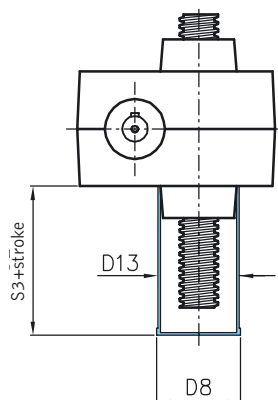


## PR rigid protection

The application of a rigid protection in the back side of the screw jack is the ideal solution in order to prevent dust and foreign matters from coming into contact with the coupling and causing damages to the threaded spindle. The PR protection can only be applied to TP models. The overall dimensions are shown in the following table. Incompatibility: TPR models.



**PR rigid protection - XPR Models\***

Size	420	630	740
D8 Ø	48	65	74
D13 Ø	46	63	72
S3	50	60	75

For non quoted dimensions see to the relative tables on pages 110-111

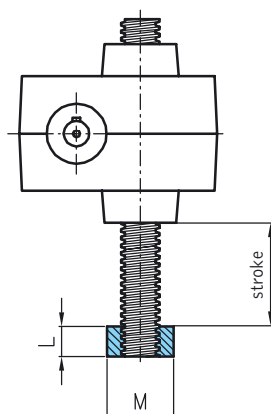
\* XPR Model: stainless steel version

## BU Anti withdrawing bush

If there's the necessity the spindle, in case of extra-stroke, not to withdraw from the jack body, it's possible assembling a steel withdrawing bush. The BU has a trapezoidal thread, able to sustain the load in extra-stroke case. The BU can apply only in TP models. In case of PRF stroke control, the BU has the function of end-of-stroke too. It's important underline that one only extra-stroke attempt (and the consequent impact between BU and the carter) can hopeless damage the transmission.

The overall dimensions are shown in the table below.

Incompatibility: TPR models – PRA



**Anti withdrawing bush BU - XBU Models \***

Size	420	630	740
L	25	25	25
M Ø	38	48	58

\* XBU Model: stainless steel version

For non quoted dimensions see to the relative tables on pages 110-111

## PE elastic protection

The purpose of the elastic protections is to protect the threaded spindle by following its own movement during stroke. Standard type protections are elastic bellows, made of polyester covered nylon and can have, as serial, collars or flanges at their ends whose dimensions are shown in the table 1 below.

Special implementations are available upon request, as well as a fixing by means of iron.

Fixing flanges can be in plastic or metal. Special materials for the bellows are also available: Neoprene® and Hypalon® (water sea environment), Kevlar® (resistant to cuts and abrasion), glass fiber (for extreme temperatures, from -50 to 250°C) e aluminized carbon (it's an auto-extinguish material for limit applications with molten metal spits). **The PE standard material is guarantee for ambient temperature between -30 and 70°C.**

If it's needed a waterproof elastic bellow, it's possible to realize protections whose bellows are not sewed but heat-sealed. This kind of protection is not able to solve condensate problem. Moreover, it's possible to have metal protections on demand; such requests are be submitted to the Technical Office. Besides further implementations made of special materials fire-resistant and cold-resistant materials as well as of materials suited for aggressive oxidizing environments can be supplied.

In case of long strokes internal anti-stretching rings are previewed in order to guarantee an uniform bellows opening.

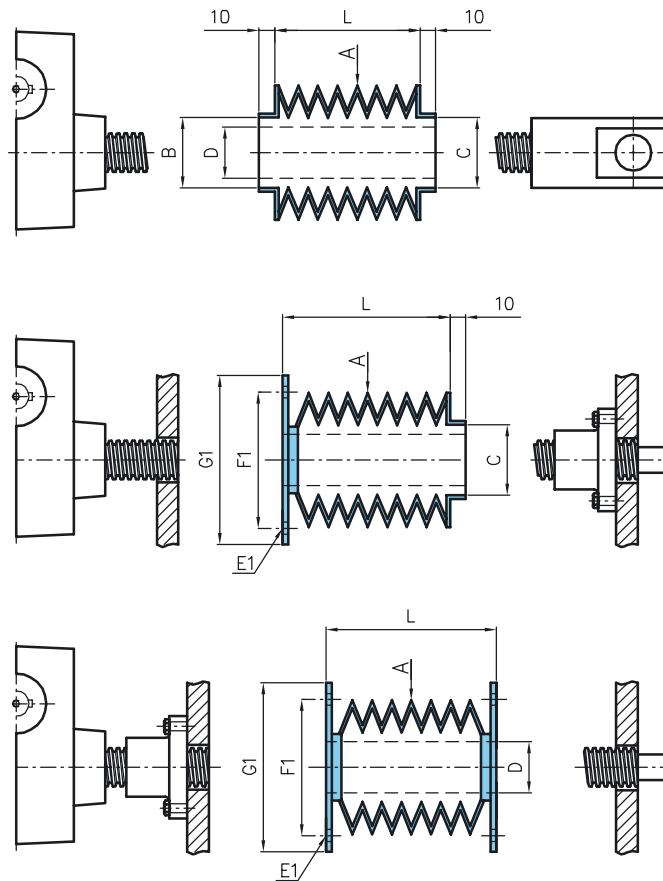


Table 1

PE elastic protection			
Size	420	630	740
A Ø	70	85	105
B Ø	44	60	69
D Ø spindle	20	30	40
C Ø	Dimension function of the end fitting		
E1 Ø (n° of holes)	Dimension to be specified by the costumer		
F1 Ø	Dimension to be specified by the costumer		
G1 Ø	Dimension to be specified by the costumer		
L	1/8 of the stroke (completely closed)		

For non quoted dimensions see to the relative tables on pages 110-111



The application of elastic protections on the screw jacks may implicate some dimensioning amendments due to the PE own sizes, as shown in table n.2. Further, in completely close conditions, the PE has an overall dimension equal to 1/8 of the stroke value. In case said value exceeds the C1 quote (which can be taken from the dimension tables on pages 60-63), the total length of the threaded spindle should be fitted to said dimensions. In case of horizontal mounting (of which previous notice should be given) it is necessary to support the protection weight itself in order to avoid that it leans on the threaded spindle; for this purpose special support rings are foreseen. The PE can be applied to TP and TPR models and in case of missing specifications they can be supplied with fabric collars and the dimensions shown in table 1, supposing that a vertical mounting is carried out.  
 Incompatibility: none

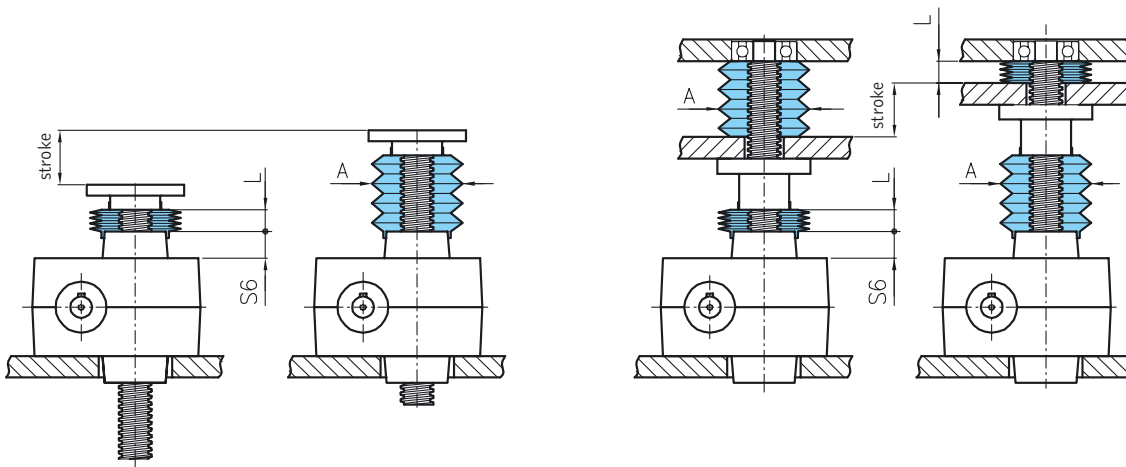


Table 2

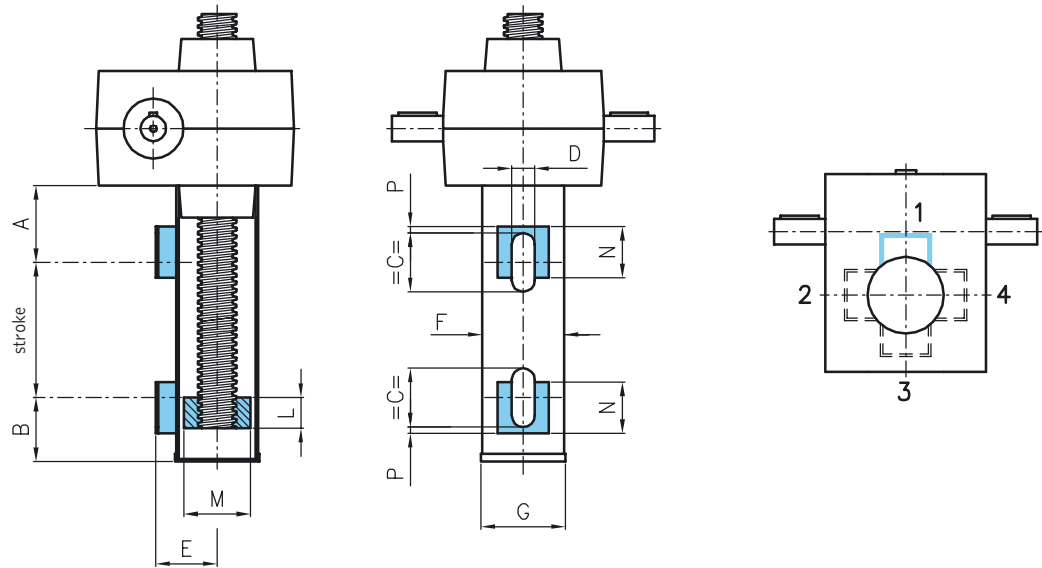
PE elastic protection			
Size	420	630	740
S6	20	25	35
A Ø	70	80	105
L	1/8 of the stroke (completely closed)		

For non quoted dimensions see the schemes on pages 110-111

## PRF stroke control

In order to meet the requirement of an electric stroke control it is possible to apply to a rigid protection suitable supports for end-of-stroke. In the standard version these supports are of two types and they are placed at the ends of the stroke in one of the four positions shown below. They are carried out in such a way as to allow a small adjustment. In case more than one end-of-stroke are needed, it is possible to provide intermediate supports or a continuous support for the requested length. In order to enable the end-of-stroke to operate, a steel bushing is mounted on the threaded spindle. More bushings can be mounted upon request. The PRF can only be applied to TP models and in case of missing specifications it will be supplied with the supports mounted according to position 1. Sensor are supplied only on demand. The overall dimensions are shown in the table below. Moreover it's possible assembling magnetic sensors on the protection, avoiding to mill it. The end-of-stroke signal is given by a magnet attached on the bottom of the spindle.

Incompatibility: TPR – PRO models - CU



PRF stroke control - XPRF Models\*

Size	420	630	740
A	55	60	70
B	35	50	50
C	45	45	45
D	18	18	18
E	38	47	51
F $\varnothing$	46	63	72
G $\varnothing$	48	65	74
L	25	25	25
M $\varnothing$	38	48	58
N	40	40	40
P	5	5	5

For non quoted dimensions see to the schemes on pages 110-111

\* XPRF Model: stainless steel version

DA and FD models (pages 86-87) can suit Aleph series.

