



**Baumer**

Passion for Sensors

# My-Com. High-Precision Switch with 1 $\mu\text{m}$ Accuracy.

Reliable, ultra-precise. Edition 2013



«Micrometer Precision:  
70 times more accurate  
than a hair is thick»

# Visibly better: Baumer sensors.

The Baumer Group is leading at international level in the development and production of sensors, shaft encoders, measuring instruments as well as components for automatic image processing. As an owner-managed family business, we employ about 2500 workers worldwide in 36 subsidiaries and 18 countries. With marked customer orientation, consistently high quality and vast innovation potential worldwide, Baumer develops specific solutions for many industries and applications.

## Our standards – your benefits.

- Passion coupled with expertise – both have made us a sensor pioneer and technology leader
- Our range of services is hard to beat – we have the right product, developed by our own team, for every task
- Inspiring through innovation – a challenge Baumer employees take on every day
- Reliability, precision and quality – our customers' requirements are what drives us
- Partnership from the start – together with our customers we develop suitable solutions
- Always a step ahead – thanks to our production depth, our flexibility and our delivery reliability
- Available worldwide – Baumer is Baumer everywhere



# Unrivaled 1 $\mu\text{m}$ repeat accuracy.

Setting reference points, monitoring tolerances, controlling, adjusting. Fast, reliable, ultra-precise. Uncompromising accuracy tried and tested millions of times in industrial applications. Negligible activating forces. A compact precision switch in task matching packages. IP 67 versions for applications in contami-

nated areas. Repeat accuracy of 1 micrometer. For critical applications where spot-on precision is not enough. Baumer helps you make exactly the right choice.



Learn more.

Downloadable data sheets as well as further information about our products is available at:

[www.baumer.com/mycom](http://www.baumer.com/mycom)



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## My-Com precision switches

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## Baumer – setting standards with innovations.

The success story of the Baumer Group is characterized by innovations. By hardware and software engineers, designers or process engineers who work day in and day out to make our products and systems even better.

Our particular focus is on further miniaturization, enhanced precision as well as improved measuring speed and sensor robustness. That's what our products are characterized by - and something we are proud of.

The Baumer development teams are organized in an international network and are in close contact with well-known universities, recognized research institutes and highly specialized international engineering companies. As the technological leader, Baumer always endeavors to maintain its lead over the long term and protect its numerous innovations through patents.



## Our entire portfolio

- Absolute encoders
- Bearingless encoders
- Bearingless linear encoders
- Cable-pull encoders
- Capacitive sensors
- Conductivity measurement
- Counters
- Force/strain sensors
- Format alignment
- HeavyDuty encoders
- Inclusion sensors
- Incremental encoders
- Inductive sensors
- Industrial Cameras
- Level measurement
- Magnetic sensors
- Mechanical precision switches
- Photoelectric sensors
- Pressure measurement
- Process displays
- Temperature measurement
- Ultrasonic sensors
- Vision Sensors



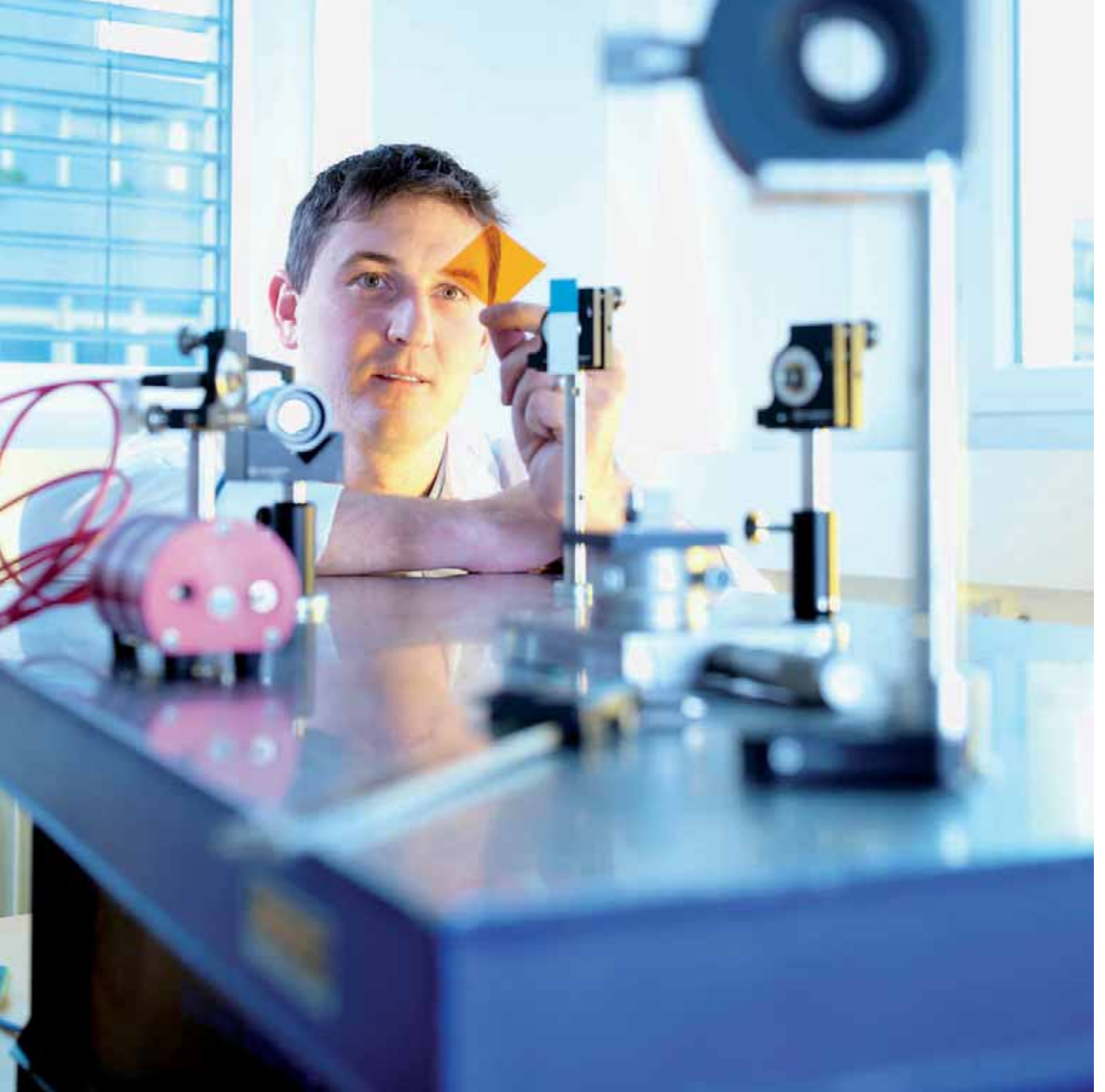


- Inductive sensors
- Capacitive sensors
- Photoelectric sensors
- Vision sensors
- Ultrasonic sensors
- Magnetic sensors
- Precision switches  
My-Com

## Passion for sensors.

Whether for object or position recognition, measuring, a miniaturized or exceptionally robust design – Baumer has the right sensor for every application. Different sensor functions in standard housings ease assembly for the user and limit the setup time to a minimum. Baumer can supply a wide range from inductive to vision sensors and advise you comprehensively.





## Customized solutions.

Our broad range of products enables us to provide the optimum solution for a large number of applications. But customers might have needs completely outside these application areas that cannot be entirely satisfied by the products currently on the market.

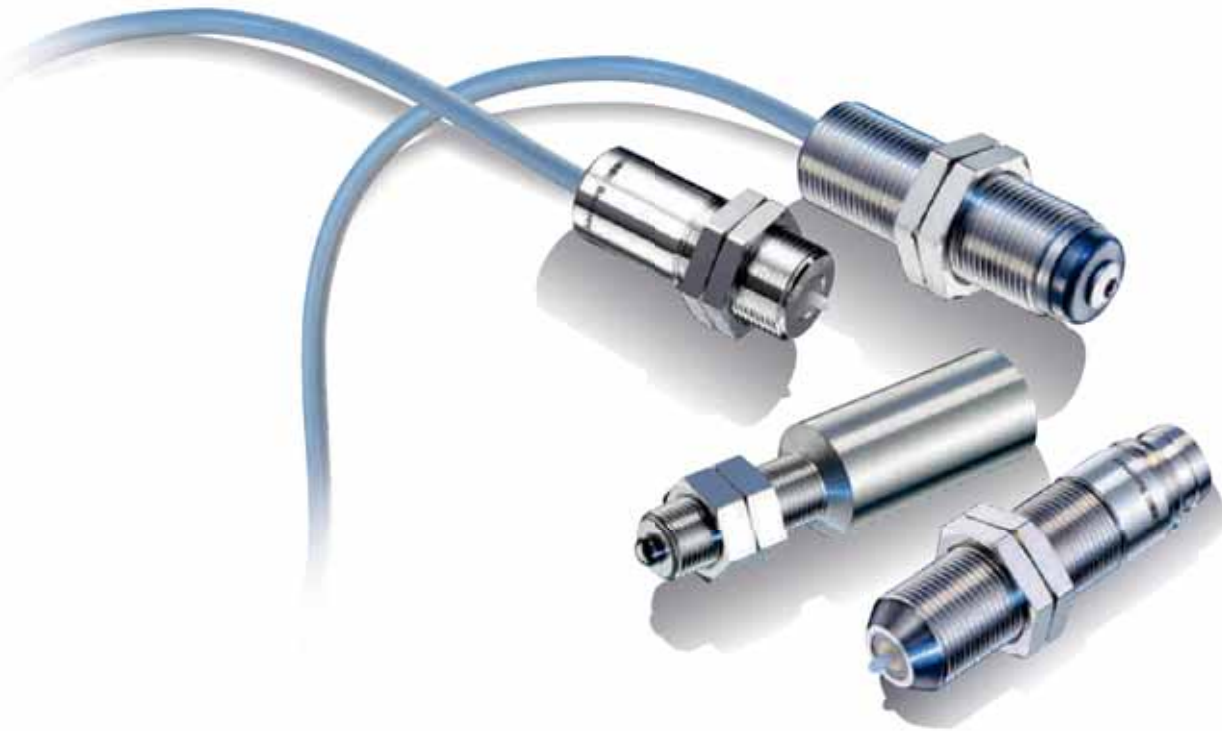
And this is precisely why our development engineers work closely with our customers. In searching for optimum solutions to meet these special needs, we are able to create customized solutions. Our customized solutions range from special mechanical designs to completely new sensor systems.

An innovative sensor solution can also help you gain a significant competitive advantage.

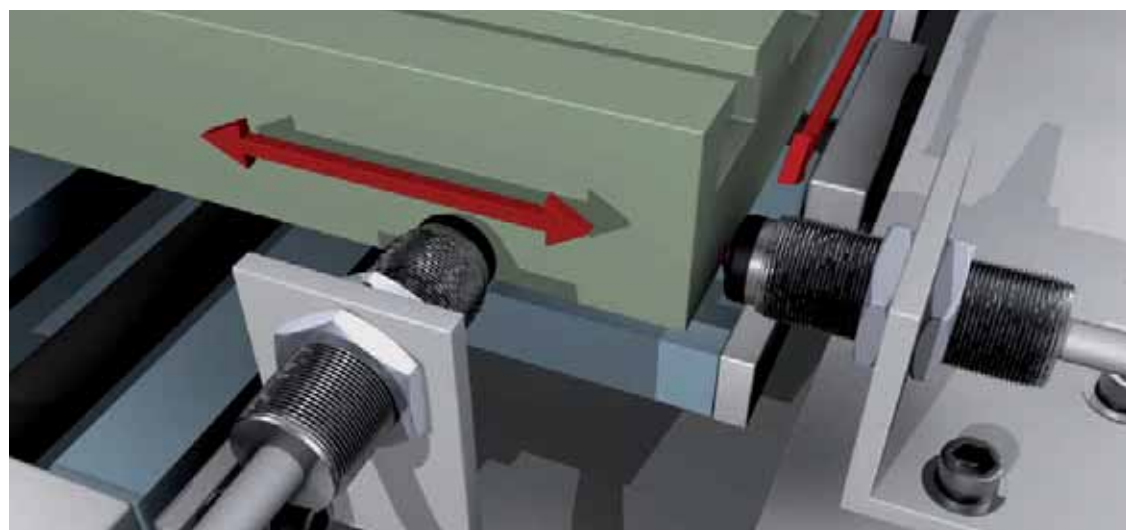
We would be happy to advise you!



# My-Com<sup>®</sup> ultra precision switches.



With a repeat accuracy of 1 micron, the *My-Com*<sup>®</sup> remains undisputedly the most accurate and most compact mechanical switch in the world. The standard *My-Com*<sup>®</sup> range of the most diverse mechanical and electric types largely reflects the requirements of the market. With its extremely compact design, the *My-Com*<sup>®</sup> can also be easily integrated in very constrained surroundings.



## Precision finishing

- Referencing XY-tables on machine tools



### 0,001 mm repeat accuracy

Ensured reliable repeat accuracy of one micrometer makes *My-Com*® the most precise limit switch in the world. The mechanical device – with a service life of 10 million switching operations – provides ultra-precise reference signals for most diverse applications



### 1 µm accuracy even in harsh environments

*My-Com*® precision switches retain their ultimate precision even under most adverse conditions.

Viton and silicone gaskets prevent the gold-plated contacts from impairment by dirt, dust and condensation and thus ensure constant micrometer switching precision throughout the entire service life.



### Housing fronts and product variants

*My-Com*® high-precision switches excel by ultra-compact design merged with big product variety.

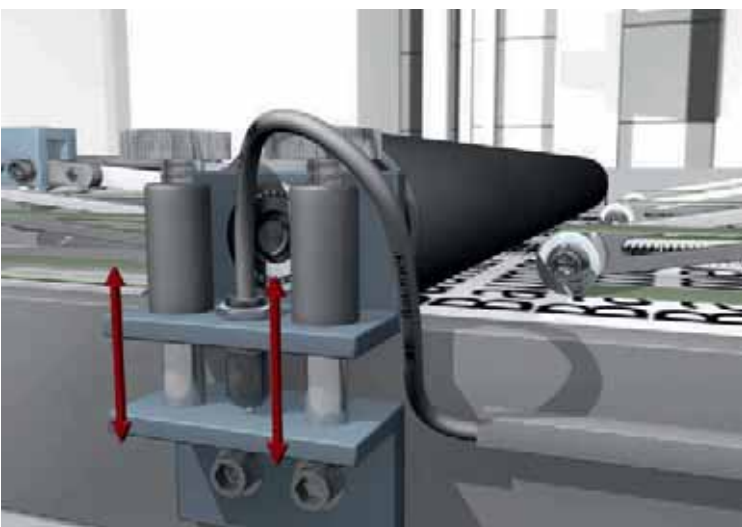
- Conical and tapered housing fronts
- Activating force configurable from 30 cN to 250 cN according to application
- Spherical hard metal or ruby tips for lateral approach

- Integrated amplifier with LED for 50 mA load current (PLC)

Typical applications for the *My-Com*® high-precision switches are:

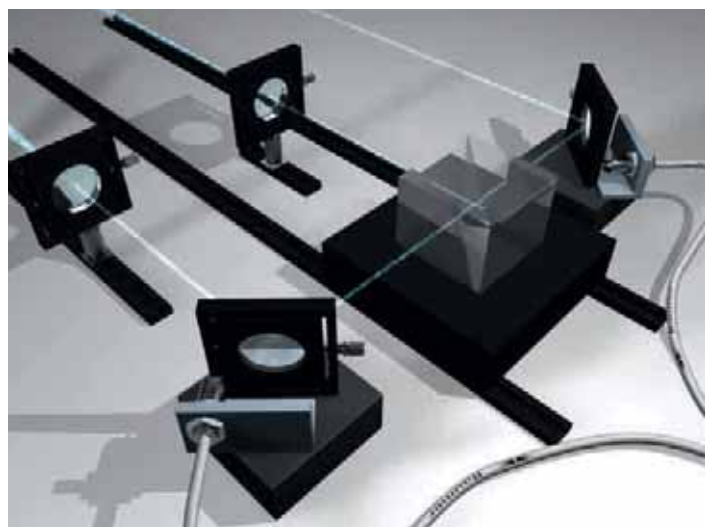
- Reference point setting in X/Y tables and machine tools
- Monitoring of the closing and locking accuracy of injection molding dies
- Detection of the smallest deflections, movements and deformations
- Integration in measuring sensors, gauges and activating pins
- Calibration of measuring instruments in quality control
- Monitoring of surface roughness
- Other applications in precision mechanical engineering

Rigorous attention was paid to the design of the *My-Com*® precision switch to reduce the number of components to an absolute minimum. Just three moving parts and high-quality materials guarantee a large number of switching operations with constant repeat accuracy. Short, linear displacements in just two directions and low activating forces further increase the reliability and service life of the *My-Com*® precision switch. The *My-Com*® has proven its impressive reliability in over 1 million applications.



### Quality control

- Concentricity check in measuring gauge
- Checking parts for correct thickness
- Monitoring concentricity



### Laboratory test setups

- Referencing mirrors and beam-splitters
- Home position sensor
- Precision referencing



### Mechanical data

|                             |                                     |
|-----------------------------|-------------------------------------|
| Repeat accuracy (T = const) | < 0,001 mm (1 micron)               |
| Mechanical lifetime         | 10'000'000 switchings               |
| Switching frequency         | 0 - 10 Hz                           |
| Max. activating velocity    | < 30 mm/s                           |
| Temperature range           | -20 °C to +75 °C (-5 °F to +165 °F) |
| Standard cable material     | PVC                                 |
| Protection class (standard) | IP 50                               |

### LED indicator

The My-Com types with transistor output are available with LED output indicators.

### Transistor output

The My-Com types L, G and M are available with a transistorized output. When supplied with this configuration, the output circuit is supplied normally open (NO). A protective diode is incorporated into the circuit to protect against transients.

### Activation force

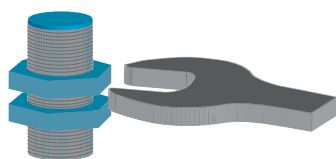
For most My-Coms, the appropriate activation force can be defined at the time of ordering.

### Increased environmental protection (IP 67)

For applications in harsh environments (dust, oil, cooling fluid) we recommend the waterproof My-Com D, H or M. The My-Com type L, with transistor output, is also available with the same protection (IP 67). The sealing membrane for all of these is made of Viton.

### Maximum installation torque (not lubricated)

If the published installation torque specifications prove to be insufficient for your application, we recommend using a nut locking liquid to secure the My-Com. The published specifications for maximum torque must not be exceeded!















|            |        |
|------------|--------|
| My-Com D   | 20 Nm  |
| My-Com E   | 5,5 Nm |
| All others | 3,5 Nm |

## Part number key

|                                     |        |   |    |   |    |    |
|-------------------------------------|--------|---|----|---|----|----|
|                                     | MY-COM | F | 50 | / | 80 |    |
|                                     | MY-COM | L | 75 | N | 80 | /L |
| Type                                | _____  |   |    |   |    |    |
| Activating force in gram force (cN) | _____  |   |    |   |    |    |
| Transistor output                   | _____  |   |    |   |    |    |
| N = NPN or P = PNP                  |        |   |    |   |    |    |
| Cable length in cm                  | _____  |   |    |   |    |    |
| LED                                 | _____  |   |    |   |    |    |



| product family                 | MY-COM A  | MY-COM B  | MY-COM C  | MY-COM D  | MY-COM E  | MY-COM E  |
|--------------------------------|---|---|---|---|---|---|
|                                |  |  |  |  |  |  |
| housing material               | brass nickel plated   | brass nickel plated   | brass nickel plated   | browned brass   | brass nickel plated   | brass nickel plated   |
| housing length                 | 20 mm<br>30 mm  | 20 mm<br>30 mm  | 20 mm<br>30 mm  | 56 mm<br>66 mm  | 36 mm   | 47 mm   |
| cable, 80 cm                   | ■   | ■   | ■   | ■   | ■   | ■   |
| connector M8                   | ■   |   | ■   | ■   |   |   |
| connector S30                  |   | ■   |   |   |   |   |
| NPN make function (NO)         |   |   |   |   |   | ■   |
| PNP make function (NO)         |   |   |   |   |   | ■   |
| break function (NC) mechanical | ■   | ■   | ■   | ■   | ■   |   |
| protection class               | IP 50   | IP 50   | IP 50   | IP 67   | IP 50   | IP 50   |
| <b>page</b>                    | <b>12</b>   | <b>13</b>   | <b>14</b>   | <b>15</b>   | <b>16</b>   | <b>17</b>   |

| product family                 | MY-COM F  | MY-COM G  | MY-COM H  | MY-COM L  | MY-COM M  | MY-COM M  |
|--------------------------------|---|---|---|---|---|---|
|                                |  |  |  |  |  |  |
| housing material               | brass nickel plated   | brass nickel plated   | brass nickel plated   | brass nickel plated   | brass nickel plated   | brass nickel plated   |
| housing length                 | 28 mm<br>38 mm  | 28 mm<br>38 mm  | 21 mm<br>40 mm  | 30 mm<br>40 mm  | 27 mm<br>37 mm  | 27 mm<br>37 mm  |
| cable, 80 cm                   | ■   | ■   | ■   | ■   | ■   | ■   |
| connector M8                   | ■   | ■   | ■   | ■   | ■   | ■   |
| NPN make function (NO)         |   | ■   |   | ■   |   | ■   |
| PNP make function (NO)         |   | ■   |   | ■   |   | ■   |
| break function (NC) mechanical | ■   |   | ■   |   | ■   |   |
| protection class               | IP 50   | IP 50   | IP 67   | IP 67   | IP 67   | IP 67   |
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- conical housing front
- two wire break function (NC)



### general data

|                         |                     |
|-------------------------|---------------------|
| repeat accuracy         | < 0,001 mm          |
| mech. pre-run / overrun | - / 1,5 mm approx.  |
| measurement type        | contact with medium |
| direction of approach   | frontal             |

### electrical data

|                         |                                |
|-------------------------|--------------------------------|
| DC voltage max.         | 15 VDC                         |
| switch. current DC max. | 2 mA                           |
| AC voltage max.         | 24 VAC                         |
| switch. current AC max. | 50 mA                          |
| output circuit          | break function (NC) mechanical |

### mechanical data

|                  |                         |
|------------------|-------------------------|
| activating pin   | zirconium oxide $ZrO_2$ |
| housing material | brass nickel plated     |
| dimension        | 8 mm                    |
| type             | cylindrical threaded    |

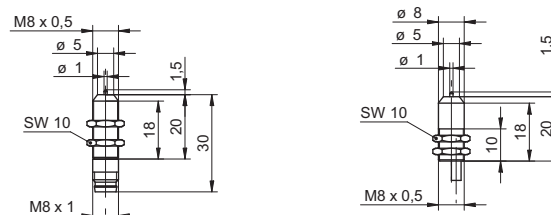
### ambient conditions

|                       |                |
|-----------------------|----------------|
| operating temperature | -20 ... +75 °C |
| protection class      | IP 50          |

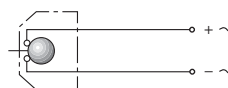
### connectors and mating connectors

|  |                                    |
|--|------------------------------------|
| ESG 32SH0200                                 | Connector M8, 3 pin, straight, 2 m |
| ESW 31SH0200                                 | Connector M8, 3 pin, angular, 2 m  |
| additional cable connectors: see accessories |                                    |

### dimension drawings



### connection diagram



### remarks

other versions on request

| order reference | activating force | connection types | housing length |
|-----------------|------------------|------------------|----------------|
| MY-COM A30/80   | 30 cN            | cable, 80 cm     | 20 mm          |
| MY-COM A30/S35  | 30 cN            | connector M8     | 30 mm          |
| MY-COM A50/80   | 50 cN            | cable, 80 cm     | 20 mm          |
| MY-COM A50/S35  | 50 cN            | connector M8     | 30 mm          |
| MY-COM A75/80   | 75 cN            | cable, 80 cm     | 20 mm          |
| MY-COM A75/S35  | 75 cN            | connector M8     | 30 mm          |
| MY-COM A100/80  | 100 cN           | cable, 80 cm     | 20 mm          |
| MY-COM A100/S35 | 100 cN           | connector M8     | 30 mm          |



- flat housing front
- two wire break function (NC)



**general data**

|                         |                     |
|-------------------------|---------------------|
| repeat accuracy         | < 0,001 mm          |
| mech. pre-run / overrun | - / 1,5 mm approx.  |
| measurement type        | contact with medium |
| direction of approach   | frontal             |

**electrical data**

|                         |                                |
|-------------------------|--------------------------------|
| DC voltage max.         | 15 VDC                         |
| switch. current DC max. | 2 mA                           |
| AC voltage max.         | 24 VAC                         |
| switch. current AC max. | 50 mA                          |
| output circuit          | break function (NC) mechanical |

**mechanical data**

|                  |                                  |
|------------------|----------------------------------|
| activating pin   | zirconium oxide ZrO <sub>2</sub> |
| housing material | brass nickel plated              |
| dimension        | 8 mm                             |
| type             | cylindrical threaded             |

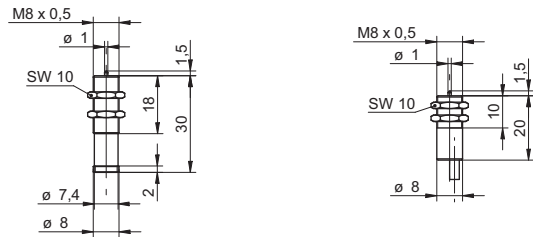
**ambient conditions**

|                       |                |
|-----------------------|----------------|
| operating temperature | -20 ... +75 °C |
| protection class      | IP 50          |

**connectors and mating connectors**

KSW 30BV0200 "snap-in" connector, 2 pin, angular, 2 m  
 additional cable connectors: see accessories

**dimension drawings**



**connection diagram**



**remarks**

other versions on request

| order reference | activating force | connection types | housing length |
|-----------------|------------------|------------------|----------------|
| MY-COM B30/80   | 30 cN            | cable, 80 cm     | 20 mm          |
| MY-COM B50/80   | 50 cN            | cable, 80 cm     | 20 mm          |
| MY-COM B75/80   | 75 cN            | cable, 80 cm     | 20 mm          |
| MY-COM B100/80  | 100 cN           | cable, 80 cm     | 20 mm          |
| MY-COM BS30     | 30 cN            | connector S30    | 30 mm          |
| MY-COM BS50     | 50 cN            | connector S30    | 30 mm          |
| MY-COM BS75     | 75 cN            | connector S30    | 30 mm          |
| MY-COM BS100    | 100 cN           | connector S30    | 30 mm          |



- rectangular brass housing
- two bore mounting
- two wire break function (NC)



**general data**

|                         |                     |
|-------------------------|---------------------|
| repeat accuracy         | < 0,001 mm          |
| mech. pre-run / overrun | - / 1,5 mm approx.  |
| measurement type        | contact with medium |
| direction of approach   | frontal             |

**electrical data**

|                         |                                |
|-------------------------|--------------------------------|
| DC voltage max.         | 15 VDC                         |
| switch. current DC max. | 2 mA                           |
| AC voltage max.         | 24 VAC                         |
| switch. current AC max. | 50 mA                          |
| output circuit          | break function (NC) mechanical |

**mechanical data**

|                  |                                  |
|------------------|----------------------------------|
| activating pin   | zirconium oxide ZrO <sub>2</sub> |
| housing material | brass nickel plated              |
| dimension        | 8 mm                             |
| type             | rectangular                      |

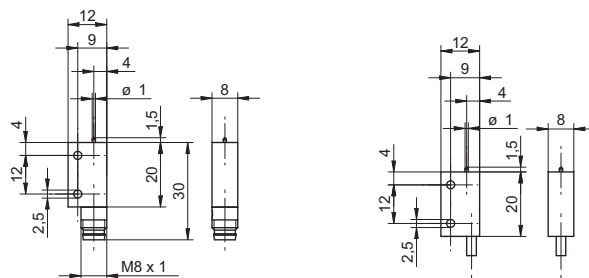
**ambient conditions**

|                       |                |
|-----------------------|----------------|
| operating temperature | -20 ... +75 °C |
| protection class      | IP 50          |

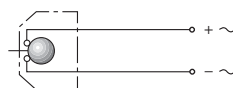
**connectors and mating connectors**

|  |                                    |
|--|------------------------------------|
| ESG 32SH0200                                 | Connector M8, 3 pin, straight, 2 m |
| ESW 31SH0200                                 | Connector M8, 3 pin, angular, 2 m  |
| additional cable connectors: see accessories |                                    |

**dimension drawings**



**connection diagram**



**remarks**

other versions on request

| order reference | activating force | connection types | housing length |
|-----------------|------------------|------------------|----------------|
| MY-COM C30/80   | 30 cN            | cable, 80 cm     | 20 mm          |
| MY-COM C30/S35  | 30 cN            | connector M8     | 30 mm          |
| MY-COM C50/80   | 50 cN            | cable, 80 cm     | 20 mm          |
| MY-COM C50/S35  | 50 cN            | connector M8     | 30 mm          |
| MY-COM C75/80   | 75 cN            | cable, 80 cm     | 20 mm          |
| MY-COM C75/S35  | 75 cN            | connector M8     | 30 mm          |
| MY-COM C100/80  | 100 cN           | cable, 80 cm     | 20 mm          |
| MY-COM C100/S35 | 100 cN           | connector M8     | 30 mm          |





- browned brass
- two wire break function (NC)
- protection class IP 67

**general data**

|                         |                              |
|-------------------------|------------------------------|
| repeat accuracy         | < 0,001 mm                   |
| activating force        | 250 cN                       |
| mech. pre-run / overrun | 1 mm / 1 mm approx.          |
| measurement type        | contact with medium          |
| direction of approach   | frontal and lateral approach |

**electrical data**

|                         |                                |
|-------------------------|--------------------------------|
| DC voltage max.         | 15 VDC                         |
| switch. current DC max. | 2 mA                           |
| AC voltage max.         | 24 VAC                         |
| switch. current AC max. | 50 mA                          |
| output circuit          | break function (NC) mechanical |

**mechanical data**

|                  |                      |
|------------------|----------------------|
| activating pin   | hardened steel       |
| housing material | browned brass        |
| dimension        | 16 mm                |
| type             | cylindrical threaded |

**ambient conditions**

|                       |                |
|-----------------------|----------------|
| operating temperature | -20 ... +75 °C |
| protection class      | IP 67          |

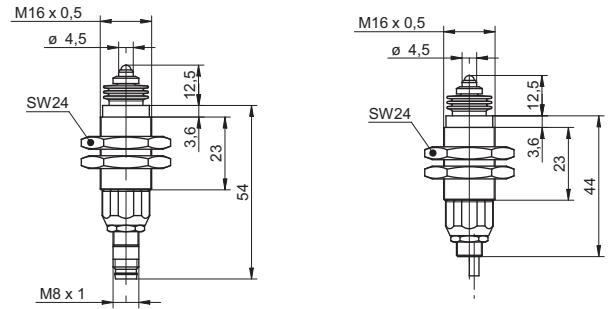
**connectors and mating connectors**

|  |                                    |
|--|------------------------------------|
| ESG 32SH0200                                 | Connector M8, 3 pin, straight, 2 m |
| ESW 31SH0200                                 | Connector M8, 3 pin, angular, 2 m  |
| additional cable connectors: see accessories |                                    |

| order reference | connection types | housing length |
|-----------------|------------------|----------------|
| MY-COM D250/80  | cable, 80 cm     | 56 mm          |
| MY-COM D250/S35 | connector M8     | 66 mm          |



**dimension drawings**



**connection diagram**



**remarks**

other versions on request



- spherical hard metal tip
- thread M6 x 0,5
- two wire break function (NC)



**general data**

|                         |                              |
|-------------------------|------------------------------|
| repeat accuracy         | < 0,001 mm                   |
| mech. pre-run / overrun | - / 0,8 ... 1,5 mm approx.   |
| measurement type        | contact with medium          |
| direction of approach   | frontal and lateral approach |

**electrical data**

|                         |                                |
|-------------------------|--------------------------------|
| DC voltage max.         | 15 VDC                         |
| switch. current DC max. | 2 mA                           |
| AC voltage max.         | 24 VAC                         |
| switch. current AC max. | 50 mA                          |
| output circuit          | break function (NC) mechanical |

**mechanical data**

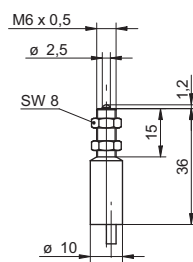
|                  |                      |
|------------------|----------------------|
| activating pin   | hardened steel       |
| housing material | brass nickel plated  |
| dimension        | 6 mm                 |
| type             | cylindrical threaded |
| housing length   | 36 mm                |
| connection types | cable, 80 cm         |

**ambient conditions**

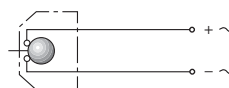
|                       |                |
|-----------------------|----------------|
| operating temperature | -20 ... +75 °C |
| protection class      | IP 50          |

| order reference | activating force |
|-----------------|------------------|
| MY-COM E75/80   | 75 cN            |
| MY-COM E100/80  | 100 cN           |

**dimension drawing**



**connection diagram**



**remarks**

other versions on request



- spherical hard metal tip
- thread M6 x 0,5
- three wire make function (NO)



**general data**

|                         |                              |
|-------------------------|------------------------------|
| repeat accuracy         | < 0,001 mm                   |
| activating force        | 75 cN                        |
| mech. pre-run / overrun | - / 0,8 ... 1,5 mm approx.   |
| measurement type        | contact with medium          |
| direction of approach   | frontal and lateral approach |

**electrical data**

|                             |              |
|-----------------------------|--------------|
| voltage supply range +Vs    | 5 ... 36 VDC |
| load current max. at 24 VDC | 50 mA        |
| load resistance min.        | 480 Ohm      |

**mechanical data**

|                  |                      |
|------------------|----------------------|
| activating pin   | hardened steel       |
| housing material | brass nickel plated  |
| dimension        | 6 mm                 |
| type             | cylindrical threaded |
| housing length   | 47 mm                |
| connection types | cable, 80 cm         |

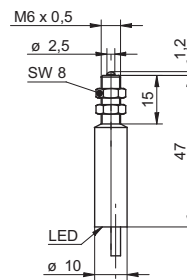
**ambient conditions**

|                       |                |
|-----------------------|----------------|
| operating temperature | -20 ... +75 °C |
| protection class      | IP 50          |

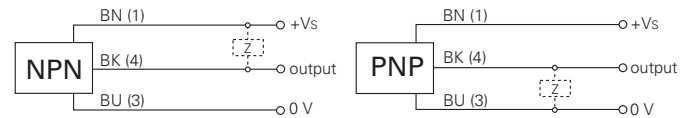
**order reference      output circuit**

|                        |                        |
|------------------------|------------------------|
| <b>MY-COM E75N80/L</b> | NPN make function (NO) |
| <b>MY-COM E75P80/L</b> | PNP make function (NO) |

**dimension drawing**



**connection diagrams**



**remarks**

other versions on request



- long body
- long thread length
- two wire break function (NC)



**general data**

|                         |                     |
|-------------------------|---------------------|
| repeat accuracy         | < 0,001 mm          |
| mech. pre-run / overrun | - / 1,5 mm approx.  |
| measurement type        | contact with medium |
| direction of approach   | frontal             |

**electrical data**

|                         |                                |
|-------------------------|--------------------------------|
| DC voltage max.         | 15 VDC                         |
| switch. current DC max. | 2 mA                           |
| AC voltage max.         | 24 VAC                         |
| switch. current AC max. | 50 mA                          |
| output circuit          | break function (NC) mechanical |

**mechanical data**

|                  |                                  |
|------------------|----------------------------------|
| activating pin   | zirconium oxide ZrO <sub>2</sub> |
| housing material | brass nickel plated              |
| dimension        | 8 mm                             |
| type             | cylindrical threaded             |

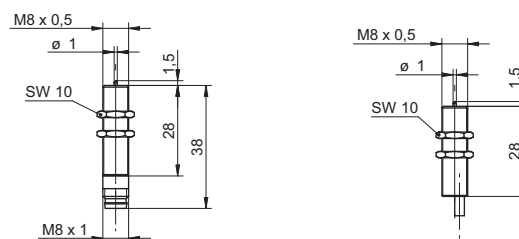
**ambient conditions**

|                       |                |
|-----------------------|----------------|
| operating temperature | -20 ... +75 °C |
| protection class      | IP 50          |

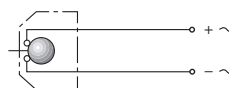
**connectors and mating connectors**

|  |                                    |
|--|------------------------------------|
| ESG 32SH0200                                 | Connector M8, 3 pin, straight, 2 m |
| ESW 31SH0200                                 | Connector M8, 3 pin, angular, 2 m  |
| additional cable connectors: see accessories |                                    |

**dimension drawings**



**connection diagram**



**remarks**

other versions on request

| order reference | activating force | connection types | housing length |
|-----------------|------------------|------------------|----------------|
| MY-COM F30/80   | 30 cN            | cable, 80 cm     | 28 mm          |
| MY-COM F30/S35  | 30 cN            | connector M8     | 38 mm          |
| MY-COM F50/80   | 50 cN            | cable, 80 cm     | 28 mm          |
| MY-COM F50/S35  | 50 cN            | connector M8     | 38 mm          |
| MY-COM F75/80   | 75 cN            | cable, 80 cm     | 28 mm          |
| MY-COM F75/S35  | 75 cN            | connector M8     | 38 mm          |
| MY-COM F100/80  | 100 cN           | cable, 80 cm     | 28 mm          |
| MY-COM F100/S35 | 100 cN           | connector M8     | 38 mm          |





- transistor output NPN / PNP
- long thread length
- three wire make function (NO)

**general data**

|                         |                     |
|-------------------------|---------------------|
| repeat accuracy         | < 0,001 mm          |
| activating force        | 75 cN               |
| mech. pre-run / overrun | - / 1,5 mm approx.  |
| measurement type        | contact with medium |
| direction of approach   | frontal             |

**electrical data**

|                             |              |
|-----------------------------|--------------|
| voltage supply range +Vs    | 5 ... 36 VDC |
| load current max. at 24 VDC | 50 mA        |
| load resistance min.        | 480 Ohm      |

**mechanical data**

|                  |                                  |
|------------------|----------------------------------|
| activating pin   | zirconium oxide ZrO <sub>2</sub> |
| housing material | brass nickel plated              |
| dimension        | 8 mm                             |
| type             | cylindrical threaded             |

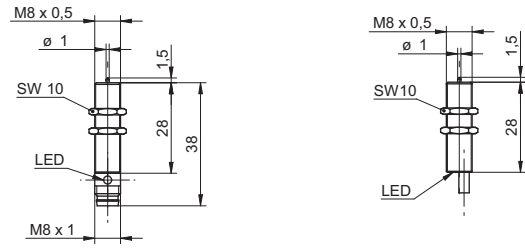
**ambient conditions**

|                       |                |
|-----------------------|----------------|
| operating temperature | -20 ... +75 °C |
| protection class      | IP 50          |

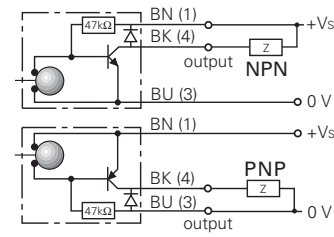
**connectors and mating connectors**

|  |                                    |
|--|------------------------------------|
| ESG 32SH0200                                 | Connector M8, 3 pin, straight, 2 m |
| ESW 31SH0200                                 | Connector M8, 3 pin, angular, 2 m  |
| additional cable connectors: see accessories |                                    |

**dimension drawings**



**connection diagram**



**remarks**

other versions on request

| order reference  | output circuit         | connection types | housing length |
|------------------|------------------------|------------------|----------------|
| MY-COM G75N/S35L | NPN make function (NO) | connector M8     | 38 mm          |
| MY-COM G75N80/L  | NPN make function (NO) | cable, 80 cm     | 28 mm          |
| MY-COM G75P/S35L | PNP make function (NO) | connector M8     | 38 mm          |
| MY-COM G75P80/L  | PNP make function (NO) | cable, 80 cm     | 28 mm          |



- spherical ruby tip
- two wire break function (NC)
- protection class IP 67

### general data

|                         |                     |
|-------------------------|---------------------|
| repeat accuracy         | < 0,001 mm          |
| activating force        | 75 cN               |
| mech. pre-run / overrun | - / 0,6 mm approx.  |
| measurement type        | contact with medium |
| direction of approach   | frontal             |

### electrical data

|                         |                                |
|-------------------------|--------------------------------|
| DC voltage max.         | 15 VDC                         |
| switch. current DC max. | 2 mA                           |
| AC voltage max.         | 24 VAC                         |
| switch. current AC max. | 50 mA                          |
| output circuit          | break function (NC) mechanical |

### mechanical data

|                  |                      |
|------------------|----------------------|
| activating pin   | ruby                 |
| housing material | brass nickel plated  |
| dimension        | 8 mm                 |
| type             | cylindrical threaded |

### ambient conditions

|                       |                |
|-----------------------|----------------|
| operating temperature | -20 ... +75 °C |
| protection class      | IP 67          |

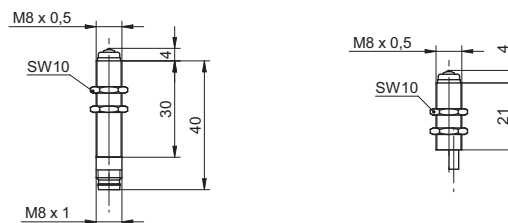
### connectors and mating connectors

|  |                                    |
|--|------------------------------------|
| ESG 32SH0200                                 | Connector M8, 3 pin, straight, 2 m |
| ESW 31SH0200                                 | Connector M8, 3 pin, angular, 2 m  |
| additional cable connectors: see accessories |                                    |

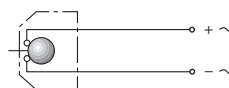
| order reference | connection types | housing length |
|-----------------|------------------|----------------|
| MY-COM H75/80   | cable, 80 cm     | 21 mm          |
| MY-COM H75/S35  | connector M8     | 40 mm          |



### dimension drawings



### connection diagram



### remarks

gasket made of Viton 60° Shore A  
other versions on request



- transistor output NPN / PNP
- three wire make function (NO)
- protection class IP 67

**general data**

|                         |                     |
|-------------------------|---------------------|
| repeat accuracy         | < 0,001 mm          |
| activating force        | 75 cN               |
| mech. pre-run / overrun | - / 0,6 mm approx.  |
| measurement type        | contact with medium |
| direction of approach   | frontal             |

**electrical data**

|                             |              |
|-----------------------------|--------------|
| voltage supply range +Vs    | 5 ... 36 VDC |
| load current max. at 24 VDC | 50 mA        |
| load resistance min.        | 480 Ohm      |

**mechanical data**

|                  |                      |
|------------------|----------------------|
| activating pin   | ruby                 |
| housing material | brass nickel plated  |
| dimension        | 8 mm                 |
| type             | cylindrical threaded |

**ambient conditions**

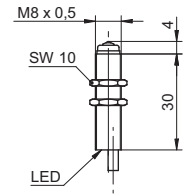
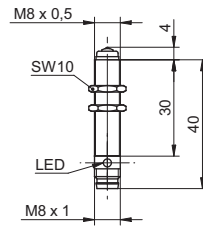
|                       |                |
|-----------------------|----------------|
| operating temperature | -20 ... +75 °C |
| protection class      | IP 67          |

**connectors and mating connectors**

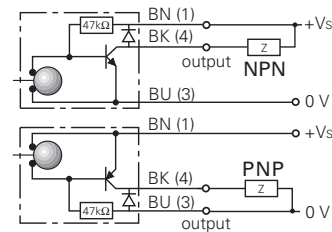
|  |                                    |
|--|------------------------------------|
| ESG 32SH0200                                 | Connector M8, 3 pin, straight, 2 m |
| ESW 31SH0200                                 | Connector M8, 3 pin, angular, 2 m  |
| additional cable connectors: see accessories |                                    |



**dimension drawings**



**connection diagram**



**remarks**

gasket made of Viton 60° Shore A  
other versions on request

| order reference  | output circuit         | connection types | housing length |
|------------------|------------------------|------------------|----------------|
| MY-COM L75N/S35L | NPN make function (NO) | connector M8     | 40 mm          |
| MY-COM L75N80/L  | NPN make function (NO) | cable, 80 cm     | 30 mm          |
| MY-COM L75P/S35L | PNP make function (NO) | connector M8     | 40 mm          |
| MY-COM L75P80/L  | PNP make function (NO) | cable, 80 cm     | 30 mm          |



- silicone gasket
- protection class IP 67
- two wire break function (NC)

### general data

|                         |                     |
|-------------------------|---------------------|
| repeat accuracy         | < 0,001 mm          |
| activating force        | 75 cN               |
| mech. pre-run / overrun | - / 1,5 mm approx.  |
| measurement type        | contact with medium |
| direction of approach   | frontal             |

### electrical data

|                         |                                |
|-------------------------|--------------------------------|
| DC voltage max.         | 15 VDC                         |
| switch. current DC max. | 2 mA                           |
| AC voltage max.         | 24 VAC                         |
| switch. current AC max. | 50 mA                          |
| output circuit          | break function (NC) mechanical |

### mechanical data

|                  |                         |
|------------------|-------------------------|
| activating pin   | zirconium oxide $ZrO_2$ |
| housing material | brass nickel plated     |
| dimension        | 8 mm                    |
| type             | cylindrical threaded    |

### ambient conditions

|                       |                |
|-----------------------|----------------|
| operating temperature | -20 ... +75 °C |
| protection class      | IP 67          |

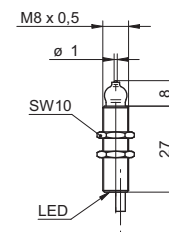
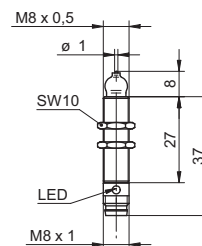
### connectors and mating connectors

|  |                                    |
|--|------------------------------------|
| ESG 32SH0200                                 | Connector M8, 3 pin, straight, 2 m |
| ESW 31SH0200                                 | Connector M8, 3 pin, angular, 2 m  |
| additional cable connectors: see accessories |                                    |

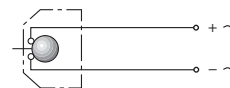
| order reference | connection types | housing length |
|-----------------|------------------|----------------|
| MY-COM M75/80   | cable, 80 cm     | 27 mm          |
| MY-COM M75/S35  | connector M8     | 37 mm          |



### dimension drawings



### connection diagram



### remarks

gasket made of Silicone  
other versions on request



- silicone gasket
- protection class IP 67
- three wire make function (NO)



**general data**

|                         |                     |
|-------------------------|---------------------|
| repeat accuracy         | < 0,001 mm          |
| activating force        | 75 cN               |
| mech. pre-run / overrun | - / 1,5 mm approx.  |
| measurement type        | contact with medium |
| direction of approach   | frontal             |

**electrical data**

|                             |              |
|-----------------------------|--------------|
| voltage supply range +Vs    | 5 ... 36 VDC |
| load current max. at 24 VDC | 50 mA        |
| load resistance min.        | 480 Ohm      |

**mechanical data**

|                  |                                  |
|------------------|----------------------------------|
| activating pin   | zirconium oxide ZrO <sub>2</sub> |
| housing material | brass nickel plated              |
| dimension        | 8 mm                             |
| type             | cylindrical threaded             |

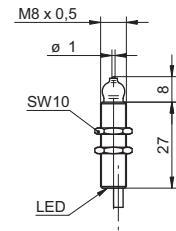
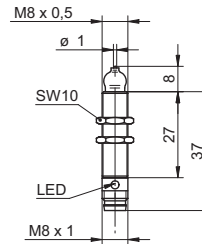
**ambient conditions**

|                       |                |
|-----------------------|----------------|
| operating temperature | -20 ... +75 °C |
| protection class      | IP 67          |

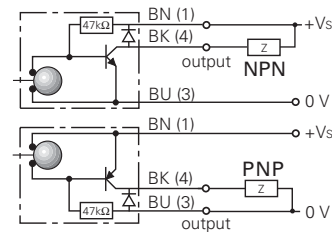
**connectors and mating connectors**

|  |                                    |
|--|------------------------------------|
| ESG 32SH0200                                 | Connector M8, 3 pin, straight, 2 m |
| ESW 31SH0200                                 | Connector M8, 3 pin, angular, 2 m  |
| additional cable connectors: see accessories |                                    |

**dimension drawings**



**connection diagram**



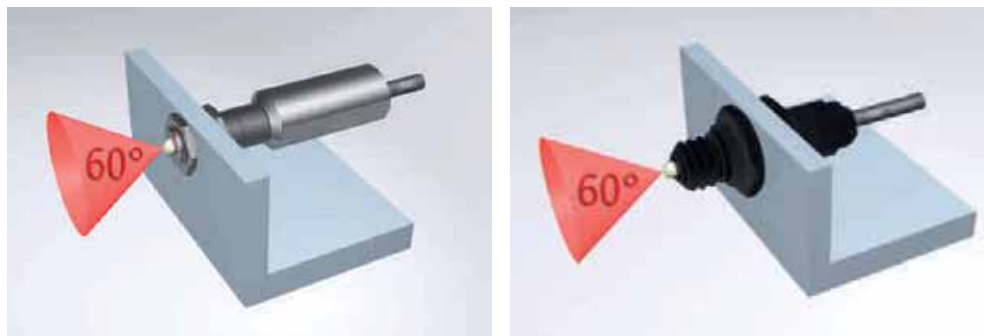
**remarks**

gasket made of Silicone  
other versions on request

| order reference | output circuit         | connection types | housing length |
|-----------------|------------------------|------------------|----------------|
| MY-COM M75N/S35 | NPN make function (NO) | connector M8     | 37 mm          |
| MY-COM M75N80   | NPN make function (NO) | cable, 80 cm     | 27 mm          |
| MY-COM M75P/S35 | PNP make function (NO) | connector M8     | 37 mm          |
| MY-COM M75P80   | PNP make function (NO) | cable, 80 cm     | 27 mm          |

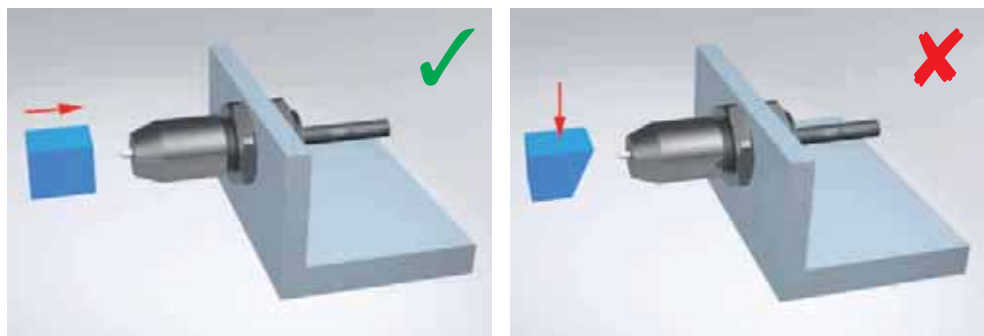


### with hardened steel stylus



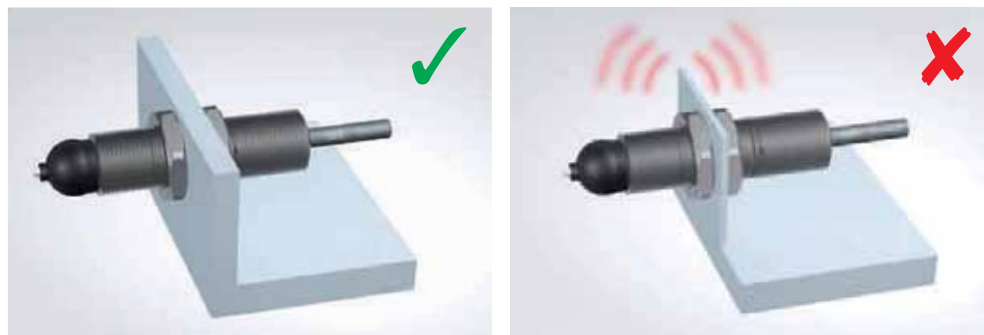
My-Com E and D have spherical hardened steel tips which allow lateral approach of an object, such as a tapered plate.

### with ZrO<sub>2</sub> actuator tip



My-Com A, B, BS, C, F, G and M must be approached axially. Lateral approach will break the stylus.

### vibration-proof attachment



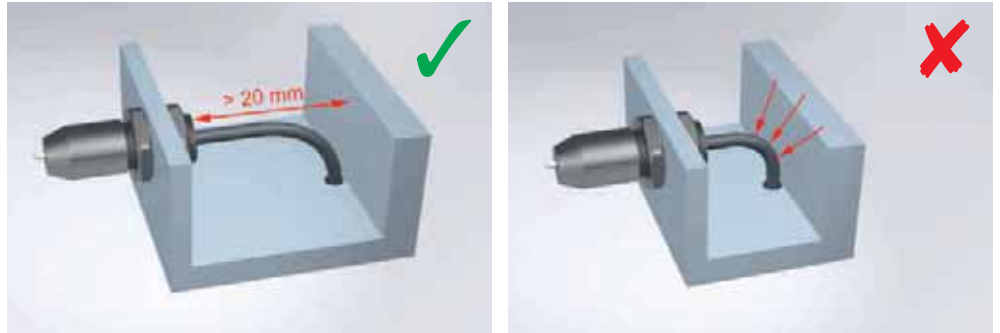
My-Com precision switch must be securely fixed into place. To ensure flawless operation, make sure the support is not subject to vibrations. Strong vibrations and high acceleration might entail switching errors caused by the inertia of the contact ball.



## Mounting guidelines

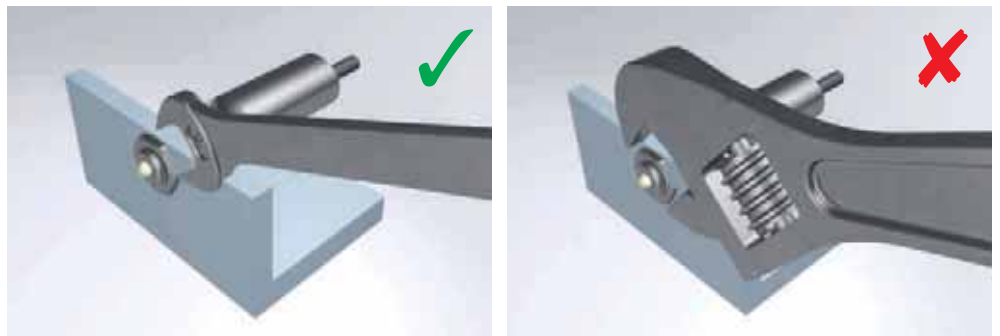


### cable considerations



To avoid cable breakage, the My-Com should be mounted with adequate clearance.

### installation



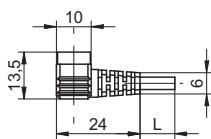
#### Maximum installation torque (not lubricated)

If the published installation torque specifications prove to be insufficient for your application, we recommend using a nut locking liquid to secure the My-Com.

The published specifications for maximum torque must not be exceeded!

|            |        |
|------------|--------|
| My-Com D   | 20 Nm  |
| My-Com E   | 5,5 Nm |
| All others | 3,5 Nm |

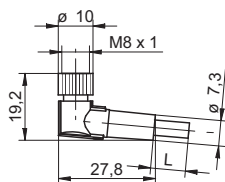
**KSW 30** - Connector Ø 9,5 mm angular, snap-in



| order reference |  |
|-----------------|--|
| KSW 30BV0200    | "snap-in" connector, 2 pin, angular, 2 m |

- Connector unshielded "snap-in"
- 2 pin version
- Cable coating PVC

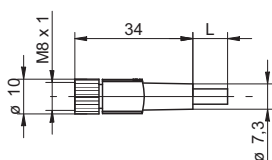
**ESW 31** - Connector M8 angular



| order reference |                                    |
|-----------------|------------------------------------|
| ESW 31SH0200    | Connector M8, 3 pin, angular, 2 m  |
| ESW 31SH0500    | Connector M8, 3 pin, angular, 5 m  |
| ESW 31SH1000    | Connector M8, 3 pin, angular, 10 m |

- Connector unshielded
- 3 pin versions
- Cable coating PUR
- Halogen-free
- Suitable for flexible cable carriers
- UL listed, number E315836

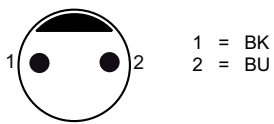
**ESG 32** - Connector M8 straight



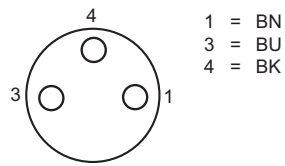
| order reference |                                     |
|-----------------|-------------------------------------|
| ESG 32SH0200    | Connector M8, 3 pin, straight, 2 m  |
| ESG 32SH0500    | Connector M8, 3 pin, straight, 5 m  |
| ESG 32SH1000    | Connector M8, 3 pin, straight, 10 m |

- Connector unshielded
- 3 pin versions
- Cable coating PUR
- Halogen-free
- Suitable for flexible cable carriers
- UL listed, number E315836

**Ø 9,5 2 pin**



**M8 3 pin**



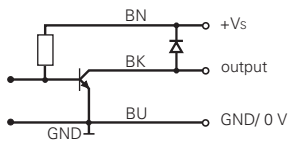
**KSW 30**

**ESG 32S  
ESW 31S**

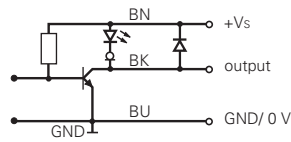
**Connection diagrams for My-Coms´ with 3 wires**

When supply voltage and load voltage are different, My-Com without LED should be used (open collector output).

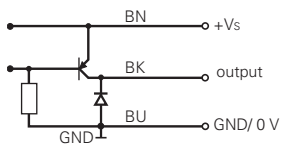
**NPN without LED**



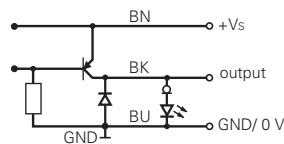
**NPN with LED**



**PNP without LED**

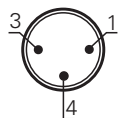


**PNP with LED**



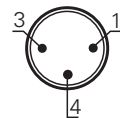
**Pin assignment S35 - view My-Com**

**3-wire make function with transistor output**



- 1 = BN (brown) +Vs
- 3 = BU (blue) 0 V
- 4 = BK (black) Output

**2-wire break function without transistor output**



- 1 = BN (brown) +Vs
- 3 = BU (blue) 0 V
- 4 = BK (black) n.c.



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