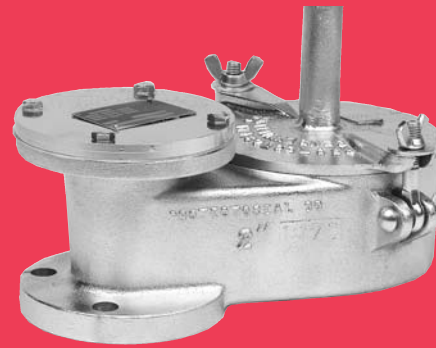


# SERIES 6240

## End-of-Line Vacuum Relief Vent

**SERIES  
6240**

- Sizes 2" (DN 50) through 12" (DN 300)
- Settings achieved by weight loading
- Reduces costly evaporation losses
- Leakage rate of less than 1 SCFH of air at 90% of set point
- Patented, FEP film "Air-Cushioned Seating"
- Low-leak pallet design - certified test reports
- Conforms with European ATEX Directive 94/9/EC
- Factory tested / certified for leakage and correct settings
- Available in Aluminum, Ductile Iron, Stainless Steel, Carbon Steel, and Alloy C / C276



### OBJECTIVE

The Protectoseal Series 6240, End-of-Line Vacuum Vent provides vacuum relief to maintain tank's vapor space within safe operating parameters. Vent settings minimize vent opening.

### TECHNIQUE

A pallet in the vent housing retards air intake as the tank normally breathes in due to atmospheric temperature changes or due to emptying the tank. The pallet opens and closes to permit only the intake relief necessary to avoid tank damage under normal operating conditions.

Peripheral pallet assembly guides and center pallet stem guides insure proper alignment of pallet assembly on the seat and smooth lifting and reseating action.

### Optimized Performance Vents™

Protectoseal's "Optimized Performance Vents" incorporate patented features that provide the optimum overall vent performance with regard to sealing, set point, flow and resealing (blow down).

### SPECIAL FEATURES

**Fast Inspection, Easy Maintenance.** Design and light weight of entire unit permits easy, convenient handling for inspection and maintenance.

**Maintains Accurate Pressure Settings.** Set points are accurate to within +/- 3% across the entire range of available settings.

**Air-Cushioned Seating.** A flat, smooth diaphragm of FEP film is supported on both sides of an annular channel to form a floating air seal with the seat. An outer support rim assures proper seating.

**Automatic Condensate Drainage.** Self-draining housing body and drip rings keep condensate away from seating surfaces. Vent is protected from freezing, binding and clogging.

**Low-Leakage.** Vent leakage is no more than 1 SCFH at 90% of the set pressure. Pressure tested against leakage through castings and gasketed joints.

**Sizes Available.** Available in 2" (DN 50) through 12" (DN 300) sizes. Aluminum flanged to mate with 125# ANSI and DIN PN 16 flat face flanges. All other materials mate with 150# ANSI and DIN PN 16 raised face flanges. Other drilling patterns are also available upon special request.

**PRO-FLOW III® Sizing and Selection Software.** Use PRO-FLOW III® to select the correct size unit for pressure and vacuum relief calculated in accordance with API 2000, ISO 28300 NFPA 30 and OSHA 1910.106.

### CONSTRUCTION

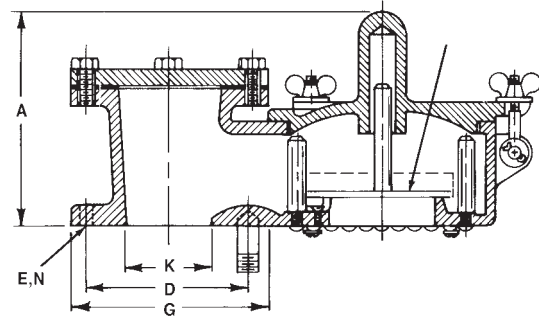
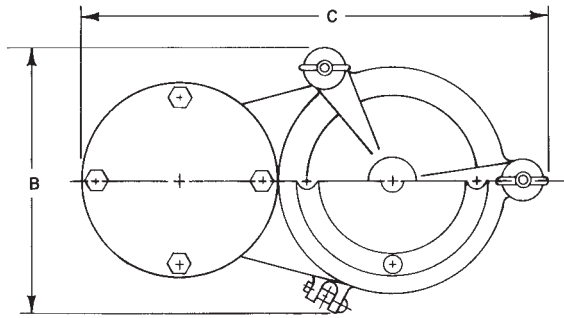
A comprehensive range of materials is offered as shown in the chart below. Non-metallic (thermoplastic resin & FRP) construction available. Other materials and features can be furnished upon request.

### Available Options.

- Alternate diaphragm materials
- Material certifications for castings
- Lower than standard minimum vacuum setting
- Higher than standard maximum vacuum setting
- Mounting connections added to vacuum port
- Steam jacketing available
- Electronic indication of vent opening
- FEP coating
- Kynar® coating (*Kynar® is a Registered Trademark of Arkema, Inc.*)
- Special cleaning & packaging for the storage of ultrapure liquids

Series	Housing	Pallet	Pallet Diaphragm	Weight Material
6240	Aluminum 356	Aluminum	FEP Film	Steel or Lead
C6240	Ductile Iron	316 S.S.	FEP Film	Steel or Lead
CS6240	Cast Steel	316 S.S.	FEP Film	Steel or Lead
F6240	316 S.S.	316 S.S.	FEP Film	S.S. or Lead
RE6240	Aluminum 356	316 S.S.	FEP Film	Steel or Lead
M6240	Alloy C	C276	FEP Film	C276 or Lead

Note: Aluminum flanged to mate with 125# ANSI and DIN PN 16 flat face flanges. All other materials mate with 150# ANSI and DIN PN 16 raised face flanges.



Dimensions shown are for reference only, contact Factory for certified drawings.

## DIMENSIONS & ORDERING INFORMATION

Cat. No.*	Flange K	Ht. A	Width B	Length C	B.C. D	Dia. G	Dia. E	Holes N
6242	2"	8½"	7½"	13¾"	4¼"	6	¾"	4
6242DN	DN50	216mm	191mm	349mm	125mm	165mm	18mm	4
6243D	3"	7"	9¾"	15"	6"	7½"	¾"	4
6243DN	DN75	178mm	248mm	381mm	160mm	200mm	18mm	8
6244D	4"	9"	10"	18½"	7½"	9"	¾"	8
6244DN	DN100	229mm	254mm	470mm	180mm	220mm	18mm	8
6246D	6"	12¼"	12⅞"	23½"	9½"	11"	⅞"	8
6246DN	DN150	311mm	327mm	597mm	240mm	285mm	22mm	8
6248D	8"	12½"	15¾"	28¼"	11¾"	13½"	⅞"	8
6248DN	DN200	318mm	400mm	718mm	295mm	340mm	22mm	12
6250D	10"	13⅞"	18½"	33½"	14¼"	16"	1"	12
6250DN	DN250	352mm	470mm	851mm	355mm	405mm	26mm	12
6252D	12"	16⅞"	19"	37¼"	17"	19"	1"	12
6252DN	DN300	416mm	483mm	946mm	410mm	460mm	26mm	12

\* Cat. No. designates Aluminum Housing & Pallets, please refer to chart on the reverse for other materials of construction.

## PRESSURE AND/OR VACUUM SETTINGS (Consult factory for settings outside of STANDARD range.)

Flange Size	STANDARD MINIMUM SETTINGS						STANDARD MAXIMUM SETTINGS					
	VACUUM						PRESSURE			VACUUM		
	Aluminum			Other Materials			All Materials			All Materials		
	oz./in. <sup>2</sup>	in.W.C.	kPa	oz./in. <sup>2</sup>	in.W.C.	kPa	oz./in. <sup>2</sup>	in.W.C.	kPa	oz./in. <sup>2</sup>	in.W.C.	kPa
2" / DN 50	0.50	0.87	0.22	0.75	1.30	0.32	n/a	n/a	n/a	11.00	19.03	4.74
3" / DN 80	0.50	0.87	0.22	0.75	1.30	0.32	n/a	n/a	n/a	11.00	19.03	4.74
4" / DN 100	0.50	0.87	0.22	0.75	1.30	0.32	n/a	n/a	n/a	7.40	12.80	3.19
6" / DN 150	0.50	0.87	0.22	0.75	1.30	0.32	n/a	n/a	n/a	18.00	31.14	7.76
8" / DN 200	0.50	0.87	0.22	0.75	1.30	0.32	n/a	n/a	n/a	18.00	31.14	7.76
10" / DN 250	0.50	0.87	0.22	0.75	1.30	0.32	n/a	n/a	n/a	19.00	32.87	8.19
12" / DN 300	0.50	0.87	0.22	0.75	1.20	0.32	n/a	n/a	n/a	23.00	39.79	9.91



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