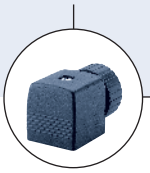
burkert
FLUID CONTROL SYSTEMS



2/2 or 3/2-way Solenoid Valve, with pivoted armature and isolating diaphragm

- Lockable manual override as standard
- For liquid, gaseous and aggressive media
- Long service life, even in non-lube conditions
- Insensitive to contaminated fluids
- Analysis version available
- Approvals:

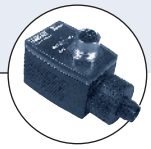
Type 0330 can be combined with…



Type 2508
Cable plug



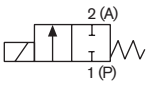
Type 1078
Timer unit



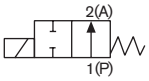
Type 2511
ASI cable plug

The Type 0330 is a direct-acting 2/2 or 3/2-way pivoted armature solenoid valve with a wide range of circuit functions. The magnetic system and the medium are separated by a diaphragm system. The valve is fast-acting and has a long service life, even in non-lube conditions.

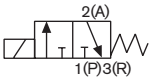
Circuit functions



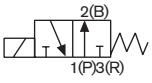
A 2/2-way valve NC



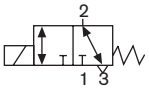
B 2/2-way valve NO



C 3/2-way valve NC



D 3/2-way valve NO



E 3/2-way valve, universal function, any flow direction

Applications

- Water and gas analysis
- Pharmaceutical industry
- Food processing

Technical data	
Port connection	NPT 1/4
Orifice	DN 2.0 - 4.0mm
Body and seat materials	Brass and stainless steel 1.4401
Coil material	Epoxy
Coil insulation class	H
Seal material	NBR and FKM (EPDM, FFKM on request)
Media NBR FKM on request EPDM on request FFKM	 Neutral media, such as compressed air, water, hydraulic oil Hot air, oxygen, hot oil, per-solution Oil and fat-free media Hot air, oxygen, hot oil, per-solution
Media temperature NBR FKM on request EPDM on request FFKM	 32°F to 176°F (0°C to +80°C) 32°F to 194°F (0°C to +90°C) -22°F to 194°F (-30°C to +90°C) 32°F to 194°F (0°C to +90°C)
Ambient temperature	max. 131°F (+55°C) (min. temperature see media temp.)
Viscosity	max. 37 cSt
Operating voltage	24 V DC, 24 V/60 Hz, 120 V/60 Hz, 240 V/60 Hz further on request
Voltage tolerance	±10%
Duty cycle	100% continuous rating
Electrical connection	Cable plug Type 2508 (DIN EN 175301-803 Form A) for Ø 7 mm cable (supplied as standard)
Protection class	IP 65 with cable plug
Weight [kg]	0.47
Installation	As required, preferably with actuator upright

DTS 1000082396 EN Version: A Status: RL (released | freigegeben | validé) printed: 19.04.2013

Technical data, cont.

Power ratings

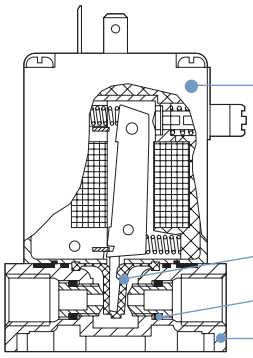
Orifice	Power ratings			
[mm]	Inrush AC [VA]	Hold AC (hot coil) [VA]	[W]	Hot/cold coil DC [W]
2-4	30	15	8	8 / 11

Response times

Orifice	Response times			
	AC		DC	
[mm]	Opening [ms]	Closing [ms]	Opening [ms]	Closing [ms]
2-4	8-15	8-15	10-20	10-20

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%

Materials



Coil: Epoxy

Isolating diaphragm: see ordering chart

O-Ring: see ordering chart

Valve body: Brass, stainless steel 1.4401

DTS 1000082396 EN Version: A Status: RL (released | freigegeben | validé) printed: 19.04.2013

Ordering chart for valves (other versions on request)

Circuit Functions	Orifice	C_V [1]	Port Connection [NPT]	Pressure Range [PSI]	Body Material	Seal Material	Voltage [2]	Electrical Classifications [3]	Item no.
A	2mm	0.09	1/4	0 – 174	Stainless Steel	FKM	024/DC	–	457 681
							120/60	–	457 682
							240/60	–	457 683
	3mm	0.21	1/4	0 – 145	Brass	FKM	024/DC	UR/CSA	461 284
							120/60	UR/CSA	460 216
					Stainless Steel	FKM	024/DC	–	457 687
							024/DC	UR/CSA	459 292
							120/60	–	457 688
							120/60	UR/CSA	459 291
							240/60	–	457 689
	4mm	0.27	1/4	0 – 72	Stainless Steel	FKM	024/DC	–	457 693
							120/60	–	457 694
							240/60	–	457 695
C	2mm	0.09	1/4	0 – 174	Brass	FKM	024/DC	–	453 692
							120/60	UR/CSA	450 294
							120/60	UL/FM/CSA	453 266
							240/60	UR/CSA	451 708
					Stainless Steel	FKM	024/DC	UL/FM/CSA	453 223
							120/60	UR/CSA	450 295
							120/60	UL/FM/CSA	453 227
							240/60	UL/FM/CSA	453 229
	3mm	0.21	1/4	0 – 145	Brass	FKM	024/DC	UR/CSA	451 710
							024/DC	UL/FM/CSA	453 020
							120/60	UR/CSA	450 297
							120/60	UL/FM/CSA	453 018
							240/60	UR/CSA	451 714
					Stainless Steel	FKM	024/DC	UR/CSA	451 711
							024/DC	UL/FM/CSA	453 230
							120/60	UR/CSA	450 298
							120/60	UL/FM/CSA	453 232
							240/60	UR/CSA	451 715
	4mm	0.27	1/4	0 – 72	Brass	FKM	024/DC	UR/CSA	451 716
							024/DC	UL/FM/CSA	453 235
							120/60	UR/CSA	451 720
							120/60	UL/FM/CSA	452 863
							240/60	UR/CSA	451 722
					Stainless Steel	FKM	024/DC	–	454 261
							024/DC	UL/FM/CSA	453 236
							120/60	UR/CSA	451 721
							120/60	UL/FM/CSA	453 239
							240/60	UL/FM/CSA	453 241

Notes:

1) C_V reduced 20% with DC current operation.
2) 120/56 suitable for 50Hz or 60 Hz power.
3) • U.R. is a U.L. recognized component.
   • U.L. is U.L. listed for general purpose applications.
   • FM is FM approved for Haz location CL 1, Div 2, Groups A, B, C, and D.
   • UL/FM/CSA approved valves come with Type 2509 series conduit plug.

Vacuum versions available on request.

DTS 1000082396 EN Version: A Status: RL (released | freigegeben | validé) printed: 19.04.2013

Ordering chart for valves ...*continued* (other versions on request)

Circuit Functions	Orifice	C_V [1]	Port Connection [NPT]	Pressure Range [PSI]	Body Material	Seal Material	Voltage [2]	Electrical Classifications [3]	Item No.
E	2mm	0.09	1/4	0 – 145	Brass	FKM	024/DC	UR/CSA	457 218
							024/DC	UL/FM/CSA	454 762
							120/60	UR/CSA	450 301
							120/60	UL/FM/CSA	454 490
					Stainless Steel	FKM	024/DC	UR/CSA	455 574
							120/60	UR/CSA	453 776
							120/60	UL/FM/CSA	454 126
	3mm	0.21	1/4	0 – 87	Brass	FKM	024/DC	UL/FM/CSA	453 026
							120/60	UL/FM/CSA	453 024
					Stainless Steel	FKM	024/DC	UR/CSA	453 831
							120/60	UR/CSA	453 777
							120/60	UL/FM/CSA	453 558
	4mm	0.27	1/4	0 – 43	Brass	FKM	024/DC	UL/FM/CSA	455 055
							120/60	–	450 795
							240/60	–	454 151
					Stainless Steel	FKM	024/DC	UR/CSA	452 808
							120/60	UL/FM/CSA	453 634

Notes:
1) C_V reduced 20% with DC current operation.
2) 120/56 suitable for 50Hz or 60 Hz power.
3) • U.R. is a U.L. recognized component.
   • U.L. is U.L. listed for general purpose applications.
   • FM is FM approved for Haz location CL 1, Div 2, Groups A, B, C, and D.
   • UL/FM/CSA approved valves come with Type 2509 series conduit plug.

Vacuum versions available on request.

Further versions on request

Approvals
Explosion protection (Type 780), ATEX, UL, UR, FM - Ex Div. 1

Voltage
Non-standard voltages

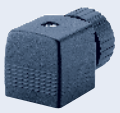
Materials
Seal materials EPDM, FFKM, NBR

Circuit function
B (normally open, 2-way), D (normally open, 3-way) or F (distributing)

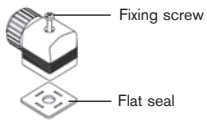
Additional
Impulse version, optical or electrical position feedback, further device combinations

Ordering chart Accessory

Cable plug acc. to DIN EN 175301-803 Form A



Circuitry	Voltage / frequency	Item no.
None (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 - 240 V	008 362
with LED and varistor	200 - 240 V	008 369
further versions see datasheet Type 2508		



The delivery of a cable plug includes the flat seal and the fixing screw. For other cable plug versions acc. to DIN EN 175301-803 Form A (previously DIN 43650), see data-sheet Type 2508.

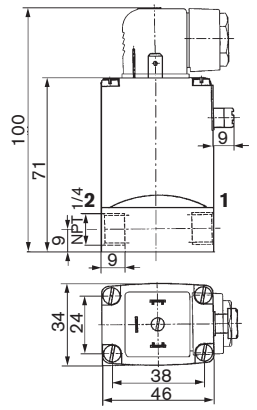
DTS 1000082396 EN Version: A Status: RL (released | freigegeben | validé) printed: 19.04.2013

Dimensions [mm]

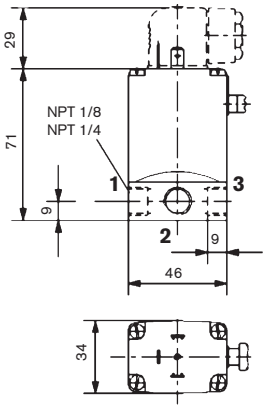
Possible body connections			
Circuit function	**1**	**2**	**3**
A	P	A	–
B	A	P	_
C	P	A	R
D	R	B	P
E	P1	A	P2
F	A	P	B

The connections marked with 1, 2 and 3 are labelled in the drawing according to the circuit function table on the left.

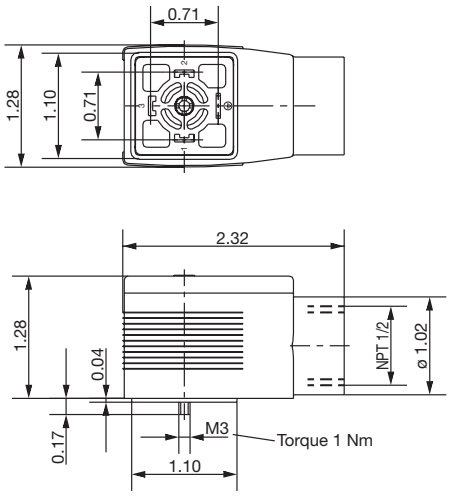
2/2-way valve



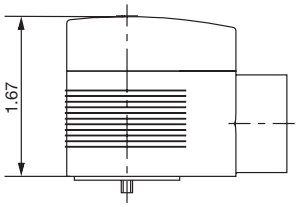
3/2-way valve



Type 2509



without circuitry



with circuitry

To find your nearest Burkert facility, click on the orange box ⟶

In case of special application conditions, please consult for advice.

We reserve the right to make technical changes without notice.
© Christian Bürkert GmbH & Co. KG

DTS 1000082396 EN Version: A Status: RL (released | freigegeben | validé) printed: 19.04.2013