



EMC1204p Concentration Transducer

___ Relative Concentration Measurement

Chemical Instrument

Ref:EMC1204p_DS_E

Features

- CPU based
- High sensitivity over wide range
- Simple tank or pipeline installation
- High on-line accuracy and repeatability
- No moving parts, no maintenance



EMC1204 series concentration transducer can be used for on-line determination of the content of sulfuric acid, hydrochloric acid, nitric acid, phosphoric acid, caustic soda and salts in the fluids of various industrial processes, such as printing and dyeing, chemical processes, metallurgy, environment protection, etc.

Application Data

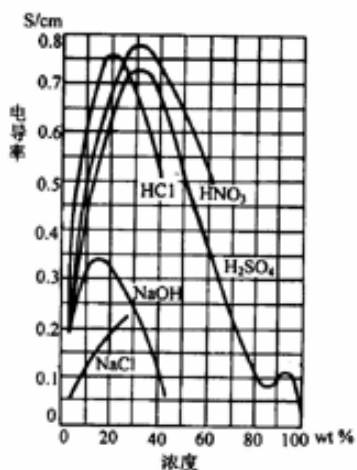


图 1-1 浓度对电导率的相关曲线

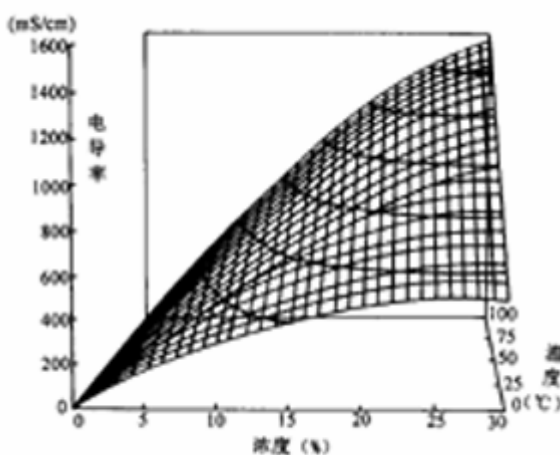


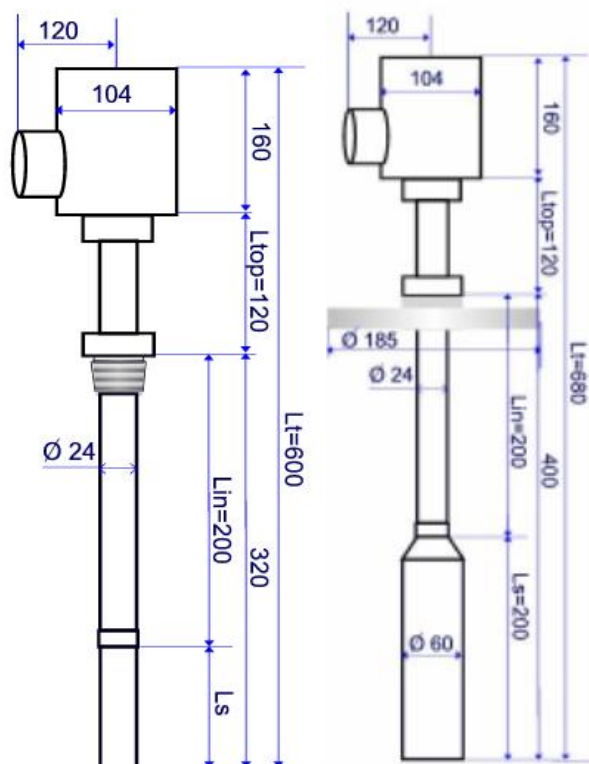
图 1-2 H₂SO₄ 浓度对电导率和温度的相关曲面

Chemicals	Hydrochloric acid	Sulfuric acid	Nitric acid	Caustic soda	Salt
Range	0~15% 25~40%	0~30% 30~85% 85~93% 93-100%	0~30% 30~60%	0~15% 15~42%	0 ~ Saturation

*Inflection of signal linearity could be adjusted in plant. If any special requirement from the above table about working range, please denote in the order as technical attachment.

Specification

Size of Transducer:



Transducer

Accuracy: +/-2.0% of reading

Repeatability: +/-0.1 %

Range: 0-100% (dependent to solution)

Temperature Range (sensor): -40°C to 400°C

Pressure Range: 1.6MPa (standard) , up to 4.0Mpa

Connection:

SS wet materials: Standard 1" NPT(); or DN50 Flange by order;

FTE wet materials: 1 1/2" NPT(Standard);

Overall length: 620mm

Insertion Part::SS:Ø24 mm, Wet length 310 mm; FTE: Ø30 mm, Wet length 310 mm;

Weight: 4 kg

Wet Materials: SS, FTE; Optional by order

Safety Certification: Ex ia

Environmental Rating:

Class 1,Group A/B/C/D(PL); Class II,Group E/F/G(AL)

NEMA 7, with BD5_M,PL; NEMA 8, with BD5_M,PL; NEMA 9, with BD5_M,AL

Standard Model:

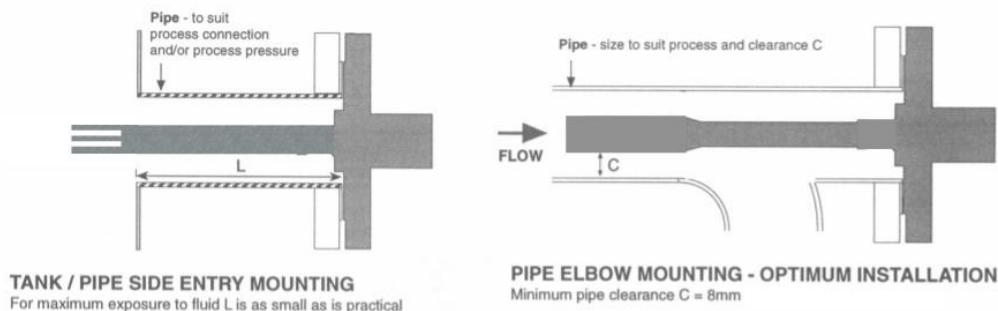
Thread Connection: T-BD5xCD+EMC1204pp NPT1" _T100_R60_P1.6

Flange connection:T-BD5xCD+EMC1204pm F150_T100_R60_P1.6

● Note: Extended temperature and pressure range instruments also available

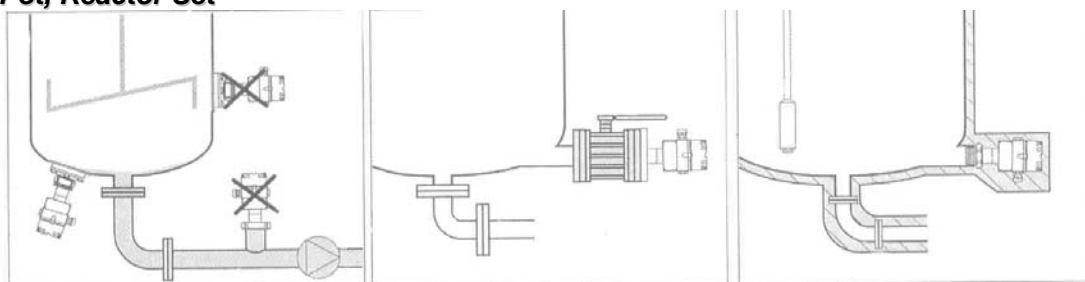
Installation: Against stream

Fitting Set



NOTE: PIPE OR TANK, TEE, FITTING AND TRANSDUCER BODY SHOULD BE LAGGED WHERE THERE IS RISK OF LOCAL TEMPERATURE CHANGE DUE TO HEAT DISSIPATION. ALWAYS ENSURE MATERIAL AROUND TRANSDUCER IS AT SAME TEMPERATURE AS BULK OF FLUID

Pot, Reactor Set



Signal Processor

Processor Unit: BD5xM / BD5xMD (Included)

Power Supply: 9-24 v DC. @ 50mA

Analogue Output: 0/4 - 20mA, Fully configurable, representing setup

Communication: RS232 & R485, IEEE1451.2 STIM, STIMcom/ ModBus support

Alarm/Switch: one isolated voltage free contact, 1 5V switch control

Optional Accessory

Remote operator: BD4CCD Controller: Human interface by field bus

Remote Indicator: XM Digitalizer

Power supply regulator: 9-24V DC regular

BigDipper TechnoChem Insitute

Call: 010-8264.0226; 8264.0225; 8911.1814;

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