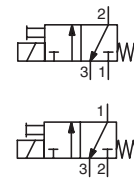




# SOLENOID PILOT VALVES

with 290/390 valves, 32, 50 & 63 mm operators  
direct operated  
1/8

NC



**3/2**  
Series  
**189/banjo**  
**356**

## FEATURES

- Compact design and low weight enabling easy installation on all series 290 & 390 valves with 32, 50 & 63 mm operators
- Manual operator allows an easy installation
- AC/DC interchangeability of the solenoid without disassembly of the valve
- Simple installation (supply port, solenoid valve body, coil and connector rotatable through 360°), built-in exhaust regulator (pilot valve series 189/banjo coupling)
- Compliance with UL and CSA standards (pilot valve series 356 coupling)
- The solenoid valves satisfy all relevant EU Directives

## GENERAL

**Differential pressure** See «SPECIFICATIONS» [1 bar = 100 kPa]  
**Maximum viscosity** 40 cSt (mm<sup>2</sup>/s)  
**Response time** See page 7 ([www.asco.com](http://www.asco.com))

pilot (series)	fluids (*)	temperature range (TS)	seal materials (*)
189 banjo	filtered air	-10°C to +60°C	NBR (nitrile)
356	filtered air and water		FPM (fluoroelastomer)

## MATERIALS IN CONTACT WITH FLUID

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

	Banjo pilot 189	Pilot 356
<b>Body</b>	PA, glass fibre reinforced	Brass or stainless steel AISI 316
<b>Core tube</b>	Brass	Stainless steel
<b>Core and plugnut</b>	Stainless steel	Stainless steel
<b>Springs</b>	Stainless steel	Stainless steel
<b>Seats</b>	PA + Stainless steel	Brass or stainless steel
<b>Seals</b>	NBR	FPM
<b>Shading coil</b>	Copper	Copper

## ELECTRICAL CHARACTERISTICS

**Coil insulation class** F  
**Connector** Spade plug (cable Ø 6-8 mm)  
**Connector specification** DIN 43650, 11 mm, industry standard B  
**Electrical safety** IEC 335  
**Electrical enclosure protection** Moulded IP65 (EN 60529)  
**Standard voltages** DC (=) : 24V - 48V  
 (Other voltages and 60 Hz on request) AC (~) : 24V - 48V - 115V - 230V / 50 Hz

prefix option	power ratings				operator ambient temperature range (TS) (C°)	replacement coil		type <sup>(1)</sup>
	inrush ~		holding ~			~	=	
	(VA)	(VA)	(W)	(W)		230 V/50 Hz	24 V DC	
-	6	3,5	2,5	2,5 / 3	-10 to +60	400127-097	400904-542	01
SC	12	6	4	5 / 6,9	-10 to +60	400127-197	400127-142	02

<sup>(1)</sup> Refer to the dimensional drawings on the following page.

## SPECIFICATIONS

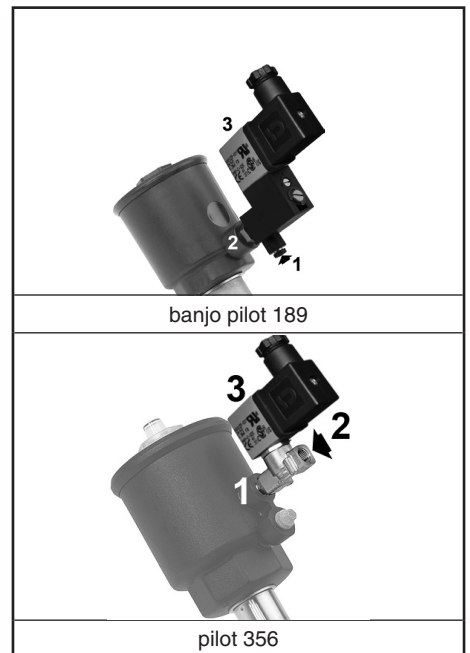
pipe size	orifice size		flow coefficient Kv				operating pressure differential (bar)						power coil (W)		catalogue number with maintained manual operator	
							min. <sup>(4)</sup>	max. (PS)				~				=
								air (*)		water (*)						
G	2↔1 (mm)	1-2→3 (mm)	2↔1 (m <sup>3</sup> /h)	1-2→3 (l/min)	2↔1 (m <sup>3</sup> /h)	1-2→3 (l/min)										
<b>NC - Normally closed, series 189 banjo pilot</b>																
1/8 <sup>(2)</sup>	1,2	1,2	0,03	0,5	0,04	0,7	0	10	10	-	-	2,5	3	18900032		
<b>NC - Normally closed, series 189 banjo pilot with built-in exhaust regulator</b>																
1/8 <sup>(2)(5)</sup>	1,2	1,2	0,03	0,5	0,04	0,7	0	10	10	-	-	2,5	3	18900047		
<b>NC - Normally closed, series 356 pilot, brass body</b>																
1/8 <sup>(2)</sup>	1,6	1,2	0,08	1,33	0,05	0,8	0	10	10	10	10	4	6,9	SCG356B053VMS <sup>(3)</sup>		
<b>NC - Normally closed, series 356 pilot, stainless steel body</b>																
1/8 <sup>(2)</sup>	1,6	1,2	0,08	1,33	0,05	0,8	0	10	10	10	10	4	6,9	SCG356B058VMS <sup>(3)</sup>		

- <sup>(2)</sup> Pipe size:  
 - Port 1: O.D. 4 mm instant fitting (189 banjo) / 1/8 (series 356)  
 - Port 2: 1/8  
 - Port 3 (exhaust): M5

<sup>(3)</sup> Solenoid valve with 1/8 adapter.

<sup>(4)</sup> Refer to leaflets on series 290/390 valves which show the minimum pilot pressure for each version of the product.

<sup>(5)</sup> Exhaust regulator integrated at port 3, M5.



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**OPTIONS**

- Explosionproof enclosures for use in zones 1/21-2/22, categories 2-3 to ATEX Directive 2014/34/EU ([www.asco.com](http://www.asco.com))
- Connector with visual indication and peak voltage suppression or with cable length of 2 m ([www.asco.com](http://www.asco.com))
- M5 exhaust regulator to fit port 3, catalogue number: **34600380**

**INSTALLATION**

- The solenoid valves can be mounted in any position without affecting operation
- Pipe connection identifier is G = G (ISO 228/1)
- Installation/maintenance instructions are included with each valve

**ORDERING EXAMPLES:**

18900032	230V / 50 Hz
SC G356B053 VMS	24V / DC
SC G356B053 VMS	230V / 50 Hz
catalogue number _____	_____ voltage

**DIMENSIONS (mm), WEIGHT**

**TYPE 01**

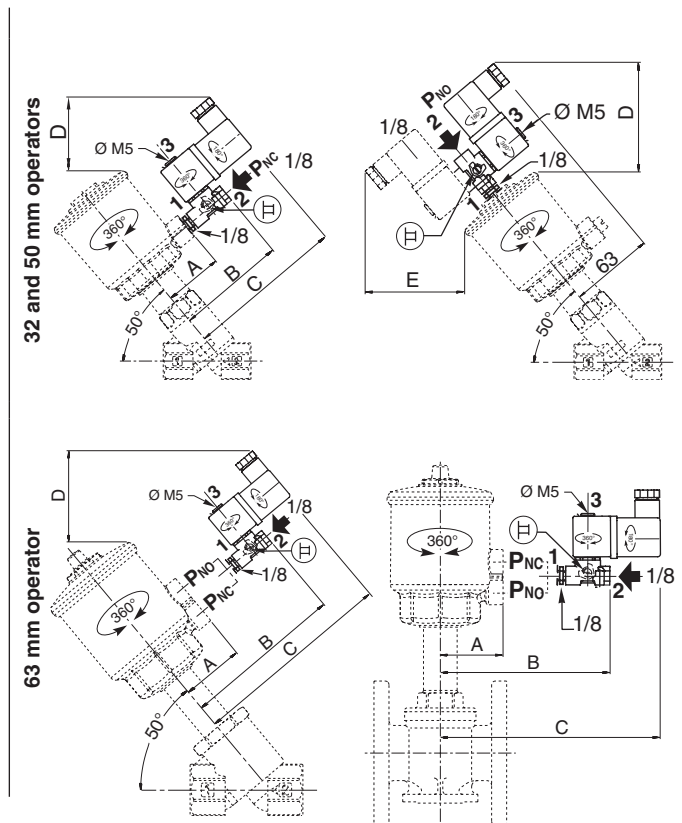
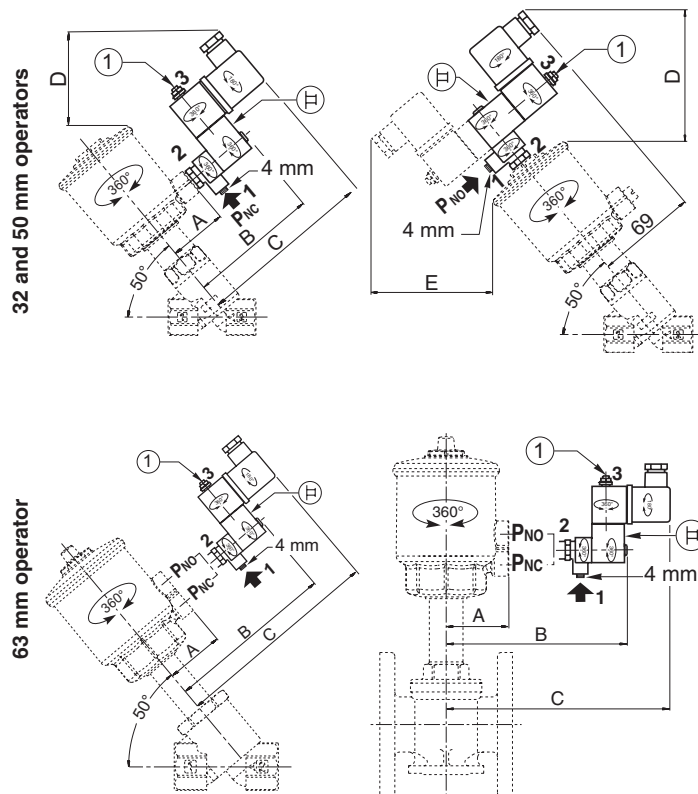
Pilot 189/banjo  
Epoxy moulded  
IEC 335 / DIN 43650  
IP65

18900032 - 18900047


**TYPE 02**

Prefix "SC" Solenoid  
Pilot 356  
Epoxy moulded  
IEC 335 / DIN 43650 / IP65

SCG356B053VMS - SCG356B058VMS



type	prefix option	pilot	operator diameter	A	B	C	D		E	pilot inlet port		weight <sup>(1)</sup>
							NC	NO		NC	NO	
01	-	189/banjo series	32 mm	27	78,5	113,5	79	102	85	P <sub>NC</sub>	P <sub>NO</sub>	0,175
			50 mm	43	93	149	67	83	74			
			63 mm	50,5	100	156	53	62	-			
02	SC	356 series	32 mm	27	68	102	65	90	85	P <sub>NC</sub>	P <sub>NO</sub>	0,165
			50 mm	43	84	118	56	80	74			
			63 mm	50,5	91,5	125,5	41	59	-			

① Exhaust regulator location

<sup>(1)</sup> including adapter connection (series 356), coil and connector.



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