

Umschaltventile – Magnete

– DFE10/6 –



Bestellnr.	Typ	Code
254-050-01155	DFE10/6A18ES-W202-12VDC	12A470021
254-050-01160	DFE10/6A18ES-W202-24VDC	12A470024
254-050-01165	DFE10/6A18ES-Y202-12VDC	12A470017
254-050-01170	DFE10/6A18ES-Y202-24VDC	12A470015
254-050-01200	DFE10/6B18ES-W202-12VDC	12A480013
254-050-01250	DFE10/6B18ES-W202-24VDC	12A480025
254-050-01300	DFE10/6B18ES-Y202-12VDC	12A480019

Working conditions

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

N. of available ways		DFE10
Nominal flow rating	in steady conditions	90 l/min
Operating pressure (maximum)*	without drain	200 bar 2900 psi
	with drain	315 bar 4600 psi
Available nominal voltage	VDC	12-24-48
	VAC 50Hz (with C04 connector)	110-220
Potenza nominale	W	60
Internal leakage A(B)→T	Δp=100 bar 1450 psi with fluid and valve at 40°C	10 cm ³ /min 0.61 in ³ /min
Fluid		Mineral base oil
Fluid temperature	with NBR seals	da -20° a 80°C
	with FPM seals	da -20° a 100°C
Viscosity	operating range	da 15 a 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		da -40° a 60°C

NOTE - For different working conditions please contact Customer Service.

(*) - This value is reachable only in steady conditions; for dynamic working conditions see the pages from 49 to 52.

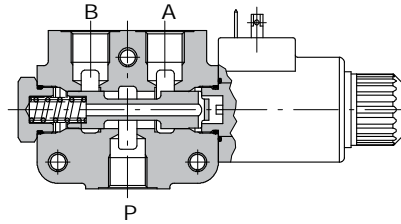
Standard threads

ALL PORTS	BSP (ISO 228/1)	UN-UNF (ISO 11926-1)
DFE052	G 3/8	3/4-16 UNF-2B (SAE 8)
DFE10	G 1/2	7/8-14 UNF-2B (SAE 10)
DFE20	G 3/4	1 1/16-12 UN-2B (SAE 12)
DRAIN PORT		
L	G 1/4	7/16-20 UNF-2B (SAE 4)

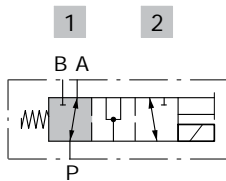
Hydraulic circuit

3-way

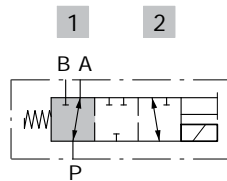
It's possible to obtain 2-way diverter valve plugging port A or B.



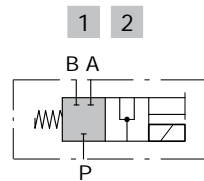
Spool type A



Spool type B

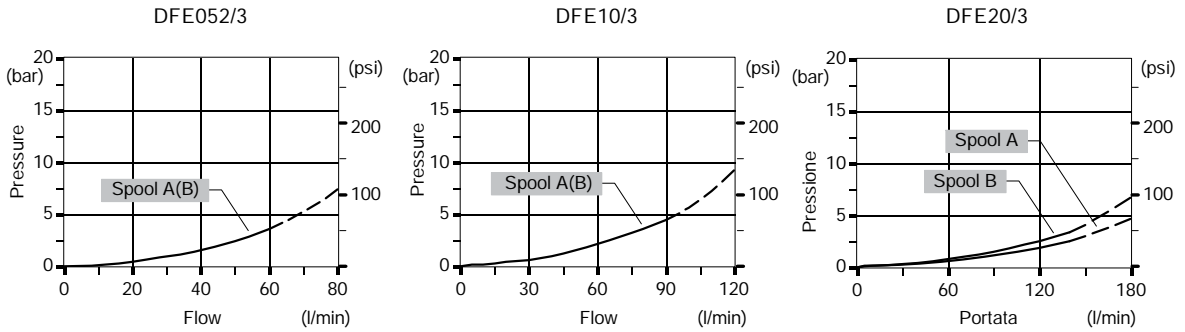


Spool type D

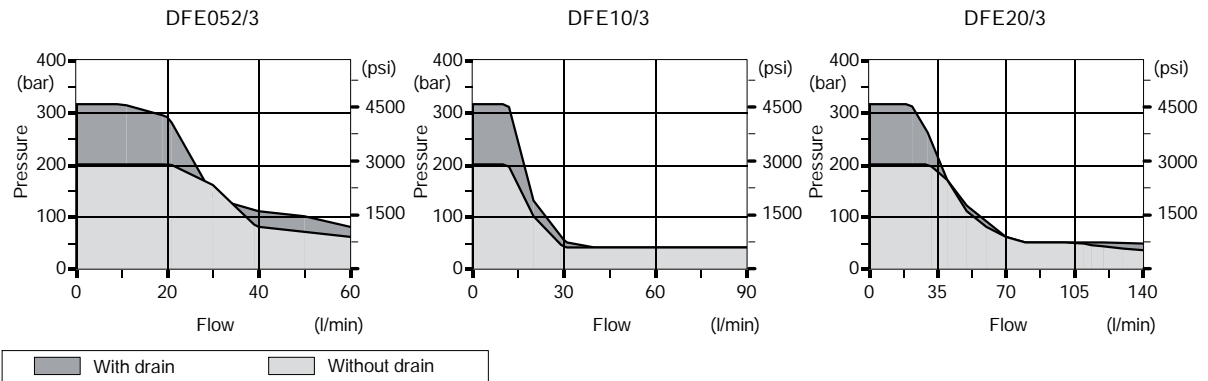


Performance data

Pressure drop versus flow: P→A(B)



Minimum dynamic conditions: (supply = Vn-10%, coil at 70 °C)

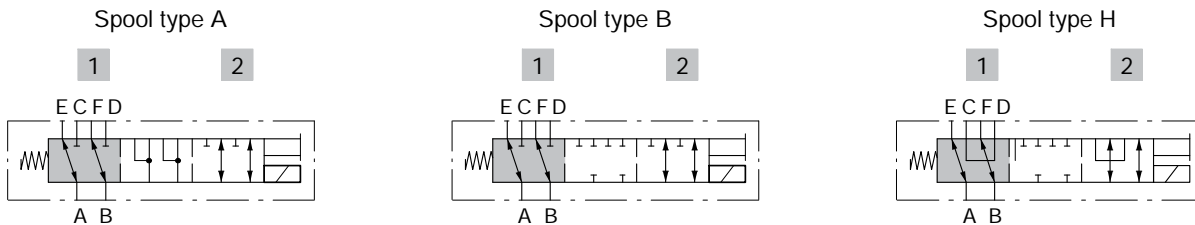
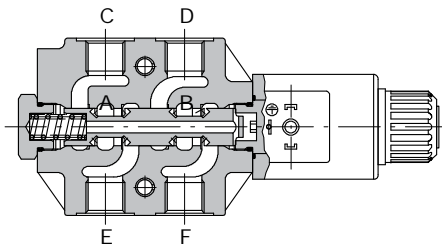


with solenoid control

DFE

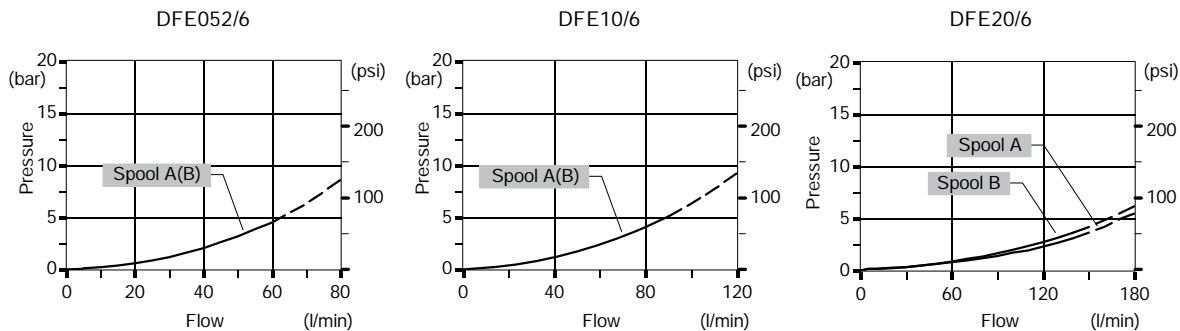
Hydraulic circuit

6-way

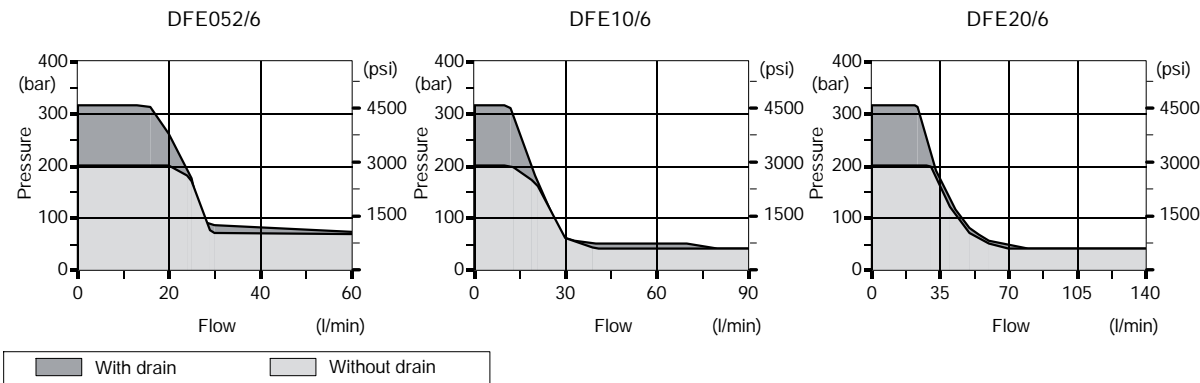


Performance data

Pressure drop versus flow: A→E(C).



Minimum dynamic conditions: (supply = Vn-10%, coil at 70 °C)

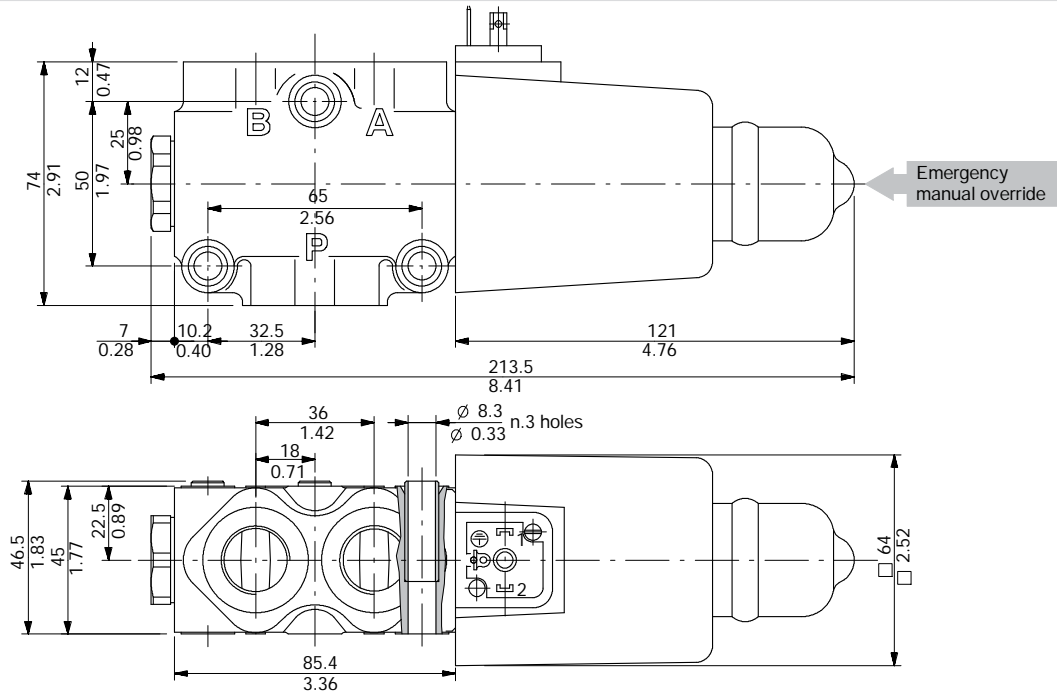


with solenoid control

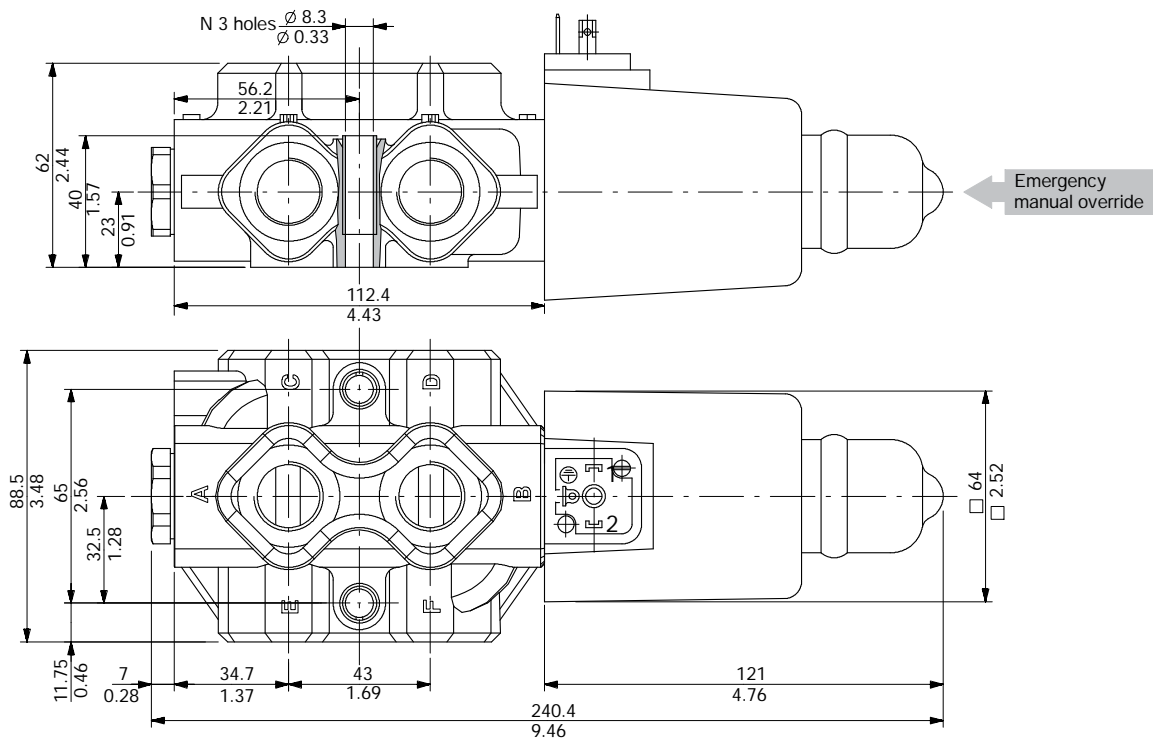
DFE10

Dimensional data

3-way DFE10/3 valve



6-way DFE10/6 valve



DFE10

with solenoid control

Ordering codes

Description example :

Diverter valve DFE10/3 A 18 ES - W 202-12VDC - <CVN>

1.

2.

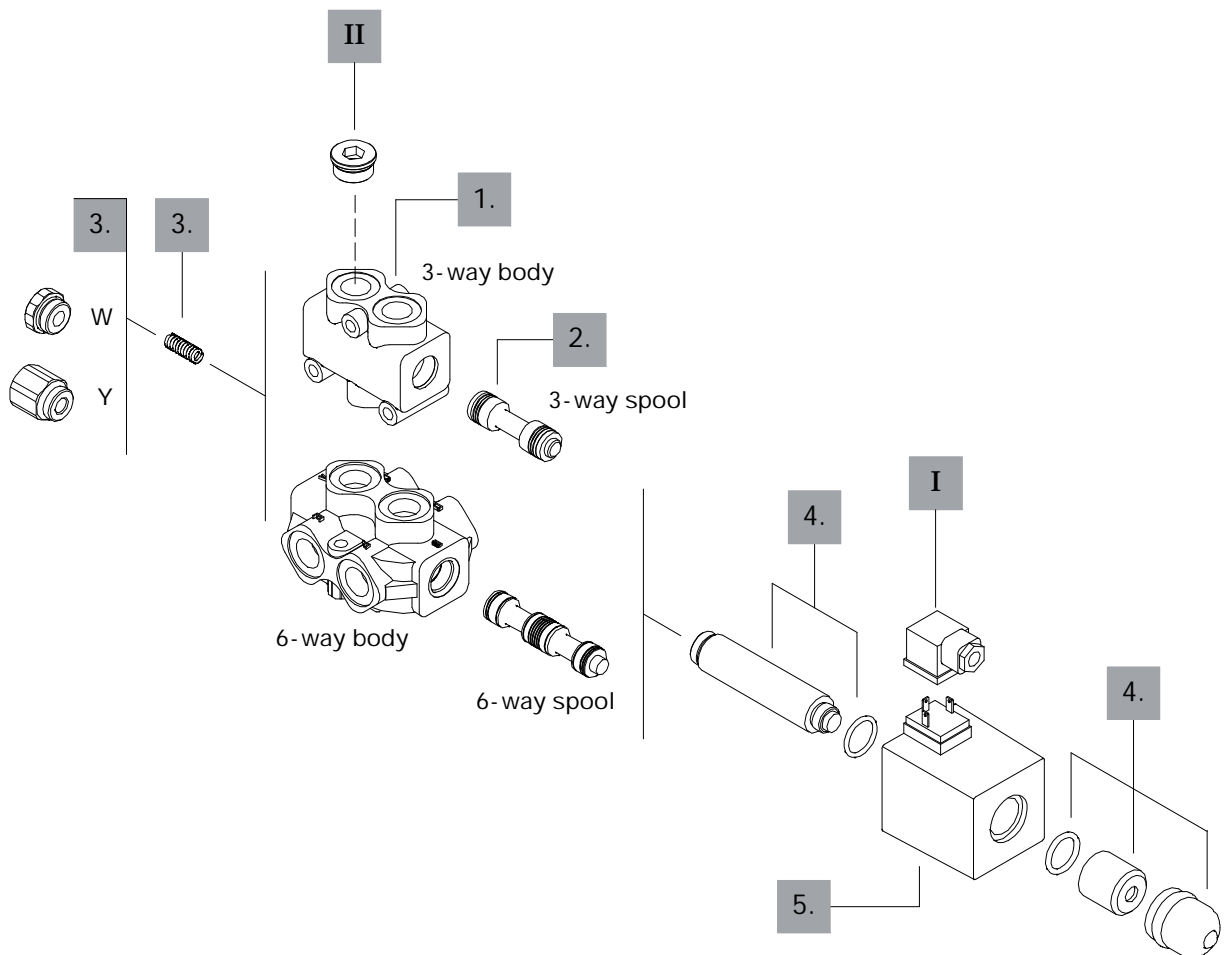
3.

4.

3.

5.

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



3-way**1. Body ***

TYPE	CODE	DESCRIPTION
DFE10/3	3CO2241320	Standard body, BSP threaded

2. Spool options

TYPE	CODE	DESCRIPTION
A	3CAS110341	3-way, 2 positions with ports connected in transit position
B	3CAS110441	3-way, 2 positions with ports closed in transit position
D	3CAS110540	3-way, 2 positions, without transit position, with ports closed in rest position

6-way**1. Body ***

TYPE	CODE	DESCRIPTION
DFE10/6	3CO2242322	Standard body, BSP threaded

2. Spool options

TYPE	CODE	DESCRIPTION
A	3CAS110641	6-way, 2 positions with ports connected in transit position
B	3CAS110741	6-way, 2 positions with ports closed in transit position
H	3CAS110840	6-way, 2 positions, D↔C in position 1, F↔E in position 2, ports closed in transit position
N	3CAS110952	6-way, 2 positions with ports closed in transit position, with check valve

3. Positioner kits page 64

TYPE	CODE	DESCRIPTION
18...W	5TAP002	Spring return in position 1
18...Y	5GIU004 *	Spring return in position 1, with G1/4 drain port

4. Tube assembly page 64

TYPE	CODE	DESCRIPTION
ES	5SOL516000	Spring return in position 1 (without coil)

5. Coil options page 64

TYPE	CODE	DESCRIPTION
102	-	Without coil (only with tube kit)
VDC supply (connector C02)		
202-12VDC	4SOL516012	Coil with 12VDC nominal voltage
202-24VDC	4SOL516024	Coil with 24VDC nominal voltage
202-48VDC	4SOL516048	Coil with 48VDC nominal voltage
VAC supply (connector C04)		
202-92VDC	4SOL516094	Coil with 92VDC nominal voltage (for 110VAC)
202-192VDC	4SOL516192	Coil with 192VDC nominal voltage (for 220VAC)

I Optional connectors page 80

TYPE	CODE	DESCRIPTION
C02	2X1001010	According to ISO4400
C04	2X1001040	According to ISO4400 with rectifier

II Ports plug

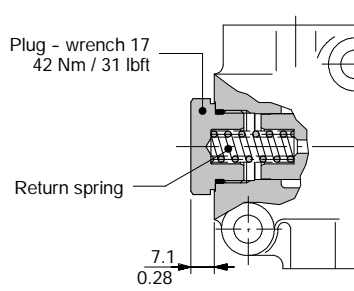
TYPE	CODE	DESCRIPTION
G1/2	3XTAP727180*	Body conversion from 3-way to 2-way circuit

NOTE (*) - Codes are referred to BSP thread.

Positioner kits

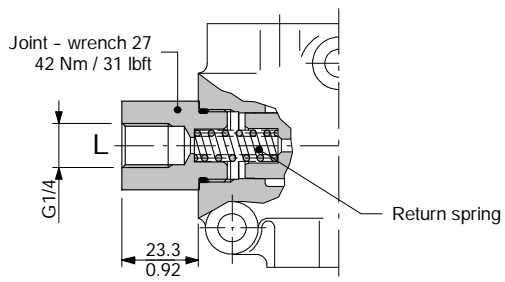
18W kit

Spring return in position 1 with plug.



18Y kit

Spring return in position 1, with G1/4 joint for drain.

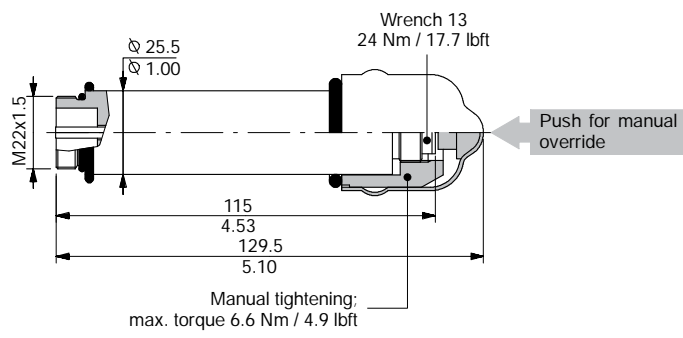


with solenoid control

DFE10

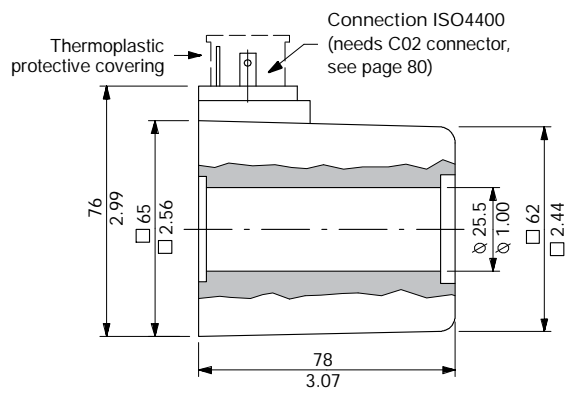
Solenoid parts

ES tube assembly



Operating features
Plunger stroke : 10.2 mm / 0.40 in

Coil options



Operating features
Nominal voltage : 12-24-48-92-192VDC
Nominal voltage tolerance . . . : $\pm 10\%$
Power rating : 60 W
Duty cycle : 100%
Weather protection : IP66
Coil insulation : Class H