

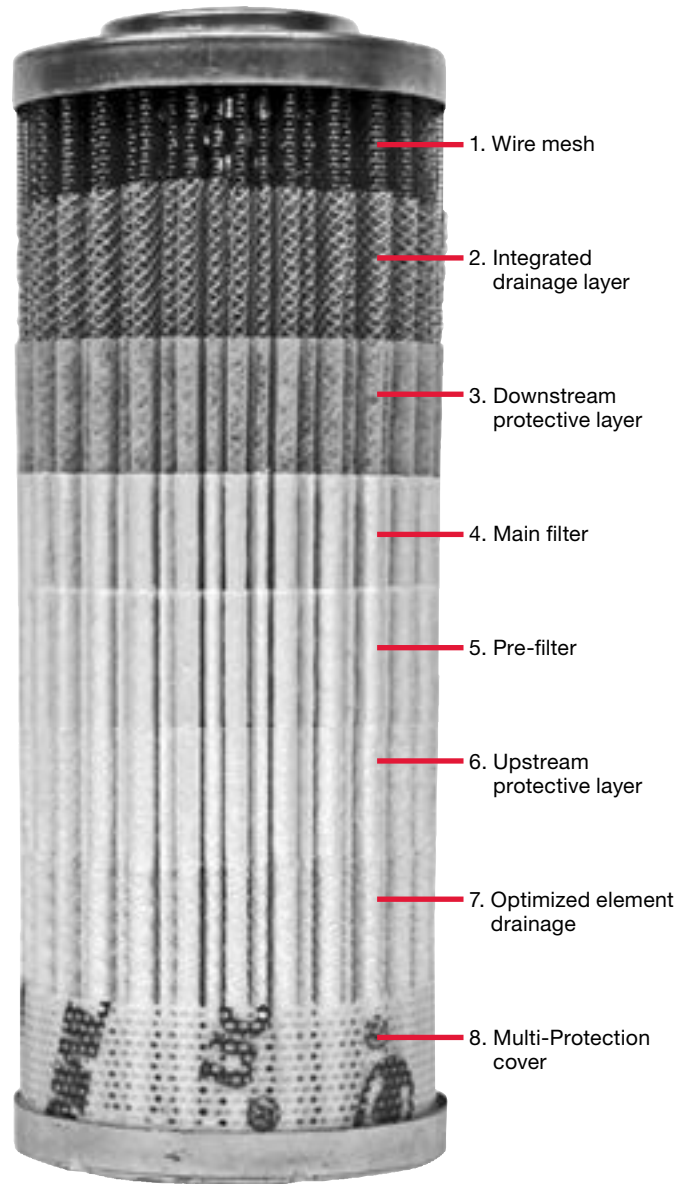
Overview of Elements

Optimicron® Elements

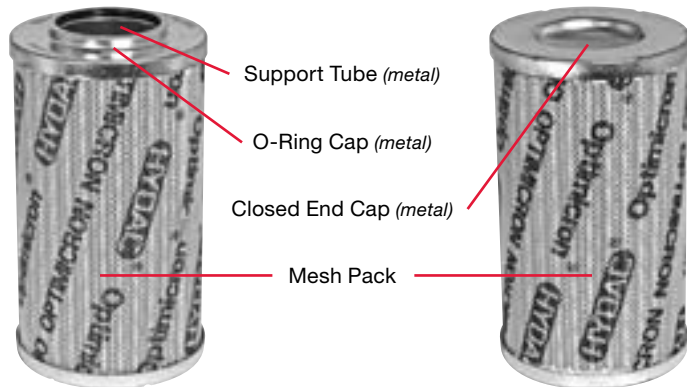
- ON - code designation
- Glass fiber, multi-layered with support
- Collapse rating - 290 psid (20 bar)
- 1, 3, 5, 10, 15, 20 micron
- Filtration Rating $\beta_{x(e)} \geq 1000$
- Depth Filtration
- Pressure and Return elements available
- Disposable - single use element
- Plastic outerwrap



Element Construction

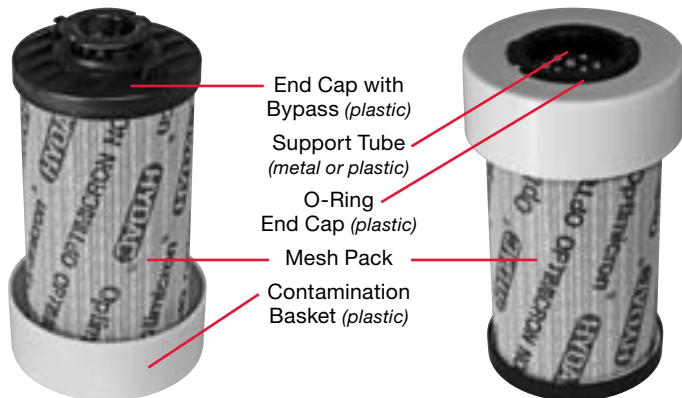


Optimicron® Pressure Element



Optimicron® Return Element

Return filters include Bypass in the endcap - insures proper bypass operation at all times.



Optimicron® Power Elements

- ON/PO - code designation
- Synthetic Fiber, multi-layered with support
- All Plastic Construction
- Collapse Rating - 145 psid
- 3, 5, 10, 20 micron
- Stat-Free Technology included
- Depth Filtration
- Disposable - single use element
- Plastic outerwrap
- API 614 Approved



FILTER ELEMENTS

Optimicron® Series

Energy efficient filtration



Description

The Optimicron filter elements have been optimized with respect to filtration performance and energy efficiency. These elements offer the best optimization of separation efficiency, service life and differential pressure versus flow rate.

As a complete element package, the innovative characteristics of the HYDAC technology has a very positive impact on the differential pressure of the elements and high degree of filtration efficiency and performance.

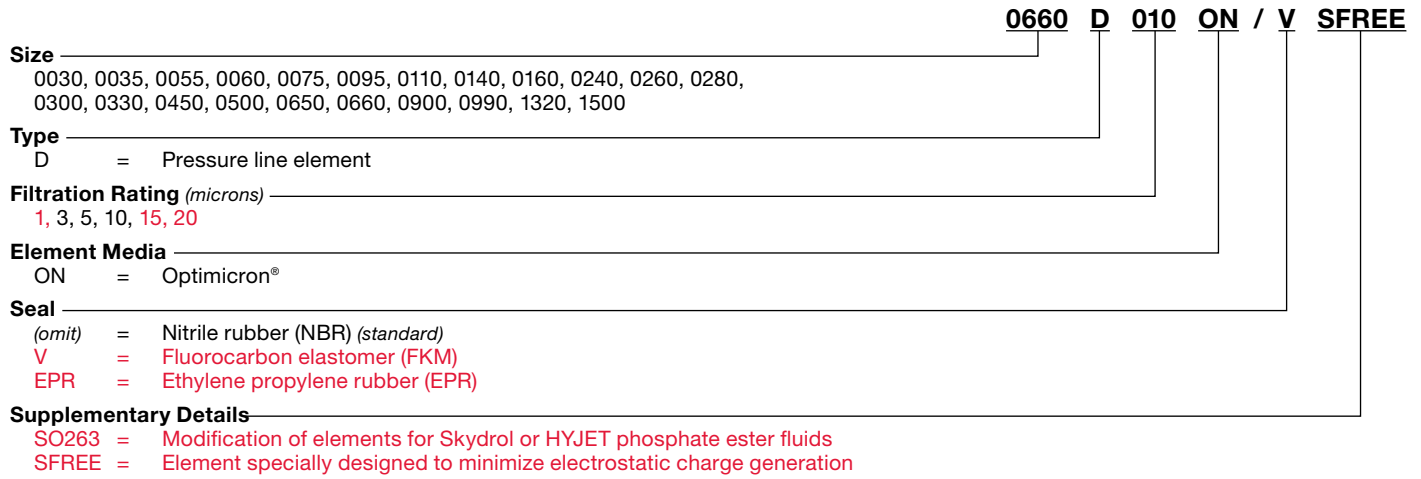
Features

- Unique HELIOS pleat geometry – optimizes media area open to flow to calm the flow in areas between pleats reducing ΔP .
- Outer wrap perforations insure optimized flow onto the filter pleats and help to minimize pressure losses.
- Outer wrap perforations also help to distribute the fluid incidence stresses evenly in the axial and radial directions and thus increase tear resistance.

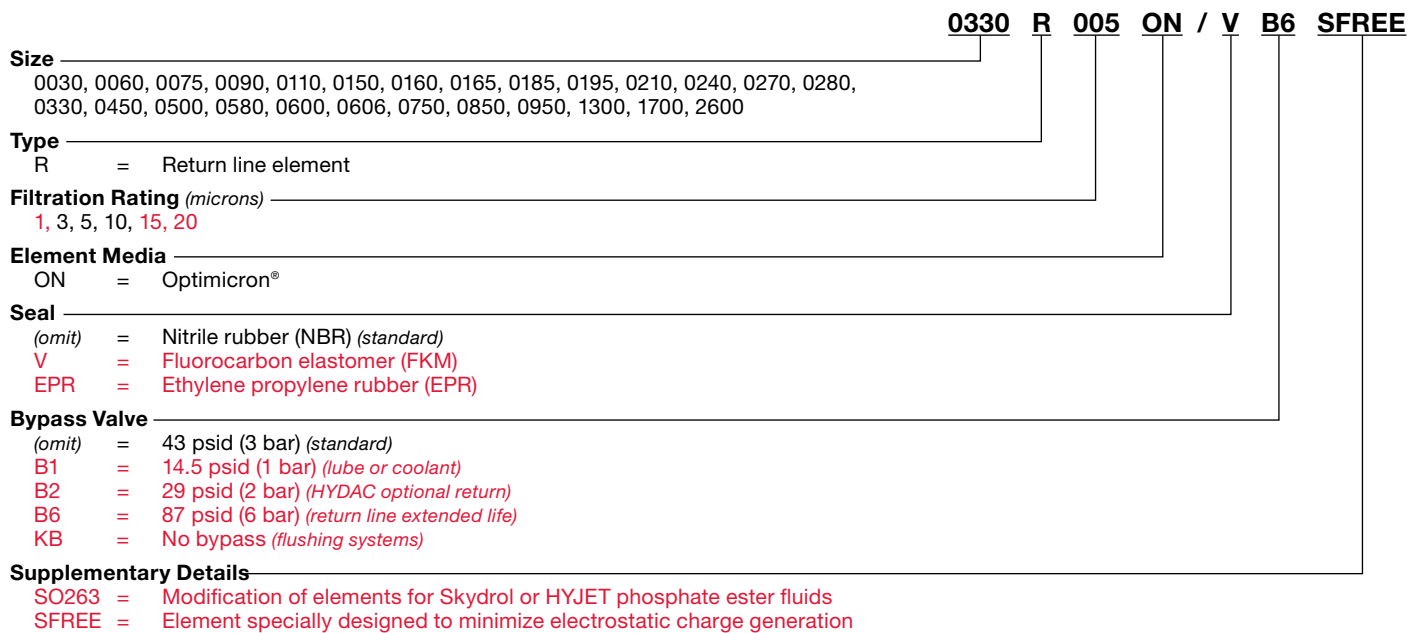
Technical Specifications

Collapse Rating	290 psid (20 bar)
Temperature range	-22°F to 212°F (-30°C to 100°C)
Flow direction	outside to inside
Category	Disposable - single use
Bypass Cracking Pressure	R (only) = 43 psid (3 bar) (standard, others available)

“D” Pressure Elements Model Code

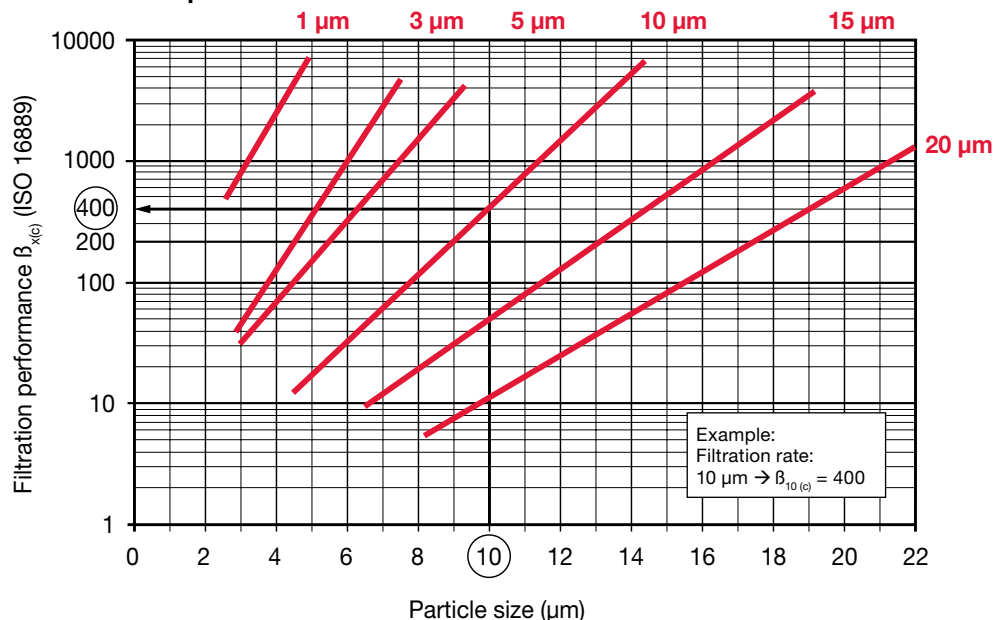


“R” Return Elements Model Code



Model Codes Containing Red are non-stock items — Minimum quantities may apply – Contact HYDAC for information and availability

Beta Ratio (β) Values for Optimicron



FILTER ELEMENTS

Element K-Factors

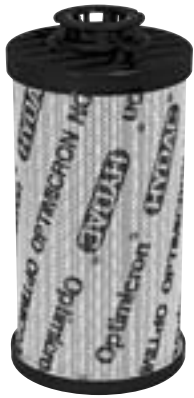
Optimicon® “D...ON” Pressure Elements

K-Factors (gradient coefficients) for Filter Elements: These K-factors in (psi/gpm) apply to hydraulic and lubricating fluids with kinematic viscosity of 141 SSU/(30mm²/S). The pressure drop changes proportionally to the change in viscosity.



Optimicon Size	...D...ON (Pressure Element)						Wgt. (lbs.)
	1 µm	3 µm	5 µm	10 µm	15 µm	20 µm	
0030 D XXX ON	4.27	3.507	2.376	1.251	0.768	0.62	0.19
0035 D XXX ON	2.755	1.169	0.938	0.752	0.549	0.408	0.26
0055 D XXX ON	1.427	0.675	0.543	0.434	0.284	0.211	0.37
0060 D XXX ON	2.936	1.427	1.004	0.664	0.537	0.347	0.23
0075 D XXX ON	0.916	0.461	0.37	0.296	0.183	0.136	0.49
0095 D XXX ON	0.724	0.37	0.296	0.238	0.144	0.105	0.59
0110 D XXX ON	1.416	0.735	0.527	0.333	0.254	0.164	0.54
0140 D XXX ON	1.092	0.631	0.406	0.24	0.194	0.126	0.44
0160 D XXX ON	1.015	0.604	0.423	0.225	0.204	0.175	0.58
0240 D XXX ON	0.631	0.379	0.293	0.175	0.134	0.115	0.78
0260 D XXX ON	0.449	0.272	0.212	0.127	0.1	0.079	0.71
0280 D XXX ON	0.304	0.185	0.15	0.082	0.075	0.064	1.75
0300 D XXX ON	0.801	0.488	0.391	0.268	0.154	0.143	0.66
0330 D XXX ON	0.452	0.23	0.185	0.135	0.085	0.067	1.13
0450 D XXX ON	0.401	0.244	0.193	0.131	0.077	0.069	1.36
0500 D XXX ON	0.277	0.141	0.114	0.068	0.052	0.041	1.50
0650 D XXX ON	0.245	0.148	0.121	0.081	0.047	0.044	2.04
0660 D XXX ON	0.207	0.106	0.086	0.051	0.039	0.031	2.53
0900 D XXX ON	0.185	0.115	0.092	0.06	0.036	0.035	2.56
0990 D XXX ON	0.138	0.07	0.057	0.033	0.026	0.02	3.29
1320 D XXX ON	0.102	0.053	0.042	0.025	0.019	0.015	8.39
1500 D XXX ON	0.09	0.053	0.038	0.026	0.02	0.015	10.44

Optimicon® “R...ON” Return Elements



Optimicon Size	...R...ON (Return Element - Low Pressure)						Wgt. (lbs.)
	1 µm	3 µm	5 µm	10 µm	15 µm	20 µm	
0030 R XXX ON	4.928	3.754	2.409	1.471	0.922	0.807	0.142
0060 R XXX ON	2.59	1.295	0.944	0.539	0.494	0.376	0.286
0075 R XXX ON	1.405	1.065	0.735	0.401	0.263	0.241	0.508
0090 R XXX ON	1.235	0.719	0.521	0.333	0.236	0.176	0.364
0110 R XXX ON	1.224	0.719	0.487	0.296	0.234	0.178	0.46
0150 R XXX ON	0.735	0.428	0.31	0.198	0.14	0.105	0.502
0160 R XXX ON	0.878	0.439	0.312	0.177	0.148	0.182	0.682
0165 R XXX ON	0.774	0.518	0.404	0.221	0.123	0.133	0.77
0185 R XXX ON	0.571	0.408	0.315	0.161	0.091	0.077	0.873
0195 R XXX ON	0.42	0.301	0.232	0.119	0.067	0.057	1.115
0210 R XXX ON	0.311	0.18	0.14	0.084	0.055	0.048	1.684
0240 R XXX ON	0.571	0.284	0.201	0.125	0.101	0.077	0.848
0270 R XXX ON	0.201	0.116	0.091	0.054	0.036	0.031	2.358
0280 R XXX ON	0.28	0.141	0.114	0.078	0.058	0.044	1.763
0330 R XXX ON	0.444	0.204	0.15	0.081	0.07	0.056	1.54
0450 R XXX ON	0.347	0.174	0.126	0.077	0.055	0.047	1.798
0500 R XXX ON	0.289	0.143	0.104	0.06	0.046	0.038	2.28
0580 R XXX ON	0.137	0.068	0.049	0.029	0.022	0.019	3.975
0600 R XXX ON	0.129	0.068	0.06	0.033	0.023	0.019	3.321
0660 R XXX ON	0.196	0.093	0.066	0.037	0.031	0.025	3.488
0750 R XXX ON	0.116	0.061	0.05	0.029	0.019	0.018	4.764
0850 R XXX ON	0.152	0.072	0.055	0.032	0.024	0.020	4.328
0950 R XXX ON	0.131	0.057	0.043	0.026	0.021	0.017	5.076
1300 R XXX ON	0.094	0.04	0.032	0.019	0.018	0.012	9.188
1700 R XXX ON	0.074	0.035	0.029	0.015	0.014	0.010	7.564
2600 R XXX ON	0.046	0.02	0.016	0.01	0.009	0.006	11.964

Optimicon® Power “ON/PO” Elements



Optimicon Power Size	...A...ON			
	5 µm	10 µm	20 µm	Wgt. (lbs.)
0110 R XXX ON/PO	0.199	0.169	0.111	0.562
0240 R XXX ON/PO	0.072	0.061	0.040	0.873
0330 R XXX ON/PO	0.044	0.038	0.024	2.12
0500 R XXX ON/PO	0.029	0.025	0.016	2.372
0660 R XXX ON/PO	0.019	0.016	0.010	3.697
0850 R XXX ON/PO	0.015	0.013	0.009	5.357
0950 R XXX ON/PO	0.010	0.012	0.008	7.317
1300 R XXX ON/PO	0.010	0.008	0.005	7.848
1700 R XXX ON/PO	0.007	0.006	0.004	10.02
2600 R XXX ON/PO	0.004	0.004	0.003	15.18
2700 R XXX ON/PO	0.004	0.004	0.003	21.94

Optimicon Power Size	API Compliant	
	10 µm	Wgt. (lbs.)
0110 A XXX ON/PO	0.169	0.259
0120 A XXX ON/PO	0.075	0.937
0230 A XXX ON/PO	0.037	2.731
0240 A XXX ON/PO	0.061	1.011
0330 A XXX ON/PO	0.038	1.671
0500 A XXX ON/PO	0.025	2.447
0540 A XXX ON/PO	0.018	6.15
0880 A XXX ON/PO	0.008	9.034
1400 A XXX ON/PO	0.005	16.18
2600 R XXX ON/PO	0.004	16.73
2700 A XXX ON/PO	0.004	20.61