

LUCIFER®

EEx nAC Coils - Electrical Parts

For Zone 2 (Gas) and Zone 22 (Dust)

Catalogue 8715/GB



Parker

Coils for Zone 2 (Gas) and Zone 22 (Dust)

22 mm coil with DIN plug



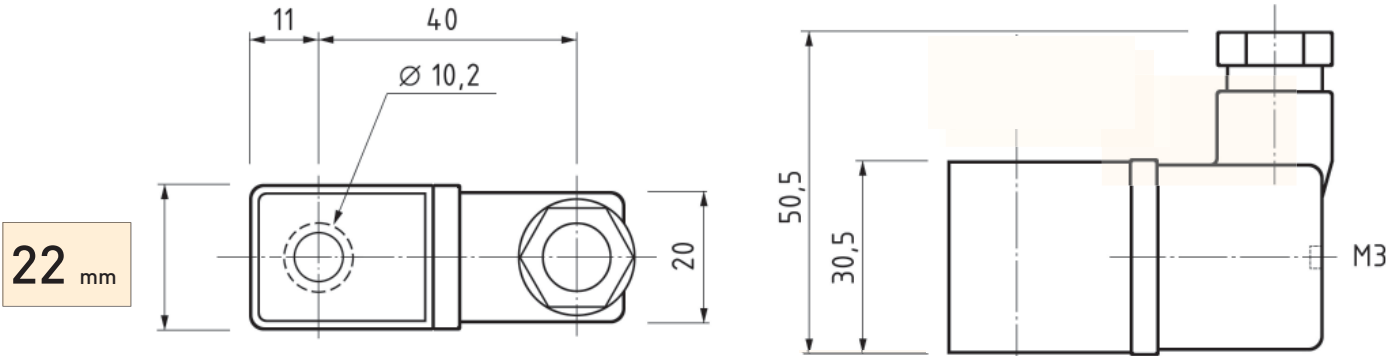
Application:
Control of solenoid valves for installations in hazardous areas in which explosive gas (Zone 2) or dust (Zone 22) are present.

Features :
This is an encapsulated assembly comprising a coil, integral magnetic iron path and snap-on plug connection. The synthetic material encapsulation provides an effective compact housing, offering full protection against dust, oil, water, etc. Small size for ease of mounting in confined spaces.

These electrical parts conform to the IEC/CENELEC safety standards and comply with the European explosive atmosphere directive 94/9/CE .

Reference			495865		
Coil type			22 mm		
Approval			LCIE 05 ATEX 6003 X		
Type of protection	Gas	(Zone 2)	II 3 G - EEx nAC IIC T5		
	Dust	(Zone 22)	II 3 D - T95°C		
Degree of protection			IP65 to CEI/EN 60529 Standard (with plug)		
Ambient temperature range			-40°C bis +50°C <i>The application is also limited by the temperature range of the valve</i>		
Insulation class			F (155°C)		
Electrical connection			Through a 2P+T plug according to EN 175301-803 type B		
Power-consumption	DC	Pn hot	2.5 W		
		P cold 20°C	3 W		
	AC	Pn holding	2 W		
		Attraction cold	5.7 VA (2.5 W)		
Available voltages			24,48 VDC / 24/50, 48/50, 110-115/50, 220-230/50 VAC , 110-115/60, 220-230/60 VAC		
Voltage tolerance			±10% of the nominal voltage		
Duty cycle			Continuous duty cycle (100% ED)		
Weight			120 g		

Indicative dimensions (in mm) :



Coil delivered without assembly kit (Washer and nut not included)

Coils for Zone 2 (Gas) and Zone 22 (Dust)

32 mm coils with DIN plug



Application:

Control of solenoid valves for installations in hazardous areas in which explosive gas (Zone 2) or dust (Zone 22) are present.

Features :

This is an encapsulated assembly comprising a coil, integral magnetic iron path and snap-on plug connection. The synthetic material encapsulation provides an effective compact housing, offering full protection against dust, oil, water, etc. Small size for ease of mounting in confined spaces.

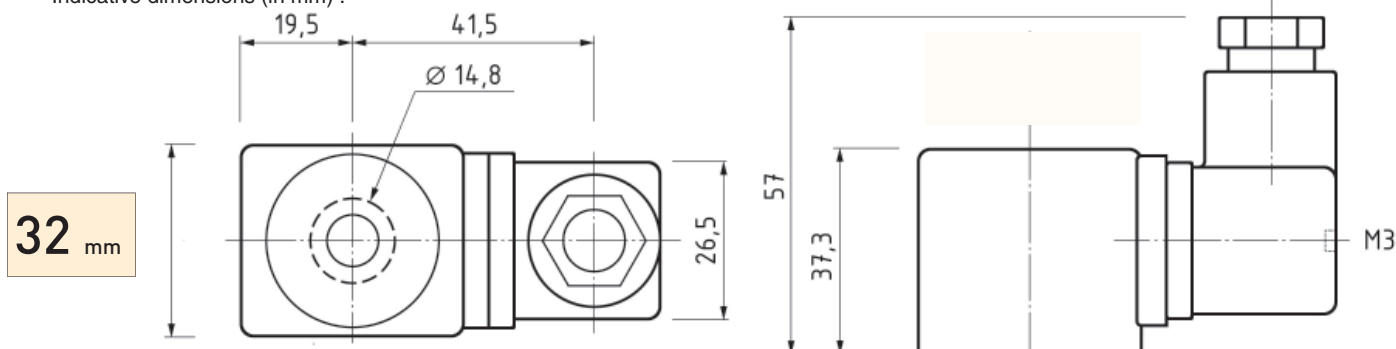


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Reference			495870	495875	496110	495880	496125	
Coil type			32 mm	Standard	Low Power	Double frequency	High Power	Miniwatt
Approval			LCIE 05 ATEX 6003 X					
Type of protection	Gas (Zone 2)		II 3 G - EEx nAC IIC T3/T4		T3	T3	T5/T6	
	Dust (Zone 22)		II 3 D - T195°C/130°C		T195°C	T195°C	T95°C/T80°C	
Degree of protection			IP65 to CEI/EN 60529 Standards (with plug)					
Ambient temperature range			-40°C to+65°C/+50°C		-40°C to +50°C		-40°C to +65°C/50°C	
			The application is also limited by the temperature range of the valve					
Insulation class			F (155°C)			H (180°C)	F (155°C)	
Electrical connection			Through a 2P + T plug to EN 175301-803 type A					
Power consumption	DC	Pn hot	9 W	7 W	-	14 W	1.6 W	
		P cold 20°C	12 W	9 W	-	21 W	2.1 W	
	AC	Pn holding	8 W	6 W	9 W	14 W	-	
		Attraction cold	26 VA (9 W)	20 VA (7 W)	32 VA (10 W)	55 VA (18 W)	-	
Available Voltages	DC		24, 48 & 110 V	24 V	-	24 V	24, 48, 110, V	
	AC		24, 48, 110 & 220-230 V (50 Hz)	220-230 V (50 Hz)	24, 48, 110, 220 V (50-60 Hz)	24, 110 & 230 V (50 Hz)	-	
Voltage tolerance			±10% of the nominal voltage					
Duty cycle			Continuous duty cycle 100% ED					
Weight			150 g					

Indicative dimensions (in mm) :



Coil delivered without assembly kit (Washer and nut not included)

Coils for Zone 2 (Gas) and Zone 22 (Dust)

32 mm CPR* coil with DIN plug



Application:

Control of solenoid valves for installations in hazardous areas in which explosive gas (Zone 2) or dust (Zone 22) are present. This coil with DIN plug is described as «coil with hole going clean through» and is dedicated to Lucifer CPR/Offshore valves used in the process industry (valves with larger pilot tube than standard versions).

Features :

This is an encapsulated assembly comprising a coil, integral magnetic iron path and snap-on plug connection. The synthetic material encapsulation provides an effective compact housing, offering full protection against dust, oil, water, etc. Small size for ease of mounting in confined spaces.

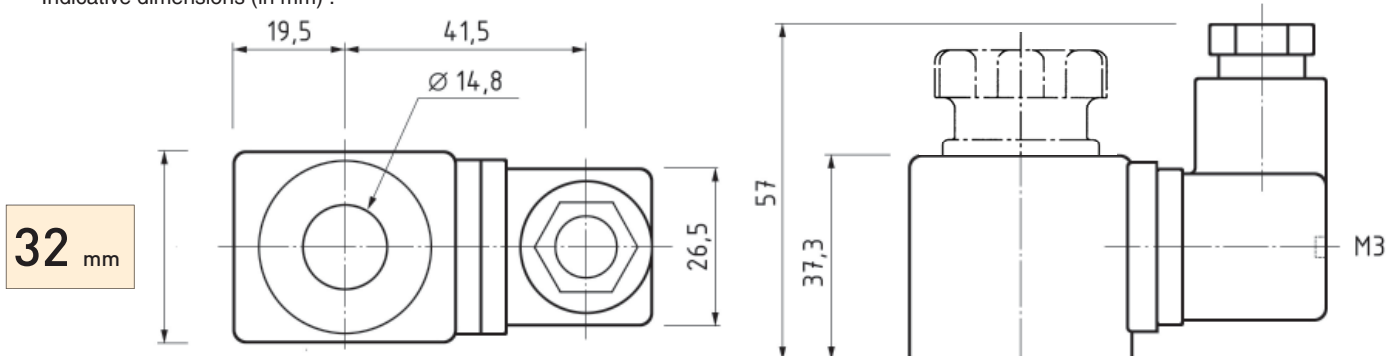
* CPR : Chemical, Petrochemical and Refineries.



These electrical parts conform to the IEC/CENELEC safety standards and comply with the European explosive atmosphere directive 94/9/CE.

Reference	496130	
Coil type	CPR / Offshore	
Approval	LCIE 05 ATEX 6003 X	
Type of protection	Gas	(Zone 2)
	Dust	(Zone 22)
Degree of protection	IP65 to CEI/EN 60529 standards (with plug)	
Ambient temperature range	-40°C à +65°C/+50°C	
Insulation class	H (180°C)	
Electrical connection	Through a 2P + E plug according to DIN 43650 A	
Power consumption	DC	Pn hot
		P cold 20 °C
	AC	Pn holding
		Attraction cold
Available voltages	24 VDC / 220 VAC (50 Hz)	
Voltage tolerance	±10% of the nominal voltage	
Duty cycle	Continuous duty cycle (100% ED)	
Weight	150 g	

Indicative dimensions (in mm) :



Coil supplied without assembly kit (Nameplate and plastic nut not included)

Electrical Parts for Zone 2 (Gas) and Zone 22 (Dust)

50 mm Impulse electrical part



Application:
Control of solenoid valves for installations in hazardous areas in which explosive gas (Zone 2) or dust (Zone 22) are present.

Features :
Rotatable housing 360°, galvanized steel with internal and external screw terminals for earth connection. Small size for ease of mounting in confined space. These electrical parts are specially designed for Lucifer bi-stable (or impulse or magnetic latch) solenoid valves with 3 leads connection.

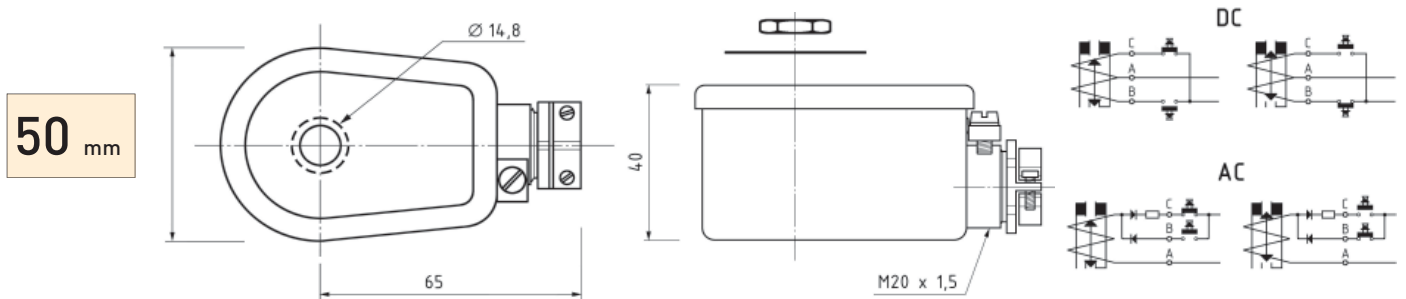
Electrical connections :
Valve switch-ON (terminals A - B) : min. 50 ms / max. 1 s duration
Valve switch-OFF (terminals A - C) : min. 35 ms / max. 1 s duration



  These electrical parts conform to the IEC/CENELEC safety standards and comply with the European explosive atmosphere directive 94/9/CE .

Reference			495915	
Coil type			50 mm Impulse	
Approval			LCIE 05 ATEX 6010 X	
Type of protection	Gas	(Zone 2)	II 3 G - EEx nAC IIC T3	
	Dust	(Zone 22)	II 3 D - T195°C	
Degree of protection			IP67 to CEI/EN 605029 standards	
Ambient temperature			-40°C to +65°C	
			The application is also limited by the temperature range of the valve	
Insulation class			F (155 °C)	
Power consumption	DC	Attraction hot / cold	13 W / 19W (during 1 sec. max.)	
		Release hot / cold	8 W / 10W (during 1 sec. max.)	
	AC	Attraction hot / cold	11 W / 17W (during 1 sec. max.)	
		Release hot / cold	4 W / 7W (during 1 sec. max.)	
Available voltages			24 and 48 VDC	24, 48, 110-115 and 220-230 VAC
Voltage tolerance			±10% of the nominal voltage	
Duty cycle			Continuous duty cycle (100% ED)	
Weight			320 g	

Indicative dimensions (in mm) :



Coil supplied complete with assembly kit (Nameplate and nut included).

Note: the detailed operation of this special coil is presented in the Lucifer general catalogue

Electrical Parts for Zone 2 (Gas) and Zone 22 (Dust)

50 mm High Power (14W) Electrical Parts

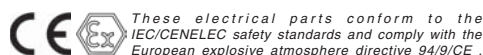


Application:

Control of solenoid valves for installations in hazardous areas in which explosive gas (Zone 2) or dust (Zone 22) are present.

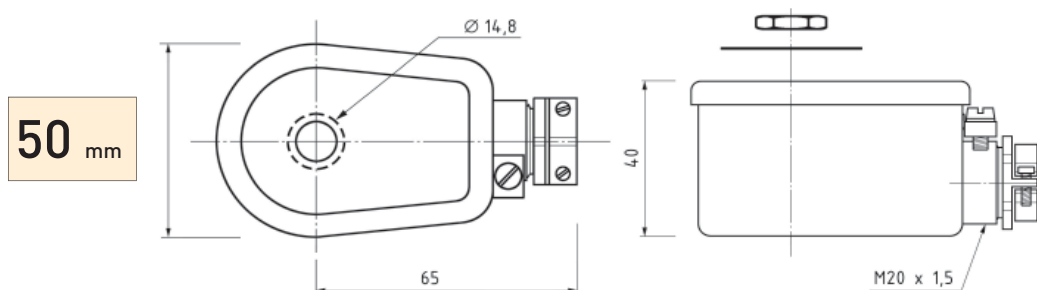
Features :

Rotatable housing 360°, galvanized steel with internal and external screw terminals for earth connection. Small size for ease of mounting in confined space.



Reference			496155	
Coil type			50 mm High Power	
Approval			LCIE 05 ATEX 6010 X	
Type of protection	Gas	(Zone 2)	II 3 G - EEx nAC IIC T3	
	Dust	(Zone 22)	II 3 D - T195°C	
Degree of protection			IP67 to CEI/EN 605029 standards	
Ambient temperature			-40°C to +65°C <i>The application is also limited by the temperature range of the valve</i>	
Insulation class			H (180 °C)	
Power consumption	DC	Attraction hot	14 W	
		Attraction cold	21 W	
	AC	Attraction hot	14 W	
		Attraction cold	56VA (20 W)	
Available voltages			24 and 48 VDC	24/50, 110/50, 230/50 VAC
Voltage tolerance			±10% of the nominal voltage	
Duty cycle			Continuous duty cycle (100% ED)	
Weight			320 g	

Indicative dimensions (in mm) :



Coil supplied complete with assembly kit (Nameplate and nut included).

Coil Assembly Kits

Assembly Kits for 22 mm coils

The coil assembly kit corresponds to housing in the numbering system of Lucifer valves:
Valve – housing – coil – voltage.

It is composed of a nameplate with details of the valve type, a washer and a nut to secure the fixing of the 22mm coil to the valve.



Reference	Code	Specification	Application
8993	A4	Standard – aluminium nameplate – passivated washer and nut – pressure indication in [bar]	Standard valves
8993.03	A1	Standard – aluminium nameplate – passivated washer and nut – pressure indication in [psi]	UL/CSA valves
8122	A2	Special – aluminium nameplate – washer and nut in stainless steel – pressure indication in [kPa]	316L valves

Assembly Kits for 32 mm coils

The coil assembly kit corresponds to housing in the numbering system of Lucifer valves:
Valve – housing – coil – voltage.

It is composed of a nameplate with details of the valve type, a washer and a nut to secure the fixing of the 32mm coil to the valve.



Reference	Code	Specification	Application
2995	N1	Standard – aluminium nameplate – passivated washer and nut – pressure indication in [bar]	Standard valves
2995.03	N3	Standard – aluminium nameplate – passivated washer and nut – pressure indication in [psi]	UL / CSA valves
8132	NL	Special – aluminium nameplate – washer and nut in stainless steel – pressure indication in [kPa]	316L valves

Assembly Kits for 32mm CPR coils

It is composed of a plastic nut with a metal insert to secure the fixing of CPR coils to the valves.



Reference	Code	Specification	Application
8886	NI	Plastic nut with metal insert	CPR valves

Electrical Parts Groups

The Lucifer coils and electrical parts are sorted by «Electrical Part Group» (numbered from 1 to 12) which determine their compatibility with the Lucifer valves (mechanical and electrical compatibility).

This «Electrical Part Group» reference is given on each page of the catalogue Coils/Electrical parts, above the tables giving the technical data. Each group (1 to 12) is represented by a yellow logo (puzzle piece) with the following meaning:

Note: In this nAC coils catalogue, 5 groups are presented only.

	Applications on standard valves with 10.2 mm pilot diameter (for 22 mm coils only)
	Applications on standard valves with 14.8mm pilot diameter (for 32 and 50mm coils)
	Applications on permanent magnet valves (bi-stable) for impulse coils (with 14.8 mm pilot diameter)
	Applications on short stroke valves with 14.8 mm pilot diameter (Miniwatt 32mm coils)
	Applications on special valves for CPR and Offshore markets (V,F,X types)

How to pass an order

1. Valve Reference Number
2. Housing Reference Number
3. Coil Reference Number
4. Voltage or voltage code

Example:

121K0756-2995-481865-220-230/50 or
121K0756-2995-481865-3D

Important:

Valve, housing, coil or electrical parts may be ordered separately as spare part.



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