

P80

Hydraulic directional control valves



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Introduction

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

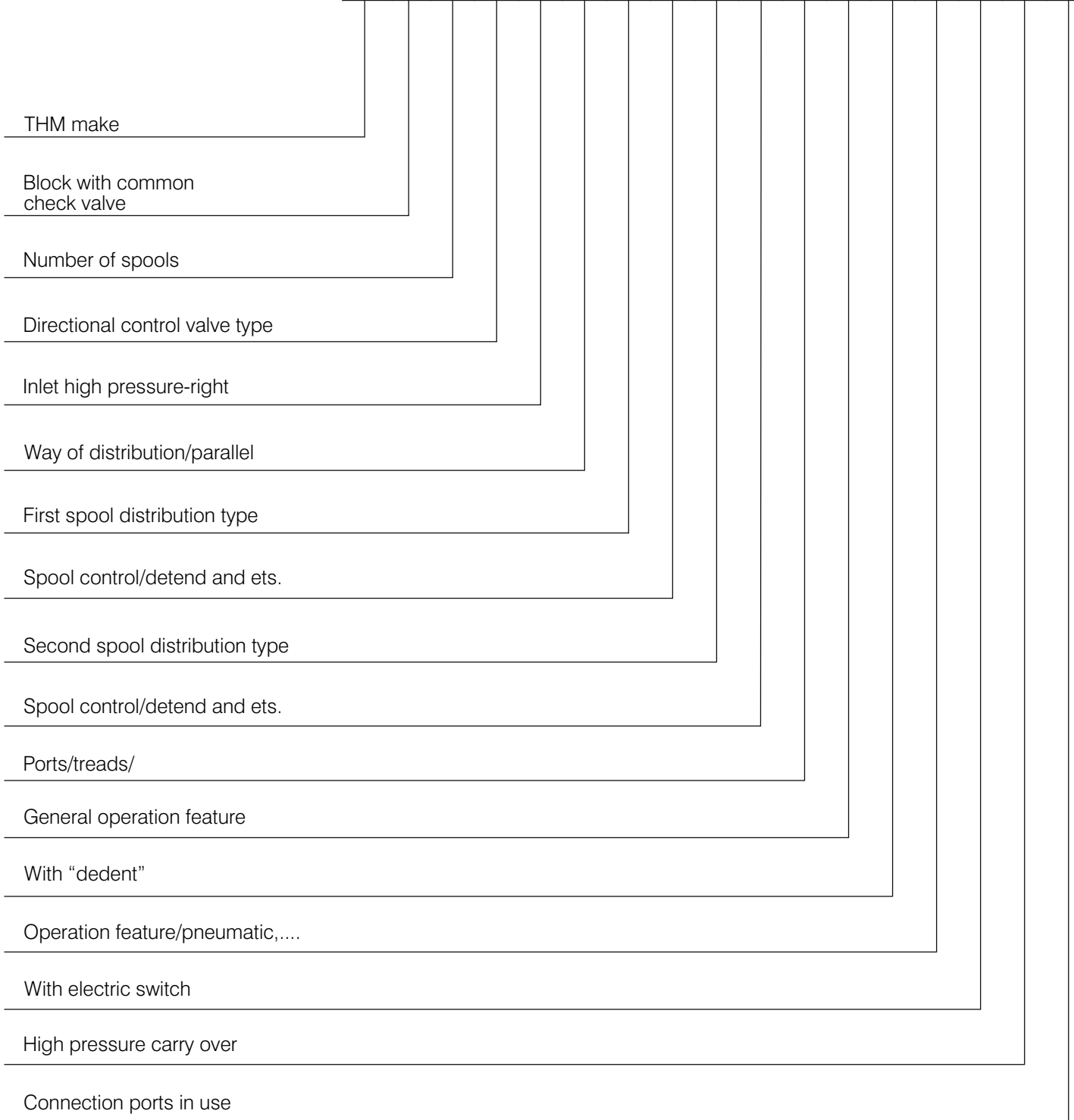
- Specifications

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



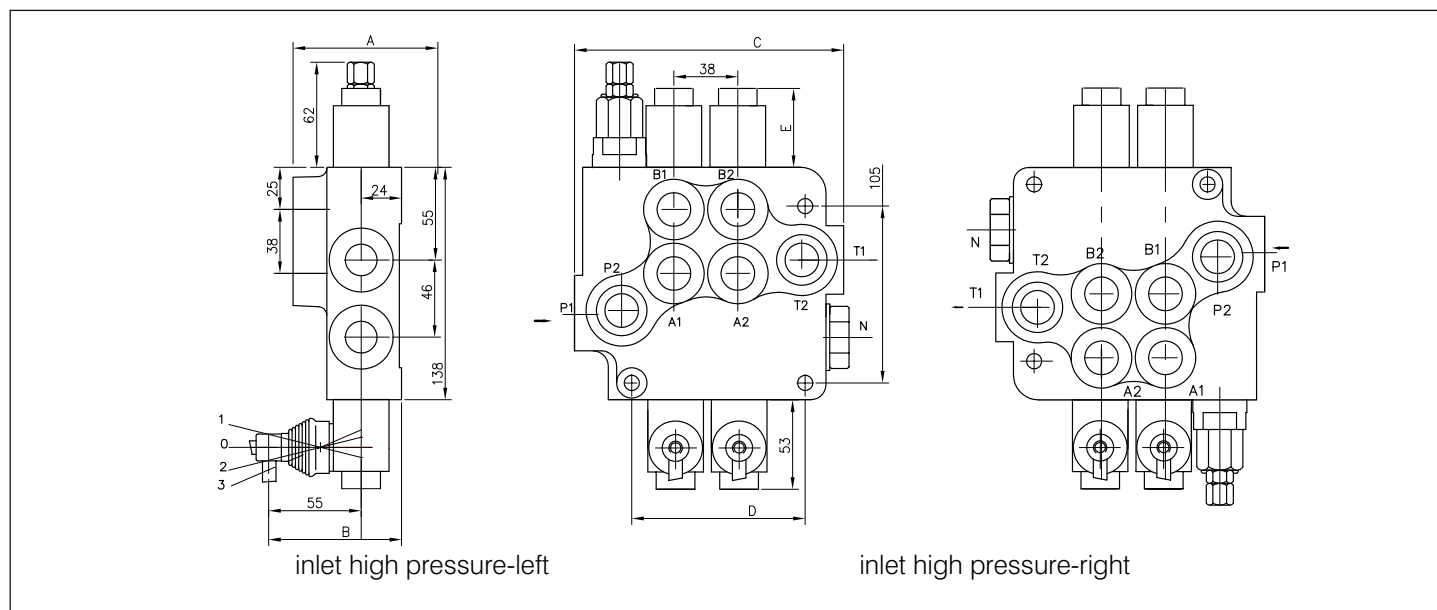
Ordering code

THM	0	*	P40	R	1	A	1	A	1	G	KZ1	T	H	E	C2	11
-----	---	---	-----	---	---	---	---	---	---	---	-----	---	---	---	----	----





Element size model selection (ordering code)



• Table 1

	A	B	C	D	P1	P2	T1	T2
01P80	65	79	107	65	+	+	-	-
02P80	80	94	160	103	+	+	+	+
03P80	80	94	198	141	+	+	+	+
04P80	80	94	236	179	+	+	+	+
05P80	80	94	274	217	+	+	+	+
06P80	80	94	312	255	+	+	+	+

• Table 2

Spool control	E
1; 4; 5; 6; 7; 8; 9; 10; 11	40
2; 3; 12; 14	72
13	44

• Table 3

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

• Table 4

Code	Way of distribution
1	parallel
2	tanden (series parallel)

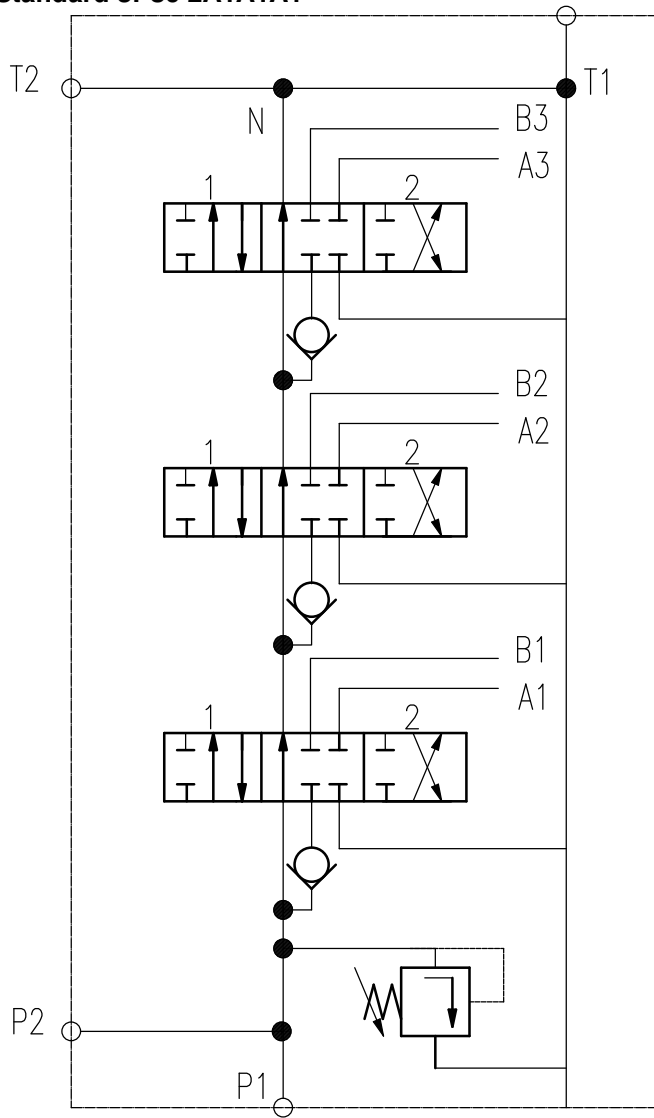
• Table 5

Code	Spool type	Code	Spool type	Code	Spool type
A		G		Q	
B		H		R	
C		M		S	
D		N		T	
E		O		K	
F		P		L	



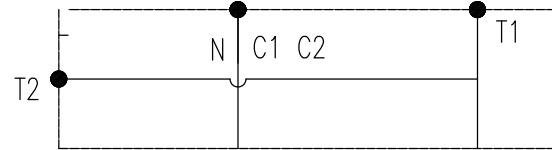
Element size model selection (ordering code)

Standard 3P80 2A1A1A1

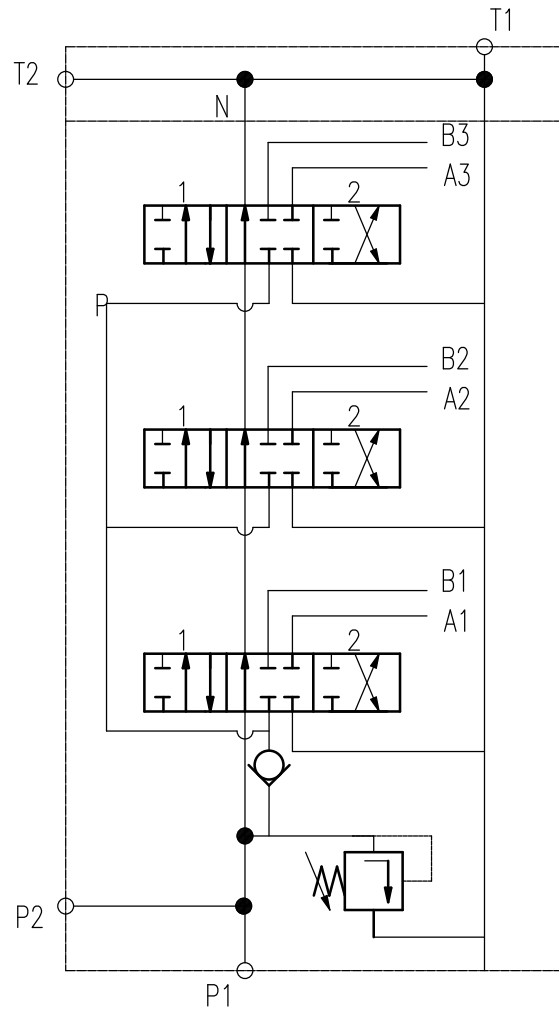
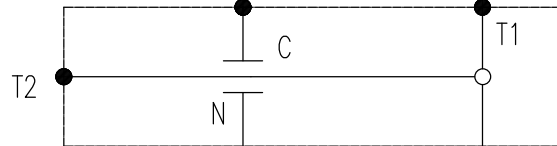


Standard 3P80 1A1A1A1

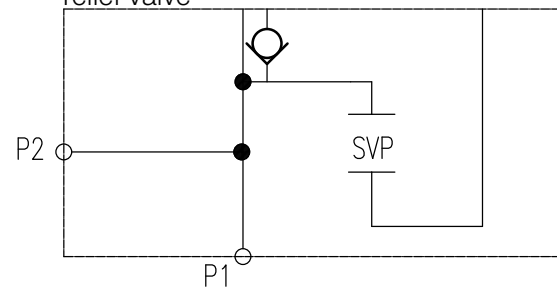
**Power beyond
High pressure carry over**



Closed center



Without relief valve





Element size model selection (ordering code)

• Table 6

Code	Spool control
1	1 0 2
2	1 0 2
3	1 0 2
4	0 2
5	1 0
6	1 2
7	1 2
8	1 0 2
9	1 0
10	0 2
11	1 2
12	1 0 2 3
13	1 0 2 3

• Table 7

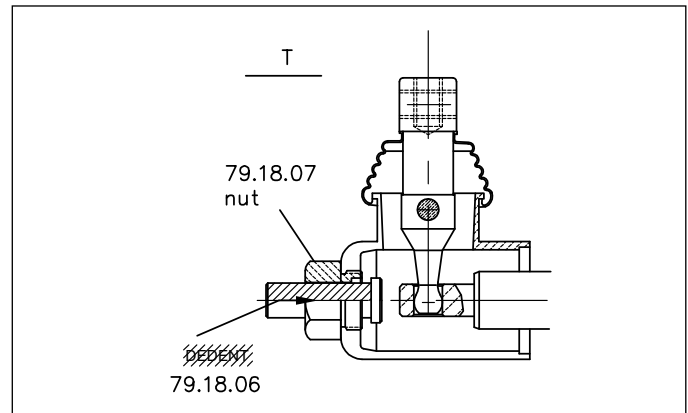
Code	Incorporated microswitch
E	<p>Microswitch type- Omron-V 165/C5</p>

• Table 8

Code	Operation feature
P	<p>On-Off pneumatic control; 5-10 bar; parts G1/4</p>
H	<p>On-Off hydraulic control; pn=5-20 bar; parts G1/4</p>

• Table 9

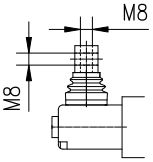
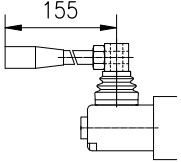
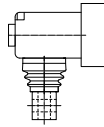
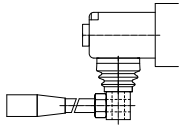
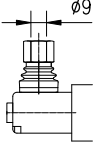
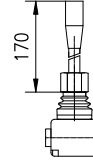
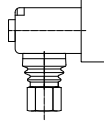

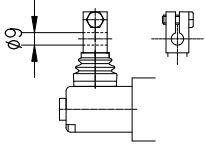
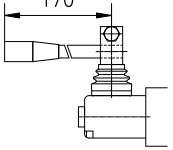
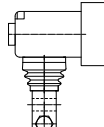
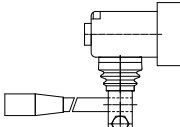
Code	Ports (treads)			
	P	A; B	T	N
M	M22X1.5	M22X1.5	M26X1.5	M26X1.5
G	G1/2	G1/2	G3/4	G3/4
S	7/8-14UNF	7/8-14UNF	1 1/16-14UNF	1 1/16-14UNF








Element size model selection (ordering code)

• Table 10

Code	Feature	Code	Feature	Code	Feature	Code	Feature
KZ		KZ1		KZ0		KZ01	
KY		KY1		KY0		KY01	
KL		KL1		KL0		KL01	
-	Without hand control						

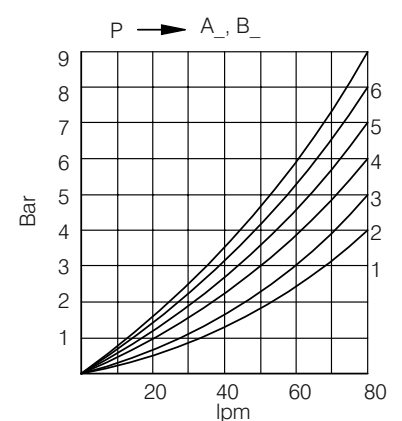
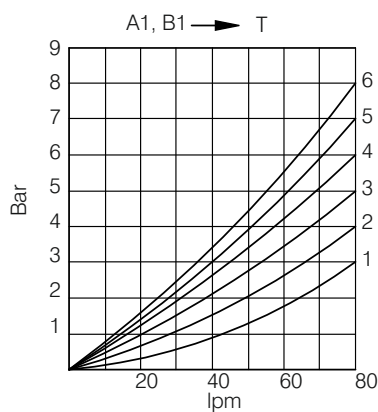
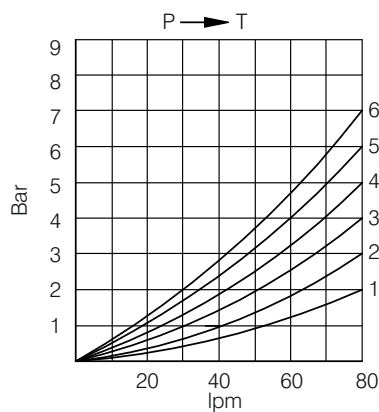
• Table 11

Code		
C	Closed center	
C2	Part for power beyond sleeve (carry over) (N : G1/2 M22X1.5)	
-	Without part for pressure carry over	
X	Power beyond ever to tank	

• Table 12

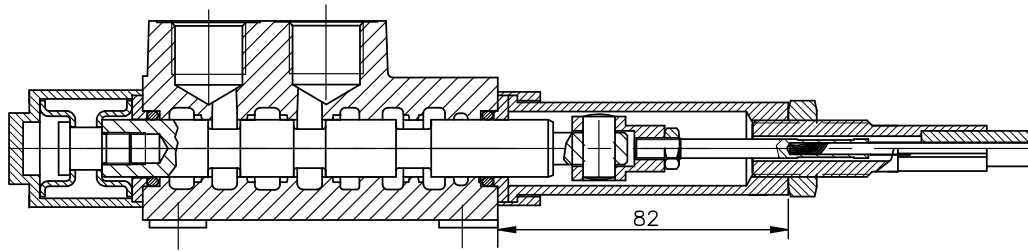
Code	Used connection ports
11	P1 ; T1
12	P1 ; T2
21	P2 ; T1
22	P2 ; T2

Pressure Drop curves

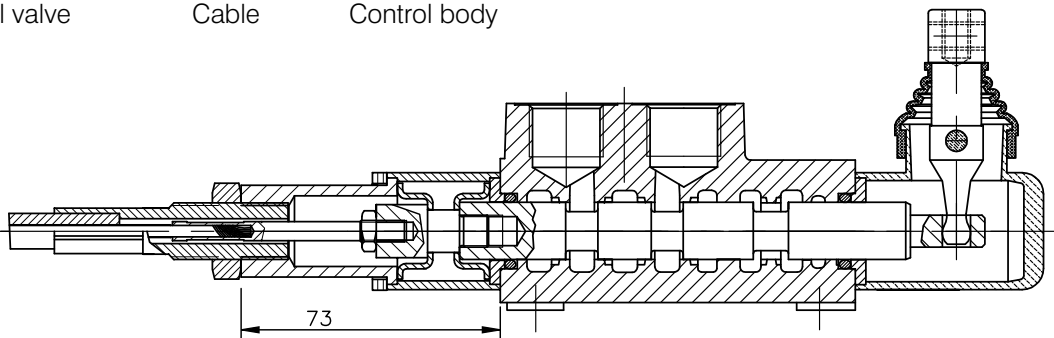




Remote controls



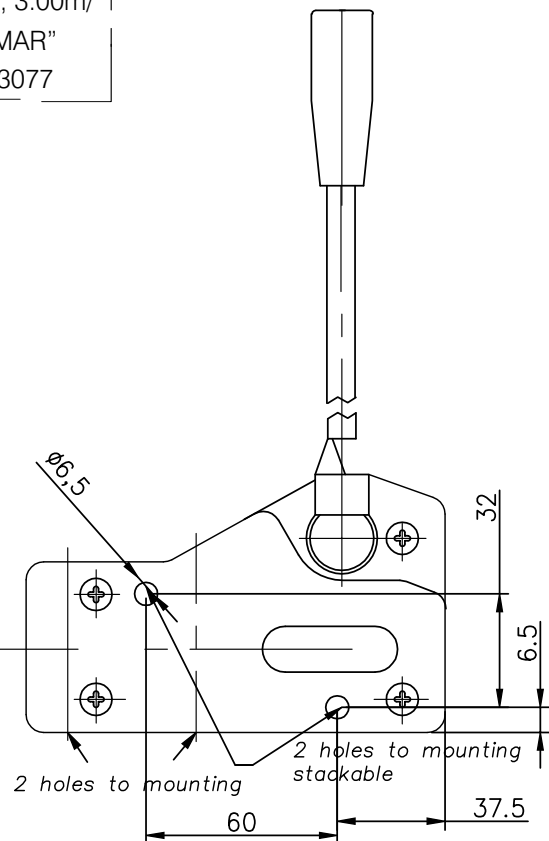
P80 A1G / Spool valve V1(l =)+ / Cable 3047 / Control body



P80 A1G / Spool valve V2KZ1(l = ...)+ / Cable 3047 / Control body

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

	Technical Specification		
	3047	3076	3077
Stroke	13+13mm	13+13mm	13+13mm
Max. Load	45Kg	45Kg	45Kg
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~+80°C	-40~+80°C	-40~+80°C



High solidity controls for easy mounting on every type of distributor. They can be mounted stand alone or packed together.

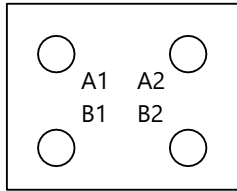
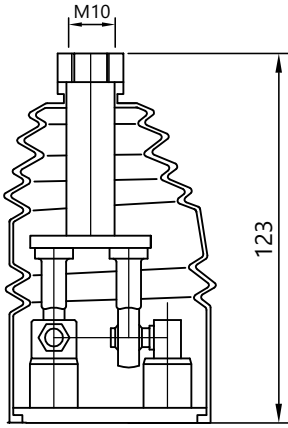
They use push-pull heavy duty cables that provide a positive smooth operating lever and are manufactured in a three different models to meet different needs of clients.



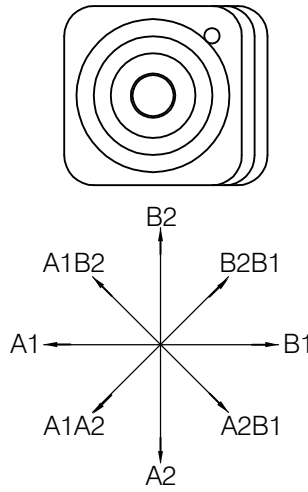
Joystick details

Joystick “+”

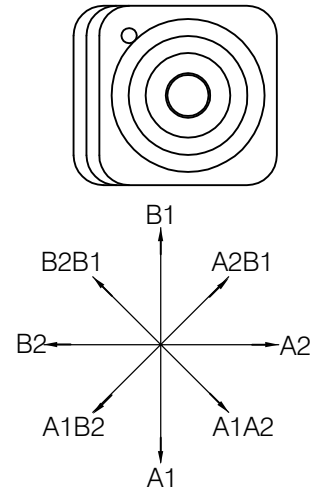
This control gives the possibility to operate, at the same time two spools with a “+” movement.



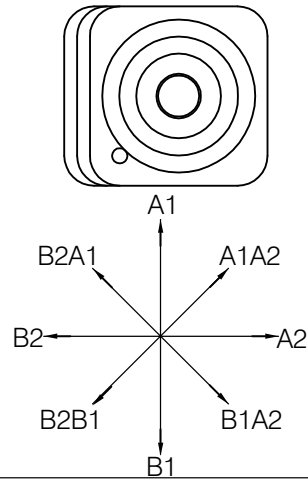
Standard version 1



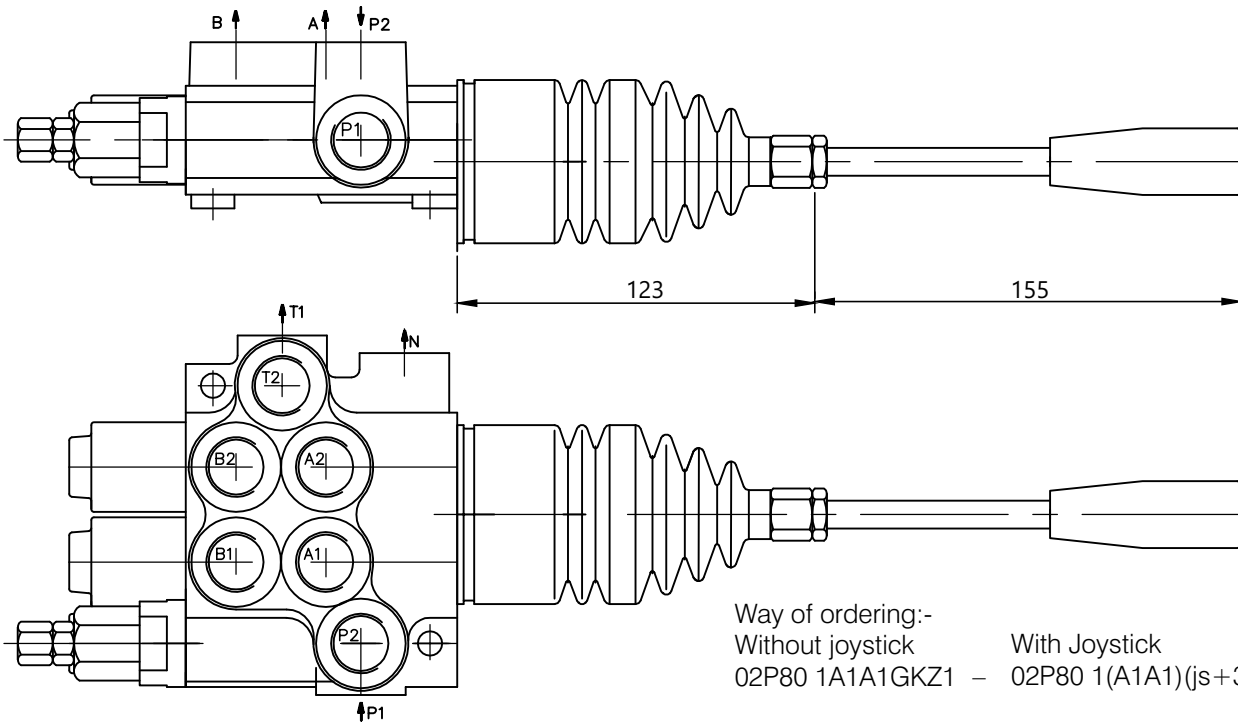
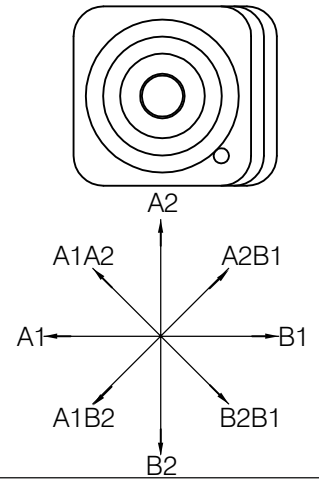
Standard version 2



Standard version 3



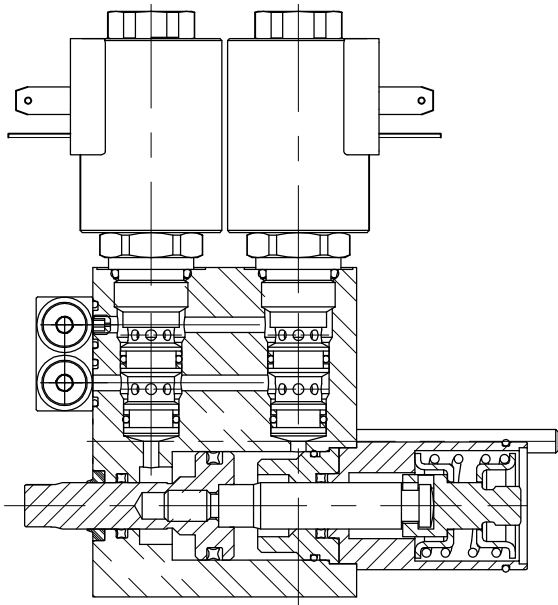
Standard version 4



Way of ordering:-
 Without joystick 02P80 1A1A1GKZ1 -
 With Joystick 02P80 1(A1A1)(js+3)G

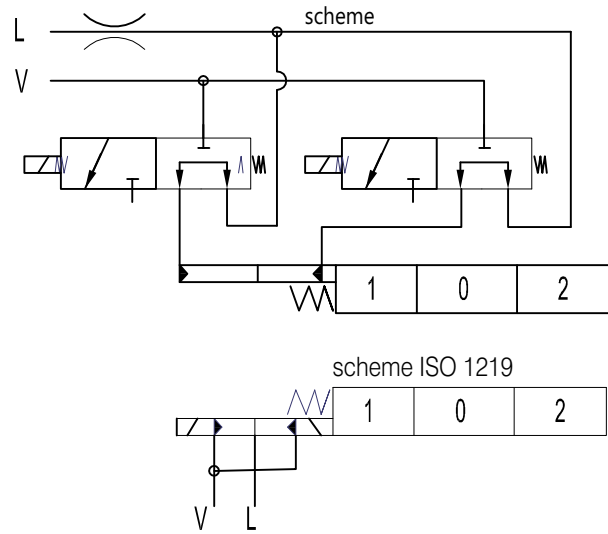


Electro-hydraulic control details



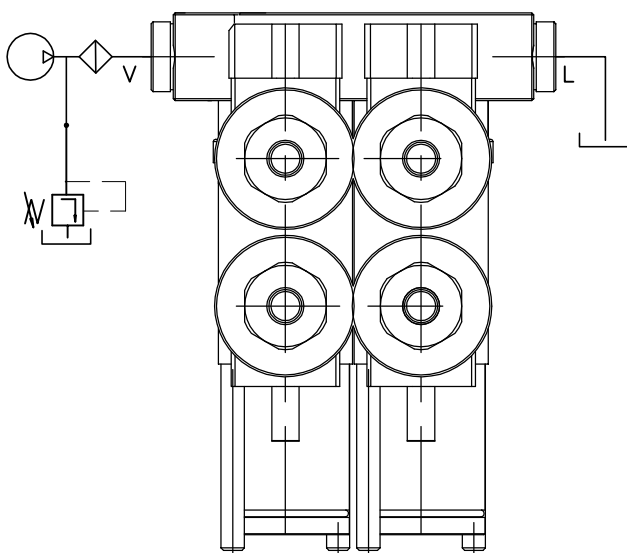
- Ordering codes:-
3-way solenoid valve- SV08-33
coil P80ED3-G-12VDC
coil P80ED3-G-24VDC

ED3- electro-hydraulic control ON-OFF

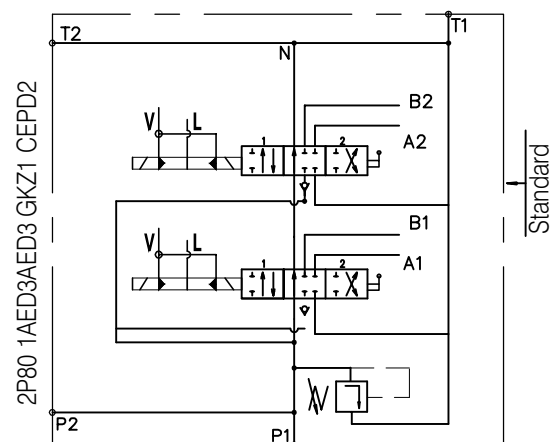


Operating pressure	Min.	10Bar (145 psi)
	Max.	50Bar (725psi)
Max. Operating pressure in L (T line)		25Bar (360psi)
Solenoid operating features		
Nominal voltage tolerance		±10%
Power rating		24W
Duty cycle		100%

Collector kit for external pilot and drain - CED...(1,2,3...)



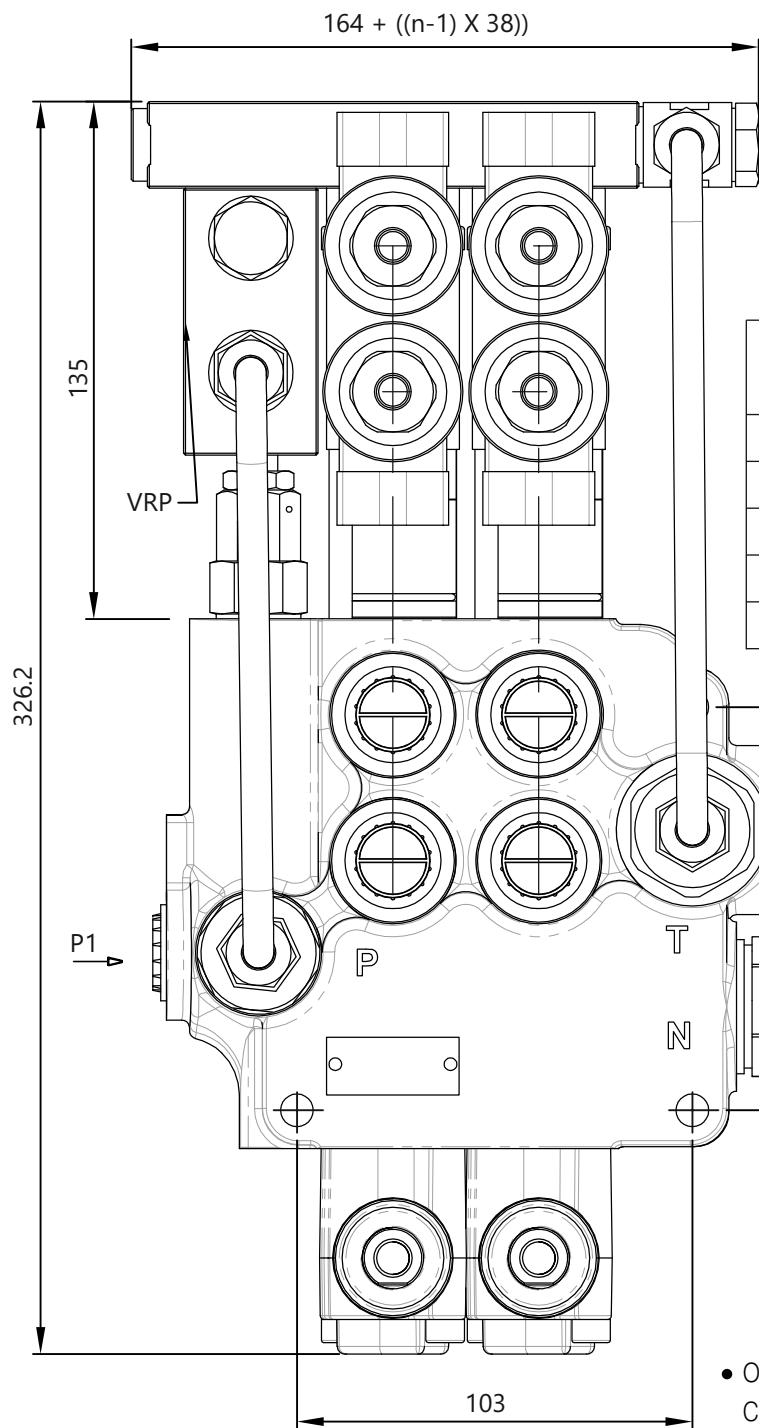
- Ordering example:-
2P80 1A1ED3A1ED3 G KZ1-CEED2-12VDC



- Ordering codes(BSP threads):-
CEED1P40 Kit for 1 section
CEED2P40 Kit for 2 section
CEED3P40 Kit for 3 section
CEED4P40 Kit for 4 section

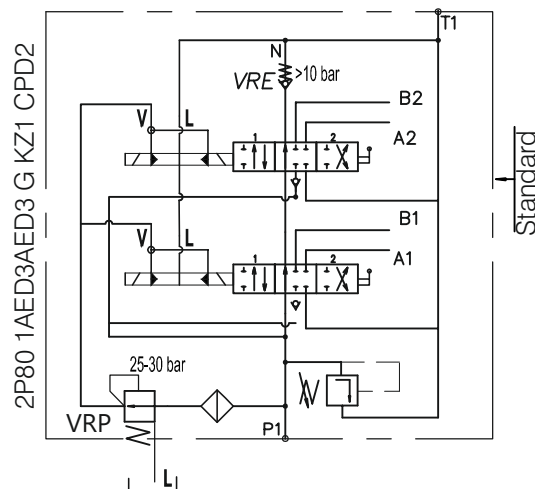


ED3-Electro-hydraulic control details



- Ordering codes:-
 3-wai solenoid valve- LSV2-08-3C-NNN
 coil P40ED3-G-12VDC
 coil P40ED3-G-24VDC

Operating pressure	Min.	10Bar (145 psi)
	Max.	50Bar (725psi)
Max. Operating pressure in L (T line)		25Bar (360psi)
Solenoid operating features		
Nominal voltage tolerance		± 10%
Power rating		24W
Duty cycle		100%



- Ordering example:-
 2P80 VRP 1A1ED3A1ED3 G KZ1-CED2-VRE-12VDC

- Ordering codes(BSP threads):-
 CED1Z80 Kit for 1 section
 CED2P80 Kit for 2 section
 CED3P80 Kit for 3 section
 CED4P80 Kit for 4 section



Back pressure valve - VRE-P80

