

Show China Eternal Quality To The World

Orbit Motor
Power Steering Unit



COMPANY PROFILE



Eternal Hydraulic belongs to Eternal Group, which is a International Well-known Professional Hydraulic Enterprise with 6 Own Manufacturing Bases in 2023, and we will complete our 12+ Manufacturing Bases in future 5 years to become the No.1 Hydraulic Alliance Group Enterprise.

Eternal Hydraulic are integrating Design&Develop&Manufacturing&Marketing for Hydraulic Components, and with more than 16+ years experience in Hydraulic Field.

Eternal Hydraulic commit ourselves to the No.1 Global One-Stop Mall in Hydraulic Field, Our products are widely used in Agricultural Machinery, Forestry Machinery, Dump Trucks & Special Vehicles, Municipal Sanitation Machinery, Construction Machinery, Logistics&Forklift Machinery, Industrial Equipment, Mining machinery, Marine Machinery and Military Machinery etc, with 98% Good Quality&Price Feedback from market.

Eternal Hydraulic can be used in all Equipments which need Hydraulic Power.

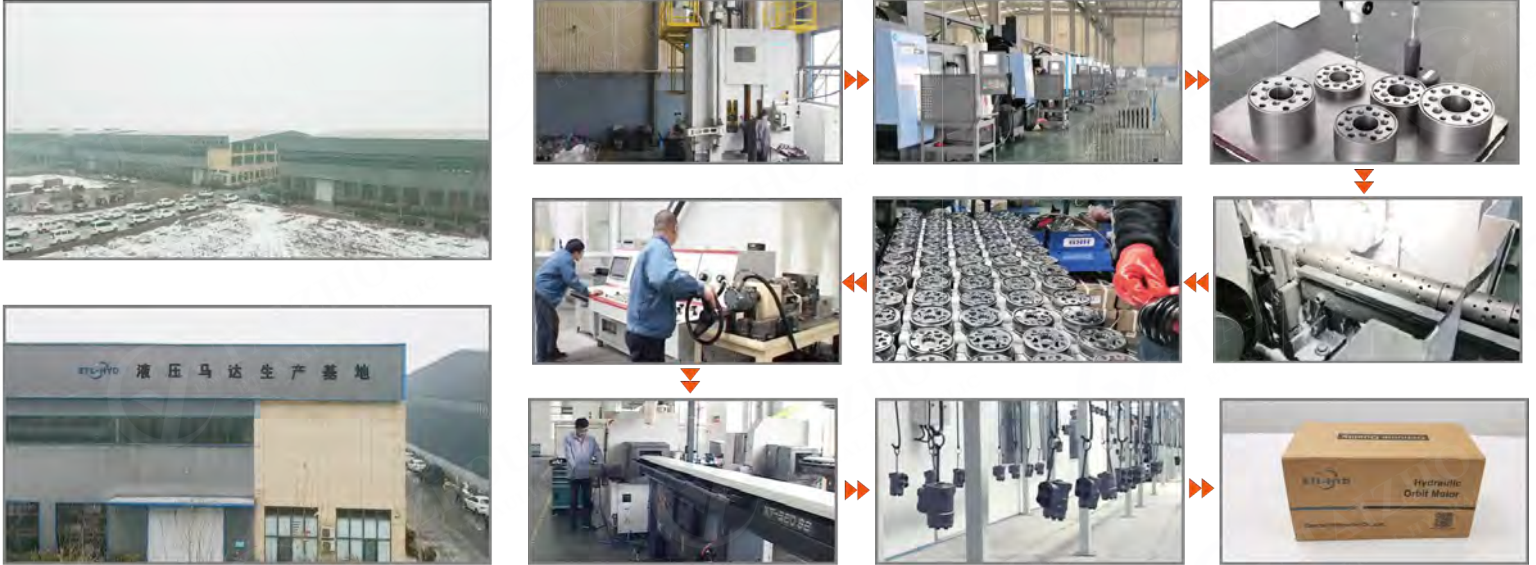
Eternal Hydraulic keep good cooperative relationship with most of International Well-known Hydraulic Companies to provide best Service to our all regular customers.

Eternal Hydraulic firmly believes that "Only the Best can Satisfied the Best" , become the First and Best Purchase Choice of Hydraulic Components in all over the World.

Inviting all ability Partners to join in us to complete 86+ Strategic Partners in all over the World.

ETERNAL HYDRAULIC MOTOR MANUFACTURING BASE

● No. of Workers: 180+ ● Factory area: 53,000m²

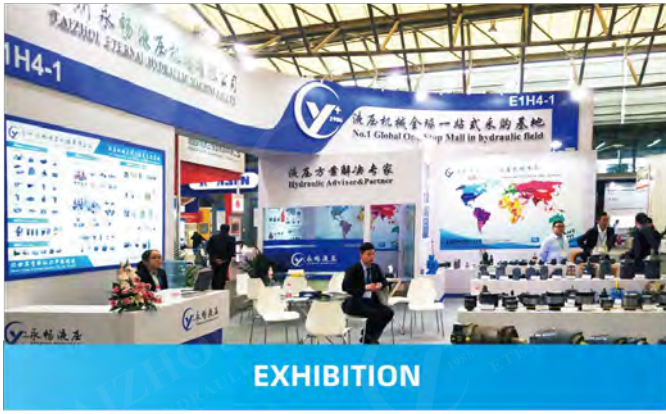


MAIN PRODUCTS

Orbit Motor: Danfoss, Parker, White, M+S Series
Power Steering Unit, Rotators, Radial Piston Motor...

CERTIFICATES





EXHIBITION



EXHIBITION



SAMPLE ROOM



SAMPLE ROOM

APPLICATIONS



Agricultural Machinery



Forklift



Sanitation Machinery



Forestry Machinery



Construction Machinery



Dump Truck



Industry



Mining Machine



Ship Machinery

OMM Series Hydraulic Orbit Motor.....	1
OMP/OMR Series Hydraulic Orbit Motor.....	4
OMR Series Hydraulic Orbit Motor.....	7
OMS Series Hydraulic Orbit Motor.....	12
OMT Series Hydraulic Orbit Motor.....	19
OMV Series Hydraulic Orbit Motor.....	25
OMH Series Hydraulic Orbit Motor.....	29
OM Series Hydraulic Orbit Motor.....	32
BZZ Series Hydraulic Power Steering Unit.....	33
10 Series Hydraulic Steering Control Unit.....	39
101(S) Series Hydraulic Steering Control Unit.....	40
101(S)-5 Series Hydraulic Steering Control Unit.....	43
102(S) Series Hydraulic Steering Control Unit.....	47
102(S)-5 Series Hydraulic Steering Control Unit.....	50
103(S) Series Hydraulic Steering Control Unit.....	54
109 Series Hydraulic Steering Control Unit.....	57
Hydraulic Valve Block&Steering Column.....	60

■ OMM型号说明 Model Code

OMM系列马达壳体采用足够强度的球墨铸铁铸造而成，适用于负载较小且间隙工作的场合，广泛应用于农业林业、塑料、机床、矿业机械等。

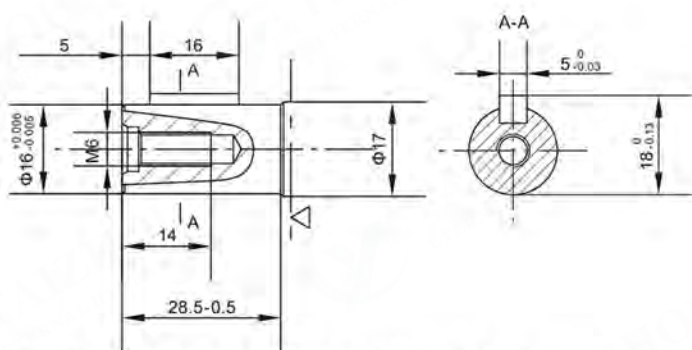
OMM Series motor with its shell made of ductile cast iron of adequate intensity, can be applied to situations with less and interval operation, widely to agriculture, forestry, plastic machine tools and minmachines etc.



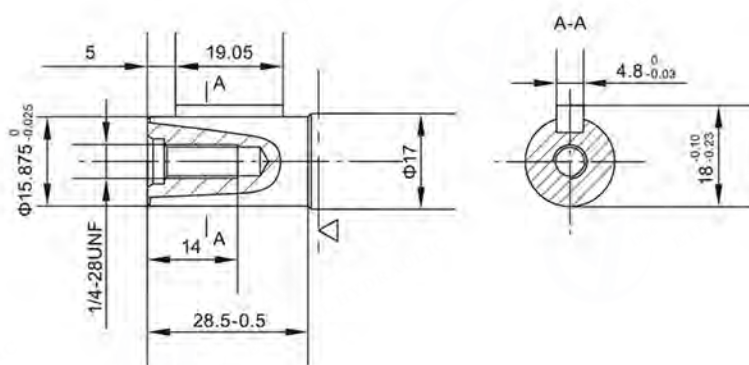
OMM	-40	M	A	E		
系列 Code	排量 Displacement	安装法兰及止口 Mounting Flange & Spigot	输出轴 Shaft	油口 & 泄油口 Inlet & Outlet and Drain Port		
OMM	8, 12.5, 20, 32, 40, 50	M: 3-M6 圆法兰 Round Flange, 止口 Spigot $\phi 31.5 \times 5$ U: 3-1/4-28UNF 圆法兰 Round Flange, 止口 Spigot $\phi 31.5 \times 5$ F: 2- $\phi 9$ 菱形法兰 Diamond Flange, 止口 Spigot $\phi 63 \times 2$ S: 特殊轴 Special Shaft	A: $\phi 16$, key 5x5x16 B: $\phi 15.875$, key 4.8x4.8x19.05 C: $\phi 16.5$ 花键 Spline Shaft, B17x14, DIN5482 S: 特殊轴 Special Shaft	E: 侧油口 Side Port G3/8, G1/8 U: 侧油口 Side Port 9/16-18UNF, 3/8-24UNF 1E: 后油口 Rear Port G3/8, G1/8 1U: 后油口 Rear Port 9/16-18UNF, 3/8-24UNF		
型号 Model	OMM-8	OMM-12.5	OMM-20	OMM-32	OMM-40	OMM-50
重量 Weight(KG)	1.9	2	2.1	2.2	2.3	2.4

■ OMM 外形安装尺寸-输出轴 Shaft Version

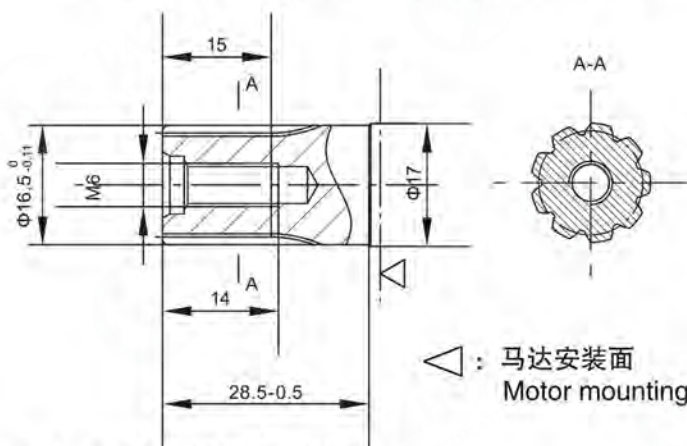
A: $\phi 16$ 平键轴, 平键 5x5x16
 $\phi 16$ Straight Shaft Key 5X5X16



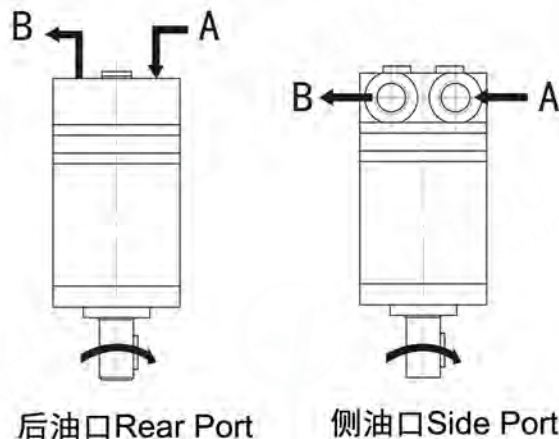
B: $\phi 15.875$ 平键轴, 平键 4.8x4.8x19.05
 $\phi 15.875$ Straight Shaft Key 4.8x4.8x19.05



C: $\phi 16.5$ 渐开线花键轴 B17x14 DIN5482
 $\phi 16.5$ involute splined shaft B17x14 DIN5482



△: 马达安装面
Motor mounting surface



■ OMM输出轴旋向: 标准

OMM Direction of Shaft Rotation: Standard

面向马达输出轴方向:

当“A”口进油时, 马达顺时针方向旋转;

当“B”口进油时, 马达逆时针方向旋转。

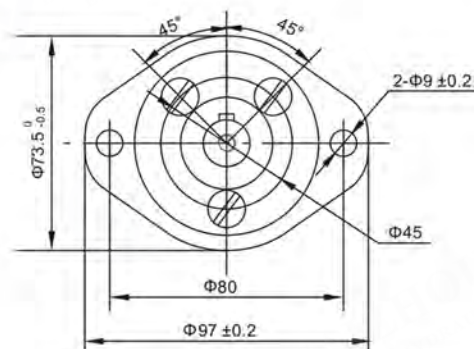
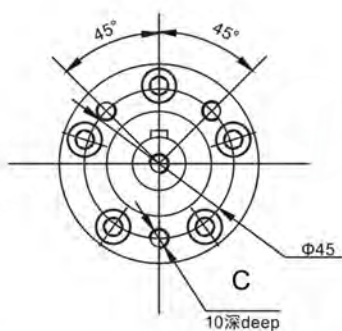
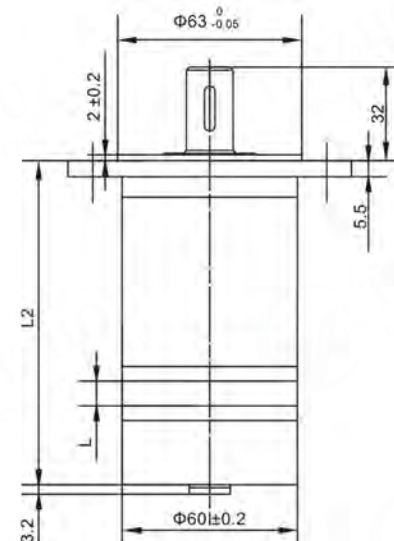
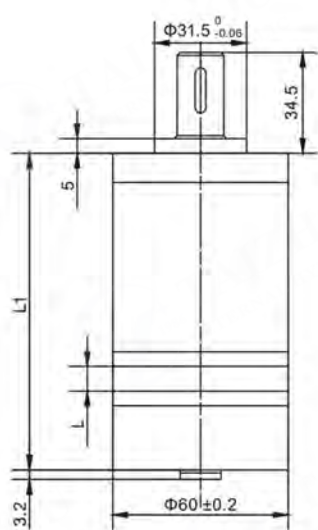
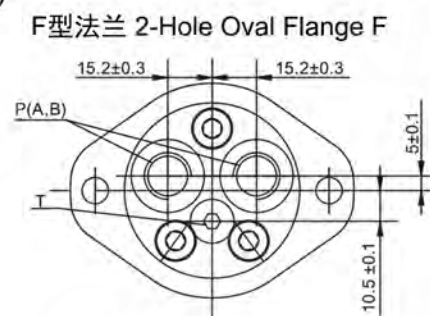
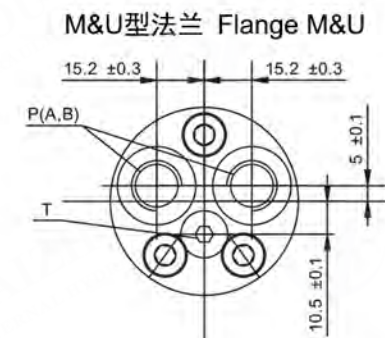
When facing shaft end of motor, shaft to rotate:

Clockwise when port “A” is pressurized;

Counter-clockwise port “A” is pressurized.

■ OMM外形安装图 Installation

1E&1U后油口 (Rear Port)



连接尺寸 Connection Size	代号Code	
	M	U
C	3-M6	3-1/4-28UNF

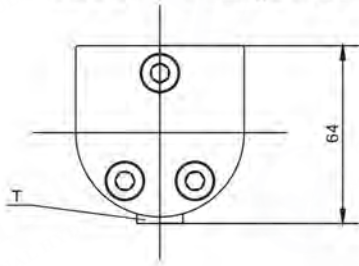
连接尺寸 Connection Size	代号Code			
	1E	1U	E	U
P	G3/8(12)	9/16-18UNF(12)	G3/8(12)	9/16-18UNF(12)
T	G1/8(8)	3/8-24UNF(8)	G1/8(8)	3/8-24UNF(8)

型号Type	OMM-8	OMM-12.5	OMM-20	OMM-32	OMM-40	OMM-50
L	3.5	5.5	8.5	13.5	17	21.5
L1	104	106	109	114	117.5	122
L2	107.5	109.5	112.5	117.5	121	125.5

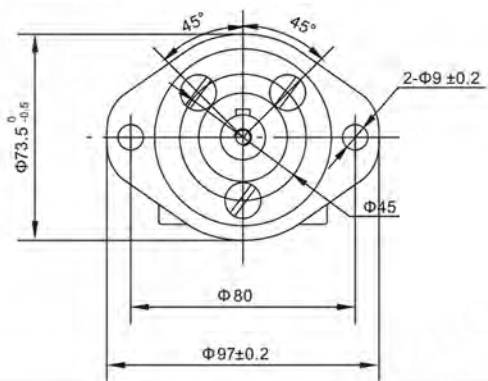
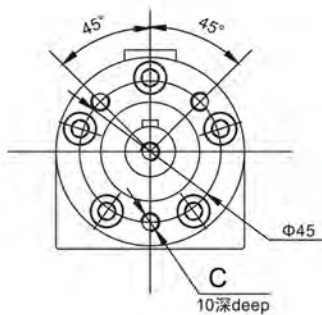
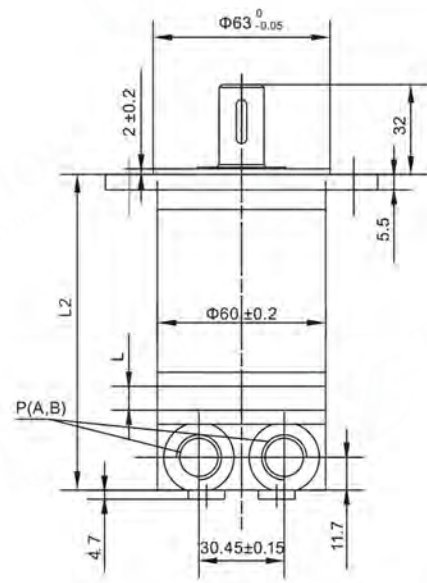
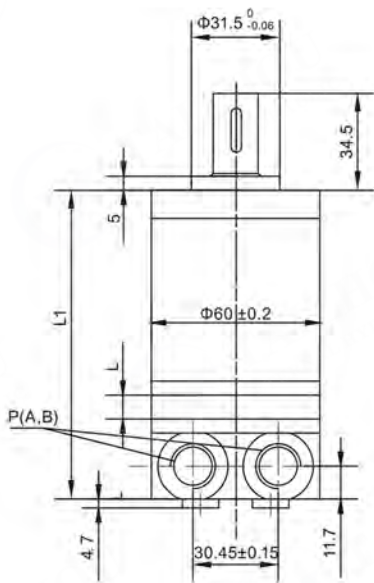
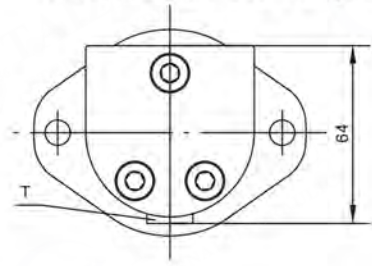
■ OMM外形安装图 Installation

E&U侧油口 (Side Port)

M&U型法兰 Flange M&U



F型法兰 2-Hole Oval Flange F



连接尺寸 Connection Size	代号Code	
	M	U
C	3-M6	3-1/4-28UNF

连接尺寸 Connection Size	代号Code			
	1E	1U	E	U
P	G3/8(12)	9/16-18UNF(12)	G3/8(12)	9/16-18UNF(12)
T	G1/8(8)	3/8-24UNF(8)	G1/8(8)	3/8-24UNF(8)

型号Type	OMM-8	OMM-12.5	OMM-20	OMM-32	OMM-40	OMM-50
L	3.5	5.5	8.5	13.5	17	21.5
L1	105	107	110	115	118.5	123
L2	108.5	110.5	113.5	118.5	122	126.5

■ 特点 Feature:

OMR是一种轴配流式马达

采用镶针齿定转子副设计，启动压力低，效率优于BMP马达。

可靠的轴密封设计，承受背压高，可以串并联使用。

正反换转向方便、转速平稳。

OMR Motor is one spool valve type motor,

Advanced manufacturing devices for the geroler gear set, the efficiency is better than OMP motor.

Shaft seal can bear high pressure of back and the motor can be used in parallel or in series.



■ OMP/OMR型号说明 Model Code

OMR	-125	S	A1	P3	Y10
系列 Code	排量 Displacement	油口类型 Port Type	安装法兰及止口 Mounting Flange&Spigot	输出轴 Shaft	油口&泄油口 Inlet&Outlet and Drain
OMP OMR	40,50,63,80,100, 125,160,200,250, 315,400,500	S: S Type H: H Type L: L Type	参照下图 See Below Drawing		
OMRW	-160	A	Z	Y	
系列 Code	排量 Displacement	安装法兰及止口 Mounting Flange&Spigot	输出轴 Shaft	油口&泄油口 Inlet&Outlet and Drain	
OMRW OMRW1	40,50,80,100,125,160, 200,250,315,400	A: 4-φ13.5方形法兰 Square Flange, 止口 Poiltφ82.5x9		参照下图 See Below Drawing	

■ OMR技术参数 Technical Data

型号 Type	OMR	OMR	OMR	OMR	OMR	OMR	OMR	OMR	OMR
	OMRW	OMRW	OMRW	OMRW	OMRW	OMRW	OMRW	OMRW	OMRW
	50	80	100	125	160	200	250	315	400
排量 Displacement.(ml/r)	51.7	80.5	100.5	126.3	160.8	200.9	252.6	321.5	401.9
最大压降 Max.Pressure. Drop (Mpa)	连续 cont.	14	14	14	14	14	11	9	7
	间断 int.	17.5	17.5	17.5	17.5	17.5	14	11	9
	尖峰 peak.	20	20	20	20	20	16	13	11
最大扭矩 Max.torque (Nm)	连续 cont.	93	152	194	237	310	369	380	380
	间断 int.	118	189	236	296	378	450	470	470
	尖峰 peak.	135	216	270	338	433	509	540	540
转速范围(连续) Speed.Range(cont.)(r/min)	10-775	10-750	10-600	10-475	10-375	10-300	10-240	10-190	10-160
最大流量(连续) Max.Flow(cont.)(L/min)	40	60	60	60	60	60	60	60	60
最大输出功率(连续)(Kw) Max.Output.Power(cont.)	7	10	10	10	10	8	6	5	4
重量 Weight(Kg)	6.5	6.9	7.0	7.3	7.5	8.0	8.5	9.0	11

间断工作时间每分钟不得超过6秒，尖峰工作时间每分钟不得超过0.6秒。

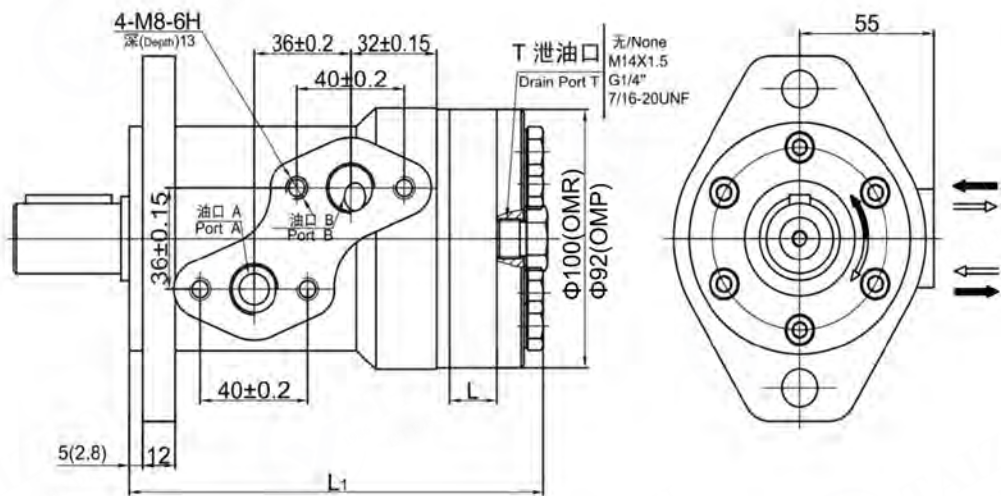
Intermittent operation the permissible values may occur for max.10% of every minute,

Peak load:the permissible values may occur for max.1% of every minute.

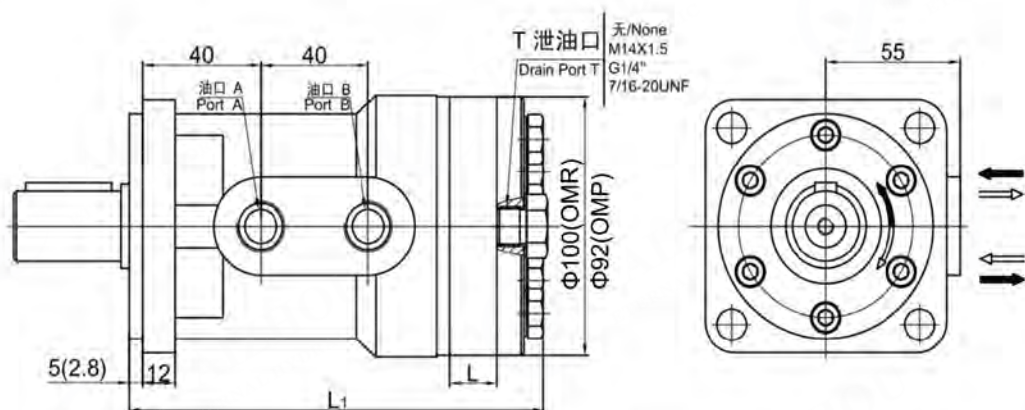
轴承受最大扭矩 (N.m) : Φ25, Φ25.4花键轴为360, Φ25, Φ25.4平键轴为300。

■ OMP/OMR马达连接尺寸&外形图 Dimension&Mounting

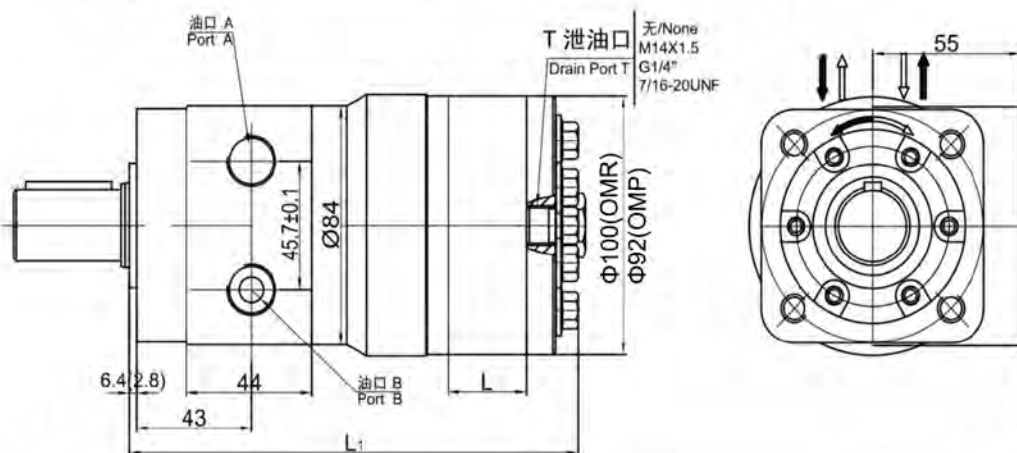
S形 (S Type)



L形 (L Type)



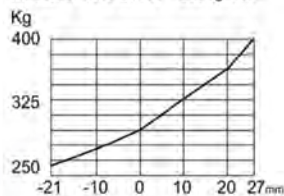
H形 (H Type)



输出轴负载能力 Shaft Load Capacity:

径向负载 Radial Load: 400Kg Max.

轴向负载 Axis Load: 200Kg Max.



排量 Displacement	50	63	80	100	125	160	200	250	315	400
L	9	11.5	14.5	18	22.5	28.8	37	44.6	55	72
L ₁	147	149.5	152.5	156	160.5	168.8	175	182.6	193	210

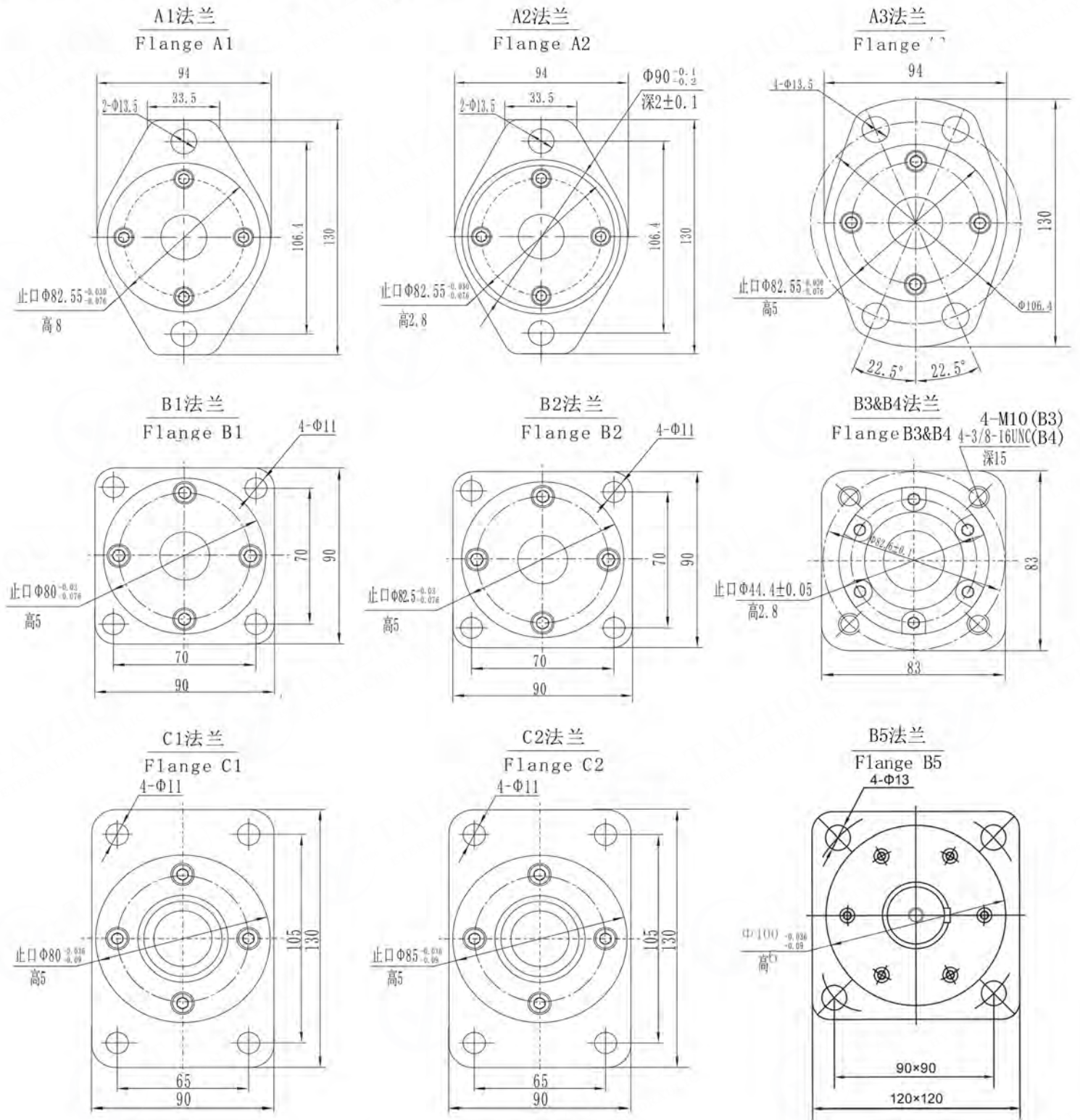
马达标准旋向:

面对输出轴轴端, A油口进油, 马达顺时针旋转。

Standard Direction of The Motor Rotation:

CW---When A Port pressurized, Viewed From the Shaft End.

■ OMP/OMR 马达安装法兰 Mounting Flange



OMP/OMR油口代号 Port Code

油口 Ports 代号 Code	P(A、B)(深deep)	C (深deep)	T (深deep)
Y	G1/2 (15)	M8 (13)	M14 × 1.5 (12)
Y1	M18 × 1.5 (15)	M8 (13)	M14 × 1.5 (12)
Y2	M22 × 1.5 (15)	M8 (13)	M14 × 1.5 (12)
Y4	ZG3/8 (15)	M8 (13)	M14 × 1.5 (12)
Y5	7/8-14UNF (15)	—	M14 × 1.5 (12)
Y7	ZG1/2 (15)	M8 (13)	M14 × 1.5 (12)
Y8	NPT1/2 (15)	M8 (13)	M14 × 1.5 (12)
Y9	NPTF1/2 (15)	5/16-18UNC (13)	7/16-20UNF (12)
Y10	G1/2 (15)	M8 (13)	G1/4 (12)
Y15	7/8-14UNF (15)	5/16-18UNC (13)	7/16-20UNF (12)
Y17	3/4-16UNF(15)	—	7/16-20UNF(12)
Y19	Φ11(15)	5/16-18UNC(13)	7/16-20UNF(12)
Y20	M18 × 1.5(15)	M8 (13)	G1/4(12)

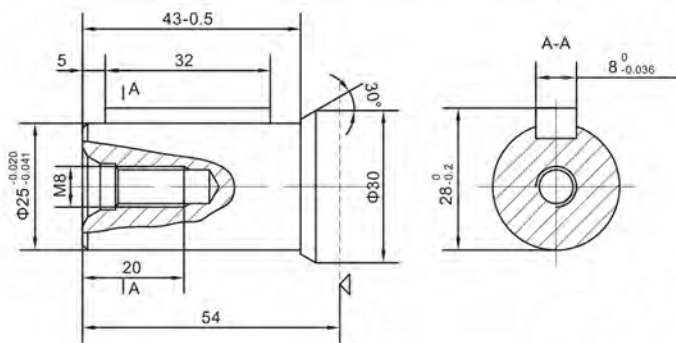
注: P(A、B)—进出口, C—油口面安装螺纹 (—表示没有此螺纹孔), T—泄油口

Note:P(A、B)—Ports, C—Mounting Thread (—Indicates no this thread), T—Drain connettion

OMP/OMR外形安装尺寸—输出轴 Shaft Version

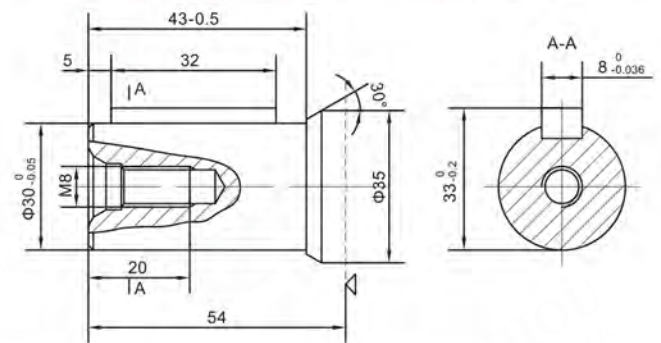
P1: Φ25平键轴, 平键8 × 7 × 32

Φ25 Cylindrical shaft, parallel key 8 × 7 × 32



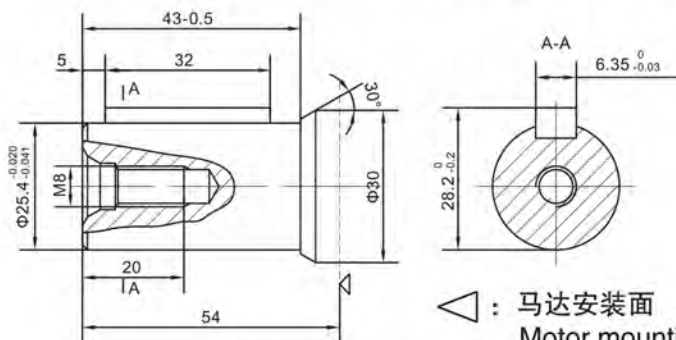
P2: Φ30平键轴, 平键8 × 7 × 32

Φ30 Cylindrical shaft, parallel key 8 × 7 × 32



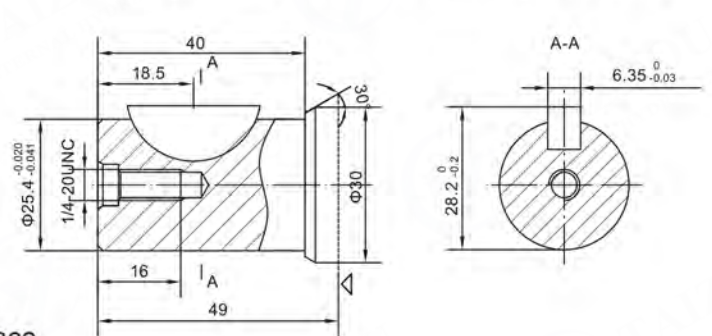
P3: Φ25.4平键轴, 平键6.35 × 6.35 × 32

Φ25.4 Cylindrical shaft, parallel key 6.35 × 6.35 × 32



P4: Φ25.4平键轴, 半圆键Φ25.4 × 6.35

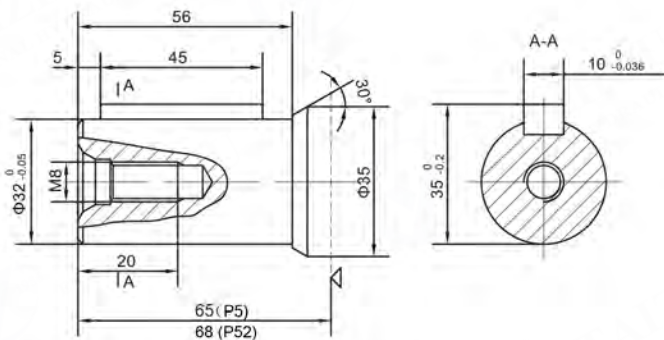
Φ25.4 Cylindrical shaft, Woodruff key Φ25.4 × 6.35



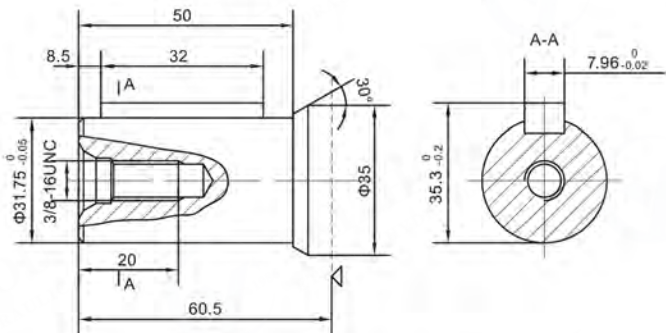
△: 马达安装面
Motor mounting surface

OMP/OMR外形安装尺寸—输出轴 Shaft Version

P5&P52: $\Phi 32$ 平键轴, 平键 $10 \times 8 \times 45$
 $\Phi 32$ Cylindrical shaft, parallel key $10 \times 8 \times 45$

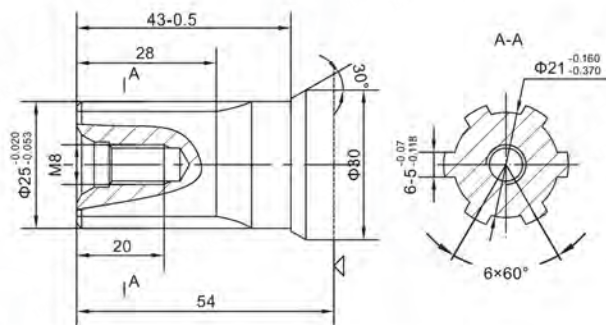
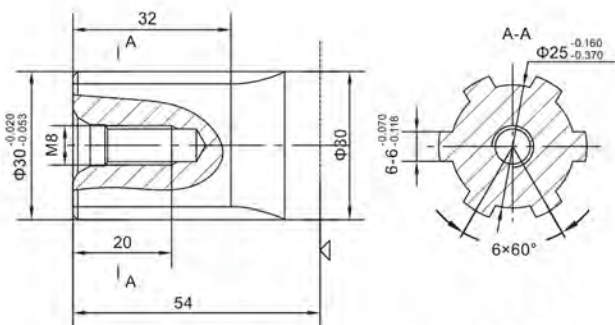


P6: $\Phi 31.75$ 平键轴, 平键 $7.96 \times 7.96 \times 32$
 $\Phi 31.75$ Cylindrical shaft, parallel key $7.96 \times 7.96 \times 32$



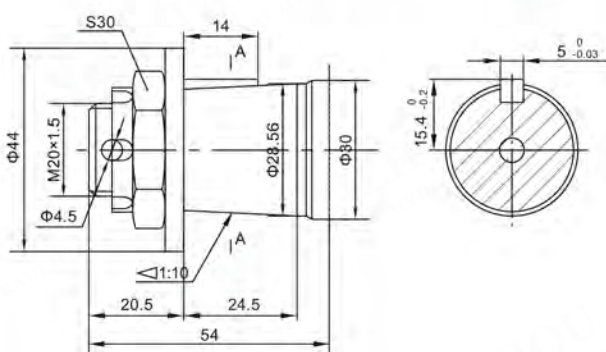
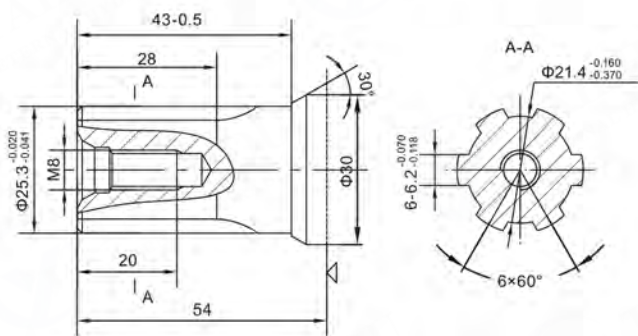
H1: $\Phi 30$ 矩形花键轴, $6-30 \times 25 \times 6$
 $\Phi 30$ Splined shaft, $6-30 \times 25 \times 6$

H2: $\Phi 25$ 矩形花键轴, $6-25 \times 21 \times 5$
 $\Phi 25$ Splined shaft, $6-25 \times 21 \times 5$



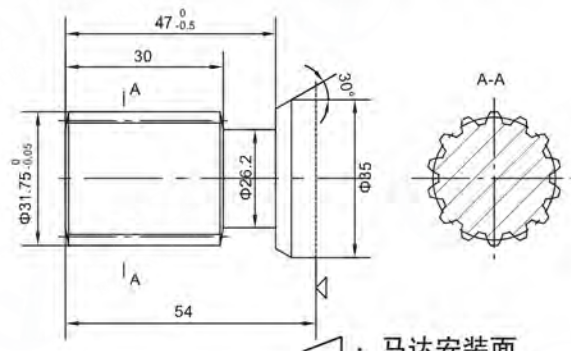
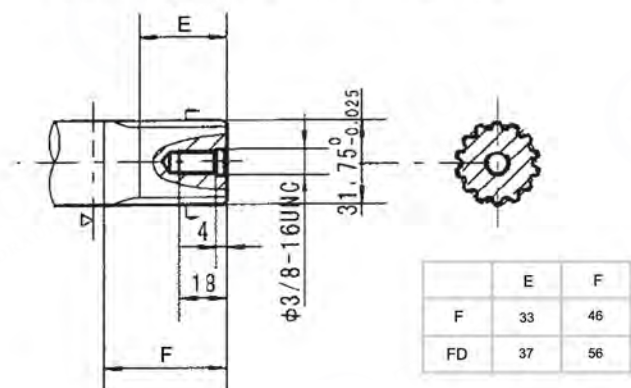
H3: $\Phi 25.3$ 矩形花键轴, $6-25.3 \times 21.4 \times 6.2$
 $\Phi 25.3$ Splined shaft, $6-25.3 \times 21.4 \times 6.2$

Z1: $\Phi 28.56$ 锥轴, 锥度 $1:10$, 平键 $5 \times 5 \times 14$
 $\Phi 28.56$ Tapered shaft, taper $1:10$, parallel key $5 \times 5 \times 14$



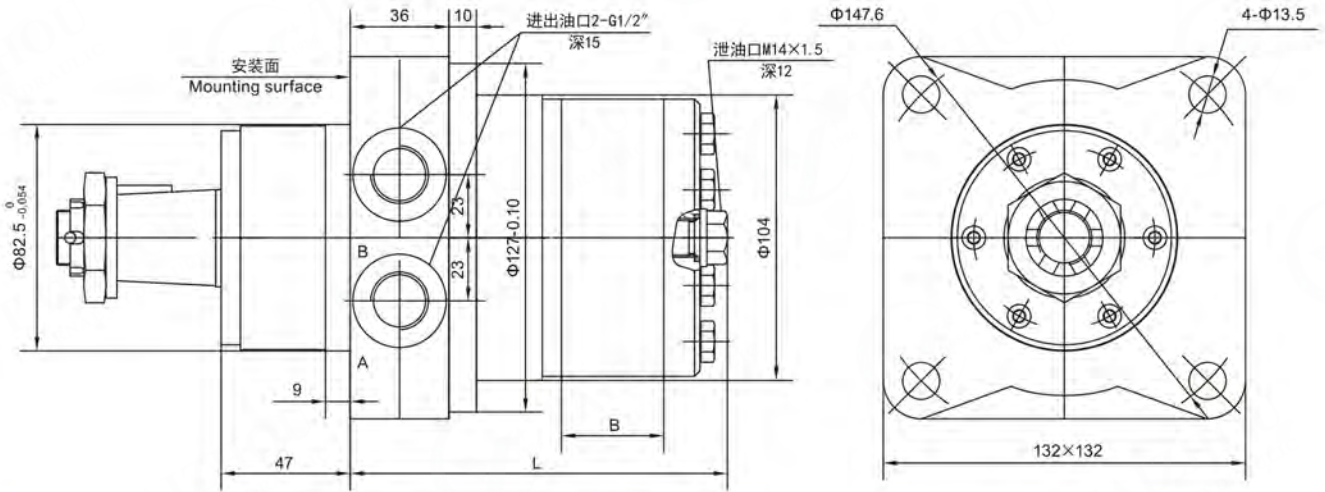
F&FD: $\Phi 31.75$ 渐开线花键轴 $14-DP12/24$
 $\Phi 31.75$ involute splined shaft $14-DP12/24$

K10: $\Phi 31.75$ 渐开线花键轴 $14-DP12/24$ $a=30^\circ$
 $\Phi 31.75$ involute splined shaft $14-DP12/24$ $a=30^\circ$



: 马达安装面
 Motor mounting surface

■ OMRW轮用马达外形安装图 Installation



型号 Type	BMRW-50	BMRW-80	BMRW-100	BMRW-125	BMRW-160	BMRW-200	BMRW-250	BMRW-315	BMRW-400
L	108	113	117	121	127	134	143	155	169
B	9	14	17.5	22	28	35	44	56	70

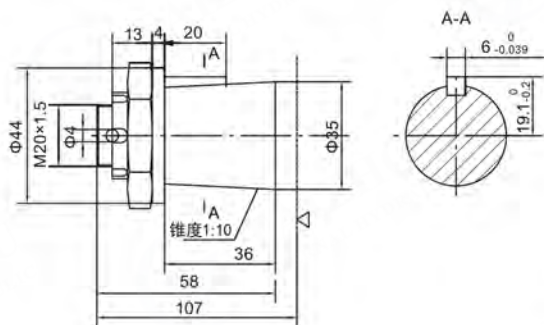
■ OMRW油口代号 Port Code

油口 Ports	P(A、B)(深deep)	C (深deep)	T (深deep)
代号 Code			
Y	G1/2 (15)	—	M14 x 1.5(12)

P(A、B)---进油口, C---油口面安装螺纹孔 (—表示没有此螺纹孔), T---泄油口
P(A、B)---Ports, C---Mounting Thread (—Indicates no this thread), T---Drain connettion

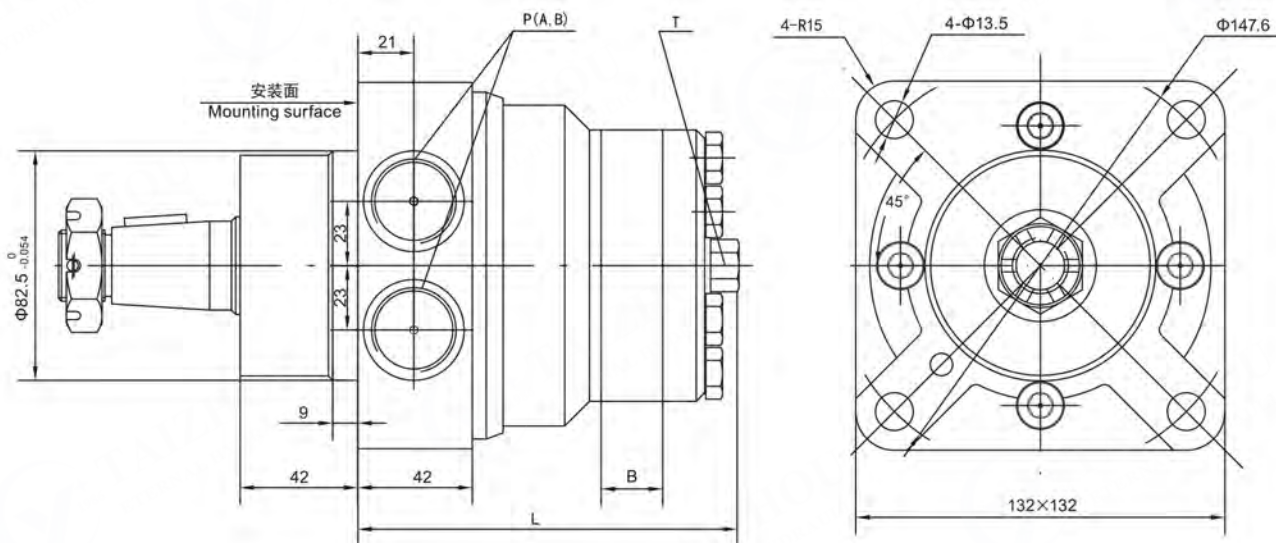
■ OMRW轮用马达外形连接尺寸—输出轴 Shaft Version

Z: Φ35锥轴, 锥度1:10, 平键B6 × 6 × 20
Φ35 Tapered shaft, taper1:10, parallel key B6 × 6 × 20



◁ : 马达安装面
Motor mounting surface

■ OMRW1轮用马达外形安装图 Installation



型号Type	OMRW1-50	OMRW1-80	OMRW1-100	OMRW1-125	OMRW1-160	OMRW1-200	OMRW1-250	OMRW1-315	OMRW1-400
L	125	130	134	138	144	151	160	172	186
B	9	14	17.5	22	28	35	44	56	70

■ OMRW1油口代号 Port Code

代号 Code	油口 Ports	P(A、B)(深deep)	C (深deep)	T (深deep)
Y		G1/2 (15)	—	M14 × 1.5(12)
Y5		7/8-14UNF(15)	—	M14 × 1.5(12)
Y10		G1/2 (15)	—	G1/4 (12)

P(A、B)--进出油口，C--油口面安装螺纹孔（—表示没有此螺纹孔），T--泄油口

P(A、B)--Ports, C--Mounting Thread（—Indicates no this thread），T--Drain connettion

■ 特点 Feature:

OMS马达是一种盘配流马达

先进的盘配流设计，低速性能好，容积效率高，并具有磨损自动补偿功能
双列圆锥滚针轴承能够承受大的径向力，并应用于重载荷驱动的场所

OMS motor is one disc valve type gerolor motor,

Advanced design of disc distribution flow, which can provide improved performance at low speed

Higher volumetric for the automatically copensate wear.

Double taper roller bearings permit high radial loads, can be used on heavy vehicles in traction drive applications



■ OMS型号说明 Model Code

OMS	-400	S1	B1	P1	E
系列 Code	排量 Displacement	泄油口位置 Drain Port Position	安装法兰及止口 Mounting Flange&Spigot	输出轴 Shaft	油口&泄油口 Inlet&Outlet and Drain Port
OMS	80,100,125, 160,200,250, 315,400,475	S1:隔板上 (on Spacer Plate) S2:后盖上 (on End Cover) S3: S3 Type	参照下图 See Below Drawing		

■ OMS技术参数 Technical Data

型号 TYPE	OMS-80 OMSS-80 OMSW-80	OMS-100 OMSS-100 OMSW-100	OMS-125 OMSS-125 OMSW-125	OMS-160 OMSS-160 OMSW-160	OMS-200 OMSS-200 OMSW-200	OMS-250 OMSS-250 OMSW-250	OMS-315 OMSS-315 OMSW-315	OMS-400 OMSS-400 OMSW-400
排量 Displacement(ml/r)	80.5	100.5	126.3	160.8	200.9	252.6	321.5	401.9
最大压降 Max.Pressure. Drop (Mpa)	连续 cont.	17.5	17.5	17.5	16	16	12.5	10
	间断 int.	20	20	20	20	20	16	14
	尖峰 peak.	22.5	22.5	22.5	22.5	22.5	20	17.5
最大扭矩 Max.torque (N.m)	连续 cont.	194	242	303	358	438	440	551
	间断 int.	218	283	345	429	540	580	625
	尖峰 peak.	271	318	373	459	576	700	831
转速范围(连续) Speed.Range(cont.)(r/min)	10-810	10-750	9-600	7-470	6-375	6-300	5-240	5-180
最大流量(连续) Max.Flow(cont.)(L/min)	65	75	75	75	75	75	75	75
最大输出功率(连续) Max.Output.Power(cont.)(Kw)	14	16	16	14	14	11	10	8
重量 Weight (kg)	9.8	10.0	10.3	10.7	11.1	11.6	12.3	13.1

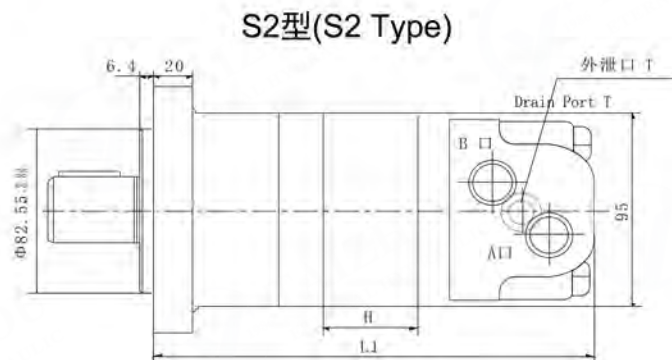
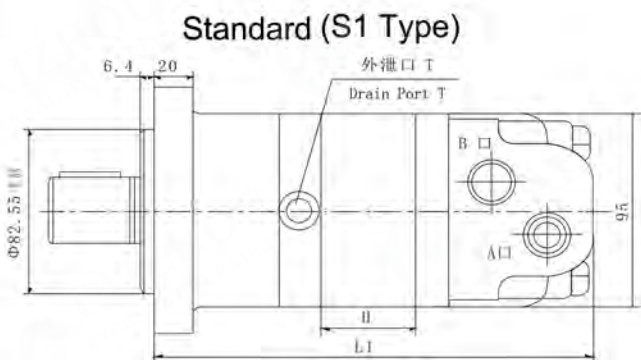
间断工作时间每分钟不得超过6秒，尖峰工作时间每分钟不得超过0.6秒

Intermittent operation the permissible values may occur for max. 10% of every minute

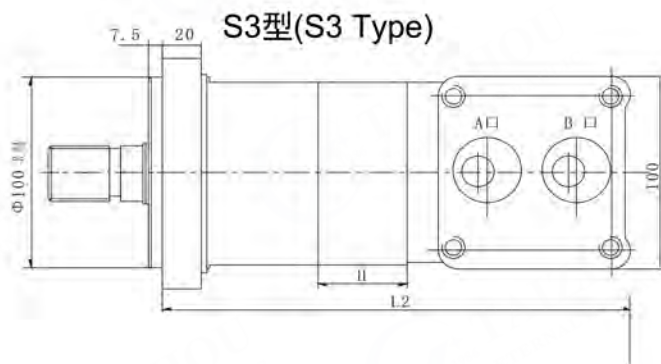
Peak load: the permissible values may occur for max. 1% of every minute

■ 轴承受最大扭矩(N.m): $\Phi 25$, $\Phi 25.4$ 花键轴为360, $\Phi 25$, $\Phi 25.4$ 平键轴为300

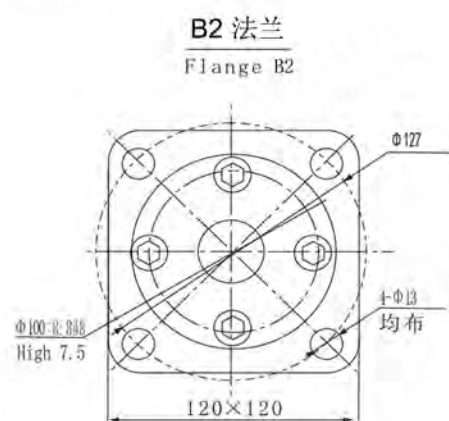
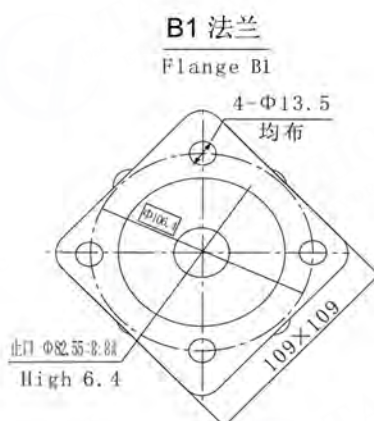
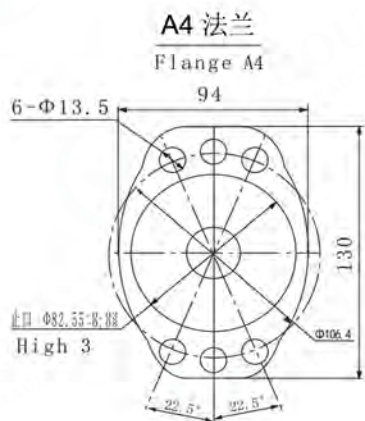
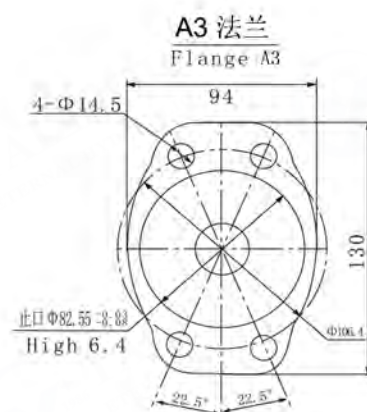
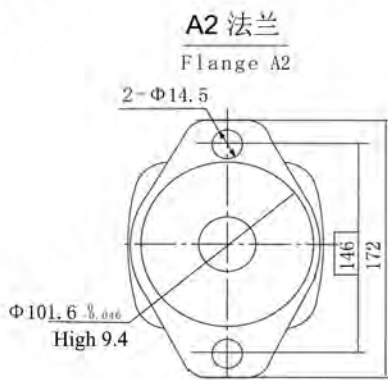
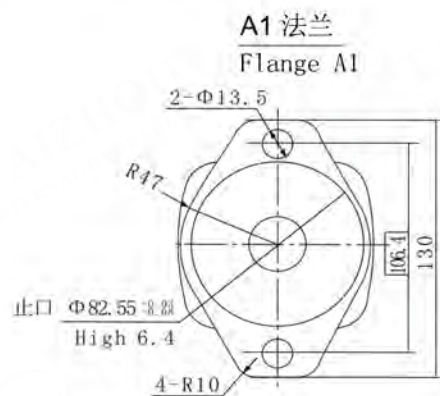
■ OMS马达连接尺寸—外形图 Dimensions&Mounting



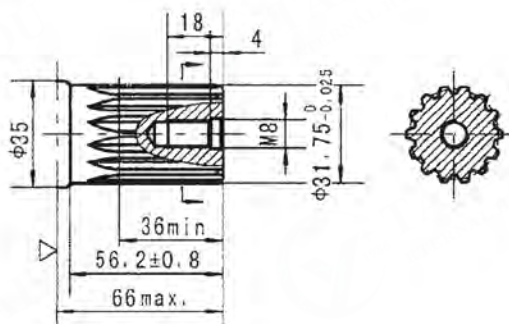
排量 (ml/r) Displacement	80	100	130	160	195	245	305	395	490
H	14.4	18	22.8	28.8	35.6	44.6	56	72	90
L1	180	184	188	195	201	211	223	239	256
L2	208	212	216	222	229	238	249	265	282



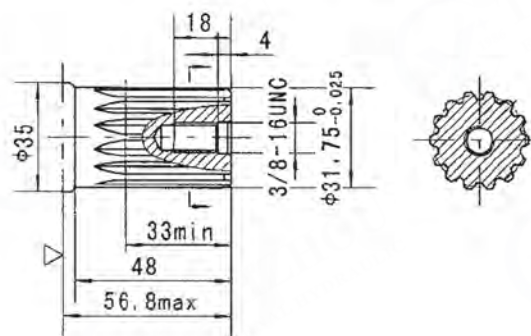
■ OMS马达连接尺寸—安装法兰 Flange



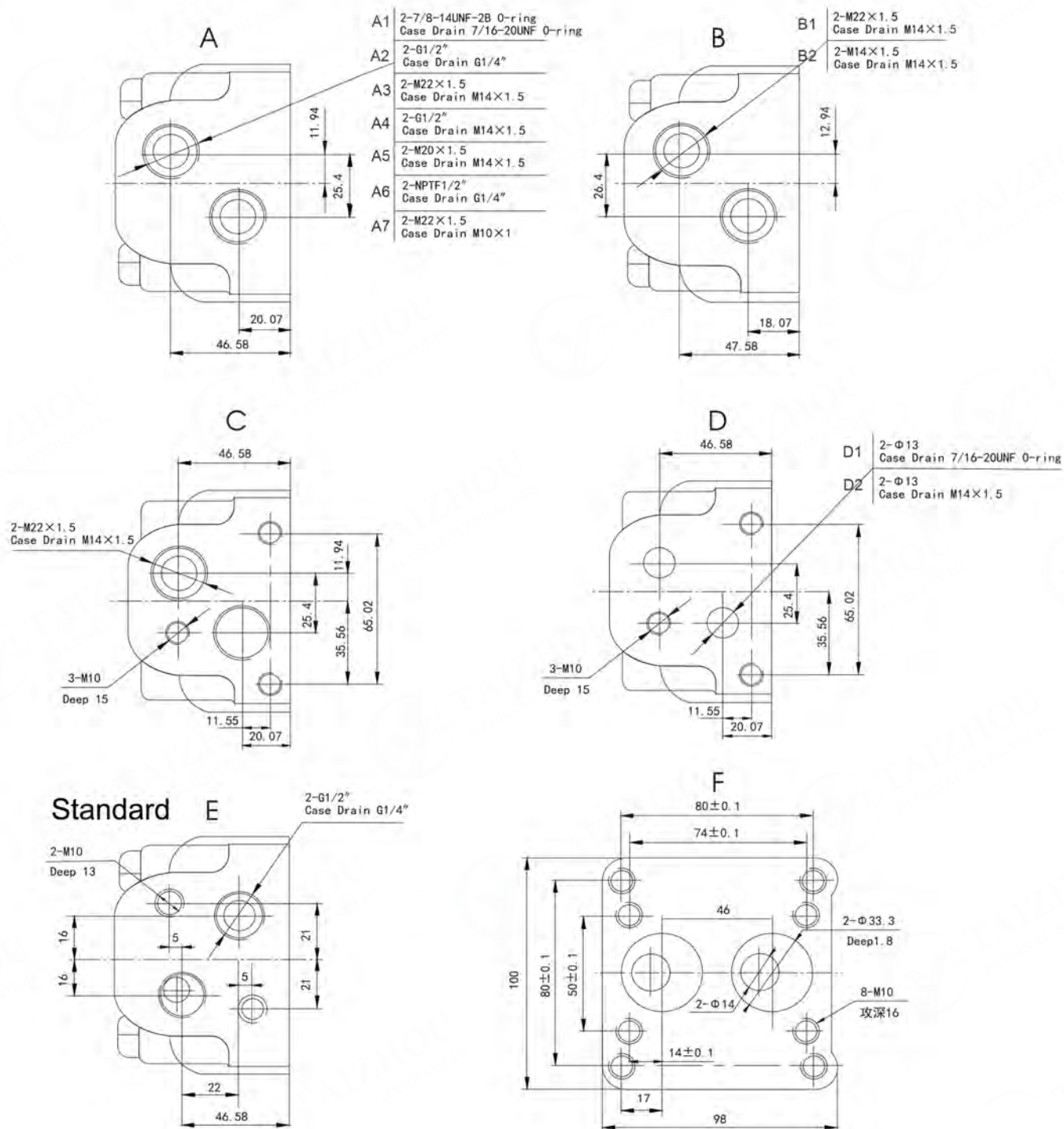
FD: $\Phi 31.75$ 渐开线花键轴 14-DP12/24
 $\Phi 31.75$ involute splined shaft 14-DP12/24



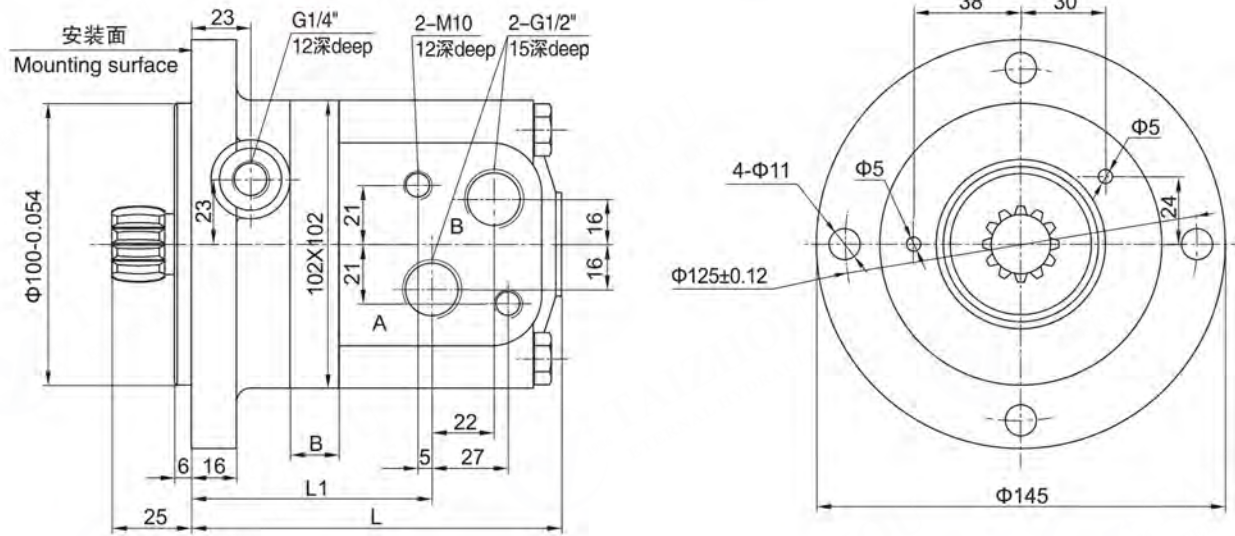
F: $\Phi 31.75$ 渐开线花键轴 14-DP12/24
 $\Phi 31.75$ involute splined shaft 14-DP12/24



OMS马达连接尺寸—油口 Port

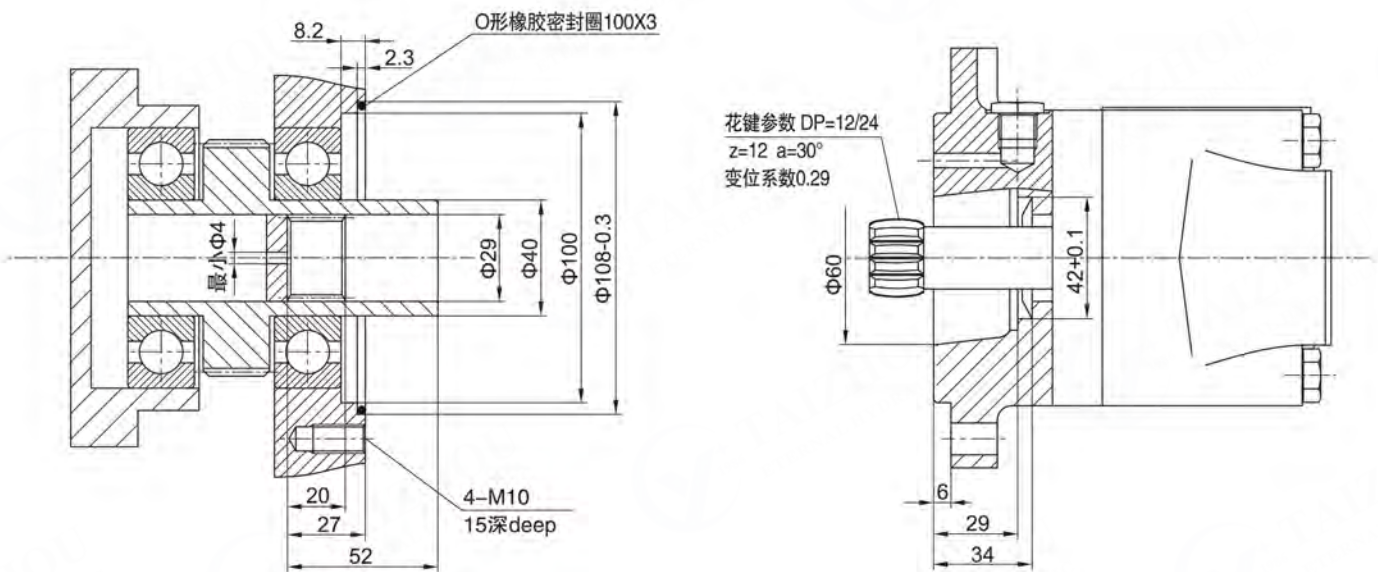


■ OMSS外形安装图 Installation

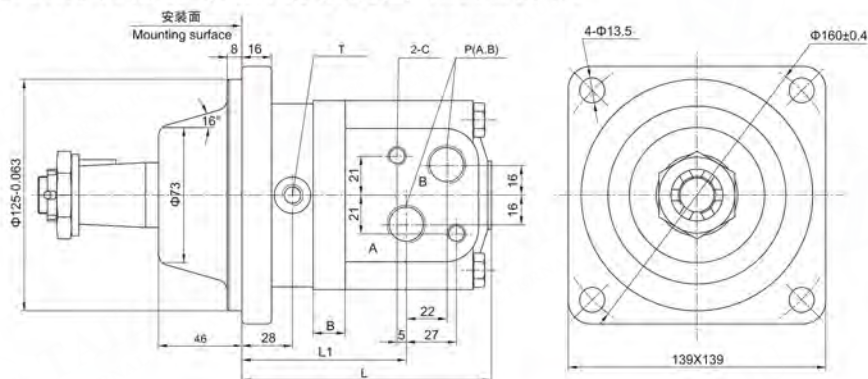


型号 Type	OMSS-80	OMSS-100	OMSS-125	OMSS-160	OMSS-200	OMSS-250	OMSS-315	OMSS-400
L	122.5	126	130.5	136.5	143.5	152.5	164.5	178.5
L1	79.5	83	87.5	93.5	100.5	109.5	121.5	135.5
B	11	14.5	19	25	32	41	53	67

■ OMSS外形连接尺寸 Dimension of The Attached Component



OMSW轮用马达外形安装图 Installation



型号Type	OMSW-80	OMSW-100	OMSW-125	OMSW-160	OMSW-200	OMSW-250	OMSW-315	OMSW-400
L	126	129.5	134	140	147	156	168	182
L1	83	86.5	91	97	104	113	125	139
B	11	14.5	19	25	32	41	53	67

OMSW轮用马达油口代号 Ports Code

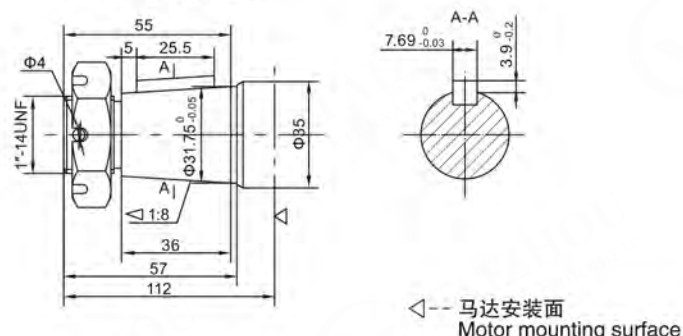
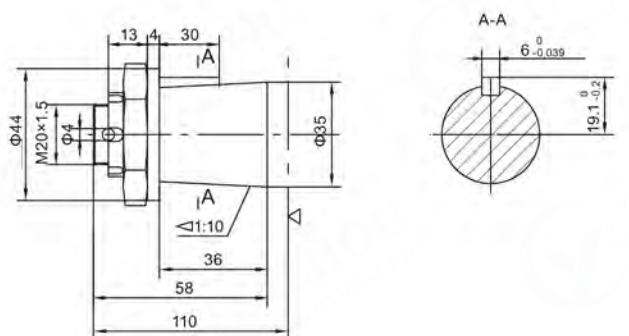
代号 Code	油口 Ports	P(A、B)(深deep)	C (深deep)	T (深deep)
Y		G1/2 (15)	M10 (12)	G1/4 (12)
Y5		7/8-14UNF (15)	—	7/16-20UNF (12)

注: P(A、B)—进/出口, C—油口面安装螺纹 (—表示没有此螺纹孔), T—泄油口
 Note: P(A、B)—Ports, C—Mounting Thread (—Indicates no this thread), T—Drain connection

OMSW输出轴 Shaft Version

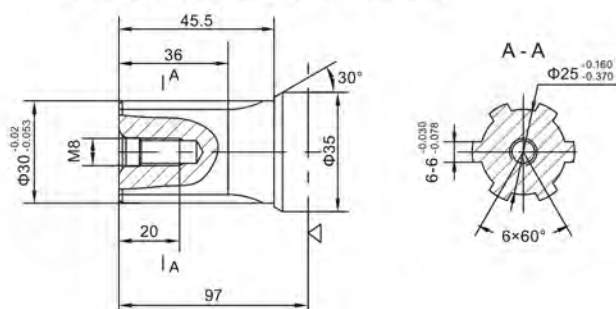
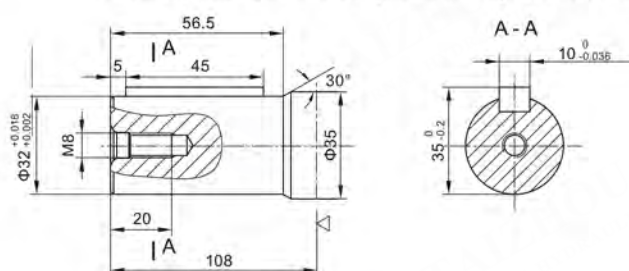
Z1: Φ35锥轴, 锥度1:10, 平键6×6×30
 Φ35 Tapered shaft, taper1:10, parallel key 6×6×30

Z2: Φ31.75锥轴, 锥度1:8, 平键7.96×7.96×25
 Φ31.75 Tapered shaft, taper1:8, parallel key 7.96×7.96×25

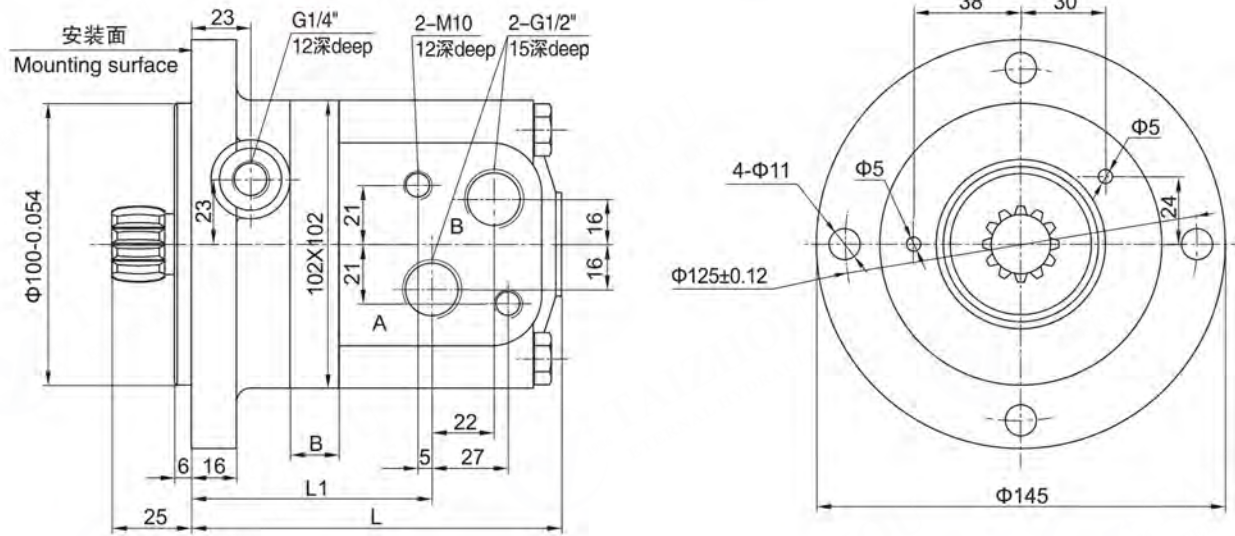


P1: Φ32平键轴, 平键10×8×45
 Φ32 Cylindrical shaft, parallel key 10×8×45

H1: Φ30矩形花键轴, 6-30×25×6
 Φ30 Splined shaft, 6-30×25×6

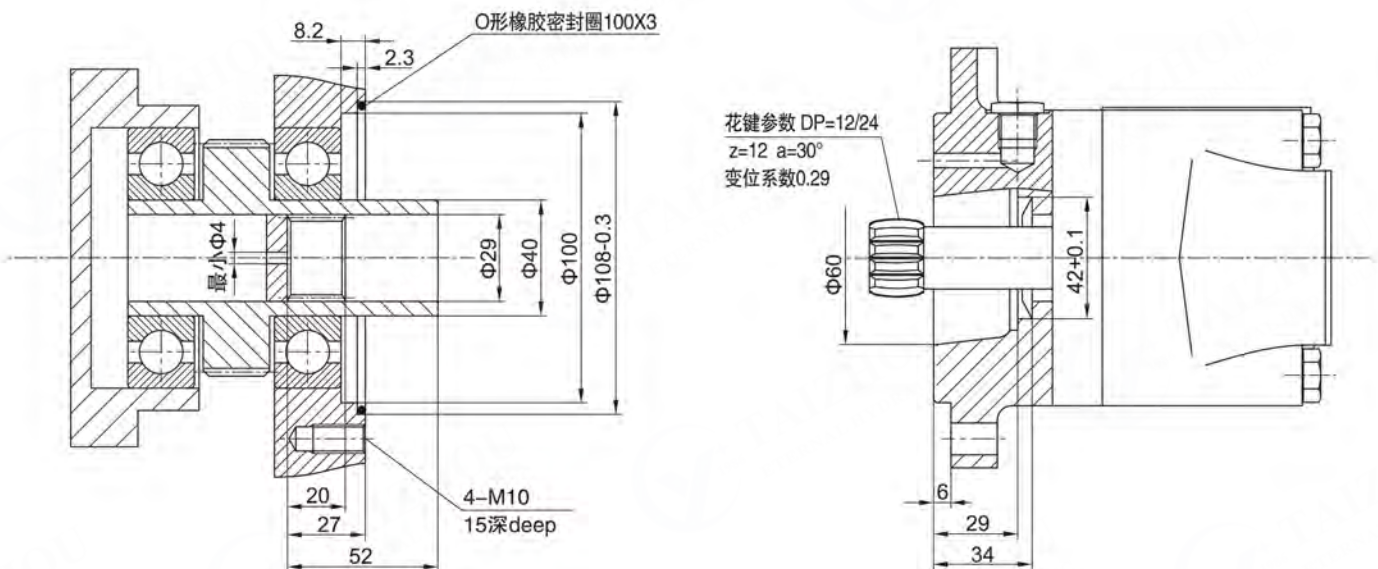


■ OMSS外形安装图 Installation



型号 Type	OMSS-80	OMSS-100	OMSS-125	OMSS-160	OMSS-200	OMSS-250	OMSS-315	OMSS-400
L	122.5	126	130.5	136.5	143.5	152.5	164.5	178.5
L1	79.5	83	87.5	93.5	100.5	109.5	121.5	135.5
B	11	14.5	19	25	32	41	53	67

■ OMSS外形连接尺寸 Dimension of The Attached Component



OMT系列摆线液压马达 OMT Series Hydraulic Orbit Motor



■ 特点 Feature:

OMT马达是一种盘配流马达。先进的盘配流结构设计，低速性能好。容积效率高，并具有磨损自动补偿功能。双列圆锥滚针轴承能够承受大的径向力，并应用于重载驱动场合。

OMT Motor is one disc valve type gerolor motor.
Advanced design of disc distribution flow, which can provide improve performance at low speed
Higher volumetric for the automatically compensate wear.
Double taper roller bearings permit high radial loads, can be used on heavy vehicles in traction drive applications



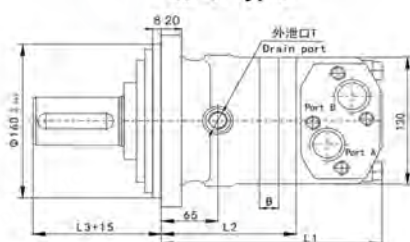
■ OMT型号说明 Model Code

OMT	-315	J	A1	P1	D
系列 Code	排量 Displacement	油口位置 Port Position	安装法兰及止口 Mounting Flange&Spigot	输出轴 Shaft	油口&泄油口 Inlet&Outlet and Drain Port
OMT	160,200,230, 250,315,400, 500,630,800	J D E	参照下图 See Below Drawing		

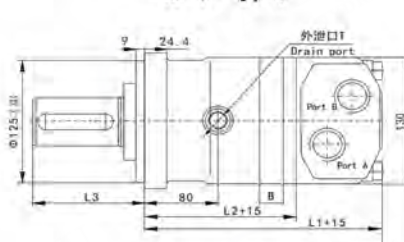
■ OMT技术参数 Technical Data

型号 TYPE	OMT-160	OMT-200	OMT-230	OMT-250	OMT-315	OMT-400	OMT-500	OMT-630	OMT-800
排量 Displacement(ml/r)	161.1	201.4	232.5	251.8	326.3	410.9	523.6	629.1	801.8
最大压降 Max.Pressure.Drop(Mpa)	连续 cont.	20	20	20	20	18	16	14	12.5
	间断 int.	24	24	24	24	24	21	18	13
	尖峰 peak.	28	28	28	28	28	24	21	16
最大扭矩 Max.Torque(N.m)	连续 cont.	470	590	670	730	950	1080	1220	1464
	间断 int.	560	710	821	880	1140	1260	1370	1520
	尖峰 peak.	669	838	958	1036	1346.3	1450.3	1643.8	1665
转速范围(连续) Speed.Range(cont)(r/min)	625	625	536	500	380	305	240	196	154
最大流量(连续) Max.Flow(cont)(L/min)	100	125	125	125	125	125	125	125	125
最大输出功率(连续) Max.output.Power(cont)(Kw)	27.7	34.9	34.7	34.5	34.9	31.2	28.8	25.3	22.2
重量 Weight(Kg)	19.5	20	20.4	20.5	21	22	23	24	25

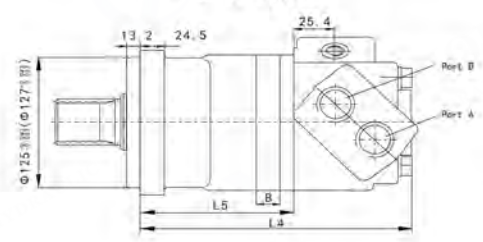
J形 (J Type)



D形 (D Type)



E形 (E Type)

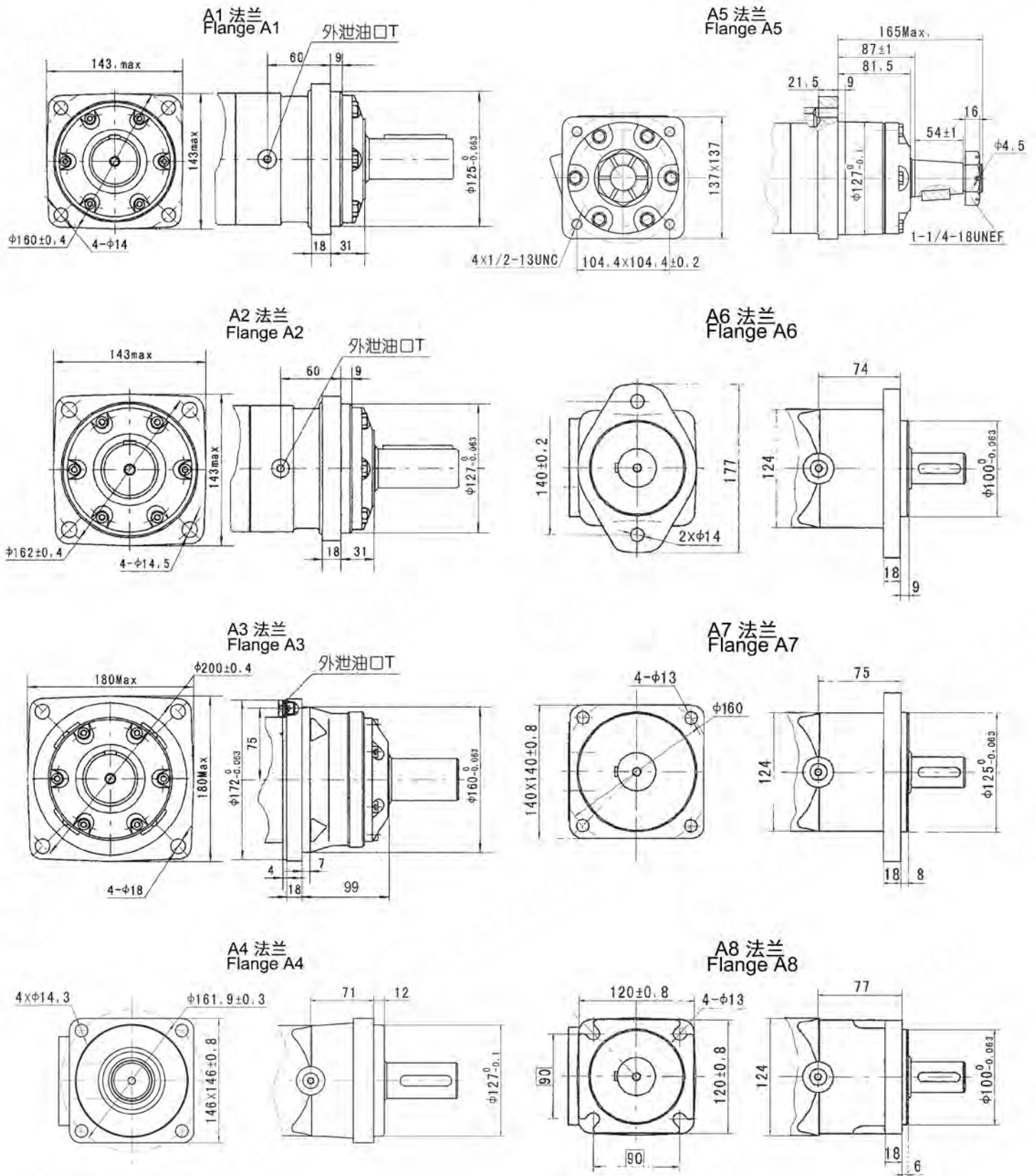


排量	195	245	310	390	490	625	800	985
B	21.7	27.3	34.5	43.1	54.4	69.1	89	108.9
L1	229.7	235.3	242.5	251.3	262.5	277	292.9	317
L2	135.1	140.7	148.1	156.7	167.7	182.5	198.5	222.3
L4	270.1	275.7	283	291.6	302.6	317.5	335.4	357.3
L5	150.1	155.7	163.1	171.7	182.9	197.5	213.5	237.3

L3:见下一页

马达标准旋向:
面对输出轴轴端, A油口进油, 马达顺时针旋转。
Standard Direction of The Motor Rotation:
CW---When A port pressurized, Viewed From the Shaft End.

■ OMT马达安装法兰 Mounting Flange

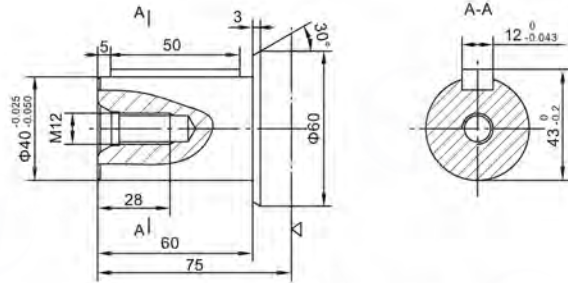


■ OMT外形安装尺寸-输出轴 Shaft Version

仅配A,A1,A7型 方法兰 Only match A,A1,A7 flange

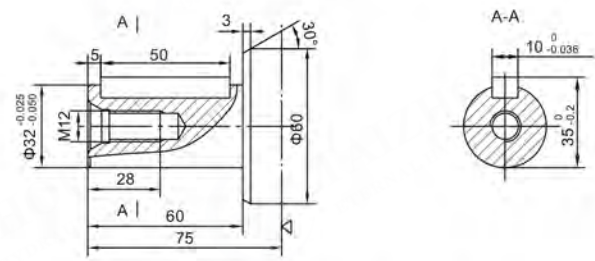
P1: Φ40平键轴, 平键12×8×50

Φ40 Cylindrical shaft, parallel key12×8×50



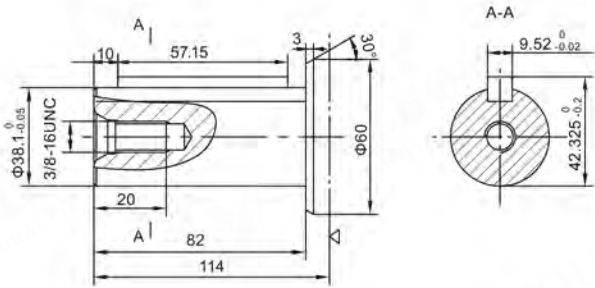
P2: Φ32平键轴, 平键10×8×50

Φ32 Cylindrical shaft, parallel key10×8×50



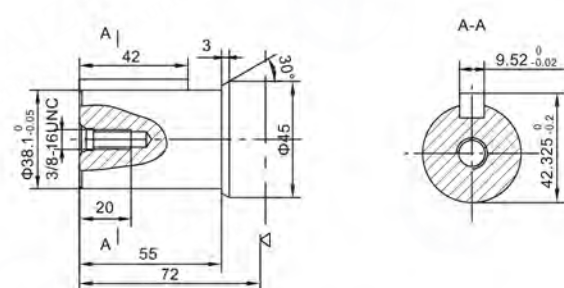
P3: Φ38.1平键轴, 平键9.525×9.525×57.15

Φ38.1 Cylindrical shaft, parallel key9.525×9.525×57.15



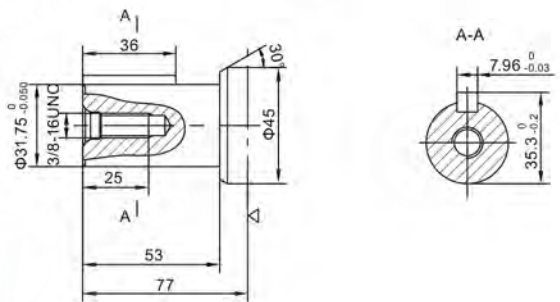
P4: Φ38.1平键轴, 平键9.525×9.525×42

Φ38.1 Cylindrical shaft, parallel key9.525×9.525×42



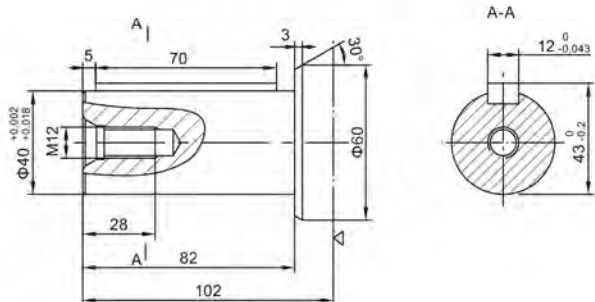
P5: Φ31.75平键轴, 平键7.96×7.96×36

Φ31.75 Cylindrical shaft, parallel key7.96×7.96×36



P6: Φ40平键轴, 平键轴12×8×70

Φ40 Cylindrical shaft, parallel key12×8×70



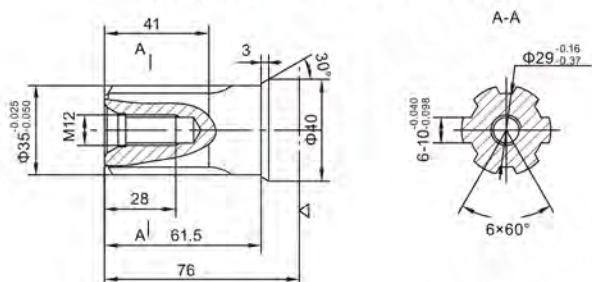
仅配A,A1,A7型 方法兰 Only match A,A1,A7 flange

H4: Φ35矩形花键轴, 6-35×29×10

Φ35 Splined shaft, 6-35×29×10

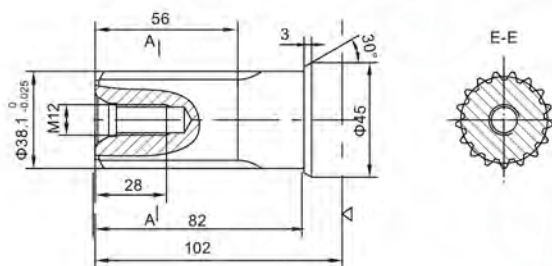
H5: Φ35矩形花键轴, 6-35×29×6

Φ35 Splined shaft, 6-35×29×6



K3: Φ38.1渐开线花键轴 17-DP12/24 a=30°

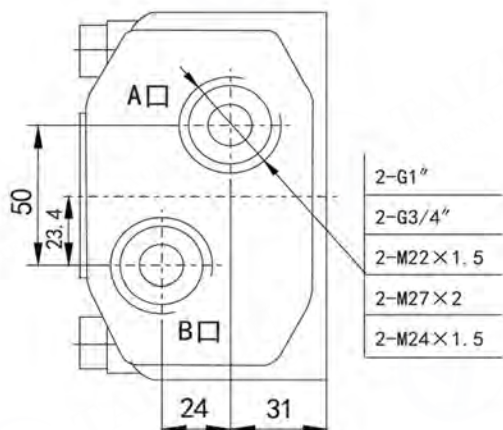
Φ38.1 involute splined shaft 17-DP12/24 a=30°



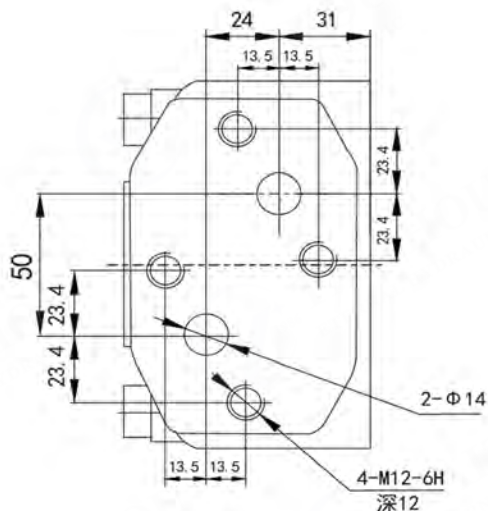
◁ : 马达安装面
Motor mounting surface

■ OMT马达连接尺寸 油口 Port

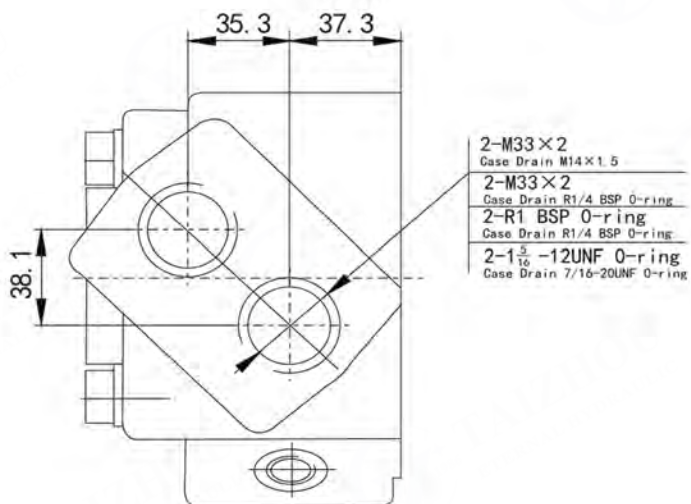
A:



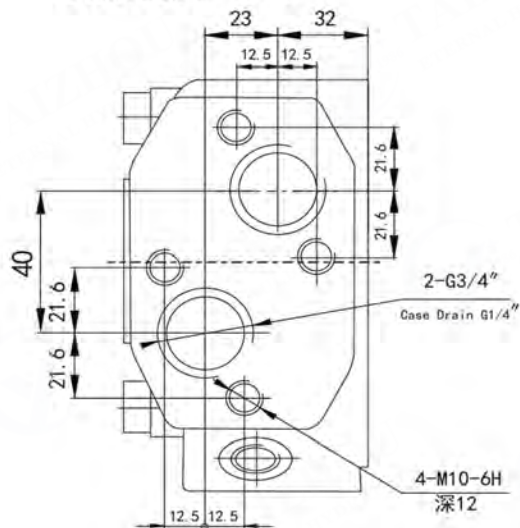
B:



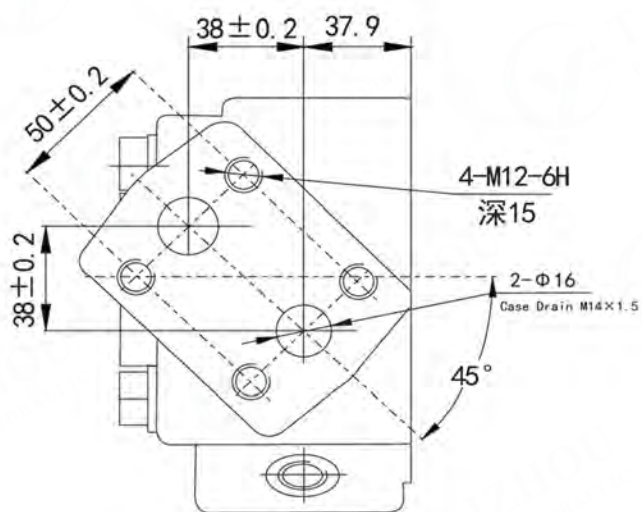
C:



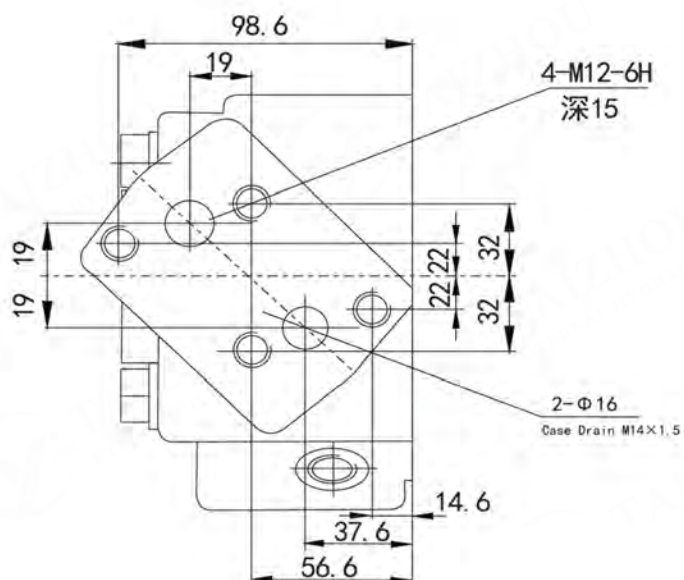
Standard D:



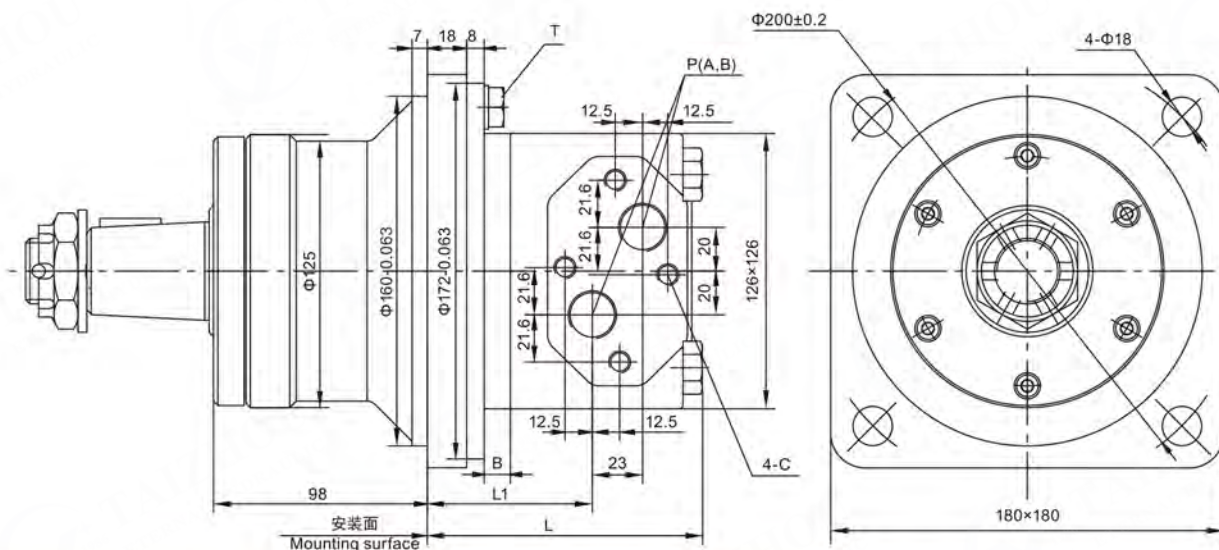
E:



F:



OMTW型号说明 Model Code



型号 Type	OMTW-160	OMTW-200	OMTW-250	OMTW-320	OMTW-400	OMTW-500
L	127	131.5	138	145	154	172
L1	76.5	81	86.5	93.5	102.5	121
B	12	16.5	22	29	38	56.5

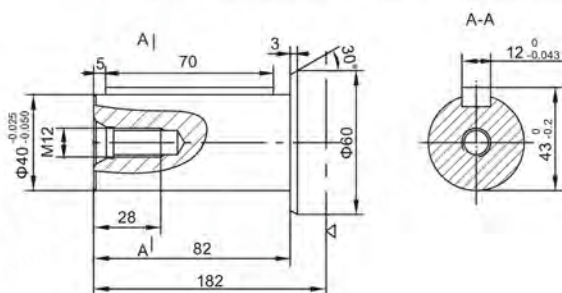
OMTW油口代号 Ports Code

油口 Ports	P(A、B)(深deep)	C (深deep)	T (深deep)
代号 Code			
Y	G3/4 (15)	M10 (12)	G1/4(12)

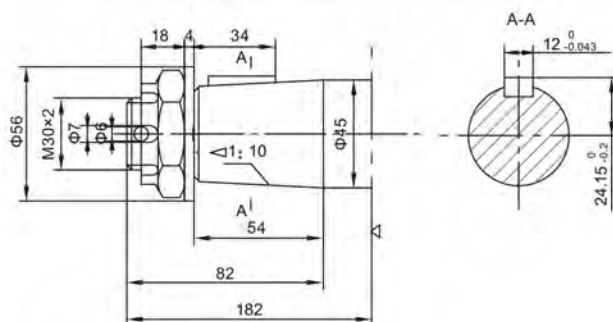
P(A、B)—进/出油口，C—油口面安装螺纹孔（—表示没有此螺纹孔），T—泄油口
P(A、B)—Ports, C—Mounting Thread（—Indicates no this thread），T—Drain connettion

OMTW外形安装尺寸-输出轴 Shaft Version

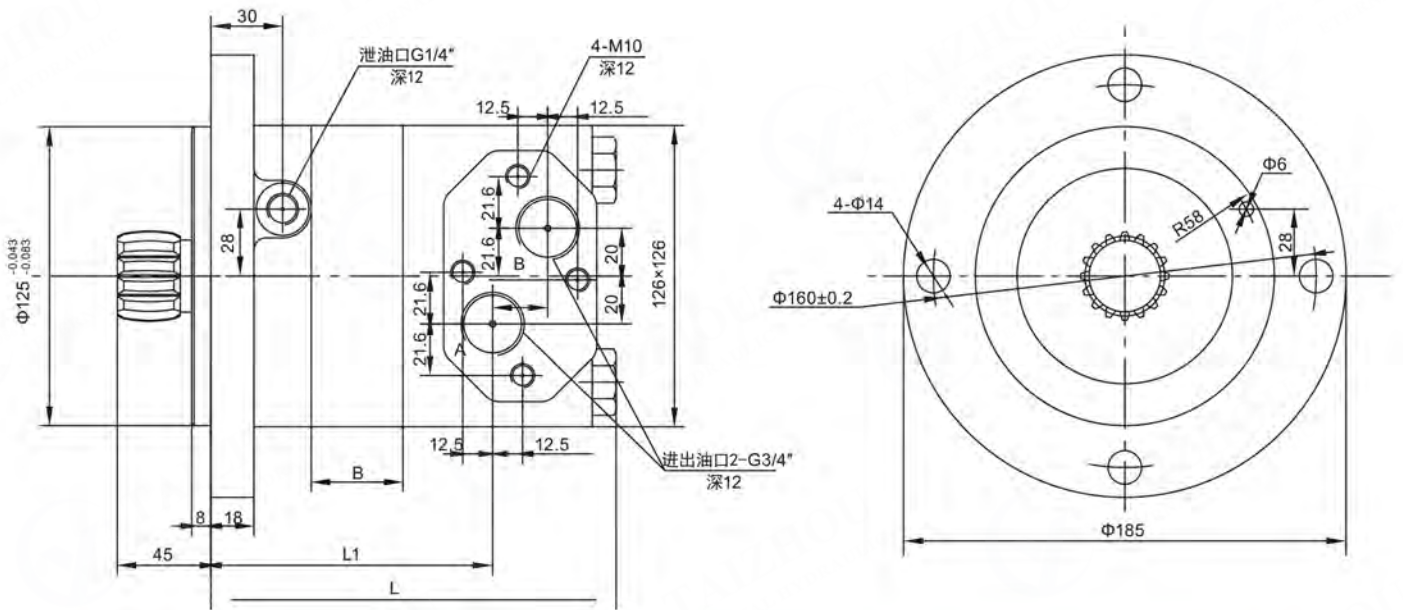
P31: Φ40平键轴，平键12×8×70
Φ40 Cylindrical shaft, parallel key 12×8×70



Z2: Φ45锥轴，锥度1:10，平键12×8×28
Φ45 Tapered shaft, taper 1:10, parallel key 12×8×28

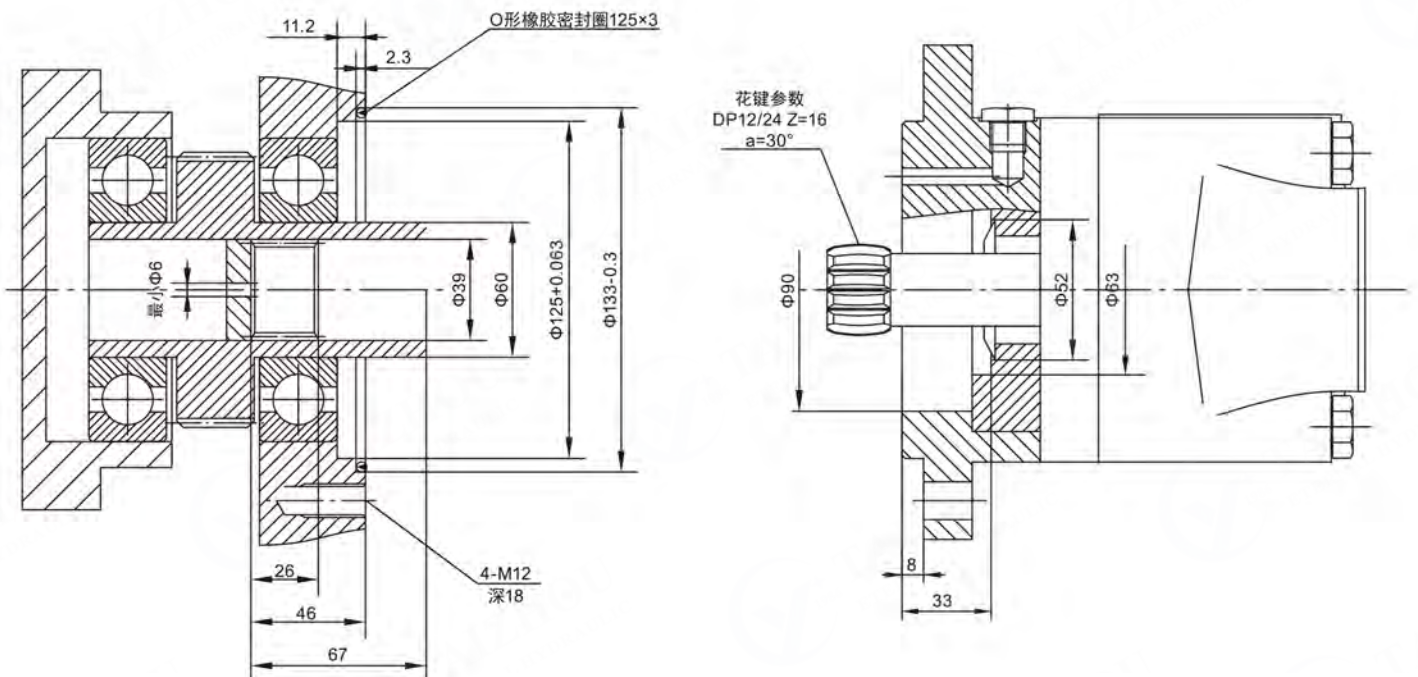


■ OMTS外形安装图 Installation



型号Type	OMTS-160	OMTS-200	OMTS-250	OMTS-320	OMTS-400	OMTS-500
L	144	148.5	154	161	170	188.5
L1	93.5	98	103.5	110.5	119.5	138
B	12	16.5	22	29	38	56.5

■ OMTS外形连接尺寸（连接尺寸供参考） Shaft Version



■ 特点 Feature:

OMV马达是一种盘配流马达

先进的盘配流设计, 低速性能好 容积效率高, 并具有磨损自动补偿功能

双列圆锥滚针轴承能够承受大的径向力, 并应用于重载驱动场合

OMV motor is one disc valve type gerotor motor,

Advanced design of disc distribution flow, which can provide improved performance at low speed

Higher volumetric for the automatically copensate wear.

Double taper roller bearings permit high radial loads, can be used on heavy vehicles in traction drive applications



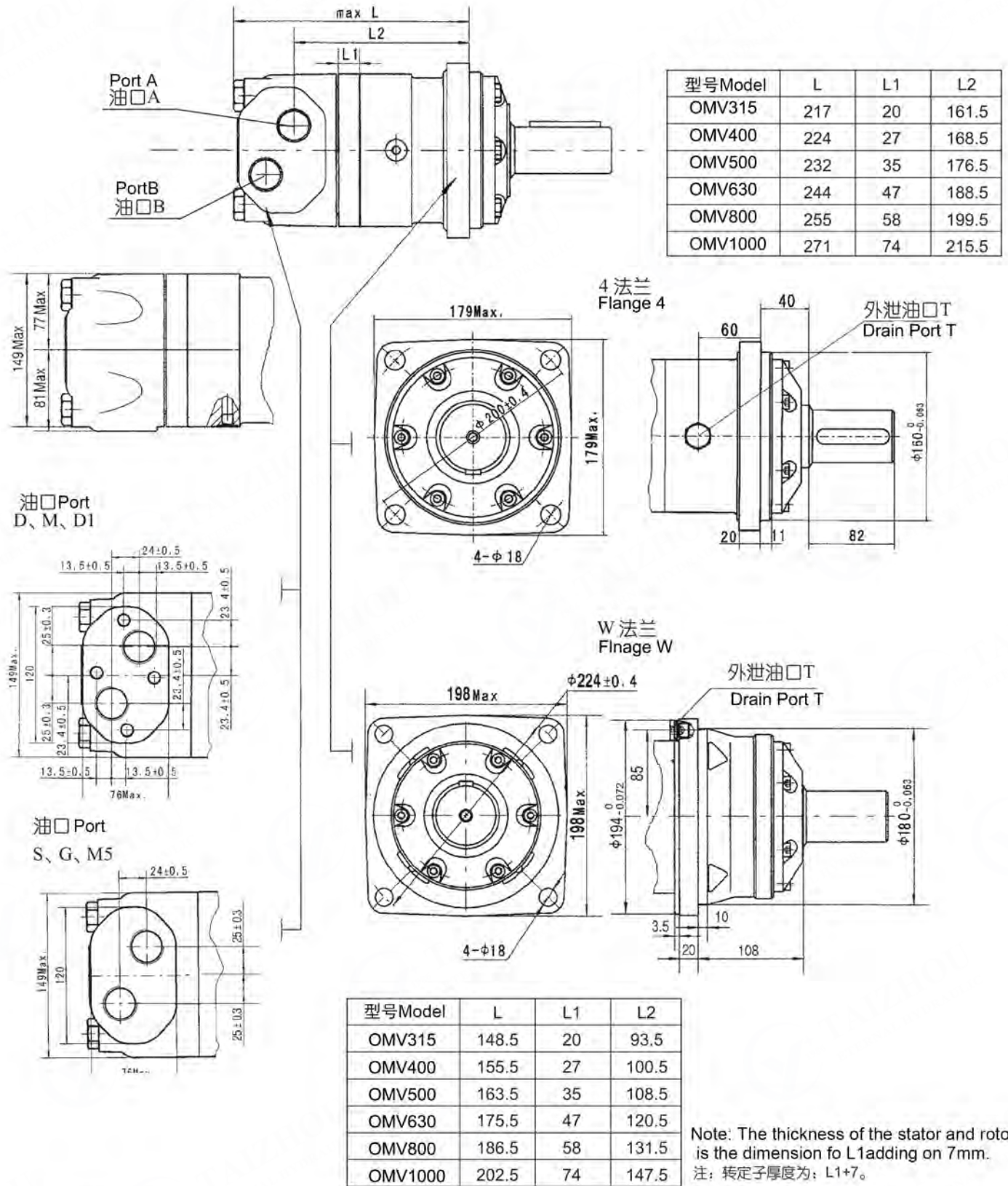
■ OMV型号说明 Model Code

OMV	-800	4	P1	D
系列 Code	排量 Displace	安装法兰及止口 Mounting Flange&Spigot	输出轴 Shaft	油口&泄油口 Inlet&Outlet and Drain Port
OMV	315,400, 500,630, 800,1000	4: 4-φ18方法兰Square Flange (φ200),止口Spigotφ160x11 W: 4-φ18车轮法兰Wheel Flange (φ224),止口Spigotφ180x10	P1: φ50(82),key14x9x70 P2: φ57.15(82), key12.7x12.7x57.15 H1: φ53.975(82), 16-DP8/16 H2: φ53.975(82), 16-DP8/16 H3: φ45.17Zx2.5x30Px5e Z1: φ60锥轴Taper,key B16x10x32 Z2: 57.2锥轴Taper, key14.308x14.308x50.8	D: G1,G3/4,4-M12 M: M33x2,M14x1.5,4-M12 S: 1-5/16-12UN, 9/16-18UNF G: G1,G1/4 M5: M33x2,M14x1.5 D1: G3/4,G1/4,4-M12
OMVE		K6: 4-φ14.2方形法兰Square Flange (φ162),止口Spigotφ127x11 K4: 4-φ14.2方法兰Square Flange (φ160),止口Spigotφ125x11	P3: φ40(79),key12x8x70 P4: φ40(56),key12x8x45	

■ OMV技术参数 Technical Data

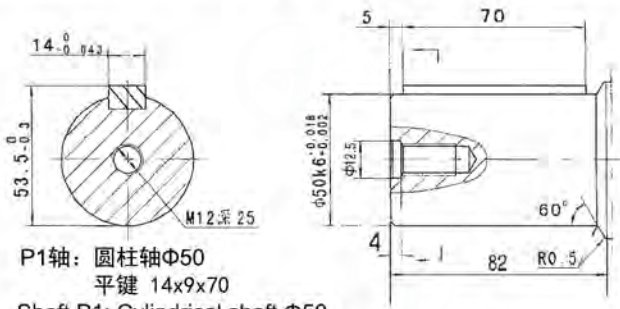
型号 TYPE	OMV OMVE 315	OMV OMVE 400	OMV OMVE 500	OMV OMVE 630	OMV OMVE 800	OMV OMVE 1000
排量 Displacement(ml/r)	333	419	518	666	801	990
最大压降 Max.Pressure.Drop(MPa) (MPa)	连续 cont.	20	20	20	18	16
	间断 int.	24	24	24	21	18
	尖峰 peak.	28	28	28	24	21
最大扭矩 Max.Torque(N.m)	连续 cont.	920	1180	1460	1660	1880
	间断 int.	1110	1410	1760	1940	2110
	尖峰 peak.	1290	1640	2050	2210	2470
转速范围 (连续) Speed.Range(cont)(r/min)	510	500	400	320	250	200
最大流量 (连续) Max Flow(cont)(L/min)	160	200	200	200	200	200
最大输出功率 (连续) Max.output.Power(cont)(Kw)	38	47	47	40	33	28.6
重量 Weight(Kg)	31.8	32.6	33.5	34.9	36.5	38.6

■ OMV 安装连接尺寸 Dimension

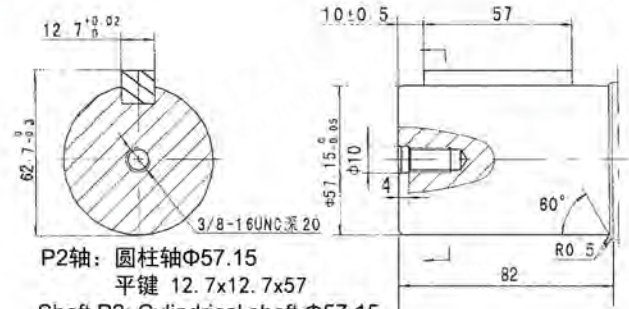


内容 Content	代号 Code					
	D(深)(depeth)	M(深)(depeth)	S(深)(depeth)	G(深)(depeth)	M5(深)(depeth)	D1(深)(depeth)
连接尺寸 Mounting						
P(A,B)	G1 (18)	M33 x 2 (18)	1-5/16-12UN(18)	G1 (18)	M33 x 2 (18)	G3/4(18)
T	G1/4 (12)	M14 x 1.5 (12)	9/16-18UNF(12)	G1/4 (12)	M14 x 1.5 (12)	G1/4 (12)
C	4-M12 (12)	4-M12 (12)	-	-	-	4-M12 (12)

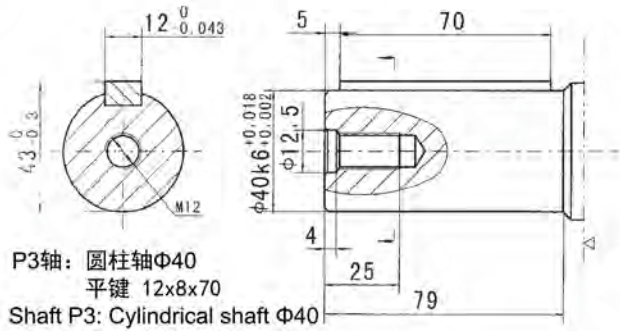
■ OMV外形安装尺寸—输出轴 Shaft Version



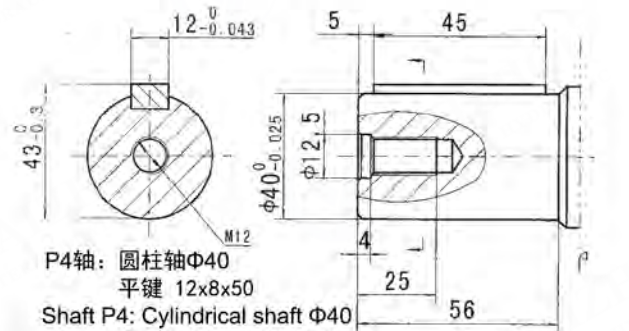
P1轴: 圆柱轴Φ50
平键 14x9x70
Shaft P1: Cylindrical shaft Φ50
Parallel key 14x9x70



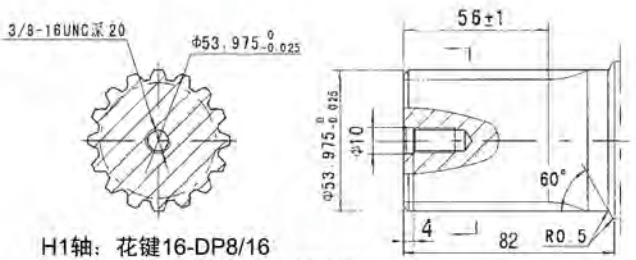
P2轴: 圆柱轴Φ57.15
平键 12.7x12.7x57
Shaft P2: Cylindrical shaft Φ57.15
Parallel key 12.7x12.7x57



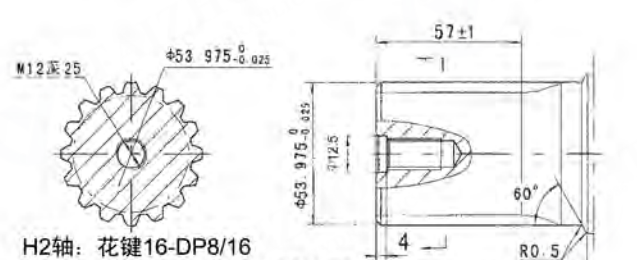
P3轴: 圆柱轴Φ40
平键 12x8x70
Shaft P3: Cylindrical shaft Φ40
Parallel key 12x8x70



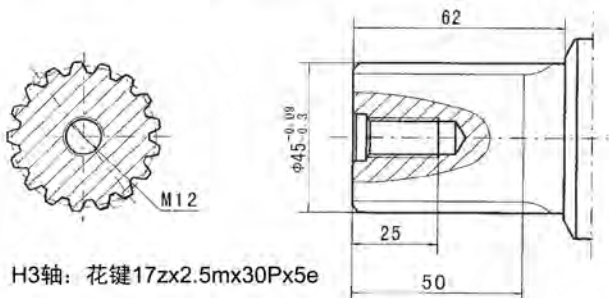
P4轴: 圆柱轴Φ40
平键 12x8x50
Shaft P4: Cylindrical shaft Φ40
Parallel key 12x8x50



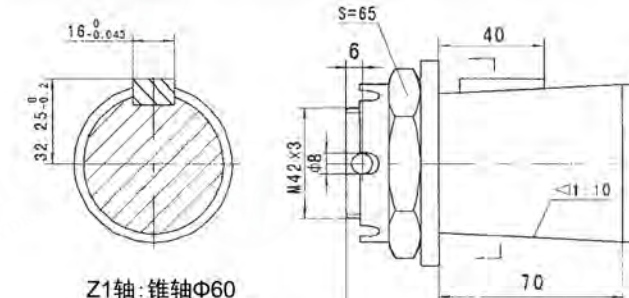
H1轴: 花键16-DP8/16
Shaft H1: Splined key 16-DP8/16



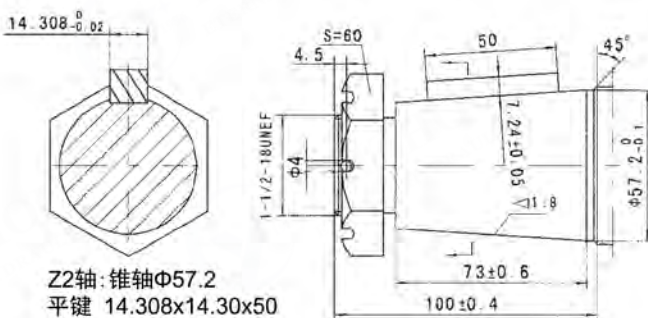
H2轴: 花键16-DP8/16
Shaft H2: Splined key 16-DP8/16



H3轴: 花键17x2.5mx30Px5e
Shaft H3: Splined key 17x2.5mx30Px5e



Z1轴: 锥轴Φ60
平键 B16x10x32
螺母拧紧力矩: 750±50Nm
Shaft Z1: Cone-shaft Φ60
Parallel key: 16x10x32
Tightening torque: 750±50Nm



Z2轴: 锥轴Φ57.2
平键 14.308x14.30x50
螺母拧紧力矩: 750±50Nm
Shaft Z2: Cone-shaft Φ57.2
Parallel key: 14.308x14.30x50
Tightening torque: 750±50Nm

■ 特点 Feature:

OMH马达是带有轴承支撑的轴配流马达。
 双轴承支撑，可以承受更大的径向力。
 采用镶齿式定转子副，气动压力低，效率高，保持性好。
 可靠的轴密封设计，承受背压高，可以串并联使用

OMH Motor is one spool valve with double ball-bearing type moto,
 Supported by double ball-bearing,the shaft can bear higher radial force.
 Adope gerolor design, low starting pressure, high efficiency and good performance
 Shaft seal can bear high pressure of bace and the motor can be used in parallel or in series



■ 型号说明 Model Code

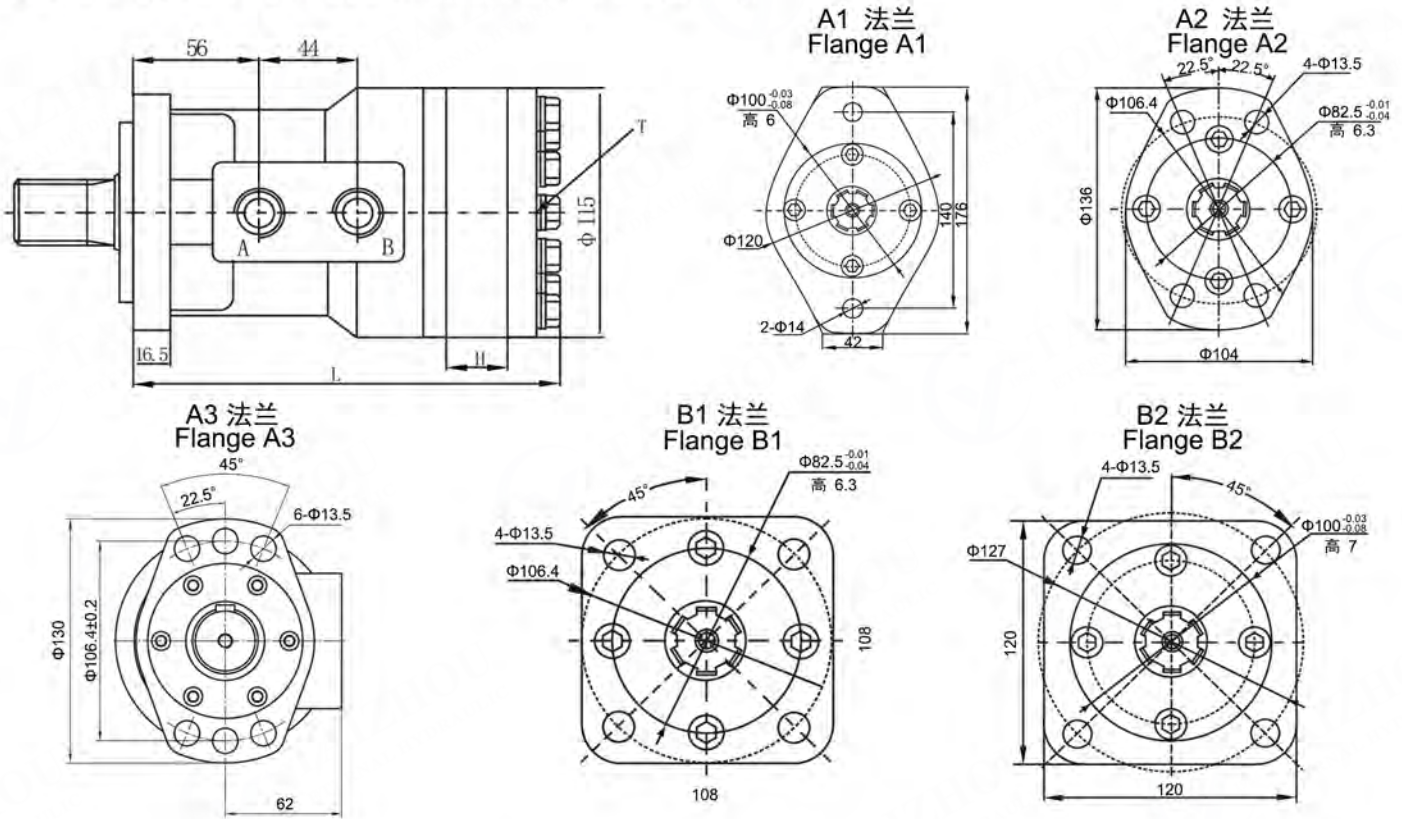
OMH	-400	B1	P1	Y
系列 Code	排量 Displacement	安装法兰及止口 Mounting Flange&Spigot	输出轴 Shaft	油口&泄油口 Inlet&Outlet and Drain Port
OMH	200,250,315,400,500	参照下图 See Below Drawing		

■ OMH技术参数 Technical Data

型号 TYPE		OMH-200	OMH-250	OMH-315	OMH-400	OMH-500
排量 Displacement(ml/r)		203	253.7	318.9	405.9	471.1
最大压降 Max.Pressure.Drop (Mpa)	连续 cont.	15.5	15.5	13.5	10.5	8.5
	间断 int.	17.5	17.5	15.5	12.5	10
	尖峰 peak.	20	20	19	15.5	13
最大扭矩 Max.torque (N.m)	连续 cont.	419	493	541	535	508
	间断 int.	473	557	621	636	598
	尖峰 peak.	541	636	762	789	778
最高转速 Max. Cont. Speed (r/min)		370	295	235	185	155
最大流量 Max.Flow(cont.)(L/min)		75	75	75	75	75
最大输出功率 Max.Output.Power(cont.)(Kw)		14	14	12.5	10	8.5
重量 Weight(kg)		10.5	11	11.5	12.5	13

间断工作时间每分钟不得超过6秒，尖峰工作时间每分钟不得超过0.6秒
 Intermittent operation the permissible values may occur for max. 10% of every minute
 Peak load: the permissible values may occur for max. 1% of every minute

■ OMH马达连接尺寸&外形图 Dimension&Mounting



排量(ml/r) Displacement	200	250	315	400	500	600	800
H	21.7	27.3	34.5	43.4	54.4	69.1	89
L	184.7	190.3	197.5	206.4	217.4	232.1	252

马达标准旋向：
面对输出轴轴端，A油口进油，马达顺时针旋转

Standard direction if the motor rotation
CW-When a part pressurize, Viewed from the shaft end

■ OMH油口代号 Port Code

油口 Ports 代号 Code	P(A、B)(深deep)	C (深deep)	T (深deep)
Y	G1/2 (15)	M8 (13)	G1/4 (12)
Y5	7/8-14UNF (15)	3/8-16UNC (13)	7/16-20UNF (12)
Y8	NPT1/2 (15)	5/16-18UNC (13)	7/16-20UNF (12)
Y25	7/8-14UNF (15)	M8 (13)	7/16-20UNF (12)

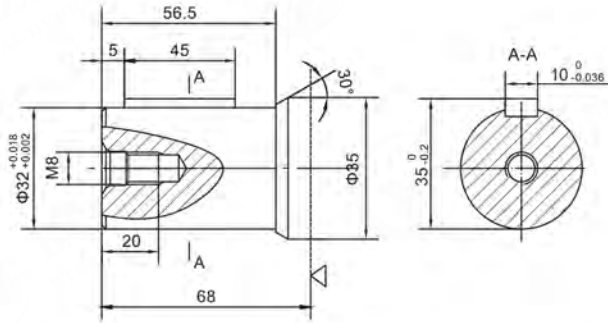
注: P(A、B)--进出油口, C--油口面安装螺纹 (—表示没有此螺纹孔), T--泄油口

Note: P(A、B)--Ports, C--Mounting Thread (—Indicates no this thread), T--Drain connettion

■ OMH外形安装尺寸-输出轴 Shaft Version

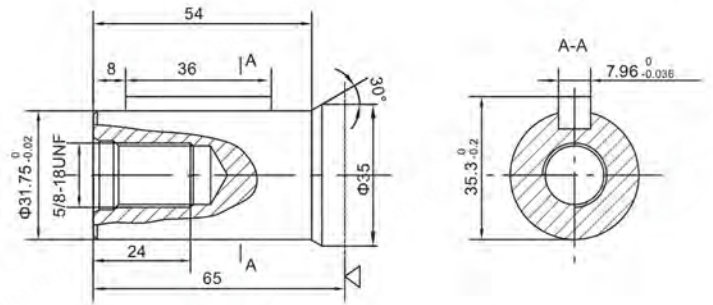
P1: $\Phi 32$ 平键轴, 平键 $10 \times 8 \times 45$

$\Phi 32$ Cylindrical shaft, parallel key $10 \times 8 \times 45$



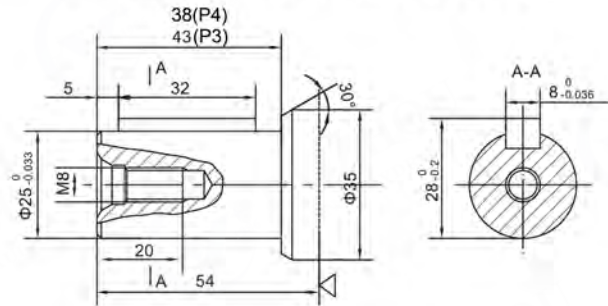
P2: $\Phi 31.75$ 平键轴, 平键 $7.96 \times 7.96 \times 36$

$\Phi 31.75$ Cylindrical shaft, parallel key $7.96 \times 7.96 \times 36$



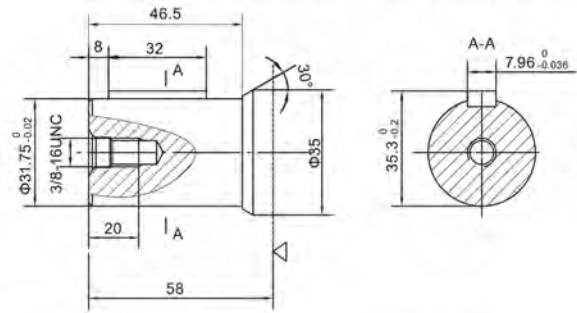
P3&P4: $\Phi 25$ 平键轴, 平键 $8 \times 7 \times 32$

$\Phi 25$ Cylindrical shaft, parallel key $8 \times 7 \times 32$



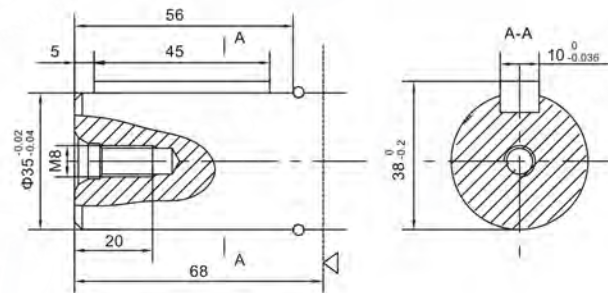
P5: $\Phi 31.75$ 平键轴, 平键 $7.96 \times 7.96 \times 32$

$\Phi 31.75$ Cylindrical shaft, parallel key $7.96 \times 7.96 \times 32$



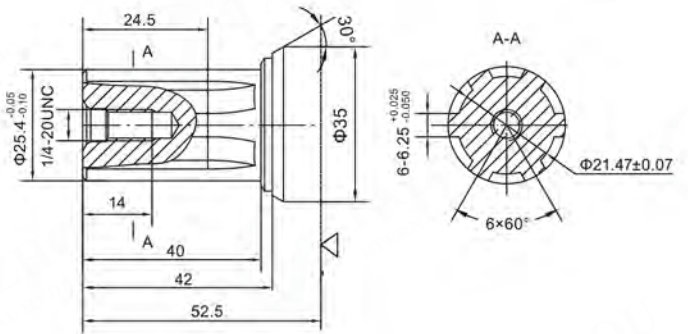
P6: $\Phi 35$ 平键轴, 平键 $10 \times 8 \times 45$

$\Phi 35$ Cylindrical shaft, parallel key $10 \times 8 \times 45$



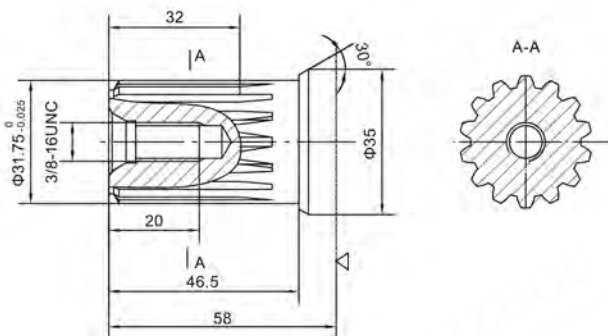
H3: $\Phi 25.4$ 矩形花键轴, $6-25.4 \times 21.47 \times 6.25$

$\Phi 25.4$ Splined shaft, $6-25.4 \times 21.47 \times 6.25$



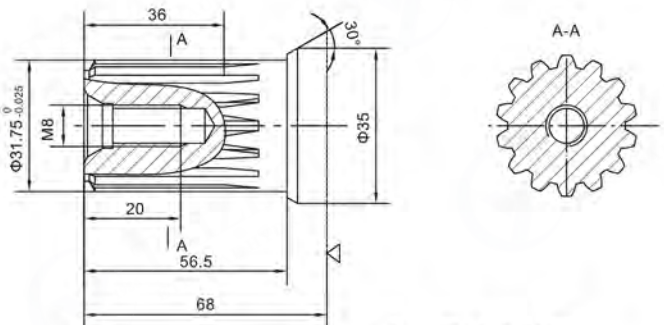
K1: $\Phi 31.75$ 渐开线花键轴 14-DP12/24 $a=30^\circ$

$\Phi 31.75$ involute splined shaft 14-DP12/24 $a=30^\circ$



K2: $\Phi 31.75$ 渐开线花键轴 14-DP12/24 $a=30^\circ$

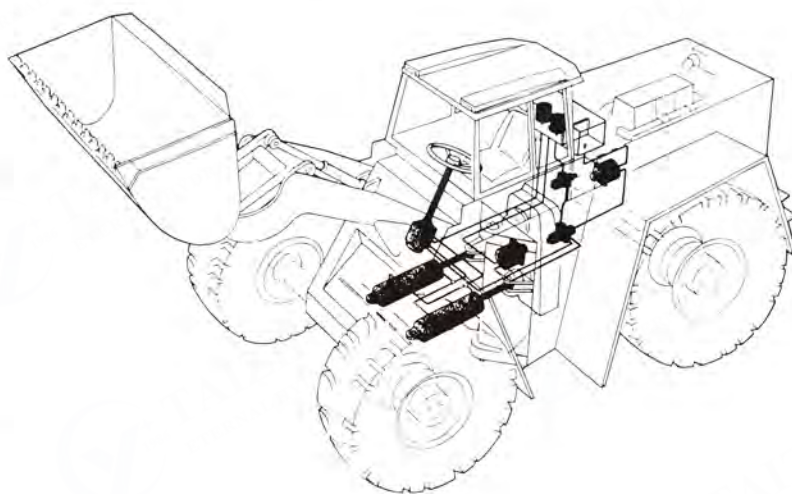
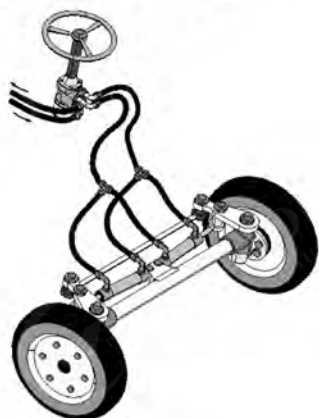
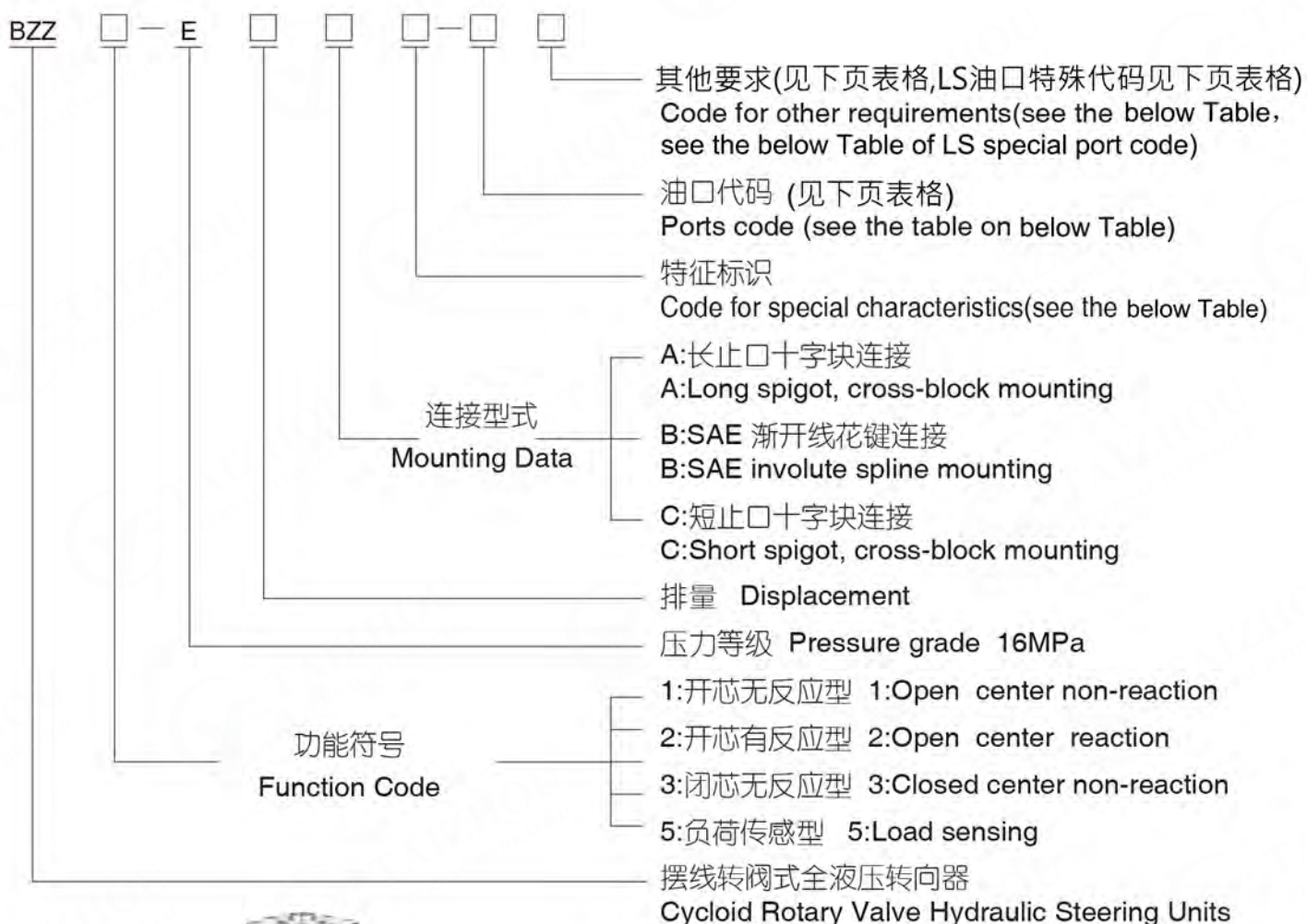
$\Phi 31.75$ involute splined shaft 14-DP12/24 $a=30^\circ$



△ : 马达安装面
Motor mounting surface

OMP1	-400	B1	P	G
系列 Code	排量 Displacement	安装法兰及止口 Mounting Flange& Spigot	输出轴 Shaft	油口& 泄油口 Inlet& Outlet and Drain Port
OMP1	50, 80, 100, 125, 160, 200, 250, 315, 400	B1: 4-φ11 方法兰 Square Flange, 止口 Spigot φ80x5 B2: 4-φ11 方法兰 Square Flange, 止口 Spigot φ82.5x5	P: φ25(40), key8x7x28 L: φ25(40), 6-25x21x5 花键 Spline M: φ25(40), 6-25x21x6 花键 Spline	M1: M18x1.5, M10x1 M2: M20x1.5, M10x1 M3: M22x1.5, M10x1 G: G1/2, G1/4
OM1		B1: 4-φ11 方法兰 Square Flange, 止口 Spigot φ80x6 B2: 4-φ11 方法兰 Square Flange, 止口 Spigot φ82.5x6		
OMRL		Z: 2-φ13.5 菱形法兰 Diamond Flange, 止口 Spigot φ82.5x6		
OYM		Z3: 4-φ11 长方形法兰 Rectangle Flange, 止口 Spigot φ80x5 Z5: 4-φ11 长方形法兰 Rectangle Flange, 止口 Spigot φ85x5		
OM2/3/4	-400	2	A	M3
系列 Code	排量 Displacement	安装法兰及止口 Mounting Flange& Spigot	输出轴 Shaft	油口& 泄油口 Inlet& Outlet and Drain Port
OM2	80, 100, 125, 160, 200, 250, 315, 400	2: 4-φ13 方法兰 Square Flange, 止口 Spigot φ100x6	A: φ25(43), key8x7x32 P: φ30(43), key10x8x40 N: φ30(43), 6-30x26x6 花键 Spline J: φ30(43), 6-30x26x8 花键 Spline P1: φ30(37), key8x7x28	M3: M22x1.5, M10x1
OM3	500, 630	3: 4-φ13 方法兰 Square Flange, 止口 Spigot φ125x6	N: φ42轴, 8-42x36x7 花键 Spline	
OM4	160, 200, 250, 315, 400, 500, 630	2: 4-φ13 方法兰 Square Flange, 止口 Spigot φ100x6	P: φ30(46), key10x8x40 N: φ30(46), 6-30x26x6 花键 Spline J: φ30(46), 6-30x26x8 花键 Spline P1: φ30(37.5), key8x7x28 B: φ30(56), key10x8x45 B1: φ30(46), key10x8x32	
OMER2	475	M	S	G2
系列 Code	排量 Displacement	安装法兰及止口 Mounting Flange& Spigot	油口 Inlet& Outlet Port	输出轴 Shaft
OMER2	160, 200, 250, 315, 400, 500, 630, 800, 985	M: 4-φ13.5 腰型法兰 Magneto Flange, 止口 Spigot φ82.55x2.8 F: 6-φ13.5 腰型法兰 Magneto Flange, 止口 Spigot φ82.55x2.8 W: 4-φ13.5 车轮法兰 Wheel Flange, 止口 Spigot φ82.55x2.5	S: 7/8-14 O-ring P: 1/2-14NPTF D: G1/2 H: 1/2 法兰油口 Flange Port	G2: φ31.75, key7.96x36.5 B1: φ32, key10x45 FD1: φ31.75, 14-DP12/24 T4: φ31.75 锥轴 Taper, key7.96x25.4 RW: φ25.4, key6.35x31.75 AW: φ25, key 8x32 SW: φ25.4, SAE 6B

■ 型号说明 Model Code



■ BZZ 系列全液压转向器 Hydraulic Steering Control Unit(SCU)

类别 Category	符号 Code	含义 Definition	备注 Remark	
特征标识 Characteristic Code	(缺省) (omit)	普通型 Common Type	适合各类转向系统，例如：拖拉机、装载机、压路机等。 Fit various steering system, e.g. tractor, loader, and road roller, etc. mainly used in china.	
	D	输入扭矩: Input torque 1.6N·m~2.4 N·m	适合平坦路面的转向系统，例如：叉车。 fit steering system of vehicles that driving on flat road , such as forklift.	
	C	输入扭矩: Input torque ≤1.6N·m		
	其他性能特征要求的标识（协议确定） Codes for the requirement of other performance characteristics (should be confirmed in an agreement)		例如：人力转向、终点感、噪音、回位性能等方面，或综合要求。 e.g. manual steering, lower terminal steering feeling, noise and back-to-the-neutral-position function etc., or comprehensive requirement.	
油口代码 Ports Code	代码 Code	P、T、A、B油口 Ports P,T,A,B	连接螺纹C Column Mounting C	连接螺纹V Valve Mounting V
	(缺省) (omit)	M20×1.5	M10	M12
	A	M18×1.5	M10	M12
	B	G1/2	M10	M10×1
	C	3/4-16UNF O-ring	3/8-16UNC	3/8-24UNF
	D	M20×1.5 O-ring	M10	M12
	E	M18×1.5 O-ring	M10	M12
	G	M22×1.5	M10	M12
	Q	M22×1.5 O-ring	M10	M12
	U	G1/2 O-ring	M10	M10×1
	M	3/4-16UNF O-ring	M10	M12
	I	3/4-16UNF O-ring	M10	M10
	N	3/4-16UNF O-ring	M10×1.25	M10
	R	P,T: M22×1.5 A,B: M18×1.5	M10	M12
S	P,T: M22×1.5 O-ring A,B: M18×1.5 O-ring	M10	M12	
其他要求 Other Requirements	主要指协议规定的外观、油漆颜色等方面，协议确定代码。 Mainly refers to the appearance, paint color etc. specified by agreement; the code will be listed in the agreement.			

注1：油口P、T、A、B的深度16 mm，连接螺纹C、V的深度16 mm。

Note 1: Ports P,T,A,B Depth : 16 mm; Column Mounting C & V Depth: 16 mm.

BZZ1, BZZ3 系列特大排量全液压转向器
BZZ1, BZZ3 series Hydraulic Steering Units (SCU) with Super Displacement

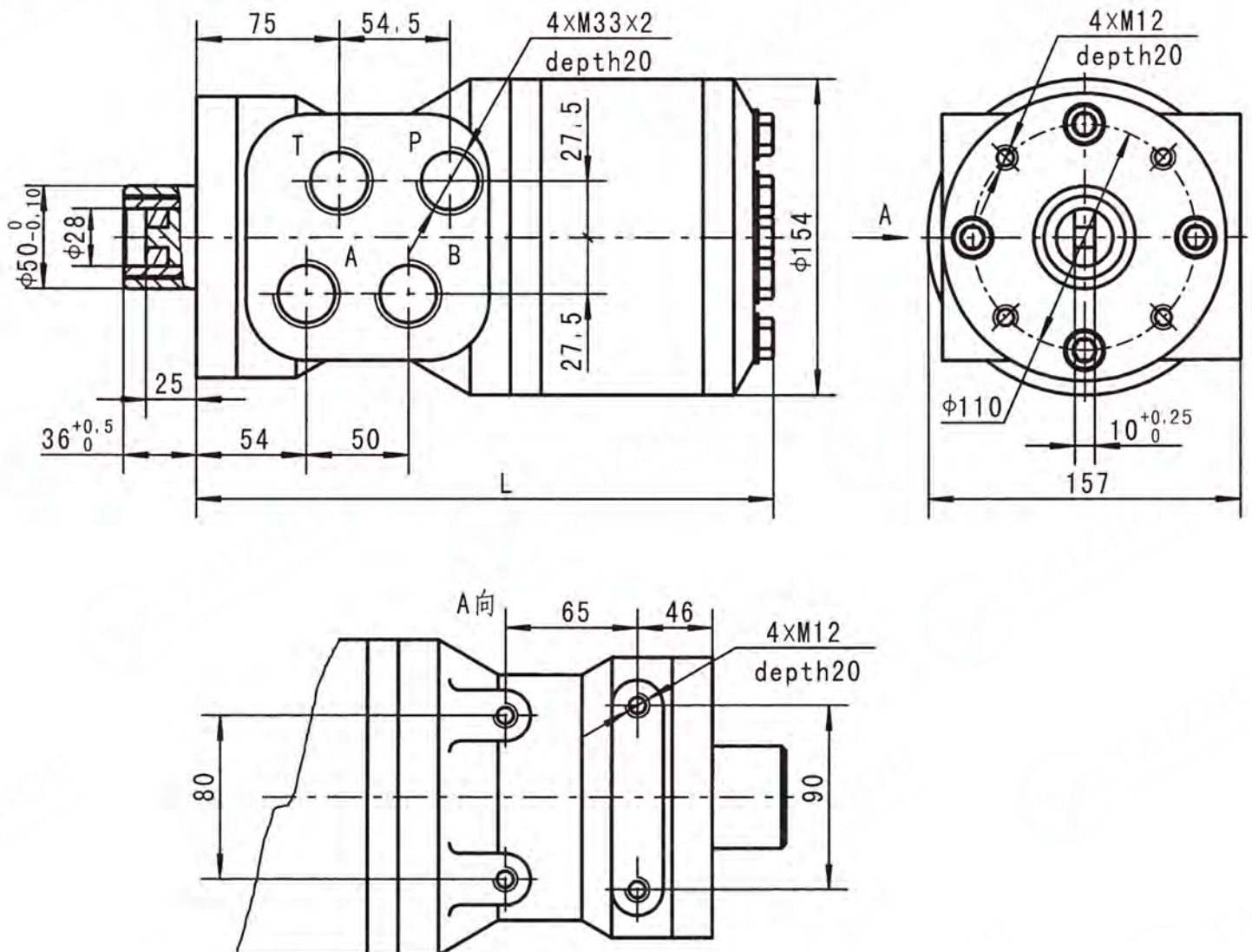
■ 主要技术参数 Main Specification

型号 Type	排量 Displacement (mL/r)	流量 Flow (L/min)	最大入口压力 Max. input pressure (MPa)	最大连续背压 Max. cont. back pressure (MPa)	总长 Length L(mm)	重量 Weight (kg)
BZZ □-E1000	1000	60	16	2.5	249	24.5
BZZ □-E1250	1250	75			261.5	25.5
BZZ □-E1600	1600	96			279	27.5
BZZ □-E2000	2000	120			299	28.5
BZZ □-E2500	2500	150			324	30

注：□为功能代码；只有BZZ1和BZZ3功能可供选择。功能代码详见第5页。

Note: □ represents Function Code, BZZ1 & BZZ3 can be chosen. please check Page 5 for Function Code explanation.

■ 连接尺寸 Mounting Data



BZZ5 系列全液压转向器 BZZ5 Series Hydraulic Power Steering Unit

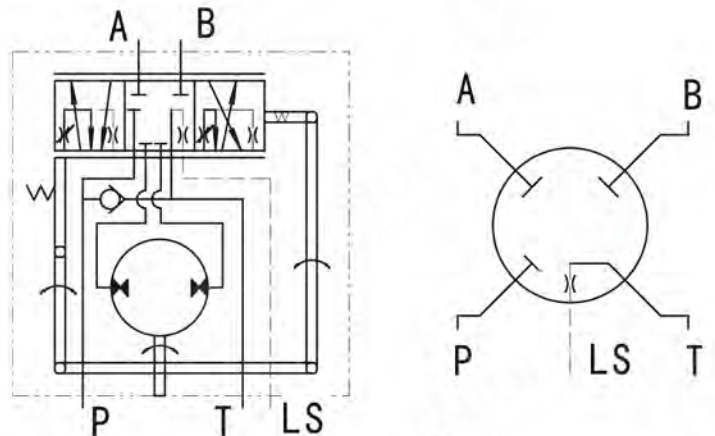
主要技术参数 Main Specification

型号 Type	排量 Displacement (mL/r)	长度 Length L(mm)	方向盘允许最高转速 Max. input speed (rpm)	最大入口压力 Max. input pressure (MPa)	最大连续背压 Max. cont. back pressure (MPa)	最大动力转向扭矩 Max. power steering torque (N·m)
BZZ5-E 50*	50	140	100	16	1.6	≤5
BZZ5-E 63*	63	141				
BZZ5-E 80*	80	142.5				
BZZ5-E 100*	100	145				
BZZ5-E 125*	125	148				
BZZ5-E 160*	160	153				
BZZ5-E 200*	200	158				
BZZ5-E 250*	250	164	75	16	1.6	≤5
BZZ5-E 280*	280	169				
BZZ5-E 315*	315	174	60	16	1.6	≤5
BZZ5-E 400*	400	184				
BZZ5-E 500*	500	197				
BZZ5-E 630*	630	216				
BZZ5-E 800*	800	236				
BZZ5-E 1000*	1000	262				

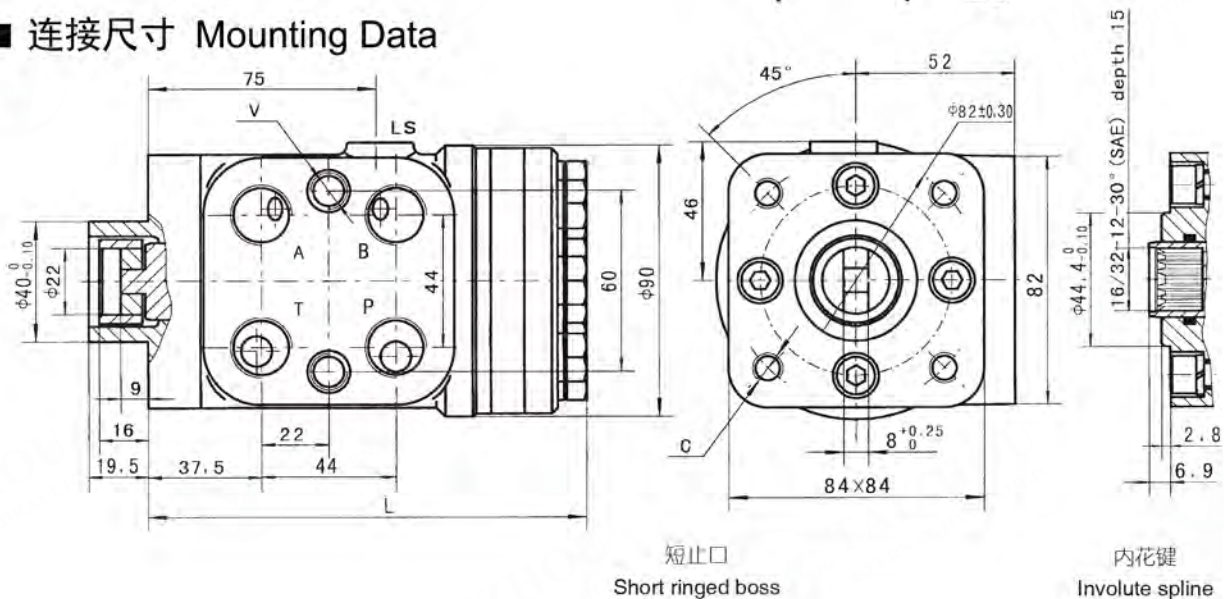
注1: L是产品的最大长度, 该尺寸在某些产品上可能会短2mm或4mm;
Note1: L is the maximum length dimension of product, this dimension on some products may 2mm or 4mm short.

功能符号 Function Code

BZZ5
负荷传感型
Load sensing



连接尺寸 Mounting Data



■ BZZ5 系列全液压转向器 BZZ5 Series Hydraulic Steering Control Unit(SCU)

■ 油口代码 Ports Code

类别 Category	代码 Code	P、T、A、B油口 Ports P,T,A,B	连接螺纹C Column Mounting C	连接螺纹V Valve Mounting V	LS油口 Port LS
油口代码 Ports Code	(缺省) (omit)	M20×1.5	M10	M12	M12×1.5
	A	M18×1.5	M10	M12	M12×1.5
	B	G1/2	M10	M10×1	G1/4
	C	3/4-16UNF O-ring	3/8-16UNC	3/8-24UNF	7/16-20UNF O-ring
	D	M20×1.5 O-ring	M10	M12	M12×1.5
	E	M18×1.5 O-ring	M10	M12	M12×1.5
	G	M22×1.5	M10	M12	M12×1.5
	Q	M22×1.5 O-ring	M10	M12	M12×1.5
	U	G1/2 O-ring	M10	M10×1	G1/4 O-ring
	M	3/4-16UNF O-ring	M10	M12	7/16-20UNF O-ring
	I	3/4-16UNF O-ring	M10	M10	7/16-20UNF O-ring
	N	3/4-16UNF O-ring	M10×1.25	M10	7/16-20UNF O-ring
	R	P,T: M22×1.5 A,B: M18×1.5	M10	M12	M12×1.5
S	P,T: M22×1.5 O-ring A,B: M18×1.5 O-ring	M10	M12	M12×1.5	

注1: 油口P、T、A、B的深度16 mm, 连接螺纹C、V的深度16 mm, 油口LS的深度12 mm。

Note 1: Ports P,T,A,B Depth : 16 mm; Column Mounting C & V Depth: 16 mm;Port LS Depth:12mm.

当LS油口尺寸不符合上述表格中规定时, 在油口代码后面加“-”, 按照下面表格选择LS代码。

If the dimension of LS port don't comply with the specifications in the above form, add "-" after the port code and then choose LS code according to the following form.

油口代码 Ports Code	LS油口 Port LS
1	M12×1.5 O-ring
3	G1/4
5	7/16-20UNF O-ring
6	G1/4 O-ring
7	M12×1.5

10系列 10 Series

10系列全液压转向器的阀体为集成式结构，产品可以集成插装阀，例如：集成系统压力控制阀。

10系列产品广泛应用于多种工农业自行走机械的主机和船舶操舵的转向系统，实现输入较小的力，控制较大阻力的转向油缸的动作；操纵轻便、灵活，安全可靠；集成的单向阀可以防止系统压力油的反向流动，并防止出现操作“打手”现象；集成的压力控制阀，可以实现转向系统的工作压力、缓冲压力的控制。

10系列产品的连接尺寸符合国际标准。10系列产品按照转定子啮合副的结构，可以分为6/7齿结构和4/5齿结构两大系列。

6/7齿结构系列：按照连接尺寸划分为101、102、103系列（其中：102系列的连接尺寸与BZZ系列的连接尺寸一致）；

4/5齿结构系列：定义为109系列，适应特殊用户的需求，派生出119、129系列。

10系列产品均集成入口单向阀；每个系列按照是否集成插装压力阀的情况又可以分为两个系列，即缺省和带S；缺省表示不带集成压力阀，带S表示带集成压力阀，对于开芯无反应型产品，集成安全阀和缓冲阀以代码1表示，仅集成安全阀以代码4表示。

Hydraulic Steering Unit 10 series is integral hydraulic steering unit, the valve body of rotary valve is integral structure, then the steering unit can integrate with cartridge valve, such as the pressure control valve of the integral system.

Hydraulic Steering Unit 10 series is widely used in the steering control system of different kinds of engineering vehicles, such as the steering system of many kinds of industrial and agricultural mobile machinery forklift, loader, road roller, tractor, combine harvester, and the ship helm etc. The steering unit can control the steering cylinder with bigger resistance force by inputting minor force; It's easier, flexible and reliable; The integral check valve can prevent the system pressure oil from anti-vibration, and prevent from "hit-hand" during the steering operation; Integral pressure control valve can control the operation pressure and the shock pressure of the steering system.

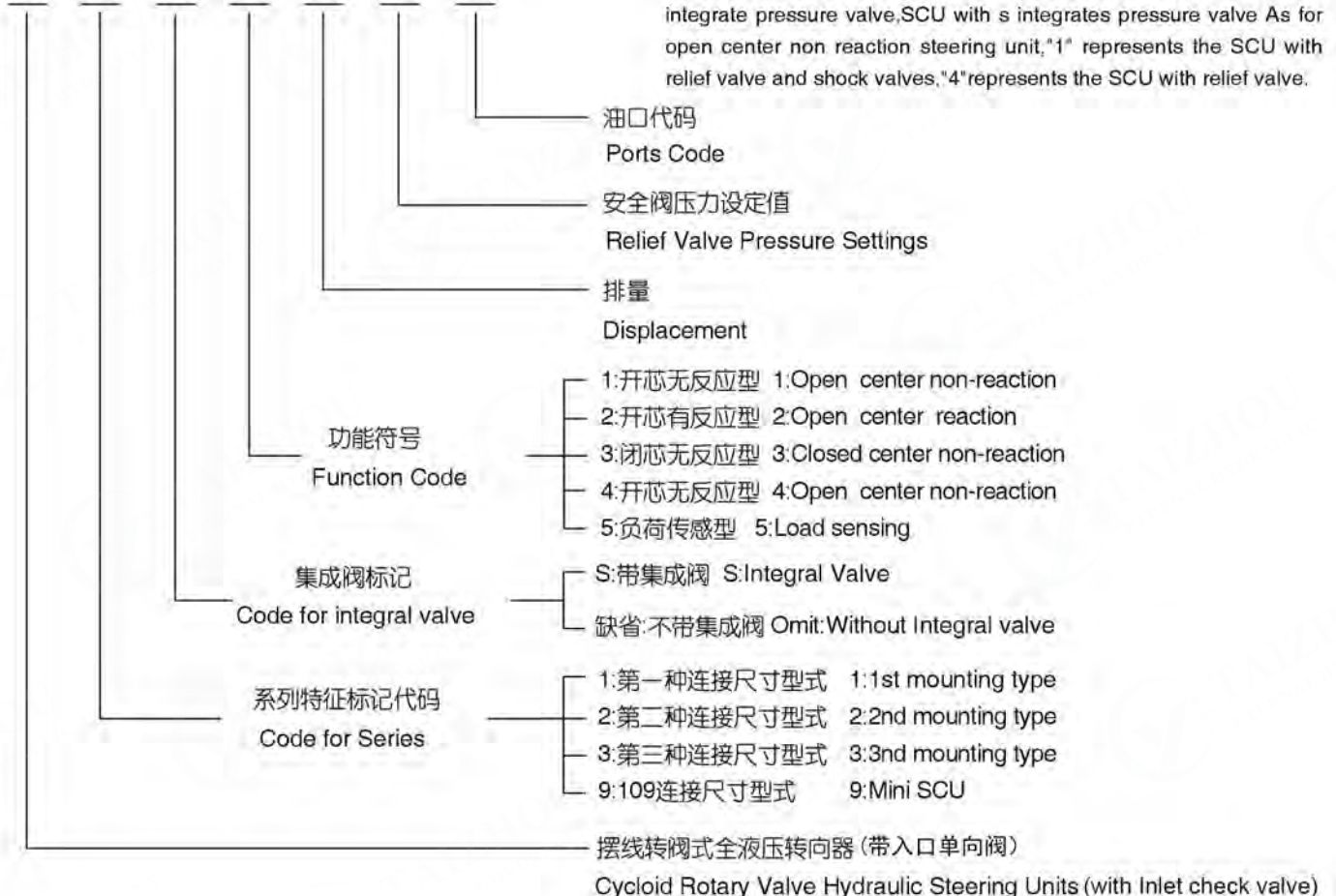
The mounting dimensions of Hydraulic Steering Unit 10 series are consistent with the international standard. According to the structure of gerotor set, Hydraulic Steering Unit 10 series can be divided into 2 series: 6/7 teeth structure steering unit and 4/5 teeth structure steering unit.

Hydraulic steering unit with 6/7 teeth structure: according to the size, this series may be divided into 101,102,103 series (among these series, the mounting dimension of 102 series is consistent with that of BZZ series;) Hydraulic steering unit with 4/5 teeth structure: it's defined as 109 series; according to special requirement of special customers, then we develop 119 and 129 series on the base of 109 series.

10 series SCU integrate inlet check Valve;Each series may be divided into 2 series according to the steering unit integrating cartridge calve or not, SCU without valve and SCU with S,SCU without valve doesn't integrate pressure valve,SCU with s integrates pressure valve As for open center non reaction steering unit,"1" represents the SCU with relief valve and shock valves,"4" represents the SCU with relief valve.

型号说明 Model Code

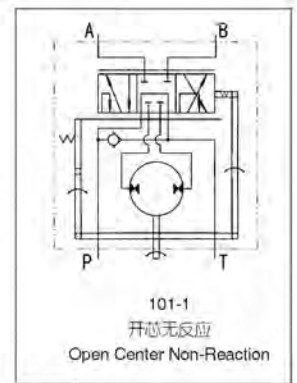
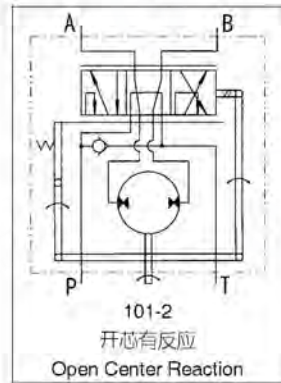
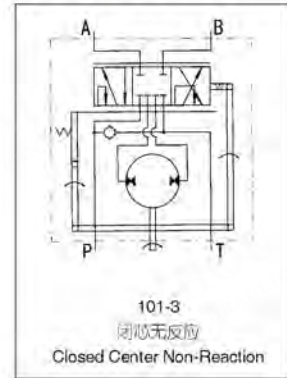
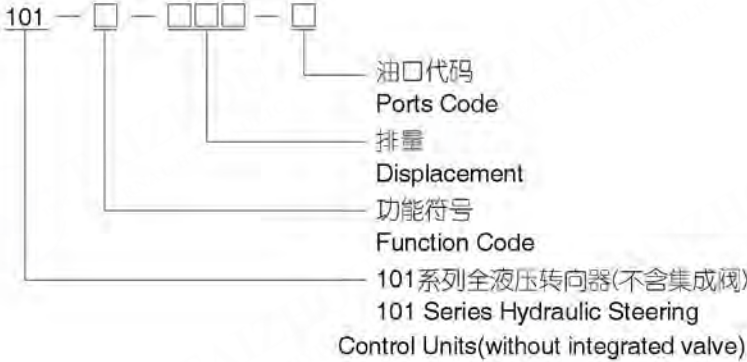
10 □ □ - □ - □ - □ - □



101-1,2,3系列全液压转向器
101-1,2,3 Series Hydraulic Steering Control Units (SCU)

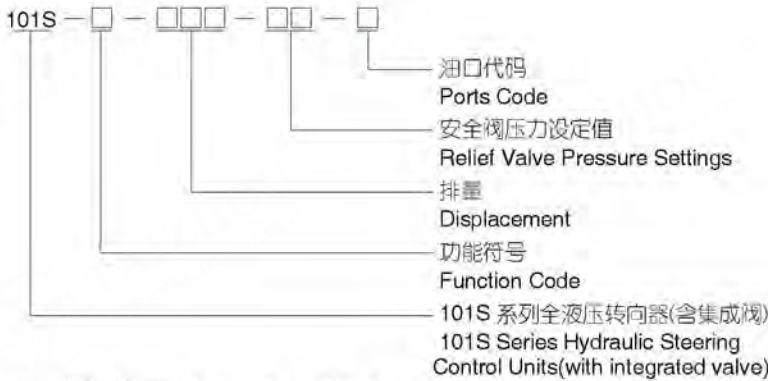
功能符号 Function Code

型号说明 Model Code



101S-1,2,4系列全液压转向器
101S-1,2,4 Series Hydraulic Steering Control Unit (SCU)

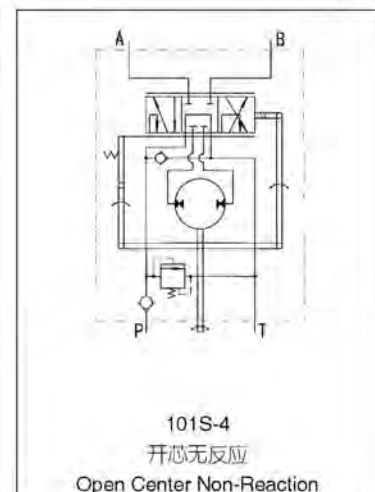
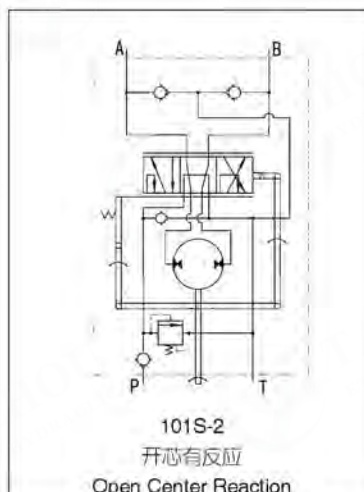
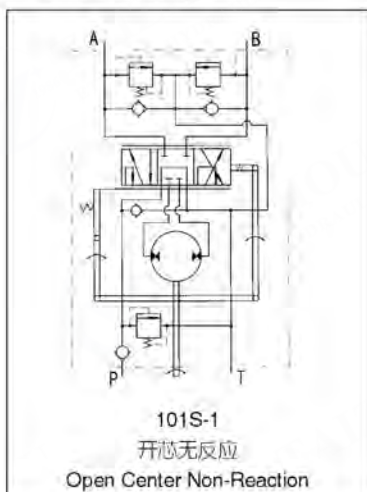
型号说明 Model Code



101S-1、2、4系列全液压转向器从结构到原理继承了101系列的全液压转向器的转向功能，101S系列转向器特点是在101系列的基础上将安全阀、缓冲阀、补油阀以及入口单向阀根据不同的要求设置在转向器阀体中，这种连接结构更加紧凑，使用更加方便。

SCU 101S-1,2,4 series inherits the steering function of 101 series both in the structure and in the principle. The feature of 101S series is to have the following valves functions incorporated inside one housing as follows: the relief valve, the shock valves, the suction valves and the check valve according to the different requirement upon the base of the 101 series. This kind of structure is more compact, and it's more convenient in operation.

功能符号 Function Code

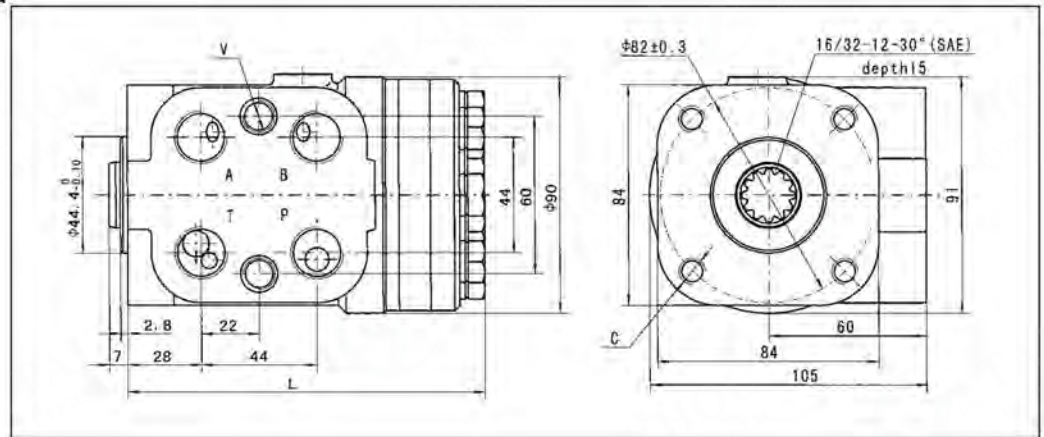


■ 101-1,2,3系列全液压转向器
101-1,2,3 Series Hydraulic Steering Control Unit (SCU)

■ 主要技术参数 Main Specification

Parameters	Type 101-*-*-*-*										
	1,2,3						1,3				
Function Code	1,2,3						1,3				
Displacement(mL/r)	50	63	80	100	125	160	200	250	280	315	400
Rated flow (L/min)	5	6	8	10	12.5	16	20	25	28	31.5	40
Max. input pressure (MPa)	17.5										
Max. cont. back pressure (MPa)	2.5										
Weight (kg)	5.70	5.76	5.84	5.91	6.05	6.25	6.45	6.68	6.86	7.06	7.45
Dimension L (mm)	130	132	134	137	140	145	150	156	161	166	176

■ 连接尺寸 Mounting Data



■ 油口螺纹 Port Thread

代码 Code	P、T、A、B油口 Ports P, T, A, B	连接螺纹C Column Mounting C	连接螺纹V Valve Mounting V	
A	M20×1.5	M10	M12	
B	M20×1.5 O-ring			
C	M18×1.5			
D	M18×1.5 O-ring			
E	G1/2		M10×1	
U	G1/2 O-ring			
G	M22×1.5		M12	
Q	M22×1.5 O-ring			
M	3/4-16UNF O-ring			3/8-16 UNC
F			M10	M10
I		M10×1.25		
N				

注1: 油口P、T、A、B的深度14 mm, 连接螺纹C、V的深度16 mm。

Note 1: Ports P, T, A, B Depth: 14 mm; Column Mounting C & V Depth: 16 mm.

注2: 其他油口连接方式协议确定代号。

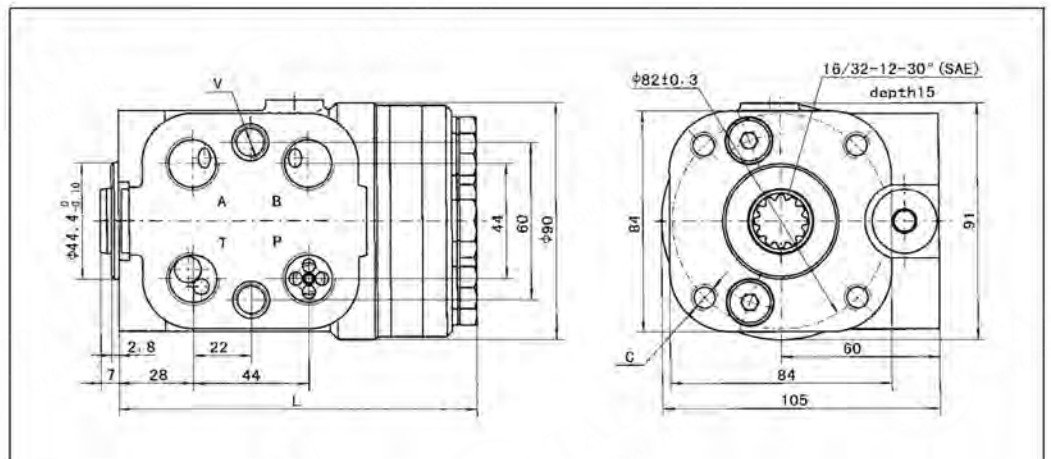
Note 2: The code of other ports dimensions will be listed in an agreement.

■ 101S-1,2,4 系列全液压转向器
101S-1,2,4 Series Hydraulic Steering Control Unit (SCU)

■ 主要技术参数 Main Specification

Parameters	Type 101S-*****										
	1,2,4							1,4			
Function Code											
Displacement(mL/r)	50	63	80	100	125	160	200	250	280	315	400
Rated flow (L/min)	5	6	8	10	12.5	16	20	25	28	32	40
Max. input pressure (MPa)	17.5										
Relief Valve Pressure Settings (MPa)	06, 07, 08, 10, 12, 14, 15, 16, 17.5										
Shock Valves Pressure Settings (MPa)	12, 13, 14, 16, 18, 20, 21, 22, 23.5										
Max. cont. back pressure (MPa)	2.5										
Weight (kg)	5.75	5.81	5.89	5.96	6.1	6.3	6.5	6.73	6.91	7.1	7.5
Dimension L (mm)	130	132	134	137	140	145	150	156	161	166	176

■ 连接尺寸 Mounting Data



■ 油口螺纹 Port Thread

代码 Code	P、T、A、B油口 Ports P,T,A,B	连接螺纹C Column Mounting C	连接螺纹V Valve Mounting V
A	M20×1.5	M10	M12
B	M20×1.5 O-ring		
C	M18×1.5		
D	M18×1.5 O-ring		M10×1
E	G1/2		
U	G1/2 O-ring		
M	3/4-16UNF O-ring		
F		3/8-16 UNC	3/8-24 UNF
I		M10	M10
N		M10×1.25	

注1: 油口P、T、A、B的深度14 mm, 连接螺纹C、V的深度16 mm。
Note 1: Ports P, T, A, B Depth : 14 mm; Column Mounting C & V Depth: 16 mm.
注2: 其他油口连接方式协议确定代号。
Note 2: The code of other ports dimensions will be listed in an agreement.

101(S)-5(T)(TE)(L)(E)(TX)系列全液压转向器

101(S)-5(T)(TE)(L)(E)(TX) Series Hydraulic Steering Control Unit (SCU)

101(S)-5(T)(TE)(L)(E)(TX)系列全液压转向器用于负荷传感型转向系统。

101S-5、101S-5L、101S-5E系列全液压转向器均为板式连接方式，与PVF*型优先阀采用板式连接后使用。

101S-5L系列全液压转向器在LL接口处引出了LS口的压力信号，将信号传送给电气控制系统；

101S-5E系列全液压转向器在EL接口处引出了A或B油口的压力信号，将信号传送给电气控制系统。

101S-5T、101S-5TE系列全液压转向器为管式连接方式，与PVL*或DYXL、YXL型优先阀采用管式连接后使用。

101S-5TE系列全液压转向器在EL接口处引出了A或B油口的压力信号，将信号传送给电气控制系统。

101-5T系列全液压转向器为管式连接方式，必须和DYXL、YXL型优先阀采用管式连接后使用，并且其系统安全阀设在优先阀上。

101-5TX系列全液压转向器处于中位时，其左右腔和回油是相连的，这种转向器和LFA、LFB型流量放大阀配套使用。

SCU 101(S)-5(T)(TE)(L)(E)(TX) series is used in the load sensing steering system.

SCU 101S-5, 101S-5L, 101S-5E series adopt modular mounting type and can only be used with PVF* type priority valve via modular mounting.

SCU 101S-5L series guides the pressure signal of port LS out of port LL, and transfers the pressure signal to the electrical control system.

SCU 101S-5E series guides the pressure signal of port A or B out of port EL, and then supplies the pressure signal to the electrical control system.

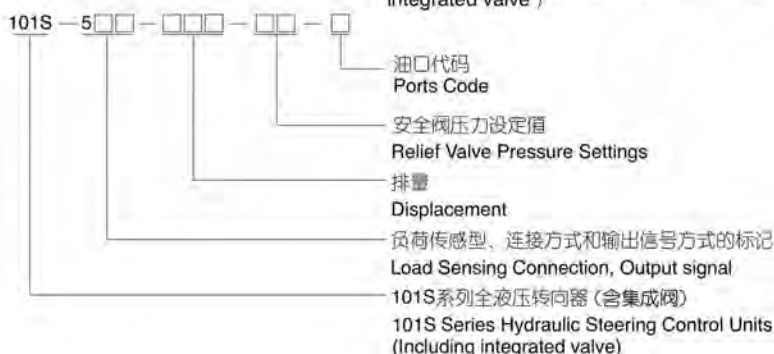
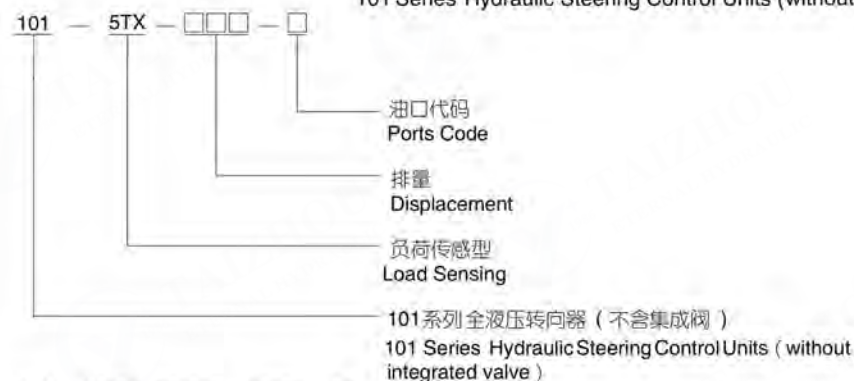
SCU 101S-5T, 101S-5TE series adopts Pipe mounting and via pipe mounting can be used with PVL* or DYXL, YXL type priority valve.

SCU 101S-5TE series guides the pressure signal of the port A or B out of port EL and then supplies the pressure signal to the electrical control system.

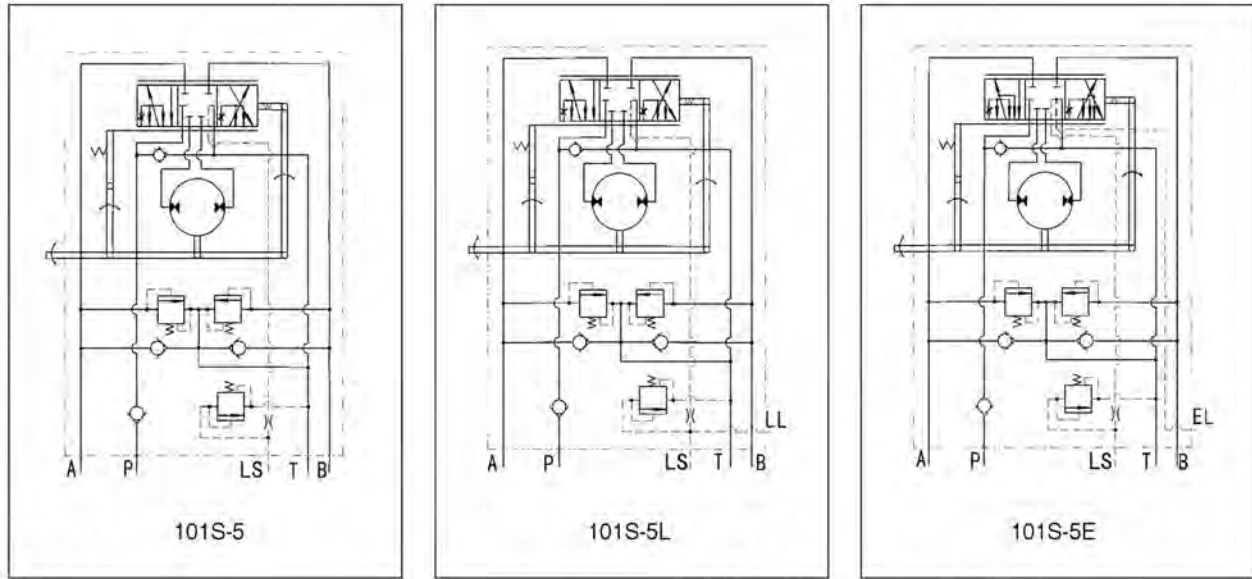
SCU 101-5T series adopts the pipe mounting, it can be used only after the pipe mounted with the DYXL, YXL type priority valve, and the relief valve is integrated in the priority valve.

When the 101-5TX series SCU is in neutral position, both of its left and right cavity are connected with T port. This kind of SCU are used with LFA, LFB type flow amplifiers.

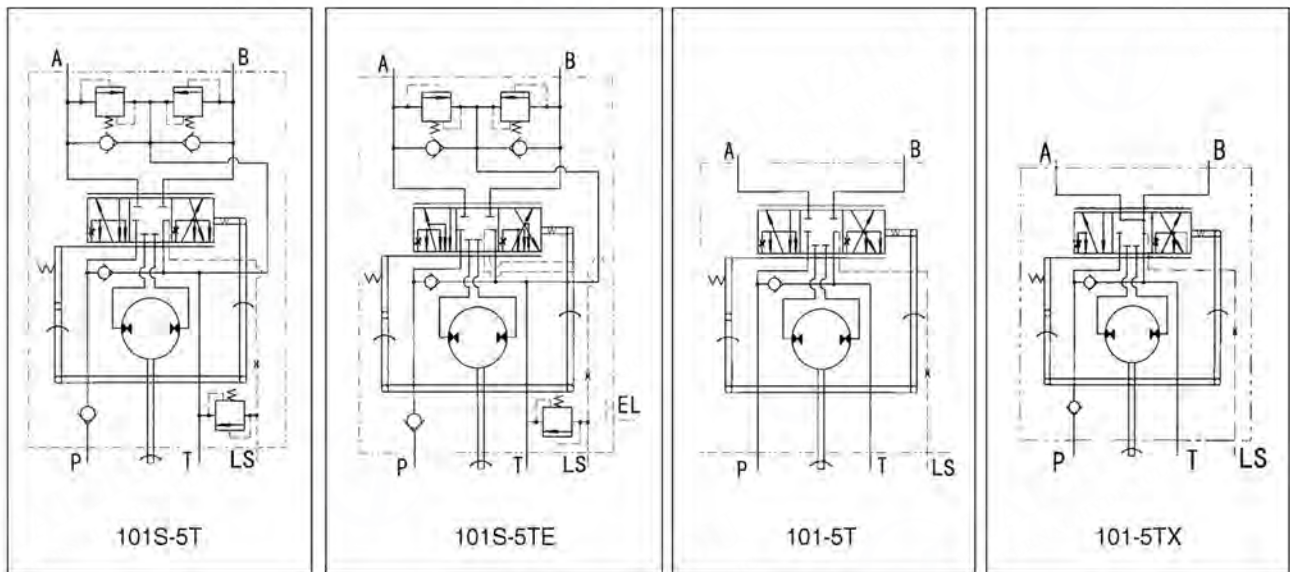
型号说明 Order Code



■ 功能符号 Function Code



板式连接
Modularity Mounting



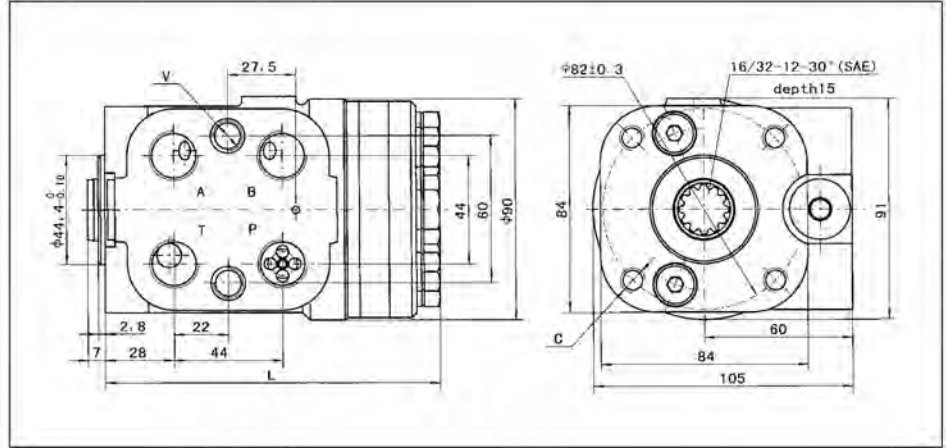
管式连接
Pipe Mounting

■ 主要技术参数 Main Specification

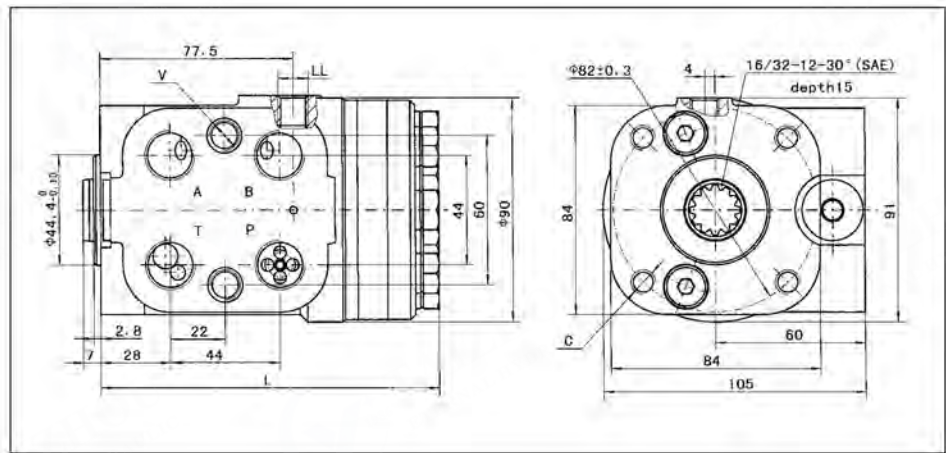
Parameters	Type 101-5T(TX)-****, 101S-5(T)(TE)(L)(E)-****-***											
	50	63	80	100	125	160	200	250	280	315	400	
Displacement(mL/r)	50	63	80	100	125	160	200	250	280	315	400	
Max. input speed (rpm)	100								75			
Max. input pressure (MPa)	17.5											
Relief Valve Pressure Settings (MPa)	06, 07, 08, 10, 12, 14, 15, 16, 17.5											
Shock Valves Pressure Settings (MPa)	12, 13, 14, 16, 18, 20, 21, 22, 23.5											
Max. Cont. Back pressure (MPa)	2.5											
Weight (kg)	5.75	5.81	5.89	5.93	6.1	6.3	6.5	6.73	6.91	7.1	7.5	
Dimension L (mm)	130	132	134	137	140	145	150	156	161	166	176	

■ 连接尺寸 Mounting Data

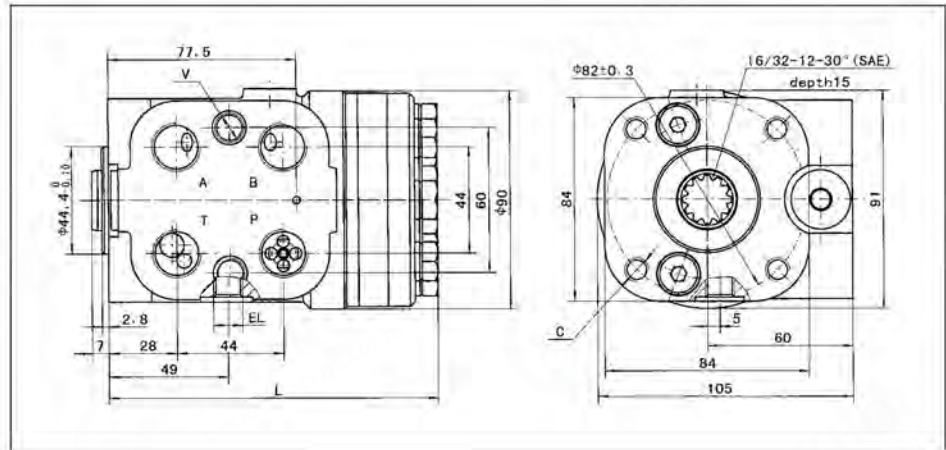
101S-5



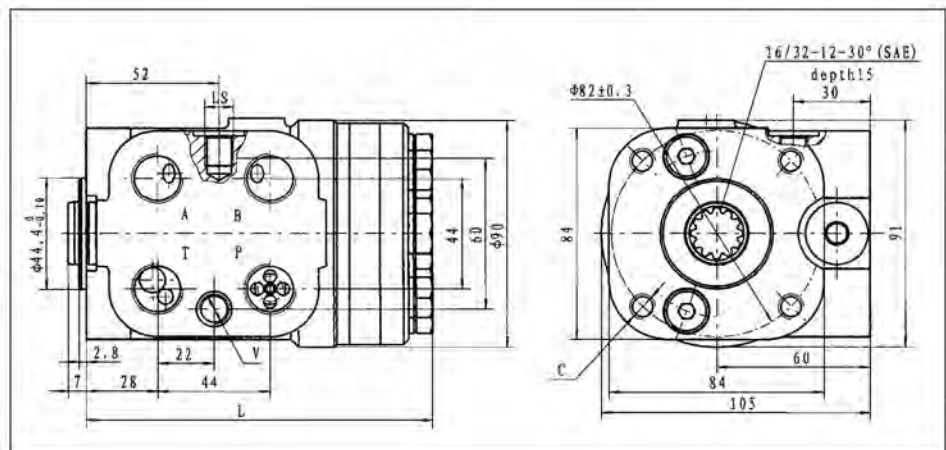
101S-5L



101S-5E



101S-5T



102-1,2,3系列全液压转向器 102-1,2,3 Series Hydraulic Steering Control Unit (SCU)

102-1、2、3系列全液压转向器油口至安装法兰端面的尺寸与BZZ系列转向器相同，其连接尺寸与101系列全液压转向器有差异。

SCU 102-1,2,3 series have the same dimension as BZZ series on flange and ports, but different connection compared with 101 series.

102S-1,2,4系列全液压转向器 102S-1,2,4 Series Hydraulic Steering Control Unit (SCU)

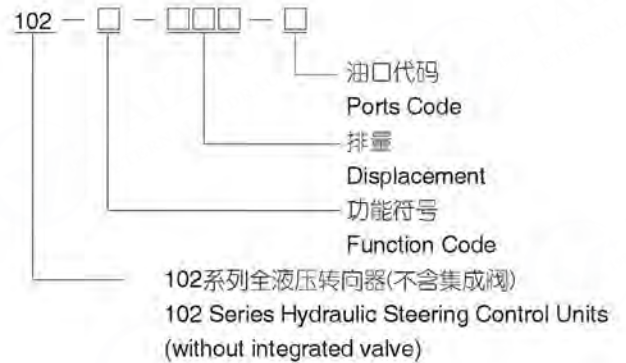
102S-1、2、4系列全液压转向器从结构到原理继承了102系列的全液压转向器的转向功能，102S系列转向器特点是在102系列的基础上将安全阀、缓冲阀、补油阀以及人口单向阀根据不同的要求设置在转向器阀体中，这种连接结构更加紧凑，使用更加方便。

102S-1、2、4系列转向器油口至安装法兰端面的尺寸与BZZ系列转向器相同，其连接尺寸与101系列全液压转向器有差异。

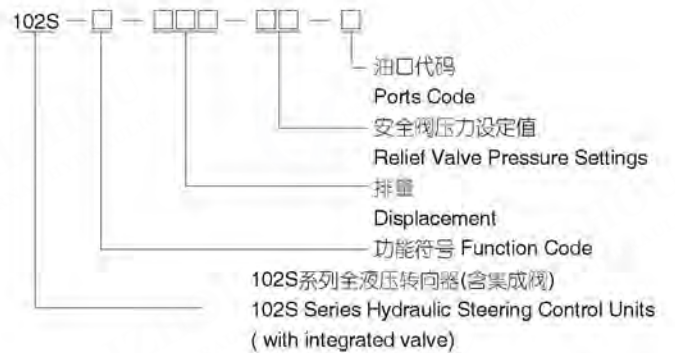
102S-1,2,4 series hydraulic steering control unit inherit the function of 102 series both in its structure and working principle. On the basis feature of 102 series SCU, 102S series SCU is to incorporate the relief valve, shock valves, suction valves and the inlet check valve inside the housing of SCU according to different requirement. This kind of structure is more compact with easier operation.

The dimension of 102S-1,2,4 series such as port and flange is as the same as BZZ series SCU, but different from 101 series SCU in connection dimensions.

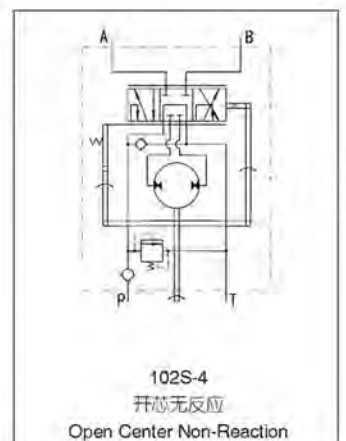
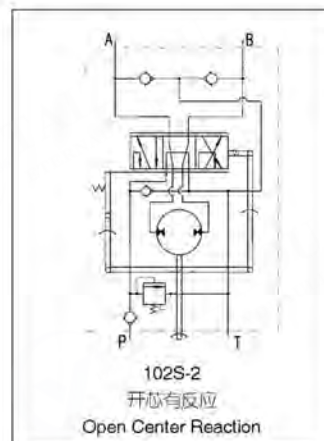
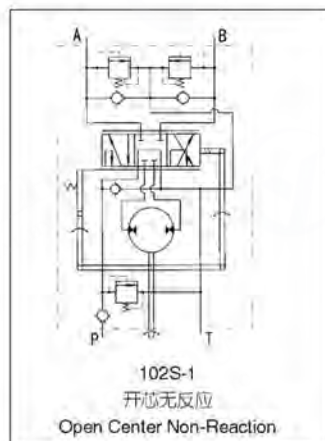
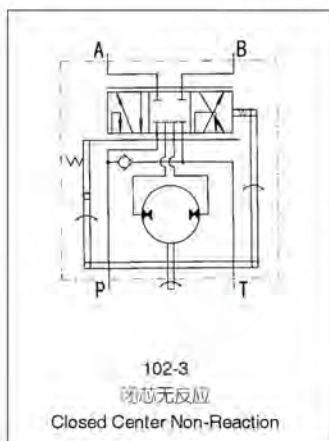
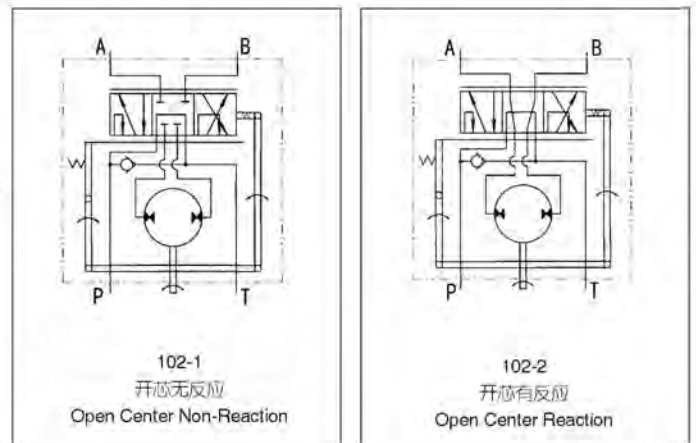
型号说明 Model Code



型号说明 Model Code



功能符号 Function Code

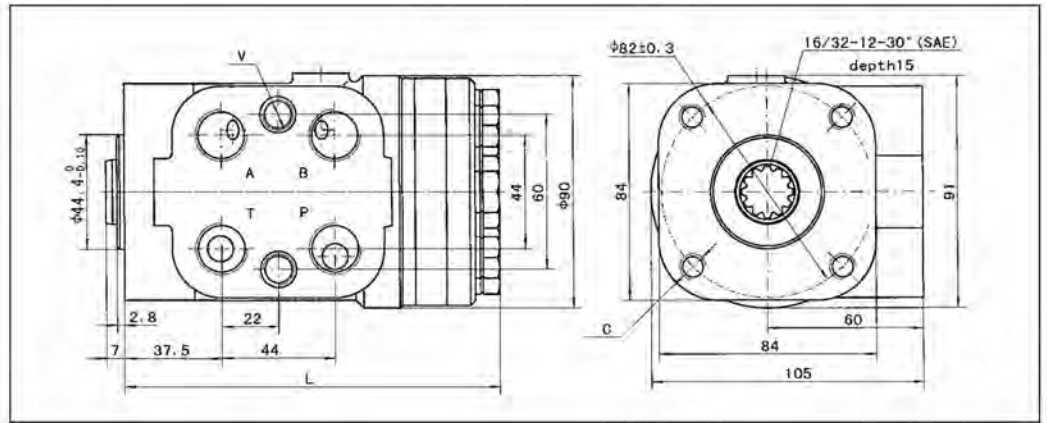


■ 102-1,2,3系列全液压转向器
102-1,2,3 Series Hydraulic Steering Control Unit (SCU)

■ 主要技术参数 Main Specification

Parameters	Type 102-***-****										
	1,2,3							1,3			
Function Code											
Displacement(mL/r)	50	63	80	100	125	160	200	250	280	315	400
Rated flow (L/min)	5	6	8	10	12.5	16	20	25	28	32	40
Max. input pressure (MPa)	17.5										
Max. cont. back pressure (MPa)	2.5										
Weight (kg)	5.94	6.0	6.08	6.18	6.3	6.5	6.7	6.9	7.1	7.29	7.79
Dimension L (mm)	140	142	144	146	149	154	159	165	170	175	185

■ 连接尺寸 Mounting Data



■ 油口螺纹 Port Thread

代码 Code	P、T、A、B油口 Ports P,T,A,B	连接螺纹C Column Mounting C	连接螺纹V Valve Mounting V	
A	M20×1.5	M10	M12	
B	M20×1.5 O-ring			
C	M18×1.5			
D	M18×1.5 O-ring			
E	G1/2		M10×1	
U	G1/2 O-ring			
G	M22×1.5		M12	
Q	M22×1.5 O-ring			
M	3/4-16UNF O-ring			3/8-16 UNC
F			M10	M10
I		M10×1.25		
N				

注1: 油口P、T、A、B的深度14 mm, 连接螺纹C、V的深度16 mm。

Note 1: Ports P,T,A,B Depth : 14 mm; Column Mounting C & V Depth: 16 mm.

注2: 其他油口连接方式协议确定代号。

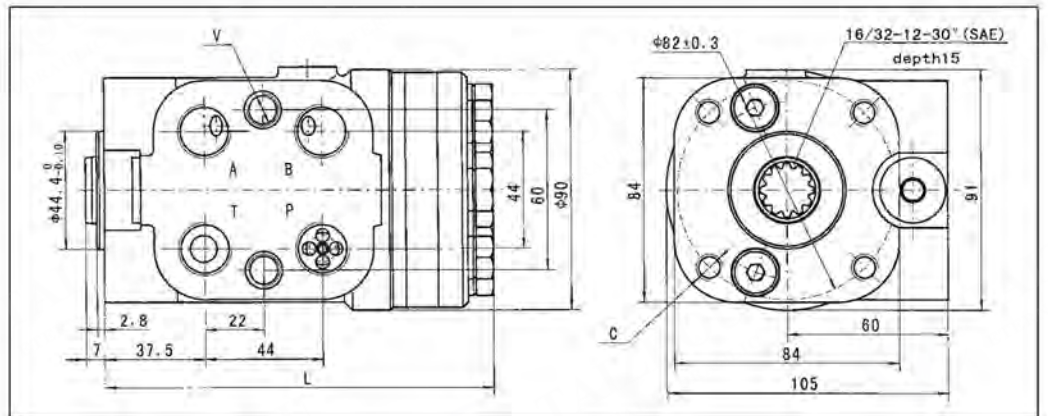
Note 2: The code of other ports dimensions will be listed in an agreement.

102-1,2,4系列全液压转向器
102-1,2,4 Series Hydraulic Steering Control Unit (SCU)

主要技术参数 Main Specification

Parameters	Type 102S-*****										
	1,2,4							1,4			
Function Code											
Displacement(mL/r)	50	63	80	100	125	160	200	250	280	315	400
Rated flow (L/min)	5	6	8	10	12.5	16	20	25	28	31.5	40
Max. input pressure (MPa)	16										
Relief Valve Pressure Settings (MPa)	06,07,08,10,12,14,15,16,17.5										
Shock Valves Pressure Settings (MPa)	12,13,14,16,18,20,21,22,23.5										
Max. cont. back pressure (MPa)	2.5										
Weight (kg)	6.04	6.09	6.18	6.27	6.4	6.6	6.79	7.02	7.2	7.39	7.89
Dimension L (mm)	140	142	144	146	149	154	159	165	170	175	185

连接尺寸 Mounting Data



油口螺纹 Port Thread

代码 Code	P、T、A、B油口 Ports P,T,A,B	连接螺纹C Column Mounting C	连接螺纹V Valve Mounting V
A	M20×1.5	M10	M12
B	M20×1.5 O-ring		
C	M18×1.5		
D	M18×1.5 O-ring		M10×1
E	G1/2		
U	G1/2 O-ring		
M	3/4-16UNF O-ring	M12	3/8-24 UNF
F		3/8-16 UNC	
I		M10	M10
N		M10×1.25	

注1: 油口P、T、A、B的深度14 mm, 连接螺纹C、V的深度16 mm。
Note 1: Ports P,T,A,B Depth : 14 mm; Column Mounting C & V Depth: 16 mm,
注2: 其他油口连接方式协议确定代号。
Note 2: The code of other ports dimensions will be listed in an agreement.

■ 102(S)-5(T)(TE)(L)(E)系列全液压转向器
102(S)-5(T)(TE)(L)(E) Series Hydraulic Steering Control Unit (SCU)

102S-5 (T) (TE) (L) (E)系列全液压转向器用于负荷传感型转向系统。

102S-5、102S-5L、102S-5E系列全液压转向器均为板式连接方式，与PVF*型优先阀采用板式连接后使用。

102S-5L系列全液压转向器在LL接口处引出了LS口的压力信号，将信号传送给电气控制系统；

102S-5E系列全液压转向器在EL接口处引出了A或B油口的压力信号，将信号传送给电气控制系统。

102S-5T、102S-5TE系列全液压转向器为管式连接方式，与PVL*或DYXL、YXL型优先阀采用管式连接后使用。

102S-5TE系列全液压转向器在EL接口处引出了A或B油口的压力信号，将信号传送给电气控制系统。

102-5T系列全液压转向器为管式连接方式，必须和DYXL、YXL型优先阀采用管式连接后使用，并且其系统安全阀设在优先阀上。

SCU 102(S)-5(T)(TE)(L)(E) series is used in the load sensing steering system.

SCU 102S-5,102S-5L,102S-5E series adopt modular mounting type and can only be used with PVF* type priority valve via modular mounting.

SCU 102S-5L series guides the pressure signal of port LS out of port LL, and transfers the pressure signal to the electrical control system.

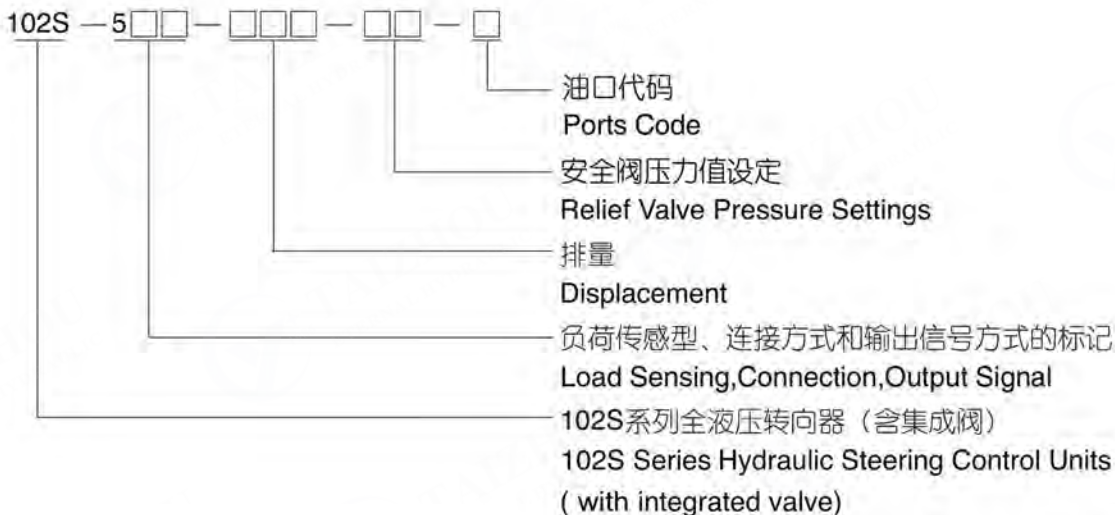
SCU 102S-5E series guides the pressure signal of port A or B out of port EL, and then supplies the pressure signal to the electrical control system.

SCU 102S-5T,102S-5TE series adopts the Pipe mounting and via pipe mounting can be used with PVL* or DYXL,YXL type priority valve.

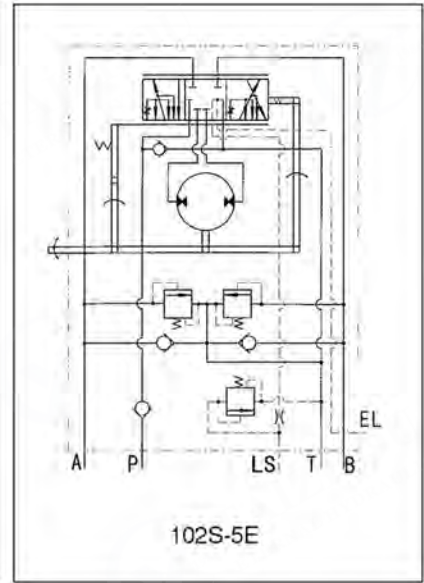
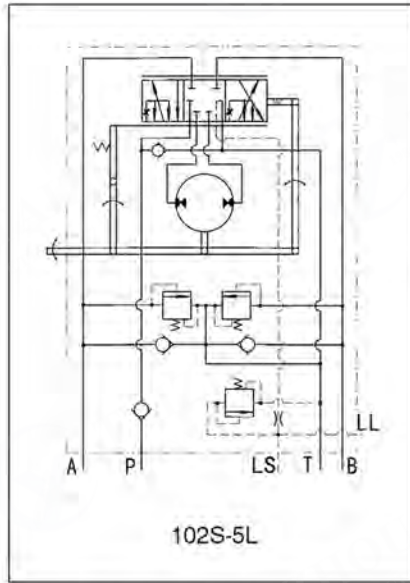
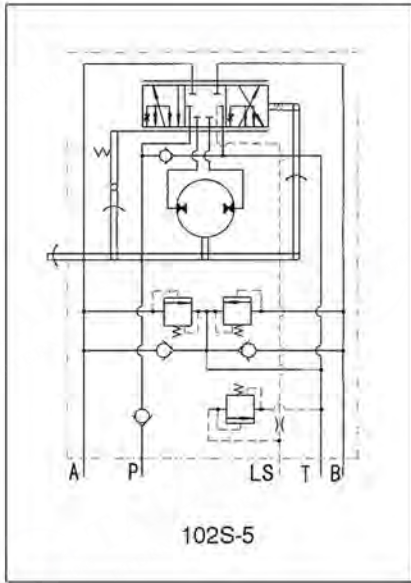
SCU 102S-5TE series guides the pressure signal of the port A or B out of port EL, and then supplies the pressure signal to the electrical control system.

SCU 102-5T series adopts the pipe mounting, it can be used only after the pipe mounted with the DYXL,YXL type priority valve. and the relief valve is integrated in the priority valve.

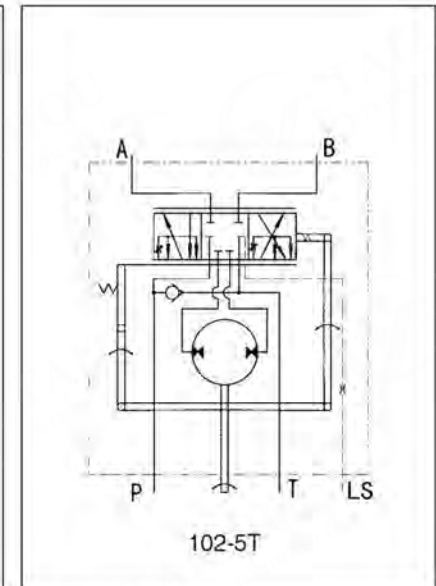
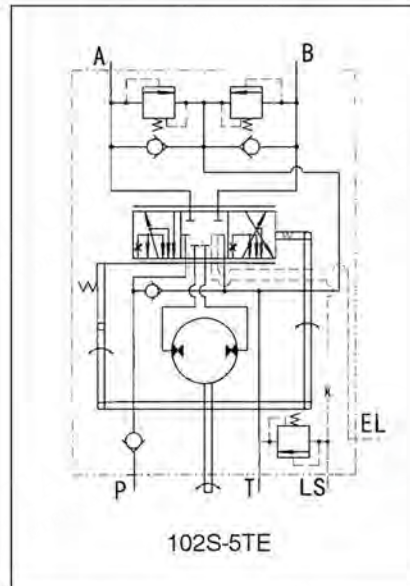
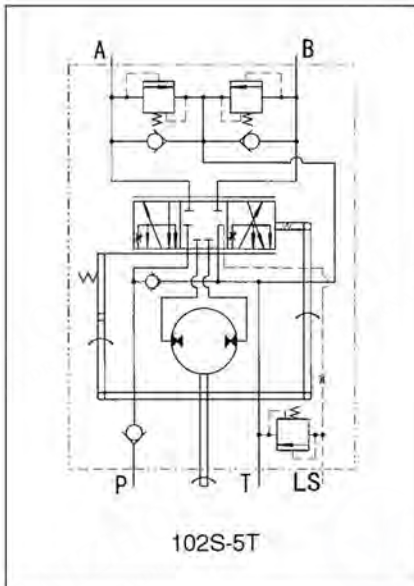
■ 型号说明 Order Code



■ 功能符号 Function Code



板式连接 Modularity mounting



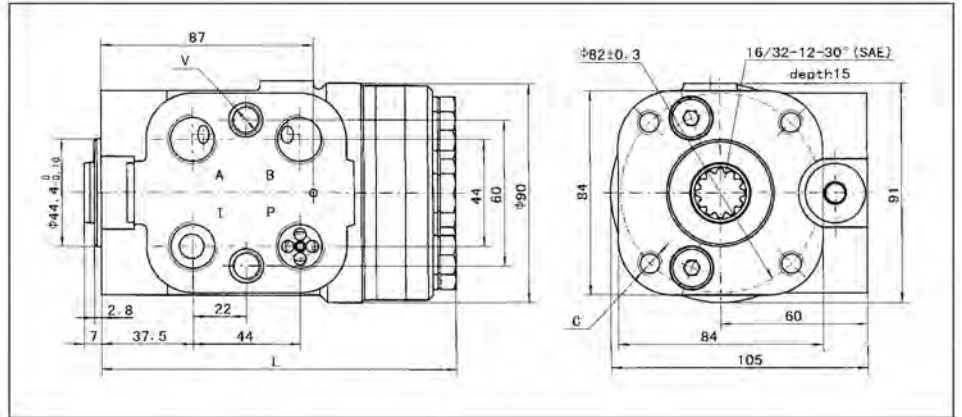
管式连接 Pipe Mounting

■ 主要技术参数 Main Specification

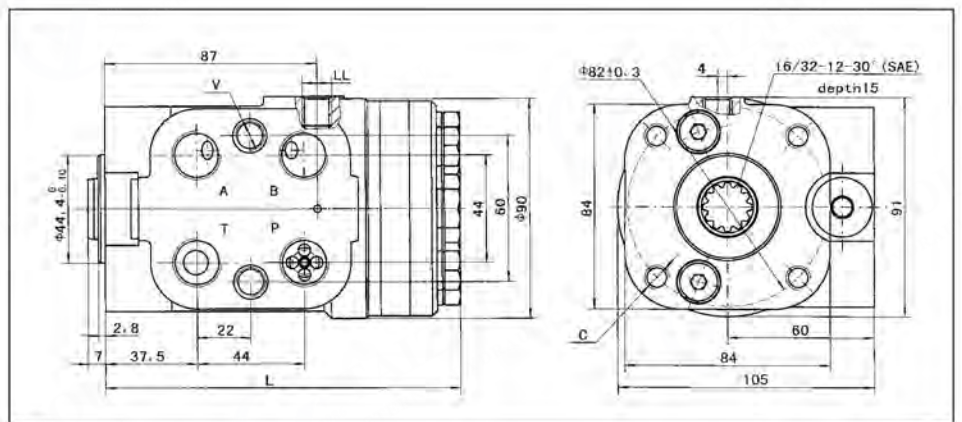
Parameters	Type 102-5T-*****, 102S-5(T)(TE)(L)(E)-****-***											
	50	63	80	100	125	160	200	250	280	315	400	
Displacement(mL/r)	50	63	80	100	125	160	200	250	280	315	400	
Max. input speed (rpm)	100								75			
Max. input pressure (MPa)	17.5											
Relief Valve Pressure Settings (MPa)	06,07,08,10,12,14,15,16,17.5											
Shock Valves Pressure Settings (MPa)	12,13,14,16,18,20,21,22,23.5											
Max. Cont. Back pressure (MPa)	2.5											
Weight (kg)	6.04	6.09	6.18	6.27	6.4	6.6	6.79	7.02	7.2	7.39	7.89	
Dimension L (mm)	140	142	144	146	149	154	159	165	170	175	185	

■ 连接尺寸 Mounting Data

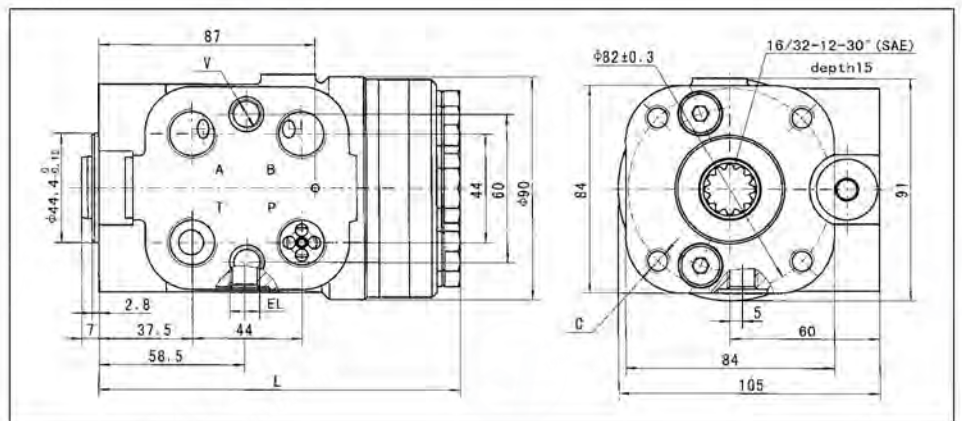
102S-5



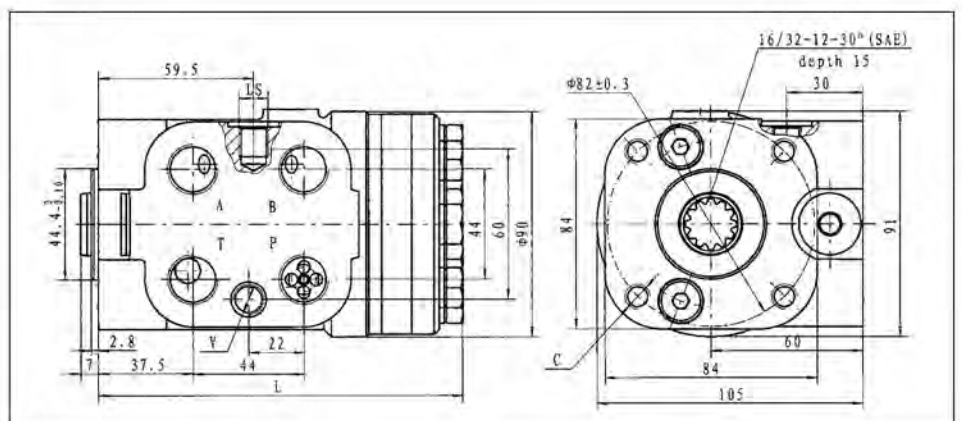
102S-5L



102S-5E

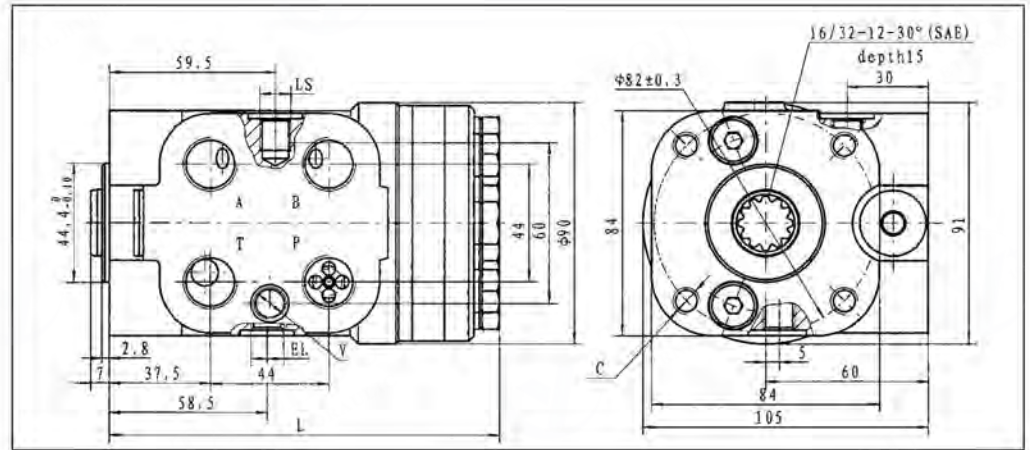


102S-5T

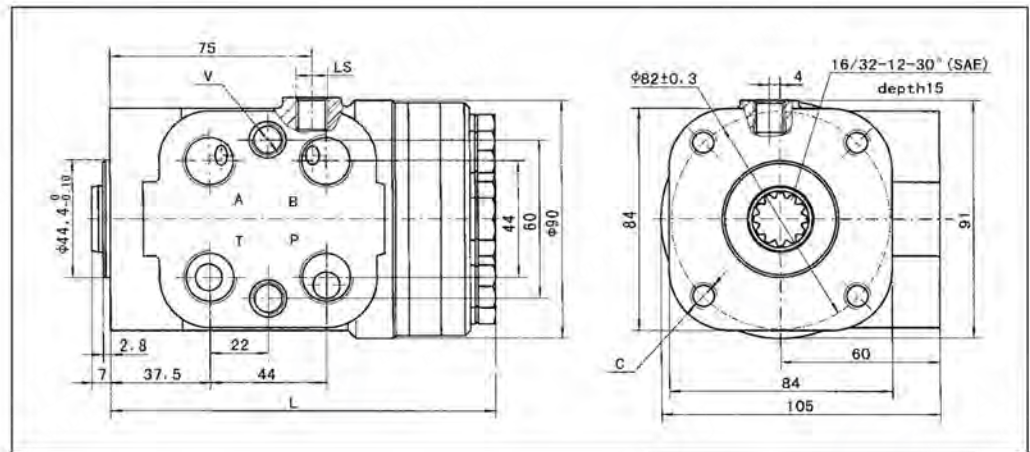


■ 连接尺寸 Mounting Data

102S-5TE



102-5T



■ 油口螺纹 Port Thread

代码 Code	P、T、A、B油口 Ports P,T,A,B	连接螺纹C Column Mounting C	连接螺纹V Column Mounting V	LS油口 Port LS	LL、EL油口 Ports LL, EL
A	M20×1.5	M10	M12	M12×1.5	
B	M20×1.5 O-ring			M12×1.5 O-ring	
C	M18×1.5			M12×1.5	
D	M18×1.5 O-ring			M12×1.5 O-ring	
E	G1/2	M10×1	M10×1	G1/4	M10×1
U	G1/2 O-ring			G1/4 O-ring	M10×1 O-ring
M	3/4-16UNF O-ring	3/8-16 UNC	3/8-24 UNF	7/16-20UNF O-ring	
F					
I		M10×1.25	M10		
N					
H	φ18.5	M10	M10	M12×1.5	

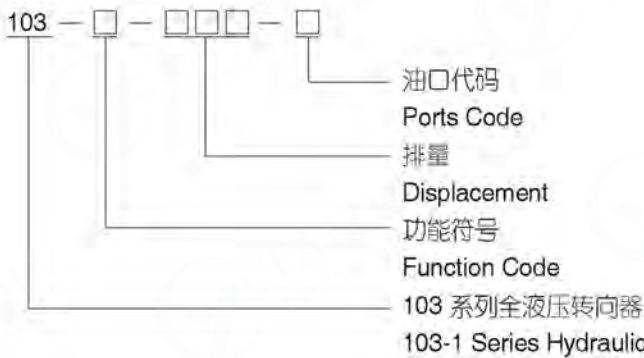
注1: 油口P、T、A、B的深度14 mm, 连接螺纹C、V的深度16 mm, LS、LL、EL的深度12 mm。
Note 1: Ports P,T,A,B Depth : 14 mm; Column Mounting C & V Depth: 16 mm;LS,LL,EL Depth: 12 mm.
注2: 其他油口连接方式协议确定代号。
Note 2: The code of other ports dimensions will be listed in an agreement.

■ 103-1系列全液压转向器
103-1 Series Hydraulic Steering Control Unit (SCU)

103-1系列全液压转向器结构更加紧凑，连接尺寸符合国际标准，和101、102系列产品有差异，结构小巧紧凑，适合于狭空间装配，广泛应用于低速车辆的转向控制系统，如叉车、拖拉机、联合收割机，工程或道路建设设备、船舶舵机等；能够通过输入较小的力完成较大输出转向力的场合，操纵上轻便、灵活、可靠。

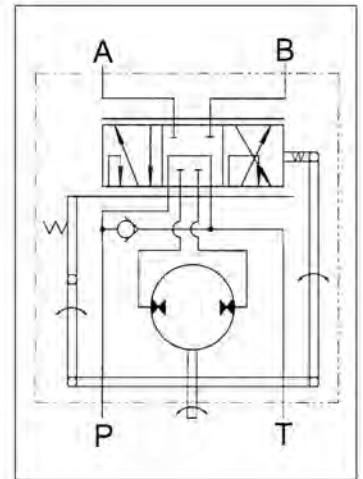
The structure of 103-1 series Hydraulic SCU is more compact and its connection dimension conforms to the international standard, while it is different from 101 and 102 series which are suitable for assembly in the narrow space. It's widely used in the low-speed vehicles, steering control system, such as forklift, tractor, combined harvester, engineering or road construction machinery, and the marine rudder, etc. It can obtain more powerful output steering force through the input force and it operates easily, flexibly and reliably.

■ 型号说明 Order Code



■ 功能符号 Function Code

103-1
开心无反应
Open Center Non-Reaction

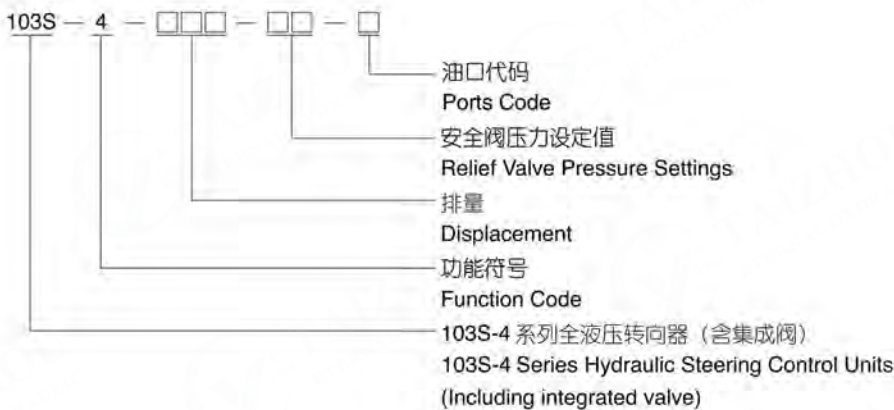


■ 103S-4系列全液压转向器
103S-4 Series Hydraulic Steering Control Unit (SCU)

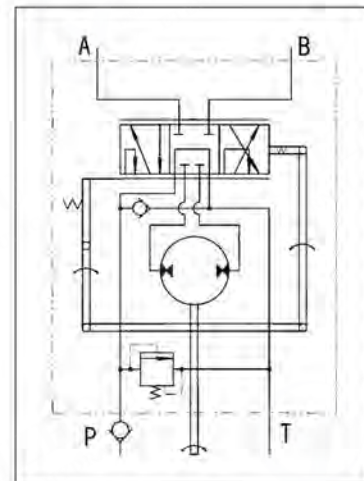
103S-4系列转向器除具备103-1系列转向器的功能外，还含有安全阀和入口单向阀的功能。

103S-4 series steering unit contains, in addition to the function of 103-1 series steering unit, also function of relief valve and inlet check valve.

■ 型号说明 Order Code



■ 功能符号 Function Code



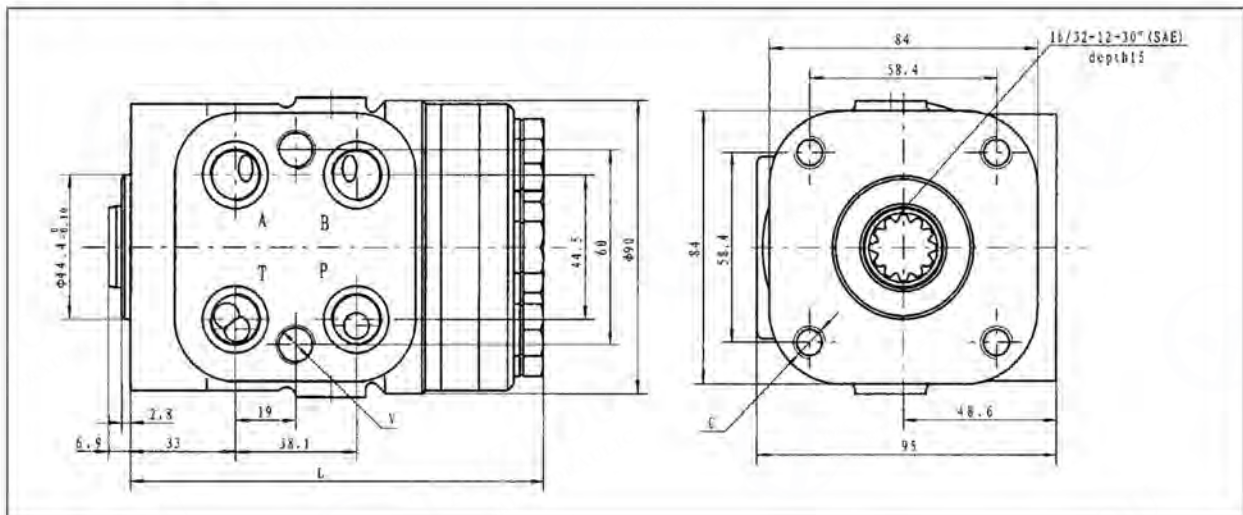
103S-4
开心无反应
Open Center Non-Reaction

■ 103-1系列全液压转向器
103-1 Series Hydraulic Steering Control Unit (SCU)

■ 主要技术参数 Main Specification

Parameters	Type 103-1-****							
Function Code	1	1	1	1	1	1	1	1
Displacement(mL/r)	50	63	80	100	125	160	200	250
Rated Flow (L/min)	5	6	8	10	12.5	16	20	25
Max.Input Pressure (MPa)	17.5							
Max.Cont.Back Pressure	2.5							
Weight (kg)	3.85	4.0	4.05	4.10	4.25	4.4	4.6	4.8
Dimension L (mm)	123	125	127	130	133	138	143	149

■ 连接尺寸 Mounting Data



■ 油口螺纹 Port Thread

代码Code	P、T、A、B 油口 Ports P , T, A, B	连接螺纹C Column Mounting	连接螺纹V Valve Mounting
A	G3/8-19 O-ring	M10×1.25	M10
B	9/16-18UNF O-ring		
C	M18×1.5	M10	M12
D	M18×1.5 O-ring		
M	3/4-16UNF O-ring	3/8-16UNC	3/8-24UNF
F		M10	M10
I			
N		M10×1.25	

注1: 油口P、T、A、B的深度14 mm, 连接螺纹C、V的深度16 mm。
Note 1: Ports P, T, A, B Depth : 14 mm; Column Mounting C & V Depth: 16 mm.

注2: 其他油口连接方式协议确定代号。
Note 2: The code of other ports dimensions will be listed by an agreement.

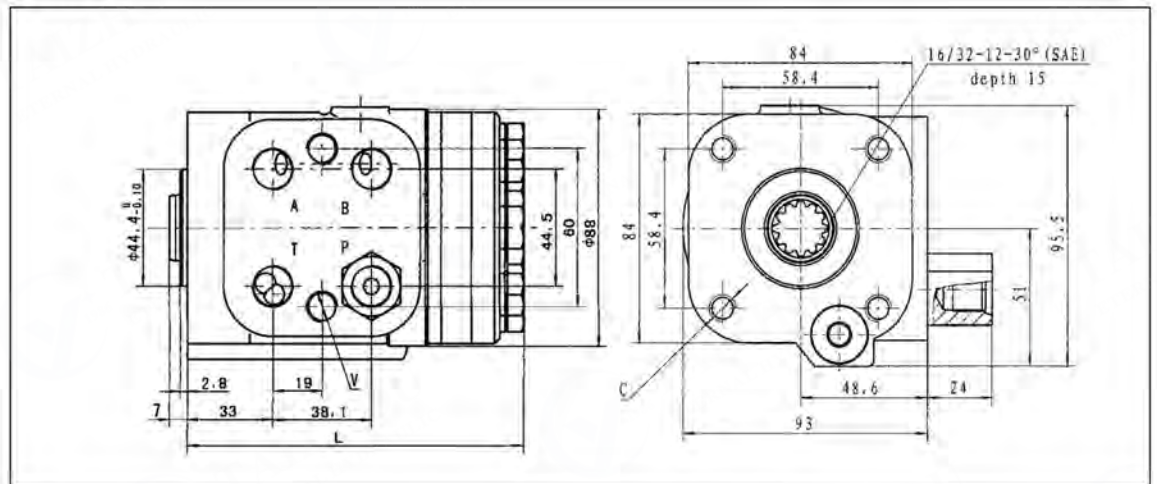
■ 103S-4系列全液压转向器
103S-4 Series Hydraulic Steering Control Unit (SCU)

■ 主要技术参数 Main Specification

Parameters	Type 103S-4-*****							
	50	63	80	100	125	160	200	250
Displacement(mL/r)	50	63	80	100	125	160	200	250
Rated flow (L/min)	5	6	8	10	12.5	16	20	25
Max. input pressure (MPa)	17.5							
Relief valve pressure settings (Mpa)	06,07,08,10,12,14,15,16,17.5							
Max. cont. back pressure (MPa)	2.5							
Weight (kg)	4.75	4.81	4.89	4.96	5.1	5.3	5.5	5.73
Dimension L (mm)	123	125	127	130	133	138	143	149

■ 连接尺寸 Mounting Data

103S-4



■ 油口螺纹 Port Thread

代码 Code	P、T、A、B油口 Ports P,T,A,B	连接螺纹 C Column Mounting C	连接螺纹 V Column Mounting V
A	G3/8-19 O-ring	M10x1.25	M10
B	9/16-18UNF O-ring		
C	M18x1.5	M10	M12
D	M18x1.5 O-ring		
M	3/4-16UNF O-ring	3/8-16 UNC	3/8-24 UNF
F		M10	M10
I			
N		M10x1.25	

注1: 油口P、T、A、B的深度14 mm, 连接螺纹C、V的深度16 mm。
Note 1: Ports P,T,A,B Depth : 14 mm; Column Mounting C & V Depth: 16 mm.

注2: 其他油口连接方式协议确定代号。

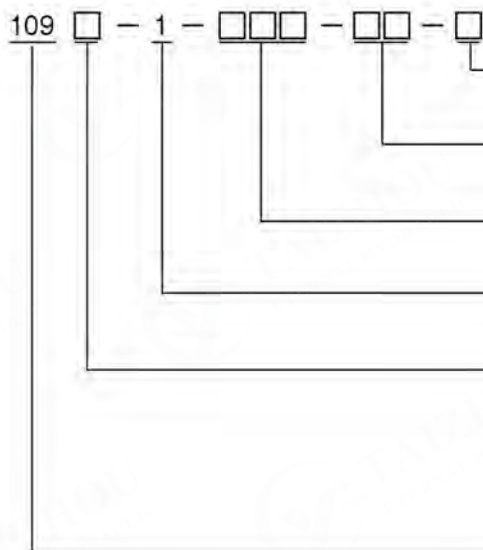
Note 2: The code of other ports dimensions will be listed in an agreement.

109系列全液压转向器 109 Series Hydraulic Steering Control Unit (SCU)

109系列全液压转向器是整体集成式4/5齿结构的摆线全液压转向器。可以集成单向阀、安全阀、缓冲阀，结构小巧玲，连接尺寸符合国际规范，产品广泛运用于微型非道路车辆，如：微型叉车、小型拖拉机(及其它农机)、微型土方机械、市政养护车辆等。能够通过输入较小的力，获得较大的输出转向力矩，具有操作轻巧、灵活、可靠等特点。

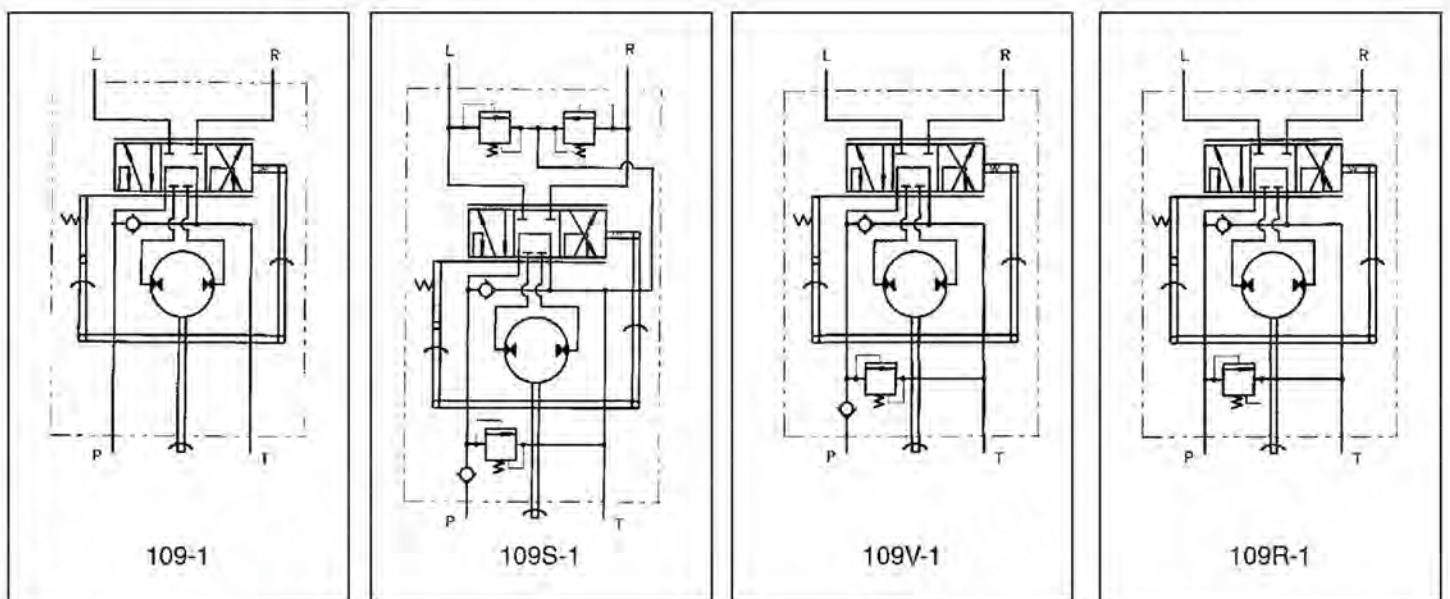
109 series hydraulic steering unit is an integrated orbital steering unit with 4/5 tooth structure. This kind of steering unit has a small and exquisite structure with integrated check valve, relief valve and shock valves and its mounting dimension conforms to international standard. This kind of steering unit is widely used in mini vehicles, such as mini forklift, mini tractor (and other agricultural machinery), mini earthmoving machinery, mini municipal vehicle, etc. It can obtain more steering output torque through input of less power, with features of easy, flexible and reliable operation.

型号说明 Order Code

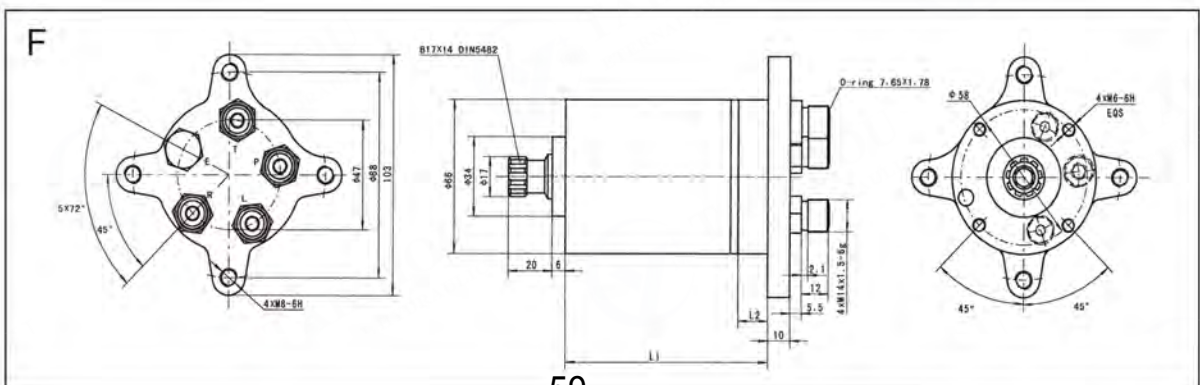
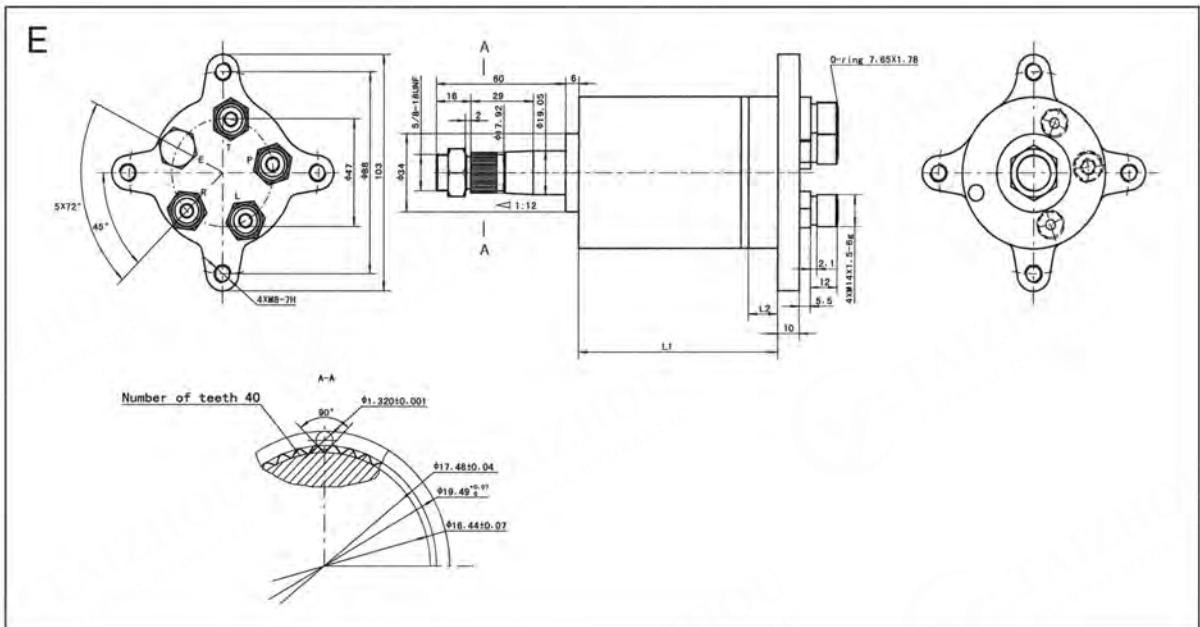
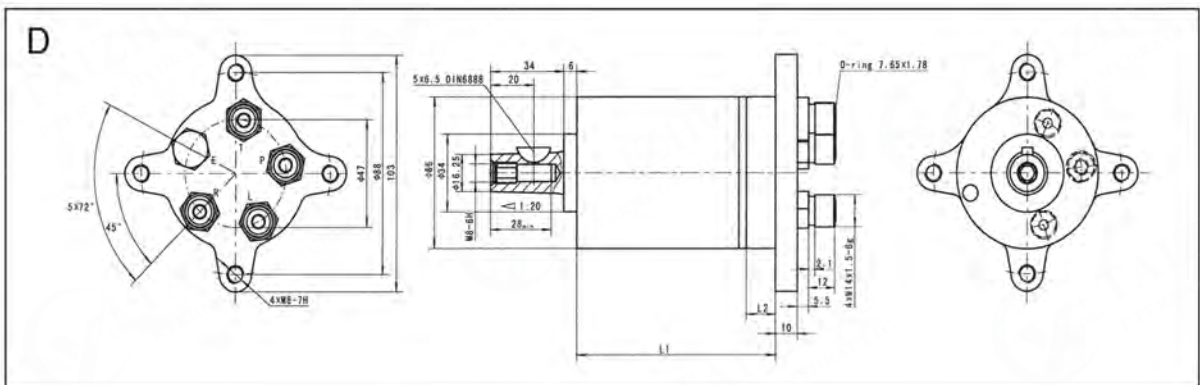
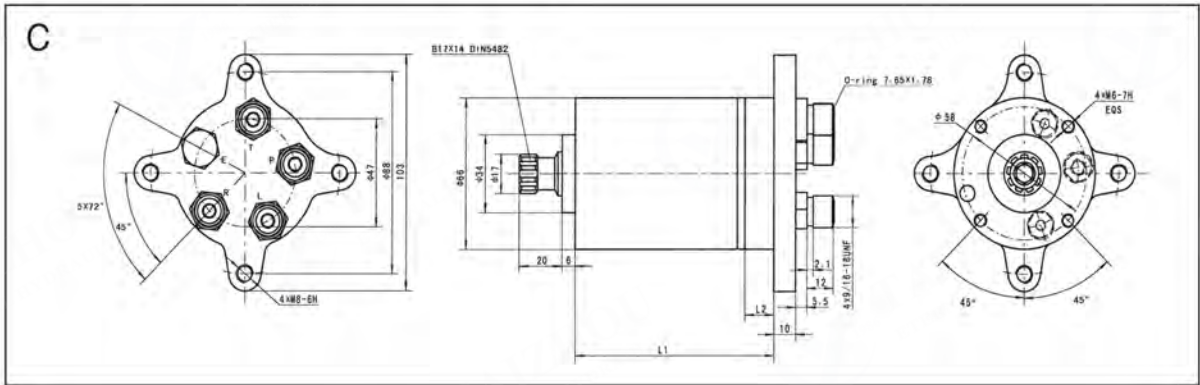


- 连接尺寸标记
- Mounting Data
- 安全阀压力设定值
- Relief Valves pressure settings
- 排量
- Displacement
- 功能符号：开心无反应
- Function Code: Open Center, Non-Reaction
- 缺省：表示不含集成阀；Omit: Without Integrated Valve
- S: 表示含入口单向阀、安全阀、缓冲阀
- S: With Check Valve, Relief Valve, Shock Valves
- V: 表示含入口单向阀、安全阀 V: With Check Valve, Relief Valve
- R: 表示安全阀 R: With Relief Valve
- 109系列全液压转向器
- 109 Series Hydraulic Steering Control Units

功能符号 Function Code



109系列全液压转向器
109 Series Hydraulic Steering Control Unit (SCU)





FK



FKS



FLD



FZ

FKAR	-6	-30	-6		
型号 Model	溢流阀调压范围 Relief Valve Pressure Range (MPa)	公称流量 Rated Flow (l/min)	双缓阀调压范围 Dual Shockproof Valve Pressure Range (Mpa)	单向阀开启压力 Inlet Check Valve Open Pressure (Mpa)	补油阀开启压力 Suction Valve Open Pressure (MPa)
FKAR	2.5~16	30/60	6.3~20	0.1	0.05
FKA					
FKSA					
FKBR					0.05
FKB					
FKSB		30	6.3~20		
FKC	2.5~16	30/60			
FKSC					

AR: 集成单向阀, 溢流阀, 双向缓冲阀和双向补油阀 Contains inlet check valve, relief valve, dual shockproof valve and suction valve

BR: 集成单向阀, 双向缓冲阀和双向补油阀 Contains inlet check valve, dual shockproof valve and suction valve

A: 集成单向阀, 溢流阀, 双向缓冲阀 Contains inlet check valve, relief valve, dual shockproof valve

B: 集成单向阀和双向缓冲阀 Contains inlet check valve and dual shockproof valve

C: 集成单向阀, 溢流阀 Contains inlet check valve and relief valve

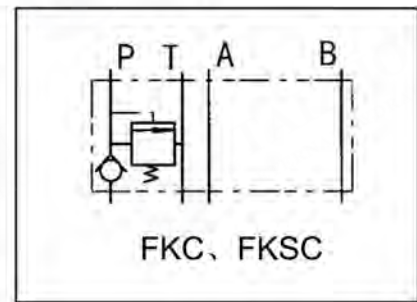
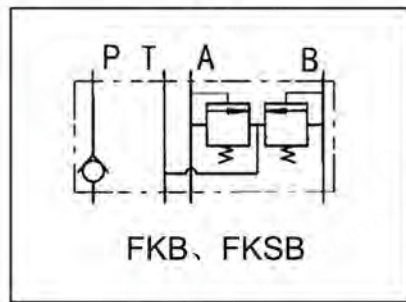
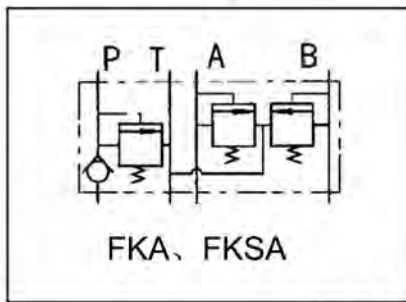
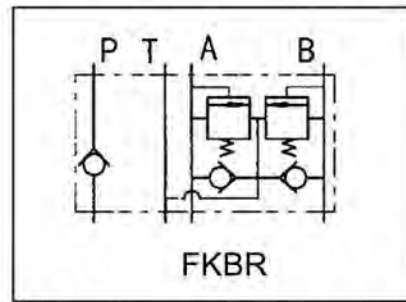
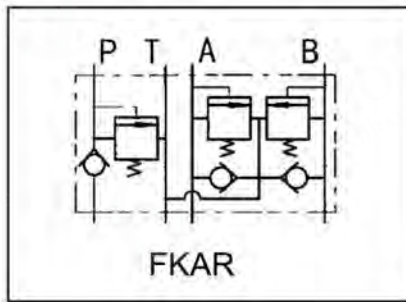
FK: 方阀块Crossover relief valve

FKS: 平行油口阀块Cushion crossover anticavitation relief valve

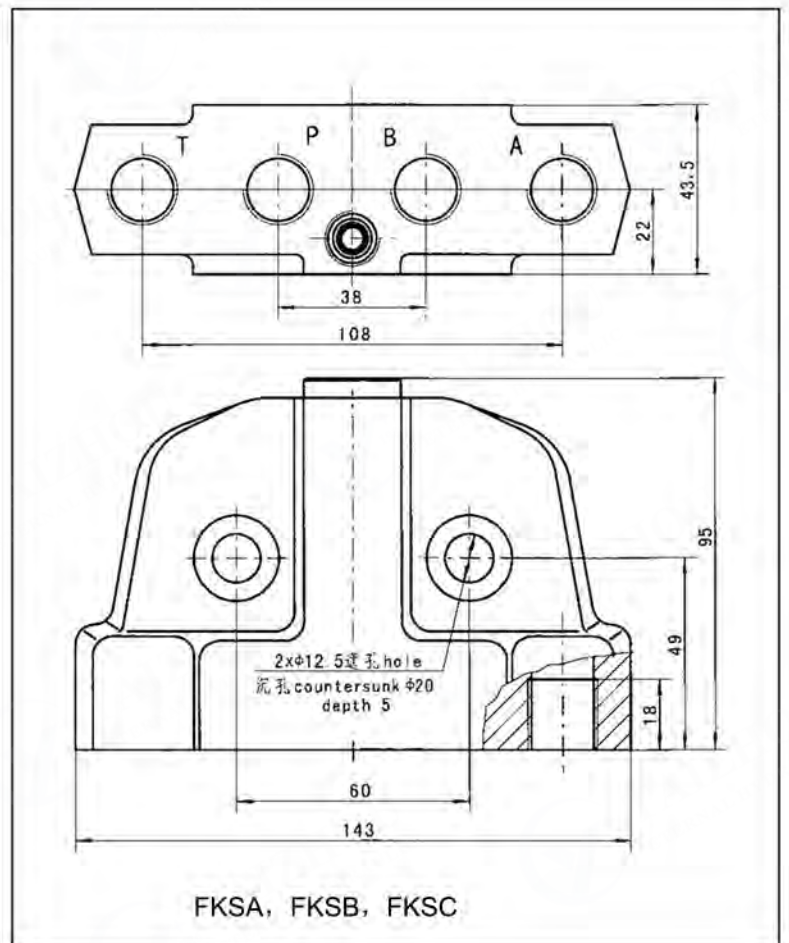
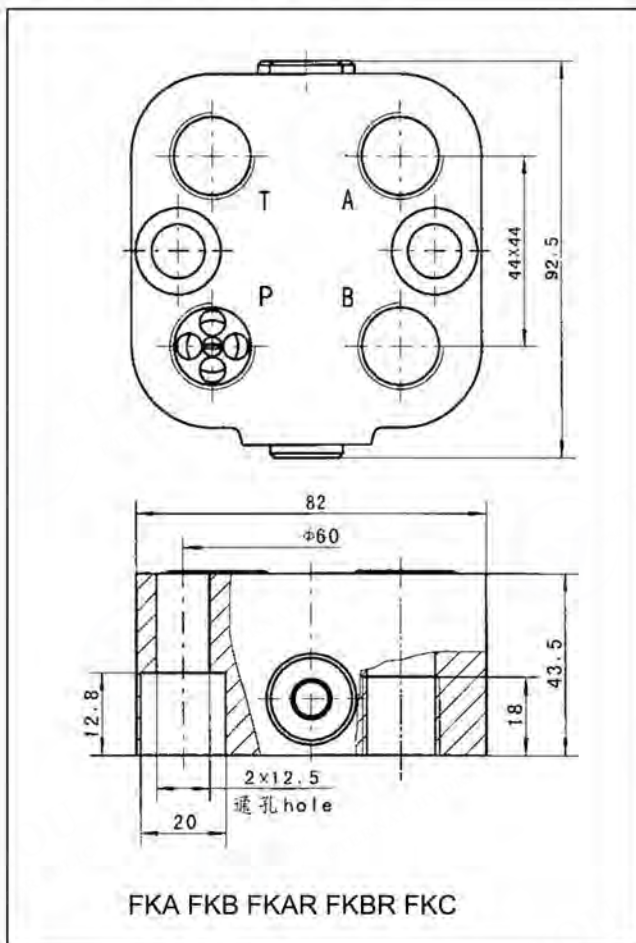
FLD	-F	12		F
型号 Model	最大入口压力 Max.Input Pressure	公称稳定流量Rated Flow L/min	最大入口流量 Max.input Flow (L/min)	类型Type
FLD 单路稳定 分流阀 Flow Divider Valve	F: 20Mpa	4,6,7.5,9.5,12,15	45	F: Dividing Flow H: 恒流型Constant Flow W: 无安全阀分流型 Non-relief Valve Dividing Flow
		19,24,30	90	
		38,48,60,75	200	

FZ	2	200	H	Ha	F
型号 Model	功能 Function	转向柱长度 Length of the Steering column	方向盘连接形式 Steering-Wheel Linkage Type	输出端连接形 式Output end linkage type	法兰连接形式 Flange linkage type
FZ 转向柱 Steering Columns	1: 不带喇叭线 Without horn wire 2: 上端出喇叭线 With horn wire from top 2a: 侧面出喇叭线 With horn wire from side	140, 200, 225, 250, 275, 300, 325, 350, 400, 450, 475, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000, 1100, 1200	H:三角花键(锥轴 1:12)Serration (Taper Shaft1:12) D:单键(锥轴 1:12)Woodruffkey (Taper shaft 1:12)	Ha: SAE 花键Spline Ea: 扁舌 Tongue	F:正方形 Square

- FK型组合阀块
FK Type Combinatory Valve Block
- 功能符号 Function Code

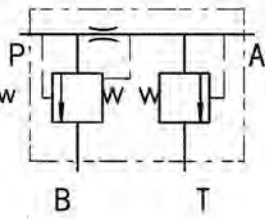


■ 连接尺寸 Mounting Data

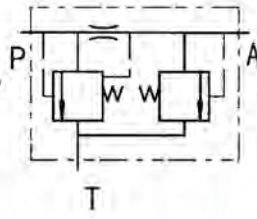


■ 功能符号 Function Code

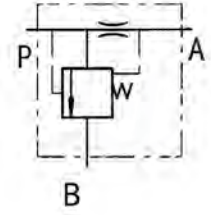
分流型
Dividing Flow



恒流型
Constant Flow

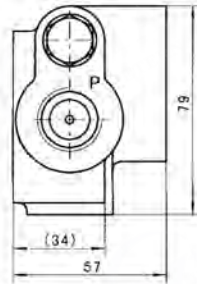
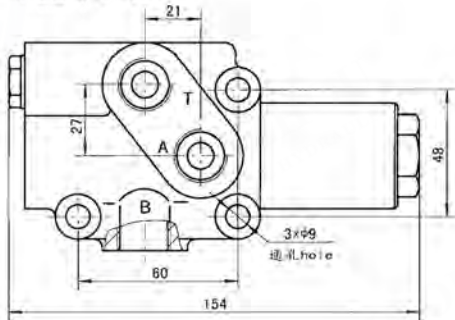


无安全阀分流型
Non-Relief Valve
Dividing Flow

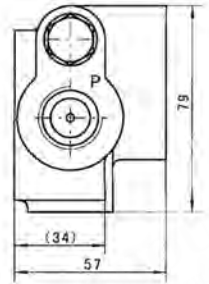
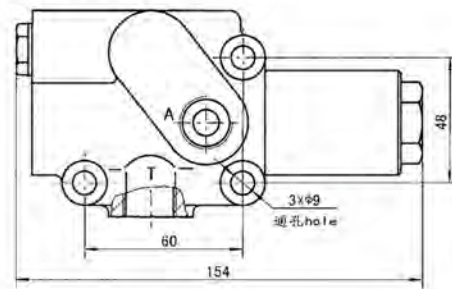


■ 连接尺寸 Mounting Data

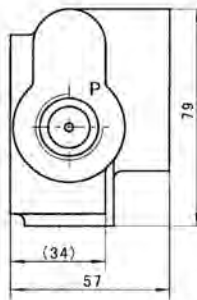
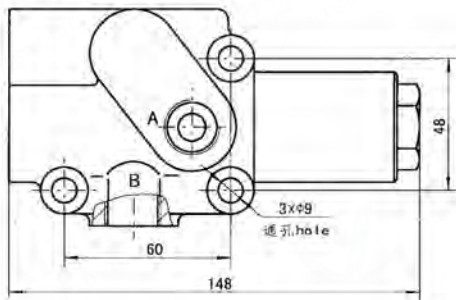
FLD-F4~15



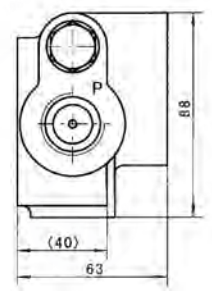
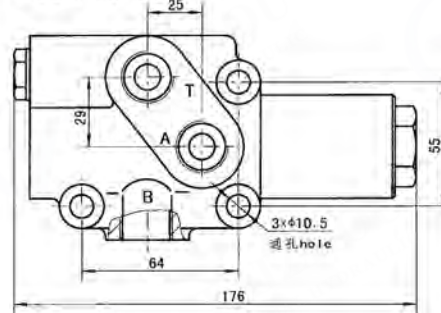
FLD-F4~15H



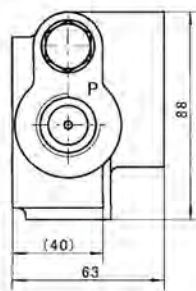
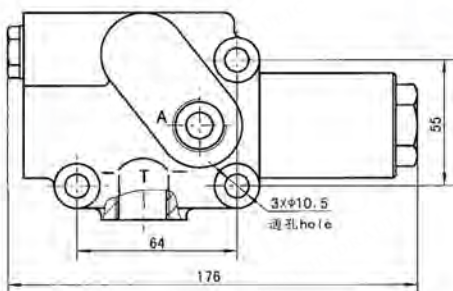
FLD-F4~15W



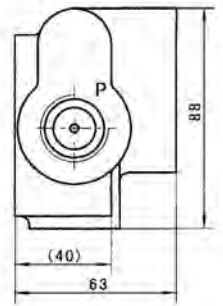
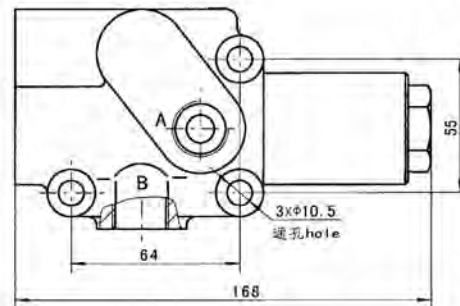
FLD-F19~30



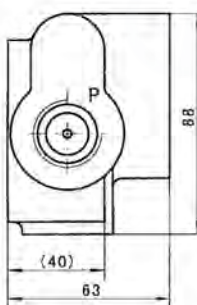
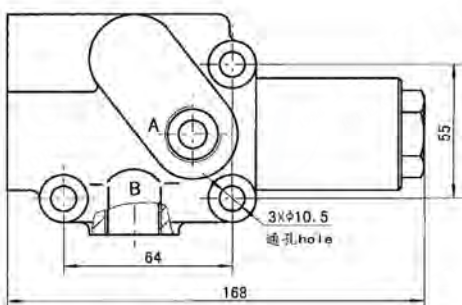
FLD-F19~30H



FLD-F19~30W



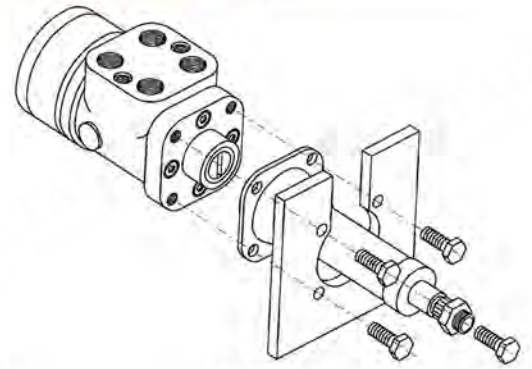
FLD-38~75W



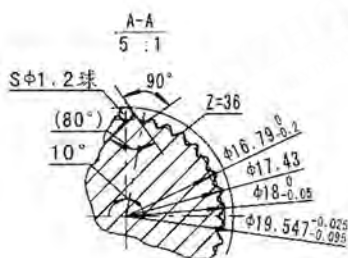
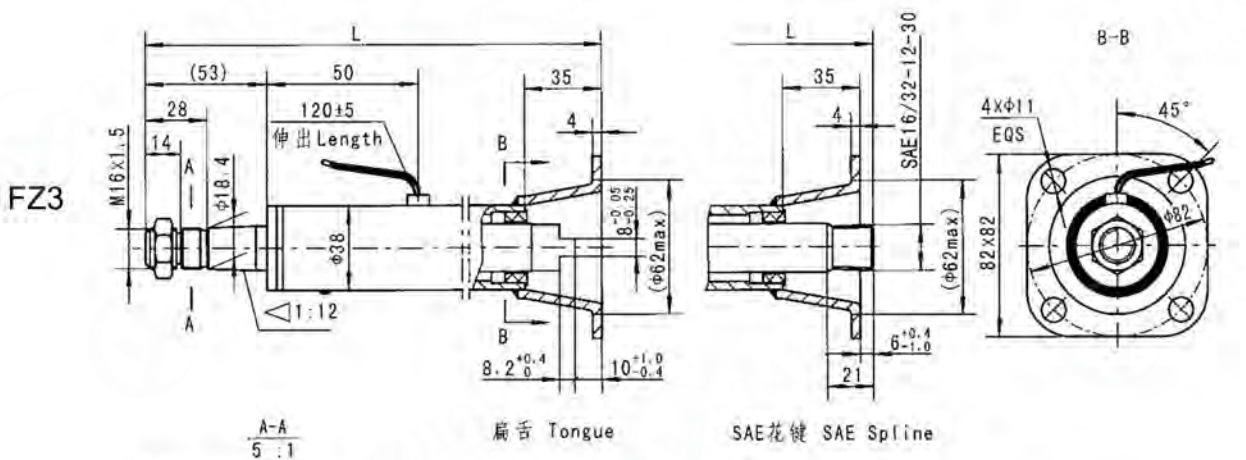
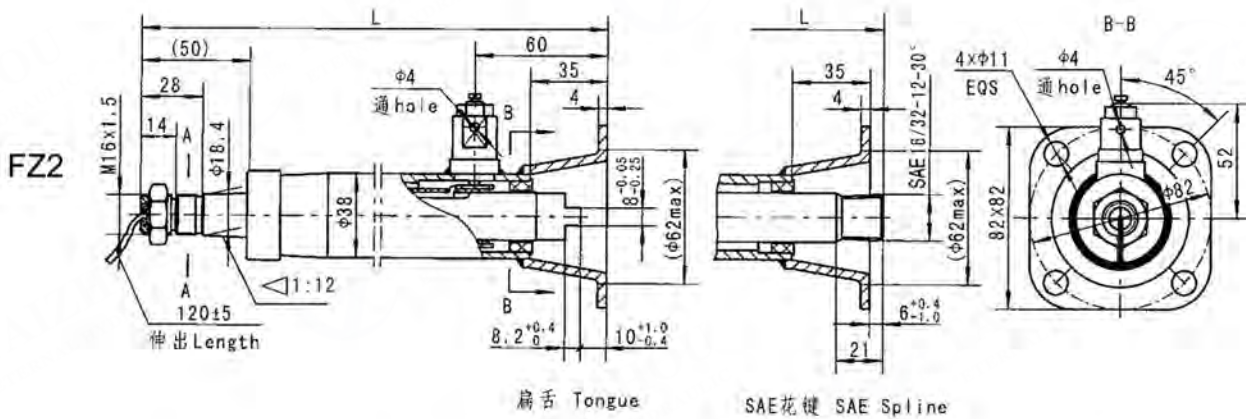
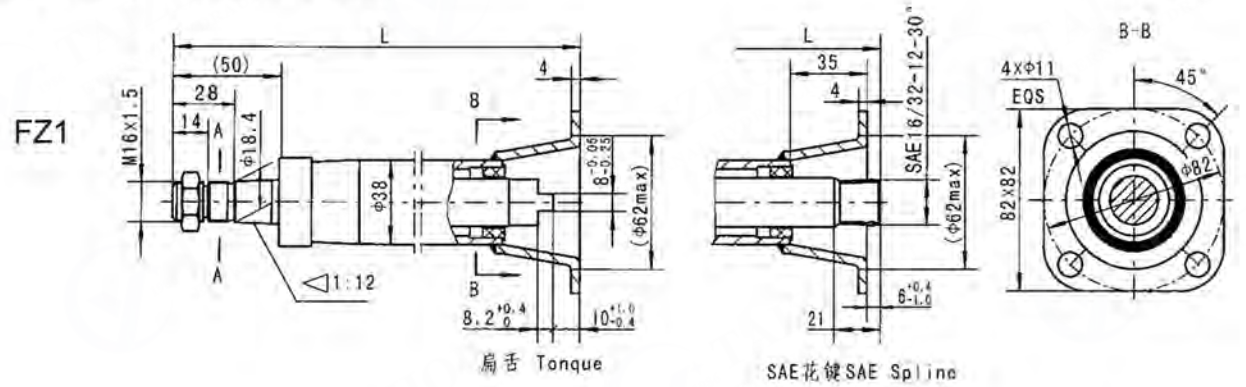
■ 推荐连接示意图 Recommendable Mounting Example

转向柱与转向器之间最好不加装其他零件

No other parts be mounted between steering unit and steering column



■ 连接尺寸 Mounting Data



- 注： 1、样图尺寸为我厂转向柱基本型式的尺寸；
2、如有特殊要求请与厂家联系；
3、如有改动，恕不通知。

- Note: 1、All above is provided from our factory.
2、Please contact us if any require differs from this catalog offerings.
3、Due to improvement of product, please forgive us if we change at any time without notice.

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Vane Pump



Dump Pump



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Directional Control Valve

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