

# Directional Control Valves

## Open Centre Valves

Mobile Valves

P70CF



F130CF



H170CF



Open centre valves tend to be used most in applications requiring simple, uncomplicated systems that are undemanding in terms of operating characteristics. However, our considerable experience and high-quality products mean that we can offer open centre valves offering much more, especially in terms of operation. Our open centre valves are used by several market leaders in the mechanical engineering industry, which are extremely demanding in terms of repeatability and precision of operation.

P70CF and F130CF are of modular construction. The H170CF is a flangeable monoblock type meaning valve blocks can be flanged together to form a valve package for either single or multi-pump operation. The valves are designed for many different applications and used extensively in machines such as lorry cranes, small wheel loaders, concrete placing cranes, forestry machines, refuse trucks, drill rigs, garbage trucks, container trucks, forklift trucks etc.

These valves can be equipped with a large number of optional components and assemblies such as:

- Pump unloading with blocked pump channel for emergency stop
- Main pressure relief valve
- Port relief valves with anti cavitation function
- Anti cavitation valves
- Counter pressure valve
- Application adapted spools
- Pressure compensated spools
- Load check valve
- Power beyond feature

(Options vary for different valves)

Valve	Pump Flow l/min	Pressure bar	Operation			
			Manual	Pneumatic	Hydraulic	Electrohydraulic
P70CF	70	320	X	X	X	X
F130CF	110	320	X	X	X	X
H170CF	170	250	X	X	X	X

# Directional Control Valves

## Constant Pressure Valves

Mobile Valves

P70CP



Valves for constant pressure systems are mainly used where operational characteristics are critical and energy consumption is not. In these systems, simultaneous function operation is possible. Valves for constant pressure can return an un-loading signal to the variable pump when they are not in use. These valves can be equipped with a large number of optional components and assemblies such as:

- Pressure relief valve in inlet
- Port relief valves with anti cavitation function
- Anti cavitation valves
- Pressure compensated spools
- Load check valve
- Wide range of adaptors for system unique functionality

F130CP



(Options vary for different valves)

Valve	Pump Flow l/min	Pressure bar	Operation			
			Manual	Pneumatic	Hydraulic	Electrohydraulic
P70CP	90	320	X	X	X	X
F130CP	150	320	X	X	X	X

# Directional Control Valves

## Load Sensing Valves

Mobile Valves

VP120



L90LS



K170LS



K220LS



K + L Midinlet



VP170



M200LS



M250LS



M402LS



Valves for load sensing systems have the same operating characteristics as valves for constant pressure systems, except that the pressure in the motor port is sent as a signal either to a variable load sensing pump or to a bypass in the inlet. Bypasses are used with fixed displacement pumps. The load sensing system can be used to achieve complex system structures, for example including flow sharing, pressure compensation and pressure limitation in the motor ports. Correctly used, the load sensing system can significantly reduce energy consumption (heat generation) and therefore reduce operating costs, primarily in systems with wide variations in loads and operating times.

These valves can be equipped with a large number of optional components and assemblies such as:

- Options for variable or fixed displacement pumps
- Pump unloading with blocked pump channel for emergency stop
- Flanged multi-valves, L90LS, K170LS, K220LS
- Counter pressure valve
- Pressure relief valve in inlet
- Port relief valves with or without anti cavitation function
- Anti cavitation valves
- Port specific feed reducers
- Application adapted spools
- Port specific force feedback
- Load check valve
- Sections with pressure compensators

(Options vary for different valves)

Valve	Pump Flow l/min	Pressure bar	Operation			
			Manual	Pneumatic	Hydraulic	Electrohydraulic
VP120*	160	280	X		X	X
L90LS*	200	320	X	X	X	X
VP170*	220	350	X	X	X	X
K170LS	280	330			X	X
K220LS*	320	350			X	X
M200LS	400	350			X	X
M250LS	400	350			X	X
M402LS	1000	375			X	X

\* Flow sharing