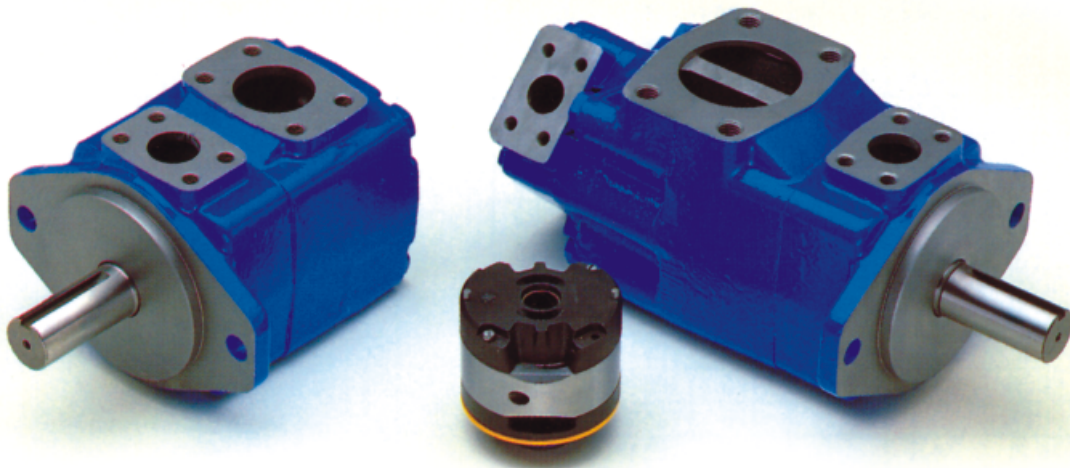
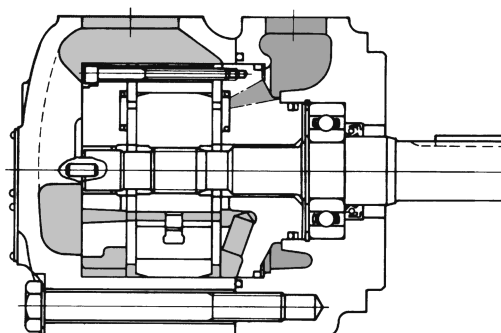
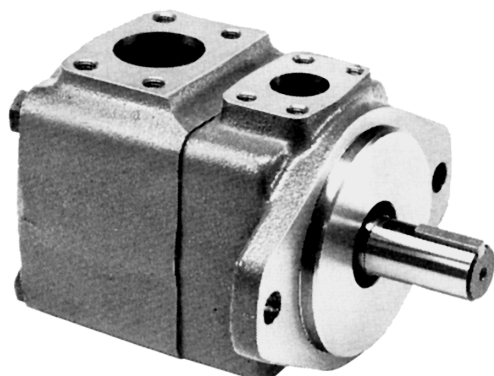




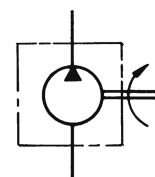
Features

- MAV Pump: 12 vane designed for industrial application.
- MAVQ Pump: 10 vane designed for mobile application.
- MAVS Pump: 12 vane designed very low noise model for industrial application.
- Intra-vane design increase operator comfort.
- High operating pressure capabilities and low noise levels.
- Hydraulic balancing designed to prevent radial loads and add bearing life.
- The cartridge kit design offers fast and efficient field serviceability.
- Pump rotation easy to change.
- Up to 4 positions for single pump and up to 16 positions for double pumps, this reduces mounting cost improves performance.

MAV, MAVQ Series Specification



SYMBOL



Series	Code Capacity Rating	Displacement in/rev (ml/rev)	Max. Working Pressure psi (bar)		Max Speed (rpm)		Weight Pounds (kgs)
			MAV	MAVQ	MAV	MAVQ	
V20 VQ20	5	1.1 (18)	2500 (175)	3000 (207)	1800	3200	17 (7.8)
	8	1.65 (27)				3000	
	9	1.83 (30)				2800	
	11	2.2 (36)				2800	
	12	2.38 (39)	2200 (150)	2300 (160)		2400	
	14	2.75 (45)	2030 (140)	2030 (140)		2200	
V25 VQ25	12	2.44 (40)	2500 (175)	3000 (207)	1800	2700	32 (14.5)
	14	2.75 (45)				2500	
	17	3.36 (55)					
	19	3.72 (61)					
	21	4.09 (67)					
V35 VQ35	21	4.09 (67)	2500 (175)	3000 (207)	1800	2500	50 (22.7)
	25	4.94 (81)				2400	
	30	5.80 (95)					
	35	6.83 (112)					
	38	7.38 (121)					
V45 VQ45	42	8.42 (138)	2500 (175)		1800	2200	75 (34)
	47	9.34 (153)					
	50	9.89 (162)					
	57	11.23 (184)					
	60	11.78 (193)					

Ordering Code

MA * * * * - * - * - * - *

V : 12 vane for Industrial model
VQ : 10 vane for Mobile model

Series: 20, 25, 35, 45

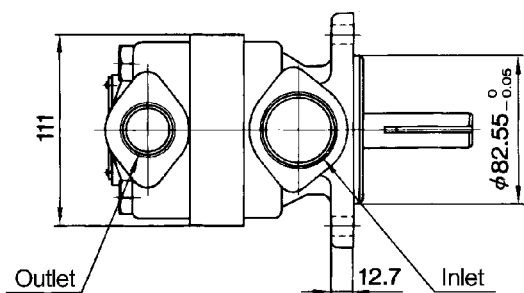
Code
Capacity Rating: GPM at 1200 rpm and 100psi

C: Cylindrical (see page 16)
S: Splined shaft (see page 16)

Porting Combination
(see page 16)

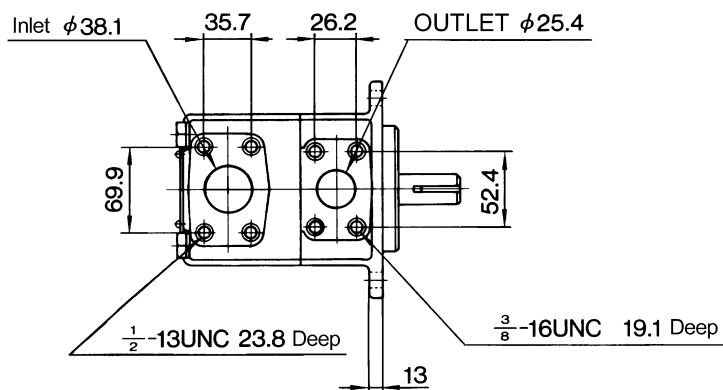
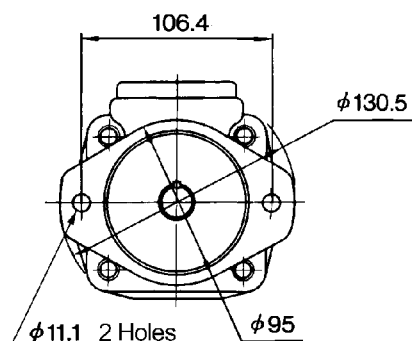
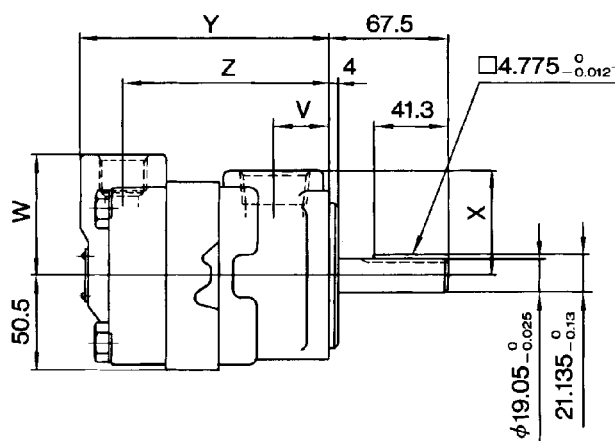
R: Clockwise
L: Anti-clockwise

MAV, MAVQ Series Dimensions



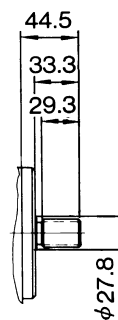
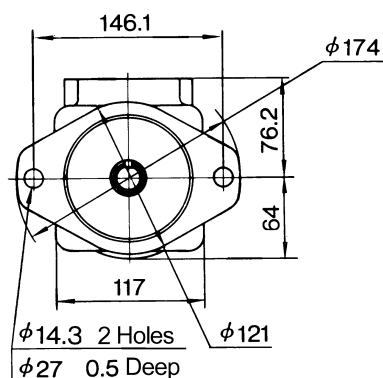
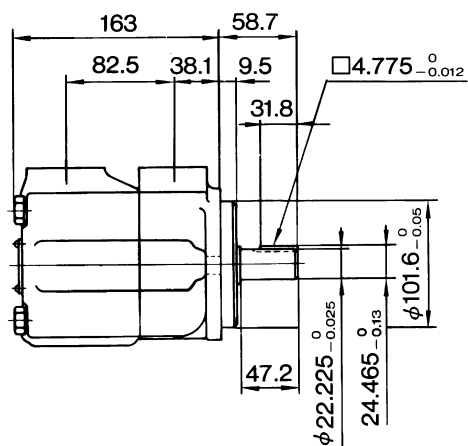
MA -20**

Dimensions (mm)



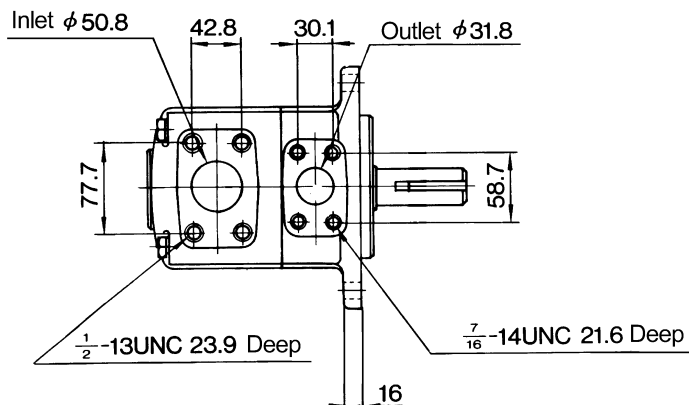
MA -25**

Dimensions (mm)



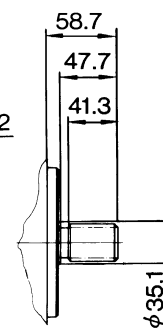
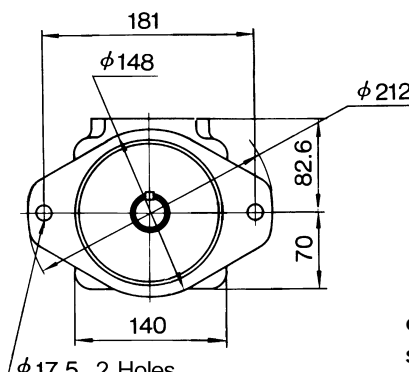
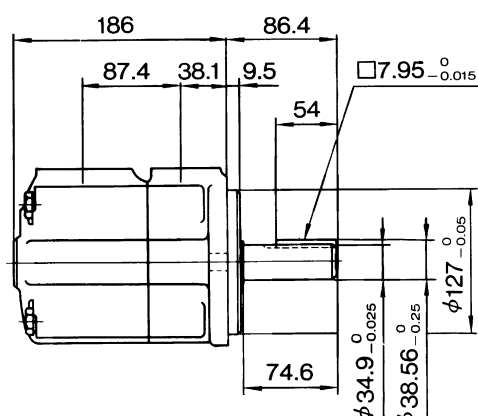
code s
splined shaft

MAV, MAVQ Series Dimensions

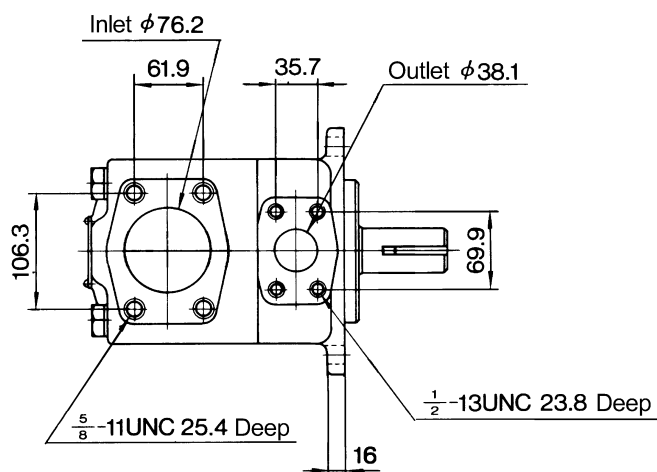


MA * *-35

Dimensions (mm)

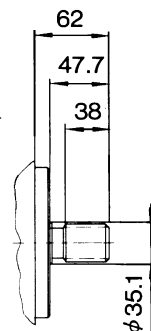
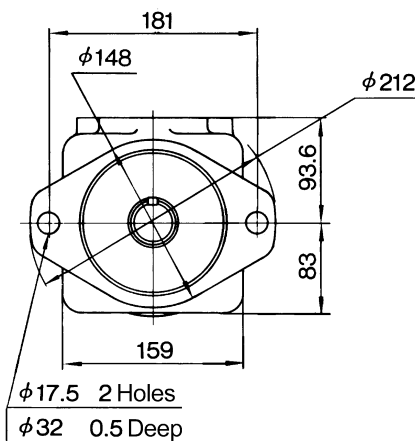
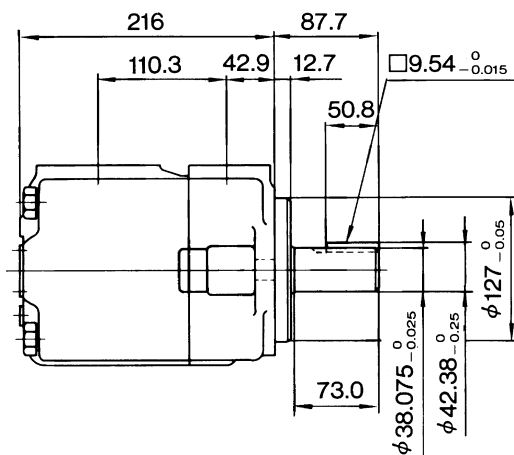


code s
splined shaft

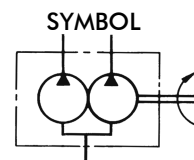
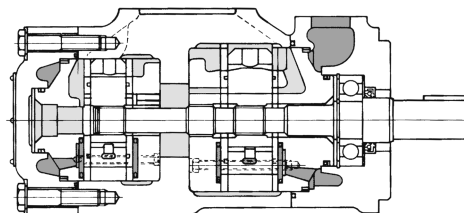
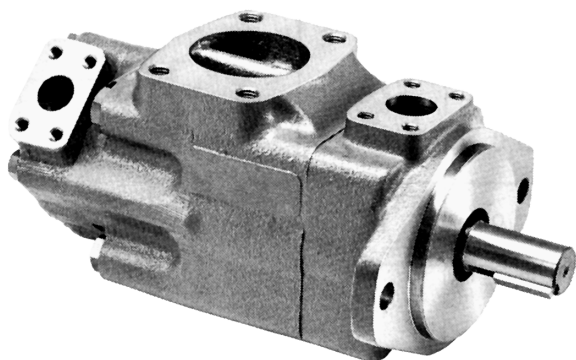


MA * *-45

Dimensions (mm)



code s
splined shaft

MAV, MAVQ Series Dimensions


Series	Code Capacity Rating	P1 Displacement in/rev (ml/rev)	Max. Working Pressure psi (bar)		Max Speed (rpm)		Code Capacity Rating	P2 Displacement in/rev (ml/rev)	Max. Working Pressure psi (bar)		Max Speed (rpm)		Weight Pounds (kgs)
			MAV	MAVQ	MAV	MAVQ			MAV	MAVQ	MAV	MAVQ	
V2520 VQ2520	12	2.44 (40)	2500 (175)	3000 (207)	1800	2700	5	1.1 (18)	2500(175)	3000(207)	1800	2700	45 (20.4)
	14	2.75 (45)				2700	8	1.65 (27)					
	17	3.36 (55)				2700	9	1.83 (30)					
	19	3.72 (61)				2500	11	2.2 (36)					
	21	4.09 (67)				2500	12	2.38 (39)					
V3520 VQ3520	21	4.09 (67)	2500 (175)	3000 (207)	1800		14	2.75 (45)	2500(175)	3000(207)	1800	2700	75 (34)
	25	4.94 (81)				2500	5	1.1 (18)					
	30	5.80 (95)					8	1.65 (27)					
	35	6.83 (112)					9	1.83 (30)					
	38	7.38 (121)				2400	11	2.2 (36)					
V3525 VQ3525	21	4.09 (67)	2500 (175)	3000 (207)	1800		12	2.38 (39)	2500(175)	3000(207)	1800	2700	76 (34.5)
	25	4.94 (81)				2500	12	2.44 (40)					
	30	5.80 (95)					14	2.75 (45)					
	35	6.83 (112)					17	3.36 (55)					
	38	7.38 (121)				2400	19	3.72 (61)					
V4520 VQ4520	42	8.42 (138)	2500(175)	3000(207)	1800	2200	21	4.09 (67)	2500(175)	3000(207)	1800	2700	94 (42.6)
	47	9.34 (153)					5	1.1 (18)					
	50	9.89 (162)					8	1.65 (27)					
	57	11.23 (184)					9	1.83 (30)					
	60	11.78 (193)					11	2.2 (36)					
V4525 VQ4525	42	8.42 (138)	2500(175)	3000(207)	1800	2200	12	2.38 (39)	2500(175)	3000(207)	1800	2700	101 (45.8)
	47	9.34 (153)					14	2.75 (45)					
	50	9.89 (162)					17	3.36 (55)					
	57	11.23 (184)					19	3.72 (61)					
	60	11.78 (193)					21	4.09 (67)					
V4535 VQ4535	42	8.42 (138)	2500(175)	3000(207)	1800	2200	25	4.94 (81)	2500(175)	3000(207)	1800	2500	118 (53.5)
	47	9.34 (153)					21	4.09 (67)					
	50	9.89 (162)					30	5.80 (95)					
	57	11.23 (184)					35	6.83 (112)					
	60	11.78 (193)					38	7.38 (121)				2400	

Ordering Code
MA * * * * * - * - * - * - *

V : 12 vane for Industrial model
VQ : 10 vane for Mobile model

Series: 2520, 3520, 3525, 4520, 4525, 4535

Code P1 Capacity Rating: GPM at 1200 rpm and 100psi

Code P2 Capacity Rating: GPM at 1200 rpm and 100psi

C: Cylindrical (see page 16) S: Splined shaft (see page 16)

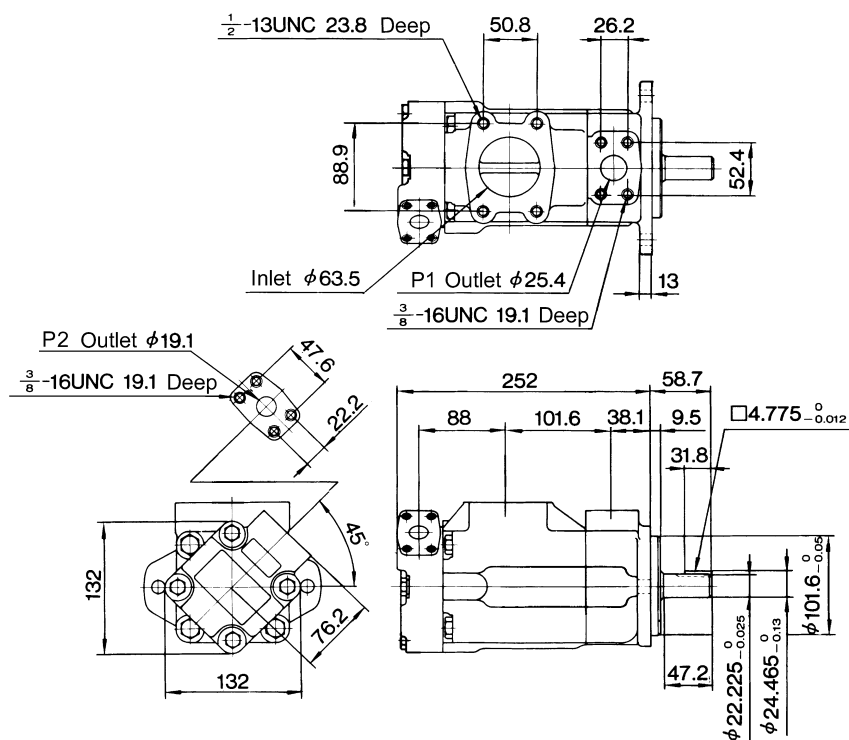
Shaft type

Shaft rotation

Porting Combination
(see page 16)

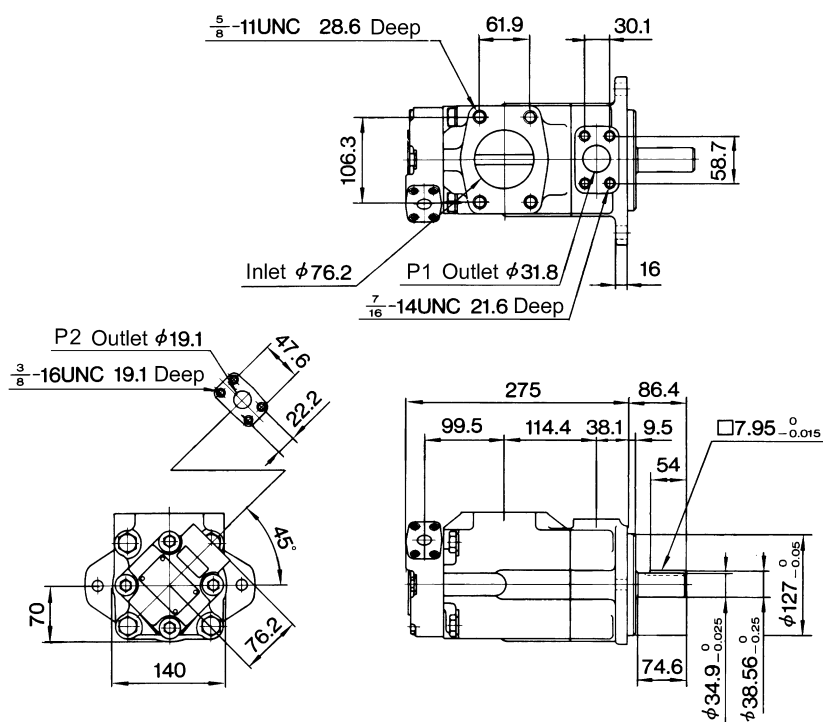
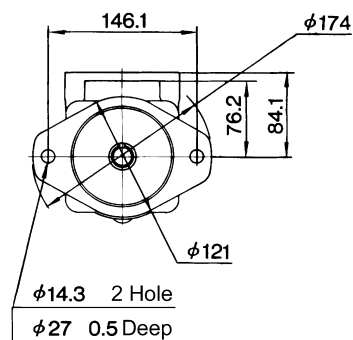
R: Clockwise
L: Anti-clockwise

MAV, MAVQ Series Dimensions



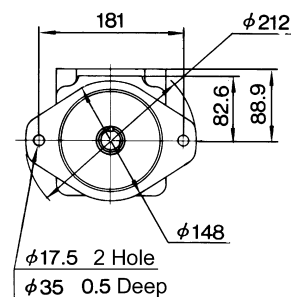
MA*-2520

Dimensions (mm)



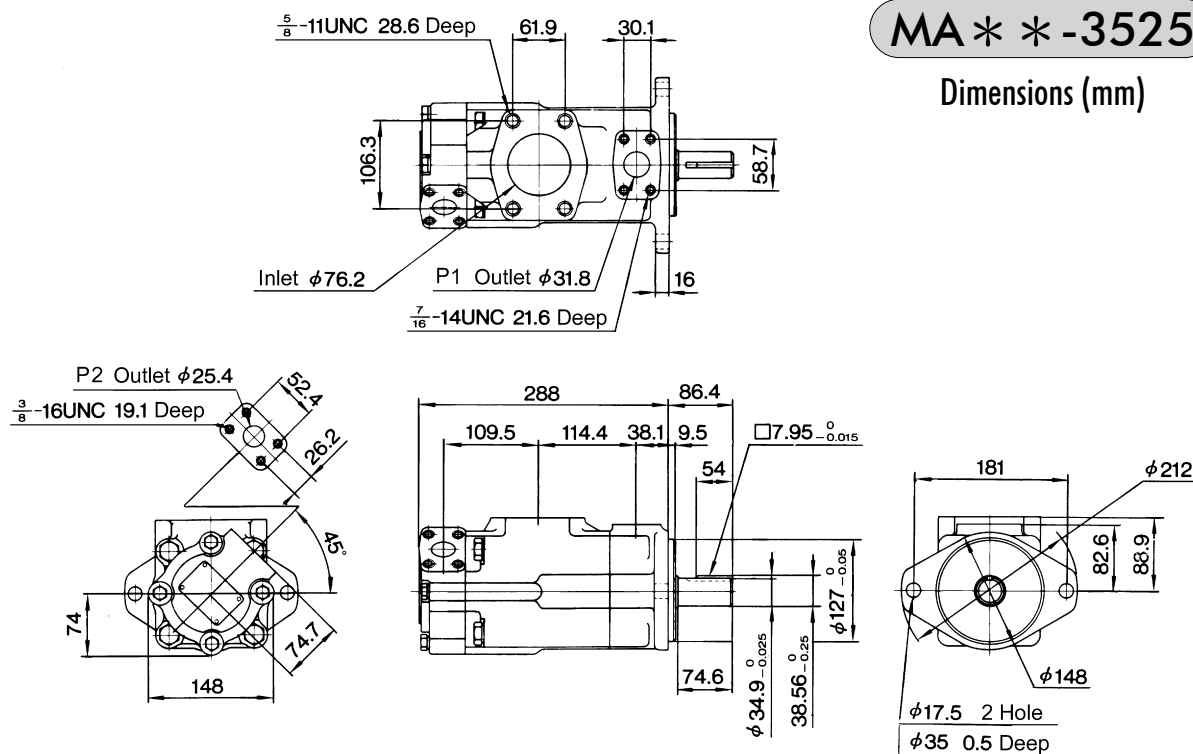
MA*-3520

Dimensions (mm)

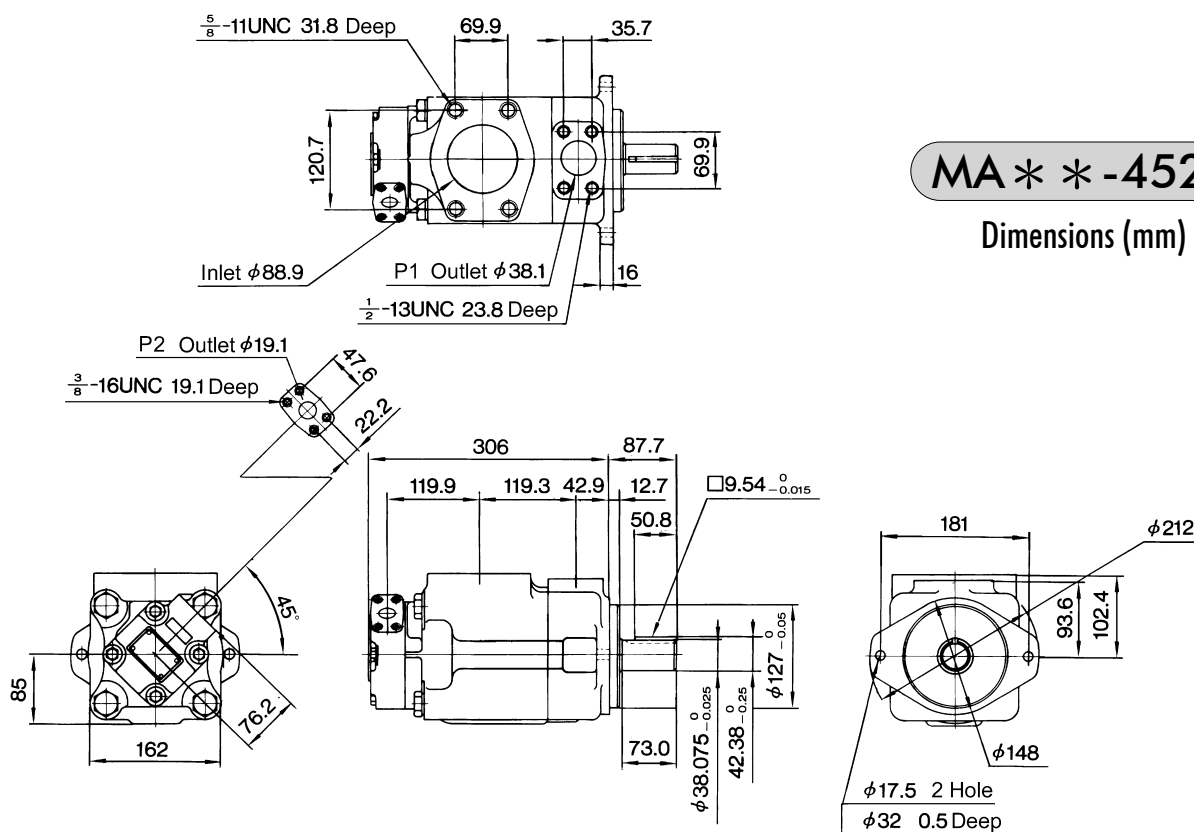


MAV, MAVQ Series Dimensions
MA -3525**

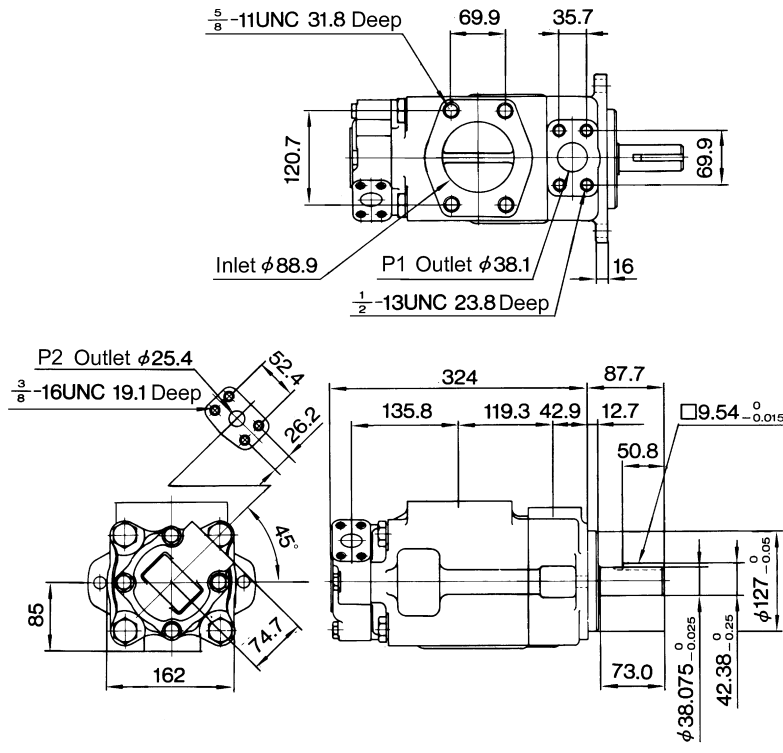
Dimensions (mm)


MA -4520**

Dimensions (mm)

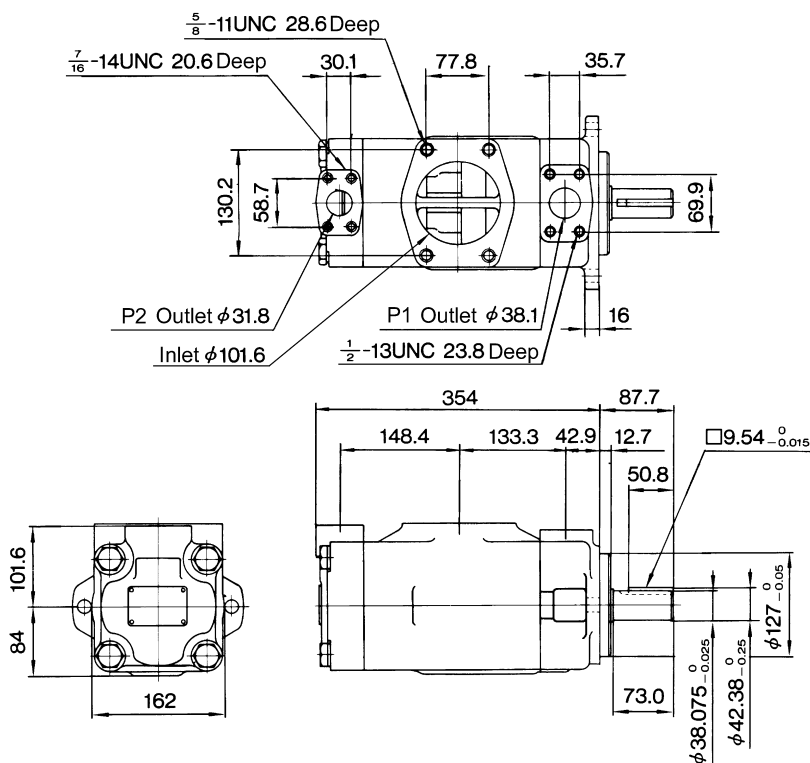


MAV, MAVQ Series Dimensions



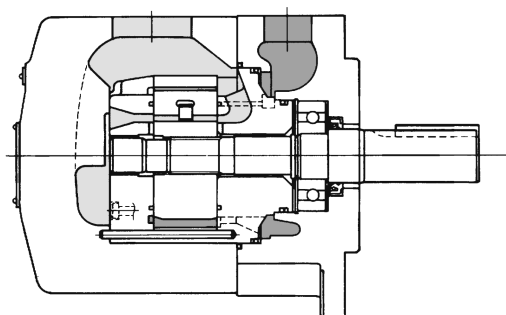
MA ** -4525

Dimensions (mm)

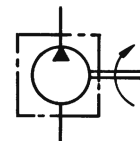


MA ** -4535

Dimensions (mm)

MAVS Series Specification


SYMBOL



Series	Code Capacity Rating	Displacement in/rev (ml/rev)	Max. Working Pressure psi (bar)	Speed (rpm)		Weight Pounds (kgs)
				Min	Max	
20	5	1.1 (18)	2500 (175)	600	1800	35 (16)
	8	1.65 (27)				
	9	1.83 (30)				
	11	2.2 (36)	2300 (160)			
	12	2.38 (39)				
	14	2.75 (45)				
25	12	2.44 (40)	2500 (175)	600	1800	55 (25)
	14	2.75 (45)				
	17	3.36 (55)				
	19	3.72 (61)				
	21	4.09 (67)				
	21	4.09 (67)				
25	4.94 (81)					
30	5.80 (95)					
35	6.83 (112)					
38	7.38 (121)					
45	42	8.42 (138)	2500 (175)	600	1800	131 (59.5)
	47	9.34 (153)				
	50	9.89 (162)				
	57	11.23 (184)				
	60	11.78 (193)				

Ordering Code
MAVS — * * — * — C — * — *

12 vane for very low noise model

Series: 20, 25, 35, 45

 Code
Capacity Rating: GPM at 1200 rpm and 100psi

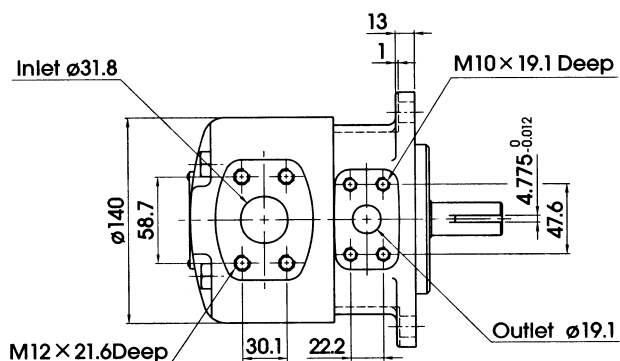
Cylindrical

Shaft type

 Porting Combination
(see page 16)

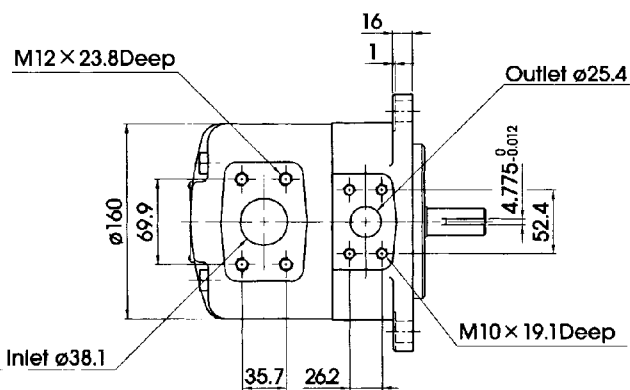
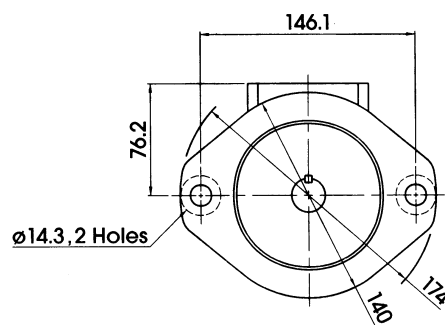
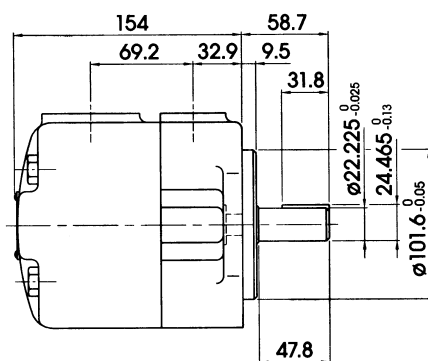
 R: Clockwise
L: Anti-clockwise

MAVS Series Dimensions



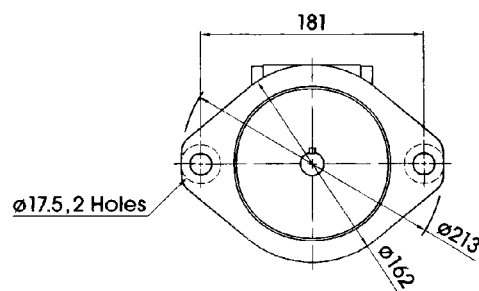
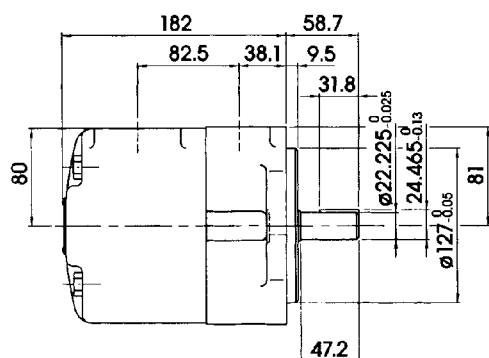
MAVS-20

Dimensions (mm)

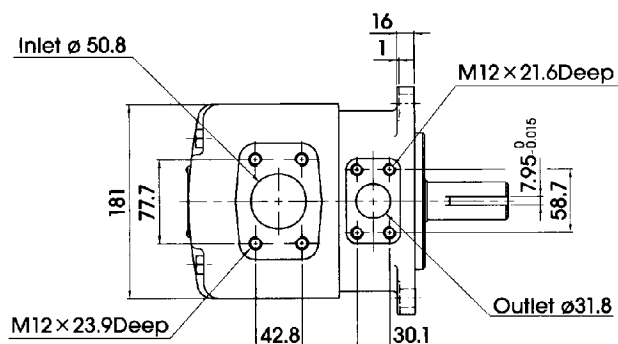


MAVS-25

Dimensions (mm)

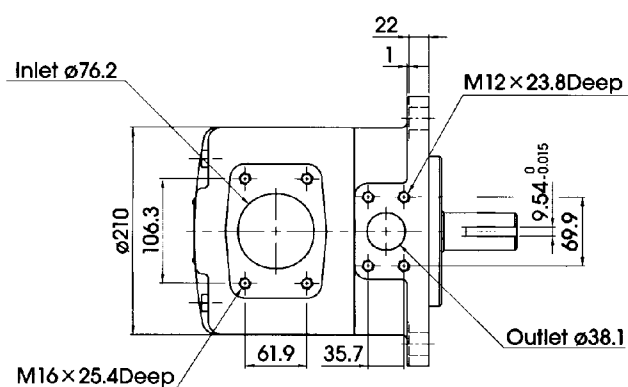
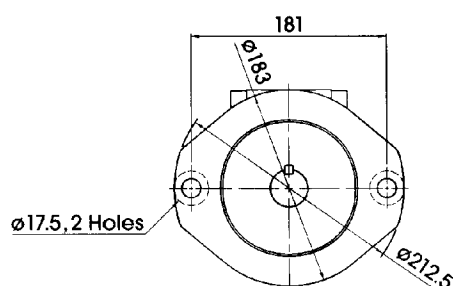
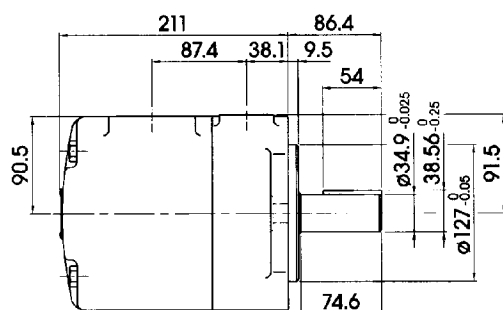


MAVS Series Dimensions



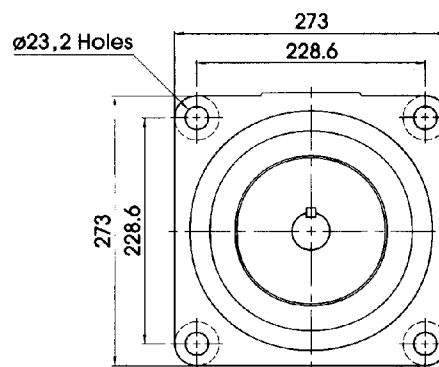
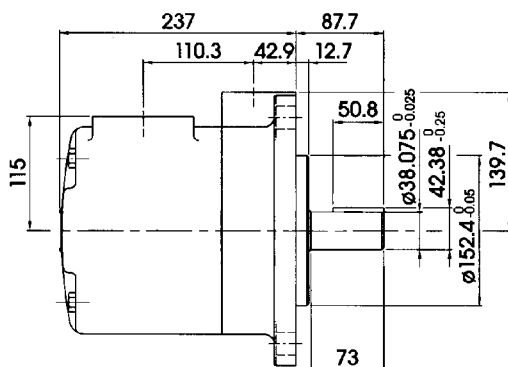
MAVS-35

Dimensions (mm)

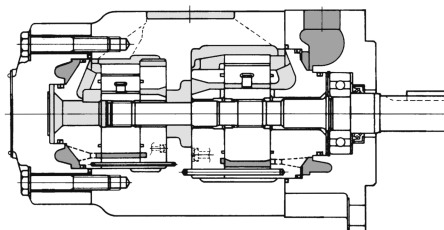
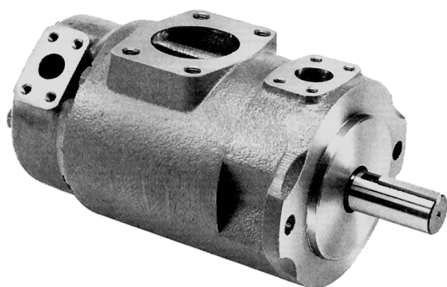


MAVS-45

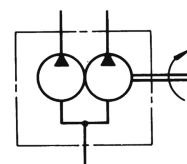
Dimensions (mm)



MAVS Series Specification



SYMBOL



Series	Code Capacity Rating	P1	Max. Working Pressure psi (bar)	Code Capacity Rating	P2	Max. Working Pressure psi (bar)	Speed (rpm)		Weight Pounds (kgs)
		Displacement in/rev (ml/rev)			Displacement in/rev (ml/rev)		Min	Max	
2520	12	2.44 (40)	2500(175)	5	1.1 (18)	2500(175)	600	1800	69.5 (31.5)
	14	2.75 (45)		8	1.65 (27)				
	17	3.36 (55)		9	1.83 (30)				
	19	3.72 (61)		11	2.2 (36)				
	21	4.09 (67)		12	2.38 (39)				
				14	2.75 (45)				
3520	21	4.09 (67)	2500(175)	5	1.1 (18)	2500(175)	600	1800	101.5 (46)
	25	4.94 (81)		8	1.65 (27)				
	30	5.80 (95)		9	1.83 (30)				
	35	6.83 (112)		11	2.2 (36)				
	38	7.38 (121)		12	2.38 (39)				
				14	2.75 (45)				
3525	21	4.09 (67)	2500(175)	12	2.44 (40)	2500(175)	600	1800	106 (48)
	25	4.94 (81)		14	2.75 (45)				
	30	5.80 (95)		17	3.36 (55)				
	35	6.83 (112)		19	3.72 (61)				
	38	7.38 (121)		21	4.09 (67)				
4520	42	8.42 (138)	2500(175)	5	1.1 (18)	2500(175)	600	1800	163 (74)
	47	9.34 (153)		8	1.65 (27)				
	50	9.89 (162)		9	1.83 (30)				
	57	11.23 (184)		11	2.2 (36)				
	60	11.78 (193)		12	2.38 (39)				
				14	2.75 (45)				
4525	42	8.42 (138)	2500(175)	12	2.44 (40)	2500(175)	600	1800	176.4 (80)
	47	9.34 (153)		14	2.75 (45)				
	50	9.89 (162)		17	3.36 (55)				
	57	11.23 (184)		19	3.72 (61)				
	60	11.78 (193)		21	4.09 (67)				
4535	42	8.42 (138)	2500(175)	21	4.09 (67)	2500(175)	600	1800	195 (88.5)
	47	9.34 (153)		25	4.94 (81)				
	50	9.89 (162)		30	5.80 (95)				
	57	11.23 (184)		35	6.83 (112)				
	60	11.78 (193)		38	7.38 (121)				

Ordering Code

MAVS — * * * * — * — * — C — * — *

12 vane for very low noise model

Series: 2520, 3520, 3525, 4520, 4525, 4535

Code P1 Capacity Rating: GPM at 1200 rpm and 100psi

Code P2 Capacity Rating: GPM at 1200 rpm and 100psi

Cylindrical Shaft type

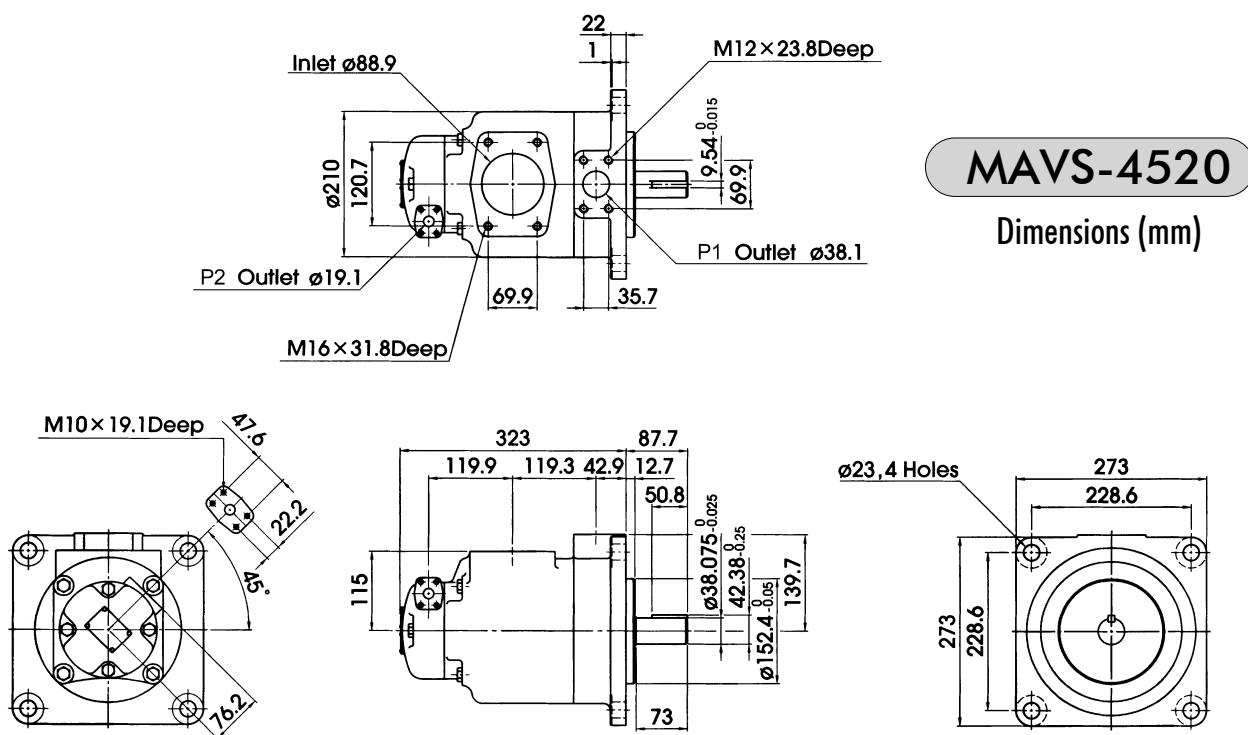
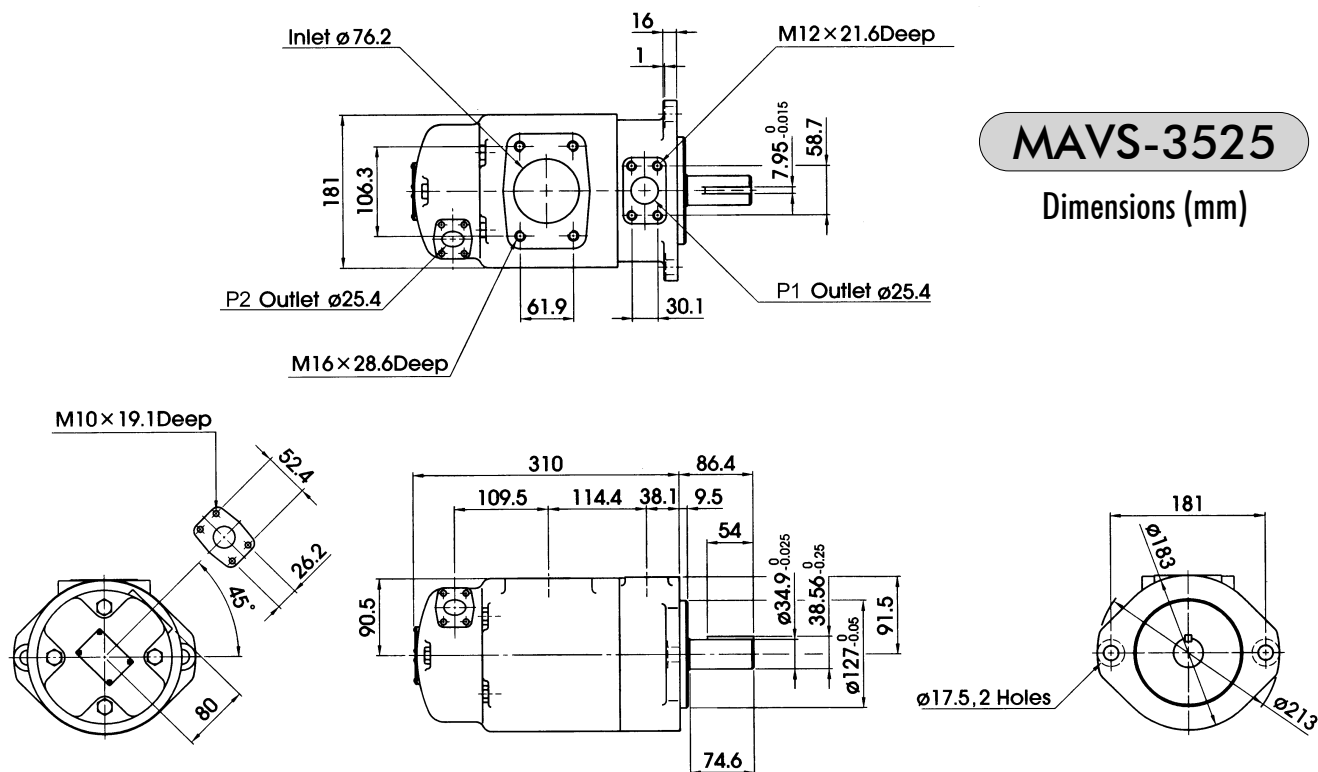
Shaft rotation

R: Clockwise
L: Anti-clockwise

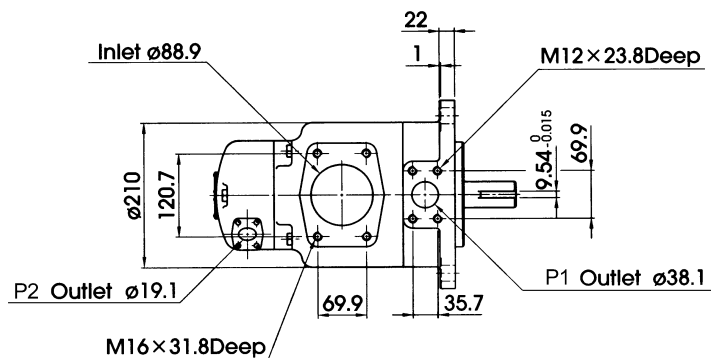
Porting Combination
(see page 16)

VERY LOW NOISE DOUBLE VANE PUMPS

MAVS Series Dimensions

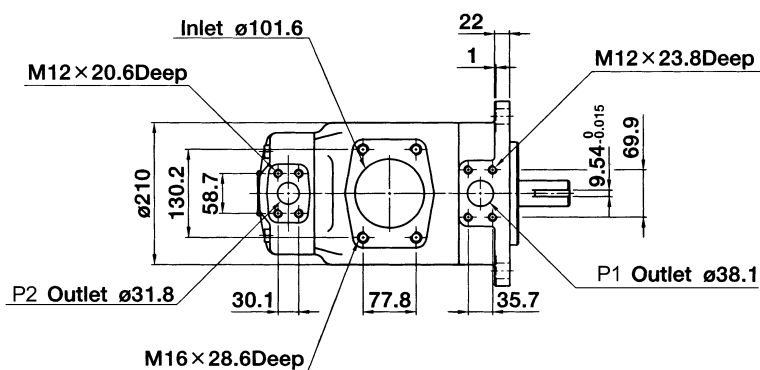
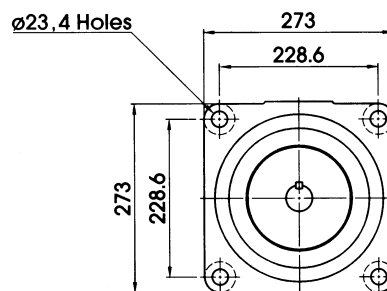
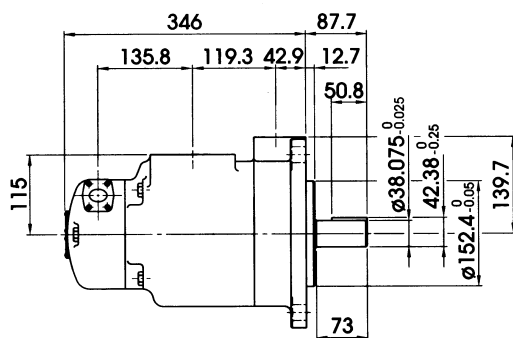
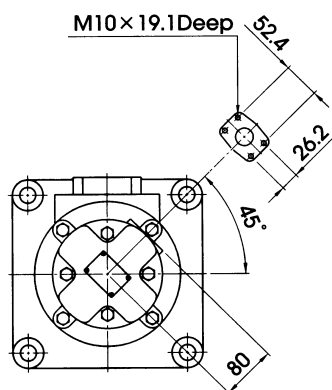


MAVS Series Dimensions



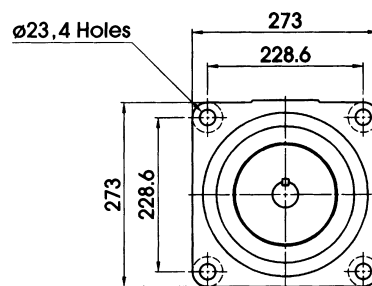
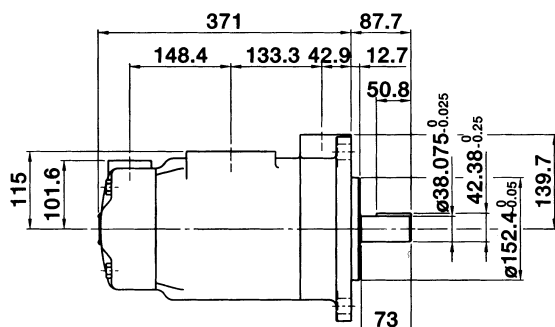
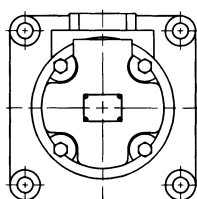
MAVS-4525

Dimensions (mm)



MAVS-4535

Dimensions (mm)



SINGLE PUMP SHAFTS

Pump Style	Code	Description	Major Diameter	Ext.
25	C	3/16 Aquare Keyed	0.875	2.310
	S	13T 16/32 Splined	0.875	1.750
35	C	5/16 Square Keyed	1.250	2.880
	S	14T 12/24 Splined	1.250	2.310
45	C	5/16 Square Keyed	1.250	2.440
	S	14T 12/24 Splined	1.248	2.440

DOUBLE PUMP SHAFTS

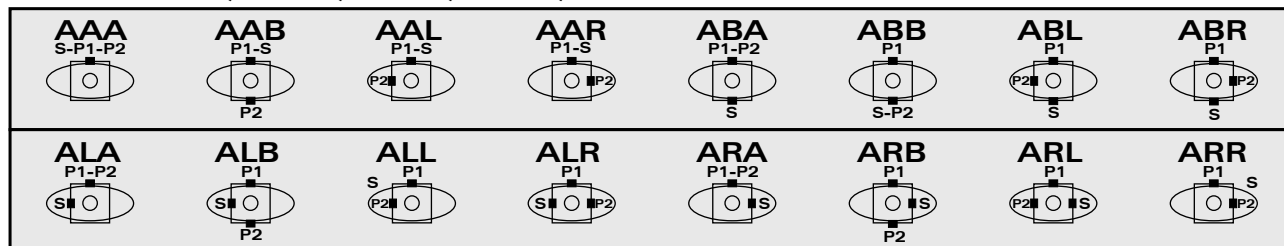
Pump Style	Code	Description	Major Diameter	Ext.
2520	C	3/16 Keyed	0.875	2.310
	S	13T 16/32 Splined	0.875	1.750
3520	C	5/16 Square Keyed	1.250	2.880
	S	14T 12/24 Splined	1.250	2.310
3525	C	5/16 Square Keyed	1.250	2.880
	S	14T 12/24 Splined	1.248	2.310
4520	C	5/16 Square Keyed	1.250	2.440
	S	14T 12/24 Splined	1.248	2.440
4525	C	5/16 Square Keyed	1.250	2.440
	S	14T 12/24 Splined	1.250	2.440
4535	C	5/16 Square Keyed	1.250	2.440
	S	14T 12/24 Splined	1.248	2.440

PORTING COMBINATION (viewed from shaft)

MA * * 20, 25, 35, 45



MA * * 2520, 3520, 3525, 4520, 4525



MA * * 4535

