

X6 System-Weighing Controller

global weighing technologies



- Programmable weighing controller with 19"-housing
- EC type approval certificate as Indicator classIII, 5000 d
- Compact, comfortable, fast
- Easy-to-use operator interface
- Integrated PLC with substantial library
- Programmable according to IEC61131
- Wide range of interfaces
- Connection of second weighing point (external)
- Easy integration in automation concepts

The X6 Controller family is designed as a micro-processor controlled weighing device with 19" housing to be used in any kind of process automation.

Equipped with 32-bit technology the X6 controller ensure the accuracy of OIML R76 resp. EN45501.

Beside the normal operating elements for weighing functions the instrument has soft-keys specific defined for the application running on the device. The operator will be prompted via the display to act accordingly. The full alpha-numerical keyboard allows a comfortable entry and editing of data direct at the controller.

The construction in a 19" housing make it easy to incorporate the device in a common industrial surrounding.

Based on the well approved hardware platform several applications are available which can be easy configured and adapted to industrial processes.

These are:

- IBC application
- Batchprocesses
- Loss in weight
- Truck scales

The basic instrument named PRO-X6 controller can be used by engineering and construction companies as base for their specific demands.

Basic features are already incorporated and can be modified with powerfull programming tools.

The controller has 3+1 slots for optional interface boards. The predefined controller for applications has the necessary cards already on board.

A variety of serial, digital and analogue interface options are available.



BULK-X6

The BULK-X6 is a weighing and control electronic for circuit scales with automatic supervision and control of material flow in auxiliary hoppers

Circuit scales are ideal for all processes where big quantities of raw material have to be measured within a short time. Typical applications are loading and unloading of ships, trains and trucks of agricultural commodities usually grain, flour as well as building materials and fodder. Circuit scales allow the measurement of big quantities of raw material in a relatively small scale. This is realised by summing up the results of single weighings. As the procedure has to be time-saving auxiliary hoppers are used as a buffer. The buffering allows a continuous material flow. The BULK-X6 meets all requirements of typical circuit scale applications. BULK-X6 guarantees high accuracy even at high material throughput.

IBC-X6

The IBC-X5 is a flexible control unit for the direct control of automatic charge and discharge processes for IBCs (Intermediate Bulk Containers) with powders or granulated material. Operator interface, batch control unit and PLC are integrated in a single compact unit. The Controller is ideal for all processes where charging or discharging of IBCs like Big Bags or Tote bins is required. It contains a user-friendly operator interface and a powerful programmable logic controller (PLC). Four predefined operation modes allow the direct use without any programming.

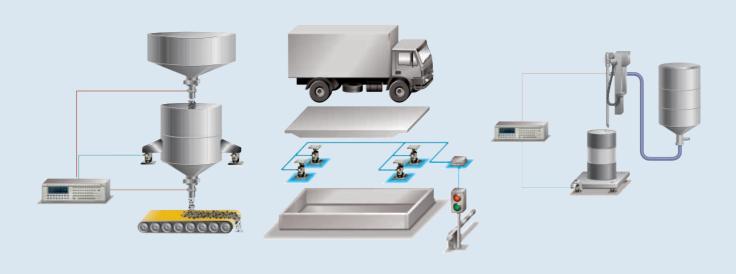
Benefits:

- Integrated direct control of valves or feeders
- User-friendly container data base with integrated tare-table
- Direct start with setpoint entry or via container selection
- Integrated material and consumption reports

BATCH-X6

In many batch processes, different kinds of raw material are processed into intermediate and end products. From raw material storage area they are dosed to the production and processed in different steps like heating, cooling, stirring etc. The production steps and the raw materials with its set-points are described in a recipe. The Stand-alone batch controller BATCH-X6 meets the requirements of small batch applications in different industries, like food industry, chemical industry or building material industry.

The robust stainless steel housing allows the use also under rough environmental conditions. It provides a two-line display for a text based dialog with the operator. A convenient user interface is implemented to supervise the complete process. The operations can be done via soft-keys at the front of the BATCH-X6 or an external keyboard. There is also a PC-tool available for the input of data to Material and recipe tables in a comfortable way.



FLOW-X6

The FLOW-X6 is a flexible control unit for the direct control of continuous discharge processes from weigh-hoppers.

Operator interface, digital signal processing, digital controller and PLC are integrated in a single compact unit.

It not only integrates direct control of feeders and valves but also supports specials functions like automatic start-up value acquisition, linear material compression correction and intelligent top-up functions.

The unit is designed to allow the flow control of different materials even under adverse conditions. It is very versatile and especially easy to operate.

Benefits

- Direct control of valves and feeders via analogue output
- User-friendly material data base
- Manual or full-automatic adaptation to different materials
- Totaliser function
- Intelligent top-up mode for continuous material flow

TRUCK-X6

The new TRUCK-X6 controller greatly facilitates process monitoring of weighbridge applications. The TRUCK-X6 controller with the implemented software fulfills the basic requirements for effective data gathering and comfortable operation.

With this solution, the weighbridge is operated with a single device only.

The program includes the following standard functions:

- Database with truck, product, address and on-site table.
- Functions like 1st-Weighing, 2nd-Weighing, Tare-Weighing and Single-Weighing.
- Control of barrier/traffic-light
- Internal Alibi-Memory Table
- Statistics

FILL-X6

The FILL-X6 is a flexible controller for the direct control of automatic filling of liquids into containers or drums.

A user-friendly operator interface, batch control unit and a powerful programmable logic controller (PLC) are integrated in a single compact unit.

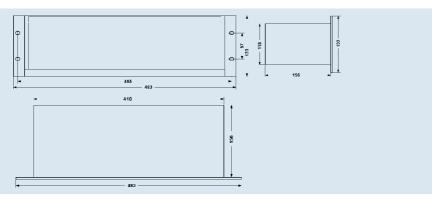
The controller is ideal for processes were liquids are charged in automatic or manual mode.

Benefits

- Predefined In- and Outputs for bunghole detection and process control
- Lance-control for three different filling modes: bunghole position, under or above surface
- Complex material database
- Lance collision detection
- Master or slave mode possible
- Printable consumption and production reports



Technical Data X6



Power supply

115/230 V VAC 50-60 Hz max. 19 W / 25 VA

Housing

Steel housing Aluminium front plate Class of Protection: Front IP 54 Back IP30

Display

7-Digit plus status symbols text: 2 lines, 20 characters

Load cell input

6- or 4-wire

Load cell supply: 12 V/20V Impedance: min. 75 Ohm, e.g. 8 load cells with 650 Ohm

Built-in Interface

Bi-directional serial interfaces RS 232; user selectable protocols: Remote Display, Printer

Accuracy

5000d class III acc. to EN 45 501; OIML R 76 min. verification interval 1.2 μ V/e; suitable for automatic weighing instruments

Linearity

<0.007 %

Resolution

max. 330,000 div. (internal)

Measuring principle

ratiometric integrating A/D converter

Conversion time: 50 ms Update: 100 ms to 2 s

Input signal range

Net range 2.4 mV to 36 mV tare range: 0...33.6 mV

Temperature influence

Live zero Tko: $<0.1 \mu V / K$ RTI Span TKspn: <0.006 %/10 K

Environmental conditions

Temperature range

Operation: -10°C to $+55^{\circ}\text{C}$ Storage: -40°C to $+70^{\circ}\text{C}$

Electrical safety

According to IEC 61010-1

Vibration

According to IEC 60068

Electrostatic discharge

According to IEC 61000-4-2

Supply line

According to IEC 61000-4-4

Electromagnetic fields

According to IEC 61000-4-3

Radio interference

According to EN 55011

Order informationen	
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Description		order code	Description	order code
PRO-X6	230V	PR 5710/00	1 analog In-/4 analog Output	PR 1713/07
TRUCK-X6	230V	PR 5710/10	4 dig. In-/4 dig. Output (Opto)	PR 1713/12
BATCH-X6	230V	PR 5710/20	DIOS Master	PR 1713/13
IBC-X6	230V	PR 5710/30	4 dig. In-/4 dig. Output (Opto/Relais)	PR 1713/15
FLOW-X6	230V	PR 5710/40	6 dig. In-/8 dig. Output (Opto)	PR 1713/17
FILL-X6	230V	PR 5710/50	Ethernet Interface	PR 1713/24
BULK-X6	230V	PR 5710/70	Profibus-DP Interface	PR 1721/21
Options			Interbus-S Interface	PR 1721/22
Serial Interfa	ce (RS232/485)	PR 1713/04	DeviceNet Interface	PR 1721/24
RAM Extension 1 MB		PR 1713/05	X5-PowerTools	PR 8001/01
Analog Output		PR 1713/06	Internal Alibi Memory (Licence)	PR 8901/81