUST WASHER	1			
7	STEM RETAINER	2			
6	BUSHING	1			
5	PACKING	1			
4	STEM	1			
3	DISC	1			
2	SEAT	1			
1	BODY	1			

ITEM No.	NAME	No. REQUIRED	SERIES/PART No.	MATERIAL	SPECIFICATION/REMARKS
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Valve Size _____ Flg. Drilling _____	<p>The High Performance Company</p> <p><b>BRAY CONTROLS (UK) LTD.</b></p> <p>A Subsidiary of BRAY INTERNATIONAL, Inc.</p>	<p><b>Bray</b></p>			
Pressure Rating _____					
Customer/Project _____	<p align="center">PARTS LIST and DIMENSIONS (Metric)</p> <p align="center">BUTTERFLY VALVE, SERIES 30</p> <p align="center">SIZES 350 - 500mm</p>				
Inq./P.O. No. _____	Series	Size	Part No.	Material Trim Code	Drawing No.
Bray Order No. _____					ES12A-0013
Certified Correct By _____ Date _____					

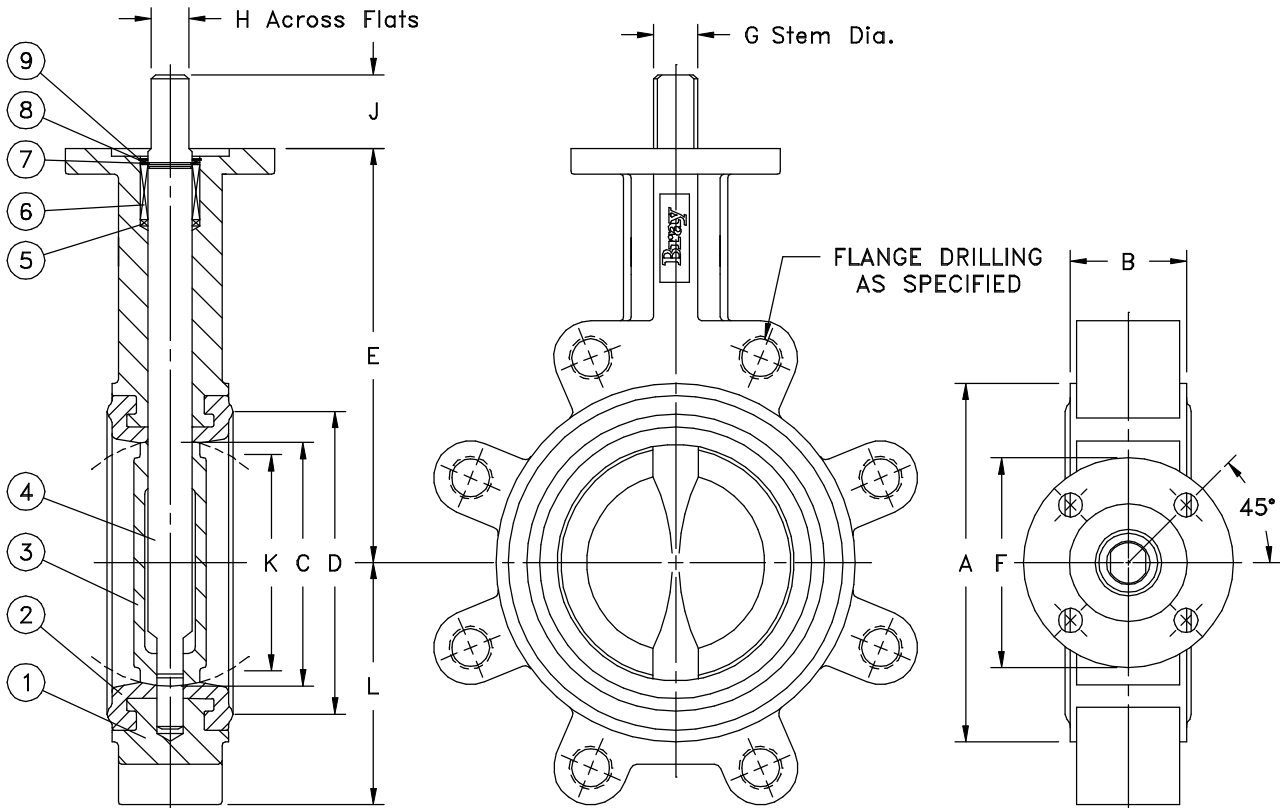
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**SERIES 31**  
**ES12A-0014**  
**Date: August 1993**

Valve Size	A	B	C	D	E	F	BC	Top Plate Drilling		G	H	J	K	L	Lug BC	Bolting No. of Holes	Data Threads ISO-Coarse	Adapter Code	Weight (Kg.)
								No. of Holes	Hole Diameter										
50	94	43	51	72	140	90	70	4	10	14	10	32	30	58				A	3.0
65	106	46	64	85	152	90	70	4	10	14	10	32	46	65				A	3.5
80	124	46	76	102	159	90	70	4	10	14	10	32	63	71				A	4.0
100	154	52	102	131	178	90	70	4	10	16	11	32	89	104				B	7.0
125	181	56	127	156	190	90	70	4	10	19	13	32	116	117				C	9.0
150	206	56	146	178	203	90	70	4	10	19	13	32	137	129				C	10.5
200	267	60	197	240	241	150	125	4	14	22	16	32	189	154				D	19.0
250	324	68	248	291	273	150	125	4	14	30	22	51	240	195				E	30.0
300	378	78	298	342	311	150	125	4	14	30	22	51	290	229				E	40.0

Note: K dim is disc chordal dimension at valve face.



9	RETAINING RING	1			
8	THRUST WASHER	1			
7	STEM RETAINER	2			
6	BUSHING	1			
5	PACKING	1			
4	STEM	1			
3	DISC	1			
2	SEAT	1			
1	BODY	1			

ITEM No.	NAME	No. REQUIRED	SERIES/PART No.	MATERIAL	SPECIFICATION/REMARKS
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Valve Size \_\_\_\_\_ Flg. Drilling \_\_\_\_\_  
 Pressure Rating \_\_\_\_\_  
 Customer/Project \_\_\_\_\_  
 Inq./P.O. No. \_\_\_\_\_  
 Bray Order No. \_\_\_\_\_  
 Certified Correct By \_\_\_\_\_ Date \_\_\_\_\_

**The High Performance Company**  
**BRAY VALVE & CONTROLS**  
 A Subsidiary of BRAY INTERNATIONAL, Inc.

**PARTS LIST AND DIMENSIONS ( Metric )**  
**BUTTERFLY VALVE, SERIES 31 SIZES 50-300**

Series	Size	Part No.	Material Trim Code	Drawing No.
				ES12A-0014



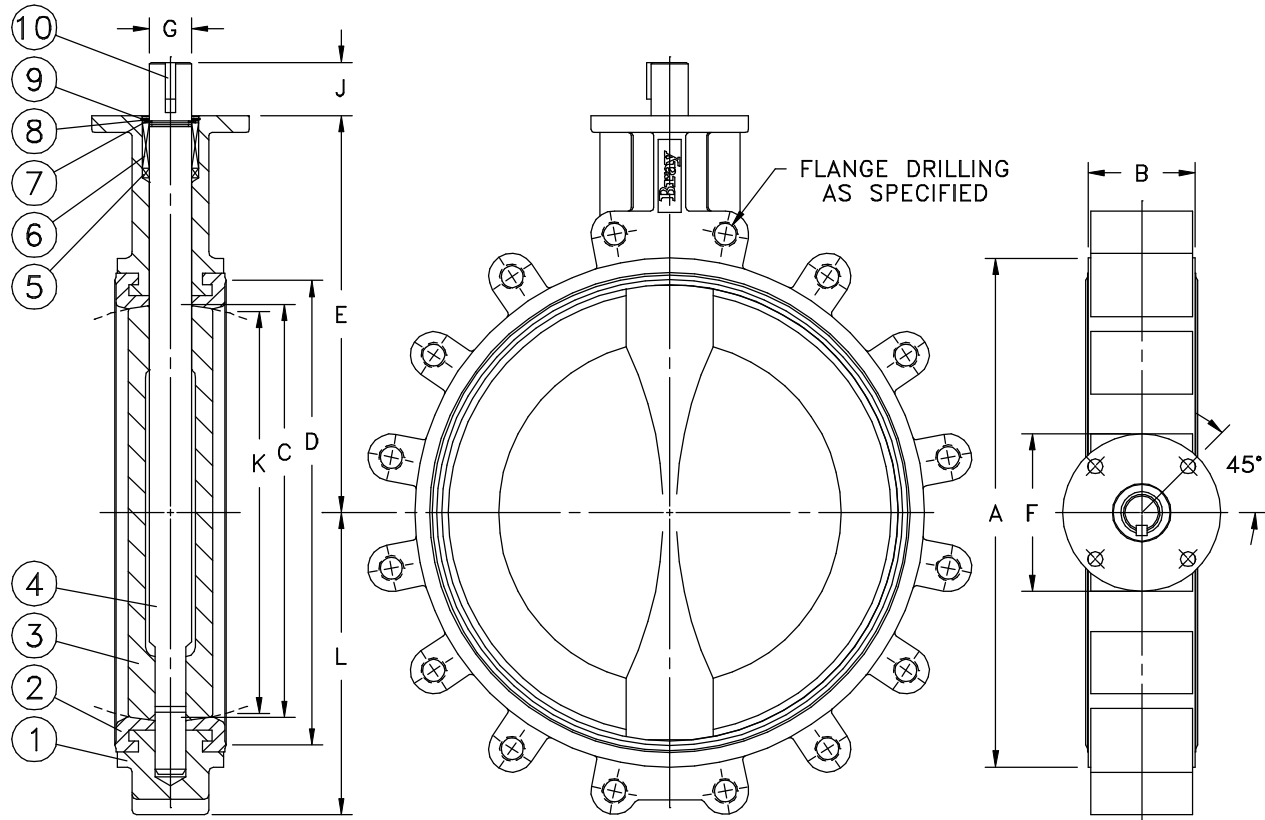
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**SERIES 31**  
**ES12A-0015**  
**Date: August 1993**

Valve Size	A	B	C	D	E	F	BC	Top Plate No. of Holes	Drilling Hole Diameter	G	J	Key Size	K	L	Lug BC	Bolting No. of Holes	Data Threads ISO-Coarse	Adapter Code	Weight (Kg.)
350	433	78	337	388	346	150	125	4	14	35	51	10x10	330	252				F	52.0
400	488	102	387	435	375	150	125	4	14	35	51	10x10	376	287				F	75.0
450	536	114	438	495	406	210	165	4	20	50	64	10x12	426	309				G	102.5
500	590	127	489	548	438	210	165	4	20	50	64	10x12	475	356				G	138.5

Note: K dim is disc chordal dimension at valve face.



10	KEY	1			
9	RETAINING RING	1			
8	THRUST WASHER	1			
7	STEM RETAINER	2			
6	BUSHING	1			
5	PACKING	1			
4	STEM	1			
3	DISC	1			
2	SEAT	1			
1	BODY	1			

ITEM No.	NAME	No. REQUIRED	SERIES/PART No.	MATERIAL	SPECIFICATION/REMARKS
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Valve Size \_\_\_\_\_ Flg. Drilling \_\_\_\_\_  
 Pressure Rating \_\_\_\_\_  
 Customer/Project \_\_\_\_\_  
 Inq./P.O. No. \_\_\_\_\_  
 Bray Order No. \_\_\_\_\_  
 Certified Correct By \_\_\_\_\_ Date \_\_\_\_\_



**BRAY VALVE & CONTROLS**  
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PARTS LIST and DIMENSIONS ( Metric )  
 BUTTERFLY VALVE, SERIES 31 SIZES 350 - 500

Series	Size	Part No.	Material Trim Code	Drawing No.
				ES12A-0015

**Bray**