

## MSUD valve plug A-18mm with cable

PUR 3x0.75 bk UL/CSA+drag ch. 2m

**MSUD** Form A (18 mm) 24 V AC ±20% / DC ±25% LED and suppression Bridged PE

Further cable lengths on request.

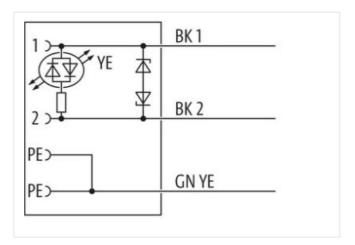
Plastic housings with good resistance against chemicals and oils.

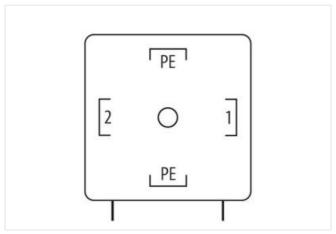
The resistance to aggressive media should be individually tested for your application. Further details on request.

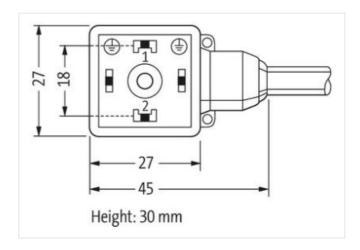
## **Link to Product**

## Illustration









Product may differ from Image









Cable length

2 m

Side 1



stay connected

Tightening torque	0,4 Nm	
Mounting method	inserted, screwed	
Family construction form	MSUD A	
Thread	M3	
Material	PBT	
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	4048879193528	
Packaging unit	1	
Electrical data		
Capacity CX	20 ms	
Electrical data   Supply		
Operating voltage AC	24 V	
Operating voltage AC min.	19,2 V	
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	
	yenow	
Installation   Connection		
Mounting set	M3	
Device protection   Electrical		
Additional condition protection degree	inserted, screwed	
Pollution Degree	3	
Rated surge voltage	0,8 kV	
Material group (IEC 60664-1)	I	
Additional suppressor	Diode, Z-Diode	
Mechanical data   Material data		
Coating locking	verzinkt	
Coating of fitting	verzinkt	
Color housing	black	
Material gasket	PUR	
Locking material	Steel	
Material screw connection	Steel	
Mechanical data   Mounting data		
Mounting method	inserted, screwed	



stay connected

Important installation notes  Note on strain relief Protect the Attention: rendangered installation   Cable   Cable identification 636  Cable Type 3  Printing color of wire insulation white (isolat Jacket Color black   Type of Certificate CURus   Amount stranding 1  Stranding 3 wires twis wire arrangement black 1, blac   Traversing distance (C-track) 10 m @ 25  Cable weigth 56,1 g/m   Material jacket PUR   Shore hardness jacket   90 ± 5 Shor   Freedom from ingredients (jacket)   1,9 mm   Tolerance outer diameter (sheath) ± 5 %   Material wire insulation   PP   Amount wires 3   Outer diameter insulation   PP   Amount wires 3   Outer diameter tolerance core insulation   ± 5 %   Shore hardness wire insulation   1,85 mm   Outer diameter tolerance core insulation   2 ± 5 Shor   Ingredient freeness wire insulation   Hadd-free, circle of the printing color of wire insulation   1,85 mm   Outer diameter of single wires   0,15 mm   Conductor crosssection (wire)   42   Diameter of single wires   0,15 mm   Conductor type (wire)   stranded or conductor type (wire)   2,5 kV @ 60   Power frequency withstand voltage (wire - wire)   2,5 kV @ 60   Min. operating temperature (static)   40 °C   Max. operating temperature max. (dynamic)   2.5 °C   Operating temperature max. (dynamic)   30 °C / 90 °C   UV resistance   DIN EN ISC   Flame resistance   Good, appli	
Interportant installation notes  Installation   Cable  Installatio	
lote on strain relief  Protect the  Attention: endangered endanger	on cable quality
ote on bending radius         Attention: endangered           nstallation   Cable           able identification         636           able Type         3           rinting color of wire insulation         white (isolated purpose)           acket Color         black           yep of Certificate         cURus           mount stranding         1           tranding         3 wires twise           ire arrangement         black 1,	
nstallation   Cable           able identification         636           able identification         636           able Type         3           rinting color of wire insulation         white (isolation in the color in	connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.
table identification 636 table Type 3 trinting color of wire insulation white (isolat acket Color black ype of Certificate cURus mount stranding 1 tranding 3 wires twis fire arrangement black 1, blact raversing distance (C-track) 10 m @ 25 table weigth 56,1 g/m Ideterial jacket PUR Thore hardness jacket 90 ± 5 Shor reedom from ingredients (jacket) lead-free, civiller-diameter (jacket) 5,9 mm olerance outer diameter (sheath) ± 5 % Ideterial wire insulation PP Industrial wire insulation PP Industrial wire insulation 1,85 mm outer diameter insulation 1,85 mm outer diameter tolerance core insulation 5 % Thore hardness wire insulation 1,85 mm outer diameter tolerance core insulation 1,85 mm outer diameter of single wire insulation white (isolat mount strands (wire) 42 Industrial conductor wire 1,15 mm onductor crosssection (wire) 0,75 mm² Ideterial conductor wire 1,2 A Industrial conductor wire 2,5 kV @ 60 Industrial resistance line constant wire 2,5 kV @ 60 Industrial temperature (static) 40 °C Industrial temperature (static) 40 °C Idex operating temperature (static) 40 °C Idex operating temperature (static) 40 °C Idex operating temperature min. (dynamic) 40 °C Idex operating temperature min. (dynamic) 50 °C / 90 °C Idex operating temperature max. (dynamic) 80 °C / 90 °C Idex operating temperature max. (dynamic) 80 °C / 90 °C Idex operating temperature max. (dynamic) 10 °C / 90 °C Idex operating temperature max. (dynamic) 10 °C / 90 °C Idex operating temperature max. (dynamic) 10 °C / 90 °C Idex operating temperature max. (dynamic) 10 °C / 90 °C Idex operating temperature max. (dynamic) 10 °C / 90 °C Idex operating temperature max. (dynamic) 10 °C / 90 °C Idex operating temperature max. (dynamic) 10 °C / 90 °C Idex operating temperature max. (dynamic) 10 °C / 90 °C Idex operating temperature max. (dynamic) 10 °C / 90 °C Idex	Observe the permissible bending radii when laying cables, as the IP protection class can be I by excessive bending forces.
Cable Type 3 Printing color of wire insulation white (isolated color black of Curitificate cursus white (isolated cursus of Cursus of Cartificate cursus of Cursus of Cartificate cursus of Cartificate cursus of Cable weight cursu	
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acket Color  ype of Certificate  mount stranding  1  stranding  3 wires twis  fire arrangement  black 1, black  raversing distance (C-track)  field weigth  finder hardness jacket  reedom from ingredients (jacket)  puter-diameter (jacket)  folerance outer diameter (sheath)  finder insulation  puter diameter insulation  puter diameter insulation  finder hardness wire insulation  finder hardness	
Type of Certificate       cURus         Amount stranding       1         Stranding       3 wires twis         Arice arrangement       black 1, blant         Traversing distance (C-track)       10 m @ 25         Cable weigth       56,1 g/m         Material jacket       PUR         Shore hardness jacket       90 ± 5 Shore         Freedom from ingredients (jacket)       lead-free, control         Outer-diameter (jacket)       5,9 mm         Follower diameter (jacket)       5,9 mm         Follower frequences wire insulation       1,85 mm         Follower frequences wire insulation       white (isolated free)         Follower freeness wire insulation       white (isolated free)         Follower freeness wire insulation       white (isolated free)         Follower freeness wire insulation       white (isolated	iion black)
Amount stranding 1 Stranding 3 wires twis wire arrangement black 1, blar fraversing distance (C-track) 10 m @ 25 Cable weigth 56,1 g/m Material jacket PUR Schore hardness jacket 90 ± 5 Shore hardness jacket 10 lead-free, control of the freedom from ingredients (jacket) 10 lead-free, control of the freedom from ingredients (jacket) 10 lead-free, control of the freedom from ingredients (jacket) 10 lead-free, control of the freedom from ingredients (jacket) 10 lead-free, control of the freedom from ingredients (jacket) 10 lead-free, control of the freedom from ingredient free insulation 10 lead-free, control of the freedom from ingredient freeness wire insulation 10 lead-free, control of the freedom from ingredient freeness wire insulation 10 lead-free, control of the freedom from from from from from from from fr	
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black 1, bl	
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Cable weigth  Material jacket  PUR  Shore hardness jacket  Poet 5 Shore hardness jacket  Freedom from ingredients (jacket)  Duter-diameter (jacket)  Material wire insulation  Poet diameter insulation  Puter diameter insulation  Amount wires  Duter diameter tolerance core insulation  Printing color of wire insulation  Printing color of wire insulation  Material conductor wire  Diameter of single wires  Conductor type (wire)  Material conductor wire  Conductor type (wire)  Material coadcapacity (standard)  Current load capacity (standard)  Current load capacity (sitandard)  Current load capacity (wire - wire)  Cover frequency withstand voltage (wire - acket)  Mat. operating temperature (static)  Max. operating temperature max. (dynamic)  Diameter lesistance  Elame resistance  DIN EN ISC  Diameter of Shore  Diameter of Shore  Poet 12 A  Stranded co  2,5 kV @ 60  Acc withstand voltage (wire - wire)  Diameter of Shore  Diameter of Sho	ck 2, green-yellow
Atterial jacket PUR whore hardness jacket 90 ± 5 Shore reedom from ingredients (jacket) lead-free, control of the properties of the prope	°C   horizontal
shore hardness jacket  shore hardness jacket  shore hardness jacket  streedom from ingredients (jacket)  streedom from ingredients (sheath)  streedom from ingredient (sheath)  streedom from ingredients (sheath)  s	
Freedom from ingredients (jacket)  Duter-diameter (jacket)  Duter-diameter (jacket)  Material wire insulation  PP  Mount wires  Duter diameter insulation  Duter diameter tolerance core insulation  Duter diameter tolerance core insulation  End the free comparison of the first simple content of the first simpl	
Outer-diameter (jacket)       5,9 mm         Following of the content of t	e A
Tolerance outer diameter (sheath) ± 5 %  Material wire insulation PP  Amount wires 3  Duter diameter insulation 1,85 mm  Duter diameter tolerance core insulation ± 5 %  Shore hardness wire insulation 70 ± 5 Shore diameter tolerance wire insulation lead-free, contribution white (isolate wire) 42  Diameter of single wires 0,15 mm  Conductor crosssection (wire) 0,75 mm²  Material conductor wire Stranded or strand class diameter load capacity (standard) to DIN VDE  Diameter load capacity (standard) to DIN VDE  Conductor type (wire) 12 A  Electrical resistance line constant wire 26 Ω/km @  Conver frequency withstand voltage (wire - 2,5 kV @ 60  Power frequency withstand voltage (wire - 40 °C  Max. operating temperature (static) -40 °C  Max. operating temperature (fixed) 80 °C / 90 °  Diameter of single wires 0,15 kV @ 60  Departing temperature max. (dynamic) -25 °C  Diameter of single wires 2,5 kV @ 60  Diameter of single wires 3,8 km and a single wire 3,8 k	admium-free, CFC-free, halogen-free, silicone-free
Material wire insulation PP  Amount wires 3  Duter diameter insulation 1,85 mm  Duter diameter tolerance core insulation ± 5 %  Shore hardness wire insulation 70 ± 5 Shore hardness wire insulation ingredient freeness wire insulation lead-free, or intring color of wire insulation white (isolate the mount strands (wire) 42  Diameter of single wires 0,15 mm  Conductor crosssection (wire) 0,75 mm²  Material conductor wire Stranded or Str	
Amount wires  Duter diameter insulation  Duter diameter tolerance core insulation  Duter diameter tolerance core insulation  Duter diameter tolerance core insulation  To ± 5 Shore hardness wire insulation  Description of the wire insulat	
Duter diameter insulation 1,85 mm Duter diameter tolerance core insulation ± 5 % Shore hardness wire insulation 70 ± 5 Shore hardness wire insulation lead-free, contributing color of wire insulation white (isolated and the properties) white (isolated and the properties) 1,15 mm Donductor of single wires 0,15 mm Donductor crosssection (wire) 0,75 mm² Donductor crosssection (wire) 0,75 mm² Donductor type (wire) stranded contribution of the properties of the p	
Duter diameter tolerance core insulation ±5 % shore hardness wire insulation 70 ± 5 Shore and the properties of the pro	
shore hardness wire insulation regredient freeness wire insulation white (isolation freeness) regredient freeness wire insulation regredient freeness reg	
rinting color of wire insulation white (isolat amount strands (wire) 42 Diameter of single wires 0,15 mm Conductor crosssection (wire) 0,75 mm² Material conductor wire Stranded of Conductor type (wire) strand class dominal voltage AC max. 300 V Current load capacity (standard) to DIN VDE Current load capacity min. wire 12 A Electrical resistance line constant wire 26 Ω/km @ CO withstand voltage (wire - wire) 2,5 kV @ 60 Cower frequency withstand voltage (wire - acket) 40 °C  Max. operating temperature (static) -40 °C  Max. operating temperature min. (dynamic) -25 °C  Operating temperature max. (dynamic) 80 °C / 90 °C  Over resistance IEC 60332-ihemical resistance  Electrical resistance Good, appli	
Printing color of wire insulation white (isolate Amount strands (wire) 42 Diameter of single wires 0,15 mm Conductor crosssection (wire) 0,75 mm² Material conductor wire Stranded of Conductor type (wire) strand class along the Amount of th	e D
Amount strands (wire)  Algorithment of single wires  Conductor crosssection (wire)  Material conductor wire  Conductor type (wire)  Control load capacity (standard)  Courrent load capacity (standard)  Courrent load capacity min. wire  Conductor type (wire)  Courrent load capacity (standard)  Courrent load capacity (standard)  Courrent load capacity min. wire  Conductor type (wire)  12 A  Courrent load capacity (wire - wire)  2.5 kV @ 60  Cover frequency withstand voltage (wire - acket)  Alin. operating temperature (static)  Alin. operating temperature (fixed)  Courrent load capacity (wire - wire)  Cover frequency withstand voltage (wire - acket)  Alin. operating temperature (fixed)  Courrent load capacity (standard)  Cover frequency withstand voltage (wire - acket)  Alin. operating temperature (fixed)  Cover frequency withstand voltage (wire - acket)  Alin. operating temperature (fixed)  Cover frequency withstand voltage (wire - acket)  Co	admium-free, CFC-free, halogen-free, silicone-free
Diameter of single wires  O,15 mm  Onductor crosssection (wire)  O,75 mm²  Stranded of St	ion black)
Conductor crosssection (wire)  Material conductor wire  Stranded co Conductor type (wire)  Strand class  Conductor type (wire)  Strand class  Common voltage AC max.  Courrent load capacity (standard)  Courrent load capacity min. wire  12 A  Electrical resistance line constant wire  CO withstand voltage (wire - wire)  Cower frequency withstand voltage (wire - acket)  Max. operating temperature (static)  Coperating temperature min. (dynamic)  Coperating temperature max. (dynamic)	
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Conductor type (wire)       strand class         Nominal voltage AC max.       300 V         Current load capacity (standard)       to DIN VDE         Current load capacity min. wire       12 A         Electrical resistance line constant wire       26 Ω/km @         AC withstand voltage (wire - wire)       2,5 kV @ 60         Power frequency withstand voltage (wire - acket)       2,5 kV @ 60         Min. operating temperature (static)       -40 °C         Max. operating temperature (fixed)       80 °C / 90 °         Operating temperature min. (dynamic)       -25 °C         Operating temperature max. (dynamic)       80 °C / 90 °         JV resistance       DIN EN ISC         Elame resistance       IEC 60332-1         chemical resistance       Good, appli	
Nominal voltage AC max.  Current load capacity (standard)  Current load capacity min. wire  12 A  Electrical resistance line constant wire  AC withstand voltage (wire - wire)  Cower frequency withstand voltage (wire - acket)  Alin. operating temperature (static)  Coperating temperature (fixed)  Coperating temperature min. (dynamic)  Coperating temperature max. (dynamic)	opper wire, bare
Current load capacity (standard)  Current load capacity min. wire  12 A  Electrical resistance line constant wire  AC withstand voltage (wire - wire)  Cower frequency withstand voltage (wire - acket)  Alin. operating temperature (static)  Alin. operating temperature (fixed)  Component temperature (fixed)  Component temperature min. (dynamic)  Component temperature max. (dynamic)	; 6
Current load capacity min. wire  12 A  Electrical resistance line constant wire  26 Ω/km @  12 A  26 Ω/km @  18 C withstand voltage (wire - wire)  2,5 kV @ 60  19 Cower frequency withstand voltage (wire - acket)  2,5 kV @ 60	
Electrical resistance line constant wire 26 Ω/km @ AC withstand voltage (wire - wire) 2,5 kV @ 60 Power frequency withstand voltage (wire - acket) 2,5 kV @ 60 AC withstand voltage (wire - acket) 40 °C AC AC Wax. operating temperature (static) 40 °C AC	0298-4
AC withstand voltage (wire - wire)  2,5 kV @ 60  Power frequency withstand voltage (wire - 2,5 kV @ 60  Alin. operating temperature (static)  Alin. operating temperature (fixed)  Alin. operating temperature min. (dynamic)  Alin. operating temperat	
Power frequency withstand voltage (wire - 2,5 kV @ 60 acket)  Ain. operating temperature (static) -40 °C  Max. operating temperature (fixed) 80 °C / 90 °C  Operating temperature min. (dynamic) -25 °C  Operating temperature max. (dynamic) 80 °C / 90 °C  Operating temperature max. (dynamic) BIN EN ISC  Elame resistance IEC 60332-ihemical resistance Good, appli	20 °C
Acket)  Ain. operating temperature (static)  Aix. operating temperature (fixed)  Aix. operating temperature (fixed)  Aix. operating temperature min. (dynamic)  Aix. operating temperature max. (dynamic)  Aix. operating temperature max. (dynamic)  Aix. operating temperature max. (dynamic)  Aix. operating temperature min. (dyna	)s
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Operating temperature min. (dynamic)  -25 °C  Operating temperature max. (dynamic)  80 °C / 90 °  IV resistance  DIN EN ISC  Ilame resistance  IEC 60332-  hemical resistance  Good, appli	
Operating temperature max. (dynamic) 80 °C / 90 °  IV resistance DIN EN ISC  Iame resistance IEC 60332-  hemical resistance Good, appli	C @ 10000 h Operation
V resistance DIN EN ISC lame resistance IEC 60332-hemical resistance Good, appli	
lame resistance IEC 60332-i hemical resistance Good, appli	C @ 10000 h Operation
hemical resistance Good, appli	
, 11	2-2   UL 1581 § 1100 FT2   UL 1581 § 1090
Cood anni	cation-related testing
	cation-related testing
	cation-related testing   DIN EN 60811-404
sending radius (fixed) 5 x Outer di	
Rending radius (dynamic) 10 x Outer of ravel speed (C-track) 10 Mio. @ 2	



No. of torsion cycles	2 Mio.	
Torsion stress	± 180 °/m	
Torsion speed	35 cycles/min	