

▶ ModWeigh DBW comfort

- **Weight indicator for weight calculation and regulation of weigh feeders**
- **Modular design, multichannel connection**
- **With internal PI-regulator**
- **Analog and digital inputs**
- **Analog and pulse output for measuring value output, digital outputs for status information**
- **Fieldbus interfaces**
- **Plug & play function via data stick**
- **Easy to use, modern menu navigation**
- **With callable alarm memory**



DESCRIPTION:

The control unit ModWeigh DBW comfort is a modern and easy to handle weight indicator. With the internal PI-regulator it is particularly suitable for applications with weigh feeders. It is constructed for continuous weighing tasks and complex regulation tasks.

The control unit regulates the flow rate of the belt scale according to the setpoint with high accuracy.

The ModWeigh control unit has a modular design: transmitter MT1 with I/O module MR1 as well as a display and operator module MD1.

Features of ModWeigh DBW comfort:

- Easy to operate via keypad and menu control in German and English
- By default are available: several digital inputs and outputs, pulse input and output, one analog input and two analog outputs as well as two serial interfaces (for printer and gateways for fieldbus interfaces)
- Plug-in contact blocks which simplify the installation, maintenance and service
- Plug & play function via data stick.

FUNCTIONING:

The ModWeigh DBW comfort control unit is used for weight recording and speed measurement. The weight indicator continuously measures the material load on the belt conveyor. The belt speed of the conveyor is recorded by a speed encoder.

The ModWeigh DBW comfort calculates the current flow rate (actual value) in kg/h or t/h from the material load and belt speed. The regulation of the flow rate results by comparison of the actual value and the setpoint.

The internal PI-regulator controls the constant- and proportional-regulation of the scale on basis of an internal and external setpoint.

The overruns of the characteristics are noted in the alarm memory, e.g. Flowrate default. The error list can be called and elected on the display.

Each weighing module comes with a data stick which saves all parameters of the scale. In case of dysfunction of the weighing module, the stick can simply be put into the new module in order to make all scale parameters available (plug & play).

TECHNICAL DATA:

ModWeigh DBW comfort	Ausgeführt nach den Vorgaben der MID	
Configuration	Modular design: transmitter MT1 with I/O module MR1 as well as display and operator module MD1	
Printer interface	yes	
Fieldbus interfaces	Profibus DP/ Profinet IO/ CANopen/ Modbus-TPC/ EtherNet /IP - optional via Gateways	
Power supply	10 - 32 V DC	
Power of consuming	15 VA	
Temperature range	-10°C up to +45°C	
Housing/ protection	Steel panel, powder-coated, IP 20 Dimensions (LxWxD): 136 x 66 x 50 mm (MT1) und 136 x 66 x 30 mm (MR1)	
Display MD1		
Dimensions (L x W x D)	208 x 104 x 38 mm – panel cut out: 186 x 92 mm	
Type	Grafic LCD colour display, 4,3", backlighted	
Operator module	Embossed keys with numeric and function keys as well as softkeys	
Languages	German, English, other languages in preparation	
Display/ protection	Plastic, polycarbonat, UV constant, IP 65	
Measuring value input		
Number of load cells	Max. 8 pcs. á 350 Ω	
Supply load cells	5 V DC (max. 250 mA), +/- 4 mV/V	
Resolution	0,4 µV/Count	
Speed encoder	100 Hz	
Inputs and outputs	MT1	MR1
Analog inputs	-	1 x 0(4) - 20 mA, max. resistance 1000 Ω, resolution 0,4 µA
Analog outputs	-	2 x 0(4) - 20 mA, max. resistance 1000 Ω, resolution 0,4 µA
Pulse input	1 x PNP (12 – 24 V DC, one channel)	-
Isolated pulse output	-	1 x max. 500 Hz
Serial interfaces	1 x RS 232 for printer 1 x RS 485 for fieldbus interfaces via gateways	
Protocol	Modbus RTU	
Digital inputs	1 x 24 V for external taring	8 x 24 V
Digital outputs	1 x 24 V for freely assignable switching function	8 x 24 V
Wiring	Plug-in contact blocks	

