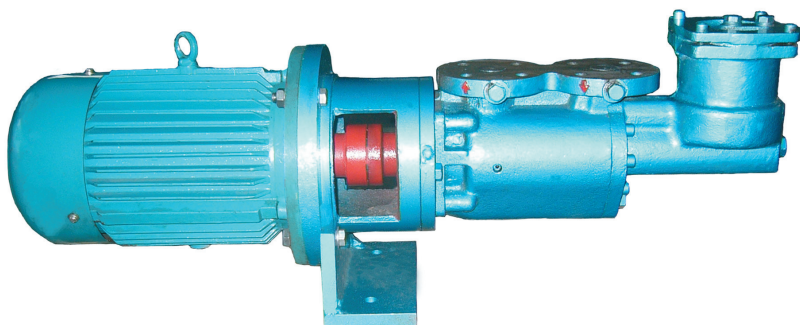


# SPF 系列三螺杆泵

## Type Three-Spindle Screw Pump



### 1.用途

适于输送燃料油,润滑油,液压油或其它润滑性液体,所输送介质中不得含有任何磨料颗粒和对泵材料有腐蚀性的物质。

### 2.主要应用范围

SPF 系列泵在燃油系统中用作输送,增压及燃油炉的燃油泵;在输油系统中可用作传输及加油泵;在一切工业领域中皆可用作润滑油泵,此外,也可用于各种液压传动装置中的液压泵。

### 3.结构

SPF 泵为内置轴承自吸三螺杆泵,经硬化处理的螺杆,装在一可更换的衬套内运转。主杆采用液压平衡,从杆的轴向力支撑在后盖上。并由液压力驱动旋转。因而螺杆型面仅传递液压扭矩,并不受力,也无磨损,对全部传动零件而言,均由被输送介质润滑。

主杆的径向由平衡活塞定位,且借助于平衡活塞和轴套的间隙使高压腔和密封腔分开,在密封腔内装有机机械密封,腔内的油液回油孔与泵的吸入腔相通,因而不受排出压力的影响。

泵由支架、联轴器与电机联接和驱动,(如规格 20 型),亦可壁式安装(如规格 40 型)。

### 4.运转

由特殊型线构成的螺旋型面的主动螺杆转动时,其动密封腔室将把液体由吸入口吸入并沿轴向连续、无脉动的输送到排出口。

### 5.噪音/脉动

螺杆泵的结构和运转的稳定性,保证了泵的低噪音和无脉动。

### 1.Use

For the delivery of fuel oils,lube oils,hydraulic oils or other lubricating liquids. The delivery media must not contain any abrasive particles nor chemically attack the pump materials.

### 2.Main fields of application

SPF pumps operate as transfer, booster and burner operation pumps in fuel oil engineering, as transfer and filling pumps in tank farms as well as lube-oil pumps in any industrial branches.They are moreover used for pressure generation in oil-hydraulic plants of all kinds.

### 3.Design

Self-priming three-screw type of pump with internal bearing. The hardened and ground screws run in an exchangeable casing insert.

The driving screw is hydraulically balanced. The axial thrust of the working screw is absorbed by the endside pump cover Their drive is hydraulic.The thread flanks merely transmit the torque resulting from the liquid friction.Thus,the thread flanks are practically stress-free and not subject to any wear. All sliding parts are lubricated by the delivery medium being within the range of full liquid friction.

The radial and axial bearing of the driving screw is by the balancing piston guided in the bearing ring. Simultaneously, the gap between balancing piston and bearing rings separates the pressure chamber from the sealing chamber. A maintenance-free mechanical seal is provided as the shaft sealing.

Sealing chamber and suction chamber are interconnected by way of a return gallery. Thus, independently of the delivery pressure at the shaft sealing, only the suction pressure becomes effective.

Complete units being supplied, the connection pump/driving motor is by a pump connector with bracket (sizes 20) or by a wall/foot bracket resp. (size 40)

### 4.Operation

Owing to a special profiling of the thread flanks,the three screws from sealed chambers the contents of which are axially and completely continuously shifted from the suction to the pump side of the pump as the screws turn. There will be no turbulence in spite of the screw rotation. The constant chamber volume excludes squeezing.

### 5.Noise/pulsation

The structural design and operation of the screw pump ensure a very low noise level and almost pulsation-free delivery.



# SPF 系列三螺杆泵

## Type Three-Spindle Screw Pump

SPF20 规格性能参数表 Performance table Data for Size 20

转速 转/分 speed r/min	泵规格 pump size	压力 兆帕 Delivery pressure MPa	运动粘度 mm <sup>2</sup> /s 或恩氏粘度 (° E) Kinematic viscosity mm <sup>2</sup> /s (° E)															
			3 (1.2)		6 (1.5)		12 (2)		40 (5)		75 (10)		150 (20)		380 (50)		750 (100)	
			流量 Q 升/分 L/min	轴功率 P 升瓦 KW	流量 Q 升/分 L/min	轴功率 P 升瓦 KW	流量 Q 升/分 L/min	轴功率 P 升瓦 KW	流量 Q 升/分 L/min	轴功率 P 升瓦 KW	流量 Q 升/分 L/min	轴功率 P 升瓦 KW	流量 Q 升/分 L/min	轴功率 P 升瓦 KW	流量 Q 升/分 L/min	轴功率 P 升瓦 KW	流量 Q 升/分 L/min	轴功率 P 升瓦 KW
2900	20-38	0.5	28.1	0.48	28.9	0.48	29.4	0.48	29.9	0.48	30.1	0.56	30.2	0.70	30.3	0.96	30.4	1.24
		1.0	26.2	0.73	27.6	0.73	28.4	0.73	29.4	0.73	29.7	0.81	30.0	0.95	30.2	1.21	30.3	1.49
		1.5	24.4	0.98	26.4	0.98	27.5	0.98	28.9	0.98	29.4	1.06	29.7	1.20	30.0	1.46	30.2	1.74
		2.0	22.6	1.23	25.3	1.23	26.7	1.23	28.4	1.23	29.0	1.31	29.5	1.45	29.9	1.71	30.1	1.99
		2.5	21.0	1.48	24.2	1.48	25.9	1.48	27.9	1.48	28.7	1.56	29.2	1.70	29.7	1.96	30.0	2.24
		3.0	19.4	1.73	23.1	1.73	25.1	1.73	27.5	1.73	28.4	1.81	29.0	1.95	29.6	2.21	29.9	2.49
		3.5	17.8	1.98	22.1	1.98	24.3	1.98	27.1	1.98	28.1	2.06	28.8	2.20	29.5	2.46	29.8	2.74
		4.0	16.3	2.23	21.0	2.23	23.6	2.23	26.7	2.23	27.8	2.31	28.6	2.45	29.3	2.71	29.7	2.99
	20-46	0.5	37.4	0.56	38.4	0.56	38.9	0.56	39.5	0.56	39.8	0.64	39.9	0.78	40.1	1.04	40.2	1.32
		1.0	35.0	0.89	36.8	0.89	37.7	0.89	38.9	0.89	39.3	0.97	39.6	1.11	39.9	1.37	40.0	1.65
		1.5	32.8	1.22	35.3	1.22	36.7	1.22	38.3	1.22	38.9	1.30	39.3	1.44	39.7	1.70	39.3	1.98
		2.0	30.7	1.55	33.9	1.55	35.6	1.55	37.7	1.55	38.5	1.63	39.0	1.77	39.5	2.03	39.8	2.31
		2.5	28.6	1.88	32.5	1.88	34.6	1.88	37.2	1.88	38.1	1.96	38.7	2.10	39.4	2.36	39.6	2.64
		3.0	26.7	2.21	31.2	2.21	33.7	2.21	36.6	2.21	37.7	2.29	38.5	2.43	39.2	2.69	39.5	2.97
		3.5	24.8	2.54	29.9	2.54	32.8	2.54	36.1	2.54	37.3	2.62	38.2	2.76	39.0	3.02	39.4	3.30
		4.0	22.9	2.87	28.7	2.87	31.8	2.87	35.6	2.87	37.0	2.95	38.0	3.09	38.9	3.35	39.3	3.63
	20-56	0.5	52.5	0.69	53.8	0.69	54.5	0.69	55.3	0.69	55.6	0.77	55.8	0.91	56.0	1.17	56.1	1.45
		1.0	49.4	1.15	51.7	1.15	53.0	1.15	54.5	1.15	55.0	1.23	55.4	1.37	55.8	1.63	55.9	1.91
		1.5	46.6	1.61	49.8	1.61	51.6	1.61	53.7	1.61	54.5	1.69	55.0	1.84	55.5	2.09	55.8	2.37
		2.0	43.9	2.07	48.0	2.07	50.3	2.07	52.9	2.07	53.9	2.15	54.6	2.30	55.3	2.55	55.6	2.83
		2.5	41.3	2.53	46.3	2.53	49.0	2.53	52.2	2.53	53.4	2.62	54.3	2.76	55.1	3.01	55.4	3.29
		3.0	38.7	2.99	44.6	2.99	47.8	2.99	51.5	2.99	52.9	3.08	53.9	3.22	54.9	3.47	55.3	3.76
		3.5			43.0	3.45	46.6	3.45	50.9	3.45	52.5	3.54	53.6	3.68	54.6	3.93	55.1	4.22
		4.0			41.4	3.91	45.4	3.91	50.2	3.91	52.0	4.00	53.3	4.14	54.4	4.39	55.0	4.68
1450	20-38	0.5	12.8	0.21	13.6	0.21	14.1	0.21	14.6	0.21	14.8	0.24	14.9	0.29	15.0	0.38	15.1	0.48
		1.0	10.9	0.33	12.3	0.33	13.1	0.33	14.1	0.33	14.4	0.36	14.7	0.41	14.9	0.50	15.0	0.60
		1.5	9.1	0.46	11.1	0.46	12.2	0.46	13.6	0.46	14.1	0.49	14.4	0.54	14.7	0.63	14.9	0.73
		2.0	7.3	0.58	10.0	0.58	11.4	0.58	13.1	0.58	13.7	0.61	14.2	0.66	14.6	0.75	14.8	0.85
		2.5	5.7	0.71	8.9	0.71	10.6	0.71	12.6	0.71	13.4	0.74	13.9	0.79	14.4	0.88	14.7	0.98
		3.0	4.1	0.83	7.8	0.83	9.8	0.83	12.2	0.83	13.1	0.86	13.7	0.91	14.3	1.00	14.6	1.10
		3.5			6.8	0.96	9.0	0.96	11.8	0.96	12.8	0.99	13.5	1.04	14.2	1.13	14.5	1.23
		4.0			5.7	1.08	8.3	1.08	11.4	1.08	12.5	1.11	13.3	1.16	14.0	1.25	14.4	1.35
	20-46	0.5	17.2	0.25	18.2	0.25	18.7	0.25	19.3	0.25	19.6	0.28	19.7	0.33	19.9	0.42	20.0	0.52
		1.0	14.8	0.41	16.6	0.41	17.5	0.41	18.7	0.41	19.1	0.44	19.4	0.49	19.7	0.58	19.8	0.68
		1.5	12.6	0.58	15.1	0.58	16.5	0.58	18.1	0.58	18.7	0.61	19.1	0.66	19.5	0.75	19.7	0.85
		2.0	10.5	0.74	13.7	0.74	15.4	0.74	17.5	0.74	18.3	0.77	18.8	0.82	19.3	0.91	19.6	1.01
		2.5	8.4	0.91	12.3	0.91	14.4	0.91	17.0	0.91	17.9	0.94	18.5	0.99	19.2	1.08	19.4	1.18
		3.0	6.5	1.07	11.0	1.07	13.5	1.07	16.4	1.07	17.5	1.10	18.3	1.15	19.0	1.24	19.3	1.34
		3.5			9.7	1.24	12.6	1.24	15.9	1.24	17.1	1.27	18.0	1.32	18.8	1.41	19.2	1.51
		4.0			8.5	1.40	11.6	1.40	15.4	1.40	16.8	1.43	17.8	1.48	18.7	1.57	19.1	1.67
	20-56	0.5	24.3	0.31	25.6	0.31	26.3	0.31	27.1	0.31	27.4	0.34	27.6	0.39	27.8	0.48	27.9	0.58
		1.0	21.2	0.54	23.5	0.54	24.8	0.54	26.3	0.54	26.8	0.57	27.2	0.62	27.6	0.71	27.7	0.81
		1.5	18.4	0.77	21.6	0.77	23.4	0.77	25.5	0.77	26.3	0.80	26.8	0.85	27.3	0.94	27.6	1.04
		2.0	15.7	1.00	19.8	1.00	22.1	1.00	24.7	1.00	25.7	1.03	26.4	1.08	27.1	1.17	27.4	1.27
		2.5			18.1	1.23	20.8	1.23	24.0	1.23	25.2	1.26	26.1	1.31	26.9	1.40	27.2	1.50
		3.0			16.4	1.46	19.6	1.46	23.3	1.46	24.7	1.49	25.7	1.54	26.7	1.63	27.1	1.73
		3.5							22.7	1.69	24.3	1.72	25.4	1.77	26.4	1.86	26.9	1.96
		4.0							22.0	1.92	23.8	1.95	25.1	2.00	26.2	2.09	26.8	2.19

△灰色为不推荐区 The area of this color is not recommend able.



# SPF 系列三螺杆泵

## Type Three-Spindle Screw Pump

SPF40 规格性能参数表 Performance table Data for Size 40

转速 转/分 speed r/min	泵规格 pump size	压力 兆帕 Delivery pressure MPa	运动粘度 mm <sup>2</sup> /s 或恩氏粘度 (° E) Kinematic viscosity mm <sup>2</sup> /s (° E)															
			3 (1.2)		6 (1.5)		12 (2)		40 (5)		75 (10)		150 (20)		380 (50)		750 (100)	
			流量 Q 升/分 L/min	轴功率 P 升瓦 KW	流量 Q 升/分 L/min	轴功率 P 升瓦 KW	流量 Q 升/分 L/min	轴功率 P 升瓦 KW	流量 Q 升/分 L/min	轴功率 P 升瓦 KW	流量 Q 升/分 L/min	轴功率 P 升瓦 KW	流量 Q 升/分 L/min	轴功率 P 升瓦 KW	流量 Q 升/分 L/min	轴功率 P 升瓦 KW	流量 Q 升/分 L/min	轴功率 P 升瓦 KW
1750	20-38	0.5	15.9	0.26	16.7	0.26	17.1	0.26	17.6	0.26	17.9	0.29	18.0	0.36	18.1	0.48	18.2	0.61
		1.0	13.9	0.41	15.4	0.41	16.2	0.41	17.1	0.41	17.5	0.44	17.6	0.51	17.9	0.63	18.0	0.76
		1.5	12.1	0.56	14.2	0.56	15.3	0.56	16.6	0.56	17.1	0.59	17.5	0.66	17.8	0.78	17.9	0.91
		2.0	10.4	0.71	13.0	0.71	14.5	0.71	16.2	0.71	16.8	0.74	17.2	0.81	17.6	0.93	17.8	1.06
		2.5	8.7	0.86	11.9	0.86	13.7	0.86	15.7	0.86	16.5	0.89	17.0	0.96	17.5	1.08	17.7	1.21
		3.0	7.1	1.01	10.9	1.01	12.9	1.01	15.3	1.01	16.2	1.04	16.8	1.11	17.3	1.23	17.6	1.36
		3.5	5.6	1.16	9.8	1.16	12.1	1.16	14.8	1.16	15.8	1.19	16.6	1.26	17.2	1.38	17.5	1.51
		4.0	4.1	1.31	8.8	1.31	11.4	1.31	14.4	1.31	15.6	1.34	16.4	1.41	17.1	1.53	17.4	1.66
	20-46	0.5	21.2	0.30	22.2	0.30	22.7	0.30	23.4	0.30	23.6	0.34	23.8	0.14	23.9	0.53	24.0	0.66
		1.0	18.8	0.50	20.6	0.50	21.6	0.50	22.7	0.50	23.2	0.54	23.5	0.61	23.7	0.72	23.9	0.86
		1.5	16.6	0.70	19.1	0.70	20.5	0.70	22.1	0.70	22.7	0.74	23.2	0.80	23.5	0.92	23.7	1.05
		2.0	14.5	0.90	17.7	0.90	19.5	0.90	21.5	0.90	22.3	0.94	22.9	1.00	23.4	1.12	23.6	1.25
		2.5	12.5	1.10	16.4	1.10	18.5	1.10	21.0	1.10	21.9	1.14	22.6	1.20	23.2	1.32	23.5	1.45
		3.0	10.5	1.29	15.1	1.29	17.5	1.29	20.5	1.29	21.5	1.33	22.3	1.40	23.0	1.52	23.4	1.65
		3.5			13.8	1.49	16.6	1.49	19.9	1.49	21.2	1.53	22.0	1.60	22.9	1.72	23.2	1.85
		4.0			12.5	1.69	15.7	1.69	19.4	1.69	20.8	1.73	21.8	1.80	22.7	1.91	23.1	2.04
	20-56	0.5	30.0	0.38	31.2	0.38	31.9	0.38	32.7	0.38	33.1	0.42	33.3	0.49	33.5	0.61	33.6	0.74
		1.0	26.9	0.66	29.2	0.66	30.4	0.66	31.9	0.66	32.5	0.70	32.8	0.76	33.2	0.88	33.4	1.01
		1.5	24.0	0.93	27.3	0.93	29.0	0.93	31.1	0.93	31.9	0.97	32.5	1.04	33.0	1.16	33.2	1.29
		2.0	21.3	1.21	25.5	1.21	27.7	1.21	30.4	1.21	31.4	1.25	32.1	1.32	32.7	1.43	33.0	1.57
		2.5			23.7	1.49	26.5	1.49	29.7	1.49	30.9	1.53	31.7	1.59	32.5	1.71	32.9	1.84
		3.0			22.1	1.76	25.2	1.76	29.0	1.76	30.4	1.80	31.4	1.87	32.3	1.99	32.7	2.12
		3.5							28.3	2.04	29.9	2.08	31.0	2.15	32.1	2.26	32.6	2.40
		4.0							27.7	2.32	29.4	2.36	30.7	2.42	31.9	2.54	32.4	2.67
1140	20-38	0.5	9.5	0.15	10.4	0.15	10.8	0.15	11.3	0.15	11.5	0.17	11.7	0.21	11.8	0.27	11.8	0.34
		1.0	7.6	0.25	9.1	0.25	9.8	0.25	10.8	0.25	11.1	0.27	11.4	0.31	11.6	0.37	11.7	0.44
		1.5	5.8	0.35	7.8	0.35	9.0	0.35	10.3	0.35	10.8	0.37	11.1	0.41	11.4	0.47	11.6	0.54
		2.0	4.1	0.45	6.7	0.45	8.1	0.45	9.8	0.45	10.5	0.47	10.9	0.50	11.3	0.57	11.5	0.64
		2.5	2.4	0.55	5.6	0.55	7.3	0.55	9.4	0.55	10.1	0.57	10.7	0.60	11.2	0.67	11.4	0.74
		3.0			4.5	0.65	6.5	0.65	8.9	0.65	9.8	0.67	10.5	0.70	11.0	0.76	11.3	0.83
		3.5			3.5	0.74	5.8	0.74	8.5	0.74	9.5	0.76	10.2	0.80	10.9	0.86	11.2	0.93
		4.0			2.5	0.84	5.0	0.84	8.1	0.84	9.2	0.86	10.0	0.90	10.7	0.96	11.1	1.03
	20-46	0.5	12.9	0.19	13.8	0.19	14.4	0.19	15.0	0.19	15.3	0.21	15.4	0.24	15.6	0.30	15.7	0.37
		1.0	10.5	0.32	12.2	0.32	13.2	0.32	14.4	0.32	14.8	0.34	15.1	0.37	15.4	0.43	15.5	0.50
		1.5	8.2	0.45	10.8	0.45	12.1	0.45	13.8	0.45	14.4	0.47	14.8	0.50	15.2	0.56	15.4	0.63
		2.0	6.1	0.57	9.4	0.57	11.1	0.57	13.2	0.57	14.0	0.60	14.5	0.63	15.0	0.69	15.2	0.76
		2.5	4.1	0.70	8.0	0.70	10.1	0.70	12.6	0.70	13.6	0.73	14.2	0.76	14.8	0.82	15.1	0.89
		3.0			6.7	0.83	9.2	0.83	12.1	0.83	13.2	0.86	14.0	0.89	14.7	0.95	15.0	1.02
		3.5					8.2	0.96	11.6	0.96	12.8	0.99	13.7	1.02	14.5	1.08	14.9	1.15
		4.0					7.3	1.09	11.1	1.09	12.5	1.11	13.4	1.15	14.3	1.21	14.8	1.28
	20-56	0.5	18.3	0.24	19.6	0.24	20.3	0.24	21.1	0.24	21.4	0.26	21.6	0.29	21.8	0.36	21.9	0.43
		1.0	15.2	0.42	17.5	0.42	18.8	0.42	20.2	0.42	20.8	0.44	21.2	0.47	21.5	0.54	21.7	0.61
		1.5	12.4	0.60	15.6	0.60	17.4	0.60	19.5	0.60	20.2	0.62	20.8	0.66	21.3	0.72	21.5	0.79
		2.0	9.7	0.78	13.8	0.78	16.1	0.78	18.7	0.78	19.7	0.80	20.4	0.84	21.1	0.90	21.4	0.97
		2.5					14.8	0.96	18.0	0.96	19.2	0.98	20.1	1.02	20.8	1.08	21.1	1.15
		3.0					13.6	1.14	17.3	1.14	18.7	1.16	19.7	1.20	20.6	1.26	21.1	1.33
		3.5							16.6	1.32	18.2	1.34	19.4	1.38	20.4	1.44	20.9	1.51
		4.0							16.0	1.51	17.8	1.53	19.0	1.56	20.2	1.62	20.8	1.69

△灰色为不推荐区 The area of this color is not recommend able.



# SPF 系列三螺杆泵

## Type Three-Spindle Screw Pump

SPF40 规格性能参数表 Performance table Data for Size 40

转速 转/分 speed r/min	泵规格 pump size	压力 兆帕 Delivery pressure MPa	运动粘度 mm <sup>2</sup> /s 或恩氏粘度(° E) Kinematic viscosity mm <sup>2</sup> /s(° E)																
			3 (1.2)		6 (1.5)		12 (2)		40 (5)		75 (10)		150 (20)		380 (50)		750 (100)		
			流量 Q 升/分 L/min	轴功率 P 升瓦 KW	流量 Q 升/分 L/min	轴功率 P 升瓦 KW	流量 Q 升/分 L/min	轴功率 P 升瓦 KW	流量 Q 升/分 L/min	轴功率 P 升瓦 KW	流量 Q 升/分 L/min	轴功率 P 升瓦 KW	流量 Q 升/分 L/min	轴功率 P 升瓦 KW	流量 Q 升/分 L/min	轴功率 P 升瓦 KW	流量 Q 升/分 L/min	轴功率 P 升瓦 KW	
40-38	40-38	0.5	16.9	0.23	18.1	0.23	18.8	0.23	19.6	0.23	19.9	0.25	20.1	0.28	20.3	0.35	20.4	0.42	
		1.0	13.9	0.40	16.2	0.40	17.4	0.40	18.0	0.40	18.8	0.42	19.7	0.45	20.0	0.52	20.2	0.59	
		1.5	11.2	0.56	14.3	0.56	16.0	0.56	17.3	0.56	18.0	0.59	19.3	0.62	19.8	0.69	20.0	0.76	
		2.0	8.6	0.73	12.6	0.73	14.8	0.73	17.3	0.73	18.3	0.75	19.0	0.79	19.6	0.85	19.9	0.92	
		2.5	6.1	0.90	10.9	0.90	13.5	0.90	16.6	0.90	17.8	0.92	18.6	0.95	19.4	1.02	19.7	1.09	
		3.0			9.3	1.07	12.3	1.07	16.0	1.07	17.3	1.09	18.3	1.12	19.1	1.19	19.5	1.26	
		3.5			7.7	1.24	11.2	1.24	15.3	1.24	16.9	1.26	18.0	1.29	18.9	1.36	19.4	1.43	
		4.0			6.2	1.41	10.1	1.41	14.7	1.41	16.4	1.43	17.6	1.46	18.7	1.53	19.3	1.60	
	950	40-46	0.5	22.9	0.28	24.4	0.28	25.3	0.28	26.2	0.28	26.6	0.30	26.9	0.34	27.1	0.41	27.2	0.47
			1.0	19.3	0.51	22.0	0.51	23.5	0.51	25.2	0.51	25.9	0.53	26.4	0.56	26.8	0.63	27.0	0.70
			1.5	15.9	0.73	19.8	0.73	21.8	0.73	24.3	0.73	25.2	0.75	25.9	0.79	26.5	0.85	26.8	0.92
			2.0	12.7	0.96	17.6	0.96	20.3	0.96	23.4	0.96	24.6	0.98	25.5	1.01	26.2	1.08	26.6	1.15
			2.5			15.6	1.18	18.8	1.18	22.6	1.18	24.0	1.20	25.0	1.24	25.9	1.30	26.4	1.37
			3.0			13.6	1.41	17.3	1.41	21.8	1.41	23.5	1.43	24.6	1.46	25.7	1.53	26.2	1.60
			3.5					15.9	1.63	21.0	1.63	22.9	1.65	24.2	1.69	25.4	1.75	26.0	1.82
			4.0					14.5	1.86	20.2	1.86	22.3	1.88	23.8	1.91	25.2	1.98	25.8	2.05
	40-54	40-54	0.5	31.2	0.36	33.1	0.36	34.1	0.36	35.3	0.36	35.8	0.38	36.1	0.41	36.4	0.48	36.6	0.55
			1.0	26.6	0.66	30.0	0.66	31.9	0.66	34.1	0.66	34.9	0.68	35.5	0.72	36.0	0.78	36.3	0.85
			1.5	22.4	0.96	27.2	0.96	29.8	0.96	32.9	0.96	34.1	0.99	34.9	1.02	35.7	1.09	36.0	1.16
			2.0	18.4	1.27	24.5	1.27	27.9	1.27	31.8	1.27	33.3	1.29	34.4	1.32	35.3	1.39	35.8	1.46
			2.5			26.0	1.57	30.8	1.57	33.8	1.57	35.6	1.59	36.8	1.62	37.5	1.69	38.1	1.76
			3.0			24.2	1.87	29.8	1.87	33.8	1.87	36.1	1.89	37.5	1.92	38.1	1.99	38.8	2.06
			3.5					28.8	2.19	34.1	2.19	37.5	2.23	39.4	2.26	40.1	2.33	40.8	2.40
			4.0					27.8	2.50	33.4	2.50	36.8	2.54	38.1	2.57	39.4	2.64	40.1	2.71
3400	40-38	0.5	70.1	1.00	71.4	1.00	72.0	1.00	72.8	1.00	73.1	1.14	73.3	1.36	73.5	1.82	73.6	2.29	
		1.0	67.2	1.60	69.4	1.60	70.6	1.60	72.0	1.60	72.5	1.75	72.9	1.96	73.2	2.43	73.4	2.89	
		1.5	64.4	2.21	67.6	2.21	69.2	2.21	71.2	2.21	72.0	2.35	72.5	2.56	73.0	3.03	73.2	3.50	
		2.0	61.8	2.81	65.8	2.81	68.0	2.81	70.5	2.81	71.5	2.95	72.2	3.17	72.8	3.64	73.1	4.10	
		2.5	59.3	3.41	64.1	3.41	66.8	3.41	69.9	3.41	71.0	3.56	71.8	3.77	72.6	4.24	72.9	4.71	
		3.0	56.9	4.02	62.5	4.02	65.6	4.02	69.2	4.02	70.5	4.16	71.5	4.38	72.4	4.84	72.8	5.31	
		3.5	54.5	4.62	60.9	4.62	64.4	4.62	68.5	4.62	70.1	4.76	71.2	4.98	72.2	5.45	72.6	5.91	
		4.0	52.2	5.22	59.4	5.22	63.3	5.22	67.9	5.22	69.6	5.37	70.9	5.58	72.0	6.05	72.5	6.52	
	40-46	40-46	0.5	93.9	1.20	95.4	1.20	96.2	1.20	97.2	1.20	97.6	1.34	97.8	1.56	98.0	2.03	98.2	2.49
			1.0	90.2	2.00	93.0	2.00	94.4	2.00	96.2	2.00	96.9	2.15	97.3	2.36	97.7	2.83	97.9	3.30
			1.5	86.9	2.81	90.7	2.81	92.8	2.81	95.3	2.81	96.2	2.95	96.9	3.17	97.4	3.64	97.7	4.10
			2.0	83.7	3.61	88.6	3.61	91.2	3.61	94.4	3.61	95.6	3.76	96.4	3.97	97.2	4.44	97.5	4.91
			2.5	80.6	4.42	86.5	4.42	89.7	4.42	93.6	4.42	95.0	4.56	96.0	4.78	96.9	5.25	97.3	5.71
			3.0	77.6	5.22	84.5	5.22	88.3	5.22	92.7	5.22	94.4	5.37	95.6	5.58	96.7	6.05	97.2	6.52
			3.5	74.7	6.03	82.6	6.03	86.9	6.03	91.9	6.03	93.9	6.17	95.2	6.39	96.4	6.85	97.0	7.32
			4.0	71.8	6.83	80.7	6.83	85.5	6.83	91.2	6.83	93.3	6.98	94.8	7.19	96.2	7.66	96.8	8.13
	40-54	40-54	0.5	126.5	1.48	128.4	1.48	129.4	1.48	130.6	1.48	131.1	1.62	131.4	1.83	131.7	2.30	131.9	2.77
			1.0	121.9	2.56	125.3	2.56	127.2	2.56	129.4	2.56	130.2	2.70	130.8	2.92	131.3	3.38	131.6	3.85
			1.5	117.7	3.64	122.5	3.64	125.1	3.64	128.2	3.64	129.4	3.78	130.2	4.00	131.0	4.46	131.3	4.93
			2.0	113.7	4.72	119.8	4.72	123.2	4.72	127.1	4.72	128.6	4.86	129.7	5.08	130.6	5.54	131.1	6.01
			2.5	109.8	5.80	117.3	5.80	121.3	5.80	126.1	5.80	127.9	5.94	129.1	6.16	130.3	6.62	130.8	7.09
			3.0	106.0	6.88	114.7	6.88	119.5	6.88	125.1	6.88	127.1	7.02	128.6	7.24	130.0	7.71	130.6	8.17
			3.5			112.3	7.96	117.7	7.96	124.1	7.96	126.4	8.10	128.1	8.32	129.7	8.79	130.4	9.25
			4.0			109.9	9.04	115.9	9.04	123.1	9.04	125.7	9.18	127.6	9.40	129.3	9.87	130.2	10.33

△灰色为不推荐区 The area of this color is not recommend able.





# SPF 系列三螺杆泵

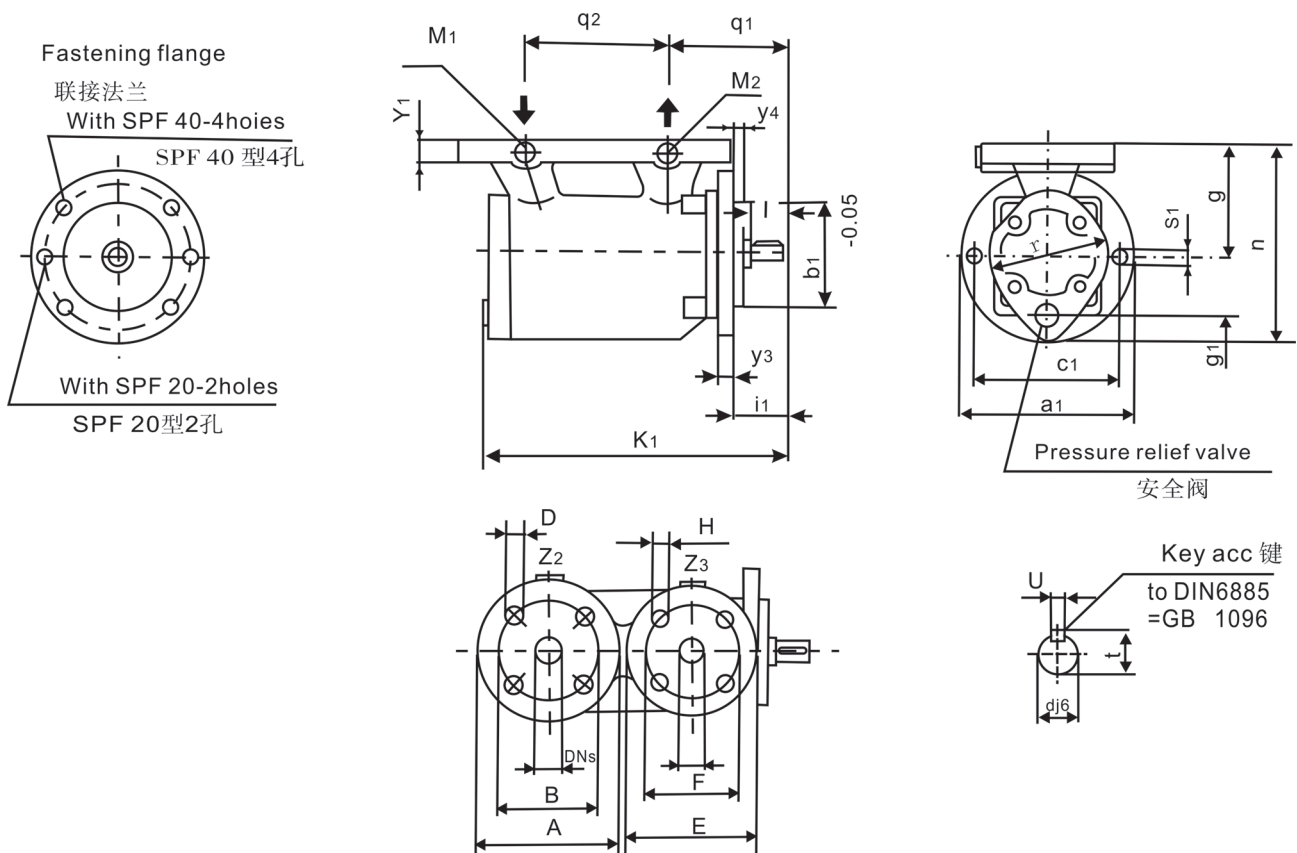
## Type Three-Spindle Screw Pump

必需气蚀余量(NPSHr):下面给出的数值用于输送不含气体的介质。不带滤器的泵,并不要求许用安全值。当使用带滤器的泵时,表中给出的 NPSH 值应增加 0.5 米。

NPSH rep.(m)The values as indicated apply to pumps without filter for air-free delivery media. A safety allowance is not required. when using pumps with filter. the indicated NPSH values are increased by 0.5m

pump size 泵规格	转速 Speed r/min																			
	950/1140					1450/1740					2900					3400				
	运动粘度 Kinematic viscosity mm <sup>2</sup> /s(° E)																			
	3-40 (1.2-5)	75 (10)	150 (20)	380 (50)	750 (100)	3-40 (1.2-5)	75 (10)	150 (20)	380 (50)	750 (100)	3-40 (1.2-5)	75 (10)	150 (20)	380 (50)	750 (100)	3-40 (1.2-5)	75 (10)	150 (20)	380 (50)	750 (100)
	必带汽蚀余量 NPSHr m(理想工况下)																			
20-38	2.5	2.8	2.9	3.0	3.2	2.5	2.8	2.9	3.1	3.3	2.5	3.0	3.2	3.5	3.8	2.6	3.1	3.4	3.7	4.0
20-46	2.5	2.8	2.9	3.1	3.3	2.5	2.9	3.1	3.3	3.5	2.7	3.2	3.5	3.9	4.2	2.9	3.4	3.8	4.1	4.5
20-56	2.5	2.9	3.0	3.3	3.5	2.5	3.1	3.3	3.6	3.9	3.2	3.8	4.1	4.5	4.9	3.5	4.1	4.5	5.0	5.5
40-38	2.5	2.8	2.9	3.1	3.3	2.5	2.9	3.1	3.3	3.5	3.7	3.2	3.5	3.8	4.1	2.8	3.4	3.7	4.0	4.4
40-46	2.5	2.8	3.0	3.2	3.4	2.6	3.0	3.3	3.5	3.8	3.0	3.6	4.0	4.3	4.7	3.3	4.0	4.3	4.7	5.2
40-54	2.5	3.0	3.2	3.4	3.6	2.7	3.3	3.6	3.9	4.2	3.6	4.3	4.7	5.1	5.6	4.1	4.8	5.3	5.8	6.4

泵的尺寸 不带过滤器的 SPF 型 Pump dimensions SPF without filter



旋转方向:从轴端看为顺时针

Sense of rotation: clockwise, as seen from the driving side

尺寸 (mm)Dimensions(mm)





