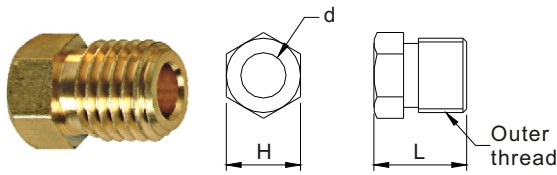
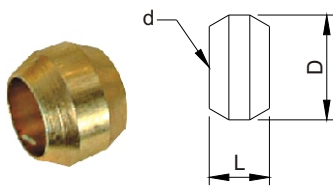


## Compression Bushing



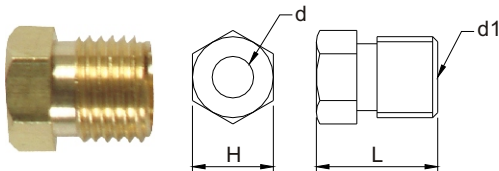
Model	Bore	d	L	Outer-thread	H	Weight(g)
PA-4	Ø4	Ø4.1	12	M8xP1.0	8	3
PA-6	Ø6	Ø6.1	12.5	M10xP1.0	10	4
PA-8	Ø8	Ø8.1	14	M14xP1.5	14	9
PA-10	Ø10	Ø10.1	15	M16xP1.5	16	12
PA-12	Ø12	Ø12.1	16	M18xP1.5	19	16

## Compression Sleeve



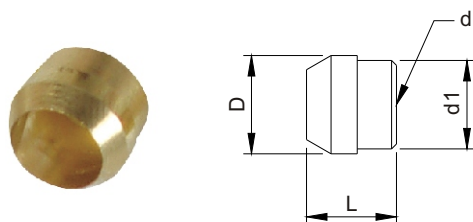
Model	Bore	d	D	L	Weight(g)
PB-4	Ø4	Ø4.1	Ø6	4.6	0.3
PB-6	Ø6	Ø6.1	Ø8	4.6	0.6
PB-8	Ø8	Ø8.1	Ø11	7	2
PB-10	Ø10	Ø10.1	Ø13.5	8	3
PB-12	Ø12	Ø12.1	Ø16	9	4

## Compression Bushing



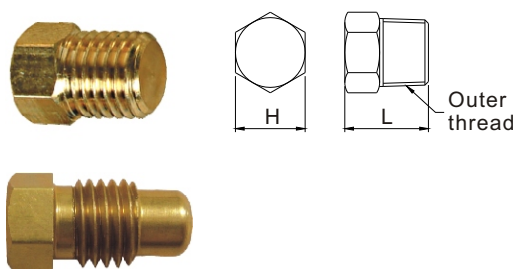
Model	Bore	d	d1	L	Outer-thread	H	Weight(g)
PA104	Ø4	Ø4.1	Ø5.5	12	M8xP1.0	8	3
PA106	Ø6	Ø6.1	Ø7.5	12.5	M10xP1.0	10	4
PA108	Ø8	Ø8.1	Ø9.5	14	M12xP1.0	14	10

## Compression Sleeve



Model	Bore	d	d1	D	L	Weight(g)
PB104	Ø4	Ø4.1	Ø5.4	Ø6	5.5	0.4
PB106	Ø6	Ø6.1	Ø7.4	Ø8	6	0.7
PB108	Ø8	Ø8.1	Ø9.4	Ø10	7	1

## Closure Plug

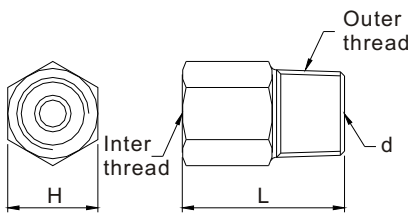
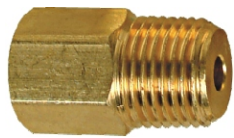


Model	L	Outer-thread	H	Weight(g)
PG-004	12	M8xP1.0	8	4
PG-1	12	PT1/8	10	6
PG-410	15	M10xP1.0	14	10
PUNOM080-1 (Central Bored Ø3)	16	M8xP1.0 (Long Type)	8	6

PUNOM080-1

※ In millimeter unless otherwise stated.

# Straight Adapter



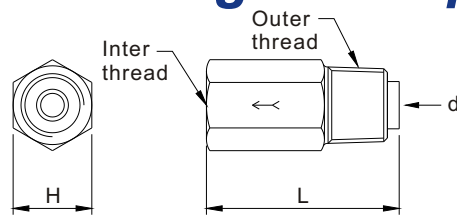
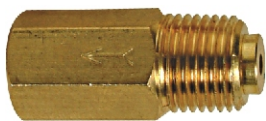
Model	Bore	d	L	H	Inter-thread	Outer-thread	Weight(g)
PD-401	Ø4	Ø3	18	10	M8xP1.0	PT1/8	8
PD-402	Ø4	Ø3	18	14	M8xP1.0	PT1/4	17
PD-403	Ø4	Ø3	18	17	M8xP1.0	PT3/8	28
PD-601	Ø6	Ø4	18	12	M10xP1.0	PT1/8	8
PD-602	Ø6	Ø5	18	14	M10xP1.0	PT1/4	14
PD-603	Ø6	Ø5	18	17	M10xP1.0	PT3/8	24
PD-801	Ø8	Ø5	26	17	M14xP1.5	PT1/8	22
PD-802	Ø8	Ø6	26	17	M14xP1.5	PT1/4	26
PD-803	Ø8	Ø7	26	17	M14xP1.5	PT3/8	30
PD-1002	Ø10	Ø7	30	19	M16xP1.5	PT1/4	33
PD-1003	Ø10	Ø9	30	19	M16xP1.5	PT3/8	35
PD-1202	Ø12	Ø7	34	21	M18xP1.5	PT1/4	42
PD-1203	Ø12	Ø9	34	21	M18xP1.5	PT3/8	46

### Special Items

Model	Bore	d	L	H	Inter-thread	Outer-thread	Weight(g)
PD-406	Ø4	Ø2	20	10	M8xP1.0	M6xP0.75	6
PD-4061	Ø4	Ø2	20	10	M8xP1.0	M6xP1.0	6
PD-410	Ø4	Ø3	18	12	M8xP1.0	M10xP1.0 TAP	6
PD-408	Ø4	Ø3	18	10	M8xP1.0	M8xP1.0	6
PD-606	Ø6	Ø1.9	18	12	M10xP1.0	M6xP0.75	8
PD-6061	Ø6	Ø1.9	18	12	M10xP1.0	M6xP1.0	8
PD-608	Ø6	Ø3	21	12	M10xP1.0	M8xP1.0	8
PD-610	Ø6	Ø4	18	12	M10xP1.0	M10xP1.0 TAP	8

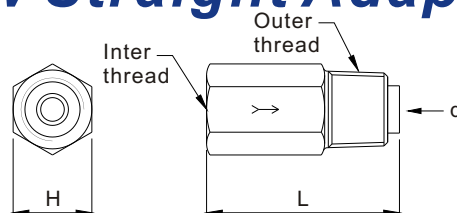
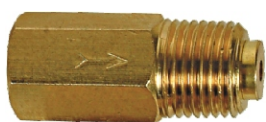
Model	L	H	Inter-thread	Outer-thread	Weight(g)
PD-101	18	12	PT1/8	PT1/8	9
PD-102	18	14	PT1/8	PT1/4	16
PD-202	28	19	PT1/4	PT1/4	14
PD-203	26	17	PT1/4	PT3/8	34

# One-Way Flow Straight Adapter



Model	Bore	d	L	H	Inter-thread	Outer-thread	Weight(g)
PD-4011	Ø4	Ø4.9	25	10	M8xP1.0	PT1/8	11
PD-6011	Ø6	Ø4.9	26	12	M10xP1.0	PT1/8	14

# Reverse Flow Straight Adapter



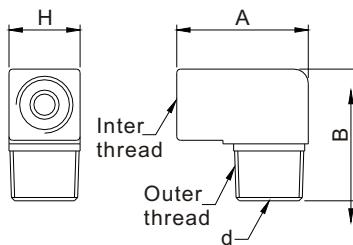
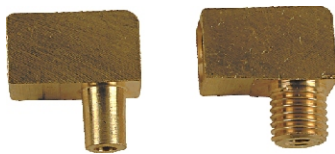
Model	Bore	d	L	H	Inter-thread	Outer-thread	Weight(g)
PD-4012	Ø4	Ø4.9	25	10	M8xP1.0	PT1/8	11
PD-6012	Ø6	Ø4.9	26	12	M10xP1.0	PT1/8	14

※ In millimeter unless otherwise stated.

# Elbow Adapter

Elbow Adapter/One-Way Flow Elbow Adapter/Reverse Flow Elbow Adapter

PH400



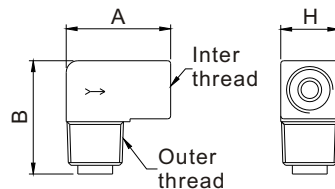
Model	Bore	d	A	B	H	Inter-thread	Outer-thread	Weight(g)
PH-400	Ø4	Ø3	18	18	10	M8xP1.0	Ø5.8-6.2	13
PH-401	Ø4	Ø4	18	18	10	M8xP1.0	PT1/8	13
PH-402	Ø4	Ø5	20	21	14	M8xP1.0	PT1/4	32
PH-601	Ø6	Ø4	20	20	12	M10xP1.0	PT1/8	20
PH-602	Ø6	Ø5	20	21	14	M10xP1.0	PT1/4	29
PH-801	Ø8	Ø4	26	29	17	M14xP1.5	PT1/8	52
PH-802	Ø8	Ø6	26	29	17	M14xP1.5	PT1/4	56
PH-803	Ø8	Ø8	26	29	17	M14xP1.5	PT3/8	59
PH-1002	Ø10	Ø7	29	31	19	M16xP1.5	PT1/4	70
PH-1003	Ø10	Ø8	29	31	19	M16xP1.5	PT3/8	76
PH-1202	Ø12	Ø7	33	34	21	M18xP1.5	PT1/4	91
PH-1203	Ø12	Ø10	33	34	21	M18xP1.5	PT3/8	95

### Special Items

Model	Bore	d	A	B	H	Inter-thread	Outer-thread	Weight(g)
PH-406	Ø4	Ø2	18	18	10	M8xP1.0	M6xP0.75	13
PH-4061	Ø4	Ø2	18	18	10	M8xP1.0	M6xP1.0	12
PH-408	Ø4	Ø3	18	18	10	M8xP1.0	M8xP1.0	13
PH-410	Ø4	Ø4	20	20	12	M8xP1.0	M10xP1.0	15
PH-6061	Ø6	Ø2	20	20	12	M10xP1.0	M6xP1.0	20
PH-608	Ø6	Ø3	20	20	12	M10xP1.0	M8xP1.0	20
PH-610	Ø6	Ø4	20	20	12	M10xP1.0	M10xP1.0 TAP	22

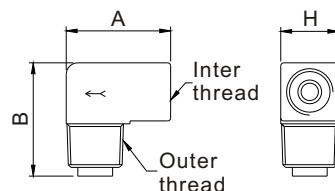
Model	d	A	B	H	Inter-thread	Outer-thread	Weight(g)
PH-101	Ø4	20	20	12	PT1/8	PT1/8	17
PH-102	Ø5	19.5	21	14	PT1/8	PT1/4	30
PH-201	Ø4	26	29	17	PT1/4	PT1/8	47
PH-202	Ø6	26	29	17	PT1/4	PT1/4	50
PH-203	Ø8	26	29	17	PT1/4	PT3/8	56
PH-303	Ø10	33	34	21	PT3/8	PT3/8	91

## One-Way Flow Elbow Adapter



Model	Bore	d	A	B	H	Inter-thread	Outer-thread	Weight(g)
PH-4011	Ø4	Ø4.9	18	19.5	10	M8xP1.0	PT1/8	11
PH-6011	Ø6	Ø4.9	20	21.5	12	M10xP1.0	PT1/8	14

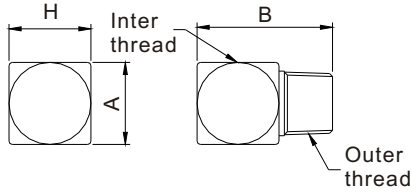
## Reverse Flow Elbow Adapter



Model	Bore	d	A	B	H	Inter-thread	Outer-thread	Weight(g)
PH-4012	Ø4	Ø4.9	18	19.5	10	M8xP1.0	PT1/8	11
PH-6012	Ø6	Ø4.9	20	21.5	12	M10xP1.0	PT1/8	14

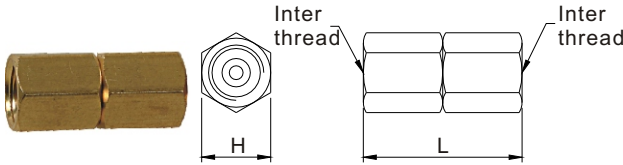
※ In millimeter unless otherwise stated.

# Plane Elbow Adapter



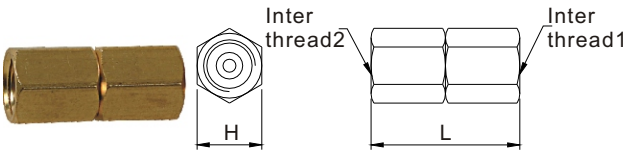
Model	A	B	Inter-thread	Outer-thread	H	Weight(g)
PI-408	12.7	21	M8xP1.0	M8xP1.0	12.7	12
PI-401	12.7	21	M8xP1.0	PT1/8	12.7	13
PI-601	12.7	21	M10xP1.0	PT1/8	12.7	13
PI-101	12.7	21	PT1/8	PT1/8	12.5	17
PI-1061	12	20	PT1/8	M6xP1.0	12	10
PI-106	12	20	PT1/8	M6xP0.75	12	10
PI-4061	12	20	M8xP1.0	M6xP1.0	12	14
PI-402	12.4	23	M8xP1.0	PT1/4	12.4	22
PI-1011	12.7	30	PT1/8	PT1/8	12.7	20
PI-102	12.4	23	PT1/8	PT1/4	12.4	18

# Connector A



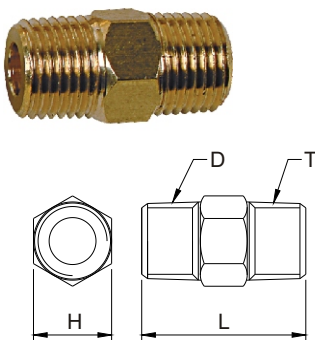
Model	Bore	H	L	Inter-thread	Weight(g)
PM-4	Ø4	10	23	M8xP1.0	17
PM-6	Ø6	12	25	M10xP1.0	12
PM-8	Ø8	17	33	M14xP1.5	40
PM-10	Ø10	19	36	M16xP1.5	51
PM-12	Ø12	21	39	M18xP1.5	65

# Connector B



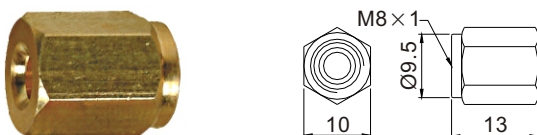
Model	Bore	H	L	Inter-thread1	Inter-thread2	Weight(g)
PN-4	Ø4	12	23	M8xP1.0	PT1/8	16
PN-6	Ø6	12	23	M10xP1.0	PT1/8	12
PN-8	Ø8	17	33	M14xP1.5	PT1/4	41
PN-10	Ø10	19	36	M16xP1.5	PT1/4	58
PN-12	Ø12	21	39	M18xP1.5	PT3/8	65

# Connector



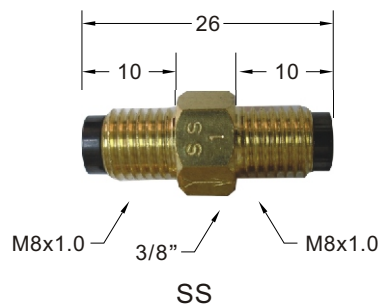
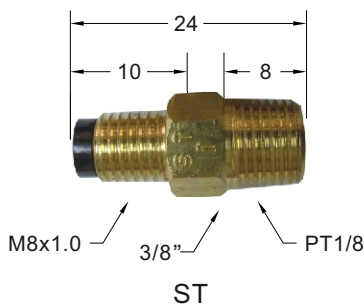
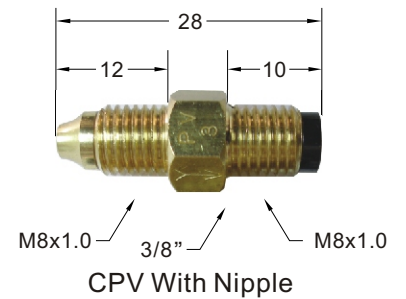
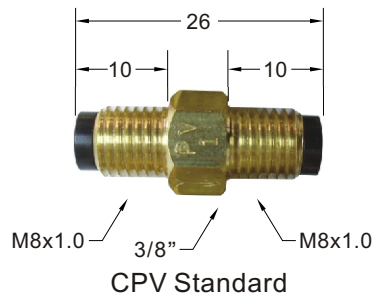
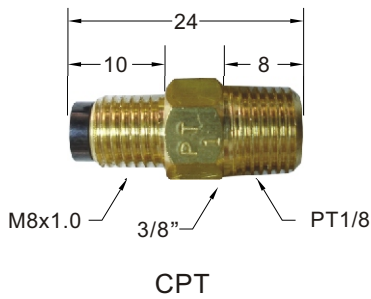
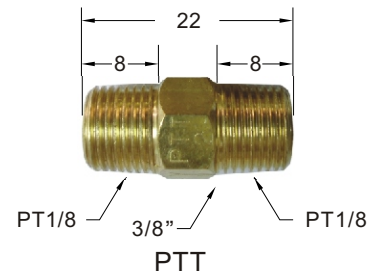
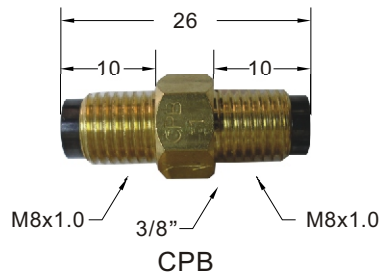
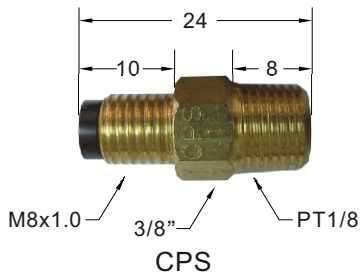
Model	DxT	Material	H	L	Weight(g)
CN-101	PT1/8xPT1/8	Brass	10	21	6
CN-202	PT1/4xPT1/4	Brass	14	25	12
CN-404	PT1/2xPT1/2	Iron	23	40	68
RN-102	PT1/8xPT1/4	Brass	14	27	16
RN-203	PT1/4xPT3/8	Brass	17	27	18
RN-304	PT3/8xPT1/2	Iron	21	39	56
PTD10100	M10xM10	Brass	10	20	10
PTD01021	PT1/8xPT1/4	Iron	14	32	20
PTD03031	PT3/8xPT3/8	Iron	17	36	42
PTD03061	PT3/8xPT3/4	Iron	27	47	108
PROCPV-1	M8xM8	Brass	10	22	7
PROCPS-1	M8xM1/8	Brass	10	22	9

# Compression Nut



Model	Inter-thread	Weight(g)
PR-08	M8xP1.0	4

※ In millimeter unless otherwise stated.



Specification	Model	Code					Outer-thread	Weight(g)
For Grease NLGI grades 0 ~ 000	CPS	1	2	3	4	5	M8xPT1/8	10
	CPB						M8xM8	9

Code				
1	2	3	4	5
Flow Rate				
1	2	4	8	16

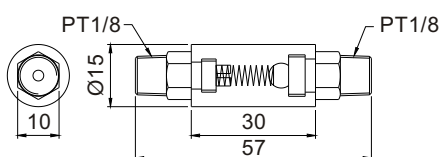
Specification	Model	Code					Outer-thread	Weight(g)
<ul style="list-style-type: none"> <li>One way flow with reverse stopper</li> <li>For large and small volume use</li> <li>Suitable for oil use</li> </ul>	PTT	1	2	3	4	5	PT1/8xPT1/8	10
	CPT						M8xPT1/8	10
	1. CPV Standard 2. CPV With Nipple						M8xM8	9

Code				
1	2	3	4	5
Flow Rate				
1	2	4	8	16

Specification	Model	Code					Outer-thread	Weight(g)	
<ul style="list-style-type: none"> <li>One way flow with reverse stopper</li> <li>For large volume use</li> <li>Suitable for oil use</li> </ul>	ST	0	1	2	3	4	5	M8xPT1/8	9
	SS							M8xM8	8

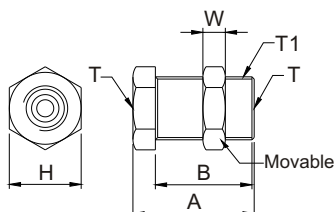
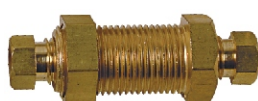
Code					
0	1	2	3	4	5
Flow Rate					
2	4	8	16	32	64

# Transparent Straight Adapter



Model	Outer-thread
DV-5	PT1/8

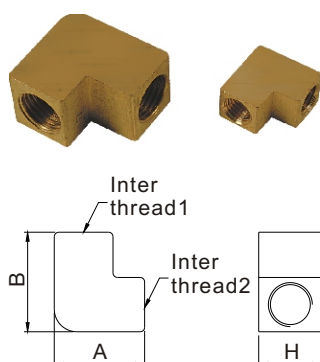
# Connector



Model	Bore	A	B	H	W	T	T1
PM-104	Ø4	28	23	14	5	M8xP1.0	M12xP1.0
PM-106	Ø6	27	22	16	5	M10xP1.0	M14xP1.0
PM-108	Ø8	33	26	21	7	M14xP1.0	M18xP1.0
PM-110	Ø10	36	28	23	8	M16xP1.5	M20xP1.5

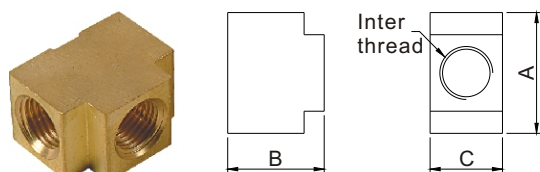
PS. The photo of connector is assembled with compression bushing and compression sleeve as a set. **Please specify if only need the connector itself.**

# Elbow Connector



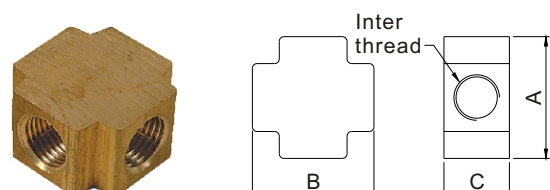
Model	Bore	d	A	B	Inter-thread1	Inter-thread2	H
FEA-404	Ø4	Ø3	18	18	M8xP1.0	M8xP1.0	10
FEA-808	Ø8	Ø6	29	31	M14xP1.5	M14xP1.5	19
FEA-1002	Ø10	Ø8	29	31	M16xP1.5	PS1/4	19
Model	Bore	d	A	B	Inter-thread1	Inter-thread2	H
PI220101			20	22	PS1/8	PS1/8	14
PI220202			26	29	PS1/4	PS1/4	17
PI220303			30	30	PS3/8	PS3/8	24.5

# 3 Way Connector



Model	Inter-thread	A	B	C	Weight(g)
PKD-01	PT1/8	26	20	14	34
PKD-02	PT1/4	30	24	18	47
PKD-03	PT3/8	40	30	21	86

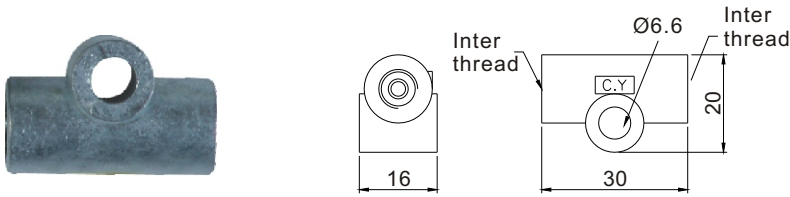
# 4 Way Connector



Model	Inter-thread	A	B	C	Weight(g)
PJD-01	PT1/8	26	26	14	38
PJD-02	PT1/4	30	30	18	58
PJD-03	PT3/8	40	40	21	105

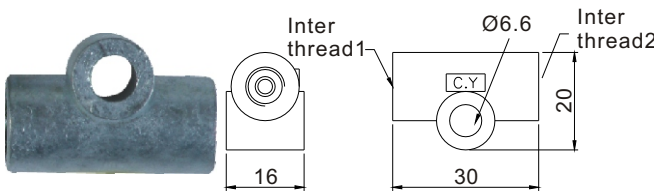
※ In millimeter unless otherwise stated.

## 2 Way Junction A



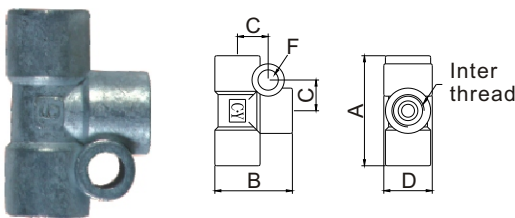
Model	Bore	Inter-thread	Weight(g)
JD-4	Ø4	M8xP1.0	27
JD-6	Ø6	M10xP1.0	23

## 2 Way Junction B



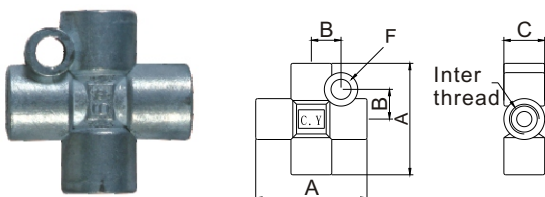
Model	Bore	Inter-thread1	Inter-thread2	Weight(g)
JD-601	Ø6	M10xP1.0	PT1/8	22
JD-406	Ø4xØ6	M8xP1.0	M10xP1.0	25

## 3 Way Junction



Model	Bore	A	B	C	D	F	Inter-thread	Weight(g)
PKD-4	Ø4	29	19.5	8.5	12	Ø6.2	M8xP1.0	16
PKD-6	Ø6	34	24	9.5	15		M10xP1.0	32
PKD-8	Ø8	42	31	14.5	19	Ø6.6	M14xP1.5	64
PKD-10	Ø10	51	37	16	24		M16xP1.5	89

## 4 Way Junction



Model	Bore	A	B	C	F	Inter-thread	Weight(g)
PJD-4	Ø4	30	8	11	Ø5.3	M8xP1.0	23
PJD-6	Ø6	34	9	15.5	Ø5.8	M10xP1.0	33
PJD-8	Ø8	42	12	22	Ø6.8	M14xP1.5	94

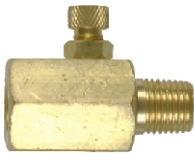
## Vertical Junction



Model	Outlet Num.	Bore	A	B	C	Inter-thread	Weight(g)
PHD-301	3	Ø4	21	21	21	M8xP1.0	18
PHD-401	4		30	21	21		23
PHD-501	5		30	30	21		27

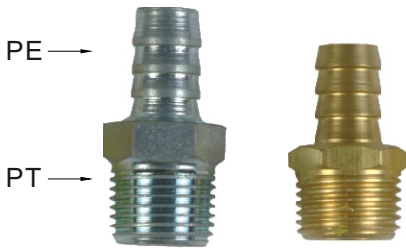
※ In millimeter unless otherwise stated.

# Adjustable Flow Valve



Model	Specification	Outer-thread
M18028	PT1/4"*PT1/4"	96

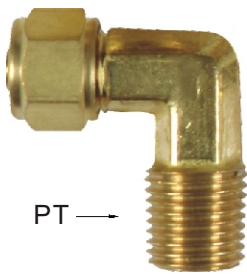
## Hose Fitting



Various kinds of specification are available on request

Model	PTxPE	Weight(g)	Model	PTxPE	Weight(g)
PIP04100	PT1/8xPE5/16	13	PIP16120	PT1/2xPE3/8	41
PIP04120	PT1/8xPE3/8	13	PIP16160	PT1/2xPE1/2	43
PIP08080	PT1/4xPE1/4	17	PIP16240	PT1/2xPE3/4	64
PIP08100	PT1/4xPE5/16	17	PIP16480	PT1/2xPE1	84
PIP08120	PT1/4xPE3/8	19	PIP24120	PT3/4xPE3/8	65
PIP08160	PT1/4xPE1/2	24	PIP24160	PT3/4xPE1/2	61
PIP12080	PT3/8xPE1/4	25	PIP24240	PT3/4xPE3/4	81
PIP12100	PT3/8xPE5/16	24	PIP24320	PT3/4xPE1	90
PIP12120	PT3/8xPE3/8	28	PIP32240	PT1xPE3/4	104
PIP12160	PT3/8xPE1/2	28	PIP32320	PT1xPE1	116
PIP16100	PT1/2xPE5/16	38			

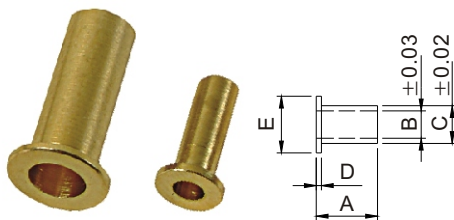
## Hose Fitting



Various kinds of specification are available on request

Model	PTxPE	Weight(g)
SD421001	PT1/8xPE5/16	20
SD421002	PT1/4xPE1/4	20
SD421003	PT1/4xPE3/8	28
SD421004	PT1/2xPE1/2	64
SD421005	PT1/8xPE1/4	10
SD421006	PT3/8xPE3/8	32
SD421007	PT1/2xPE3/8	52
SD421008	PT1/4xPE5/16	24
SD421204	Ø12xPT1/2	64

## Connector Insert



Model	Bore	A	B	C	D	E
P0-4	Ø4	10	1.6	2.2	0.5	4
P0-401	Ø4	10	1.7	2.5	0.5	4
P0-403	Ø4	10	1.6	2.1	0.5	4
P0-6	Ø6	11	3.4	4	0.5	6
P0-601	Ø6	12	3.6	4.2	0.5	6
P0-8	Ø8	15	4.7	5.4	0.5	8

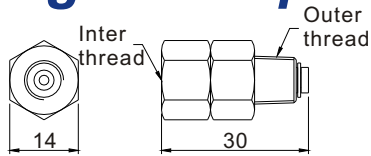
## Brush



Model	Inter-thread	Weight(g)
M25006S	M10xP1.0 Ø6	21.5
M25006		17

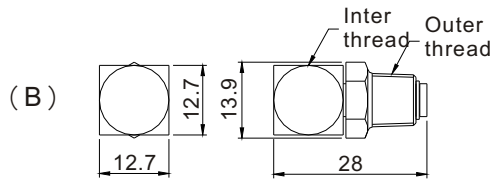
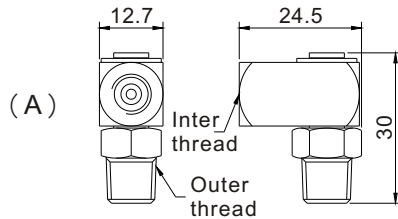
※ In millimeter unless otherwise stated.

# Swivel Straight Adapter



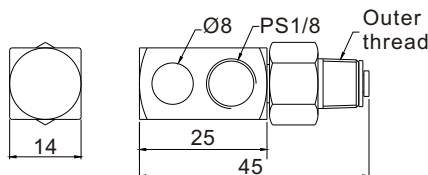
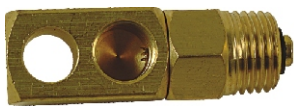
Model	Inter-thread	Outer-thread	Weight(g)
SS-101	PT1/8	PT1/8	26
SS-401	PT1/8	M8xP1.0	28

# Plane Swivel Elbow Adapter



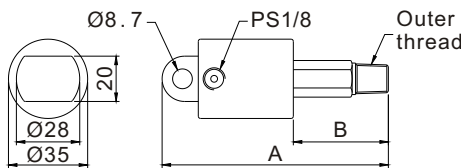
Model	Inter-thread	Outer-thread	Weight(g)
ES-401 (A)	M8xP1.0	PT1/8	38
ES-601 (A)	M10xP1.0	PT1/8	38
Model	Inter-thread	Outer-thread	Weight(g)
ES-101 (B)	PT1/8	PT1/8	36

# Brass Swivel Fitting



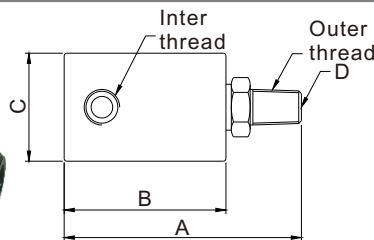
Model	Outer-thread	Weight(g)
PWN-101	PT1/8	46
PWN-201	PT1/4	50

# Swivel



Model	Outer-thread	A	B	Weight(g)
PWN-130	PT1/8	88	30	150
PWN-142	PT1/8	100	42	160
PWN-160	PT1/8	118	60	180
PWN-230	PT1/4	88	30	160
PWN-242	PT1/4	100	42	170
PWN-260	PT1/4	118	60	190
PWN-342	PT3/8	100	42	154
PWN-360	PT3/8	118	60	225

# Swivel



◆ Order Code :

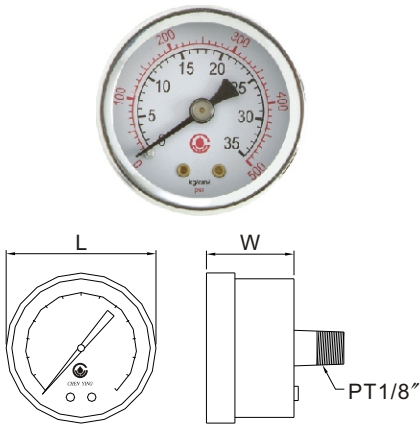
RU-02 — L — A — ※ Special Request

Model L : Left Thread 02 to 15  
 A : For Air W : For Water  
 H : High Speed (RU-02~04), 3500~4000 RPM  
 S : Standard Speed 1800~2000 RPM

Model	Thread	Bore	A	B	C	D	Inter-thread	Outer-thread	Weight(g)
RU-02	Left or Right Thread	PT1/4	88	60	Ø40	Ø7	PT1/4	PT1/4	256
RU-03		PT3/8	88	60	Ø40	Ø9	PT3/8	PT3/8	265
RU-04		PT1/2	104	70	Ø50	Ø12	PT1/2	PT1/2	484
RU-06		PT3/4	122	80	Ø60	Ø16	PT3/4	PT3/4	776
RU-10		PT1	134	93	Ø70	Ø20	PT1	PT1	1144
RU-12		PT11/4	160	110	Ø85	Ø28	PT11/4	PT11/4	1987
RU-15		PT11/2	170	120	Ø93	Ø32	PT11/2	PT11/2	2593

※ In millimeter unless otherwise stated.

# Horizontal Pressure Gauge

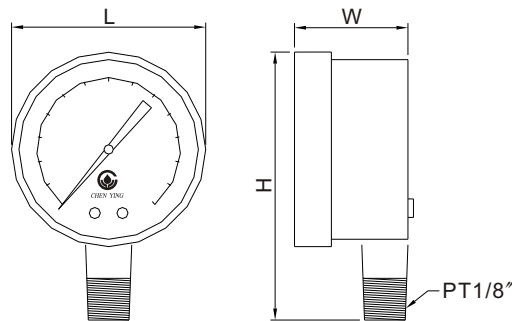


Model	Specification	L (mm)	W (mm)	Size	Weight (g)	Gauge Inside
M06001	7kgf/cm <sup>2</sup>	42.10	24.60	1 1/2"	58	Dry
M06003	15kgf/cm <sup>2</sup>	42.10	24.67		60	
M06009	35kgf/cm <sup>2</sup>	42.15	24.68		60	
M06013	40kgf/cm <sup>2</sup>	43.95	26.40		101	With Oil
M06029	14kgf/cm <sup>2</sup>	44.05	26.33		101	
M06030	70kgf/cm <sup>2</sup>	43.95	26.40		100	

# Vertical Pressure Gauge



Model	Specification	L (mm)	W (mm)	H (mm)	Size	Weight (g)	Gauge Inside
M06010	35kgf/cm <sup>2</sup>	43	24	58	1 1/2"	56	Dry



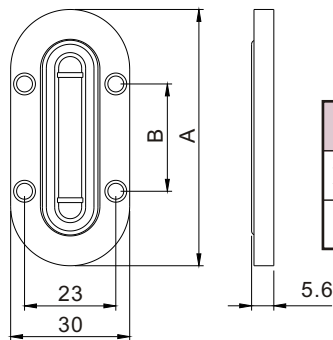
# Oil Window



For CLA-8



For CTA-8  
CLA-6



Model	A	B	Weight(g)
M11001 (Small)	66.5	27	24
M11003 (Big)	98.5	44.5	36

# Float Switch



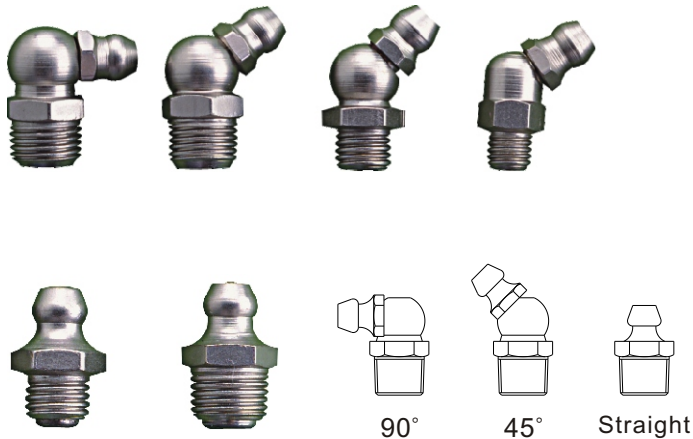
41mm

Model	Outer-thread	Specification	Weight(g)
M21005	M8xP1.25	White Ballcock, NO Contact	10
M21006	M8xP1.25	White Ballcock, NC Contact	
M21001	PS1/8	Black Ballcock, NO Contact	12
M21002	PS1/8	Black Ballcock, NC Contact	
S21003	PS1/8	Black Ballcock With Float Pillar, NO Contact	68
S21006	PS1/8	Black Ballcock With Float Pillar, NC Contact	

※S21003/S21006 Please specify the length of the float pillar, or the size of the reservoir and the model of lubricator while ordering.

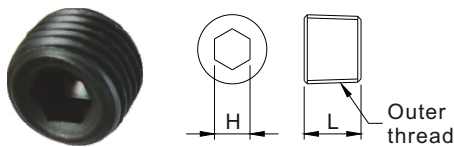
※ In millimeter unless otherwise stated.

# Grease Nipple



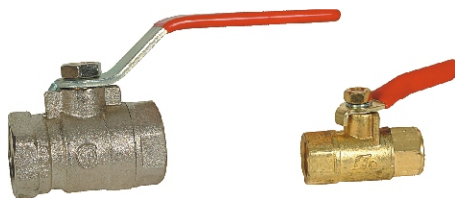
Model	Outer-thread	Angle
PJ000600	M6xP1.0	Straight
PJ000645	M6xP1.0	45°
PJ000690	M6xP1.0	90°
PJ000800	M8xP1.0	Straight
PJ000845	M8xP1.0	45°
PJ010890	M8xP1.0	90°
PJ010100	PT1/8	Straight
PJ010145	PT1/8	45°
PJ010190	PT1/8	90°
PJ010200	PT1/4	Straight
PJ010245	PT1/4	45°
PJ010290	PT1/4	90°
PJ010300	PT3/8	Straight
PJ021600	PS1/16	Straight
PJ021690	PS1/16	90°

# Closure Plug



Model	Outer-thread	H	L	Weight(g)
PUN-16	PT1/16	4	6.5	2
PUN-01	PT1/8	5	8	3
PUN-02	PT1/4	6	9	7
PUN-03	PT3/8	8	10	11
PUN-04	PT1/2	10	12	23
PUN-06	PT3/4	14.4	16	47
PUN-08	PT1	17	17	80

# Valve Gate A



Model	Thread
PWSA06	Inter-thread 1/8" * Outer-thread 1/8"
PWSA08	Both Inter-thread 1/4"
PWSA08-1	Inter-thread 1/4" * Outer-thread 1/4"
PWSA12	Both Inter-thread 3/8"
PWSA16	Both Inter-thread 1/2"
PWSA24	Both Inter-thread 3/4"
PWSA32	Both Inter-thread 1"

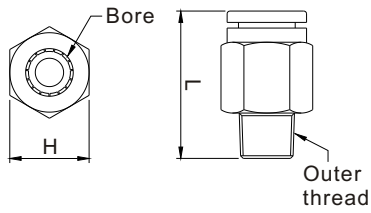
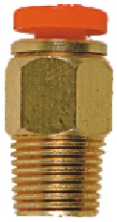
# Ball Gate B



Model	Thread
PWSB08	Both Inter-thread 1/4"
PWSB12	Both Inter-thread 3/8"
PWSB16	Both Inter-thread 1/2"
PWSB24	Both Inter-thread 3/4"
PWSB32	Both Inter-thread 1"

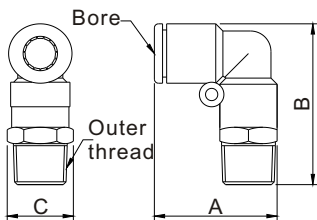
※ In millimeter unless otherwise stated.

# Quick Straight Adapter



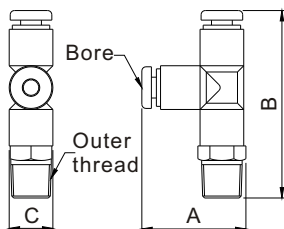
Model	Bore	Outer-thread	H	L	Weight(g)
SPC4-01	Ø4	PT1/8	10	22	8
SPC4-02		PT1/4	14	21	26
SPC6-01	Ø6	PT1/8	12	21	20
SPC6-02		PT1/4	14	22	22
SPC6-03		PT3/8	17	25	30
SPC8-01	Ø8	PT1/8	14	26	18
SPC8-02		PT1/4	14	25	22
SPC8-03		PT3/8	17	22	30
SPC10-02	Ø10	PT1/4	17	31	26
SPC10-03		PT3/8	17	39	30
SPC12-03	Ø12	PT3/8	19	28	40

# Quick Elbow Adapter



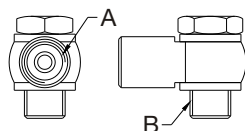
Model	Bore	Outer-thread	A	B	C	Weight(g)
SPL4-01	Ø4	PT1/8	23	30.5	12	8
SPL4-02		PT1/4	24	34	16	26
SPL6-01	Ø6	PT1/8	26	33	14	20
SPL6-02		PT1/4	27	35	16	22
SPL6-03		PT3/8	29	35	17	30
SPL8-01	Ø8	PT1/8	31	37	15	18
SPL8-02		PT1/4	31	39	16	22
SPL8-03		PT3/8	33	43	17	30
SPL10-02	Ø10	PT1/4	37	48	19	26
SPL12-03	Ø12	PT3/8	40	51	24	40

# Quick 3 Way Adapter



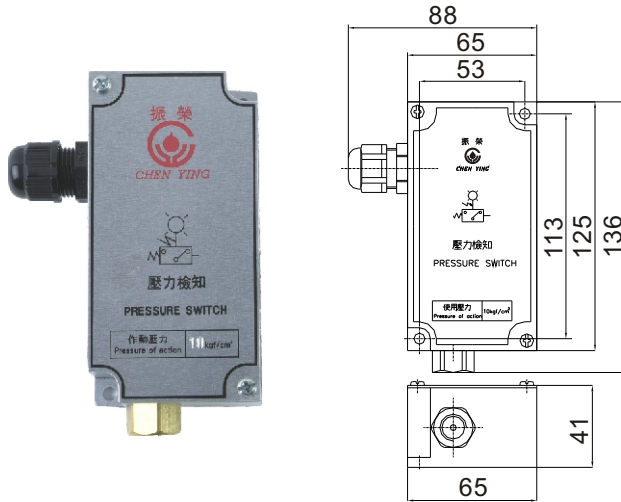
Model	Bore	Outer-thread	A	B	C	Weight(g)
SPD4-01	Ø4	PT1/8	24	45	11	8
SPD4-02		PT1/4	25	49	16	26
SPD6-02	Ø6	PT1/4	27	49	16	22
SPD8-01	Ø8	PT1/8	32	57	16	18

# Swivel Fitting



Model	A	B
BF-404	M8xP1.0	M8xP1.0
BF-606	M10xP1.0	M10xP1.0

# Pressure Switch



Model	Operation Pressure	Weight(g)
M21011	6 kg/cm <sup>2</sup>	350
M21012	10 kg/cm <sup>2</sup>	
M21013	1 kg/cm <sup>2</sup>	

## Socket Pressure Switch



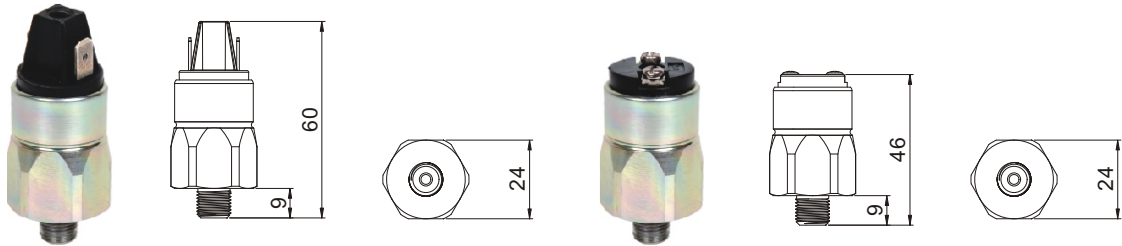
Model	Specification	Operation Pressure	Weight(g)
20140	NO 8±1.0 kg/cm <sup>2</sup>	ON 8kg/cm <sup>2</sup> ; OFF 6kg/cm <sup>2</sup>	32
20141	NC 8±1.0 kg/cm <sup>2</sup>	ON 6kg/cm <sup>2</sup> ; OFF 8kg/cm <sup>2</sup>	
20142	NO 1±0.2 kg/cm <sup>2</sup>	ON 1.2kg/cm <sup>2</sup> ; OFF 0.8kg/cm <sup>2</sup>	
20143	NC 1±0.2 kg/cm <sup>2</sup>	ON 0.8kg/cm <sup>2</sup> ; OFF 1.2kg/cm <sup>2</sup>	
20163	NC 3.5±0.5 kg/cm <sup>2</sup>	ON 3kg/cm <sup>2</sup> ; OFF 4kg/cm <sup>2</sup>	
20172	NC 14±2.0 kg/cm <sup>2</sup>	ON 11kg/cm <sup>2</sup> ; OFF 14kg/cm <sup>2</sup>	

## Adjustable Pressure Switch



Model	Operation Pressure	Max Pressure (kg/cm <sup>2</sup> )	Thread	Weight(g)
M21039	0~3kg/cm <sup>2</sup>	11	With one adapter (Outer-thread PT3/8 and inter-thread PT7/16")	420
M21040	0~6kg/cm <sup>2</sup>	16.5		
M21041	0~10kg/cm <sup>2</sup>	16.5		
M21042	0~30kg/cm <sup>2</sup>	30		

## DS Type Socket Pressure Switch



Push-On Type

Screw Type

Model	Voltage	Overload Current	Switching Frequency	Contact Type	Connection Type	Connection Thread	Pressure Range	Mechanical Life Expectancy
DS	DC 42V	Max. 3A	120/min	NO	Screw or Push-On	PT 1/8	8~50 Bars	10 <sup>6</sup> cycles
	AC 220V			NC				

◆ Order Code :

DS	D	NO	008	S	O	※
Model	Voltage	Contact Type	Pressure	Connection Type	Protection Cap	Special Request
	D : DC 42V C : AC 220V	NO : NO NC : NC	008 : 8 Bars 010 : 10 Bars 020 : 20 Bars 030 : 30 Bars 040 : 40 Bars 050 : 50 Bars	S : Screw Type P : Push-On Type	C : With Waterproof Cap O : Without Waterproof Cap	

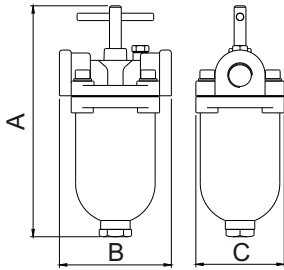
# Oil Auto Cleaner



(Chen Ying)



(Japanese Filter)



Model	Specification	A	B	C	Mesh	Max Pressure	Weight (g)	
A-102	PT1/4xPT1/4	160	76	60	60	25kgf/cm <sup>2</sup>	750	
					100			
A-103	PT3/8xPT3/8				60			750
					100			
A-104	PT1/2xPT1/2	200	89	71	60		1150	
					100			
	PT3/4xPT3/4				60			
					100			
A-106	PT3/4xPT3/4	270	120	85	60 (20 μ)			1900
A-110	PT1xPT1				60 (20 μ)			2200

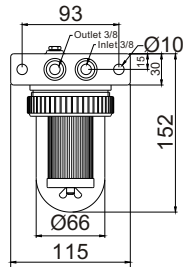
◆Order Code :

A-102 — A  
 |  
 Model A : 60Mesh  
 A-102 B : 100Mesh  
 A-103

◆Order Code :

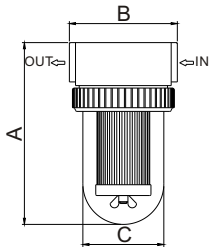
A-104 — A — 1  
 | |  
 Model A : 60Mesh 1 : PT1/2xPT1/2  
 B : 100Mesh 2 : PT3/4xPT3/4

# Fixed Oil Filter



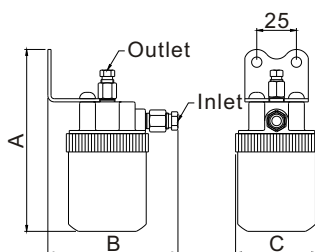
Model	Mesh	Weight(g)
PEF20	100	1036

# Oil Filter



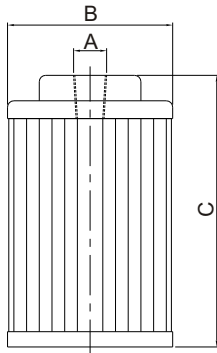
Model	Specification	A	B	C	Max Pressure	Mesh	Weight(g)
FL-2	PT1/4xPT1/4	148	88	Ø66	10kgf/cm <sup>2</sup>	100	875
FL-3	PT3/8xPT3/8	148	88	Ø66			867
FL-6	PT3/4xPT3/4	218	114	Ø93			1340
FL-8	PT1xPT1	218	114	Ø93			1350

# Oil Filter



Model	Specification	A	B	C	Max Pressure	Mesh	Weight(g)
A-101-1	PT1/8xPT1/8	105	85	52	10kgf/cm <sup>2</sup>	40	260
A-101-3		115	85	52	30kgf/cm <sup>2</sup>		440
A-101-2		115	85	52	30kgf/cm <sup>2</sup>	400 (37 μ)	440

※ In millimeter unless otherwise stated.



Model	A	B	C	Mesh
PFS0237059	PT1/4	Ø37	59	100Mesh
PFS0237100	PT1/4	Ø37	100	100Mesh
PFS0245060	PT1/4	Ø45	60	100Mesh
PFS0245080	PT1/4	Ø45	80	80Mesh
PFS0245100	PT1/4	Ø45	100	80Mesh
PFS0250080	PT1/4	Ø50	80	100Mesh
PFS0260080	PT1/4	Ø60	80	100Mesh
PFS0260100	PT1/4	Ø60	100	80Mesh
PFS0260150	PT1/4	Ø60	150	80Mesh
PFS0337100	PT3/8	Ø37	100	100Mesh
PFT0345060	PT3/8	Ø45	60	100Mesh
PFT0350100	PT3/8	Ø50	100	100Mesh
PFT0360080	PT3/8	Ø60	80	100Mesh
PFT0360100	PT3/8	Ø60	100	100Mesh
PFT0360150	PT3/8	Ø60	150	100Mesh
PFT0435100	PT1/2	Ø35	100	100Mesh
PFT0460100	PT1/2	Ø60	100	100Mesh
PFT0460150	PT1/2	Ø60	150	100Mesh

※ In millimeter unless otherwise stated.

## Tube Cutter



Model	Weight(g)
M25004	30

## Net Plastic Pipe

◆ Order Code :



RPH — 2 ——— 0100

2 : 1/4"

3 : 5/16"

4 : 3/8"

5 : 1/2"

7 : 3/4"

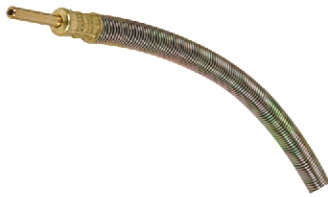
8 : 1 1/4"

0100 : 100mm

Length could be custom  
-made on request

Model	Pipe Dia.
RPH-2	1/4"
RPH-3	5/16"
RPH-4	3/8"
RPH-5	1/2"
RPH-7	3/4"
RPH-8	1 1/4"

## Flexible Hose



Order Code	Pipe Dia.	Length	Max Pressure	Suitable Lubricant
PPST00	Ø4、Ø6	100mm~9000mm	40kg/cm <sup>2</sup>	Oil

◆Order Code :

PPST00 — 4 — 0100 — ※

Model 4 : Ø4 0100 : 100mm S: With Compression  
Flexible Hose 6 : Ø6 to Bushing and Sleeve  
9000 : 9000mm

## High Pressure Flexible Hose



Order Code	Pipe Dia.	Length	Max Pressure	Suitable Lubricant
PPST30	Ø4、Ø6	200mm~5000mm	150kg/cm <sup>2</sup>	Grease

◆Order Code :

PPST30 — 4 — 0200

Model 4 : Ø4 0200 : 200mm  
High Pressure 6 : Ø6 to  
Flexible Hose 5000 : 5000mm

## High Pressure Flexible Hose



Order Code	Pipe Dia.	Length	Max Pressure	Suitable Lubricant
PPST40	Ø4、Ø6	100mm~9000mm	70kg/cm <sup>2</sup>	Grease Oil

◆Order Code :

PPST40 — 4 — 0100

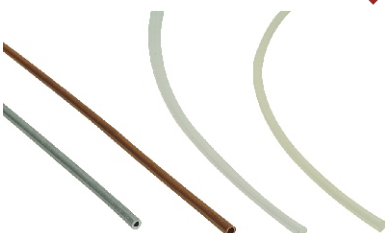
Model 4 : Ø4 0100 : 100mm  
High Pressure 6 : Ø6 to  
Flexible Hose 9000 : 9000mm

## Nylon Pipe Spring



Model	Spring Dia.	Bore x Length	Weight(g)
SG-4450	Ø4.5	Ø4x450mm	14
SG-41800	Ø4.5	Ø4x1800mm	52
SG-6450	Ø6.5	Ø6x450mm	22
SG-61800	Ø6.5	Ø6x1800mm	72

## Pipes



◆Order Code :

PU — 4 — 100 (M)

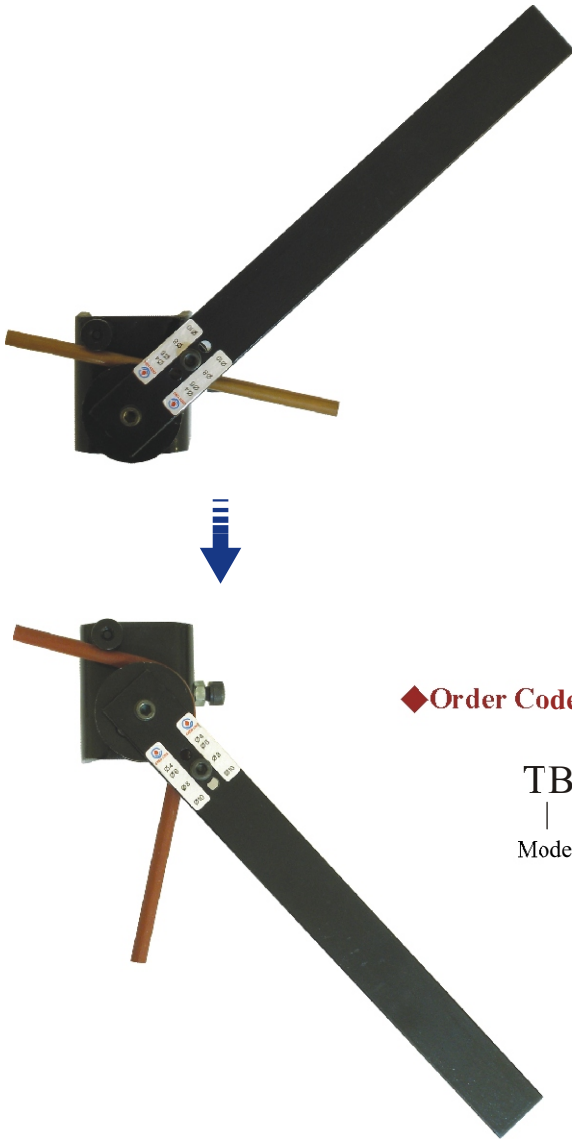
Model 4 : Ø4 100 : 100M  
PU : PU Pipe 6 : Ø6  
PE : PE Pipe 8 : Ø8  
N : Nylon Pipe 10 : Ø10  
C : Copper Pipe 12 : Ø12  
A : Aluminum Pipe

Model	Length	Pipe Dia.
PU Pipe	100M/Ro11	Ø4
Nylon Pipe		Ø6
PE Pipe		Ø8
Aluminum Pipe	50M/Ro11	Ø10
Copper Pipe		Ø12

※ In millimeter unless otherwise stated.

# Manual Multiple Size $\varnothing 4 \sim \varnothing 10$ Tube Bender

Manual Multiple Size  $\varnothing 4 \sim \varnothing 10$  Tube Bender



### ◆ Features

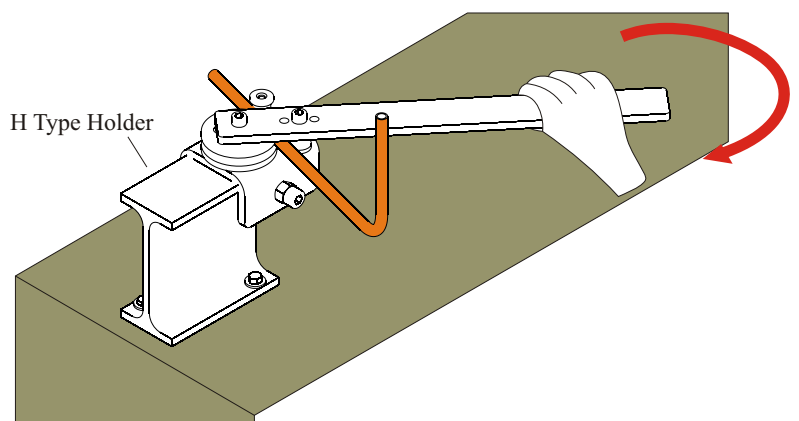
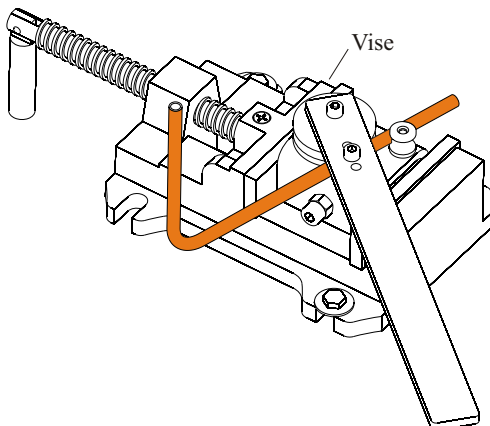
1. It is suitable for bending  $\varnothing 4 \sim \varnothing 10$  tubes.
2. Easy to bend variable kinds of tubes and pipes, such as cooper tube, aluminum tube, iron tube, etc.
3. Its compact design permits a great deal of mobility, as well as flexibility of location.
4. Multiple size of grooved disk  $\varnothing 4$ ,  $\varnothing 6$ ,  $\varnothing 8$ , and  $\varnothing 10$  are available for choice.
5. This tube bender may be mounted to a vise or H type holder or anything rigid enough not to twist or move during the bending operation.
6. Please refer to the Tube Bender Instruction Manual for operation details.

### ◆ Order Code :

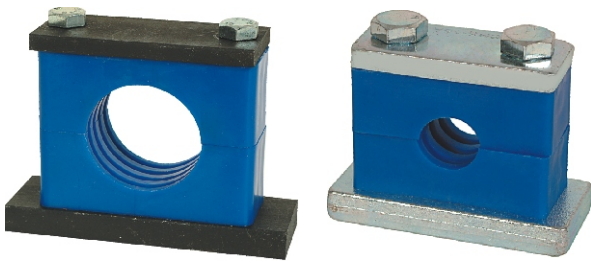
TB	—	4	—	6	—	8	—	10	—	※
Model		$\varnothing 4$		$\varnothing 6$		$\varnothing 8$		$\varnothing 10$		Special Request
										※D : Only Grooved Disk D $\varnothing 4$ , D $\varnothing 6$ , D $\varnothing 8$ , D $\varnothing 10$



### ◆ Tube Bender Instruction Example



# High Pressure Pipe Clamps



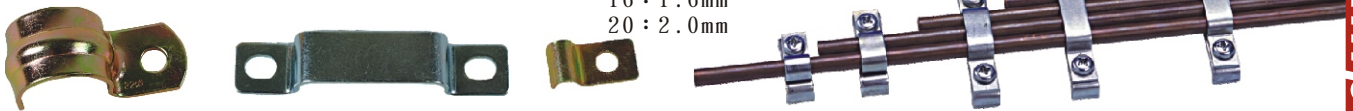
Specification	Diameter	Bore
6A	10.5mm	
8A	13.8mm Standards	PT 1/4
	12mm Special Item1	
	16mm Special Item2	
10A	17.3mm	PT 3/8
15A	21.7mm	PT 1/2
20A	27.2mm	PT 3/4
25A	34mm Standards	PT 1
	25mm Special Item1	
	30mm Special Item2	
32A	42.7mm	PT 1 1/4
40A	48.6mm	PT 1 1/2
50A	60.5mm	PT 2
65A	76.3mm	PT 2 1/2
80A	89.1mm	PT 3
100A	114.3mm	PT 4
125A	140mm	PT 5

## Pipe Clips

◆ Order Code :

PZ — 1 — 1 — 04 — 07

Fixed Hole Num.	Pipe Number	Pipe Diameter	Thickness(mm)
1 : 1 fixed hole	1 : 1 pipe	04 : Ø4	07 : 0.7mm
2 : 2 fixed holes	to	to	10 : 1.0mm
3 : 3 fixed holes	7 : 7 pipe	28 : Ø28	12 : 1.2mm
			15 : 1.5mm
			16 : 1.6mm
			20 : 2.0mm



No	Order Code	Fixed Hole Num.	Pipe Dia.	Pipe Num.	Thickness (mm)	Width(mm)	Length (mm)	Fixed Hole Dia.(mm)
1	PZ-110407	1	Ø4	1	0.7	10	19	5
2	PZ-120410	1	Ø4	2	1.0	10	28	5
3	PZ-130410	1	Ø4	3	1.0	10	27	5
4	PZ-140410	1	Ø4	4	1.0	10	31	5
5	PZ-150410	1	Ø4	5	1.0	10	35	5
6	PZ-110610	1	Ø6	1	1.0	10	23	5
7	PZ-120610	1	Ø6	2	1.0	10	28	5
8	PZ-130610	1	Ø6	3	1.0	12	34	5
9	PZ-110810	1	Ø8	1	1.0	10	23	5
10	PZ-120810	1	Ø8	2	1.0	12	32	5
11	PZ-111010	1	Ø10	1	1.0	10	27	5
12	PZ-111212	1	Ø12	1	1.2	12	31	5
13	PZ-111516	1	Ø15	1	1.6	20	43	7
14	PZ-110320	1	PS3/8 (Ø16.67)	1	2.0	20	47	7
15	PZ-110420	1	PS1/2 (Ø21)	1	2.0	20	52	7
16	PZ-112216	1	Ø22	1	1.6	20	48	7
17	PZ-110620	1	PS3/4 (Ø26.44)	1	2.0	20	55	7
18	PZ-112816	1	Ø28	1	1.6	20	57	7
19	PZ-113316	1	Ø33	1	1.6	20	64	7
20	PZ-110820	1	PS1 (Ø33.2)	1	1.6	20	64	7
21	PZ-114220	1	Ø42	1	2.0	20	76	7
22	PZ-115020	1	Ø50	1	2.0	20	83	7
23	PZ-116020	1	Ø60	1	2.0	20	95	7

※ In millimeter unless otherwise stated.



No	Order Code	Fixed Hole Num.	Pipe Dia.	Pipe Num.	Thickness(mm)	Width (mm)	Length (mm)	Fixed Hole Distance (mm)	Fixed Hole Dia.(mm)
24	PZ-220415	2	Ø4	2	1.5	13	45	30	7
25	PZ-230415	2	Ø4	3	1.5	13	47	32	7
26	PZ-240415	2	Ø4	4	1.5	12	47	35	5
27	PZ-250415	2	Ø4	5	1.5	13	55	38	7
28	PZ-210615	2	Ø6	1	1.5	13	45	30	7
29	PZ-220616	2	Ø6	2	1.6	12	46	30	7
30	PZ-230616	2	Ø6	3	1.6	12	54	37	7
31	PZ-240616	2	Ø6	4	1.6	12	54	40	6.5*8
32	PZ-250616	2	Ø6	5	1.6	15	63	48	7
33	PZ-260616	2	Ø6	6	1.6	15	68	53	7
34	PZ-280616	2	Ø6	8	1.6	15	85	67	7*9
35	PZ-210816	2	Ø8	1	1.6	13	45	30	7
36	PZ-220816	2	Ø8	2	1.6	12	53	36	7
37	PZ-230816	2	Ø8	3	1.6	12	61	44	7
38	PZ-240816	2	Ø8	4	1.6	15	69	54	7
39	PZ-260816	2	Ø8	6	1.6	15	80	65	7
40	PZ-270816	2	Ø8	7	1.6	15	100	85	7
41	PZ-211016	2	Ø10	1	1.6	13	45	30	7
42	PZ-221016	2	Ø10	2	1.6	12	54	38	6.5*9
43	PZ-231016	2	Ø10	3	1.6	12	66	51	7
44	PZ-241016	2	Ø10	4	1.6	15	77	62	7*9
45	PZ-251016	2	Ø10	5	1.6	15	87	71	7*9
46	PZ-261016	2	Ø10	6	1.6	15	96	81	7*9
47	PZ-271016	2	Ø10	7	1.6	15	106	91	7*9
48	PZ-211216	2	Ø12	1	1.6	13	45	30	7
49	PZ-221216	2	Ø12	2	1.6	10	53	39	5*7
50	PZ-221515	2	Ø15	2	2.0	20	80	61	7*9
51	PZ-231515	2	Ø15	3	2.0	20	96	76	7*9
52	PZ-212216	2	Ø22	1	1.6	20	71	53	7
53	PZ-212816	2	Ø28	1	1.6	20	74	57	7
54	PZ-211515	2	Ø15	1	1.5	20	59	41	7

※ In millimeter unless otherwise stated.

# Pipe Clips



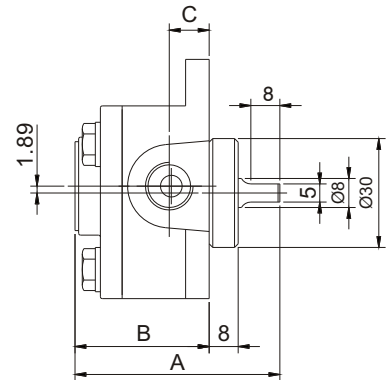
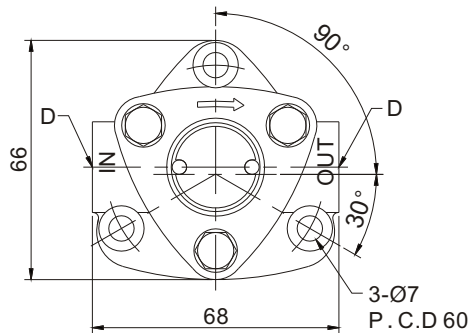
CHEN YING

Pipe Clips

No	Order Code	Fixed Hole Num.	Pipe Dia.	Pipe Num.	Base	Thickness(mm)	Width (mm)	Length (mm)	Fixed Hole Distance (mm)	Fixed Hole Dia.(mm)
55	PZ-320415	2	Ø4	2	Upper	1.5	13	45	30	7
					Lower	3.0	13	49	30	M6xP1.0
56	PZ-330415	2	Ø4	3	Upper	1.5	13	47	32	7
					Lower	3.0	13	51	32	M5xP0.8
57	PZ-340415	2	Ø4	4	Upper	1.5	12	47	35	5
					Lower	3.0	13	50	35	M5xP0.8
58	PZ-350415	2	Ø4	5	Upper	1.5	13	55	38	7
					Lower	3.0	13	57	37	M6xP1.0
59	PZ-310615	2	Ø6	1	Upper	1.5	13	45	30	7
					Lower	3.0	13	49	30	M6xP1.0
60	PZ-320616	2	Ø6	2	Upper	1.6	12	46	30	7
					Lower	3.0	13	49	30	M6xP1.0
61	PZ-330616	2	Ø6	3	Upper	1.6	12	54	37	7
					Lower	3.0	13	57	37	M6xP1.0
62	PZ-340616	2	Ø6	4	Upper	1.6	12	54	40	6.5*8
					Lower	3.0	13	57	40	M6xP1.0
63	PZ-360616	2	Ø6	6	Upper	1.6	15	68	53	7
					Lower	3.0	16	71	53	M6xP1.0
64	PZ-380616	2	Ø6	8	Upper	1.6	15	85	67	7*9
					Lower	3.0	15	82	65	M6xP1.0
65	PZ-310816	2	Ø8	1	Upper	1.6	13	45	30	7
					Lower	3.0	13	49	30	M6xP1.0
66	PZ-320816	2	Ø8	2	Upper	1.6	12	53	36	7
					Lower	3.0	13	57	37	M6xP1.0
67	PZ-330816	2	Ø8	3	Upper	1.6	12	61	44	7
					Lower	3.0	13	64	44	M6xP1.0
68	PZ-340816	2	Ø8	4	Upper	1.6	15	69	54	7
					Lower	3.0	16	71	53	M6xP1.0
69	PZ-360816	2	Ø8	6	Upper	1.6	15	80	65	7
					Lower	3.0	15	82	65	M6xP1.0
70	PZ-311016	2	Ø10	1	Upper	1.6	13	45	30	7
					Lower	3.0	13	49	30	M6xP1.0
71	PZ-321016	2	Ø10	2	Upper	1.6	12	54	38	6.5*9
					Lower	3.0	13	57	37	M6xP1.0
72	PZ-331016	2	Ø10	3	Upper	1.6	12	66	51	7
					Lower	3.0	13	70	51	M6xP1.0
73	PZ-341016	2	Ø10	4	Upper	1.6	15	77	62	7*9
					Lower	3.0	15	82	65	M6xP1.0
74	PZ-311216	2	Ø12	1	Upper	3.0	13	45	30	7
					Lower	3.0	13	49	30	M6xP1.0
75	PZ-321216	2	Ø12	2	Upper	1.6	10	53	39	5*7
					Lower	3.0	13	57	40	M5xP0.8
76	PZ-360820	2	Ø8	6	Upper	1.6	15	80	65	7
					Lower	3.0	15	82	65	M6xP1.0

※ In millimeter unless otherwise stated.

# Rotary Oil Pump (Clockwise or Anti-clockwise)



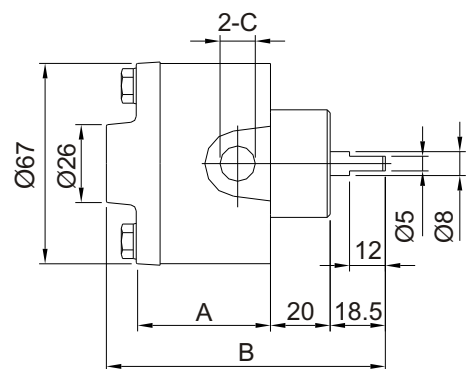
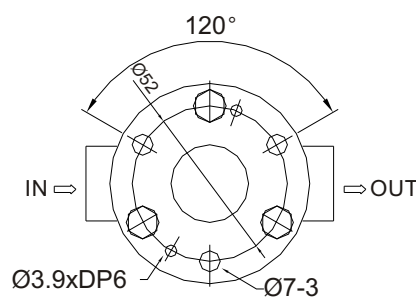
### ◆ Features

1. Single rotary oil pump is also called Triangular pump or oil circulation pump.
2. Recommend to assemble with 1/4 HP Horizontal Motor.
3. CYP-10A ~ 13A with different flow rate, the standard model is clockwise. Please remark on order while request anti-clockwise one.
4. It can be added adjustable pressure valve CYP-AV as optional. The range of pressure adjustment is 2~5 kg/cm<sup>2</sup>.
5. Special request on assembling with reservoir or cyclic inlet or motor with fan, etc. are available. Refer to Chen Ying Circulating Electric Lubricator series products.
6. The revolution is 1420~1720 rpm and 450~1200 rpm for choosing type of CYP-12L only.
7. It can be applied widely for lubricating or cooling in various machines.

Model	A	B	C	D
CYP-11A-1	56.5	37	11	PT1/8
CYP-11A-2				PT1/4
CYP-12A	62.5	43	11	PT1/4
CYP-12L	62.5	43	11	PT1/4
CYP-13A	77.5	58	13.5	PT3/8

Model	Dis. Volume(L/min)		Max Pressure	R.P.M
	1420rpm	1720rpm		
CYP-10A	1.0	1.2	5kgf/cm <sup>2</sup>	1420~1720rpm
CYP-11A	1.8	2.2		
CYP-12A	3.0	3.7		
CYP-12L				1420~1720rpm
CYP-13A	5.5	6.7		

# Reversible Pump (Clockwise and Anti-clockwise)



### ◆ Features

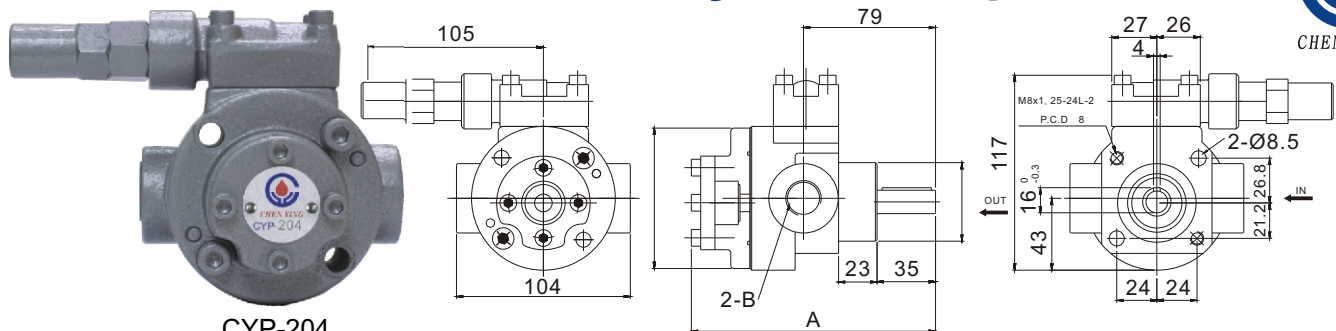
1. Reversible pump uses three pieces of M6\*16L screw to make inlet and outlet be fixed. The rotating shaft can reverse clockwise or anti-clockwise during the operation of machine.
2. It is suitable for assembling with gear pump.
3. There are CYP-1FS~3FS available for different flow rate. The high revolution is 2,000 rpm.
4. Reversible pump is usually applied in Drilling Machines, Milling Machines, and CNC Lathes, etc.

Model	A	B	C
CYP-1FS	85	46	PT1/4
CYP-2FS	89	50	PT1/4
CYP-3FS	93	54	PT1/4

Model	Dis. Volume(L/min)		Max Pressure	R.P.M
	1420rpm	1720rpm		
CYP-1FS	1.74	2.08	5kgf/cm <sup>2</sup>	2000rpm
CYP-2FS	2.7	3.24		
CYP-3FS	3.75	4.50		

※ In millimeter unless otherwise stated.

# CYP-204~CYP-210 Heavy Oil Pump

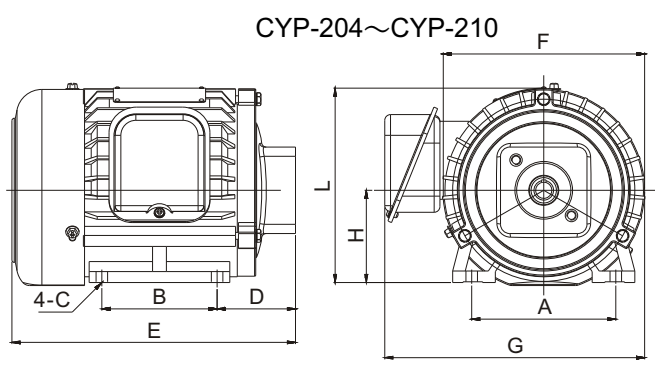


CYP-204

Model	A	B
CYP-204	141	1/2"
CYP-206	146	3/4"
CYP-208	151	3/4"
CYP-210	156	3/4"



1/2HP Horizontal Motor+ CYP-204 Heavy Oil Pump



CYP-204~CYP-210

Horse Power(HP)	A	B	C	D	E	F	G	H	L
1/2	125	100	Ø10	68	246	175	225.5	80	167.5
	112	90	Ø10	83.5	243.5	156	210	71	154
1	125	100	Ø10	75.5	261	175	225.5	80	167.5
2	140	125	Ø12	74.5	284.5	196	250	90	188

## ◆ Features

1. It can steady provides oil.
2. It is easy to operate and install.
3. The discharge volume and pressure is bigger than the small oil pump.
4. Recommend to assemble with adjustable valve and working pressure under 10kgf/cm in order to avoid damaging oil pump function.
5. Use clean oil to avoid the block or damage the pump.
6. Standard fixed-hole direction is \. If the fixed-hole direction is /, please note ※T on order code.
7. The standard fixed hole is 125×100 mm for 1/2 HP motor assembled with heavy oil pump. If the fixed hold needs to be 112×90 mm, please mark ※K while ordering.
8. The proper oil viscosity is 32~220cSt@40°C.

Model	Discharge Volume (L/min)		Max Pressure	R.P.M.	A Length (mm)	B Bore	Weight (kg)
	1420rpm	1720rpm					
CYP-204	7.5	9	20 kgf/cm <sup>2</sup>	450~2000 rpm	141	PT 1/2	3.2
CYP-206	11.3	13.5			146	PT 3/4	3.3
CYP-208	15.3	18.5			151	PT 3/4	3.5
CYP-210	19	23			156	PT 3/4	3.7

## ◆ Recommend to work with the motor as the follows.

With Adjustable Pressure Valve		Without Adjustable Pressure Valve	
Model	Motor Type	Model	Motor Type
CYP-204	1/2HP	CYP-204	1HP
CYP-206	1/2HP	CYP-206	1HP
CYP-208	1/2HP	CYP-208	1HP
CYP-210	1/2HP	CYP-210	2HP

## ◆ Application of Machine Equipment

Suitable for various kinds of Machinery.

## ◆ Order Code:

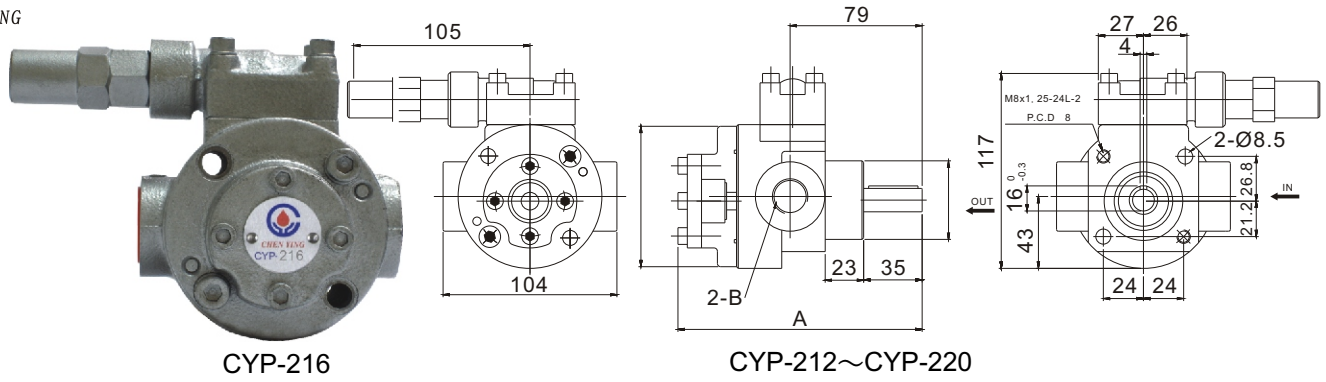
CYP-204	1	04	C	※
Model	1 : With Adjustable Pressure Valve	Motor	Voltage	Special Request
204		04 : 1/2HP	A : 1Ø110/220V, 60 Hz	※T : Fixed-Hole Direction/
206	0 : Without Adjustable Pressure Valve	08 : 1HP	B : 1Ø110/220V, 50 Hz	※K : Fixed-Hole size 112×90 mm
208		16 : 2HP	C : 3Ø220V/380V	
210			D : 3Ø220/440V	
			E : 3Ø208/415V	
			F : 3Ø230/460V	
			G : 3Ø240/480V	
			X : Special Voltage	

In millimeter unless otherwise stated.

CYP-204~CYP-210 Heavy Oil Pump

# CYP-212~CYP-220 Heavy Oil Pump

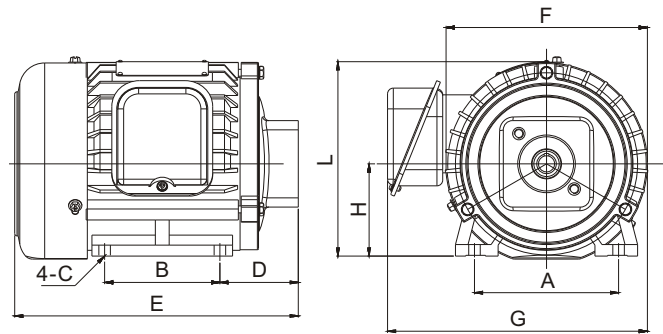
CYP-212~CYP-220 Heavy Oil Pump



Model	A	B
CYP-212	161	1"
CYP-216	171	1"
CYP-220	181	1"



Horizontal Motor + Heavy Oil Pump



Horse Power(HP)	A	B	C	D	E	F	G	H	L
1	125	100	Ø10	75.5	261	175	225.5	80	167.5
2	140	125	Ø12	74.5	284.5	196	250	90	188
3	140	125	Ø12	82	299.5	196	249	90	188

### ◆Features

- 1.It can steady provides oil and easily operate and install.
- 2.The discharge volume and pressure is bigger than the small oil pump.
- 3.Recommend to assemble with adjustable valve and working pressure under 10kgf/cm<sup>2</sup> in order to avoid damaging oil pump function.
- 4.Use clean oil to avoid the block or damage the pump.
- 5.Standard fixed-hole direction is \. If the fixed-hole direction is /, please note ※T on order code.
- 6.The proper oil viscosity is 32~220cSt@40°C.

### ◆Application of Machine Equipment

Suitable for various kinds of Machinery.

### ◆Recommend to work with the motor as the follows.

Model	Discharge Volume (L/min)		Max Pressure	R.P.M	Length (mm)	Bore	Weight (g)
	1420rpm	1720rpm					
CYP-212	21.9	26.5	20 kgf/cm <sup>2</sup>	450~2000 rpm	161	PT1	3.9
CYP-216	29.3	35.5			171	PT1	4.3
CYP-220	34.3	41.5			181	PT1	4.6

※ With Adjustable Pressure Valve		Without Adjustable Pressure Valve	
Model	Motor Type	Model	Motor Type
CYP-212	1HP	CYP-212	2HP
CYP-216	1HP	CYP-216	2HP
CYP-220	1HP	CYP-220	3HP

※ Recommend to assemble with adjustable pressure valve to extend the life cycle of motor.

### ◆Order Code:

CYP-212      1      08      C

Model 1 : With Adjustable Pressure Valve  
 212      0 : Without Adjustable Pressure Valve  
 216      220

Motor  
 08 : 1HP  
 16 : 2HP  
 24 : 3HP

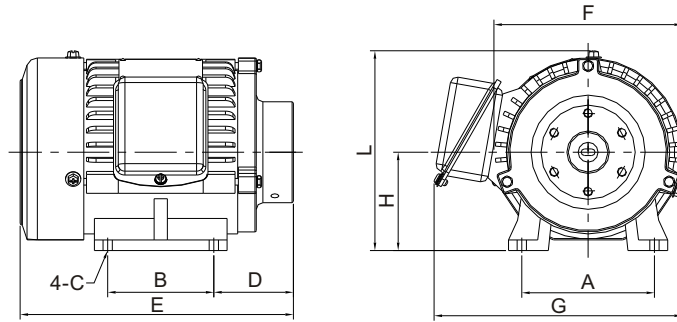
Voltage  
 A : 1Ø110/220V, 60 Hz  
 B : 1Ø110/220V, 50 Hz  
 C : 3Ø220V/380V  
 D : 3Ø220/440V  
 E : 3Ø208/415V  
 F : 3Ø230/460V  
 G : 3Ø240/480V  
 X : Special Voltage



Special Request

※T : Fixed-Hole Direction /

## Horizontal Motor With Cast Iron Frame

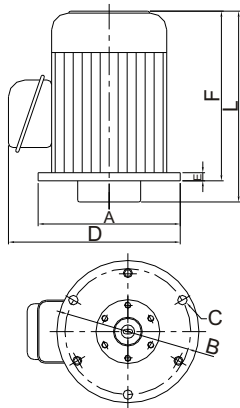


HP	A	B	C	D	E	F	G	H	L	Mark
1/4	100	80	Ø8	60	210	140	185	60	135	J
	100	80	Ø7	60	206	142	187	74	150	S
1/2	125	100	Ø10	74	257	174	225	80	175	J
	125	100	Ø10	68	246	175	225	80	173	S
1	125	100	Ø10	80	270	174	225	80	175	J

## Vertical Motor With Cast Iron Frame



HP	A	B	C	D	E	F	L	Mark
1/4	Ø158	Ø140	3-Ø9	191	8.5	192	212	J
1/2	Ø160	Ø140	4-Ø10	208	11	241		J
	Ø157	Ø130	4-Ø11	215	11	244		S
1	Ø205	Ø180	4-Ø12	239	10	247	248	S



### ◆ Order Code :

PMO-0 02

0 : Motor HP

01 : 1/8HP  
(Only Horizontal Type)

02 : 1/4HP

04 : 1/2HP

08 : 1HP

D

Voltage

A : 1Ø110V

C : 1Ø220V

D : 3Ø220/380V

E : 3Ø220/440V

F : 3Ø208/415V

G : 3Ø230/460V

H : 3Ø240/480V

X : Special Voltage

1

1 : Vertical Type

3 : Horizontal Type

2

1 : Steel Plate

2 : Cast Iron

※

Special Request

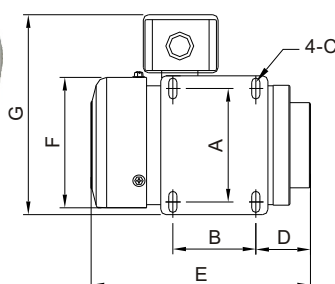
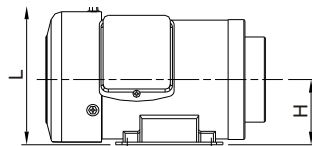
J

Mark

J or S

(Standards: J Type)

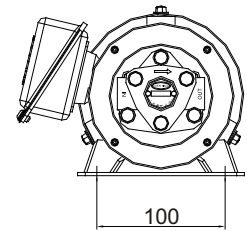
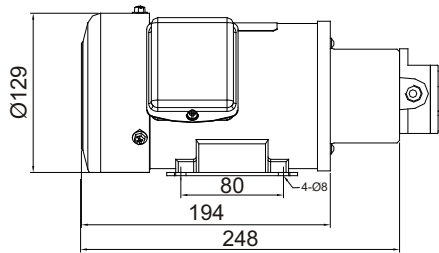
## Horizontal Motor With Steel Plate Frame



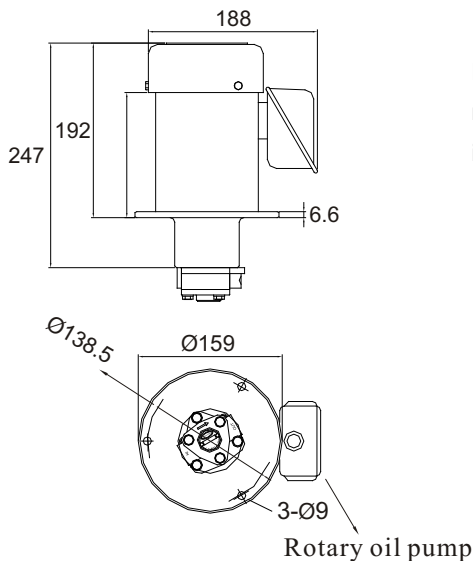
HP	A	B	C	D	E	F	G	H	L	Mark
1/4	100	79	Ø8	62	220	140	187	61	131	J
	100	80	Ø7	52	209	129	175	62	132	S
1/8	70	60	Ø7	51	179	106.5	160	56	105	S

※ In millimeter unless otherwise stated.

# Horizontal Motor With Connector



# Vertical Motor With Connector



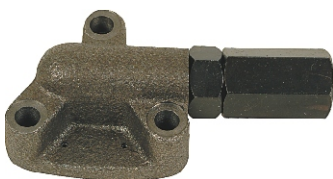
PS. Please specify the model of rotary oil pump (CYP-10A ~ CYP-13A) if needs to assemble with motor



◆ Order Code :

PMO	2	02	D	1	※
2 : Motor With Connector		HP 02 : 1/4HP	Voltage A : 1Ø110V C : 1Ø220V D : 3Ø220V/380V E : 3Ø220V/440V F : 3Ø208V/415V G : 3Ø230/460V H : 3Ø240/480V X : Special Voltage	1 : Vertical Type 3 : Horizontal Type	Special Request

# Adjustable Pressure Valve

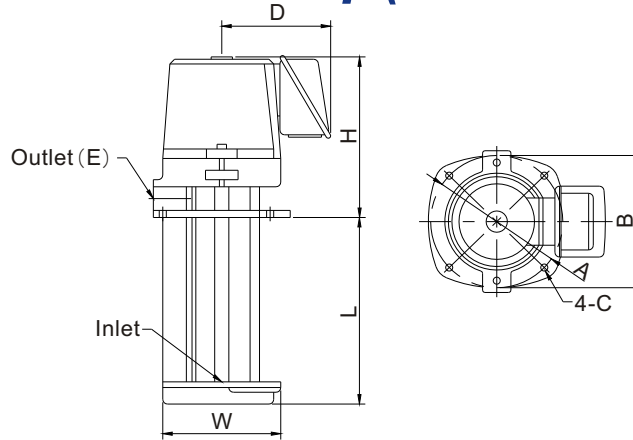
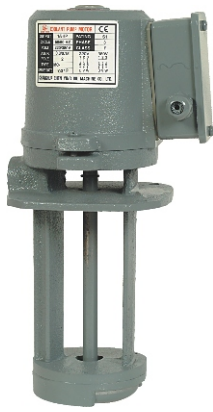


Model	Adjustable pressure range	Weight(g)
CYP-AV Assemble With CYP Oil Pump	2~5kg/cm <sup>2</sup>	352

※ In millimeter unless otherwise stated.

Horizontal Motor With Connector/Vertical Motor With Connector/Adjustable Pressure Valve

# Electric Immersion Pump(Coolant Pump)



HP	A	B	C	D	E(Dis. Bore)	H	W	L(On request)	Output(L/min)	Voltage	Mark
1/8HP	Ø128	125	Ø8	91	PT 3/8	150	90	100/120/134/150 /180/220	30-35	1Ø Voltage : 110V、220V (1/4、1/8HP) 3Ø Voltage : 220/380V、 220/440V、208/415V、 230/460V、240/480V	
				PT 1/2							
1/4HP	Ø158	175	Ø10	111	PT 1/2	175	124	120/155/180/200/220 /240/270/350	70-90		
				PT 3/4							
1/2HP	Ø170	196	Ø10	124	PT 1	270	138	150/180/240/290	135	3Ø Voltage : 220/380V、 220/440V、208/415V、 230/460V、240/480V	F
		190	Ø9	135	PT 3/4	225	135	180/250/290			D
3/4HP	Ø170	212	Ø11	119	PT 1	270	152	290	170		F
		Ø185	190	Ø9		135	255	150			180/250/280
1HP	Ø170	212	Ø11	119	PT 1	270	152	250/290	189		F
		Ø185	190	Ø9		135	275	150			180/250/280/380/550

PS. The output will be different according to the different voltage, height and discharge bore.

### ◆ Order Code :

PMO - 4 01

D

180

A

F

※

4 : Immersion HP Pump

Voltage

Height(mm)

Discharge Bore

Mark

Special Request

- 01 : 1/8HP A : 1Ø110V(1/8HP、1/4HP) could be
- 02 : 1/4HP C : 1Ø220V(1/8HP、1/4HP) custom-made
- 04 : 1/2HP D : 3Ø220V/380V on request.
- 06 : 3/4HP E : 3Ø220V/440V
- 08 : 1HP F : 3Ø208V/415V
- G : 3Ø230V/460V
- H : 3Ø240V/480V
- X : Special Voltage

- A : 1/2"(1/8HP、1/4HP)
- B : 3/4"(1/4HP、1/2HP)
- C : 1"(1/2HP、3/4HP、1HP)
- D : 3/8"(1/8HP)

- (1/2HP~1HP)
- F or D
- (Standards : F Type)

# Electric Suction Pump(Coolant Pump)



HP	A	B	C	D	E(Dis. Bore)	H	Output(L/min)	Voltage	Mark
1/8HP	Ø140	147	Ø8	114	PT 3/8	173	21-22	1Ø Voltage : 110V、220V (1/4、1/8HP) 3Ø Voltage : 220/380V、220/440V、 208/415V、230/460V、 240/480V	F
	Ø140	165	Ø8	105	PT 3/8	195	24-25		C
1/4HP	Ø185	178	Ø10	126	PT 3/4	133	72-74		F
	Ø185	225	Ø8	125	PT 1/2	240	70		C
1/2HP	Ø215	170	Ø11	131	PT 1	310	120	3Ø Voltage : 220/380V、220/440V、 208/415V、230/460V、 240/480V	F
	Ø215	195	Ø9	135	PT 3/4	280	110		D
3/4HP	Ø215	170	Ø11	131	PT 1	310	145		F
	Ø220	200	Ø9	135		300	135		D
1HP	Ø219	204	Ø11	131	PT 1	310	170		F
	Ø220	200	Ø9	135		300			D

PS. The output will be different according to the different voltage, height and discharge bore.

### ◆ Order Code :

PMO - 3 01

D

A

F

※

3 : Suction Pump HP

Voltage

Discharge Bore

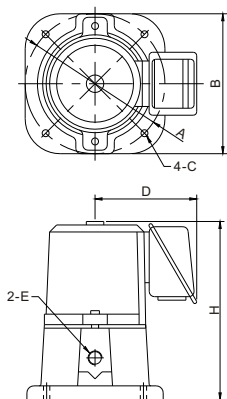
Mark

Special Request

- 01 : 1/8HP A : 1Ø110V(1/8HP、1/4HP)
- 02 : 1/4HP C : 1Ø220V(1/8HP、1/4HP)
- 04 : 1/2HP D : 3Ø220V/380V
- 06 : 3/4HP E : 3Ø220V/440V
- 08 : 1HP F : 3Ø208V/415V
- G : 3Ø230/460V
- H : 3Ø240/480V
- X : Special Voltage

- A : 1/2"(1/4HP)
- B : 3/4"(1/4HP、1/2HP)
- C : 1"(1/2HP、3/4HP、1HP)
- D : 3/8"(1/8HP)

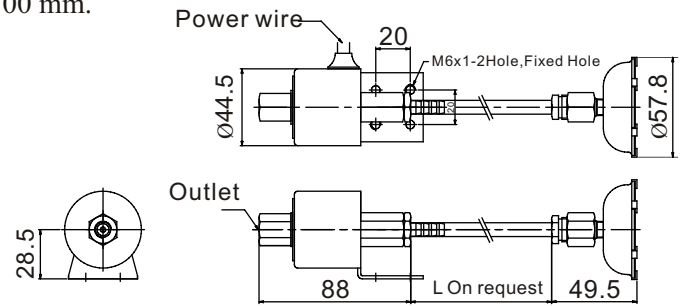
- (1/2HP~1HP)
- F or D
- (Standards : F Type)



※ In millimeter unless otherwise stated.

**◆Features:**

1. Electro-Magnetic pump has large volume but compact size.
2. Low cost of electricity.
3. Easy operation and high practicality.
4. EL-1 type has fixed volume and EL-2 could adjust the volume.
5. Discharge volume is changed by pipe length and oil viscosity.
6. Pressure is changed by temperature. When temperature increases, pressure decreases.
7. The length of L can be customized. Standard length is PU tube 300 mm.

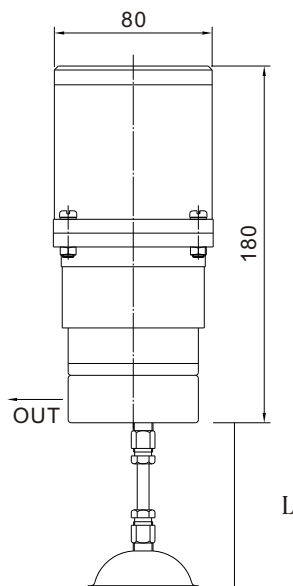


**◆Application of Machines Equipment :**

1. It is suitable for machinery requiring long-term lubrication and cooling.
2. It usually works with small size machinery, such as Lathes, Milling Machine, Grinding Machine and Presses Machine.

Model	Motor	Max Volume	Operation Pressure	Voltage	Dis. Bore	Suction Pressure	Temperature Endurance	Function	Viscosity	Weight (g)
EL-1	25W	300cc/min	0.8~1.2kgf/cm <sup>2</sup>	110V 220V	PT1/8	30cm Hg±5cm Hg	85°C	Volume Fixed	32-68cSt@40°C	400
EL-2								Volume Adjustable		450

## GA-25 Gear Pump



**◆Features:**

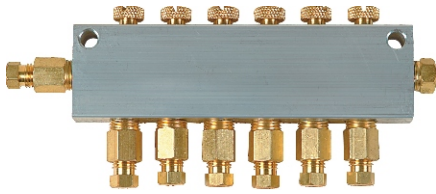
1. Easy to operation.
2. Low cost, high practicality.
3. High quality of alloy steel that can maintain each lubrication point with oil.
4. The length of L can be customized. Standard length is steel tube 300 mm.

Model	Motor	Max Volume	Max Pressure	Voltage	Ampere	Herz	Dis. Bore	Viscosity
GA-25 Resistance Type	25W	250 cc/min	12 kgf/cm <sup>2</sup>	1Ø110V 1Ø220V 3Ø220V	0.7A 0.2A 0.3A	50/60HZ	Ø4 or Ø6	32-68cSt@40°C

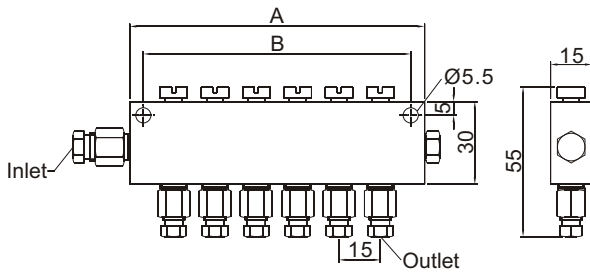


# B Type Adjustable Distributor

B Type Adjustable Distributor/CB Type Anti-Vibration Distributor With Nut



Model	Outlet Num.	Inlet Bore	Outlet Bore	A (mm)	B (mm)	Inlet BoreØ4 Weight(g)	Inlet BoreØ6 Weight(g)
B-2	2	StandardsØ6 Ø4 Optional	StandardsØ4 Ø6 Optional	47	37	96	99
B-3	3			62	52	127	130
B-4	4			77	67	159	162
B-5	5			92	82	189	192
B-6	6			107	97	221	224
B-7	7			122	112	251	254
B-8	8			137	127	283	286
B-9	9			152	142	313	316
B-10	10			167	157	343	346
B-11	11			182	172	371	374
B-12	12			197	187	404	407



◆ Order Code :

**B-6**                      **6**                      **4**

|                                      |                                      |

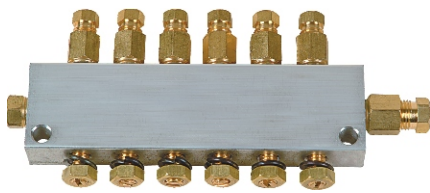
Outlet Number              Inlet Bore              Outlet Bore

2 : 2 Outlets              4 : Ø4                      4 : Ø4

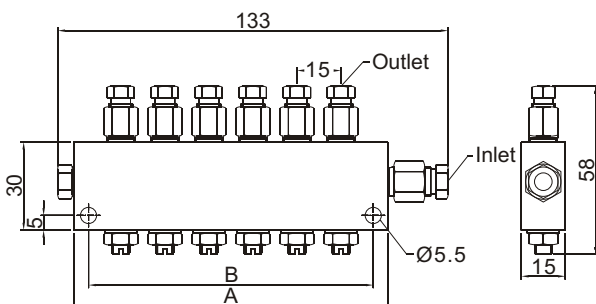
to                                      6 : Ø6

12 : 12 Outlets

# CB Type Anti-Vibration Distributor With Nut



Model	Outlet Num.	Inlet Bore	Outlet Bore	A (mm)	B (mm)	Inlet BoreØ4 Weight(g)	Inlet BoreØ6 Weight(g)
CB-2	2	StandardsØ6 Ø4 Optional	StandardsØ4 Ø6 Optional	47	37	101	103
CB-3	3			62	52	134	136
CB-4	4			77	67	166	168
CB-5	5			92	82	198	200
CB-6	6			107	97	230	232
CB-7	7			122	112	263	265
CB-8	8			137	127	295	297
CB-9	9			152	142	315	317
CB-10	10			167	157	362	364
CB-11	11			182	172	375	377
CB-12	12			197	187	410	412



◆ Order Code :

**CB-6**                      **6**                      **4**

|                                      |                                      |

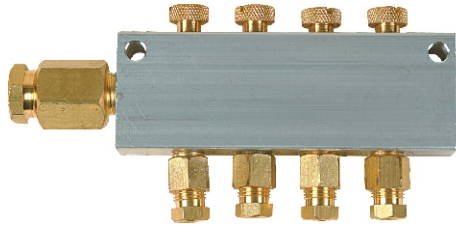
Outlet Number              Inlet Bore              Outlet Bore

2 : 2 Outlets              4 : Ø4                      4 : Ø4

to                                      6 : Ø6                      6 : Ø6

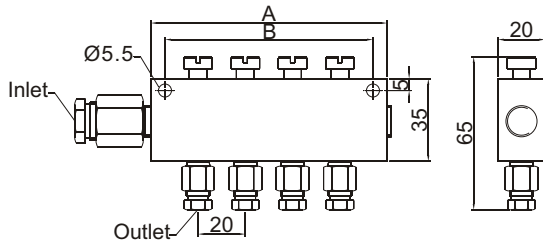
12 : 12 Outlets

# AB Type Adjustable Distributor



Model	Outlet Num.	Inlet Bore	Outlet Bore	A (mm)	B (mm)	Inlet Bore Ø4 Weight(g)	Inlet Bore Ø6 Weight(g)
AB-2	2	Standards Ø8 Ø10 Optional	Standards Ø6	60	50	186	200
AB-3	3			80	70	240	255
AB-4	4			100	90	295	310
AB-5	5			120	108	352	367
AB-6	6			140	127	407	421
AB-7	7			160	148	462	476
AB-8	8			180	168	514	528
AB-10	10			220	208	624	638

◆ Order Code :



**AB-4**                      **10**                      **6**

|                                      |                                      |

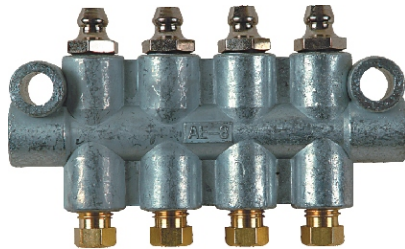
Outlet Number                      Inlet Bore                      Outlet Bore

2 : 2 Outlets                      Ø8 : Ø8                      6 : Ø6

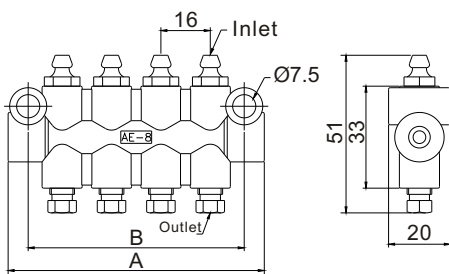
to

8 : 8 Outlets                      10 : Ø10

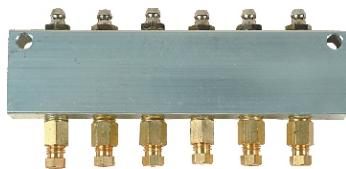
# AE Type Grease Distributor With Parallel Outlet



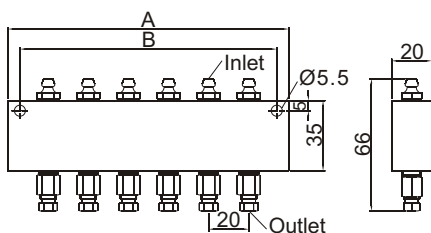
Model	Outlet Num.	Inlet Bore	Outlet Bore	A (mm)	B (mm)	Weight(g)
AE-41	2	M8xP1.0 Ø4	M8xP1.0 Ø4	48	35	98
AE-61	3			65	51	129
AE-81	4			83	70	162
AE-101	5			97	83	190
AE-121	6			112	99	222



# BB Type Grease Nipple Distributor



Model	Outlet Num.	Inlet Bore	Outlet Bore	A (mm)	B (mm)	Weight(g)
BB-2	2	Outer-thread PT1/8	Ø4 Ø6 PT1/8	60	50	134
BB-3	3			80	70	181
BB-4	4			100	90	230
BB-5	5			120	108	275
BB-6	6			140	127	321
BB-7	7			160	148	380
BB-8	8			180	168	420
BB-10	10			220	208	520



AB Type Adjustable Distributor/AE Type Grease Distributor With Parallel Outlet/BB Type Grease Nipple Distributor

# CO、OA Type Oil-Air Volume Distributor

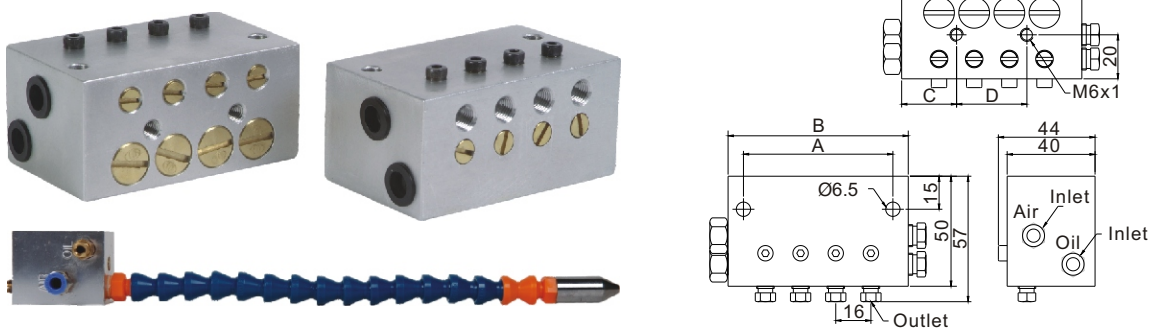
## ◆ Features:

- 1.CO and OA type could use air pressure to atomize the lubricant, and spread out on the lubrication points.
- 2.Fixed amount of oil feeding. The lubrication points of volume distributor supply a fixed flow of lubricant.
- 3.CO and OA type could work with all kinds of pressure-relief type oil lubricators. The air volume of CO type is fixed, and OA type is adjustable.
- 4.CO and OA type both have many kinds of discharge volume to be chosen: 0.01, 0.03, 0.06, 0.10, 0.16 cc/stroke. As ordering, please details the discharge volume wanted.
- 5.CO and OA type must work with pressure-relief type oil lubricators. The range of air operation pressure is 3.5~7 kgf/cm<sup>2</sup>, and the range of oil operation pressure is 20~30 kgf/cm<sup>2</sup>.
- 6.CO-1 Oil-Air Spray Gun is designed for spreading minimum-quantity lubricant on each lubrication point equally. It is suitable for applying to high-speed anti-friction bearings in spindles.
- 7.The viscosity range of oil is 10-90 cSt @ 40°C.

Model	Outlet Num.	Inlet Bore	Outlet Bore	A (mm)	B (mm)	C (mm)	D (mm)	Discharge Volume	Oil Pressure	Air Pressure	Function
CO-1	1	M10xP1.0 Ø6	M8xP1.0 Ø4	20	34	/	/	0.01cc	20kgf/cm <sup>2</sup> to 30kgf/cm <sup>2</sup>	3.5kgf/cm <sup>2</sup> to 7kgf/cm <sup>2</sup>	Air Volume Fixed
CO-2	2			36	50	25	/	0.03cc			
CO-3	3			52	66	25	16	0.06cc			
CO-4	4			68	82	25	32	0.10cc			
CO-5	5			84	98	25	48	0.16cc			

## ◆ Order Code :

CO-4	-	1	2	3	4
Outlet Num.		First	Second	Third	Fourth
		Outlet Volume	Outlet Volume	Outlet Volume	Outlet Volume
1 : 1 Outlet		1 : 0.01cc	1 : 0.01cc	1 : 0.01cc	1 : 0.01cc
2 : 2 Outlets		2 : 0.03cc	2 : 0.03cc	2 : 0.03cc	2 : 0.03cc
3 : 3 Outlets		3 : 0.06cc	3 : 0.06cc	3 : 0.06cc	3 : 0.06cc
4 : 4 Outlets		4 : 0.10cc	4 : 0.10cc	4 : 0.10cc	4 : 0.10cc
5 : 5 Outlets		5 : 0.16cc	5 : 0.16cc	5 : 0.16cc	5 : 0.16cc
(If there are five outlets please specify the fifth outlet volume.)					



CO-1 Oil-Air Spray Gun

Model	Outlet Num.	Inlet Bore	Outlet Bore	A (mm)	B (mm)	C (mm)	D (mm)	Discharge Volume	Oil Pressure	Air Pressure	Function
OA-1	1	M10xP1.0 Ø6	M8xP1.0 Ø4	20	34	/	/	0.01cc	20kgf/cm <sup>2</sup> to 30kgf/cm <sup>2</sup>	3.5kgf/cm <sup>2</sup> to 7kgf/cm <sup>2</sup>	Air Volume Adjustable
OA-2	2			36	50	25	/	0.03cc			
OA-3	3			52	66	25	16	0.06cc			
OA-4	4			68	82	25	32	0.10cc			
OA-5	5			84	98	25	48	0.16cc			

## ◆ Order Code :

OA-4	-	1	2	3	4
Outlet Num.		First	Second	Third	Fourth
		Outlet Volume	Outlet Volume	Outlet Volume	Outlet Volume
1 : 1 Outlet		1 : 0.01cc	1 : 0.01cc	1 : 0.01cc	1 : 0.01cc
2 : 2 Outlets		2 : 0.03cc	2 : 0.03cc	2 : 0.03cc	2 : 0.03cc
3 : 3 Outlets		3 : 0.06cc	3 : 0.06cc	3 : 0.06cc	3 : 0.06cc
4 : 4 Outlets		4 : 0.10cc	4 : 0.10cc	4 : 0.10cc	4 : 0.10cc
5 : 5 Outlets		5 : 0.16cc	5 : 0.16cc	5 : 0.16cc	5 : 0.16cc
(If there are five outlets please specify the fifth outlet volume.)					

# CAB · CBB Type Volume Distributor



## ◆ Features:

1. Fixed amount of oil feeding. The lubrication points of volume distributor supply a fixed flow of lubricant.
2. CAB type has many kinds of discharge volume to be chosen: 0.03, 0.06, 0.10, 0.16 cc/stroke. As ordering, please details the discharge volume wanted.
3. CBB type also has many kinds of discharge volume to be chosen: 0.1, 0.2, 0.3, 0.4, 0.5 cc/stroke. As ordering, please details the discharge volume wanted.
4. CAB, CBB type volume distributors have to work with pressure-relief type oil lubricators, and oil will feed during the operation time of the lubricator.
5. The lowest operation pressure of CAB, CBB is 8 kgf/cm<sup>2</sup>, and the max pressure is 30 kgf/cm<sup>2</sup>.
6. The viscosity range of oil is 32-90 cSt @ 40°C.

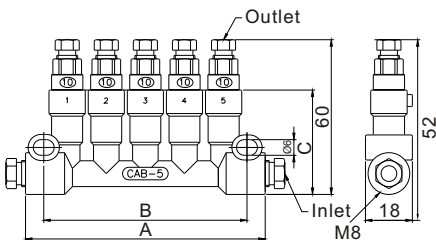


Model	Outlet Num.	Inlet Bore	Outlet Bore	A (mm)	B (mm)	C (mm)	Discharge Volume	Operation Pressure Range	Weight (g)
CAB-1	1	M8xP1.0/PT1/8	M8xP1.0 Ø4	Ø12	33	46	0.03cc 0.06cc 0.10cc 0.16cc	8kgf/cm <sup>2</sup> to 30kgf/cm <sup>2</sup>	30
CAB-2	2	M10xP1.0 Ø6		47					96
CAB-3	3			62	128				
CAB-5	5			92	192				
CAB-6	6			107	215				
CAB-8	8			151	297				

## ◆ Order Code :

CAB- 5 ——— 1                      1                      1                      1                      1

Outlet Num.	First Outlet Volume	Second Outlet Volume	Third Outlet Volume	Fourth Outlet Volume	Fifth Outlet Volume
1 : 1 Outlet	1 : 0.03cc	1 : 0.03cc	1 : 0.03cc	1 : 0.03cc	1 : 0.03cc
2 : 2 Outlets	2 : 0.06cc	2 : 0.06cc	2 : 0.06cc	2 : 0.06cc	2 : 0.06cc
3 : 3 Outlets	3 : 0.10cc	3 : 0.10cc	3 : 0.10cc	3 : 0.10cc	3 : 0.10cc
5 : 5 Outlets	4 : 0.16cc	4 : 0.16cc	4 : 0.16cc	4 : 0.16cc	4 : 0.16cc
6 : 6 Outlets					
8 : 8 Outlets					

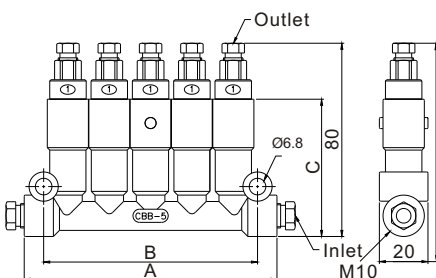


Model	Outlet Num.	Inlet Bore	Outlet Bore	A (mm)	B (mm)	C (mm)	Discharge Volume	Operation Pressure Range	Weight (g)
CBB-1	1	M10xP1.0 Ø6	M8xP1.0 Ø4	Ø16	37	68	0.1cc 0.2cc 0.3cc 0.4cc 0.5cc	8kgf/cm <sup>2</sup> to 30kgf/cm <sup>2</sup>	79
CBB-2	2			53					178
CBB-3	3			70	250				
CBB-5	5			104	410				

## ◆ Order Code :

CBB-5 ——— 1                      1                      1                      1                      1

Outlet Num.	First Outlet Volume	Second Outlet Volume	Third Outlet Volume	Fourth Outlet Volume	Fifth Outlet Volume
1 : 1 Outlet	1 : 0.1cc	1 : 0.1cc	1 : 0.1cc	1 : 0.1cc	1 : 0.1cc
2 : 2 Outlets	2 : 0.2cc	2 : 0.2cc	2 : 0.2cc	2 : 0.2cc	2 : 0.2cc
3 : 3 Outlets	3 : 0.3cc	3 : 0.3cc	3 : 0.3cc	3 : 0.3cc	3 : 0.3cc
5 : 5 Outlets	4 : 0.4cc	4 : 0.4cc	4 : 0.4cc	4 : 0.4cc	4 : 0.4cc
	5 : 0.5cc	5 : 0.5cc	5 : 0.5cc	5 : 0.5cc	5 : 0.5cc



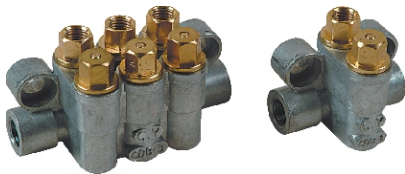
CAB · CBB Type Volume Distributor

# CDB · T Type Detective Volume Distributor

CDB · T Type Detective Volume Distributor

### ◆ Features:

1. Fixed amount of oil feeding. The lubrication points of volume distributor supply a fixed flow of lubricant.
2. T and CDB type have many kinds of discharge volume to be chosen: 0.1, 0.2, 0.3, 0.4, 0.5 cc/stroke. As ordering, please details the discharge volume wanted.
3. The standards are assembled detective piston, which can observe if operation is normal.
4. CDB, T type volume distributors have to work with pressure-relief type lubricators, and lubricant will feed during the operation time of the lubricator.
5. T type could be assembled NO (Normal Open) or NC (Normal Close) sensor switch on request, which would make symbols during operation or intermittent time, it's easier to observe.
6. CDB, T type can be used with oil pressure-relief type lubricators.
7. The lowest operation pressure of T, CDB is 8 kgf/cm<sup>2</sup>, and the max pressure is 30 kgf/cm<sup>2</sup>.
8. The viscosity range of oil is 32-90 cSt @ 40°C.

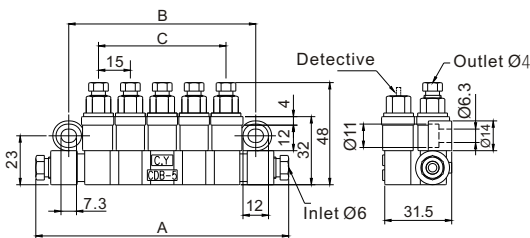


Model	Outlet Num.	Inlet Bore	Outlet Bore	A (mm)	B (mm)	C (mm)	Discharge Volume	Operation Pressure Range	Weight (g)
CDB-1	1	M10xP1.0	M8xP1.0	59	28	15	0.1cc	8kgf/cm <sup>2</sup> to 30kgf/cm <sup>2</sup>	121
CDB-2	2			74	43		0.2cc		201
CDB-3	3	Ø6	Ø4	89	58	30	0.3cc		276
CDB-5	5	Ø6	Ø4	119	88	60	0.4cc	30kgf/cm <sup>2</sup>	433
				0.5cc					

### ◆ Order Code :

CDB- 5 ——— 1      1      1      1      1

Outlet Number	First Outlet Volume	Second Outlet Volume	Third Outlet Volume	Fourth Outlet Volume	Fifth Outlet Volume
1 : 1 Outlet	1 : 0.1cc	1 : 0.1cc	1 : 0.1cc	1 : 0.1cc	1 : 0.1cc
2 : 2 Outlets	2 : 0.2cc	2 : 0.2cc	2 : 0.2cc	2 : 0.2cc	2 : 0.2cc
3 : 3 Outlets	3 : 0.3cc	3 : 0.3cc	3 : 0.3cc	3 : 0.3cc	3 : 0.3cc
5 : 5 Outlets	4 : 0.4cc	4 : 0.4cc	4 : 0.4cc	4 : 0.4cc	4 : 0.4cc
	5 : 0.5cc	5 : 0.5cc	5 : 0.5cc	5 : 0.5cc	5 : 0.5cc

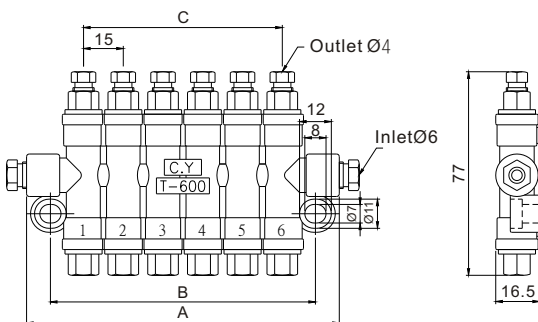


Model	Outlet Num.	Inlet Bore	Outlet Bore	A (mm)	B (mm)	C (mm)	Discharge Volume	Operation Pressure Range	Weight (g)
T-200	2	M10xP1.0	M8xP1.0	58	40	15	0.1cc	8kgf/cm <sup>2</sup> to 30kgf/cm <sup>2</sup>	154
T-300	3			73	55	30	0.2cc		205
T-400	4	Ø6	Ø4	88	70	45	0.3cc		263
T-500	5	Ø6	Ø4	103	85	60	0.4cc	30kgf/cm <sup>2</sup>	318
T-600	6			118	100	75	0.5cc		375

### ◆ Order Code :

T-500 ——— 1      2      3      4      5

Outlet Number	First Outlet Volume	Second Outlet Volume	Third Outlet Volume	Fourth Outlet Volume	Fifth Outlet Volume
200 : 2 Outlets	1 : 0.1cc	1 : 0.1cc	1 : 0.1cc	1 : 0.1cc	1 : 0.1cc
300 : 3 Outlets	2 : 0.2cc	2 : 0.2cc	2 : 0.2cc	2 : 0.2cc	2 : 0.2cc
400 : 4 Outlets	3 : 0.3cc	3 : 0.3cc	3 : 0.3cc	3 : 0.3cc	3 : 0.3cc
500 : 5 Outlets	4 : 0.4cc	4 : 0.4cc	4 : 0.4cc	4 : 0.4cc	4 : 0.4cc
600 : 6 Outlets	5 : 0.5cc	5 : 0.5cc	5 : 0.5cc	5 : 0.5cc	5 : 0.5cc



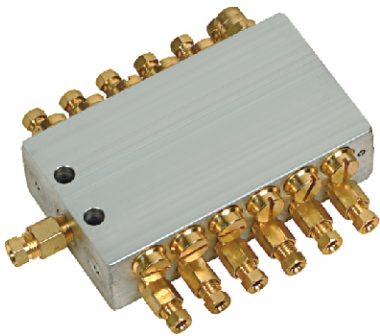
# CV Type Progressive Feeders

◆Taiwanese Patent No. 182121, Chinese Patent No. ZL03222941. 0.

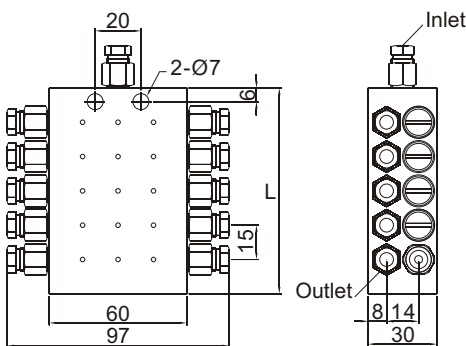
◆Features:

- 1.Fixed amount of oil feeding. The lubrication points of volume distributor supply a fixed flow of lubricant. The discharge volume of each outlet is 0.18 cc/stroke.
- 2.Every piston of CV type progressive feeders cannot deliver its lubricant until the preceding one has discharged it.
- 3.If one feeder section doesn't receive any lubricant or is blocked, the entire CV type progressive feeder will stop, and that situation can be noticed by the signal of the feeder.
- 4.The standards are assembled detective piston, which can be seen if operation is normal.
- 5.CV type could be assembled NO (Normal Open) or NC (Normal Close) sensor switch on request, which would make symbol during operation or intermittent time, it's easier to observe.
- 6.CV type can be used with grease or oil lubricators. As ordering, please details used for oil or grease.
- 7.When using grease, the operation pressure range is 15 kgf/cm<sup>2</sup> to 150 kgf/cm<sup>2</sup>. When using oil, the operation pressure range is 5 kgf/cm<sup>2</sup> to 30 kgf/cm<sup>2</sup>.
- 8.The viscosity range of grease is NLGI grades 0 to 2. And the viscosity range of oil is 32-220 cSt @ 40°C.

CV Type Progressive Feeders



Model	Outlet Num.	Inlet Bore	Outlet Bore	L (mm)	Discharge Volume	Operation Pressure Range	Weight (g)
CV-6	6	Standards Ø6 Ø4 Optional	Standards Ø4 Ø6 Optional	60	0.18cc/ Stroke	Grease 15 to 150 kgf/cm <sup>2</sup> Oil 5-30 kgf/cm <sup>2</sup>	407
CV-8	8			75			514
CV-10	10			90			628
CV-12	12			105			686
CV-14	14			120			840



◆ Order Code :

CV-10 ——— 6 ——— 4 ——— ※

Outlet Number                      Inlet Bore    Outlet Bore                      Special Request

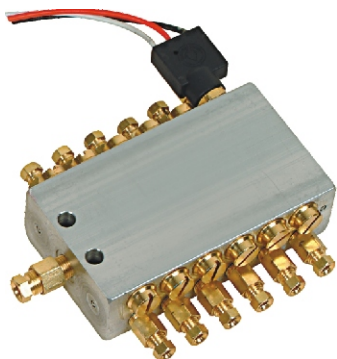
6 : 6 Outlets                          4 : Ø4            4 : Ø4                          ※ S : Add Sensor Switch

8 : 8 Outlets                          6 : Ø6            6 : Ø6

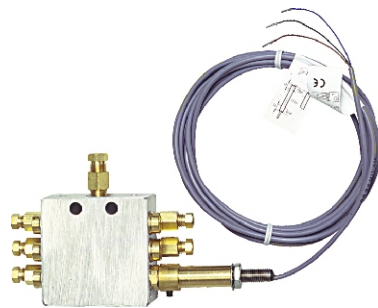
10 : 10 Outlets

12 : 12 Outlets

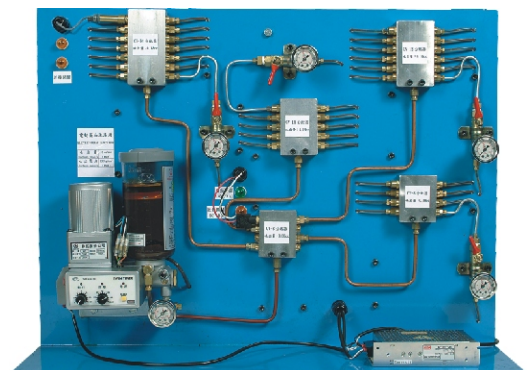
14 : 14 Outlets



CV Type With Sensor Switch

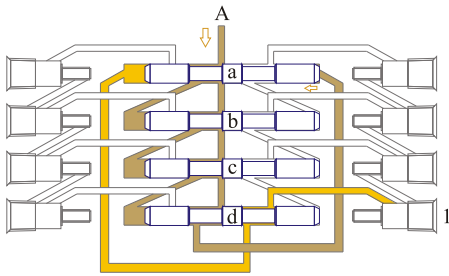


CV Type With Proximity Switch

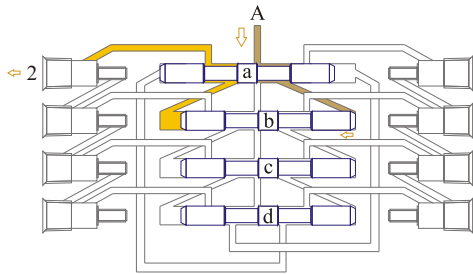


The Piping Of KSB Type Grease Lubrication System

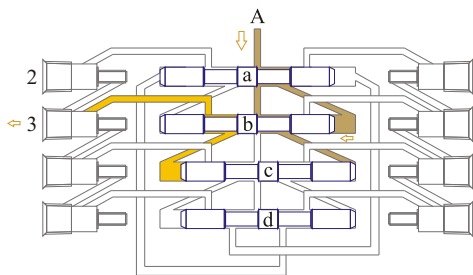
# CV Type Progressive Feeders Circulation Illustration



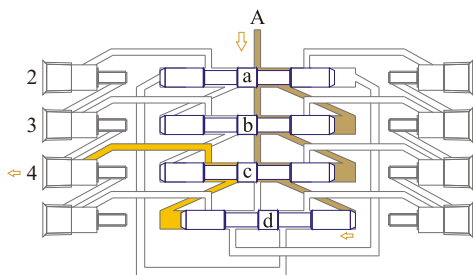
1. The oil pressure forces the lubricant flowing into inlet bore A and pushes pistons move to each tap stop.
2. The piston **a** moves toward to left, then the flow direction of lubricant changes. The lubricant, which originally is in the left piston flows through piston **d** and keeps moving to the first outlets.



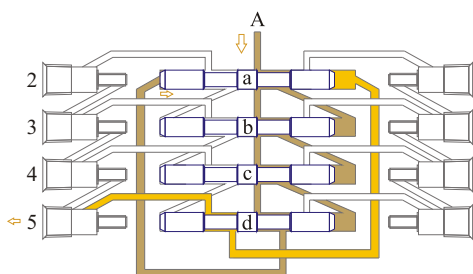
3. The lubricant changes the flow direction and moves toward to piston **b** that forces piston **b** moving toward to left. The lubricant, which originally is in piston **b** flows through piston **a**, and keeps moving to the second outlets.



4. The lubricant changes the flow direction then moves toward to piston **c** that forces piston **c** moving toward to left. The lubricant, which originally is in piston **c** flows through piston **b** and keeps moving to the third outlets.



5. The lubricant changes the flow direction then moves toward to piston **d** that forces piston **d** moving toward to left. The lubricant, which originally is in piston **d** flows through piston **c** and keeps moving to the fourth outlets.



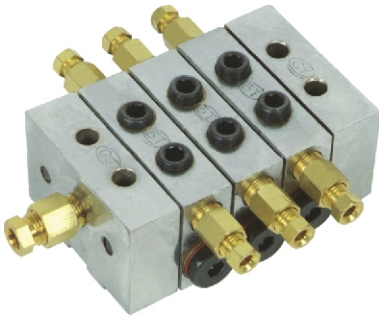
6. The lubricant changes the flow direction then moves toward to piston **a** that forces piston **a** moving toward to right. The lubricant, which originally is in piston **a** flows through piston **d** and keeps moving to the fifth outlets. The left-side circulation is completed. The right-side circulation is same as the left-side circulation.

# CJ Type Progressive Feeders

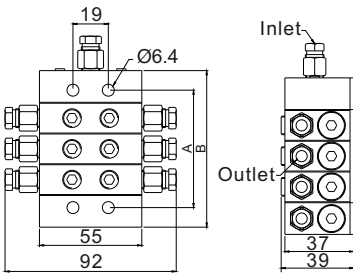


### ◆ Features:

- 1.Fixed amount of oil feeding. The lubrication points of volume distributor supply a fixed flow of lubricant.
- 2.Every piston of CJ type progressive feeders cannot deliver its lubricant until the preceding one has discharged it.
- 3.CJ type has 0.2, 0.4 cc/ stroke of discharge volume to be chosen. As ordering, please details the discharge volume wanted.
- 4.CJ type can be used with grease or oil lubricators. As ordering, please details used for oil or grease.
- 5.When using grease, the operation pressure range is 15 kgf/cm<sup>2</sup> to 80 kgf/cm<sup>2</sup>. When using oil, the operation pressure range is 5 kgf/cm<sup>2</sup> to 30 kgf/cm<sup>2</sup>.
- 6.The viscosity range of grease is NLGI grades 0 to 2. And the viscosity range of oil is 32-220 cSt @ 40°C.



Model	Max Outlet Num.	Inlet Bore	Outlet Bore	A (mm)	B (mm)	Operation Pressure Range	Weight (g)
CJ-3	6	StandardsØ6 Ø4 Optional	StandardsØ4 Ø6 Optional	64.5	85.5	Grease 15~80 kgf/cm <sup>2</sup> Oil 5~30 kgf/cm <sup>2</sup>	1054
CJ-4	8			83.5	104.5		1264
CJ-5	10			100	121		1509
CJ-6	12			116.5	137.5		1727
CJ-7	14			133	154		1869
CJ-8	16			149.5	170.5		2086
Code	Max Outlet Num.	Cm <sup>3</sup> /stroke					
15T	2	0.2cc					
15S	1	0.4cc					



### ◆ Order Code :

CJ-3 ——— 6 4 1 2 1 ※

Outlet Number    Inlet Bore    Outlet 1 : 15T, 0.2cc    1 : 15T, 0.2cc    1 : 15T, 0.2cc    Special Request

3 : 3 Sections    4 : Ø4    4 : Ø4    2 : 15S, 0.4cc    2 : 15S, 0.4cc    2 : 15S, 0.4cc

4 : 4 Sections    6 : Ø6    6 : Ø6

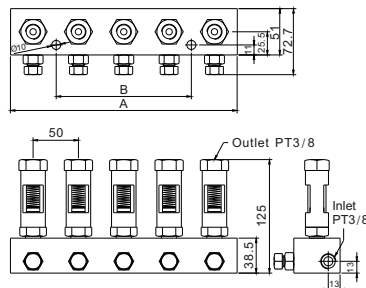
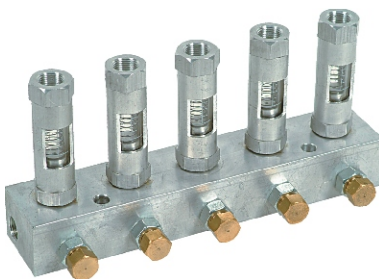
5 : 5 Sections

6 : 6 Sections

7 : 7 Sections

8 : 8 Sections

# BS Type Transparent Adjustable Distributor



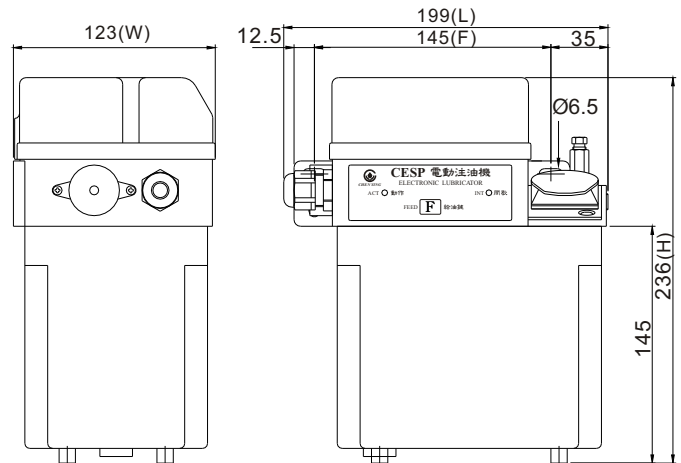
### ◆ Features:

- 1.BS type has transparent tube which is easy to observe the oil volume and operation.
- 2.The flow rate of each outlet is about 1 L/min, the flow rate of BS-6 could reach 6 L/min.
- 3.Suitable for machinery requiring large discharge volume, usually works with CLS type series of products.
- 4.BS type could bear high temperature up to 80°C
- 5.The viscosity range of oil is 32-220 cSt @ 40°C

Model	Outlet Num.	Inlet Bore	Outlet Bore	A (mm)	B (mm)	Discharge Volume	Operation Pressure Range	Temperture Endurance	Weight (g)
BS-1	1	PT3/8	PT3/8	70	50	Each discharge bore: 1L/min Adjustable	8kgf/cm <sup>2</sup> to 30kgf/cm <sup>2</sup>	80°C	466
BS-2	2			120	100				833
BS-3	3			150	50				1115
BS-4	4			200	100				1489
BS-5	5			250	149				1863
BS-6	6			300	200				2225

CJ Type Progressive Feeders/BS Type Transparent Adjustable Distributor

◆ Taiwanese Patent NO.M270302



CESP-01 Type Standard Externals

### ◆ Features

- 1.The time adjuster of CESP is inside the wire box. The standard of CESP type, operation time is 2,3,5,10,15,20, 25,30 seconds optional , and interval time is 3,5,10,15,20,30,60,180 minutes optional.
- 2.The electronic box has operation indicator and interval indicator. Two types of this CESP series, CESP Turn On-Feeding Type and CESP Turn On-Interval Type, both could automatically save the original operation and interval time. If the power is suddenly off, after turning on the power, both would start the cycle again.
- 3.It has a float switch that can detect the oil volume. When the oil is lower than the standard. The float switch will send continuous signal automatically and the buzzer will alarm.
- 4.Please don't press the force feed-oil ( F button) more than three minutes in order to avoid overloading. When the temperature reaches 100°C , the sensor will be on to stop the motor continue running about 5 minutes.

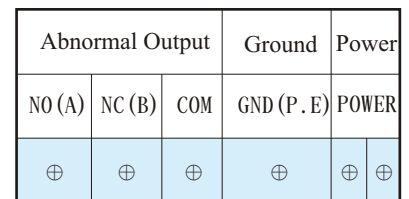
### ◆ Application of Machines Equipment

- 1.CESP Turn On-Feeding Type is suitable for the machinery that needs automatically oil feeding after turning on the power.
- 2.CESP Turn On-Interval Type is suitable for the machinery that has to avoid feeding oil immediately after turning on the power.

Model	Act Time	Interval Time	Motor (W)	Max Volume	Max Pressure	1ØVoltage (V)	Ampere (A)	Hertz (Hz)	Discharge Bore	Pressure Gauge	Oil Viscosity
CESP	2,3,5,10,15,20,25,30 sec (Optional)	3,5,10,15,20,30,60,180 min (Optional)	12W	135 cc/min	10kgf/cm <sup>2</sup>	110V 220V	1.6A 0.6A	60Hz or 50Hz	Ø4orØ6	Optional	32-68cSt@40°C

Model	Tank Code	Tank Material	Capacity Liters	Fixed Hole Distance(mm)	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
CESP	01	Resin	2L	145	199	124	236	2.30
	02	Aluminum	2L	200	202	134	224	3.50
	03	Resin	3L	205	230	167	232	2.80
	04	Resin	4L	250	256	162	277	3.45
	05	Aluminum	4L	280	275	150	246	4.45
	08	Iron	8L	338	355	197	261	7.20

CESP Single Phase Wiring Diagram

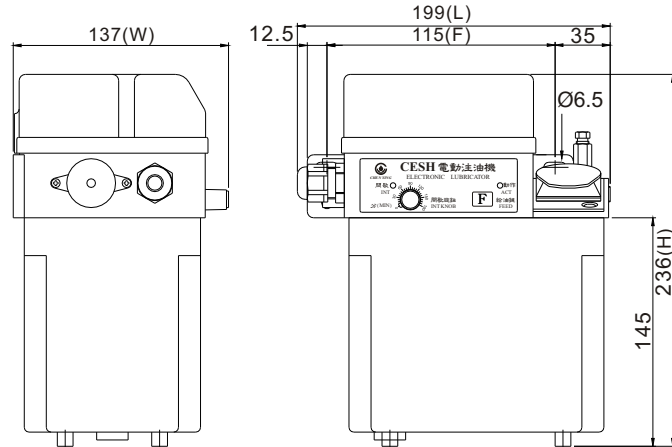


### ◆ Order Code :

<b>CESP</b>	<b>01</b>	<b>C</b>	<b>1</b>	<b>2</b>	<b>※</b>
Model	Tank Capacity (Material)	Voltage	Discharge Bore	Operation Model	Special Request
P : Dial Type	01 : 2L ( Resin ) 02 : 2L ( Aluminum ) 03 : 3L ( Resin ) 04 : 4L ( Resin ) 05 : 4L ( Aluminum ) 08 : 8L ( Iron )	A : 110V,60HZ B : 220V,50HZ C : 220V,60HZ	0 : Ø4 1 : Ø6 2 : Ø4 ( With Pressure Gauge ) 3 : Ø6 ( With Pressure Gauge )	1 : Turn on-Feeding 2 : Turn on-Interval	

# CESH Single Time Adjuster Type Electric Lubricator

◆Taiwanese Patent NO.M269392



CESH-01 Type Standards Externals

## ◆Features

- 1.The standard of CESH type, operation time is 10 sec fixed, and interval time is 1-60 min or 1-180 min optional.
- 2.The electronic box has operation indicator and interval indicator. Two types of this CESH series, CESH Turn On-Feeding Type and CESH Turn On-Interval Type, both could automatically save the original operation and interval time. If the power is suddenly off, after turning on the power, both would start the cycle again.
- 3.It has a float switch that can detect the oil volume. When the oil is lower than the standard. The float switch will send continuous signal automatically and the buzzer will alarm.
- 4.Please don't press the force feed-oil ( **F** button) more than three minutes in order to avoid overloading. When the temperature reaches 100°C , the sensor will be on to stop the motor continue running about 5 minutes.

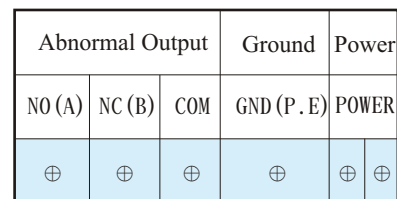
## ◆Application of Machines Equipment

- 1.CESH Turn On-Feeding Type is suitable for the machinery that needs automatically oil feeding after turning on the power.
- 2.CESH Turn On-Interval Type is suitable for the machinery that has to avoid feeding oil immediately after turning on the power.

Model	Act Time	Interval Time	Motor (W)	Max Volume	Max Pressure	1Ø Voltage (V)	Ampere (A)	Hertz (Hz)	Discharge Bore	Pressure Gauge	Oil Viscosity
CESH	10 sec (Non-adjustable)	1-180 min or 1- 60 min Optional	12W	135 cc/min	10kgf/cm <sup>2</sup>	110V 220V	1.6A 0.6A	60Hz or 50Hz	Ø4orØ6	Optional	32-68cSt@40°C

Model	Tank Code	Tank Material	Capacity Liters	Fixed Hole Distance (mm)	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
CESH	01	Resin	2L	145	199	137	236	2.30
	02	Aluminum	2L	200	202	139	224	3.50
	03	Resin	3L	205	230	167	232	2.80
	04	Resin	4L	250	256	162	277	3.45
	05	Aluminum	4L	280	275	150	246	4.45
	08	Iron	8L	338	355	197	261	7.20

CESH Single Phase Wiring Diagram

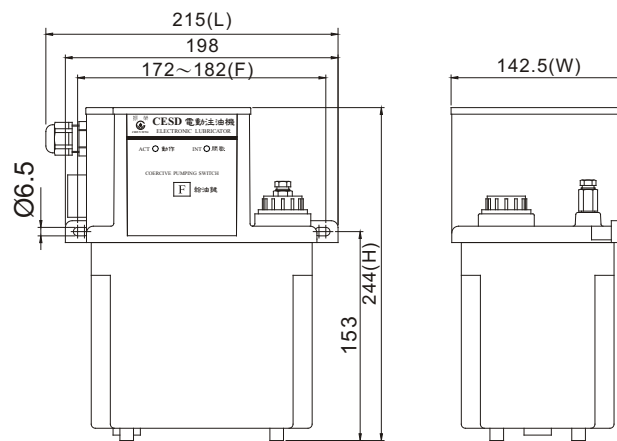


## ◆Order Code :

CESH	01	2	C	1	2	※
Model	Tank Capacity(Material)	Time (Act x Interval)	Voltage	Discharge Bore	Operation Model	Special Request
H : Single Time Adjuster	01 : 2L (Resin)	1 : 10 sec x 60 min	A : 110V,60HZ	0 : Ø4	1 : Turn on-Feeding	
	02 : 2L (Aluminum)	2 : 10 sec x 180 min	B : 220V,50HZ	1 : Ø6	2 : Turn on-Interval	
	03 : 3L (Resin)		C : 220V,60HZ	2 : Ø4 (With Pressure Gauge)		
	04 : 4L (Resin)			3 : Ø6 (With Pressure Gauge)		
	05 : 4L (Aluminum)					
	08 : 8L (Iron)					



# CESD Type Resistance Electric Lubricator



CESD-01 Type Standards Externals

## ◆ Features

1. The time adjuster of CESD is inside the wiring box. The electronic box has operation indicator and interval time indicator.
2. Two types of this CESD series, Turn On-Feeding Type will feed oil after turning on the power. Turn On-Interval Type will be interval after turning on the power and this type can memorize the original setting time automatically, if the power is suddenly off, after turning on the power, it would continue the unfinished work and avoid repeating to feed oil.
3. It has a float switch that can detect the oil volume. When the oil is lower than the standard. The float switch will send continuous signal automatically and the buzzer will alarm.
4. Please don't press the force feed-oil ( **F** button) more than three minutes in order to avoid overloading. When the temperature reaches 100°C , the sensor will be on to stop the motor continue running about 5 minutes.
5. Its function is similar to CESW type. The difference is the location of the time adjuster.

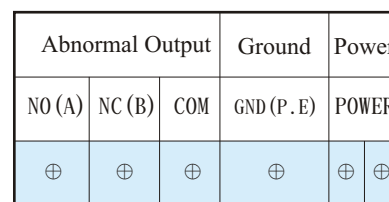
## ◆ Application of Machines Equipment

1. CESD Turn On-Feeding Type is suitable for the machinery that needs automatically oil feeding after turning on the power.
2. CESD Turn On-Interval Type is suitable for the machinery that has to avoid feeding oil immediately after turning on the power.

Model	Act Time	Interval Time	Motor	Max Volume	Max Pressure	1Ø Voltage	Ampere	Hertz	Discharge Bore	Time Adjuster	Float Switch	Buzzer	Oil Viscosity
CESD	3-60 sec	1-60min or 1-180min	12W	130 cc/min	8kgf/cm <sup>2</sup>	110V 220V	1.6A 0.6A	60Hz or 50Hz	Ø4orØ6	Inside The Wiring Box	<input type="checkbox"/>	<input type="checkbox"/>	32-68cSt@40°C

Model	Tank Code	Tank Material	Capacity Liters	Fixed Hole Distance(mm)	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
CESD	01	Resin	2L	177	215	128	244	3.30
	02	Aluminum	2L	200	218	145	235	4.45
	03	Resin	3L	205	230	167	244	3.75
	04	Resin	4L	250	277	162	264	4.30
	05	Aluminum	4L	280	298	167	255	5.30
	08	Iron	8L	338	355	190	280	8.00

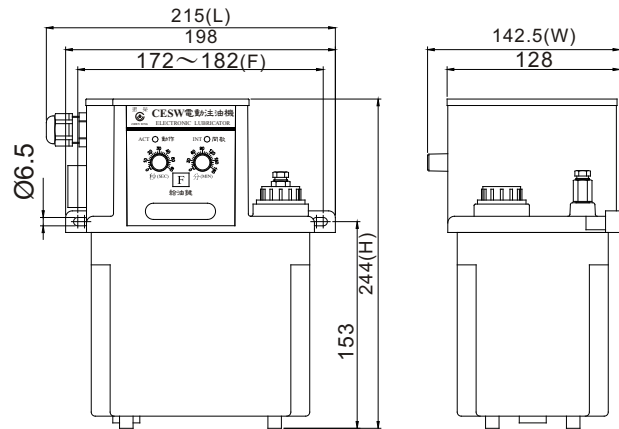
CESD Single Phase Wiring Diagram



## ◆ Order Code :

CES	D	01	2	C	1	2	※
Model	Tank Capacity(Material)	Time (Act x Interval)	Voltage	Discharge Bore	Operation Model	Special Request	
D : Time Adjuster	01 : 2L (Resin)	1 : 1min×60min	A : 110V,60Hz	0 : Ø4	1 : Turn on-Feeding		
Inside the wiring box	02 : 2L (Aluminum)	2 : 1min×180min	B : 220V,50Hz	1 : Ø6	2 : Turn on-Interval		
	03 : 3L (Resin)	3 : 1min×12hours	C : 220V,60Hz	2 : Ø4 ( With Pressure Gauge )			
	04 : 4L (Resin)	4 : 1min×72hours		3 : Ø6 ( With Pressure Gauge )			
	05 : 4L (Aluminum)						
	08 : 8L (Iron)						

CESD Type Resistance Electric Lubricator



CESW-01 Type Standards Externals

### ◆ Features

1. The time adjuster of CESW is outside the wiring box. The electronic box has operation indicator and interval time indicator.
2. CESW type resistance lubricator has time memory function that can automatically memorize the original operation and interval time settings. If the power is suddenly off, both indicators will continue the cycle after the power is back. The operation time and interval time can be adjusted easily as need.
3. Two operation models of CESW are for option: Turn On-Feeding or Turn On-Interval. Turn On-Feeding type will feed oil after turning on the power. Turn On-Interval type will be interval after turning on the power.
4. It has a float switch that can detect the oil volume. When the oil is lower than minimum level, the float switch will send continuous signal and the buzzer will alarm.

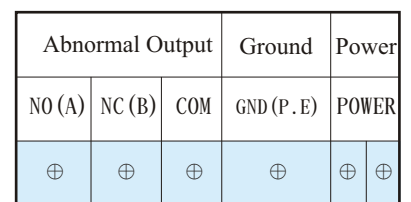
### ◆ Application of Machines Equipment

1. CESW Turn On-Feeding Type is suitable for the machinery that needs automatically oil feeding after turning on the power.
2. CESW Turn On-Interval Type is suitable for the machinery that has to avoid feeding oil immediately after turning on the power.

Model	Act Time	Interval Time	Motor	Max Volume	Max Pressure	1Ø Voltage	Ampere	Hertz	Discharge Bore	Time Adjuster	Float Switch	Buzzer	Oil Viscosity
CESW	3-60 sec	1-60min or 1-180min	12W	130 cc/min	8kgf/cm <sup>2</sup>	110V 220V	1.6A 0.6A	60Hz or 50Hz	Ø4orØ6	Outside The Wiring Box	○	○	32-68cSt@40°C

Model	Tank Code	Tank Material	Capacity Liters	Fixed Hole Distance(mm)	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
CESW	01	Resin	2L	177	215	142.5	244	3.30
	02	Aluminum	2L	200	218	160	235	4.45
	03	Resin	3L	205	230	167	244	3.75
	04	Resin	4L	250	277	162	264	4.30
	05	Aluminum	4L	280	298	165	255	5.30
	08	Iron	8L	338	355	190	280	8.00

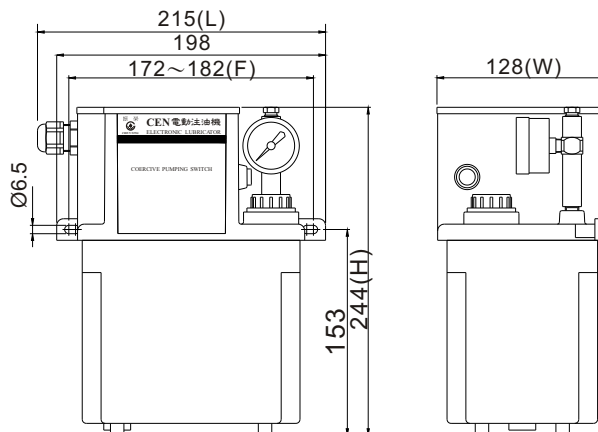
CESW Single Phase Wiring Diagram



### ◆ Order code :

CES	W	01	2	C	1	2	※
Model	Tank Capacity(Material)	Time (Act x Interval)	Voltage	Discharge Bore	Operation Model	Special Request	
W : Time	01 : 2L (Resin)	1 : 1 min x 60 min	A : 110V,60Hz	0 : Ø4	1 : Turn on-Feeding		
Adjuster	02 : 2L (Aluminum)	2 : 1 min x 180 min	B : 220V,50Hz	1 : Ø6	2 : Turn on-Interval		
Outside the wiring box	03 : 3L (Resin)	3 : 1 min x 12 hours	C : 220V,60Hz	2 : Ø4 (With Pressure Gauge)			
	04 : 4L (Resin)	4 : 1 min x 72 hours		3 : Ø6 (With Pressure Gauge)			
	05 : 4L (Aluminum)						
	08 : 8L (Iron)						

# CEN01 Resistance Type Electric Lubricator



CEN01-01 Type Standards Externals

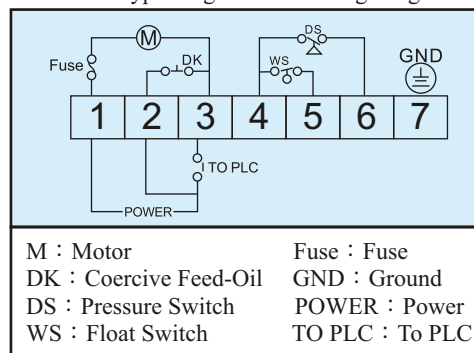
### ◆ Features

1. CEN01 type is without timer (also could be controlled by Programmable Logic Controller) and can work with many kinds of open distributors and proportion adapters.
2. It has a pressure switch device and been set up as 1kg/cm<sup>2</sup> for checking if the piping works normally. The standard specification is NC (Normal Close) contact, which means if the pressure is abnormal, it will have abnormal signal. NO (Normal Open) contact is on request.
3. It has a spark-eliminator inside to prevent the sparks producing when the electric current is running. The spark-eliminator can avoid PLC to be interfered.
4. It has a float switch that can detect the volume of oil. It will have abnormal signal automatically when the oil level is lower than the standard.
5. Please don't press the force feed-oil ( **F** ) button more than three minutes in order to avoid overloading. When the temperature reaches 100°C , the sensor will be on to stop the motor continue running about 5 minutes.
6. It has a pressure gauge, which can detect the pressure.
7. Its function is similar to CEN02 type. The difference is CEN01 type is without timer and CEN02 type is controlled by a timer. CEN03 and CEN04 types are pressure-relief type electric lubricators.

### ◆ Application of Machines Equipment

CEN01 type usually works with processing or projecting machinery.

CEN01 Type Single Phase Wiring Diagram



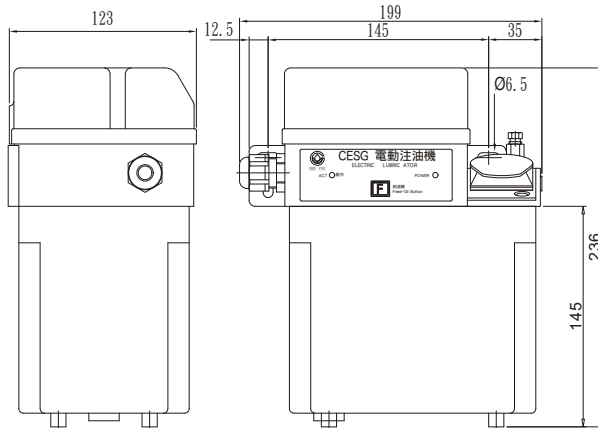
Model	Act Time	Interval Time	Motor	Max Volume	Max Pressure	1Ø Voltage	Ampere	Hertz	Discharge Bore	Oil Viscosity
CEN01	Control by PLC		30W	130 cc/min	15kgf/cm <sup>2</sup>	110V 220V	2.5A 1A	60Hz or 50Hz	Ø4orØ6	32-68cSt@40°C

Model	Tank Code	Tank Material	Capacity Liters	Fixed Hole Distance(mm)	Length (mm)	Width (mm)	Height (mm)	Weight(kg)
CEN01	01	Resin	2L	177	215	128	244	3.75
	02	Aluminum	2L	200	218	145	235	4.90
	03	Resin	3L	205	230	167	244	4.30
	04	Resin	4L	250	277	162	264	4.90
	05	Aluminum	4L	280	298	167	255	5.85
	08	Iron	8L	338	355	190	280	8.60

### ◆ Order code :

CEN	01	01	C	3	※
Model	Tank Capacity(Material)	Voltage	Discharge Bore	Special Request	
01 : Resistance Type, Controlled By PLC	01 : 2L ( Resin ) 02 : 2L ( Aluminum ) 03 : 3L ( Resin ) 04 : 4L ( Resin ) 05 : 4L ( Aluminum ) 08 : 8L ( Iron )	A : 110V,60Hz B : 220V,50Hz C : 220V,60Hz	0 : Ø4 1 : Ø6 2 : Ø4 ( With Pressure Gauge ) 3 : Ø6 ( With Pressure Gauge )	※B : Add a buzzer	

CEN01 Resistance Type Electric Lubricator

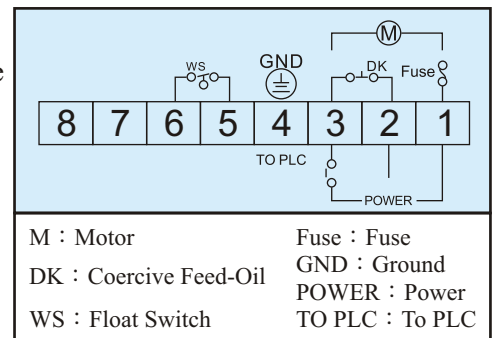


CESG01-01 Type Standards Externals

### ◆ Features

1. CESG-01 is resistance electric lubricator, which can be operated by Programmable Logic Controller (PLC), suitable to work with all kinds of straight adapters and proportion adapters.
2. It has a float switch that can detect the oil volume. When oil is lower than minimum level, the signal will automatically turn on.
3. It has a force feed-oil button (F button), slightly press the F button for three seconds and the oil will feed immediately.
4. Please don't press the force feed-oil button (F button) more than three minutes in order to avoid overloading. When the temperature reaches 100 °C, the sensor will be on to stop the motor continue running about 5 minutes.

CESG-01 Type Single Phase Wiring Diagram



### ◆ Application of Machines Equipment

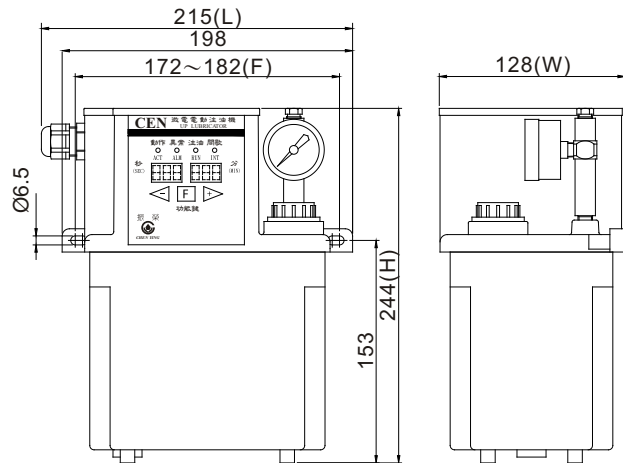
It usually works with Processing or Projecting or Lathes.

Model	Pressure-Relief Device	Act Time	Interval Time	Motor	Max Volume	Max Pressure	1Ø Voltage	Ampere	Hertz	Discharge Bore	Pressure Switch	Oil Viscosity
CESG01	×	Controlled by PLC		30W	135cc/min	15kgf/cm <sup>2</sup>	110V 220V	1.6A 0.6A	60HZ or 50HZ	Ø4 or Ø6	Optional	32-68cSt@40°C
Model	Tank Code	Tank Material	Capacity Liters	Fixed Hole Distance(mm)	Length (mm)	Width (mm)	Height (mm)	Weight(kg)				
CESG01	01	Resin	2 L	145	199	137	236	2.30				
	02	Aluminum	2 L	200	202	139	224	3.50				
	03	Resin	3 L	205	230	167	232	2.80				
	04	Resin	4 L	250	256	162	277	3.45				
	05	Aluminum	4 L	280	275	150	246	4.45				
	08	Iron	8 L	338	355	197	261	7.20				

### ◆ Order code :

CESG- 01	01	C	3	※
Model Type	Tank Capacity (Material)	Voltage	Discharge Bore	Special Request
01 : Resistance	01 : 2L (Resin)	A : 110V,60HZ	0 : Ø4	※P : Add a pressure switch
	02 : 2L (Aluminum)	B : 220V,50HZ	1 : Ø6	(NO or NC 1kgf/cm <sup>2</sup> )
	03 : 3L (Resin)	C : 220V,60HZ	2 : Ø4 ( With Pressure Gauge )	
	04 : 4L (Resin)		3 : Ø6 ( With Pressure Gauge )	
	05 : 4L (Aluminum)			
	08 : 8L (Iron)			

# CEN02 Type Resistance Electric Lubricator



CEN02-01 Type Standards Externals

## ◆ Features

1. CEN02 type has a timer, which controls the operation and interval time. The electronic box has operation, abnormal, feeding and interval indicators.
2. It has a float switch that can detect the oil volume. It will have abnormal signal automatically when the oil level is lower than the standard.
3. The buzzer will alarm when oil level is lower than the standard.
4. Please don't press the force feed-oil ( **F** button) more than three minutes in order to avoid overloading. When the temperature reaches 100°C, the sensor will be on to stop the motor continue running about 5 minutes.
5. It has a pressure gauge that can detect the pressure easily.
6. Its function is similar to CEN01 type. The difference is CEN01 type is without timer (also could be controlled by Programmable Logic Controller) and CEN02 type is controlled by a timer. CEN03 and CEN04 types are pressure-relief type electric lubricators.

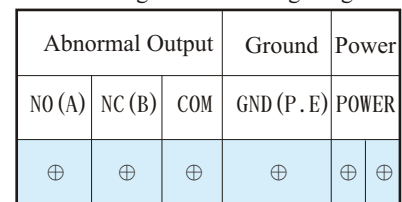
## ◆ Application of Machines Equipment

It usually works with processing or projecting machinery.

Model	Act Time	Interval Time	Motor	Max Volume	Max Pressure	1Ø Voltage	Ampere	Hertz	Discharge Bore	Oil Viscosity
CEN02	1-999 sec	1-999sec or min	30W	130 cc/min	15kgf/cm <sup>2</sup>	110V 220V	2.5A 1A	60Hz or 50Hz	Ø4orØ6	32-68cSt@40°C

Model	Tank Code	Tank Material	Capacity Liters	Fixed Hole Distance(mm)	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
CEN02	01	Resin	2L	177	215	128	244	3.80
	02	Aluminum	2L	200	218	145	235	5.10
	03	Resin	3L	205	230	167	244	4.40
	04	Resin	4L	250	277	162	264	5.00
	05	Aluminum	4L	280	298	167	255	5.95
	08	Iron	8L	338	355	190	280	8.65

CEN02 Single Phase Wiring Diagram



## ◆ Order code :

<b>CEN 02</b>	<b>01</b>	<b>2</b>	<b>C</b>	<b>3</b>	<b>※</b>
Model	Tank Capacity(Material)	Time(Act x Interval)	Voltage	Discharge Bore	Special Request
02 : Resistance	01 : 2L ( Resin )	1 : sec x sec	A : 110V,60Hz	0 : Ø4	
Type,	02 : 2L ( Aluminum )	2 : sec x min	B : 220V,50Hz	1 : Ø6	
Controlled By	03 : 3L ( Resin )		C : 220V,60Hz	2 : Ø4 ( With Pressure Gauge )	
Timer	04 : 4L ( Resin )			3 : Ø6 ( With Pressure Gauge )	
	05 : 4L ( Aluminum )				
	08 : 8L ( Iron )				

# CESA/B, CESMA/B, CESC, CESS Type Resistance Electric Lubricator

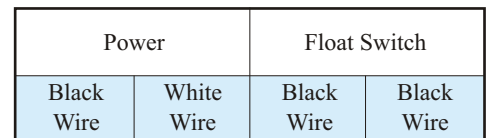
## ◆ Features

1. CES resistance type electric lubricator series include CESA/B, CESMA/B, CESC and CESS types. The accessories are different by each model. Please refer to the specification for further details.
2. The interval time could be set up on request (2, 3, 5, 10, 15, 30, 60 minutes), supply the power, and the lubricator will work automatically.
3. The discharge volume could be set up on request and customers can adjust it by themselves. The standard specification of discharge volume is 3-6 cc/stroke, 1-6 cc/stroke is also available on request.
4. CES series used a Japanese synchronous motor, worm gear and a worm shaft working together.
5. CESB, CESMB and CESC type have float switches for detecting the oil level. When oil level is lower than minimum level, the float switch will signal automatically.
6. The standard specification of float switch is NO (Normal Open) contact, which means when oil level is normal, it will send signals automatically. NC (Normal Close) contact is also available on request.

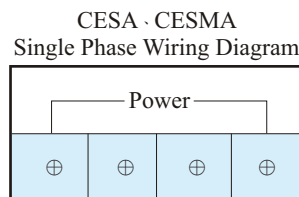
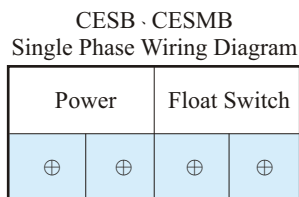
## ◆ Application of Machines Equipment

1. It is suitable for the machinery which needs fixed interval time and discharge volume.
2. It usually works with desktop lathes or carpentry machinery or press machines.

CESS Single Phase Wiring Diagram



1. CESSType has no terminal base.
2. CESSType standards has no float switch, but could be assembled one on request.



Model	Interval Time	Motor	cc/stroke	Max Pressure	1Ø Voltage	Ampere	Hertz	Discharge Bore	Oil Viscosity
CESA	2、3、5、10、 15、30、60 min Optional (Non-Adjustable)	4W	3-6cc	3kgf/cm <sup>2</sup>	110V 220V	0.1A 0.05A	50/60Hz	Ø4 or Ø6	32-68cSt@40°C
CESB									
CESMA									
CESMB									
CESC									
CESS	1-3cc								

Model	Capacity Liters	Fixed Hole Distance(mm)	Length (mm)	Width (mm)	Height (mm)	Weight (kg)	Float Switch	Wiring	Buzzer	IC Board
CESA	2L	176	197	139	250.5	1.91	×	Pu11 Out	×	×
CESB			197	139	250.5	1.97	○		×	×
CESMA			205	139	250.5	2.07	○	Inside	×	×
CESMB			205	139	250.5	2.13			×	×
CESC			198	139	250.5	2.04	○	Pu11 Out	○	○
CESS	1L	100	125	89	203	1.28	×	Pu11 Out	×	×

## ◆ Order code :

CES	A	10	C	6	3	※
Model	Interval	Voltage	Discharge Volume	Discharge Bore	Special Request	
A : Standards, Wiring Pull Out	03 : 3min	A : 110V	1 : 1cc	0 : Ø4	※L : Add a Light	
B : With Float Switch, Wiring Pull Out	05 : 5min	C : 220V	2 : 2cc	1 : Ø6		
MA : Standards, Wiring Inside	10 : 10min		3 : 3cc	2 : Ø4 ( With Pressure Gauge )		
MB : With Float Switch, Wiring Inside	15 : 15min		4 : 4cc	3 : Ø6 ( With Pressure Gauge )		
C : With IC Box and Buzzer	30 : 30min		5 : 5cc			
	60 : 60min		6 : 6cc			

## ◆ Order code :

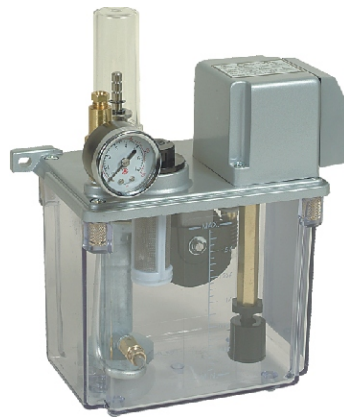
CES	S	10	C	3	1	※
Model	Interval	Voltage	Discharge Volume	Discharge Bore	Special Request	
S : Standards, Tank Capacity 1L	03 : 3min	A : 110V	1 : 1cc	0 : Ø4	※B : Add a Buzzer	
SB : With Float Switch Tank Capacity 1L	05 : 5min	C : 220V	2 : 2cc	1 : Ø6		
	10 : 10min		3 : 3cc			
	15 : 15min					
	30 : 30min					
	60 : 60min					

# CESA/B、CESMA/B、CESC、CESS Type Resistance Electric Lubricator

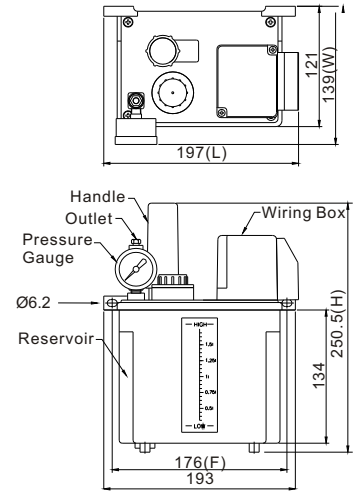
CESA/B、CESMA/B、CESC、CESS Type Resistance Electric Lubricator



CESA



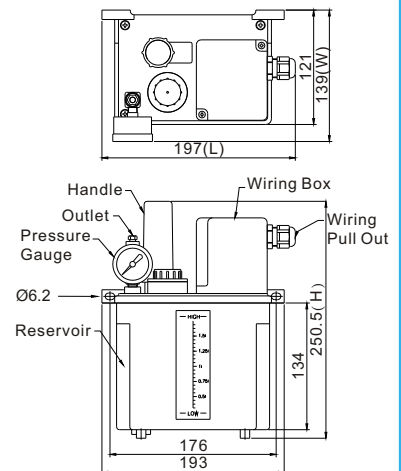
CESB



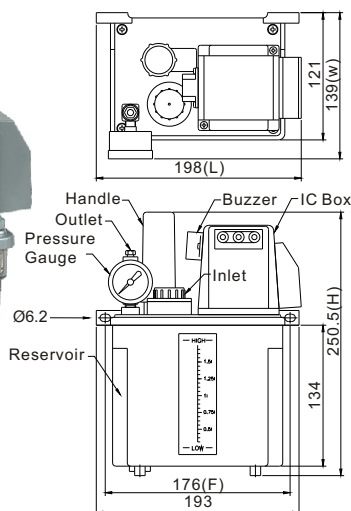
CESMA



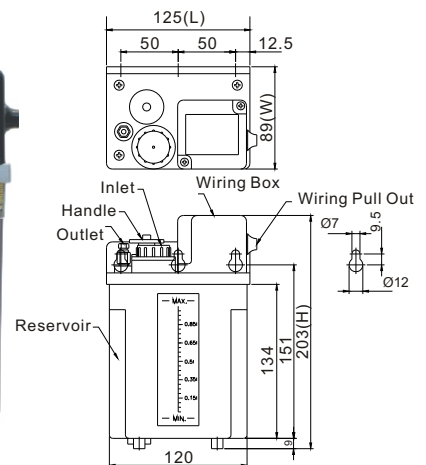
CESMB



CESC



CESS



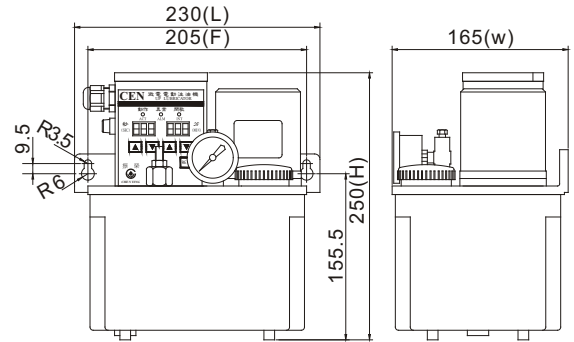
# CENA Type Resistance Electric Lubricator

CENA Type Resistance Electric Lubricator



CENA-03  
Type Standards

CENA-03  
Type With Larger Buzzer



CENA-03  
Type Standards Externals

### ◆ Features

1. CENA type has a timer, which controls the operation and interval time. It has operation, abnormal and interval indicators that is easy for visual checking.
2. It has a pressure-regulating valve, which can adjust the pressure.
3. It has a pressure gauge that can detect the pressure easily.
4. It has a float switch (NC Contact) that can detect the oil volume. When oil is lower than the minimum level, the float switch will send continuous signal automatically.
5. It has a reset button (RES button), press the button, and it would return to the original setting time and start the cycle again.
6. CENA type could be installed a 1 kg/cm<sup>2</sup> pressure switch upon request for detecting if the piping works normally. The standard specification is NC (Normal Close) contact, which means if the pressure is abnormal, it will have signal.
7. A small buzzer is installed inside but also can add a large buzzer on request.

CENA Single Phase Wiring Diagram

Abnormal Output		Ground	Power
NO (A)	NC (B)	COM	GND (P. E) POWER
⊕	⊕	⊕	⊕ ⊕

### ◆ Application of Machines Equipment

It usually works with processing or projecting machinery.

Model	Act Time	Interval Time	Motor	Max Volume	Max Pressure	1Ø Voltage	Ampere	Hertz	Discharge Bore	Oil Viscosity
CENA	1-999 sec	1-999min or 1-999sec	25W	250 cc/min	15kgf/cm <sup>2</sup>	110V 220V	0.5A 0.25A	50/60Hz	Ø4 or Ø6	32-68cSt@40°C
			60W	500 cc/min	30kgf/cm <sup>2</sup>	110V 220V	1.2A 0.6A			

Model	Tank Code	Tank Material	Capacity Liters	Fixed Hole Distance(mm)	Length (mm)	Width (mm)	Height (mm)	Weight(kg)
CENA (25W)	03	Resin	3L	205	230	165	250	5.05
	04	Resin	4L	250	275	160	270	5.65
	05	Aluminum	4L	280	298	165	260	6.65
	08	Iron	8L	338	355	190	290	9.40
CENA (60W)	05	Aluminum	4L	280	298	165	310	7.70
	08	Iron	4L	338	355	190	340	10.45

### ◆ Order code :

CEN A 03 2 C 25 3 ※

Model : Tank Capacity (Material) Time (Act x Interval) Voltage Motor Discharge Bore Special Request

A : Resistance Type  
 03 : 3L (Resin)  
 04 : 4L (Resin)  
 05 : 4L (Aluminum)  
 08 : 8L (Iron)  
 12 : 12L (Iron)  
 16 : 16L (Iron)

1 : sec x sec  
 2 : sec x min

A : 110V  
 C : 220V

25 : 25W  
 3 : Ø4  
 1 : Ø6  
 2 : Ø4 (With Pressure Gauge)  
 3 : Ø6 (With Pressure Gauge)

※60 : 4L above metal tank could be assembled with 60W motor.  
 ※90 : 4L above metal tank could be assembled with 90W motor.  
 ※B : Add a larger buzzer

# CEA Type Resistance Electric Lubricator



CEA Type Resistance Electric Lubricator



CEA-05(25W)

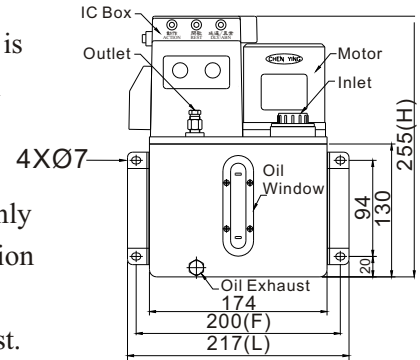
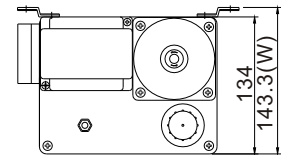
Feed-Oil Button



CEA-05(60W)



CEA-02



CEA-02

Type Standards External

## ◆ Features

1. CEA type has a timer, which controls the operation and interval time. It has operation, abnormal and interval indicators that is easy for visual checking.
2. It has a pressure-regulating valve, which can adjust the pressure.
3. It has a pressure gauge that can detect the pressure easily.
4. It has a float switch (NC Contact) that can detect the oil volume. When oil is lower than the minimum level, the float switch will send continuous signal automatically.
5. It has a feed-oil button, press the button and the oil will feed immediately.
6. It used a high quality alloy steel gear pump and induction motor that not only has steady output pressure and low noise, but also can assure each lubrication point with output of oil. It can be applied for large machines' request.
7. A small buzzer is installed inside but also can add a large buzzer on request.

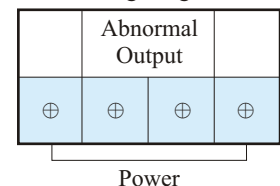
## ◆ Application of Machines Equipment

It can be specially used for the machines requiring large oil-output and large pressure-output.

Model	Act Time	Interval Time	Motor	Max Volume	Max Pressure	1Ø Voltage	Ampere	Hertz	Discharge Bore	Oil Viscosity
CEA	3sec-3min	1-60min	25W	250cc/min	15kgf/cm <sup>2</sup>	110V	0.7A	50/60Hz	Ø4 or Ø6	32-68cSt@40°C
		1-180min 1-360min	60W	600cc/min	30kgf/cm <sup>2</sup>	110V 220V	0.25A 1A 0.65A			

Model	Tank Code	Tank Material	Capacity Liters	Fixed Hole Distance(mm)	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
CEA (25W)	02	Aluminum	2L	200	217	143.3	255	5.44
	04	Resin	4L	250	269	184	276	5.45
	05	Aluminum	4L	280	311	184	276	6.45
	08	Iron	8L	338	355	189	295	9.40
CEA (60W)	05	Aluminum	4L	280	298	165	310	7.50
	08	Iron	8L	338	355	190	340	10.45

## CEA Single Phase Wiring Diagram



## ◆ Order code :

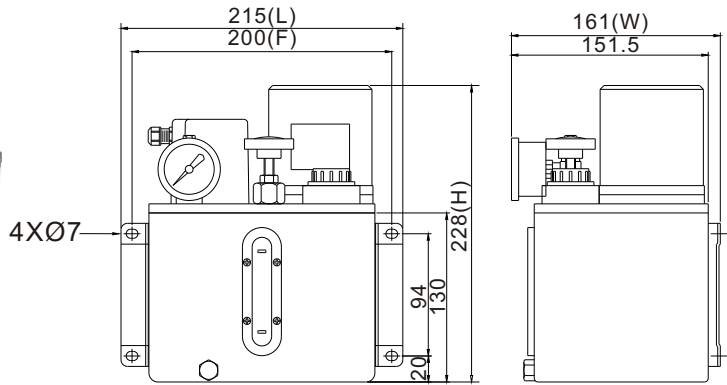
CE A 02 060 C 25 1 ※

Model : Resistance Type  
 Tank Capacity(Material)  
 Interval  
 Voltage  
 Motor  
 Discharge Bore  
 Special Request

※60 : 4L above metal tank could be assembled with 60W motor.  
 ※90 : 4L above metal tank could be assembled with 90W motor.

# CEV Resistance Type Electric Lubricator

CEV Resistance Type Electric Lubricator



CEV-02(25W) Type Standards Externals

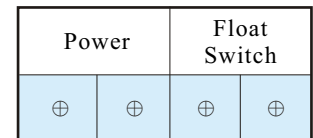
### ◆ Features

- 1.CEV type is without timer (also could be controlled by Programmable Logic Controller) and can work with many kinds of open type distributors and proportion adapters.
- 2.It has a pressure-regulating valve, which can adjust the pressure.
- 3.It has a pressure gauge that can detect the pressure easily.
- 4.It has a float switch (NC Contact) that can detect the oil volume. When oil is lower than the minimum level, the float switch will send continuous signal automatically.
- 5.It used a high quality alloy steel gear pump and induction motor that not only has steady output pressure and low noise, but also can assure each lubrication point with output of oil. It can be applied for large machines' request.
- 6.For CEV 3L or above, it can be added a pressure switch, power indicator and feed-oil button on request.
- 7.CEV type series include CEV02, CEV03, CEV04, CEV05, and CEV08. The accessories are different for each model. Please refer to the specification for further details.

### ◆ Application of Machines Equipment

- 1.It can be specially used for the machine requiring large oil-output and large pressure-output.
- 2.It usually works with processing or projecting machinery.

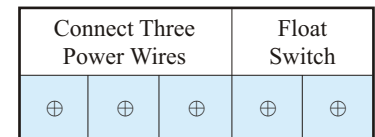
CEV Single Phase Wiring Diagram



Model	Motor	Max Volume	Max Pressure	Voltage	Ampere	Hertz	Discharge Bore	Oil Viscosity
CEV	25W	250cc/min	15kgf/cm <sup>2</sup>	1Ø110V 1Ø220V 3Ø Optional	0.7A 0.2A 0.3A	50/60Hz	Ø4 or Ø6	32-68cSt@40°C
	60W	600cc/min	30kgf/cm <sup>2</sup>	1Ø110V 1Ø220V 3Ø Optional	1A 0.65A 0.35A			

Model	Tank Code	Tank Material	Capacity Liters	Fixed Hole Distance(mm)	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
CEV (25W)	02	Aluminum	2L	200	215	161	228	5.50
	03	Resin	3L	205	230	165	240	4.85
	04	Resin	4L	250	280	165	260	5.45
	05	Aluminum	4L	280	295	165	255	6.40
	08	Iron	8L	338	355	190	275	9.15
CEV (60W)	05	Aluminum	4L	280	295	165	310	7.45
	08	Iron	8L	338	355	190	340	10.20

CEV Three Phase Wiring Diagram



While connecting wires, please notice that if the motor rotate anti-clockwise (see the red spot of spindle). If the motor rotate clockwise, please change positions of two power wires, then try again.

### ◆ Order code :

**CE V 02 C 25 3**  
 Model : Resistance Type | Tank Capacity(Material) | Voltage | Motor | Discharge Bore  
 02 : 2L (Aluminum) | A : 1Ø110V 25 : 25W | 0 : Ø4  
 03 : 3L (Resin) | C : 1Ø 220V | 1 : Ø6  
 04 : 4L (Resin) | D : 3Ø220/380V | 2 : Ø4 (With Pressure Gauge)  
 05 : 4L (Aluminum) | E : 3Ø 220/440V | 3 : Ø6 (With Pressure Gauge)  
 08 : 8L (Iron) | F : 3Ø 208/415V  
 20 : 20L (Iron) | G : 3Ø230/460V  
 H : 3Ø240/480V V  
 X : Special Voltage



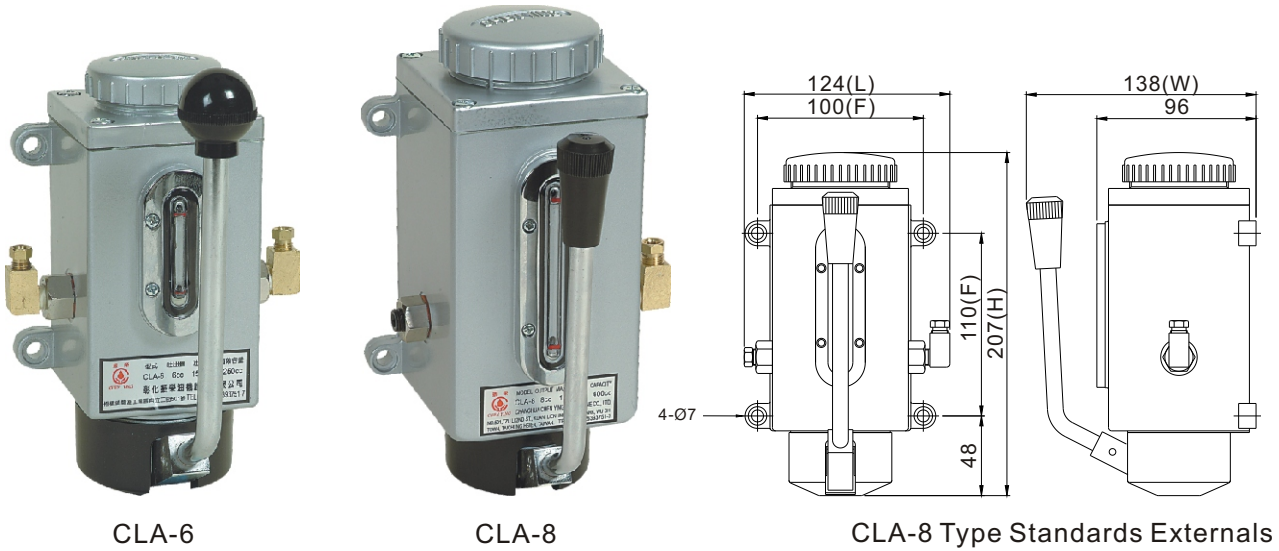
### Special Request

- ※F : Add a Feed-Oil Button
- ※P : Add a Pressure Switch
- ※L : Add a light
- ※60 : 4L above metal tank could be assembled with 60W motor.
- ※90 : 4L above metal tank could be assembled with 90W motor.

# CLA Type Hand-Pull Manual Lubricators



CLA Type Hand-Pull Manual Lubricators



CLA-6

CLA-8

CLA-8 Type Standards Externals

## ◆ Features

1. CLA type is divided by the volume of container CLA-6(350cc) and CLA-8(600cc).
2. Low cost, high practicality. It can be used in diverse machinery.
3. Easy to be operated by pushing the handle down for oil feeding.
4. Small volume and easy to install.
5. The unit is equipped with reverse stopper that prevents the back-flow of oil.
6. It has an oil outlet on left or right side of the unit. A dual outlet (left and right sides) is also available.

## ◆ Application of Machines Equipment

1. This unit can work with the machines that do not need to feed oil at certain time.
2. It's suitable for various kinds of machine tools and automatic machinery.

Model	Max Volume	Max Pressure	Capacity	Discharge Bore	Discharge Bore No.	Fixed Hole Distance(mm)	Length (mm)	Width (mm)	Height (mm)	Oil Viscosity	Weight (kg)
CLA-6	8cc	15kgf/cm <sup>2</sup>	350cc	Ø4	1	85, 85mm	112	134	188	32-68cSt@40°C	1.23
					2						1.25
				Ø6	1						1.24
					2						1.27
CLA-8	8cc	15kgf/cm <sup>2</sup>	600cc	Ø4	1	100, 110mm	124	138	207		1.50
					2						1.52
				Ø6	1						1.50
					2						1.53

## ◆ Order code :

CLA-6

Tank Capacity  
6 : 350cc  
8 : 600cc

R

L : Left Hand Outlet  
R : Right Hand Outlet  
D : Dual Outlet

H

Outlet Connector  
H : Elbow Adapter  
D : Straight Adapter  
B : Block

1

Discharge Bore  
0 : Ø4  
1 : Ø6

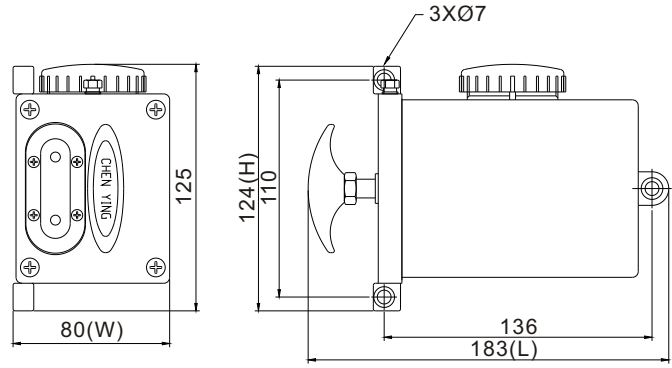
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Special Request

# CTA Type Hand-Pull Manual Lubricators



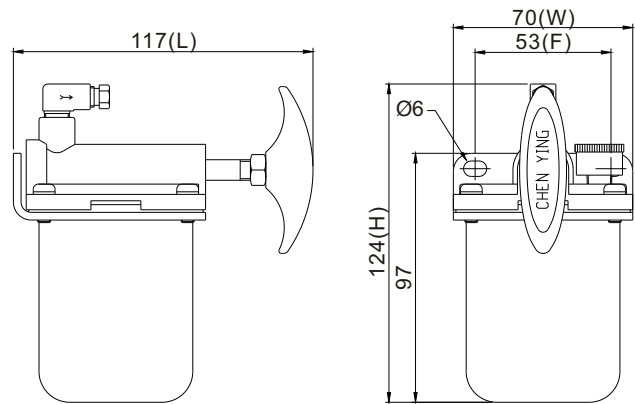
CTA-8 Left Type    CTA-8 Right Type



CTA-8 Right Type Standards Externals



CTA-3



CTA-3 Type Standards Externals

### ◆ Features

1. CTA type is divided by the volume of container CTA-3(180cc) and CTA-8(650cc).
2. The oil outlet of CTA-8 can be left-pull type or right-pull type upon request, Ø4 or Ø6 discharge bore are available as optional.
3. Low cost, high practicality. It can be used in diverse machinery.
4. Easy to be operated by pulling up the tee-handle for oil feeding repeatedly.
5. Small volume and easy for installation.
6. The unit is equipped with reverse stopper that prevents the back-flow of oil.

### ◆ Application of Machines Equipment

1. This unit can work with the machines that do not need to feed oil at certain time.
2. It usually works with laser cutting machines or milling machines.

Model	Max Volume	Max Pressure	Capacity	Discharge Bore	Fixed Hole Distance(mm)	Length (mm)	Width (mm)	Height (mm)	Oil Viscosity	Weight (kg)
CTA-3	3cc	3.5kgf/cm <sup>2</sup>	180cc	Ø4, Ø6	56	117	70	124	32-68cSt@40°C	0.49
CTA-8 Left Type CTA-8 Right Type	8cc		650cc	Ø4	136, 110	183	80	125		1.01

### ◆ Order code :

CTA- 8		R		U		0		※
Discharge Volume		L : Left Type		Outlet Direction		Discharge Bore		Special Request
8 : 8cc		R : Right Type		U : Up		0 : Ø4		
				D : Down		1 : Ø6		

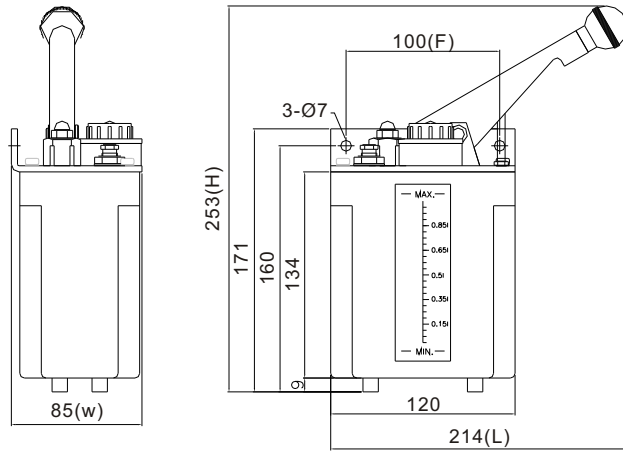
# CKE Type Hand-Pressing Lubricators



CKE Type Hand-Pressing Lubricators



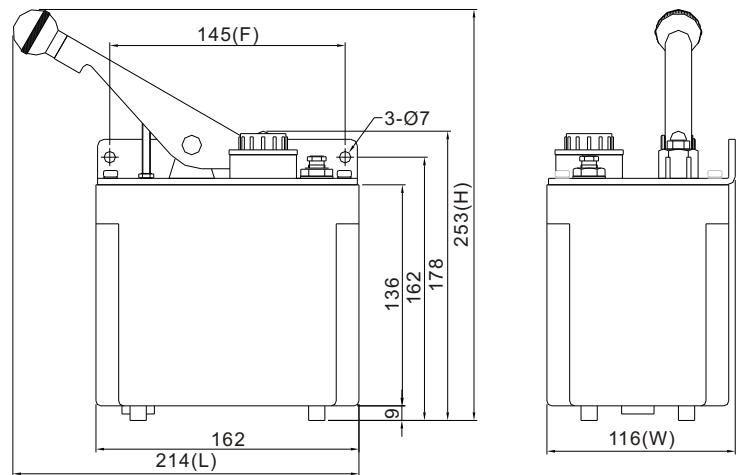
CKE-8 Left Type



CKE-8 Left Type Standards Externals



CKE-20 Right Type



CKE-20 Right Type Standards Externals

## ◆ Features

1. Easy to be operated by pushing the handle down for oil feeding.
2. Small volume and easy for installation.
3. Low cost, high practicality. It can be used in diverse machinery.
4. The oil outlet can be on left-hand side or right-hand side of the unit. Ø4 or Ø6 discharge bore are available as optional.
5. The unit is equipped with reverse stopper that prevents the back-flow of oil.

## ◆ Application of Machines Equipment

1. This unit can work with the machines that do not need to feed oil at certain time.
2. It's suitable for various kinds of machine tools and automatic machinery.

Model	Max Volume	Max Pressure	Capacity Liters	Discharge Bore	Fixed Hole Distance(mm)	Length (mm)	Width (mm)	Height (mm)	Oil Viscosity	Weight (kg)
CKE-8 Left Type CKE-8 Right Type	8cc	5kgf/cm <sup>2</sup>	1 L	Ø4 or Ø6	100	195	85	253	32-68cSt@40°C	1.53
CKE-20 Left Type CKE-20 Right Type			2 L		145	214	116	253		

## ◆ Order code :

CKE

08

R

1

※

08 : 1Liter Type  
20 : 2Liter Type

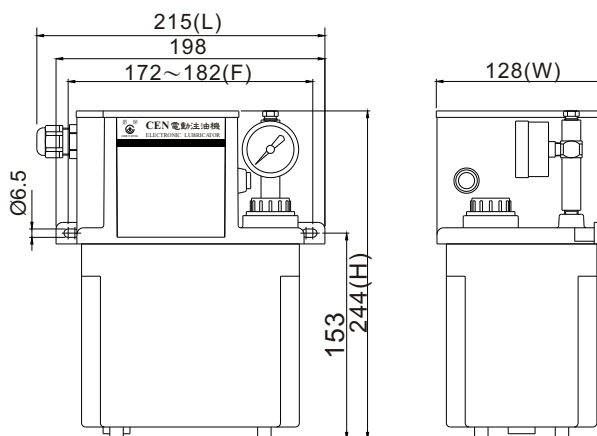
L : Left Hand Outlet  
R : Right Hand Outlet

Discharge Bore  
0 : Ø4  
1 : Ø6

Special Request



# CEN03 Type Pressure-Relief Electric Lubricator



CEN03-01 Type Standards Externals

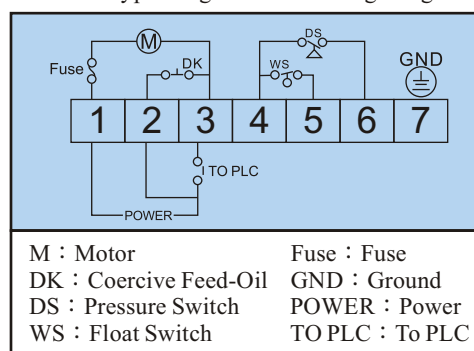
## ◆ Features

1. CEN03 type is without timer (also could be controlled by Programmable Logic Controller) and has to work with volume distributors. With CAB or CBB type volume distributor, oil will feed during operation time. With CDB or T type volume distributor, oil will feed during interval time.
2. The discharge volume is fixed. The lubrication points of volume distributor supply a fixed flow of oil.
3. It has a spark-eliminator inside to prevent the sparks producing when the electric current is running. The spark-eliminator can avoid PLC (Programmable Logic Controller) to be interfered.
4. CEN03 type has a pressure switch device and been set up as 8kg/cm<sup>2</sup>, which assures the oil volume of lubrication point and check if the piping works normally. The standard specification is NC (Normal Close) contact, which means if the pressure is abnormal, it will have signal. NO (Normal Open) contact is on request.
5. It has a float switch that can detect the oil volume. When oil is lower than the minimum level, the float switch will automatically send a continuous signal.
6. It has a pressure gauge where an operator can check the pressure easily.
7. Please don't press the force feed-oil ( **F** ) button more than three minutes in order to avoid overloading. When the temperature reaches 100°C, the sensor will be on to stop the motor continue running about 5 minutes.
8. Its function is similar to CEN04 type. The difference is CEN03 type is without timer and CEN04 type is controlled by a timer. CEN01 and CEN02 types are resistance type lubricators.

## ◆ Application of Machines Equipment

1. It can be used for the machines requiring strictly rationing oil flow.
2. It is usually used for such as processing machines or projecting machines.

CEN03 Type Single Phase Wiring Diagram



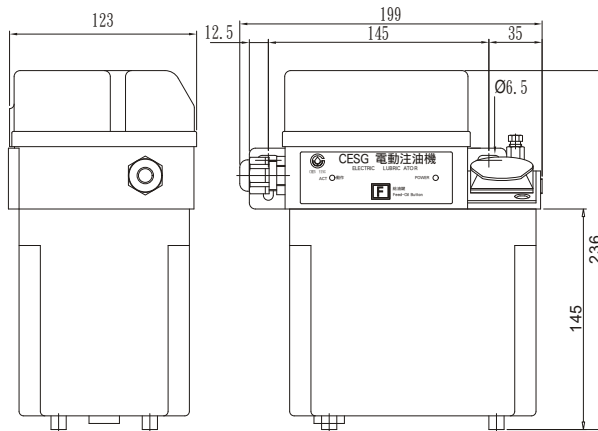
Model	Tank Code	Tank Material	Capacity Liters	Fixed Hole Distance(mm)	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
CEN03	01	Resin	2 L	177	215	128	244	3.80
	02	Aluminum	2 L	200	218	145	235	5.10
	03	Resin	3 L	205	230	167	244	4.35
	04	Resin	4 L	250	277	162	264	4.95
	05	Aluminum	4 L	280	298	167	255	5.90
	08	Iron	8 L	338	355	190	280	8.65

Model	Act Time	Interval Time	Motor	Max Volume	Max Pressure	1Ø Voltage	Ampere	Hertz	Discharge Bore	Oil Viscosity
CEN03	Control By PLC		30W	130 cc/min	15kgf/cm <sup>2</sup>	110V 220V	2.5A 1A	60Hz or 50Hz	Ø4 or Ø6	32-68cSt@40°C

## ◆ Order code :

CEN 03	01	C	3	※
Model 03 : Pressure-Relief Type, Controlled by PLC	Tank Capacity (Material) 01 : 2L ( Resin ) 02 : 2L ( Aluminum ) 03 : 3L ( Resin ) 04 : 4L ( Resin ) 05 : 4L ( Aluminum ) 08 : 8L ( Iron )	Voltage A : 110V,60Hz B : 220V,50Hz C : 220V,60Hz	Discharge Bore 0 : Ø4 1 : Ø6 2 : Ø4 ( With Pressure Gauge ) 3 : Ø6 ( With Pressure Gauge )	Special Request ※B : Add a Buzzer

# CESG-03 Pressure-Relief Type PLC Electric Lubricator

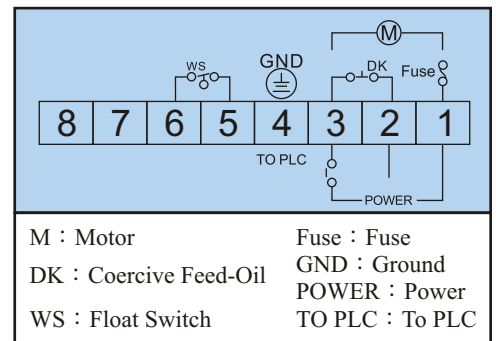


### ◆ Features

- CESG-03 is Pressure-relief type electric lubricator, which can be operated by Programmable Logic Controller (PLC). Recommend to work with volume distributors.
- The discharge volume is fixed. The lubrication points of volume distributor supply a fixed flow of oil.
- CESG-03 type has a pressure switch device and been set up as 8 kg/cm<sup>2</sup>, which assures the oil volume of lubrication point and check if the piping works normally. The standard specification is NC (Normal Close) contact, which means if the pressure is abnormal, it will have signal. NO (Normal Open) contact is on request.
- It has a float switch that can detect the oil volume. When oil is lower than the minimum level, the float switch will automatically send a continuous signal.
- It has a force feed-oil button (F button), slightly press the F button for three seconds and the oil will feed immediately.
- Please don't press the force feed-oil button (F button) more than three minutes in order to avoid overloading. When the temperature reaches 100 °C, the sensor will be on to stop the motor continue running about 5 minutes.

### CESG01-03 Type Standards Externals

CESG-03 Type Single Phase Wiring Diagram



### ◆ Application of Machines Equipment

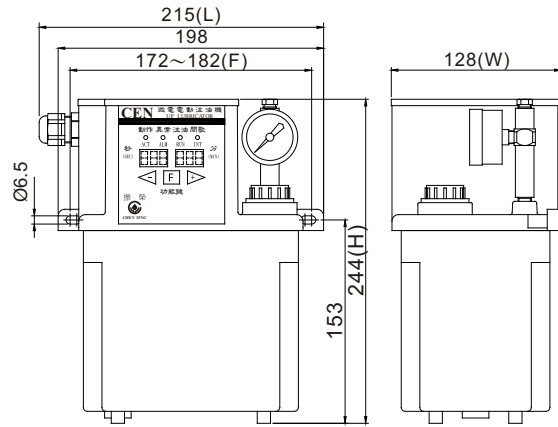
It usually works with Processing or Projecting Machine or Lathes.

Model	Pressure-Relief Device	Act Time	Interval Time	Motor	Max Volume	Max Pressure	1Ø Voltage	Ampere	Hertz	Discharge Bore	Pressure Switch	Oil Viscosity
CESG03	○	Controlled by PLC		30W	135cc/min	15kgf/cm <sup>2</sup>	110V 220V	1.6A 0.6A	60HZ or 50HZ	Ø4 or Ø6	○	32-68cSt@40°C
Model	Tank Code	Tank Material	Capacity Liters	Fixed Hole Distance(mm)	Length (mm)	Width (mm)	Height (mm)	Weight(kg)				
CESG03	01	Resin	2 L	145	199	137	236	2.30				
	02	Aluminum	2 L	200	202	139	224	3.50				
	03	Resin	3 L	205	230	167	232	2.80				
	04	Resin	4 L	250	256	162	277	3.45				
	05	Aluminum	4 L	280	275	150	246	4.45				
	08	Iron	8 L	338	355	197	261	7.20				

### ◆ Order code :

CESG- 03	01	C	3	※
Model	Tank Capacity (Material)	Voltage	Discharge Bore	Special Request
03 : Resistance Type	01 : 2L (Resin)	A : 110V,60HZ	0 : Ø4	※B : Add a buzzer
	02 : 2L (Aluminum)	B : 220V,50HZ	1 : Ø6	
	03 : 3L (Resin)	C : 220V,60HZ	2 : Ø4 ( With Pressure Gauge)	
	04 : 4L (Resin)		3 : Ø6 ( With Pressure Gauge)	
	05 : 4L (Aluminum)			
	08 : 8L (Iron)			

# CEN04 Type Pressure-Relief Electric Lubricator



CEN04-01 Type Standards External

### ◆ Features

1. CEN04 type has a timer, which controls the operation and interval time. It has operation, abnormal and interval indicators that is easy for visual checking.
2. Recommend to work with volume distributors. If works with CAB or CBB type volume distributor, it will feed oil during operation time. If works with CDB or T type volume distributor, it will feed oil during interval time.
3. The discharge volume is fixed. The lubrication points of volume distributor supply a fixed flow of oil.
4. It has a pressure switch device and been set up as 8kg/cm<sup>2</sup>, which assures the oil volume of lubrication point and check if the piping works normally. The standard specification is NC (Normal Close) contact, which means if the pressure is abnormal, it will have signal.
5. It has a float switch (NC Contact) that can detect the oil volume. When oil is lower than the minimum level, the float switch will send continuous signal automatically and the buzzer will alarm.
6. It has a pressure gauge where an operator can check the pressure easily.
7. Please don't press the force feed-oil (F button) more than three minutes in order to avoid overloading. When the temperature reaches 100°C, the sensor will be on to stop the motor continue running about 5 minutes.
8. Its function is similar to CEN03 type. The difference is CEN03 type is without timer and CEN04 type is controlled by a timer. CEN01 and CEN02 types are resistance type lubricators.

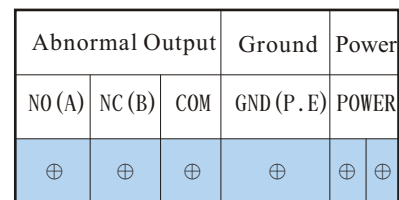
### ◆ Application of Machines Equipment

1. It can be used for the machines requiring strictly rationing oil flow.
2. It is usually used for such as processing machines or projecting machines.

Model	Act Time	Interval Time	Motor	Max Volume	Max Pressure	1Ø Voltage	Ampere	Hertz	Discharge Bore	Oil Viscosity
CEN04	1-999sec	1-999sec 1-999min	30W	130 cc/min	15kgf/cm <sup>2</sup>	110V 220V	2.5A 1A	60Hz or 50Hz	Ø4 or Ø6	32-68cSt@40°C

CEN04 Single Phase Wiring Diagram

Model	Tank Code	Tank Material	Capacity Liters	Fixed Hole Distance(mm)	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
CEN04	01	Resin	2 L	177	215	128	244	4.00
	02	Aluminum	2 L	200	218	145	235	5.20
	03	Resin	3 L	205	230	167	244	4.60
	04	Resin	4 L	250	277	162	264	5.20
	05	Aluminum	4 L	280	298	167	255	6.15
	08	Iron	4 L	338	355	190	280	8.85



### ◆ Order code :

CEN	04	01	2	C	3	※
Model	Tank Capacity(Material)	Time (Act x Interval)	Voltage	Discharge Bore	Special Request	
04 : Pressure-Relief Type, Controlled By Timer	01 : 2L (Resin) 02 : 2L (Aluminum) 03 : 2.5L (Resin) 04 : 4L (Resin) 05 : 4L (Aluminum) 08 : 8L (Iron)	1 : sec x sec 2 : sec x min	A : 110V,60Hz B : 220V,50Hz C : 220V,60Hz	0 : Ø4 1 : Ø6 2 : Ø4 (With Pressure Gauge) 3 : Ø6 (With Pressure Gauge)		

CEN04 Type Pressure-Relief Electric Lubricator

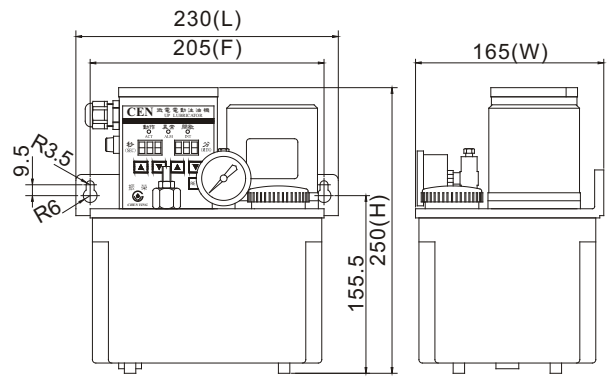
# CENB Type Pressure-Relief Electric Lubricator

CENB Type Pressure-Relief Electric Lubricator



CENB-03  
Type Standards

CENB-03  
Type With Larger Buzzer



CENB-03  
Type Standards Externals

### ◆ Features

1. CENB type has a timer, which controls the operation and interval time. It has operation, abnormal and interval indicators that is easy for visual checking.
2. Recommend to work with volume distributors. If works with CAB or CBB type volume distributor, it will feed oil during operation time. If works with CDB or T type volume distributor, it will feed oil during interval time.
3. Rationing oil feeding. The flow of oil of each output point of volume distributors is equal.
4. It has a pressure switch device and been set up as 8kg/cm<sup>2</sup>, which assure the oil volume of lubrication point and check if the piping works normally. The standard specification is NC (Normal Close) contact, which means if the pressure is abnormal, it will have signal.
5. It has a float switch (NC Contact) that can detect the oil volume. When oil is lower than the minimum level, the float switch will send continuous signal automatically and the buzzer will alarm.
6. It has a pressure-regulating valve and pressure gauge, where an operator can adjust the pressure and check the pressure easily.
7. It has a reset button (RES button), press the button and it will start the cycle again.
8. A small buzzer is installed inside but also can add a large buzzer on request.

### ◆ Application of Machines Equipment

1. It can be used for the machines requiring strictly rationing oil flow.
2. It can be specially used for the machines requiring larger oil-output and larger pressure-output.
3. It is usually used for such as processing machines or projecting machines.

CENB Single Phase Wiring Diagram

Abnormal Output			Ground	Power
NO (A)	NC (B)	COM	GND (P. E)	POWER
⊕	⊕	⊕	⊕	⊕ ⊕

Model	Act Time	Interval Time	Motor	Max Volume	Max Pressure	1Ø Voltage	Ampere	Hertz	Discharge Bore	Oil Viscosity
CENB	1-999sec	1-999min or 1-999sec	25W	250 cc/min	20kgf/cm <sup>2</sup>	110V 220V	0.5A 0.25A	50/60Hz	Ø4 or Ø6	32-68cSt@40°C
			60W	600 cc/min	30kgf/cm <sup>2</sup>	110V 220V	1.2A 0.6A			

Model	Tank Code	Tank Material	Capacity Liters	Fixed Hole Distance(mm)	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
CENB (25W)	03	Resin	3 L	205	230	165	250	5.40
	04	Resin	4 L	250	275	160	270	5.90
	05	Aluminum	4 L	280	298	165	260	6.75
	08	Iron	8 L	338	355	190	290	9.90
Model	Tank Code	Tank Material	Capacity Liters	Fixed Hole Distance(mm)	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
CENB (60W)	05	Aluminum	4 L	280	298	165	310	7.80
	08	Iron	4 L	338	355	190	340	10.95

### ◆ Order code :

CEN B 03 2 C 25 3 ※

Model :	Tank Capacity(Material)	Time (Act x Interval)	Voltage	Motor	Discharge Bore	Special Request
B : Pressure-Relief Type	03 : 3L (Resin) 04 : 4L (Resin) 05 : 4L (Aluminum) 08 : 8L (Iron) 12 : 12L (Iron) 16 : 16L (Iron)	1 : sec x sec 2 : sec x min	A : 110V C : 220V	25 : 25W	0 : Ø4 1 : Ø6 2 : Ø4 (With Pressure Gauge) 3 : Ø6 (With Pressure Gauge)	※60 : 4L above metal tank could be assembled with 60W motor. ※90 : 4L above metal tank could be assembled with 90W motor. ※B : Add a larger buzzer

# CEAB Type Pressure-Relief Electric Lubricator



CEAB-05(25W)



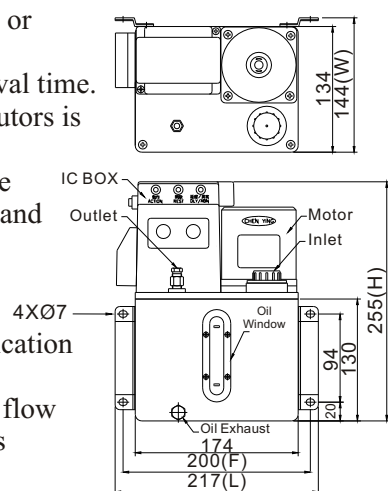
CEAB-05(60W)



CEAB-02

### ◆ Features

1. CEAB type has a timer and the timer controls the operation and interval time. The electronic box has operation, abnormal and interval indicators.
2. CEAB type has to work with volume distributors. If it is operated with CAB or CBB type volume distributor, it will feed oil during operation time. If it is operated with CDB or T type volume distributor, it will feed oil during interval time.
3. Rationing oil feeding. The flow of oil of each output point of volume distributors is equal.
4. It has a float switch that can detect the oil volume. When oil is lower than the minimum level, the float switch will automatically send a continuous signal and the buzzer will alarm.
5. It has a feed-oil button, press the button and the oil will feed immediately.
6. It used a high quality alloy steel gear pump and induction motor that not only has steady output pressure and low noise, but also can assure each lubrication point with output of oil. It can be applied for large machines' request.
7. When CEAB assembles with 25W motor, the max pressure is 20 kg/cm<sup>2</sup>, the flow rate is 250cc/min. And when assembles with 60W motor, the max pressure is 30 kg/cm<sup>2</sup>, the flow rate is 600cc/min.
8. CEAB 4L has pressure-regulating valve and pressure gauge for adjusting the pressure and checking if the pressure is normal.



CEAB-02 Type Standards External

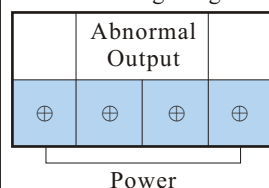
### ◆ Application of Machines Equipment

1. It can be used for the machines requiring strictly rationing oil flow.
2. It can be specially used for the machines requiring large oil-output and large pressure-output.

Model	Act Time	Interval Time	Motor	Max Volume	Max Pressure	1Ø Voltage	Ampere	Hertz	Discharge Bore	Oil Viscosity
CEAB	3sec-3min	1-60min	25W	250cc/min	20kgf/cm <sup>2</sup>	110V	0.7A	50/60Hz	Ø4 or Ø6	32-68cSt@40°C
		1-180min 1-360min	60W	600cc/min	30kgf/cm <sup>2</sup>	110V 220V	1A 0.65A			

Model	Tank Code	Tank Material	Capacity Liters	Fixed Hole Distance(mm)	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
CEAB (25W)	02	Aluminum	2 L	200	217	144	255	5.82
	04	Resin	4 L	250	269	184	276	5.65
	05	Aluminum	4 L	280	311	184	276	6.60
	08	Iron	8 L	338	355	189	295	9.81
CEAB (60W)	05	Aluminum	4 L	280	298	165	310	7.65
	08	Iron	8 L	338	355	190	340	10.87

CEAB Single Phase Wiring Diagram



### ◆ Order code :

CE AB 02 060 C 25 1 ✱

Model :	Tank Capacity(Material)	Interval	Voltage	Motor	Discharge Bore	Special Request
B :	02 : 2L (Aluminum)	060 : 60min	A : 110V	25 : 25W	0 : Ø 4	✱60 : 4L above metal tank could be assembled with 60W motor.
Pressure-Relief	04 : 4L (Resin)	180 : 180min	C : 220V		1 : Ø6	
Type	05 : 4L (Aluminum)	360 : 360min			2 : Ø4 (With Pressure Gauge)	✱90 : 4L above metal tank could be assembled with 90W motor.
	08 : 8L (Iron)				3 : Ø6 (With Pressure Gauge)	
	20 : 20L (Iron)					

# CEVB Type Pressure-Relief Electric Lubricator

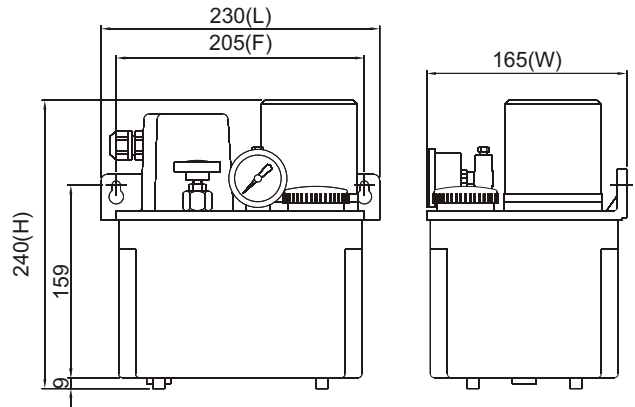


CEVB-08

(60W - With pressure switch - Feed-Oil Button and light)



CEVB-03



CEVB-03 Type Standards Externals

### ◆ Features

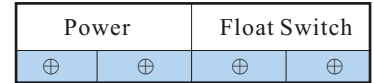
1. CEVB type is without timer (also could be controlled by Programmable Logic Controller) and has to work with volume distributors. If it is operated with CAB or CBB type volume distributor, it will feed oil during operation time. If it is operated with CDB or T type volume distributor, it will feed oil during interval time.
2. The discharge volume is fixed. Each output point of volume distributor has equal oil amount.
3. It has a pressure-regulating valve, which can adjust the pressure and easy to check from the pressure gauge.
4. It has a float switch that can detect the oil volume. When oil is lower than the minimum level, the float switch will automatically send a continuous signal and the buzzer will alarm.
5. It used a high quality alloy steel gear pump and induction motor that not only has steady output pressure and low noise, but also can assure each lubrication point with output of oil. It can be applied for large machines' request.
6. It can be added a pressure switch, power indicator and force feed-oil button for tank capacity 3 liters and above.
7. CEVB series of products include CEVB02, CEVB03, CEVB04, CEVB05, CEVB08.

The accessories for each model are different. Please look at the specification for further details.

### ◆ Application of Machines Equipment

1. It can be used for the machines requiring strictly rationing oil flow.
2. It can be specially used for the machines requiring large oil-output and large pressure-output.
3. It is usually used for such as processing machines or projecting machines.

CEVB Single Phase Wiring Diagram

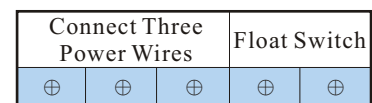


PS. If there are special requests, please refer to the special wiring diagram inside the lubricator.

Model	Motor	Max Volume	Max Pressure	Voltage	Ampere	Hertz	Discharge Bore	Oil Viscosity
CEVB	25W	250 cc/min	20kgf/cm <sup>2</sup>	1Ø 110V 1Ø 220V 3Ø optional	0.7A 0.2A 0.3A	50/60Hz	Ø4 or Ø6	32-68cSt@40°C
	60W	600 cc/min	30kgf/cm <sup>2</sup>	1Ø 110V 1Ø 220V 3Ø optional	1A 0.65A 0.35A			

Model	Tank Code	Tank Material	Capacity Liters	Fixed Hole Distance(mm)	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
CEVB (25W)	02	Aluminum	2 L	200	217	161	228	5.75
	03	Resin	3 L	205	230	165	240	5.05
	04	Resin	4 L	250	280	165	260	5.65
	05	Aluminum	4 L	280	298	165	255	6.60
	08	Iron	8 L	338	355	190	275	9.30
Model	Tank Code	Tank Material	Capacity Liters	Fixed Hole Distance(mm)	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
CEVB (60W)	05	Aluminum	4 L	280	298	165	310	7.65
	08	Iron	8 L	338	355	190	340	10.40

CEVB Three Phase Wiring Diagram

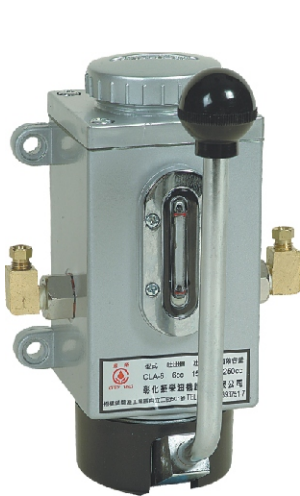


While connecting wires, please notice that if the motor rotate anti-clockwise (see the red spot of spindle). If the motor rotate clockwise, please change positions of two power wires, then try again.

### ◆ Order code :

CE	VB	02	C	25	3	※
Model :	Tank Capacity(Material)	Voltage	Motor	Discharge Bore	Special Request	
Pressure-Relief Type	02 : 2L (Aluminum)	A : 1Ø110V	25 : 25W	0 : Ø 4	※F : Add a Feed-Oil Button	
	03 : 3L (Resin)	C : 1Ø 220V	60 : 60W	1 : Ø 6	※P : Add a Pressure Switch	
	04 : 4L (Resin)	D : 3Ø 220/380V		2 : Ø 4 (With Pressure Gauge)	※L : Add a light	
	05 : 4L (Aluminum)	E : 3Ø 220/440V		3 : Ø 6 (With Pressure Gauge)	※60 : 4L above metal tank could be assembled with 60W motor.	
	08 : 8L (Iron)	F : 3Ø 208/15V			※90 : 4L above metal tank could be assembled with 90W motor.	
	20 : 20L (Iron)	G : 3Ø 230/460V				
		H : 3Ø 240/480V				
		X : Special Voltage				

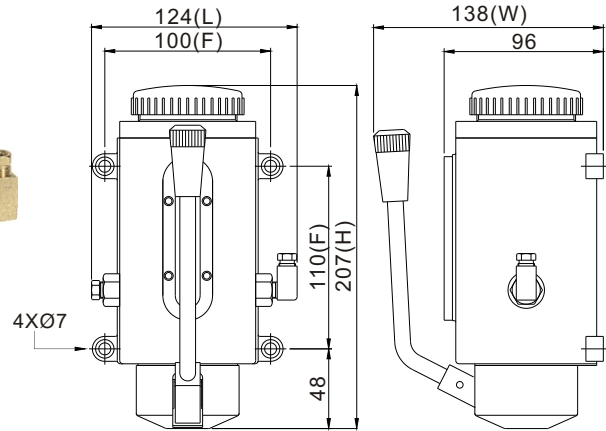
# CLAB Type Pressure-Relief Manual Lubricator



CLAB-6



CLAB-8



CLAB-8 Type Standards Externals

### ◆ Features

1. CLAB is the only one manual type of pressure-relief type lubricators. It has to work with volume distributors.
2. The discharge volume of oil is fixed.
3. CLAB type is low cost, and high practicality.
4. Easy to be operated by pushing the handle down for oil feeding.
5. Small size and easy to install.
6. It is divided by the volume of container CLAB-6 (350cc) and CLAB-8 (600cc).
7. The unit is equipped with reverse stopper that prevents the back-flow of oil.
8. It has an oil outlet on left or right side of the unit. A dual outlet (left and right sides) is also available.

### ◆ Application of Machines Equipment

1. It is suitable for the machinery needs to feed fixed discharge volume of oil but without setting timer.
2. It is suitable for the machinery that does not need to feed oil at certain time.

Model	Max Volume	Max Pressure	Capacity	Discharge Bore	Discharge Bore Num.	Fixed Hole Distance(mm)	Length (mm)	Width (mm)	Height (mm)	Oil Viscosity	Weight (kg)								
CLAB-6	8cc	15kgf/cm <sup>2</sup>	350cc	Ø4	1	85,85	112	134	188	32-68cSt@40°C	1.23								
					2						1.24								
				Ø6	1						1.24								
					2						1.25								
				CLAB-8	8cc						15kgf/cm <sup>2</sup>	600cc	Ø4	1	100,110	124	138	207	1.48
														2					1.50
Ø6	1	1.49																	
	2	1.52																	

### ◆ Order code :

CLAB	6	R	H	1	※
Model : Pressure-Relief Type	Tank Capacity 6 : 350cc 8 : 600cc	L : Left Hand Outlet R : Right Hand Outlet D : Dual Outlet	Outlet Connector H : Elbow Adapter D : Straight Adapter B : Block	Discharge Bore 0 : Ø 4 1 : Ø 6	Special Request

# CLHA Type Grease Manual Lubricator

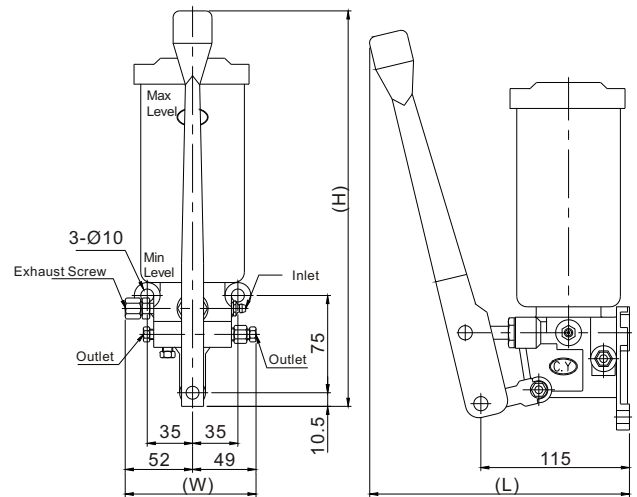
CLHA Type Grease Manual Lubricator



CLHA-35



CLHA-20

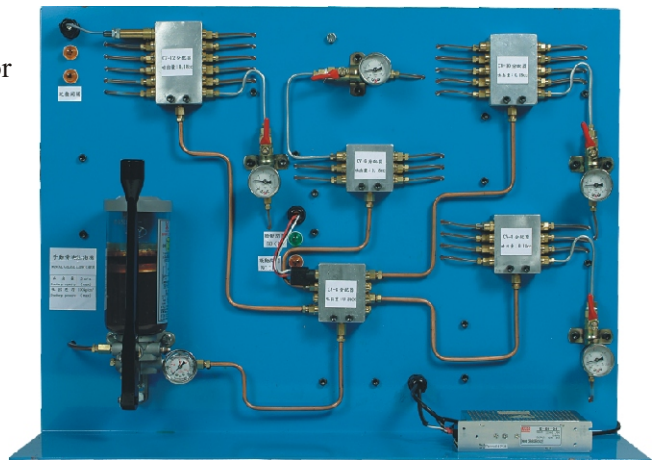


### ◆ Features

1. CLHA type has good tight pressing iron, which can press grease out smoothly.
2. Low cost, and high practicality.
3. Easy to be operated by pushing the handle down for oil feeding.
4. Small size and easy for installation.
5. CLHA type is suitable for grease NLGI grades 0 to 000, and CLHP type is suitable for grease NLGI grades 0 to 2.
6. Recommend using a grease gun for filling with lubricant from grease inlet. It can avoid air or impurities dropping into the reservoir.
7. Fill the lubricator with grease to exhaust air before the distributors are mounted.

### ◆ Application of Machines Equipment

1. It is suitable for the machinery that does not need to feed oil at certain time.
2. It usually works with press, woodworking or thermal treatment machinery.



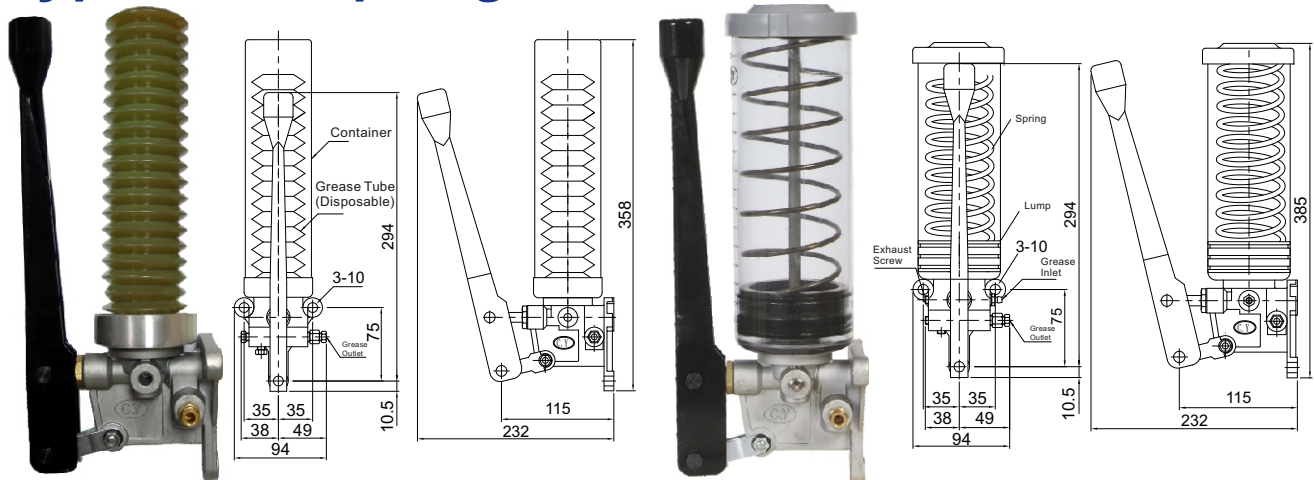
The Piping of CLHA Type Grease Lubrication System

Model	Capacity Liters	Max Volume	Max Pressure	Discharge Bore	Viscosity	Fixed Hole Distance(mm)	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
CLHA-10	300cc	2cc/stroke	100kgf/cm <sup>2</sup>	Ø4 Ø6 Ø8 PT1/8	Grease NLGI grades 0 to 000	70	232	103	315	1.08
CLHA-20	600cc					103		315	1.14	
CLHA-35	1000cc					106		345	2.20	
CLHA-40	800cc					106		325	1.39	
CLHA-50	2000cc					120		390	2.09	

### ◆ Order Code :

CLH	A	20	R	D	1	※
<p>Grease Manual Lubricator      Tank Capacity      Outlet      Outlet Connector      Discharge Bore      Special Request</p>						
<p>10 : 300cc      L : Left Hand Outlet      H : Elbow Adapter      0 : Ø4</p>						
<p>20 : 600cc      R : Right Hand Outlet      D : Straight Adapter      1 : Ø6</p>						
<p>35 : 1000cc      D : Dual Outlet      B : Block      2 : Ø4 ( With Pressure Gauge )</p>						
<p>40 : 800cc      T : Three Outlets      3 : Ø6 ( With Pressure Gauge )</p>						
<p>50 : 2000cc      F : Four Outlets      4 : Ø8</p>						
<p>5 : Ø8 ( With Pressure Gauge )</p>						
<p>6 : PT1/8</p>						
<p>7 : PT1/8 ( With Pressure Gauge )</p>						

# CLHA-25 Type Grease Tube, CLHP-40 Type Hard Spring Manual Lubricator



CLHA-25 CLHA-25 Type Standards Externals

CLHP-40

CLHP-40 Type Standards Externals

## ◆ Features

1. CLHA-25 type works with disposable grease tube (400 cc) that is more convenient for cleaning and easy operating. The disposable grease tube is not included but can be purchased as optional.
2. Chen Ying manual grease type lubricator can easily be operated by pushing the handle down for grease feeding repeatedly.
3. Manual grease type lubricator is small and easy for installation.
4. CHLA-25 can work with disposable grease tube (400cc) or with iron reservoir as optional.
5. The standard grease tube thread of CLHA-25 is M15 x P2.5 with reservoir cover and thread M15 x P2.0 is also available on request.
6. CLHP-40 has a hard spring inside that is suitable for NLGI grades 000 to 2.
7. Recommend using a grease gun for filling with lubricant from grease inlet. It can avoid air or impurities dropping into the reservoir.

## ◆ Application of Machines Equipment

1. It is suitable for the machinery that does not need to feed grease at certain time.
2. It usually works with press, wood working or thermal treatment machinery.

Model	Capacity	Max Volume	Max Pressure	Discharge Bore	Remark
CLHA-25	Grease Tube 400g	2cc/stroke	100kf/cm <sup>2</sup>	Ø4	Grease Tube Thread A : M15xP2.5 B : M15xP2.0
CLHP-40	650cc			Ø6	
				Ø8	Viscosity NLGI000~2
				PT1/8	

Model	Fixed Hole Distance(mm)	Length(mm)	Width(mm)	Height(mm)	Weight(kg)
CLHA-25	70mm	232	94	358	1.25
CLHP-40		232	94	325	1.35

## ◆ Order Code :

CLHA

25

R

1

※

Grease Manual  
Lubricator

Grease Tube  
25 : 400g

Outlet  
L : Left Hand Outlet  
R : Right Hand Outlet  
D : Dual Outlet  
T : Three Outlets  
F : Four Outlets

Discharge Bore  
0 : Ø4  
1 : Ø6  
2 : Ø4 ( With Pressure Gauge )  
3 : Ø6 ( With Pressure Gauge )  
4 : Ø8  
5 : Ø8 ( With Pressure Gauge )  
6 : PT1/8  
7 : PT1/8 ( With Pressure Gauge )

T : Grease Tube Included  
I : Iron Reservoir

## ◆ Order Code :

CLHP

40

R

1

※

Grease Manual Lubricator  
P : With Hard Spring  
Viscosity NLGI 000~2

Effective Capacity  
40 : 650cc

Outlet  
L : Left Hand Outlet  
R : Right Hand Outlet  
D : Dual Outlet  
T : Three Outlets  
F : Four Outlets

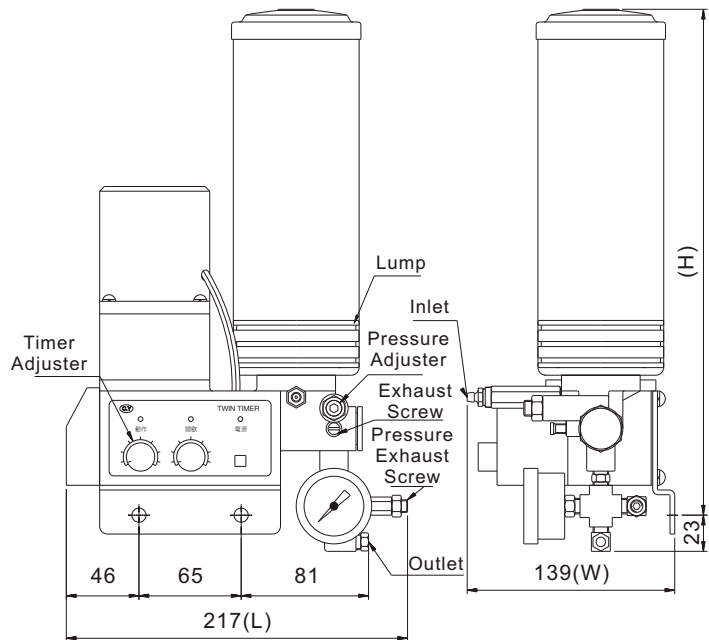
Discharge Bore  
0 : Ø4  
1 : Ø6  
2 : Ø4 ( With Pressure Gauge )  
3 : Ø6 ( With Pressure Gauge )  
4 : Ø8  
5 : Ø8 ( With Pressure Gauge )  
6 : PT1/8  
7 : PT1/8 ( With Pressure Gauge )

Special Request

# KSB Type Grease Electric Lubricator



KSB-40(110/220V)



◆ **Features**

1. KSB type has a timer, which controls the operation and interval time, it's quite user-friendly.
2. It is divided by the volume of container KSB-30(600cc), KSB-35(1000cc), KSB-40(800cc), and KSB-50(2000cc). Please refer the specification for further details.
3. Recommend using a grease gun for filling with lubricant from grease inlet. It can avoid air or impurities dropping into the reservoir.
4. It has a pressure gauge where an operator can check the pressure easily.
5. Recommend working with CV type progressive feeder that can easily control the volume of lubricant. CV type progressive feeder can be assemble with NO (Normal Open) or NC (Normal Close) sensor switch on request.
6. Its function is similar to KSC type. KSC type is without timer and could be controlled by Programmable Logic Controller but KSB type is controlled by a timer.
7. Fill the lubricator with grease to exhaust air before the distributors are mounted.



KSB-40 with level switch

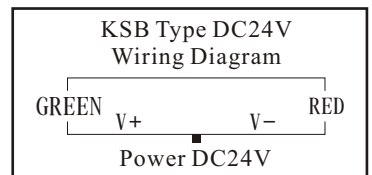
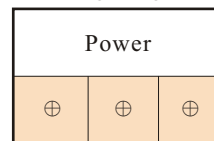
◆ **Application of Machines Equipment**

It is suitable for plastic or rubber processing machines, pressing and thermal treatment machines, etc.

Model	Capacity	Operation Time	Interval Time	Motor	Max Volume	Max Pressure	Voltage	Ampere	Hertz	Discharge Bore	Viscosity
KSB-30	600cc	3sec-12min	1-180min	15W	15cc/min	150kgf/cm <sup>2</sup>	DC24V 110V 220V	1.2A 0.34A 0.17A	50/60Hz	Ø4 Ø6 Ø8 PT1/8	Grease NLGI grades 0 to 000
KSB-35	1000cc		or								
KSB-40	800cc		1-360min								
KSB-50	2000cc										

Model	Fixed Hole Distance(mm)	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
KSB-30	65mm	217	138	262	3.31
KSB-35		217	138	280	4.25
KSB-40		217	138	345	3.66
KSB-50		217	158	367	4.42

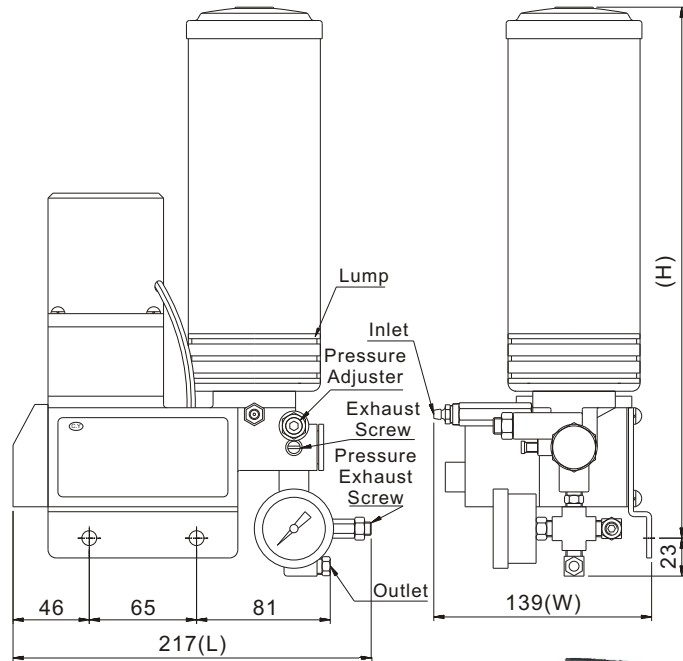
KSB Single Phase Wiring Diagram



◆ **Order Code :**

<b>KS</b>	<b>B</b>	<b>30</b>	<b>180</b>	<b>C</b>	<b>3</b>	<b>⊗</b>
Electric Grease Lubricator	Tank Capacity	Interval	Voltage	Discharge Bore	Special Request	
B : Controlled by Timer	30 : 600cc 35 : 1000cc 40 : 800cc 50 : 2000cc	180 : 180min 360 : 360min	A : 110V C : 220V D : DC24V	0 : Ø4 1 : Ø6 2 : Ø4 ( With Pressure Gauge ) 3 : Ø6 ( With Pressure Gauge ) 4 : Ø8 5 : Ø8 ( With Pressure Gauge ) 6 : PT1/8 7 : PT1/8 ( With Pressure Gauge )	S : KSB - 40 could add a level switch	

# KSC Type Grease Electric Lubricator



## ◆ Features

- 1.KSC type is without timer, also could be controlled by Programmable Logic Controller.(PLC)
- 2.It is divided by the volume of container KSC-30(600cc), KSC-35(1000cc), KSC-40(800cc), and KSC-50(2000cc). Please look the specification for further details.
- 3.Recommend using a grease gun for filling with lubricant from grease inlet. It can avoid air or impurities dropping into the reservoir.
- 4.It has a pressure gauge for checking if the pressure is normal.
- 5.Recommend working with CV type progressive feeder that can easily control the volume of lubricant. CV type progressive feeder can be assemble with NO (Normal Open) or NC (Normal Close) sensor switch on request.
- 6.Its function is similar to KSB type. The difference is KSC type is without timer (also could be controlled by Programmable Logic Controller) and KSB type is controlled by a timer.
- 7.Fill the lubricator with grease to exhaust air before the distributors are mounted.



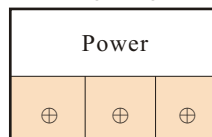
## ◆ Application of Machines Equipment

It's usually used for plastic or rubber processing machines, pressing and thermal treatment machines, etc.

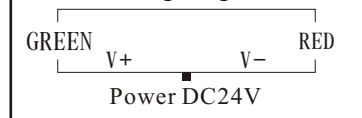
Model	Capacity Liters	Operation Time	Interval Time	Motor	Max Volume	Max Pressure	Voltage	Ampere	Hertz	Discharge Bore	Viscosity
KSC-30	600cc	Control By PLC		15W	15cc/min	150kgf/cm <sup>2</sup>	DC24V 110V 220V	1.2A 0.34A 0.17A	50/60Hz	Ø4 Ø6 Ø8 PT1/8	Grease NLGI grades 0 to 000
KSC-35	1000cc										
KSC-40	800cc										
KSC-50	2000cc										

Model	Fixed Hole Distance(mm)	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
KSC-30	65mm	217	138	262	3.26
KSC-35		217	138	280	4.19
KSC-40		217	138	345	3.61
KSC-50		217	158	367	4.36

### KSC Single Phase Wiring Diagram



### KSC Type DC24V Wiring Diagram



## ◆ Order Code :

<b>KS</b>	<b>C</b>	<b>30</b>	<b>C</b>	<b>3</b>	<b>※</b>
Electric Grease Lubricator	Tank Capacity	Voltage	Discharge Bore	Special Request	
C : Controlled by PLC	30 : 600cc	A : 110V	0 : Ø4	S : KSC - 40 could add a level switch	
	35 : 1000cc	C : 220V	1 : Ø6		
	40 : 800cc	D : DC24V	2 : Ø4 ( With Pressure Gauge )		
	50 : 2000cc		3 : Ø6 ( With Pressure Gauge )		
			4 : Ø8		
			5 : Ø8 ( With Pressure Gauge )		
			6 : PT1/8		
			7 : PT1/8 ( With Pressure Gauge )		



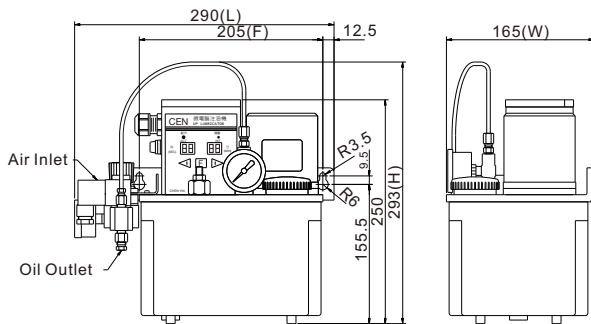
# CEN22 Horizontal, CEN23 Vertical Type Oil-mist Electric Lubricators



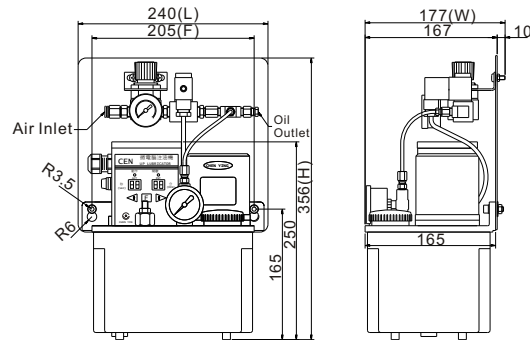
CEN22-03



CEN23-03



CEN22-03 Type Standards Externals



CEN23-03 Type Standards Externals

## ◆ Features

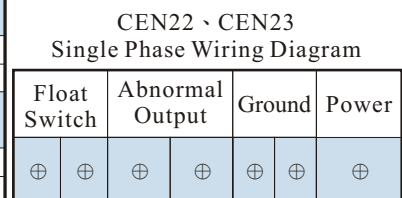
1. The timer controls the operation and interval time. The electronic box has operation and interval indicators.
2. The electronic box can automatically save the original operation and interval time while the power is suddenly off. After turning on the power, it would return to the original setting time and start the cycle again.
3. It has a feed-oil button ( **F** button), press the button and the oil will feed immediately.
4. The discharge volume is stable and can be adjusted by the pressure-regulating valve. Turning the valve clockwise, the oil volume will increase, and turning anticlockwise, the oil volume will reduce.
5. When the power of the lubricator turns off, the air pressure and output power will be turned off at the same time for safety.
6. It has a pressure-regulating valve, which can adjust the pressure and easy to check from the pressure gauge.
7. It has a float switch that can detect the oil volume. It will have an automatic signal when the oil level is lower than the minimum.
8. The function of CEN22, CEN23 types are similar to CEN24 (Horizontal), CEN25 (Vertical) types. The difference is CEN24, CEN25 types are without timer, and CEN22, CEN23 types are with timers.

## ◆ Application of Machines Equipment

The oil-mist type electric lubricator has cooling, lubricative and filtering effect, which can reduce wear of lubrication point. It's suitable for cutting machines and bearings.

Model	Act Time	Interval Time	Motor	Max Volume	Max Pressure	1Ø Voltage	Ampere	Hertz	Discharge Bore	Oil Viscosity
CEN22Horizontal CEN23Vertical	1-99sec	1-99sec 1-99min	25W	200 cc/min	15kgf/cm <sup>2</sup>	110V 220V	2.5A 1A	50/60Hz	Ø4 or Ø6	32-68cSt@40°C

Model	Tank Code	Tank Material	Capacity Liters	Fixed Hole Distance(mm)	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
CEN22	03	Resin	3L	205	290	165	293	5.70
	04	Resin	4L	250	348	169	293	6.30
CEN23	03	Resin	3L	205	240	177	356	6.40
	04	Resin	4L	250	285	174	372	7.00



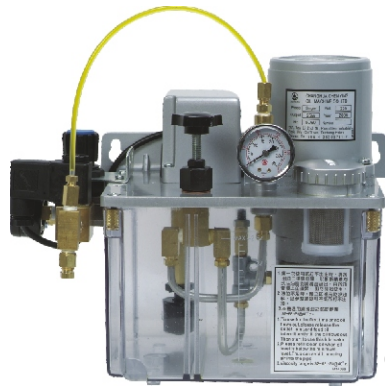
## ◆ Order Code :

CEN	22	03	1	C	25	3	※
Model : Oil-Mist	Tank Capacity(Material)	Time ( Act x Interval )	Voltage	Motor	Discharge Bore	Special Request	
22 : Horizontal Type	03 : 3L ( Resin )	1 : sec x sec	A : 110V	25 : 25W	2 : Ø4 ( With Pressure Gauge )		
23 : Vertical Type	04 : 4L ( Resin )	2 : sec x min	C : 220V		3 : Ø6 ( With Pressure Gauge )		

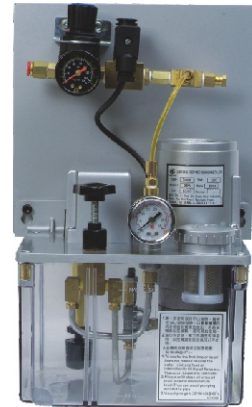
CEN22 Horizontal, CEN23 Vertical Type Oil-mist Electric Lubricators

# CEN24 Horizontal, CEN25 Vertical Type Oil-mist Electric Lubricator

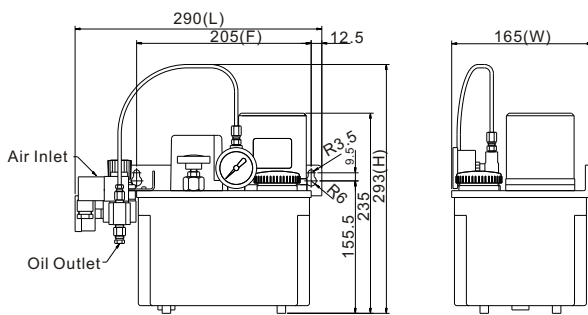
CEN24 Horizontal, CEN25 Vertical Type Oil-mist Electric Lubricator



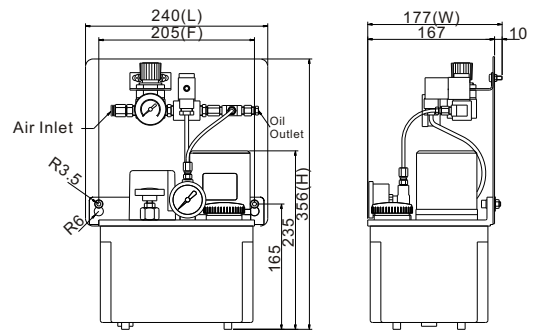
CEN24-03



CEN25-03



CEN24-03 Type Standards Externals



CEN25-03 Type Standards Externals

### ◆ Features

1. CEN24, CEN25 types are without timer, also could be controlled by Programmable Logic Controller (PLC).
2. The discharge volume is stable and can be adjusted by the pressure-regulating valve. Turning the valve clockwise, the oil volume will increase, and turning anticlockwise, the oil volume will reduce.
3. When the power of the lubricator turns off, the air pressure and output power will be turned off at the same time for safety.
4. It has a pressure-regulating valve, which can adjust the pressure and easy to check from the pressure gauge.
5. It has a float switch that can detect the oil volume. It will have abnormal signal automatically when the oil level is lower than the minimum.
6. The function of CEN24, CEN25 types are similar to CEN22 (Horizontal), CEN23 (Vertical) types. The difference is CEN24, CEN25 types are without timer, and CEN22, CEN23 types are with timers.

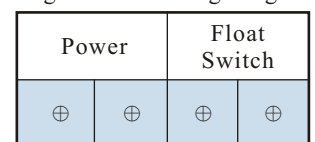
### ◆ Application of Machines Equipment

The oil-mist type electric lubricator has cooling, lubricative and filtering effect, which can reduce wear of lubrication point. It's suitable for cutting machines and bearings.

Model	Motor	Max Volume	Max Pressure	1Ø Voltage	Ampere	Hertz	Discharge Bore	Oil Viscosity
CEN24 Horizontal CEN25 Vertical	25W	200 cc/min	15kgf/cm <sup>2</sup>	110V 220V	2.5A 1A	50/60Hz	Ø4 or Ø6	32-68cSt@40°C

Model	Tank Code	Tank Material	Capacity Liters	Fixed Hole Distance(mm)	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
CEN24	03	Resin	3L	205	290	165	293	5.65
	04	Resin	4L	250	348	169	293	6.25
CEN25	03	Resin	3L	205	240	177	356	6.10
	04	Resin	4L	250	285	174	372	7.30

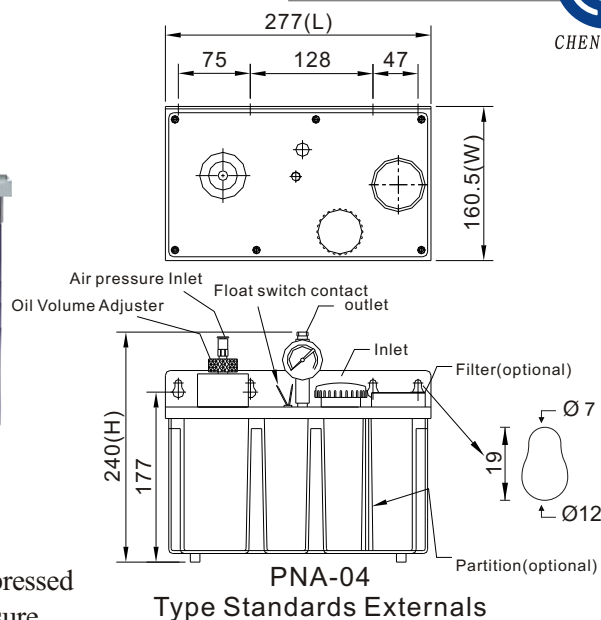
CEN24、CEN25 Single Phase Wiring Diagram



### ◆ Order Code :

CEN	24	03	C	25	3	※
Model : Oil-Mist	Tank Capacity (Material)	Voltage	Motor	Discharge Bore	Special Request	
24 : Horizontal Type	03 : 3L ( Resin )	A : 110V	25 : 25W	2 : Ø4 ( With Pressure Gauge )		
25 : Vertical Type	04 : 4L ( Resin )	C : 220V		3 : Ø6 ( With Pressure Gauge )		

# PNA Resistance Type, PNB Pressure-Relief Type Pneumatic Lubricators



### ◆ Features

1. PNA and PNB type pneumatic lubricators are actuated by compressed air, and the pressure of lubricator is controlled by input air pressure.
2. PNA type is resistance type, which doesn't have pressure-relief device and the discharge volume is 0~8cc/stroke adjustable. Turn the adjuster clockwise, and the volume increases; turn it anti-clockwise, and the volume decreases.
3. PNA type can work with many kinds of open distributors, such as straight adapters, proportion adapters, A type, B type, AE type, and AB type distributors.
4. PNB type has pressure-relief device, and the discharge volume is fixed. PNB type needs to work with volume distributors.
5. PNA and PNB type have float switch that can detect the oil volume. It will have an automatic signal when the oil level is lower than the minimum.
6. Pressure gauge and pressure switch could be added on request for checking if the pressure is normal.
7. Reservoir 3L and above could be added partition and filter on request.

### ◆ Application of Machines Equipment

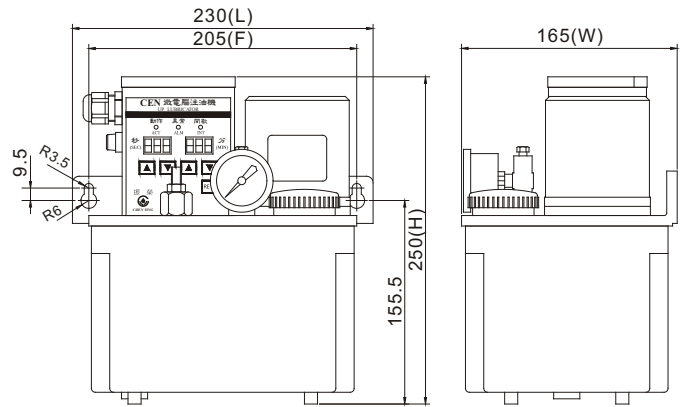
Pneumatic lubricator has small discharge volume, usually used for knitting and bending machines.

Model	Dis. Volume	Input Air Pressure	Output Pressure	Discharge Bore	Air Pressure Inlet	Oil Viscosity
PNA Resistance Type	0~8 cc/stroke (Adjustable)	4 kgf/cm <sup>2</sup>	14 kgf/cm <sup>2</sup>	Ø4 or Ø6	□ 4or □ 6 Air Quick Joint Inlet M5	10~220cSt@40°C
		5 kgf/cm <sup>2</sup>	18 kgf/cm <sup>2</sup>			
		6 kgf/cm <sup>2</sup>	23 kgf/cm <sup>2</sup>			
		7 kgf/cm <sup>2</sup>	28 kgf/cm <sup>2</sup>			
		8 kgf/cm <sup>2</sup>	33 kgf/cm <sup>2</sup>			
PNB Pressure- Relief Type	8 cc/stroke	4 kgf/cm <sup>2</sup>	14 kgf/cm <sup>2</sup>	Ø4 or Ø6	Ø4 PT1/8 or Ø6 PT1/8 Air Quick Joint	10~220cSt@40°C
		5 kgf/cm <sup>2</sup>	18 kgf/cm <sup>2</sup>			
		6 kgf/cm <sup>2</sup>	23 kgf/cm <sup>2</sup>			
		7 kgf/cm <sup>2</sup>	28 kgf/cm <sup>2</sup>			
		8 kgf/cm <sup>2</sup>	33 kgf/cm <sup>2</sup>			

Model	Tank Code	Tank Material	Capacity Liters	Fixed Hole Distance(mm)	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
PNA PNB	01	Resin	2L	144	168	117.5	226	1.88
	02	Aluminum	2L	200	217	148	212	2.85
	03	Resin	3L	170	204	161.5	221	2.50
	04	Resin	4L	250	277	160.5	240	3.40
	05	Aluminum	4L	280	299	162	230	4.35
	08	Iron	8L	338	355	208	253	7.20

### ◆ Order Code :

<b>PN A</b>	<b>01</b>	<b>1</b>	<b>0</b>	<b>※</b>
Model	Tank Capacity(Material)	Discharge Bore	Air Quick Joint	Special Request
A : Resistance Type	01 : 2L (Resin)	0 : Ø4	0 : Ø4	※C : Reservoir 2.5L above could be added filter (40μ) on request.
B : Pressure-Relief Type	02 : 2L (Aluminum)	1 : Ø6	1 : Ø6	※P : Add a pressure switch
	03 : 3L (Resin)	2 : Ø4 (With Pressure Gauge)		※D : Add a partition
	04 : 4L (Resin)	3 : Ø6 (With Pressure Gauge)		
	05 : 4L (Aluminum)			
	08 : 8L (Iron)			



COA-03 (25W) Type Standards Externals

**◆ Features**

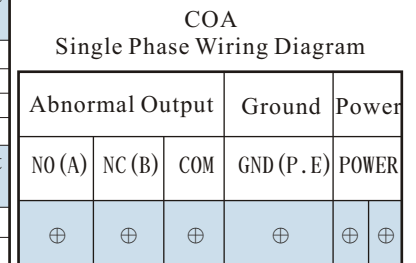
1. COA type is pressure-relief type electric lubricator, which has to work with CO or OA type oil-air volume distributors.
2. The feature of CO and OA type oil-air volume distributors is "fixed discharge oil volume". CO type has fixed amount of air, and OA type can adjust the amount of air.
3. It has a pressure switch device and been set up as 8kg/cm<sup>2</sup>, which assures the oil volume of lubrication points and checks if the piping works normally. The standard specification is NC (Normal Close) contact, which means if the pressure is abnormal, it will have abnormal signal.
4. The timer controls the operation and interval time, and has sec/sec and sec/min model to be chosen. The electronic box has operation, abnormal and interval indicators.
5. It has a pressure-regulating valve, which can adjust the pressure and is easy to check pressure from the pressure gauge.
6. It has a float switch that can detect the oil volume. It will have an automatic signal when the oil level is lower than the minimum.
7. It used a high quality alloy steel gear pump and induction motor that maintain steady output pressure and has low noise.
8. It used a fuse to eliminate unusual electric currents and prevent the motor from overloading.
9. A small buzzer is installed inside but also can add a large buzzer on request.

**◆ Application of Machines Equipment**

The Oil-Air Lubrication System can spread out the lubricant on bearings, which has cooling and lubricative effect. It's suitable for machinery equipped with bearing equipment.

Model	Act Time	Interval Time	Motor	Max Volume	Max Pressure	1Ø Voltage	Ampere	Hertz	Discharge Bore	Pressure-Relief	Suitable Distributor	Oil Viscosity
COA	1-999 sec	1-999sec or 1-999min	25W	250 cc/min	20kgf/cm <sup>2</sup>	110V 220V	0.5A 0.25A	50/60Hz	Ø4 or Ø6	○	Oil-Mist Distributor Volume Distributor	32-68cSt@40°C
			60W	500 cc/min	30kgf/cm <sup>2</sup>	110V 220V	1.2A 0.6A					

Model	Tank Code	Tank Material	Capacity Liters	Fixed Hole Distance(mm)	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
COA (25W)	03	Resin	3L	205	230	165	250	5.40
	04	Resin	4L	250	275	160	270	5.90
	05	Aluminum	4L	280	298	165	260	6.75
	08	Iron	8L	338	355	190	290	9.50
COA (60W)	05	Aluminum	4L	280	298	165	310	7.80
	08	Iron	8L	338	355	190	340	10.55

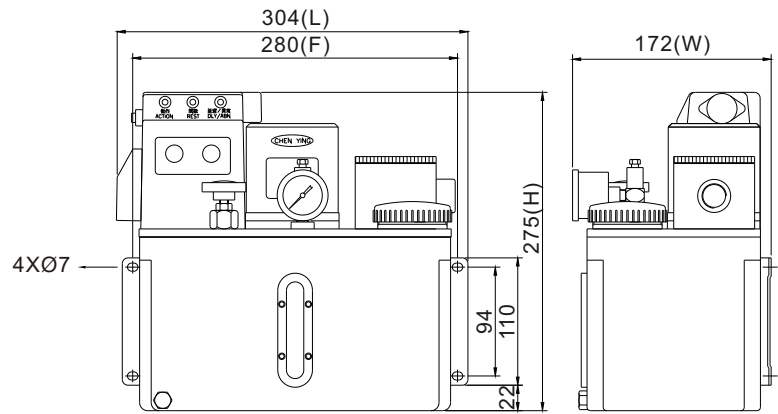


**◆ Order Code :**

COA      03                      1                      C      25                      3                      ※

Model :	Tank Capacity(Material)	Time (Act x Interval)	Voltage	Motor	Discharge Bore	Special Request
Oil-Air	03 : 3L (Resin)	1 : sec x sec	A : 110V	25 : 25W	0 : Ø4	※60 : 4L above metal tank could be assembled with 60W motor.
	04 : 4L (Resin)	2 : sec x min	C : 220V		1 : Ø6	
	05 : 4L (Aluminum)				2 : Ø4 (With Pressure Gauge)	
	08 : 8L (Iron)				3 : Ø6 (With Pressure Gauge)	※90 : 4L above metal tank could be assembled with 90W motor.

# CEF Type Circulating Electric Lubricator



CEF-05(25W) Type Standards Externals

## ◆ Features

1. CEF type is circulating lubricator, which means the oil flows out, then comes back into the oil tank through the cyclic inlet. The cyclic inlet has magnetic filter, which can block the impurities and assure the oil clean.
2. The timer controls the operation and interval time. The electronic box has operation, interval and abnormal indicators.
3. It has a feed-oil button, press the button and the oil will feed immediately.
4. After installing and connecting the piping, press the "feed-oil button" till the oil flows out, then start to use it.
5. It used a high quality alloy steel gear pump and induction motor that not only has steady output pressure and low noise, but also can assure each lubrication point with output of oil. It can be applied for large machines' request.
6. It has a pressure-regulating valve and pressure gauge, where an operator can adjust the pressure and check the pressure easily.
7. It has a float switch that can detect the oil volume. It will have an automatic signal automatically when the oil level is lower than the minimum.

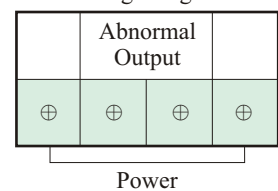
## ◆ Application of Machines Equipment

1. The circulating type electric lubricators could save the usage volume of oil, and have large discharge volume.
2. Circulating type lubricators also have cooling, lubricative and filtering effect, which can reduce wear of lubrication point. It's suitable for machinery requiring large discharge volume or quickly operating.

Model	Act Time	Interval Time	Motor	Max Volume	Max Pressure	1Ø Voltage	Ampere	Hertz	Discharge Bore	Cyclic Inlet	Oil Viscosity
CEF	3sec-3min	1-60min	25W	250 cc/min	15kgf/cm <sup>2</sup>	110V 220V	0.7A 0.25A	50/60Hz	Ø4 or Ø6	1/2" or 3/4" (inch)	32-68cSt@40°C
		1-180min 1-360min	60W	500 cc/min	30kgf/cm <sup>2</sup>	110V 220V	1A 0.65A				

Model	Tank Code	Tank Material	Capacity Liters	Fixed Hole Distance(mm)	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
CEF (25W)	05	Aluminum	4L	280	304	172	275	7.50
	08	Iron	8L	338	355	190	305	10.10
	12	Iron	12L	475	495	220	345	12.40
CEF (60W)	08	Iron	8L	338	355	190	340	11.15
	12	Iron	12L	475	495	220	380	13.45

CEF Single Phase Wiring Diagram



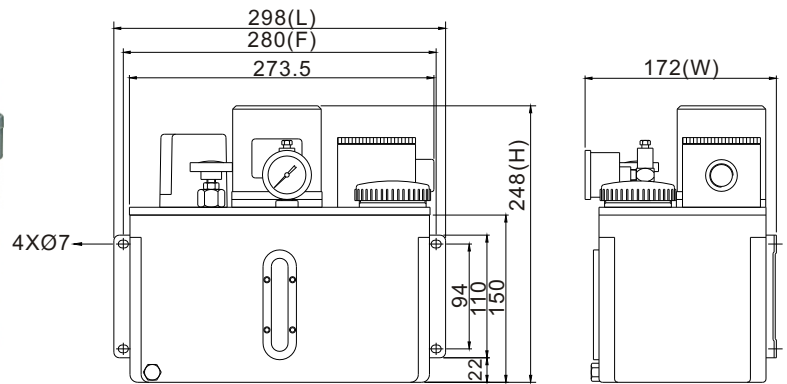
## ◆ Order Code :

CE	F	05	060	C	25	1	A	※
Model :	Tank Capacity (Material)	Interval	Voltage	Motor	Discharge Bore	Cyclic Inlet	Special Request	
Circulating Type	05 : 4L (Aluminum)	060 : 60min	A : 110V	25 : 25W	0 : Ø4	A : 1/2"	※60 : 8L above metal tank could be assembled with 60W motor.	
F : Controlled by Timer	08 : 8L (Iron)	180 : 180min	C : 220V		1 : Ø6	B : 3/4"		
	12 : 12L (Iron)	360 : 360min			2 : Ø4 (With Pressure Gauge)			
	20 : 20L (Iron)				3 : Ø6 (With Pressure Gauge)			
	30 : 30L (Iron)							
	40 : 40L (Iron)							
	60 : 60L (Iron)							※90 : 8L above metal tank could be assembled with 90W motor.

CEF Type Circulating Electric Lubricator

# CEH Type Circulating Electric Lubricator

CEH Type Circulating Electric Lubricator



CEH-05 (25W) Type Standards Externals

### ◆ Features

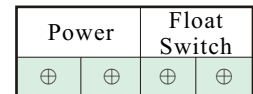
1. CEH type is circulating lubricator, which means the oil flows out, then comes back into the oil tank through the cyclic inlet. The cyclic inlet has magnetic filter, which can block the impurities and assure the oil clean.
2. CEH type is without timer, also could be controlled by Programmable Logic Controller (PLC).
3. After installing and connecting the piping, feed oil till oil flows out, then start to use this lubricator.
4. It used a high quality alloy steel gear pump and induction motor that not only has steady output pressure and low noise, but also can assure each lubrication point with output of oil. It can be applied for large machines' request.
5. It has a pressure-regulating valve and pressure gauge, where an operator can adjust the pressure and check the pressure easily.
6. It has a float switch that can detect the oil volume. It will have an automatic signal automatically when the oil level is lower than the minimum.

### ◆ Application of Machines Equipment

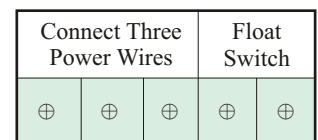
1. The circulating type electric lubricators could save the usage volume of oil, and have large discharge volume.
2. Circulating type lubricators also have cooling, lubricative and filtering effect, which can reduce wear of lubrication point. It's suitable for machinery requiring large discharge volume or quickly operating.

Model	Motor	Max Volume	Max Pressure	Voltage	Ampere	Hertz	Discharge Bore	Cyclic Inlet	Oil Viscosity
CEH	25W	250 cc/min	15kgf/cm <sup>2</sup>	110V 220V 3Ø Optional	0.7A 0.2A 0.3A	50/60Hz	Ø4 or Ø6	1/2" or 3/4" (inch)	32-68cSt@40°C
	60W	600 cc/min	30kgf/cm <sup>2</sup>	110V 220V 3Ø Optional	1A 0.65A 0.35A				

CEH Single Phase Wiring Diagram



CEH Three Phase Wiring Diagram



While connecting wires, please make sure that the motor rotates anticlockwisely (see the red spot of spindle). If the motor rotate clockwise, please change positions of two power wires, then try again

Model	Tank Code	Tank Material	Capacity Liters	Fixed Hole Distance(mm)	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
CEH (25W)	05	Aluminum	4L	280	298	172	248	7.25
	08	Iron	8L	338	355	190	275	10.30
	12	Iron	12L	475	495	220	315	12.60
CEH (60W)	08	Iron	8L	338	355	190	340	11.35
	12	Iron	12L	475	495	220	380	13.65

### ◆ Order Code :

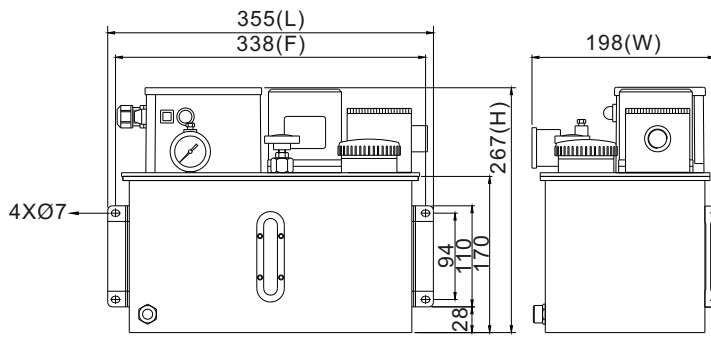
CE H                      05                      C                      25                      1                      A                      ✱

Model :	Tank Capacity(Material)	Voltage	Motor	Discharge Bore	Cyclic Inlet	Special Request
Circulating Type	05 : 4L ( Aluminum ) 08 : 8L ( Iron ) 12 : 12L ( Iron ) 20 : 20L ( Iron ) 30 : 30L ( Iron ) 40 : 40L ( Iron ) 60 : 60L ( Iron )	A : 110V C : 220V D : 3Ø 220/380V E : 3Ø220/440V F : 3Ø 208/415V G : 3Ø 230/460V H : 3Ø 240/480V X : Special Voltage	25 : 25W	0 : Ø4 1 : Ø6 2 : Ø4 ( With Pressure Gauge ) 3 : Ø6 ( With Pressure Gauge )	A : 1/2 "     B : 3/4 "	✱60 : 8L above metal tank could be assembled with 60W motor. ✱90 : 8L above metal tank could be assembled with 90W motor.
H:controlled by PLC						

# CEU Type Circulating Electric Lubricator



CHEN YING



CEU-08(25W) Type Standards Externals

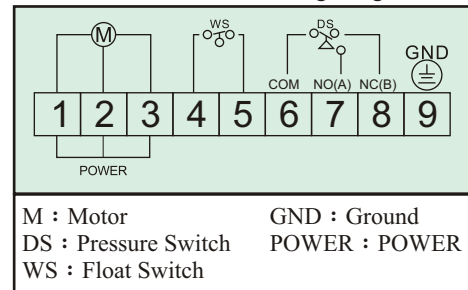
## ◆ Features

1. CEU type is circulating lubricator, which means the oil flows out, then comes back into the oil tank through the cyclic inlet. The cyclic inlet has magnetic filter, which can block the impurities and assure the oil clean.
2. CEU type is without timer, also could be controlled by Programmable Logic Controller (PLC).
3. After installing and connecting the piping, feed oil till oil flows out, then start to use this lubricator.
4. It used a high quality alloy steel gear pump and induction motor that not only has steady output pressure and low noise, but also can assure each lubrication point with output of oil. It can be applied for large machines' request.
5. It has a pressure switch device and been set up as 1kg/cm<sup>2</sup>, which assures the oil volume of lubrication point and detects if the piping works normally. The standard specification is NC (Normal Close) contact, which means if the pressure is abnormal, it will have abnormal signal. NO (Normal Open) contact is on request.
6. It has a pressure-regulating valve, which can adjust the pressure and easy to check from the pressure gauge.
7. It has a float switch that can detect the oil volume. It will have an automatic signal when the oil level is lower than the minimum.
8. CEU type could be installed a power indicator on request.

## ◆ Application of Machines Equipment

The circulating type electric lubricators could save the usage volume of oil, and have large discharge volume. Circulating type lubricators also have cooling, lubricative and filtering effect, which can reduce wear of lubrication point. It's suitable for machinery requiring large discharge volume or quickly operating.

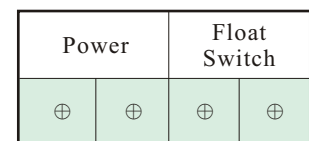
CEU Three Phase Wiring Diagram



Model	Motor	Max Volume	Max Pressure	Voltage	Ampere	Hertz	Discharge Bore	Cyclic Inlet	Oil Viscosity
CEU	25W	250 cc/min	15kgf/cm <sup>2</sup>	1Ø 110V 1Ø 220V 3Ø Optional	0.7A 0.2A 0.3A	50/60Hz	Ø4 or Ø6	1/2" or 3/4" (inch)	32-68cSt@40°C
	60W	600 cc/min	30kgf/cm <sup>2</sup>	1Ø 110V 1Ø 220V 3Ø Optional	1A 0.65A 0.35A				

Model	Tank Code	Tank Material	Capacity Liters	Fixed Hole Distance(mm)	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
CEU (25W)	08	Iron	8L	338	355	198	267	12.25
	20	Iron	20L	410,200	450	250	370	17.80
	40	Iron	40L	450,300	560	410	505	43.00
CEU (60W)	08	Iron	8L	338	355	190	340	13.30
	20	Iron	20L	410,200	450	250	435	18.90
	40	Iron	40L	450,300	560	410	570	44.05

CEU (No Pressure Switch Type) Single Phase Wiring Diagram



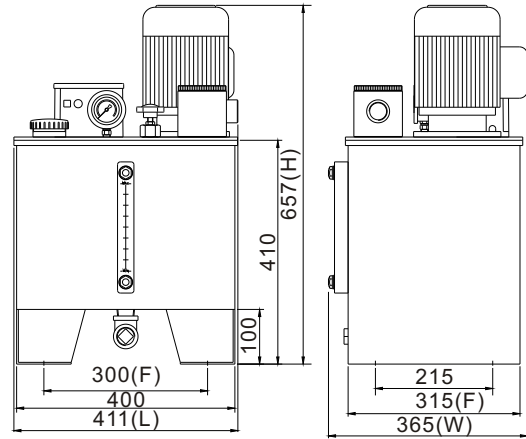
## ◆ Order Code :

<b>CE</b>	<b>U</b>	<b>08</b>	<b>C</b>	<b>25</b>	<b>1</b>	<b>A</b>	<b>※</b>
Model :	Tank Capacity(Material)	Voltage	Motor	Discharge Bore	Cyclic Inlet	Special Request	
Circulating Type	08 : 8L (Iron)	A : 110V	25 : 25W	0 : Ø4	A : 1/2 "	※60 : 8L above metal tank could be assembled with 60W motor.	
U : With	20 : 20L (Iron)	C : 220V		1 : Ø6	B : 3/4 "	※90 : 8L above metal tank could be assembled with 90W motor.	
Pressure Switch	30 : 30L (Iron)	D : 3Ø 220/380V		2 : Ø4 ( With Pressure Gauge )			
	40 : 40L (Iron)	E : 3Ø 220/440V		3 : Ø6 ( With Pressure Gauge )			
	60 : 60L (Iron)	F : 3Ø 208/415V					
		G : 3Ø 230/460V					

V08#04Σ QΣ : H  
 9g8tloV lsi00q2 : X

CEU Type Circulating Electric Lubricator

# CLS Type Circulating Electric Lubricator



CLS 10-30 Type Standards Externals

### ◆ Features

1. According to the difference of flow rate, there are CLS-10, CLS-30, CLS-50 type, among them, CLS-50 has largest flow rate 4.5 L/min, please refer the specification for details.
2. CLS type is circulating lubricator, which means the oil flows out, then comes back into the oil tank through the cyclic inlet. The cyclic inlet has magnetic filter, which can block the impurities and assure the oil clean.
3. After installing and connecting the piping, feed oil till oil flows out, then start to use this lubricator.
4. It used a high quality pump that not only has steady output pressure and low noise, but also can assure each lubrication point with output of oil. It can be applied for large machines' request.
5. It has a pressure switch device, which assures the oil volume of lubrication point and detects if the piping works normally. The standard specification is NC (Normal Close) contact, which means if the pressure is abnormal, it will have abnormal signal. NO (Normal Open) contact is on request.
6. It has a pressure-regulating valve, which can adjust the pressure and easy to check from the pressure gauge.
7. It has a float switch that can detect the oil volume. It will have an automatic signal when the oil level is lower than the minimum.
8. The standards assemble with 1/2 HP motor, also can be changed to 1 HP.
9. The standard of cyclic inlet is 3/4 inches, but can be changed to 1, 1 1/4, 1 2/1 inches on request.
10. A buzzer can be added on request, which will alarm when the oil level is lower than the minimum.

### ◆ Application of Machines Equipment

The circulating type electric lubricators could save the usage volume of oil, and have quite large discharge volume. CLS type lubricators have cooling, lubricative and filtering effect, which can reduce wear of lubrication point. It's suitable for machinery requiring large discharge volume or quickly operating.

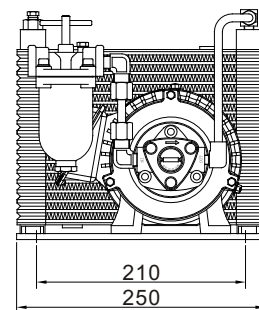
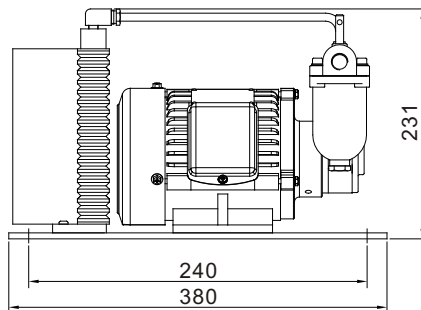
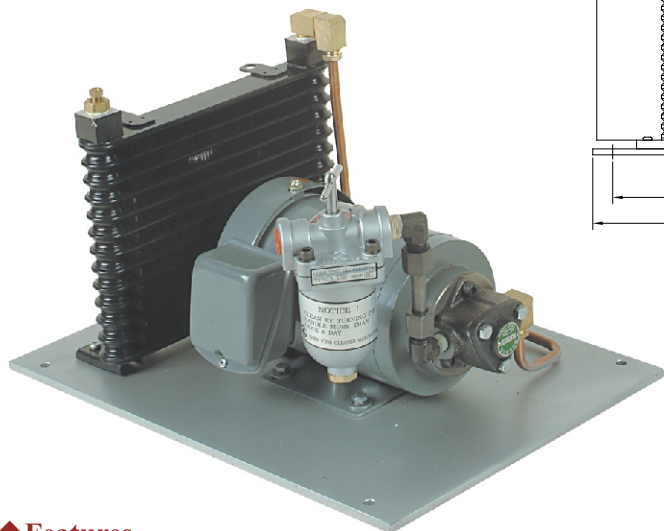
Model	Motor	Max Volume	Max Pressure	Voltage	Pole	Discharge Bore	Cyclic Inlet	Oil Viscosity
CLS-10	1/2HP	1.5L/min	15kgf/cm <sup>2</sup>	1Ø 110V	4	PT1/4	3/4" 1" 1 1/2" 1 1/4"	32-68cSt@40°C
CLS-30	or	3L/min		1Ø 220V				
CLS-50	1HP	4.5L/min		3Ø Optional				

Model	Tank Code	Tank Material	Capacity Liters	Fixed Hole Distance(mm)	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
CLS-10	30	Iron	30L	300,315	411	365	657	46.3
CLS-30	40	Iron	40L	450,300	560	410	650	52.5
CLS-50	60	Iron	60L	500,300	610	415	690	75.5

### ◆ Order Code :

CLS	—	10	30	D	2	3	B	※
Model : Circulating Type		Tank Capacity (Material)	Voltage	Motor	Discharge Bore PT1/4	Cyclic Inlet	Special Request	
10 : Volume 1.5L/min		30 : 30L ( Iron )	A : 1Ø 110V,60Hz	2 : 1/2HP	2 : Ø4 ( With Pressure Gauge )	B : 3/4 "	※100L and above tank capacity is on request.	
30 : Volume 3L/min		40 : 40L ( Iron )	B : 1Ø 220V,50Hz	4 : 1HP	3 : Ø6 ( With Pressure Gauge )	C : 1 "		
50 : Volume 4.5L/min		60 : 60L ( Iron )	C : 1Ø 220V,60Hz			D : 1 1/4 "		
		100 : 100L ( Iron )	D : 3Ø 220/380V			E : 1 1/2 "		
		150 : 150L ( Iron )	E : 3Ø 220/440V					
			F : 3Ø 208/415V					
			G : 3Ø 230/460V					
			H : 3Ø 240/480V					
			X : Special Voltage					

# CLSS-1/4 Type Cooling Circulating Electric Lubricator



## ◆ Features

1. CLSS-1/4 type has cooling device, the standards assemble with 1/4 HP motor and CYP-10A rotary oil pump, the flow rate could be 1.2 to 1.4 L/min. The type of motor and oil pump also can be chosen on request. Please look the specification for details.
2. CLSS-1/4 type has to work with customer's oil tank.
3. CLSS-1/4 type assembles with A-102 type oil auto cleaner (100mesh), which can filter the impurities. The oil auto cleaner also could be chosen with different mesh upon request.
4. The standard one is assembled with CYP-10A rotary oil pump, but also can be assembled CYP-11A, CYP-12A, or CYP-13A upon the difference of discharge volume. Please refer the specification for details.
5. The max pressure of CLSS-1/4 type is 5 kg/cm<sup>2</sup>, and after cooling, the temperature of oil will be room temperature plus 10°C.
6. A fan can be added on request for better cooling effect.

## ◆ Application of Machines Equipment

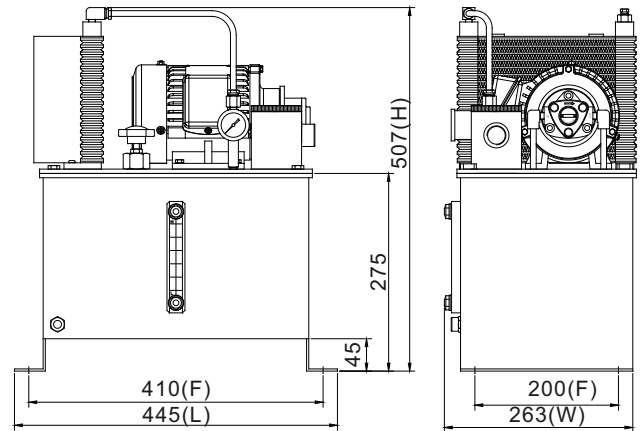
CLSS-1/4 type assembles with good cooling device and adjustable filter, suitable for machinery requiring cooling down or quickly operating.

Model	Motor	Rotary Pump	Max Volume	Max Pressure	Voltage	Pole	Discharge Bore	Cyclic Inlet	Oil Viscosity	Weight(kg)
CLSS	1/4HP	CYP-10A	1.2~1.4L/min	5kgf/cm <sup>2</sup>	1Ø 110V 1Ø 220V 3Ø Optional	4	PT3/8	1/2" or 3/4" (inch) Optional	32-68cSt@40°C	18.5

## ◆ Order Code :

CL	S	10	D	1	1	※
Model : Cooling, Circulating Type S : Without Oil Tank	Rotary Oil Pump 10 : CYP-10A 11 : CYP-11A 12 : CYP-12A 13 : CYP-13A	Voltage A : 1Ø 110V,60Hz B : 1Ø 220V,50Hz C : 1Ø 220V,60Hz D : 3Ø 220/380V E : 3Ø 220/440V F : 3Ø 208/415V G : 3Ø 230/460V H : 3Ø 240/480V X : Special Voltage	HP 1 : 1/4HP	Discharge Bore PT3/8 0 : Ø4 1 : Ø6 2 : Ø4 ( With Pressure Gauge ) 3 : Ø6 ( With Pressure Gauge )	Special Request ※Fan : Add a fan	

# CLST-1/4 Type Cooling Circulating Electric Lubricator



CLST-20 Type Standards Externals

### ◆ Features

1. CLST-1/4 type has cooling device, the standards assemble with 1/4 HP motor and CYP-10A rotary oil pump, the flow rate could be 1.2 to 1.4 L/min. The type of motor and oil pump also can be chosen on request. Please look the specification for details.
2. This is circulating lubricator, which means the oil flows out, then comes back into the oil tank through the cyclic inlet. The cyclic inlet has magnetic filter, which can block the impurities and assure the oil clean.
3. After installing and connecting the piping, feed oil till oil flows out, then start to use this lubricator.
4. It used a high quality alloy steel pump that not only has steady output pressure and low noise, but also can assure each lubrication point with output of oil. It can be applied for large machines' request.
5. It has a pressure-regulating valve, which can adjust the pressure and easy to check from the pressure gauge.
6. It has a float switch that can detect the volume of oil. It will have abnormal signal when the oil level is lower than the standard.
7. The standard one is assembled with CYP-10A rotary oil pump, but also can be assembled with CYP-11A, CYP-12A or CYP-13A upon the difference of discharge volume. Please refer the specification for details.
8. The max pressure of CLST-1/4 type is 5 kg/cm<sup>2</sup>, and after cooling, the temperature of oil will be room temperature plus 10°C.
9. The various capacity of reservoirs are available, such as 20L, 30L, 40L, 60L, 100L, and 150L.
10. A fan can be added on request for better cooling effect.

### ◆ Application of Machines Equipment

The cooling circulating type electric lubricators assemble with good cooling device, which not only save the usage volume of oil, but also have quite large discharge volume. It's suitable for machinery requiring large discharge volume or quickly operating.

Model	Motor	Rotary Pump	Max Volume	Max Pressure	Voltage	Pole	Discharge Bore	Cyclic Inlet	Oil Viscosity
CLST	1/4HP	CYP-10A	1.2~1.4L/min	5kgf/cm <sup>2</sup>	1Ø 110V 1Ø 220V 3Ø optional	4	PT3/8	1/2" or 3/4" (inch) optional	32-68cSt@40°C

Model	Tank Code	Tank Material	Capacity Liters	Fixed Hole Distance(mm)	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
CLST	20	Iron	20L	410,200	445	263	507	29.5
	30	Iron	30L	300,215	410	351	641	41.5
	40	Iron	40L	450,300	560	410	650	54.4

### ◆ Order Code :

CLS	T	20	10	D	1	3	B	※
Model :	Tank Capacity	Rotary Oil Pump	Voltage	HP	Discharge Bore PT3/8	Cyclic Inlet	Special	
Cooling,	Liters	10 : CYP-10A	A : 1Ø 110V,60Hz	1 : 1/4HP	2 : Ø4	A : 1/2 "	Request	
Circulating Type	20 : 20L (Iron)	11 : CYP-11A	B : 1Ø 220V,50Hz		(With Pressure Gauge)	B : 3/4 "	※Fan :	
T : With Oil Tank	30 : 30L (Iron)	12 : CYP-12A	C : 1Ø 220V,60Hz		3 : Ø6		Add a fan	
	40 : 40L (Iron)	13 : CYP-13A	D : 3Ø 220/380V		(With Pressure Gauge)			
	60 : 60L		E : 3Ø 220/440V					
	100 : 100L		F : 3Ø 208/415V					
	150 : 150L		G : 3Ø 230/460V					
			H : 3Ø 240/480V					
			X : Special Voltage					

CLST-1/4 Type Cooling Circulating Electric Lubricator

# HV-200, HV-201 Air Operated Oil Filler



## ◆ Features

1. Oil filling and extracting are driven by a pneumatic motor pump. No contact between the oil and the air, preventing the oil from being emulsified.
2. Continuous, variable refilling rates can be controlled by the oil gun or the gas inlet valve. The operation is simple and convenient. The oil refilling gun is a standard component.
3. An electronic flow meter can be attached to measure the volume of the refilled oil. (Optional accessory)
4. Open design without an oil tank. A 5gallon oil tank can be directly placed on the car rack.
5. It is suitable to use with a variety of engine oil, lubricants, and gear oil.



Model	Used Pressure	Power	Machine Size	Filling Style	N.W	G.W
HV-200	5~7kg/cm <sup>2</sup>	AP-35	200X190X300	Air Pressure	7 kg	7.5 kg

Model	Capacity	Used Pressure	Power	Machine Size	Filling Style	N.W	G.W
HV-201	20 L	5~7kg/cm <sup>2</sup>	AP-35	360X390X790	Air Pressure	10 kg	11 kg

# MG-55 Air Operated Grease Filler

## ◆ Features

1. Top opening flap design is suitable for filling five gallons of grease.
2. Fitted with four 360 degree turn-able wheels for easy pushing around.
3. Suitable for grease NLGI grades 00 to 2.
4. Tank inner diameter 320mm, outer diameter 324mm, tank inner height 445mm, outer height 452mm.
5. For smoother flow of grease, standard heavy duty flow plate is available on request.



Model	Capacity	Usage Pressure	Shrink Rate	Volume Output	Hose	N.W	G.W	CUFT
MG-55	20L	4-9 kg	1:50	2L/min	1/4"X2WX3M	21 kg	23 kg	4.2

# Adjustable Automatic Grease Lubricator

## ◆ Features

1. Easy to install and operate.
2. The discharge grease flow can be adjusted depends on the flow rate and bearing's size.
3. It is suitable for NLGI grade 0~3.
4. The proper working temperature is around -20°C ~125°C.
5. It can be applied in lubricating linears and bearings, etc.

Specification		Capacity
GP-26C	120H×155 m/m	60g
GP-36C	134.5H×68 m/m	125g



Air Operated Grease Filler / Adjustable Automatic Grease Lubricator