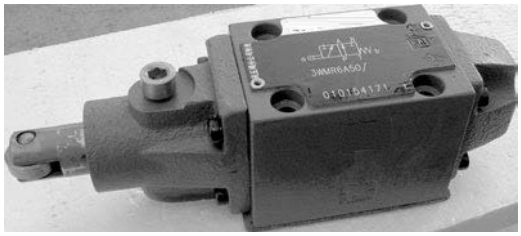
	Directional control valves mechanical operation Type AH4WMU/R		
ACCESSHYDRO	Size 6 、 10	up to 31.5 MPa	up to 120L/min

Features:

- Direct operated directional spool valve with adjustable roller operation
- Roller lever assembly may be stepped in 90°
- Radial forces absorb reliably (up to 30°)
- 19 kinds standard spool function

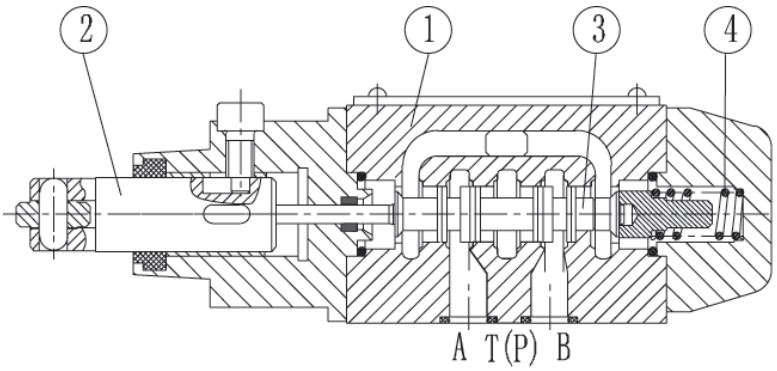


Funtion,section

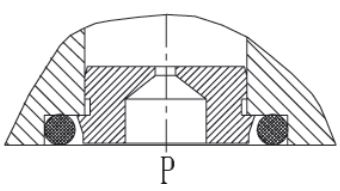
Directional valves type AH-WMR are roller operated directional valves.

They basically consist of the housing（1） the roller lever（2） the control spool（3）and the return spring（4）.

A plug-in throttle is required if flow greater than the permitted value may occur while the valve spool is being from one position to another.The plug-in orifice is fitted in the P port of the directional valve.

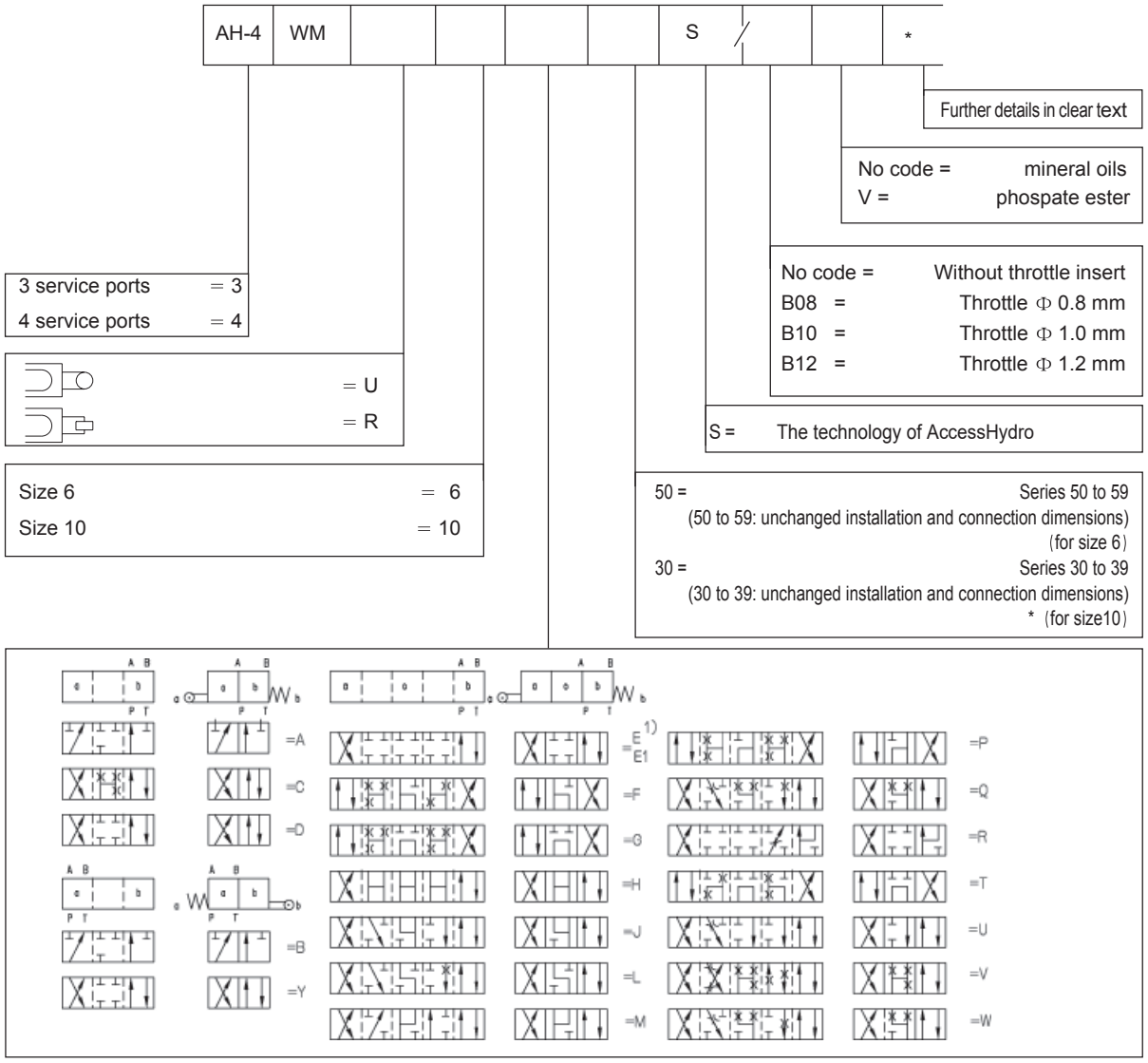


Type AH-4WMR6



Cartridge throttle

Ordering details



1)Symbol E1:P to A and B with pre-opening

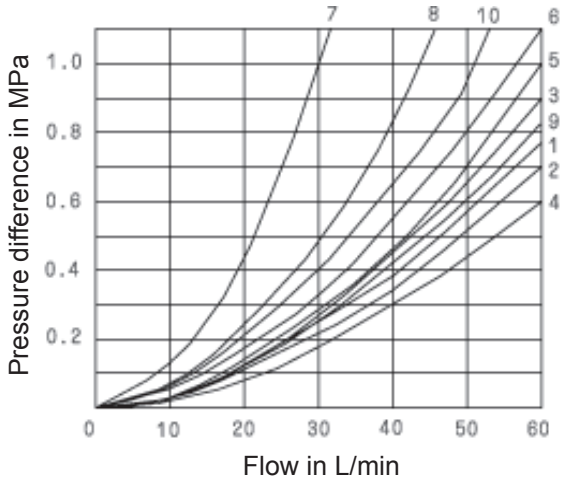
Warning:please consider pressure intensification with single rod cylinders

Technical data

Size	6		10	
Operating ports A、B、P (MPa)	up to 31.5			
Pressure port T (MPa)	up to 6		up to16	
In symbols A and B,the T port must be used as a drain connection if the operating pressure is above the pressure permitted at the T port				
Max.flow (L/min)	up to 60		up to120	
Flow cross section (control position 0)	for symbol Q, 6% of nominal cross section			
	for symbol W, 3% of nominal cross section			
Pressure fluid	mineral oils or phospate ester			
Pressure fluid temperature range (° C)	- 30 to + 80			
Viscosity range (mm^2/s)	2.8 to 500			
Weight (kg)	approx.1.4		approx.3.3	
Operating force at roller lever	at zero tank pressure	100 to 121	two positions valve	70 to140
(N)	at a pressure	184 to 205	three positions valve	70 to175

Characteristic curves (measured at ν = 41 mm^2/s and t = 50 ℃)

AH-WM $^{R}_{U}$6

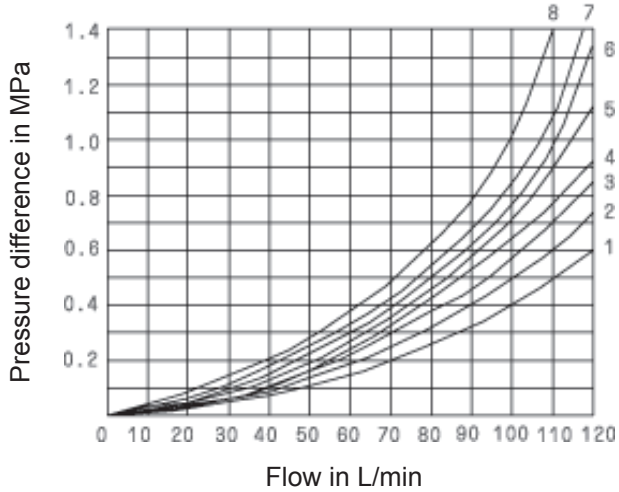


Symbols	Direction of flow			
	P → A	P → B	A → T	B → T
A	3	3	-	-
B	3	3	-	-
C	1	1	3	1
D	5	5	3	3
E	3	3	1	1
F	1	3	1	1
G	6	6	9	9
H	2	4	2	2
J	1	1	2	1
L	3	3	4	9
M	2	4	3	3
P	3	1	1	1
Q	1	1	2	1
R	5	5	4	-
T	10	10	9	9
U	3	3	9	4
V	1	2	1	1
W	1	1	2	2
Y	5	5	2	3

7、Symbol "R" with position A-B

8、Symbols "G" and "T" with mid position P-T

AH-WM $^{R}_{U}$10



Symbols	Direction of flow			
	P → A	P → B	A → T	B → T
A	4	3	-	-
B	3	4	-	-
C	3	3	4	4
D	3	3	5	5
Y	4	4	6	6
E	2	2	4	4
F	1	2	3	4
G、T	4	4	7	7
H	1	1	5	5
J	2	2	3	3
L	3	3	2	4
M	1	1	4	4
P	3	1	5	5
Q	2	2	2	2
R	3	4	3	-
U	3	3	5	2
V	2	2	3	3
W	3	3	3	3

7、Symbol "R" with position A-B

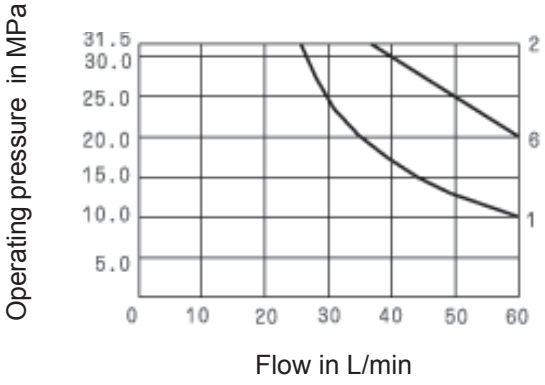
8、Symbols "G" and "T" with mid position P-T

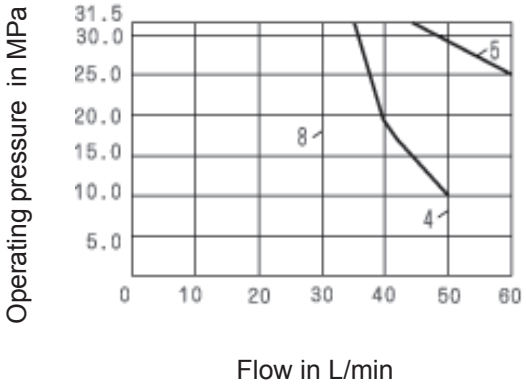
Performance limits (measured at v=41mm^2 /s and t=50 ˚C)

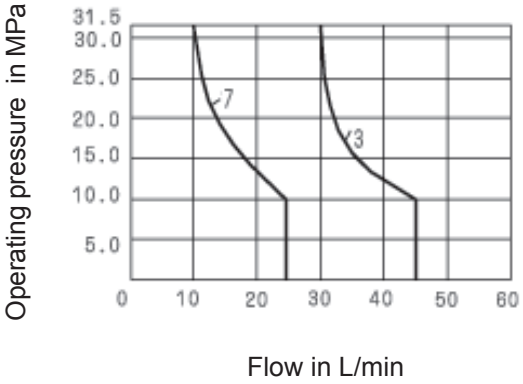
The operation of the valve is dependent upon the effect of filtration .In order to achieve the given permissible flow rates,full flow filtration 20μm is required.The flow forces operating within the valve influence the valve performance .For 4 way valves,the flows given are valid for normal operation with 2 directions of flow (e.g.from P to A and from B to T) If only one flow path is operative e.g.if port A or B is blocked and the valve is used as a 3 way valve ,the permissible flows can be very much lower.

AH-WM $\begin{matrix}=R\\U\end{matrix}$ 6

Curve	symbol
1	A、B
2	C、D、Y、E、E1、H、M、Q、U、W
3	F、P
4	G
5	J、L
6	R
7	T
8	V

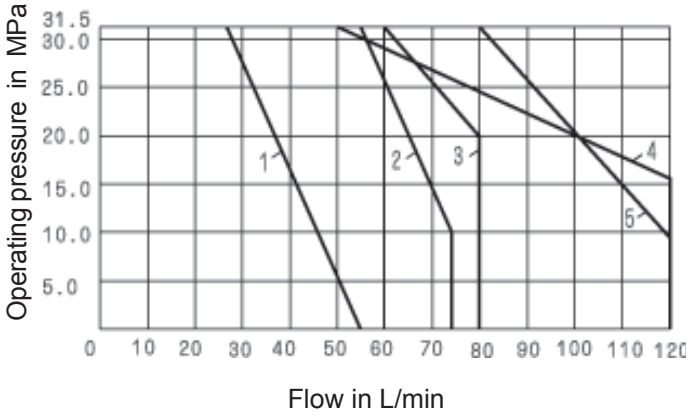


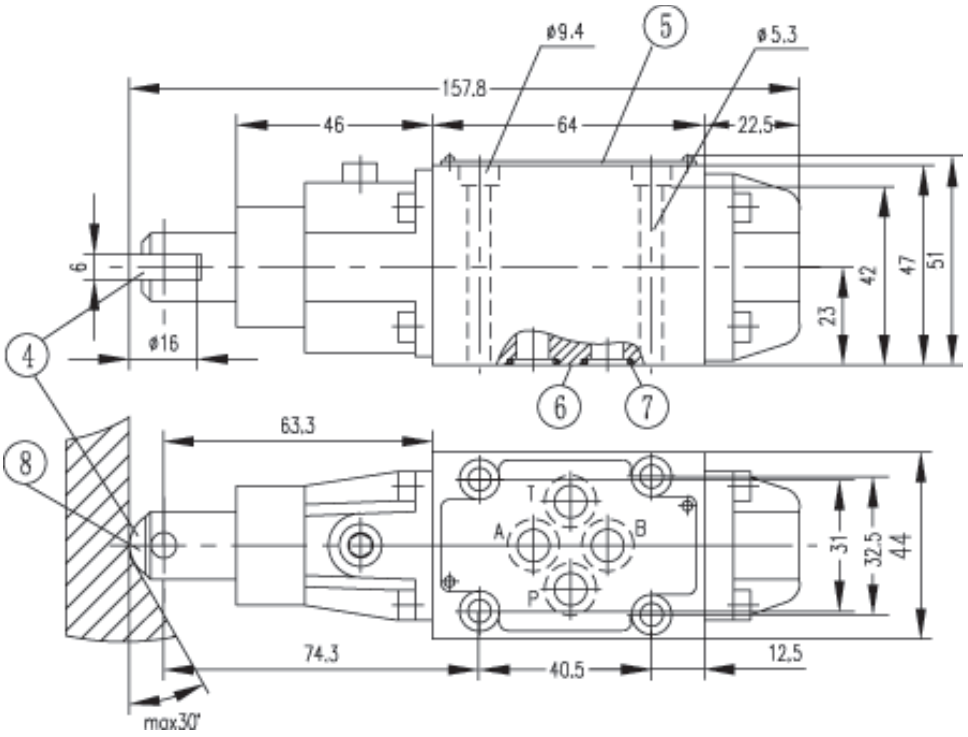


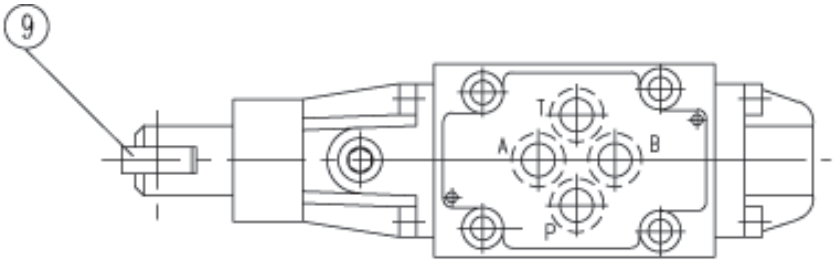


AH-WM $\begin{matrix}R\\U\end{matrix}$ 10

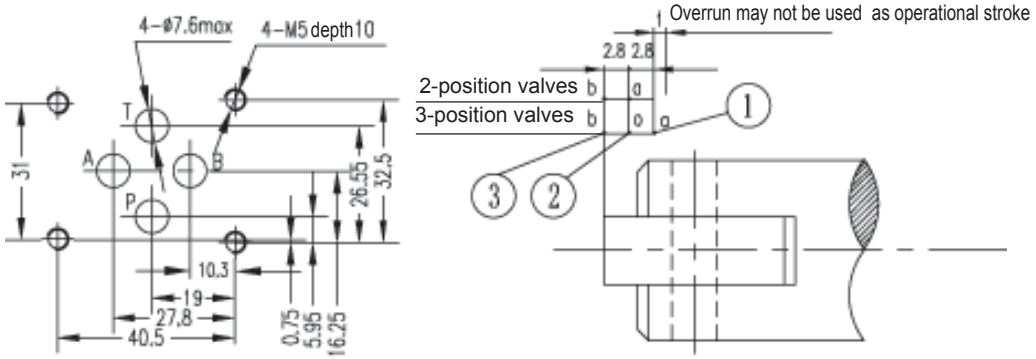
Curve	Symbol
1	A、B
2	H
3	F、G、P、R、T
4	J、L、Q、U、W
5	C、D、E、M、V、Y



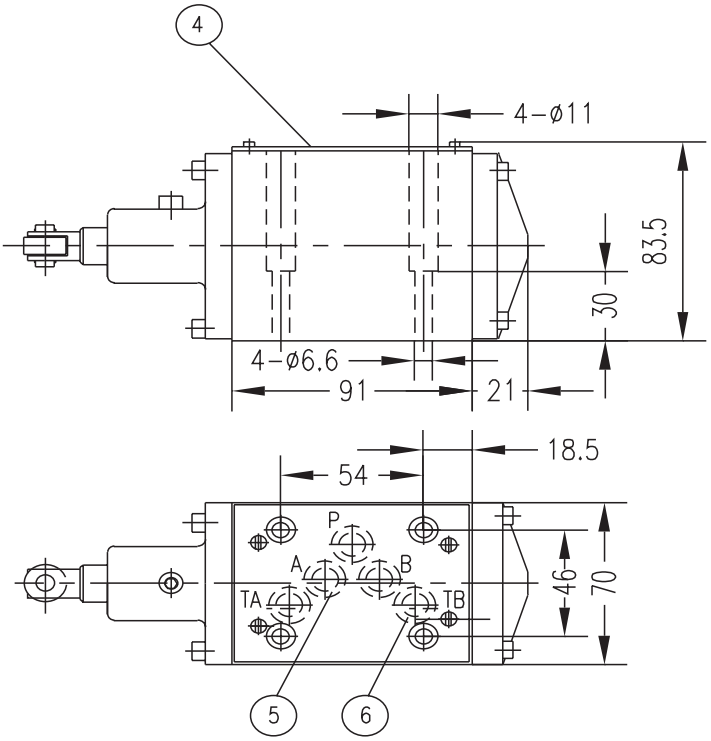




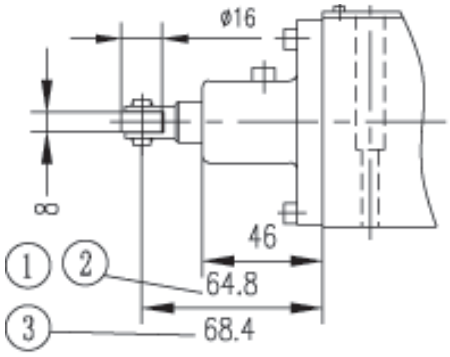
Rorler lever assemblied next to B end in 2-position valves of spools B.Y

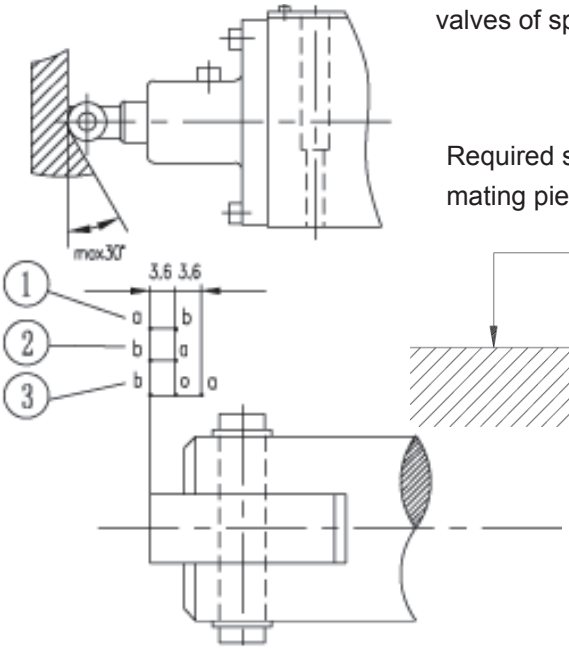


1、Spool position"a"
2、Spool position"o"and"a"（for 2- position valve）
3、Spool position"b"
4、Roller lever assembly may be stepped in 90°
5、Nameplate
6、Connection surface
7、O-ring9.25X1.78（for ports A、B、P、and T）
8、AH-W|MR the code"R"
9、AH-W|MU the code"U"

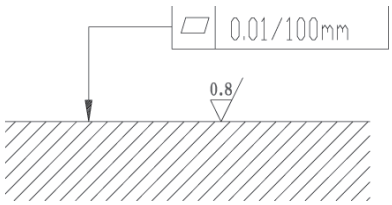


Rorler lever assemblied next to B end in 2-position valves of spools B.Y





Required surface finish of mating piece



1、Two position valve（B、Y）
2、Two position valve（A、C、D）
3、Three position valve
4、Nameplate
5、O-ring12X2（for ports A、 B、P、and T）
6、Adjunctive port T can be connected with AH-ZDR10D... in special condition