

16 mm Miniature Rocker Solenoid Valve with Isolating Diaphragm for Technical Applications

Type 6125/6126

(2/2- 3/2-way)

M5, sub-base



Advantages/Benefits

- ▶ Hermetic isolation of fluid from the actuator
- ▶ Insensitive to contamination
- ▶ High pressure and back-pressure rating of 10 bars
- ▶ Low internal volume
- ▶ Body materials: PPS, Brass, Stainless steel
- ▶ Seal materials: FPM or EPDM
- ▶ Normally closed, normally opened and 3-way universal functions
- ▶ Flow diagnosis on request

Design/Function

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

The actuator is hermetically isolated from the coil by a stainless steel plate and the coil can be rotated or replaced without disturbing the process.

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.

The valves are ideal for manifold mounting and are available with a simplified common wiring system. Custom manifolds are available to satisfy specific application requirements.

Applications

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

bürkert
Easy Fluid Control Systems

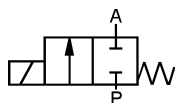
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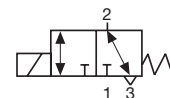
Technical Data	type 6605: 2/2-Way	type 6606: 3/2-Way
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Circuit Function

A 2/2-way valve,
normally closed

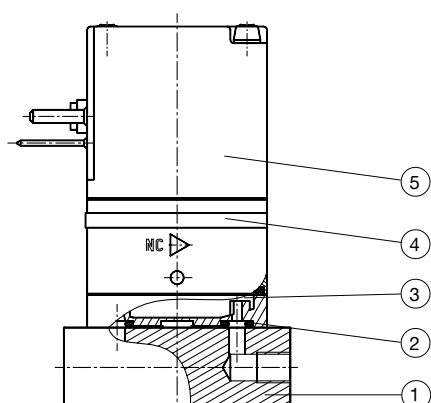


T 3/2-way valve, direct acting,
universal function, any flow direction



Valve specification		Solenoid specification	
Pressure range max.	Vacuum - 10 bar (see specifications)	Nominal voltages	DC: 12, 24 V/= AC (50Hz) and DC: 230-240 V
Body material	PPS for sub-base body; PPS, brass or stainless steel 316L for M5 valve body	Voltage tolerance	±10 %
Seal material	FPM or EPDM	Power consumption	3.4 W at 12 and 24 V/DC 4 W at 110-120 V/DC 4 W at 230-240 V/DC
Isolating plate body/coil	Stainless steel 1.4310	Cycling rate	approx. 300/min.
Fluids	Ink, difficult and slightly aggressive media	Duty cycle	100% continuously rated
Fluid temperature	-10°C to +50°C	Protection class	IP 65 with leads or cable plug 2506, IP 20 without cable plug
Ambient temperature	max. +55 °C	Installation / Accessories	
Max. viscosity	approx. 21 mm²/s		
Response time	approx. 25 ms	Installation	as required, but preferably with solenoid system upright.
Internal volume:		Fixation	M3 from the the top or sheet metal screw (ø3.9) from below
Sub-base	68 µl	Electrical connection	<ul style="list-style-type: none"> side or top tag connector to DIN 43 650 rectangular connector
Manifolds		Cable plug	Type 2506, DIN 43650, form C (standard delivery with valve) Type 2505, rectangular plug (as accessory, separate to order)
Manifolds according to specific application demands are available.			

Materials

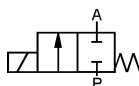


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|---|------------------|---|
| 1 | Valve body: | PPS, Brass or
Stainless steel 1.4404(316L) |
| 2 | O-Rings: | FPM or EPDM |
| 3 | Diaphragm: | FPM or EPDM |
| 4 | Isolating plate: | Stainless steel 1.4310 |
| 5 | Coil body: | PA (Polyamide) |

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Specifications - Ordering Chart (Other Versions on Request)



2/2-Way, direct acting,
normally closed

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 [kg]	ITEM - No. Voltage / Frequency [V/Hz]			
									12/DC ¹⁾	24/DC ¹⁾	110/DC/AC ²⁾	230/DC/AC ²⁾
Sub-base	0.8	0.015	16	0-10	10.0	FPM	cab. plug 2506	0.053	139 151 U	139 088 Z	139 152 V	139 153 W
Sub-base	0.8	0.015	16	0-10	10.0	FPM	rect. plug 2505	0.053	---	139 236 Z	---	---
Sub-base	0.8	0.015	16	0-10	10.0	EPDM	cab. plug 2506	0.053	139 154 X	139 155 Y	---	---

¹⁾ Side tag connector, ²⁾ Top tag connector, universal coil (AC/DC) with integrated rectifier.

Brass / PPS valve body

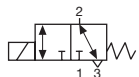
Port connection	Orifice DN [mm]	Kv-Value (water) [m³/h]	Q _{Nn} (air) [l/min]	Pressure Range [bar]	Back-pressure [bar]	Seal Material	Electrical Connection	Weight [kg]	ITEM - No. Voltage / Frequency [V/Hz]			
									12/DC ¹⁾	24/DC ¹⁾	110/DC/AC ²⁾	230/DC/AC ²⁾
M 5	0.8	0.015	16	0-10	10.0	FPM	cab. plug 2506	0.12	---	431 568 T	431 569 U	431 570 Z

¹⁾ Side tag connector, ²⁾ Top tag connector, universal coil (AC/DC) with integrated rectifier.

Stainless steel 1.4404 (316L) / 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 [kg]	ITEM - No. Voltage / Frequency [V/Hz]			
									12/DC ¹⁾	24/DC ¹⁾	110/DC/AC ²⁾	230/DC/AC ²⁾
M 5	0.8	0.015	16	0-10	10.0	FPM	cab. plug 2506	0.12	---	431 575 J	431 576 K	431 577 L

¹⁾ Side tag connector, ²⁾ Top tag connector, universal coil (AC/DC) with integrated rectifier.



3/2-Way, direct acting
universal functions, any flow direction

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 [kg]	ITEM - No. Voltage / Frequency [V/Hz]			
									12/DC ¹⁾	24/DC ¹⁾	110/DC/AC ²⁾	230/DC/AC ²⁾
Sub-base	0.8	0.015	16	0- 6	6.0	FPM	cab. plug 2506	0.053	139 158 B	139 159 C	139 160 H	139 161 W
Sub-base	0.8	0.015	16	0- 6	6.0	FPM	rect. plug 2505	0.053	---	139 237 S	---	---
Sub-base	0.8	0.015	16	0- 6	6.0	EPDM	cab. plug 2506	0.053	139 162 X	139 163 Y	134 164 Z	134 165 S

¹⁾ Side tag connector, ²⁾ Top tag connector, universal coil (AC/DC) with integrated rectifier.

Brass / 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 [kg]	ITEM - No. Voltage / Frequency [V/Hz]			
									12/DC ¹⁾	24/DC ¹⁾	110/DC/AC ²⁾	230/DC/AC ²⁾
M 5	0.8	0.015	16	0- 6	6.0	FPM	cab. plug 2506	0.12	---	431 582 A	431 583 B	431 584 C

¹⁾ Side tag connector, ²⁾ Top tag connector, universal coil (AC/DC) with integrated rectifier.

Stainless steel 1.4404 (316L) / 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 [kg]	ITEM - No. Voltage / Frequency [V/Hz]			
									12/DC ¹⁾	24/DC ¹⁾	110/DC/AC ²⁾	230/DC/AC ²⁾
M 5	0.8	0.015	16	0- 6	6.0	FPM	cab. plug 2506	0.12	---	431 589 R	431 590 N	431 591 B

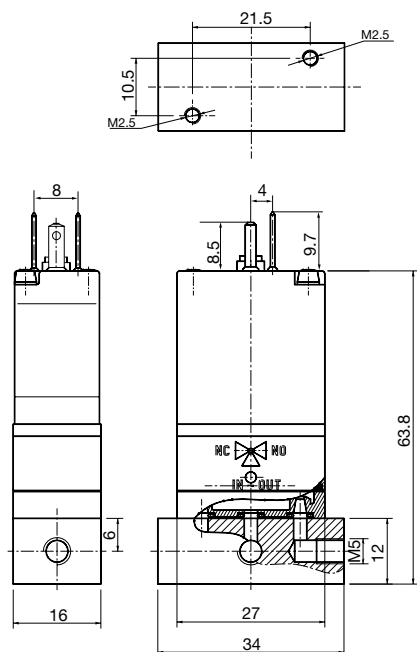
¹⁾ Side tag connector, ²⁾ Top tag connector, universal coil (AC/DC) with integrated rectifier.

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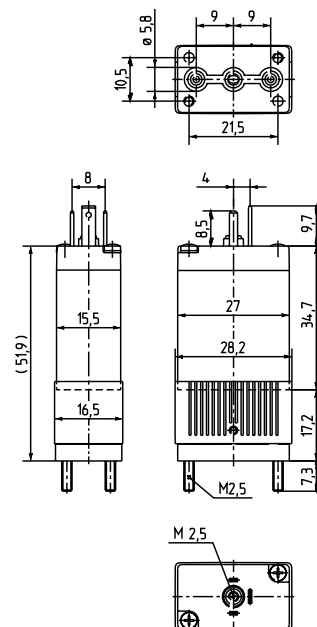
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Coil with top plug 2506 - Dimensions [mm]

Thread connection M5

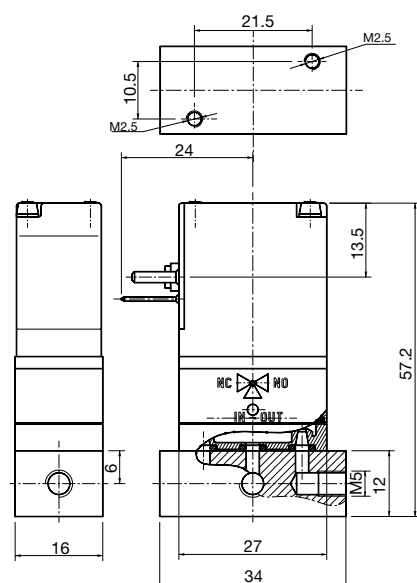


Sub-base connection

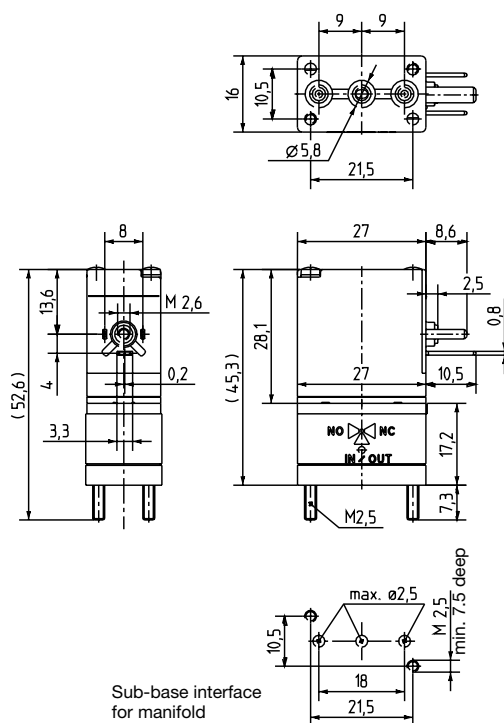


Coil with side plug 2506 - Dimensions [mm]

Thread connection M5



Sub-base connection

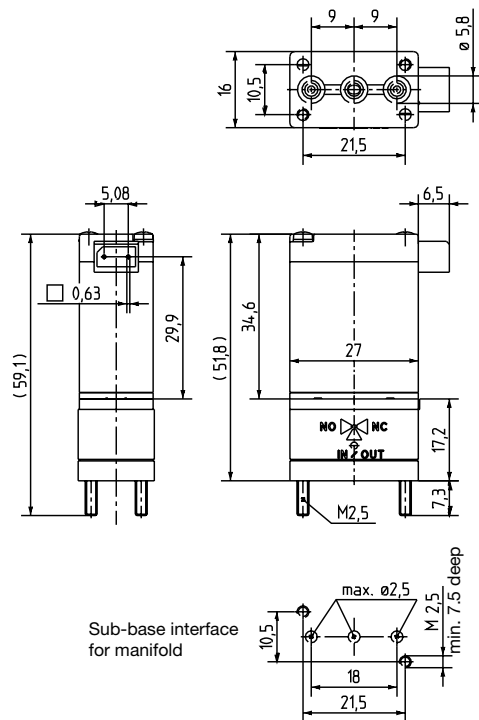


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Coil with rectangular plug 2505 - Dimensions [mm]

Sub-base connection



16 mm Miniature Rocker Solenoid Valve with Isolating Diaphragm for Technical Applications

Type 6125/6126
(2/2- 3/2-way)

Type 2505 - Rectangular cable plug

Technical Data

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

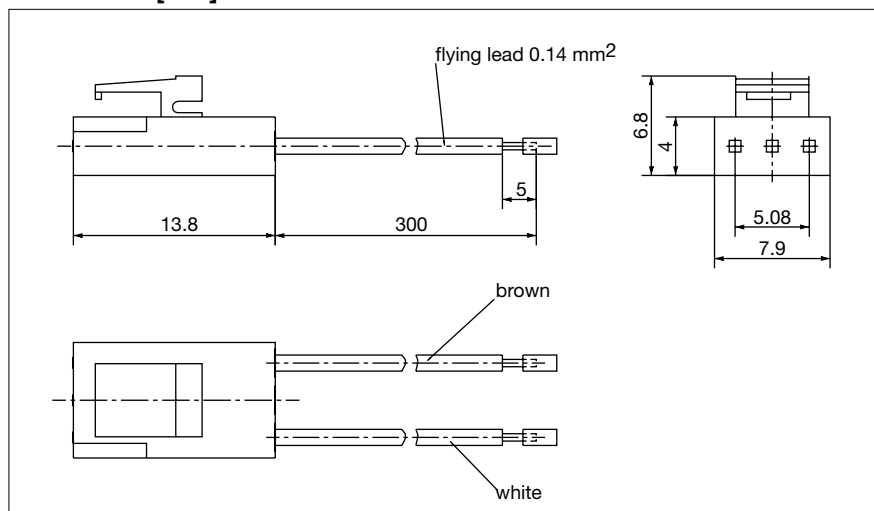
Ordering¹⁾

Item-No.

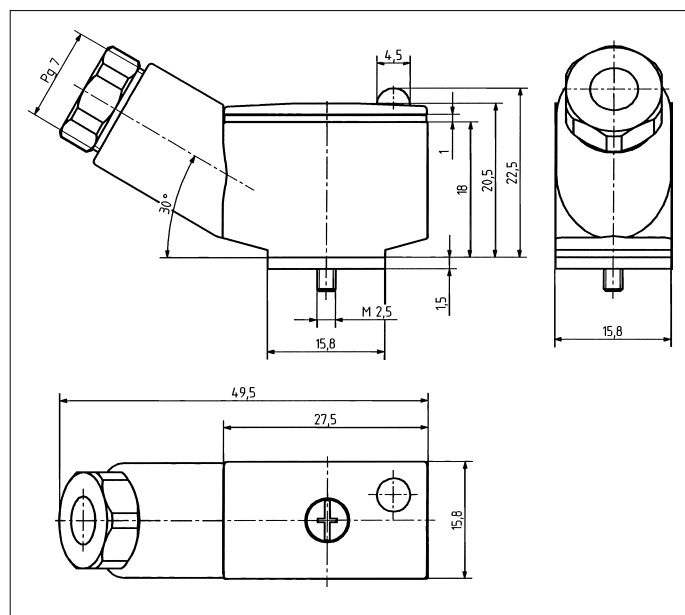
cable length 300 mm	644 068 N
cable length 3 m	133 486 F

¹⁾ Please order separately
(no standard delivery)

Dimensions [mm]



Type 2506 - Cable plug DIN 43650, Form C



Technical Data

Body material	PA (polyamide)
Contact material	brass, electro-silverplated
Isolation between cable plug and coil	gasket 1.5 mm
Continuous limit temp.	+125 °C
Cable diameter	5-6 mm
Electr. connection	terminal screws max. 0.75 mm ²
Poles	2-pole + protective earth
Nominal voltage	0-250 V

Ordering

Item-No.

Cable plug 2506	008 353 P ²⁾
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²⁾ Standard delivery with the valve

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

