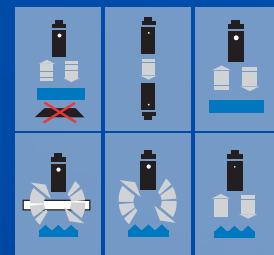




QM series

Miniaturized photoelectric sensors with high performance



High performances
miniaturized

features

- Cubic miniaturized photoelectric high-performance sensors with long sensing distance
- 2 kHz switching frequency, background suppression with mechanical adjustment
- Wide range of models: diffuse reflection with short, medium and long sensing distance, polarized, reflective for transparent objects, through-beam and background suppression
- Available with cable and M8 plug exit or with M8-M12 pig-tail
- Selectable LO/DO output state
- Completely filled with resin (except background suppression models)
- Complete protection against electrical damages

web content



- Application notes
- Photos
- Catalogue / Manuals



code description

QM R 8 / 0 P - 0 A VE 80

| | | |
|----------------------|-----------|--|
| series | QM | Miniaturized cubic photoelectric sensor 13x21x31.2 mm |
| emission | R | RED emission |
| | I | Infrared emission |
| type | B | Direct diffuse with sens. adj. 100 mm |
| | 7 | Direct diffuse with sens. adj. 400 mm |
| | 8 | Direct diffuse with sens. adj. 1,000 mm |
| | 9 | Direct diffuse with sens. adj. 1,500 mm |
| | N | 5 m polarized with sensitive adjustment |
| | C | 7 m reflective with sensitive adjustment |
| | G | 0.05...1.5 m or 0.05...1.0 m for transparent objects with adjustment (R) |
| | L | 0.4...4 m for transparent objects with adjustment |
| | HD | 20 m or 30 m emitter + receiver kit with adjustment (R) |
| | H | Emitter with adjustment |
| | D | 20 m or 30 m receiver without adjustment |
| | S | 30...200 mm or 30...400 mm background suppression (R) |
| | emitter | 0 |
| PNP / NPN output | 0 | Emitter |
| | P | PNP output |
| | N | NPN output |
| housing | 0 | Plastic housing |
| cable / plug output | A | 2 m cable exit |
| | F | M8 4 pin plug cable exit |
| pig tail plug output | | Standard model |
| | VE | M12 pig-tail output ⁽¹⁾ |
| | VF | M8 3 pin pig tail output ⁽¹⁾ |
| cable | VG | M8 4 pin pig tail output ⁽¹⁾ |
| | 80 | 20 cm cable length (pig-tail models) ⁽¹⁾ |
| | | Standard model |

⁽¹⁾ pig-tail models



available models (*)


High performances
miniaturized

| function | distance | emission | adjustment | output type | housing | models | | |
|-------------------------|-----------------|----------|--------------|--------------|-------------|---------------|---------------|------------|
| | | | | | | PNP + NO / NC | NPN + NO / NC | |
| direct diffuse | 100 mm | red | ● | cable | plastic | QMRB/0P-0A | QMRB/0N-0A | |
| | | | | connector M8 | | QMRB/0P-0F | QMRB/0N-0F | |
| | 400 mm | | | IR | | cable | QMR7/0P-0A | QMR7/07-0A |
| | | | | | | connector M8 | QMR7/0P-0F | QMR7/0N-0F |
| | 1.000 mm | red | | cable | | QMI7/0P-0A | QMI7/07-0A | |
| | | | | connector M8 | | QMI7/0P-0F | QMI7/0N-0F | |
| | 1.500 mm | IR | | cable | | QMR8/0P-0A | QMR8/0N-0A | |
| | | | | connector M8 | | QMR8/0P-0F | QMR8/0N-0F | |
| | polarized | 5 m | | red | | cable | QMI9/0P-0A | QMI9/0N-0A |
| | | | | | | connector M8 | QMI9/0P-0F | QMI9/0N-0F |
| | retroreflection | 7 m | | IR | | cable | QMRN/0P-0A | QMRN/0N-0A |
| | | | | | | connector M8 | QMRN/0P-0F | QMRN/0N-0F |
| for transparent objects | 0,05...1,5 m | red | cable | QMIC/0P-0A | QMIC/0N-0A | | | |
| | | | connector M8 | QMIC/0P-0F | QMIC/0N-0F | | | |
| | 0,05...1,0 m | IR | cable | QMRG/0P-0A | QMRG/0N-0A | | | |
| | | | connector M8 | QMRG/0P-0F | QMRG/0N-0F | | | |
| | 0,4...4 m | | cable | QMIG/0P-0A | QMIG/0N-0A | | | |
| | | | connector M8 | QMIG/0P-0F | QMIG/0N-0F | | | |
| emitter | 20 m | red | cable | QMRL/0P-0A | QMRL/0N-0A | | | |
| | | | connector M8 | QMRL/0P-0F | QMRL/0N-0F | | | |
| receiver | 20 m | | cable | QMRH/00-0A | | | | |
| | | | connector M8 | QMRH/00-0A | | | | |
| emitter + receiver | 20 m | | cable | QMRD/0P-0A | QMRD/0N-0A | | | |
| | | | connector M8 | QMRD/0P-0F | QMRD/0N-0F | | | |
| emitter | 30 m | IR | cable | QMRHD/0P-0A | QMRHD/0N-0A | | | |
| | | | connector M8 | QMRHD/0P-0F | QMRHD/0N-0F | | | |
| receiver | 30 m | | cable | QMIH/00-0A | | | | |
| | | | connector M8 | QMIH/00-0F | | | | |
| emitter + receiver | 30 m | | cable | QMID/0P-0A | QMID/0N-0A | | | |
| | | | connector M8 | QMID/0P-0F | QMID/0N-0F | | | |
| background suppression | 30 - 200 mm | red | cable | QMIHD/0P-0A | QMIHD/0N-0A | | | |
| | | | connector M8 | QMIHD/0P-0F | QMIHD/0N-0F | | | |
| background suppression | 30 - 400 mm | IR | cable | QMRS/0P-0A | QMRS/0N-0A | | | |
| | | | connector M8 | QMRS/0P-0F | QMRS/0N-0F | | | |
| | | | cable | QMIS/0P-0A | QMIS/0N-0A | | | |
| | | | connector M8 | QMIS/0P-0F | QMIS/0N-0F | | | |

(*) pig tail available models:
 QM**/0*-0AVE80 (pig-tail M12)
 QM**/0*-0AVF80 (pig-tail M8, 3 wires)
 QM**/0*-0AVG80 (pig-tail M8, 4 wires)

technical specification

direct diffuse models

| | QMRB/0*-0* | QMR7/0*-0* | QMR8/0*-0* | QMI7/0*-0* | QMI9/0*-0* |
|-----------------------------|---|-----------------------|-------------------------|-----------------------|-------------------------|
| |  | | | | |
| nominal sensing distance | 100 mm ⁽¹⁾ | 400 mm ⁽¹⁾ | 1,000 mm ⁽²⁾ | 400 mm ⁽¹⁾ | 1,500 mm ⁽²⁾ |
| minimum sensing distance | 5 mm | - | | | |
| sensibility adjustment | ● | | | | |
| emission | red (660 nm) | | | infrared (850 nm) | |
| hysteresis | ≤ 10 % | | | | |
| repeatability | 5 % | | | | |
| rotary switch | ● | | | | |
| operating voltage | 10...30 Vdc | | | | |
| power on delay | ≤ 100 ms | | | | |
| ripple | ≤ 10 % | | | | |
| no-load supply current | ≤ 30 mA | | | ≤ 45 mA | |
| load current | ≤ 100 mA | | | | |
| supply current | ≤ 10 μA | | | | |
| output voltage drop | 2 V max. @ 100 mA | | | | |
| maximum load current | ≤ 100 mA | | | | |
| output type | PNP or NPN NO or NC | | | | |
| switching frequency | 1 kHz | 2 kHz | 1 kHz | 2 kHz | 1 kHz |
| power on delay | ≤ 100 ms | | | | |
| power supply protections | polarity reversal, over voltage pulses | | | | |
| output protection | short circuit (auto reset), over voltage pulses | | | | |
| operating temperature range | - 25°C...+ 70°C (without freeze) | | | | |
| temperature range | - 30°C...+ 80°C | | | | |
| temperature drift | 10% | | | | |
| protection degree | IP67 (EN60529) ⁽³⁾ | | | | |
| EMC | in conformity with the EMC Directive according to EN 60947-5-2 | | | | |
| external light interference | 3.000 lux (incandescence lamp), 10.000 lux (sunlight) | | | | |
| LEDs | yellow (LO/DO output state) green (excess gain) | | | | |
| housing material | PA66 | | | | |
| optic material | PMMA | | | | |
| tightening torque | 1 Nm ⁽⁴⁾ | | | | |
| weight (approximate) | 10 g connector / 52 g cable | | | | |

⁽¹⁾ White target Kodak 90% 200 x 200 mm ⁽²⁾ White target Kodak 90% 400 x 400 mm ⁽³⁾ Protection guaranteed only with plug cable well mounted ⁽⁴⁾ Screws, nuts and mounting brackets are not included with the sensor (accessories)



technical specification

background suppression models

High performances
miniaturized

| | QMRS/0*-0* | QMIS/0*-0* |
|-----------------------------|--|----------------------------|
| | | |
| nominal sensing distance | 30...200 mm ⁽¹⁾ | 30...400 mm ⁽¹⁾ |
| minimum sensing distance | 5 mm | |
| sensitivity adjustment | ● | |
| emission | red (630 nm) | infrared (850 nm) |
| hysteresis | ≤ 10 % | |
| repeatability | 5 % | |
| rotary switch | ● | |
| operating voltage | 10...30 Vdc | |
| power on delay | ≤ 10 ms | |
| ripple | ≤ 10 % | |
| no-load supply current | ≤ 30 mA | ≤ 45 mA |
| load current | ≤ 100 mA | |
| supply current | ≤ 10 μA | |
| output voltage drop | 2 V max. @ 100 mA | |
| maximum load current | ≤ 100 mA | |
| output type | PNP or NPN NO or NC | |
| switching frequency | 1 kHz | |
| power on delay | ≤ 100 ms | |
| power supply protections | polarity reversal, over voltage pulses | |
| output protection | short circuit (auto reset), over voltage pulses | |
| operating temperature range | - 25°C...+ 70°C (without freeze) | |
| temperature range | - 30°C...+ 80°C | |
| temperature drift | 10% | |
| protection degree | IP67 (EN60529) ⁽²⁾ | |
| EMC | in conformity with the EMC Directive according to EN 60947-5-2 | |
| external light interference | 3,000 lux (incandescent lamp), 10,000 lux (sunlight) | |
| LEDs | yellow (output state LO/DO) | |
| housing material | PA66 | |
| optic material | PMMA | |
| tightening torque | 1 Nm ⁽³⁾ | |
| weight (approximate) | 10 g connector / 52 g cable | |

⁽¹⁾ White target Kodak 90% 200 x 200 mm ⁽²⁾ White target Kodak 90% 400 x 400 mm ⁽³⁾ Protection guaranteed only with plug cable well mounted ⁽⁴⁾ Screws, nuts and mounting brackets are not included with the sensor (accessories)



| | QMRG/0*-0* | QMIG/0*-0* | QMRL/0*-0* |
|-----------------------------|--|-------------------|--------------|
| | | | |
| nominal sensing distance | 1.5 m | 1 m | 4 m |
| minimum sensing distance | 0.05 m | | 0.4 m |
| sensitivity adjustment | ● | | |
| emission | red (630 nm) | infrared (850 nm) | red (630 nm) |
| hysteresis | ≤ 10 % | | |
| repeatability | 5 % | | |
| rotary switch | ● | | |
| operating voltage | 10...30 Vdc | | |
| power on delay | ≤ 100 ms | | |
| ripple | ≤ 10 % | | |
| no-load supply current | ≤ 30 mA | ≤ 45 mA | ≤ 30 mA |
| load current | ≤ 100 mA | | |
| supply current | ≤ 10 μA | | |
| output voltage drop | 2 V max. @ 100 mA | | |
| maximum load current | ≤ 100 mA | | |
| output type | PNP or NPN NO or NC | | |
| switching frequency | 2 kHz | | |
| power on delay | ≤ 100 ms | | |
| power supply protections | polarity reversal, over voltage pulses | | |
| output protection | short circuit (auto reset), over voltage pulses | | |
| operating temperature range | - 25°C...+ 70°C (without freeze) | | |
| temperature range | - 30°C...+ 80°C | | |
| temperature drift | ≤ 10% | | |
| protection degree | IP67 (EN60529) ⁽¹⁾ | | |
| EMC | in conformity with the EMC Directive according to EN 60947-5-2 | | |
| external light interference | 3,000 lux (incandescent lamp), 10,000 lux (sunlight) | | |
| LEDs | yellow (output state LO/DO) | | |
| housing material | PA66 | | |
| optic material | PMMA | | |
| tightening torque | 1 Nm ⁽²⁾ | | |
| weight (approximate) | 10 g connector / 52 g cable | | |

⁽¹⁾ Protection guaranteed only with plug cable well mounted ⁽²⁾ Screws, nuts and mounting brackets are not included with the sensor (accessories)



technical specification

polarized models

technical specification

retroreflection models


High performances
miniaturized

| | QMRN/0*-0* |
|-----------------------------|--|
| | |
| nominal sensing distance | 5 m ⁽¹⁾ |
| minimum sensing distance | 5 mm |
| sensibility adjustment | ● |
| emission | red (630 nm) |
| hysteresis | ≤ 10 % |
| repeatability | 5 % |
| rotary switch | ● |
| operating voltage | 10...30 Vdc |
| power on delay | ≤ 100 ms |
| ripple | ≤ 10 % |
| no-load supply current | - |
| load current | ≤ 100 mA |
| supply current | ≤ 10 μA |
| output voltage drop | 2 V max. @ 100 mA |
| maximum load current | ≤ 100 mA |
| output type | PNP or NPN NO or NC |
| switching frequency | 2 kHz |
| power on delay | ≤ 100 ms |
| power supply protections | polarity reversal, over voltage pulses |
| output protection | short circuit (auto reset), over voltage pulses |
| operating temperature range | - 25°C...+ 70°C (without freeze) |
| temperature range | - 30°C...+ 80°C |
| temperature drift | ≤ 10 % |
| protection degree | IP67 (EN60529) ⁽²⁾ |
| EMC | in conformity with the EMC Directive according to EN 60947-5-2 |
| external light interference | 3.000 lux (incandescent lamp), 10.000 lux (sunlight) |
| LEDs | yellow (output state LO/DO) green (excess gain) |
| housing material | PA66 |
| optic material | PMMA |
| tightening torque | 1 Nm ⁽³⁾ |
| weight (approximate) | 10 g connector / 52 g cable |

| | QMIC/0*-0* |
|-----------------------------|--|
| | |
| nominal sensing distance | 7 m ⁽¹⁾ |
| minimum sensing distance | 0,02 m @ RL 110 |
| sensibility adjustment | ● |
| emission | infrared (850 nm) |
| hysteresis | ≤ 10 % |
| repeatability | 5 % |
| rotary switch | ● |
| operating voltage | 10...30 Vdc |
| power on delay | ≤ 100 ms |
| ripple | ≤ 10 % |
| no-load supply current | ≤ 45 mA |
| load current | ≤ 100 mA |
| supply current | ≤ 10 μA |
| output voltage drop | 2 V max. @ 100 mA |
| maximum load current | ≤ 100 mA |
| output type | PNP or NPN NO or NC |
| switching frequency | 2 kHz |
| power on delay | ≤ 100 ms |
| power supply protections | polarity reversal, over voltage pulses |
| output protection | short circuit (auto reset), over voltage pulses |
| operating temperature range | - 25°C...+ 70°C (without freeze) |
| temperature range | - 30°C...+ 80°C |
| temperature drift | ≤ 10 % |
| protection degree | IP67 (EN60529) ⁽²⁾ |
| EMC | in conformity with the EMC Directive according to EN 60947-5-2 |
| external light interference | 3.000 lux (incandescent lamp), 10.000 lux (sunlight) |
| LEDs | yellow (output state LO/DO) green (excess gain) |
| housing material | PA66 |
| optic material | PMMA |
| tightening torque | 1 Nm ⁽³⁾ |
| weight (approximate) | 10 g connector / 52 g cable |

⁽¹⁾ With RL 110 reflector EG = 2; ⁽²⁾ protection guaranteed only with plug cable well mounted; ⁽³⁾ screws, nuts and mounting brackets are not included with the sensor (accessories).

⁽¹⁾ With RL 110 reflector EG = 2; ⁽²⁾ protection guaranteed only with plug cable well mounted; ⁽³⁾ screws, nuts and mounting brackets are not included with the sensor (accessories).

| | QMRH/0*-0* | QMRD/0*-0* | QMIH/0*-0* | QMID/0*-0* |
|-----------------------------|--|---|---------------------|---|
| |  | | | |
| nominal sensing distance | 20 m ⁽¹⁾ | | 30 m ⁽¹⁾ | |
| minimum sensing distance | - | | | |
| sensitivity adjustment | ● | | | |
| emission | red (630 nm) | - | infrared (850 nm) | - |
| hysteresis | ≤ 10 % | | | |
| repeatability | 5 % | | | |
| rotary switch | - | ● | - | ● |
| operating voltage | 10...30 Vdc | | | |
| power on delay | ≤ 100 ms | | | |
| ripple | ≤ 10 % | | | |
| no-load supply current | ≤ 30 mA | | ≤ 45 mA | |
| load current | - | ≤ 100 mA | - | ≤ 100 mA |
| supply current | - | ≤ 10 μA | - | ≤ 10 μA |
| output voltage drop | - | 2 V max. @ 100 mA | - | 2 V max. @ 100 mA |
| maximum load current | - | ≤ 100 mA | - | ≤ 100 mA |
| output type | - | PNP or NPN NO or NC | - | PNP or NPN NO or NC |
| switching frequency | 2 kHz | - | 2 kHz | - |
| power on delay | ≤ 100 ms | | | |
| power supply protections | - | polarity reversal, over voltage pulses | - | polarity reversal, over voltage pulses |
| output protection | - | polarity reversal, over voltage pulses | - | polarity reversal, over voltage pulses |
| operating temperature range | - 25°C...+ 70°C (without freeze) | | | |
| temperature range | - 30°C...+ 80°C | | | |
| temperature drift | ≤ 10 % | | | |
| protection degree | IP67 (EN60529) ⁽²⁾ | | | |
| EMC | in conformity with the EMC Directive according to EN 60947-5-2 | | | |
| external light interference | 3,000 lux (incandescent lamp), 10,000 lux (sunlight) | | | |
| LEDs | yellow (output state LO/DO), 10,000 lux (sunlight) | | | |
| housing material | PA66 | | | |
| optic material | PMMA | | | |
| tightening torque | 1 Nm ⁽³⁾ | | | |
| weight (approximate) | 10 g connector / 52 g cable | | | |

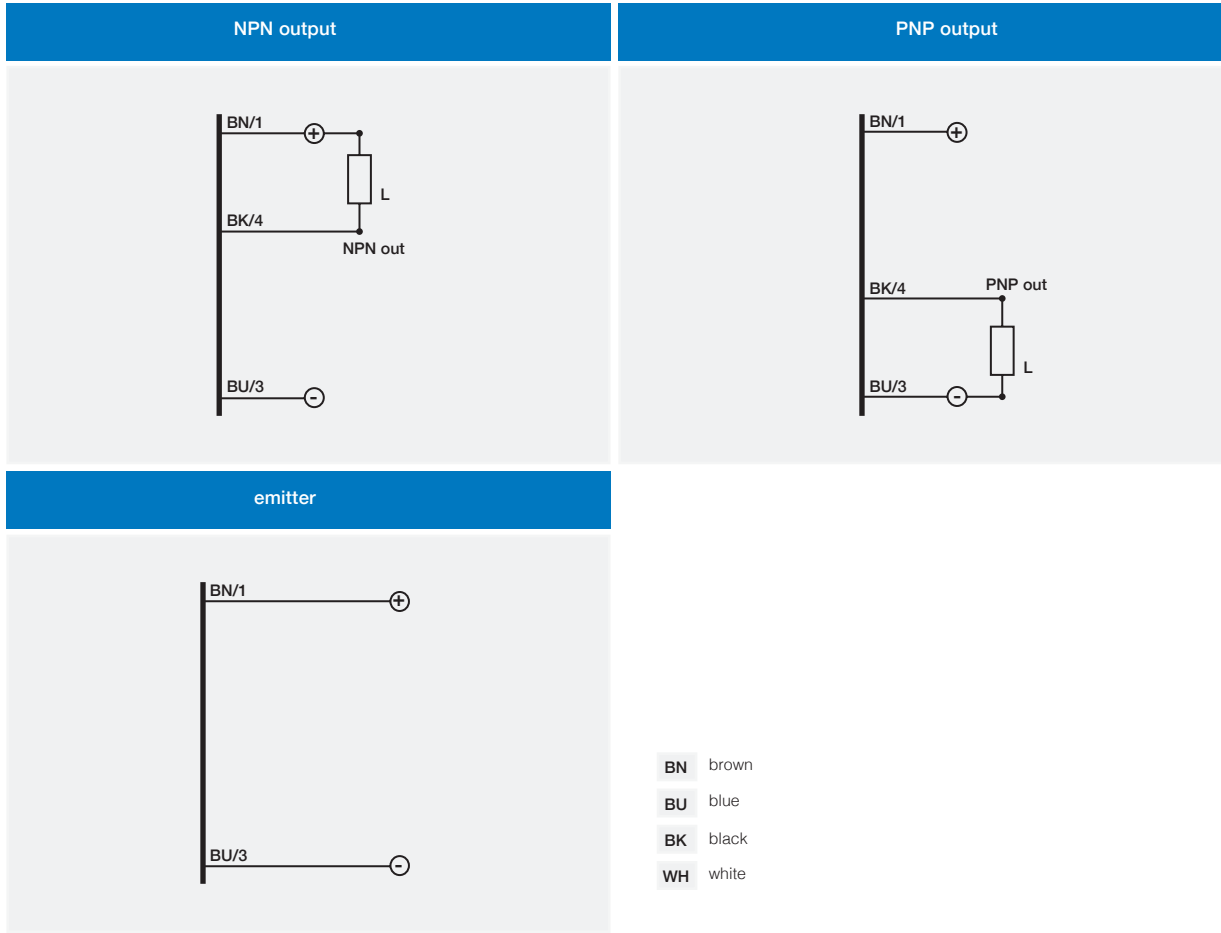
⁽¹⁾ White target Kodak 90% 200 x 200 mm ⁽²⁾ Protection guaranteed only with plug cable well mounted ⁽³⁾ Screws, nuts and mounting brackets are not included with the sensor (accessories)



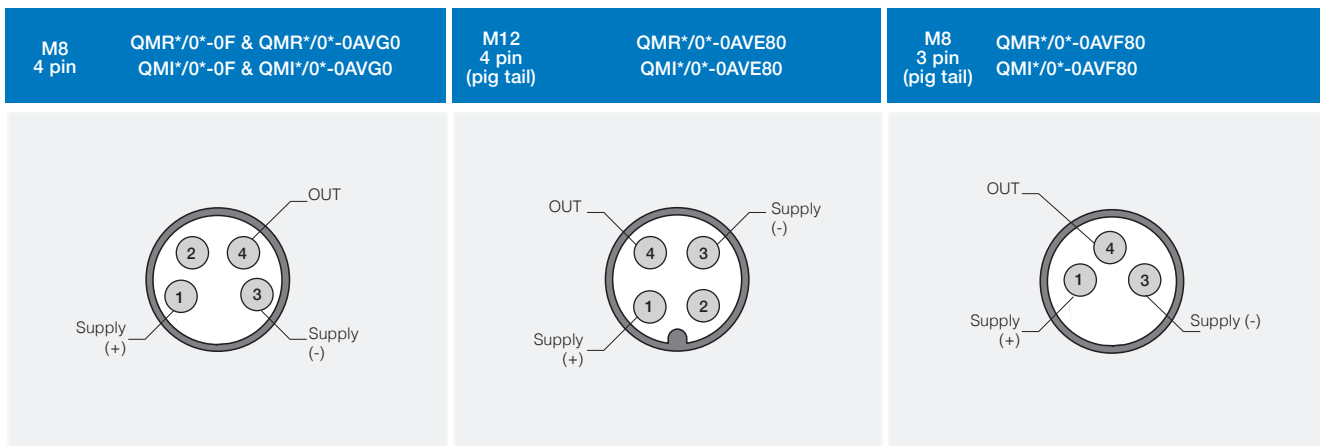
response diagrams

LO/DO selectable output

High performances
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plug



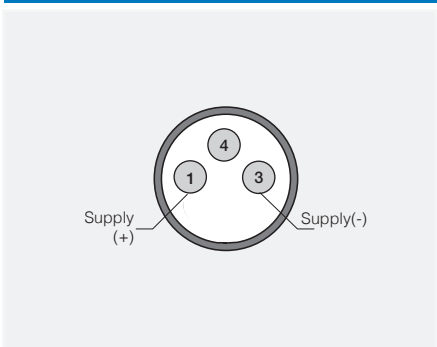
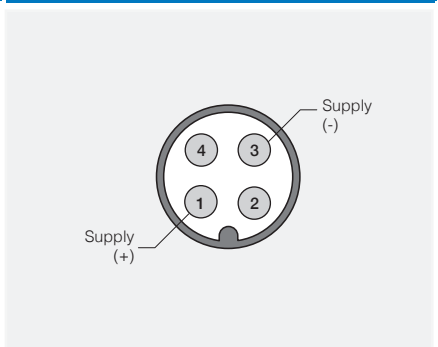
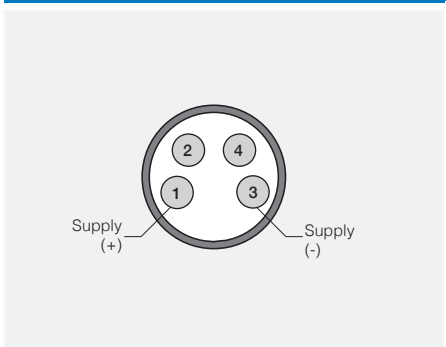
QM



M8
4 pin
QM*H/00-0F & QM*H/00-0AVG80

M12
4 pin
(pig tail)
QM*H/0*-0AVE80

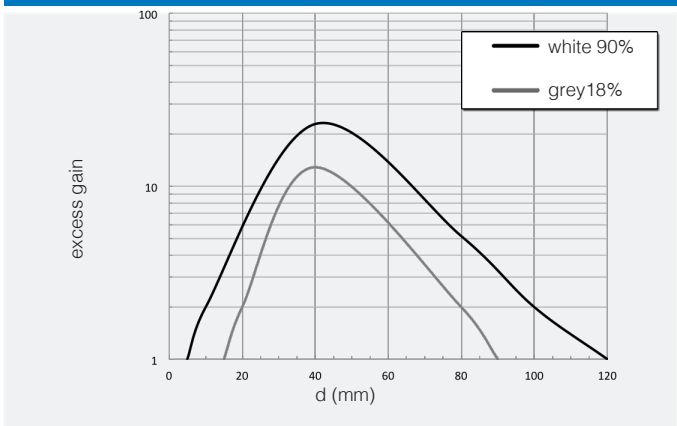
M8
3 pin
(pig tail)
QM*H/0*-0AVF80



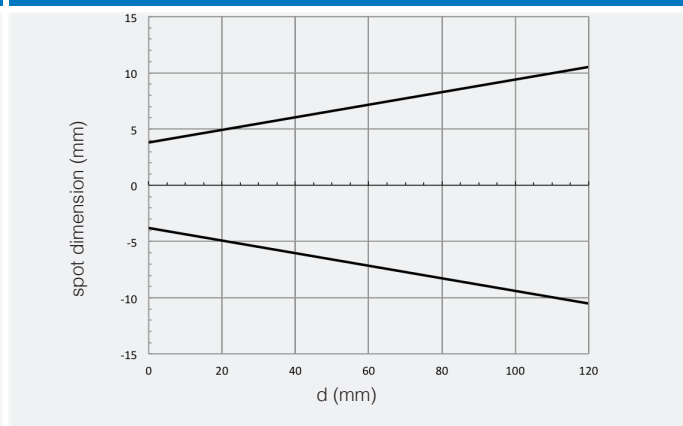
response diagrams

direct diffuse models

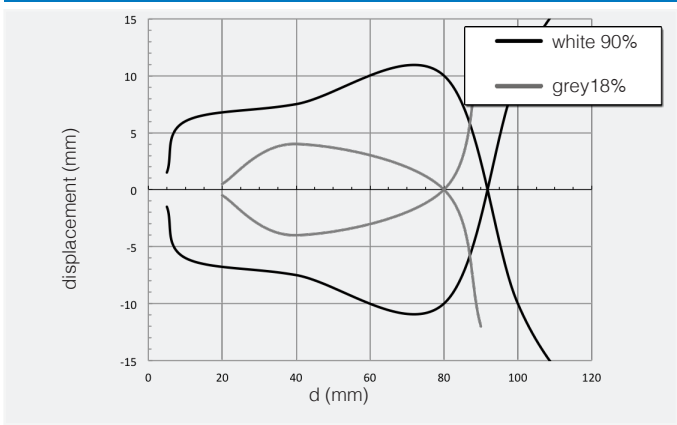
QMRB/**-* excess gain



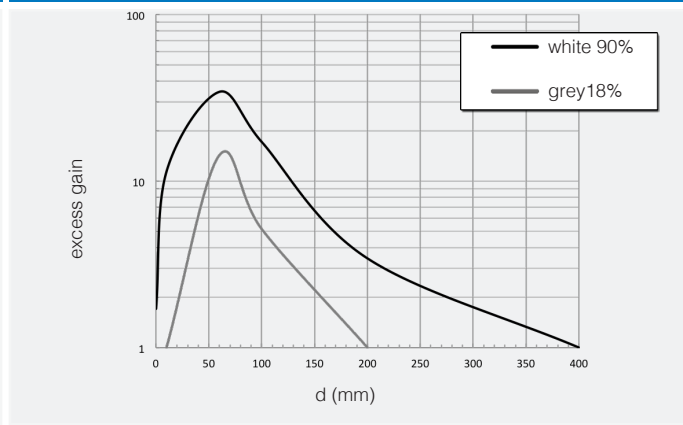
QMRB/**-* spot dimension



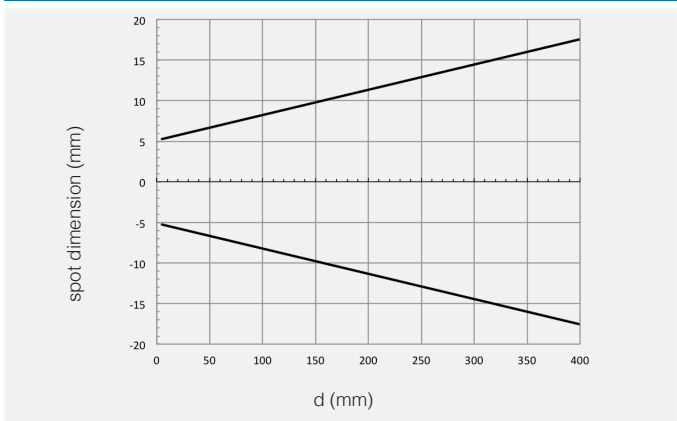
QMRB/**-* parallel displacement



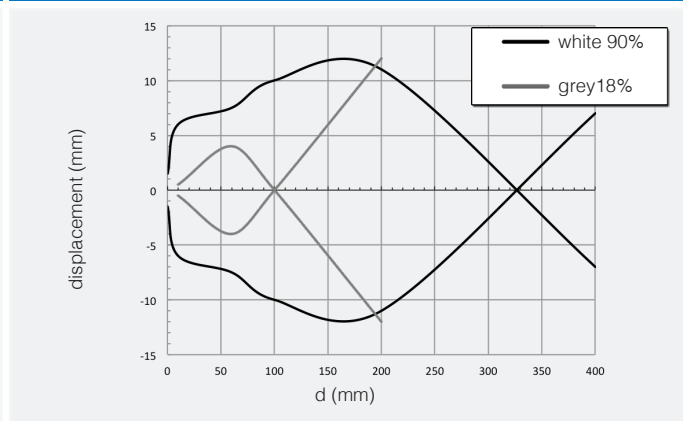
QMR7/**-* excess gain



QMR7/**-* spot dimension



QMR7/**-* parallel displacement



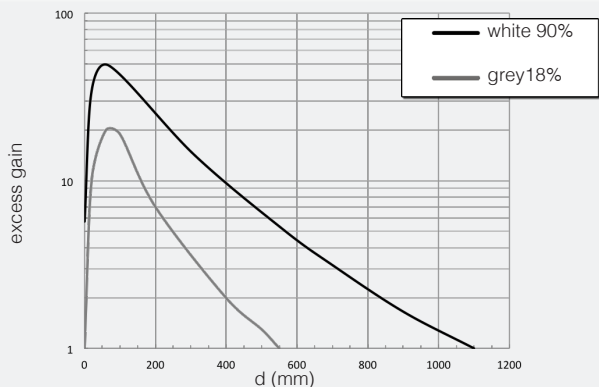


response diagrams

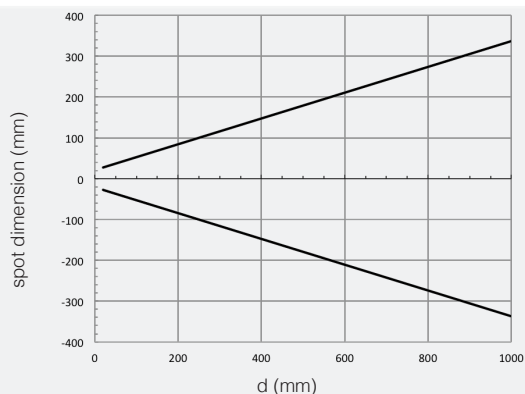
direct diffuse models

High performances
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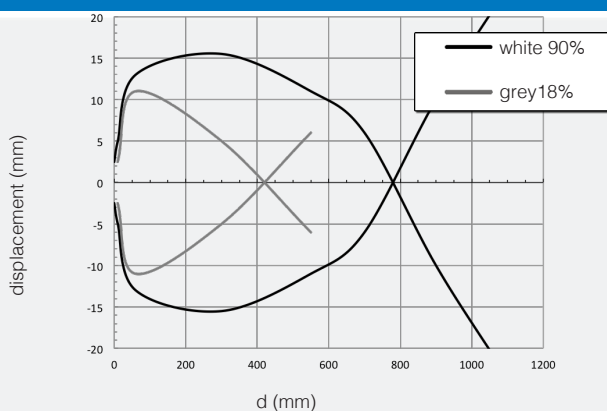
QMR8/**-* excess gain



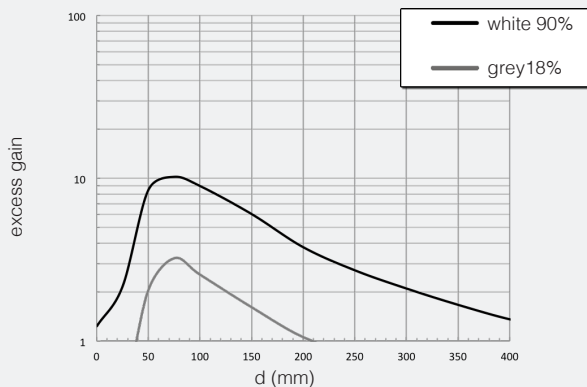
QMR8/**-* spot dimension



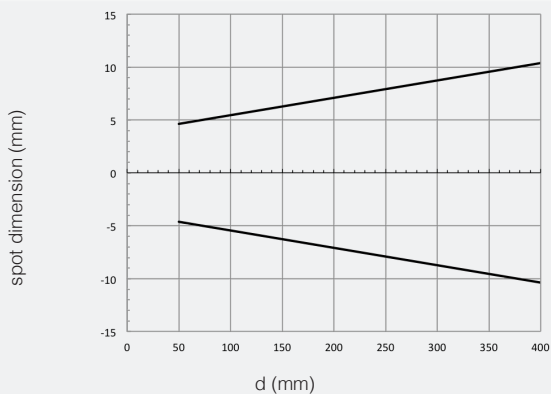
QMR8/**-* parallel displacement



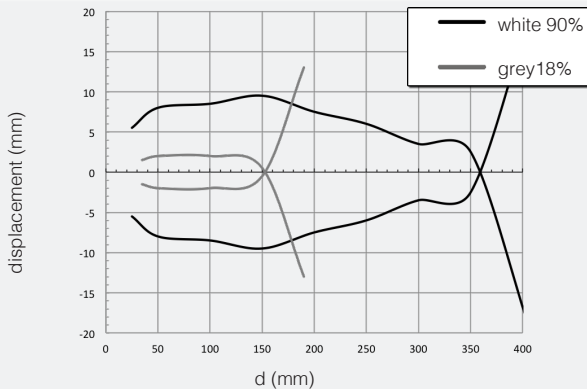
QMI7/**-* excess gain



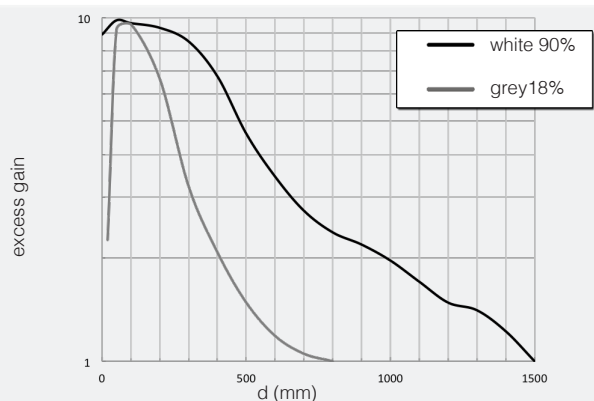
QMI7/**-* spot dimension



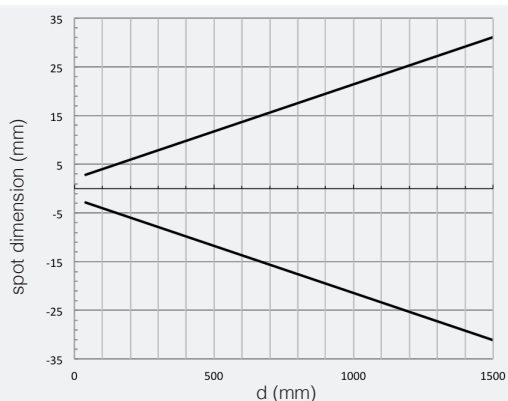
QMI7/**-* parallel displacement

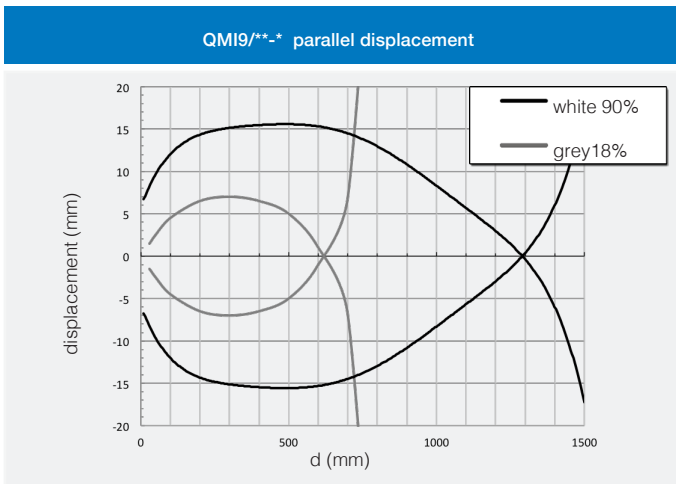


QMI9/**-* excess gain



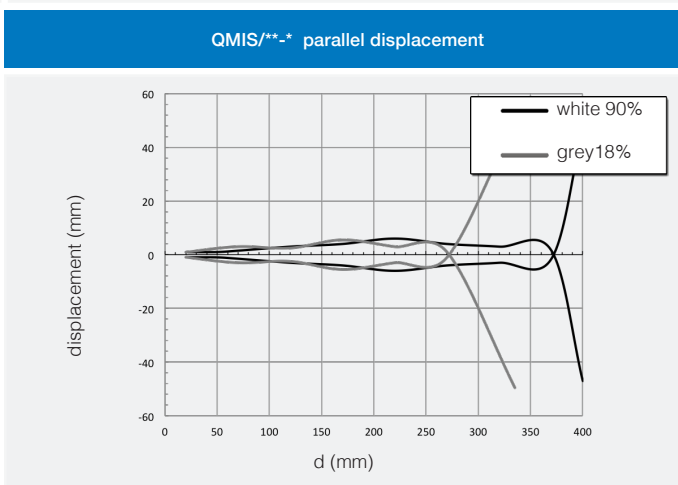
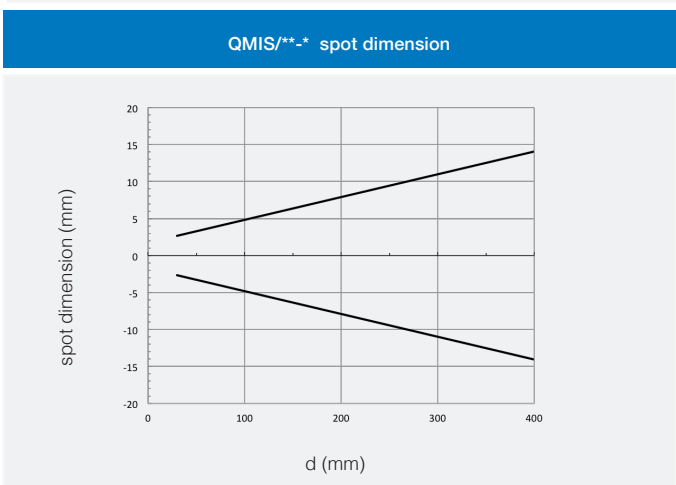
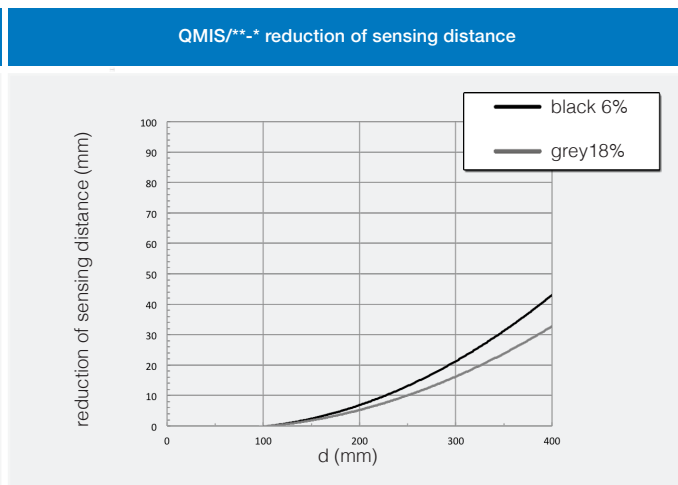
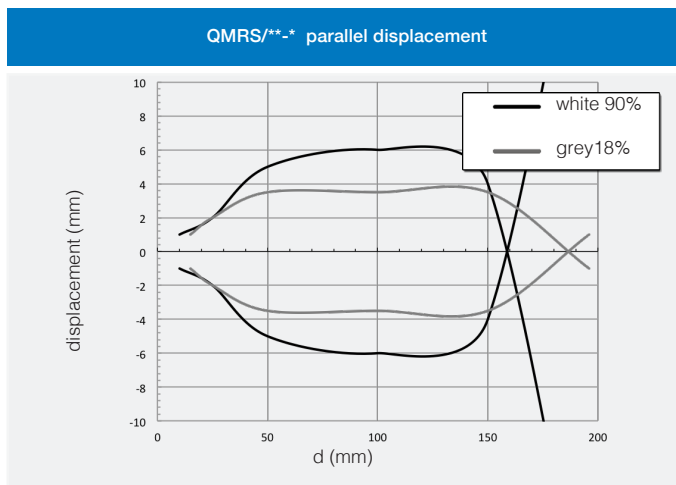
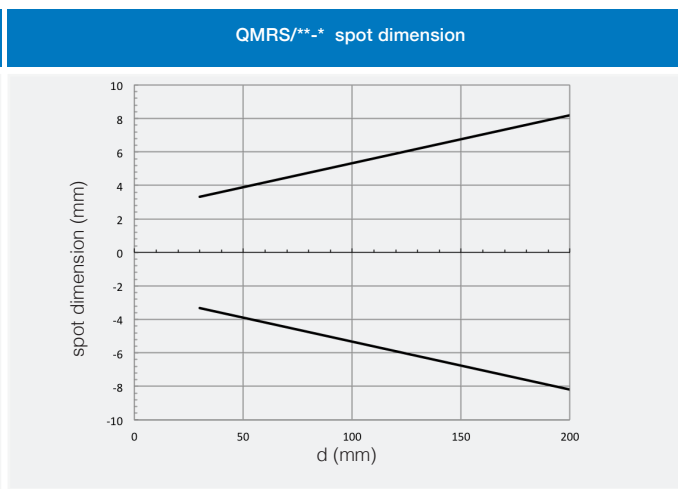
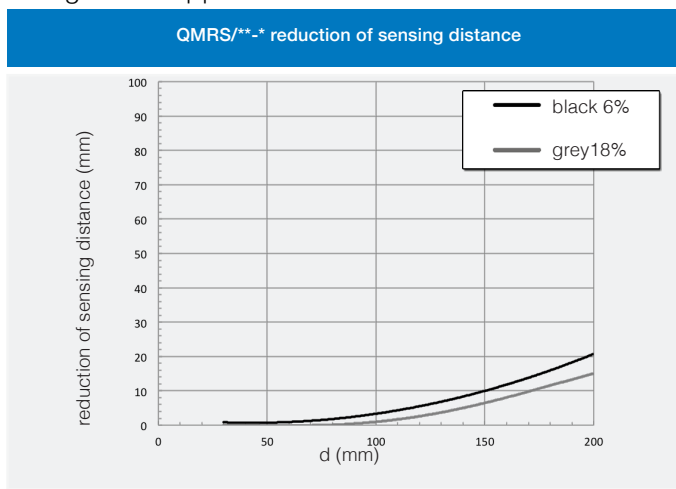
QMI9/**-* spot dimension





response diagrams

background suppression models



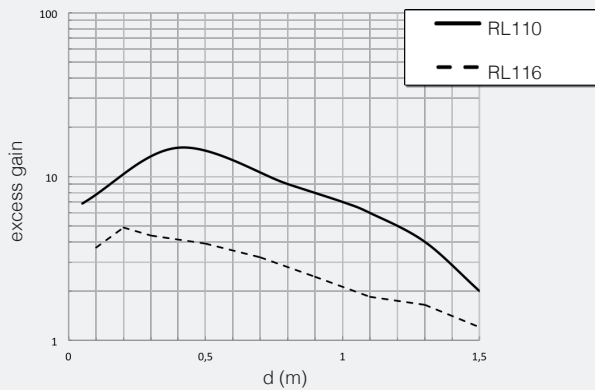


response diagrams

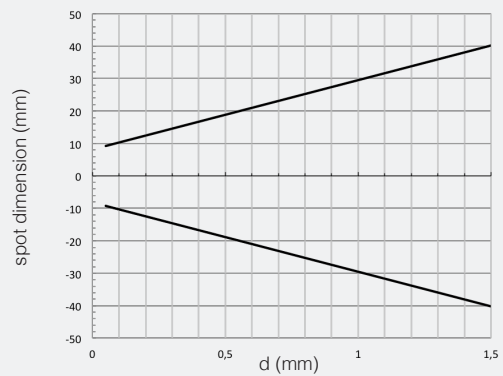
models for transparent objects

High performances
miniaturized

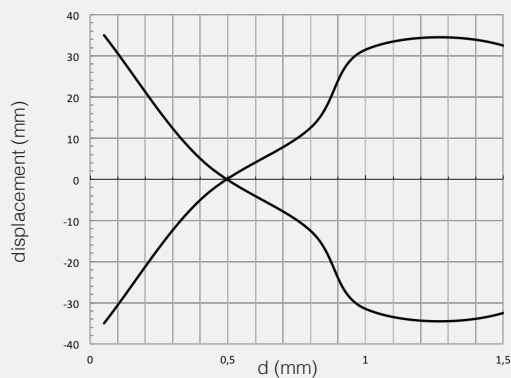
QMRG/**-* excess gain



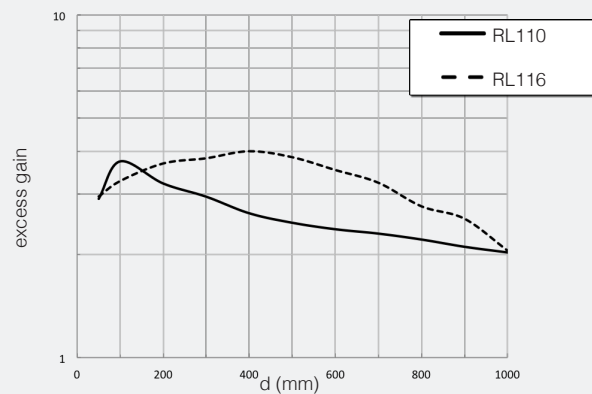
QMRG/**-* spot dimension



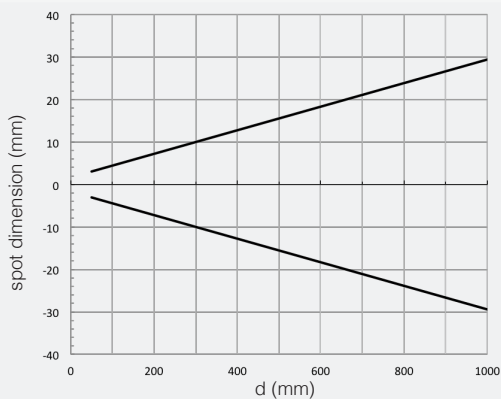
QMRG/**-* parallel displacement



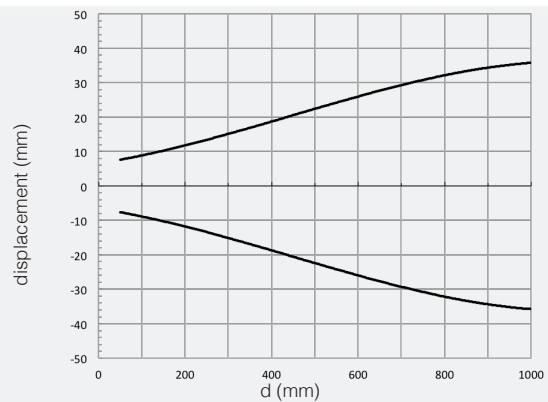
QMIG/**-* excess gain



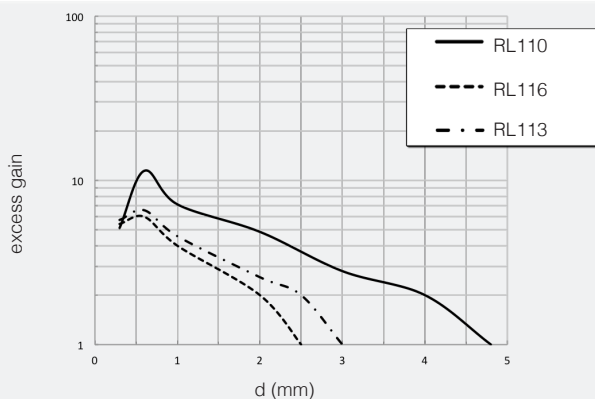
QMIG/**-* spot dimension



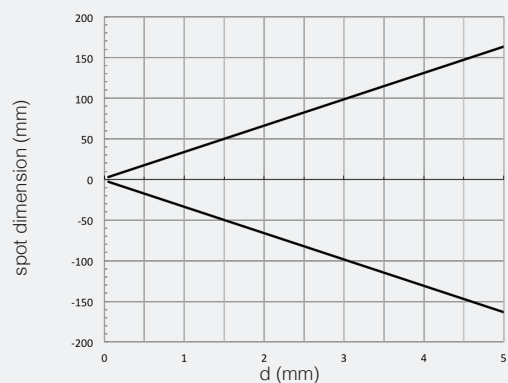
QMIG/**-* parallel displacement



QMRL/**-* excess gain



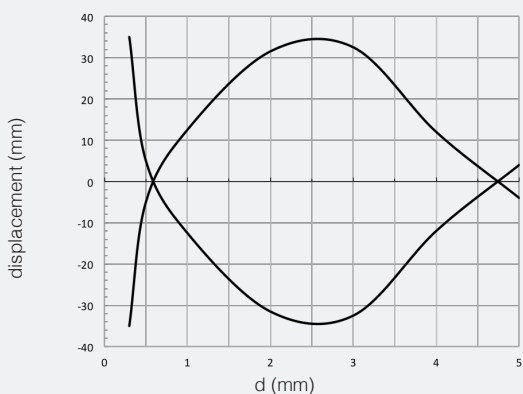
QMRL/**-* spot dimension



QM



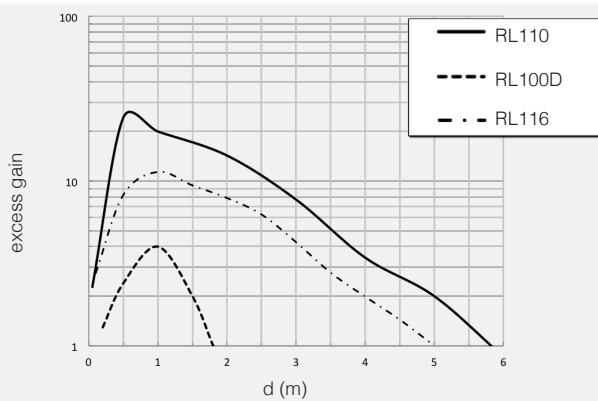
QMRL/**-*parallel displacement



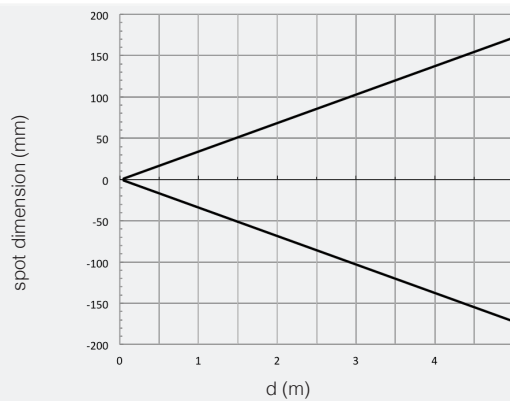
response diagrams

retroreflective polarized models

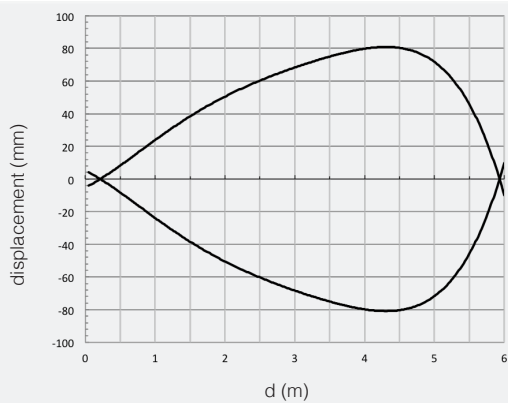
QMRN/**-* excess gain



QMRN/**-* spot dimension



QMRN/**-*parallel displacement



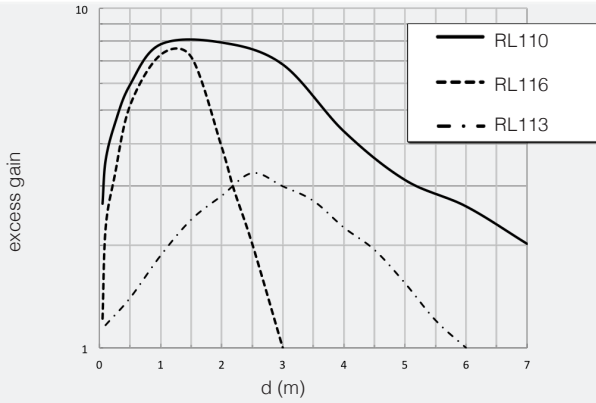


response diagramss

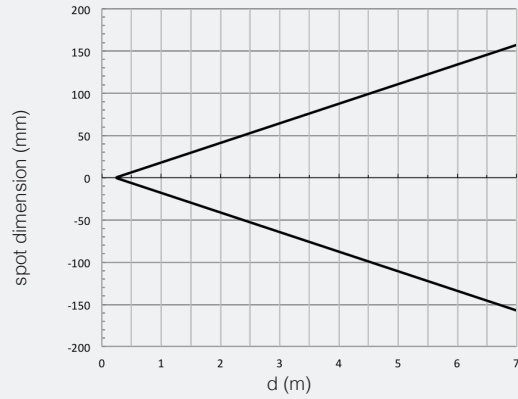
retro-reflective models

High performances
miniaturized

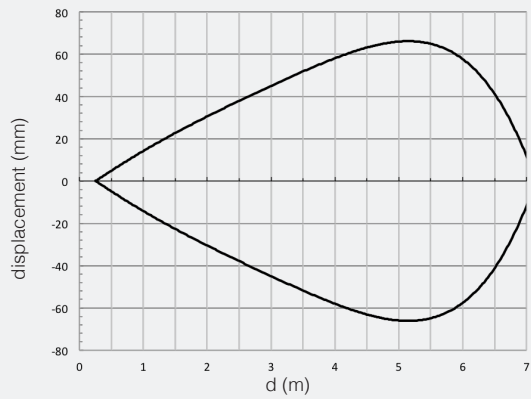
QMIC/**-⁺ excess gain



QMIC/**-⁺ spot dimension



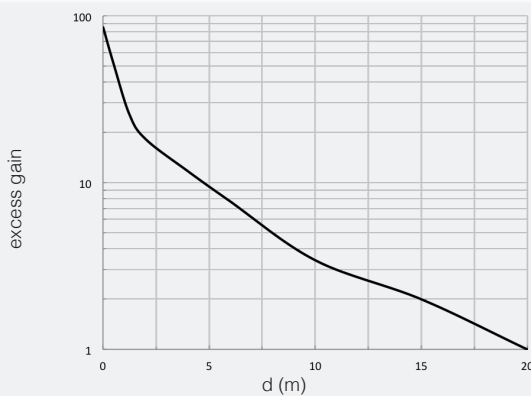
QMIC/**-⁺ parallel displacement



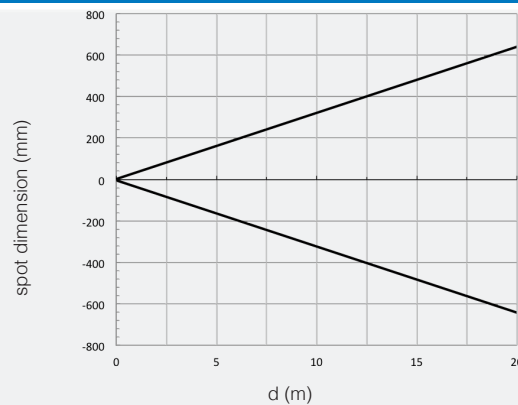
response diagramss

through beam models

QMRHD/**-⁺ excess gain

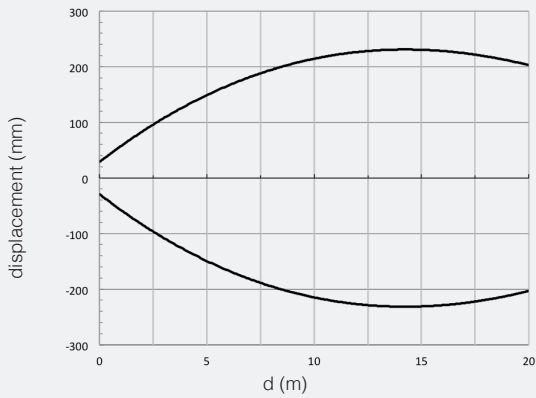


QMRHD/**-⁺ spot dimension

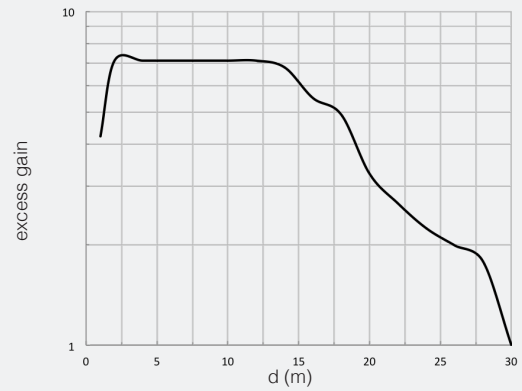




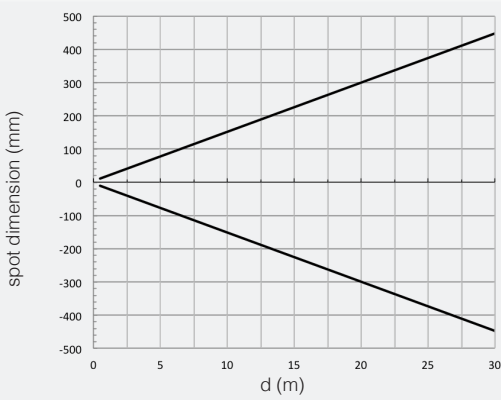
QMRHD/**-*parallel displacement



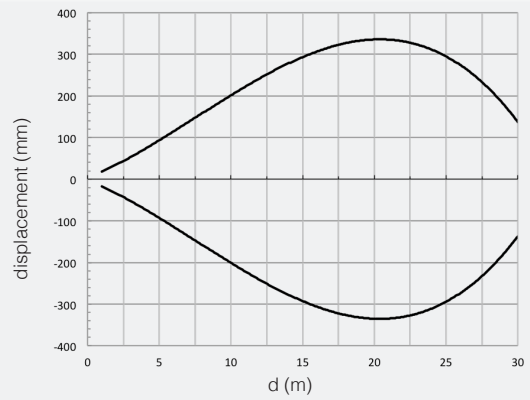
QMIHD/**-* excess gain



QMIHD/**-* spot dimension

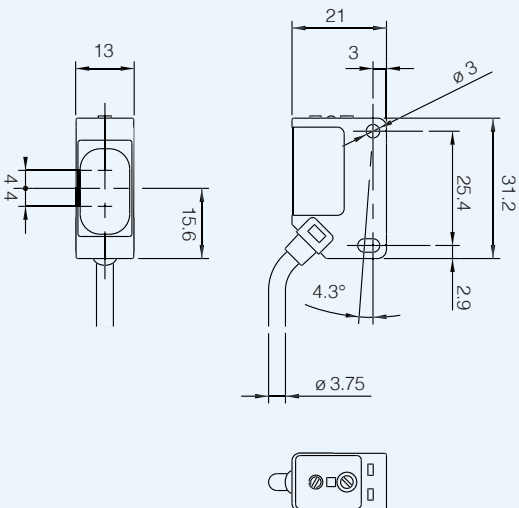


QMIHD/**-*parallel displacement

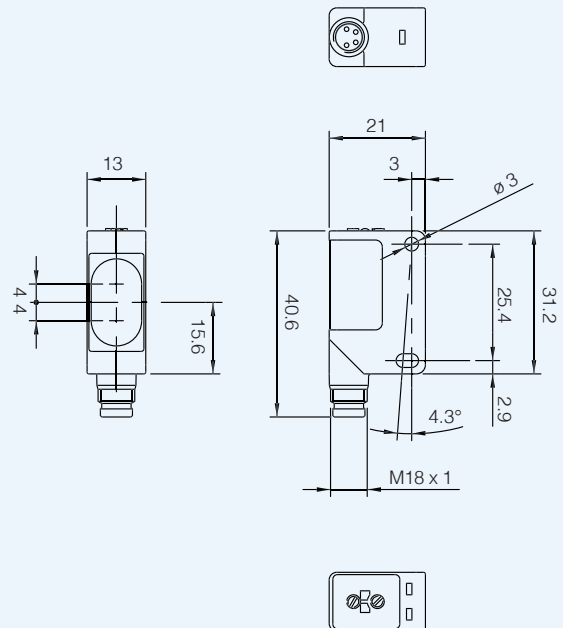


dimensions (mm)


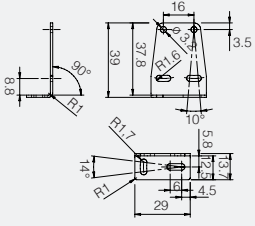

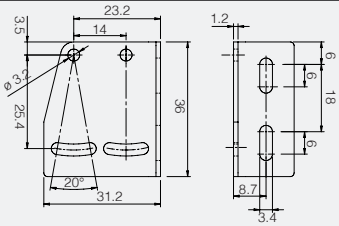

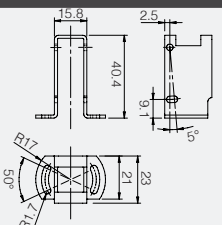

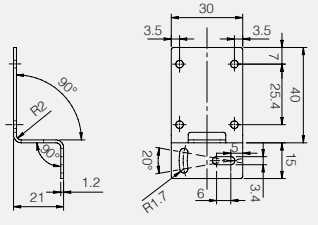

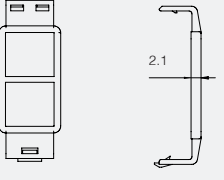
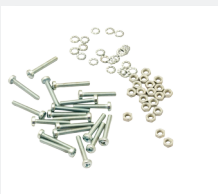
QM**/**-0A



QM**/**-0E





| ST 101 / L vertical mounting bracket | | | | | | | | | | | | | | | | | | | |
|---|-----------------|--|--|------|-----|---|---|-----------|-------|-----|-------|-----------|-----|-------|-----|--------|--------|--------|--------|
| product | to be used with | dimensions (mm) | description / installation | | | | | | | | | | | | | | | | |
|  | QM Sensors |  | <ul style="list-style-type: none"> ± 5° tip ± 7° swivel stainless steel | | | | | | | | | | | | | | | | |
| ST 102 / L side mounting bracket | | | | | | | | | | | | | | | | | | | |
| product | to be used with | dimensions (mm) | description / installation | | | | | | | | | | | | | | | | |
|  | QM Sensors |  | <ul style="list-style-type: none"> ± 10° tip stainless steel | | | | | | | | | | | | | | | | |
| ST 103 ⁽¹⁾ / Vertical mounting bracket with protective cover | | | | | | | | | | | | | | | | | | | |
| prodotto | to be used with | dimensions (mm) | description / installation | | | | | | | | | | | | | | | | |
|  | QM Sensors |  | <ul style="list-style-type: none"> ± 25° swivel stainless steel | | | | | | | | | | | | | | | | |
| ST 104 ⁽¹⁾ / Horizontal mounting bracket with protective cover | | | | | | | | | | | | | | | | | | | |
| product | to be used with | dimensions (mm) | description / installation | | | | | | | | | | | | | | | | |
|  | QM Sensors |  | <ul style="list-style-type: none"> ± 10° swivel stainless steel | | | | | | | | | | | | | | | | |
| STQM0 / Vertical and horizontal shutters | | | | | | | | | | | | | | | | | | | |
| prodotto | to be used with | dimensions (mm) | description / installation | | | | | | | | | | | | | | | | |
|  | QM*HD Sensors |  | <ul style="list-style-type: none"> Vertical and horizontal diaphragms (0.5 - 1.2) Packing units 2 <table border="1"> <thead> <tr> <th>dia.</th> <th>0.5</th> <th>1</th> <th>2</th> </tr> </thead> <tbody> <tr> <td>Sn (EG=1)</td> <td>1.5 m</td> <td>2 m</td> <td>4.5 m</td> </tr> <tr> <td>Sn (EG=2)</td> <td>1 m</td> <td>1.5 m</td> <td>4 m</td> </tr> <tr> <td>Min. Ø</td> <td>0.8 mm</td> <td>1.5 mm</td> <td>2.5 mm</td> </tr> </tbody> </table> | dia. | 0.5 | 1 | 2 | Sn (EG=1) | 1.5 m | 2 m | 4.5 m | Sn (EG=2) | 1 m | 1.5 m | 4 m | Min. Ø | 0.8 mm | 1.5 mm | 2.5 mm |
| dia. | 0.5 | 1 | 2 | | | | | | | | | | | | | | | | |
| Sn (EG=1) | 1.5 m | 2 m | 4.5 m | | | | | | | | | | | | | | | | |
| Sn (EG=2) | 1 m | 1.5 m | 4 m | | | | | | | | | | | | | | | | |
| Min. Ø | 0.8 mm | 1.5 mm | 2.5 mm | | | | | | | | | | | | | | | | |
| STQMS ⁽²⁾ / Screws - nuts - lockwashers | | | | | | | | | | | | | | | | | | | |
| prodotto | to be used with | dimensions (mm) | description / installation | | | | | | | | | | | | | | | | |
|  | QM Sensors | - | <ul style="list-style-type: none"> 20 Cross-slotted screw M3x20 20 Hexagon nuts M3 20 Lockwashers Ø3 | | | | | | | | | | | | | | | | |

⁽¹⁾ It can be used only for cable or pig-tail exit models ⁽²⁾ Components not present in standard sensors packaging