percentage deviation =
$$\frac{100(Z-\overline{Z})}{\overline{Z}}$$
,

where Z is the compressibility factor interpolated from the original measurements and \overline{Z} is the tabulated most reliable compressibility factor value. Some of them are given graphically in Figs. 1 and 2.

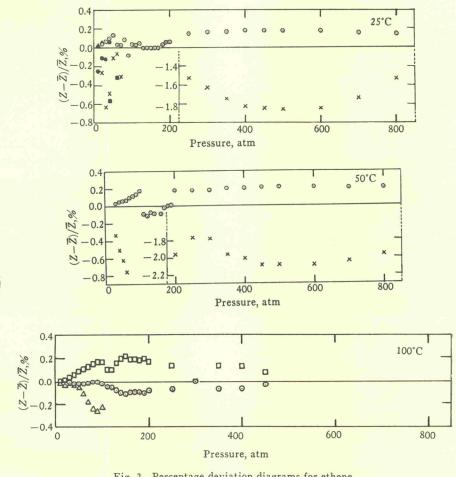


Fig. 2 Percentage deviation diagrams for ethene

 ⊙: Ref 9),
 □: Ref 11),
 ▲: Ref 12)

 ∆: Ref 13),
 ♠: Ref 14),
 ×: Ref 15)

 ■: Ref 16)

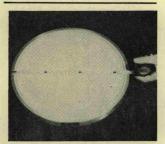
Acknowledgment

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HORIBA'S HIGH-PURITY SYNTHETIC CRYSTALS

for precision optical measurements of radiation, infrared, ultraviolet or lasor beam.

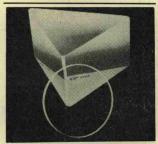
Nal (TI) SCINTILLATOR



HORIBA, Ltd. has established a steady production line for large size crystals of greater than 12 inches by diameter in addition to conventional size crystals.

The photograph at right shows an Nal (TI)Scintillator for use with scintillation camera. The large diameter Nal (TI) scintillator enabled scintillation survey of an extensive area to be done in a drastically shorter time. HORIBA, Ltd. is ready to respond to your requirements for any purpose as for as the scintillators are concerned.

INFRARED RAY OPTICAL CRYSTAL

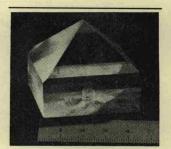


Infrared ray optical crystal is formed from materials specially refined for optical crystals as melted and grown into a huge size ingot. Its uncontested high purity. exact crystal lattice and transparency at the transmission range are universally acknowledged.

The crystal is available in forms of prism, window or lense of either rough-polish or rough-cut block, or in a random size.

Materials : LiF, NaCl, KCl, KBr, Csl, AgCl, CaF2, KRS-5, etc.

ELECTRO-OPTIC CRYSTAL



HORIBA, Ltd. is the first in Japan to have developed electro-optic crystal, known as DKDP single crystal especially for modulation of lasor beam. The electro-optic effect of the crystal has been greatly expanded by replacing hydrogen in KDP crystal by its isotope, deuterium (maximum deuterium replacement: 99.7%)

Electro-Optical Crystals

	Pockel's Index $\lambda = 5461A$	Half-Wave Voltage A=5461A	Z Cut Maximum Size
DKDP (KH2PO4)	742 = 26.4 x 10m-12/V	3.0KV	40 x 40 x 40mm
KDP (KH2PO+)	7 ₆₃ =10.3 x 10m ⁻¹² /V	7 5KV	40 x 40 x 40mm
ADP (NH+H+PO+)	7 ₆₃ = 8.3 x 10m ⁻¹² /V	9.6KV	40 ± 40 ± 40mm

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