

4DWHG16 SERIES SOLENOID PILOT OPERATED DIRECTIONAL VALVES



4DWHG16型电液换向阀是用电磁换向阀作为先导控制的滑阀式换向阀，用于控制液流的通断和流动方向。

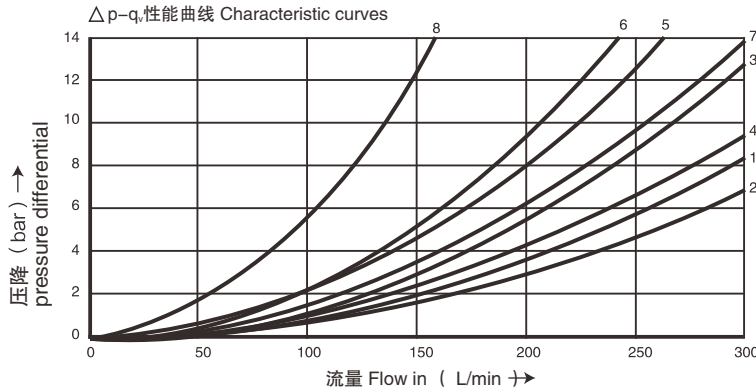
4DWHG16 series are solenoid pilot operated spool type valves . This series are used to control the start ,stop and direction of flow.

▶ 技术参数 Technical data

通径 Size		16
最高工作压力 P A B(MPa) Max operating pressure P.A.B(MPa)		35
T 口 (MPa)T Port (MPa)	控制油外排 Externally drained	25
	控制油内排 Internally drained	交流 (AC)-10 直流 (DC)-16
Y 口 (MPa)Y Port (MPa)	控制油外排 Externally drained	交流 (AC)-10 直流 (DC)-16
	控制油内排 Internally drained	交流 (AC)-10 直流 (DC)-16
最小控制压力 (MPa) Min. Pilot pressure(MPa)		0.45-1.3
最大流量 (L/min)Max. flow rate(L/min)		300
重量 (千克)Weight(KGS)		9.5
阀体 (材料) 表面处理 Valve body (Material) Surface treatment		铸件 表面磷化处理 casting phosphating surface
油液清洁度 /Oilcleanliness		NAS1638 9 级和 ISO4406 20/18/15 级 NAS1638 class 9 and ISO4406 class 20/18/15

特性曲线：4DWHG16... 型（在使用HLP46，油温=40℃±5℃时测得）

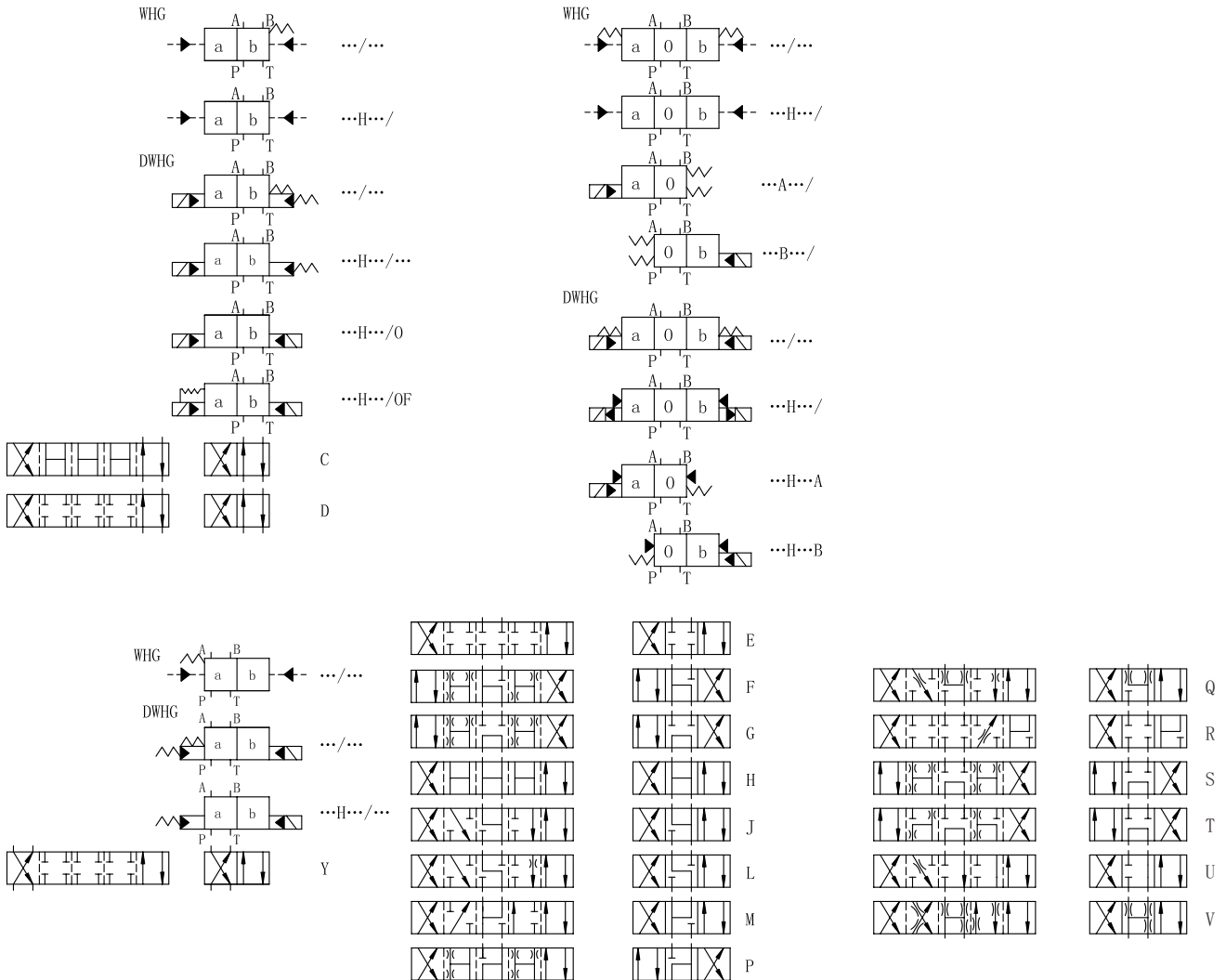
Characteristic curves : Type 4DWHG16... (measured with HLP46 , Voil=40℃±5℃)



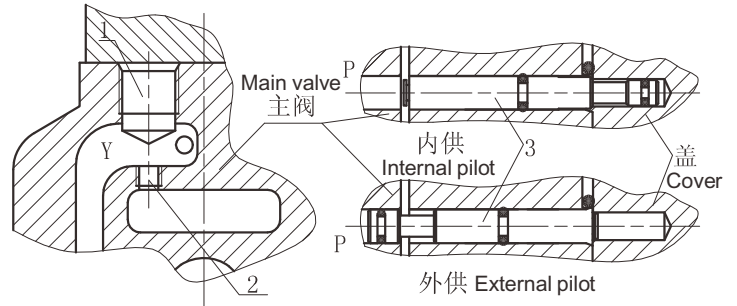
机能符号 Spool symbol	切换位置 Spool position				
	P-A	P-B	A-T	B-T	P-T
E,D,Y	1	1	1	3	-
F	2	2	3	3	-
G,T	5	1	3	7	6
H,C,Q,V,Z	2	2	3	3	-
J,K,L	1	1	3	3	-

机能符号 Spool symbol	切换位置 Spool position				
	P-A	P-B	A-T	B-T	P-T
M,W	2	2	4	3	-
R	2	2	4	-	-
U	1	1	4	7	-
S	4	4	4	-	8

机能符号 Spool symbols



▶ 控制油内供与外供及内排与外排的说明 Pilot fluid supply



DWHG16 型供排结构图
DWHG16 explanation partial drawing

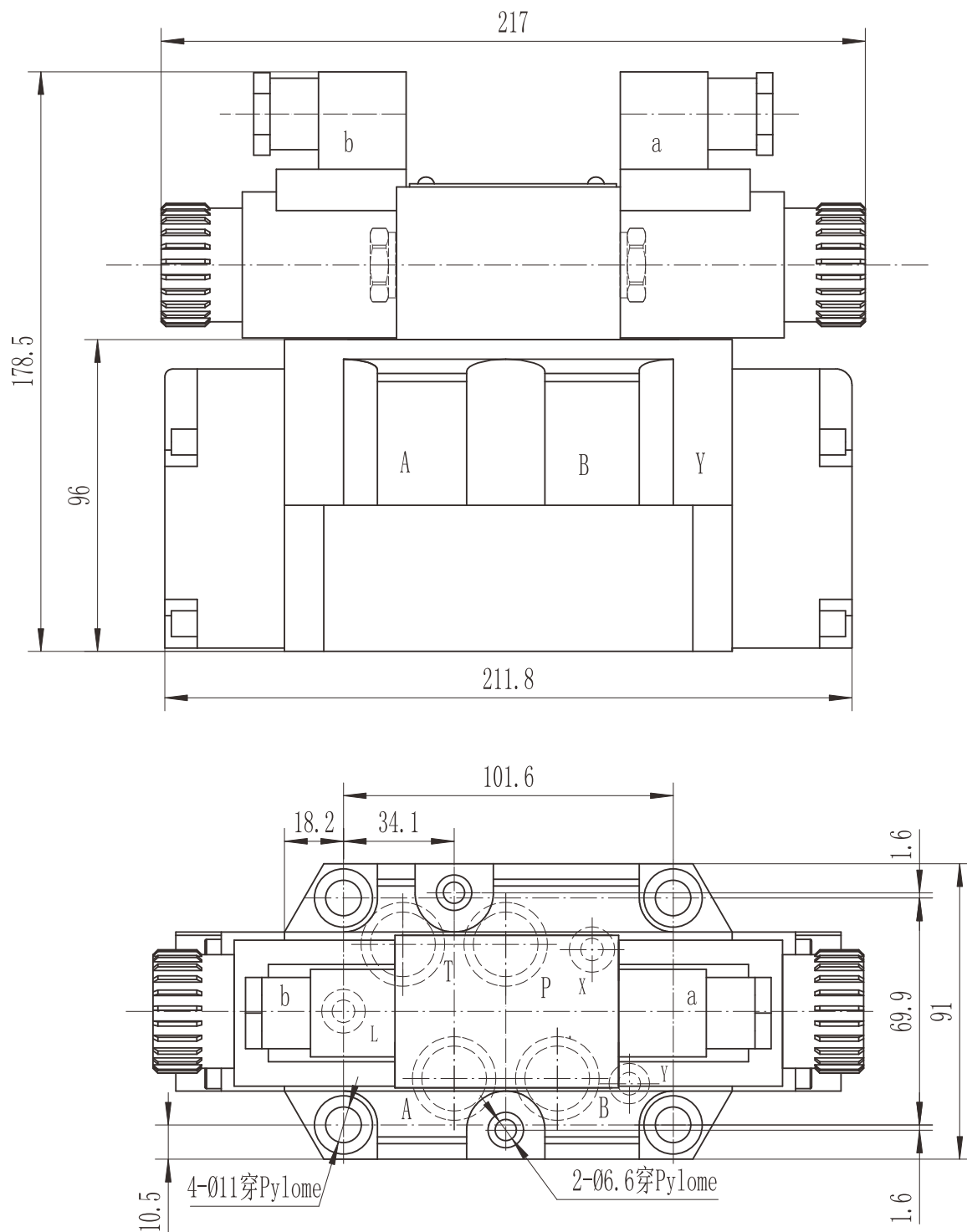
4DWHG16 型

- 1、内供与外供转换：拆下右盖，将销 3 的小头朝向主阀内装成外供，将销 3 的小头朝外装成内供。
- 2、内排与外排转换：将主阀顶上螺塞 1 拆下，装上 M6 螺钉 2 成外排，拆下 M6 螺钉 2 成内排。

4DWHG16

- (1) Internal pilot and external pilot:
Removing the sideward cover, installing the pin to allow "P" port with open position is internal pilot, to convert the pin into "P" port with plugged position is external drain.
- (2) Internal drain and external drain:
Removing the bolt 1 and installing M6 screw 2 is external drain, unscrew the M6 screw 2 is internal drain.

4DWHG16 外型尺寸 4DWHG16 Overall Dimensions



阀固定螺钉

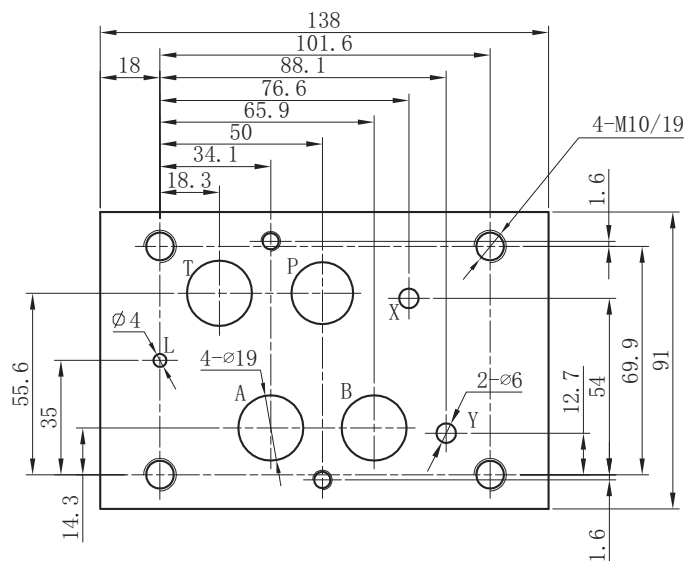
4个 M10X60GB/T 70.1-12.9 级 拧紧扭矩 Ma=75Nm
 2个 M6X60GB/T 70.1-12.9 级 拧紧扭矩 Ma=15.5Nm
 P.T.A.B 口 O 型圈: ϕ 26X2.4
 X.Y.L 口 O 型圈: ϕ 15X1.9

Valve's set screw

4 of M10x60 GB/T70.1-12.9 Tightening torque Ma=75Nm.
 2 of M6x60 GB/T70.1-12.9 Tightening torque Ma=15.5Nm.
 O-ring for P.T.A.B Port: ϕ 26 \times 2.4
 O-ring for X.Y.L Port: ϕ 15 \times 1.9

底板安装尺寸 Installation dimensions

4DWHG16



4DWHG16	E	60	/*	DC24	N	/*	/*	Z5L	*	*	*	*
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通路 16
 Size 16

见滑阀机能符号
 See the function symbol
 of spool valve

系列 60=16-32 通路
 Series 60=Size 16-32

无 = 弹簧复位
 O= 导阀无复位弹簧
 OF= 导阀无复位弹簧, 带定位器
 No code=With spring return
 O=Without spring return
 OF=Without spring return,with detent

电压 Voltage
 DC12;DC24 ;AC110;AC220

N= 有故障检查按钮
 N=With concealed manual override

无 = 外供外排型 E= 内供外排型
 ET= 内供内排型 T= 外供内排型
 No code=Externally pilot, externally drained
 E=Internally pilot,externally drained
 ET=Internally pilot internally drained
 T=Externally pilot, internally drained

附加说明
 For further details
 无 = 丁晴橡胶

V= 氟橡胶
 No code = NBR seals
 V=FPM seals

无标记 = 不带预压阀
 P4.5= 带预压阀; 开启压力 0.45MPa
 No code=Without preload valve
 P4.5=With preload valve
 cracking pressure is 0.45MPa

无标记 = 不带插入式阻尼器
 (电磁换向阀 P 口节流)
 B0.8= 节流孔径 0.8 B10= 节流孔径 1.0
 B12= 节流孔径 1.2 B15= 节流孔径 1.5

No code if without plug-in throttleer
 B0.8=Throttle orifice size 0.8
 B10=Throttle orifice size 1.0
 B12=Throttle orifice size 1.2
 B15=Throttle orifice size 1.5

Z5L= 带灯大方型插头
 ER= 德意志插头
 Z5L= Large quadrate plug with light
 ER=Deutsch Connector

无 = 没有调节器
 S= 有调节器, 进口节流 S2= 有调节器, 出口节流
 No code=Without pilot adjustment
 S=With meter-in pilot adjustment
 S2=With meter-out pilot adjustment