3系列/Group 3

3系列选型规则/Group 3 Ordering Code Rules

B	H	P	3	A0	D	20	C0	E0	省略/omit	省略/omit	省略/omit
博顿 Boden	材质 Material	功能 Function	系列 Group	前盖 Front cover	旋向 Rotation	排量 Displacement	轴伸 Shaft	泵体油口 Ports	特殊结构 Special structure	可选项 Options	其他 Other

材质 Material
- A 前、后盖材料为铝合金 Front and end cover material aluminum
- H 前、后盖材料为铸铁，压力比铝盖高 30bar。Front and end cover material cast iron, pressure 30 bar higher than aluminum covers

功能 Function
- P 泵 Pump
- M 马达 Motor

系列 Group
- 3 3系列 Group 3
- 3Y 3Y系列 Group3Y

旋向 Rotation
- D 顺时针转 Clockwise
- S 逆时针转 Counter clockwise
- R 可正反转 Reversible

排量 Displacement
20 / 22 / 26 / 33 / 39 / 46 / 50 / 52 / 55 / 63 / 71

其他 Other
特殊设计 special designing

可选项 Options
- 省略-温度范围在-10℃~+80℃,进油口最高绝对压力为3bar。 Omit-Range between -10℃ and +80℃,inlet pressure up to max. 3 bar absolute.
- V 适用于高温介质，温度范围在-10℃~+120℃。 Version suitable for fluid at hi-temperatures, range between -10℃ and +120℃.
- H 适用于低温介质，温度范围在-40℃~+80℃。 Version suitable for fluid at low-temperatures, range between -40℃ and +80℃.
- N 适用于进油口最大绝对压力3~10bar。 Version suitable for inlet pressure up to max. 3 and 10 bar absolute.

如需其它特殊选项请联系本公司工程师 For other special options, please contact our engineers.

前盖 Front cover

- A0 菱形前盖(止口φ101.6) Diamond front cover (centering φ101.6mm)
- A1 菱形前盖(止口φ100) Diamond front cover (centering φ100mm)
- B0 方形前盖（止口φ90) Square front cover (centering φ90mm)
- B1 方形前盖（止口φ50.8) Square front cover (centering φ50.8mm)
- B2 方形前盖（止口φ105) Square front cover (centering φ105mm)

详见 151 页 See page 151 for details

轴伸 Shaft

- T0 锥形键槽轴 1:8 Taper shaft 1:8
- T1 锥形键槽轴 1:5 Taper shaft 1:5
- C0 平键轴 φ25 straight keyed φ25
- C2 平键轴 φ22.22 straight keyed φ22.22
- C3 平键轴 φ25.4 straight keyed φ25.4
- H0 矩形花键轴 Rectangle spline shaft 6-25x20.1x6
- H2 矩形花键轴 Rectangle spline shaft 6-25x21x5
- S0 SAE花键轴 SAE spline shaft DP16/32-30°-13T
- S1 SAE花键轴 SAE spline shaft DP16/32-30°-15T

详见 152 页 See page 152 for details

泵体油口 Ports

- E_ 矩形法兰 Rectangular flange
- F_ 矩形法兰 Rectangular flange
- F_ 矩形法兰 Split flange
- Z_ 公制螺纹 (M) Metric thread
- L_ 英制管螺纹(G) Gas thread
- U_ 美制管螺纹(UNF-2B) UNF thread
- R_ 英制锥螺纹(PT) PT thread
- X 泵体无油口 Body without ports

详见 153-154 页 See page 153-154 for details

特殊结构 Special structure

- 省略-默认普通 omit-regular
- Q_ 后盖带泄油口 Back cover with oil drain

详见 155 页 See page 155 for details

如需其它型号请见详情页或联系本公司工程师
If you need other models, please see the details page or contact our engineers.

博顿液压
HIGH PRESSURE GEAR PUMP

3系列/Group 3

3系列标准型产品概览/Group 3 Standard Product Overview

型式 type			
页码 page	156	157	158
型式 type			
页码 page	159	160	161

3系列排量参数表/Group 3 Displacement parameter table

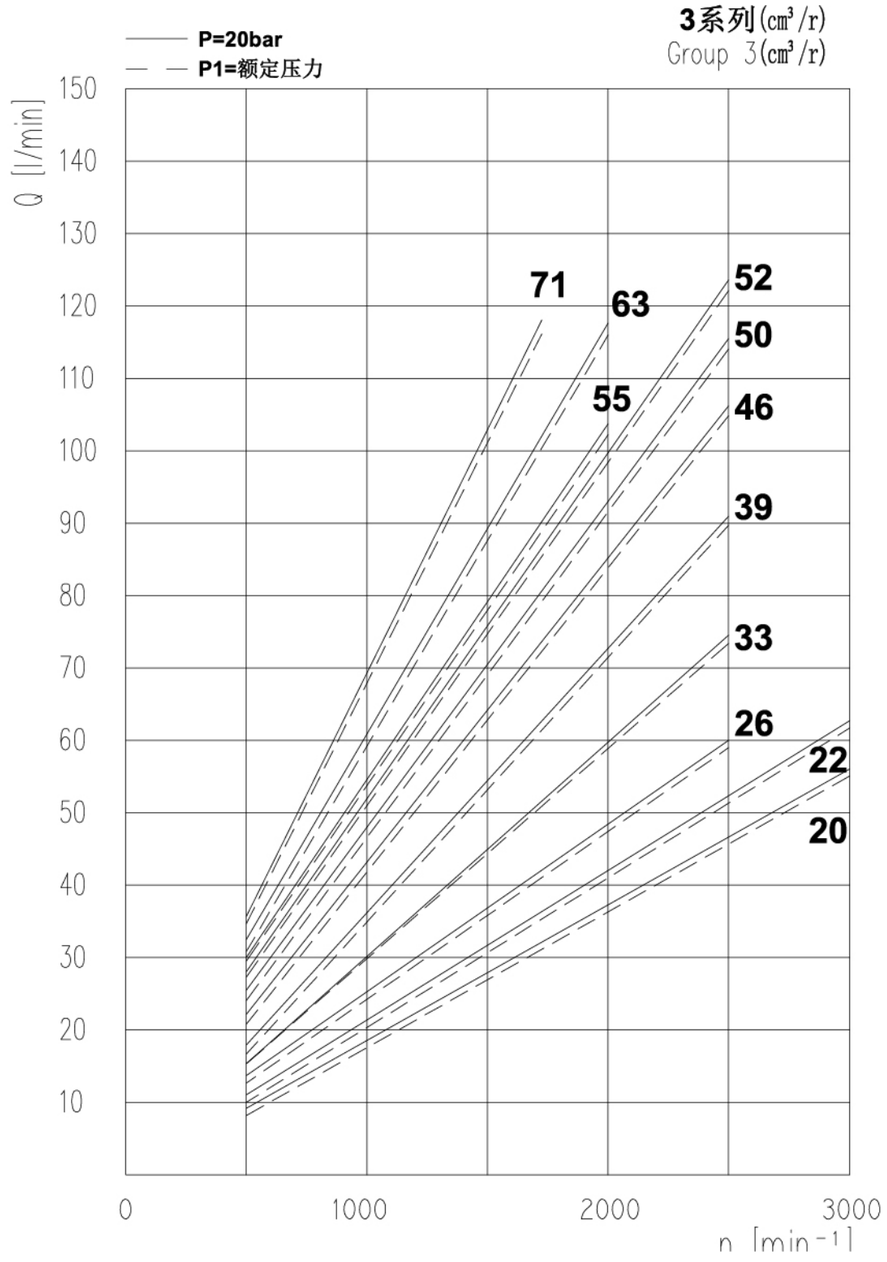
排量 Displacement	V	cm^3/rev	20	22	26	33	39	46	50	52	55	63	71
吸油绝对压力 Suction absolute pressure	Pe	bar	0.7...3										
最高连续压力 Max. continuous pressure	P1	bar	250			230			220		200		180
最高间隙压力 Max. intermittent pressure	P2	bar	265			250			240		230		200
最高峰值压力 Max. peak pressure	P3	bar	280			270			260		250		220
最低转速 Min. speed	n_{Min}	r/min	600			500					400		
最高转速 Max. speed	n_{Max}	r/min	3500			3000					2800		2500
容积效率 Volumetric efficiency	η_v	%	⩾92			⩾93			⩾94			⩾95	

3Y系列排量参数表/Group 3Y Displacement parameter table

排量 Displacement	V	cm^3/rev	20	22	26	33	39	46	50	52	55	63	71
吸油绝对压力 Suction absolute pressure	Pe	bar	0.7...3										
最高连续压力 Max. continuous pressure	P1	bar	250			230			220		200		180
最高间隙压力 Max. intermittent pressure	P2	bar	265			250			240		230		200
最高峰值压力 Max. peak pressure	P3	bar	280			270			260		250		220
最低转速 Min. speed	n_{Min}	r/min	200								150		
最高转速 Max. speed	n_{Max}	r/min	3000								2500		
容积效率 Volumetric efficiency	η_v	%	⩾95								⩾97		

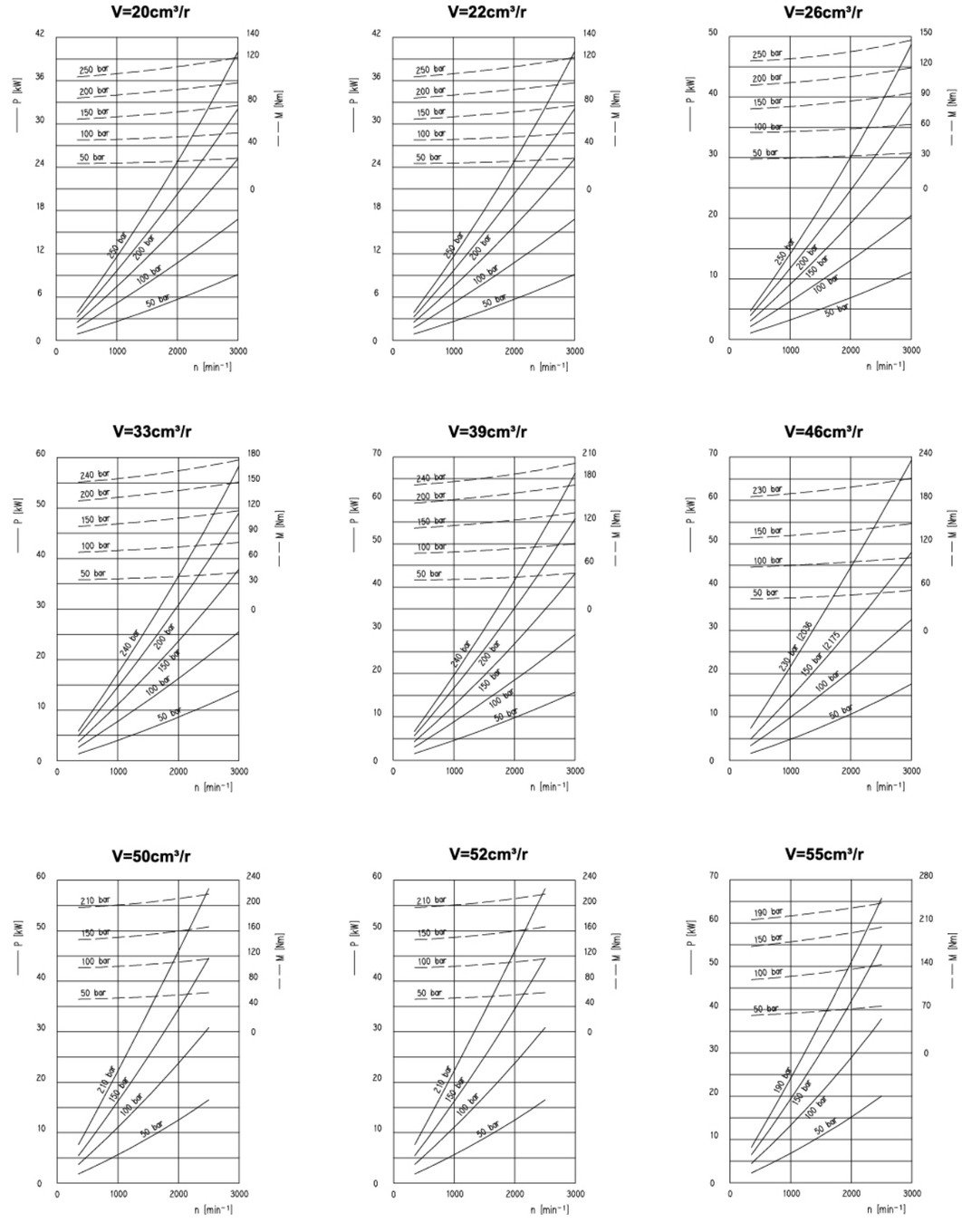
3系列/Group 3

3系列流量性能曲线表/Group 3 Flow Performance Curve Table



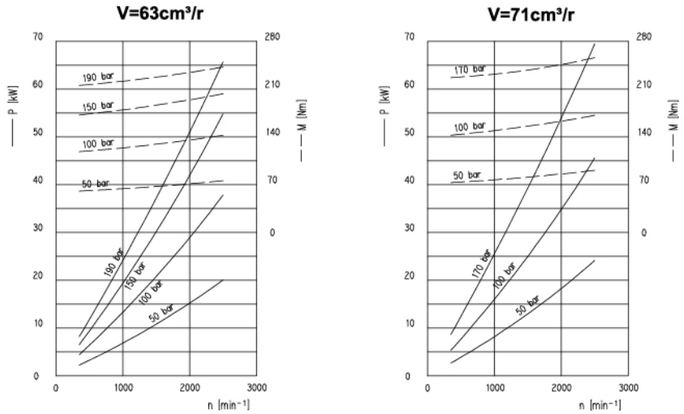
3系列/Group 3

3系列功率性能曲线表/Group 3 Power Performance Curve Table



3系列/Group 3

3系列功率性能曲线表/Group 3 Power Performance Curve Table



Boden博顿液压
HIGH PRESSURE GEAR PUMP

3系列/Group 3

3系列噪音曲线表/Group 3 Noise Curve Table

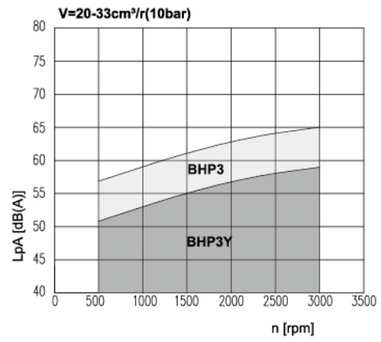
噪音曲线

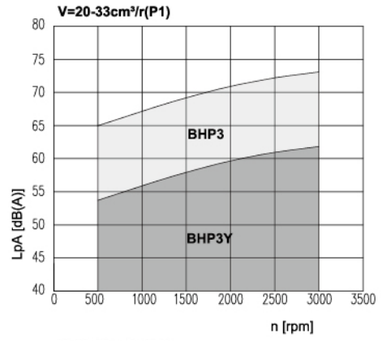
噪音等级取决于转速和压力范围；这个压力范围介于10 bar和压力值 P1之间。
The noise level depends on the speed and pressure range;This pressure range is between 10 bar and pressure value P1.

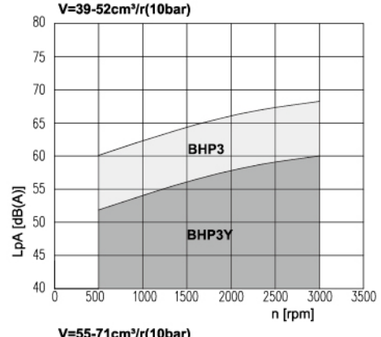
油液数据： v = 32 ㎟/s, ϑ= 50℃.
Oil data: V=32mm²/s,ϑ=50℃.

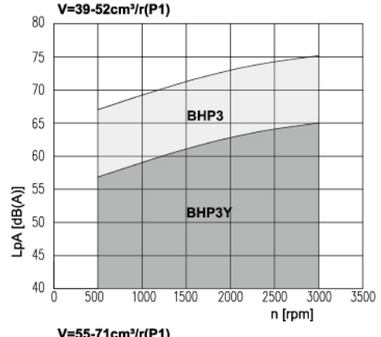
对于从吸声测量室测得的噪音值进行计算而得到的声音压力等级，符合 DIN 45635 第 26 章的要求。
The sound pressure level obtained by calculating the noise value measured from the sound absorption measuring room meets the requirements of Chapter 26 of DIN 45635.

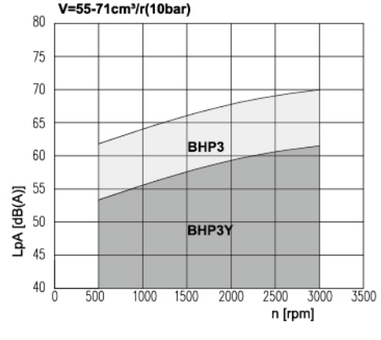
测量传感器与液压泵之间的距离：1 米。
Distance between measuring sensor and hydraulic pump: 1m.

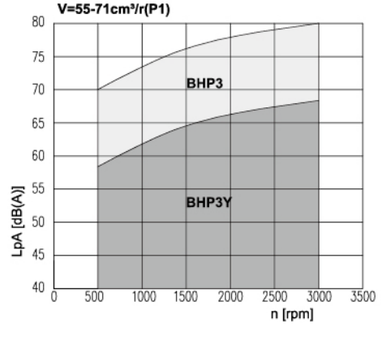






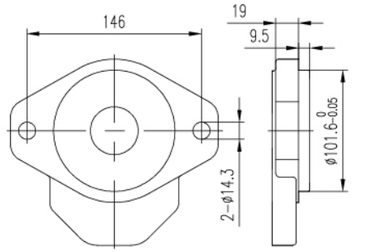




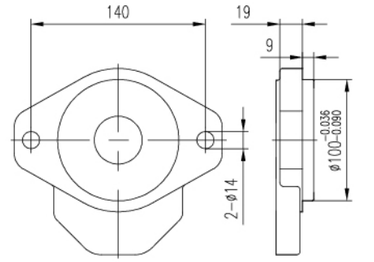


3系列/Group 3

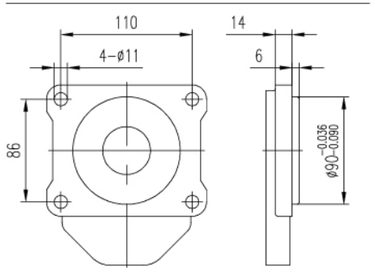
前盖/FRONT COVER



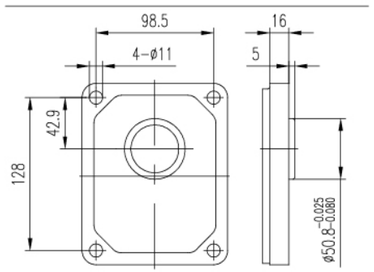
A0



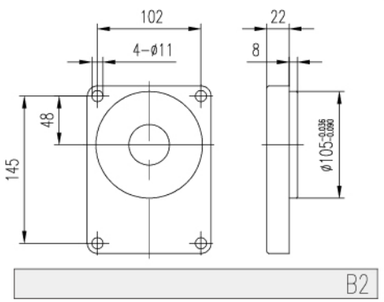
A1



B0



B1

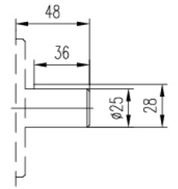


B2

Boden博顿液压
HIGH PRESSURE GEAR PUMP

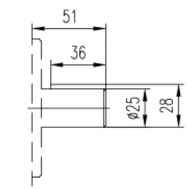
3系列/Group 3

轴伸/SHAFTS



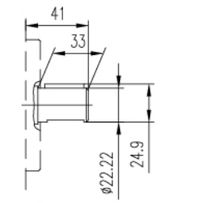
C0

最大扭矩 Max.Torque 450 Nm



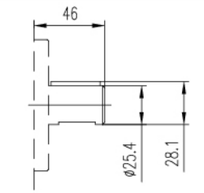
C1

最大扭矩 Max.Torque 450 Nm



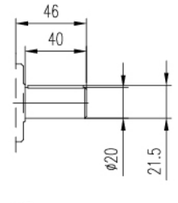
C2

最大扭矩 Max.Torque 400 Nm



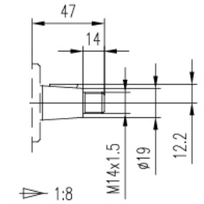
C3

最大扭矩 Max.Torque 450 Nm



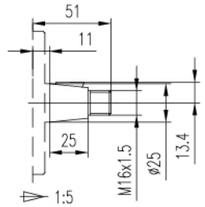
C4

最大扭矩 Max.Torque 350 Nm



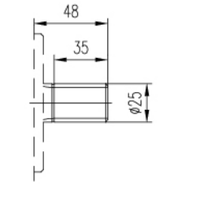
T0

最大扭矩 Max.Torque 300 Nm



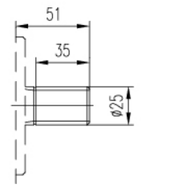
T1

最大扭矩 Max.Torque 350 Nm



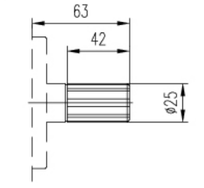
H0

最大扭矩 Max.Torque 500 Nm



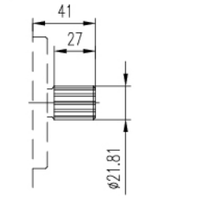
H1

最大扭矩 Max.Torque 500 Nm



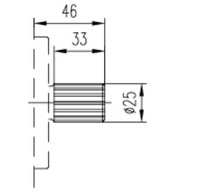
H2

最大扭矩 Max.Torque 500 Nm



S0

最大扭矩 Max.Torque 500 Nm

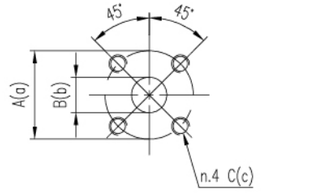


S1

最大扭矩 Max.Torque 600 Nm

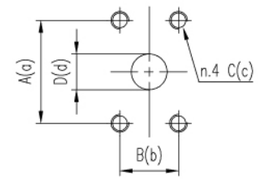
3系列/Group 3

泵体油口/PORTS



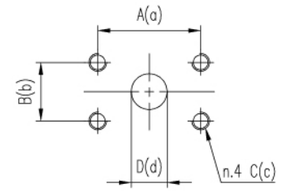
F0/F1/F2/F3

油口代号 PORTS CODE	排量 Displacement	进油口 INLET			出油口 OUTLET		
	(cm^3/rev)	A	B	C	a	b	c
F0	20...26	50	20	M8	50	20	M8
F1	33...46	65	25	M8	65	20	M8
F2	50...71	76	33	M10	76	25	M10
F3	50...63	76	33	M8	76	25	M8



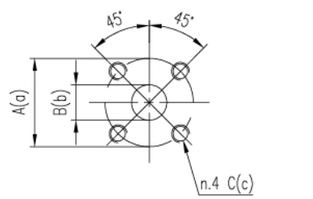
F4/F5

油口代号 PORTS CODE	排量 Displacement	进油口 INLET				出油口 OUTLET			
	(cm^3/rev)	A	B	C	D	a	b	c	d
F4	20...52	52.4	26.2	3/8-16UNC	27	47.6	22.2	3/8-16UNC	19
F5	55...71	58.7	30.2	7/16-14UNC	33	52.4	26.2	3/8-16UNC	27



F6

排量 Displacement	进油口 INLET				出油口 OUTLET			
(cm^3/rev)	A	B	C	D	a	b	c	d
20...25	57.2	26	M10	25	57.2	26	M10	20
33	57.2	26	M10	30	57.2	26	M10	20
39	57.2	26	M10	35	57.2	26	M10	20
50...63	57.2	26	M10	35	57.2	26	M10	25

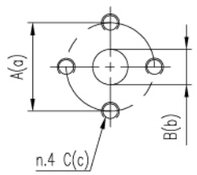


F7

排量 Displacement	进油口 INLET			出油口 OUTLET		
(cm /rev)	A	B	C	a	b	c
20...71	55	27	M8	55	19	M8

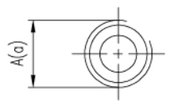
3系列/Group 3

泵体油口/PORTS



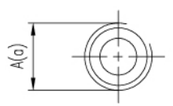
E0/E1/E2/E3

油口代号 PORTS CODE	排量 Displacement	进油口 INLET			出油口 OUTLET		
	(cm^3/rev)	A	B	C	a	b	c
E0	20...39	56	27	M10	56	19	M10
E1	46	51	27	M10	51	27	M10
E2	50...52	56	27	M10	56	27	M10
E3	55...71	62	33	M10	51	27	M10



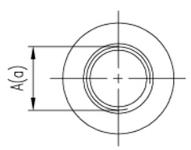
L0/L1/L2/L3

油口代号 PORTS CODE	排量 Displacement	进油口 INLET	出油口 OUTLET
	(cm^3/rev)	A	a
L0	20...22	G3/4	G3/4
L1	26...39	G 1	G3/4
L2	46...63	G1 1/4	G 1
L3	71	G1 1/2	G1 1/4



R0/R1/R2/R3

油口代号 PORTS CODE	排量 Displacement	进油口 INLET	出油口 OUTLET
	(cm^3/rev)	A	a
R0	20...22	PT3/4	PT3/4
R1	26...39	PT 1	PT3/4
R2	46...63	PT1 1/4	PT 1
R3	71	PT1 1/2	PT1 1/4

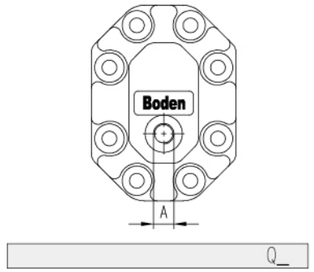


O型圈密封
O-ring
U0/U1/U2

油口代号 PORTS CODE	排量 Displacement	进油口 INLET	出油口 OUTLET
	(cm^3/rev)	A	a
U0	20...33	1 5/16-12UNF	1 1/16-12UNF
U1	39...52	1 5/8-12UNF	1 1/16-12UNF
U2	55...71	1 7/8-12UNF	1 5/16-12UNF

3系列/Group 3

特殊结构/SPECIAL STRUCTRE



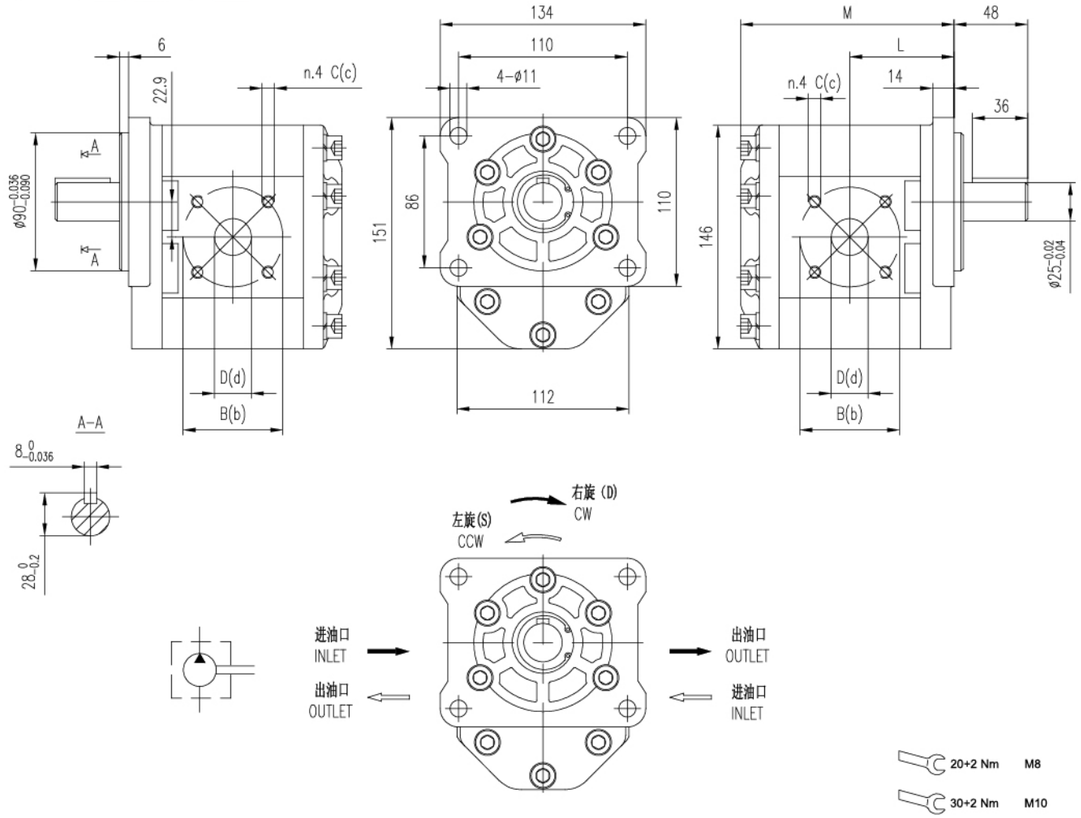
代号 CODE	泄油口 oil drain
	A
Q1	G3/8
Q2	3/4-16UNF

Boden博顿液压
HIGH PRESSURE GEAR PUMP

3系列/Group 3

3系列标准型产品尺寸/Group 3 Standard Product Dimensions

BHP3-B0-D-20-C0-F0

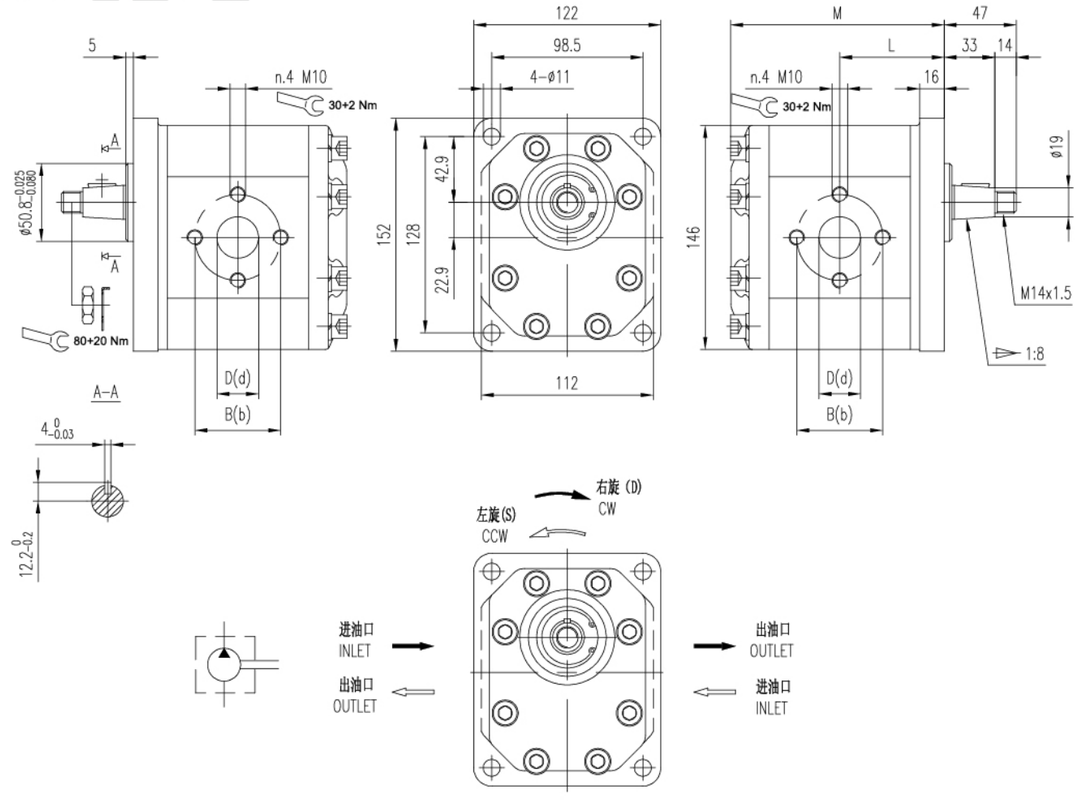


排量 Displacement	最大压力 Max pressure			最高转速 Max. speed	最低转速 Min. speed	重量 Weight	尺寸 Dimensions		油口代码 Oil port code	进油口 INLET			出油口 OUTLET		
	P1	P2	P3				M	L		B	D	C	b	d	c
(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	Kg	mm	mm		mm	mm		mm	mm	
20	250	265	280	3500	600	7.5	128	63	F0	50	20	M8	50	20	M8
22	250	265	280	3500	600	7.7	130	64	F0	50	20	M8	50	20	M8
26	250	265	280	3000	600	8.1	133	65	F0	50	20	M8	50	20	M8
33	230	250	270	3000	500	8.6	139	68	F1	65	25	M8	65	20	M8
39	230	250	270	3000	500	9.1	146	72	F1	65	25	M8	65	20	M8
46	230	250	270	3000	500	9.6	152	75	F1	65	25	M8	65	20	M8
50	220	240	260	3000	500	10.0	156	77	F2	76	33	M10	76	25	M10
52	220	240	260	3000	500	10.2	158	78	F2	76	33	M10	76	25	M10
55	200	230	250	2800	400	10.5	160	79	F2	76	33	M10	76	25	M10
63	200	230	250	2800	400	11.1	168	83	F2	76	33	M10	76	25	M10
71	180	200	220	2500	400	11.8	175	86	F2	76	33	M10	76	25	M10

3系列/Group 3

3系列标准型产品尺寸/Group 3 Standard Product Dimensions

BHP3-B1-D-20-T0-E0

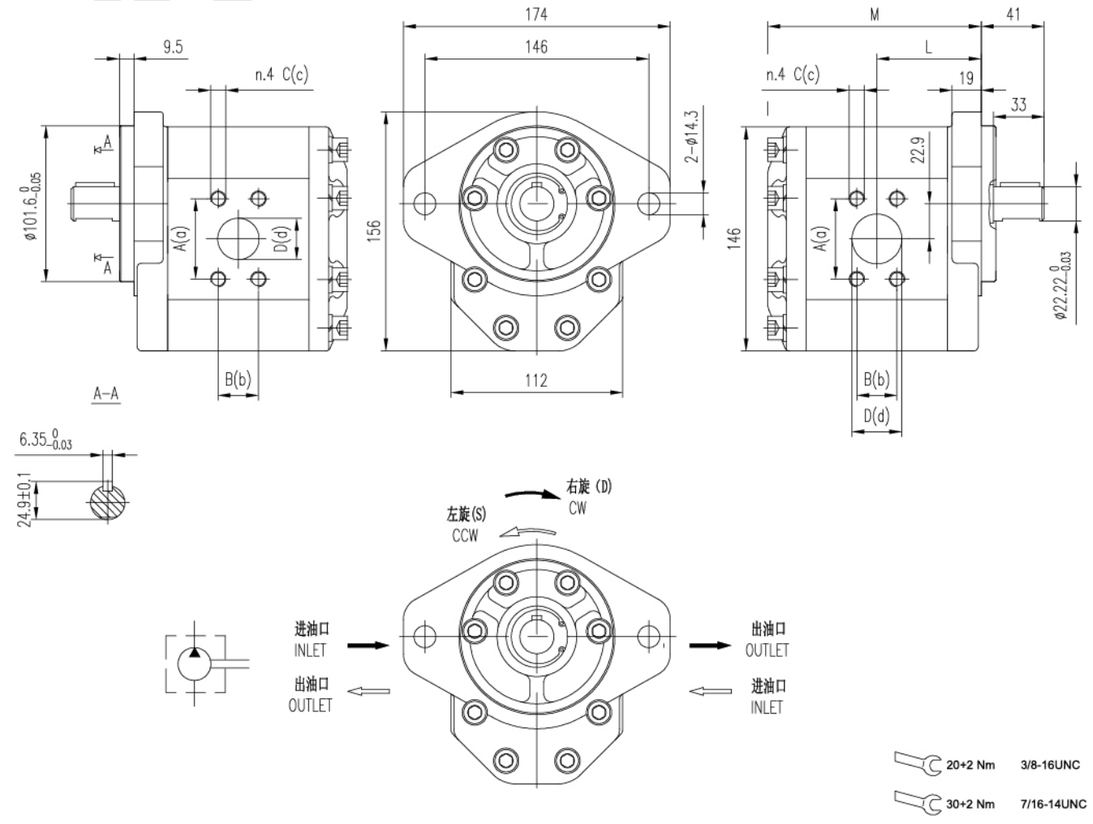


排量 Displacement	最大压力 Max pressure			最高转速 Max. speed	最低转速 Min. speed	重量 Weight	尺寸 Dimensions		油口代码 Oil port code	进油口 INLET		出油口 OUTLET	
	P1	P2	P3				M	L		B	D	b	d
(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	Kg	mm	mm		mm	mm	mm	mm
20	250	265	280	3500	600	7.5	128	63	E0	56	27	56	19
22	250	265	280	3500	600	7.7	130	64	E0	56	27	56	19
26	250	265	280	3000	600	8.1	133	65	E0	56	27	56	19
33	230	250	270	3000	500	8.6	139	68	E0	56	27	56	19
39	230	250	270	3000	500	9.1	146	72	E0	56	27	56	19
46	230	250	270	3000	500	9.6	152	75	E1	51	27	51	27
50	220	240	260	3000	500	10.0	156	77	E2	56	27	56	27
52	220	240	260	3000	500	10.2	158	78	E2	56	27	56	27
55	200	230	250	2800	400	10.5	160	79	E3	62	33	51	27
63	200	230	250	2800	400	11.1	168	83	E3	62	33	51	27
71	180	200	220	2500	400	11.8	175	86	E3	62	33	51	27

3系列/Group 3

3系列标准型产品尺寸/Group 3 Standard Product Dimensions

BHP3-A0-D-20-C2-F4

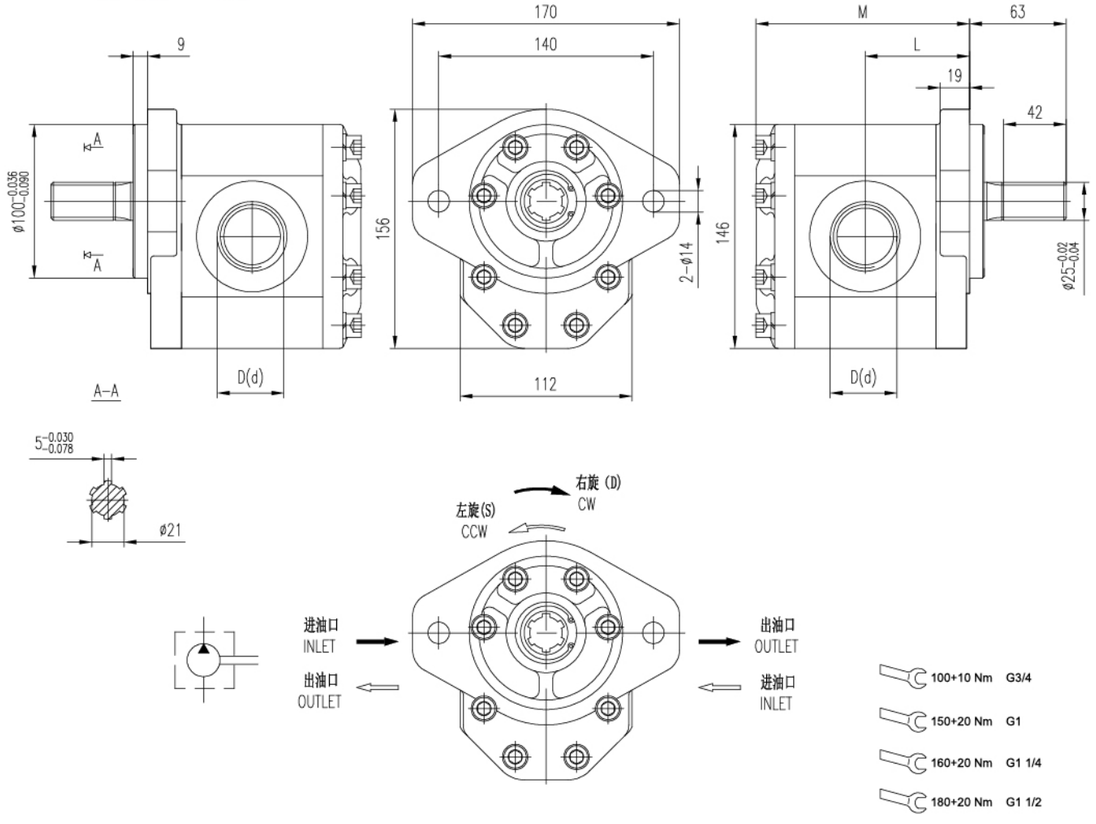


排量 Displacement	最大压力 Max pressure			最高转速 Max. speed	最低转速 Min. speed	重量 Weight	尺寸 Dimensions		油口代码 Oil port code	进油口 INLET				出油口 OUTLET			
	P1	P2	P3				M	L		A	B	C	D	a	b	c	d
(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	Kg	mm	mm		mm	mm	UNC	mm	mm	mm	UNC	mm
20	250	265	280	3500	600	7.5	128	63	F4	52.4	26.2	3/8	27	47.6	22.2	3/8	19
22	250	265	280	3500	600	7.7	130	64	F4	52.4	26.2	3/8	27	47.6	22.2	3/8	19
26	250	265	280	3000	600	8.1	133	65	F4	52.4	26.2	3/8	27	47.6	22.2	3/8	19
33	230	250	270	3000	500	8.6	139	68	F4	52.4	26.2	3/8	27	47.6	22.2	3/8	19
39	230	250	270	3000	500	9.1	146	72	F4	52.4	26.2	3/8	27	47.6	22.2	3/8	19
46	230	250	270	3000	500	9.6	152	75	F4	52.4	26.2	3/8	27	47.6	22.2	3/8	19
50	220	240	260	3000	500	10.0	156	77	F4	52.4	26.2	3/8	27	47.6	22.2	3/8	19
52	220	240	260	3000	500	10.2	158	78	F4	52.4	26.2	3/8	27	47.6	22.2	3/8	19
55	200	230	250	2800	400	10.5	160	79	F5	58.7	30.2	7/16	33	52.4	26.2	3/8	27
63	200	230	250	2800	400	11.1	168	83	F5	58.7	30.2	7/16	33	52.4	26.2	3/8	27
71	180	200	220	2500	400	11.8	175	86	F5	58.7	30.2	7/16	33	52.4	26.2	3/8	27

3系列/Group 3

3系列标准型产品尺寸/Group 3 Standard Product Dimensions

BHP3-A1-[D]-[20]-H2-[L0]

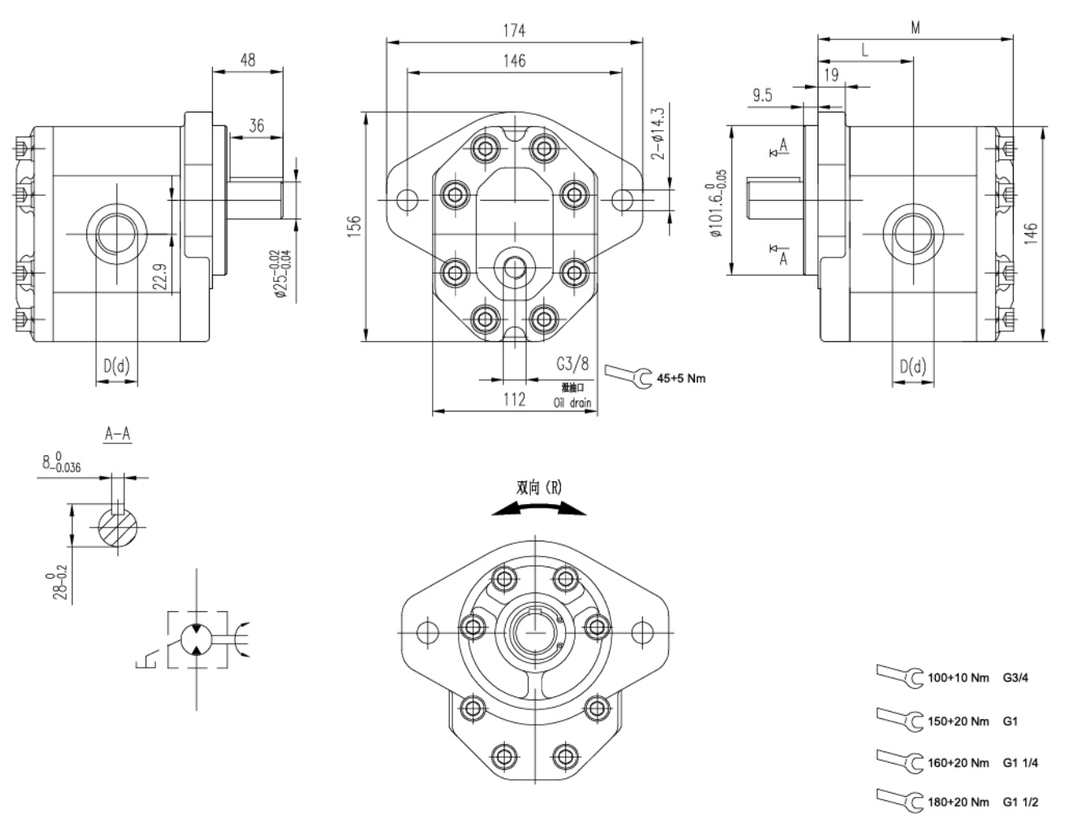


排量 Displacement	最大压力 Max pressure			最高转速 Max. speed	最低转速 Min. speed	重量 Weight	尺寸 Dimensions		油口代码 Oil port code	进油口 INLET	出油口 OUTLET
	P1	P2	P3				M	L		D	d
(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	Kg	mm	mm			
20	250	265	280	3500	600	7.5	128	63	L0	G3/4	G3/4
22	250	265	280	3500	600	7.7	130	64	L0	G3/4	G3/4
26	250	265	280	3000	600	8.1	133	65	L1	G1	G3/4
33	230	250	270	3000	500	8.6	139	68	L1	G1	G3/4
39	230	250	270	3000	500	9.1	146	72	L1	G1	G3/4
46	230	250	270	3000	500	9.6	152	75	L2	G1 1/4	G1
50	220	240	260	3000	500	10.0	156	77	L2	G1 1/4	G1
52	220	240	260	3000	500	10.2	158	78	L2	G1 1/4	G1
55	200	230	250	2800	400	10.5	160	79	L2	G1 1/4	G1
63	200	230	250	2800	400	11.1	168	83	L2	G1 1/4	G1
71	180	200	220	2500	400	11.8	175	86	L3	G1 1/2	G1 1/4

3系列/Group 3

3系列标准型产品尺寸/Group 3 Standard Product Dimensions

BHM3-A0-R-[20]-C0-[L0]- Q1

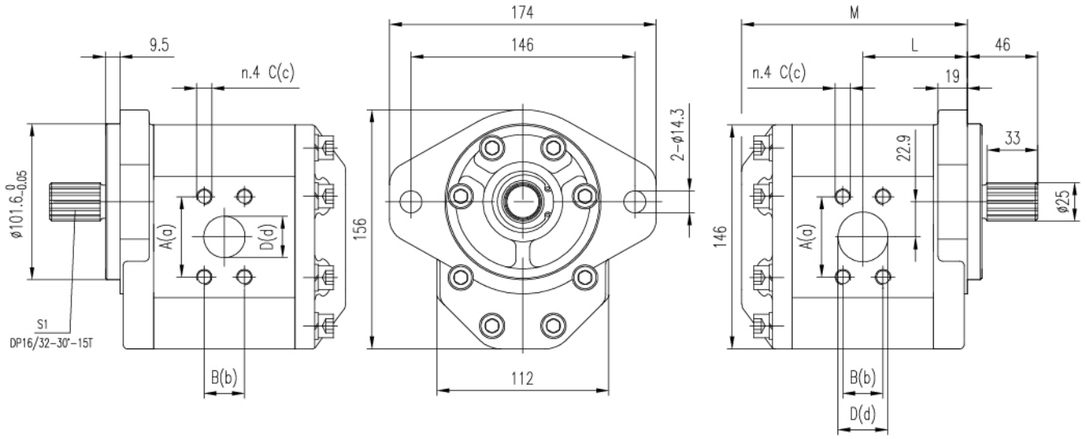


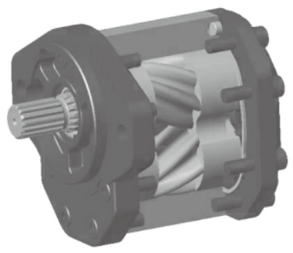
排量 Displacement	最大压力 Max pressure			最高转速 Max. speed	最低转速 Min. speed	重量 Weight	尺寸 Dimensions		油口代码 Oil port code	进油口 INLET	出油口 OUTLET
	P1	P2	P3				M	L		D	d
(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	Kg	mm	mm			
20	250	265	280	3500	600	7.5	128	63	L0	G3/4	G3/4
22	250	265	280	3500	600	7.7	130	64	L0	G3/4	G3/4
26	250	265	280	3000	600	8.1	133	65	L4	G1	G1
33	230	250	270	3000	500	8.6	139	68	L4	G1	G1
39	230	250	270	3000	500	9.1	146	72	L4	G1	G1
46	230	250	270	3000	500	9.6	152	75	L4	G1	G1
50	220	240	260	3000	500	10.0	156	77	L4	G1	G1
52	220	240	260	3000	500	10.2	158	78	L4	G1	G1
55	200	230	250	2800	400	10.5	160	79	L5	G1 1/4	G1 1/4
63	200	230	250	2800	400	11.1	168	83	L5	G1 1/4	G1 1/4
71	180	200	220	2500	400	11.8	175	86	L5	G1 1/4	G1 1/4

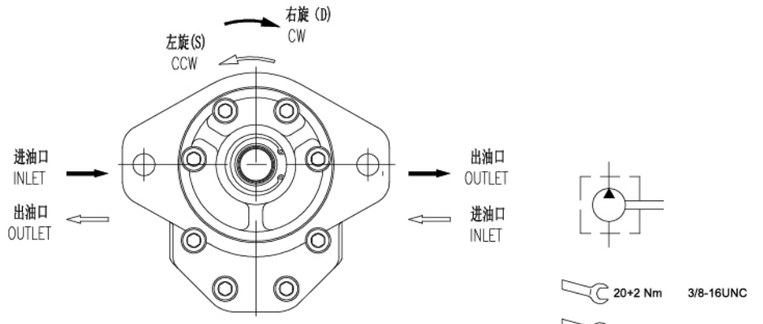
3Y系列/Group 3Y

3Y系列标准型产品尺寸/Group 3Y Standard Product Dimensions

BHP3Y-A0-[D]-[20]-C2-[F4]







排量 Displacement	最大压力 Max pressure			最高转速 Max. speed	最低转速 Min. speed	重量 Weight	尺寸 Dimensions		油口代码 Oil port code	进油口 INLET				出油口 OUTLET			
	P1	P2	P3				M	L		A	B	C	D	a	b	c	d
(cm^3/rev)	bar	bar	bar	(r/min)	(r/min)	Kg	mm	mm		mm	mm	UNC	mm	mm	mm	UNC	mm
20	250	265	280	3500	600	7.7	131.2	60.6	F4	52.4	26.2	3/8	27	47.6	22.2	3/8	19
22	250	265	280	3500	600	7.9	131.7	61.4	F4	52.4	26.2	3/8	27	47.6	22.2	3/8	19
26	250	265	280	3000	600	8.3	134.5	62.3	F4	52.4	26.2	3/8	27	47.6	22.2	3/8	19
33	230	250	270	3000	500	8.8	139.5	64.8	F4	52.4	26.2	3/8	27	47.6	22.2	3/8	19
39	230	250	270	3000	500	9.3	144.1	67.5	F4	52.4	26.2	3/8	27	47.6	22.2	3/8	19
46	230	250	270	3000	500	9.8	148.7	69.9	F4	52.4	26.2	3/8	27	47.6	22.2	3/8	19
50	220	240	260	3000	500	10.2	151.6	71.3	F4	52.4	26.2	3/8	27	47.6	22.2	3/8	19
52	220	240	260	3000	500	10.4	153	72	F4	52.4	26.2	3/8	27	47.6	22.2	3/8	19
55	200	230	250	2800	400	10.7	152.2	73.1	F5	58.7	30.2	7/16	33	52.4	26.2	3/8	27
63	200	230	250	2800	400	11.3	160.9	76	F5	58.7	30.2	7/16	33	52.4	26.2	3/8	27
71	180	200	220	2500	400	12	166.5	78.3	F5	58.7	30.2	7/16	33	52.4	26.2	3/8	27

3.5系列/Group 3.5

3.5系列选型规则/Group 3.5 Ordering Code Rules

B	H	P	3.5	A0	D	10	S0	F0	省略/omit	省略/omit	省略/omit
博顿 Boden	材质 Material	功能 Function	系列 Group	前盖 Front cover	旋向 Rotation	排量 Displacement	轴伸 Shaft	泵体油口 Ports	特殊结构 Special structure	可选项 Options	其他 Other
	H 材料为铸铁 material cast iron	P 泵 Pump M 马达 Motor	3.5 3.5系列 Group 3.5 3.5A 3.5A系列 Group3.5A		D 顺时针转 Clockwise S 逆时针转 Counter clockwise R 可正反转 Reversible	10 16 20 25 29 32 36 40 45 51 55 63 70 80					特殊设计 special designing

可选项 Options

省略-温度范围在-10℃~+80℃，进油口最高绝对压力为3bar。	Omit-Range between -10℃ and +80℃,inlet pressure up to max. 3 bar absolute.
V 适用于高温介质，温度范围在-10℃~+120℃。	Version suitable for fluid at hi-temperatures, range between -10℃ and +120℃.
H 适用于低温介质，温度范围在-40℃~+80℃。	Version suitable for fluid at low-temperatures, range between -40℃ and +80℃.
N 适用于进油口最大绝对压力3~10bar。	Version suitable for inlet pressure up to max. 3 and 10 bar absolute.

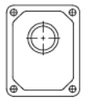
如需其它特殊选项请联系本公司工程师
For other special options, please contact our engineers.

前盖 Front cover

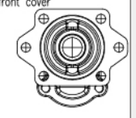
A0 菱形前盖(止口φ101.6)
Diamond front cover (centering φ101.6mm)



B1 方形前盖（止口φ50.8）
Square front cover (centering φ50.8mm)



Q1 方形+菱形前盖（止口φ101.6）
Square and Diamond front cover (centering φ101.6)



详见 168 页
See page 168 for details

轴伸 Shaft

C0 平键轴 φ31.75
straight keyed φ31.75



H0 矩形花键轴
Rectangle spline shaft
6-36x32x6



S0 SAE花键轴
SAE spline shaft
DP16/32-30°-13T



S1 SAE花键轴
SAE spline shaft
DP12/24-30°-14T



详见 168 页
See page 168 for details

泵体油口 Ports

F_ 矩形法兰
Split flange



L_ 英制管螺纹(G)
Gas thread



N_ 美制锥螺纹(NPT)
NPT thread



U_ 美制管螺纹(UNF-2B)
UNF thread



详见 169 页
See page 169 for details

如需其它型号请见详情页或联系本公司工程师
If you need other models, please see the details page or contact our engineers.