



**CHUCK**

# Power Wing Chuck PW(C) series

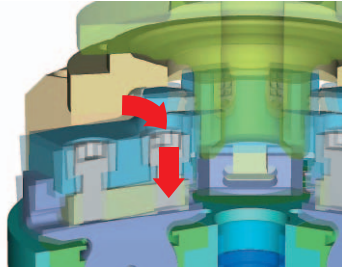
※PWC has the same specification as PW with the exception of the fact that PWC is a compensation type.

## Draw down work material for steady gripping Optimum PW(C) chuck for steady gripping for rough processing



### ● Powerful Gripping

After gripping the component in a radial direction, a Powerful PULL-BACK action is applied which significantly increases the Gripping Force, allowing heavier machine cut to be taken.

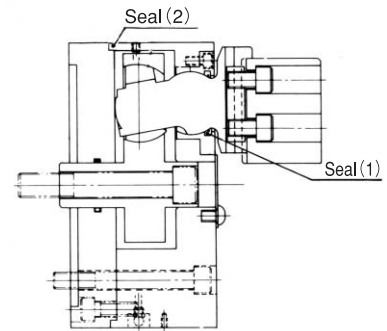


### ● High Durability

Master jaws are of spherical design and sealed against swarf and coolant. This permits High Gripping Forces to be retained between lubrication periods.

### ● Complete Sealing

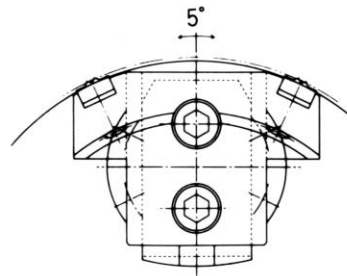
The seal (1) is fitted to the bearing bush and the seal (2) is inserted, which has improved the sealing for lubrication grease.



### ● JAW Equalising

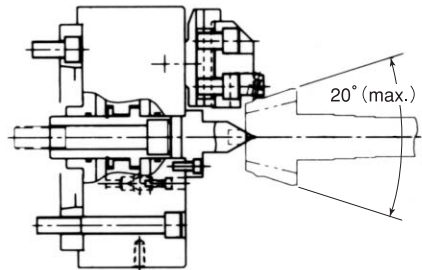
5° max equalising angle

Various workpieces can be firmly gripped by the self-equalising jaws to max. 5°.



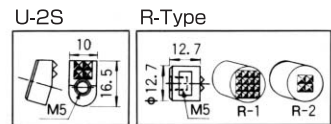
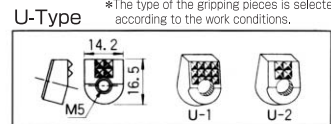
### ● Gripping on Tapered Parts

The radial and PULL-BACK jaw action allows rough tapered castings and forgings to be securely gripped to maximum 20°.

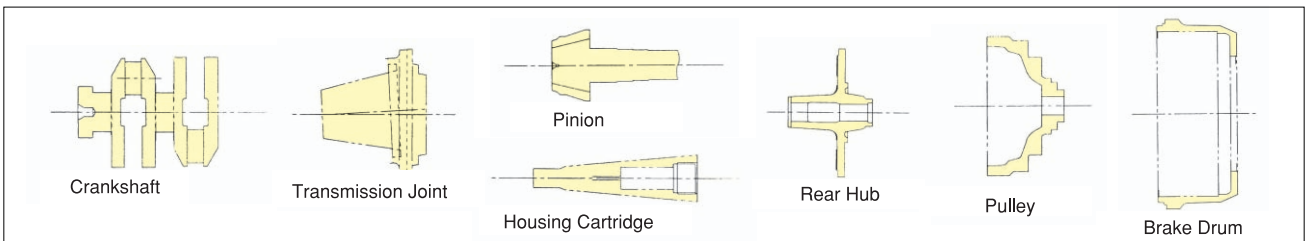


### ■ Type of the gripping pieces

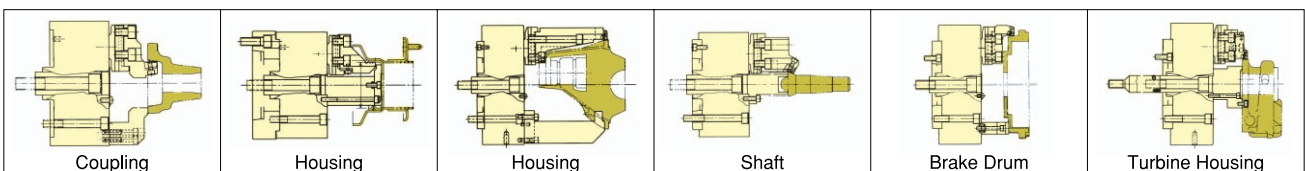
\*The type of the gripping pieces is selected according to the work conditions.



## Work Examples

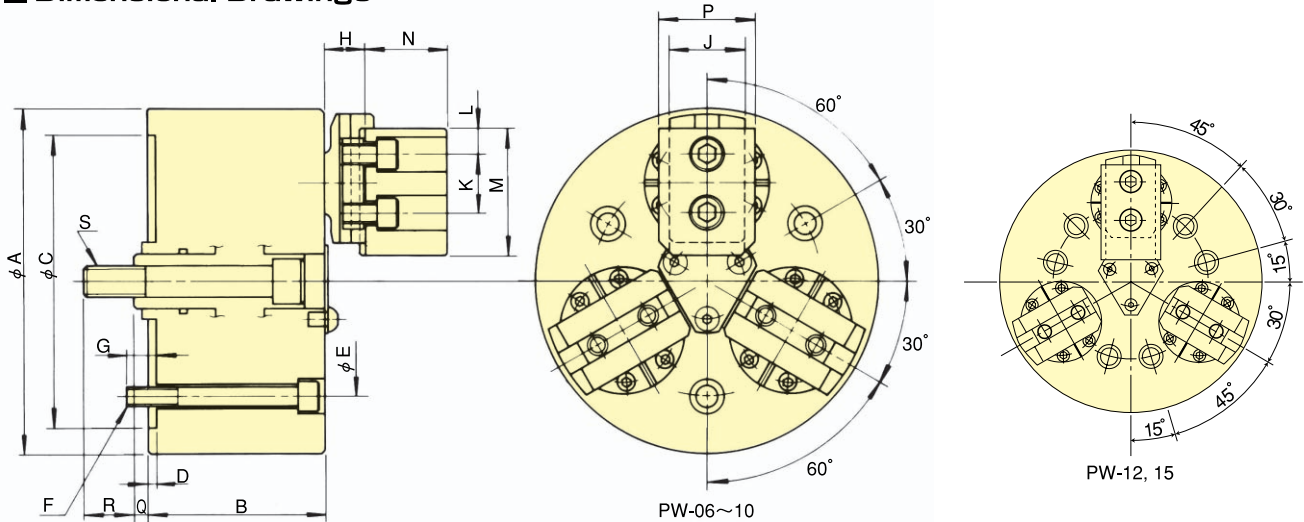


## Gripping Examples



Advanced Chuck

**Dimensional Drawings**

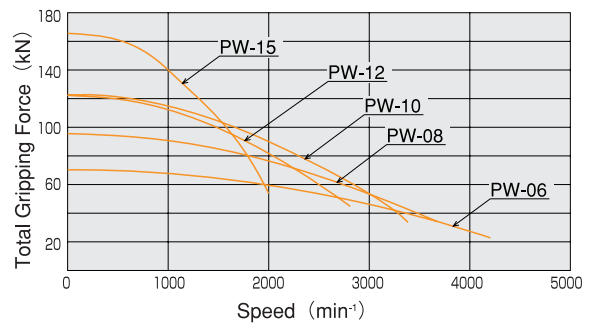


**Dimensions**

Model	A	B	C(H6)	D	E	F	G	H	J
PW-06	162	77	140	5	104.8	3-M10	14	19.3	38.07
PW-08	200	88	170	5	133.4	3-M12	18	23.33	44.45
PW-10	254	105	220	5	171.4	3-M16	25	29.14	57.1
PW-12	300	105	220	5	171.4	6-M16	25	29.14	57.1
PW-15	381	117	300	5	235	6-M20	30	32.4	66.62

Model	K	L	M	N	P	Q max.	Q min.	R	S
PW-06	29.36	15	67.5	47.7	50.8	24	12.6	25.4	M16
PW-08	34.14	15	74	54.17	57	29.3	15.1	29.2	M18
PW-10	44.45	19	89.5	66.9	70.1	34.9	17.4	34.7	M22
PW-12	44.45	19	108.5	66.9	70.1	34.9	17.4	34.7	M22
PW-15	53.98	23.9	140	73.2	76.2	48.7	26.3	41	M27

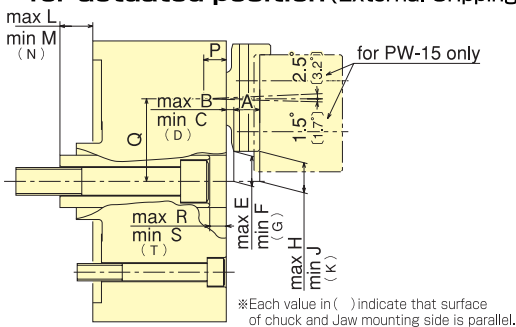
**Gripping Performance**



**Specifications**

Model	Plunger stroke mm	Jaw stroke (diameter)mm	Max. pull force kN(kgf)	Max. gripping force kN(kgf)	Max speed min⁻¹ (r.p.m)	Mass (with Standard Sort Jaw) kg	Moment of Inertia kg · m²	Matching cylinder	Max. pressure MPa(kgf/cm²)	Gripping range		Compensation value for PWC only mm
										external φ mm	internal φ mm	
PW-06	11.4	7.9	23.3(2376)	70(7138)	4200	14.7	0.050	Y1225R	2.3(23.5)	12.7~120	70~152	1.0
PW-08	14.2	9.5	32(3263)	96(9788)	3700	23.5	0.110	Y1225R	3.09(31.5)	16~152	76~203	1.5
PW-10	17.5	12.7	41(4180)	123(12540)	3400	39.3	0.265	Y1530R	2.8(28.5)	50~203	85~235	2.0
PW-12	17.5	12.7	41(4180)	123(12540)	2800	58.3	0.523	Y1530R	2.8(28.5)	63~241	127~305	2.0
PW-15	22.4	15.8	55(5607)	165(16800)	2000	95	1.943	Y2035R	2.14(21.8)	76~317	165~381	3.0

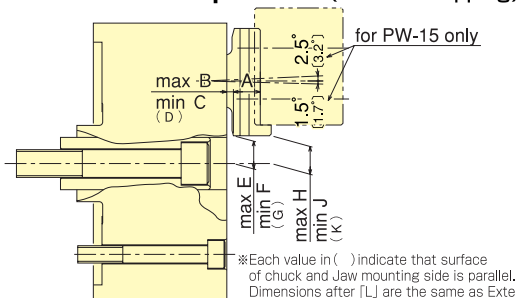
**Dimensional Drawing for actuated position (External Gripping)**



**Dimensions for actuated position (External Gripping)**

Model	A	B	C	D	E	F	G	H	J	K
PW-06	15.50	5.02	3.05	3.80	20.09	18.89	19.33	20.77	18.48	19.33
PW-08	18.50	5.68	3.24	4.80	22.63	21.18	22.10	23.08	20.36	22.10
PW-10	25.61	5.47	2.44	3.53	31.16	29.44	30.03	32.37	28.77	30.03
PW-12	25.61	5.47	2.44	3.53	51.81	50.09	50.68	53.02	49.42	50.68
PW-15	28.67	6.27	2.35	3.73	75.85	73.76	74.45	77.45	72.91	74.45

**Dimensional Drawing for actuated position (Internal Gripping)**



**Dimensions for actuated position (Internal Gripping)**

Model	A	B	C	D	E	F	G	H	J	K
PW-06	15.03	5.66	3.43	4.27	16.32	15.08	15.53	17.25	14.52	15.53
PW-08	16.71	8.35	5.56	6.62	18.04	16.41	17.00	18.99	15.84	17.00
PW-10	20.51	10.92	7.23	8.63	19.59	17.61	18.33	20.74	16.92	18.33
PW-12	20.51	10.92	7.23	8.63	40.24	38.26	38.98	41.39	37.57	38.98
PW-15	23.94	12.19	6.44	8.46	54.75	52.23	53.05	56.41	51.35	53.05



**CHUCK**

# 2-Jaw Power Wing Chuck PWT(C) series

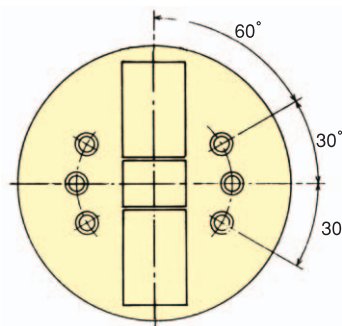
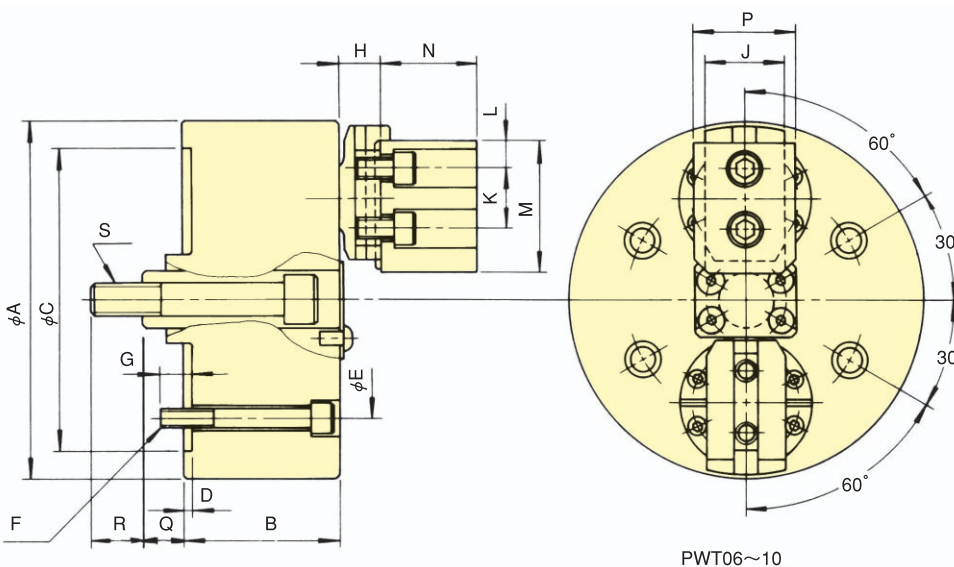
※PWC has the same specification as PW with the exception of the fact that PWC is a compensation type.

**Draw down even a irregular shaped material for steady gripping**  
**Optimum PWT(C) chuck for steady gripping for rough processing**

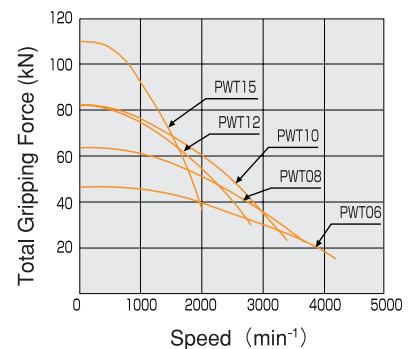
- 2-jaw type for gripping deformed work  
The hard-to-grip deformed work of square bar or flange, etc. by 3-jaw type (PW series) can be gripped securely.
- PW series and soft jaws function with compatibility



## Dimensional Drawings



## Gripping Performance



## Dimensions

Model	A	B	C(H6)	D	E	F	G	H	J	K	L	M	N	P	Q <sub>max.</sub>	Q <sub>min.</sub>	R	S
PWT06	162	77	140	5	104.8	4-M10	14	19.3	38.07	29.36	15	67.5	47.7	50.8	24	12.6	25.4	M16
PWT08	200	88	170	5	133.4	4-M12	18	23.33	44.45	34.14	15	74	54.17	57	29.3	15.1	29.2	M18
PWT10	254	105	220	5	171.4	4-M16	25	29.14	57.1	44.45	19	89.5	66.9	70.1	34.9	17.4	34.7	M22
PWT12	300	105	220	5	171.4	6-M16	25	29.14	57.1	44.45	19	108.5	66.9	70.1	34.9	17.4	34.7	M22
PWT15	381	117	300	5	235	6-M20	30	32.4	66.62	53.98	23.9	140	73.2	76.2	48.7	26.3	41	M27

## Specifications

Model	Plunger stroke mm	Jaw stroke (diameter) mm	Max. pull force kN(kgf)	Max. gripping force kN(kgf)	Max speed min <sup>-1</sup> (r.p.m)	Mass (With Standard Soft Jaw) kg	Moment of Inertia kg · m <sup>2</sup>	Matching cylinder	Max. pressure MPa(kgf·cm <sup>2</sup> )	Gripping range	
										external φ mm	internal φ mm
PWT06	11.4	7.9	15.5(1581)	46.6(4752)	4200	14	0.047	Y1225R	1.6(16.3)	12.7~120	70~152
PWT08	14.2	9.5	21.3(2172)	64(6526)	3700	24	0.120	Y1225R	2.1(21.4)	16~152	76~203
PWT10	17.5	12.7	27.3(2784)	82(8362)	3400	46	0.378	Y1530R	1.85(18.9)	50~203	85~235
PWT12	17.5	12.7	27.3(2784)	82(8362)	2800	63	0.720	Y1530R	1.82(18.6)	63~241	127~305
PWT15	22.4	15.8	36.7(3742)	110(11217)	2000	112	2.130	Y2035R	1.4(14.3)	76~317	165~381