

VARIABLE ANNULUS DESUPERHEATER

VAD

PRODUCT OVERVIEW

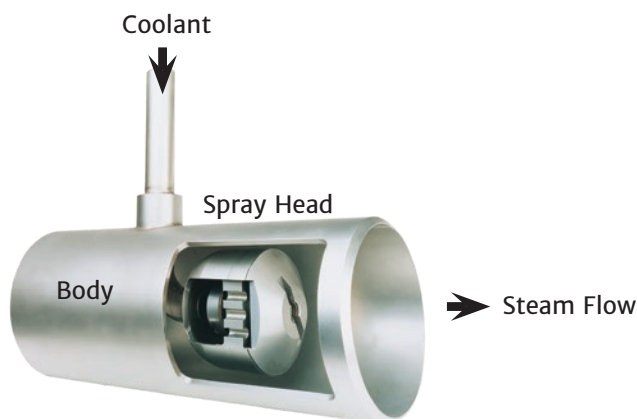
The VAD is a cost effective, line size desuperheater. Produced from stock materials it is readily available to satisfy general desuperheating and gas cooling applications. Essentially a dynamically contoured, stainless steel spray head concentrically located within a short section of pipe (body). The pipe acts as the desuperheater's outer body and pressure boundary. It fits into the main vapor line via either line size flanged or butt weld end connections for easy installation.

FEATURES

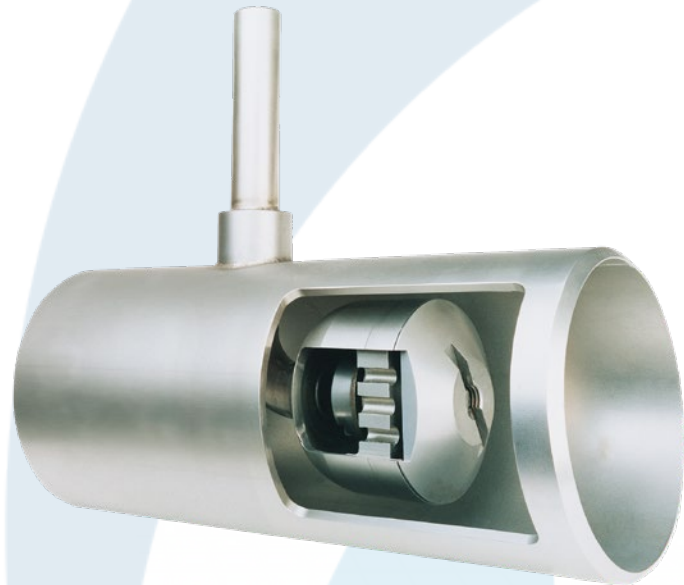
- Temperature control to within 10°F (5°C) of saturation
- Horizontal or vertical installation
- High rangeability 15:1
- Coolant pressure need only be 7 psi (48 kPa) superior to vapor
- Self-regulating 360° coolant annulus for uniform distribution
- No spray nozzles to introduce blockage concerns
- Full atomization over entire operating range
- Minimal vapor side pressure drop
- No thermal liners required
- Butt weld or flanged to ANSI 150, 300, 600 or DIN PN10, 16, 40, 64, 100

STANDARD MATERIALS

- Body ASTM A106 Gr. B carbon steel
- Spray head ASTM A312 TP316 stainless steel



COPES-VULCAN®



TYPICAL APPLICATIONS

The VAD Variable Annulus Desuperheater is available to satisfy general desuperheating and gas cooling applications:

- CHEMICAL
- POWER
- PULP & PAPER

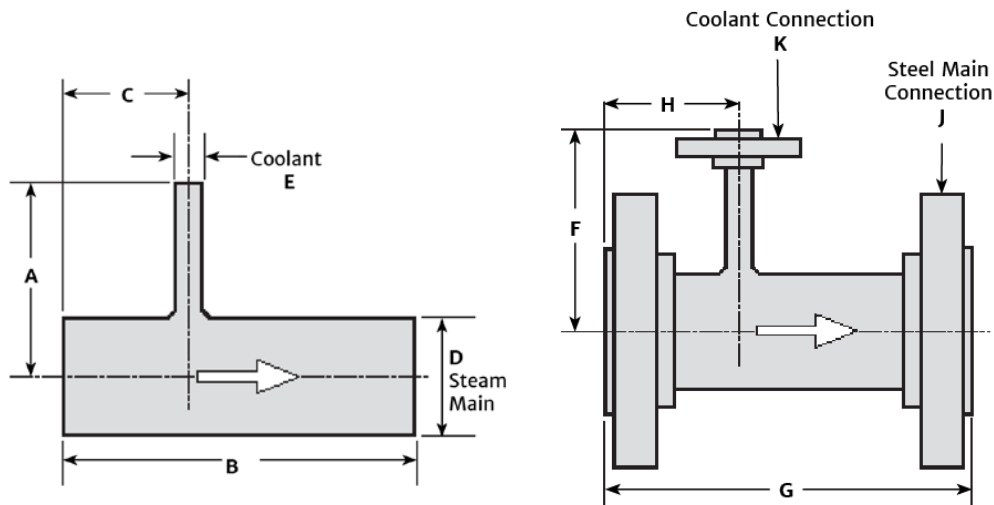
WEIGHTS AND DIMENSIONS

FLANGED

SIZE	Dimensions					Weights		
	F	G	H	J FLANGE ANSI (IN) DN	K FLANGE ANSI (IN) DN	ANSI 150 PN10/PN16	LBS/KG ANSI 300 PN40/PN64	ANSI 600 PN100
1" /25mm	3"/76mm	6"/152mm	2.5"/64mm	1"/25mm	1/8 NPT	4/2	7/3	9/4
1.25"/32mm	3.25"/83mm	6"/152mm	2.5"/64mm	1.25"/32mm	1/4 NPT	7/3	9/4	11/5
1.5"/40mm	3.69"/94mm	7"/178mm	3.5"/89mm	1.5"/40mm	3/8 NPT	9/4	13/6	15/7
2"/50mm	3.88"/99mm	8"/203mm	3.5"/89mm	2"/50mm	3/8 NPT	13/6	18/8	20/9
2.5"/65mm	4"/102mm	8"/203mm	3.5"/89mm	2.5"/65mm	3/8 NPT	20/9	26/12	29/13
3"/80mm	6"/152mm	10"/254mm	4"/102mm	3"/80mm	.5"/15mm	26/12	37/17	42/19
4"/100mm	7.5"/191mm	11"/279mm	5"/128mm	4"/100mm	.75"/20mm	40/18	60/27	82/37
5"/125mm	8"/203mm	13"/330mm	6"/153mm	5"/125mm	.75"/20mm	51/23	79/36	135/61
6"/150mm	9"/229mm	15"/381mm	6"/153mm	6"/150mm	1"/25mm	71/32	110/50	170/77
8"/200mm	10"/254mm	16"/406mm	6"/153mm	8"/200mm	1"/25mm	132/60	187/85	276/125
10"/250mm	13"/330mm	19"/483mm	8"/204mm	10"/250mm	1.5"/40mm	198/90	287/130	441/200
12"/300mm	14"/356mm	21"/533mm	8.5"/217mm	12"/300mm	1.5"/40mm	298/135	397/180	551/250
14"/350mm	16"/406mm	24"/610mm	9"/230mm	14"/350mm	1.5"/40mm	474/215	639/290	772/350
16"/400mm	17"/432mm	27"/686mm	10"/255mm	16"/400mm	1.5"/40mm	662/300	860/390	1103/500

BUTT WELD

D		Dimensions					Weights
SIZE	SCHED.	A	B	C	E		LBS/KG
					SIZE	SCHED.	
1" /25mm	40	3"/76mm	5.5"/140mm	2.25"/57mm	0.12"/6mm	40	1/0.4
1.25"/32mm	40	3.25"/83mm	5.5"/140mm	2.25"/57mm	0.25"/8mm	40	1/0.6
1.5"/40mm	40	3.69"/94mm	6.5"/165mm	3.25"/83mm	0.38"/10mm	40	2/1
2"/50mm	40	3.88"/99mm	7.5"/191mm	3.25"/83mm	0.38"/10mm	40	4/1.6
2.5"/65mm	40	4"/102mm	7.5"/191mm	3.25"/83mm	0.38"/10mm	40	6/2.5
3"/80mm	40	5.75"/146mm	9.5"/241mm	3.75"/96mm	0.5"/15mm	40	9/4
4"/100mm	40	7.25"/184mm	10.5"/267mm	4.75"/121mm	0.75"/20mm	40	13/6
5"/125mm	40	7.75"/197mm	12.5"/318mm	5.75"/147mm	0.75"/20mm	40	22/10
6"/150mm	40	8.75"/222mm	14.5"/368mm	5.75"/147mm	1"/25mm	40	35/16
8"/200mm	80	9.75"/248mm	15"/381mm	5.75"/147mm	1"/25mm	40	75/34
10"/250mm	80	12.75"/324mm	18"/457mm	7.50"/191mm	1.5"/40mm	40	119/54
12"/300mm	80	13.75"/349mm	19.5"/495mm	7.75"/198mm	1.5"/40mm	40	170/77
14"/350mm	80	15.75"/400mm	22.5"/572mm	8.25"/210mm	1.5"/40mm	40	309/140
16"/400mm	80	16.75"/425mm	25.5"/648mm	9.25"/236mm	1.5"/40mm	40	463/210



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