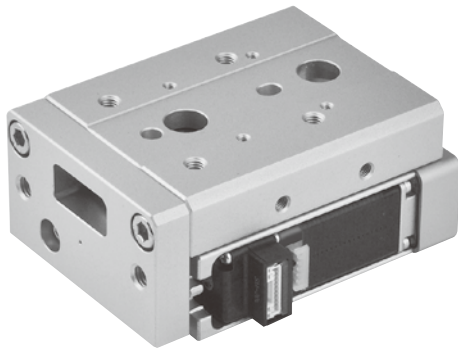


MESS2 series

MINIATURE ELECTRIC CYLINDER (WITH MOTOR)



Specification

Model		MESS2		
Size		16	25	
Position repeatability	(mm)	±0.02		
Lead	(mm)	2	2	8
Maximum speed *1	(mm/s)	≤50	≤100	≤400
Work load *2	Horizontal (kg)	3	6	1.5
	Vertical (kg)	0.8	1.8	0.8
Pushing force *1,3,4	(N)	18 ~ 60	64 ~ 195	18 ~ 48
Stroke	(mm)	30 / 50 / 100	30 / 50 / 75 / 100	
Motor size	(mm)	□20	□28	
Encoder		Incremental A/B/Z (4000PPR)		
Rated voltage		DC 24V±10%		
Sensor switch		RLT (Please refer to page 5-16)		

Motor type Step motor

Transmission Ball screw + Belt

Environment Standard

Guide type Cross roller guide

*1. The speed and force may change depending on the cable length, load, stroke and mounting conditions.

*2. The maximum load capacity decreases as the speed increases.

*3. The accuracy of pushing force is ± 20%.

*4. Pushing force for MESS2 is from 30% to 90%.

Order example

MESS2 – 16 L02 – 30 – CQ1 03 N 01 – XA00

Model

Special order no.

Size	Ball screw lead	Stroke	Controller	I/O type	I/O cable length
16	L02 2 mm	30 30 mm	CQ1 MECQ1	N NPN	01 1.5 m
25	L02 2 mm	50 50 mm	CP MECP		03 3 m
	L08 8 mm	75* 75 mm			* Standard: 1.5 m
		100 100 mm			

* Only for Spec. 25

* Please refer to page 4-106

Actuator cable length	
01	1.5 m
03	3 m
05	5 m

* Standard: 3 m

Slot-type photomicro sensor set

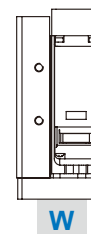
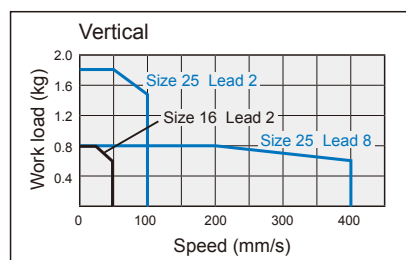
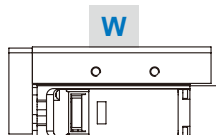
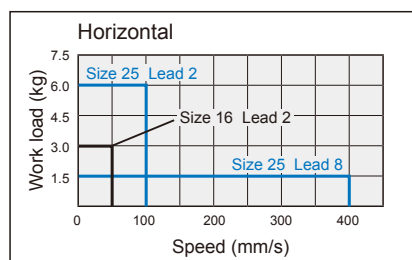
RLT – MESS2 – 16 – 30 – 1

Model

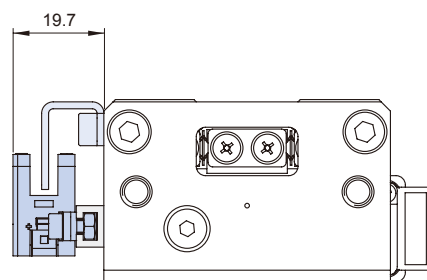
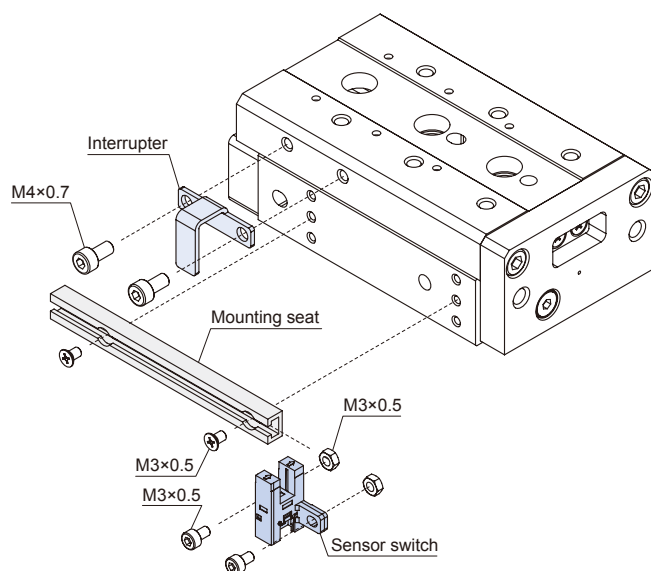
Size	Stroke	Sensor quantity
16	30 30 mm	1 1 pc
25	50 50 mm	2 2 pcs
	75* 75 mm	
	100 100 mm	

* Only for Spec. 25

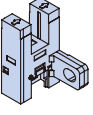
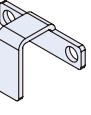
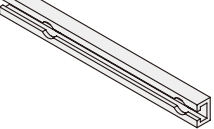
Speed-load curve diagram



Slot-type photomicro sensor set



Accessory kits

			
Sensor switch (×1)	Interrupter (×1)		
			
Mounting seat (×1)			
			
Bolt (×2)	Bolt (×2)	Bolt (×2)	Nut (×2)

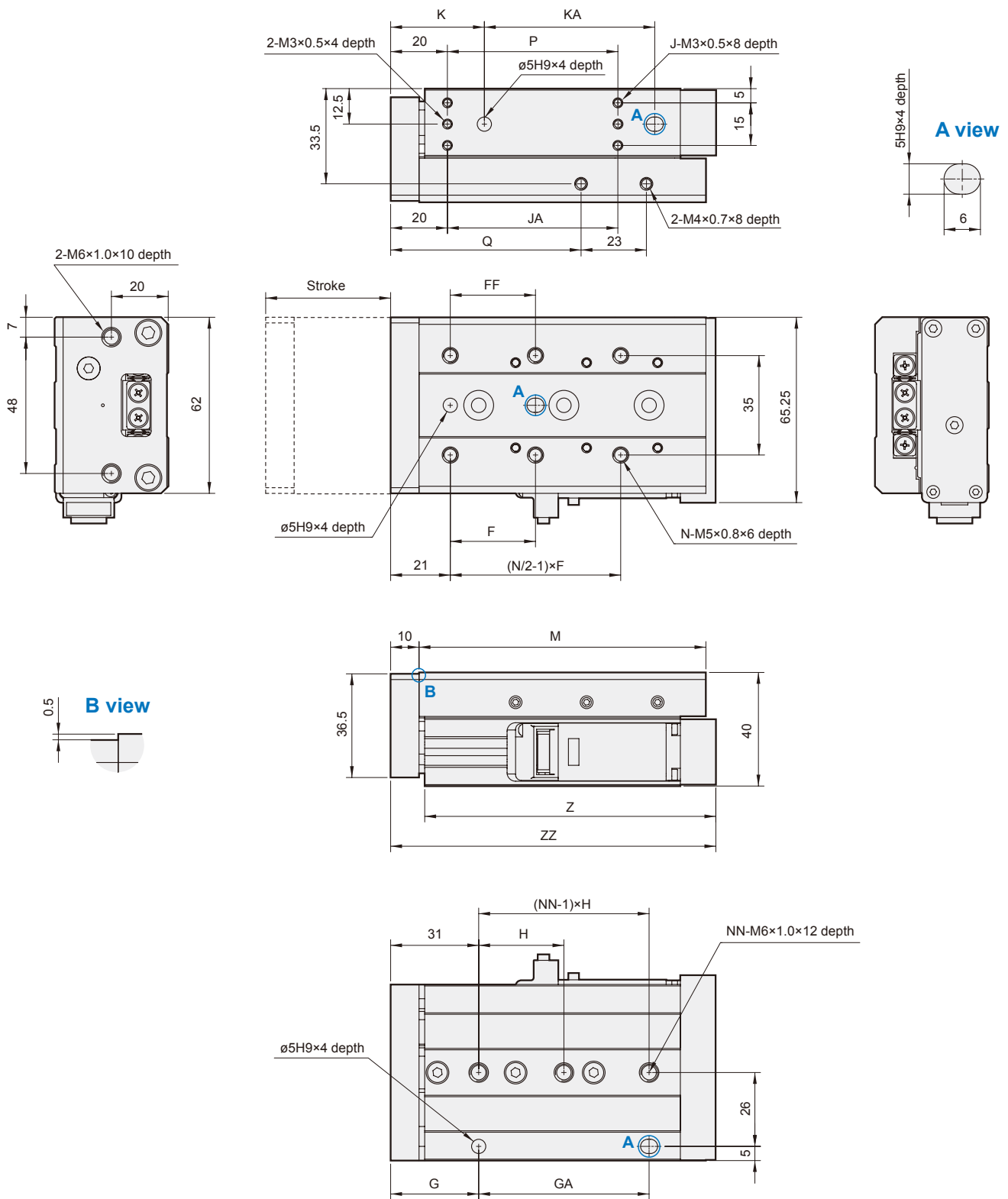
* With cable 2m.

MESS2 Dimensions $\phi 16$

MINIATURE ELECTRIC CYLINDER (WITH MOTOR)



Mindman



Unit: mm

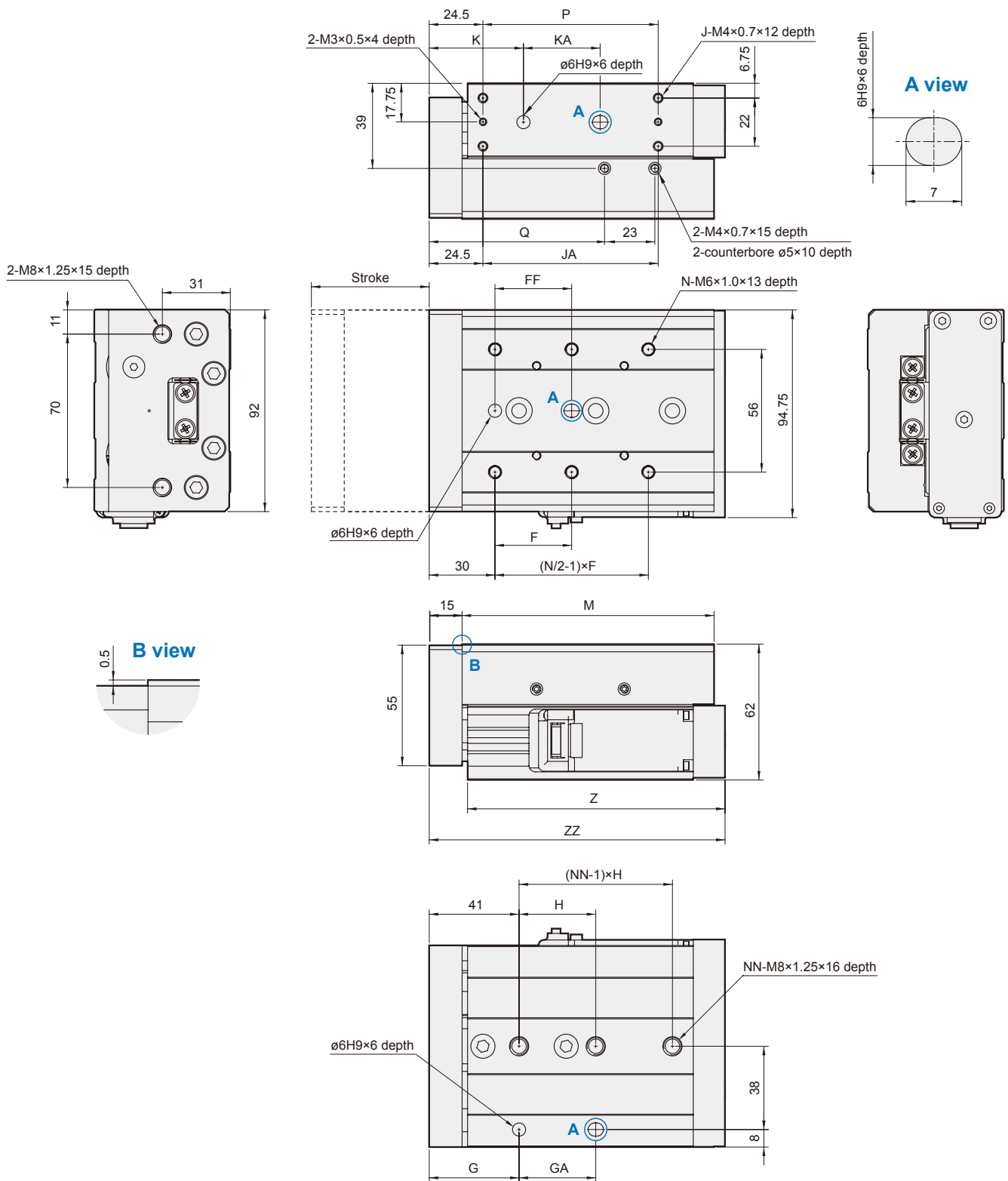
Stroke	F	FF	G	GA	H	J	JA	K	KA	M	N	NN	P	Q	Z	ZZ	Weight (g)
30	35	35	27	40	40	4	40	29	40	76	4	2	40	47	77.5	89.5	634
50	30	30	31	60	30	4	60	33	60	101	6	3	60	67	102.5	114.5	812
100	65	65	31	70	35	6	75	33	70	199	6	5	150	159	200.5	212.5	1503

MESS2 Dimensions $\phi 25$

MINIATURE ELECTRIC CYLINDER (WITH MOTOR)



Mindman



Unit: mm

Stroke	F	FF	G	GA	H	J	JA	K	KA	M	N	NN	P	Q	Z	ZZ	Weight (g)
30	50	40	30.5	45	45	4	40	32.5	45	92	4	2	40	60	94.5	112	1743
50	35	35	41	35	35	4	80	43	35	115	6	3	80	80	117.5	135	2030
75	60	60	41	70	35	6	120	43	70	156	6	4	120	111	158.5	176	2680
100	70	70	41	70	35	6	160	43	70	197	6	5	160	134	199.5	217	3380

MECQ1 / MECP series

ELECTRIC CYLINDER DRIVER / CONTROLLER



Mindman

Controller / Drive model	Type	Specification	Exterior	Features
MECQ1	Communication (485 & I/O)	24VDC±10% max. 500mA (Except motor current)		● Provide I/O control ● Provide 485 communication control ● Various control mode ● With status indicator ● With closed-loop monitoring functions
MECP	Pulse input			● Provide single/double pulse control ● Can amplify the current to improve motor performance ● With status indicator ● With closed-loop monitoring functions

Accessories

Order example	Description
MECQ1-P	Controller power adapter *1
MECQ1-M015	Actuator cable - 1.5M *1
MECQ1-M03	Actuator cable - 3M *1
MECQ1-M05	Actuator cable - 5M *1
MECQ1-S015	I/O signal cable - 1.5M (26Pin)
MECQ1-S03	I/O signal cable - 3M (26Pin)
MECQ1-C035	Transmission cable - 3.5M
MECP-C	Parameter setting adapter (Pulse input)
MECP-S015	I/O signal cable - 1.5M (20Pin)
MECP-S03	I/O signal cable - 3M (20Pin)

*1. Shared with MECP series.

Wire material

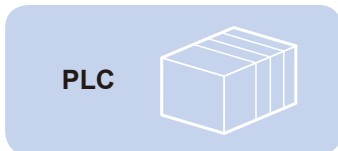
Wire	Material
I/O Signal cable	Isolation
Cable	Encoder cable
	Motor cable
	Isolation + Flexible
	Flexible

MECQ1 / MECP System structure

ELECTRIC CYLINDER DRIVER / CONTROLLER



Prepared by customer



I/O single cable

Controller / Driver	Model
MECQ1	MECQ1-S □
MECP	MECP-S □

Prepared by customer



Communication connection & Software setting items

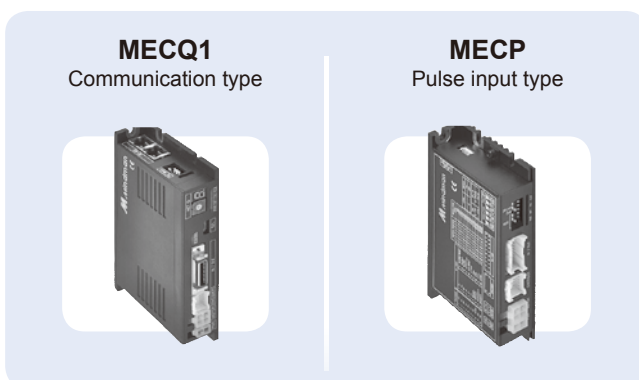
Controller / Driver	Model	Setting items
MECQ1	MECQ1-C035 (*1)	● Parameter setting ● Action program editing ● Action test ● Numerical monitoring
MECP	MECP-C (*2)	● Parameter setting

*1. Customers could prepare RJ45 to RS-485 by themselves.

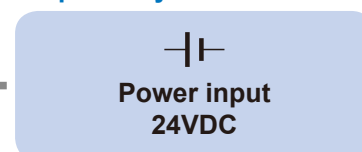
*2. Connectors only.

*3. Please download the software from the Mindman website.

Controller / Driver



Prepared by customer



Connect power supply

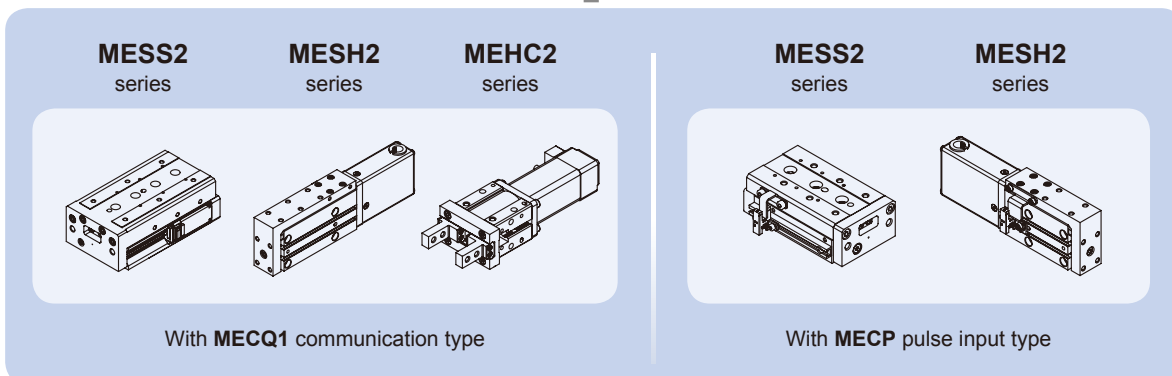
Controller / Driver	Model
MECQ1	MECQ1-P
MECP	

* Connectors only.

Motor cable

Controller / Driver	Model
MECQ1	MECQ1-M □
MECP	

Electric Actuator



Set the origin position directly by software

Need to install an external sensor to set the origin position
(Sensor set to be purchased separately)