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Coaxial Roughing/ Foreline Trap

Instruction Manual



VARIAN

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INTRODUCTION

The Varian coaxial roughing/foreline trap is designed specifically for use in roughing manifolds in vacuum systems where freedom from contaminants is desired. The copper wool trapping media is contained within the stainless steel trap by stainless steel screens that are permanently attached to the trap body. The elements of the trap are shown in Figure 1-1.

The Varian copper wool-filled traps effectively protect vacuum systems from backstreaming roughing pump fluids. Figure 1-2 shows a typical trap installed in a diffusion-pumped system.

INSTALLATION

The coaxial roughing/foreline trap may be installed in either the vertical or horizontal position. The side of the trap that is marked with an "I" should be considered the "inlet". Varian recommends that the trap be installed with an isolation valve at both ends so that the trap may be isolated from the vacuum system while the vacuum system is still under vacuum. Both inlet and outlet connections are made using vacuum hoses, NW40 KF flanges, ConFlat® flanges, or ISO clamp-type flanges. Various combinations of flanges are available on request.

CLEANING

Although the trap cannot be disassembled, it can be cleaned by flushing it thoroughly with a chemical solvent. The trap should be thoroughly dry before re-installing it in the vacuum system.

ORDERING INFORMATION

Figure 1-3 shows the dimensional specifications for the trap; the accompanying table lists the part numbers of the different models of the trap and the dimensions corresponding to each model.

ACCESSORIES

The attached table lists the accessories available with the copper wool roughing/foreline trap.

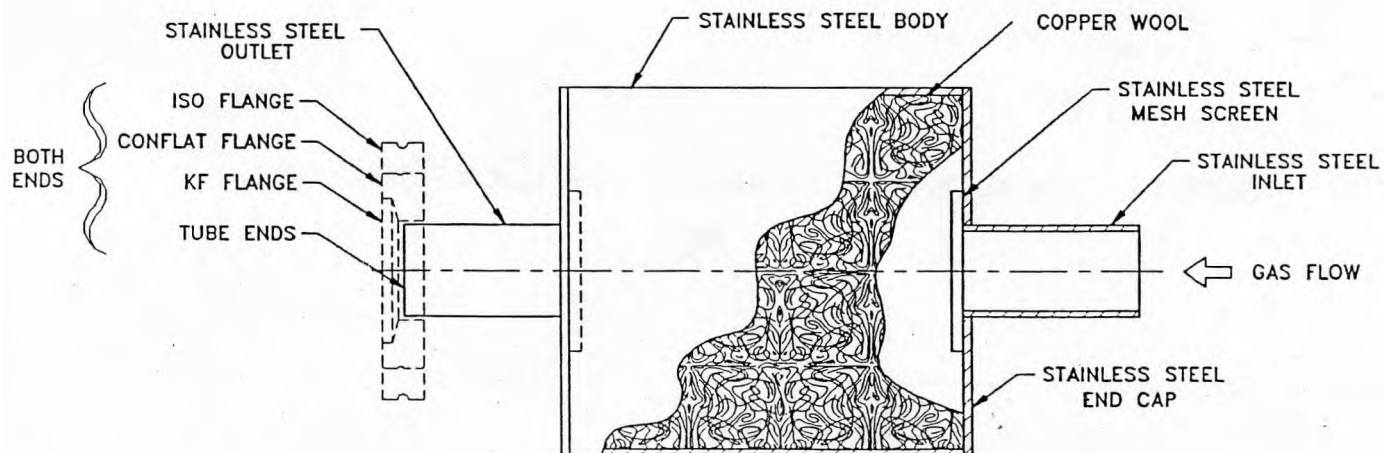


FIGURE 1-1. ELEMENTS OF ROUGHING/FORELINE TRAP

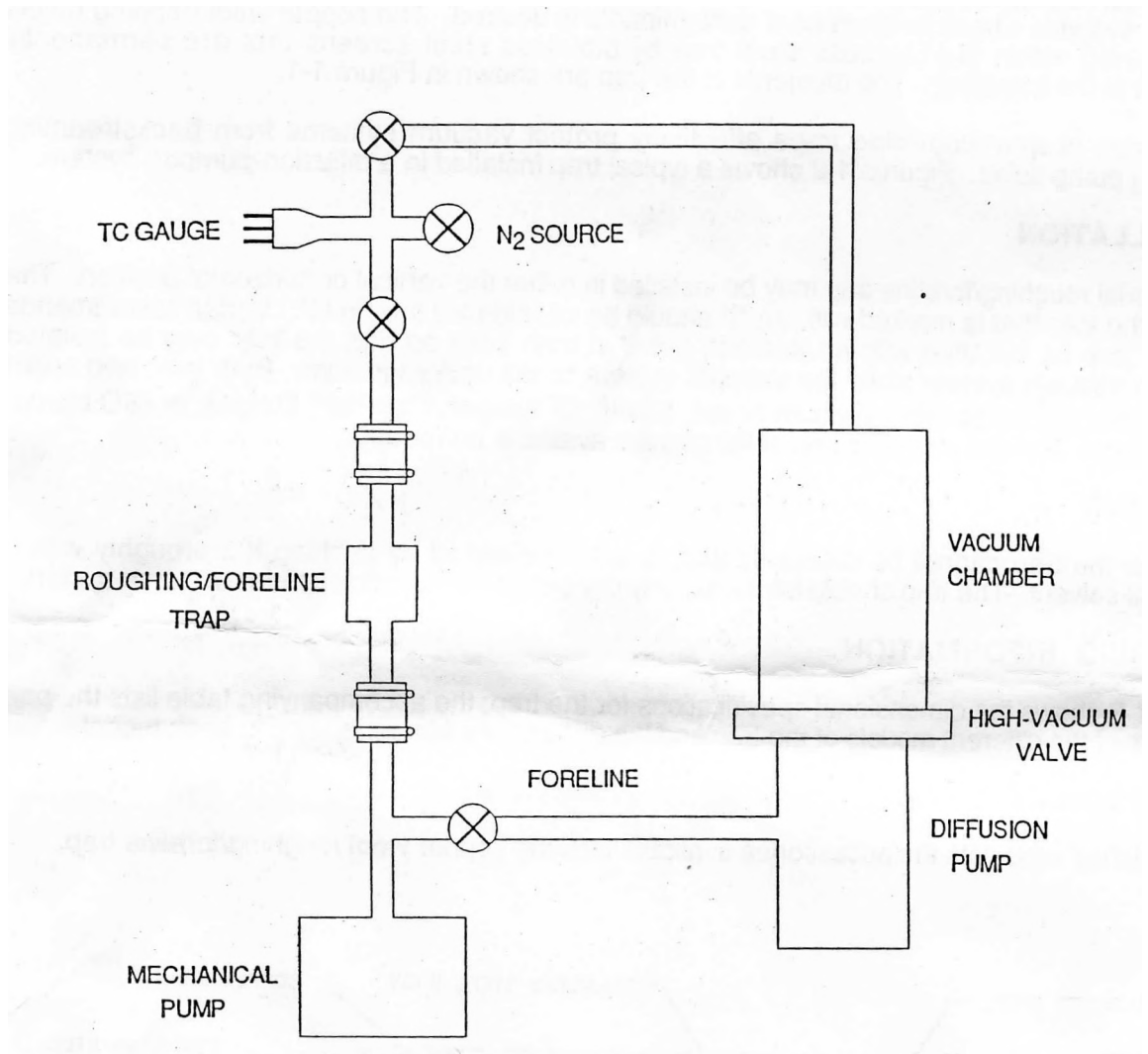


FIGURE 1-2. TYPICAL TRAP INSTALLATION IN A DIFFUSION PUMP SYSTEM

COAXIAL ROUGHING/FORELINE TRAP DIMENSION DIAGRAM

Trap Part Number	Description	Dimension inches (mm)		
		A	B	C
RT-0075-0075	Trap with hose connections	8.50 (216)	2.00 (51)	0.75 (19)
RT-0075-0133	Trap with 1.33 ConFlat® Flanges	9.50 (241)	2.00 (51)	0.75 (19)
RT-0075-NW16	Trap with NW16 Flanges	9.50 (241)	2.00 (51)	0.75 (19)
RT-0100-0100	Trap with hose connections	8.50 (216)	2.00 (51)	1.00 (25)
RT-0100-0212	Trap with 2.12 ConFlat Flanges	8.84 (225)	2.00 (51)	1.00 (25)
RT-0100-NW25	Trap with NW25 Flanges	8.84 (225)	2.00 (51)	1.00 (25)
RT-0150-0150	Trap with hose connections	8.50 (216)	2.00 (51)	1.50 (38)
RT-0150-0275	Trap with 2.75 ConFlat Flanges	8.92 (226)	2.00 (51)	1.50 (38)
RT-0150-NW40	Trap with NW40 Flanges	8.92 (226)	2.00 (51)	1.50 (38)
RT-0200-0200	Trap with hose connections	8.50 (216)	2.00 (51)	2.00 (51)
RT-0200-0338	Trap with 3.38 ConFlat Flanges	8.95 (227)	2.00 (51)	2.00 (51)
RT-0200-NW50	Trap with NW50 Flanges	8.95 (227)	2.00 (51)	2.00 (51)
RT-0250-0250	Trap with hose connections	8.50 (216)	2.00 (51)	2.50 (64)
RT-0250-0450	Trap with 4.50 ConFlat Flanges	9.25 (235)	2.00 (51)	2.50 (64)
RT-0250-1063	Trap with ISO 63 Flanges	9.00 (229)	2.00 (51)	2.50 (64)
RT-0300-0300	Trap with hose connections	8.50 (216)	2.00 (51)	3.00 (76)
RT-0300-0462	Trap with 4.62 ConFlat Flanges	9.25 (235)	2.00 (51)	3.00 (76)
RT-0300-1080	Trap with ISO 80 Flanges	9.00 (229)	2.00 (51)	3.00 (76)
RT-0400-0400	Trap with hose connections	8.50 (216)	2.00 (51)	4.00 (102)
RT-0400-0600	Trap with 6.00 ConFlat Flanges	9.38 (238)	2.00 (51)	4.00 (102)
RT-0400-I100	Trap with ISO 100 Flanges	9.00 (229)	2.00 (51)	4.00 (102)

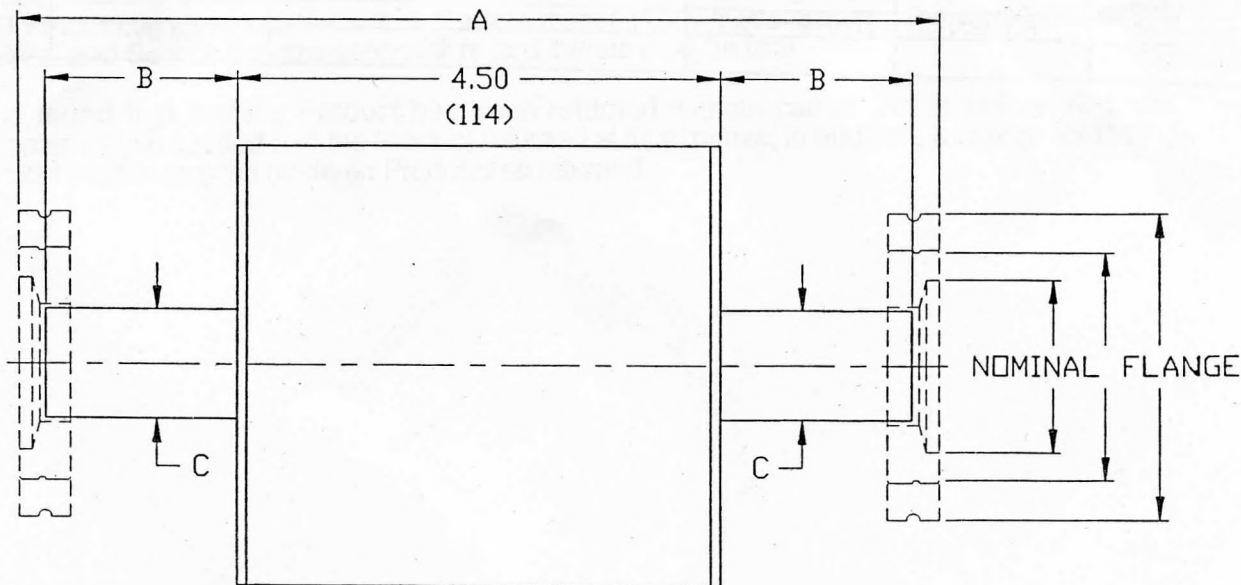


FIGURE 1-3. DIMENSIONS OF ROUGHING/FORELINE TRAP

ACCESSORIES

Trap Part Number	Copper Gasket	Bolt Set	KF Viton Centering Ring	KF Clamp	ISO Viton Centering Ring	ISO Clamp
RT-0075-0075						
RT-0075-0133	FG-0133-CU	FB-0133-C				
RT-0075-NW16			FKC-16-SV	KQ-16-AR		
RT-0100-0100						
RT-0100-0212	FG-0212-CU	FB-0275-C06				
RT-0100-NW25			KC-25-SV	KQ-25-AR		
RT-0150-0150						
RT-0150-0275	FG-0275-CU	FB-0275-C06				
RT-0150-NW40			KC-40-SV	KQ-40-AR		
RT-0200-0200						
RT-0200-0338	FG-0338-CU	FB-00450-C06				
RT-0200-NW50			KC-50-SV	KQ-50-AR		
RT-0250-0250						
RT-0250-0450	FG-0450-CU	FB-0450-C06				
RT-0250-I063					IC-063-SV	IC-063-100-A
RT-0300-0300						
RT-0300-0462	FG-0462-CU	FB-0450-C06				
RT-0300-I080					IC-063-SV	IC-063-100-A
RT-0400-0400						
RT-0400-0600	FG-0600-CU	FB-0450-C06				
RT-0400-1100					IC-100-SV	IC-063-100-A