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## M12 X-treme male $90^{\circ}$ / MSUD dbl. valve plug form A

PUR 4x0.75 bk UL/CSA+drag chain 1,5m

Form A (18 mm) - M12, male $90^{\circ}$
24 V AC $\pm 20 \% / D C \pm 25 \%$
LED and suppression
Connection cable $L=150 \mathrm{~mm}$
Bridged PE
without cable sleeves
Plastic housings with good resistance against chemicals and oils.
The resistance to aggressive media should be individually tested for your application. Further details on request.
Further cable lengths on request.

Link to Product
Illustration


Valve plug 2
Valve plug 1
Male M12



Product may differ from Image

Cable length
1,5 m

| Side 1 | $0,4 \mathrm{Nm}$ |
| :--- | :--- |
| Tightening torque | MSUD A |
| Family construction form | M12 x 1 |
| Thread | PUR |
| Material |  |
| Side 2 | $0,6 ~ \mathrm{Nm}$ |
| Tightening torque | MSUD A |
| Family construction form | PBT |
| Material |  |
| Side 3 | M12 |
| Family construction form |  |


| Commercial data | 27279218 |
| :--- | :--- |
| ECLASS-6.0 | 27279218 |
| ECLASS-7.0 | 27279218 |
| ECLASS-8.0 | 27060311 |
| ECLASS-9.0 | 27060312 |
| ECLASS-10.1 | 27060312 |
| ECLASS-11.1 | 27060312 |
| ECLASS-12.0 | EC001855 |
| ETIM-5.0 | 85444290 |
| customs tariff number | 4048879902106 |
| GTIN | 1 |


| Electrical data |  |
| :--- | :--- |
| Capacity CX | 20 ms |
| Electrical data \| Supply |  |
| Operating voltage AC | 24 V |
| Operating voltage AC min. | $19,2 \mathrm{~V}$ |
| Operating voltage AC max. | $28,8 \mathrm{~V}$ |
| Operating voltage DC | 24 V |


| Operating voltage DC min. | 18 V |
| :---: | :---: |
| Operating voltage DC max. | 30 V |
| Cut-off peak voltage max. | 55 V |
| Current operating per contact max. | 4 A |
| Current consumption max. | 15 mA |
| Diagnostics |  |
| Status indication LED | yellow |
| Installation \| Connection |  |
| Width across flats | SW 14 |
| Device protection \| Electrical |  |
| Degree of protection (EN IEC 60529) | IP67 |
| Pollution Degree | 3 |
| Rated surge voltage | 0,8 kV |
| Material group (IEC 60664-1) | 1 |
| Additional suppressor | Diode, Z-Diode |
| Mechanical data \| Material data |  |
| Color housing | black |
| Material gasket | Silicon |
| Material housing | Plastic |
| Locking material | Stainless steel 1.4404 (V4A) |
| Mechanical data \| Mounting data |  |
| Mounting method | M3 |
| Environmental characteristics \| Climatic |  |
| Operating temperature min. | $-25^{\circ} \mathrm{C}$ |
| Operating temperature max. | $85^{\circ} \mathrm{C}$ |
| Additional condition temperature range | depending on cable quality |
| Important installation notes |  |
| Note on strain relief | Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties. |
| Note on bending radius | Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces. |
| Installation \| Cable |  |
| Cable identification | 637 |
| Cable Type | 3 |
| Printing color of wire insulation | white (isolation black) |
| Jacket Color | black |
| Type of Certificate | cURus |
| Amount stranding | 1 |
| Stranding | 4 wires twisted |
| wire arrangement | black 1, black 2, black 3, green-yellow |
| Cable weigth | 69,3 g/m |
| Material jacket | PUR |
| Shore hardness jacket | $90 \pm 5$ Shore A |
| Freedom from ingredients (jacket) | lead-free, cadmium-free, CFC-free, halogen-free, silicone-free |
| Outer-diameter (jacket) | 6,5 mm |
| Tolerance outer diameter (sheath) | $\pm 5 \%$ |
| Material wire insulation | PP |
| Amount wires | 4 |
| Outer diameter insulation | 1,85 mm |
| Outer diameter tolerance core insulation | $\pm 5$ \% |
| Shore hardness wire insulation | $70 \pm 5$ Shore D |
| Ingredient freeness wire insulation | lead-free, cadmium-free, CFC-free, halogen-free, silicone-free |


| Printing color of wire insulation | white (isolation black) |
| :---: | :---: |
| Amount strands (wire) | 42 |
| Diameter of single wires | 0,15 mm |
| Conductor crosssection (wire) | 0,75 mm ${ }^{2}$ |
| Material conductor wire | Stranded copper wire, bare |
| Conductor type (wire) | strand class 6 |
| Traversing distance (C-track) | 10 m @ $25^{\circ} \mathrm{C}$ \| horizontal |
| Nominal voltage AC max. | 300 V |
| Current load capacity (standard) | to DIN VDE 0298-4 |
| Current load capacity min. wire | 9,6 A |
| Electrical resistance line constant wire | $26 \Omega / \mathrm{km} @ 20^{\circ} \mathrm{C}$ |
| AC withstand voltage (wire - wire) | 2,5 kV @ 60 s |
| Power frequency withstand voltage (wire jacket) | 2,5 kV @ 60 s |
| Min. operating temperature (static) | $-40^{\circ} \mathrm{C}$ |
| Max. operating temperature (fixed) | $80^{\circ} \mathrm{C} / 90^{\circ} \mathrm{C}$ @ 10000 h Operation |
| Operating temperature min. (dynamic) | $-25^{\circ} \mathrm{C}$ |
| Operating temperature max. (dynamic) | $80^{\circ} \mathrm{C} / 90^{\circ} \mathrm{C}$ @ 10000 h Operation |
| UV resistance | DIN EN ISO 4892-2 A |
| Flame resistance | UL 1581 § 1100 FT2 \| IEC 60332-2-2 | UL 1581 § 1090 |
| chemical resistance | Good, application-related testing |
| Gasoline resistance | Good, application-related testing |
| Oil resistance | DIN EN 60811-404 \| Good, application-related testing |
| Bending radius (fixed) | $5 \times$ Outer diameter |
| Bending radius (dynamic) | $10 \times$ Outer diameter |
| Travel speed (C-track) | 10 Mio. @ $25^{\circ} \mathrm{C}$ |
| No. of torsion cycles | 2 Mio. |
| Torsion stress | $\pm 180 \% \mathrm{~m}$ |
| Torsion speed | 35 cycles/min |

