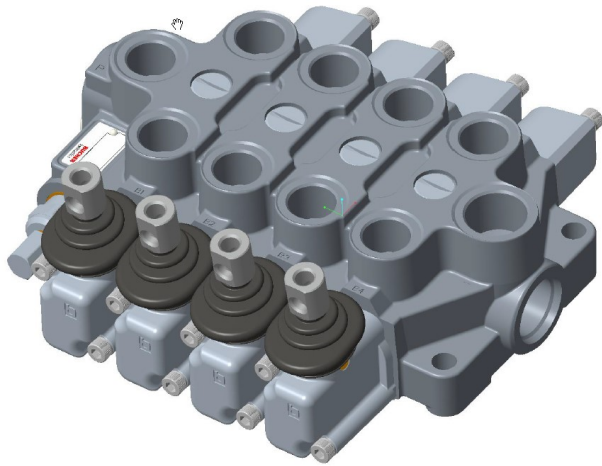


Open Center Spool Valves

Monoblock Directional Control Valve D-DM18



- compact hand lever control valve
- Wide range of capabilities
- Perfect designed for easy control

1 Description

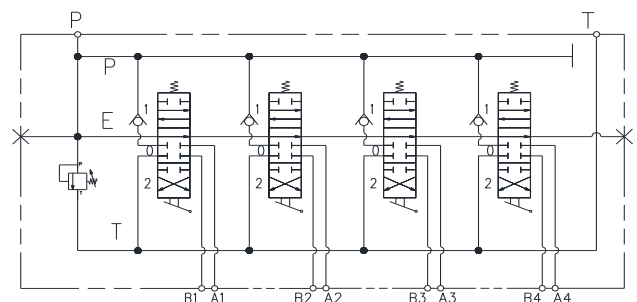
1.1 Short description

The D-DM18 is a directional control valve in a Monoblock design with up to 4 spool. The valve can be use for various applications in agriculture and construction business in the power range of 250 bar 70 l/min

1.2 Application

Working equipment for agriculture and construction business

2 Symbol (example)



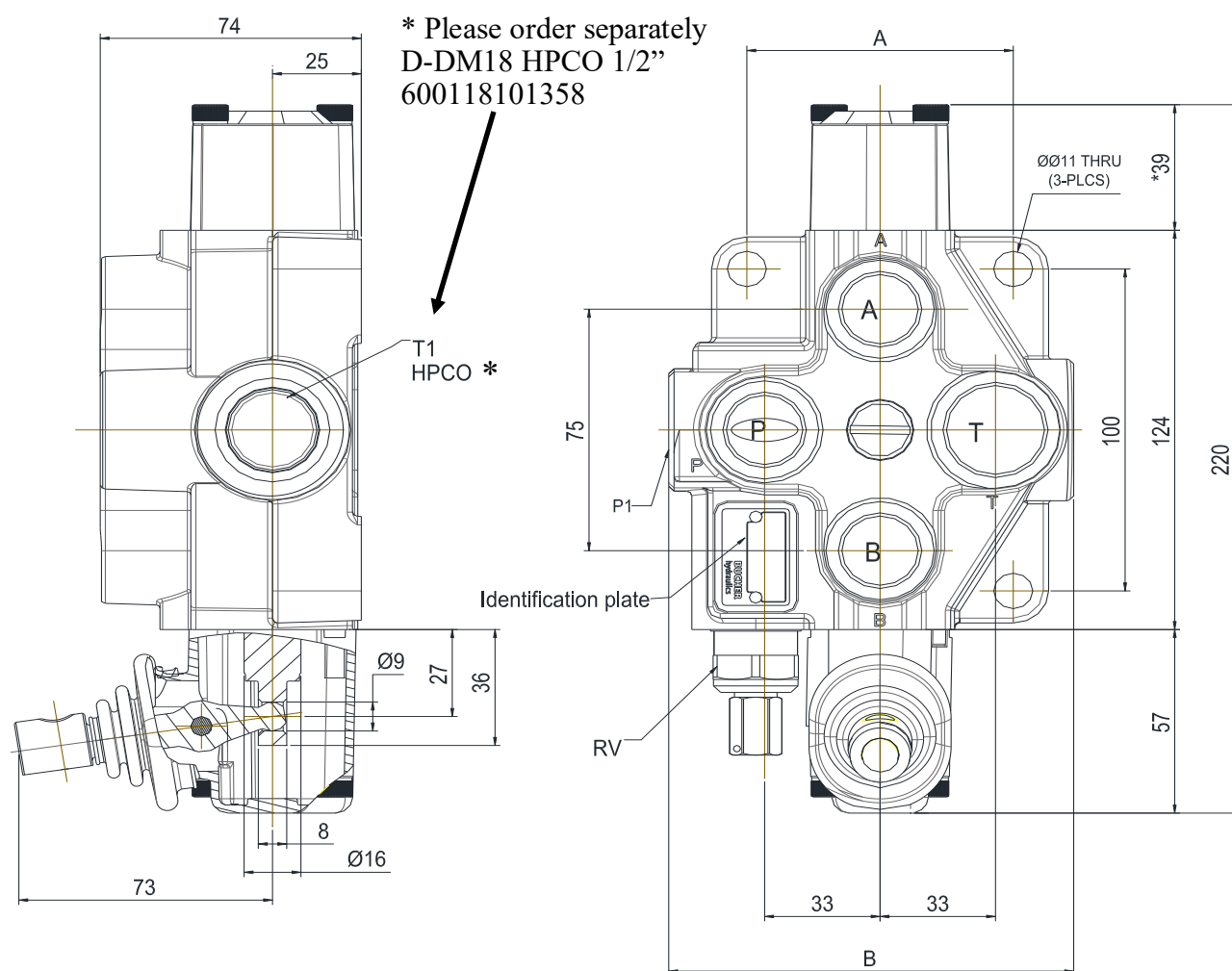
3 General specifications

3.1 Technical data

General characteristics	Unit	Description, valve
Design		Monoblock design with 1 ,2,3 and 4 spools
Seal material		NBR (Standard)
Weight	Kg	D-DM18/1=4.3 D-DM18/2=6.0 D-DM18/3=9.0 D-DM18/4=12.0
Control type		Manual
Number of spools		1,2,3,4
Adjustable direct operated relief valve	RV	Integrated
Single load hold check valve	LC	Integrated
Connection port P, T,A and B		BSP 1/2"

Hydraulic characteristics	Unit	Description valve
Nominal flow rate	l/min.	Max. 70
Maximum inlet pressure	bar	Continuous 250
Maximum tank pressure at port T	bar	25
Viscosity range	mm ² /s	16 ≤ 75
Oil cleanliness		class 20/18/15 of ISO4406
Oil temperature range	°C	-10 to + 80
Average Spool leakage at 100bar, 50°C, and 27 mm ² /s	cm ³ /min	7 on average

4 Dimensions



NUMBER OF SECTION	D-DM18/1	D-DM18/2	D-DM18/3	D-DM18/4
Dimension A in mm	75	115	155	195
Dimension B in mm	114	154	194	235

5 Preferred versions

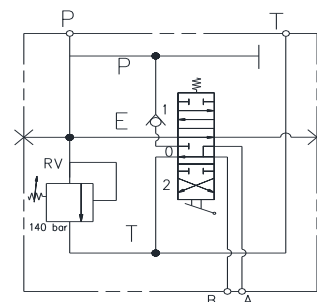
5.1 One spool type A

D-DM18/1 K02 15 A08 L100

Item number without top coat: 600118051

D-DM18/1 K02 15 A08 L100/TC

Item number with top coat: 600118050



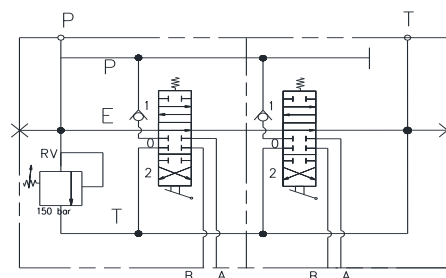
5.2 Two spool type A

D-DM18/2 K02 15 AA08 L100

Item number without top coat: 600118053

D-DM18/2 K02 15 AA08 L100/TC

Item number with top coat: 600118052



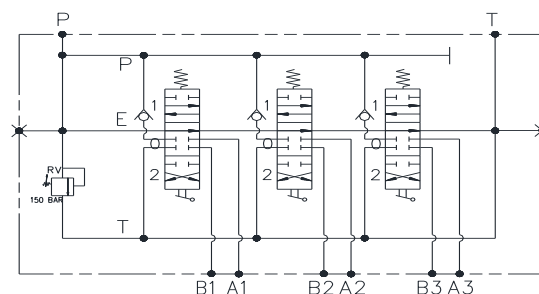
5.3 Three spool type A

D-DM18/3 K02 15 AAA08 L100

Item number without top coat: 600118055

D-DM18/3 K02 15 AAA08 L100/TC

Item number with top coat: 600118054



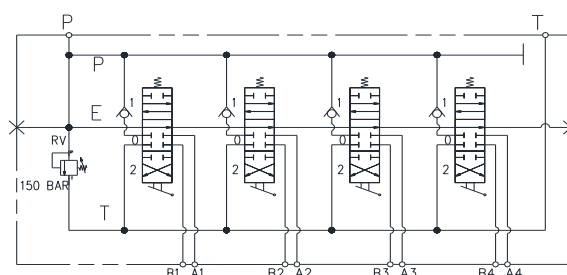
5.4 Four spool type A

D-DM18/4 K02 15 AAAA08 L100

Item number without top coat: 600118057

D-DM18/4 K02 15 AAAA08 L100/TC

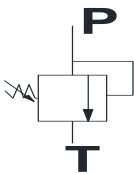
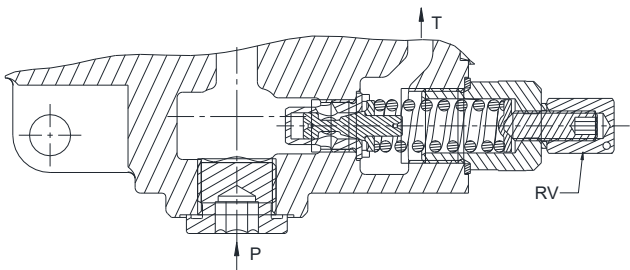
Item number with top coat: 600118056



NOTE :- RV: Standard spring 96-210 bar Factory setting: 150 bar at 30l/min

6 Options to be purchased separately

6.1 Spring for relief valve



Pressure set range bar	Std. setting Bar	Order code	Item number	Spring color
30 - 95	60	06	600114300026	Yellow
96 - 210 (Standard)	150	15	600114300038	Green
211 – 320	260	26	600114300025	Blue

6.2 Spool positioners

Spool Position				Stroke	TYPE Code	Order CODE	Item number
3	1	0	2	mm			
	○	★	○	5	08	D-POS.08 DS15-DM18-DS130	600115100428
	●	●	○	5	10	D-POS.10 DS15-DM18-DS130	600115100679
	●	●	●	5	17	D-POS.17 DS15-DM18-DS130	600115100161
	○	●	●	5	20	D-POS.20 DS15-DM18-DS130	600115100050
		●	●	5	25	D-POS.25 DS15-DM18-DS130	600115100578
		★	○	5	29	D-POS.29 DS15-DM18-DS130	600115100051
●	○	★	○	4-5-5	136	D-POS.136 DS15-DM18-DS130	600115100053

★ Initial hand lever positioner - ● Hand lever in detent position - ○ Spring return position of hand lever

6.2.1 Spool positioner dimensions

Spool positioners
08

Spool positioners
10 - 17 - 20 - 25 - 29

Spool positioners
136 (Z spool type)

Spool position corresponds
to hand lever position

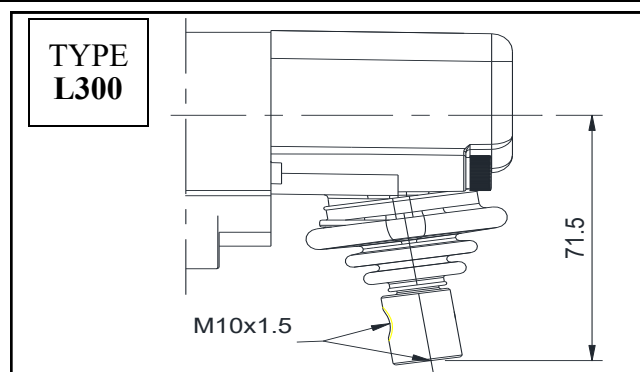
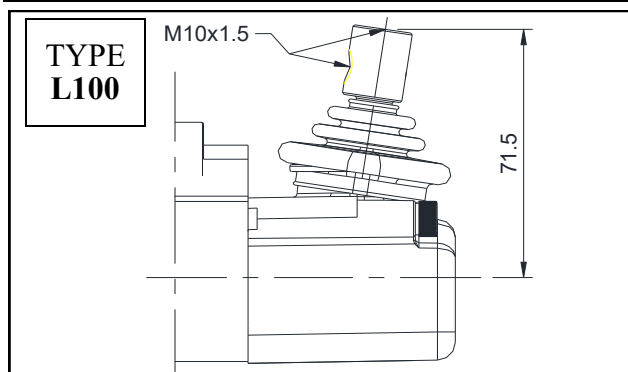
6.3 Spool type

Spool scheme	Spool features	Type	Item number
	4 Way - 3 position A/B closed E open by pass	A	600115300136
	4 Way - 3 position A/B E closed	B	600115300137
	4 Way - 3 position A/B to tank in neutral E open by pass	C	600115300138
	3 Way - 3 position B closed E open by pass	G	600115300139
	3 Way - 3 position A closed E open by pass	S	600115300140
	4 Way - 4 position 4th floating position	Z	600115300141

6.4 Hand lever fitting system

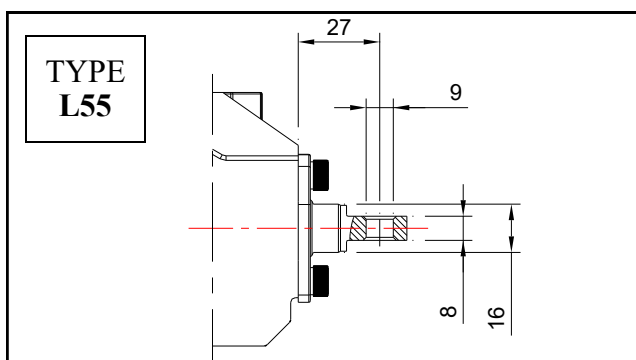
6.4.1 L100-L300 Standard

Order code	Item number
D-L100-L300 M10	600115100693



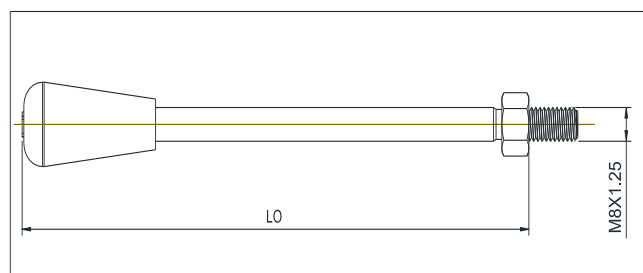
6.4.2 L55 Kit

Order code	Item number
D-L55 D9	600115100101



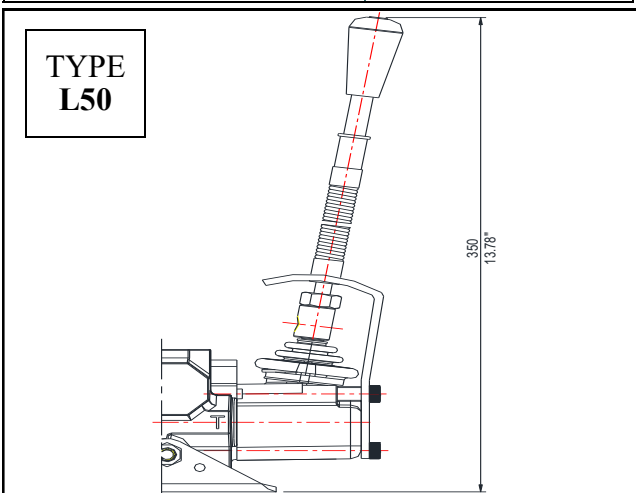
6.4.3 Available hand lever

Order Code	Item Number
D-AL185 M10	600909200039
D-AL250 M10	600909200040



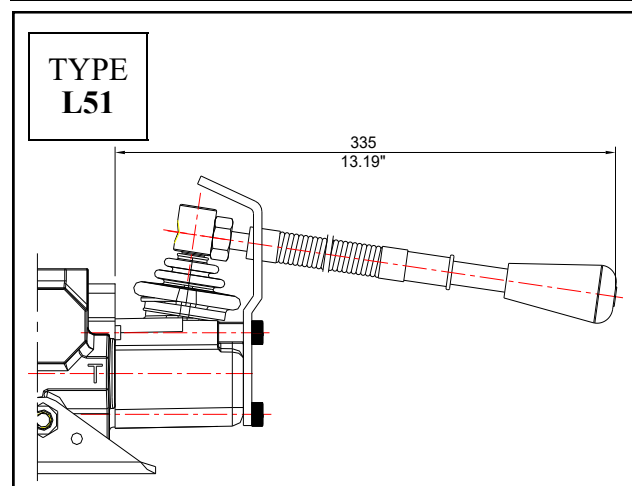
6.4.4 L50 Safety hand lever

Order code	Item number
D-L50 M10	600115100145



6.4.5 L51 Safety hand lever

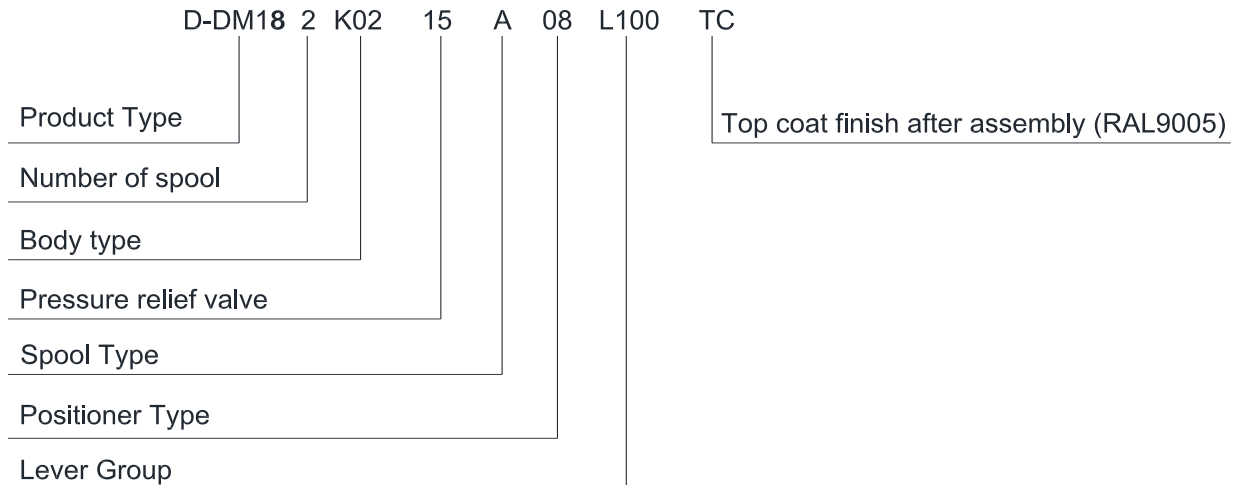
Order code	Item number
D-L51 M10	600115100150



7 How to order

7.1 Ordering code monoblock

Please use for order code 7.1 The standard hand lever must be ordered separately



8 Fluid

D-DM18 is a directional control valves require fluid with a minimum cleanliness level of ISO 4406 code 19/17/14. We recommend the use of fluid that contain anti-wear Additives for mixed –friction operating conditions. Fluids Without appropriate additives can reduce the service life of valves. The user is responsible for maintaining, and regularly checking the fluid quality.

9 Fluid cleanliness class

Cleanliness class (RK) on to ISO 4406

Code ISO 4406	Number of particles / 100 ml		
	$\geq 4 \mu\text{m}$	$\geq 6 \mu\text{m}$	$\geq 14 \mu\text{m}$
23/21/18	8000000	2000000	250000
22/20/18	4000000	1000000	250000
22/20/17	4000000	1000000	130000
22/20/16	4000000	1000000	64000
21/19/16	2000000	500000	64000
20/18/15	1000000	250000	32000
19/17/14	500000	130000	16000
18/16/13	250000	64000	8000
17/15/12	130000	32000	4000
16/14/12	64000	16000	4000
16/14/11	64000	16000	2000
15/13/10	32000	8000	1000