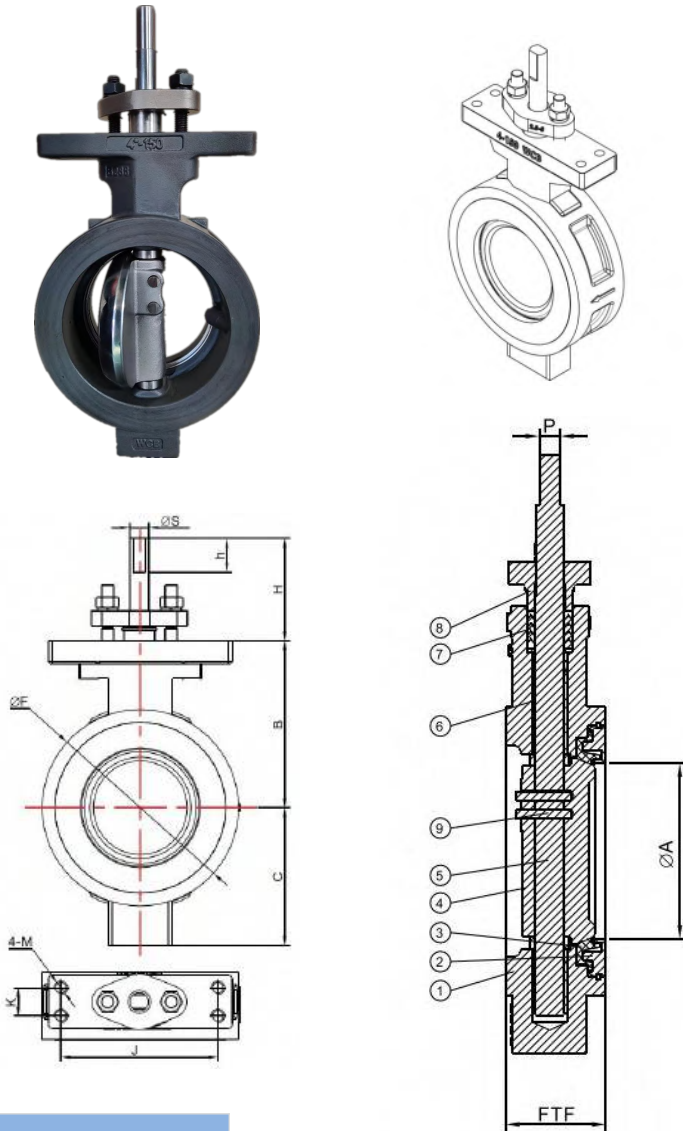


## Class 150 High performance Double offset Wafer Butterfly Valve A



### Technical Standard

Design & Manufacturing Standards: API609  
 Temperature & Pressure Standards: ASME B16.34  
 Inspection & Test: API598  
 Flange Size: ASME B16.5

### Materials Specification

No	Name	Materials
9	Pin	17-4PH
8	Cover	WCB, CF3, CF3M, CF8, CF8M
7	Packing	RPTFE
6	Sleeve	316L+RPTFE
5	Stem	17-4PH
4	Disc	CF8
3	Seat	RPTFE
2	Insert	A105, F304, F304L, F316
1	Body	WCB, CF3, CF3M, CF8, CF8M

### Main Dimensions

NPS	ØA	B	C	ØF	FTF + 3.3	H	h	P	ØS	J	K	M
1 1/2"	38	82	70	102	44	42.5	14	7	10	125.4	22.4	M10
2"	50	82	70	102	44	42.5	14	7	10	125.4	22.4	M10
2.5"	59	111	82	118	48	82	27	11.2	14.8	125.4	22.4	M10
3"	73	120	93	132	48	82	27	11.2	14.8	125.4	22.4	M10
4"	96	133	110	157	54	82	27	11.2	14.8	125.4	22.4	M10
5"	111	135	120	186	57	82	27	11.2	14.8	125.4	22.4	M10
6"	142	152	135	217	57	82	27	14	18	125.4	22.4	M10
8"	188	187	172	273	64	82	27	15.9	21.9	125.4	22.4	M10
10"	236	231	202	330	71	97	28	20.6	28	142.7	37.3	M12
12"	282	260	241	376	81	97	33	23.8	33.3	142.7	37.3	M12
14"	314	315	295	413	92	105	41	28.7	37	142.7	37.3	M16

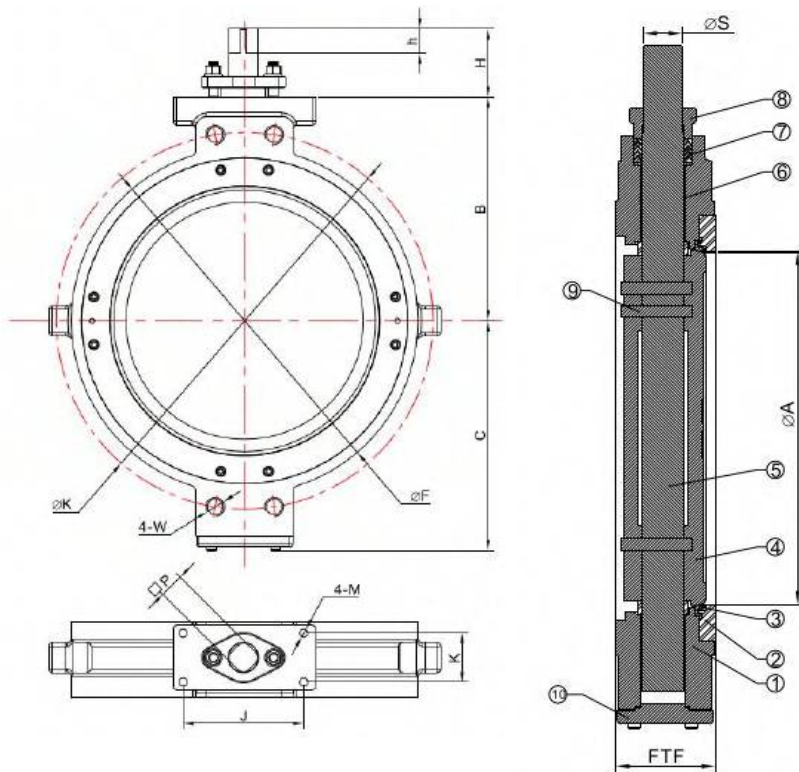
## Class 150 High performance Double offset Wafer Type Butterfly Valve B

### Technical Standard

Design & Manufacturing Standards: API609  
 Temperature & Pressure Standards: ASME B16.34  
 Inspection & Test: API598  
 Flange Size: ASME B16.5

### Materials Specification

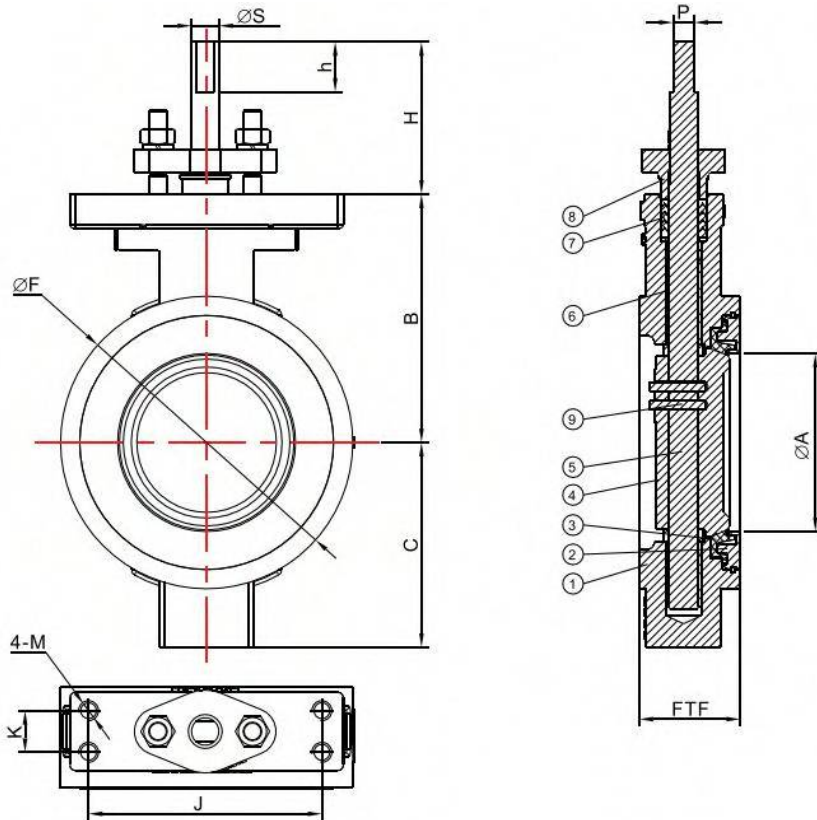
No	Name	Materials
9	Pin	17-4PH
8	Cover	WCB, CF3, CF3M, CF8, CF8M
7	Packing	RPTFE
6	Sleeve	316L+RPTFE
5	Stem	17-4PH
4	Disc	CF8
3	Seat	RPTFE
2	Insert	A105, F304, F304L, F316
1	Body	WCB, CF3, CF3M, CF8, CF8M



### Main Dimensions

NPS	ØA	B	C	ØF	FTF±3.3	H	h	P	ØS	J	K	M	ØK	W
16"	362	355	329	470	102	111	41	33.5	42	203.2	82.6	M16	539.8	030
18"	413	356	340	533	114	111	41	35	47	203.2	82.6	M16	577.9	1 1/8"-8UN
20"	455	377	387	584	127	115	41	41.4	50	203.2	82.6	M16	635	1 1/8"-8UN
24"	548	490	467	692	154	130	51	51	64	254	107.7	M20	749.3	1 1/4"-8UN
28"	682	570	552	799	165	157	50.8	50.8	66	254	107.7	M20	863.6	1 1/4"-8UN
30"	702	570	557	863	187	157	50.8	50.8	66	254	107.7	M20	914.4	1 1/4"-8UN
32"	702	570	557	905	191	157	50.8	50.8	66	254	107.7	M20	977.9	1 1/2"-8UN
48"	1168	841	805	1385	254	293	90	90	125	381	178	M20	1422.4	1 1/2"-8UN

## Class 300 High performance Double offset Wafer Type Butterfly Valve A



### Technical Standard

Design & Manufacturing Standards: API609  
 Temperature & Pressure Standards: ASME B16.34  
 Inspection & Test: API598  
 Flange Size: ASME B16.5

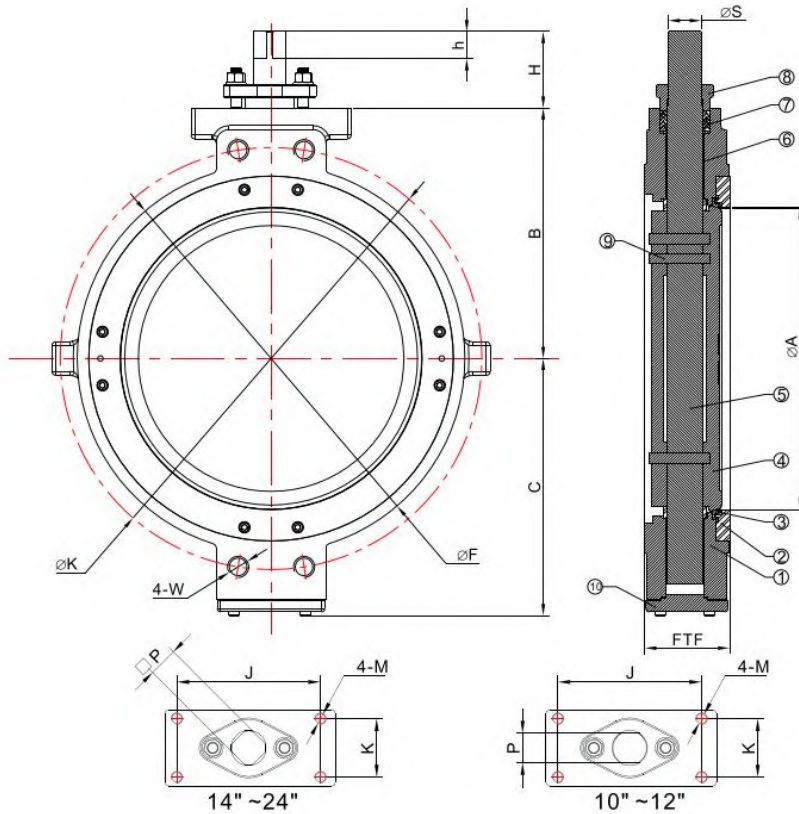
### Materials Specification

No	Name	A	B	C	D	E
9	Pin	17-4PH	17-4PH	17-4PH	17-4PH	17-4PH
8	Cover	WCB	WCB	CF8	CF8M	CF3M
7	Packing	RPTFE	RPTFE	RPTFE	RPTFE	RPTFE
6	Sleeve	316L+RPTFE				
5	Stem	17-4PH	17-4PH	17-4PH	17-4PH	17-4PH
4	Disc	CF8	CF8M	CF8	CF8M	CF3M
3	Seat	RPTFE	RPTFE	RPTFE	RPTFE	RPTFE
2	Insert	A105	A105	F304	F316	F316L
1	Body	WCB	WCB	CF8	CF8M	CF3M

### Main Dimensions

NPS	ØA	B	C	ØF	FTF+3.3	H	h	P	ØS	J	K	M
2"	38	81.8	70	102	44	42.5	14	7	10	125.4	22.4	M10
2.5"	59	111.1	82.5	118	48	82	27	11.2	14.8	125.4	22.4	M10
3"	73	120.5	93	132	48	82	27	11.2	14.8	125.4	22.4	M10
4"	96	133.3	110	157	54	82	27	11.2	14.8	125.4	22.4	M10
5"	111	135	120	186	57	82	27	11.2	14.8	125.4	22.4	M10
6"	142	174	153	217	59	82	27	15.9	21.9	125.4	22.4	M10
8"	188	212	180	273	73	95	28	20.6	28	142.7	37.3	M12

## Class 300 High performance Double offset Wafer Type Butterfly Valve B



### Technical Standard

Design & Manufacturing Standards: API609  
 Temperature & Pressure Standards: ASME B16.34  
 Inspection & Test: API598  
 Flange Size: ASME B16.5

### Materials Specification

No	Name	A	B	C	D	E
9	Pin	17-4PH	17-4PH	17-4PH	17-4PH	17-4PH
8	Cover	WCB	WCB	CF8	CF8M	CF3M
7	Packing	RPTFE	RPTFE	RPTFE	RPTFE	RPTFE
6	Sleeve	316L+RPTFE				
5	Stem	17-4PH	17-4PH	17-4PH	17-4PH	17-4PH
4	Disc	CF8	CF8M	CF8	CF8M	CF3M
3	Seat	RPTFE	RPTFE	RPTFE	RPTFE	RPTFE
2	Insert	A105	A105	F304	F316	F316L
1	Body	WCB	WCB	CF8	CF8M	CF3M

### Main Dimensions

NPS	ØA	B	C	ØF	FTF±3.3	H	h	P	ØS	J	K	M	ØK	4-W
10"	236	254	222	327	83	100	33	23.8	33.3	142.7	37.3	M12	387.4	1"-8UN
12"	282	282	284	385	92	105	41	28.7	37	142.7	37.3	M12	450.8	1 1/8"-8UN

NPS	ØA	B	C	ØF	FTF±3.3	H	h	□P	ØS	J	K	M	ØK	4-W
14"	314	325	310	416	117	102	34.5	41.4	50	203.2	82.6	M16	514.4	1 1/8"-8UN
16"	362	350	338	472	133	102	34.5	41.4	50	203.2	82.6	M16	571.5	1 1/4"-8UN
18"	413	424	412	537	149	118	40	51	64	254	107.7	M20	628.6	1 1/4"-8UN
20"	454	446	440	588	159	130	43	51	64	254	107.7	M20	658.8	1 1/4"-8UN
24"	548	500	505	692	181	145	60	51	64	254	107.7	M20	812.8	1 1/2"-8UN

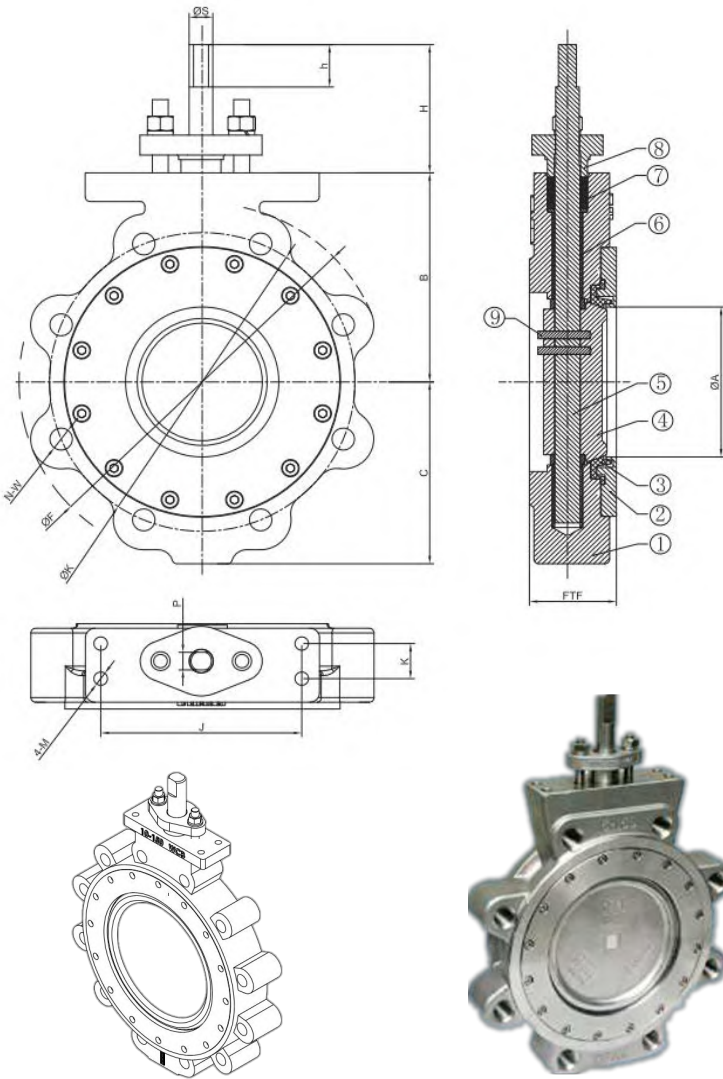
## Class 150 High performance Double offset Lug Butterfly Valve Dimension A

### Technical Standard

Design & Manufacturing Standards: API609  
 Temperature & Pressure Standards: ASME B16.34  
 Inspection & Test: API598  
 Flange Size: ASME B16.5

### Materials Specification

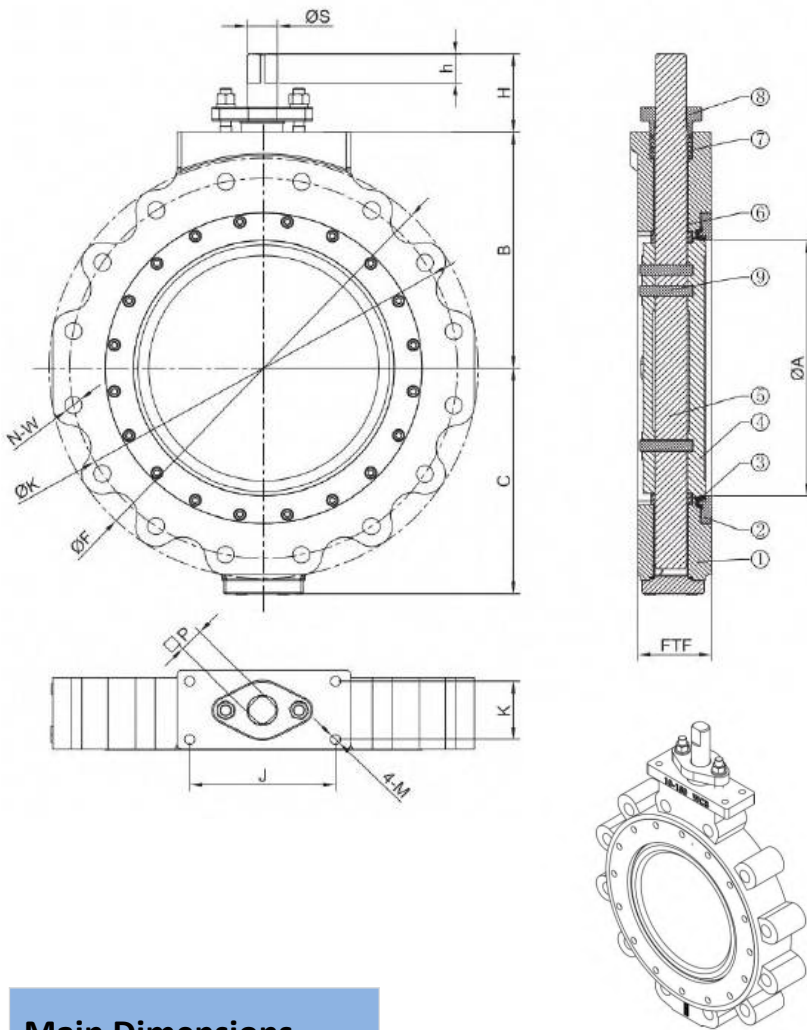
No	Name	A	B	C	D	E
9	Pin	17-4PH	17-4PH	17-4PH	17-4PH	17-4PH
8	Cover	WCB	WCB	CF8	CF8M	CF3M
7	Packing	RPTFE	RPTFE	RPTFE	RPTFE	RPTFE
6	Sleeve	316L+RPTFE				
5	Stem	17-4PH	17-4PH	17-4PH	17-4PH	17-4PH
4	Disc	CF8	CF8M	CF8	CF8M	CF3M
3	Seat	RPTFE	RPTFE	RPTFE	RPTFE	RPTFE
2	Insert	A105	A105	F304	F316	F316L
1	Body	WCB	WCB	CF8	CF8M	CF3M



### Main Dimensions

NPS	ØA	B	C	FTF±3.3	H	h	P	ØS	J	K	M	ØF	ØK	N-W
2.5"	59	111.1	82.5	48	82	27	11.2	14.8	125.4	22.4	M10	180	139.7	4-5/8"-11UNC
3"	73	120.5	93	48	82	27	11.2	14.8	125.4	22.4	M10	190	152.4	4-5/8"-11UNC
4"	96	133.3	110	54	82	27	11.2	14.8	125.4	22.4	M10	230	190.5	8-5/8M1UNC
5"	111	135	120	57	82	27	11.2	14.8	125.4	22.4	M10	255	215.9	8-3/4M0UNC
6"	142	152.4	135	57	82	27	14	18	125.4	22.4	M10	280	241.3	8-3/4"-10UNC
8"	188	187.3	172	64	82	27	15.9	21.9	125.4	22.4	M10	345	298.5	8-3/4M0UNC
10"	236	231.8	202	71	97	28	20.6	28	142.7	37.3	M12	405	362	12-7/8"-9UNC
12"	282	260.3	241.3	81	97	33	23.8	33.3	142.7	37.3	M12	485	431.8	12-7/8,-9UNC
14"	314	315	295	92	105	41	28.7	37	142.7	37.3	M16	535	476.3	12-V-8UN

## Class 150 High performance Double offset Lug Butterfly Valve B



### Technical Standard

Design & Manufacturing Standards: API609  
 Temperature & Pressure Standards: ASME B16.34  
 Inspection & Test: API598  
 Flange Size: ASME B16.5

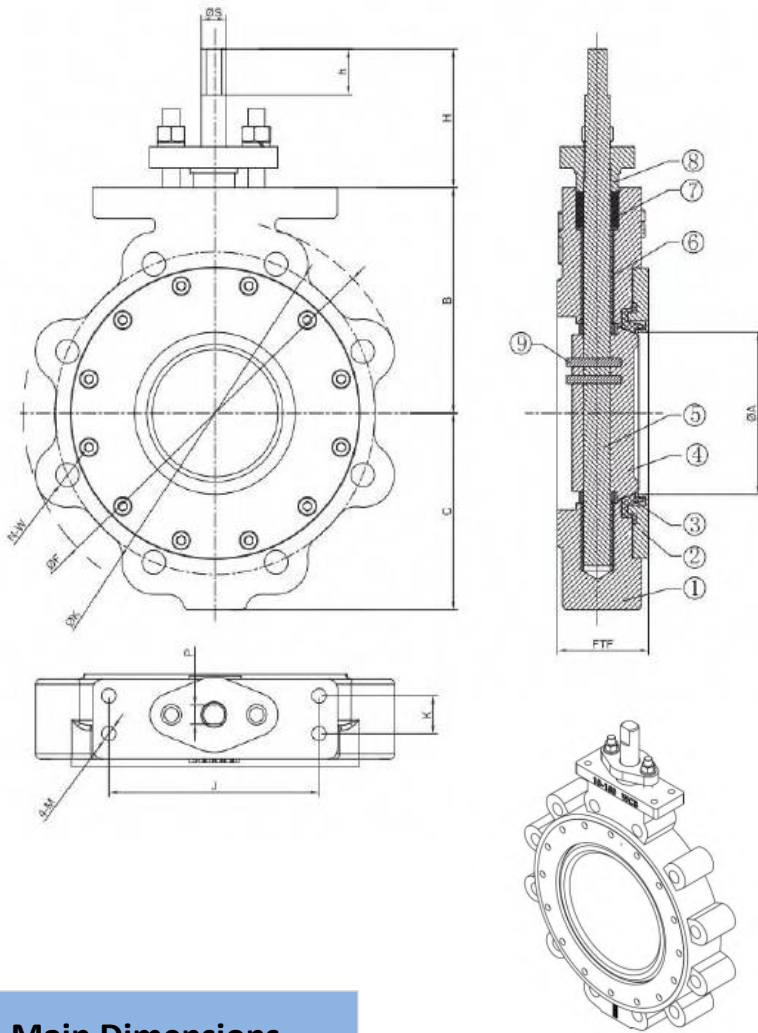
### Materials Specification

No	Name	A	B	C	D	E
9	Pin	17-4PH	17-4PH	17-4PH	17-4PH	17-4PH
8	Cover	WCB	WCB	CF8	CF8M	CF3M
7	Packing	RPTFE	RPTFE	RPTFE	RPTFE	RPTFE
6	Sleeve	316L+RPTFE				
5	Stem	17-4PH	17-4PH	17-4PH	17-4PH	17-4PH
4	Disc	CF8	CF8M	CF8	CF8M	CF3M
3	Seat	RPTFE	RPTFE	RPTFE	RPTFE	RPTFE
2	Insert	A105	A105	F304	F316	F316L
1	Body	WCB	WCB	CF8	CF8M	CF3M

### Main Dimensions

NPS	ØA	B	C	FTF *3.3	H	h	□P	ØS	J	K	M	ØF	ØK	N-W
16"	362	355	329	102	111	41	33.5	42	203.2	82.6	M16	595	539.8	16-1"-8UN
18"	413	356	340	114	111	41	35	47	203.2	82.6	M16	635	577.9	16-1 1/8"-8UN
20"	455	377	387	127	115	41	41.4	50	203.2	82.6	M16	700	635	20-1 1/8" -8UN
24"	548	490	467	154	130	51	51	64	254	107.7	M20	815	749.3	20-1 1/4" -8UN

## Class 300 High performance Double offset Lug Butterfly Valve A



### Technical Standard

Design & Manufacturing Standards: API609  
 Temperature & Pressure Standards: ASME B16.34  
 Inspection & Test: API598  
 Flange Size: ASME B16.5

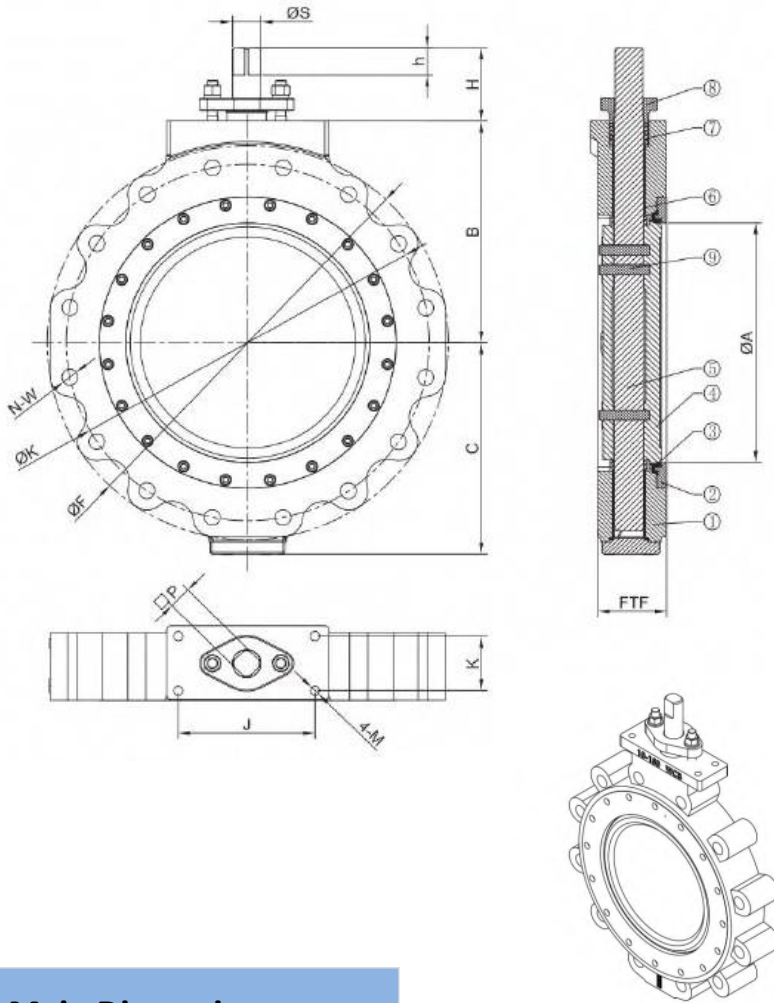
### Materials Specification

No	Name	A	B	C	D	E
9	Pin	17-4PH	17-4PH	17-4PH	17-4PH	17-4PH
8	Cover	WCB	WCB	CF8	CF8M	CF3M
7	Packing	RPTFE	RPTFE	RPTFE	RPTFE	RPTFE
6	Sleeve	316L+RPTFE				
5	Stem	17-4PH	17-4PH	17-4PH	17-4PH	17-4PH
4	Disc	CF8	CF8M	CF8	CF8M	CF3M
3	Seat	RPTFE	RPTFE	RPTFE	RPTFE	RPTFE
2	Insert	A105	A105	F304	F316	F316L
1	Body	WCB	WCB	CF8	CF8M	CF3M

### Main Dimensions

NPS	0A	B	C	FTF±3.3	H	h	P	OS	J	K	M	OF	OK	N-W
2.5"	59	111	90	48	82	27	11.2	14.8	125.4	22.4	M10	191	149.2	8-3/4"-10UNC
3"	73	121	113	48	82	27	11.2	14.8	125.4	22.4	M10	207	168.3	8-3/4"-10UNC
4"	96	133	125	54	82	27	11.2	14.8	125.4	22.4	M10	238	200	8-3/4"-10UNC
5"	111	153	127	57	82	27	11.2	14.8	125.4	22.4	M10	279	235	8-3/4"-10UNC
6"	142	175	174	59	82	27	15.9	21.9	125.4	22.4	M10	308	269.9	12-3/4M0UNC
8"	188	213	189	73	93	28	20.6	28	142.7	37.3	M12	381	330.2	12-7/8'-9UNC
10"	236	254	239	83	99	33	23.8	33.3	142.7	37.3	M12	445	387.4	16-1"-8UNC
12"	282	283	286	92	106	41	28.7	37	142.7	37.3	M12	514	450.8	16-1 1/8"-8UNC

## Class 300 High performance Double offset Lug Butterfly Valve B



### Technical Standard

Design & Manufacturing Standards: API609  
 Temperature & Pressure Standards: ASME B16.34  
 Inspection & Test: API598  
 Flange Size: ASME B16.5

### Materials Specification

No	Name	A	B	C	D	E
9	Pin	17-4PH	17-4PH	17-4PH	17-4PH	17-4PH
8	Cover	WCB	WCB	CF8	CF8M	CF3M
7	Packing	RPTFE	RPTFE	RPTFE	RPTFE	RPTFE
6	Sleeve	316L+RPTFE				
5	Stem	17-4PH	17-4PH	17-4PH	17-4PH	17-4PH
4	Disc	CF8	CF8M	CF8	CF8M	CF3M
3	Seat	RPTFE	RPTFE	RPTFE	RPTFE	RPTFE
2	Insert	A105	A105	F304	F316	F316L
1	Body	WCB	WCB	CF8	CF8M	CF3M

### Main Dimensions

NPS	ØA	B	C	FTF ±3.3	H	h	□ P	ØS	J	K	M	ØF	ØK	N-W
14"	314	325	312	117	102	34.5	41.4	50	203.2	82.6	M16	584	514.4	20-1 1/8"-8UN
16"	363	350	341	133	102	34.5	41.4	50	203.2	82.6	M16	647	571.5	20-1 1/4"-8UN
18"	413	424	418	149	118	40	51	64	254	107.7	M20	711	628.6	24-1 1/4"-8UN
20"	455	446	441	159	130	43	51	64	254	107.7	M20	774	685.8	24-1 1/4"-8UN
24"	549	500	507	181	145	60	51	64	254	107.7	M20	914	812.8	24-1 1/2"-8UN



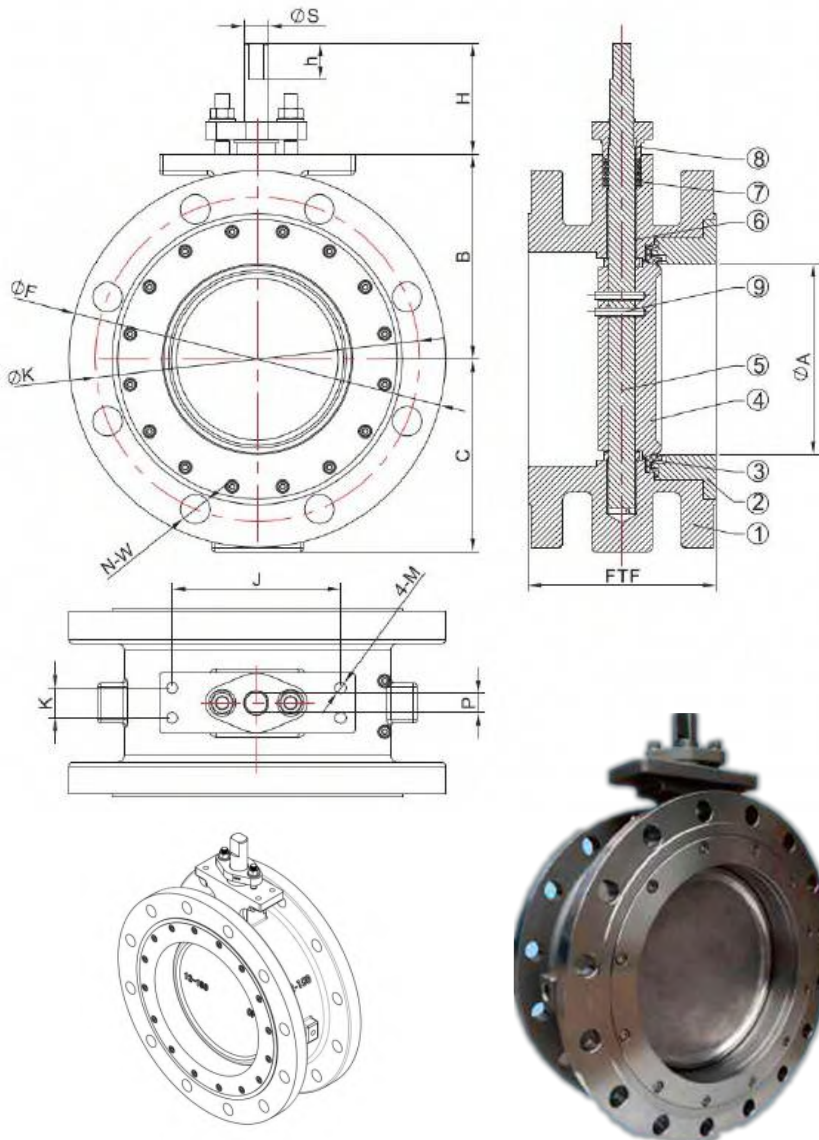
## Class 150 High performance Double offset Double Flange Butterfly Valve

### Technical Standard

Design & Manufacturing Standards: API609  
 Temperature & Pressure Standards: ASME B16.34  
 Inspection & Test: API598  
 Flange Size: ASME B16.5

### Materials Specification

No	Name	A	B	C	D	E
9	Pin	17-4PH	17-4PH	17-4PH	17-4PH	17-4PH
8	Cover	WCB	WCB	CF8	CF8M	CF3M
7	Packing	RPTFE	RPTFE	RPTFE	RPTFE	RPTFE
6	Sleeve	316L+RPTFE				
5	Stem	17-4PH	17-4PH	17-4PH	17-4PH	17-4PH
4	Disc	CF8	CF8M	CF8	CF8M	CF3M
3	Seat	RPTFE	RPTFE	RPTFE	RPTFE	RPTFE
2	Insert	A105	A105	F304	F316	F316L
1	Body	WCB	WCB	CF8	CF8M	CF3M



### Main Dimensions

NPS	ØA	B	C	FTE±3.3	H	h	P	ØS	J	K	M	ØF	ØK	N-W
3"	73	121	93	114	82	27	11.2	14.8	125.4	22.4	M10	190	152.4	4-Ø19
4"	96	133.3	110	127	62	27	11.2	14.8	125.4	22.4	M10	230	190.5	4-Ø19
5"	111	136	120	140	82	27	11.2	14.8	126.4	22.4	M10	255	215.9	8-Ø22
6"	142	152.4	143	140	82	27	14	18	125.4	22.4	M10	280	241.3	8-Ø22
8"	188	187.3	172	152	62	27	16.9	21.9	126.4	22.4	M10	346	298.6	8-Ø22
10"	290	231.8	202	168	97	28	20.6	28	142.7	37.3	M12	405	362	12-Ø26
12"	282	260.3	241.3	178	97	33	23.8	33.3	142.7	37.3	M12	485	431.8	12-Ø26
14"	314	315	295	190	105	41	28.7	97	142.7	37.3	M15	535	478.3	12-Ø29

Other sizes available on customers' request.