

Service carts for large and extra large gas compartments

L170R01

SF₆ gas service carts

The L170 service cart has been developed to recover, evacuate, fill, purify and vent large to extra large SF_6 gas compartments with high process reliability. Thus, a gas compartment with 1,000l and 5 bar pa can be recovered down to 1 mbar in only 38 minutes*) when using the DN40 coupling**). Thanks to the state-of-the art control all functions run automatically and are displayed on a 10" touch panel. The operating software with intuitive user navigation in several languages makes operation very easy and comfortable. This service cart can be optionally operated via mobile devices such as a smartphone, tablet or laptop.

Emission-free gas handling is the high standard for all DILO service carts. SF_6 gas can be recovered down to a final vacuum of < 1 mbar. When using the hermetically gastight couplings and connecting systems, emissions will not occur! The series also enables short recovery and evacuating times thanks to the existing DN20 / DN 40 couplings.

The L170 series is optionally available with a second DN20 connecting coupling so that two functions can be carried out simultaneously. This makes it possible to evacuate air from one gas compartment and at the same time fill another gas compartment with SF_6 gas or to recover the gas from it.





- Devices for liquid SF₆ storage (storage pressure up to max. 50 bar).
- SF₆ gas recovery down to < 1 mbar</p>
- Automatic control via 10" capacitive touch panel
- Reversing switch to correct the direction of rotation
- Digital weighing scales for SF₆ cylinders
- Reduction to transport pressure as integrated special function
- All versions are available with integrated tanks, CE marked or optionally with SQL and ASME approval

^{*)} in accordance with the specifications in the DILO time calculator at https://de.dilo.com/en/sf6-gas/dilo-sf6-apps/ and with TÜV SÜD confirmed performance data
**) in 57 minutes when using the DN20 coupling





For liquid storage

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A swivelling control panel enables ergonomic working.



Operation, indication of the important process parameters and illustration of the selected gas flow on the touch panel. Indication units (e.g. bar/mbar/kg) can be selected directly on the panel.



Lockable drawer for storing tools, adapters and hoses.



With TÜV SÜD confirmed performance data



Additional DN20 connecting coupling for evacuation and filling/recovery at the same time (Option K177R14)



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Technical data:

Dimensions: Length 2,350 mm, Width 1,100 mm, Height 1,350 mm	
Weight: 1,048 kg	
Protection class IP54	
Sound level < 78 dB(A)	

Operating voltage for service carts (3-phase current ranges to be selected):

208 -	- 240 V / 60 Hz	6-170SP-R011
380 -	- 440 V / 50 Hz	6-170SP-R012
380 -	- 480 V / 60 Hz	6-170SP-R013

Special operating voltage (at an extra charge) for service carts (3-phase current ranges to be selected):

200 V / 50 Hz	6-170SP-R016
200 V / 60 Hz	6-170SP-R017
210 - 240 V / 50 Hz	6-170SP-R018
600 V / 60 Hz	6-170SP-R019

Standard equipment:

R110R11 oilfrog DILO	compressor: delivery rate (19 m	3/h [at 50 Hz]· 15 m3/h [at 60 Hzll at modium cuction n	roccuro with CE

Oilfree suction pump for recovery of SF_g gas (35 m³/h [at 50 Hz]; 42 m³/h [at 60 Hz], final vacuum < 1 mbar)

Vacuum pump for evacuation of air (63 m³/h [at 50 Hz]; 76m³//h [at 60 Hz], final vacuum < 1 mbar)

Evaporator for SF_s gas filling (max. flow rate 200 kg/h)

Dry filter (water absorption capacity: 175 g at a dew point of -36°C)

Particle filter 1 µm

Digital weighing scales for SF_g cylinders (with automatic switch off function), 0 - 120 kg with tare function, accuracy \pm 20 g

DILO couplings DN20 and DN40 (connected in parallel)

Operation and indication of the important process parameters via 10" touch panel with protective cover

Pressure and vacuum units individually adjustable

Vacuum indication 0 - 100 mbar, resolution 0.1 mbar

5 m long storage connecting hose DN8, with coupling tongue part DN20 and 5 different cylinder connections

Fork lift provisions

Crane eyelets

Fixing and steerable rollers

Lockable drawer for storing tools, adapters and hoses

Wrenches for DILO couplings and filters

Paint: powder-coated in anthracite-orange



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Mounted onto a pressure tank / stowage



L170R01 with 300 I pressure tank

Optional additional equipment (mounted) at an extra charge:

	Storage capacity	Length mm	Width mm	Height mm	Net weight	Article no.:
300 I / 50 bar pressure tank in accordance with 2014/68/EU regulations and CE marked with electronic weight indication and chassis with solid tired wheels	280 kg	2,625	1,185	1,960	1,660 kg	B172R11L170
600 I / 50 bar pressure tank in accordance with 2014/68/EU regulations and CE marked with electronic weight indication and chassis with solid tired wheels	580 kg	2,625	1,185	2,095	1,960 kg	B172R12L170
Stowage including 5 SF ₆ cylinders with electronic weight indication and chassis with solid tired wheels	5 x 50 kg	2,625	1,185	2,095	1,730 kg	B175R65L170





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Can be mounted onto a trailer with the following accessories:



Device including stowage with weighing scales and 4 $\rm SF_{6}$ cylinders on the B175R11L057 trailer

Technical data:

Dimensions: Length 4,500 mm, Width 1,900 mm, Height 2,450 mm
Max. admissible total weight: 2,500 kg

2-axle car trailer TÜV-approved, prepared for 100 km/h registration, stowage including weighing scales with 4 SF ₆ cylinders (50 I each), tarpaulin, side and back walls to be opened by pneumatic springs (can be used as sun and rain protection)	B175R51L170
2-axle car trailer TÜV-approved, prepared for 100 km/h registration, stowage with weighing scales without SF ₆ cylinders, including tarpaulin, side and back walls to be opened by pneumatic springs (can be used as sun and rain protection)	B175R52L170

Standard equipment for both versions:

2 fixing facilities for hoses and connecting cable
LED work lighting
2 support feet for level adjustment of the trailer

Options for both versions:

Hose reel with 15m long DN20 hose	K197R100
DN20 pre-filter unit, fixing facilities included	B007R20





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Optional additional equipment at an extra charge for all L170R01 service carts:

Vacuum pump, (100 m³/h [at 50 Hz], 120 m³/h [at 60 Hz], final vacuum < 1 mbar	6-170VP-R001
Vacuum pump, (200 m³/h [at 50 Hz], 240 m³/h [at 60 Hz], final vacuum < 1 mbar	6-170VP-R002
Two-stage vacuum pump with exhaust filter, final vacuum 0.0067 mbar, nominal suction capacity (55 m³/h [at 50 Hz], 65 m³/h [at 60 Hz])	6-170VP-R008
Two-stage vacuum pump with exhaust filter, final vacuum 0.0067 mbar, nominal suction capacity (80 m³/h [at 50 Hz], 95 m³/h [at 60 Hz])	6-170VP-R009
High-precision vacuum display, vacuum sensor 10 ⁻⁵ mbar for gas compartment A	K207R04
High-precision vacuum display, vacuum sensor 10 ⁻⁵ mbar for gas compartment B (for additional DN20 coupling)	K207R05
Automatic control and switch-off of the individual functions with variably adjustable final values (evacuation, filling, SF ₆ recovery)	K141R11
SF ₆ dew point indication downstream from dry filter	K129R08
Tarpaulin	6-170KA-R002
Chassis with solid tired wheels Ø 400 mm	6-170FG-R003
SF ₆ gas warning unit	K203R01
Additional DN20 coupling for simultaneous evacuation and recovery or filling (available for 55 m ³ /h - 100 m ³ /h vacuum pump)	K177R14
Additional DN20 coupling for simultaneous evacuation and recovery or filling (available for 200 m³/h vacuum pump)	K177R15
Increase of the maximum gas compartment filling pressure of pa 10 bar to pa 15 bar	K205R02
Recovery of storage tank down to 1 mbar	K204R03
Wi-Fi router for remote control via mobile devices	K176R13
Relief of fixing and steerable rollers for transport	K223R057

Optional additional equipment at an extra charge for all L170R01 service carts:

5 m long DN20 rubber hose with DN20 coupling tongue part on both ends	6-1017-R050
10 m long DN20 rubber hose with DN20 coupling tongue part on both ends	6-1017-R100
5 m long DN20 wire braided hose with DN20 coupling tongue part on both ends PN 64 bar	6-1365-R050
10 m long DN20 wire braided hose with DN20 coupling tongue part on both ends PN 64 bar	6-1365-R100
5 m long DN40 wire braided hose with DN40 coupling tongue part on both ends	6-1076-R050
10 m long DN40 wire braided hose with DN40 coupling tongue part on both ends	6-1076-R100
5 m long DN40 wire braided hose with DN40 coupling tongue part on one end and DN20 coupling tongue part on the other end	6-1080-R050
10 m long DN40 wire braided hose with DN40 coupling tongue part on one end and DN20 coupling tongue part on the other end	6-1080-R100
Distributor 3-fold, DN40 coupling to 3 x DN20 coupling with ball valve	3-718-R006
DN40 coupling tongue part with transition piece to 2 x DN20, 2 DN20 rubber hoses 10 m long, DN20 coupling tongue part	6-1235-R001
Electrical connecting cable 5 x 10 AWG 7 for 380 - 600 V (available lengths 5 - 30 m)	6-1053-R005
Electrical connecting cable 5 x 16 AWG 5 for 200 - 240 V (available lengths 5 - 30 m)	6-1053-R004



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Spare parts kits for L170R01:

Annual maintenance kit for L170R01 with standard vacuum pump (63 m³/h) / 6-170VP-R001 (100 m³/h)	6-1048-R501
Annual maintenance kit for L170R01 with 6-170VP-R002 (200 m³/h) vacuum pump	6-1048-R502
Annual maintenance kit for L170R01 with 2-stage 6-170VP-R008 (55 m³/h) vacuum pump	6-1048-R505
Annual maintenance kit for L170R01 with 2-stage 6-170VP-R009 (80 m³/h) vacuum pump	6-1048-R506
Spare parts kit for compressor	6-1091-R111
Spare filter kit (for SF ₆ dry and particle filter)	6-1101-R131

Packing for L170R01:

Packing for L170R01	3-788-R010-C
Packing for L170R01 with 6-170FG-R003 (chassis) as option	3-788-R013-C
Packing for L170R01 with pressure tank	3-788-R011-C
Packing for L170R01 with stowage and weighing scales	3-788-R011-C
Transport pallet for L170R01 trailer mounted	3-688-R005-C