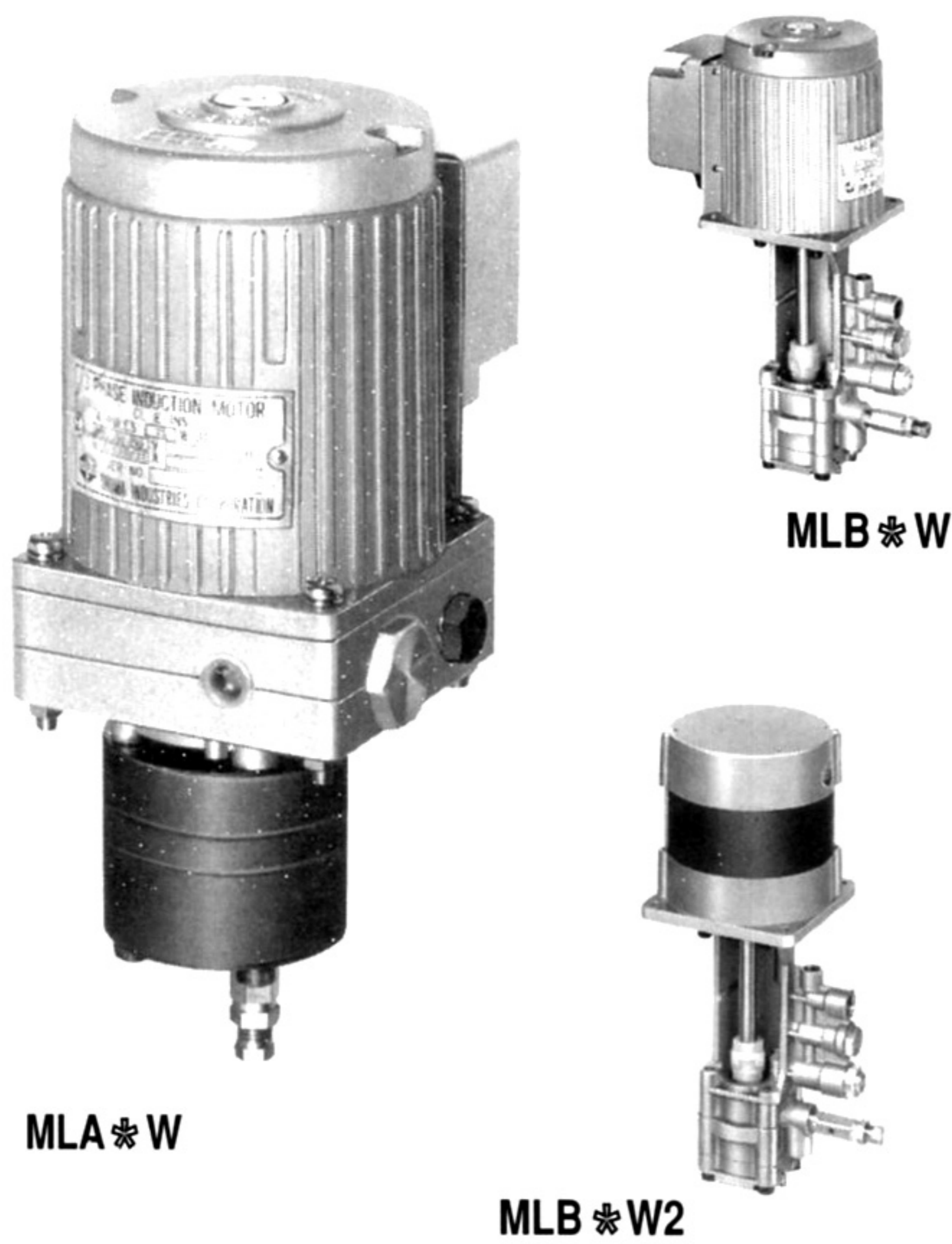


## MLA\*W, MLB\*W Pressure Displacing Motor Pump

- Volumetric type gear pump featuring a pressure displacement mechanism
- Highly efficient and durable. Various types / specifications available
- Utilized in various volumetric type lubrication units

The "LW" pumps, MLA\*W and MLB\*W models, designed for centralized lubrication system units utilizing the volumetric type system, are small gear pumps featuring a pressure displacement mechanism.

The body and casing of the MLB\*W model have been produced from die-cast aluminum and the functioning components have been designed to consume less space, allowing a significant reduction in product weight.



### MODEL CODE MLA 05 W T

**Motor Output**  
- : 25W x 4Pole  
T : 60W x 2Pole

**Pressure Displacement**  
W : Mechanism Featured

**Discharge Volume**  
015 : 0.15L/min  
03 : 0.3L/min  
05 : 0.5L/min

**Base Code**

### MLB 03 W 2

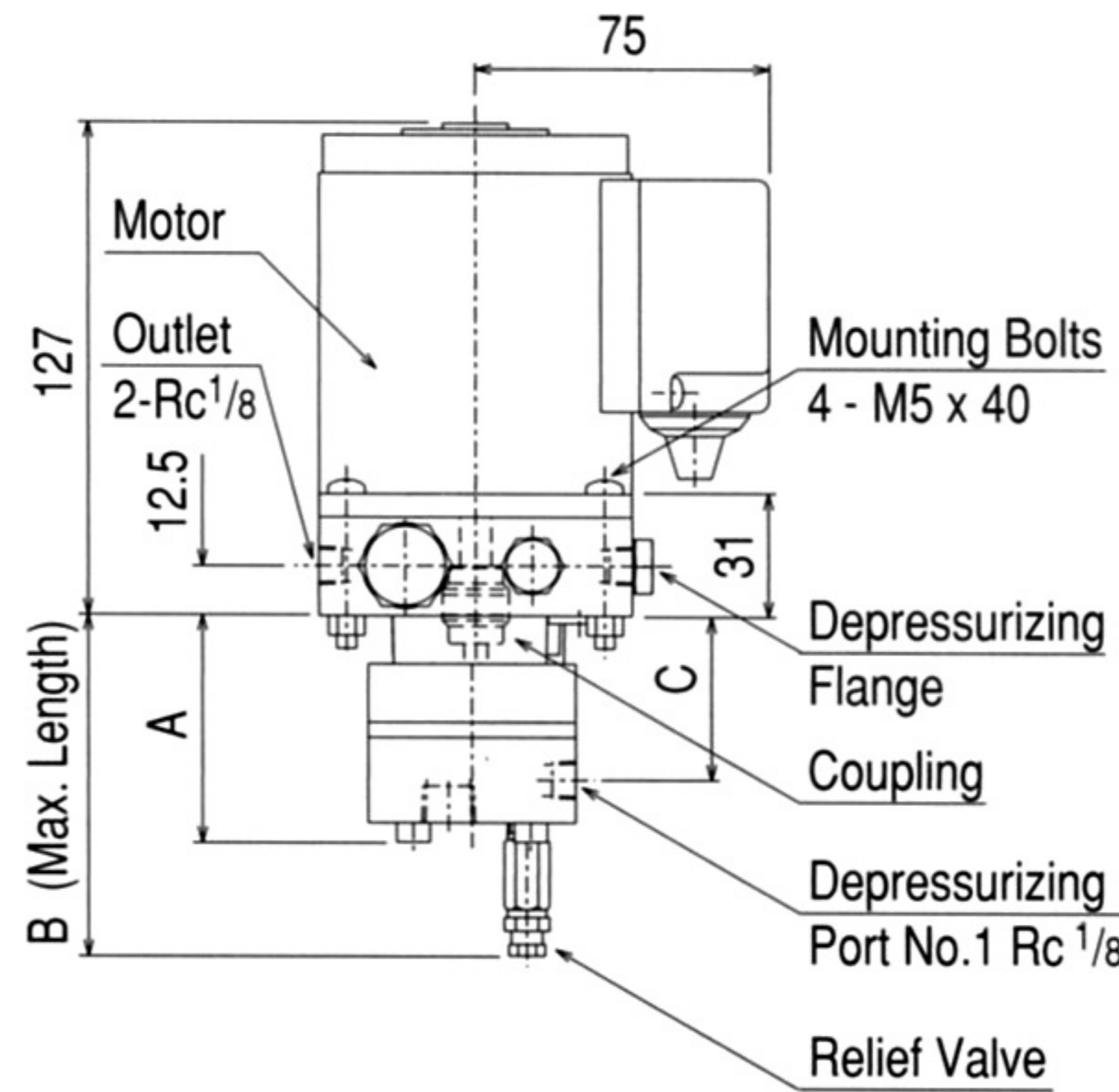
**Motor Specification**  
- : 25W x 4Pole Enclosed Type  
2 : 25W x 4Pole Exposed Type  
3 : 20W x 4Pole Exposed Type

**Pressure Displacement**  
W : Mechanism Featured

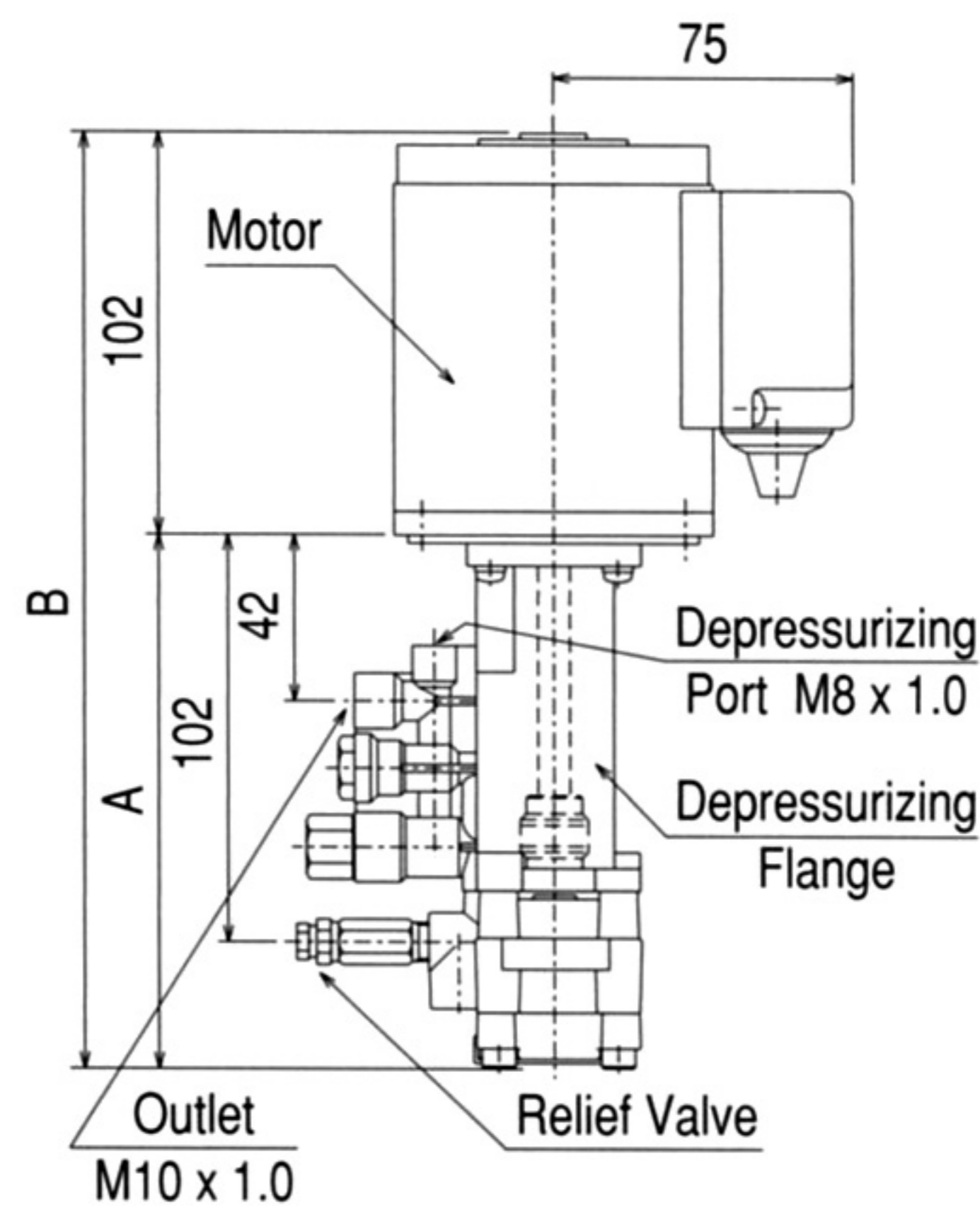
**Discharge Volume**  
015 : 0.15L/min  
03 : 0.3L/min

**Base Code**

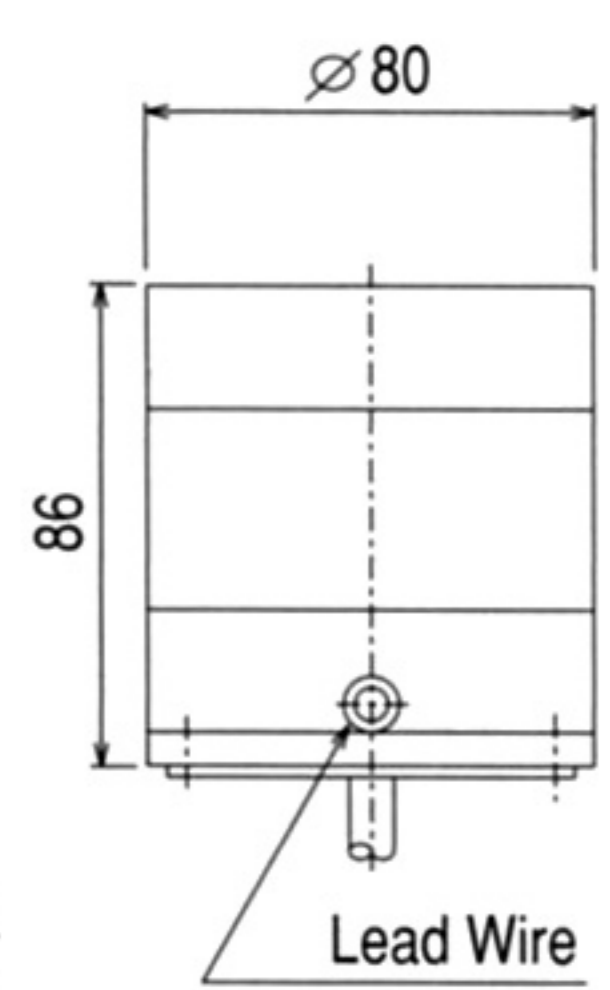
### MLA\*W



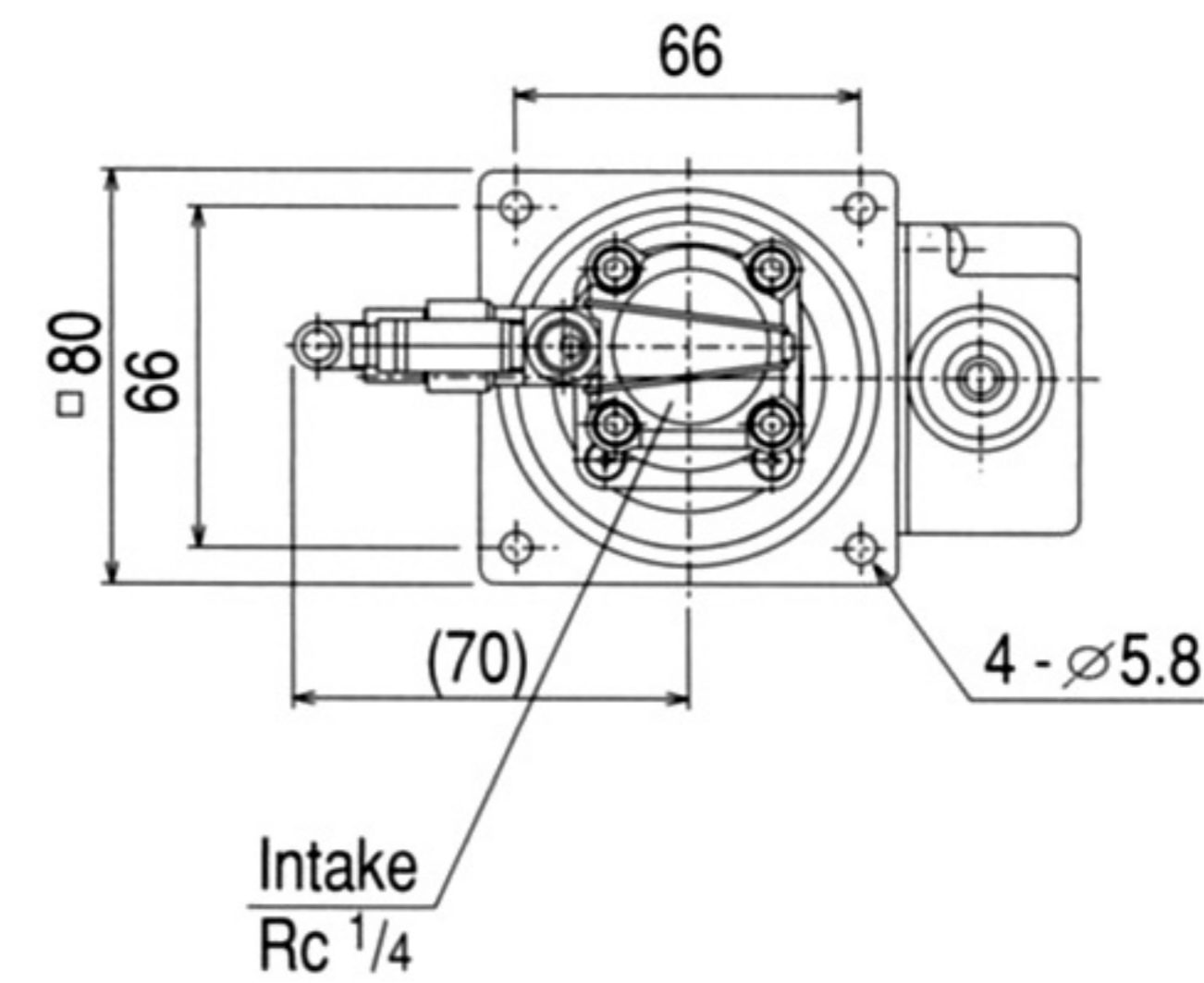
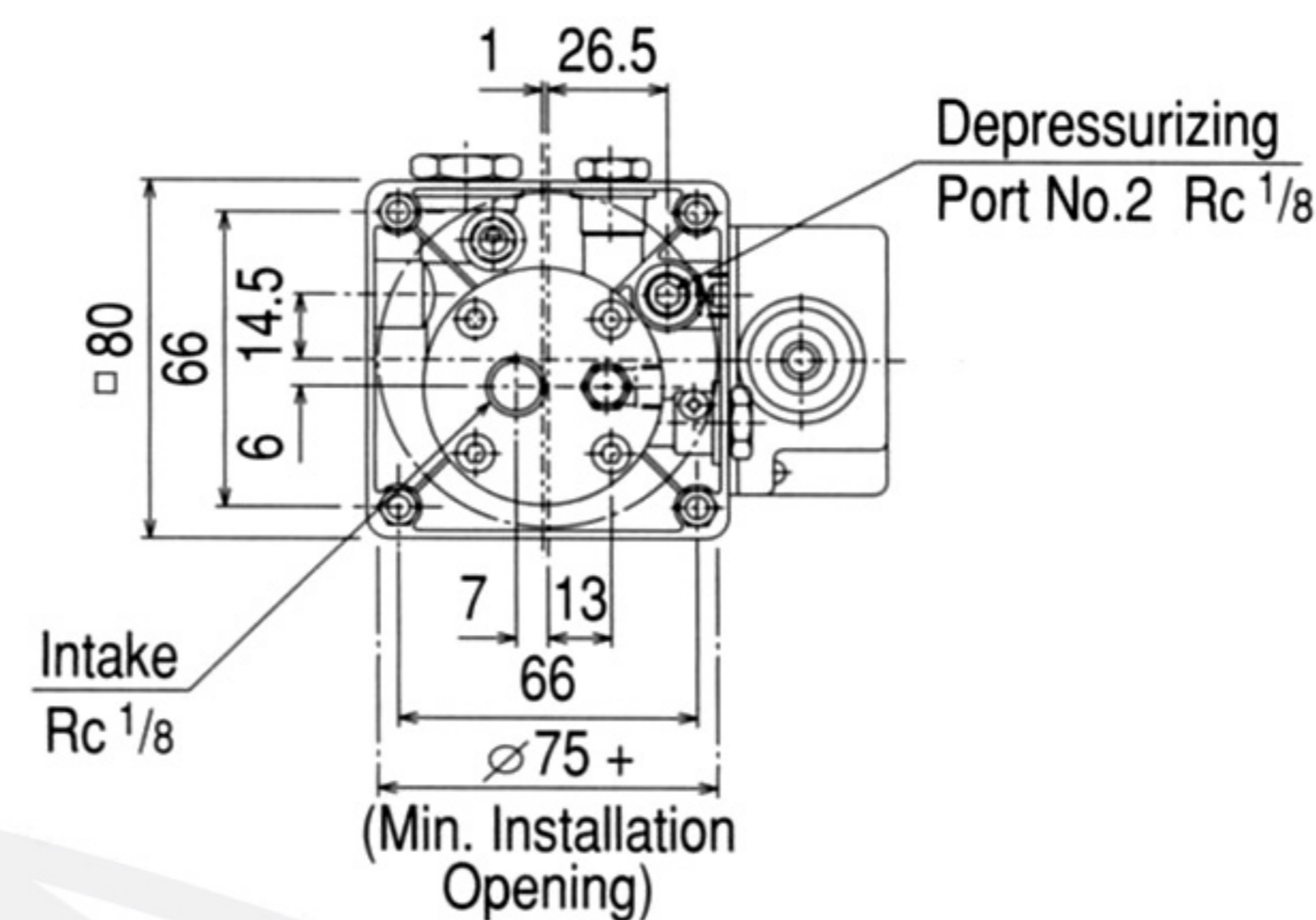
### MLB\*W



### MLB\*W2



MLB\*W2 pump utilizes the same pump and flange components as the MLB\*W.

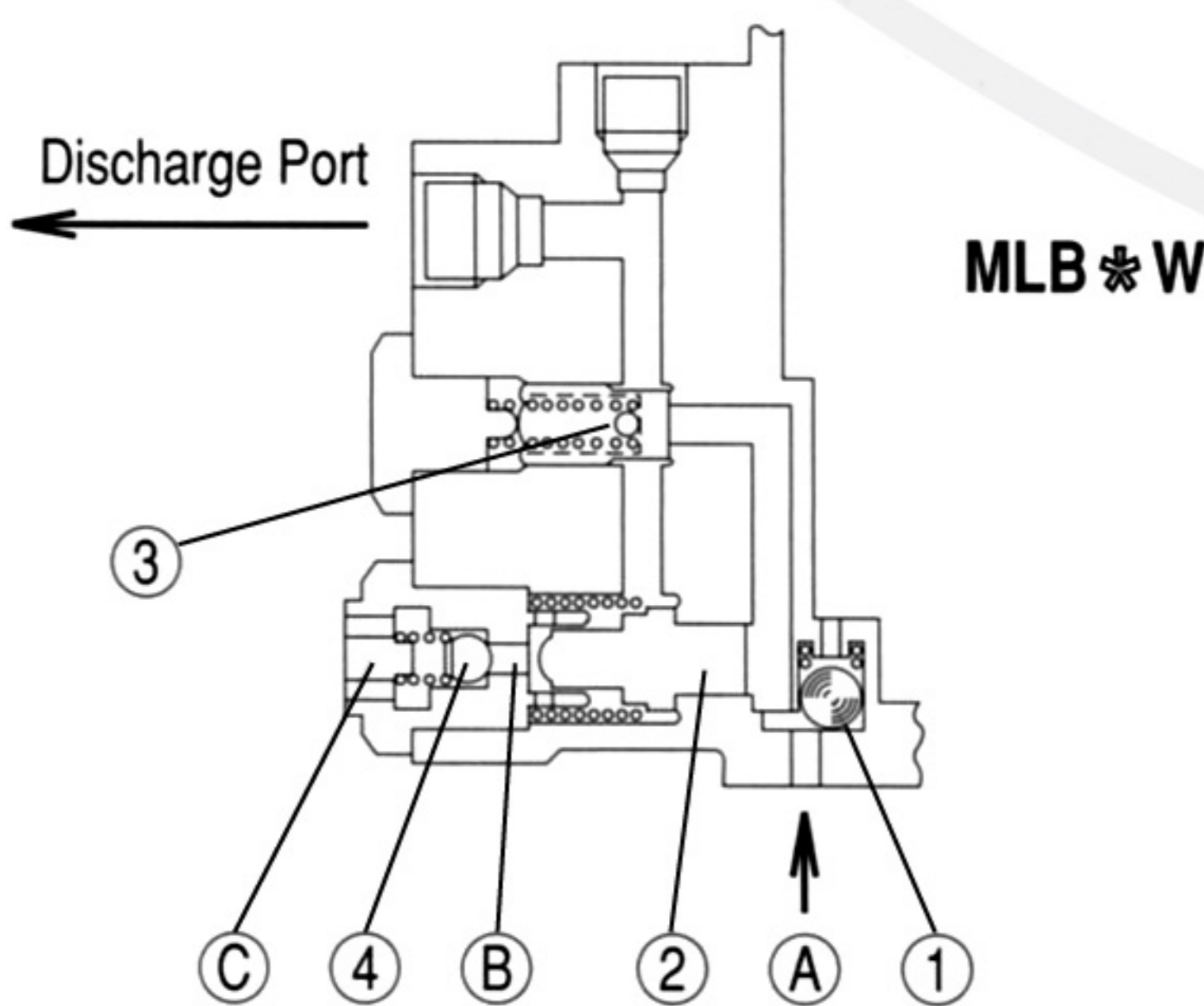


### DIMENSIONS

MODEL CODE	A	B	C
MLA015W	59	95	43
MLA03W	62	98	46
MLA03WT	59	95	43
MLA05W	62	98	46

MODEL CODE	A	B
MLB015W	135	237
MLB03W	138	240

### OPERATION (Internal Mechanism)



Oil is drawn from port (A) and any air present is expelled passing the outer-side of the steel ball (1), back into the oil supply tank. When oil enters, the steel ball (1) blocks the air expulsion port, increasing internal pressure causing the main valve (2) to move and block off port (B).

Next, The resistance valve (3) opens, allowing oil to pass through the main chamber and be discharged for distribution.

When the pump stops, the resistance valve (3) closes and the main valve returns to its original position with the help of a spring, opening port (B). The internal pressure pushes the valve (4) open and the pressurized oil returns to the tank via port (C), depressurizing the main chamber.

### SPECIFICATION

MODEL CODE	Discharge Pressure (MPa)	Discharge Volume (L/min)		Theoretical Discharge (cm <sup>3</sup> /R)	Viscosity Range (mm <sup>2</sup> /s)	Motor Output x Pole (W) x (P)	Current (A)		
		50Hz	60Hz				200V (50Hz)	200V (60Hz)	220V (60Hz)
MLA015W	1.5	0.16	0.19	0.12	20 ~ 2000	25 x 4	0.26	0.27	0.27
MLA03W		0.28	0.33	0.2	20 ~ 1000	25 x 4	0.26	0.27	0.27
MLA03WT	2.0	0.3	0.36	0.12	20 ~ 2000	60 x 2	0.4	0.4	0.4
MLA05W		0.5	0.6	0.2	20 ~ 1000	60 x 2	0.4	0.4	0.4
MLB015W	2.0	0.16	0.19	0.12	20 ~ 2000	25 x 4	0.26	0.27	0.27
MLB015W2		0.16	0.19	0.12	20 ~ 2000	25 x 4	*0.35	*0.35	----
MLB015W3		0.16	0.19	0.12	20 ~ 2000	20 x 4	*0.25	*0.25	----
MLB03W		0.28	0.33	0.2	20 ~ 1000	25 x 4	0.26	0.27	0.27
MLB03W2		0.28	0.33	0.2	20 ~ 1000	25 x 4	*0.35	*0.35	----

\* 25W motor's rating are 200, 220, 230Volts (50Hz - 0.26A) or 200, 220, 230, 240Volts (60Hz - 0.27 A)

\* Three phase 200 / 220V is standard, however, models can be made available to meet different power specifications.

\* The MLB015W2, MLB015W3 and MLB03W2 are limited to single phase 100 / 200V power supplies.

\* The "\*" in the Specification table above, indicates a current level (A) utilizing a 200V single phase power supply.

\* Class E insulation

\* Pressure: 1kgf/cm<sup>2</sup> = 0.1MPa

\* Discharge Volume: 1cc/min = 1cm<sup>3</sup>/min

\* Viscosity: 1cSt = 1mm<sup>2</sup>/S