
International Standard



2057

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Agricultural tractors — Remote control hydraulic cylinders for trailed implements

Tracteurs agricoles — Vérins de commande hydraulique des instruments traînés

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Descriptors : agricultural machinery, tractors, central equipment, hydraulic cylinders, specifications, dimensions.

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO member bodies). The work of developing International Standards is carried out through ISO technical committees. Every member body interested in a subject for which a technical committee has been set up has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

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 2057 was drawn up by Technical Committee ISO/TC 23, *Agricultural tractors and machinery*, and circulated to the member bodies in September 1973.

It has been approved by the member bodies of the following countries :

Australia	Germany, F.R.	Portugal
Austria	Hungary	Romania
Belgium	India	South Africa, Rep. of
Bulgaria	Iran	Spain
Canada	Ireland	Sweden
Chile	Italy	Switzerland
Denmark	Japan	Thailand
Egypt, Arab Rep. of	Netherlands	Turkey
Finland	New Zealand	United Kingdom
France	Poland	USA

No member body expressed disapproval of the document.

This second edition cancels and replaces the first edition (i.e. ISO 2057-1975). It differs from the latter only by the deletion of the values in inches and some editorial changes.

Agricultural tractors — Remote control hydraulic cylinders for trailed implements

1 Scope and field of application

This International Standard gives the specifications and dimensions for the assembly and clearances common to hydraulically operated cylinders and to trailing-type farm implements.

The specifications given permit

- the interchangeability of hydraulic operation between tractors equipped with a cylinder and trailing-type implements designed for this purpose, the tractor possessing enough power at its draw-bar to operate the implement;
- the transference of the hydraulic cylinder from one implement to another.

This International Standard applies to three categories of agricultural tractors, as follows :

Category	Maximum power at the draw-bar
1	Up to 35 kW
2	30 to 75 kW
3	Over 70 kW

2 References

ISO 500, *Agricultural tractors — Power take-off and draw-bar — Specification.*

ISO 730/1, *Agricultural wheeled tractors — Three-point linkage — Part 1 : Categories 1, 2 and 3.*

ISO 789/1, *Agricultural tractors — Test procedure — Part 1 : Power tests.*

3 Definitions

3.1 moving end : The yoke of the piston rod.

3.2 anchor end : The closed end of the cylinder.

3.3 attaching pins : Removable pins in the yokes for attaching the cylinder to the implement.

4 Classification and rating

Minimum thrust capacity (extending stroke of the moving end) shall be based on the calculated piston area and on a pressure of 80 % of the relief valve setting.

Implements requiring a cylinder thrust of more than 80 kN shall be provided with 400 mm stroke cylinders.

Table 1 — General characteristics

Category	Length of stroke	Minimum thrust per kilowatt at the draw-bar	Spherical radius to front attaching pin*
	mm	N	mm
1	200 $\begin{smallmatrix} + 5 \\ 0 \end{smallmatrix}$	924	1 500
2	200 $\begin{smallmatrix} + 5 \\ 0 \end{smallmatrix}$	924	2 100
3	200 $\begin{smallmatrix} + 5 \\ 0 \end{smallmatrix}$	924	2 500
	400 $\begin{smallmatrix} + 5 \\ 0 \end{smallmatrix}$	924	2 500

* See figures 5 and 6.