FIELDS OF EXPERTISE
APPLICATION EXAMPLES
June 2016
VALV-O-MATIC SINGLE-FUNCTION CONTROL VALVE

IN-LINE 3 WAY, PRESSURE COMPENSATED PROPORTIONAL FLOW CONTROL VALVE

MOD. RFP-3WPC-E_2A-ILV
3 way, pressure compensated proportional flow control valve
(IN-Line Version)

MOD. EC-PWM-A1-MPC1
Single channel PWM driver

MOD. FTC-L1S
Unidirectional control lever

HYDRAULIC DIAGRAM
VALV-O-MATIC SINGLE-FUNCTION CONTROL VALVE

FLANGE-MOUNTED 3 WAY, PRESSURE COMPENSATED PROPORTIONAL FLOW CONTROL VALVE

MOD. EC-VIS-G-G-D128X64-M-C
Alpha-numeric display with built-in PWM driver for ground-speed oriented control of a hydraulic motor

MOD. RFP-3WPC-E_2A-FLV
3 way, pressure compensated proportional flow control valve (FLANGED version)

SEED DRILLS
VALV-O-MATIC SINGLE-FUNCTION CONTROL VALVE

FLANGE-MOUNTED 2 WAY OR 3 WAY LIFT & LOWER ELECTRO-HYDRAULIC PROPORTIONAL CONTROL FOR STACKERS

1. Non-pressure compensated LIFT & LOWER proportional control with fixed displacement pump at constant RPM

2. Pressure compensated LIFT & LOWER proportional control with fixed displacement pump at constant RPM

3. Non-pressure compensated LIFT & LOWER control with variable electric motor/pump RPM controller for LIFT and electro-hydraulic proportional control for LOWER

Lift & lower electronic control and PWM driver

Single effect mast cylinder

Proportional roller switch for manual lift & lower control

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TECNORD PAGE 5
VALV-O-MATIC MULTI-FUNCTION CONTROL VALVE

COMBINED ON-OFF (FUNCTION SELECTION & DIRECTIONAL CONTROL) WITH PROPORTIONAL 2 WAY/METER-OUT CONTROL OF A SINGLE EFFECT MAST CYLINDER

MOD. JLP-FTC
Fingertip control levers

MOD. MMS-1521
MMS (Machine Management System)

MOD. VOM-4F-32-FRS2G
Electro-hydraulic control manifold

HYDRAULIC DIAGRAM

ELECTRIC FORK LIFTS
TDV100 TECNORD DIRECTIONAL VALVE WITH MPP OPEN LOOP POSITION ACTUATOR SYSTEM

TDV100-MPP-4F-DIRECTIONAL CONTROL SECTION WITH OPEN LOOP BY MEANS OF PROPORTIONAL PRESSURE REDUCING VALVE.
THE TDV100 IS OPERATED BY DUAL AXIS JOYSTICKS WITH TWO PROPORTIONAL ROLLERS, MULTI-CHANNEL PWM DRIVER AND HARNESS

- MOD. EC-PWM-08-MPC4
  MMS (Machine Management System)

- MOD. JHM-L4D/MS-2FPR
  Dual-axes Joystick controller with 2 ea FPR

- MOD. TDV100-00PP
  Directional control section with open-loop by means of proportional pressure reducing valve (IP-DAR 43)

HYDRAULIC DIAGRAM

ROUGH TERRAIN FORK LIFT
TDV30 TECNORD DIRECTIONAL VALVE WITH DIRECT ACTING PROPORTIONAL CONTROL SOLENOIDS

MEDIUM-FLOW/MULTI-FUNCTION DIRECTIONAL-PROPORTIONAL CONTROL SYSTEM WITH LOAD SENSE FOR ELECTRIC FORK LIFT TRUCKS

MOD. JLP-FTC
Fingertip control levers

MOD. MMS-1521
MMS (Machine Management System)

MOD. TDV30-3F
Special MEDIUM FLOW inlet section for single effect LIFT & LOWER control

FORK LIFTS

TECNORD
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FIELDS OF EXPERTISE
APPLICATION EXAMPLES
June 2016
**TDV30 TECNORD DIRECTIONAL VALVE WITH DIRECT ACTING PROPORTIONAL CONTROL SOLENOIDS**

Medium-flow/multi-function directional-proportional control system with load sense for electric fork lift trucks

**MOD. MMS-1521**
MMS (Machine Management System)

**MOD. JTM-MC SF1383-NCC**

**MOD. TDV30-3F**
Special high flow inlet section for single effect lift & lower control

**HYDRAULIC DIAGRAM**

**DieSEL FORk-LIFT TrUck**
VALV-O-MATIC MULTI-FUNCTION CONTROL VALVE
ELECTRO-HYDRAULIC MANIFOLD WITH 4 ON-OFF BIDIRECTIONAL SELECTOR VALVES

MOD. JLP (or FTC)
Fingertip control levers

MOD. MMS-1521
MMS (Machine Management System)

MOD. VOM-4F-32-FR52G
Meter-in controlled valve block, combining directional and proportional 4 sections electro-hydraulic functions

HYDRAULIC DIAGRAM

Truck-mounted Aerial Platform
VALV-O-MATIC MULTI-FUNCTION CONTROL VALVE

ELECTRO-HYDRAULIC/MULTI-FUNCTION ON-OFF CONTROL FOR SCISSOR LIFT APPLICATION

MOD. JMF-L2S
Single axis joystick with rocker switch for steering and variable output signal for electric traction motor

MOD. EC-PWM-08-MPC4
MMS (Machine Management System)

MOD. VOM-3F-TRACT

HYDRAULIC DIAGRAM

AERIAL PLATFORMS

Scissor Lift
VALV-O-MATIC MULTI-FUNCTION CONTROL VALVE

ELECTRO-HYDRAULIC 4-FUNCTIONS SYSTEM WITH DUAL PATTERN/METER-IN
PROPORTIONAL CONTROL AND ON-OFF SELECTION OF BIDIRECTIONAL FUNCTIONS

MOD. VOM 4F DUAL PROPORTIONAL
4-functions manifold block with
solenoid-operated ON-OFF cartridge valves
and DUAL PATTERN pressure compensated,
3 way proportional control valves system

HYDRAULIC DIAGRAM
TDV100 TECNORD DIRECTIONAL VALVE WITH MLT/FD5 CLOSED LOOP POSITION ACTUATOR SYSTEM

ELECTRO-HYDRAULIC PROPORTIONAL SELF-LEVELING SYSTEM WITH MULTIPLE OUTPUTS FOR COMBINED OUTRIGGERS AND STABILIZERS CONTROL OF TRUCK-MOUNTED AERIAL PLATFORMS

MOD. TDV100-M0FDA
Proportional directional systems with electro-hydraulic proportional actuator and built-in electronics

MOD. MMS-2218 TILT
Electronic control unit with built-in tilt sensor

Truck-mounted Platform
VALV-O-MATIC MULTI-FUNCTION CONTROL VALVE
COMBINED ON-OFF (FUNCTION SELECTION & DIRECTIONAL CONTROL) WITH PROPORTIONAL 3 WAY/METER-IN CONTROL OF PUMP FLOW

MOD. JHM-L4C-MG-A4P9
Multi-function, dual axes joystick with 4 push buttons for function selection

MOD. EC-PWM-1012-H
MMS (Machine Management System)

MOD. VOM-3F-32-1M
3 bidirectional functions with 3 way proportional pressure compensated meter-in control of pump flow and a 3 way-2pos flow diverter to feed a hydraulic motor in series connection with the other functions

HYDRAULIC DIAGRAM

FRONT AND REAR IMPLEMENTS FOR VINEYARD TRACTORS

AG TRIMMERS & STRIPPERS
**VALV-O-MATIC MULTI-FUNCTION CONTROL VALVE**

**COMBINED ON-OFF (FUNCTION SELECTION & DIRECTIONAL CONTROL) WITH PROPORTIONAL 3 WAY/METER-IN CONTROL OF PUMP FLOW AND 4 ON/OFF FUNCTIONS METER-IN SHW TRANSMITTER**

**MOD. VOM-AF-32**
Electro-hydraulic manifold block with 4 ea ON-OFF bidirectional selector valves and 3 way, pressure compensated flow regulator for meter-in control of pump flow

**MOD. EC-MMS-0713-H**

**MOD. RX-CAN-2G4**
CANbus radio receiver

**MOD. RC-SHW-4F**
Single-hand radio controller with CANbus interface

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**HYDRAULIC DIAGRAM**

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**SERVICE CRANE**
RETROFITTING CONTROL SYSTEMS

MLT/CE16 ELECTRO-HYDRAULIC REMOTE CONTROL SYSTEM FOR TRUCK MOUNTED/KNUCKLE BOOM CRANES. THE SYSTEM IS EQUIPPED WITH LMI (RATED CAPACITY INDICATOR) FOR OVERTURNING MOMENT CONTROL.

LMI SERIES
Electronic load limiter device

MOD. RX-CAN-2G4
CANbus radio receiver

MOD. MLT/CE16
Hydraulically operated push-pull type servo-piston rods for mechanical linkage to the spools of the original manual control system

MOD. PTM-4F-CAN-2G4
Multifunction proportional radio control system
2.4 GigaHertz transceiver radio

CRANES

EMERGENCY BYPASS

BOOM EQUIPMENT
SINGLE AXIS INCLINOMETER ±90°
OR ON-OFF TILT DEVICE
PRESSURE TRANSDUCER
LIGHT TOWER WITH BUZZER

CRANES
TDV100 TECNORD DIRECTIONAL VALVE WITH MLT/FD5 CLOSED LOOP POSITION ACTUATOR SYSTEM

TDV100-MLT-4F DIRECTIONAL/PROPORTIONAL STACKABLE CONTROL VALVE WITH LOAD SENSE AND MLT/FD5-CLOSED LOOP/PILOT OPERATED REMOTE CONTROL SYSTEM

MOD. MMS-1521
MMS (Machine Management System) for individual function tune-up

MOD. JLP-FTC
Fingertip control levers

MOD. TDV100-M0FDA
Electro-hydraulic proportional actuators with built-in electronics allow direct connection with in-cabin remote control joysticks

STIFF-BOOM CRANES
VALV-O-MATIC MULTI-FUNCTION CONTROL VALVE

ELECTRO-HYDRAULIC 4-FUNCTIONS SYSTEM WITH DUAL PATTERN/METER-IN PROPORTIONAL CONTROL AND ON-OFF SELECTION OF BIDIRECTIONAL FUNCTIONS

Customized ARM REST control panel with JHM- L4C/MG-ZFPR multi-function joystick

MOD. MMS-1521
MMS (Machine Management System)

MOD. VOM-AF-DUAL-PROP.
4-functions manifold block with solenoid-operated ON-OFF cartridge valves and DUAL PATTERN pressure compensated, 3 way proportional control valve system

HEA4 ANGLE
5 @ 20 min
REACH
15 @ 20 min
SWING
6-10 @ 10 min

30 @ 10 min

MODIFIED

HYDRAULIC DIAGRAM
VALV-O-MATIC MULTI-FUNCTION CONTROL VALVE

ECOMATIC SYSTEM-GROUND-SPEED ORIENTED/CLOSED LOOP CONTROL SYSTEM FOR DE-ICING SALT & CHEMICALS SPREADERS

MOD. VOM 3F SERIES
3-fuctions pressure compensated proportional manifold

MOD. ECOMATIC SYSTEM
Ground-speed oriented spreading control system

MOD. EC-SNR-EOM-H
End-off material sensor

HYDRAULIC DIAGRAM

SALT SPREADERS
TDV100 TECNORD DIRECTIONAL VALVE WITH MLT/FD5 CLOSED LOOP POSITION ACTUATOR SYSTEM

TDV100-MLT-4F DIRECTIONAL/PROPORTIONAL STACKABLE CONTROL VALVE WITH LOAD SENSE AND MLT/FD5-CLOSED LOOP/PILOT OPERATED REMOTE CONTROL SYSTEM

MOD. TDV100-MLFDC
Proportional directional systems with electro-hydraulic proportional actuator and built-in electronics
CROSS-BRAND CONTROL VALVE WITH MLT/FD5 CLOSED LOOP PROPORTIONAL ACTUATOR SYSTEM

HDS30/LARGE FLOW-DIRECTIONAL/PROPORTIONAL STACKABLE CONTROL VALVE WITH LOAD SENSE AND MLT/FD5-CLOSED LOOP/PILOT OPERATED REMOTE CONTROL SYSTEM

MOD. HDS30/5F-MLT-FD5
Large-flow / 5-functions directional/proportional control valve with load-sense and MLT/FD5 closed loop proportional control system

MOD. JHM-L4D/MS-2FPR
Dual-axes joystick controller with 2 ea FPR

MOD. MMS-1521
MMS (Machine Management System) for individual function tune-up

MOD. EC-VIS-GC
Graphic display unit

HYDRAULIC DIAGRAM

+V

- V
TDV100 TECNORD DIRECTIONAL VALVE WITH MPP OPEN LOOP POSITION ACTUATOR SYSTEM

TDV100-MPP-4F-DIRECTIONAL/PROPORTIONAL STACKABLE CONTROL VALVE WITH LOAD SENSE MULTI-FUNCTION RADIO CONTROL SYSTEM 2.4 GHZ WITH CAN

MOD. TDV100-00PP
Directional control section with open-loop control

MOD. RX-CAN-2G4
CANbus radio receiver

MOD. PTM-4F-CAN-2G4
Multifunction proportional radio control system - 2.4 GigaHertz transceiver radio

MOD. EC-PWM-08-MPC4
MMS (Machine Management System)

+V -V

Un-Manned Crawler Vehicle
for Hazardous Environment Operation