



### 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	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	P			Z	N		N.S. metal enclosure ATEX (EN 50021)*	○	-	-	●
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) *	●	-	-	●
W	S	Z	N				N.S. 316 SS enclosure ATEX (EN 50021)*	●	-	-	●
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 the fluid temperature range and seal material from the general table on page 7. Select basic catalogue number, including pipe thread identification letter. Refer to the specifications table above.

**Example: G551A421**

#### STEP 2

Select prefix (combination). Select the appropriate operator from the specifications table on page 1 and the prefix table on page 2. Select for this operator in the electrical characteristics table on page 3: the power level (LP, BP), the type of electrical enclosure protection and the desired temperature class.

**Warning:** The ambient temperature range of your application may not exceed the temperature range of your operator.

**Example: EM**

#### STEP 3

Select suffix (combination) if required.

**Example: MO**

#### STEP 4

Select voltage. Refer to standard voltages on page 9.

**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 (Series 551) <sup>(2)</sup>	○/●	-	-	●

### OPTIONS & ACCESSORIES

series	pipe size	stainless steel exhaust protector	
		G	NPT
551-553	1/8	<b>34600418</b> <sup>(1)</sup>	<b>34600482</b> <sup>(1)</sup>
551	1/4	<b>34600419</b> <sup>(1)</sup>	<b>34600483</b> <sup>(1)</sup>
553	1/2	<b>34600479</b>	<b>34600479</b>

● 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:

SC	G	551	A	421	230V / 50 Hz
SC	G	553	A	421	230V / 50 Hz
SC	G	551	A	421	SL 230V / 50 Hz
SC	G	551	A	422	MO 230V / 50 Hz
SCHT	8	551	A	422	MO 230V / 50 Hz
ISSC	G	551	A	422	MO 24V / DC
WPIS	G	551	A	321	24V / DC
EM	8	551	A	421	MO 230V / 50 Hz
EF	G	551	G	421	MO 240V / 60 Hz

prefix <sup>(3)</sup> — pipe thread — basic number <sup>(3)</sup> — voltage — suffix

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

### EXPLANATION OF TEMPERATURE RANGES OF SOLENOID VALVES

Valve temperature range The valve temperature range is determined by the selected seal material, the temperature range for proper operation of the valve and sometimes by the fluid (e.g. steam)

Operator ambient temperature range The operator ambient temperature range is determined by the selected power level (LP, RP, MP or BP) and the ATEX safety code

Total temperature range The temperature range of the complete solenoid valve is determined by the limitations of both temperature ranges above

### ELECTRICAL CHARACTERISTICS

Coil insulation class  
Electrical safety  
Standard voltages

F  
IEC 335  
DC (=) 24V - 48V  
AC (-) 24V - 48V - 115V - 230V/50Hz; other voltages and 60Hz are available on request

prefix option	power ratings				operator ambient temperature range (TS) (C°)	safety code	electrical enclosure protection (EN 60529)	replacement coil		type (2)
	inrush ~ (VA)	holding ~ (VA) (W)		hot/cold = (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	400-425-117	400-425-142	01
SCDU	55	23	10,5	9/11,2	-40 to +75	II 3D IP65 T 200°C(-)/135°C(=)	moulded IP65	- (4)	- (4)	01
WP/WS	55	23	10,5	9/11,2	-40 to +75	EN 60730	steel/SS IP67	400-405-117	400-405-142	04
WPDU/WSDU	55	23	10,5	9/11,2	-40 to +75	II 3D IP67 T 200°C	steel/SS IP67	- (4)	- (4)	04
(WS)NF	55	23	10,5	-	[-60] <sup>(1)</sup> -40 to +25/40/60	II 2G/D EEx d IIC T6/T5/T4	alu./SS IP67	400-405-117	-	02
(WS)NF	-	-	-	9/11,2	[-60] <sup>(1)</sup> -40 to +40/60/75	II 2G/D EEx d IIC T6/T5/T4	alu./SS IP67	-	400-405-142	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	400-405-117	400-405-142	03
EM/WSEM	55	23	10,5	9/11,2	-40 to +40	II 2G/D EEx em II T3	steel/SS IP67	400-909-117	400-913-142	04
PV	55	23	10,5	9/11,2	-40 to +65	II 2G/D EEx m II T3(-)/T4(=)	moulded IP65	- (4)	- (4)	05
EF/EV	55	23	10,5	9/11,2	-40 to +54/40	NEMA type 7 and 9	mould.NEMA 4X	238-610-058	238-710-006	06
ZN	55	23	10,5	9/11,2	-20 to +50	II 3G/D EEx nA II T3	moulded IP65	- (4)	- (4)	01
WP(WS)ZN	55	23	10,5	9/11,2	-40 to +50/60	II 3G/D EEx nA II T3(-)/T4(=)	steel/SS IP67	- (4)	- (4)	04
<b>Low power (LP)</b>										
SC	1,5	1,5	1,5	1,7/1,7	-40 to +60	EN 60730	moulded IP65	400-925-097	400-925-042	07
WP/WS	1,5	1,5	1,5	1,7/1,7	-40 to +60	EN 60730	steel/SS IP67	400-926-097	400-926-042	09
(WS)NF	-	-	1,9	- / 1,9	[-60] <sup>(1)</sup> -40 to +75/80	II 2G/D EEx d IIC T6/T5	alu./SS IP67	- (4)	- (4)	08
EM/WSEM	1,5	1,5	1,5	1,7/1,7	-40 to +40/55	II 2G/D EEx em II T6/T5	steel/SS IP67	- (4)	- (4)	09
PV	-	-	-	1,7/1,7	-40 to +60	II 2G/D EEx m II T6	moulded IP65	-	- (4)	10
EF/EV	-	-	-	1,7/1,7	-40 to +40	NEMA type 7 and 9	mould.NEMA 4X	-	- (4)	11
ISSC (3)	-	-	-	0,4/0,4	-40 to +60	II 1G/2D EEx ia IIC T6(2G/D=553)	moulded IP65	-	268-976-001	12
WPIS (3)	-	-	-	0,4/0,4	-40 to +60	II 1G/2D EEx ia IIC T6(2G/D=553)	acier IP67	-	268-900-001	09
WSIS (2)	-	-	-	0,4/0,4	-40 to +60	II 1G/2D EEx ia IIC T6(2G/D=553)	St steel IP67	-	268900-001	09
ZN	-	-	-	1,7/1,7	-20 to +50	II 3G/D EEx nA II T3	moulded IP65	-	- (4)	07
WP(WS)ZN	1,5	1,5	1,5	1,7/1,7	-40 to +60	II 3G/D EEx nA II T6	steel/SS IP67	- (4)	- (4)	09

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

- (1) The certified minimum temperature of this operator  
(2) Refer to the dimensional drawings on pages 4 to 6.  
(3) Intrinsically safe pilots: Check the electrical characteristics in the corresponding catalogue pages (ISSC/WPIS operators).  
(4) Multiple coil kits available under ATEX, contact us  
- Not available

### ELECTRICAL CONNECTIONS

prefix	connection
SC, SCDU, ZN	Spade plug connector with cable gland EN175301-803A (ISO 4400) for cables with an outer diameter from 6 to 10 mm
WP, WS, EM, WSEM, WPDU, WSDU, WPZN, WSNZ, WPIS, WSIS	M20 cable gland for cables with an outer diameter from 7 to 12 mm. With an internal and external facility for an earthing or bonding conductor
NF, WSNF	1/2" NPT threaded cable entry. Enclosures are supplied without cable gland
NK	3/4" NPT threaded cable entry. Enclosures are supplied without cable gland
PV	Moulded-in cable, standard length 2 m
EF/EV	1/2" NPT conduits, standard length 35 cm

### ADDITIONAL OPTIONS

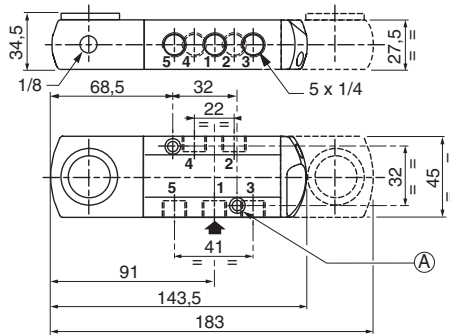
- Valves configured for external pilot air supply, TPL 20547
- Other pipe threads are available on request
- EEx m (prefix "PV") execution can be supplied in various cable lengths
- Compliance with "UL", "CSA" and other local approvals available on request
- 1/2" NPT (prefix "T") and M20 x 1.5 (prefix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

### INSTALLATION

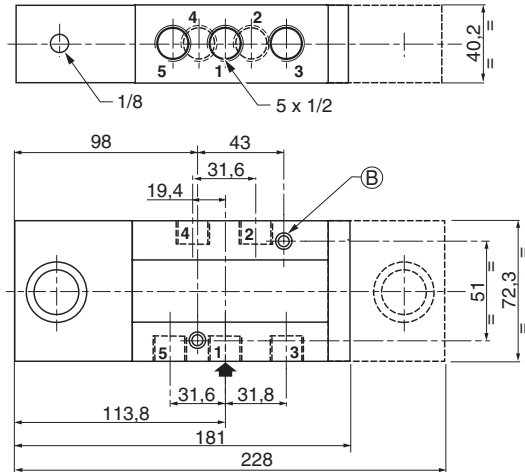
- Installation/maintenance instructions are included with each valve
- The solenoid valves can be mounted in any position without affecting operation
- IEC 61508 Functional Safety (Suffix SL), allowable temperature range: -40°C to +60°C. Probability of failure on demand, contact us
- It is necessary 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)
- Prefix "(WS)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
- 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

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

#### Series 551



#### Series 553



2 mounting holes

- Ⓐ 5.3 mm dia.; Spotfacing: 9 mm dia., depth 5 mm
- Ⓑ 6.5 mm dia.; Spotfacing: 11 mm dia., depth 6 mm



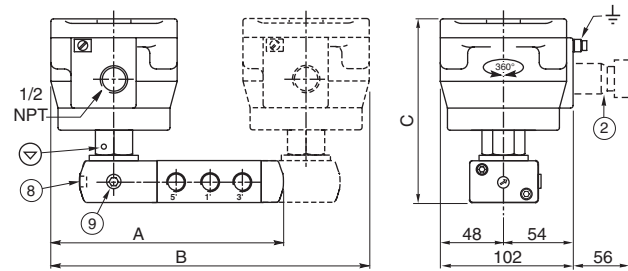
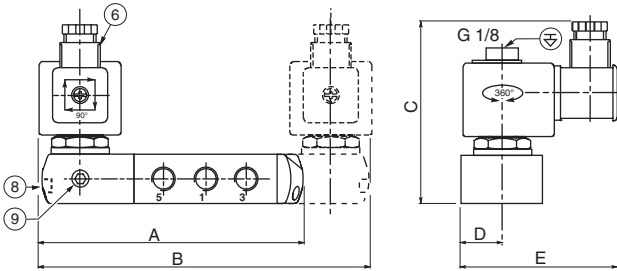
**TYPE 01: Prefixes SC: IP65, ZN: II 3 G/D, IP65, EEx nA II, SCDU: II 3 D, IP65, T100°C to 200°C**  
Basic power  
Epoxy moulded  
IEC 335 / ISO 4400

551A421 / 551A422 / 553A421 / 553A422



**TYPE 02: Prefixes NF/WSNF: II 2 G/D, IP67, EEx d IIC**  
Basic power  
Aluminium, epoxy coated (NF)  
AISI 316 SS (WSNF)  
EN 50018 and EN 50281-1-1

551A421 / 551A422 / 553A421 / 553A422



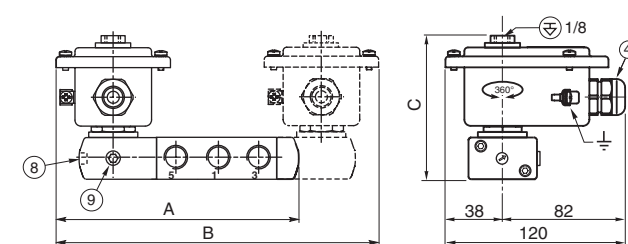
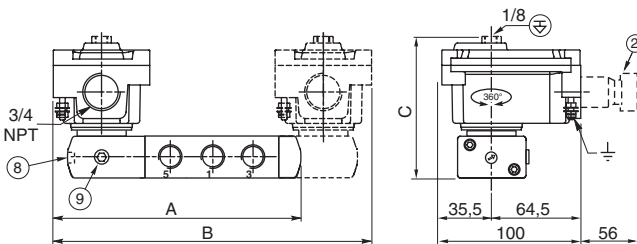
**TYPE 03: Prefix NK: II 2 GD, IP65, EEx d IIB + H<sub>2</sub>**  
Basic power  
Aluminium, epoxy coated  
EN 50018 and EN 50281-1-1

551A421 / 551A422 / 553A421 / 553A422



**TYPE 04: Prefixes WP/WS: IP67, EM/WSEM: II 2 G/D, IP67, EEx em II, WPDU/WSDU: II 3 D, IP67, T85°C to 200°C, WPZN/WSZN: II 3 G/D, IP67, EEx nA II**  
Basic power  
Steel, epoxy coated (EM, WP, WPDU, WPZN)  
AISI 316 SS (WS, WSDU, WSEM, and WSZN)  
IEC 335 / EN 50019, EN 50028 and 50281-1-1

551A421 / 551A422 / 553A421 / 553A422

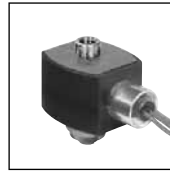
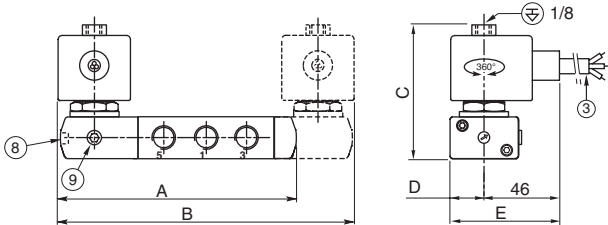


### DIMENSIONS (mm), WEIGHT (kg)



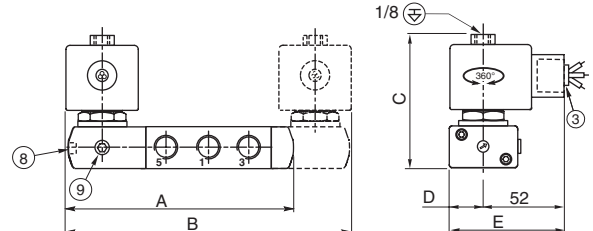
**TYPE 05: Prefix: PV: II 2 G/D, IP65, EEx m II**  
 Basic power  
 Epoxy encapsulated  
 EN50028 and EN 50281-1-1

551A421 / 551A422 / 553A421 / 553A422



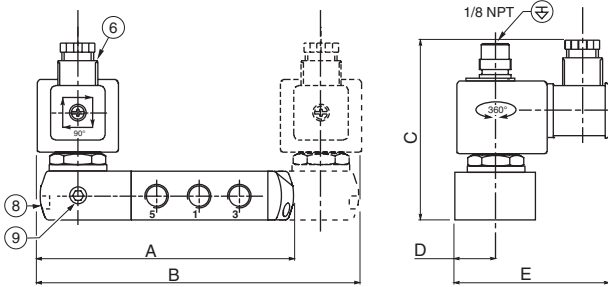
**TYPE 06: Prefix: EF: ICS-6 ANSI / NEMA type 7 and 9**  
 Basic power  
 Epoxy encapsulated  
 EN50028 and EN 50281-1-1  
 NOTE: applicable to solenoid only

551G421 / 551G422 / 553G421 / 553G422



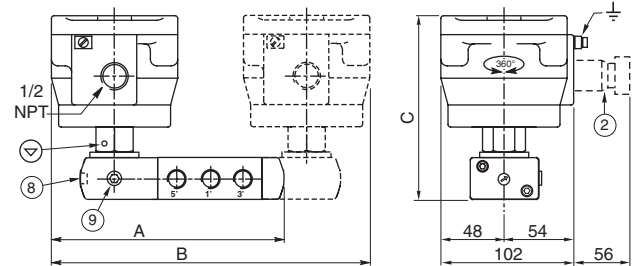
**TYPE 07: Prefixes SC: IP65, ZN: II 3 G/D, IP65, EEx nA II**  
 Low power  
 Epoxy moulded  
 IEC 335 / ISO 4400

551A321 / 551A322 / 553A321 / 553A322



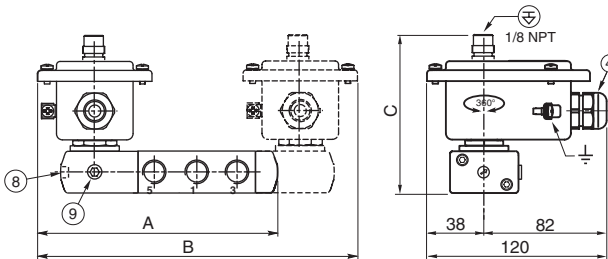
**TYPE 08: Prefixes NF/WSNF: II 2 G/D, IP67, EEx d IIC**  
 Low power  
 Aluminium, epoxy coated (NF)  
 AISI 316 SS (WSNF)  
 EN 50018 and EN 50281-1-1

551A321 / 551A322 / 553A321 / 553A322



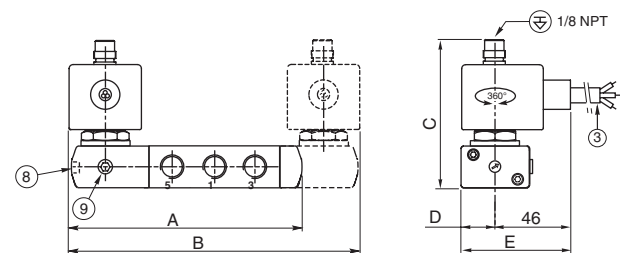
**TYPE 09: Prefixes WP/WS: IP67, EM/WSEM: II 2 G/D, IP67, EEx em II, WPDU/WSDU: II 3 D, IP67, T85°C to 200°C, WPZN/WSZN: II 3 G/D, IP67, EEx nA II, WPIS/WSIS: 551 = II 1G/2D EEx ia IIC - 553 = II 2 G/D EEx ia IIC**  
 Low power  
 Steel, epoxy coated (EM, WP, WPDU, WPZN, WPIS)  
 AISI 316 SS (WS, WSDU, WSEM, WSIS and WSZN)  
 IEC 335 / EN 50019, EN 50028 and 50281-1-1

551A321 / 551A322 / 553A321 / 553A322



**TYPE 10: Prefix: PV: II 2 G/D, IP65, EEx m II**  
 Low power  
 Epoxy encapsulated  
 EN50028 and EN 50281-1-1

551A321 / 551A322 / 553A321 / 553A322



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



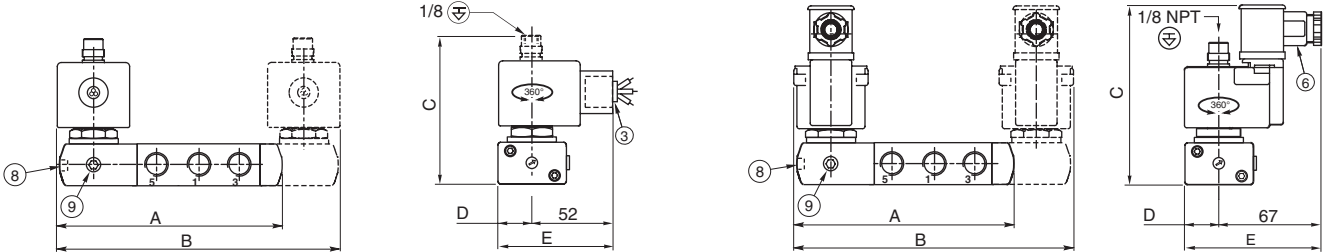
**TYPE 11: Prefixes: EF/EV: ICS-6 ANSI / NEMA type 7 and 9**  
 Low power  
 Epoxy encapsulated  
 EN50028 and EN 50281-1-1  
 NOTE: applicable to solenoid only

551G321 / 551G322 / 553G321 / 553G322



**TYPE 12: 551: II 1G/2D EEx ia IIC, IP65 - 553: II 2 G/D EEx ia IIC, IP65**  
 Low power  
 Polypropylene moulded  
 IEC 335 / ISO 4400  
 EN 50020 and EN 50281-1-1

551A321 / 551A322 / 553A321 / 553A322

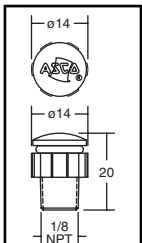


type	prefix option	power level	Series 551					Series 553					weight <sup>(1)</sup>			
			A	B	C	D	E	A	B	C	D	E	monostable		bistable	
01	SC / SCU / ZN	basic power	144	184	103	22,5	87	182	229	109	36,5	101	1,27	3,06	2,03	4,38
02	NF	basic power	170	236	142	-	-	208	281	148	-	-	2,42	4,21	4,13	6,48
02	WSNF	basic power	170	236	142	-	-	208	281	148	-	-	3,72	5,51	6,73	9,08
03	NK	basic power	155	208	102	-	-	193	253	108	-	-	1,81	3,6	2,63	4,98
04	WP/WPDU/WS/WSDU/EM/WSEM	basic power	160	216	103	-	-	198	261	109	-	-	1,70	3,49	2,69	5,04
05	PV	basic power	144	184	88	22,5	69	182	229	94	36,5	82,5	1,37	3,16	2,03	4,38
06	EF / EV	basic power	145	185	86	22,5	75	183	230	92	36,5	88,5	1,37	3,16	2,03	4,38
07	SC / ZN	low power	145	185	102	22,5	88	183	230	108	36,5	102	1,27	3,06	2,03	4,38
08	NF	low power	170	236	142	-	-	208	281	148	-	-	2,42	4,21	4,13	6,48
08	WSNF	low power	170	236	142	-	-	208	281	148	-	-	3,72	5,51	6,73	9,08
09	WP / WS / EM / WSEM / WPIS / WSIS	low power	160	216	102	-	-	198	261	108	-	-	1,70	3,49	2,69	5,04
10	PV	low power	144	184	101	22,5	69	182	229	107	36,5	82,5	1,37	3,16	2,03	4,38
11	EF / EV	low power	145	185	101	22,5	75	182	230	107	36,5	88,5	1,37	3,16	2,03	4,38
12	ISSC	low power	146	187	125	22,5	90	184	232	131	36,5	103,5	1,37	3,16	2,23	4,38

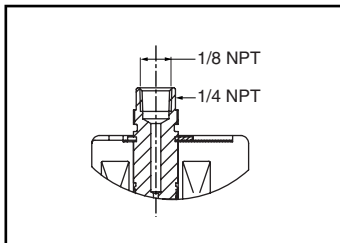
<sup>(1)</sup> Incl. coil(s) and connector(s)

- 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

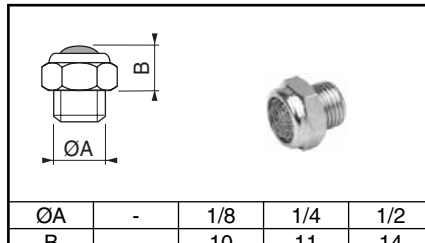
### ACCESSORIES



**pilot exhaust protector**  
 part number  
 276405-001

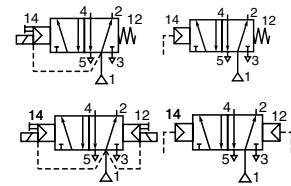


**pilot top exhaust low power**  
 (ASCO solenoid interface)



ØA	-	1/8	1/4	1/2
B	-	10	11	14

**exhaust protector**  
 (stainless steel)



### FEATURES

- Series 551 monostable spool valves 1/4 have TÜV certified IEC 61508 Functional Safety data and can be used up to SIL 4/AK 7
- Series 551 versions according to ATEX 94/9/EC, for zones 0, 1 and 2 and series 553 air-operated versions for zones 1 and 2
- 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

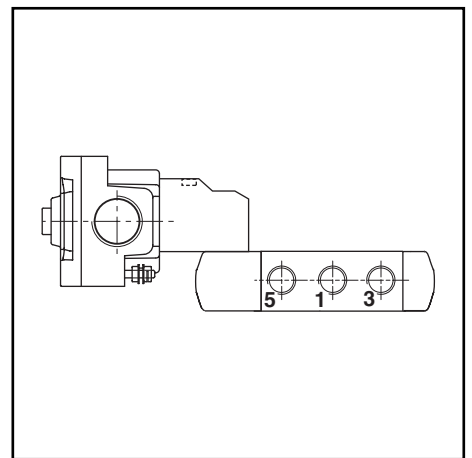
**Differential pressure** 2 - 10 bar [1 bar = 100 kPa]  
**Flow (Qv at 6 bar)** 1/4 = 860 l/min (ANR)  
1/2 = 3000 l/min

fluids (*)	temperature range (TS)	seal materials (*)
air, inert gas, filtered	551 : - 40°C to + 80°C	VMQ (silicone) + PUR (polyurethane)
	553 : - 40°C to + 60°C	

### MATERIALS IN CONTACT WITH FLUID

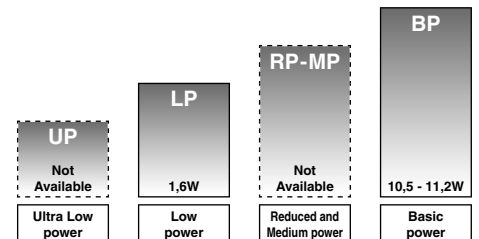
(\*) Ensure that the compatibility of the fluids in contact with the materials is verified

	Air operated (Series 551-553)	CNOMO solenoid (pilot) interface (Series 551)
<b>Body, end covers</b>	Stainless steel, AISI 316L	Stainless steel, AISI 316L
<b>Spool valve internal parts</b>	Stainless steel, POM	Stainless steel, POM
<b>Seals</b>	NBR	NBR
<b>Pilot internal parts</b>	-	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)		air (*)			
					~	=		
<b>Pilot air operated - spring return (monostable)</b>								
1/4	6	0,75	12,5	2	10	10	-	❖551A121 <sup>(1)</sup>
1/2	13	3,15	52,5	2	10	10	-	❖553A121
<b>Pilot air operated and return (bistable)</b>								
1/4	6	0,75	12,5	2	10	10	-	❖551A122
1/2	13	3,15	52,5	2	10	10	-	❖553A122



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)		
(*)	(mm)	(m³/h)	(l/min)		air (*)		~/=			
					~	=	~/=			
<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.  
(1) 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 c (551)/ 2 GD c (553), 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 (Series 551) <sup>(1)</sup>	-	○	-	●

### OPTIONS & ACCESSORIES

series	pipe size	stainless steel exhaust protector	
		G	NPT
551	1/8	<b>34600418</b> <sup>(2)</sup>	<b>34600482</b> <sup>(2)</sup>
551	1/4	<b>34600419</b> <sup>(2)</sup>	<b>34600483</b> <sup>(2)</sup>
553	1/2	<b>34600479</b>	<b>34600479</b>

- 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 the fluid temperature range and seal material from the general table on page 7. Select basic catalogue number, including pipe thread identification letter. Refer to the specifications tables on page 7.

**Example: G551A221**

#### STEP 2

Select prefix (combination). Select the appropriate operator from the tables on page 7. Select for this operator in the electrical characteristics table on page 9: the power level (LP, BP), the type of electrical enclosure protection and the desired temperature class.

**Warning:** The ambient temperature range of your application may not exceed the temperature range of your operator.

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 15.

**Example : 230V / 50Hz**

#### STEP 5

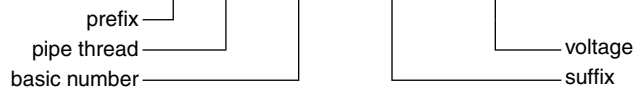
Final catalogue / ordering number.

**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	GD <sup>SL</sup>
		G	551	A	122	
		G	553	A	121	
		G	551	A	122	GD





## EXPLANATION OF TEMPERATURE RANGES OF SOLENOID VALVES

Valve temperature range	The valve temperature range is determined by the selected seal material, the temperature range for proper operation of the valve and sometimes by the fluid (e.g. steam)
Operator ambient temperature range	The operator ambient temperature range is determined by the selected power level (LP or BP) and the ATEX safety code
Total temperature range	The temperature range of the complete solenoid valve is determined by the limitations of both temperature ranges above

## ELECTRICAL CHARACTERISTICS

<b>Coil insulation class</b>	F
<b>Electrical safety</b>	IEC 335
<b>Standard voltages</b>	DC (=) CTNK : 24V - 48V ; ISSC : 24V CA (~) 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 <sup>(3/4)</sup>	-	-	-	1,6	-40 to +50	II 2G/D 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

## ELECTRICAL CONNECTIONS

prefix	connection
CTNK	3/4" NPT threaded cable entry. Enclosures are supplied without cable gland
ISSC	Spade plug connector with cable gland EN175301-803A (ISO 4400) for cables with an outer diameter from 6 to 8 mm

## ADDITIONAL OPTIONS

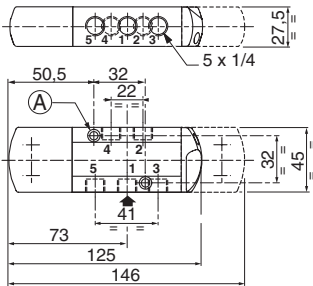
- Mounting on aluminium supply rail, 1/4 or 1/2
- Other pipe threads are available on request

## INSTALLATION

- Installation/maintenance instructions are included with each valve
- The 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 valve 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 "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
- Valves with suffix "SL" are provided with specific exhaust protectors

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

#### Type 01-02: CNOMO (Series 551) size 30 (E06.05.80)



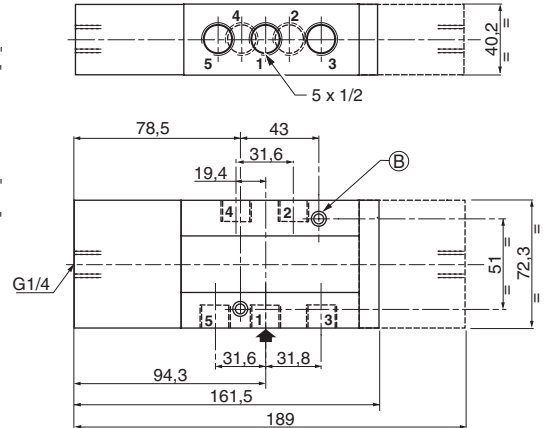
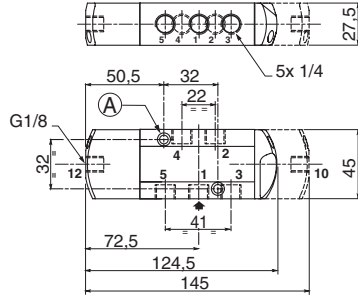

2 mounting holes

- (A) 5.3 mm dia.; Spotfacing: 9 mm dia., depth 5 mm
- (B) 6.5 mm dia.; Spotfacing: 11 mm dia., depth 6 mm

#### Type 03: Air operated


#### Series 551

#### Series 553

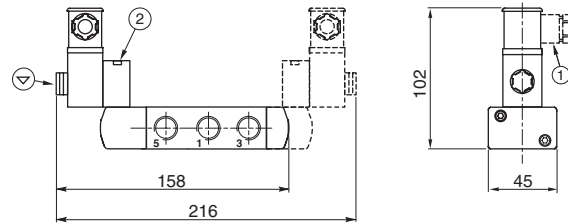
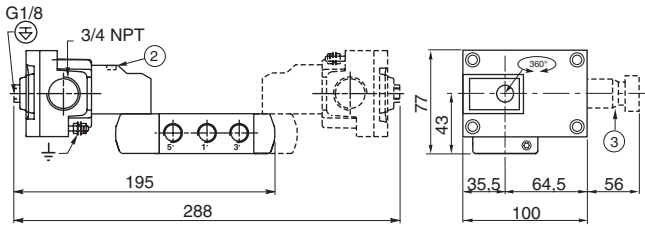

**TYPE 01: Prefix CTNK: II 2 GD, IP65, EEx d IIB + H<sub>2</sub>**  
Basic power  
374 pilot, light alloy  
Aluminium, epoxy coated  
EN 50018 and EN 50281-1-1

551A221 / 551A222  
551A221MS / 551A222MS



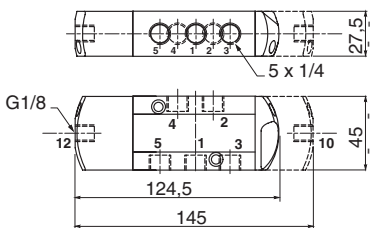
**TYPE 02: Prefix ISSC:**  
**Series 551: II 1 GD EEx ia IIC, IP65**  
**Series 553: II 2 GD EEx ia IIC, IP65**  
Low power  
195 pilot  
Polyamide  
IEC 335 / ISO 4400  
EN 50020 and EN 50281-1-1

551A221 / 551A222  
551A221MO / 551A222MO

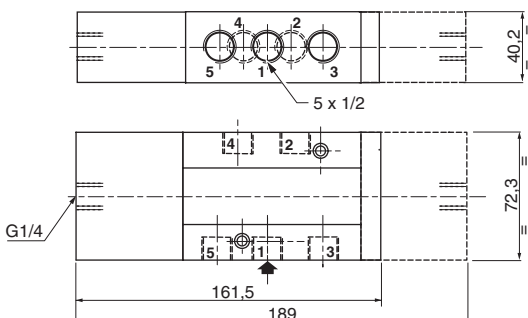



**TYPE 03: No prefix (suffixes 551: "GD", "SL" or "GD SL" suffix 553: "GD")**  
Air operated version  
551: IP65 / II 1 GD c  
553: IP65 / II 2 GD c

551A121 / 551A122



553A121 / 553A122

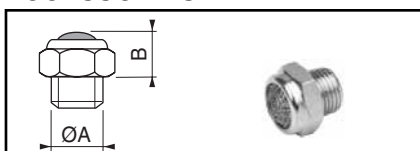


- ① Connector rotatable by 90° increments (cable 6 - 10 mm)
- ② Manual operator location
- ③ EEx d certified cable gland (on request)
- ⊖ Connectable pilot exhaust port
- ⊕ Non-connectable pilot exhaust port

type	prefix option	power level	weight <sup>(1)</sup>			
			monostable		bistable	
			551	553	551	553
01	CTNK	basic power	1,66	-	2,60	-
02	ISSC	low power	1,05	-	1,39	-
03	-	-	0,86	2,52	0,99	3,07

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

### ACCESSORIES



ØA	-	1/8	1/4	1/2
B	-	10	11	14

**exhaust protector (stainless steel)**