



Cartridges

Carstick

PLM/PLS

LIQUIfit

TrueSeal

SAE Encapsulated





Cartridges



Parker has developed a range of cartridges guaranteeing the integrity of the sealing system before and after assembly in non-threaded cavities. The compact design of the one-piece cartridges enables automation of your manufacturing process and improves the reliability of your system.

Product Features:

- Self-centering of the cartridge in the cavity
- Push-in connection
- Designed for automation assembly process
- SAE & NSF cartridges available

Markets:

- Industrial
- Pneumatic
- Filtration
- Semi-Conductor
- Life Science
- Automation
- Heavy Duty Truck









Applications:

- Air
- Water
- Beverage Dispensing
- Cab Controls
- Packaging
- Labeling

Specifications:

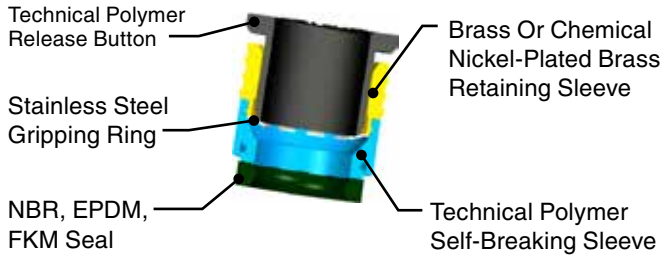
	Pressure	Temperature
Carstick	Up to 290 psi	-4 °F to 175 °F
PLM/PLS	Up to 435 psi	-4 °F to 302 °F
LIQUIfit	Up to 230 psi	35 °F to 200 °F
TrueSeal	Up to 150 psi	-20 °F to 180 °F
SAE Encapsulated	Up to 250 psi	-40 °F to 200 °F

Cartridge

 3100 Carstick® Cartridge Brass p. D6	 3100 Carstick® Cartridge Nickel-Plated Brass p. D6	 6300 LIQUIfit Cartridge Brass p. D8	 6300 LIQUIfit Cartridge Nickel-Plated Brass p. D8	 TSC Cartridge Insert p. D10	 PLMC Cartridge p. D11
 PLSC Cartridge p. D11	 PMTCE Encapsulated p. D12				

Carstick® Cartridges

Component Materials



3100 Carstick® Cartridge Brass

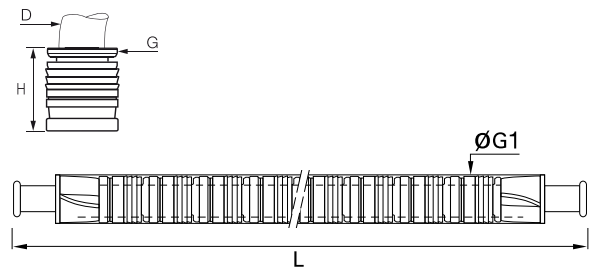
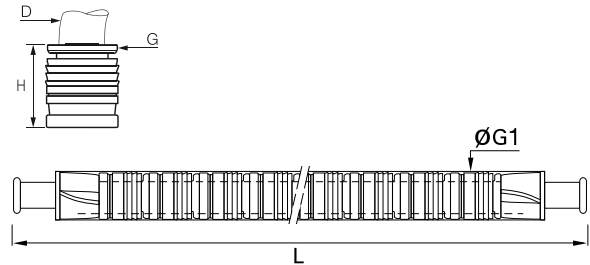
PART NO.	OD	G	G1	H	L	KG
3100 04 00	4	8	11	10	554	0.001
3100 06 00	6	10	14.5	11.5	629	0.002
3100 08 00	8	13	15	15	794	0.002
3100 10 00	10	15.5	19.5	17	930	0.005
3100 12 00	12	19.5	21	19.5	1038	0.010

50 cartridges per Carstick®

3100 Carstick® Cartridge Nickel-Plated Brass Inch

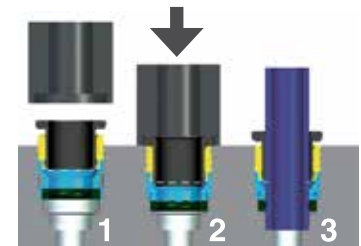
PART NO.	OD	G	G1	H	L	KG
3100 53 00 99	1/8	7	10	9	508	0.002
3100 56 00 99	1/4	10.5	14.5	12	600	0.003
3100 60 00 99	3/8	15.5	19	16.5	930	0.006

50 cartridges per Carstick®
5/32" (4mm) and 5/16" (8mm) also available

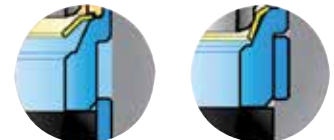


Installation

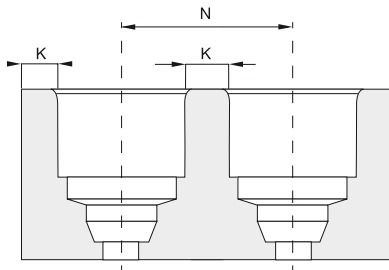
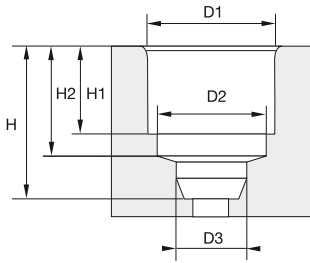
1. Self-centering of the cartridge in the cavity.
2. The seal protection is broken. The seal slides into the cavity. The cartridge is in place.
3. Tube connection.



Assembly Tool: For details on the assembly tool, please contact us.



Carstick® Cavity Dimensions



Please consult us for detailed drawings of cavity dimensions and tolerances. All our dimensions are in millimeters.

Carstick® & Quick Fitting Metric

CAVITY	OD3	H	H1	H2
4	4.1	10	6	8.15
6	6.1	12	7.5	9.65
8	8.15	15.5	9.9	12.45
10	10.25	19	11.7	14.35
12	12.17	22	13.9	16.75

Carstick® Inch

CAVITY	OD3	H	H1	H2
1/8	3.25	7.45	5.3	9.5
5/32 *	4.1	8.15	6	10
1/4	6.45	10.15	8	12.5
5/16 *	8.15	12.45	9.9	15.5
3/8	9.65	14.35	11.7	19

Polyamide Cavity

CAVITY	OD1	OD2	N*	K
4	8.25	7.05	9.8	1.5
6	10.2	9.15	12.2	2
8	12.15	10.85	14.2	2
10	14.8	13.2	16.8	2
12	17.5	15.5	20	2.5

CAVITY	OD1	OD2	N	K
1/8	7.05	6.02	8.6	1.5
5/32*	8.25	7.05	9.75	1.5
1/4	10.55	9.35	12.6	2
5/16*	12.15	10.85	14.2	2
3/8	14.8	13.1	16.8	2

Aluminum Cavity

CAVITY	OD1	OD2	N*	K
4	8.25	7.5	11.5	3
6	10.3	9.15	13.5	3
8	12.2	10.85	15.2	3
10	15.05	13.2	17.1	2
12	17.5	15.5	20	2.5

CAVITY	OD1	OD2	N	K
1/8	7.1	6.2	8.6	1.5
5/32*	8.25	7.05	11.25	3
1/4	10.6	9.35	12.65	2
5/16*	12.2	10.85	15.2	3
3/8	15.05	13.1	17.1	2

Brass Cavity

CAVITY	OD1	OD2	N*	K
4	8.25	7.05	10.25	2
6	10.25	9.1	12.25	2
8	12.2	10.85	14.25	2
10	15.05	13.2	17.1	2
12	17.65	15.5	20	2.5

CAVITY	OD1	OD2	N	K
1/8	7.1	6.2	8.6	1.5
5/32*	8.25	7.05	10.25	2
1/4	10.6	9.35	12.65	2
5/16*	12/2	10.85	14.25	2
3/8	10.05	13.1	17.1	2

* Carstick®

*5/32"=4mm and 5/16"=8mm

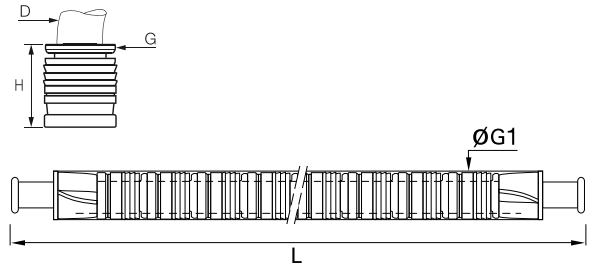
LIQUfit® Cartridges



6300 LIQUfit Cartridge Brass

PART NO.	OD	G	G1	H	L	KG
6300 04 00	4	8	11	10	554	0.002
6300 06 00	6	10	14.5	11.5	629	0.002
6300 08 00	8	13	15	15	794	0.003
6300 10 00	10	15.5	19.5	17	930	0.005
6300 12 00	12	18.5	21	19.5	1038	0.010

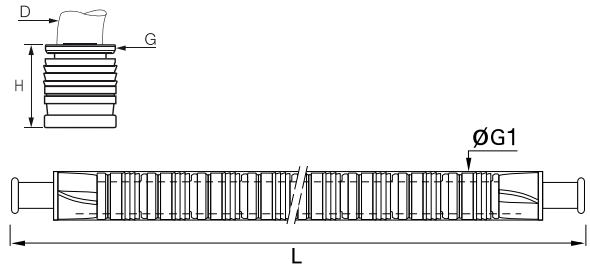
50 cartridges per Carstick®



6300 LIQUfit Cartridge Nickel-Plated Brass

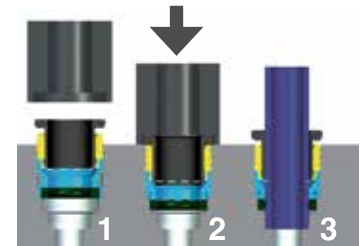
PART NO.	OD	G	G1	H	L	KG
6300 56 00	1/4	10.5	14.5	12.5	600	0.002
6300 60 00	3/8	15.5	19	17	930	0.005
6300 62 00	1/2	22	25	23	1038	0.011

50 cartridges per Carstick®
5/32" (4mm) and 5/16" (8mm) also available



Installation

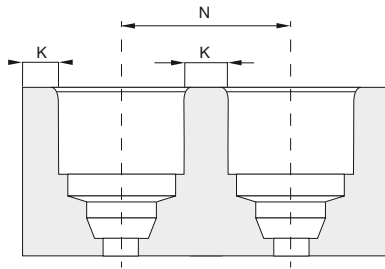
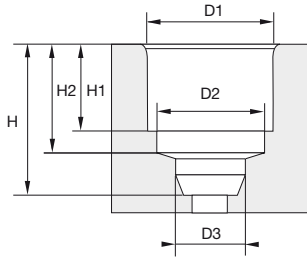
1. Self-centering of the cartridge in the cavity.
2. The seal protection is broken. The seal slides into the cavity. The cartridge is in place.
3. Tube connection.



Assembly Tool: For details on the assembly tool, please contact us.



LIQufit® Carstick® Cavity Dimensions



Please consult us for detailed drawings of cavity dimensions and tolerances. All our dimensions are in millimeters.

LIQufit®Carstick® Metric

CAVITY	OD3	H	H1	H2
4	4.1	10	6	8.15
6	6.1	12	7.5	9.65
8	8.15	15.5	9.9	12.45
10	10.25	19	11.7	14.35
12	12.17	22	13.9	16.75

LIQufit®Carstick® Inch

CAVITY	OD3	H	H1	H2
1/8	3.25	7.45	5.3	9.5
5/32*	4.1	8.15	6	10
1/4	6.45	10.15	8	12.5
5/16*	8.15	12.45	9.9	15.5
3/8	9.65	14.35	11.7	19

Polyamide Cavity

CAVITY	OD1	OD2	N*	K
4	8.25	7.05	9.8	1.5
6	10.2	9.15	12.2	2
8	12.15	10.85	14.2	2
10	14.8	13.2	16.8	2
12	17.5	15.5	20	2.5

CAVITY	OD1	OD2	N	K
1/8	7.05	6.02	8.6	1.5
5/32*	8.25	7.05	9.75	1.5
1/4	10.55	9.35	12.6	2
5/16*	12.15	10.85	14.2	2
3/8	14.8	13.1	16.8	2

Aluminum Cavity

CAVITY	OD1	OD2	N*	K
4	8.25	7.5	11.5	3
6	10.3	9.15	13.5	3
8	12.2	10.85	15.2	3
10	15.05	13.2	17.1	2
12	17.5	15.5	20	2.5

CAVITY	OD1	OD2	N	K
1/8	7.1	6.2	8.6	1.5
5/32*	8.25	7.05	11.25	3
1/4	10.6	9.35	12.65	2
5/16*	12.2	10.85	15.2	3
3/8	15.05	13.1	17.1	2

Brass Cavity

CAVITY	OD1	OD2	N*	K
4	8.25	7.05	10.25	2
6	10.25	9.1	12.25	2
8	12.2	10.85	14.25	2
10	15.05	13.2	17.1	2
12	17.65	15.5	20	2.5

CAVITY	OD1	OD2	N	K
1/8	7.1	6.2	8.6	1.5
5/32*	8.25	7.05	10.25	2
1/4	10.6	9.35	12.65	2
5/16*	12.2	10.85	14.25	2
3/8	10.05	13.1	17.1	2

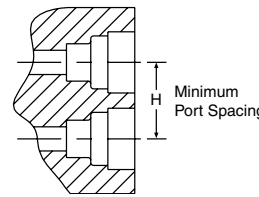
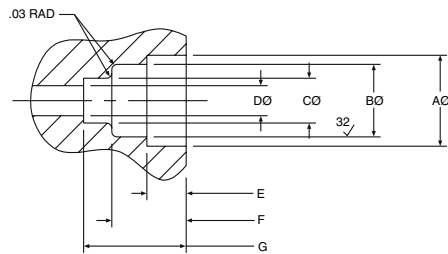
*5/32"=4mm and 5/16"=8mm

TrueSeal™ Cartridges



TSC - Cartridge Insert

PART NUMBER WITH EPDM SEAL	NOM. TUBE O.D.	A* DIAMETER ±002	B DIAMETER ±003	C DIAMETER ±003	D DIAMETER MAXIMUM	E DEPTH ±002	F DEPTH ±002	G DEPTH ±002	H* CENTERLINE OF PORTS MINIMUM
ATSC4-MG	1/4	.528	.421	.260	.19	.230	.435	.600	.670
ATSC6-MG	3/8	.632	.545	.385	.31	.280	.455	.705	.790
ATSC8-MG	1/2	.774	.668	.510	.41	.315	.510	.810	1.250



Parker TrueSeal™ Cartridge Inserts:

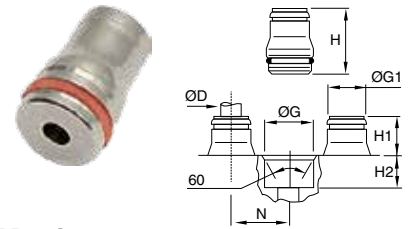
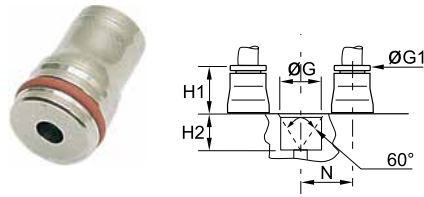
Allow you to machine or mold a tube connection into your equipment or components. By using cartridge inserts, you will reduce your material and assembly costs, reduce potential leak paths, and give your equipment a new, clean profile by eliminating the need for threaded connections. TSC Cartridge Inserts consist of 1 o-ring, 1 cartridge, and 1 collet.

*Cartridge inserts are rated at 150 psi in ports dimensioned as above and having Noryl as the receiving material. Other materials may have different ratings and require different port dimensions. Consult the Fluid System Connectors Division when using polypropylene, unfilled polypropylene, ABS or Nylon.

Assembly Instructions:

1. Machine or mold the receiving orifice as per the above dimensions.
2. Place the cartridge insert squarely onto the prepared port opening making sure that the barbs of the cartridge are going into the hole and the lettering on the face of the cartridge is visible.
3. Using a rubber mallet or press, insert the cartridge into the first gland orifice until its face is flush with the top surface of the port.
4. Insert the o-ring into the cartridge and seat it evenly into the second gland orifice.
5. Insert the collet into the cartridge opening.
6. Insert tubing.

PLM/PLS Cartridges



PLMC Cartridge

PART NO.	TUBE SIZE MM	G + .1 - 0	H1 MM	H2 MM	N MM
PLMC-4M	4	10.00	9.00	8.50	11.00
PLMC-6M	6	12.00	11.00	8.50	13.50
PLMC-8M	8	15.00	12.50	8.50	16.00
PLMC-10M	10	17.50	14.50	10.50	20.00
PLMC-12M	12	19.50	15.00	10.50	22.50
PLMC-14M	14	21.50	16.50	12.00	25.00

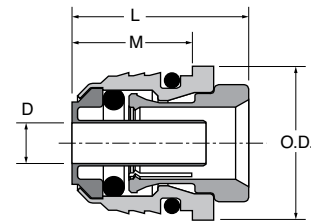
PLSC Cartridge - Metric

PART NO.	TUBE SIZE MM	G + .1 - 0 MM	G1 MM	H MM	H1 MM	H2 MM	N MM
PLSC-4M	4	9.80	8	18.00	9.50	8.50	11.00
PLSC-6M	6	12.10	10	20.00	11.50	8.50	13.50
PLSC-8M	8	14.80	13	22.00	13.50	8.50	16.00
PLSC-10M	10	17.50	15	25.50	15.00	10.50	20.00
PLSC-12M	12	20.00	17	26.00	15.50	10.50	22.50

PMT Cartridges

Prestomatic SAE Encapsulated Cartridge PMCE/PMTCE

PART NO.	TUBE SIZE	CAVITY SIZE $\pm .002$	L	M	O.D.	FLOW DIA. D
PMTCE-4	1/4	.504	.64	.44	.56	.140
PMTCE-4-8	1/4	.775	.66	.42	.87	.140
PMTCE-6	3/8	.650	.84	.64	.75	.217
PMTCE-6-8	3/8	.775	.84	.64	.87	.217
PMTCE-8	1/2	.775	.98	.77	.87	.338
PMTCE-10	5/8	.925	1.07	.86	1.00	.398



NOMINAL TUBE OD (IN)	D1 (MM) $\pm .05$	D1 (IN) $\pm .002$	L1 (MM) MIN	L1 (IN) MIN	R1 (MM) $\pm .05$	R1 (IN) $\pm .002$	R2 (MM) $\pm .05$	R2 (IN) $\pm .002$	C1 (MM) $\pm .05$	C1 (IN) $\pm .002$
1/4	12.8	0.504	12.7	0.5	0.5	0.02	0.5	0.02	0.5	0.02
3/8	16.5	0.65	16.5	0.65	0.5	0.02	0.5	0.02	0.5	0.02
1/2	19.7	0.775	19.8	0.78	0.5	0.02	0.5	0.02	0.5	0.02
5/8	23.5	0.925	22.4	0.88	0.8	0.03	0.5	0.02	0.8	0.03

Cavity material is to be 6061 T6 aluminum

Cavity Specifications

Dimensions are per the proposed SAE Standard J2494-4. The SAE Encapsulated Cartridge is thoroughly tested to meet or exceed the performance requirements of D.O.T. FMVSS 571.106 and SAE J2231 and the proposed dimensional standards of SAE J2494-4 in 6061-T6 aluminum. Cavity dimensions specified by SAE J2494-4 need to be adjusted slightly for optimum performance in material other than 6061-T6.

Installation

Apply force evenly over the top surface of the cartridge body until the cartridge shoulder bottoms out on the top of the cavity. The amount of force required will vary depending on the cartridge size and the material of the cavity.

