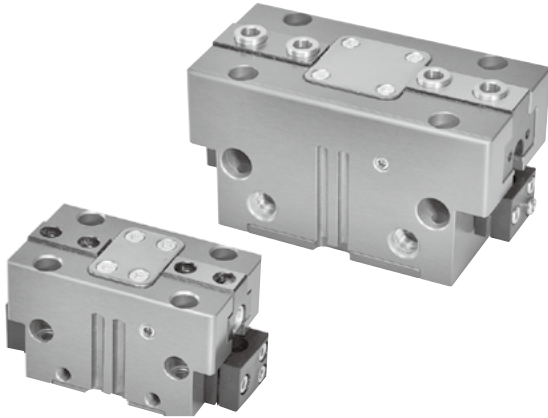


SGSS series

PARALLEL GRIPPER (2-Finger)



Order example

SGSS – 50

MODEL

BODY SPECIFICATION
50, 66, 80, 100,
125, 160, 200, 300

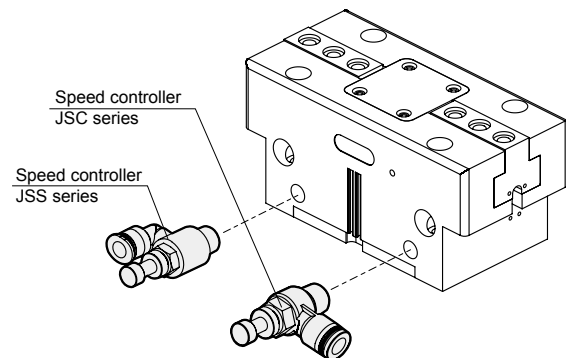
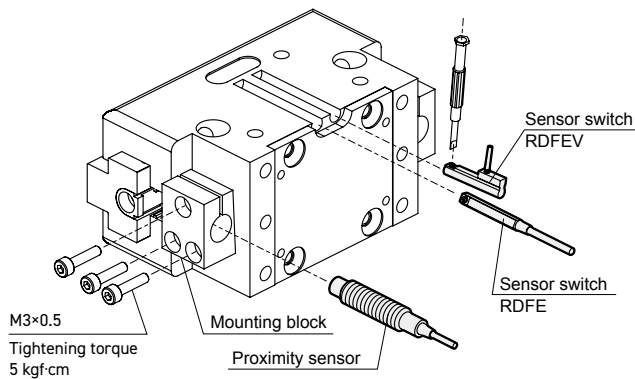
Features

- Compact design to ensure minimum interference while operating; robust T rail design, ensure accurate gripping.
- Can reach maximum torque suitable for long jaws design.
- Oval piston-driven design ensure maximum gripping force.
- Hose-free direct connection: Air supply channel can connect directly without piping or through tread to assure the flexibility of supplying compressed air on any kind of automation system.

Specification

Model	SGSS							
Acting type	Double acting							
Body specification	50	66	80	100	125	160	200	300
Stroke per-jaw(mm)	4	6	8	10	12	16	20	30
Closing force(N)	170	300	550	740	1290	1860	3175	6675
Opening force(N)	185	325	590	795	1370	1960	3330	6830
Close/Open time(s)	0.02	0.03	0.04	0.07	0.1	0.1	0.35	0.4
Medium	Air							
Operating pressure range	0.3~0.8 MPa							
Compressed air consumption(cm ³)	4.1	10.1	23.6	39.3	85	85	330	1000
Ambient temperature	+5°C~ +80°C							
Lubrication	Not required							
Sensor switch (*)	2 wire	RDVE(V): Non-contact						
	3 wire	RNFE(V): NPN, RPFE(V): PNP						
Accessories	Mounting block, Centering sleeve							
Weight (kg)	0.14	0.27	0.495	0.85	1.6	3.0	5.7	14.2
Recom. workpiece weight (kg)	0.85	1.4	2.6	3.6	6.3	9.2	15	32

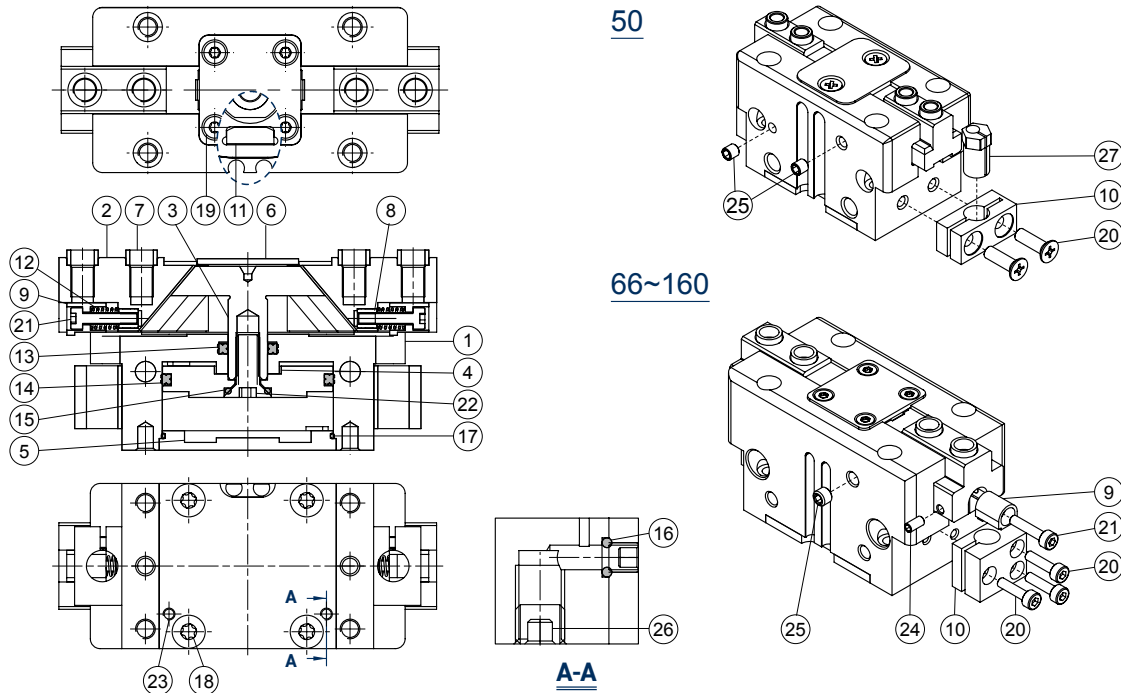
Installation of sensor switch & speed controller



* Each gripper needs at least two speed control valves to control speed.

SGSS Inside structure & Parts list

PARALLEL GRIPPER (2-Finger)



Material

No.	Part name	Material	Body spec & Q'y					Repair kits (inclusion)
			50	66	80	100	125	
1	Body	Aluminum alloy	1					
2	Finger	Mid carbon steel	2					
3	Rod	Mid carbon steel	1					
4	Piston	Aluminum alloy	1					
5	End cover	Aluminum alloy	1					
6	Plate cover	Stainless steel	1					
7	Centering sleeve	Stainless steel	4					
8	Thread insert	Brass	-		2			
9	Sensor adj block	Aluminum alloy	-		2			
10	Magnet holder	PBT+30%GF	2					
11	Magnet	Magnet material	1					
12	Spring	SWP	-		2			
13	Rod packing	NBR	1					●
14	Piston packing	NBR	1					●
15	O-ring	NBR	1					●
16	O-ring	NBR	3	4	2		●	
17	O-ring	NBR	1					●
18	Screw	Carbon steel	4					
19	Screw	Carbon steel	2	4				
20	Bolt	Stainless steel	4	6				
21	Hex bolt	Stainless steel	-		2			
22	Hex bolt	Stainless steel	1					
23	Hex screw	Stainless steel	2					
24	Hex screw	Carbon steel	4					
25	Hex screw	Stainless steel	2					
26	Hex screw	Stainless steel	2					
27	Adjust socket	Stainless steel	2	-				

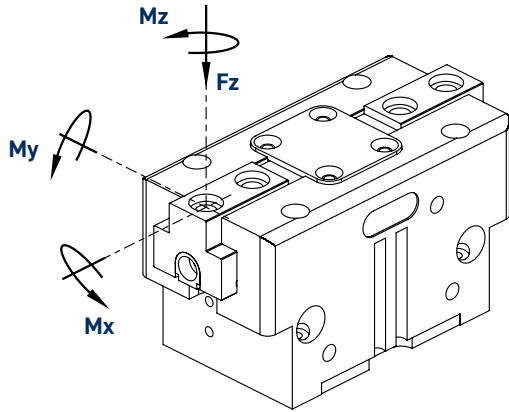
Order example of repair kits

Model	Repair kits
SGSS-50	PS-SGSS-50
SGSS-66	PS-SGSS-66
SGSS-80	PS-SGSS-80
SGSS-100	PS-SGSS-100
SGSS-125	PS-SGSS-125
SGSS-160	PS-SGSS-160

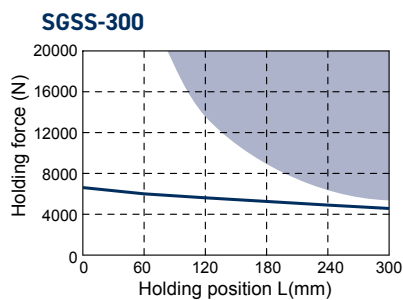
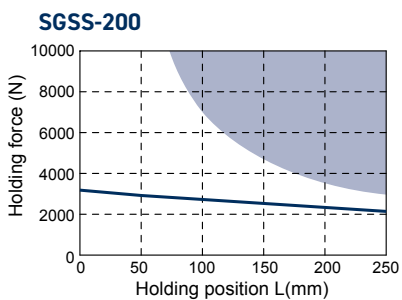
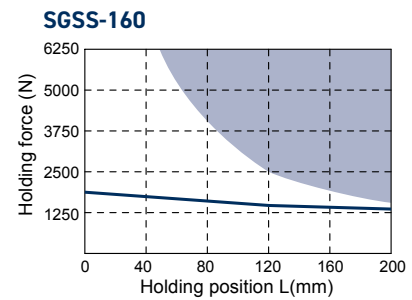
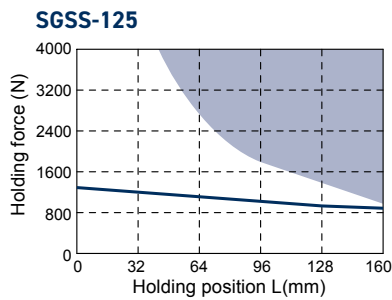
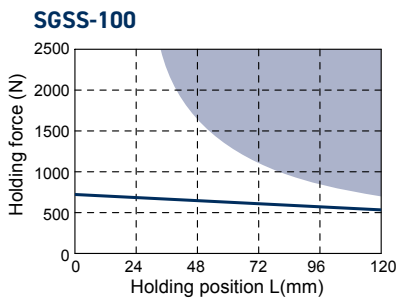
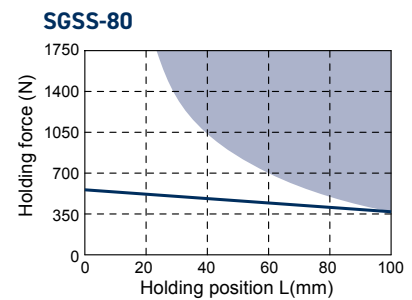
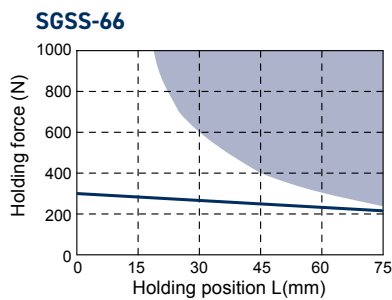
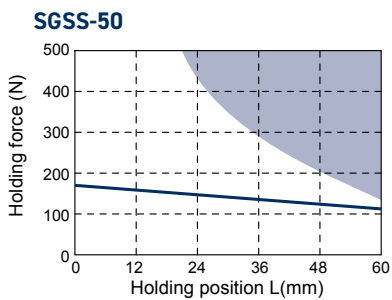
SGSS Capacity 50~300

PARALLEL GRIPPER (2-Finger)

Holding force



Code Model	Mx max. (Nm)	My max. (Nm)	Mz max. (Nm)	Fz max. (N)
SGSS-50	15	15	8	700
SGSS-66	50	45	35	1200
SGSS-80	80	60	50	1800
SGSS-100	100	90	75	2500
SGSS-125	120	120	100	3200
SGSS-160	160	180	140	5000
SGSS-200	180	220	170	7000
SGSS-300	275	300	200	9000

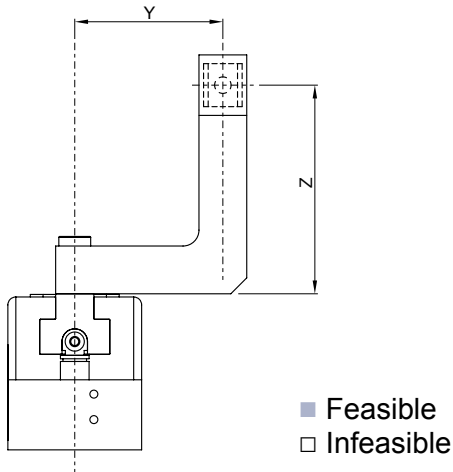


* Blue area: Less durable performance can be expected.

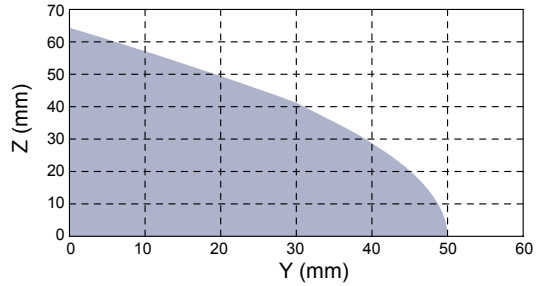
SGSS Capacity 50~300

PARALLEL GRIPPER (2-Finger)

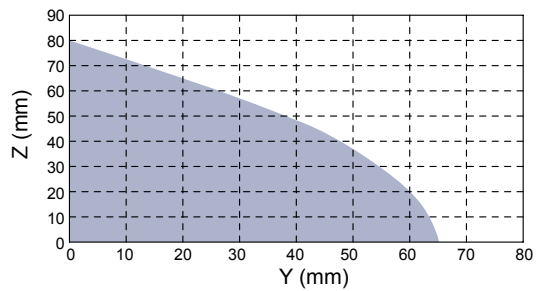
Max. feasible centrifugal degree



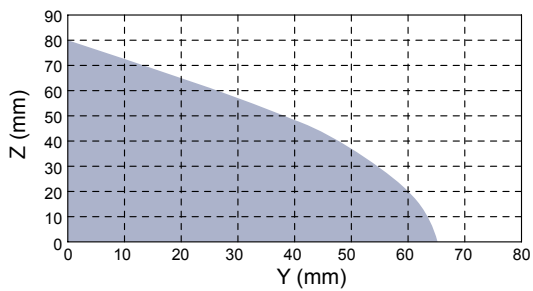
SGSS-50



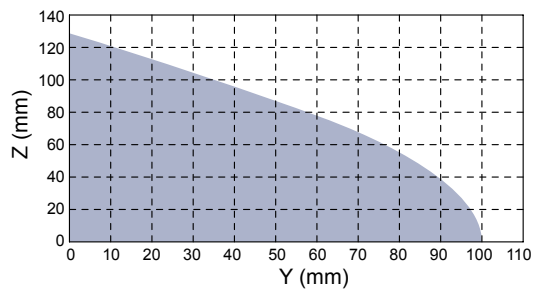
SGSS-66



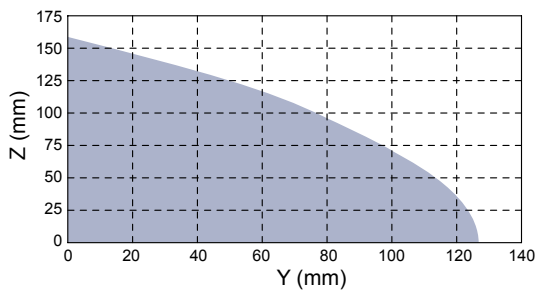
SGSS-80



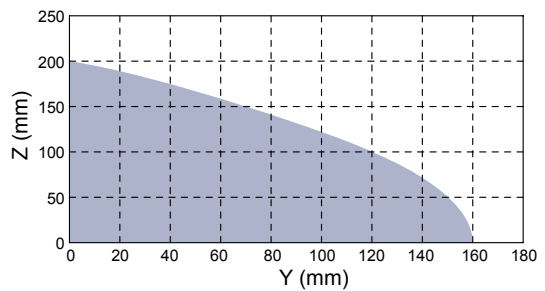
SGSS-100



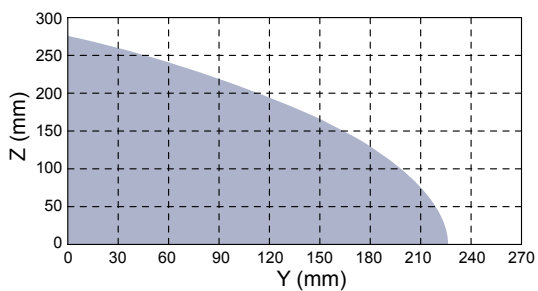
SGSS-125



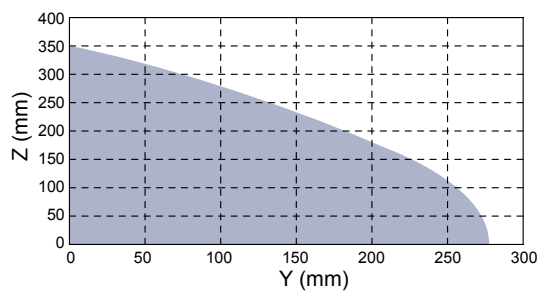
SGSS-160



SGSS-200



SGSS-300

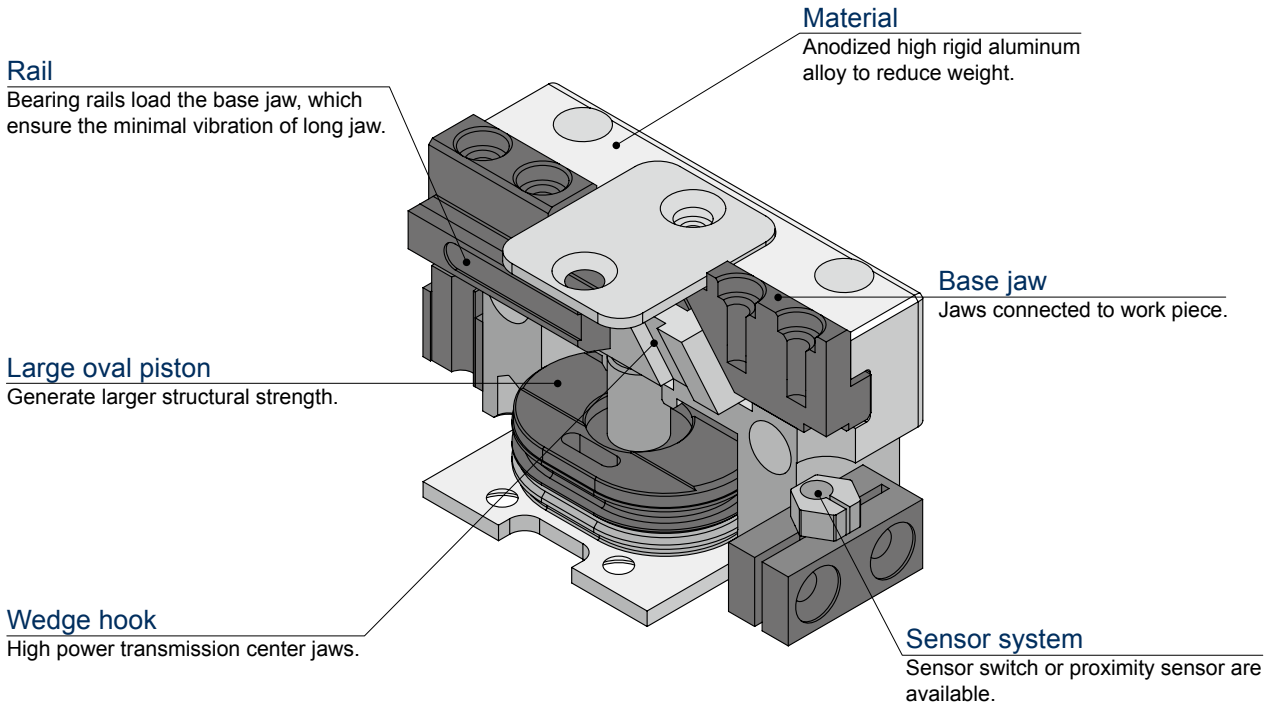


SGSS Internal structure & Application examples

PARALLEL GRIPPER (2-Finger)

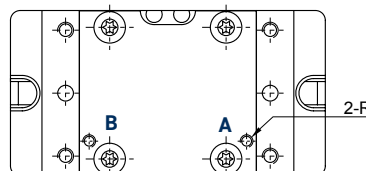
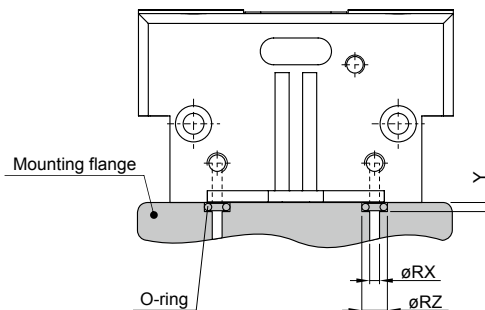
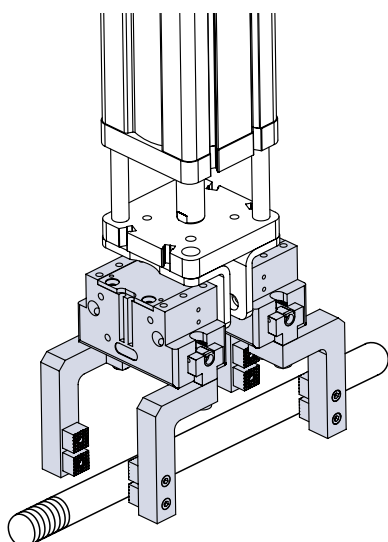
Internal structure & Movement description

Compressed air will push or press the oval piston.
By tilting the working surface, the wedge hook will transfer the movement to side movement, and initiate the action of the two base jaws simultaneously.



Application examples

Hose-free direct connection

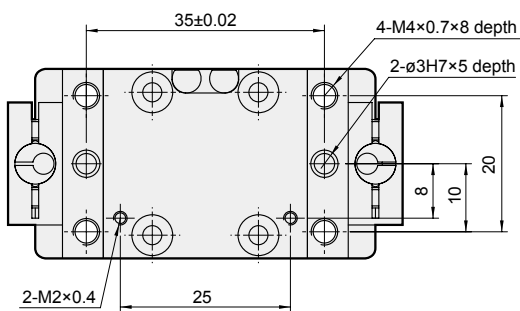
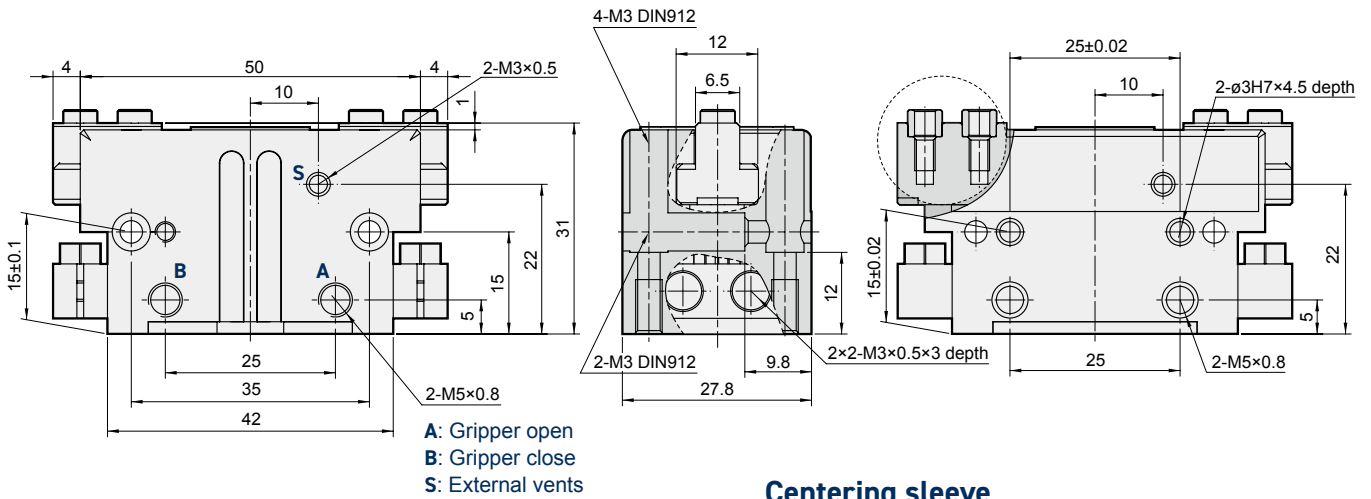
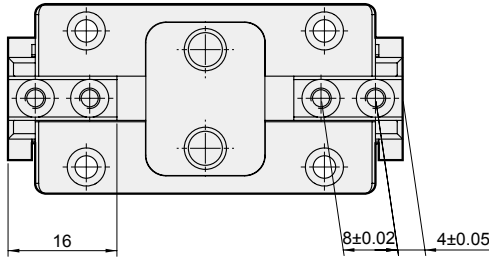


Code Model	R	RX	RZ	Y
SGSS-50	M2	2	4	0.7
SGSS-66	M3	3	5	0.7
SGSS-80	M3	3	5	1.1
SGSS-100	M5	5	8	1.1
SGSS-125	M5	5	8	1.1
SGSS-160	M5	5	8	1.1
SGSS-200	M5	5	8	1.1
SGSS-300	M5	5	8	1.1

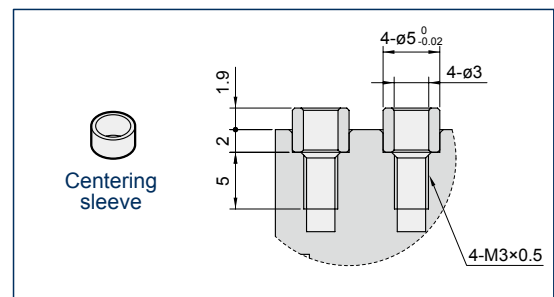
A : Gripper open
B : Gripper close

SGSS Dimensions 50

PARALLEL GRIPPER (2-Finger)



Centering sleeve

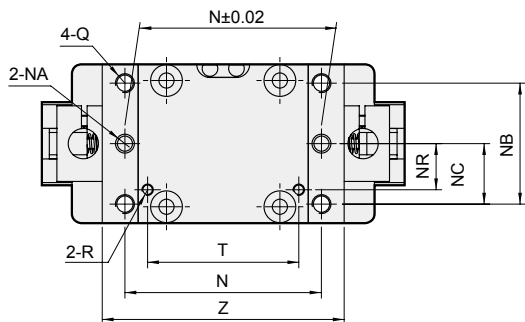
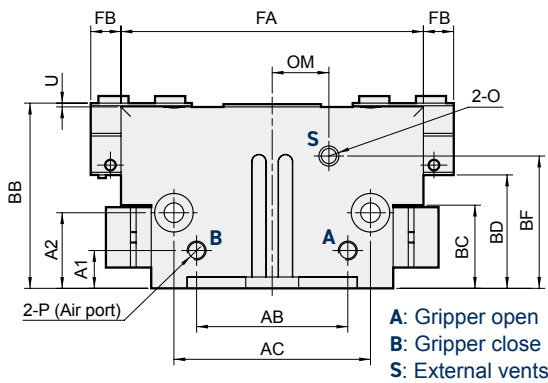
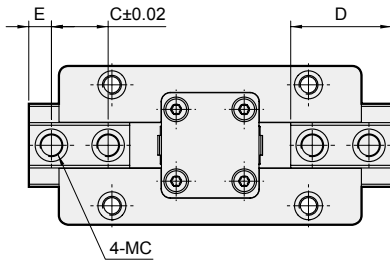




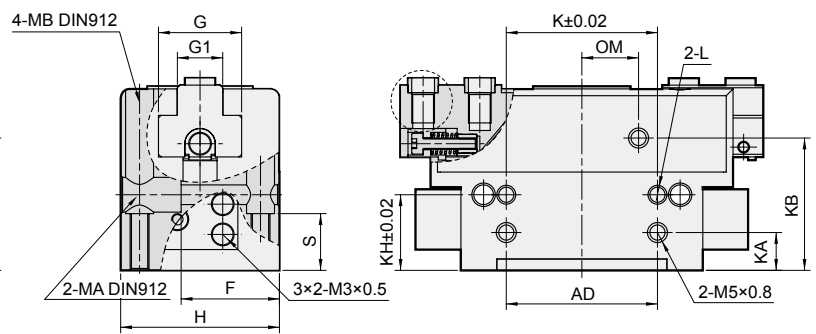
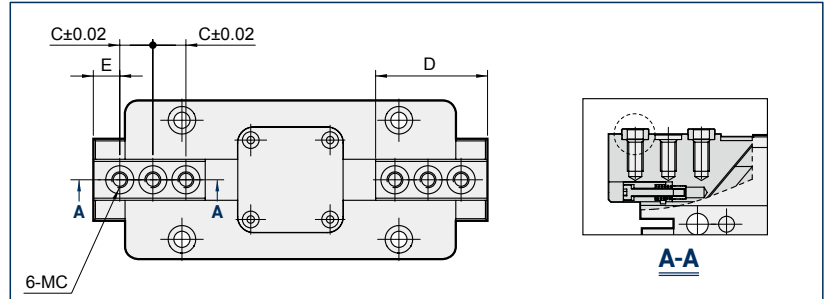
SGSS Dimensions 66~160

PARALLEL GRIPPER (2-Finger)

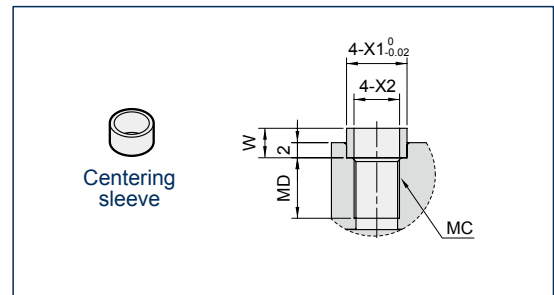
66~100



125~160



Centering sleeve

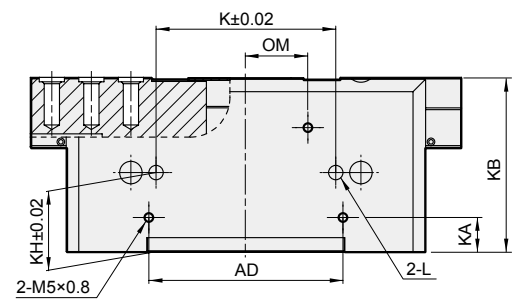
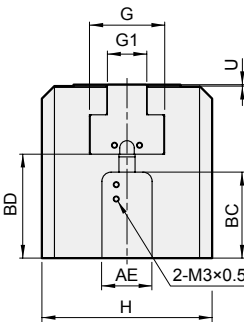
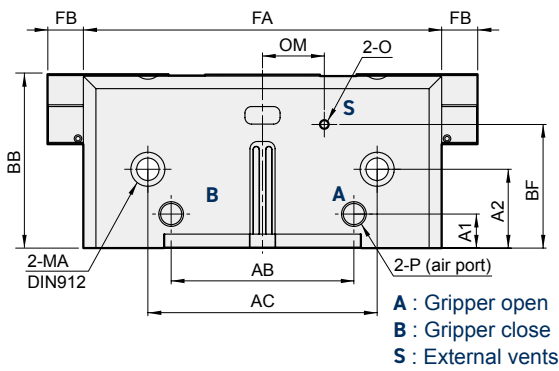
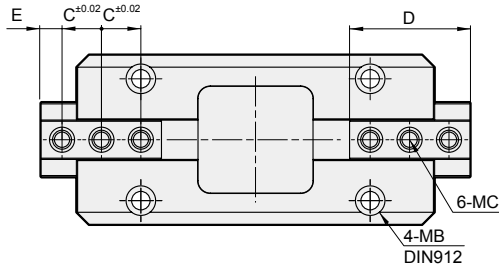


Code Model	A1	A2	AB	AC	AD	BB	BC	BD	BF	C	D	E	F	FA	FB	G	G1	H	K	KA	KB	KH	L	MA	MB
SGSS-66	5	18	28	42	28	39	18.5	23	27.5	12	22	5	23	64	6	17	10	36	20	28	5	18	ø4H7×4dp	M4	M4
SGSS-80	10	20	40	52	40	49	22	30	35	15	26.7	6	26	80	8	22	12	42	40	40	10	20	ø4H7×6dp	M5	M4
SGSS-100	12	25	48	66	54	55	28	33	38	18	34.2	10	22	100	10	26	14	50	50	48	12	25	ø5H7×7dp	M6	M5
SGSS-125	13	30	62	82	65	64	32	38.5	45	12.5	42.3	10	26	125	12	31	15.5	60	60	60	13	30	ø6H7×8dp	M8	M6
SGSS-160	15.5	28	78	100	82	78	39	46	53	18	54.8	10	25	160	16	39	20	72	76	76	15.5	28	ø6H7×10dp	M8	M6

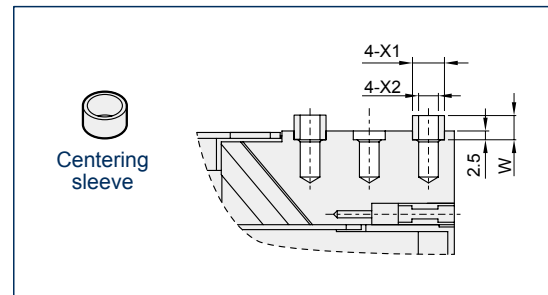
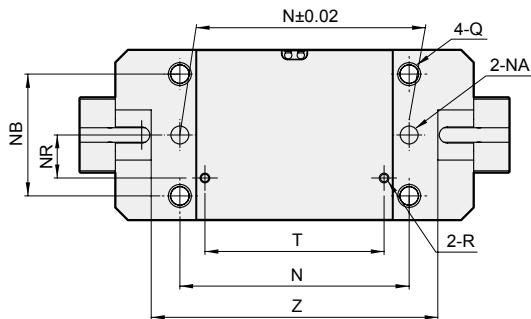
Code Model	MC	MD	N	NA	NB	NC	NR	O	OM	P	Q	R	S	T	U	W	X1	X2	Z
SGSS-66	M4×0.7	6	42	ø4H7×6 dp	27	13.5	11	M5×0.8	12	M5×0.8	M5×0.8×14 dp	M3×0.5	14	1	3.9	27.5	ø6	ø4	52
SGSS-80	M6×1.0	8	52	ø4H7×6 dp	32	16	12.2	M5×0.8	15	M5×0.8	M5×0.8×15 dp	M3×0.5	15	1	3.9	35	ø8	ø6	64
SGSS-100	M6×1.0	10	66	ø5H7×8 dp	38	19	16	M5×0.8	16	G1/8	M6×1.0×10 dp	M5×0.8	32.5	1	3.9	38	ø10	ø6	80
SGSS-125	M6×1.0	12	82	ø6H7×8 dp	45	22.5	18	M5×0.8	20	G1/8	M8×1.25×10 dp	M5×0.8	23	1	3.9	45	ø10	ø6	100
SGSS-160	M8×1.25	12	100	ø6H7×8 dp	56	28	22	M5×0.8	27	G1/8	M8×1.25×12 dp	M5×0.8	40	1	3.9	53	ø12	ø8	125

SGSS Dimensions 200, 300

PARALLEL GRIPPER (2-Finger)



Centering sleeve



Code Model	A1	A2	AB	AC	AD	AE	BB	BC	BD	BF	C	D	E	FA	FB	G	G1	H	K	KA	KB	KH	L
SGSS-200	19	44	102	128	108	28	97	48	58	69	22	67.5	12	200	20	42	22	95	100	19	69	44	ø8H7×8 dp
SGSS-300	19	66	150	180	152	30	130	67	78	92	30	91.0	15	260	30	66	32	139	140	19	92	66	ø10H7×12 dp

Code Model	MA	MB	MC	MD	N	NA	NB	NR	O	OM	P	Q	R	T	U	W	X1	X2	Z
SGSS-200	M12	M10	M10×20 dp	20	128	ø10H7×10 dp	68	24	M5	34.5	G1/4	M12×17 dp	M5	100	0.8	4.9	ø14h7	ø11	160
SGSS-300	M12	M10	M12×20 dp	20	180	ø10H7×12 dp	100	24	M5	43	G1/4	M12×16 dp	M5	150	0.8	4.9	ø18h7	ø12.5	220