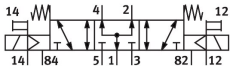
Solenoid valve
MFH-5/3B-1/4-S-B-EX

Part number: 535952





Data sheet

Feature	Value
Valve function	5/3-way, pressurised
Type of actuation	Electrical
Construction width	32 mm
Standard nominal flow rate (standardised to DIN 1343)	1600 l/min
pneumatic working port	G1/4
Operating voltage	24 V DC
Operating pressure	-0.09 MPa...1 MPa -0.9 bar...10 bar
Design	Piston gate valve
Type of reset	Mechanical spring
CE mark (see declaration of conformity)	To EU Explosion Protection Directive (ATEX)
UKCA marking (see declaration of conformity)	To UK EX instructions
Explosion protection certification outside the EU	EPL Db (GB) EPL Gb (GB)
ATEX category gas	II 2G
ATEX category dust	II 2D
Explosion ignition protection type for gas	Ex h IIC T4 Gb
Explosion ignition protection type for dust	Ex h IIIC T130°C Db
Explosion ambient temperature	-5°C <= Ta <= +40°C
Degree of protection	IP65
Nominal size	10 mm
Grid dimension	33 mm
Exhaust-air function	Can be throttled
Sealing principle	Soft
Mounting position	Any
Manual override	Non-detenting
Type of piloting	Piloted
Pilot air supply	External
Flow direction	Reversible
lap	Overlap
Pilot pressure	0.3 MPa...1 MPa 3 bar...10 bar

Feature	Value
b value	0.38
C value	6.35 l/sbar
Max. switching frequency	3 Hz
Switching time off	23 ms
Switching time on	22 ms
Switching time reversal	35 ms
Max. positive test pulse with 0 signal	2200 µs
Max. negative test pulse with 1 signal	3700 µs
Explosion protection	Zone 1 (ATEX) Zone 1 (UKEX) Zone 2 (ATEX) Zone 21 (ATEX) Zone 21 (UKEX) Zone 22 (ATEX)
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]
Note on operating and pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)
Corrosion resistance class CRC	1 - Low corrosion stress
LABS (PWIS) conformity	VDMA24364-B1/B2-L
Storage temperature	-40 °C...60 °C
Media temperature	-10 °C...60 °C
Pilot medium	Compressed air to ISO 8573-1:2010 [7:4:4]
Ambient temperature	-5 °C...40 °C
Product weight	500 g
Electrical connection	Via F coil, to be ordered separately
Type of mounting	With through-hole
Pilot exhaust port 82	M5
Pilot exhaust port 84	M5
Pilot air port 12	G1/8
Pilot air port 14	G1/8
Pneumatic connection, port 1	G1/4
Pneumatic connection, port 2	G1/4
Pneumatic connection, port 3	G1/4
Pneumatic connection, port 4	G1/4
Pneumatic connection, port 5	G1/4
Note on materials	RoHS compliant
Material seals	NBR
Material housing	Die-cast aluminium