



DFC100

Mechanical control monoblock diverter valves

- 3 - 6 ways configuration
- Cam control kit
- Especially suitable for use in external environments

This catalogue shows technical specifications and diagrams measured with mineral oil of 46 mm²/s - 46 cSt viscosity at 40°C - 104°F temperature.

WORKING CONDITIONS

N. of available ways	3 - 6	
Max. flow rating	90 l/min (23.7 US gpm)	
Max. pressure	315 bar (4600 psi)	
Internal leakage A(B)⇒T	Δp = 100 bar (1450 psi)	5 cm ³ /min (0.31 in ³ /min)
Fluid	Mineral based oil	
Fluid temperature	from -20°C to 80°C (from -4°F to 176°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)
Max. level of contamination	21/19/16 - ISO 4406 - NAS 1638 - class 10	
Ambient temperature for working conditions	from -40°C to 60°C (from -40°F to 140°F)	

NOTE - For different working conditions please contact Sales Dept.

Available threads

PORTS THREAD

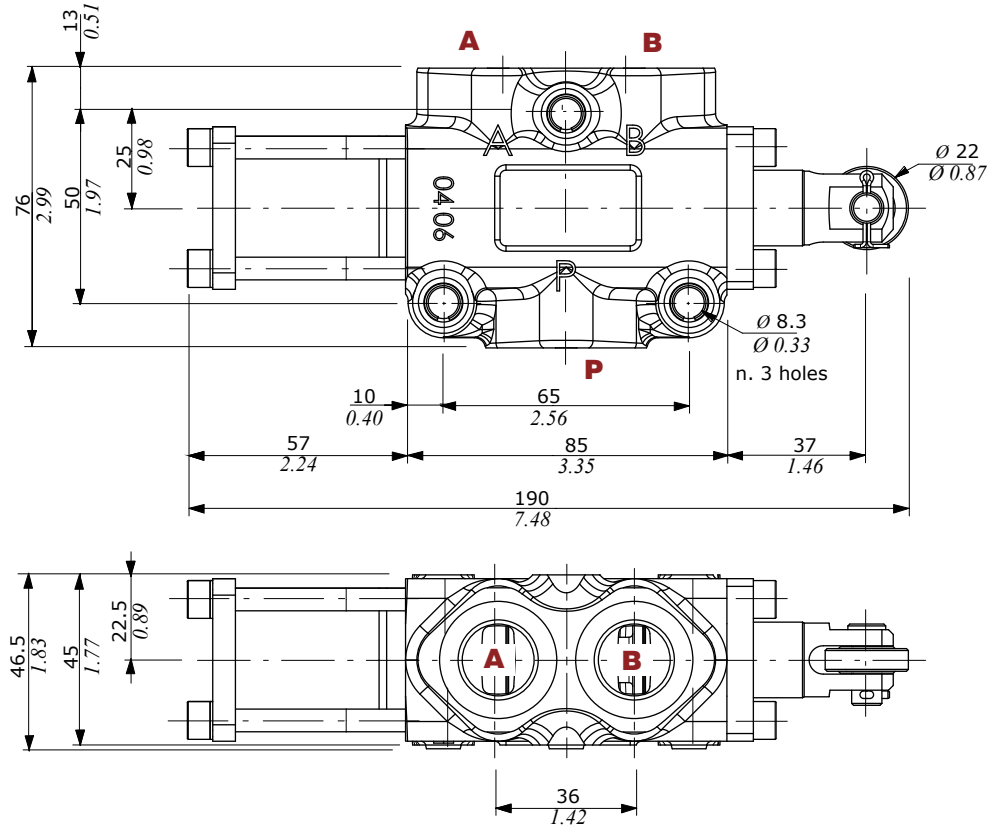
ALL PORTS	BSP	UN-UNF	METRIC* (ISO 9974-1)
DFC100	G 1/2	7/8-14 (SAE 10)	M22x1.5

(*) Optional threads
for availability contact Sales
Department

Dimensional data - hydraulic circuit - performance data

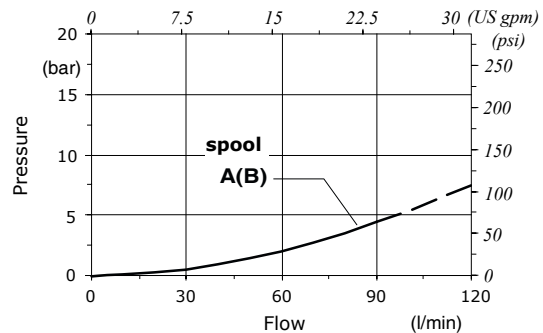
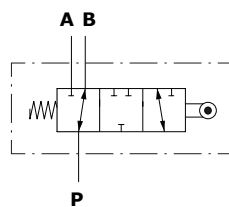
Cam spool control suggested for severe applications; it requires a special body, spool and control kit.

3 way



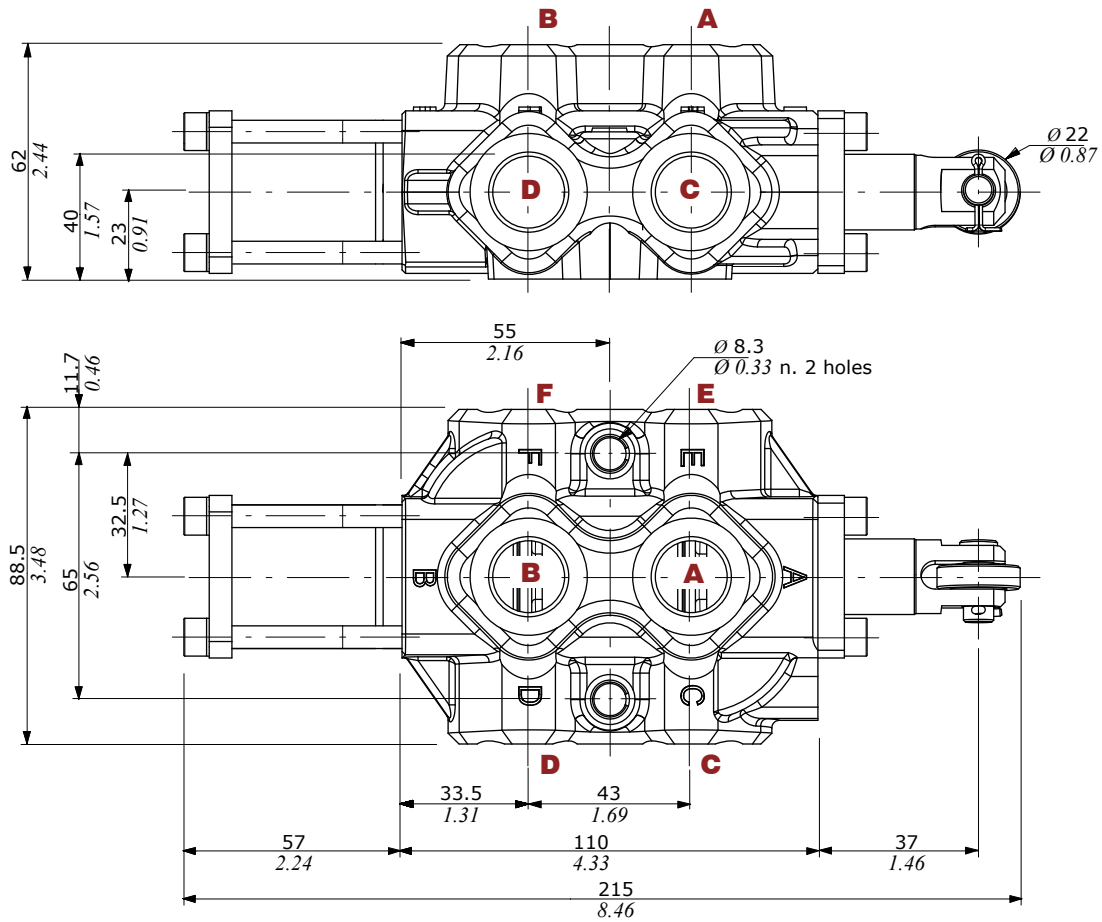
Pressure drop versus flow

P → A(B)



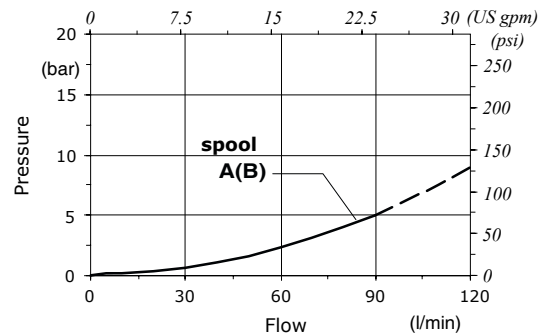
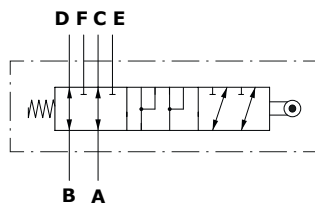
Dimensional data - hydraulic circuit - performance data

6 way



Pressure drop versus flow

A → C(E)



Part ordering codes

Example:

DFC100/3 **B** **17G** **SLP** - **SAE** - **(CVN)**

1

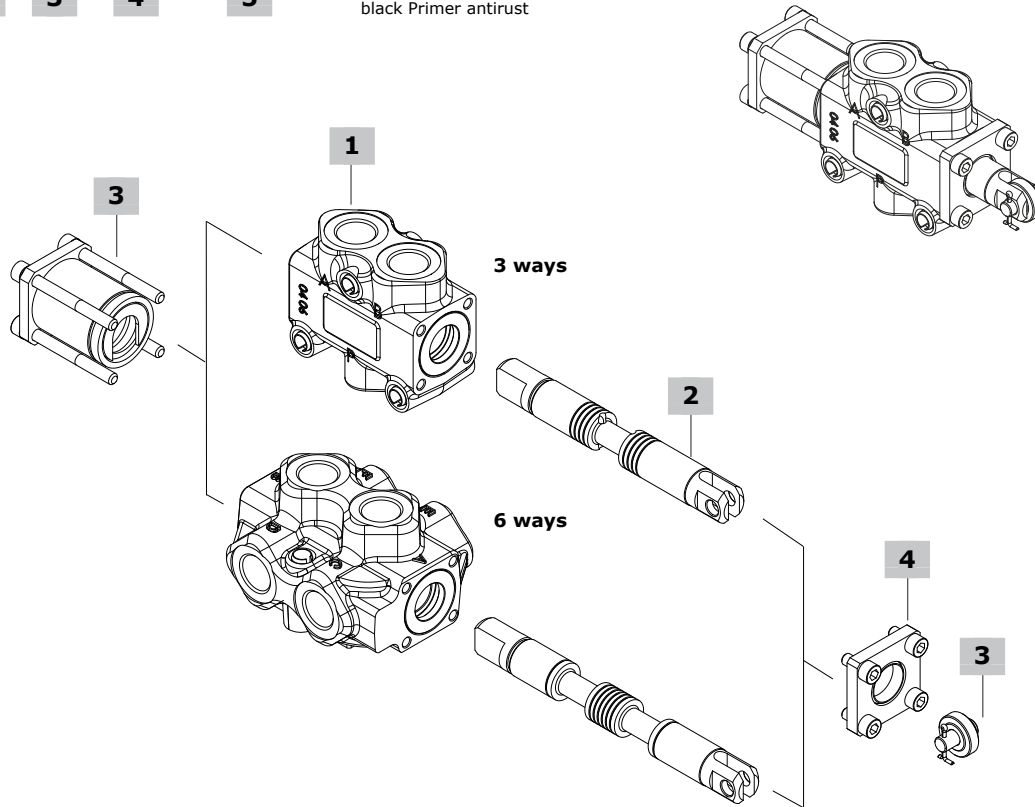
2

3

4

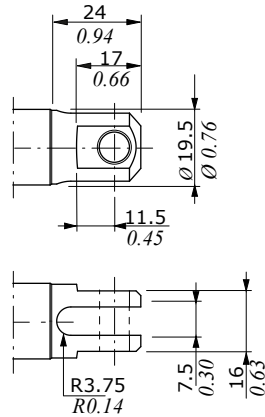
5

Painted with one layer of black Primer antirust



1 Body kit*			3 Complete controls page 40		
TYPE	CODE	DESCRIPTION	TYPE	CODE	DESCRIPTION
DFC100/3	5CO2241713	3 ways body kit	17G	5V17910000	Cam control with spring return in pos. 1
DFC100/6	5CO2242711	6 ways body kit	17GCAX	5V17910001	Inox steel cam control with spring return in pos. 1
2 Spools page 39			4 "B" side options page 40		
TYPE	CODE	DESCRIPTION	TYPE	CODE	DESCRIPTION
for DFC100/3:					
A	3CAS110312	Ports connected in transit position	SLP	5COP110005	with dust-proof plate
B	3CAS110421	Ports closed in transit position			
for DFC100/6:					
A	3CAS110711	Flow in C and D. E and F closed in pos. 1			
		Ports connected in transit position			
B	3CAS110721	Flow in C and D. E and F closed in pos. 1			
		Ports closed in transit position			
5 Body threading			Specify threading always when it is different from BSP standard		

(*) - Codes are referred to **UN-UNF** thread

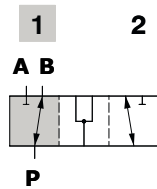


Rotary cam arrangement:
spool type **A, B**

3 ways

Type A

Ports connected
in transit position

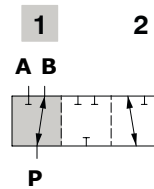


Spool stroke

Position 2: - 14 mm (- 0.55 in)

Type B

Ports closed
in transit position



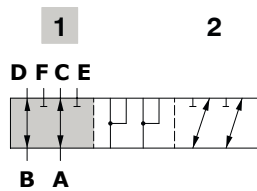
Spool stroke

Position 2: - 14 mm (- 0.55 in)

6 ways

Type A

Flow in C and D. E and F closed in pos. 1
Ports connected in transit position

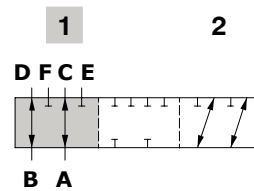


Spool stroke

Position 2: - 14 mm (- 0.55 in)

Type B

Flow in C and D. E and F closed in pos. 1
Ports closed in transit position



Spool stroke

Position 2: - 14 mm (- 0.55 in)

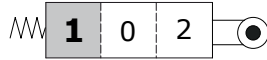
Complete controls

Cam control kit

17G type cam control available with stainless steel bearing (type 17GCAX).
It must be coupled with type SLP flange on valve B side

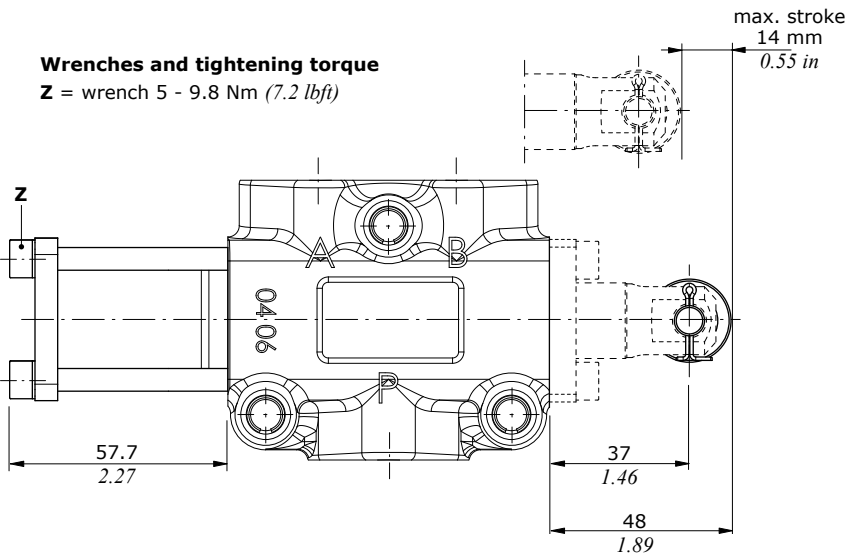
Type 17G - 17GCAX

Spring return in pos.1

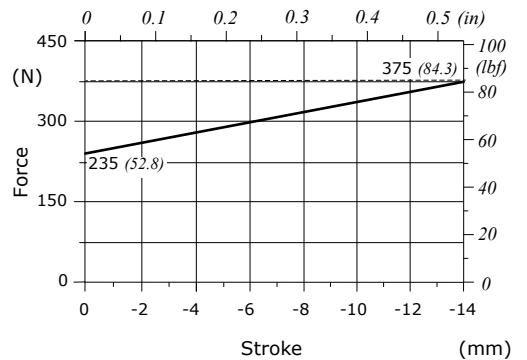


Wrenches and tightening torque

Z = wrench 5 - 9.8 Nm (7.2 lbf_t)



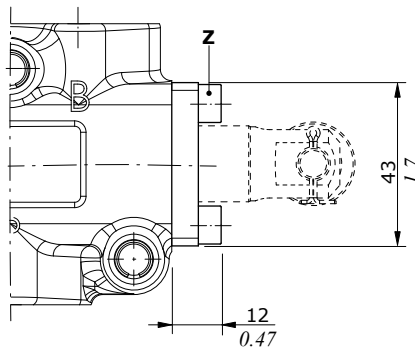
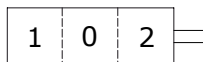
Force-Stroke diagram



"B" side options

Without lever, with flange

Type SLP



Wrenches and tightening torque

Z = wrench 5 - 9.8 Nm (7.2 lbf_t)