



# SPOOL VALVES

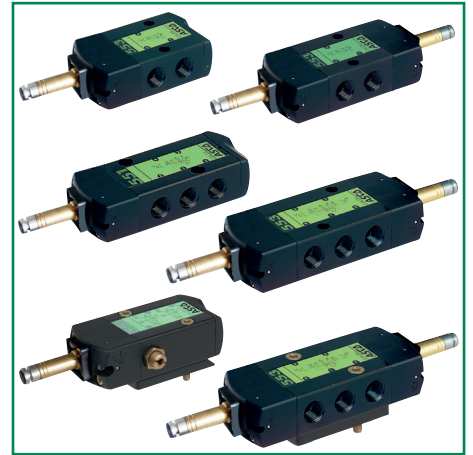
## solenoid air operated

1/4 to 1/2 tapped body and NAMUR  
for integrated pilot



ATEX

**3/2-5/2**  
Series  
**551-553**



**⚠** These solenoid valves can only be installed with PV, WBLP or SG solenoids. Information on these can be found on pages 5, 6, and 7.

### FEATURES

- The valves offer environmental protection against the ingress of liquids, dusts or other foreign matter (environmentally-protected construction)

### GENERAL

**Fluid** Air or neutral gas, filtered, lubricated or not  
**Operating pressure** 2 to 10 bar  
**Ambient temperature** -25°C to +60°C (temperature range can be limited depending on operator limits)  
**Flow (Qv at 6 bar)** series 551 860 l/min (ANR) - Kv : 12,5  
 series 553 3800 l/min (ANR) - Kv : 52,5

### CONSTRUCTION

**SPOOL VALVES**  
**Body, end covers** Black anodised aluminium  
**Internal parts** Stainless steel, POM (polyacetal), aluminium  
**Seals** NBR (nitrile), PUR (polyurethane)

### SPECIFICATIONS

TAPPED	function symbol	operators		pipe size	series	ATEX basic code	suffix	
		pilot	return				M	MS
3/2 NC		solenoid air	spring	1/4	551	❖551A005GD	●	●
				1/2	553	❖553A005GD	-	●
3/2 NC		solenoid air	solenoid air	1/4	551	❖551A006GD	●	●
				1/2	553	❖553A006GD	-	●
5/2		solenoid air	spring	1/4	551	❖551A017GD	●	●
				1/2	553	❖553A017GD	-	●
5/2		solenoid air	solenoid air	1/4	551	❖551A018GD	●	●
				1/2	553	❖553A018GD	-	●
5/3 W1		solenoid air	solenoid air	1/4	551	❖551A067GD	●	●
				1/2	553	❖553A067GD	-	●
5/3 W3		solenoid air	solenoid air	1/4	551	❖551A068GD	●	●
				1/2	553	❖553A068GD	-	●

### NAMUR

3/2 - 5/2		solenoid air	spring	1/4	551	❖551A001GD	●	●
				1/2	553	❖553A001GD	-	●
3/2 - 5/2		solenoid air	solenoid air	1/4	551	❖551A002GD	●	●
				1/2	553	❖553A002GD	-	●
5/3 W1		solenoid air	solenoid air	1/4	551	❖551A065GD	●	●
				1/2	553	❖553A065GD	-	●
5/3 W3		solenoid air	solenoid air	1/4	551	❖551A066GD	●	●
				1/2	553	❖553A066GD	-	●

❖ Select 8 for NPT ANSI 1.20.3 or select G for ISO G (228/1) ● Available version - Not available

(M) With flow reducer

(MS) With manual operator

Note: Do not connect the pressure supply to the exhaust port 3. For a "distributing" function or use in NO function, consult us.

### When ordering, please specify:

G 551 A 001 GDMMS	
G 553 A 018 GD	
pipe thread _____	suffix _____
basic number _____	

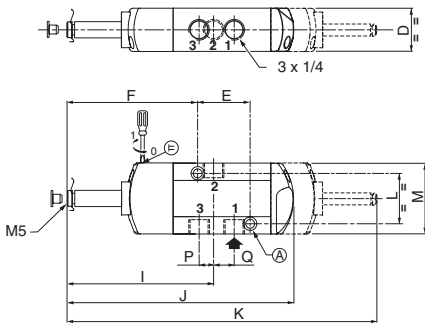
90403GB-2018/R01  
Availability, design and specifications are subject to change without notice. All rights reserved.

### OPTIONS

- Other pipe threads are available on request

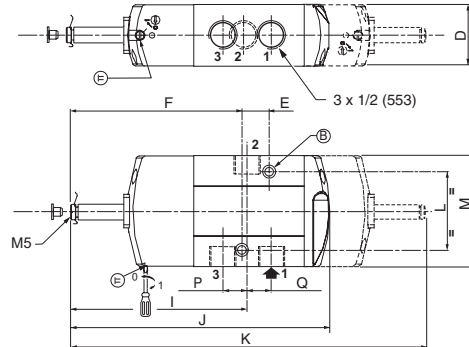
### DIMENSIONS (mm), WEIGHT (kg)

#### 551A005GD / A006GD



- ① 5,3 mm dia. (Spotfacing: 9 mm dia., depth 5 mm)

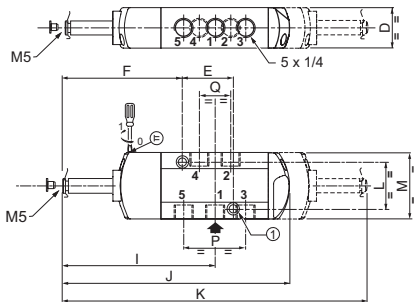
#### 553A005GD / A006GD



- ② 6,5 mm dia. (Spotfacing: 11 mm dia., depth 6 mm)

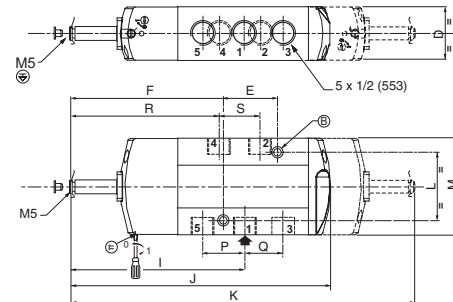
type	D	E	F	I	J	K	L	M	P	Q
551	27,5	33	83,5	93,5	145	198	32	45	9,5	12
553	40,2	16	114,2	111,6	170,2	233,3	51	72,3	12,1	19,5

#### 551A017GD / A018GD / A067GD / A068GD



- ① 5,3 mm dia. (Spotfacing: 9 mm dia., depth 5 mm)

#### 553A017GD / A018GD / A067GD / A068GD



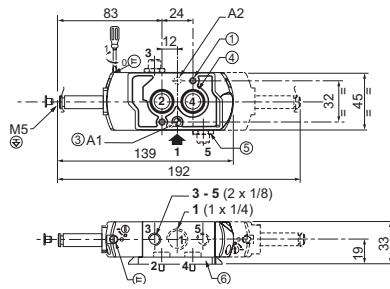
- ② 2 trous de fixation Ø 6,5; Lamage : Ø 11, profondeur 6 mm

type	D	E	F	I	J	K	L	M	P	Q	R	S
551	27,5	32	82,5	105,5	157	210	32	45	9,5	12	-	-
553	40,2	43	114,5	130,5	197,5	261	51	72,3	12,1	19,5	111	31,6

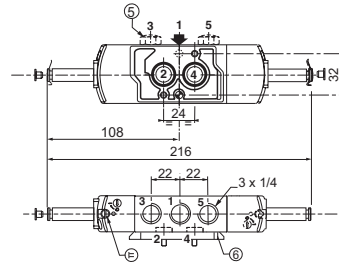
### DIMENSIONS (mm), WEIGHT (kg)



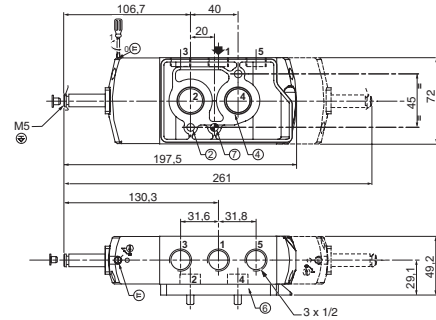
#### 551A001GD / A002GD



#### 551A065GD / A066GD (W1 - W3)



#### 553A001GD / A002GD - 553A065GD / A066GD



- ① 2 mounting holes, 5,3 dia. (Spotfacing: 9 mm dia., depth 5 mm)
- ② 2 mounting holes, 6,5 dia. (Spotfacing: 11 mm dia., depth 6 mm)
- ③ One 5 mm dia. hole for dowel pin: (Series 551)
  - in position A1: 3/2 NC function plate
  - in position A2: 5/2 function plate
- ④ 2 O-ring seals (supplied)
- ⑤ Exhaust reducer (G 1/8, 3/2 NC-5/2, series 551) or exhaust protector
- ⑥ Interface plate
- ⑦ One 6,5 mm dia. hole for dowel pin (Series 553). Position for 3/2 NC or 5/2 function plate
- ⊕ Connectable pilot exhaust port



## FEATURES

- Explosionproof operator for use in potentially explosive atmospheres, zones 1-21, according to ATEX-Directive 2014/34/EU  
EC type examination certificate no.: **BAS 98 ATEX 2168 X**  
IECEX Certificate of Conformity no.: **IECEX SIR 06.109X**
- Compliance with the Essential Health and Safety Requirements has been assured by compliance with the International and European Standards EN-IEC 60079-0 and EN-IEC 60079-18
- Easy electrical installation with moulded-in supply cable, 2 m long
- Ingress protection degree IP67
- The operators are designed for installation on a wide range of valves

## CONSTRUCTION

**Solenoid enclosure**  
**Nameplate**  
**Safety code**

Epoxy encapsulated  
Polyester  
IECEX / II 2G Ex mb IIC T5..T3 Gb  
IECEX / II 2D Ex mb IIC 100°C..200°C Db IP67



These solenoids may only be installed on the 551/553 series as seen on page 1.

## ELECTRICAL CHARACTERISTICS

product application	voltage	cable length (m)	article number
551	24 V - 50/60 Hz-4 W	2	513329-001
	48 V - 50/60 Hz-4 W		513329-002
	115 V - 50/60 Hz-4 W		513329-003
	120 V - 50/60 Hz-4 W		513329-004
	230 V - 50/60 Hz-4 W		513329-005
	24 V - DC-3 W		513329-006
	48 V - DC-3 W		513329-007
	110 V - DC-3 W		513329-008
553	24 V - 50 Hz-4 W	2	513329-009
	48 V - 50 Hz-4 W		513329-010
	115 V - 50 Hz-4 W		513329-011
	230 V - 50 Hz-4 W		513329-012
	24 V - DC-6,9 W		513329-013
	48 V - DC-6,9 W		513329-014
551	24 V - DC-3 W	4	513329-015
	230 V - 50 Hz-4 W		513329-016

## TEMPERATURE CLASSIFICATION TABLES

### AC solenoids (~)

Pn (watt)	solenoid size		maximum ambient °C <sup>(1)</sup>			
	EM5		surface temperature			
			T6 85°C	T5 100°C	T4 135°C	T3 200°C
insulation class F (155°C) 100% E.D.						
4,0 <sup>(2)</sup>	●		-	-	60	65
6,3 <sup>(3)</sup>	●		-	-	-	65

### DC solenoids (=)

Pn (watt)	solenoid size		maximum ambient °C <sup>(1)</sup>			
	EM5		surface temperature			
			T6 85°C	T5 100°C	T4 135°C	T3 200°C
insulation class F (155°C) 100% E.D.						
3,0 <sup>(4)</sup>	●		-	40	60	60
6,9 <sup>(5)</sup>	●		-	-	-	40

Check the wattage compatibility with the product selected.

<sup>(1)</sup> **Allowable minimum ambient temperature: -40°C.** Actual temperature range may be limited depending on valve operation limits.

<sup>(2)</sup> AC, 551 Series, integrated pilot

<sup>(3)</sup> CA, Series 553

<sup>(4)</sup> CC, 551 Series, integrated pilot

<sup>(5)</sup> CC, Series 553

## CONNECTIONS

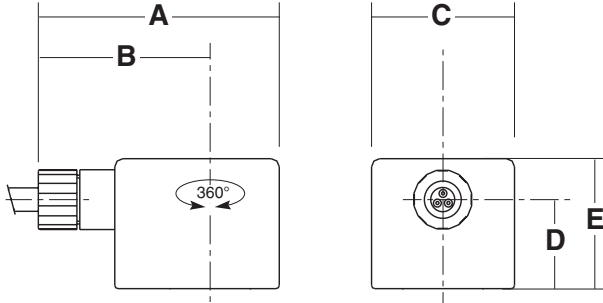
- The solenoid can be rotated through 360° to select the most favourable position for the cable.

**DIMENSIONS (mm), WEIGHT**



**TYPE PV**

Prefix "PV" solenoids  
 Epoxy coated  
 EN-IEC 60079-18  
 II 2G Ex mb IIC Gb - II 2D Ex mb IIIC Db IP67



size	A	B	C	D	E
EM5	60	45	29	18	26

## FEATURES

- Explosionproof operator for use in potentially explosive atmospheres, zones 1-21, according to Directive ATEX 2014/34/EU  
EC type examination certificate no.: **LCIE 12 ATEX 3005 X**  
IECEX Certificate of Conformity no.: **IECEX LCI 12.0002X**
- 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 60079-7, EN-IEC 60079-18 and EN-IEC 60079-31
- Easy electrical installation by means of a screw terminal coil
- Peak voltage suppression standard for DC executions
- The coil winding is fitted with a thermal fuse (in AC/DC) which will trip in case of excessive temperature due to prolonged overvoltage or a blocked core and cause the valve to de-energise and fail-safe
- Enclosure provided with integral strain relief for cable with an O.D. of 7 to 8,5 mm
- Ingress protection degree IP67
- A wide range of valves can be supplied with the operator



## CONSTRUCTION

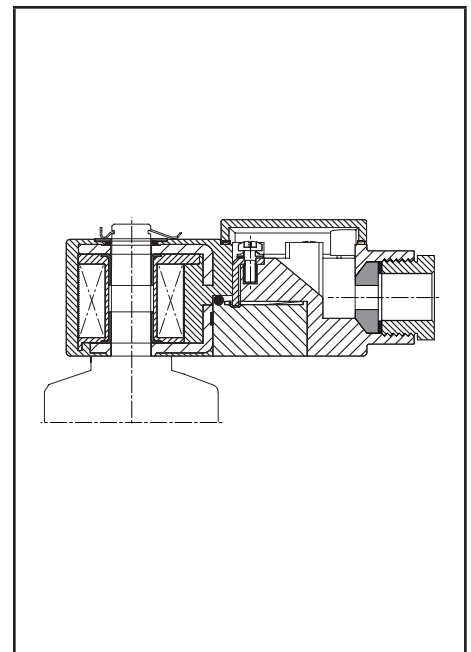
**Solenoid enclosure**  
**Cable gland**  
**Nameplate**  
**Coil connection**  
**Safety code**

PBT  
PA 66, M20 x 1,5  
Polyester  
Embedded screw terminals  
II 2G Ex e mb IIC T4 Gb  
II 2D Ex tb IIIC T 135°C Db IP67



## ELECTRICAL CHARACTERISTICS

product application	voltage	article number
551 -553	24 V - 50 Hz-3,5 W	<b>513327-001</b>
	48 V - 50 Hz-3,5 W	<b>513327-002</b>
	115 V - 50 Hz-3,5 W	<b>513327-003</b>
	230 V - 50 Hz-3,5 W	<b>513327-004</b>
	24 V - DC-4 W	<b>513327-005</b>
	48 V - DC-4 W	<b>513327-006</b>
	110 V - DC-4 W	<b>513327-007</b>



## TEMPERATURE CLASSIFICATION TABLES

### AC (~) solenoids

Pn (watt)	solenoid size	maximum ambient °C <sup>(1)</sup>	
		surface temperature	T4 135°C
insulation class F (155°C) 100% E.D.			
3,5 <sup>(2)</sup>	●		65

### DC (=) solenoids

Pn (watt)	solenoid size	maximum ambient °C <sup>(1)</sup>	
		surface temperature	T4 135°C
insulation class F (155°C) 100% E.D.			
4	●		65

**⚠** These solenoids may only be installed on the 551/553 series as seen on page 1.

Check the wattage compatibility with the product selected.


<sup>(1)</sup> The minimum allowable ambient temperature is -40°C for the operator. Actual temperature range can be limited depending on valve operation limits.

## CONNECTIONS

- Internal and external earthing connection
- The operator can be rotated through 360° to select the most favourable position for cable entry

## ORDERING INFORMATION

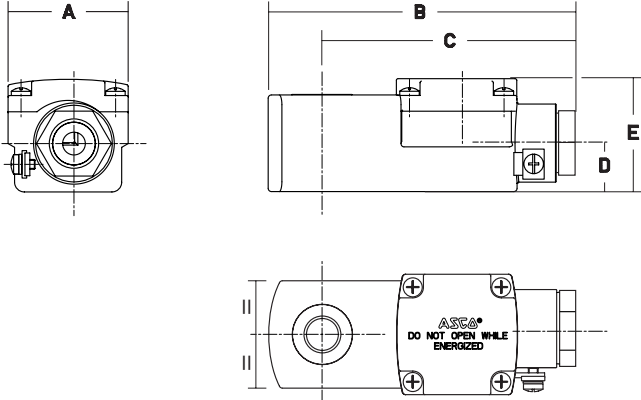
For your order please refer to the table above

**DIMENSIONS (mm), WEIGHT (kg)** 



**TYPE WBLP**

Prefix "WBLP" solenoids  
 EN-IEC 60079-7, EN-IEC 60079-18 and EN-IEC 60079-31  
 II 2G Ex e mb IIC T4 Gb, II 2D Ex tb IIIC T135°C Db IP67



prefix	A	B	C	D	E	weight
WBLP	37	98	81,5	15	35,2	0,18



### FEATURES

- Explosionproof operator for use in potentially explosive atmospheres according to ATEX-Directive 2014/34/EU
- Compliance with the Essential Health and Safety Requirements has been assured by compliance with the European Standards EN 60079-0, EN 60079-7 and EN 60079-31
- The assembly consisting of the coil and connector has IP65 protection
- The operators are designed for installation on a wide range of valves

### CONSTRUCTION

<b>Coil</b>	Epoxy encapsulated
<b>Connector enclosure</b>	Glass-fibre filled PA
<b>Connector specification</b>	
size 22 (11 mm)	EN 175301-803 industry standard form B
size 30 (18 mm)	ISO 4400 / EN 175301-803, form A
<b>Nameplate</b>	Polyester
<b>Safety code</b>	SG (solenoid valves): II 3 GD, Ex ec IIC T4 Gc Ex tc IIIC T115°C Dc IP65X

### CONSTRUCTION

<b>Standard version</b>	PA (polyamide), glass-fibre reinforced
<b>Enclosure with LED and protection</b>	PA
<b>Enclosure with PVC cable</b>	PA (polyamide), glass-fibre reinforced
<b>Seals</b>	FPM o-ring, EPDM gasket [option for size 30: VMQ (silicone)]



These solenoids may only be installed on the 551/553 series as seen on page 1.

### ELECTRICAL CHARACTERISTICS

product application	voltage	article number	product application	voltage	article number
551 (XM5)	24 V - 50/60 Hz-2,5 W	513328-001	553 (C25)	24 V - 50/60 Hz-5 W	513328-009
	48 V - 50/60 Hz-2,5 W	513328-002		48 V - 50/60 Hz-5 W	513328-010
	115 V - 50 Hz-2,5 W	513328-003		115 V - 50 Hz-5 W	513328-011
	230 V - 50/60 Hz-2,5 W	513328-004		230 V - 50 Hz-5 W	513328-012
	12 V - DC-2,5 W	513328-005		12 V - DC-5 W	513328-013
	24 V - DC-2,5 W	513328-006		24 V - DC-5 W	513328-014
	48 V - DC-2,5 W	513328-007		48 V - DC-5 W	513328-015
	110 V - DC-2,5 W	513328-008		110 V - DC-5 W	513328-016

	max. AC power (W)	max. DC power (W)
SG	17,1	11,6

### TEMPERATURE CLASSIFICATION TABLES

	surface temperature	min. ambient temperature	max. ambient temperature	E.D. <sup>(1)</sup>
SG	115°C	-10°C	+50°C	100%

<sup>(1)</sup> Duty factor.

### ORDERING EXAMPLES

For your order please refer to the table above.

### INSTALLATION

- The package consists of the solenoid valve, the coil (installed) and the connector (not installed)
- The coil is provided with an earthing connection
- Additional protection is necessary to protect the coil against mechanical stress and UV radiation
- Easy connection with spade plug connector
- Installation/maintenance instructions are included with each coil
- The spare part coil is always delivered with the connector in a unique reference

### DIMENSIONS (mm), WEIGHT (kg)



#### TYPE 01

Coil + connector size 22 (11 mm)  
EN 175301-803 industry standard B  
IP65

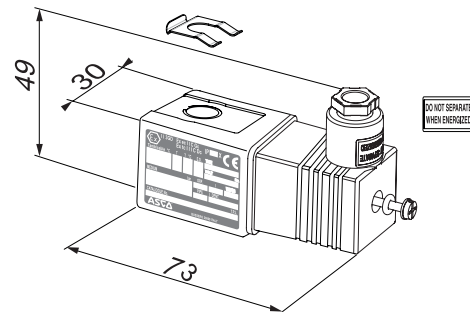
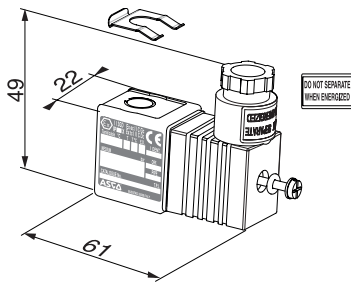
Series (XM5)



#### TYPE 02

Coil + connector size 30 (18 mm)  
ISO 4400 / EN 175301-803, form A  
IP65

Série (C25)



type	weight (kg)
XM5	0,092
C25	0,156