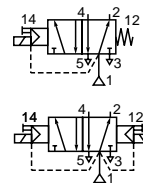




# SOLENOID VALVES

pilot operated, spool type  
single/dual solenoid (mono/bistable function)  
stainless steel body, 1/4



**5/2**  
Series  
**551**

## FEATURES

- The monostable spool valves, series 551, have TÜV certified IEC 61508 Functional Safety data and can be used up to SIL 4/AK 7
- The 5/2 solenoid operated spool valves have threaded port connections
- All the exhaust ports of this spool valve are connectable, providing better environmental protection, particularly recommended for sensitive areas such as clean rooms, and applications in the pharmaceutical and food processing sectors
- The valve offers environmental protection against the ingress of liquids, dusts or any other foreign matter (environmentally-protected construction)
- Can be externally piloted (external air pilot supply) to convert valve to zero minimum operation by flipping a gasket
- The solenoid valves satisfy all relevant EC Directives

## GENERAL

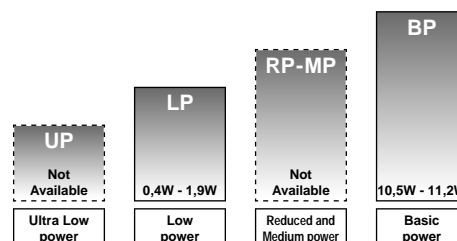
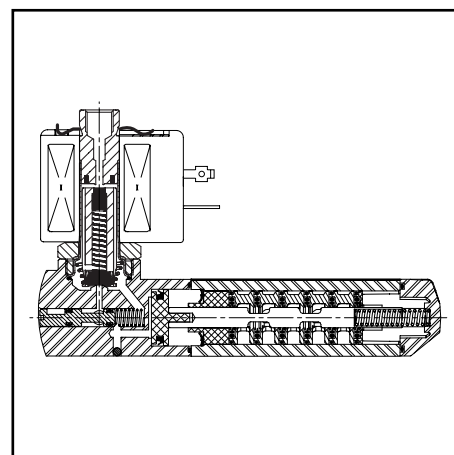
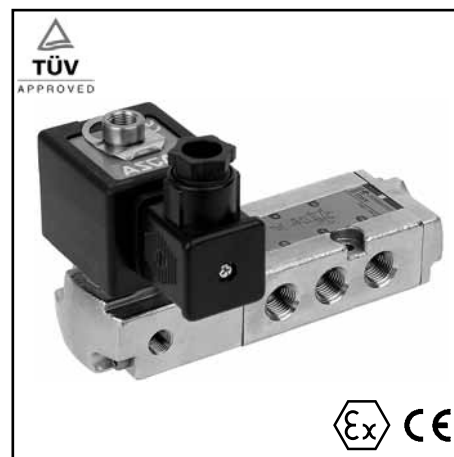
Differential pressure (\*) 2 - 10 bar [1 bar =100 kPa]  
Flow (Qv at 6 bar) 860 l/min (ANR)

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

## MATERIALS IN CONTACT WITH FLUID

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

Body	Stainless steel, AISI 316L
End cover (spring)	Stainless steel
Spool valve internal parts	Stainless steel, POM
Pilot end-cover	Stainless steel
Core tube	Stainless steel
Core and plugnut	Stainless steel
Core spring	Stainless steel
Sealings & discs	NBR
Top disc	FPM
Disc holder	POM
Cartridge (Low power)	Welded, packless AISI 430
Seat	Stainless steel
Seat insert	POM
Shading coil	Copper
Rider ring (Low power)	PTFE



POWER LEVELS - cold electrical holding values (watt)

## SPECIFICATIONS

pipe size	orifice size	flow coefficient kv		operating pressure differential (bar)			power level	prefix optional solenoids								basic catalogue number		
								min. <sup>(2)</sup>	max. (PS)		NEMA 7 & 9	ATEX/CENELEC (gas/dust)					IP65	
									air (*)			EF	EEEx d	EEEx em	EEEx m			EEEx i
(*)	(mm)	(m³/h)	(l/min)		~	=	~/=	EF	NF	NK	EM	PV	IS	ZN	SC			
<b>Solenoid air pilot operated - spring return (monostable)</b>																		
1/4	6	0,75	12,5	0 / 2	10	10	BP	-	●	●	●	●	-	●	●	❖551A421 <sup>(1)</sup>		
1/4	6	0,75	12,5	0 / 2	10	10	BP	●	-	-	-	-	-	-	-	❖551G421 <sup>(1)</sup>		
1/4	6	0,75	12,5	0 / 2	10	10	LP	-	●	-	●	○	○	○	●	❖551A321 <sup>(1)</sup>		
1/4	6	0,75	12,5	0 / 2	10	10	LP	○	-	-	-	-	-	-	-	❖551G321 <sup>(1)</sup>		
<b>Solenoid air pilot operated and return (bistable)</b>																		
1/4	6	0,75	12,5	0 / 2	10	10	BP	-	●	●	●	●	-	●	●	❖551A422		
1/4	6	0,75	12,5	0 / 2	10	10	BP	●	-	-	-	-	-	-	-	❖551G422		
1/4	6	0,75	12,5	0 / 2	10	10	LP	-	●	-	●	○	○	○	●	❖551A322		
1/4	6	0,75	12,5	0 / 2	10	10	LP	○	-	-	-	-	-	-	-	❖551G322		

❖ Select **8** for NPT ANSI 1.20.3 or select **G** for ISO G (228/1) ● Available feature ○ Available feature in DC only

<sup>(1)</sup> Certified IEC 61508 Functional Safety data, use suffix "SL"

<sup>(2)</sup> Zero minimum is only achieved if external pressure is applied

**PREFIX TABLE**

prefix							description	power level			
1	2	3	4	5	6	7		LP	RP	MP	BP
S	C			D	U		Dustproof ATEX (EN 50281-1-1) *	-	-	-	●
E	F						Explosionproof - NEMA 3, 4, 6, 7, 9	○	-	-	●
E	V						Explosionproof - NEMA 3, 4, 6, 7, 9 - 316 SS	○	-	-	●
E	M						Encapsulated ATEX (EN 50019 & EN 50028) *	●	-	-	●
		E	T				Threaded conduit/hole (M20 x 1.5)	●	-	-	●
I	S			S	C		Intrinsically safe with SC coil ATEX (EN 50020) *	○	-	-	-
N	F						Flameproof - Alum. ATEX (EN 50018) *	●	-	-	●
N	N						Flameproof - Cast Iron ATEX (EN 50018) *	●	-	-	●
N	K						Flameproof - Alum. ATEX (EN 50018) *	-	-	-	●
P	V						Encapsulated ATEX (EN 50028) *	○	-	-	●
S	C						Solenoid with spade plug connector (EN 60730)	●	-	-	●
W	P						Waterproof IP67 - Metal enclosure (EN 60730)	●	-	-	●
W	S						Waterproof IP67 - 316 SS enclosure (EN 60730)	●	-	-	●
W	S	E	M				316 SS "EM" enclosure ATEX (EN 50019 & EN 50020) *	●	-	-	●
W	P			D	U		Dustproof ATEX (EN 50281-1-1) - Metal enclosure *	-	-	-	●
W	S			D	U		Dustproof ATEX (EN 50281-1-1) - 316 SS enclosure *	-	-	-	●
W	P			I	S		I.S. with Metal IP67 enclosure ATEX (EN 50020) *	○	-	-	-
W	S			I	S		I.S. with Metal IP67- 316 SS enclosure ATEX (EN 50020) *	○	-	-	-
W	S	N	F				Flameproof - 316 SS ATEX (EN 50018) *	●	-	-	●
Z	N						Encapsulated Non Sparking ATEX (EN 50021) *	○	-	-	●
						T	Threaded conduit (1/2" NPT)	●	-	-	●
				H	T		Class H - High temperature, +80°C ambient temp.	-	-	-	●
						X	Other special constructions	●	-	-	●

**PRODUCT SELECTION GUIDE**

**STEP 1**

Select basic catalogue number, including pipe thread identification letter. Refer to the specifications table on page 1.

**Example: G551A421**

**STEP 2**

Select prefix (combination). Refer to the specifications table on page 1 and the prefix table on page 2, respect the indicated power level.

**Example: EM**

**STEP 3**

Select suffix if required. Refer to the suffix table, respect the indicated power level.

**Example: MO**

**STEP 4**

Select voltage. Refer to standard voltages on page 3.

**Example: 230V / 50Hz**

**STEP 5**

Final catalogue / ordering number.

**Example:**

**EM G551A421MO 230 V / 50 Hz**

**SUFFIX TABLE**

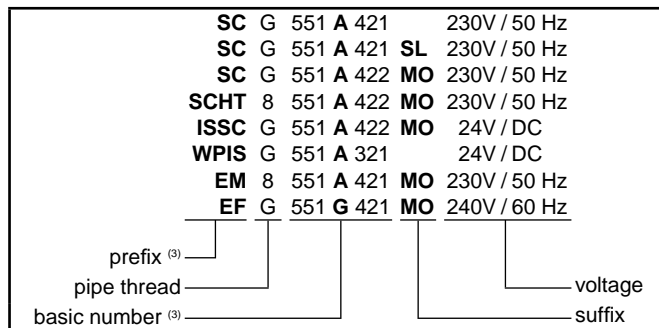
suffix							description	power level			
1	2	3	4	5	6	7		LP	RP	MP	BP
			M	O			Push type or screw type manual operator	○/●	-	-	●
S	L						Certified IEC 61508 Functional Safety data <sup>(2)</sup>	○/●	-	-	●

**OPTIONS & ACCESSORIES**

series	pipe size	exhaust protector (stainless steel)
551	G 1/8	<b>34600418</b> <sup>(1)</sup>
	NPT 1/8	<b>34600482</b> <sup>(1)</sup>
	G 1/4	<b>34600419</b> <sup>(1)</sup>
	NPT 1/4	<b>34600483</b> <sup>(1)</sup>

- Available feature
- Available feature in DC only
- Not available
- \* ATEX solenoids are also approved to EN 50281-1-1 (dust) and EN 13463-1 (non electrical valves)
- <sup>(1)</sup> Provided with "SL" suffix
- <sup>(2)</sup> Not to use with MO suffix

**ORDERING EXAMPLES:**



<sup>(3)</sup> Prefix EF should always be used with the letter G in the basic number.

**ELECTRICAL CHARACTERISTICS**

Coil insulation class F  
 Connector Spade plug (cable Ø 6 - 10 mm)  
 Connector specification ISO 4400  
 Electrical safety IEC 335  
 Standard voltages DC (=) 24V - 48V  
 AC (-) 24V - 48V - 115V - 230V/50Hz; other voltages and 60Hz are available on request

prefix option	power ratings				operator ambient temperature ranges (TS) (C°)	safety code	electrical enclosure protection (EN 60529)	replacement coil		type <sup>(1)</sup>
	inrush	holding	hot/cold					~	=	
	~ (VA)	~ (VA) (W)	= (W)	= (W)				230 V/50 Hz	24 V DC	
<b>Basic power (BP)</b>										
SC	55	23	10,5	9/11,2	-40 to +75	EN 60730	moulded IP65	400425-117	400425-142	01
SCDU	55	23	10,5	9/11,2	-40 to +75	II 3D IP65 T 200°C(-)/135°C(=)	moulded IP65	- <sup>(3)</sup>	- <sup>(3)</sup>	01
WP	55	23	10,5	9/11,2	-40 to +75	EN 60730	steel IP67	400405-117	400405-142	04
WPDU	55	23	10,5	9/11,2	-40 to +75	II 3D IP67 T 200°C	steel IP67	- <sup>(3)</sup>	- <sup>(3)</sup>	04
WS	55	23	10,5	9/11,2	-40 to +75	EN 60730	st. steel IP67	400405-117	400405-142	04
WSDU	55	23	10,5	9/11,2	-40 to +75	II 3D IP67 T 200°C	st. steel IP67	- <sup>(3)</sup>	- <sup>(3)</sup>	04
(WS)NF/NL	55	23	10,5	-	-60 to +25/40/60	II 2G/D EEx d IIC T6/T5/T4	alu/steel IP67	400405-117	-	02
(WS)NF/NL	-	-	-	9/11,2	-60 to +40/60/75	II 2G/D EEx d IIC T6/T5/T4	alu/steel IP67	-	400405-142	02
NK	55	23	10,5	9/11,2	-40 to +50/60	II 2G/D EEx d IIB+H <sub>2</sub> T4(-/=)	aluminium IP65	400405-117	400405-142	03
EM	55	23	10,5	9/11,2	-40 to +40	II 2G/D EEx em II T3	steel IP67	400909-117	400913-142	04
WSEM	55	23	10,5	9/11,2	-40 to +40	II 2G/D EEx em II T3	st. steel IP67	400909-117	400913-142	04
PV	55	23	10,5	9/11,2	-40 to +65	II 2G/D EEx m II T3(-)T4(=)	moulded IP65	- <sup>(3)</sup>	- <sup>(3)</sup>	05
EF	55	23	10,5	9/11,2	-40 to +54/40	NEMA Types 7 and 9	NEMA 4X	238610-058	238710-006	06
EV	55	23	10,5	9/11,2	-40 to +54/40	NEMA Types 7 and 9-316 SS	NEMA 4X	238610-058	238710-006	06
ZN	55	23	10,5	9/11,2	-20 to +50	II 3G/D EEx nA II T3	moulded IP65	- <sup>(3)</sup>	- <sup>(3)</sup>	01
<b>Low power (LP)</b>										
SC	1,5	1,5	1,5	1,7/1,7	-40 to +60	EN 60730	moulded IP65	- <sup>(3)</sup>	- <sup>(3)</sup>	07
WP	1,5	1,5	1,5	1,7/1,7	-40 to +60	EN 60730	steel IP67	- <sup>(3)</sup>	- <sup>(3)</sup>	09
WS	1,5	1,5	1,5	1,7/1,7	-40 to +60	EN 60730	st. steel IP67	- <sup>(3)</sup>	- <sup>(3)</sup>	09
NF	-	-	1,9	-/1,9	-40 to +75	II 2G/D EEx d IIC T6	aluminium IP67	-	- <sup>(3)</sup>	08
NL	-	-	1,9	-/1,9	-40 to +75	II 2G/D EEx d IIC T6	cast iron IP67	-	- <sup>(3)</sup>	08
WSNF	-	-	1,9	-/1,9	-40 to +75	II 2G/D EEx d IIC T6	st. steel IP67	-	- <sup>(3)</sup>	08
EM	1,5	1,5	1,5	1,7/1,7	-40 to +40/55	II 2G/D EEx em II T6/T5	steel IP67	- <sup>(3)</sup>	- <sup>(3)</sup>	09
WSEM	1,5	1,5	1,5	1,7/1,7	-40 to +40/55	II 2G/D EEx em II T6/T5	st. steel IP67	- <sup>(3)</sup>	- <sup>(3)</sup>	09
PV	-	-	-	1,7/1,7	-40 to +60	II 2G/D EEx m II T6	moulded IP65	-	- <sup>(3)</sup>	10
EF	-	-	-	1,7/1,7	-40 to +40	NEMA Types 7 and 9	NEMA 4X	-	- <sup>(3)</sup>	11
EV	-	-	-	1,7/1,7	-40 to +40	NEMA Types 7 and 9-316 SS	NEMA 4X	-	- <sup>(3)</sup>	11
ISSC <sup>(2)</sup>	-	-	-	0,4/0,4	-40 to +60	II 1G/2D EEx ia IIC T6	moulded IP65	-	268976-001	12
WPIS <sup>(2)</sup>	-	-	-	0,4/0,4	-40 to +60	II 1G/2D EEx ia IIC T6	steel IP67	-	268900-001	09
WSIS <sup>(2)</sup>	-	-	-	0,4/0,4	-40 to +60	II 1G/2D EEx ia IIC T6	st. steel IP67	-	268900-001	09
ZN	-	-	-	1,7/1,7	-20 to +50	II 3G/D EEx nA II T3	moulded IP65	-	- <sup>(3)</sup>	07

- Not available

<sup>(1)</sup> Refer to the dimensional drawings on pages 4 to 6.

<sup>(2)</sup> **Intrinsically safe pilots: Check the electrical characteristics in the corresponding catalogue pages (ISSC/WPIS/WSIS operators).**

<sup>(3)</sup> Multiple coil kits available under ATEX, contact us

prefix option	safety parameters				
	U <sub>i</sub>	I <sub>i</sub>	P <sub>i</sub>	L <sub>i</sub>	C <sub>i</sub>
	= (DC) (V)	(mA)	(W)	(µF)	(mF)
<b>Low power (LP)</b>					
ISSC	32	500	1,5	0	0
WPIS/WSIS	32	500	1,5	0	0

**ADDITIONAL OPTIONS**

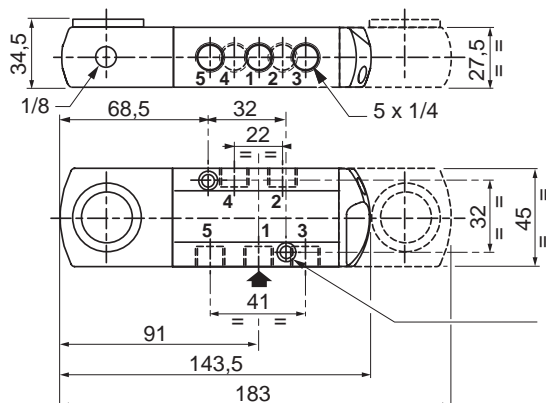
- Valves configured for external pilot air supply, TPL 20547
- Other pipe threads are available on request
- EEx m (prefix "PV") execution can be supplied in various cable lengths
- Compliance with "UL", "CSA" and other local approvals available on request
- 1/2" NPT (prefix "T") and M20 x 1.5 (prefix "ET") conduits (aluminium or 316 SS) available for steel solenoid housing

**INSTALLATION**

- Installation/maintenance instructions are included with each valve
- The solenoid valves can be mounted in any position without affecting operation
- IEC 61508 Functional Safety (Suffix SL), allowable temperature range: -40°C to +60°C. Probability of failure on demand, contact us
- It is necessary to connect pipes or fittings to the exhaust ports to protect the internal parts of the spool valve and its pneumatic operator if used outside or in harsh environments (dusts, liquids etc.)
- Threaded pipe connection identifier is: 8 = NPT (ANSI 1.20.3); G = G (ISO 228/1)
- EEx d (prefix "NF") enclosure is provided with a 1/2" NPT threaded entry hole [optionally, M20 x 1,5 (prefix "ET")] and is supplied without cable gland
- EEx d (prefix "NK") enclosure is provided with a 3/4" NPT threaded entry hole [optionally, 1/2" NPT (prefix "T") or M20 x 1,5 (prefix "ET")] and is supplied without cable gland
- EEx em (prefix "EM") execution: solenoid enclosure has a cable gland with integral strain relief for cables with an o.d. from 7 to 12 mm and is provided with an internal and external connection facility for an earthing or bonding conductor
- Valves with suffix "SL" are provided with a specific exhaust protector

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

**All types**



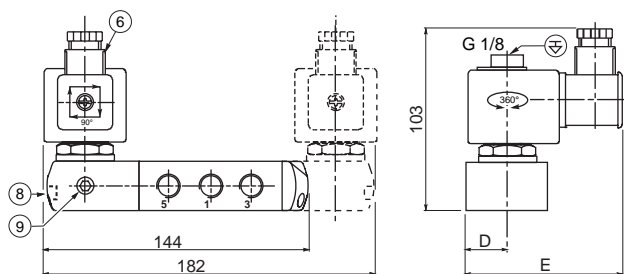
2 mounting holes 5.3 mm dia.;  
Spotfacing: 9 mm dia., depth 5 mm



**TYPE 01**

Prefix "SC", "ZN" and "SCDU" Solenoid  
Basic power  
Epoxy moulded  
IEC 335 / ISO 4400 (SC/SCDU)  
EN 50021 (ZN)  
IP65 / II 3 D IP65 T 100°C to 200°C / II 3 G/D EEx nA II

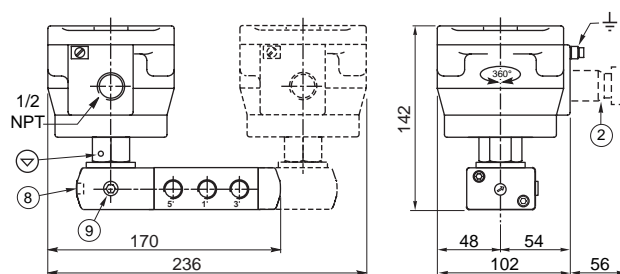
551A421 / 551A422



**TYPE 02**

Prefix "NF", "NL" and "WSNF" Solenoid  
Basic power  
Aluminium, steel; epoxy coated (NF and NL)  
AISI 316 SS (WSNF)  
EN 50018 and EN 50281-1-1  
IP67 / II 2 G/D EEx d IIC

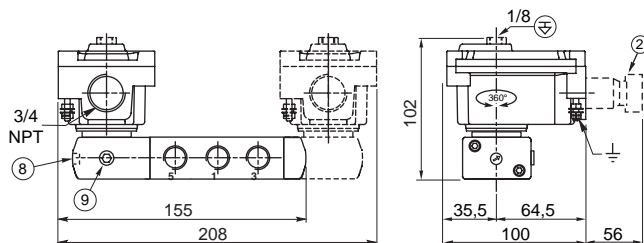
551A421 / 551A422



**TYPE 03**

Prefix "NK" Solenoid  
Basic power  
Aluminium; epoxy coated  
EN 50018 and EN 50281-1-1  
IP65 / II 2 G/D EEx d IIB + H2

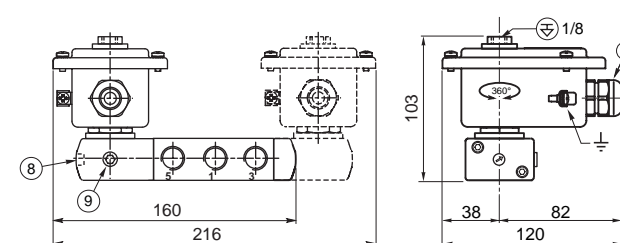
551A421 / 551A422




**TYPE 04**

Prefix "WP", "WS" / "WPDU", "WSDU" / "EM", "WSEM" Solenoid  
Basic power  
Steel; epoxy coated (WP, WPDU and EM)  
AISI 316 SS (WS, WSDU and WSEM)  
IEC 335 / EN 50019 & EN 50028 EN 50281-1-1  
IP67 / II 3 D IP65 T 135°C to 200°C / II 2 G/D EEx em II

551A421 / 551A422



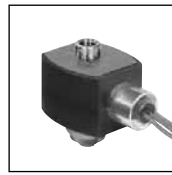
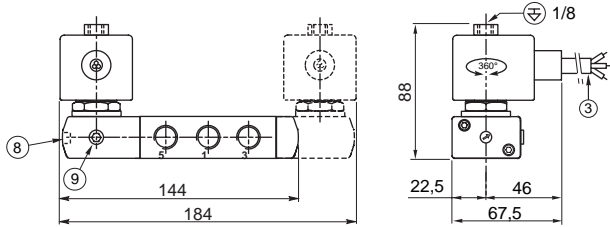
**DIMENSIONS (mm), WEIGHT (kg)** 



**TYPE 05**

Prefix "PV" Solenoid  
Basic power  
Epoxy encapsulated  
EN 50028 and EN 50281-1-1  
II 2 G/D EEx m II  
IP65

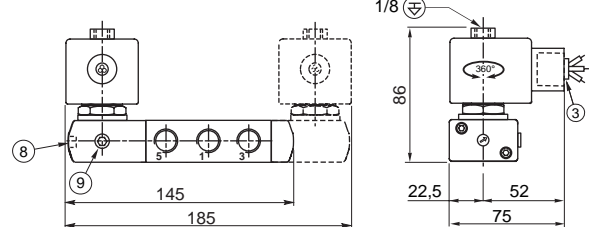
551A421 / 551A422



**TYPE 06**

Prefix "EF" and "EV" Solenoid  
Basic power  
Epoxy encapsulated  
ICS-6 ANSI / NEMA  
Types 7 and 9  
Note: applicable to solenoid only

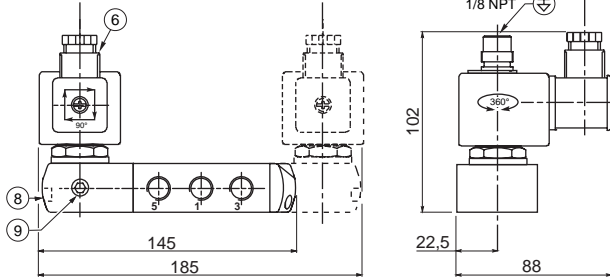
551G421 / 551G422



**TYPE 07**

Prefix "SC" / "ZN" Solenoid  
Low power  
Epoxy moulded  
IEC 335 / ISO 4400 (SC)  
EN 50021 (ZN)  
IP65 / II 3 G/D EEx nA II

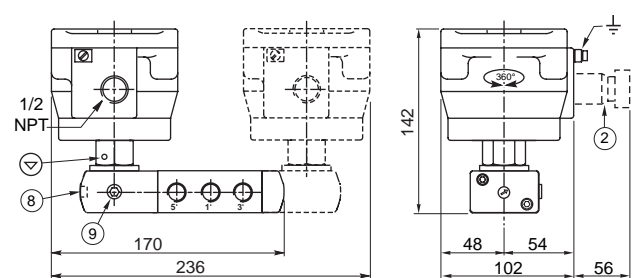
551A321 / 551A322



**TYPE 08**

Prefix "NF", "NL" and "WSNF" Solenoid  
Low power  
Aluminium, steel; epoxy coated (NF and NL)  
AISI 316 SS (WSNF)  
EN 50018 and EN 50281-1-1  
IP67 / II 2 G/D EEx d IIC

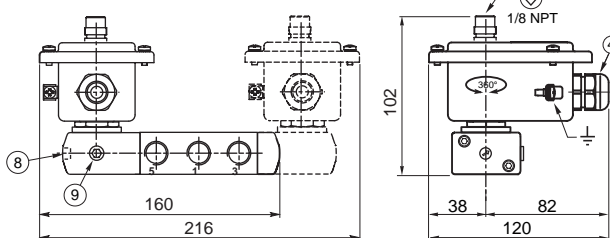
551A321 / 551A322



**TYPE 09**

Prefix "WP", "WS" / "EM", "WSEM" Solenoid  
Prefix "WPIs" / "WSIS" Solenoid  
Low power  
Metal; epoxy coated / AISI 316 SS  
IEC 335 / EN 50019 & EN 50028 / EN 50020 EN 50281-1-1  
IP67 / II 2 G/D EEx em II / II 1G/2D EEx ia IIC

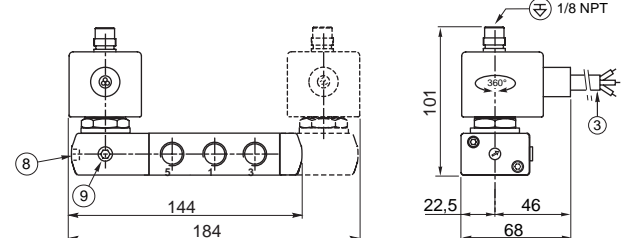
551A321 / 551A322



**TYPE 10**

Prefix "PV" Solenoid  
Low power  
Epoxy encapsulated  
EN 50028 and EN 50281-1-1  
II 2 G/D EEx m II  
IP65

551A321 / 551A322



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



#### TYPE 11

Prefix "EF" and "EV" Solenoid  
Low power  
Epoxy encapsulated  
ICS-6 ANSI / NEMA  
Types 7 and 9  
Note: applicable to solenoid only

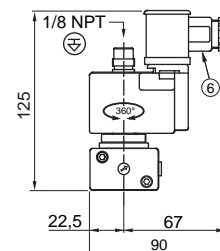
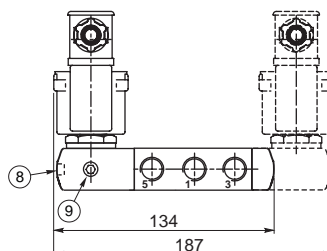
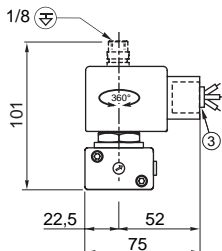
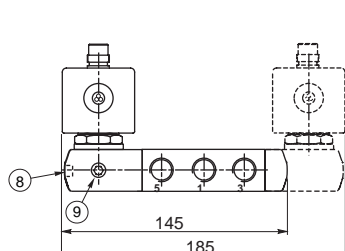
551G321 / 551G322



#### TYPE 12

Prefix "ISSC" Solenoid  
Low power  
Polypropylene moulded  
EN 50020 and EN 50281-1-1  
II 2 G/D EEx ia IIC

551A321 / 551A322

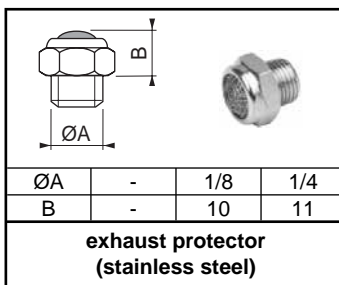
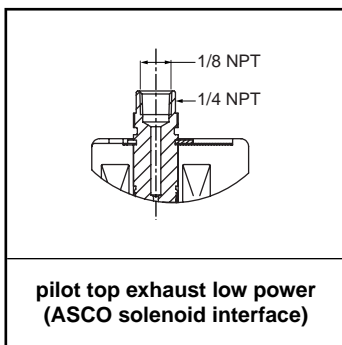
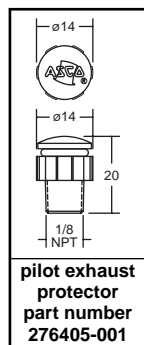


type	prefix option	power level	weight <sup>(1)</sup>	
			monostable	bistable
01	SC / SCUD / ZN	basic power	1,27	2,03
02	NF	basic power	2,42	4,13
02	WSNF	basic power	3,72	6,73
02	NL	basic power	3,52	6,33
03	NK	basic power	1,81	2,63
04	WP/WPDU/WS/WSDU/EM/WSEM	basic power	1,70	2,69
05	PV	basic power	1,37	2,03
06	EF / EV	basic power	1,37	2,03
07	SC / ZN	low power	1,27	2,03
08	NF	low power	2,42	4,13
08	WSNF	low power	3,72	6,73
08	NL	low power	3,52	6,33
09	WP / WS / EM / WSEM / WPIS / WSIS	low power	1,70	2,69
10	PV	low power	1,37	2,03
11	EF / EV	low power	1,37	2,03
12	ISSC	low power	1,37	2,23

<sup>(1)</sup> Incl. coil(s) and connector(s)

- ② EEx d certified cable gland (on request)
- ③ Three-core cable, length 2 m)
- ④ Cable gland for unarmoured cable with 7 to 12 mm dia. sheath
- ⑥ Connector rotatable by 90° increments (Ø 6 - 10 mm)
- ⑧ Manual operator location, suffix MO
- ⑨ External pilot air supply, 1/8 pipe size
- ⊕ Connectable pilot exhaust port
- ⊖ Non-connectable pilot exhaust port

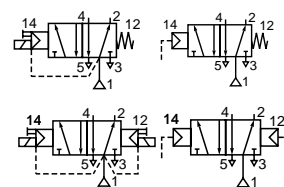
### ACCESSORIES





# SPOOL VALVES

pilot or air operated, spool type  
single/dual solenoid (mono/bistable function)  
stainless steel body, 1/4



**5/2**  
Series  
**551**

## FEATURES

- The monostable spool valves, series 551, have TÜV certified IEC 61508 Functional Safety data and can be used up to SIL 4/AK 7
- The 3/2 NC solenoid operated spool valves have threaded port connections
- All the exhaust ports of this spool valve are connectable, providing better environmental protection, particularly recommended for sensitive areas such as clean rooms, and applications in the pharmaceutical and food processing sectors
- The valve offers environmental protection against the ingress of liquids, dusts or any other foreign matter (environmentally-protected construction)
- The solenoid valves satisfy all relevant EC Directives

## GENERAL

Differential pressure 2 - 10 bar [1 bar =100 kPa]  
Flow (Qv at 6 bar) 860 l/min (ANR)

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

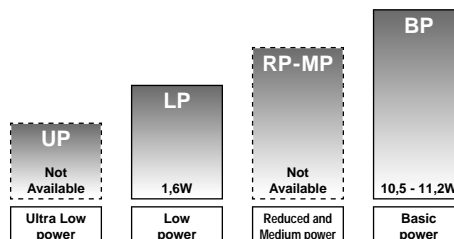
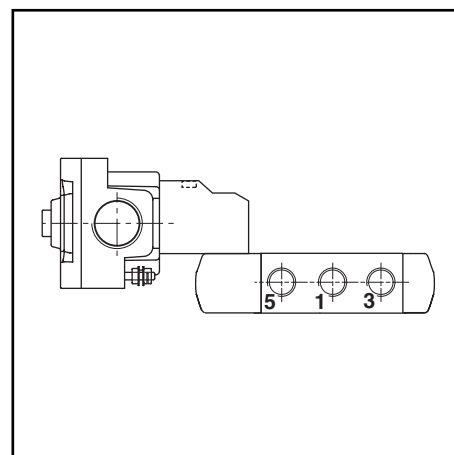
## MATERIALS IN CONTACT WITH FLUID

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

	Air operated	CNOMO solenoid (pilot) interface
Body, end covers	Stainless steel, AISI 316L	Stainless steel, AISI 316L
Spool valve internal parts	Stainless steel, POM	Stainless steel, POM
Seals	NBR	NBR
Pilot internal parts	-	Size 30 (E06.05.80N), refer to catalogue pages: 374 pilot (CTNK) and 195 pilot (ISSC)

## AIR OPERATED SPECIFICATIONS

pipe size	orifice size	flow coefficient kv		operating pressure differential (bar)			prefix optional	basic catalogue number
				min.	max. (PS)			
(*)	(mm)	(m³/h)	(l/min)		~	=		
<b>Pilot air operated - spring return (monostable)</b>								
1/4	6	0,75	12,5	2	10	10	-	❖551A121 <sup>(1)</sup>
<b>Pilot air operated and return (bistable)</b>								
1/4	6	0,75	12,5	2	10	10	-	❖551A122



POWER LEVELS - cold electrical holding values (watt)

## CNOMO SOLENOID (PILOT) INTERFACE SPECIFICATIONS

pipe size	orifice size	flow coefficient kv		operating pressure differential (bar)			power level	prefix optional solenoids		basic catalogue number
				min.	max. (PS)			ATEX/CENELEC (gas/dust)	EEx d	
(*)	(mm)	(m³/h)	(l/min)		~	=	~/=			CTNK
<b>Solenoid air pilot operated - spring return (monostable)</b>										
1/4	6	0,75	12,5	2	10	10	BP	●	-	❖551A221 <sup>(1)</sup>
1/4	6	0,75	12,5	2	-	8	LP	-	○	❖551A221 <sup>(1)</sup>
<b>Solenoid air pilot operated and return (bistable)</b>										
1/4	6	0,75	12,5	2	10	10	BP	●	-	❖551A222
1/4	6	0,75	12,5	2	-	8	LP	-	○	❖551A222

❖ Select 8 for NPT ANSI 1.20.3 or select G for ISO G (228/1) ● Available feature ○ Available feature in DC only.  
<sup>(1)</sup> Certified IEC 61508 Functional Safety data, use suffix "SL".



**PREFIX TABLE**

prefix							description	power level			
1	2	3	4	5	6	7		UP	LP	RP	BP
C	T	N	K				Flameproof, pilot 374, ATEX (EN 50018) *	-	-	-	●
I	S	S	C				Intrinsically safe, pilot 195, ATEX (EN 50020) *	-	○	-	-

**SUFFIX TABLE**

suffix							description	power level			
1	2	3	4	5	6	7		UP	LP	RP	BP
	G	D					Non-electrical, 1 GD EEx c, construction safety, gas/dust-ATEX (EN 13463-5)	-	-	-	-
			M	S			Screw type manual operator	-	-	-	●
			M	O			Push type or screw type manual operator	-	○	-	-
	S	L					Certified IEC 61508 Functional Safety data <sup>(1)</sup>	-	○	-	●

**OPTIONS & ACCESSORIES**

series	pipe size	exhaust protector (stainless steel)
551	G 1/8	<b>34600418</b> <sup>(2)</sup>
	NPT 1/8	<b>34600482</b> <sup>(2)</sup>
	G 1/4	<b>34600419</b> <sup>(2)</sup>
	NPT 1/4	<b>34600483</b> <sup>(2)</sup>

- Available feature
- Available feature in DC only
- Not available
- \* ATEX solenoids are also approved to EN 50281-1-1 (dust) and EN 13463-1 (non electrical valves)
- <sup>(1)</sup> Not to use with MS or MO suffix
- <sup>(2)</sup> Provided with "SL" suffix

**PRODUCT SELECTION GUIDE**

**STEP 1**

Select basic catalogue number, including pipe thread identification letter. Refer to the specifications table on page 7.

**Example: G551A221**

**STEP 2**

Select prefix (combination). Refer to the specifications table on page 7 and the prefix table on page 8, respect the indicated power level.

Air operated version, does not use prefix.

**Example: CTNK**

**STEP 3**

Select suffix (combination) if required. Refer to the suffix table, respect the indicated power level.

GD suffix available for air operated version only (do not use manual operator suffix)

**Example: MS**

**STEP 4**

Select voltage. Refer to standard voltages on page 9.

**Example: 230V / 50Hz**

**STEP 5**

Final catalogue / ordering number.

**Example: CTNK G551A221MS 230 V / 50 Hz**

**ORDERING EXAMPLES:**

CTNK	G	551	A	221	230V / 50 Hz
CTNK	G	551	A	221 SL	24V / DC
CTNK	G	551	A	221 MS	115V / 50 Hz
CTNK	G	551	A	222	230V / 50 Hz
CTNK	G	551	A	222 MS	48V / DC
CTNK	8	551	A	221	230V / 50 Hz
ISSC	G	551	A	221	24V / DC
ISSC	G	551	A	221 SL	24V / DC
ISSC	G	551	A	221 MO	24V / DC
ISSC	G	551	A	222	24V / DC
ISSC	G	551	A	222 MO	24V / DC
				G 551 A 121	
				G 551 A 121 GD	
				G 551 A 121 GDSL	
				G 551 A 122	
				G 551 A 122 GD	

prefix ———

pipe thread ———

basic number ———

voltage ———

suffix ———



**CNOMO SOLENOID (PILOT) INTERFACE ELECTRICAL CHARACTERISTICS**

Coil insulation class F  
 Connector Spade plug (cable Ø 6 - 10 mm)  
 Connector specification ISO 4400 / EN 175301-803, form A (ISSC prefix)  
 Connection Cable gland (CTNK prefix)  
 Electrical safety IEC 335  
 Standard voltages DC (=) CTNK: 24V - 48V  
 ISSC: 24V <sup>-10%/+10%</sup>  
 AC (~) CTNK: 24V - 48V - 115V - 230V/50Hz; other voltages and 60Hz are available on request

prefix option	power ratings				operator ambient temperature ranges (TS) (C°)	safety code	electrical enclosure protection (EN 60529)	replacement coil		type <sup>(1)</sup>
	inrush ~	holding ~		hot/cold =				~	=	
	(VA)	(VA)	(W)	(W)				-	-	
<b>Basic power (BP)</b>										
CTNK	55	23	10,5	9/11,2	-20 to +60	II 2GD EEx d IIB+H <sub>2</sub> T4 (AC/DC)	moulded IP65	-	-	01
<b>Low power (LP)</b>										
ISSC	-	-	-	1,6	-40 to +50	II 1GD EEx ia IIC T6	moulded IP65	-	-	02

- Not available  
<sup>(1)</sup> Refer to the dimensional drawings on page 10.

prefix option	safety parameters				
	U <sub>i</sub> = (DC)	I <sub>i</sub>	P <sub>i</sub>	L <sub>i</sub>	C <sub>i</sub>
	(V)	(mA)	(W)	(µF)	(mF)
<b>Low power (LP)</b>					
ISSC	28	115	1,6	0	0

**ADDITIONAL OPTIONS**

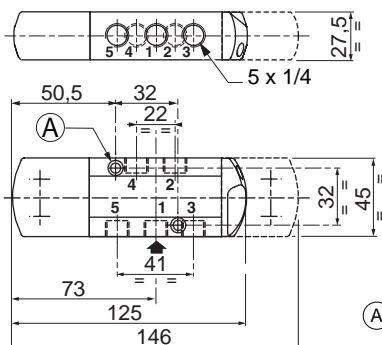
- Other pipe threads are available on request

**INSTALLATION**

- Installation/maintenance instructions are included with each valve
- The spool valves can be mounted in any position without affecting operation
- IEC 61508 Functional Safety (Suffix SL), allowable temperature range: -40°C to +60°C. Probability of failure on demand, contact us
- It is necessary to connect pipes or fittings to the exhaust ports to protect the internal parts of the spool valve and its pneumatic operator if used outside or in harsh environments (dusts, liquids etc.)
- EEx d (prefix "CTNK") enclosure is provided with a 3/4" NPT threaded entry hole [optionally, 1/2" NPT (prefix "T") or M20 x 1,5 (prefix "ET")] and is supplied without cable gland
- Threaded pipe connection identifier is: 8 = NPT (ANSI 1.20.3); G = G (ISO 228/1)
- Valves with suffix "SL" are provided with a specific exhaust protector

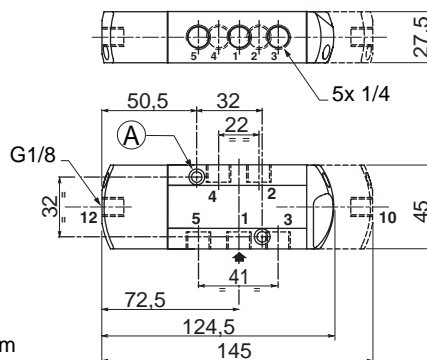
**DIMENSIONS (mm), WEIGHT (kg)**

**Type 01-02: CNOMO size 30 (E06.05.80)**



(A) 2 mounting holes 5.3 mm dia.;  
Spotfacing: 9 mm dia., depth 5 mm

**Type 03: Air operated**



**TYPE 01**

Prefix "CTNK" Solenoid  
Basic power  
374 pilot  
Aluminium, epoxy coated  
EN 50018 and EN 50281-1-1  
IP65 / II 2 GD EEx IIB+H<sub>2</sub>

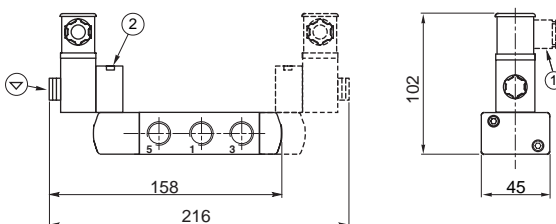
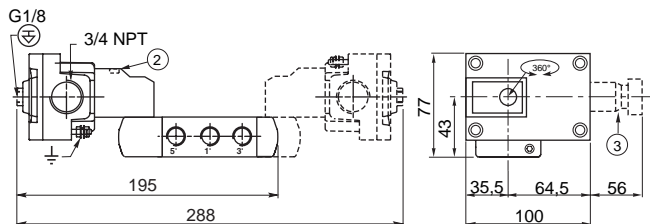
551A221 / 551A222  
551A221MS / 551A222MS



**TYPE 02**

Prefix "ISSC" Solenoid  
Low power  
195 pilot  
Polyamide (cable 6 - 10 mm)  
EN 50020 and EN 50281-1-1  
IP65 / II 1 GD EEx ia IIC

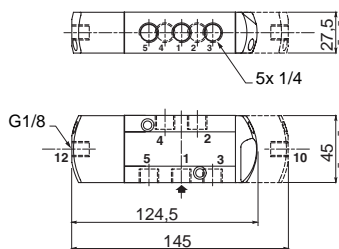
551A221 / 551A222  
551A221MO / 551A222MO



**TYPE 03**

Air operated version  
No prefix  
Use "SL", "GD" or "GD SL" suffix  
IP65 / II 1 GD EEx c

551A121 / 551A122



- ① Connector rotatable by 90° increments (cable 6 - 10 mm)
- ② Manual operator location
- ③ EEx d certified cable gland (on request)
- ⊕ Connectable pilot exhaust port
- ⊖ Non-connectable pilot exhaust port

type	prefix option	power level	weight <sup>(1)</sup>	
			monostable	bistable
01	CTNK	basic power	1,66	2,60
02	ISSC	low power	1,05	1,39
03	-	-	0,86	0,99

<sup>(1)</sup> Incl. connector(s), except CFVT.

**ACCESSORIES**

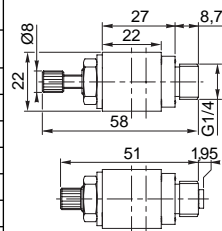
ØA	-	1/8	1/4
B	-	10	11

**exhaust protector  
(stainless steel)**

### ACCESSORIES

supply rail with seals and banjo bolts (without mounting brackets) (1)		
supply rail for "n" valves	catalogue number	
	G 1/4	NPT 1/4
2	<b>88100034</b>	<b>88100053</b>
3	<b>88100035</b>	<b>88100054</b> <sup>(4)</sup>
4	<b>88100036</b>	<b>88100054</b>
5	<b>88100037</b>	<b>88100058</b>
6	<b>88100038</b>	<b>88100055</b>
7	<b>88100039</b>	<b>88100059</b>
8	<b>88100040</b>	<b>88100060</b>

supply rail with isolation valves (without mounting brackets) (2) - allows the isolation of one or more valves from the general pressure supply		
supply rail for "n" valves	catalogue number	
	G 1/4	
2	<b>88100717</b>	
3	<b>88100718</b>	
4	<b>88100719</b>	
5	<b>88100720</b>	
6	<b>88100721</b>	
7	<b>88100722</b>	
8	<b>88100723</b>	



<sup>(4)</sup> Available on request.

series 551	number of valves							
	2	3	4	5	6	7	8	
A	108	136	164	192	220	248	276	
B	92	120	148	176	204	232	260	
C	55	83	111	139	167	195	223	
D	78	106	134	162	190	218	246	
type	weight (kg)							
03, monostable	1,83	2,75	3,66	4,58	5,49	6,41	7,32	
03, bistable	2,09	3,14	4,18	5,23	6,27	7,32	8,36	

set of 2 mounting brackets (3)	
series	catalogue number
551	<b>88100049</b>

