BASIC M6. 5



| SHORT |  |  |  |
| :---: | :---: | :---: | :---: |
| FLUSH |  | NON FLUSH |  |
| M8 conn | cable | M8 conn | cable |
| 1,5 mm | 1,5 mm | 2 mm | 2 mm |
| --- | --- | --- | --- |
| --- | --- | --- | --- |
| IS-65-B1-S1 | IS-65-B1-03 | IS-65-D1-S1 | IS-65-D1-03 |
| $95 \mathrm{B066070}$ | 95B064750 | $95 \mathrm{B066230}$ | $95 \mathrm{B064910}$ |
| IS-65-B2-S1 | IS-65-B2-03 | IS-65-D2-S1 | IS-65-D2-03 |
| $95 \mathrm{B066110}$ | 95B064790 | $95 \mathrm{B066270}$ | $95 \mathrm{B064950}$ |
| IS-65-B3-S1 | IS-65-B3-03 | IS-65-D3-S1 | IS-65-D3-03 |
| 95B064990 | $95 \mathrm{B064670}$ | $95 \mathrm{B066150}$ | 95B064830 |
| IS-65-B4-S1 | 1S-65-B4-03 | IS-65-D4-S1 | IS-65-D4-03 |
| $95 B 066030$ | $95 B 064710$ | $95 \mathrm{B066190}$ | $95 \mathrm{B066190}$ |
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| --- | -- | -- | --- |
|  |  |  |  |
| 10-30 Vdc (-15/10\%) | 10-30 Vdc (-15/10\%) | 10-30 Vdc (-15/10\%) | 10-30 Vdc (-15/10\%) |
| < 10\% | < $10 \%$ | < 10\% | < 10\% |
| < $10 \%$ | < $10 \%$ | < $10 \%$ | < 10\% |
| 200 mA | 200 mA | 200 mA | 200 mA |
| --- | --- | --- | --- |
| < 10 mA | < 10 mA | < 10 mA | < 10 mA |
| $<1,2 \mathrm{~V}$ ( $\mathrm{l}=100 \mathrm{~mA}$ ) | $<1,2 \mathrm{~V}$ ( $\mathrm{l}=100 \mathrm{~mA}$ ) | $<1,2 \mathrm{~V}$ ( $\mathrm{l}=100 \mathrm{~mA}$ ) | $<1,2 \mathrm{~V}$ ( $\mathrm{l}=100 \mathrm{~mA}$ ) |
| Yellow | Yellow | Yellow | Yellow |
| 1000 Hz | 1000 Hz | 1000 Hz | 1000 Hz |
| < 50 ms | < 50 ms | < 50 ms | < 50 ms |
| < $3 \%$ | < 3\% | < 3\% | < 3\% |
| Present (self-resetting) | Present (self-resetting) | Present (self-resetting) | Present (self-resetting) |
| Against polarity reversal inductive loads | Against polarity reversal inductive loads | Against polarity reversal inductive loads | Against polarity reversal inductive loads |
| $\left(-25 . . .+70^{\circ} \mathrm{C}\right)$ | $\left(-25 \ldots+70^{\circ} \mathrm{C}\right)$ | $\left(-25 \ldots+70^{\circ} \mathrm{C}\right)$ | $\left(-25 \ldots+70^{\circ} \mathrm{C}\right)$ |
| IP67 | IP67 | IP67 | IP67 |
| --- | 2 m | --- | 2 m |
| --- | $3 \times 0,14 \mathrm{~mm}^{2}$ | --- | $3 \times 0,14 \mathrm{~mm}^{2}$ |
| Nickel-plated brass | Nickel-plated brass | Nickel-plated brass | Nickel-plated brass |
| LCP | LCP | LCP | LCP |
| --- | --- | --- | --- |
| --- | 80 g | --- | 80 g |
| 40 g | --- | 40 g | --- |

3 wires PNP or NPN


M8 3 pole


| CONTACTS COMPIGURATION |  |  |  |
| :---: | :---: | :---: | :---: |
| Anviatle | Contacts nuties |  |  |
|  | $\frac{1}{1}$ | $3^{3}$ | ${ }_{\text {max }}^{4}$ |
| NPNPNP | + | - | NONC |

## BASIC M6. 5




## 12 DJAtALOGIC



SHORT X 2 NON FLUSH


| 10-30 Vdc (-15/10\%) | 10-30 Vdc (-15/10\%) |
| :---: | :---: |
| < 10\% | < 10\% |
| < 10\% | < 10\% |
| 200 mA | 200 mA |
| --- | --- |
| < 10 mA | < 10 mA |
| $<1,2 \mathrm{~V}$ ( $1=100 \mathrm{~mA}$ ) | $<1,2 \mathrm{~V}$ ( $1=100 \mathrm{~mA}$ ) |
| Yellow | Yellow |
| 500 Hz | 500 Hz |
| < 75 ms | < 75 ms |
| < 3\% | < 3\% |
| Present (self-resetting) | Present (self-resetting) |
| Against polarity reversal inductive loads | Against polarity reversal inductive loads |
| $\left(-25 \ldots+70^{\circ} \mathrm{C}\right)$ | $\left(-25 \ldots+70^{\circ} \mathrm{C}\right)$ |
| IP67 | IP67 |
| --- | 2 m |
| --- | $3 \times 0,14 \mathrm{~mm}^{2}$ |
| Nickel-plated brass | Nickel-plated brass |
| LCP | LCP |
| --- | --- |
| --- | 80 g |
| 40 g | --- |

3 wires PNP or NPN


M8 3 pole


## BASIC M8



|  |  |  |  |  | SHANDARD |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | FLUSH |  |
|  |  |  |  | M8 conn | M12 conn | cable |
| NOMINAL SWITC | NG DISTAN |  |  | 1,5 mm | 1,5 mm | 1,5 mm |
|  | PNP/NPN | 4 wires |  | --- | --- | --- |
| 10-30 Vdc | NO-NC | 4 wires | order No. | --- | --- | --- |
| 10-30 Vdc | PNP | 3 wires |  | IS-08-A1-S1 | IS-08-A1-S2 | 15-08-A1-03 |
| 10-30 Vdc | NO | 3 wires | order No. | $95 \mathrm{B061141}$ | $95 \mathrm{B061131}$ | $95 \mathrm{B061121}$ |
| 10-30 Vdc | PNP | 3 wires |  | IS-08-A2-S1 | 1S-08-A2-S2 | IS-08-A2-03 |
| 10-30 Vdc | NC | 3 wires | order No. | $95 \mathrm{B061171}$ | 95B061161 | $95 \mathrm{B061151}$ |
| 10-30 Vdc | NPN | 3 wires |  | IS-08-A3-S1 | 15-08-A3-S2 | 1S-08-A3-03 |
| 10-30 Vdc | NO | 3 wires | order No. | $95 \mathrm{B061081}$ | $95 \mathrm{B061071}$ | $95 \mathrm{B061061}$ |
| 10-30 Vdc | NPN | 3 wires |  | IS-08-A4-S1 | 1S-08-A4-S2 | 15-08-A4-03 |
| 10-30 Vdc | NC | 3 wires | order No. | 95 B061111 | $95 \mathrm{B061101}$ | $95 \mathrm{B061091}$ |
| 10-30 Vdc | PNP | 4 wires |  | --- | --- | --- |
| 10-30 Vdc | NO-NC | 4 wires | order No. | --- | --- | --- |
| 10-30 Vdc | NPN | 4 wires |  | --- | --- | --- |
| $10-30 \mathrm{Vdc}$ | NO-NC | 4 wires | order No. | --- | --- | --- |
| 10-30 Vdc | NO-NC | 2 wires |  | -- | --- | --- |
| $10-30 \mathrm{Vdc}$ |  | 2 wires | order No. | --- | --- | --- |
| 20-250 Vac/Vdc | NO | 2 wires |  | --- | --- | --- |
| $20-250 \mathrm{Vac} / \mathrm{Vdc}$ |  | 2 wires | order No. | --- | --- | --- |
| 20-250 Vac/Vdc | NC | 2 wires |  | --- | --- | --- |
| 20-250 Vac/Vac | NC | 2 wires | order No. | --- | --- | --- |
| 20-250 Vac | NO | 2/3wires |  | --- | --- | --- |
| 20-250 Vac | NO | 2/3wires | order No. | --- | --- | --- |
| 10-30 Vdc |  |  |  | --- | --- | --- |
| $10-30 \mathrm{Vdc}$ | $0-20 \mathrm{~mA}$ | 3 wires | order No. | --- | --- | --- |
|  |  |  |  | --- | --- | -- |
| NAMUR amplifier | NAMUR | 2 wires | order No. | --- | --- | --- |
|  |  |  |  |  |  |  |
| Nominal Voltage |  |  |  | 10-30 Vdc (-15/10\%) | 10-30 Vdc (-15/10\%) | 10-30 Vdc (-15/10\%) |
| Residual Ripple |  |  |  | < 10\% | < 10\% | < 10\% |
| Hysteresis |  |  |  | < 10\% | < 10\% | < 10\% |
| Max. Output Curre |  |  |  | 200 mA | 200 mA | 200 mA |
| Min. Output Curre |  |  |  | --- | --- | --- |
| Residual Current |  |  |  | < 10 mA | < 10 mA | < 10 mA |
| Voltage Drop |  |  |  | $<1,2 \mathrm{~V}$ ( $1=100 \mathrm{~mA}$ ) | $<1,2 \mathrm{~V}$ ( $1=100 \mathrm{~mA}$ ) | $<1,2 \mathrm{~V}$ ( $1=100 \mathrm{~mA}$ ) |
| Operation Led |  |  |  | Yellow | Yellow | Yellow |
| Switching Freque |  |  |  | 1000 Hz | 1000 Hz | 1000 Hz |
| Start Up Delay |  |  |  | < 50 ms | < 50 ms | < 50 ms |
| Repeatability |  |  |  | < 3\% | < $3 \%$ | < $3 \%$ |
| Short Circuit Prot | ction |  |  | Present (self-resetting) | Present (self-resetting) | Present (self-resetting) |
| Electric Protectio |  |  |  | Against polarity reversal inductive loads | Against polarity reversal inductive loads | Against polarity reversal inductive loads |
| Temperature Limi |  |  |  | $\left(-25 . . .+70^{\circ} \mathrm{C}\right)$ | $\left(-25 \ldots+70^{\circ} \mathrm{C}\right)$ | $\left(-25 . . .+70^{\circ} \mathrm{C}\right)$ |
| Protection Degree |  |  |  | IP67 | IP67 | IP67 |
| Cable Length |  |  |  | --- | --- | 2 m |
| Cable Section |  |  |  | -- | --- | $3 \times 0,14 \mathrm{~mm}^{2}$ |
| Housing Material |  |  |  | Nickel-plated brass | Nickel-plated brass | Nickel-plated brass |
| Active face |  |  |  | LCP | LCP | LCP |
| Tightening torque |  |  |  | 4Nm | 4Nm | 4 Nm |
| Weight - Cable Ou |  |  |  |  |  | 80 g |
| Weight - Connecto | Output |  |  | 35g | 55g | --- |




BASIC M8




| SH0-T |  |  |
| :---: | :---: | :---: |
| NON FLUSH |  |  |
| M8 conn | M12 conn | cable |
| 2 mm | 2 mm | 2 mm |
| --- | --- | --- |
| --- | --- | --- |
| IS-08-D1-S1 | IS-08-D1-S2 | IS-08-D1-03 |
| 95B066970 | 95B066700 | 95B062321 |
| IS-08-D2-S1 | IS-08-D2-S2 | IS-08-D2-03 |
| 95B067000 | 95B066720 | 95B062351 |
| IS-08-D3-S1 | IS-08-D3-S2 | IS-08-D3-03 |
| 95B066920 | 95B066650 | 95B066430 |
| IS-08-D4-S1 | IS-08-D4-S2 | IS-08-D4-03 |
| 95B066940 | 95B066670 | 95B062291 |
| --- | --- | --- |
| --- | --- | --- |
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| --- | --- | --- |
| --- | --- | --- |
| --- | --- | --- |
|  |  |  |
| 10-30 Vdc (-15/10\%) | 10-30 Vdc (-15/10\%) | 10-30 Vdc (-15/10\%) |
| < 10\% | < 10\% | < 10\% |
| < 10\% | < 10\% | < 10\% |
| 200mA | 200mA | 200 mA |
| --- | --- | --- |
| < 10 mA | < 10 mA | < 10 mA |
| < 1,2 V (l=100mA) | < 1,2 V (l=100mA) | < 1,2 V (l=100mA) |
| Yellow | Yellow | Yellow |
| 1000 Hz | 1000 Hz | 1000 Hz |
| < 50 ms | < 50 ms | < 50 ms |
| < 3\% | < 3\% | < 3\% |
| Present (self-resetting) | Present (self-resetting) | Present (self-resetting) |
| Against polarity reversal inductive loads | Against polarity reversal inductive loads | Against polarity reversal inductive loads |
| $\left(-25 \ldots+70^{\circ} \mathrm{C}\right)$ | $\left(-25 \ldots+70^{\circ} \mathrm{C}\right)$ | $\left(-25 \ldots+70^{\circ} \mathrm{C}\right)$ |
| IP67 | IP67 | IP67 |
| --- | --- | 2 m |
| --- | --- | $3 \times 0,14 \mathrm{~mm}^{2}$ |
| Nickel-plated brass | Nickel-plated brass | Nickel-plated brass |
| LCP | LCP | LCP |
| 4 Nm | 4 Nm | 4 Nm |
|  |  | 80 g |
| 35 g | 55g | --- |

3 wires PNP or NPN


M12 3 pole


M8 3 pole


BASIC M8


| NOMINAL SWITCHING DISTANCE |  |  |  |
| :---: | :---: | :---: | :---: |
| 10-30 Vdc | $\begin{aligned} & \text { PNP/NPN } \\ & \text { NO-NC } \end{aligned}$ | 4 wires | order No. |
| 10-30 Vdc | $\begin{aligned} & \text { PNP } \\ & \text { NO } \end{aligned}$ | 3 wires | order No. |
| 10-30 Vdc | $\begin{aligned} & \text { PNP } \\ & \text { NC } \end{aligned}$ | 3 wires | order No. |
| 10-30 Vdc | $\begin{aligned} & \text { NPN } \\ & \text { NO } \end{aligned}$ | 3 wires | order No. |
| 10-30 Vdc | $\begin{aligned} & \text { NPN } \\ & \text { NC } \end{aligned}$ | 3 wires | order No. |
| 10-30 Vdc | $\begin{aligned} & \text { PNP } \\ & \text { NO-NC } \end{aligned}$ | 4 wires | order No. |
| 10-30 Vdc | $\begin{aligned} & \text { NPN } \\ & \text { NO-NC } \end{aligned}$ | 4 wires | order No. |
| 10-30 Vdc | NO-NC | 2 wires | order No. |
| 20-250 Vac/Vdc | NO | 2 wires | order No. |
| 20-250 Vac/Vdc | NC | 2 wires | order No. |
| 20-250 Vac | NO | 2/3wires | order No. |
| 10-30 Vdc | Analog 0-20 mA | 3 wires | order No. |
| NAMUR amplifier | NAMUR | 2 wires | order No. |


| Nominal Voltage |
| :--- |
| Residual Ripple |
| Hysteresis |
| Max. Output Current |
| Min. Output Current |
| Residual Current |
| Voltage Drop |
| Operation Led |
| Switching Frequency |
| Start Up Delay |
| Repeatability |
| Short Circuit Protection |
| Electric Protection |
| Temperature Limit |
| Protection Degree |
| Cable Length |
| Cable Section |
| Housing Material |
| Active face |
| Tightening torque |
| Weight - Cable Output |
| Weight - Connector Output |



SHORT X2
FLUSH

| 10-30 Vdc (-15/10\%) | 10-30 Vdc (-15/10\%) | 10-30 Vdc (-15/10\%) |
| :---: | :---: | :---: |
| < 10\% | < 10\% | < 10\% |
| < 10\% | < 10\% | < 10\% |
| 200 mA | 200 mA | 200 mA |
| --- | --- | --- |
| < 10 mA | < 10 mA | < 10 mA |
| $<1,2 \mathrm{~V}$ ( $1=100 \mathrm{~mA}$ ) | $<1,2 \mathrm{~V}$ (l= 100 mA ) | $<1,2 \mathrm{~V}$ (l $=100 \mathrm{~mA}$ ) |
| Yellow | Yellow | Yellow |
| 500 Hz | 500 Hz | 500 Hz |
| < 75 ms | < 75 ms | < 75 ms |
| < 3\% | < 3\% | < 3\% |
| Present (self-resetting) | Present (self-resetting) | Present (self-resetting) |
| Against polarity reversal inductive loads | Against polarity reversal inductive loads | Against polarity reversal inductive loads |
| $\left(-25 \ldots+60^{\circ} \mathrm{C}\right)$ | $\left(-25 \ldots+60^{\circ} \mathrm{C}\right)$ | $\left(-25 \ldots+70^{\circ} \mathrm{C}\right)$ |
| IP67 | IP67 | IP67 |
| --- | --- | 2 m |
| --- | --- | $3 \times 0,14 \mathrm{~mm}^{2}$ |
| Nickel-plated brass | Nickel-plated brass | Nickel-plated brass |
| LCP | LCP | LCP |
| 4Nm | 4Nm | 4Nm |
|  |  | 80 g |
| 35g | 55g | --- |



| $\text { SHORI } \times 2$ |  |  |
| :---: | :---: | :---: |
| NON FLUSH |  |  |
| M8 conn | M12 conn | cable |
| 3 mm | 3 mm | 3 mm |
| --- | --- | --- |
| --- | --- | --- |
| IS-08-H1-S1 | IS-08-H1-S2 | IS-08-H1-03 |
| 95B066960 | 95B066690 | 95B066480 |
| IS-08-H2-S1 | IS-08-H2-S2 | IS-08-H2-03 |
| 95B066990 | 95B063301 | 95B066500 |
| IS-08-H3-S1 | IS-08-H3-S2 | IS-08-H3-03 |
| 95B066910 | 95B066640 | 95B066420 |
| IS-08-H4-S1 | IS-08-H4-S2 | IS-08-H4-03 |
| 95B063251 | 95B063241 | 95B066460 |
| --- | --- | --- |
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| --- | --- | --- |
| --- | --- | --- |


| 10-30 Vdc (-15/10\%) | 10-30 Vdc (-15/10\%) | 10-30 Vdc (-15/10\%) |
| :---: | :---: | :---: |
| < 10\% | < 10\% | < 10\% |
| < 10\% | < 10\% | < 10\% |
| 200mA | 200mA | 200mA |
| --- | --- | --- |
| < 10 mA | < 10 mA | < 10 mA |
| $<1,2 \mathrm{~V}$ ( $1=100 \mathrm{~mA}$ ) | < 1,2 V (I=100mA) | < 1,2 V (I=100mA) |
| Yellow | Yellow | Yellow |
| 500 Hz | 500 Hz | 500 Hz |
| < 75 ms | $<75 \mathrm{~ms}$ | $<75 \mathrm{~ms}$ |
| < 3\% | < 3\% | < 3\% |
| Present (self-resetting) | Present (self-resetting) | Present (self-resetting) |
| Against polarity reversal inductive loads | Against polarity reversal inductive loads | Against polarity reversal inductive loads |
| $\left(-25 \ldots+60^{\circ} \mathrm{C}\right)$ | $\left(-25 \ldots+60^{\circ} \mathrm{C}\right)$ | $\left(-25 \ldots+70^{\circ} \mathrm{C}\right)$ |
| IP67 | IP67 | IP67 |
| --- | --- | 2 m |
| --- | --- | $3 \times 0,14 \mathrm{~mm}^{2}$ |
| Nickel-plated brass | Nickel-plated brass | Nickel-plated brass |
| LCP | LCP | LCP |
| 4 Nm | 4 Nm | 4 Nm |
|  |  | 80 g |
| 35 g | 55g | --- |

3 wires PNP or NPN


M12 3 pole


M8 3 pole





| SHORT |  |  |  |
| :---: | :---: | :---: | :---: |
| FLUSH |  | NON FLUSH |  |
| M12 conn | cable | M12conn | cable |
| 2 mm | 2 mm | 4 mm | 4 mm |
| --- | --- | --- | --- |
| --- | --- | --- | --- |
| IS-12-B1-S2 | IS-12-B1-03 | IS-12-D1-S2 | IS-12-D1-03 |
| $95 \mathrm{B062051}$ | $95 \mathrm{B062041}$ | 95B062451 | $95 \mathrm{B062441}$ |
| IS-12-B2-S2 | IS-12-B2-03 | IS-12-D2-S2 | IS-12-D2-03 |
| 95B062081 | $95 \mathrm{B062071}$ | 95B062481 | $95 \mathrm{B062471}$ |
| IS-12-B3-S2 | 1S-12-B3-03 | IS-12-D3-S2 | IS-12-D3-03 |
| 958061991 | $95 \mathrm{B061981}$ | 95B062391 | $95 \mathrm{B062381}$ |
| 15-12-B4-S2 | IS-12-B4-03 | IS-12-D4-S2 | 15-12-D4-03 |
| 958062021 | $95 \mathrm{B062011}$ | 958062421 | 958062411 |
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| --- | --- | --- | --- |
| --- | --- | --- | --- |
|  |  |  |  |
| 10-30 Vdc (-15/10\%) | 10-30 Vdc (-15/10\%) | 10-30 Vdc (-15/10\%) | 10-30 Vdc (-15/10\%) |
| < 10\% | < 10\% | < 10\% | < 10\% |
| < 10\% | < 10\% | < 10\% | < 10\% |
| 200 mA | 200 mA | 200 mA | 200 mA |
| --- | --- | --- | --- |
| < 10 mA | < 10 mA | < 10 mA | < 10 mA |
| < $1,8 \mathrm{~V}$ ( $\mathrm{l}=100 \mathrm{~mA}$ ) | < $1,8 \mathrm{~V}$ ( $\mathrm{l}=100 \mathrm{~mA}$ ) | $<1,8 \mathrm{~V}$ ( $\mathrm{l}=100 \mathrm{~mA}$ ) | $<1,8 \mathrm{~V}$ ( $\mathrm{l}=100 \mathrm{~mA}$ ) |
| Yellow | Yellow | Yellow | Yellow |
| 1000 Hz | 1000 Hz | 1000 Hz | 1000 Hz |
| < 50 ms | < 50 ms | < 50 ms | < 50 ms |
| < 3\% | < 3\% | < 3\% | < 3\% |
| Present (self-resetting) | Present (self-resetting) | Present (self-resetting) | Present (self-resetting) |
| Against polarity reversal inductive loads | Against polarity reversal inductive loads | Against polarity reversal inductive loads | Against polarity reversal inductive loads |
| $\left(-25 \ldots+60^{\circ} \mathrm{C}\right)$ | $\left(-25 \ldots+70^{\circ} \mathrm{C}\right)$ | $\left(-25 \ldots+60^{\circ} \mathrm{C}\right)$ | $\left(-25 \ldots+70^{\circ} \mathrm{C}\right)$ |
| IP67 | IP67 | IP67 | IP67 |
|  | 2 m | --- | 2 m |
|  | $3 \times 0,14 \mathrm{~mm}^{2}$ | --- | $3 \times 0,14 \mathrm{~mm}^{2}$ |
| Nickel-plated brass | Nickel-plated brass | Nickel-plated brass | Nickel-plated brass |
| LCP | LCP | LCP | LCP |
| 10Nm | 10Nm | 10Nm | 10Nm |
| --- | 110 g | --- | 110 g |
| 60 g | --- | 60 g | --- |

2 wires NO or NC


3 wires PNP or NPN


4 wires (PNP/NPN, NO/NC)


M12 connector - connections


2 wires NO or NC

| CONTACTS CONFIGURATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Avelabio | 1 | 2 | 3 | 4 |
| NO | + |  | - |  |
| NO | - |  | + |  |

## 3 wires

CONTACTS CONFIGURATION

| Anaiactio | 1 | 2 | 3 | 4 |
| :---: | :---: | :---: | :---: | :---: |
|  | Contact numbers |  |  |  |
| NO NC) | + |  | - | NONC |

4 wires (PNP/NPN, NO/NC)

| CONTACTO CONFIGURATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| OutpuA | 1 | 2 | 3 | 4 |
| NPNNO | + | NO | - | - |
| NPNNC | - | NC | + | - |
| PNPNO | + | + | - | NO |
| PNO NC | - | + | + | NC |





SHORT X2

| SHORT $\times 2$ |  |  |  |
| :---: | :---: | :---: | :---: |
| FLUSH |  | NON FLUSH |  |
| M12 con | cable | M12 conn | cable |
| 4 mm | 4 mm | 8 mm | 8 mm |
| --- | --- | --- | --- |
| --- | --- | --- | --- |
| IS-12-G1-S2 | IS-12-G1-03 | IS-12-H1-S2 | IS-12-H1-03 |
| $95 \mathrm{B063371}$ | $95 \mathrm{B063361}$ | 958063451 | $95 \mathrm{B063441}$ |
| IS-12-G2-S2 | IS-12-G2-03 | IS-12-H2-S2 | IS-12-H2-03 |
| $95 \mathrm{B063391}$ | $95 \mathrm{B063381}$ | 958063471 | $95 \mathrm{B063461}$ |
| IS-12-G3-S2 | IS-12-G3-03 | IS-12-H3-S2 | IS-12-H3-03 |
| 958063331 | $95 \mathrm{B063321}$ | 958063411 | $95 \mathrm{B063401}$ |
| IS-12-G4-S2 | IS-12-G4-03 | IS-12-H4-S2 | IS-12-H4-03 |
| 958063351 | $95 \mathrm{B063341}$ | 958063431 | $95 \mathrm{B063421}$ |
| IS-12-G5-S2 | IS-12-G5-03 | IS-12-H5-S2 | IS-12-H5-03 |
| $95 \mathrm{B062691}$ | $95 \mathrm{B062681}$ | 958062771 | $95 \mathrm{B062761}$ |
| IS-12-G6-S2 | IS-12-G6-03 | IS-12-H6-S2 | IS-12-H6-03 |
| $95 \mathrm{B062671}$ | $95 \mathrm{B062661}$ | 958062751 | 958062741 |
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|  |  |  |  |
| 10-30 Vdc (-15/10\%) | 10-30 Vdc (-15/10\%) | 10-30 Vdc (-15/10\%) | 10-30 Vdc (-15/10\%) |
| < 10\% | < 10\% | < 10\% | < 10\% |
| < $10 \%$ | < 10\% | < 10\% | < 10\% |
| 200 mA | 200 mA | 200 mA | 200 mA |
| > $1,6 \mathrm{~mA}$ (2wires ver.) | > $1,6 \mathrm{~mA}$ (2wires ver.) | > $1,6 \mathrm{~mA}$ (2wires ver.) | $>1,6 \mathrm{~mA}$ (2wires ver.) |
| < 10 mA | < 10 mA | < 10 mA | < 10 mA |
| $<1,2 \mathrm{~V}$ ( $1=100 \mathrm{~mA}$ ) | $<1,2 \mathrm{~V}$ ( $1=100 \mathrm{~mA}$ ) | $<1,2 \mathrm{~V}$ ( $1=100 \mathrm{~mA}$ ) | $<1,2 \mathrm{~V}$ ( $1=100 \mathrm{~mA}$ ) |
| Yellow | Yellow | Yellow | Yellow |
| $500 \mathrm{~Hz} / 200 \mathrm{~Hz}$ (4 wires NO-NC) | $500 \mathrm{~Hz} / 200 \mathrm{~Hz}$ (4 wires NO-NC) | $500 \mathrm{~Hz} / 200 \mathrm{~Hz}$ ( 4 wires NO-NC) | $500 \mathrm{~Hz} / 200 \mathrm{~Hz}$ ( 4 wires NO-NC) |
| < 75 ms | $<75 \mathrm{~ms}$ | $<75 \mathrm{~ms}$ | $<75 \mathrm{~ms}$ |
| < 3\% | < 3\% | < 3\% | < 3\% |
| Present (self-resetting) | Present (self-resetting) | Present (self-resetting) | Present (self-resetting) |
| Against polarity reversal inductive loads | Against polarity reversal inductive loads | Against polarity reversal inductive loads | Against polarity reversal inductive loads |
| $\left(-25 \ldots+70^{\circ} \mathrm{C}\right)$ | $\left(-25 \ldots+70^{\circ} \mathrm{C}\right)$ | $\left(-25 \ldots+70^{\circ} \mathrm{C}\right)$ | $\left(-25 \ldots+70^{\circ} \mathrm{C}\right)$ |
| IP67 | IP67 | IP67 | IP67 |
| --- | 2 m |  | 2 m |
| --- | $\begin{aligned} & 3 \times 0,14 \mathrm{~mm}^{2} \\ & 4 \times 0,25 \mathrm{~mm}^{2} \end{aligned}$ |  | $\begin{aligned} & 3 \times 0,14 \mathrm{~mm}^{2} \\ & 4 \times 0,25 \mathrm{~mm}^{2} \end{aligned}$ |
| Nickel-plated brass | Nickel-plated brass | Nickel-plated brass | Nickel-plated brass |
| LCP | LCP | LCP | LCP |
| 10Nm | 10Nm | 10Nm | 10Nm |
| --- | 110 g | --- | 110 g |
| 60 g | --- | 60 g | --- |

2 wires NO or NC


3 wires PNP or NPN


4 wires (PNP / NPN, NO/NC)


4 wires (NO+NC)


## M12 connector connections

2 wires NO or NC

| CONTACTS CONFIGURATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Availabla | Contacter numbers |  |  |  |
|  | 1 | 2 | 2 | 4 |
| NO | $+$ |  | - |  |
| NC | - |  | + |  |

3 wires

| CONTACT3 CONFIGURATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Avsiable 1 2 3 4 <br> NO or NC) +  - NONC |  |  |  |  |

4 wires (PNP/NPN, NO/NC)

| CONTACTS CONFIGURATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Ouput | Contacta number |  |  |  |
|  | 1 | 2 | 3 | 4 |
| NPWNO | $+$ | NO | - | - |
| NPNNC | - | NC | $+$ | - |
| PNP NO | $+$ | $+$ | - | NO |
| PNPNC | - | $+$ | + | NC |

4 wires (NO+NC)

| Nowlable | Contmets numbers |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 |  |
| (NO - NC] | + | NC | - | NO |  |

BASIC M18




| SHORT |  |  |  |
| :---: | :---: | :---: | :---: |
| FLUSH |  | NON FLUSH |  |
| $\begin{aligned} & \text { M12 conn } \\ & 5 \mathrm{~mm} \end{aligned}$ | cable <br> 5 mm | $\begin{aligned} & \text { M12 conn } \\ & 8 \mathrm{~mm} \end{aligned}$ | cable <br> 8 mm |
| --- | --- | --- | --- |
| --- | --- | --- | --- |
| \|S-18-B1-S2 | IS-18-B1-03 | IS-18-D1-S2 | \|S-18-D1-03 |
| 95B062151 | $95 \mathrm{B062141}$ | $95 \mathrm{B062551}$ | $95 \mathrm{B062541}$ |
| IS-18-B2-S2 | IS-18-B2-03 | IS-18-D2-S2 | IS-18-D2-03 |
| $95 \mathrm{B062171}$ | $95 \mathrm{B062161}$ | 958062571 | $95 \mathrm{B062561}$ |
| IS-18-B3-S2 | IS-18-B3-03 | IS-18-D3-S2 | IS-18-D3-03 |
| $95 \mathrm{B062111}$ | 958062101 | $95 \mathrm{B062511}$ | $95 \mathrm{B062501}$ |
| 1S-18-B4-S2 | IS-18-B4-03 | IS-18-D4-S2 | IS-18-D4-03 |
| 95B062131 | $95 \mathrm{B062121}$ | $95 \mathrm{B062531}$ | $95 \mathrm{B062521}$ |
| --- | --- | --- | --- |
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| - | --- | --- | --- |
| --- | --- | --- | --- |
| --- | --- | --- | --- |
|  |  |  |  |
| 10-30 Vdc (-15/10\%) | 10-30 Vdc (-15/10\%) | 10-30 Vdc (-15/10\%) | 10-30 Vdc (-15/10\%) |
| < 10\% | < 10\% | < 10\% | < 10\% |
| < 10\% | < 10\% | < 10\% | < 10\% |
| 200 mA | 200 mA | 200 mA | 200 mA |
| --- | --- | --- | --- |
| < 10 mA | < 10 mA | < 10 mA | < 10 mA |
| $<1,8 \mathrm{~V}$ ( $1=100 \mathrm{~mA}$ ) | $<1,8 \mathrm{~V}$ (l $=100 \mathrm{~mA}$ ) | $<1,8 \mathrm{~V}$ ( $1=100 \mathrm{~mA}$ ) | $<1,8 \mathrm{~V}$ ( $1=100 \mathrm{~mA}$ ) |
| Yellow | Yellow | Yellow | Yellow |
| 1000 Hz | 1000 Hz | 1000 Hz | 1000 Hz |
| < 50 ms | < 50 ms | < 50 ms | < 50 ms |
| < 3\% | < $3 \%$ | < 3\% | < 3\% |
| Present (self-resetting) | Present (self-resetting) | Present (self-resetting) | Present (self-resetting) |
| Against polarity reversal inductive loads | Against polarity reversal inductive loads | Against polarity reversal inductive loads | Against polarity reversal inductive loads |
| $\left(-25 \ldots+60^{\circ} \mathrm{C}\right)$ | $\left(-25 \ldots+60^{\circ} \mathrm{C}\right)$ | $\left(-25 \ldots+60^{\circ} \mathrm{C}\right)$ | $\left(-25 \ldots+60^{\circ} \mathrm{C}\right)$ |
| IP67 | IP67 | IP67 | IP67 |
| --- | 2 m | --- | 2 m |
| --- | $3 \times 0,14 \mathrm{~mm}^{2}$ | --- | $3 \times 0,14 \mathrm{~mm}^{2}$ |
| Nickel-plated brass | Nickel-plated brass | Nickel-plated brass | Nickel-plated brass |
| LCP | LCP | LCP | LCP |
| 30Nm | 30Nm | 30Nm | 30Nm |
| --- | 145g | --- | 145g |
| 95g | --- | 95g | --- |

2 wires NO or NC


3 wires PNP or NPN


4 wires (PNP/NPN, NO/NC)


## M12 connector - connections



2 wires NO or NC

| CONTACTS CONFIGURATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Anelabio | 1 | 2 | 3 | 4 |
| NO | + |  | - |  |
| NO | - |  | + |  |

3 wires

| CONTACTS CONFIGURATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Avalable Contacts numbers    <br>  1 2 3  <br> (NO er NC) +  -  <br> NONC     |  |  |  |  |

4 wires (PNP/NPN, NO/NC)

| CONTACTS CONFIGURATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| OUHAA | 1 | 2 | 3 | 4 |
| NPNNC | + | NO | - | - |
| NPNNC | - | NC | + | - |
| PNPNO | + | + | - | NO |
| PNO NC | - | + | + | NC |

BASIC M18




| SH0RT $\times 2$ |  |  |  |
| :---: | :---: | :---: | :---: |
| FLUSH |  | NON FLUSH |  |
| M12 conn | cable | M12 conn | cable |
| 8 mm | 8 mm | 14 mm | 14 mm |
| --- | -- | --- | --- |
| --- | --- | --- | --- |
| IS-18-G1-S2 | IS-18-G1-03 | IS-18-H1-S2 | IS-18-H1-03 |
| $95 \mathrm{B063531}$ | $95 \mathrm{B063521}$ | $95 \mathrm{B063611}$ | $95 \mathrm{B063601}$ |
| IS-18-G2-S2 | IS-18-G2-03 | IS-18-H2-S2 | IS-18-H2-03 |
| 95B063551 | $95 \mathrm{B063541}$ | $95 \mathrm{B063631}$ | $95 \mathrm{B063621}$ |
| IS-18-G3-S2 | IS-18-G3-03 | IS-18-H3-S2 | IS-18-H3-03 |
| 95B063491 | $95 \mathrm{B063061}$ | $95 \mathrm{B063571}$ | $95 \mathrm{B063561}$ |
| IS-18-G4-S2 | IS-18-G4-03 | IS-18-H4-S2 | IS-18-H4-03 |
| $95 \mathrm{B063511}$ | $95 \mathrm{B063501}$ | $95 \mathrm{B063591}$ | $95 \mathrm{B063581}$ |
| IS-18-G5-S2 | IS-18-G5-03 | IS-18-H5-S2 | IS-18-H5-03 |
| $95 \mathrm{B062731}$ | $95 \mathrm{B062721}$ | $95 \mathrm{B062811}$ | 95B064220 |
| IS-18-G6-S2 | IS-18-G6-03 | IS-18-H6-S2 | IS-18-H6-03 |
| $95 B 062711$ | 95B064200 | 958062791 | $95 B 064210$ |
| --- | --- | --- | --- |
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| --- | --- | --- | --- |
| --- | --- | --- | --- |
| -- | --- | --- | --- |
| --- | --- | --- | --- |
| 10-30 Vdc (-15/10\%) | 10-30 Vdc (-15/10\%) | 10-30 Vdc (-15/10\%) | 10-30 Vdc (-15/10\%) |
| < 10\% | < 10\% | < $10 \%$ | < 10\% |
| < 10\% | < 10\% | < 10\% | < 10\% |
| 200 mA | 200 mA | 200 mA | 200 mA |
| $>1,6 \mathrm{~mA}$ (2wires ver.) | $>1,6 \mathrm{~mA}$ (2wires ver.) | $>1,6 \mathrm{~mA}$ (2wires ver.) | $>1,6 \mathrm{~mA}$ (2wires ver.) |
| < 10 mA | < 10 mA | < 10 mA | < 10 mA |
| $<1,2 \mathrm{~V}$ ( $1=100 \mathrm{~mA}$ ) | $<1,2 \mathrm{~V}$ ( $1=100 \mathrm{~mA}$ ) | $<1,2 \mathrm{~V}$ ( $1=100 \mathrm{~mA}$ ) | $<1,2 \mathrm{~V}$ ( $1=100 \mathrm{~mA}$ ) |
| Yellow | Yellow | Yellow | Yellow |

$400 \mathrm{~Hz} / 100 \mathrm{~Hz}$ (4 wires NO-NC) $400 \mathrm{~Hz} / 100 \mathrm{~Hz}$ (4 wires NO-NC) $400 \mathrm{~Hz} / 100 \mathrm{~Hz}$ (4 wires NO-NC) $400 \mathrm{~Hz} / 100 \mathrm{~Hz}$ (4 wires NO-NC)

| < 75 ms | < 75 ms | < 75 ms | < 75 ms |
| :---: | :---: | :---: | :---: |
| < 3\% | < 3\% | < 3\% | < 3\% |
| Present (self-resetting) | Present (self-resetting) | Present (self-resetting) | Present (self-resetting) |
| Against polarity reversal inductive loads | Against polarity reversal inductive loads | Against polarity reversal inductive loads | Against polarity reversal inductive loads |
| $\left(-25 \ldots+60^{\circ} \mathrm{C}\right)$ | $\left(-25 \ldots+70^{\circ} \mathrm{C}\right)$ | $\left(-25 \ldots+60^{\circ} \mathrm{C}\right)$ | $\left(-25 \ldots+70^{\circ} \mathrm{C}\right)$ |
| IP67 | IP67 | IP67 | IP67 |
| --- | 2 m | --- | 2 m |
| --- | $\begin{aligned} & 3 \times 0,14 \mathrm{~mm}^{2} \\ & 4 \times 0,25 \mathrm{~mm}^{2} \end{aligned}$ | --- | $\begin{aligned} & 3 \times 0,14 \mathrm{~mm}^{2} \\ & 4 \times 0,25 \mathrm{~mm}^{2} \end{aligned}$ |
| Nickel-plated brass | Nickel-plated brass | Nickel-plated brass | Nickel-plated brass |
| LCP | LCP | LCP | LCP |
| 30Nm | 30Nm | 30Nm | 30Nm |
| --- | 145g | --- | 145g |
| 95g | --- | 95g | --- |

2 wires NO or NC


3 wires PNP or NPN


4 wires (PNP/NPN, NO/NC)


4 wires (NO+NC)


## M12 connector connections

2 wires NO or NC

| CONTACTS CONFIGURAMON |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Analabla | 1 | 2 | 2 | 4 |
|  | 1 | Contacts number |  |  |
| NO | + |  | - |  |
| NC | - |  | + |  |

3 wires


4 wires (PNP/NPN, NO/NC)

| CONTACTS CONFIGURATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| OUFA | Contacta numben |  |  |  |
|  | 1 | 2 | 3 | 4 |
| NPNNO | $+$ | NO | - | - |
| NPNNC | - | NC | 4 | - |
| PNPNO | $+$ | $+$ | - | NO |
| PNPNC | - | $+$ | $+$ | NC |

4 wires (NO+NC)

| Aualiasle | Contactanimber |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 |
| INO +NC$]$ | + | NC | - | NO |

BASIC MFO


STANDARD

| - |  |  |  | STANDARD |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | FLUSH |  | NON FLUSH |  |
|  |  |  |  | M12 conn | cable | M12 conn | cable |
| NOMINAL SWITCHING DISTANCE |  |  |  | 10 mm | 10 mm | 15 mm | 15 mm |
| 10-30 Vdc | PNP/NPN | 4 wires |  | IS-30-A0-S2 | IS-30-A0-03 | 15-30-C0-52 | 15-30-C0-03 |
|  |  | 4 wires | order No. | 958064490 | 958064460 | 958064510 | 958064470 |
| $10-30 \mathrm{Vdc}$ | PNP | 3 wires |  | \|S-30-A1-S2 | 15-30-A1-03 | \|S-30-C1-S2 | 15-30-C1-03 |
|  | NO | 3wires | order No. | 95B061431 | $95 \mathrm{B061421}$ | $95 B 061831$ | $95 \mathrm{B061821}$ |
| $10-30 \mathrm{Vdc}$ | PNP | 3 wires |  | 15-30-A2-S2 | 15-30-A2-03 | 15-30-C2-52 | 15-30-C2-03 |
|  | NC | 3 wires | order No. | $95 \mathrm{B061451}$ | $95 \mathrm{B061441}$ | 95B061851 | $95 B 061841$ |
| $10-30 \mathrm{Vdc}$ | NPN | 3 wires |  | \|S-30-A3-S2 | 15-30-A3-03 | 15-30-C3-52 | 15-30-C3-03 |
|  |  |  | order No. | 95B061391 | $95 \mathrm{B061381}$ | 95B061791 | $95 \mathrm{B061781}$ |
| 10-30 Vdc | NPN | 3 wires |  | 15-30-A4-52 | 15-30-A4-03 | 15-30-C4-52 | 15-30-C4-03 |
|  |  |  | order No. | $95 B 061411$ | $95 B 061401$ | 958061811 | $95 \mathrm{B061801}$ |
| 10-30 Vdc | PNP | 4 wires |  | --- | --- | --- | --- |
|  | NO-NC | 4 wires | order No. | --- | --- | --- | --- |
| 10-30 Vdc | NPN | 4 wires |  | --- | --- | --- | --- |
|  | NO-NC |  | order No. | --- | --- | --- | --- |
| 10-30 Vdc |  |  |  | 15-30-A9-S2 | 15-30-A9-03 | 15-30-C9-52 | 15-30-C9-03 |
|  | NO-NC |  | order No. | 958064570 | 958064530 | 958064590 | 958064550 |
| 20-250 Vac/Vdc | NO | 2 wires |  | --- | --- | --- | --- |
|  | No | 2 wires | order No. | --- | --- | --- | --- |
| 20-250 Vac/Vdc |  |  |  | --- | --- | --- | --- |
|  | NC | 2 wires | order No. | --- | --- | --- | --- |
| 20-250 Vac | No | 2/3wires |  | --- | --- | --- | --- |
|  |  | 2/3wires | order No . | --- | --- | --- | --- |
| $10-30 \mathrm{Vdc}$ | Analog | 3 wires |  | --- | --- | --- | --- |
|  | $0-20 \mathrm{~mA}$ | 3 wires | order No. | --- | --- | --- | --- |
| NAMUR amplifier | NAMUR | 2 wires |  | --- | --- | --- |  |
|  | Namur | 2wires | order No. | --- | --- | --- | --- |
| Nominal Voltage |  |  |  | 10-30 Vdc (-15/10\%) | 10-30 Vdc (-15/10\%) | 10-30 Vdc (-15/10\%) | $10-30 \operatorname{Vdc}(-15 / 10 \%)$ |
| Residual Ripple |  |  |  | < $10 \%$ | < $10 \%$ | < $10 \%$ | < $10 \%$ |
| Hysteresis |  |  |  | < $10 \%$ | < 10\% | < 10\% | < 10\% |
| Max. Output Current |  |  |  | 200mA; 100 mA (2wires) | 200mA; 100 mA (2wires) | 200mA; 100 mA (2wires) | 200mA; 100 mA (2wires) |
| Min. Output Current |  |  |  | $>1,6 \mathrm{~mA}$ (2wires) | $>1,6 \mathrm{~mA}$ (2wires) | $>1,6 \mathrm{~mA}$ (2wires) | $>1,6 \mathrm{~mA}$ (2wires) |
| Residual Current |  |  |  | < $1,6 \mathrm{~mA}$ | < $1,6 \mathrm{~mA}$ | < $1,6 \mathrm{~mA}$ | < $1,6 \mathrm{~mA}$ |
| Voltage Drop |  |  |  | < $1,8 \mathrm{~V} ;<6,5 \mathrm{~V}$ (2wires) | < 1,8V; < $6,5 \mathrm{~V}$ (2wires) | < $1,8 \mathrm{~V} ;<6,5 \mathrm{~V}$ (2wires) | < 1,8V ${ }_{\text {i }}$ < $6,5 \mathrm{~V}$ (2wires) |
| Operation Led |  |  |  | Yellow | Yellow | Yellow | Yellow |
| Switching Frequency |  |  |  | $300 \mathrm{~Hz} / 250 \mathrm{~Hz}$ (2 wires NO-NC) | $300 \mathrm{~Hz} / 250 \mathrm{~Hz}$ (2 wires NO-NC) | $300 \mathrm{~Hz} / 250 \mathrm{~Hz}$ (2 wires NO-NC) | $300 \mathrm{~Hz} / 250 \mathrm{~Hz}$ (2 wires NO-NC) |
| Start Up Delay |  |  |  | < 50 ms | < 50 ms | < 50 ms | < 50 ms |
| Repeatability |  |  |  | < $3 \%$ | < $3 \%$ | < $3 \%$ | < $3 \%$ |
| Short Circuit Protection |  |  |  | Present (self-resetting) | Present (self-resetting) | Present (self-resetting) | Present (self-resetting) |
| Electric Protection |  |  |  | Against polarity reversal inductive loads | Against polarity reversal inductive loads | Against polarity reversal inductive loads | Against polarity reversal inductive loads |
| Temperature Limit |  |  |  | $\left(-25 \ldots+70^{\circ} \mathrm{C}\right)$ | $\left(-25 . . .+70^{\circ} \mathrm{C}\right)$ | $\left(-25 . .+70^{\circ} \mathrm{C}\right)$ | $\left(-25 \ldots+70^{\circ} \mathrm{C}\right)$ |
| Protection Degree |  |  |  | IP67 | IP67 | IP67 | IP67 |
| Cable Length |  |  |  | --- | 2 m | --- | 2 m |
| Cable Section |  |  |  | --- | $\begin{aligned} & 2 \times 0,34 \mathrm{~mm}^{2} \\ & 3 \times 0,14 \mathrm{~mm}^{2} \\ & 4 \times 0,25 \mathrm{~mm}^{2} \end{aligned}$ | --- | $\begin{aligned} & 2 \times 0,34 \mathrm{~mm}^{2} \\ & 3 \times 0,14 \mathrm{~mm}^{2} \\ & 4 \times 0,25 \mathrm{~mm}^{2} \end{aligned}$ |
| Housing Material |  |  |  | Nickel-plated brass | Nickel-plated brass | Nickel-plated brass | Nickel-plated brass |
| Active face |  |  |  | LCP | LCP | LCP | LCP |
| Tightening torque |  |  |  | 60Nm | 60Nm | 60Nm | 60Nm |
| Weight - Cable Output |  |  |  | --- | 210 g | --- | 210 g |
| Weight - Connector Output |  |  |  | 170 g | --- | 170 g | --- |



| SHORT |  |  |  |
| :---: | :---: | :---: | :---: |
| FLUSH |  | NON FLUSH |  |
| M12 conn | cable | M12 conn | cable |
| 10 mm | 10 mm | 15 mm | 15 mm |
| --- | --- | --- | --- |
| --- | --- | --- | --- |
| 15-30-81-52 | 15-30-81-03 | 15-30-D1-52 | 15-30-01-03 |
| 958062231 | 958062221 | 958062631 | 958062621 |
| 15-30-82-52 | 15-30-82-03 | 15-30-02-52 | 15-30-02-03 |
| 958062251 | 958062241 | 958062651 | 958062641 |
| 15-30-83-52 | 15-30-83-03 | $15-30-03-52$ | 15-30-03-03 |
| 958062191 | 958062181 | 958062591 | 958062581 |
| 15-30-84-52 | 15-30-84-03 | 15-30-D4-52 | 15-30-D4-03 |
| 958062211 | 958062201 | 95062611 | 958062601 |
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| ---- | --- | --- | ---- |
| --- | --- | --- | --- |


| 10-30 Vdc (-15/10\%) | 10-30 Vdc (-15/10\%) | 10-30 Vdc (-15/10\%) | 10-30 Vdc (-15/10\%) |
| :---: | :---: | :---: | :---: |
| < 10\% | < 10\% | < 10\% | < 10\% |
| < 10\% | < 10\% | < 10\% | < 10\% |
| 200 mA | 200 mA | 200 mA | 200 mA |
| --- | --- | --- | --- |
| < 10 mA | < 10 mA | < 10 mA | < 10 mA |
| $<1,8 \mathrm{~V}$ ( $\mathrm{l}=100 \mathrm{~mA}$ ) | < $1,8 \mathrm{~V}$ ( $\mathrm{l}=100 \mathrm{~mA}$ ) | $<1,8 \mathrm{~V}$ ( $\mathrm{l}=100 \mathrm{~mA}$ ) | < $1,8 \mathrm{~V}$ ( $\mathrm{l}=100 \mathrm{~mA}$ ) |
| Yellow | Yellow | Yellow | Yellow |
| 300 Hz | 300 Hz | 300 Hz | 300 Hz |
| < 50 ms | < 50 ms | < 50 ms | < 50 ms |
| < 3\% | < 3\% | < 3\% | < 3\% |
| Present (self-resetting) | Present (self-resetting) | Present (self-resetting) | Present (self-resetting) |
| Against polarity reversal inductive loads | Against polarity reversal inductive loads | Against polarity reversal inductive loads | Against polarity reversal inductive loads |
| $\left(-25 . . .+60^{\circ} \mathrm{C}\right)$ | $\left(-25 . . .+60^{\circ} \mathrm{C}\right)$ | $\left(-25 \ldots+60^{\circ} \mathrm{C}\right)$ | $\left(-25 \ldots+60^{\circ} \mathrm{C}\right)$ |
| IP67 | IP67 | IP67 | IP67 |
| --- | 2 m | --- | 2 m |
| --- | $3 \times 0,14 \mathrm{~mm}^{2}$ | --- | $3 \times 0,14 \mathrm{~mm}^{2}$ |
| Nickel-plated brass | Nickel-plated brass | Nickel-plated brass | Nickel-plated brass |
| LCP | LCP | LCP | LCP |
| 60Nm | 60Nm | 60Nm | 60Nm |
| --- | 210 g | -- | 210 g |
| 170 g | --- | 170 g | --- |

## 2 wires NO or NC



3 wires PNP or NPN


4 wires (PNP/NPN, NO/NC)


## M12 connector - connections



2 wires NO or NC

| CONTACTS CONFIGURATION |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Avalable | Contacts numbers |  |  |  |  |
|  | 1 | 2 | 3 | 4 |  |
| NO | + |  | - |  |  |
| NC | - |  | + |  |  |

3 wires

| CONTACTS CONPIGURATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Avalable | Contacts rumber |  |  |  |
|  | 1 | 2 | 3 | 4 |
| (NO or NG) | + |  | - | NOINC |

4 wires (PNP/NPN, NO/NC)

| CONTACTS CONFIGURATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Output | 1 | 2 | 3 | 4 |
| NPN NO | + | NO | - | - |
| NPN NC | - | NC | + | - |
| PNP NO | + | + | - | NO |
| PNP NC | - | + | + | NC |

BASIC MFO




SHORT X?

| SH0RT <2 |  |  |  |
| :---: | :---: | :---: | :---: |
| FLUSH |  | NON FLUSH |  |
| M12 conn | cable | M12 conn | cable |
| 15 mm | 15 mm | 20 mm | 20 mm |
| --- | --- | --- | --- |
| --- | --- | --- | --- |
| IS-30-G1-S2 | IS-30-G1-03 | IS-30-H1-S2 | IS-30-H1-03 |
| $95 \mathrm{B063691}$ | $95 \mathrm{B063681}$ | 958063771 | $95 \mathrm{B063761}$ |
| IS-30-G2-S2 | IS-30-G2-03 | IS-30-H2-S2 | IS-30-H2-03 |
| 958063711 | $95 \mathrm{B063701}$ | 958063791 | $95 \mathrm{B063781}$ |
| IS-30-G3-S2 | IS-30-G3-03 | IS-30-H3-S2 | IS-30-H3-03 |
| $95 \mathrm{B063651}$ | 95B063641 | $95 \mathrm{B063731}$ | $95 \mathrm{B063721}$ |
| IS-30-G4-S2 | IS-30-G4-03 | IS-30-H4-S2 | IS-30-H4-03 |
| 958063671 | $95 \mathrm{B063661}$ | 958063751 | $95 \mathrm{B063741}$ |
| IS-30-G5-S2 | IS-30-G5-03 | IS-30-H5-S2 | IS-30-H5-03 |
| $95 \mathrm{B063831}$ | $95 \mathrm{B063821}$ | 95B064450 | $95 \mathrm{B064420}$ |
| IS-30-G6-S2 | IS-30-G6-03 | IS-30-H6-S2 | IS-30-H6-03 |
| 95B064430 | 95B064400 | $95 \mathrm{B064440}$ | 95B064410 |
| --- | --- | --- | --- |
| --- | --- | --- | --- |
| --- | --- | --- | --- |
| --- | --- | --- | --- |
| --- | --- | --- | --- |
| --- | --- | --- | --- |
| --- | --- | --- | --- |
| --- | --- | --- | --- |
| --- | --- | --- | --- |
| --- | --- | --- | --- |
| --- | --- | --- | --- |
| --- | --- | --- | --- |
|  |  |  |  |
| 10-30 Vdc (-15/10\%) | 10-30 Vdc (-15/10\%) | 10-30 Vdc (-15/10\%) | 10-30 Vdc (-15/10\%) |
| < 10\% | < 10\% | < 10\% | < 10\% |
| < 10\% | < 10\% | < 10\% | < 10\% |
| 200 mA | 200 mA | 200 mA | 200 mA |
| --- | --- | --- | --- |
| < 10 mA | < 10 mA | < 10 mA | < 10 mA |
| $<1,2 \mathrm{~V}$ ( $1=100 \mathrm{~mA}$ ) | $<1,2 \mathrm{~V}$ ( $1=100 \mathrm{~mA}$ ) | $<1,2 \mathrm{~V}$ ( $1=100 \mathrm{~mA}$ ) | $<1,2 \mathrm{~V}(1=100 \mathrm{~mA})$ |
| Yellow | Yellow | Yellow | Yellow |
| 200 Hz | 200 Hz | 200 Hz | 200 Hz |
| < 75 ms | < 75 ms | < 75 ms | < 75 ms |
| < 3\% | < 3\% | < 3\% | < 3\% |
| Present (self-resetting) | Present (self-resetting) | Present (self-resetting) | Present (self-resetting) |
| Against polarity reversal inductive loads | Against polarity reversal inductive loads | Against polarity reversal inductive loads | Against polarity reversal inductive loads |
| $\left(-25 \ldots+70^{\circ} \mathrm{C}\right)$ | $\left(-25 \ldots+70^{\circ} \mathrm{C}\right)$ | $\left(-25 \ldots+70^{\circ} \mathrm{C}\right)$ | $\left(-25 \ldots+70^{\circ} \mathrm{C}\right)$ |
| IP67 | IP67 | IP67 | IP67 |
| --- | 2 m | --- | 2 m |
| --- | $\begin{aligned} & 3 \times 0,14 \mathrm{~mm}^{2} \\ & 4 \times 0,25 \mathrm{~mm}^{2} \end{aligned}$ | --- | $\begin{aligned} & 3 \times 0,14 \mathrm{~mm}^{2} \\ & 4 \times 0,25 \mathrm{~mm}^{2} \end{aligned}$ |
| Nickel-plated brass | Nickel-plated brass | Nickel-plated brass | Nickel-plated brass |
| LCP | LCP | LCP | LCP |
| 60 Nm | 60 Nm | 60 Nm | 60Nm |
| --- | 210 g | --- | 210 g |
| 170 g | --- | 170 g | --- |

2 wires NO or NC


3 wires PNP or NPN


4 wires (PNP / NPN, NO/NC)


4 wires (NO+NC)


## M12 connector connections

2 wires NO or NC

| CONTACTS CONFIGURATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Analatio | 1 | 2 | 3 | 4 |
| NO | + |  | - |  |
| MO | - |  | + |  |

3 wires


4 wires (PNP/NPN, NO/NC)

| contacts consturamion |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Outat | Connacti numben |  |  |  |
|  | 1 | 2 | 3 | 4 |
| sewno | + | NO | - | - |
| NONMC | - | NC | $+$ | - |
| PNPNO | $+$ | $+$ | - | No |
| PNPNC | - | + | + | NC |

4 wires (NO+NC)


