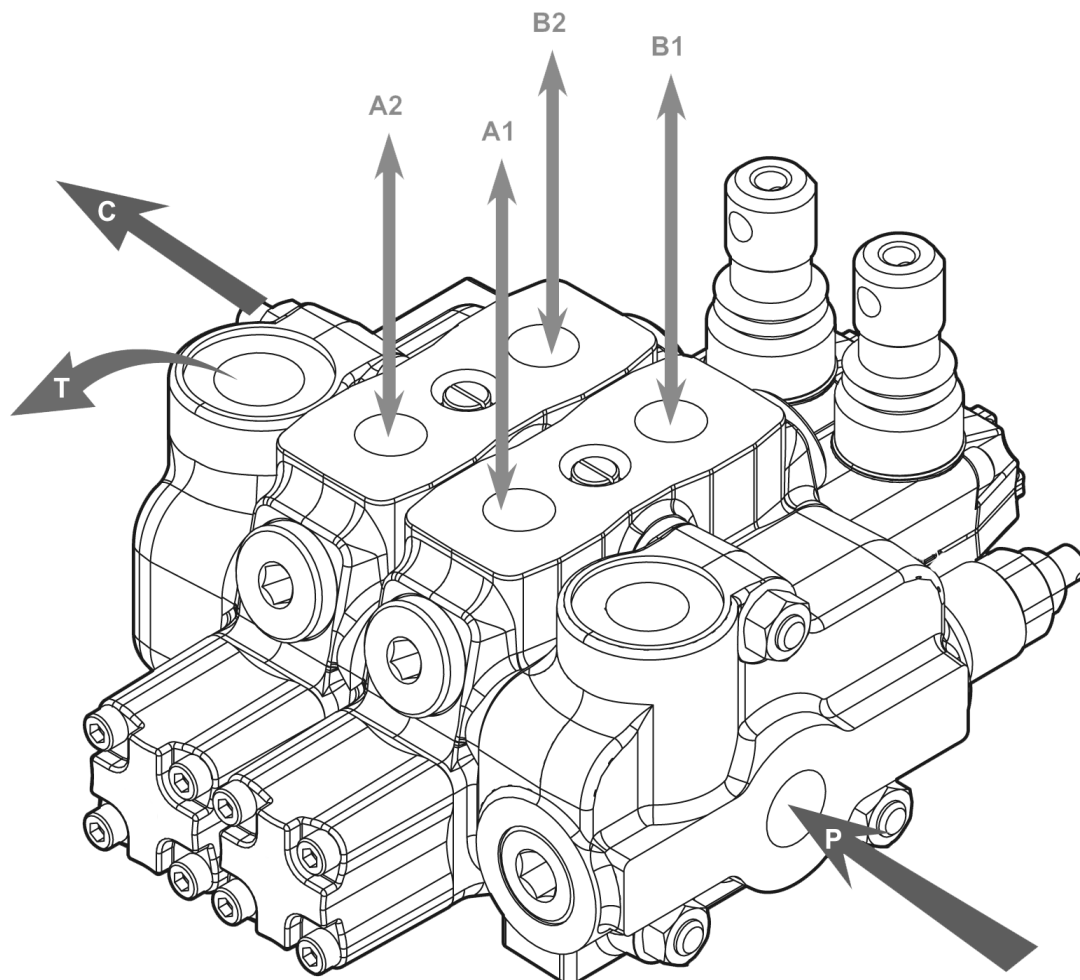


# VS3

## Sectional Directional Control Valves



### VS3 Specifications

Nominal flow rate		50 l/min	13 US gpm
Operating pressure (maximum)	parallel or tandem circuit	315 bar	4600 psi
	series circuit	210 bar	3050 psi
Back pressure (maximum)	on outlet port T	25 bar	360 psi
Fluid temperature range	with NBR(BUNA-N) seals	from -20°C to 80°C	from -4° to 176° F
	with FPM(VITON) seal	from -20°C 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°C to 60°C	from -40° to 140° F

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

# VS3 Complete

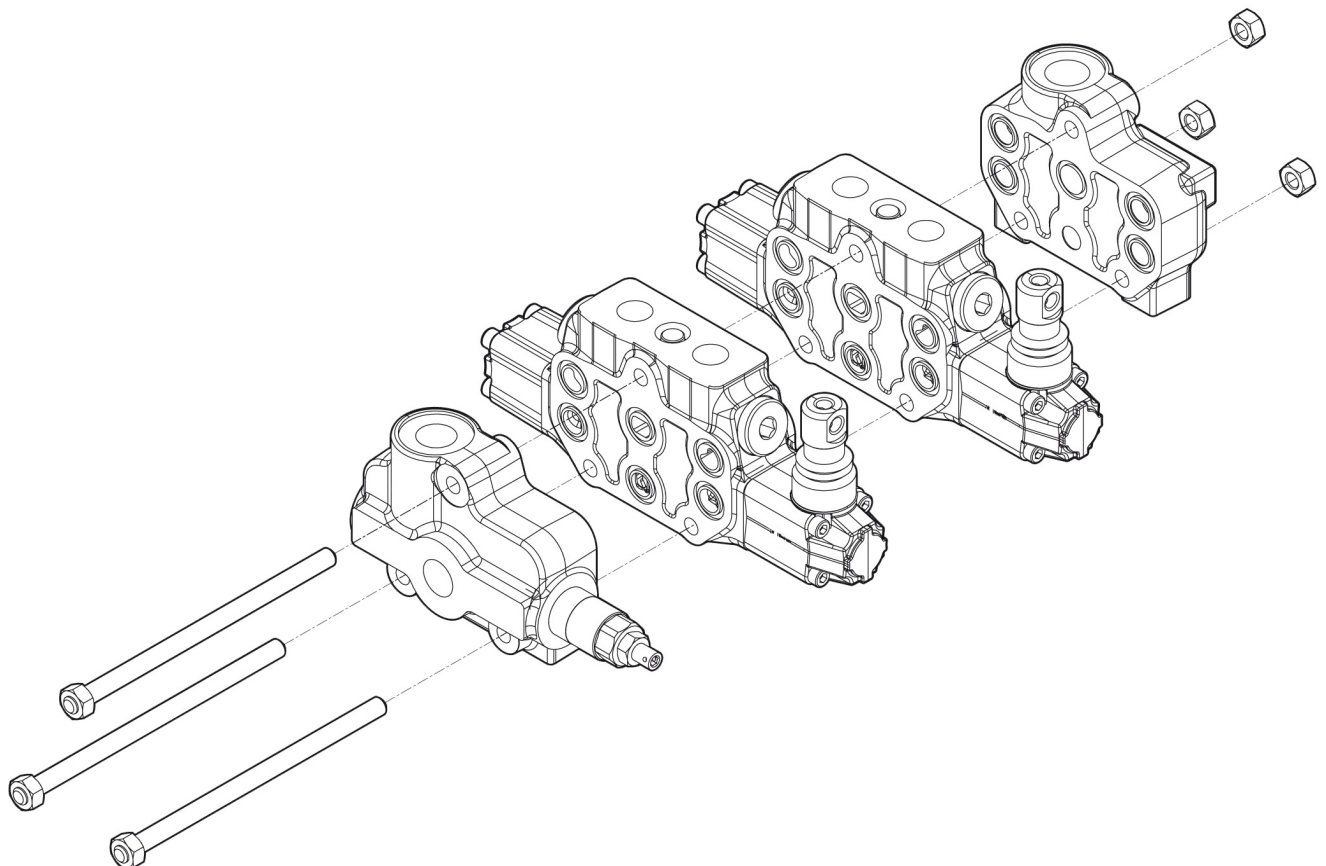
## Sectional Directional Control Valves

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### HOW TO ORDER FOR A COMPLETE ASSEMBLED VALVE

VS3 / 2S - 3 / 18L / 28L / G-3-4 / M3

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



# VS3 Inlet Section

## Sectional Directional Control Valves

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FP VS3 / YG-3 / G3

Inlet relief

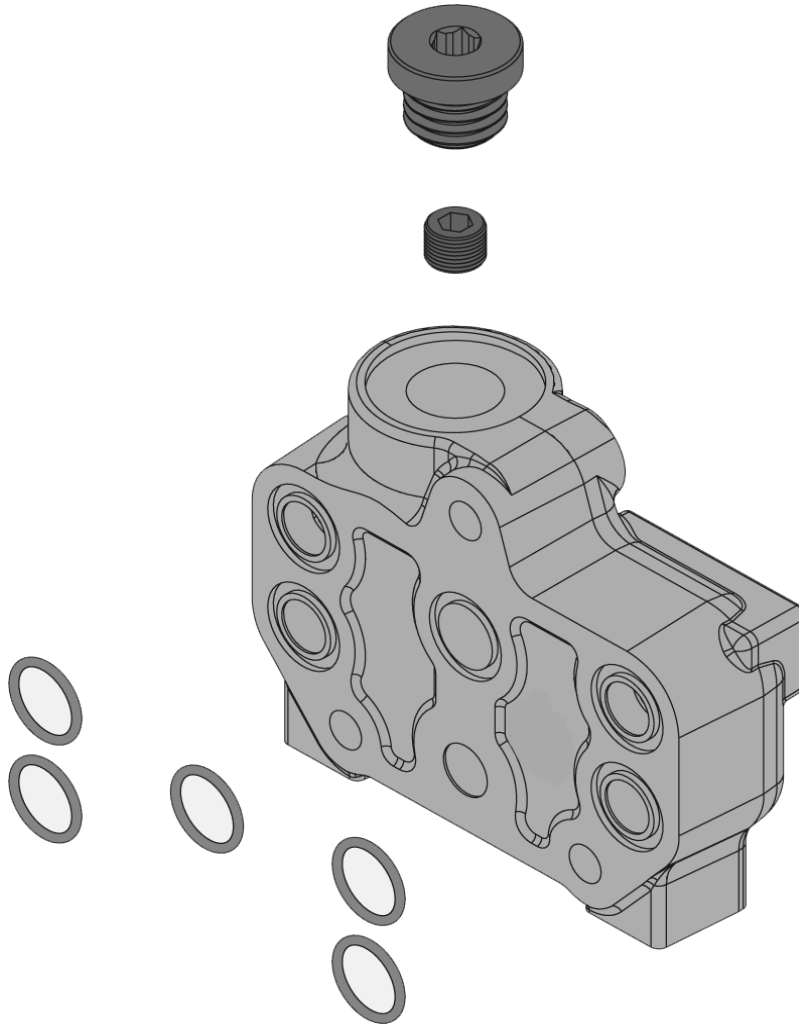
Inlet Relief		
TYPE	CODE	DESCRIPTION
YG-2	VS33002	Range 40 to 80 bar / 1150 to 2300 psi, standard setting 125 bar / 1800 psi
YG-3	VS33003	Range 63 to 200 bar / 1800 to 3600 psi, standard setting 175 bar / 2500 psi
YG-4	VS33004	Range 160 to 315 bar / 2900 to 4600 psi, standard setting 220 bar / 3200 psi Standard setting is referred to 10 l/min - 2.6 US gpm flow.
SV	VS34000	Relief valve blanking plug
XYG	VS33000	Pilot operated pressure relief valve Range 25 to 315 bar/360 to 4600 psi, standard setting 125 bar/1800 psi

# VS3 Outlet Section

## Sectional Directional Control Valves

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FT VS3 / G-4 / M3



# VS3 Working Section

## Sectional Directional Control Valves

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EW VS3 / 1S / **1 8 L** / **P1 (G3-100)** / G-3  
                           **1 2 3**                           **4**

- 1** Spool options
- 2** "B" side Spool positioners
- 3** "A" side controls
- 4** Port relief

1: Spool Symbol		
TYPE	CODE	DESCRIPTION
1	VS32001	Double acting, 3 positions, with A and B closed in neutral position
1S	VS32010	Double acting, 3 positions, with A and B closed in neutral position, for series circuit
2	VS32002	Double acting, 3 positions, with A and B open to tank in neutral position
3	VS32003	Single acting on A closed in neutral position, 3 positions, B plugged
4	VS32004	Single acting on B closed in neutral position, 3 positions, A plugged
5	VS32005	Double acting, 3 positions, with B open to Tank in neutral position
6	VS32006	Double acting, 3 positions, with A open to Tank in neutral position
5PY	VS33051	Double acting, 4 positions, floating circuit in 4th position with A, B open to Tank by pushing the lever
2H	VS32020	Double acting with A, B open partially to Tank in neutral

# VS3 Working Section

## Sectional Directional Control Valves

EW VS3 / 1S / **1 8 L** / **P1 (G3-100)** / G-3  
                           **1 2 3**                                   **4**

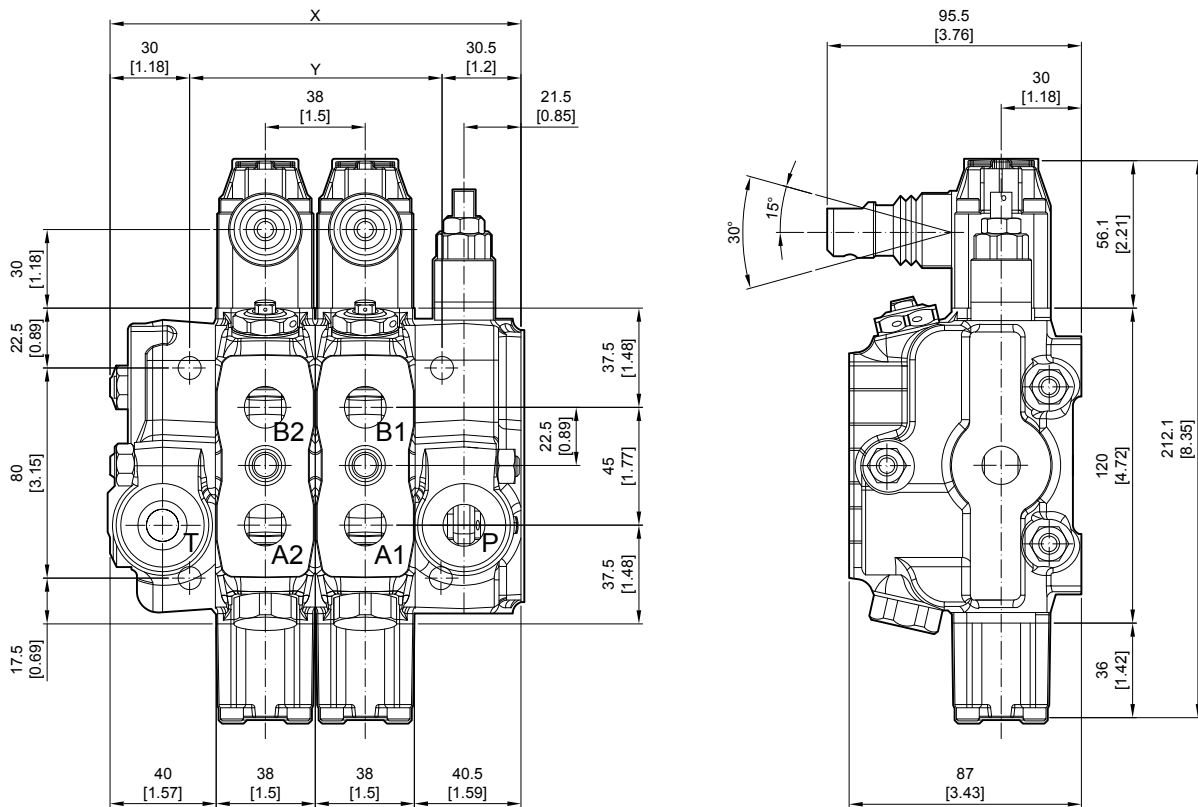
- 1** Spool options
- 2** "B" side Spool positioners
- 3** "A" side controls
- 4** Port relief

2: B Side Spool Positioners		
TYPE	CODE	DESCRIPTION
6-1	VS33061	Detent in pos. 1-0-2, without spring centered
6-2	VS33062	2 positions, detent in pos. 0-2, without spring centered
6-3	VS33063	2 positions, detent in pos. 1-0, without spring centered
8D2	VS33082	With spring return to neutral position and pin with M8 male thread for dual control
8P	VS33080	ON/OFF Pneumatic actuator
8EP3	VS34300	ON/OFF Electro-Pneumatic actuator
8MG1 (NO)	VS34801	Microswitch kit operated in pos. 1 (Normally Open)
8MG2 (NO)	VS34802	Microswitch kit operated in pos. 2 (Normally Open)
8MG3 (NO)	VS34803	Microswitch kit operated in pos. 1&2 (Normally Open)
MG(NO)	VS34804	Microswitch with NO terminal
8MG1 (NC)	VS348011	Microswitch kit operated in pos. 1 (Normally Closed)
8MG2 (NC)	VS348021	Microswitch kit operated in pos. 2 (Normally Closed)
8MG3 (NC)	VS348031	Microswitch kit operated in pos. 1&2 (Normally Closed)
MG(NC)	VS348041	Microswitch with NC terminal
8	VS33008	With spring return to neutral position
8-1	VS34081	2 positions, with spring centered from pos. 1
8-2	VS34082	2 positions, with spring centered from pos. 2
9-1	VS33091	Detent in pos. 1, 2 with spring centered
9-2	VS33092	Detent in pos. 2 with spring centered
9-3	VS33093	Detent in pos. 1 with spring centered

<b>2: B Side Spool Positioners</b>		
<b>TYPE</b>	<b>CODE</b>	<b>DESCRIPTION</b>
8ED3+RV-KE1R3	VS34201	1S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC)
8ED3+RV-KE2R3	VS34202	2S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC)
8ED3+RV-KE3R3	VS34203	3S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC)
8ED3+RV-KE4R3	VS34204	4S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC)
8ED3+RV-KE5R3	VS34205	5S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC)
8ED3+RV-KE6R3	VS34206	6S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC)
8ED3+RV-KE7R3	VS34207	7S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC)
8ED3+RV-KE8R3	VS34208	8S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC)
8ED3+RV-KE9R3	VS34209	9S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC)
8ED3+RV-KE10R3	VS34210	10S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC)
8ED3+RV-KE11R3	VS34211	11S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC)
8ED3+RV-KE12R3	VS34212	12S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC)
8ER3+KE1SO	VS33401	1S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain
8ER3+KE2SO	VS33402	2S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain
8ER3+KE3SO	VS33403	3S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain
8ER3+KE4SO	VS33404	4S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain
8ER3+KE5SO	VS33405	5S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain
8ER3+KE6SO	VS33406	6S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain
8ER3+KE7SO	VS33407	7S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain
8ER3+KE8SO	VS33408	8S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain
8ER3+KE9SO	VS33409	9S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain
8ER3+KE10SO	VS33410	10S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain
8ER3+KE11SO	VS33411	11S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain
8ER3+KE12SO	VS33412	12S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain
<b>3: A Side controls</b>		
<b>TYPE</b>	<b>CODE</b>	<b>DESCRIPTION</b>
L	VS34000	Standard lever
SLP	VS34003	Without lever, with dust proof plate
LCB	VS34002	Joystick lever for 2 section operation
TQ	VS34004	Flexible cable connection
<b>4: Port Relief</b>		
<b>TYPE</b>	<b>CODE</b>	<b>DESCRIPTION</b>
P (G2-63)	VS35002	Anti-shock valve, range 63 to 125 bar / from 900 to 1800 psi standard setting 63 bar / 900 psi
P (G3-100)	VS35003	Anti-shock valve, range 100 to 250 bar / from 1450 to 3600 psi standard setting 100 bar / 1450 psi
P (G4-200)	VS35004	Anti-shock valve, range 200 to 315 bar / from 2900 to 4600 psi standard setting 200 bar / 2900 psi
U (G2-63)	VS35012	Anti-shock valve and Anti-cavitation valve, range 63 to 125 bar / from 900 to 1800 psi standard setting 63 bar / 900 psi
U (G3-100)	VS35013	Anti-shock valve and Anti-cavitation valve, range 100 to 250 bar / from 1450 to 3600 psi standard setting 100 bar / 1450 psi
U (G4-200)	VS35014	Anti-shock valve and Anti-cavitation valve, range 200 to 315 bar / from 2900 to 4600 psi standard setting 200 bar / 2900 psi
C	VS35100	Anti-cavitation

# VS3 Dimensions

## Sectional Directional Control Valves



### Standard threads

Ports	BSP	A and B	METRIC
P	G 3/8	7/8-14 (SAE 10)	M18 x 1.5
A and B	G 3/8	3/4-16 (SAE 8)	M18 x 1.5
T and C	G 1/2	7/8-14 (SAE 10)	M22 x 1.5

• G-1/2 : G4 G-3/8 : G3 G-3/4 : G6

• SAE 8 : E8 SAE 10 : E10 SAE 12 : E12 SAE 16 : E16

### Standard dimensions

TYPE	X		Y	
	mm	in	mm	in
VS3/1S	118.5	4.66	58	2.28
VS3/2S	156.5	6.16	96	3.78
VS3/3S	194.5	7.66	134	5.28
VS3/4S	232.5	9.15	172	6.77
VS3/5S	270.5	10.65	210	8.27
VS3/6S	308.5	12.15	248	9.76

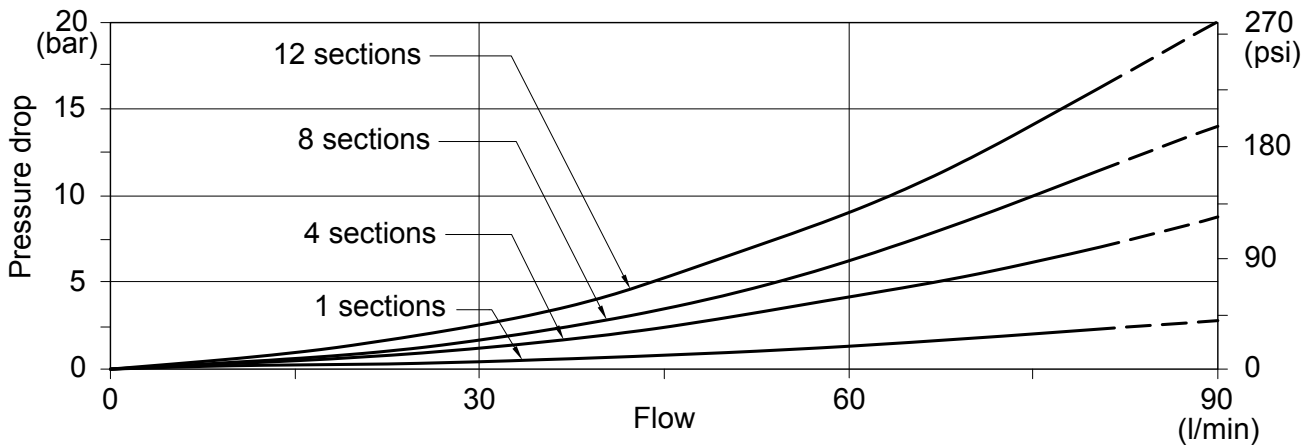
TYPE	X		Y	
	mm	in	mm	in
VS3/7S	346.5	13.65	286	11.26
VS3/8S	384.5	15.15	324	12.76
VS3/9S	422.5	16.65	362	14.26
VS3/10S	460.5	18.15	400	15.76
VS3/11S	498.5	19.65	438	17.26
VS3/12S	536.5	21.15	476	18.76



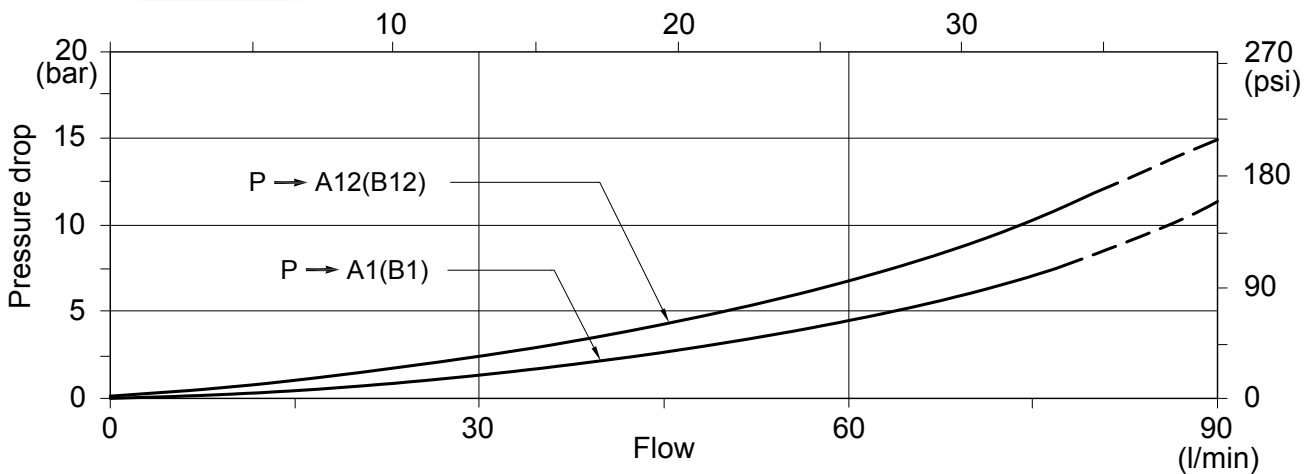
# VS3 Performance Curve Chart

## Sectional Directional Control Valves

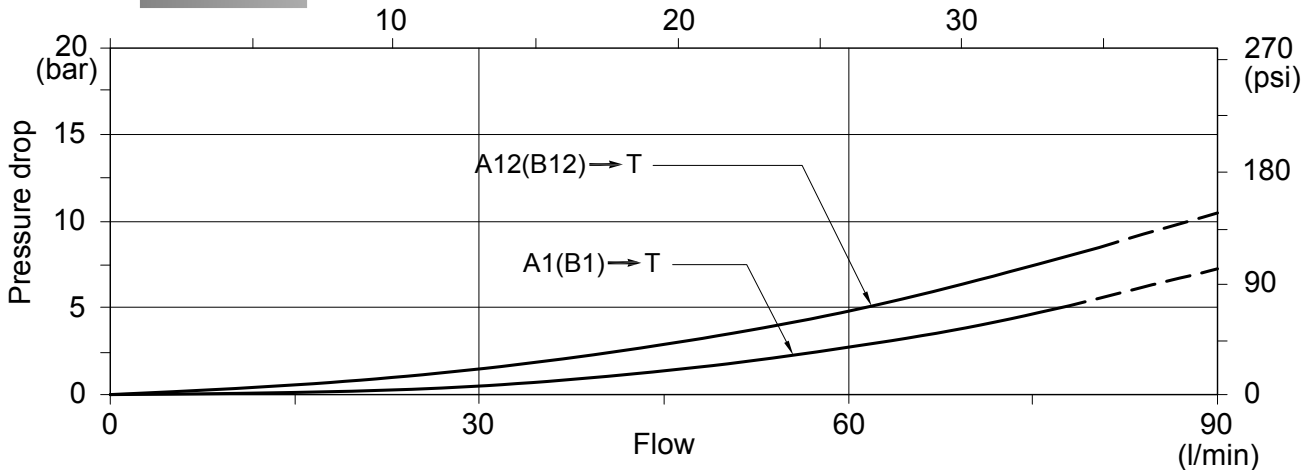
**P to T**



**P to A (B)**

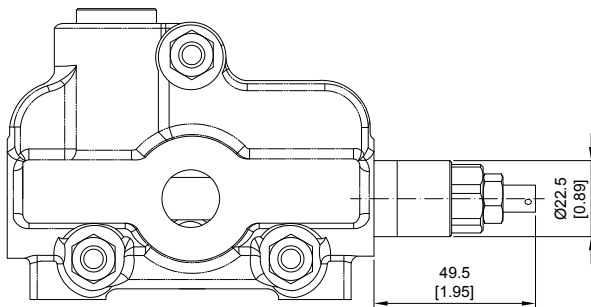


**A(B) to T**

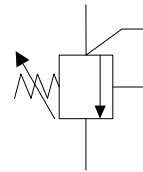


# VS3 Inlet Relief (Optional) Sectional Directional Control Valves

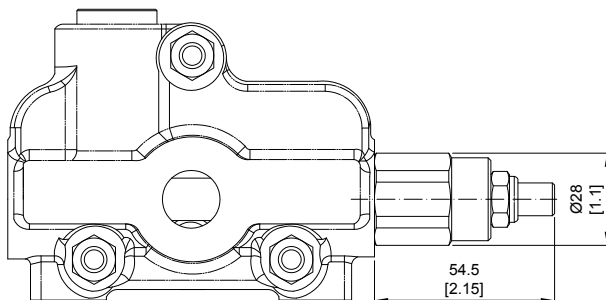
## Type YG



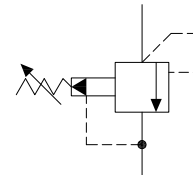
Direct pressure relief valve:



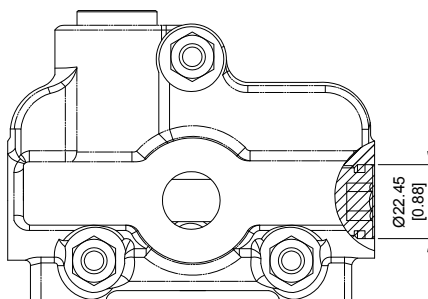
## Type XYG



Pilot operated pressure relief valve:



## Type SV



Relief valve blanking plug:



# VS3 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>	

# VS3 Spool Options

## Sectional Directional Control Valves

TYPE 3		
	<p>P → A C closed</p>	<p>1 0 2 "B" port plugged</p>
	<p>P &amp; T &amp; A &amp; B closed C open</p>	<p>1 0 2 "B" port plugged</p>
	<p>A → T C open</p>	<p>1 0 2 "B" port plugged</p>
TYPE 4		
	<p>B → T C open</p>	<p>1 0 2 "A" port plugged</p>
	<p>P &amp; T &amp; B closed C open</p>	<p>1 0 2 "A" port plugged</p>
	<p>P → B C closed</p>	<p>1 0 2 "A" port plugged</p>

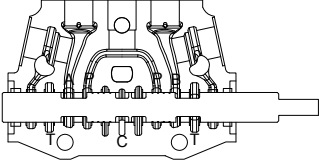
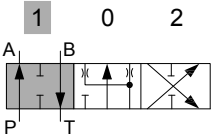
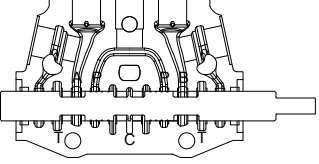
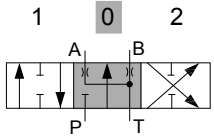
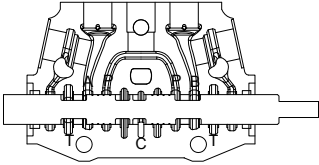
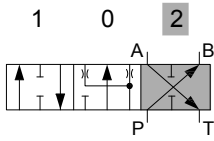
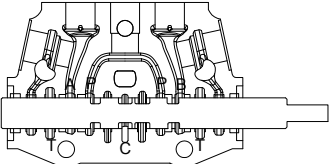
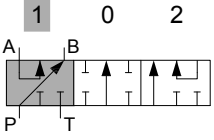
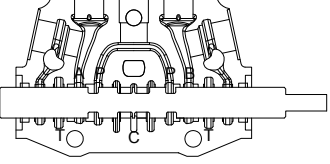
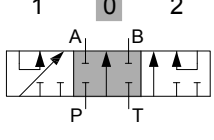
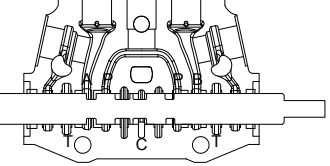
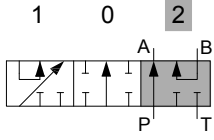
# VS3 Spool Options

## Sectional Directional Control Valves

TYPE 5		
	<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>	
TYPE 6		
	<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>	

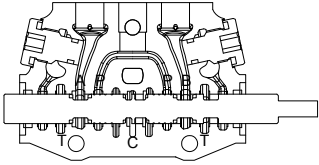
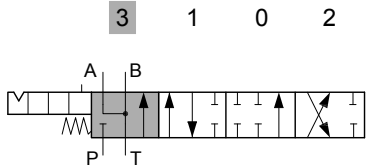
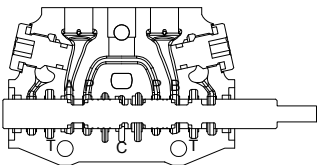
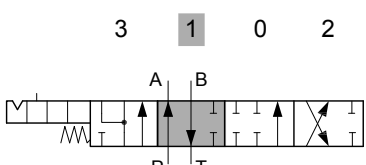
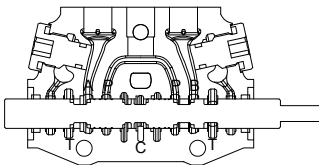
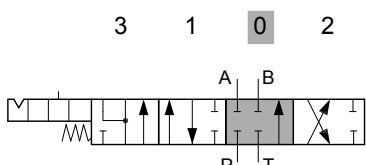
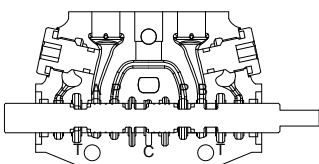
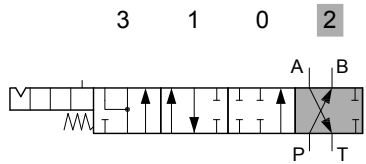
# VS3 Spool Options

## Sectional Directional Control Valves

TYPE 2H		
	<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>	
TYPE 1S		
	<p>P → B A → C</p>	 <p>"B" port plugged</p>
	<p>P &amp; T &amp; A &amp; B closed C open</p>	 <p>"B" port plugged</p>
	<p>P → A B → C</p>	 <p>"B" port plugged</p>

# VS3 Spool Options

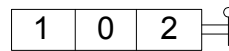
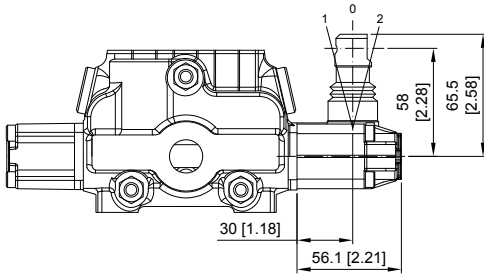
## Sectional Directional Control Valves

TYPE 5PY		NOTE: WITH SPECIAL BODY AND SPECIAL POSITIONER
	<p>A &amp; B → T            P closed            C open</p>	<p>3 1 0 2</p> 
	<p>P → A            B → T            C closed</p>	<p>3 1 0 2</p> 
	<p>P &amp; A &amp; B &amp; T closed            C open</p>	<p>3 1 0 2</p> 
	<p>P → B            A → T            C closed</p>	<p>3 1 0 2</p> 

# VS3 A Side

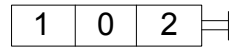
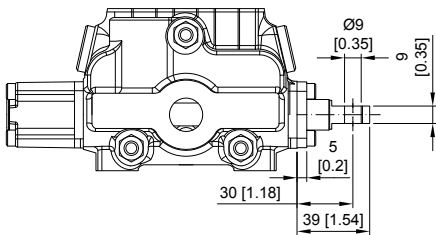
## Sectional Directional Control Valves

### Type L



**Type L:**  
STANDART LEVER KIT

### Type SLP

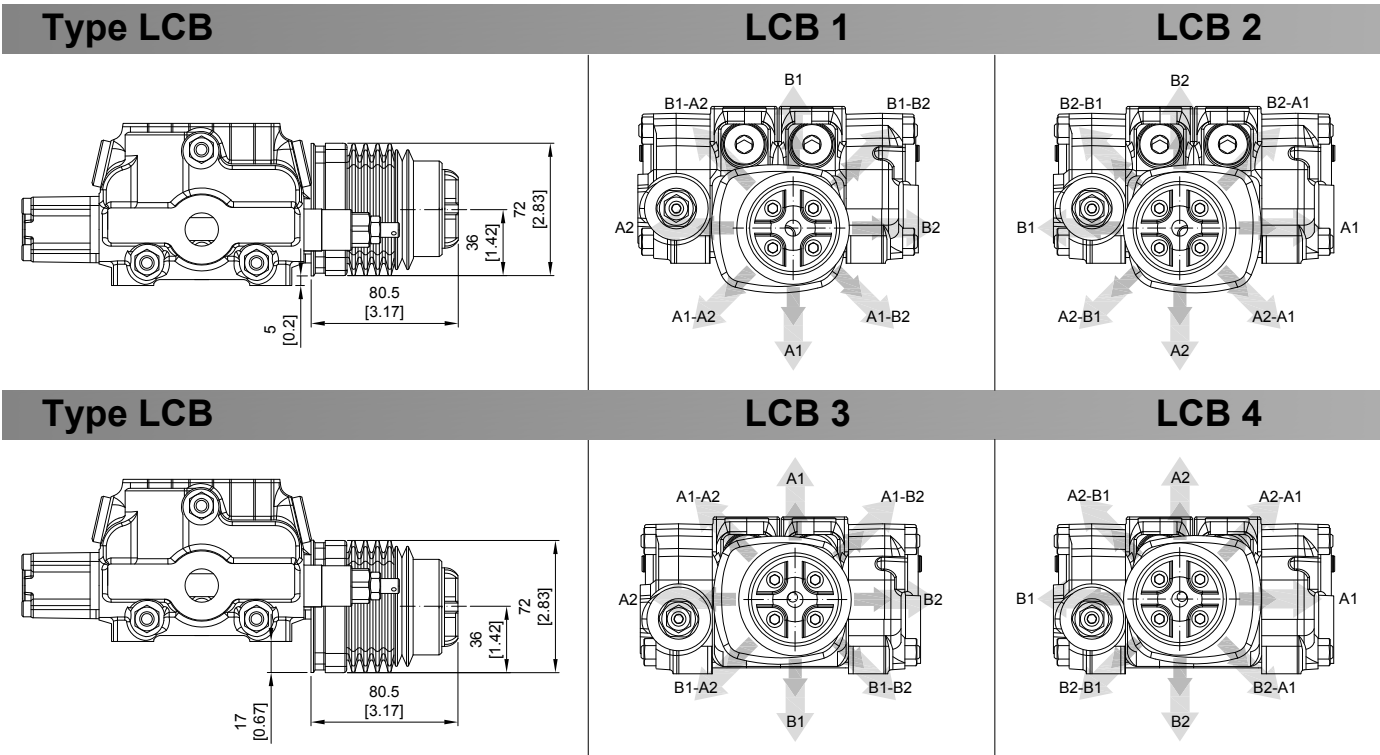
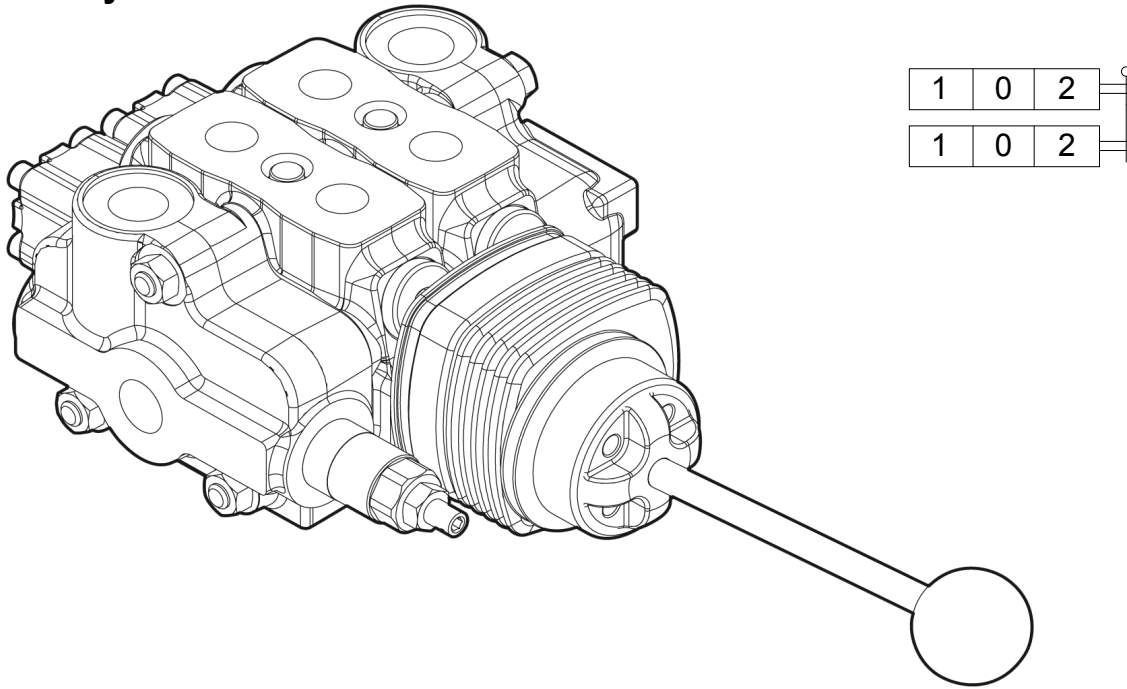


**Type SLP:**  
WITH DUST-PROOF PLATE



# VS3 A Side Sectional Directional Control Valves

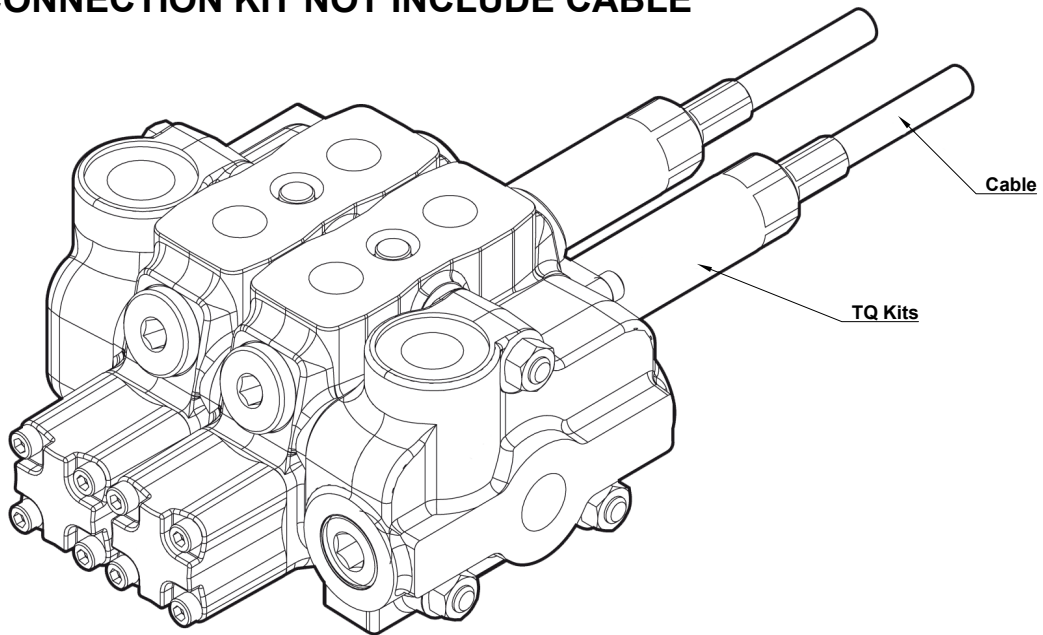
LCB: Joystick control



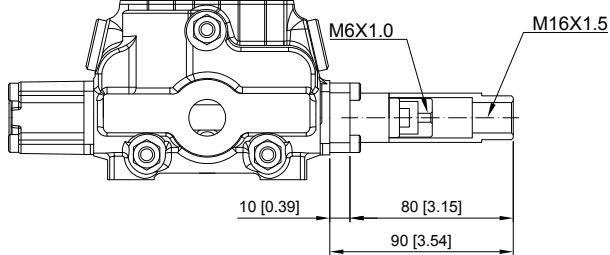
# VS3 A Side

## Sectional Directional Control Valves

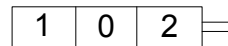
Note : CONNECTION KIT NOT INCLUDE CABLE



### Type TQ



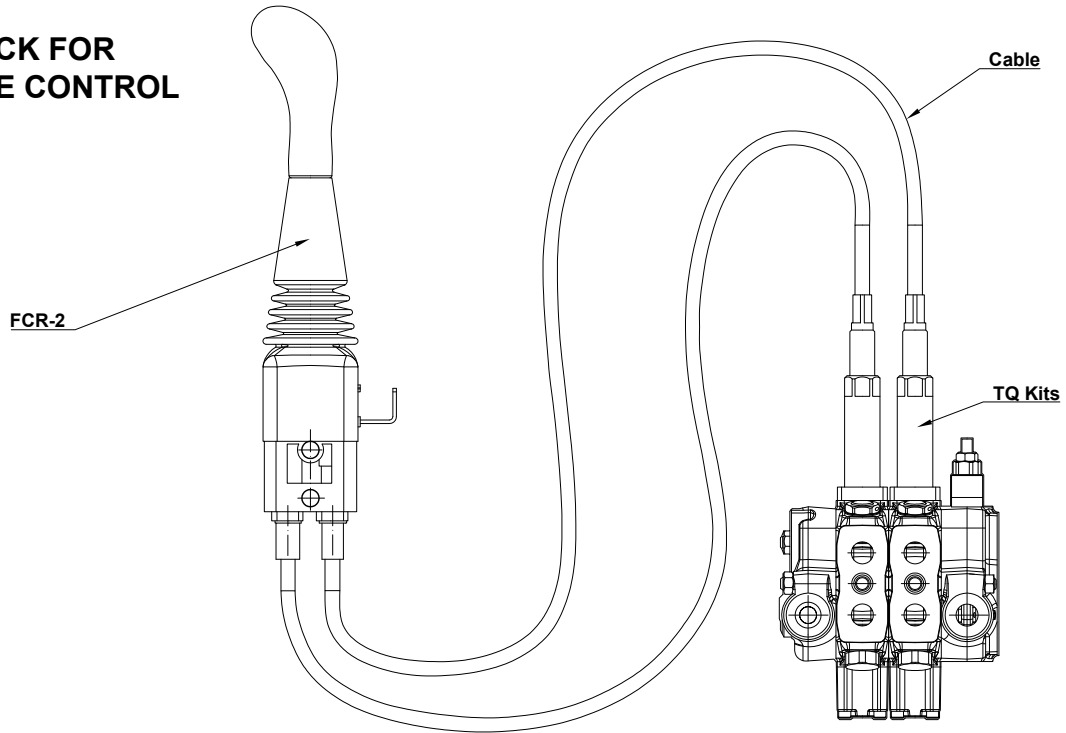
TQ Kit:



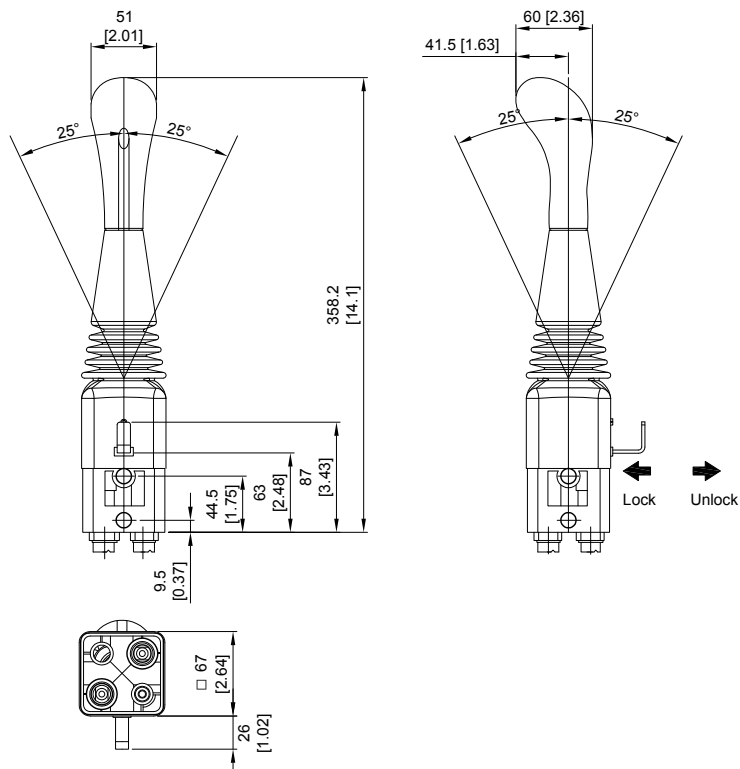
# VS3 A Side

## Sectional Directional Control Valves

**FCR-2:  
JOYSTICK FOR  
REMOTE CONTROL**

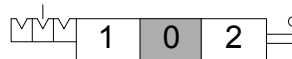
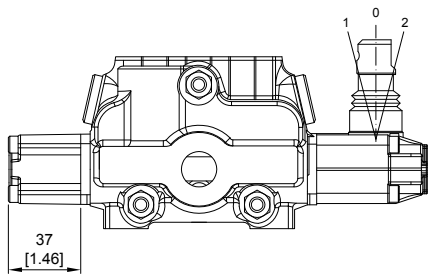


### Type FCR-2



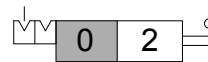
# VS3 B Side Sectional Directional Control Valves

## Type 6



### 6-1 Kit:

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



### 6-2 Kit:

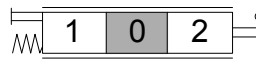
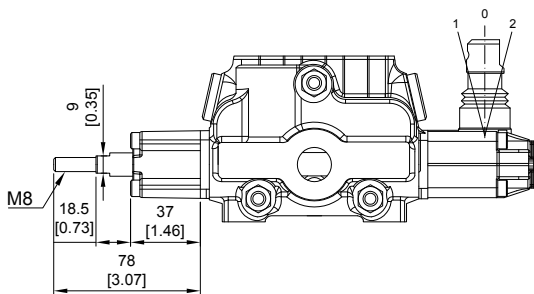
2 POSITIONS, DETENT IN POS. 0-2, WITHOUT SPRING CENTERED



### 6-3 Kit:

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

## Type 8D2



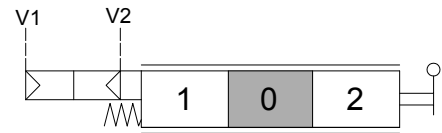
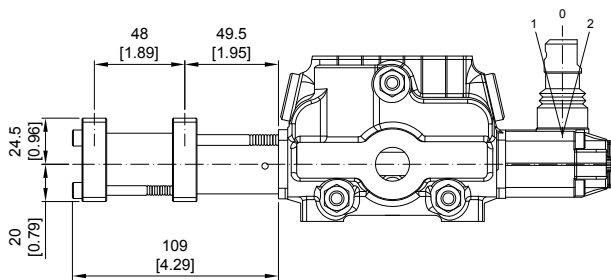
### 8D2 Kit:

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

# VS3 B Side Sectional Directional Control Valves

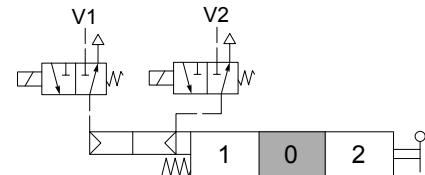
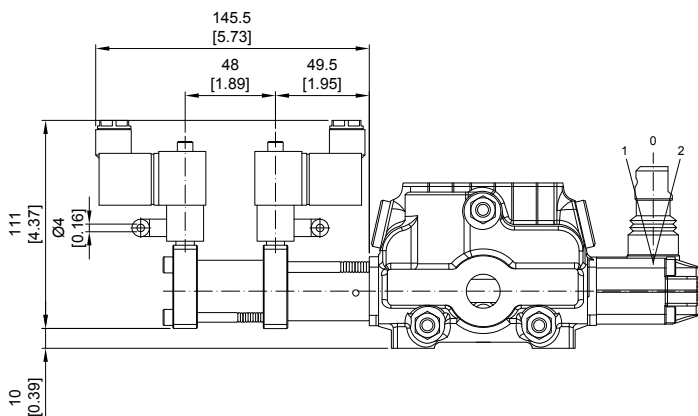
## Type 8P

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

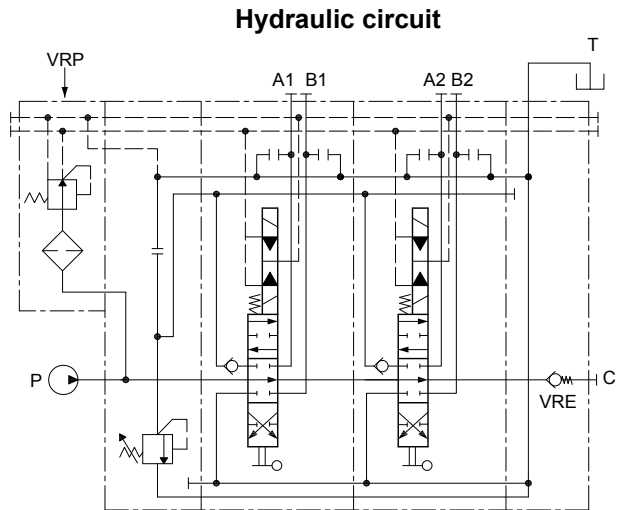
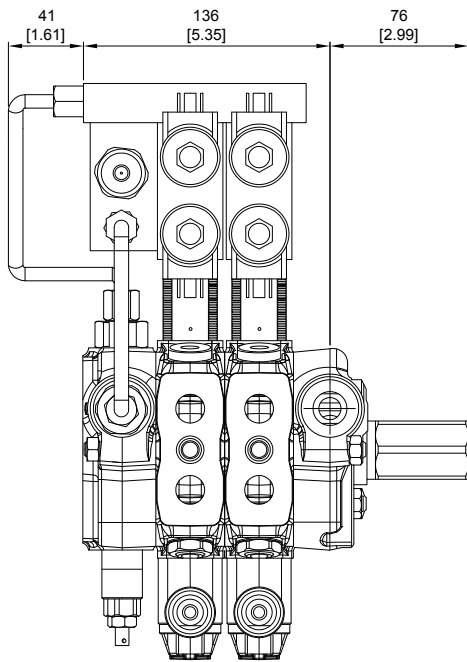
NOMINAL VOLTAGE TOLERANCE:  $\pm 10\%$

POWER RATING: 5W

# VS3 B Side

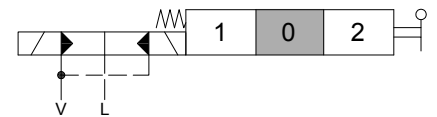
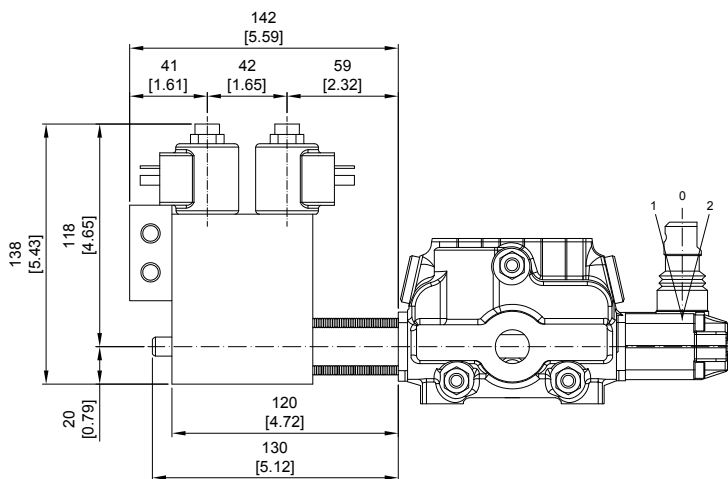
## Sectional Directional Control Valves

### 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 / 360 PSI

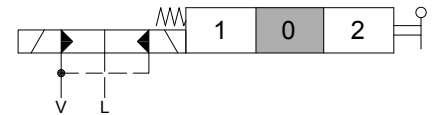
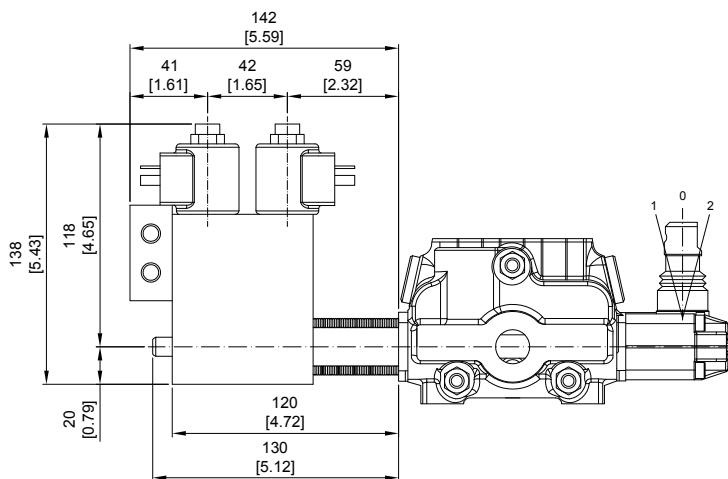
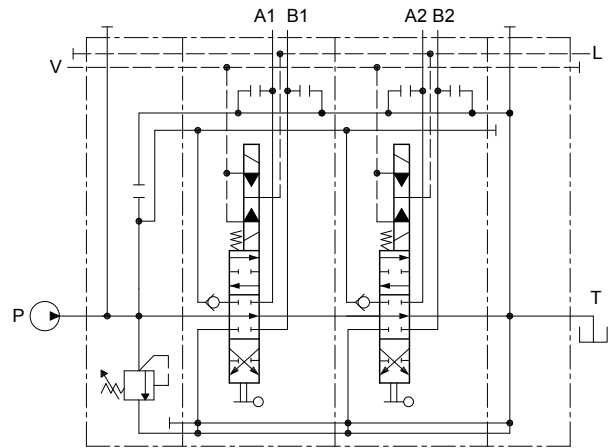
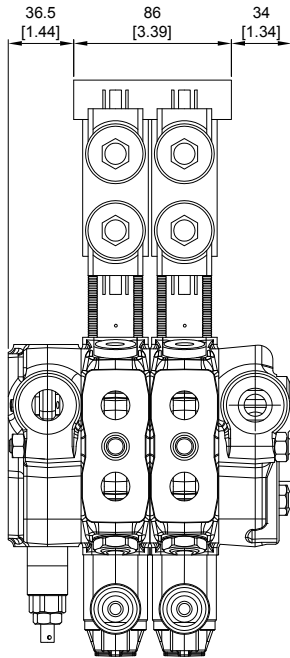
#### Solenoid operating features:

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

# VS3 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 / 360 PSI

#### Solenoid operating features:

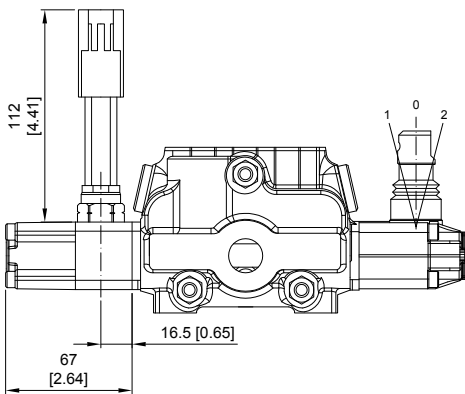
NOMINAL VOLTAGE: 12 VDC / 24 VDC

POWER RATING: 21 W

DUTY CYCLE: 100%

# VS3 B Side Sectional Directional Control Valves

## Type 8MG



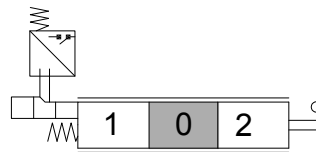
### MICROSWITCH

#### Operating features:

MECHANICAL LITE: • 5X10<sup>5</sup> OPERATIONS

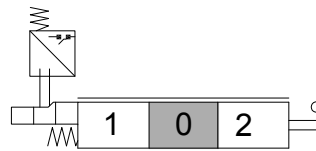
ELECTRICAL LITE (RESISTIVE LOAD):

- 10<sup>5</sup> OPERATIONS - 7A / 13.5 VDC
- 5X10<sup>4</sup> OPERATIONS - 10A / 12 VDC
- 5X10<sup>4</sup> OPERATIONS - 3A / 28 VDC



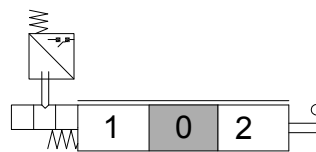
#### 8MG1 Kit:

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



#### 8MG2 Kit:

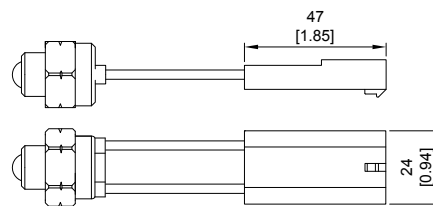
MICROSWITCH WITH MALE/FEMALE CONNECTOR, OPERATED IN POS. 2



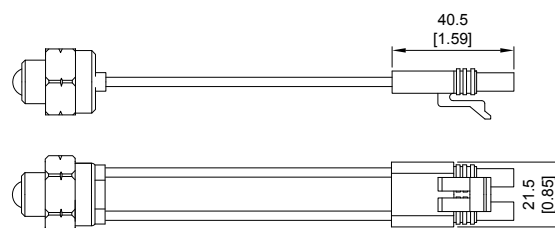
#### 8MG3 Kit:

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

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



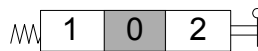
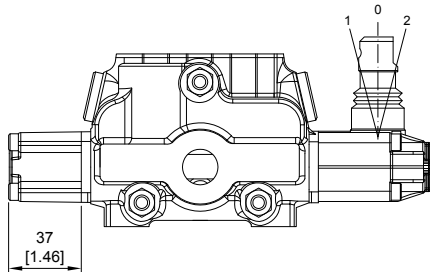
### With NC contact (male connector with female end)





# VS3 B Side Sectional Directional Control Valves

## Type 8



### 8 Kit:

SPRING RETURN TO NEUTRAL POSITION.



### 8-1 Kit:

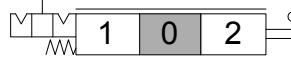
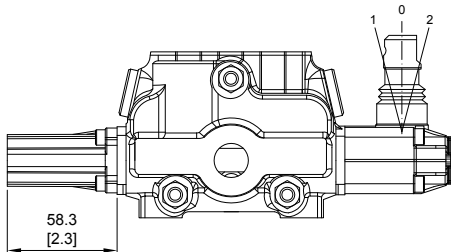
SPRING RETURN TO NEUTRAL POSITION.  
(2 POSITIONS)



### 8-2 Kit:

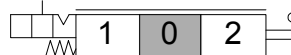
SPRING RETURN TO NEUTRAL POSITION.  
(2 POSITIONS)

## Type 9



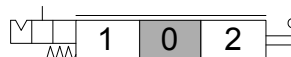
### 9-1 Kit:

DETENT IN POS. 1, 2 WITH SPRING CENTERED



### 9-2 Kit:

DETENT IN POS. 2 WITH SPRING CENTERED



### 9-3 Kit:

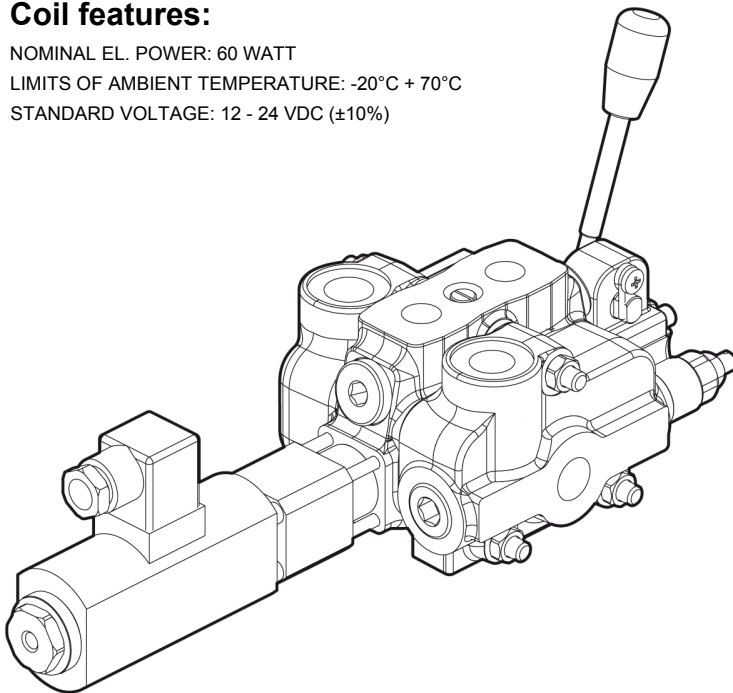
DETENT IN POS. 1 WITH SPRING CENTERED

# VS3 B Side (Optional controls) Sectional Directional Control Valves

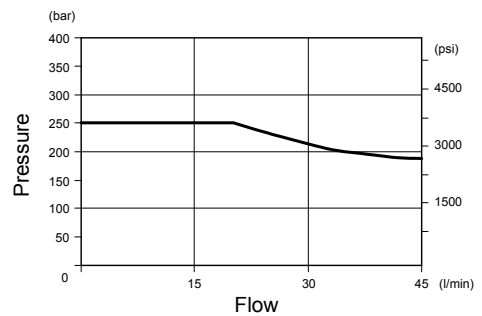
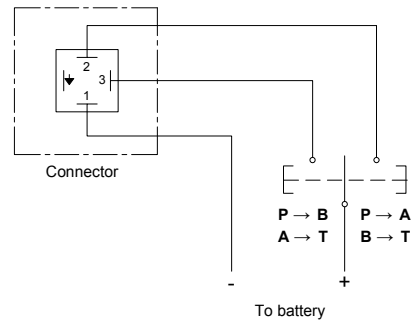
## Type 8

### Coil features:

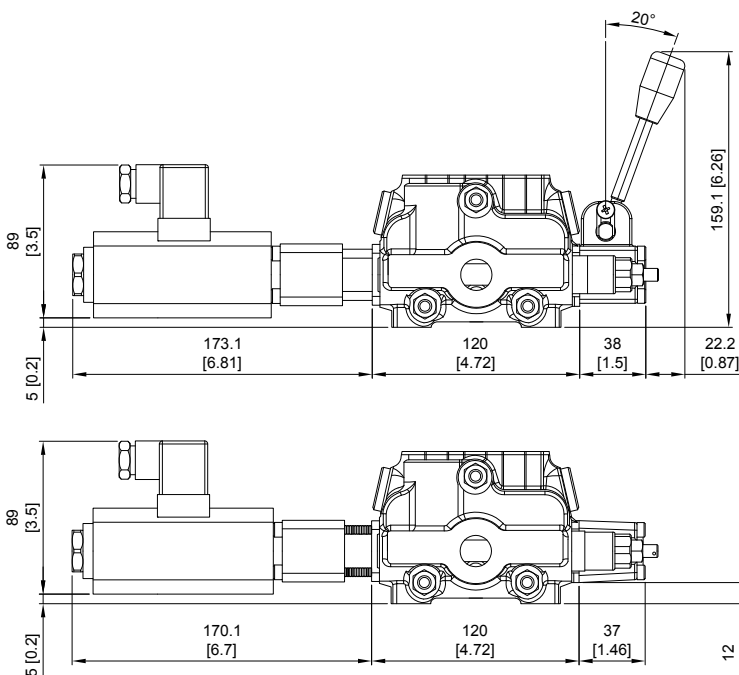
NOMINAL EL. POWER: 60 WATT  
 LIMITS OF AMBIENT TEMPERATURE: -20°C + 70°C  
 STANDARD VOLTAGE: 12 - 24 VDC (±10%)



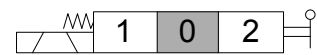
### Electric wiring example



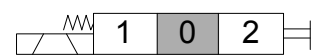
## Type 8ESN



### 8ESNLES Kit:

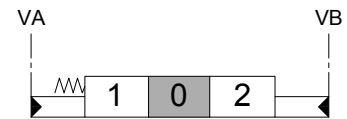
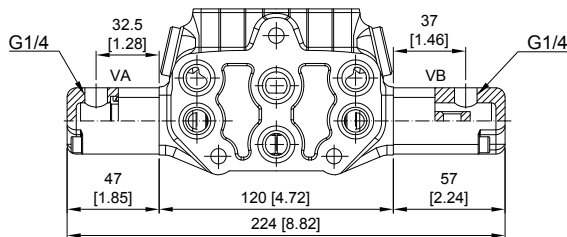


### 8ESNCAE Kit:



# VS3 B Side (Optional controls) Sectional Directional Control Valves

## Type 8IM



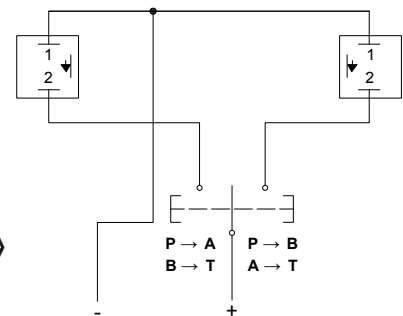
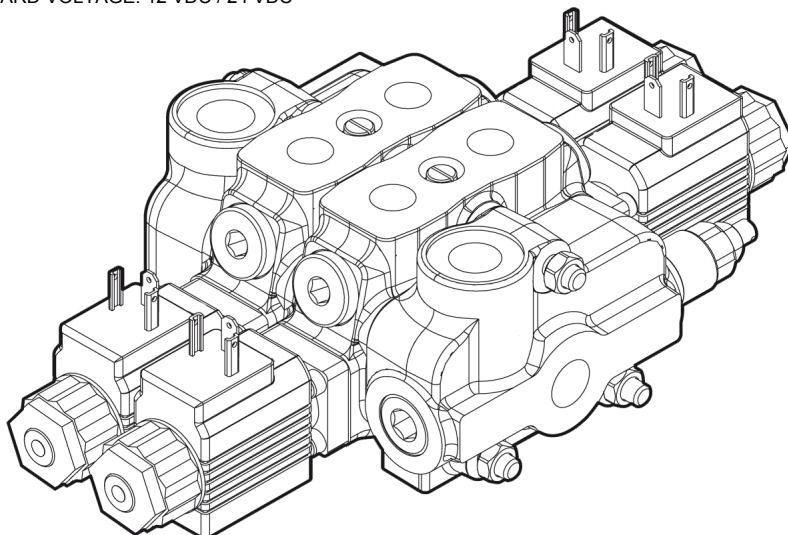
### Operating features:

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

## Type 8ES3

### Coil features:

NOMINAL VOLTAGE TOLERANCE: 10%  
ELECTRIC POWER: 36 W  
STANDARD VOLTAGE: 12 VDC / 24 VDC



# VS3 Special spool (Options for 8ESN Kit)

## Sectional Directional Control Valves

### Type 8ESN#1 (CODE: YLWSN32001-8ESN)

	<p>P → A B → T C closed</p>	<p>1 0 2</p>
	<p>A &amp; B &amp; P &amp; T closed C open</p>	<p>1 0 2</p>
	<p>P → B A → T C closed</p>	<p>1 0 2</p>

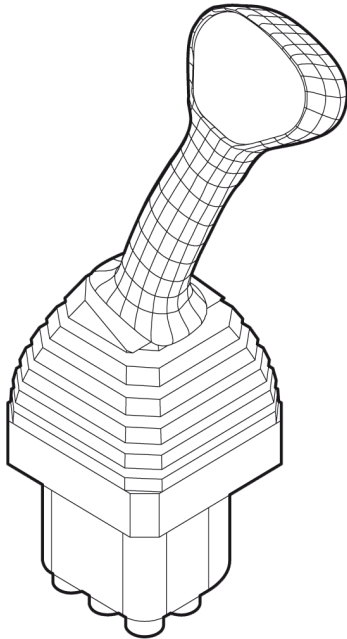
### Type 8ESN#2 (CODE: YLWSN32002-8ESN)

	<p>P → A B → T C closed</p>	<p>1 0 2</p>
	<p>A &amp; B → T P closed C open</p>	<p>1 0 2</p>
	<p>P → B A → T C closed</p>	<p>1 0 2</p>

# VS3 Accessories

## Sectional Directional Control Valves

Type JS

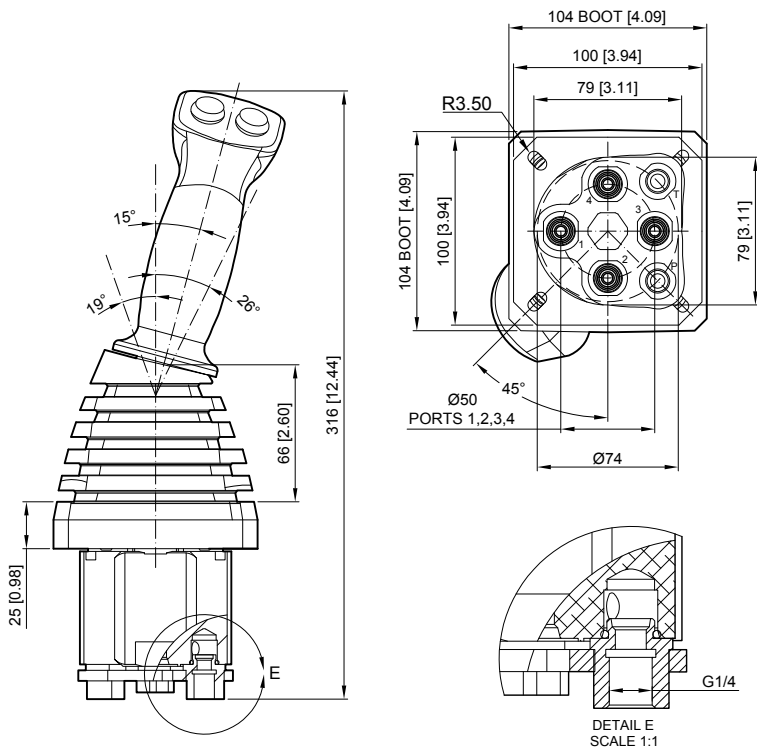


**CODE: VSJS446**

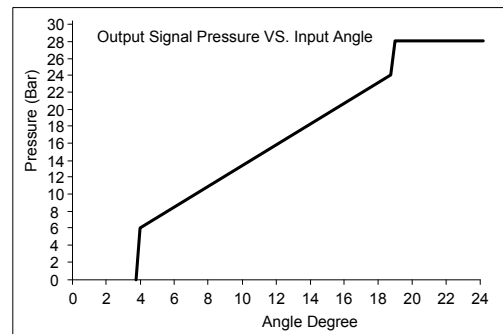
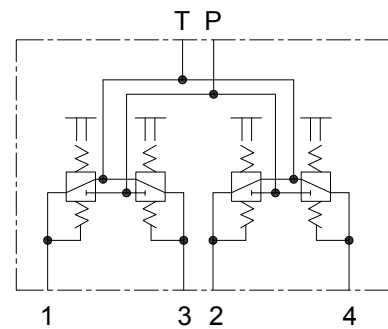
**Hydraulic Pilot Valve - handle type**

**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
- Output pressure: see diagram
- Internal leakage at 30 bar: 18~24 cm<sup>3</sup>/min
- Fluid: mineral oil
- Fluid temperature: -10~80°C
- Ambient temperature: -40~60°C



**HYDRAULIC SCHEME:**



# VS3 Accessories

## Sectional Directional Control Valves

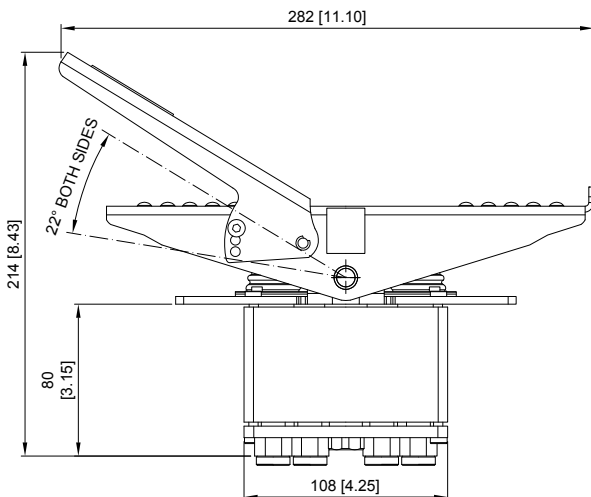
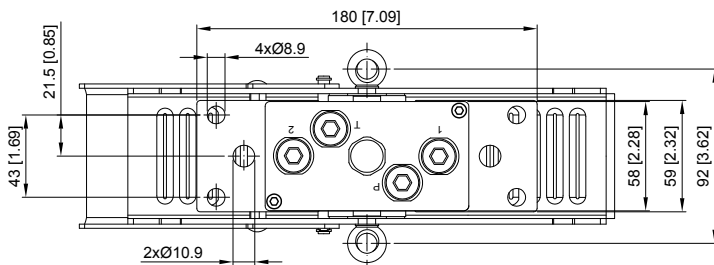
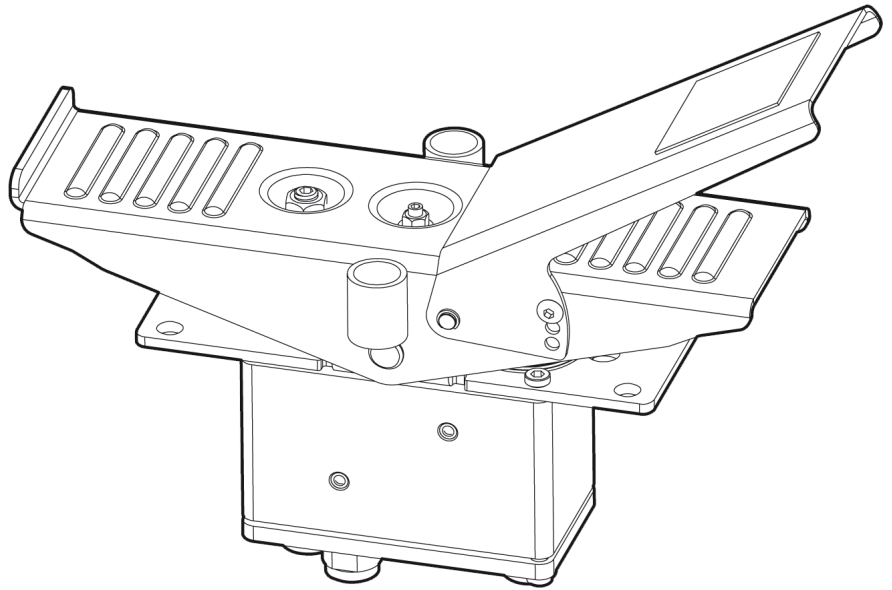
Type FP

**CODE: VSFP246**

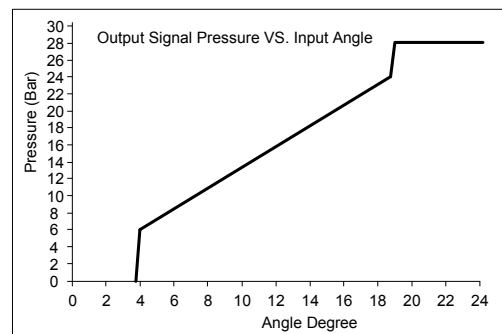
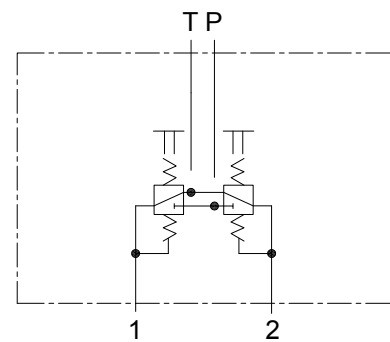
**Hydraulic Pilot Valve - pedal type**

**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
- Output pressure: see diagram
- Internal leakage at 30 bar: 18~24 cm<sup>3</sup>/min
- Fluid: mineral oil
- Fluid temperature: -10~80°C
- Ambient temperature: -40~60°C



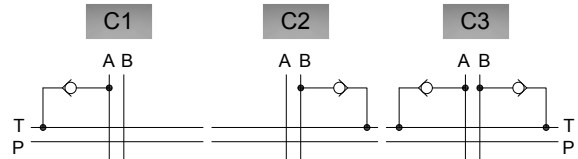
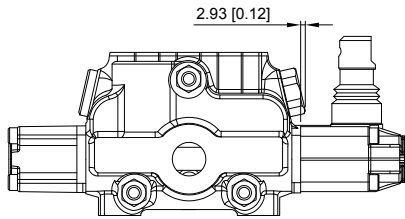
**HYDRAULIC SCHEME:**



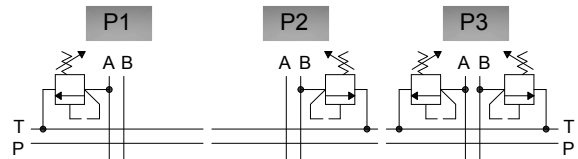
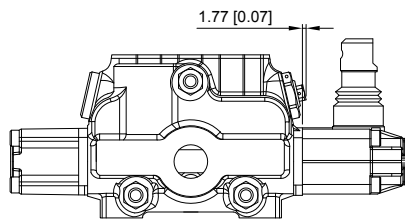
# VS3 Port Relief

## Sectional Directional Control Valves

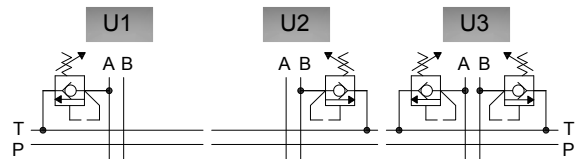
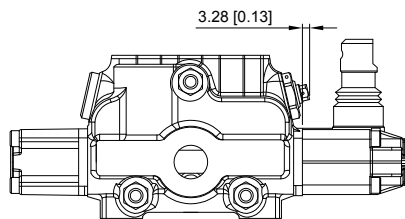
### TYPE C



### TYPE P



### TYPE U



# VS3 Outlet

## Sectional Directional Control Valves

Power Beyond Conversion plug  
(Closed center plug)

