

Umschaltventile

– DF25/3 –



– mit Hebel –

Bestellnr.	Typ	Code
254-160-01000	DF25/3A17SLP	127054020
254-160-01050	DF25/3A18PL	127055140
254-160-01100	DF25/3A8IB3	127050006
254-160-01150	DF25/3A17MEIA2-TAP(B)	127050013
254-160-01200	DF25/3A17MEIA2	127050014
254-160-01250	DF25/3B17MEIB2	127050015
254-160-01300	DF25/3A8IA3	127051380
254-160-01350	DF25/3A12L	127052040
254-160-01400	DF25/3A11L	127052041
254-160-01450	DF25/3A17L	127054040
254-160-01500	DF25/3A17C	127054050
254-160-01550	DF25/3A17MEIB2	127054090
254-160-01600	DF25/3A17IA2	127054380
254-160-01650	DF25/3B12L	127072040
254-160-01700	DF25/3B17IA2-ME	127074091
254-160-01750	DF25/3B18E11L-KE1R0-24VDC	127075040

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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)

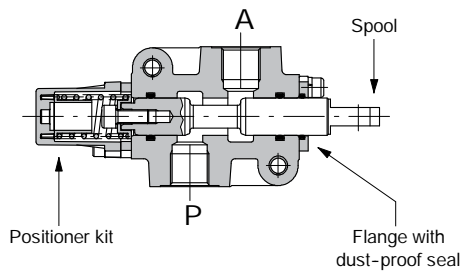
with mechanical control

DF

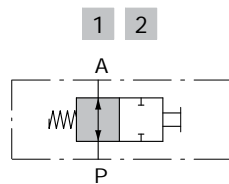
Hydraulic circuit

2-way

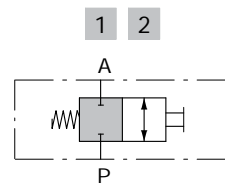
Available as body only in DF5/2 execution; for other executions 3-way body is used.



Spool type A

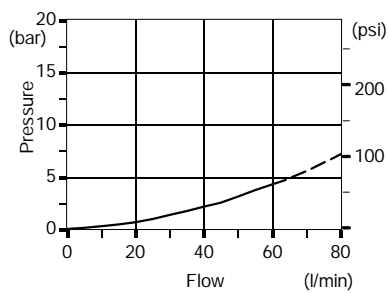


Spool type B



Performance data

Pressure drop versus flow
P→A



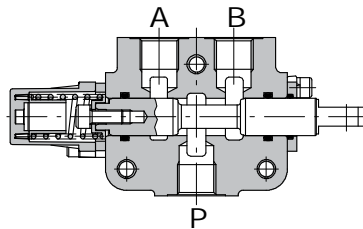
DF

with mechanical control

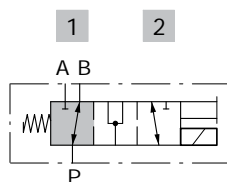
Hydraulic circuit

3-way

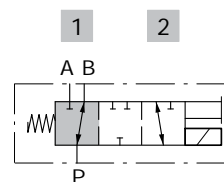
It's possible to obtain 2-way diverter valve plugging port A or B.



Spool type A



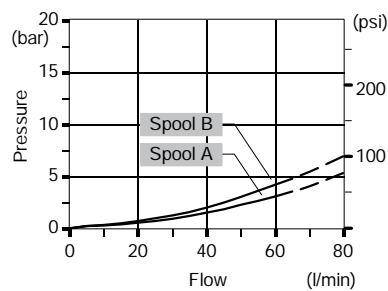
Spool type B B



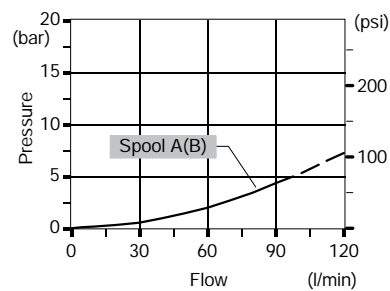
Performance data

Pressure drop versus flow: P→A(B)

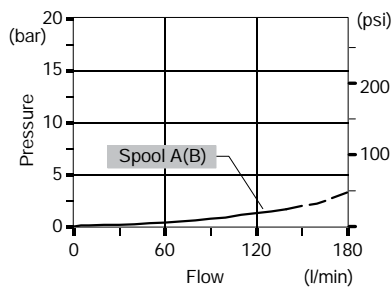
DF5/3



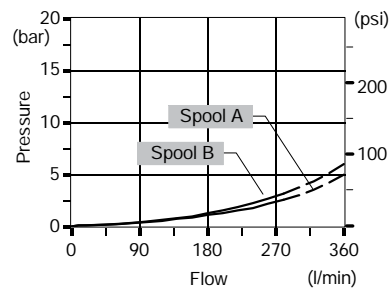
DF10/3



DF20/3



DF25/3

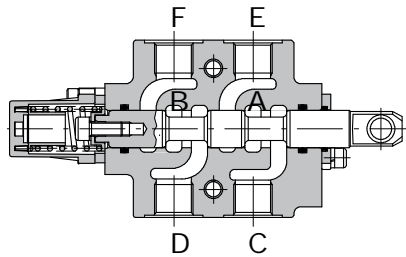


with mechanical control

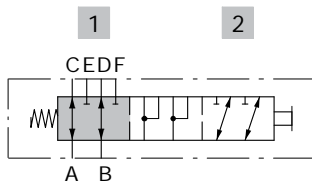
DF

Hydraulic circuit

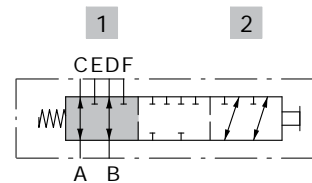
6-way



Spool type A



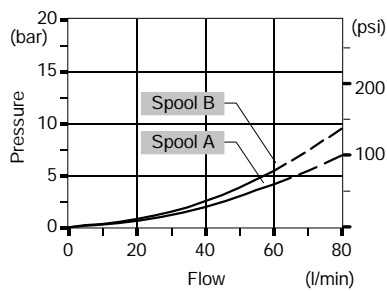
Spool type B



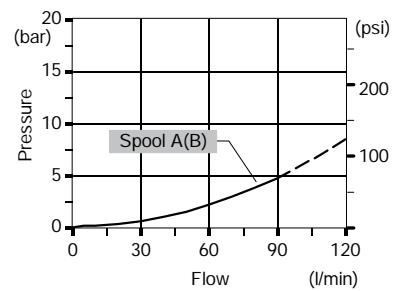
Performance data

Pressure drop versus flow: A→C(E).

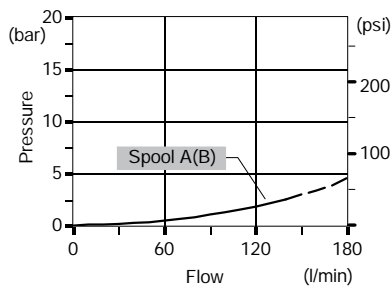
DF5/6



DF10/6



DF20/6

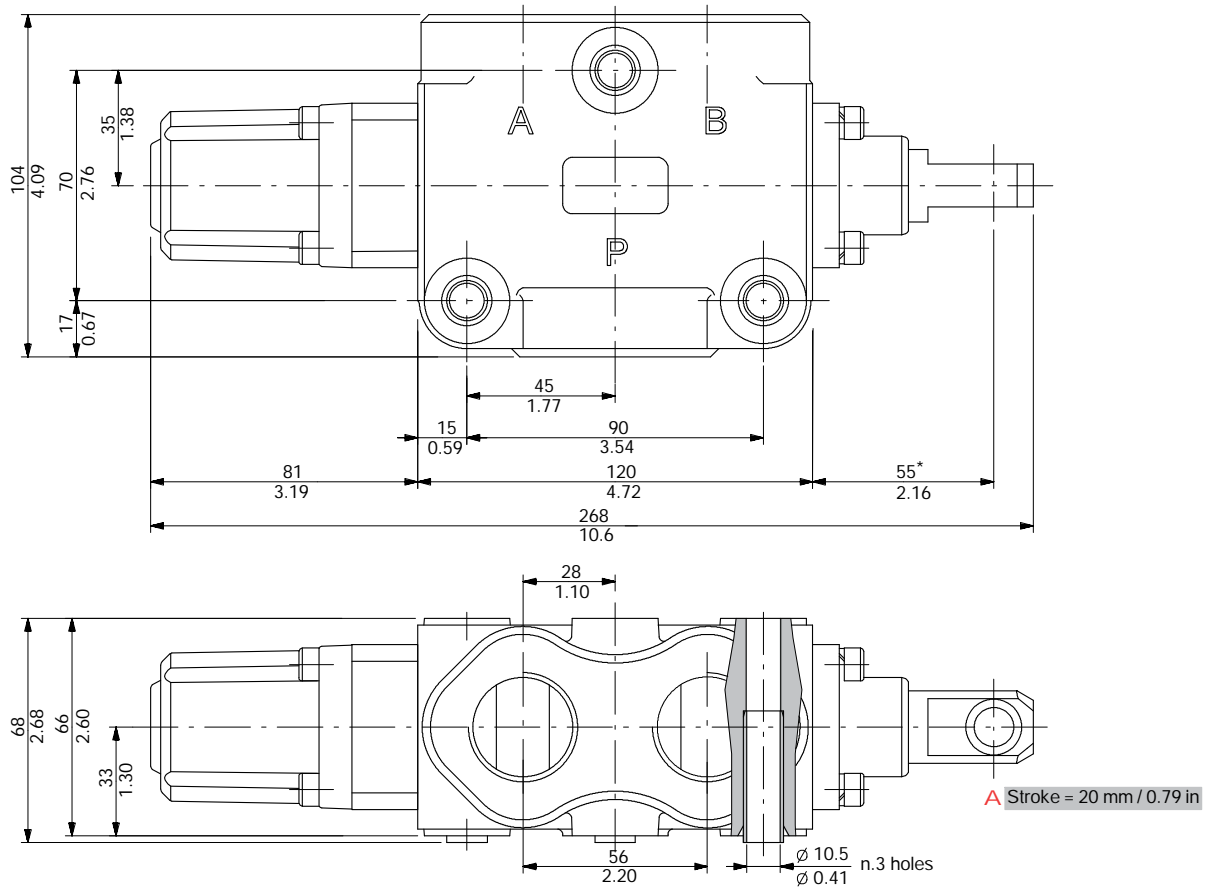


with mechanical control

DF25

Dimensional data

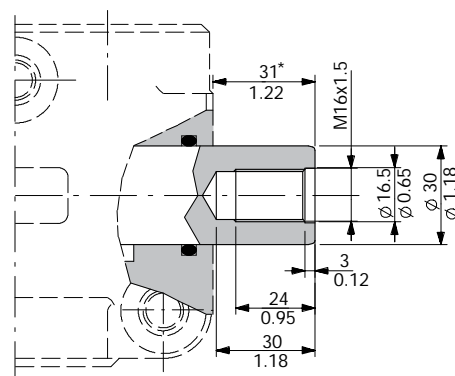
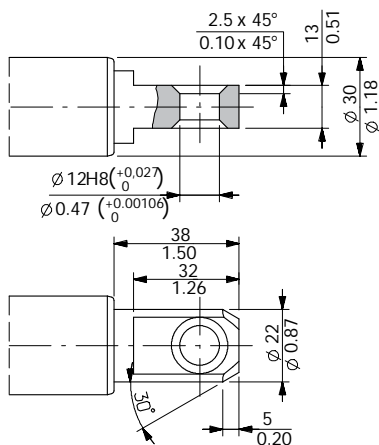
3-way DF25/3 valve



Spool end

Standard end

Rotary cam prearrangement



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

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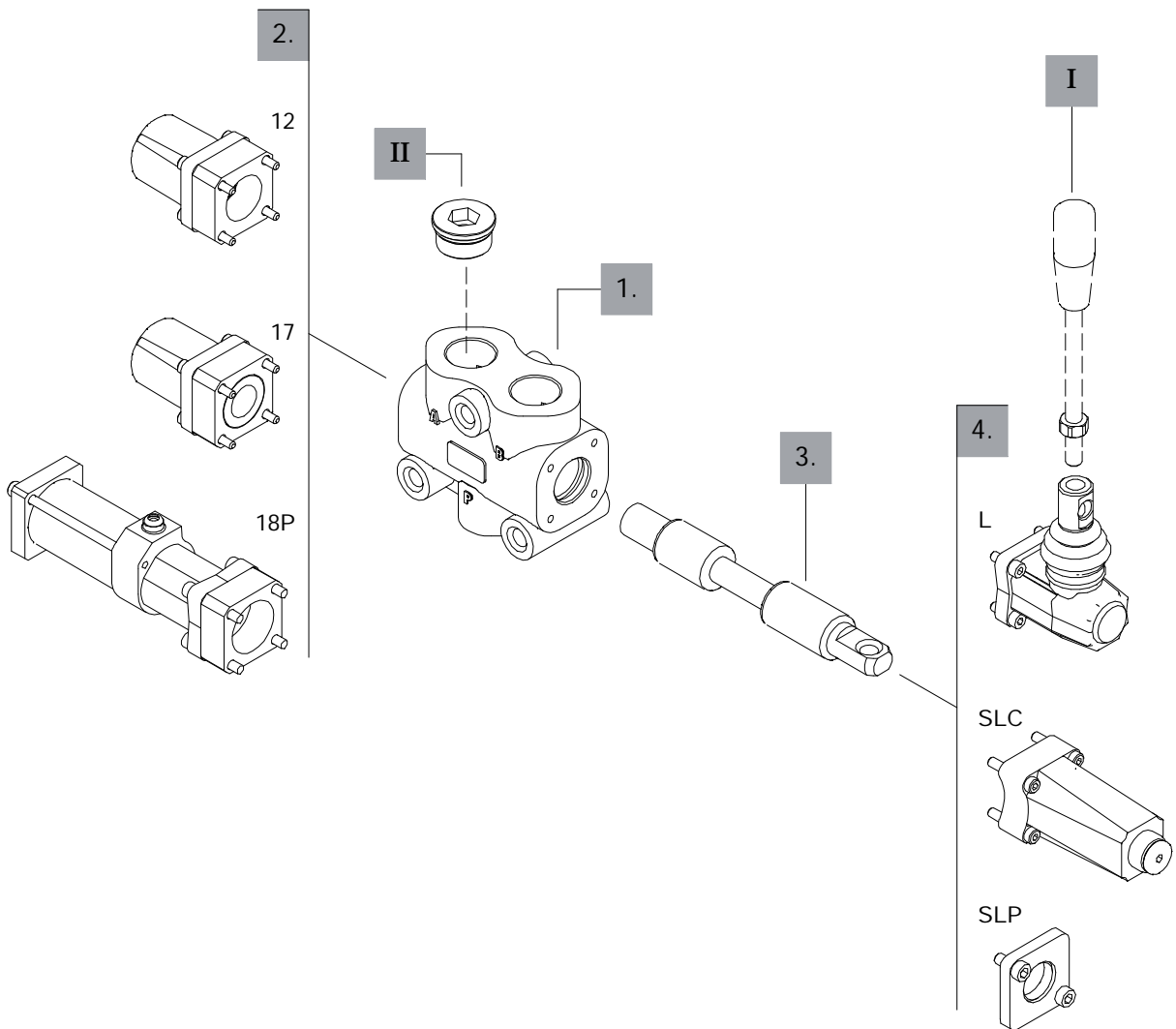
DF25

with mechanical control

Ordering codes

Description example :

Diverter valve DF25/3 A 17 SLP
1. 2. 3. 4.



with mechanical control

DF25

Ordering codes

3-way

1. Body kit *

TYPE	CODE	DESCRIPTION
DF25/3	5CO2271300	Standard body kit, BSP threaded

Include body and seals

2. Spool options

TIPO	CODICE	DESCRIZIONE
A	3CAS125310	3-way, 2 positions with ports connected in transit position
B	3CAS125410	3-way, 2 positions with ports closed in transit position
AC	3CAS125320	As type A prearranged for cam control
BC	3CAS125420	As type B prearranged for cam control

3. Positioner kits page 42

TYPE	CODE	DESCRIPTION
12	5V12125000	Detent in positions 1 and 2
17	5V17125000	Spring return in position 1
18P	5V18125700	ON/OFF pneumatic kit with spring return in position 2
18E11	5V18125350	12VDC ON/OFF electro-hydraulic kit with spring return in position 2
	5V18125351	24VDC ON/OFF electro-hydraulic kit with spring return in position 2

4. Control kits page 45

TYPE	CODE	DESCRIPTION
SLP	5COP125000	Without lever box with dust-proof plate kit
SLC	5COP220000	Without lever box with endcap
L	5LEV120000	Standard lever box
IA2	5IDR520000*	ON/OFF high pressure kit
CB	5CAM125020	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	3XTAP740210*	Body conversion from 3-way to 2-way circuit

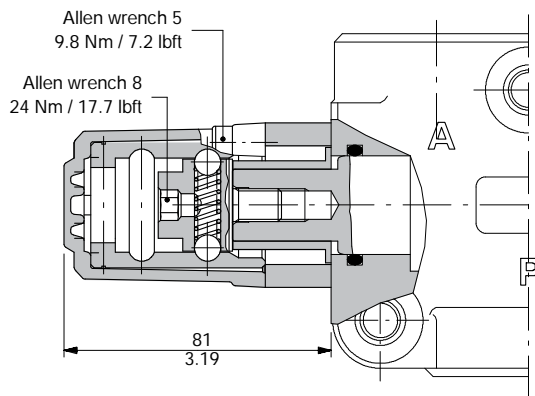
DF25

with mechanical control

Positioner kits

12 kit: with detent

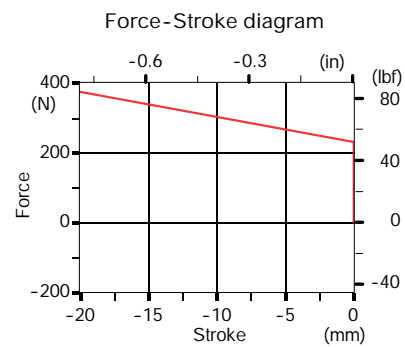
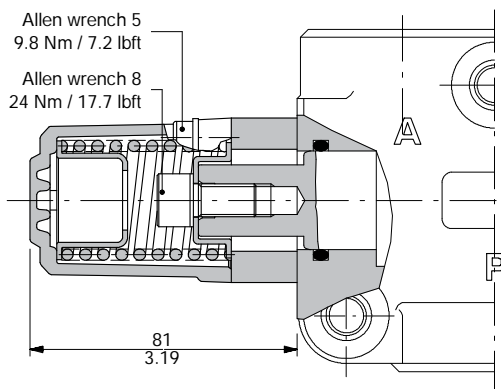
Detent in positions 1 and 2.



Operating features
Locking and unlocking force : ±10%

17 kit: with spring return

Spring return in position 1.



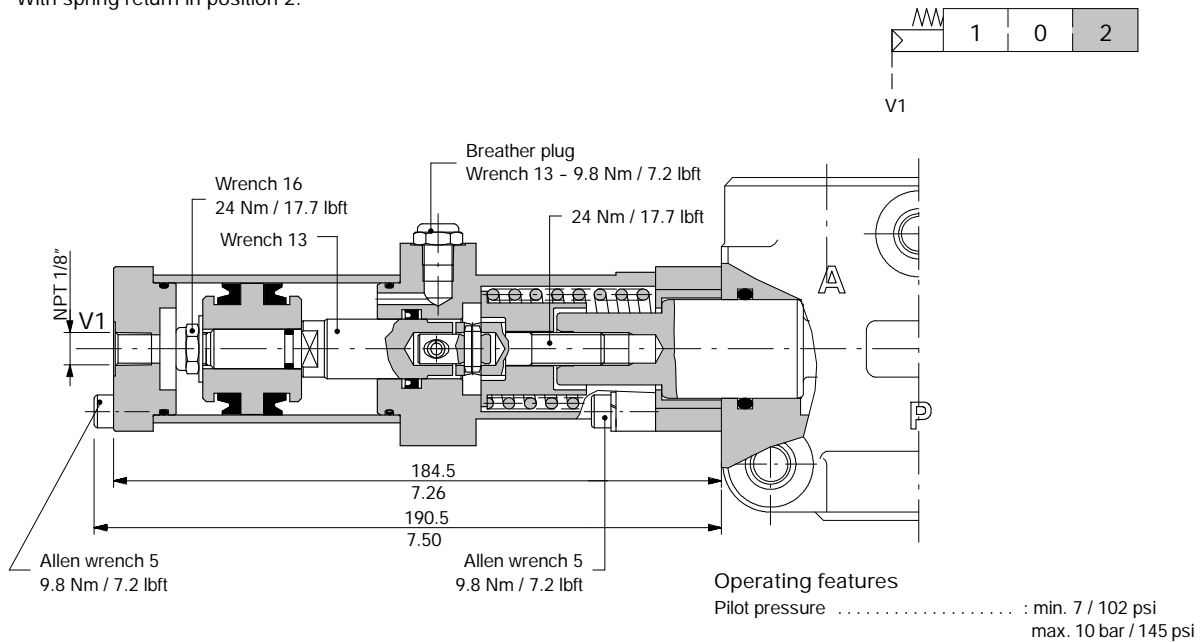
with mechanical control

DF25

Positioner kits

18P: ON/OFF pneumatic kit

With spring return in position 2.



DF25

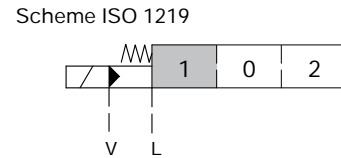
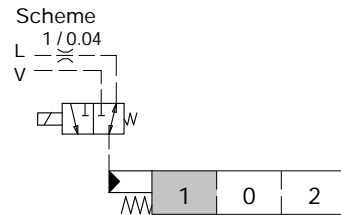
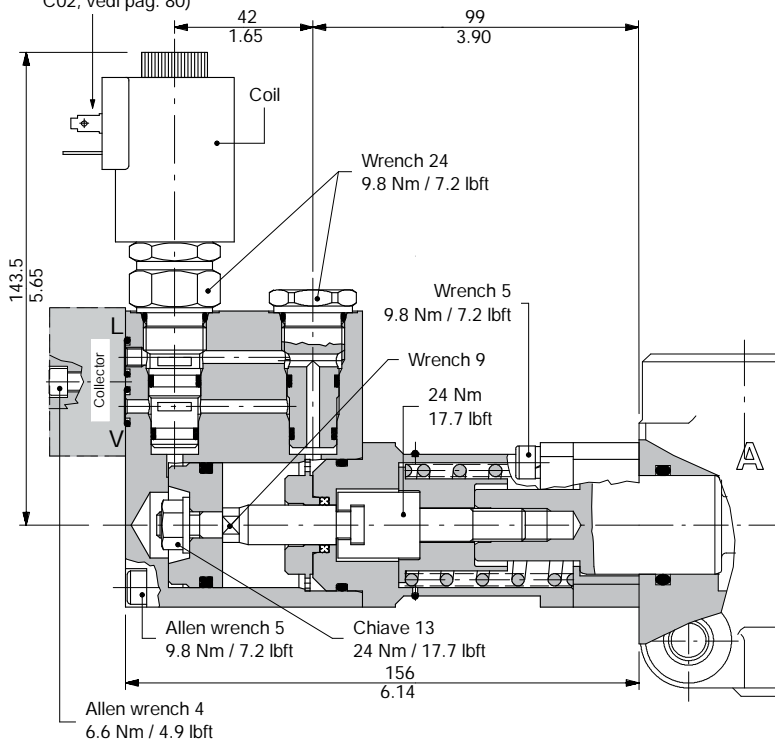
with mechanical control

Positioner kits

18E11: ON/OFF electro-hydraulic control

External pilot and drain, with spring return in position 2.

Connessione ISO4400
(richiede connettore tipo
C02, vedi pag. 80)



Operating features

Pilot pressure : min.10 bar / 145 psi
 : max.50 bar / 725 psi

Max. backpressure on
 drain port L : 4 bar / 58 psi

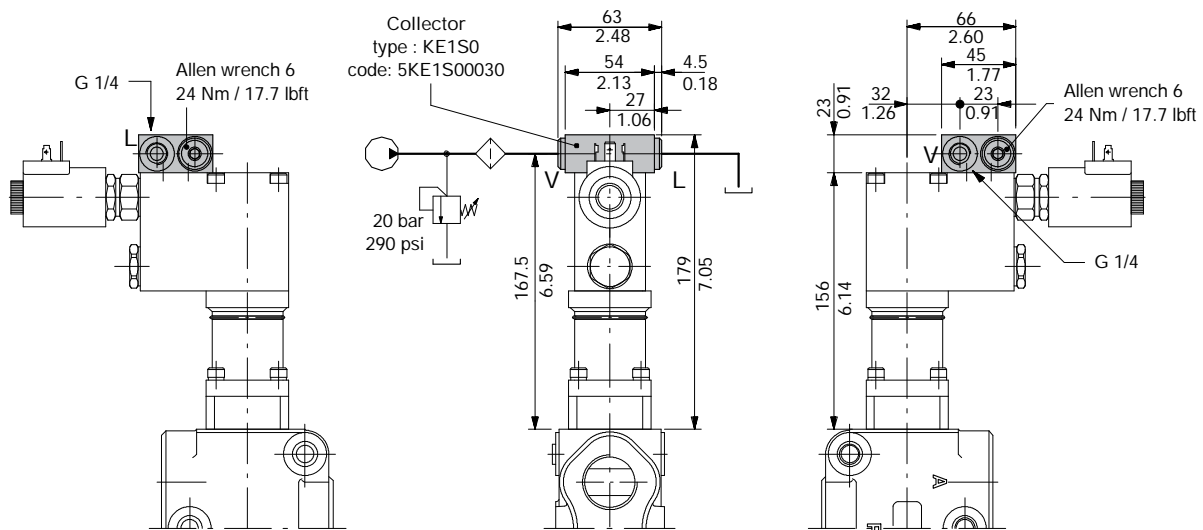
Solenoid operating features

Voltage tolerance : ±10%
 Power rating : 21 W
 Duty cycle : 100%

Ordering codes

CODE	DESCRIPTION
2S0EJ08002013	3-way solenoid valve
2X4350012	12VDC coil
2X4350024	24VDC coil

Collector kit for external pilot and drain



Ex: DF25/3A18E11SLC/KE1S0-12VDC

with mechanical control

DF25

Control kits

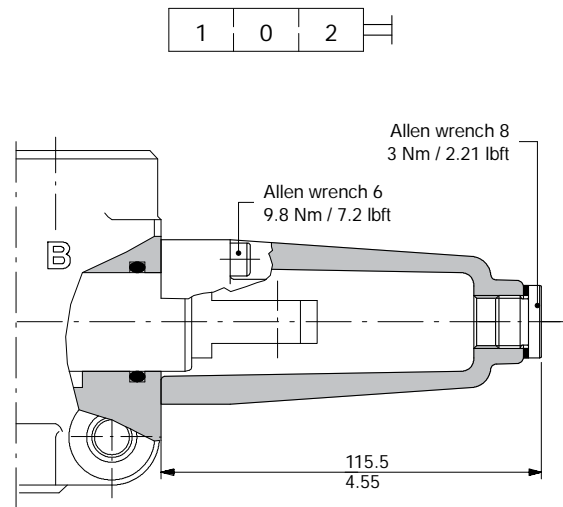
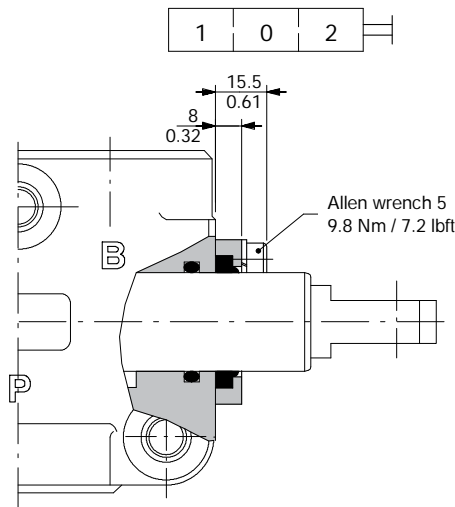
Controls prearranged

SLP kit

Mechanical control with dust-proof plate.

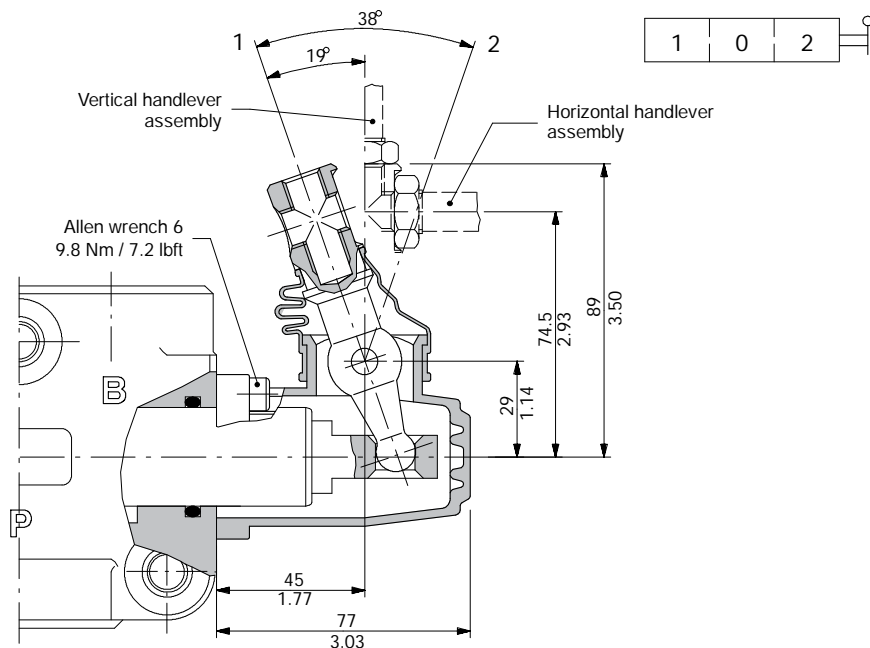
SLC kit

Protection cap usable with pneumatic and hydraulic spool positioner kits.



L lever control

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



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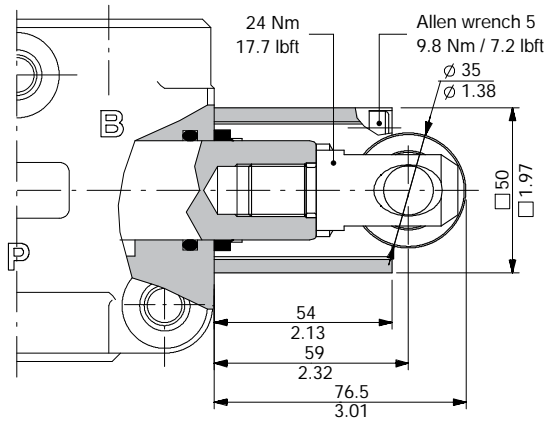
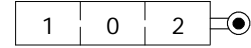
DF25

with mechanical control

Control kits

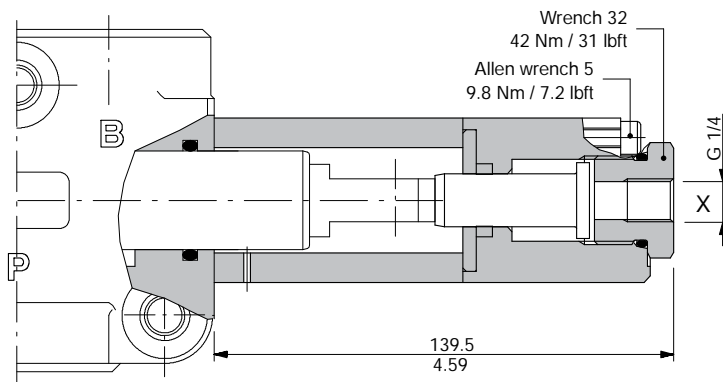
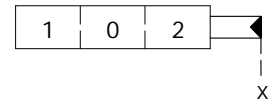
CB cam control

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