Standard filter system KF 200/950

Electric control cabinet

- E-Plan E-102578.00.x-x-x-x-x-x | Electricity for compact filters
- Control cabinet AE1058 (600x800x250)
- PLC control VIPA SLIO | text display KTP400

Power sections

- 1 x KF drive (Han-Drive)
- 1 x low-pressure pump 1* (Han-Drive)
- 1 x low-pressure pump 2* (Han-Drive)
- 2 x high-pressure pump 1* (Han-Drive)

Please note

- 400 V interface for the cooler is not included | If a cooler unit is required, it must be supplied directly via the hall energy supply | The cooler is released via a potential-free contact from the cooling lubricant system | Signal is located on the terminal strip (without connector)

Sensor system

- 2 level sensors KF filter | 1 light sensor fleece end | 1 button fleece transport manual operation | 1 level sensor (overflow alarm) | 1 level sensor (cooling lubricant min. alarm) | 1 bypass valve high-pressure pump*

Interface to machine tool

- 400 V supply via 35 A Harting connector with mating plug (supplied loose)
- Signal exchange via 24-pin Harting connector with mating plug (supplied loose)
- Requirement low-pressure pump 1*
- Requirement low-pressure pump 2*
- Requirement high-pressure pump 1*
- Requirement pressure stage high-pressure 1/2/3* | Release signal charge KF filter possible

Equipment/Version

- Wire marking printed wires | Range selector switch black (Eaton) | Power switch Sirius (Siemens) | Contactor Sirius (Siemens) | PLC control (VIPA) | Visualization (Siemens) | Power supply (Murr) | Terminals (Phoenix) | Connector (Harting) | Frequency inverter (Kostal) | Installation PUR line (Lapp)

Connection voltage 3 x 400 V | Frequency 50 Hz

* Only included if the associated option was selected

Dimensions

Option Continuos flow-cooler

- Deliverable within 3 weeks
- Can be configured

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Areas of application
The compact filter KF is a band filter for cleaning cooling lubricants in metal machining. As a cleaning and supply unit for chip-producing machine tools, it is usually combined with chip conveyors.

System configuration
Machine manufacturer: freely selectable
Number of machines: 1
Processing: turning, drilling, milling (others after consultation)
Customer specification: no, KNOLL standard model
Energy supply: 400 V, 50 Hz
Compressed air connection: min. 5 bar, provided by the customer
Volumetric flow: 200 l/min for emulsion and steel or aluminum < 8% Si
90 l/min for oil up to max. 10 mm²/s at operating temperature and steel
Filter fineness: nominally 40 µm with filter fleece PW70/70
Chip pre-separation: via chip conveyor provided by the customer (with edge filter or strainer basket)
Colors: system RAL 7035*, control cabinet RAL 7035*, components RAL 9005, cooler RAL 7005*
Documentation: on CD, languages: German / English / French / Italian / Spanish / Czech / Dutch / Swedish
Equipment labeling: local languages named + English
User guidance: local languages named / English / German*
* Other colors available at extra charge (see price list) after consultation with KNOLL. All systems and components except electrical users are powder-coated (textured paint Emil Frei GmbH & Co., gloss level 60% at an angle of 60°, tolerance of gloss level +/- 10%).

Equipment
Options
Option 3 Screw pump
Option 1 Centrifugal pump I
Option 4 Duplex switch filter
Option 2 Centrifugal pump II
Option 5 Continuous-flow cooler
Option 6 Hose package
Option 7 Electricity for customer lifting pump and level sensors

Basic equipment
- Compact filter KF 200
- Electronic control cabinet
- 2 level sensors
- Coolant container FKA 950
- Connection for continuous-flow cooler

Option 1 – Centrifugal pump I (for external cooling lubricant supply)
0 without pump, holder sealed with sheet metal piece
1 MTR 5-18/8, 40 l/min @ 5 bar (80 l/min @ 4 bar) 1.1 kW Han-Drive, pressure gauge
2 MTR 5-18/8, 40 l/min @ 5 bar (80 l/min @ 4 bar) 1.1 kW Han-Drive, pressure gauge

Option 2 – Centrifugal pump II (for flushing)
0 without pump, holder sealed with sheet metal piece
1 TG 40-422533, 120 l/min @ 2.7 bar (75 l/min @ 2.7 bar) 200 l/min @ 2.3 bar, 2.2 kW Han-Drive, pressure gauge

Option 3 – Screw pump (for internal cooling lubricant supply)
0 without pump, holder sealed with sheet metal piece
1 KTS 25-60-T, 37 l/min @ 70 bar, 7.5 kW Han-Drive, Han-Drive, DBD and pressure gauge
2 KTS 25-38-T with FI (piggyback), 5.5 kW with FI Kostal (piggyback), Vario valve SPB-H-15 with pressure gauge

Option 4 – Duplex switch filter (as police filter)
0 without duplex switch filter
1 duplex switch filter PI3730 DRG100

Option 5 – Continuous-flow cooler
0 without continuous-flow cooler
1 continuous-flow cooler alpha 9 for emulsion, cooling capacity 8.3 kW, air-cooled, at ambient temperature 42 °C, medium 20 °C, temperature completely controlled, own control and power supply, length 715 mm, width 715 mm, height 1,545 mm
2 continuous-flow cooler alpha 9 for oil, cooling capacity 8.3 kW, air-cooled, at ambient temperature 42 °C, medium 25 °C, temperature completely controlled, own control and power supply, length 715 mm, width 715 mm, height 1,545 mm

Option 6 – Hose package (cooler to coolant container)
0 without hose package
1 hose package 5 m (2 oil flex hoses à 5 m, each with mech. ball valve, ready for connection)
2 hose package 10 m (2 oil flex hoses à 10 m, each with mech. ball valve, ready for connection)

Option 7 – Electricity for customer lifting pump and level sensors
0 without
1 for lifting pump with motor 1.8 – 2.5 A
2 for lifting pump with motor 2.2 – 3.2 A
3 for lifting pump with motor 2.8 – 4.0 A
4 for lifting pump with motor 3.5 – 5.0 A
5 for lifting pump with motor 4.5 – 6.3 A
6 for lifting pump with motor 5.5 – 8.0 A

Order key
The performance data of the pumps named above refer to operation with emulsion. In case of operation with oil, the performance data of the low-pressure pumps is reduced by 10-20% depending on viscosity.