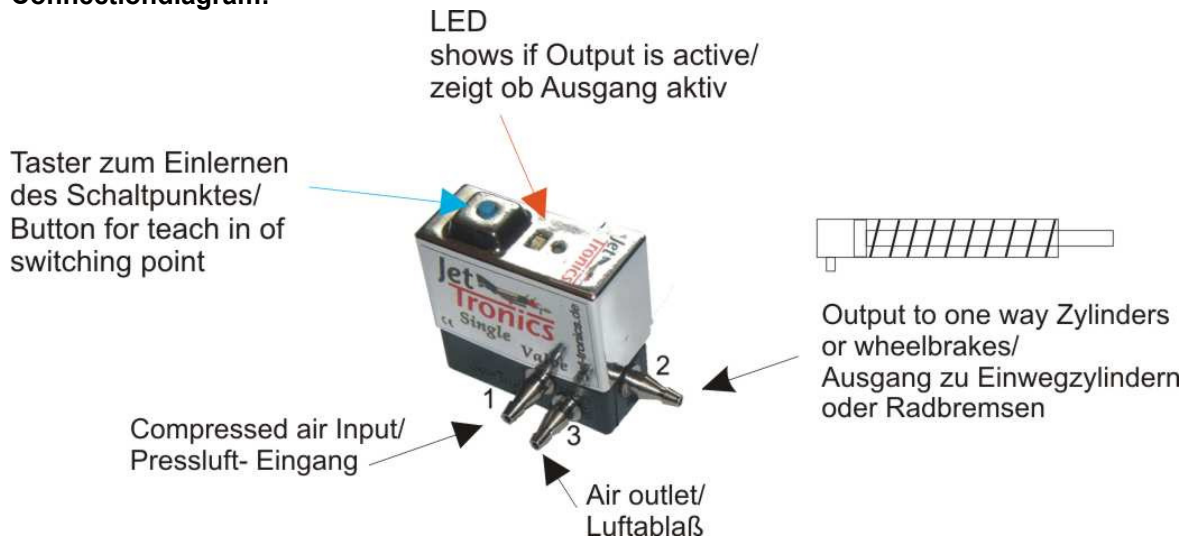


M-Valve

3/2 Way Pneumaticvalve

Connectiondiagram:



This valve is attached directly to the receiver to control undercarriages with spring loaded single acting cylinders and wheel brakes with proportional function (PWM). (Pre selected mode: brake function)

It replaces the mechanical valve AND the servo plus linkage:

- The bottom measurements without connections are smaller than those of usual mechanical valves (L = 28 mm, B = 16 mm) in which the room is dropped for servo and linkage. The height is 29 mm.
- The connections consist of high-quality metal fast connections for tubes with 3 mm of outside diameter.
- The speed of delivering in and out of the undercarriage can be throttled. This happens by using restrictors which are attached at output 3.
- In the off condition the valve is closed. When operating, the open position is indicated by a LED.
- The remember function prevents that the undercarriage unintentionally works, if the transmitter function should be in an other position as on shutdown.
- The current consumption of 100 mA at 5 volts is by 50% lower than at the usual 1 watt valves.
- The air throughput is around 40% higher and therefore very well suitable also for big undercarriages.
- Viton gaskets make the valve resistant to most oil sorts.
- For braking, the minimum brake point can be set so that the wheels start braking at 10% of the functions travel.
- The point at which the brakes should be full on can be set to 90% of the functions travel.
- These adjustments give a nearly linear braking function for usual non-linear mechanical wheel brakes.
- The pulse modulated brake function needs air but there is no loss on full braking.

Adjustments

(Important for all adjustments: All button sequences must be carried out within 2 seconds)

Toggle mode of operation:

- Hold button pressed.
- Turn receiver on.
- Wait 2 Seconds, release button.

Adjusting switching point or travel of braking range:

- Switch on transmitter/receiver.
- Transmitter function to undercarriage "OUT" or brake "OPEN".
- Push button 1 x and wait 2 seconds.
- Transmitter function to undercarriage "IN" or brake "CLOSED".
- Push button 2 x and wait 2 seconds.
- Check function.

Prerequisite for the following steps is the filling of the system with compressed air and the check of the tightness.

Adjusting minimal brake point:

- Move transmitters function so far, till the brakes just start working.
- Push button 3 x and wait 2 seconds.
- Check function.

Adjusting maximal brake point:

- Move transmitters function so far, till the brakes are nearly at the 100% braking point.
- Push button 4 x and wait 2 seconds.
- Check function.

To change any taught in point, a reset must be carried out:

- Push button 5 x within 2 seconds and wait 2 seconds.
- Repeat all steps above.

The so taught in points remain saved also after turning the receiver power supply off.

Technical data:

Supply voltage	3,5V..7.5V
Current consumption	100mA bei 5V
Pressure range	0 – 10 Bar
Measurements	30x16x29 mm L/B/H
Weight	18 gr
Connection:	Universal Nipples for all usual tubes

Remark: The noise which the valve produces in the switching mode arises from the current reduction and is normal.

Attention:

Do not cut tubes with a knife it could cause leakage. Use side cutter instead.