Hydrochloric Acid/Nitric Acid 1/a

Order No. 81 01 681

Application Range

Standard Measuring Range:	Hydrochloric Acid	
	1 to 10 ppm	
	Nitric Acid	
	1 to 15 ppm	
Number of Strokes n:	Hydrochloric Acid 10	
	Nitric Acid 20	
Time for Measurement:	approx. 1.5 min / 3 min	
Standard Deviation:	± 30 %	
Color Change:	blue → yellow	

Ambient Operating Conditions

Temperature:	5 to 40 °C for HCI

For HNO₃ measurements, the tube scales are applicable only to 20 °C. Where the temperature is different, the measuring result must be multiplied as follows:

Temperature °C Factor

40 0.3 30 0.4 10 2

Absolute Humidity: max. 15 mg H_2O / L

Reaction Principle

HCl and/or HNO₃ + pH indicator → yellow reaction product

Cross Sensitivity

50 ppm nitrogen dioxide result in almost the same reading as 2 ppm nitric acid. 10 ppm hydrogen sulfide or 5 ppm nitrogen dioxide do not effect the reading. Chlorine concentrations in excess of 1 ppm change the entire indicating layer to a yellow-green.

Additional Information

Extension of measuring range for hydrochloric acid: depending on the stroke number, multiply the scale value by the following factor.

Measuring range (ppm)	Strokes	Factor
10 to 50	2	5
0.5 to 1	20	0.5



