COILS, HOUSINGS & ELECTRICAL PARTS

A COMPLETE RANGE OF COILS, HOUSINGS AND ELECTRICAL PARTS FOR SOLENOID VALVES

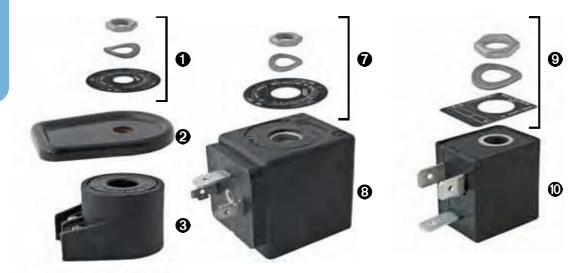






DEFINITIONS

HOUSINGS OR COIL ASSEMBLY KITS, COILS AND ELECTRICAL PARTS





Housing:

We define a **housing** as the combination of the fixing elements including the nameplate **1**, the cover **2** or the subplate **3** and the envelope itself **4** or **5** which protects the coil and its electrical components. The housings may be made of metal or plastic material.



Coil assembly kit:

The coil assembly kit **7** or **9** is the set comprising a plate, washer and nut. Sometimes coil assembly kits consist only of a nut or a special fixing device.

Coil:

6

This consists of the winding and its plastic moulding. There are three different types of coils distinguished by their shape and dimensions: 40 mm 3, 32 mm 3 and 22 mm 0.

Electric part:

The electric part is the set comprising the housing, the assembly kit and the coil.

Attention:

Any Parker FCDE coil or electrical part may be energised only when mounted on a valve. Otherwise there is a risk of damaging the product and its surroundings (overheating, explosion, fire, etc.).





TABLE OF CONTENT

INTRODUCTION	
Index for Explosion Proof Electrical Parts	442
List of Coil Groups	443
COILS	
	440
Coils for DIN plug connection	
Coils with flying leads	
Coils with screw terminal.	
Coils with ISO-DIN connector	481
EXPLOSION PROOF ELECTRICAL PARTS	
Level of protection "nAc nCc"	484
Level of protection "db"	492
Level of protection "mb"	494
Level of protection "db mb"	499
Level of protection "eb"	504
Level of protection "eb mb"	505
Level of protection "ia"	508
HOUSINGS	<i>5</i> 10
HOOSINGS	310
COIL ACCESSORIES	522
EXPLOSIVE ENVIRONMENTS	524
COIL APPENDICES	
Guidance chart for IS-Barriers	534





INDEX FOR EXPLOSION PROOF ELECTRICAL PARTS

Coil Reference	Coil Group	Designation	Power DC Pn (W)	Power AC Pn (W)	Ambient Temperature	UL	Degree of Protection	ATEX or NEMA 4X Protection (Gas)	Page
496637	1.2	Explosion proof electrical part "nAc nCc", 22 mm, double frequency	3.0	3.0	-20°C to +50°C	-	IP65	II3 D Ex to IIIC T 95°C	485
495880	2.0/2.2	Explosion proof electrical part "nAc nCc", 32 mm	14.0	14.0	-40°C to +50°C	-	IP65	II 3 G Ex nAc nCc IIC T3	489
496155	2.0/2.2	Explosion proof increased safety electrical part "nAc nCc", 50 mm	14.0	14.0	-40°C to +65°C	-	IP67	II 3 G Ex nAc nCc IIC T3	491
495915	4.0	Explosion proof increased safety electrical part "nAc nCc", 50 mm	13.0	11.0	-40°C to +65°C	-	IP67	II 3 G Ex nAc nCc IIC T3	490
495870	2.0/2.1	Explosion proof electrical part "nAc nCc", 32 mm	9.0	8.0	-40°C to +50°C	-	IP65	II 3 G Ex nAc nCc IIC T3/T4	486
495875	3.0	Explosion proof electrical part "nAc nCc", 32 mm	7.0	6.0	-40°C to +50°C	-	IP65	II 3 G Ex nAc nCc IIC T3/T4	488
496110	2.0/2.1	Explosion proof electrical part "nAc nCc", 32 mm	-	9.0	-40°C to +50°C	-	IP65	II 3 G Ex nAc nCc IIC T3/T4	486
495865	1.1	Explosion proof electrical part "nAc nCc", low power, 22 mm	2.5	2.0	-40°C to +50°C	-	IP65	II 3 G Ex nAc nCc IIC T5	484
496125	6.0	Explosion proof electrical part "nAc nCc", low power, 32 mm	1.6	-	-40°C to +50°C	-	IP65	II 3 G Ex nAc nCc IIC T5/T6	487
492670	2.0/2.1	Explosion proof encapsulated electrical part "mb", 32 mm	9.0	8.0	-40°C to +50°C	-	IP65	II 2 G Ex mb IIC T4	495
482605	1.1	Explosion proof encapsulated electrical part "mb", 32 mm	5.0	4.0	-40°C to +65°C	-	IP65	II 2 G Ex mb IIC T4/T5	494
482606	1.1	Explosion proof encapsulated electrical part "mb", low power, 32 mm $$	2.5	2.0	-40°C to +65°C	-	IP65	II 2 G Ex mb IIC T4/T5	494
492070	2.0/2.1	Explosion proof encapsulated electrical part "mb", with water proof metal housing, 50 mm	8.0	9.0	-40°C to +65°C	-	IP67	II 2 G Ex mb IIC T4/T5	496
HZ10	2.0/2.1	Explosion proof encapsulated electrical part "mb", double frequency	8.0	8.0	-40°C to +85°C	-	IP65	II2 G - Ex mb IIC T3/T4/T5	497
HZ11	2.0/2.2	Explosion proof encapsulated electrical part "mb", double frequency	14.0	14	-40°C to +85°C	-	IP65	II2 G - Ex mb IIC T3/T4/T5	498
483270	11.0	Flame proof electrical part "db", 50 mm	8.0	8.0	-40°C to +80°C	-	IP66	II 2 G Ex db IIC T4/T5/T6	492
497105	10.3	Flame proof electrical part "db", 50 mm	8.0	8.0	-50°C to +80°C	-	IP66	II 2 G Ex db IIC T4/T5/T6	493
493640	2.0/2.1	Flame proof encapsulated electrical part "db mb", double frequency	8.0	8.0	-40°C to +75°C	-	IP65	II 2 G Ex db mb IIC T4/T5	503
495905	2.0/2.1	Flame proof encapsulated electrical part "db mb", 37 mm	8.0	8.0	-40°C to +65°C	-	IP67	II 2 G Ex db mb IIC T4	500
496560	10.1	Flame proof encapsulated electrical part "db mb", 37 mm	8.0	8.0	-40°C to +65°C	-	IP67	II 2 G Ex db mb IIC T4	501
496800	10.1	Flame proof encapsulated electrical part "db mb", 37 mm	8.0	8.0	-40°C to +65°C	-	IP67	II 2 G Ex db mb IIC T4	502
495900	6.0	Flame proof encapsulated electrical part "db mb", low power, 37 mm	2.0	2.5	-40°C to +65°C	-	IP67	II 2 G Ex db mb IIC T4/T5/T6	499
496555	10.2	Flame proof encapsulated electrical part "db mb", 37 mm	6.0	6.0	-40°C to +65°C	-	IP67	II 2 G Ex db mb IIC T4/T5/T6	501
496700	10.2	Flame proof encapsulated electrical part "db mb", 37 mm	6.0	6.0	-40°C to +65°C	-	IP67	II 2 G Ex db mb IIC T4/T5/T6	502
494040	2.0/2.1	Explosion proof increased safety electrical part "eb", 50 mm	8.0	8.0	-40°C to +90°C	-	IP67	II 2 G Ex eb IIC T3/T4	504
483371	2.0/2.1	Explosion proof increased safety electrical part "eb", 50 mm	8.0	8.0	-40°C to +65°C	-	IP67	II 2 G Ex eb IIC T4	504
492190	2.0/2.1	Explosion proof increased safety and encapsulated elect. part "eb", 50 mm	9.0	11.0	-40°C to +75°C	-	IP66	II 2 G Ex eb mb IIC T3/T4	507
492310	10.1	Explosion proof increased safety and encapsulated electrical part "eb", 50 mm	6.0	6.0	-40°C to +75°C	-	IP66	II 2 G Ex eb mb IIC T4/T5	505
492210	9.0	Explosion proof increased safety and encapsulated electrical part "eb", " Booster", 50 mm	1.0 to 1.8	-	-40°C to +75°C	-	IP66	II 2 G Ex eb mb IIC T5/T6	506
495910	8.0	Explosion proof intrinsically safe electrical part "ia", "booster", 37 mm	0.3 to 1.2	-	-40°C to +80°C	-	IP67	II 1 G Ex ia IIC T4/T5/T6	509
496565	9.0	Explosion proof intrinsically safe electrical part "ia", "Booster", 37 mm	0.77 to 2.58	-	-40°C to +80°C	-	IP67	II 1 G Ex ia IC T4/T5/T6	510
483580.01	7.0	Explosion proof intrinsically safe electrical part "ia", 32 mm	3.0	-	-40°C to +55°C	-	IP65	II 1 G Exia IIC T6	508
488650.01	7.0	Explosion proof intrinsically safe electrical part "ia", 50 mm	0.3 to 3.0	-	-40°C to +65°C	-	IP66	II 1 G Exia IIC T6	513
488660.01	7.0	Explosion proof intrinsically safe electrical part "ia", 50 mm	3.0	-	-40°C to +65°C	-	IP67	II1 G Exia IIC T6	514
488670.01	7.0	Explosion proof intrinsically safe electrical part "ia", 50 mm	0.3 to 3	-	-40°C to +65°C	-	IP65	II 1 G Exia IIC T6	515
492965.01	9.0	Explosion proof intrinsically safe electrical part "ia", "Booster", 50 mm	0.3 to 2.3	-	-40°C to +65°C	-	IP66	II 1 G ExialIC T6	511
482870.01	12.0	Explosion proof intrinsically safe electrical part "ia", 50 mm	3.0	-	-40°C to +65°C	-	IP66	II 1 G Exia IIC T6	512
490885	7.0	Explosion proof intrinsically safe electrical part, "NEMA", 50 mm	3.0	-	-40°C to +60°C	-	NEMA 4 - 4X	Cl. I, Div.I, Gr. A, B, C, D	513
490890	7.0	Explosion proof intrinsically safe electrical part, "NEMA", 50 mm	3.0	-	-40°C to +60°C	-	NEMA 4 - 4X	Cl. I, Div.I, Gr. A, B, C, D	514
492335	12.0	Explosion proof intrinsically safe electrical part, "NEMA", 50 mm	3.0	-	-40°C to +60°C	-	NEMA 4 - 4X	Cl. I, Div.I, Gr. A, B, C, D	512





LIST OF COIL GROUPS

Parker coils and electrical parts are classified by groups determining their compatibility with Parker solenoid valves.

Group	For application with
1.1	Standard valves or on 2000 Series with standard pilot
1.2	Standard valves or on 2000 Series for high flow
1.3	Standard valves or on 2000 Series of W coil
2.0	Standard valves or on 7000 Series with standard pilot
2.1	Standard valves or on 7000 Series, for coils 8 - 9 W
2.2	Standard valves or on 7000 Series, for coils 14 W
3.0	Standard valves or on 7000 Series with reduced power
4.0	Standard valves or on 7000 Series, for bistable (Impulse) coils or electrical parts
6.0	Special valves "97" or on 7000 Series, for Intrinsically safe coils or electrical parts
7.0	Special valves "90", for coils and intrinsically safe electrical parts
8.0	Special valves "97" or on 7000 Series, for Intrinsically safe coils or electrical parts with booster
9.0	Special valves "xx" or on 9000 Series, for Intrinsically safe coils or electrical parts with booster
10.1	Standard valves or on 9000 Series with standard pilot
10.2	Standard valves or on 9000 Series "db mb"
10.3	
	Special valves or on 8000 Series "d" Standard valves or on 0000 Series d D
11.0	Standard valves or on 9000 Series "1D"
12.0	Standard valves or on 9000 Series with manual reset
13.0	Special valves or on 7000 Series for Transportation
14.1	Special valves or on 7000 Series for Oil Burners
14.2	Special valves or on 7000 Series for Oil Burners
14.3	Special valves or on 7000 Series for Oil Burners
20.1	Standard valves or on 7000 Series for Z-Y coil
20.2	Standard valves or on 7000 Series for Z-Y "High Power" coil
21.0	Standard valves or on 7000 Series for J-B coil
22.0	Standard valves for KP-KT-KH coil
23.0	Standard valves for XP-XT coil for Oil Burners
24.0	Standard valves for Liquipure coils for Beverage Dispensing



COILS



TABLE OF CONTENT

INTRODUCTION	
Index for Explosion Proof Electrical Parts	442
List of Coil Groups	443
COILS	
Coils for DIN plug connection	446
Coils with flying leads	469
Coils with screw terminal	474
Coils with ISO-DIN connector	481
EXPLOSION PROOF ELECTRICAL PARTS	
Level of protection "nAc nCc"	484
Level of protection "db"	492
Level of protection "mb"	494
Level of protection "db mb"	499
Level of protection "eb"	504
Level of protection "eb mb"	505
Level of protection "ia"	508
HOUSINGS	518
COIL ACCESSORIES	522
EXPLOSIVE ENVIRONMENTS	524
COIL APPENDICES	



2.0/2.1

COILS FOR DIN PLUG CONNECTION



COILS 32 mm

These coils can be mounted with every Parker solenoid valves corresponding to the specified Coil Group.

See column "Coil Group" within valve pages.

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.

Ease of mounting in confined space - offers shock and corrosion protection - simplifies conversion of existing equipment to other requirements, etc.

Coils conform to the IEC/CENELEC safety standards and complies with European low-voltage directive.



Specification				Stan	dard		Double f	requency		
Ref. (withou with D	t DIN plug) IN plug)			865 725		483510 482635			
Coil G	iroup					2.0	/ 2.1			
Degre	e of p	rotection			IP65 according to IEC	/ EN 60	529 standards (with DIN plug).			
Class	of ins	ulation				F 15	55°C			
Electr	ical co	nnection		The coil	is connected with a 2	P + E pl	ug according to EN 175301-80	l3 type A		
Ambient temperature			-40°C to +50°C The application is limited also by the temperature range of the valve.							
Je .	DC	Pn (hot)	9 W				-			
Power	DC	P (cold) 20°C		12	! W		-			
Elect.	AC	Pn (holding)		8	W		9 W			
当	AU	Attraction cold		26 VA	(9 W)		32 VA	(10 W)		
Weigl	nt				1	30 g (wit	thout plug)			
Volta	ges "U	n"	VAC/Hz	Code	VDC	Code	VAC/Hz	Code		
-10% to +10% of the Un		0% of the Un	24/50 48/50 110/50 220-230/50	A2 A4 A5 3D	24 48 110	C2 C4 C5	24/50, 24/60 48/50, 48/60 110-115/50, 120/60 220-240/50, 240/60	P0 S4 S5 S6		

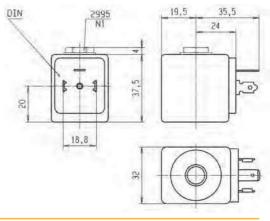
To Order a Coil choose Coil Ref + Voltage Code, example: 481865 for 24 VDC = 481865C2

More voltage possibilities can be found in the table of voltage codes at the end of the coil section.

These coils must be used with suitable housings, see example below:

The coil assembly kit **Ref. 2995** corresponds to the "housing" of Lucifer® valve numbering system (Valve - housing - coil/voltage).







2.0/2.1 2.2

COILS FOR DIN PLUG CONNECTION



HIGH TEMPERATURE COILS 32 mm

These coils can be mounted with every Parker solenoid valves corresponding to the specified Coil Group.

See column "Coil Group" within valve pages.

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.

Ease of mounting in confined space - offers shock and corrosion protection - simplifies conversion of existing equipment to other requirements, etc.

Coils conform to the IEC/CENELEC safety standards and complies with European low-voltage directive.



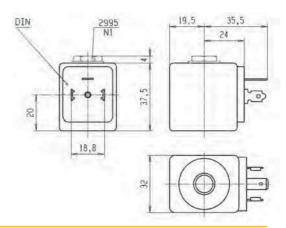
Specification			Н	igh tem	perature		High temp. + high power			
Ref. (without DIN plug) Ref. (with DIN plug)			492453 492726				492425 492727			
Coil G	iroup			2.0	/ 2.1			2.0	/ 2.2	
Degre	e of p	otection			IP65 according to IEC	/ EN 60	529 standards (with D	IN plug).		
Class	of ins	ulation				H 18	30°C			
Electrical connection				The coil	is connected with a 2	P + E pl	ug according to EN 17	5301-80	3 type A	
Ambi	ent ten	nperature		-40°C to +50°C The application is limited also by the temperature range of the valve.						
Je.	DC	Pn (hot)		9 W			14 W			
Elect. Power	DC	P (cold) 20°C		12	12 W 21 W			W	1	
넔	AC	Pn (holding)		8	W		14 W			
啬	AU	Attraction cold		26 VA	. (9 W)			55 VA	(18 W)	
Weigl	ht				1	30 g (wit	thout plug)			
Voltag	ges "U	n"	VAC/Hz	Code	VDC	Code	VAC/Hz	Code	VDC	Code
-10%	-10% to +10% of the Un		24/50 48/50 110/50 220/50-230/50	A2 A4 A5 3D	12 24 48 110	C1 C2 C4 C5	24/50 110/50 230/50	A2 A5 F4	24	C2

To Order a Coil choose Coil Ref + Voltage Code, example: 492453 for 24 VDC= 492453C2 More voltage possibilities can be found in the table of voltage codes at the end of the coil section.

These coils must be used with suitable housings, see example below:

The coil assembly kit **Ref. 2995** corresponds to the "housing" of Lucifer® valve numbering system (Valve - housing - coil/voltage).







3.0

COILS FOR DIN PLUG CONNECTION





REDUCED POWER COIL 32 mm

These coils can be mounted with every Parker solenoid valves corresponding to the specified Coil Group. See column "Coil Group" within valve pages.

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.

Ease of mounting in confined space - offers shock and corrosion protection - simplifies conversion of existing equipment to other requirements, etc.

Coils conform to the IEC/CENELEC safety standards and complies with European low-voltage directive.



Spec	ificati	on	Reduced power						
Ref. (without DIN plug) Ref. (with DIN plug)			482730 482735						
Coil Group				3.	0				
Degree of protection				IP65 according to IEC / EN 60	529 standards (with DIN plug)				
Class of insulation				F 15	5°C				
Electrical connection			The coil	is connected with a 2 P + E pli	ug according to EN 175301-8	03 ty pe A			
Ambie	Ambient temperature		-40°C to +50°C The application is limited also by the temperature range of the valve.						
Je.	DC	Pn (hot)		7 W					
S S	DC	P (cold) 20°C		9'	W				
Elect. Power	40	Pn (holding)		6'	W				
E	AC	Attraction cold		20 VA	(7 W)				
Weigh	nt			130 g (wit	hout plug)				
Voltag	Voltages "Un"		VAC/Hz	Code	VDC	Code			
-10% to +10% of the Un		% of the Un	48/50 220-230/50	A 4 3D	24 48	C2 C4			

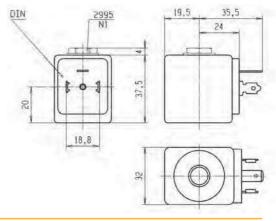
To Order a Coil choose Coil Ref + Voltage Code, example: 482730 for 24 VDC = 482730C2

More voltage possibilities can be found in the table of voltage codes at the end of the coil section.

These coils must be used with suitable housings, see example below:

The coil assembly kit Ref. 2995 corresponds to the "housing" of Lucifer® valve numbering system (Valve - housing - coil/voltage).







6.0

COILS FOR DIN PLUG CONNECTION





LOW POWER COIL 32 mm

These coils can be mounted with every Parker solenoid valves corresponding to the specified Coil Group. See column "Coil Group" within valve pages.

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.

Ease of mounting in confined space - offers shock and corrosion protection - simplifies conversion of existing equipment to other requirements, etc.

Coils conform to the IEC/CENELEC safety standards and complies with European low-voltage directive.



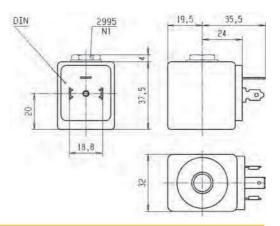
Spec	ificat	ion	Miniwatt				
Refere Refere	ence (ence (without DIN plug) with DIN plug)	482740 482745				
Coil G	roup		6.0				
Degre	e of p	rotection	IP65 according to IEC / EN 60529 stand	ards (with DIN plug).			
Class of insulation			F 155°C				
Electrical connection			The coil is connected with a 2 P + E plug accord	ing to EN 175301-803 type A			
Ambie	Ambient temperature		-40° C to $+50^{\circ}$ C The application is limited also by the temperature range of the valve.				
Je.	DC	Pn (hot)	1.6 W				
§.	DC	P (cold) 20°C	2.1 W				
Elect. Power	AC	Pn (holding)	-				
当	AU	Attraction cold	-				
Weigh	nt		130 g (without plug)			
Voltag	ges "U	n"	VDC	Code			
-10%	-10% to +10% of the Un		24 48 110	C2 C4 C5			

To Order a Coil choose Coil Ref + Voltage Code, example: 482740 for 24 VDC = 482740C2 More voltage possibilities can be found in the table of voltage codes at the end of the coil section.

These coils must be used with suitable housings, see example below:

The coil assembly kit Ref. 2995 corresponds to the "housing" of Lucifer® valve numbering system (Valve - housing - coil/voltage).







2.0/2.1



UL COIL 32 mm

This coil can be mounted with every Parker solenoid valves corresponding to the specified Coil Group. See column "Coil Group" within valve pages.

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.

Ease of mounting in confined space - offers shock and corrosion protection - simplifies conversion of existing equipment to other requirements, etc. Coils conform to the IEC/CENELEC safety standards and complies with European low-voltage directive.

DIN plug connector to be ordered separately (see coil accessories section)



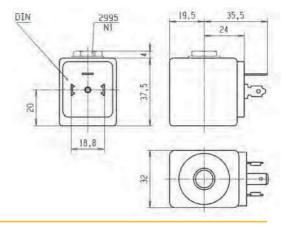
Spec	ificati	on	UL-recognized coil - UL File E200N - designation AMIF				
Refer	ence (1	without DIN plug)		491	514		
Coil G	roup			2.0	/ 2.1		
Degre	e of p	otection		IP65 according to IEC / EN 60	529 standards (with DIN plug).		
Class of insulation				F (15	55°C)		
Electrical connection			The coil	is connected with a 2 P + E pl	ug according to EN 175301-80	3 type A	
Ambie	Ambient temperature		-40°C to 50°C The application is limited also by the temperature range of the valve.				
뉼	DC	Pn (hot)		•	12 W		
Elect. Power	DG	P (cold) 20°C	-	•	16 W		
븅	AC	Pn (holding)	11	W	-		
当	AG	Attraction cold	40 VA	(13 W)		-	
Weigh	ıt			130 g (wit	thout plug)		
Voltag	jes "U	n"	VAC/Hz	Code	VDC	Code	
- 15%	- 15% to +10% of the Un		110/50-120/60 220/50-240/60	P3 Q3	24	C2	

To Order a Coil choose Coil Ref + Voltage Code, example: 491514 for 24 VDC = 491514C2 More voltage possibilities can be found in the table of voltage codes at the end of the coil section.

These coils must be used with suitable housings, see example below:

The coil assembly kit Ref. 2995 with non UL valve and Ref. 2995.03 with UL valve correspond to the "housing" of Lucifer® valve numbering system (Valve - housing - coil/voltage).







14.2

COILS FOR DIN PLUG CONNECTION Sons CE &









UL COIL 32 mm

This coil can be mounted with every Parker solenoid valves corresponding to the specified Coil Group. See column "Coil Group" within valve pages.

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.

Ease of mounting in confined space - offers shock and corrosion protection - simplifies conversion of existing equipment to other requirements, etc.

Coils conform to the IEC/CENELEC safety standards and complies with European low-voltage directive.



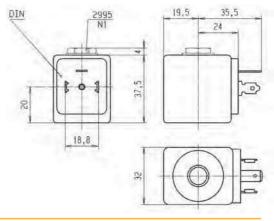
Specification			Coil for oil burner - UL recognized					
Reference (without DIN plug)			483764					
Coil group			14	.2				
Degre	e of p	rotection	IP65 according to IEC / EN 605	529 standards (with DIN plug).				
Class	of ins	ulation	F 155°C					
Electrical connection			With DIN 43	650 A Plug				
Ambient temperature		nperature	-40°C to 50°C The application is limited also by the temperature range of the valve.					
/er	DC	Pn (hot)	-	•				
Ş	DC	P (cold) 20°C	-	-				
Elect. Power	AC	Pn (holding)	91	N				
ä	AG	Attraction cold	-					
Weigh	nt		138	3 g				
Voltag	ges "U	n"	VAC/Hz	Code				
- 15% to +10% of the Un		0% of the Un	240/50-60 110/50-115/60 230/50-240/60	Q1 Q9 T1				

To Order a Coil choose Coil Ref + Voltage Code, example: 483764 for 240/50-60 = 483764Q1 More voltage possibilities can be found in the table of voltage codes at the end of the coil section.

These coils must be used with suitable housings, see example below:

The coil assembly kit Ref. 2995 corresponds to the "housing" of Lucifer® valve numbering system (Valve - housing - coil - voltage).







2.2

COILS FOR DIN PLUG CONNECTION





COIL 32 mm FOR JET VALVES

This coil can be mounted with every Parker solenoid valves corresponding to the specified Coil Group. See column "Coil Group" within valve pages.

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.

Ease of mounting in confined space - offers shock and corrosion protection - simplifies conversion of existing equipment to other requirements, etc. Coils conform to the IEC/CENELEC safety standards and complies with European low-voltage directive.

DIN plug connector to be ordered separately (see coil accessories section)



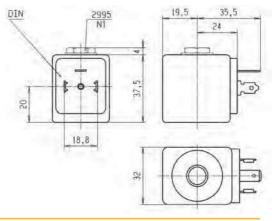
Specification			32 mm coil 14 W						
Reference			483816						
Coil Group				2	.2				
Degree of protection			IP65 accord	ing to IEC / EN 60	529 standards (with DIN plug).				
Class of insulation				F 15	55°C				
Electrical connection			The coil is connected	l with a 2 P + E pl	ug according to EN 175301-803 type A				
Ambie	Ambient temperature		-40°C to $+50^{\circ}\text{C}$ The application is limited also by the temperature range of the valve.						
뉼	DC	Pn (hot)							
§ S	DG	P (cold) 20°C		<u>-</u>					
Elect. Power	AC	Pn (holding)		14	W				
ä	AG	Attraction cold			_				
Weigh	Weight			16	0 g				
Voltag	jes "U	n"	VAC/Hz	Code	VDC	Code			
-10%	to +10	% of the Un	24/50	A2	24 V	C2			

To Order a Coil choose Coil Ref + Voltage Code, example: 483816 for 24 VDC = 483816C2 More voltage possibilities can be found in the table of voltage codes at the end of the coil section.

These coils must be used with suitable housings, see example below:

The coil assembly kit Ref. 2995 corresponds to the "housing" of Lucifer® valve numbering system (Valve - housing - coil/voltage).







1.1

COILS FOR DIN PLUG CONNECTION





COILS 22 mm

These coils can be mounted with every Parker solenoid valves corresponding to the specified Coil Group. See column "Coil Group" within valve pages.

This coil is designed for valves equipped with a miniature tube assembly (2000 series valves). 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.

Ease of mounting in confined space-offers shock and corrosion protection - simplifies conversion of existing equipment to other requirements, etc. Coil conforms to the IEC/CENELEC safety standards and complies with European low-voltage directive.



Specification				Low	oower		High power				
Ref. (withou with D	it DIN plug) IN plug)			980 045		481180 481530				
Coil (Group					1.	.1				
Degre	ee of p	rotection			IP65 according to IEC	C / EN 60	529 standards (with D	IN plug).			
Class	of ins	ulation				F 15	55°C				
Elect	rical c	onnection		The coil	is connected with a 2	P + E plu	ug according to EN 17	5301-80	3 t y pe B.		
Ambi	ent ter	nperature		-40°C to +50°C The application is limited also by the temperature range of the valve.							
Je.	DC	Pn (hot)	2.5 W				5 W				
Elect. Power	DC	P (cold) 20°C		3 W				6.5 W			
성	AC	Pn (holding)		2 W			4 W				
ä	AG	Attraction cold		5.7 VA	(2.5 W)			8.9 V A	(5 W)		
Weig	ht				1	00 g with	n DIN Plug				
Volta	ges "U	n"	VAC/Hz	Code	VDC	Code	VAC/Hz	Code	VDC	Code	
-10%	-10% to +10% of the Un		24/50 48/50 110/50-115/50 220/50-230/50	A2 A4 OA 3D	24 48 110	C2 C4 C5	24/50 110/50-115/50 220/50-230/50	A2 0A 3D	24	C2	

To Order a Coil choose Coil Ref + Voltage Code, example: 488980 for 24 VDC = 488980C2

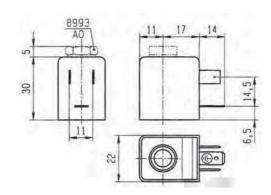
More voltage possibilities can be found in the table of voltage codes at the end of the coil section.

These coils must be used with suitable housings, see example below:

The coil assembly kit Ref. 8993 corresponds to the numbering system for Lucifer® valve housings (Valve - housing - coil/voltage).

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







1.1

COILS FOR DIN PLUG CONNECTION



UL COIL 22 mm

These coils can be mounted with every Parker solenoid valves corresponding to the specified Coil Group.

See column "Coil Group" within valve pages.

This coil is designed for valves equipped with a miniature tube assembly (2000 series valves). 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.

Ease of mounting in confined space-offers shock and corrosion protection - simplifies conversion of existing equipment to other requirements, etc. Coil conforms to the IEC/CENELEC safety standards and complies with European low-voltage directive.



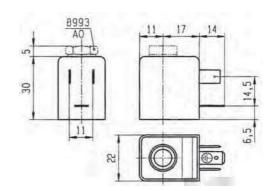
Spec	ificat	ion	Standard UL (only if used with 321K, 121M, 131M valves)						
Refer Refer	ence († ence (†	without DIN plug) with DIN plug)	492912 492919						
Coil G	iroup			1.	.1				
Degre	e of p	rotection		IP65 according to IEC / EN 60	529 standards (with DIN plug).				
Class	of ins	ulation		A 105°C f	or UL/CSA				
Electr	ical co	nnection	The coil	is connected with a 2 P + E plu	ug according to EN 175301-80	3 type B.			
Ambie	Ambient temperature		$-40^{\circ}\mathrm{C}$ to $+50^{\circ}\mathrm{C}$ The application is limited also by the temperature range of the valve.						
ī.	DC	Pn (hot)	4 W						
Elect. Power	DC	P (cold) 20°C	4.5 W						
당.	AC	Pn (holding)		3'	W				
当	AG	Attraction cold		7.5 V A	(4 W)				
Weigh	nt			100 g with	n DIN Plug				
Volta	Voltages "Un"		VAC/Hz	Code	VDC	Code			
- 15%	- 15% to +10% of the Un		48/50-48/60 115/50-120/60	S4 P8	24	C2			

To Order a Coil choose Coil Ref + Voltage Code, example: 492912 for 24 VDC = 492912C2 More voltage possibilities can be found in the table of voltage codes at the end of the coil section.

These coils must be used with suitable housings, see example below:

The coil assembly kit **Ref. 8993** corresponds to the "housing" of Lucifer® valve numbering system (Valve - housing - coil/voltage).







1.1

COILS FOR DIN PLUG CONNECTION





DOUBLE FREQUENCY COIL 22 mm

This coil can be mounted with every Parker solenoid valves corresponding to the specified Coil Group. See column "Coil Group" within valve pages.

This coil is designed for valves equipped with a miniature tube assembly (2000 series valves). 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.

Ease of mounting in confined space-offers shock and corrosion protection - simplifies conversion of existing equipment to other requirements, etc. Coil conforms to the IEC/CENELEC safety standards and complies with European low-voltage directive.





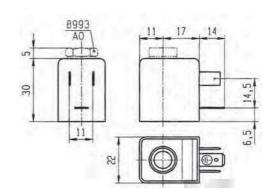
Spec	ificati	on	Double for	requency			
Refer	ence (1	without DIN plug)	483	590			
Coil g	roup		1.	1			
Degre	e of p	otection	IP65 according to IEC / EN 60	529 standards (with DIN plug).			
Class	of ins	ulation	F 15	5°C			
Electr	rical co	nnection	The coil is connected with a 2 P + E plu	ig according to EN 175301-803 type B.			
Ambi	ent ten	nperature	-40°C to +50°C The application is limited also by the temperature range of the valve.				
7er	DC	Pn (hot)		•			
Elect. Power	ЪС	P (cold) 20°C	-				
븅	AC	Pn (holding)	3	W			
ä	AG	Attraction cold	7.5 VA (4 W)				
Weigl	ht		100 g with	n DIN Plug			
Voltag	ges "U	n"	VAC/Hz	Code			
-10%	-10% to +10% of the Un		24/50-60 48/50-60 110-115/50, 120/60 220-240/50, 240/60	PO \$4 \$5 \$6			

To Order a Coil choose Coil Ref + Voltage Code, example: 483590 for 24/50,24/60 = 483590P0 More voltage possibilities can be found in the table of voltage codes at the end of the coil section.

These coils must be used with suitable housings, see example below:

The coil assembly kit Ref. 8993 corresponds to the "housing" of Lucifer® valve numbering system (Valve - housing - coil/voltage).







1.1

COILS FOR DIN PLUG CONNECTION





DOUBLE FREQUENCY COIL 22 mm

This coil can be mounted with every Parker solenoid valves corresponding to the specified Coil Group. See column "Coil Group" within valve pages.

This coil is designed for valves equipped with a miniature tube assembly (2000 series valves). 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.

Ease of mounting in confined space-offers shock and corrosion protection - simplifies conversion of existing equipment to other requirements, etc. Coil conforms to the IEC/CENELEC safety standards and complies with European low-voltage directive.

DIN plug connector to be ordered separately (see coil accessories section).



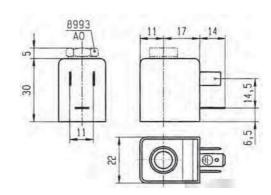
Spec	ificati	ion	Double for	requency	
Refere	ence (1	without DIN Plug)	488143		
Coil g	Coil group		1.1		
Degre	e of p	rotection	IP65 according to IEC / EN 60	529 standards (with DIN plug).	
Class	of ins	ulation	F 15	55°C	
Electr	ical co	nnection	The coil is connected with a 2 P + E plu	ug according to EN 175301-803 type B.	
Ambie	ent ten	nperature	$-40^{\circ}\mathrm{C}$ to $+50^{\circ}\mathrm{C}$ The application is limited also by the temperature range of the valve.		
Je.	DC	Pn (hot)	-		
Power	Ю	P (cold) 20°C		-	
Elect.	AC	Pn (holding)	2.5	W W	
ä	AG	Attraction cold	-	-	
Weigh	nt		60) g	
Voltag	Voltages "Un"		VAC/Hz	Code	
-10%	to +10	% of the Un	100/50-60 200/50-60	P1 P6	

To Order a Coil choose Coil Ref + Voltage Code, example: 488143 for 100/50-60 = 488143P1 More voltage possibilities can be found in the table of voltage codes at the end of the coil section.

These coils must be used with suitable housings, see example below:

The coil assembly kit Ref. 8993 corresponds to the "housing" of Lucifer® valve numbering system (Valve - housing - coil/voltage).







1.2

COILS FOR DIN PLUG CONNECTION





DOUBLE FREQUENCY COIL 22 mm

This coil can be mounted with every Parker solenoid valves corresponding to the specified Coil Group. See column "Coil Group" within valve pages.

This coil is designed for valves equipped with a miniature tube assembly (2000 series valves). 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.

Ease of mounting in confined space-offers shock and corrosion protection - simplifies conversion of existing equipment to other requirements, etc. Coil conforms to the IEC/CENELEC safety standards and complies with European low-voltage directive.

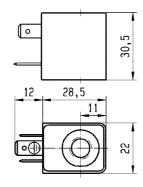
DIN plug connector to be ordered separately (see coil accessories section).



Spec	ificat	ion	Double frequency							
Refer	ence (1	without DIN Plug)		496	131					
Coil g	roup			1.	2					
Degre	e of p	rotection		IP65 according to IEC / EN 60	529 standards (with DIN plug)					
Class	of ins	ulation		F 15	5°C					
Electr	ical co	nnection	The coil	is connected with a 2 P + E plu	ig according to EN 175301-8	03 type B.				
Ambie	Ambient temperature		-40°C to +50°C The application is limited also by the temperature range of the valve.							
Je.	DC	Pn (hot)		3 W						
Ş	DC	P (cold) 20°C		•						
Elect. Power	AC	Pn (holding)		3 W						
ä	AG	Attraction cold		-						
Weigh	nt			60) g					
Voltag	ges "U	n"	VAC/Hz	Code	VDC	Code				
-10%	-10% to +10% of the Un		24/50-60 110/50-60 230/50-60 48/50-60	P0 P2 P9 S4	24 V 48 V 110 V	C2 C4 C5				

To Order a Coil choose Coil Ref + Voltage Code, example: 496131 for 24 VDC = 496131C2 More voltage possibilities can be found in the table of voltage codes at the end of the coil section.

"The housing kit is already included in the valve reference, it is not needed to order it separately."







1.2

COILS FOR DIN PLUG CONNECTION



DOUBLE FREQUENCY COIL 22 mm

This coil can be mounted with every Parker solenoid valves corresponding to the specified Coil Group.
See column "Coil Group" within valve pages.

This coil is designed for valves equipped with a miniature tube assembly (2000 series valves). 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.

Ease of mounting in confined space-offers shock and corrosion protection - simplifies conversion of existing equipment to other requirements, etc. Coil conforms to the IEC/CENELEC safety standards and complies with European low-voltage directive.

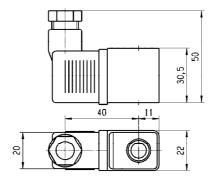
DIN plug connector included.



				10000					
Spec	ificat	on	Double frequency						
Refer	ence			496	482				
Coil g	roup			1.	2				
Degre	e of p	otection		IP65 according to IEC / EN 60	529 standards (with DIN plug)	,			
Class	of ins	ulation		F 15	5°C				
Electr	ical co	nnection	The coil	is connected with a 2 P + E plu	ig according to EN 175301-80	03 type B.			
Ambie	Ambient temperature		$-40^{\circ}\mathrm{C}$ to $+50^{\circ}\mathrm{C}$ The application is limited also by the temperature range of the valve.						
Je.	DC	Pn (hot)		3 W					
Elect. Power	DC	P (cold) 20°C		•					
访	AC	Pn (holding)		3 W					
ä	AG	Attraction cold		-	•				
Weigh	nt			75	g				
Voltag	ges "U	n"	VAC/Hz	Code	VDC	Code			
-10%	-10% to +10% of the Un		24/50-60 110/50-60 230/50-60 48/50-60	P0 P2 P9 S4	24 V 48 V 110 V	C2 C4 C5			

To Order a Coil choose Coil Ref + Voltage Code, example: 496482 for 24 VDC = 496482C2 More voltage possibilities can be found in the table of voltage codes at the end of the coil section.

"The housing kit is already included in the valve reference, it is not needed to order it separately."





1.3

COILS FOR DIN PLUG CONNECTION SHE CESTION



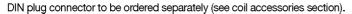


WB COIL SERIES 22 mm

These coils can be mounted with every Parker solenoid valves corresponding to the specified Coil Group. See column "Coil Group" within valve pages.

These coils can be mounted with the majority of type 2 operators. Coil manufactured with H class copper wire, moulded in thermoplastic material polyester with 30% glass fiber. IP65 protection rate with DIN 43650A three pin connector and appropriate gasket.

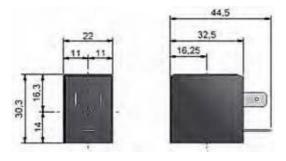
The synthetic material encapsulation provides an effective compact housing, offering full protection against dust, oil, water, etc. Coils conforms to the IEC/ CENELEC safety standards and complies with European low-voltage directive. For UL recognized version: UL file MH19410.





Spec	ificati	on	Stand	ar d	UL recognize	d version	High Po	wer
Ref. (Ref. (without DIN plug)		WB4.5 fo WB5.0 fo	or AC or DC	WB4.5 UR WB5.0 cURus (only 24 VDC) WB8		.0	
Coil G	iroup		1.3					
Degre	e of pr	otection		IP65 accordin	g to IEC / EN 60529 sta	andards (with DIN _I	plug + gasket)	
Class	of inst	ulation	F 155	°C	F 155	°C	F 155	°C
Electr	ical co	nnection		The coil is connect	ed with a 2 P + E plug	according to EN 1	75301-803 type B.	
Ambi	Ambient temperature		-10°C to -	°C to +50°C -10°C to +50°C -10°C to +50°C The application is limited also by the temperature range of the valve.				
ء يہ	DC	P(cold) 20°C	5 W		-		-	
Elect. Power	AC	Pn (holding)	4.5 W		4.5 W		8 W	
ш ~	AG	Attraction cold	7.5 V	'A	7.5 V A		11 V	A
Weigl	nt		90 g (without plug)					
Voltag	ges "U	n"	WB4.5 VAC/Hz	Order Number	WB4.5 UR VAC/Hz	Order Number	WB8.0 VAC/Hz	Order Number
	-10% to +10% of Un for AC - 5 % to + 10 % for Un DC		100/50-60 115/50-60 230/50-60 110/50	302609 304260 304262J 304316	115/60 208-240/60 24/60	304087 304089 304086	115/50-60 230/50-60 24/50-60	302672 302674 302670
			WB5.0 VDC	Order Number	WB5.0 cURus VDC	Order Number		
			110 VDC 12 VDC	302660 302652	24 VDC	302654		

To Order a Coil: Use 6 digits ordering number - Code Example: WB8.0 for 115/50-60 = 302672More voltage possibilities can be found in the table of voltage codes at the end of the coil section.





20.1



ZB COIL SERIES

These coils can be mounted with every Parker solenoid valves corresponding to the specified Coil Group.

See column "Coil Group" within valve pages.

Coil manufactured with H class copper wire, moulded in thermoplastic material polyester with 30% glass fiber.

IP65 protection rate with EN 175301-803:2006-A. Three pin connector.

This coil conforms to the IEC/CENELEC safety standards and complies with European low-voltage directive.

For UL recognized version: UL file MH19410.

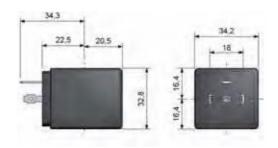
DIN plug connector to be ordered separately (see coil accessories section).



Spec	ificat	ion		Stan	dard		UL recognize	d version		
Refer	ence (without DIN plug)		ZB09.	/ZB12		ZB09 for A	C only		
Coil G	iroup				20.	1				
Degre	e of p	rotection		IP65 according	to IEC / EN 60529 sta	ndards (with DIN p	lug and gasket)			
Class	of ins	ulation			F 155	°C				
Electr	rical co	onnection		The coil is connect	ed with a 2 P + E plug	according to EN 1	75301-803 - type A			
Ambie	ent ter	nperature		The application	-10°C to on is limited also by the		e of the valve.			
=	DC	P(cold) 20°C		12 W						
Elect. Power	AC	P (cold) 20°C								
ш ~	AG	Attraction cold	25 VA							
Weigh	ht		130 g							
Voltag	ges "U	n"	VAC/Hz	Order Number	VDC	Order Number	VAC/Hz	Order Number		
-10% to +10% of Un for AC - 5 % to + 10 % for Un DC.			ZB09 24/50-60 ZB09 12/50-60 ZB09 230/50-60 ZB09 115/50-60 ZB09 100/50-60 ZB09 240/50-60 ZB09 48/50-60 ZB09 110-120/60 ZB09 380/50-60	304004 304002 304012 304010 304009 304014 304008 304011 304016	ZB12 12DC ZB12 24DC ZB12 110DC ZB12 48VDC	304018 304020 304022 304021	ZB09 24/60 ZB09 110-120/60 ZB09 208-240/60	304048 304011 304051		

To Order a Coil: Use 6 digits ordering number - Code Example: ZB09 24/50-60 = 304004

More voltage possibilities can be found in the table of voltage codes at the end of the coil section.







20.2

COILS FOR DIN PLUG CONNECTION







ZB/ZH HIGH POWER - HIGH TEMPERATURE COIL SERIES

These coils can be mounted with every Parker solenoid valves corresponding to the specified Coil Group.

See column "Coil Group" within valve pages.

Coil manufactured with H class copper wire, moulded in thermoplastic material polyester with 30% glass fiber.

IP65 protection rate with EN 175301-803:2006-A. Three pin connector.

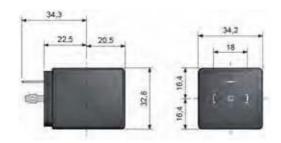
This coil conforms to the IEC/CENELEC safety standards and complies with European low-voltage directive.

DIN plug connector to be ordered separately (see coil accessories section).



Spec	ificat	ion	High power High temperature + high power			+ high power					
Ref. (without DIN plug)			ZB14/ZB16			ZH14/ZH16					
Coil G	iroup					20).2				
Degre	e of p	rotection		IP65 ac	cording to IEC / E	N 60529 s	tandards (with DIN plu	g and gaske	t)		
Class	of ins	ulation				H 18	30°C				
Electr	rical c	onnection	-	The coil is c	onnected with a	2 P + E plu	ig according to EN 175	301-803 - t	уре А		
Ambi	ent ter	mperature	ZB14/	ZB16 -10°0/ The ap		ed also b y t	ZH14. he temperature range	ZH16 -10°(of the valve			
ء يہ	DC	P (cold) 20°C		16 W							
Elect. Power	AC	P (cold) 20°C	14 W								
ш а	AG	Attraction cold	33 VA								
Weigl	ht		130 g (without plug)								
Volta	ges "U	n"	VAC/Hz	Order Number	VDC	Order Number	VAC/Hz	Order Number	VDC	Order Number	
	-10% to +10% of Un for AC - 5 % to + 10 % for Un DC		ZB14 12/50-60 ZB14 24/50-60 ZB14 100/50-60 ZB14 115/50-60 ZB14 230/50-60 ZB14 240/50-60 ZB14 380/50-60 ZB14 48/50-60	304052 304054 304084 304060 304062 304064 304066 304058	ZB16 12DC ZB16 24DC ZB16 110DC	304068 304070 304072	ZH14 24/50-60 ZH14 115/50-60 ZH14 230/50-60	304100 304102 304104	ZH16 24DC ZH16 12DC	304112 304110	

To Order a Coil: Use 6 digits ordering number - Code Example: ZH16 for 24 VDC = 304112 More voltage possibilities can be found in the table of voltage codes at the end of the coil section.







21.0

COILS FOR DIN PLUG CONNECTION



JB COIL SERIES

These coils can be mounted with every Parker solenoid valves corresponding to the specified Coil Group.

See column "Coil Group" within valve pages.

Coil manufactured with H class copper wire, moulded in thermoplastic material polyester with 30% glass fiber.

IP65 protection rate with EN 175301-803:2006-A. Three pin connector.

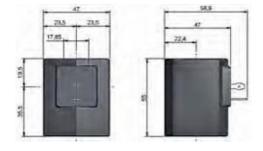
This coil conforms to the IEC/CENELEC safety standards and complies with European low-voltage directive.

DIN plug connector to be ordered separately (see coil accessories section).



Spec	ificat	on		Stan	dard					
Ref. (withou	t DIN plug)	JB14/JB16							
Coil G	iroup			21	.0					
Degre	e of p	otection	IP65	according to IEC / EN 60529 s	tandards (with DIN plug and ga	isket)				
Class	of ins	ulation		F 15	55°C					
Electr	ical co	nnection	The coil i	s connected with a 2 P + E plu	g according to EN 175301-803	3 - T y pe A				
Ambi	Ambient temperature		-10°C to +50°C The application is limited also by the temperature range of the valve.							
	DC	P (cold) 20°C	16 W							
Elect. Power	AC	P (cold) 20°C	14 W							
ша	AG	Attraction cold		55 VA						
Weigl	nt			130 g (wi	thout plug)					
Voltag	ges "U	n"	VAC/Hz	Order Number	VDC	Order Number				
	-10% to +10% of Un for AC - 5 % to + 10 % for Un DC.		JB14 24/50-60 JB14 115/50-60 JB14 230/50-60 JB14 240/50-60	304900 304910 304915 304920	JB16 12DC JB16 24DC JB16 196DC	304945 304950 304958				

To Order a Coil: Use 6 digits ordering number - Code Example: JB16 for 12 VDC = 304945 More voltage possibilities can be found in the table of voltage codes at the end of the coil section.





22.0

COILS FOR DIN PLUG CONNECTION







KT/KH COIL SERIES

These coils can be mounted with every Parker solenoid valves corresponding to the specified Coil Group.

See column "Coil Group" within valve pages.

Coil manufactured with H class copper wire, moulded in thermoplastic material polyester with 30% glass fiber.

IP65 protection rate with EN 175301-803:2006-A. Three pin connector.

This coil conforms to the IEC/CENELEC safety standards and complies with European low-voltage directive.

DIN plug connector to be ordered separately (see coil accessories section).



Spec	ificati	on		Standa	rd		High Ten	nperature	
Ref. (withou	t DIN plug)	KT09/KT10			KI	109		
Coil G	iroup					22	.0		
Degre	e of p	rotection		IP65 ac	cording to IEC /	EN 60529 st	tandards (with DIN plug and ga	asket)	
Class	of ins	ulation		F 155°	C		H1	80°C	
Electr	ical co	nnection		The coil is c	onnected with a	2 P + E plu	g according to EN 175301-80	3 - Type A	
Ambi	ent ten	nperature	-10°C to +50°C The application is limited also by th			-10°C to +80°C he temperature range of the valve.			
	DC	P (cold) 20°C	10 W			-			
Elect. Power	AC	P (cold) 20°C	9 W				9 W		
ш а	AU	Attraction cold		20 VA			20 V A		
Weigh	nt					150 g (wit	hout plug)		
Volta	ges "U	n"	VAC/Hz	Order Number	VDC	Order Number	VAC/Hz	Order Number	
-10% to +10% of Un for AC - 5 % to + 10 % for Un DC			KT09 24/50 KT09 115/50 KT09 208-230/60 KT09-230/50 KT09 240/50	304621 304631 304656 304639 304641	KT10 12DC KT10 24DC	304666 304971	KH09 24/50 KH09 230/50	304746 304748	

To Order a Coil: Use 6 digits ordering number - Code Example: KT10 for 12VDC = 304666 More voltage possibilities can be found in the table of voltage codes at the end of the coil section.





23.0

available separately.

COILS FOR DIN PLUG CONNECTION





XT09 COIL SERIES

This coil can be mounted with every Parker solenoid valves corresponding to the specified Coil Group. See column "Coil Group" within valve pages.

Coil manufactured with H class copper wire, moulded in thermoplastic material polyester with 30% glass fiber. IP54 protection rate with special 2P+E connection. Special plug with integrated powercord

This coil conforms to the IEC/CENELEC safety standards and complies with European low-voltage directive.

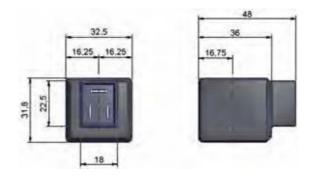
DIN plug connector to be ordered separately (see coil accessories section).



Spec	cificati	ion	For Heating	For Heating Applications			
Ref. (withou	t DIN plug)	XT09				
Coil (Group		23	1.0			
Degre	ee of pi	rotection	IP54 according to IEC / EN 60529 standar	ds (with special plug supplied separately)			
Class	of ins	ulation	F 15	5°C			
Elect	rical co	onnection	Special 2 P + E plug connection				
Ambi	ent ten	nperature	$-10^{\circ}\mathrm{C}$ to $+50^{\circ}\mathrm{C}$ The application is limited also by the temperature range of the valve.				
ىر د	DC	P (cold) 20°C	•				
Elect. Power	AC	P (cold) 20°C	9	W			
ш а	AC	Attraction cold	22	VA			
Weig	Weight		150 g (wit	hout plug)			
Volta	ges "U	n"	VAC/Hz	Order Number			
-10%	to +10	% of Un for AC	XT09 230/50	304776			

To Order a Coil: Use 6 digits ordering number - Code Example: XT09 230/50 = 304776

More voltage possibilities can be found in the table of voltage codes at the end of the coil section.





24.0

COILS FOR DIN PLUG CONNECTION ROHS CETT (**)





D4 SERIES - UL COILS 32 mm

This coil is UL-approved as a recognized component for the insulation Class 155, conforms to the IEC/CENELEC safety standards and complies with European low-voltage directive.

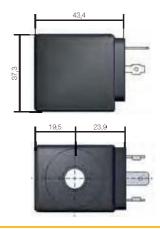
DIN plug connector to be ordered separately (see coil accessories section).



Spec	ificati	ion	UL Recognized					
Refere	ence (1	without DIN plug)	D4 Series					
Coil g	roup			24	.0			
Degre	e of p	rotection		IP65 according to IEC / EN 60	529 standards (with DIN plug)			
Class	of ins	ulation		F 15	5°C			
Electr	ical Co	onnection	The coil	is connected with a 2 P + E pli	ug according to EN 175301-80	3 type A		
Ambie	ent ten	nperature	-40°C to +50°C The application is limited also by the temperature range of the valve.					
Je.	DC	Pn (hot)		12 W				
Power	DC	P (cold) 20°C	16 W					
Elect.	AC	Pn (holding)		11 W				
Ë	AG	Attraction cold		13	VA	A		
Weigh	nt			130	O g			
Voltaç	ges "U	n"	VAC/Hz	Code	VDC	Code		
-10% to +10% of Un for AC - 5 % to + 10 % for Un DC.			24/60 110/50 - 120/60 220/50 - 240/60	D4E D4F D4G	24	D4B		

To Order a Coil: Use 6 digits ordering number - Code Example: D4 for 24VAC/60Hz = D4E More voltage possibilities can be found in the table of voltage codes at the end of the coil section.







24.0

COILS FOR DIN PLUG CONNECTION ROHS CE A









D5 COIL SERIES 32 mm

Encapsulated in synthetic material, Connector for 2P+E according with DIN EN 175301-803, Form A, IP65 degree of protection to be considered with connector plug only.

This coil conforms to the IEC/CENELEC safety standards and complies with European low-voltage directive.

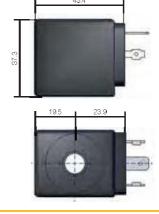
DIN plug connector to be ordered separately (see coil accessories section).



Spec	ificat	ion	Mono Frequency VDE Coil							
Refer	ence (without DIN plug)	D5 Series							
Coil g	roup			24	l.0					
Degre	e of p	rotection		IP65 according to IEC / EN 60	529 standards (with DIN plug)					
Class	of ins	ulation		F 18	55°C					
Electr	rical co	nnection	The coil	is connected with a 2 P + E plo	ug according to EN 175301-80	3 ty pe A .				
Ambi	ent ter	nperature	$-40^{\circ}\mathrm{C}$ to $+50^{\circ}\mathrm{C}$ The application is limited also by the temperature range of the valve.							
ē	DC	Pn (hot)								
Po S	DC	P (cold) 20°C		-						
Elect. Power	AC	P (cold) 20°C		8 W						
Ë	AG	Attraction cold		40	O VA					
Weigl	ht		130 g							
Volta	ges "U	n"	VAC/Hz	Code	VDC	Code				
	-10% to +10% of Un for AC - 5 % to + 10 % for Un DC.		24/50 110/50 220-230/50 24/60 230/60 115/60	D5H D5XA5 D5L D5E D5XJ3 D5XK8	24	D5B				

To Order a Coil: Use 6 digits ordering number - Code Example: D5 for 24 VAC/60 Hz = D5E More voltage possibilities can be found in the table of voltage codes at the end of the coil section.







24.0

COILS FOR DIN PLUG CONNECTION ROHS C E









XS03 COIL SERIES 32 mm

Encapsulated in synthetic material, Connector for 2P+E according with DIN EN 175301-803, Form A, IP65 degree of protection to be considered with connector plug only.

This coil conforms to the IEC/CENELEC safety standards and complies with European low-voltage directive.

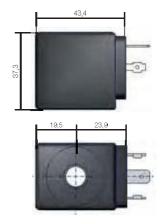
DIN plug connector to be ordered separately (see coil accessories section).



Specification		ion	Bi- Frequency VDE Coil				
Reference (without DIN plug)		without DIN plug)	XS03 Series				
Coil group			24.0				
Degre	e of p	otection	IP65 according to IEC / EN 60529 standards (with DIN plug)				
Class	of ins	ulation	F 155°C				
Electr	ical Co	onnection	The coil is connected with a 2 P + E plo	ug according to EN 175301-803 type A			
Ambie	Ambient temperature		$-40^{\circ}\mathrm{C}$ to $+50^{\circ}\mathrm{C}$ The application is limited also by the temperature range of the valve.				
ē	DO	Pn (hot)	•				
Š	DC	P (cold) 20°C	-				
Elect. Power	AC	Pn (holding)	9'	W			
哥	AG	Attraction cold	32	? VA			
Weigh	nt		130 g				
Voltag	jes "U	n"	VAC/Hz	Code			
-10% to +10% of Un for AC		% of Un for AC	24/50 - 24/60 110-115/50 - 120/60 220-240/50 - 240/60	XS03M XS03XS5 XS03XS6			

To Order a Coil: Use 6 digits ordering number - Code Example: XS03 for 24/50-24/60 = XS03M More voltage possibilities can be found in the table of voltage codes at the end of the coil section.







10.1

COILS FOR DIN PLUG CONNECTION



COIL FOR OIL AND GAS 37 mm

This coil can be mounted with every Parker solenoid valves corresponding to the specified Coil Group.

See column "Coil Group" within valve pages.

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.

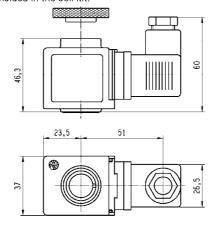
Ease of mounting in confined space - offers shock and corrosion protection - simplifies conversion of existing equipment to other requirements, etc. Coils conform to the IEC/CENELEC safety standards and complies with European low-voltage directive. DIN plug connector included (The AC electrical connection is delivered with a rectifier bridge).



Specification			Coil for Oil and Gas					
Refer	ence (1	with DIN plug)		496	895			
Coil g	roup			10).1			
Degre	e of p	otection		IP65 according to IEC	/ EN 60529 standards			
Class	of ins	ulation		H 18	0°C			
Electr	ical co	nnection		With DIN plug 492459	(AC) or 486586 (DC)			
Ambie	Ambient temperature		The	-40°C to +50°C The application is limited also by the temperature range of the valve.				
Je.	DC	Pn (hot)	8 W					
Elect. Power	DC	P (cold) 20°C	-					
덩	AC	Pn (holding)	8 W					
ă	AC	Attraction cold		•	•			
Weigh	nt			273 g				
Voltaç	ges "U	n"	VAC/Hz	Code	VDC	Code		
-10% to +10% of the Un		% of the Un	230/50-60 110/50-60 24/50-60 48/50-60	P9 P2 P0 S4	24 48 110	C2 C4 C5		

To Order a Coil choose Coil Ref + Voltage Code, example: 496895 for 24 VDC = 496895C2

More voltage possibilities can be found in the table of voltage codes at the end of the coil section. The fixing nut (housing kit) is already inclued in the coil kit.





20.1

COILS WITH FLYING LEADS



YB COIL SERIES IP67

These coils can be mounted with every Parker solenoid valves corresponding to the specified Coil Group.

See column "Coil Group" within valve pages.

Coil manufactured with H class copper wire, moulded in thermoplastic material polyester with 30% glass fiber.

IP67 protection rate. Electrical connection: 2 x 1000 mm cables.

This coil conforms to the IFC/CENELEC safety standards and complies

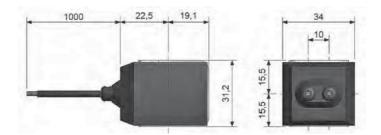
This coil conforms to the IEC/CENELEC safety standards and complies with European low-voltage directive.

For UL recognized version: UL file MH19410.



Speci	ificati	on	Standard				UL recognized version	
Reference			YB09/YB12			YB09		
Coil G	roup				20.1			
Degre	e of p	otection		IF	67 according to IEC / I	EN 60529 standard	ds	
Class	of ins	ulation			F 155	°C		
Electri	ical co	nnection		The coil is c	onnected with a 2 x 10	00 mm flying lead	s integrated.	
Ambie	nt ten	nperature	-10°C to +50°C The application is limited also by the temperature range of the valve.					
h	DC	P(cold) 20°C	12 W				-	
Elect. Power	AC	Pn (holding)		9	9 W			
ш а	AG	Attraction cold		24	VA		24 VA	
Weigh	ıt		150 g					
Voltag	jes "U	n"	VAC/Hz	Order Number	VDC	Order Number	VAC/Hz	Order Number
-10% to +10% of Un for AC - 5 % to + 10 % for Un DC.			YB09 115/50-60 YB09 230/50-60 YB09 24/50-60 YB09 240/50-60	304396 304398 304390 304400	YB12 12DC YB12 24DC	304412 304416	YB09 24/60 YB09 110-120/60 YB09 208-240/60	304481 304488 304483

To Order a Coil: Use 6 digits ordering number - Code Example: YB09 for 24 VAC/60 Hz = 304481 More voltage possibilities can be found in the table of voltage codes at the end of the coil section.





24.0

COILS WITH FLYING LEADS





LA COIL SERIES 32 mm IP67

Encapsulated in synthetic material. Degree of protection IP67 as per IEC/EN60529.

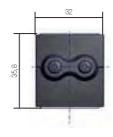
Connection: 2 x 500 mm cables.

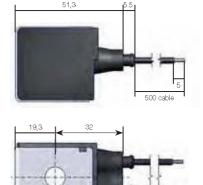
This coil conforms to the IEC/CENELEC safety standards and complies with European low-voltage directive.



Specification			Coil with two 500 mm flying leads					
Reference			LA Series					
Coil group				24	1.0			
Degre	e of p	otection		IP67 according to IEC	/ EN 60529 standards			
Class	of ins	ulation		F 15	55°C			
Ambient temperature			-10°C to +50°C The application is limited also by the temperature range of the valve.					
Je.	DC	Pn (hot)		9 W				
δ	DC	P (cold) 20°C	•					
Elect. Power	AC	Pn (holding)		9	9 W			
ä	AG	Attraction cold		32 VA				
Weigh	ıt			180 g				
Voltag	Voltages "Un"		VAC/Hz	Code	VDC	Code		
-10% to +10% of Un for AC - 5 % to + 10 % for Un DC.			24/50 - 24/60 110-115/50 - 120/60 220-240/50 - 240/60	LAM LAXS5 LAXS6	24	LAB		

To Order a Coil: Use 6 digits ordering number - Code Example: LA Series for 24 VDC = LAB More voltage possibilities can be found in the table of voltage codes at the end of the coil section.







24.0

COILS WITH FLYING LEADS



LB-LC COIL SERIES 32 mm UL IP67

Encapsulated in synthetic material. Degree of protection IP67 as per IEC/EN60529.

Connection: 2 x 500mm cables.

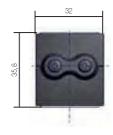
This coil is UL-approved as a recognized component for the insulation Class 155, conforms to the IEC/CENELEC safety standards and complies with European low-voltage directive.

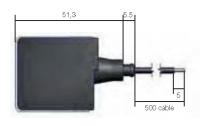


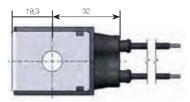
Spec	ificat	on	UL Coil with two 500 mm flying leads							
Refer	ence		LB-LC Series							
Coil group				24	.0					
Degre	e of p	otection		IP67 according to IEC	/ EN 60529 standards					
Class	of ins	ulation		F 15	5°C					
Ambi	ent ter	nperature	-10°C to +50°C The application is limited also by the temperature range of the valve.							
Je L	DC	Pn (hot)		16 W						
Elect. Power	DC	P (cold) 20°C								
당	AC	Pn (holding)	13-14 W							
ä	AG	Attraction cold		40	VA					
Weigl	nt		180 g							
Volta	jes "U	n"	VAC/Hz	Code	VDC	Code				
	-10% to +10% of Un for AC - 5 % to + 10 % for Un DC		24/60 110/50 - 120/60 208-240/60 220/50 240/60	LBE LBF LBXU3 LBG	24	LCB				

To Order a Coil: Use 6 digits ordering number - Code Example: LB-LC for 24 VDC = LCB

More voltage possibilities can be found in the table of voltage codes at the end of the coil section.









2.0/2.1

COILS WITH FLYING LEADS





COIL 32 mm IP67

This coil can be mounted with every Parker solenoid valves corresponding to the specified Coil Group. See column "Coil Group" within valve pages.

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.

Ease of mounting in confined space - offers shock and corrosion protection - simplifies conversion of existing equipment to other requirements, etc.

Coils conform to the IEC/CENELEC safety standards and complies with European low-voltage directive.

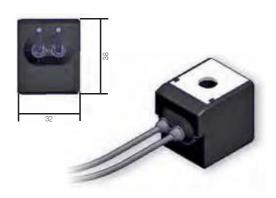


Spec	cificat	ion	Coil with two 500 mm flying leads					
Reference			496081					
Coil (Group			2.0	' 2.1			
Degr	ee of p	rotection		IP67 according to IEC	/ EN 60529 standards			
Class	of ins	ulation		F 15	5°C			
Ambi	ient ter	mperature	-40 °C to +50°C The application is limited also by the temperature range of the valve.					
Je.	DC	Pn (hot)	9 W					
Power	ЪС	P (cold) 20°C	•					
Elect.	AC	Pn (holding)		9	W			
ä	AU	Attraction cold		32	VA			
Weig	ht		180 g					
Volta	Voltages "Un"		VAC/Hz	Order Number	VDC	Order Number		
	-10% to +10% of Un for AC - 5 % to + 10 % for Un DC		24/50 - 24/60 110-115/50 - 120/60 220-240/50 - 240/60	439816 439820 439822	24 12	439818 439814		

To Order a Coil: Use 6 digits ordering number - Code Example: 496081 for 24 VDC = 439818 More voltage possibilities can be found in the table of voltage codes at the end of the coil section.

For Parker Lucifer® valves please order housing Ref: 2995







2.0/2.2

COILS WITH FLYING LEADS



COIL 32 mm IP67 UL

This coil can be mounted with every Parker solenoid valves corresponding to the specified Coil Group.

See column "Coil Group" within valve pages.

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.

Ease of mounting in confined space - offers shock and corrosion protection - simplifies conversion of existing equipment to other requirements, etc.

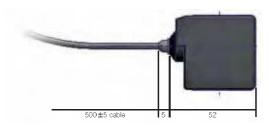
Coils conform to the IEC/CENELEC safety standards and complies with European low-voltage directive.

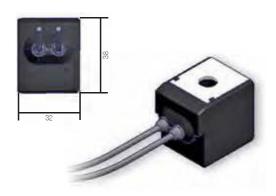


Specification			UL Coil with two 500 mm flying leads						
Reference				496	082				
Coil Group				2.0	/ 2.2				
Degre	e of p	otection		IP67 according to IEC	/ EN 60529 standards				
Class	of ins	ulation		F 15	55°C				
Ambient temperature		nperature	-40°C to +50°C The application is limited also by the temperature range of the valve.						
Je.	DC	Pn (hot)	16 W						
Power	DC	P (cold) 20°C	•						
Elect.	AC	Pn (holding)	13-14 W						
ä	AG	Attraction cold	40 VA						
Weigh	nt		180 g						
Voltag	jes "U	n"	VAC/Hz	Order Number	VDC	Order Number			
-10% to +10% of Un for AC - 5 % to + 10 % for Un DC			24/60 110/50 - 120/60 208-240/60 220/50 - 240/60	439826 439828 439824 439834	24 12	439832 439830			

To Order a Coil: Use 6 digits ordering number - Code Example: 496082 for 24 VDC= 439832 More voltage possibilities can be found in the table of voltage codes at the end of the coil section.

For Parker Lucifer® valves please order housing Ref: 2995







2.0/2.1

COILS WITH SCREW TERMINALS



STANDARD COILS 40 mm

These coils can be mounted with every Parker Solenoid Valves corresponding to the specified Coil Group. See column "Coil Group" within valve pages.

They can be mounted with all metal housings.

The coil winding is completely encapsulated in synthetic material.

Easy mounting in confined spaces. Electrical connection with screw terminals for wire up to 1.5 mm².

Coils conform to the IEC/CENELEC safety standards and complies with European low-voltage directive.

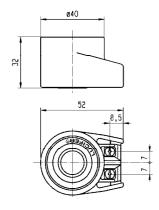


Specification		ion	Standard			Double Frequency			
Refer	ence		481000			483520			
Coil G	iroup					2.0	2.1		
Class	of ins	ulation				F 15	55°C		
Ambi	ent ten	nperature	-40°C to +50°C The application is limited also by the temperature range of the valve						
īe.	DC	Pn (hot)	8	W		-			
Elect. Power	DC	P (cold) 20°C		9'	W		-		
ť	AC	Pn (holding)		8	W		9 W		
当	AG	Attraction cold		32 VA	(9 W)		36 VA (10 W)		
Weigl	ht		130 g				130 g		
Voltag	ges "U	n"	VAC/Hz	Code	VDC	Code	VAC/Hz	Code	
(-15 % for do with v	-10% to +10% of the Un (-15% to +5% for double-frequency coil with voltage code S6 if 240 V/50/Hz is used).		24/50 48/50 110/50-115/50 220/50-230/50	A2 A4 0A 3D	24 48 110	C2 C4 C5	24/50-60 220-240/50-240/60	P0 \$6	

To Order a Coil choose Coil Ref + Voltage Code, example: 4828 for 24 VDC = 481000C2

More voltage possibilities can be found in the table of voltage codes at the end of the coil section.

These coils must be used with suitable housings, see examples below:





Ref. 4270 - Protection IP 44 according to IEC / EN 60529 standard (with cable gland)

474



Ref. 4538 - Protection IP 67 according to IEC / EN 60529 standard



2.0/2.2 COILS WITH SCREW TERMINALS



HIGH POWER COILS 40 mm

This coil can be mounted with every Parker Solenoid Valves corresponding to the specified Coil Group. See column "Coil Group" within valve pages.

They can be mounted with all metal housings.

The coil winding is completely encapsulated in synthetic material.

Easy mounting in confined spaces. Electrical connection with screw terminals for wire up to 1.5 mm².

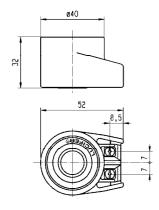
Coils conform to the IEC/CENELEC safety standards and complies with European low-voltage directive.



Spec	Specification		High Power			
Refer	Reference		481044			
Coil G	Coil Group		2.0 /	2.2		
Class	of ins	ulation	F 15	5°C		
Ambie	ent ter	nperature	-40°C to The application is limited also by tl			
je je	DC	Pn (hot)	-			
Power	ЪС	P (cold) 20°C	•			
Elect.	AC	Pn (holding)	14	W		
ä	AG	Attraction cold	56 VA (20 W)			
Weigh	ht		130) g		
Voltag	ges "U	n"	VAC/Hz	Code		
-10%	-10% to +10% of the Un		24/50 110/50 220/50 230/50	A2 A5 A7 F4		

To Order a Coil choose Coil Ref + Voltage Code, example: 481044 for 24VAC/50Hz = 481044A2 More voltage possibilities can be found in the table of voltage codes at the end of the coil section.

These coils must be used with suitable housings, see examples below:





Ref. 4270 - Protection IP 44 according to IEC / EN 60529 standard (with cable gland)



Ref. 8520 - Protection IP 67 according to IEC / EN 60529 standard



2.0/2.1 2.2

COILS WITH SCREW TERMINALS



HIGH TEMPERATURE COILS 40 mm

These coils can be mounted with every Parker Solenoid Valves corresponding to the specified Coil Group. See column "Coil Group" within valve pages.

They can be mounted with all metal housings.

The coil winding is completely encapsulated in synthetic material.

Easy mounting in confined spaces. Electrical connection with screw terminals for wire up to 1.5 mm².

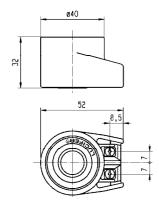
Coils conform to the IEC/CENELEC safety standards and complies with European low-voltage directive.



Specification			High	Temperatu	re		High Temperature & High Power					
Reference				485100			486265					
Coil Group				2.0 / 2.1				2.0	/ 2.2			
Class	of ins	ulation				H 18	30°C					
Ambient temperature				The applicat	ion is limited		o +50°C he temperature range	of the va	ılve.			
Te.	DC	Pn (hot)		8 W			14 W					
Power	DC	P (cold) 20°C			21 W							
Elect.	AC	Pn (holding)		8 W					14 W			
ä	AG	Attraction cold	;	32 VA (9 W)					56 VA (20 W)			
Weigl	nt					14	0 g					
Voltag	ges "U	n"	VAC/Hz	Code	VDC	Code	VAC/Hz	Code	VDC	Code		
-10% to +10% of the Un			24/50 380/50-440/60 220/50-230/50	A2 5P 3D	24	C2	24/50 110/50 220/50 230/50	A2 A5 A7 F4	12 24 48	C1 C2 C4		

To Order a Coil choose Coil Ref + Voltage Code, example: 485100 for 24VAC/50Hz = 485100A2 More voltage possibilities can be found in the table of voltage codes at the end of the coil section.

These coils must be used with suitable housings, see examples below:





Ref. 4270 - Protection **IP 44** according to IEC / EN 60529 standard (with cable gland)



Ref. 8520 - Protection **IP 67** according to IEC / EN 60529 standard



14.1

COILS WITH SCREW TERMINALS



HIGH TEMPERATURE & HIGH POWER COILS 40 mm OIL BURNER

This coils can be mounted with every Parker Solenoid Valves corresponding to the specified Coil Group.
See column "Coil Group" within valve pages.

It can be mounted with all metal housings.

The coil winding is completely encapsulated in synthetic material.

Easy mounting in confined spaces. Electrical connection with screw terminals for wire up to 1.5 $\mbox{mm}^2.$

Coil conform to the IEC/CENELEC safety standards and complies with European low-voltage directive.

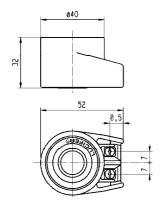
This coil is used only in safety application according to DIN/EN/ISO 23551-1:2009-10 (Oil burners)



Spec	Specification		High Temperature & High Power				
Refer	ence		483824				
Coil G	iroup		14	4.1			
Class	of ins	ulation	H 1	80°C			
Ambi	ent ter	nperature	-40°C to +50°C The application is limited also by the temperature range of the valve.				
/er	DC	Pn (hot)	19 W				
Elect. Power	DC	P (cold) 20°C	19 W				
넔	AC	Pn (holding)	19 W				
当	AG	Attraction cold	56 VA (20 W)				
Weigh	nt		130 g				
Volta	ges "U	n"	VAC/Hz	Code			
-10%	-10% to +10% of the Un		120/50 240/50 110/60 220/60 58/50-60/60 55/60	A6 A8 B5 B7 T6 4J			

To Order a Coil choose Coil Ref + Voltage Code, example: 483824 for 120/50 = 483824A6 More voltage possibilities can be found in the table of voltage codes at the end of the coil section.

These coils must be used with suitable housings, Ref: 8760.24 and Ref: 8520.23







Ref. 8760.24

Ref. 8520.23



14.3

COILS WITH SCREW TERMINALS



HIGH TEMPERATURE & HIGH POWER COILS 40 mm OIL BURNER

This coils can be mounted with every Parker Solenoid Valves corresponding to the specified Coil Group. See column "Coil Group" within valve pages.

It can be mounted with all metal housings.

The coil winding is completely encapsulated in synthetic material.

Easy mounting in confined spaces. Electrical connection with screw terminals for wire up to 1.5 mm².

Coil conform to the IEC/CENELEC safety standards and complies with European low-voltage directive.

This coil is used only in safety application according to DIN/EN/ISO 23551-1:2009-10 (Oil burners)

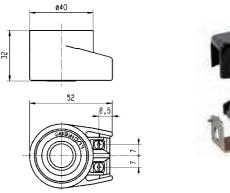


Spec	Specification		High Temperature & High Power					
Refer	ence		483541					
Coil G	iroup		14.3					
Class	of ins	ulation	H 180°C					
Ambi	ent ter	nperature	-40°C to +50°C The application is limited also by the temperature range of the valve.					
Je.	DC	Pn (hot)	20) W				
Š	ьс	P (cold) 20°C	20 W					
Elect. Power	AC	Pn (holding)	20 W					
Ë	AG	Attraction cold	56 VA (20 W)					
Weigl	ht		130 g					
Volta	ges "U	n"	VAC/Hz	Code				
-10%	-10% to +10% of the Un		120/50 240/50 110/60 220/60 58/50-60/60 55/60	A6 A8 B5 B7 T6 4J				

To Order a Coil choose Coil Ref + Voltage Code, example: 483541 for 120/50 = 483541A6

More voltage possibilities can be found in the table of voltage codes at the end of the coil section.

These coils must be used with suitable housings, Ref: 8760.24 and Ref: 8520.23







Ref. 8760.24

Ref. 8520.23



2.0/2.1

COILS WITH SCREW TERMINALS



COIL DOUBLE FREQUENCY 40 mm H CLASS

This coil can be mounted with every Parker Solenoid Valves corresponding to the specified Coil Group.

See column "Coil Group" within valve pages.

They can be mounted with all metal housings.

The coil winding is completely encapsulated in synthetic material.

Easy mounting in confined spaces. Electrical connection with screw terminals for wire up to $1.5\ mm^2$.

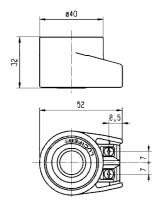
Coils conform to the IEC/CENELEC safety standards and complies with European low-voltage directive.



Spec	Specification		Double Frequency 100 V - 200 V			
Reference			488553			
Coil G	iroup		2.0/	/ 2.1		
Class	of ins	ulation	H 18	30°C		
Ambient temperature		nperature	-40°C to +50°C The application is limited also by the temperature range of the valve.			
뉼	DC	Pn (hot)	-			
Power	ЪС	P (cold) 20°C	-	-		
Elect.	AC	Pn (holding)	91	W		
ä	AG	Attraction cold	-	-		
Weigl	ht		130	0 g		
Voltag	ges "U	n"	VAC/Hz	Code		
-10% to +10% of the Un		% of the Un	100/50-60 200/50-60	P1 P6		

To Order a Coil choose Coil Ref + Voltage Code, example: 488553 for 110/50-60 = 488553P1 More voltage possibilities can be found in the table of voltage codes at the end of the coil section.

These coils must be used with suitable housings, see examples below:







Ref. 4270 - Protection IP 44

Ref. 8520 - Protection IP 54



4.0

COILS WITH SCREW TERMINALS



BISTABLE COILS 40 mm FOR IMPULSE APPLICATIONS

These coils can be mounted with every Parker solenoid valves corresponding to the specified Coil Group.

See column "Coil Group" within valve pages.

These coils are specially designed for Lucifer® bistable (or impulse or magnetic latch) solenoid valves for Heating Applications.

They can be mounted only with the Lucifer® metallic housing 4269 or 4538.

The coil winding is completely encapsulated in synthetic material. Easy mounting in confined spaces. Electrical connection with screw terminals for wire up to 1.5 mm².

Coils conform to the IEC/CENELEC safety standards and complies with European low-voltage directive.

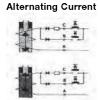


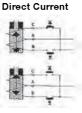
Spec	ificati	ion		Bistable	(Impulse)		
Refer	ence		484	484990 485400			
Coil G	iroup			4	.0		
Class of insulation				F 15	55°C		
Ambient temperature		nperature	-40°C to $+50^{\circ}\text{C}$ The application is limited also by the temperature range of the valve.				
Length of impulses				Switch on (terminals A-B): minimum 50 ms Switch off (terminals A-C): minimum 35 ms			
=		Attraction (hot)		-	13 W		
讀	DC	Attraction (cold)		-	19 W		
nsu	DC	Release (hot)		-	8	W	
8		Release (cold)			10	W	
Wei		Attraction (hot)	11	W	-		
<u> </u>	80	Attraction (cold)	17	W	-		
Electr. Power consuption	AC	Release (hot)	4	W	-		
□		Release (cold)	7	W	-		
Weigh	nt			15	0 g		
Voltaç	ges "U	n"	VAC/Hz	Code	VDC	Code	
-10% to +10% of the Un		% of the Un	24/50-24/60 48/50-48/60 110-115/50-115/60 220-230/50-60	P0 S4 1P 3P	24 48 110	C2 C4 C5	

To Order a Coil choose Coil Ref + Voltage Code, example: 485400 for 24 VDC = 485400C2 More voltage possibilities can be found in the table of voltage codes at the end of the coil section.

These coils must be used with suitable housings, see examples below:

DIAGRAM









Only an electrical impulse given to terminals A-C reverses the magnetic field. This magnetic field demagnetises the reversible magnet enough to allow the return spring to bring the plunger back to its initial position and close the valve.

Ref. 4269 - Protection IP 44

Ref. 4538 - Protection IP 67



13.0

COILS WITH ISO-DIN CONNECTORS



COILS 12 V - 24 V FOR TRANSPORTATION APPLICATIONS 32 mm

These coils can be mounted with every Parker solenoid valves corresponding to the specified Coil Group. See column "Coil Group" within valve pages.

These coils are specially designed for Lucifer $\!\!\!^{\circledcirc}$ solenoid valves for Transportation Applications.

They can be mounted with the standard Lucifer® housing 2161 or customized housing.

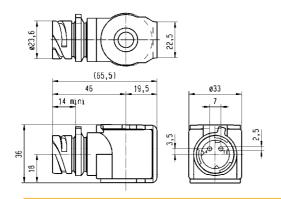
The coil winding is completely encapsulated in epoxy. Easy mounting and dismounting in confined spaces. Bayonet twist and lock coupling for tight, vibration resistant connection.

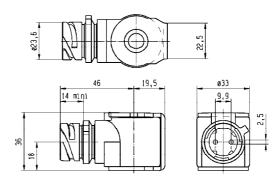
Coils conform to the IEC/CENELEC safety standards and complies with European low-voltage directive.



Spec	cificat	ion	Transportation						
Reference			496193 495294 with diode without diode						
Coil (Group			13	3.0				
Degr	ee of p	rotection	IP69K for DIN 400050 part 9						
Ambi	iant ter	mperature	The application is	- 40°C to +120°C The application is limited also by the temperature range of the valve and duty cycle of the valve.					
Insul	Insulation Class			F 155°C					
Elect	rical c	onnection	ISO 15170-A1-2.3-Sn/K2 DIN 72585-A3-2.1			5-A3-2.1			
Je.	DC	Pn (hot)		9 w					
δ	DC	P (cold) 20°C		•	-				
Elect. Power	AC	Pn (holding)			-				
ä	AU	Attraction cold			-				
Weig	ht			14	7 g				
Volta	ges "U	n"	VDC	Code	VDC	Code			
- 309	% to + 3	30% of the Un	12 24	C1 C2	12 24	C1 C2			

To Order a Coil choose Coil Ref + Voltage Code, example: 496193 for 24 VDC = 496193C2 These coils must be used with suitable housings Ref.2168 for 12Vdc and 2169 for 24 VDC.







EXPLOSION PROOF ELECTRICAL PARTS





TABLE OF CONTENT

INTRODUCTION	
Index for Explosion Proof Electrical Parts	442
List of Coil Groups	443
COILS	
Coils for DIN plug connection	446
Coils with flying leads	469
Coils with screw terminal	474
Coils with ISO-DIN connector	481
EXPLOSION PROOF ELECTRICAL PARTS	
Level of protection "nAc nCc"	484
Level of protection "db"	492
Level of protection "mb"	494
Level of protection "db mb"	499
Level of protection "eb"	504
Level of protection "eb mb"	
Level of protection "ia"	508
HOUSINGS	518
COIL ACCESSORIES	522
EXPLOSIVE ENVIRONMENTS	524
COIL APPENDICES	
Guidance chart for IS-Barriers	534



1.1

ELECTRICAL PARTS "nAc nCc"







ELECTRICAL PART LOW POWER 22 mm

This coil can be mounted with every Parker ATEX solenoid valves corresponding to the specified Coil Group.

See column "Coil Group" within valve pages.

Application:

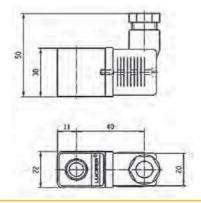
Control of solenoid valves in dangerous areas where explosion-proof protection Ex nAc nCc IIC T5 is required.

The synthetic material encapsulation of the coil provides an effective compact housing, offering full protection against dust, oil, water, etc. Small size for ease of mounting in confined spaces.



Reference				495865				
Certif	icate			LCIE 05 ATEX 6003 X				
Coil G	iroup				1.	1		
Tuno	of prof	ection	Gas		II3G Ex nA	c nCc IIC T5		
Type	oi pioi	COLIOII	Dust		II 3 D - Ex to	IIIC - T 95°C		
Degre	e of p	rotection		IP65 (with plug) according to IEC/EN 60529 Standards				
Ambia	ant ter	nperature		The	-40°C to +50°C The application is limited also by the temperature range of the valve.			
Insula	ation C	lass		F 155°C				
Electr	ical co	nnection		These coils with connection 2P + G - when mounted together with the supplied Pg 9 plug (delivered with the coil),				
ē	DC	Pn (hot)		2.5 W				
Elect. Power	DC	P (cold) 20°0	С	3 W				
덩	AC	Pn (holding)		2 W				
当	AC	Attraction co	old		5.7 VA	(2.5 W)		
Weigh	nt				120) g		
Voltaç	ges "U	n"		VAC/Hz	Code	VDC	Code	
-10%	-10% to +10% of the Un			24/50 48/50 110/50-115/50 220/50-230/50	A2 A4 OA 3D	24 48	C2 C4	

To Order a Coil choose Coil Ref + Voltage Code, example: 495865 for 24 VDC = 495865C2





1.2

ELECTRICAL PARTS "nAc nCc"







ELECTRICAL PART DOUBLE FREQUENCY 22 mm

This coil can be mounted with every Parker ATEX solenoid valves corresponding to the specified Coil Group.

See column "Coil Group" within valve pages.

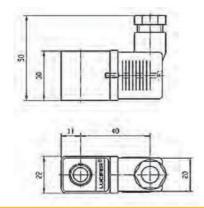
Control of solenoid valves in dangerous areas where explosion-proof protection Ex nAc nCc IIC T5 is required.

The synthetic material encapsulation of the coil provides an effective compact housing, offering full protection against dust, oil, water, etc. Small size for ease of mounting in confined spaces.



Specification					Double Frequency				
Refer	ence			496637					
Certificate					AT	EX			
Coil g	roup				1.	2			
Type	of prot	ection	Gas		Ex nAc n	Cc IIC T5			
турск	oi pioi	COLIDII	Dust	II 3 D - Ex to IIIC - T 95°C					
Degre	e of p	otection			IP65 (with plug) according	to IEC/EN 60529 Sandards			
Ambiant temperature				-20°C to $+50^{\circ}\text{C}$ The application is limited also by the temperature range of the valve.					
Insula	ition C	lass		F 155°C					
Je.	DC	Pn (hot)		3 W					
δ	DG	P(cold) 20°C		-					
Elect. Power	AC	Pn (holding)		3 W					
ä	AC	Attraction co	old		5.7 VA (2.5 W)				
Weigh	ıt				75	g			
Voltag	jes "U	n"		VAC/Hz	Code	VDC	Code		
-10% to +10% of the Un				24/50-60 110/50-60 230/50-60 48/50-60	P0 P2 P9 S4	24 V 48 V 110 V	C2 C4 C5		

To Order a Coil choose Coil Ref + Voltage Code, example: 496637 for 24 VDC = 496637C2





2.0/2.1

ELECTRICAL PARTS "nAc nCc"







ELECTRICAL PART 32 mm

These coils can be mounted with every Parker ATEX solenoid valves corresponding to the specified Coil Group.
See column "Coil Group" within valve pages.

Application: Control of solenoid valves in dangerous areas where explosionproof protection Ex nAc nCc IIC T3/T4 is required.

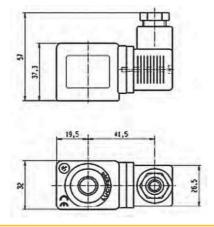
Ease of mounting in confined space - offers shock and corrosion protection-simplifies conversion of existing equipment to other requirements, etc.

The synthetic material encapsulation of the coil provides an effective compact housing, offering full protection against dust, oil, water, etc. Small size for ease of mounting in confined spaces.



Reference				495	870		49611	0		
Certif	Certificate			LCIE 05 ATEX 6003 X						
Coil G	roup				2.0 / 2.1					
Tuno	Type of protection Gas			II	I3G ExnAc	nCc IIC T3/T4		II 3 G Ex nAc nCo	IIC T3/T4	
Type	n prot	CCHOII	Dust	II 3 D	- Ex to IIIC -	T195°C / T130°C		II 3 D - Ex to IIIC - T19	95°C / T130°C	
Degre	e of pi	otection		IP65 (with plug) according to IEC/EN 60529 Standards						
Insula	tion C	lass					F (15	55°C)		
Duty o	cycle						10	0%		
Ambia	Ambiant temperature			-40°C to +65°C / 50°C The application is limited also by the temperature range of the valve.						
rer.	DC	Pn (hot)		9 W				-		
Elect. Power	ЪС	P (cold) 20°0	3	12 W				-		
넑	AC	Pn (holding)			8	W		9 W		
ä	AU	Attraction co	ıld		26 VA	(9 W)		32 VA (10	W)	
Weigh	ıt						15	0 g		
Voltag	jes "U	n"		VAC/Hz	Code	VDC	Code	VAC/Hz	Code	
-10%	-10% to +10% of the Un			24/50 48/50	A2 A4	24 48	C2 C4	24/50-60 48/50-60	P0 S4	
				110/50 220-230/50	A 5 3D	110	C5	110/50-60 220/50-60	\$5 \$6	

To Order a Coil choose Coil Ref + Voltage Code, example: 495870 for 24 VDC = 495870C2





6.0

ELECTRICAL PARTS "nAc nCc"







ELECTRICAL PART LOW POWER 32 mm

This coil can be mounted with every Parker ATEX solenoid valves corresponding to the specified Coil Group.

See column "Coil Group" within valve pages.

Application: Control of solenoid valves in dangerous areas where explosionproof protection Ex nAc nCc IIC T5/T6 is required.

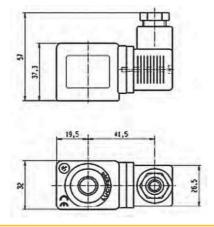
Ease of mounting in confined space - offers shock and corrosion protection-simplifies conversion of existing equipment to other requirements, etc.

The synthetic material encapsulation of the coil provides an effective compact housing, offering full protection against dust, oil, water, etc. Small size for ease of mounting in confined spaces.



Refer	ence			496	125		
Certifi	icate			LCIE 05 ATEX 6003 X			
Coil g	roup			6.	0		
Туре	of prot	action	Gas	II 3 G Ex nAc	II 3 G Ex nAc nCc IIC T5/T6		
iype c	Ji piot	COLIDII	Dust	II 3 D Ex to IIIC T95°C/80°C			
Degre	e of p	rotection		IP65 (with plug) according	to IEC/EN 60529 Standards		
Insula	ation C	lass		F (15	55°C)		
Duty o	cycle			100%			
Ambia	ant ten	nperature		-40°C to $+65^{\circ}\text{C}$ / 50°C The application is limited also by the temperature range of the valve.			
Je.	DC	Pn (hot)		1.6 W			
Po	DG	P (cold) 20°0	3	2.1 W			
Elect. Power	AC	Pn (holding)		-	•		
ä	AU	Attraction co	old	•			
Weigh	nt			150	O g		
Voltag	ges "U	n"		VDC	Code		
-10%	-10% to +10% of the Un			24 48	C2 C4		
				110	C5		

To Order a Coil choose Coil Ref + Voltage Code, example: 496125 for 24 VDC = 496125C2





3.0

ELECTRICAL PARTS "nAc nCc"







ELECTRICAL PART 32 mm

This coil can be mounted with every Parker ATEX solenoid valves corresponding to the specified Coil Group.
See column "Coil Group" within valve pages.

Application: Control of solenoid valves in dangerous areas where explosionproof protection Ex nAc nCc IIC T3/T4 is required.

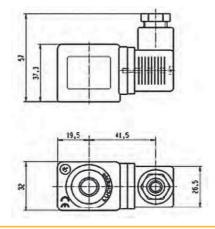
Ease of mounting in confined space - offers shock and corrosion protection-simplifies conversion of existing equipment to other requirements, etc.

The synthetic material encapsulation of the coil provides an effective compact housing, offering full protection against dust, oil, water, etc. Small size for ease of mounting in confined spaces.



Speci	ificati	ion		32 mm Coil "nAc nCc"				
Refere	ence			495875				
Certifi	icate				LCIE 05 AT	EX 6003 X		
Coil G	roup			3.0				
Туре	of neat	action	Gas		∥3 G Ex nAc	nCc IIC T3/T4		
Type	n prot	CCLIOII	Dust		II 3 D - Ex to IIIC -	T195°C / T130°C		
Degre	e of pi	otection			IP65 (with plug) according	to IEC/EN 60529 Standards		
Insula	tion C	lass		F 155°C				
Duty o	ycle				10	0%		
Ambia	ınt ten	nperature		-40°C to +65°C / 50°C The application is limited also by the temperature range of the valve.				
Je .	DC	Pn (hot)		7 W				
Elect. Power	ьс	P (cold) 20°C		-				
넔	AC	Pn (holding)		6 W				
ä	Attraction cold			-				
Weigh	Weight			180 g				
Voltag	Voltages "Un"			VAC/Hz	Code	VDC	Code	
-10%	-10% to +10% of the Un			220-230/50	3D	24	C2	

To Order a Coil choose Coil Ref + Voltage Code, example: 495875 for 24 VDC = 495875C2





2.0/2.2

NON ENCAPSULATED ELECTRICAL PARTS "nAc nCc"







ELECTRICAL PART 32 mm

This coil can be mounted with every Parker ATEX solenoid valves corresponding to the specified Coil Group.
See column "Coil Group" within valve pages.

Application: Control of solenoid valves in dangerous areas where explosionproof protection Ex nAc nCc IIC T3 is required.

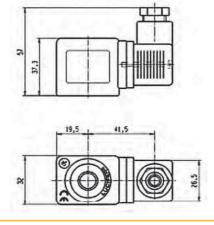
Ease of mounting in confined space - offers shock and corrosion protection - simplifies conversion of existing equipment to other requirements, etc.

The synthetic material encapsulation of the coil provides an effective compact housing, offering full protection against dust, oil, water, etc. Small size for ease of mounting in confined spaces.



Spec	Specification			32 mm Coil "nAc nCc"				
Refer	ence			495880				
Certif	icate				LCIE 05 A1	TEX 6003X		
Coil G	Coil Group				2.0	2.2		
Time	Type of protection Gas				II 3 G Ex nA	c nCc IIC T3		
туре	or prot	ection	Dust	II 3 D - Ex tc IIIC - T195°C				
Degre	e of p	otection			IP65 (with plug) according	to IEC/EN 60529 Standards		
Insula	ntion C	lass			H 18	30°C		
Duty o	cycle			100%				
Ambia	ant ten	nperature		The	-40°C to application is limited also by t	o +65°C he temperature range of the v a	ılve.	
ē	DO	Pn (hot)		14 W				
Elect. Power	DC	P (cold) 20°0	C	-				
귱	AC	Pn (holding)		14 W				
ä	AG	Attraction co	old	-				
Weigh	nt				18	0 g		
Voltag	Voltages "Un"			VAC/Hz	Code	VDC	Code	
-10%	-10% to +10% of the Un			24/50 110/50 230/50	A2 A 5 F4	24	C2	

To Order a Coil choose Coil Ref + Voltage Code, example: 495880 for 24 VDC = 495880C2





4.0

INCREASED SAFETY ELECTRICAL PARTS "nAc nCc"



495915 - ELECTRICAL PARTS 50 mm

This coil can be mounted with every Parker ATEX solenoid valves corresponding to the specified Coil Group.
See column "Coil Group" within valve pages.

Application: Control of solenoid valves in dangerous areas where explosion-proof protection - Ex nAc nCc IIC T3 is required.

Benefits: Rotatable housing 360°, epoxy vernished steel with internal and external screw terminals for earth connection.

Small size for ease of mounting in confined space. Simplifies conversion of existing equipment to hazardous area requirements.



Reference					495	915		
Certif	icate			LCIE 05 ATEX 6010 X				
Coil g	roup				4	.0		
T		4:	Gas	II 3 G Ex nAc nCc IIC T3				
Type	Type of protection Dust			II 3 D - Ex tc IIIC - T 195°C				
Degre	e of p	otection			IP67 according to IEC	C/EN 60529 Standards		
Ambi	ent ten	nperature		The a	-40°C to pplication is limited also by t	o +65°C he temperature range of the	valve.	
Insula	ation C	lass			F 18	55°C		
Electrical connection				B y specia Cable with outside	By special cable gland M20 x 1.5 on screw terminals for wires up to 1.5 mm². Cable with outside diameter 6.5 mm to 13.5 mm can be simply sealed using the rubber gland with resilient sealing rings supplied			
		Attraction (hot)		11	11 W		-	
Consomation Electrique	AC	Attraction (cold):	20°C	17	W		-	
ect	AG	Release (hot)		4	W		-	
Ξ.		Release (cold) 20°C		7 W		-		
랿		Attraction (hot)		-		13 W		
Ë	DC	Attraction (cold):	20°C			19 W		
Si O	100	Release (hot)			-	3	3 W	
		Release (cold) 20	O°C		-		0 W	
Weigl						0 g		
	Duty cycle					olenoid (ED 100%)		
Voltages "Un"				VAC/Hz	Code	VDC	Code	
-10% to +10% of the Un				110-115/50-60 220-230/50-60 48/50-60 24/50-60	1P 3P \$4 P0	24 C2 48 C4		

To Order a Coil choose Coil Ref + Voltage Code, example: 495915 for 24 VDC = 495915C2

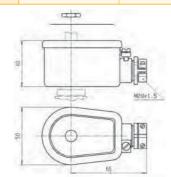
Schema





As soon as an electrical impulse is given to the terminals A-B, the electromagnetical force attracts As soon as an electrical iniputes its given to the reminians A-b, the electron agricultural necessities are versible permanent magnet ring. This magnet retains the plunger in place, it stays in position even without current. Only an electricial impulse given to terminals A-C reserves the magnetic field. This magnetic field demagnetises the reversible magnet enough to allow the return spring to bring the plunger back to its initial position and close the valve.

Switch: Switch on (terminals A-B): Minimum 50 ms (maximum 1 s)
AC: Switch off (terminals A-C): Minimum 35 ms (maximum 1 s)





2.0/2.2

INCREASED SAFETY ELECTRICAL PARTS "nAc nCc"







3.5.1 ELECTRICAL PARTS 496155

These coils can be mounted with every Parker solenoid valves corresponding to the specified Coil Group.

See column "Coil Compatibility Group" within valve pages.

Application: Control of solenoid valves in dangerous areas where explosion-proof protection Ex nAc nCc IIC T3 is required.

Benefits: Rotatable housing 360°, epoxy vernished steel with internal and external screw terminals for earth connection.

Small size for ease of mounting in confined space. Simplifies conversion of existing equipment to hazardous area requirements.

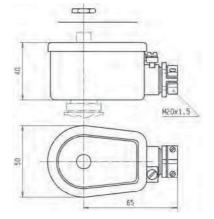


Refe	rence			496155				
Certificate				LCIE 05 ATEX 6010 X				
Coil G	iroup				2.0	/2.2		
Gas			Gas		Ⅱ3G ExnA	ic nCc IIC T3		
туре	Type of protection Dust			II 3 G D - Ex to IIIC - T 195 °C				
Degre	ee of p	rotection			IP67 according to IEC	/EN 60529 Standards		
Ambia	ant ter	nperature		The	-40°C to application is limited also by t	o +65°C he temperature range of the v a	ılve.	
Insula	ation C	lass		F 155°C				
Electr	rical co	onnection		By special Cables with outs	al cable gland or M20x1.5 on s ide diameter 6.5 mm to 13.5 m with resilient seali	crew terminals for wires up to nm can be simply sealed using ing rings supplied.	1.5 mm². the rubber gland	
ē	D0	Pn (hot)		14 W				
Elect. Power	DC	P (cold) 20°0)	21 W				
벙	AC	Pn (holding)		14 W				
ä	AG	Attraction co	ld		56 VA	(20 W)		
Weigl	ht				32	0 g		
Volta	Voltages "Un"			VAC/Hz	Code	VDC	Code	
-10% to +10% of the Un				24/50 110/50 230/50	A 2 A 5 F4	24 48	C2 C4	

To Order a Coil choose Coil Ref + Voltage Code, example: 496155 for 24VAC/50Hz = 496155A2

Fuses:

Both electrical parts have to be connected in series with a safety fuse according to IEC 60127-3.





11.0

FLAME PROOF **ELECTRICAL PARTS**









483270 & 483270.02 - ELECTRICAL PARTS 50 mm

These coils can be mounted with every Parker ATEX solenoid valves corresponding to the specified Coil Group. See column "Čoil Group" within valve pages.

Application: Control of solenoid valves in dangerous areas where explosion-proof protection Ex db IIC T4 to T6 is required.

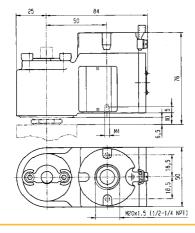
Benefits: Rotatable 360°, housing made of cast iron with internal connection chamber: Cover made of aluminium alloy fixed with 4 screws. The electromagnetic control pilot is composed of three main elements: housing, coil and plunger tube including housing plate.

Small size for ease of mounting in confined space.



Refe	Reference			483270 (M20 x 1.5) 483270.02 (1/2 NPT)				
Certif	icate				LCIE 02 AT	EX 6008 X		
Coil g	roup				11	.0		
Turno	Type of protection Gas				II 2 G - Ex db	IIC T4/T5/T6		
Type	oi pioi	ecuon	Dust	II 2 D - Ex tb IIIC - T130°C/ 95°C/ 80°C				
Degre	e of p	rotection		IP66	with appropriate cable gland a	ccording to IEC/EN 60529 Stan	dards	
Ambie	ent ten	nperature		The		+75°C / +60°C he temperature range of the va	ılve.	
Class	of ins	ulation			F (1	55 °)		
Electr	rical co	onnection		The electrical connection is entry to the connecting cham	made within the housing conne ber is made through 1/2" NPT	ection chamber on an accessib thread suitable for fitting an ar	le screw terminal. The cable proved Ex db IIC cable gland.	
ī.	DC	Pn (hot)		8 W				
Š	DC	P (cold) 20°0	3	9 W				
Elect. Power	AC	Pn (holding)			8	W		
ä	AG	Attraction co	ld		9	W		
Weigh	ht				1100 g (with coil)		
Voltag	Voltages "Un"			VAC/Hz	Code	VDC	Code	
-10%	-10% to +10% of the Un			110-115/50-60 220-230/50-60	1P 3P	24 48 110	C2 C4 C5	

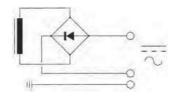
To Order a Coil choose Coil Ref + Voltage Code, example: 483270 for 24 VDC = 483270C2



Plunger tube:

The plunger tube is welded to the stainless steel plate and is thus integrated to the housing which is screwed on the valve body.

This electrical part is supplied only as complete unit mounted on a valve, as the "Ex db" protection depends on minimum gap between plunger tube, plate and housing.





10.3

FLAMEPROOF ELECTRICAL PARTS "db"



497105 & 497105.02 - ELECTRICAL PARTS

These coils can be mounted with every Parker ATEX solenoid valves corresponding to the specified Coil Group.

See column "Coil Group" within valve pages.

Application: Control of solenoid valves in dangerous areas where explosion-proof protection Ex db IIC T4 / T5 / T6 is required.

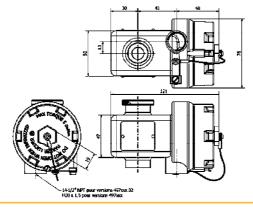
Benefits: Rotatable 360° , stainless steel with internal and external screw terminals for earth connection.

Small size for ease of mounting in confined space. Simplifies conversion of existing equipement to hazardous area requirements.



Refer	ence				497105 (497105.02	M20x1.5) (NPT 1/2")		
Certifi	cate			INERIS 12ATEX0041X - IECEX INE 12.0034X				
Coil G	roup				10).3		
Type of protection Gas Dust			Gas		II 2 G - Ex db I	IC T4 / T5 / T6		
			Dust		II 2 D - Ex tb IIIC - 1	30°C / 95°C / 80°C		
Degree	e of p	rotection		IP66	(with relevant cable gland) ac	cording to IEC/EN 60529 Stand	lards	
Ambie	nt ter	nperature		The ope	-50°C to +80°C rating temperature of the valve	/ +60°C / +40°C /coil can be limited by that of t	the valve	
Insula	tion C	lass			F 15	i5°C		
Electri	ical co	onnection		The cable entre	is done in the connection char y to the connection chamber is in which an approved Exdb IIC	made through a 1/2" NPT or N	/I20x1.5 thread	
_ =	DC	Pn (hot)		8 W				
rica Pti	ЪС	P (cold) 20°C		9 W				
Electrical consumption		Pn (holding)			8	W		
ᄪᇙ	AC	Attraction cold			9	W		
Voltag	e Tole	rance			+/- 10% of no	ominal voltage		
Emerg	jising	Cuty			ED 1	00%		
Voltages				VAC/Hz	Code	VDC	Code	
				24/50-60 110-115 / 50-60 220-230 / 50-60	P0 1P 3P	12 24 48 110	C1 C2 C4 C5	

To Order a Coil choose Coil Ref + Voltage Code, example: 497105 for 24 VDC = 497105C2





1 1

ENCAPSULATED ELECTRICAL PARTS "mb"



ELECTRICAL PART LOW POWER 22 mm

These coils can be mounted with every Parker ATEX solenoid valves corresponding to the specified Coil Group.
See column "Coil Group" within valve pages.

Application:

Control of solenoid valves in dangerous areas where explosion-proof protection Ex mb IIC T4 / T5 is required.

Benefits

Coil and magnetic circuit encapsulated in synthetic material - offering shock and corrosion protection. AC coils with integrated thermal fuse. Small size for ease of mounting in confined spaces.



Refer	Reference			48260	05	482606 or 482606.160*				
Certif	icate			LCIE 02 ATEX 6014 X - IECEX LCI 07,0026 X						
Coil G	iroup				1	.1				
Tuna	Tune of protection Gas				II 2 G - Ex m	ib IIC T4 / T5				
Турс	Type of protection Dust		Dust		II 2 D - Ex tb IIIC	- T130°C / 95°C				
Degre	e of p	rotection			IP65 (with plug) according	to IEC/EN 60529 Stan	dards			
Ambia	ant ter	nperature		-40°C to +65° The a	C / +40°C oplication is limited also by t			65°C / +35°C al v e.		
Insula	ation C	lass		F 155°C						
Electr	ical co	onnection		Cable connection (3	x 0.75 mm²) encapsulated	with coil, cable materi	al accord	ling to application		
声	DC	Pn (hot)		5 W 2.5 W						
	DC	P (cold) 20°	C	6.5 W 3 W			W			
Elect. Power	**	Pn (holding)		4 W			2	W		
Ë	AC	Attraction co	old	8.9 VA (8	5 W)		5.7 VA	(2.5 W)		
Weigh	nt				15	0 g				
Voltag	ges "U	n"		VDC	Code	VAC/Hz	Code	VDC	Code	
-10%	-10% to +10% of the Un			12 24	C1 C2	24/50 48/50 110/50-115/50 220/50-230/50	A2 A4 0A 3D	24 48 110	C2 C4 C5	

To Order a Coil choose Coil Ref + Voltage Code, example: 482605 for 24 VDC = 482605C2

Fuses:

Both electrical parts 482605 & 482606 have to be connected in series with a safety fuse according to CEI 60127-3. Indicating example bellow:

482605:

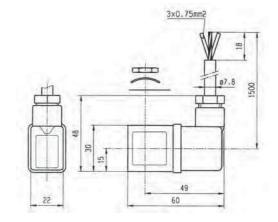
DC: 12 V, 1000 mA - 24 V, 500 mA - 48 V, 200 mA - 110 V, 100 mA
AC 50 HZ: 24 V, 500 mA - 48 V, 250 mA - 110/115 V, 100 mA - 220/230 V, 3 mA
AC 60 HZ: 24 V, 630 mA - 110/115 V, 125 mA - 220/230 V, 63 mA

482606:

DC: 12 V, 400 mA - 24 V, 200 mA - 48 V, 100 mA - 110 V, 50 mA

AC 50 HZ: 24 V, 250 mA - 48 V, 125 mA - 110/115 V, 63 mA - 220/230 V, 32 mA

AC 60 HZ: 24 V, 315 mA - 110/115 V, 63 mA - 220/230 V, 32 mA





 $^{^{\}star}$ 482606.160 - 6 m cable length - available only in C2 and 3D

^{* 482606 - 1.5} m cable length

2.0/2.1

ENCAPSULATED ELECTRICAL PARTS









ELECTRICAL PART 32 mm

This coil can be mounted with every Parker ATEX solenoid valves corresponding to the specified Coil Group. See column "Coil Group" within valve pages.

Application: Control of solenoid valves in dangerous areas where explosion-proof protection Ex mb IIC T4 is required.

Benefits: Coil and magnetic circuit encapsulated in synthetic material offering shock and corrosion protection. AC/DC coils with integrated thermal fuse. DC coils with integrated surge suppression diode.

Small size for ease of mounting in confined spaces. This electrical



Refe	rence			492670*				
Certif	icate			LCIE 02 ATEX 6015 X				
Coil G	iroup				2.0	/ 2.1		
Type	Type of protection Gas				II 2 G - Ex	mb IIC T4		
Type	oi proi	ECTION	Dust	II 2 D - Ex tb IIIC - T130°C				
Degre	e of p	otection		IP6	5 (With DIN Plug connector) ac	cording to IEC/EN 60529 stand	lards	
Ambia	ant ten	nperature		The	-40°C to application is limited also by t	o +40°C he temperature range of the v	alve.	
Class	of ins	ulation		F 155°C				
Electr	ical co	nnection		Cable connection	n (3 x 1.5 m m²) encapsulated v	vith coil, cable material accord	ling to application	
Je.	DC	Pn (hot)		9 W				
Elect. Power	Ю	P (cold) 20°0)	12 W				
访	AC	Pn (holding)		8 W				
Ĕ	AU	Attraction co	ld	26 VA (9 W)				
Weigh	nt				32	0 g		
Volta	Voltages "Un"			VAC/Hz	Code	VDC	Code	
-10% to +10% of the Un				48/50 230/50	A 4 F4	24 48 110	C2 C4 C5	

To Order a Coil choose Coil Ref + Voltage Code, example: 492670 for 24 VDC = 492670C2

Special conditions:

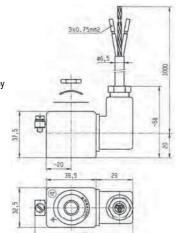
The supply connection lines have to be fixed and positioned in such a way that they are protected against mechanical damages.

It is necessary to use a safety fuse with a nominal current corresponding to the coil current (max. 3 x nominal according to IEC 60127 and IEC 60269) against short-circuits.

Recommended values:

12 V, 1250 mA - 24 V, 630 mA - 48 V, 315 mA - 110 V, 125 mA AC 50 HZ: 24 V, 1000 mA - 48 V, 500 mA - 110 V, 250 mA - 230 V, 100 mA

AC 60 Hz: 240 V, 100 mA





^{* 492670 3} m cable length

2.0/2.1

ENCAPSULATED ELECTRICAL PARTS "mb"



WITH WATER PROOF METAL HOUSING 50 mm

These coils can be mounted with every Parker ATEX solenoid valves corresponding to the specified Coil Group.

See column "Coil Group" within valve pages.

Application: Control of solenoid valves in dangerous areas where explosion-proof protection Ex mb IIC T4/T5 is required.

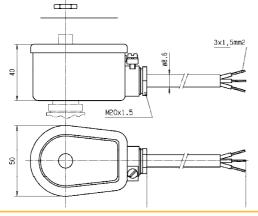
Benefits: Epoxy-vernished steel housing - solenoid coil, rectifier (silicium diodes), fuse and varistor protection element are completely encapsulated in the coil housing by means of epoxy resin.

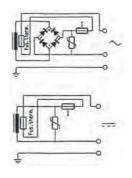
Small size for ease of mounting in confined space. Simplifies conversion of existing equipment to hazardous area requirements.



Refe	rence			492070 (with 3 m cable length) 492070.160 (with 6 m cable length)				
Certif	icate				LCIE 02 ATEX 6017 X	- IECEx LCI 09.0024 X		
Coil G	ìroup				2.0	/ 2.1		
Turno	of neo	ection	Gas		II 2 G - Ex m	nb IIC T4/ T5		
Type	oi pioi	ection	Dust		II 2 D - Ex tb III	C - T130 / 95°C		
Degre	e of p	rotection			IP67 according to IEC	C/EN 60529 standards		
Ambie	ent ter	nperature		The		35°C / 40°C he temperature range of the va	ılve.	
Insula	ation C	lass		F 155°C				
Electr	rical c	onnection		Cable connection (3 x 1.5 mm²) with cable gland M20 x 1.5, external earth screw connection.				
Je.	DC	Pn (hot)		8 W				
Elect. Power	БО	P (cold) 20°C)	10 W				
듆	AC	Pn (holding)		9 W				
ă	AU	Attraction col	ld	11 W				
Weigh	ht				50	0 g		
Voltag	ges "U	n"		VAC/Hz	Code	VDC	Code	
-10%	to +10)% of the Un		24/50-60 110/50-60 220/50-60 230/50-60 240/50-60	P0 P2 R5 P9 Q1	24 48 110	C2 C4 C5	

To Order a Coil choose Coil Ref + Voltage Code, example: 492070 for 24 VDC = 492070C2







2.0/2.1

ENCAPSULATED ELECTRICAL PARTS "mb"



HZ10 COIL DOUBLE FREQUENCY

This coil can be mounted with every Parker ATEX solenoid valves corresponding to the specified Coil Group.

See column "Coil Group" within valve pages.

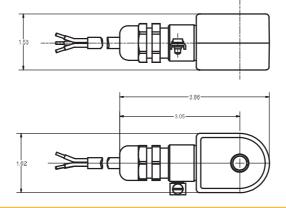
Application: Control of solenoid valves in dangerous areas where explosion-proof protection Ex mb IIC T3/T4/T5 is required.

The coil is delivered with a 3m cable.



Specification				Double Frequency				
Refer	ence			HZ10				
Certif	icate				LCIE 02 ATEX 6020 X	- IECEx LCI 08.0027 X		
Coil G	roup				2.0	⁷ 2.1		
Time	of nead	action	Gas		II 2 G - Ex mb	IIC T3/T4/T5		
Type	oi bioi	ection	Dust	II 2 D - Ex tb IIIC T195°C / 130°C / 95°C				
Degre	e of p	rotection			IP65 (with plug) according	to IEC/EN 60529 Standards		
Ambie	ent ter	nperature		The	-40°C to +80°0 application is limited also by t		ılve.	
Insula	rtion C	lass		H 180°C				
Duty o	cycle				100% co	ntinuous		
Electr	ical co	nnection		Cable connection (3 x 1.5 mm²) with cable gland M20 x 1.5, external earth screw connection.				
Ē	DC	Pn (hot)		8 W				
₽o	DC	P (cold) 20°C		-				
Elect. Power	AC	Pn (holding)		8 W				
当	AU	Attraction cold	t	-				
Weigh	Weight				29	9 g		
Voltag	Voltages "Un"			VAC/Hz	Code	VDC	Code	
-10% to +10% of the Un				24/60 110/50-120/60 220/50-240/60	B2 P3 Q3	12 24 120	C1 C2 C6	

To Order a Coil choose Coil Ref + Voltage Code, example: HZ10 for 24 VDC = HZ10C2



Dimensions in Inches.



2.0/2.2

ENCAPSULATED ELECTRICAL PARTS "mb"



HZ11 COIL DOUBLE FREQUENCY

This coil can be mounted with every Parker ATEX solenoid valves corresponding to the specified Coil Group.

See column "Coil Group" within valve pages.

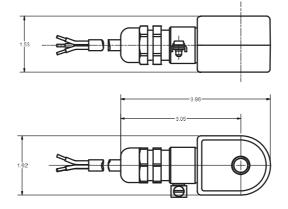
Application: Control of solenoid valves in dangerous areas where explosion-proof protection Ex mb IIC T3/T4/T5 is required.

The coil is delivered with a 3m cable.



Spec	ificati	on		Double Frequency				
Refer	ence			HZ11				
Certif	ficate				LCIE 02 ATEX 6020 X	- IECEx LCI 08.0027 X		
Coil G	iroup				2.0	/ 2.2		
Tuno	of prot	action	Gas		II 2 G - Ex mb	IIC T3/T4/T5		
Type	oi proi	ection	Dust	II 2 D - Ex tb IIIC T195°C / 130°C / 95°C				
Degre	e of p	otection			IP65 (with plug) according	to IEC/EN 60529 Standards		
Ambi	ent ten	perature		The	-40°C to + 65°C / 40°C The application is limited also by the temperature range of the valve			
Insula	ation C	lass		H 180 °C				
Duty	cycle				100% cc	ntinuous		
Je.	DC	Pn (hot)		14 W				
Š	DC	P (cold) 20°0	2	-				
Elect. Power	AC	Pn (holding)			14	W		
哥	AG	Attraction co	ld					
Weigl	ht				29	9 g		
Volta	Voltages "Un"			VAC/Hz	Code	VDC	Code	
-10%	-10% to +10% of the Un			24/60 110/50-120/60 220/50-240/60	B2 P3 Q3	12 24 120	C1 C2 C6	

To Order a Coil: Coil Ref + Voltage Code, example: HZ11 for 24 VDC = HZ11C2



Dimensions in Inches.



6.0

FLAME PROOF ENCAPSULATED ELECTRICAL PARTS (Ex)

495900 - LOW POWER ELECTRICAL PARTS 37 mm

This coil can be mounted with every Parker ATEX solenoid valves corresponding to the specified Coil Group.

See column "Coil Group" within valve pages.

Application: Control of solenoid valves in dangerous areas where explosion-proof protection Ex db mb IIC T4 to T6 is required.

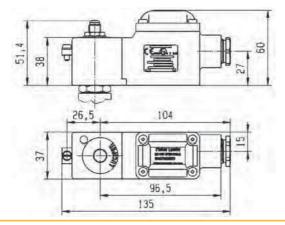
Benefits: Rotatable 360° fibreglass-reinforced plastic housing (class H). Solenoid coil, rectifier (silicium diodes), fuses and varistor protection are completely encapsulated into the coil housing by epoxy resin for shock and corrosion protection.

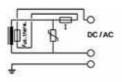
The plastic housing is delivered with M20 x 1.5 cable gland certified for use "db" protection. Small size for ease of mounting in confined space.



Refe	Reference			495900	(VAC)	495900	O (VDC)	
Certif	ficate			LCIE 03 ATEX 6451 X - IECEx LCI 06.0004 X				
Coil G	iroup				6.	.0		
Turno	Type of protection Gas			II 2 G - Ex db mb IIC T4 / T5 / T6			b IIC T4 / T5 / T6	
туре	Dust		Dust	II 2 D Ex tb IIIC - 13	30°C / 95°C / 80°C	II 2 D Ex tb IIIC - T1	30°C / 95°C / 80°C	
Degre	e of p	rotection			IP67 according to IEC	/EN 60529 Standards		
Ambi	ant tar	nperature		-40°C to +80°C	C / 55°C / 40°C	-40°C to +80°	C/65°C/55°C	
AIIIDI	CIII ICI	iipei atui e		The	The application is limited also by the temperature range of the valve.			
Class	of ins	ulation			H (18	80 °)		
Electr	rical co	onnection		Electric connection is done in (Ø min 5 mm, Ømax. 11 mn	Electric connection is done in the connection box on an easily accessible connector terminals. The introduction of (Ø min 5 mm, Ømax. 11 mm, section max. 2.5 mm²) in the connection box passes by the built in M20 x 1.5 cab			
Je .	DC	Pn (hot)		-		2	W	
Elect. Power	DC	P (cold) 20°	С	-		2.5 W		
턿	AC	Pn (holding)		2.5	W	-		
ä	AG	Attraction co	old	3	W		-	
Volta	ges "U	n"		VAC/Hz	Code	VDC	Code	
	-10% to +10% of Un for AC - 10 % to + 10 % for Un DC.			24/50 48/50 115/50 230/50	A2 A4 E5 F4	24 48 110	C2 C4 C5	

To Order a Coil: Coil Ref + Voltage Code, example: 495900 for 24 VDC = 495900C2







2.0/2.1

FLAME PROOF ENCAPSULATED ELECTRICAL PARTS "db mb" FLAME PROOF ENCAPSULATED FLAME PROOF ENCAPSULATED FLAME PROOF ENCAPSULATED

495905 - ELECTRICAL PARTS 37 mm

These coils can be mounted with every Parker ATEX solenoid valves corresponding to the specified Coil Group. See column "Coil Group" within valve pages.

Application: Control of solenoid valves in dangerous areas where explosion-proof protection Ex db mb IIC T4 is required.

Benefits: Rotatable 360° fibreglass-reinforced plastic housing (class H). Solenoid coil, rectifier (silicium diodes), fuses and varistor protection are completely encapsulated into the coil housing by epoxy resin for shock and corrosion protection.

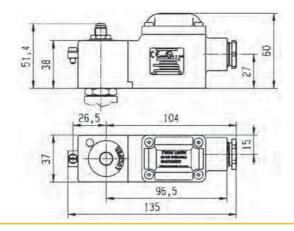
The plastic housing is delivered with M20 x 1.5 cable gland certified for use "db" protection. Small size for ease of mounting in confined space.

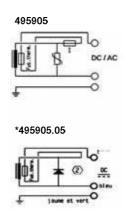


Refe	rence			495	905	49590	05.05*	
Certif	icate			LCIE 03 ATEX 6451 X - IECEx LCI 06.0004 X				
Coil G	iroup				2.0 /	⁷ 2.1		
Tuno	of prot	ection	Gas		II 2 G - Ex d	b mb IIC T4		
iype	oi pioi	COLIDII	Dust		II 2 D - Ex tb	IIIC - 130°C		
Degre	e of p	otection			IP67 according to IEC	/EN 60529 Standards		
Ambie	ent ten	nperature		The	-40°C to application is limited also by t	o +80°C he temperature range of the va	alve.	
Class	of ins	ulation		H (180 °)				
Electr	ical co	nnection		Electric connection is done in the connection box on an easily accessible connector terminals. The introduction of the cable (Ø min 5 mm, Ømax. 11 mm, section max. 2.5 mm²) in the connection box passes by the built in M20 x 1.5 cable gland.				
Je /	DC	Pn (hot)		8 W				
Elect. Power	DC	P (cold) 20°0	C	9 W				
넑	AC	Pn (holding)		8 W				
ä	AU	Attraction co	old		9	W		
Voltag	ges "U	n"		VAC/Hz	Code	VDC	Code	
	-10% to +10% of Un for AC -10% to +10% for Un DC			24/50 48/50 115/50 230/50	A2 A4 E5 F4	24 48 110	C2 C4 C5	

To Order a Coil choose Coil Ref + Voltage Code, example: 495905 for 24 VDC = 495905C2

^{* 495905.05} available only in C4







FLAME PROOF ENCAPSULATED 10.2/10.1 ELECTRICAL PARTS "db mb" ✓ C EX EE E

496555 & 496560 - ELECTRICAL PARTS 37 mm

These coils can be mounted with every Parker ATEX solenoid valves corresponding to the specified Coil Group.
See column "Coil Group" within valve pages.

Application: Control of solenoid valves in dangerous areas where explosion-proof protection Ex db mb IIC T4 to T6 is required.

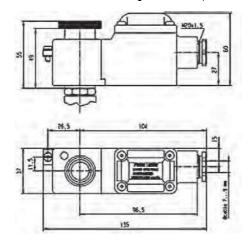
 $\textbf{Benefits:}\ \text{Rotatable 360}^{\circ}\ \text{fibreglass-reinforced plastic housing (class H)}.$ Solenoid coil, rectifier (silicium diodes), fuses and varistor protection are completely encapsulated into the coil housing by epoxy resin for shock and corrosion protection.

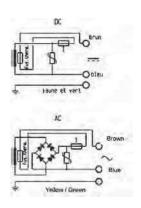
The plastic housing is delivered with M20 x 1.5 cable gland certified for use "db" protection. Small size for ease of mounting in confined space.



Refer	ence				496	555		496560				
Certif	icate			LCIE 07 ATEX 6075 X - IECEX LCI 07.0014X								
Coil G	roup				10).2			10.1			
Tumo	of neat	ection	Gas	l l	2 G - Ex db ml	b IIC T4 / T5 / T	6		II 2 G - Ex c	lb mb IIC T4		
Type	oi proi	ecuon	Dust	II 2 D	- Ex tb IIIC - T	130°C / 95°C /	80°C		II 2 D - Ex tb	IIIC - T130°C		
Degre	e of p	otection				IP 67	according to IE	C/EN 60529 Sta	ındards			
Ambia	ant ten	nperature			-40°C to +6 The	5 / 50 / 35°C application is I	imited also by t	he temperature		o +65°C ıl v e.		
Class	Class of insulation			H (180 °)								
Electr	ical co	nnection		Electric connection is done in the connection box on an easily accessible connector terminals. The introduction of the cable (Ø min 5 mm, Ømax. 11 mm, section max. 2.5 mm²) in the connection box passes by the built in M20 x 1.5 cable gland.								
Je.	DC	Pn (hot)			•	6 W		-		8 W		
Elect. Power	DC	P (cold) 20°0)	-		7.5 W		-		10.5 W		
헎	AC	Pn (holding)		6	W		-	8 W		-		
ä	AC	Attraction co	ld	7.5	W		-	10.	5 W	-		
Voltag	ges "U	n"		VAC/Hz	Code	VDC	Code	VAC/Hz	Code	VDC	Code	
-10%	-10% to +10% of the Un			230/50-60 110/50-60 24/50-60 48/50-60	P9 P2 P0 S4	24 48 110	C2 C4 C5	230/50-60 110/50-60 24/50-60 48/50-60	P9 P2 P0 S4	24 48 110	C2 C4 C5	

To Order a Coil choose Coil Ref + Voltage Code, example: 496555 for 24 VDC = 496555C2







FLAME PROOF ENCAPSULATED 10.2/10.1 ELECTRICAL PARTS "db mb" ROHS C E EX EE EE ES

496700 & 496800 - ELECTRICAL PARTS 37 mm

These coils can be mounted with every Parker ATEX solenoid valves corresponding to the specified Coil Group.
See column "Coil Group" within valve pages.

Application: Control of solenoid valves in dangerous areas where explosionproof protection Ex db mb IIC T4 to T6 is required.

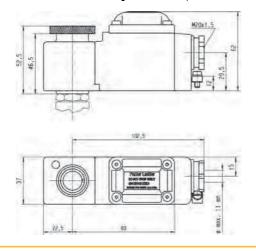
Benefits: Rotatable 360° fibreglass-reinforced plastic housing (class H). Solenoid coil, rectifier (silicium diodes), fuses and varistor protection are completely encapsulated into the coil housing by epoxy resin for shock and corrosion protection.

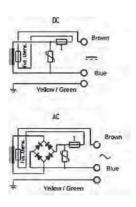
The plastic housing is delivered with 1/2" NPT or M20 x 1.5 threaded hole for wide range of cable glands. Small size for ease of mounting in confined space.



Refer	rence			4	96700 or 49	6700.02 (NP)	Γ)	4	196800 or 49	6800.02 (NP)	r)
Certif	icate			LCIE 10 ATEX 3059 X - IECEX LCI 10.0023X							
Coil G	iroup				10).2			10	0.1	
Tuno	of prof	ection	Gas	II	l 2 G - Ex db ml	b IIC T4 / T5 / T	6		II 2 G - Ex d	db mb IIC T4	
Type	oi pioi	COHOH	Dust	II 2	D - Ex tb IIIC -	· T130 / 95 / 80)°C		II 2 D - Ex tb	IIIC - T130°C	
Degre	e of p	rotection				IP67	according to IE(C/EN 60529 Sta	ndards		
Ambia	Ambiant temperature			-4		/ +50°C / +65° application is I		he temperature		o +65°C al v e.	
Class	of ins	ulation		H (180°)							
Electr	ical co	nnection		Electric connection is done in the connection box passes through a 1/2 NPT or M20x1.5 thread in which a certified Ex dBIIC cable gland must be installed							
rer	DC	Pn (hot)		-	-	6 W		-		8 W	
Elect. Power	DC	P (cold) 20°0	3	-		7.5 W		-		10.5 W	
덩	AC	Pn (holding)		61	W	-		8	W		-
ä	AC	Attraction co	ld	7.5	W		-	10.	5 W		-
Voltag	ges "U	n"		VAC/Hz	Code	VDC	Code	VAC/Hz	Code	VDC	Code
-10%	-10% to +10% of the Un			230/50-60 110/50-60 24/50-60 48/50-60	P9 P2 P0 S4	24 48 110	C2 C4 C5	230/50-60 110/50-60 24/50-60 48/50-60	P9 P2 P0 S4	24 48 110	C2 C4 C5

To Order a Coil choose Coil Ref + Voltage Code, example: 496700 for 24 VDC = 496700C2







2.0/2.1

FLAME PROOF ENCAPSULATED ELECTRICAL PART "db mb"







493640 OR HZ09 - ELECTRICAL PARTS

This coil can be mounted with every Parker ATEX solenoid valves corresponding to the specified Coil Group. See column "Coil Group" within valve pages.

Application: Control of solenoid valves in dangerous areas where explosion-proof protection Ex db mb IIC T4/T5 is required.

Benefits: Metal armature encapsulated in synthetic material provides high shock and corrosion protection.

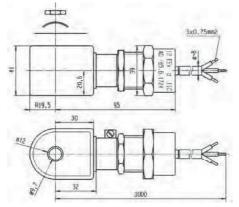
Small size for ease of mounting in confined space.



Reference				493640 493640.60*					
Certif	icate			LCIE 02 ATEX 6009 X					
Coil G	iroup				2.0 /	2.1			
Turno	of neo	lastian	Gas		II 2 G Ex db	mb IIC T4/T5			
туре	oi pro	tection	Dust		II 2 D - Ex tb IIIC -	- T130°C / T95°C			
Degre	e of p	rotection			IP65 according to IEC	/EN 60529 Standards			
Ambia	Ambiant temperature			- 40°C to +100°C / +75°C The application is limited also by the temperature range of the valve.					
Class	of ins	ulation		F (155°)					
Electr	rical c	onnection		Special "Ex db" cable gland, galvanized steel, with EPDM sealing. (EPR) cable, outside diameter 7.3 \pm 0.5 mm and 3000 mm long.					
ē	D0	Pn (hot)		8 W					
Elect. Power	DC	P (cold) 20°	С	9 W					
둉	AC	Pn (holding)			8	W			
Ë	AU	Attraction co	old		32 VA	(9 W)			
Weigh	ht				500	0 g			
Voltag	ges "U	n"		VAC/Hz	Code	VDC	Code		
- 15%	- 15% to +10% of the Un			110/50 110-120/50-60 220-240/50-60	A5 P3 Q3	24 48 120	C2 C4 C6		

To Order a Coil choose Coil Ref + Voltage Code, example: 493640 for 24 VDC = 493640C2

^{* 493640.60 - 6} m cable length - Available only in C2



This electrical part is equipped with a standard thermal cut-off fuse on all models and voltages

This electrical part must be connected in series with a safety fuse according to IEC 60127-3.

DC: 24V, 400 mA

AC: 110/50-120/60, 200 mA 220/50-240/60, 100 mA 230/50, 95 mA



2.0/2.1

INCREASED SAFETY ELECTRICAL PARTS "eb"









483371 & 494040 - ELECTRICAL PARTS 50 MM

This coil can be mounted with every Parker ATEX solenoid valves corresponding to the specified Coil Group. See column "Coil Group" within valve pages.

Application: Control of solenoid valves in dangerous areas where explosion-proof protection Ex eb IIC T3 orT4 is required.

Benefits: Rotatable housing 360°, epoxy vernished steel with internal and external screw terminals for earth connection.

Small size for ease of mounting in confined space. Simplifies conversion of existing equipment to hazardous area requirements.



Refe	rence				483	371			494	040	
Certif	ficate			LCIE 02 ATEX 6011 X			LCIE 02 ATEX 6013 X				
Coil G	iroup						2.0	/ 2.1			
Type	Type of protection Gas				II 2 G - Ex	eb IIC T4			II 2 G - Ex e	b IIC T3 / T4	
Type	oi pioi	CCHOII	Dust		II 2 D - Ex tb	IIIC - T130°C		II 2 D	- Ex tb IIIC -	T195°C / T130 °C)
Degre	e of p	rotection				IP67 ac	cording to IEC	C/EN 60529 Stand	ards		
Ambi	ant ter	nperature				o +65°C application is lim	nited also by t	he temperature ra		°C / to +65°C ılve.	
Class	of ins	ulation		F 155°C			H (180°)				
Electi	rical co	onnection		By special cable gland or M20 x 1.5 "Ex eb" on screw terminals for wires up to 1.5 mm². Cables with outside diameter 6.5 mm to 13.5 mm can be simply sealed using the ru bber gland with resilient sealing rings supplied.							
/er	DC	Pn (hot)			8	W		8 W			
Elect. Power	DC	P (cold) 20°	C		9	W		9 W			
덩	AC	Pn (holding)		8 W				8 W			
当	AG	Attraction co	old		32 VA	. (9 W)		32 VA (9 W)			
Weigl	ht						32	0 g			
Volta	ges "U	n"		VAC/Hz	Code	VDC	Code	VAC/Hz	Code	VDC	Code
-10%	-10% to +10% of the Un			24/50 48/50 110-115/50 220-230/50	A2 A4 0A 3D	24 48 110	C2 C4 C5	220-230/50	3D	24	C2

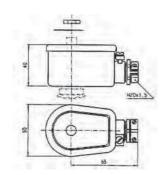
To Order a Coil choose Coil Ref + Voltage Code, example: 483371 for 24 VDC = 483371C2

Both electrical parts have to be connected in series with a safety fuse according to IEC 60127-3.

24 V, 400 mA - 48V, 250 mA - 110 V, 100 mA

AC 50HZ: 24 V, 630 mA - 48V, 315 mA - 110 V, 160 mA - 220/230 V, 80 mA

12 V, 400 mA - 24V, 200 mA - 48 V, 100 mA - 110V, 50 mA AC 50HZ: 24 V, 250 mA - 48V, 125 mA - 110/115 V, 63 mA - 220/230 V, 32 mA





10.1

INCREASED SAFETY AND ENCAPSULATED ELECTRICAL PARTS "eb mb" Rohs C Experience Control of the cont

492310 - ELECTRICAL PARTS 50 mm

This coil can be mounted with every Parker ATEX solenoid valves corresponding to the specified Coil Group.

See column "Coil Group" within valve pages.

Application: Control of solenoid valves in dangerous areas where explosion-proof protection Ex eb mb II T4 to T5 is required.

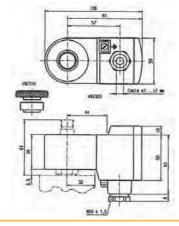
Benefits: Rotatable 360° fibreglass-reinforced plastic housing. Solenoid coil, rectifier (silicium diodes), fuses and varistor protection are completely encapsulated into the coil housing by epoxy resin for shock and corrosion protection.

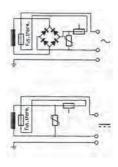
Small size for ease of mounting in confined space.



Refe	Reference			492310					
Certif	icate			LCIE 02 ATEX 6023 X - IECEX LCI 06.0011 X					
Coil g	roup				10).1			
Tumo	Type of protection Gas				II 2 G - Ex eb	mb II T4 / T5			
Type	oi pioi	ection	Dust		II 2 D - Ex tb IIIC	- T130°C / T95°C			
Degre	e of p	rotection			IP66 according to IEC	C/EN 60529 Standards			
Ambi	ant ter	nperature		The ope		°C / to +40°C e/coil can be limited by that of t	the valve		
Class	of ins	ulation		F 155°C					
Electr	rical co	nnection		Connection box with terminals and cable entry via gland M20 x 1.5 - Possibility for additional earth via external screw.					
Je.	DC	Pn (hot)		6W					
Po	DC	P (cold) 20°C		7.5 W					
Elect. Power	AC	Pn (holding)		6 W					
ä	AU	Attraction cold		7.5 W					
Weigl	ht				50	0 g			
Volta	ges "U	n"		VAC/Hz	Code	VDC	Code		
-10%	-10% to +10% of the Un			24/50-60 48/50-60 230/50-60	P0 S4 P9	24 48 110	C2 C4 C5		

To Order a Coil choose Coil Ref + Voltage Code, example: 492310 for 24 VDC = 492310C2







9.0

INCREASED SAFETY AND ENCAPSULATED ELECTRICAL PARTS "eb mb" Rohs C E EX EMPLE PARTS TO THE PARTS

492210 - ELECTRICAL PARTS "BOOSTER" 50 mm

These coils can be mounted with every Parker ATEX solenoid valves corresponding to the specified Coil Group.
See column "Coil Group" within valve pages.

Application: Control of solenoid valves in dangerous areas where explosion-proof protection - Ex eb mb IIC T5/T6 is required.

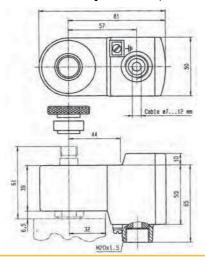
Benefits: Rotatable 360° fibreglass-reinforced plastic housing. Solenoid coil, fuses and varistor protection are completely encapsulated into the coil housing by epoxy resin for shock and corrosion protection. Small size for ease of mounting in confined space. Simplifies conversion of existing equipment to hazardous area requirements.

Available only in 24 VDC (suffix code: C2)



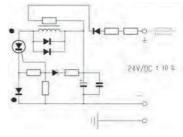
Reference		492210		
Certificate		LCIE 02 ATEX 6023 X - IECEX LCI 06.0011 X		
Coil group		9.0		
Type of protection	Gas	II 2 G - Ex eb mb IIC T5 / T6		
Type of protection	Dust	II 2 D - Ex tb IIIC - T95°C / T80°C		
Degree of protection		IP66 according to IEC/EN 60529 Standards		
Ambient temperature		-40° C to $+75^{\circ}$ C $/ +40^{\circ}$ C The operating temperature of the valve/coil can be limited by that of the valve		
Insulation Class		F 155°C		
Electrical connection		Connection box with terminals and cable entry via gland M20 x 1.5 Possibility for additional earth via external screw		
Power consumption DC		1 to 1.8 W according to length of cable		
Attraction current		I min = 60 mA (I nominal = 75 mA)		
Voltage DC		U nominal = 24 VDC (C2), Umin = 21.6 VDC		
Resistance		$23 \Omega + (R = 270 \Omega)$		
Inductance		0 mH		
Capacitance		0 μF		
Response time		2 - 4 s		
Weight		500 g		

To Order a Coil choose Coil Ref + Voltage Code, example: 492210 for 24 VDC = 492210C2



Indications:

Booster for Offshore valves



These electrical parts need an external fuse of I = 100 mA



2.0/2.1

INCREASED SAFETY AND ENCAPSULATED ELECTRICAL PARTS "eb mb" Rohs C E EX EX EXTERMINED

492190 - ELECTRICAL PARTS 50 mm

This coil can be mounted with every Parker ATEX solenoid valves corresponding to the specified Coil Group.

See column "Coil Group" within valve pages.

Application: Control of solenoid valves in dangerous areas where explosion-proof protection Ex eb mb IIC T3 to T4 is required.

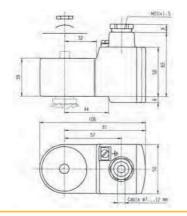
Benefits: Rotatable 360°, fiberglass -reinforced plastic housing. Solenoid coil, rectifier (silicium diodes), fuses and varistor protection are completely encapsulated into the coil housing by epoxy resin for shock and corrosion protection.

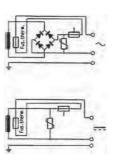
Small size for ease of mounting in confined space.



Refe	rence				492	190			
Certif	Certificate			LCIE 02 ATEX 6023 X - IECEx LCI 06.0011 X					
Coil G	Group				2.0 /	⁷ 2.1			
Tumo	of prot	action	Gas		II 2 G - Ex eb ı	mb IIC T3 / T4			
Type	oi proi	ection	Dust		II 2 D - Ex tb IIIC	- 195°C / 130°C			
Degre	ee of p	rotection			IP66 according to IEC	/EN 60529 Standards			
Ambi	ent ter	nperature		The ope	-40°C to +7 rating temperature of the valve		the valve		
Insula	ation C	lass		F 155°C					
Electi	rical co	onnection		Connection box with terminals and cable entry via gland M20 x 1.5 Possibility for additional earth via external screw					
5	DC	Pn (hot)		9 W					
rice mpt	- 00	P (cold) 20°C		11 W					
Electrical consumption	AC	Pn (holding)			11 W				
щ <u>8</u>	AC	Attraction co	old	13 W					
Weigl	ht				320	0 g			
	ges "U			VAC/Hz	Code	VDC	Code		
-10%	-10% to +10% of the Un			24/50-60 110/50-60 230/50-60	P0 P2 P9	24 48 110	C2 C4 C5		

To Order a Coil choose Coil Ref + Voltage Code, example: 492190 for 24 VDC = 492190C2







7.0

INTRINSICALLY SAFE ELECTRICAL PARTS "ia"



483580 - 483960 ELECTRICAL PARTS 32 mm "IS"

These coils can be mounted with every Parker ATEX solenoid valves corresponding to the specified Coil Group.

See column "Coil Group" within valve pages.

Application: Control of solenoid valves in dangerous areas where explosion-proof protection Ex ia IIC T6 is required.

Benefits: Fully encapsulated assembly comprising a coil, metal armature, three diodes circuit and DIN plug connection.

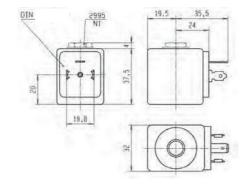
The encapsulation provides an effective compact housing offering full protection against dust, oil, water, etc.

Small size for ease of mounting in confined space. Available only in 28 VDC (suffix code: N7)



Referen	Reference (without plug) (with plug)		483580.01 483960.01		
Certificat	е		LCIE 02 ATEX 6065 X - IECEx LCI 07.0025 X		
Coil Grou	Р		7.0		
Type of p	rotootion	Gas	II 1 G - Ex ia IIC - T6		
type of p	rotection	Dust	II 1 D - Ex ta IIIC - T80°C		
Degree of	protection		IP65 with plug according to IEC/EN 60529 Standards		
Ambiant	temperature		- 40°C à + 55°C The operating temperature of the valve/coil can be limited by that of the valve.		
Electrical	connection		The coil is connected with a 2P + E plug according to EN 175301-803 type A Contact 1 is marked as the positive pole ⊕.		
Maximun	n supply voltage)	28 VDC (N7) - 110 mA The minimum operating voltage at maximum 60°C is 14 VDC.		
t n	C Minimum		500 m W		
Power	Maximum		3 W		
~			Depending on applied voltage, IS barrier type and resistance of connected cable		
Impedane Apparent	Coil resistance at 20°C Impedance Apparent inductance Apparent capacitance		340 Ω 340 Ω 0 mH $_0$ μF		
Weight			160 g (with plug)		

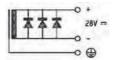
To Order a Coil choose Coil Ref + Voltage Code, example: 483580 for 28 VDC = 483580N7



Important

The intrinsically safe supply circuit should have enough capacity in all environmental conditions to assure a minimum operating current of 35 mA through the coil.

The minimal holding current is 20 mA.



For the barrier compatibility see the corresponding table in in appendix

These coil must be used with suitable housing: Ref. 2995



8.0

INTRINSICALLY SAFE ELECTRICAL PARTS "ia"



495910 - MINIWATT - 0.3 W ELECTRICAL PARTS "IS" "BOOSTER" 37 mm

These coils can be mounted with every Parker ATEX solenoid valves corresponding to the specified Coil Group.
See column "Coil Group" within valve pages.

Application: Control of solenoid valves in dangerous areas where explosion-proof protection Ex ia IIC T4 to T6 is required.

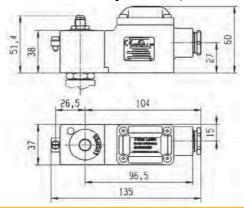
Benefits: Rotatable 360° fibreglass-reinforced plastic housing (class H). Solenoid coil, rectifier (silicium diodes), fuses and varistor protection are completely encapsulated into the coil housing by epoxy resin for shock and corrosion protection.

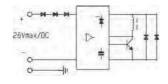




Refe	rence			495910				
Certit	ficate			LCIE 03 ATEX 6464 X - IECEx LCI 07.0006 X				
Coil 6	Group			8.0				
Tumo	of protect	ion	Gas	II 1 G - Ex ia IIC - T4 / T5 / T6				
Type	or protect	lion	Dust	II 1 D - Ex ta IIIC T80 / 95 / 130°C				
Degre	ee of prot	ection		IP67 according to IEC/EN 60529 Standards				
Ambi	ant tempe	erature		- 40° C to $+80^{\circ}$ C $/75^{\circ}$ C $/65^{\circ}$ C The application is limited also by the temperature range of the valve				
Class	of insula	tion		H 180°C				
Elect	rical conn	ection		Electric connection is done in the connection box on an easily accessible connector terminals. The introduction of the cable (Ø min 7 mm, Ømax. 11 mm, section max. 2.5 mm²) in the connection box passes by the built in M20 x 1.5 cable gland				
Maxi	mum supp	oly voltage	:	28 VDC (N7) - 110 mA				
-	DC N	linimum		0.3 W (with 13 VDC)				
Power	DC N	laximum		1.2 W (with 24 VDC)				
_				Depending on applied voltage, IS barrier type and resistance of connected cable				
Line	check			4 mA or 5 VDC max				
Impe Appa	Coil resistance at 20°C Impedance Apparent inductance Apparent capacitance			Charge \sim 550 Ω - Holding \sim 500 Ω 0 mH $_0$ μF				
Resp	onse time			2 - 3 s				
Weig	ht			500 g				

To Order a Coil choose Coil Ref + Voltage Code, example: 495910 for 28 VDC = 495910N7







9.0

INTRINSICALLY SAFE ELECTRICAL PARTS "ia"



496565 ELECTRICAL PARTS "BOOSTER" "IS" 37 mm

This coil can be mounted with every Parker ATEX solenoid valves corresponding to the specified Coil Group. See column "Coil Group" within valve pages.

Application: Control of solenoid valves in dangerous areas where explosion-proof protection Ex ia IIC T4 to T6 is required.

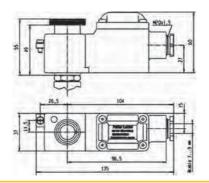
Benefits: Rotatable 360° fibreglass-reinforced plastic housing (class H). Solenoid coil, rectifier (silicium diodes), fuses and varistor protection are completely encapsulated into the coil housing by epoxy resin for shock and corrosion protection.

The plastic housing is delivered with M20 x 1.5 cable gland. Small size for ease of mounting in confined space. Available only in 28 VDC (code: N7).



Reference		496	565		
Certificate		LCIE 08 ATEX 6071 X - IECEx LCI 08.0030 X			
Coil group		9.0			
	Gas	II 1 G - Ex ia IIC	- - T4 / T5 / T6		
Type of protection	Dust	II 1 D - Ex ta IIIC - T80 / T95 /T130°C			
Degree of protection		IP67 according to IEC	/EN 60529 Standards		
Ambiant temperature		- 40°C to +80° The application might also be limited b	y the temperature range of the valve.		
Electrical connection		Cable connection through a plastic cable gland M20 x 1.5 allowing use of cable diameter from 7 to 12 mm. Additional earth connection possible with external screw terminal.			
Class of insulation		H180°C			
Minimum Courant of fund	ction	20 mA			
Minimum voltage of function at 60°C		28 VDC (N7)			
Safety parameters Maximum acceptable val Ui (V) / Ii (mA) / Pi (W)	ues:	28 V / 110 mA / 0.77 W 27 V / 120 mA / 0.81 W 26 V / 135 mA / 0.88 W 25 V / 150 mA / 0.94 W 24 V / 170 mA/ 1.02 W	28 V / 280 mA / 1.96 W 27 V / 320 mA / 2.16 W 26 V / 350 mA / 2.27 W 25 V / 390 mA / 2.43 W 24 V / 430 mA/ 2.58 W		
Line check		4 mA or 5	VDC max		
Apparent Impedance Typ. Apparent Inductance Apparent Capacitance		Attraction $\sim 600~\Omega$ - Holding $\sim 570~\Omega$ 0 mH $_0$ μF			
Response Time Typ.		2 - 4 s			
Weight		500) g		

To Order a Coil choose Coil Ref + Voltage Code, example: 496565 for 28 VDC = 496565N7





9.0

INTRINSICALLY SAFE ELECTRICAL PARTS "ia"



492965 ELECTRICAL PART "BOOSTER" "IS" 50 mm

This coil can be mounted with every Parker ATEX solenoid valves corresponding to the specified Coil Group.

See column "Coil Group" within valve pages.

Application: Control of solenoid valves in dangerous areas where explosion-proof protection Ex ia IIC - T6 is required.

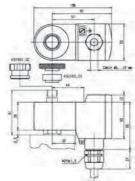
Benefits: Rotatable 360° fibreglass-reinforced plastic housing. Solenoid coil, fuses and varistor protection are completely encapsulated into the coil housing by epoxy resin for shock and corrosion protection. Small size for ease of mounting in confined space. Simplifies conversion of existing equipment to hazardous area requirements.

Small size for ease of mounting in confined space. Available only in 28 VDC.



Reference				492965.01 - (Stainless steel fixation) 492965.02 - (Plastic fixation)		
Certificate				LCIE 02 ATEX 6066 X - IECEX LCI 07.0007 X		
Coil (Group			9.0		
Turno	of neo	tection	Gas	II 1 G - Ex ia IIC - T6		
Type	oi pio	lection	Dust	II 1 D - Ex ta IIIC - T80°C		
Degre	ee of p	rotection		IP66 according to IEC/EN 60529 Standards		
Ambi	Ambiant temperature			- 40°C to $+65^{\circ}\text{C}$ The application is limited also by the temperature range of the valve.		
Elect	Electrical connection			Cable connection through a plastic or stainless steel cable gland M20 x 1.5 allowing use of cable diameter from 10 to 12 mm. Additional earth connection possible with external screw terminal.		
Class	Class of insulation			H180°C		
Maxi	imum s	upply voltage)	28 VDC (N7) - 110 mA		
*	DC	Minimum		0.3 W (with 13 VDC)		
Power	DC	Maximum		2.3 W (with 24 VDC)		
~				Depending on applied voltage, IS barrier type and resistance of connected cable		
Line	check			4 mA or 5 VDC max		
Coil resistance at 20°C Impedance Apparent inductance Apparent capacitance			$85~\Omega$ $275~\Omega$ (with 13 VDC) - 260 Ω (with 24 VDC) $0~mH$ $0~\mu F$			
Resp	Response time			2 - 4 s		
Weig	ht			500 g		

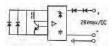
To Order a Coil choose Coil Ref + Voltage Code, example: 492965.01 for 28 VDC = 492965.01N7



Important

The intrinsically safe supply circuit should have enough capacity in all environmental conditions to assure a **minimum operating current of 29 mA** through the coil.

The minimal holding current is 20 mA.





12.0

INTRINSICALLY SAFE ELECTRICAL PARTS
"ia"







482870.01 & 492335 "NEMA" ELECTRICAL PARTS "IS" 50 mm

These coils can be mounted with every Parker ATEX solenoid valves corresponding to the specified Coil Group. See column "Čoil Group" within valve pages.

Application: Control of solenoid valves in dangerous areas where an explosion-proof protection Ex ia IIC - T6 is required.

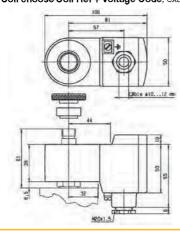
Benefits: Rotatable 360° housing, polyamid with fibreglass housing and cover. Coil, electronic circuits and other elements required for intrinsic safety are completely encapsulated in the housing with epoxy material for shock and corrosion protection.





Reference		482870.01 492335		
Certificate		LCIE 02 ATEX 6024 X	LCIE - FM - CSA	
Coil Group		12.0		
Type of protection	Gas	II 1 G - Ex ia IIC - T6	Cl. I, Div.I, Gr. A, B, C, D, Cl. II, Div.I, Gr. E, F, G	
Type of protection	Dust	II 1 D - Ex ta IIIC - T80°C	Gi. I, DIV.I, Gi. A, B, G, D, Gi. II, DIV.I, Gi. E, F, G	
Degree of protection		IP66 according to IEC/EN 60529 Standards	NEMA 4 - 4X	
Ambiant temperature		- 40°C to +65°C +60°C The application is limited also by the temperature range of the valve.		
Class of insulation		H180°C		
Electrical connection		Cable connection through a stainless steel cable gland M20 x 1.5 allowing use of cable diameter from 10 to 12 mm. Additional earth connection possible with external screw terminal.		
Maximum supply voltage	!	28 VDC (N7) - 110 mA	30 VDC (L8) - 100 mA	
DC Minimum		300 mW		
DC Maximum		3 W		
_		Depending on applied voltage, IS barrier type and resistance of connected cable		
Coil resistance at 20°C		295 Ω		
Impedance		345 Ω		
Apparent inductance Apparent capacitance		0 mH 0 μF		
Weight		500 g		

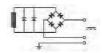
To Order a Coil choose Coil Ref + Voltage Code, example: 492335 for 30VDC = 492335L8



Important

The intrinsic safety supply circuit must have sufficient capacitance in all ambient conditions to guarantee a minimum operating current in excess of

The minimum current for holding in the energised position is 20 mA





7.0

INTRINSICALLY SAFE ELECTRICAL PARTS









488650.01 & 490885 "NEMA" ELECTRICAL PARTS "IS" 50 mm

This coil can be mounted with every Parker ATEX solenoid valves corresponding to the specified Coil Group.

See column "Coil Group" within valve pages.

Application: Control of solenoid valves in dangerous areas where explosion-proof protection Ex ia IIC - T6 is required.

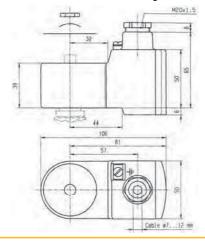
Benefits: Rotatable 360° housing, polyamid with fibreglass housing and cover. Coil, electronic circuits and other elements required for intrinsic safety are completely encapsulated in the housing with epoxy material for shock and corrosion protection.

Small size for ease of mounting in confined space.



Reference		488650.01 490885		
Certificate		LCIE 02 ATEX 6024 X	LCIE / FM / CSA	
Coil Group		7.0		
Type of protection Gas		II 1 G - Ex ia IIC - T6	Cl. I, Div.I, Gr. A, B, C, D, Cl. II, Div.I, Gr. E, F, G	
Type of protection	Dust	II 1 D - Ex ta IIIC - T80°C	Oi. 1, Div.1, di. A, D, O, D, Oi. 11, Div.1, di. E, 1, d	
Degree of protection		IP66 according to IEC/EN 60529 Standards	NEMA 4 - 4X	
Ambiant temperature		- 40°C to +65°C The operating temperature of the valve/coil can be limited by that of the valve.		
Electrical connection		Cable entry through a cable gland M20 x1.5. Screw terminals for leads 3 x 1.5 mm² max. Additional earth connection possible with external screw terminal		
Class of insulation		H180°C		
Maximum supply voltage		28 VDC (N7) - 110 mA The minimum operating voltage at maximum 60°C is 11.5 VDC.		
© DC Minimum		300 mW		
DC Maximum		3 W		
<u> </u>		Dependent on the applied voltage, type of barrier IS and the resistance of the connected cable		
Coil resistance at 20°C Impedance Apparent inductance		295 Ω 345 Ω 0 mH		
Apparent capacitance		0 µF		
Weight		500 g		

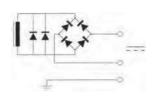
To Order a Coil choose Coil Ref + Voltage Code, example: 490885 for 30VDC = 490885L8



Important

The intrinsically safe supply circuit should have enough capacity in all environmental conditions to assure a minimum operating current of 29 mA through the coil.

The minimal holding current is 20 mA.





7.0

INTRINSICALLY SAFE ELECTRICAL PARTS









488660.01 & 490890 " NEMA" ELECTRICAL PARTS "IS" 50 mm

These coils can be mounted with every Parker ATEX solenoid valves corresponding to the specified Coil Group. See column "Coil Group" within valve pages.

Application: Control of solenoid valves in dangerous areas where explosion-proof protection Ex ia IIC T6 is required.

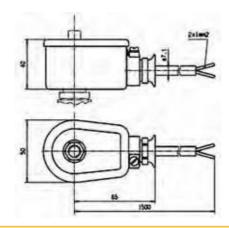
Benefits: Rotatable 360° housing, epoxy vernished steel housing and cover. Coil, electronic circuits and other elements required for intrinsic safety are completely encapsulated in the housing with epoxy material for shock and corrosion protection.

Small size for ease of mounting in confined space.



Reference		488660.01 490890		
Certificate		LCIE 02 ATEX 6024 X	LCIE / FM / CSA	
Coil Group		7.0		
Type of protection	Gas	II 1 G - Ex ia IIC - T6	Cl. I, Div.I, Gr. A, B, C, D Cl. II, Div.I, Gr. E, F, G	
Type of protection	Dust	II 1 D - Ex ta IIIC - T80°C	Cl. II, Div.I, Gr. E, F, G	
Degree of protection		IP67 according to IEC/EN 60529 Standards	NEMA 4 - 4X	
Ambiant temperature		- 40°C to +65°C The operating temperature of the valve/coil can be limited by that of the valve		
Electrical connection		Cable connection (2 x 1 mm²) with cable gland M20 x1.5, external earth screw connection.		
Class of insulation		H180°C		
Maximum supply voltage	!	28 VDC - 110 mA (N7) The minimum operating voltage at maximum 60°C is 11.5 VDC.		
DC Minimum		300 m₩		
DC Maximum		3 W		
2		Dependent on the applied voltage, type of barrier IS and the resistance of the connected cable		
Coil resistance at 20°C Impedance		295 Ω 345 Ω		
Apparent inductance Apparent capacitance		0 mH 0 µF		
Weight		500 g		

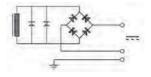
To Order a Coil choose Coil Ref + Voltage Code, example: 490890 for 28 VDC = 490890N7



Important

The intrinsic safety supply circuit must have sufficient capacitance in all ambient conditions to guarantee a minimum operating current in excess of 29 mA across

The minimum current for holding in the energised position is 20 mA.





7.0

INTRINSICALLY SAFE ELECTRICAL PARTS









488670.01 - ELECTRICAL PARTS "IS" 50 mm

This coil can be mounted with every Parker ATEX solenoid valves corresponding to the specified Coil Group. See column "Coil Group" within valve pages.

Application: Control of solenoid valves in dangerous areas where explosion-proof protection Ex ia IIC - T6 is required.

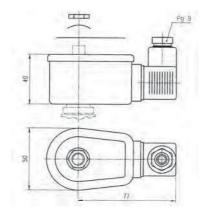
Benefits: Rotatable 360° housing, epoxy vernished steel housing and cover. Coil, electronic circuits and other elements required for intrinsic safety are completely encapsulated in the housing with epoxy material for shock and corrosion protection.

Small size for ease of mounting in confined space.



Reference			488670.01	
Certificate			LCIE 02 ATEX 6024 X	
Coil group			7.0	
Type of pro	taction	Gas	II 1 G - Ex ia IIC - T6	
Type of pro	lection	Dust	II 1 D - Ex ta IIIC - T80°C	
Degree of p	rotection		IP65 according to IEC/EN 60529 Standards	
Ambiant te	Ambiant temperature		- 40°C to +65°C The operating temperature of the valve/coil can be limited by that of the valve	
Electrical c	onnection		Cable entry through a cable gland M20 x1.5. Screw terminals for leads 3 x 1.5 mm² max. Additional earth connection possible with external screw terminal.	
Maximum s	Maximum supply voltage		28 VDC (N7) - 110 mA The minimum operating voltage at maximum 60°C is 11.5 VDC.	
₽ DC	Minimum		300 m₩	
Power	Maximum		3 W	
~			Dependent on the applied voltage, type of barrier SI and the resistance of the connected cable	
Coil resistance at 20°C Impedance Apparent inductance Apparent capacitance			$295~\Omega$ $345~\Omega$ $0~\text{mH}$ $0~\text{\muF}$	
Weight			500 g	

To Order a Coil choose Coil Ref + Voltage Code, example: 488670.01 for 28 VDC = 488670.01N7



Important

The intrinsic safety supply circuit must have sufficient capacitance in all ambient conditions to guarantee a minimum operating current in excess of 29 mA across the coil.

The minimum current for holding in the energised position is 20 mA.

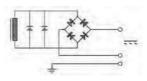






TABLE OF CONTENT

INTRODUCTION	
Index for Explosion Proof Electrical Parts	442
List of Coil Groups	443
COILS	
Coils for DIN plug connection	446
Coils with flying leads	469
Coils with screw terminal	474
Coils with ISO-DIN connector	481
EXPLOSION PROOF ELECTRICAL PARTS	
Level of protection "nAc nCc"	484
Level of protection "db"	492
Level of protection "mb"	494
Level of protection "db mb"	499
Level of protection "eb"	504
Level of protection "eb mb"	505
Level of protection "ia"	508
HOUSINGS	518
COIL ACCESSORIES	522
EXPLOSIVE ENVIRONMENTS	524
COIL APPENDICES	
Guidance chart for IS-Barriers.	534



4270

COIL STANDARD HOUSING WITH SCREW TERMINALS

Standard housing:

Reference:	4270
Material:	Epoxy vernished steel with cataphoresis traitement
Degree of protection:	IP according to IEC/EN 60529 IP 10 with armoured conduit IP 44 with cable gland
Electrical connection:	Can be made with armoured conduit or cable gland M12x1.5. Parts No. 495740 (cable gland M12x1.5) and 484093 to be ordered separately. Grounding connection by screw M3 on the inside of housing base plate.
Weight:	120 g



Benefits:

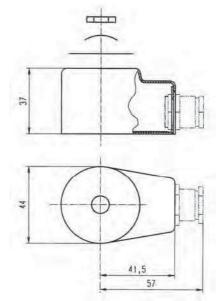
This metal housing offers the ideal protection against shocks and corrosion- rotatable 360° - easy mounting in confined spaces - single-nut mounting - light weight - simplifies conversion of existing equipment to other requirements.

Application:

The majority of the Lucifer® valves can be fitted with this standard housing, and can be mounted with several compatible Lucifer® coils group.

Compatible coils:

- **481000 Standard Coil** 8 W Class F (155°C)
- 483520 Double-Frequency Coil 9 W Class F (155°C)
- 481044 Standard High-Power Coil 14 W Class F (155°C)
- 485100 Standard High-Temperature Coil 8 W Class H (180°C)
- ◆ 486265 High-Temperature and High-Power Coil 14 W Class H (180°C





4269

HOUSING FOR BISTABLE (IMPULSE) COILS

Housing for bistable coil:

Reference:	4269	
Material:	Epoxy vernished steel	
Degree of protection:	IP according to IEC/EN 60529 IP 10 with armoured conduit IP 44 with cable gland	
Electrical connection:	Can be made with armoured conduit or cable gland M12x1.5. Parts No. 484092 and 484093 to be ordered separately. Grounding connection by screw M3 on the inside of housing base plate.	
Weight:	120 g	



Benefits:

This metal housing offers the ideal protection against shocks and corrosion- rotatable 360° - easy mounting in confined spaces - single-nut mounting - light weight - simplifies conversion of existing equipment to other requirements.

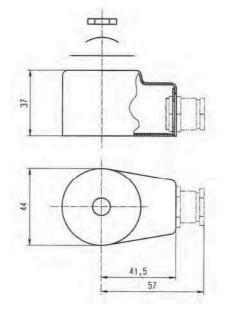
Application:

This housing is specially designed for group 4.0 coils and can be mounted only with valves controlled by electrical impulses.

Compatible coils:

- 484990 Impulse coil for AC 11 W Class F (155°C)
- 485400 Impulse coil for DC

13 W Class F (155°C)





4538

WATERPROOF AND DUSTPROOF HOUSING

Waterproof housing:

Reference:	4538	
Material:	Epoxy vernished steel	
Degree of protection:	IP according to IEC/EN 60529 IP 67 with cable gland	
Electrical connection:	Cable connection by cable gland M20x1.5 according to DIN 46320. Cable with outer diameter 6.5 - 13.5 mm can be simply sealed using a rubber gland with resilient sealing rings.	
	The enclosure is internally and externally fitted with grounding and earthing screw terminals.	
Weight:	180 g	



Benefits:

This enclosure is dust- and waterproof. It corresponds to the degree of "International Protection" IP 67 according to IEC / EN 60529. Corrosion resistant, the metal housing offers good protection for the coil against shocks and other outside influences - rotatable 360° - easy mounting in confined spaces - easy access to the screw terminals - single-nut mounting - light weight - simple conversion of existing electrical equipment to other requirements without interruption of fluid passage in the valve.

Application:

This housing can be equipped with several coils of our range, like the standard, double-frequency and magnetic latch coils.

Compatible coils:

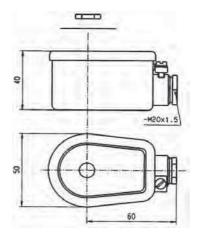
● 481000 - Standard Coil 8 W Class F (155°C)

● 483520 - Double-Frequency Coil

9 W Class F (155°C)

● 484990 - Impulse Coil for AC 11 W Class F (155°C)

◆ 485400 - Impulse Coil for DC 13 W Class H (180°C)





8520

WATERPROOF HOUSING FOR HIGH-TEMPERATURE COILS

Waterproof housing:

Reference:	8520
Material:	Epoxy vernished steel
Degree of protection:	IP according to IEC/EN 60529 IP 67 with cable gland
Electrical connection:	Cable connection by cable gland M20x1.5 according to European standards. Cable with outer diameter 6.5 - 13.5 mm can be simply sealed using a rubber gland with resilient sealing rings. The enclosure is internally and externally fitted with grounding and earthing screw terminals.
Weight:	180 g



Benefits:

This enclosure is dust- and waterproof. It corresponds to the degree of "International Protection" IP 67 according to IEC / EN 60529. Corrosion resistant, the metal housing offers good protection for the coil against shocks and other outside influences - rotatable 360° - easy mounting in confined spaces - easy access to the screw terminals - single-nut mounting - light weight - simple conversion of existing electrical equipment to other requirements without interruption of fluid passage in the valve.

Application:

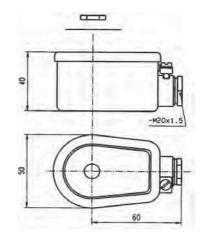
The majority of the Parker Lucifer® valves can be fitted with this housing and can be mounted with several compatible Parker Lucifer® coils for high temperature (14 W, 8 W Class F or H).

Compatible coils:

● 481044 - High Power Coil 14 W Class F (155°C)

● 486265 - High Power Coil 14 W Class H (180°C)

● 485100 - Coil for High Temperature 8 W Class H (180°C)







22 mm 32 mm

COIL ASSEMBLY KITS

COIL ASSEMBLY KIT FOR 22 mm COIL

The coil assembly kit corresponds to the numbering system for Parker Lucifer® valve housings (Valve - housing - coil/voltage).

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

Caution: This coil assembly kits for 22 mm coils are not adapted for high flow valves, ask your distributor for the adapted kit.



KIT OF 100 PIECES

Reference	Specification Sp	Application
488993.50	Standard - aluminium nameplate - passivated washer and nut - pressure indication in [bar]	Standard valves

COIL ASSEMBLY KIT FOR 32 mm COIL

The coil assembly kit corresponds to the "housing" of Parker Lucifer® valve numbering system (Valve - housing - coil/voltage).

It is composed of a nameplate giving details of the valve type, a round washer and a nut to ensure the fixing between 32 mm coil and the valve.



KIT OF 100 PIECES

Reference	Specification	Application
482995.50	Standard - Aluminium nameplate - Passivated iron washer and nut - Pressure indication in [bar]	Standards valves





ACCESSORIES

DIN PLUG CONNECTOR ACCORDING TO EN 175301-803 -B

No. 481043 for Parker Lucifer® coil No. 600040 for Parker coil

Electrical connection suitable for all 22 mm coils (e.g. 488980, 481180)



No. 486586 for standard Parker Lucifer® version

No. 492645 for high temperature Parker Lucifer® version

No. 600004 for Parker version

Electrical connection suitable for all 32 mm coils (e.g. 481865, 492425)

METALIC ASSEMBLY KIT

Nut No. 482213 M14 x 1+ Ring No. 482214 + O-Ring No. 483917

Coil assembly kit for offshore electrical parts (e.g. 482870.01, 492210, 492965.01, 496565, 496700)

PLASTIC NUT WITH METAL INSERT

No. 8886

For Oil & Gaz electrical parts (e.g. 492965.01)

CABLE GLAND

No. 492398 - Pg 13.5 -Ex eb II No. 493841 - M20x1.5 - Ex ia IIC

Electrical connection and mooring cable with 6 to 12 mm diameter, for electrical parts approved "eb mb" or "ia" (e.g. 492190, 492965....)

CABLE GLAND

No. 493426 - 1/2"-14 NPT

Electrical connection and mooring cable with 6 to 12 mm diameter, for flameproof approved electrical parts (e.g. 493640)



















INTRODUCTION

Current European regulations concerning electrical equipment for potentially explosive environments are based on optional and partial European directives which require regular modification in the form of application or adaptation directives in order to keep pace with technical developments.

The basic European text in this field, directive **76/117/EC**, which allow the free circulation of goods within the European Union, provides the general framework for the present regulations.

Electrical equipment for use in potentially explosive environments is certified by a government-approved body when it meets relevant European standards (EN 60079-0 and upwards) covering each type of protection (db, ia, eb, m, p, etc). Such equipment is then issued with a an EC type examination certificate, entitling it to carry the distinctive marking.

This mark opens the way for trading within the European Union and occasionally beyond.

Although largely beneficial, it has revealed certain drawbacks, notably a lack of flexibility and the absence of a global concept for safety. It has now been completely revised by the **new European directive 94/9/EC from March 23, 1994.**

The EC type examination certificate to harmonised standards obtained in compliance with previous directives will remain valid until June 30, 2003, but their validity will cover only conformity to the harmonised standards specified in these directives.

EUROPEAN MEMBER COUNTRIES







DEFINITIONS

EXPLOSIVE ENVIRONMENTS

Mixture with air, under atmospheric conditions, of flammable substances in the form of gases, vapours, mists or dusts in which, after combustion has occurred, combustion spreads to the entire unburned mixture.

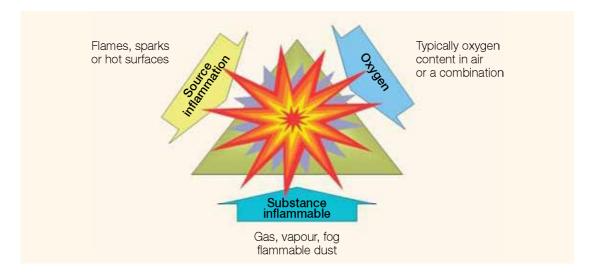
HAZARDOUS AREAS

A hazardous area is an area in which an explosive gas environment is present, or may be expected to be present, in quantities such as to require special precautions for construction, installation and use of electrical apparatus.

INGREDIENTS FOR AN EXPLOSION

- When combustible materials are mixed with air, an explosive mixture is produced. Danger of explosion
 therefore exists wherever these hazardous materials are handled: such a condition is to be found on the
 biggest chemical plant as well as at the smallest filling station.
- Nowadays with the use of electronic and electrical instrumentation in process control, the risk of combustion by electrical energy has increased sharply.
- To protect personnel and expensive equipment special precautions should be taken to prevent combustion of those dangerous substances. Conditions likely to ignite explosive mixtures are as follows:

Three conditions are enough to create an explosion.









DEFINITIONS

ZONES

The hazardous areas are classified in zones based on the frequency of the occurrence and the duration of an explosive gas or dust environment as follows:

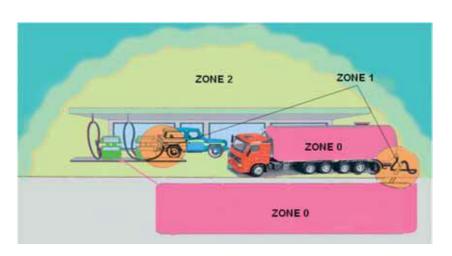
Zone 0 (20)	Zone 1 (21)	Zone 2 (22)
An area in wich an explosive gas (dust) atmosphere is present CONTINUOUSLY or is present for LONG PERIODS (~1000 h/y).	An area in wich an explosive gas (dust) atmosphere is present LIKELY TO OCCUR in normal operation (~10 to 999 h/y).	An area in wich an explosive gas (dust) atmosphere is not LIKELY TO OCCUR and if it does occur it will exist for short period only (~1 to 10 h/y).
Mode of protection: ia - ma - px	Mode of protection:db-eb-ib-mb-pxb	Mode of protection: nc-mc-ic-pz

HAZARDOUS LOCATION CLASSIFICATION

Explosive	Continuous	Intermittent Presence	Occasional Presence
Environment	Presence	(normal operation conditions)	(abnormal operation)
IEC	Zone 0 (gas)	Zone 1 (gas)	Zone 2 (gas)
	Zone 20 (dust)	Zone 21 (dust)	Zone 22 (dust)
Europe	Zone 0 (gas)	Zone 1 (gas)	Zone 2 (gas)
	Zone 20 (dust)	Zone 21 (dust)	Zone 22 (dust)
Canada (CEC)¹ USA (NEC) ²	Cl. I Div. 1 (gas) Cl. II Div. 1 (dust) Cl.III Div. 1 (fibres)	CI. I Div. 1 (gas) CI. II Div. 1 (dust) CI.III Div. 1 (fibres)	CI. I Div. 2 (gas) CI. II Div. 2 (dust) CI.III Div. 2 (fibres)

^{1 (}CEC): Code Canadien d'Electricité / 2 (NEC): National Electrical Code

Example:







DEFINITIONS

HAZARDOUS LOCATION CLASSIFICATION

Category	Fault protection	Atmosphere	Zone	Example of protections
EC Type examination by	Notified Body → annex III			
1	2 types of protection or	G (Gas)	0	"ia", "ma", "px"
Very high level	2 indépendant faults	D (Dust)	20	or "ia-ma", "db/eb"

EC Type examination by Notified Body → annex III

2	One type of protection	$G_{(Gas)}$	1	One type of protection
High level	Habitual frequent malfunction	D (Dust)	21	lb, db, mb, eb, p y , o,

Internal production inspection -> EC declaration of conformity

3	Required level of protection -	$G_{(Gas)}$	2	n, ic, pz,
Normal		D (Dust)	22	A , C, L, P, R

Hazardous Location Classification

Group	Gas Reference
I	Methane
IIA	Propane
IIB	Ethylene
IIC	Hydrogen / Acethylene

Group	Dust Reference
-	-
IIIA	Fibres
IIIB	Non-conductive dust
IIIC	Conductive dust

Surface Temperature Classes

T1 T2	450°C	- 600 - 500	560°C Hydrogen
	300°C	500	
			537°C Methane
T3	200°C	400	425°C Ethylene
T4	135°C	300	305°C Acetylene
		\ \	210°C Kerozene
T5	100°C	200	160°C Ethylether
T6	85°C		95°C Carbon disulphide







PROTECTION MODES

PROTECTION MODES

Concept	Gas Co	de Dust	Gas Zone	es Dust
Flameproof enclosure	db	tb	1/2	21/22
Encapstulation	ma/ mb /mc	tb /tc	0/1/2	20/21/22
Increased Safety	eb	-	1/2	-
Intrinsic Safety	i a / ib / ic	ta / tb / tc	0/1/2	20/21/22
Pressurized apparatus	pxb / p y / pz	pD	1/2	21/22
Concept Cat. 3 apparatus	nA nL nR nC	- - - -	2 2 2 2	- - -

In red, protection modes used by parker FCDE.







STANDARDS AND PROTECTION MODES

APPARATUS FOR EXPLOSIVE GAS ATMOSPHERES EQUIPMENT GROUP II

EPL	Standards EN / IEC	Protection	Title
	60079-0	-	General requirements
	60079-11	ia	Intrinsic safety
Ga	60079-18	ma	Encapsulation
au	60079-26		Equipment with equipment protection level (EPL) Ga (Zone 0)
	60079-28	op is	Protection of equipment and transmission systems using optical radiation
	60079-1	db	Flameproof enclosures
	60079-2	p, p x b, p y	Pressurized enclosures
	60079-5	q	Powder filling
	60079-6	0	Oil immersion
	60079-7	eb	Increased safety
Gb	60079-1 1	ib	Intrinsic safety
	60079-18	mb	Encapsulation
	60079-25		Intrinsically safe systems
	60079-27		Fieldbus intrinsically safe concept (FISCO)
	60079-28	op is op pr op sh	Protection of equipment and transmission systems using optical radiation
	60079-11	ic	Intrinsic safet y
	60079-18	mc	Encapsulation
	60079-15	nA	Non sparking
	60079-15	nR	Restricted breathing enclosure
Gc	60079-15	nL	Limited energy (only old edition)
uc	60079-15	nC	Equipment producing operational sparks
	60079-2	pz	Pressurized enclosures
	60079-27		Concept de réseau de terrain de sécurité intrinsèque (FISCO)
	60079-28	op is op pr op sh	Protection of equipment and transmission systems using optical radiation

EPL = Equipement Protection Level

In red, protection modes used by parker FCDE.







STANDARDS AND PROTECTION MODES

ELECTRICAL EQUIPMENT FOR USE IN AREAS WITH COMBUSTIBLE DUST - EQUIPMENT GROUP III

EPL	Standards EN / IEC	Protection	Title
	60079-0	-	General requirements
	60079-31	ta	Protection by enclosure
Da	60079-11	ia	Protection by intrinsic safety (iaD IEC/EN 61241-11)
	61241-18	ma	Protection by encapsulation
	60079-31	tb	Protection by enclosure
DIA	60079-11	ib	Protection by intrinsic safety (ibD IEC/EN 61241-11)
Db	60079-18	mb	Protection by encapsulation
	IEC 61241-4	pD	Type of protection "pD"
	60079-31	tc	Protection by enclosure
Dc	60079-11	ic	Protection by intrinsic safety
DC	60079-18	mc	Protection by encapsulation
	IEC 61241-4	pD	Type of protection "pD"

EPL = Equipement Protection Level

In red, protection modes used by parker FCDE.

NON ELECTRICAL EQUIPMENT FOR USE IN POTENTIALLY EXPLOSIVE ATMOSPHERE

Standards	Protection	Title
EN 13463-1	-	Basic method and requirements
EN 13463-2	fr	Protection by flow restricting enclosure
EN 13463-3	db	Protection by flameproof enclosure
EN 13463-5	С	Protection by constructional safety
EN 13463-6	b	Protection by control of ignition source
EN 13463-7	р	Protection by pressurized enclosure
EN 13463-8	k	Protection by liquid immersion

ZONES AND EQUIPEMENT PROTECTION LEVEL (EPL)

Zone	Gas EPL	Dust Zone EPL				
0	Ga	20	Da			
1	Ga and Gb	21	Da and Db			
2	Ga, Gb and Gc	22	Da, Db and Dc			

CATEGORIES AND EQUIPEMENT PROTECTION LEVEL (EPL)

Categories	Gas	Dust	Safety
1	Ga	Da	Very high
2	Gb	Db	High
3	Gc	Dc	Normal

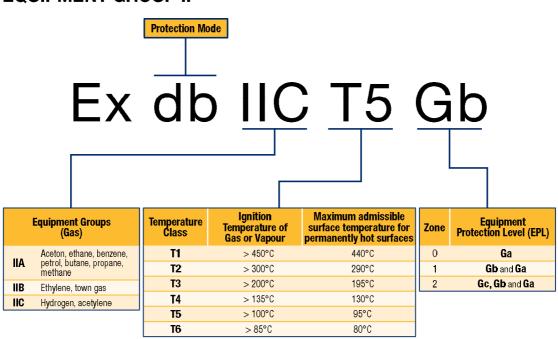




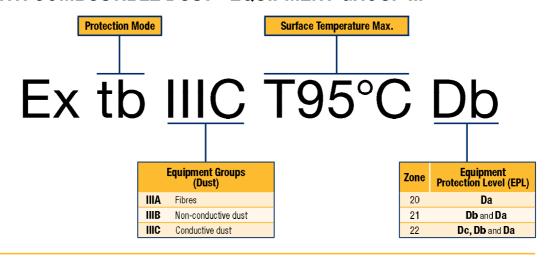


EXAMPLES OF MARKING

ELECTRICAL APPARATUS FOR EXPLOSIVE GAS ATMOSPHERES EQUIPMENT GROUP II



ELECTRICAL EQUIPMENT FOR USE IN AREAS WITH COMBUSTIBLE DUST - EQUIPMENT GROUP III







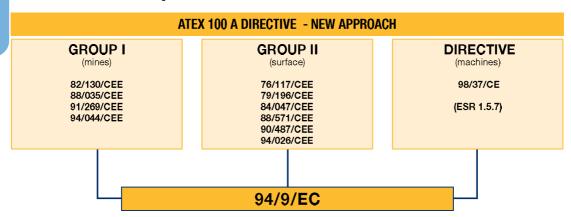


WHAT ABOUT THE DIRECTIVE ? (94/9/EC - 1994-03-23)

WHAT ABOUT THE DIRECTIVE ? (94/9/EC - 1994-03-23)

In keeping with the "new approach", the new directive lays down the framework for a total harmonization of regulations covering this field.

It makes no direct references to standards but sets out the essential health and safety requirements to be met and introduces the **CE** marking.



THE FRAMEWORK OF THE DIRECTIVE

The main principles of the new directive can be summarized as follows:

- It applies to electric and non-electric equipment.
- It defines essential health and safety requirements.
- It takes into consideration all potential hazards equipment may cause, in particular at design and production level
- The one directive applies to both mines susceptible to fire damp and surface industries.
- It stresses the importance of equipment being used in accordance with its intended purpose.
- It recognises The European Standards Committee **CEN** and the European Committee for Electrotechnical Standardisation **CENELEC** as competent bodies to fix the required harmonised standards.
- It provides for the contribution of labour and management.
- It defines procedures for assessing conformity to essential requirements, on the basis of modules which
 qualify equipment to carry the CE mark of conformity.

APPLICATIONS

The directive applies to the industrial field and concerns the following equipment:

- Equipment (machines, apparatus, etc.)
- Protective systems (discharge devices, explosion suppression devices, etc.)
- Components (parts with no autonomous function, terminals, etc.)
- Safety devices, controlling devices and regulating devices intended for use outside potentially
 explosive environments but required for safety with respect to explosions (relays, barriers, pressure
 switches, thermostats, etc.)







WHAT ABOUT THE DIRECTIVE ? (94/9/EC - 1994-03-23)

EXCLUDED FROM THE SCOPE OF THE NEW DIRECTIVE

The following equipment falls outside the scope of the new directive:

- Medical devices intended for use in a medical environment.
- Equipment and protective systems relating only to the risk of explosion of unstable chemical substances (explosives, etc.)
- Equipment intended for use in domestic and non-commercial environments.
- Personal protective equipment covered by directive 89/686/EC.
- Seagoing vessels and mobile offshore units.
- Means of transport, except for vehicles intended for use in a potentially explosive environment.

APPLICATION DATES

ATEX 100A DIRECTIVE - NE	W APPROACH						
94/9/EC							
Application dates							
Transposition to national law	1/9/1995						
Application (optional)	1/3/1996						
Application (total)	1/7/2003						

POTENTIAL IGNITION SOURCES AND OTHER HAZARDS TO BE CONTROLLED

The following all represent potential hazards:

- Various sources of ignition, such as sparks, flames, electric arcs, high surface temperature, acoustic energy, optical radiation or electromagnetic waves.
- Static electricity.
- Pressure compensation operations.
- Disturbance from external sources, such as changing environmental conditions, extraneous voltage, humidity, vibration or contamination.

Provision is also made for specific requirements governing devices used to provide additional equipment safety.

These requirements necessitate detailed analysis to asses the operational reliability of such devices and their interaction with other components connected with the equipment.







GUIDANCE CHART FOR IS-BARRIERS

Manufacturer	D-4	Ex	IS Standard Electrical Parts						IS Booster Electrical Parts			
Manulacurer	Reference	EX	Ex ia IIC T6 488650.01/02 488660,01 488670,01	Ex ia IIC T6 490885 490890 (490895)	Ex ia IIC T6 483580.01/03 483960.01/03	Ex ia 490880	Ex ia IIB T6 482160,01	Ex ia IIC T6 482870,01	Ex ia 492335	Ex ia IIC T6 492965.01/02	Ex ia IIC T6 496565	Ex ia IIC T6 495910
			LCIE/AUS	LCIE/FM/CSA	LCIE/AUS	LCIE/FM/CSA	LCIE	LCIE	LCIE/FM/CSA	LCIE	LCIE	LCIE
A puissance 3	NAEV 22-140	ia	•	-	•		•	•	-	•	•	•
	NAEV 26-100	ia	•	-	•		•	•	-	•	•	•
ABB	V171132-54	ib	•	-	•	•	•	•	-	•	•	•
	V171132-55	ib	•	-	-	-	•	•	-	•	•	•
	V171132-61	ia	•	•	•	•	•	•	•	•	•	•
	DO 890	ib	•	-	•	-	•	•	-	•	•	•
DDADLEV	S900-D04-EX	ib	•	•	•	•	•	•	•	•	•	•
BRADLEY	FEX-EX 24V	ia.	•	•	•	•	•	•	•	•	•	•
COOPER	LB 2101 LB 2105	ia ia	•	•	•	•	•	•	•	•	•	•
	LB 2103	ia	•	·	•	•	•	•	•	·	•	•
ELCON	1881/1882	ia.	·	·	·	•	•	•	•	·	•	•
220011	471 / 472	ia	·	•	•	•	•	•	•	•	•	•
	2871/2872	ia	•	•	•	•	•	•	•	•	•	•
	2874/2875/2876	ia	•	•	•	•	•	•	•	•	•	•
GEORGIN	AVB 122	ia	•	-	•	-	•	•	-	•	•	•
	AVB 125	ia	•	-	•	-	•	•	-	•	•	•
	AVB 128	ia	•	-	•	-	•	•	-	•	•	•
Hima	F3328A	ib	•	-	•	-	•	•	-	•	•	•
	F3335	ib	•	-	-	-	•	•	-	•	•	•
	H4007	ib	•	-	•	-	•	•	-	•	•	•
MTL	728P, 7128P, 7728P	ia	-	-	-	-	•	•	-	•	•	•
	728, 7028, 7128, 7728	ia	•	•	•	•	•	•	•	•	•	•
	3021, 4021, 4021S	ia	•	-	•	-	•	•	-	•	•	•
	3022	ia	-	-	-	-	•	-	-	-	-	-
	4023	ia		•	•	-	•		-	•		
	4024	ia	•	-	•	-	•	•		•	•	•
	4025	ia	•	•	•	•	•	•	•	•	•	•
	5021, 5023, 5024	ia	•	-	•	-	•	•	-	•	•	•
	5025	ia	•	-	•	-	•	•	•	•	•	•
	4521 / 4523 / 4524	ia	•	-	-	-	•	•	•	•	•	•
	5521 / 5523 / 5524	ia	•	•	•	-	•	•	•	•	•	•
Pepperl & Fuchs	Z 728	ia	•	•	•	•	•	•	•	•	•	•
a i dollo	Z 779	ia	•	•	•	•	•	•	•	•	•	•
	EGA-041-3	ia	-	•	•	•	•	•	•	•	•	•
	KFD2-SD-EX1.36 KFD2-SL-EX1.36	ia ia	-	-	-	-	-	•	-	-	-	-
	KFD2-SD-EX1.48	ia	-	•	-	•	-	•	•	•	•	•
	KFD2-SL-EX1.48	ia	-	·	-	•	-	•	•	·	•	•
	KFD2-SL-		-		<u>-</u>		-	<u>-</u>	<u> </u>		•	
	EX1.48.90A KFD2-SL-	ia in	-		-					•		•
	EX1.48.90A	ia	-	•		•	-	-	-	•	•	•
	KFD2-SL2-EX1.LK	ia		•	-	•	-	•	•		•	•
	KFD2-SL2-EX2	ia	-	•	•	•	•	•	•	•	•	•
	KSD2-B0-EX	ia	-	•	•	•	•	•	•	•	•	•
	RSD-BO-EX4	ib	-	•	-	•	-	•	•	•	•	•
	RSD-VO-EX8	ib	-	-	-	-	-	-	-	•	•	•







GUIDANCE CHART FOR IS-BARRIERS

Manufacturer	Reference	Ex	IS Standard Electrical Parts					IS Booster Electrical Parts				
Manufacture:	Hererenee		Ex ia IIC T6 488650.01/02 488660,01 488670,01 LCIE/AUS	Ex ia IIC T6 490885 490890 (490895) LCIE/FM/CSA	Ex ia IIC T6 483580.01/03 483960.01/03 LCIE/AUS	Ex ia 490880 (493997) LCIE/FM/CSA	Ex ia IIB T6 482160,01 LCIE	Ex ia IIC T6 482870,01 LCIE	Ex ia 492335 LCIE/FM/CSA	Ex ia IIC T6 492965.01/02 LCIE	Exia IIC T6 496565 LCIE	Ex ia IIC T6 495910 LCIE
SIEMENS	5RD00-0AB0	ib	-	-	-	-				•		
CILITERO	7RD00-0AB0	ia	_							•	•	•
	7RD01-0AB0	ia	-	-	-	-	-	-	-	•	•	•
	7RD10-0AB0	ia	-							•	•	•
	7RD11-0AB0	ia								•	•	•
	7RD20-0AB0	ia	-	-	-	-	-	-	-	•	•	•
	7RD21-0AB0	ia	-		-	-	-	-	-	•	•	•
STAHL	9001/01-252- 100-14	ia	٠	٠	27 V	27 V	•	٠	•	•	•	٠
	9001/01-280- 100-10	ia	•	•	24 V	24 V	•	•	•	•	•	•
	9001/01-280-	ia	•		24 V	-	•	•	-	•	•	•
	9002/13-280- 100-04	ia	24 V	24 V	27 V	27 V	24 V	24 V	24 V	17 V	17 V	17 V
	9311/52-11-10	ia	-	•	•	25 V	25 V	•	•	15 V	15V	15 V
	9111/63-11-00	ia	-	•	•	25 V	25 V	•	•	15 V	15 V	15 V
	9351/10-15-10	ia	-	•	•	•	•	•	•	•	•	•
	9351/10-16-10	ia	-	•		•	-	•	•	•	•	•
	9351/10-17-10	ia	•	•		•	-	•	•	-		-
	9381/10-187- 050-10	ib	-	•	•	•	•	•	•	•	•	•
	9381/10-246- 055-10	ib	-	•	•	•	•	•	•	•	•	•
	9381/10-246- 070-10	ib	-	•	•	•	•	•	•	•	•	•
	9465/12-04-11	ib	-	•	•	-	-	•	•	•	•	•
	9475/12-04-21	ia/ib	-	•	-	•	-	•	•	•	•	•
	9475/12-04-31	ia/ib	-	-	-	-	-	-	-	•	•	•
	9475/12-08-41	ia/ib	•	•	•	•	•	•	•	•	•	•
	9475/12-08-51	ib	-	•	•	•	-	•	•	•	•	•
	9475/12-08-61	ia/ib	•	•	•	•	•	•	•	•	•	•
Turck	MK72-S01-EX	ib	-	-	-	-	•	•	-	•	•	•
	MK72-S02-EEX	ib :L		-		-	•	•		•	•	•
	MK72-S04-EEX MK72-S05-EEX	ib ib	•	-	•	-	•	•	-	•	•	•
	MK72-S06-EEX	ib	•	-	•	•	•	•	-	•	•	•
	MK72-S07-EEX	ib	•	•	•	-	•	•	-	•	•	•
	MK72-S09-EEX	ia				-			-		<u> </u>	`
	MK72-S12-EEX	ia.	•		•		•	•		•	•	•
	MC72 - 41	ia	•	-	•	-	•	•	-	•	•	•
	MC72 - 43	ia	•		•		•	•		•	•	•
	MC72 - 44	ia		-	-	-	-		-	•	•	•
BARTEC	07-7331- 2301/1000	ia	•		-	-	•	•	-	•	-	-
	07-7331- 2301/1100	ia	•		•		•	•		•	-	-

If barrier reference not listed, consult factory for compatibility (tech.support@parker.com)

