

Sub-base



Advantages/Benefits

- ▶ Design of smaller, lighter and more complex instruments
- ▶ Hermetic isolation of fluid from the actuator
- ▶ High back-pressure rating
- ▶ Low internal volume
- ▶ Impulse version on request
- ▶ Flow diagnosis on request
- ▶ 3/2-way universal function (2/2-way function on request)
- ▶ Body material: PPS
Seal material: FPM

Design/Function

A unique flipper designed actuating mechanism operates an isolating diaphragm that separates the actuator itself and the coil from the fluid.

No friction, no risk of sticking and a strong and rugged diaphragm provide a high reliability and long service life.

The valve has a minimal internal volume that is easily purged. No cross-contamination occurs and the control of critical fluids are possible.

Heat transfer is virtually eliminated as the coil is not directly in contact with the diaphragm.

A high accuracy and the control of critical fluids are possible.

Smaller, lighter and more complex analytical instruments can be designed with the 10 mm micro-diaphragm valve.

The valves are ideal for compact manifold mounting. Custom manifolds are available to satisfy specific application requirements, including dead volume free designs.

Applications

- Ink Jet
- Technical application
- Analytical instruments
- Difficult and slightly aggressive media

bürkert
Easy Fluid Control Systems

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

Type 6123/6124 (2/2- 3/2-way)

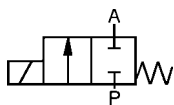
Technical Data

type 6603: 2/2-Way

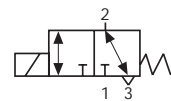
type 6604: 3/2-Way

Circuit Function

A 2/2-way valve,
normally closed
(on request)



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



Valve specification

Pressure range max.	Vacuum -3 bar (see specifications)
Body material	PPS
Seal material	FPM (EPDM on request)
Fluids	Ink; difficult and slightly aggressive media
Fluid temperature	-10 to +50 °C
Ambient temperature	max. +55 °C
Max. viscosity	approx. 21 mm ² /s
Response time	approx. 20 ms
Internal volume:	approx 15 µl

Solenoid specification

Nominal voltages	DC 12, 24 V/=
Voltage tolerance	±10 %
Power consumption	1.5 W
Duty cycle	
single valve:	100% continuously rated
multiple valve on manifold:	if temperature of fluid or ambient >40°C intermittent operation 40% (10 min.)
Cycling rate	approx. 1000 c.p.m.
Protection class	IP 65 with leads, IP 40 with rectangular plug

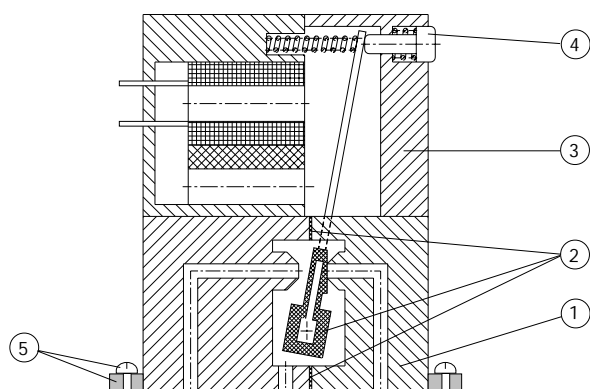
Manifolds

Manifolds according to specific application demands are available including dead volume free valves and manifolds.

Installation / Accessories

Installation	as required, but preferably with solenoid system upright.
Fixation	M1.6 x 5 from the top, 2 mounting clips and screws supplied as standard
Electrical connection	• rectangular connector • flying leads
Cable plug	Rectangular plug

Materials

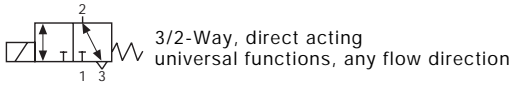


1 Valve body:	PPS
2 Diaphragm:	FPM (EPDM on request)
3 Coil body:	PA (Polyamide)
4 Manual override:	PPS
5 Mounting clip:	PA with stainless steel screw

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

Type 6123/6124
(2/2- 3/2-way)

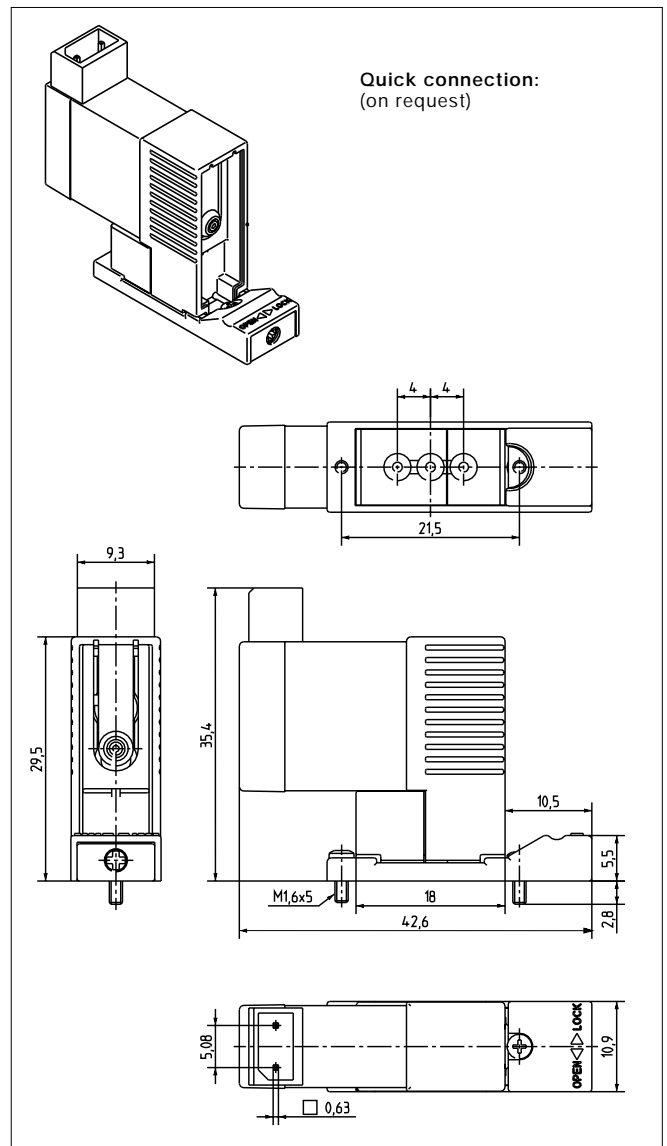
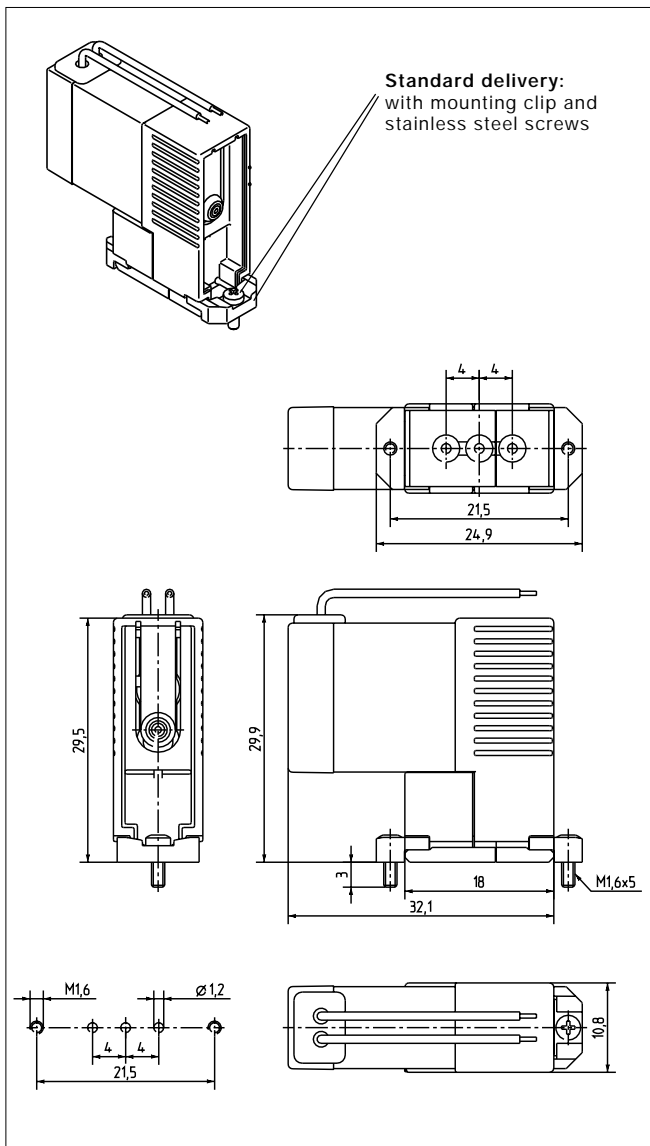
Specifications - Ordering Chart (other versions on request)



PPS valve body

Port connection	Orifice DN [mm]	Kv-Value (water) [m³/h]	Q _{Nn} (air) [l/min]	Pressure Range [bar]	Back-pressure [bar]	Seal Material	Electrical Connection	Weight [g]	ITEM - No.	
									12/DC	24/DC
Sub-base	0.6	0.005	5	Vac.-3	3	FPM	leads	12	140 459 N	140 460 K
Sub-base	0.6	0.005	5	Vac.-3	3	FPM	rect. plug	12	140 457 C	140 458 M

Dimensions [mm]



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

Type 6123/6124
(2/2- 3/2-way)

Rectangular cable plug type 2505

Technical Data

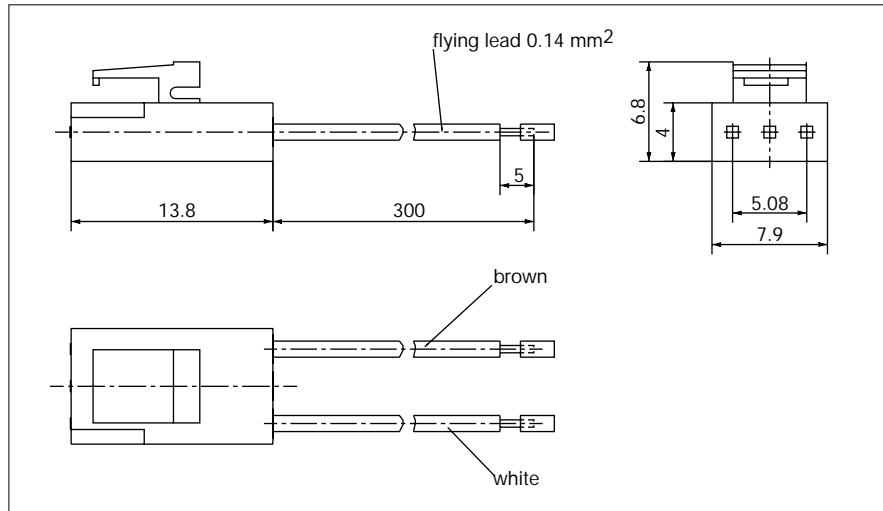
Protection class	IP 20
Operating voltage	24 V
Power consumption	3 W
Operating temperature	0-50 °C

Ordering¹⁾

	Item-No.
cable length 300 mm	644 068 N
cable length 3 m	133 486 F

¹⁾ Please order separately
(no standard delivery)

Dimensions [mm]



Diagnosis valve (available on request)

- Flow / low flow signal with adjustable level
- Valve position signal
- LED's and binary outputs
- for 2/2-way and 3/2-way valves

Dimensions [mm]

