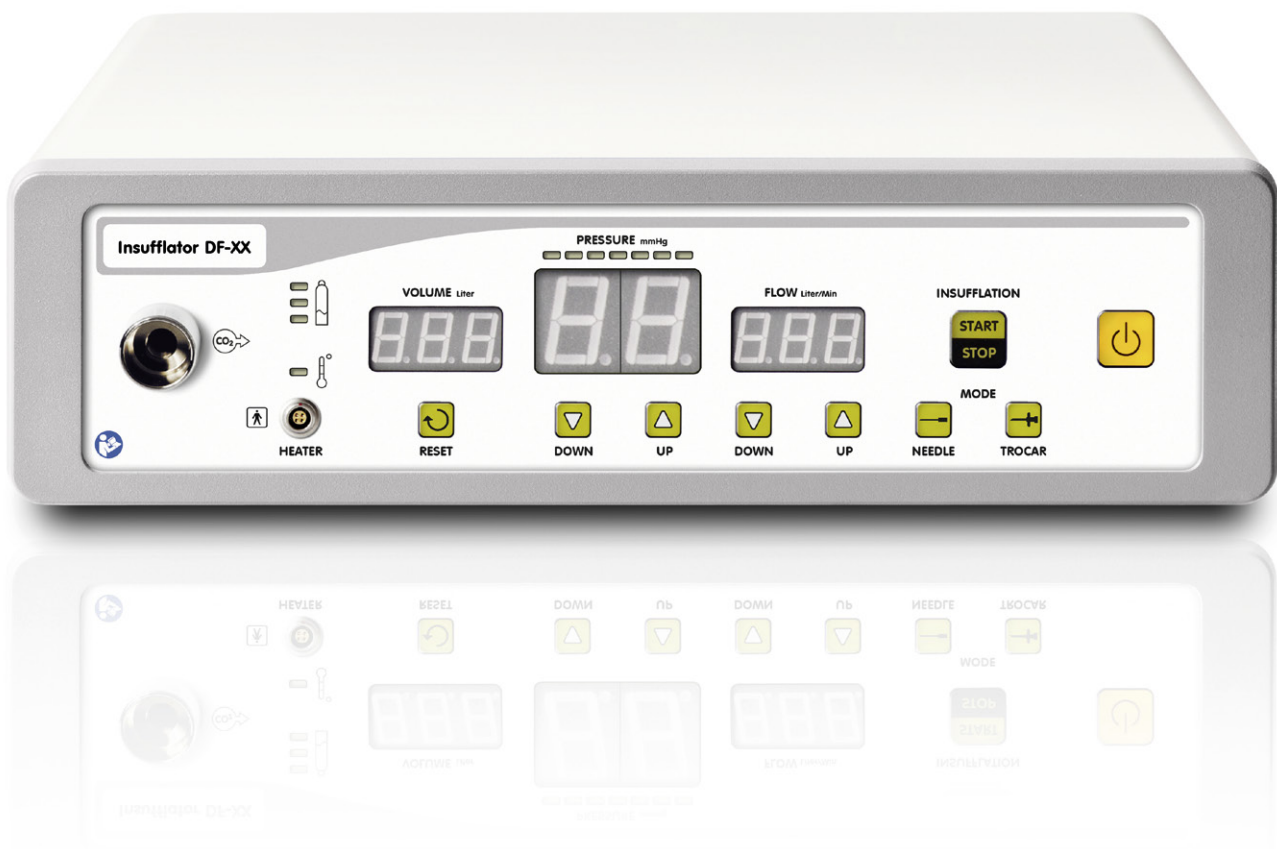


# INSUFFLATOR

## CO<sub>2</sub>-INSUFFLATOR DF series

- Full automatic
- Filter system for sterility
- Up to 45 liters/ minute
- Microprocessor controlled



# INSUFFLATOR

## CO<sub>2</sub>-INSUFFLATOR DF series

| Series  | Description                                 |
|---------|---------------------------------------------|
| DF-320  | · without heater, Maximum gasflow: 20 l/min |
| DF-330  | · without heater, Maximum gasflow: 30 l/min |
| DF-345  | · without heater, Maximum gasflow: 45 l/min |
| DF-320H | · with heater, Maximum gasflow: 20 l/min    |
| DF-330H | · with heater, Maximum gasflow: 30 l/min    |
| DF-345H | · with heater, Maximum gasflow: 45 l/min    |

### Technical Data

|                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Insufflator pressure:                            | · 0 - 30 mmHg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Power supply:                                    | · 100 - 240 VAC, 50 - 60 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Power consumption:                               | · 25 - 40 VA (25-105 VA with gas heating)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Protection class (acc.to IEC 60601-1):           | · I                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Safety class:                                    | · BF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| IP code:                                         | · IP 20                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Standard:                                        | · IEC 60601-1-2 / IEC 60601-1-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Device classification (EU) 2017/745, annex VIII: | · IIb                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Gas:                                             | · Carbon dioxide (medical)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Gas connection:                                  | · UNF 7/16"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Dimensions:                                      | · Control unit: 355mm x 105mm x 253mm (WxHxD); 6,7 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Delivery contains:                               | · Insufflator, mains cable, CO <sub>2</sub> high pressure tube UNF to German gas connection, wrench set: SW17/ SW30 (sterile filter)* standard silicone tube (not H version), system gas heater with tube set (only H version), user manual                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Features:                                        | <ul style="list-style-type: none"><li>· Flexible gas supply: The device can be used with gas bottles or central gas supply systems. The gas supply mode can be changed very easily by integrated software.</li><li>· System gas heater: For reduction of post surgery problems the DF Series is available with a high efficient gas heater. The gas heater is preadjusted and works on a plug and play base full automatically. The heat exchanger can be autoclaved with the tube set.</li><li>· 2 modes available:<ul style="list-style-type: none"><li>- Needle (pre-insufflation) use for veress-needle</li><li>- Trocar (main insufflation) use for high-flow-instruments</li></ul></li><li>· ACF: The DF Series stands for Advance-Continuous-Flow-Insufflation. That means no more disruption between gasflow and pressure reading phases.</li><li>· Safety: The automatic self check is activated each time the unit is switched on to ensure that all electronic and pneumatic components are in good running order. This safety feature carries a guarantee for lifetime of the unit. The changeable sterile filter prevents reflux of liquids and contamination of the gas way.</li><li>· Differential pressure indicator: A colored LED array shows the actual-setpoint pressure difference between setted value and factual value in the patient.</li></ul> |