



Solenoids with Kick and Drop

- Two windings encapsulated in one coil with epoxy
- Inrush power increases performance and differential pressure range for small installation volumes
- Holding power reduces to less than 1 W with over 80 % energy saved
- Less heating reduces calcification and increases service life
- Internal electronics assembly covers direct and alternating voltage with frequencies 50 Hz and 60 Hz

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

Can be combined with

	Type 6013 Plunger valve 2/2-way direct-acting	▶
	Type 6014 Plunger valve 3/2-way direct-acting	▶
	Type 6027 Direct-acting 2/2-way plunger valve	▶
	Type 6213 Servo-assisted 2/2-way diaphragm valve	▶
	Type 6281 Servo-assisted 2/2-way diaphragm valve	▶
	Type 5404 Servo-assisted 2/2-way piston valve	▶
	Type 6240 Servo-assisted 2/2-way piston valve	▶

Type description

The Kick and Drop variants of the AC10 and AC19 coil types use two windings in one solenoid. Thanks to an increased inrush power for the first winding, the switchable pressure range is increased as installation volumes stay the same. The second winding is switched in series after 500 ms. Thanks to this reduced holding power, energy is saved and coil heating is reduced.

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1. General technical data

Product properties

Dimensions Detailed information can be found in chapter **"3. Dimensions"** on page 5.

Material^{1.)}

Seal FKM

Coil Epoxy

Thermal insulation class of solenoid Epoxy class H

Performance data

Switching frequency

AC10 Max. 10 cycles/min

AC19 Max. 30 cycles/min

Electrical data

Operating voltage 24 V/50...60 Hz and 24 V/DC, 110...120 V/50...60 Hz, 230...240 V/50...60 Hz

Single valve duty cycle Continuous operation 100 % duty cycle

Voltage tolerance $\pm 10\%$

Approvals and certificates

Degree of protection IP65 with cable plug, IP67 with cable plug Type 2518 (for possible versions see data sheet **Type 2518** ▶)

UL cURus

Process/Port connection & communication

Electrical connection According to DIN EN 175 301-803, form A for cable plug Type 2518 and Type 2509 (see **"4.13. Ordering chart for accessories"** on page 16)
Cable or terminal box at AC19

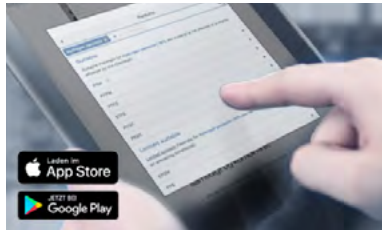
Environment and installation

Ambient temperature Max. 131 °F (higher temperatures available on request)

1.) The following materials are not in contact with the medium due to the push-over coil system.

2. Materials

2.1. Chemical Resistance Chart – Bürkert resistApp

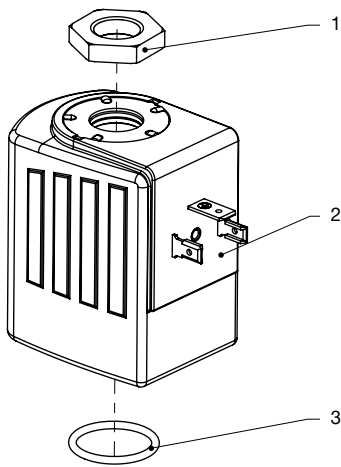


Bürkert resistApp – Chemical Resistance Chart

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](#)

2.2. Material specifications



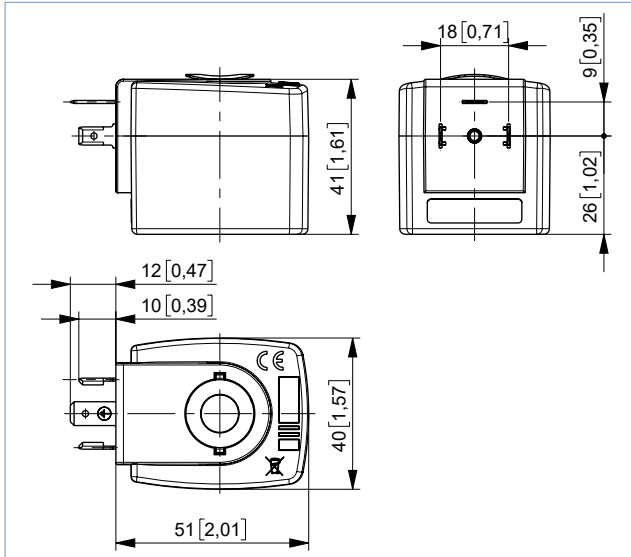
No.	Element	Material
1	Nut	DIN 176 thick film passivated or stainless steel
2	Coil	Epoxy
3	Seal	FKM

3. Dimensions

3.1. Standard version AC10

Note:

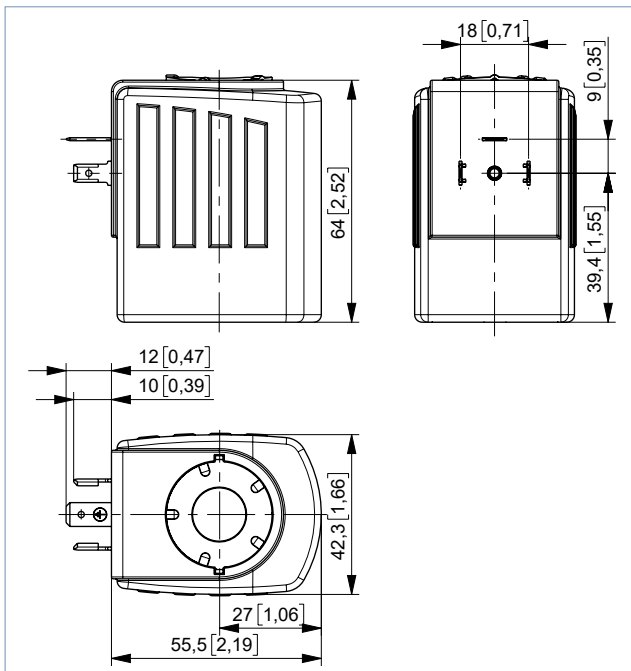
Dimensions in mm [inch]



3.2. Standard version AC19


Note:

Dimensions in mm [inch]



4. Ordering information

4.1. Bürkert eShop – Easy ordering and quick delivery




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](#)

4.2. 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](#)

4.3. Ordering chart for Kick and Drop UL recognized (cURus) coil sets

Note:

- As replacement demand or for retrofitting
- Set contains Kick and Drop solenoid, seal and fixing nut
- Further variants with alternative voltages available on request.

Coil type	Recommended solenoid valves ^{1.)}	Electrical connection	Coil power		Article no.	
			Inrush power [W]	Holding power [W]	24 / AC/DC [V/Hz]	120/AC [V/Hz]
AC10 40 mm	6013, 6014 6213 DN 10...20, 6281, 5404, 6240 DN 6	DIN EN 175 301 - 803, form A	12	0.6	20044994	–
		DIN EN 175 301 - 803, form A	20	2	20045040	20045046
		DIN EN 175 301 - 803, form A	65	7	20045051	20045053
AC19 42 mm	6026, 6027, 6213 DN 13...40, 6407, 6240 DN 12	DIN EN 175 301 - 803, form A	44	6.5	350043	X
		Cable UL Listed for hazardous locations, Class I, Division 2	44	6.5	20024417	X
		Terminal box UL Listed for hazardous locations, Class I, Division 2	44	6.5	X	X
		DIN EN 175 301 - 803, form A	85	8.5	338843	344831

X: on request

1.) Guaranteed use depends on the version in question and can only be confirmed by discussing it with your Bürkert contact person.

DTS 1000579974 EN Version: D Status: RL (released | freigegeben | valide) printed: 16.11.2023

4.4. Ordering chart for Type 6013 with Kick and Drop UL recognized (cURus) coil

The Type 6013 valve is a direct-acting 2/2-way plunger valve. The Kick and Drop coil enables the holding power to be reduced by up to 10 watts, depending on the version, and an increase in the pressure range for the normally closed version.



Note:

- For more information on the solenoid valve, see data sheet **Type 6013** ▶.
- Further variants with stainless steel body without short circuit ring, alternative voltages, G or RC internal threads, as flange version or other seal materials available on request.

Circuit function	Port connection	Orifice [mm]	C _v value water [gal/min]	Coil power		Pressure range (MAWP ^{1.)} [psi]	Article no.	
				Inrush power [W]	Holding power [W]		24 / AC/DC [V/Hz]	120/AC [V/Hz]
Brass body, NPT internal thread, seal material FKM/FKM								
CF A 2/2-way solenoid valve Direct-acting Normally closed 	NPT 1/8	1.0	0.05	12	0.6	0...870	20046587	X
	NPT 1/4	2.0	0.14	12	0.6	0...290	20046588	X
		3.0	0.27	0...87	20046589	X		
		4.0	0.35	0...29	20046591	X		
		6.0	0.64	0...7.3	20046592	X		
	NPT 1/8	1.0	0.05	20	2	0...870	20046593	20046599
	NPT 1/4	2.0	0.14	20	2	0...435	20046594	20046600
		3.0	0.27	0...145	20046595	20046601		
		4.0	0.35	0...58	20046596	20046602		
		6.0	0.64	0...15	20046597	20046603		
CF B 2/2-way solenoid valve Direct-acting Normally open 	NPT 1/8	1.0	0.05	20	2	0...580	20046618	20046625
	NPT 1/4	2.0	0.14	20	2	0...232	20046619	20046626
		3.0	0.27	0...116	20046622	20046627		
		4.0	0.35	0...58	20046623	20046628		
		6.0	0.64	0...29	20046624	20046629		

X: on request

1.) Maximum allowable working pressure

4.5. Ordering chart for Type 6014 with Kick and Drop UL recognized (cURus) coil

The Type 6014 valve is a direct-acting 3/2-way plunger valve. The Kick and Drop coil enables the holding power to be reduced to up to 10 watts, depending on the version.



Note:

- For more information on the solenoid valve, see data sheet **Type 6014** ▶.
- Further variants with stainless steel body without short circuit ring, alternative voltages, NPT or RC internal threads, as flange version or other seal materials available on request.

Circuit function	Port connection	Orifice [mm]	C _v value water [gal/min]	Coil power		Pressure range (MAWP ^{1.)} [psi]	Article no.	
				Inrush power [W]	Holding power [W]		24 / AC/DC [V/Hz]	120/AC [V/Hz]
Brass body, NPT internal thread, seal material FKM/FKM								
CF C 3/2-way solenoid valve Direct-acting Normally closed 	NPT 1/8	1.5	0.08	20	2	0...232	20046643	20046652
	NPT 1/4	2.0	0.13	20	2	0...145	20046644	20046653
		2.5	0.18			0...87	20046646	20046654
		3.0	0.23			0...58	20046647	20046655
CF D 3/2-way solenoid valve Direct-acting Normally open 	NPT 1/8	1.5	0.08	20	2	0...232	20046648	20046657
	NPT 1/4	2.0	0.13	20	2	0...145	20046649	20046658
		2.5	0.18			0...87	20046650	20046659
		3.0	0.23			0...58	20046651	20046660

1.) Maximum allowable working pressure

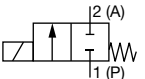
4.6. Ordering chart for Type 6026 with Kick and Drop UL recognized (cURus) coil

The Type 6026 valve is a direct-acting, media-separated 2/2-way plunger valve.



Note:

- For more information on the solenoid valve, see data sheet **Type 6026** ▶.
- Further variants with brass body without short circuiting ring, alternative voltages, NPT or RC internal threads, as flange version or other seal materials available on request.

Circuit function	Port connection	Orifice	C _v value water	Coil power		Pressure range (MAWP ^{1.)})	Article no.	
		[mm]	[gal/min]	Inrush power	Holding power		24 / AC/DC	120/AC
				[W]	[W]		[V/Hz]	[V/Hz]
Stainless steel body, NPT internal thread, seal material PTFE								
CF A 2/2-way solenoid valve Direct-acting Normally closed 	NPT 1/4	4.0	0.6	44	6.5	0...145	20047002 𠄎	20047005 𠄎
		6.0	0.9				20047003 𠄎	20047007 𠄎

1.) Maximum allowable working pressure

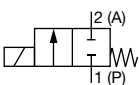
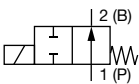
4.7. Ordering chart for Type 6027 with Kick and Drop UL recognized (cURus) coil

The Type 6027 valve is a direct-acting 2/2-way plunger valve. The Kick and Drop coil enables the holding power to be reduced by up to 14 watts, and an increase in the pressure range for the normally closed version.



Note:

- For more information on the solenoid valve, see data sheet **Type 6027** ▶.
- Further variants with stainless steel body, alternative voltages, NPT or RC internal threads, as flange or screw-in version or other seal materials available on request.

Circuit function	Port connection	Orifice [mm]	C _v value water [gal/min]	Coil power		Pressure range (MAWP ^{1.)} [psi]	Article no.	
				Inrush power [W]	Holding power [W]		24/AC/DC [V/Hz]	120/AC [V/Hz]
Brass body, NPT internal thread, seal material FKM/FKM (for orifice 12.0 mm only stainless steel body possible)								
CF A 2/2-way solenoid valve Direct-acting Normally closed 	NPT ¼	3.0	0.32	44	6.5	0...435	20047372	20047385
		4.0	0.62			0...435	20047374	20047386
	NPT ⅜	6.0	1.1	44	6.5	0...87	20047375	20047387
		8.0	1.8			0...44	20047376	20047388
	NPT ½	10.0	2.1	44	6.5	0...29	20047377	20047389
12.0		2.3	0...17			20010536	20047390	
CF B 2/2-way solenoid valve Direct-acting Normally open 	NPT ¼	3.0	0.32	44	6.5	0...232	20047379	20047391
		4.0	0.62			0...145	20047380	20047392
	NPT ⅜	6.0	1.1	44	6.5	0...87	20047381	20047393
		8.0	1.8			0...44	20047382	20047394
	NPT ½	10.0	2.1	44	6.5	0...29	20047383	20047395
12.0		2.3	0...14.5			20047384	20047396	

1.) Maximum allowable working pressure

4.8. Ordering chart for Type 6213 with Kick and Drop UL recognized (cURus) coil

The Type 6213 valve is a servo-assisted 2/2-way diaphragm valve with spring coupling of the pilot valve and diaphragm. The Kick and Drop coil enables the holding power to be reduced to up to 14 watts, depending on the version.



Note:

- For more information on the solenoid valve, see data sheet **Type 6213** ▶.
- Further variants with stainless steel body without short circuit ring, alternative voltages, NPT or RC internal threads, as flange version or other seal materials available on request.

Circuit function	Port connection	Orifice [mm]	C _v value water [gal/min]	Coil power		Pressure range (MAWP ^{1.)} [psi]	Article no.	
				Inrush power [W]	Holding power [W]		24 / AC/DC [V/Hz]	120/AC [V/Hz]
Brass body, NPT internal thread, seal material FKM/FKM								
CF A 2/2-way solenoid valve Direct-acting Normally closed 	NPT 3/8	10.0	2.2	20	2	0...145	20047795	20047798
	NPT 1/2	13.0	4.2	20	2	0...145	20047796	20047799
				44	6.5		20047801	20047803
	NPT 3/4	20.0	9.6	20	2	0...145	20047797	20047800
				44	6.5		20047802	20047804
	NPT 1	25.0	13	85	8.5	0...145	333893	333894
							NPT 1 1/4	333908
	NPT 1 1/2	40.0	35	85	8.5	0...145	333923	333924
NPT 2							333926	333927

1.) Maximum allowable working pressure

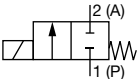
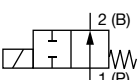
4.9. Ordering chart for Type 6281 with Kick and Drop UL recognized (cURus) coil

The Type 6281 valve is a servo-assisted 2/2-way diaphragm valve. A minimum differential pressure is required in order to function. The Kick and Drop coil enables the holding power to be reduced to up to 7 watts, depending on the version.



Note:

- For more information on the solenoid valve, see data sheet **Type 6281** ▶.
- Further variants with stainless steel body without short circuit ring, alternative voltages, NPT or RC internal threads, as flange version or other seal materials available on request.

Circuit function	Port connection	Orifice [mm]	C _v value water [gal/min]	Coil power		Pressure range (MAWP ^{1.)} [psi]	Article no.	
				Inrush power [W]	Holding power [W]		24 / AC/DC [V/Hz]	120/AC [V/Hz]
Brass body, NPT internal thread, seal material FKM/FKM								
CF A 2/2-way solenoid valve Direct-acting Normally closed 	NPT ¼	10.0	1.7	12	0.6	3...232	20046915 ☞	–
				20	2		X	20046943 ☞
	NPT ⅜	10.0	2.1	12	0.6	3...232	20046916 ☞	–
				20	2		X	20046944 ☞
	NPT ½	13.0	4.4	12	0.6	3...232	20046917 ☞	–
				20	2		X	20046945 ☞
	NPT ¾	20.0	9.8	12	0.6	3...232	20046918 ☞	–
				20	2		X	20046946 ☞
	NPT 1	25.0	14	12	0.6	3...232	20046919 ☞	–
				20	2		X	20046947 ☞
NPT 1¼	25.0	27	12	0.6	3...232	20046920 ☞	–	
			20	2		X	20046948 ☞	
NPT 1½	40.0	35	12	0.6	3...232	20046921 ☞	–	
			20	2		X	20046949 ☞	
NPT 2	50.0	46	12	0.6	3...232	20046922 ☞	–	
			20	2		X	20046950 ☞	
NPT 2½	50.0	46	12	0.6	3...232	20046923 ☞	–	
			20	2		X	20046951 ☞	
CF B 2/2-way solenoid valve Direct-acting Normally open 	NPT ¼	10.0	1.7	20	2	3...232	20046934 ☞	20046952 ☞
	NPT ⅜	10.0	2.1	20	2	3...232	20046935 ☞	20046953 ☞
	NPT ½	13.0	4.4	20	2	3...232	20046936 ☞	20046954 ☞
	NPT ¾	20.0	9.8	20	2	3...232	20046937 ☞	20046955 ☞
	NPT 1	25.0	14	20	2	3...232	20046938 ☞	20046956 ☞
	NPT 1¼	40.0	27	20	2	3...232	20046939 ☞	20046957 ☞
	NPT 1½	40.0	35	20	2	3...232	20046940 ☞	20046958 ☞
	NPT 2	50.0	46	20	2	3...232	20046941 ☞	20046959 ☞
	NPT 2½	50.0	46	20	2	3...232	20046942 ☞	20046960 ☞

X: on request

1.) Maximum allowable working pressure

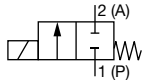
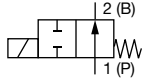
4.10. Ordering chart for Type 5404 with Kick and Drop UL recognized (cURus) coil

The Type 5404 valve is a servo-assisted 2/2-way piston valve. A minimum differential pressure is required in order to function. The Kick and Drop coil enables the holding power to be reduced to up to 9 watts, depending on the version.



Note:

- For more information on the solenoid valve, see data sheet [Type 5404](#) ▶.
- Further variants without short circuit ring, alternative voltages, NPT or RC internal threads, as flange version or other seal materials available on request.

Circuit function	Port connection	Orifice [mm]	C _v value water [gal/min]	Coil power		Pressure range (MAWP ^{1.)} [psi]	Article no.	
				Inrush power [W]	Holding power [W]		24 / AC/DC [V/Hz]	120/AC [V/Hz]
Brass body, NPT internal thread, seal material PTFE/FKM								
CF A 2/2-way solenoid valve Direct-acting Normally closed 	NPT 1/2	12.0	2.3	12	0.6	15...725	20047544	–
				20	2		X	20047551
	NPT 3/4	20.0	8	12	0.6	15...363	20047545	–
				20	2		X	20047552
NPT 1	25.0	11.5	12	0.6	15...363	20047546	–	
			20	2		X	20047554	
CF B 2/2-way solenoid valve Direct-acting Normally open 	NPT 1/2	12.0	2.3	20	2	15...464	20047547	20047555
	NPT 3/4	20.0	8	20	2	15...363	20047548	20047559
	NPT 1	25.0	11.6	20	2	15...363	20047550	20047560

X: on request

1.) Maximum allowable working pressure

4.11. Ordering chart for Type 6240 with Kick and Drop UL recognized (cURus) coil

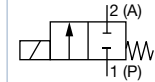
The Type 6240 valve is a servo-assisted 2/2-way piston valve with spring coupling of the pilot valve and piston. The Kick and Drop coil enables the holding power to be reduced by up to 14 watts, and an increase in the pressure range, depending on the version.



Note:

- For more information on the solenoid valve, see data sheet **Type 6240** ▶.
- Further variants with brass body, alternative voltage, NPT or RC internal threads, as flange or cartridge version or other seal materials available on request.

Circuit function	Port connection	Orifice	C _v value water	Coil power		Pressure range (MAWP ^{1.)}	Article no.	
				Inrush power	Holding power		24 / AC/DC	120/AC
		[mm]	[gal/min]	[W]	[W]	[psi]	[V/Hz]	[V/Hz]
Stainless steel body, G-internal thread, seal material FKM/FKM								
CF A	NPT ¼	6.0	0.7	20	2	0...363	20047424	20047426
2/2-way solenoid valve	NPT ¾	6.0	0.7	20	2	0...363	20047425	20047427
Direct-acting	NPT ½	12.0	2.5	44	6.5	0...363	20047428	20047429
Normally closed								



1.) Maximum allowable working pressure

4.12. Ordering chart for Type 6407 with Kick and Drop UL recognized (cURus) coil

The Type 6407 valve is a servo-assisted 2/2-way piston valve with fixed coupling of the pilot valve and piston. The Kick and Drop coil enables the holding power to be reduced to up to 14 watts.



Note:

- For more information on the solenoid valve, see data sheet **Type 6407** ▶.
- Further variants without short circuit ring, alternative voltages, NPT or RC internal threads, as flange version or other seal materials available on request.

Circuit function	Port connection	Orifice	C _v value water	Coil power		Pressure range (MAWP ^{1.)}	Article no.	
				Inrush power	Holding power		24 / AC/DC	120/AC
		[mm]	[gal/min]	[W]	[W]	[psi]	[V/Hz]	[V/Hz]
Brass body, NPT internal thread, seal material FKM/FKM								
CF A 2/2-way solenoid valve Direct-acting Normally closed 	NPT 1/2	13	4.3	44	6.5	0...145	20047538	20047541
	NPT 3/4	20	6.5	44	6.5	0...145	20047539	20047542
	NPT 1	25	11.6	44	6.5	0...145	20047540	20047543

1.) Maximum allowable working pressure

4.13. Ordering chart for accessories

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

Note:

For further 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
		Without circuitry (AC/DC) with silicone seal for higher ambient temperature, e.g. steam version (NA07)	0...250 V AC/DC	361687

Cable plug Type 2509, form A according to DIN EN 175301 - 803

Note:

- Without circuitry (Standard)
- For more information on the cable plug, see data sheet [Type 2509](#) ▶.

Cable plug	Dimensions	Version	Voltage	Article no.
		Without circuitry	0...250 V AC/DC	137943

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