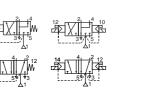


SOLENOID VALVES

integrated pilot operated, spool type

single/dual solenoid

aluminium body, 1/4", NAMUR and THREADED style



3/2 NC & 5/2 function Namur Version

5/2 function Threaded Version

3/2 5/2 Series 531

FEATURES

- The "NAMUR" style spool valve comes with threaded port connection and Namur interface, while the "THREADED" style spool valve comes with threaded port connection
- All the exhaust ports of this spool valve are connectable, providing better environmental protection, particularly recommended for sensitive areas such as clean rooms as well as applications in the pharmaceutical and food processing sectors
- The valve offers environmental protection against the ingress of liquids, dusts or any other foreign matters (environmentally-protected construction)

GENERAL

Differential pressure Flow (Qv at 6 bar)		2 - 10 bar [1 bar = 100 kPa] 1100 l/min (ANR)				
[Fluid (*)	Temperature Range (TS)	Seal Materials (*)			
	air, inert gas, filtered	- 10°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 verifiedBodyAluminium, black anodizedEnd cover (spring)Glass fiber filled PAInternal partsZamak, stainless steel, POM, aluminiumSealsNBR+PURCore and plugnutStainless steelShading coilCopper

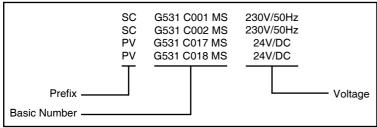
Pipe			ow		ating Pre erential (Power	Optional Prefix	Solenoids	Basic
Size		Size	Defficient Kv		Max.	(PS)	Level	ATEX / IECEX / NEPSI	IP65	Catalog
		r r	. v	Min.	A	ir		Ex m	1602	Number
(G)	(mm)	(m³/h)	(l/min)		AC	DC	AC/DC	PV	SC	
NAMU	R 3/2 NC - 5	5/2 - Sole	noid air	pilot oper	ated - spi	ring retur	n (Single	Solenoid)		
1/4	6	0.95	15.5	2	10	10	RP	-	•	G531C001 MS
1/4	6	0.95	15.5	2	10	10	MP	•	-	G531C001 MS
NAMU	R 3/2 NC - 5	5/2 - Sole	noid air	pilot oper	ated (Dou	uble Soler	noid)	· · ·		
1/4	6	0.95	15.5	2	10	10	RP	-	•	G531C002 MS
1/4	6	0.95	15.5	2	10	10	MP	•	-	G531C002 MS
THRE	ADED 5/2 - 9	Solenoid	air pilot	operated	- spring I	return (Si	ngle Sole	noid)		
1/4	6	0.95	15.5	2	10	10	RP	-	•	G531C017 MS
1/4	6	0.95	15.5	2	10	10	MP	•	-	G531C017 MS
THRE	ADED 5/2 - 9	Solenoid	air pilot	operated	(Double	Solenoid)				
1/4	6	0.95	15.5	2	10	10	RP	-	•	G531C018 MS
1/4	6	0.95	15.5	2	10	10	MP	•	-	G531C018 MS

RP - Reduced Power, MP - Medium Power

Available feature - Not available



ORDERING EXAMPLES



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

The temperature range of the complete solenoid valvle is determined by the limitations of both temperature range above

ELECTRICAL CHARACTERISTICS

Coil insulation class	F
Electrical safety	IEC 335
Standard voltages	DC 24V - 48V
(Other voltages and 60 Hz available on request)	AC 24V - 48V - 115V - 230V/50Hz

	Coil Type	Norminal Power Rating		ating	Operator	Electricial	Replacement Coil				
Prefix Option		Inrush AC	Holo A	ding C	Hot/Cold DC	Ambient Temperature Range (TS)		Enclosure Protection	AC	DC	Type ⁽¹⁾
		(VA)	(VA)	(W)	(W)	(°C)		(EN60529)	230V / 50 Hz	24V DC	
Medium	Medium Power (MP)										
PV	EM5	9	5	4	3.0/4.0	-40 to +60	IECEX/©II2G Ex mb IIC T5 T3 Gb IECEX/©II2D Ex mb IIIC T100°C T200°C Db NEPSI Ex mb IIC T5 T3 Gb NEPSI Ex mbD 21 T100°C T200°C	Moulded IP67	129658 -IE-197	129658 -IE-042	02 / 04
Reduced Power (RP)											
SC	CM22	6	3.5	2.5	2.5/3.0	-25 to +60	EN60730	Moulded IP65	43004886	43004869	01 / 03

(1) Refer to the dimensional drawings

ELECTRICAL CONNECTIONS

F	Prefix	Connection
Γ	SC	Spade plug connector with cable gland DIN 43650, 11mm, industry standard B, for cables with an outer diameter from 6 to 8 mm (Type 01 / 03)
	PV	Moulded - in cable, standard length 2m (Type 02 / 04)

ADDITIONAL OPTIONS

- Other pipe threads are available on request
- Plug with visual indication and peak voltage suppression or with cable length of 2m, SC prefix only

(Consult ASCO NUMATICS Office)

• Moulded-in cable, standard length 2m (Type 02 /04), other length on request

INSTALLATION

- Installation/maintenance instructions are included with each valve
- The solenoid valves can be mounted in any position without affecting operation
- 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 onto 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 identifier is: 8 = NPT (ANSI 1.20.3); G = G (ISO 228/1)

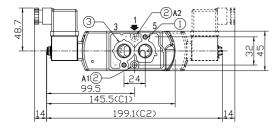
ASCO numatics..

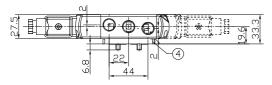
DIMENSIONS (mm), WEIGHT (Kg)

SERIES 531 NAMUR 3/2 - 5/2 WAY



TYPE 01: Prefix SC Moulded IP65 Reduced power IEC 335 / DIN 43650 G531C001 MS / G531C002 MS



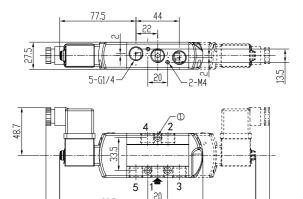


(C1): monostable (C2): bistable Port 1, 3 and 5: G 1/4

SERIES 531 THREADED 5/2 WAY



TYPE 03: Prefix SC Moulded IP65 Reduced power IEC 335 / DIN 43650 G531C017 MS / G531C018 MS



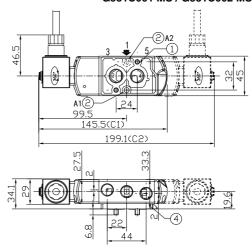


- (C1): monostable
- (C2): bistable
- (1) 3 mounting holes 4.2 mm dia.

99.5



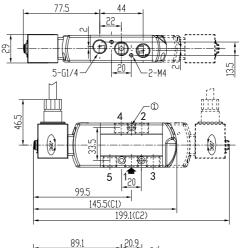
TYPE 02: Prefix PV IECEX/© II2G Ex mb IIC T5.. T3 Gb IECEX/© II2D Ex mb IIC T100°C.. T200°C Db NEPSI Ex mb IIC T5.. T3 Gb NEPSI Ex mbD 21 T100°C.. T200°C Medium power Epoxy moulded EN60079 -18 and EN 61241-18 G531C001 MS / G531C002 MS



- ① 2 mounting holes: 5.3 mm dia. (Spotfacing: 9 mm dia., depth 5 mm)
- ② One 5 mm dia. hole for dowel pin:
 - in position A1: 3/2 NC function plate
- in position A2: 5/2 function plate
- ③ 2 O-ring seals (supplied)
- (4) Interface plate



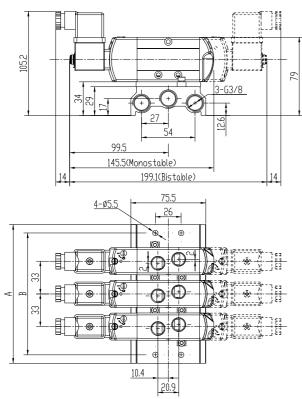
TYPE 04: Prefix PV IECEX/☺ II2G Ex mb IIC T5.. T3 Gb IECEX/☺ II2D Ex mb IIC T100°C.. T200°C Db NEPSI Ex mb IIC T5.. T3 Gb NEPSI Ex mb 21 T100°C.. T200°C Medium power Epoxy moulded EN60079 -18 and EN 61241-18 G531C017 MS / G531C018 MS



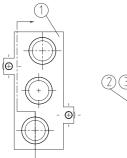


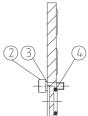
DIMENSIONS (mm), WEIGHT (Kg)

SERIES 531 THREADED 5/2 WAY (MANIFOLD ASSEMBLY)



BLANK STATION PLATE KIT 294018-001

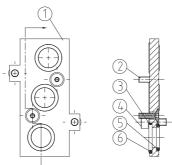




DET. NO	NO. REQ'D	PART NAME
1	1	Blank Station Plate
2	2	Screw
3	2	Lockwasher
4	3	O-ring

MANIFOLDOF STATIONS	DIM A	DIM B	PART NO.
2 Stations	107	90	M531-1-2-P
3 Stations	140	123	M531-1-3-P
4 Stations	173	156	M531-1-4-P
5 Stations	206	189	M531-1-5-P
6 Stations	239	222	M531-1-6-P
7 Stations	272	255	M531-1-7-P
8 Stations	305	288	M531-1-8-P
9 Stations	338	321	M531-1-9-P
10 Stations	371	354	M531-1-10-P
11 Stations	404	387	M531-1-11-P
12 Stations	437	420	M531-1-12-P

ADAPTOR KIT 294017-001



DET. NO	NO. REQ'D	PART NAME
1	1	Adaptor
2	2	Screw
3	2	Lockwasher
4	2	Screw
5	3	O-ring
6	3	O-ring