



## PHC electronic systems

- Complete electronic control systems, plug-and-play
- Pre-setted functionality
- Customization on request
- Applicable on a wide range of directional valves
- Robust construction
- Suitable for general applications

Working conditions		PHC400F	PHC220C	PHC250C	PHC251C	PHC400C	PHC640C	PHC400P
General features	System type	•						•
		potentiometric						
		ratiometric						
		CAN bus	•	•	•	•	•	
	Proportional functions (nr.)	4	2	2	2	4	6	4
	Float function management	•	•	•	•	•	•	•
	Digital outputs (nr)	/	2	3	3	/	2	/
	"Dead man" switch management	•	/	/	/	•	•	/
	Return to dig	/	/	•	•	/	/	/
	Fast-Slow	/	/	/	•	/	/	/

# PHC electronic systems

## PHC400F

### System description

The system can be used for 12VDC or 24VDC applications.

It allows to drive up to four functions/sections on the directional valve, all the controls are proportional.

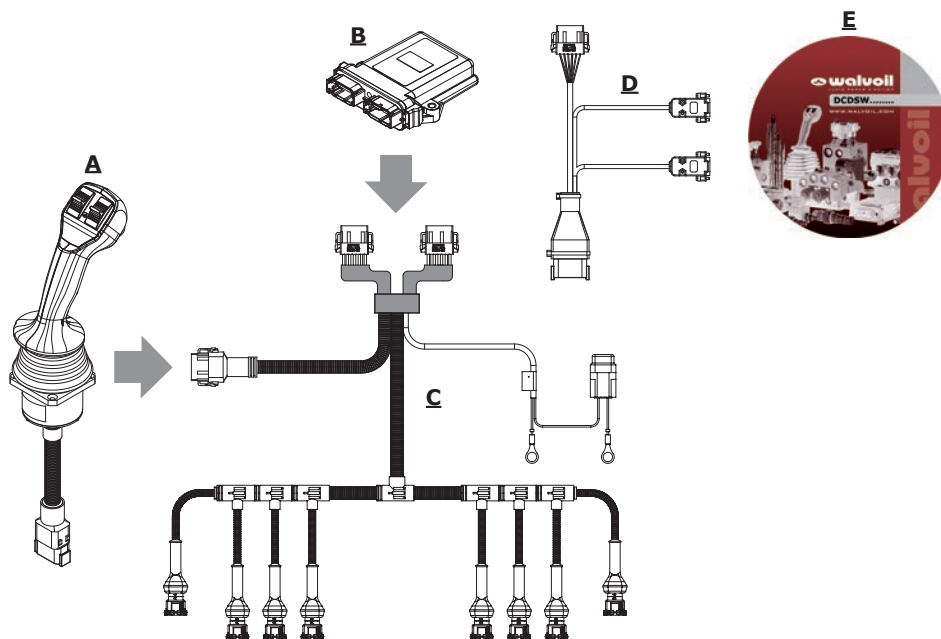
The control signals come from an analog AJW joystick. CED400X control unit drives the directional valve.

The "dead man" switch enables all the functions; the float and the fast/slow signals are used to control the float and fast/slow functions.

Acceleration and decelerations ramp times are programmable and applicable to the machine movements for those applications that require to manage heavy loads.

Through a dedicated WST software, a few customizations can be set to adjust the system dynamic.

<b>Code</b>	<b>1XSE40002</b>
<b>Description</b>	PHC400F electronic system
<b>Notes</b>	12-24V application, 4 proportional functions (1 floating)



### PHC400F parts

ID	Code	Type	Qty
A	183540028	AJW analog joystick: 4 proportional axis, "dead man" switch, 1 push-button	1
B	183334003	CED400X/PHC400F/v43.02 electronic control unit	1
C	183480118	KCD04 harness	1
D	VCAV600018	CED400X programming cable	1
E	DCDSW0170051	PHC/v2.0 SYSTEM WST software	1

### System description

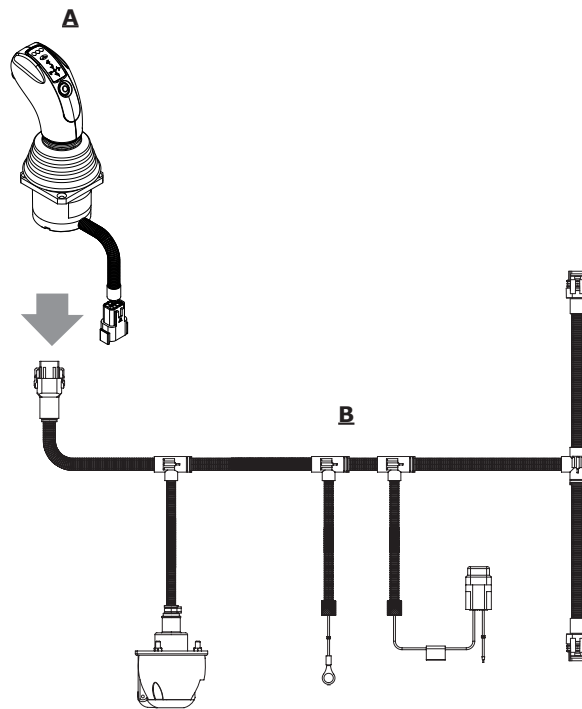
The system can be used for the front-end loader application, 12VDC.

It allows to drive up to two functions/sections on the directional valve, all the controls are proportional.

The control signals come from a CAN bus CJW joystick, that drives two mechatronic EME controls, which drive the directional valve.

The float signal is used to control the float function on the directional valve, two external diverter valve can be driven with one push-buttons from the joystick handle.

<b>Code</b>	<b>1XSE21002</b>
<b>Description</b>	PHC220C electronic system
<b>Notes</b>	12V application, 2 proportional functions (1 for floating), 4 <sup>th</sup> function through diverter valves



### PHC210C parts

ID	Code	Type	Qty
A	183530045	CJW SAE J1939 joystick: 2 proportional functions, 2 ON/OFF switch, 3 push-buttons	1
B	183480165	KCD05 harness	1

## PHC250C

### System description

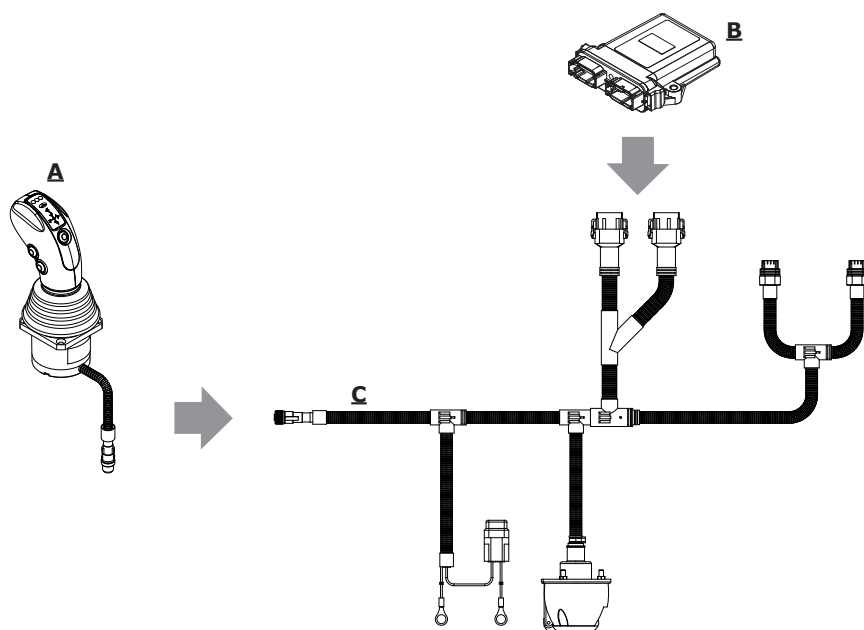
The system can be used for the front-end loader application, 12VDC.

It allows to drive up to two functions/sections on the directional valve, all the controls are proportional.

The control signals come from a CJW CAN bus joystick, that drives two mechatronic EME controls, which drive the directional valve.

The float and return to dig functions are available on the directional valve, three external diverter valves can be driven with the push-buttons from the joystick handle.

<b>Code</b>	<b>1XSE21006</b>
<b>Description</b>	PHC250C electronic system
<b>Notes</b>	12V application, 2 proportional functions (1 floating), 3 <sup>rd</sup> , 4 <sup>th</sup> and 5 <sup>th</sup> function for diverter valves, return to dig sensors



### PHC250C parts

ID	Code	Type	Qty
A	183530044	CJW SAE J1939 joystick: 2 proportional functions, 1 ON/OFF switch, 6 push-buttons	1
B	183360010	CED040/PHC250C-12V/v06.00 electronic control unit	1
C	183480166	KCD05 harness programming cable	1

### System description

The system can be used for the front-end loader application, 12VDC.

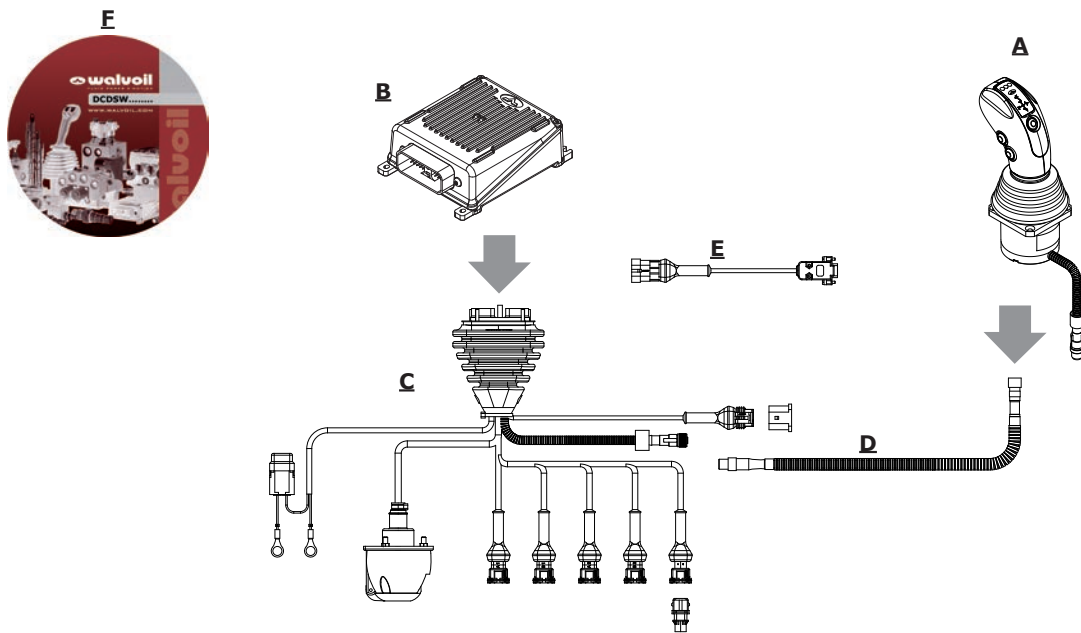
It allows to drive up to two functions/sections on the directional valve, all the controls are proportional.

The control signals come from a CJW CAN bus joystick. CED252 control unit drives the directional valve.

The float, Fast/Slow and return to dig functions are available on the directional valve, three external diverter valves can be driven with the push-buttons from the joystick handle.

Through a dedicated WST software, the diagnostic on the system can be executed.

<b>Code</b>	<b>1XSE21007</b>
<b>Description</b>	PHC251C electronic system
<b>Notes</b>	12V application, 2 proportional functions (1 floating), 3 <sup>rd</sup> , 4 <sup>th</sup> and 5 <sup>th</sup> function for diverter valves, return to dig sensors



PHC251C parts				
ID	Code	Type		Qty
<b>A</b>	<b>183530044</b>	CJW SAE J1939 joystick: 2 proportional functions, 1 ON/OFF switch, 6 push-buttons		1
<b>B</b>	<b>183350025</b>	CED252/PHC251C/v40.25 electronic control unit		1
<b>C</b>	<b>183480167</b>	KCD09 harness		1
<b>D</b>	<b>183490001</b>	extension for joystick connection , L=4m (157.48 in)		1
<b>E</b>	<b>VCAV600014</b>	CED252 programming cable		1
<b>F</b>	<b>DCDSW004005</b>	WST/FLC/v11.01 software		1

# PHC electronic systems

## PHC400C

### System description

The system can be used for 12VDC or 24VDC applications.

It allows to drive up to four functions/sections on the directional valve, all the controls are proportional.

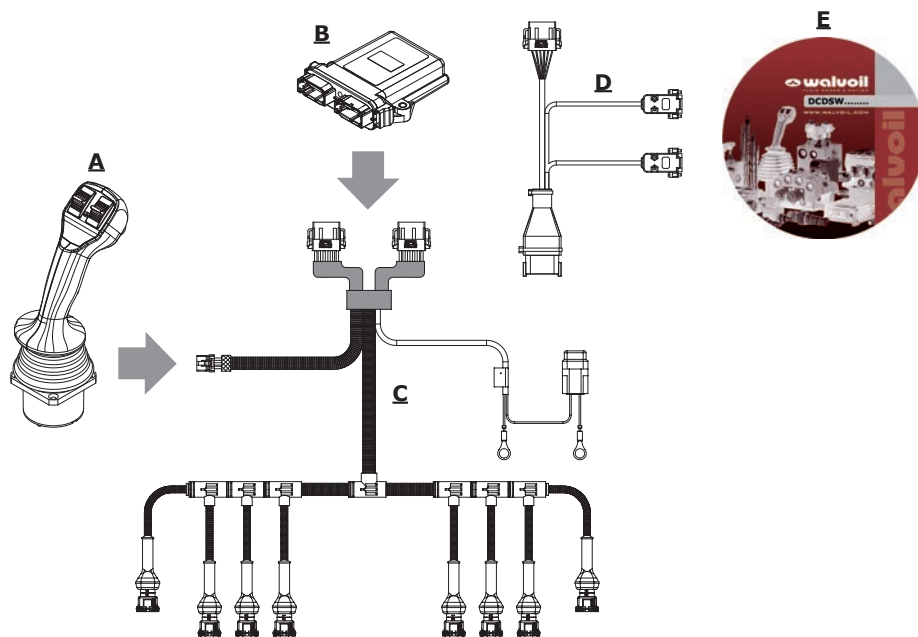
The control signals come from a CAN bus CJW joystick. CED400X control unit drives the directional valve.

The "dead man" switch enables all the functions; the float and the fast/slow signals are used to control the float and fast/slow functions.

Acceleration and decelerations ramp times are programmable and applicable to the machine movements for those applications that require to manage heavy loads.

Through a dedicated WST software, a few customizations can be set to adjust the system dynamic.

<b>Code</b>	<b>1XSE40003</b>
<b>Description</b>	PHC400C electronic system
<b>Notes</b>	12-24V application, 4 proportional functions (1 floating)



### PHC400C parts

ID	Code	Type	Qty
A	183530011	CJW CAN bus joystick: 4 proportional axis, "dead man" switch, 1 push-button	1
B	183338007	CED400X/PHC400C/v73.01 electronic control unit	1
C	1834800168	KCD04 harness	1
D	VCAV600018	CED400X programming cable	1
E	DCDSW0170088	PHC/v2.0 SYSTEM WST software CAN bus	1

### System description

The system can be used for 12VDC or 24VDC applications.

It allows to drive up to eight functions/sections on the directional valve; six controls are proportional, two controls are on/off actuated.

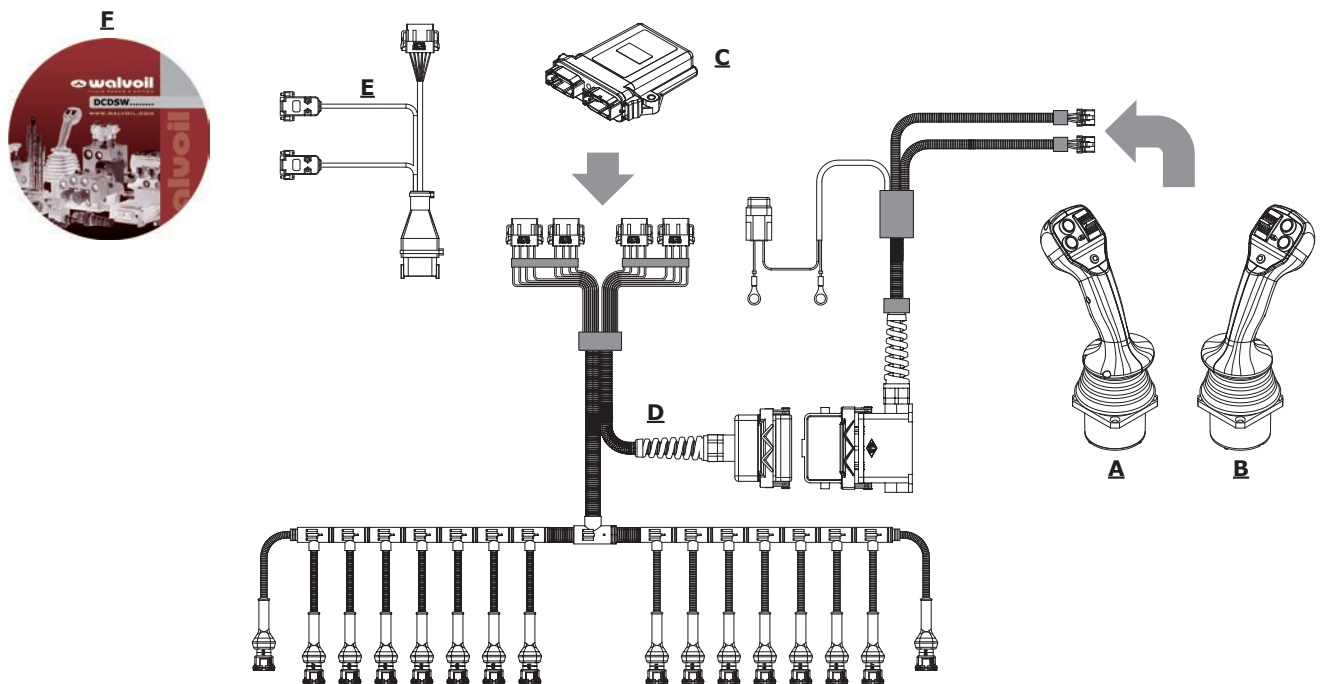
The control signals come from a CAN bus CJW joystick. CED400X control units drive the directional valve.

The "dead man" switch enables all the functions.

Acceleration and decelerations ramp times are programmable and applicable to the machine movements for those applications that require to manage heavy loads.

Through a dedicated WST software, a few customizations can be set to adjust the system dynamic.

<b>Code</b>	<b>1XSE4004</b>
<b>Description</b>	PHC640C electronic system
<b>Notes</b>	12-24V application, 6 proportional functions, 2 on/off functions



PHC640C parts			
ID	Code	Type	Qty
A	183530012	CJW CAN bus joystick: 3 proportional functions, "dead man" switch, 2 push-buttons, 1 LED, left configuration	1
B	183530013	CJW CAN bus joystick: 3 proportional functions, "dead man" switch, 2 push-buttons, 1 LED, right configuration	1
C	183338007	CED400X/PHC400C/v73.01 electronic control unit	1
D	183480169	KCD03 harness	1
E	VCAV600018	CED400X programming cable	1
F	DCDSW0170088	PHC/v2.0 SYSTEM WST software CAN bus	1

## PHC400P

### System description

The system can be used for 12VDC or 24VDC applications.

It allows to drive up to four functions/sections on the directional valve, all the controls are proportional.

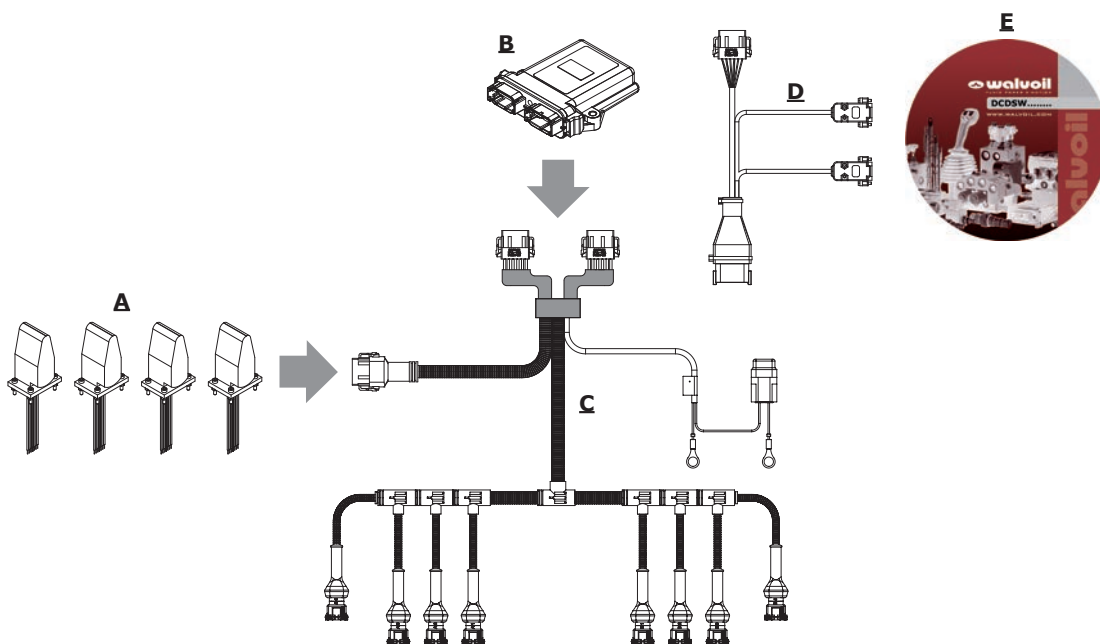
The control signals come from four single axis analog joysticks. CED400X control unit drives the directional valve.

The 'operator presence' switch enables all the functions, the float and the fast/slow commands are used to control the float and fast/slow functions.

Acceleration and decelerations ramp times are programmable and applicable to the machine movements for those applications that require to manage heavy loads.

Through a dedicated WST software, a few customizations can be set to adjust the system dynamic.

<b>Code</b>	<b>1XSE40005</b>
<b>Description</b>	PHC400P electronic system
<b>Notes</b>	12-24V application, 4 proportional functions (1 floating)



### PHC400P parts

ID	Code	Type	Qty
A	<b>VJOY200001</b>	MDN142 potentiometric joystick: 1 proportional axis with redundancy	4
B	<b>183334003</b>	CED400X/PHC400F/v43.02 electronic control unit	1
C	<b>183480118</b>	KCD04 harness	1
D	<b>VCAV600018</b>	CED400X programming cable	1
E	<b>DCDSW0170051</b>	PHC/v2.0 SYSTEM WST software	1