









## **Stainless Steel Valves**

For Life sciences, Harsh Environments, Food & Healthy Beverage Dispensing





ENGINEERING YOUR SUCCESS.

DYSTRYBUTOR PARKER PREMIUM



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## Parker Fluid Control Division Europe - FCDE

### **Parker Hannifin**

Parker Hannifin is the world's leading diversified manufacturer of motion and control technologies and systems, providing precision-engineered solutions for a wide variety of commercial, mobile, industrial, life science and aerospace markets.

The company's products are vital to virtually everything that moves or requires control, including the manufacture and processing of raw materials, durable goods, infrastructure development and all forms of transport.



### **Fluid Control Division Europe**

The Fluid Control Division in Europe (FCDE) is a division of Parker Hannifin, the global leader in motion and control technologies.

FCDE core competences are the development and manufacturing of an extremely diverse range of fluid control products, including solenoid valves and pressure regulators.

Parker Fluidic Solutions (PFS) is a global designer and manufacturer of bespoke integrated system solutions. Renowned globally for solutions in high technology, fluid and motion control utilising advanced design and manufacturing techniques. PFS is focused on incorporating the best of Parker products into solutions designed for you.

#### **History**

Parker FCDE has been a leading player in the manufacturing and development of solenoid valve technologies for over 60 years, with continuous research and development bringing innovative solutions to the marketplace, for example leading the way in the utilisation of synthetic ruby for critical water applications or the unsurpassed reliability and precision of our pressure regulators. The expertise accumulated and developed through the years is evident in the superior quality of FCDE solutions.

#### **Markets**

Our products and solutions are typically designed for markets including Industrial Equipment, Industrial Automation, Mobile, Transportation, Life Sciences, Beverage dispensing and for Fluid and Process Control.

#### **Benefits**

The modular concept of our products, having separate solenoid valves and electrical parts, provides the customer with increased flexibility by allowing numerous combinations. This additional flexibility can enable distributors to greater reduce valve inventory levels, whilst retaining the same number of capabilities. Parker also has unrivalled experience in developing customised product solutions complying with the highest technical, environmental, energy and service life requirements.



## **Table of content**

Series		Body	Specifications	Way	Function	Port Size (inch)	Orifice (mm)	Flow Factor Kv(l/min)	MOPD (bar) Maxi	Max Fluid Temp. (°C)	Page
201LG/202LG/301L0	G			0 (0	Normally Closed	1/8 to 1/2	1.5 to 6.2	1.0 to 10.0	20	180	6-7
		316L Stainless St.	High corrosion resistance	2/2	Normally Open	1/4 to 1/2	3.0 to 6.2	4.5 to 10.0	6	140	8
				3/2	Normally Closed	1/8 to 1/4	1.5 to 3.0	1.0 to 4.5	3 to 12	140	9
121V/122V/133V 131F				2/2	Normally Closed		1.5 to 5.0	1.5 to 10	2 to 55	180	12
	_		Complete range	212	Normally Open		2.5	3.0	12	120	14
		303 Stainless St.	with all functions and including Ruby		Normally Closed	1/4	1.0 to 2.5	0.6 to 3.5	2 to 15	180	15
			sealing	3/2	Universal		1.5 to 2.5	1.5 to 3.5	4 to 10	180	17
					Normally Closed	SB	1.5	1.5	15	100	16
		316L Stainless St.	ATEX versions for	3/2	Normally Closed	SB	2.5	3.5	10	65	16
			piloting solutions	0/2	Universal	1/4 NPT	2.5	3.5	8.5	75	17
2216		316L Stainless St.	Large flow valves for pressure up to 16 bar	2/2	Normally Closed	3/8 to 1	15 to 25	65 to 170	10 to 20	140	20-21
Liquipure®	æ.			2/2	Normally Closed	SB	1.5 to 5	1.3 to 7.2	3 to 20	140	24
0		305 Stainless St.	Include NSF certified offering		Normally Closed	SB	1.5 to 5	1.3 to 7.2	2 to 14	140	25-26
N. N	50		<b>.</b>	3/2	Universal	SB	1.5 to 3	1.4 to 3.3	2 to 9.5	140	27
501C	P	303 Stainless St.	FKM FDA approved for healthy beverage dispensing	2/2	Normally Closed	1/8 to 1/4	1.5 to 2.5	1.1 to 2.5	12-14	140	31
x	p	316L Stainless St.	Solutions for actuators piloting	3/2	Universal	1/4 NPTF	6	9	12	65	34
PA Angle Seat valve	Å				Normally Closed OVER Seat		13 to 65	78 to 1167	16	180	38
	<b>A</b>	316L Stainless St. (304 Stainless St. or Aluminium	Air operated valves offering high flow for	2/2	Normally Open OVER Seat	3/8 to 2-1/2	13 to 45	78 to 833	16	180	40
	1	Actuator)	offering high flow for slurry fluids		Normally Closed UNDER Seat	3/4 to 2	13 to 45	78 to 833	16	180	41
Index		Coil Range for Stair	iless Steel Solenoid Valv	es							45

WARNING - USER RESPONSIBILITY

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

•This document and other information from Parker-Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.

• The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

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## 201/202/301LG Series

### **Product Description**

High grade material and corrosion resistant 201, 202, 301LG Valve Series is a complete range of 2 way and 3 way valves, direct acting, normally close and normally open.

This new range of solenoid valves, having AISI 316L grade stainless steel body, is the right answer for a wide range of applications in Food & Beverage Industry, Process industry, Wastewater treatment appliances, Marine, high temperature steam applications in aggressive environments or with aggressive media.

FFKM seal is available in order to increase mechanical, high temperature and aggressive media resistance for the most specific and demanding fluid control applications.

Thanks to the modular concept, a wide range of electrical parts can be used including ATEX, IP67, H class, reduced power, UL or VDE approved.

This selection of valves is NSF certified with mechanical ATEX approval available.

### **Applications**

#### Market of interest:

#### Typical applications:

- Life Sciences
- Food & Beverage Processing
- Commercial Equipment
- Industrial equipment
- Waste Water treatment
- Water purification and preparation devices
- Food & Beverage processing, Healthy Beverage Dispense equipment
- Demineralized water shut off, cooling of medical and surgical devices
- Dishwasher disinfectors, Laboratory and high end hot steam sterilizers
- Compatible aggressive liquids shut-off
- Ammonia (with silver shading ring version)

### **Benefits**

#### The most valuable features you will find in this product range:

- High grade corrosion resistant valve body, AISI 316L
- NSF certified references
- FFKM seal option for superior endurance in heavy duty conditions
- Modular concept: a wide range of electrical parts can be used with this family, including ATEX, low power, IP67, UL/VDE approved
- Robust and solid design





### **General Description**

### Materials in contact with the fluid

#### Valve Body & Seat:

AISI 316L Stainless Steel

**Tube assembly:** AISI 303 Stainless Steel

Plungers: AISI 430F Stainless Steel

Springs: AISI 302 Stainless Steel

### Installation

Seals:

FKM FDA, FFKM

### Shading ring:

Copper: standard Silver: according to notes

The valves can be mounted in any position. It is however recommended to install them with the coil in vertical position above the body.

### Media

These valves have been developed to achieve the best performances with a wide range of media.

### Coil

A wide range of coils can be used with this range. The complete coil range is described in pages 45 to 69.

### Temperature

The ambient temperature range of the value is  $-10^{\circ}$ C to  $+50^{\circ}$ C. For ATEX environments, temperature can be limited by the max ambient temperature of the coil. See coil pages.

### How to Order

A complete solenoid valve is composed by 2 elements: the **valve body** and the **coil**. 201LG Series pressure vessel is supplied with the standard housing integrated. Standard housing is composed by washer, nut and nameplate.

Step 1: Select the valve body reference needed. Example: 301LG2NVG7

Step 2: According the coil group, select coil + voltage code from page 45. Example: D5C

Step 3: Define the complete assembly numbering system. Example: 301LG2NVG7D5C

**Step 4:** Please note that you can order the plug seperatly if not included with the coil. **Example: 600003PLUG.** Please check the coil range pages for more details.





### **201LG Series**



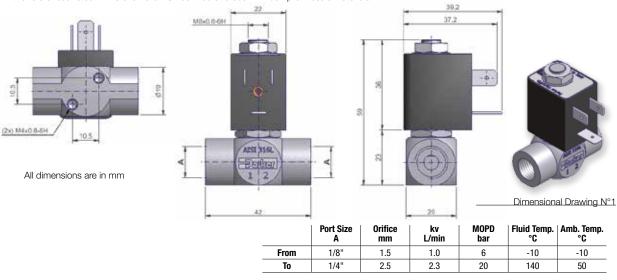
High corrosion resistant valves Direct Operated - Port size from 1/8" to 1/4" and orifice from 1.5mm to 3.0mm

3-	I6L S	tainl	ess	St.									2 –		
P	ipe l	Λοι	untir	ng									M <sup>1</sup>		
N	Normally Closed												1 Ċ	)	
Port Size	Orifice Ø	Flow F	actors		rating Pres Differentia			uid erature	Seat Parker Valves Power Coil Seal Group						
BSP		Kv L/min	KV m³/h	Min. Bar	Max. ( AC bar	MOPD) DC bar	Min. °C	Max.		Valve	Coil	AC	DC		
DOP	mm	I/min													
	15							°C	EKM	Ref.	Ref.	<b>W</b>	<b>W</b>	1 1/1 3	1
	1.5 1.5	1.0	0.06	0	16 20	7 10	-10	140	FKM FKM	Ref. 201LG1GVG2 201LG1GVG2	Ref. DF DG	2 4	2.5 5	1.1/1.3	1
1/8"	1.5 1.5 2.5			0	16	7			FKM FKM FKM	201LG1GVG2	DF	2	2.5	1.1/1.3 1.1/1.3 1.1/1.3	1 1 1
1/8"	1.5	1.0 1.0	0.06 0.06	0	16 20	7 10	-10 -10	140 140	FKM	201LG1GVG2 201LG1GVG2	DF DG	2 4	2.5 5	1.1/1.3	1 1 1 1
1/8"	1.5 2.5	1.0 1.0 2.3	0.06 0.06 0.14	0 0 0	16 20 8	7 10 3	-10 -10 -10	140 140 140	FKM FKM	201LG1GVG2 201LG1GVG2 201LG1LVG2	DF DG DF	2 4 2	2.5 5 2.5	1.1/1.3 1.1/1.3	1
1/8"	1.5 2.5 2.5	1.0 1.0 2.3 2.3	0.06 0.06 0.14 0.14	0 0 0 0	16 20 8 10	7 10 3 6	-10 -10 -10 -10	140 140 140 140	FKM FKM FKM	201LG1GVG2 201LG1GVG2 201LG1LVG2 201LG1LVG2	DF DG DF DG	2 4 2 4	2.5 5 2.5 5	1.1/1.3 1.1/1.3 1.1/1.3	1

Notes :

Nominal Pressure = 40 bar

All the references listed in this chart are NSF certified and use FDA compliant seals materials.



3-	16L S	Stainl	ess	St.									2		
Ρ	Pipe Mounting												M		
N	Normally Closed												ı Ċ	)	
Port Size	Orifice Ø	Flow F	actors		rating Pres Differentia			uid erature	Seat Seal	Parker Valv	es	Pow	/er	Coil Group	Drawing N°
		Kv	KV	Min.	Max. (	MOPD)	Min.	Max.	Sear	Valve	Coil	AC	DC		
BSP	mm	l/min	m³/h	Bar	AC bar	DC bar	°C	°C		Ref.	Ref.	W	W		
	1.5	1.0	0.06	0	20	15	-10	180	FFKM	201LG2GKG7A <sub>1</sub>	D5	8	9	2.0/24.0	2
	3.0	4.5	0.27	0	9	5	-10	180	FFKM	201LG2NKG7A <sub>1</sub>	D5	8	9	2.0/24.0	2
1/4"	3.0	4.5	0.27	0	20	8	-10	180	FFKM	201LG2NKG7A <sub>1</sub>	DM	14	14	2.0/24.0	2
1/4	3.0	4.5	0.27	0	9	5	-10	140	FKM	201LG2NVG7	D5	8	9	2.0/24.0	2
3.0 4.5 0.27 0 20 8 -10									FKM	201LG2NVG7	DM	14	14	2.0/24.0	2
	3.0	4.5	0.27	0	9	5	-10	140	FKM	201LG2NVG7A <sub>1</sub>	D5	8	9	2.0/24.0	2

Notes :

1. With silver shading ring Nominal Pressure = 40 bar

All the references listed in this chart are NSF certified and use FDA compliant seals materials.



### 201LG Series

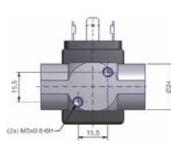


High corrosion resistant valves Direct Operated - Port size from 1/4" to 1/2" and orifice from 4.0mm to 6.2mm

	16L S												2 		
( Pi	ipe l	Μοι	untir	ŋg									M T	ΙЦ	
				-										<u> </u>	
	orma												1 ( )	)	
Port Size	Orifice Ø	Flow F	actors	Ope	rating Pres Differential			luid erature	Seat Seal	Parker Valv	es	Pov	ver	Coil Group	Drawing N°
0120	Ű	Kv	KV	Min.	Max. (I		Min.	Max.	ocui	Valve	Coil	AC	DC	uroup	
BSP	mm	l/min	m³/h	Bar	AC bar	DC bar	°C	°C		Ref.	Ref.	W	w		
	4.0	7.0	0.42	0	10	4	-10	180	FFKM	201LG2QKG7A <sub>1</sub>	DM	14	14	2.0/24.0	2
	4.0	7.0	0.42	0	5	3	-10	140	FKM	201LG2QVG7	D5	8	9	2.0/24.0	2
	4.0	7.0	0.42	0	10	4	-10	140	FKM	201LG2QVG7	DM	14	14	2.0/24.0	2
	4.0	7.0	0.42	0	5	3	-10	140	FKM	201LG2QVG7A <sub>1</sub>	D5	8	9	2.0/24.0	2
	4.0	7.0	0.42	0	10	4	-10	140	FKM	201LG2QVG7A <sub>1</sub>	DM	14	14	2.0/24.0	2
1/4"	5.0	8.0	0.48	0	3	2	-10	180	FFKM	201LG2SKG7A <sub>1</sub>	D5	8	9	2.0/24.0	2
	5.0	8.0	0.48	0	8	2.5	-10	180	FFKM	201LG2SKG7A <sub>1</sub>	DM	14	14	2.0/24.0	2
	5.0	8.0	0.48	0	3	2	-10	140	FKM	201LG2SVG7	D5	8	9	2.0/24.0	2
	5.0	8.0	0.48	0	8	2.5	-10	140	FKM	201LG2SVG7	DM	14	14	2.0/24.0	2
	5.0	8.0	0.48	0	3	2	-10	140	FKM	201LG2SVG7A	D5	8	9	2.0/24.0	2
	5.0	8.0	0.48	0	8	2.5	-10	140	FKM	201LG2SVG7A	DM	14	14	2.0/24.0	2
	5.0	8.0	0.48	0	3	2	-10	180	FFKM	201LG3SKG7	D5	8	9	2.0/24.0	2
	5.0	8.0	0.48	0	8	2.5	-10	180	FFKM	201LG3SKG7A	DM	14	14	2.0/24.0	2
	5.0	8.0	0.48	0	3	2	-10	140	FKM	201LG3SVG7	D5	8	9	2.0/24.0	2
	5.0	8.0	0.48	0	8	2.5	-10	140	FKM	201LG3SVG7	DM	14	14	2.0/24.0	2
	5.0	8.0	0.48	0	3	2	-10	140	FKM	201LG3SVG7A	D5	8	9	2.0/24.0	2
3/8"	5.0	8.0	0.48	0	8	2.5	-10	140	FKM	201LG3SVG7A	DM	14	14	2.0/24.0	2
3/8"	6.2	10.0	0.60	0	1.5	0.5	-10	180	FFKM	201LG3UKG7A	D5	8	9	2.0/24.0	2
	6.2	10.0	0.60	0	4	1.5	-10	180	FFKM	201LG3UKG7A	DM	14	14	2.0/24.0	2
	6.2	10.0	0.60	0	1.5	0.5	-10	140	FKM	201LG3UVG7	D5	8	9	2.0/24.0	2
	6.2	10.0	0.60	0	4	1.5	-10	140	FKM	201LG3UVG7	DM	14	14	2.0/24.0	2
	6.2	10.0	0.60	0	1.5	0.5	-10	140	FKM	201LG3UVG7A,	D5	8	9	2.0/24.0	2
	6.2	10.0	0.60	0	4	1.5	-10	140	FKM	201LG3UVG7A	DM	14	14	2.0/24.0	2
	5.0	8.0	0.48	0	3	2	-10	180	FFKM	201LG4SKG7	D5	8	9	2.0/24.0	2
	5.0	8.0	0.48	0	8	2.5	-10	180	FFKM	201LG4SKG7A,	DM	14	14	2.0/24.0	2
	5.0	8.0	0.48	0	3	2	-10	140	FKM	201LG4SVG7	D5	8	9	2.0/24.0	2
	5.0	8.0	0.48	0	8	2.5	-10	140	FKM	201LG4SVG7	DM	14	14	2.0/24.0	2
	5.0	8.0	0.48	0	3	2	-10	140	FKM	201LG4SVG7A,	D5	8	9	2.0/24.0	2
	5.0	8.0	0.48	0	8	2.5	-10	140	FKM	201LG4SVG7A	DM	14	14	2.0/24.0	2
1/2"	6.2	10.0	0.60	0	1.5	0.5	-10	180	FFKM	201LG4UKG7A,	D5	8	9	2.0/24.0	2
	6.2	10.0	0.60	0	4	1.5	-10	180	FFKM	201LG4UKG7A	DM	14	14	2.0/24.0	2
	6.2	10.0	0.60	0	1.5	0.5	-10	140	FKM	201LG4UVG7	D5	8	9	2.0/24.0	2
	6.2	10.0	0.60	0	4	1.5	-10	140	FKM	201LG4UVG7	DM	14	14	2.0/24.0	2
	6.2	10.0	0.60	0	1.5	0.5	-10	140	FKM	201LG4UVG7A,	D5	8	9	2.0/24.0	2
	6.2	10.0	0.60	0	4	1.5	-10	140	FKM	201LG4UVG7A	DM	14	14	2.0/24.0	2
				-											_

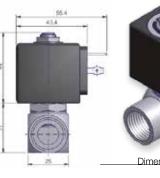
#### Notes :

1. With silver shading ring
 Nominal Pressure = 40 bar
 All the references listed in this chart are NSF certified and use FDA compliant seals materials.



All dimensions are in mm







Dimensional Drawing N°2

	Port Size A	Orifice mm	kv L/min	MOPD bar	Fluid Temp. °C	Amb. Temp. °C
From	1/4" 3/8"	1.5	1	2	-10	-10
То	3/8 1/2"	6.2	10	20	140	50
			•			



### **202LG Series**

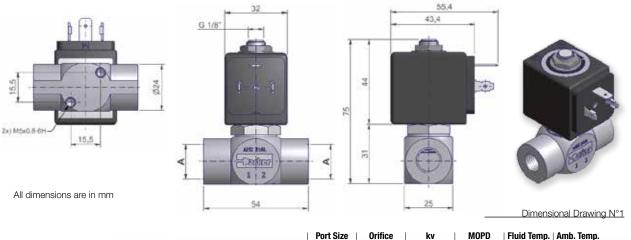


High corrosion resistant valves Direct Operated - Port size from 1/4" to 1/2"and orifice from 3.0mm to 6.2mm

31	I6L S	tainle	ess St	t.									2			
Pi	Pipe Mounting												M			
N	Normally Open												1 Ć	)		
Port Size	Orifice Ø	Flow F	actors		rating Pres Differentia			uid erature	Seat Parker Valves Power Coil D e Seal Group							
		Kv	KV	Min.		MOPD)	Min.	Max.		Valve	Coil	AC	DC			
BSP	mm	l/min	m³/h	Bar	AC bar	DC bar	°C	°C		Ref.	Ref.	W	w			
4 / 411	3.0	4.5	0.27	0	6	6	-10	140	FKM	202LG2NVG7	D5	8	9	2.0/24.0	1	
<b>1/4"</b> 5.0 8.0 0.48 0 3 3 -10								140	FKM	202LG2SVG7	D5	8	9	2.0/24.0	1	
1/2"	5.0 8.0 0.48 0 3 3 -10								FKM	202LG4SVG7	D5	8	9	2.0/24.0	1	
1/2	6.2	10.0	0.60	0	1	1	-10	140	FKM	202LG4UVG7	D5	8	9	2.0/24.0	1	

Notes :

Nominal Pressure = 40 bar All the references listed in this chart are NSF certified and use FDA compliant seals materials.



	Port Size A	Orifice mm	kv L/min	MOPD bar	Fluid Temp. °C	Amb. Temp °C
From	1/4"	3.0	4.5	1	-10	-10
То	1/2"	6.2	10	6	140	50



### **301LG Series**

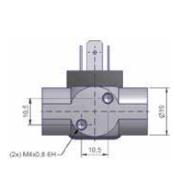


High corrosion resistant valves Direct Operated - Port size from 1/8" to 1/4" and orifice from 1.5mm to 3.0mm

31	I6LS	tainle	ss St										2 		
( Pi	Pipe Mounting												M	ПΥП	
N	Normally Closed												3 (	] ⊙ 1	
Port Size	Orifice Ø	Flow F	actors		rating Pres Differentia			uid erature	Seat Parker Valves Power Coil Seal Group						Drawing N°
		Kv	KV	Min.	Max. (	MOPD)	Min.	Max.		Valve	Coil	AC	DC		
BSP	mm	l/min	m³/h	Bar	AC bar	DC bar	°C	°C		Ref.	Ref.	W	W		
1/8"	1.5	1.0	0.06	0	8	8	-10	140	FKM	301LG1GVG2	DG	4	5	1.1/1.3	2
1/0	2.5	2.3	0.14	0	3	3	-10	140	FKM	301LG1LVG2	DG	4	5	1.1/1.3	2
	1.5	1.0	0.06	0	8	8	-10	140	FKM	301LG2GVG2	DG	4	5	1.1/1.3	2
1/4"	1.5	1.0	0.06	0	12	12	-10	140	FKM	301LG2GVG7	D5	8	9	2.0/24.0	3
1/4**	2.5 2.3 0.14 0 3 3 -10						-10	140	FKM	301LG2LVG2	DG	4	5	1.1/1.3	3
	3.0	4.5	0.27	0	4	4	-10	140	FKM	301LG2NVG7	D5	8	9	2.0/24.0	3

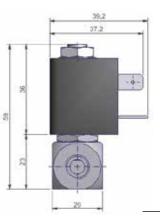
Notes : Nominal Pressure = 40 bar

All the references listed in this chart are NSF certified and use FDA compliant seals materials.



All dimensions are in mm

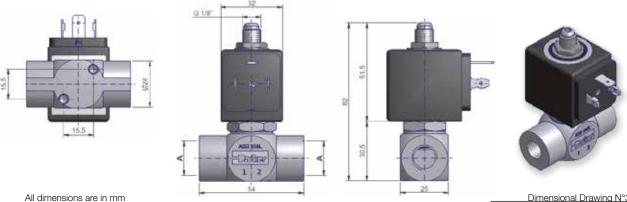






Dimensional Drawing N°2

	Port Size A	Orifice mm	kv L/min	MOPD bar	Fluid Temp. °C	Amb. Temp. °C
From	1/8"	1.5	1.0	3	-10	-10
То	1/4"	2.5	2.3	8	140	50



Dimensional Drawing N°3

	Port Size A	Orifice mm	kv L/min	MOPD bar	Fluid Temp. °C	Amb. Temp. °C
From	1/4"	1.5	1	4	-10	-10
То	1/4	3.0	4.5	12	140	50



## 121V / 122V / 133V / 131F Series

### **Product Description**

This complete range with 2 ways and 3 ways constructions offers a large choice of sealing. These valves can be combined with a wide range of electrical parts including ATEX zone 0.



### Applications

#### Market of interest:

- Life Sciences
- Food & Beverage Processing
- Commercial Equipment
- Industrial equipment
- Waste Water treatment

#### Typical applications:

- Water purification and preparation devices
- Dishwasher disinfectors, Laboratory and high end hot steam sterilizers
- Compatible aggressive liquids shut-off
- Ammonia (with silver shading ring version in option)

### **Benefits**

#### The most valuable features you will find in this product range:

- FFKM seal option for superior endurance in heavy duty conditions
- Modular concept: a wide range of electrical parts can be used with this family, including ATEX, low power, IP67, UL/VDE approved
- Robust and solid design
- Large choice of sealing
- Selection for ATEX zone 0 applications
- Universal 3 ways construction available



### **General Description**

### Materials in contact with the fluid

#### Valve Body & Seat:

AISI 303 Stainless Steel (316L for U133V)

**Plunger:** Ferritic stainless steel

Shading ring:

Copper: standard Silver: according to notes Other parts: Stainless steel

Seals (according versions):

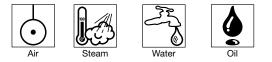
FKM, PTFE, RUBY, PUR

### Installation

The valves can be mounted in any position. It is however recommended to install them with the coil in vertical position above the body. Please check compability with materials.

### Media

These valves have been developed to achieve the best performances with a wide range of media. Check compatibility with material.



### Temperature

For the 121V: The ambient temperature range of the valve is -10°C to +50°C.

**For the 121V5x97 and 131V5x97 series:** The ambient temperature range of the valve is -20°C to +65°C. **For the U133Vx97:** The ambient temperature range of the valve is -25°C to +50°C.

For ATEX environments: temperature can be limited by the max ambient temperature of the coil. See coil pages.

### Coils

A wide range of coils can be used with this range. The complete coil range is described in pages 45 to 69.

### How to Order

A complete solenoid valve is composed by 3 elements: the **valve body**, the **housing** and the **coil**.

Step 1: Select the valve body reference needed. Example: 121V5706

Step 2: Select the housing depending on the protection level. Example: 2995

**Step 3:** Select the coil ref. + voltage code. Find the voltage code in coil pages starting from page 45 **Example: 481865C2** 

Step 5: The complete assembly numbering system is : 121V5706-2995-481865C2

#### Step 4: Accessories

Din Plug Connector according to DIN EN 175301-803 Form A 48658640 (batch size = 25)

**121V Series** 



High corrosion resistant valves Direct Operated - Port size 1/4" and orifice from 1.5mm to 5.0mm

	303 Stainless St. Pipe Mounting															2			
$\left( \right)$	Pip	e l	Мc	un	ting	J										M		Z	
	Nor	ma	llv	Clo	sed											1 (	$\dot{\cdot}$		
	Orifice				ating Pre	SSIIRA	FI	uid	Seat	Parl	ker Valve		IS	ATEX	Protection Mode	 Po	wer	Coil	Dwg
Size	Ø				Differenti	al	Tempe	rature	1.1.1.1.1.1.1	- Tun				Zone				Group	N°
	mm	Kv I/min	KV m <sup>3</sup> /h	Min. Bar	Max. (I AC bar		Min. °C	Max. °C		Valve Ref.	Housing Ref.	Coil Ref.				AC W	DC W		
	1.5	1.5	0.09	0	20	20	-10	100	FKM	121V5406,	2995	481865		-	-	8	9	2.0	8116
	1.5	1.5	0.09	0	20	20	-10	120	FKM	121V5406,	4270	481000	-	-	-	8	8	2.0	8116
	1.5	1.5	0.09	0	60	25	0	100	Ruby	121V5463,		481865	-	-	-	8	9	2.0	8116
	1.5	1.5	0.09	0	75	30	0	130	Ruby	121V5463		481000	-	-	-	8	8	2.0	8116
	1.5	1.5	0.09	0	100	55	0	140	Ruby	121V5463		486265	-	-	-	14	14	2.0	8116
	1.5	1.5	0.09	0	-	8	-20	75	PUR	121V5497 <sub>13</sub>	2995	482740	-	-	-	-	1.6	6.0/8.0	8116
	1.5	1.5	0.09	0	-	8	-20	65	PUR	121V5497	2995	496125	-	2-22	Ex nAc nCc IIC T5/T6	-	1.6	6.0/8.0	8116
	1.5	1.5	0.09	0	10	10	-20	75	PUR	121V5497		495900	-	1-21	Ex db mb IIC T4 to T6	3	2	6.0/8.0	8024
	1.5	1.5	0.09	0	-	10	-20	75	PUR	121V5497 <sub>13</sub>	-	495910	$\checkmark$	0-20	Ex ia IIC T4 to T6	-	0.3-1.2	6.0/8.0	8024
	2.5	3.5	0.21	0	14	7	-10	100	FKM	121V5706,	2995	481865	-	-	-	8	9	2.0	8116
	2.5	3.5	0.21	0	14	9	-10	120	FKM	<b>121V5706</b> <sub>1</sub>	4270	481000	-	-	-	8	8	2.0	8116
	2.5	3.5	0.21	0	14	14	-10	120	FKM	121V5706,	4270	486265	-	-	-	14	14	2.0	8116
	2.5	3.5	0.21	0	28	10	0	100	Ruby	121V5763 <sub>12</sub>	2995	481865	-	-	-	8	9	2.0	8116
	2.5	3.5	0.21	0	34	12	0	130	Ruby	121V5763 <sub>12</sub>	4270	481000	-	-	-	8	8	2.0	8116
	2.5	3.5	0.21	0	50	22	0	140	Ruby	121V5763	4270	486265	-	-	-	14	14	2.0	8116
	3.0	4.5	0.27	0	10	7	-10	100	FKM	121V5306 <sub>1</sub>	2995	481865	-	-	-	8	9	2.0	8116
	3.0	4.5	0.27	0	10	8.5	-10	120	FKM	121V5306 <sub>1</sub>	4270	481000	-	-	-	8	8	2.0	8116
	3.0	4.5	0.27	0	10	10	-10	120	FKM	121V5306 <sub>1</sub>	4270	486265	-	-	-	14	14	2.0	8116
	3.0	4.5	0.27	0	20	7	0	100	Ruby	121V5363 <sub>12</sub>		481865	-	-	-	8	9	2.0	8116
	3.0	4.5	0.27	0	25	8.5	0	130	Ruby	121V5363 <sub>12</sub>		481000	-	-	-	8	8	2.0	8116
	3.0	4.5	0.27	0	36	15	0	140	Ruby	121V5363 <sub>12</sub>		486265	-	-	-	14	14	2.0	8116
1/4"	3.0	3.5	0.21	0	-	2	-20	75	PUR	121V5397 <sub>13</sub>		482740	-	-	-	-	1.6	6.0/8.0	8116
	3.0	3.5	0.21	0	-	2	-20	65	PUR	121V5397 <sub>13</sub>	2995	496125	-	2-22	Ex nAc nCc IIC T5/T6	-	1.6	6.0/8.0	8116
	3.0	3.5	0.21	0	4.5	4	-20	75	PUR	121V5397 <sub>13</sub>	-	495900	-	1-21	Ex db mb IIC T4 to T6	3	2	6.0/8.0	8024
	3.0	3.5	0.21	0	-	4.5	-20	75	PUR	121V5397		495910	V	0-20	Ex ia IIC T4 to T6	-	0.3-1.2	6.0/8.0	8024
	4.0	7.0	0.42	0	10	4	-10	100	FKM	121V5206,	2995	481865	-	-	-	8	9	2.0	8116
	4.0	7.0	0.42	0	10	5	-10	120	FKM	121V5206,	4270	481000	-	-	-	8	8	2.0	8116
	4.0	7.0	0.42	0	10	10	-10 0	120	FKM PTFE	121V5206, 121V5212,	4270	486265	-	-	-	14 8	14 9	2.0 2.0	8116
	4.0	7.0 7.0	0.42	0	3.5 3.5	3.5 3.5	0	100 130	PTFE	121V5212 <sub>12</sub> 121V5212 <sub>12</sub>		481865 481000	-	_	-	8	8	2.0	8116 8116
	4.0	7.0	0.42	0	3.5	3.5	0	130		121V5212 <sub>12</sub> 121V5212 <sub>12</sub>		486265		_		o 14	0 14	2.0	8116
	4.0	7.0	0.42	0	3.5 12	4	0	100		121V5212 <sub>12</sub> 121V5263 <sub>12</sub>		481865		_		8	9	2.0	8116
	4.0	7.0	0.42	0	12	4 5	0	130		121V5263 <sub>12</sub>		481000		_		о 8	8	2.0	8116
	4.0	7.0	0.42	0	22	10	0	180		121V5263		486265		-		14	14	2.0	8116
	5.0	10.0	0.42	0	7	2	-10	100	FKM	121V5205 <sub>12</sub>		481865		_	_	8	9	2.0	8116
	5.0	10.0	0.60	0	7	2.8	-10	120	FKM	121V5106,		481000		-		8	8	2.0	8116
	5.0	10.0	0.60	0	7	5	-10	120		121V5106,		486265		-	-	14	14	2.0	8116
	5.0	10.0	0.60	0	2.8	2	0	100		121V5112 <sub>12</sub>		481865		-	-	8	9	2.0	8116
	5.0	10.0	0.60	0	2.8	2.8	0	130		121V5112		481000		-	-	8	8	2.0	8116
	5.0	10.0	0.60	0	2.8	2.8	0	130		121V5112,		486265		-	-	14	14	2.0	8116
	5.0	10.0		0	8.5	2	0	100		121V5163,		481865		-	-	8	9	2.0	8116
	5.0	10.0	0.60	0	10	3.5	0	130		121V5163		481000		-	-	8	8	2.0	8116
	5.0		0.60	0	14	6.5	0	140		121V5163		486265		-	-	14	14	2.0	8116
_							_	_		12			_						

 Notes :

 1. With silver shading ring

 2. Valve only compatible with hydraulic oil and neutral liquids

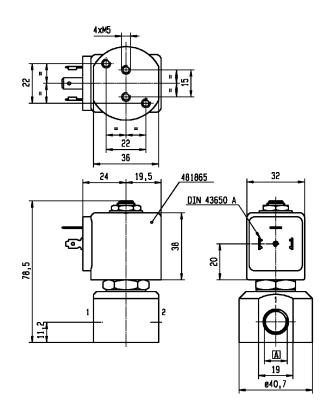
 3. For water, the maximum fluid temperature is +40°C

 The maximum fluid temperature is given for the lower coil class temperature. See coil pages for more details.



### **121V Series**

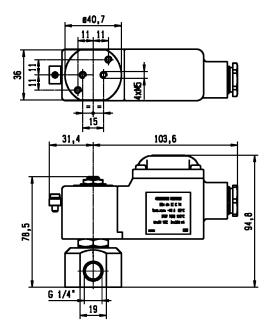
High corrosion resistant valves Direct Operated - Port size 1/4" and orifice from 1.0mm to 5.0mm

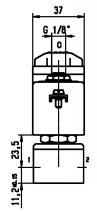






Drawing 8116







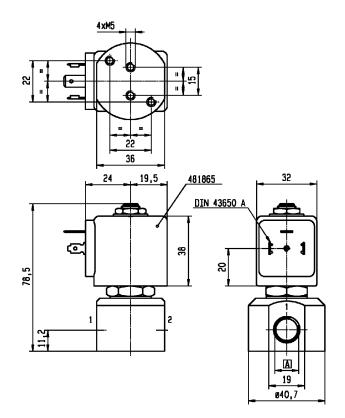
Drawing 8024



### 122V Series

High corrosion resistant valves Direct Operated - Port size 1/4" and orifice 2.5 mm

	303	3 St	ainl	ess	sSt.										2	┍╾╁╴	- <b>1</b> 1-	-	
	Pip Nor				<u> </u>	J									W 1			Z	
	Normally Open           Port Orifice Flow Factors Size         Operating Pressure Differential         Fluid Seat								Par	ker Valves	5	IS	ATEX Zone	Protection Mode	Pov		Coil Group	Dwg N°	
	mm	Kv I/min	KV m³/h	Min. Bar		MOPD) DC bar	Min. °C	Max. °C		Valve Ref.	Housing Ref.	Coil Ref.				AC W	DC W		
1 / 4 11	2.5	3.0	0.18	0	12	12	-30	100	FKM	122V8306	2995	481865	-	-	-	8	9	2.1	8116
1/4*	1/4" 2.5 3.0 0.18 0 12 12 -30 120 FKM 122V8306 4270										4270	481000	-	-	-	8	8	2.1	8116





Drawing 8116



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### **131V Series**

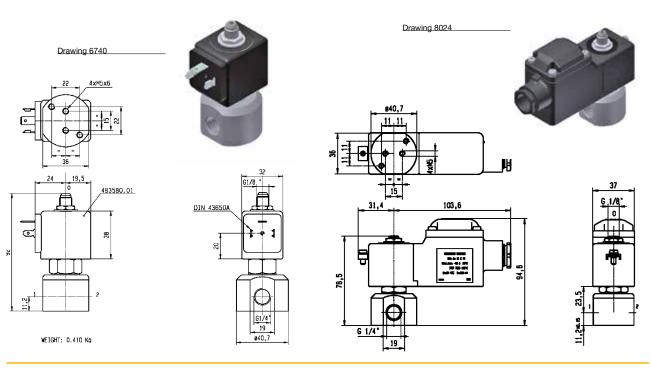
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High corrosion resistant valves Direct Operated - Port size 1/4" and orifice from1.0mm to 2.5mm

	303	3 St	ain	less	s St											1	<b>x</b>		
$\left( \right)$	Pip	e l	Мo	un	ting	2										M	, т т	Ϋ́	
			lly (			,										0	$\bigcirc 2$		
			actors		nting Pr			uid	Seat	Dow	ker Valve		IS	ATEX	Protection Mode	v		Coil	Dwa
Size	Ø	FIOW F			ifferent	ial	Tempe	rature		Par	Ker valve	:5	19	Zone	Protection mode			Group	N° N°
		Kv	KV	Min.		(MOPD)	Min.				Housing					AC	DC		
	mm	I/min		Bar		DC bar	°C	°C	FILM	Ref.	Ref.	Ref.	,	0.00	Eu in IIO TO	W	W	0.0/7.0/0.0	0740
	1.0 1.0	0.6	0.04	0	-	10 10	-10 -10	55 75	FKM FKM	131V5490 <sub>3</sub> 131V5490	2995	48358001 495910	√ /	0-20	Ex ia IIC T6 Ex ia IIC T4 to T6	-	0.5-3	6.0/7.0/8.0 6.0/7.0/8.0	
	1.0	1.5	0.04	0	- 15	15	-10	100	FKM	131V5490 <sub>3</sub>	- 2995	495910	V	-20	EX 18 110 14 10 10	- 8	9	2.1	6740
	1.5	1.5	0.09	0	15	15	-10	120	FKM	131V5400,	4270	481000	-	-		8	8	2.1	6740
	1.5	1.5	0.09	0	15	15	-10	120	Ruby	131V5400, 131V5463,,		481865	-	-	-	о 8	o 9	2.1	6740
	1.5	1.5	0.09	0	15	15	0	130	Ruby	131V5463 <sub>12</sub>		481000	-			8	8	2.0	6740
	1.5	1.5	0.09	0	15	15	0	180	Ruby	131V5463,		486265	_	-		14	14	2.0	6740
	1.5	1.5	0.09	0	-	7	-20	75	PUR	131V5497,	2995	482740	-	-		-	1.6	6.0/8.0	6740
	1.5	1.5	0.09	0	-	7	-20	65	PUR	131V5497,	2995	496125	-	2-22	Ex nAc nCc IIC T5/T6	-	1.6	6.0/8.0	6740
	1.5	1.5	0.09	0	7	7	-20	75	PUR	131V5497,	-	495900	-		Ex db mb IIC T4 to T6	3	2	6.0/8.0	8024
1/4"	1.5	1.5	0.09	0	-	7	-20	75	PUR	131V5497	-	495910	J	0-20	Ex ia IIC T4 to T6	-	0.3-1.2	6.0/8.0	8024
	2.5	3.5	0.21	0	7	7	-10	120	FKM	131V5306,	2995	481865	-	-	-	8	9	2.0/2.1	6740
	2.5	3.5	0.21	0	7	7	-10	120	FKM	131V5306,	4270	481000	-	-	-	8	8	2.1	6740
	2.5	3.5	0.21	0	7	7	-30	100	Ruby	131V5363,	2995	481865	-	-	-	8	9	2.0	6740
	2.5	3.5	0.21	0	7	7	-30	130	Ruby	131V5363,		481000	-	-	-	8	8	2.0	6740
	2.5	3.5	0.21	0	7	7	-30	180	Ruby	131V5363	4270	486265	-	-	-	14	14	2.0	6740
	2.5	3.0	0.18	0	-	2	-20	75	PUR	131V5397,	2995	482740	-	-	-	-	1.6	6.0/8.0	6740
	2.5	3.0	0.18	0	-	2	-20	65	PUR	131V5397 <sub>1</sub>	2995	496125	-	2-22	Ex nAc nCc IIC T5/T6	-	1.6	6.0/8.0	6740
	2.5	3.0	0.18	0	2	2	-20	75	PUR	131V5397 <sub>1</sub>	-	495900	-	1-21	Ex db mb IIC T4 to T6	3	2	6.0/8.0	8024
	2.5	3.0	0.18	0	-	2	-20	75	PUR	131V5397 <sub>1</sub>	-	495910	$\checkmark$	0-20	Ex ia IIC T4 to T6	-	0.3-1.2	6.0/8.0	8024

Notes :

With silver shading ring
 Valve only compatible with hydraulic oil and neutral liquids
 No shading ring for this version
 In this grid the maximum fluid temperature is given for the lower coil class temperature. See coil pages for more details.





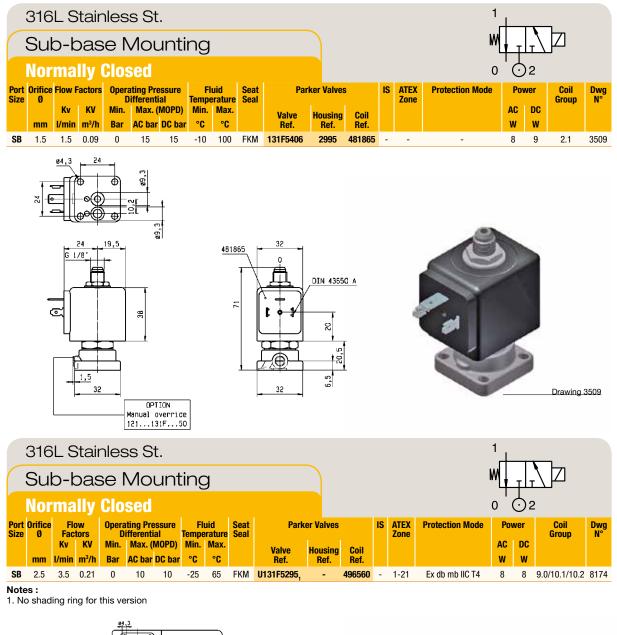
Parker Hannifin Corporation Fluid Control Division Europe Stainless Steel Catalogue FCDE/0111/UK

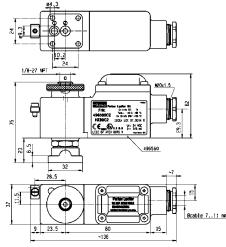
3/2

### **131F Series**



High corrosion resistant valves Direct Operated - Sub-base mounting and orifice from 1.5mm to 2.5mm







Parker Hannifin Corporation Fluid Control Division Europe Stainless Steel Catalogue FCDE/0111/UK

### 133V Series

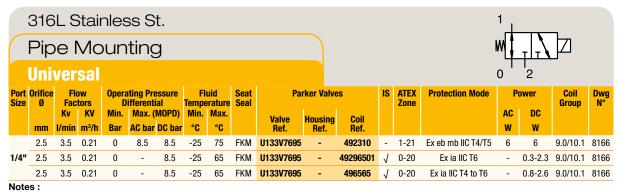
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High corrosion resistant valves Direct Operated - Port size 1/4" and orifice from 1.5mm to 2.5mm

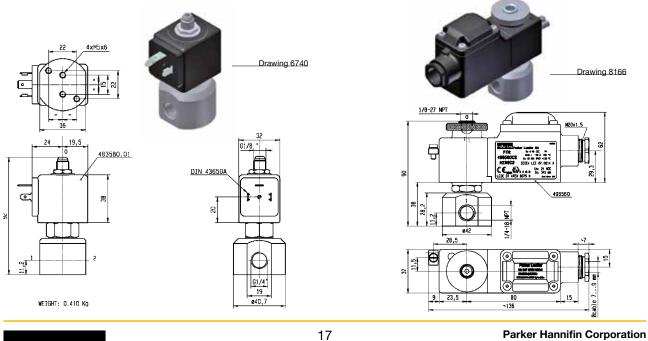
	303	3 St	ainl	ess	s St.										1			_	
				unt	ting										W	μŢ	<b> </b> _\	Z	
	Univ Orifice			Opera	ating Pre	essure	Fli	uid	Seat	Parl	cer Valves	:	IS	ATEX	O Protection Mode	· Pov	)2 ver	Coil	Dwg
Size	Ø	Kv I/min	KV m³/h	D Min. Bar	ifferenti Max. (I AC bar	MOPD)	Tempe Min. °C	rature Max. °C	Seal	Valve Ref.	Housing Ref.	Coil Ref.		Zone		AC W	DC W	Group	N°
	1.5	1.5	0.09	0	10	10	-10	100	FKM	133V5406,	2995	481865	-	-	-	8	9	2.1	6740
	1.5	1.5	0.09	0	10	10	-10	120	FKM	133V5406,	4270	481000	-	-	-	8	8	2.1	6740
	1.5	1.5	0.09	0	4	4	0	100	Ruby	133V5463 <sub>12</sub>	2995	481865	-	-	-	8	9	2.0	6740
	1.5	1.5	0.09	0	10	10	0	130	Ruby	133V5463 <sub>12</sub>	4270	481000	-	-	-	8	8	2.0	6740
1/4"	1.5	1.5	0.09	0	10	10	0	180	Ruby	133V5463 <sub>12</sub>	4270	486265	-	-	-	14	14	2.0	6710
1/4	2.5	3.5	0.21	0	4	4	-10	100	FKM	133V5306 <sub>1</sub>	2995	481865	-	-	-	8	9	2.1	6740
	2.5	3.5	0.21	0	4	4	-10	120	FKM	133V5306 <sub>1</sub>	4270	481000	-	-	-	8	8	2.1	6740
	2.5	3.5	0.21	0	4	4	0	100	Ruby	133V5363 <sub>12</sub>	2995	481865	-	-	-	8	9	2.0	6740
	2.5	3.5	0.21	0	4	4	0	130	Ruby	133V5363 <sub>12</sub>	4270	481000	-	-	-	8	8	2.0	6740
	2.5	3.5	0.21	0	4	4	0	180	Ruby	133V5363 <sub>12</sub>	4270	486265	-	-	-	14	14	2.0	6740

Notes :

With silver shading ring
 Valve only compatible with hydraulic oil and neutral liquids



The maximum fluid temperature of this reference is given for the lower class temperature . See coil pages for more details.



Fluid Control Division Europe Stainless Steel Catalogue FCDE/0111/UK

## 221G Series

### **Product Description**

These 2 ways valves with 316L stainless steel body and FKM sealing offer a large possibility of applications based on a wide chemical compatibility with many fluids and environments.

This range from orifice 15mm to 25mm is suitable for pressure from 0 to 16 bar and can be associated with ATEX coils.



### **Applications**

#### Market of interest:

- Industrial equipment
- Life Sciences
- Food & Beverage Processing
- Commercial Equipment
- Wastewater treatment

#### Typical applications:

- Food & Beverage processing
- Dishwasher disinfectors, sterilizers
- Aggressive liquids & environments

### **Benefits**

## The 221G anti-corrosive solenoid valve is the most resistant solution for fluid control in even the harshest environment

This stainless steel solenoid valves is the most resistant to corrosion and aggressive chemicals with the largest number of possible electrical connections. It delivers high performance and reliability:

- Longer lifetime (+30% in average)
- Cost efficient (-10% in cost installation)
- Compatible with explosive environment (ATEX certified)



Parker Hannifin Corporation Fluid Control Division Europe Stainless Steel Catalogue FCDE/0111/UK

### **General Description**

### Materials in contact with fluid

Valve Body, seat, cover & diaphragm holder:

AISI 316L Stainless Steel

#### **Shading ring:**

None in standard Silver for all codes type 221G6x06

### Plunger :

Ferritic Stainless Steel

#### Other parts:

Stainless Steel CuBe2 for all codes type 221G6x36

### Seals:

FKM

### Installation

The valves can be mounted in any position. It is however recommended to install them with the coil in vertical position above the body.

### Media

These valves have been developed to achieve a wide range of chemical compatibilities with 316L body material and FKM sealing . Check chemical compatibilities with the fluid.



### Temperature

The ambient temperature range of the valve is -10°C to +50°C. **For ATEX environments**, temperature can be limited by the max ambient temperature of the coil. See coil pages.

### Coils

A wide range of coils can be used with this range. The complete coil range is described in pages 45 to 69.

### How to Order

A complete solenoid valve is composed by 3 elements: the valve body, the housing and the coil.

Step 1: Select the valve body reference needed. Example: 221G6306

Step 2: Select the housing depending on the protection level. Example: 2995

Step 3: Select the coil ref. + voltage code. Find the voltage code in coil pages starting from page 44 Example: 481865C2

Step 5: The complete assembly numbering system is : 221G6306-2995-481865C2

#### **Step 4: Accessories**

Din Plug Connector according to DIN EN 175301-803 Form A 48658640 (batch size = 25)

**Please note: Valve can be ordered according to desired configuration:** Valve body and coil separately, Valve body and coil assembled or Valve body, pipe mounting adaptation kit and coil assembled (pipe mounting version)





### 221G Series

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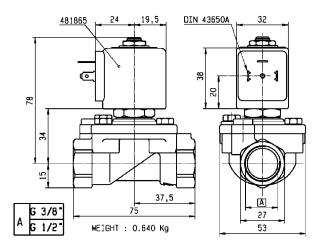
Valves for dry or lubricated air, neutral gases and liquids Magnalift - Port size from 3/8" to 1/2" and orifice 15mm

;	316	LS	tair	nles	s St										2	<u> </u>			
	Pip	e N	No	unt	ting										l			DZI	
	Nor	ma	lly (	Clos	sed										1	Ó			
Port Size	Orifice Ø	Flow F	actors		ating Pre lifferenti			uid erature	Seat Seal	Par	ker Valves	5	IS	ATEX Zone	Protection Mode	Pov	ver	Coil Group	Dwg N°
		Kv	KV	Min.	Max. (		Min.	Max.		Valve	Housing					AC	DC		
	mm	I/min	m <sup>3</sup> /h	Bar		DC bar	°C	°C		Ref.	Ref.	Ref.				W	W		0700
	15	65	3.90	0	16	-	0	100	FKM	221G6306,	2995	481865	-	-	-	8	-	2.0	3732
	15	65	3.90	0	-	6	0	60	FKM	221G6306 <sub>12</sub>		492425	-	-	-	-	14	2.0	3732
	15	65	3.90	0	16	-	0	65	FKM	221G6306,	2995	495870	-	2-22	Ex nAc nCc IIC T3/T4	8	-	2.0	3732
	15	65	3.90	0	16	- 7	0	120	FKM	221G6306,	4538	481000 486265	-	-	-	8	-	2.0	3732 3732
3/8"	15 15	65 65	3.90 3.90	0	20 16	-	0	140 80	FKM FKM	221G6306, 221G6306,	4538	400200	-	- 1-21	Ex db mb IIC T4	14 8	- 14	2.0	3732
3/0	15	65	3.90	0	-	- 10	-10	100	FKM	221G6336	- 2995	495905	-	1-21	EX UD IIID IIC 14	0	- 9	2.0	3732
	15	65	3.90	0	-	10	-10	65	FKM	221G6336	2995	495870	-	2-22	Ex nAc nCc IIC T3/T4	-	9	2.1	3732
	15	65	3.90	0	10	10	-10	65	FKM	221G6336	-	492070	-	1-21	Ex mb IIC T4/T5	9	8	2.1	3732
	15	65	3.90	0	10	10	-10	75	FKM	221G6336	-	492190	-	1-21	Ex eb mb IIC T3/T4	11	9	2.1	3732
	15	65	3.90	0	-	10	-10	80	FKM	221G6336	-	495905	-	1-21	Ex db mb IIC T4	-	8	2.1	3732
	15	65	3.90	0	16	-	0	100	FKM	221G6506,	2995	481865	-	-	-	8	-	2.0	3732
	15	65	3.90	0	-	6	0	60	FKM	221G6506,,	2995	492425	-	-	-	-	14	2.0	3732
	15	65	3.90	0	16	-	0	65	FKM	221G6506,	2995	495870	-	2-22	Ex nAc nCc IIC T3/T4	8	-	2.0	3732
	15	65	3.90	0	16	-	0	120	FKM	221G6506,	4538	481000	-	-	-	8	-	2.0	3732
	15	65	3.90	0	20	7	0	140	FKM	221G6506,	4538	486265	-	-	-	14	14	2.0	3732
1/2"	15	65	3.90	0	16	-	0	80	FKM	221G6506,	-	495905	-	1-21	Ex db mb IIC T4	8	-	2.0	3732
	15	65	3.90	0	-	10	-10	100	FKM	221G6536	2995	481865	-	-	-	-	9	2.1	3732
	15	65	3.90	0	-	10	-10	65	FKM	221G6536	2995	495870	-	2-22	Ex nAc nCc IIC T3/T4	-	9	2.1	3732
	15	65	3.90	0	10	10	-10	65	FKM	221G6536	-	492070	-	1-21	Ex mb IIC T4/T5	9	8	2.1	3732
	15	65	3.90	0	10	10	-10	75	FKM	221G6536	-	492190	-	1-21	Ex eb mb IIC T3/T4	11	9	2.1	3732
	15	65	3.90	0	-	10	-10	80	FKM	221G6536	-	495905	-	1-21	Ex db mb IIC T4	-	8	2.1	3732

#### Notes:

With silver shading ring
 For air, the ambient temperature is limited to +25°C, and the max fluid temperature to +40°C

The maximum fluid temperature is given for the lower coil class temperature. See coil pages for more details.







2/2

221G Series

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Valves for dry or lubricated air, neutral gases and liquids Magnalift - Port size from 3/4" to 1" and orifice from 15.0mm to 25mm

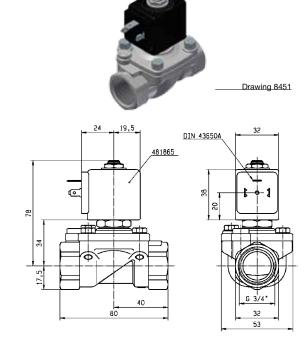
	316	il S	stair	les	s St										2				
$\bigcap$	Pip	e N	No	unt	ing											I T		DZI	
			lly (												1	$\odot$			
Port			actors		ting Pre	ssure	FI	uid	Seat	Parl	ker Valves	:	IS	ATEX	Protection Mode	Pov	ver	Coil	Dwg
Size	Ø	Kv	ку	D Min.	ifferenti Max. (		Tempe Min.	erature Max.	Seal		I I			Zone		AC	DC	Group	N°
	mm	l/min	m³/h	Bar	AC bar	DC bar	°C	°C		Valve Ref.	Housing Ref.	Coil Ref.				W	w		
	15	80	4.80	0	16	-	0	100	FKM	221G6606 <sub>1</sub>	2995	481865	-	-	-	8	-	2.0	8451
	15	80	4.80	0	-	6	0	60	FKM	221G6606 <sub>12</sub>	2995	492425	-	-	-	-	14	2.0	8451
	15	80	4.80	0	16	-	0	65	FKM	221G6606 <sub>1</sub>	2995	495870	-	2-22	Ex nAc nCc IIC T3/T4	8	-	2.0	8451
	15	80	4.80	0	16	-	0	120	FKM	221G6606 <sub>1</sub>	4538	481000	-	-	-	8	-	2.0	8451
	15	80	4.80	0	20	7	0	140	FKM	221G6606 <sub>1</sub>	4538	486265	-	-	-	14	14	2.0	8451
3/4"	15	80	4.80	0	16	-	0	80	FKM	221G6606 <sub>1</sub>	-	495905	-	1-21	Ex db mb IIC T4	8	-	2.0	8451
	15	80	4.80	0	-	10	-10	100	FKM	221G6636	2995	481865	-	-	-	-	9	2.1	8451
	15	80	4.80	0	-	10	-10	65	FKM	221G6636	2995	495870	-	2-22	Ex nAc nCc IIC T3/T4	-	9	2.1	8451
	15	80	4.80	0	10	10	-10	65	FKM	221G6636	-	492070	-	1-21	Ex mb IIC T4/T5	9	8	2.1	8451
	15	80	4.80	0	10	10	-10	75	FKM	221G6636	-	492190	-	1-21	Ex eb mb IIC T3/T4	11	9	2.1	8451
	15	80	4.80	0	-	10	-10	80	FKM	221G6636	-	495905	-	1-21	Ex db mb IIC T4	-	8	2.1	8451
	25	160	9.60	0	16	-	0	100	FKM	221G6106 <sub>1</sub>	2995	481865	-	-	-	8	-	2.0	3448
	25	160	9.60	0	-	6	0	60	FKM	221G6106 <sub>12</sub>	2995	492425	-	-	-	-	14	2.0	3448
	25	160	9.60	0	16	-	0	65	FKM	221G6106 <sub>1</sub>	2995	495870	-	2-22	Ex nAc nCc IIC T3/T4	8	-	2.0	3448
	25	160	9.60	0	16	6	0	120	FKM	221G6106 <sub>1</sub>	4538	486265	-	-	-	14	14	2.0	3448
1"	25	160	9.60	0	16	-	0	80	FKM	221G6106 <sub>1</sub>	-	495905	-	1-21	Ex db mb IIC T4	8	-	2.0	3448
	25	170	10.20	0	-	10	-10	100	FKM	221G6136	2995	481865	-	-	-	-	9	2.0	3448
	25		10.20	0	-	10	-10	65	FKM	221G6136	2995	495870	-	2-22	Ex nAc nCc IIC T3/T4	-	9	2.0	3448
	25		10.20	0	-	10	-10	100	FKM	221G6136	4538	481000	-	-	-	-	8	2.0	3448
	25	170	10.20	0	-	10	-10	80	FKM	221G6136	-	495905	-	1-21	Ex db mb IIC T4	-	8	2.0	3448

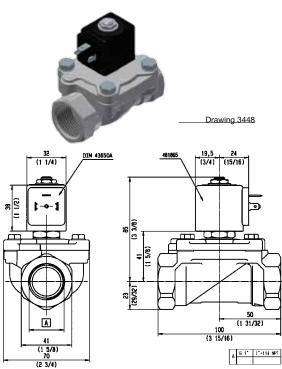
#### Notes:

1. With silver shading ring

2. For air, the ambient temperature is limited to +25°C, and the max fluid temperature to +40°C

The maximum fluid temperature is given for the lower coil class temperature. See coil pages for more details.







## Liquipure<sup>®</sup> Series

### **Product Description**

Parker Liquipure<sup>®</sup> Valve Series is the ultimate solution developed by Parker, marking a new standard for Beverage Dispensing and Life Sciences appliances.

For this new valve concept we have selected lead free materials in compliance with the most restrictive standards and regulations, in accordance with Market and People expectations concerning health.

A wide range of Liquipure<sup>®</sup> valves is also NSF certified. The innovative design makes the product easy to maintain. Liquipure<sup>®</sup> is interchangeable with 32 x 32 sub base mounting solutions.

Product is available in 2/2 and 3/2 configuration, normally closed. It is also available in 3/2 Universal function making the valve applicable as diverter or selector.

An adapter kit is also offered to convert the product into a pipe mounting version. A wide range of seals is also available, including FKM-FDA, Ruby and EPDM in order to optimize compatibility with the media.

Liquipure<sup>®</sup> technology is unique, protected by patent and is a registered trademark of Parker Hannifin Corporation.

### **Applications**

#### Typical applications:

- Coffee Machines, professional, semi-professional and vending
- Water purification and water preparation
- Food & Beverage processing, Healthy Beverage Dispense equipment
- Demineralized water shut off
- Dishwasher disinfectors, hot steam sterilizers

### **Benefits**

- Healthy and foodstuffs compatible
- Full stainless steel structure
- Wide range of Liquipure<sup>®</sup> valves is NSF certified
- Increase of reliability: reduction of welding joints
- Easy to maintain: easy and quick access to internal parts for cleaning and service

### **General Description**

#### Materials in contact with the fluid:

Valve body and seat support: AISI 305 Stainless Steel

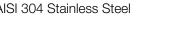
Seat: AISI 303 Stainless Steel Plungers: AISI 430F Stainless Steel Springs: AISI 302 Stainless Steel Tube assembly : Stainless Steel Main seat disc: FKM-FDA, Ruby, EPDM Exhaust seat disc (static sealing): FKM-FDA Adapter: AISI 304 Stainless Steel

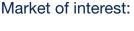
### Media

These valves have been developed to achieve a wide range of chemical compatibilities

### Temperature

The ambient temperature range of the valve is -10°C to +50°C.





- Coffee machine
- Beverage dispensing







## Installation

Valves can be mounted in any position, respecting the installation scheme. Valves have been developed to achieve the best performances with water, superheated water and steam.

Maximum recommended media temperature is 140°C.

Parker wide variety of coils including IP65 & IP67 with UL & IEC/CE-NELEC & Dual Frequency.

Each valve must be mounted using 4 screws M4 x 0,7, minimum recommended length: 6.0 mm. It is mandatory to install the valve using 4 screws, for a proper use of it.

### Mounting : Sub-base features (SB)

For Valves with orifice  $\emptyset < 3 \text{ mm}$  8.5 - 10.2 1.6 Min 0 - 10.2 1.2 1.6 Min 0 - 10.2 1.2 1.2 1.6 Min0 - 10.2 1.2

B)

### **Easy Maintenance**

Among the most innovative features of Liquipure<sup>®</sup> Valve Series you will find an easy and quick access to internal parts, without any specific tools.

The image on the right show how the seat support can be mounted and dismounted to get a quick access to the valve plunger in order to clean it or replace it after a long operating life.

### How to Order

Step 1: Select the valve body reference needed

Step 2: Select the coil and the voltage code in coil pages starting from page 45

Step 3: Define the complete assembly numbering system

#### Step 4: accessories

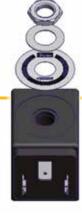
Din Plug Connector according to DIN EN 175301-803 Form A 600003PLUG (batch size = 100)

You can now identify the complete Liquipure® designation which must be used to release your order !

**Please note:** Valve can be ordered according to desired configuration: Valve body and coil separately, Valve body and coil assembled or Valve body, pipe mounting adaptation kit and coil assembled (pipe mounting version)







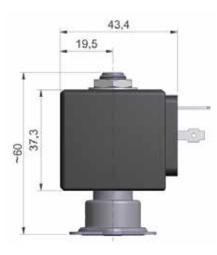
# Liquipure<sup>®</sup> Series Valves for beverage dispensing Direct Operated - Sub-base and orifice from 1.5mm to 5.0mm



30	)5 Sta	ainles	ss St.										2	<b>,</b>	_
Sı	ub-ba	ise N	lount	ing									M :		
No	orma	lly C	losec										1 (	5	
Port Size	Orifice Ø	Flow F	actors		rating Pres Differentia			uid erature	Seat Seal	Parker Valv	res	Pow	<i>i</i> er	Coil Group	Adapter Kit
3120	U	Kv	KV	Min.		MOPD)	Min.	Max.		Valve	Coil	AC	DC	Group	
BSP	mm	l/min	m³/h	Bar	AC bar	DC bar	°C	°C		Ref.	Ref.	W	W		
	1.5	1.3	0.08	0	20	20	-10	140	Ruby	2019F1GRG7 <sub>1</sub>	D5	8	9	24.0	XGSPG1-XGSPG2
	1.5	1.3	0.08	0	20	20	-10	140	FDA FKM	2019F1GVG7 <sub>1</sub>	D5	8	9	24.0	XGSPG1-XGSPG2
	2.0	2.3	0.14	0	15	15	-10	140	Ruby	2019F1JRG7 <sub>1</sub>	D5	8	9	24.0	XGSPG1-XGSPG2
	2.0	2.3	0.14	0	15	15	-10	140	FDA FKM	2019F1JVG7,	D5	8	9	24.0	XGSPG1-XGSPG2
	2.5	3.2	0.19	0	10	10	-10	140	Ruby	2019F1LRG7,	D5	8	9	24.0	XGSPG1-XGSPG2
SB	2.5	3.2	0.19	0	10	10	-10	140	FDA FKM	2019F1LVG7,	D5	8	9	24.0	XGSPG1-XGSPG2
30	3.0	4.2	0.25	0	7	7	-10	140	Ruby	2019F1NRG7 <sub>1</sub>	D5	8	9	24.0	XGSPG1-XGSPG2
	3.0	4.2	0.25	0	7	7	-10	140	FDA FKM	2019F1NVG7 <sub>1</sub>	D5	8	9	24.0	XGSPG1-XGSPG2
	4.0	6.5	0.39	0	5	5	-10	140	EPDM	2019F1QEG7	D5	8	9	24.0	XGSPG3
	4.0	6.5	0.39	0	5	5	-10	140	FDA FKM	2019F1QVG7 <sub>1</sub>	D5	8	9	24.0	XGSPG3
	5.0	7.2	0.43	0	3	3	-10	140	EPDM	2019F1SEG7	D5	8	9	24.0	XGSPG3
	5.0	7.2	0.43	0	3	3	-10	140	FDA FKM	2019F1SVG7 <sub>1</sub>	D5	8	9	24.0	XGSPG3

Notes: 1. NSF Certified Nominal Pressure = 20 bar

2/2







All dimensions are in mm



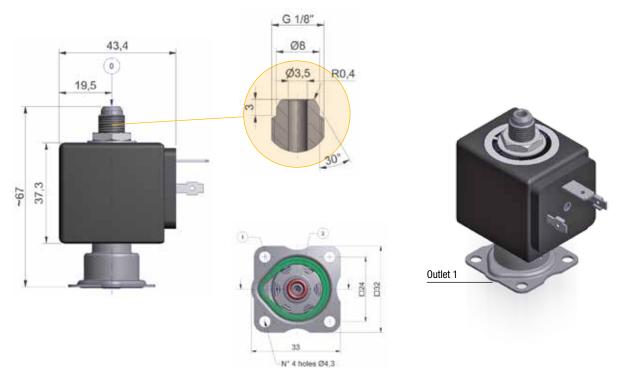


Liquipure® Series SIL A SF. C Valves for beverage dispensing 1/8" G Threaded Male Exhaust Port Direct Operated - Sub-base and orifice from 1.5mm to 5.0mm

3	05	Sta	ainle	ss S	st.											1 		_
S	Sub	-ba	se N	/lour	nting	J										M	┰┟┰	Z
N	lorr	na	lly C	lose	ed											0	<u></u> О2	
Port Size	Orif m			Flow F	actors			ating Pro Different			uid erature	Seat Seal	Parker Valv	ies	Pow	<i>i</i> er	Coil Group	Adapter Kit
	1	(2)	1 Kv	KV	(2 Kv	2) KV	Min.	Max. (	MOPD)	Min.	Max.		Value	0	AC	DC		
			I/min	m³/h	l/min	m³/h	Bar	AC bar	DC bar	°C	°C		Valve Ref.	Coil Ref.	w	w		
	1.5	2.5	1.3	0.08	2.9	0.17	0	14	14	-10	140	Ruby	3019F1GRG7 <sub>1</sub>	D5	8	9	24.0	XGSPG1-XGSPG2
	1.5	2.5	1.3	0.08	2.9	0.17	0	14	14	-10	140	FDA FKM	3019F1GVG7 <sub>1</sub>	D5	8	9	24.0	XGSPG1-XGSPG2
	2.0	2.5	2.2	0.13	2.9	0.17	0	10	10	-10	140	Ruby	3019F1JRG7 <sub>1</sub>	D5	8	9	24.0	XGSPG1-XGSPG2
	2.0	2.5	2.2	0.13	2.9	0.17	0	10	10	-10	140	FDA FKM	3019F1JVG7 <sub>1</sub>	D5	8	9	24.0	XGSPG1-XGSPG2
	2.5	2.5	2.8	0.17	2.9	0.17	0	6.5	6.5	-10	140	Ruby	3019F1LRG7 <sub>1</sub>	D5	8	9	24.0	XGSPG1-XGSPG2
SB	2.5	2.5	2.8	0.17	2.9	0.17	0	6.5	6.5	-10	140	FDA FKM	3019F1LVG7 <sub>1</sub>	D5	8	9	24.0	XGSPG1-XGSPG2
00	3.0	2.5	3.3	0.20	2.9	0.17	0	4	4	-10	140	Ruby	<b>3019F1NRG7</b> <sub>1</sub>	D5	8	9	24.0	XGSPG1-XGSPG2
	3.0	2.5	3.3	0.20	2.9	0.17	0	4	4	-10	140	FDA FKM	<b>3019F1NVG7</b> <sub>1</sub>	D5	8	9	24.0	XGSPG1-XGSPG2
	4.0	2.5	6.5	0.39	2.9	0.17	0	3	3	-10	140	EPDM	3019F1QEG7	D5	8	9	24.0	XGSPG3
	4.0	2.5	6.5	0.39	2.9	0.17	0	3	3	-10	140	FDA FKM	3019F1QVG7 <sub>1</sub>	D5	8	9	24.0	XGSPG3
	5.0	2.5	7.2	0.43	2.9	0.17	0	2	2	-10	140	EPDM	3019F1SEG7	D5	8	9	24.0	XGSPG3
	5.0	2.5	7.2	0.43	2.9	0.17	0	2	2	-10	140	FDA FKM	3019F1SVG7 <sub>1</sub>	D5	8	9	24.0	XGSPG3

**Notes:** 1. NSF Certified Nominal Pressure = 20 bar

3/2



All dimensions are in mm



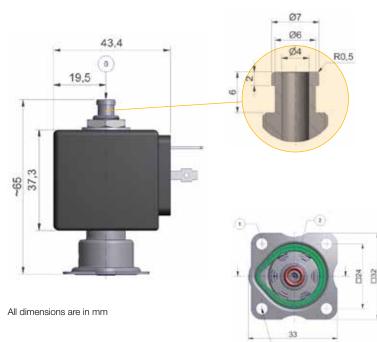


Liquipure® Series SIL Valves for beverage dispensing Hose Bib at Exhaust Port Direct Operated - Sub-base and orifice from 1.5mm to 5.0mm

3	05 3	Sta	inles	s St												1 		_
S	ub-	ba	se N	loun	ting											M	ТТ	LΩ
N	orn	nal	ly C	lose	d											0	02	
Port Size	Orif m			Flow F	actors			rating Pro Different			uid erature	Seat Seal	Parker Val	ves	Ροι	ver	Coil Group	Adapter Kit
	1	(2)	1 Kv I/min	KV m³/h	(2 Kv I/min	2) KV m³/h	Min. Bar	Max. (I AC bar		Min. °C	Max. °C		Valve Ref.	Coil Ref.	AC W	DC W		
	1.5	2.5	1.3	0.08	2.9	0.17	<b>Dai</b> 0	14	14	-10	140	Ruby	301XGFRTG7,		8	9	24.0	XGSPG1-XGSPG2
	1.5	2.5	1.3	0.08	2.9	0.17	0	14	14	-10	140		301XGFVTG7		8	9	24.0	XGSPG1-XGSPG2
	2.0	2.5	2.2	0.13	2.9	0.17	0	10	10	-10	140	Ruby	301XGFRTJ7	D5	8	9	24.0	XGSPG1-XGSPG2
	2.0	2.5	2.2	0.13	2.9	0.17	0	10	10	-10	140	FDA FKM	301XGFVTJ7	D5	8	9	24.0	XGSPG1-XGSPG2
	2.5	2.5	2.8	0.17	2.9	0.17	0	6.5	6.5	-10	140	Ruby	301 XGFRTL7 <sub>1</sub>	D5	8	9	24.0	XGSPG1-XGSPG2
SB	2.5	2.5	2.8	0.17	2.9	0.17	0	6.5	6.5	-10	140	FDA FKM	301XGFVTL7 <sub>1</sub>	D5	8	9	24.0	XGSPG1-XGSPG2
30	3.0	2.5	4.2	0.25	2.9	0.17	0	4	4	-10	140	Ruby	301XGFRTN7 <sub>1</sub>	D5	8	9	24.0	XGSPG1-XGSPG2
	3.0	2.5	4.2	0.25	2.9	0.17	0	4	4	-10	140	FDA FKM	301XGFVTN7 <sub>1</sub>	D5	8	9	24.0	XGSPG1-XGSPG2
	4.0	2.5	6.5	0.39	2.9	0.17	0	3	3	-10	140	EPDM	301XGFETQ7	D5	8	9	24.0	XGSPG3
	4.0	2.5	6.5	0.39	2.9	0.17	0	3	3	-10	140	FDA FKM	301XGFVTQ7 <sub>1</sub>	D5	8	9	24.0	XGSPG3
	5.0	2.5	7.2	0.43	2.9	0.17	0	2	2	-10	140	EPDM	301XGFETS7	D5	8	9	24.0	XGSPG3
	5.0	2.5	7.2	0.43	2.9	0.17	0	2	2	-10	140	FDA FKM	301XGFVTS7 <sub>1</sub>	D5	8	9	24.0	XGSPG3

Notes: 1. NSF Certified Nominal Pressure = 20 bar

3/2



Nº 4 holes Ø4,3



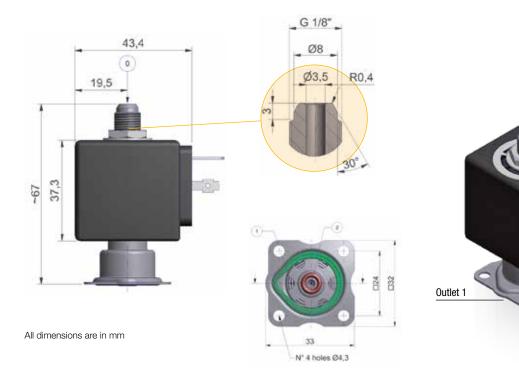


Liquipure<sup>®</sup> Series SIL A SEC (C) Valves for beverage dispensing 1/8"G threaded Male Exhaust Port Direct Operated - Sub-base and orifice from 1.5mm to 3.0mm

3	05 (	Sta	inles	s St	•											1 		_
S	ub-	bas	se M	oun	ting											M ‡		
U	niv	ers	al													0	2	_
Port Size	Orif m	m		Flow F				iting Pres ifferentia			uid erature	Seat Seal	Parker Val	ves	Pov	ver	Coil Group	Adapter Kit
	1	(2)	1 Kv I/min	KV m³/h	(2 Kv I/min	2) KV m³/h	Min. Bar	Max. (M AC bar	1 S S	Min. °C	Max. °C		Valve Ref.	Coil Ref.	AC W	DC W		
	1.5	1.5	1.4	0.08	1.3	0.08	0	9.5	9.5	-10	140	EPDM	3039F1GEG7	D5	8	9	24.0	XGSPG1-XGSPG2
	1.5	1.5	1.4	0.08	1.3	0.08	0	9.5	9.5	-10	140	FDA FKM	3039F1GVG7,	D5	8	9	24.0	XGSPG1-XGSPG
	2.0	2.0	2.1	0.13	2	0.12	0	3.5	3.5	-10	140	EPDM	3039F1JEG7	D5	8	9	24.0	XGSPG1-XGSPG2
SB	2.0	2.0	2.1	0.13	2	0.12	0	3.5	3.5	-10	140	FDA FKM	<b>3039F1JVG7</b> 1	D5	8	9	24.0	XGSPG1-XGSPG2
эр	2.5	2.5	2.8	0.17	2.8	0.17	0	2	2	-10	140	EPDM	3039F1LEG7	D5	8	9	24.0	XGSPG1-XGSPG2
	2.5	2.5	2.8	0.17	2.8	0.17	0	2	2	-10	140	FDA FKM	3039F1LVG7 <sub>1</sub>	D5	8	9	24.0	XGSPG1-XGSPG2
	3.0	2.5	3.3	0.20	2.8	0.17	0	2	2	-10	140	EPDM	3039F1NEG7	D5	8	9	24.0	XGSPG1-XGSPG2
	3.0	2.5	3.3	0.20	2.8	0.17	0	2	2	-10	140	FDA FKM	3039F1NVG7,	D5	8	9	24.0	XGSPG1-XGSPG2

Notes: 1. NSF Certified Nominal Pressure = 20 bar

3/2





### Liquipure<sup>®</sup> Adapter Easy mounting for all applications

Adapter kits are available for all Liquipure® Valves in 1/8" or 1/4"G.

Port Size	Part Number	Material	Kit Including	Compatible with Valves with
1/8"G	XGSPG1	AISI 304	fixing screws	any < 3.0 mm orifice
1/4"G	XGSPG2	AISI 304	fixing screws	any < 3.0 mm orifice
1/4"G	XGSPG3	AISI 304	fixing screws	4.0 mm to 5 mm orifice



### **Spare Parts** Plunger Service Kit

Plunger Type	Main Seat Seals	Part Number	To be used with	Box Quantity
2 Ways	FKM FDA	7GRP01	2019F1 FKM FDA Seals version	50
3 Ways	FKM FDA	7GRP02	3019F1-301XG FKM FDA Seals version	50
2 Ways	Ruby	7GRP03	2019F1 Ruby Seals version	50
3 Ways	Ruby	7GRP04	3019F1-301XG Ruby Seals version	50
2 Ways	FKM FDA	7GRP05	2019F1QVG7 FKM FDA Seals version	50
3 Ways	FKM FDA	7GRP06	3019F1QVG7-301XGFVTQ7 FKM FDA Seals version	50
2 Ways	EPDM	7GRP07	2019F1SVG7 EPDM Seals version	50
3 Ways	EPDM	7GRP08	3019F1SVG7-301XG EPDM Seals version	50

Note: contains plunger only

### Flange Interface Seals

Seals Type	Seals Material	Part Number	To be used with	Box Quantity
Flange Interface Seals	FKM FDA	7GRS01	any version	50



## 501C Series

### **Product Description**

The new 501C Stainless Steel is the right answer to complete on healthy valve range for professional coffee machine, water dispenser and vending machines.

For this new valve, we have selected lead free materials in compliance with the most restrictive standards and regulations, in accordance with market and people expectations concerning health.

Fully made of Stainless Steel, with FKM FDA robust seals, in order to give you the best Foodstuff Compatibility. This new stainless steel product family is NSF certified.

Thanks to the modular concept, a wide range of electrical parts can be used, including F Class, IP67, H Class, reduced power and UL/VDE approved.



### **Applications**

Market of interest:

Typical applications:

- Life Sciences
- Food & Beverage Processing
- Commercial Equipment
- Industrial equipment
- Waste Water treatment

- Water purification and preparation devices
- Food & Beverage processing, Healthy Beverage Dispense equipment
- Demineralized water shut off, cooling of medical and surgical devices
- Dishwasher disinfectors, Laboratory and high end hot steam sterilizers
- Aggressive liquids shut-off

### **Benefits**

#### The most valuable features you will find in this product range:

- High grade corrosion resistant valve body
- NSF certified references available
- FFKM seal option for superior endurance in heavy duty conditions
- Modular concept: a wide range of electrical parts can be used with this family, including ATEX, low power, IP67, UL/VDE approved
- Robust and solid design

These valves have been developed to achieve a wide range of chemical compatibilities





### **General Description**

### Materials in contact with the fluid

Valve Body:

AISI 303 Stainless Steel

Seat: AISI 303 Stainless Steel

Plungers: AISI 430F Stainless Steel

Springs: AISI 302 Stainless Steel Main Seat disc: FKM, FFKM

Shading ring: Copper

Tube assembly: AISI 303 Stainless Steel AISI 305 Stainless Steel

### Installation

The valves can be mounted in any position. It is however recommended to install them with the coil in vertical position above the body.

### Media

These valves have been developed to achieve the best performances with a wide range of media.

### Temperature

The ambient temperature range of the valve is -10°C to +50°C.

### Coils

A wide range of coils can be used with this range. The complete coil range is described in pages 45 to 69.

### How to Order



Step 1: Select the valve body reference needed from page 31 Example: 501CG1GVG7

Step 2: Select the coil and the voltage code in coil pages starting from page 45. Example: D5B Series

**Step 3:** You can now identify the complete 501C designation which must be used to release your order! **Example: 501CGV7D5B.** 

#### **Step 4: Accessories**

Din Plug Connector according to DIN EN 175301-803 Form A 600003PLUG (batch size = 100)

**Please note: Valve can be ordered according to desired configuration:** Valve body and coil separately, Valve body and coil assembled or Valve body, pipe mounting adaptation kit and coil assembled (pipe mounting version)



### **501C Series**



Valves for beverage dispensing

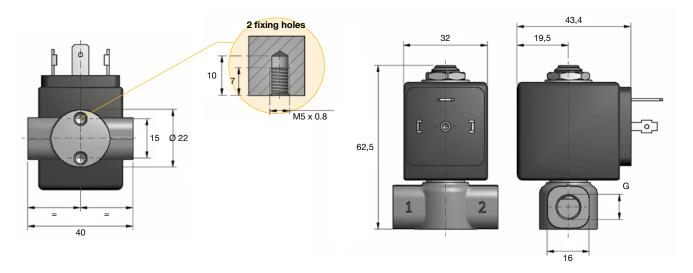
Direct Operated - Port size from 1/8" to 1/4" and orifice from 1.5mm to 2.5mm

3	03 S <sup>.</sup>	tainle	ess S	St.							2 			
Ρ	ipe l	Μοι	untir	ng										
N	Normally Closed												1 🖯	
Port Size	Orifice Ø	Flow Factors Operating Pressure Differential			Fluid Temperature		Seat Seal	Parker Val	Power		Coil Group			
G	mm	Kv I/min	KV m <sup>3</sup> /h	Min. Bar	Max. ( AC bar	MOPD) DC bar	Min. °C	Max. °C		Valve Ref.	Coil Ref.	AC W	DC W	
	1.5	1.1	0.06	0	14	14	-10	140	FDA FKM	501CG1GVG7	D5	8	9	24.0
1/8"	2.5	2.5	0.15	0	12	12	-10	140	FDA FKM	501CG1LVG7	D5	8	9	24.0
	1.5	1.1	0.06	0	14	14	-10	140	FDA FKM	501CG2GVG7	D5	8	9	24.0
1/4"														

#### Notes:

All the references listed in this chart are NSF certified.

#### **Dimensional References:**



#### Electrical Parts Availability:

Product line is compatible with a wide range of coils including Mono and Double Frequency solutions, 2P+E connection according with DIN EN 175301-803, Form A and flying leads versions.



## **X** Series

### **Product Description**

Universal 3 ways valves 1/4" NPTF with 316L material body for ATEX zones from zone 0 to zone 2 or with standard coils for non ATEX applications.

Available with manual reset.

### Applications Market of interest:

Market of Interest

- Process
- Oil & Gas

- Typical applications:
- Valve actuation control

### **Benefits**

#### The most valuable features you will find in this product range:

- High grade corrosion resistant valve body, AISI 316L
- Modular concept: a wide range of electrical parts can be used with this family, including ATEX, low power, IP67, UL/VDE approved
- Robust and solid design
- Compact coils
- Easy maintenance
- Quick coil removal



Parker Hannifin Corporation Fluid Control Division Europe Stainless Steel Catalogue FCDE/0111/UK

### **General Description**

### **Material Specifications**

Valve Body: AISI 316L Stainless Steel Seals: NBR

### Installation

The valves can be mounted in any position. It is however recommended to install them with the coil in vertical position above the body.

### Media

These valves have been developed to achieve the best performances with air & neutral gas

### Temperature

The ambient temperature range of the valve is  $-25^{\circ}$ C to  $+65^{\circ}$ C. **For ATEX environments:** temperature can be limited by the max ambient temperature of the coil. See coil pages.

### Coils

A wide range of coils can be used with this range. The complete coil range is described in pages 45 to 69.

### How to Order

A complete solenoid valve is composed by 2 elements: the valve body and the coil.

Step 1: Select the valve body reference needed Example: U033X7156

**Step 2:** Select the coil ref. + voltage code. Find the voltage code in coil pages starting from page 45 **Example: 496565N7** 

Step 5: The complete assembly numbering system is : Example U033X7156-496565N7

#### Step 4: accessories Din Plug Connector according to DIN EN 175301-803 Form A **48658640** (batch size = 25)

#### You can now identify the complete Ux33X designation which must be used to release your order !

Please note: Valve can be ordered according to desired configuration: Valve body and coil separately, Valve body and coil assembled





### **Ux33X Series**



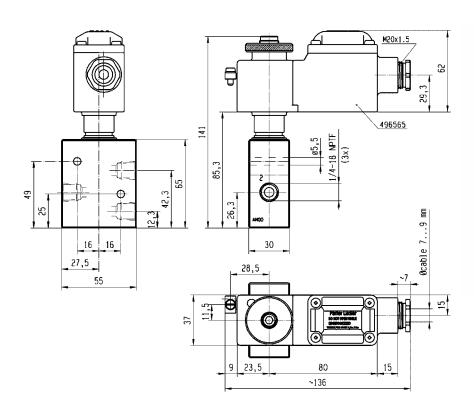
3 & 5 way valves for actuator control Direct Operated - Port size 1/4" and orifice 6.0mm

316L Stainless St.															_				
	Pip	e l	Mc	Dur	ntin	g										W	┇ <sub>┲</sub> ┠╴	RESET	
Universal <sup>3 1</sup>																			
Port Size	Orifice Ø	e Flow Factors		Operating Pressure Differential		Fluid Temperature		Seat Seal	Parker Valves			IS	ATEX Zone	Protection Mode	Power		Coil Group	Dwg N°	
	mm	Kv I/min	KV m³/h	Min. Bar	Max. ( AC bar	MOPD) DC bar	Min. °C	Max. °C		Valve Ref.	Housing Ref.	Coil Ref.				AC W	DC W		
	6.0	9.0	0.54	0	-	12	-25	65	NBR	U033X7156 <sub>2</sub>	-	496565	√	0-20	Ex ia IIC T4 to T6	-	0.8-2.6	9.0/10.1/10.2	8168
1/4"	6.0	9.0	0.54	0	12	12	-25	65	NBR	U033X7156 <sub>2</sub>	-	496700	-	1-21	Ex db mb IIC T4 to T6 $$	6	6	9.0/10.1/10.2	8168
	6.0	9.0	0.54	0	12	12	-25	65	NBR	U033X7156 <sub>2</sub>	-	496895	-	-	-	8	8	9.0/10.1/10.2	8168
	6.0	9.0	0.54	0	12	12	-25	65	NBR	U033X7156 <sub>2</sub>	-	497105	$\checkmark$	1-21	Ex db IIC T4 to T6	8	8	9.0/10.1/10.2	8308
	6.0	9.0	0.54	0	-	12	-25	65	NBR	U133X7156,	-	496565	$\checkmark$	0-20	Ex ia IIC T4 to T6	-	0.8-2.6	9.0/10.1/10.2	8168
	6.0	9.0	0.54	0	12	12	-25	65	NBR	U133X7156,	-	496700	-	1-21	Ex db mb IIC T4 to T6 $$	6	6	9.0/10.1/10.2	8168
	6.0	9.0	0.54	0	12	12	-25	65	NBR	U133X7156,	-	496895	-	-	-	8	8	9.0/10.1/10.2	8168
	6.0	9.0	0.54	0	12	12	-25	65	NBR	U133X7156,	-	497105	$\checkmark$	1-21	Ex db IIC T4 to T6	8	8	9.0/10.1/10.2	8308
	6.0	9.0	0.54	0	-	12	-25	65	NBR	U133X7196	-	496565	$\checkmark$	0-20	Ex ia IIC T4 to T6	-	0.8-2.6	9.0/10.1/10.2	8314
	6.0	9.0	0.54	0	12	12	-25	65	NBR	U133X7196	-	496700	-	1-21	Ex db mb IIC T4 to T6	6	6	9.0/10.1/10.2	8314
	6.0	9.0	0.54	0	12	12	-25	65	NBR	U133X7196	-	496895	-	-	-	8	8	9.0/10.1/10.2	8314
	6.0	9.0	0.54	0	12	12	-25	65	NBR	U133X7196	-	497105	$\checkmark$	1-21	Ex db IIC T4 to T6	8	8	9.0/10.1/10.2	8314

#### Notes:

1. With manual override 2. With manual reset

The maximum fluid temperature is given for the lower coil class temperature. See coil pages for more details.

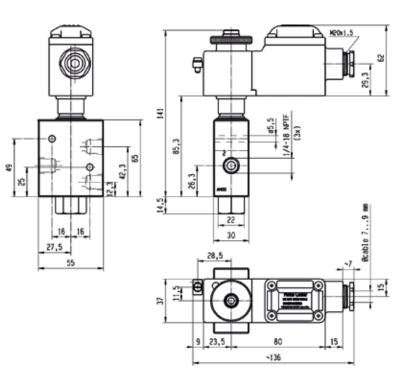




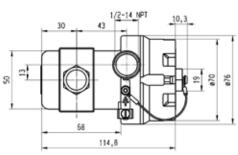


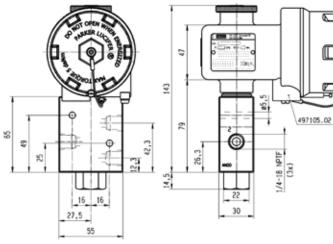
### **Ux33X Series**

3 & 5 way valves for actuator control Direct Operated - Port size 1/4" and orifice 6.0mm













## **Angle Seat Valves PA Series**

### **Product Description**

An angle seat valve is actuated by a pneumatically driven piston and is capable to handle slurry solutions with particles or corrosive solutions at high temperature up to 180°C and operating pressure up to 16 Bar.

### Applications

Market of interest:

#### Typical applications:

- Life Sciences
- Food & Beverage Processing
- Industrial Equipment
- Commercial Equipment
- Waste Water treatment
- Textile industry



- Sterilizers steam supply
- Dishwasher disinfectors, Laboratory and high end hot steam sterilizers
- Pharmaceutical, Chemical & Cosmetic industry

### **Benefits**

#### The most valuable features you will find in this product range:

- Compact design, high flow rates
- Visual position indicator
- For temperatures from -10°C to 180°C
- Working pressures up to 16 Bar
- Fluid Viscosity up to 600 mm²/s (600cSt, 80° E, 2700 SSU)
- Dampened closing anti-water hammer design (fluid under seat)
- Stainless Steel actuator housing for exceptional durability in steam and aggressive applications
- Valves meeting Pressure Equipment Directive 97/23/EC
- Mountable in any position
- Tight shut-off and Long Service Life
- Parker Angle Seat Valves conform to the terms of the 94/9/CE directive specific to non electrical equipment for use within potentially explosive environments - zones 1/21 and 2/22



Parker Hannifin Corporation Fluid Control Division Europe Stainless Steel Catalogue FCDE/0111/UK

## **General Description**

# **Material Specifications**

### Valve Body:

ANSI 316L Stainless Steel

Seals: PTFE/RTFE

Nozzle: ANSI 316L Stainless Steel

### Sealings:

PTFE/RTFE for seat seal material PTFE with carbon for packing gland (EPDM for 100°c versions)

## Temperature

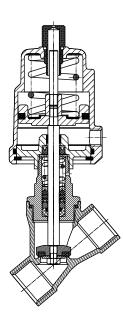
The ambient temperature range of the valve is -10°C to +60°C. **For ATEX environments:** temperature can be limited by the max ambient temperature of the coil. See coil pages.

### Please note that for liquids use the versions with flow direction under the seat to avoid water hammer effect

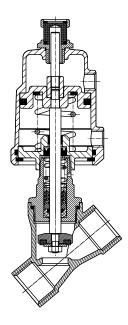


#### Accessories :

• 3 Way Direct Acting AC & DC Pilot Control Valves available as separate components



Normally Closed Valve



Normally Open Valve

## How to Order

Select the complete valve in the tables in next pages **EXAMPLE: PA10C1G3R032S** 



# 2/2

# PA Series

Flow Direction Over Seat

Air Operated - Port size from 3/8" to 2-1/2" and orifice from 13.0mm to 65.0mm

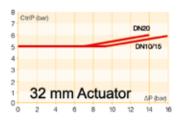
310	6L S.S	Steel	Body /	/ 304	S.Steel Actuate	or			
	e Mo		-						
No	rmall	y Clo	sed						
Size	Port Size	Orifice Ø	Actuator	KV m³/h	Operating Pressure Differential bar	Minimum Pilot Control Pressure Range bar		uid erature	Parker Valves
	BSP	mm	mm		Dai	Dai	Min. C°	Max. C°	Valve Reference
		13	32	4.7	0-16	4.5-6	-10	180	PA10C1G3R032S
DN10	3/8"	13	32	4.7	0-16	4.5-6	-10	100	PA10C3G3R032S
DNIO	3/0	13	40	4.7	0-16	4	-10	180	PA10S1G3R040S
		13	50	4.7	0-16	3	-10	180	PA10S1G3R050S
		13	32	4.7	0-16	4.5-6	-10	180	PA15C1G4R032S
DN15	1/2"	13	32	4.7	0-16	4.5-6	-10	100	PA15C3G4R032S
DNID	1/2**	13	40	4.7	0-16	4	-10	180	PA15S1G4R040S
		13	50	4.7	0-16	3	-10	180	PA15S1G4R050S
		15	32	5.4	0-14	4.5-6	-10	180	PA20C1G5R032S
DN20	3/4"	15	32	5.4	0-14	4.5-6	-10	100	PA20C3G5R032S
		18	50	9.0	0-16	3-4	-10	180	PA20S1G5R050S
DN25	1"	24	50	16.0	0-16	3-5.5	-10	180	PA25S1G6R050S
DNZO	1	24	63	16.0	0-16	3-3.5	-10	180	PA25S1G6R063S
DN32	1-1/4"	31	63	24.0	0-16	3-5	-10	180	PA32S1G7R063S
DN40	1-1/2"	35	63	32.0	0-16	3-6	-10	180	PA40S1G8R063S
		45	63	50.0	0-10	3-6.5	-10	180	PA50S1G9R063S
DN50	2"	45	80	50.0	0-16	3-6.6	-10	180	PA50S1G9R080S
		45	100	50.0	0-16	3-5	-10	180	PA50S1G9R100S
DN65	2-1/2"	65	100	70.0	0-10	3-6	-10	180	PA65S1GTR100S

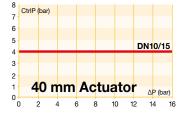
## 316L S.Steel Body / Aluminium Actuator

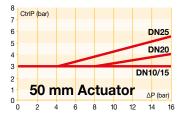
#### **Pipe Mounting Normally Closed** Minimum Pilot Control Pressure Range Port Size Orifice Ø Operating Pressure Differential bar Actuator KV m³/h Fluid Temperature Size **Parker Valves** bar mm mm Min. C° Max. C **Valve Reference** 3/8" DN10 13 50 4.7 0-16 3 -10 180 PA10S1G3R050A DN15 1/2" 13 50 4.7 0-16 3 -10 180 PA15S1G4R050A DN20 3/4" 18 50 9.0 0-16 3-4 -10 180 PA20S1G5R050A 24 50 16.0 0-16 3-5.5 -10 180 PA25S1G6R050A 1" DN25 24 63 16.0 0-16 3-4 -10 180 PA25S1G6R063A DN32 1-1/4" 31 63 24.0 0-16 3-5.5 -10 180 PA32S1G7R063A DN40 1-1/2" 35 63 32.0 0-16 3-6.5 -10 180 PA40S1G8R063A 45 63 50.0 0-10 3-6.5 -10 180 PA50S1G9R063A DN50 2" 45 80 50.0 0-16 3-6.6 -10 180 PA50S1G9R080A -10 180 PA50S1G9R100A 45 100 50.0 0-16 3-5 DN65 2-1/2" -10 PA65S1GTR100A 65 100 70.0 0-10 3-6 180



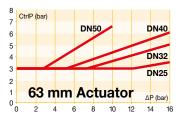


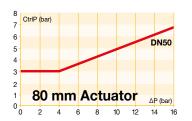


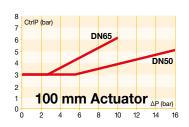




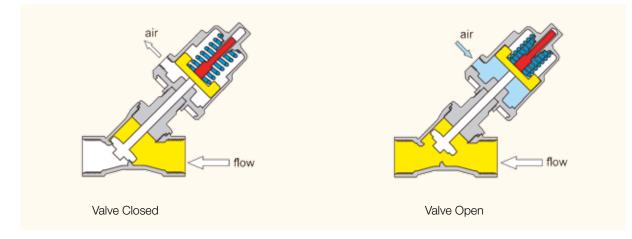
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## Flow Diagram Over Seat







PA Series

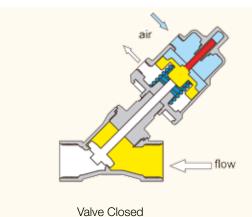
Flow Direction Over Seat Air Operated - Port size from 3/8" to 2"and orifice from 13.0mm to 45.0mm

	6L S.S		,	/ 304	S.Steel Actuato	or			
· ·			pen						
Size	Port Size	Orifice Ø	Actuator	KV m³/h	Operating Pressure Differential	Minimum Pilot Control Pressure Range		uid Frature	Parker Valves
		mm	mm		bar	bar	Min. C°	Max. C°	Valve Reference
DN10	3/8"	13	50	4.7	0-16	3.5	-10	180	PA10S2G3R050S
DN15	1/2"	13	50	4.7	0-16	3.5	-10	180	PA15S2G4R050S
DN20	3/4"	18	50	9.0	0-16	3.5	-10	180	PA20S2G5R050S
DN25	1"	24	63	16.0	0-16	4.5	-10	180	PA25S2G6R063S
DN32	1-1/4"	31	63	24.0	0-14	4.5	-10	180	PA32S2G7R063S
DN40	1-1/2"	35	63	32.0	0-11	4.5	-10	180	PA40S2G8R063S
DN50	2"	45	63	50.0	0-6	5	-10	180	PA50S2G9R063S
DGAIG	2	45	80	50.0	0-12	5	-10	180	PA50S2G9R080S

## **Control & Operating Pressure**

Please note : Charts do not apply for Normally Open Valves. A minimum pressure as noted above is all that is required, up to 10 bar Maximum.

## Flow Diagram Over Seat



valve Open





## **PA Series**



Flow Direction Under Seat with Anti Water Hammer Construction Air Operated - Port size from 3/8" to 2"and orifice from 13.0mm to 45.0mm

Pip	oe Mo	unting	,		S.Steel Actuato	or			
Size	Port Size	Orifice Ø	Actuator	KV m³/h	Operating Pressure Differential bar	Minimum Pilot Control Pressure Range bar	Fli Tempe	uid erature	Parker Valves
		mm	mm		Dai	Udi	Min. C°	Max. C°	Valve Reference
		13	32	4.7	0-6	5-6	-10	180	PA10C2G3R032S
DN10	3/8"	13	32	4.7	0-6	5-6	-10	100	PA10C4G3R032S
		13	50	4.7	0-16	4.5	-10	180	PA10SAG3R050S
		13	32	4.7	0-6	5-6	-10	180	PA15C2G4R032S
DN15	1/2"	13	32	4.7	0-6	5-6	-10	100	PA15C4G4R032S
		13	50	4.7	0-16	4.5	-10	180	PA15SAG4R050S
		15	32	5.4	0-4	5-6	-10	180	PA20C2G5R032S
DN20	3/4"	15	32	5.4	0-4	5-6	-10	100	PA20C4G5R032S
		18	50	9.0	0-10	4.5	-10	180	PA20SAG5R050S
DN25	1"	24	63	16.0	0-8	4.5	-10	180	PA25SAG6R063S
DN32	1-1/4"	31	80	24.0	0-11	4	-10	180	PA32SAG7R080S
DN40	1-1/2"	35	80	32.0	0-8	4	-10	180	PA40SAG8R080S
D1440	1-1/2"	35	100	32.0	0-16	4	-10	180	PA40SAG8R100S
DN50	2"	45	100	50.0	0-9	4	-10	180	PA50SAG9R100S

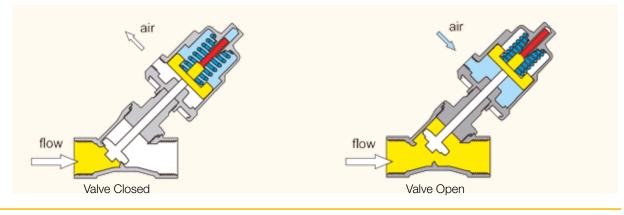
#### 316L S.Steel Body / Aluminium Actuator

Pip	be Mo	unting	9						
N	orma	illy C	lose	d					
Size	Port Size	Orifice Ø	Actuator	KV m³/h	Operating Pressure Differential	Minimum Pilot Control Pressure Range		uid erature	Parker Valves
		mm	mm		bar	bar	Min. C°	Max. C°	Valve Reference
DN10	3/8"	13	50	4.7	0-16	4.5	-10	180	PA10SAG3R050A
DN15	1/2"	13	50	4.7	0-16	4.5	-10	180	PA15SAG4R050A
DN20	3/4"	18	50	9.0	0-10	4.5	-10	180	PA20SAG5R050A
DN25	1"	24	63	16.0	0-8	4.5	-10	180	PA25SAG6R063A
DN32	1-1/4"	31	80	24.0	0-11	4	-10	180	PA32SAG7R080A
DN40	1-1/2"	35	80	32.0	0-8	4	-10	180	PA40SAG8R080A
DN40	1-1/2**	35	100	32.0	0-16	4	-10	180	PA40SAG8R100A
DN50	2"	45	100	50.0	0-9	4	-10	180	PA50SAG9R100A

## **Control & Operating Pressure**

Please note : Charts do not apply for Valves with flow direction Under Seat. A minimum pressure as noted above is all that is required, up to a maximum of 10 bar.

## Flow Diagram Under Seat

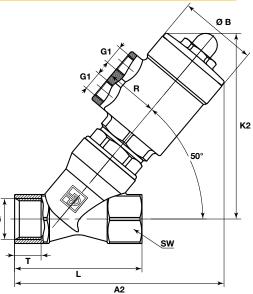




## **PA Series - Drawings and Dimensions**

## Stainless Steel Actuators Size 32 mm

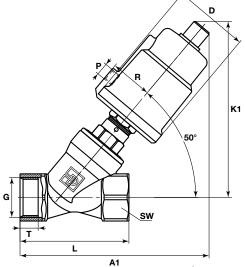
Туре	Actuator	Ø B	R	G1	Type C1/C2 (180°C) X	Type C3/C4 (100°C)	Type C1/C2 (180°C) <b>D</b>	Type C3/C4 (100°C)	G	L	т	SW
DN10	32	39.6	27	G1/8	107	94	117	106	G3/8	60	10	22 hexagon
DN15	32	39.6	27	G1/8	109	96	119	108	G1/2	65	11.5	25 hexagon
<b>DN20</b>	32	39.6	27	G1/8	112	100	126	115	G3/4	75	14	31 hexagon



G

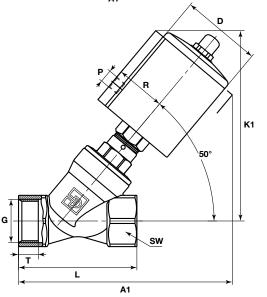
## Stainless Steel Actuators Sizes 40, 50, 63, 80, 100 mm

Туре	Actuator	D	R	Р	K1	<b>A1</b>	G	L	Т		SW
DN10	40	50.5	27	G1/8	116	121	G3/8	60	10	22	hexagon
DIVIO	50	62	34	G1/8	130	133	G3/8	60	10	22	hexagon
DN15	40	50.5	27	G1/8	118	124	G1/2	65	11.5	25	hexagon
DNIS	50	62	34	G1/8	131	135	G1/2	65	11.5	25	hexagon
DN 20	50	62	34	G1/8	134	141	G3/4	75	14	31	hexagon
DN25	50	62	34	G1/8	141	153	G1	90	15	39	hexagon
DN25	63	77	41.5	G1/8	164	175	G1	90	15	39	hexagon
DN32	63	77	41.5	G1/8	170	188	G1-1/4	110	18	50	octagon
DNSZ	80	98	52	G1/4	184	205	G1-1/4	110	18	50	octagon
	63	77	41.5	G1/8	181	201	G1-1/2	120	18	56	octagon
<b>DN40</b>	80	98	52	G1/4	195	217	G1-1/2	120	18	56	octagon
	100	121	63	G1/4	213	235	G1-1/2	120	18	56	octagon
	63	77	41.5	G1/8	189	216	G2	150	22	68	octagon
DN50	80	98	52	G1/4	203	233	G2	150	22	68	octagon
	100	121	63	G1/4	221	250	G2	150	22	68	octagon
<b>DN65</b>	100	121	63	G1/4	248	285	G2-1/2	180	25	85	octagon



## Aluminum Actuators Sizes 50, 63, 80, 100 mm

Туре	Actuator	D	R	Р	K1	<b>A1</b>	G	L	Т		SW
<b>DN10</b>	50	61	38	G1/8	132	141	G3/8	60	10	22	hexagon
DN15	50	61	38	G1/8	133	144	G1/2	65	11.5	25	hexagon
DN20	50	61	38	G1/8	136	150	G3/4	75	14	31	hexagon
DN25	50	61	38	G1/8	144	162	G1	90	15	39	hexagon
DNZJ	63	75	45	G1/8	167	183	G1	90	15	39	hexagon
DN32	63	75	45	G1/8	173	196	G1-1/4	110	18	50	octagon
DNSZ	80	94	54	G1/4	192	214	G1-1/4	110	18	50	octagon
	63	75	45	G1/8	184	209	G1-1/2	120	18	56	octagon
DN40	80	94	54	G1/4	203	226	G1-1/2	120	18	56	octagon
	100	115	64	G1/4	223	245	G1-1/2	120	18	56	octagon
	63	75	45	G1/8	192	224	G2	150	22	68	octagon
<b>DN50</b>	80	94	54	G1/4	211	242	G2	150	22	68	octagon
	100	115	64	G1/4	231	260	G2	150	22	68	octagon
DN65	100	115	64	G1/4	257	294	G2-1/2	180	25	85	octagon





# PA Series - 3 Way Direct Acting Pilot

Solenoid Valves for Controlling the Angle Seat Valves

## **Banjo Valves** G1/4" & G1/8" Series with Aluminium Body

Solenoid Operated B14-B04 Versions with 22 mm Coil

	Por Siz		Orifice		different	dmissibl tial pressu max.		Max. admissible fluid temperature (°C) Min. = - 10°C	Seat disc	Refe	rence nur	nber	Consu Pov (Wa	ver	Weight (g)	Dim. Ref.
Ba	anjo	G	mm	l/min	min	DC=	AC~	Air & Neutral gases		Valve	Housing	Coil	DC	AC		

#### 3/2 Solenoid operated - Spring return (monostable)

			-		-	-	•						
1/8	1/8	1.2	50	0	10	10	50	NBR	131B14	-	496131	3	
1/8	1/8	1.2	50	0	10	10	50	NBR	131B14	-	496482	3	
1/8	1/8	1.2	50	0	10	10	50	NBR	131B14	-	496637	3	
1/8	1/8	12	50	0	10	-	50	NBB	131B14	-	482605	5	

50

50

50

50

**Dimensions Reference 27** 

NBR

NBR

NBR

NBR

131B04

131B04

131B04

131B04

#### 3/2 Solenoid operated - Spring return (monostable) 10

10

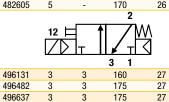
10

10

10

10

10



3

3

3

3

140

150

150

190

26

26

26

27

12

3

5

482605

**Dimensions Reference 26** 

50

50

50

50

0

0

0

1.2

1.2

1.2

1.2

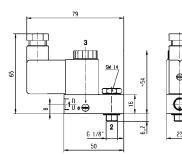
1/4 1/8

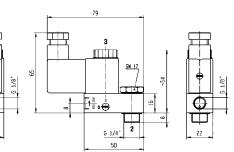
1/4 1/8

1/8

1/4 1/8

1/4







Banjo Valve Mounted to the valve

## Coils 22 mm for Banjo Valves Series

These coils with connection for 2 P+G DIN 43650 B plug are encapsulated in synthetic material, conform to the IEC/CENELEC safety standards and comply with European low voltage directive 2006/95/EC. Banjo Valve bodies conform to the terms of the directive 94/9/CE specific to non electrical equipment for use within potentially explosive environments - Please select apropriate Coil for Safe Area or ATEX zones 1/21 or 2/22 in the following table.

- Power: 3 W or 5 W
- Insulation Class: F (155°C) •
- Degree of Protection: IP65
- (with plug) • Duty Cycle: 100% ED

Available Voltages	Safe area without DIN plug Code	Safe area with DIN plug Code	For Zone 2/22 II 3 G-Ex nc AC IIC T5 II 3 D-Ex tc AC IIIC - T 95°C code with DIN plug	For Zone 1/21 II 2 G-Ex mb II T4 II 2 D-Ex tb IIIC - T 130°C code includes DIN plug and 1.5 m cable
12 VDC	496131 C1	496482 C1	496637 C1	482605 C1
24 VDC	496131 C2	496482 C2	496637 C2	482605 C2
48 VDC	496131 C4	496482 C4	496637 C4	-
110 VDC	496131 C5	496482 C5	496637 C5	-
24/50-60 VAC	496131 P0	496482 P0	496637 P0	-
48/50-60 VAC	496131 S4	496482 S4	496637 S4	-
110/50-60 VAC	496131 P2	496482 P2	496637 P2	-
115/60 VAC	496131 K8	496482 K8	496637 K8	-
230/50-60 VAC	496131 P9	496482 P9	496637 P9	-



# **Stainless Steel Air Preparation** & Airline Accessories

## Ball valves series



#### Ball valves MB Series

- One piece compact barstock design
- Center off position for 3-way 2-way, inline, angle; 3-way, 4-way
- and 5-way
- Standard drop-in replacement
- Patented seat design

#### **Ball valves B Series**

- 2-way, 3-way
- Wide temperature application range
- Widest variety of seats, seals and

port connections

For more details refer to catalogue: 4121-BV

## Filter & Check valve

#### Filter FT series

- Filter elements are easily replaced without disconnecting the tube lines Fast Loop bypass option enables a
- continuous self cleaning flow

#### **Check valves C series**

- · Resilient, custom molded, seat design Back stopped poppet to minimize spring stress
- Cracking Pressures: 0.02 to 7 bar Various port connections male and
- female BSP, NPT...

For more details refer to catalogue: IPD 4135-CV

## Quick-Acting Couplers

- Compact design
- Corrosion resistance
- · Mainly used for applications in the
- areas of compressed air and liquids
- · Optimally suited to use with liquid and aggressive media

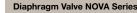
For more details refer to catalogue: CAT/3800-Legris

## Push-In Fittings

- Extreme chemical and mechanical resistance for severe conditions: food
- industry, chemicals, medical... · Fittings suitable for permanent food
- contact Hygienic external design for reducing
- retention zones
- Proven gripping technology
- · Manual connection and disconnec-
- tion, no tools required
- 100 % leak-tested in production

For more details refer to catalogue: CAT/0570

## Diaphragm valve



- General purpose, high cycle, compact valve
- For regular outlet valve, gas control panels and analyser sampling system applications.
- Handwheel, lever and indicating handhweel options

For more details refer to catalogue: IPD 4515

## Relief valve



Professional Relief valve 20XXG series · Easy to adjust, precise setting variation

- · Easy to install, minimum size
- Adjusting screw protected by user
- Highest repeatability of cracking pressure
- Minimized leakage preventing waste of media

For more details refer to catalogue: FCDE 5531UK

#### FRLs



- Suitable for Marine & Offshore
- Chemical / Petroleum and process industries
- Coalescing filters are designed for
- removing oil and water aerosols down to 0.01µ
- · Suitable for food industry applications

For more details refer to catalogue: PDE2504TCUK

## **Compression Fittings**



- Excellent resistance to environmental conditions and corrosive fluids
- Pressure and temperature resistant
- Withstand strong vibration and water hammer

For more details refer to catalogue: CAT/0570



- applications

## **Table of Content**

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Coils 32mm for DIN plug connection	page <b>46</b>
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### EXPLOSION PROOF ELECTRICAL PARTS

Level of protection "nAc nCc" "tc"
Level of protection "db" "tb"page 64
Level of protection "mb" 22mm "tb"page 65
Level of protection"mb" 50mm "tb"page 61
Level of protection "db mb" "tb"page 57
Level of protection "eb mb" "tb"page 62
Level of protection "ia" "ta"page 66



COIL GROUP

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

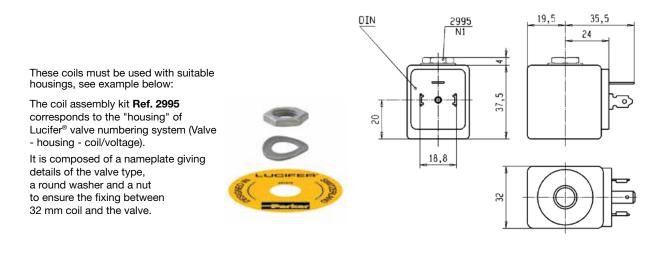
European low-voltage directive.



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Specification			Standard				Double frequency			
Ref. (w Ref. (w	rithout rith DIN	DIN plug)   plug)	481865 483510 482725 482635							
Coil Gr	oup		2.0 / 2.1							
Degree	e of pro	tection			IP65 according to IE	C / EN 60	529 standards (with DIN plug).			
Class o	of insul	ation				F 15	55°C			
Electric	cal con	nection		The coil	is connected with a 2	2 P + E pl	ug according to EN 175301-80	)3 type A		
Ambient temperature				The	application is limited		o +50°C he temperature range of the va	alve.		
Power	DC	Pn (hot)	9 W				-	-		
Po	DC	P (cold) 20°C		12	W	-	-			
Elect.	AC	Pn (holding)		8	W	9	W			
E	AU	Attraction cold		26 VA	(9 W)		32 VA (10 W)			
Weight	1				1	30 g (wit	hout plug)			
Voltage	es "Un'	I	VAC/Hz	Code	VDC	Code	VAC/Hz	Code		
-10% to +10% of the Un			24/50 48/50 110/50 220-230/50 230/60	A2 A4 A5 3D J3	12 24 48 110	C1 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.





COIL GROUP 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.



ROHS CE

Specification			High temperature				High temp. + high power					
Ref. (w Ref. (w	vithout vith DII	DIN plug) I plug)		492 492	453 726		492425 492727					
Coil Gr	oup			2.0	/ 2.1				2.0 / 2.2			
Degree	e of pro	tection	IP65 according to IEC / EN 60529 standards (with DIN plug).									
Class o	of insu	ation				H 18	30°C					
Electric	cal cor	nection		The coil	is connected with a 2	P + E pl	ug according to	EN 175	301-803 type A			
Ambier	nt tem	perature		The	application is limited		o +50°C he temperature	range o	of the valve.			
/er	DC	Pn (hot)	9 W						14 W			
Elect. Power	00	P (cold) 20°C				21 W						
ct.	AC	Pn (holding)		8 W					14 W			
Ele	AU	Attraction cold		26 VA	(9 W)		55 VA (18 W)					
Weight	t				1	30 g (wit	hout plug)					
Voltage	es "Un	u –	VAC/Hz	Code	VDC	Code	VAC/Hz	Code	VDC	Code		
-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		

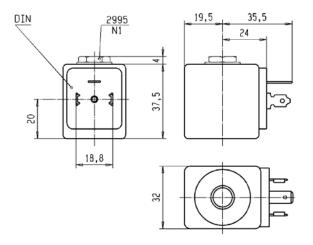
To Order a Coil choose Coil Ref + Voltage Code, example: 492453 for 24VDC= 492453C2 More voltage possibilities can be found in the table of voltage codes at the end of the coil section.

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

The coil assembly kit **Ref. 2995** corresponds to the "housing" of Lucifer<sup>®</sup> 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.







COIL GROUP

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

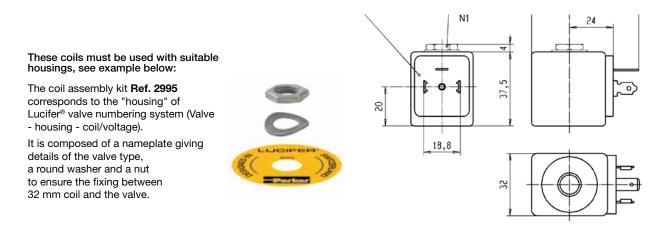
European low-voltage directive.



ROHS CE

Speci	fication		Mini	watt			
Refer Refer	ence (w ence (w	thout DIN plug) th DIN plug)	482 482				
Coil G	iroup		6.0				
Degre	e of pro	tection	IP65 according to IEC / EN 60	529 standards (with DIN plug).			
Class	of insul	ation	F 15	5°C			
Electr	ical con	nection	The coil is connected with a 2 P + E plu	ug according to EN 175301-803 type A			
Ambie	ent temp	oerature	$-40^\circ C$ to $+50^\circ C$ The application is limited also by the temperature range of the valve.				
/er	DC	Pn (hot)	1.6	W			
Pow	DC	P (cold) 20°C	2.1 W				
Elect. Power		Pn (holding)	-				
E	AC	Attraction cold	-				
Weigh	nt		130 g (wit	hout plug)			
Voltag	ges "Un	ı	VDC	Code			
-10%	to +10%	o of the Un	24	C2			
			48	C4			
			110	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.





COIL GROUP

🖌 CE 🖄

24.0

COILS FOR DIN PLUG CONNECTION

## 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.

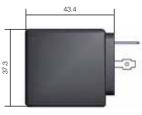
This coil conforms to the IEC/CENELEC safety standards and complies with European low-voltage directive. DIN plug connector to be ordered separately (see coil accessories section).

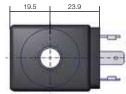


Specifi	cation			Mono Freque	ency VDE Coil				
Refere	nce (wi	thout DIN plug)		D5 S	eries				
Coil gr	oup		24.0						
Degree	e of prot	tection	IP65 according to IEC / EN 60529 standards (with DIN plug)						
Class o	of insula	ation		F 15	5°C				
Electric	cal con	nection	The coil	is connected with a 2 P + E plu	ug according to EN 175301-80	3 type A.			
Ambier	nt temp	erature	The	-40°C to application is limited also by t	o +50°C he temperature range of the va	alve.			
e	DC	Pn (hot)		9 W					
Elect. Power	DC	P (cold) 20°C							
ect.	AC	P (cold) 20°C		8 W					
ă	AU	Attraction cold	26 VA						
Weight	t			13	0 g				
Voltage	es "Un"		VAC/Hz	Code	VDC	Code			
		of Un for AC % 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 - 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.









COIL GROUP

24.0

COILS FOR DIN PLUG CONNECTION

## HIGH TEMPERATURE COILS 32 mm

These coils can be mounted with any Parker solenoid valves whereas specified Coil Group is indicated.

See column "Coil Group" within valve pages.

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.

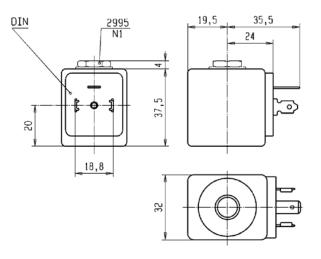
Coils conform to the IEC/CENELEC safety standards and complies with 2006/95/EC European low-voltage directive.



ROHS CE

Specifi	Specification		High temp. + high power							
Ref. (w	ithout	DIN plug)	DM							
Coil Gro	oup		24							
Degree of protection			IP65 according to IEC / EN 60529 standards (with DIN plug).							
Class o	of insul	ation		H 18	30°C					
Electrical connection			The coil	is connected with a 2 P + E pl	ug according to EN 175301-80	03 type A				
Ambier	nt temp	erature	$-40^{\circ}$ C to $+50^{\circ}$ C The application is limited also by the temperature range of the valve.							
e		Pn (hot)		14 W						
Elect. Power	DC	P (cold) 20°C	21 W							
sct.	AC	Pn (holding)	14 W							
Ĕ	AU	Attraction cold		55 VA	(18 W)					
Weight	t			130 g (wit	hout plug)					
Voltage	es "Un'	1	VAC/Hz	Code	VDC	Code				
-10% to +10% of the Un		o of the Un	24/50 110/50 230/50	H J K	24	В				

To Order a Coil : Use coil reference DM and add Voltage Code, example: DM for 24VDC= DMB





#### COIL GROUP

## 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.

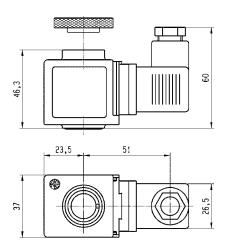
The synthetic material encapsulation provides an effective compact housing, offering full protection against dust, oil, water, etc. Ease of mounting in confined space - offers shock and corrosion protection - simplifies conversion of existing equipment to other requirements, etc. Coils conform to the IEC/CENELEC safety standards and complies with European low-voltage directive. DIN plug connector included.



Specifi	cation			Coil for Oil a	nd Gas					
Referen	nce (wi	th DIN plug)	496895							
Coil gro	oup		10.1							
Degree	of prot	tection		IP65 according to IEC / El	N 60529 standards					
Class of insulation				H 180°	C					
Electric	cal con	nection		With DIN plug 492459 (A	C) or 486586 (DC)					
Ambient temperature			The a	-40°C to + pplication is limited also by the						
ler	DC	Pn (hot)	8 W							
Elect. Power	DC	P (cold) 20°C	-							
sct.	AC	Pn (holding)	8 W							
ă	AU	Attraction cold		-						
Weight			273 g							
Voltage	es "Un"		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 24VDC = 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.







COIL GROUP

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 mm<sup>2</sup>.

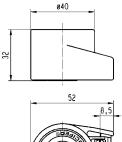
Coils conform to the IEC/CENELEC safety standards and complies with European low-voltage directive.

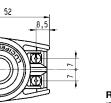


Specifi	ication			Stan	dard		Double Frequency			
Refere	nce			481	000	483520				
Coil Gr	oup		2.0 / 2.1							
Class o	of insul	ation				F 15	55°C			
Ambie	nt temp	erature	$-40^{\circ}$ C to $+50^{\circ}$ C The application is limited also by the temperature range of the valve							
Ŀ	DC	Pn (hot)		8	W		-			
Elect. Power	DC	P (cold) 20°C		9	W		-			
ect.		Pn (holding)		8	W	9	W			
ā	AC	Attraction cold		32 VA	(9 W)	36 VA (10 W)				
Weight	t			13	0 g		13	0 g		
Voltage	es "Un'	I.	VAC/Hz	Code	VDC	Code	VAC/Hz	Code		
(-15 % for dou with vo	-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 S6		

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:







 $\mbox{Ref. 4270}$  - Protection  $\mbox{IP 44}$  according to IEC / EN 60529 standard (with cable gland)



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





COIL GROUP

1.1

COILS FOR DIN PLUG CONNECTION



## COILS 22 mm

These coils can be mounted with any 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.

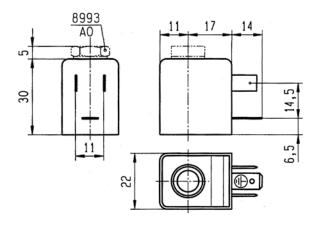
Ease of mounting in confined space - offers shock and corrosion protection - simplifies conversion of existing equipment to other requirements, etc.

Coil conforms to the IEC/CENELEC safety standards and complies with 2006/95/EC European low-voltage directive.



Speci	ficatio	n		Low p	oower		High power			
Ref. (v	withou	t DIN plug)		D	F			D	G	
Coil G	roup					1.	.1			
Degre	e of p	rotection			IP65 according to IEC	C / EN 60	529 standards (with D	DIN plug).		
Class	of ins	ulation				F 15	i5°C			
Electr	ical co	onnection		The coil i	is connected with a 2	P + E plı	ug according to EN 17	75301-80	13 type B.	
Ambie	ent ten	nperature	$-40^{\circ}$ C to $+50^{\circ}$ C The application is limited also by the temperature range of the valve.							
rer	DC	<b>Pn</b> (hot)	2.5 W					5	W	
Elect. Power	DC	P (cold) 20°C		W	6.5 W					
ct.	AC	Pn (holding)		2	W		4 W			
Ele	AU	Attraction cold		5.7 VA	(2.5 W)		8.9 VA (5 W)			
Weigh	nt				1	00 g witl	n DIN Plug			
Voltag	jes "U	n"	VAC/Hz	Code	VDC	Code	VAC/Hz	Code	VDC	Code
-10%	to +10	% of the Un	24/50 220-230/50 110/50-115/50	H L J	24	В	24/50 110/50-115/50 220/50-230/50	H J L	24	В

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





COIL GROUP

2.0/2.1

**ZONE 2/22** 

EXPLOSION PROOF ELECTRICAL PARTS

NON SPARKING PROTECTION 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 protectionsimplifies conversion of existing equipment to other requirements, etc.

#### **Benefits:**

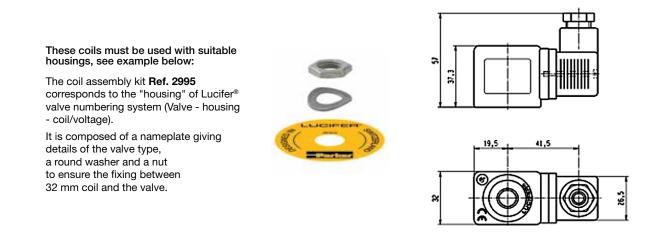
The synthetic material encapsulation of the coil provides an effective compact housing, offering full protection against dust, oil, water, etc. Small size for ease of mounting in confined spaces.



🔨 C E 🕅

Referen	ice				495	870		496110	1	
Certific	ate			LCIE 05 ATEX 6003 X						
Coil Gro	oup			2.0 / 2.1						
Tuno of	Type of protection Gas				3 G Ex nAc	nCc IIC T3/T4		II 3 G Ex nAc nCc IIC T3/T4		
Type of				II 3 D - Ex tc IIIC - T195°C / T130°C				II 3 D - Ex to IIIC - T1	95°C / T130°C	
Degree	of pro	tection				IP65 (with plug	g) according	to IEC/EN 60529 Standards		
Insulati	ion Cla	ss					F (15	55°C)		
Duty cy	cle						10	0%		
Ambiar	Ambiant temperature			$-40^{\circ}$ C to $+65^{\circ}$ C / $50^{\circ}$ C The application is limited also by the temperature range of the valve.						
/er	DC	Pn (hot)			9	W		-		
Elect. Power	00	P (cold) 20°C			12	W		-		
ct.	AC	Pn (holding)		8 W				9 W		
Ele	AU	Attraction cold	ł		26 VA	. (9 W)		32 VA (10	W)	
Weight							15	0 g		
Voltage	es "Un'	•		VAC/Hz	Code	VDC	Code	VAC/Hz	Code	
-10% to	) +10%	o of the Un		24/50	A2	24	C2	24/50-60	PO	
				48/50	A4	48	C4	48/50-60	S4	
				110/50	A5	110	C5	110/50-60	S5	
				220-230/50	3D			220/50-60	S6	

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





COIL GROUP

6.0

**EXPLOSION PROOF ELECTRICAL PARTS** 

NON SPARKING PROTECTION 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 protectionsimplifies conversion of existing equipment to other requirements, etc.

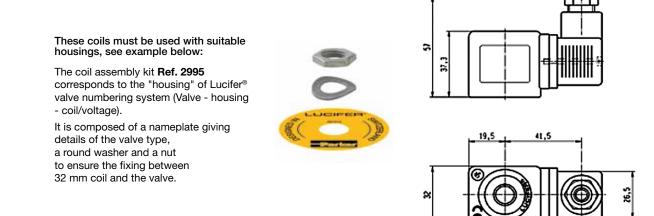
#### **Benefits:**

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.



Refere	nce			496	125		
Certifie	cate			LCIE 05 AT	EX 6003 X		
Coil gr	Coil group			6.0			
Type of protection Gas			Gas	II 3 G Ex nAc nCc IIC T5/T6			
Type o	Dust		Dust	II 3 D Ex tc IIIC T95°C/80°C			
Degree	Degree of protection			IP65 (with plug) according t	to IEC/EN 60529 Standards		
Insulat	tion Cla	SS		F (15	5°C)		
Duty cycle				100%			
Ambia	nt temp	erature		$-40^{\circ}$ C to $+65^{\circ}$ C / $50^{\circ}$ C The application is limited also by the temperature range of the valve.			
er	DC	Pn (hot)		1.6 W			
Elect. Power	DC	P (cold) 20°C		2.1	2.1 W		
ict.	AC	Pn (holding)		-	•		
ă	AU	Attraction cold		-			
Weight	t			150	) g		
Voltag	Voltages "Un"			VDC	Code		
-10% t	-10% to +10% of the Un			24	C2		
				48	C4		
				110	C5		

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





**ZONE 2/22** 



1.2

#### EXPLOSION PROOF ELECTRICAL PARTS



**ZONE** 2/22

NON SPARKING PROTECTION 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.

#### Application:

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

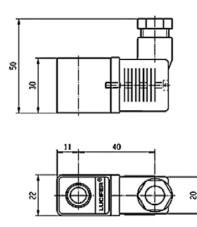
#### **Benefits:**

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.



Specif	Specification			Double F	requency				
Refere	ence			496637					
Certifi	cate			ATEX					
Coil gi	Coil group			1.2					
Tuno	forata	ation	Gas		Ex nAc n	Cc IIC T5			
Type u	of prote		Dust		ll 3 D - Ex tc	IIIC - T 95°C			
Degre	e of pro	tection			IP65 (with plug) according	to IEC/EN 60529 Sandards			
Ambia	Ambiant temperature			$-20^{\circ}$ C to $+50^{\circ}$ C The application is limited also by the temperature range of the valve.					
Insula	tion Cla	ISS		F 155°C					
/er	DC	Pn (hot)		3 W					
Pow	DC	P (cold) 20°C							
Elect. Power	AC	Pn (holding)		3 W					
E	AU	Attraction cold		5.7 VA (2.5 W)					
Weigh	t				75	5 g			
Voltag	es "Un	•		VAC/Hz	Code	VDC	Code		
-10% 1	-10% to +10% of the Un			24/50-60 110/50-60	P0 P2	24 V 48 V	C2 C4		
				230/50-60 48/50-60	P9 S4	110 V	C5		

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





COIL GROUP

COIL GROUP

**EXPLOSION PROOF ELECTRICAL PARTS** 

2.0/2.1

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

## 495905 - ELECTRICAL PARTS 37 mm

These coils can be mounted with every Parker ATEX solenoid values 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 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.

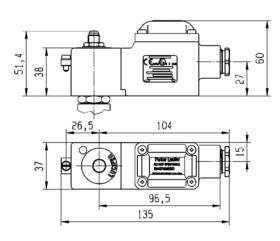


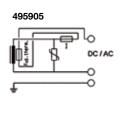
**ZONE 1/21** 

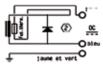


Refere	nce			495	i905	4959	0505*		
Certific	ate			LCIE 03 ATEX 6451 X - IECEx LCI 06.0004 X					
Coil Gr	oup				2.0	/ 2.1			
Type of	Type of protection Gas				II 2 G - Ex c	lb mb IIC T4			
Type of	protec	,001	Dust	II 2 D - Ex tb IIIC - 130°C					
Degree	of pro	tection			IP67 according to IEC	/EN 60529 Standards			
Ambier	nt temp	erature		The	-40°C to application is limited also by t	o +80°C he temperature range of the va	alve.		
Class o	of insul	ation		H (180 °)					
Electric	cal con	nection		Electric connection is done in (Ø min 5 mm, Ømax. 11 mm	the connection box on an easily n, section max. 2.5 mm²) in the	accessible connector terminals	s. The introduction of the cable wilt in M20 x 1.5 cable gland.		
/er	DC	Pn (hot)		8 W					
Elect. Power	DC	P (cold) 20°C		9 W					
sct.	AC	Pn (holding)		8 W					
Ĕ	AU	Attraction cold			9	W			
Voltage	Voltages "Un"			VAC/Hz	Code	VDC	Code		
	-10% to +10% of Un for AC			24/50	A2	24	C2		
-10% t	0 +10%	% for Un DC		48/50	A4	48	C4		
				115/50	E5	110	C5		
				230/50	F4				

To Order a Coil choose Coil Ref + Voltage Code, example: 495905 for 24 VDC = 495905C2 \* 49590505 available only in C4









COIL GROUP

6.0

**EXPLOSION PROOF ELECTRICAL PARTS** 

FLAME PROOF ENCAPSULATED ELECTRICAL PARTS "db mb"



**ZONE 1/21** 

## 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 explosionproof protection Ex db mb IIC T4 to T6 is required.

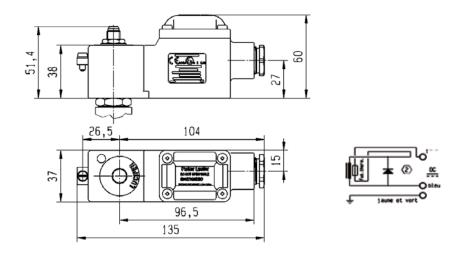
**Benefits:** Rotatable 360° fibreglass-reinforced plastic housing (class H). Solenoid coil, rectifier (silicium diodes), fuses and varistor protection are completely encapsulated into the coil housing by epoxy resin for shock and corrosion protection. The plastic housing is delivered with M20 x 1.5 cable gland certified for use "db"

protection. Small size for ease of mounting in confined space.



Refere	nce			495900	) (VAC)	495900	) (VDC)		
Certific	cate			LCIE 03 ATEX 6451 X - IECEx LCI 06.0004 X					
Coil Gr	oup			6.0					
Type of protection Gas			Gas	ll 2 G - Ex db mi	b IIC T4 / T5 / T6	ll 2 G - Ex db ml	b IIC T4 / T5 / T6		
Type of	i protec		Dust	II 2 D Ex tb IIIC - 130°C / 95°C / 80°C II 2 D Ex tb IIIC - T130°C / 95°C / 80°C			30°C / 95°C / 80°C		
Degree	of prot	tection			IP67 according to IEC	/EN 60529 Standards			
Ambio	nt tomn	erature		-40°C to +80°C	C / 55°C / 40°C	-40°C to +80°	C / 65°C / 55°C		
AIIIDIE	nt temp	erature		The application is limited also by the temperature range of the valve.					
Class o	Class of insulation			H (180 °)					
Electri	cal con	nection		Electric connection is done in t (Ø min 5 mm, Ømax. 11 mm	Electric connection is done in the connection box on an easily accessible connector terminals. The introduction of the cabl (Ø min 5 mm, Ømax. 11 mm, section max. 2.5 mm <sup>2</sup> ) in the connection box passes by the built in M20 x 1.5 cable gland				
/er	DC	Pn (hot)		-		2	W		
Elect. Power	DC	P (cold) 20°C		-		2.5 W			
ct.	AC	Pn (holding)		2.5	5 W	-			
Ele	AU	Attraction cold	l	3	W	-	-		
Voltage	Voltages "Un"			VAC/Hz	Code	VDC	Code		
-10% t	-10% to +10% of Un for AC			24/50	A2	24	C2		
- 10 %	- 10 % to + 10 % for Un DC.			48/50	A4	48	C4		
				115/50	E5	110	C5		
				230/50	F4				

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





COIL GROUP

**EXPLOSION PROOF ELECTRICAL PARTS** 

10.1/10.2

FLAME PROOF ENCAPSULATED ELECTRICAL PARTS "db mb"

## 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.

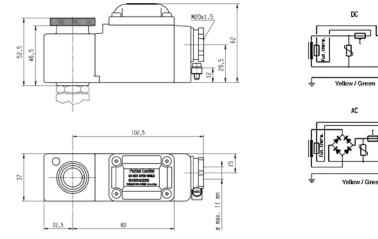
Application: Control of solenoid valves in dangerous areas where explosionproof protection Ex db mb IIC T4 to T6 is required.

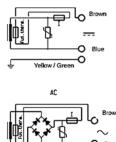
Benefits: Rotatable 360° fibreglass-reinforced plastic housing (class H). Solenoid coil, rectifier (silicium diodes), fuses and varistor protection are completely encapsulated into the coil housing by epoxy resin for shock and corrosion protection. The plastic housing is delivered with 1/2" NPT or M20 x 1.5 threaded hole for wide range of cable glands. Small size for ease of mounting in confined space.



Reference					496700 or 490	6700.02 (NPT)		496800 or 49680002 (NPT)			
Certific	cate			LCIE 10 ATEX 3059 X - IECEx LCI 10.0023X							
Coil Gr	oup			10.2				10.1			
Type of protection Gas				II 2 G - Ex db mb IIC T4 / T5 / T6				ll 2 G - Ex db mb llC T4			
Type of	i protet		Dust	II 2	D - Ex tb IIIC -	T130 / 95 / 80	)°C		ll 2 D - Ex tb	IIIC - T130°C	
Degree	e of pro	tection				IP67 a	according to IEC	C/EN 60529 Star	ndards		
Ambia	nt temp	perature		-4	0°C to +35°C The			he temperature		o +65°C alve.	
Class o	Class of insulation				H (180°)						
Electric	cal con	nection		Electric connec	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						
/er	DC	Pn (hot)		-		6	W	-		8	W
Elect. Power	DC	P (cold) 20°C		-		7.5 W		-		10.5 W	
sct.	AC	Pn (holding)		6	N	-		8 W		-	
Ĕ	AU	Attraction cold	i	7.5	W		-	10.	5 W		-
Voltage	Voltages "Un"				Code	VDC	Code	VAC/Hz	Code	VDC	Code
-10% to	-10% to +10% of the Un			230/50-60 110/50-60	P9 P2	24 48	C2 C4	230/50-60 110/50-60	P9 P2	24 48	C2 C4
					P0 S4	110	C5	24/50-60 48/50-60	P0 S4	110	C5

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





Ex EAL 🕼 **ZONE 1/21** 

COIL GROUP

10.2/10.1

EXPLOSION PROOF ELECTRICAL PARTS



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

## 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.

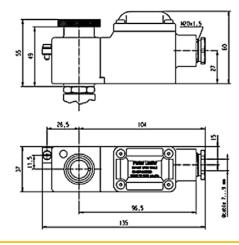
**Application:** Control of solenoid valves in dangerous areas where explosionproof protection Ex db mb IIC T4 to T6 is required.

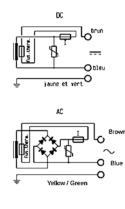
**Benefits:** Rotatable 360° fibreglass-reinforced plastic housing (class H). Solenoid coil, rectifier (silicium diodes), fuses and varistor protection are completely encapsulated into the coil housing by epoxy resin for shock and corrosion protection. The plastic housing is delivered with M20 x 1.5 cable gland certified for use "db" protection. Small size for ease of mounting in confined space.



Referen	nce			496555				496560				
Certific	ate			LCIE 07 ATEX 6075 X - IECEx LCI 07.0014X								
Coil Gro	oup				10	).2			10.1			
Type of protection				11	2 G - Ex db m	b IIC T4 / T5 / T	6		ll 2 G - Ex o	db mb IIC T4		
Type of	protec	;0011	Dust	ll 2 D	- Ex tb IIIC - T	130°C / 95°C /	80°C		ll 2 D - Ex tb	IIIC - T130°C		
Degree	of pro	tection				IP 67	according to IE	C/EN 60529 Sta	ndards			
Ambiar	nt temp	oerature				5 / 50 / 35°C application is	limited also by	the temperature		o +65°C alve.		
Class o	Class of insulation				H (180 °)							
Electric	cal con	nection		Electric connec (Ø min 5 mm,	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.							
er	DC	Pn (hot)		-		6	W	-		8	W	
Elect. Power	DC	P (cold) 20°C		-		7.	7.5 W		-		.5 W	
ect.	AC	Pn (holding)		6	N	-		8	N	-		
ă	AU	Attraction cold	ł	7.5	W		-	10.5	5 W	-		
Voltage	Voltages "Un"				Code	VDC	Code	VAC/Hz	Code	VDC	Code	
-10% to	-10% to +10% of the Un			230/50-60 110/50-60 24/50-60	P9 P2 P0	24 48 110	C2 C4 C5	230/50-60 110/50-60 24/50-60	P9 P2 P0	24 48 110	C2 C4 C5	
				48/50-60	S4	110		48/50-60	S4	110	00	

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







COIL GROUP

**EXPLOSION PROOF ELECTRICAL PARTS** 



**ZONE 1/21** 

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-

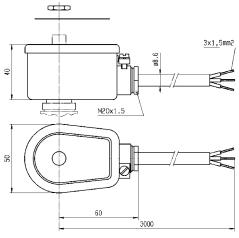
proof protection Ex mb IIC T4/ T5 is required.

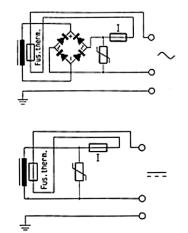
Benefits: Epoxy-vernished steel housing - solenoid coil, rectifier (silicium diodes), fuse and varistor protection element are completely encapsulated in the coil housing by means of epoxy resin.Small size for ease of mounting in confined space. Simplifies conversion of existing equipment to hazardous area requirements.



Reference				492070 ( with 3 m cable length ) 492070160 ( with 6 m cable length )				
Certifi	cate			LCIE 02 ATEX 6017 X - IECEx LCI 09.0024 X				
Coil G	roup			2.0 / 2.1				
Type o	of prote	otion	Gas	II 2 G - Ex mb IIC T4/ T5				
Type o		cuon	Dust	ll 2 D - Ex tb IIIC - T130 / 95°C				
Degree	e of pr	otection			IP67 according to IEC	C/EN 60529 standards		
Ambie	ent tem	perature		The		65°C / 40°C he temperature range of the va	llve.	
Insula	tion Cl	ass		F 155°C				
Electri	ical co	nection		Cable connection (3 x 1.5 mm <sup>2</sup> ) with cable gland M20 x 1.5, external earth screw connection.				
/er	DC	Pn (hot)		8 W				
Pow	DC	P (cold) 20°C		10 W				
Elect. Power	AC	Pn (holding)		9 W				
Ĕ	AU	Attraction cold	I	11 W				
Weigh	t				50	0 g		
Voltag	es "Ur	n		VAC/Hz	Code	VDC	Code	
-10% t	-10% to +10% of the Un			24/50-60	PO	24	C2	
				110/50-60	P2	48	C4	
				220/50-60	R5	110	C5	
				230/50-60	P9			
				240/50-60	Q1			

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







COIL GROUP

EXPLOSION PROOF ELECTRICAL PARTS



**2.0/2.1** INCREASED SAFETY AND ENCAPSULATED ELECTRICAL PARTS "eb mb"

# **ZONE 1/21**

## 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.

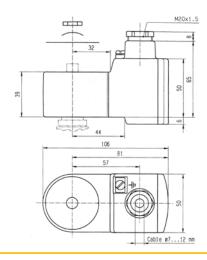
**Application:** Control of solenoid valves in dangerous areas where explosionproof protection Ex eb mb IIC T3 to T4 is required.

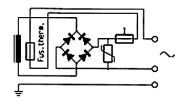
**Benefits:** Rotatable 360°, fiberglass -reinforced plastic housing. Solenoid coil, rectifier (silicium diodes), fuses and varistor protection are completely encapsulated into the coil housing by epoxy resin for shock and corrosion protection. Small size for ease of mounting in confined space.

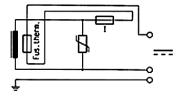


Reference					492	190		
Certific	ate			LCIE 02 ATEX 6023 X - IECEx LCI 06.0011 X				
Coil Gr	oup			2.0 / 2.1				
Tuno of	Type of protection Gas			II 2 G - Ex eb mb IIC T3 / T4				
Type of	protec		Dust	II 2 D - Ex tb IIIC - 195°C / 130°C				
Degree	of pro	tection			IP66 according to IEC	/EN 60529 Standards		
Ambier	nt temp	erature		The oper	-40°C to +7 ating temperature of the valve	5°C / +40°C /coil can be limited by that of t	the valve	
Insulat	ion Cla	SS		F 155°C				
Electric	Electrical connection			Сог	nection box with terminals an Possibility for additional	d cable entry via gland M20 x earth via external screw	1.5	
_ 5	DC	Pn (hot)		9 W				
Electrical	DC	P (cold) 20°C		11 W				
lect	AC	Pn (holding)		11 W				
E E	AU	Attraction cold		13 W				
Weight					32	0 g		
Voltage	Voltages "Un"			VAC/Hz	Code	VDC	Code	
-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









COIL GROUP

EXPLOSION PROOF ELECTRICAL PARTS

10.1

INCREASED SAFETY AND ENCAPSULATED ELECTRICAL PARTS "**eb mb**"

## 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 explosionproof protection Ex eb mb II T4 to T5 is required.

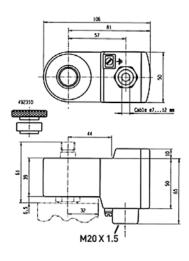
**Benefits:** Rotatable 360° fibreglass-reinforced plastic housing. Solenoid coil, rectifier (silicium diodes), fuses and varistor protection are completely encapsulated into the coil housing by epoxy resin for shock and corrosion protection. Small size for ease of mounting in confined space.

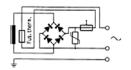


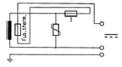
**ZONE 1/21** 

Reference					492	310		
Certific	ate			LCIE 02 ATEX 6023 X - IECEx LCI 06.0011 X				
Coil gro	oup			10.1				
Gas Gas			Gas	ll 2 G - Ex eb mb ll T4 / T5				
Type of	Type of protection Dust		Dust	II 2 D - Ex tb IIIC - T130°C / T95°C				
Degree	Degree of protection				IP66 according to IEC	/EN 60529 Standards		
Ambiant temperature				The ope		°C / to +40°C e/coil can be limited by that of t	the valve	
Class of insulation				F 155°C				
Electric	cal con	nection		Connection box with termina	Is and cable entry via gland M	20 x 1.5 - Possibility for addition	onal earth via external screw.	
/er	DC	Pn (hot)		6 W				
Ром	DC	P (cold) 20°C		7.5 W				
Elect. Power	AC	Pn (holding)		6 W				
Ele	AU	Attraction cold	ł	7.5 W				
Weight					50	0 g		
Voltage	Voltages "Un"			VAC/Hz	Code	VDC	Code	
-10% to	-10% to +10% of the Un			24/50-60	PO	24	C2	
				48/50-60	S4	48	C4	
				230/50-60	P9	110	C5	

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







COIL GROUP

**EXPLOSION PROOF ELECTRICAL PARTS** 



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.

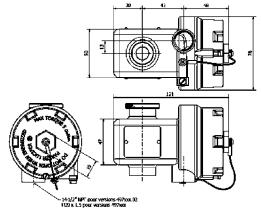
**Application:** Control of solenoid valves in dangerous areas where explosion-proof protection Ex db IIC T4 / T5 / T6 is required.

**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.



Refere	nce					M20x1.5) (NPT 1/2")		
Certific	ate			INERIS 12ATEX0041X - IECEx INE 12.0034X				
Coil Gr	oup			10.3				
Tuno of	Enrota	ation	Gas		ll 2 G - Ex db l	IC T4 / T5 / T6		
Type of	i protei		Dust	II 2 D - Ex tb IIIC - 130°C / 95°C / 80°C				
Degree	of pro	tection		IP66	(with relevant cable gland) ac	cording to IEC/EN 60529 Stan	lards	
Ambie	nt temp	perature		The oper	-50°C to +80°C ating temperature of the valve	/ +60°C / +40°C /coil can be limited by that of	the valve	
Insulat	ion Cla	SS			H 18	30°C		
Electric	cal con	nection		Electric connection is done in the connection chamber on an easily accessible connector terminals. The cable entry to the connection chamber is made through a 1/2" NPT or M20x1.5 thread in which an approved Exdb IIC cable gland must be installed.				
_ 5		Pn (hot)		8 W				
Electrical consumption	DC	P (cold) 20°C		9 W				
lect	AC	Pn (holding)		8 W				
E E	AU	Attraction cold	I	9 W				
Voltage	e Tolera	ance			+/- 10% of no	ominal voltage		
Emergi	ising C	uty			ED 1	00%		
Voltage	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





COIL GROUP

**EXPLOSION PROOF ELECTRICAL PARTS** 



**ZONE 1/21** 

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 values 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.



Refere	nce			482605 482606 or 482606.160*							
Certific	cate			LCIE 02 ATEX 6014 X - IECEx LCI 07.0026 X							
Coil Gr	oup			1.1							
Type of	fnratac	tion	Gas		ll 2 G - Ex m	nb IIC T4 / T5					
Type of	i protet		Dust		ll 2 D - Ex tb IIIC - T130°C / 95°C						
Degree	e of pro	tection			IP65 (with plug) according	to IEC/EN 60529 Stan	dards				
Ambia	nt temp	erature		-40°C to +65° The ap	C / +40°C oplication is limited also by t			5°C / +35°C alve.			
Insulation Class				F 155°C							
Electric	cal con	nection		Cable connection (3	Cable connection (3 x 0.75 mm <sup>2</sup> ) encapsulated with coil, cable material according to application						
er	DC	Pn (hot)		5 W		2.5	5 W				
No	DC	P (cold) 20°C		6.5 W		3	W				
Elect. Power		Pn (holding)		4 W 2 W			W				
Ele	AC	Attraction cold		8.9 VA (5	5 W)	5.7 VA (2.5 W)					
Weight	t				15	0 g					
Voltage	Voltages "Un"			VDC	Code	VAC/Hz	Code	VDC	Code		
-10% to	-10% to +10% of the Un			12	C1 C2	24/50	A2	24	C2		
				24	62	48/50 110/50-115/50 220/50-230/50	A4 0A 3D	48 110	C4 C5		

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

\* 482606.160 - 6 m cable length - available only in C2 and 3D \* 482606 - 1.5 m cable length

#### Fuses:

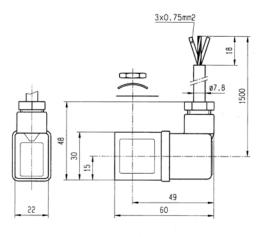
Both electrical parts 482605 & 482606 have to be connected in series with a safety fuse according to CEI 60127-3. Indicating example bellow:

#### 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





COIL GROUP

EXPLOSION PROOF ELECTRICAL PARTS



7.0

INTRINSICALLY SAFE ELECTRICAL PARTS "ia"

# **ZONE** 0/20

## 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 explosionproof 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)



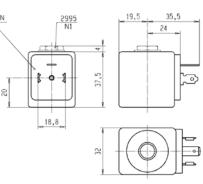
Referer		thout plug) th plug)		48358001 48396001				
Certific	Certificate			LCIE 02 ATEX 6065 X - IECEx LCI 07.0025 X				
Coil Gro	oup			7.0				
Tuno of	nrotos	tion	Gas	II 1 G - Ex ia IIC - T6				
Type of	protec	uon	Dust	II 1 D - Ex ta IIIC - T80°C				
Degree	of pro	ection		IP65 with plug according to IEC/EN 60529 Standards				
Ambiar	nt temp	erature		$^-$ 40 $^\circ\mathrm{C}$ à $+$ 55 $^\circ\mathrm{C}$ The operating temperature of the valve/coil can be limited by that of the valve.				
Electric	cal con	nection		The coil is connected with a 2P + E plug according to EN 175301-803 type A Contact 1 is marked as the positive pole $\oplus$ .				
Maxim	um sup	ply voltage		28 VDC (N7) - 110 mA The minimum operating voltage at maximum 60°C is 14 VDC.				
7	DC	Minimum		500 mW				
Power	DC	Maximum		3 W				
ē.				Depending on applied voltage, IS barrier type and resistance of connected cable				
Coil res	Coil resistance at 20°C			340 Ω				
Impedance			340 Ω					
Apparent inductance			0 mH					
Appare	nt capa	acitance		0 μF				
Weight				160 g (with plug)				

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

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

The coil assembly kit **Ref. 2995** corresponds to the "housing" of Lucifer<sup>®</sup> 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.





#### 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 section.

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



COIL GROUP

EXPLOSION PROOF ELECTRICAL PARTS



**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.

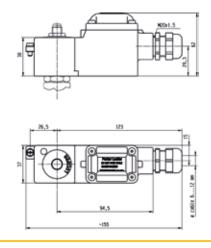
See column "Coil Group" within valve pages.

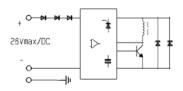
**Application:** Control of solenoid valves in dangerous areas where explosionproof protection Ex ia IIC T4 to T6 is required.

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

			-				
Reference			495910				
Certificate			LCIE 03 ATEX 6464 X - IECEx LCI 07.0006 X				
Coil Gr	oup			8.0			
Type of	f nroto	otion	Gas	II 1 G - Ex ia IIC - T4 / T5 / T6			
Type of	i piotei	,001	Dust	II 1 D - Ex ta IIIC T80 / 95 / 130°C			
Degree	e of pro	tection		IP67 according to IEC/EN 60529 Standards			
Ambia	nt temp	perature		- $40^{\circ}$ C to $+80^{\circ}$ C / $75^{\circ}$ C / $65^{\circ}$ C The application is limited also by the temperature range of the valve			
Class o	of insul	ation		H 180°C			
Electric	cal con	nection		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			
Maxim	um sup	oply voltage		28 VDC (N7) - 110 mA			
7	DC	Minimum		0.3 W (with 13 VDC)			
Power	DC	Maximum		1.2 W (with 24 VDC)			
ē.				Depending on applied voltage, IS barrier type and resistance of connected cable			
Line ch	neck			4 mA or 5 VDC max			
Coil resistance at 20°C Impedance Apparent inductance Apparent capacitance			Charge ~ 550 Ω - Holding ~ 500 Ω 0 mH 0 μF				
Respor	nse tim	e		2 - 3 s			
Weight	t			500 g			

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





ZONE 0/20



COIL GROUP

9.0

**EXPLOSION PROOF ELECTRICAL PARTS** 



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.

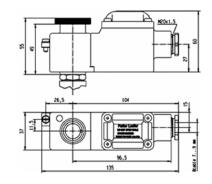
**Application:** Control of solenoid valves in dangerous areas where explosionproof protection Ex ia IIC T4 to T6 is required.

**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		496565					
Certificate		LCIE 08 ATEX 6071 X - IECEx LCI 08.0030 X					
Coil group		9.0					
Tune of protection	Gas	ll 1 G - Ex ia IIC	- T4 / T5 / T6				
Type of protection	Dust	ll 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					
Electrical connection		Cable connection through a plastic cable gland M20 x Additional earth connection possil	1.5 allowing use of cable diameter from 7 to 12 mm. ble with external screw terminal.				
Class of insulation		H180°C					
Minimum Courant of function	ı	20 mA					
Minimum voltage of function at 60°C		28 VDC (N7)					
Safety parameters Maximum acceptable values Ui (V) / Ii (mA) / Pi (W)	:	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					
Apparent Impedance Typ. Apparent Inductance Apparent Capacitance		Attraction ~ 600 Ω - Holding ~ 570 Ω 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





COIL GROUP

9.0

EXPLOSION PROOF ELECTRICAL PARTS



INTRINSICALLY SAFE ELECTRICAL PARTS "ia"

### 492965 ELECTRICAL PARTS "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.

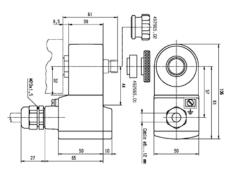
**Application:** Control of solenoid valves in dangerous areas where explosionproof protection Ex ia IIC - T6 is required.

**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.



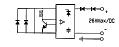
Reference				49296501 - (Stainless steel fixation) 49296502 - (Plastic fixation)
Certificate				LCIE 02 ATEX 6066 X - IECEx LCI 07.0007 X
Coil Group				9.0
Type of protection Gas Dust			Gas	II 1 G - Ex ia IIC - T6
			Dust	ll 1 D - Ex ta IIIC - T80°C
Degree of protection				IP66 according to IEC/EN 60529 Standards
Ambiant temperature				$^-$ 40 $^\circ\mathrm{C}$ to +65 $^\circ\mathrm{C}$ The application is limited also by the temperature range of the valve.
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 of insulation				H180°C
Maximum supply voltage				28 VDC (N7) - 110 mA
5	DC	Minimum		0.3 W (with 13 VDC)
Power	DC	Maximum		2.3 W (with 24 VDC)
<u>م</u>			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				85 Ω
Impedance				275 $\Omega$ (with 13 VDC) - 260 $\Omega$ (with 24 VDC)
Apparent inductance Apparent capacitance				0 mH 0 иF
Response time				0 μr 2 - 4 s
Weight				500 g
weight				500 Y

To Order a Coil choose Coil Ref + Voltage Code, example: 492965.01 for 28 VDC = 49296501N7



#### 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.



For the barrier compatibility see the corresponding table in appendix section.



# Housing

COIL GROUP

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:**

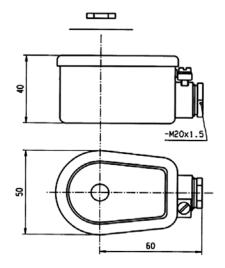
This enclosure is dust- and waterproof. It corresponds to the degree of "International Protection" IP 67 according to IEC / EN 60529. Corrosion resistant, the metal housing offers good protection for the coil against shocks and other outside influences - rotatable 360° - easy mounting in confined spaces - 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, high temperature, 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)
- 486265 High Temperature & High Power 14 W Class H (180°C)







#### At Parker, we're guided by a relentless drive to help our customers become more productive and achieve higher levels of profitability by engineering the best systems for their requirements. It means looking at customer applications from many angles to find new ways to create value. Whatever the motion and control technology need, Parker has the experience, breadth of product and global reach to consistently deliver. No company knows more about motion and control technology than Parker. For further info call 00800 27 27 5374



#### Fluid & Gas Handling Key Markets

Aerial lift Agriculture Bulk chemical handling Construction machinery Food & beverage Fuel & gas delivery Industrial machinery Life sciences Marine Mining Mobile Oil & gas Renewable energy Transportation

#### **Key Products**

Check valves Connectors for low pressure fluid conveyance Deep sea unbilicals Diagnostic equipment Hose couplings Industrial hose Mooring systems & power cables PTFE hose & tubing Quick couplings Rubber & thermoplastic hose Tube fittings & adapters Tubing & plastic fittings



#### Aerospace Kev Markets

Advantages of the services Commercial transports Engines General & business aviation Helicopters Launch vehicles Military aircraft Missiles Power generation Regional transports Unmanned aerial vehicles

#### Key Products

Control systems & actuation products Engine systems & components Fluid conveyance systems & components Fluid metering, delivery & atomization devices Fuel systems & components Fuel systems & components Hydraulic systems & components Thermal maragement Wheels & brakes

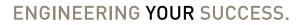


#### Hydraulics Key Markets

Aerial lift Agriculture Alternative energy Construction machinery Forestry Industrial machinery Machine tools Marine Material handling Mining Oil & gas Power generation Refuse vehicles Renewable energy Truck hydraulics

#### Key Products

Accumulators Cartridge valves Electrohydraulic actuators Human machine interfaces Hydraulic oylinders Hydraulic oylinders Hydraulic oylinders Hydraulic utes & controls Hydraulic utes & controls Hydraulic aves & controls Hydraulic aver offs Power take-offs Power units Rotary actuators Sensors





**Parker's Motion & Control Technologies** 

#### Climate Control Key Markets Agriculture Air conditioning Construction Machinery Food & beverage Industrial machinery Life sciences

Cile sciences Oil & gas Precision cooling Process Refrigeration Transportation

#### Key Products

Accumulators Advanced actuators CO<sub>2</sub> controls Electronic controllers Filter driers Hand shut-off valves Heat exchangers Hose & fittings Pressure regulating valves Refrigerant distributors Safety relief valves Somart pumps Solenoid valves



#### Pneumatics Key Markets Aerospace Convevor & material

Conveyor & material handling Factory automation Life science & medical Machine tools Packaging machinery Transportation & automotive

#### Key Products

Air preparation Brass fittings & valves Manifolds Pneumatic accessories Pneumatic averations & grippers Pneumatic averations & grippers Quick disconnects Rotary actuators Rubber & thermoplastic hose & couplings Structural extrusions Thermoplastic tubing & fittings Vacuum generators, cups & sensors



#### Electromechanical Key Markets Aerospace Factory automation

Life science & medical Machine tools Packaging machinery Paper machinery Plastics machinery & converting Primary metals Semiconductor & electronics Textile Wire & cable

#### Key Products

AC/DC drives & systems Electric actuators, gantry robots & slides Electorhydrostatic actuation systems Electromechanical actuation systems Human machine interface Linear motors Stepper motors, servo motors, drives & controls Structural extrusions



#### Process Control Key Markets

Atternative fuels Biopharmaceuticals Chemical & refining Food & beverage Marine & shipbuilding Medical & dental Microelectronics Nuclear Power Offshore oil exploration Oil & gas Pharmaceuticals Power generation Pulp & paper Steel Water/wastewater

#### Key Products

Analytical Instruments Analytical sample conditioning products & systems Chemical injection fittings & valves Fluoropolymer chemical delivery fittings, valves & pumps High purity gas delivery fittings, valves, regulators & digital flow controllers Industrial mass flow meters/ controllers Pereasion industrial regulators & flow controllers Process control double block & bleeds Process control fittings, valves, regulators & manifold valves



#### Filtration Key Markets

Aerospace Food & beverage Industrial plant & equipment Life sciences Marine Mobile equipment Oil & gas Power generation & renewable energy Process Transportation Water Purification

#### Key Products

Analytical gas generators Compressed air filters & dryers Engine air, coolant, fuel & oil filtration systems Fluid condition monitoring systems Hydraulic & lubrication filters Hydrogen, nitrogen & zero air generators Instrumentation filters Membrane & fiber filters Microfiltration Sterle air filtration Water desalination & purification filters & system



#### Sealing & Shielding

Key Markets Aerospace Chemical processing Consumer Fluid power General industrial Information technology Life sciences Microelectronics Military Oil & gas Power generation Renewable energy Telecommunications Transportation

#### Key Products

Dynamic seals Elastomeric o-rings Electro-medical instrument design & assembly EMI shielding Extruded & precision-cut, fabricated elastomeric seals High temperature metal seals Homogeneous & inserted elastomeric shape Medical device fabrication & assembly Metal & plastic retained composite seals Shielded optical windows Silicone tubing & extrusions Thermal management Vibration dampening



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