

N54 dual seal barrier fluid system

Designed to provide superior reliability and value, the N54 circulator from Flowserve is ideal to support dual pressurized mechanical seals in general industry applications. Commonly found in the chemical and pharmaceutical markets, the N54 circulator is utilized in applications such as:

- High-temperature pumps or specialty equipment where extra barrier fluid cooling is needed compared to a Plan 53A system
- Low-speed mixer or specialty equipment requiring higher barrier fluid flow rates

The N54 circulator is the preferred solution for new or retrofit dual seal systems when Plan 53 reservoirs or accumulator systems do not provide adequate cooling or flow rates. Providing the correct cooling capability and barrier flow is an essential part of any upgrade package for mechanical seals or seal systems.

Standard pre-engineered options to reduce lead time

The N54 circulator features pre-engineered temperature, level and pressure switch options. The N54 circulator can be assembled-to-order (ATO) from stock components in six weeks or less in multiple Flowserve manufacturing locations.

When needed, your unique process requirements also can be met with engineered-to-order (ETO) systems utilizing the full-service quoting, engineering and manufacturing capabilities of Flowserve.

Configurations and specifications

- 75 liter (20 gallon) stainless steel tank
- Nominal 15 lpm (4 gpm) flow rate
- Barrier fluid pressures up to 24 bar (350 psig)
- Oil viscosities from 5 to 32 cSt @ 40°C (104°F)
- Optional compliance to EU directives:
 - 2014/34/EC (ATEX)
 - 2006/42/EC (Machine Directive)
 - 2014/68/EU (PED)



N5404N101SLS

Technical specifications

	Model	Nominal Flow	Region	Pressure Relief	Barrier Pressure	Temperature	Level	Pressure
Example:								
N54W4N101SLS	N54W	4	N1	O	1	S	L	S
N54O4N1R1SLS	N54O	4	N1	R	1	S	L	S

Model:
 N54W – General Industry Circulator for Water
 N54O – General Industry Circulator for Oil

Nominal Flow:
 4 – 15 lpm (4 gpm)

Region:
 E1 – Europe (ATEX/PED/Machinery Directive)
 N1 – North America (NEC Class 1 div 2 motor/UL/CSA/CRN)
 N2 – North America (NEC Class 1 div 2 motor/UL/CSA/CRN) with low-viscosity oil pump

Pressure Relief:
 O – None
 R – Relief Valve

Barrier Pressure Operating Range:
 1 – 2.0 to 6.9 bar (30 to 100 psi) 3 – 10 to 24 bar (150 to 350 psi)
 2 – 4.1 to 12 bar (60 to 175 psi) 4 – 21 to 34 bar (300 to 500 psi)

Temperature:
 0 – None
 S – Switch (High)

Level:
 0 – None
 L – Switch (Low)

Pressure:
 0 – None
 S – Switch (Low)

N54W4N101SLS

