

Power Meister

By adding an inverter drive to our NCP/NNP series standard variable pump unit, we created the inverter drive NCP/NNP series hydraulic units to achieve great energy savings. They are great for jobs that need to dwell for long periods.

Features

Compact Hydraulic System

- Superior energy savings
- High precision

AC servo motor controls rotational speed and direction of pump.

Generates flow and pressure to match the operating cycle of machinery and to stop during idle times.

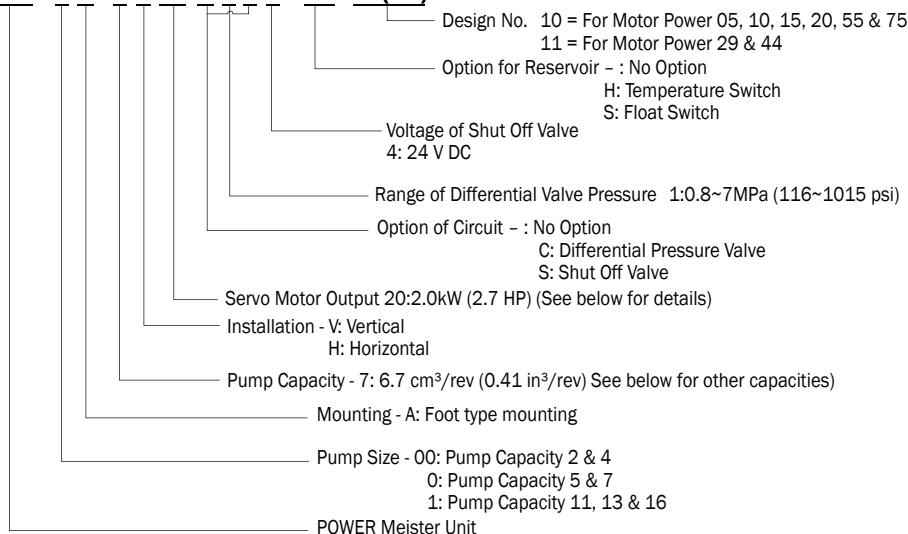
Incredible energy savings by only operating when necessary. Position, Speed and Pressure are controlled with great precision by using a high-speed digital processing servo controller.

Specifications

Electric Motor	AC servo motor (0.5~7.5kW) (0.7~10.0HP)
Piston Pump	(2.0~15.8 cm ³ /rev) (0.12~0.96 in ³ /rev)
Ambient Temperature/ Humidity	0~+40 °C (32~104 °F) / 20~90% RH
Fluid Temperature	5~60 °C (41~140 °F)
Recommended Fluid	ISO VG32~68 (VG 46 recommended)
Range of Viscosity	20~200 mm ² /s (cSt)
Cleanliness Level	NAS class 10
Setting Range of Relief Valve	3.5~30MPa (508~4350 psi)
Maximum Pressure	30MPa (4350 psi)
Color	Black

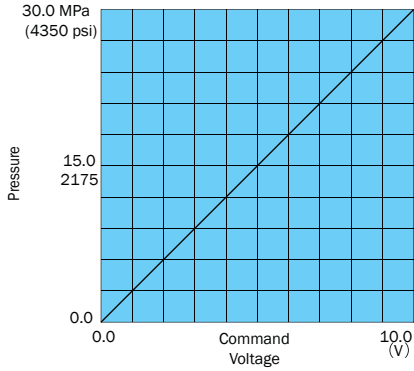
Understanding Model Numbers

UPS - 0 A - 7 V 20 C 1 S 4 - HS - 1 - (11)



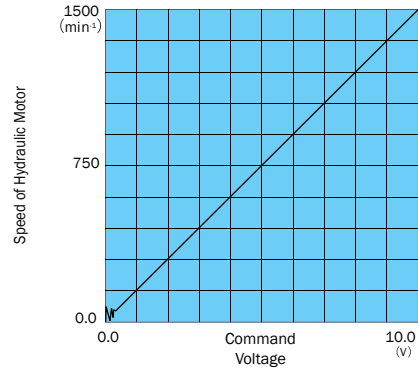
Performance Characteristics

Pressure: Pressure Command Voltage - Pressure Characteristic (0-100%)



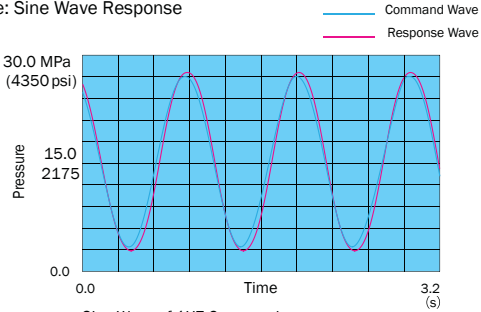
30MPa (4350 psi) at 10V Minimum Pressure: 0.15 MPa (22 psi)
 Command of 0V → -10V → 0V Maximum Pressure: 30 MPa (4350 psi)

Speed: Speed Command Voltage- Speed Characteristic (0-100%)



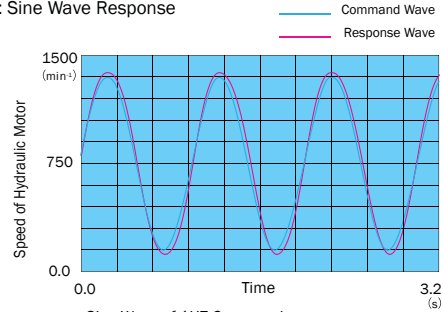
1500 min⁻¹ at 10V Minimum Speed: 50 min⁻¹
 Command of 0V → -10V → 0V Maximum Speed: 1500 min⁻¹
 (In case of oil motor as actuator)

Pressure: Sine Wave Response



Sine Wave of 1HZ Command
 Range of Wave 10-90%

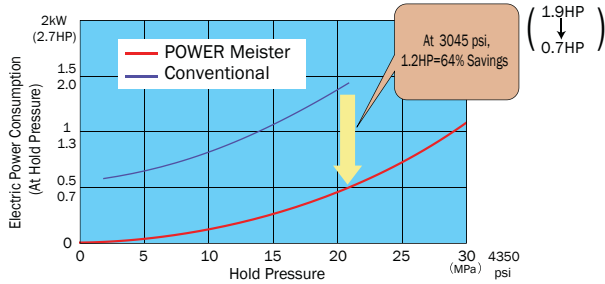
Speed: Sine Wave Response



Sine Wave of 1HZ Command
 Range of Wave 10-90%
 (In case of oil motor as actuator)

Hold Pressure: Electric Power Consumption Characteristic

Hydraulic Unit (UPS)
 Pump 0.29 in³/rev, Motor 2.7HP



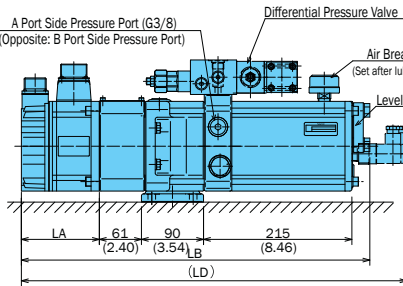
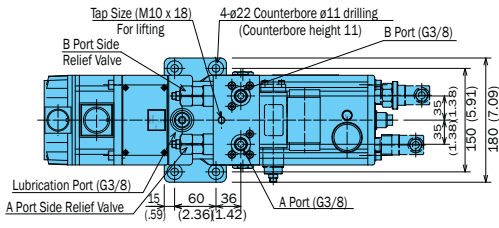
Ref. 2.2kW unipump (variable piston pump)
 Consumption at full cut off (N=1.800 min⁻¹)

Installation Dimensional Drawings

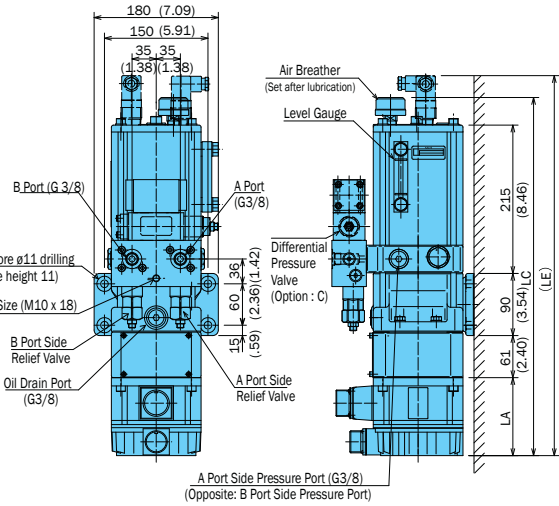
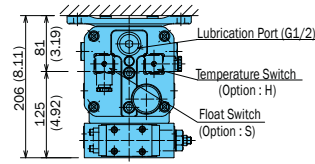
UPS-00A Series

Option : Without option S (Shut Off Valve)

UPS-00A-*H**** (Horizontal type)



UPS-00A-*V**** (Vertical type)



UPS Model	L A	L B	LC	LD	LE	(Note 2) Weight
UPS-00A-*V05	113 (4.45)	505 (19.88)	519 (20.43)	559 (20.01)	551 (21.69)	28 (61.7)
UPS-00A-*V10	133 (5.24)	525 (20.67)	539 (21.22)	579 (22.80)	571 (22.48)	30 (66.2)
UPS-00A-*V15	152 (5.98)	544 (21.42)	558 (21.97)	598 (23.54)	590 (23.23)	31 (68.4)
UPS-00A-*V20	171 (6.73)	563 (22.17)	577 (21.93)	617 (24.29)	609 (23.98)	33 (72.8)

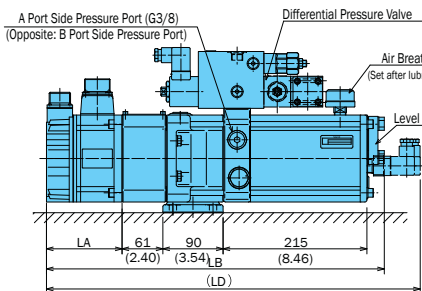
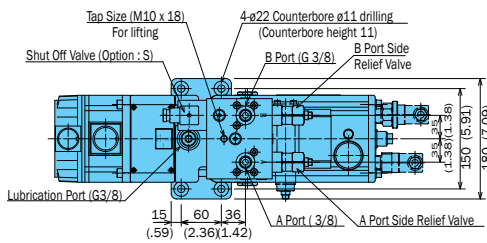
Note 1: Dimensions in (parentheses) and two dot chain lines are for circuit options C and S and tank options H and S.

Note 2: Does not include circuit or tank options or weight of hydraulic fluid.

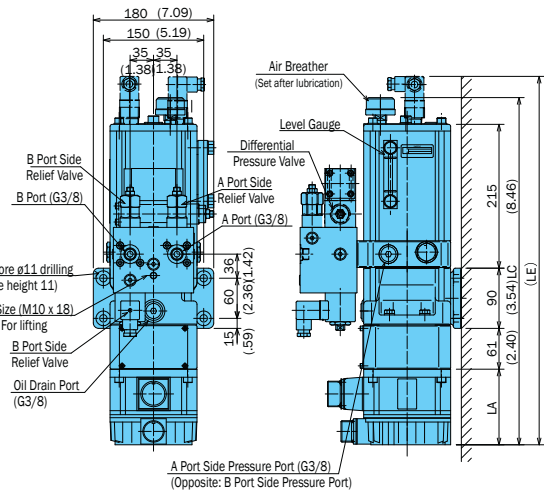
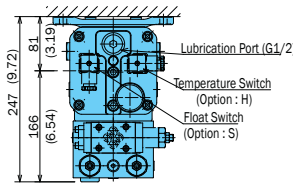
Note 3: Install the air breather face up.

Option : With option S (Shut Off Valve)

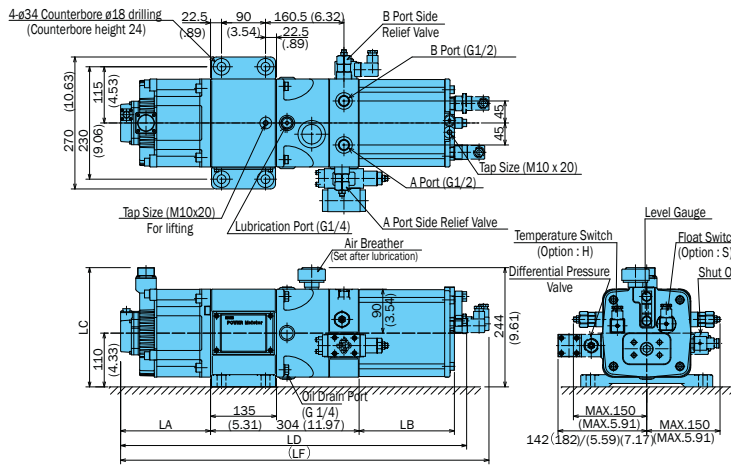
UPS-00A-*H****S4 (Horizontal type)



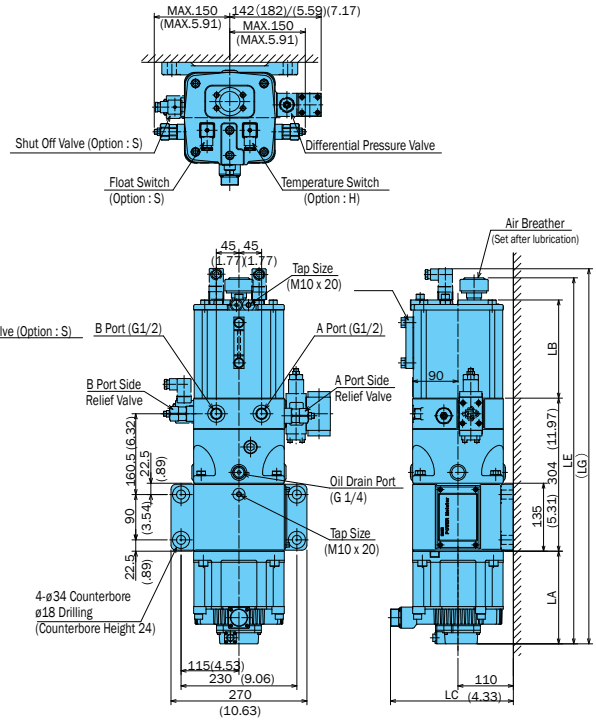
UPS-00A-*V****S4 (Vertical type)



UPS-0A/1A Series
UPS-00*A-H**** (Horizontal type)**



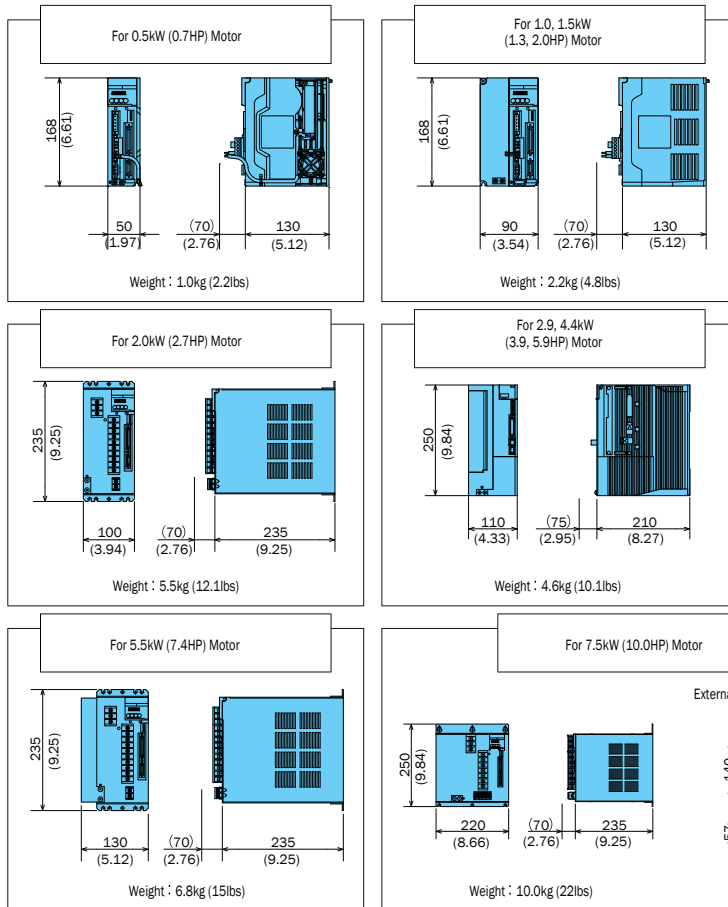
UPS-*A-V**** (Vertical type)**



UPS	L A	L B	L C	L D	L E	L F	L G	(Note 2) Weight
UPS-0A- *V20	171 (6.73)	120 (4.72)	229 (9.01)	620 (24.40)	639 (25.15)	666 (26.22)	657 (25.86)	52 (114.7)
UPS-1A- *V29	160 (6.29)	244 (9.60)	684 (26.92)	703 (27.67)	730 (28.74)	721 (28.38)	58 (127.9)	
UPS-1A- *V44	184 (7.24)	195 (7.67)	708 (27.87)	727 (28.62)	754 (29.68)	745 (29.33)	62 (136.7)	
UPS-1A- *V55	267 (10.51)	276 (10.86)	791 (31.14)	810 (31.88)	837 (32.95)	828 (32.59)	76 (174.2)	
UPS-1A- *V75	332 (13.07)	856 (33.70)	875 (34.44)	902 (35.51)	893 (35.15)	87 (191.8)		

Note 1: Dimensions in (parentheses) and two dot chain lines are for circuit options C and S and tank options H and S.
 Note 2: Does not include circuit or tank options or weight of hydraulic fluid.
 Note 3: Install the air breather face up.

Servo Amplifier



Servo Controller - EPD-PD3-10-D2-20

