

42xx Solenoid

- For 2/2-, 3/2-, 5/2- and 5/3-way valves
- Power consumption from 0,7 up to 13 watt
- Suited for outdoor use under critical environment conditions
- For high and low ambient temperatures
- Housing material: Plastic PPS
- Easy installation of the solenoid
- Compact design
- Userfriendly terminal compartment with screwless terminals for wire cross-section 0,5 to 4 mm²
- Type of protection Ex me



Technical features

EU-type examination certificate:
KEMA 98 ATEX 4452 X, Ausg. 4

Ex-Approval international:
IECEx KEM 09.0068X

Duty cycle:
100% ED

Fuse:
Integrated

Relative humidity of the air
max. 80%

Coil insulation:
Thermic class H

Standard voltages:
DC 24 V
AC 230 V (40 ... 60 Hz)
Further voltages on request

Degree of protection (EN 60529):
IP66

Weight:
650 g

Temperature:
See table

Materials:
Plastic PPS

Model overview solenoids

Model		Rated power	Voltage	Rated current	Device fuse rated current	Power consumption	Protection class IP	Ex-protection (ATEX-category)	Ambient / media temperature (°C)	Circuit diagram No.
Core tube Ø 13 mm Ø 16 mm										
4200	4250	0,7 W	24 V DC	33 mA	63 mA	0,8 W	IP66 (with cable gland)	II 2G Ex eb mb IIC T5/T6 Gb	T5: -40 ... +80 T6: -40 ... +70 -40 ... +80	1
4201	4251	1,0 VA (1,4 W)	230 V AC	6 mA	40 mA	1,3 VA		II 2D Ex tb IIIC T130°C Db		2
4210	4260	4,0 W	24 V DC	162 mA	400 mA	3,9 W	IP66 (with cable gland)	II 2G Ex eb mb IIC T4/T6 Gb	T4: -40 ...+80 T6: -40 ... +55 -40 ...+80	1
4211	4261	5,0 VA (4,5 W)	230 V AC	23 mA	40 mA	5,3 VA		II 2D Ex tb IIIC T130°C Db		2
4220	4270	8,0 W	24 V DC	369 mA	800 mA	8,9 W	IP66 (with cable gland)	II 2G Ex eb mb IIC T4/T5 Gb	T4: -40 ... +65 T5: -40 ... +55 -40 ... +65	1
4221	4271	9,0 VA (8 W)	230 V AC	43 mA	80 mA	10,0 VA		II 2D Ex tb IIIC T130°C Db		2
4230	4280	11,0 W	24 V DC	475 mA	1000 mA	11,4 W	IP66 (with cable gland)	II 2G Ex eb mb IIC T4/T5 Gb	T4: -40 ... +50 T5: -40 ... +40 -40 ... +50	1
4231	4281	13,0 VA (13,1 W)	230 V AC	66 mA	125 mA	15,2 VA		II 2D Ex tb IIIC T130°C Db		2

The mentioned solenoids are among others compatible with the following Valve series.

Solenoid	Valve series
4200/4201	97105, 98025
4210/4211	26360, 80207, 95000, 96000
4220/4221	95000, 95100, 96000
4230/4231	91000, 95000, 95100, 96000
4260/4261	24011, V81, V82, V87
4270/4271	24011, 25003, 95000, 95100, 96000, 98015, V81, V82, V87
4280/4281	25003, 95000, 95100, 96000

Item numbers for international approvals

Country/Approvals	Code
Europa/ATEX	Standard
International/IECEx	Standard
China/NEPSI	-01
Brasil	-02
Korea/KOSHA	-03
Russia, Kazakhstan & Belarus/TR-CU 012	-04
India/CCOE	Standard
Taiwan/ITRI	Standard

Example: 0000000423002400-03
(Solenoid: 4230; Voltage 24 V DC; Approval: KOSHA)

Cable glands (ordered separately)

Cable gland Protection class Ex e (ATEX)						
						
For sole-noid	Thread	Cable Ø (mm)	Material	Protection class (ATEX)	Ambient temperatur limitation*1)	Typ
42xx	M20 x 1,5	7,0 ... 12,0	Plastic	II 2G Ex e / II 2D Ex t	See table	0589735
42xx	M20 x 1,5	10,0 ... 14,0	Plastic	II 2G Ex e / II 2D Ex t	See table	0589736
42xx	M20 x 1,5	6,0 ... 12,0	Plastic	II 2G Ex e / II 2D Ex t	See table	0589737

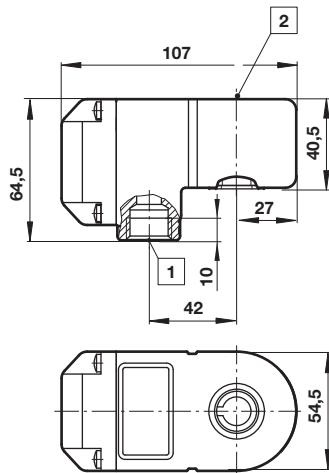
*1) The limitation of the temperature range to the mentioned range is due to the self-heating of the solenoid.

For sole-noid	Ambient temperatur limitation solenoid 42xx	
	0589735 & 0589736 *2)	0589737
420x/425x	T5 & Dust Ex: -35°C ... + 80°C T6: -35°C ... +70°C	T5 & Dust Ex: -40°C...+68°C T6: -40°C...+68°C
421x/426x	T4 & Dust Ex: -35°C ... + 80°C T6: -35°C ... + 55°C	T4 & Dust Ex: -40°C...+ 65°C T6: -40°C...+ 55°C
422x/427x	T4 & Dust Ex: -35°C +65°C T5: -35°C + 55°C	T4 & Dust Ex: -40°C...+ 62°C T5: -40°C + 55°C
423x/428x	T4 & Dust Ex: -35°C...+50°C T5: -35°C...+40°C	T4 & Dust Ex: -40°C...+50°C T5: -40°C...+40°C

*2) Tested for the lower level of mechanical risk (4 joule), an additional protection against impacts might be needed.

Dimensions - Solenoid

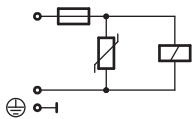
Dimensions in mm
Projection/First angle



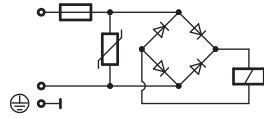
- 1 M20 x 1,5
- 2 Ø 16 or 13 (with spacer tube)

Circuit diagrams

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Warning

These products are intended for use in industrial compressed air systems only. Do not use these products where pressures and temperatures can exceed those listed under »**Technical features/data**«.

Before using these products with fluids other than those specified, for non-industrial applications, life-support systems or other applications not within published specifications, consult IMI Precision Engineering, Norgren GmbH.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes. The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.

System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.