

AML1 Type Motor-Pumps AML1-**-*-20

Notice of Model Change

We hereby announce that AML1 Type Motor-Pumps underwent renewal of on-board motors and model change to design 20. (Sales of AML1 Type Motor-Pumps were temporarily stopped in March 2015. We restart the sales because now the on-board electric motors comply with the high efficiency regulations)



■Major Changes

- (1) Mass has been increased in the range of 1.5~9.7kg (mass ratio 106~136%)
- (2) The body has become larger in general
- (3) Efficiency class of the on-board electric motor has been modified to IE3. Motor specifications have improved in general

■Installation Interchangeability

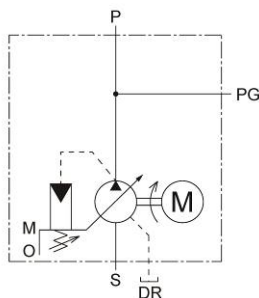
There is no interchangeability. The following dimensions have changed.

Non-interchangeable difference description	Non-Interchangeable different dimensions
Distance from pump mounting point to the center of the electric motor	No.4 Dimension IL
Height of pump center	No.4 Dimension C
Motor Mounting Portion	No.4 Dimension E, Dimension F, Dimension ℓ1 [AML1-**-2.2 only]

■Sales Restart Timing

April 2020

■Graphic Symbol



★Displacement adjustment function is not available

■ Specifications

Model Numbers	Geometric Displacement cm ³ /rev	Max. Operating Pressure Rated Pressure	Motor Capacity	Mass kg
AML1-6*-*-20	6.2	7 MPa Depends on Operating Conditions. Please, contact us for details.	0.75 kW×4P	23
			1.5 kW×4P	26.3
			2.2 kW×4P	37
AML1-8*-*-20	8.5		0.75 kW×4P	23
			1.5 kW×4P	26.3
			2.2 kW×4P	37
AML1-12*-*-20	12.3		1.5 kW×4P	26.3
AML1-16*-*-20	16.3		2.2 kW×4P	37
			1.5 kW×4P	26.3
		2.2 kW×4P	37	

■ Electric Motor Specifications

Output x Number of Poles	Insulation Class	Voltage-Frequency V Hz	Rated Current A	Rotational Speed r/min	Starting Current A	Enclosure Structure / Ambient Environment
0.75 kW×4P	F	200-50	3.50	1460	21.8	<ul style="list-style-type: none"> ●Enclosure Structure Dustproof and splashproof / self-cooling type enclosure surface (IP54 IC411, IEC60034-1 compliant) ●Ambient Environment Installation place: indoors Temperature: -20~+40°C Humidity: relative humidity below 80%, avoid dew condensation Altitude: below 1000 m Avoid corrosion, explosive gases/ steam
		200-60	3.45	1750	19.6	
		220-60	3.30	1760	21.9	
1.5 kW×4P		200-50	6.40	1450	39.8	
		200-60	6.60	1760	37.0	
		220-60	5.90	1756	39.0	
2.2 kW×4P		200-50	9.50	1450	64.0	
		200-60	9.00	1740	56.0	
		220-60	8.50	1750	64.0	

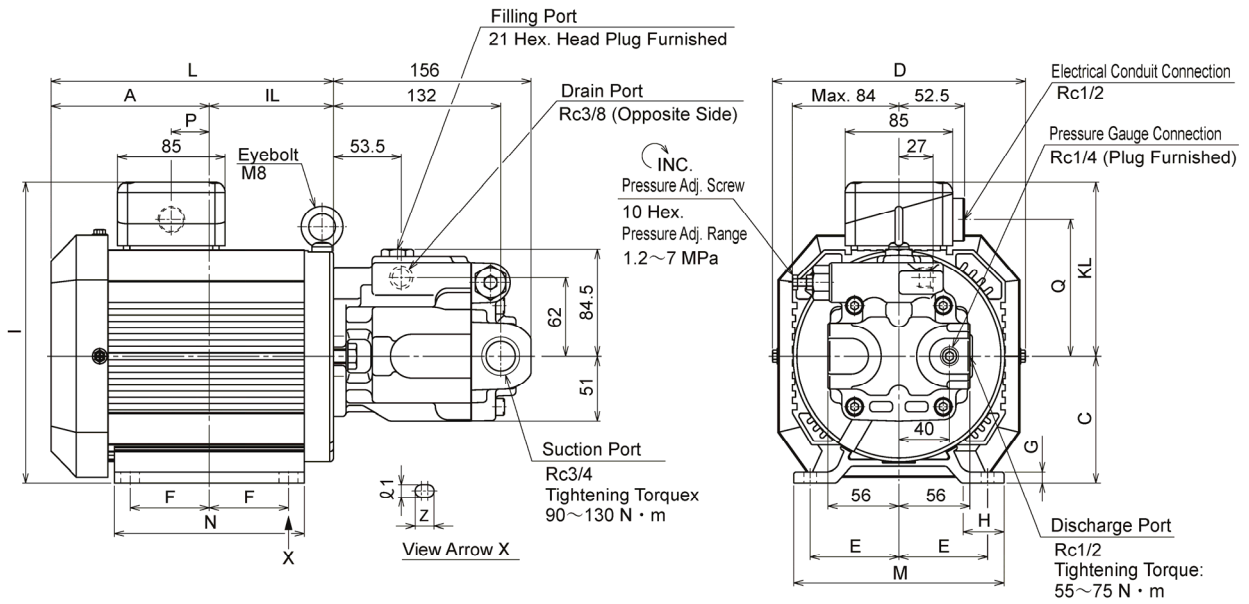
■ Model Number Designation

AML1	-16	A	-1.5	-20
Series Number	Geometric Displacement	Mounting	Motor Capacity	Design Number
AML1: AML1 Type Motor-Pump	6: 6.2 cm ³ /rev 8: 8.5 cm ³ /rev	S: Side Port (Standard) A: Suction Port Downwards (Standard for <L Pack>)	0.75: 0.75 kW×4P 1.5: 1.5 kW×4P 2.2: 2.2 kW×4P	20
	12: 12.3 cm ³ /rev 16: 16.3 cm ³ /rev		1.5: 1.5 kW×4P 2.2: 2.2 kW×4P	

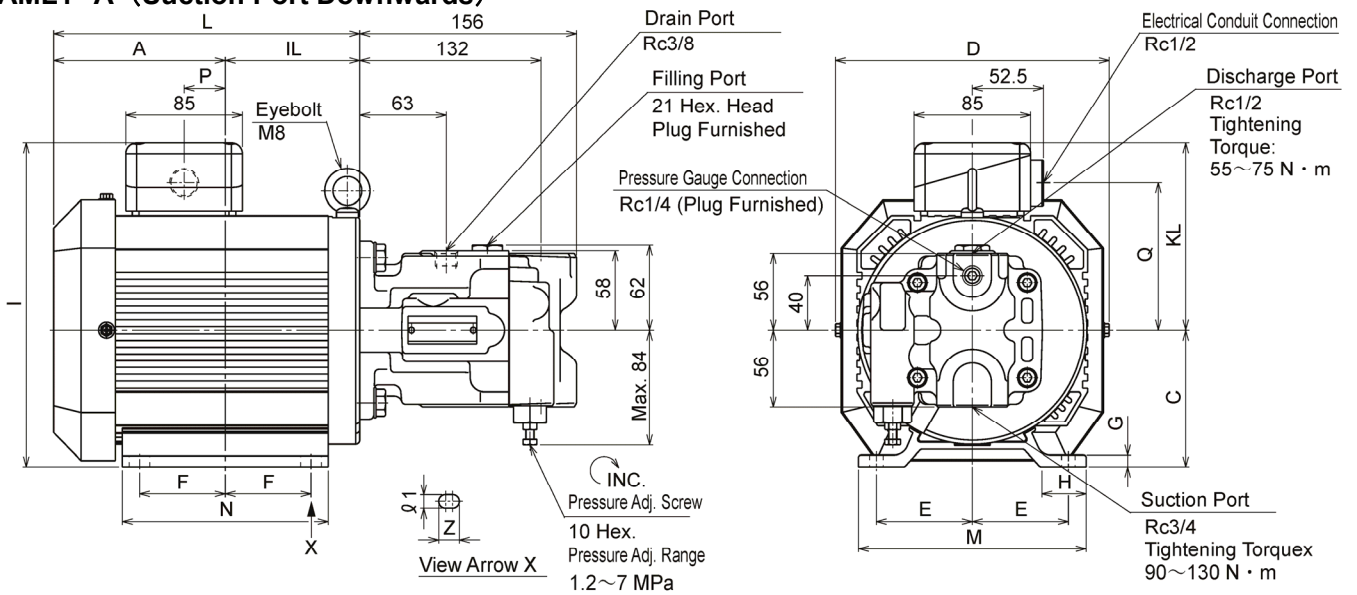
■ Pump Performance Characteristics

Please refer to typical characteristics of ARL1 Series Piston Pump (General Catalogue) for typical characteristics of the pump

AML1-*S (Side Port)



AML1-*A (Suction Port Downwards)



Model Numbers	Motor Capacity x Number of Poles	A	IL	C	D	E	F	G	H	I	M
AML1-**-0.75	0.75 kW×4P	108	85.5	100	200	70	50	8.7	32.4	234	166
AML1-**-1.5	1.5 kW×4P	125.5	98	100	200	70	62.5	8.7	32.4	234	166
AML1-**-2.2	2.2 kW×4P	139	114.5	110	218	95	70	10.7	59	254	220

Model Numbers	Motor Capacity x Number of Poles	N	KL	Q	Z	φ1	L	P
AML1-**-0.75	0.75 kW×4P	125	134	108	15	10	193.5	12.5
AML1-**-1.5	1.5 kW×4P	150	134	108	15	10	223.5	30
AML1-**-2.2	2.2 kW×4P	185	144	118	15	12	253.5	42.5

★The motor for this motor-pump is not offered for sale separately. Please, order motor-pump when spare parts are necessary

■Specification Comparison between Old and New Design

Specifications not shown in the table below are the same for New and Old design. Mass has been increased in the range from 1.5 to 9.7kg(mass ratio 106~136%)

●Mass

Model Numbers	Mass kg
AML1-**-0.75	23(19.8)
AML1-**-1.5	26.3(24.8)
AML1-**-2.2	37(27.3)

★Figures Outside (): New 20 Design, inside (): Old 10 Design

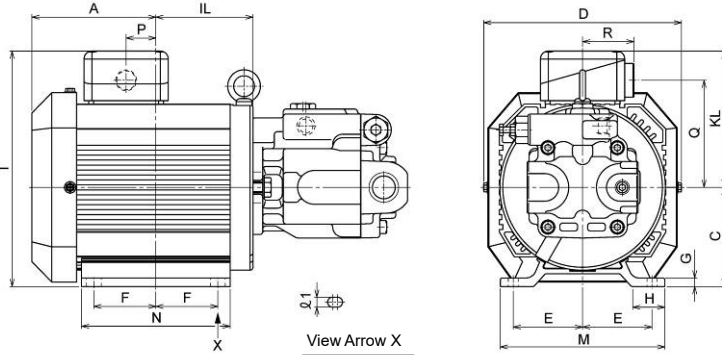
●Electric Motor

Output x Number of Poles	Voltage—Frequency		Rated Current A	Rotational Speed r/min	Starting Current A
	V	Hz			
0.75 kW×4P	200-50		3.50(3.70)	1460(1410)	21.8(17.0)
	200-60		3.45(3.40)	1750(1700)	19.6(15.5)
	220-60		3.30(3.35)	1760(1720)	21.9(17.5)
1.5 kW×4P	200-50		6.40(6.30)	1450(1410)	39.8(34.5)
	200-60		6.60(6.00)	1760(1700)	37.0(30.0)
	220-60		5.90(5.60)	1756(1720)	39.0(33.6)
2.2 kW×4P	200-50		9.50(9.60)	1450(1410)	64.0(49.5)
	200-60		—	1740(1700)	56.0(44.5)
	220-60		—	1750(1720)	64.0(50.2)

★Figures Outside (): New 20 Design, inside (): Old 10 Design

■Comparison of Dimensions between New and Old Models

Dimensions not shown in the table below are the same for New and Old design



Model Numbers		A	IL	C	D	E	F	G	H	I	M
Old	AML1-**-0.75-10	128.5	65	90	192			8	—	228	
	AML1-**-1.5-10	146.2	77.5	90	192			8	—	228	
	AML1-**-2.2-10	176	77.5	90	192	70	62.5	8	—	228	166
New	AML1-**-0.75-20	108	85.5	100	200			8.7	32.4	234	
	AML1-**-1.5-20	125.5	98	100	200			8.7	32.4	234	
	AML1-**-2.2-20	139	114.5	110	218	95	70	10.7	59	254	220

Model Numbers		N	KL	Q	∅1	P	R
Old	AML1-**-0.75-10		138	105		18	51.5
	AML1-**-1.5-10		138	105		35.5	51.5
	AML1-**-2.2-10	150	138	105	10	65.5	51.5
New	AML1-**-0.75-20		134	108		12.5	52.5
	AML1-**-1.5-20		134	108		30	52.5
	AML1-**-2.2-20	185	144	118	12	42.5	52.5