

Axial Piston High Pressure Pump For Seawater

HPS 1.5~3.5

THINKTANK



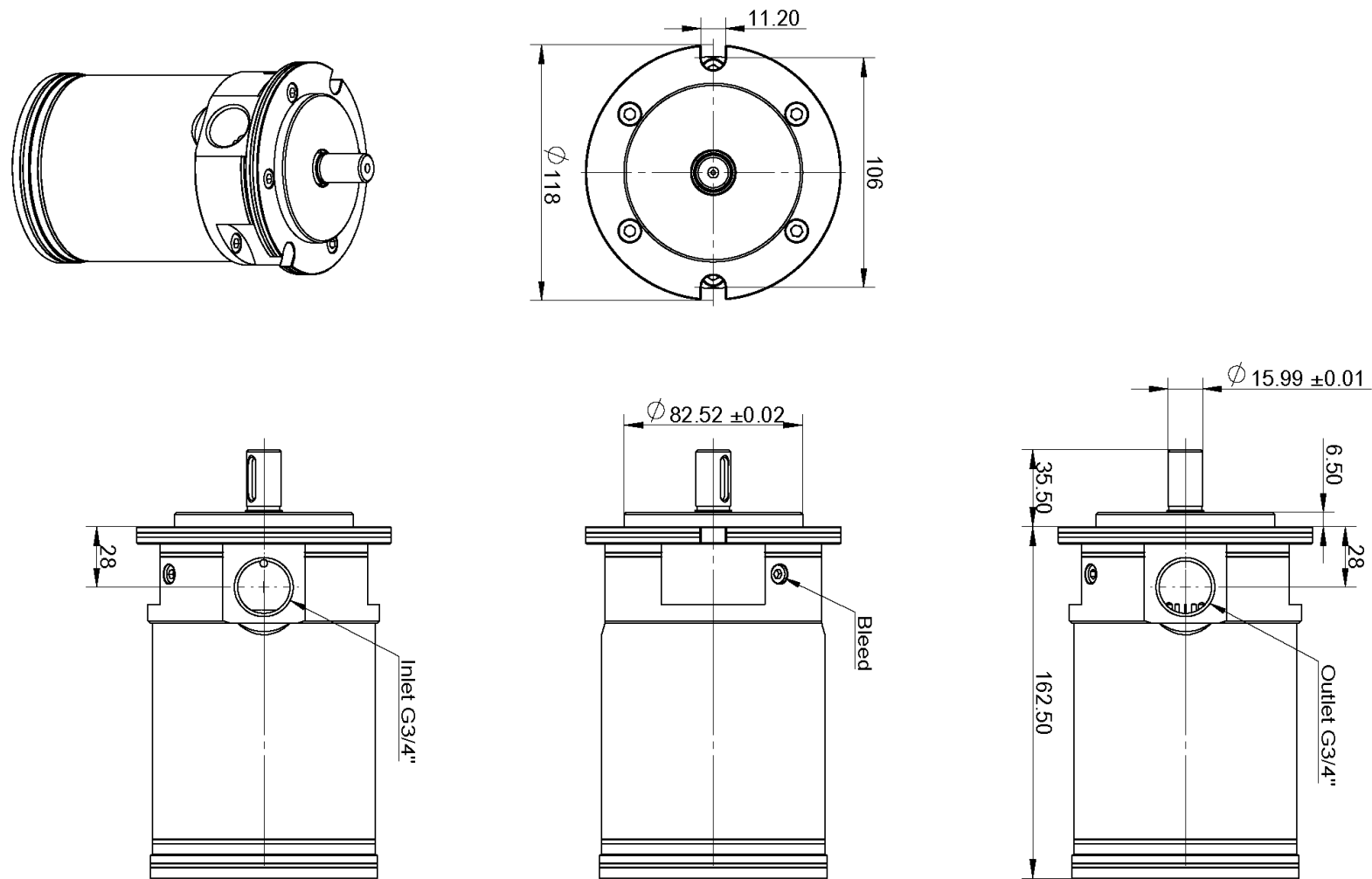
Specification - HPS 1.5~3.5

Pumps Model	1.5	1.8	2.2	2.5	3.0	3.5
Code Number	TT010200204	TT010200205	TT010200206	TT010200207	TT010200208	TT010200209
Displacement (cc/rev)	9.34	10.21	12.75	15.4	17.85	21.56
Housing Material	2205	2205	2205	2205	2205	2205
Min. Outlet Pressure (barg)	20	20	20	20	20	20
Max. Outlet Pressure (barg)	85	85	85	85	85	85
Inlet Pressure Continuous (barg)	0.5-5	0.5-5	0.5-5	0.5-5	0.5-5	0.5-5
Min. Speed,Continuous (rpm)	700	700	700	700	700	700
Max. Speed * (rpm)	3500	3500	3500	3000	3500	3000
Flow Rate (m³/H) (85barg,700 rpm)	0.3	0.34	0.45	0.57	0.64	0.76
Flow Rate(m³/H) (85barg,1000 rpm)	0.54	0.58	0.75	0.90	1.03	1.24
Flow Rate(m³/H) (85barg,1200 rpm)	0.58	0.64	0.84	1.03	1.18	1.39
Flow Rate (m³/H) (85barg,1500 rpm)	0.80	0.87	1.10	1.34	1.55	1.88
Flow Rate (m³/H) (85barg,1800 rpm)	0.92	1.0	1.27	1.58	1.80	2.11
Flow Rate (m³/H) (85barg,2500 rpm)	1.31	1.42	1.80	2.22	2.55	2.98
Flow Rate (m³/H) (85barg,3000 rpm)	1.60	1.73	2.18	2.68	3.07	3.58
Flow Rate (m³/H) (85barg,3500 rpm)	1.84	1.99	2.52		3.56	
Calculation Factor (at maximum speed)	519	524	532	535	532	530
Motor selection (KW) (Maximum pressure, maximum speed)	5.5	5.5	7.5	7.5	11	11
Media temperature (°C)	2~50	2~50	2~50	2~50	2~50	2~50
Sound Pressure Level (dB) **	78	78	78	78	78	78
Weight (kg)	8.5	8.5	8.5	8.5	8.5	8.5
Integrated Flush Valve	YES	YES	YES	YES	YES	YES

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

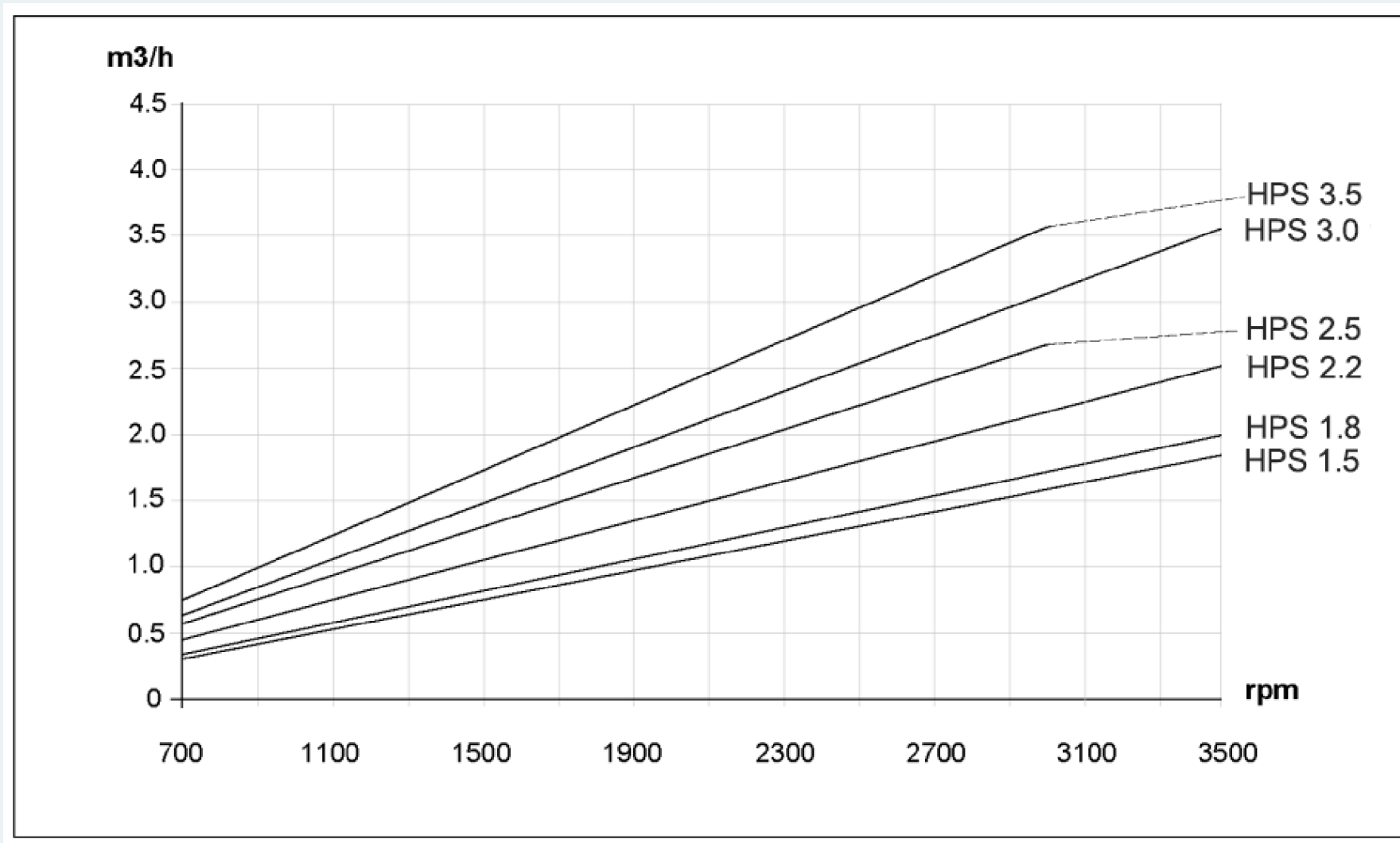
** Sound Pressure Level: Calculated according to EN ISO 3744: 2010 / dB(A) [LPA, 1m], when driven by a motor and operating at maximum working pressure and speed.

Installation Dimensions (HPS 1.5~3.5)



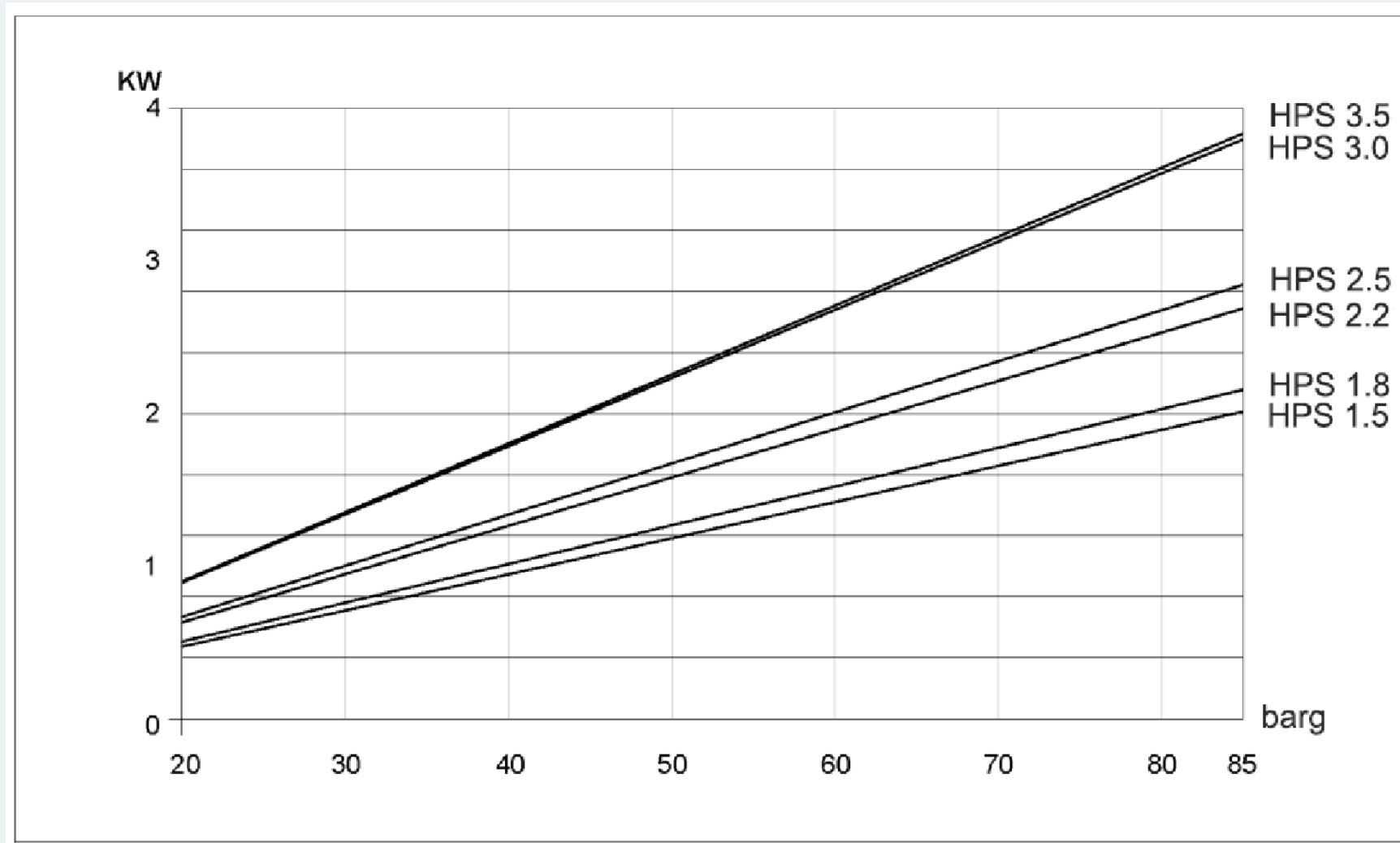
Parallel Key	5*5*20 (DIN6885)
Bleed	M5*8
Inlet Port	G 3/4" (T Port)
Outlet Port	G 3/4" (P Port)

HPS 1.5~3.5 Typical Flow Curve at Maximum Pressure

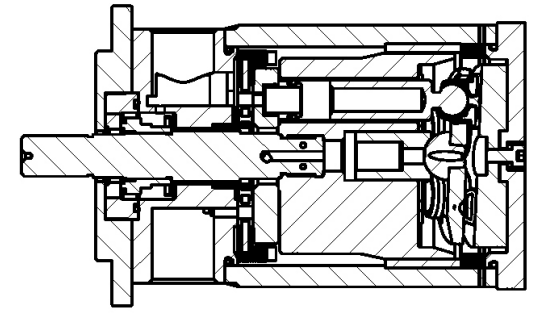
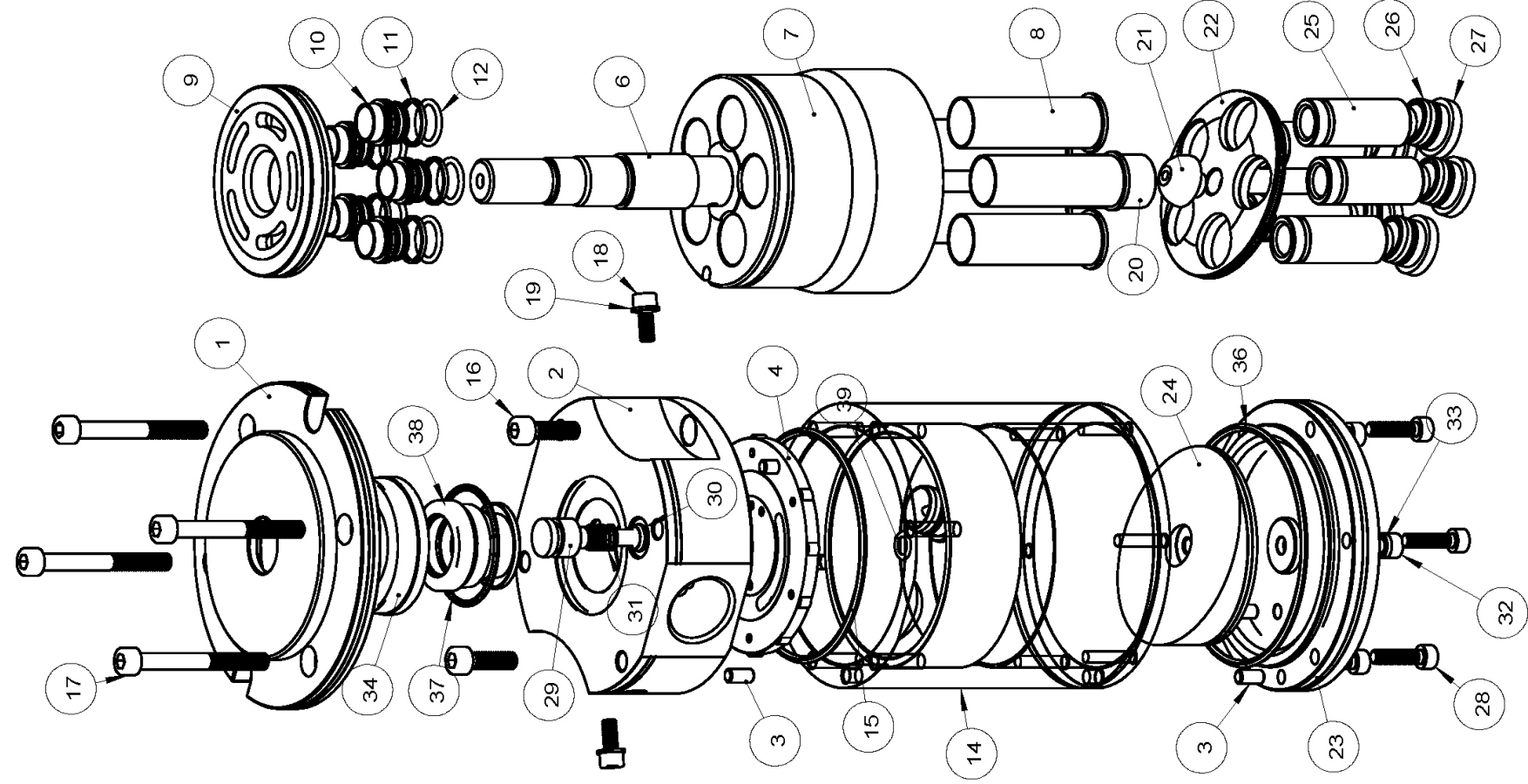


HPS 1.5~3.5 Motor Power Curve

Different Pressures at Maximum Speed



Drawing - HPS 1.5~3.5



No.	Parts	1.5-2.5	3.0-3.5	Material
1	Mounting Flange-63	1	1	316L
2	Connection Flange	1	1	2507
3	Round Pin 5-10	5	5	PEEK
4	Distribution Plate	1	1	PEEK
5	Distribution Plate with Iron Core	1	1	2205
6	Main Shaft	1	1	2507
7	Piston Cylinder	1	1	2507
8	Piston Bushing	5	7	PEEK
9	Valve Plate	1	1	2507
10	Valve Plate Guide Sleeve	5	7	2507
11	Guide Seal Ring	5	7	PTFE
12	Guide O-Ring	5	7	NBR
13	Small Bearing	1	1	PEEK
14	Housing	1	1	2205
15	Large Bearing	1	1	PEEK
16	Internal Hexagon Screw M6 x 20	2	2	316
17	Internal Hexagon Screw M6 x 55	4	4	316
18	Internal Hexagon Screw M5 x 12	2	2	316
19	PTFE Gasket	2	2	PTFE
20	Ball Joint Block	1	1	PEEK
21	Ball Joint	1	1	2507
22	Return Plate	1	1	2507
23	Bottom Cover	1	1	316L
24	12.5cc Swash Plate	1	1	2507
25	Piston	5	7	2507
26	Slipper 304	5	7	2507
27	Slipper PEEK	5	7	PEEK
28	Internal Hexagon Screw M5 x 20	6	6	316
29	Single Valve End Cap	1	1	2205
30	Single Valve Core	1	1	PEEK
31	Spring	1	1	2507
32	Internal Hexagon Screw M5-10	1	1	316L
33	M5 Combined Gasket	1	1	304
34	Mechanical Seal Seat	1	1	PTFE
35	O-Ring 80-2.5	1	1	NBR
36	O-Ring 83-2.5	1	1	NBR
37	O-Ring 40-2.0	1	1	NBR
38	Mechanical Seal	1	1	NBR
39	Spring	1	1	2507