

AXIAL DISPLACEMENT CANTILEVERED AIRSHAFTS:

HARNESSING THE POWER OF PNEUMATIC TECHNOLOGY:

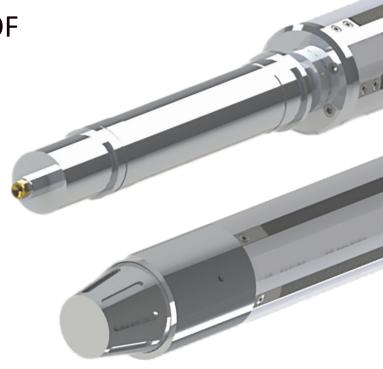
Our pneumatic expanding shafts deliver exceptional torque transmission, making them the ideal choice for roll rewinding and roll unwinding in packaging applications. With a cutting-edge design, these shafts serve as reliable drive shafts, ensuring smooth and efficient operations.

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 Axial Displacement airshafts.

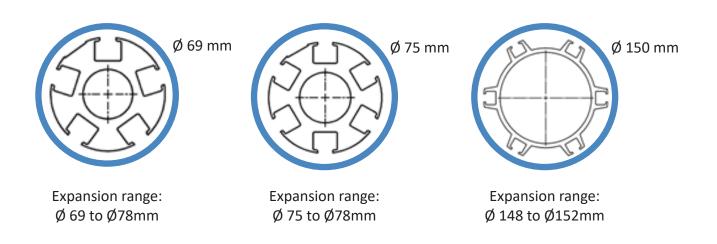








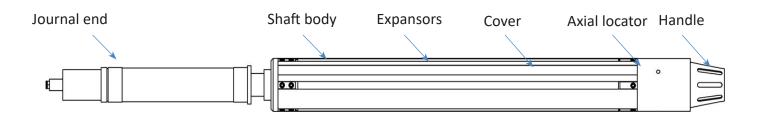
STANDARD CORE SIZE:



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

AIR SHAFT MAIN PARTS:

AXIAL DISPLACEMENT RANGE: ± 15MM





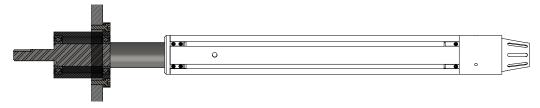


TECHNICAL INFORMATION:

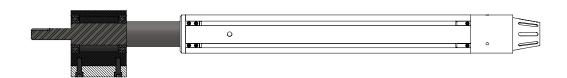
Core size Ø		[mm]	6	59	75	148
Expanding range with short expansors \emptyset		[mm]	7	73	79	152
Expanding range with long expansors \emptyset		[mm]	7	78	84	157
Number of expansors Ø		[N/lin m]	5	6	6	6
Grapping radial force (6bar)			42000	50400	50400	50400
Grapping torque transmition with cardboard cores		[N*m/lin m]			
	Rubber expansors 0,4		630	756	816	1552
	Nylon expansors 0,35		551	662	714	1358
	Aluminium expansorsa 0,35		551	662	714	1358
Grapping torque transmision with steel cores		[N*m/lin m]			
	Rubber expansors 0,4		1103	1323	1429	2717
	Nylon expansors 0,35		394	473	970	970
	Aluminium expansors 0,35		394	473	970	970
Air expanding shaft weight (without jornal ends nor covers)		[kg/lin m]	5,68	5,36	6,41	7,54
Recommended inflation pressure		[bar]	6	6	6	6

ASSEMBLY TO MACHINE:

AXIAL DISPLACEMENT FLANGE MOUNTED



AXIAL DISPLACEMENT FOOT MOUNTED



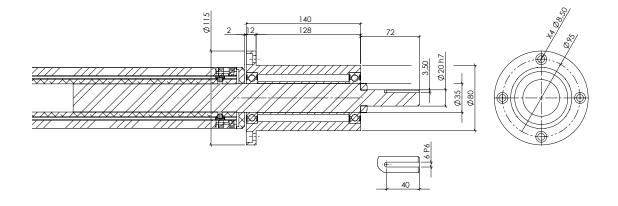




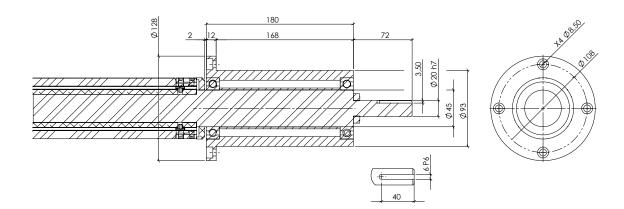
STANDARD FLANGE BUSHINGS Ø69 / Ø75:

The flanged bushing allows the airshaft to be anchored in machinery with vertical bench walls. The bushing is machined in one piece and the large surface of the flange rests on the vertical bench wall, thus achieving the best rigidity and concentricity performance.





Ø45

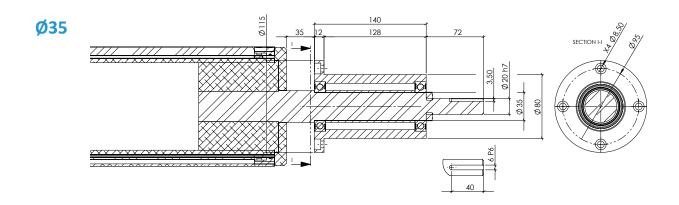


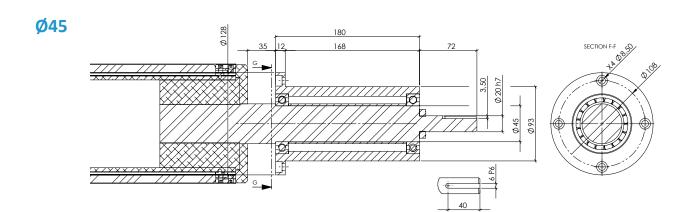




STANDARD FLANGE BUSHINGS Ø148:

The flanged bushing allows the airshaft to be anchored in machinery with vertical bench walls. The bushing is machined in one piece and the large surface of the flange rests on the vertical bench wall, thus achieving the best rigidity and concentricity performance.





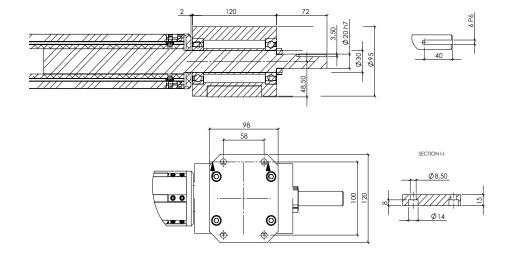




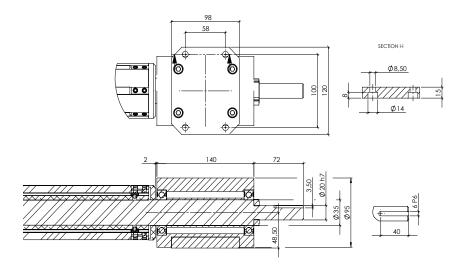
STANDARD FOOT BUSHINGS Ø69/Ø75:

The foot bushing allows the airshaft to be anchored in machinery with horizontal bench walls. The two parts foot bushing assembly has been carefully designed amd manufactured in order to achieve the best rigidity and concentricity performance.





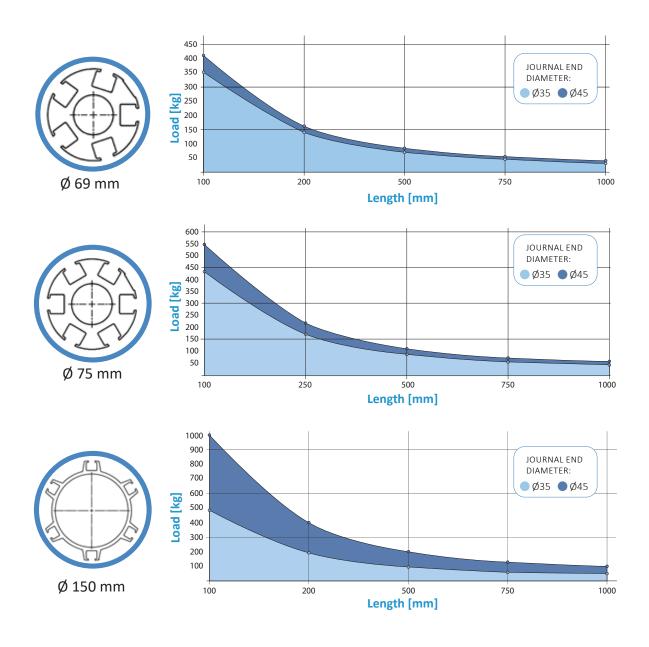
Ø45





EXPANDABLE SHAFT SELECTION TABLE:

Indicate on the graph the working condition point of the expandable shaft regarding the roll weight and roll lenght. If the working condition points is within the area of the graph, it means that the expandable shaft will work correctly. Otherwise select different journal end diameter or move to a different body \emptyset selection graph.







ORDER CHECKBOX:

ASSEMBLY TO MACHINE								
☐ Flange mounted bushing ☐ Flange mounted bushing	s Ø45 shaft	Axial displacement Foot mounted bushin Foot mounted bushin	ngs Ø45 shaft	□Special				
CORE DIAMETER AND NUMBER OF EXPANSORS								
Ø69 ☐ 5 expansors ☐ 6 €	expansors	Ø75 ☐ 6 expansors	Ø150 ☐ 6 expansors	□Special				
VALVE POSITION								
Journal end ☐ Back air inle	et	Covers ☐ Frontal air inlet	□Specia	I				
CONTROL TENSION BRAKES								
□ Powder Brake	☐ 6N/m	□ 12N/m □ 25N/ı	m □ 50N/m					
☐ Mecanical Brake (Axial Adjus	,	\square 6N/m \square 12N/ı \square 6N/m \square 12N/ı						
EXPANSORS								
Expansors [□ Lineal	☐ Section						
Materials [□ Rubber	☐ Aluminu	m	☐ Special				
Expansion range	□ + Ø 4mm	☐ + Ø 9mi	m	☐ Special				
CONSTRUCTION MATERIALS								
Journal end [□ Steel	☐ AISI 304		☐ Special				
Core [☐ Aluminum alloy ext	trusion □ Steel		☐ Special				
Covers [☐ Aluminum	☐ AISI 304		☐ Special				
Bushings	□ Steel	☐ AISI 304		☐ Special				

