

Solenoids 396X, 397X, 398X in Protection Class EEx me or EEx m



Catalog Register
A 17, P 17

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Available voltages: 24 VDC, 24 VUC (0 ... 60 Hz), 230 VAC (40 ... 60 Hz), other voltages available on request.
Design to VDE 0580 and EN 50014, EN 50028/VDE 0170/0171.

Conformity Certificate: PTB No. Ex-92.C.2175 X, Publication 7502929.


100 % duty cycle.

Electrical connection: Terminal in connection space for max. wire cross section 2.5 mm², cable gland Pg 13.5 or with cable Ø 9 mm, 3 x 1.5 mm² (+140 °C) 3 m and epoxy-sealed coil space (IP 66).

Aluminium housing with corrosion-protected surface.

Solenoids also available without fuse.


For core tube dia. 16 mm

Picture	Rated power		Protection class	Temperatures ²⁾		Degree of protection to DIN 40050 ¹⁾	Perm. relative air humidity [%]	Weight [kg]	Voltage	Circuit diagram	Cat. No. Solenoids	Constructional features		
	DC	AC		Fluid max. [°C]	Ambience [°C]									
	4 W	5 VA	EEx me II T5 or EEx me II T6	80	-20 to +80	IP 65	80	0.83	DC	04	3960	Epoxy encapsulated, terminal		
				60	-40 to +60	IP 65	80	0.83	AC	07	3961	Epoxy encapsulated, terminal, rectifier		
	4 W	5 VA	EEx m II T5 or EEx m II T6	80	-20 to +80	IP 66	95	1.0	DC	04	3966	Epoxy encapsulated, lead		
	4 W			60	-40 to +60	IP 66	95	1.0	AC	07	3967	Epoxy encapsulated, lead, rectifier		
	8 W	9 VA	EEx me II T4 or EEx me II T6	70	-20 to +70	IP 65	80	0.83	DC	04	3970	Epoxy encapsulated, terminal		
				50	-40 to +50	IP 65	80	0.83	AC	07	3971	Epoxy encapsulated, terminal, rectifier		
	8 W	9 VA	EEx m II T4 or EEx m II T6	70	-20 to +70	IP 66	95	1.0	DC	04	3976	Epoxy encapsulated, lead		
	8 W			50	-40 to +50	IP 66	95	1.0	AC	07	3977	Epoxy encapsulated, terminal, rectifier		
												3972	Hard anodised, terminal	
													3968	Epoxy encapsulated, lead
													3978	Epoxy encapsulated, lead

¹⁾ Degree of protection applies to complete assembly composed of valve and coil, with electrical wiring according to regulations.

²⁾ Temperatures mentioned refer to solenoids only. Permissible valve temperatures are not considered here. The max. temperature sum composed of the ambient and fluid temperature must not be exceeded.

For core tube dia. 16 mm

Picture	Rated power		Protection	Temperatures ²⁾		Degree of protection to DIN 40050 ¹⁾	Perm. relative air humidity [%]	Weight [kg]	Voltage	Circuit diagram	Cat. No. Solenoids	Constructional features
	DC	AC		Fluid max. [°C]	Ambience [°C]							
	12 W	13 VA	EEx me II T5 or EEx me II T6	60	-20 to +60	IP 65	80	0.83	DC	04	3980	Epoxy encapsulated, terminal
				45	-40 to +45	IP 65	80	0.83	AC	07	3981	Epoxy encapsulated, terminal, rectifier
	12 W	13 VA	EEx m II T5 or EEx m II T6	60	-20 to +60	IP 66	95	1.0	DC	04	3986	Epoxy encapsulated, lead
				45	-40 to +45	IP 66	95	1.0	AC	07	3987	Epoxy encapsulated, terminal, rectifier
											3988	Epoxy encapsulated, lead

¹⁾ Degree of protection applies to complete assembly composed of valve and coil, with electrical wiring according to regulations.

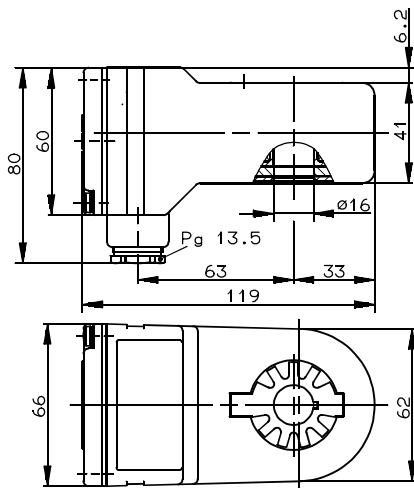
²⁾ Temperatures mentioned refer to solenoids only. Permissible valve temperatures are not considered here. The max. temperature sum composed of the ambient and fluid temperature must not be exceeded.

Standard-type temperature-resistant connection cables may be used for solenoids in Protection Class EEx me under following temperature conditions:

Solenoid Cat. No.	Max. ambient temperature
3960, 3961, 3962	61 °C
3970, 3971, 3972	55 °C
3980, 3981	50 °C

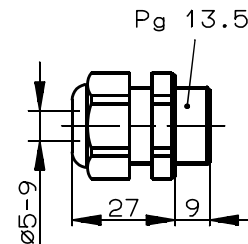
The solenoids must be provided with a cable plate indicating the respective ambient temperature and the power stated on the type plate.

Dimensional drawing (in mm)



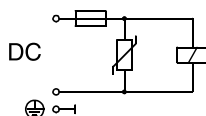
Accessories

Cable gland Pg 13.5, synthetic, black.
 Temperature range: -20 to +105 °C,
 EEx e II approval, KEMA No. Ex-93.C.9962
 Cat. No. **0681819**



Circuit diagrams

04



07

