

# OFFLINE FILTRATION SYSTEMS

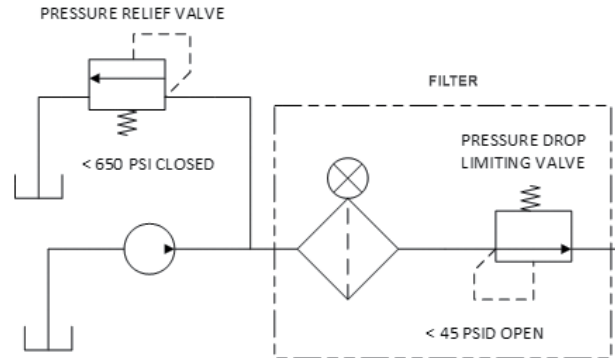
## MCO Series

### Fail-Safe In-Line Mechanical Clean Oil Dispensing Filter

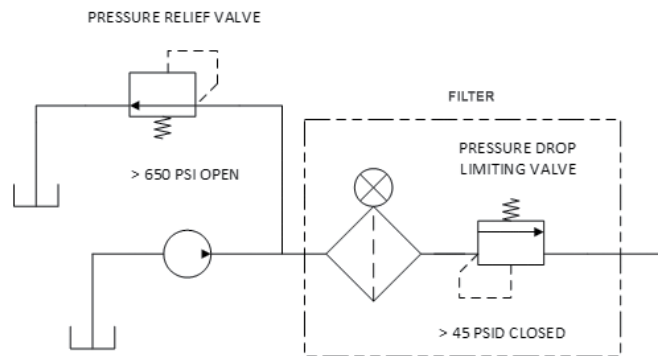


#### Hydraulic Schematic

##### Normal Operation



##### "Bypass" Operation



#### Description

- Fail-safe In-Line Mechanical Clean Oil Dispensing Filter rated for 900 psi and 30 gpm
- Ideal for dispensing applications where clean fluid delivery is a must
- Dispensed fluid is filtered or it is returned to the tank
- Field proven to deliver ISO cleanliness levels of 18/15/13 or better in a single pass
- Series filtration with MCO2 and MCO3 filters

#### Features

- Housings incorporate a non-bypassing but low cost 150 psi Beta X  $\geq 1000$  rated element
- Low element cost is achieved through the use of a unique proportional valve that, when used with an external relief valve, redirects the flow back to the tank as element DP increases
- As the element loads, the element service life indicator, located on the housing, **indicates** that service is required before the fluid flow begins to return to tank. Unfiltered "dirty" oil cannot pass the filter even if the service life indicator is ignored.
- Fluid Cleanliness Sampling Ports provided for proof of filtration into the system being filled
- Easy to install and designed with top service for easy element service

#### Applications

- Mobile equipment
- Cleaning up a hydraulic system following component replacement
- Filtering new fluid before it is put into service
- Transferring fluid from storage tanks and drums to system reservoirs

#### Technical Specifications

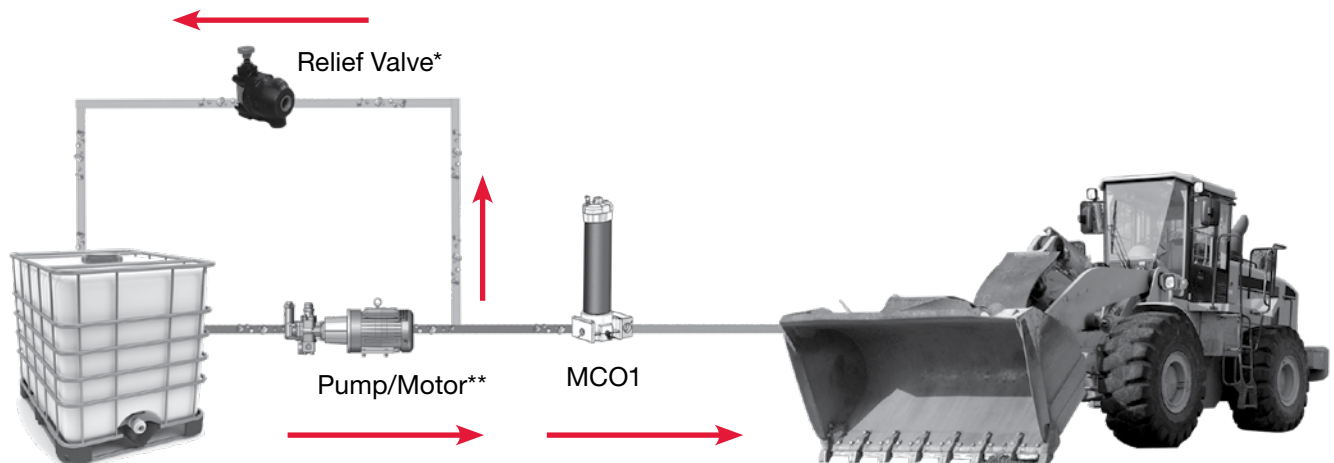
Flow Rating	Up to 30 gpm (113 L/min) for 150 SUS (32 cSt) fluids
Max. Operating Pressure	900 psi (60 bar)
Min. Yield Pressure	3200 psi (220 bar), per NFPA T2.6.1
Rated Fatigue Pressure	750 psi (52 bar) per NFPA T2.6.1-R1-2005
Temp. Range	-20°F to 225°F (-29°C to 107°C)
Bypass Setting	Non-Bypassing System
Porting Head & Cap Element Case	Cast Aluminum Steel
Weight of MCO-1K	21 lbs. (9.5 kg)
Weight of MCO-2K	32 lbs. (14.5 kg)
Weight of MCO-3K	43 lbs. (19.5 kg)
Element Change Clearance	17.50" (445 mm) for KK; 26.5" (673 mm) for 27K

## Model Code

		<b>MCO</b>	<b>-</b>	<b>3</b>	<b>-</b>	<b>27</b>	<b>-</b>	<b>G05</b>	<b>-</b>	<b>G03</b>	<b>-</b>	<b>G03</b>	<b>-</b>	<b>B</b>	<b>-</b>	<b>S</b>	<b>-</b>	<b>D5</b>	<b>-</b>	<b>RV</b>
<b>Series</b>																				
MCO	= Mechanical Clean Oil Filter System																			
<b>Number of Housings</b>																				
1, 2, 3																				
<b>Element Length</b>																				
27																				
<b>Element Micron Rating First Filter (MCO1, MCO2, MCO3)</b>																				
G01	= 1 µm Z-Media® (synthetic)																			
G03	= 3 µm Z-Media® (synthetic)																			
G05	= 5 µm Z-Media® (synthetic)																			
G010	= 10 µm Z-Media® (synthetic)																			
G025	= 25 µm Z-Media® (synthetic)																			
<b>Element Micron Rating Second Filter (MCO2, MCO3)</b>																				
G01	= 1 µm Z-Media® (synthetic)																			
G03	= 3 µm Z-Media® (synthetic)																			
G05	= 5 µm Z-Media® (synthetic)																			
G10	= 10 µm Z-Media® (synthetic)																			
G25	= 25 µm Z-Media® (synthetic)																			
<b>Element Micron Rating Third Filter (MCO3 Only)</b>																				
G01	= 1 µm Z-Media® (synthetic)																			
G03	= 3 µm Z-Media® (synthetic)																			
G05	= 5 µm Z-Media® (synthetic)																			
G10	= 10 µm Z-Media® (synthetic)																			
G25	= 25 µm Z-Media® (synthetic)																			
<b>Seal Material</b>																				
V	= Viton®																			
<b>Porting</b>																				
S	= SAE 20																			
P	= 1 1/4 NPTF																			
<b>Indicator Options (Only for outlet block)</b>																				
D5	= Visual Pop-up																			
MS10	= Electrical with DIN Connector (male end only)																			
MS11	= Electrical with 12ft. 4-conductor wire																			
MS14	= Supplied with 5-pin Brad Harrison make connector and light (male end)																			
<b>Relief Valve</b>																				
Omit	= Customer Supplied																			
RV	= HYDAC Relief Valve (set at 650 psi)*																			

\*The "RV" option is supplied as a loose item. Users have to install the relief valve within their Hydraulic System.

## Application Circuit



\* Product not included in base model pricing.

\*\* Product is customer supplied.