

Mechanical and air/water or chemical electrode-cleaning systems

Models 8540/8544



Mechanical cleaning



Air, water or chemical cleaning

Mechanical electrode-cleaning system, Model 8540

The mechanical electrode-cleaning system utilizes a ring-shaped, small brush or a silicon rubber membrane. The brush frame of stainless steel is attached to the lower end of an up-and-down moving shaft. The shaft movement is periodically activated by means of a double-acting pneumatic cylinder programmed by timer.

Cleaning frequency is adjustable within wide range depending upon the application. Both the programmer and the drive are housed in a splashproof enclosure. A manual override permits the operation of the cleaning system by hand.

Air or water electrode cleaning system

Models 8544.1 (220 V)/ 8544.2 (110 V)/8544.3 (24 V)

A simple IP65 electrovalve, which can be supplied by air or water, is installed between the transmitter and the electrode or sensor.

Chemical electrode-cleaning system

Models 8544.4 (220V)/8544.5 (110 V)/8544.6 (24V)

A twin chamber hose pump using air-instrument, delivers measured volumes of a cleaning fluid via a nozzle which is mounted immediately below the tip of the electrode or sensor.

The 8544 systems are to be used with 9100 serie transmitters only.

data sheet

Specifications - Model 8540 (mechanical)

● Pneumatic control unit 8540.0

Air pressure: 4–8 bar (58–116 psi)
 Connections: for plastic tubing $\varnothing 5 \times 1$ mm
 Cleaning interval:
 adjustable within 1–10 cycles/minute
 Enclosure: plastic, for wall mounting
 Dimensions: 240 H x 170 W x 102 D mm
 (9.5 H x 6.7 W x 4 D in)
 Weight: 1,375 g (3 lbs)

● Cleaner units 8540.4/8540.5

For use in neutral or alkaline pH range

8540.4: piston, 2 brushes, 2 x 10 m of plastic tubing, 1 friction washer, 1 seal

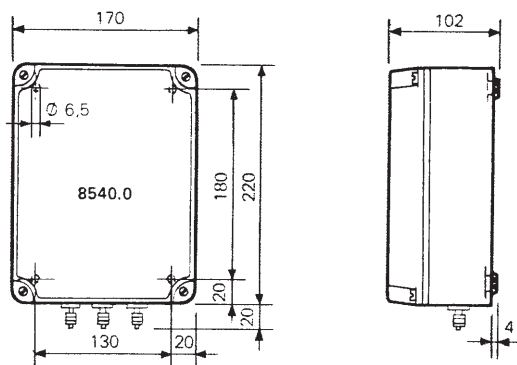
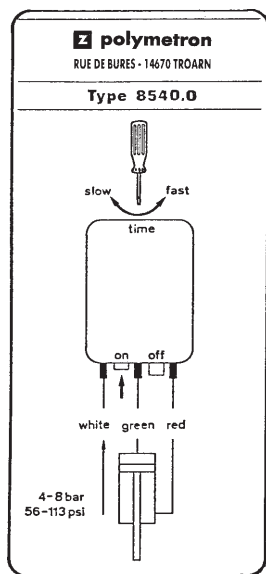
8540.5: piston, 1 membrane and its holder, 1 x 10 m of plastic tubing, 1 friction washer, 1 seal

Operating temperature: -5 to 120°C
 (23 – 248°F)

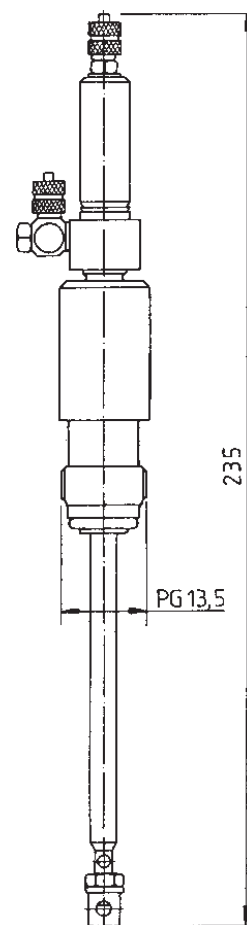
Weight: 270 g (0.6lb)

● Materials

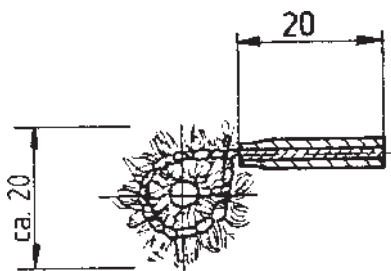
Piston of cleaner units 8540.4, 8540.5: PVDF and stainless steel
 Brush (8540.4): holder in stainless and brush in polypropylene
 Membrane holder (8540.5): stainless steel/Membrane (8540.5): silicon rubber
 Friction washer (8540.4/8540.5): Teflon® /Seal (8540.4/8540.5): Viton®
 Plastic tubing (8540.4/8540.5): high density polyethylene



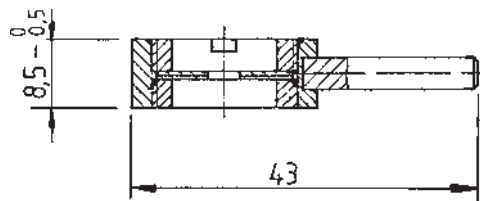
**Control unit
8540.0**



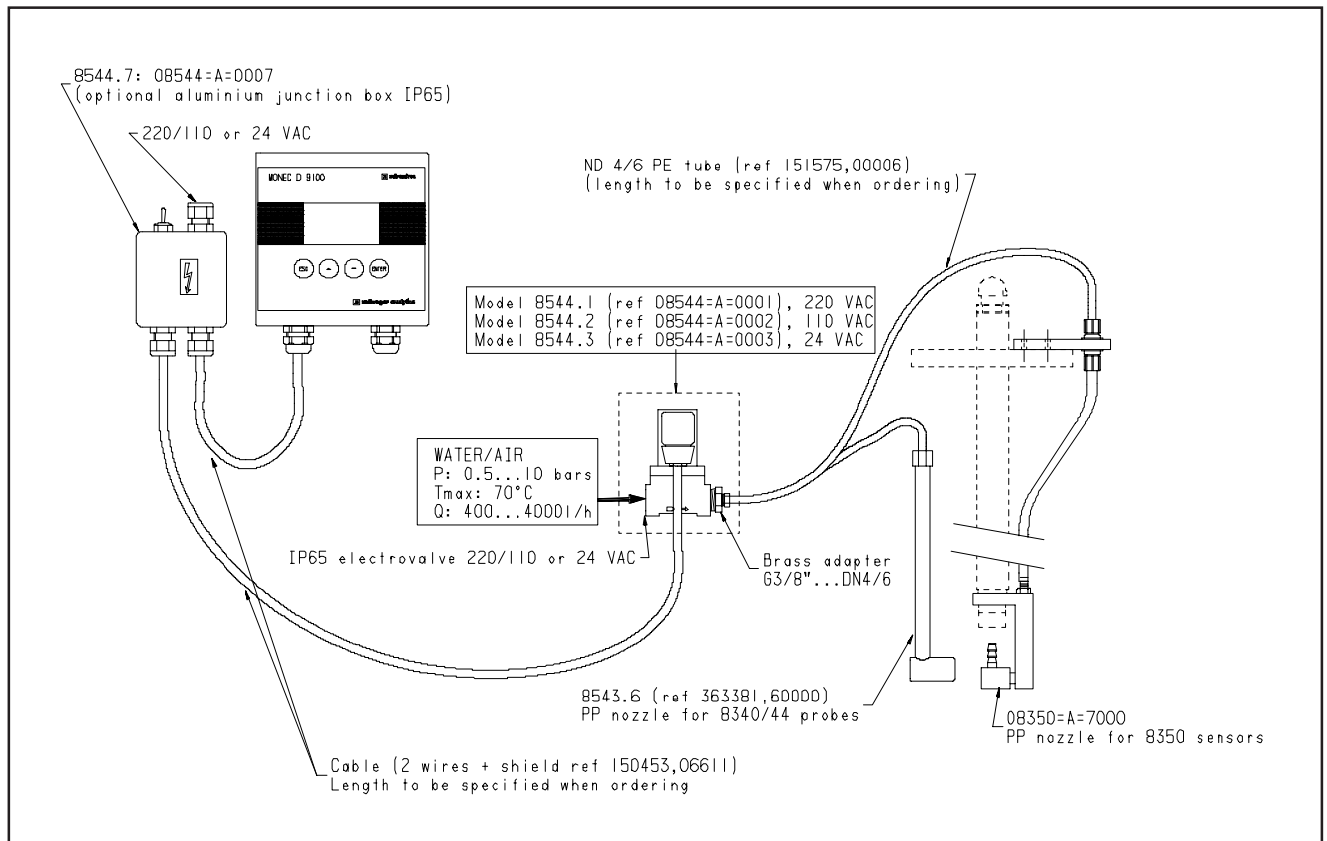
Piston for 8540.4/8540.5



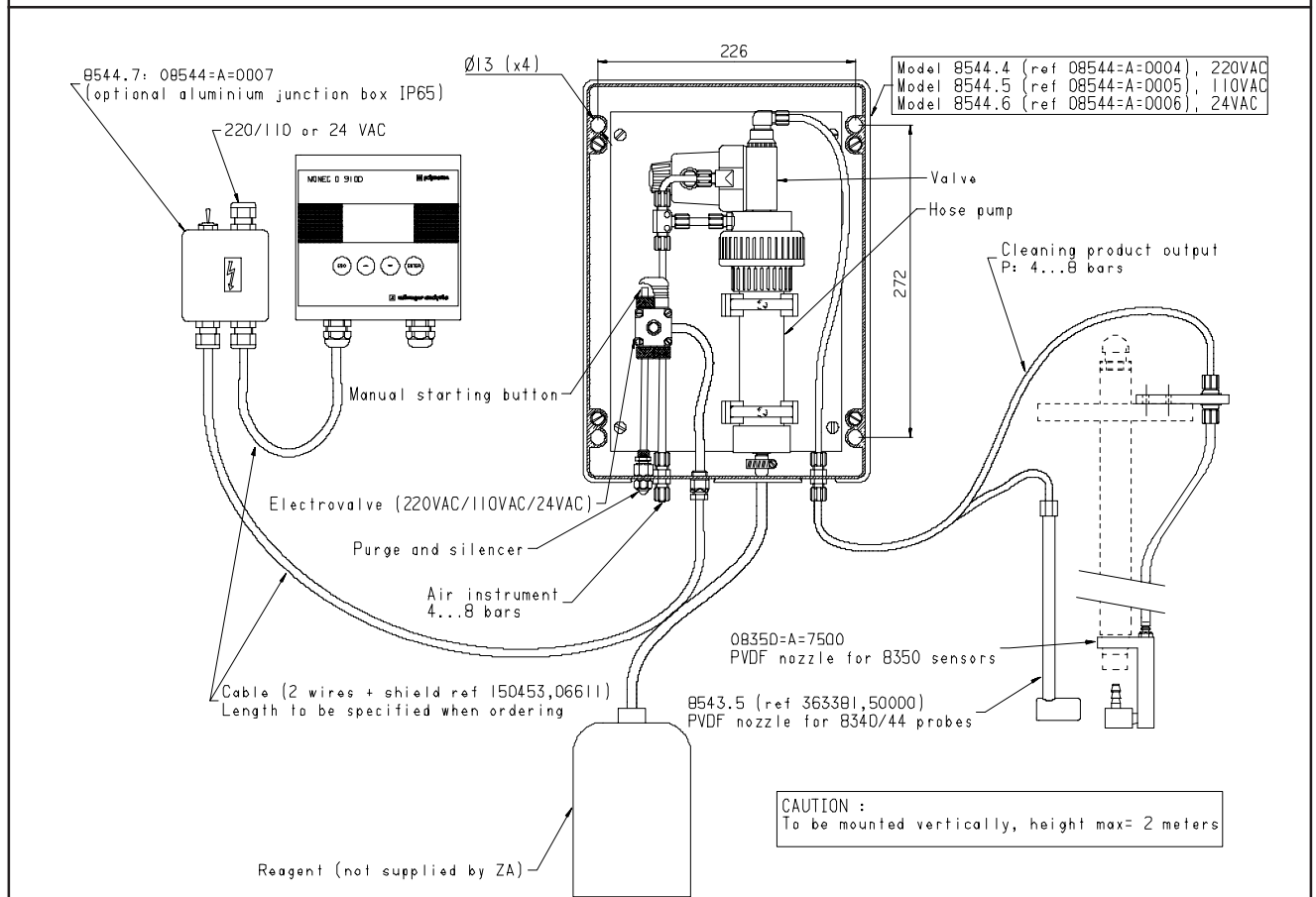
Brush for 8540.4



Membrane for 8540.5



Cleaning system with air or water (8544.1/8544.2/8544.3)



Cleaning system with chemical reagent (8544.4/8544.5/8544.6)

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Distributor

TE8544=A=100 - rev. D - FR50622048726

Specifications - Models 8544.x

● Systems for air or water cleaning :

8544.1: IP65 electrovalve 220 VAC and brass adapter: G 3/8" - ND 4/6

8544.2: IP65 electrovalve 110 VAC and brass adapter: G 3/8" - ND 4/6

8544.3: IP65 electrovalve 24 VAC and brass adapter: G 3/8" - ND 4/6

Electrovalves can be supplied with air or water: 0.5 bar<P<10 bar (7.25<P<145 psi)

Tmax = 70°C (158°F)

400<Q<4000 l/h

● Other optional items

. Cable (2 wires and 1 shield) to connect the electrovalve to transmitter relay.

. ND 4/6 polyethylene tube to connect the electrovalve to the electrode's or sensor's nozzle (see hereafter).

. IP65 junction box in aluminium.

● Nozzles for electrodes or sensors :

Ref. 08350=A=7000: PP nozzle with 3/4" NPT thread for combined sensors

Ref. 08350=A=7500: PVDF nozzle with 3/4" NPT thread for combined sensors

Ref. 363381,60000: PP nozzle for electrodes installed in 8340/44 probes (fitting PG13,5)

Ref. 363381,50000 : PVDF nozzle for

● Systems for chemical cleaning with a reagent :

8544.4: based on air powered hose pump with electrovalve 220 VAC

8544.5: based on air powered hose pump with electrovalve 110 VAC

8544.6: based on air powered hose pump with electrovalve 24 VAC

The hose pump which is installed in a plastic enclosure has to be supplied with air for wall mounting: 4 bar<P<8 bar (58<P<116 psi)

The electrovalve is equipped with a manual starting button.

The reagent and its container are not supplied by Zellweger Analytics S.A. Ambient temperature: -10 to 50°C (14-122°F)

Suction height: 2 m max. (6.5 ft)
Volume of discharge per cycle: ± 10 ml

Plastic tubing for air pressure and cleaning fluid: Ø 6 x 1 mm (not supplied by Zellweger Analytics S.A.)

Plastic hose for reagent intake: 10 x 2 mm (not supplied by Zellweger Analytics S.A.)

Weight: 3,500 g (7.7 lbs)

Hose pump output tubing: VITON®

Hose pump input tubing: PVC

Internal air tubing: high pressure

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