

Axial Piston High Pressure Pump For Seawater

HPS 16~21

THINKTANK



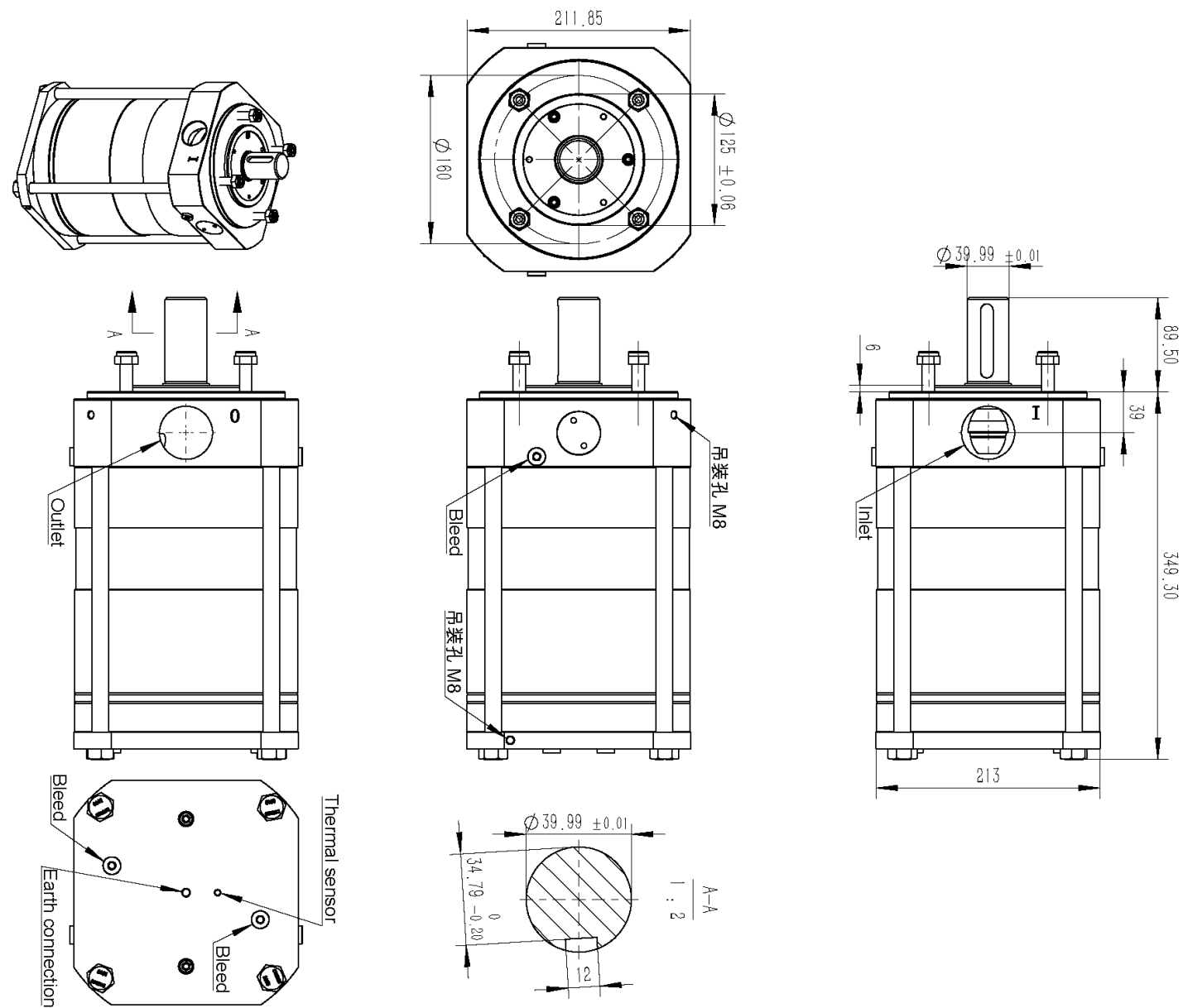
Specification - HPS 16~21

Pumps Model	16	17	19	21
Code Number	TT010200217	TT010200218	TT010200219	TT010200220
Displacement (cc/rev)	187.3	196.4	220.3	251.96
Housing Material	2205	2205	2205	2205
Min. Outlet Pressure (barg)	10	10	10	10
Max. Outlet Pressure (barg)	70 (1500rpm) 85 (1200rpm)	70 (1500rpm) 85 (1200rpm)	70 (1500rpm) 85 (1200rpm)	70 (1500rpm) 85 (1200rpm)
Inlet pressure Continuous (barg)	2-5	2-5	2-5	2-5
Min. Speed,Continuous(rpm)	700	700	700	700
Max. Speed * (rpm)	1500	1500	1500	1500
Flow Rate (m³/H) (85barg,700 rpm)	7.12	7.53	8.42	9.92
Flow Rate (m³/H) (85barg,1000 rpm)	10.6	11.18	12.58	14.58
Flow Rate (m³/H) (85barg,1200 rpm)	12.76	13.45	15.02	17.52
Flow Rate (m³/H) (70barg,1500 rpm)	16.0	16.80	18.85	21.82
Calculation Factor(at maximum speed)	533	536	531	535
Motor Selection (KW) (Maximum pressure, maximum speed)	37	37	45	55
Media Temperature (°C)	2~50	2~50	2~50	2~50
Sound Pressure Level (dB) **	85	85	85	85
Weight (kg)	75	75	75	75
Integrated Flush Valve	YES	YES	YES	YES

* At maximum speed, the inlet pressure must be at least 2 barg;

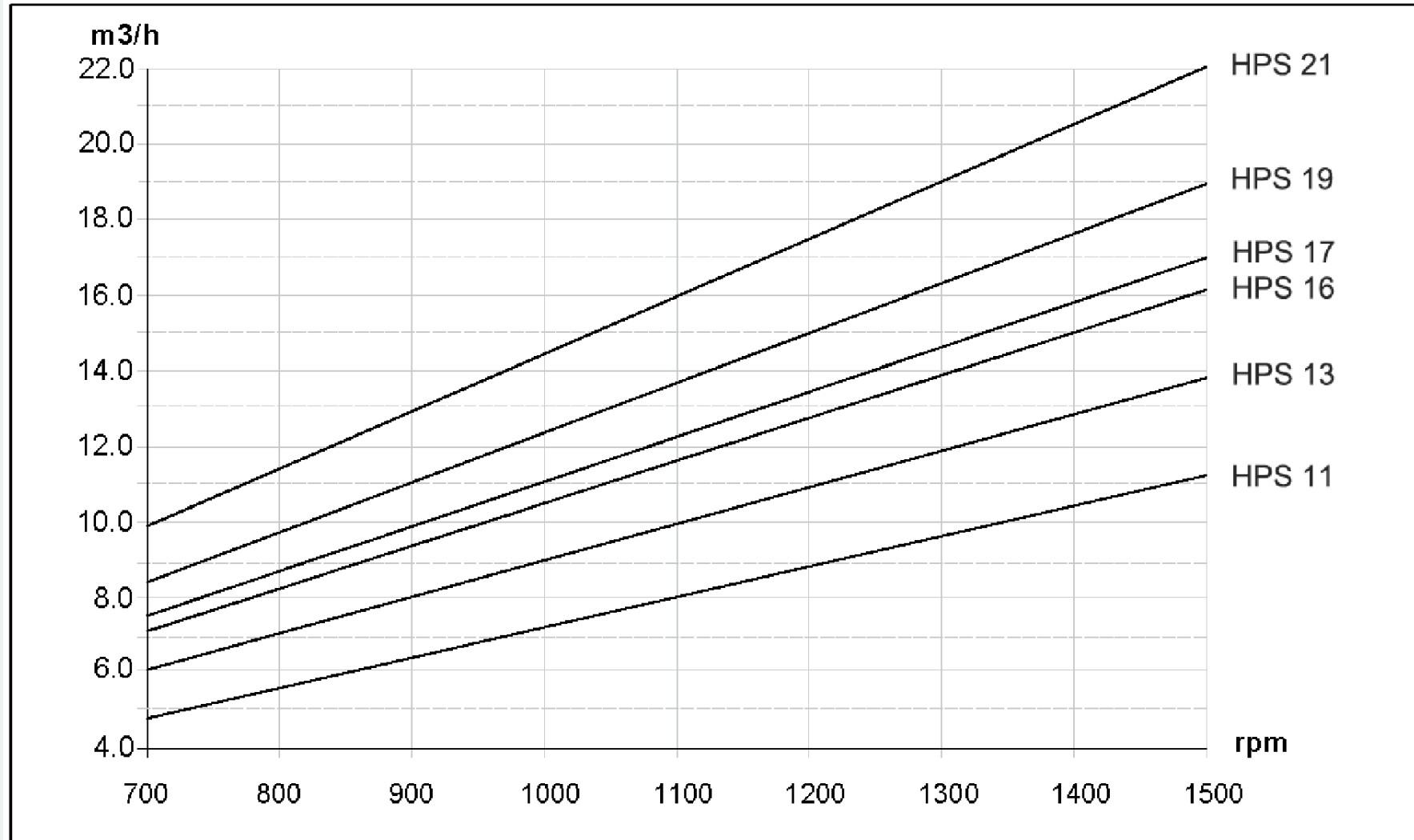
** Sound Pressure Level: Calculated according to EN ISO 3744: 2010 / dB(A) [LPA, 1m], when driven by a motor and operating at maximum working pressure and speed.

Installation Dimensions (HPS 16~21)



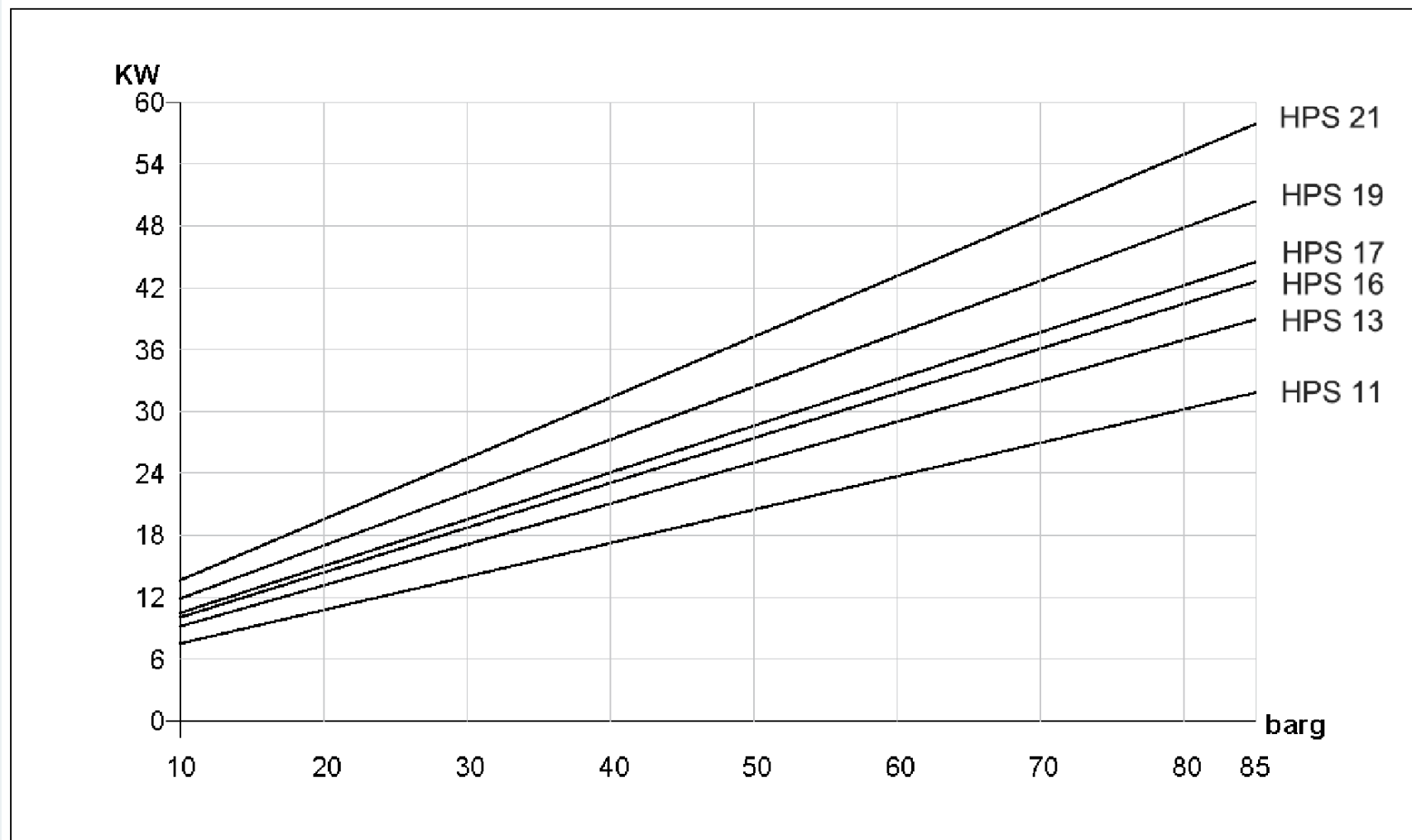
Parallel Key	10*8*45 (DIN6885)
Bleed	G 1/4" * 4
Inlet Port	M52*1.5; Depth 22mm
Outlet Port	M42*1.5; Depth 22mm
Earth Conn.	M8; Depth 8mm
Thermal Sensor	M6; Depth 8mm

HPS 16~21 Typical Flow Curve at Maximum Pressure

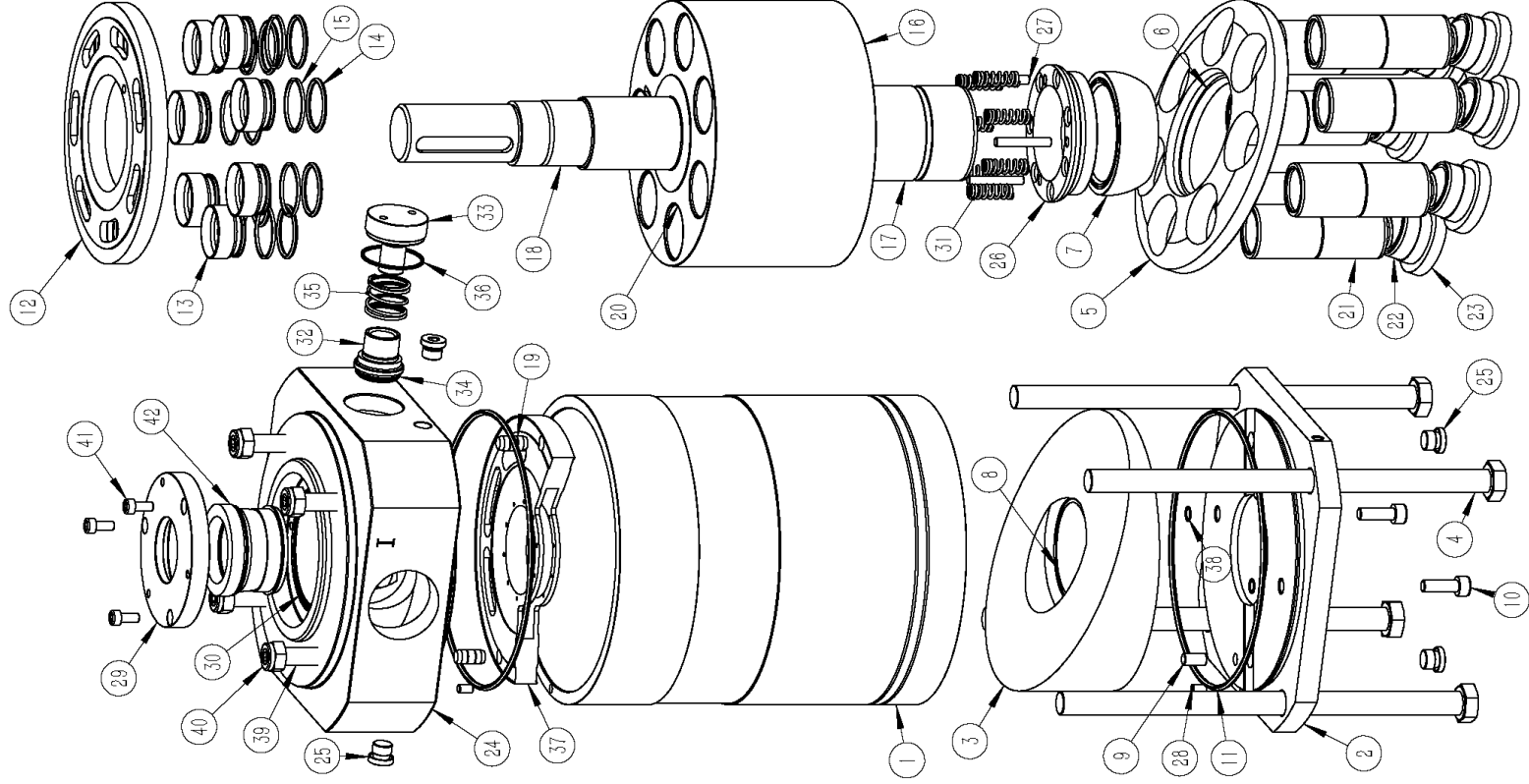
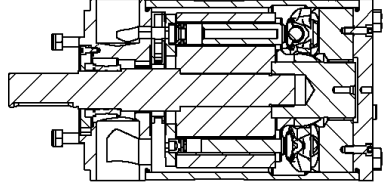


HPS 16~21 Motor Power Curve

Different Pressures at Maximum Speed



Drawing - HPS 16~21



No.	Parts	Material	Qty
1	Body	2205	1
2	Bottom Cover	2205	1
3	Swash Plate-81	2507	1
4	Hexagon Screw	316L	4
5	Return Plate	2507	1
6	Return Plate Sleeve	PEEK	1
7	Ball Joint	2507	1
8	Main Shaft Bearing-1	PEEK	1
9	Round Pin 8-16	2507	2
10	Internal Hexagon Screw M8-25	316	2
11	O-Ring 185-3.55	NBR	2
12	Pressure Relief Valve Plate	2507	1
13	Valve Plate Guide Sleeve	2507	7
14	O-Ring 31-3.0-90	NBR	2
15	Guide Seal Ring	PTFE	7
16	Piston Cylinder	2507	1
17	Main Shaft Extension Shaft	2507	1
18	Main Shaft-22	2507	1
19	Round Pin 10-20	2507	3
20	Piston Bushing	PEEK	7
21	Piston	2507	7
22	Slipper	2507	7
23	Slipper PEEK	PEEK	7
24	Connection Flange 22	2507	1
25	ED Hex Plug G1-4	2205	4
26	Ball Joint Gasket	2507	1
27	Round Pin 6-40	2507	3
28	Round Pin 6-10	2507	2
29	Shaft Seal Cover	2205	1
30	O-Ring 81-2.5	NBR	1
31	Return Plate Spring	2507	7
32	Flushing Valve Core	2507	1
33	Flushing Valve	2205	1
34	O-Ring 25-3.0	NBR	1
35	Flushing Valve Spring	2507	1
36	O-Ring 39.5-2.0	NBR	1
37	Distribution Plate	PEEK	1
38	O-Ring 8.0-1.0	NBR	2
39	Internal Hexagon Screw M12-60	316	4
40	Anti-Loose Nut M12	316	4
41	Internal Hexagon Screw M6-14	316	3
42	Mechanical Seal	NBR	1