

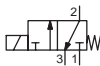
ASCO™ Solenoid Valves

intrinsically safe, II 1G Ex ia IIC T6 Ga, II 2D Ex ib IIIC T85°C Db IP67
ISO 15218 (CNOMO, size 30) interface, direct operated, pad mounting body

3/2
Series
195/LISC

Features and Benefits

- Low consumption valves for use in potentially explosive atmospheres according to ATEX-Directive 2014/34/EU
EC type examination certificate no.: **DEKRA 11 ATEX 0091 X**
IECEx Certificate of Conformity no.: **IECEx DEK 11.0038X**
- Compliance with the Essential Health and Safety Requirements has been assured by compliance with the International and European Standards IEC and EN: 60079-0 and 60079-11
- The valve's Ex ia protection allows it to be installed in explosive atmospheres up to zone 1. It can be used in the chemical, oil and pharmaceutical industries, or in processing and packaging plants for flammable products (paints, solvents)
- Compact, monobloc pilot valve with spade plug connection according to ISO 4400 / EN 175301-803, form A (3 pins)
- This solenoid valve can be mounted as operator onto valve 551-553 series SIL3 capable (EXIDA approval)

NC 



General

Differential pressure

2 - 10 bar [1 bar = 100 kPa]
See «SPECIFICATIONS»

Flow

conforming to ISO 6358

$C = 3 \times 10^{-10} \text{ m}^3/\text{s} \cdot \text{Pa}$ (sonic conductance)
 $b = 0.4$ (critical pressure ratio)

Pneumatic base
Response time

ISO 15218 (CNOMO E06.05.80N, size 30)
11 ms

Fluids (*)	Temperature range (TS)	Seal materials (*)
air or inert gas dry, filtered (50 µm), without condensate, dew point: -20°C	-40°C to +65°C	FPM (fluoroelastomer)

Materials of components in contact with fluid

(*) Ensure that compatibility of materials in contact with fluids is verified.

Body

Aluminium

Internal parts, core tube

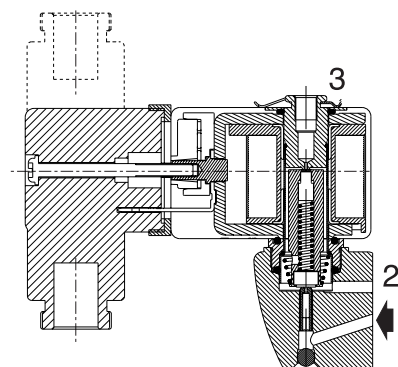
Stainless steel

Seals

FPM

Subbase

PA or zamak



Other components

Coil

Thermoplastic resin


Electrical characteristics

Coil insulation class

F

Safety code ⁽¹⁾

 II 1G Ex ia IIC T6 Ga
II 2D Ex ib IIIC T 85°C Db IP67

 ⁽¹⁾ For use in zone 0 locations, see the installation conditions given in the I&M instructions.

Connector

Spade plug (cable Ø 6-8 mm)

Connector specification

ISO 4400 / EN 175301-803, form A

Electrical safety

IEC 335

Electrical enclosure protection

Moulded IP65 (EN 60529)

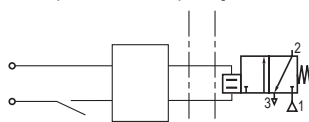
Standard voltages

DC (=) : 12V .. 24V

Voltage (U _n) (max. ripple 10%)	Typical functional ratings			R 20°C	Operator ambient temperature range (TS)	Type ⁽²⁾
	I _(ON) min.	U _(ON) min.	P _(ON) min.			
(V)	(mA)	(V)	(W)	(Ω)	(°C) ⁽³⁾	
24	36	12.8	0.46	240	-40 to +65	01

Safety parameters				
U _i = (DC)	I _i	P _i	L _i	C _i
(V)	(mA)	(W)	(H)	(µF)
30	300	1.6	0	0

safe area (RS interface) explosive area



Example of use with a Zener barrier installed in a non-hazardous zone

Temperature classification table DC (=)

Pi (watt)	Maximum ambient °C ⁽³⁾
	Surface temperature T6 85°C
Insulation class F (155°C) 100% E.D. ⁽⁴⁾	
1.6	65

⁽²⁾ Refer to the dimensional drawings on the following page.

⁽³⁾ The minimum allowable ambient temperature is -40°C

⁽⁴⁾ This intrinsically safe valve must be connected to a specific, approved power supply (safety barrier or interface) located in a safe area.

Specifications

Pipe size	Orifice size		Flow				Operating pressure differential (bar)		Power coil (W)	Catalog number	
			At 6 bar l/min (ANR)		Coefficient Kv (l/min)		Min.	Max. (PS)		Without manual operator	With impulse manual operator
	1 → 2 (mm)	2 → 3 (mm)	1 → 2	2 → 3	1 → 2	2 → 3		Air (*)			
NC - Normally closed											
pad mounting	0.5	0.7	8	15	0.11	0.26	2	10	0.46	19500036	19500038

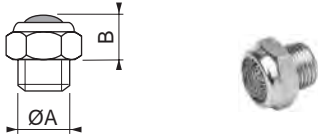
(*) Ensure that compatibility of materials in contact with fluids is verified.

Subbases

Pipe size	Designation	Safety code	Catalog number
6/6 polyamide subbases			
instant fittings ⁽¹⁾	single subbase (instant fittings OD 4 mm)	II 2 GD c Ta 50°C T 85°C (T6)	35300069
Zamak subbases			
G 1/8 ⁽¹⁾ , tapped	laterally-connected single subbase	II 2 GD c Ta 50°C T 85°C (T6)	35300047

⁽¹⁾ These subbases can be mounted on omega rail to EN 50022 using 2 clips (clips sold in packs of 10, catalogue number: 33400036).

Accessories



ØA	M5
B	4.5

exhaust protector
(stainless steel)
catalogue number: **34600484**

Ordering examples valves:

basic number _____	19500036	.	12...24V	/ DC	_____ voltage
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Options

- Joinable subbases

Installation

- The solenoid valves can be mounted in any position without affecting operation
- Solenoid valve supplied with mounting screws
- Pipe connections G 1/8 have standard thread according to ISO 228/1
- Electrical connection between solenoid valve and barrier/interface with cable type A or B according to EN 50039
- Installation/maintenance instructions are included with each valve

ASCO™ Solenoid Valves

Compatibles barriers

Located in safe areas, these interfaces allow to feed the intrinsically safe solenoid valves located in explosive areas.

ASCO pilot 195/LISC II 1G Ex ia IIC T6 Ga / II 2D Ex ib IIIC T 85°C Db IP67			
Suppliers	Barrier reference	195/LISC	
ABB	DO9105/B/N	X	
AP3	NAEV30-DO2C-A230-0	X	
	NAEV30-DO2C-A115-0	X	
	NAEV30-DI2N-DO1C-A230-0	X	
	NAEV30-DI2N-DO1C-A115-0	X	
G.M. international	D5048S	X	
	D5049S	X	
	D1045Y	X	
	D1048S	X	
	D1049S	X	
	D1040Q 2	X	
	D1040Q 3	X	
	D1041Q 3	X	
	D1041Q 4	X	
	D1042Q 2	X	
	D1042Q 3	X	
	D1043Q 3	X	
	D1043Q 4	X	
MTL	MTL4521	X	
	MTL5521	X	
	MTL4521L	X	
	MTL5522	X	
	MTL4523	X	
	MTL5523	X	
	MTL4523L	X	
	MTL4523R	X	
	MTL4523V	X	
	MTL5523V	X	
	MTL4524	X	
	MTL5524	X	
	MTL4524S	X	
	MTL5521T	X	
	MTL4523VL	X	
	MTL5523VL	X	
	MTL5523	X	
	Pepperl + Fuchs	KCD0-SD3-Ex1.1045	X
KCD0-SD3-Ex1.1245		X	
KCD0-SD-EX1.1245		X	
KCD2-SLD-EX1.1045		X	
KCD2-SLD-EX1.1065		X	
KCD2-SLD-EX1.1245		X	
KFD0-SD2-EX1.10100		X	
KFD0-SD2-EX1.1180		X	
KFD0-SD2-EX2.1245		X	
KFD2-SL2-EX1		X	
KFD2-SL2-EX1.B		X	
KFD2-SL2-EX1.LK		X	
KFD2-SL2-EX2		X	
KFD2-SL2-EX2.B		X	
KCD0-SD3-Ex1.1245.SP		X	
KCD0-SD-Ex1.1245.SP		X	
KFD2-SL2-Ex1.LK-Y1		X	
HiC2871		X	
HIC2871A		X	
HIC2873		X	
HIC2883		X	
HID2872		X	
LB-2112 AR/ER		X	
FB-2212		X	
FB-2216		X	
FB2217		X	
FB6216		X	
FB6217		X	
FB2213	X		
FB6208	X		
FB2201	X		

In accordance with the zone classification and the national legislation of each country, apply the certification procedures for the connection of IS-rated products with associated equipment.
 All information subject to change without notice. All responsibility for the use of products from other suppliers and the possible modifications of their characteristics is disclaimed.

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Compatibles barriers

ASCO pilot 195/LISC II 1G Ex ia IIC T6 Ga / II 2D Ex ib IIIC T 85°C Db IP67		
Suppliers	Barrier reference	195/LISC
Stahl	9475/32-04-72	X
	9176/ 20- 15- 00s 2 canals	X
	9176/ 20- 16- 00s 2 canals	X
	9176/ 20- 17- 00s 2 canals	X
	9175/ 10- 14- 11s	X
	9175/ 20- 14- 11s 1 canal	X
	9175/ 20- 14- 11s 2 canals	X
	9175/ 20- 16- 11s 2 canals	X
	9276/ 10- 21- 60- 00k	X
	9276/ 10- 21- 60- 00s	X
	9276/ 10- 24- 48- 00k	X
	9276/ 10- 24- 48- 00s	X
	9275/ 10- 24- 48- 11s	X
	Siemens	6ES7132-7GD10-0AB0 2 ways
6ES7132-7-GD21-0AB0 2 ways		X
6ES7132-7RD22-0AB0 2 ways		X
Phoenix Contact	MACX MCR-EX-SL-SD-21-60-LP-SP - 2924100	X
	MACX MCR-EX-SL-SD-21-60-LP - 2865515	X
	MACX MCR-EX-SL-SD-24-48-LP - 2865609	X
	MACX MCR-EX-SL-SD-24-48-LFD-SP - 2906156	X
	MACX MCR-EX-SL-SD-24-48-LFD - 2906155	X
	MACX MCR-EX-SL-SD-23-48-LFD-SP - 2924870	X
	MACX MCR-EX-SL-SD-23-48-LFD - 2924867	X
	PI-EX-SD-24-48 - 2865298	X
WAGO	PI-EX-SD-21-60 - 2865188	X
	750-535	X
	750-535/040-000	X
	750-539	X

For other compatible barriers and interfaces, please ask our product support.

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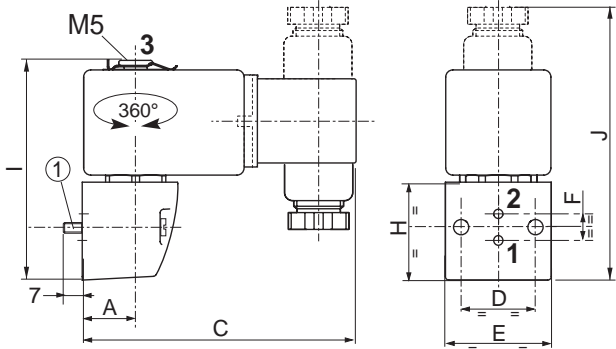
ASCO™ Solenoid Valves

Dimensions (mm), Weight (kg)

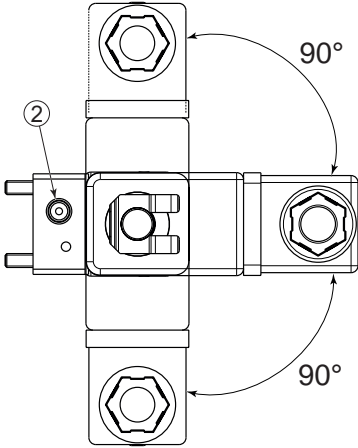
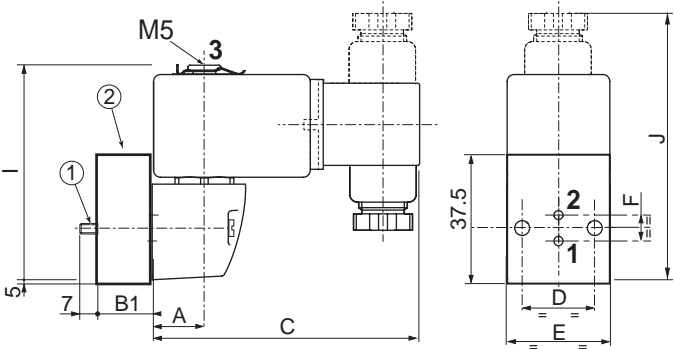


TYPE 01
Spade plug
IEC 335 / DIN 43650
II 1G Ex ia IIC T6 Ga
II 2D Ex ib IIIC T85°C Db IP67

19500036



19500038




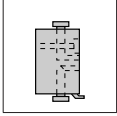
- ① Mounting: two CM 4 x 35 screws
- ② Impulse manual operator location

Type	Catalog number	A	B1	C	D	E	F	G	H	I	J	Weight ⁽¹⁾
01	19500036	15.5	-	79	21	30	7.5	15	30	63	81	0.22
	19500038	15.5	15	79	21	30	7.5	15	30	63	81	0.28

⁽¹⁾ Incl. coil(s) and connector(s).

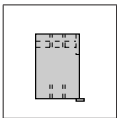
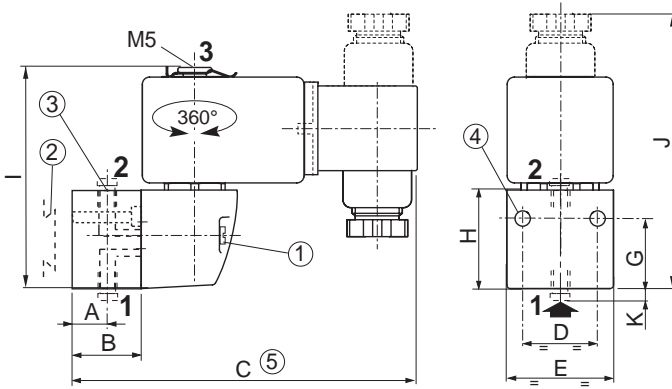
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Dimensions (mm), Weight (kg) 



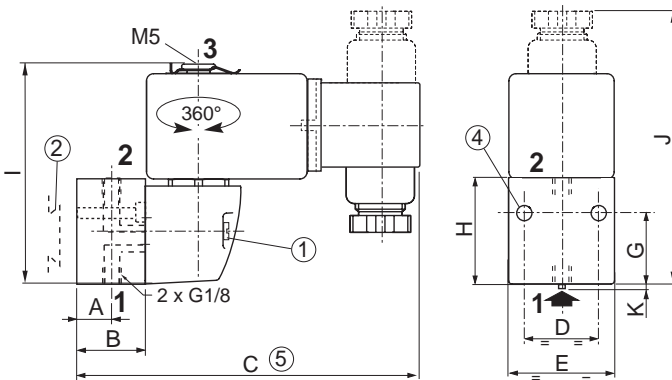
TYPE 02
Single instant fitting subbase
Polyamide

35300069



TYPE 03
Single subbase
Zamak

35300047



- ① Mounting: two CM 4 x 35 screws
- ② Adaptable clips
- ③ Instant-fitting connection for OD 4 mm tube
- ④ Two dia. 3.5 mm securing holes
- ⑤ For MO version (19500038), add 15 mm to dimension C

Type	Catalog number	A	B	C	D	E	G	H	I	J	K	Weight ⁽¹⁾
02	35300069	13	20	99	23	33	22.5	30	67	81	4	0.20
03	35300047	15	25	104	21	31	30	36	70	81	3.5	0.20

⁽¹⁾ Incl. coil(s) and connector(s).