

## M12 male 0° A-cod. / MSUD valve plug A-18mm

PUR 5x0.34 bk UL/CSA+drag ch. 3m

MSUD Form A (18 mm) – M12, male straight 24 V DC ±25% LED (yellow/green) for pressure switches Further cable lengths on request.

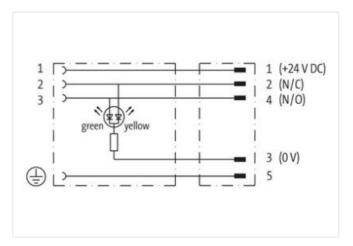
Plastic housings with good resistance against chemicals and oils.

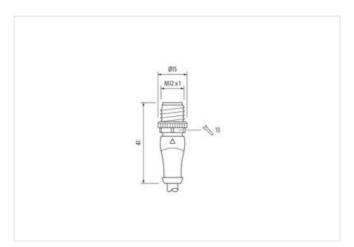
The resistance to aggressive media should be individually tested for your application. Further details on request.

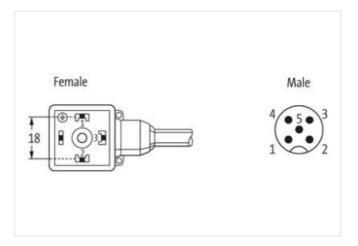
## **Link to Product**

## Illustration



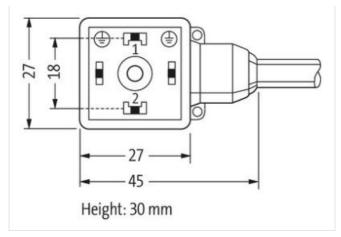








stay connected



Product may differ from Image



Cable length	3 m
Side 1	
Tightening torque	0,4 Nm
Family construction form	MSUD
Thread	M3
Material	PUR
Degree of protection (EN IEC 60529)	IP67
Side 2	
Tightening torque	0,6 Nm
Family construction form	M12
Thread	M12 x 1
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	4048879315456
Packaging unit	1
Electrical data   Supply	
Operating voltage DC	24 V
Operating voltage DC min.	18 V
Operating voltage DC max.	30 V
Current operating per contact max.	4 A
-	

The information in this Product-PDF has been compiled with the utmost care. Liability for the correctness completeness and topicality of the information is restricted to gross negligence. Version: 2024-05-21



stay connected

Additional condition protection degree inserval pollution Degree 3 Rated surge voltage 0,8 Material group (IEC 60664-1) I  Mechanical data   Material data  Coating locking Nick Color housing black Material gasket PUF Material housing Plast Locking material Zinc Mechanical data   Mounting data  Mounting method inserval Mounting data  Environmental characteristics   Climatic Operating temperature min25 Operating temperature max. 85° Additional condition temperature range dep Important installation notes  Note on strain relief Protection Cable identification 635 Cable Type 3 Jacket Color black	ckeled  ack  JR  astic  actic  actic  actic  actic  actic  actic-casting  erted, screwed  actic  actic actic  actic actic actic actic actic actic actic actic actic actic actic actic actic act
Device protection   Electrical  Additional condition protection degree inservation   Section   S	serted, screwed  SkV  ckeled  ckeled  ckeled  ckeled  ckeled  ckeled  ckeled  contained  serted, screwed  serted, screwed  serted, screwed  certed, screwed  ce
Additional condition protection degree inserval pollution Degree 3 Rated surge voltage 0,8 Material group (IEC 60664-1) I  Mechanical data   Material data Coating locking Nick Color housing black Material gasket PUF Material housing Plast Locking material Zinc Mechanical data   Mounting data Mounting method inserval characteristics   Climatic Operating temperature min25 Operating temperature max. 85° Additional condition temperature range dep Important installation notes Note on strain relief Prot Note on bending radius Attalendary Attalendary Prot Installation   Cable Cable identification 635 Cable Type 3 Jacket Color black	ckeled  ck  DR  astic  astic  creted, screwed  certed, screwed  certed, screwed  certed by screwed  companies on cable quality  contect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.  tention: Observe the permissible bending radii when laying cables, as the IP protection class can be dangered by excessive bending forces.
Pollution Degree 3 Rated surge voltage 0,8 Material group (IEC 60664-1) 1  Mechanical data   Material data Coating locking Nick Color housing blac Material gasket PUF Material housing Plas Locking material Zinc Mechanical data   Mounting data Mounting method inse Environmental characteristics   Climatic Operating temperature min25 Operating temperature max. 85° Additional condition temperature range dep Important installation notes Note on strain relief Prof Note on bending radius Atte Installation   Cable Cable identification 635 Cable Type 3 Jacket Color blace	ckeled  ck  DR  astic  astic  creted, screwed  certed, screwed  certed, screwed  certed by screwed  companies on cable quality  contect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.  tention: Observe the permissible bending radii when laying cables, as the IP protection class can be dangered by excessive bending forces.
Pollution Degree 3 Rated surge voltage 0,8 Material group (IEC 60664-1) 1  Mechanical data   Material data Coating locking Nick Color housing blac Material gasket PUF Material housing Plas Locking material Zinc Mechanical data   Mounting data Mounting method inse Environmental characteristics   Climatic Operating temperature min25 Operating temperature max. 85 ° Additional condition temperature range dep Important installation notes Note on strain relief Prof Note on bending radius Atte Installation   Cable Cable identification 635 Cable Type 3 Jacket Color blace	ckeled  ck  DR  astic  astic  creted, screwed  certed, screwed  certed, screwed  certed by screwed  companies on cable quality  contect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.  tention: Observe the permissible bending radii when laying cables, as the IP protection class can be dangered by excessive bending forces.
Rated surge voltage 0,8  Material group (IEC 60664-1) I  Mechanical data   Material data  Coating locking Nick Color housing blac  Material gasket PUF  Material housing Plas Locking material Zinc  Mechanical data   Mounting data  Mounting method inse  Environmental characteristics   Climatic  Operating temperature min25  Operating temperature max. 85°  Additional condition temperature range dep  Important installation notes  Note on strain relief Prot  Note on bending radius Atte end  Installation   Cable  Cable identification 635  Cable Type 3  Jacket Color blace	ckeled  ack  JR  astic  actic  actic  actic  actic  actic  actic-casting  erted, screwed  actic  actic actic  actic actic actic actic actic actic actic actic actic actic actic actic actic act
Material group (IEC 60664-1)  Mechanical data   Material data  Coating locking  Nick Color housing  Material gasket  Put Material housing  Locking material  Zinc  Mechanical data   Mounting data  Mounting method  inse  Environmental characteristics   Climatic  Operating temperature min.  -25  Operating temperature max.  Additional condition temperature range  Important installation notes  Note on strain relief  Prof  Note on bending radius  Installation   Cable  Cable identification  G35  Cable Type  3  Jacket Color	ckeled  ack  JR  astic  actic  actic  actic  actic  actic  actic-casting  erted, screwed  actic  actic actic  actic actic actic actic actic actic actic actic actic actic actic actic actic act
Mechanical data   Material data  Coating locking Nick Color housing blac  Material gasket PUF Material housing Plas Locking material Zinc  Mechanical data   Mounting data  Mounting method inse  Environmental characteristics   Climatic  Operating temperature min25 Operating temperature max. 85° Additional condition temperature range dep  Important installation notes  Note on strain relief Prof Note on bending radius Atteend  Installation   Cable  Cable identification 635 Cable Type 3 Jacket Color blace	IR astic  actic die-casting  serted, screwed  5 °C  °C  pending on cable quality  otect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.  tention: Observe the permissible bending radii when laying cables, as the IP protection class can be dangered by excessive bending forces.
Coating locking Nick Color housing blace Material gasket PUF Material housing Plase Locking material Zince  Mechanical data   Mounting data  Mounting method insee  Environmental characteristics   Climatic  Operating temperature min25 Operating temperature max. 85 ° Additional condition temperature range dep  Important installation notes  Note on strain relief Prof  Note on bending radius Atte end  Installation   Cable  Cable identification 635 Cable Type 3 Jacket Color blace	IR astic  actic die-casting  serted, screwed  5 °C  °C  pending on cable quality  otect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.  tention: Observe the permissible bending radii when laying cables, as the IP protection class can be dangered by excessive bending forces.
Color housing black Material gasket PUF Material housing Plast Locking material Zinc  Mechanical data   Mounting data  Mounting method inse  Environmental characteristics   Climatic  Operating temperature min25  Operating temperature max. 85° Additional condition temperature range dep  Important installation notes  Note on strain relief Prof  Note on bending radius Atta end  Installation   Cable  Cable identification 635  Cable Type 3  Jacket Color black	IR astic  actic die-casting  serted, screwed  5 °C  °C  pending on cable quality  otect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.  tention: Observe the permissible bending radii when laying cables, as the IP protection class can be dangered by excessive bending forces.
Material gasket PUF  Material housing Plas Locking material Zinc  Mechanical data   Mounting data  Mounting method inse  Environmental characteristics   Climatic  Operating temperature min25 Operating temperature max. 85° Additional condition temperature range dep  Important installation notes  Note on strain relief Prof Note on bending radius Atte end  Installation   Cable  Cable identification 635 Cable Type 3 Jacket Color blace	astic actic actic acting  serted, screwed  5 °C  pending on cable quality  btect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.  Itention: Observe the permissible bending radii when laying cables, as the IP protection class can be dangered by excessive bending forces.
Material housing Plas Locking material Zinc  Mechanical data   Mounting data  Mounting method inse  Environmental characteristics   Climatic  Operating temperature min25 Operating temperature max. 85° Additional condition temperature range dep  Important installation notes  Note on strain relief Prof Note on bending radius Atte end  Installation   Cable  Cable identification 635 Cable Type 3 Jacket Color blace	astic no die-casting  eerted, screwed  5 °C  °C  pending on cable quality  otect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.  tention: Observe the permissible bending radii when laying cables, as the IP protection class can be dangered by excessive bending forces.
Locking material Zinc  Mechanical data   Mounting data  Mounting method inse  Environmental characteristics   Climatic  Operating temperature min25  Operating temperature max. 85°  Additional condition temperature range dep  Important installation notes  Note on strain relief Prof  Note on bending radius Atteend  Installation   Cable  Cable identification 635  Cable Type 3  Jacket Color blace	erted, screwed  5 °C  °C  pending on cable quality  otect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.  tention: Observe the permissible bending radii when laying cables, as the IP protection class can be dangered by excessive bending forces.
Mechanical data   Mounting data  Mounting method inse  Environmental characteristics   Climatic  Operating temperature min25  Operating temperature max. 85°  Additional condition temperature range dep  Important installation notes  Note on strain relief Prof  Note on bending radius Atteend  Installation   Cable  Cable identification 635  Cable Type 3  Jacket Color blace	pending on cable quality  percentage of cable ties.  Section: Observe the permissible bending radii when laying cables, as the IP protection class can be dangered by excessive bending forces.
Mounting method insert Environmental characteristics   Climatic    Operating temperature min25 Operating temperature max. 85 ° Additional condition temperature range dep   Important installation notes   Note on strain relief   Prof Note on bending radius   Atte end   Installation   Cable   Cable identification   635 Cable Type   3 Jacket Color   blace	pending on cable quality  otect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.  tention: Observe the permissible bending radii when laying cables, as the IP protection class can be dangered by excessive bending forces.
Environmental characteristics   Climatic  Operating temperature min25  Operating temperature max. 85°  Additional condition temperature range dep  Important installation notes  Note on strain relief Prot  Note on bending radius Atteend  Installation   Cable  Cable identification 635  Cable Type 3  Jacket Color blace	pending on cable quality  otect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.  tention: Observe the permissible bending radii when laying cables, as the IP protection class can be dangered by excessive bending forces.
Operating temperature min25 Operating temperature max. 85° Additional condition temperature range dep Important installation notes  Note on strain relief Prof Note on bending radius Atte end Installation   Cable Cable identification 635 Cable Type 3 Jacket Color blace	pending on cable quality  pertect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.  tention: Observe the permissible bending radii when laying cables, as the IP protection class can be dangered by excessive bending forces.
Operating temperature max.  Additional condition temperature range dep  Important installation notes  Note on strain relief Prof  Note on bending radius Atte end  Installation   Cable  Cable identification 635  Cable Type 3  Jacket Color blace	pending on cable quality  pertect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.  tention: Observe the permissible bending radii when laying cables, as the IP protection class can be dangered by excessive bending forces.
Operating temperature max.  Additional condition temperature range dep  Important installation notes  Note on strain relief Prof  Note on bending radius Atte end  Installation   Cable  Cable identification 635  Cable Type 3  Jacket Color blace	pending on cable quality  otect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.  tention: Observe the permissible bending radii when laying cables, as the IP protection class can be dangered by excessive bending forces.
Important installation notes  Note on strain relief Prof  Note on bending radius Atte end  Installation   Cable  Cable identification 635  Cable Type 3  Jacket Color blace	otect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.  tention: Observe the permissible bending radii when laying cables, as the IP protection class can be dangered by excessive bending forces.
Important installation notes  Note on strain relief Prof  Note on bending radius Atte end  Installation   Cable  Cable identification 635  Cable Type 3  Jacket Color blace	otect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.  tention: Observe the permissible bending radii when laying cables, as the IP protection class can be dangered by excessive bending forces.
Note on strain relief Prof Note on bending radius  Installation   Cable Cable identification Cable Type 3 Jacket Color blace	tention: Observe the permissible bending radii when laying cables, as the IP protection class can be dangered by excessive bending forces.
Note on bending radius  Installation   Cable  Cable identification 635  Cable Type 3  Jacket Color blace	tention: Observe the permissible bending radii when laying cables, as the IP protection class can be dangered by excessive bending forces.
Cable identification 635 Cable Type 3 Jacket Color blace	5
Cable identification 635 Cable Type 3 Jacket Color blace	5
Cable Type 3 Jacket Color blace	
Jacket Color blac	
Type of Certificate cUF	uck
••	Rus
Amount stranding 1	
Stranding 5 wi	vires around Core filler twisted
Filler yes	S
	own, black, blue, white, green-yellow
	,8 g/m
Material jacket PUF	-
	± 5 Shore A
·	id-free, cadmium-free, CFC-free, halogen-free, silicone-free
	3 mm
Tolerance outer diameter (sheath) ± 5	5 %
Material wire insulation PP	
Amount wires 5	
Outer diameter insulation 1,25	25 mm
Outer diameter tolerance core insulation ± 5	5 %
Shore hardness wire insulation 70 ±	± 5 Shore D
Ingredient freeness wire insulation lead	d-free, cadmium-free, CFC-free, halogen-free, silicone-free
Amount strands (wire) 42	
Diameter of single wires 0,1	mm
· · · · · · · · · · · · · · · · · · ·	34 mm <sup>2</sup>
	randed copper wire, bare
	and class 6
Traversing distance (C-track) 10 r	



Nominal voltage AC max.	300 V
Current load capacity (standard)	to DIN VDE 0298-4
Current load capacity min. wire	4,5 A
Electrical resistance line constant wire	57 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
UV resistance	DIN EN ISO 4892-2 A
Flame resistance	UL 1581 § 1100 FT2   UL 1581 § 1090   IEC 60332-2-2
chemical resistance	Good, application-related testing
Gasoline resistance	Good, application-related testing
Oil resistance	Good, application-related testing   DIN EN 60811-404
Bending radius (fixed)	5 x Outer diameter
Bending radius (dynamic)	10 x Outer diameter
Travel speed (C-track)	10 Mio. @ 25 °C
No. of torsion cycles	2 Mio.
Torsion stress	± 180 °/m
Torsion speed	35 cycles/min