

# Hydraulic Directional Control Valves



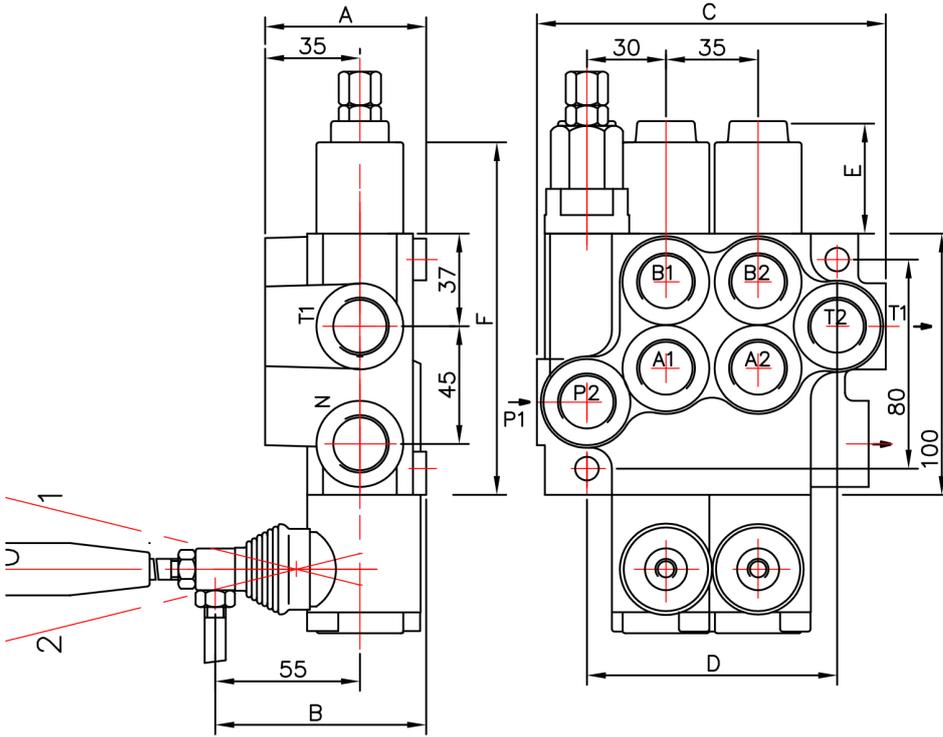
## Description

For starting, controlling and stopping the working fluid between the generator of pressured flow, the consumers at the Tank.

## Specifications

1.Valve monoblock	
2.Mounting	2 bolts M8
3.Pressure connections	internal thread
4.Ambient temperature	-40C...+60C
5.Pressure medium	mineral oil based hydraulic oil
6.Viscosity	12...800 mm <sup>2</sup> /s permissible range 20...100 mm <sup>2</sup> /s recommended range
7.Fluid temperature	- 15C...+80C
8.Filtration	Oil contamination 10 to NAS1638
9. Max. operating pressure max. bar	P = 250 bar T = 50 bar A, B = 300 bar
10.Leakage	15 cm <sup>3</sup> /min at 120 bar
11.Nominal flow	40 l/min (see "operating" diagram)
12.Spool stroke	± 6 mm
13.Actuating force	< 200 N in spool axis direction

Left hand configuration - standart



Right hand configuration

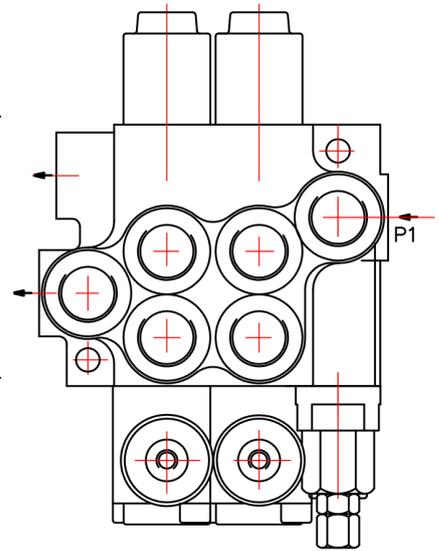


Table 1

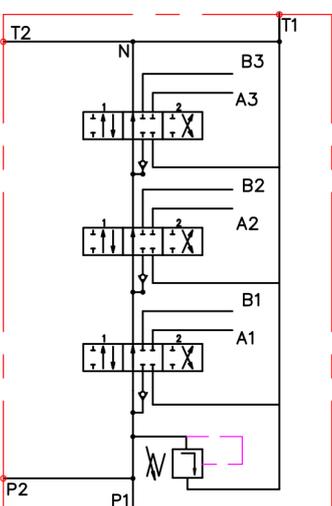
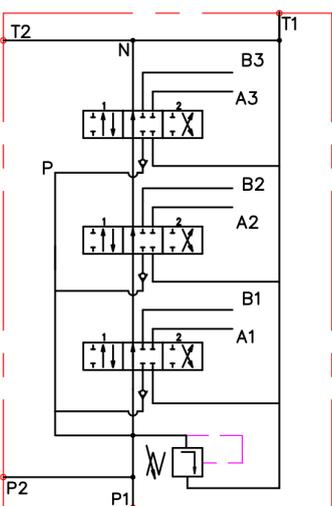
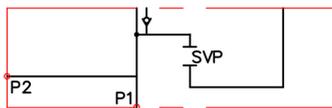
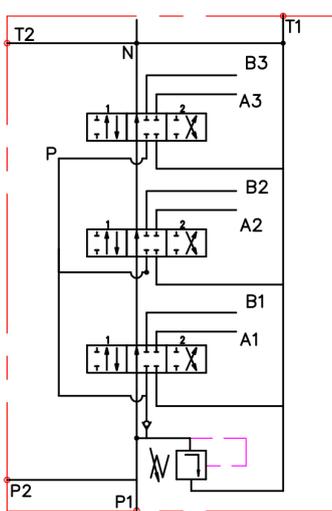
	A	B	C	D	P1	P2	T1	T2
P40	60	80	85	60	+	-	+	-
02P40	60	80	129	97	+	+	+	+
03P40	60	80	164	132	+	+	+	+
04P40	60	80	199	167	+	+	+	+
05P40	60	80	234	202	+	+	+	+
06P40	60	80	269	237	+	+	+	+
07P40	60	80	304	272	+	+	+	+
2P40	60	80	129	97	+	+	+	+
3P40	60	80	164	132	+	+	+	+
4P40	60	80	199	167	+	+	+	+

Table 2

spool control	E	F
1; 4; 5; 6; 7; 8; 9; 10; 11;	40	193
2; 3;	72	225
16	+	+

0 2 P40 R 1 A 1 A 1 G KZ1 T H E C2 11  
 block with common check valve \_\_\_\_\_  
 number of spools \_\_\_\_\_  
 directional control valve type ... \_\_\_\_\_  
 inlet high pressure - right \_\_\_\_\_  
 way of distribution/parallel or .../ \_\_\_\_\_  
 first spool distribution type \_\_\_\_\_  
 spool control/detend and estr./ \_\_\_\_\_  
 second spool distribution type \_\_\_\_\_  
 spool control/detend and estr./ \_\_\_\_\_  
 ports /treads/ \_\_\_\_\_  
 general operation feature \_\_\_\_\_  
 with "teton" \_\_\_\_\_  
 operation feature /pneumatic, .../ \_\_\_\_\_  
 with electric switch \_\_\_\_\_  
 high pressure carry over \_\_\_\_\_  
 connection ports in use \_\_\_\_\_

OSP40 1A1A1A1



Power beyond  
High pressure carry over

Closed center

Standard

Without relief valve

Table 3

code	Number of spools
	1
02, 2	2
03, 3	3

Table 4

code	way of distribution
1	parallel
2	tandem(series parallel)

ets.

Table 5

code	spool type
A	
B	
C	
D	
E	
F	
G	
H	
M	
N	
O	
P	
Q	
R	
S	
T	
* K	
** L	

\* only for left hand configuration

\*\* only for right hand configuration

Table 6

code	spool control
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	

* 15	
* 16	

\* only for left hand configuration

** 12	
** 13	

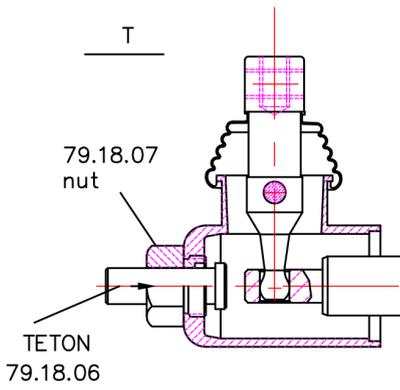
\*\* only for right hand configuration

Table 7

code	incorporated microswitch
E	<div style="display: inline-block; vertical-align: middle;"> <p>mikroswitch type Omron-V 165 I C5</p> </div>

Table 8

code	operation feature
P	<p>on-off pneumatic control; 5-10 bar ; ports NPTF 1/8-27</p>
H	<p>on-off hydraulic control ; pn = 5 - 20 bar ; ports G1/4</p>



P40

Table 9

code	ports (treads)			
	P	A ; B	T	N
M	M22x1.5	M18x1.5	M22x1.5	M22x1.5
G	G1/2	G3/8	G1/2	G1/2
S	7/8-14UNF	3/4-16UNF	7/8-14UNF	7/8-14UNF

kind of hand control ; bug

Table 10

code	feature	code	feature	code	feature
KZ		KY		KI	
KZ1		KY1		KI1	
KZ0		KY0		KI0	
KZ01		KY01		KI01	
-	without hand control ;				

P40 directional control valve

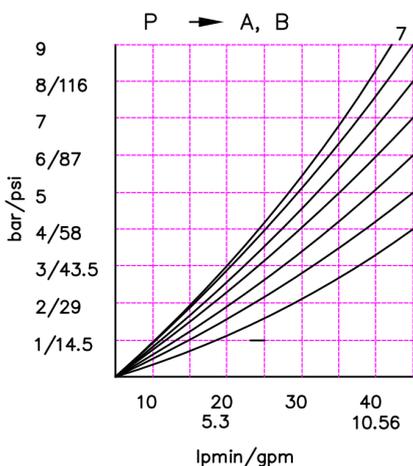
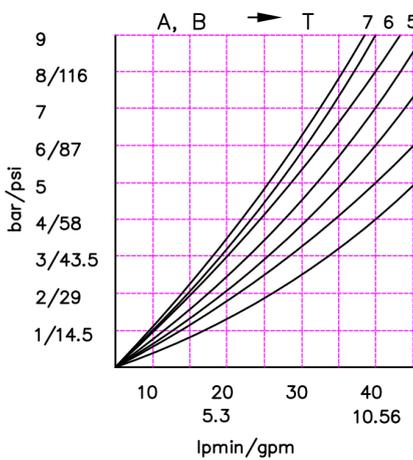
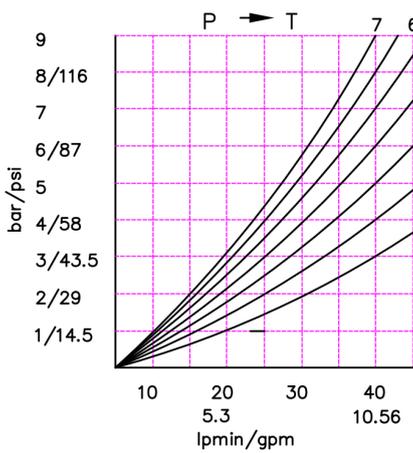


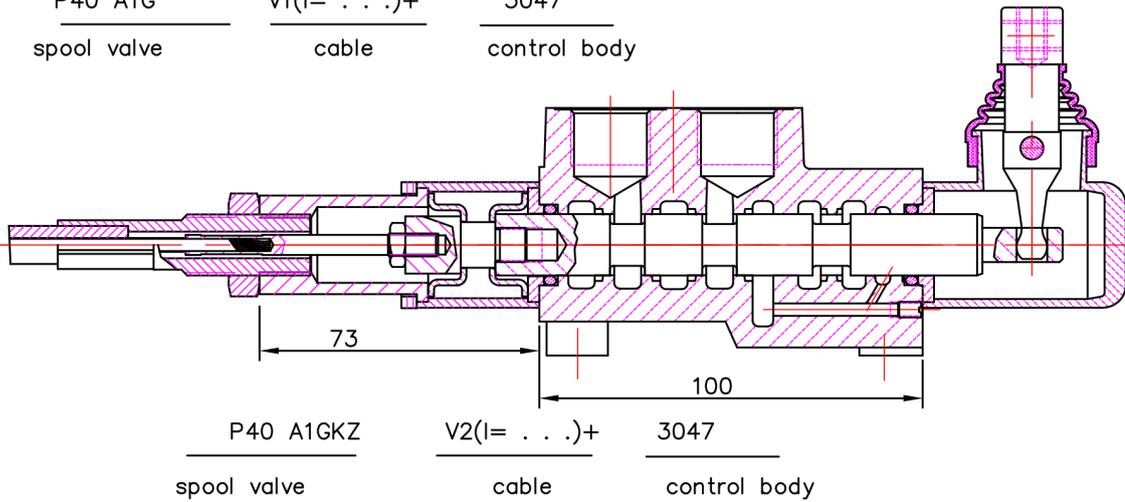
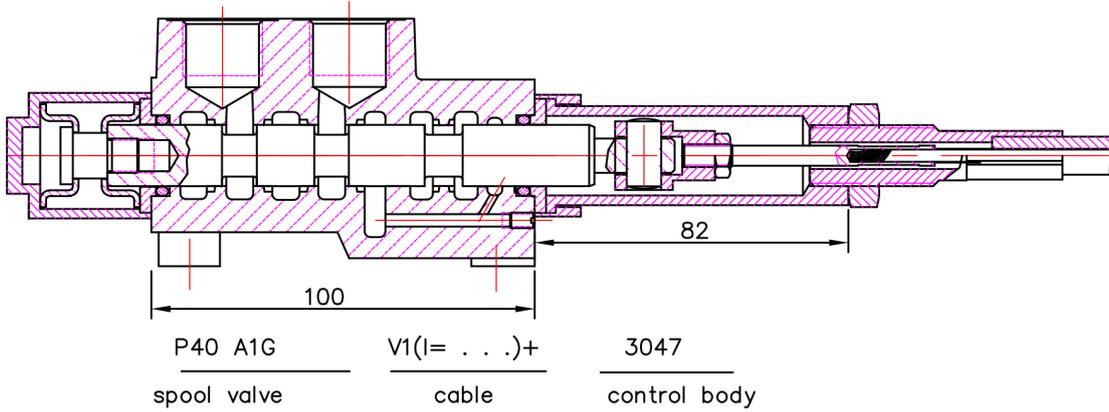
Table 11

code	bug	
C	closed center	
C1	part for power beyond sleeve(carry over)	
C2	part for power beyond sleeve(carry over)	
-	without part for pressure carry over	
X	power beyond ever to tank	

Table 12

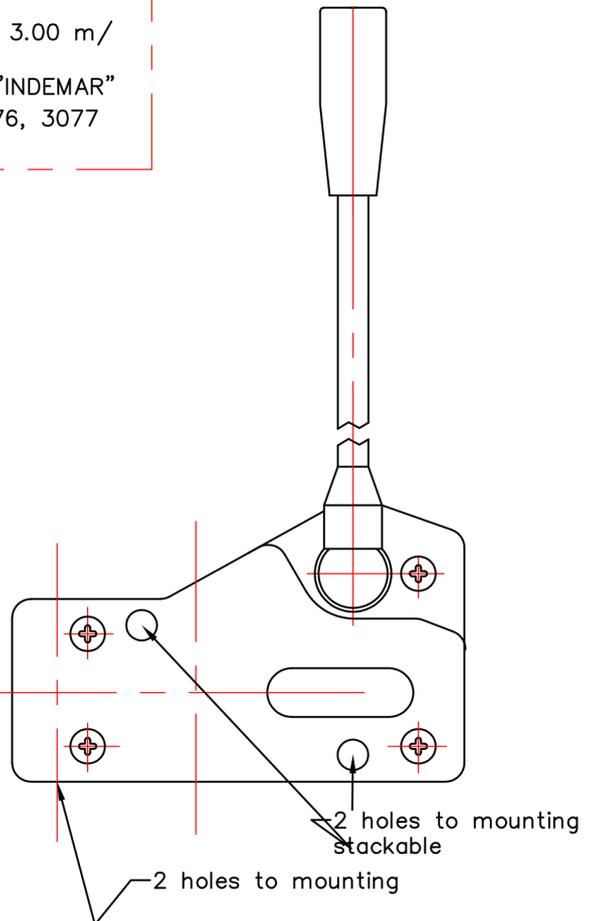
code	used connection ports ;
11	P1 ; T1
12	P1 ; T2
21	P2 ; T1
22	P2 ; T2

## REMOTE CONTROLS



Cable "INDEMAR" Cod. IT 3056 /l=1.00; 1.50; 2.00; 2.50; 3.00 m/  
+control body "INDEMAR" code 3047, 3076, 3077

Technical specifications			
	3047	3076	3077
Stroke	13+13 mm	13+13 mm	13+13 mm
Max. load	45 kg	45 kg	45 kg
Level ratio	10:1	10:1	10:1
Lock in neutral	No	No	Yes
Antireverse lock	No	Yes	No
Body colour	Black	Black	Black
Cables type	Heavy Duty	Heavy Duty	Heavy Duty
Operating temperature	-40/+80C	-40/+80C	-40/+80C

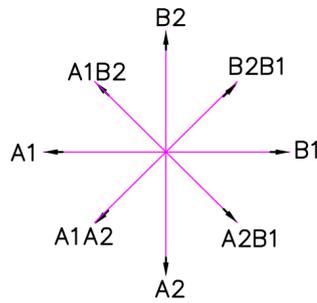
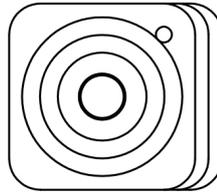


High solidity controls for easy mounting on every type of distributor. They can be mounted stand alone or packed together. They use push-pull heavy duty cables that provide a positive smooth operating lever and are manufactured in three different models to meet different needs of Clients.

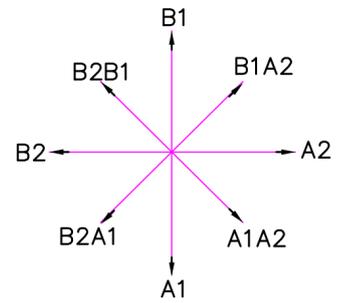
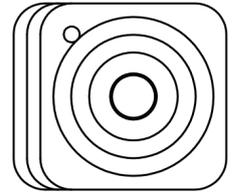
# JOYSTICK "+"

This control gives the possibility to operate, at the same time two spools with a "+" movement.

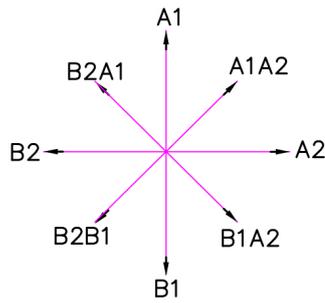
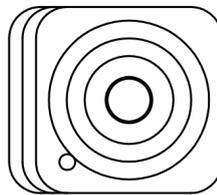
standard version 1



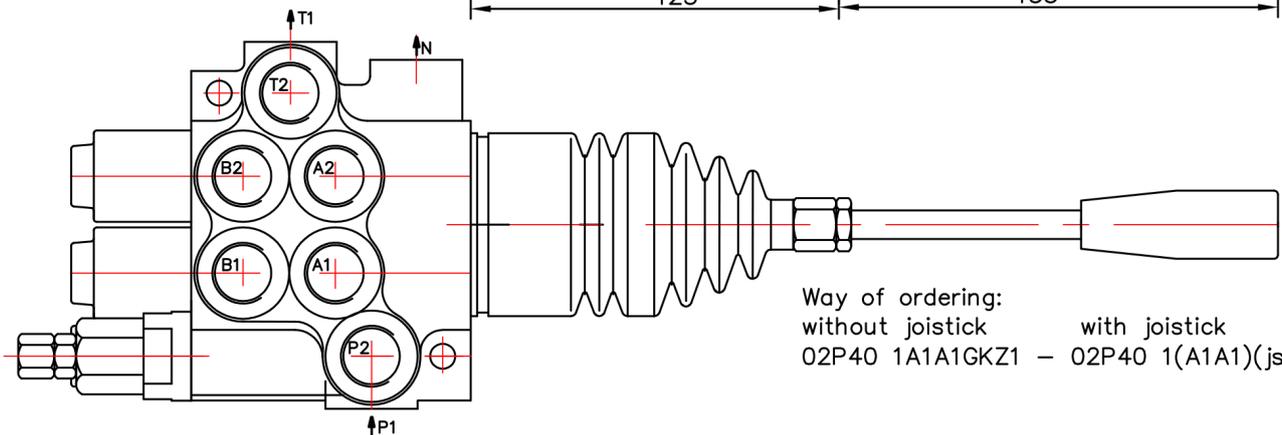
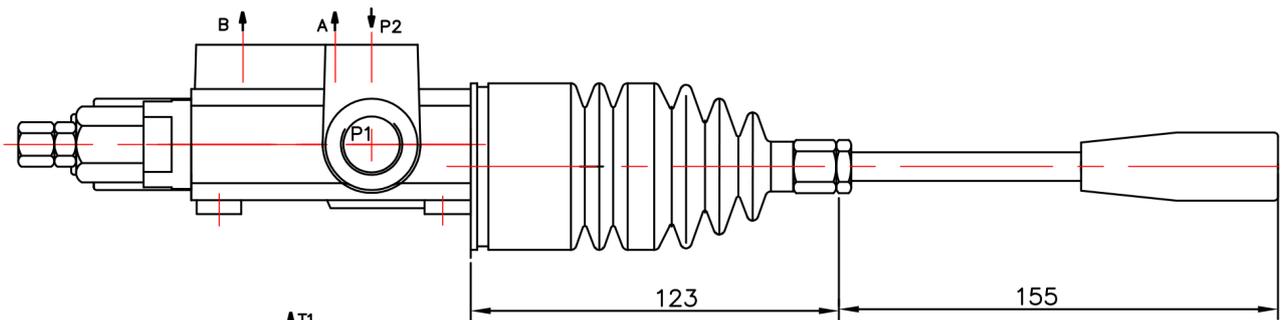
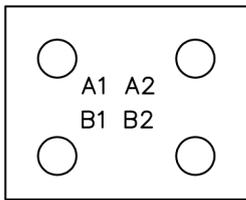
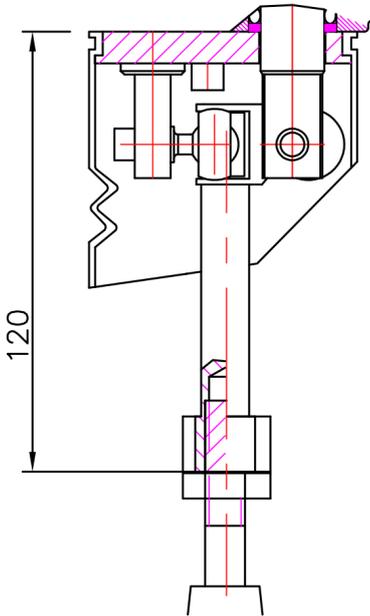
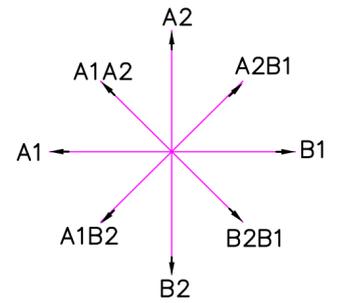
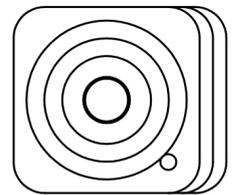
standard version 2



standard version 3



standard version 4



Way of ordering:  
 without joystick      with joystick  
 02P40 1A1A1GKZ1 - 02P40 1(A1A1)(js+3)G