



# Cable plug for whisper valve Types 6712 and 6724

- Latching
- Stranded wire variant available
- · Boost Close and Soft Close electronics assembly
- Impuls-Electronics



Product variants described in the data sheet may differ from the product presentation and description.

## Can be combined with



**Type 6712** 2/2-way Whisper Valve with media separation



with media separation
Type 6724

2/2 or 3/2-way Whisper Valve with media separation

# **Type description**

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Plug connection with locking lugs for contacting Bürkert whisper valves. This robust and affordable plug connection has become well established for Bürkert whisper valves Types 6712 and 6724 in the fields of analysis technology. In addition to the stranded wire variants, variants with electronics assembly are also available that actively influence the switching behaviour of the valve and thus fully exploit the potential of the whisper valve actuator.



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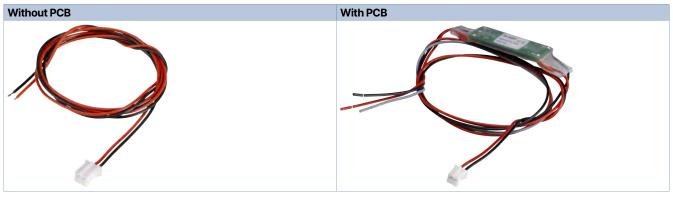
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# 1. General technical data

Product properties	
Dimensions	Further information can be found in chapter "5. Dimensions" on page 5.
Material	
Body	Polyamide
Contacts	Bronze gold-plated
Flying leads jacket	PVC
Cable outlet	Straight
Flying leads cross section	0.22 mm <sup>2</sup> corresponds to AWG 24
Minimum bending radius	Single bending: 6 mm radius Multiple bending: 12 mm radius
Number of pins	2-pin
Electrical data	
Maximum continuous current	
Without PCB	2 A
With PCB	0.2 A
Nominal voltage	Up to 24 V DC
Contact resistance	≤10 mΩ
Approvals and conformities	
Degree of protection	IP10
Environment and installation	
Ambient temperature without PCB	0 °C+ 70 °C
Ambient temperature with PCB	0 °C+ 60 °C

# 2. Product variants



# 3. Circuit functions

Symbol	Description	
	Circuit function A (CF A) 2/2-way solenoid valve Direct-acting Normally closed	
	Circuit function T (CF T) 3/2-way solenoid valve Direct-acting Flow direction optional Universal	



# 4. Approvals and conformities

### 4.1. General notes

- The approvals and conformities listed below must be stated when making enquiries. This is the only way to ensure that the product complies with all required specifications.
- Not all available variants can be supplied with the below mentioned approvals or conformities.

# 4.2. Conformity

In accordance with the Declaration of Conformity, the product is compliant with the EU Directives.

## 4.3. Standards

The applied standards which are used to demonstrate compliance with the EU Directives are listed in the EU-Type Examination Certificate and/or the EU Declaration of Conformity.

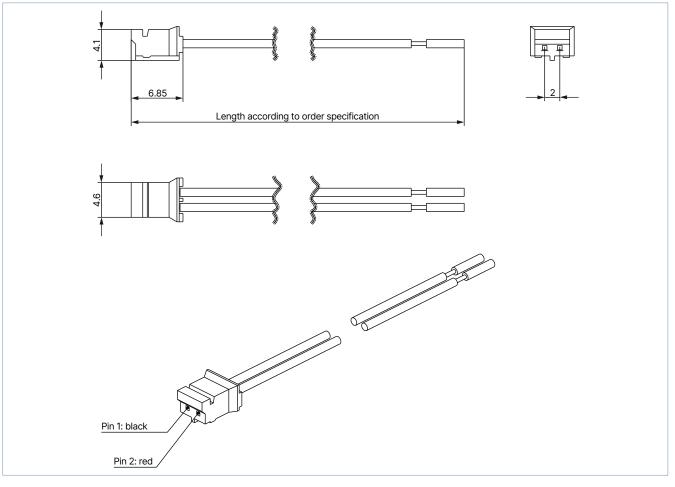


# 5. Dimensions

# 5.1. Connector without wiring

## Note:

- Dimensions in mm
- Diffrent flying lead lengths are available on request.
- Flying lead ends for customer adaptation can be configured individually on request



Description	Flying leads length	Article no.
Connector <sup>1.)</sup> with flying lea	ads AWG 24	
	500 mm	689974 <sup>y</sup> .
	1000 mm	349986 🛱
	2000 mm	318330 🥅

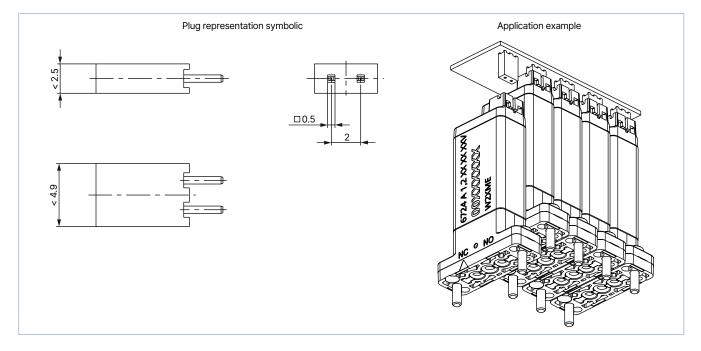
1.) Plug connector comparable to e.g.: W+P: 521 series (socket 521 - 02 - 1; contact 521 - 01 - 2 - 00) or JST (socket PHR-2; contact SPH- 002GW-P0, 5S), as of 04/2015).



# 5.2. Connector for PCB mounting

## Note:

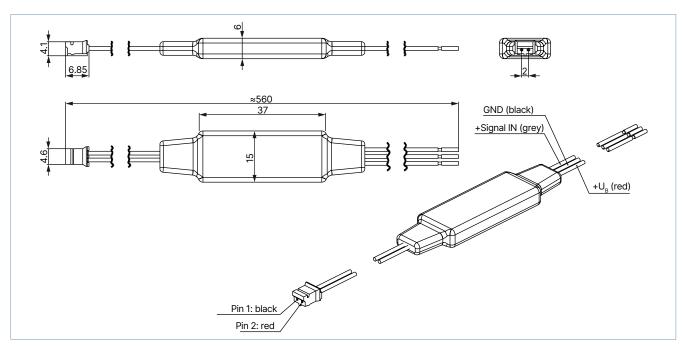
- Dimensions in mm
- E.g. Samtec SQT-102-01-x-S (x=L or F), W+P series 257 art. no. 257-002-1-50-00-6
- The connectors cannot be ordered from Bürkert.



# 5.3. Connector with wiring

## Note:

- Dimensions in mm
- See the relevant operating instructions for the function description
- The dimensional drawing shown refers to the boost close, soft close and impulse electronics.





# 6. Ordering information

# 6.1. Bürkert eShop



### Bürkert eShop - Easy ordering and quick delivery

You want to find your desired Bürkert product or spare part quickly and order directly? Our online shop is available for you 24/7. Sign up and enjoy all the benefits.

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## 6.2. Bürkert product filter



### Bürkert product filter - Get quickly to the right product

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## 6.3. Ordering chart

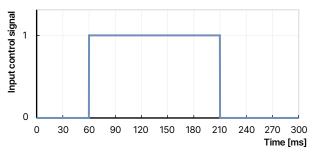
### Connector without PCB

Refer to chapter "5.1. Connector without wiring" on page 5 for more order information.

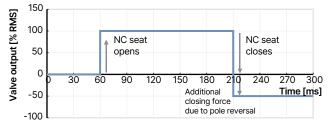
### Connector with PCB "Boost Close"

The accessory electronics **"Boost Close"** has been specially developed for solenoid valves with WhisperValve actuator of **Type 6724** series. The electronics increase the tightness of the "Normally Closed" valve connection by reversing the polarity of the voltage applied to the valve. The following is an example of a switching cycle.

#### **Control signal Boost Close**



#### Valve voltage curve



- The Boost Close electronics can be operated with 12 and 24 V valves.
- Further information can be found in the **operating instructions Type 2503**  Boost Close.
- Not suitable for the impulse variant.
- The electronics cannot be used for solenoid valves.
- We would be pleased to support you with the design of a customer's own electronics for use in large-scale production, which fully exploits the properties of the unique WhisperValve actuator and is optimally adapted to the respective application.

# Description

Description	Al licie no.
Accessory electronics "Boost Close" with flying leads AWG 24	689998 🐖

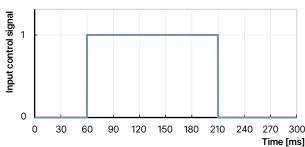


Article no.

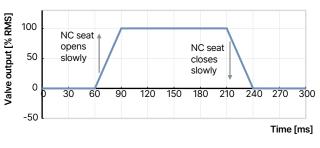
### Connector with PCB "Soft Close"

The accessory electronics **"Soft Close**" has been specially developed for solenoid valves with WhisperValve actuator of **Type 6724**. The switching noise of the valve is significantly reduced by the electronics through a targeted lowering of the voltage. At the time of switching, the operating voltage at the valve is not switched on and off abruptly, but "gently" by means of a ramp function. The following is an example of a switching cycle.

### **Control signal Soft Close**



### Valve voltage curve



- Values < 20 dB(A) can be achieved.</li>
- For optimum noise reduction, the valve should be mounted decoupled from the housing to avoid structure-borne noise (e.g. by attaching to supply lines or rubber suspension).
- The valve switching time is extended up to 30 ms by the electronics.
- The Soft Close electronics can be operated with 12 and 24 V valves, all materials and the circuit functions A, B and T.
- Further information can be found in the operating instructions Type 2503 > Soft Close.
- Not suitable for Type 6712 and the impulse variant Type 6724.
- We would be pleased to support you with the design of a customer's own electronics for use in large-scale production, which fully exploits the properties of the unique WhisperValve actuator and is optimally adapted to the respective application.

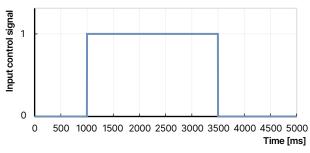
#### Description

Accessory electronics "Soft Close" with flying leads AWG 24	689999 🛱

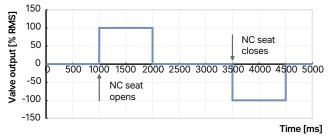
#### Connector with PCB "Impulse"

The accessory electronics **"Impulse"** was specially developed for the impulse variant of the solenoid valve **Type 6724**. With the help of the electronics, the impulse valve is switched by selectively reversing the polarity of the voltage. The electronics take over the control of the correct polarity to the valve. This means that no reversal logic needs to be provided in the control system. The following is an example of a switching cycle.

### **Control signal Impulse**



#### Valve voltage curve



- The advantage is a very low heat input into the medium.
- The pulse electronics can be operated with 12 and 24 V pulse valves and all materials and the circuit functions P and S.
- Further information can be found in the operating instructions Type 2503 > Impulse and operating instructions Type 6724 >.
- We would be pleased to support you in designing a customer-specific electronic system for use in large-scale production, which is
  optimally matched to the respective application.

Description	Article no.
Accessory electronics "Impulse" with flying leads AWG 24	366210 🛒