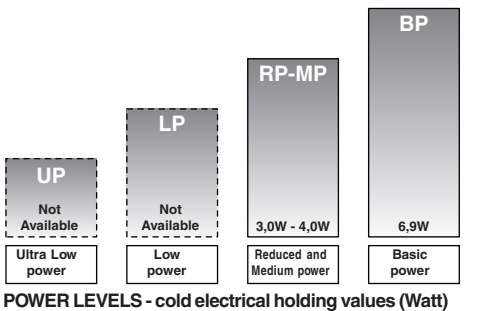
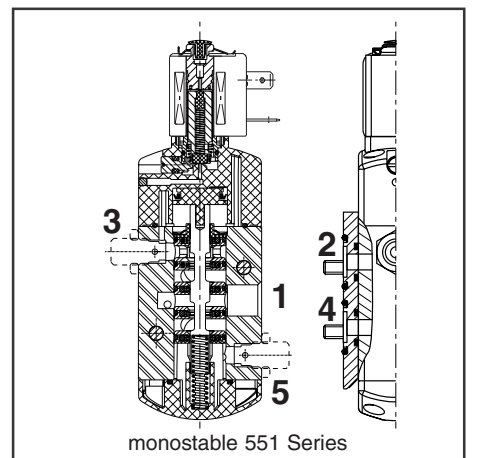
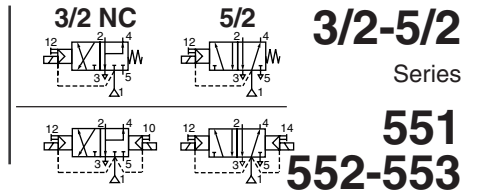




SPOOL VALVES

pilot operated or air operated, spool type
single/dual solenoid or air (mono/bistable function)
aluminium body, "NAMUR" style, 1/4 to 1/2



FEATURES

- ASCO/JOUCOMATIC solenoid valves satisfy all relevant EC Directives
- 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 spool valves have threaded port connections and "NAMUR" style interface
- The same spool valve can be adapted for 3/2 NC or 5/2 functions for controlling double-acting and single-acting actuators
- All the exhaust ports of this spool valve are pipable, providing better environmental protection, particularly recommended for sensitive areas such as clean rooms, and applications in the pharmaceutical and food processing sectors
- The valves offer environmental protection against the ingress of liquids, dusts or any other foreign matter (environmental-protected construction)
- Epoxy moulded coil for general service applications

GENERAL

Differential pressure 2 - 10 bar [1 bar = 100 kPa]
Flow (Qv at 6 bar) 1/4 = 700 l/min (ANR)
3/8 - 1/2 = 3000 l/min

fluids (*)	temperature range (TS)	seal materials (*)
air, inert gas, filtered	-25°C to +60°C	NBR (nitrile) + PUR (polyurethane)

MATERIALS IN CONTACT WITH FLUID

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

Body	Aluminium, black anodized
End covers + interface plates	Glass-filled polyamide
Internal parts	Zamak, stainless steel, acetal (POM), aluminium
Sealing	NBR + PUR
Core and core tube	Stainless steel
Shading coil	Copper

AIR OPERATED SPECIFICATIONS

pipe size	orifice size	flow coefficient Kv		operating pressure differential (bar)			prefix optional	basic catalogue number
		(m³/h)	(l/min)	min.	max. (PS)			
(◇)	(mm)	(m³/h)	(l/min)		air (*)			
		~	=					
Pilot air operated - spring return (monostable)								
1/4	6	0,75	12,5	2	10	10	-	◇551A101 ⁽¹⁾
3/8	12	2,49	41,5	2	10	10	-	◇552A101
1/2	13	3,15	52,5	2	10	10	-	◇553A101
Pilot air operated and return (bistable)								
1/4	6	0,75	12,5	2	10	10	-	◇551A102
3/8	12	2,49	41,5	2	10	10	-	◇552A102
1/2	13	3,15	52,5	2	10	10	-	◇553A102

PILOT OPERATED SPECIFICATIONS

pipe size	orifice size	flow coefficient Kv		operating pressure differential (bar)			power level	prefix optional solenoids					basic catalogue number				
		(m³/h)	(l/min)	min.	max. (PS)			ATEX/CENELEC									
		(◇)	(mm)	(m³/h)	(l/min)			air (*)		~	=	~/=		EEx d	EEx em	EExm	EEx i
Solenoid air pilot operated - spring return (monostable)																	
1/4	6	0,6	10	2	10	10	RP	-	-	-	-	-	●	◇551A001 ⁽¹⁾			
1/4	6	0,6	10	2	10	10	MP	-	-	●	-	-	-	◇551A001 ⁽¹⁾			
3/8	12	2,49	41,5	2	10	10	BP	-	-	●	-	-	●	◇552A001			
1/2	13	2,49	41,5	2	10	10	BP	-	-	●	-	-	●	◇553A001			
Solenoid air pilot operated and return (bistable)																	
1/4	6	0,6	10	2	10	10	RP	-	-	-	-	-	●	◇551A002			
1/4	6	0,6	10	2	10	10	MP	-	-	●	-	-	-	◇551A002			
3/8	12	2,49	41,5	2	10	10	BP	-	-	●	-	-	●	◇552A002			
1/2	13	2,49	41,5	2	10	10	BP	-	-	●	-	-	●	◇553A002			

◇ Select B for NPT ANSI 1.20.3 or select G for ISO G (228/1)

● Available feature

⁽¹⁾ Certified IEC 61508 Functional Safety data, used suffix "SL"

PREFIX TABLE

prefix							description	power level			
1	2	3	4	5	6	7		LP	RP	MP	BP
S	C			D	U		Solenoid + spade plug connector, dustproof - ATEX (EN50281-1-1)	-	●	-	●
P	V						Encapsulated ATEX (EN 50028-EN50281-1-1)	-	-	●	●
S	C						Solenoid with spade plug connector (EN 60730)	-	●	-	●
						X	Other special constructions	-	●	-	●

SUFFIX TABLE

suffix					description	power level			
1	2	3	4	5		LP	RP	MP	BP
	G	D			Non-electrical, 2G/D EEx c, construction safety, gas/dust - ATEX (prEN 13463-5)	-	-	-	-
		M	S		Screw type manual operator	-	●	●	●
				M	Metering device (exhaust reducers, series 551)	-	●	●	●
		S	L		Certified IEC 61508 Functional Safety data ⁽¹⁾	-	●	●	●

⁽¹⁾ Not to use with MS suffix

PRODUCT SELECTION GUIDE

STEP 1

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

Example: G551A001

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.

Air operated version, no used prefix.

Example: PV

STEP 3

Select suffix (combination) if required. Refer to the suffix table on page 2, respect the indicated power level.

GD suffix available for air operated version only (do not use MS suffix).

Example: MS

STEP 4

Select voltage. Refer to standard voltages on page 2.

Example: 230 V / 50 Hz

STEP 4

Final catalogue / ordering number.

Example:

PV G551A001 MS 230 V / 50 Hz

OPTIONS & ACCESSORIES

catalogue number	spare parts kit no.	bronze (set of 2) (G)	exhaust protector	
			stainless steel (G)	stainless steel (NPT)
G551.... (1/8)	-	97701875	34600418 ⁽²⁾	34600482 ⁽²⁾
G552.... (3/8)	-	34600478	-	-
G553.... (1/2)	-	34600479	-	-

◆ Select **B** for NPT ANSI 1.20.3 or select **G** for ISO G (228/1)

● Available feature

- Not available

* ATEX solenoids are also approved to EN 50281-1-1 (dust) and EN 13463-1 (non electrical valves)

⁽²⁾ Provide with «SL» suffix

ORDERING EXAMPLES:

SC	G 551 A 001 MS	230V / 50 Hz
SCDU	G 551 A 002	115V / 50 Hz
PV	B 551 A 002	115V / 50 Hz
SC	G 552 A 001 MS	24V / DC
	G 553 A 102	
	G 551 A 102 GD	
	G 551 A 101 GD SL	
SC	G 551 A 001 SL	230V / 50 Hz

prefix — pipe thread — basic number — voltage — suffix

ELECTRICAL CHARACTERISTICS

Coil insulation class F

Connector specification DIN 43650, 11 mm, industry, standard B (type 01) or ISO 4400 (type 02)

Connector Spade plug (cable Ø 6-8 mm or Ø 6-10 mm)

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 range (TS) (°C)	safety code	electrical enclosure protection (EN 60529)	replacement coil		type ⁽³⁾
	inrush	holding	hot/cold	=				~	=	
	(VA)	(VA)	(W)	(W)				230 V / 50 Hz	24 V DC	
Basic power (BP)										
SC	15	7	5	5/6,9	-25 to +60	EN 60730	moulded IP65	43004649	43004647	02
SCDU	15	7	5	5/6,9	-25 to +60	II 3 D IP65 T 135°C	moulded IP65	- ⁽⁴⁾	- ⁽⁴⁾	02
PV	-	-	4	-/6,9	-40 to +65/40	II 2G/D EEx m IIC T3(AC-DC)	moulded IP65	- ⁽⁴⁾	- ⁽⁴⁾	04
Medium Power (MP)										
PV	9	5	4	3,5/4,0	-40 to +60	II 2G/D EEx m IIC T4(AC)/T5(DC)	moulded IP65	- ⁽⁴⁾	- ⁽⁴⁾	03
Reduced Power (RP)										
SC	6	3,5	2,5	2,5/3,0	-25 to +60	EN 60730	moulded IP65	43004886	43004869	01
SCDU	6	3,5	2,5	2,5/3,0	-25 to +60	II 3 D IP65 T 100°C	moulded IP65	- ⁽⁴⁾	- ⁽⁴⁾	01

⁽³⁾ Refer to the dimensional drawings on pages 3 and 4. (Air operated versions, refer to page 4, types 5 and 6)

⁽⁴⁾ Multiple coil-kits available under ATEX, consult ASCO/JOUOMATIC

All leaflets are available on: www.ascojouomatic.com

ADDITIONAL OPTIONS

- Other pipe threads are available on request
- Coil type CM25 with connector type 30 ISO 4400 (Pg 11P)
- Polyamide coil
- EEx m (Prefix "PV") execution can be supplied in various cable lengths
- Compliance with "UL" standard is available on request (552-553 ranges)
- Set of stainless steel mounting screws, catalogue number **978 02 212** (Series 551)
- Set of two exhaust reducers, G1/8, catalogue number **881 00 344** (Series 551)
- Dustproof ATEX (SCDU) with a coil and spade plug connector with lead (2 m lead), TPL 20651
- Magnetic latch execution for 551 series, TPL 20649

INSTALLATION

- Installation/maintenance instructions are included with each valve
- The solenoid valves and air operated valves can be mounted in any position without affecting operation
- IEC 61508 Functional Safety (Suffix SL), permissible temperature range: -40°C to +60°C. Probability of failure, consult ASCO/JOUCOMATIC
- Spool valve supplied with two interface plates with NAMUR mating surfaces. Depending on function (NC 3/2 or 5/2), position one of the two plates on the spool valve body before installing on actuator
- 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.)
- Dowel pin (if necessary), bolts and gaskets are standard supplied
- Threaded pipe connection identifiers are B = NPT (ANSI 1.20.3); G = G (ISO 228/1)

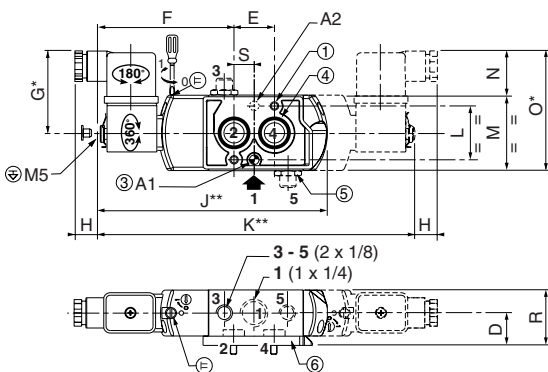
DIMENSIONS (mm), WEIGHT (kg), PILOT OPERATED



TYPE 01

Prefix "SC"
and «SCDU» Solenoids
Reduced power
Epoxy moulded
IEC 335 / 3 x DIN 46244
IP65 / II 3 D IP65 T 85°C to T 135°C (SCDU)

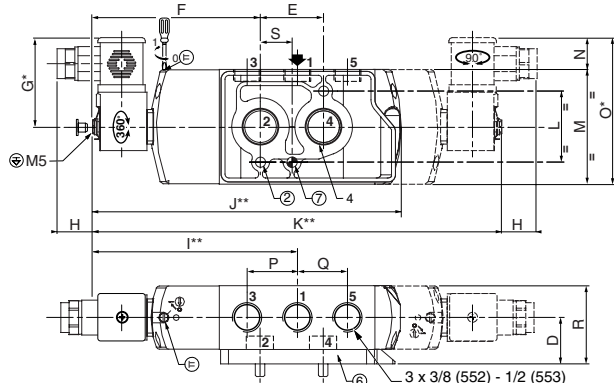
551A001 / A001 MS / A002 / A002 MS



TYPE 02

Prefix "SC"
and «SCDU» Solenoids
Basic power
Epoxy moulded
IEC 335 / ISO 4400
IP65 / II 3 D IP65 T 85°C to T 135°C (SCDU)

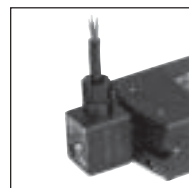
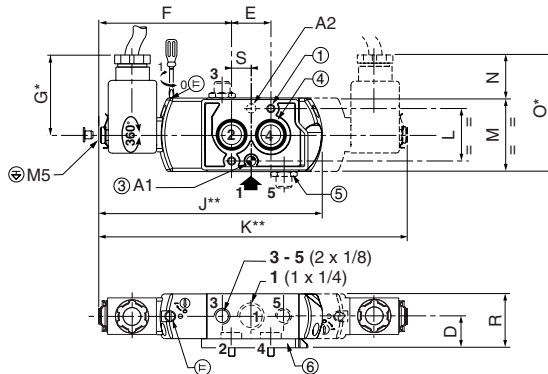
552A001 / A001 MS / A002 / A002 MS
553A001 / A001 MS / A002 / A002 MS



TYPE 03

Prefix "PV" Solenoid
Medium power
Epoxy encapsulated
2 m lead with 3 cores, length 2 m
EN 50028 and EN 50281-1-1
II 2 G/D EEx m II IP65

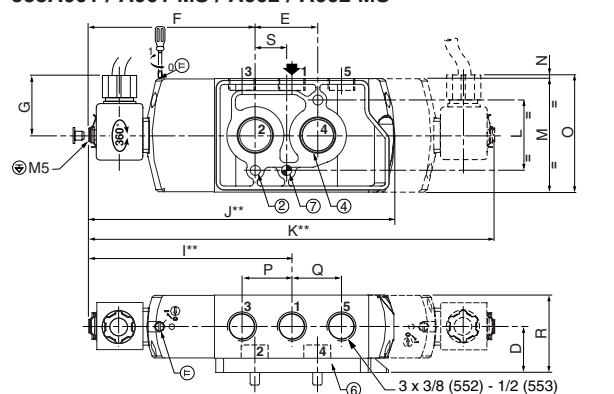
551A001 / A001 MS / A002 / A002 MS



TYPE 04

Prefix "PV" Solenoid
Basic power
Epoxy encapsulated
2 m lead with 3 cores, length 2 m
EN 50028 and EN 50281-1-1
II 2 G/D EEx m II IP65

552A001 / A001 MS / A002 / A002 MS
553A001 / A001 MS / A002 / A002 MS

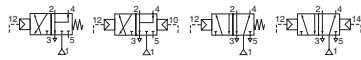


* + 15 mm for connector removal ** + 35 mm for coil removal

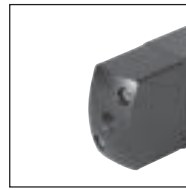
DIMENSIONS (mm), WEIGHT (kg), AIR OPERATED



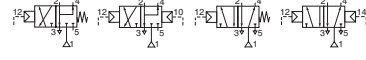
TYPE 05
No Prefix ("GD", "SL" or "GDSL" suffix)
Air operated version



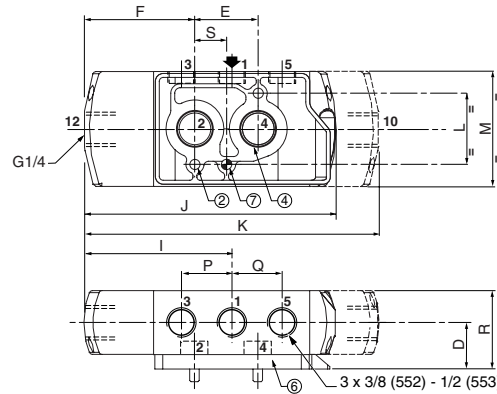
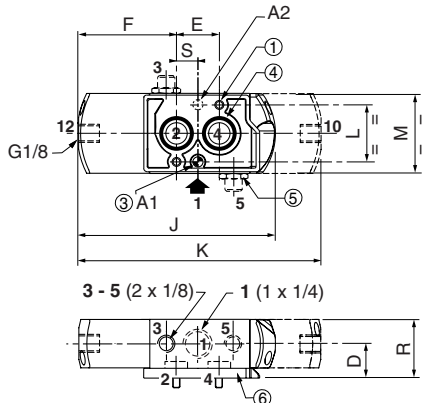
551A101 / 551A102



TYPE 06
No Prefix ("GD" suffix)
Air operated version



552A101 / 552A102 / 553A101 / 553A102

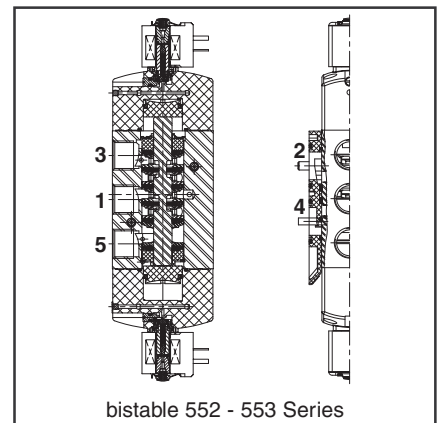
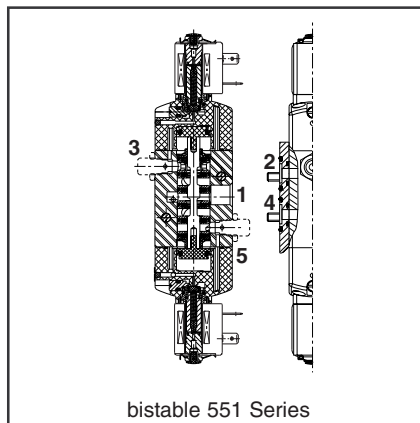
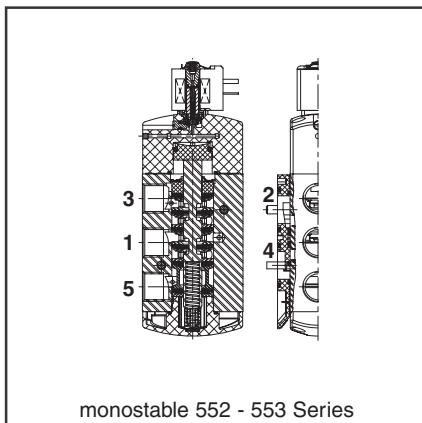


- ① 2 mounting holes 5.3 mm dia.; Spotfacing: 9 mm dia., depth 5 mm
- ② 2 mounting holes 6.5 mm dia., Spotfacing: 11 mm dia., depth 6 mm
- ③ One 5 mm (Series 551) dia. hole for dowel pin
- in position A1: 3/2 NC function plate (Series 551)
- in position A2: 5/2 function plate (Series 551)
- ④ 2 O-ring seals (supplied)
- ⑤ Exhaust reducers G 1/8 (Series 551) or protectors adaptable on orifices 3 and 5
- ⑥ Interface plates
- ⑦ One 6,5 mm (Series 552-553) dia. hole for dowel pin. Same position for interface plate 3/2NC or 5/2

type	prefix option	power level	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	weight ⁽¹⁾	
																			(2)	(3)
01 (551)	SC/SCDU	RP	19	24	83	49	13	-	139	192	32	45	27	72	-	-	33	12	0,34	0,46
02 (552)	SC/SCDU	BP	29,1	40	106,7	56,2	21,8	129,3	197,5	261	45	72,3	20	92,3	29,6	29,7	49,2	20	0,91	1,21
02 (553)	SC/SCDU	BP	29,1	40	106,7	56,2	21,8	130,3	197,5	261	45	72,3	20	92,3	31,6	31,8	49,2	20	0,90	1,20
03 (551)	PV	MP	19	24	83	43,5	-	-	139	192	32	45	21	66	-	-	33	12	0,38	0,50
04 (552)	PV	MP	29,1	40	106,7	36,5	-	129,3	197,5	261	45	72,3	0,3	72,6	29,6	29,7	49,2	20	0,94	1,24
04 (553)	PV	MP	29,1	40	106,7	36,5	-	130,3	197,5	261	45	72,3	0,3	72,6	31,6	31,8	49,2	20	0,93	1,23
05 (551)	-	-	19	24	-	-	-	-	107	128	32	45	-	-	-	-	33	12	0,31	0,41
06 (552)	-	-	29,1	40	70,7	-	-	129,3	161,5	189	45	72,3	-	-	29,6	29,7	49,2	20	0,86	1,12
06 (553)	-	-	29,1	40	70,7	-	-	130,3	161,5	189	45	72,3	-	-	31,6	31,8	49,2	20	0,85	1,11

⁽¹⁾ Incl. coil(s) and connector(s) (2) monostable (3) bistable

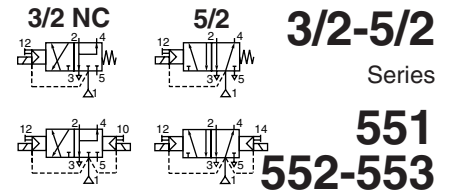
SECTIONAL DRAWINGS





SOLENOID VALVES

pilot operated, spool type
single/dual solenoid (mono/bistable function)
aluminium body, "NAMUR" style, 1/4 to 1/2



FEATURES

- ASCO/JOUCOMATIC solenoid valves satisfy all relevant EC Directives
- 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 solenoid spool valves have threaded port connections and "NAMUR" style interface
- The same spool valve can be adapted for 3/2 NC or 5/2 functions for controlling double-acting and single-acting actuators
- All the exhaust ports of this solenoid spool valve are pipable, providing better environmental protection, particularly recommended for sensitive areas such as clean rooms, and applications in the pharmaceutical and food processing sectors
- The valves offer environmental protection against the ingress of liquids, dusts or any other foreign matter (environmental-protected construction)
- Epoxy moulded coil for general service applications
- Stainless steel manual operator as standard
- Piezotronic pilot, ultra low power level for inside application, suitable to connect to process fieldbus remote I/O or valve couplers
- Possibility of external air pilot supply (ASCO solenoid interface)



GENERAL

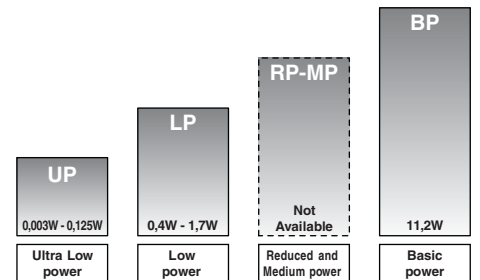
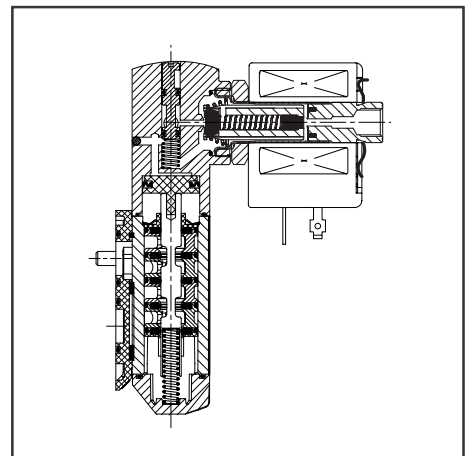
Differential pressure 2 - 10 bar [1 bar = 100 kPa]
Flow (Qv at 6 bar) 1/4 = 700 l/min (ANR)
3/8 - 1/2 = 3000 l/min

fluids (*)	temperature range (TS)	seal materials (*)
air, inert gas, filtered	-25°C to +60°C	NBR (nitrile) + PUR (polyurethane)

MATERIALS IN CONTACT WITH FLUID

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

	ASCO solenoid interface	CNOMO solenoid (pilot) interface
Body	Aluminium, black anodized	Aluminium, black anodized
End cover (spring)	Glass-filled polyamide	Glass-filled polyamide
Interface plates	Glass-filled polyamide	Glass-filled polyamide
Spool valve internal parts	Zamak, st. steel, acetal (POM), aluminium	Zamak, st. steel, acetal (POM), aluminium
Pilot internal parts	Refer to specific solenoid catalogue pages	Size 30 (E06.05.80), Refer to catalogue pages: 374 pilot (CTNK) and 195 pilot (ISSC) Size 15 (E06.36.120N), Refer to catalogue pages: 302 pilot (CFSC/CFSCIS) and 630 piezotronic pilot (PISC/PISCIS)
Pilot end-covers	Aluminium	Aluminium
Core tube	Stainless steel	-
Core and plugnut	Stainless steel	-
Core spring	Stainless steel	-
Sealings & discs	NBR	-
Top disc	PA (nylon)	-
Disc holder	CA (Acetal)	-
Cartridge (Low power)	Welded, packless AISI 430	-
Seat	Brass	-
Seat insert	CA (Acetal)	-
Shading coil	Copper	-
Riderring (Low power)	PTFE (teflon)	-



POWER LEVELS - cold electrical holding values (Watt)

ASCO SOLENOID INTERFACE SPECIFICATIONS

pipe size	orifice size	flow coefficient Kv		operating pressure differential (bar)			power level	prefix optional solenoids								basic catalogue number
				min.	max. (PS)			7 & 9	ATEX/CENELEC							
					air (*)				EF	NF	NK	EM	PV	IS	ZN	
(◆)	(mm)	(m³/h)	(l/min)	~	=		~/=	EF	NF	NK	EM	PV	IS	ZN	SC	
Solenoid air pilot operated - spring return (monostable)																
1/4	6	0,6	10	2	10	10	BP	-	●	●	●	●	-	●	●	◆551B401 ⁽¹⁾
1/4	6	0,6	10	2	10	10	BP	●	-	-	-	-	-	-	-	◆551H401 ⁽¹⁾
1/4	6	0,6	10	2	10	10	LP	-	-	-	●	○	○	○	●	◆551B301
1/4	6	0,6	10	2	10	10	LP	○	-	-	-	-	-	-	-	◆551H301
3/8	12	2,49	41,5	2	10	10	BP	-	●	●	●	●	-	●	●	◆552A401
3/8	12	2,49	41,5	2	10	10	BP	●	-	-	-	-	-	-	-	◆552G401
3/8	12	2,49	41,5	2	10	10	LP	-	-	-	●	○	○	○	●	◆552A301
3/8	12	2,49	41,5	2	10	10	LP	○	-	-	-	-	-	-	-	◆552G301
1/2	13	2,49	41,5	2	10	10	BP	-	●	●	●	●	-	●	●	◆553A401
1/2	13	2,49	41,5	2	10	10	BP	●	-	-	-	-	-	-	-	◆553G401
1/2	13	2,49	41,5	2	10	10	LP	-	-	-	●	○	○	○	●	◆553A301
1/2	13	2,49	41,5	2	10	10	LP	○	-	-	-	-	-	-	-	◆553G301
Solenoid air pilot operated and return (bistable)																
1/4	6	0,6	10	2	10	10	BP	-	●	●	●	●	-	●	●	◆551B402
1/4	6	0,6	10	2	10	10	BP	●	-	-	-	-	-	-	-	◆551H402
1/4	6	0,6	10	2	10	10	LP	-	-	-	●	○	○	○	●	◆551B302
1/4	6	0,6	10	2	10	10	LP	○	-	-	-	-	-	-	-	◆551H302
3/8	12	2,49	41,5	2	10	10	BP	-	●	●	●	●	-	●	●	◆552A402
3/8	12	2,49	41,5	2	10	10	BP	●	-	-	-	-	-	-	-	◆552G402
3/8	12	2,49	41,5	2	10	10	LP	-	-	-	●	○	○	○	●	◆552A302
3/8	12	2,49	41,5	2	10	10	LP	○	-	-	-	-	-	-	-	◆552G302
1/2	13	2,49	41,5	2	10	10	BP	-	●	●	●	●	-	●	●	◆553A402
1/2	13	2,49	41,5	2	10	10	BP	●	-	-	-	-	-	-	-	◆553G402
1/2	13	2,49	41,5	2	10	10	LP	-	-	-	●	○	○	○	●	◆553A302
1/2	13	2,49	41,5	2	10	10	LP	○	-	-	-	-	-	-	-	◆553G302

(1) Certified IEC 61508 Functional Safety data, used suffix "SL"

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	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	L						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	P			D	U		Dustproof ATEX (EN 50281-1-1) - Metal enclosure *	●	-	-	●
W	P			I	S		I.S. with Metal IP67 enclosure ATEX (EN 50020) *	○	-	-	●
W	S						Waterproof IP67 - 316 SS enclosure	●	-	-	●
W	S			D	U		Dustproof ATEX (EN 50281-1-1) - 316 SS enclosure *	-	-	-	●
W	S	E	M				316 SS "EM" enclosure ATEX (EN 50019 & EN 50020) *	-	-	-	●
W	S	N	F				Flameproof - 316 SS ATEX (EN 50018) *	-	-	-	●
Z	N						Encapsulated Non Sparking ATEX (EN 50021) *	○	-	-	●
							Threaded conduit (1/2" NPT)	●	-	-	●
							Class H - High temperature, +80°C temp. ambient, only Series 551	-	-	-	●
						X	Other special constructions	●	-	-	●

SUFFIX TABLE

suffix					description	power level			
1	2	3	4	5		LP	RP	MP	BP
		M	O		Impulse or locking type manual operator (push-turn)	●	-	-	●
				M	Metering device (exhaust reducers), only Series 551	●	-	-	●
		S	L		Certified IEC 61508 Functional Safety data ⁽²⁾	●	-	-	●

OPTIONS & ACCESSORIES

catalogue number	spare parts kit no.	bronze (set of 2) (G)	exhaust protector	
			stainless steel (G)	(NPT)
G551.... (1/8)	-	97701875	34600418 ⁽³⁾	34600482 ⁽³⁾
G552.... (3/8)	-	34600478	-	-
G553.... (1/2)	-	34600479	-	-

- ◆ Select B for NPT ANSI 1.20.3 or select G for ISO G (228/1)
- 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)
- (2) Not to use with MO suffix
- (3) Provide with «SL» suffix
- (4) Prefix EF should always be used with the letter H in the basic number.

ORDERING EXAMPLES:

SC	G 551	B 401	230V / 50 Hz
SC	G 551	B 401SL	230V / 50 Hz
SC	G 551	B 402MO	230V / 50 Hz
SCHT	B 551	B 402MO	230V / 50 Hz
ISSC	G 553	A 302MO	24V / DC
WPIS	B 552	A 301	24V / DC
EM	B 552	A 402MO	230V / 50 Hz
EF	G 551	H 401MS	240V / 60 Hz

prefix⁽⁴⁾ voltage
 pipe thread basic number⁽⁴⁾ suffix

All leaflets are available on: www.ascojoucomatic.com

ASCO SOLENOID INTERFACE 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 range (TS) (°C)	safety code	electrical enclosure protection (EN 60529)	replacement coil		type ⁽¹⁾
	inrush	holding		hot/cold				~	=	
	(VA)	(VA)	(W)	(W)				230 V / 50 Hz	24 V DC	
Basic power (BP)										
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 135°C(-)/T 200°C(=)	moulded IP65	- ⁽³⁾	- ⁽³⁾	01
WP/WS	55	23	10,5	9/11,2	-40 to +75	EN 60730	steel 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 IP67	- ⁽³⁾	- ⁽³⁾	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	400-405-117	-	02
(WS)NF/NL	-	-	-	9/11,2	-60 to +40/60/75	II 2G/D EEx d IIC T6/T5/T4	alu/steel IP67	-	400-405-142	02
NK	55	23	10,5	9/11,2	-40 to +50/60	II 2G/D EEx d IIB+H ₂ 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 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	- ⁽³⁾	- ⁽³⁾	05
EF	55	23	10,5	9/11,2	-40 to +54/40	NEMA type 7 and 9	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	- ⁽³⁾	- ⁽³⁾	01
Low power (LP)										
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 IP67	400-926-097	400-926-042	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 IP67	- ⁽³⁾	- ⁽³⁾	08
PV	-	-	-	1,7/1,7	-40 to +60	II 2G/D EEx m II T4	moulded IP65	-	- ⁽³⁾	09
EF	-	-	-	1,7/1,7	-40 to +40	NEMA type 7 and 9	NEMA 4X	-	- ⁽³⁾	10
ISSC ⁽²⁾	-	-	-	0,4/0,4	-40 to +60	II 2G/D EEx ia IIC T6	moulded IP65	-	268-976-001	11
WPIS ⁽²⁾	-	-	-	0,4/0,4	-40 to +60	II 2G/D EEx ia IIC T6	steel IP67	-	268-900-001	08
ZN	-	-	-	1,7/1,7	-20 to +50	II 3G/D EEx nA II T3	moulded IP65	-	- ⁽³⁾	07

⁽¹⁾ Refer to the dimensional drawings on pages 10 to 12.

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

⁽³⁾ Multiple coil-kits available under ATEX, consult ASCO/JOUCOMATIC

- Not available

prefix option	safety parameters				
	U _i	I _i	P _i	L _i	C _i
	= (DC) (V)	(mA)	(W)	(µF)	(mH)
Low power (LP)					
ISSC	32	500	1,5	0	0
WPIS	32	500	1,5	0	0

ADDITIONAL OPTIONS

- Valves configured for external pilot air supply with ASCO solenoid interface, 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 Series 551 steel solenoid housing
- Set of stainless steel mounting screws, catalogue number **978 02 212** (Series 551)
- Set of two exhaust reducers, G1/8, catalogue number **881 00 344** (Series 551)

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), permissible temperature range: -40°C to +60°C. Probability of failure, consult ASCO/JOUCOMATIC
- Spool valve supplied with two interface plates with NAMUR mating surfaces. Depending on function (NC 3/2 or 5/2), position one of the two plates on the spool valve body before installing on actuator
- 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.)
- Dowel pin (if necessary), bolts and gaskets are standard supplied
- Threaded pipe connection identifiers are B = 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 (M20 x 1,5 (prefix "ET") optional) and is supplied without cable gland
- EEx d (prefix "NK") enclosure is provided with a 3/4" NPT threaded entry hole (1/2" NPT (prefix "T") or M20 x 1,5 (prefix "ET") optional) 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

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/GENELEC						CNOMO size 30	CNOMO size 15
					air (*)			EEExd	EEExi	EEExi	EEExi	IP65	IP65		
(◆)	(mm)	(m³/h)	(l/min)	~	=	~/=	CTNK	ISSC	CFSCIS	PISCIS	CFSC	PISC			
Solenoid air pilot operated - spring return (monostable)															
1/4	6	0,6	10	2	10	10	LP	-	-	-	-	●	-	-	◆551A501 ⁽¹⁾
1/4	6	0,6	10	2	-	8	BP	-	-	○	-	-	-	-	◆551A501 ⁽¹⁾
1/4	6	0,6	10	2	10	10	LP	●	-	-	-	-	-	-	◆551A201 ⁽¹⁾
1/4	6	0,6	10	2	10	10	BP	-	○	-	-	-	-	-	-
1/4	6	0,6	10	2	8	8	UP	-	-	-	○	-	●	-	◆551A501 ⁽¹⁾
3/8	12	2,49	41,5	2	10	10	LP	-	-	-	-	●	-	-	◆552A501
3/8	12	2,49	41,5	2	-	8	LP	-	-	○	-	-	-	-	◆552A501
3/8	12	2,49	41,5	2	10	10	BP	●	-	-	-	-	-	-	◆552A201
3/8	12	2,49	41,5	2	10	10	LP	-	○	-	-	-	-	-	◆552A201
3/8	12	2,49	41,5	2	8	8	UP	-	-	-	○	-	●	-	◆552A501
1/2	13	2,49	41,5	2	10	10	LP	-	-	-	-	●	-	-	◆553A501
1/2	13	2,49	41,5	2	-	8	LP	-	-	○	-	-	-	-	◆553A501
1/2	13	2,49	41,5	2	10	10	BP	●	-	-	-	-	-	-	◆553A201
1/2	13	2,49	41,5	2	10	10	LP	-	○	-	-	-	-	-	◆553A201
1/2	13	2,49	41,5	2	8	8	UP	-	-	-	○	-	●	-	◆553A501
Solenoid air pilot operated and return (bistable)															
1/4	6	0,6	10	2	10	10	LP	-	-	-	-	●	-	-	◆551A502
1/4	6	0,6	10	2	-	8	LP	-	-	○	-	-	-	-	◆551A502
1/4	6	0,6	10	2	10	10	BP	●	-	-	-	-	-	-	◆551A202
1/4	6	0,6	10	2	10	10	LP	-	○	-	-	-	-	-	◆551A202
1/4	6	0,6	10	2	8	8	UP	-	-	-	○	-	●	-	◆551A502
3/8	12	2,49	41,5	2	10	10	LP	-	-	-	-	●	-	-	◆552A502
3/8	12	2,49	41,5	2	-	8	LP	-	-	○	-	-	-	-	◆552A502
3/8	12	2,49	41,5	2	10	10	BP	●	-	-	-	-	-	-	◆552A202
3/8	12	2,49	41,5	2	10	10	LP	-	○	-	-	-	-	-	◆552A202
3/8	12	2,49	41,5	2	8	8	UP	-	-	-	○	-	●	-	◆552A502
1/2	13	2,49	41,5	2	10	10	LP	-	-	-	-	●	-	-	◆553A502
1/2	13	2,49	41,5	2	-	8	LP	-	-	○	-	-	-	-	◆553A502
1/2	13	2,49	41,5	2	10	10	BP	●	-	-	-	-	-	-	◆553A202
1/2	13	2,49	41,5	2	10	10	LP	-	○	-	-	-	-	-	◆553A202
1/2	13	2,49	41,5	2	8	8	UP	-	-	-	○	-	●	-	◆553A502

(1) Certified IEC 61508 Functional Safety data, used suffix "SL"

PREFIX TABLE

prefix							description	power level			
1	2	3	4	5	6	7		UP	LP	RP	BP
CNOMO solenoid (pilot) interface size 30											
I	S			S	C		Intrinsically safe with pilot 195, ATEX (EN 50020) *	-	○	-	-
C	T			N	K		Flameproof with pilot 374, ATEX (EN 50018) *	-	-	-	●
CNOMO solenoid (pilot) interface size 15											
C	F	S	C				Solenoid with spade plug connector (EN 60730), 302 pilot	-	●	-	-
C	F	S	C	I	S		Intrins. safe, spade plug connector, pilot 302; ATEX (EN 50020) *	-	○	-	-
P	I	S	C				Solenoid with spade plug connector (EN 60730), 630 pilot	●	-	-	-
P	I	S	C	I	S		Intrinsically safe with pilot piezotronic 630; ATEX (EN 50020) *	○	-	-	-

SUFFIX TABLE

suffix					description	power level			
1	2	3	4	5		UP	LP	RP	BP
CNOMO solenoid (pilot) interface size 30									
		M	S		Screw type manual operator ⁽²⁾	-	-	-	●
		M	O		Impulse or locking type manual operator (push-turn) ⁽²⁾	-	○	-	-
			M		Metering device (exhaust reducers), only Series 551	○	●	-	●
S	L				Certified IEC 61508 Functional Safety data	-	-	-	●
CNOMO solenoid (pilot) interface size 15									
		M	S		Screw type manual operator ⁽²⁾	-	●	-	-
		M	O		Impulse manual operator	○/●	○/●	-	-
			M		Metering device (exhaust reducers), only Series 551	○/●	●	-	●
S	L				Certified IEC 61508 Functional Safety data	○/●	○/●	-	-

OPTIONS & ACCESSORIES

catalogue number	spare parts kit no.	exhaust protector		
		bronze (set of 2) (G)	(G)	(NPT)
G551.... (1/8)	-	97701875	34600418 ⁽³⁾	34600482 ⁽³⁾
G552.... (3/8)	-	34600478	-	-
G553.... (1/2)	-	34600479	-	-

◆ Select B for NPT ANSI 1.20.3 or select G for ISO G (228/1)

● 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)

(2) Not to use with «SL» suffix

(3) Provide with «SL» suffix

ORDERING EXAMPLES:

CTNK	G 551 A 201	115V / 50 Hz
CTNK	G 551 A 202MS	115V / 50 Hz
CTNK	G 551 A 201SL	115V / 50 Hz
CFSC	G 552 A 502	230V / 50 Hz
CFSC	B 552 A 501MO	230V / 50 Hz
CFSC	G 552 A 501SLMO	230V / 50 Hz
ISSC	G 552 A 201MO	24V / DC
PISCIS	G 551 A 502MO	6V / DC
PISCIS	G 551 A 501SLMO	6V / DC
PISCIS X	G 551 A 501MO	TPL20666 24HV / DC

prefix _____ voltage _____
 pipe thread _____ TPL _____
 basic number _____ suffix _____

All leaflets are available on: www.ascojoucomatic.com

CNOMO SOLENOID (PILOT) INTERFACE ELECTRICAL CHARACTERISTICS

Coil insulation class	F
Connector	Spade plug (cable Ø 6 - 10 mm or Ø 6 - 7 mm)
Connector specification	ISO 4400 or size 15, AMP 2,8x0,5 - 9,4 mm (302 and piezotronic)
Standard voltages ⁽³⁾	DC(=) CTNK: 24V - 48V ; CFSC: 5V - 12V - 24V - 48V ; CFSCIS: 12V ; ISSC : 24V PISC: 24V à 70V ; PISCIS : 6V, 8V, 12V, 24V
	AC (~) CTNK/CFSC: 24V - 48V - 115V - 230V/50Hz; Other voltages and 60Hz are available on request PISC: 24V à 70V

prefix option	power ratings				operator ambient temperature range (TS) (°C)	safety code	electrical enclosure protection (EN 60529)	replacement coil		type ⁽¹⁾
	inrush ~	holding ~	hot/cold =	~				=		
	(VA)	(VA)	(W)	(W)				230 V / 50 Hz	24 V DC	
Basic power										
CTNK	55	23	10,5	9/11,2	-20 to +50/60	II 2G/D EEx d IIB+H ₂ T4(AC/DC)	aluminium IP65	400-405-117	400-405-142	12
Low power										
CFSC	1,5	1,35	1,3	1/1,2	-15 to +50	EN 60730	moulded IP65	-	-	14
CFSCIS ⁽⁴⁾⁽⁵⁾	-	-	-	0,5	-10 to +50	II 2G/D EEx ia IIC T5	moulded IP65	-	-	16
ISSC ⁽²⁾⁽⁴⁾	-	-	-	1,6	-40 to +50	II 2G/D EEx ia IIC T6	moulded IP65	-	-	13
Ultra low power										
PISC	-	-	-	0,007	0 to +60	-	moulded IP65	-	-	15
PISCIS ⁽³⁾⁽⁴⁾ 6V	-	-	-	0,003	-20 to +50	II 2GD EEx ia IIC T6	moulded IP65	-	-	15
PISCIS ⁽³⁾⁽⁴⁾ 8V	-	-	-	0,022	-20 to +50	II 2GD EEx ia IIC T6	moulded IP65	-	-	15
PISCIS ⁽³⁾⁽⁴⁾ 12LV	-	-	-	0,012	-20 to +50	II 2GD EEx ia IIC T6	moulded IP65	-	-	15
PISCIS ⁽³⁾⁽⁴⁾ 12HV	-	-	-	0,032	-20 to +50	II 2GD EEx ia IIC T6	moulded IP65	-	-	15
PISCIS ⁽³⁾⁽⁴⁾ 24LV	-	-	-	0,046	-20 to +50	II 2GD EEx ia IIC T6	moulded IP65	-	-	15
PISCIS ⁽³⁾⁽⁴⁾ 24HV	-	-	-	0,125	-20 to +50	II 2GD EEx ia IIC T6	moulded IP65	-	-	15

⁽¹⁾ Refer to the dimensional drawings on pages 12 and 13

⁽²⁾ Min. operating current (I_{min}): 0,037 A

⁽³⁾ Piezotronic standards voltages:

Prefix PISC, 24 V to 70 V AC/DC, peak current max.: 80 mA, holding current max.: 1 mA

Prefix PISCIS:

6 V DC / 3 mW 8 V DC / 22 mW 12LV DC / 12 mW 12HV DC / 32 mW 24LV DC / 46 mW 24HV DC / 125 mW

Turn ON voltage U_{ON} : 6 .. 9 V 7,2 .. 12 V 10,8 .. 16 V 10,8 .. 16 V 21,6 .. 28 V 21,6 .. 28 V

Turn OFF voltage U_{OFF} : 3 V 3,2 V 3,3 V 3,3 V 5 V 5 V

Peak current : 6 mA 10 mA 6,8 mA 8,1 mA 10 mA 14 mA

Holding current : 0,5 mA 2,8 mA 1 mA 2,7 mA 1,9 mA 5,2 mA

Cable + max. barrier resistances ($R_s + R_c$) : 1200 Ω max. 300 Ω max. 1200 Ω max. 470 Ω max. 1200 Ω max. 470 Ω max.

⁽⁴⁾ Intrinsically safe pilots: Check the electrical characteristics in the corresponding catalogue pages (CFSCIS/ISSC/PISCIS: 302/195/630 pilots).

⁽⁵⁾ CFSCIS (302 pilot), 12 V ^{0%+30%}: $I_{(ON)min.}$ = 33 mA; $U_{(ON)min.}$ = 11,9 V; $U_{(max)}$ recommended = 15,6 V; $U_{(OFF)}$ turn off = 3,3 V; $I_{(OFF)}$ = 10 mA

- Not available

prefix option	safety parameters				
	U_i	I_i	P_i	L_i	C_i
	= (DC) (V)	(mA)	(W)	(μF)	(mH)
Low power (LP)					
CFSCIS	28	300	1,6	0	0
ISSC	28	115	1,6	0	0
Ultra low power (UP)					
PISCIS	30	200	0,9	0	0

ADDITIONAL OPTIONS

- Used TPL number: TPL **20665** (Piezotronic, PISCIS prefix, 12 HV (32 mW))
TPL **20666** (Piezotronic, PISCIS prefix, 24 HV (125 mW))
- Other pipe threads are available on request
- Set of stainless steel mounting screws, catalogue number **978 02 212** (Series 551)
- Set of two exhaust reducers, catalogue number **881 00 344** (Series 551)

INSTALLATION

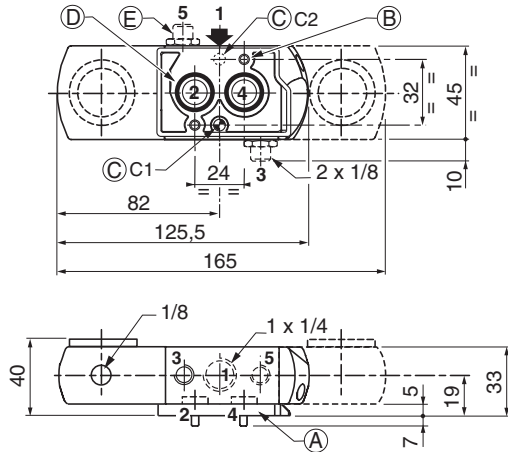
- Installation/maintenance instructions are included with each valve
- The solenoid valves can be mounted in any position without affecting operation
- IEC 61508 Functional Safety (Suffix SL), permissible temperature range: -40°C to +60°C. Probability of failure, consult ASCO/JOUCOMATIC
- Spool valve supplied with two interface plates with NAMUR mating surfaces. Depending on function (NC 3/2 or 5/2), position one of the two plates on the spool valve body before installing on actuator
- 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.)
- Dowel pin (if necessary), bolts and gaskets are standard supplied
- Threaded pipe connection identifiers are B = 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 (1/2" NPT (prefix "T") or M20 x 1,5 (prefix "ET") optional) and is supplied without cable gland
- Valves with suffix "SL" should be provided with of the specific exhaust protectors

DIMENSIONS (mm), WEIGHT (kg)

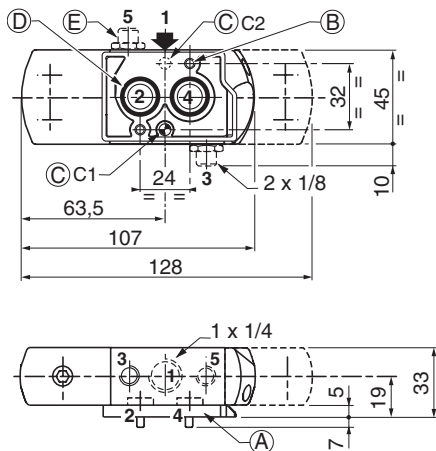


Series 551

Types 01 to 11

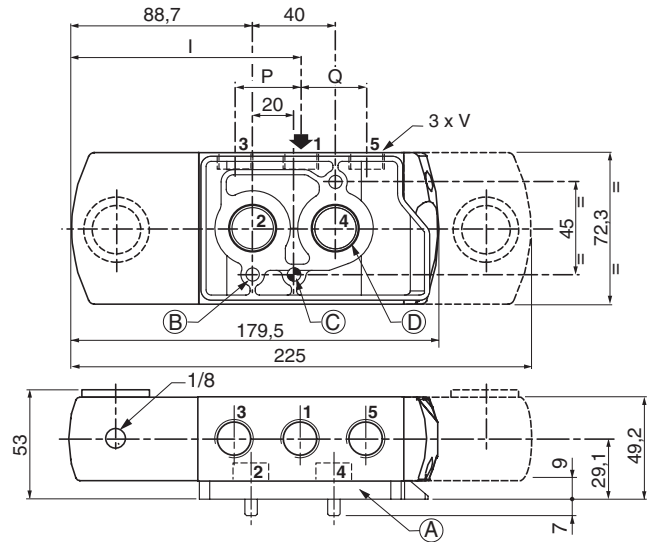


Types 12 to 15

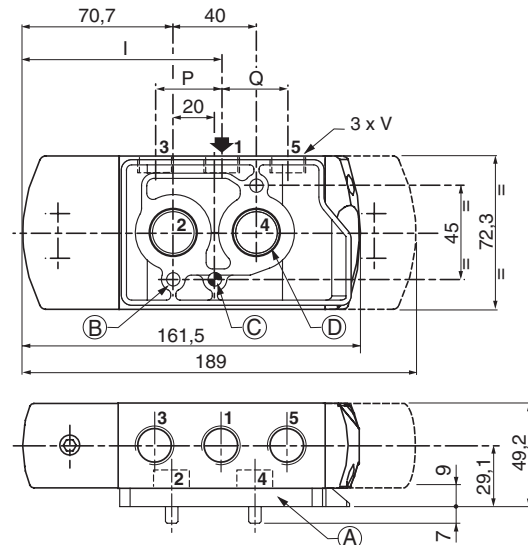


Series 552-553

Types 01 to 11



Types 12 to 15



	type	I	P	Q	V
552	01 to 11	111,3	29,6	29,7	3/8
	12 to 15	93,3	29,6	29,7	3/8
553	01 to 11	112,3	31,6	31,8	1/2
	12 to 15	94,3	31,6	31,8	1/2

- (A) Interface plates
- (B) 2 mounting holes 5.3 mm dia.; Spotfacing: 9 mm dia., depth 5 mm; 2 screws (CHc M5 x 35), engaged length: 7 mm
- (C) One 5 mm dia. hole for dowel pin
 - in position C1: 3/2 NC function plate
 - in position C2: 5/2 function plate
- (D) 2 O-ring seals (supplied)
- (E) Exhaust reducers G 1/8 (Series 551) or protectors adaptable on orifices 3 and 5

- (A) Interface plates
- (B) 2 mounting holes 6.5 mm dia.; Spotfacing: 11 mm dia., depth 6 mm; 2 screws (CHc M6 x 50), engaged length: 7 mm
- (C) One 6,5 mm dia. hole for dowel pin
 - in position C1: 3/2 NC function plate
 - in position C2: 5/2 function plate
- (D) 2 O-ring seals (supplied)

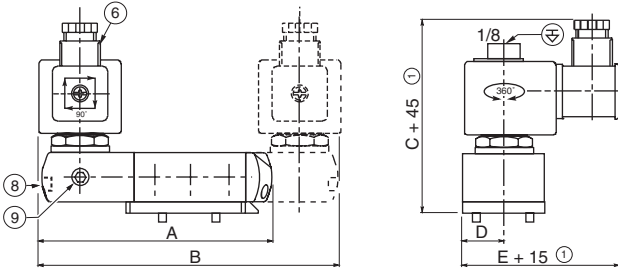
DIMENSIONS (mm), WEIGHT (kg)



TYPE 01

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

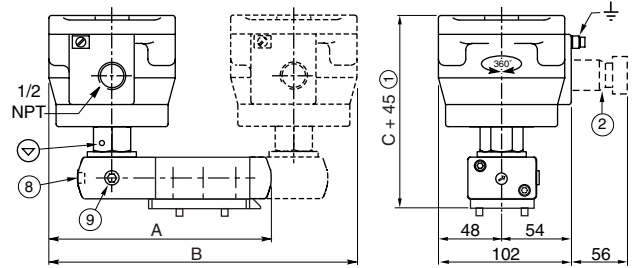
551B401 / B402 / B401 MO / B402 MO
 552A401 / A402 / A401 MO / A402 MO
 553A401 / A402 / A401 MO / A402 MO



TYPE 02

Prefix "NF", "NL" and "WSNF" Solenoid
 Basic power
 Aluminium, steel; epoxy coated (NF and NL)
 AISI 316 SS (WSNF)
 EN50018 and EN 50281-1-1
 IP67 / II 2 G/D EEx d IIC

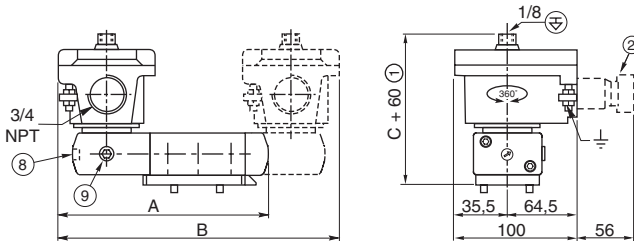
551B401 / B402 / B401 MO / B402 MO
 552A401 / A402 / A401 MO / A402 MO
 553A401 / A402 / A401 MO / A402 MO



TYPE 03

Prefix "NK" Solenoid
 Basic power
 Aluminium; epoxy coated
 EN50018 and EN 50281-1-1
 IP65 / II 2 G/D EEx d IIB + H2

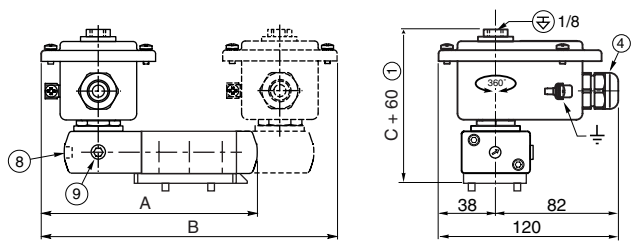
551B401 / B402 / B401 MO / B402 MO
 552A401 / A402 / A401 MO / A402 MO
 553A401 / A402 / A401 MO / A402 MO



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 / EN50019 & EN50028 / EN 50281-1-1
 IP67 / II 3 D IP65 T 135°C to T 200°C / II 2 G/D EEx em II

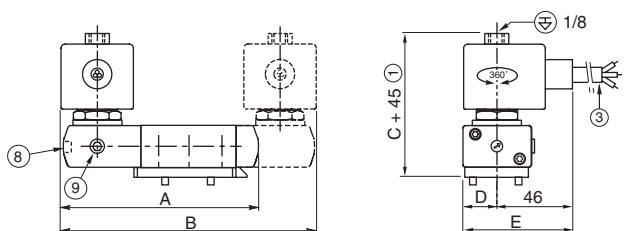
551B401 / B402 / B401 MO / B402 MO
 552A401 / A402 / A401 MO / A402 MO
 553A401 / A402 / A401 MO / A402 MO



TYPE 05

Prefix "PV" Solenoid
 Basic power
 Epoxy encapsulated
 EN50028 and EN 50281-1-1
 II 2 G/D EEx m II
 IP65

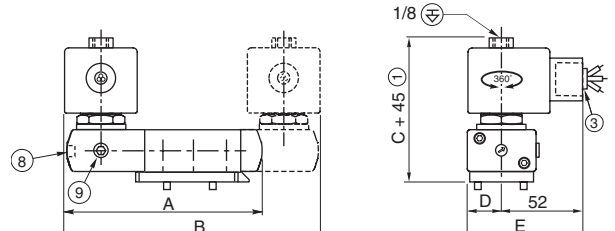
551B401 / B402 / B401 MO / B402 MO
 552A401 / A402 / A401 MO / A402 MO
 553A401 / A402 / A401 MO / A402 MO



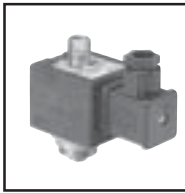
TYPE 06

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

551H401 / H402 / H401 MO / H402 MO
 552G401 / G402 / G401 MO / G402 MO
 553G401 / G402 / G401 MO / G402 MO



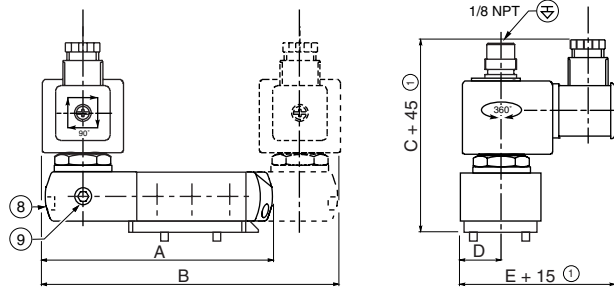
DIMENSIONS (mm), WEIGHT (kg)



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

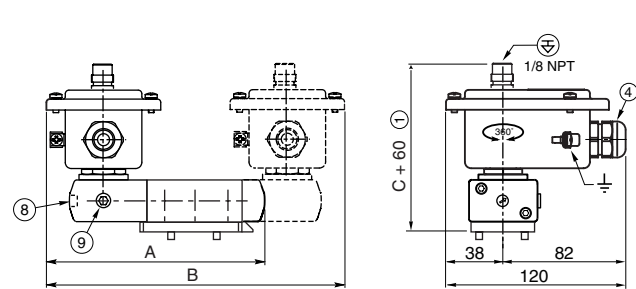
551B301 / B302 / B301 MO / B302 MO
 552A301 / A302 / A301 MO / A302 MO
 553A301 / A302 / A301 MO / A302 MO



TYPE 08

Prefix "WP", "WS" / "EM", "WSEM" Solenoid
 Prefix "WPIS" Solenoid
 Low power
 Metal; epoxy coated / AISI 316 SS
 IEC 335 / EN50019 & EN50028 / EN50020 / EN 50281-1-1
 IP67 / II 2 G/D EEx em II / II 2G/D EEx ia IIC

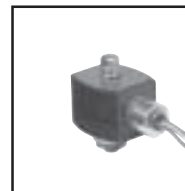
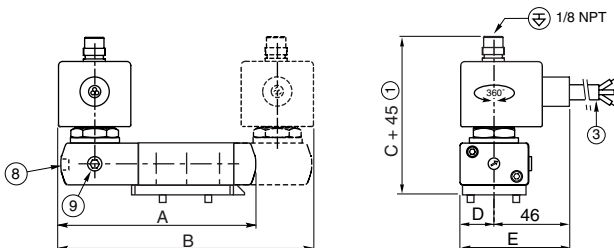
551B301 / B302 / B301 MO / B302 MO
 552A301 / A302 / A301 MO / A302 MO
 553A301 / A302 / A301 MO / A302 MO



TYPE 09

Prefix "PV" Solenoid
 Low power
 Epoxy encapsulated
 EN50028 and EN 50281-1-1
 II 2 G/D EEx m II
 IP65

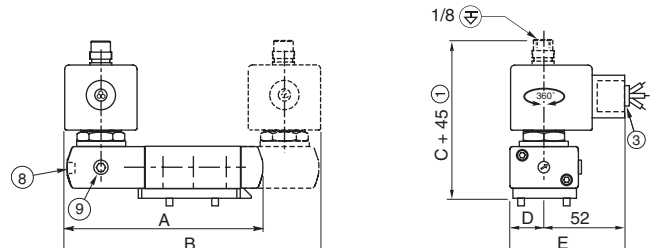
551B301 / B302 / B301 MO / B302 MO
 552A301 / A302 / A301 MO / A302 MO
 553A301 / A302 / A301 MO / A302 MO



TYPE 10

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

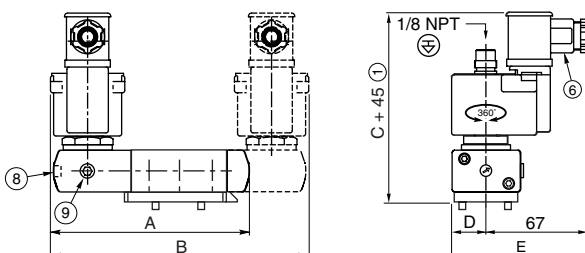
551H301 / H302 / H301 MO / H302 MO
 552G301 / G302 / G301 MO / G302 MO
 553G301 / G302 / G301 MO / G302 MO



TYPE 11

Prefix "ISSC" Solenoid
 Low power
 Polypropylene moulded
 EN50020 and EN 50281-1-1
 II 2 G/D EEx ia IIC
 IP65

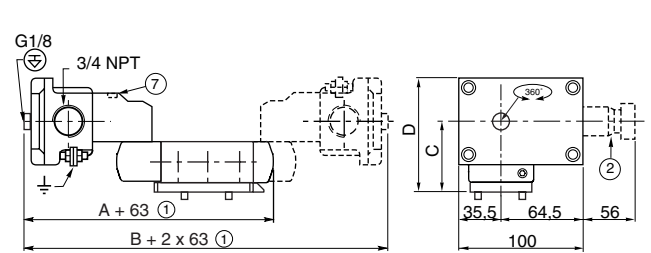
551B301 / B302 / B301 MO / B302 MO
 552A301 / A302 / A301 MO / A302 MO
 553A301 / A302 / A301 MO / A302 MO



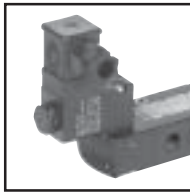
TYPE 12

Prefix "CTNK" Solenoid
 Basic power
 374 pilot, light alloy
 Aluminium; epoxy coated
 EN50018 and EN 50281-1-1
 IP65 / II 2 G/D EEx d IIB + H2

551A201 MS / A202 MS
 552A201 MS / A202 MS
 553A201 MS / A202 MS

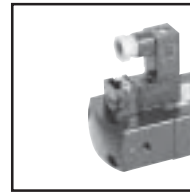
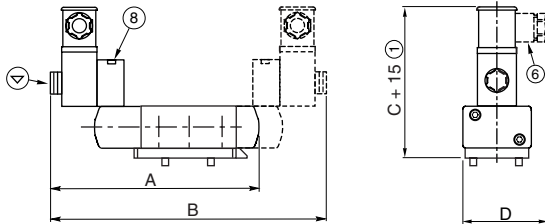


DIMENSIONS (mm), WEIGHT (kg)



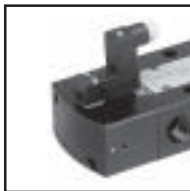
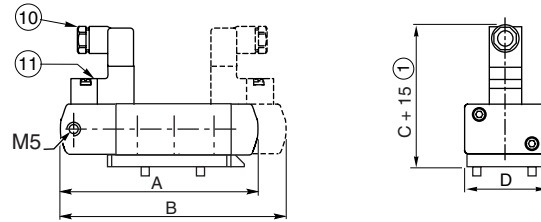
TYPE 13
 Prefix "ISSC" Solenoid
 Low power
 195 pilot
 Polyamide
 EN50020 and EN 50281-1-1
 II 2 G/D EEx ia IIC

551A201 MO / A202 MO
 552A201 MO / A202 MO
 553A201 MO / A202 MO



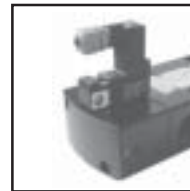
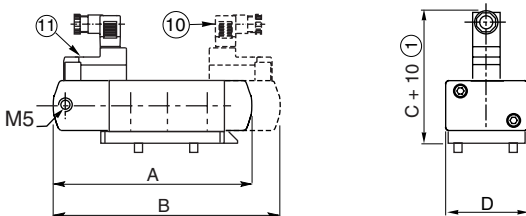
TYPE 14
 Prefix "CFSC" Solenoid
 Low power
 302 pilot
 Aluminium; epoxy coated
 IEC 335 / size 15 (Pg 7P)
 IP65

551A501 MO / A502 MO
 552A501 MO / A502 MO
 553A501 MO / A502 MO



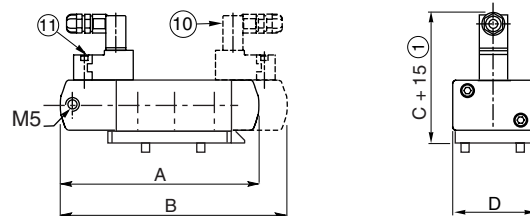
TYPE 15
 Prefix "PISC" and "PISCIS" Solenoids
 Ultra low power
 Piezotronic pilots
 Polyamide, epoxy coated
 IEC 335 (PISC)
 EN50020 and EN 50281-1-1 (PISCIS)
 IP65 / II 2 GD EEx ia IIC

551A501 MO / A502 MO
 552A501 MO / A502 MO
 553A501 MO / A502 MO



TYPE 16
 Prefix "CFSCIS" Solenoid
 Low power
 302 pilot
 Aluminium; epoxy coated
 EN50020 and EN 50281-1-1
 II 2 G/D EEx ia IIC

551A501 MO / A502 MO
 552A501 MO / A502 MO
 553A501 MO / A502 MO



- ① Extra length for disassembly, depending on model
- 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
- ⑤ Pg 13,5P gland for 8 to 13 mm dia. cable
- ⑥ Connector rotatable by 90° increments, Pg 11P (Ø 6 - 10 mm)
- ⑦ Screwdriver type manual operator, suffix MS
- ⑧ Impulse or locking (push/turn) type manual operator, suffix MO
- ⑨ External pilot air supply, 1/8 pipe size
- ⑩ Connector rotatable by 90° increments, Pg 7P (Ø 6 - 7 mm)
- ⑪ Impulse type manual operator, suffix MO
- ⊕ Connectable pilot exhaust port
- ⊖ Non-connectable pilot exhaust port

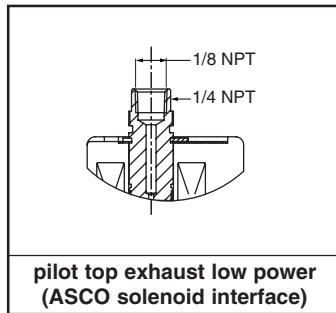
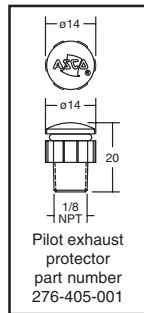
DIMENSIONS (mm), WEIGHT (kg)



type	prefix option	power level	A		B		C		D		E		weight ⁽¹⁾					
			551	552/553	551	552/553	551	552/553	551	552/553	551	552/553	monostable			bistable		
													551	552	553	551	552	553
01	SC / SCDU / ZN	BP	125	179,5	174	225	107,7	121,2	22,5	36,15	86,5	100,2	0,76	1,66	1,56	1,27	2,22	2,12
02	NF	BP	152	224,3	218	314,6	146,8	160,3	-	-	-	-	1,80	2,70	2,60	3,35	4,36	4,26
03	NK	BP	137	193,5	190	253	107	120,5	-	-	-	-	1,00	2,18	2,08	1,79	2,74	2,64
04	WP/WS/WSDU/WPDU	BP	142	196,2	198	258,3	108	121,5	-	-	-	-	0,79	1,67	1,57	1,33	2,24	2,14
04	(WS)EM	BP	142	196,2	198	258,3	108	121,5	-	-	-	-	0,79	1,67	1,57	1,33	2,24	2,14
05	PV	BP	126	179,5	166	225	93	106,5	22,5	36,15	67,5	81,2	0,77	1,67	1,57	1,29	2,23	2,13
06	EF	BP	126,5	183	167	232	90,5	104	22,5	36,15	74,5	88,2	0,78	1,67	1,57	1,30	2,24	2,14
07	SC / ZN	LP	126,5	180,5	167	227	106,5	120	22,5	36,15	87,5	101,2	0,76	1,87	1,77	1,51	2,43	2,33
08	WP/WS/(WS)EM	LP	142	196,2	198	258,3	107,2	120,7	-	-	-	-	1,00	1,88	1,78	1,33	2,45	2,35
08	WPIS	LP	142	196,2	198	258,3	107,2	120,7	-	-	-	-	1,00	1,88	1,78	1,33	2,45	2,35
09	PV	LP	126	179,5	166	225	105,5	119	22,5	36,15	67,5	81,2	0,98	1,88	1,78	1,50	2,44	2,34
10	EF	LP	126,5	183	167	232	105,5	119	22,5	36,15	74,5	88,2	0,97	1,88	1,78	1,49	2,45	2,35
11	ISSC	LP	116	182	169	230	129,5	143	22,5	36,15	89,5	103,5	0,80	1,70	1,60	1,36	2,26	2,16
12	CTNK	BP	177	244,5	270	355	48	64,7	82	98,7	-	-	1,66	2,18	2,08	1,70	3,26	3,16
13	ISSC	LP	140	213,5	198	293	107	120,5	45	72,3	-	-	0,52	1,65	1,55	0,80	2,73	2,63
14	CFSC	LP	107	161,5	128	189	83	99	45	72,3	-	-	0,37	1,31	1,21	0,55	2,39	2,29
15	PISC/PISCIS	UP	107	161,5	128	189	84	100	45	72,3	-	-	0,31	1,25	1,15	0,49	2,33	2,23
16	CFSCIS	LP	107	161,5	128	189	84	100	45	72,3	-	-	0,33	1,27	1,17	0,53	2,37	2,27

⁽¹⁾ Incl. coil(s) and connector(s)

ACCESSORIES



Exhaust protector

	Bronze				Stainless steel			
Ø A	1/8	1/4	3/8	1/2	1/8	1/4	3/8	1/2
B	7	-	8	13	16	-	-	-