CONTARDI

LASTRE A NORMA DIN 7081
RIFLESSIONE - TRASPARENZA

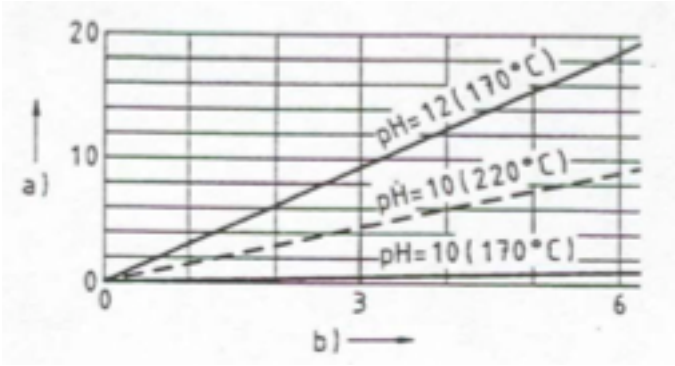
INDICAZIONI PER IL MONTAGGIO E IL CORRETTO UTILIZZO

ISTRUZIONI PER IL MONTAGGIO

- Metallo e vetro per sollecitazione termica si dilatono con coefficienti di dilatazione differenti.
- Nel montaggio di dischi e lastre in vetro, occorre osservare che questi non siano a contatto della parte metallica
- Si consiglia l'uso di una guarnizione in elastometro, adatta a compensare sufficientemente le differenti dilatazioni
- Le superfici di appoggio delle guarnizioni devono essere piane ed esenti da polvere o corpi estranei, i quali provocano concentrazioni di tensioni nel vetro, diminuendo la sicurezza d'impiego
- Le viti di tenuta devono essere strette a croce con chiave dinamometrica
- Lo sforzo di tenuta deve essere almeno due volte e mezzo della forza che viene prodotta dalla pressione sulla superficie esposta alla pressione
- A causa della differente dilatazione fra vetro e metallo è talvolta necessario eseguire un ulteriore serraggio delle viti dopo aver raggiunto la temperatura di esercizio.

INSTRUCTIONS FOR USE

- Check the sight window glass periodically to ensure there are no signs of mechanical yield or significant reductions of the resistance layer owing to erosion phenomena. Carry out these checks without removing the glass component from the window's flange. Replace any glass with scratches ≥ 0,5 mm deep, signs of fracture or erosion. Glass opacity is a possible sign of erosion.
- The frequency of these inspections depends on the nature of the pressurized fluid and pressure values as well as the operating temperature. The main factors influencing glass erosion are pressurized fluid temperature and alkalinity levels. The following diagram offers an indication of the loss of mass, a, (in eroded mm) for the borosilicate glass in relation to the time of exposure to fluids with assigned temperature and pH values, b, (in months).



Further information on the chemical resistance of borosilicate glass can be found in technical standards ISO 719 (hydrolytic resistance), ISO 1776 (acid resistance) or ISO 695 (alkali resistance). The designer of the pressure equipment for which the sight windows are intended must establish inspections and replacement frequency, using the diagram above and the technical standards mentioned as a guide and keeping his own risk analysis in mind. Even in theoretically non-critical applications, the interval between inspections should never be greater than 6 months.

- Glass removed from sight windows, even if not apparently damaged or worn, must never be re-assembled.
- Each borosilicate glass component for sight windows destined for use in pressurized equipment has its own well-defined field of application. Sight windows made with these glass components must never be used outside their intended application.

Minimum operating temperature:	Unlimited
Maximum operating temperature (continuative):	300°C (on a single face)
Maximum allowable pressure	varies from 8 to 50 bar (on a single face) depending on nominal diameter and thickness. The maximum allowable pressure (in bar) is permanently marked on each glass ring after the DIN 7080 marking.
Special use limitations:	Exposure to continued temperatures higher than 280° C could cause thermal stress and diminish material resistance. Should operating temperature rise above 280°C (on a single face) the glass must be protected with mica film and in any case be replaced after 300 operating hours.

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