

PLUNGER DOSING PUMP

KOPP88/2.0



KOBN General Electric Solution

Email: info@kobn.co.dk | Website: www.kobn.co.dk | Phone : +4553858123

Address: Rådhusstræde 10, st. 1466 København K

Follow us: [in](#) [f](#) [@](#) [X](#)

PLUNGER DOSING PUMP



Oil & gas and
petrochemical industries



Fertilizer & agriculture
chemical dosing



Water treatment &
wastewater plants

Description

A plunger pump is a type of positive displacement pump that uses a reciprocating plunger to move fluids at high pressure. Unlike centrifugal pumps, it delivers a fixed amount of liquid with each stroke, making it highly accurate and ideal for controlled dosing applications. These pumps are widely used where precise flow and high-pressure performance are required.

The KOPP88/2.0 Plunger Pump is a high-performance dosing pump engineered for accurate and reliable fluid transfer in industrial applications. With a robust plunger mechanism and durable construction, it ensures consistent flow rates even under high-pressure conditions. Designed for versatility, this pump handles a wide range of liquids, including viscous and corrosive fluids, making it suitable for demanding environments. Its compact vertical design, manual flow control, and easy maintenance features make it a dependable choice for continuous operation.

Parameter Selection

1	Pump Type	Plunger Type
2	Pump Model	KOPP88/2.0
3	Capacity	88L/H
4	Discharger Max Pressure	Max. 20 Bar
5	Suction Height	2-3 meter
6	Plunger Diameter	32 mm
7	Stroking Speed	96 min
8	Temperature	Max. 120 (°C)
9	Viscosity(Cp)	0-2000
10	Accuracy	± 2.0%
11	Flow Control	Manual
12	Direction	Vertical
13	Connection Type/Size	DN10 (Union for welding)
14	Discharger Pressure	10bar

Material of Liquid End

15	Pump Head	SS316L
16	Housing	Cast Iron
17	Valve Housing/Seat/Body	SS316L
18	Valve Balls	SS316L
19	Valve Gasket	PTFE
20	Plunger	SS316 cotaed the ceramic
21	Packing Seal	PTFE

Motor

22	Motor Type	IEC Explosion-proof motor BT4
23	Motor Power	0.37KW
24	Voltage	3 Phase 400V 50Hz
25	Protection Grade	IP55
26	Motor Speed	1450 rpm

Packaging

27	Estimated G.W	40KG
28	Estimated Package Size	59*47*50cm(Carton Box)

Features



High Precision Dosing:
Accuracy up to ±2% ensures consistent performance



High Pressure Capability
Operates up to 20 bar maximum pressure



Wide Viscosity Handling:
Suitable for fluids ranging from 0–2000 cP

Performance

- » **Max Flow:** 44.04 L/H @50Hz | 27.6 L/H @60Hz
- » **Max Pressure:** 40 MPa
- » **Accuracy:** ±1%
- » **Adjust Ratio:** 1:200

Operation

- » **Control Type :** Manual Stroke
- » **Automatic Control (Optional):** Electric Stroke Controller / VFD / LIGAO Digital DC Motor Module (220V Single Phase)

Material Specifications

- » **Pump Head & Check Valve:** SS304 / SS316L (Others on request)
- » **Plunger Material:** Ceramic (Ø 6–10 mm), SS coated with Ceramic (Ø 12 mm & above)
- » **Packing Seal:** PTFE Ring + SS Ring

Valve Components

- » **Ball Material :** Ceramic (DN6), SS316 (DN10 & DN15)
- » **Ball Quantity:** Two Balls (DN6 & DN10), Single Ball (DN15)

Performance Parameter

Model	Flow(L/h)		Pressure Mpa	Plunger mm	SPM	Motor	Connection	
	50Hz	60Hz						
KOPP 1/40	1	1.2	40	6	96	0.37KW	DN6 Welding Union	
KOPP 2/40	2	2.4	40	6				
KOPP 4/33	4	4.8	33	8				
KOPP 8/21	8	9.6	21	10				
KOPP 11/14	11	13.2	14	12				
KOPP 20/8	20	24	8	16	96		DN10 Welding Union	
KOPP 33/5	33	39.6	5	20				
KOPP 52/3.3	52	62.4	3.3	25				
KOPP 65/2.6	65	78	2.6	28				
KOPP 88/2.0	88	105.6	2	32				
KOPP 105/1.7	105	126	1.7	35	96			DN15 Welding Union
KOPP 125/1.4	125	150	1.4	38				
KOPP 155/1.1	155	186	1.1	42				
KOPP 90/1.0	190	228	1	38				
KOPP 230/0.8	230	276	0.8	42	144			

Note: Double or multiple heads can be mounted on one pump base. (Pressure will reduce if power not increased)



Features



Durable Construction
SS316L wetted parts for corrosion resistance



Smooth Operation
Advanced plunger design for stable and reliable flow



Easy Maintenance
Simple structure with accessible components

PLUNGER DOSING PUMP LIQUID END EXPLOSIVE VIEW

● Gasket Options

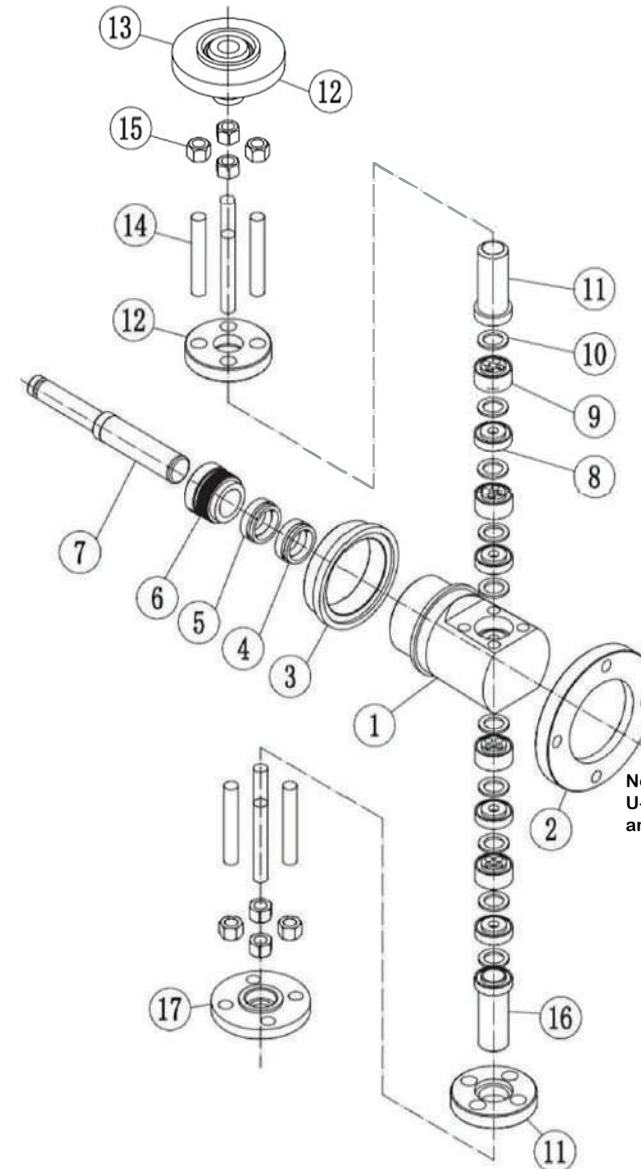
- » **Standard:** PP
- » **Medium Temperature (100–150°C):** PTFE
- » **High Temperature (>150°C):** Copper
- » **Adjust Ratio:** 1:200

● Operating Conditions

- » **Liquid Temperature Range:** -20°C to +130°C (SS304 / SS316 / SS316L), Above 130°C: Cooling Required, Maximum: 350°C

● Power Supply

- » **Standard:** IE3 Motor, 380V, 50Hz, 3 Phase
- » **Optional:** VFD Motor / Explosion-Proof Motor



Detailed List

NO	Item Name	Qty
①	Pump head	1
②	Pump head fixed flange	1
③	Pump head transition flange	1
④	U-shaped support ring	2
⑤	U-shaped packaging	2
⑥	Packaging pressure cap	1
⑦	Piston	1
⑧	Valve seat	4
⑨	Valve sleeve	4
⑩	Valve gasket	10
⑪	Outlet pipe	1
⑬	Pressure valve flange	2
⑬	Outlet flange	1
⑭	Full screw rod	8
⑯	Hexagon Nuts	8
⑯	Inlet pipe	1
⑰	Inlet flange	1

Note: Our plunger pump commonly used U-shaped packing, a few use V-shaped packing and gland packing.

Features



Compact Vertical Design
Saves installation space



Temperature Resistance
Handles fluids up to 120°C

PLUNGER DOSING PUMP



Built for Demanding Dosing Applications

Engineered to deliver precise, consistent flow even under high-pressure and **challenging conditions**, ensuring reliable performance across critical industrial processes.