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Industrial rubber hose for compressed air (up to 2,5 MPa)

Tuyaux en élastomères à usage industriel pour l'air comprimé (à moins de 2,5 MPa)

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FOREWORD

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Draft International Standards adopted by the Technical Committees are circulated to the Member Bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 2398 was drawn up by Technical Committee ISO/TC 45, *Rubber and rubber products*, and circulated to the Member Bodies in March 1971.

It has been approved by the Member Bodies of the following countries :

| | | |
|---------------------|-----------------------|----------------|
| Canada | New Zealand | Switzerland |
| Czechoslovakia | Poland | Turkey |
| Egypt, Arab Rep. of | Romania | United Kingdom |
| France | South Africa, Rep. of | U.S.A. |
| Hungary | Spain | U.S.S.R. |
| India | Sri Lanka | Yugoslavia |
| Netherlands | Sweden | |

The Member Body of the following country expressed disapproval of the document on technical grounds :

Belgium

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0 INTRODUCTION

This International Standard has been prepared to provide minimum acceptable requirements for the satisfactory performance of four types of industrial rubber hose for compressed air.

NOTE — Type A hose replaces the hose previously specified in ISO/R 1404, *Industrial air hose*.

1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies the requirement for four types of rubber hose for compressed air as follows :

Type A — Industrial air hose for a maximum working pressure of 1,0 MPa (10 bar).

Type B — Air hose for mining and construction work and maximum working pressure of 1,0 MPa (10 bar).

Type C — Air hose for mining and construction work and maximum working pressure of 1,6 MPa (16 bar).

Type D — Air hose for mining and construction work and maximum working pressure of 2,5 MPa (25 bar).

2 REFERENCES

ISO/R 36, *Determination of the adhesion strength of vulcanized rubbers to textile fabrics*.

ISO/R 37, *Determination of tensile stress-strain properties of vulcanized rubbers*.

ISO/R 188, *Vulcanized rubbers — Accelerated ageing or heat resistance tests*.

ISO 1307, *Rubber hose — Bore sizes, tolerances on length and test pressures*.

ISO 1402, *Rubber hose — Hydrostatic testing*.

ISO/R 1817, *Vulcanized rubbers — Method of test for resistance to liquids*.

3 DIMENSIONS AND TOLERANCES

3.1 Bore

The bore of the hose shall be in accordance with the nominal dimensions and tolerances given in table 1.

3.2 Cover

For hose of Types B, C and D the cover thickness shall be in accordance with table 1.

TABLE 1 — Nominal bore and thickness of cover

Values in millimetres

| Type A | | Types B, C, D | | |
|--------------|-----------|---------------|-----------|----------------------------|
| Nominal bore | Tolerance | Nominal bore | Tolerance | Minimum thickness of cover |
| 5 | ± 0,50 | — | — | — |
| 6,3 | ± 0,75 | — | — | — |
| 8 | ± 0,75 | — | — | — |
| 10 | ± 0,75 | — | — | — |
| 12,5 | ± 0,75 | 12,5 | ± 0,75 | 1,5 |
| 16 | ± 0,75 | 16 | ± 0,75 | 1,5 |
| 20 | ± 0,75 | 20 | ± 0,75 | 1,5 |
| 25 | ± 1,25 | 25 | ± 1,25 | 1,5 |
| 31,5 | ± 1,25 | 31,5 | ± 1,25 | 2,0 |
| 40 | ± 1,50 | 40 | ± 1,50 | 2,0 |
| 50 | ± 1,50 | 50 | ± 1,50 | 2,0 |
| — | — | 63* | ± 1,50 | 2,0 |
| — | — | 80* | ± 2,00 | 2,0 |
| — | — | 100* | ± 2,00 | 2,0 |

* For types B and C hose.

NOTE — If special cases call for extra sizes :

a) for smaller or larger dimensions further numbers shall be chosen from the R10 series of preferred numbers with tolerances as given in ISO 1307;

b) for intermediate dimensions numbers should be chosen from the R20 series of preferred numbers, with the tolerances as given for the next larger bore size.