



Accessories

Large hole diameter butterfly valve ·
High temperature specification

W,W-TS,W-TSL

**It is a flange sandwich type air damper
that fits JIS 5K steel flange.**

I Feature

- ① There is a hole diameter of $1\frac{1}{2}^{\text{B}} \sim 16^{\text{B}}$.
- ② In addition to W type (standard), there are the following types.
 - W - TS type is high temperature heat resistant specification up to 400 °C.
 - W - TSL type is a specification that extended the operation part by 100 mm compared with the standard part so that thermal insulation material (100 mm) can be used.



I Main Usage

- Adjust the flow rate of large capacity air.
- Flow rate adjustment of hot air such as exhaust.

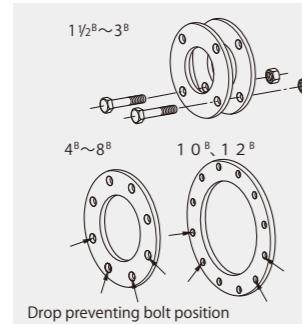
I Installation procedure

① Please make sure that dirt, sand, welding spatter, etc. are not in the pipe used for piping.

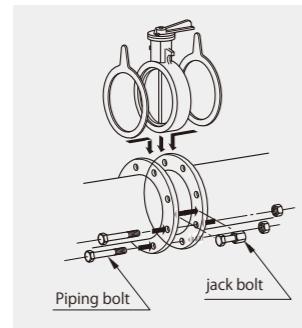
② Check the flange (JIS 5k) for distortion, weld burr etc. do not appear on the end face, weld portion.

③ Confirm that the concentricity of the pipe and both sides of the flange are parallel.

④ Pass the bolts through the bolt holes at the bottom of the flange to prevent the damper from falling off.



⑤ Set the jack bolt and adjust the both side dimensions of both flanges widely about 10 to 15 mm from the damper full width.



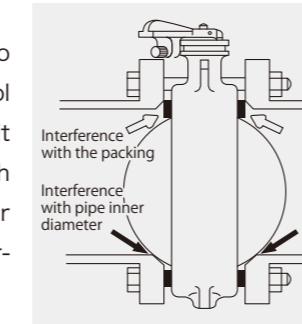
⑥ Gently insert the damper in the fully closed (S) state.

⑦ Insert the gasket packing into both sides of the damper.

⑧ Pass the remaining bolts through.

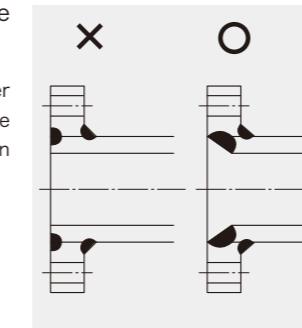
⑨ Remove the jack bolt, gently squeeze it while looking at the center of the damper body and packing, so that it does not move.

⑩ At this point, make sure to move the damper control lever slightly, check that it does not interfere with the inside of the flange, or gasket packing, and operate properly.

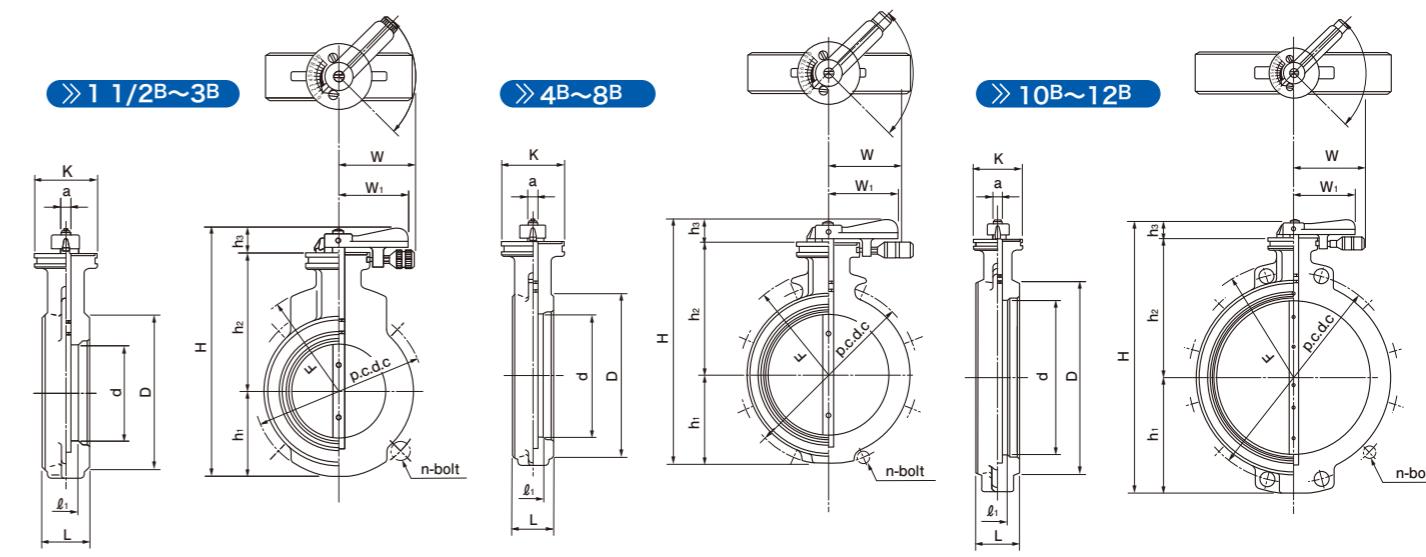


⑪ Diagonally, Tighten the bolts equilibrium

*About welding method, In order to avoid interference with the valve body, please weld as shown in the right figure, right side.



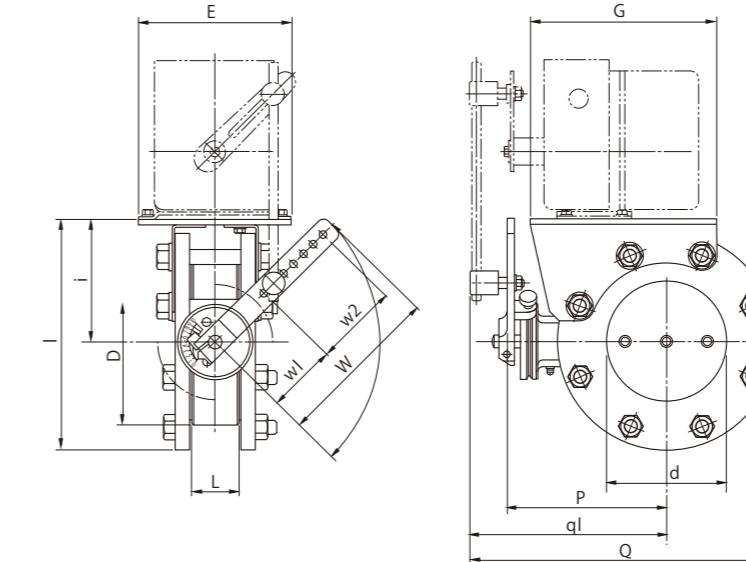
I Specifications · Overall size



Nominal diameter	Main dimension													Approximate weight (kg)	Piping bolt size (for JIS 5K flange)		
	B	D	d	L	ℓ ₁	H	h ₁	h ₂	h ₃	W	W ₁	K	a	F	C		
1 1/2	78	42	36	38	18	159	60	78	21	65	60	56	9	60	95	1.5	4-M12-80
2	89	53	165		51	93	65	105						1.8	4-M12-90		
2 1/2	114	68	190.5		64	105.5	77.5	130						2.5	4-M12-90		
3	125	81	40	210.5	71.5	118	90	145						2.8	4-M16-90		
4	145	102		230.5	81.5	128	100	165						3.2	8-M16-100		
5	180	128	52	20	284	98.5	156	29.5	107	87	82	14	117.5	200	7.0	8-M16-110	
6	210	150			314	113.5	171						132.5	230	8.5	8-M16-110	
8	256	200			367	139	198.5						160	280	11.5	8-M20-130	
10	321	250	70	30	504	191.5	231	81	180	142	20	192.5	345	23.0	12-M20-140		
12	366	300			549	214	253.5						390	26.5	12-M20-150		
14	410	350			617	239	288						435	34.0	12-M22-160		
16	470	400	80	45	677	269	318	90	200	200	25	270	495	40.0	16-M22-160		

I Option

There is also a type (AW) linking with a control motor.



Nominal diameter B	4	5	6	8
	D	d	I	i
D	145	180	210	256
d	102	128	150	200
I	216	251	281	336
i	116	133.5	148.5	176
L	40	52	52	60
P	129	170	185	212.5
Q	254.5	328.5	358.5	413.5
gl	164.5	211	226	253.5
w	125	180	180	180
wl	50	75	75	75
w2	60	90	90	90
ϕ	6.5	8.5	8.5	8.5
E	165	165	165	165
G	161.8	199.7	167	177