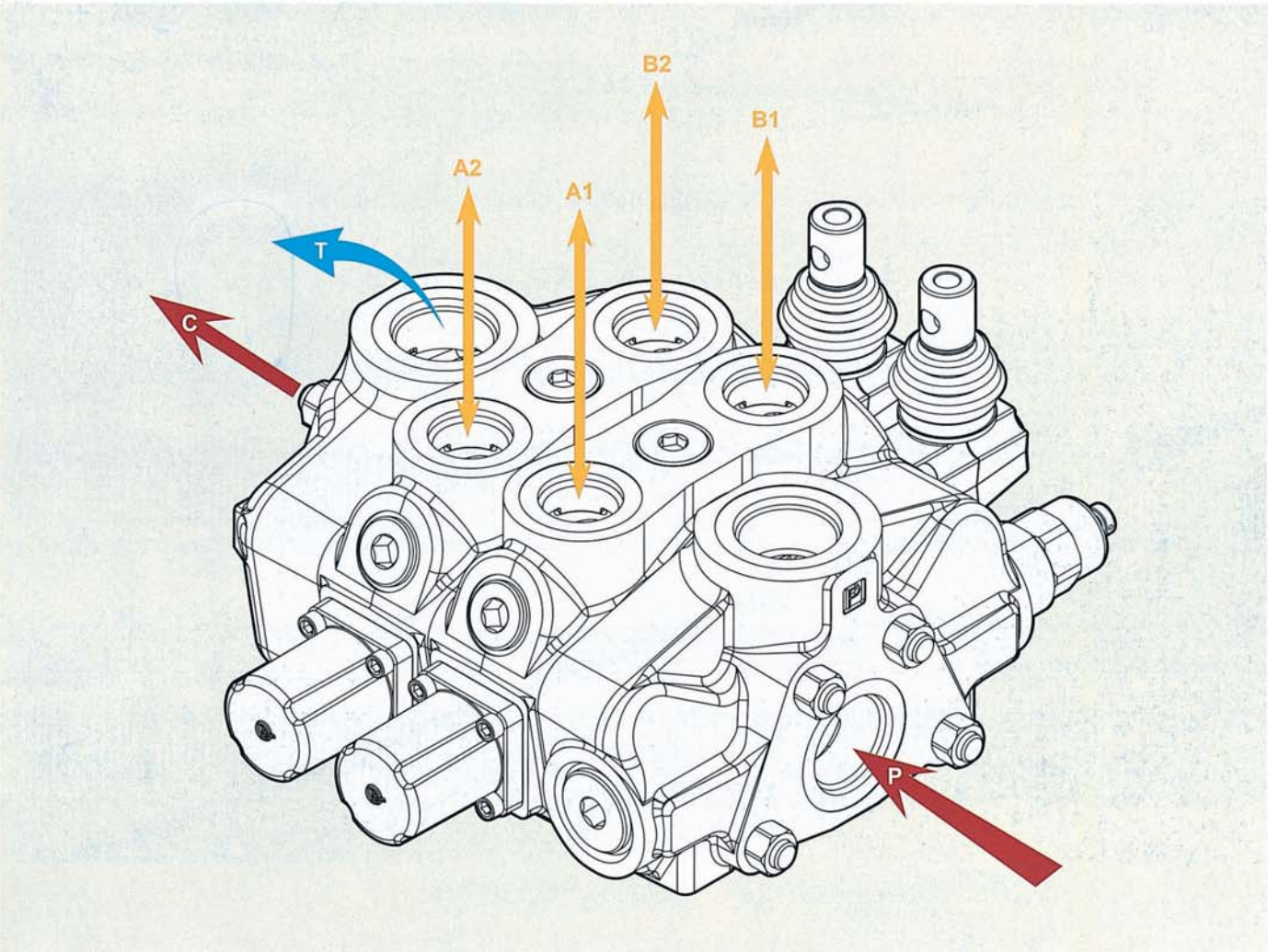


SN-8

Sectional Directional Control Valves



SN-8 Specifications

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
Fluid temperature range	with NBR seals	from - 20° to 80°C	from - 4° to 176° F
	with FPM seal	from - 20° to 100°C	from - 4° to 212° F
Viscosity	operating range	from 15 to 75 mm²/s	from 15 to 75 cst
	min.	12 mm²/s	12 cst
	max.	400 mm²/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.

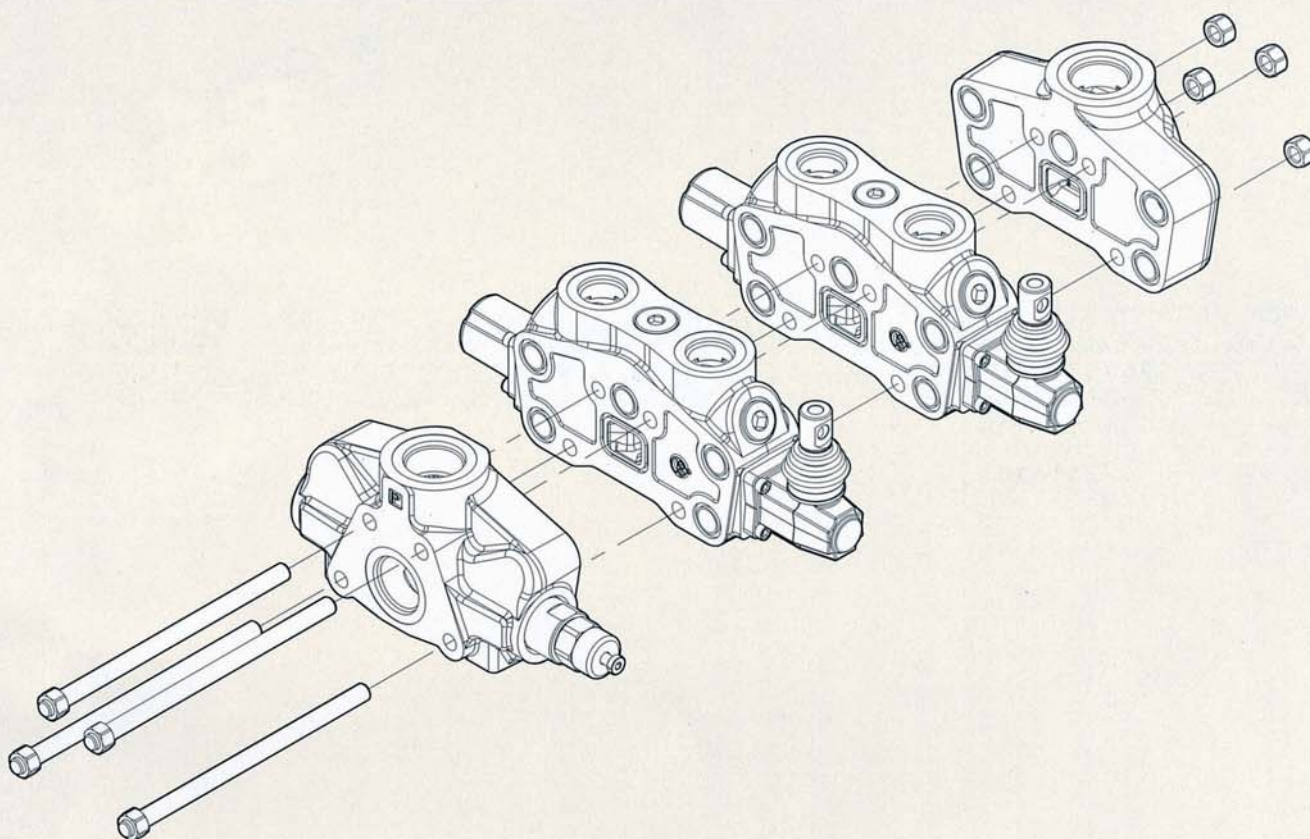
SN-8 Complete

Sectional Directional Control Valves

HOW TO ORDER FOR A COMPLETE ASSEMBLED VALVE

SN-8 / 2S - XHG / 18L / 28L / G-8-10 / M3

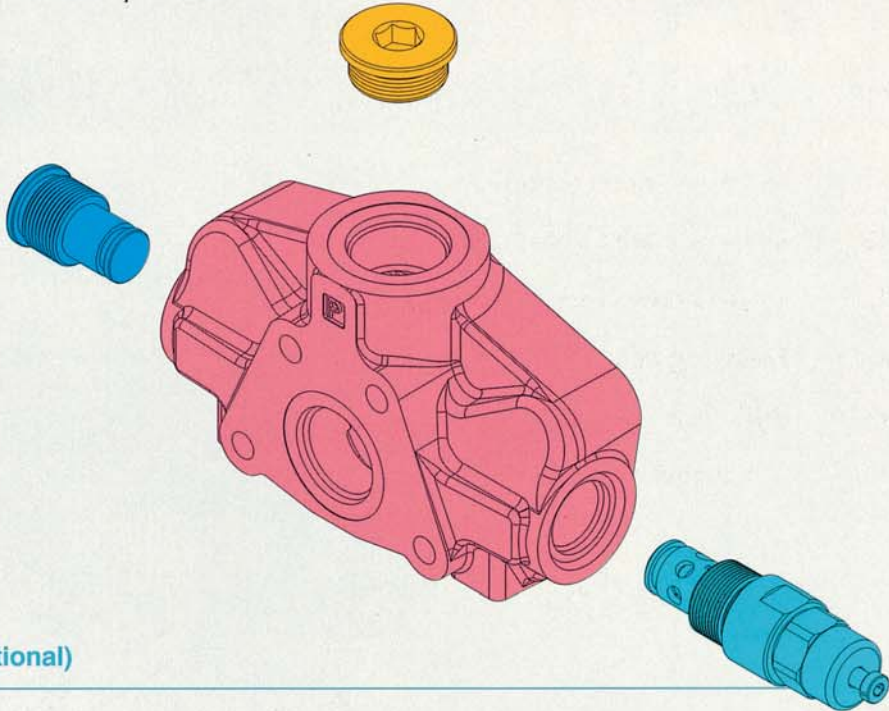
2S	No. of working section
XHG	Inlet cover with a main pressure relief valve
18L	1st section (complete working section)
28L	Following section (complete working section)
G-8-10	BSP ports
M3	Outlet cover



SN-8 Inlet Section

Sectional Directional Control Valves

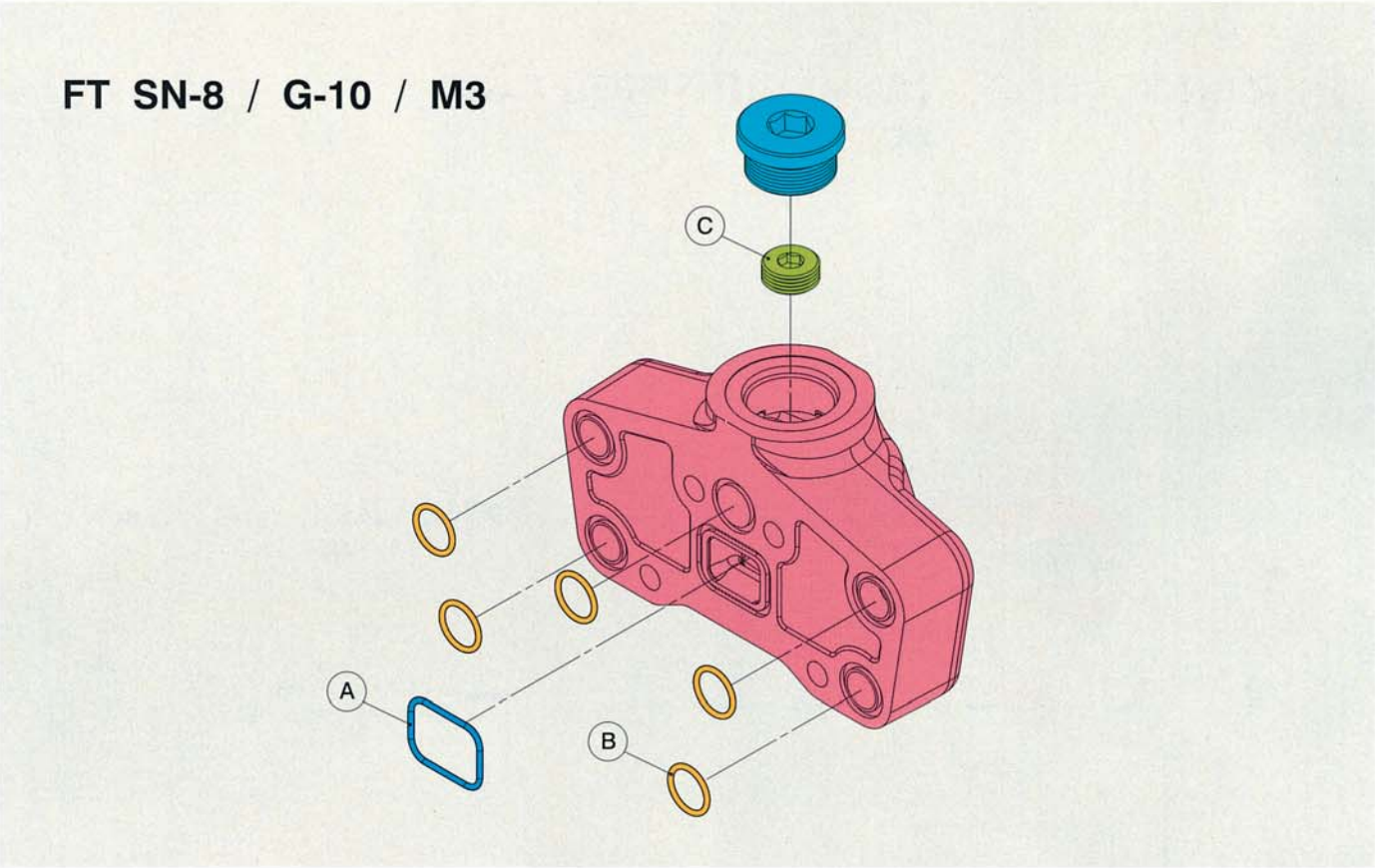
FP SN-8 / XHG / G-8



Inlet Relief (optional)			
TYPE	CODE	DESCRIPTION	PAGE
SV	YLPSN84000	Relief valve blanking plug	P. 228
XHG	YLPSN83000	Pilot operated pressure relief valve Range 25 to 315 bar/ 360 to 4600 psi, standard setting 125 bar/ 1800 psi	P. 228

SN-8 Outlet Section

Sectional Directional Control Valves



Outlet		
ITEM	DESCRIPTION	Q'TY
A	2.62 x 40.94	1
B	2.62 x 20.29	5
C	G3/4 Plug	1

SN-8

SN-8 Working Section

Sectional Directional Control Valves

EW SN-8 / 1S /

1

8

L

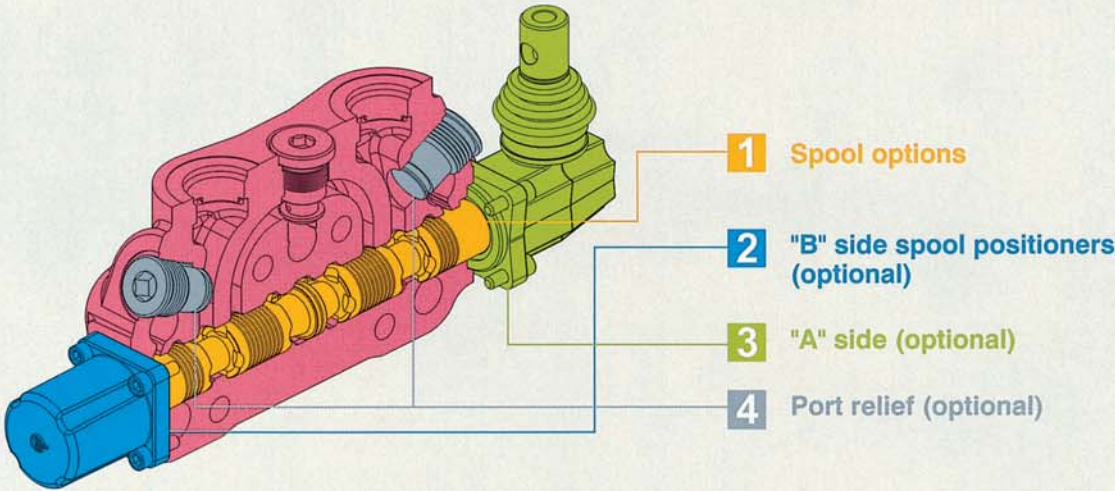
/ P1(G3-100) / G-8

1

2

3

4



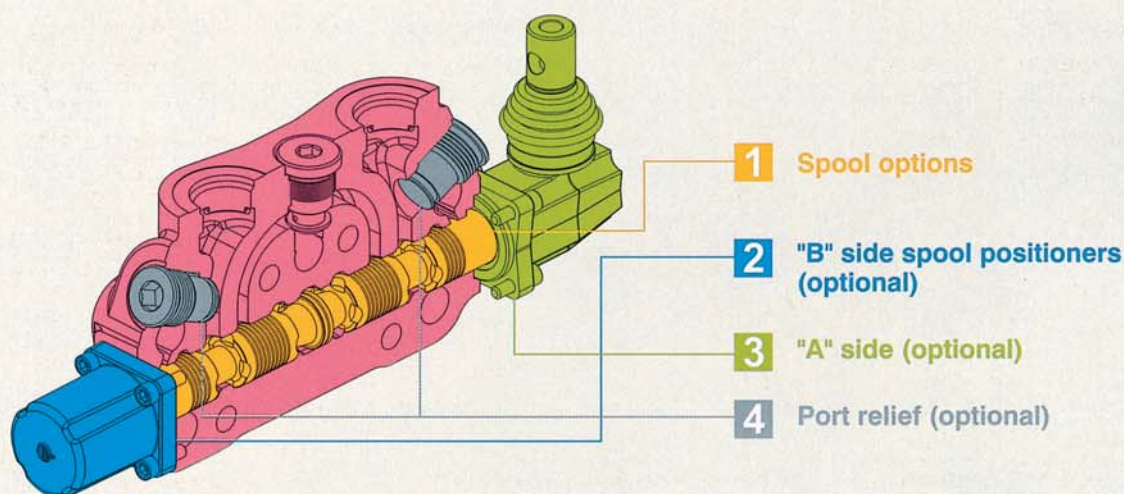
1: Spool options			
TYPE	CODE	DESCRIPTION	PAGE
1	YLWSN82001	Double acting,3 positions,with A and B closed in neutral position	P. 229
2	YLWSN82002	Double acting,3 positions,with A and B open to tank in neutral position	P. 229
3	YLWSN82003	Single acting on A closed in neutral position, 3 positions, B plugged	P. 230
4	YLWSN82004	Single acting on B closed in neutral position, 3 positions, A plugged	P. 230
5	YLWSN82005	Double acting, 3 positions, with B open to Tank in neutral position	P. 231
6	YLWSN82006	Double acting, 3 positions, with A open to Tank in neutral position	P. 231
5DY	YLWSN83052	Double acting, 4 positions, floating circuit in 4th position with A,B open to Tank by pulling the lever	P. 232
5PY	YLWSN83051	Double acting, 4 positions, floating circuit in 4th position with A, B open to Tank by pushing the lever	P. 233

SN-8 Working Section

Sectional Directional Control Valves

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

1 2 3 4



2: B Side Spool Positioners			
TYPE	CODE	DESCRIPTION	PAGE
6-1	YLWSN83061	Detent in pos. 1-0-2, without spring centered	P. 238
6-2	YLWSN83062	2 positions, detent in pos. 0-2, without spring centered	P. 238
6-3	YLWSN83063	2 positions, detent in pos. 1-0, without spring centered	P. 238
8D2	YLWSN83082	With spring return to neutral position and pin with M8 male thread for dual control	P. 238
8IM	YLWSN830810	Hydraulic pilot kit	P. 238
8P	YLWSN83080	ON/OFF Pneumatic actuator	P. 239
8EP3	YLWSN84300	ON/OFF Electro-Pneumatic actuator	P. 239
8MG1 (NO)	YLWSN83801	Microswitch kit operated in pos. 1 (Normally Open)	P. 242
8MG2 (NO)	YLWSN83802	Microswitch kit operated in pos. 2 (Normally Open)	P. 242
8MG3 (NO)	YLWSN83803	Microswitch kit operated in pos. 1&2 (Normally Open)	P. 242
MG (NO)	YLWSN83804	Microswitch with NO terminal	P. 242
8MG1 (NC)	YLWSN838011	Microswitch kit operated in pos. 1 (Normally Closed)	P. 242
8MG2 (NC)	YLWSN838021	Microswitch kit operated in pos. 2 (Normally Closed)	P. 242
8MG3 (NC)	YLWSN838031	Microswitch kit operated in pos. 1&2 (Normally Closed)	P. 242
MG (NC)	YLWSN838041	Microswitch with NC terminal	P. 242
8	YLWSN83008	With spring return to neutral position	P. 243
8-1	YLWSN84081	2 positions, with spring centered from pos. 1	P. 243
8-2	YLWSN84082	2 positions, with spring centered from pos. 2	P. 243
9-1	YLWSN83091	Detent in pos. 1, 2 with spring centered	P. 243
9-2	YLWSN83092	Detent in pos. 2 with spring centered	P. 243

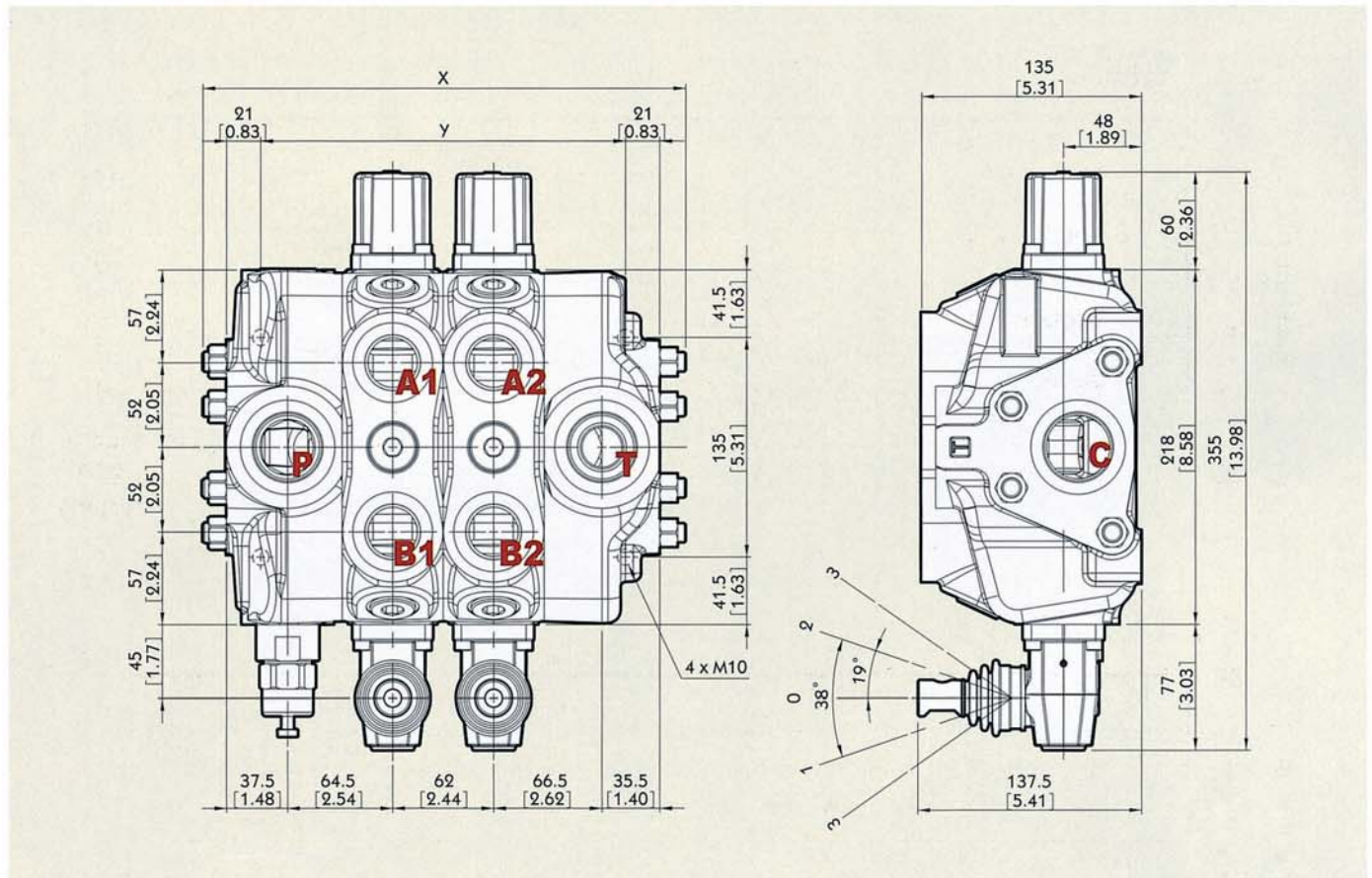
2: B Side Spool Positioners			
TYPE	CODE	DESCRIPTION	PAGE
9-3	YLWSN83093	Detent in pos. 1 with spring centered	P. 243
8ED3+RV-KE1R3	YLWSN83201	1S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC)	P. 240
8ED3+RV-KE2R3	YLWSN83202	2S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC)	P. 240
8ED3+RV-KE3R3	YLWSN83203	3S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC)	P. 240
8ED3+RV-KE4R3	YLWSN83204	4S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC)	P. 240
8ED3+RV-KE5R3	YLWSN83205	5S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC)	P. 240
8ED3+RV-KE6R3	YLWSN83206	6S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC)	P. 240
8ED3+RV-KE7R3	YLWSN83207	7S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC)	P. 240
8ED3+RV-KE8R3	YLWSN83208	8S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC)	P. 240
8ED3+RV-KE9R3	YLWSN83209	9S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC)	P. 240
8ED3+RV-KE10R3	YLWSN83210	10S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC)	P. 240
8ED3+RV-KE11R3	YLWSN83211	11S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC)	P. 240
8ED3+RV-KE12R3	YLWSN83212	12S: ON/OFF Electro-Hydraulic control kit with pilot and drain line+backpressure valve (12/24 VDC)	P. 240
8ER3+KE1S0	YLWSN83401	1S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain	P. 241
8ER3+KE2S0	YLWSN83402	2S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain	P. 241
8ER3+KE3S0	YLWSN83403	3S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain	P. 241
8ER3+KE4S0	YLWSN83404	4S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain	P. 241
8ER3+KE5S0	YLWSN83405	5S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain	P. 241
8ER3+KE6S0	YLWSN83406	6S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain	P. 241
8ER3+KE7S0	YLWSN83407	7S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain	P. 241
8ER3+KE8S0	YLWSN83408	8S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain	P. 241
8ER3+KE9S0	YLWSN83409	9S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain	P. 241
8ER3+KE10S0	YLWSN83410	10S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain	P. 241
8ER3+KE11S0	YLWSN83411	11S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain	P. 241
8ER3+KE12S0	YLWSN83412	12S: ON/OFF Electro-hydraulic control kit with collector kit for external pilot and drain	P. 241

3: A Side (Optional)			
TYPE	CODE	DESCRIPTION	PAGE
L	YLWSN84000	Standard lever	P. 234
SLP	YLWSN84001	Without lever, with dust proof plate	P. 234
LCB	YLWSN84002	Joystick lever for 2 section operation	P. 235
TQ	YLWSN84003	Flexible cable connection	P. 236
FCR-2		Joystick for remote control	P. 237

4: Port Relief (Optional)			
TYPE	CODE	DESCRIPTION	PAGE
P (G2-63)	YLWSN65002	Anti-shock valve, range 63 to 125 bar / from 900 to 1800 psi standard setting 63 bar / 900 psi	P. 244
P (G3-100)	YLWSN65003	Anti-shock valve, range 100 to 250 bar / from 1450 to 3600 psi standard setting 100bar / 1450 psi	P. 244
P (G4-200)	YLWSN65004	Anti-shock valve, range 200 to 315 bar / from 2900 to 4600 psi standard setting 200 bar / 2900 psi	P. 244
XU (G2-63)	YLWSN85012	Anti-shock valve and Anti-cavitation valve, range 63 to 125 bar / from 900 to 1800 psi standard setting 63 bar / 900 psi	P. 244
XU (G3-100)	YLWSN85013	Anti-shock valve and Anti-cavitation valve, range 100 to 250 bar / from 1450 to 3600 psi standard setting 100 bar / 1450 psi	P. 244
XU (G4-200)	YLWSN85014	Anti-shock valve and Anti-cavitation valve, range 200 to 315 bar / from 2900 to 4600 psi standard setting 200 bar / 2900 psi	P. 244
C	YLWSN65100	Anti - cavitation	P. 244

SN-8 Dimensions

Sectional Directional Control Valves



Standard threads

Ports	Inlet P	A and B	Outlet T and power beyond C
BSP	G1	G1	G1-1/4
UN-UNF	1-5/8-12 (SAE 20)	1-5/16-12 (SAE 16)	1-5/8-12 (SAE 20)

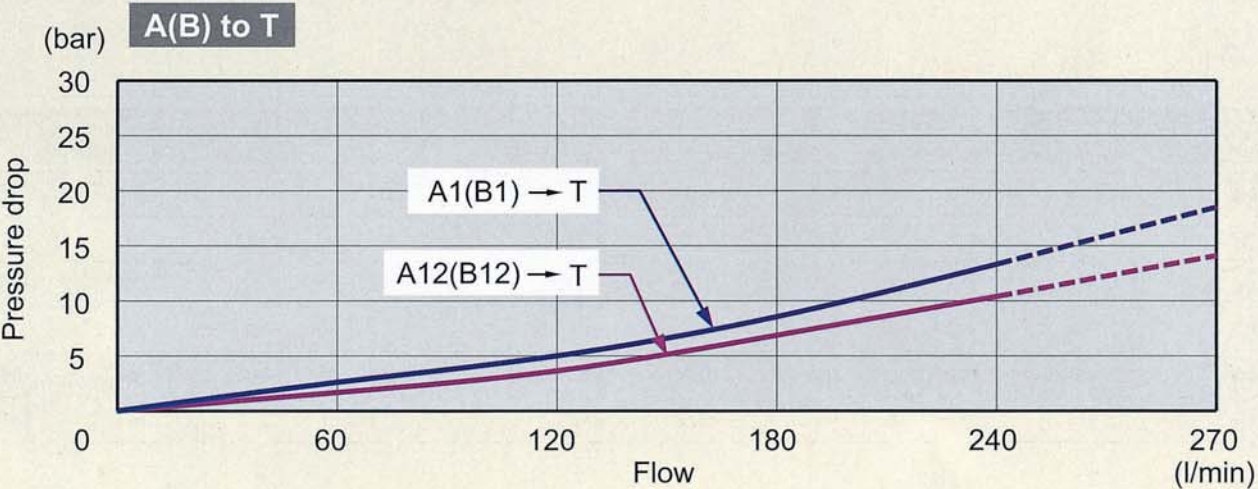
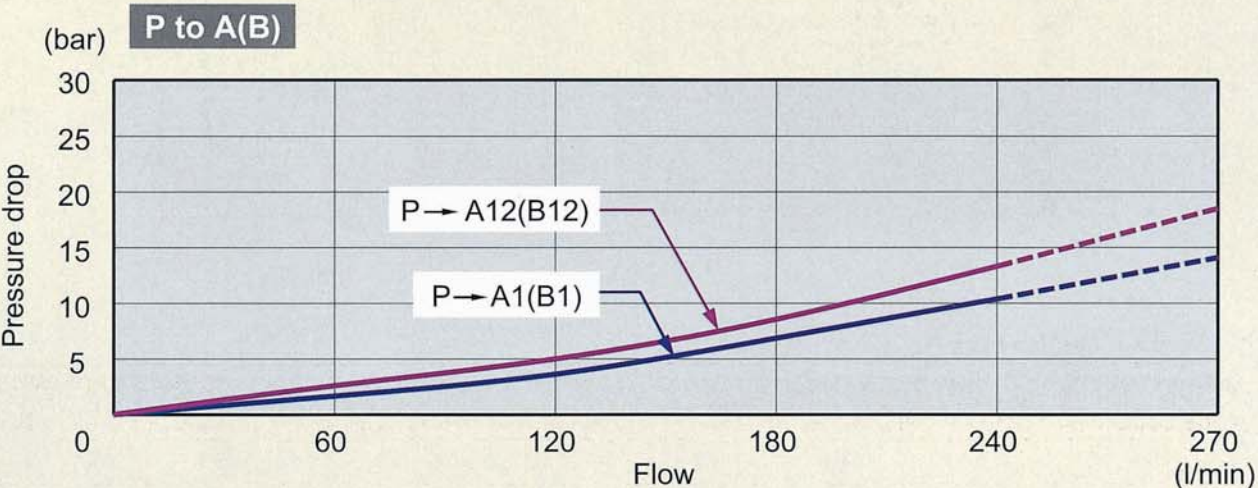
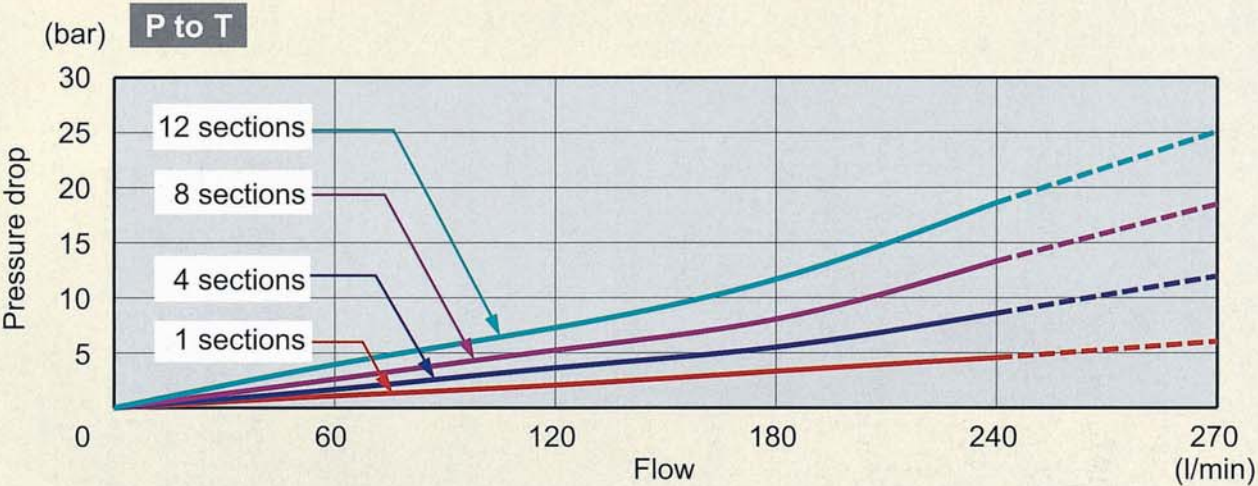
• G-1/2 : G4 G-3/8 : G3 G-3/4 : G6 G-1 : G8 G-1 1/4 : G10
 • SAE 8 : E8 SAE 10 : E10 SAE 12 : E12 SAE 16 : E16 SAE 20 : E20

Standard dimensions

TYPE	X		Y		TYPE	X		Y	
	mm	in	mm	in		mm	in	mm	in
SN8 /1S	235	9.25	162	6.38	SN8 /7S	607	23.90	534	21.02
SN8 /2S	297	11.69	224	8.28	SN8 /8S	669	26.34	596	23.46
SN8 /3S	359	14.13	286	11.26	SN8 /9S	731	28.78	658	25.90
SN8 /4S	421	16.57	348	13.70	SN8 /10S	793	31.22	720	28.34
SN8 /5S	483	19.02	410	16.14	SN8 /11S	855	33.66	782	30.78
SN8 /6S	545	21.46	472	18.58	SN8 /12S	917	36.10	844	33.22

SN-8 Performance Curve Chart

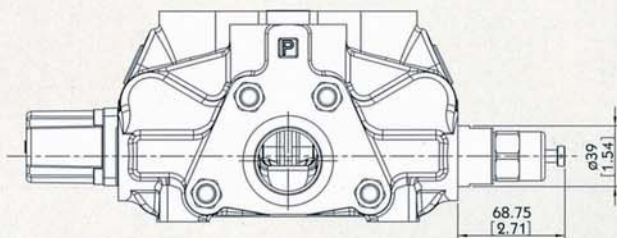
Sectional Directional Control Valves



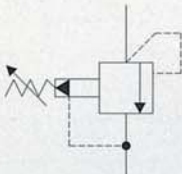
SN-8 Inlet Relief (Optional)

Sectional Directional Control Valves

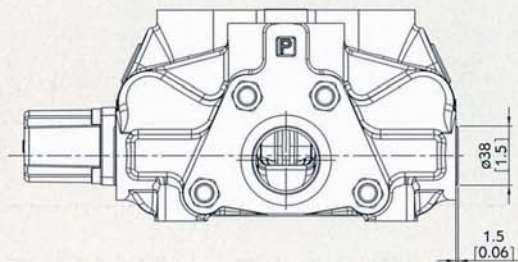
Type XHG



Pilot operated pressure relief valve:



Type SV



Relief valve blanking plug:



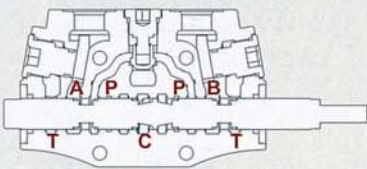
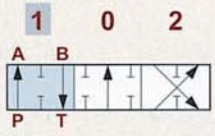
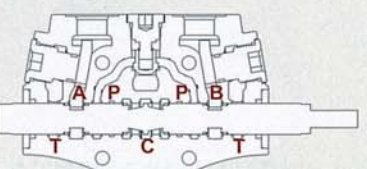
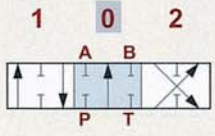
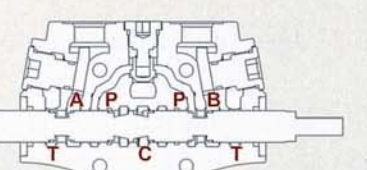
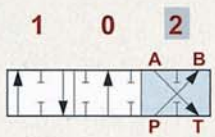
SN-8

SN-8 Spool Options

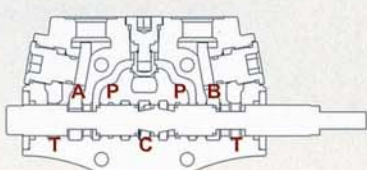
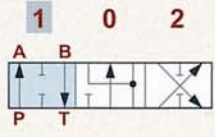
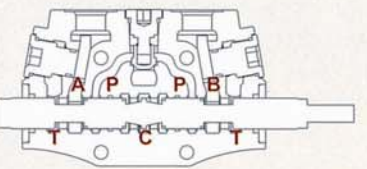
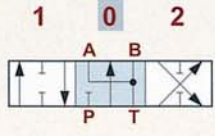
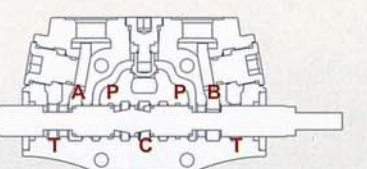
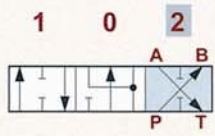
Sectional Directional Control Valves

SN-8

TYPE 1

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

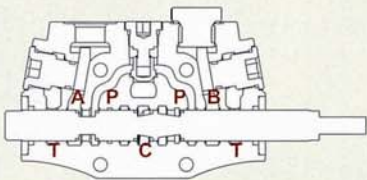
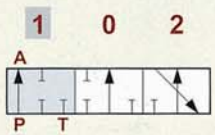
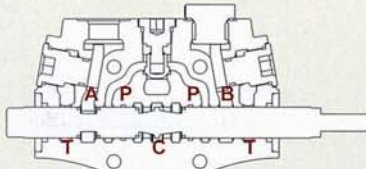
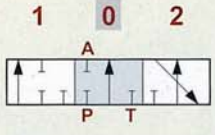
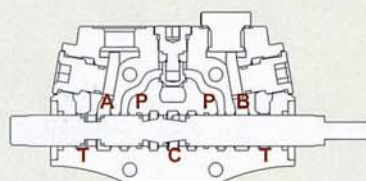
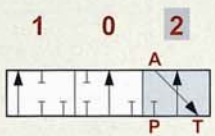
TYPE 2

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

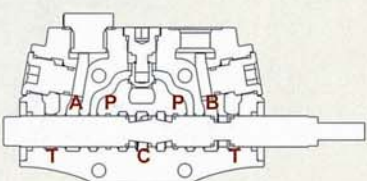
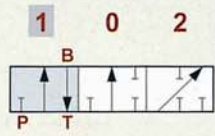
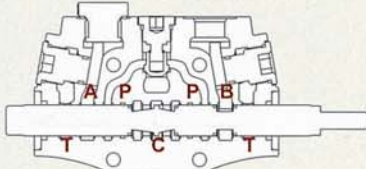
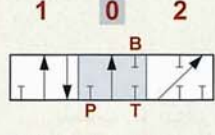
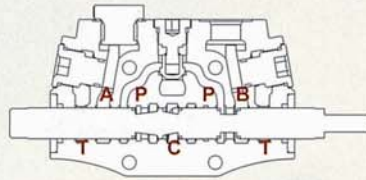
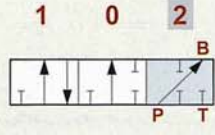
SN-8 Spool Options

Sectional Directional Control Valves

TYPE 3

	<p>P → A C & T closed</p>	 <p>"B" port plugged</p>
	<p>P & A & T closed C open</p>	 <p>"B" port plugged</p>
	<p>A → T P closed C open</p>	 <p>"B" port plugged</p>

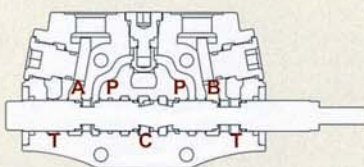
TYPE 4

	<p>B → T P closed C open</p>	 <p>"A" port plugged</p>
	<p>P & B & T closed C open</p>	 <p>"A" port plugged</p>
	<p>P → B C & T closed</p>	 <p>"A" port plugged</p>

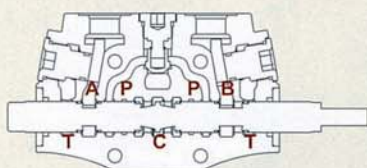
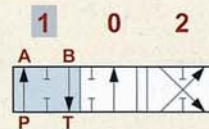
SN-8 Spool Options

Sectional Directional Control Valves

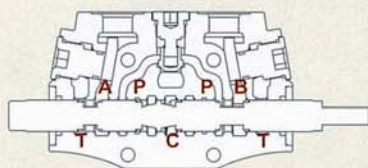
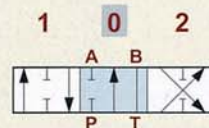
TYPE 5



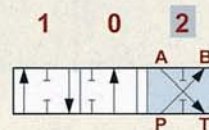
P → A
B → T
C closed



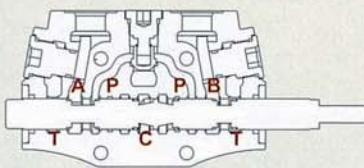
B → T
P & A closed
C open



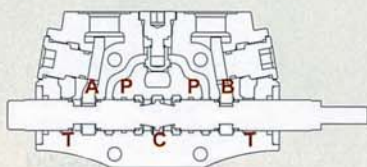
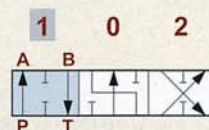
P → B
A → T
C closed



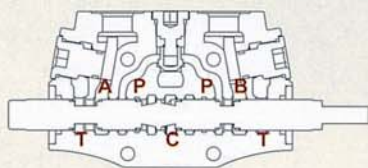
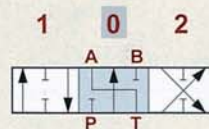
TYPE 6



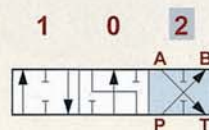
P → A
B → T
C closed



A → T
P & B closed
C open

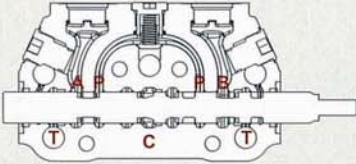
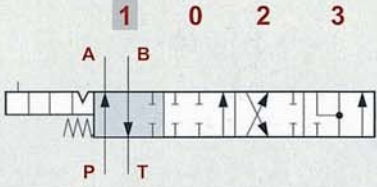
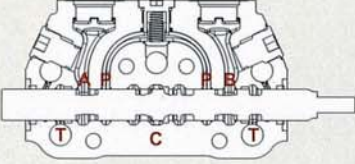
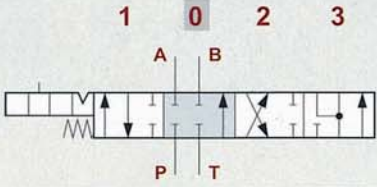
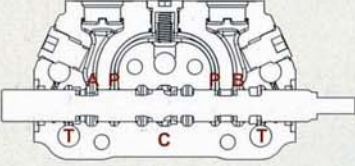
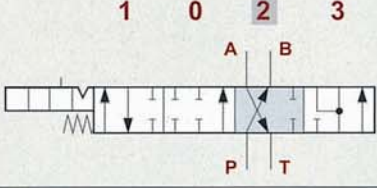
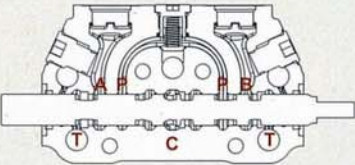
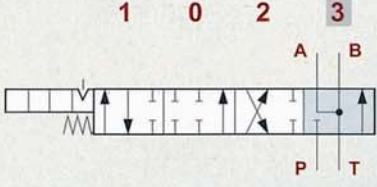


P → B
A → T
C closed



SN-8 spool Options

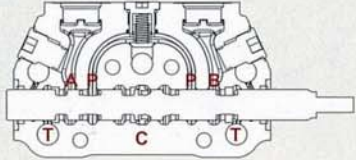
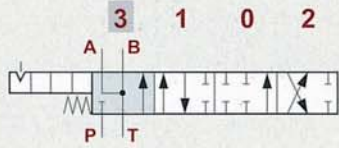
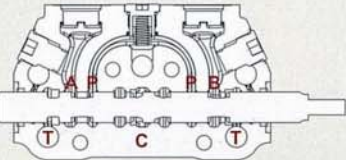
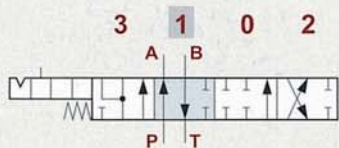
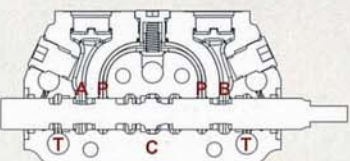
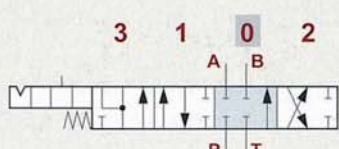
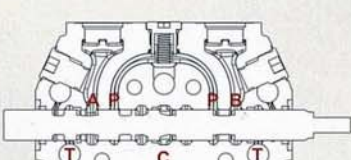
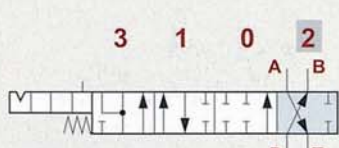
Sectional Directional Control Valves

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

SN-8 spool Options

Sectional Directional Control Valves

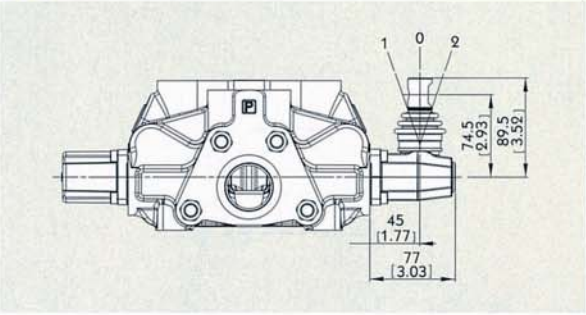
SN-8

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

SN-8 A Side

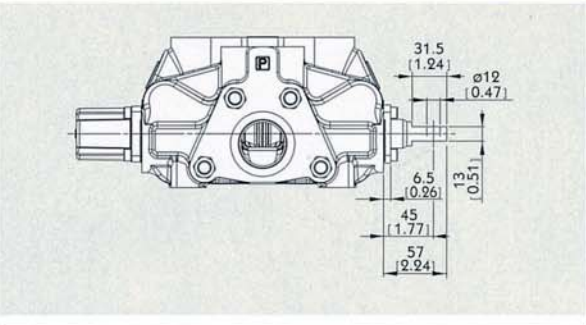
Sectional Directional Control Valves

Type L



Type L:
STANDART LEVER KIT

Type SLP

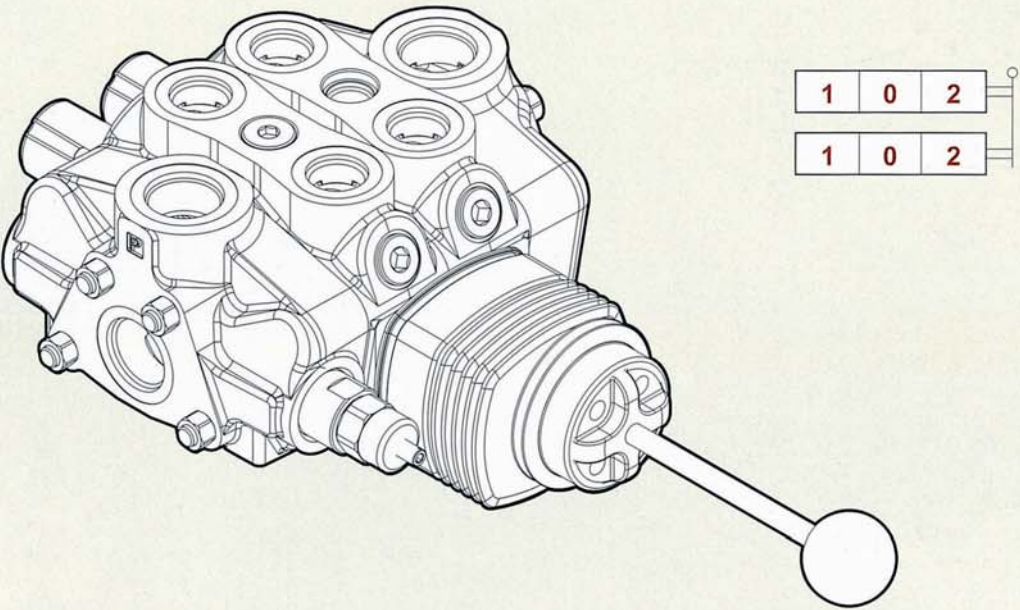


Type SLP:
WITH DUST-PROOF PLATE

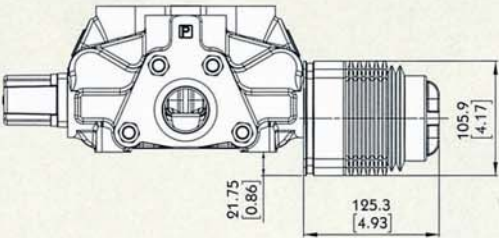
SN-8 A Side

Sectional Directional Control Valves

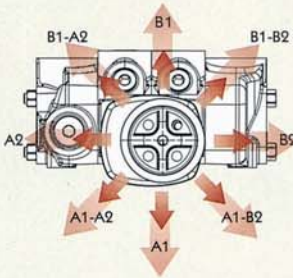
LCB: Joystick control



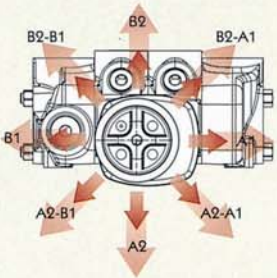
Type LCB



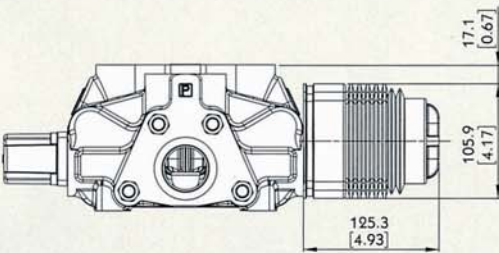
LCB1



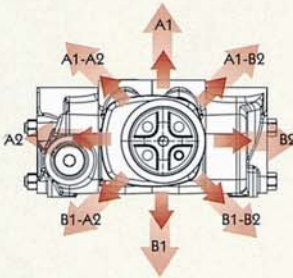
LCB2



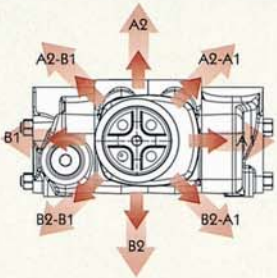
Type LCB



LCB3



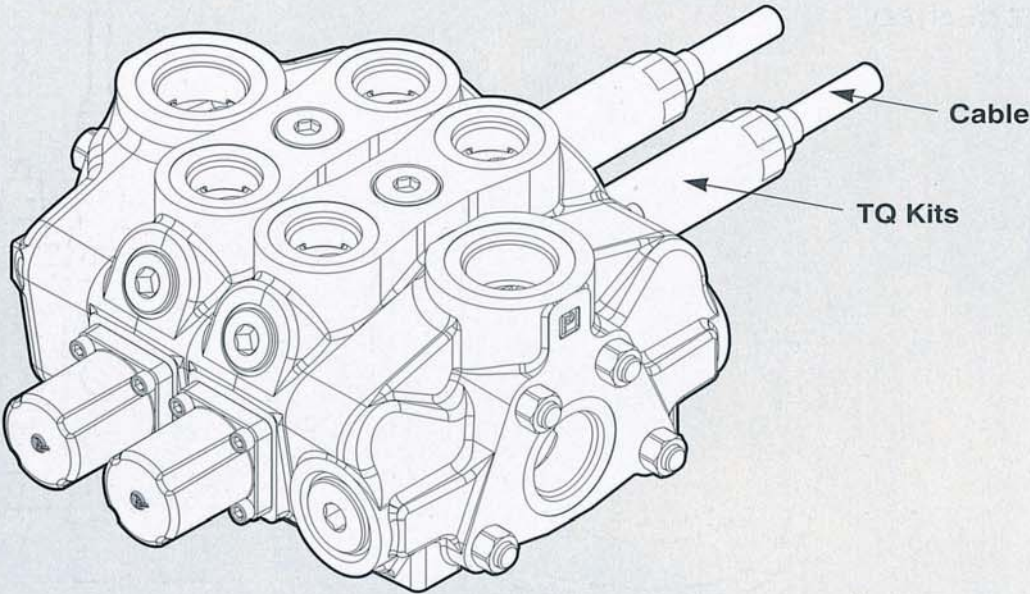
LCB4



SN-8 A Side

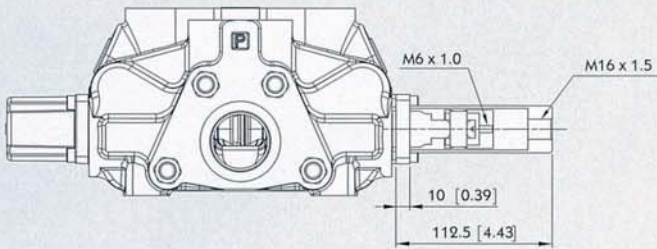
Sectional Directional Control Valves

Note : CONNECTION KIT NOT INCLUDE CABLE



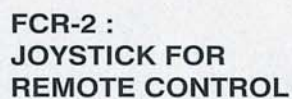
SN-8

Type TQ



TQ Kit:

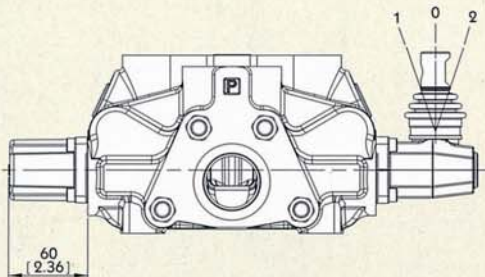


$$\infty\text{-}N\text{-}S$$


SN-8 B Side

Sectional Directional Control Valves

Type 6



6-1 Kit:

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



6-2 Kit:

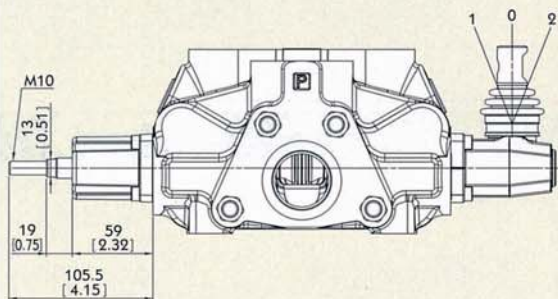
2 POSITIONS, DETENT IN POS. 0-2, WITHOUT SPRING CENTERED



6-3 Kit:

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

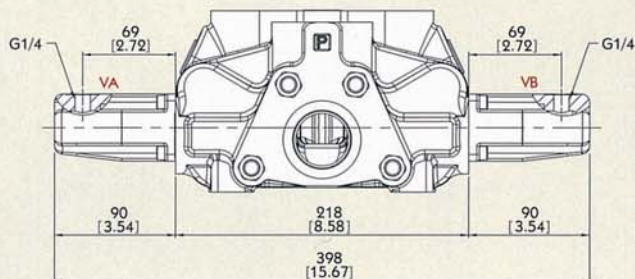
Type 8D2



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 CM³/MIN (100 BAR / 40 °C)



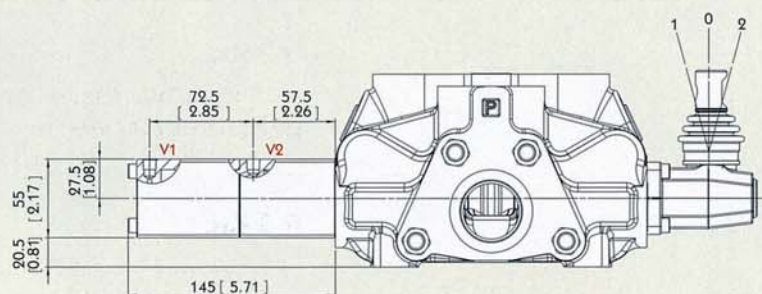
SN-8

SN-8 B Side

Sectional Directional Control Valves

Type 8P

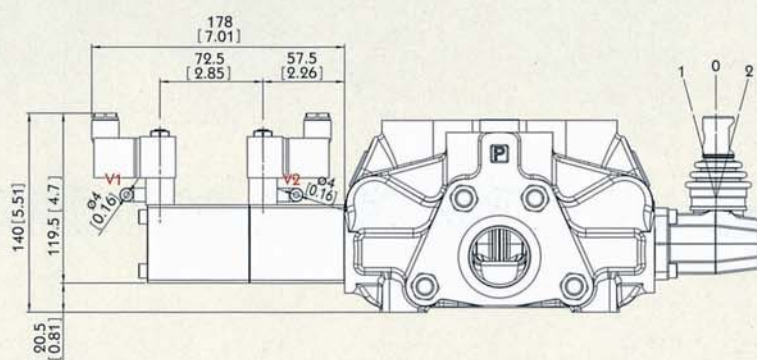
V1 & V2 : NPT 1/8 - 27



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



Type 8EP3

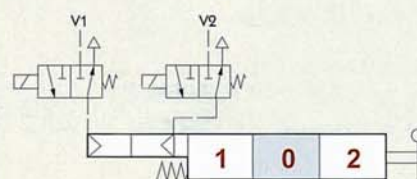


Solenoid operating features :

NOMINAL VOLTAGE: 24VDC

NOMINAL VOLTAGE TOLERANCE: $\pm 10\%$

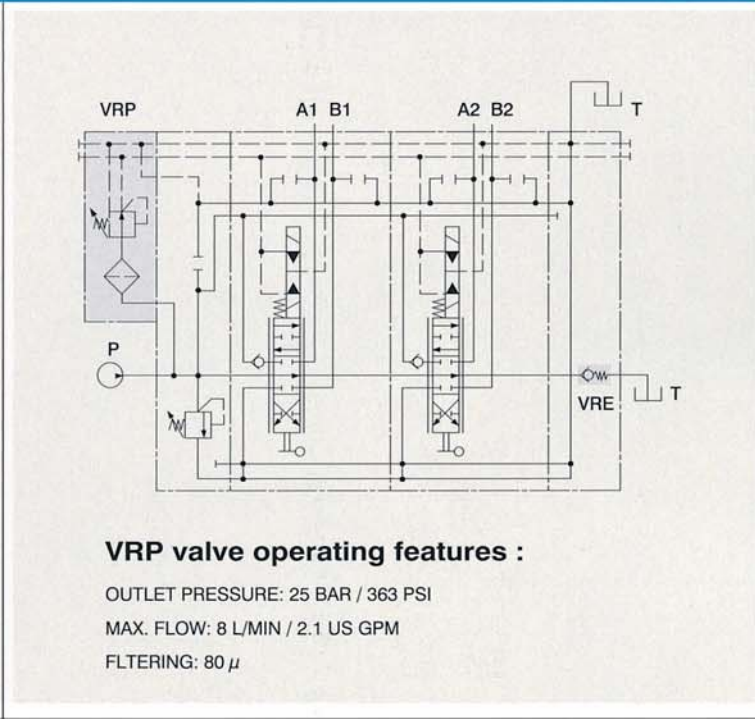
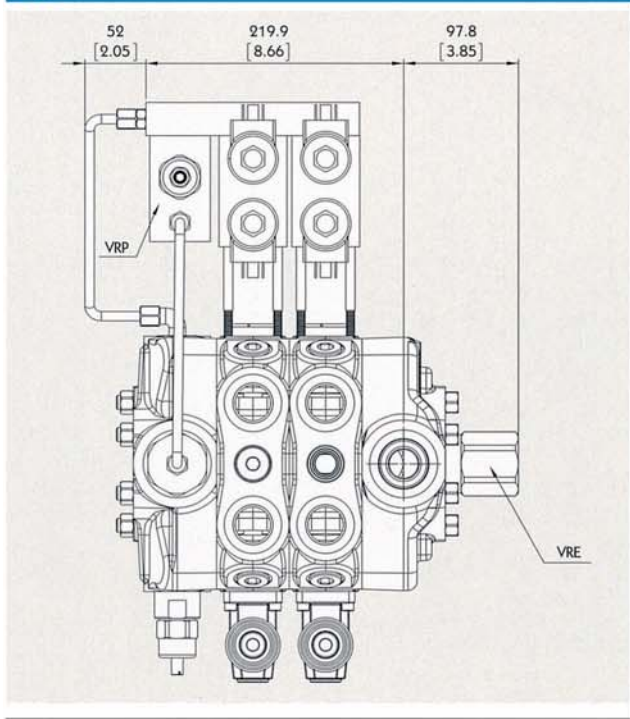
POWER RATING: 5W



SN-8 B Side

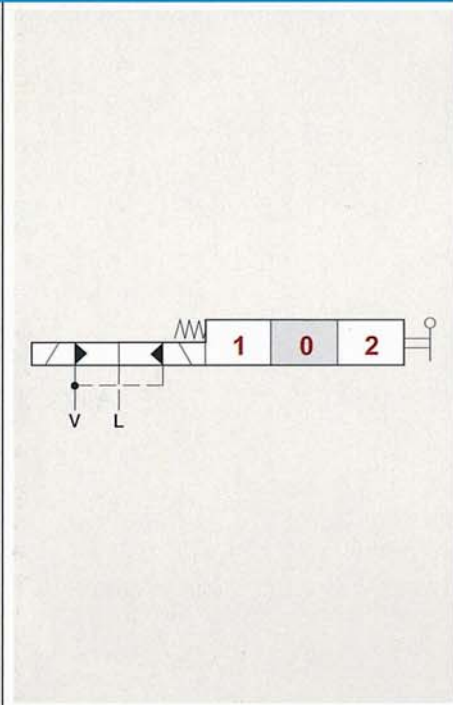
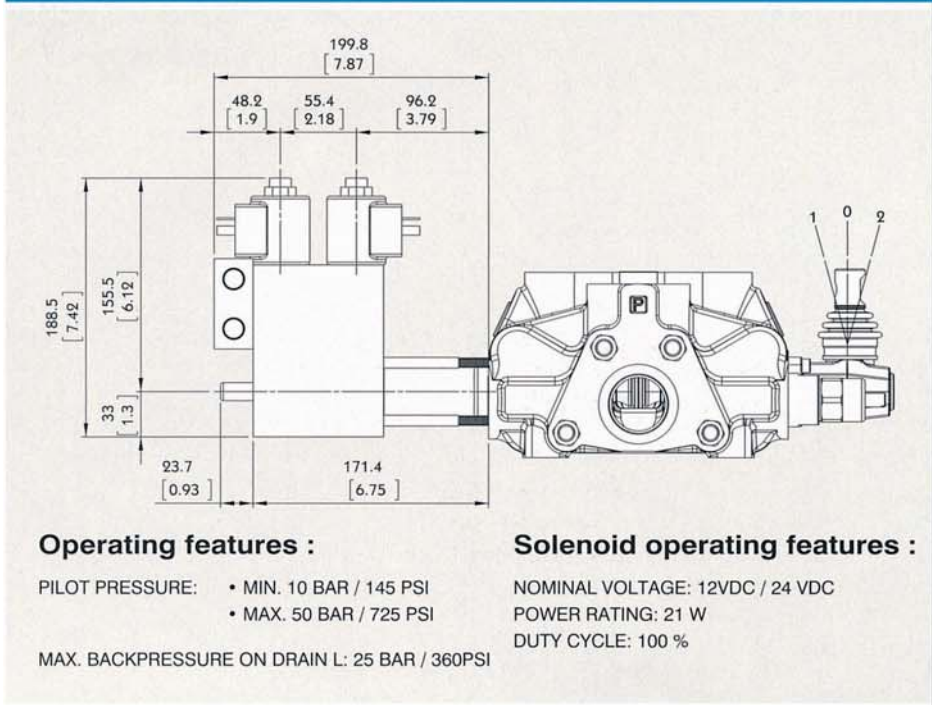
Sectional Directional Control Valves

Type 8ED3



SN-8

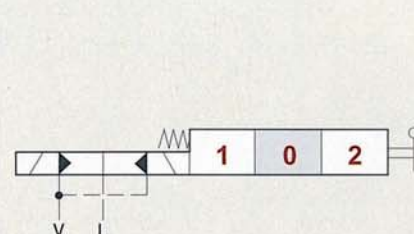
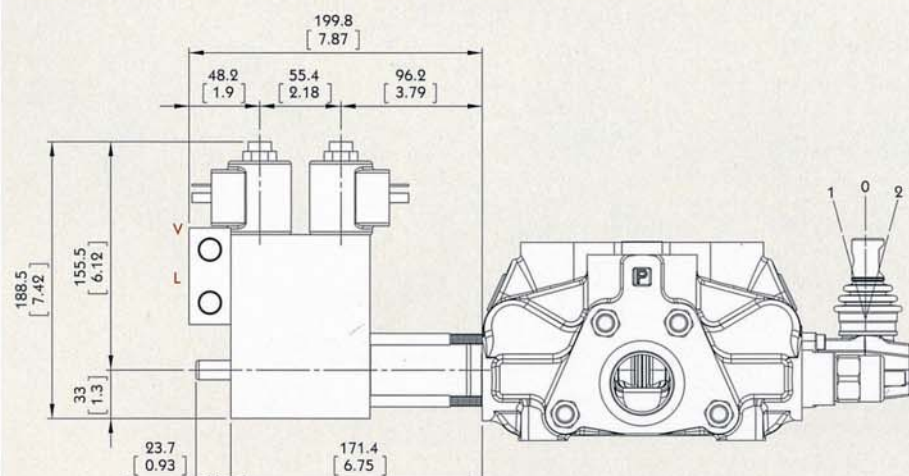
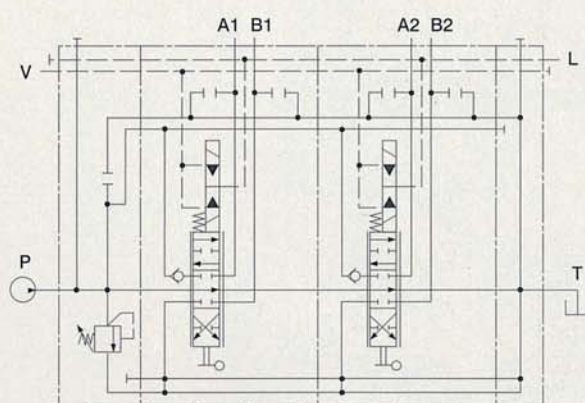
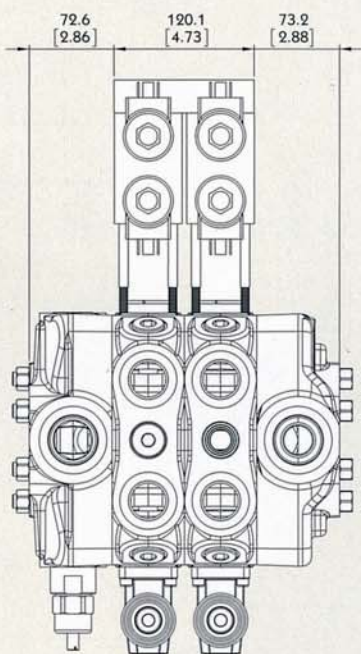
Operating features :



SN-8 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

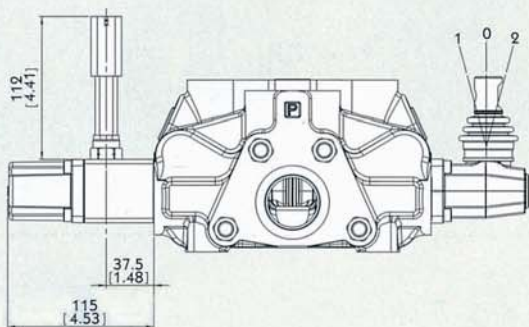
Solenoid operating features :

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

SN-8 B Side

Sectional Directional Control Valves

Type 8MG



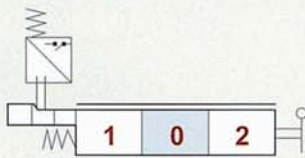
MICROSWITCH

Operating features :

MECHANICAL LITE: • 5X10⁶ OPERATIONS

ELECTRICAL LITE (RESISTIVE LOAD):

- 10⁶ OPERATIONS - 7A / 13.5 VDC
- 5x10⁶ OPERATIONS - 10A / 12 VDC
- 5x10⁶ OPERATIONS - 3A / 28 VDC



8MG1 Kit:
MICROSWITCH WITH MALE/FEMALE CONNECTOR, OPERATED IN POS. 1

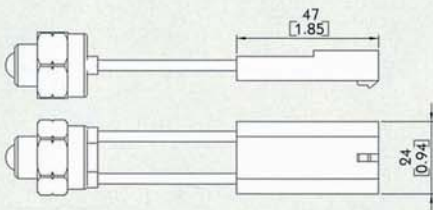


8MG2 Kit:
MICROSWITCH WITH MALE/FEMALE CONNECTOR, OPERATED IN POS. 2

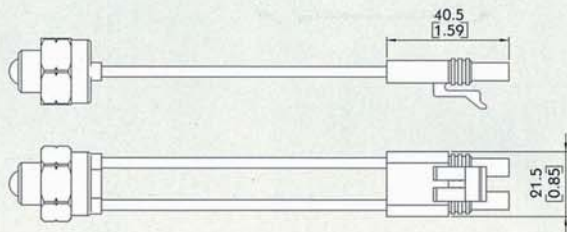


8MG3 Kit:
MICROSWITCH WITH MALE/FEMALE CONNECTOR, OPERATED IN POS. 1 AND POS. 2

With NO contact (female connector with male end)



With NC contact (male connector with female end)



SN-8 B Side

Sectional Directional Control Valves

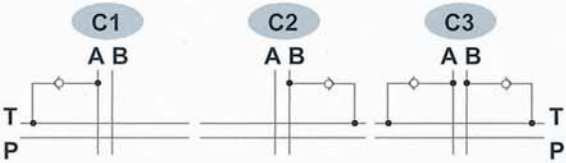
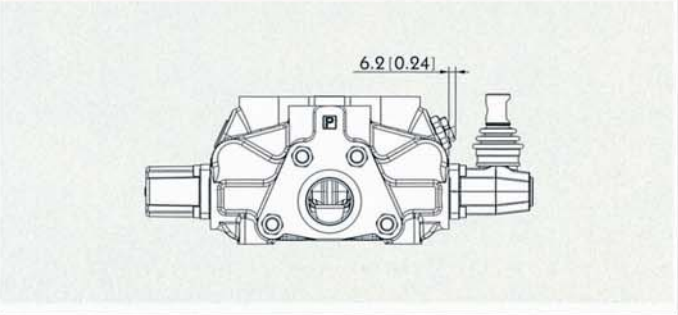
Type 8		
		8 Kit: SPRING RETURN TO NEUTRAL POSITION
		8-1 Kit: SPRING RETURN TO NEUTRAL POSITION. (2 POSITIONS)
		8-2 Kit: SPRING RETURN TO NEUTRAL POSITION. (2 POSITIONS)

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

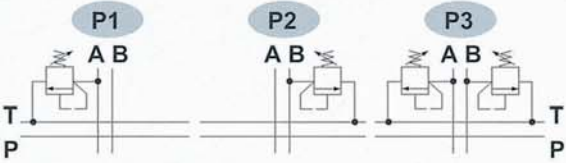
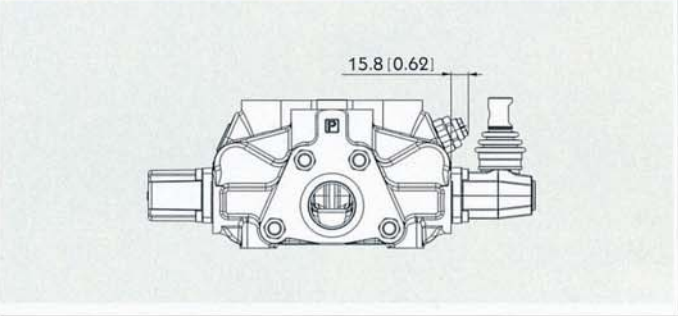
SN-8 Port Relief

Sectional Directional Control Valves

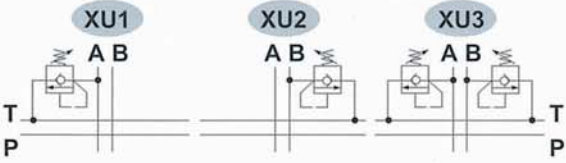
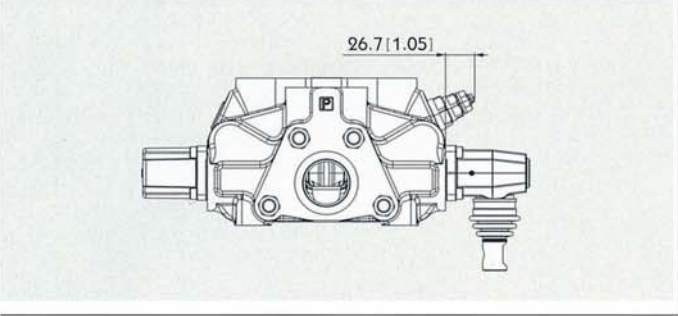
TYPE C



TYPE P



TYPE XU

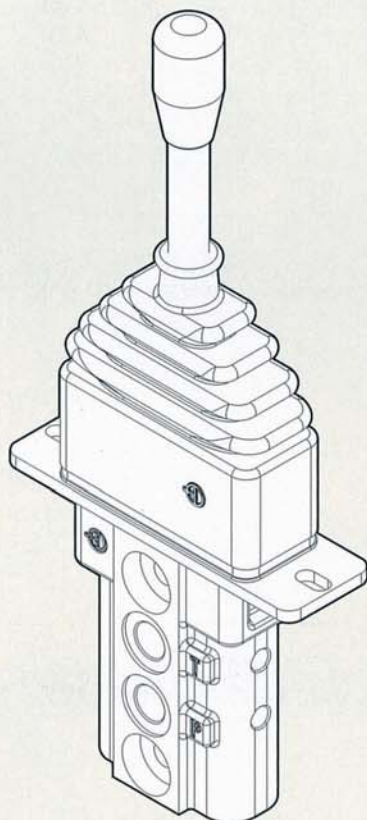


SN-8

SN-8 Accessories

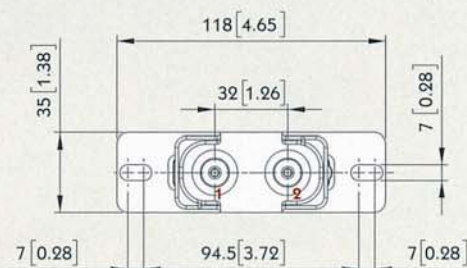
Sectional Directional Control Valves

Type JHP-1

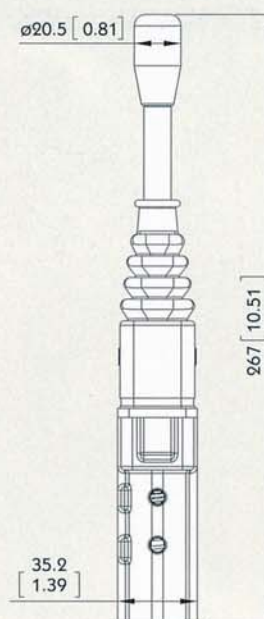
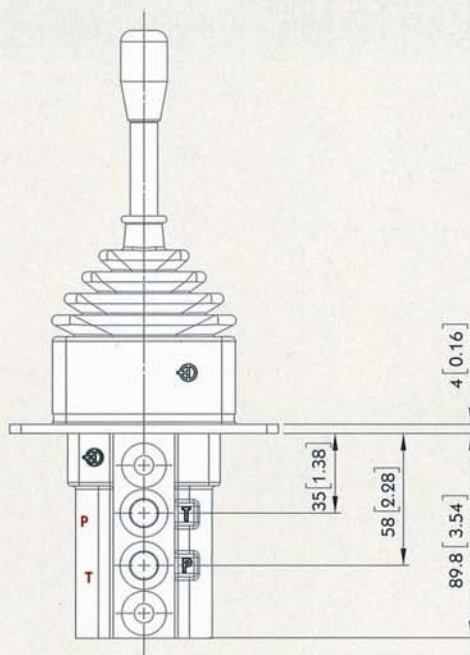
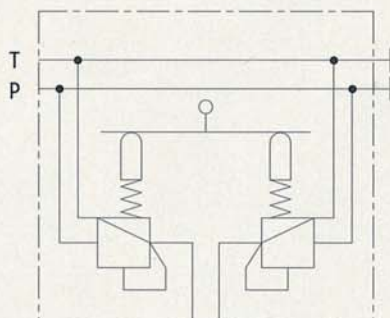


Specifications:

- This data sheet shows technical spec. with mineral oil of 46 mm²/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 cm³/min
- Fluid : mineral oil
- Fluid temperature : - 10 ~ 80°C
- Ambient temperature : - 40 ~ 60°C



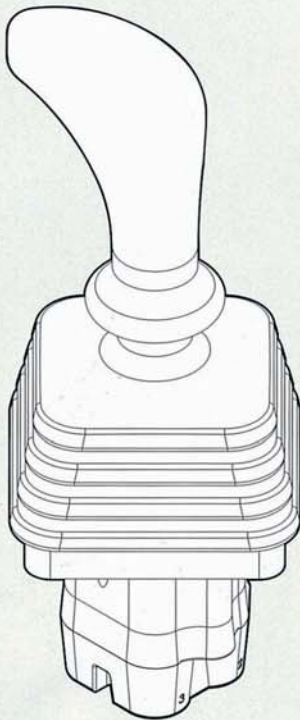
HYDRAULIC SCHEME:



SN-8 Accessories

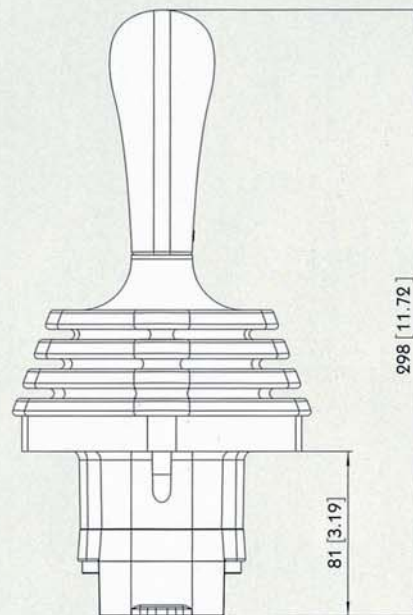
Sectional Directional Control Valves

Type JHP-2

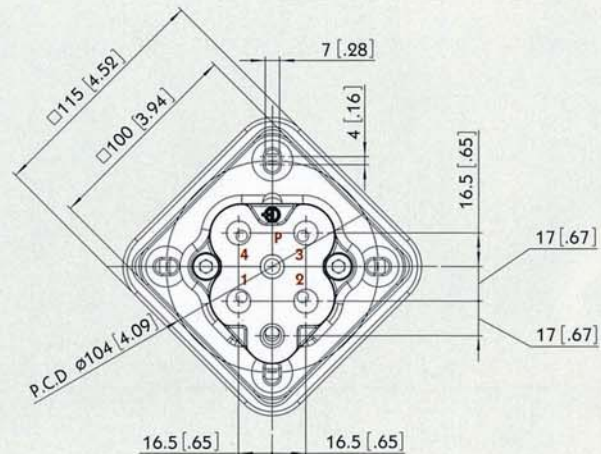
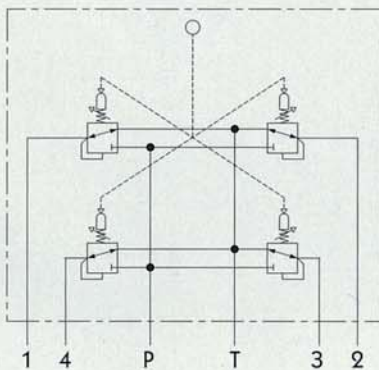


Specifications:

- This data sheet shows technical spec. with mineral oil of 46 mm²/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 cm³/min
- Fluid : mineral oil
- Fluid temperature : - 10 ~ 80°C
- Ambient temperature : - 40 ~ 60°C



HYDRAULIC SCHEME:



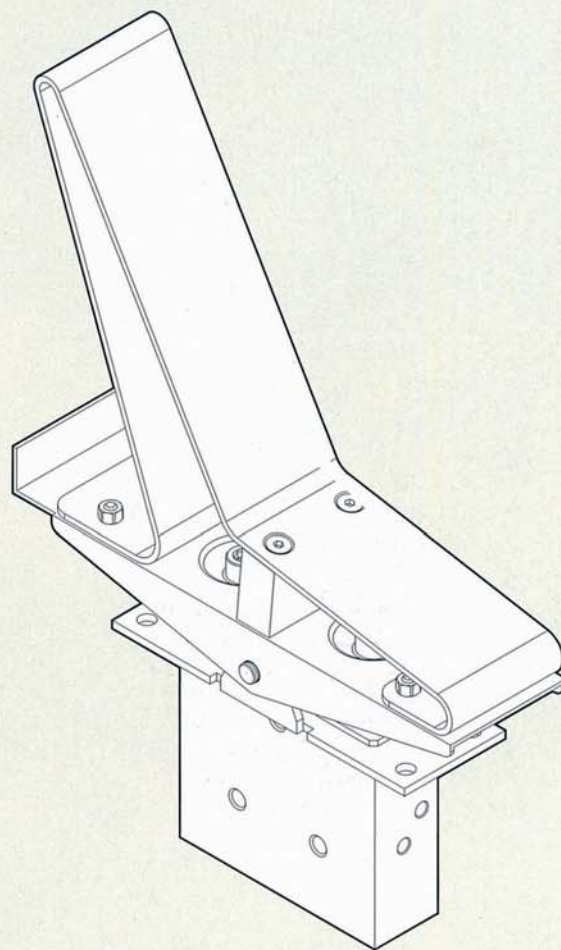
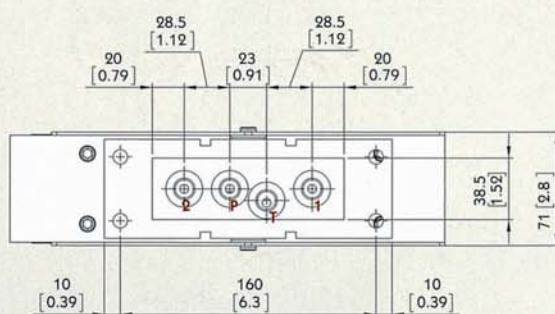
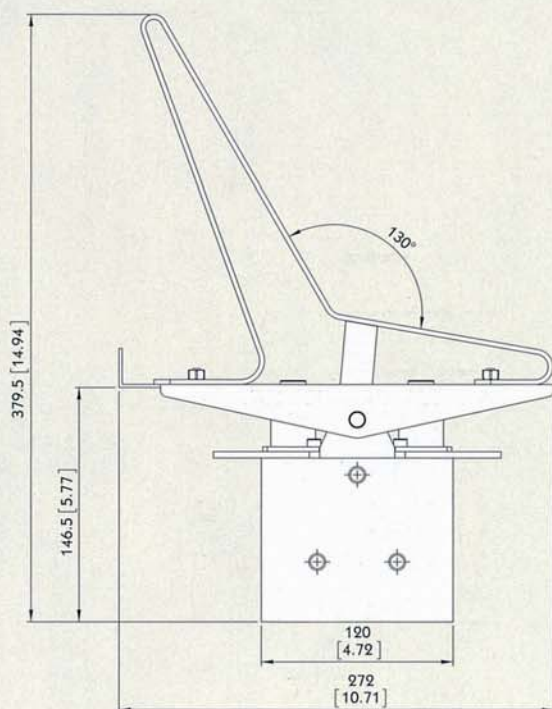
SN-8 Accessories

Sectional Directional Control Valves

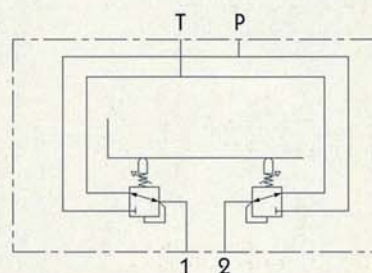
Type PHP-1

Specifications:

- This data sheet shows technical spec. with mineral oil of 46 mm²/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 cm³/min
- Fluid : mineral oil
- Fluid temperature : - 10 ~ 80°C
- Ambient temperature : - 40 ~ 60°C



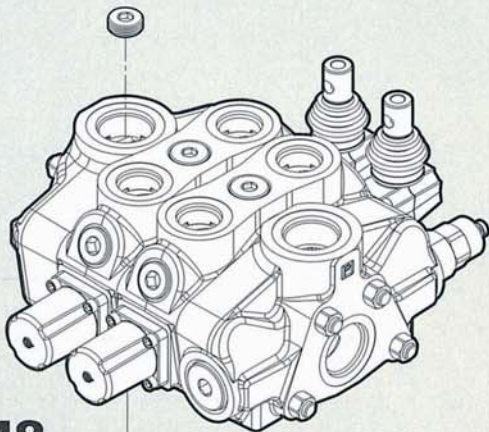
HYDRAULIC SCHEME:



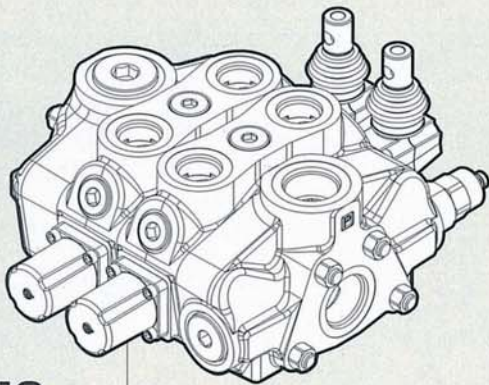
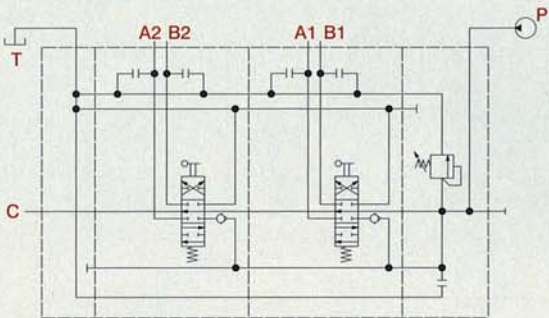
SN-8 Outlet

Sectional Directional Control Valves

Power Beyond Conversion plug
(Closed center plug)



M8



M3

