

MLA Continuous Motor Pump

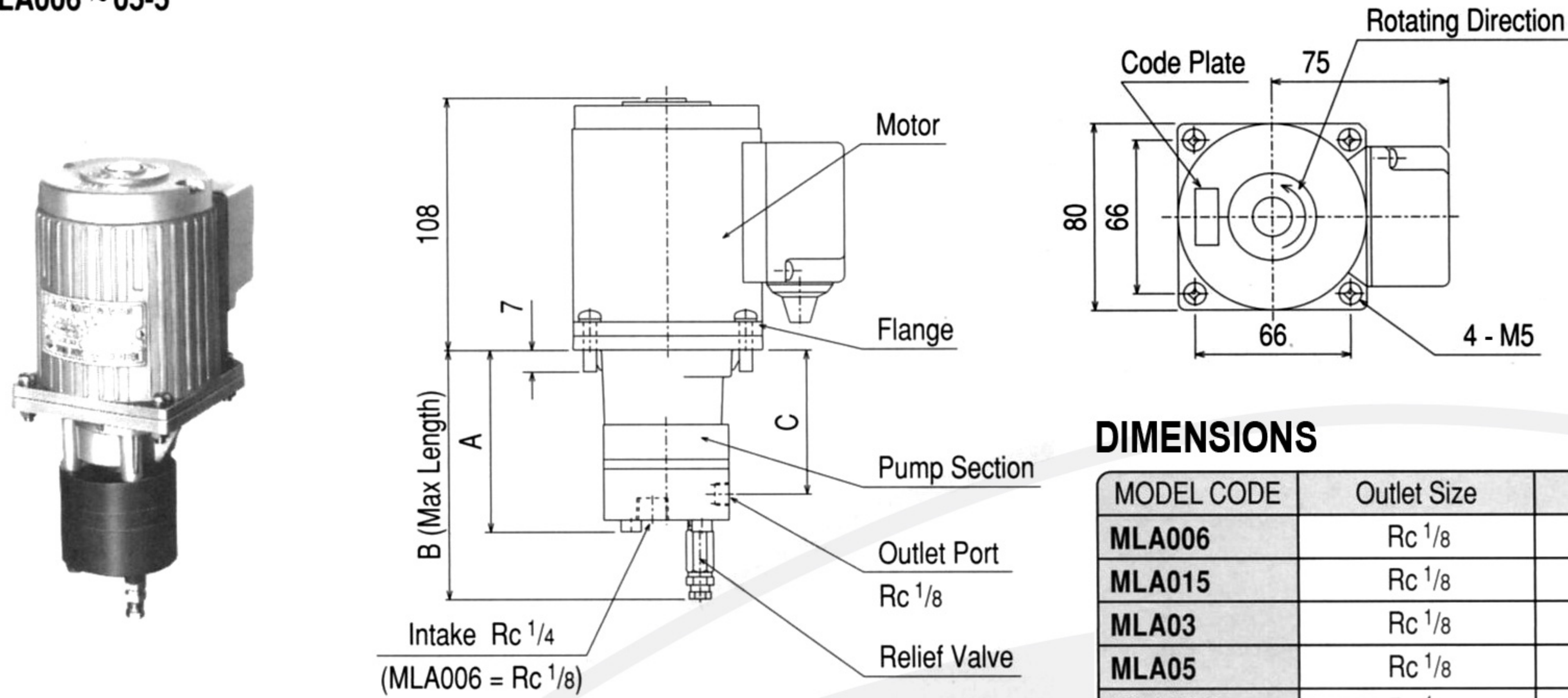
- Gear pump for continuous oil distribution systems
- High levels of performance, safety and durability
- Various types and specifications available to meet a wide variety of needs

The MLA pumps are designed for continuous / circulating oil distribution in resistance type systems, which have the added benefit of a cooling effect.

The compact automatic gear pump, featuring a relief valve, achieves high levels of performance, durability and safety.

10 flow-rate models (0.06L/min ~ 10L/min) are available, enabling the MLA series to cover a very broad flow-rate spectrum.

MLA006 ~ 05-5

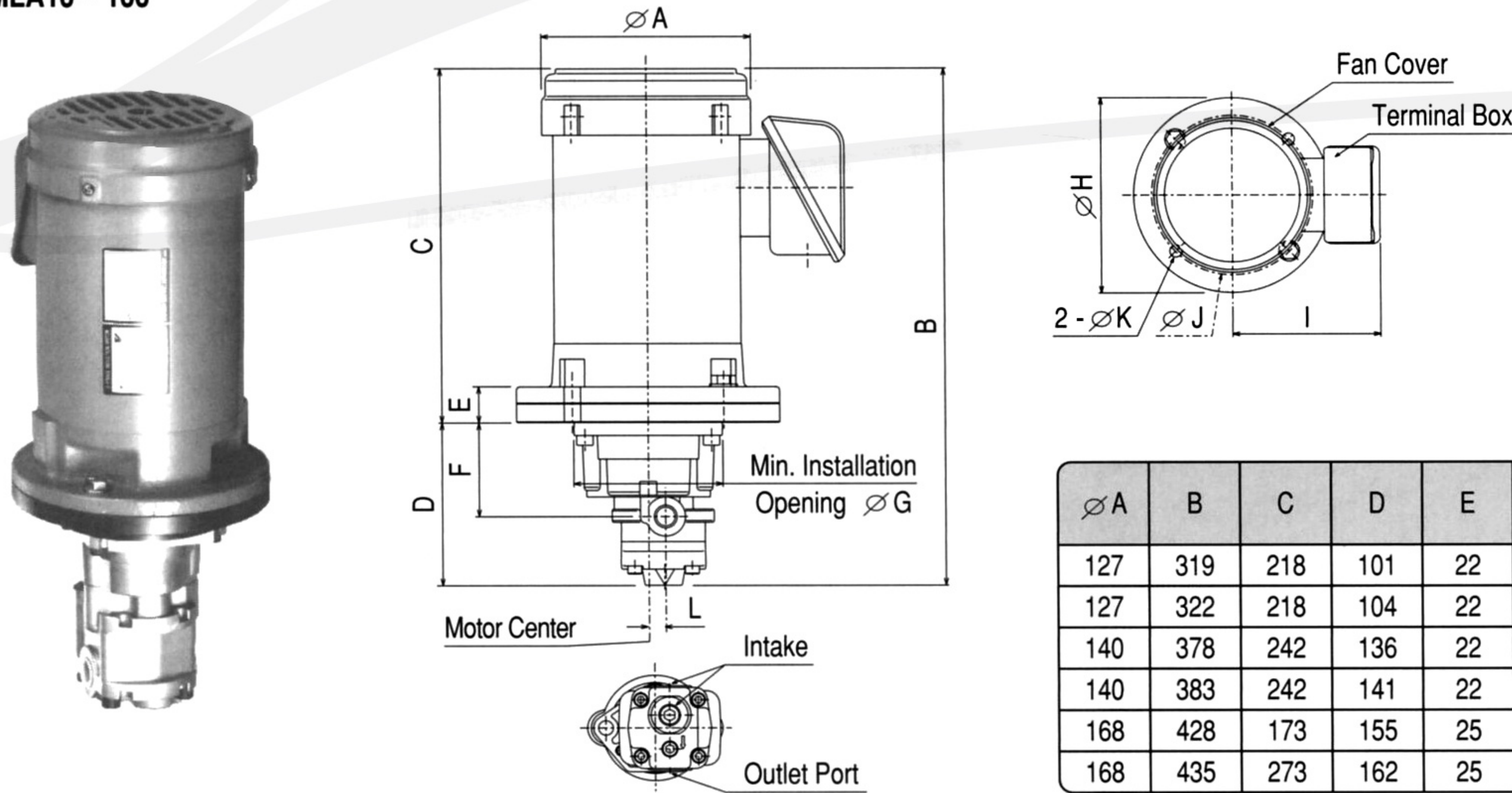


- * The motor can be rotated and affixed to the flange in 4 directions (every 90°) to suit installation requirements.
- * Contact SHOWA for further details regarding suction pipes and filter details. (Not included)
- * Dimensions will differ for pumps utilizing 60W x 2P motors of non-standard voltages.
- * Minimum opening diameter for installation: $\varnothing 68 +$

DIMENSIONS

MODEL CODE	Outlet Size	A	B	C
MLA006	Rc 1/8	74	95	42.5
MLA015	Rc 1/8	78	114	62
MLA03	Rc 1/8	81	117	65
MLA05	Rc 1/8	81	117	65
MLA05-5	Rc 1/8	86	122	70

MLA10 ~ 100



DIMENSIONS

MODEL CODE	Outlet Port Size	Intake Port Size
MLA10	Rc 1/4	Rc 1/4
MLA15	Rc 1/4	Rc 1/4
MLA30	Rc 3/8	Rc 1/2
MLA50	Rc 3/8	Rc 1/2
MLA70	Rc 3/8	Rc 1/2
MLA100	Rc 3/8	Rc 1/2

$\varnothing A$	B	C	D	E	F	$\varnothing G$	$\varnothing H$	I	$\varnothing J$	$\varnothing K$	L
127	319	218	101	22	58	Min.	160	120	130	10	10.3
127	322	218	104	22	58		160	120	130	10	10.3
140	378	242	136	22	112.9		160	125	130	10	13.5
140	383	242	141	22	117.8	Min.	160	125	130	10	13.5
168	428	173	155	25	131.5		200	131	165	12	13.5
168	435	273	162	25	139		200	131	165	12	13.5

MODEL CODE

MLA 03

Nominal Discharge Volume	
006 : 0.06L/min	15 : 1.5L/min
015 : 0.15L/min	30 : 3.0L/min
03 : 0.3L/min	50 : 5.0L/min
05 : 0.5L/min	70 : 7.0L/min
10 : 1.0L/min	100 : 10L/min

Base Code

SPECIFICATION

MODEL CODE	Discharge Pressure (MPa)	Discharge Volume (L/min)		Theoretical Discharge (cm ³ /R)	Viscosity Range (mm ² /s)	Motor Output x Pole (W) x (P)	Current (A)		
		50Hz	60Hz				200V (50Hz)	200V (60Hz)	220V (60Hz)
MLA006	0.3 ~ 1	0.05	0.06	0.038	20 ~ 2000	25 x 4	0.26	0.27	0.27
MLA015		0.16	0.19	0.12	20 ~ 2000	25 x 4	0.26	0.27	0.27
MLA03		0.28	0.32	0.2	20 ~ 1000	25 x 4	0.26	0.27	0.27
MLA05	0.3 ~ 1.5	0.5	0.6	0.2	20 ~ 1000	60 x 2	0.4	0.4	0.4
MLA05-5	0.3 ~ 0.5	0.5	0.57	0.36	20 ~ 500	25 x 4	0.26	0.27	0.27
MLA10	0.3 ~ 1.5	0.96	1.16	0.662	20 ~ 1000	200 x 4	1.34	1.12	1.17
MLA15		1.43	1.72	0.984	20 ~ 1000				
MLA30		3.18	3.83	2.19	20 ~ 1000	400 x 4	2.2	1.93	1.95
MLA50		5.28	6.37	3.64	20 ~ 1000				
MLA70		7.29	8.80	5.03	20 ~ 1000	750 x 4	3.6	3.3	3.2
MLA100		10.51	12.69	7.25	20 ~ 1000				

- * The 25W motors can operate using 200, 220, 230Volts (50Hz - 0.26A) or 200, 220, 230, 240Volts (60Hz - 0.27A).
- * 3 phase 200V 50Hz, 200V 60Hz and 220V 60Hz are the standard. Different power specifications also available.
- * Class E insulation
- * After wiring, ensure the motor rotates in the correct direction.
- * Current (A) values conform to NIDEC (motors above 200W)



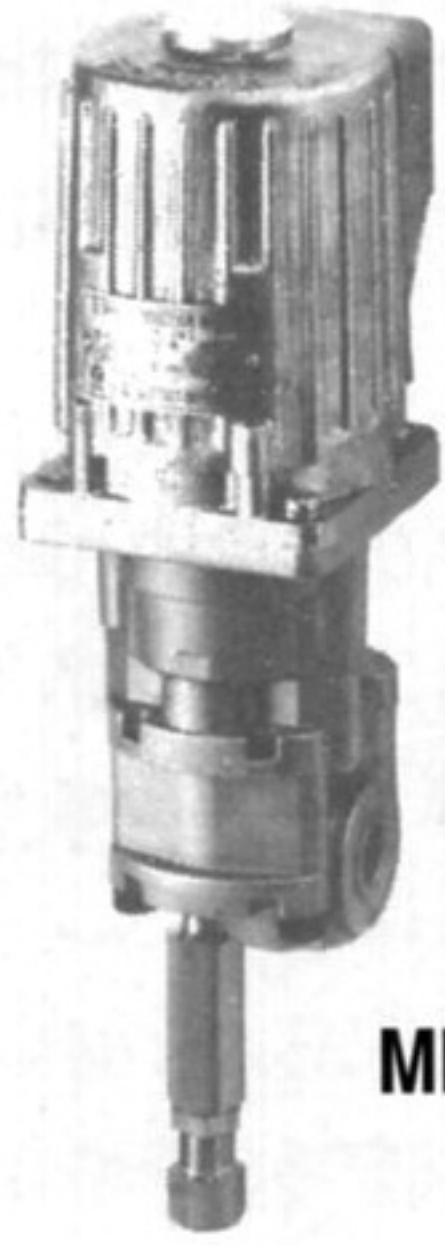
MLC, MLD

Continuous Motor Pump

- Simplified version of the MLA type gear pump for continuous oil distribution
- Light weight and compact design, with high discharge rates of varying volumes



MLC



MLD

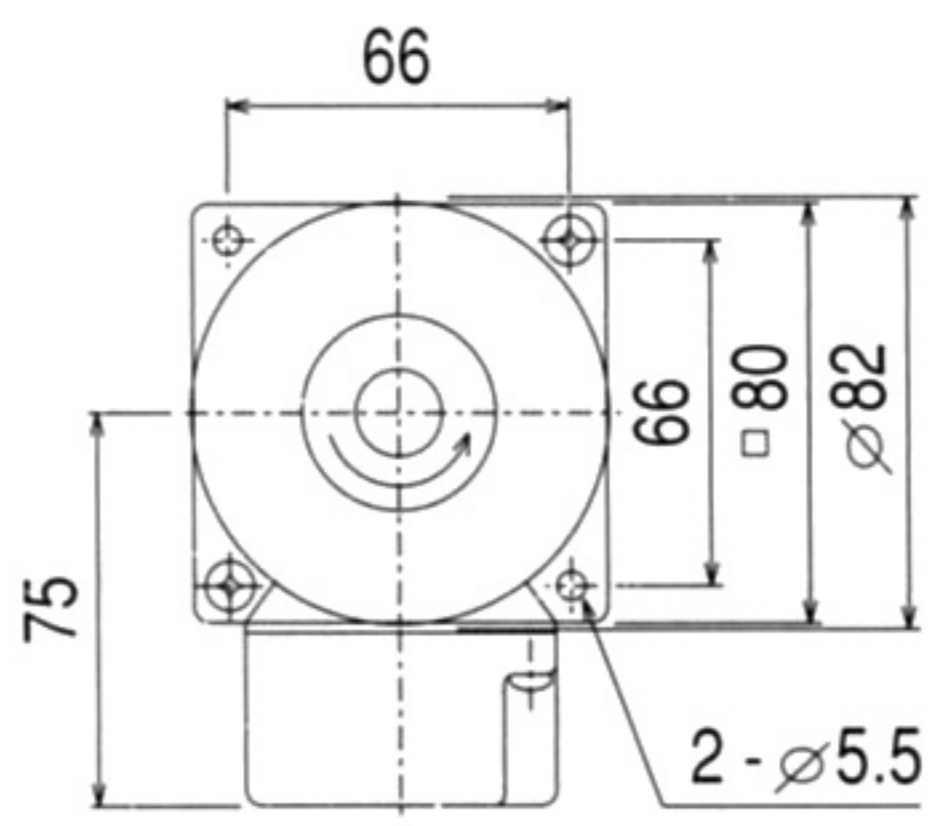
MODEL CODE MLC 05 1

Motor Output
1 : 25W
Discharge Volume
05 : 0.5L/min
10 : 1L/min
Base Code

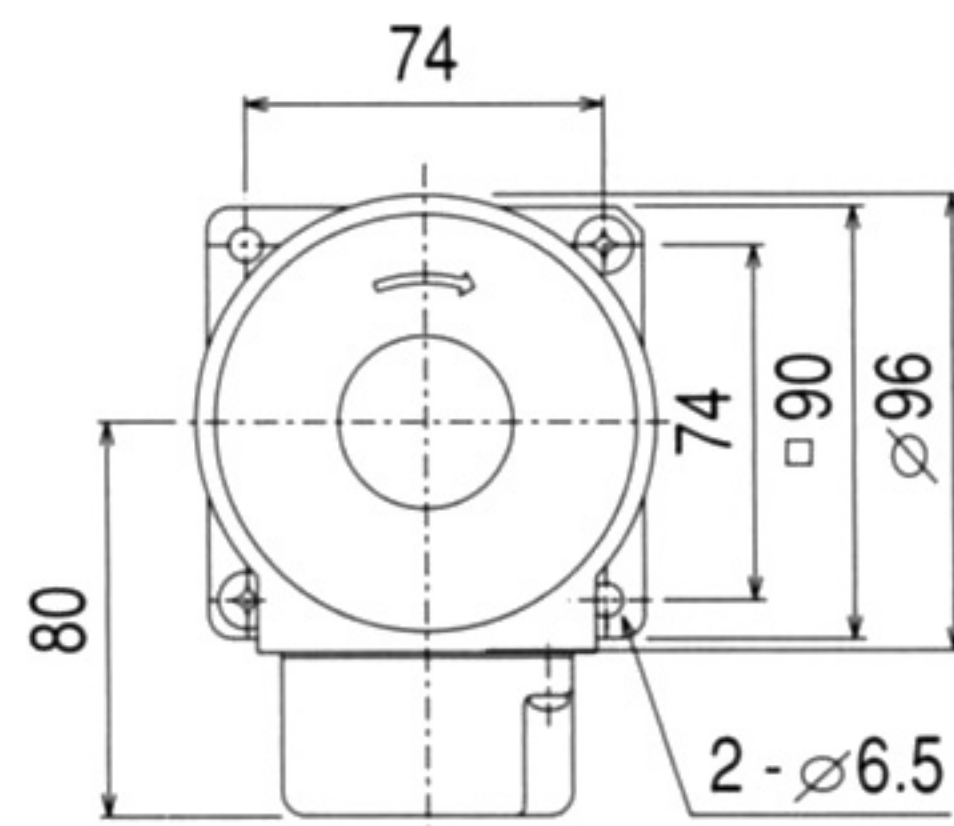
MODEL CODE MLD 05 2

Motor Output
2 : 70W
3 : 80W
4 : 200W
5 : 400W
Discharge Volume
05 : 0.5L/min
10 : 1L/min
30 : 3L/min
50 : 5L/min
70 : 7L/min
100 : 10L/min
Base Code

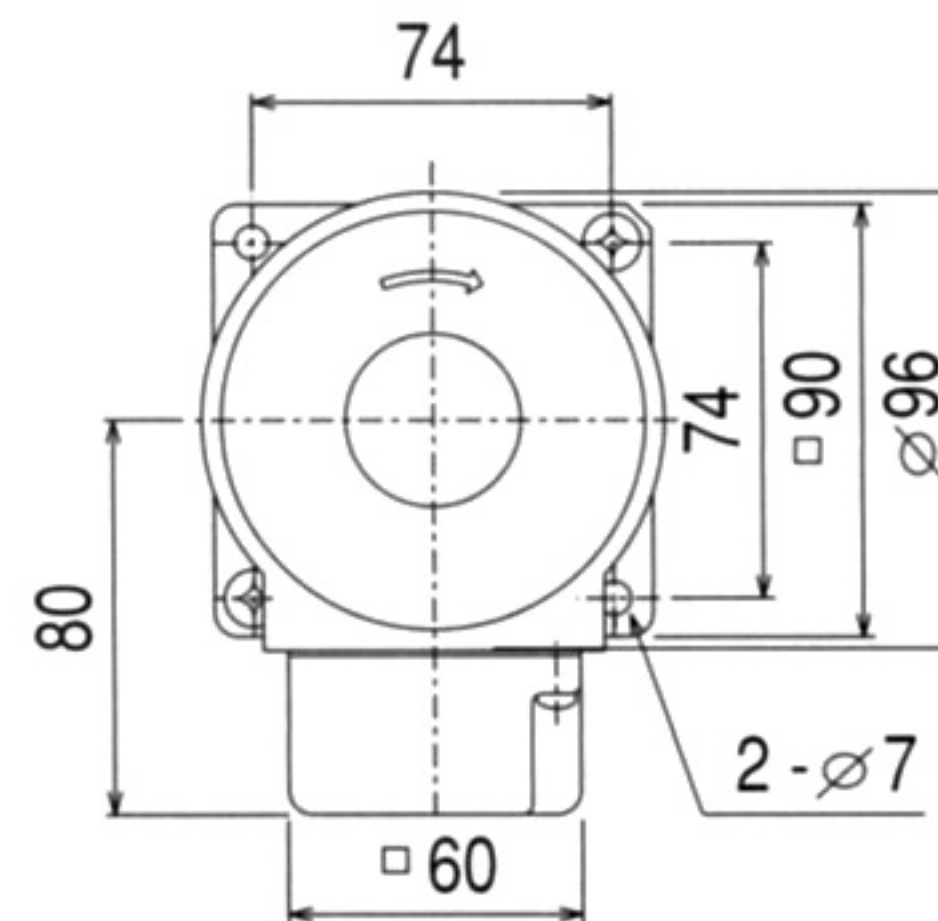
MLC (25W Motor)



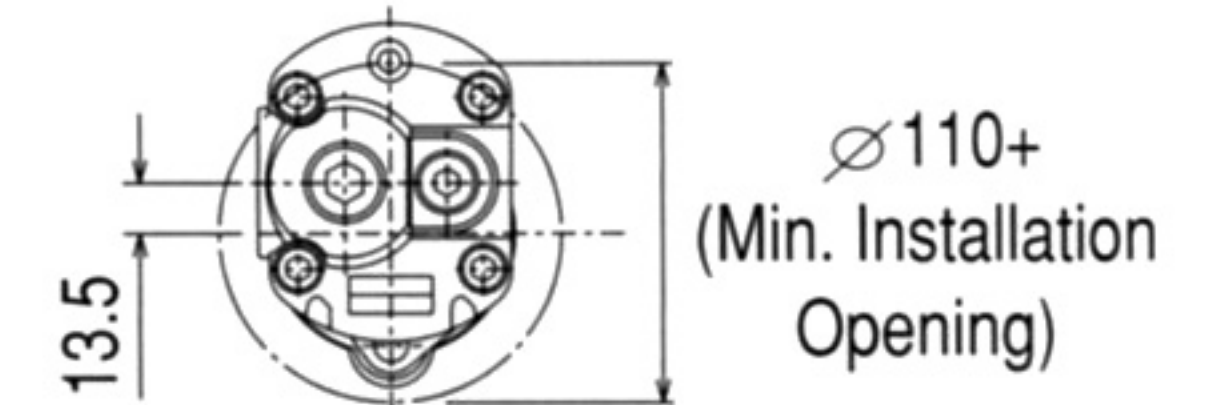
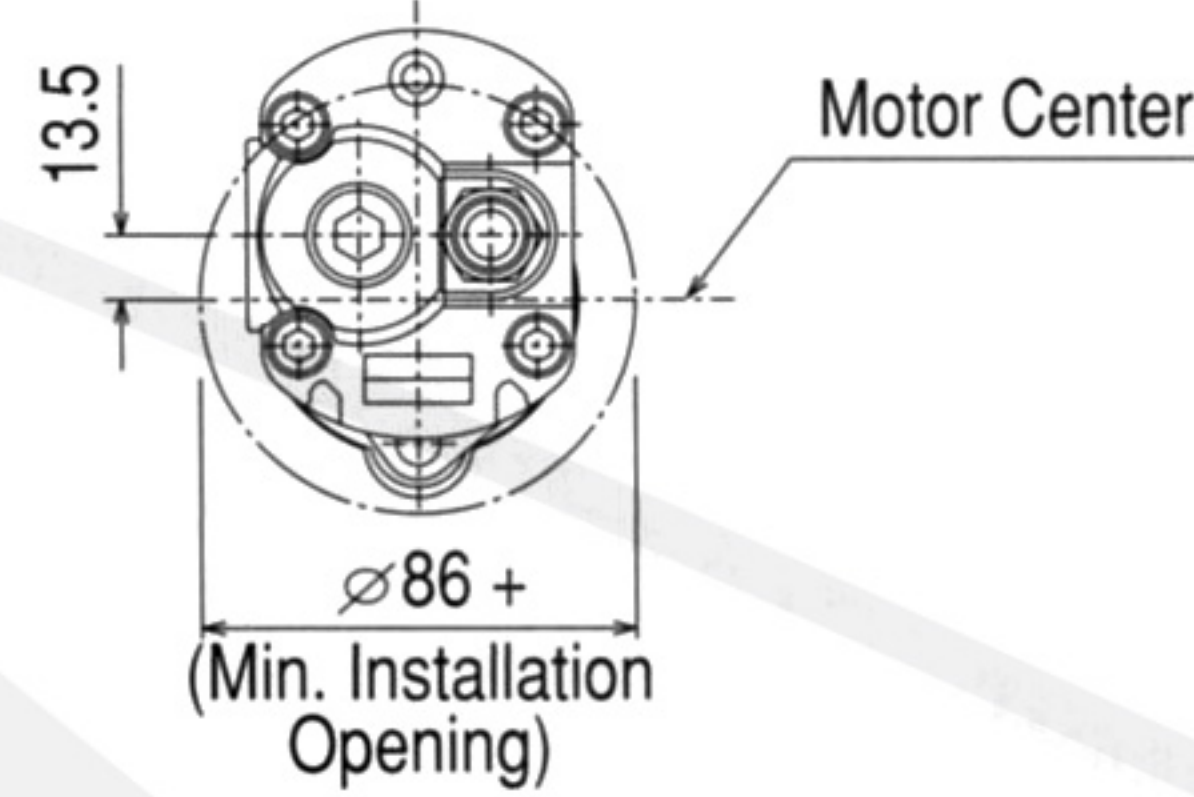
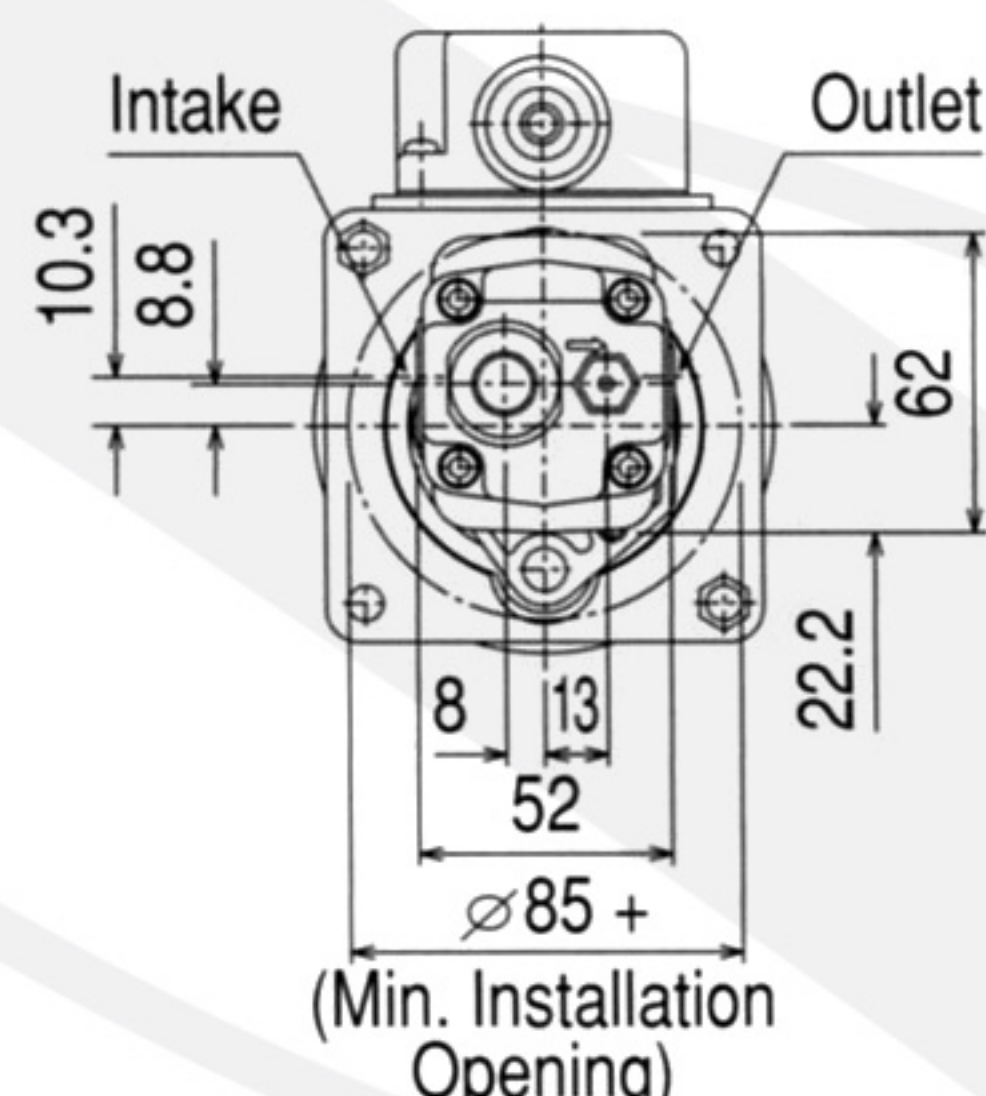
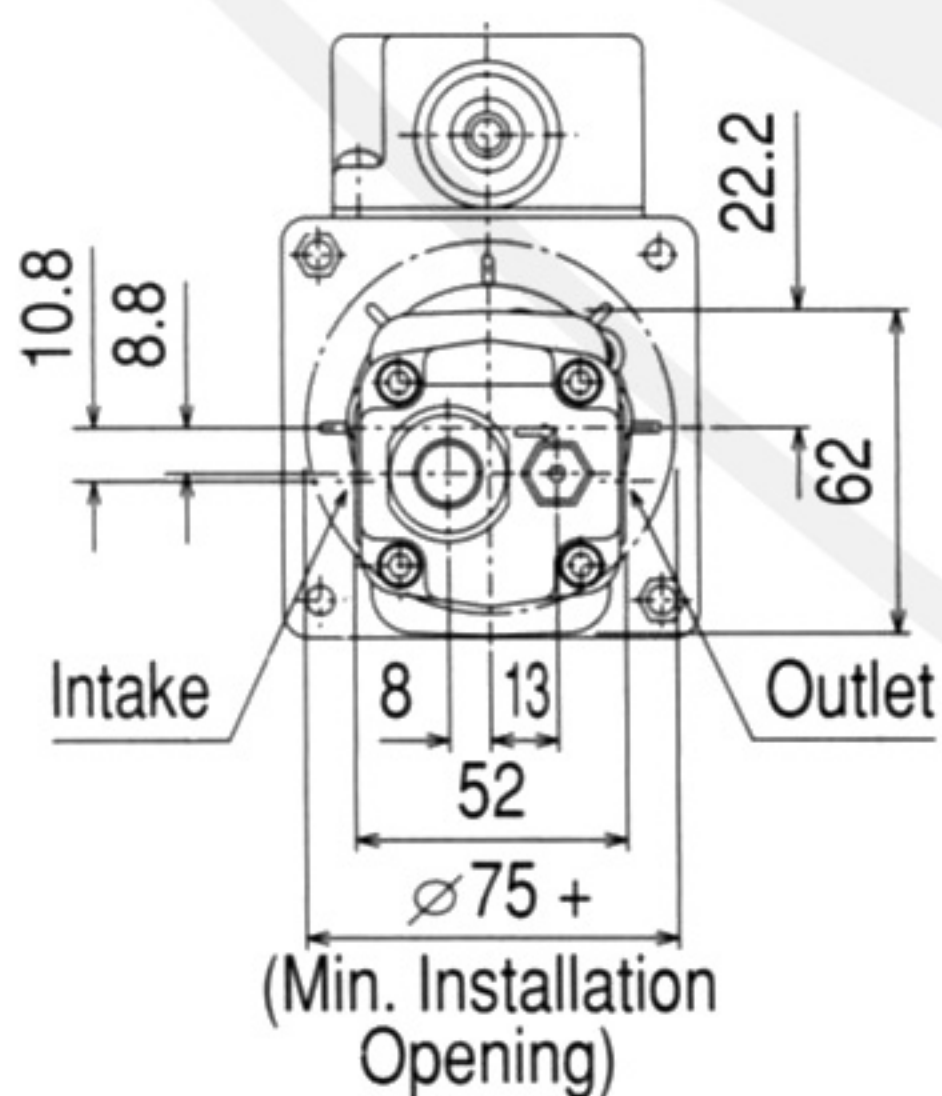
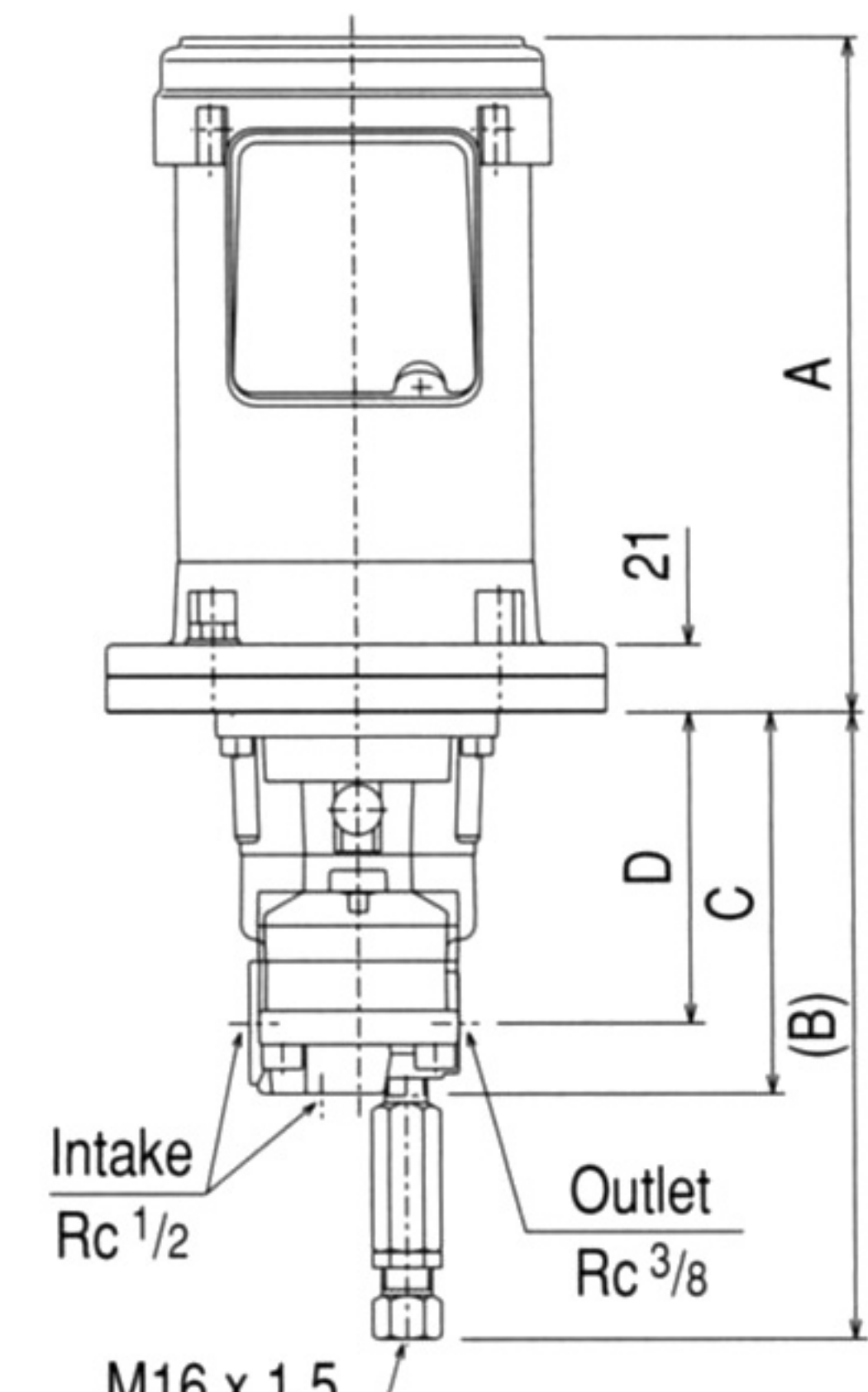
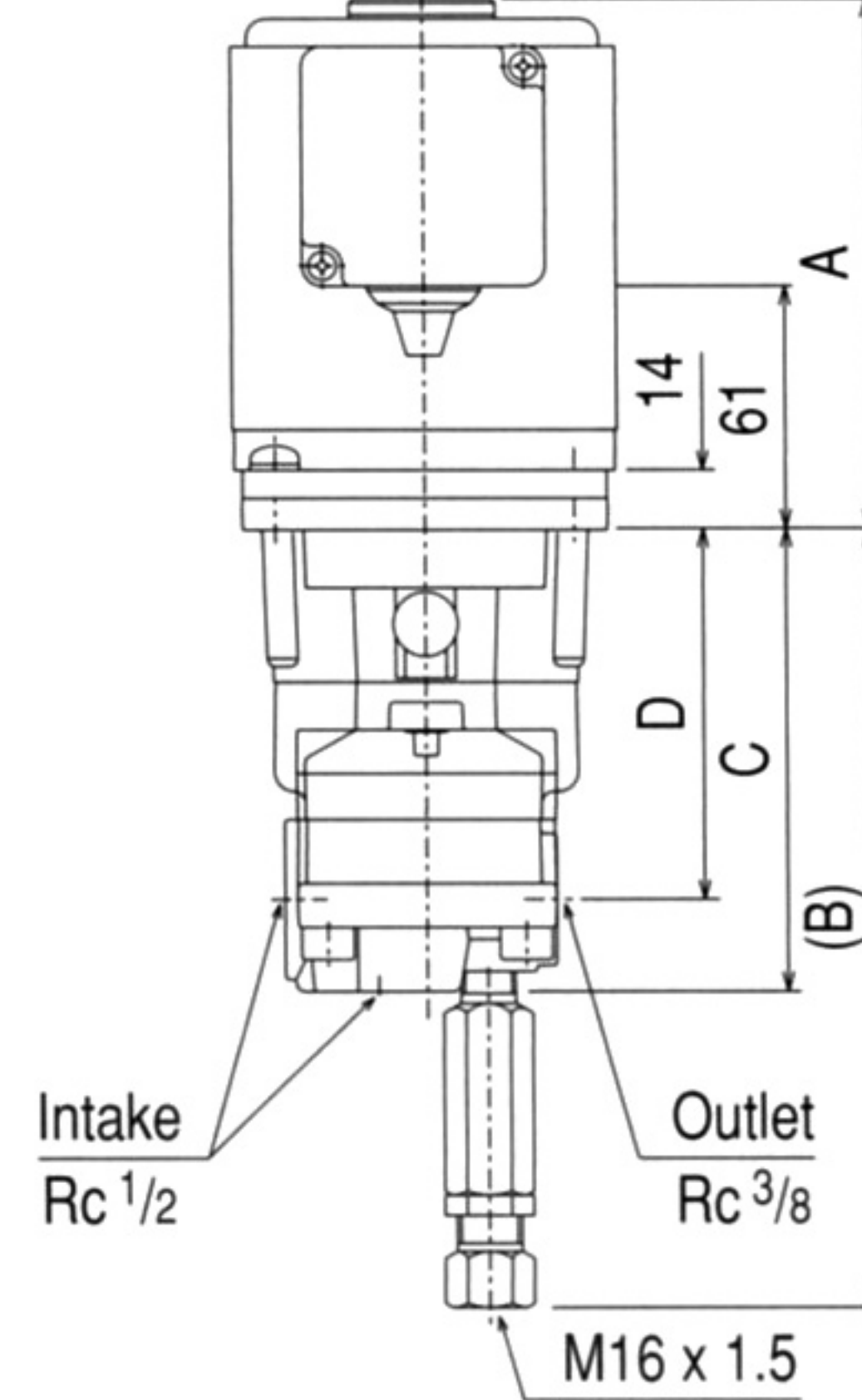
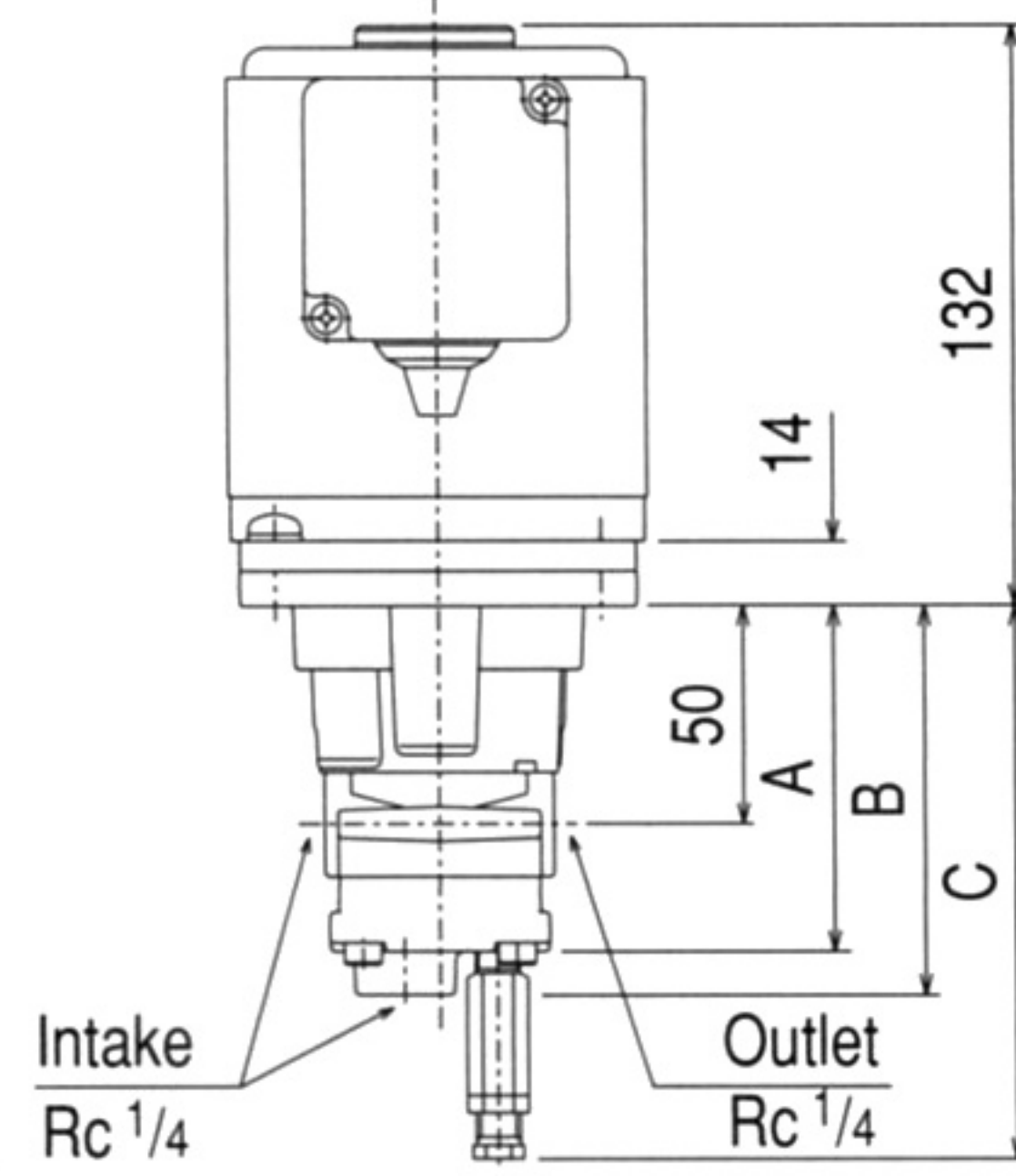
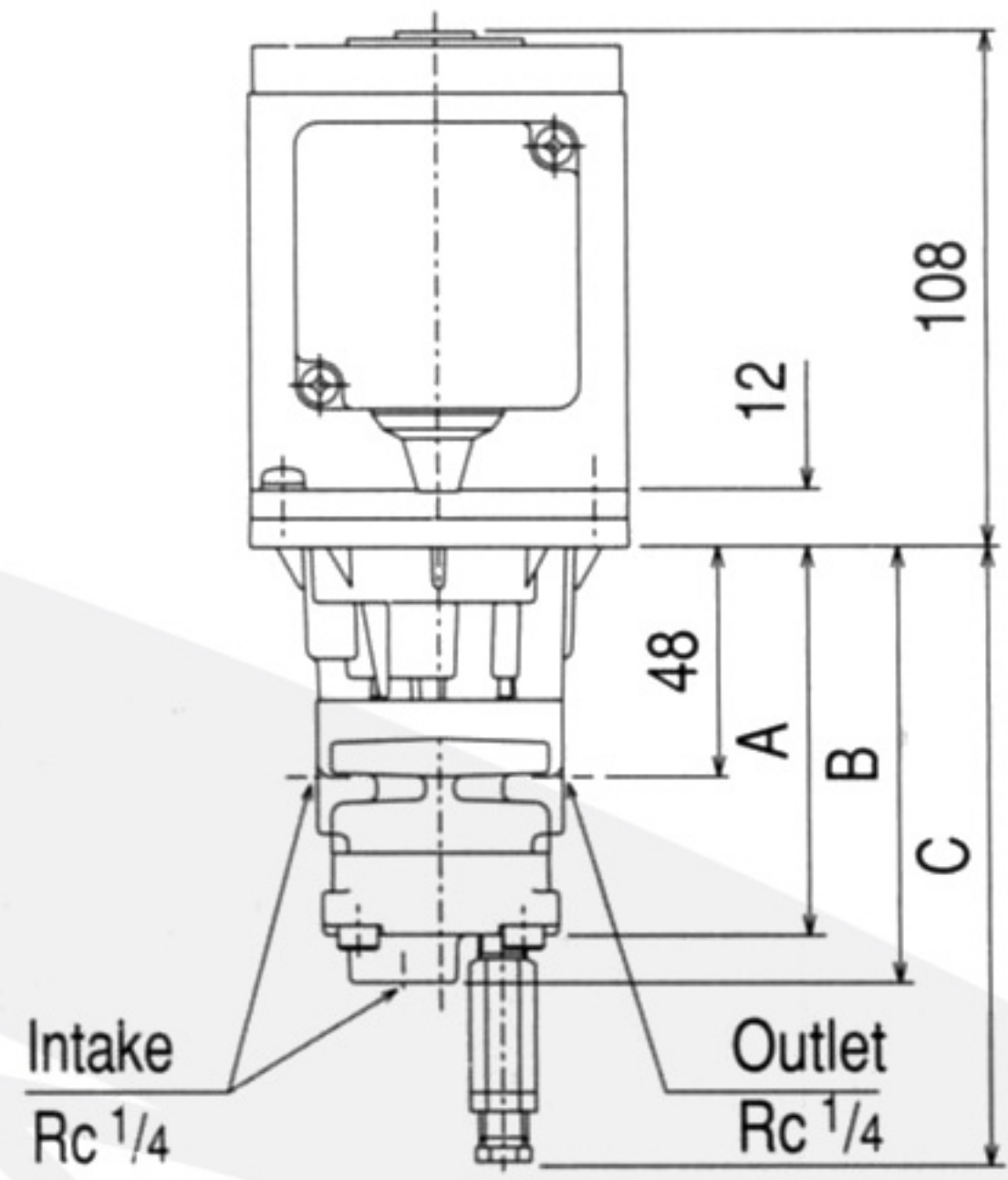
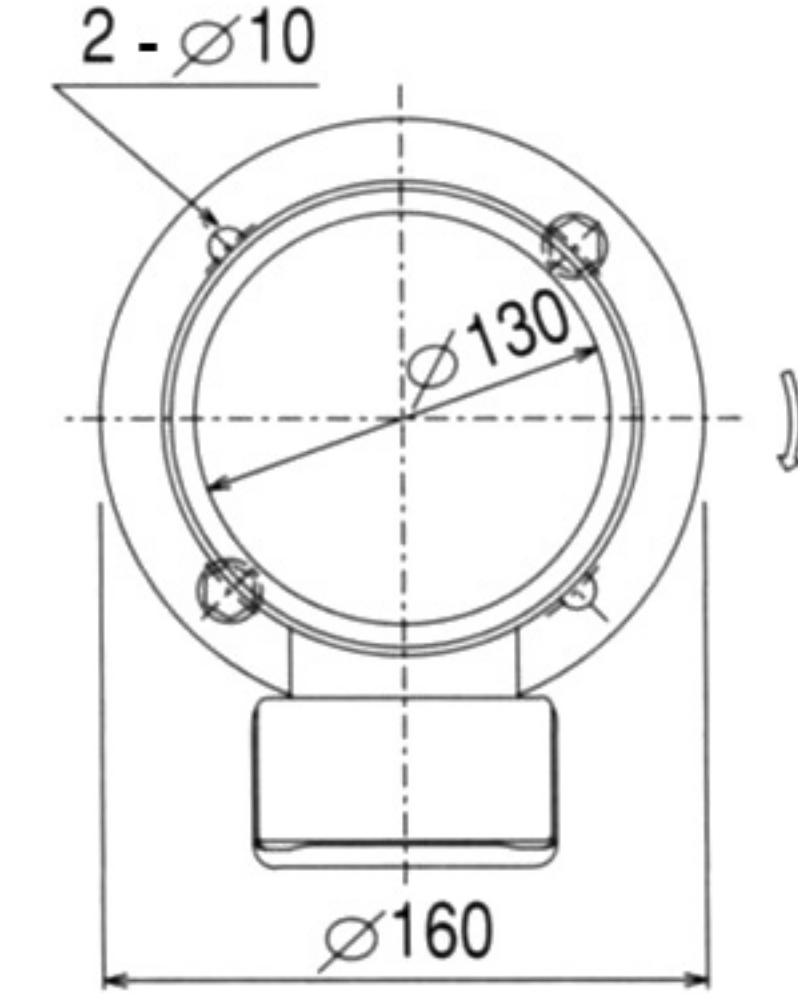
MLD (1.5MPa 70W Motor)



MLD (70W, 80W Motor)



MLD (200W, 400W Motor)



CODE	A	B	C
MLC051	81	91	(119)
MLC101	84	94	(122)

CODE	A	B	C
MLD052	79	89	(124)
MLD102	82	92	(127)

CODE	A	B	C	D
MLD302	132	193.4	115.4	92.4
MLD503	148	198.3	120.3	97.3

CODE	A	B	C	D
MLD304	218	201.4	123.4	100.4
MLD505	243.5	218.8	140.8	117.8
MLD704	221	211	133	110
MLD705	243.5	223.5	145.5	122.5
MLD1004	221	218.5	140.5	117.5
MLD1005	243.5	231	153	130

SF Suction Filters



SFS02



SFM02

Suction filters for the "L" & "LW" type pumps are available to be attached to the Intake ports. Contact SHOWA for further details.

- * The 25W motors can operate using 200, 220, 230Volts (50Hz - 0.26A) or 200, 220, 230, 240Volts (60Hz - 0.27 A).
- * 3 phase 200V 50Hz, 200V 60Hz and 220V 60Hz are the standard. Different power specifications also available.
- * Class E insulation
- * After wiring, ensure the motor rotates in the correct direction.
- * Current (A) values conform to NIDEC (motors above 200W)

SPECIFICATION

MODEL CODE	Discharge Pressure (MPa)	Discharge Vol. (L/min)		Outlet Size (Rc)	Motor Output x Pole	Current (A)		
		50Hz	60Hz			200V 50Hz	200V 60Hz	220V 60Hz
MLC051	0.5	0.51	0.59	1/4	25W x 4P	0.26	0.27	0.27
MLC101	0.5	0.93	1.06	1/4	25W x 4P	0.26	0.27	0.27
MLD052	1.5	0.51	0.59	1/4	70W x 4P	0.65	0.65	0.65
MLD102	1.5	0.93	1.06	1/4	70W x 4P	0.65	0.65	0.65
MLD302	0.5	3.1	3.5	3/8	70W x 4P	0.65	0.65	0.65
MLD304	1.5	3.2	3.8	3/8	200W x 4P	1.34	1.12	1.17
MLD503	0.5	5.1	5.8	3/8	80W x 4P	0.65	0.6	0.6
MLD505	1.5	5.3	6.4	3/8	400W x 4P	2.2	1.93	1.95
MLD704	0.5	7.3	8.8	3/8	200W x 4P	1.34	1.12	1.17
MLD705	1.5	7.3	8.8	3/8	400W x 4P	2.2	1.93	1.95
MLD1004	0.5	10.5	12.7	3/8	200W x 4P	1.34	1.12	1.17
MLD1005	1.5	10.5	12.7	3/8	400W x 4P	2.2	1.93	1.95