

ELETTROVALVOLE
SPOOL VALVES

EVJ55 - EVJ56

EVJ55 (LISCG551B201 - internal reference)

ELETTROVALVOLA A SINGOLO SOLENOIDE, A SICUREZZA INTRINSECA
SINGLE COIL SPOOL VALVE, INTRINSICALLY SAFE



SIL 3 Capable
On request

IP 65

IECE_x

ATEX

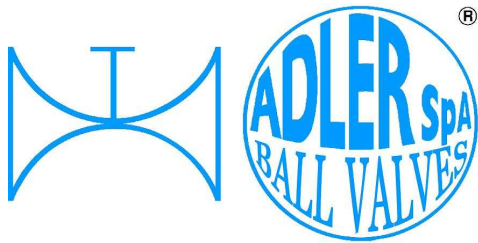
Ex ia IIC T6 Ga
Ex ib IIIC T85°C Db

(internal reference - LISCG551B202) **EVJ56**

ELETTROVALVOLA A DOPPIO SOLENOIDE, A SICUREZZA INTRINSECA
TWO COILS SPOOL VALVE, INTRINSICALLY SAFE

DIPONIBILI CON SILENZIATORI IN OTTONE O IN PLASTICA.
DISPONIBILI CON SILENZIATORI RIDUTTORE DI FLUSSO.

AVAILABLE WITH BRASS OR PLASTIC SILENCERS.
AVAILABLE WITH FLOW NOISES SUPPRESSOR REDUCING.



**ELETTROVALVOLE
SPOOL VALVES**

EVJ55 - EVJ56

EVJ55 – SINGLE COIL SOLENOID VALVE (LISCG551B201- internal reference)

EVJ56 – TWO COILS SOLENOID VALVE (LISCG551B202- internal reference)

CARATTERISTICHE GENERALI / GENERAL FEATURES

- Elettrodistributore a comando servoassistito con raccordi filettati e piano di posa secondo NAMUR.
- Adatto alle funzioni 3/2 NC e 5/2 per il comando di attuatori a semplice e doppio effetto.
- Elettrovalvole a basso assorbimento per l'utilizzo in atmosfere potenzialmente esplosive in accordo alla direttiva ATEX 2014/34/EU.
- Tutte le vie di scarico sono canalizzabili, assicurando così una migliore protezione ambientale, raccomandata in particolare in zone sensibili come camere bianche e per le applicazioni nei settori farmaceutico e agroalimentare.
- Conforme alle Direttive CE applicabili.
- Distributori monostabili EVJ55-56 conformi alla norma IEC 61508 di sicurezza funzionale, utilizzabili fino a SIL 3.
- I distributori monostabili EVJ55-56 hanno il ritorno a molla.
- Temperatura di funzionamento:
-40°C < T < +65°C
- Elettrovalvole conformi alle Direttive IEC e EN: 60079-11.
- Peso: 330 gr (EVJ55) – 400 gr (EVJ56)
- 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 function for controlling double-acting and single acting actuators.
- Low power valves for use in potentially explosive atmospheres according to ATEX Directive 2014/34/EU.
- All the exhaust port of this 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 spool valves satisfy all relevant EC Directives.
- The monostable spool valve EVJ55-56 complies the IEC 61508 functional safety standard, and can be used up to SIL3.
- The monostable spool valve EVJ55-56 have spring return.
- Operating temperature:
-40°C < T < +65°C
- The solenoid valves satisfy IEC-EN directives: 60079-11.
- Peso: 330 gr (EVJ55) – 400 gr (EVJ56)

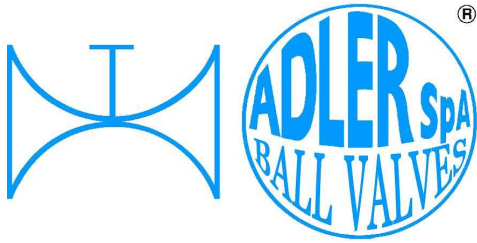
SPECIFICHE PNEUMATICHE / PNEUMATIC SPECIFICATION

- **Pressione di utilizzo:**
Pmin: 2 bar
Pmax: 10,4 bar.
- **Caratteristiche di passaggio:**
Ø passaggio: 6mm.
Portata (Qv a 6 bar): 700 l/min.
- **Fluido di funzionamento:**
Fluidi: aria, gas neutri, filtrati (50µm), senza condensa (punto rugiada -20°C).
- **Operating pressure:**
Pmin: 2 bar
Pmax: 10,4 bar.
- **Flow diameter:**
Orifice size: Ø 6mm.
Portata (Qv a 6 bar): 700 l/min.
- **Operating media:**
Fluids: air, inert gas, filtered (50µm), without condensate (dew point -20°C).

MATERIALE / MATERIAL

(*) Verificare la compatibilità del fluido con i materiali / Verify the compatibility of the fluids in contact with the materials

- **Cassetto, materiali in contatto con il fluido (*):**
Corpo: alluminio anodizzato nero.
Testata (ritorno a molla): PA caricata fibre di vetro.
Piastrine interfaccia: PA caricata fibre di vetro.
Parti interne: Zamak, acciaio inox, POM, alluminio.
Testata pilota: Alluminio.
- **Pilota, materiali in contatto con il fluido (*):**
Corpo: Alluminio.
Parti interne: Acciaio inox .
Guarnizioni: EPM.
- **Pilota, altri materiali:**
Bobina: Resina termoplastica.
- **Spool, materiali in contatto con il fluido (*):**
Body: aluminium, black anodized.
End cover (spring): glass-filled PA.
Interface plates: glass-filled PA.
Internal parts: Zamak, stainless steel, POM, aluminium.
Pilot end cover: aluminium.
- **Pilot, materials in contact with the fluid (*)**
Body: Aluminium.
Internal parts: Stainless steel.
Seals: EPM.
- **Pilot, other materials:**
Coil: thermoplastic resin.



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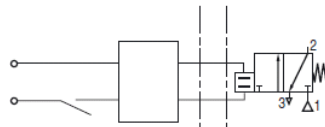
CARATTERISTICHE ELETTRICHE / ELECTRICAL FEATURES

- Disponibili bobine:
12V DC 0,5 W (ON REQUEST)
24V DC 0,5 W
- Classe di protezione: IP 65
- Connessione elettrica: spade plug cavo Ø6-8 mm
- Solenoide attivo 100% ED;
- Bobina con classe di isolamento F;
- Connettore approvato ATEX-IECEX.
- Disponibili bobine:
12V DC 0,5 W (ON REQUEST)
24V DC 0,5 W
- Class protection: IP 65
- Electrical connection: spade plug for cable Ø6-8 mm
- Duty cycle: 100% ED, continuous operation;
- Coil isolation class F;
- IECEX-ATEX approved cable entry device.

voltage (U _n) (max. ripple 10%)	typical functional ratings			R 20°C (Ω)	operator ambient temperature range (TS) (°C)	type (³)
	I _(ON) min. (mA)	U _(ON) min. (V)	P _(ON) min. (W)			
(V)	(mA)	(V)	(W)			
Low power (LP)						
24	36	12,8	0,46	240	-40 to +65	01

safety parameters				
U _i = (DC)	I _i	P _i	L _i	C _i
(V)	(mA)	(W)	(H)	(μF)
30	300	1,6	0	0

safe area (RS interface) explosive area



Example of use with a Zener barrier installed in a non-hazardous zone

TEMPERATURE CLASSIFICATION TABLES DC (=)

P _i (watt)	maximum ambient °C ⁽¹⁾
	surface temperature T ₆ 85°C
Insulation class F (155°C) 100% E.D. ⁽²⁾	
1,6	65

⁽¹⁾ The minimum allowable ambient temperature is -40°C

⁽²⁾ This intrinsically safe valve must be connected to a specific, approved power supply (safety barrier or interface) located in a safe area. See list of safety barriers/interfaces on page 2.

⁽³⁾ Refer to the dimensional drawings on the following page.

SPECIFICATIONS

pipe size	orifice size		flow				operating pressure differential (bar)		power coil (W)	catalogue number
	1 → 2	2 → 3	at 6 bar l/min (ANR)		coefficient K _v (l/min)		min.	max. (PS) air (*)		without manual operator
	(mm)	(mm)	1 → 2	2 → 3	1 → 2	2 → 3		=	=	=
NC - Normally closed										
pad mounting	0,8	1	8	15	0,11	0,26	2	10	0,46	19500036

INSTALLATION

- Multi language installation/maintenance instructions are included with each valve
- The solenoid valves can be mounted in any position without affecting operation
- Solenoid valve supplied with mounting screws
- Pipe connections G 1/8 have standard thread according to ISO 228/1
- Electrical connection between solenoid valve and barrier/interface with cable type A or B according to EN 50039