

# HIGH PERFORMANCE BUTTERFLY VALVE DAP -Series



# DAP™ High-Performance

## ■ DAP HIGH-PERFORMANCE VALVE

DAP High-Performance Valves combine a unique seat that seals bubble-tight, single off-set stem and disc to reduce torque and seat wear, twin stem bearing support.

## ■ TIGHT SHUTOFF AND EFFICIENCY

DAP seat flexes against the sealing edge of the disc when moving on seat. When the valve is closed, the symmetrical moment seat ensure against the bi-direction. The unique DAP seat provides positive, tight shutoff with long cycle life.

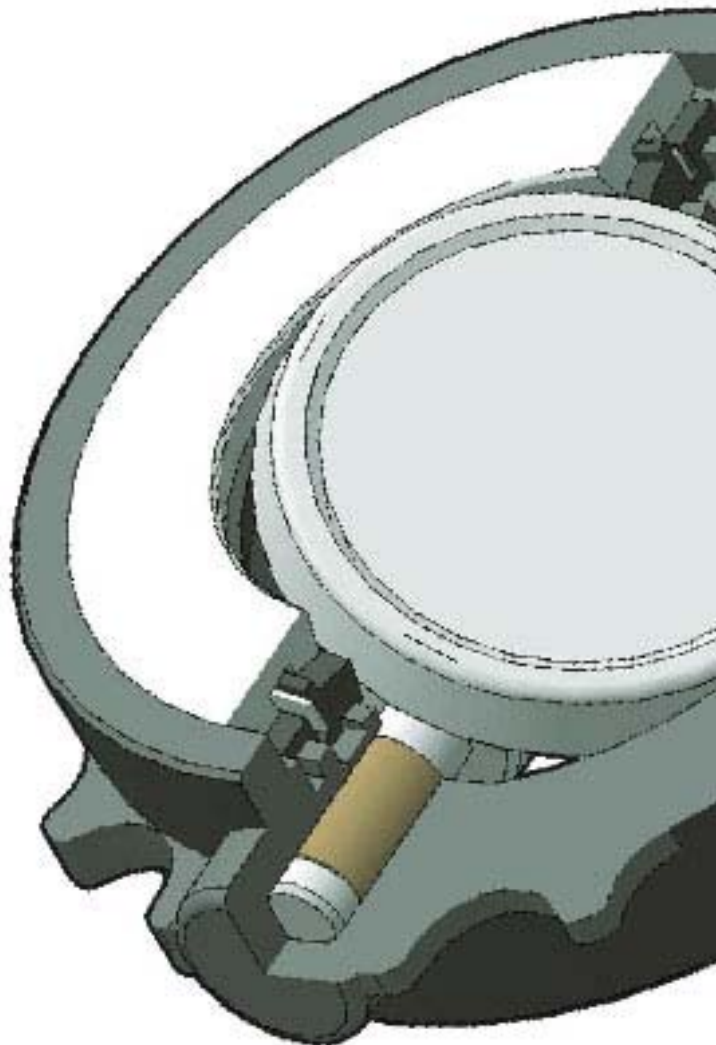
## ■ EASY INSTALLATION AND MAINTENANCE

DAP butterfly valve weights considerably less than other types of valves of equal port size. This means easier installation. And, with its slim profile and smaller actuators, the DAP requires less space in the system.

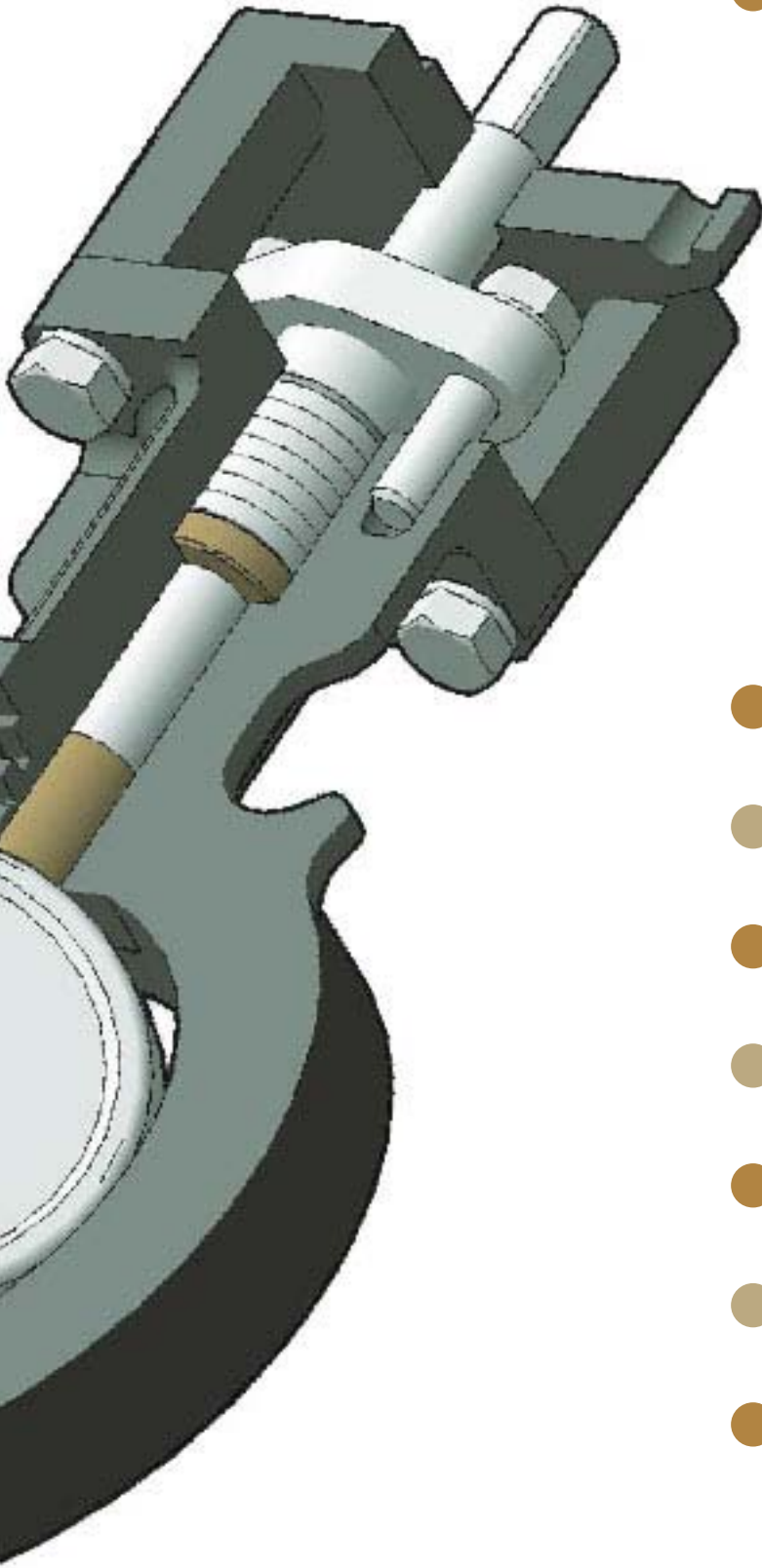
## ■ WIDE SPECTRUM OF APPLICATION

DAP butterfly valves are designed to handle to everything from general applications to clean liquids;

- High temperature services
- Throttling steam control
- High cycle industrial gas
- Heat transfer services
- Vacuum pump isolation

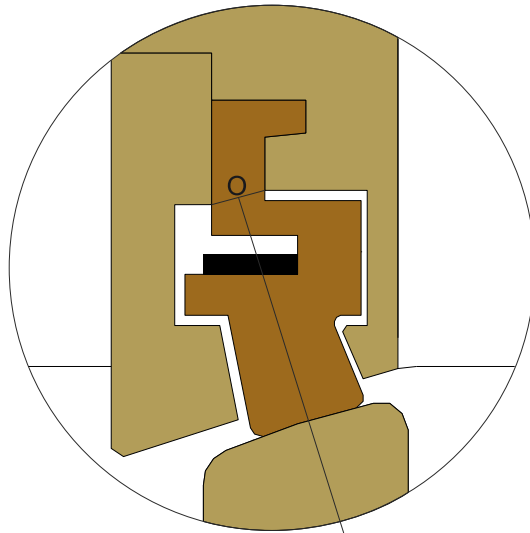


# Butterfly Valve

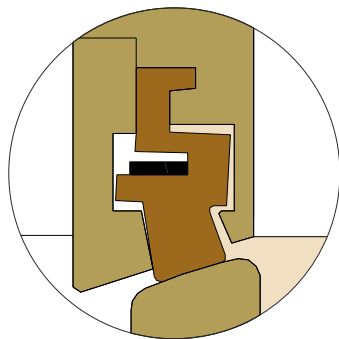


- Bubble Tight Shut Off
- Bi-Directioning Tightness
- Single Off-Set
- Blind Bottom Shaft Hole
- Recessed Retainer Ring
- Low Cost of Manufacture
- Minimal Restriction Flow
- Quickness of Opening
- Compact Construction
- Operating for On/Off or Control
- Temperature Rating Max. 260 °C
- Material : Ductile Iron/ Stainless Steel/ Special
- Class Rating JIS 10, 20, ANSI 150, DIN 10, 16

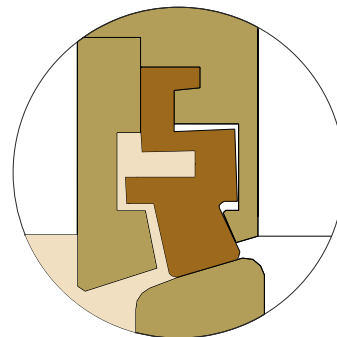
## SYMMETRIC MOMENT SEAT



View of DAP seat in moving on the disc. When moving of the disc, the moment of DAP seat at point O' is the symmetric at the both end of disc.



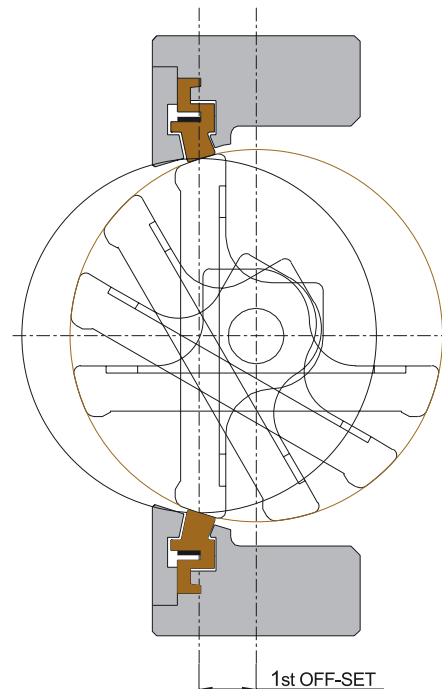
Fluid pressure with seat upstream



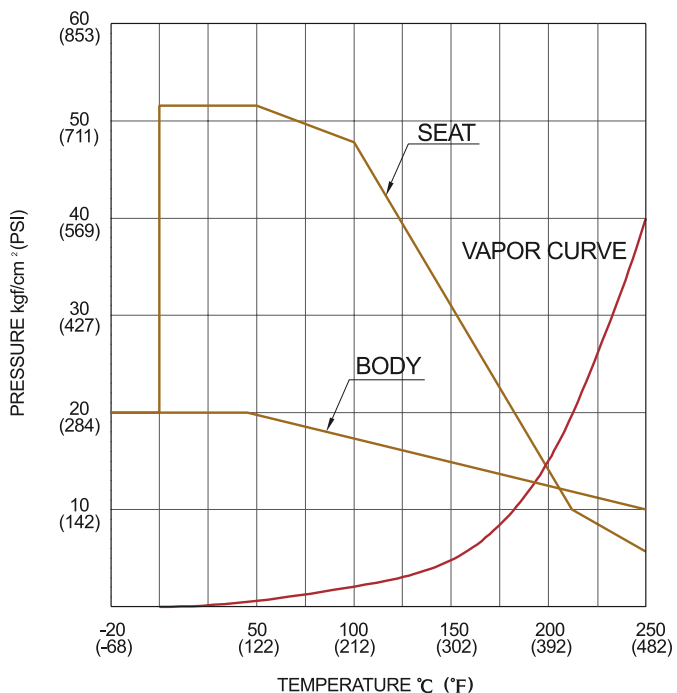
Fluid pressure with seat downstream

## SINGLE OFF-SET DISC

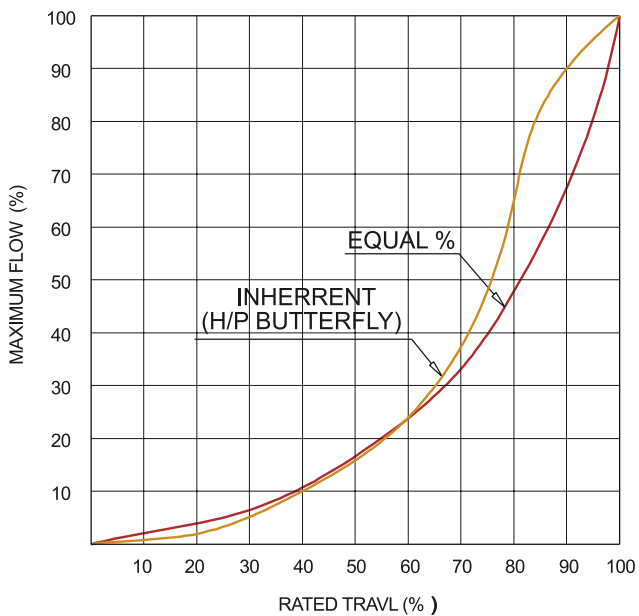
Single off-set disc design provides uninterrupted 360° sealing surface. The pressure balanced disc reduces the possibility of unintentional disc opening when in the closed position. The single off-set disc also minimizes the amount of seat-to-disc interference. Lowering operating torque, increasing cycle life, and reducing the size of actuators required. Smaller actuators reduce initial purchase price and use less energy over time.



## ■ ■ ■ PRESSURE/TEMPERATURE RATINGS



## ■ ■ ■ FLOW CHARACTERISTIC

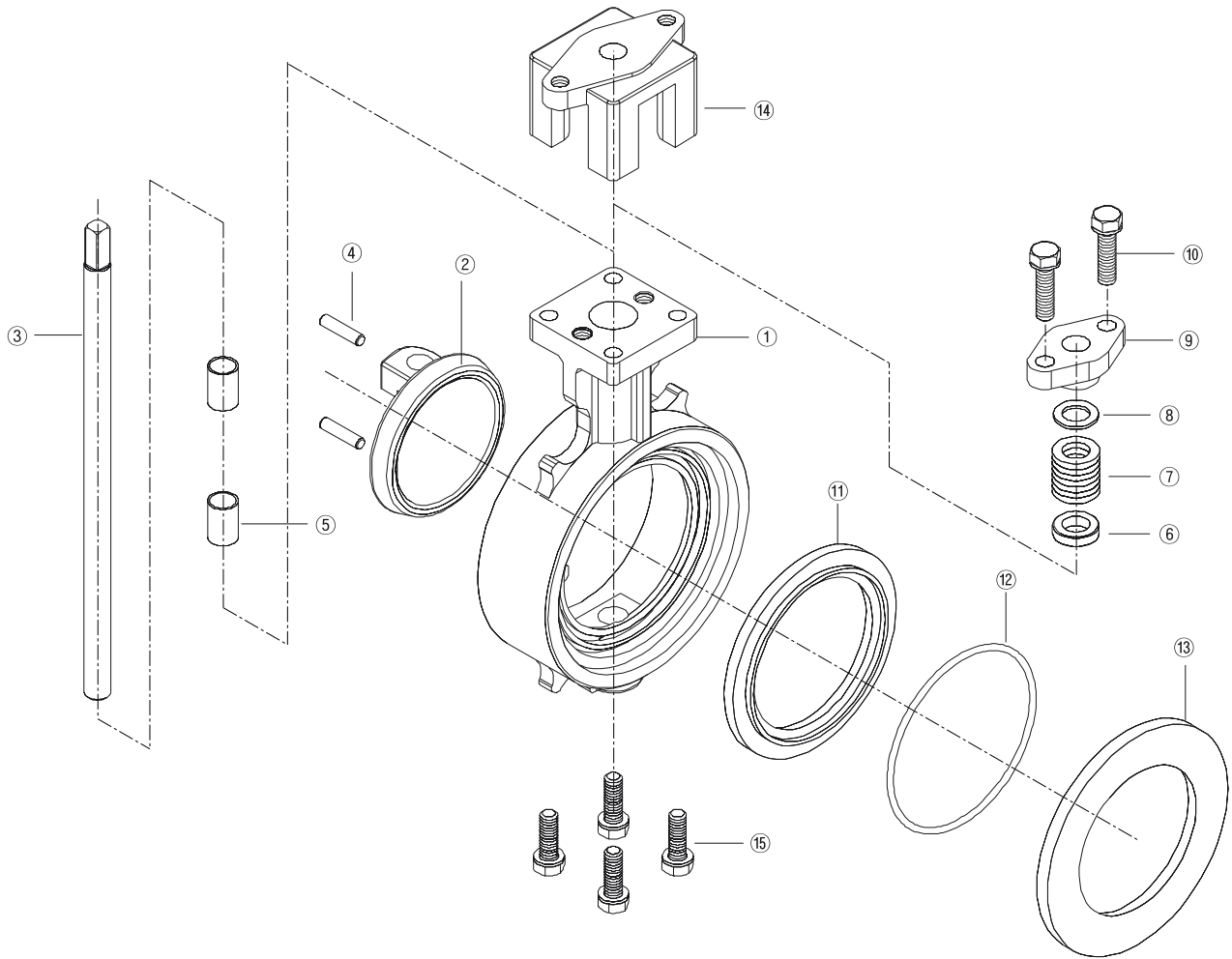


## ■ ■ ■ Cv VALUE

	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20
in	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20
mm	50	65	80	100	125	150	200	250	300	350	400	450	500
30°	15	29	47	86	139	203	380	603	864	1224	1620	2124	2574
50°	35	65	104	190	308	450	844	1340	1920	2760	3600	4720	5720
70°	65	120	195	356	577	844	1583	2513	3600	5175	6750	8850	10725
90°	85	160	260	475	770	1125	2110	3350	4800	6900	9000	11800	14300

Flow in GPM of Water at 1Psi Pressure Drop.

## COMPONENTS



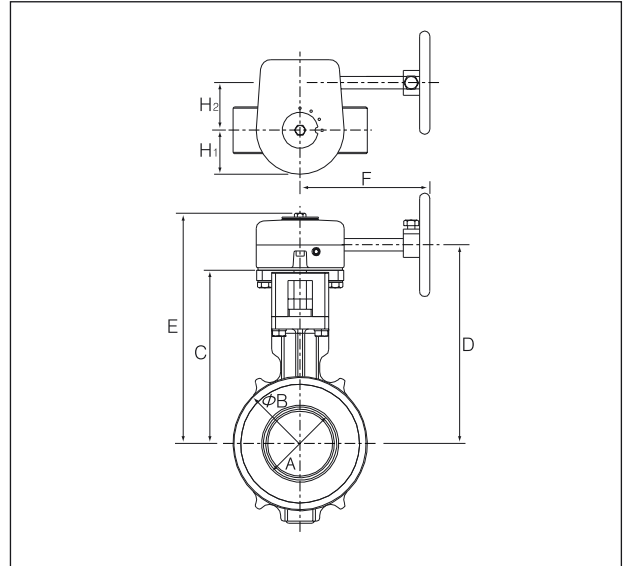
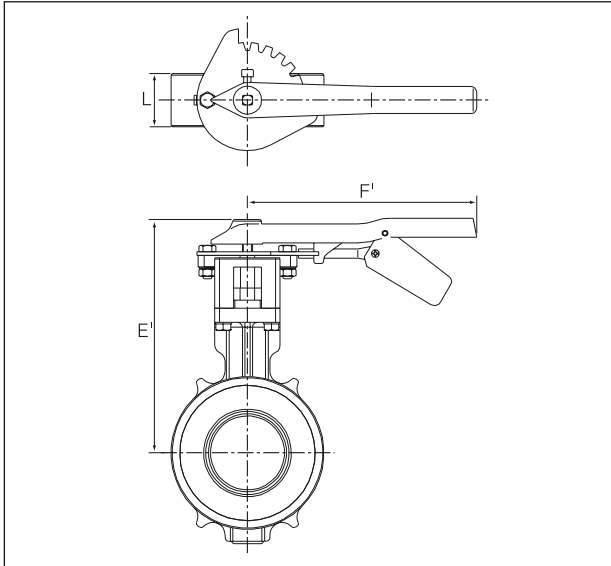
## STANDARD MATERIALS

No.	Description	Q'ty	Material
①	Body	1	FC, FCD, SUS
②	Disc	1	SCS13
③	Shaft	1	SUS304
④	Pin	2	SCM
⑤	Bearing	2	DU
⑥	Packing Ring	1	BS, SUS304
⑦	Packing Set	1	TFE
⑧	Washer	1	SS41

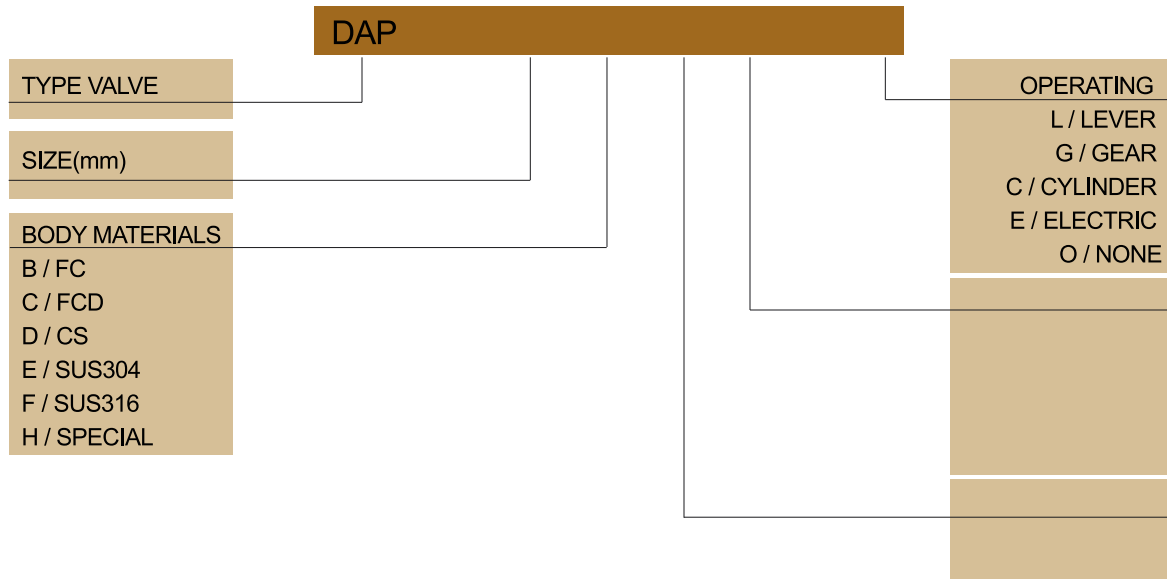
No.	Description	Q'ty	Material
⑨	Packing Gland	1	FCD
⑩	Adjust Fastener	2	SCH3
⑪	Seat	1	RTFE
⑫	Back-up Ring	1	SUS304
⑬	Retainer Ring	1	SUS304
⑭	Bonnet	1	FCD
⑮	Bonnet Bolt	4	SS41

## STANDARD SPECIFICATIONS

Description	inch	mm	Remarks
Size	1 1/4 ~ 20	32 ~ 500	
Flow Direction	1 1/4 ~ 20	32 ~ 500	Bi-direction
Temperature	1 1/4 ~ 8	32 ~ 200	- 20jC ~ 250jC
	10 ~ 20	250 ~ 500	- 20jC ~ 200jC
Pressure Rating	1 1/4 ~ 20	32 ~ 500	JIS10K, 20K, ANSI 150
Test Seal Pressure (Max.)	1 1/4 ~ 8	32 ~ 200	52kgf/cm <sup>2</sup> 40jC Water
	10 ~ 20	250 ~ 500	20kgf/cm <sup>2</sup> 40jC Water
Connection	Wafer		



Valve size		Dimensions(mm)											Weight	
mm	inch	L	A	B	C	E'	F'	D	E	F	G	H1	H2	(Kgf)
32/40	1¼ / 1½	38	36	88	115	147	200	139	170	125	100	43	46	2
50	2	44	43	101	145	177	200	169	200	125	100	43	46	3.2
65	2½	44	60	120	151	183	200	175	206	125	100	43	46	4.7
80	3	44	74	131	170	202	200	194	225	125	100	43	46	5.4
100	4	52	93	155	187	219	200	212	247	150	130	56	53	7.9
125	5	62	119	187	215			240	275	150	130	56	53	9.5
150	6	62	143	215	232			257	292	150	130	56	53	17
200	8	74	188	264	266			297	336	225	170	65	70	26
250	10	93	243	330	301			332	371	225	170	65	70	51
300	12	99	290	374	323			368	413	305	300	102	80	70





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