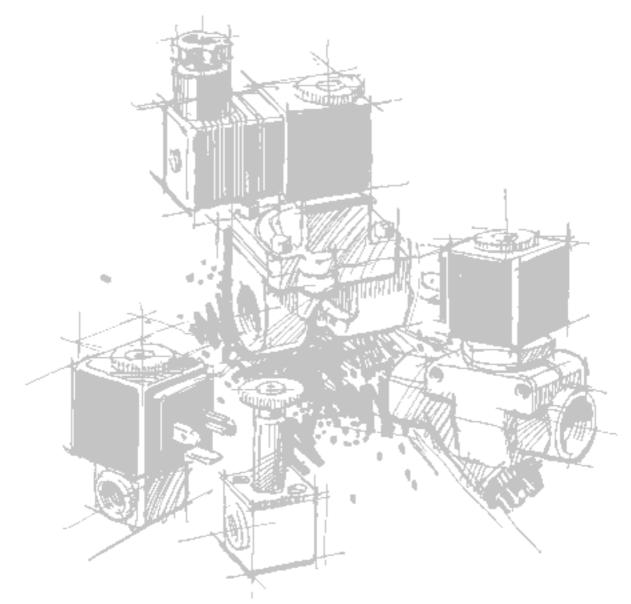
# Data sheet



Solenoid valves with built in filter 2/2-way servo-operated

Type EV220A DN 11

June 2000 DKACV.PD.100.D2.02





De-energized closed

Type EV220A for neutral liquids and gases DN 11 B

G 1/,

#### **Features**

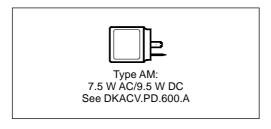


- Very compact valve for industrial and sanitary application
- Normally closed (NC) function
- Interchangeable filter (mesh size 0.6 mm)
- For water, oil, compressed air and similar neutral media
- Flow range for water: 1.27 to 7.20 m³/h
- Differential pressure: Up to 16 bar
- Viscosity: Up to 40 cSt
- Ambient temperature: Up to +50°C
- Coil enclosure: Up to IP 65

# Technical data (Valve)

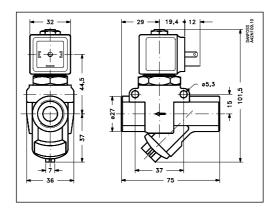
Installation	Optional, but vertical solenoid system is recommended			
Pressure range	0.5 to 16 bar			
Max. test pressure	24 bar			
Ambient temperature	−15 °C to +50 °C			
Medium temperature	-10 °C to +100 °C			
Viscosity	Max. 40 cSt			
Materials	Valve body: Armature Armature tube: Armature top: Springs: Orifice: Filter: O-rings, valve plate and diaphragm:	Brass, W.no. 2.0401 Stainless steel W.no. 1.4016 / AISI 430 Stainless steel W.no. 1.4303 / AISI 305 Stainless steel W.no. 1.4016 / AISI 430 Stainless steel W.no. 1.4310 / AISI 301 Stainless steel W.no. 1.4305 / AISI 303 Stainless steel W.no. 1.4301 / AISI 304 FKM (Viton)		

#### **Coil options**



Danfoss also offers EEx m II T4 coils for use in explosion risk areas - please see coil data sheet DKACV.PD.600.A

## **Dimensions and weight**



Weight:	
Valve body without coil	0.46 kg
Coil	0.10 kg

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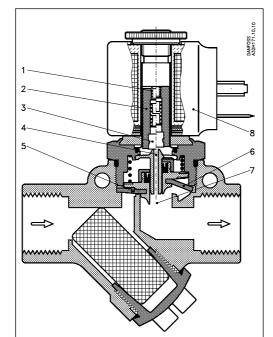
G 1/2

Type EV220A for neutral liquids and gases DN 11 B

De-energized closed



#### **Function**



Coil voltage disconnected (closed):

When the voltage is disconnected, the valve plate (3) is pressed down against the pilot orifice (4) by the closing spring (1). The pressure across the diaphragm (6) is built up via the equalizing orifice (5). The diaphragm (6) closes the main orifice (7) as soon as the pressure across the diaphragm is equivalent to the inlet pressure.

The valve will be closed for as long as the voltage to the coil is disconnected.

### Coil voltage connected (open):

When voltage is applied to the coil (8), the pilot orifice (4) is opened. As the pilot orifice is larger than the equalizing orifice (5), the pressure across the diaphragm (6) drops and therefore it is lifted clear of the main orifice (7).

The valve is now open for unimpeded flow and will be open for as long as the minimum differential pressure across the valve is maintained, and for as long as there is voltage to the coil.

# 1. Closing Spring

- 2. Armature
- 3. Valve plate
- 4. Pilot orifice5. Equalizing orifice
- 6. Diaphragm
- 7. Main orifice
- 8. Coil

## Ordering

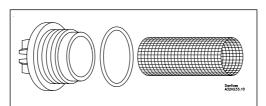
## Valve body

Connection	Seal material	k <sub>v</sub> - value	Type designation		Code no. without coil		nissible diff. ssure [bar] Max.		Suitable coil type
ISO 228/1		[m <sup>3</sup> /h]	Main type	Specification	<b>55</b>	14	ac	dc	
G 1/2	FKM	1.80	EV220A 11 B	G 12F NC045	032H8204	0.5	16	16	AM

#### Coils

See separate data sheet for coils DKACV.PD.600.A

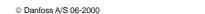
## Spare parts kit



The kit consists of:

- Filter
- O-ring
- Plastic plug

	Code no.
Spare parts kit	032H8298



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