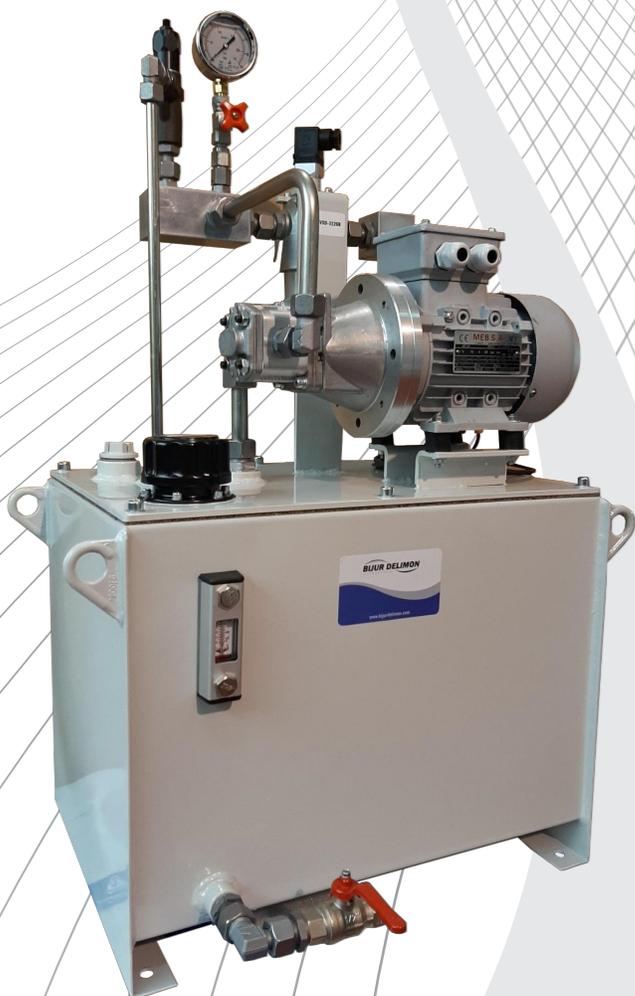


# Farval® FLO

OIL CIRCULATING SYSTEMS



## CONFIGURABLE STANDARD OCS

A BRAND OF **BIJUR DELIMON**  
INTERNATIONAL

# CONFIGURABLE STANDARD OCS

**ROBUST  
SYSTEMS  
DESIGN**

**ENGINEERING  
EXCELLENCE**

**MANUFACTURING  
QUALITY**

**SERVICE  
& SPARES**

Bijur Delimon International is a global supplier of Oil Circulating Systems and Equipment, designed for the optimum lubrication of bearings, gear trains and other processes requiring oil for lubrication and cooling.

- + A range of standard Multi-Purpose Oil Circulating units are manufactured to fill the need for a relatively simple, inexpensive, yet reliable system where a custom design is not required.
- + Reliability is a key to our success, achieved by utilizing proven design techniques, coupled with product quality and competitive pricing.



In providing the key functions of an Oil Circulating System, the system is built from the following primary equipment:

- **TANKS** – to allow settlement, de-aeration, and heating with the ability to condition and change the lubricant as appropriate.
- **PUMPS** – typically motor driven gear pumps to provide the correct flow and pressure to the application.
- **HEATERS & COOLERS** – to ensure the lubricant reaches the points of application at the required viscosity.
- **FILTRATION** – to maintain the system cleanliness at the required level.
- **INSTRUMENTATION** – monitoring for pressure, flow, filtration, temperature, and level.
- **ACCESSORIES** – controls and wiring, pressure relief.

# SYSTEM DESIGN

One electric gear pump draws oil from a reservoir and supplies the oil via check valves through a single or dual basket type filter to the delivery connection.

## Standard Units Comprised of:

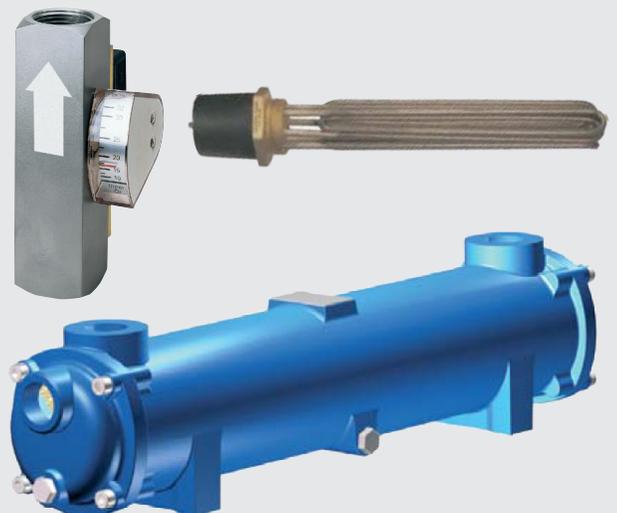
- **RESERVOIR:** Fabricated from mild steel plate, sandblasted, and painted one coat primer with one coat of Light Grey (RAL7035).
- **RESERVOIR COMPONENTS:** Return and drain connections; level gauge; thermometer; air breather filler and filter.
- **PUMP & MOTOR:** Positive displacement integral gear type aluminum pump; 1500 rpm motor suitable for 380/440 VAC, 3phase, 50/60Hz supply.<sup>1</sup>
- **OIL FILTER:** 25 $\mu$  (nominal) stainless steel mesh element; high dirt load capacity; visual/electrical clogging indication; bypass valves.<sup>1</sup>
- **PRESSURE RELIEF VALVE:** Self-operating relief; easily adjustable relief spring pressure.
- **PRESSURE INDICATION:** 63mm gauge; 0-16 bar pressure.
- **CHECK VALVE, PIPE & FITTINGS:** Screwed, mild steel.
- **LEVEL SWITCH:** 2 position digital level switch.

<sup>1</sup> Standard design for oil viscosity up to ISO VG 220 - for higher viscosities, please contact our technical department.



## OPTIONAL EXTRAS

- **HEATER:** 1kW, 3phase, 0.9W/cm<sup>2</sup> watts density; Thermostat.
- **PRESSURE TRANSMITTER:** 4-20mA analogue signal.
- **OIL COOLER:** Shell & Tube type; cooling oil to 100°F from 122°F with water at 68°F (water flow = oil flow x2).
- **ELECTRICAL:** Aluminum junction box.
- **FLOW SWITCH:** Viscosity compensating float type; SPDT contacts.
- **TANK TEMPERATURE:** PT100 RTD and Thermowell



# CONFIGURABLE STANDARD OCS

Output (lpm)	Reservoir (liters)	Length (mm)	Width (mm)	Height (mm)	No. of Pumps	Filter	Connection	Return	Power (kW)	Part Number
5	50	515	345	405	1	Simplex	1/2" NPT thread	1" NPT thread	0.37	OF05010*
						Duplex				OF05020*
	100	760	500	505		Simplex				OF10010*
						Duplex				OF10020*
10	100	760	500	505	1	Simplex	1/2" NPT thread	1 1/4" NPT thread	0.55	OF10011*
						Duplex				OF10021*
	150	760	570	645		Simplex				OF15010*
						Duplex				OF15020*
15	150	760	570	645	1	Simplex	1/2" NPT thread	1 1/2" NPT thread	0.75	OF15011*
						Duplex				OF15021*
	350	1260	670	680		Simplex				OF35010*
						Duplex				OF35020*
20	250	1010	720	670	1	Simplex	3/4" NPT thread	1 1/2" NPT thread	1.1	OF25011*
						Duplex				OF25021*
	400	1250	745	720		Simplex				OF40010*
						Duplex				OF40020*
30	350	1260	670	680	1	Simplex	3/4" NPT thread	2" NPT thread	1.5	OF35011*
						Duplex				OF35021*
40	400	1250	745	720	1	Simplex	1" NPT thread	2" NPT thread	2.2	OF40011*
						Duplex				OF40021*
50	600	1360	860	800	1	Simplex	1" NPT thread	2" NPT thread	2.2	OF60010*
						Duplex				OF60020*

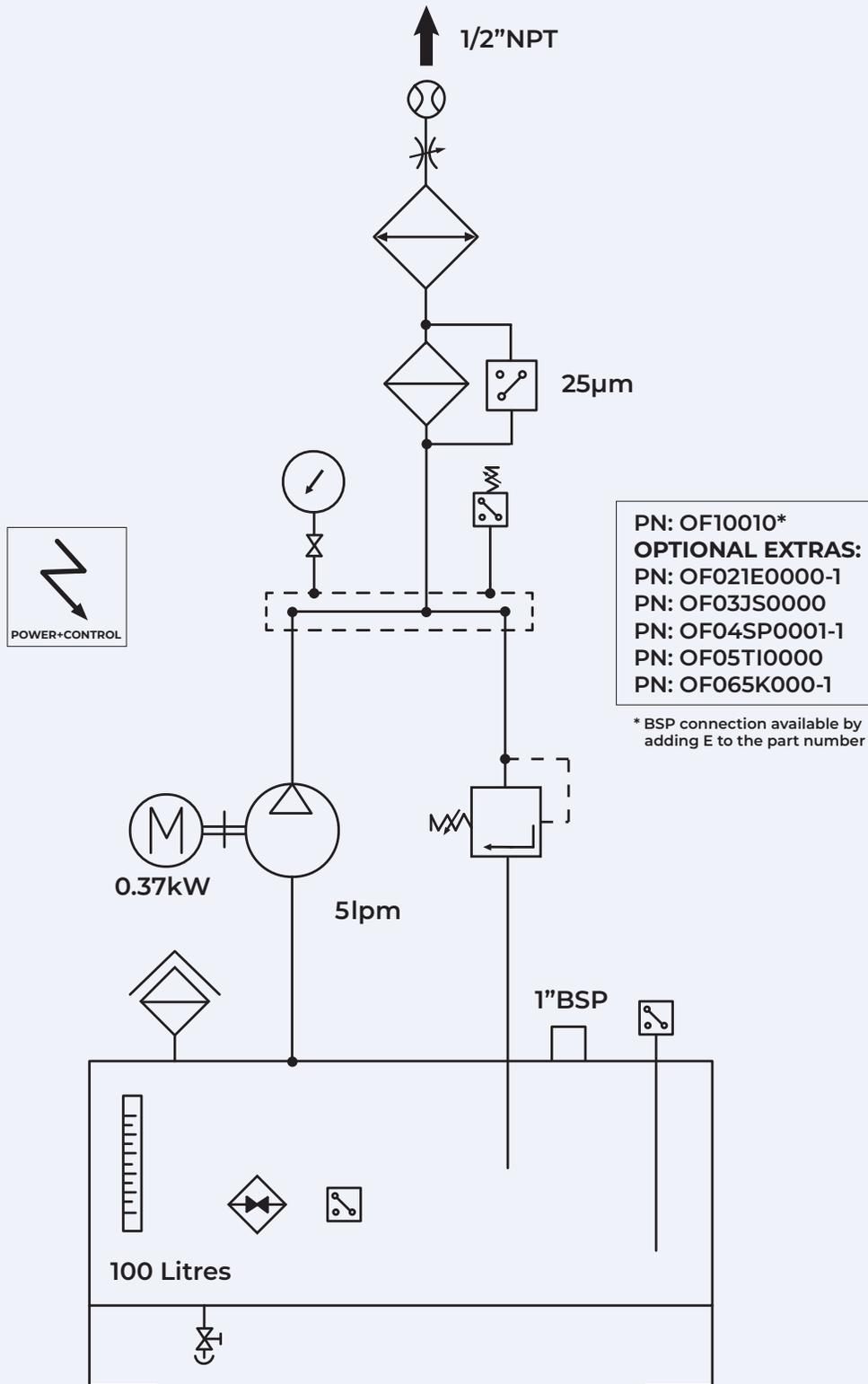
\* BSP connection available by adding E to the part number

<b>Option</b>	Removable 1kW Heater + PT100 <sup>1</sup>	OF021E0000-1
<b>Option</b>	Wired Aluminum Junction Box	OF03JS0000
<b>Option</b>	Heat Exchanger + Thermostat 5LPM	OF04SP0000-1
<b>Option</b>	Heat Exchanger + Thermostat 5-40LPM	OF04SP0001-1
<b>Option</b>	Heat Exchanger + Thermostat 50LPM	OF04SP0002-1
<b>Option</b>	4-20 mA Pressure Transmitter	OF05TI0000
<b>Option</b>	Flow Meter + Control Needle Valve <sup>1</sup>	OF065K000-1
<b>Option</b>	Drip Pan (Available reservoir sizes: 50, 100, 150, 250, 350, 400, & 600 liters)	OF99CM (0+ tank volume)

<sup>1</sup> Max quantity of 2 in the standard design. If more heaters or flow meters are required, please contact our technical department.



# SCHEME EXAMPLE



# TECHNICAL INFORMATION

## MAIN DATA

**Type of Oil:** Mineral Oils

**Fluid Temperature:** Up to 70°C

**Design Pressure:** 12 bar

**Standard Viscosity:** Up to ISO VG 220

## PUMP

Fluid kinematic viscosity ranges are the following:

**Max. Viscosity:** 6 - 500 cSt

**Recommended Viscosity:** 10 - 100 cSt

**Max Viscosity at Startup:** <2000 cSt

**Continuous Max. Pressure:** 170 bar

**Intermittent Max. Pressure:** 185 bar

**Peak Max. Pressure:** 200 bar

\* Stand-by Pump: Consult Bijur Delimon

\* Different Retention Times: Consult Bijur Delimon  
(due to long distances with low Flow rates for example)

## MOTOR

**Voltage:** 230-260/400-460 VAC, 50/60Hz

**Speed:** 1500 rpm

**Design:** IMB3/B5

**Electrical Protection:** IP55

## ELECTRONIC LEVEL SENSOR

**Operating Voltage:** 18..30 VDC

**Number of Outputs:** 2

**Output Signal:** Switching Signal

**Electrical Design:** PNP/NPN

**Output Function:** Normally Open / Normally Closed

## FILTER

**Max. Working Pressure:** 16 bar

**Max. Δp:** 0.4 bar

Simplex/Duplex Type

Stainless Steel Mesh

25 Micron Nominal Filtration

Bypass Valve Set to 2 bar

Visual + Electrical Clogging Indicator

## RELIEF VALVE

**Pressure Range:** 5-80 bar

**Max. Pressure:** 350 bar

## HEATER

**Voltage:** 230/400 VAC, 1Kw

**Watts Density:** 0.9W/cm<sup>2</sup>

IP-66 Hermetic Aluminium Terminal Box

M25 Cable Gland

M6 Plated Steel Welded Terminal

Rubber Gasket

2" Threaded Cap

Removable Without Draining the Reservoir

0-120°C Adjustable Thermostat  
PT100 to Control Heater (Option)

## PRESSURE TRANSMITTER

**Operating Voltage:** 8.5...36 VDC

**Measuring Range:** 0-25 bar

**Number of Outputs:** 1

**Output Signal:** Analogue 4...20 mA

## HEAT EXCHANGER

**Standard:** Shell and Tube

**Water Requirements:** Oil Flow Rate x 2

**Oil VG:** 220 cSt

**Water Temperature:** 20°C

**Oil ΔT:** >12°C

**Heat Losses:** To Be Included with the Quotation

## FLOW METER

**Standard:** Viscosity Compensated

**Max. Pressure:** 250 bar

**Contact Type:** 1 Change Over Contact

**Operating Voltage:** Max 240 VAC

Side Display Included

**Mounting Position:** From Bottom to the Top

\* Other Mounting Position: Consult Bijur Delimon

\* Measuring Ranges: To Be Included with the Quotation

# Innovators of engineered lubrication technology since 1872

Bijur Delimon International has ISO 9001:2015 and ISO 14001:2015 quality certified manufacturing facilities around the world, so your centralized lubrication system meets the highest industry quality standards. It's all part of our commitment to quality and customer service.

## OUR INDUSTRY LEADING FAMILY OF BRANDS



**DELIMON**

**Farval®**



### USA

Bijur Delimon International  
2685 Airport Road  
Kinston, NC 28504

(252) 527-6001 TEL  
(800) 227-1063 TOLL-FREE  
(252) 527-9232 FAX

### GERMANY

Delimon GmbH  
Arminstrasse 15  
40227 Düsseldorf

(+49) 211 / 77 74-0 TEL  
(+49) 211 / 77 74-210 FAX

### CHINA

Nanjing Bijur Machinery  
Products, Ltd.  
#9 Hengtong Road  
Nanjing Xingang Economic &  
Technical Development Zone  
Nanjing 210038

(+86) 25-85801188 TEL  
(+86) 25-85802288 FAX

### UNITED KINGDOM

Denco Lubrication Limited  
Ramsden Court  
Ramsden Road  
Rotherwas Industrial Estate  
Hereford, HR2 6LR

(+44) (0) 1432365000 TEL  
(+44) (0) 1432365001 FAX

### IRELAND

Bijur Lubricating Ireland Limited  
Gort Road  
Ennis, County Clare

(+353) 6568-21543 TEL  
(+353) 6568-29667 FAX

### FRANCE

Bijur Products, Inc.  
PB 50 - 9 Avenue du Quebec  
Zi de Courtabœuf  
Villebon Sur Yvette  
F-91942 Courtaboeuf Cedex

(+33) (0)169298585 TEL  
(+33) (0)169077627 FAX

### SPAIN

Bijur Delimon International  
- Lubrimonsa  
Avenida Txorierrri 38  
48150, Sondika, Bizkaia

(+34) 94-453-2000 TEL  
(+34) 94-453-2500 FAX

### INDIA

Bijur Delimon India Private Limited  
Gat No. 448/13, Village Nigoje  
Behind Mahindra Plant - Gate No. 8A  
Taluka-Rajgurunagar (Khed)  
District-Pune, Pin: 410 501  
Maharashtra

(+91) 2032319149 TEL  
(+91) 2027451725 FAX