# Type 0142





## Diaphragm valve 2/2 way servo-assisted

- Servo-assisted diaphragm with diameter of up to DN50
- Plastic valve for aggressive and contaminated media
- · Media separated, metal-free version
- Service-friendly manual override
- Switching reliability with feedback function (available as an option)





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

#### Can be combined with



**Type 2518**Cable Plug Form A

#### Type description

The 0142 valve is a servo-assisted diaphragm valve.

A minimum differential pressure of 0.5 bar is required to open and close the valve. Various diaphragm material combinations and methods of operation are available depending on the application.

The 3/2 way pilot valve can be easily converted from NC to NO functioning principle by rotating it on the main seat. The pilot valve position feedback can take place with a switching or NAMUR signal. The solenoid coils are moulded with a chemically resistant epoxy.

The 0142 is equipped with manual override for commissioning and testing. To reduce power consumption in operation, coils with "Kick and Drop" (KD) electronics (double coil technology) are available. In combination with a plug in accordance with DIN EN 175301 - 803 Form A, the valves satisfy protection class IP65 and NEMA 4X.



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#### 1. General technical data

Product properties	
Materials	
Body	PVC, PVDF (on request)
Seal	PVDF
Inner part valve	FKM, EPDM
Orifice	DN15DN50
Dimensions	Detailed information can be found in chapter "4. Dimensions" on page 5.
Response times	Measured at valve outlet at 6 bar and +20 °C (response times see table below)
Opening	100 ms800 ms
Closing	1000 ms4000 ms
(Thermal) Coil insulation class	Class H
Electrical data	
Voltage tolerance	±10%
Electrical power consumption	Detailed information can be found in chapter "5.1. Electrical power consumption" on page 5.
Performance data	
Duty cycle	100 % continuous rating
Medium data	
Media	EPDM: Alkalis, alkaline washing and bleaching lyes FKM: Oxydizing acids and substances, salt solutions
Media temperature	PVC-body: 0+50 °C PVDF-body: 0+70 °C
Approvals and Certificates	
Protection class	IP65 with cable plug
Product connections	
Port connection	True union
Environment and installation	
Installation	As required, preferably with actuator upright
Ambient temperature	PVC-body: 0+40 °C PVDF-body: 0+55 °C

## 2. Circuit functions

Circuit functions	Description
2 (A)	Type: A, solenoid valve
<u> </u>	2/2 way
	Servo-controlled
l1 (P)	Normally closed

#### 3. Materials

#### 3.1. Chemical Resistance Chart - Bürkert resistApp



#### Bürkert resistApp - Chemical Resistance Chart

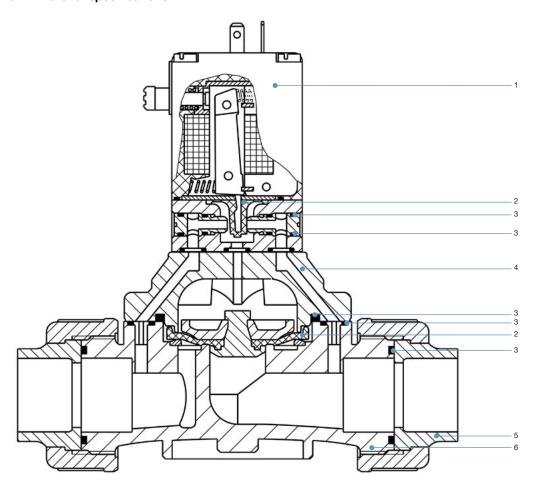
You want to ensure the reliability and durability of the materials in your individual application case? Verify your combination of media and materials on our website or in our resistApp.

**Start Chemical Resistance Check** 

Visit product website ▶ 3 | 8



## 3.2. Material specifications



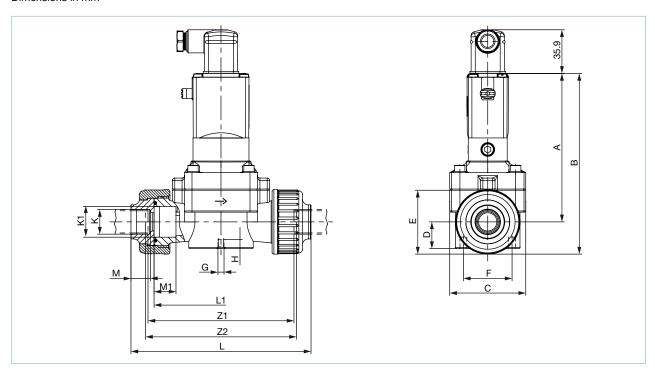
No.	Element	Material
1	Coil body	Epoxy
2	Diaphragm	FKM, EPDM
3	O-rings	FKM, EPDM
4	Cover	PVC, PVDF
5	Socket fitting (true union)	PVC, PVDF
6	Body	PVC, PVDF

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## 4. Dimensions

#### Note:

Dimensions in mm



All versions				PVC-boo	PVC-body		PVDF-body	
DN	Pipe Ø	В	С	F	L	Р	L	P
15	20	148	62.5	40	148	16	147	16
20	25	148	62.5	40	154	19	151	18
25	32	174.5	85	44.5	190	22	185	20
32	40	174.5	85	44.5	198	26	189	22
40	50	212	115	44.5	254	31	245	25
50	63	212	115	44.5	268	38	253	29

## 5. Performance specifications

## 5.1. Electrical power consumption

Power consumption						
Inrush		Hold	Hold			
AC	DC	AC	DC			
[VA]	[W]	[VA/W]	[W]			
20	5	11/5	5			