

15 Spare Parts and Accessories

The silencers used can be replaced with AVENTICS material number R412010247. To ensure a good hold, the silencer should be screwed in another 5–10° after the initial contact.

16 Technical Data

Safety relevant data	
Service life parameter B ₁₀	Please ask AVENTICS for latest B ₁₀ declaration.
Fault exclusion	<ul style="list-style-type: none"> Change of the output switching position of a IS12-PD valve (without input signal)
Sound pressure level	94,8 dB(A) L _{p,A,peak} or 92 dB(C) L _{p,C,peak} (measured on a volume of 0.75 l at 6.3 bar) Warning! This may irreversibly damage the hearing. Always wear ear protectors during operation.

Overview of the achievable diagnostic coverage level (DC), categories and PL depending on the safety function and product variant:

SF	Product variant	DC	Category max.	PL max.
SF1 ¹⁾	R422003980/-982 R422003729/-730	> 99%, both valves position monitored	4	e
SF2 ²⁾	R422003980/-982 R422003729/-730	> 99%, both valves position monitored	4	e

¹⁾ SF1: Safe exhaust

²⁾ SF2: Prevention of unexpected start-up

Proven component in terms of ISO 13849-1

The dual valve variants can be viewed as proven components in terms of ISO 13849-1 in the area of industrial automation for the functions "safe exhaust" and "prevention of unexpected start-up" under the following conditions, if they are exclusively operated in accordance with all information contained in these operating instructions, especially in compliance with the performance limits and ambient conditions stated in the technical data.

General data	
Dimensions (length x width x height)	160 mm x 152 mm x 160 mm
Weight	3700 g
Working pressure min./max.	1 to 10 bar external pilot 3 to 10 bar internal pilot
Control pressure min./max.	3 to 10 bar
Ambient temperature min./max.	0°C/+50°C
Storage temperature min./max.	0°C/+50°C
Ambient operating conditions	Max. height above sea level: 1000 m
Permissible medium	Compressed air in accordance with ISO 8573-1 (7; 4; 4)
Max. particle size	5 µm
Oil content of compressed air	0-5 mg/m ³

The pressure dew point must be at least 15°C below the ambient and medium temperatures and must not exceed 3°C.

The oil content of compressed air must remain constant during the life cycle.

- Use only the approved oils from AVENTICS, see the AVENTICS online catalog, chapter "Technical information".

Mounting orientation	Any
Vibration resistance	±0.35 mm displacement at 10 Hz–60 Hz, 5 g acceleration at 60 Hz to 60 Hz
Shock resistance	30 g with 18 ms duration 3 shocks each direction
IP protection class	IP65
Switching times (at 6.3 bar)	
On (1 -> 2)	20 ms
Off (2 -> 3)	50 ms
Nominal flow for pressurization 1 -> 2	1950 std l/min
Nominal flow for exhaust 2 -> 3	3000 std l/min (including in error case)

Electrical data	
Max. positive test pulse	1000 µs
Max. negative test pulse	700 µs
Relative humidity	Max. 75% at 50°C

Coil, C01 series (1824210223)	
Electrical connection	EN 175301-803, form A (without Zener diodes)
Power supply	24 V DC ± 10%
Power consumption	4.4 W

Coil, C01 series (1824210354)	
Electrical connection	EN 61076-2-101, M12x1
Power supply	24 V DC ± 10%
Power consumption	4.5 W

Electrical data	
Sensor, ST4 series	
Electrical connection	M8 with knurled nuts
Min./max. power supply	10/30 V DC
Max. switching current	0.1 A
Vibration resistance	10–55 Hz, 1 mm
Shock resistance	30 g/11 ms
Voltage drop U at I _{max}	≤2.5 V
Type of contact	Electronic PNP
Cable length	0.3 m
Sensor LED	Yes
Electrical safety	Protection class III

- For further technical data, see the catalog pages in the AVENTICS online catalog (see www.aventics.com/pneumatics-catalog).