#### **DATASHEET - M22-DP-R**



 $\label{eq:mushroom} \textbf{Mushroom actuator, RMQ-Titan, Mushroom, momentary, Mushroom red, red, Blank, Bezel: titanium}$ 





Part no. M22-DP-R Catalog No. 216714 Alternate Catalog M22-DP-RQ

No.

**EL-Nummer** 4355674

(Norway)

#### **Delivery program**

| Delivery program           |   |    |                                 |
|----------------------------|---|----|---------------------------------|
| Product range              |   |    | RMQ-Titan                       |
| Basic function             |   |    | Mushroom-headed pushbutton      |
| Mounting hole diameter     | Ø | mm | 22.5                            |
| Single unit/Complete unit  |   |    | Single unit                     |
| Design                     |   |    | Mushroom                        |
|                            |   |    | momentary                       |
| Colour                     |   |    |                                 |
| Mushroom                   |   |    | red                             |
| Mushroom colour            |   |    |                                 |
| Button plate               |   |    |                                 |
| button plate               |   |    | red                             |
| Button plate               |   |    |                                 |
|                            |   |    | Blank                           |
| Degree of Protection       |   |    | IP66, IP67, IP69                |
| Front ring                 |   |    | Bezel: titanium                 |
| Connection to SmartWire-DT |   |    | yes<br>with SWD-RMQ connections |
| Function                   |   |    | momentary                       |

## **Technical data**

| General                     |              |                   |  |
|-----------------------------|--------------|-------------------|--|
| Standards                   |              |                   | IEC/EN 60947<br>VDE 0660   |
| Lifespan, mechanical        | Operations   | x 10 <sup>6</sup> | >5   |
| Operating frequency         | Operations/h |                   | ≦ 3600   |
| Actuating force             |              | n                 | ≦5   |
| Climatic proofing           |              |                   | Damp heat, constant, to IEC 60068-2-78<br>Damp heat, cyclic, to IEC 60068-2-30 |
| Degree of Protection        |              |                   | IP66, IP67, IP69   |
| Ambient temperature         |              |                   |  |
| Open                        |              | °C                | -25 - +70  |
| Storage                     |              | °C                | - 40 - + 80  |
| Mounting position           |              |                   | As required  |
| Mechanical shock resistance |              | g                 | 30<br>Shock duration 11 ms<br>Sinusoidal<br>according to IEC 60068-2-27        |
| shipping classification     |              |                   | DNV  |







### Design verification as per IEC/EN 61439

| Design vermedition as per reo/en or 150   |                   |    |  |
|---|-------------------|----|--|
| Technical data for design verification  |                   |    |  |
| Rated operational current for specified heat dissipation  | In                | Α  | 0  |
| Heat dissipation per pole, current-dependent  | P <sub>vid</sub>  | W  | 0  |
| Equipment heat dissipation, current-dependent   | P <sub>vid</sub>  | W  | 0  |
| Static heat dissipation, non-current-dependent  | P <sub>vs</sub>   | W  | 0  |
| Heat dissipation capacity   | P <sub>diss</sub> | W  | 0  |
| Operating ambient temperature min.  |                   | °C | -25  |
| Operating ambient temperature max.  |                   | °C | 70   |
| IEC/EN 61439 design verification  |                   |    |  |
| 10.2 Strength of materials and parts  |                   |    |  |
| 10.2.2 Corrosion resistance   |                   |    | Meets the product standard's requirements.   |
| 10.2.3.1 Verification of thermal stability of enclosures  |                   |    | Meets the product standard's requirements.   |
| 10.2.3.2 Verification of resistance of insulating materials to normal heat  |                   |    | Meets the product standard's requirements.   |
| 10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects $$ |                   |    | Meets the product standard's requirements.   |
| 10.2.4 Resistance to ultra-violet (UV) radiation  |                   |    | Please enquire   |
| 10.2.5 Lifting  |                   |    | Does not apply, since the entire switchgear needs to be evaluated.   |
| 10.2.6 Mechanical impact  |                   |    | Does not apply, since the entire switchgear needs to be evaluated.   |
| 10.2.7 Inscriptions   |                   |    | Meets the product standard's requirements.   |
| 10.3 Degree of protection of ASSEMBLIES   |                   |    | Does not apply, since the entire switchgear needs to be evaluated.   |
| 10.4 Clearances and creepage distances  |                   |    | Meets the product standard's requirements.   |
| 10.5 Protection against electric shock  |                   |    | Does not apply, since the entire switchgear needs to be evaluated.   |
| 10.6 Incorporation of switching devices and components  |                   |    | Does not apply, since the entire switchgear needs to be evaluated.   |
| 10.7 Internal electrical circuits and connections   |                   |    | Is the panel builder's responsibility.   |
| 10.8 Connections for external conductors  |                   |    | Is the panel builder's responsibility.   |
| 10.9 Insulation properties  |                   |    |  |
| 10.9.2 Power-frequency electric strength  |                   |    | Is the panel builder's responsibility.   |
| 10.9.3 Impulse withstand voltage  |                   |    | Is the panel builder's responsibility.   |
| 10.9.4 Testing of enclosures made of insulating material  |                   |    | Is the panel builder's responsibility.   |
| 10.10 Temperature rise  |                   |    | Not applicable.  |
| 10.11 Short-circuit rating  |                   |    | Is the panel builder's responsibility. The specifications for the switchgear must be observed.                             |
| 10.12 Electromagnetic compatibility   |                   |    | Is the panel builder's responsibility. The specifications for the switch<br>gear must be observed. $\label{eq:constraint}$ |
| 10.13 Mechanical function   |                   |    | The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.                   |

#### **Technical data ETIM 8.0**

 $Low-voltage\ industrial\ components\ (EG000017)\ /\ Front\ element\ for\ mushroom\ push-button\ (EC001038)$ 

Electric engineering, automation, process control engineering / Low-voltage switch technology / Command and alarm device / Front element for mushroom push-button actuators (ecl@ss10.0.1-27-37-12-12 [AKF030014])

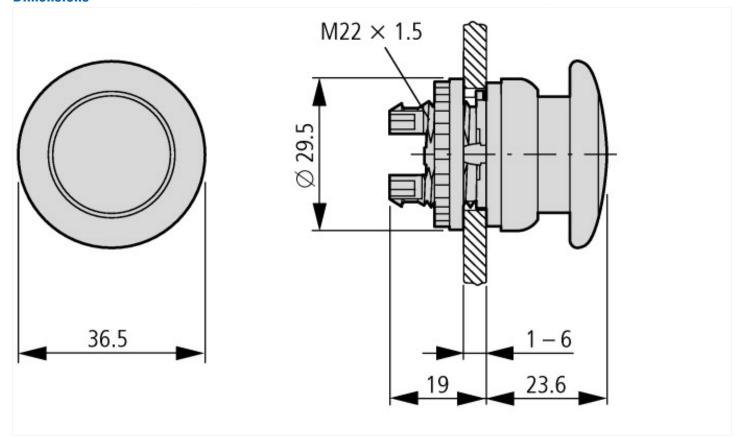
| (60)@3310.0.1-27-07-12-12 [AIXI 000014]] |    |       |
|--|----|-------|
| Colour button                            |    | Red   |
| Construction type lens                   |    | Round |
| Diameter cap                             | mm | 36.5  |
| Hole diameter                            | mm | 22.5  |
| Width opening                            | mm | 0     |

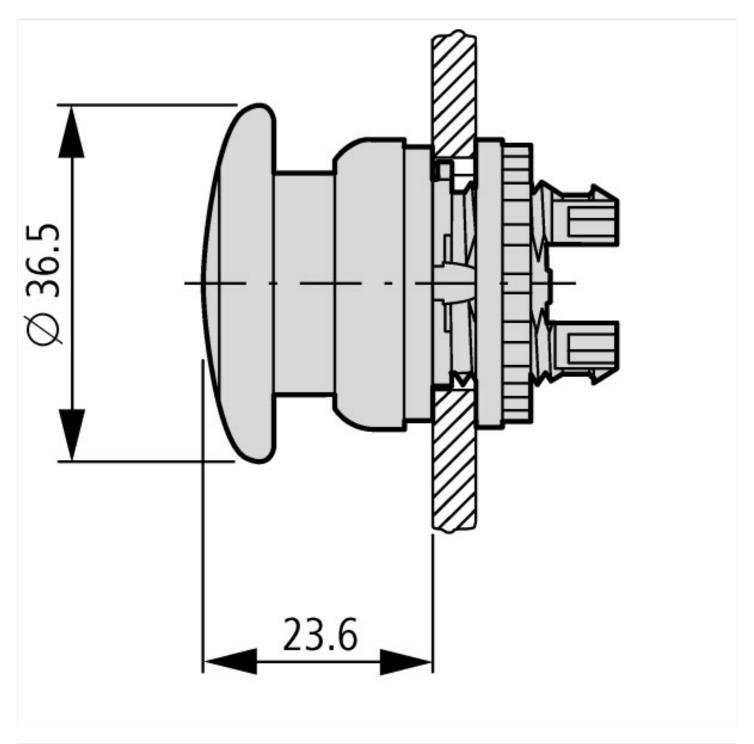
| Height opening              | mm | 0          |
|-----------------------------|----|------------|
| Degree of protection (IP)   |    | IP67/IP69K |
| Degree of protection (NEMA) |    | 4X, 13     |
| Type of button              |    | Flat       |
| Suitable for illumination   |    | No         |
| With lighting               |    | No         |
| Supply voltage lamp         | V  | 0          |
| Switching function latching |    | No         |
| Spring-return               |    | Yes        |
| With front ring             |    | Yes        |
| Material front ring         |    | Plastic    |
| Colour front ring           |    | Chrome     |
| Suitable for emergency stop |    | No         |
| Unlocking method            |    | None       |

# Approvals

| Product Standards           | IEC/EN 60947-5; UL 508; CSA-C22.2 No. 14-05; CSA-C22.2 No. 94-91; CE marking |
|-----------------------------|--|
| UL File No.                 | E29184   |
| UL Category Control No.     | NKCR   |
| CSA File No.                | 012528   |
| CSA Class No.               | 3211-03  |
| North America Certification | UL listed, CSA certified   |
| Degree of Protection        | UL/CSA Type 3R, 4X, 12, 13   |

### **Dimensions**





### **Additional product information (links)**

IL04716002Z (AWA1160-1745) RMQ-Titan System

IL04716002Z (AWA1160-1745) RMQ-Titan System  $https://es-assets.eaton.com/DOCUMENTATION/AWA\_INSTRUCTIONS/IL04716002Z2021\_07.pdf$