



# Piston valve 2/2-way servo-assisted

- Push-over solenoid system
- NC valves, certified in accordance with DIN EN ISO 23553-1
- Supply or circulation valve for liquid fuels





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 according to DIN EN 175301-803



Type 6027 Direct-acting 2/2-way plunger valve



Type 5407 Direct-acting 2/2-way lifting armature valve



# **Table of contents**

I.	Gene	erai tecnnicai data	3
2.	Circu	uit functions	3
3.	Appr	rovals and conformities	4
	3.1.	General notes	4
	3.2.	Conformity	
	3.3.	Standards	
	3.4.	North America (USA/Canada)	4
_			_
4.	Mate	erials	5
	4.1.	Bürkert resistApp	5
	4.2.	Material specifications	5
		Standard version DN 13 and DN 20	5
5.	Dime	ensions	6
	5.1.	Standard version DN 13 and DN 20	
6.	Ordo		7
ο.		ering information	
	6.1.	Bürkert eShop	
	6.2.	Bürkert product filter	
	6.3.	Bürkert Product Enquiry Form	
	6.4.	Ordering chart	
		Flow valve/return valve combinations	
	6.5.	Ordering chart accessories	
		Cable plug Type 2518, form A according to DIN EN 175301 - 803	8



# 1. General technical data

i. General technica	i data						
Product properties							
Dimensions	Further information can be found in chapter "5. Dimensions" on page 6.						
Material							
Seal	Seat: PTFE						
	Housing: FKM						
Body	Brass, stainless steel						
Coil	Ероху						
Orifice	DN 13, DN 20						
Circuit function	A and B						
	Further information can be found in chapter "2. Circuit functions" on page 3.						
Thermal insulation class of solenoid	Epoxy coil class H						
Performance data							
Duty cycle	100 % continuous operation						
Electrical data							
Operating voltage	110 V 50 Hz, 230 V 50 Hz (further voltages on request)						
Medium data							
Operating medium	Heating oil (EL, L, M, S) according to DIN 51603 part 1 - 6 Shipping fuels according to ISO 8217 Only with stainless steel body: Fatty acid methyl esters (FAME) according to DIN EN 14213 Rapeseed oil according to DIN V 51605						
Medium temperature	0 °C+160 °C						
Viscosity	Max. 1.676 mm <sup>2</sup> /s						
Process/Port connection & con	nmunication						
Electrical connection	Plug contacts according to DIN EN 175 301 - 803 form A for cable plug <b>Type 2518</b> ▶. Further information can be found in chapter "Cable plug Type 2518, form A according to DIN EN 175301 - 803" on page 8.						
Port connection	G 3/8, G 1/2, G 3/4						
Approvals and conformities							
DIN CERTCO registration (NC valves, DN 13, DN 20)	Reg. No.: 5S255						
Degree of protection	IP65						
North America (USA/Canada)	Further information can be found in chapter "3.4. North America (USA/Canada)" on page 4.						
Environment and installation							
Installation position	As required, preferably with actuator upright						
Ambient temperature	-15 °C+ 60 °C						

# 2. Circuit functions

Symbol	Description
2 (A) 1 (P)	Circuit function A (CF A) 2/2-way solenoid valve Servo-controlled Normally closed
2 (B) T 1 (P)	Circuit function B (CF B) 2/2-way solenoid valve Servo-controlled Normally open

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# 3. Approvals and conformities

#### 3.1. 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 versions can be supplied with the below mentioned approvals or conformities.

## 3.2. Conformity

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

#### 3.3. 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.

## 3.4. North America (USA/Canada)

Approval	Description
c <b>FL</b> ° us	Optional: UL Recognized for the USA and Canada (valid for coils) The coils are UL Recognized for the USA and Canada according to:  UL 429 (electrically operated valves)  CAN/CSA-C22.2 No. 139
CUL US LISTED SOLENOID FOR USE IN HAZARDOUS LOCATIONS	Optional: UL Hazardous Locations – Explosion Protection (valid for coils) UL Listed for Hazardous Locations for USA and Canada Class I, Zone 1 Class I, Division 2, Group A, B, C and D Class II + III, Division 2, Group F and G

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# 4. Materials

## 4.1. Bürkert resistApp



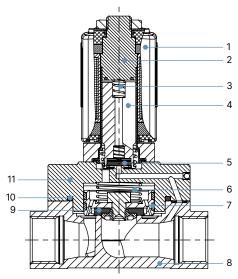
## Bürkert resistApp - Chemical resistance chart

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

# 4.2. Material specifications

## Standard version DN 13 and DN 20



No.	Element	Material
1	Coil	Ероху
2	Stopper	1.4113
3	Spring	1.4310
4	Plunger	1.4105
5	Seat seal	PTFE
6	Spring	1.4310
7	Piston seal	PTFE/graphite
8	Valve body	DN 13 brass DN 20 stainless steel 1.4581
9	Seat sealing	PTFE
10	Seal ring	FKM
11	Cover	DN 13 brass DN 20 stainless steel 1.4581

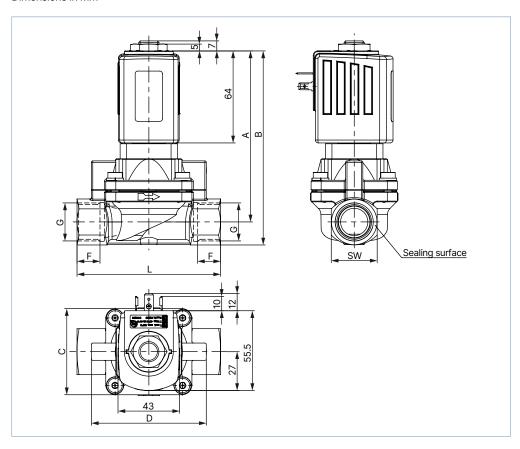


# 5. Dimensions

## 5.1. Standard version DN 13 and DN 20

#### Note:

Dimensions in mm



DN	Α	В	С	D	F	G	L	SW	Sealing surface
13	118	131.5	40	57	12	G 3/8	75	27	17 × 21
					14	G 1/2			22×27
20	119	135	60	80	16	G 3/4	100	32	27 × 32



## 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.

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

#### 6.3. Bürkert Product Enquiry Form



#### Bürkert Product Enquiry Form - Your enquiry quickly and compactly

Would you like to make a specific product enquiry based on your technical requirements? Use our Product Enquiry Form for this purpose. There you will find all the relevant information for your Bürkert contact. This will enable us to provide you with the best possible advice.

Fill out the form now

## 6.4. Ordering chart

### Flow valve/return valve combinations

If the oil burner is designed with a return nozzle and without a nozzle shut-off valve (see DIN EN 267), flow and return valves with safety shut-off function are required. The following combinations are possible:

Feed line v	alve			Return line valve					
Type Orifice [mm]		Housing material	K <sub>v</sub> value water	Туре	Orifice	Housing material	K <sub>v</sub> value water		
			[m³/h]		[mm]		[m³/h]		
6027	3	Brass/stainless steel	0.22	6027	3	Brass/stainless steel	0.18		
6027	3.5	Brass/stainless steel	0.38	6027	3.5	Brass/stainless steel	0.35		
5406 <sup>1.)</sup>	13	Brass	3.5	6027	10	Brass	1.8		
5406 <sup>1.)</sup> 20 St		Stainless steel	6.3	5407 2.)	20	Stainless steel	4.7		

<sup>1.)</sup> See data sheet **Type 6027** ▶ solenoid valve safety shut off valve for oil burner

<sup>2.)</sup> See data sheet **Type 5407** • solenoid valve safety shut off valve for oil burner



#### Note:

Further versions with alternative voltages and frequencies available on request.

Circuit function	Port connec- tion							Orifice	K <sub>v</sub> value water	Appli- cations	Closing times	Electrical p	ower	Pressure range	Body material	Article no.	
			[m³/h]		[ms]	Operation	Inrush	Oil		110120/50	220240/50						
		[mm]				[W]	[VA]	[bar]		[V/Hz]	[V/Hz]						
G-inner thread, seal ma	terial PTFE	/FKM															
DIN EN ISO 23553-1 Sa	fety isolati	ng equip	ment for lic	quid fuels P	F15												
<b>CF A</b> 2/2-way solenoid valve	G 3/8	13.0	3.5 3.0	Feed line	< 500	20	120	130	Brass	270861 ∖≕	257496 💬						
Servo-controlled Normally closed	G 1/2	13.0	3.3 3.0	Feed line	< 500	20	120	130	Brass	233267 ≒	230462 📜						
2 (A) 	G 3/4	20.0	6.3	Feed line	< 800	20	120	130	Stainless steel	233270 🛱	239769 ≒						
Normally open without	approval D	IN EN ISC	23553-1,	but adapte	d for use v	with liquid fu	els MW8	5			'						
CF B 2/2-way solenoid valve	G 3/8	13.0	3.5 3.0	Circula- tion	< 500	20	120	130	Brass	382364 ≒	328969 ≒						
Servo-controlled Normally open	G 1/2	13.0	3.3 3.0	Circula- tion	< 500	20	120	130	Brass	o. r.	233271 ≒						
2 (B) T 1 (P)																	

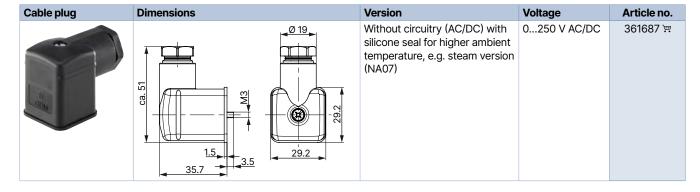
o. r. = on request

## 6.5. Ordering chart accessories

## Cable plug Type 2518, form A according to DIN EN 175301 - 803

#### Note:

- Dimensions in mm
- For further versions see data sheet **Type 2518** ▶.



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8 | 8