bürkert
FLUID CONTROL SYSTEMS



2/2-way Compact Solenoid Valve, G 1/4 - G 1/2

- Direct-acting, normally closed
- Brass and stainless steel body
- Electrical connection cable plug Form A
- High pressure version up to 100 bar
- High temperature version up to +180 °C

Type 6027 Compact can be combined with…



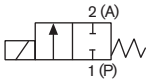
Type 2508
Cable plug

Type 1078
Timer unit

Type 2511
ASI cable plug

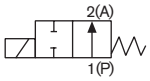
Type 6027 is a direct-acting solenoid valve used for shut-off, dosing, filling, and ventilation. The push-over solenoid system is of modular design and the coil can be rotated 360°.

Circuit function A



2/2-way valve, normally closed

Circuit Function B



2/2-way valve, normally open

Technical data	
Port connection	G 1/4, G 3/8, G 1/2 (NPT and RC on request)
Orifice	DN 2.0 - 12.0
Body material	Brass or stainless steel 1.4404 (316L)
Coil material	Epoxy
Coil insulation class	Epoxy class H
Seal material	FKM, PTFE/FKM and PTFE/PEEK for high temperature versions (EPDM on request)
Medium High temperature version	Vacuum, neutral gases and liquids (e.g. compressed air, town gas, natural gas, water, hydraulic oil, petrol) and slightly aggressive medium (stainless steel version) Hot fluids and steam (only with stainless steel body)
Medium temperature Seal material FKM, PTFE/FKM Seal material PTFE/PEEK	 -10 to +140°C -40 to +180 °C
Ambient temperature	-10 to +55°C
Viscosity	max. 21 mm^2/s
Voltages	24 V DC, 24 V/50 Hz, 230 V/50 Hz
Voltage tolerance	±10%
Duty cycle / single valve	100 % continuous operation
Electrical connection	According to DIN EN 175301-803 Form A for cable plug Type 2508 (see Ordering chart for accessories)
Protection class	IP65 with Cable Plug
Installation	As required, preferably with actuator in upright position

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Technical data (cont.)

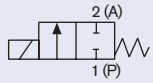
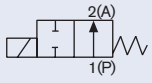
Power consumption				
Orifice [mm]	Power consumption Inrush AC [VA]	Hold AC (hot coil) [VA]	[W]	DC (hot/cold coil) [W]
2.0-12.0	105	37	16	16 / 21

Response times				
Orifice [mm]	Response times AC		Response times DC	
	Opening [ms]	Closing [ms]	Opening [ms]	Closing [ms]
2.0-12.0	10-20	20-30	20-80	20-30

Response times [ms]:
Measured at valve outlet at 6 bar and +20°C.
Opening: pressure build-up 0 to 90% *Closing*: Pressure relief 100 to 10%

Ordering chart for valves with brass or stainless steel body, standard temperature version

Valves with AC19 coil (42 mm), seal material FKM, without cable plug

Circuit function	Port connection		Orifice [mm]	Kv value water [m3/h] 1)	Pressure range [bar] 2) for liquid and gaseous medium DC	AC	Item no. 024/DC	024/50	230/50
A 2/2-way valve NC 	**Seal material FKM, medium temperature -10 to +140°C**								
	Brass body								
	Threaded port 	G 1/4	3.0	0.28	0-30	0-25	178 295	178 296	178 297
			4.0	0.54	0-12	0-16	178 299	178 300	178 301
			5.0	0.73	0-6	0-10	178 303	178 304	178 305
			6.0	0.95	0-3	0-6	178 307	178 308	178 309
		G 3/8	3.0	0.28	0-30	0-25	178 311	178 312	178 313
			4.0	0.54	0-12	0-16	178 315	178 316	178 317
			5.0	0.73	0-6	0-10	178 319	178 320	178 321
			6.0	0.95	0-3	0-6	178 323	178 324	178 325
			8.0	1.6	0-1	0-3	178 327	178 328	178 329
		G 1/2	6.0	0.95	0-3	0-6	178 331	178 332	178 333
			8.0	1.6	0-1	0-3	178 335	178 336	178 337
			10.0	1.8	0-0.4	0-2.0	178 339	178 340	178 341
	Stainless steel 1.4404 (316L)								
	Threaded port 	G 1/4	3.0	0.28	0-30	0-25	178 239	178 240	178 241
			4.0	0.54	0-12	0-16	178 243	178 244	178 245
			5.0	0.73	0-6	0-10	178 247	178 248	178 249
			6.0	0.95	0-3	0-6	178 251	178 252	178 253
		G 3/8	3.0	0.28	0-30	0-25	178 255	178 256	178 257
			4.0	0.54	0-12	0-16	178 259	178 260	178 261
			5.0	0.73	0-6	0-10	178 263	178 264	178 265
			6.0	0.95	0-3	0-6	178 267	178 268	178 269
			8.0	1.6	0-1	0-3	178 271	178 272	178 273
		G 1/2	6.0	0.95	0-3	0-6	178 275	178 276	178 277
			8.0	1.6	0-1	0-3	178 279	178 280	178 281
			10.0	1.8	0-0.4	0-2.0	178 283	178 284	178 285
			12.0	2.0	0-0.2	0-1.2	178 287	178 288	178 289
B 2/2-way valve NO 	**Brass body**								
		G1/4	3	0.28	0-16		211 914	228 487	228 488
			4	0.54	0-10		208 623	228 489	228 490
			6	0.95	0-6		211 915	■	■
		G1/2	8	1.6	0-3		211 916	228 503	228 504
			10	1.8	0-2		210 436	219 530	210 438
	Stainless steel								
		G1/4	3	0.28	0-16		230 243	230 244	230 245
			4	0.54	0-10		230 246	230 247	230 248
		G3/8	6	0.95	0-6		230 255	230 256	230 257
		G1/2	8	1.6	0-3		230 261	230 262	230 263
			10	1.8	0-2		225 248	230 264	230 265

1) Measured at +20 °C, 1 bar 2) pressure at valve inlet and free outlet
2) Measured as overpressure to the atmospheric pressure

■ on request

Please note that the cable plug has to be ordered separately, see accessories on page 5 and separate datasheet for Type 2508.

Further versions on request

Materials
Seal material EPDM, PTFE

Voltage
Non-standard voltages

Pressure
Higher pressures for gaseous medium

Port connection
NPT, RC

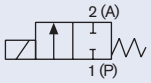
Approvals
ATEX

Additional
Oxygen versions

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Ordering chart for valves with brass body, standard temperature and high pressure version

All valves with AC19 coil (42 mm), seal material PTFE/FKM, without Cable Plug

Circuit function	Port connection		Orifice [mm]	Kv value water [m3/h] [1]	Pressure range [bar] [2] for liquid and gaseous medium: DC for liquid and gaseous medium	AC Liquids	AC Gaseous medium	Item no. per voltage/frequency [V/Hz]: 024/DC	024/50	230/50
A 2/2-way valve NC	**Seal material PTFE/FKM, medium temperature -10 to +140°C**									
	**Brass body**									
	Threaded port	G 1/4	2.0	0.14	0-80	0-75	0-80	184 667	■	184 668
			4.0	0.54	0-20	0-30	0-50	184 670	■	184 671
			6.0	0.95	0-5	0-12		184 674	■	184 675
		G 3/8	6.0	0.95	0-5	0-12		184 677	■	184 678
			8.0	1.6	0-1	0-5		184 680	■	184 681
		G 1/2	8.0	1.6	0-1	0-5		184 683	■	184 684
			10.0	1.8	0-0.4	0-2	0-3	184 686	■	184 687



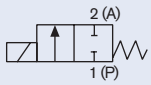
[1] Measured at +20 °C, 1 bar [2] pressure at valve inlet and free outlet
[2] Measured as overpressure to the atmospheric pressure

■ on request

Please note that the cable plug has to be ordered separately, see accessories on page 5 and separate datasheet for Type 2508.

Ordering chart valves with stainless steel body, also for high temperatures and high pressure

All valves with AC19 coil (42 mm), seal material PTFE/PEEK, without Cable Plug

Circuit function	Port connection		Orifice [mm]	Kv value water [m3/h] [1]	Pressure range [bar] [2] for liquid and gaseous medium: DC for liquid and gaseous medium	AC Liquids	AC Gaseous medium	Item no. per voltage/frequency [V/Hz]: 024/DC	024/50	230/50
A 2/2-way valve NC	**Seal material PTFE/PEEK, also for high temperatures up to +180°C**									
	**Stainless steel body**									
	Threaded port	G 1/4	2.0	0.14	0-100	0-75	0-100	184 689	■	184 690
			4.0	0.54	0-20	0-30	0-50	184 692	■	184 693
		G 3/8	6.0	0.95	0-5	0-12		184 695	■	184 696
			8.0	1.6	0-1	0-5		184 698	■	184 699
		G 1/2	10.0	1.8	0-0.4	0-2	0-3	184 701	■	184 702
			12.0	2.0	0-0.2	0-1.2	0-2	184 704	■	184 705



[1] Measured at +20 °C, 1 bar [2] pressure at valve inlet and free outlet
[2] Overpressure with respect to atmospheric pressure

■ on request

Please note that the cable plug has to be ordered separately, see accessories on page 5 and separate datasheet for Type 2508.

Further versions on request

Materials
Seal material EPDM, PTFE

Port connection
NPT, RC

Voltage
Non-standard voltages

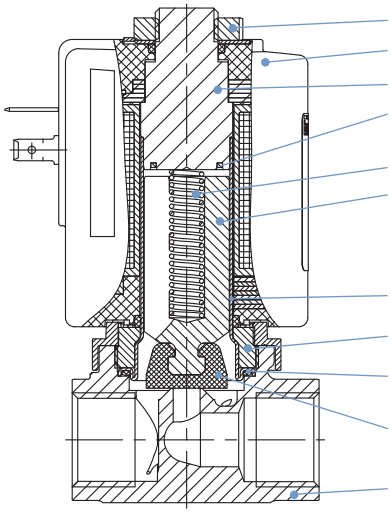
Approvals
ATEX

Pressure
Higher pressures for gaseous medium

Additional
Oxygen versions

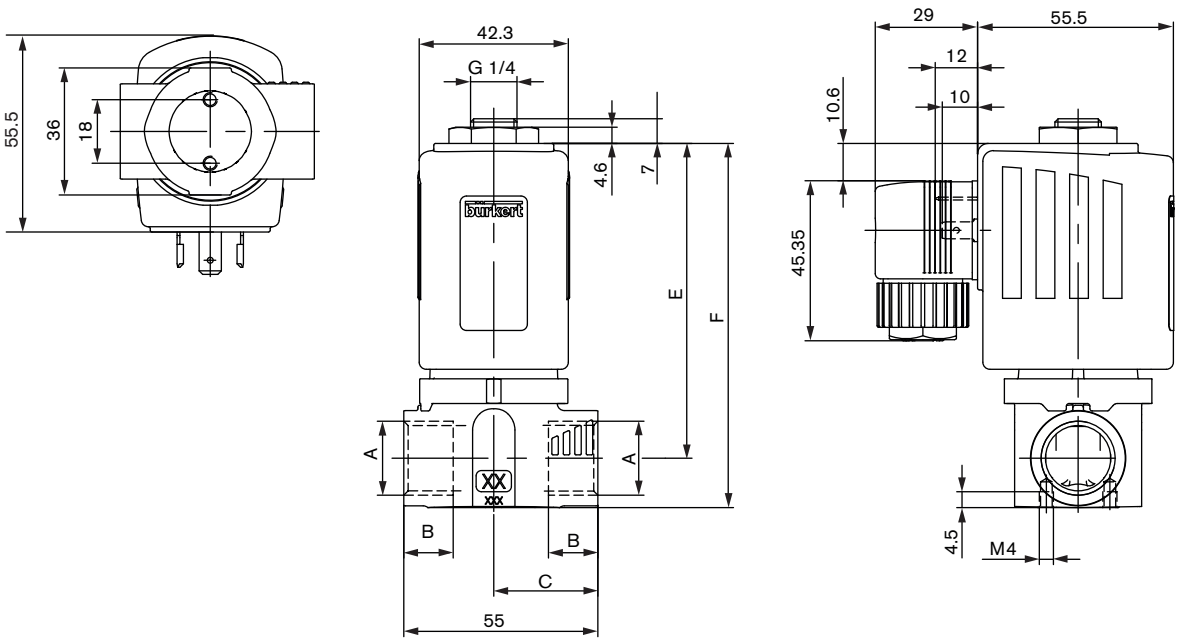
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Materials



Locknut	DIN 176 9Sn Pb 28K thick-film passivated or stainless steel
Coil	Epoxy
Stopper	Stainless steel 1.4113
Shading ring	Copper (brass body), silver (stainless steel body)
Spring	Stainless steel 1.4310
Plunger	Stainless steel 1.4113
Guide tube	Stainless steel 1.4303
Nipple	Brass, stainless steel 1.4305
Seal	FKM, PEEK for high temperature versions (EPDM on request)
Seat seal	FKM, PTFE (EPDM on request)
Body	Brass, stainless steel 1.4404 /316L

Dimensions [mm]



A Port connection	B [mm]	C [mm]	E [mm]	F [mm]	Weight [g]
G 1/4	12	27.5	88.2	98.2	793
G 3/8	12	27.5	89.2	101.2	816
G 1/2	14	29.5	89.2	103.2	840

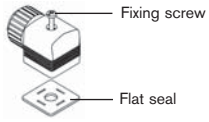
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Ordering chart accessories

Cable plug Type 2508 according to DIN EN 175301-803 Form A



Circuit	Voltage/ Frequency	Item no.
without (Standard)	0 - 250 V AC/DC	008 376
with LED	12 - 24 V AC/DC	008 360
with LED and varistor	12 - 24 V AC/DC	008 367
with rectifier, LED and varistor	12 - 24 V AC/DC	008 363
with LED	200- 240V	008 362
with LED and varistor	200- 240V	008 369
further versions see datasheet Type 2508		



Included in delivery is a connector with flat seal and fixing screw. For other cable plug versions according to DIN EN 175301-803 (previously DIN 43650) Form A, see separate datasheet for Type 2508. When you click on the orange box "More info." below, you will come to our website for the resp. product where you can download the datasheet.

More info.

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