



## CANTILEVER PNEUMATIC EXPANDING SHAFTS:

### HARNESSING THE POWER OF PNEUMATIC TECHNOLOGY:

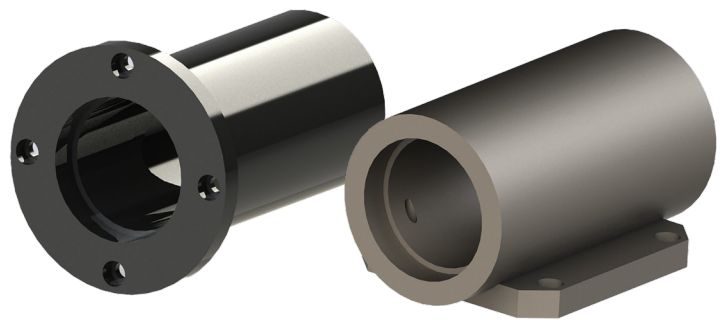
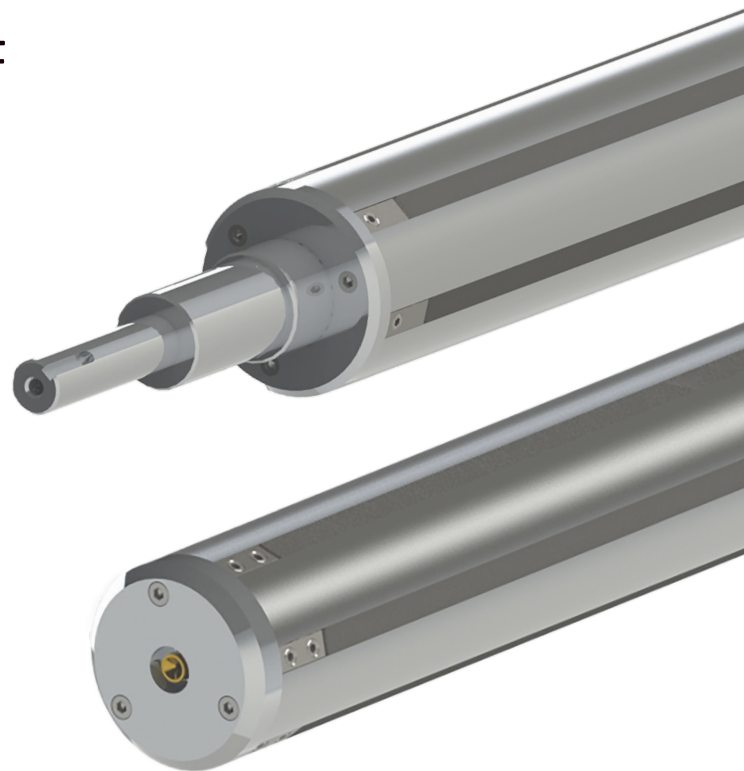
Our pneumatic expanding shafts deliver exceptional torque transmission, making them the ideal choice for roll rewinding and roll unwinding in packaging applications. With a cutting-edge design, these shafts serve as reliable drive shafts, ensuring smooth and efficient operations.

Expansion is achieved through a sophisticated system of inflatable chambers strategically positioned beneath each row of expanders, guaranteeing precise control and consistent performance throughout the process.

### DURABLE CONSTRUCTION MATERIALS FOR EXPANDING SHAFTS

Our expandable shafts feature a robust construction designed to meet your specific requirements. The shaft body is available in standard diameters, offering a compelling quality-price ratio with aluminum alloy extrusion. Additionally, upon request, we provide a wide range of steel options for the shaft body, allowing for tailored solutions.

The journal ends of our shafts are crafted from AISI 304 steel as a standard material, ensuring strength and reliability. However, we also offer various steel options to accommodate individual needs. The use of aluminum extrusion provides exceptional rigidity, comparable to AISI 304 steel's modulus of elasticity, enabling the construction of highly rigid airshafts.



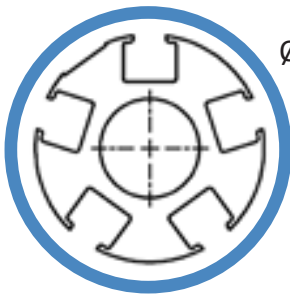
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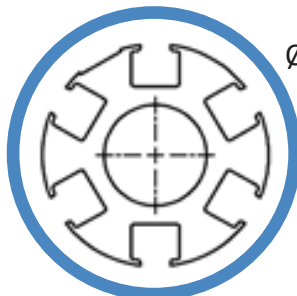


## STANDARD CORE SIZE:



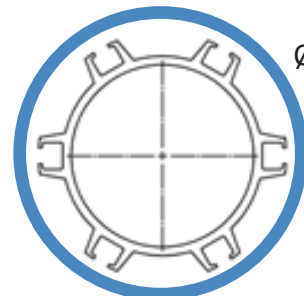
Ø 69 mm

Expansion range:  
Ø 69 to Ø78mm



Ø 75 mm

Expansion range:  
Ø 75 to Ø78mm

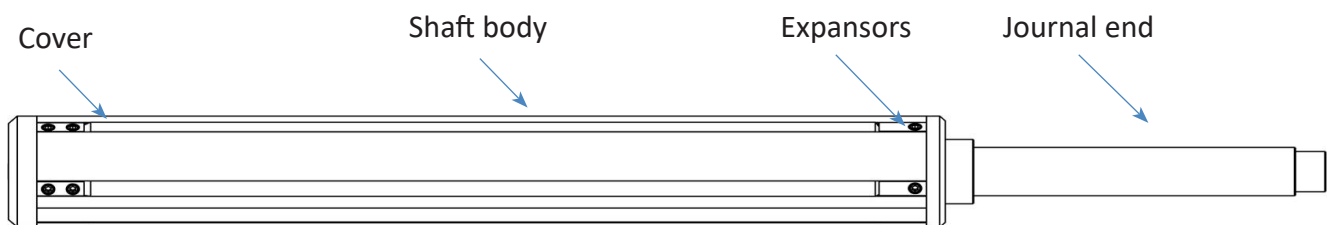


Ø 150 mm

Expansion range:  
Ø 148 to Ø152mm

Special core size upon request: from Ø 25 mm to Ø 300 mm

## AIR SHAFT MAIN PARTS:



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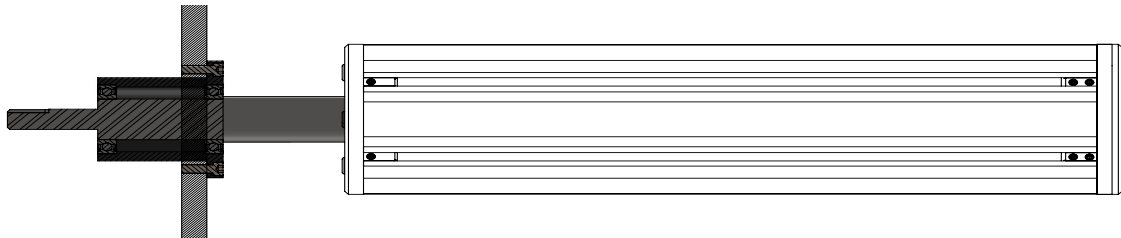


## TECHNICAL INFORMATION:

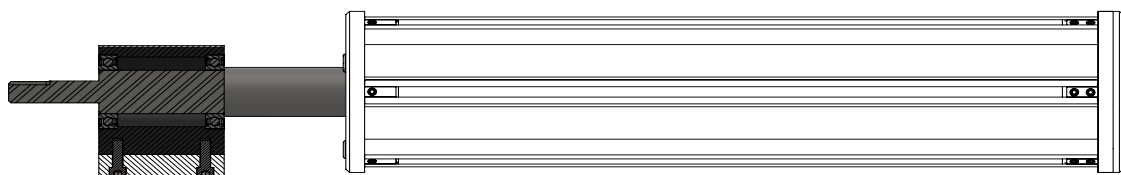
Core size $\varnothing$	[mm]	69	75	148
Expanding range with short expandors $\varnothing$	[mm]	73	79	152
Expanding range with long expandors $\varnothing$	[mm]	78	84	157
Number of expandors	[N/lin m]	5	6	6
Gripping radial force (6bar)		42000	50400	50400
Gripping torque transmission with cardboard cores	[N*m/lin m]			
Rubber expandors 0,4		630	756	816
Nylon expandors 0,35		551	662	714
Aluminium expandors 0,35		551	662	714
Gripping torque transmission with steel cores	[N*m/lin m]			
Rubber expandors 0,4		1103	1323	1429
Nylon expandors 0,35		394	473	970
Aluminium expandors 0,35		394	473	970
Air expanding shaft weight (without journal ends nor covers)	[kg/lin m]	5,68	5,36	6,41
Recommended inflation pressure	[bar]	6	6	6

## ASSEMBLY TO MACHINE:

### FLANGE MOUNTED



### FOOT MOUNTED

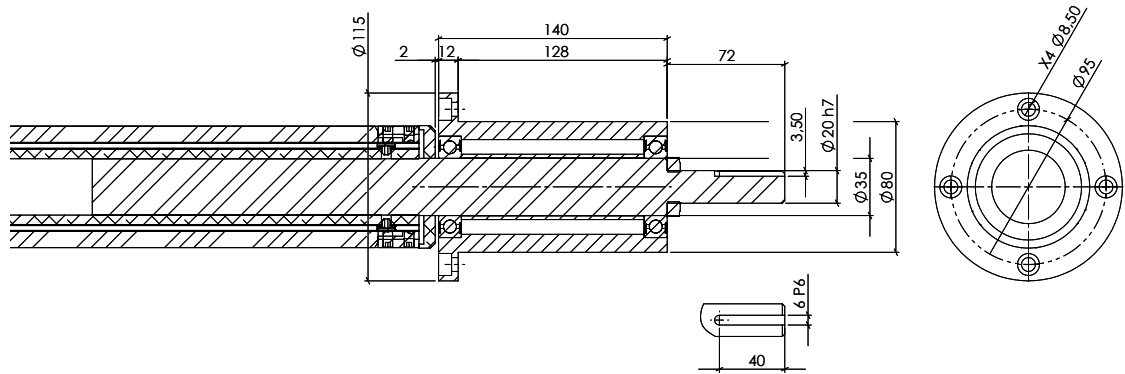




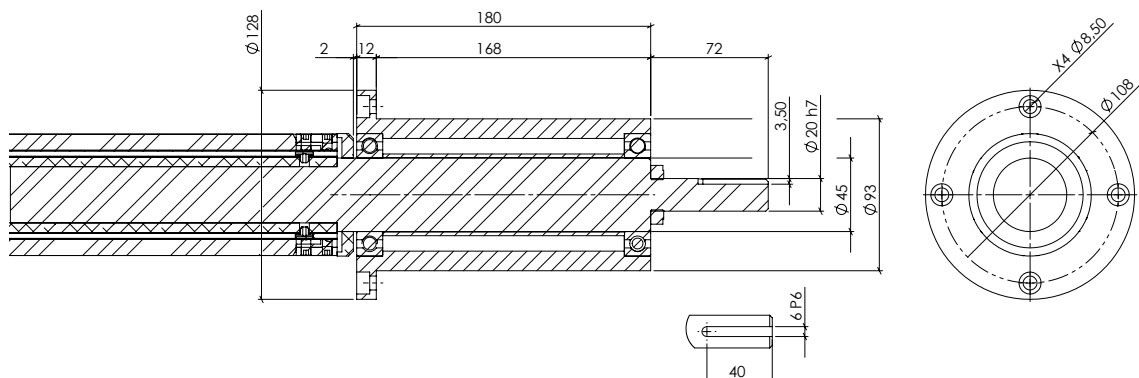
## STANDARD FLANGE BUSHINGS $\varnothing 69 / \varnothing 75$ :

The standard flange bushings, designed for core sizes  $\varnothing 69 / \varnothing 75$  airshafts, provide a reliable anchoring solution for airshafts installed in machinery with vertical bench walls. These bushings undergo meticulous machining processes, ensuring superior rigidity and concentricity performance. By maximizing contact with the vertical bench wall, the large flange surface delivers optimal stability and precise alignment.

$\varnothing 35$



$\varnothing 45$



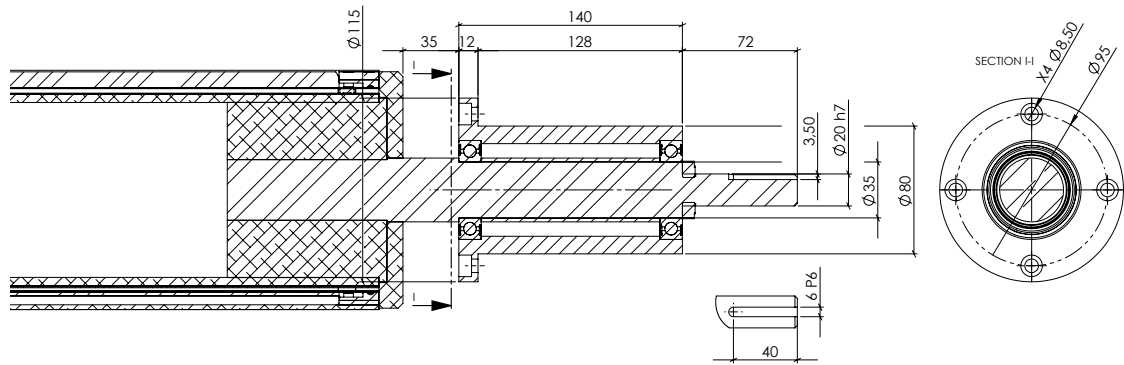




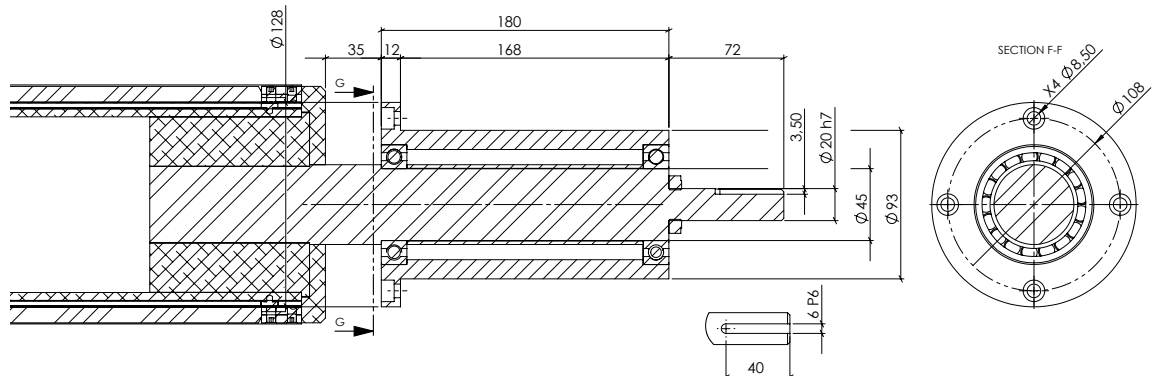
## STANDARD FLANGE BUSHINGS Ø148:

The standard flange bushings, designed for core sizes  $\varnothing 69$  /  $\varnothing 75$  airshafts, provide a reliable anchoring solution for airshafts installed in machinery with vertical bench walls. These bushings undergo meticulous machining processes, ensuring superior rigidity and concentricity performance. By maximizing contact with the vertical bench wall, the large flange surface delivers optimal stability and precise alignment.

Ø35



Ø45



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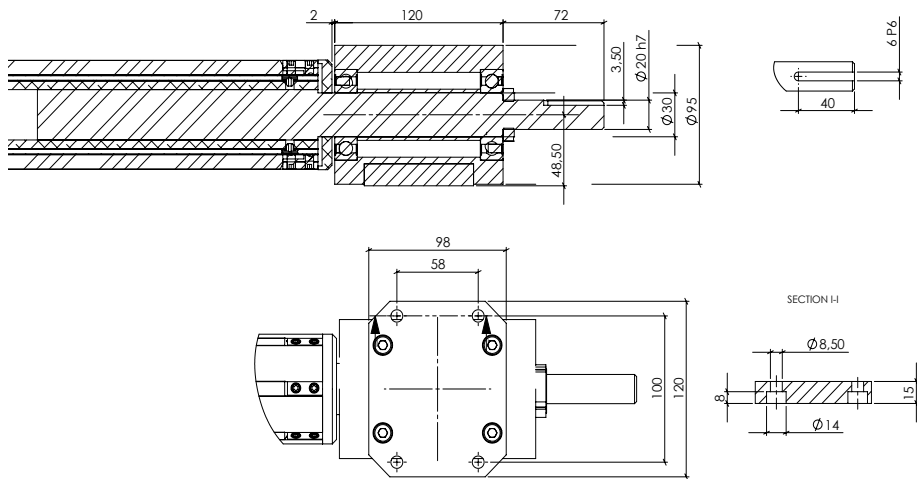
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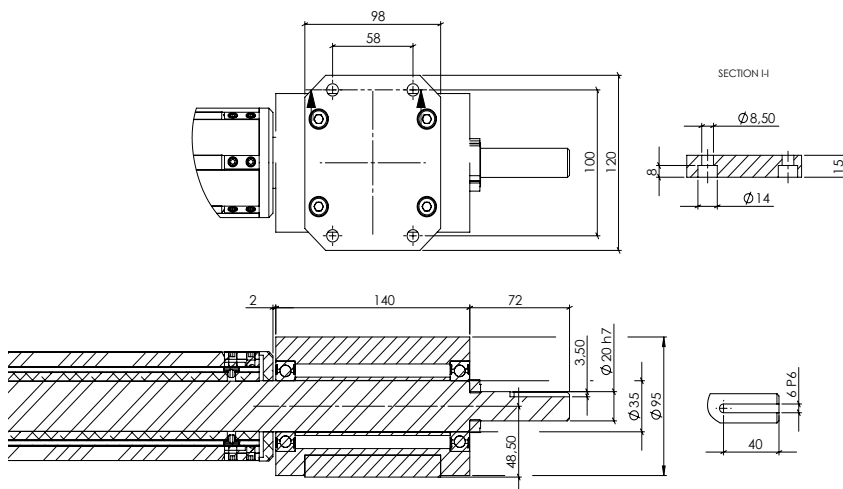
## STANDARD FOOT BUSHINGS $\varnothing 69/\varnothing 75$ :

Our standard foot bushing for Airshaft  $\varnothing 69/\varnothing 75$  provide a reliable anchoring solution for cantilever airshafts in machinery with horizontal bench. This two-part foot bushing assembly has been meticulously designed and manufactured to ensure optimal rigidity and concentricity performance.

$\varnothing 35$



$\varnothing 45$



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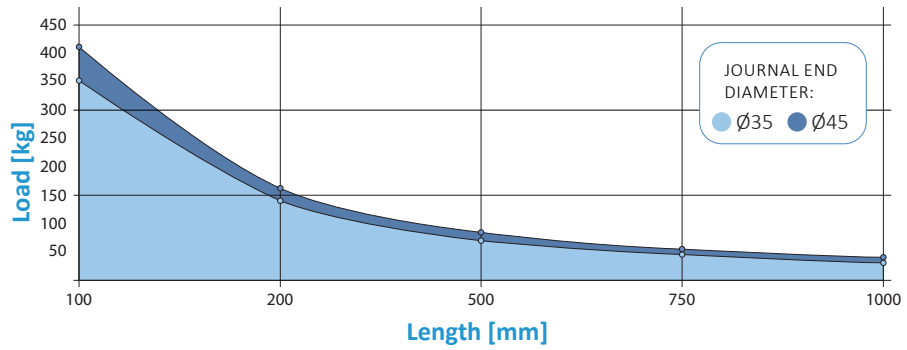


## EXPANDABLE SHAFT SELECTION TABLE:

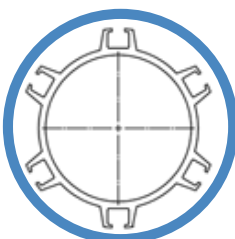
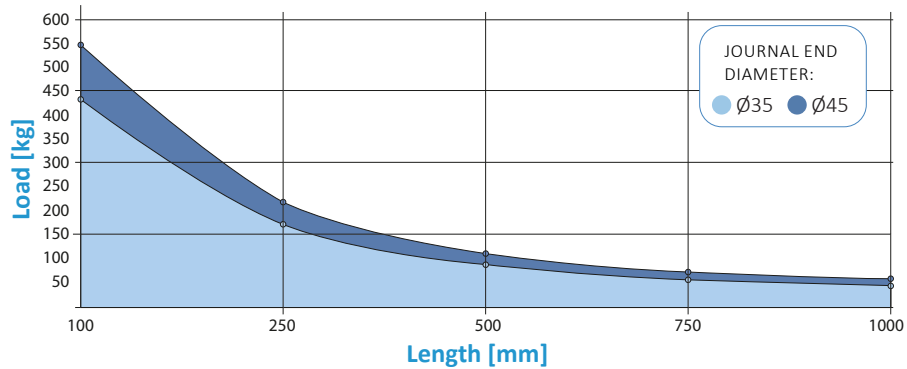
The expanding shaft selection table is a comprehensive overview of parameters to consider when selecting the appropriate expanding shaft for a specific application. It includes key factors such as roll weight, roll length, and other relevant specifications. The table is a valuable tool for ensuring the correct and optimal functioning of the expanding shaft in machinery. For precise recommendations, it is advisable to consult the technical team.



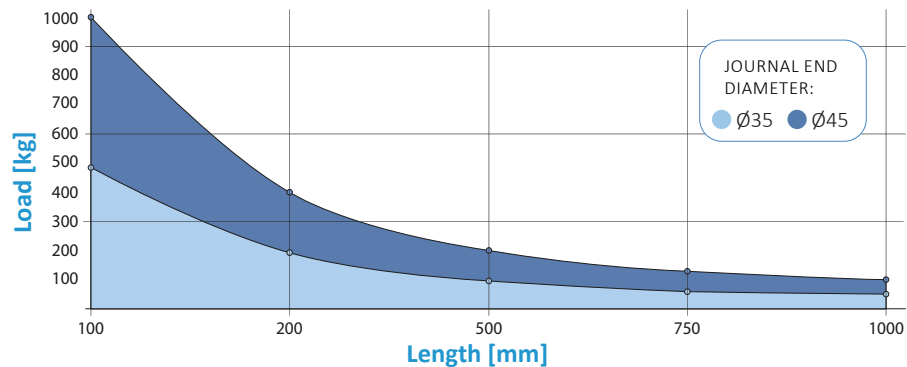
Ø 69 mm



Ø 75 mm



Ø 150 mm





## ORDER CHECKBOX:

### ASSEMBLY TO MACHINE

- Flange mounted bushings for  $\varnothing 35$  journal end
- Flange mounted bushings for  $\varnothing 45$  journal end

#### Cantilever Airshaft

- Foot mounted bushings for  $\varnothing 35$  journal end
- Foot mounted bushings for  $\varnothing 45$  journal end

Special

### CORE DIAMETER AND NUMBER OF EXPANSORS

- 5 expandors  $\varnothing 69$
- 6 expandors

- 6 expandors  $\varnothing 75$

- 6 expandors  $\varnothing 150$

Special

### VALVE POSITION

- Journal end**
- Back air inlet

- Covers**
- Frontal air inlet

Special

### CONTROL TENSION BRAKES

- Powder Brake  6N/m  12N/m  25N/m  50N/m
- Mecanical Brake (Axial Adjustable)  2N/m  6N/m  12N/m
- Mecanical Brake (Radial Adjustable)  2N/m  6N/m  12N/m

### EXPANSORS

- Expandors**  Lineal  Section
- Materials**  Rubber  Aluminum  Special
- Expansion range**  +  $\varnothing 4$ mm  +  $\varnothing 9$ mm  Special

### CONSTRUCTION MATERIALS

- Journal end**  Steel  AISI 304  Special
- Core**  Aluminum alloy extrusion  Steel  Special
- Covers**  Aluminum  AISI 304  Special
- Bushings**  Steel  AISI 304  Special



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