

# WALVOIL MOBILE HYDRAULICS





#### 1 SECTION MONOBLOCK VALVE

The SD4 is normally used in log splitters, small dumpers, small-sized tractors and workshop presses. Compact dimensions, robust construction and low cost are the main features of this valve.

- Direct Main Relief Valve.
- Hand Lever, direct electric, automatic release, rotary spool control kits.
- Double-acting, single-acting, closed-centre spools.
- Spring and detent spool control.
- Nominal Flow Rating 45 litres / min.
- Rated Pressure 250 bar.
- Maximum Back Pressure 25 bar (on T Outlet).
- Internal Leakage 3 cm³/min (A,B to T at 100 bar).
- Spool diameter 16mm.
- Stroke + / 5.5 mm.

Standard Threads				
	BSP	METRIC	SAE	
Р	G 3/8	M18 * 1.5	8	
A – B	G 3/8	M18 * 1.5	6	
T	G 3/8	M18 * 1.5	8	



#### **MONOBLOCK VALVE FROM 1 TO 7 SECTIONS**

The versatility of this valve makes it the perfect control device for all sectors: harvesting machinery, brushcutters, silage chopper-mixers, baling machines, small front-loaders, truck cranes, overhead platforms, dumpers and so on.

With tailor-made executions, this valve can also be used on cement pumps.

- Parallel, series, tandem circuit.
- Arranged power beyond
- Direct Main Relief Valve
- Pressure line check valve.
- Anti-shock., anti-cavitation and combimed valves are available on request, alongwith pilot check valves, compensated flow control valves and hydraulic or electric pilot unloader valves.
- Hand lever, joystick, hydraulic, rotary spool, on/off pneumatic and proportional, on-off electro-pneumatic, on-off electro-hydraulic and proportional, direct solenoid, flexible cable and automatic release control kits.
- Fitted for centralised microswitch control and pin for dual control.
- Double-acting, single-acting, floating and regenerative circuit spools.
- Spring and detent spool control.
- Nominal Flow Rating 45 litres / min.
- Rated Pressure 315 bar.
- Maximum Back Pressure 25 bar (on T Outlet).
- Internal Leakage 3 cm³ / min (A,B to T at 100 bar).
- Spool diameter 16mm.
- Stroke + / 5.5 mm.

Standard Threads				
	BSP	METRIC	SAE	
P – C	G 3/8	M18 * 1.5	8	
A – B	G 3/8	M18 * 1.5	6	
T	G 3/8	M18 * 1.5	8	



## **MONOBLOCK VALVE FROM 1 TO 6 SECTIONS**

The SD11 is normally used on travelling and tilting vehicles, silage chopper mixers, and in services for cranes, compactors and car carriers.

- Parallel, series, circuit.
- Arranged power beyond
- Direct Main Relief Valve
- Pressure line check valve.
- Anti-shock., anti-cavitation and combimed valves are available on request, alongwith pilot check valves and hydraulic or electric pilot unloader valves.
- Hand lever, joystick, rotary, hydraulic, on/off pneumatic and proportional, on/off electro-pneumatic, on/off electro-hydraulic and proportional, flexible cable and automatic release control kits.
- Fitted for centralised microswitch control and pin for dual control.
- Double-acting, single-acting, floating and regenerative circuit spools.
- Spring and detent spool control.
- Nominal Flow Rating 70 litres / min.
- Rated Pressure 315 bar.
- Maximum Back Pressure 25 bar (on T Outlet).
- Internal Leakage 3 cm³/min (A,B to T at 100 bar).
- Spool diameter 20 mm.
- Stroke + / 7 mm.

Standard Threads				
	BSP	METRIC	SAE	
P – C	G 1/2	M18 * 1.5	10	
A – B	G 1/2	M18 * 1.5	8	
Т	G 3/4	M22 * 1.5	10	



#### 1 - SECTION MONOBLOCK VALVE

The SD14 is normally used to control motors for brushcutters, silage chopper-mixers and medium sized log splitters.

Equipped with an on/off electro-hydraulic control kit, it is mounted on skid-steer loaders.

- Direct or pilot Main Relief Valve
- Hand lever, rotary, on/off pneumatic and proportional, on/off electro-pneumatic, on/off electro-hydraulic and flexible cable control kits.
- Double-acting, single-acting and regenerative circuit spools.
- Spring and detent spool control.
- Nominal Flow Rating 120 litres / min.
- Rated Pressure 250 bar.
- Maximum Back Pressure 25 bar (on T Outlet).
- Internal Leakage 3 cm³ / min (A,B to T at 100 bar).
- Spool diameter 20 mm.
- Stroke + / 7 mm.

Standard Threads		
	BSP	SAE
Р	G 3/4	12
A – B	G 3/4	12
Т	G 3/4	12



#### **MONOBLOCK VALVE FROM 1 TO 4 SECTIONS**

Thanks to its robust construction, the SD18 valve is used in agricultural machinery to control motors for large brushcutters and in industrial vehicles such as trash compactors and drain systems

- Parallel circuit.
- Arranged power beyond
- Direct or pilot Main Relief Valve
- Pressure line check valve.
- Anti-shock valves with cross-over and pilot check valves are available on request.
- Hand lever, joystick, rotary, hydraulic, on/off pneumatic and proportional, on/off electro-pneumatic, on/off electro-hydraulic and proportional and flexible cable control kits.
- Double-acting, single-acting, floating and regenerative circuit spools.
- Spring and detent spool control.
- Nominal Flow Rating 160 litres / min.
- Rated Pressure 250 bar.
- Maximum Back Pressure 25 bar (on T Outlet).
- Internal Leakage 4 cm³/min (A,B to T at 100 bar).
- Spool diameter 25 mm.
- Stroke + / 10 mm.

Standard Threads			
	BSP	SAE	
P – C	G 3/4	16	
A – B	G 3/4	12	
T	G 1	16	



# **SDM080**

#### **MONOBLOCK VALVE FROM 1 TO 6 SECTIONS**

The smallest valve in the Walvoil product catalogue, it is used in agricultural machinery, truck cranes and small overhead platforms.

- Parallel, tandem circuit.
- Standard top P and T ports.
- Arranged power beyond
- Direct Main Relief Valve
- Pressure line inlet check valve.
- Hand lever and joystick control kits.
- Fitted for centralised microswitch control and pin for dual control.
- Double-acting, single-acting spools with anti-shock valve on port A or on port B.
- Spring and detent spool control.
- Nominal Flow Rating 25 litres / min.
- Rated Pressure 315 bar.
- Maximum Back Pressure 25 bar (on T Outlet).
- Internal Leakage 3 cm³/min (A,B to T at 100 bar).
- Spool diameter 14 mm.
- Stroke + / 5.5 mm.

#### Standard Threads

	BSP	METRIC	SAE
P – C	G 3/8	M18 * 1.5	6
A – B	G 1/4	M14 * 1.5	6
Т	G 3/8	M18 * 1.5	6



# **SDM140**

#### **MONOBLOCK VALVE FROM 1 TO 6 SECTIONS**

The versatility of the SDM140 monoblock valve makes it the perfect control device in applications involving agricultural machinery, harvesters, front-loaders, earth moving machines, skid-steer loaders, dumpers, shovels, telescopic boom fork lifts, industrial vehicles and mobile cranes.

The valve can also be supplied in the load-sensing signal version (SDM140-LS).

- Parallel circuit.
- Standard top P and T ports.
- Arranged power beyond
- Direct or pilot Main Relief Valve
- Pressure line check valve for each port.
- Fitted for anti-shock, anti-cavitation and combined port service valves.
- Hand lever, joystick, hydraulic, pneumatic, on/off electro-pneumatic, on/off electro-hydraulic and flexible cable control kits.
- Fitted for pin for dual control.
- Double-acting, single-acting, floating and regenerative circuit spools.
- Spring and detent spool control.
- Nominal Flow Rating 80 litres / min.
- Rated Pressure 280 bar.
- Maximum Back Pressure 25 bar (on T Outlet).
- Internal Leakage 3 cm<sup>3</sup>/min (A,B to T at 100 bar).
- Spool diameter 18 mm.
- Stroke + / 7 mm.

Standard Threads				
	BSP	METRIC	SAE	
P – C	G 3/4	M27 * 2	12	
A – B	G 1/2	M22 * 1.5	10	
T	G 3/4	M27 * 2	12	



# **SDM102/2**

#### FRONT LOADER MONOBLOCK VALVE

The valve was developed for the small and medium front-loader market.

- Parallel circuit.
- Arranged power beyond
- Direct Main Relief Valve
- Pressure line check valve for each port.
- Anti-shock and anti-cavitation valves on each port are available on request.
- Hand lever, joystick and flexible cable control kits.
- Double-acting, floating and regenerative circuit spools.
- Spring and detent spool control.
- Nominal Flow Rating 45 litres / min.
- Rated Pressure 250 bar.
- Maximum Back Pressure 25 bar (on T Outlet).
- Internal Leakage 3 cm³/min (A,B to T at 100 bar).
- Spool diameter 16mm.
- Stroke + / 5.5 mm.

Standard Threads				
	BSP	METRIC	SAE	
P – C	G 3/8	M18 * 1.5	8	
A – B	G 3/8	M18 * 1.5	6	
T	G 3/8	M18 * 1.5	8	



# **SDM141/3**

#### SKID-STEER LOADER 3-SECTIONS MONOBLOCK VALVE

The valve was developed to be used in skid-steer loaders.

The spools are tailor-made for each manufacturer since they must satisfy boom lifting and tilting operating needs to avoid the chattering that normally occurs on this type of machine.

- Series circuit.
- Standard top P and T ports.
- Arranged power beyond
- Direct or pilot Main Relief Valve
- Pressure line check valve for each port.
- Fitted for anti-shock, anti-cavitation and combined port service valves.
- Hand lever, joystick, hydraulic, pneumatic, on/off electro-pneumatic, on/off electro-hydraulic and flexible cable control kits.
- Double-acting, single-acting and floating circuit spools.
- Spring and detent spool control.
- Electro-mechanical spool lock in neutral position.
- Drop in flow restrictor can also be supplied on request for ports A-B.
- Nominal Flow Rating 80 litres / min.
- Rated Pressure 250 bar.
- Maximum Back Pressure 25 bar (on T Outlet).
- Internal Leakage 3 cm<sup>3</sup>/min (A,B to T at 100 bar).
- Spool diameter 18 mm.
- Stroke + / 7 mm.

Standard Threads				
	BSP	METRIC	SAE	
P – C	G 3/4	M27 * 2	12	
A – B	G 1/2	M22 * 1.5	10	
Т	G 3/4	M27 * 2	12	



# SDM143/2

# **DLM142/2**

#### FRONT LOADER MONOBLOCK VALVES

This line of valves was developed for the medium and large front-loader market.

The casing is fitted for assembly of multiple quick connector plates for automatic connection of the four ports.

The electro-proportional control valve can be supplied with control electronics and a joystick.

- Parallel, open centre, closed centre, Load-sensing circuit.
- Arranged power beyond
- Pilot Main Relief Valve
- Pressure line check valve for each port.
- Fitted for anti-shock, anti-cavitation and combined valves.
- Flexible cable, Proportional electro-hydraulic control kits.
- Double-acting and floating circuit spools.
- Spring and detent spool control.
- Nominal Flow Rating 80 litres / min.
- Rated Pressure 250 bar.
- Maximum Back Pressure 25 bar (on T Outlet).
- Internal Leakage 3 cm³/min (A,B to T at 100 bar).
- Spool diameter 18 mm.
- Stroke + / 7 mm.

Standard Threads				
	BSP	METRIC	SAE	
P – C	G 3/4	M27 * 2	12	
A – B	G 1/2	M22 * 1.5	10	
T	G 3/4	M27 * 2	12	



#### **SECTIONAL VALVE FROM 1 TO 12 PORTS**

Small, compact and flexible, it is the ideal control valve for cranes, booms for brushcutters, miniexcavators, backhoe excavators, small and medium chipping machines and overhead platforms.

- Parallel, series, tandem circuit.
- Arranged power beyond
- Direct Main Relief Valve
- Pressure line load check valve for each port.
- Fitted for anti-shock, anti-cavitation and combined port service valves; main filler valve and hydraulic or electric pilot unloader valve, manual inlet switch (for sideshift lock port); panel flanging on pilot control check valves also possible.
- Inlet covers and intermediate sections with priority flow valves and compensated adjustable flow valves are available alongwith a dual-feed intermediate return manifold.
- Hand lever, joystick, hydraulic, on/off pneumatic and proportional, on/off electro-pneumatic, direct solenoid and on/off electro-hydraulic and proportional control kits.
- Fitted for pin for dual control.
- Double-acting, single-acting, floating and regenerative circuit spools.
- Spring and detent spool control.
- Nominal Flow Rating 45 litres / min.
- Rated Pressure 315 bar.
- Maximum Back Pressure 25 bar (on T Outlet).
- Internal Leakage 3 cm³/min (A,B to T at 100 bar).
- Spool diameter 16 mm.
- Stroke + / 5.5 mm.

Standard Threads				
	BSP	METRIC	SAE	
Р	G 3/8	M18 * 1.5	8	
A – B	G 3/8	M18 * 1.5	6	
T – C	G 1/2	M22 * 1.5	8	



#### SECTIONAL VALVE FROM 1 TO 12 PORTS

The technical features, flow rate and pressure make the SD8 ideal for numerous applications but particularly for cranes, telescopic boom fork-lifts, backhoe excavators and compactors

- Parallel, series, tandem circuit.
- Arranged power beyond
- Direct or pilot Main Relief Valve
- Pressure line load check valve for each port.
- Fitted for anti-shock, anti-cavitation and combined port service valves; main filler valve and hydraulic or electric pilot unloader valve, manual inlet switch (for sideshift lock port).
- Intermediate sections with compensated adjustable flow valve and secondary relief valve are available alongwith a dual-feed intermediate return manifold.
- Hand lever, joystick, hydraulic, on/off pneumatic and proportional, on/off electro-pneumatic, direct solenoid and on/off electro-hydraulic control kits.
- Fitted for pin for dual control.
- Double-acting, single-acting, floating circuit spools.
- Spring and detent spool control.
- Nominal Flow Rating 80 litres / min.
- Rated Pressure 315 bar.
- Maximum Back Pressure 25 bar (on T Outlet).
- Internal Leakage 3 cm<sup>3</sup>/min (A,B to T at 100 bar).
- Spool diameter 18 mm.
- Stroke + / 7 mm.

Standard Thre	ads		
	BSP	METRIC	SAE
Р	G 1/2	M22 * 1.5	10
A – B	G 1/2	M22 * 1.5	8
T – C	G 3/4	M27 * 2	10



# **SDS150**

#### **SECTIONAL VALVE FROM 1 TO 12 PORTS**

With a simple and rugged design, this valve is mounted on travelling vehicles, agricultural loaders, forest cranes and container trailers.

- Parallel, series, tandem circuit.
- Arranged power beyond
- Direct or pilot Main Relief Valve
- Pressure line load check valve for each port.
- Fitted for anti-shock, anti-cavitation and combined port service valves; main filler valve and hydraulic or electric pilot unloader valve, manual inlet switch (for sideshift lock port).
- Intermediate sections with compensated adjustable flow valve and secondary relief valve are available alongwith a dual-feed intermediate return manifold.
- Hand lever, joystick, hydraulic, on/off pneumatic and proportional, on/off electro-pneumatic, direct solenoid, on/off electro-hydraulic and proportional and automatic release control kits.
- Fitted for pin for dual control.
- Double-acting, single-acting, floating and regenerative circuit spools.
- Spring and detent spool control.
- Nominal Flow Rating 90 litres / min.
- Rated Pressure 315 bar.
- Maximum Back Pressure 25 bar (on T Outlet).
- Internal Leakage 3 cm<sup>3</sup>/min (A,B to T at 100 bar).
- Spool diameter 20 mm.
- Stroke + / 7 mm.

Standard Thread	ds		
	BSP	SAE	
P – C	G 3/4	12	
A – B	G 1/2	10	
Т	G 3/4	12	



#### SECTIONAL VALVE FROM 1 TO 10 PORTS

The SD16 is the ideal partner for backhoe loaders, agricultural loaders, forest cranes as well as city trash compactors.

- Parallel, series, tandem circuit.
- Arranged power beyond
- Direct or pilot Main Relief Valve
- Pressure line load check valve for each port.
- Fitted for anti-shock, anti-cavitation and combined port service valves; main filler valve and hydraulic or electric pilot unloader valve.
- Intermediate sections with compensated adjustable flow valve and secondary relief valve are available alongwith a dual-feed intermediate return manifold.
- Hand lever, joystick, hydraulic, on/off pneumatic and proportional, on/off electro-pneumatic, on/off electro-hydraulic and proportional and automatic release control kits.
- Fitted for pin for dual control.
- Double-acting, single-acting, floating and regenerative circuit spools.
- Spring and detent spool control.
- Nominal Flow Rating 140 litres / min.
- Rated Pressure 315 bar.
- Maximum Back Pressure 25 bar (on T Outlet).
- Internal Leakage 3 cm<sup>3</sup>/min (A,B to T at 100 bar).
- Spool diameter 20 mm.
- Stroke + / 7 mm.

Standard Threads		
	BSP	SAE
Р	G 3/4	16
A – B	G 3/4	12
T – C	G 1	16



#### SECTIONAL VALVE FROM 1 TO 10 PORTS

The SD25 valve is utilised on large fork lifts for containers, crane trucks, compactors, drain machines, large agricultural loaders and earth moving equipments.

- Parallel, series, tandem circuit.
- Arranged power beyond
- Direct or pilot Main Relief Valve
- Pressure line load check valve for each port.
- Fitted for anti-shock, anti-cavitation and combined port service valves; hydraulic or electric inlet pilot unloader valve.
- Intermediate sections with compensated adjustable flow valve and secondary relief valve are available alongwith a dual-feed intermediate return manifold.
- Hand lever, joystick, hydraulic, on/off pneumatic and proportional, on/off electro-pneumatic, on/off electro-hydraulic and proportional control kits.
- Double-acting, single-acting, floating and regenerative circuit spools.
- Spring and detent spool control.
- Nominal Flow Rating 240 litres / min.
- Rated Pressure 315 bar.
- Maximum Back Pressure 25 bar (on T Outlet).
- Internal Leakage 4 cm<sup>3</sup>/min (A,B to T at 100 bar).
- Spool diameter 25 mm.
- Stroke + / 10 mm.

Standard Threads			
	BSP	SAE	
Р	G 1	20	
A – B	G 1	16	
T – C	G 1 1/4	20	



# DLS7

#### PROPORTIONAL LOAD-SENSING SECTIONAL VALVE FROM 1 TO 10 PORTS

The DLS7 valve is installed on platforms as well as vertical and horizontal drilling rigs.

- Parallel circuit.
- Pilot Main Relief Valve
- Pressure line load check valve for each port.
- Available with inlet compensator for circuits with Load-sensing variable displacement pump or without compensator for circuits with fixed displacement pump.
- Non-compensated sections fitted for detecting an external pressure signal.
- Fitted for anti-shock, anti-cavitation and combined valves on each port.
- Hand lever, hydraulic, on/off electro-hydraulic and proportional control kits.
- Double-acting and single-acting circuit spools.
- Spring, detent and friction spool control.
- Nominal Flow Rating 60 litres / min.
- Rated Pressure 315 bar.
- Maximum Back Pressure 25 bar (on T Outlet).
- Internal Leakage 3 cm³/min (A,B to T at 100 bar).
- Spool diameter 16 mm.
- Stroke + / 5.5 mm.

Standard Threads		
	BSP	SAE
Р	G 1/2	8
A – B	G 3/8	6
T – C	G 1/4	6



# DLS8

#### PROPORTIONAL LOAD-SENSING SECTIONAL VALVE FROM 1 TO 10 PORTS

The DLS8 valve is used with a manual control kit in vertical and horizontal drilling rigs and in frontloaders for tractors.

- Parallel circuit.
- Pilot Main Relief Valve
- Pressure line load check valve for each port.
- Available with inlet compensator for circuits with Load-sensing variable displacement pump or without compensator for circuits with fixed displacement pump.
- Non-compensated sections.
- Fitted for anti-shock, anti-cavitation and combined valves on each port.
- Hand lever, joystick, hydraulic, on/off electro-hydraulic control kits.
- Double-acting and single-acting circuit spools.
- Spring, detent and friction spool control.
- Nominal Flow Rating 90 litres / min.
- Rated Pressure 315 bar.
- Maximum Back Pressure 25 bar (on T Outlet).
- Internal Leakage 3 cm³/min (A,B to T at 100 bar).
- Spool diameter 18 mm.
- Stroke + / 7 mm.

Standard Threads		
	BSP	SAE
Р	G 3/4	10
A – B	G 1/2	8
T – C	G 1/4	6



# **DPC130**

## PRESSURE COMPENSATED LOAD-SENSING PROPORTIONAL SECTIONAL VALVE FROM 1 TO 10 PORTS

This sectional valve is normally used for mobile machinery, agricultural machines, cranes, drilling rigs and compactors.

The spools have various hydraulic configurations: double-acting, single-acting, 4th position floating control and pre-set for various flow rates. The feedback based electro-proportional control kit is equipped with on-board electronics and can be interfaced with the CAN BUS system and operated with remote controls.

- Parallel circuit.
- Inlet side: open centre or closed centre.
- Available with or without compensated sections with pressure line check valve.
- Anti-shock, anti-cavitation and combined valves on each port.
- Valves on the LS signal
- Hand lever, hydraulic, on/off electro-hydraulic and electro-proportional control kits.
- Double-acting, single-acting and floating circuit spools.
- Spring, detent and friction spool control.
- Nominal Flow Rating 140 litres / min.
- Rated Pressure 315 bar.
- Maximum Back Pressure 25 bar (on T Outlet).
- Internal Leakage 10 cm³/min (A,B to T at 100 bar).
- Spool diameter 18 mm.
- Stroke + / 7 mm.

Standard Threads		
	BSP	SAE
P	G 3/4	12
A – B	G 1/2	10
T – C	G 1/4	6



# **ARC 300**

#### **ELECTRONIC CONTROLS**

The ARC 300 remote control is an open loop electronic system consisting of potentiometer electric controllers (joysticks, MEN, ME, MEW), usually mounted on a portable unit (UPA), a thin multicore signal transmitting cable (i.e CC) and a control unit (UGA) containing the electronic cards (SAS). These cards filter, amplify and process the signals coming from the joysticks and feed the proportional magnets on the controlled valve with a current proportional to the lever deflection angle. On SAS cards, a sensor controls and stabilises the current to the magnets, keeping it constant even during changes in temperature (and therefore resistance) and/or supply volatge.

- The ARC 300 is an open loop system and therefore can be used to drive ON/OFF functions and specific machine auxillary functions (motor start/stop, horn etc.)
- It can also integrate any electrical components (relays, etc.) in the UGA control unit and the relative switches in the control kits.
- When requested by the customer, it is also easy to manage PLC interfaces and create machine cycles or logic that include automated devices or movement inhibitors when specific conditions occur.



# SV **AVN020 AVN030**

#### HYDRAULIC PILOT CONTROL VALVES

Thanks to Walvoil's complete line of hydraulic pilot controls, these valves can be used in all application sectors: joysticks for mini-excavators and fork-lifts, sectional valves for overhead platforms and pedals for large excavators.

Handwheel control kits can be used to operate valves in drill rigs.

Joysticks with handles equipped with multiple microswitches are used to remote control brushcutters.

The SV pilot control valve unit includes:

- Joystick (SV01)
- Monoblock with lever (SV10 SV11 SV20)
- Sectional (SV30/...) with one pedal (SV50-51-52 SVP501 SV60)
- Two pedals (SV40 SV41)
- With handwheel (SV70)
- These valves also include friction, connectors, electric contacts.
- The pressure control curves are graphed with step, without step and interrupted.
- There are holder plates for joysticks with selectors to control hydraulic transmissions.

The AVN feeding unit series includes:

- 1-2-3 Inlets
- Main relief valve on the pilot section and inlet pressure reducing valve.
- Fitted for accumulator and electric unloader valve.

Feeding Flow - 5 to 20 litres/min

Maximum Pressure - 100 bar

Maximum Back Pressure - 3 bar

#### Standard Threads

	BSP	METRIC	SAE
All Ports	G 1/4	M 14 * 1.5	6



# SP

# PNEUMATIC PILOT CONTROL VALVES

These pilot control valves are normally used in industrial vehicles, as well as in travelling and tilting machinery.

The line of Walvoil control valves also includes a proportional pneumatic control kit (PZ).

This series of pneumatic pilot control valves includes the joystick (SP01), the monoblock with lever (SP10) and the sectional (SP30/..).

- Air flow at 7 bar 350 dm³/min.
- Maximum Pressure 10 bar

Standard Threads			
	NPT		
All Ports	1/8-27		



# FLEXIBLE CABLE REMOTE CONTROLS

# TC

#### **MONOBLOCK SERIES 5 AND SERIES 10**

# **TCC**

#### **SECTIONAL SERIES 5 AND SERIES 10**

# **SCF030**

## **JOYSTICK WITH PLASTIC BODY**

# CD

#### **FLEXIBLE CABLES**

- A position selector is fitted on the TC and TCC series.
- Standard equipment on the SCF030 joystick includes a safety lock in the neutral position. It can also be supplied with a series V ergonomic handle or a series H multiple microswitch.
- The valves activated with flexible cable remote controls are used in agricultural machinery such as brushcutters, silage choppers-mixers, front-loaders and baling machines.



# DF

#### **DIVERTER VALVES DF - DFE - DH**

In some machines that use a hydrostatic transmission for travelling, mounting a DF20/6 diverter valve with electro-hydraulic control kit can convert a parallel circuit into a series circuit.

- The DF series is equipped with hand lever and can control kits.
- The DFE series is equipped with an on/off direct electric control kit or can be on/off electropiloted for flow rates upto 220 l/min.
- The new DFE140 series can be installed in module assembly with multiple diverter valve to obtain a 8-way and a 10-way execution from the standard 6-way model.
- In this series a modular block can be mounted for the anti-shock valves with a cross-over on two ports.
- The DFE 6 or 8-way diverter valves on tractor front-loaders select different functions.
- On telescopic boom fork lifts the 2 and 3 way DF diverter valves are used as a limit switch, while they are mounted on the overhead platforms as sfety valves.





# **HANDLES**

#### **SERIE 10**

Ergonomic handle made by charged nylon for pilot control valves and flexible cable control kits.

Can be equipped with one or two top rocker microswitches.

Push buttons protected with rubber cap.

#### **SERIE 30**

Monolithic ergonomic handle with soft rubber coating for pilot control valves and flexible cable control kits.

One or two microswitches can be installed at the top or on the front

#### **SERIE 40**

Multiple microswitch charged nylon handle for pilot control valves and flexible cable control kits.

Upto 6 microswitches can be installed in the top holder plate and two microswitches on the front.

It is possible to install rocker microswitches on the holder plate.

On request, a "dead-man" microswitch can be fitted on the handle.