

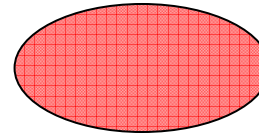


## AFU100 Product Information

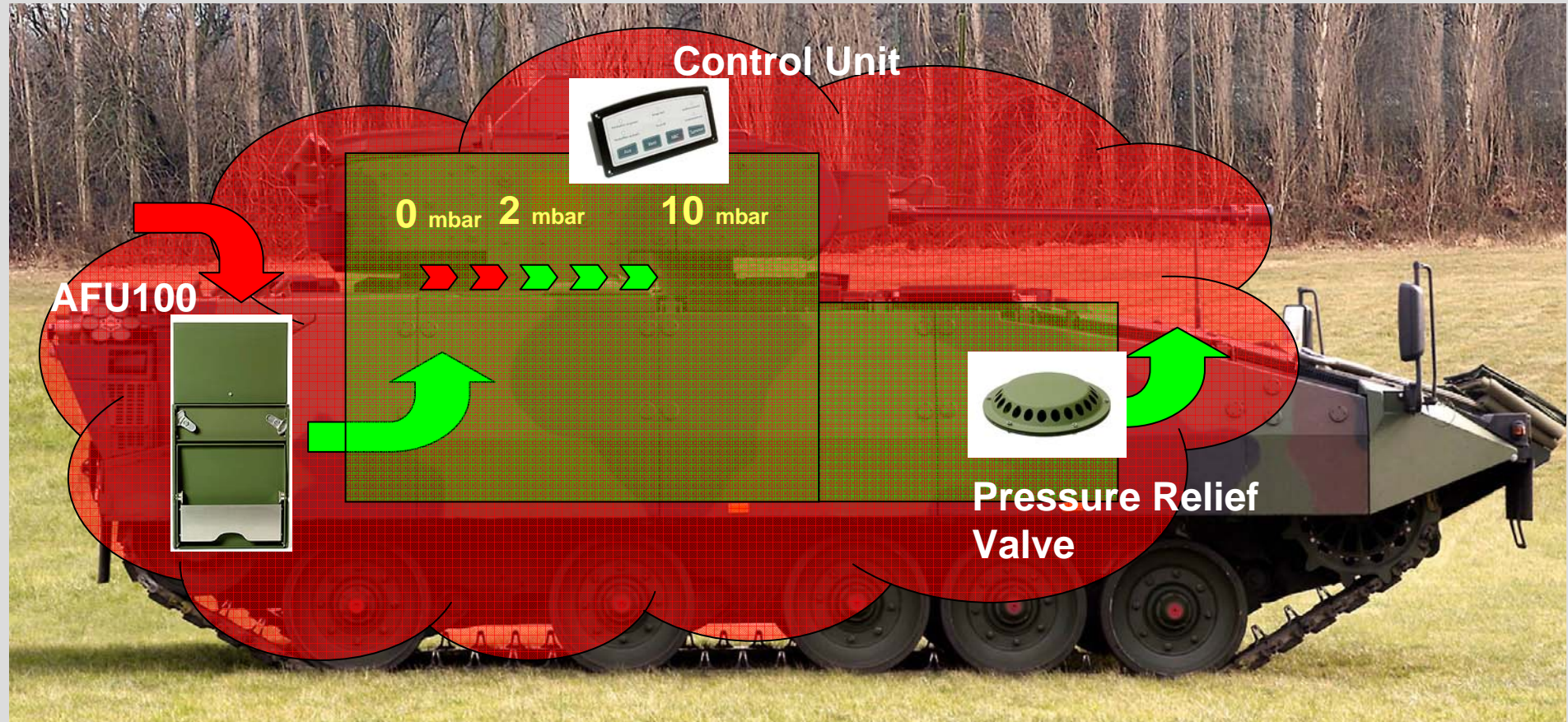
Lübeck, May 2009

# Dräger NBC Protection Systems

What is Colpro ?



The NBC - protection system produce a positive pressure inside the protected cell, so that contaminated air can't reach the interior area of .....



... vehicles, cabins and shelters

**Key Features NATO NBC Protection System AFU100:**

- **Low price**
- **Low Life Cycle Costs (Maintenance / Consumer Parts)**
- **Full Dräger Quality**
- **Low power consumption**
- **Modular configuration according to customer requirements**
- **Small and flexible package dimensions**
- **including all required accessories (Control Unit, Pressure Relief Valve)**

# NBC Protection System Dräger AFU100

## Technical Features Base Version



### Base Version:

- **Pressure Unit up to 15 mbar**
- **Unit&Filter acc. AEP54**
- **105 cbm/h NBC (=62 cfm)**
- **200 cbm/h Vent. (=118 cfm)**
- **< 15A @ 28V (420 W)**
- **Coarse dust extr. 95%**
- **Weight <25kg** (Base Version, w/o Hood, w/o Filter)
- **HEPA=Pre-Filter, 24h @ 200cbm, 1g/cbm**
- **Separated Hepa and Gas-Filter**



Base Version AFU100 with Hood and Filter

# NBC Protection System Dräger AFU100

## Pictures



# NBC Protection System Dräger AFU100 Pictures



Blower, Cyclone, w/o Hood



# NBC Protection System Dräger AFU100

## Pictures



# NBC Protection System Dräger AFU100 Particle Filter

Airflow: up to 200 cbm/h

HEPA Performance @ 105 cbm/h:

| Particle Size | Efficiency |
|---------------|------------|
| 0,1 to 0,5µm  | 99,998%    |
| 0,5 to 1,0µm  | 99,999%    |
| Around 1 µm   | 99,9999%   |
| 1,0 to 10µm   | 99,9999%   |

According to AEP54 and  
Bundeswehr TL (in process)

Dust Performance @ 200 cbm/h:  
24 hours with 1g/m<sup>3</sup> Arizona coarse dust

Weight: 0,9 kg





## NBC Protection System Dräger AFU100 Gas Filter

Airflow up to 105 cbm/h

Performance against

6x Chemical Warfare Agents (CWA)  
12x Toxic Industrial Chemicals (TIC)

According to AEP54 and  
Bundeswehr TL (in process)

Weight: 11 kg



# NBC Protection System Dräger AFU100

## Technical Features Options



### Options Basic Unit:

-Separate Mounting (2 boxes) [A1]

-Unit&Filter acc. German BW TL [A2]

-Gasfilter bypass [A3]

(not in combination with A2)

-Installation within TFA\* [A4]

(not in combination with A1)



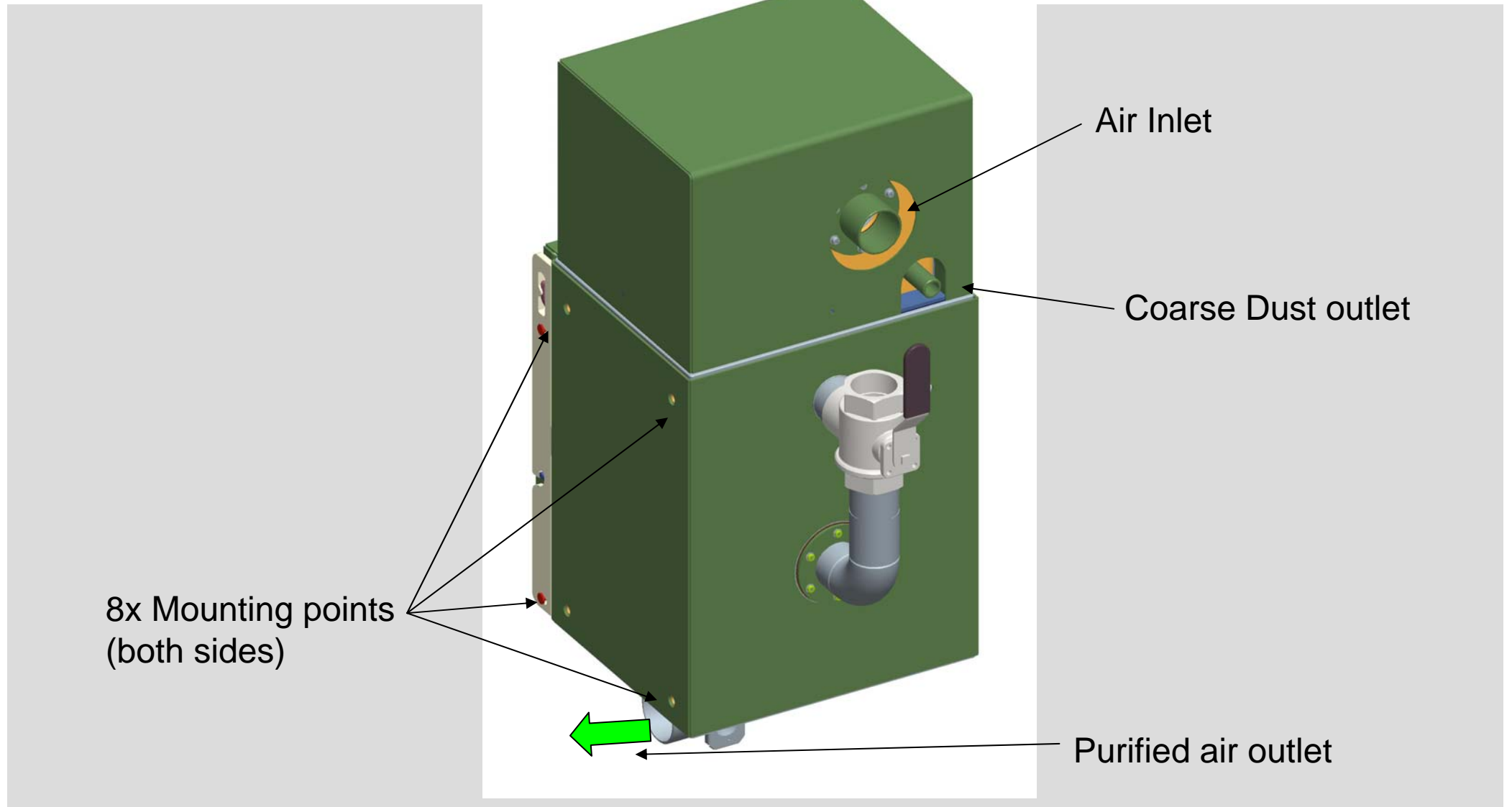
Separate Mounting Version with Hose connection



Gasfilter Bypass

TFA= Toxic Free Area, Occupant compartment

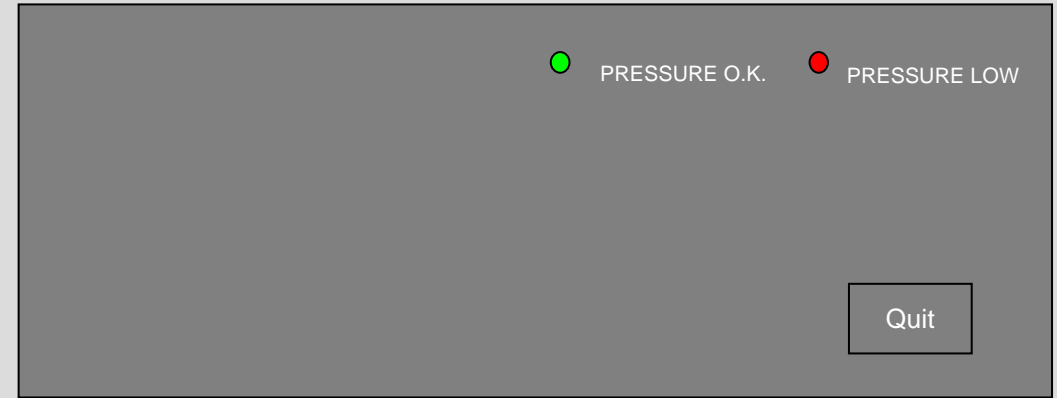
# NBC Protection System Dräger AFU100 Interfaces



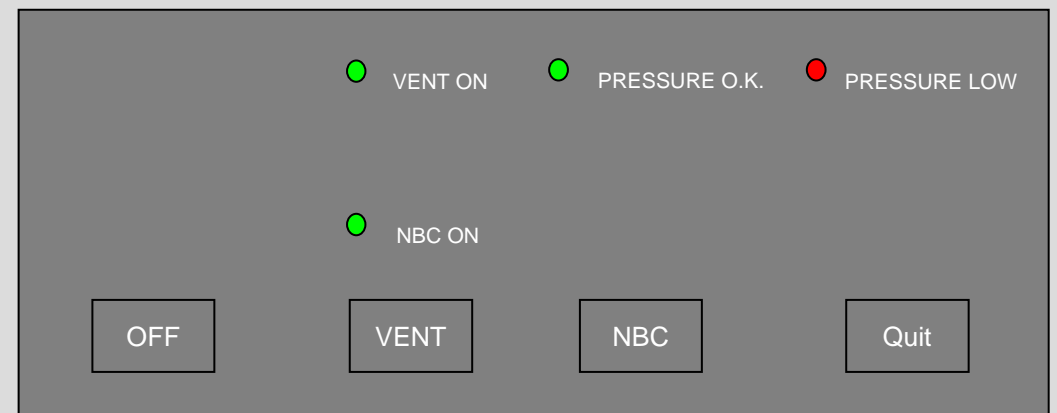
# NBC Protection System Dräger AFU100

## Technical Features Option: Electronic Control Unit

### -Pressure control TFA with Display [E1]



### -Optional with integrated AFU control [E1+E2]

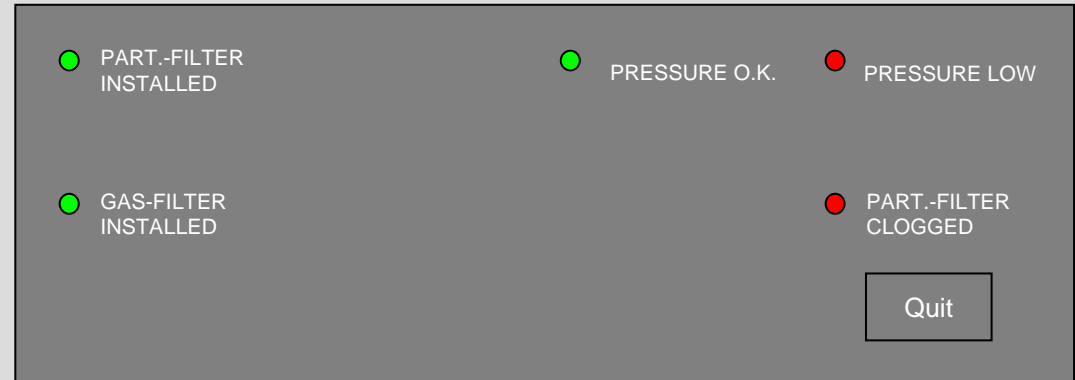


# NBC Protection System Dräger AFU100

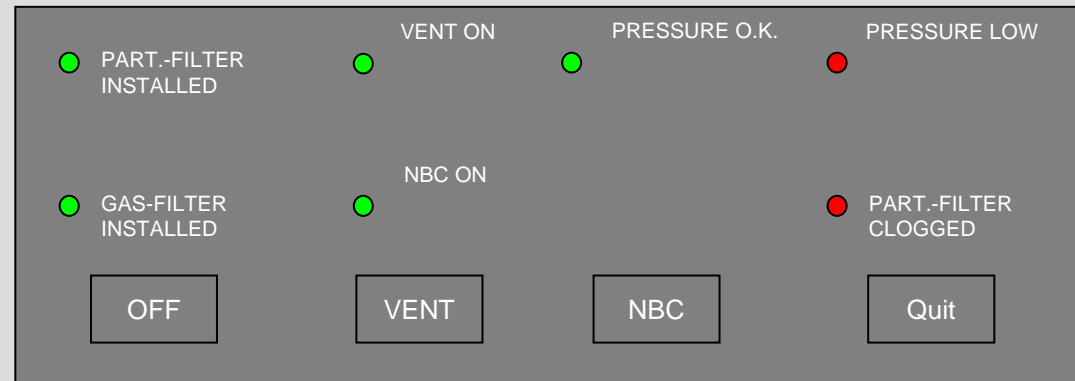
## Technical Features Option: Electronic Control Unit

### -Safety Kit 1 [E1+E3]:

#### Filter recognition & Pressure Drop Part Filter



### -Optional with integrated AFU control [E1+E2+E3]



# NBC Protection System Dräger AFU100

## Technical Features Option: Electronic Control Unit

### -Optional Safety Kit 2 [E1+E4]:

#### Kit 1 (Filter recognition & Pressure Drop Part Filter) & Air Flow control



|  |   |   |
|--|---|---|
| <input checked="" type="checkbox"/> PART.-FILTER INSTALLED | <input checked="" type="checkbox"/> PRESSURE O.K. | <input type="checkbox"/> PRESSURE LOW         |
| <input checked="" type="checkbox"/> GAS-FILTER INSTALLED   | <input type="checkbox"/> LOW FLOW                 | <input type="checkbox"/> PART.-FILTER CLOGGED |
| <input type="button" value="Quit"/>                        |   |   |

### -Optional with integrated AFU control [E1+E2+E4]



|  |   |   |   |
|--|---|---|---|
| <input checked="" type="checkbox"/> PART.-FILTER INSTALLED | <input checked="" type="checkbox"/> VENT ON | <input checked="" type="checkbox"/> PRESSURE O.K. | <input type="checkbox"/> PRESSURE LOW         |
| <input checked="" type="checkbox"/> GAS-FILTER INSTALLED   | <input checked="" type="checkbox"/> NBC ON  | <input type="checkbox"/> LOW FLOW                 | <input type="checkbox"/> PART.-FILTER CLOGGED |
| <input type="button" value="OFF"/>                         | <input type="button" value="VENT"/>         | <input type="button" value="NBC"/>                | <input type="button" value="Quit"/>           |

## NBC Protection System Dräger AFU100 Technical Features Accessories

-Pressure Relief Valve



Adjustable:

1 to 15 mbar (100 to 1500 Pa)

@ 50 to 250 cbm/h (29,5 to 147 cfm)



-One way flap (for installation with two AFU100 in parallel)

-Extension Cable 5 mtr (AFU to Control Unit)

-Data Interface (Sub-D, for external data use)



-NBC Hose 2mtr (Connection AFU to Compartment or for separate mounting)

-Clamp for Hose fixing

-Mounting Kit for AFU (Railssystem)



Thank you very much for your attention !

**Dräger**

