



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	DN15...DN50
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 ms...800 ms
Closing	1000 ms...4000 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
	Type: A, solenoid valve 2/2 way Servo-controlled Normally closed

3. Materials

3.1. Chemical Resistance Chart – Bürkert resistApp

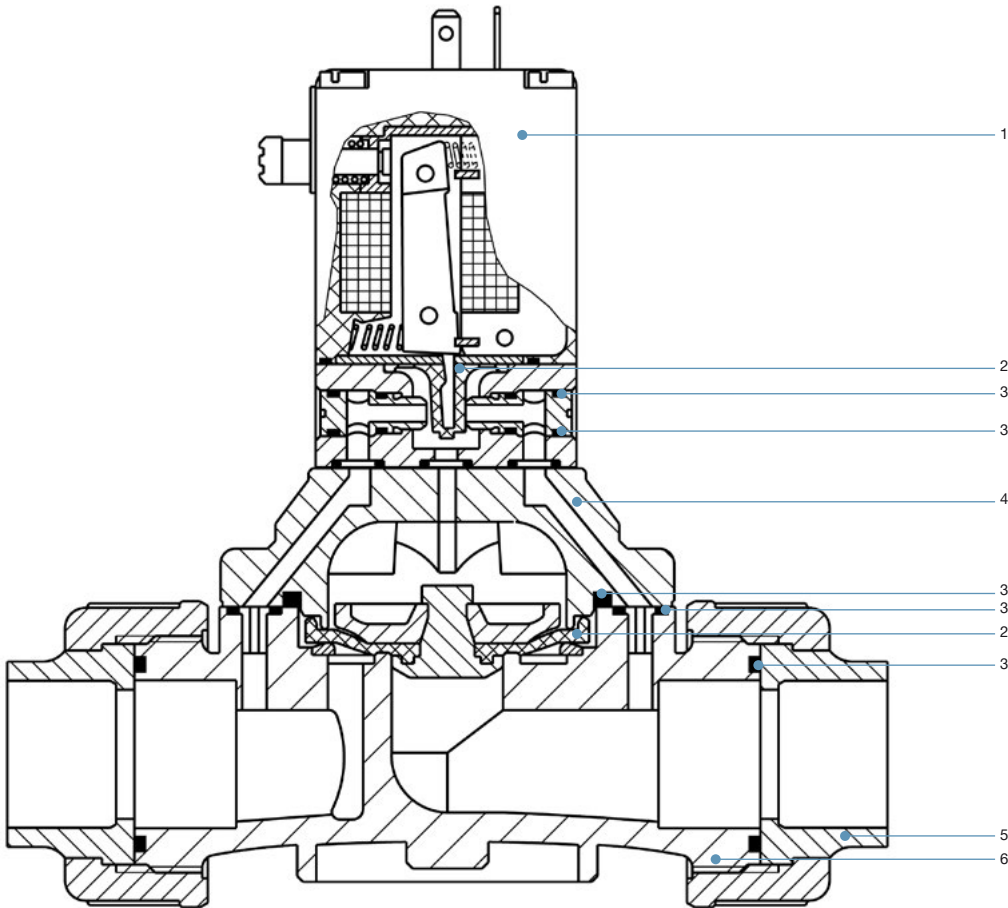


Bürkert resistApp – Chemical Resistance Chart

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](#)

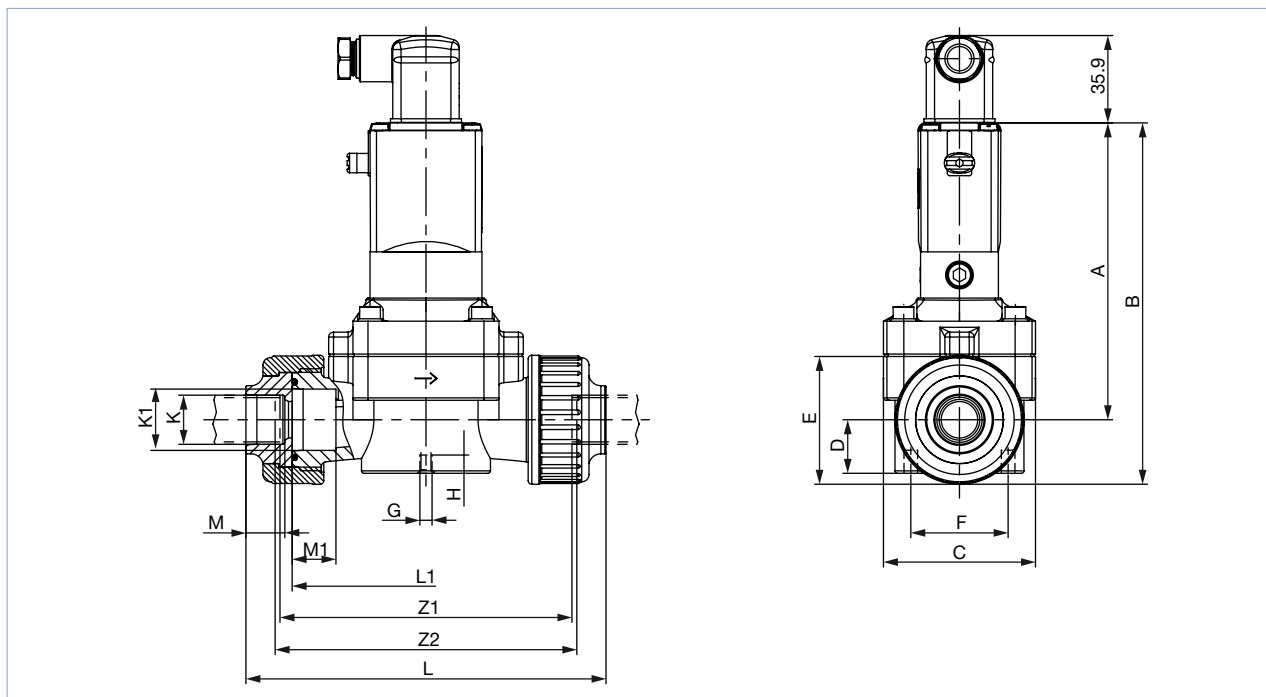
3.2. Material specifications



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

4. Dimensions

Note:
Dimensions in mm



All versions		PVC-body					PVDF-body	
DN	Pipe Ø	B	C	F	L	P	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

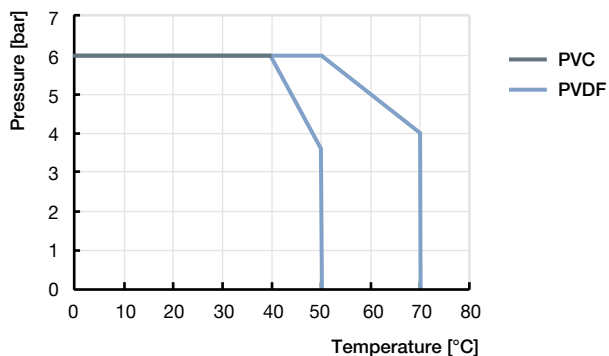
5. Performance specifications

5.1. Electrical power consumption

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

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5.2. Pressure temperature diagram for PVC and PVDF



6. Ordering information

6.1. Bürkert eShop – Easy ordering and quick delivery



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6.2. Bürkert product filter



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6.3. Ordering chart

Note:

PVC-body with cable plug and manual override

Circuit function	Orifice	Port connection	K _v value water	Pressure range	Body material	Article no.	Article no.
	[mm]	True union				[Ø]	[m ³ /h]
Seal material FKM							
Type: A, solenoid valve 2/2 way Servo-controlled Normally closed	15	20	5.0	0.5...6	PVC	041938	041934
	20	25	6.0	0.5...6	PVC	042008	042005
	25	32	14.0	0.5...6	PVC	042079	042113
	32	40	16.0	0.5...6	PVC	042169	042133
	40	50	30.0	0.5...6	PVC	042198	042245
	50	63	36.0	0.5...6	PVC	042264	042262
Seal material EPDM							
Type: A, solenoid valve 2/2 way Servo-controlled Normally closed	15	20	5.0	0.5...6	PVC	041980	041911
	20	25	6.0	0.5...6	PVC	042045	041986
	25	32	14.0	0.5...6	PVC	042047	042126
	32	40	16.0	0.5...6	PVC	042183	042128
	40	50	30.0	0.5...6	PVC	042195	042247
	50	63	36.0	0.5...6	PVC	042266	042261

Further versions on request


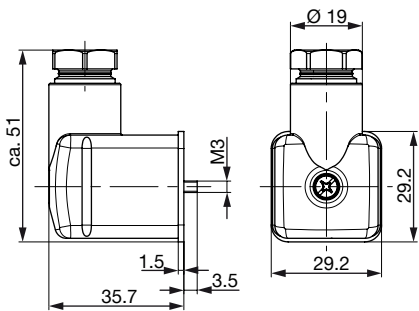
	Material Body material PVDF		Control function/Circuit function B, normally open
	Process connection With threaded port		Electrical connection Feedback switch

6.4. Ordering chart accessories

Cable plug Type 2518, form A acc. to DIN EN 175301 - 803

Note:

 For other versions see data sheet [Type 2518](#) ▶

Cable plug	Dimensions	Version	Voltage	Article no.
		Without circuitry (AC/DC)	0...250 V AC/DC	314802
		With LED (AC/DC)	12...24 V AC/DC	314812
		With LED and varistor (AC/DC)	12...24 V AC/DC	314820
		With rectifier, LED and varistor	12...24 V AC/DC	314816

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