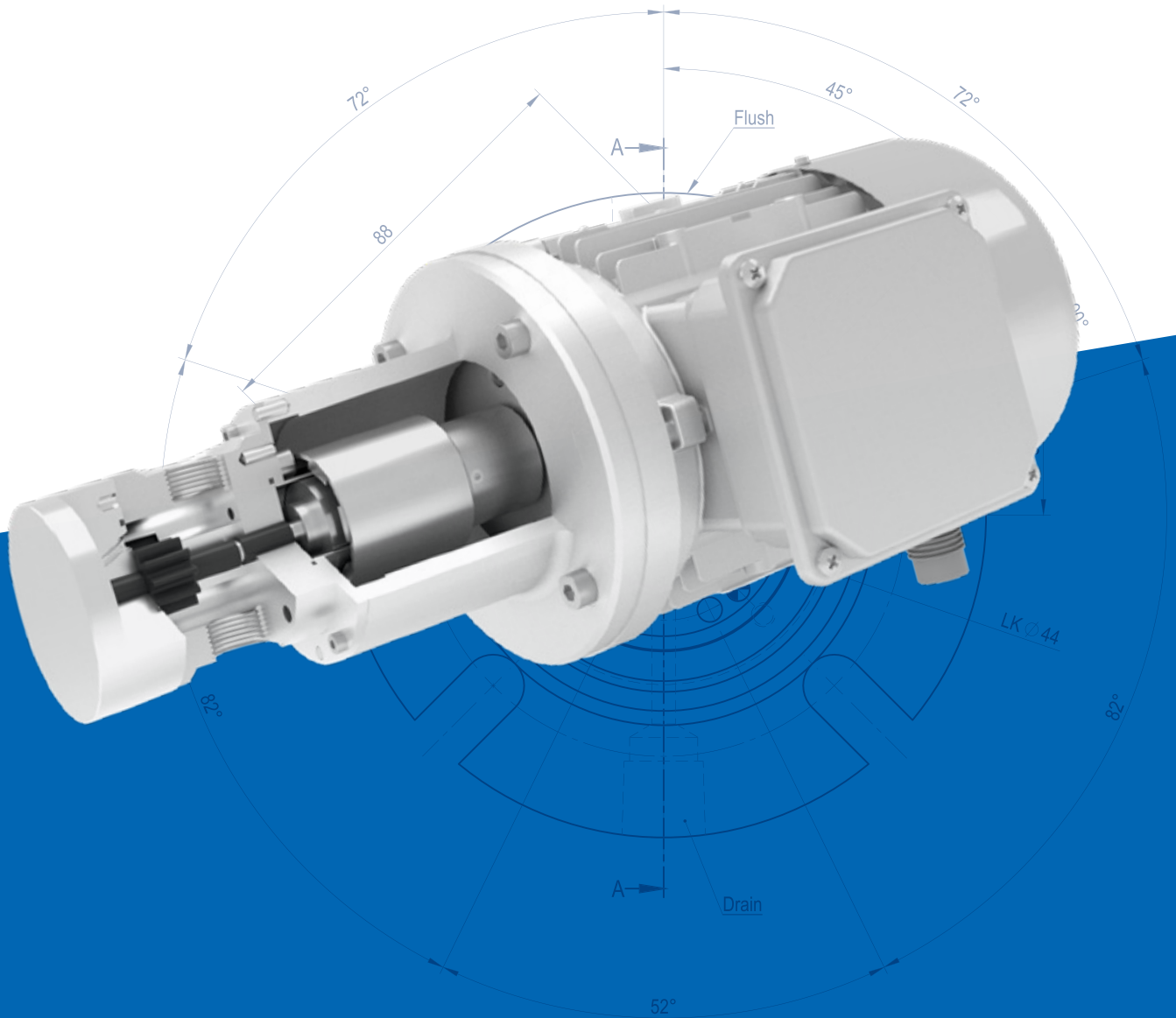




TS80/TS81, TS71,
TS46S/TS46D, TS3.0



Seal supply system

Thermosyphon system TS80/TS81



Thermosyphon system TS80/TS81

The DEPAC thermosyphon system TS80|TS81 is an easy and reliable working seal supply system for double acting mechanical seals. It can be used for DEPAC mechanical seals as well as for any other brand of mechanical seals. The basic system is equipped with a level indicator to check the level and all system connectors. Other components are available upon request.

Advantages

- Modular system
- Compact design for limited space
- Optional system components can be added
- No accreditation by authorities needed
- Can be disassembled completely to clean and service the system
- Low on maintenance
- Conforms to ATEX directive
- Refillable while pressurized

Definition

TS80 supply system without cooling coil

TS81 supply system with cooling coil

Cooling coil can be refitted at any time

Technical specifications

Vessel

Material:	wetted parts SS316 / FKM
Connections:	G 1/2", G 1/4", 1/4" NPT
Nominal volume:	7.5l
Working volume:	2l
Maximum pressure:	25bar
Testing pressure:	33bar
Allowable working temperatures*:	-10°C to +110°C
Cooling capability**:	app. 1kW with natural circulation app. 3kW with forced circulation

* Stated values are depending on certain application parameters

** At 60°C barrier media temperature and 20°C cooling water temperature

Thermosyphon system TS80/TS81

Thermosyphon system TS80/TS81

A. Level switch TS40

Material: wetted parts SS316
 Working pressure: max. 30bar
 Working temperature: max. 150°C
 Specific gravity barrier media: min. 0.7g/cm³
 Electrical contacts: HI - LOW
 EX class: II 1/2 G Ex ia IIC T3-T6 Ga/Gb

Special level switches upon request

B. Pressure gauge TS30

Material: wetted parts SS316
 Range: 0 – 25bar
 Size: NG100

Special pressure gauges upon request

C. Thermometer TS20

Material: wetted parts SS316
 Range: 0-120°C
 Size: NG100

Special pressure gauges upon request

D. Refilling unit TS09

Material: wetted parts SS316/POM/FKM
 1.4571/ POM / FKM
 Pumping volume: 18cm³ per stroke

E. Mounting console TS74

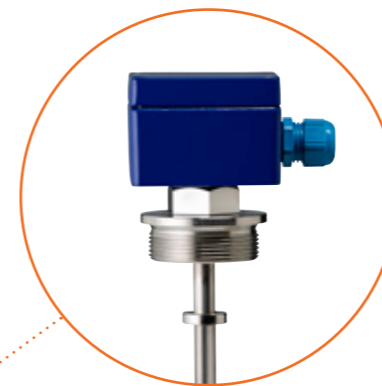
Material: stainless Steel

F. Circulation pump TS71

Material: wetted parts SS316/PEEK/PTFE
 Seal: magnetic coupling
 Max. viscosity: 100mm²/s
 Max. working temperature: 110°C
 Nominal flow: 3.5l/min
 EX class: II 2GD c X
 Supply voltage: 400V/50Hz
 Nom. Current: 1.3A

G. Connector box TS77

Material: stainless steel



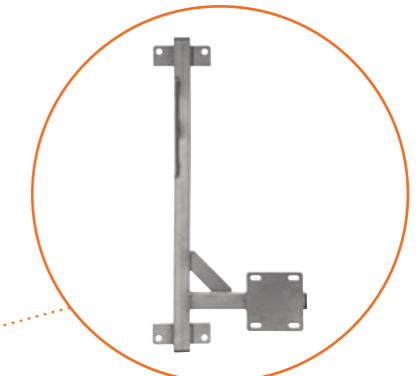
Level switch



Pressure gauge



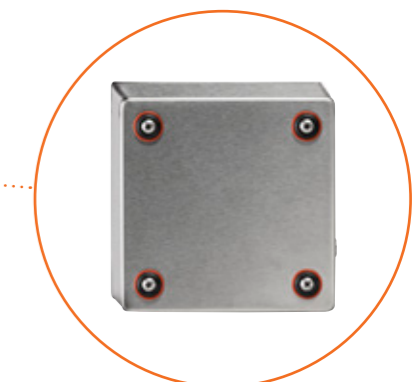
Thermometer



Mounting console



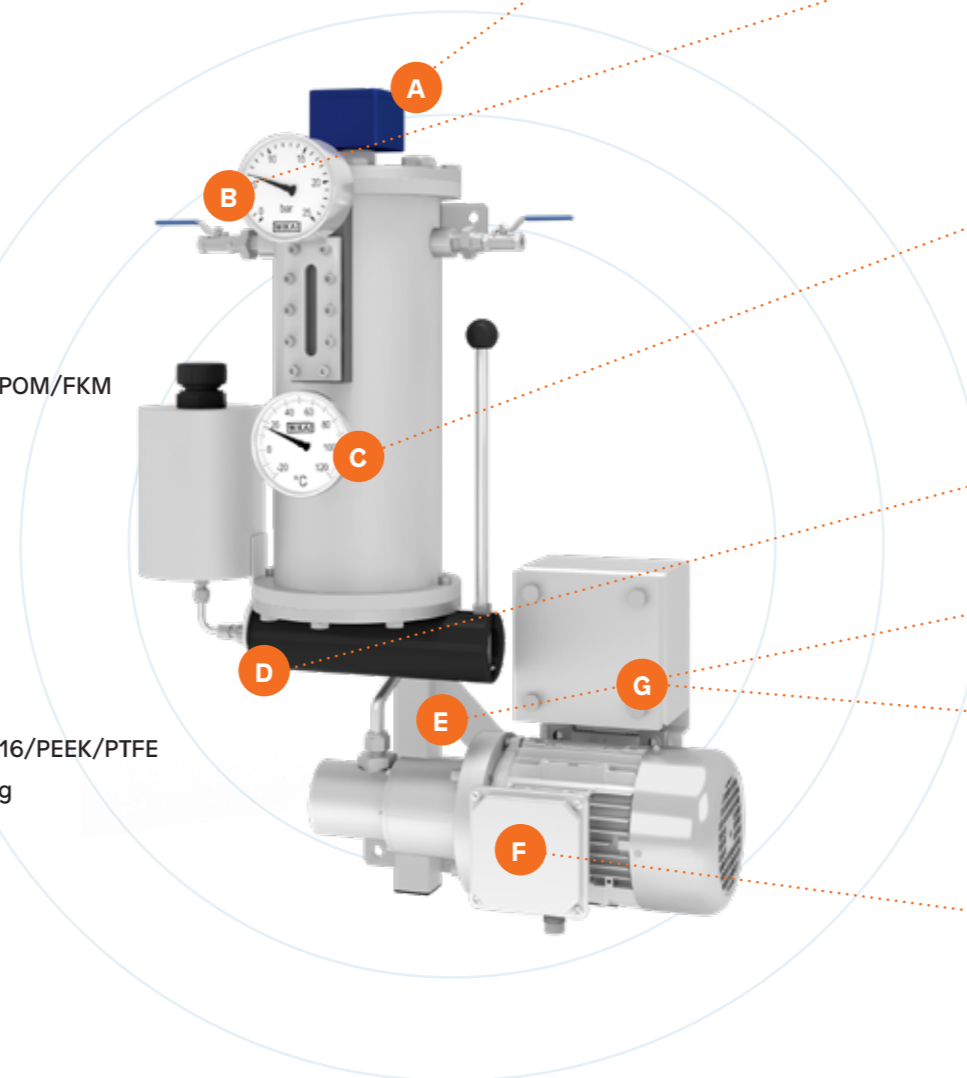
Refilling unit

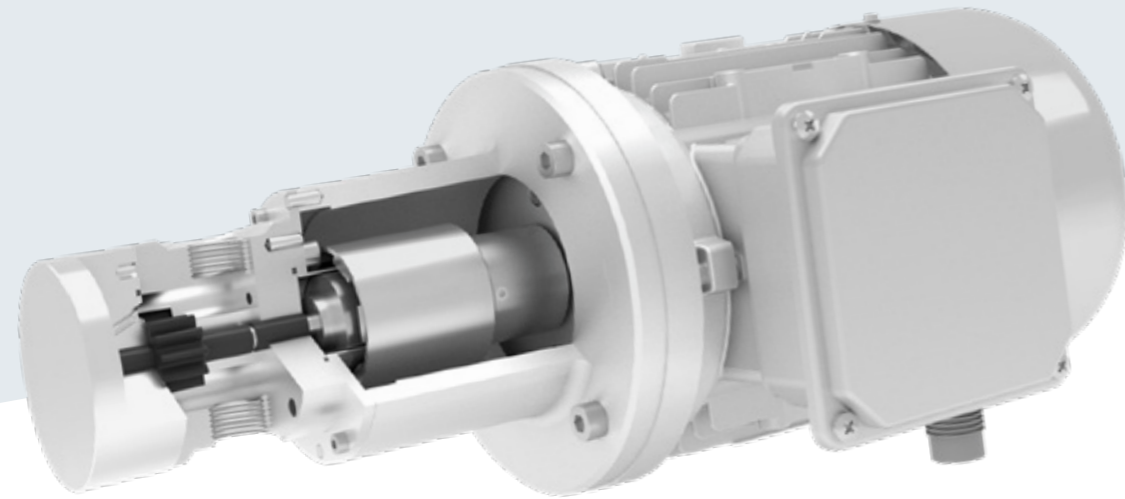


Connector box



Circulation pump





The DEPAC circulation pump TS71 is a magnetic coupled circulation pump to ensure the constant flow of the barrier fluid (max. viscosity 100mm²/s) in double acting mechanical seals.

Advantages

- Ensures a reliable flow of the barrier fluid
- Best possible supply of double acting mechanical seals
- Increase of cooling and lubrication
- Extension of the lifetime of double acting mechanical seals
- Magnetic coupled (seal less) pump
- Low on maintenance
- Conforms to ATEX directive

Technical specifications

Circulation pump TS71

Connections:	G ½"
Nominal flow rate:	3.5l/min
Max. pressure:	25bar
Max. viscosity:	100mm ² /s
RPM:	700 (standard not to be operated with inverter)
Temperature range:	up to 110°C barrier fluid
EX class:	II 2GD c X

Materials

Housing:	SS316
Shafts:	SS316
Gears:	PEEK mod.
Bearings:	PEEK mod.
O-rings:	PTFE

Electric motor

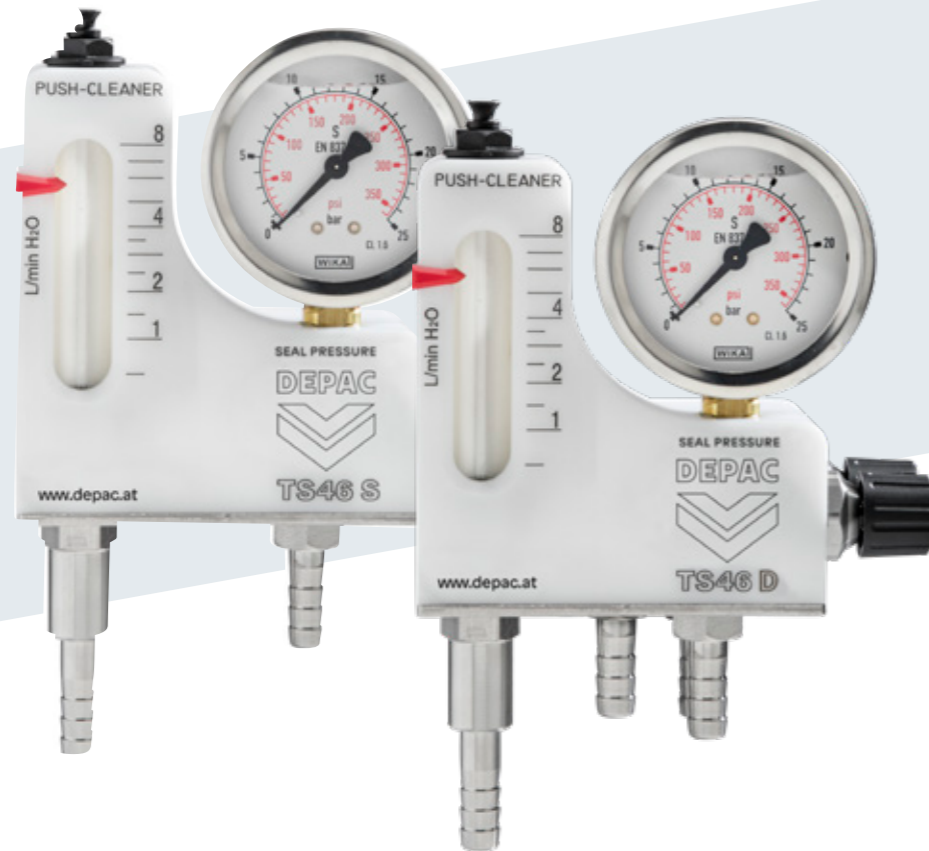
RPM:	700
Supply voltage:	400V
Nominal current:	1.3A
Rated power:	250W
Material:	aluminium
EX class:	II 2GD c X

Other electric motors upon request



Picture:
Mounting options of TS71 circulation pump directly on mounting console TS74 with TS80 thermosyphon system incl. optional parts

Thermosyphon system TS46S & TS46D



System guard TS46

The barrier fluid control system - TS46 system guard – is designed for equipment in need of a reliable supply of barrier fluid.

The TS46S model is especially designed to be used with single acting mechanical seals with flush connector working according to API plan 32. The flow rate of the flush can be set and controlled.

The TS46D model is used with double acting mechanical seals working according to API plan 54. The flow rate and pressure of the barrier fluid can be adjusted and controlled.

Both units are capable of working in contaminated water. The sight glass can be cleaned in operation.

Thermosyphon system TS46S & TS46D

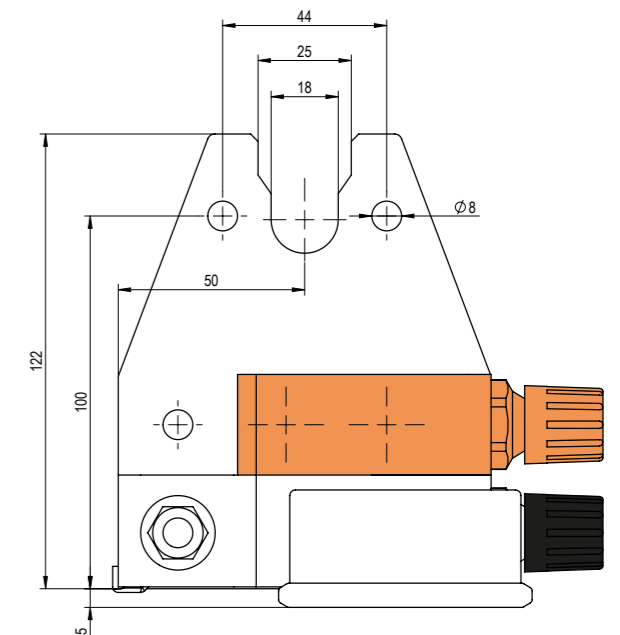
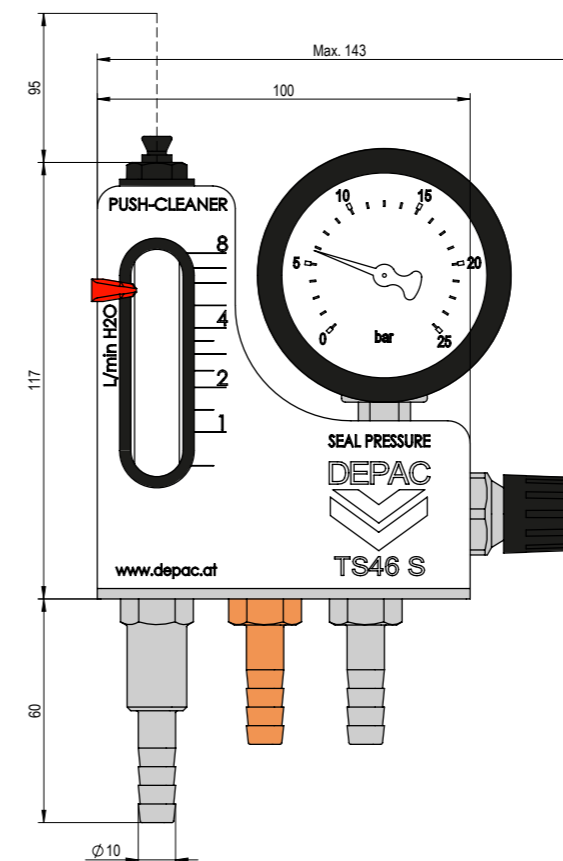
Technical specification

TS46S

System guard for use in single mechanical seal applications to adjust the flow rate of flush media in a API plan 32 setup.

TS46D

System guard for use in double acting mechanical seal applications to adjust the flow rate of the barrier fluid in a API plan 54 set up.



Materials

Housing:	POM
Sight glass:	borsilicate glass
Metal parts:	stainless steel
O-rings:	FKM

Operation parameters

Max. pressure:	20bar
Max. temperature:	100°C
Flow rate range:	0.5-8.0l/min

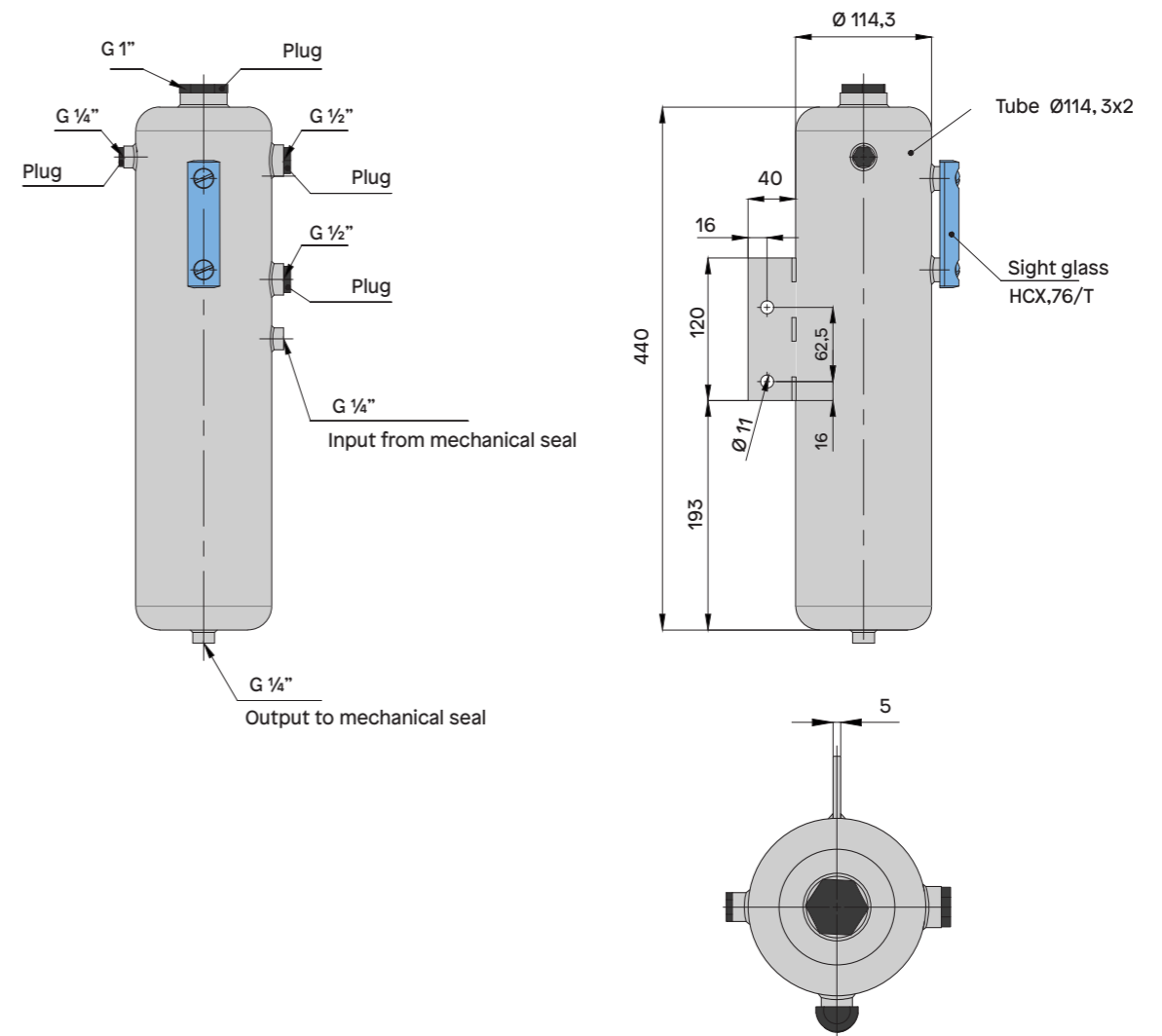
Optional equipment

Flow rate sensor	
Usable flow rate range:	0.8-3.0l/min
Supply voltage:	10-55VDCC
Max. current:	400mA
Protection class:	IP67
Conector:	PUR cable 2m; 2x0.5mm ²

Thermosyphon system TS3.0



Thermosyphon system TS3.0



Thermosyphon system TS3.0

Barrier system with 3l volume without cooling coil as an alternative to the TS80/81 thermosyphon system. The system can be used without pressure as quench vessel in API plan 51 od 52. Also the system can be used pressurized in an API plan 53A setup.

Advantages

- Compact design
- Thermometer integrated in level indicator
- Supply of barrier fluid pressure less or pressurized

Materials

Vessel:	stainless steel
Level indicator:	plastic
Connectors:	see drawing

Operation parameters

Volume:	3l
Max. pressure:	16bar
Max. temperature:	110°C

Optional equipment

Level switch with HI LOW connectors
also available EX classified



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