

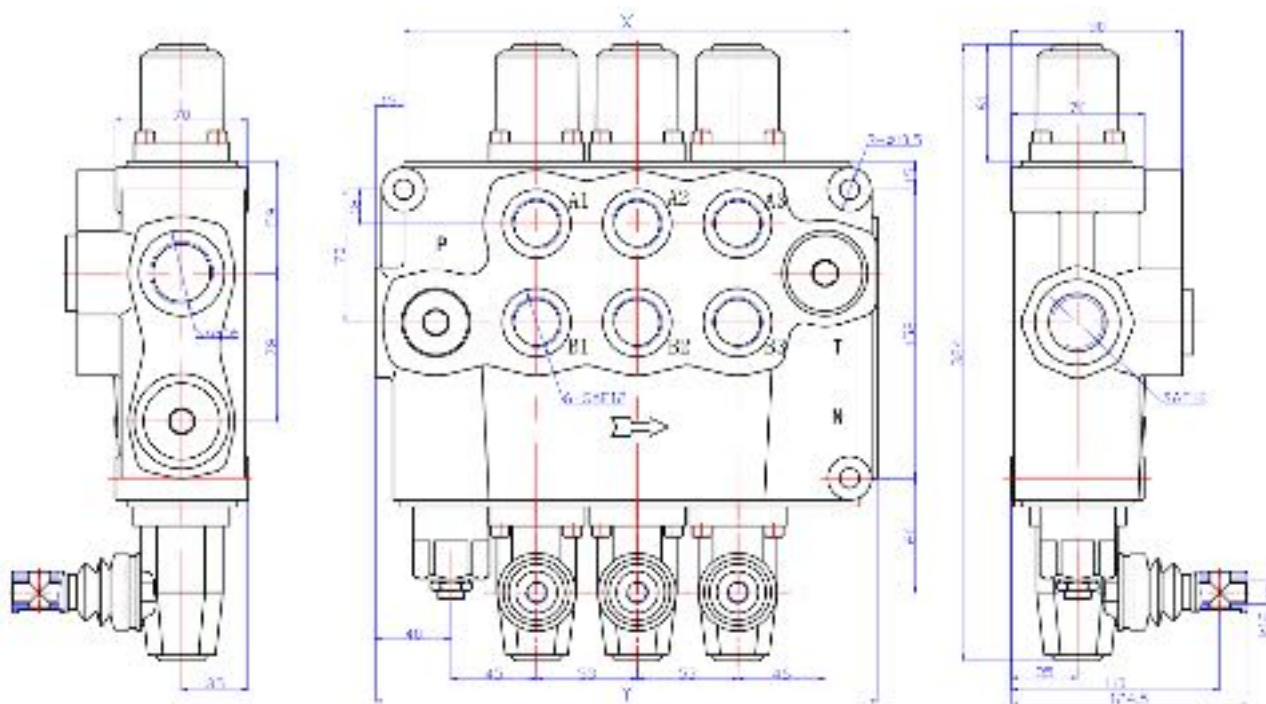
SD-18 Monoblock Directional Control Valve



SD-18 HYDRAULIC MONOBLOCK DIRECTIONAL CONTROL VALVES

Dimensional data (parallel circuit)

Directional valve with left relief valve



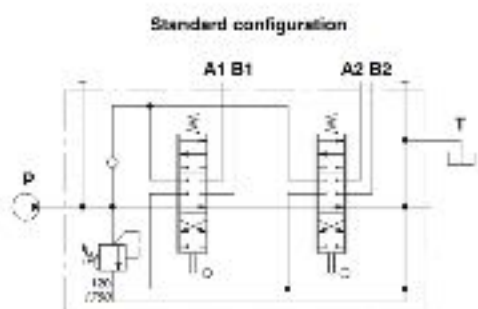
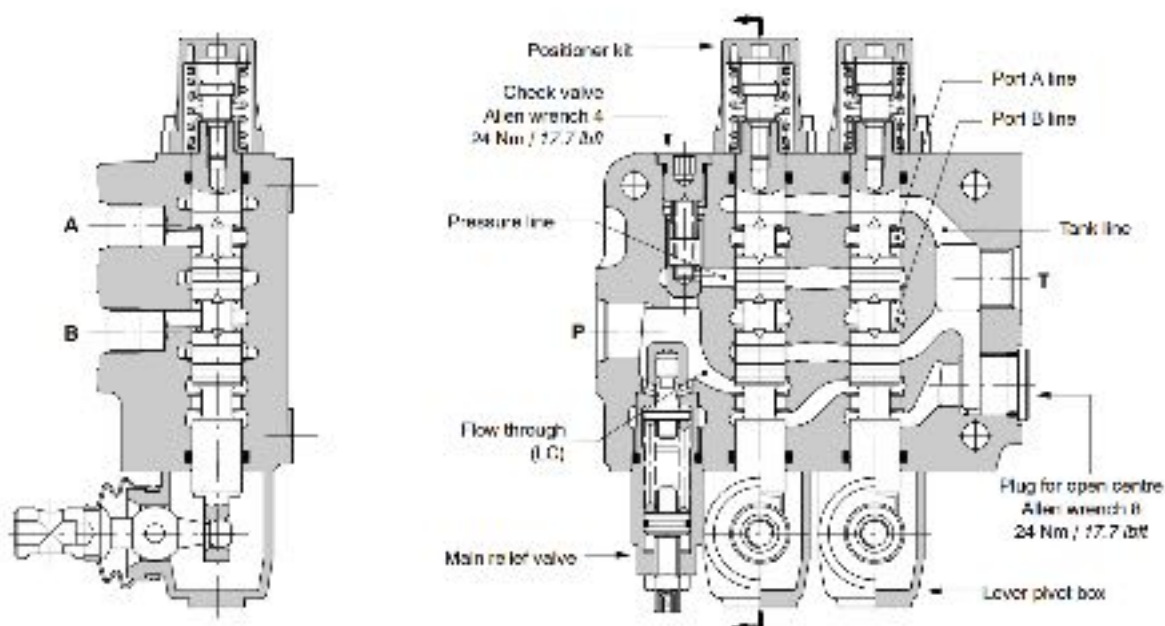
SD-18 Series Standard Dimension

Type	Y		X		Weight	
	mm	inch	mm	inch	kg	lb
SD-18/1	159	6.26	129	5.08	13.2	29.1
SD-18/2	212	8.35	182	7.17	18.6	41
SD-18/3	265	10.4	235	9.25	23.5	51.8
SD-18/4	318	12.5	288	11.3	28.8	63.5

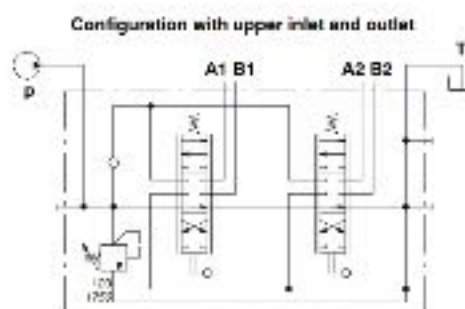
SD-18 HYDRAULIC MONOBLOCK DIRECTIONAL CONTROL VALVES

SD-18 Specification

Nominal Flow Rate		160LPM	42US GPM
Opening Pressure (Max)		250bar	3600PSI
Back Pressure (Max)	On outlet port T	25bar	360PSI
Fluid Temperature Range	With NBR Seals	From -20° to 80°C	From -4° to 176°F
	With Viton Seals	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



Description Example
SD-18/2-P(JG3--120)/18L/18L/AET-SAE

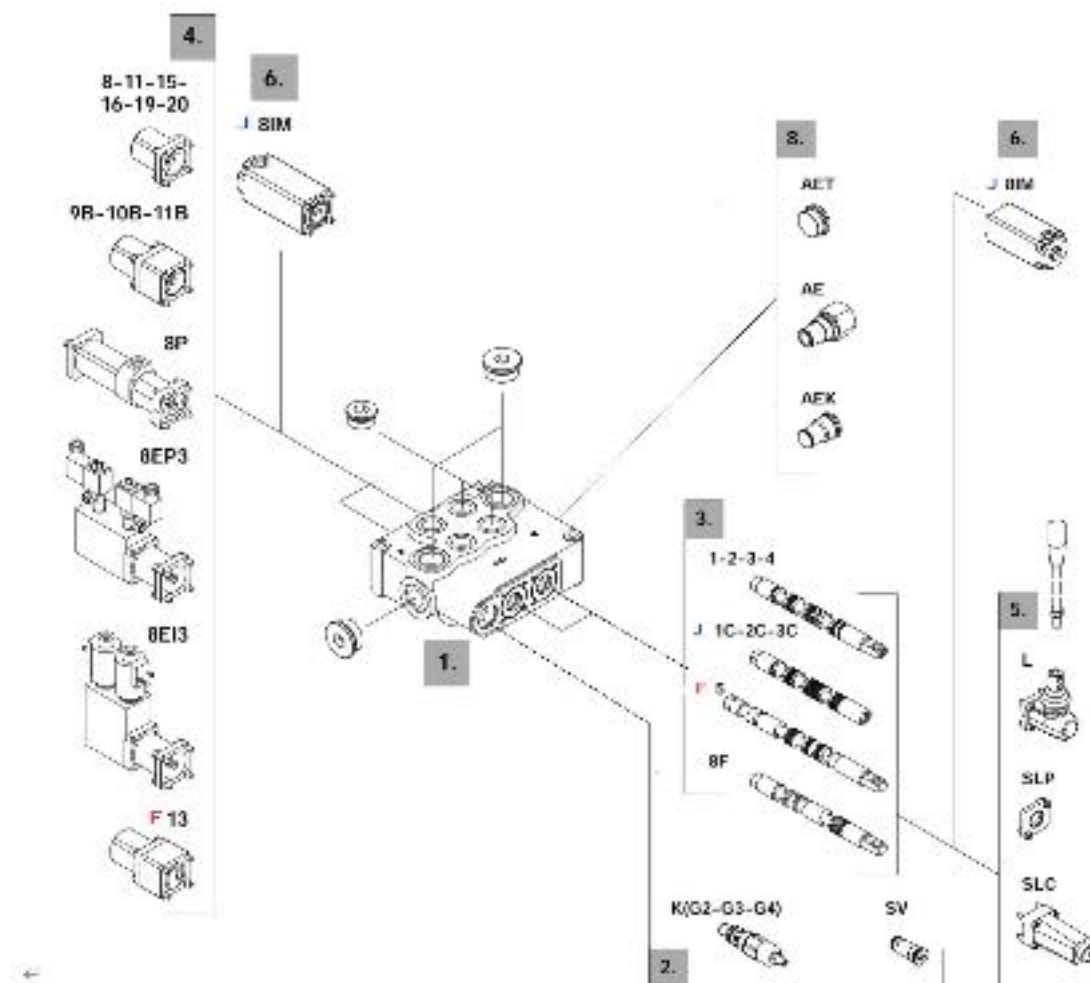


Description Example
SD-18/2--P(JG3--120)/18L/18L/AET-SAE-PSA

SD-18 HYDRAULIC MONOBLOCK DIRECTIONAL CONTROL VALVES

SD-18 Monoblock Control Valves Code

SD-18 / 2-P (JG3-160) / 1 8 L / 1 8IM / AET - U - G
 1 2 3 4 5 2nd slice 8 9 10

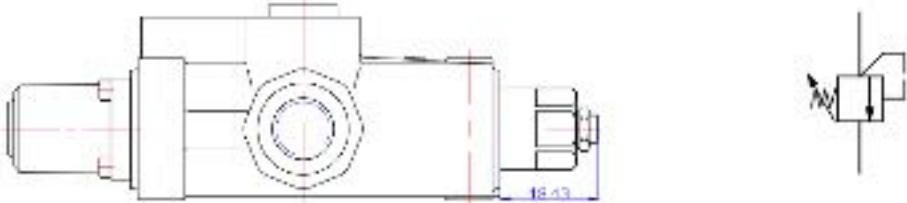


1. Body kits

TYPE	DESCRIPTION
SD-18/1-P	Parallel, 1 section
SD-18/2-P	Parallel, 2 sections
SD-18/3-P	Parallel, 3 sections
SD-18/4-P	Parallel, 4 sections

SD-18 HYDRAULIC MONOBLOCK DIRECTIONAL CONTROL VALVES

2. Inlet Relief Valve Options

	
TYPE	DESCRIPTION
YG2	Range 40 to 80 bar / 580 to 1150 psi, standard setting 80 bar / 1150 psi
YG3	Range 63 to 200 bar / 900 to 2900 psi, standard setting 120 bar / 1750 psi
YG4	Range 160 to 315 bar / 2300 to 4600 psi, standard setting 200 bar / 2900 psi
SV	Relief valve blanking plug

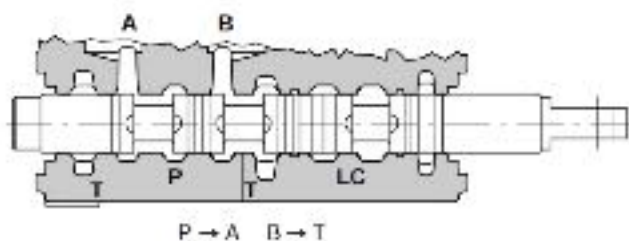
3. Spool options

TYPE	DESCRIPTION
1	Double acting, 3 positions, with A and B closed in neutral position
◦ 2	Double acting, 3 positions, with A and B open to tank in neutral position
3	Single acting on A, 3 positions, B plugged requires G3/4 plug
4	Single acting on B, 3 positions, A plugged requires G3/4 plug
1C	As type 1, spools for 8IM hydraulic control.
2C	As type 2, spools for 8IM hydraulic control.
3C	As type 3, spools for 8IM hydraulic control.

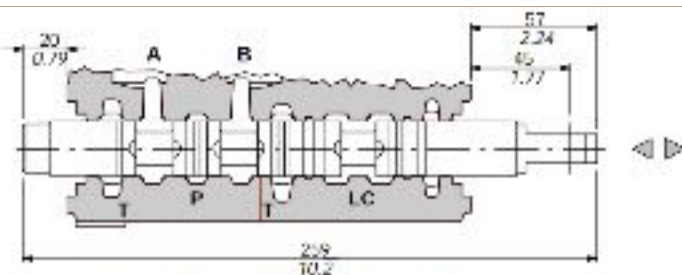
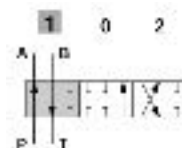
SD-18 HYDRAULIC MONOBLOCK DIRECTIONAL CONTROL VALVES

3. Spool options

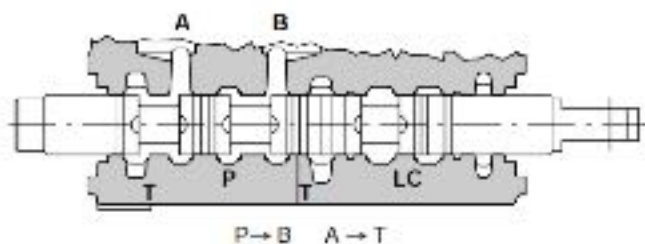
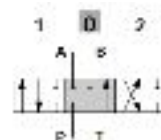
Type 1



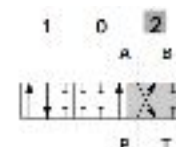
stroke = + 10 mm
+ 0.39 in



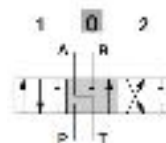
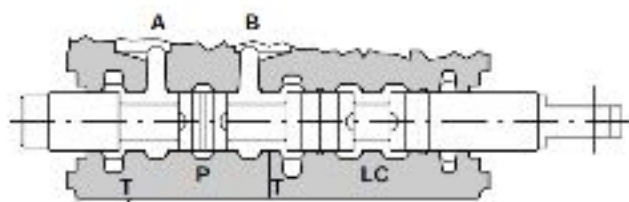
P-A-B-T closed, with flow through line (LC) open



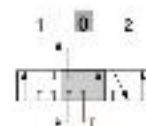
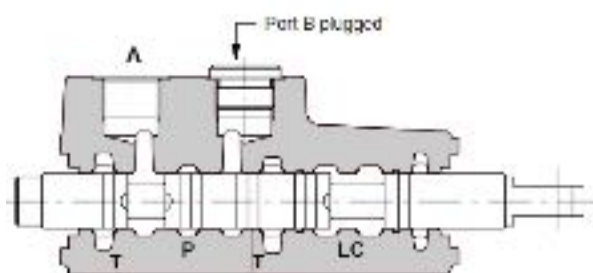
A stroke = - 10 mm
- 0.39 in



Type 2



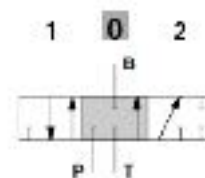
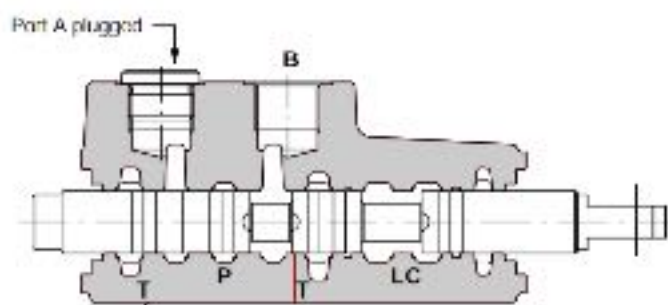
Type 3



SD-18 HYDRAULIC MONOBLOCK DIRECTIONAL CONTROL VALVES

3. Spool options

Type 4



SD-18 HYDRAULIC MONOBLOCK DIRECTIONAL CONTROL VALVES

4. “A” side spool positioners

Type	Description
8	With spring return in neutral position
9B	With detent in position 1 and spring return in neutral position
10B	With detent in position 2 and spring return in neutral position
11B	Detent in positions 1 and 2 and spring return in neutral position
11	Detent in positions neutral, 1 and 2
15	2 positions, detent in positions 1 and neutral
16	2 positions, detent in positions 2 and neutral
19	2 positions, with spring return in neutral position from position 1
20	2 positions, with spring return in neutral position from position 2
8P	ON/OFF pneumatic kit
8EP3	ON/OFF 12 VDC electro--pneumatic kit 12VDC
8EP4	ON/ OFF 24 VDC electro--pneumatic kit 24VDC
8ED3	ON/OFF 12 VDC electro--hydraulic kit 12V
8ED4	ON/OFF 24 VDC electro--hydraulic kit 24V
8IM	Proportional hydraulic control

SD-18 HYDRAULIC MONOBLOCK DIRECTIONAL CONTROL VALVES

4. “A” side spool positioners A

Type	Dimension	Circuit
8		
9B		
10B		
11B		
11		
15		
16		
19		
20		
8P		

SD-18 HYDRAULIC MONOBLOCK DIRECTIONAL CONTROL VALVES

4. “A” side spool positioners A

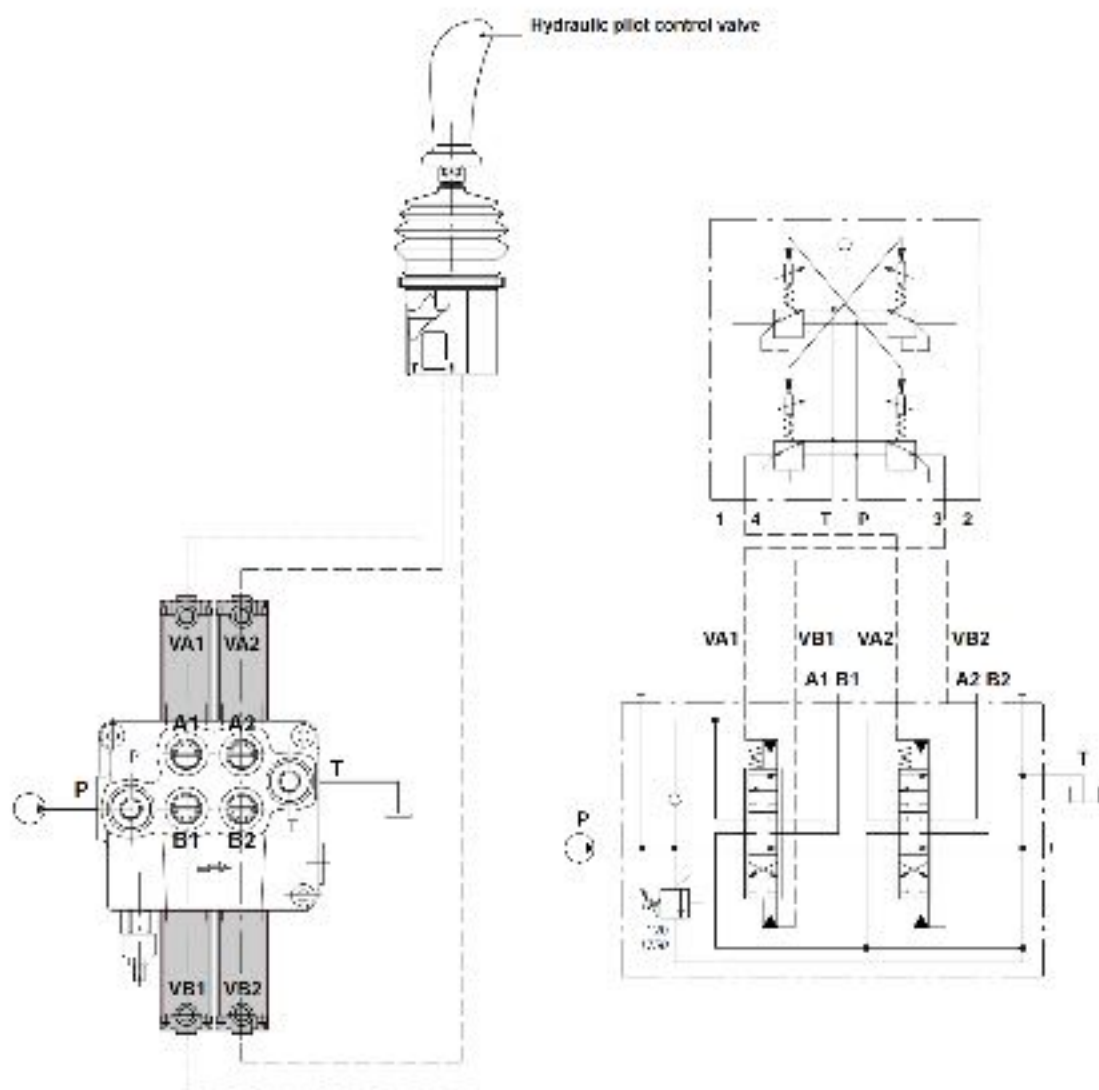
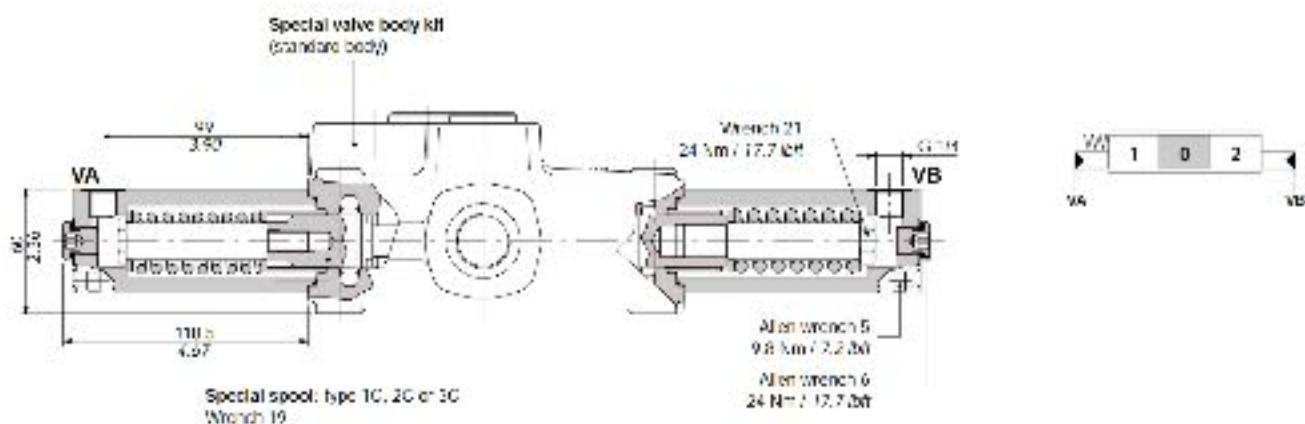
Type	Dimension	Circuit
8EP3		
8EP4		

Type: 8ED3, 8ED4 ON-OFF Electro-hydraulic spool control kits

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SD-18 HYDRAULIC MONOBLOCK DIRECTIONAL CONTROL VALVES

Type: 8IM: Proportional hydraulic control

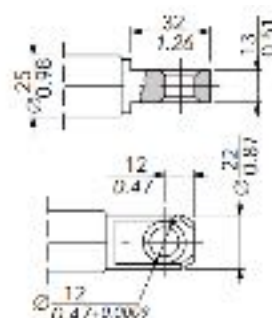
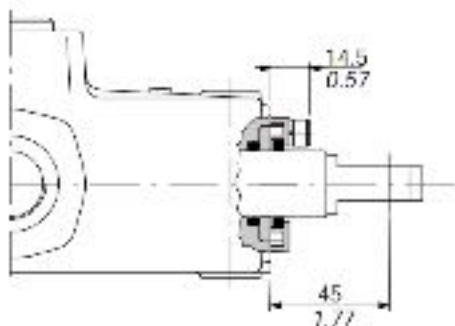
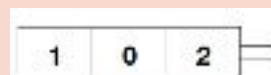


SD-18 HYDRAULIC MONOBLOCK DIRECTIONAL CONTROL VALVES

5. “B” Side control way

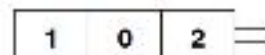
TYPE

SLP: Without lever, with dust proof plate



TYPE 型号

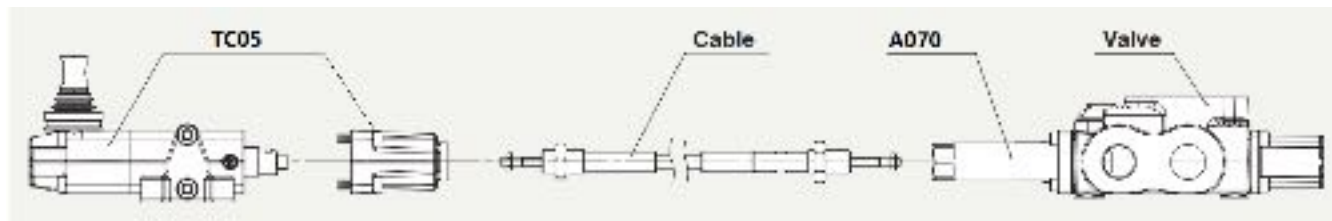
LR: With rotary control kit



SD-18 HYDRAULIC MONOBLOCK DIRECTIONAL CONTROL VALVES

5. “B” Side control way

SD-18 Cable Specification HM11 软轴



Cable Code: TQ05/3/M3/CD1500/A160

M: Spring return

N: Without spring

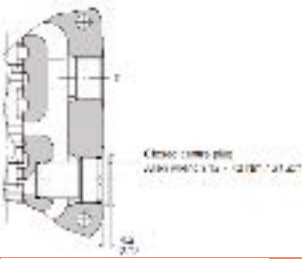
3: 3 spools

CD1500: 1500mm cable

A160: HM11 aluminum cable kits

SD-18 HYDRAULIC MONOBLOCK DIRECTIONAL CONTROL VALVES

8. Outlet port options N

Type	Description	Circuit
AET	Open centre plug	See page 5.
AEK	Closed centre plug C	
AE	Power beyond sleeve	

9. Inlet and outlet selection PT

Type	Description
S	Side ports; need n.2 plugs, standard configuration (omit in valve description)
U	Upper ports; need n.2 plugs

10. Ports Options

Port code	P	T	A	B
S	1 5/16-12UN-2B (SAE 16)	1 5/16-12UN-2B (SAE 16)	1 1/16-12UN-2B (SAE12)	1 1/16-12UN-2B (SAE12)
G	G3/4	G1	G3/4	G3/4
G1	G1	G1	G1	G1