



**WORK
GRIPPER**

Work Gripper AS series

Pneumatically operated stationary chuck Can be used as an alternative to a fixture

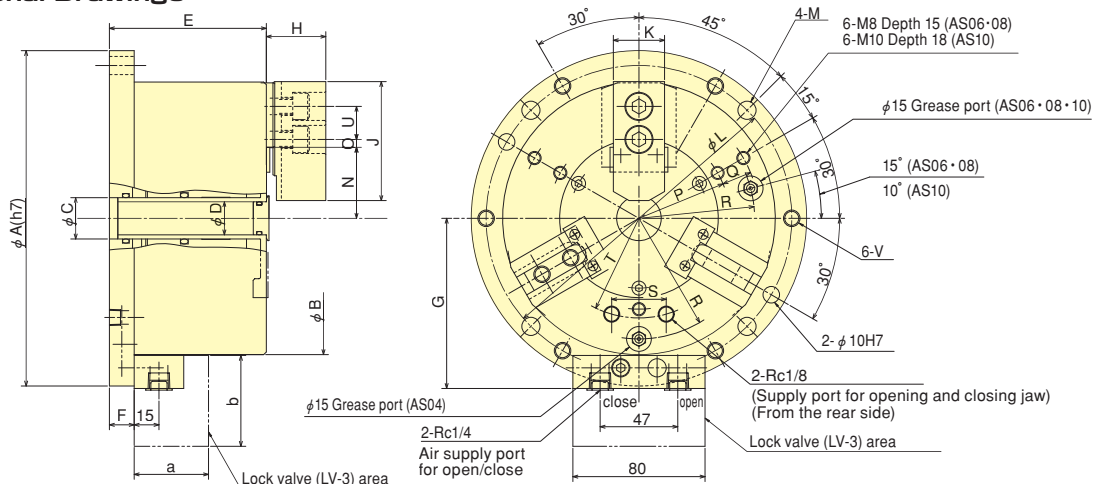
- Small and lightweight design, with inbuilt air cylinder
- Easy mounting by air piping
- Hollow structure optimal for bar work-piece and air blow
- Standard Soft Jaw for Power Chuck is used
- Lock valve unit ensures constant and regular gripping force in all machining conditions

*CE correspondence

※Provide a lubricator in the piping circuit.



Dimensional Drawings



Dimensions

※The dimensions of a/b marked are the size of LV-3(Lock-valve).

Model	Dimensions	$\phi A(h7)$	ϕB	$\phi C(h7)$	ϕD	E	F	G	H	J	K	$\phi L(\pm 0.2)$	ϕM	N max.	N min.	O max.	O min.	P	Q	R
AS04		148	110	20	—	90	15	75.5	27	55	23	130	9	25.5	22.9	9.75	6.75	—	—	43
AS06		203	165	25	20	95	15	103	36	72	31	185	11	44.5	41.9	9.25	4.75	55	18	70
AS08		248	210	36	30	106	15	125.5	42	95	35	230	11	53	49.85	14.75	8.75	68	25	90
AS10		300	254	50	43	110	16	147.5	46	110	40	280	13	66	62.85	16	8.5	85	30	110

Model	Dimensions	S	T	U	V	a	b
AS04		33	34	14	M8	45	55
AS06		33	60.3	20	M10	45	55
AS08		33	80	25	M10	45	55
AS10		33	95	30	M12	45	55

Specifications

※Air Consumption = Under Pressure 0.6MPa Plunger Stroke per 10mm

※Gripping dia./gripping range is with standard soft jaws.

Model	Specifications	Jaw Stroke (diameter) mm	Gripping Force [Pneumatic at 0.6MPa (0.6kgf/cm ²)] kN	Net Weight kg	Max. air pressure MPa	Matching Soft top jaw	Gripping range mm		Air consumption (N _l)
							Max.	Min.	
AS04		5.2	7.5	7.3	0.7	SJ04B1	110	8	0.40
AS06		5.2	21.0	16.0	0.7	SJ06B1	165	26	1.04
AS08		6.3	33.0	27.7	0.7	SJ08B1	210	38	1.81
AS10		6.3	48.0	42.5	0.7	SJ10A1	254	53	2.52



**WORK
GRIPPER**

パワーウイングワークグリッパ PWS06

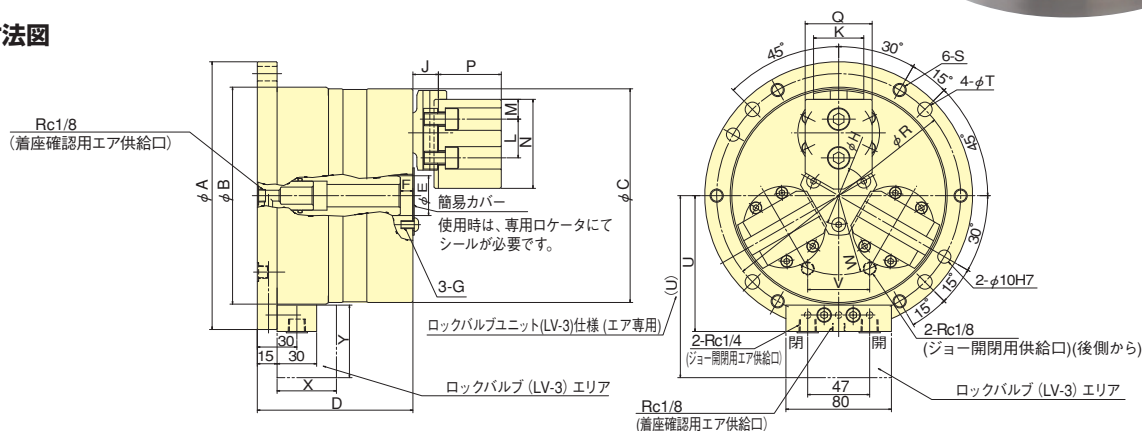
旋盤用チャックがM/C用に変身 シリンダ内蔵でコストダウン

- ワーク素材を引き込む安定把握
旋盤工程前後の荒加工用に使用すれば、同じ把握状態で省段取り
- シリンダ内蔵で導入コストダウン *別途チャック作用用シリンダが不要です
- 機械標準コラム仕様で対応可能 *シリンダ内蔵で全高を低く抑えました
- NC円テーブルにスムーズ搭載

※配管回路にルブリケータを設けてください。



■ 寸法図



■ 寸法表 ※(U), X, Yの寸法はLV-3(ロックバルブ)の寸法である。

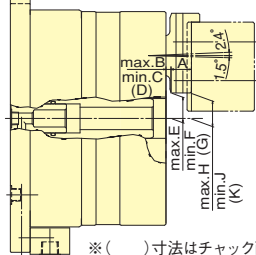
寸法	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	(U)	V	W	X	Y
型式	A _{h7}	B	C	D	E _{+0.02/0}	F _{min}	G _{M6深12}	H	J	K	L	M	N	P	Q	R _(±0.2)	S	T	U	(U)	V	W	X	Y
PWS06	203	164.5	162	118	30.17	5.5	M6深12	44	19.3	38.07	29.36	15	67.5	47.7	50.8	185	M10	11	103	138	47	60	45	55

■ 仕様表

※把握力はジョーおよびワークの把握部状態により変化します。 ※空気消費量はプランジャストローク5mm当たり、圧力0.6MPa時
※把握径/把握範囲は標準のソフトジョーを使用した場合。

仕様 型式	プランジャ ストローク mm	ジョーストローク (直径) mm	把握力 kN		許容最大圧力 MPa		最低使用圧力 MPa	把握径 mm				質量 (標準ソフトジョー付) kg	空気消費量 (Nl)
			エア圧力 0.6MPa	油圧力 1.3MPa	エア圧力	油圧力		外径 φ		内径 φ			
								Max.	Min.	Max.	Min.		
PWS06	11.1	7.7	19	53	0.7	1.3	0.2	120	13	160	70	24	0.54

■ 作動位置寸法図 (外径把握時)

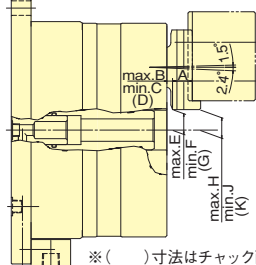


※() 寸法はチャック面とソフトジョートリツケ面が平行の場合を示す。

■ 作動位置寸法表 (外径把握時)

寸法	A	B	C	D	E	F	G	H	J	K
型式	A	B	C	D	E	F	G	H	J	K
PWS06	15.50	4.96	3.05	3.80	20.06	18.89	19.33	20.70	18.48	19.33

■ 作動位置寸法図 (内径把握時)



※() 寸法はチャック面とソフトジョートリツケ面が平行の場合を示す。

■ 作動位置寸法表 (内径把握時)

寸法	A	B	C	D	E	F	G	H	J	K
型式	A	B	C	D	E	F	G	H	J	K
PWS06	15.03	5.59	3.43	4.27	16.28	15.08	15.53	17.17	14.52	15.53



**WORK
GRIPPER**

Power Wing Work Gripper PWS06

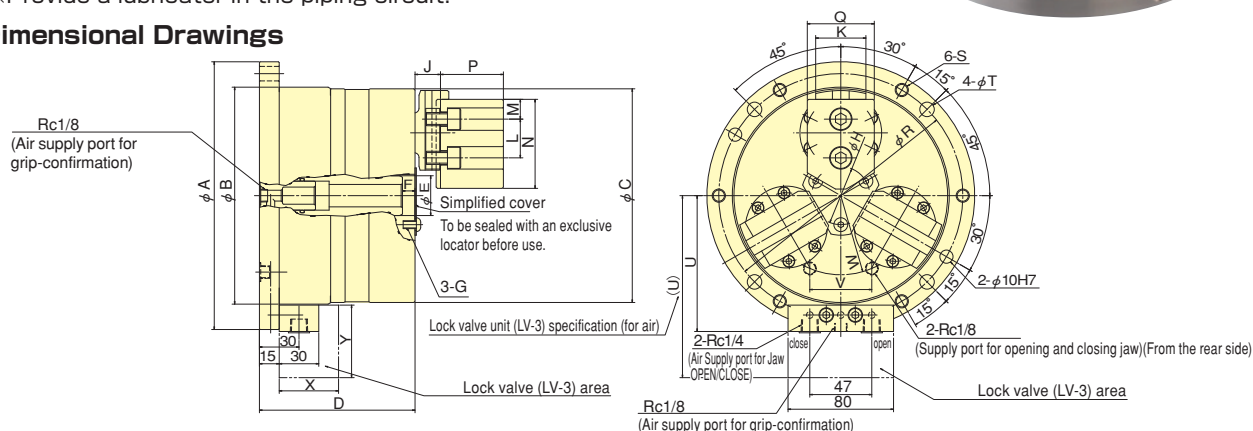
Suitable for 3 to 5-Axis machines

Cost reduction achieved by built-in Cylinder

- Stationary clamping by pull back the work-pieces
Suitable for rough machining, OP-10 or OP-20 with reduced setup time.
- Cost reduction achieved by built-in Cylinder
*No need to introduce separated Cylinder for Chuck.
- Available on the standard column of machine
*Total height is reduced by built-in Cylinder.
- Available to be mounted on NC Rotary Table
*Provide a lubricator in the piping circuit.



Dimensional Drawings



Dimensions

*The dimensions of (U)/X/Y marked are the size of LV-3(Lock-valve).

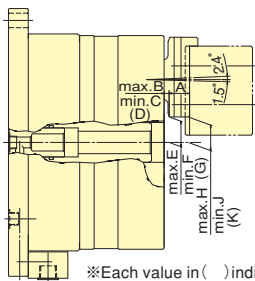
Dimensions Model	A h7	B	C	D	E +0.02 0	F min	G M6 Depth 12	H	J	K	L	M	N	P	Q	R (±0.2)	S	T	U	(U)	V	W	X	Y
PWS06	203	164.5	162	118	30.17	5.5		44	19.3	38.07	29.36	15	67.5	47.7	50.8	185	M10	11	103	138	47	60	45	55

*Clamping force varies in clamping state for jaws and work-pieces. *Air Consumption = Under Pressure 0.6MPa Plunger Stroke per 5mm
*Gripping dia./gripping range is with standard soft jaws.

Specifications

Specifications Model	Plunger Stroke mm	Jaw Stroke (diameter) mm	Gripping Force kN		Max. allowable pressure MPa		Min. allowable pressure MPa	Gripping range mm				Net Weight with Soft top jaws kg	Air consumption (Nl)
			Pneumatic at 0.6MPa	Hydraulic at 1.3MPa	external ϕ			Internal ϕ					
					Pneumatic	Hydraulic	Max.	Min.	Max.	Min.			
PWS06	11.1	7.7	19	53	0.7	1.3	0.2	120	13	160	70	24	0.54

Dimensional Drawing for actuated position (External Gripping)

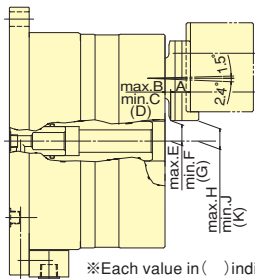


*Each value in () indicate that surface of chuck and Jaw mounting side is parallel.

Dimensions for actuated position (External Gripping)

Dimensions	A	B	C	D	E	F	G	H	J	K
Model										
PWS06	15.50	4.96	3.05	3.80	20.06	18.89	19.33	20.70	18.48	19.33

Dimensional Drawing for actuated position (Internal Gripping)



*Each value in () indicate that surface of chuck and Jaw mounting side is parallel.

Dimensions for actuated position (Internal Gripping)

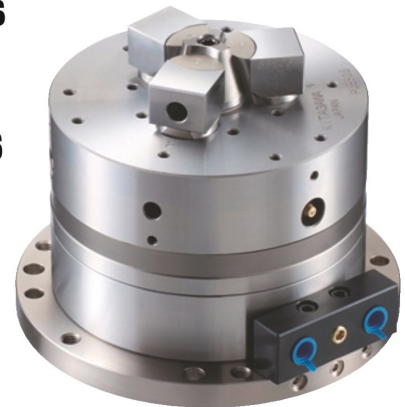
Dimensions	A	B	C	D	E	F	G	H	J	K
Model										
PWS06	15.03	5.59	3.43	4.27	16.28	15.08	15.53	17.17	14.52	15.53



**WORK
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Internal Pull Lock Work Gripper PUES06

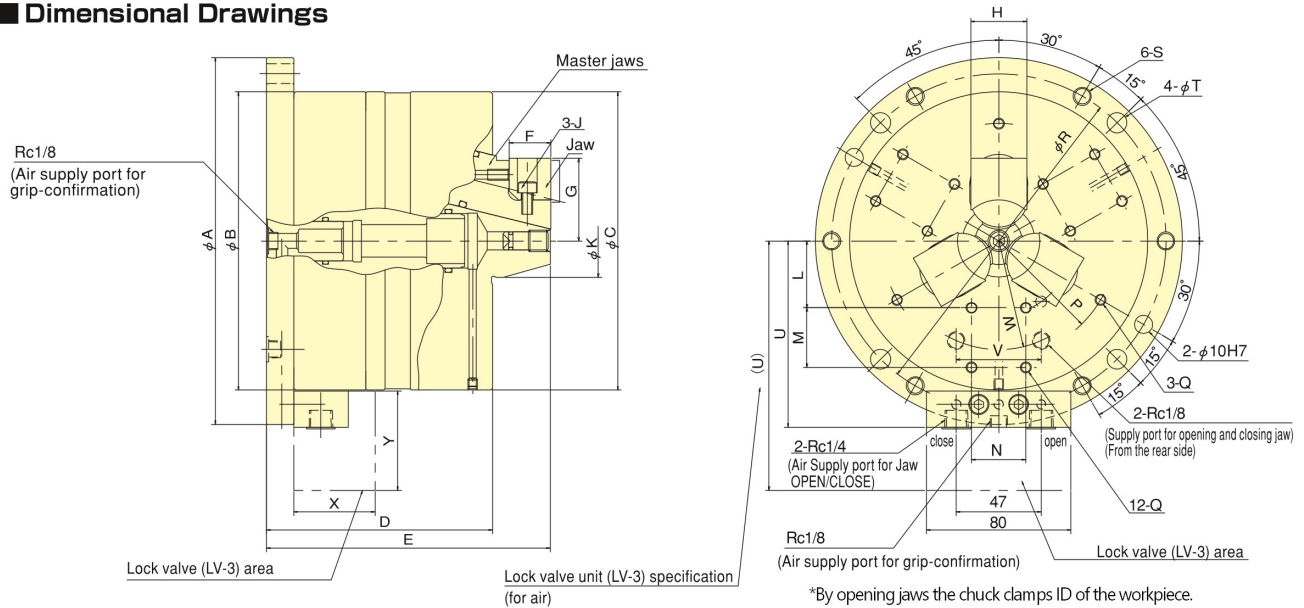
Suitable for 3 to 5-Axis machines
Cost reduction achieved by built-in Cylinder
Wide gripping range with the use of optional jaws



- Pull back and clamping the inner diameter of work-pieces
Suitable for finish machining with stationary machining accuracy.
- Cost reduction achieved by built-in Cylinder
No need to introduce separated Cylinder for Chuck.
- Available on the standard column of machine
Total height is reduced by built-in Cylinder.
- Wide gripping range with the use of optional jaw

※Provide a lubricator in the piping circuit.

Dimensional Drawings



Dimensions

※The dimensions of (U)/X/Y marked are the size of LV-3(Lock-valve).

Dimensions	A _{h7}	B	C	D	E	F	G		H	J	K	L	M	N	P	Q	R _(±0.2)	S	T	U	(U)	V	W	X	Y
Model							max.	min.																	
PUES06	203	165	165	125	157	23	46.9	44.5	31	M6	40	37	33	30	65	M6 Depth 11	185	M10	11	103	138	47	60	45	55

Specifications

※Clamping force varies in clamping state for jaws and work-pieces. ※Air Consumption = Under Pressure 0.6MPa Plunger Stroke per 5mm

Specifications	Plunger Stroke mm	Jaw Stroke (diameter) mm	Gripping Force kN		Max. allowable pressure MPa		Min. allowable pressure MPa	Gripping range mm			Net Weight with Soft top jaws kg	Air consumption (N _l)
			Pneumatic at 0.6MPa	Hydraulic at 1.3MPa	Pneumatic	Hydraulic		Standard jaws	Option jaws	Master jaws		
PUES06	10.3	4.8	20	57	0.7	1.3	0.2	φ70~φ87	φ89~φ108	φ44~φ70	21	0.54



**WORK
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Pull Lock Work Gripper

PLS series

Pull Lock for steady gripping

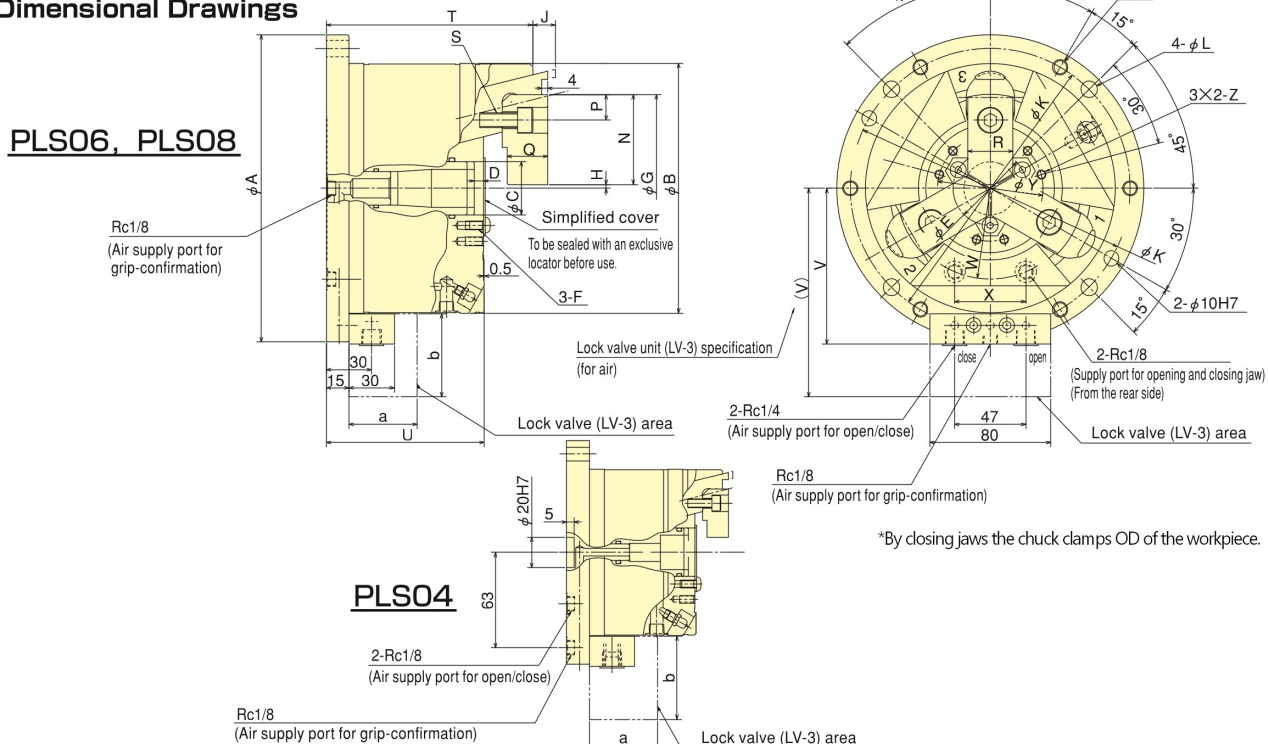
Stable cutting is guaranteed through the high precision and exceptional gripping performance. Can be used as alternative to a fixture

- Stable cutting is performed by high precision and high gripping force
- Perfect for CNC machining applications, thanks to component detection feature
- Multiplate system also accommodates PLS Series gripper, allowing up to six grippers per station
- It's compact design, featuring an inbuilt cylinder allows for more space in the machining envelope

*CE correspondence

※Provide a lubricator in the piping circuit.

■ Dimensional Drawings



*By closing jaws the chuck clamps OD of the workpiece.

ワークグripper
Work Gripper

■ Dimensions

※The dimensions of a/b marked are the size of LV-3(Lock-valve).

Dimensions	A (h7)	B ^(0/-0.1)	C ^(0/0.1)	Dmin.	E	F	G(H6)	Hmax.	Hmin.	J max.	J min.	K (±0.2)	L	M	N
Model															
PLS04	148	110.1	32	4.5	42	M5 Depth 10	84	2.25	0.75	7	1	130	9	M 8	40.5
PLS06	203	165.1	35	6.0	49	M6 Depth 12	124	3.75	1.25	15	5	185	11	M10	59.5
PLS08	248	210.1	55	6.0	71	M6 Depth 12	154	3.75	1.25	17	7	230	11	M10	74.5

Dimensions	P	Q	R	S	T	U	V	(V)	W	X	Y	Z	a	b
Model														
PLS04	9.5	14	20	M 6	103	85.5	75.5	110.5	34	33	62	M5 Depth 10	45	55
PLS06	17	27	30	M10	136.5	104.5	103	138	60	47	70	M6 Depth 12	45	55
PLS08	20.5	31	35	M12	155.5	118.5	125.5	160.5	80	47	95	M6 Depth 12	45	55

■ Specifications

※Clamping force varies in clamping state for jaws and work-pieces. ※Air Consumption = Under Pressure 0.6MPa Plunger Stroke per 5mm
 ※Gripping dia./gripping range is with standard soft jaws.

Specifications Model	Plunger Stroke mm	Jaw Stroke (diameter) mm	Gripping Force kN				Max. allowable pressure MPa		Min. allowable pressure MPa	Gripping range mm		Net Weight with Soft top jaws kg	Air consumption (N _l)
			Pneumatic at 0.6MPa		Hydraulic at 1.3MPa		Pneumatic	Hydraulic		Max.	Min.		
			Use of soft jaw	Use of hardened jaw	Use of soft jaw	Use of hardened jaw							
PLS04	6	3	6.7	7.4	16.0	17.4	0.7	1.3	0.2	φ50	φ5	7.4	0.22
PLS06	10	5	18.5	22.0	40.0	45.0				φ69	φ8	18.0	0.54
PLS08	10	5	37.0	40.0	80.0	84.0				φ89	φ8	33.0	0.93



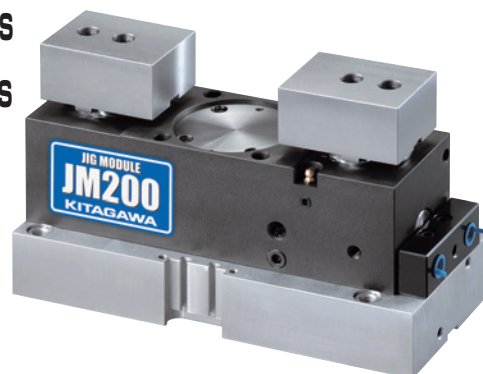
**WORK
GRIPPER**

Jig Module JM200

Securely grips a wide range of irregularly shaped components

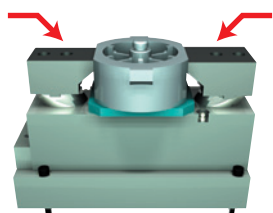
New clamping system accommodates a variety of work-pieces

- Option of lock valve mechanism meaning that during machining work-pieces can be held without air line
- Centralizing or compensating is switchable
- Face grip (end grip) is possible
- Seating confirmation can be checked automatically



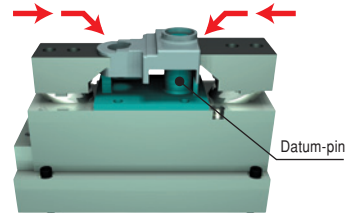
One unit is equipped with three gripping functions.

Centralizing Grip **Centralizing**



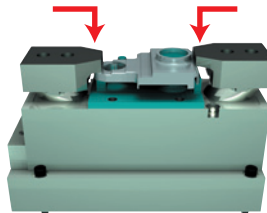
External gripping by pull down

Center compensation grip **Compensating**



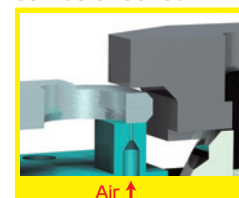
Compensating gripping using pin locators and pull down

End face grip **Face Grip**

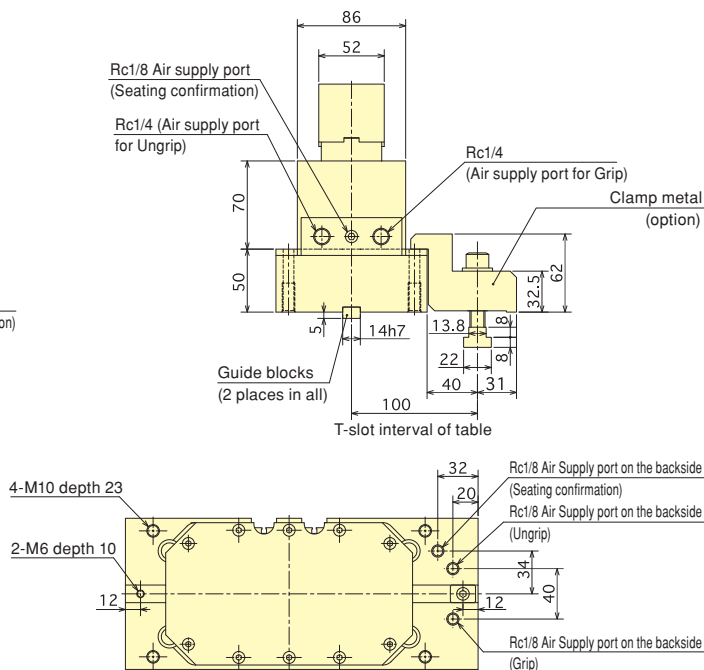
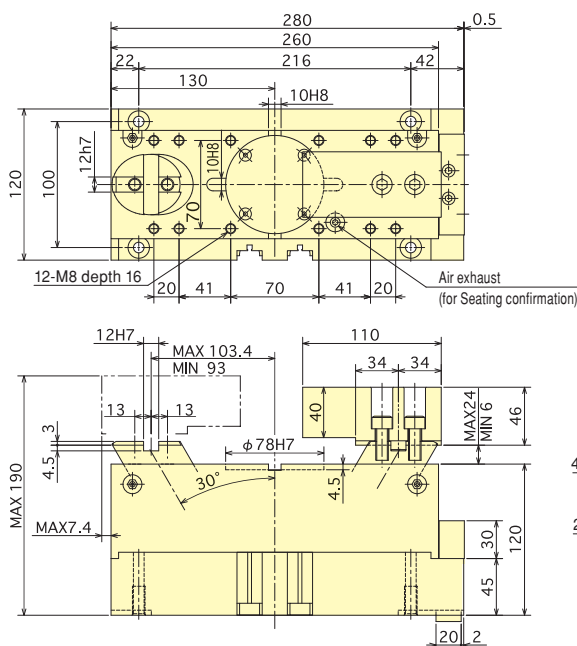


Face gripping by pull down

Seating confirmation can be checked



Dimensional Drawings



Note : Grip metals for mounting main part can be optionally offered.

Specifications

Cylinder Stroke mm	Jaw Stroke mm		Max. Gripping Force kN		Min. Gripping Force kN		Max. Oscillating amount mm		Work-piece size mm		Net Weight kg	Max. air pressure MPa	Min. air pressure MPa
	Centring/ Compensation	Face grip	Centring/ Compensation	Face grip	Centring/ Compensation	Face grip	Centring/ Compensation	Face grip	Centring/ Compensation	Face grip			
18	20.8	18	9.0	5.5	3.0	1.8	1.5	2.5	40~200	40~150	19.0	0.6	0.2



**WORK
GRIPPER**

Stationary Scroll Chuck

SC-S series

**Durable, reliable and versatile
Stationary scroll chuck**

- Available on multiplate for easy fixture mounting
- Compact designed
- Soft jaw can be machined to adapt to a wide range of machine work-pieces
- Uses exclusive handle for clamping

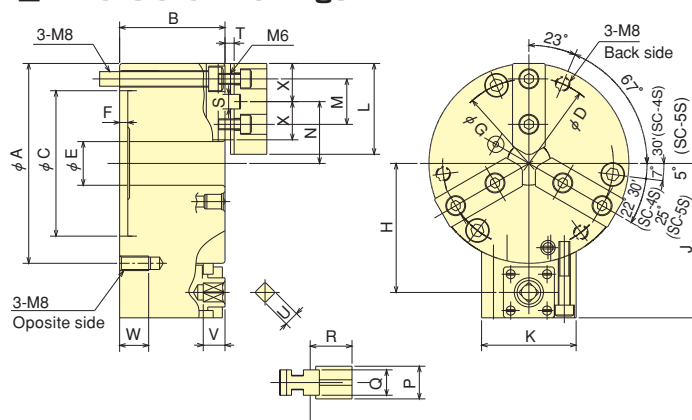


2 chuck fixture sample



4 chuck fixture sample

Dimensional Drawings



Specifications

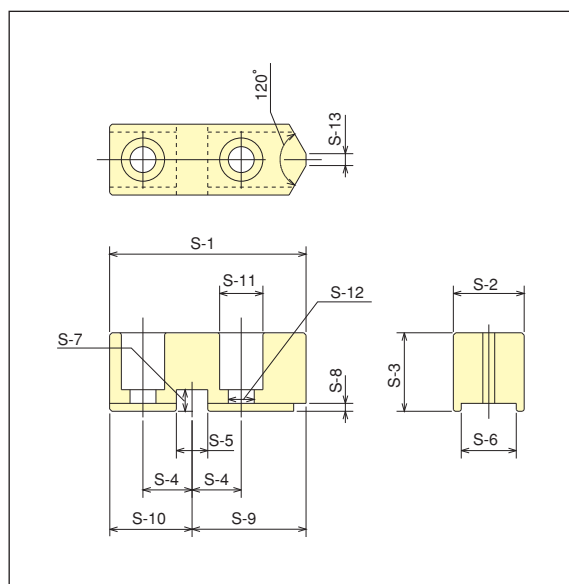
※Gripping dia./gripping range is with standard soft jaws.

Model	Specifications	Max. Gripping Force kN	Allowable handle torque N·m	Net Weight kg	Gripping range	
					external ϕ mm	internal ϕ mm
SC-4S		9.6	27.5	4.0	3~95	29~84
SC-5S		12.0	39.2	5.3	3~110	33~100

Dimensions

Model	A	B	C (H6)	D	E	F	G	H	J	K	L	M	Nmin	Nmax	P	Q	R	S	T	U	V	W	X
SC-4S	110	58	80	95	24	4.5	93	71	85	52	50	25	26	37	18	14	23	8	5	8	12	16	21
SC-5S	130	60	100	115	32	4.5	113	81	95	56	60	30	30	45	20	16	26	8	6	8	12	16	25

Dimensional Drawings for Soft Jaw



Dimensions for Soft Jaws

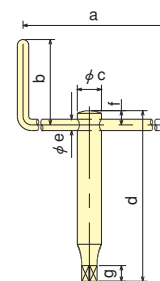
Model	Dimensions	chuck size	S-1	S-2	S-3	S-4 ± 0.1	S-5 $+0.01$ 0	S-6 $+0.05$ $+0.02$
SBS04S		4	50	18	20	12.5	8	14
SBS05S		5	60	20	22	15	8	16

Model	Dimensions	S-7	S-8	S-9	S-10	S-11	S-12	S-13
SBS04S		5.5	2	29	21	11	6.6	3
SBS05S		5.5	2	35	25	11	6.6	3

Dimensional Drawings for Handle

Dimensions for Handles

Model	a	b	c	d	e	f	g
SC-4S	130	60	17	120	8	10	11
SC-5S	150	60	20	130	10	12	11



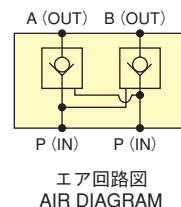
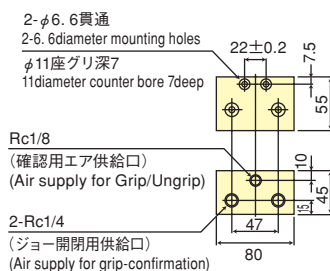
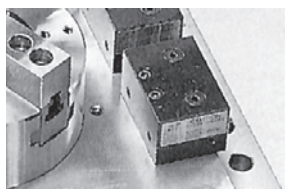


**WORK
GRIPPER**

オプション Option

LV-3

■ エアロックバルブユニット (エア専用)
Air Lock Valve Unit



AV-02F

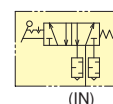
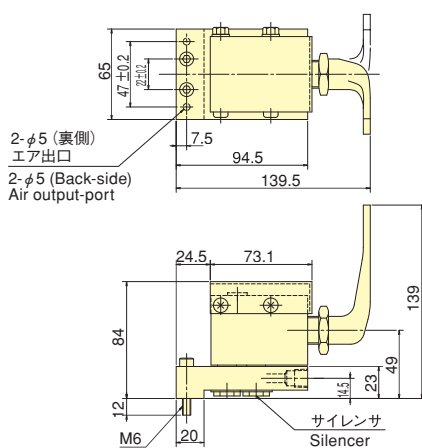
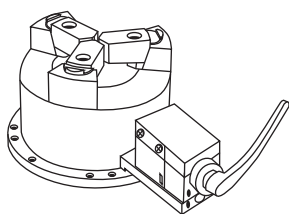
■ エア手動切換弁
Original manual air valve



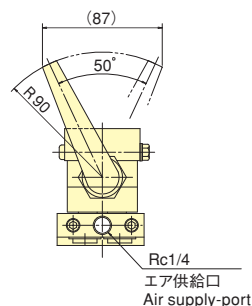
AV-02Fは空気配管をシンプルにする。
AV-02F allows air system to be simplified

※ワークグリッパ、マルチプレートに
簡単に取付けできます。
※Valves can be easily mounted onto
work gripper and multiplate.

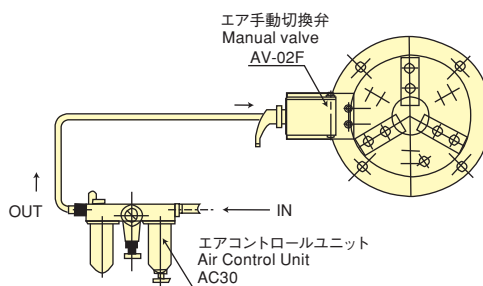
最大許容圧力 Max. pressure	1MPa
操作角度 Lever movement	50°
接続口径 Connection port	Rc 1/4



エア回路図
AIR DIAGRAM



■ 取り付け図面 (AV-02F) Mounting Drawing (by AV-02F)



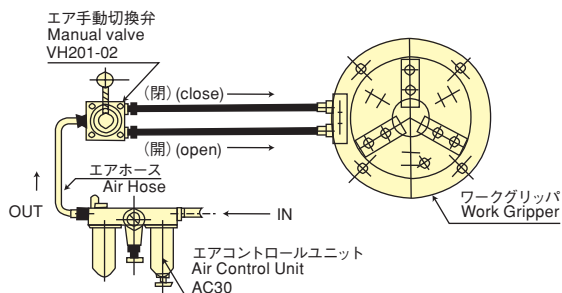
VH201-02

■ エア手動切換弁
Original manual air valve



最大許容圧力 Max. pressure	1MPa
操作角度 Lever movement	90°
接続口径 Connection port	Rc 1/4

■ 取り付け図面 (VH201-02)
Mounting Drawing (by VH201-02)



AC30

■ エアコントロールユニット
(潤滑装置付き)
Air Control Unit
(With Lubrication)

最大許容圧力 Max. pressure	1MPa
圧力設定範囲 Pressure setting range	0.05~0.85MPa
濾過精度 Filter mesh	5μm
最高使用温度 Max. temperature	60°C
接続口径 Connection port	Rc 1/4