

Off-Line Filtration Skids

Schroeder's standard line of filtration skids for off-line applications

Introduction

Schroeder's filtration skids are compact, self-contained filtration systems equipped with high efficiency, high capacity elements capable of removing particulate contamination and/or water quickly, and economically.

Over 90% of all hydraulic failures are caused by contaminants in the fluid; proper filtration is essential in achieving long component life and efficient system operation. Schroeder's filter skids supplement in-line filters whenever the existing filtration is incapable of obtaining the desired ISO cleanliness level. Common uses include bulk oil filtration, the pre-filter and transfer of fluids, and system flushing.

Standard skids include a hydraulic pump, electric motor, and either a single or dual K9 or QF15 housing. Many different component combinations provide the flexibility to match specific system viscosity, flow, and cleanliness requirements. Multiple housing lengths give the option of adding additional dirt holding capacity.



Benefits

- Protects and extends the life of expensive components
- Minimizes downtime and maintenance costs
- Designed to handle high viscosity oils up to 5,000 SUS
- Many component combinations and variable starter options allow the flexibility to match specific user needs
- Four wheel cart option provides product portability
- Low noise level
- Drip pan minimizes oil spillage
- Market leading Schroeder Excellement® synthetic filtering media provides for quick, efficient clean up, with maximum element life
- Availability of all plastic, environmentally friendly, coreless elements

Features

Environmentally Friendly

The QF15 housing accepts Schroeder's QCLQFZ coreless elements (16" and 39" lengths), as well as standard Q and QPML (deep pleat) elements. The all plastic construction of Schroeder coreless elements helps protect the environment and saves on disposal costs by reducing metallic waste. Coreless elements can be crushed, shredded or burned.

Easy Servicing

As base-ported filter housings, element access for both the K9 and QF15 is through the cap. This makes for quick and easy element changeouts, with a minimal chance of oil spillage. All elements are singular construction (no stacked elements).

Applications

- Supplemental Filtration
- Bulk Oil Storage / Transfer
- System Flushing
- In-Plant Maintenance
- Recycling
- Gear Boxes

Schroeder
INDUSTRIES

580 West Park Road | Leetsdale, PA 15056
ph. 724.318.1100 | fax 724.318.1200

www.schroederindustries.com



An ISO 9001:2008 Certified Company

Technical Specifications

Flow Rating: Up to 82 gpm (310 L/min)

Operating Pressure: Limited by 150 psi (10 bar) internal relief valve.

Temperature Range: -20°F to 225°F (-29°C to 107°C)

Bypass Valve Setting: 50 psi (3.5 bar) for skid series X1, X2, X3, X4, and X5
40 psi (2.8 bar) for skid series X6

Fluid Viscosity: Up to 5000 SUS

Compatibility: All petroleum based hydraulic fluids. Contact Schroeder for use with other fluids, including ester and Skydrol.®

Motor: Industrial duty gear pump with integral relief valve.
Horsepower is dependent on viscosity and flow.

X1	150 - 500 SUS	(1) QF15 or K9	82 gpm (310 L/min)
X2	500 - 2000 SUS	(1) QF15 or K9	82 gpm (310 L/min)
X3	2000 - 5000 SUS	(1) QF15 or K9	37 gpm (140 L/min)
X4	150 - 500 SUS	(2) QF15 or K9 in series	82 gpm (310 L/min)
X5	500 - 2000 SUS	(2) QF15 or K9 in series	82 gpm (310 L/min)
X6	2000 - 5000 SUS	(2) QF15 or K9 in series	37 gpm (140 L/min)



The exceptional filtering performance of Schroeder's X Series Off-Line Filtration Skids is due to Schroeder's market leading synthetic media. Excellement®, or Z-Media™ as it is commonly known, has been designed, tested, and proven to be the best performing media in the industry today.

Excellement® filter media outlasts, outperforms, and excels in every measurable benchmark:

- High efficiency
- Low pressure drop
- Exceptional dirt holding capacity

Skid Selection

It is not uncommon for viscosity to be overlooked when specifying an off-line filtration unit. The results of this oversight can severely affect system efficiency and longevity, and render the filtration system useless when high viscosity fluid causes the filter to be in constant bypass. Schroeder considers maximum fluid viscosity, (at the minimum operating temperature) in conjunction with flow to properly size the pump and motor.

Desired cleanliness level in combination with the dirt holding capacities for various elements will help establish the appropriate filter housing(s) and element(s) needed. Refer to drawing D-9175 to determine the model number for your application.

*In extreme cold weather conditions where oil viscosity can exceed 5,000 SUS, Schroeder can package an integral heater into the system.

Desired Cleanliness Level Dirt Holding Capacity (grams)

ISO Code Range	Schroeder Media	K9 Filter			QF15 Filter	
		1K	2K	3K	16Q	39Q
20/18/15 - 19/17/14	Z25	93	186	279	254	853
19/17/14 - 18/16/13	Z10	108	216	324	280	940
18/16/13 - 15/13/10	Z5	86	172	258	254	691
15/13/10 - 14/12/9	Z3	115	230	345	283	1001
14/12/9 - 13/11/8	Z1	112	224	336	276	974
	QCLQFZ1	N/A	N/A	N/A	317	1259
	QCLQFZ3	N/A	N/A	N/A	326	1293
	QCLQFZ5	N/A	N/A	N/A	315	869
	QCLQFZ10	N/A	N/A	N/A	306	1214
	QCLQFZ25	N/A	N/A	N/A	278	1102
	QPMLZ1	N/A	N/A	N/A	307	1485
	QPMLZ3	N/A	N/A	N/A	315	1525
	QPMLZ5	N/A	N/A	N/A	264	895
	QPMLZ10	N/A	N/A	N/A	330	1432
	QPMLZ25	N/A	N/A	N/A	299	1299