

Conveyor Belt Monitoring Systems Thermo Ramsey PROLINE.

Safety pull cord switches, belt run-off switches, tripper position switches, under speed switches, and speed sensors.



Conveyor Belt Monitoring Systems

Thermo Ramsey PROLINE monitoring systems are particularly robust and guarantee a long service life in harsh industrial environments and in mining.

Choose from our extensive range of safety pull cord switches, belt run-off switches, tripper position switches, under speed switches, and speed sensors.





Safety pull cord switch PROLINE SPS-60-31-G



Robust pull cord switch. Two switching elements are actuated by different cams on the shaft.

Technical specifications:

Housing: die-cast aluminum, IP 65 NEMA-4, yellow finish Attachment parts: steel, red finish; or stainless steel 1.4404 AISI 316L Outputs: 2NO + 2NC, 6 A 250 V AC resp. 10 A 24 V DC

Operating temperature: -45 ... +85 °C Threaded holes: M20 x 1.5 Lever orientation: changeable

Actuating angle: 18°

Abstand: recommended switch spacing: 50 m

Explosionschutz: none;

ATEX Zone 22 II 3D Ex tb IIIC T85°C Db; ATEX Zone 21 II 2D Ex tb IIIC T85°C Ip65

Belt run-off switch PROLINE ROS-60-30-G



Robust belt run-off switch. Two switching elements are actuated by different cams on the shaft.

Technical specifications:

Housing: die-cast aluminum, IP 65 NEMA-4, yellow finish Attachment parts: steel, red finish; or stainless steel 1.4404 AISI 316L Outputs: 2NO + 2NC, 6 A 250 V AC resp. 10 A 24 V DC

Operating temperature: -45 ... +85 °C
Threaded holes: M20 x 1.5
Lever orientation: changeable

Actuating angle: 15° (alarm) and 30° (shut-down)

Belt speed: max. 8 m/s

Explosion protection: none;

ATEX Zone 22 II 3D Ex tb IIIC T85°C Db; ATEX Zone 21 II 2D Ex tb IIIC T85°C Ip65



Tripper position switch PROLINE TPS-60-32-G



Robust tripper position switch. Two switching elements are actuated by different cams on the shaft.

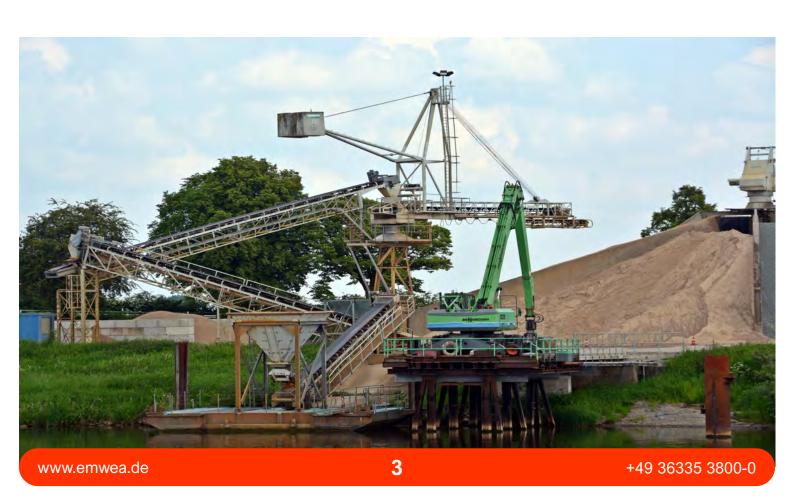
Technical specifications:

Housing: die-cast aluminum, IP 65 NEMA-4, yellow finish Attachment parts: steel, red finish; or stainless steel 1.4404 AISI 316L Outputs: 2NO + 2NC, 6 A 250 V AC resp. 10 A 24 V DC

Operating temperature: -45 ... +85 °C
Threaded holes: M20 x 1.5
Lever orientation: changeable

Actuating angle: 18° Explosion protection: none;

> ATEX Zone 22 II 3D Ex tb IIIC T85°C Db; ATEX Zone 21 II 2D Ex tb IIIC T85°C Ip65





Under speed switch PROLINE 60-23P



Inductive, shaftless under speed switch. Detects and signals stop or high/low speed of conveyor belts.

Technical specifications:

Housing: fiber-reinforced polyamide with 30% mineral

Protection: IP 65

Power supply: 110 / 220 V AC ±10%, 5 VA
Outputs: 2 A 120 V DC, non-inductive

Operating temperature: $-25 \dots +65 \,^{\circ}\text{C}$ Threaded hole: M20 x 1.5 Switching distance: 10 mm

Measuring range: 60 ... 600 pulses / min (standard);

2 ... 20; 7.5 ... 75; 30 ... 30 pulses / min (optional)

Explosion protection: none

Under speed switch PROLINE 60-23A



Shaft driven under speed switch. Detects and signals stop or high/low speed of conveyor belts.

Technical specifications:

Housing: fiber-reinforced polyamide with 30% mineral

Protection:: IP 65

Power supply: 110 / 220 V AC ±10%, 5 VA
Outputs: 2 A 120 V DC, non-inductive

Operating temperature: -25 ... +65 °C Threaded hole: M20 x 1.5

Measuring range: 15 ... 150 PPR (standard);

2 ... 20; 3 ... 30; 7.5 ... 75 PPR (optional)

Explosion protection: none; ATEX 22



Under speed switch PROLINE 60-29A



Inductive, shaftless under speed switch. Detects and signals stop or high/low speed of conveyor belts.

Technical specifications:

Housing: die-cast aluminum, yellow finish

Protection: IP 67

Power supply: 110 / 220 V AC ±10%, 5 VA
Outputs: 2 A 120 V DC, non-inductive

Operating temperature: -25 ... +65 °C
Threaded hole: M20 x 1.5
Switching distance: 10 mm

Measuring range: 60 ... 600 pulses / min (standard);

2 ... 20; 7,5 ... 75; 30 ... 30 pulses / min (optional)

Explosion protection: ATEX21 (II 2D Ex tb IIIC T90°C Db Ip68)

Speed sensors PROLINE 60-12C and 60-12EN



Shaft driven speed sensor, provides a signal proportional to the belt speed or rotation speed.

Technical specifications:

Housing: fiber-reinforced polyamide with 30% mineral

Protection: IP 65

Resolution: 50 PPR; 1000 PPR
Operating temperature: -20 ... +65 °C
Threaded hole: M20 x 1.5
Explosion protection: none; ATEX 22

Speed sensor PROLINE 60-12P



Inductive, shaftless speed sensor, provides a signal proportional to the belt speed or rotation speed.

Technical specifications:

Housing: fiber-reinforced polyamide with 30% mineral

Protection: IP 65

Power supply: 110 / 220 V AC ±10%, 5 VA

Operating temperature: -20 ... +65 °C
Threaded hole: M20 x 1.5
Explosion protection: none; ATEX 22



Speed sensors PROLINE 60-12F, 60-12ENC, 61-12N and 61-12C/CSA



Shaft driven speed sensor, provides a signal proportional to the belt speed or rotation speed.

Technical specifications:

Housing: die-cast aluminum, yellow finish

Protection: IP 67

Resolution: 50; 64; 200; 500 PPR

Operating temperature: $-25 \dots +65 \,^{\circ}\text{C}$ Threaded hole: M20 x 1.5

Explosion protection: none; ATEX 22; CSA

Speed sensors PROLINE ZA-11 and ZA-11-LS



Speed sensor with underbelt measuring wheel, provides a signal proportional to the belt speed.

Technical specifications:

Material: stainless steel 1.4301 AISI 304,

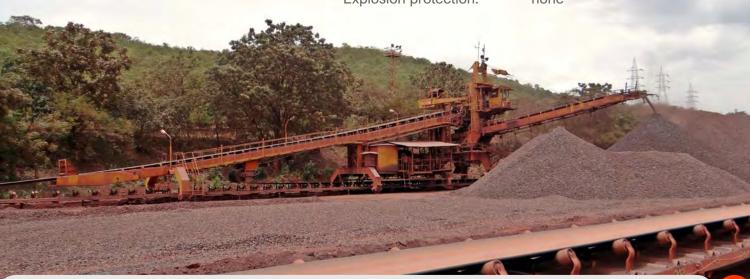
PTFE

Protection: IP 65

Belt speed: 0.3 ... 4 m/s; 0.2 ... 2.5 m/s

Operating temperature: -25 ... +65 °C Connecting cable: ca. 2 m

Explosion protection: none





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Any question?

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