

## M12 male 90° A-cod. / MSUD valve plug A-18mm

PUR 3x0.75 gy UL/CSA+drag ch. 0.6m

Form A (18 mm) – M12, male 90° 24 V AC ±20% / DC ±25% LED and suppression Bridged PE

Art-No. 7005 - M12 Lite - (plastic hexagonal screw) on request

Further cable lengths on request.

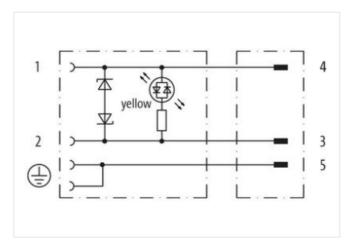
Plastic housings with good resistance against chemicals and oils.

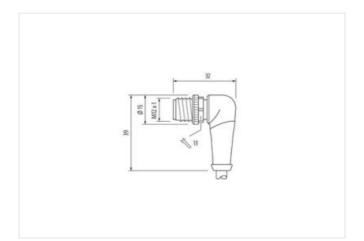
The resistance to aggressive media should be individually tested for your application. Further details on request.

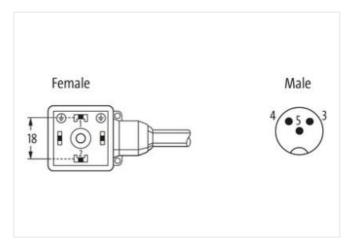
## **Link to Product**

## Illustration



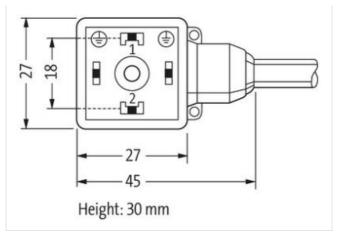








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Product may differ from Image









Side 1           Family construction form         MSUD           Thread         M12 x 1           Material         PUR           Degree of protection (EN IEC 60529)         IP67           Side 2         Tightening torque           Family construction form         M12           Thread         M3           suitable for corrusated tube (internal Ø)         10 mm           Material         PBT           Width across flats         SW13           Degree of protection (EN IEC 60529)         IP67           Commercial data         ECLASS 6.0           ECLASS 7.0         27279218           ECLASS 8.0         27279218           ECLASS 8.0         27279218           ECLASS 9.0         27060312           ECLASS 9.0         27060312           ECLASS 9.10.1         27060312           ECLASS 9.12.0         27060312           ECLASS 9.0         E001855           customs tariff number         85444290           GTIN         4048879151269           Packaging unit         1           Electrical data         Supply           Oppo-out delay time max.         20 ms	Cable length	0,6 m
Family construction form         MSUD           Thread         M12 x 1           Material         PUR           Degree of protection (EN IEC 60529)         IP67           Side 2           Tightening torque         0,4 Nm           Family construction form         M12           Thread         M3           suitable for corrugated tube (internal Ø)         10 mm           Material         PBT           Width across flats         SW13           Degree of protection (EN IEC 60529)         IP67           Commercial date           ECLASS-6.0         27279218           ECLASS-7.0         27279218           ECLASS-9.0         27060311           ECLASS-9.0         27060312           ECLASS-11.1         27060312           ECLASS-12.0         27060312           ECLASS-12.0         27060312           ETIM-5.0         E001855           customs tariff number         85444290           GTIN         4048879151269           Packaging unit         1           Electrical data         Supply	Side 1	
Thread         M12 x 1           Material         PUR           Degree of protection (EN IEC 60529)         IP67           Side 2         Image: Control of the control	Tightening torque	0,6 Nm
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Side 2           Tightening torque         0,4 Nm           Family construction form         M12           Thread         M3           suitable for corrugated tube (internal Ø)         10 mm           Material         PBT           Width across flats         SW13           Degree of protection (EN IEC 60529)         IP67           Commercial data           ECLASS-6.0         27279218           ECLASS-7.0         27279218           ECLASS-8.0         27279218           ECLASS-9.0         27060311           ECLASS-10.1         27060312           ECLASS-10.1         27060312           ECLASS-12.0         27060312           ETIM-5.0         ECOM385           customs tariff number         85444290           GTIN         4048879151269           Packaging unit         1           Electrical data         Drop-out delay time max.         20 ms           Electrical data   Supply	Material	PUR
Tightening torque 0,4 Nm Family construction form M12 Thread M3 suitable for corrugated tube (internal Ø) 10 mm Material PBT Width across flats SW13 Degree of protection (EN IEC 60529) IP67 Commercial data ECLASS-6.0 27279218 ECLASS-7.0 27279218 ECLASS-9.0 27279218 ECLASS-9.0 27279218 ECLASS-9.0 27060311 ECLASS-10.1 27060312 ECLASS-10.1 27060312 ECLASS-10.0 27060311 ECLASS-10.0 270603	Degree of protection (EN IEC 60529)	IP67
Family construction form         M12           Thread         M3           suitable for corrugated tube (internal Ø)         10 mm           Material         PBT           Width across flats         SW13           Degree of protection (EN IEC 60529)         IP67           Commercial data           ECLASS-6.0         27279218           ECLASS-7.0         27279218           ECLASS-8.0         27279218           ECLASS-9.0         27060311           ECLASS-10.1         27060312           ECLASS-11.1         27060312           ECLASS-12.0         27060312           ETIM-5.0         EC001855           customs tariff number         85444290           GTIN         4048879151269           Packaging unit         1           Electrical data         Drop-out delay time max.         20 ms           Electrical data   Supply	Side 2	
Thread	Tightening torque	0,4 Nm
suitable for corrugated tube (internal Ø)         10 mm           Material         PBT           Width across flats         SW13           Degree of protection (EN IEC 60529)         IP67           Commercial data           ECLASS-6.0         27279218           ECLASS-7.0         27279218           ECLASS-8.0         27279218           ECLASS-9.0         27060311           ECLASS-9.0.1         27060312           ECLASS-10.1         27060312           ECLASS-12.0         27060312           ETIM-5.0         EC001855           customs tariff number         85444290           GTIN         4048879151269           Packaging unit         1           Electrical data         Supply	Family construction form	M12
Material         PBT           Width across flats         SW13           Degree of protection (EN IEC 60529)         IP67           Commercial data           ECLASS-6.0         27279218           ECLASS-7.0         27279218           ECLASS-8.0         27279218           ECLASS-9.0         27060311           ECLASS-9.1         27060312           ECLASS-11.1         27060312           ECLASS-12.0         27060312           ETIM-5.0         EC001855           customs tariff number         85444290           GTIN         4048879151269           Packaging unit         1           Electrical data         Drop-out delay time max.         20 ms           Electrical data   Supply		M3
Width across flats         SW13           Degree of protection (EN IEC 60529)         IP67           Commercial data           ECLASS-6.0         27279218           ECLASS-7.0         27279218           ECLASS-8.0         27279218           ECLASS-9.0         27060311           ECLASS-9.1         27060312           ECLASS-11.1         27060312           ECLASS-12.0         27060312           ETIM-5.0         EC001855           customs tariff number         85444290           GTIN         4048879151269           Packaging unit         1           Electrical data         Supply	suitable for corrugated tube (internal $\emptyset$ )	
Degree of protection (EN IEC 60529)   IP67	Material	PBT
Commercial data         ECLASS-6.0       27279218         ECLASS-7.0       27279218         ECLASS-8.0       27279218         ECLASS-9.0       27060311         ECLASS-10.1       27060312         ECLASS-11.1       27060312         ECLASS-12.0       27060312         ETIM-5.0       EC001855         customs tariff number       85444290         GTIN       4048879151269         Packaging unit       1         Electrical data       Drop-out delay time max.       20 ms         Electrical data   Supply		
ECLASS-6.0 27279218 ECLASS-8.0 27279218 ECLASS-9.0 27060311 ECLASS-10.1 27060312 ECLASS-11.1 27060312 ECLASS-12.0 27060312 ECLASS-12.0 27060312 ETIM-5.0 EC001855 customs tariff number 85444290 GTIN 4048879151269 Packaging unit 1  Electrical data Drop-out delay time max. 20 ms  Electrical data   Supply	Degree of protection (EN IEC 60529)	IP67
ECLASS-7.0 27279218  ECLASS-8.0 27279218  ECLASS-9.0 27060311  ECLASS-10.1 27060312  ECLASS-11.1 27060312  ECLASS-12.0 27060312  ETIM-5.0 EC001855  customs tariff number 85444290  GTIN 4048879151269  Packaging unit 1  Electrical data  Drop-out delay time max. 20 ms  Electrical data   Supply	Commercial data	
ECLASS-8.0       27279218         ECLASS-9.0       27060311         ECLASS-10.1       27060312         ECLASS-11.1       27060312         ECLASS-12.0       27060312         ETIM-5.0       EC001855         customs tariff number       85444290         GTIN       4048879151269         Packaging unit       1         Electrical data       Drop-out delay time max.       20 ms         Electrical data   Supply	ECLASS-6.0	27279218
ECLASS-9.0 27060311  ECLASS-10.1 27060312  ECLASS-11.1 27060312  ECLASS-12.0 27060312  ETIM-5.0 EC001855  customs tariff number 85444290  GTIN 4048879151269  Packaging unit 1  Electrical data  Drop-out delay time max. 20 ms  Electrical data   Supply	ECLASS-7.0	27279218
ECLASS-10.1 27060312 ECLASS-11.1 27060312 ECLASS-12.0 27060312 ETIM-5.0 EC001855 customs tariff number 85444290 GTIN 4048879151269 Packaging unit 1  Electrical data Drop-out delay time max. 20 ms  Electrical data   Supply		27279218
ECLASS-11.1 27060312  ECLASS-12.0 27060312  ETIM-5.0 EC001855  customs tariff number 85444290  GTIN 4048879151269  Packaging unit 1  Electrical data  Drop-out delay time max. 20 ms  Electrical data   Supply	ECLASS-9.0	27060311
ECLASS-12.0       27060312         ETIM-5.0       EC001855         customs tariff number       85444290         GTIN       4048879151269         Packaging unit       1         Electrical data         Drop-out delay time max.       20 ms         Electrical data   Supply		
ETIM-5.0		27060312
Customs tariff number 85444290 GTIN 4048879151269 Packaging unit 1  Electrical data Drop-out delay time max. 20 ms  Electrical data   Supply		
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Packaging unit 1  Electrical data  Drop-out delay time max. 20 ms  Electrical data   Supply	customs tariff number	85444290
Electrical data  Drop-out delay time max. 20 ms  Electrical data   Supply		4048879151269
Drop-out delay time max. 20 ms  Electrical data   Supply	Packaging unit	1
Electrical data   Supply	Electrical data	
	Drop-out delay time max.	20 ms
Operating voltage AC 24 V	Electrical data   Supply	
	Operating voltage AC	24 V



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On anating a contract A Commission	19,2 V
Operating voltage AC min.	
Operating voltage AC max.	28,8 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
Device protection   Electrical	
Additional condition protection degree	inserted, screwed
Pollution Degree	3
Rated surge voltage	0,8 kV
Material group (IEC 60664-1)	1
Additional suppressor	Diode, Z-Diode
Mechanical data   Material data	
Coating locking	Nickeled
Color housing	black
Material gasket	PUR
Material housing	Plastic
Locking material	Zinc die-casting
Mechanical data   Mounting data	
Mounting method	inserted, screwed
Environmental characteristics   Climatic	
Operating temperature min.	-25 °C
Operating temperature max.	85 °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	<b>Attention:</b> Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.
Installation   Cable	
wire arrangement	black 1, black 2, green-yellow
Cable identification	236
Cable Type	3
Printing color of wire insulation	white (isolation black)
Jacket Color	gray
Type of Certificate	cURus
Amount stranding	1
Stranding	3 wires twisted
wire arrangement	black 1, black 2, green-yellow
Cable weigth	56,1 g/m
Material jacket	PUR
Shore hardness jacket	90 ± 5 Shore A
Freedom from ingredients (jacket)	lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
Outer-diameter (jacket)	5,9 mm
Tolerance outer diameter (sheath)	±5 %
Material wire insulation	PP
Amount wires	3
Outer diameter insulation	1,85 mm
Outer diameter insuidtion	1,00 11111



Outer diameter tolerance core insulation	± 5 %
Shore hardness wire insulation	70 ± 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 <sup>2</sup>
Material conductor wire	Stranded copper wire, bare
Conductor type (wire)	strand class 6
Nominal voltage AC max.	300 V
Current load capacity (standard)	to DIN VDE 0298-4
Current load capacity min. wire	12 A
Electrical resistance line constant wire	26 Ω/km @ 20 °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 °C
Max. operating temperature (fixed)	80 °C / 90 °C @ 10000 h Operation
Operating temperature min. (dynamic)	-25 °C
Operating temperature max. (dynamic)	80 °C / 90 °C @ 10000 h Operation
Flame resistance	UL 1581 § 1090   IEC 60332-2-2   UL 1581 § 1100 FT2
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 x Outer diameter
Bending radius (dynamic)	10 x Outer diameter
No. of bending cycles (C-track)	10 Mio. @ 25 °C
Traversing distance (C-track)	10 m @ 25 °C   horizontal
Travel speed (C-track)	3 m/s @ 25 °C
No. of torsion cycles	2 Mio.
Torsion stress	± 180 °/m
Torsion speed	35 cycles/min