DATA SHEET

Type 0142

bürkert
FLUID CONTROL SYSTEMS







Diaphragm valve, 2/2 way, servo-assisted

- Servo-assisted diaphragm valve up to DN 50
- 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 DIN EN 175301-803 - Form A



Type 1087
Timer

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 materials and circuit functions are available depending on the actual application. The circuit function fo the 3/2 way pilot valve can be easily converted NC to NO 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 start-up and testing. To reduce electrical power consumption during operation, coils with integrated “Kick and Drop” (KD) electronics featuring double coil technology are available.

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Visit product website

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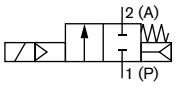
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1. General technical data

Product properties	
Dimensions	Detailed information can be found in chapter "4. Dimensions" on page 5.
Material	
Seal	FKM, EPDM
Body	PVC
Inner part valve	PVDF
Orifice	DN 15…DN 50
Circuit function	A Detailed information can be found in chapter "2. Circuit functions" on page 3.
Thermal insulation class of solenoid coil	Class H
Performance data	
Response time[1.)]	
Opening	100 ms…800 ms
Closing	1000 ms…4000 ms
Electrical data	
Operating voltage	12 V/DC, 24 V/DC, 24 V/50 - 60 Hz, 48 V/50 - 60 Hz, 110 V/50 - 60 Hz, 120 V/60 Hz, 230 V/50 - 60 Hz
Duty cycle	100 % continuous rating
Electrical power consumption	Detailed information can be found in chapter "5.1. Electrical power consumption" on page 5.
Voltage tolerance	±10 %
Medium data	
Operating medium	EPDM: Alkalis, alkaline washing and bleaching lyes FKM: Oxydizing acids and substances, salt solutions
Media temperature	PVC-body: 0…+50 °C
Approvals and certificates	
Protection class	IP65 with cable plug
Process/Port connection & communication	
Port connection	True union connection, threaded socket
Electrical connection	Steckerfahnen nach DIN EN 175301 - 803 Form A für Gerätesteckdose Typ 2518
Environment and installation	
Installation	As required, preferably with actuator upright
Ambient temperature	PVC-body: 0…+40 °C

1.) Measured at valve outlet at 6 bar and +20 °C

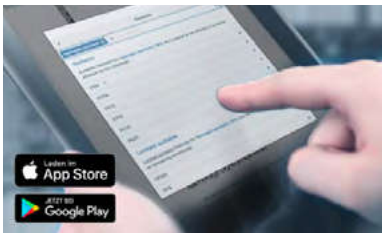
2. Circuit functions

Circuit functions	Description
	**Type: A, solenoid valve** 2/2 way Servo-controlled Normally closed

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3. Materials

3.1. Chemical Resistance Chart – Bürkert resistApp

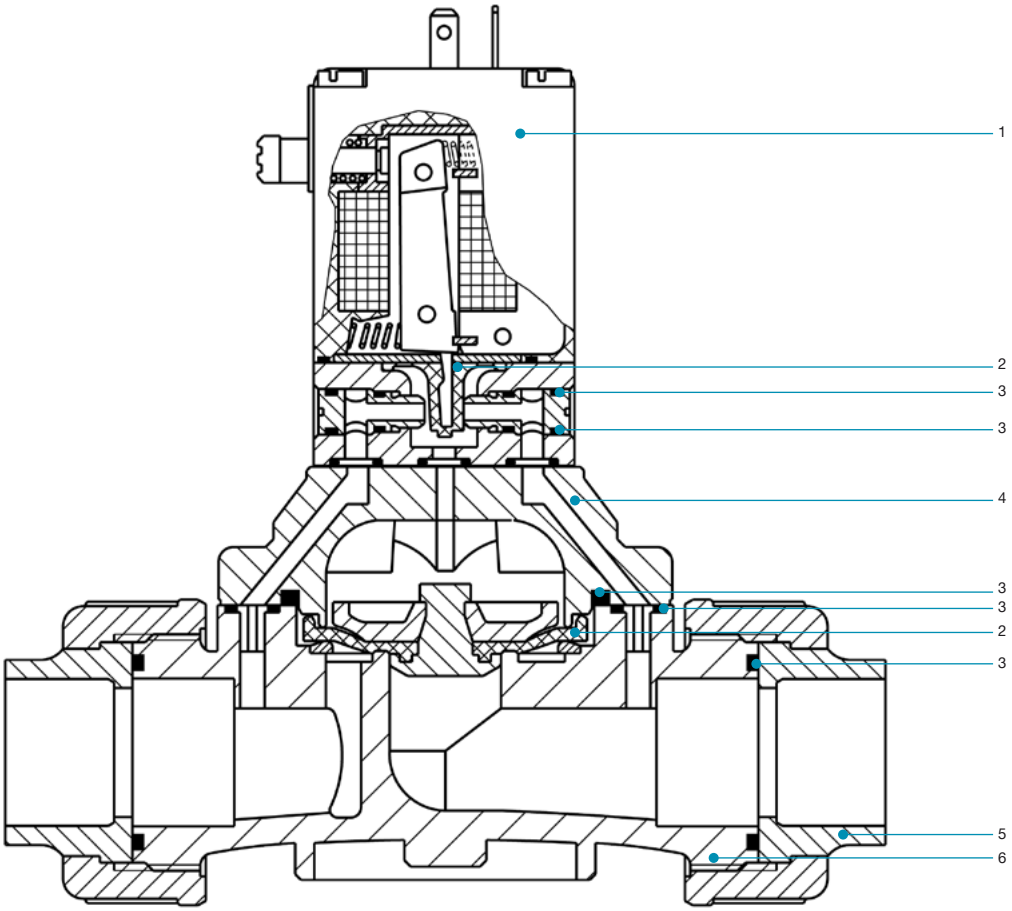


Bürkert resistApp – Chemical Resistance Chart

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

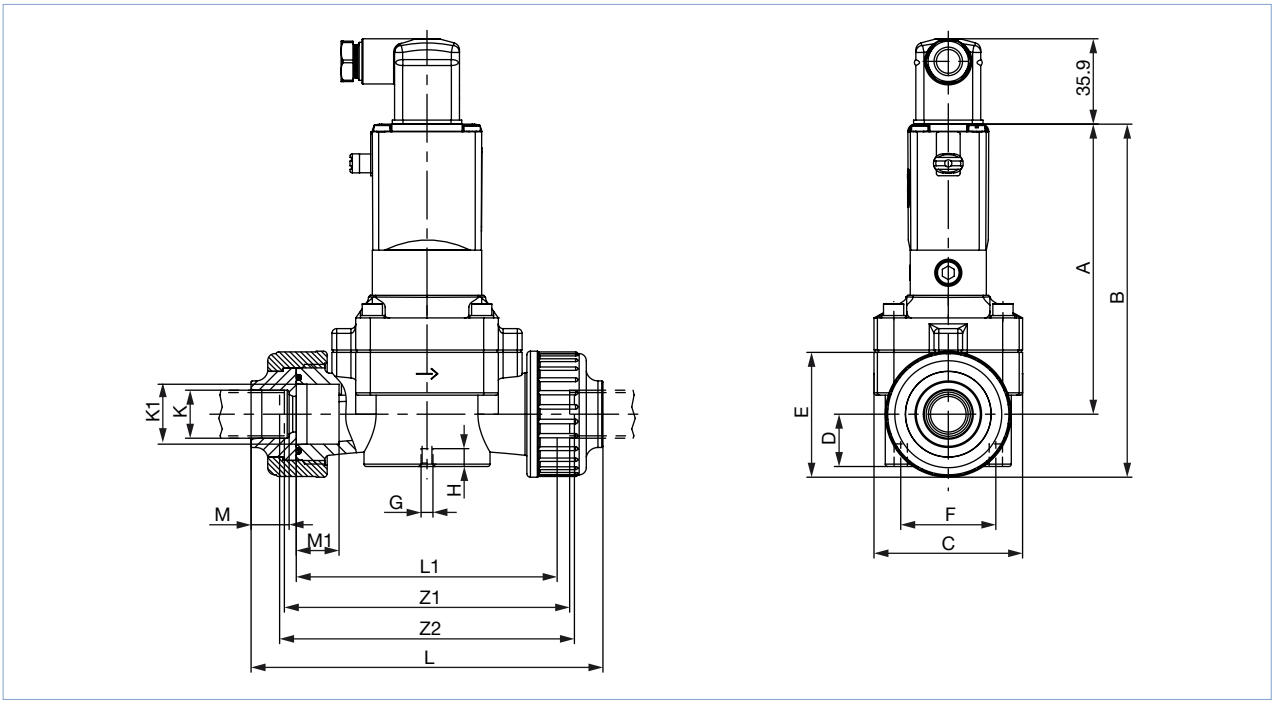


No.	Element	Material
1	Coil body	Epoxy
2	Diaphragm	FKM, EPDM
3	O-rings	FKM, EPDM
4	Cover	PVC
5	Socket fitting (true union)	PVC
6	Body	PVC

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4. Dimensions

Note:
Dimensions in mm



All versions										PVC-body						
DN	Pipe Ø	A	B	C	D	E	F	G	H	L	L1	K	K1	M	M1	Z1
15	20	122	148.5	62.5	22	53	40	M5	8	148	110	20.2	25.2	16	18	116
20	25	122	148.5	62.5	22	53	40	M5	8	154	110	25.2	25.2	19	18	116
25	32	136.5	174.5	85	31	76	44.5	M8	15	190	141	32.2	40.2	22	22	147
32	40	136.5	174.5	85	31	76	44.5	M8	15	198	141	40.2	40.2	26	22	147
40	50	160	212	115	42.5	104.5	44.5	M8	15	254	192	50.2	63.2	31	33	198
50	63	160	212	115	42.5	104.5	44.5	M8	15	268	192	63.2	63.2	38	33	198

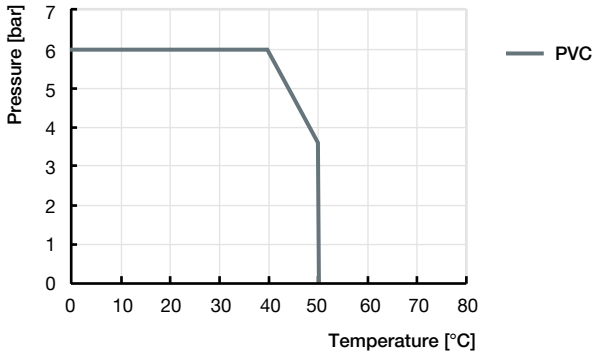
5. Performance specifications

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



6. Ordering information

6.1. Bürkert eShop – Easy ordering and quick delivery



Bürkert eShop – Easy ordering and fast 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.

Order online now

6.2. Bürkert product filter



Bürkert product filter – Get quickly to the right product

You want to select products comfortably based on your technical requirements? Use the Bürkert product filter and find suitable articles for your application quickly and easily.

Try out our product filter

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6.3. Ordering chart

Note:
PVC-body with cable plug and manual override

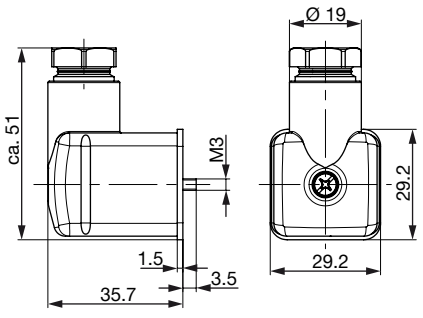
Circuit function	Orifice	Port connection True union	K_v value water	Pressure range	Body material	Article no.	Article no.
	[mm]	[Ø]	[m³/h]	[bar]		024/DC	230/50
Seal material FKM							
Type: A, solenoid valve 2/2 way Servo-controlled Normally closed	15	20	5.0	0.5…6	PVC	041938	041934
	20	25	6.0	0.5…6	PVC	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			
Control function/Circuit function B, normally open		**Electrical connectiony** Feedback switch	
Process connection With threaded port		**Approval** ATEX/IECEx approval cURus coil approval	

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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