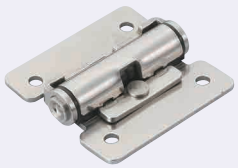
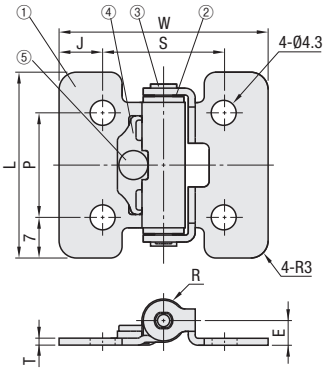
Torque Hinges
Fixed Torque, Adjustable Torque

■Fixed Torque



HHPT



Part Name	Material
①Hinge Plate	SUS304
②Plastic Barrel	Polyacetal
③Shaft	SUS303
④Plate	SUS304
⑤Swage Pin	SUSXM7

■Caution
- Use two hinges for one door/lid.
- Align the axes of the two hinges.
- Do not use the hinges outdoors or in any places where oil or grease adheres to the hinges.
- Do not use the hinges in any places requiring continuous open-close movements.
- Given the product characteristics, vertical usage is not assumed. For vertical use, adjust allowable load and torque value to the actual operating conditions.

Operating Temp. Range: -10°C ~ 50°C
Operating Humidity Range: 90%RH or lower

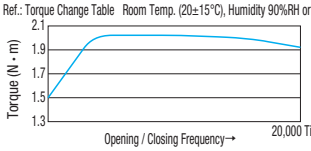
Part Number Type	No.	Rated Torque* N·m	kgf·cm	Mass (g)	L	W	P	J	S	T	E	R	Unit Price 1 ~ 19 pc (s).	Volume Discount Rate 20~50
HHPT	3	0.35	3.4	15	32	36	18	7.5	21	1.2	4.25	7.5		
	7	0.7	6.9	28	40	48	26	8	32	1.2	4.75	8.5		
	15	1.5	14.7	64	50	48	36	8	32	2	6.5	12		

* Rated torque has a margin of error between +40% and -20%.
* Rated torque value is for a single hinge.

Ordering Example: Part Number **HHPT7**

Example

Ref.: Torque Change Table Room Temp. (20±15°C), Humidity 90%RH or Lower

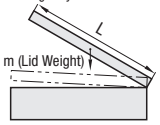


Values are measured by using HHPT15 for reference, and not guaranteed.
Opening/closing frequency: 5 times per minute (0° ~ 160° per opening/closing)
* The torque is set to a value higher than the rated torque before shipping considering the torque degradation due to aging and temperature/humidity change.

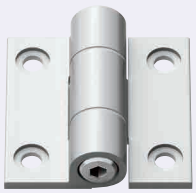
■How to Select Torque Hinges
When operated as a lid as shown on right, calculate the necessary torque according to the following formula before selecting a torque hinge that satisfies the specifications. (Assume that the lid's center of gravity lies in the middle.)

[Formula]
Max. Torque T= L / 2 x m (Weight: kg) x 9.8 (Newton: N)

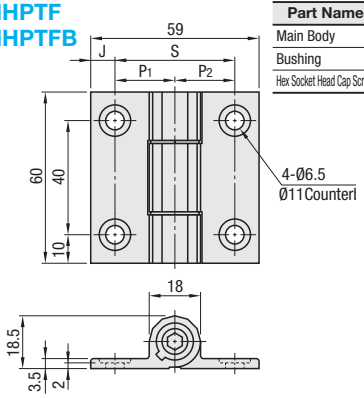
(Ex.) When L=0.3m and m=2kg,
Max. Torque T =0.3/2x2x9.8=2.94N・m.
⇒ Select 2 pcs. of **HHPT15**.



■Adjustable Torque



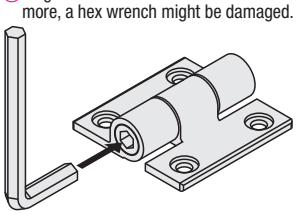
HHPTF
HHPTFB



Part Name	Material	Surface Treatment
Main Body	A6063	Anodize
Bushing	Polyacetal	-
Hex Socket Head Cap Screw	SUSXM7	-

Example

Use a hex wrench to adjust torque value.
If tightened with a force of 1.5N・m or more, a hex wrench might be damaged.



Part Number Type	No.	* Allowable Load kg	N	** Rated Torque N·m	kgf·cm	Mass (g)	S	P1	P2	J	Clear Anodize Unit Price 1 ~ 8 pc (s).	Clear Anodize Volume Discount Rate 9~50	Black Anodize Unit Price 1 ~ 8 pc (s).	Black Anodize Volume Discount Rate 9~50
HHPTF HHPTFB (Black Anodize)	6	10	98	0 ~ 4.9	0 ~ 50	54	32	16	16	13.5				
	8-6						37	16	21	13.5				
	8						42	21	21	8.5				

* The allowable load is the value when 2 pieces are used.
** Rated torque value is for a single hinge.

Ordering Example: Part Number **HHPTF8**

■Table of Weight Selection Guide (per Hinge)