

2/2- and 3/2-Way; Orifice 0.024 in.

Advantages/Benefits



- ▶ Compact size
- ▶ Hermetic isolation of fluid from the actuator
- ▶ High back-pressure rating
- ▶ Low internal volume
- ▶ Impulse version
- ▶ Zero pumping effect to media
- ▶ Impulse (latching) coil available standard

The Type 6124 solenoid valves combine the highly reliable flipper technology with isolating diaphragm and compact sizes. The valves are designed to handle a wide range of difficult and slightly aggressive media in technical applications.

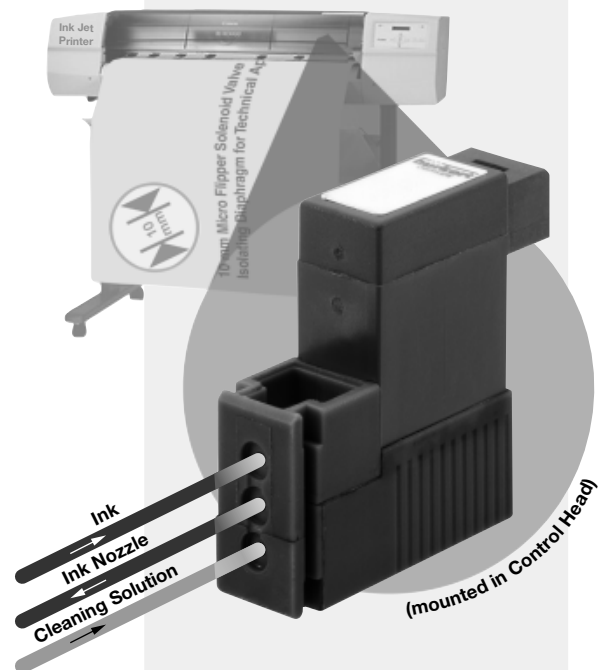
Applications

Process Specification

Nominal voltage	6, 12, 24 V/DC
Voltage tolerance	± 10%
Power consumption	1.5 W
Electrical connection	• Rectangular plug or • 2 Flying leads, 12 in.
Switching function	• Standard (Monostable) • Impulse (Bistable)
Duty cycle	100% continuously rated
Single valve	If temperature of fluid or ambient
Multiple valves on manifold	>104°F intermittent operation 40% (10 min.)
Cycling rate	Approx. 1000 c.p.m.
Protection class	• NEMA 4 (IP 65) with leads • IP 40 with rectangular plug
Pressure range max.	Vacuum to 43 PSI (see specifications)
Materials	PPS
Body	FPM (VITON)
Seal	(EPDM on request)
Fluids	Ink, difficult and slightly aggressive media
Temperatures	32°F to 122°F
Fluid	Max. 131°F
Ambient	
Max. viscosity	Approx. 21 mm ² /s
Response time	Approx. 20 ms
Internal volume	• Fluid volume: approx. 15 µl • 2/2-way version: approx. 35 µl • 3/2-way version: approx. 45 µl

Target markets:

- Ink Jet
- Analytical Instruments
- Handling of slightly aggressive or contaminated media



Burkert Contromatic USA
 2602 McGaw Avenue
 Irvine, CA 92614
 Tel. 949.223.3100
 Fax 949.223.3198
 www.burkert-usa.com

Burkert Contromatic Inc.
 760 Pacific Road, Unit 3
 Oakville, Ontario, Canada L6L 6M5
 Tel. 905.847.5566
 Fax 905.847.9006
 www.burkert.ca

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 Fluid Control Systems

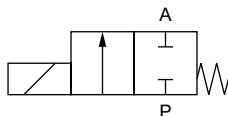
10 mm Micro Flipper Solenoid Valve with Isolating Diaphragm for Technical Applications

Type 6124

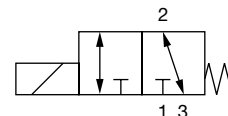
Technical Data

Circuit Function

A 2/2-way valve, normally closed



T 3/2-way valve, direct acting, universal function, any flow direction



Port connection	Orifice [inch]	C _v -Value (water) [GPM]	Pressure range [PSI]	Back- pressure [PSI]	Response Times		Weight [oz.]
					Opening [ms]	Closing [ms]	
Manifold	0.024	0.006 ²⁾	Vac. - 43	28	<10	<20	0.46

²⁾Flow rate: C_v-value water [GPM]

Measured at 68°F, 14.5 PSI pressure to atmosphere

Pressure ranges [PSI]

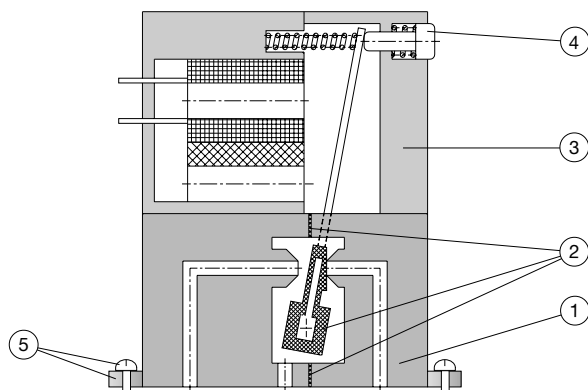
Measured as overpressure to the atmospheric pressure

Response times [ms]

Measured at valve outlet at 43 PSI and 68°F

Opening	Pressure rise from 0 to 90%
Closing	Pressure drop from 100 to 10%

Materials



1 Valve body:	PPS
2 Seals:	FPM (Viton)- EPDM on request
3 Coil body:	PA (Polyamide)
4 Manual override:	PPS
5 Mounting clip:	PA with stainless steel screw

Ordering-Information Accessories

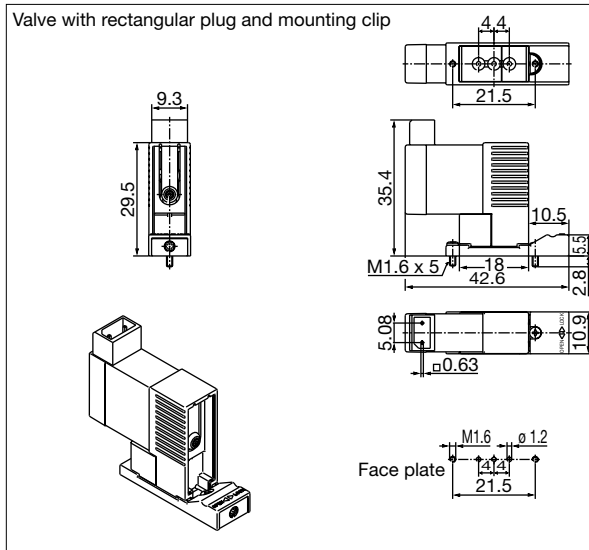
Accessory	Description	Item-No.
Rectangular plug 0.2 in.	118 in. cable jacketed [3m]	133 486 F
	12 in. leads [300mm]	644 068 N
	78 in. leads [2m]	148 578 R
	single contacts for manifold mounting	644 067 D
Single manifold PEEK	3 x UNF-1/4-28-connection	645 754 K
Single manifold SS	3 x M3-connection	644 684 D
3-Station manifold, PEEK	2-Way Function, Single Common Port, Drawing Available Upon Request	US61379
6-Station manifold, PEEK	2-Way Function, Single Common Port, Drawing Available Upon Request	US61380
3-Station manifold, PEEK	2-Way Function, Single Common Port, Drawing Available Upon Request	US61383
6-Station manifold, PEEK	2-Way Function, Single Common Port, Drawing Available Upon Request	US61384
Blanking plate PEEK	To cover unused stations	US61378

Additional Accessories on request:

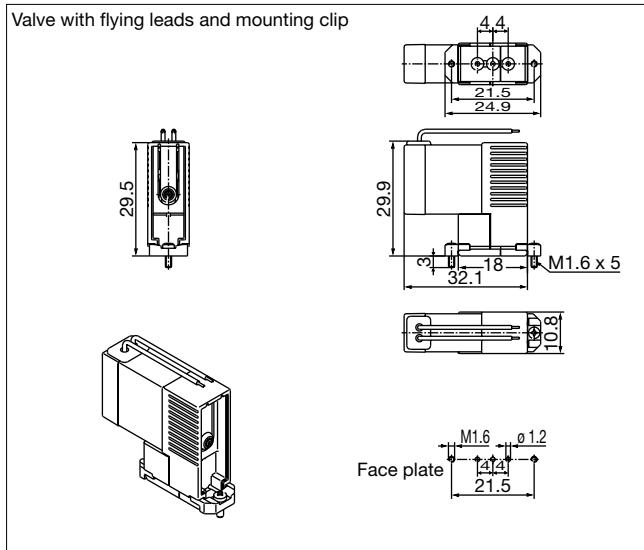
- Multi-valve manifolds
- Flow diagnostics
- Fittings and tubing

Type 6124

Valve with rectangular plug and mounting clip



Valve with flying leads and mounting clip

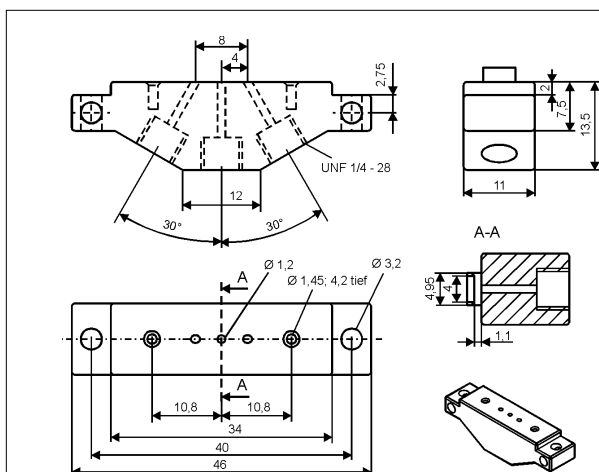


All valves with PPS housing and FPM seals; rectangular plug versions delivered without plug connectors (see accessories)

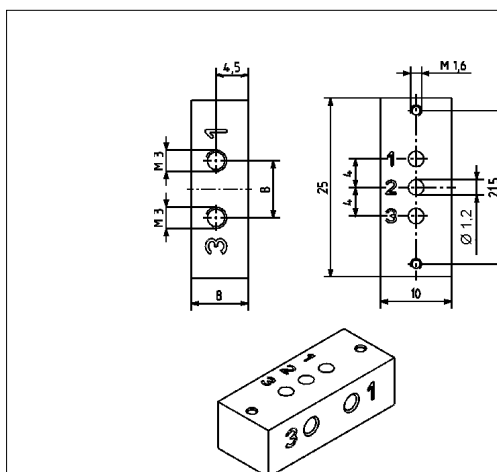
All valves delivered with mounting clips with screws M 1.6 x 5

Circuit Function	Orifice [inch]	C _v -Value (water) [GPM]	Q _{Nn} -Value (air) [l/min]	Pressure range [PSI]	Electrical connection	Switching function	Voltage/ frequency [V/Hz]	Item-No.
A (2/2-way)	0.024	0.006	5	Vac.-43	rectangular plug leads, 2x12in.	standard	006/VDC	148 841 H
	0.024	0.006	5	Vac.-43	leads, 2x12in.	standard	012/DC	144 122 L
	0.024	0.006	5	Vac.-43	rectangular plug leads, 2x31.5in.	standard	012/DC	144 120 W
	0.024	0.006	5	Vac.-43	leads, 2x31.5in.	standard	024/VDC	154 370 J
	0.024	0.006	5	Vac.-43	rectangular plug leads, 2x12in.	standard	024/DC	144 121 K
	0.024	0.006	5	Vac.-43	leads, 2x12in.	standard	024/DC	144 123 M
	0.024	0.006	5	Vac.-43	rectangular plug leads, 2x12in.	impulse	006/DC	142 261 D
	0.024	0.006	5	Vac.-43	leads, 2x12in.	impulse	006/DC	146 175 T
	0.024	0.006	5	Vac.-43	rectangular plug leads, 2x12in.	impulse	012/DC	143 376 H
T (3/2-way)	0.024	0.006	5	Vac.-43	leads, 2x12in.	impulse	012/DC	146 176 U
	0.024	0.006	5	Vac.-43	rectangular plug leads, 2x12in.	standard	012/DC	140 457 C
	0.024	0.006	5	Vac.-43	leads, 2x12in.	standard	012/DC	140 459 N
	0.024	0.006	5	Vac.-43	rectangular plug leads, 2x12in.	standard	024/DC	140 458 M
	0.024	0.006	5	Vac.-43	leads, 2x12in.	standard	024/DC	140 460 K
	0.024	0.006	5	Vac.-43	rectangular plug leads, 2x12in.	impulse	006/DC	140 461 G
	0.024	0.006	5	Vac.-43	leads, 2x12in.	impulse	006/DC	140 462 H
	0.024	0.006	5	Vac.-43	rectangular plug leads, 2x12in.	impulse	012/DC	142 089 V
	0.024	0.006	5	Vac.-43	leads, 2x12in.	impulse	012/DC	143 171 U

Single Manifold Stainless Steel with M3 Conn.



The UNF mounting plate is available separately.

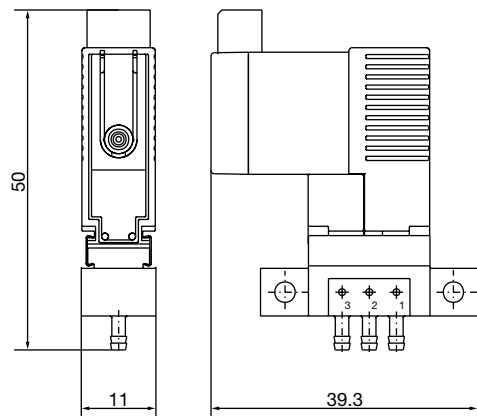


10 mm Micro Flipper Solenoid Valve with Isolating Diaphragm for Technical Applications

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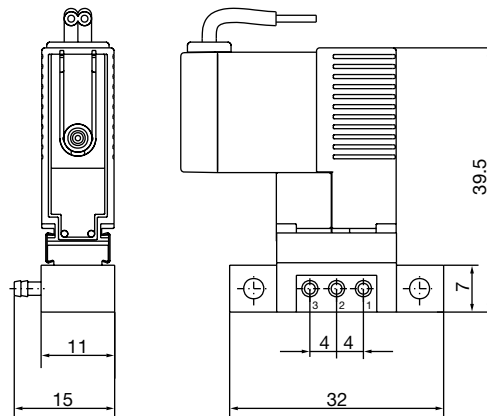
Dimensions [mm] for Valves with Tube Connections (on request)

Valve with rectangular plug and downwards tube connection



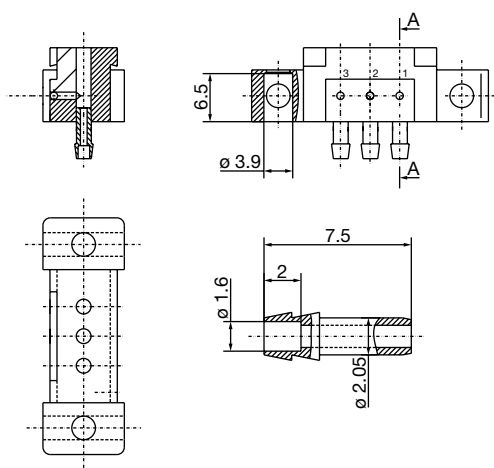
2/2-way valves are being delivered with output 3 closed

Valve with flying leads and sideways tube connection



2/2-way valves are being delivered with output 3 closed

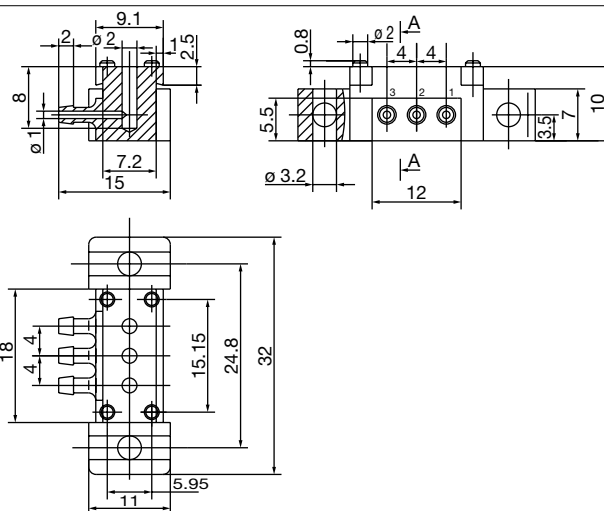
Single Manifold PA with Downwards Tube Conn.



Note:

The tube connection plates are only available as part of a complete valve

Single Manifold PA with Sideways Tube Conn.



Note:

The tube connection plates are only available as part of a complete valve

Rectangular Cable Plug Type 2505

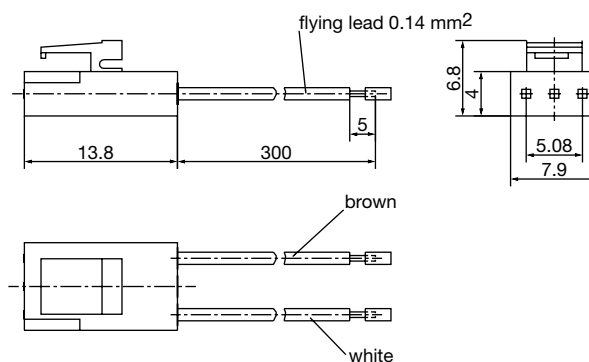
Technical Data

Protection class	IP 20
Operating voltage	24 V
Power consumption	3 W
Operating temperature	32°F - 122°F

Ordering¹⁾

	Item-No.
Cable length 300 mm	644 068 N
Cable length 3 m	133 486 F
Cable length 500 mm	148 578 R

¹⁾ Please order separately (no standard delivery)



In case of special requirements please consult for advice.

We reserve the right to make technical changes without notice.

US_6124_03/03