

# DM-102VA

Modusys module for  
Y-axis, pressure and  
crowning control

# Delem

## Modularity solutions

With the Modusys DM-10x modules, scalability and flexibility is provided based on state of the art electronics ready for tomorrow.



The DM-102VA module controls the two main axes of the synchronized press brake, Y1 and Y2. This module is part of the modular concept for the DAonWindows range.

Y1 and Y2, two fully closed-loop controlled hydraulic axes of the press brake, driven with the highest speed, position and parallelism control available on the market. Independent of the hydraulic proportional valves used, the control algorithms guarantee optimum performance combined with smooth transitions during all phases.

With its 24 I/O signals and build in sequencer (PLC) functionality the DM-102VA can optimally be configured by the OEM-manufacturer to meet the most complicated control demands.

Next to this module all kind of axes can be controlled via additional modules offering optimal flexibility.

All Modusys modules are interconnected by the HSB-bus. This enables easy setup, reduces cabling and makes a fully integrated system.

### DM-102VA module featuring:

- Delem Modusys compatible
- Hydraulic closed-loop control
- Including integrated valve amplifiers
- High frequency encoder interfacing
- Position, speed and parallelism control during all cycle phases
- Pressure control
- Crowning control
- Analogue inputs
- Compact footprint and encasing

# Technical Specifications DM-102VA

## Product configuration

### Standard

- Y1 - Y2 hydraulic closed-loop control
- Position, speed and parallelism control during all phases
- Integrated valve amplifier for proportional valves
- Pressure valve control
- Crowning control
- Delem Modusys compatible
- Delem Sequencer compatible
- HSB-bus interface, RJ45-type



DM - 10x Modusys series

### Ordering information

- DM-102VA

## Technical specifications

### General

- Robust housing
- Fast mounting
- Status and diagnostics display

### Axis control

- Y1, Y2 encoder interface (5V or 12V DC/250mA, single ended or differential)
- Valve amplifier and +/-10V, 10mA
- Analogue outputs Y1, Y2 + crowning
- Analogue pressure control (0 .. 1,5A or 0..10V)
- Crowning analogue output / input (pot.meter)

### Input / Output specification

- 8 x digital inputs (10-28Vdc/20mA)
- 8 x programmable in/output (output 8 x 500mA)
- 8 x digital outputs (18-28Vdc) (4 x 500mA + 4 x 1,5A)
- All inputs are opto isolated with common ground
- 4 x analogue input (0 - 10V, 12bit)
- Encoder input frequency: 1 MHz

### Supply

- 18 - 30V DC (ripple max. +/-20%)
- Power dissipation 3.5 Watt max.
- Max. 1A

### Environment

- Operation temperature +5 - +50°C
- Storage temperature -10 - +70°C
- EMC according to IEC 801
- Small footprint (240 x 53 x 132mm.)

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