

# ZU 0631

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Standard media connection for operating  
the Ceramat WA 150(X) / WA 160(X)

ZU 0631  
ZU 0631 / PEEK-FKM  
ZU 0631 / PEEK-EPDM  
ZU 0631 / PEEK-FFKM

# ZU 0646

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Manual control unit

# Short description, ZU 0631

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## Standard media connection

### Standard media connection for Ceramat (ZU 0631)

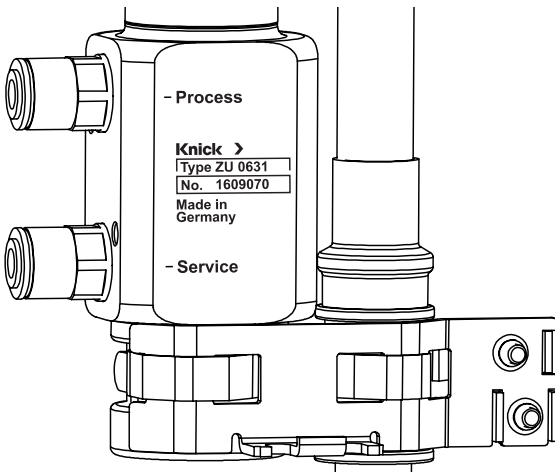
The standard media connection allows supplying and collecting all media and signals required for operating the Ceramat using commercially available tubings and connectors. The probe moves into PROCESS or SERVICE position when compressed air is applied to one of the pneumatic couplings.

- **When in SERVICE position**, the medium coming from the medium connection flows into the calibration chamber of the Ceramat.
- **When in PROCESS position**, the medium is guided to the cavity rinsing channels of the Ceramat.

The standard media connection is provided with an outlet hose to get the rinse fluid out of the Ceramat. The device can be used in hazardous or safe areas. It is mounted on the hose bracket of the Ceramat. The probe position can be interrogated via two inter-connected, floating contacts. A further accessory (ZU 0646) is a manually actuated pneumatic valve to move the Ceramat, which can be mounted directly on the standard media connection.

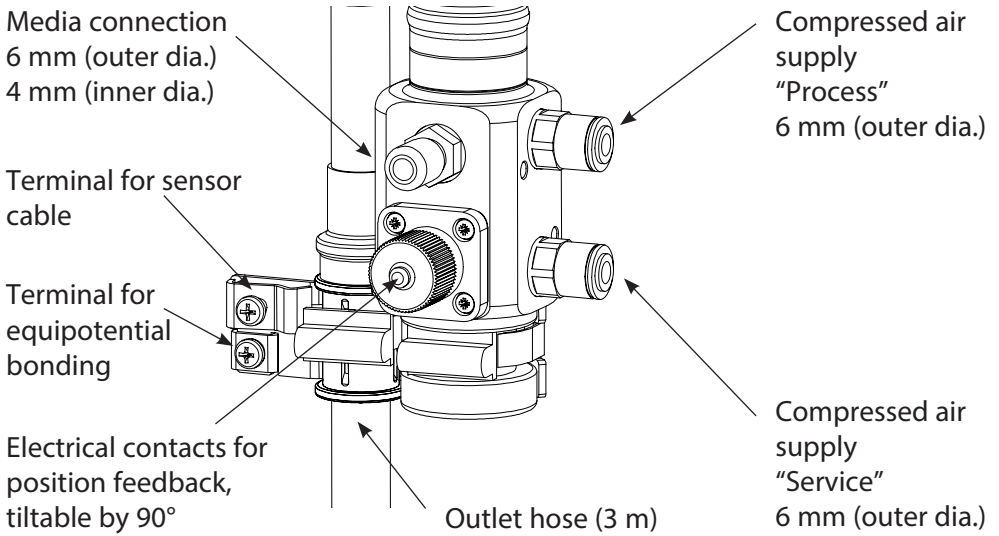
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## Inscriptions / Rating plate

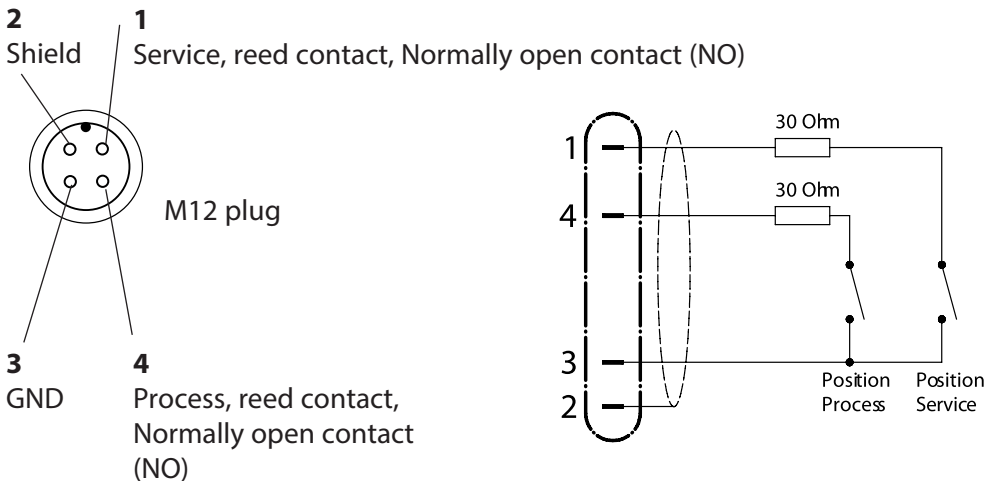


Standard media connection, ZU 0631

# Connections & coupling elements



## Contact assignment for position feedback



# Short description ZU 0646

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## Pneumatically operated manual control valve

### **Pneumatically operated manual control valve (ZU 0646)**

In conjunction with the standard media connection, the manual control valve allows actuating the Ceramat using a manually operated valve. The valve is a lock-in toggle valve. It is protected against unintended use by a collar. The toggle handle can be turned to any desired position independent of its switch position.

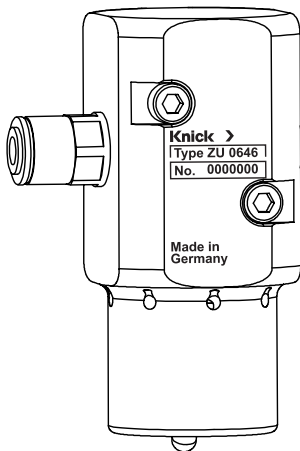
The manual control valve can be mounted directly on the standard media connection at the Ceramat. The valve can be mounted with the opening and handle pointing downwards so that it is protected against falling dirt, no matter how the Ceramat is positioned.

When the mounting site of the Ceramat is hardly accessible, the valve can be mounted on a wall or pipe using a bracket.

In that case, two additional hoses are required to connect it to the standard media connection (to be provided by the customer for the required length). The device can be used in hazardous and safe areas.

## Inscriptions / Rating plate

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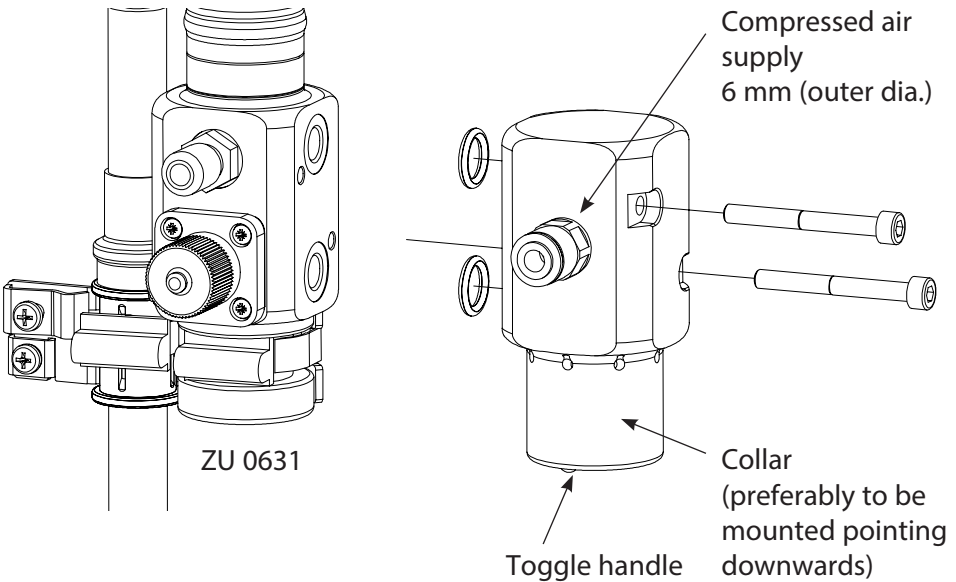


Manual control unit, ZU 0646

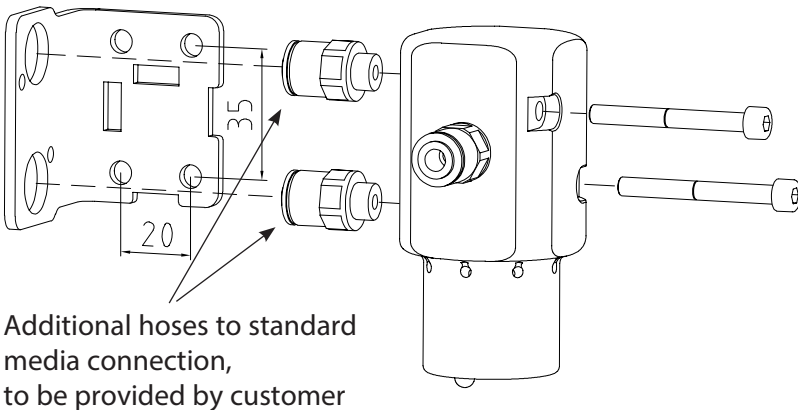


Manual control unit, ZU 0646,  
pipe mounting with bracket

# Mounting on the standard media connection of the Ceramat

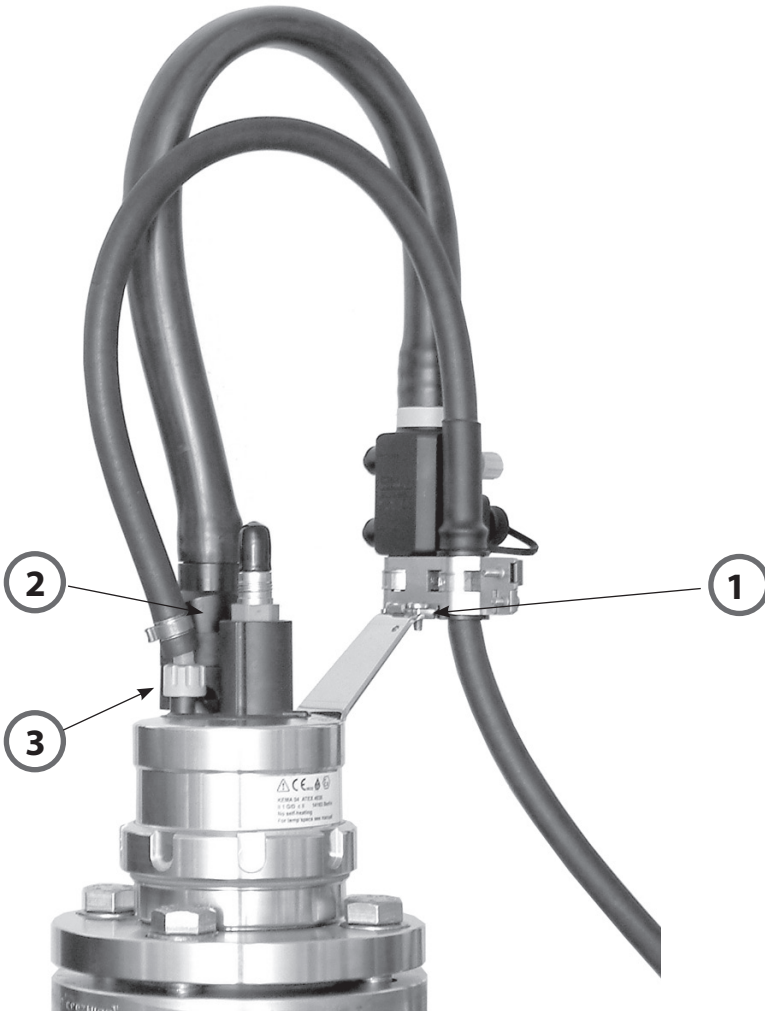


# Wall / pipe mounting with bracket



# Mounting the ZU 0631 on the Ceramat

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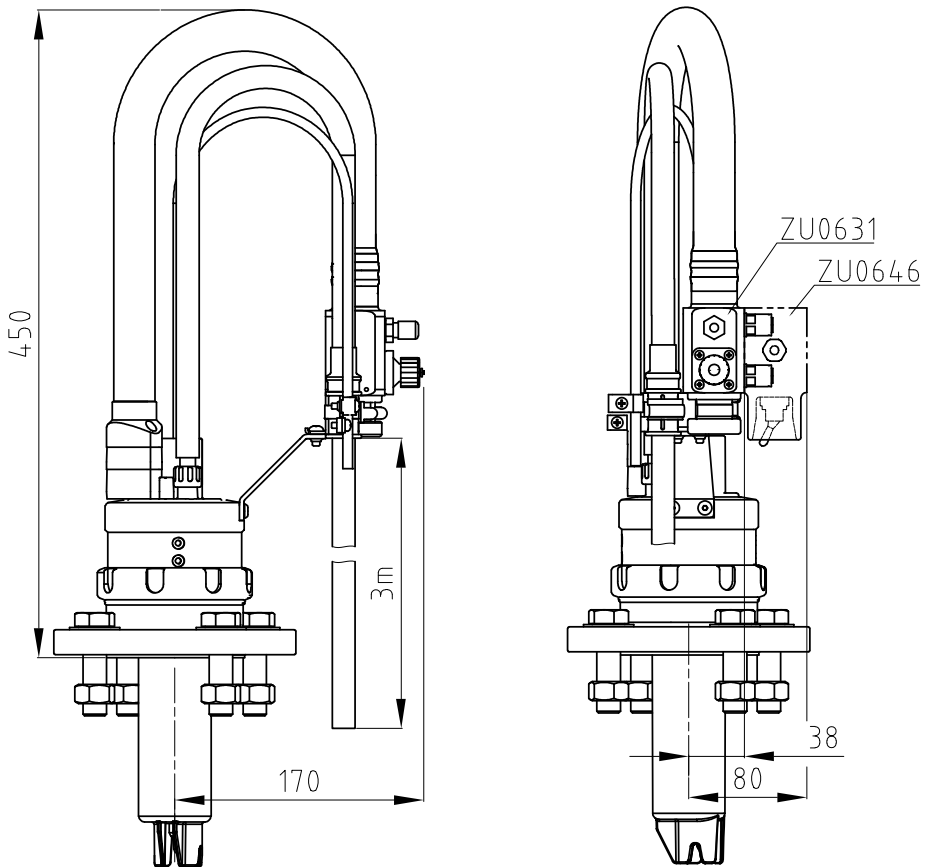


**1** Fasten the standard media connection to the hose holder bracket of the Ceramat (PZ2 screwdriver).

**2** Position multiplug and screw it tight (PZ2 screwdriver).

**3** Attach the outlet hose and secure it with coupling nut.

# Installation dimensions of Cerammat WA 150(X), ZU 0631, ZU 0646



# Specifications ZU 0631

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## Standard media connection

<b>Compressed air</b>	Air quality to ISO 8573-1:2001 Quality class 3.3.3
Solid contaminants - when using Ceramat WA-xxx	Class 3 (max 5 µm, max. 5 mg/m <sup>3</sup> )
Water content ... for temperatures ≥ 15 °C: Class 4	With operating temperatures > 15 °C a pressure dew point of max 3 °C is permitted
... for temperatures 5 ... 15 °C:	Class 3 Pressure dew point - 20 °C (or below)
Oil content:	Class 3 (max. 1 mg/m <sup>3</sup> )
Adm. pressure range:	4 ... 7 bar (min. pressure determined by process)
Min. air temperature:	5 °C
Connection:	Quick coupling for pneumatic hose, outer dia. 6 <sup>±0.1</sup> mm
<b>Rinse medium</b>	Filtered 100 µm Adm. pressure range 2 ... 4 bar Temperature range 5 ... 50 °C
Connection:	Quick coupling for plastic tube / plastic hose outer/inner dia. 6/4 mm
<b>Outlet</b>	DN8 hose, 3 m



# Specifications ZU 0631

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## Standard media connection

### Relay contacts position feedback

Reed contacts, normally open

Contact resistance (closed):

30 ohm to GND

Max. switching voltage: 30 VDC

Max. switching current: 0.10 A

Important: Reed contacts are sensitive to overrange conditions, even if momentary (e.g. due to cable capacitance or inductance)

Connection:

Sensor connector M12,

to IEC 60947-5-2

4-pole, connector tiltable by 90°

### Materials and device type

		ZU 0631 / PP	ZU 0631 / PEEK-FKM	ZU 0631 / PEEK-EPDM	ZU 0631 / PEEK-FFKM
Outside:	Multiplug:	PEEK+CF			
	Hose:	EPDM			
	Housing:	PP electrically conductive / PP	PEEK electrically conductive / PP		
	Couplings:	POM / PP	POM / PFA		
	Metal parts:	stainless steel A4			
Wetted:	Couplings:	PP	PFA		
	Housing:	PP electrically conductive	PEEK electrically conductive		
	Hose:	FEP			
	Gaskets:	FKM	EPDM	FFKM	
	Multiplug:	PEEK			
	Check valve:	Glass ball, spring made of Hastelloy C4 (2.4610)			

Ingress protection:

IP 66

Weight:

Approx. 1.3 kg

Ambient conditions:

Ambient temperature +5 ... +55 °C

Transport/Storage temp -20 ... +60 °C

### Please note:

Keep frost-free after first use of an aqueous rinse medium.

# Specifications ZU 0646

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## Pneumatically operated manual control valve

<b>Compressed air</b>	Air quality to ISO 8573-1:2001 Quality class 3.3.3
Solid contaminants - when using Ceramat WA-xxx	Class 3 (max 5 µm, max. 5 mg/m <sup>3</sup> )
Water content ... for temperatures ≥ 15 °C:	Class 4 With operating temperatures > 15 °C a pressure dew point of max 3 °C is permitted
... for temperatures 5 ... 15 °C:	Class 3 Pressure dew point - 20 °C (or below)
Oil content:	Class 3 (max. 1 mg/m <sup>3</sup> )
Adm. pressure range:	4 ... 7 bar (min. pressure determined by probe)
Min. air temperature:	5 °C
Connection:	Quick coupling for pneumatic hose, outer dia. 6 mm
<b>Materials</b>	
Housing:	PP, electrically conductive
Pneumatic couplings:	POM
Valve, filler plugs:	Brass (CuZn), nickel-plated
Mounting parts:	stainless steel A4
<b>Mounting</b>	directly on standard media connection (ZU 0631) or wall/pipe mounting dia 25 ... 50 mm
Weight	Approx. 0.3 kg
Dimensions	Max. 63 x 55 x 76 mm (w x h x d)
Ambient conditions	Ambient temperature +5 ... +55 °C Transport/Storage temp -20 ... +60 °C

# Packing list ZU 0646

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## Pneumatically operated manual control valve

- Device prepared for mounting on ZU 0631 standard media connection  
Coupling parts (2 loose pneumatic couplings, 2 pre-assembled O-rings)
- Mounting parts  
2 bolts (with SW4 hexagon socket),  
bracket for wall or post/pipe mounting),  
worm-drive hose clip for pipe mounting
- Installation instructions with specifications

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The latest user manuals are available for download on our website  
under the corresponding product description.



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