



AK

AK1/AN-3H

Ind.M18,NPN-NO,M12 Plug,Sch-LD
M18 CYLINDRICAL INDUCTIVE SENSORS

OVERVIEW

- Wide range of models: standard, long distance
- Output: cable, M12 and plug cable exit
- Models with 2, 3, and 4 wires
- ATEX models, cat. 3, available on request
- Models with complementary output (NO+NC)



TECHNICAL FEATURES

Detection properties

| | |
|--------------------------|--|
| Nominal sensing distance | 8mm |
| Operanting distance | 0...6,48mm |
| Standard target | 24x24mm FE360 |
| Correction Factor | copper: 0,40 / aluminium: 0,45 / brass: 0,50 / stainless steel: 0,75 |
| Thermal drift of Sr | < 10% |
| Repeat Accuracy | < 5% (UB 24V Ta=23°C ±5°C) |

| | |
|------------|-----------|
| Hysteresis | 1 ... 20% |
|------------|-----------|

Application

| | |
|-------------|--------------------------|
| Description | M18 standard flush mount |
|-------------|--------------------------|

| | |
|-----------|-----------|
| Functions | Proximity |
|-----------|-----------|

Outputs

| | |
|-------------|-----|
| Output type | NPN |
|-------------|-----|

| | |
|-----------------|----|
| Output Function | NO |
|-----------------|----|

| | |
|---------------------|-------|
| Switching frequency | 300Hz |
|---------------------|-------|

Electrical data

| | |
|-------------------|------------|
| Operating Voltage | 10...30Vdc |
|-------------------|------------|

| | |
|------------------------|--------------------|
| No-Load supply current | $\leq 20\text{mA}$ |
|------------------------|--------------------|

| | |
|--------------|---------------------|
| Load current | $\leq 400\text{mA}$ |
|--------------|---------------------|

| | |
|-----------------|----------------------|
| Leakage current | $\leq 10\mu\text{A}$ |
|-----------------|----------------------|

| | |
|---------------------|--------------------------------|
| Output voltage drop | $\leq 1\text{V @}400\text{mA}$ |
|---------------------|--------------------------------|

| | |
|--------------------|-------------|
| Max ripple content | $\leq 10\%$ |
|--------------------|-------------|

| | |
|----------------|-------------------------|
| LED indicators | Yellow LED output state |
|----------------|-------------------------|

| | |
|--------------------------------|--------------------|
| Time delay before availability | $\leq 50\text{ms}$ |
|--------------------------------|--------------------|

| | |
|--------------------------|-----|
| Short-circuit protection | Yes |
|--------------------------|-----|

| | |
|-----------------------------|-----|
| Reverse Polarity Protection | Yes |
|-----------------------------|-----|

| | |
|----------------------------------|-----|
| Impulsive Overvoltage Protection | Yes |
|----------------------------------|-----|

| | |
|------------------------------------|-----|
| Protection against inductive loads | Yes |
|------------------------------------|-----|

Mechanical data

| | |
|------------|--------------------|
| Dimensions | M18 x 1 / L = 64mm |
|------------|--------------------|

| | |
|----------|----------|
| Mounting | Shielded |
|----------|----------|

| | |
|----------|---------------------|
| Material | Nickel-plated brass |
|----------|---------------------|

| | |
|------------------|---------------------|
| Housing material | Nickel-plated brass |
|------------------|---------------------|

| | |
|--------|-----|
| Weight | 55g |
|--------|-----|

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|-------------|----------|
| Connections | M12 Plug |
|-------------|----------|

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|----------------------|-----|
| Active Head Material | PBT |
|----------------------|-----|

| | |
|-------------------|------|
| Tightening torque | 25Nm |
|-------------------|------|

| | |
|-----------------------|---------------|
| Operating temperature | -25°C...+70°C |
|-----------------------|---------------|

| | |
|--------------------|-----|
| Diameter/Dimension | M18 |
|--------------------|-----|

Test/Approvals

| | |
|-----------|-------|
| Approvals | CE UR |
|-----------|-------|

| | |
|-------------------|---------------|
| EMC compatibility | IEC 60947-5-2 |
|-------------------|---------------|

| | |
|-----------------------|--|
| Shocks and vibrations | Vibration IEC 60068-2-6 / Shock IEC 60068-2-27 |
|-----------------------|--|

| | |
|----------------------|------|
| Degree of protection | IP67 |
|----------------------|------|

Accessories

Supplied Accessories

2 nuts M18x1

Generical Data

Dimensions

M18 x 1 / L = 64mm

Operating Temperature

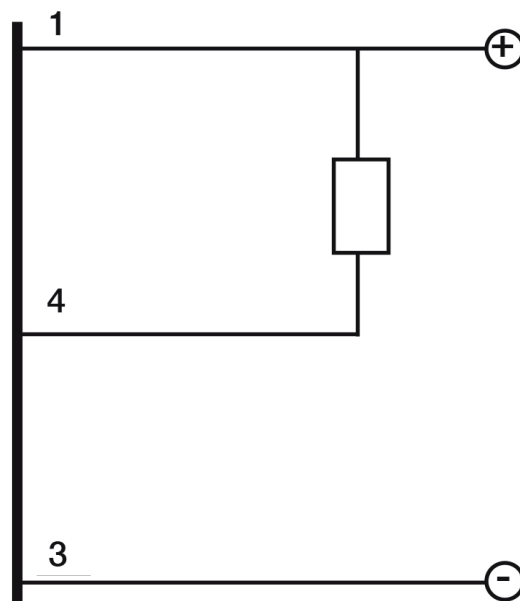
-25°C...+70°C

Mechanical Protection

IP67

CONNECTIONS

Electrical diagram

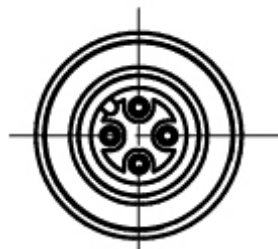
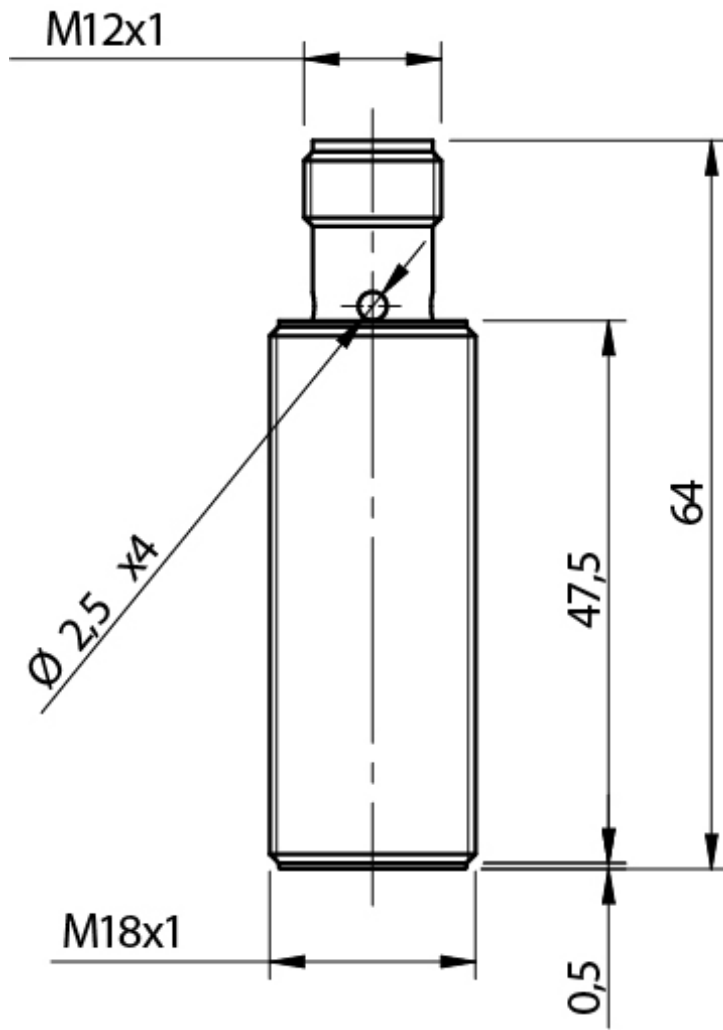


Connector

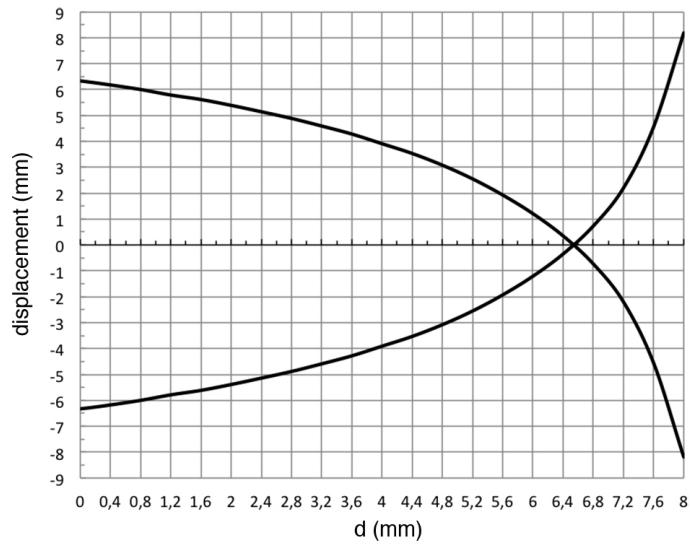


OTHERS

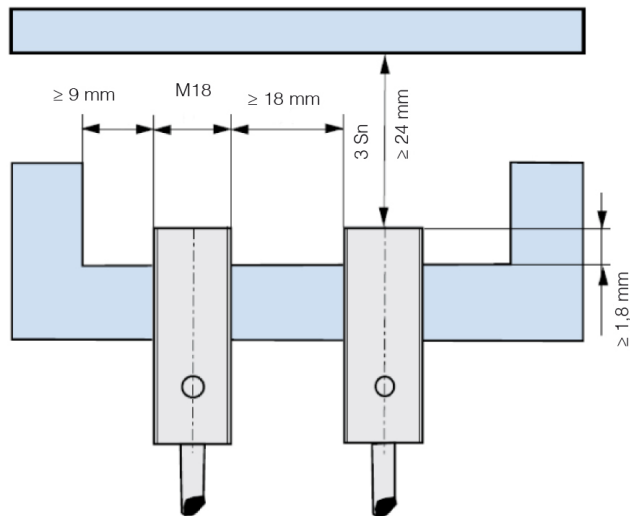
Dimensions



Response curves



Installation



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