



4/3, 4/2 and 3/2 directional valve with mechanical, manual operation

2.1

Type WMD6...L6X

Size 6
Up to 315 bar
Up to 60L/min



Contents

Function and configuration	02
Ordering code	02
Symbols	03
Technical data	03
Characteristic curves	04
Operating limitation	04
Unit dimensions	05

Features

- Direct operated directional spool valve
- Sub-plate mounting
- Rotary knob with or without lock
- 45 versions standard spool
- Porting pattern confirms to DIN 24 340 form A and ISO 4401

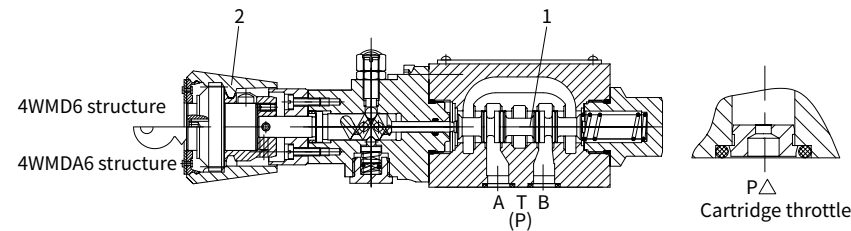
Function and configurations

Directional valves type WMD... are mechanical, manual operated directional spool valves. They control the start, stop and direction of a flow. The rotary knob (2) operates ($2 \times 90^\circ$) the spool (1), the screw type rotation transforms into axial movement and direct acts on the spool (1). Then the spool (1) moves to the end position and gets the opening position as required. Actual switch position of spool (1) can be controlled with rotary knob (2). All the switch

positions can be orientated by locating device.

Throttle

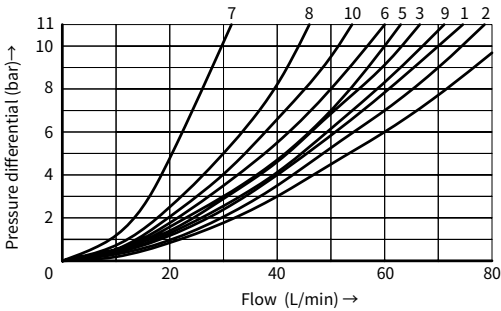
The use of a throttle insert is required, when, operating, flows can occur during the switching processes that exceed the performance limit of the valve. These throttles are to be inserted into the P-channel of the directional valve.



Ordering code

	WMD		6	- L6X / F		*
3 ways (version A) =3 4 ways =4						Further details in clear text
Rotary knob						No code = NBR seals V = FKM seals
Without lock =No code With lock = A						No code = Without cartridge throttle B08 = Throttle - $\Phi 0.8$ mm B10 = Throttle - $\Phi 1.0$ mm B12 = Throttle - $\Phi 1.2$ mm
Nominal size 6 =6						F = With detent
Symbols e.g. C, E, EA, EB etc. see below						
Series L60 to L69 (L60 to L69:unchanged installation and connection dimensions)				=L6X		

Characteristic curves (Measured at $\vartheta_{oil} = 40^{\circ}\text{C} \pm 5^{\circ}\text{C}$, using HLP46)



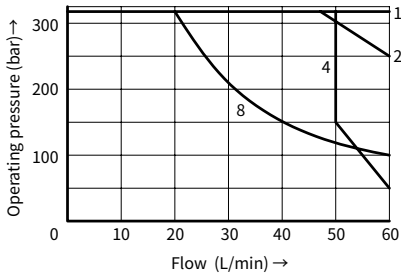
- 7 Symbol "R" in switched positions B → A
- 8 Symbol "G" and "T" in neutral position P → T
- 9 Symbol "H" in neutral position P → T

Spool symbols	Flow direction			
	P to A	P to B	A to T	B to T
AB	3	3	-	-
C	1	1	3	1
DY	5	5	3	3
E	3	3	1	1
F	1	3	1	1
T	10	10	9	9
H	2	4	2	2
JQ	1	1	2	1
L	3	3	4	9
M	2	4	3	3
P	3	1	1	1
R	5	5	4	-
V	1	2	1	1
W	1	1	2	2
U	3	3	9	4
G	6	6	9	9

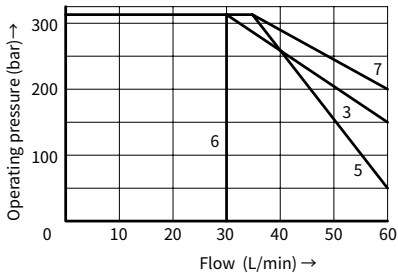
Operating limitations

The switching performance of the valves depends on the filtration. In order to achieve the specified admissible flow values, we recommend full flow filtration with 25 μm . The flow forces acting within the valves also affect the flow performance. With 4 way valves the specified flow data thus apply to normal operation with 2 volume flow directions (e.g. from P to A and at the same time return flow from B to T) (see table).

If only one flow direction is available, in certain cases, the admissible flow can be significantly smaller (e.g. when using a 4 way valve as 3 way valve, due to blocked connection A or B).



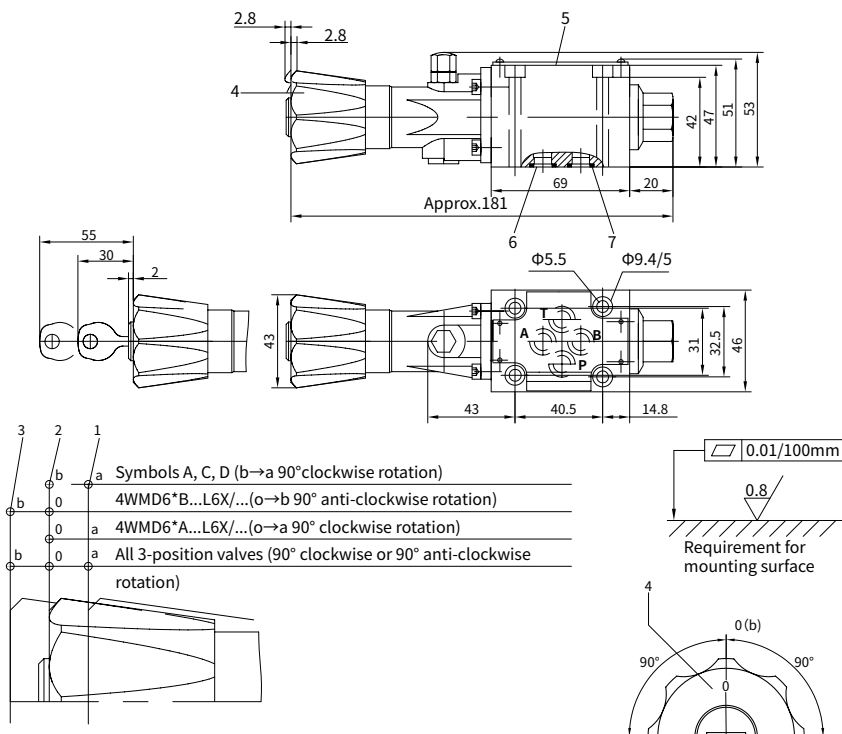
Curve	Spool symbol
1	E, M, H, C, D, Y, Q, U, W
2	J, L
4	G, P
8	T



Curve	Spool symbol
3	A, B
5	F
6	V
7	R

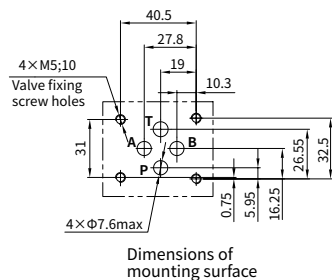
Unit dimensions

(Dimensions in mm)



**It must be ordered separately,
if connection plate is needed.**

Type: G 341/01 (G 1/4), G 341/02 (M14 × 1.5)
 G 342/01 (G 3/8), G 342/02 (M18 × 1.5)
 G 502/01 (G 1/2), G 502/02 (M22 × 1.5)



China +86 400 101 8889	America +01 630 995 3674
Germany +49 172 3683463	Japan +81 03 6809 1696



© This brochure can be reproduced, edited, reproduced or transmitted electronically without the authorization of Hengli Hydraulic Company. Due to the continuous development of the product, the information in this brochure is not specific to the specific conditions or applicability of the industry, thus, Hengli does not take any responsibility for any incomplete or inaccurate description.