SOLENOID VALVES

flameproof enclosure
Ex d IIC T6-T5 Gb, Ex t IIIC T85°C-T100°C Db IP65 direct operated, poppet type

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FEATURES

• Solenoid valves with explosionproof operator MB type for use in potentially explosive atmospheres according to ATEX Directive 94/9/EC EC type examination certificate no.: LCIE 03 ATEX 6059 X IECEx Certificate of Conformity no.: IECEx LCI 09.0001X

- Compliance with the Essential Health and Safety Requirements has been assured by compliance with the International and European Standards EN-IEC 60079-0, EN-IEC 60079-1 and EN 61241-1
- · Easy electrical connection with screw terminals
- Wide range of applications, particularly at low temperatures
- The solenoid valves have TÜV certified IEC 61508 Functional Safety data and can be used up to SIL 4

GENERAL

Differential pressure 0 to 10 bar [1 bar =100 kPa]

Response time 30 - 50 ms

fluids (*)	temperature range (TS)	seal materials (*)
air, inert gas	- 40°C to + 60°C (2)	VMQ (silicone)



(*) Ensure that the compatibility of the fluids in contact with the materials is verified **Brass body**

Stainless steel body **Brass** AISI 316L SS Internal parts Stainless steel, brass Stainless steel **Springs** Stainless steel Stainless steel

Seals **VMQ VMQ**

OTHER MATERIALS

Solenoid enclosure Aluminium **Cover screws** Steel

Stainless steel Core tube Core and plugnut Stainless steel Aluminium Nameplate

Nickel-plated brass or stainless steel Cable gland

Exhaust protector Stainless steel

ELECTRICAL CHARACTERISTICS SAFETY CODE Coil insulation class Ex d IIC T6-T5 Gb

Coil connection Ex t IIIC T85°C-T100°C Db IP65 Screw terminals

Electrical safety IEC 335

Electrical enclosure protection Moulded IP65 (EN 60529)

Standard voltages DC (=): 24V - 48V

(Other voltages and 60 Hz on request) AC (~): 24V - 48V - 115V - 230V / 50 Hz

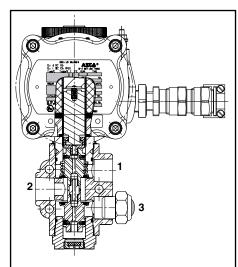
		powe	r rating	S	operator ambient		ronla	cement coil	
prefix	inrush	holo	ding	hot/cold temperature		safety	Теріа	type	
option	~	~ ~		=	range (TS) (2)	code	~	=	(1)
	(VA)	(VA)	(W)	(W)	(C°)		230 V/50 Hz	DC	
МВ	35	15	19	12 / 15	-40 to +65	Exd IIC Gb Ext IIIC Db IP65	43004053	24 V = 43002091 48 V = 43002098	01

(1) Refer to the dimensional drawings on the following page.

	operator DC (=)					
		max. ambient temp. °C				
Pn surface temperature			mperature			
1		T6	T5			
	(W)	85°C	100°C			
	15	50	65			

operator AC (~)					
	max. ambien	t temp. °C (2)			
Pn	mperature				
	T6	T5			
(W)	85°C	100°C			
19	50	65			





SPECIFICATIONS

	orifice size		coefficient		operating pressure					catalogue	e number		
pipe							differential (bar)		power coil		without manual operator		
size							max. (PS)		(W)		with exhaust protector and 1/2 NPT cable gland		
		2 → 3	1 →	_			min.	air	air (*)			, , , , , , , , , , , , , , , , , , ,	
NPT	(mm)	(mm)	(m³/h) (I/min)	(m³/h)	(l/min)		~	=	~	=	~	=
U - Un	U - Universal, brass body, VMQ seals (with nickel-plated brass cable gland)												
1/2	10	10	1,6	27	1,5	25	0	10	10	-	15	12660043	12660001
U - Universal, stainless steel body, VMQ seals (with nickel-plated brass cable gland)													
1/2	10	10	1,6	27	1,5	25	0	10	15	-	15	-	12660020
U - Un	U - Universal, stainless steel body, VMQ seals(with stainless steel cable gland)												
1/2	10	10	1,6	27	1,5	25	0	10	10	19	15	12660040	12660008

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OPTIONS

• Marine paint/anti-corrosive or dust environments (solenoid operator enclosure only)

INSTALLATION

- · Always install solenoid valves with body vertical and solenoid upward
- IECEx-ATEX cable gland, 3/4 NPT, pre-installed on solenoid valve, supplied with cable clamp)
- Can be used for the following functions, depending on how the ports are connected:

2/2 NC	2/2 NO	3/2 NC	3/2 NO	mixing	selector
2 1 3 2 1	2 W	Z 1 2 W 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	□	2 3 3 1	Z 2 W

Can be used in ambient temperatures up to +70°C without SIL qualification, max. operating pressure 8 bar.

- Solenoid valves have 3 mounting holes in body
- Threaded pipe connection is standard NPT (ANSI 1.20.3)
- Valves should be provided with a specific exhaust protector
- Installation/maintenance instructions are included with each valve

SPARE PARTS KIT & ACCESSORIES

ſ	estalogue number	spare parts kit no.		
1	catalogue number	24 V DC	48 V DC	
ſ	12660001/12660020/12660008	97701930	97701931	

DIMENSIONS (mm), **WEIGHT** (kg) □

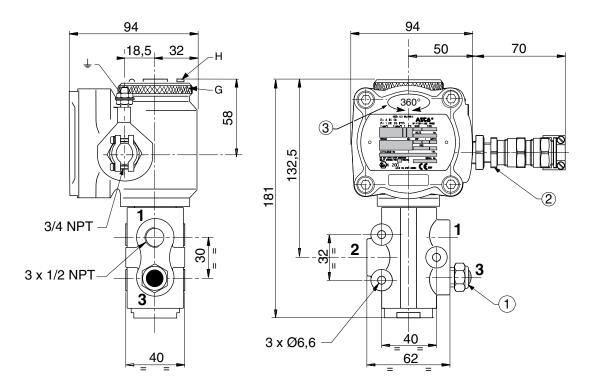




TYPE 01 Operator type "MB" Aluminium

EN-IEC: 60079-0, 60079-1 and 61241-1

Ex d IIC T6-T5 Gb - Ex t IIIC T85°C-T100°C Db IP65



type	operator type	weight		
01	MB	2,1		

- (1) Exhaust protector
- (2) Explosionproof cable gland to IECEx-ATEX with clamp
- (3) To change the orientation of the solenoid operator relative to the ports, the screw (H) and the nut of the cover (G) must be loosened.