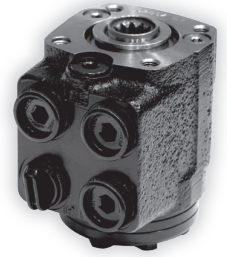


Integral Power Steering Unit



Feature

- Various integral valves are applied within steering system. (inlet check valve, relief valve, suction valve, shock valve)
- Attachable valve blocks
: priority, flow divider, flow control valve, etc.
- Special functions according to customer's request are available: high system pressure, high back pressure, low slip gerotor, low input torque, etc.

Option valve

- ① Inlet check valve: prevent kick back phenomenon. (In case of the pressure of steering cylinder is higher than one of the inlet ports, instant kick back phenomenon occurs by the returned oil.)
- ② Inlet relief valve: set the maximum steering system pressure.
- ③ Suction valve(anti-cavitation valve): prevent the cylinder vacuum phenomena.

: prevent the internal cavitation resulted by external forces and the operation of the shock valve.

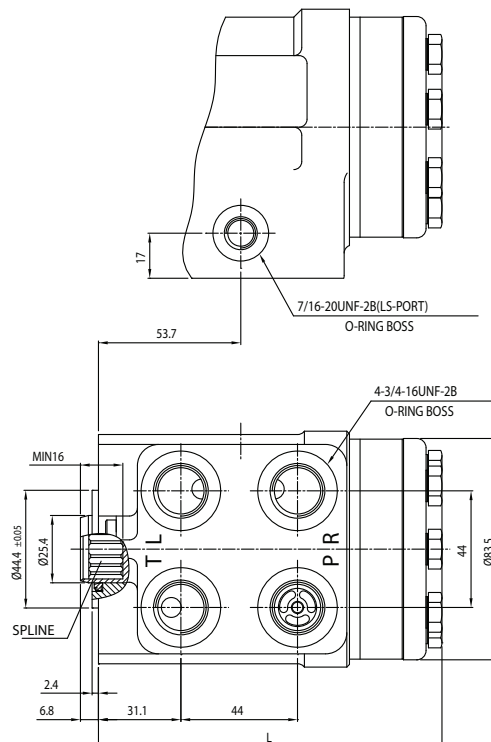
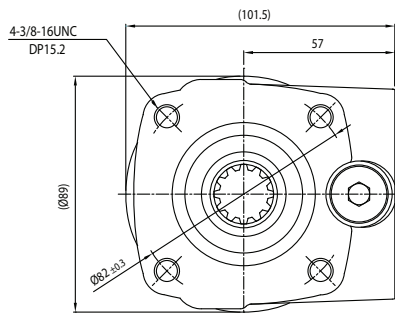
- ④ shock valve(overload relief valve): prevent internal overpressure generated by external forces.

Specifications

- Max. System Pressure: 175 kgf/cm²(17.2 MPa)
- Rated Flow: 23 l/min, 45 l/min
- Relief Pressure Range: 60~175 kgf/cm²(5.9~17.2 MPa)
- Relief Pressure Range of Shock Valve: 140~230 kgf/cm²(13.7~22.6 MPa)
- Max. Back Pressure: 20 kgf/cm²(2.0 MPa)
- Steering Input Torque: 0.2 kgf.m
- Max. System Operation Temperature: 95 °C
- Recommended Filtration: nominal 10 μm
- System: Open center(non load reaction or load reaction) Load sensing(static or dynamic signal) Closed center

Dimensions

Displacement (cm ³ /rev)	Length L(mm)	Displacement (cm ³ /rev)	Length L(mm)
40	122.3	160	136.2
51	120.7	200	139.8
62	122.3	240	146.3
69	123.2	277	151.9
80	124.7	315	155.6
100	127.5	369	163.7
120	130.1	630	211.3



Code and specification

N051E08023AU3M1A

N	051	E	080	23	A	U3	M1	A
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① System Symbol

- N : Open Center, Non Load Reaction, 23 l/min
- Y : Open Center, Non Load Reaction, 45 l/min
- L : Open Center, Load Reaction
- D : Load Sensing, Dynamic Signal
- S : Load Sensing, Static Signal
- C : Closed Center

② Displacement

040~630 : 40~630 cm³/rev

③ Valve options

	Check V.	Relief V.	Suction V.	Shock V.
E	✓			
A	✓	✓		
B	✓	✓	✓	
C	✓	✓	✓	✓
F		✓		
G		✓	✓	
H		✓	✓	✓
M			✓	
N			✓	✓
X				

④ Relief Pressure[kgf/cm²]

Setting Range of 60 ~ 175 kgf/cm²

"080" : 80 kgf/cm², "000" : Without Relief Valve

⑤ Flow Rate of Relief Pressure Setting

08 : 8 l/min, 23 : 23 l/min, 32 : 32 l/min, 45 : 45 l/min

* 00: Without Relief Valve

⑥ Pressure Setting of Shock Valve [kgf/cm²]

A: 140, B: 145, C: 150, D: 155, E: 160, F: 165, G: 170
 H: 175, J: 180, K: 185, L: 190, M: 195, N: 200, Q: 205
 R: 210, T: 215, V: 220, W: 225, X: 230, Y: 235

⑦ Port Sizes

P3 : PF 3/8 O-ring port

P5 : PF 1/2 O-ring port

U3 : 3/4-16 UNF O-ring port

B1 : With built-in Block Valves

* LS-Port Size of LS-system : 7/16-20 UNF O-ring port

⑧ Mounting Screws Sizes and PCD

M1 : M10*1.5P, PCD Ø82.6

M2 : M10*1.5P, PCD Ø82

M3 : M10*1.25P, PCD Ø82.6

M4 : M10*1.25P, PCD Ø82

C1 : 3/8-16 UNC, PCD Ø82.6

C2 : 3/8-16 UNC, PCD Ø82

⑨ Design Symbol

A : Initial Design