

Umschaltventile

– DF10/3 –



– mit Hebel –

Bestellnr.	Typ	Code
254-140-01000	DF10/3A12L	124052040
254-140-01050	DF10/3A17L	124054040
254-140-01100	DF10/3A17SLP	124054020
254-140-01150	DF10/3AT17SLP	124054010
254-140-01200	DF10/3A18IA1SLC	124055330
254-140-01250	DF10/3A18IA1L	124055340
254-140-01300	DF10/3B12L	124050009
254-140-01350	DF10/3B17L	124050010
254-140-01400	DF10/3BC17CB	124074050
254-140-01450	DF10/3B18L	124075040
254-140-01500	DF10/3A8L	124050008
254-140-01550	DF10/3AC17MECA-TAP(A)	124050012
254-140-01600	DF10/3A18IA3NA	124050024
254-140-01650	DF10/3AMA	124051000
254-140-01700	DF10/3AMB	124051010
254-140-01750	DF10/3AC17SLP	124054021
254-140-01800	DF10/3A17CB	124054050
254-140-01850	DF10/3AC17CA	124054051
254-140-01900	DF10/3A17IA2	124054080
254-140-01950	DF10/3A17IB2	124054090
254-140-02000	DF10/3A17PSLC	124054130
254-140-02050	DF10/3A18PL	124055140
254-140-02100	DF10/3B8L	124071040
254-140-02150	DF10/3B12L	124072040
254-140-02200	DF10/3B17L	124074040
254-140-02250	DF10/3B17IA2	124074080
254-140-02300	DF10/3BC17CB-TAP(B)	124014050
254-140-02350	DF10/3AC17CA-TAP(B)	124014051
254-140-02400	DF10/3B17IA2-TAP(B)	124014080
254-140-02450	DF10/3AC17SLP-TAP(A)	124034021
254-140-02500	DF10/3AC17CB-TAP(A)	124034050
254-140-02550	DF10/3A17MCSLP	124050002

254-140

DF

with mechanical control

Working conditions

This catalogue shows technical specifications and diagrams measured with mineral oil of 46 mm²/s - 46 cSt viscosity at 40°C temperature.

		DF5	DF10	DF20	DF25
N. of available ways		2-3-6	2-3-6	2-3-6	3
Nominal flow rating		60 l/min	90 l/min	140 l/min	280 l/min
Operating pressure (maximum)		315 bar 4600 psi	315 bar 4600 psi	315 bar 4600 psi	315 bar 4600 psi
Internal leakage A(B)→T	Δp=100 bar 1450 psi with fluid and valve at 40°C	5 cm ³ /min 0.31 in ³ /min	5 cm ³ /min 0.31 in ³ /min	8 cm ³ /min 0.49 in ³ /min	8 cm ³ /min 0.49 in ³ /min
Hydraulic fluid		Mineral base oil			
Fluid temperature		with NBR seals from -20° to 80°C			
		with FPM seals from -20° to 100°C			
Viscosity		operating range from 15 to 75 mm ² /s - from 15 to 75 cSt			
		minimum 12 mm ² /s - 12 cSt			
		maximum 400 mm ² /s - 400 cSt			
Max. level of contamination		19/16 - ISO 4406			
Ambient temperature		from -40° to 60°C			

NOTE - For different working conditions please contact Customer Service.

Standard threads

ALL PORTS	BSP (ISO 228/1)	UN-UNF (ISO 11926-1)
DF5	G 3/8	3/4-16 UNF-2B (SAE 8)
DF10	G 1/2	7/8-14 UNF-2B (SAE 10)
DF20	G 3/4	1 1/16-12 UN-2B (SAE 12)
DF25	G 1	1 5/16-12 UN-2B (SAE 16)
PILOT PORTS		
Pneumatic	NPT 1/8-27	NPT 1/8-27
Hydraulic	G 1/4	9/16-18 UNF-2B (SAE 6)

254-140

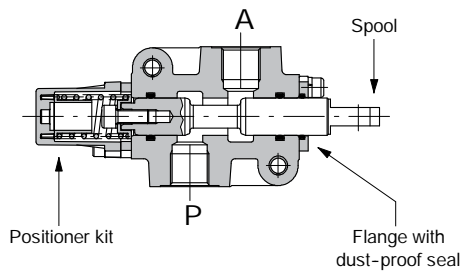
with mechanical control

DF

Hydraulic circuit

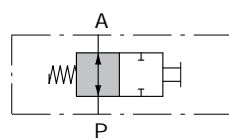
2-way

Available as body only in DF5/2 execution; for other executions 3-way body is used.



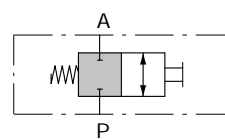
Spool type A

1 2



Spool type B

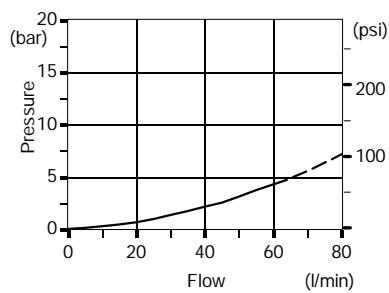
1 2



Performance data

Pressure drop versus flow

P→A



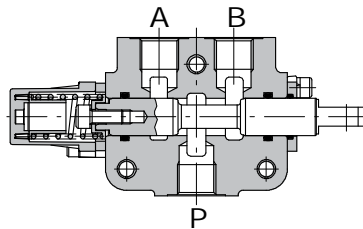
DF

with mechanical control

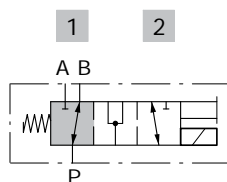
Hydraulic circuit

3-way

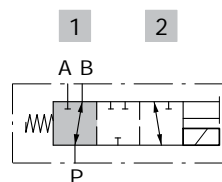
It's possible to obtain 2-way diverter valve plugging port A or B.



Spool type A



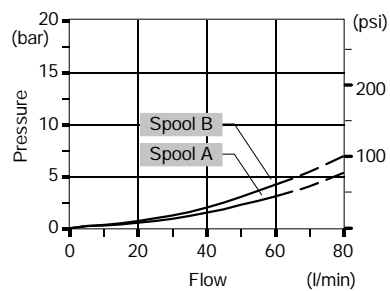
Spool type B B



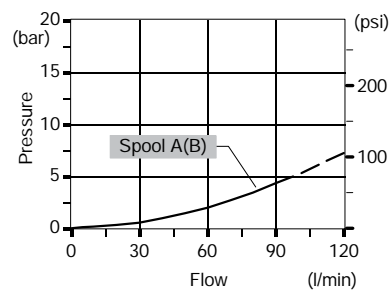
Performance data

Pressure drop versus flow: P→A(B)

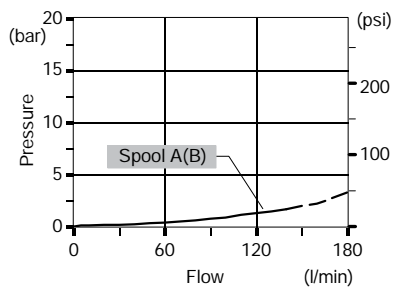
DF5/3



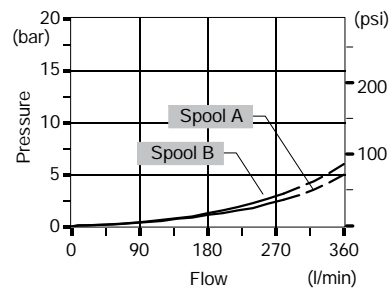
DF10/3



DF20/3



DF25/3

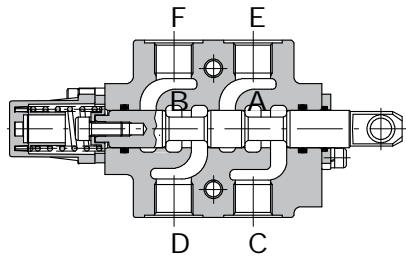


with mechanical control

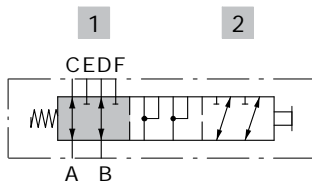
DF

Hydraulic circuit

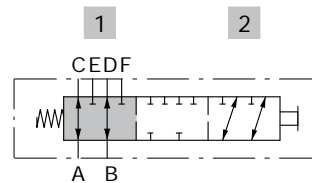
6-way



Spool type A



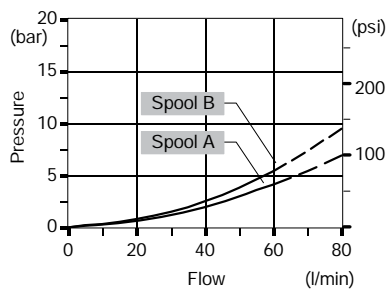
Spool type B



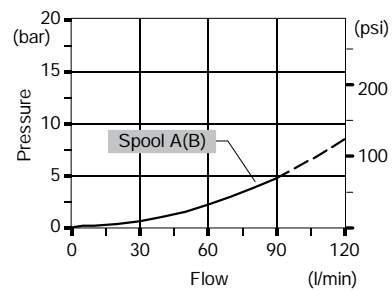
Performance data

Pressure drop versus flow: A→C(E).

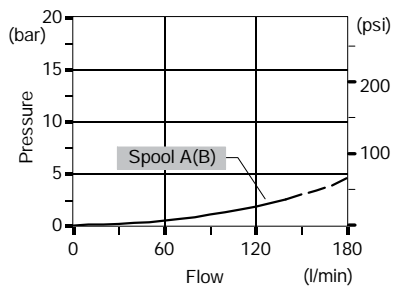
DF5/6



DF10/6



DF20/6

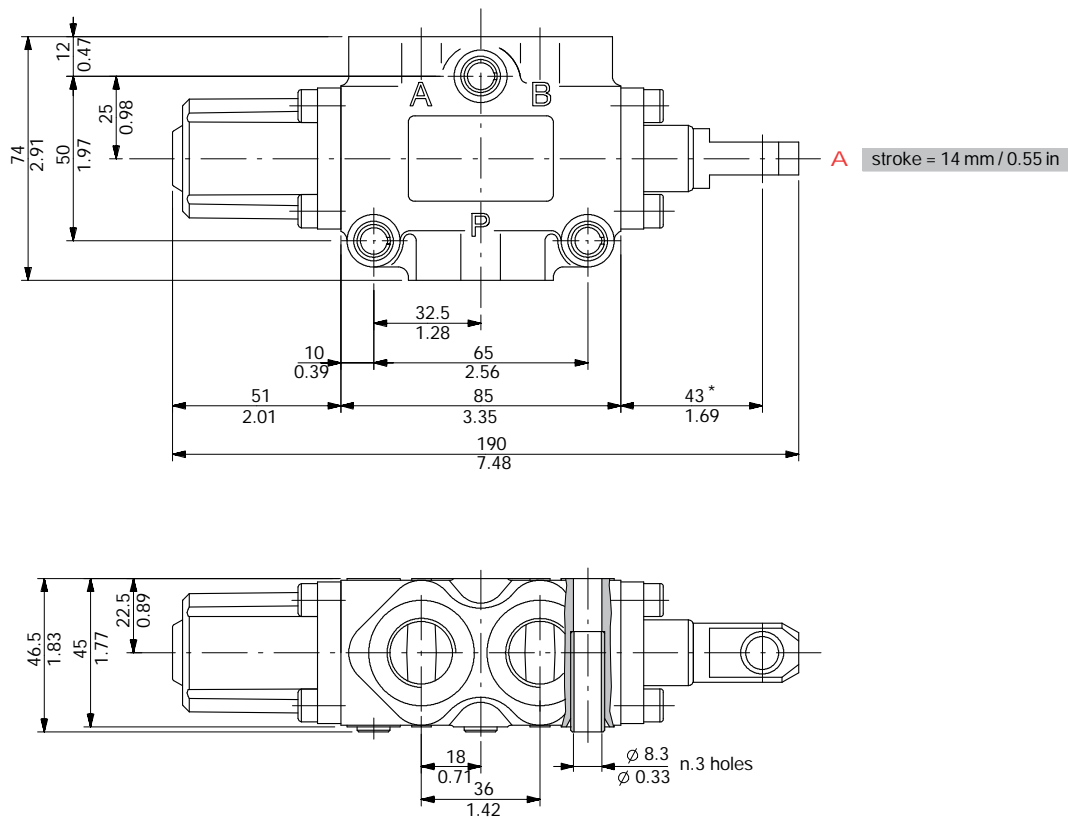


DF10

with mechanical control

Dimensional data

3-way DF10/3 valve

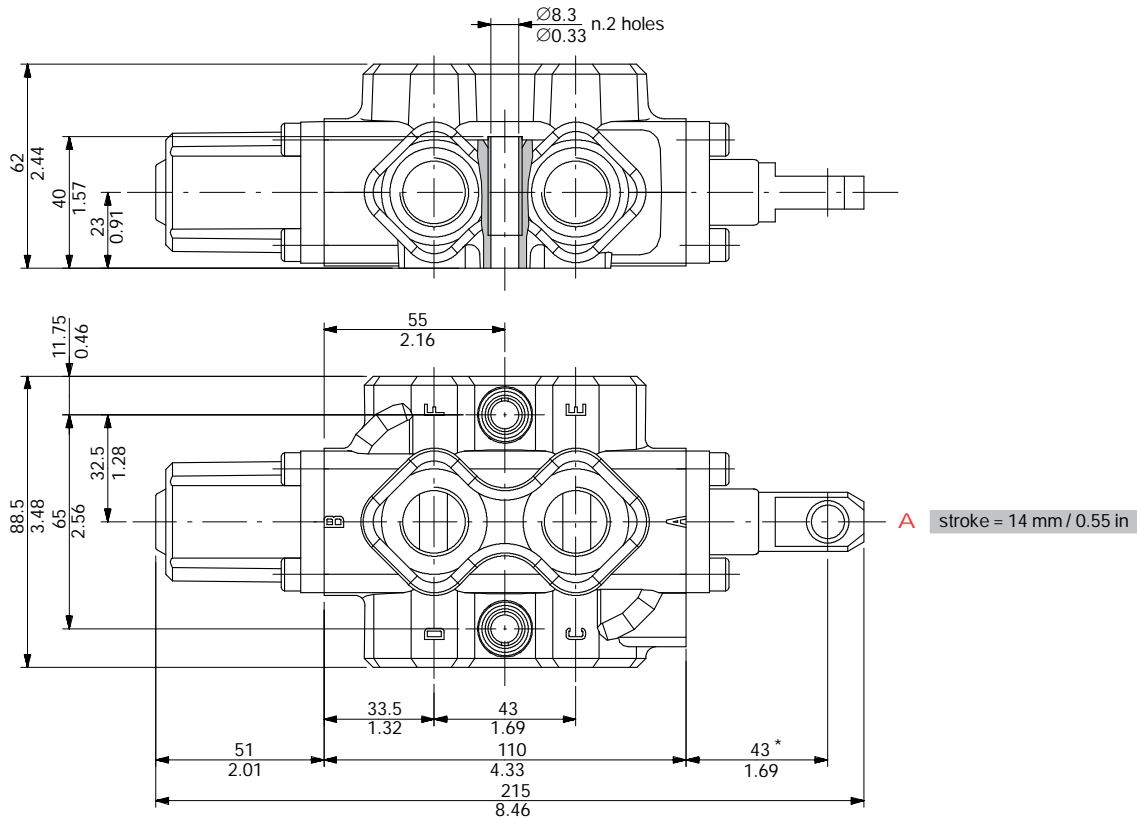


with mechanical control

DF10

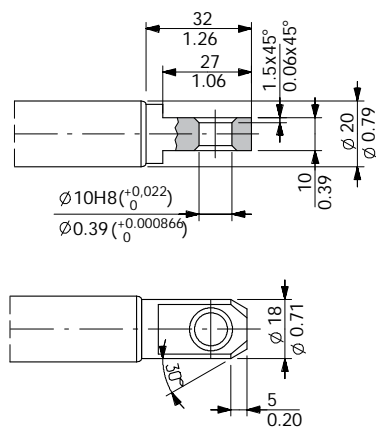
Dimensional data

6-way DF10/6 valve



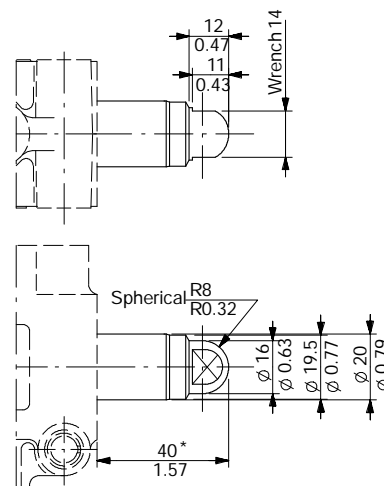
Spool end

Standard end

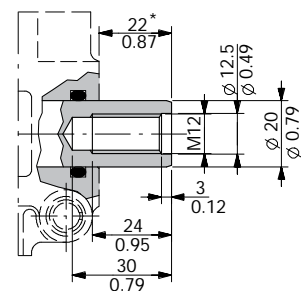


NOTE (*) - With spool out
(positioner kit type 17)

Spherical end type T



Rotary cam prearrangement



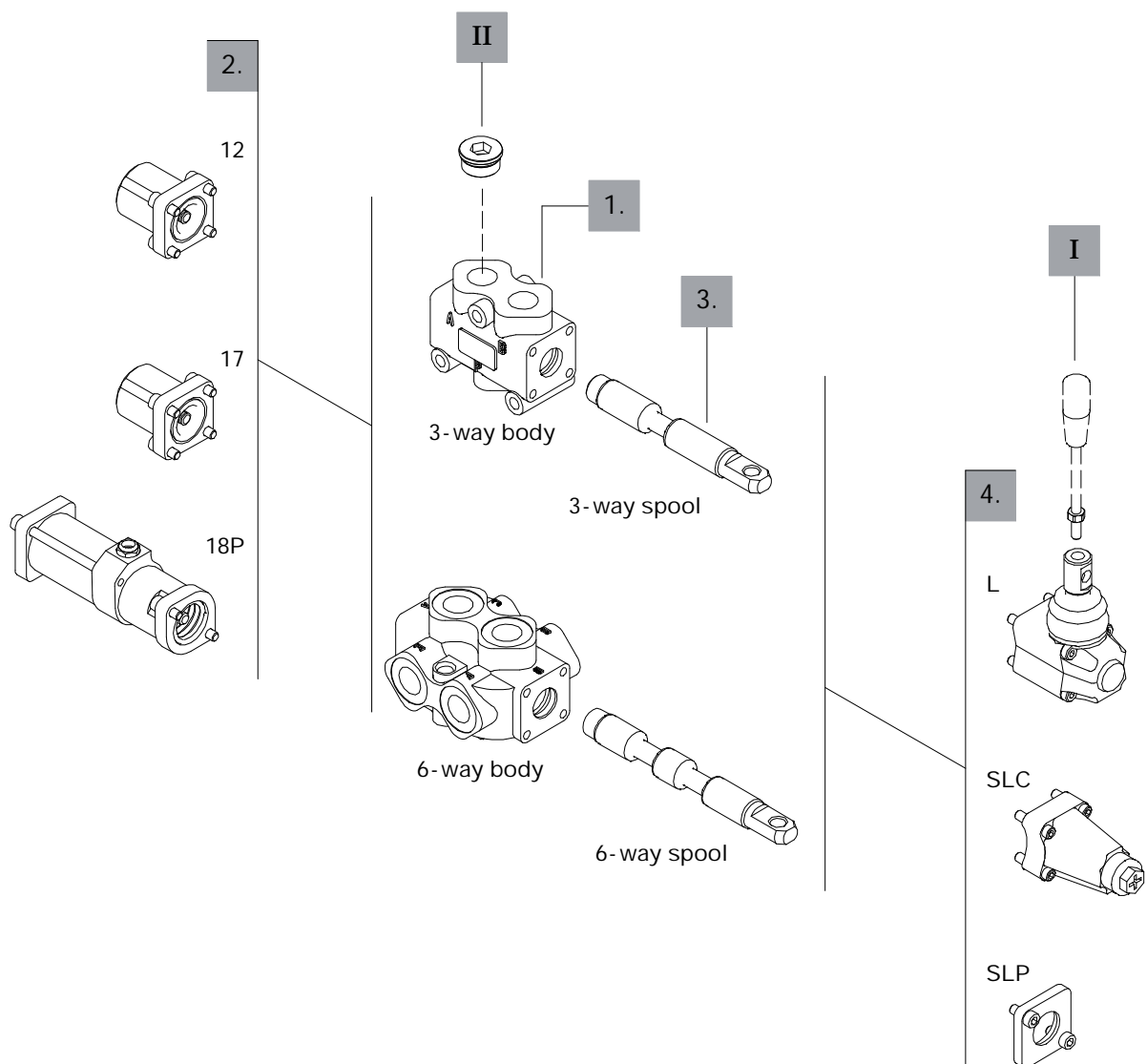
DF10

with mechanical control

Ordering codes

Description example:

Diverter valve DF10/3 A 17 SLP
1. 3. 2. 4.



with mechanical control

DF10

Ordering codes

3-way

1. body kit *

TYPE	CODE	DESCRIPTION
DF10/3	5CO2241300	Standard body kit, BSP threaded

Include body and seals

3. Spool options

TYPE	CODE	DESCRIPTION
A	3CAS110310	3-way, 2 positions with ports connected in transit position
B	3CAS110410	3-way, 2 positions with ports closed in transit position
AT	3CAS110330	As type A with spherical end
AC	3CAS110320	As type A prearranged for cam control
BC	3CAS110420	As type B prearranged for cam control

6-way

1. Body kit *

TYPE	CODE	DESCRIPTION
DF10/6	5CO2242300	Standard body kit, BSP threaded

Include body and seals

3. Spool options

TYPE	CODE	DESCRIPTION
A	3CAS110610	6-way, 2 positions with ports connected in transit positions
B	3CAS110710	6-way, 2 positions with ports closed in transit positions
AC	3CAS110620	As type A prearranged for cam control
BC	3CAS110720	As type B prearranged for cam control

2. Positioner kits page 24

TYPE	CODE	DESCRIPTION
12	5V12110000	Detent in positions 1 and 2
17	5V17110000	Spring return in position 1
18	5V18110000	Spring return in position 2
18P	5V18110710	ON/OFF pneumatic kit with spring return in position 2
18IA1	5V18110821*	ON/OFF high pressure hydraulic kit with spring return in position 2

4. Control kits page 26

TYPE	CODE	DESCRIPTION
SLP	5COP110000	Without lever box with dust-proof plate kit
SLC	5COP210000	Without lever box with endcap
L	5LEV110000	Standard lever box
IA2	5IDR510001*	ON/OFF high pressure kit
CB	5CAM110020	Cam kit

I Optional handlever

TYPE	CODE	DESCRIPTION
AL01/M10x200	170012020	For lever L, height 200 mm / 7.87 in

II Ports plug

TYPE	CODE	DESCRIPTION
G1/2	3XTAP727180*	Body conversion from 3-way to 2-way circuit

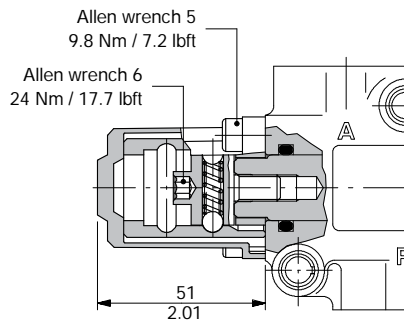
DF10

with mechanical control

Positioner kits

12 kit: with detent

Detent in positions 1 and 2.



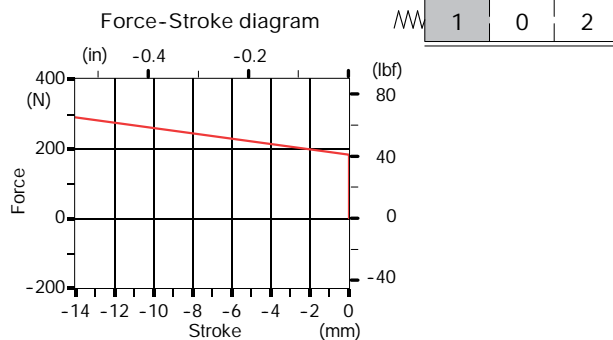
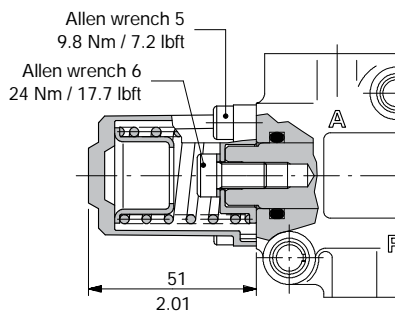
Operating features

Locking and unlocking force : ±10%

With spring return

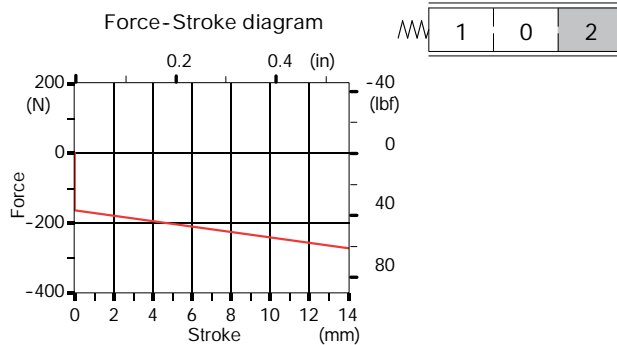
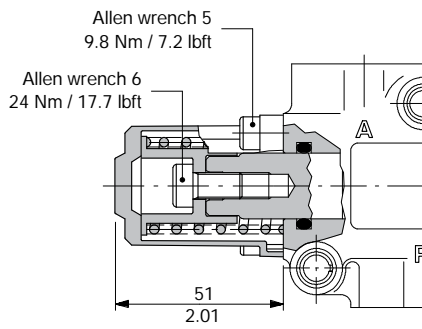
17 kit

Spring return in position 1.



18 kit

Spring return in position 2.



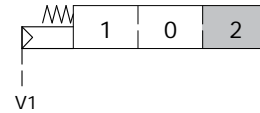
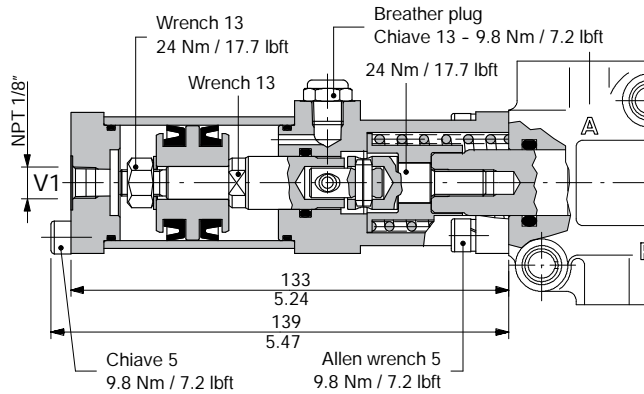
with mechanical control

DF10

Positioner kits

18P: ON/OFF pneumatic kit

With spring return in position 2.

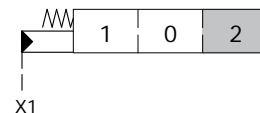
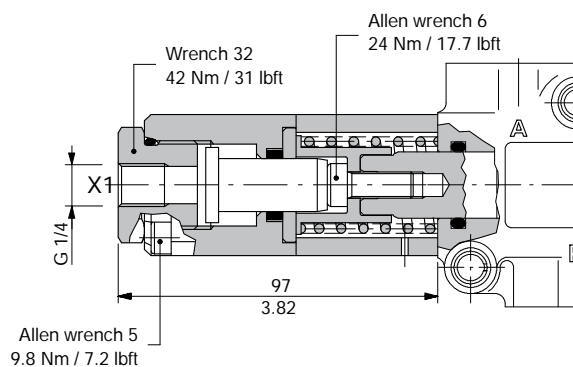


Operating features

Pilot pressure : min. 6 bar / 87 psi
max. 10 bar / 145 psi

18IA1: ON/OFF hydraulic kit

With high pressure pilot and spring return to position 2.



Operating features

Pilot pressure : min. 30 bar / 435 psi
max. 250 bar / 3600 psi

DF10

with mechanical control

Control kits

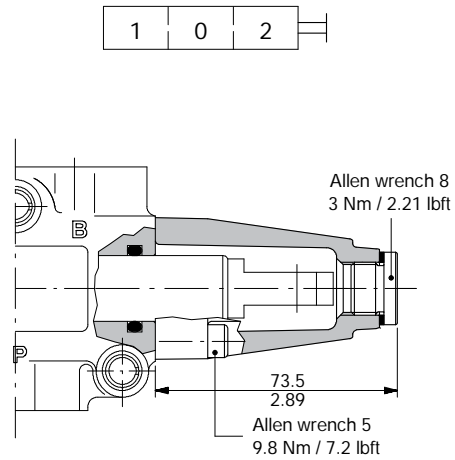
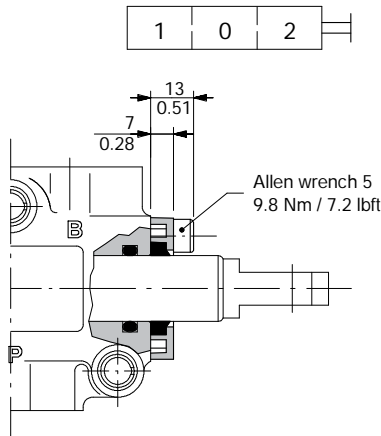
Controls prearranged

SLP kit

Mechanical control with dust-proof plate.

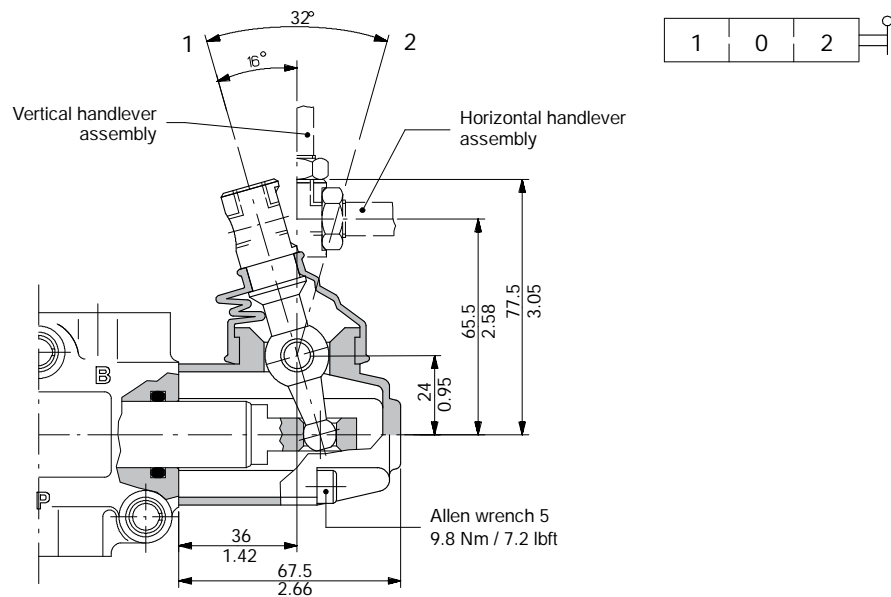
SLC kit

Protection cap usable with pneumatic and hydraulic spool positioner kits.



L lever control

Alumium with protection boot lever pivot box; it can be rotated 180° (execution L180).



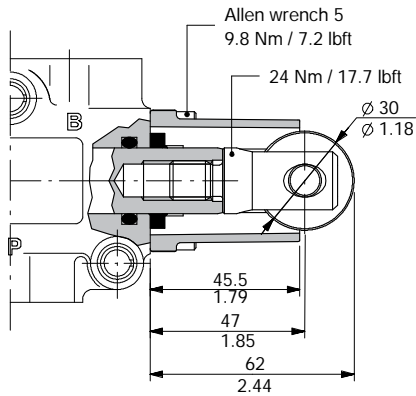
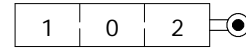
with mechanical control

DF10

Control kits

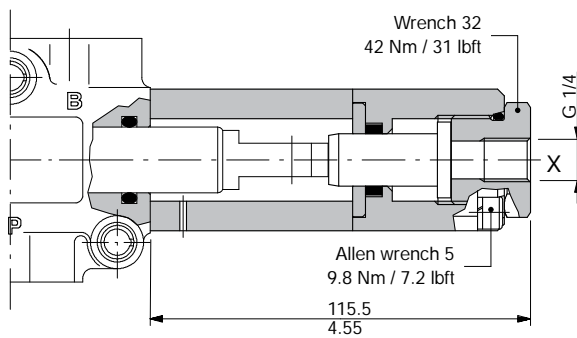
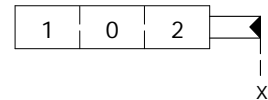
CB cam control

With bronze bearing; it must be coupled to 17 kit.



IA2: ON/OFF hydraulic control

With high pressure pilot; it must be coupled to 17 kit.



Operating features
Pilot pressure : min. 30 bar / 435 psi
max. 250 bar / 3600 psi

DF10

with mechanical control

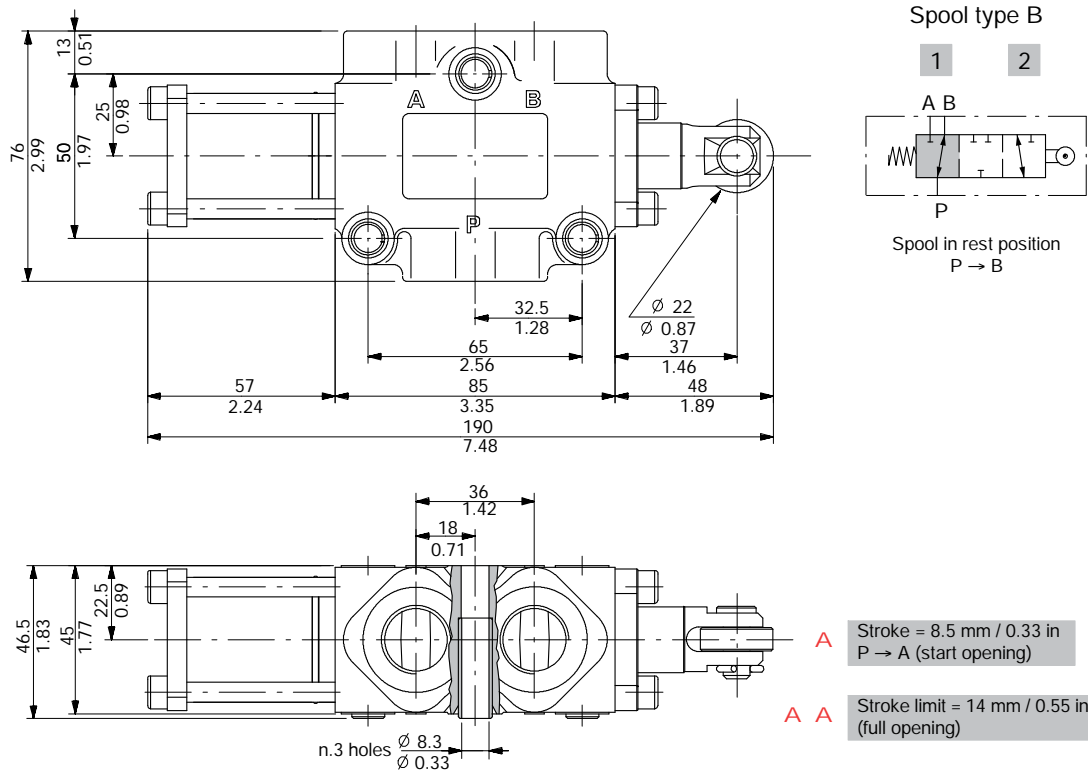
Other executions

Cam spool control suggested for severe applications; it requires a special body, spool and control kit.

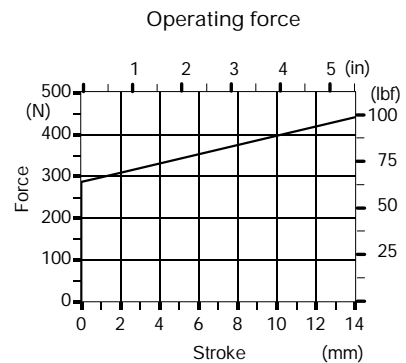
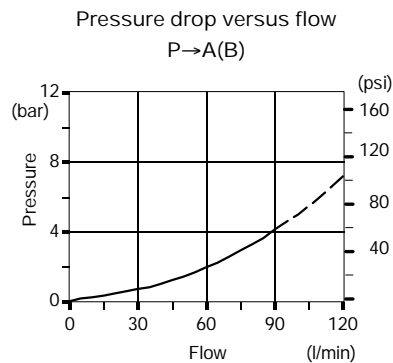
3-way DFC100/3 valve

Complete description: DFC100/3B17GSLP-<CVN> code: 124050016

Valve is supplied painted as standard, with one coat of Primer black antirust paint



Performance data



with mechanical control

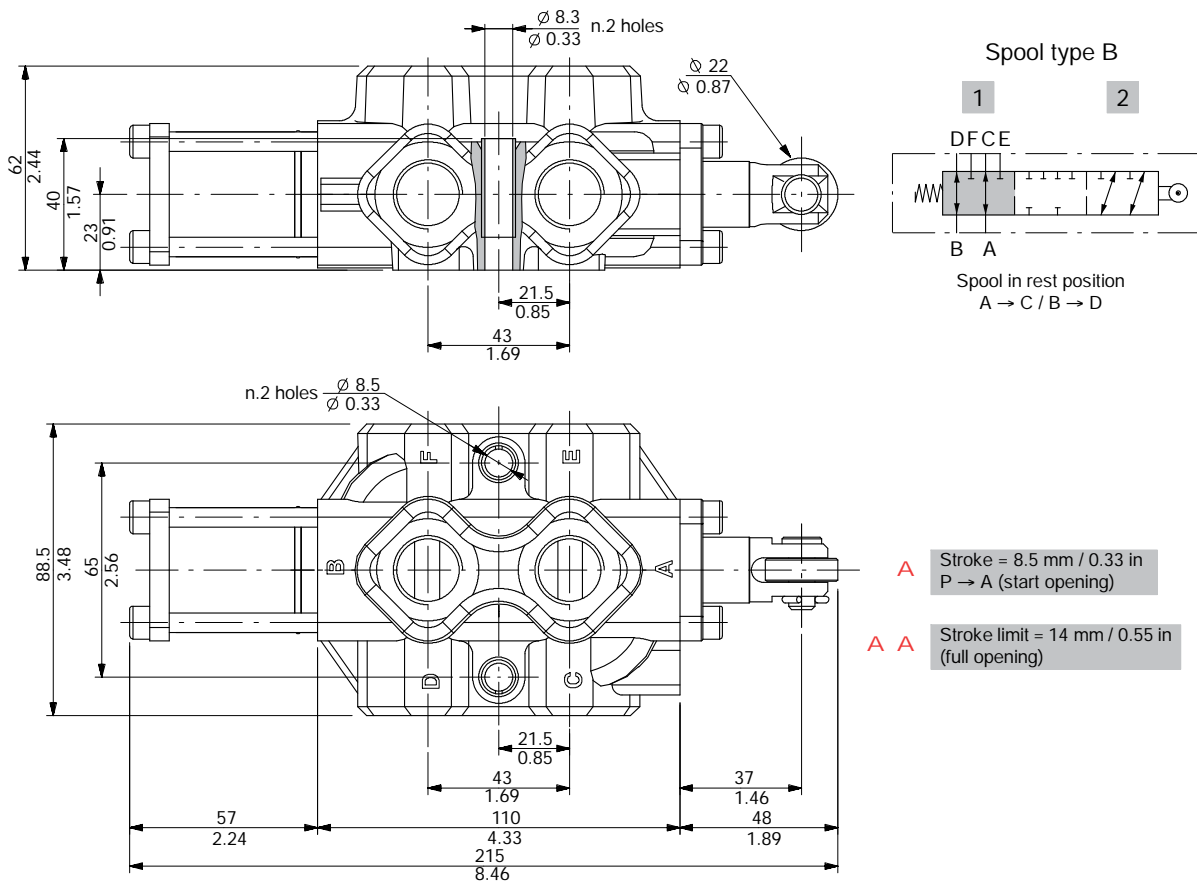
DF10

Other executions

6-way DFC100/6 valve

Complete description: DFC100/6B17GSLP-<<CVN> code: 124080013

Valve is supplied painted as standard, with one coat of Primer black antirust paint



Performance data

