



In U.S.A.

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In U.S.A.

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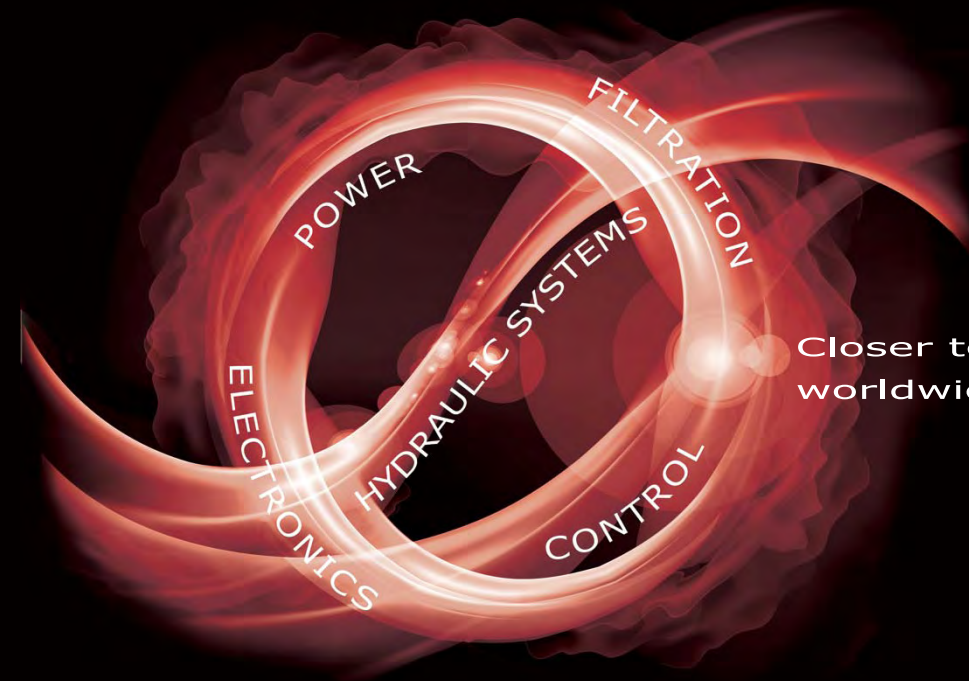
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Highlights



**Closer to customers
worldwide**



Welcome to Ifpe-Conexpo 2014

Where in the US

Closer to customers worldwide

Since the very beginning of our businesses, in Casappa and Walvoil we have been designing and developing products and solutions for hydraulic motion applications.

Here following just a few samples of our latest products, services and systems we have been offering to the construction industries.

Being closer to our customers worldwide, making your applications competitive, **cleaner, greener, safer** and **more efficient** are our daily commitments.



CASAPPA CORP.
Batavia (Illinois)
www.casappa.com

Walvoil Fluid Power Corporation
Tulsa (Oklahoma)
www.walvoil.com

e-Power System

Efficient Hydraulics for Energy Saving

● Load Sensing Electronic Control

● Torque Electronic Control

● Working modes:
Standard - Economy - Power

● Power boost option



Series DPX

Flow Sharing sectional valves

FUNCTION: Directional control valves

WORKING CONDITIONS: Nominal flow rating on working ports: up to 160 l/min - 42 US gpm • Max. pressure on working ports: up to 420 bar - 6000 psi

FEATURES: High pressure configuration
Specific configuration for steering application
Proportional hydraulic and electrohydraulic controls



MVP PECA

Variable Displacement Axial Piston Pump

WORKING CONDITIONS:

Displacements: from 28 cm³/rev (1.74 in³/rev) to 84,7 cm³/rev (5.17 in³/rev)

Max. peak pressure: up to 350 bar (5100 psi)

FEATURES: Electro-proportional pressure control and swash-plate angular sensor

CED100X

Electronic Control Unit

FEATURES: CAN protocol RS-232 protocol

INPUT: up to 4 for sensors • up to 6 digital

OUTPUT: 1 proportional PWM • 1 on/off



Series SVM

Hydraulic joysticks

FUNCTION: Hydraulic control devices

WORKING CONDITIONS:

Primary pressure (min/max):

30/100 bar - 435/1450 psi

Rated flow (min/max):

5/20 l/min - 1.3/5.3 US gpm

FEATURES: Single (stackable up to 10 functions) or double axis joysticks

Low effort actuation

Wide range of handles





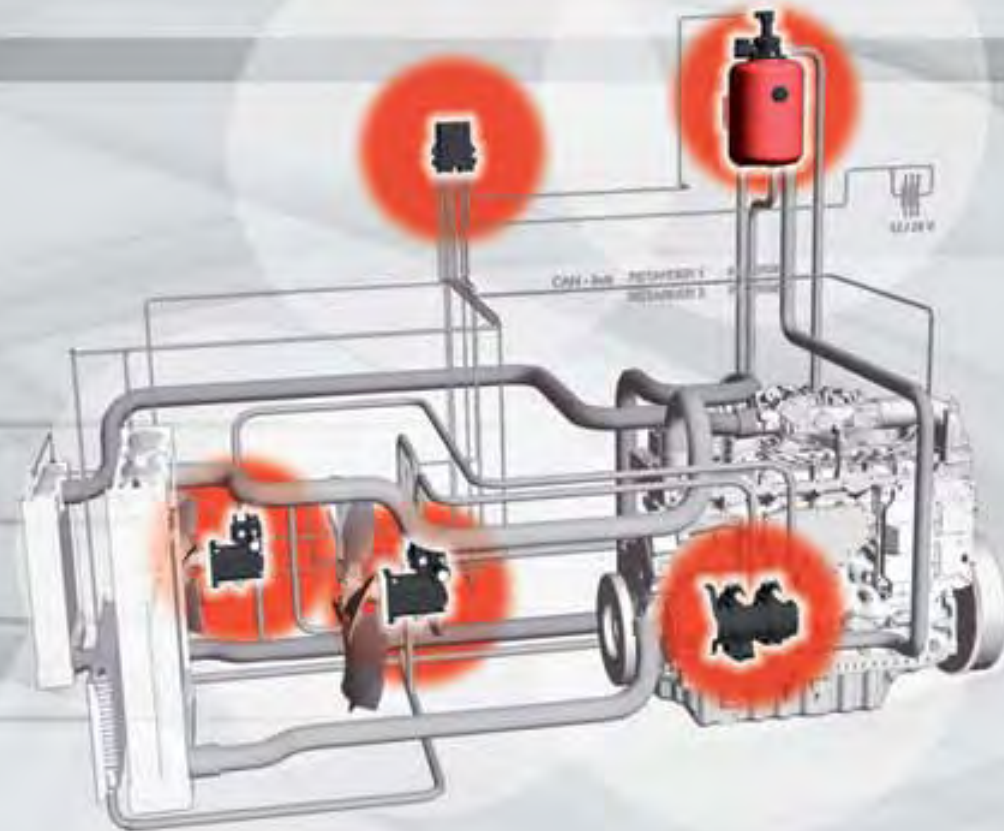
Electro-Hydraulic Fan Drive System

Flexibility in cooling system design

Programmable and full control of the fan drive

Fuel saving

Independent control of multiple fans





Electro-Hydraulic Fan Drive System

CED200X
Electronic Control Unit
HF547-10
Tank Mounted Return
Line Filter

DISPLAY
1



CED200X

FEATURES: CAN protocol • RS-232 protocol
IP67 protection • Adjustable dither frequency
Full integration with CAN-bus
INPUT: up to 4 for sensors • up to 6 digital
OUTPUT: 2 proportional PWM • 2 on/off



HF547-10

WORKING CONDITIONS:
Nominal flow:
up to 200 l/min (53 US gpm)
Working pressure:
8 bar (115 psi)
FEATURES:
Electrical indicator
Pressurized air breather




Electro-Hydraulic Fan Drive System

Fixed Displacement - Gear Pump

PHP20
Cast Iron Body Gear pump
PLM20-DBVSA-ER12M
Aluminum Body Gear
motor

DISPLAY
2



PHP20

WORKING CONDITIONS:

Displacements: from 19,09 cm³/rev (1.16 in³/rev)
to 33,03 cm³/rev (2.01 in³/rev)
Max. peak pressure: up to 300 bar (4350 psi)

PLM20-DBVSA-ER12M

WORKING CONDITIONS:

Displacements: from 4,95 cm³/rev (0.30 in³/rev)
to 33,03 cm³/rev (2.01 in³/rev)
Max. peak pressure: up to 300 bar
(4350 psi)

FEATURES:

Reverse valve: changes
the direction of rotation
Proportional relief valve:
controls the fan velocity,
independently from the
engine speed
Speed sensor: Gives the
possibility to monitor the
fan speed constantly





Variable Displacement - Axial Piston Pump

MVP-PEC

Variable Displacement Axial
Piston Pump

PHM20-ER12M

Cast Iron Body Gear
motor

DISPLAY
3



MVP-PEC

WORKING CONDITIONS:

Displacements: from 28 cm³/rev (1.74 in³/rev)
to 84,70 cm³/rev (5.17 in³/rev)

Max. peak pressure: up to 350 bar (5100 psi)

FEATURES: Electro-proportional Pressure Compensator



PHM20-ER12M

WORKING CONDITIONS:

Displacements: from 19,09 cm³/rev (1.16 in³/rev) to
33,03 cm³/rev (2.01 in³/rev)

Max. peak pressure: up to 300 bar (4350 psi)

FEATURES: Reverse valve: changes the direction of
rotation



Fixed Displacement - Double Gear Pump
Double Fan

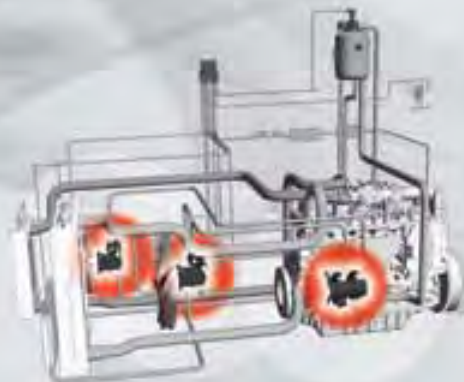
PHP20/20

Cast Iron Body Double Gear pump

PLM20-DBVSA-ER12M

Aluminum Body Gear
motor

DISPLAY
2



PHP20/20

WORKING CONDITIONS:

Displacements: from 19,09 cm³/rev (1.16 in³/rev)
to 33,03 cm³/rev (2.01 in³/rev)

Max. peak pressure: up to 300 bar (4350 psi)

PLM20-DBVSA-ER12M

WORKING CONDITIONS:

Displacements: from 4,95 cm³/rev (0.30 in³/rev)
to 33,03 cm³/rev (2.01 in³/rev)

Max. peak pressure: up to 300 bar
(4350 psi)

FEATURES:

Reverse valve: changes
the direction of rotation
Proportional relief valve:
controls the fan velocity,
independently from the
engine speed
Speed sensor: Gives the
possibility to monitor the
fan speed constantly



**HF735-20**

*In line high pressure
filter*

DISPLAY
4

**HF735-20****WORKING CONDITIONS:**

Nominal flow:
up to 150 l/min (39.7 US gpm)
Working pressure:
320 bar (4650 psi)

FEATURES:

Visual differential indicator

**PHP20/20-LN**

*Cast Iron Body Double
Gear Pump*

DISPLAY
5

HF735-20**WORKING CONDITIONS:**

Displacements:
from 19,09 cm³/rev (1.16 in³/rev)
to 33,03 cm³/rev (2.01 in³/rev)
Max. peak pressure:
up to 300 bar (4350 psi)

FEATURES:

Load-sensing
priority valve





KP40
Cast Iron Body
Gear Pump

DISPLAY
9

KP40

WORKING CONDITIONS:

Displacements:
from 61,43 cm³/rev (3.75 in³/rev)
to 180 cm³/rev (10.98 in³/rev)
Max. peak pressure:
up to 325 bar (4715 psi)



KP25/PLP20
Cast Iron Body Double
Gear Pump

DISPLAY
9

KP25/PLP20

Front pump

WORKING CONDITIONS:

Displacements:
from 19,00 cm³/rev (1.16 in³/rev)
to 43,01 cm³/rev (2.62 in³/rev)
Max. peak pressure:
up to 310 bar (4500 psi)

Rear pump

WORKING CONDITIONS:

Displacements:
from 4,95 cm³/rev
(0.30 in³/rev)
to 33,03 cm³/rev
(2.01 in³/rev)
Max. peak pressure:
up to 300 bar (4350 psi)





MVPD PECA

*Variable displacement
axial piston pump*

DISPLAY
10



MVPD PECA

WORKING CONDITIONS:

Displacements:

from 34 cm³/rev (2.07 in³/rev)

to 65 cm³/rev (3.97 in³/rev)

Max. peak pressure:

up to 290 bar (4200 psi)

FEATURES:

Electro-proportional pressure control
and swash-plate angular sensor



HF748-20

*In line high pressure
filter*

DISPLAY
11



HF748-20

WORKING CONDITIONS:

Nominal flow:

up to 145 l/min (38 US gpm)

Working pressure:

280 bar (4050 psi)

FEATURES:

Visual electrical differential indicator





Wise Solutions

Hydraulics & Electronics



SVM405
Hydraulic
Joystick

SDS180
Valve

ENERGY SAVING & EFFICIENCY

FLEXIBILITY & SAFETY

CJW
Electronic
Joystick

CED400X
Electronic
Unit

SD8
Valve

SVM100
Hydraulic
Joystick

DPX100
Valve

Wise Solutions.
Control systems for Construction, Earth Moving
Machines and On-Highway Vehicles

Wise Solutions

Hydraulics & Electronics

Energy Saving

Efficiency
in an
Open Center
System

SVM405
Hydraulic
Joystick

SDS180
Valve



SVM405 hydraulic joystick
SDS180 sectional valve

SUGGESTED APPLICATIONS:

Wheel loaders, Backhoe loaders

FEATURES:

- Cost effective
- Easy maintenance
- Reduced power consumption



Wise Solutions

Hydraulics & Electronics

Flexibility

Safety
in an
Open Center
System

CJW
Electronic
Joystick

CED400X
Electronic
Unit

SD8
Valve



CJW electronic joystick
CED400X electronic unit
SD8 sectional valve

SUGGESTED APPLICATIONS:

Tow trucks, Telehandlers,
Aerial platforms, Truck mounted cranes

FEATURES:

- Suitable for Open Center and Load Sensing circuits
- Max operational safety with spool position sensor feedback



Wise Solutions

Hydraulics & Electronics

Flexibility

Safety in a Load Sensing Flow Sharing System

CJW
Electronic
Joystick

SVM100
Hydraulic
Joystick

CED400X
Electronic
Unit

DPX100
Valve



SVM100 hydraulic joystick
CJW electronic joystick
CED400X electronic unit
DPX100HF Flow Sharing sectional
valve with IMEZ dual control

SUGGESTED APPLICATION:

Tow trucks, Telehandlers,
Aerial platforms,
Truck mounted cranes

FEATURES:

- Suitable for Open Center and Load Sensing circuits
- HiFlow options
- Electro-hydraulic / pilot operated dual control kit
- Max operational safety with spool position sensor feedback



Wise Solutions

Hydraulics & Electronics

SDS180 Sectional valve

DISPL
7



FUNCTION:

Directional control valve

WORKING CONDITIONS:

Nominal flow rating:
160 l/min - 42 US gpm
Max. pressure:
315 bar - 4600 psi

SUGGESTED APPLICATIONS:

Wheel loaders,
Backhoe loaders,
Truck mounted cranes,
Tippers

FEATURES:

- Flow unloader system
- Low leak
- Load Sensing circuit available (DLS180)
- Spool position sensors





SD8
Sectional valve

DISPL
8

FUNCTION:
Directional control valve
WORKING CONDITIONS:
Nominal flow rating:
80 l/min - 21 US gpm
Max. pressure:
315 bar - 4600 psi

SUGGESTED APPLICATIONS:
Telehandlers,
Truck mounted cranes,
Tippers

- FEATURES:**
- Flow unloader system
 - Proportional electrohydraulic controls
 - Load Sensing circuit (DLS8)
 - Spool position sensors



DPX100/HF
Flow Sharing sectional
valve

DISPL
8

FUNCTION:
High flow option for DPX100
WORKING CONDITIONS:
Nominal flow rating
on working ports:
up to 120 l/min - 32 US gpm
Max. pressure on working ports:
up to 420 bar - 6000 psi

SUGGESTED APPLICATIONS:
On-highway vehicles, Telehandlers,
Truck mounted cranes

- FEATURES:**
- HiFlow section
 - Stackable with DPX100 standard valve
 - Electro-hydraulic / pilot operated dual control kit





SVM405

Hydraulic joystick

DISPL
6

FUNCTION:
Hydraulic Control Device

WORKING CONDITIONS:
Primary pressure (min/max):
30/100 bar - 435/1450 psi
Rated flow (min/max):
5/20 l/min - 1.3/5.3 US gpm

SUGGESTED APPLICATIONS:
Earth moving machines,
Agricultural and Forestry machines,
Lifting and Transport,
Material handling

- FEATURES:**
- Dual axis with damping system
 - Low effort actuation
 - Wide range of handles



SVM100

Hydraulic joystick

DISPL
6

FUNCTION:
Hydraulic Control Device

WORKING CONDITIONS:
Primary pressure (min/max):
30/100 bar - 435/1450 psi
Rated flow (min/max):
5/20 l/min - 1.3/5.3 US gpm

SUGGESTED APPLICATIONS:
Earth moving machines,
Agricultural and Forestry machines,
Lifting and Transport,
Material handling,
Tow trucks

- FEATURES:**
- Stackable single axis, up to 10 functions
 - Low effort actuation





CED400X

Electronic control unit

DISPLAY
6



- FUNCTION:**
Control for electroproportional valves
- WORKING CONDITIONS:**
CAN protocol - CAN open
up to 6 inputs
up to 8 proportional PWM output
up to 8 on/off outputs, 60W max
- SUGGESTED APPLICATIONS:**
Earth moving machines,
Agricultural and Forestry machines,
Lifting and Transport,
Material handling
- FEATURES:**
- Robust construction, cost effective
 - User friendly interface through WST software



AJW/CJW

Electronic joysticks

DISPLAY
6



- FUNCTION:**
Electronic Control Device
- WORKING CONDITIONS:**
Output signal: analog – CAN bus
Electric/mechanical life: >4x10⁶ for axis
EMI/RFI: up to 200 V/m (CJW model)
- SUGGESTED APPLICATIONS:**
Earth moving machines,
Agricultural and Forestry machines
- FEATURES:**
- Redundant options for enhanced safety (signals diversity only for CJW model)
 - Reduced dimensions allow easy cab installation
 - Improves the system security level





Components

SDS400 Sectional valve

DISPL
14



FUNCTION:

Directional control valve

WORKING CONDITIONS:

Nominal flow rating:

400 l/min - 105 US gpm

Max. pressure:

315 bar - 4600 psi

SUGGESTED APPLICATIONS:

Wheel loaders, Stackers,
Dozers, Marine applications

FEATURES:

- Mechanical and proportional hydraulic controls
- SAE J518 flange connection option



Components

SDM104/2+1 Monoblock valve

DISPL
13



FUNCTION:

Directional
control valve

WORKING CONDITIONS:

Nominal flow rating:

45 l/min - 21 US gpm

Max. pressure:

250 bar - 3600 psi

SUGGESTED APPLICATION:

Skid steer loaders,
Front-end loader systems

FEATURES:

- Simple and reliable mechanical control
- 3rd function option stackable





Components

**Series
1116/1516**
Counterbalance valves

DISPL
12

FUNCTION:

Load motion control

WORKING CONDITIONS:

Nominal flow rating:

Series 1116 = 60 l/min - 16 US gpm

Series 1516 = 160 l/min - 42 US gpm

Max. pressure:

350 bar - 5100 psi

SUGGESTED APPLICATIONS:

Truck mounted cranes,
Telehandlers, Tow trucks,
Aerial platforms, Fork lifts

FEATURES:

- Aluminium (on 1116) or zinc-plated steel body
- Single and double valve types
- Load sensitive, relief compensated and vented configurations
- Customized pilot ratio option



Components

SAE
cartridge valves range

DISPL
12

FUNCTION:

Pressure control, flow control,
load motion control, directional control

WORKING CONDITIONS:

Nominal flow rating:

up to 400 l/min - 105 US gpm

Max. pressure:

up to 380 bar - 5500 psi

SUGGESTED APPLICATIONS:

Earth moving machines,
Construction, Lifting and transport,
Agricultural machines

FEATURES:

- From SAE8 to SAE20, 2-3-4 way cavities
- Mechanical and solenoid controls
- Direct and pilot, on/off and proportional types





Power

Gear pumps and motors
Piston pumps and motors

Filtration

Medium and high pressure filters
Suction and return filters

Control

Directional control valves
Hydraulic valves and integrated circuits

Electronics

Control devices
Control units



Display 1

Electro-Hydraulic Fan Drive System
CED200X · HF547-10

Display 2

Electro-Hydraulic Fan Drive System
PHP20 · PLM20-DBVSA-ER12M
PHP20/20
PLM20-DBVSA-ER12M

Display 3

Electro-Hydraulic Fan Drive System
MVP-PEC · PHM20-ER12M

Display 4

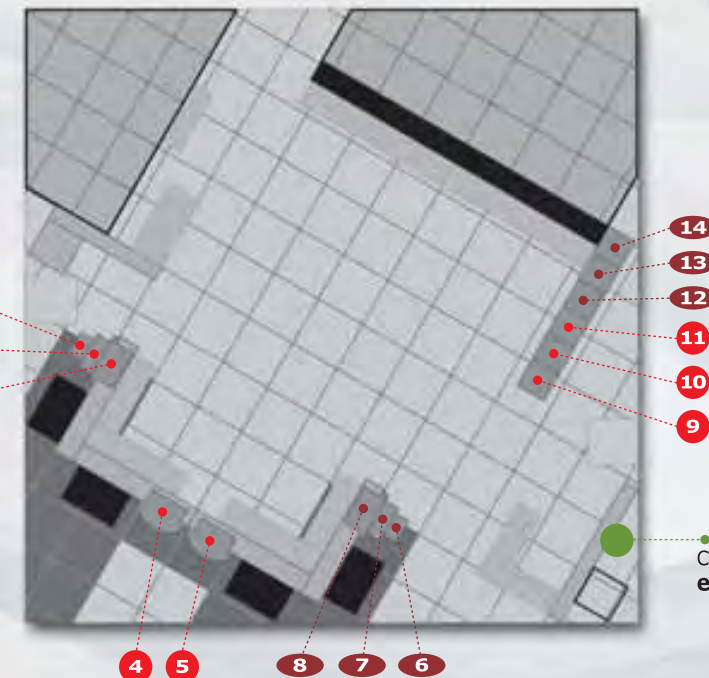
HF735-20

Display 5

PHP20/20-LN

Display 6

Wise Solutions
SVM405 · SVM100
CED400X · AJW/CJW



Casappa | Walvoil
e-Power System

Display 7

Wise Solutions
SDS180

Display 8

Wise Solutions
SD8 · DPX100/HF

Display 9

KP40 · KP25/PLP20

Display 10

MVPD PECA

Display 11

HF748-20

Display 12

Series 1116/1516
SAE Cartridge valves

Display 13

SDM104/2+1

Display 14

SDS400

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