



Inverter Drive NSP Series Energy-saving Variable Pump Unit with Inverter Drive

The "Inverter Drive NSP Series" is a hydraulic unit that reduces energy consumption by approximately 69% (dwelling, in-house comparison) compared to the standard unit by adding an energy saving NSP Series inverter drive.

They are great for jobs that need to dwell for long periods.

Features

Hydraulic oil temperature is kept at room temperature +1.5°C

The NSP series benefits your entire system by lowering oil temperature to improve machining accuracy, lengthen the life of seals and hydraulic fluid, and reduce factory air conditioning costs.

- NSP-20E-22V1A4-15
- 6.0MPa maintained while dwelling

Operates with the inverter removed also

- Can operate as an NSP unit just by switching out the wiring in case of emergencies.
- The suspension of production lines will be minimized even if there is trouble with the inverter because it is based on our reliable NSP unit and keeps running as a regular NSP unit.

Quiet operation at only 53dB (A)

- NSP-20E-22V1A4-15
- 6.0MPa dwelling
- 4-directional average
Standard unit sound level is 64dB (A)

Easy Operation

- Starts up as soon as the power is turned on
- Absolutely no external commands or delicate electrical adjustments needed because the pump's RPMs are controlled automatically in response to the load.

Inverter drive function can be installed separately later

- If you are already using an NSP unit, you can add the inverter drive function by installing the inverter control box kit, which is sold separately.

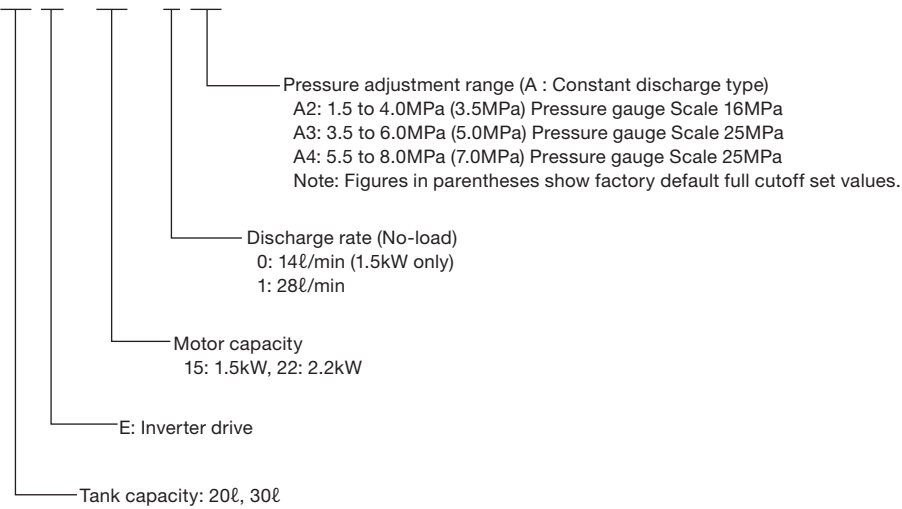
Specifications

1. Power Supply Rated Input Current	3 ϕ AC200 to 220V, 50/60Hz 9.7A/1.5kW, 13.4A/2.2kW 22.4A/3.7kW	
2. Pressure Adjustment Range	8, 16cm ³ /rev series A2: 1.5 to 4.0MPa A3: 3.5 to 6.0MPa A4: 5.5 to 8.0MPa	26cm ³ /rev series A2: 2.0 to 4.0MPa A3: 3.5 to 6.0MPa A4: 5.5 to 7.0MPa
3. Output Flow (at No-load)	0A*: 14 ℓ /min, 1A*: 28 ℓ /min 2A*: 46 ℓ /min	
4. Hydraulic Fluid	Standard mineral-based hydraulic fluid (equivalent to ISO VG32)	
5. Hydraulic Oil Temperature	10 to 60°C	
6. Color of Paint	Munsell No.N-1 70% gloss	
7. Ambient Temperature/ Humidity	0 to 35°C/ 20 to 85%RH (non-condensation) (Keep the unit away from water-soluble cutting fluid mist.)	

Explanation of model No.

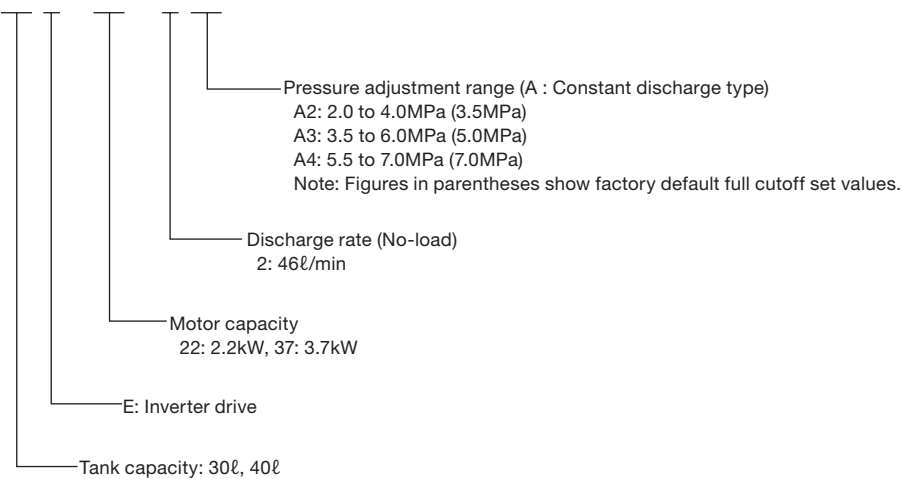
8.0, 16.0cm³/rev Series

NSP - 20 E - 15 V 0 A2 - 15



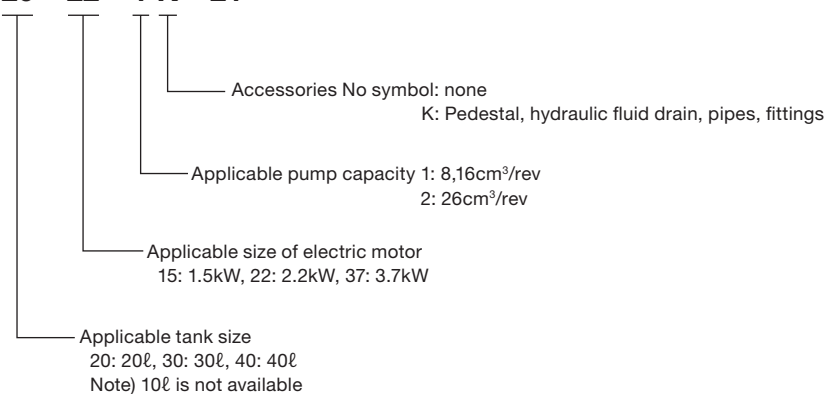
26.0cm³/rev Series

NSP - 30 E - 22 V 2 A2 - 15



Inverter Control Box Kit Specifications

EBK - 20 - 22 - 1 K - 21

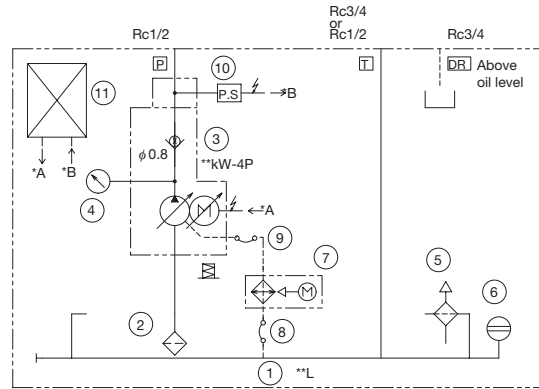
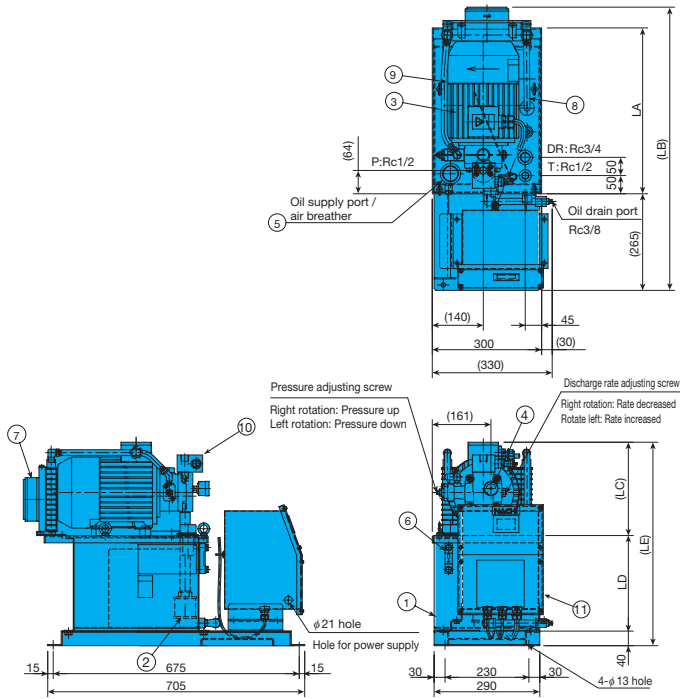


Design Drawings, Dimension Tables

Note) See the following page for dimensions.

8.0, 16.0cm³/rev Series

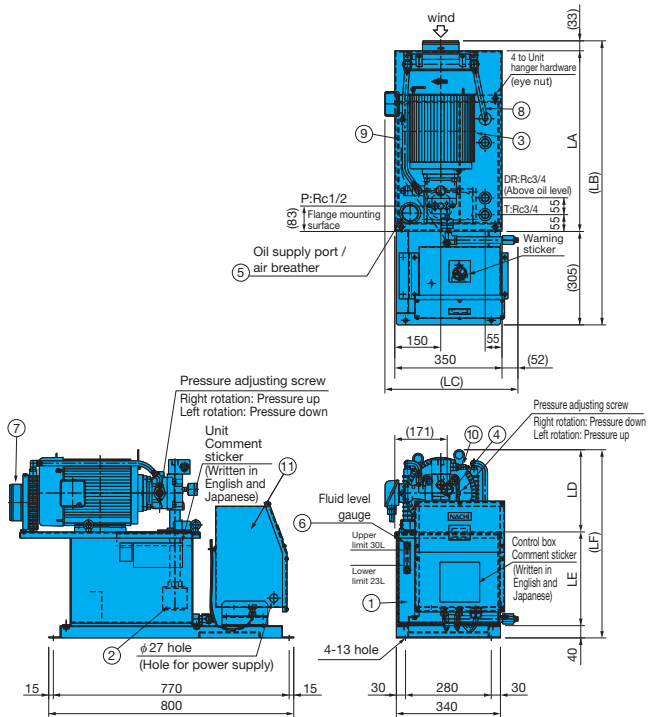
NSP-²⁰30E-****V**A*-15



Part No.	Part Name	Part No.	Part Name
1	Oil tank	7	Fan cooler
2	Suction strainer	8	Flexible hose
3	Uni-pump	9	Flexible hose
4	Pressure gauge	10	Pressure sensor
5	Fluid supply port/air breather	11	Inverter control box
6	Fluid level gauge		

26.0cm³/rev Series

NSP-³⁰40E-****V**2A*-15



8.0, 16.0cm³/rev Series

Model No.	Dimensions					Approximate Weight (kg)
	LA	LB	LC	LD	LE	
NSP-20E-15V*A*-15	425	750	243	262	545	66
NSP-20E-22V1A*-15	455	780	256		558	74
NSP-30E-15V*A*-15	425	750	236	364	647	71
NSP-30E-22V1A*-15	455	780	256		666	79

26.0cm³/rev Series

Model No.	Dimensions							Approximate Weight (kg)
	LA	LB	LC	LD	LE	LF	Z	
NSP-30E-22V2A*-15	565	903	405	234	306	581	21	101
NSP-30E-37V2A*-15	590	928	434	268		614	27	110
NSP-40E-22V2A*-15	565	903	405	234	385	660	21	106
NSP-40E-37V2A*-15	590	928	434	268		693	27	115

Precautions

- Turning the inverter on and off by cutting the main power supply (circuit breaker) significantly reduces the life of the inverter and should be limited to once an hour.
Contact us if you need to start and stop operations frequently.
- Use only the wiring methods described in the user documentation.
- Do not change any settings, regarding the inverter parameters, except the parameters described in the setting procedures in the user documentation.
- Maximum peak pressure (set pressure + surge pressure) must be 14MPa or below for the 8 and 16cm³/rev series, and 13MPa or below for the 26cm³/rev series.
Install a relief valve to cut surges in the circuit if the maximum peak pressure exceeds these figures.
If the maximum peak pressure is high, the inverter's alarm may sound and the motor may stop.