

## HIDROCONTROLES H40

Also named like «break» or «hydro-check» they control their speed of advance maintaining it constant. Used mainly to regulate the mechanical advance of the pneumatic cylinders and devices to which it also allows to easily obtain the approximation stage at fast speed.

Basically they consist of a closed circuit hydraulic cylinder that receives the force of the device to control. It contains for it, an advance regulator and an oil volume compensator.



### CHARACTERISTIC

Minimum force and maxima to regulate - 18 and 800 daN.

Give to adjustable speed between 0,06 and 9 m/min.

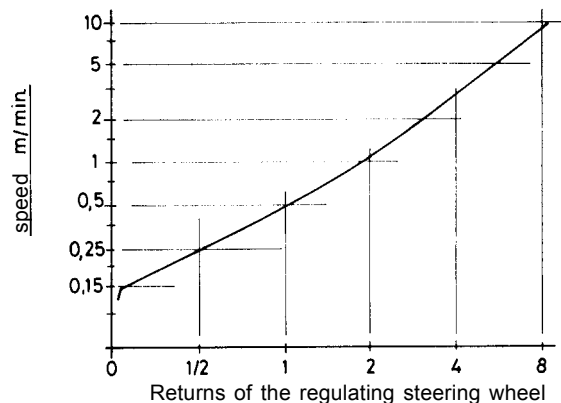
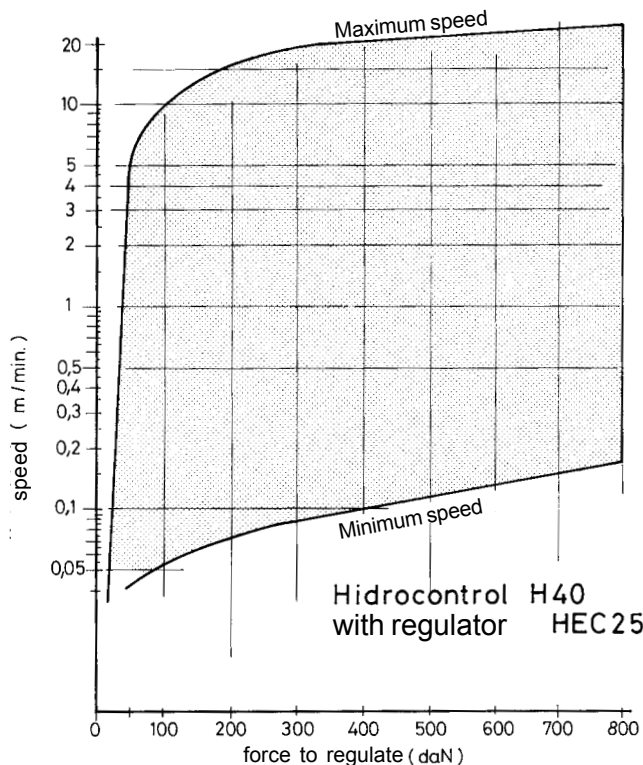
Speed in the recovery sense.- up to 12 m/min.

Operating temperature.- from -15°C until 90°C.

The speed control, two versions:

The conventional, the economic one, for a given regulation, the speed depends on the load (force applied by the device to control) as it is indicated in the graph.

The other version goes provided with a compensated speed governor that allows a constant advance independently of the load - when this one surpasses the value of 80 daN -.



VERSION WITH COMPENSATED  
REGULATOR.

cadence of operation .- Its maximum power is equivalent to its capacity of receiving energy without exceeding the Maxima temperature of operation. It comes determined by the formula:

$$F \times C \times N = 760.000 \quad (\text{aimosphere to } 20^{\circ}\text{C})$$

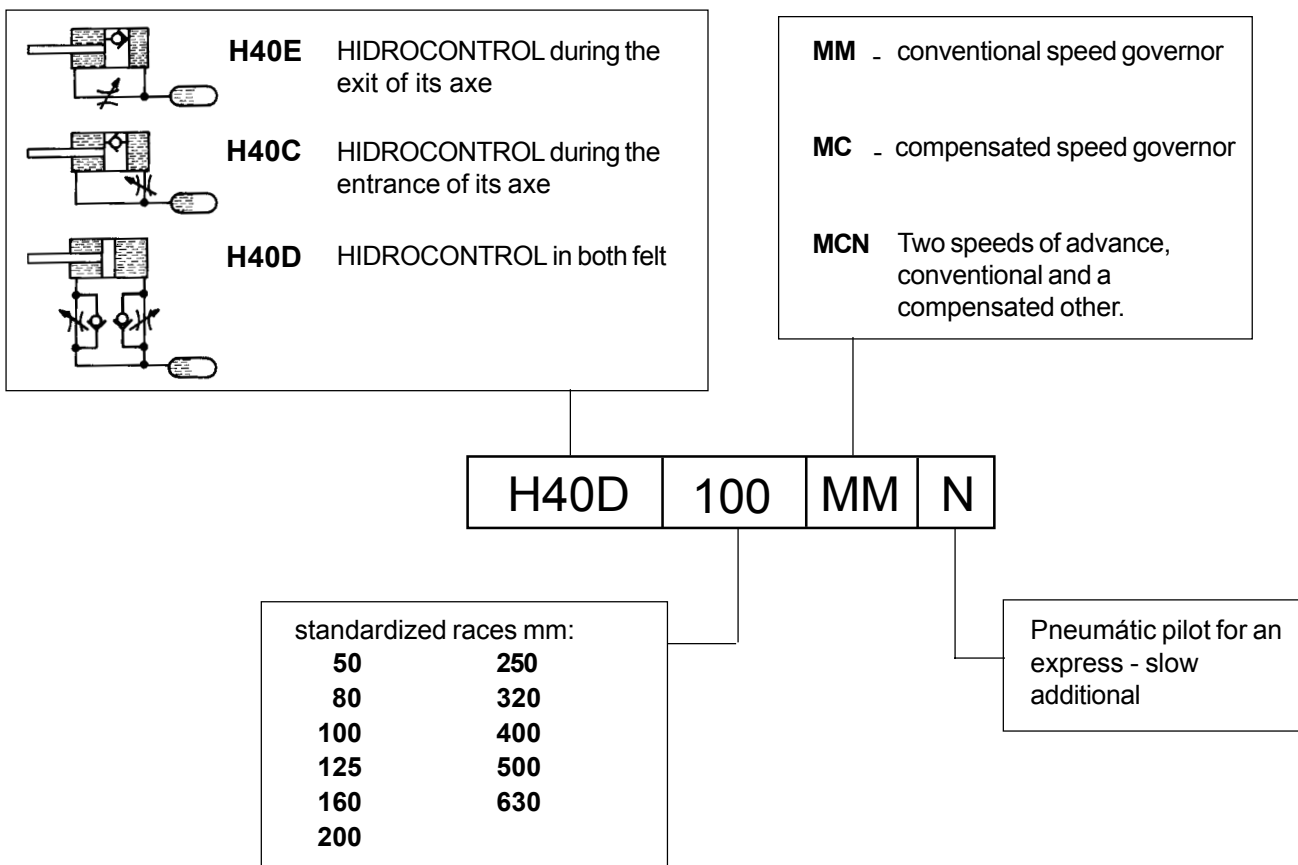
F- Regular force (daN)

C- Race (mm)

N- Amount of races regulated per minute

Using additional refrigeration, for example, the escapes in the pneumatic distributors, its power increases considerably.

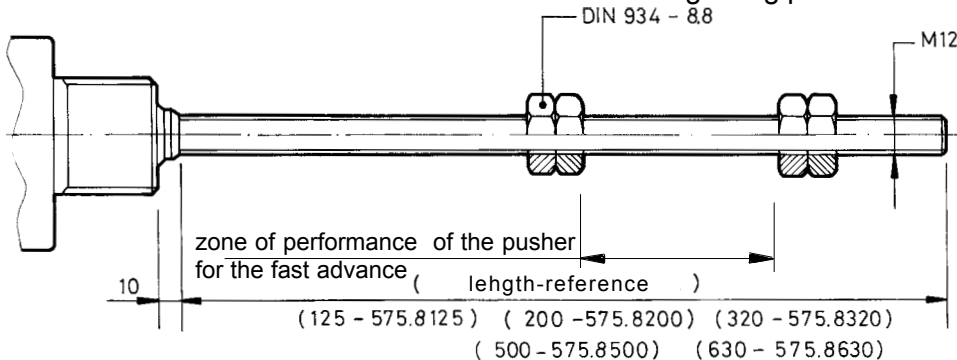
**REFERENCE FOR THE PROVISION**



**DIMENSIONS**

END OF THE AXIS

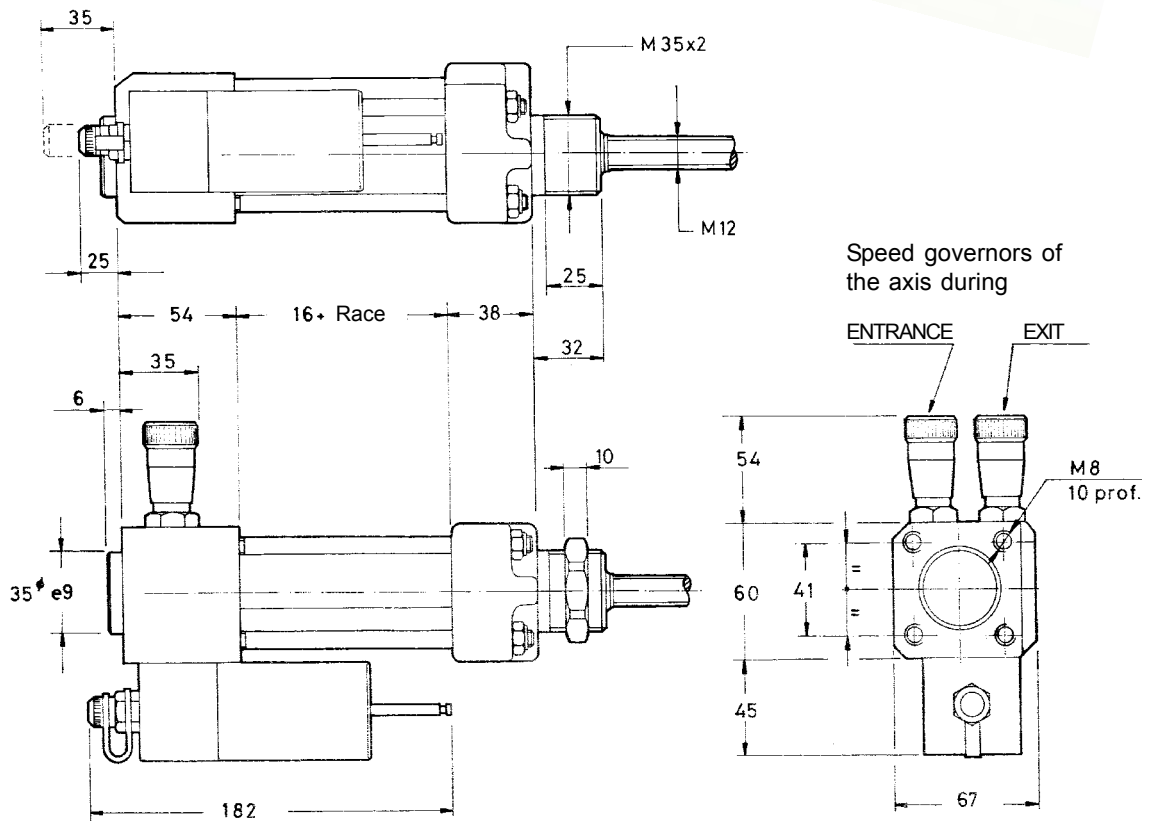
Tire iron, allows it to advance either fast or slow and to recover the beginning position.



## HIDROCONTROLS H40.....MM

DIMENSIONS FOR RACES OF 50 - 80 - 100 and 125

MECHANICAL COMPENSATOR  
AND CONVENTIONAL SPEED  
GOVERNOR



Seal spare parts set reference: **H40MN**

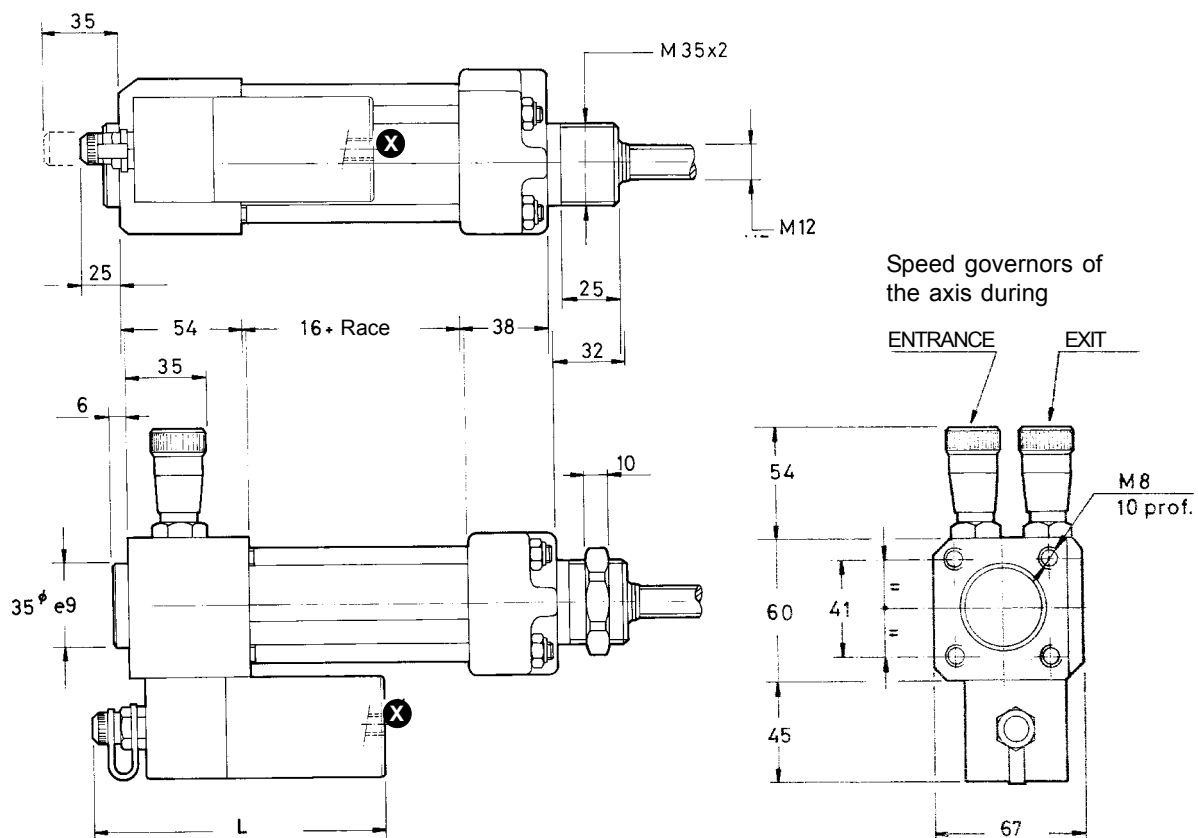
DIMENSIONS FOR RACES OF 160 UP TO 630

PNEUMATIC COMPENSATOR AND CONVENTIONAL SPEED GOVERNOR



Threaded G1/8" connection.

The compensator, of pneumatic recovery, is essential to permanently connect it to a line of air with pressure superior to 3 bar.

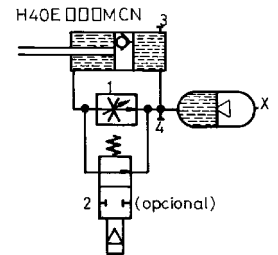


- L = 216 for races of 160 y 200
- L = 336 for races of 250, 320 y 400
- L = 416 for races of 500 y 630

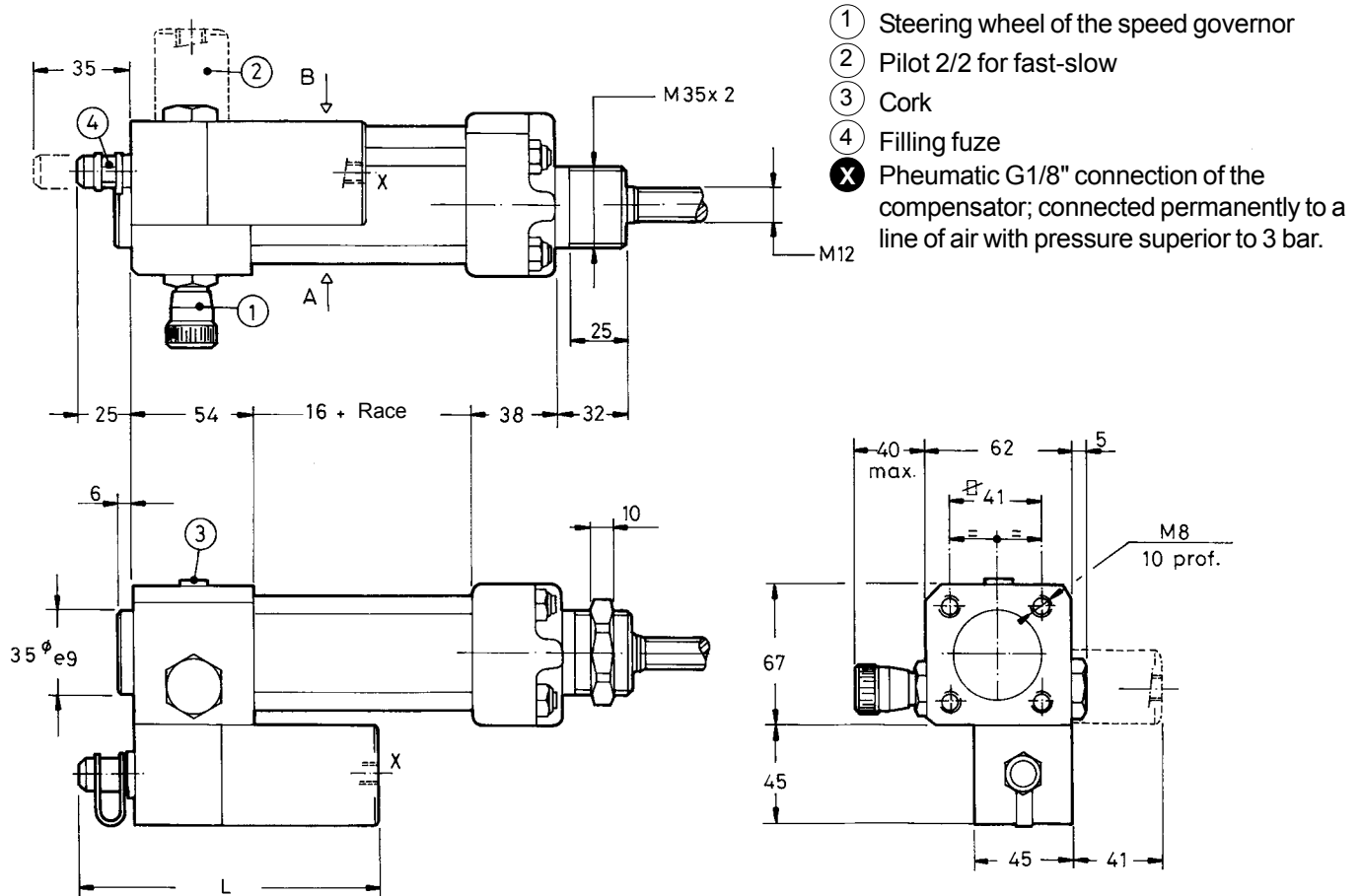
Seal spare part set reference: **H40MM**

## HIDROCONTROLS H40 ..... MC H40 ..... MCN

Surpassing the load of 80 daN, the compensator acts maintaining the speed constant, independently of the effort. Model MCN incorporates in addition a pneumatic pilot to obtain a second fast-slow one.



### DIMENSIONS



L = 216 for races of 160 y 200  
L = 336 for races of 250, 320 y 400  
L = 416 for races of 500 y 630

The table indicates the situation of the steering wheel speed governor and the pilot for the normal variants.

REGULATED SENSE	FACE WHERE IS THE ADVANCE REGULATOR	REFERENCE
when leaving the axis	WITHOUT PILOT A	H40E □□□ MC
	WITH PILOT B	H40E □□□ MCN
when entering the axis	WITHOUT PILOT B	H40C □□□ MC
	WITH PILOT A	H40C □□□ MCN

□□□ RACE

**OLEOPNEUMATIC CYLINDERS H40.....N50M**

They are formed by a caliber 50 pneumatic cylinder governed by hidrocontrol of the H40 model (technical leaves 040) to obtain precise, adjustable and of great uniformity advances.

Designed in tandem for inferior routes to 200 m.m.



**CHARACTERÍSTIC**

Pressures of work in the pneumatic cylinder .- from 1 to 16 bar (nominal 6 bar).

Adjustable speed from 0,02 to 16 m/min (0,15 up 10 m/min with 6 bar in feeding).

Speed in the recovery direction .- 12 m/min (feeding to 6 bar).

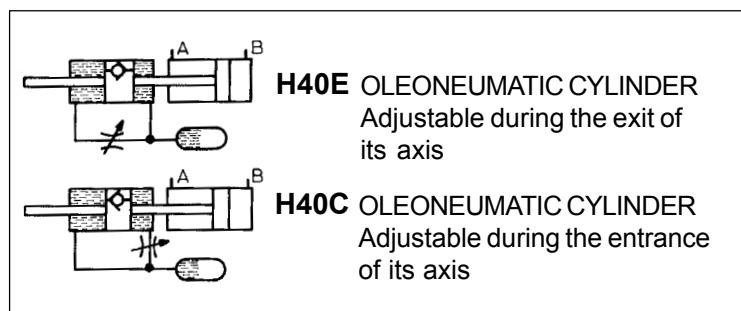
Operating temperature.- of -15°C until 90°C.

**The precision of the controlled advance** is depending of the load supported by hidrocontrol (graphical of leaf 040-1)

**Its cadence of operation** reaches 7m/min of route controlled with feeding of 6 bar and 20°C atmosphere.

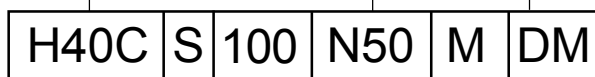
Centralized compensator. - The systems with several cylinders can incorporate a common compensator for all of them. In this case the cylinders do not have fluid filling entrance nor compensator.

**REFERENCE FOR THE PROVISION**



Caliber of the neumatic cylinder

to indicate solely when the pneumatic cylinder must be ready to magnetic detectors of proximity.



**S-** To only indicate when the centralized compensator settles

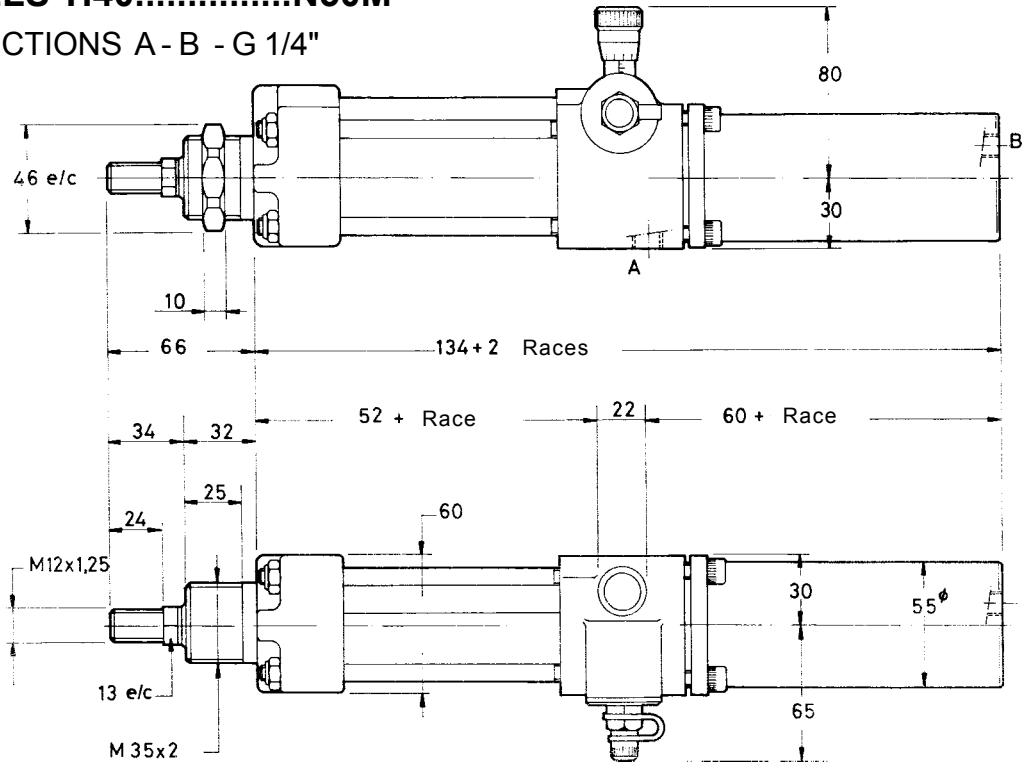
standardized races mm:  
50  
80  
100

Conventional speed governor.

## DIMENSIONS

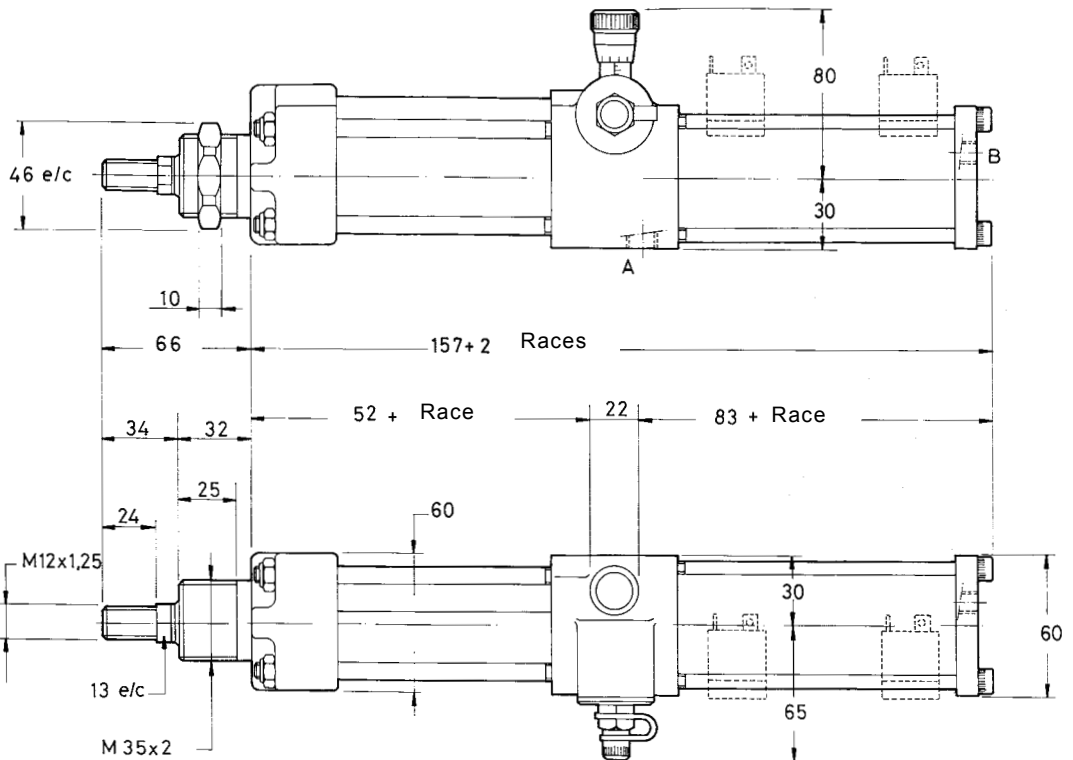
### MODELS H40.....N50M

CONNECTIONS A - B - G 1/4"



Seal spare part set reference: **H40N50**

### READY TO POSITION MAGNETIC DETECTORS



SEAL SPARE PARTS SET REFERENCE **H40N50DM**

**OLEOPNEUMATIC CYLINDERS H40 . . . . .N63M**

They are formed by a caliber 63 pneumatic cylinder governed by hidrocontrol of the H40 model (technical leaves 040) to obtain precise, adjustable and of great uniformity advances. Designed in tandem for routes inferior to 200 m.m.



It allows the route in sections of express-slow by means of an additional pneumatic pilot.

**CHARACTERÍSTICS**

Minimum pressure in the pneumatic pilot.- 4bar

Pressures of work in the pneumatic cylinder .- from 1 to 16 bar (nominal 6 bar).

Adjustable speed from 0,02 to 16 m/min (0,15 up 10 m/min with 6 bar in feeding).

Speed in the recovery sense .- 12 m/min (feeding to 6 bar).

Operating temperature.- of -15°C until 90°C.

**The speed control** two versions:

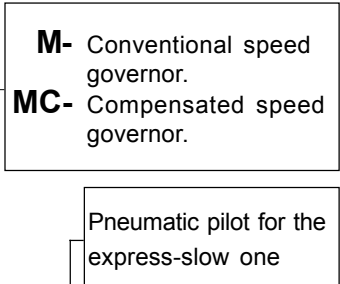
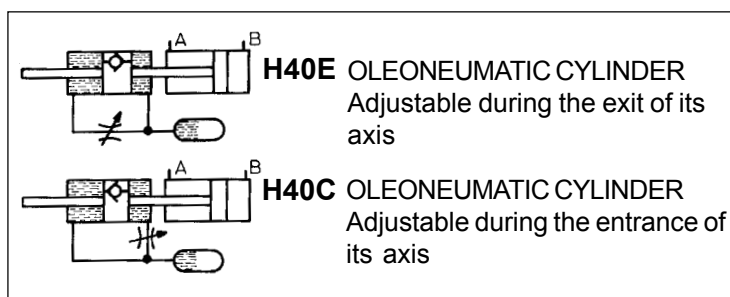
In the conventional one, more economical, for a given regulation the speed depends on the load as it is indicated in the graph of the leaf 040-1.

The other version goes provided with a compensated speed governor that allows a constant advance independently of the load - when this one surpasses the value of 80 daN -.

**Its cadence of operation** reaches 5m/min of route controlled with feeding to 6 bar and 20°C atmosphere.

Centralized compensator. - The systems with several cylinders can incorporate a common compensator for all of them. In this case the cylinders do not have fuze of filling nor of compensator.

**REFERENCE FOR THE PROVISION**



**S-** To only indicate when the centralized compensator settles

**H40C S 100 N63 M N DM**

standardized races mm:

80	160
100	200
125	

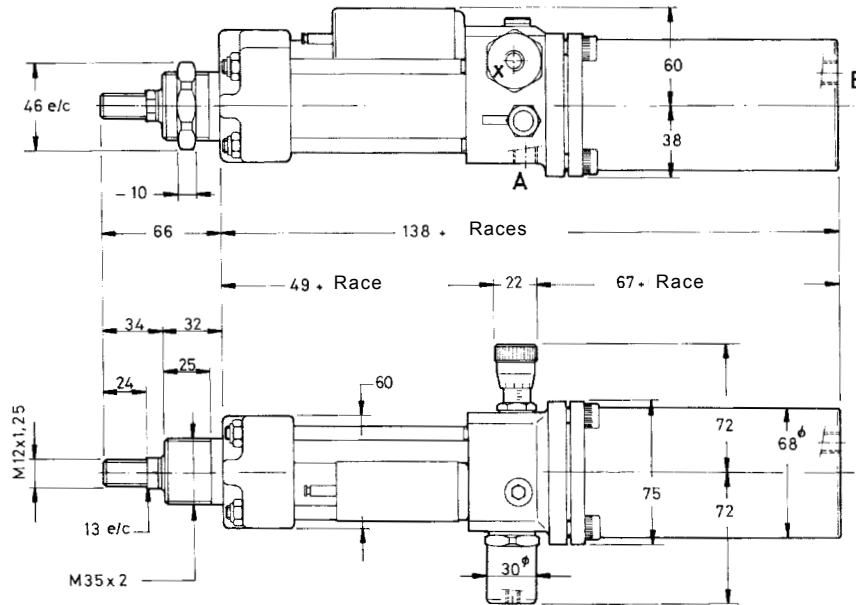
Caliber of the pneumatic cylinder

To indicate solely when the pneumatic cylinder must be ready to magnetic detectors of proximity.

## DIMENSIONES

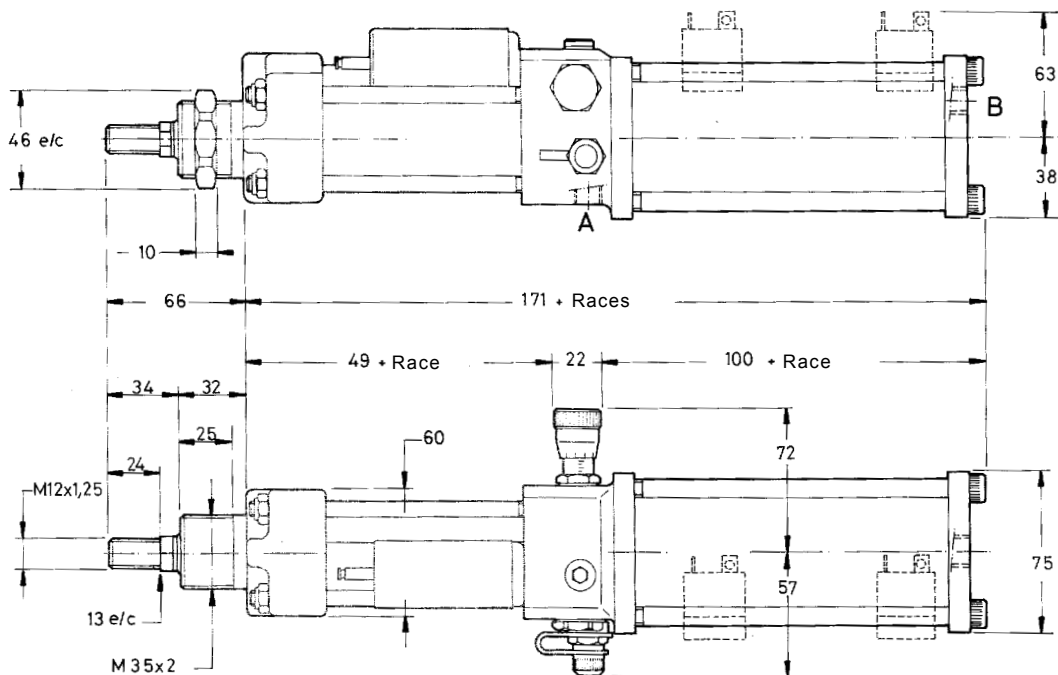
Representation of model H40E.....N63<sup>M</sup><sub>MC</sub>. The another model, control during the backward movement, H40C.....N63<sup>M</sup><sub>MC</sub> has identical measures but with the variant of which the steering wheel is in the same side of filling fuze.

CONNECTIONS A - B - G 1/4"



Seal spare parts set reference.- **H40N63**

READY TO POSITION MAGNETIC DETECTORS



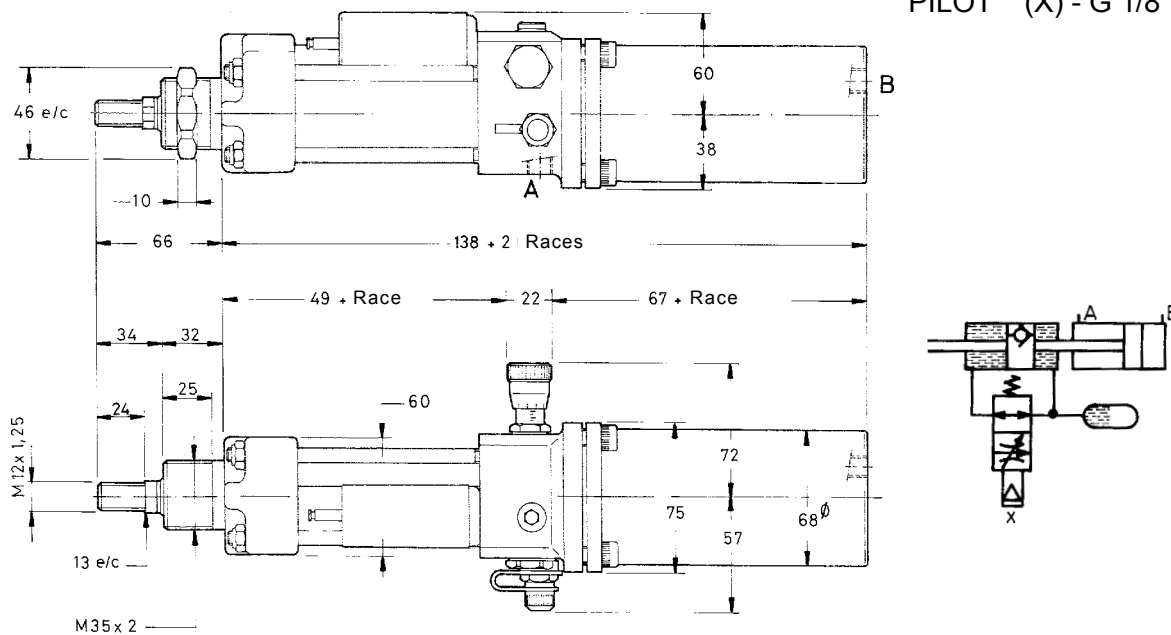
Seal spare parts set reference.- **H40N63DM**

**OLEONEUMATICS CYLINDERS H40.....N63<sup>M</sup><sub>MC</sub> N**

**DIMENSIONS**

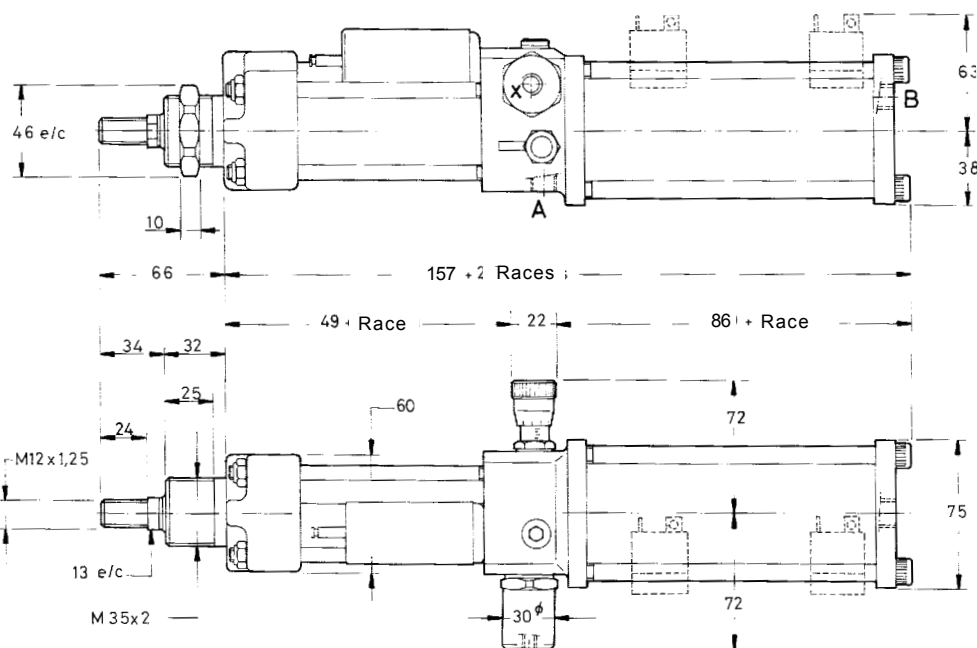
Representation of model H40E.....N63<sup>M</sup><sub>MC</sub> N. The another model, control during the backward movement, H40C.....N63<sup>M</sup><sub>MC</sub> N has identical measures but with the variant of which the steering wheel is in the same side of filling fuze.

CONNECTIONS A - B - G 1/4"  
PILOT (X) - G 1/8"



Reference of the game of spare part meetings.- **H40N63**

**READY TO POSITION MAGNETIC DETECTORS**

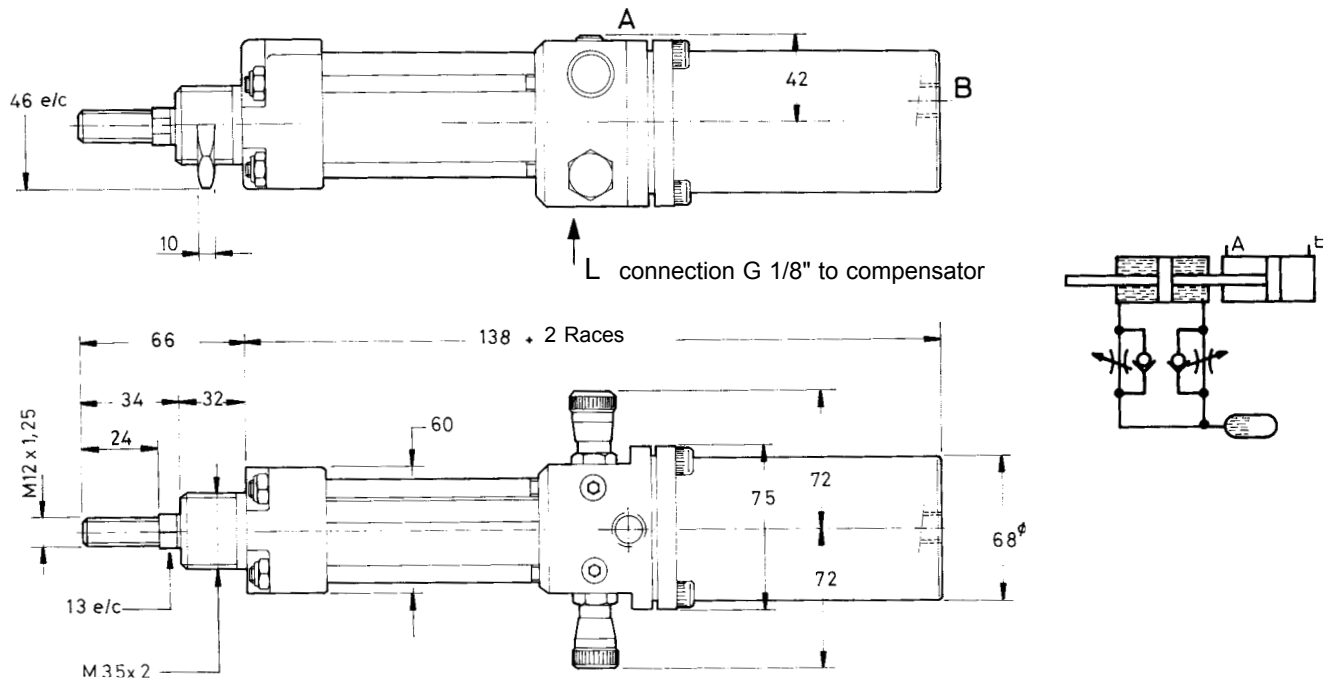


Seals spare parts set reference.- **H40N63DM**

## DIMENSIONS

Models H40DS..... N63M caliber 63 pneumatic cylinder. Control in both senses and without compensator (for centralized compensation).

CONNECTIONS A - B - G 1/4"  
TOWARDS COMPENSATOR - G 1/8"



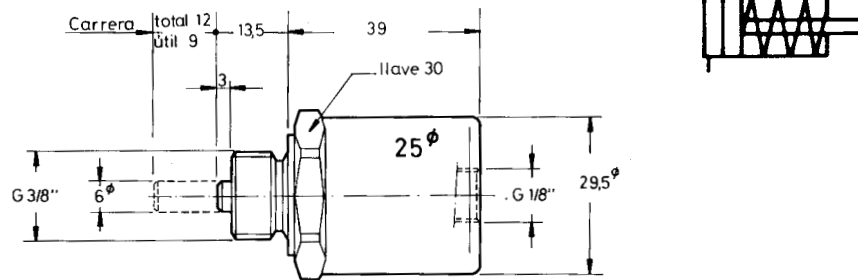
Reference of the game of spare part meetings.- **H40N63**

During the inversion of the sense of the movement a route of 2 mm without hydraulic control takes place

**ACCESORIES AND COMPLEMENTS FOR OLEOPNEUMATIC CYLINDERS H40**

**PNEUMATIC PILOT - NCS2512**

In order to control the beginning and end of the section with slow advance

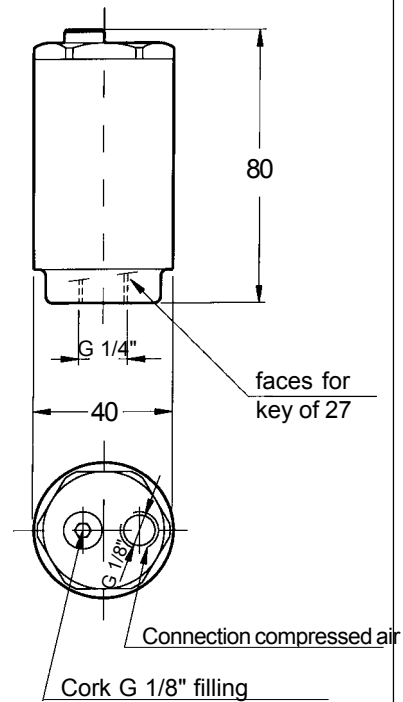
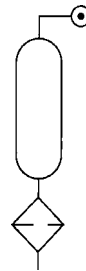


Minimum pressure of work 4 bar.-  
 Permissible pressure in the zone of the piston rod. { with 5 bar in feeding - 40 bar.  
 with 10 bar in feeding - 125 bar.

**COMPENSATING GLASS - HNC25R**

In order to centralize the oil compensation in the systems with several oleopneumatic cylinders and also to locate in visible and accessible place the compensator of the oleopneumatic cylinder that is very gathered or hidden in the structure of the equipment.

Deposit capacity .- 30 cm<sup>3</sup>  
 Work maxima pressure .- 16 bar.  
 Transparent polycarbonate deposit.



The pipe of union between the compensator and the cylinders is sufficient with the measurement of 4x2 and can be connected where the filling fuze would lodge (G 1/4\"), in the purge cork (G 1/8\"), or in the lodging for the individual compensator (M8). (installation and maintenance see manual H40).

OIL PACKAGES OF 1 LITER **Ref. 750.0040**  
 SPARE PART FILLING FUZE **Ref. HT14**