



## SN-4 SERIES

# Sectional Directional Control Valves

FOR MOBILE AND INDUSTRIAL HYDRAULIC APPLICATIONS



Innovative Designs  
Professional Quality  
Customer Satisfaction !



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01.2014 / 500 05-136ES  
Survey 04-2322 7507



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# SN-4 Chapters

## Sectional Directional Control Valves

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Working condition	P.5
Ordering code	P.7
Dimensions	P.12
Performance data	P.13
Inlet relief options	P.14
Spool options	P.15
A side options	P.20
B side spool positioners	P.23
Port relief	P.29
Other options	P.30
Outlet options	P.32





For Mobile And Industrial Hydraulic Applications.

**MONOBLOCK DIRECTIONAL CONTROL VALVES**

MB-2 / MB-3 / MB-4 / MB-5 / MSB-5

**SECTIONAL DIRECTIONAL CONTROL VALVES**

SN-3 / SN-4 / SN-6 / SN-8



**MB-2**

ONLY ONE SECTION AVAILABLE

Nominal flow rate	45 l/min	12 US gpm
Operating pressure (maximum)	250 bar	3600 psi
Back pressure (maximum) on outlet port T	25 bar	360 psi



**MB-3**

AVAILABLE SECTIONS FROM 1 TO 7

Nominal flow rate	45 l/min	12 US gpm
Operating pressure (maximum)	315 bar	4600 psi
Back pressure (maximum) on outlet port T	25 bar	360 psi



**MB-4**

AVAILABLE SECTIONS FROM 1 TO 6

Nominal flow rate	60 l/min	16 US gpm
Operating pressure (maximum)	315 bar	4600 psi
Back pressure (maximum) on outlet port T	25 bar	360 psi



**MB-5**

AVAILABLE SECTIONS FROM 1 TO 6

Nominal flow rate	80 l/min	21 US gpm
Operating pressure (maximum)	315 bar	4600 psi
Back pressure (maximum) on outlet port T	25 bar	360 psi



## MSB-5

AVAILABLE SECTIONS FROM 1 TO 6

With Independent load check valve in each section, and optional port relief.

Nominal flow rate	80 l/min	21 US gpm
Operating pressure (maximum)	315 bar	4600 psi
Back pressure (maximum) on outlet port T	25 bar	360 psi



## SN-3

AVAILABLE SECTIONS FROM 1 TO 12

Nominal flow rate	50 l/min	13 US gpm
Operating pressure (maximum)	315 bar	4600 psi
Back pressure (maximum) on outlet port T	25 bar	360 psi



## SN-4

AVAILABLE SECTIONS FROM 1 TO 12

Nominal flow rate	80 l/min	21 US gpm
Operating pressure (maximum)	315 bar	4600 psi
Back pressure (maximum) on outlet port T	25 bar	360 psi



## SN-6

AVAILABLE SECTIONS FROM 1 TO 12

Nominal flow rate	140 l/min	37 US gpm
Operating pressure (maximum)	315 bar	4600 psi
Back pressure (maximum) on outlet port T	25 bar	360 psi

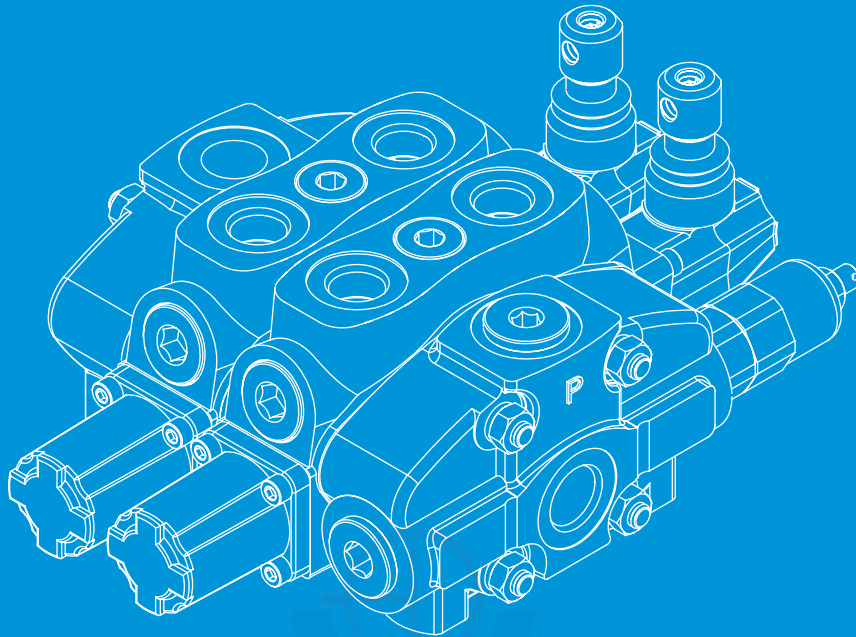


## SN-8

AVAILABLE SECTIONS FROM 1 TO 12

Nominal flow rate	240 l/min	63 US gpm
Operating pressure (maximum)	315 bar	4600 psi
Back pressure (maximum) on outlet port T	25 bar	360 psi





*Innovative Designs*  
*Professional Quality*  
*Customer Satisfaction !*

AVAILABLE SECTIONS FROM

**1 TO 12**

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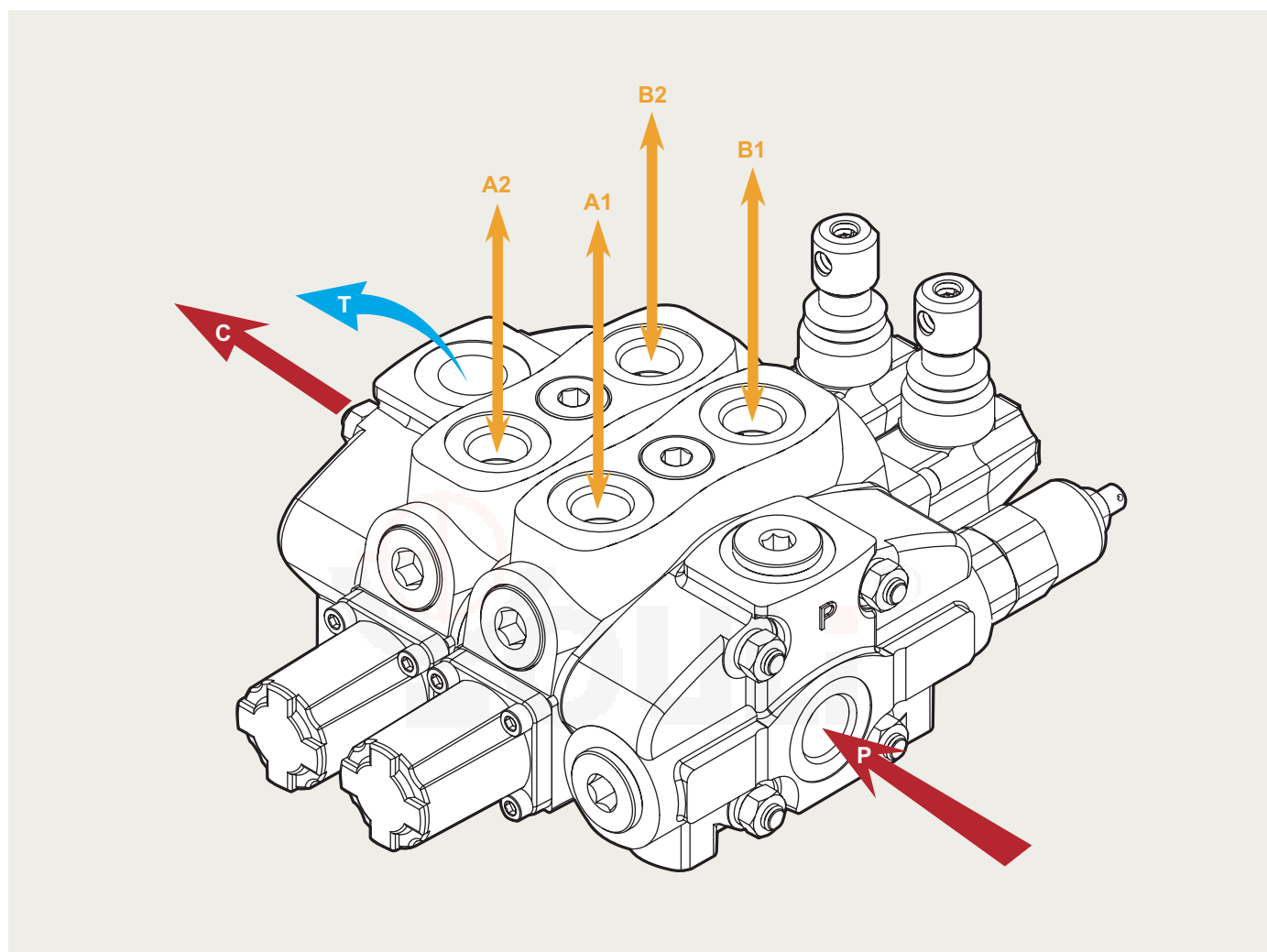
**SN-4**

**Sectional Directional Control Valves**



# SN-4

## Sectional Directional Control Valves



### SN-4 Specifications

Nominal flow rate		80 l/min	21 US gpm
Operating pressure (maximum)		315 bar	4600 psi
Back pressure (maximum)	on outlet port T	25 bar	360 psi
Fluid temperature range	with NBR(BUNA-N) seals	from - 20° to 80°C	from - 4° to 176° F
	with FPM(VITON) seal	from - 20° to 100°C	from - 4° to 212° F
Viscosity	operating range	from 15 to 75 mm <sup>2</sup> /s	from 15 to 75 cst
	min.	12 mm <sup>2</sup> /s	12 cst
	max.	400 mm <sup>2</sup> /s	400 cst
Ambient temperature range		from - 40° to 60°C	from - 40° to 140° F

• All specifications, dimensions and design characteristics shown in this catalogue are subject to change without notice.

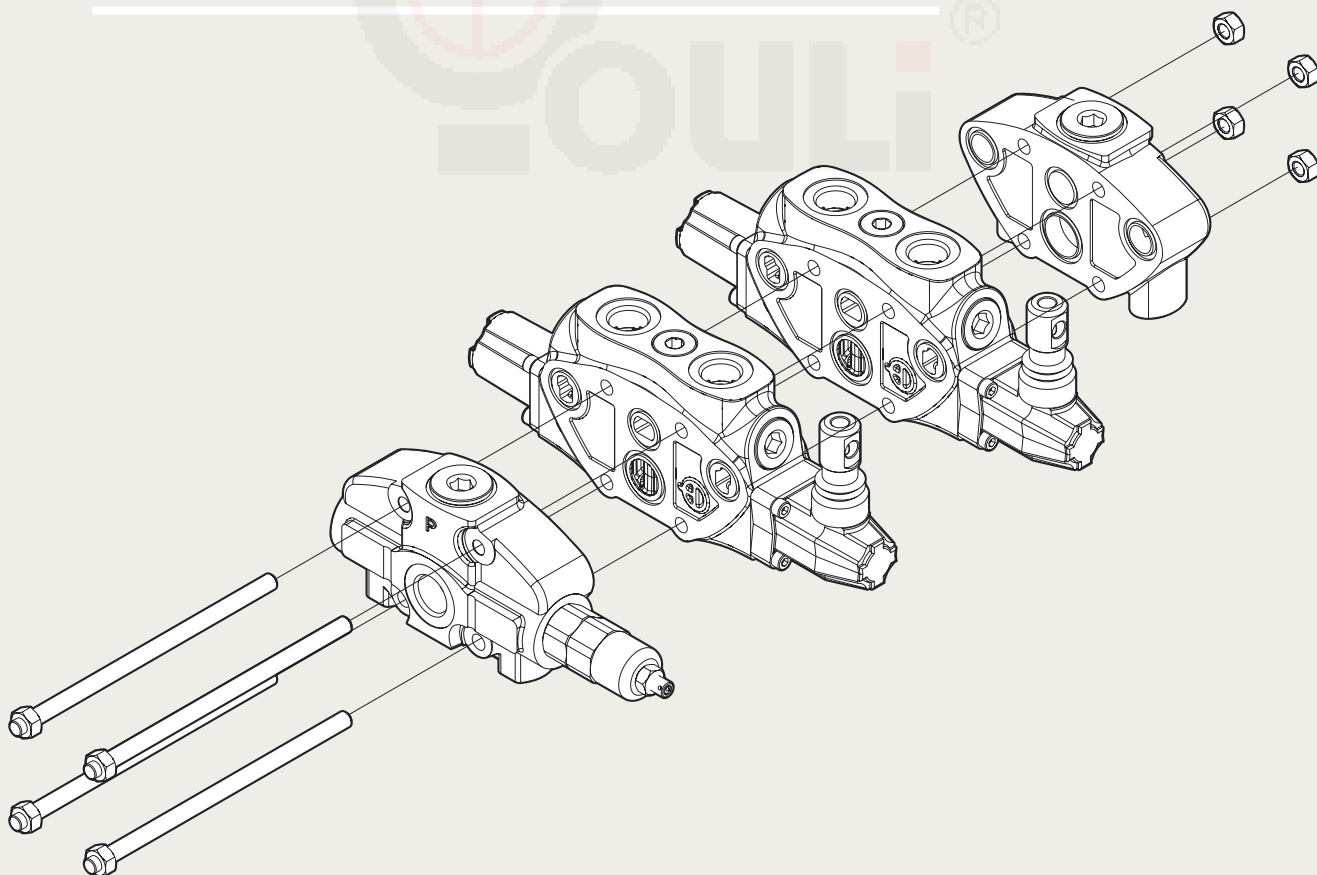
# SN-4 Complete

## Sectional Directional Control Valves

### HOW TO ORDER FOR A COMPLETE ASSEMBLED VALVE

**SN-4 / 2S - 3 / 18L / 28L / G-4-6 / M3**

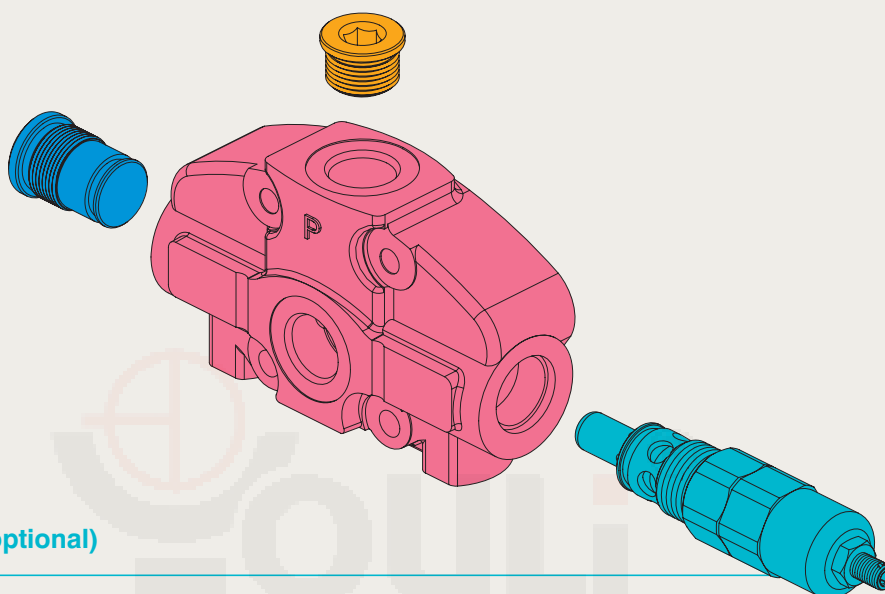
<b>2S</b>	No. of working section
<b>3</b>	Inlet cover with a main pressure relief valve
<b>18L</b>	1st section (complete working section)
<b>28L</b>	Following section (complete working section)
<b>G-4-6</b>	BSP ports
<b>M3</b>	Outlet cover



# SN-4 Inlet Section

## Sectional Directional Control Valves

FP SN-4 / SG-3 / G4



Inlet relief (optional)

Inlet Relief (optional)			
TYPE	CODE	DESCRIPTION	PAGE
SG-2	YLPSN43002	Range 80 to 160 bar / 1150 to 2300 psi , standard setting 125 bar / 1800 psi	P. 14
SG-3	YLPSN43003	Range 125 to 250 bar / 1800 to 3600 psi , standard setting 175 bar / 2500 psi	P. 14
SG-4	YLPSN43004	Range 200 to 315bar / 2900 to 4600 psi , standard setting 220 bar / 3200 psi	P. 14
		Standard setting is referred to 10 l/min - 2.6 US gpm flow.	P. 14
SV	YLPSN44000	Relief valve blanking plug	P. 14
XSG	YLX21000	Pilot operated pressure relief valve Range 25 to 315 bar/ 360 to 4600 psi, standard setting 125 bar/ 1800 psi	P. 14



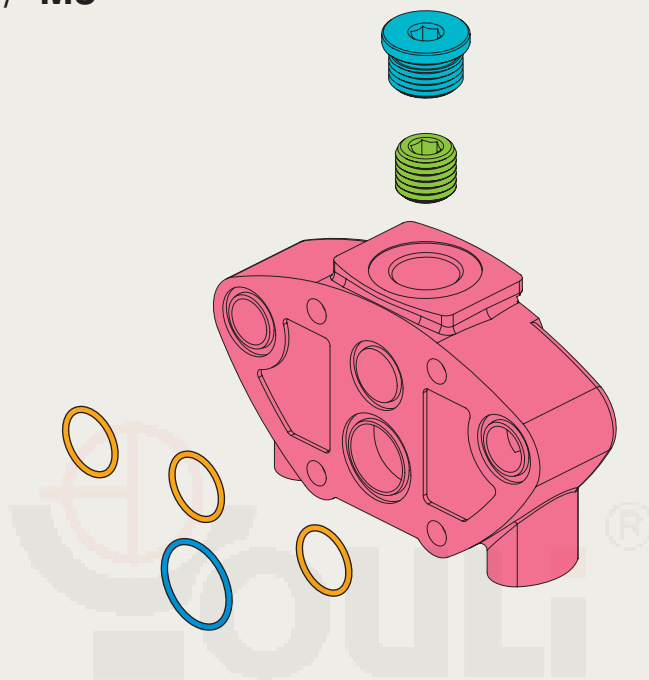
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# SN-4 Outlet Section

## Sectional Directional Control Valves

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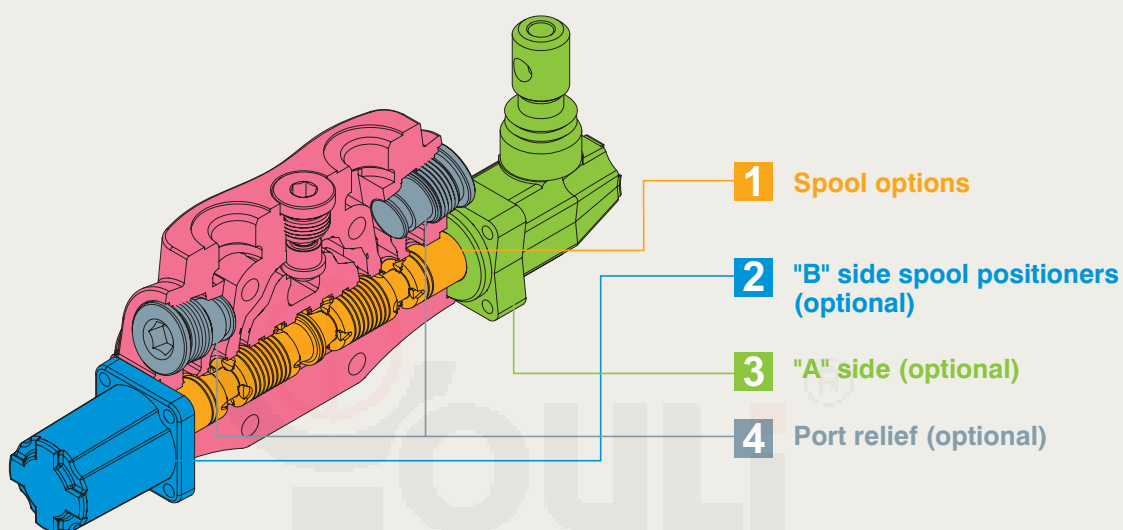
FT SN-4 / G-6 / M3



# SN-4 Working Section

## Sectional Directional Control Valves

EW SN-4 / 1S / **1** **8** **L** / **P1(G3-100)** / G-4  
**1** **2** **3** **4**

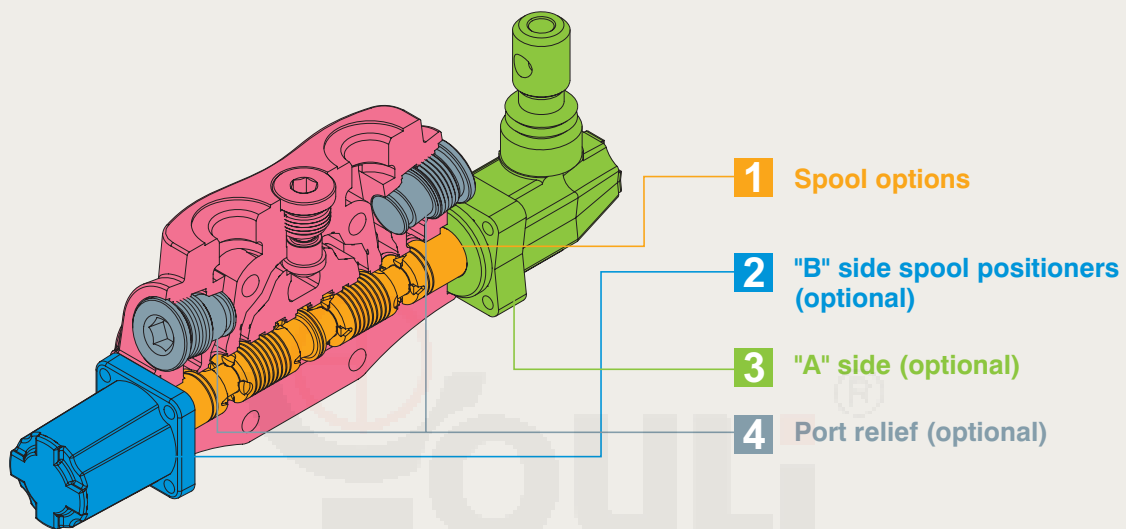


1: Spool options			
TYPE	CODE	DESCRIPTION	PAGE
1	YLWSN42001	Double acting,3 positions,with A and B closed in neutral position	P. 15
1S	YLWSN42010	Double acting,3 positions,with A and B closed in neutral position, for series circuit	P. 18
2	YLWSN42002	Double acting,3 positions,with A and B open to tank in neutral position	P. 15
3	YLWSN42003	Single acting on A closed in neutral position, 3 positions, B plugged	P. 16
4	YLWSN42004	Single acting on B closed in neutral position, 3 positions, A plugged	P. 16
5	YLWSN42005	Double acting, 3 positions, with B open to Tank in neutral position	P. 17
6	YLWSN42006	Double acting, 3 positions, with A open to Tank in neutral position	P. 17
5PY	YLWSN43051	Double acting, 4 positions, floating circuit in 4th position with A, B open to Tank by pushing the lever	P. 19

# SN-4 Working Section

## Sectional Directional Control Valves

EW SN-4 / 1S / **1** **8** **L** / P1(G3-100) / G-4  
**1** **2** **3** **4**



### 2: B Side Spool Positioners

TYPE	CODE	DESCRIPTION	PAGE
6-1	YLWSN43061	Detent in pos. 1-0-2, without spring centered	P. 23
6-2	YLWSN43062	2 positions, detent in pos. 0-2, without spring centered	P. 23
6-3	YLWSN43063	2 positions, detent in pos. 1-0, without spring centered	P. 23
8D2	YLWSN43082	With spring return to neutral position and pin with M8 male thread for dual control	P. 23
8P	YLWSN43080	ON/OFF Pneumatic actuator	P. 24
8EP3	YLWSN44300	ON/OFF Electro-Pneumatic actuator	P. 24
8MG1 (NO)	YLWSN43801	Microswitch kit operated in pos. 1 (Normally Open)	P. 27
8MG2 (NO)	YLWSN43802	Microswitch kit operated in pos. 2 (Normally Open)	P. 27
8MG3 (NO)	YLWSN43803	Microswitch kit operated in pos. 1&2 (Normally Open)	P. 27
MG (NO)	YLWSN43804	Microswitch with NO terminal	P. 27
8MG1 (NC)	YLWSN438011	Microswitch kit operated in pos. 1 (Normally Closed)	P. 27
8MG2 (NC)	YLWSN438021	Microswitch kit operated in pos. 2 (Normally Closed)	P. 27
8MG3 (NC)	YLWSN438031	Microswitch kit operated in pos. 1&2 (Normally Closed)	P. 27
MG (NC)	YLWSN438041	Microswitch with NC terminal	P. 27
8	YLWSN43008	With spring return to neutral position	P. 28
8-1	YLWSN44081	2 positions, with spring centered from pos. 1	P. 28
8-2	YLWSN44082	2 positions, with spring centered from pos. 2	P. 28
9-1	YLWSN43091	Detent in pos. 1, 2 with spring centered	P. 28
9-2	YLWSN43092	Detent in pos. 2 with spring centered	P. 28
9-3	YLWSN43093	Detent in pos. 1 with spring centered	P. 28

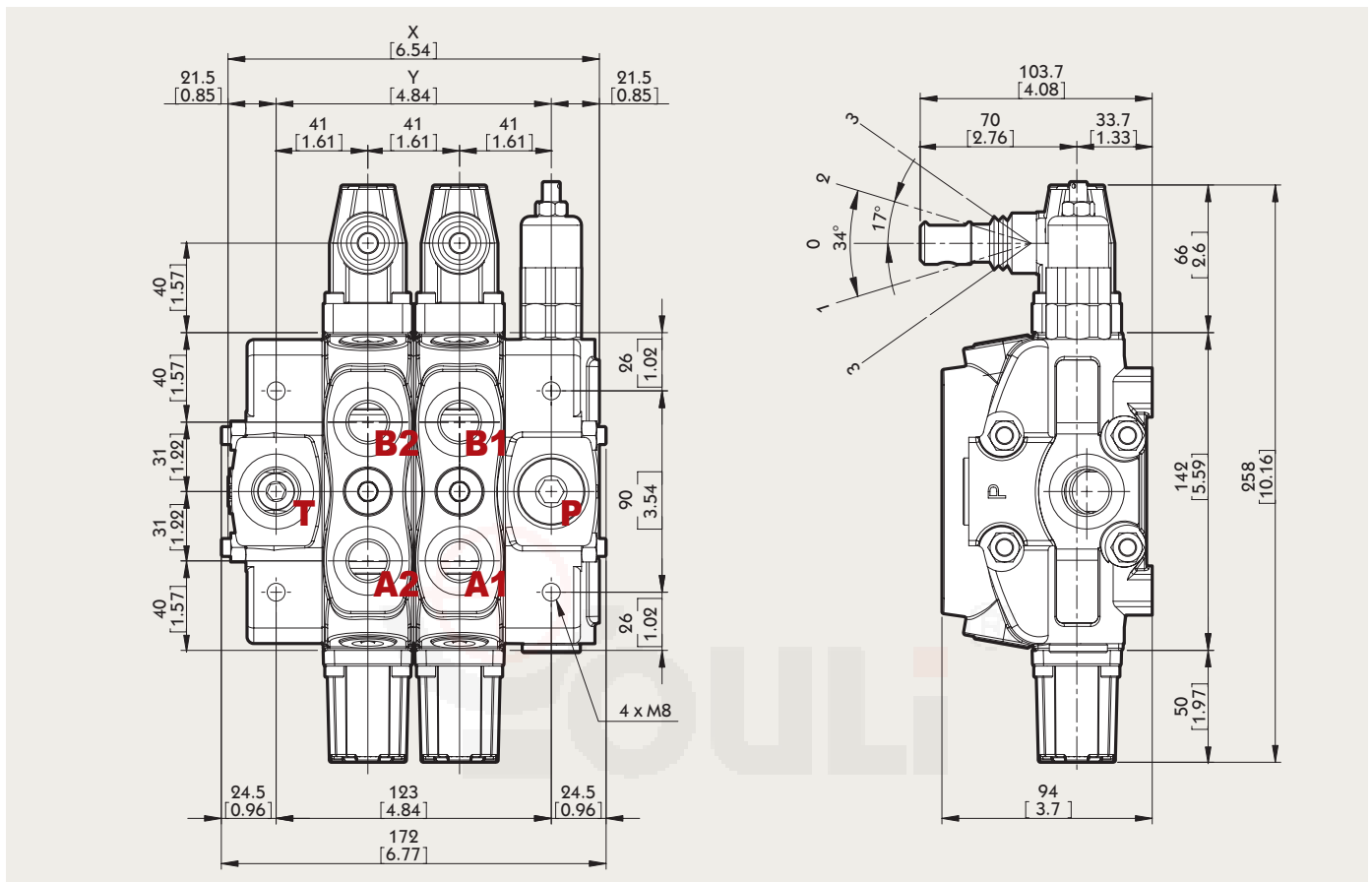
2: B Side Spool Positioners			
TYPE	CODE	DESCRIPTION	PAGE
8ED3+RV-KE1R3	YLWSN43201	1S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC)	P. 25
8ED3+RV-KE2R3	YLWSN43202	2S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC)	P. 25
8ED3+RV-KE3R3	YLWSN43203	3S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC)	P. 25
8ED3+RV-KE4R3	YLWSN43204	4S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC)	P. 25
8ED3+RV-KE5R3	YLWSN43205	5S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC)	P. 25
8ED3+RV-KE6R3	YLWSN43206	6S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC)	P. 25
8ED3+RV-KE7R3	YLWSN43207	7S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC)	P. 25
8ED3+RV-KE8R3	YLWSN43208	8S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC)	P. 25
8ED3+RV-KE9R3	YLWSN43209	9S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC)	P. 25
8ED3+RV-KE10R3	YLWSN43210	10S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC)	P. 25
8ED3+RV-KE11R3	YLWSN43211	11S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC)	P. 25
8ED3+RV-KE12R3	YLWSN43212	12S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC)	P. 25
8ER3+KE1S0	YLWSN43401	1S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain	P. 26
8ER3+KE2S0	YLWSN43402	2S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain	P. 26
8ER3+KE3S0	YLWSN43403	3S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain	P. 26
8ER3+KE4S0	YLWSN43404	4S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain	P. 26
8ER3+KE5S0	YLWSN43405	5S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain	P. 26
8ER3+KE6S0	YLWSN43406	6S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain	P. 26
8ER3+KE7S0	YLWSN43407	7S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain	P. 26
8ER3+KE8S0	YLWSN43408	8S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain	P. 26
8ER3+KE9S0	YLWSN43409	9S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain	P. 26
8ER3+KE10S0	YLWSN43410	10S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain	P. 26
8ER3+KE11S0	YLWSN43411	11S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain	P. 26
8ER3+KE12S0	YLWSN43412	12S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain	P. 26

3: A Side (Optional)			
TYPE	CODE	DESCRIPTION	PAGE
L	YLWSN44000	Standard lever	P. 20
SLP	YLWSN44001	Without lever, with dust proof plate	P. 20
LCB	YLWSN44002	Joystick lever for 2 section operation	P. 21
TQ	YLWSN44003	Flexible cable connection	P. 22

4: Port Relief (Optional)			
TYPE	CODE	DESCRIPTION	PAGE
P (G2-63)	YLWSN45002	Anti-shock valve, range 63 to 125 bar / form 900 to 1800 psi standard setting 63 bar / 900 psi	P. 29
P (G3-100)	YLWSN45003	Anti-shock valve, range 100 to 250 bar / form 1450 to 3600 psi standard setting 100bar / 1450 psi	P. 29
P (G4-200)	YLWSN45004	Anti-shock valve, range 200 to 315 bar / form 2900 to 4600 psi standard setting 200 bar / 2900 psi	P. 29
PM (G2-63)	YLWSN45005	Anti-shock valve, range 63 to 125 bar / form 900 to 1800 psi standard setting 63 bar / 900 psi, for low setting	P. 29
U (G2-63)	YLWSN45012	Anti-shock valve and Anti-cavitation valve, range 63 to 125 bar / form 900 to 1800 psi standard setting 63 bar / 900 psi	P. 29
U (G3-100)	YLWSN45013	Anti-shock valve and Anti-cavitation valve, range 100 to 250 bar / form 1450 to 3600 psi standard setting 100 bar / 1450 psi	P. 29
U (G4-200)	YLWSN45014	Anti-shock valve and Anti-cavitation valve, range 200 to 315 bar / form 2900 to 4600 psi standard setting 200 bar / 2900 psi	P. 29
C	YLWSN45100	Anti - cavitation	P. 29

# SN-4 Dimensions

## Sectional Directional Control Valves



### Standard threads

Ports	Standard threads			Pilot ports		
	Inlet P and carry-over C	A and B	Outlet T	Hydraulic	Pneumatic	
BSP	G1/2	G1/2	G3/4	BSP	G1/4	NPTF 1/8-27
UN-UNF	7/8-14 UNF-2B (SAE 10)	3/4-16 UNF-2B (SAE 8)	7/8-14 UNF-2B (SAE 10)	UN-UNF	9/16-18 UNF-2B (SAE 6)	NPTF 1/8-27
METRIC	M22x1.5	M22x1.5	M22x1.5	METRIC	G1/4	NPTF 1/8-27

• G-3/8 : G3    G-1/2 : G4    G-3/4 : G6    G-1 : G8    G-1 1/4 : G10  
 • SAE 8 : E8    SAE 10 : E10    SAE 12 : E12    SAE 16 : E16    SAE 20 : E20

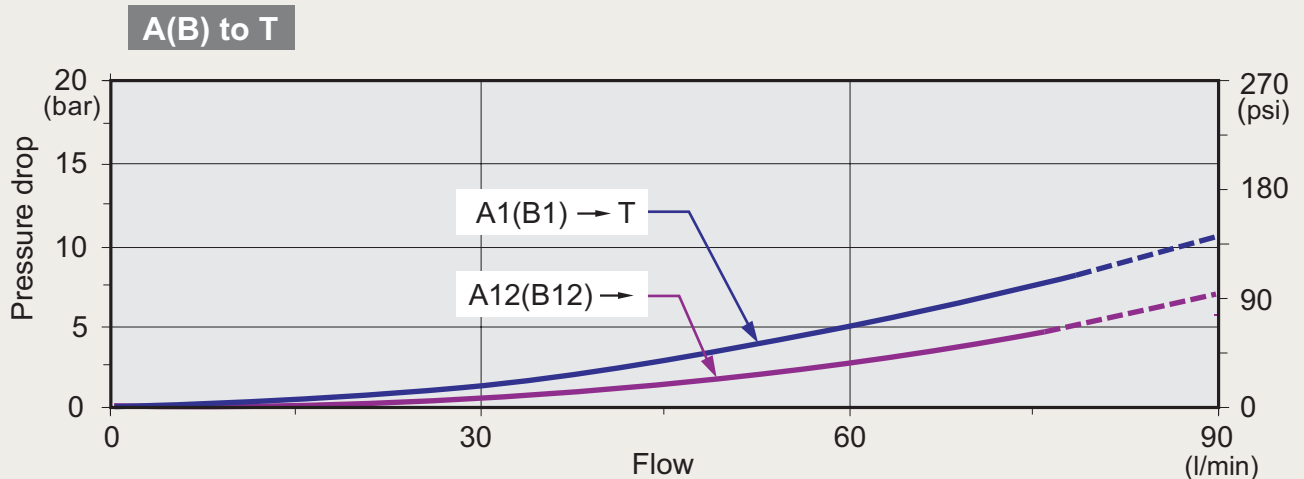
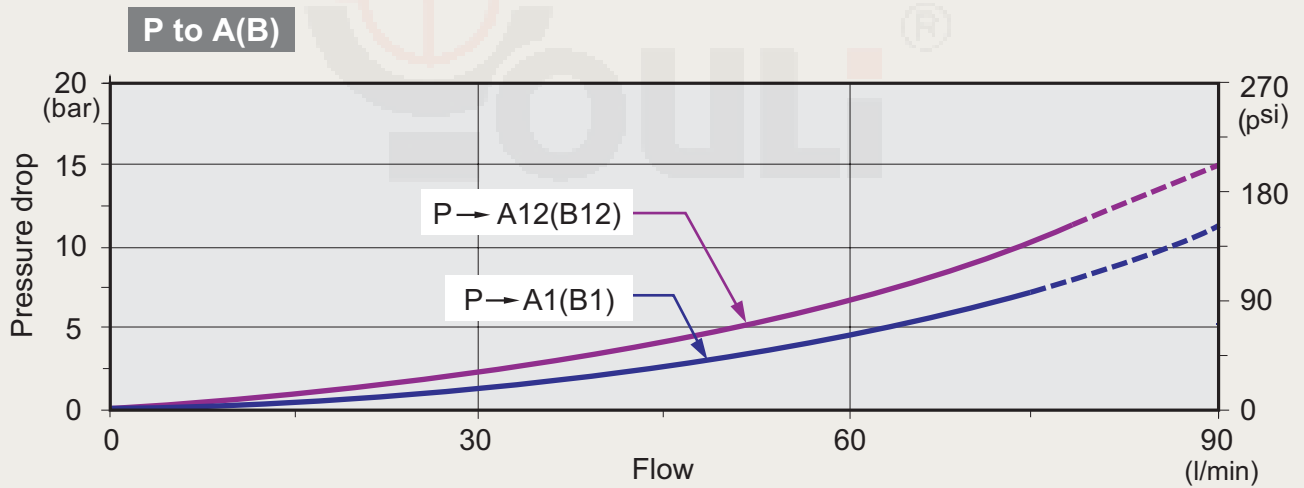
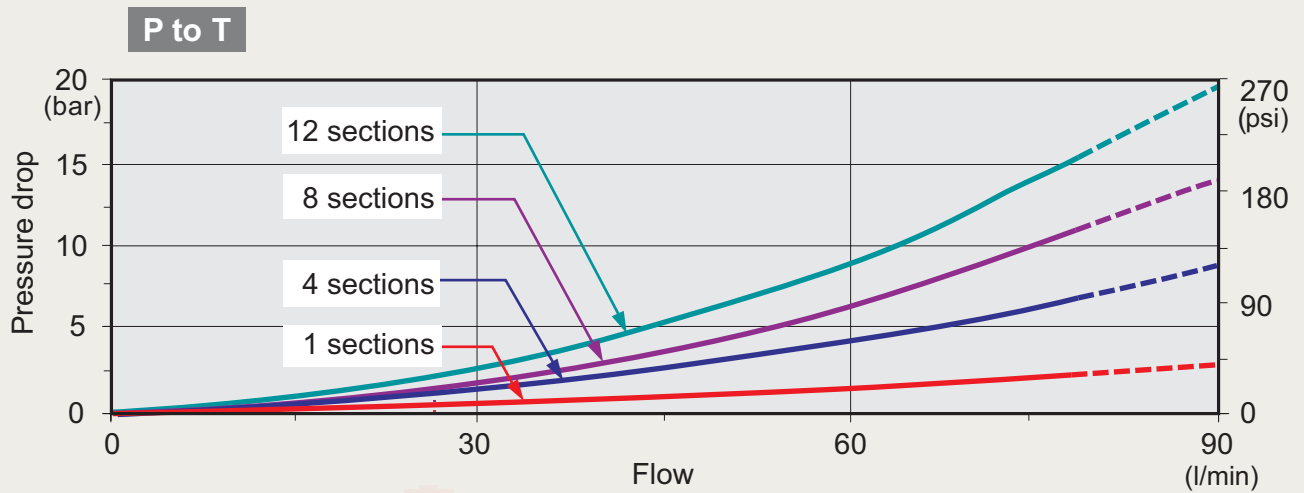
### Standard dimensions

TYPE	X		Y		TYPE	X		Y	
	mm	in	mm	in		mm	in	mm	in
SN4 /1S	128	5.04	82	3.23	SN4 /7S	374	14.72	328	12.91
SN4 /2S	169	6.65	123	4.84	SN4 /8S	415	16.33	369	14.52
SN4 /3S	210	8.27	164	6.46	SN4 /9S	456	17.94	410	16.13
SN4 /4S	251	9.88	205	8.07	SN4 /10S	497	19.55	451	17.74
SN4 /5S	292	11.5	246	9.69	SN4 /11S	538	21.16	492	19.35
SN4 /6S	333	13.11	267	11.3	SN4 /12S	579	22.77	533	20.96



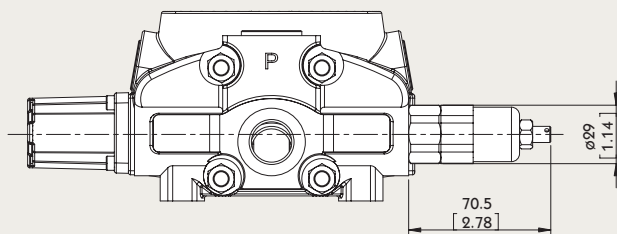
# SN-4 Performance Curve Chart

## Sectional Directional Control Valves

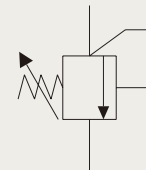


# SN-4 Inlet Relief (Optional) Sectional Directional Control Valves

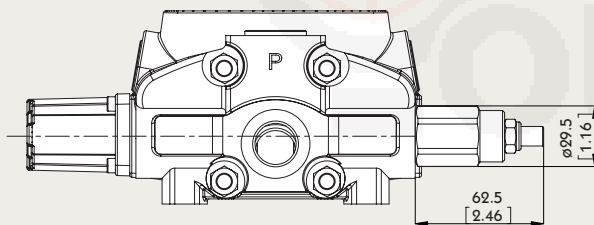
## Type SG



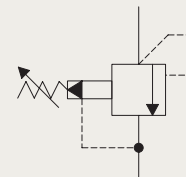
Direct pressure relief valve:



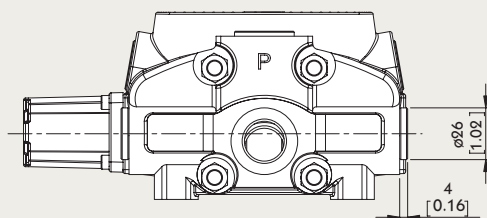
## Type XSG



Pilot operated pressure relief valve:



## Type SV

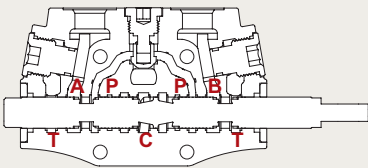
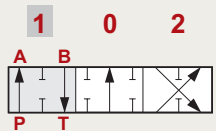
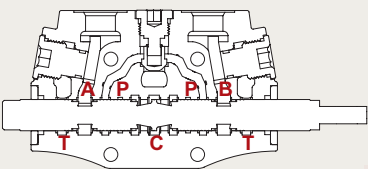
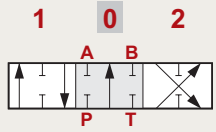
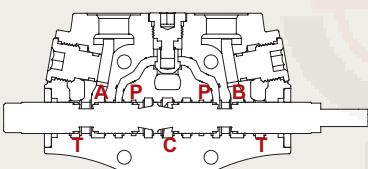
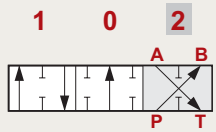
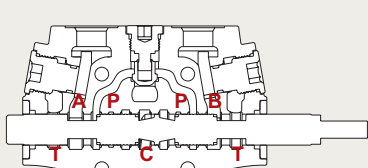
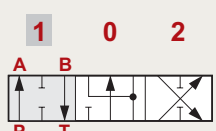
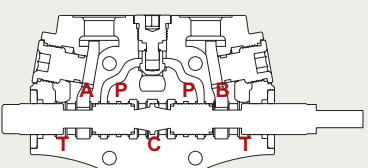
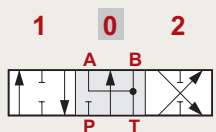
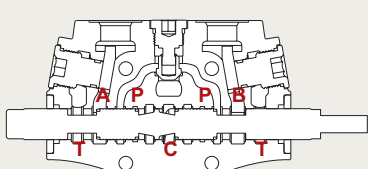
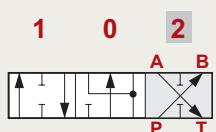


Relief valve blanking plug:



# SN-4 Spool Options

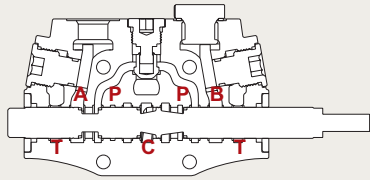
## Sectional Directional Control Valves

TYPE 1		
	<p>P → A B → T C closed</p>	
	<p>P &amp; T &amp; A &amp; B closed C open</p>	
	<p>P → B A → T C closed</p>	
TYPE 2		
	<p>P → A B → T C closed</p>	
	<p>A &amp; B → T P closed C open</p>	
	<p>P → B A → T C closed</p>	

# SN-4 Spool Options

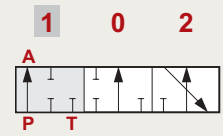
## Sectional Directional Control Valves

### TYPE 3

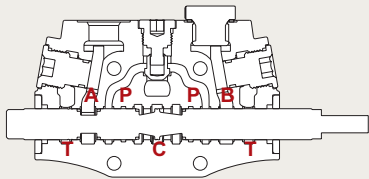


**P** → **A**

**C** closed

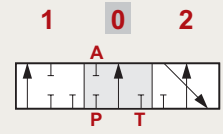


"B" port plugged

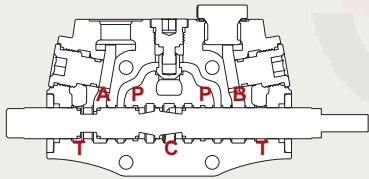


**P & A** closed

**C** open



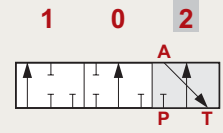
"B" port plugged



**A** → **T**

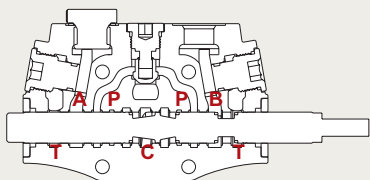
**P** closed

**C** open



"B" port plugged

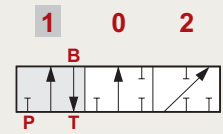
### TYPE 4



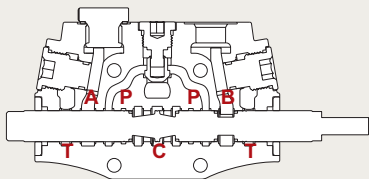
**B** → **T**

**P** closed

**C** open

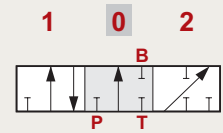


"A" port plugged

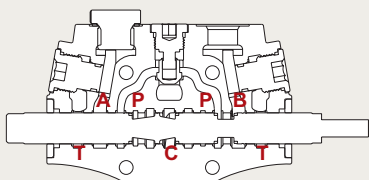


**P & B** closed

**C** open

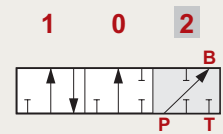


"A" port plugged



**P** → **B**

**C** closed

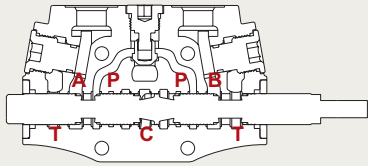
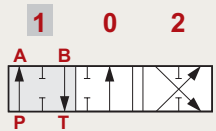
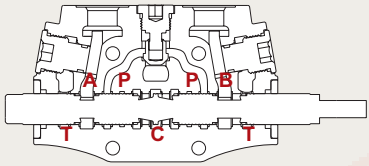
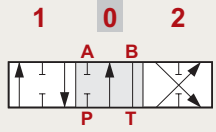
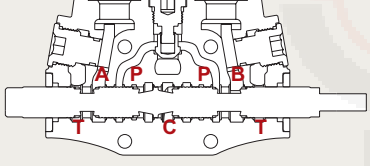
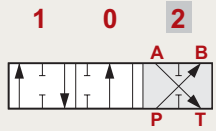


"A" port plugged

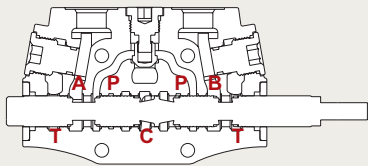
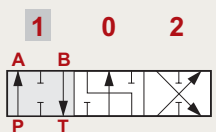
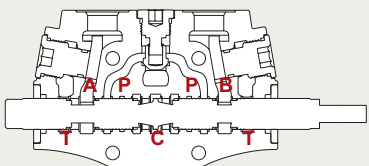
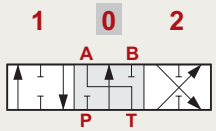
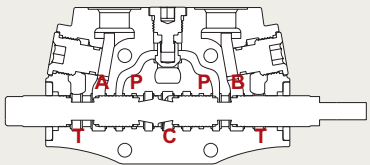
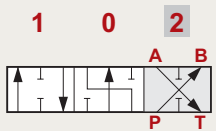
# SN-4 spool Options

## Sectional Directional Control Valves

### TYPE 5

	<p>P → A B → T C closed</p>	
	<p>B → T P &amp; A closed C open</p>	
	<p>P → B A → T C closed</p>	

### TYPE 6

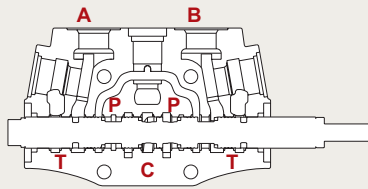
	<p>P → A B → T C closed</p>	
	<p>A → T P &amp; B closed C open</p>	
	<p>P → B A → T C closed</p>	



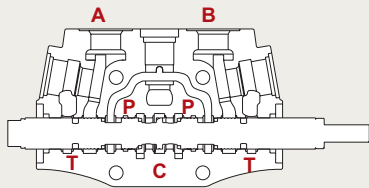
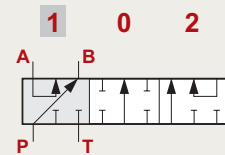
# SN-4 Spool Options

## Sectional Directional Control Valves

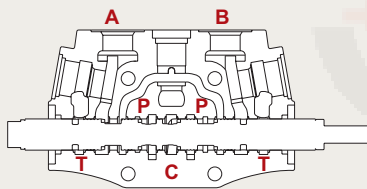
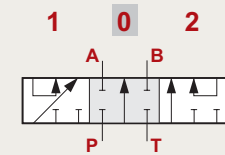
### TYPE 1S



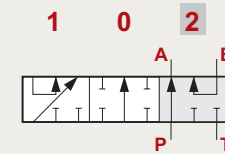
**P** → **B**  
**A** → **C**  
**T** closed



**P & A & B & T** closed  
**C** open

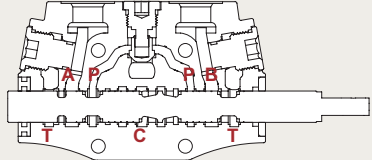
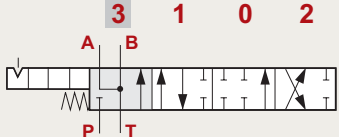
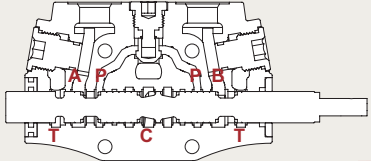
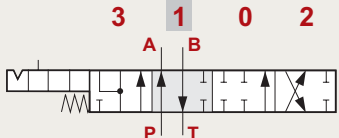
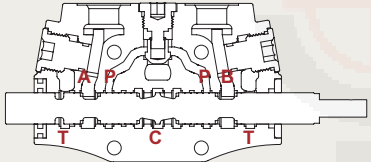
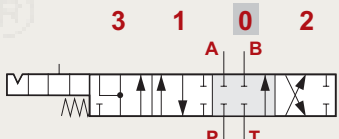
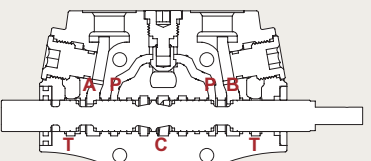
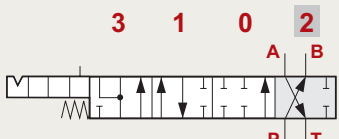


**P** → **A**  
**B** → **C**  
**T** closed



# SN-4 Spool Options

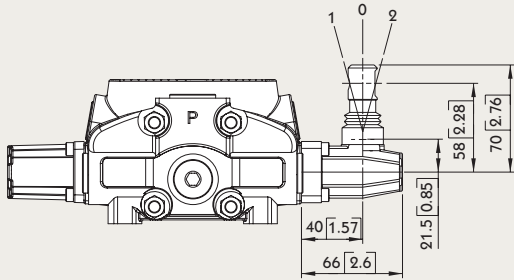
## Sectional Directional Control Valves

TYPE 5PY	NOTE : WITH SPECIAL BODY AND SPECIAL POSITIONER.	
	<p>A &amp; B → T</p> <p>P closed</p> <p>C open</p>	
	<p>P → A</p> <p>B → T</p> <p>C closed</p>	
	<p>P &amp; T &amp; A &amp; B closed</p> <p>C open</p>	
	<p>P → B</p> <p>A → T</p> <p>C closed</p>	

# SN-4 A Side

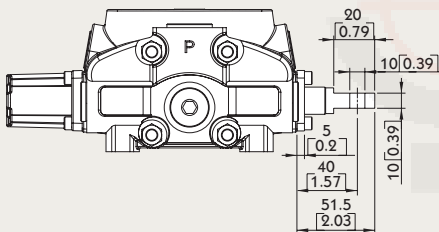
## Sectional Directional Control Valves

### Type L



**Type L:**  
STANDART LEVER KIT

### Type SLP

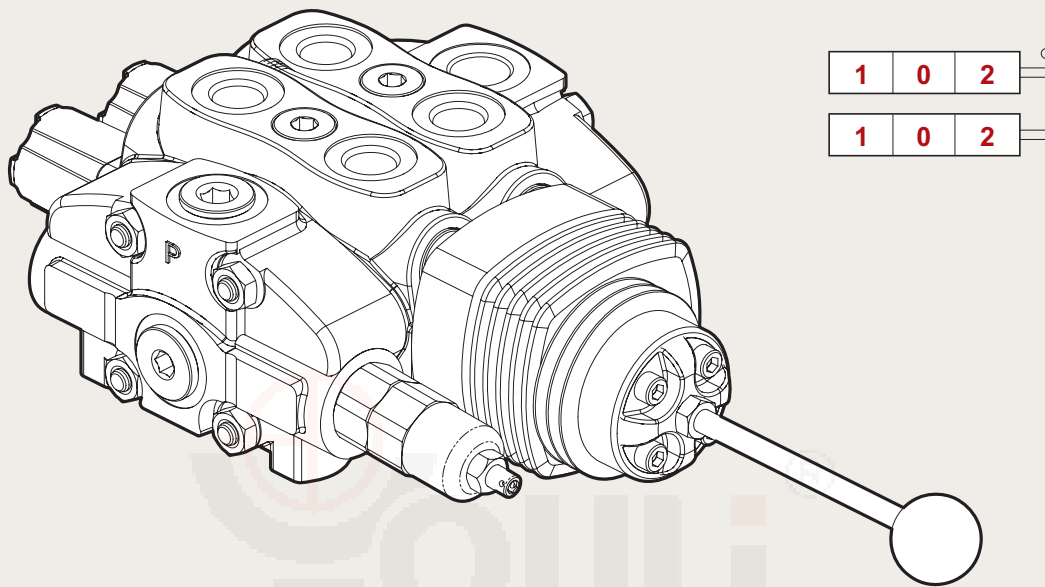


**Type SLP:**  
WITH DUST-PROOF PLATE

# SN-4 A Side

## Sectional Directional Control Valves

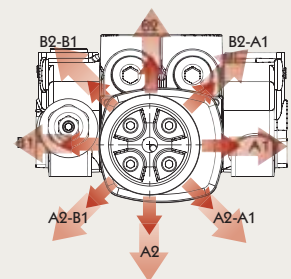
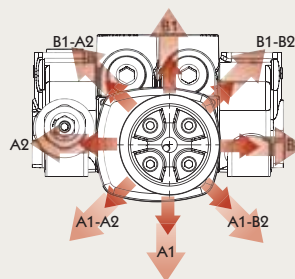
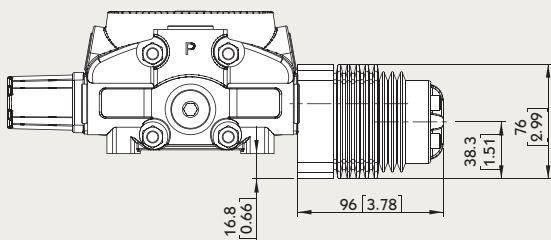
LCB: Joystick control



Type LCB

LCB1

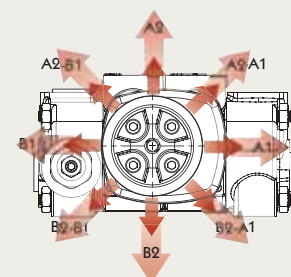
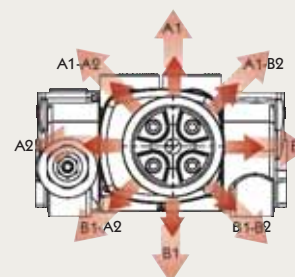
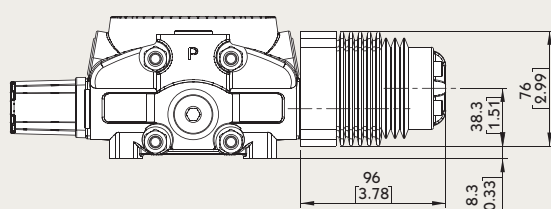
LCB2



Type LCB

LCB3

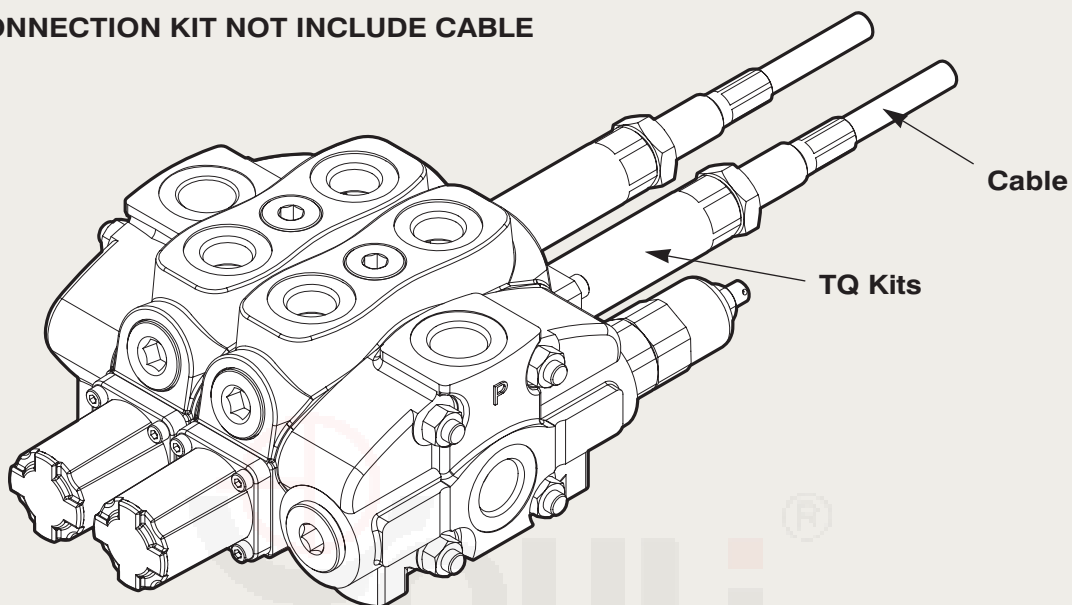
LCB4



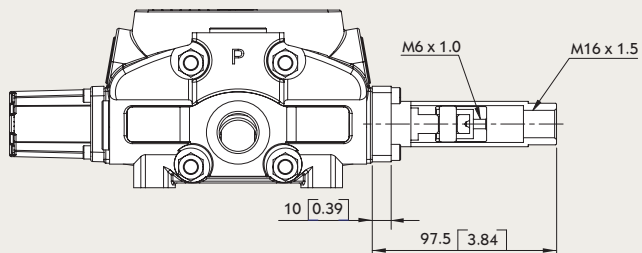
# SN-4 A Side

## Sectional Directional Control Valves

Note : CONNECTION KIT NOT INCLUDE CABLE



### Type TQ



TQ Kit:

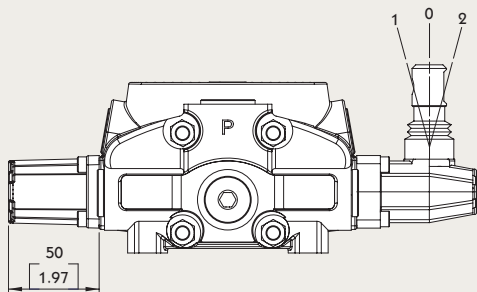




# SN-4 B Side

## Sectional Directional Control Valves

### Type 6



#### 6-1 Kit:

DETENT IN POS. 1-0-2, WITHOUT SPRING CENTERED



#### 6-2 Kit:

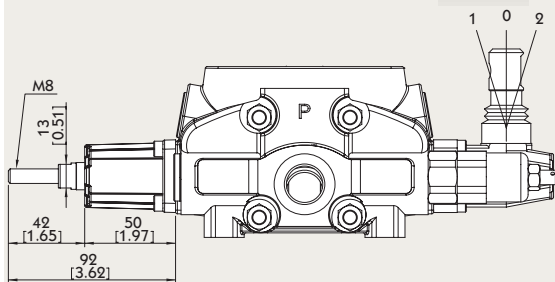
2 POSITIONS, DETENT IN POS. 0-2, WITHOUT SPRING CENTERED



#### 6-3 Kit:

2 POSITIONS, DETENT IN POS. 1-0, WITHOUT SPRING CENTERED

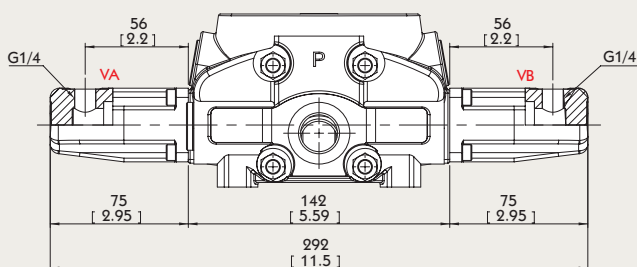
### Type 8D2



#### 8D2 Kit:

WITH SPRING RETURN TO NEUTRAL POSITION AND PIN WITH M8 MALE THREAD FOR DUAL CONTROL

### Type 8IM



#### Operating features :

PILOT PRESSURE : MAX. 50 BAR  
INTERNAL LEAKAGE A(B) -> T :  
MAX. 6 CM<sup>3</sup>/MIN (100 BAR / 40 °C)

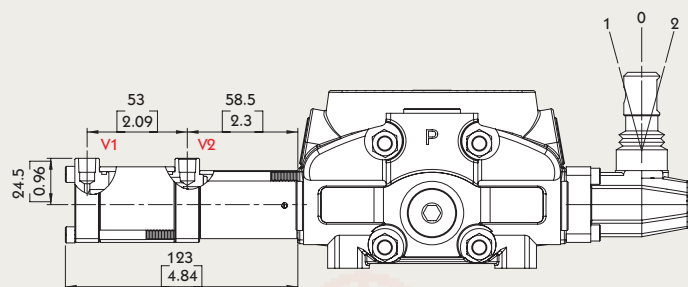


# SN-4 B Side

## Sectional Directional Control Valves

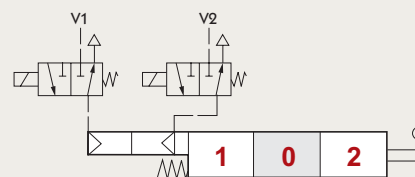
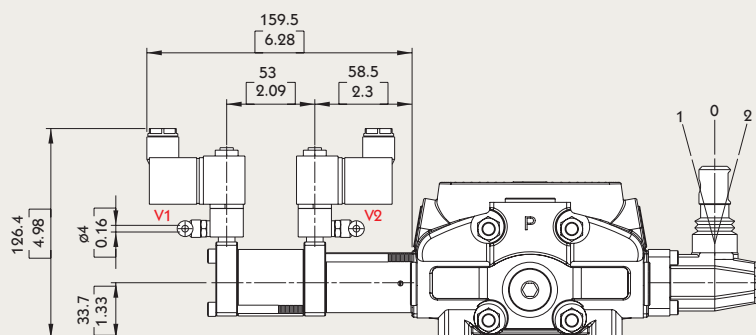
### Type 8P

V1 & V2 : NPT 1/8 - 27



Pilot pressure : FROM 7 TO 10 BAR / 101 TO 145 PSI

### Type 8EP3



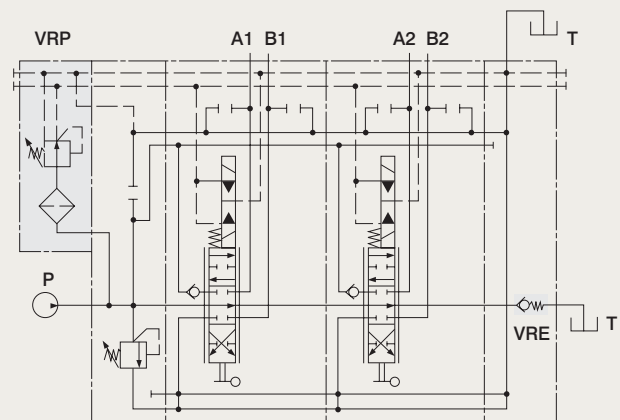
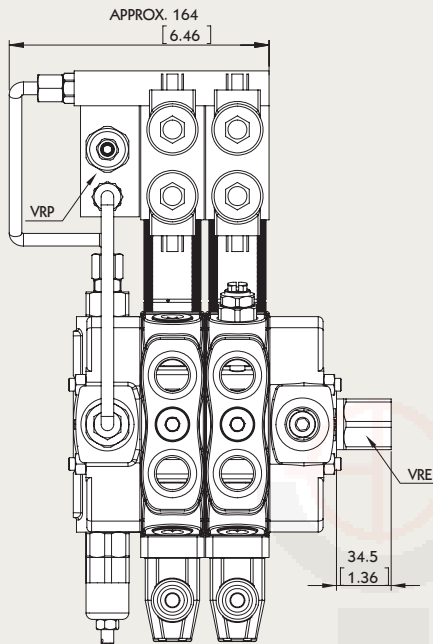
#### Solenoid operating features :

NOMINAL VOLTAGE: 24VDC  
 NOMINAL VOLTAGE TOLERANCE:  $\pm 10\%$   
 POWER RATING: 5W

# SN-4 B Side

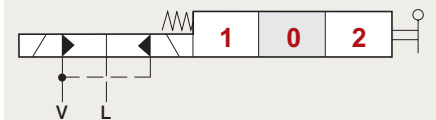
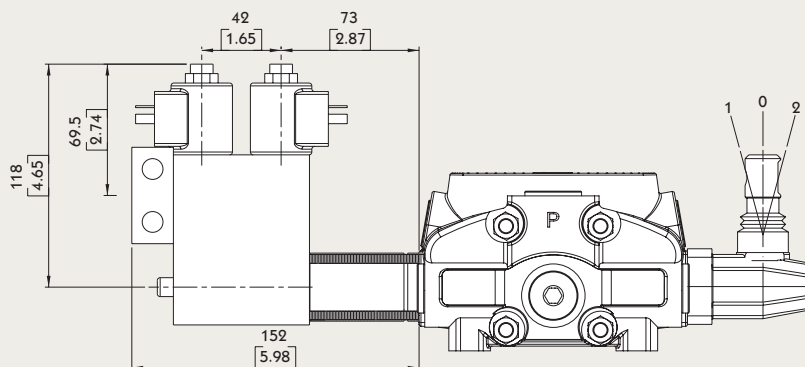
## Sectional Directional Control Valves

### Type 8ED3



#### VRP valve operating features :

- OUTLET PRESSURE: 25 BAR / 363 PSI
- MAX. FLOW: 8 L/MIN / 2.1 US GPM
- FLTERING: 80  $\mu$



#### Operating features :

- PILOT PRESSURE:
  - MIN. 10 BAR / 145 PSI
  - MAX. 50 BAR / 725 PSI
- MAX. BACKPRESSURE ON DRAIN L: 25 BAR / 360PSI

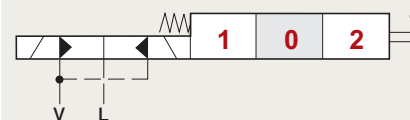
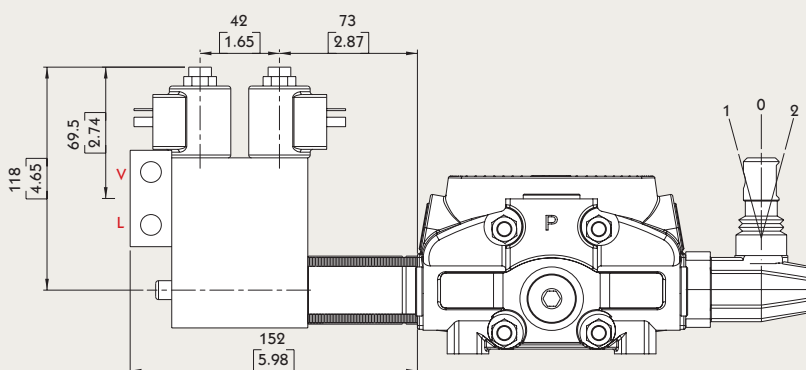
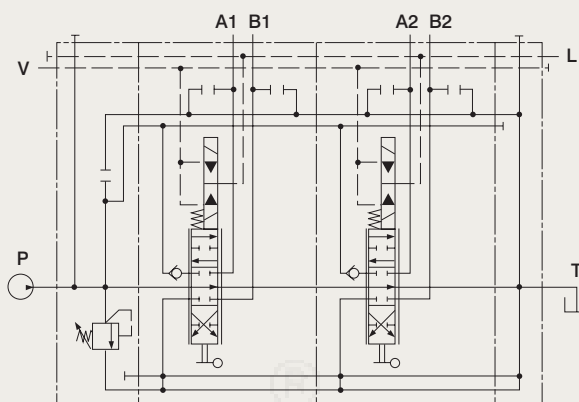
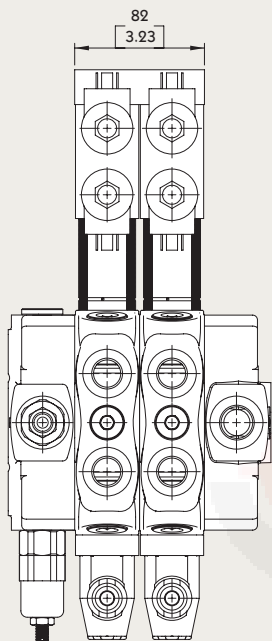
#### Solenoid operating features :

- NOMINAL VOLTAGE: 12VDC / 24 VDC
- POWER RATING: 21 W
- DUTY CYCLE: 100 %

# SN-4 B Side

## Sectional Directional Control Valves

### Type 8ER3



#### Operating features :

PILOT PRESSURE: • MIN. 10 BAR / 145 PSI  
 • MAX. 50 BAR / 725 PSI  
 MAX. BACKPRESSURE ON DRAIN L: 25 BAR / 360PSI

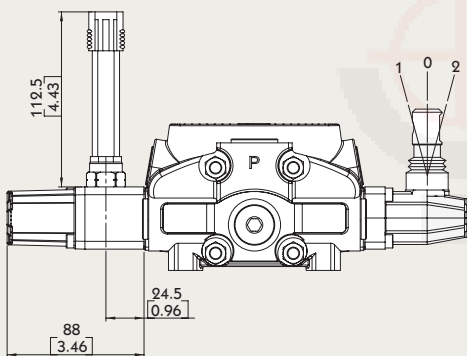
#### Solenoid operating features :

NOMINAL VOLTAGE: 12VDC / 24 VDC  
 POWER RATING: 21 W  
 DUTY CYCLE: 100 %

# SN-4 B Side

## Sectional Directional Control Valves

### Type 8MG



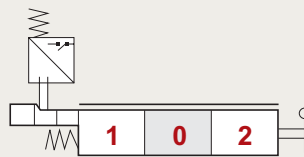
#### MICROSWITCH

#### Operating features :

MECHANICAL LIFE: • 5X10<sup>6</sup> OPERATIONS

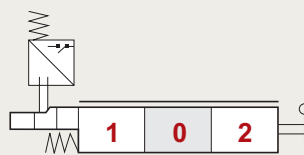
ELECTRICAL LIFE (RESISTIVE LOAD):

- 10<sup>6</sup> OPERATIONS - 7A / 13.5 VDC
- 5x10<sup>4</sup> OPERATIONS - 10A / 12 VDC
- 5x10<sup>4</sup> OPERATIONS - 3A / 28 VDC



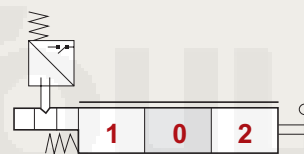
#### 8MG1 Kit:

MICROSWITCH WITH MALE/FEMALE CONNECTOR, OPERATED IN POS. 1



#### 8MG2 Kit:

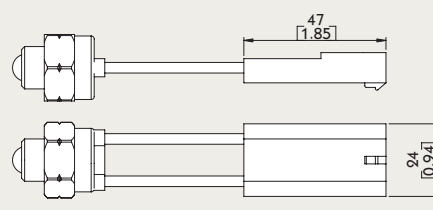
MICROSWITCH WITH MALE/FEMALE CONNECTOR, OPERATED IN POS. 2



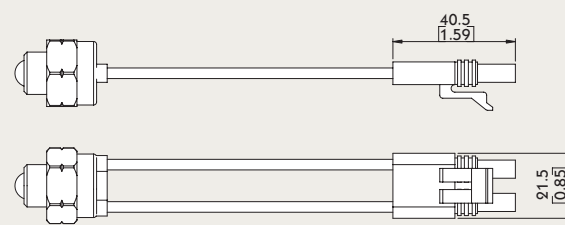
#### 8MG3 Kit:

MICROSWITCH WITH MALE/FEMALE CONNECTOR, OPERATED IN POS. 1 AND POS. 2

#### With NO contact (female connector with male end)



#### With NC contact (male connector with female end)

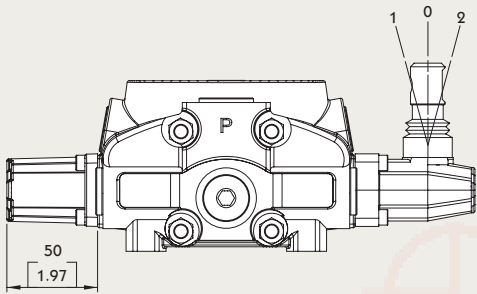




# SN-4 B Side

## Sectional Directional Control Valves

### Type 8



#### 8 Kit:

SPRING RETURN TO NEUTRAL POSITION



#### 8-1 Kit:

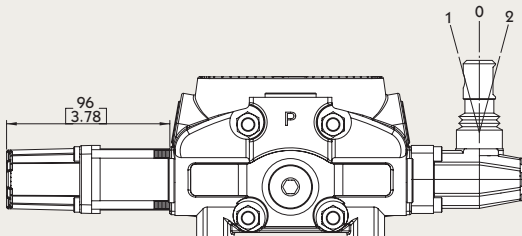
SPRING RETURN TO NEUTRAL POSITION.  
(2 POSITIONS)



#### 8-2 Kit:

SPRING RETURN TO NEUTRAL POSITION.  
(2 POSITIONS)

### Type 9



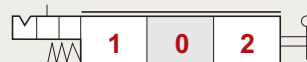
#### 9-1 Kit:

DETENT IN POS. 1, 2 WITH SPRING CENTERED



#### 9-2 Kit:

DETENT IN POS. 2 WITH SPRING CENTERED



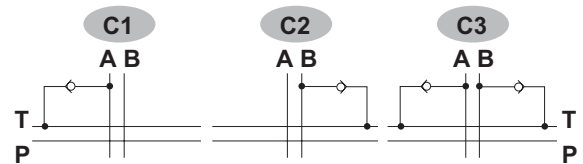
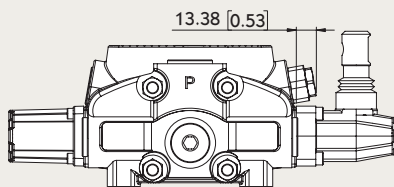
#### 9-3 Kit:

DETENT IN POS. 1 WITH SPRING CENTERED

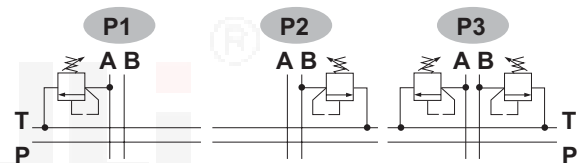
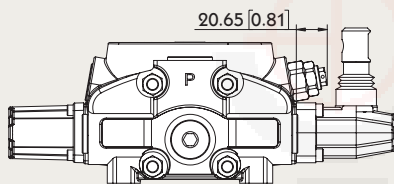
# SN-4 Port Relief

## Sectional Directional Control Valves

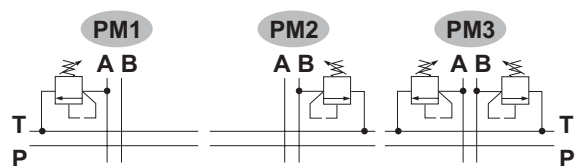
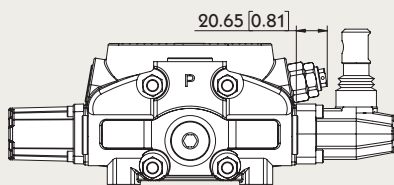
### TYPE C



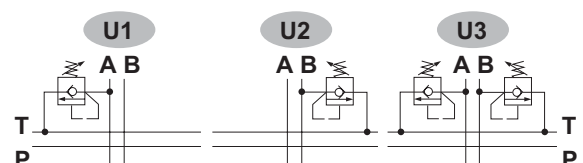
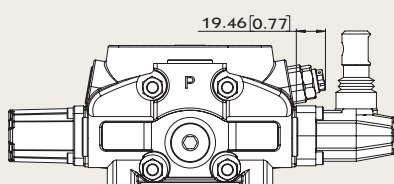
### TYPE P



### TYPE PM



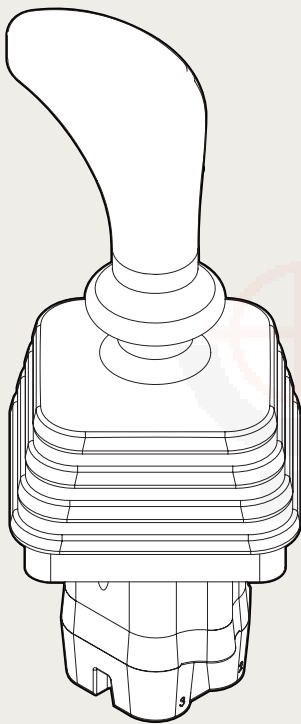
### TYPE U



# SN-4 Accessories

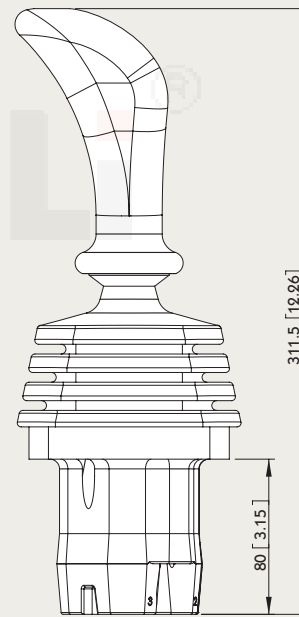
## Sectional Directional Control Valves

### Type JHP-2

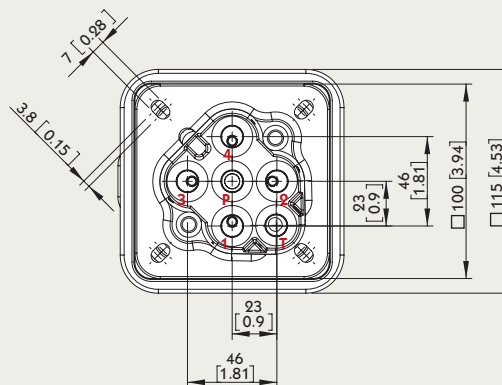
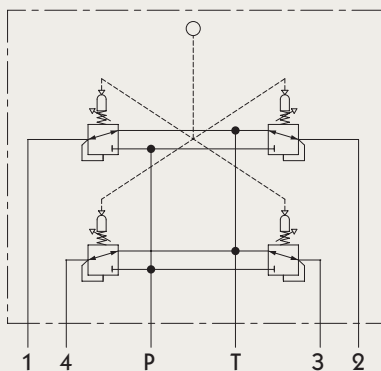


#### Specifications:

- This data sheet shows technical spec. with mineral oil of 46 mm<sup>2</sup>/s (cSt) viscosity at 40 °C (104 °F)
- Flow : 5 ~ 20 LPM
- Feeding pressure : 30 ~ 100 bar
- Max. backpressure : 3 bar
- Internal leakage at 30 bar : 10 ~ 18 cm<sup>3</sup>/min
- Fluid : mineral oil
- Fluid temperature : - 10 ~ 80 °C
- Ambient temperature : - 40 ~ 60 °C



#### HYDRAULIC SCHEME:



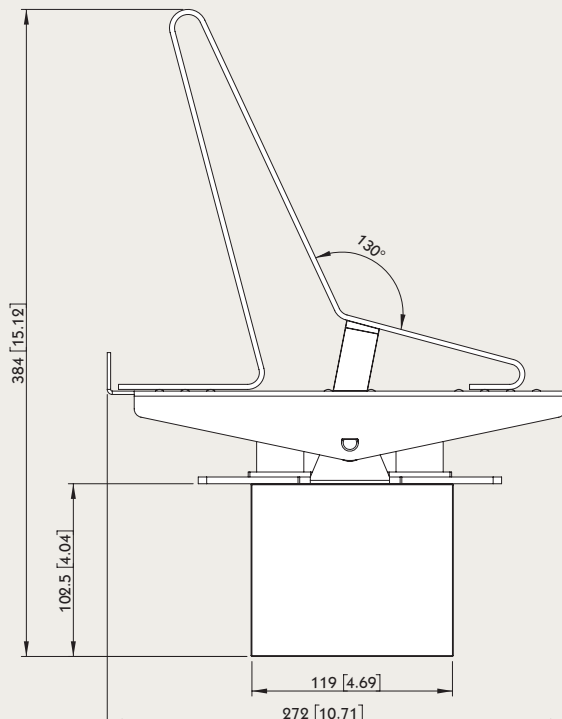
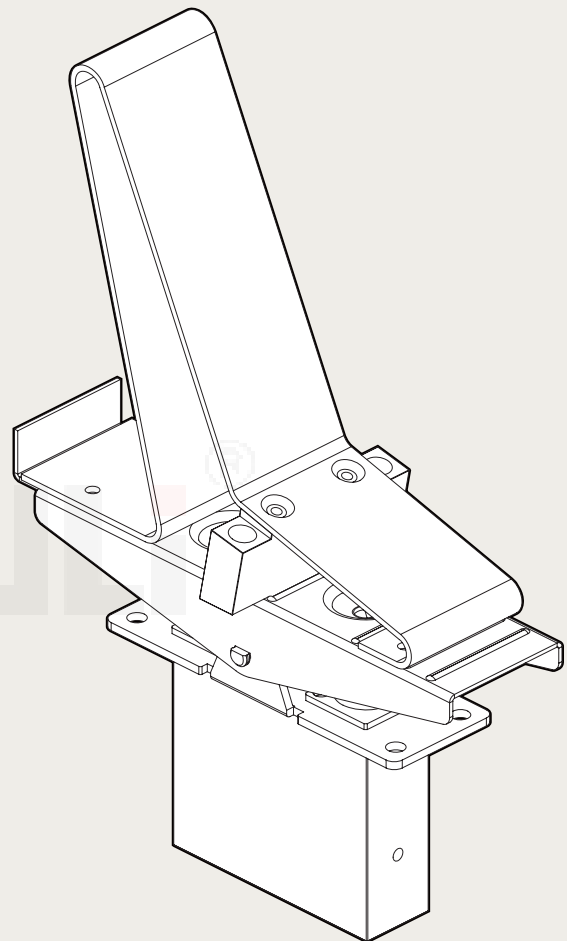
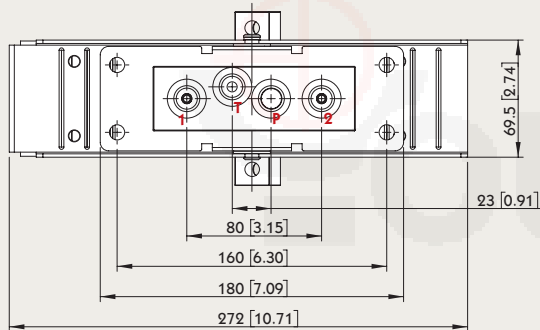
# SN-4 Accessories

## Sectional Directional Control Valves

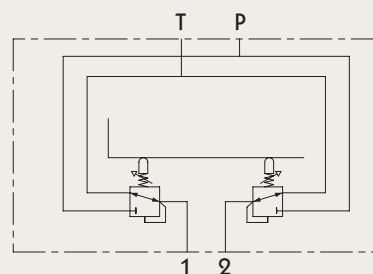
### Type PHP-1

#### Specifications:

- This data sheet shows technical spec. with mineral oil of 46 mm<sup>2</sup>/s (cSt) viscosity at 40 °C (104 °F)
- Flow : 5 ~ 20 LPM
- Feeding pressure : 30 ~ 100 bar
- Max. backpressure : 3 bar
- Internal leakage at 30 bar : 10 ~ 18 cm<sup>3</sup>/min
- Fluid : mineral oil
- Fluid temperature : - 10 ~ 80 °C
- Ambient temperature : - 40 ~ 60 °C



#### HYDRAULIC SCHEME:



# SN-4 Outlet

## Sectional Directional Control Valves

Power Beyond Conversion plug  
(Closed center plug)

