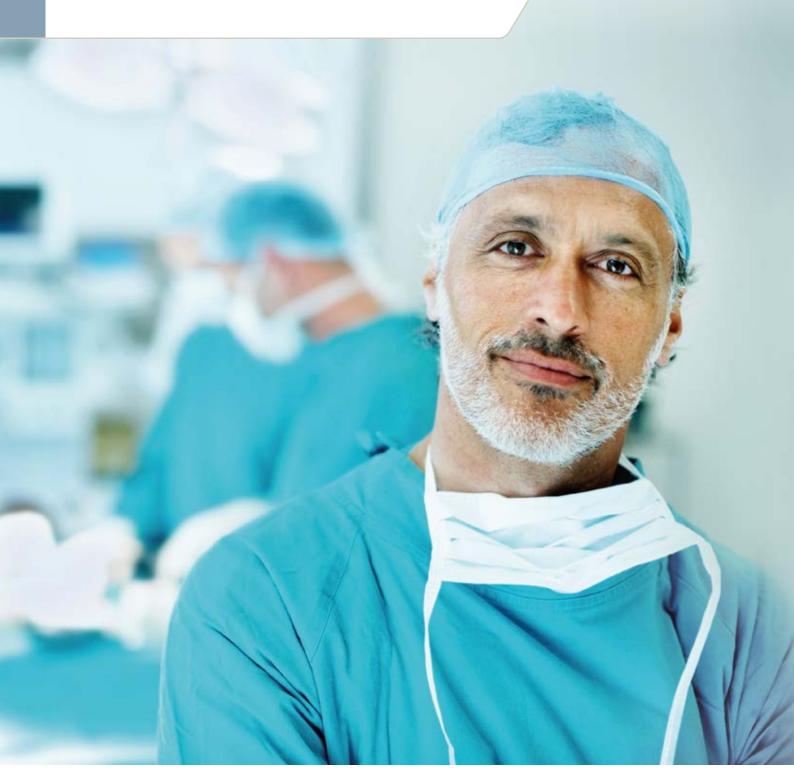
WiSAP®

INSUFFLATION

WARM GAS INSUFFLATORS / GAS HEATING MODULES / ACCESSORIES



WARM GAS INSUFFLATION THE KEY TO AVOIDING HYPOTHERMIA

WISAP® PIONEER IN INSUFFLATION

Over the past 35 years WISAP has developed over six generations of insufflators and has significantly promoted the high standard in the field of insufflation of today.

Our family of insufflators is the result of decades of experience and represents our commitment to quality.





HEATING TUBE SINGLE-USE



HEATING TUBE MULTI-USE

HIGH QUALITY HEATING HOSES MULTI-USE AND SINGLE-USE



TETRAFLATOR 50, ULTRA FLOW

Tetraflator 50, ULTRA FLOW

 ${\bf High-Performance\ CO_2-Insufflator\ with\ integrated}$ gasheating and smoke-evacuation (optional)

- 50 liter flowrate
- integrated gas heating
- optimal pressure control
- CO₂ supply with gas-bottle or central
 optical/accoustic warnings at excess pressure
- pressure relief valve



TECHNICAL D	TECHNICAL DATA	
Max. gas flow:	50 l/min	
Pressure range:	3-28 mmHg	
Gas connection:	CO ₂ -US-Standard	
Mains voltage:	100-240 V / 50/60 Hz	
Power input:	Tetraflator Standard 92 VA Tetraflator with smoke evacuation 140 VA	
Casing:	Stainless steel, aluminium / white coated	
Dimensions:	w x h x d = 350 x 140 x 310 mm	
Weight:	7,2 kg	

\	ORDER DATA	TETRAFLATOR 50, ULTRA FLOW
	7090L50	CO2-Insufflator 50 Leach with one single-use heating hose, gas filter (to bottle- / house-connection), gas filter (to patient), filter adaptor for multi-use heating hose
	7090L50SE	CO2-Insufflator 50 l with smoke evacuation each with one single-use heating hose, gas filter (to bottle- / house-connection), gas filter (to patient), filter adaptor for multi-use heating hose, tubing-set for smoke-evacuation, foot-switch for smoke evacuation

TETRAFLATOR 30, ULTRA FLOW

Tetraflator 30, ULTRA FLOW

High-Performance CO₂-Insufflator with integrated gasheating and smoke-evacuation (optional)

- 30 liter flowrate
- integrated gas heating
- optimal pressure control
- CO₂ supply with gas-bottle or central
 optical/accoustic warnings at excess pressure
- pressure relief valve



TECHNICAL DATA	
Max. gas flow:	30 l/min
Pressure range:	3-28 mmHg
Gas connection:	CO ₂ -US-Standard
Mains voltage:	100-240 V / 50/60 Hz
Power input:	Tetraflator Standard 92 VA Tetraflator with smoke evacuation 140 VA
Casing:	Stainless steel, aluminium / white coated
Dimensions:	w x h x d = 350 x 140 x 310 mm
Weight:	7,2 kg

\	ORDER DATA	TETRAFLATOR 30, ULTRA FLOW
	7090L30	CO2-Insufflator 30 l each with one single-use heating hose, gas filter (to bottle- / house-connection), gas filter (to patient), filter adaptor for multi-use heating hose
	7090L30SE	CO2-Insufflator 30 l with smoke evacuation each with one single-use heating hose, gas filter (to bottle- / house-connection), gas filter (to patient), filter adaptor for multi-use heating hose, tubing-set for smoke-evacuation, foot-switch for smoke evacuation

Tetraflator 45

 $\label{eq:high-Performance CO} \textbf{0}_2\text{-Insufflator with integrated gas heating and smoke-evacuation (optional)}$

- 45 liter flowrate
- integrated gas heating
- optimal pressure control
- Neonatal-/bariatric-mode
- CO₂ supply with gas-bottle or central
- optical/accoustic warnings at excess pressure
- pressure relief valve



TECHNICAL	DATA
Max. gas flow:	45 l/min
Pressure range:	3-30 mmHg
Gas connection:	CO ₂ -US-Standard
Mains voltage:	100-240 V / 50/60 Hz
Power input:	Tetraflator Standard 100 VA Tetraflator with smoke evacuation 140 VA
Casing:	Stainless steel, aluminium / white coated
Dimensions:	w x h x d = 350 x 130 x 360 mm
Weight:	app. 8 kg

\	ORDER DATA	TETRAFLATOR 45
	7085L45T	CO2-Insufflator 45 l each with one single-use heating hose, gas filter (to bottle- / house-connection), gas filter (to patient), filter adaptor for multi-use heating hose
	7085L45TSE	CO2-Insufflator 45 l with smoke evacuation each with one single-use heating hose, gas filter (to bottle- / house-connection), gas filter (to patient), filter adaptor for multi-use heating hose, tubing-set for smoke-evacuation, foot-switch for smoke evacuation

TETRAFLATOR 30

Tetraflator 30

$\begin{tabular}{ll} MID-RANGE~CO$_2$-Insufflator~with~gas~heating~and~smoke-evacuation~(optional) \end{tabular}$

- 30 liter flowrate integrated gas heating
- optimal pressure control
- Neonatal-/bariatric-mode
- CO₂ supply with gas-bottle or central optical/accoustic warnings at excess pressure
- pressure relief valve



TECHNICAL DATA	
Max. gas flow:	30 l/min
Pressure range:	3-30 mmHg
Gas connection:	CO ₂ -US-Standard
Mains voltage:	100-240 V / 50/60 Hz
Power input:	Tetraflator Standard 100 VA Tetraflator with smoke evacuation 140 VA
Casing:	Stainless steel, aluminium / white coated
Dimensions:	w x h x d = 350 x 130 x 360 mm
Weight:	app. 8 kg

ORDER DATA	TETRAFLATOR 30
7085L30T	CO2-Insufflator 30 l each with one single-use heating hose, gas filter (to bottle- / house-connection), gas-filter (to patient), filter adaptor for multi-use heating hose
7085L30TSE	CO2-Insufflator 30 l with smoke evacuation each with one single-use heating hose, gas filter (to bottle-/house-connection), gas filter (to patient), filter adaptor for multi-use heating hose, tubing-set for smoke-evacuation, foot-switch for smoke evacuation

Tetraflator 20

${\bf Low\text{-}Cost}\ {\bf CO_2\text{-}Insufflator}\ {\bf with}\ {\bf gas}\ {\bf heating}$

- 20 liter flowrate

- integrated gas heatingoptimal pressure controlNeonatal-/bariatric-mode
- CO₂ supply with gas-bottle or central
 optical/accoustic warnings at excess pressure
 pressure relief valve



CO₂-GAS HEATING

SAFETY-RELIEF VALVE

TECHNICAL DATA	
Max. gas flow:	20 l/min
Pressure range:	3-30 mmHg
Gas connection:	CO ₂ -US-Standard
Mains voltage:	100-240 V / 50/60 Hz
Power input:	Tetraflator Standard 100 VA
Casing:	Stainless steel, aluminium / white coated
Dimensions:	w x h x d = 350 x 130 x 360 mm
Weight:	app. 8 kg

\	ORDER DATA	TETRAFLATOR 20
	7085L20T	CO2-Insufflator 20 l each with one single-use heating hose, gas filter (to bottle- / house-connection), gas filter (to patient), filter adaptor for multi-use heating hose

CO2-GAS HEATING-MODUL

Flow Therme

Separate gas heating modul, adaptable to any cold-gas insufflator.

In the course of an operative endoscopy a few hundert liters of CO_2 -gas can be insufflated. Because of the size of the peritoneal surface and the resulting evaporative-cooling it results in cooling of the abdominal cavity (temperature in the abdominal cavity to <32° C).

This can cause a peritoneal catarrh which leads in turn to post-operative pain of the diaphragm and the shoulder.

After 3 years of studies it could be shown that by using gas heated up to body temperature, the postoperative use of analgesics was significantly reduced.

The CO₂-gas is heated up by the WISAP FLOW THERME.

FITS ALL COLD GAS INSUFFLATORS

FITS TO 7642 HS + 7642 HSE



TECHNICAL DATA	
Mains voltage:	Standard: 230 V-50 Hz Please indicate other requested voltages when ordering.
Power input:	55 VA
Dimensions:	w x h x d = 150 x 80 x 170 mm
Casing:	Stainless steel, aluminium / white coated
Weight:	2,2 kg



ORDER DATA	FLOW THERME
7642	Flow Therme, for heating up insufflation gas to body temperature incl. accessories: Mains cable

CO2-INSUFFLATOR - ACCESSORIES

$\label{thm:consisting} Veress-Needle, modular system consisting of: Needle body with stopcock, spring holder, spring, Insufflation tubing, Incision cannula$ 100 mm 120 mm 7160 W1

	ACESSORIES		
		Heating tube (multi-use)	
	7642HS	L = 2,75 m / autoclaveable / adaptor for gas-heating / LL adaptor to Veress needle or trocar	
		Heating tube (single-use) (Pack)	
	7642HSE1 7642HSE10	WISAP / L = 2.75 m / LL adaptor to Veress needle or trocar / 10 pcs. p.pck. Olympus / L = 2.75 m / LL adaptor to Veress needle or trocar / 10 pcs. p.pck.	
tro		Smoke Evacuation	
	7085SE	Single Use tubing for smoke evacuation. Only in combination with insufflation devices equiped with smoke evacuation system	
		Filter, sterile (pack)	
	7070TFW2	For CO2-gas-exit / 50 pcs. p. pack	
1		Filter extern 1 piece	
	7085FE	For CO2-connection (back side of unit)	
		Adaptor without filter 1 piece	
	7070TA	For heating-tube multi use (7642HS) / 1 piece	
		System adaptor 1 piece	
	7050AG	Adapter 1 piece	
		Insufflation tube 1 piece	
	7153	Insufflation tube (for devices without gas-heating) / L 2,4 m	
1-21		foot-switch	
	7085FS 7090FS	foot-switch for smoke evacuation control	

7160 W3

150 mm

CO2-INSUFFLATOR - ACCESSORIES

Gas-source	I Unit fitting	ORDER DATA	CO2-CONNECTION-TUBING FOR TETRAFLATORS
			PIN-Index < ▷ US (HIGH-PRESSURE)
		9919	CO2-connection-tubing (HIGH-P), bottle (PIN-index) - device (PIN-index) / L = 1 m
	l I		
	I I		
	I		Germany ⊲ ▷ US (HIGH-PRESSURE)
		9919-1	CO2-connection-tubing (HIGH-P), bottle (D) - device (US) / L = 1 m
	l I		
	I I		
			Italy < ▷ US (HIGH-PRESSURE)
		9919-3	CO2-connection-tubing (HIGH-P), bottle (Italy) - device (US) / L = 1 m
	l I		
6021	I I		
			Germany <pre></pre>
	9912-4	CO2-connection-tubing (LOW-P), central (D) - device (US) / L = 4 m	
	l		
6021	I I		
A	I		Germany ⊲ ▷ US (LOW-PRESSURE)
		9912-8	CO2-connection-tubing (LOW-P), central (D) - device (US) / L = 8 m
	l I		
	 		
	 		
A			
		ORDER DATA	CO2-CONNECTION-TUBING FOR PREVIOUS MODELS
5021		ORDER DATA	CO2-CONNECTION-TUBING FOR PREVIOUS MODELS Germany ⟨ ▷ WISAP (LOW-PRESSURE)
5021		ORDER DATA	
3021			Germany ⊲ ▷ WISAP (LOW-PRESSURE)
6021			Germany ⊲ ▷ WISAP (LOW-PRESSURE)
			Germany ⊲ ▷ WISAP (LOW-PRESSURE)
6021			Germany
5021		9912	Germany ⟨ ▷ WISAP (LOW-PRESSURE) CO2-connection-tubing (LOW-P), Central (D) - device (Wisap LOW-P) / L = 4 m Italy ⟨ ▷ Italy (HIGH-PRESSURE) CO2-connection-tubing (HIGH-P), bottle (Italy) - device (Italy) / L = 1 m
5021		9912	Germany ⟨ ▷ WISAP (LOW-PRESSURE) CO2-connection-tubing (LOW-P), Central (D) - device (Wisap LOW-P) / L = 4 m Italy ⟨ ▷ Italy (HIGH-PRESSURE) CO2-connection-tubing (HIGH-P), bottle (Italy) - device (Italy) / L = 1 m
5021		9912	Germany ⟨ ▷ WISAP (LOW-PRESSURE) CO2-connection-tubing (LOW-P), Central (D) - device (Wisap LOW-P) / L = 4 m Italy ⟨ ▷ Italy (HIGH-PRESSURE) CO2-connection-tubing (HIGH-P), bottle (Italy) - device (Italy) / L = 1 m
3027		9912	Germany ○ WISAP (LOW-PRESSURE) C02-connection-tubing (LOW-P), Central (D) - device (Wisap LOW-P) / L = 4 m Italy ○ Italy (HIGH-PRESSURE) C02-connection-tubing (HIGH-P), bottle (Italy) - device (Italy) / L = 1 m C02-connection-tubing (HIGH-P), bottle (Italy) - device (Italy) / L = 2 m
		9912	Germany ⟨ ▷ WISAP (LOW-PRESSURE) C02-connection-tubing (LOW-P), Central (D) - device (Wisap LOW-P) / L = 4 m Italy ⟨ ▷ Italy (HIGH-PRESSURE) C02-connection-tubing (HIGH-P), bottle (Italy) - device (Italy) / L = 1 m C02-connection-tubing (HIGH-P), bottle (Italy) - device (Italy) / L = 2 m
3027		9912	Germany ⟨ ▷ WISAP (LOW-PRESSURE) C02-connection-tubing (LOW-P), Central (D) - device (Wisap LOW-P) / L = 4 m Italy ⟨ ▷ Italy (HIGH-PRESSURE) C02-connection-tubing (HIGH-P), bottle (Italy) - device (Italy) / L = 1 m C02-connection-tubing (HIGH-P), bottle (Italy) - device (Italy) / L = 2 m
		9912	Germany ⟨ ▷ WISAP (LOW-PRESSURE) C02-connection-tubing (LOW-P), Central (D) - device (Wisap LOW-P) / L = 4 m Italy ⟨ ▷ Italy (HIGH-PRESSURE) C02-connection-tubing (HIGH-P), bottle (Italy) - device (Italy) / L = 1 m C02-connection-tubing (HIGH-P), bottle (Italy) - device (Italy) / L = 2 m
		9912	Germany

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