

DILO SF₆-Gas Handling Equipment, Measuring Devices, Valves & Connections



For enquires please contact:

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*Specifications are subject to changes without prior notice

SF₆-Gas Service Carts

SF₆-Gas Handling: SF₆ Gas Service Carts:

- Piccolo series – For SF₆ gas handling on switchgear with reduced filling quantities
- Compact series – For easy maintenance on high voltage switchgear
- Economy series – For universal applications
- Mega series – For large and extra-large gas compartments
- Mini-Series/ Modular Series – For efficient SF₆ gas handling on small gas compartments
- Micro Series (Portable service unit) – For handling of small SF₆ gas quantities

PICCOLO SERIES: L030R02 for Modern switchgear with small gas compartments



- Device for liquid storage of SF₆ gas
- SF₆-gas recovery down to < 1 mbar
- B100R40 oilfree DILLO compressor (3.2 m³/h, [at 50 Hz], 50 bar; 3.8 m³/h [at 60 Hz], 50 bar)
- Oil-free suction pump for recovery of SF₆ (3 m³/h, final vacuum < 1 mbar)
- Vacuum pump for evacuation of air (25 m³/h, final vacuum < 1 mbar)

COMPACT SERIES: B057R... for storage in gaseous or liquid form:

<ul style="list-style-type: none"> • SF₆ gas recovery 	<u>B057R03</u> <ul style="list-style-type: none"> ♦ <5 mbar with liquid storage (4.8m³/h) 	<u>B057R17</u> <ul style="list-style-type: none"> ♦ <1 mbar with liquid storage (15m³/h)
<ul style="list-style-type: none"> • Oil-free Compressor 	<ul style="list-style-type: none"> ♦ Delivery rate: 6.5m³/h at medium suction pressure with SF₆ 	<ul style="list-style-type: none"> ♦ Delivery rate: 6.5m³/h at medium suction pressure with SF₆
<ul style="list-style-type: none"> • Vacuum Pump for evacuation of air 	<ul style="list-style-type: none"> ♦ 40 m³/h, final vacuum < 1 mbar 	<ul style="list-style-type: none"> ♦ 25 m³/h, final vacuum < 1 mbar



SF₆ gas service cart mounted on a pressure tank

ECONOMY SERIES: L057R01 SF₆-Gas service cart for liquid storage:



NEW L057R01



A swivelling control panel allows ergonomic working



Lockable drawer for storing tools, adaptors and hoses

- SF₆-gas recovery down to < 1 mbar
- TM 5.0 B Oil-free Compressor; delivery rate: 6.5 m³/h at medium suction pressure with SF₆
- Oil-free suction pump for recovery of SF₆ (15 m³/h, final vacuum < 1 mbar)
- Vacuum pump for evacuation of air (40 m³/h, final vacuum < 1 mbar)
- Operating and indication of the most important process parameters via 10" multi-touch panel with protective cover

SF₆-Gas Service Carts

MEGA SERIES: L170R01 / L400R01 L600R.. SF₆-Gas service cart for liquid storage:

<ul style="list-style-type: none"> SF₆ gas recovery (Oil-free suction pump) 	<u>L170R01</u> <ul style="list-style-type: none"> <1 mbar with liquid storage (35m³/h, final vacuum) 	<u>L400R01</u> <ul style="list-style-type: none"> <1 mbar with liquid storage (35m³/h, final vacuum) 	<u>L600R..</u> <ul style="list-style-type: none"> <1 mbar with liquid storage (35m³/h, final vacuum) or (100m³/h, final vacuum)
<ul style="list-style-type: none"> Oil-free Compressor 	<ul style="list-style-type: none"> Delivery rate: 19m³/h at medium suction pressure with SF₆ 	<ul style="list-style-type: none"> 40m³/h, 50 bar 	<ul style="list-style-type: none"> 60m³/h, 50 bar
<ul style="list-style-type: none"> Vacuum Pump for evacuation of air 	<ul style="list-style-type: none"> 63 m³/h, final vacuum < 1 mbar 	<ul style="list-style-type: none"> 63 m³/h, final vacuum < 1 mbar 	<ul style="list-style-type: none"> 63 m³/h, final vacuum < 1 mbar



L170R01

MINI SERIES: B143R11 SF₆-Gas service cart for liquid storage:

- SF₆-gas recovery down to < 5 mbar with liquid storage
- Oil-free Compressor (1.6 m³/h, 50 bar)
- Vacuum Compressor for SF₆ gas recovery (3.3 m³/h, < 5mbar)
- Vacuum pump for evacuation of air (16 m³/h, final vacuum < 1 mbar)
- Semi-automatic control and 3.5" colour touch panel



MINI SERIES: MODULAR SERIES: for liquid storage:



- Pre-filter unit (pe 10 bar) for adsorption of moisture, solid and gaseous decomposition products
- Oil-free Compressor (1.6 m³/h [at 50 Hz], 50 bar; 1.9 m³/h [at 60 Hz], 50 bar)
- Vacuum Compressor for SF₆ gas recovery (3.3 m³/h, < 5 mbar)
- Vacuum pump for evacuation of air (16 m³/h, final vacuum < 1 mbar)
- Portable

MICRO SERIES: B160R92S16 SF₆-Gas Portable Service Unit for gaseous storage:

- SF₆ gas recovery down to < 10 mbar
- Oil-free Compressor (0.9 m³/h, final pressure pe 9bar)
- Small Diaphragm Compressor (1.2 m³/h, final vacuum < 10 mbar)
- Internal 2L storage tank, max. pe 9bar (18NI or 0.1 Kg SF₆)
- Menu navigation via 5.7" coloured touch panel
- Portable by Transport Case (Trolley)



SF₆-Gas Evacuating and Refilling Devices

SF₆-Gas Refilling Device, for reliable refilling of SF₆ gas by overpressure:

3-393-R001/R002 for high voltage

3-393-R115 for medium voltage



- Pressure reducer for SF6 gas with W 21.8 x 1/14" thread
- 5 m long hose DN8
- DILO coupling tongue parts DN8 and DN20 (for 3-393-R001/R002) or DN8 and DN6 (for 3-393-R115)
- Gauge indication in bar; Pressure range 0 up to 10 bar (for 3-393-R001/R002) 0 up to 2.5 bar (for 3-393-R115)

**Available in Portable Version, stored in a case or mobile as cylinder cart.*

3-001-R001 / R002 / R021



- SF6 bottle connection W 21.8 x 1/14"
- Ball valve with hand wheel
- 6 m long hose DN8
- Pressure reducer for SF6 (0 up to 10 bar), indication in bar / psi / kPa
- DILO coupling tongue parts DN8 and DN20

**Available with electronic weighing scales 0~120 kg*

3-001-4-R002/R022/R112 SF₆-Gas Evacuating and Refilling Device, for evacuation of air and refilling of gas compartments from SF₆ gas bottles by overpressure:

Mobile as cylinder cart

- 16 m³/h vacuum pump for air, final vacuum < 1 mbar
- Ball valve with hand wheel
- Gauge 0 to -1,200 mbar
- Two 6 m long wire-braided hoses DN8
- DILO coupling tongue parts DN8 and DN20
- SF6 bottle connection W 21.8 x 1/14"
- Pressure reducer for SF6 (0 up to 10 bar), indication in bar / psi / kPa

**Available with electronic weighing scales 0~120 kg or 0~150 kg*



B046R03/R13 Mobile Vacuum Pump Unit, for evacuation of air or nitrogen:



- Vacuum Pump: 40m³/h, final vacuum < 1 mbar
- Digital vacuum indication in mbar
- Ball valve DN20 or Solenoid valve
- 5 m long hose DN20
- DILO coupling tongue part DN20

**Available with suction capacity 100m³/h, final vacuum < 1 mbar*

SF₆-Gas Measuring Devices and Accessories

3-038R-R... SF₆-Multi-Analyser with return system, for verification of several parameters in one operation:



- Operation with or without battery (external power supply)
 - No emissions of measuring gas
 - Measuring range as follow:
 - Vol. % : 0 – 100 vol-%
 - Moisture : -60 to +20 °C
 - SO₂ : 0-20 ppm_v; 0–100 ppm_v; 0–500 ppm_v
 - Max. inlet pressure pe 0.5 ~ 35 bar
 - Storage of up to 500 measuring data
- *Other measuring devices for measurement of single parameter are also available.*

3-035R-R... Mirror Analyser ^{SF₆}



- Uses the physical dew point mirror measuring principle
 - No emissions of measuring gas
 - Measuring range as follow:
 - Vol. % : 0 – 100 vol-%
 - Moisture : -50 to +20 °C (Dew Point Mirror)
 - SO₂ : 0-20 ppm_v; 0–100 ppm_v; 0–500 ppm_v
 - Max. inlet pressure pe 0.2 ~ 35 bar
 - Storage of up to 500 measuring data
- *Other measuring devices for measurement of single parameter are also available.*

3-033-R200 SF₆-LeakSpy, for quick detection and quantification of small SF₆ leaks:

- Detection of SF₆ leakage up to 3 g / year
- Quick response time
- No cross sensitivity to moisture and most volatile organic compound (VOCs)
- Small, lightweight, easy to use
- A shoulder belt facilitates mobile and ergonomic working
- Battery-operated (operating time > 12 hours)
- Exchangeable accumulator (parallel loading of a second accumulator in separate charging unit possible)



3-033-R002 SF₆-LeakPointer, for quick tracing of small SF₆ leaks:

- Sensitivity: 5 g SF₆ / year
- Operating temperature: -20 °C to +52 °C
- Ambient moisture: up to 90 % relative moisture, non-condensing during operation
- Measuring principle: high voltage ionisation
- Response time T90: approx. 1s



SF₆-Gas Measuring Devices and Accessories

Room Monitoring Devices, for monitoring the air of SF₆ indoor plant in permanent operation:



- Measuring range: 0 to 1,500 ppm_v SF₆
- High long-time stability
- No maintenance and consumables are required
- Indication of the measuring value via LCD on the front of the device

Valves and Connections for SF₆:

DILO offers the widest valves and couplings product range in the world. Whether for medium voltage switchgear, high voltage switchgear or gas-insulated lines, our products always meet your requirements.

The DILO sealing principle prevents the loss of SF₆ gas and moisture from penetrating the SF₆ gas system. Advantages of application includes:

- Self-closing coupling system
- Pressure and vacuum-tight even when coupling and uncoupling
- Permanent tightness even when frequently connected and disconnected
- Applicable up to PN 64 bar
- Suitable for temperatures from -40°C to +80°C

