

## Getting the Most from Your Vacuum Pump

With proper care and maintenance, you can maximize the return on your investment in vacuum technology. Use this Catalog to find everything you need for your vacuum pump.

- Operation
- Maintenance
- Repair
- Repair Services



### 5 Key Elements to Top Pump Performance and Long Life

1

Change oil frequently. Certified Welch® Oil protects your pump for efficient operation and long life.



8995G-11



1407K-11

Page 2

2

Protect your pump from damaging fumes and particulates. Use cold traps and in-line filters to limit contaminants that reduce vacuum efficiency and pump life.



1420H-14



1475K-21

Page 10-11

3

Changing exhaust filters periodically maximizes air flow, minimizes noise, and reduces airborne oil and particulates.



1417P-10



1412C

Page 12-13

4

Buying Certified Welch-Ilmvac Rebuild Kits provides original parts for repair - enables a return to your pump's original performance specifications.



402044-US

Page 37

5

Economically restore your pump to top condition through Welch-Ilmvac warrantied repair service. See how our pump maintenance pays off - better performance and fewer repairs using original equipment replacement components.



Page 14-17

# Exhaust Filters & Mufflers

## Standard Exhaust Filters & Directional Exhaust Filters



1417P-10

- Filters oil mist from pump exhaust
- Easy replacement of element
- Reduces pump noise
- Filters to 0.3 micron particle size
- Screw-in type

Standard Exhaust Filters				
Use with Pump Model	Dimensions, inches		Filter CAT. No.	Replacement Element CAT. No.
	Diameter	Height		
8890 <sup>1</sup> , 8905, 1399, 1400, 1400N	2.5"	2.5"	1417	1417L (2 pk)
8907, 8912, 8917	2.5"	4.5"	1417P-7	1417R
8920, 8925, 1376, 1402, 1405, 1402N, 1376N	5.0"	6.25"	1417P-10	1417G
1397, 1374	5.0"	9.0"	1417P-20	1417H-01
8917A-80, 8947C-80	2.5"	4.5"	1417P-7	1417R

Note: 1. GEM® (8890) includes 1417 as standard equipment.



1417A

- Large, high capacity
- 360° Swivel outlet with tubing connector
- Screw-in type
- Continuously separates oil mist from the vacuum pump exhaust and by gravity returns the oil to the pump.

Directional Exhaust Filters						
Use with Pump Model	Dimensions, inches			Filter CAT. No.	Element CAT. No.	Gasket Replacement CAT. No.
	Diameter	Height	Outlet Tube O.D.			
8907, 8912, 8917, 8920, 8925, 1376, 1380, 1402, 1405, 1402N, 1376N	5.0"	7.5"	1.0"	1417A	1417G	1417A-01
8907, 8912, 8917	6.5"	10.0"	2.0"	1417B	1417H	1417B-01

## Exhaust Oil Recycler



Exhaust Mist Eliminator shown installed on pump with oil return line.

Exhaust oil recyclers are recommended for vacuum systems with continuous pressure of 1 torr (1mm Hg) or higher.<sup>1</sup> At these pressures, conventional exhaust filters quickly saturate. The Mist Eliminator System continuously separates oil mist from the vacuum pump exhaust and actively returns the oil to the pump.

CAT. No.	Vacuum Pump Model No.
1416B	8890 (GEM®)
1416H	8905
1416C	8907, 8912, 8917, 8920, 8925
1416H-01	1400, 1400N
1416C-01	1376, 1376N, 1402, 1402N, 1405

Note: 1. CAUTION: Two stage vane vacuum pumps such as models 8905, 8907, 8912, 8920, 8917, 8925, 1400, 1402, 1376, 1405, 1400N, 1402N and 1376N should not be operated continuously at pressures above 10torr.

## Hermetically Sealed Oil Mist Eliminators



When attached to an effective exhaust line, the hermetically sealed oil mist eliminator prevents corrosive vacuum pump exhaust gases from escaping into the room. It also coalesces oil mist from the pump exhaust and allows it to drain back into the pump. Coalescing the oil mist prevents loss of oil and the frequent need to add expensive vacuum fluids. Stainless steel construction with borosilicate microfiber element and fluoroelastomer gaskets. Requires, but does not include pump adaptor kit. Dimensions of CAT. No. 1416D: 5"Wx7-3/4"H; 1416F, 5"Wx13-3/8"H. 1416D exhaust port accepts 13/16" I.D. hose.

Use with Pump Model	Mist Eliminator CAT. No.	Pump Adaptor CAT. No.	Replacement Element CAT. No.
1400N	1416D	1416E-01	1417Y-05
1402N, 1376N	1416D	1416E-02	1417Y-05

# Peristaltic - Fluid Transfer Pumps

## Models 3100/3200

### Replacement Cartridges for Models 3100/3200

Material	Silicone	PVC
Applications	Biofluids / Food	General Lab, Viscous Fluids
Tubing I.D. (Flow Rate Range)	Tubing Cartridges (5 each) CAT. No.	Tubing Cartridges (5 each) CAT. No.
1.6mm (3-30 ml/min) - 5 pack	3432K-01	3434K-01
3.2mm (10-130 ml/min) - 5 pack	3432K-02	3434K-02
4.8mm (30-300 ml/min) - 5 pack	3432K-04	3434K-04



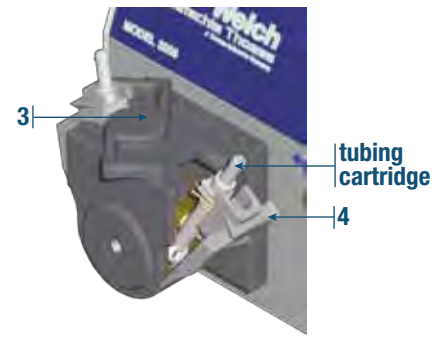
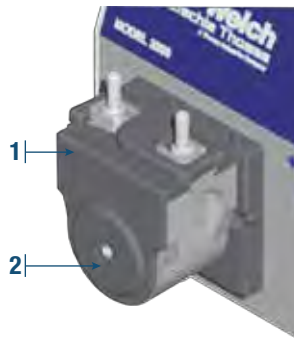
3100



3200

### Service Kit CAT. No. 3200K-02 for Models 3100/3200

ID	Qty.	Description
1	1	Pump Head
2	1	Roller Carrier
3	1	Lock
4	1	Rolling Band



## Index

Catalog No.	Page No.
1201E	46
1201T	46
1371A-01	19,20,24,25,26
1371A-01	26
1373K-05	36
1373K-06	36
1374	18
1374A	18
1374K-07	18
1374K-08	18
1376	19
1376B-46	36
1376K-05	19
1376K-06	19
1376K-09	26
1376K-10	26
1376K-46	36
1376K-47	36
1376N	26
1380	20
1380K-03	20
1380K-04	20
1393F	7,27
1393G	7,26,28
1393G	28
1393H	7
1393J	22,23
1393K	19,20,24,25
1393L	18,21
1393N	8
1393P	8
1393X	7,29
1397	21
1397A	21

Catalog No.	Page No.
1397B-46	36
1397K-07	21
1397K-08	21
1397K-46	36
1397K-47	36
1399	22
1399A	22
1399K-03	22
1399K-04	22
1400	23
1400A	23,27
1400K-03	23
1400K-04	23
1400K-09	27
1400K-10	27
1400N	27
1401D	19,20,24,25,26,28
1401D-01	19,20,24,25,26
1401E	22,23,27
1401E-01	22,23,27
1401F	18,21
1402	24
1402B-46	36
1402K-02	25
1402K-05	24,25
1402K-06	24
1402K-09	28
1402K-10	28
1402K-46	36
1402K-47	36
1402N	28
1405	25
1405A	19,20,24,25,26,28
1407K-11	3

Catalog No.	Page No.
1407K-15	3
1407K-20	3
1412C	13,51,52
1412D	13
1412E	13
1415B	13,42,51,52,53,54
1415C	13,51,52,53,54
1415D	13
1416B	12
1416C	12
1416C-01	12
1416D	12
1416E-01	10,12
1416E-02	10,12
1416H	12
1416H-01	12
1417	12,29
1417G	12
1417H-01	12
1417L	12,29
1417P-10	12
1417P-20	12
1417P-7	12
1417R	12
1417Y-05	12
1420H-01	11
1420H-02	11
1420H-14	10
1420H-17	11
1420H-18	11
1420H-19	11
1420H-20	10
1420H-21	10
1421	5

Catalog No.	Page No.
1421D	5
1423B	13,42
1426	45
1426K-01	45
1430A	11
1430B	11
1430C	11
1475K-01	55
1475K-02	55
1475K-03	55
1475K-04	55
1475K-05	55
1475K-06	55
1475K-07	55
1475K-08	55
1475K-09	55
1475K-10	55
1475K-20	55
1475K-21	11,55
1475K-22	11
1475K-23	11
1515	4
1515A	4
1515B	4
1520B-01	4
1520B-02	4
1520K-10	4
1520K-11	4
1525B-01	4
1525C-02	4
1525K-10	4
1525K-11	4
1801Z	46
2014	38