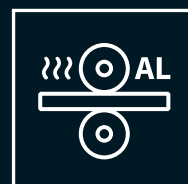
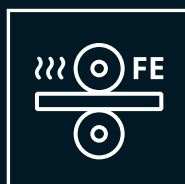


TECHNICAL SPECIFICATION

Force Measurement **RollKraft Controller (MMV)**





RollKraft Controller (MMV)

The RollKraft Controller (MMV) can be connected to any IMS RollKraft transducer (strain gauge bridge) and is supplied in a stainless steel housing with dimensions of 350 × 300 × 80 mm.

The standard RollKraft Controller (MMV) is equipped with two input channels for IMS RollKraft transducers. The signals generated by the force transducers pass through a fixed preamplifier and are then routed to the A/D converter.

Signal adjustment is carried out exclusively via software and is therefore fully digital. This makes the RollKraft Controller (MMV) particularly easy and convenient to operate, while also providing a high degree of flexibility. The modular design allows the addition of up to two further input channels without any reduction in processing speed.

The analog outputs are available for current (± 20 mA) and voltage (± 10 V). Galvanic isolation must be provided by the customer.

The RollKraft Controller (MMV) can optionally be equipped with a fieldbus module. It supports all common fieldbus systems, including EtherCAT and Profinet.

The fieldbus system enables the RollKraft Controller (MMV) not only to transmit measurement data, but also to receive

additional information. Furthermore, the MMV amplifier can be fully operated via the fieldbus.

Four binary inputs and outputs allow integration of the RollKraft Controller (MMV) on site, even if no fieldbus system is available. This also makes the MMV suitable for replacing older electronic units without requiring any changes to the RollKraft transducers.

The RollKraft Controller (MMV) is equipped with a control unit consisting of a four-line alphanumeric LCD (20 characters per line) and a four-key keypad. This allows configuration and setup of the amplifier to be completed in just a few steps.

In most cases, however, systems are delivered preconfigured so that commissioning effort on site is reduced to a minimum.

The optional PC software program “RollKraft Controller(MMV) Configurator” is available. It runs on Windows operating systems and provides tools for easy configuration, as well as for data storage and offline processing. The individual configuration of the RollKraft Controller (MMV) as delivered, can be supplied on request.

Specifications

Input strain gauge	2 optionally 4
Admissible bridge resistance	≥ 175 Ω
Bridge excitation	0 ~ 15 VDC (software-programmable per channel)
Input signal range	± 0.125 mV/V ~ 2 mV/V (software-programmable per channel)
Resolution A/D converter	± 32,767 Digit (16 Bit)
Samples per second	up to 2.000
Power supply	24 VDC / 0.2A optionally 100-240 VAC / 0.8A / 50-60Hz
Operating temperature range	-10 °C ~ 60 °C (14 °F ~ 140 °F)
Degree of protection according to EN60529 (IEC529)	IP65
Fieldbus (optionally)	available: • EtherCAT • Profinet • Profibus-DP others on request
Resolution D/A converter	± 32,767 Digit (16 Bit)
Analogue outputs	2 x current output ±20 mA (optionally 4 ~ 20 mA) or 2 x voltage output ±10V not galvanic isolated
Digital inputs	4 optocoupler inputs
Digital outputs	4 optocoupler outputs

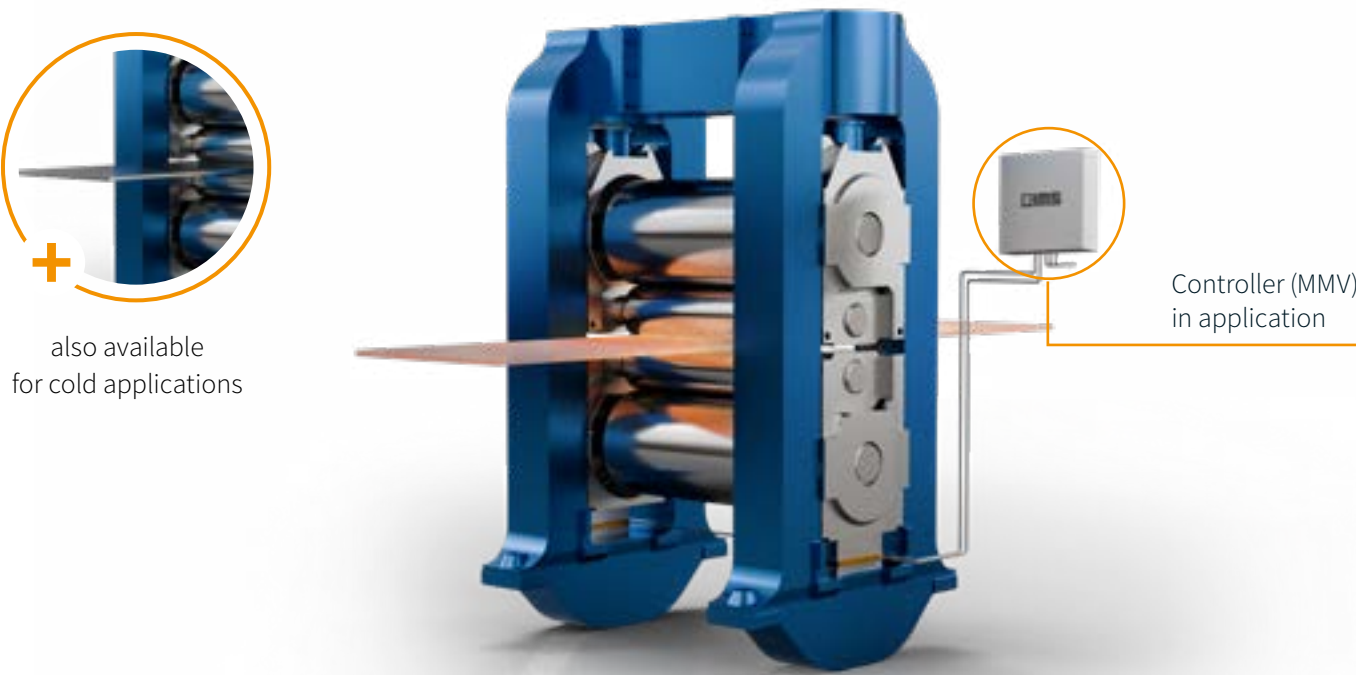


Figure 1: Illustration of a rolling stand equipped with RollKraft Rectangular and RollKraft Controller (MMV) in application

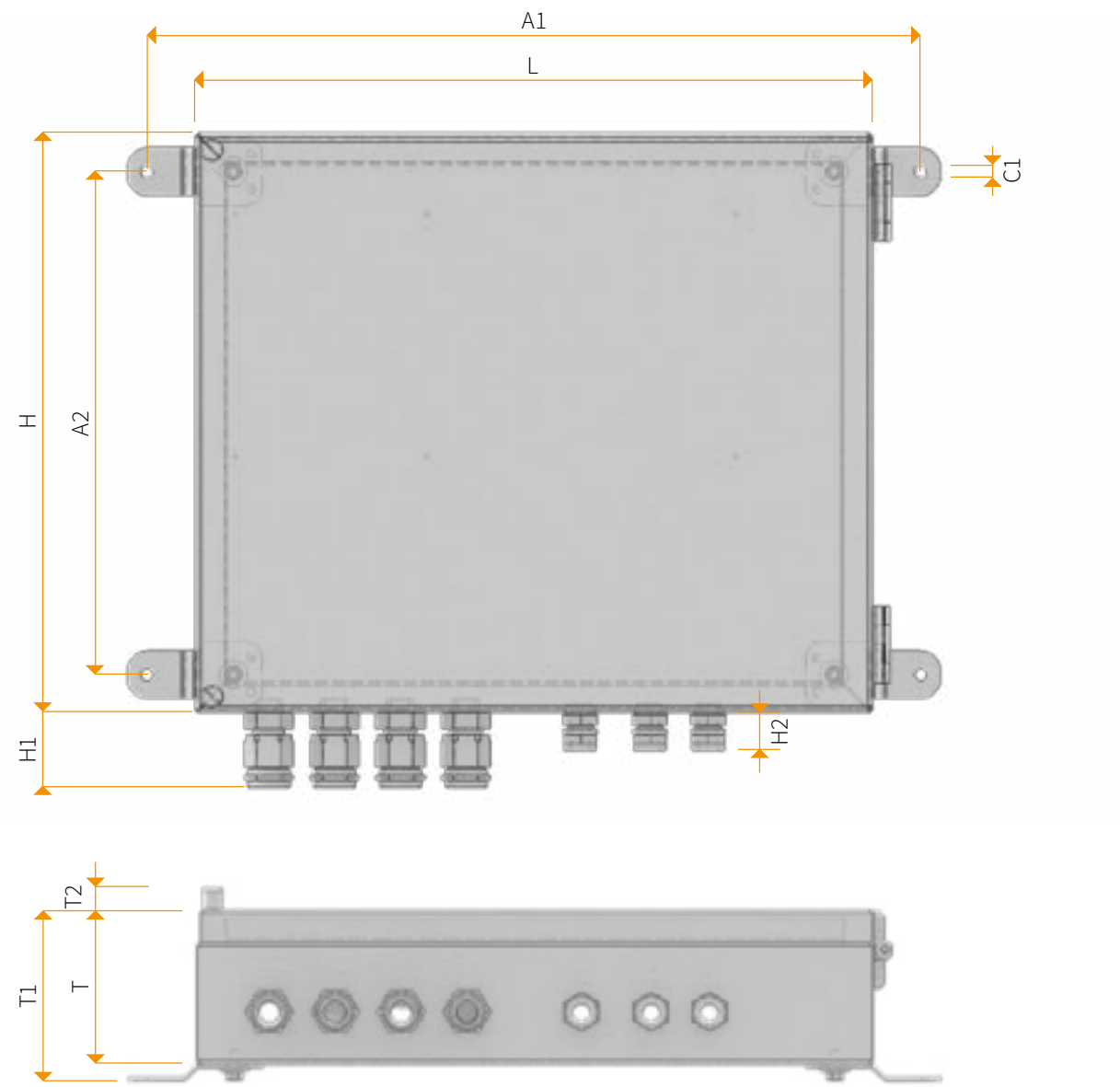


Figure 2: Standard dimensions of the RollKraft Controller (MMV)



Figure 3: Installation of the RollKraft Controller (MMV) in a hot rolling mill

Model
RollKraft Controller (MMV)

Characteristics

	L mm (inch)	T mm (inch)	T1 mm (inch)	T2 mm (inch)	H mm (inch)	H1 mm (inch)	H2 mm (inch)	Mounting Points		
								A1 mm (inch)	A2 mm (inch)	C1 mm (inch)
MMV Standard	350 (13.78)	80 (3.15)	88.5 (3.48)	~ 11 (~ 0.43)	300 (11.81)	~ 39 (~ 1.54)	~ 19 (~ 0.75)	400 (15.75)	260 (10.24)	Ø 6.4 (Ø 0.25)



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