

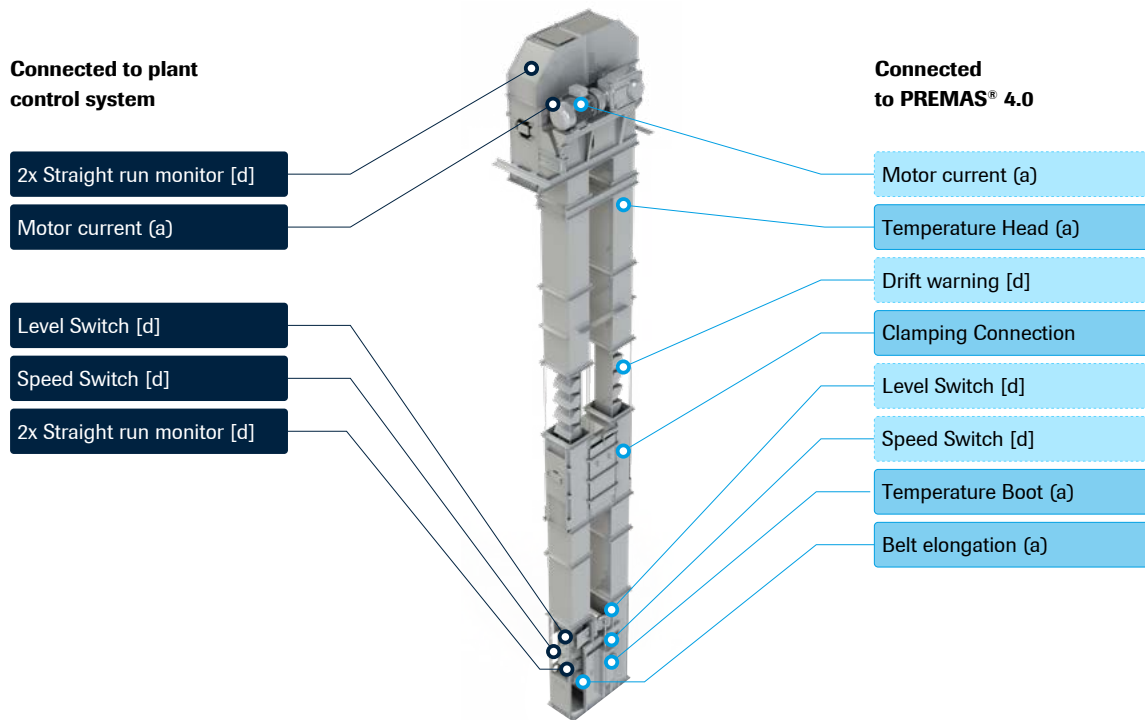
Spec Sheet

PREMAS® 4.0 for Bucket Elevators

PREMAS® 4.0 informs you in real-time about the condition of your AUMUND and non-AUMUND Bucket Elevators, sends push notifications when anomalies are detected, and provides a forecast of the estimated service life of critical machine components. Furthermore, the system can be connected to your central control room as an option. The traffic light principle makes it easy for you to recognise at a glimpse where to act next. This allows you to plan, take timely action, and prevent potential problems before your operation is impacted. For further technical details on PREMAS® 4.0, please refer to this data sheet.



Field Sensor Overview for Belt Bucket Elevators



Machine Dashboard Belt Bucket Elevators



(a) = analogue signal
[d] = digital signal

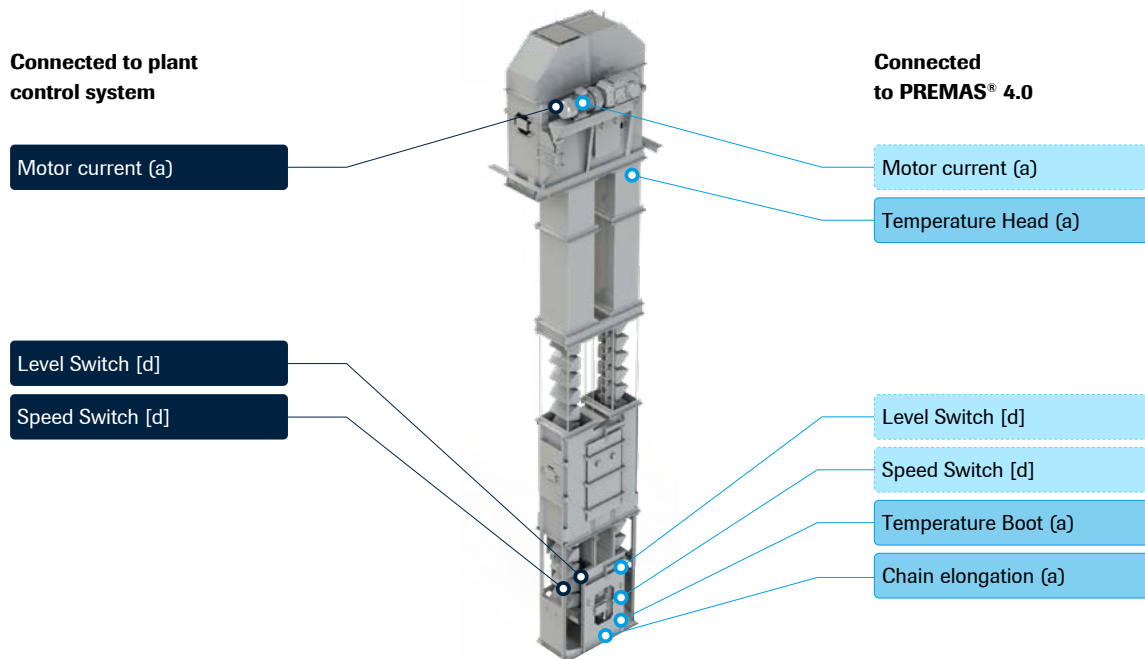
Existing sensor

New sensor

Signal transfer of existing sensor

Note: Sensors may be added as required to increase the condition monitoring.

Field Sensor Overview for Chain Bucket Elevators



Machine Dashboard Chain Bucket Elevators



(a) = analogue signal
[d] = digital signal

Existing sensor New sensor Signal transfer of existing sensor

Note: Sensors may be added as required to increase the condition monitoring.

Field Sensor: Temperature

Measurement range (belt version)	-50°C to 150°C
Measurement range (chain version)	-50°C to 250°C
Connection cable	4-wire connection to IoT Box
Signal type	4 to 20 mA
Location	1 at Boot, 1 at Head, mounted at machine wall
Transmitter required	No
External power supply required	No (24 VDC supply from IoT Box)
Protection class IP	IP67
Ambient temperature	-25°C to 80°C
Storage temperature	-40°C to 100°C

Field Sensor: Elongation

Measurement range	0 to 450 mm
Connection cable	4-wire connection to IoT Box
Signal type	4 to 20 mA
Location	1 at Boot (mounted at parallel tension device)
Transmitter required	No
External power supply required	No (24 VDC supply from IoT Box)
Protection class IP	IP67
Ambient temperature sensor (rail profile)	-25°C to 70°C
Ambient temperature magnet (belt version)	-25°C to 140°C
Ambient temperature magnet (chain version)	-25°C to 240°C
Storage temperature	-40°C to 100°C

Input Signals from Plant System

Motor current	Analogue signal: 4 to 20 mA
Level Switch	Digital signal (on/off): 0 to 24 VDC
Speed Switch	Digital signal (on/off): 0 to 24 VDC
Drift Warning (belt only)	Digital signal (on/off): 0 to 24 VDC
Input Impedance	27.4 ohms

IoT Box

Material	Metal enclosure
Operation conditions	Ambient temperature from -30°C to 70°C
Size	30 x 40 x 21 cm (11,8 x 15,75 x 8,3 in)
Miniature circuit breaker	Compact, single phase, rated current 6A
Input types	8x analog, 5x digital
Output types	2x digital (warning/alarm to external)
Power supply	110 to 230 VAC (uninterrupted power supply – UPS)
Power requirement	25 W
Location	Nearby bucket elevator boot
Mobile communication	4G (LTE), UMTS/HSPA+; EDGE; GPRS; GSM
SIM Card	Global SIM card with data package included
Protection class IP	Dust proof (NEMA 4/IP65)
Storage temperature	-30°C to 70°C

System Restrictions

Supported machines	<p>Belt Bucket Elevators, type BWG Bucket Elevators with central chain, type BWZ Bucket Elevators with central chain, type BWZ-L Double Bucket Elevators, type BWZ-D</p> <p>For any other use please contact your PREMAS® 4.0 distributor.</p>
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PREMAS® 4.0 cannot be used in the following countries

North Korea, Syria, Iran

The usage of PREMAS® 4.0 needs in the following countries a confirmation by your distributor

Bhutan, Botswana, Central African Republic, Comoros, Republic of the Congo, Cuba, Djibouti, East Timor (Timor-Leste), Eritrea, Iraq, Liberia, Libya, Maldives, Marshall Islands, Federated States of Micronesia, Palau, San Marino, Sao Tome and Principe, Seychelles, Sudan, Swaziland, Turkmenistan, Tuvalu, Vatican City, Yemen

PREMAS® 4.0 can be used in the following countries but differ from standard terms, conditions, and pricing. Please contact your AUMUND office for a country specific offer.

Afghanistan, Burundi, Congo Democratic Republic, Kosovo, Monaco, Somalia, Togo, Venezuela, Dominican Republic, Gambia, Guatemala, Andorra, Angola, Bosnia and Herzegovina, Lebanon, Mauritania, New Caledonia, Sierra Leone



“We are convinced that predictive maintenance has a future. With PREMAS® 4.0, we can plan spare parts and maintenance better, which has a positive effect on resources and costs. It enables us to immediately recognise where action is needed, regardless of time and place.”

Customer Statement of Ramona Keller
Maintenance Manager
Jura-Cement-Fabriken AG

Interested? Contact us and request a free demo-session on PREMAS® 4.0.

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Visit our website and find out more information about PREMAS® 4.0:

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