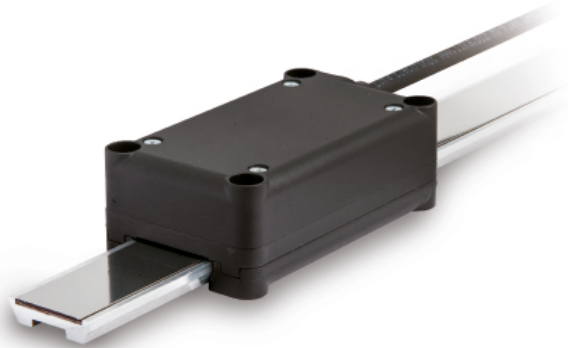


- Guided measurement system
- Absolute sensing without referencing
- CANopen & SSI interface
- Resolution up to 5 μm
- Measurement length from 115 to 570 mm
- Easy installation with 1 fixing point
- Non-linear movement possible
- Unaffected by dust, debris or liquids



SMAG

ENVIRONMENTAL SPECIFICATIONS

| | |
|------------------------------|--|
| Shock: | 250 g, 6 ms acc. to CEI EN 60068-2-27 |
| Vibrations: | 10 g, 5-2000 Hz acc. to CEI EN 60068-2-6 |
| Protection: | IP65 |
| Operating temperature range: | -25°C +85°C (-13°F +185°F) |
| Storage temperature range: | -40°C +100°C (-40°F +212°F) |
| Options: | Protection IP67 (sealed circuits) |

MECHANICAL SPECIFICATIONS

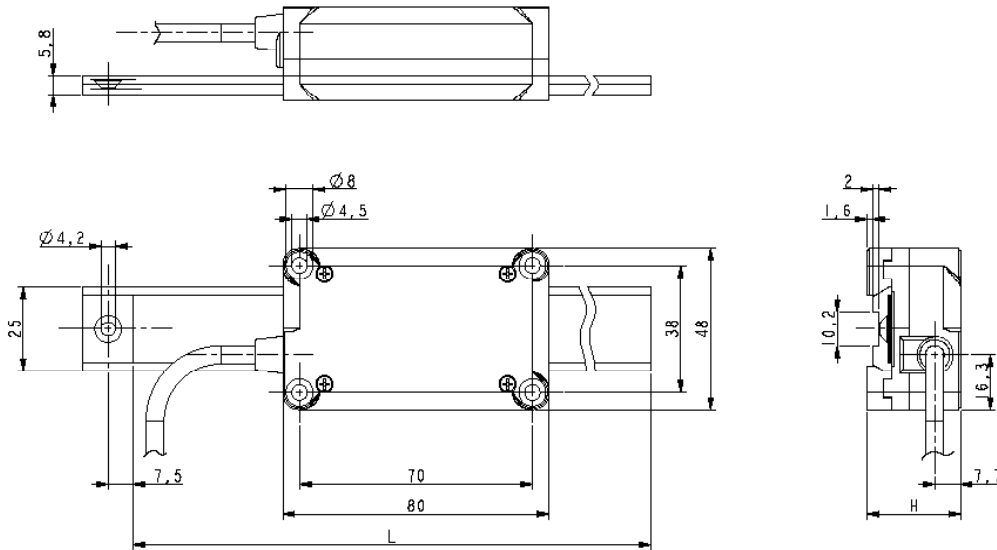
| | |
|----------------------------|--|
| Dimensions: | see drawing |
| Housing material: | Sensor: Nylon 6FC 30%, Profile: aluminium |
| Electrical connection: | Lika Hi-flex cable M8 2,0 m or M12 8 pin inline plug |
| Travel speed (mechanical): | typ. 0,5 m/s - max. 1m/s |
| Measurement length: | Measurement length = profile length - 80 mm |

ELECTRICAL SPECIFICATIONS

| | |
|--------------------|--|
| Resolution: | CANopen: 5 μm (programmable) SSI: 100, 50, 10, 5 μm |
| Sensor accuracy: | $\pm 15 \mu\text{m}$ max. |
| Repeat accuracy: | ± 1 increment |
| Output circuits: | CANopen, SSI |
| Power supply: | +10Vdc \div +30Vdc |
| Power consumption: | 1 W max. |
| Protection: | against inversion of polarity and short-circuit |
| EMC: | acc. to EN 61000-6-2 level 3 |
| Functions: | Zero setting, Counting direction |

ACCESSORIES

| | |
|--------------------|----------------------------------|
| MTAG: | Magnetic profile |
| EM12F8: | M12 8 pin mating connector |
| EC-M12F8-LK-M8-5: | cordset 5 meters with M12 conn. |
| EC-M12F8-LK-M8-10: | cordset 10 meters with M12 conn. |



| Series | L | H |
|-----------|--------------------|-------|
| SMAG - CB | see profile length | 35 mm |
| SMAG - GA | see profile length | 28 mm |

SMAG

Order code - CANopen version

| | | | | | | | |
|------|---|---------|---|--------|---|---------|------------|
| SMAG | - | XX a | - | X b | - | XX c | /Sxxx d |
|------|---|---------|---|--------|---|---------|------------|

| | | | |
|---|-------------------------------------|---|-------------------------|
| a OUTPUT CIRCUIT CB = CANopen interface | b RESOLUTION 5 = 0,005 mm | c CONNECTIONS L2 = cable output 2 m L5 = cable output 5 m Lx = cable output x m | d CUSTOM VERSION |
|---|-------------------------------------|---|-------------------------|

Order code - SSI version

| | | | | | | | | | |
|------|---|---------|---|----------|---|--------|---|---------|------------|
| SMAG | - | XX a | - | XXX b | - | X c | - | XX d | /Sxxx e |
|------|---|---------|---|----------|---|--------|---|---------|------------|

| | | | | |
|--|---|--|---|-------------------------|
| a OUTPUT CIRCUIT GA = Gray, SSI, LSB aligned | b RESOLUTION 100 = 0,1 mm 50 = 0,05 mm 10 = 0,01 mm 5 = 0,005 mm | c PROTECTION - = IP65 (standard) J = IP67 (with sealed circuit) | d CONNECTIONS L2 = cable output 2 m L5 = cable output 5 m Lx = cable output x m M0,5 = cable output 0,5 m with M12 8 pin conn. M2 = cable output 2 m with M12 8 pin connector | e CUSTOM VERSION |
|--|---|--|---|-------------------------|

Order code - Profile

| | | | | | | | |
|------|---|----------|---|---------|---|--------|------------|
| MTAG | - | XXX a | - | XX b | - | X c | /Sxxx d |
|------|---|----------|---|---------|---|--------|------------|

| | | | |
|---|--|--------------------------------------|-------------------------|
| a PROFILE LENGTH 195 = 195 mm (ML = 115mm) 300 = 300 mm (ML = 220mm) 220 = 220 mm (ML = 140mm) 370 = 370 mm (ML = 290mm) 240 = 240 mm (ML = 160mm) 650 = 650 mm (ML = 570mm) | b ACCURACY CLASS 35 = ±35 µm | c COVER STRIP 1 = supplied | d CUSTOM VERSION |
|---|--|--------------------------------------|-------------------------|

| Document release | Date | Description |
|------------------|------------|----------------|
| 1.0 | 22.09.2022 | Accuracy class |