

Parallel Gripper with 3-finger

Gripper with 3-finger, Double-acting, High gripping force

⚠ Safety instructions for this product

Safety instructions, Common safety instructions for each product category and Detailed safety instructions for each product are in the end of this catalog and our website.

Model Designation (Example)

CHT
(1) **34** - **D**
(2) (3)

(1) Parallel Gripper with 3-finger

(2) Cylinder dia.

Code	34	44
Cylinder dia. (mm)	34	44

(3) Acting type

D: Double-acting



Sensor Switch Model Designation (Example)

SEM - **G** **D** **V** - **C100**
(1) (2) (3) (4) (5)

(1) Sensor switch

(2) Applicable gripper model

Code	G	F
Applicable gripper model	CHT34	CHT44

(3) Wiring type

Code	D	N	P
Wiring type	2 wires	3 wires	
		NPN Output	PNP Output

(4) Cable direction

Code	No code	V
Direction	Side	Top

*For CHT34, only TOP is selectable.

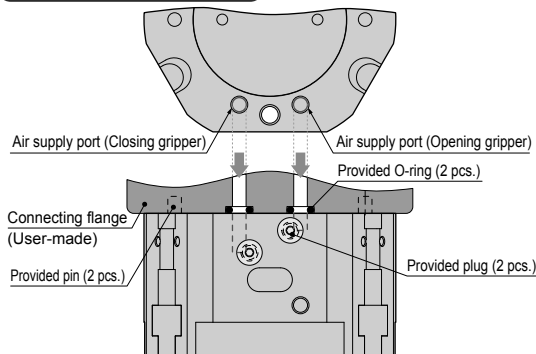
(5) Cable length

Code	C100	C200
Cable length (mm)	1,000	2,000

Characteristics

- Best suitable for gripping cylindrical work-pieces.
- Space saving compact body.
- Circular-piston-drive wedge cam generates high gripping force.
- Good Repeatability: ± 0.01 mm
- Sensor Switch is available as option part.
- Directly mountable on an end of arm tooling.

Example of direct mounting



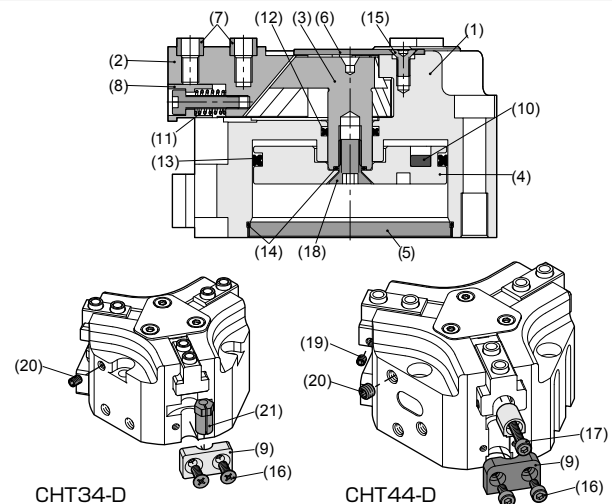
Connectable Pitch Circle Diameter on a robot

CHT34-D: P.C.D 25 M5, P.C.D 31.5 M5,

CHT44-D: P.C.D 25 M5, P.C.D 31.5 M5, P.C.D 40 M6

*With use of our Robot Flange P.C.D Conversion Attachment (page 770), this product can be connected to other P.C.D.

Sectional drawing



No.	Parts	Material	
		CHT34-D	CHT44-D
(1)	Body	Aluminum	
(2)	Finger	Carbon steel	
(3)	Rod	Carbon steel	
(4)	Piston	Aluminum	
(5)	Cap	Stainless steel	
(6)	Top cover	Stainless steel	
(7)	Bush	Stainless steel	
(8)	Sensor adjustment part	—	Aluminum
(9)	Sensor fixing holder	Aluminum	PBT
(10)	Magnet	Magnet	
(11)	Spring	—	Piano wire
(12)	Rod packing	NBR	
(13)	Piston packing	NBR	
(14)	O-ring	NBR	
(15)	Torx screw	Carbon steel	
(16)	Sensor fixing screw	Stainless steel	
(17)	Hexagon socket head bolt	—	Stainless steel
(18)	Hexagon socket countersunk head screw	Stainless steel	
(19)	Hexagon socket set screw	—	Stainless steel
(20)	Hexagon socket set screw	Stainless steel	
(21)	Adjustment socket	Stainless steel	—

Parallel Gripper with 3-finger

Specifications

Type	CHT34-D	CHT44-D
Gripper action	Double-acting	
Cylinder I. D.	34 mm	44 mm
Finger stroke	4 mm (Dia. 8 mm)	6 mm (Dia. 12 mm)
Effective gripping force (at 0.6 MPa)*	O. D	97 N
	I. D	114 N
		198 N
		209 N
Fluid medium	Air	
Operating pressure range	0.2 to 0.8 MPa	
Operating temp. range	5 to 80°C (No freezing)	
Lubrication	Not required	
Repeatability	±0.01 mm	

*Values at gripping length: 40 mm.

Sensor switch Specifications

Item	Model code	SEM-GDV ^⑤	SEM-GNV ^⑤	SEM-GPV ^⑤	SEM-FD ^⑤	SEM-FDV ^⑤	SEM-FN ^⑤	SEM-FNV ^⑤	SEM-FP ^⑤	SEM-FPV ^⑤
Wiring type	No contact, 2 wires	No contact, 3 wires NPN output	No contact, 3 wires PNP output	No contact, 2 wires		No contact, 3 wires NPN output		No contact, 3 wires PNP output		
Lead wire Direction	Top			Side	Top	Side	Top	Side	Top	
Load voltage	10 to 28 VDC	5 to 28 VDC		5 to 30 VDC						
Load current	4 to 20 mA Max.	50 mA Max.					80 mA Max.	50 mA Max.	80 mA Max.	
Current consumption	—	10 mA Max. (24 VDC)		—		10 mA Max. (24 VDC)	6 mA Max. (24 VDC)	10 mA Max. (24 VDC)	6 mA Max. (24 VDC)	
Internal voltage drop	3.5 V Max.	0.5 V Max.(at 50 mA)		3.5 V Max.		0.5 V Max.(at 50 mA)				
Leakage Current	0.8 mA Max.	0.01 mA Max.		0.1 mA Max.		0.01 mA Max.				
Indicator	Red LED indicator turns on at operation.									
Response time	1 msec Max.									
Operating temp. range	-10 to 70°C (No freezing)									
Impact resistance	490 m/s ² (Non-repetitive)									
Vibration resistance	88.3 m/s ² (Peak to peak amplitude 1.5 mm · 10 to 55Hz)									
Protective structure	IP67									
Surge protection circuit	Surge protection	Surge protection, Reverse connection prevention								

RoHS2 (2011/65/EU+EU2015/863) compliant

Type	Model code	Type	Model code
Cylinder dia. 34 mm	CHT34-D	Cylinder dia. 44 mm	CHT44-D
			

Sensor switch

For CHT34		For CHT44			
Type	Model code	Type	Model code	Type	Model code
Cable direction: Top 	SEM-GDV-C100	Cable direction: Top 	SEM-FDV-C100	Cable direction: Side 	SEM-FD-C100
	SEM-GNV-C100		SEM-FNV-C100		SEM-FN-C100
	SEM-GPV-C100		SEM-FPV-C100		SEM-FP-C100
	SEM-GDV-C200		SEM-FDV-C200		SEM-FD-C200
	SEM-GNV-C200		SEM-FNV-C200		SEM-FN-C200
	SEM-GPV-C200		SEM-FPV-C200		SEM-FP-C200

 Packaging specifications
 1 pc./bag