



CYLINDER CONNECTIONS

Instrument/Analyzer Products

Catalog 4514/USA
April 2003



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<http://www.veriflo.com>





Parker Hannifin Corporation's Veriflo Division presents CGA Connections. CGA's are used to connect High Purity Specialty gases in process applications.



features

- ▶ 100% visual inspection of critical surfaces.
- ▶ Cleaned and packaged in a certified environment.

Nuts

- ▶ 303 Stainless Steel.

Nipples

- ▶ 316L Stainless Steel.
- ▶ Standard w/wrench flats.
- ▶ Electropolished internal surfaces (Available upon request).
- ▶ O₂ Cleaned.

Gaskets

- ▶ Washer and Seal Enhancers.
- ▶ Available in PCTFE, Teflon®, Aluminum, and Nickel.
- ▶ Washers in 25 piece packages.
- ▶ Seal Enhancers in 10 piece packages..

Outlet Adapters

- ▶ 316L Stainless Steel.
- ▶ Electropolished internal surfaces (Available upon request).

Cylinder Valve Outlet Caps

- ▶ Gas tight design(Available for most connections).
- ▶ Polyethylene Disc, ring, and chain included.

materials of construction

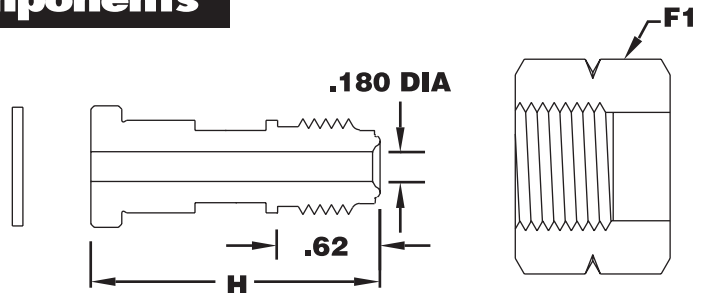
Wetted

Nuts	303 Stainless Steel, Nickel, Hastelloy C-22®
Nipples	316L Stainless Steel, Nickel, Hastelloy C-22®
Outlet Adapters	316L Stainless Steel, Nickel, Hastelloy C-22®
Cylinder Valve Outlet Caps	316L Stainless Steel, Nickel, Hastelloy C-22®
Gaskets	Nickel 200, PCTFE, Teflon®, Aluminum



CGA Series

CGA Inlet Connection Components

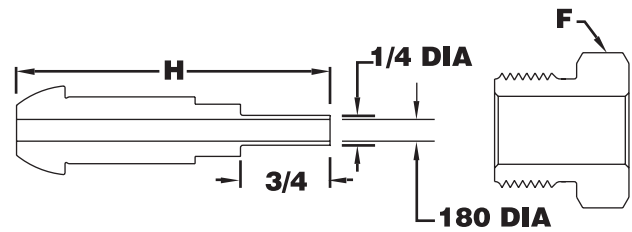


CGA 330 x 1/4" VacuSeal™ Male

CGA Number	End Connection	H Overall Length	Internal Surface Finish	Nipple Part Number	Nut Part Number	F1 Hex Flat	PTFE Washer Number	Kel-F® Washer Number
170	1/4" Auto Tube Weld	1-1/4"	9 Ra EP	56-170-4TW2-20 56-170-4TW2-P	55-170-3	11/16"	50-170-T	-
	1/8" NPT Male	1-1/4"		56-170-2M2-20				
180	1/4" Auto Tube Weld	1-1/4"	9 Ra EP	56-180-4TW2-20 56-180-4TW2-P	55-180-3	3/4"	50-180-T	-
	1/8" NPT Male	1-3/4"		56-180-2M2-28				
290	1/4" Auto Tube Weld	2-5/8"	9 Ra EP	56-290-4TW2-42 56-290-4TW2-P	55-290-3	1"	-	-
	1/4" NPT Male	2-1/4"		56-290-2M2-36				
296*	1/4" Auto Tube Weld	2-5/8"	9 Ra EP	56-296-4TW2-42 56-296-4TW2-P	55-296-3	7/8"	-	-
	1/4" VacuSeal™ Male	2-3/4"	9 Ra EP	56-296-4VM2-44 56-296-4VM2-P				
	1/4" NPT Male	3-1/2"		56-296-4M2-56				
320	1/4" Auto Tube Weld	1-3/4"	9 Ra EP	56-32-4TW2-28 56-32-4TW2-P	55-320-3	1-1/8"	50-320-T	50-320-K
	1/4" VacuSeal™ Male	2-3/4"	9 Ra EP	56-32-4VM2-28 56-32-4VM2-P				
	1/4" NPT Male	3-1/2"		56-32-4M2-40				
326	1/4" Auto Tube Weld	2-1/4"	9 Ra EP	56-326-4TW2-36 56-326-4TW2-P	55-326-3	1-1/8"	-	-
	1/4" VacuSeal™ Male	2-1/4"	9 Ra EP	56-326-4VM2-36 56-326-4VM2-P				
	1/4" NPT Male	3"		56-326-4M2-48				
330	1/4" Auto Tube Weld	1-3/4"	9 Ra EP	56-32-4TW2-28 56-32-4TW2-P	55-330-3	1-1/8"	50-320-T	50-320-K
	1/4" VacuSeal™ Male	1-3/4"	9 Ra EP	56-32-4VM2-28 56-32-4VM2-P				
	1/4" NPT Male	2-1/2"		56-32-4M2-40				
346	1/4" Auto Tube Weld	2-5/16"	9 Ra EP	56-346-4TW2-37 56-346-4TW2-P	55-346-3	1-1/8"	-	-
	1/4" VacuSeal™ Male	2-1/4"	9 Ra EP	56-346-4VM2-36 56-346-4VM2-P				
	1/4" NPT Male	3"		56-346-4M2-48				
350	1/4" Auto Tube Weld	2-5/16"	9 Ra EP	56-350-4TW2-37 56-350-4TW2-P	55-350-3	1-1/8"	-	-
	1/4" VacuSeal™ Male	2-1/4"	9 Ra EP	56-350-4VM2-36 56-350-4VM2-P				
	1/4" NPT Male	3"		56-350-4M2-48				

Electropolished I.D. components designated by the "-P" suffix are D. I. cleaned and packaged in a clean room. Non-electropolished components are ultrasonically D.I. cleaned and poly-bagged.

CGA Inlet Connection Components (continued)



CGA 580 x 1/4" Auto Tube Weld

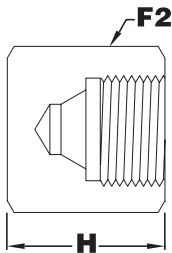
CGA Number	End Connection	H Overall Length	Internal Surface Finish	Nipple Part Number	Nut Part Number	F1 Hex Flat	PTFE Washer Number	Kel-F® Washer Number
510*	1/4" Auto Tube Weld	2-5/8"	9 Ra EP	56-50-4TW2-42 56-50-4TW2-P	55-510-3	1-1/8"	-	-
	1/4" VacuSeal™ Male	2-3/4"	9 Ra EP	56-50-4VM2-44 56-50-4VM2-P				
	1/4" NPT Male	3-1/2"		56-50-4M2-56				
540	1/4" Auto Tube Weld	2-1/4"	9 Ra EP	56-54-4TW2-36 56-54-4TW2-P	55-540-3	1-1/8"	-	-
	1/4" VacuSeal™ Male	2-1/4"	9 Ra EP	56-54-4VM2-36 56-54-4VM2-P				
	1/4" NPT Male	3"		56-54-4M2-48				
580*	1/4" Auto Tube Weld	2-5/8"	9 Ra EP	56-50-4TW2-42 56-50-4TW2-P	55-580-3	1-1/8"	-	-
	1/4" VacuSeal™ Male	2-3/4"	9 Ra EP	56-50-4VM2-44 56-50-4VM2-P				
	1/4" NPT Male	3-1/2"		56-50-4M2-56				
590*	1/4" Auto Tube Weld	2-1/2"	9 Ra EP	56-50-4TW2-42 56-50-4TW2-P	55-590-3	1-1/8"	-	-
	1/4" VacuSeal™ Male	2-3/4"	9 Ra EP	56-50-4VM2-44 56-50-4VM2-P				
	1/4" NPT Male	3-1/2"		56-50-4M2-56				
660	1/4" Auto Tube Weld	2-3/16"	9 Ra EP	56-60-4TW2-35 56-60-4TW2-P	55-660-3	1-1/4"	50-60-T	50-60-K
	1/4" VacuSeal™ Male	1-7/8"	9 Ra EP	56-60-4VM2-30 56-60-4VM2-P				
	1/4" NPT Male	2-1/2"		56-60-4M2-42				
670	1/4" Auto Tube Weld	2-3/16"	9 Ra EP	56-60-4TW2-35 56-60-4TW2-P	55-670-3	1-1/4"	50-60-T	50-60-K
	1/4" VacuSeal™ Male	1-7/8"	9 Ra EP	56-60-4VM2-30 56-60-4VM2-P				
	1/4" NPT Male	2-1/2"		56-60-4M2-42				
678	1/4" Auto Tube Weld	2-1/2"	9 Ra EP	56-678-4TW2-40 56-678-4TW2-P	55-678-3	1-1/4"	50-66-T	50-66-K
	1/4" VacuSeal™ Male	2"	9 Ra EP	56-678-4VM2-32 56-678-4VM2-P				
	1/4" NPT Male	2-1/2"		56-678-4M2-38				
679	1/4" Auto Tube Weld	2-1/2"	9 Ra EP	56-679-4TW2-40 56-679-4TW2-P	55-679-3	1-1/4"	50-110-T	-
	1/4" VacuSeal™ Male	2"	9 Ra EP	56-679-4VM2-32 56-679-4VM2-P				
	1/4" NPT Male	3"		56-679-4M2-40				

CGA Inlet Components and Outlet Adaptors are also available in Monel®.

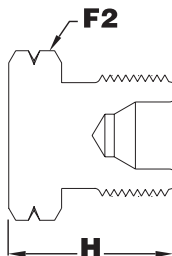
CGA Series

CGA Outlet Adapters, Blank Caps & Plugs

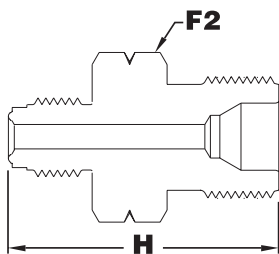
Blank Cap
CGA 580



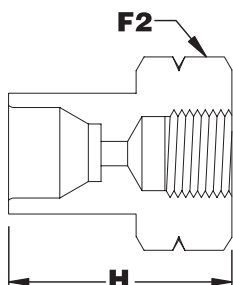
Blank Plug
CGA 350



VacuSeal® Male
CGA 350



NPT Female
CGA 350

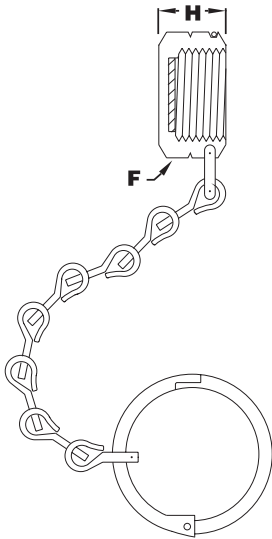


CGA Number	End Connection	Part Number	H Overall Length	F2 Hex Flat
296	Blank Cap	57-296FXX-3	1.37"	
	1/4" VacuSeal™ Male	57-296F4VM-2	2.00"	1-1/8"
	1/4" NPT Female	57-296F4F-2	2.00"	
320	Blank Plug	57-320MXX-3	1.12"	
	1/4" VacuSeal™ Male	57-320M4VM-2	1.74"	1"
	1/4" NPT Female	57-320M4F-2	1.12"	
326	Blank Plug	57-326MXX-3	1.12"	
	1/4" VacuSeal™ Male	57-326M4VM-2	1.74"	1"
	1/4" NPT Female	57-326M4F-2	1.31"	
330	Blank Plug	57-330MXX-3	1.12"	
	1/4" VacuSeal™ Male	57-330M4VM-2	1.74"	1"
	1/4" NPT Female	57-330M4F-2	1.31"	
346	Blank Plug	57-346MXX-3	1.12"	
	1/4" VacuSeal™ Male	57-346M4VM-2	1.88"	1"
	1/4" NPT Female	57-346M4F-2	1.31"	
350	Blank Plug	57-350MXX-3	1.12"	
	1/4" VacuSeal™ Male	57-350M4VM-2	1.88"	1"
	1/4" NPT Female	57-350M4F-2	1.31"	
510	Blank Cap	57-510FXX-3	1.37"	
	1/4" VacuSeal™ Male	57-510F4VM-2	2.00"	1-1/4"
	1/4" NPT Female	57-510F4F-2	2.00"	
540	Blank Plug	57-540MXX-3	1.12"	
	1/4" VacuSeal™ Male	57-540M4VM-2	1.87"	1"
	1/4" NPT Female	57-540M4F-2	1.25"	
580	Blank Cap	57-580FXX-3	1.37"	
	1/4" VacuSeal™ Male	57-580F4VM-2	2.00"	1-1/4"
	1/4" NPT Female	57-580F4F-2	2.00"	
590	Blank Cap	57-590FXX-3	1.37"	
	1/4" VacuSeal™ Male	57-590F4VM-2	2.00"	1-1/4"
	1/4" NPT Female	57-590F4F-2	2.00"	
660	Blank Plug	57-660MXX-3	0.88"	
	1/4" VacuSeal™ Male	57-660M4VM-2	1.50"	1-1/8"
	1/4" NPT Female	57-660M4F-2	1.25"	
670	Blank Plug	57-670MXX-3	0.88"	
	1/4" VacuSeal™ Male	57-670M4VM-2	1.50"	1-1/8"
	1/4" NPT Female	57-670M4F-2	1.25"	
678	Blank Plug	57-678MXX-3	1.00"	
	1/4" VacuSeal™ Male	57-678M4VM-2	1.50"	1-1/8"
	1/4" NPT Female	57-678M4F-2	1.38"	
679	Blank Plug	57-679MXX-3	0.88"	
	1/4" VacuSeal™ Male	57-679M4VM-2	1.75"	1-1/8"
	1/4" NPT Female	57-679M4F-2	1.25"	

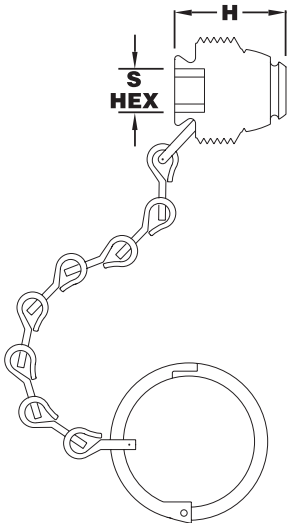
CGA Series

Cylinder Valve Outlet & Caps

CGA Cap 320-350 and 660-705



CGA Plug 510, 580, 590



CGA Number	Part Number	Material	F Hex Flat	S Hex Flat	H Length	Gas-Tight*
320	53-30C-3PR	Stainless Steel with Polyethylene disc	1"	-	.54"	No
326	53-30C-3PR	Stainless Steel with Polyethylene disc	1"	-	.54"	No
330	53-33C-3PR	Stainless Steel with Polyethylene disc	1"	-	.54"	No
346	53-30C-3PR	Stainless Steel with Polyethylene disc	1	-	.54"	No
350	53-350GTC-3R	Stainless Steel	1-1/8"	-	.82"	Yes
510	53-510P-3TR	Stainless Steel with Teflon® O-Ring	-	3/8"	1.00"	Yes
580	53-580P-3TR	Stainless Steel with Teflon® O-Ring	-	3/8"	1.00"	Yes
590	53-590P-3TR	Stainless Steel with Teflon® O-Ring	-	3/8"	1.00"	Yes
632	53-63GTC-2NR	Stainless Steel with Nickel gasket	1-1/4"	-	.98"	Yes
634	53-63GTC-2NR	Stainless Steel with Nickel gasket	1-1/4"	-	.98"	Yes
636	53-63GTC-2NR	Stainless Steel with Nickel gasket	1-1/4"	-	.98"	Yes
638	53-63GTC-2NR	Stainless Steel with Nickel gasket	1-1/4"	-	.98"	Yes
640	53-63GTC-2NR	Stainless Steel with Nickel gasket	1-1/4"	-	.98"	Yes
642	53-63GTC-2NR	Stainless Steel with Nickel gasket	1-1/4"	-	.98"	Yes
660	53-660C-3PR	Stainless Steel with Polyethylene disc	1-1/4"	-	.54"	No
670	53-67C-3PR	Stainless Steel with Polyethylene disc	1-1/4"	-	.54"	No
677	53-67C-3PR	Stainless Steel with Polyethylene disc	1-1/4"	-	.54"	No
678	53-67C-3PR	Stainless Steel with Polyethylene disc	1-1/4"	-	.54"	No
679	53-67C-3PR	Stainless Steel with Polyethylene disc	1-1/4"	-	.54"	No
705	53-705C-3PR	Stainless Steel with Polyethylene disc	1-3/8"	-	.54"	No
712	53-71GTC-2NR	Stainless Steel with Nickel gasket	1-3/8"	-	.98"	Yes
714	53-71GTC-2NR	Stainless Steel with Nickel gasket	1-3/8"	-	.98"	Yes
716	53-71GTC-2NR	Stainless Steel with Nickel gasket	1-3/8"	-	.98"	Yes
718	53-71GTC-2NR	Stainless Steel with Nickel gasket	1-3/8"	-	.98"	Yes
720	53-71GTC-2NR	Stainless Steel with Nickel gasket	1-3/8"	-	.98"	Yes
722	53-71GTC-2NR	Stainless Steel with Nickel gasket	1-3/8"	-	.98"	Yes
724	53-71GTC-2NR	Stainless Steel with Nickel gasket	1-3/8"	-	.98"	Yes
726	53-71GTC-2NR	Stainless Steel with Nickel gasket	1-3/8"	-	.98"	Yes
728	53-71GTC-2NR	Stainless Steel with Nickel gasket	1-3/8"	-	.98"	Yes

* Component not rated Gas-Tight are intended only to keep valve outlets clean and provide protection to threads. They must not be relied on to contain pressure if valve leaks or is inadvertently opened.

Ordering Information

BASIC SERIES

- 50 Series = Washers and Seal Enhancers
- 53 Series = Caps and Plugs
- 54 Series = Nuts, Nipples and Applicable Washers
- 55 Series = Nuts
- 56 Series = Nipples
- 57 Series = Adapters, Caps and Plugs
- 58 Series = Nuts, Nipples, Applicable Washers and Adapters

Note: Refer To CGA Price List For Complete Assembly Model Numbers.



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