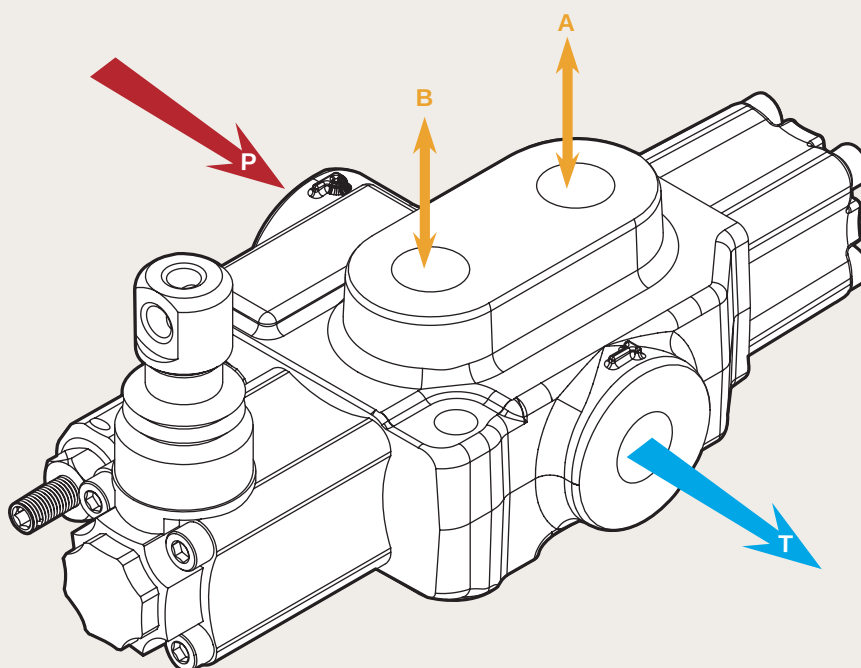

LB-2 Chapters

Monoblock Directional Control Valves

Working condition	P.5
Ordering code	P.6
Dimensions	P.8
Performance data	P.9
Inlet relief options	P.10
Spool options	P.11
A side options	P.14
B side spool positioners	P.16
Inlet options	P.20

LB-2

Monoblock Directional Control Valves



LB-2 Specifications

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
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 ² /s	from 15 to 75 cst
	min	12 mm ² /s	12 cst
	max.	400 mm ² /s	400 cst
Ambient temperature range		from - 40° to 60°C	from - 40° to 140° F

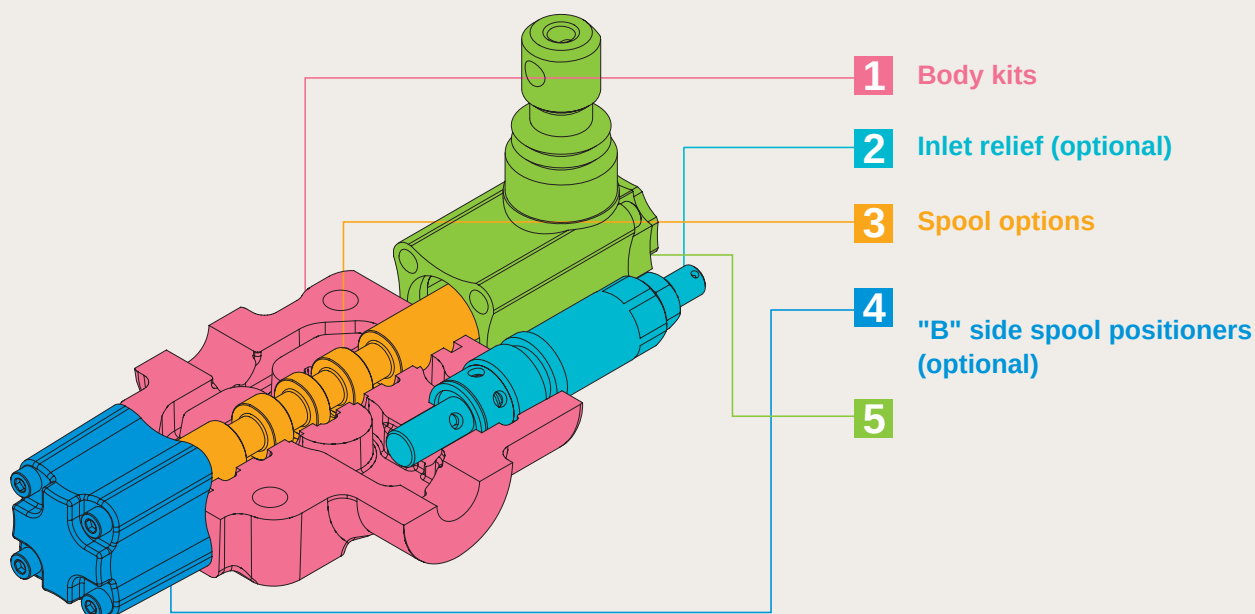
• All specifications, dimensions and design characteristics shown in this catalogue are subject to change without notice.

LB-2

Monoblock Directional Control Valves

LB-2 / **1S** - **3** / **18** **L** / G-3 / M1

1 2 3 4 5



1:	Body kits	WITHOUT SERVICE PORT VALVES PREARRANGEMENT (INCLUDE BODY, SEALS, RINGS)
TYPE	DESCRIPTION	
1 - S	1 section	

2:	Inlet Relief (optional)		
TYPE	CODE	DESCRIPTION	PAGE
DG-2	YLLB32002	Range 40 to 80 bar / 580 to 1150 psi, standard setting 80 bar / 1150 psi	P. 10
DG-3	YLLB32003	Range 63 to 200 bar / 900 to 2900 psi, standard setting 120 bar / 1750 psi	P. 10
DG-4	YLLB32004	Range 160 to 315 bar / 2300 to 4600 psi, standard setting 220 bar / 3200 psi	P. 10
SV	YLLB32100	Relief valve blanking plug	P. 10

LB-2

Monoblock Directional Control Valves

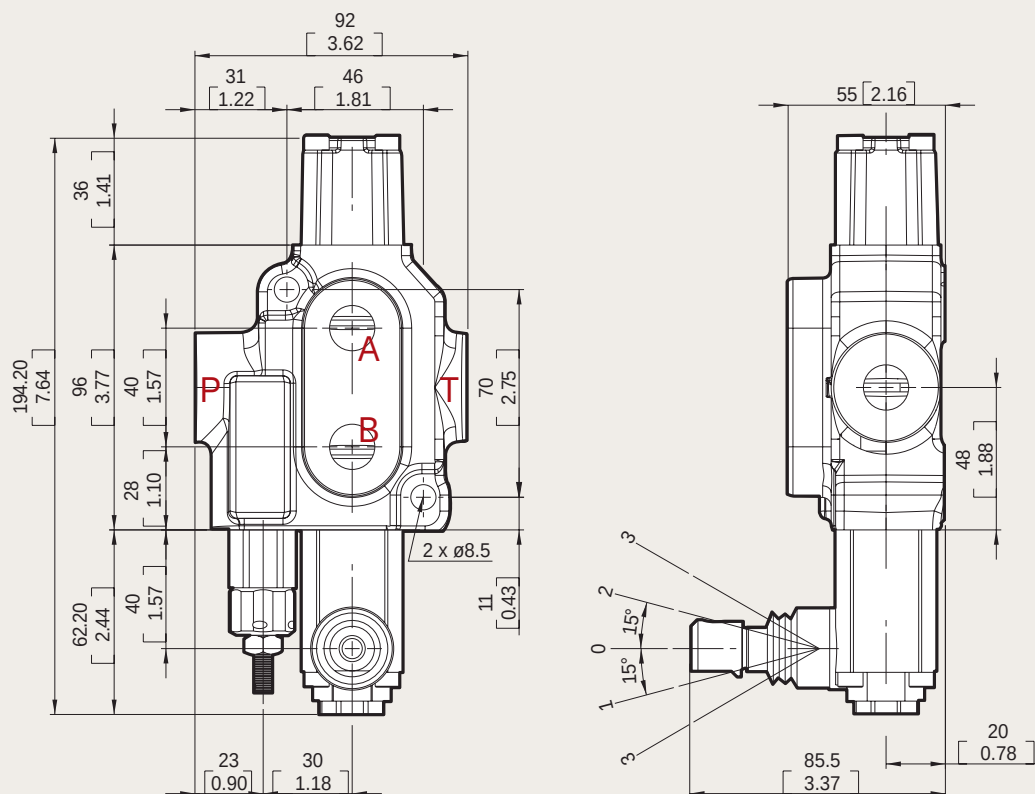
3: Spool Options			
TYPE	CODE	DESCRIPTION	PAGE
1	YLLB23001	Double acting, 3 positions, with A, B closed in neutral position	P. 11
2	YLLB23002	Double acting, 3 positions, with A, B open to Tank in neutral position	P. 11
3	YLLB23003	Single acting on A closed in neutral position, 3 positions, B plugged	P. 12
4	YLLB23003	Single acting on B closed in neutral position, 3 positions, A plugged	P. 12
9	YLLB23009	Double acting, 3 positions, with P, T, A, B closed in neutral position (Closed center)	P. 13
10	YLLB23010	Double acting, 3 positions, with A, B open to Tank and P, T closed in neutral position (Closed center)	P. 13

4: B Side Spool Positioners			
TYPE	CODE	DESCRIPTION	PAGE
6-1	YLLB24061	Detent in pos. 1-0-2, without spring centered	P. 16
6-2	YLLB24062	2 positions, detent in pos. 0-2, without spring centered	P. 16
6-3	YLLB24063	2 positions, detent in pos. 1-0, without spring centered	P. 16
8D2	YLLB24200	With spring return to neutral position and pin with M8 male thread for dual control	P. 16
8EP3	YLLB24300	ON/OFF Electro-Pneumatic actuator	P. 17
8P	YLLB24080	ON/OFF Pneumatic actuator	P. 17
8MG1 (NO)	YLLB24801	Microswitch kit operated in pos. 1 (Normally Open)	P. 18
8MG2 (NO)	YLLB24802	Microswitch kit operated in pos. 2 (Normally Open)	P. 18
8MG3 (NO)	YLLB24803	Microswitch kit operated in pos. 1&2 (Normally Open)	P. 18
MG (NO)	YLLB24804	Microswitch with NO terminal	P. 18
8MG1 (NC)	YLLB248011	Microswitch kit operated in pos. 1 (Normally Closed)	P. 18
8MG2(NC)	YLLB248021	Microswitch kit operated in pos. 2 (Normally Closed)	P. 18
8MG3 (NC)	YLLB248031	Microswitch kit operated in pos. 1&2 (Normally Closed)	P. 18
MG (NC)	YLLB248041	Microswitch with NC terminal	P. 18
8	YLLB24008	With spring return to neutral position	P. 19
8-1	YLLB24081	2 positions, with spring centered from pos. 1	P. 19
8-2	YLLB24082	2 positions, with spring centered from pos. 2	P. 19
9-1	YLLB24091	Detent in pos. 1, 2 with spring centered	P. 19
9-2	YLLB24092	Detent in pos. 2 with spring centered	P. 19
9-3	YLLB24093	Detent in pos. 1 with spring centered	P. 19

5: A Side (optional)			
TYPE	CODE	DESCRIPTION	PAGE
L	YLLB45000	Standard lever box	P. 14
SLP	YLLB45001	Without lever box, with dust-proof plate	P. 14
TQ	YLLB45003	Flexible cable connection	P. 15

LB-2 Dimensions

Monoblock Directional Control Valves



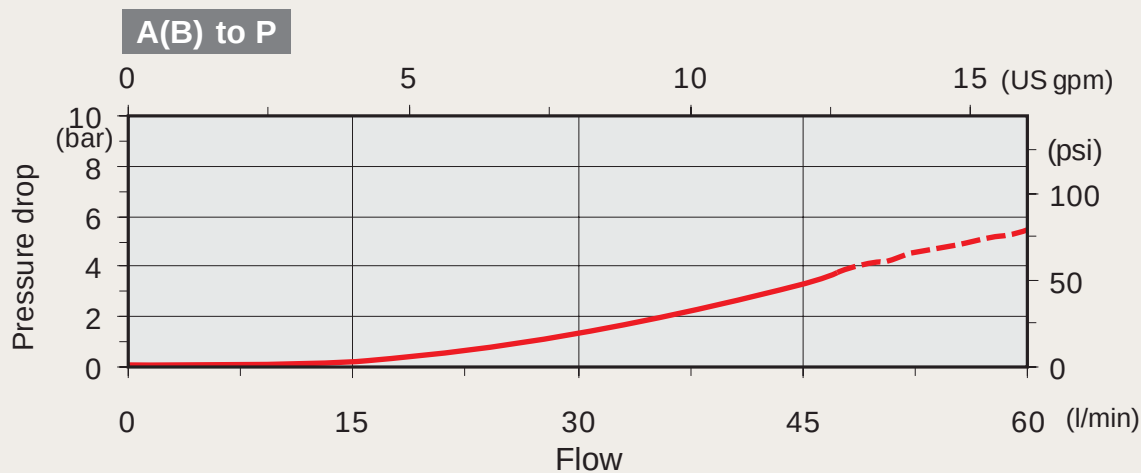
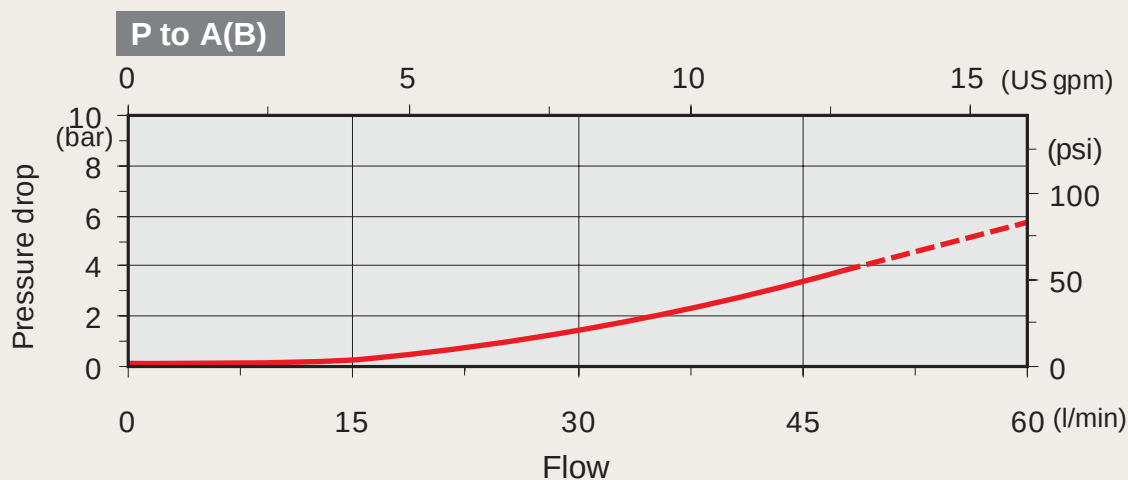
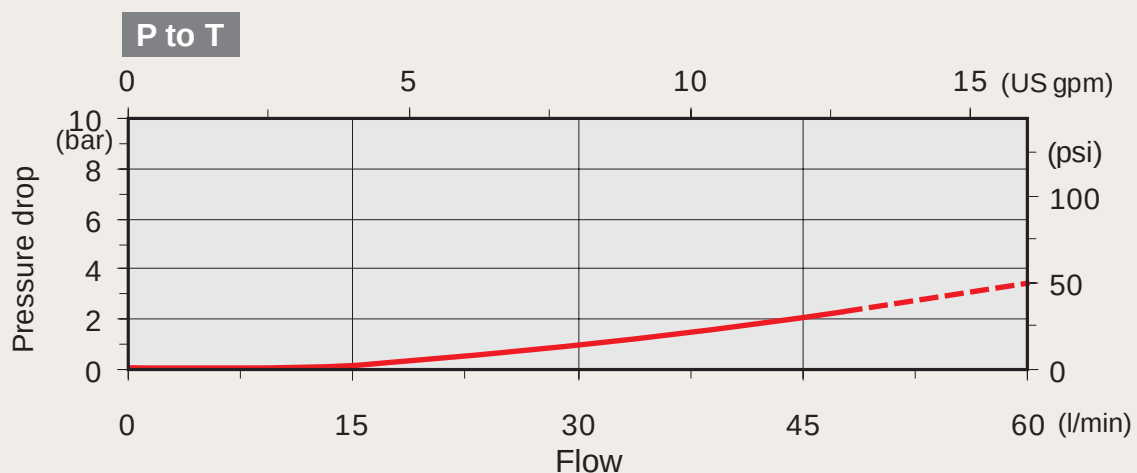
Standard threads

Ports	Inlet P	A and B	Outlet T
BSP	G3/8	G3/8	G3/8
UN-UNF	3/4-16 UNF-2B (SAE 8)	3/4-16 UNF-2B (SAE 8)	3/4-16 UNF-2B (SAE 8)
METRIC	M18x1.5	M18x1.5	M18x1.5

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

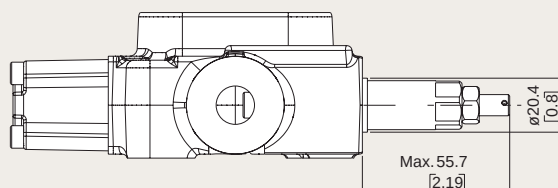
LB-2 Performance curve chart

Monoblock Directional Control Valves

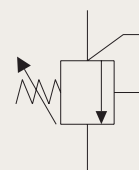


LB-2 Inlet Relief (Optional) Monoblock Directional Control Valves

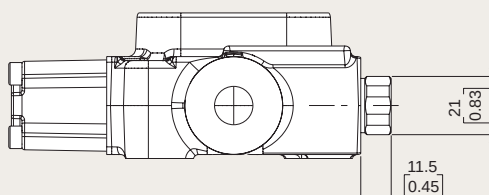
Type DG



Direct pressure relief valve:



Type SV



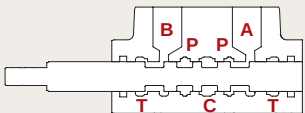
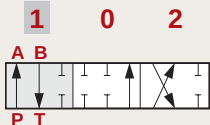
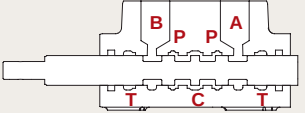
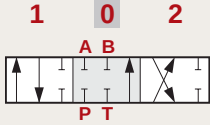
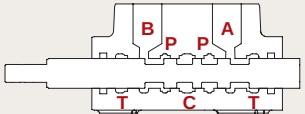
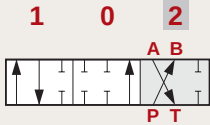
Relief valve blanking plug:



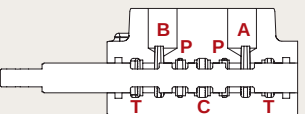
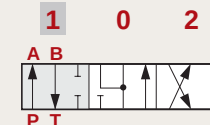
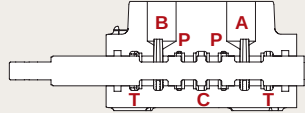
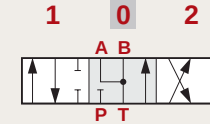
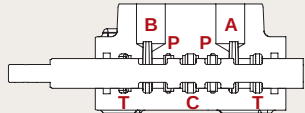
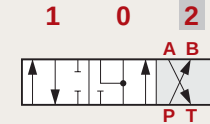
LB-2 Spool Options

Monoblock Directional Control Valves

TYPE 1

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

TYPE 2

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

LB-2 Spool Options

Monoblock Directional Control Valves

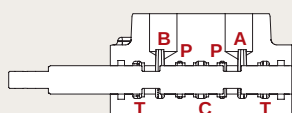
TYPE 3		
	P → A C closed	1 0 2 "B" port plugged
	P & A & T closed C open	1 0 2 "B" port plugged
	A → T C open	102 "B" port plugged

TYPE 4		
	B → T P closed C open	1 0 2 "A" port plugged
	P & B & T closed C open	1 0 2 "A" port plugged
	P → B C closed	102 "A" port plugged

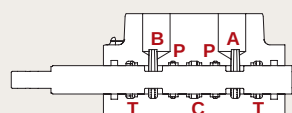
LB-2 Spool Options

Monoblock Directional Control Valves

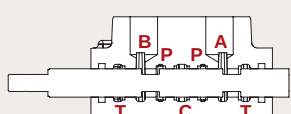
TYPE 9



P → A
B → T
C closed



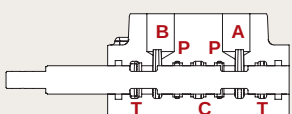
P & A & B & T closed
C closed



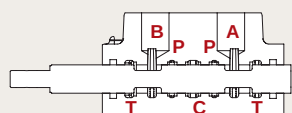
P → B
A → T
C closed



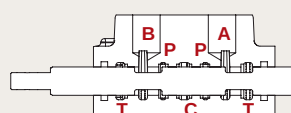
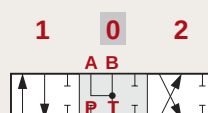
TYPE 10



P → A
B → T
C closed



A & B → T
P & C closed



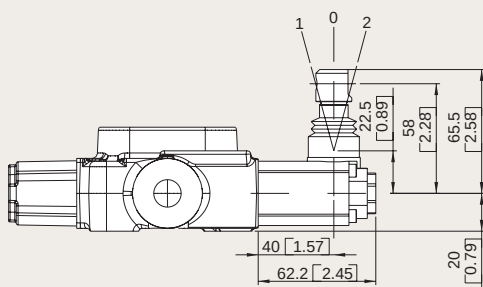
P → B
A → T
C closed



LB-2 A Side

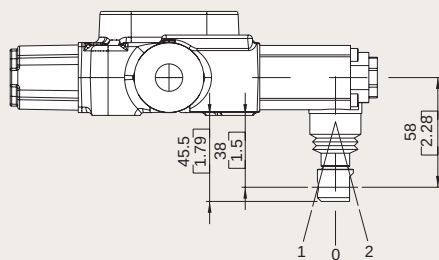
Monoblock Directional Control Valves

Type L



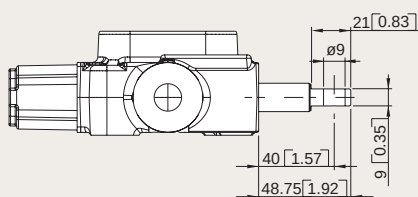
Type L:
STANDART LEVER KIT

Type R



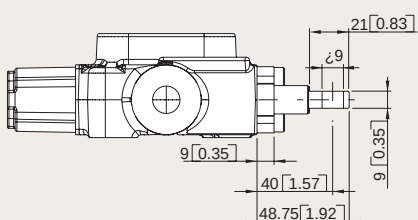
Type R:
STANDART LEVER KIT
(ROTATED 180 DEGREE)

Type SL



Type SL:
WITHOUT ANY COVER

Type SLP

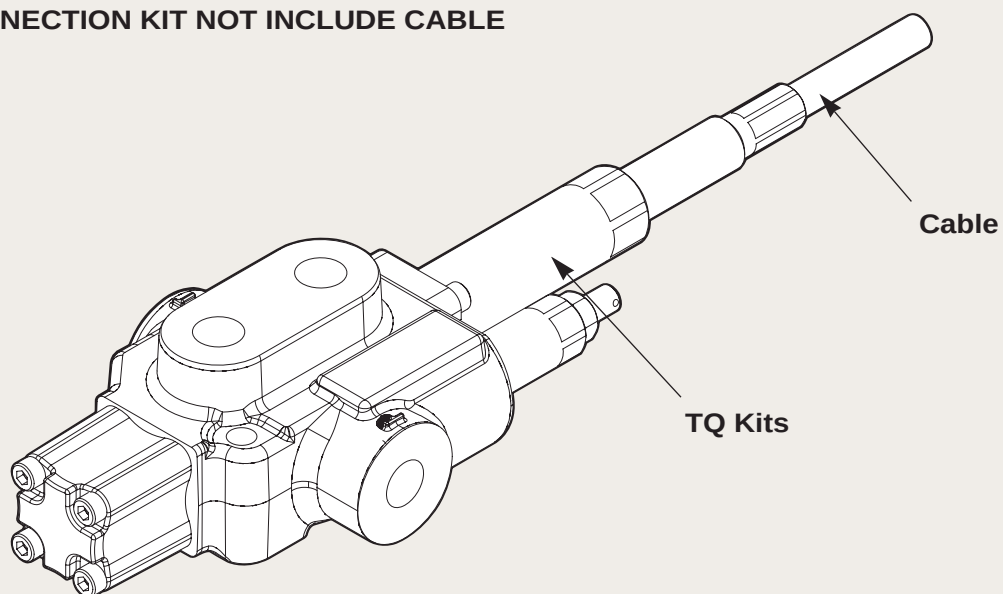


Type SLP:
WITH DUST-PROOF PLATE

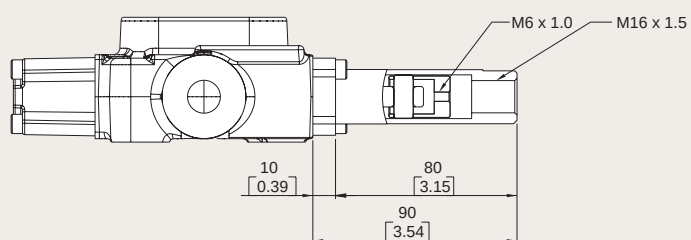
LB-2 A Side

Monoblock Directional Control Valves

Note : CONNECTION KIT NOT INCLUDE CABLE



Type TQ



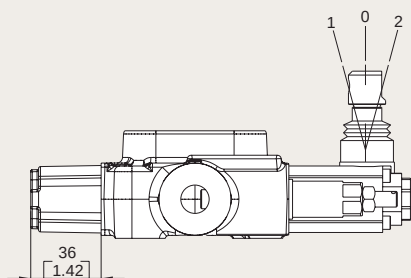
TQ Kit:



LB-2 B Side

Monoblock Directional Control Valves

Type 6



6-1 Kit:

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



6-2 Kit:

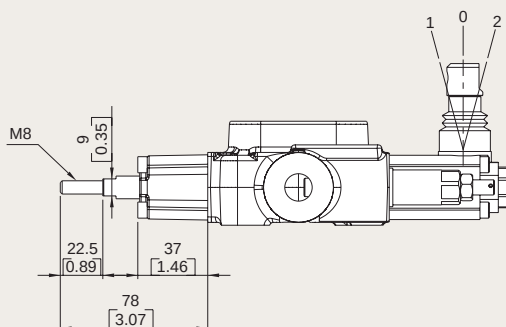
2 POSITIONS, DETENT IN POS. 0-2, WITHOUT SPRING CENTERED



6-3 Kit:

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

Type 8D2



8D2 Kit:

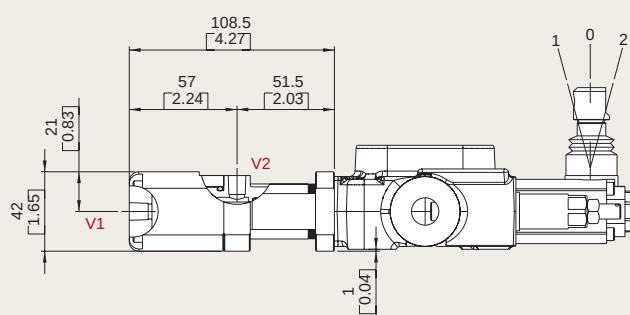
WITH SPRING RETURN TO NEUTRAL POSITION AND PIN WITH M8 MALE THREAD FOR DUAL CONTROL

LB-2 B Side

Monoblock Directional Control Valves

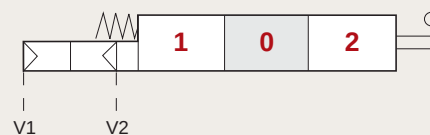
Type 8P

V1 & V2: NPT 1/8 - 27

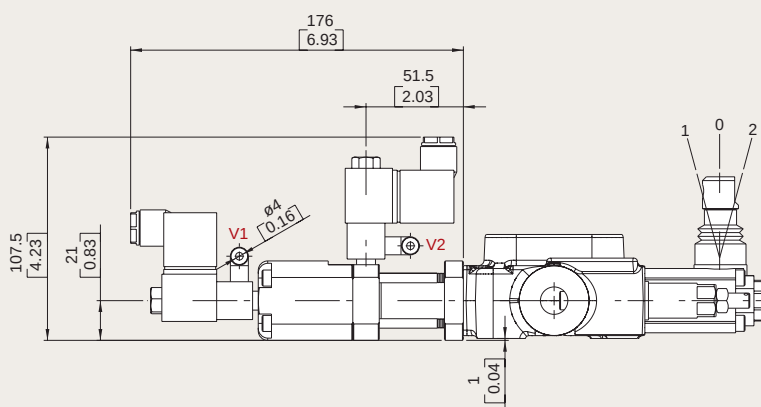


Operating feature :

PILOT PRESSURE (MIN.): 5.5 BAR / 80 PSI
PILOT PRESSURE (MAX.): 10 BAR / 145 PSI

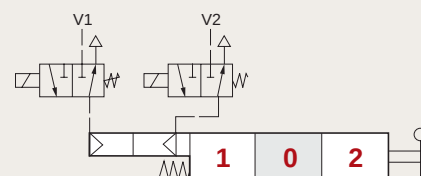


Type 8EP3



Solenoid operating features :

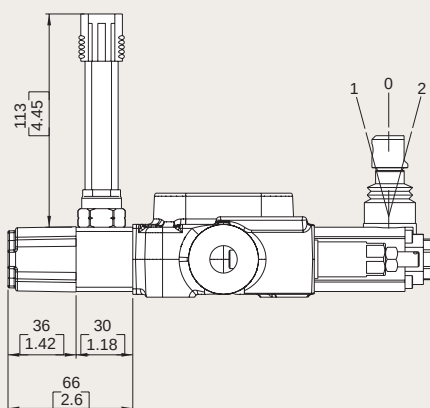
NOMINAL VOLTAGE: 24VDC
NOMINAL VOLTAGE TOLERANCE: $\pm 10\%$
POWER RATING: 5W



LB-2 B Side

Monoblock Directional Control Valves

Type 8MG



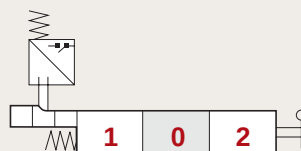
MICROSWITCH

Operating features :

MECHANICAL LIFE: • 5X10⁶ OPERATIONS

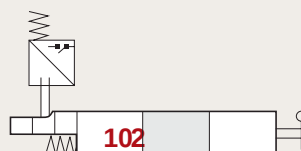
ELECTRICAL LIFE (RESISTIVE LOAD):

- 10⁵ OPERATIONS - 7A / 13.5 VDC
- 5x10⁴ OPERATIONS - 10A / 12 VDC
- 5x10⁴ OPERATIONS - 3A / 28 VDC



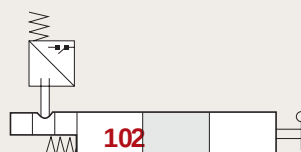
8MG1 Kit:

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



8MG2 Kit:

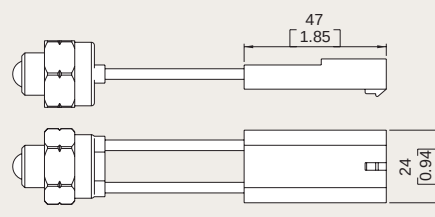
MICROSWITCH WITH MALE/FEMALE CONNECTOR, OPERATED IN POS. 2



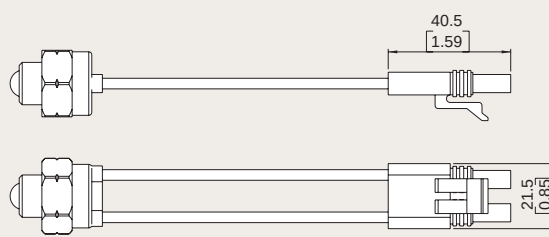
8MG3 Kit:

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

With NO contact (female connector with male end)



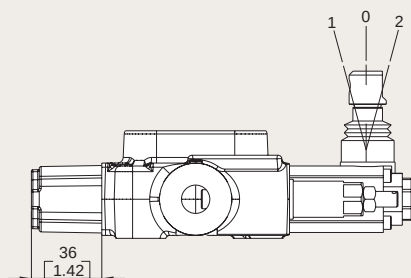
With NC contact (male connector with female end)



LB-2 B Side

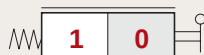
Monoblock Directional Control Valves

Type 8



8 Kit:

SPRING RETURN TO NEUTRAL POSITION.



8-1 Kit:

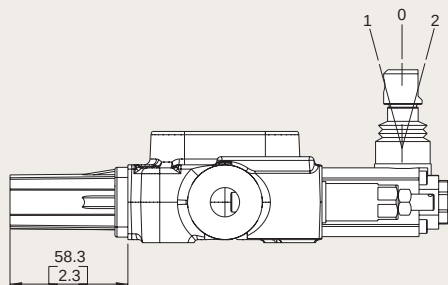
SPRING RETURN TO NEUTRAL POSITION.
(2 POSITIONS)



8-2 Kit:

SPRING RETURN TO NEUTRAL POSITION.
(2 POSITIONS)

Type 9



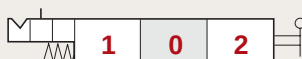
9-1 Kit:

DETENT IN POS. 1, 2 WITH SPRING CENTERED



9-2 Kit:

DETENT IN POS. 2 WITH SPRING CENTERED



9-3 Kit:

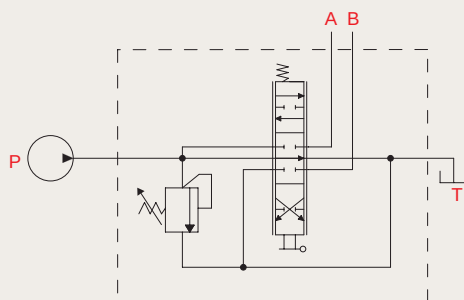
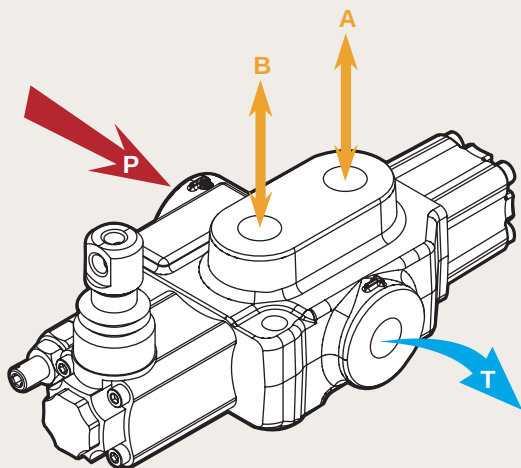
DETENT IN POS. 1 WITH SPRING CENTERED

LB-2 Inlet

Monoblock Directional Control Valves

A simmetrical body allows the reverse assembly of spool and relative control kit and lever

(Left inlet)



(Right inlet)

