CaseX DSI® GKO-gs

For the installation of all types of pipes when carrier pipes run through a casing pipe

AREA OF APPLICATION
For pipe pull-in and pipe storage; metal-free solution for large medium pipes and extreme static loads; suitable for cathodic protected pipes

MATERIAL
Material type: Polypropylene

PROPERTIES
Temperature range: -20 °C bis + 100 °C
Color: black
Skid heights: 36 - 125 mm
Static load capacity per ring: 14200 kg
Coefficient of sliding friction: of polypropylene on steel approx. 0.2
Metal-free: Yes
Cathodic pipe protection: Yes
Spacer width: 225 mm
Information: Easy installation and adaptation to different carrier pipe diameters by means of clamping connection technology

SIZE
Pipe outside diameter from 400 mm to 2500 mm


Civil engineering


Water


Energy

PRODUCT INFORMATION

FEATURES
- Easy pull-in of the carrier pipe
- The spacer's friction coefficient is reduced to a minimum because they are made of plastic
- The minimized friction prevents damage to the protective coating and wrapping of the pipes
- A wide range of skid heights facilitates the centering/storage of carrier pipe in casing pipe
- Excellent insulating properties of the materials used.
- All requirements of cathodic pipe protection are fulfilled

AREAS OF APPLICATION
Casing spacers made of high-quality polypropylene material are universally applicable in the installation of all kinds of pipelines when the carrier pipe runs through a casing pipe.

Pipe Insertion - Casing Spacer

PRODUCT DESCRIPTION

Polypropylene has a waxy and therefore a good sliding surface. The coefficient of sliding friction of PP on steel is approx. 0.2. In comparison, steel on steel is about 0.5. Due to the optimum friction conditions, abrasion is reduced to a minimum. Good stress cracking resistance, flexibility of the body, low weight, bending stiffness and stability of the skids form as well as excellent dielectric isolation characteristics are further benefiting properties. Polypropylene has a higher temperature resistance than polyethylene. The base material is resistant up to 100 °C. The specification of the load capacity applies for a skid height up to 75 mm. For skid heights above 75 mm, these values shall be multiplied by a factor of 0,75. These specifications apply to standard pipelines. To determine the correct distances for an individual application, other factors have to be taken into consideration, such as pipe diameter, wall thickness of pipe and type of media (gas or liquid). We will be glad to assist you in determining the exact dimensions.

NOTE

Plastic spacers are usually installed with the following distances:

- Pipe diameter up to 300 mm at 2.5 m distance
- Pipe diameter 301 - 600 mm at 2.0 m distance
- Pipe diameter larger than 600 mm at 1.5 m distance
- The spans also depend on the specifications of the respective pipe manufacturers.
- In particular cases, the ring distance can be modified after checking the installation situation.

RECOMMENDATIONS

For smooth pipe surfaces (e.g. PE,PVC,steel,cast PE-coated or stoneware) we recommend the use of thrust-resisting tape in the pipe/skid contact area to ensure optimum safety against slipping. For closing the annular space between the carrier pipe and the protective pipe, the EndiT end sleeves are ideally suited.

RECOMMENDATIONS

- Anti Sliding Tape

INSTALLATION

1
Put out spacer elements and wedges according to selection table. Connect elements as a spacer band (for position of the wedges per spacer element see selection table on the backside), put the mounting link with grid into the entry of next element, be aware of parallelism. Push wedges into the lateral fixing slot until top can be seen on the other side of the spacer. Mind the direction of the arrows.

2
On smooth pipe surface which are in contact with the spacers (e.g. PE, PVC, steel/cast on PE-coated or stoneware) wrap a shear-secure-tape to guarantee an optimum security against slipping.

3
Put pre-mounted elements around the medium pipe and close last joint. Shift the spacer ring together by hand.

4
Shift spacer elements together with a screw clamp as far that one or more wedges can be put in the next fixing slot.

5
Drive in all wedges with rubber hammer strokes parallel to the pipe. The wedges don’t have to be in fully.

The lashes of the smaller pipe diameters (ND 400 – 600) have to be slightly bent downwards for an easier insertion.

When mounting more spacer rings please be aware that the skids of the single mounted rings align together.

For a pipe O.D. 429 mm, use 3 full and 1 half element per ring. Put 1 wedge in position 1 and 3 wedges in position 2.

WHAT MUST BE OBSERVED

We expressly exclude any other use of the material. The PSI guarantee is restricted to faulty material. The suitability of the product for a special purpose must be tested by the user on his own responsibility.

Pipe Insertion - Casing Spacer

Pipe ND			Pipe OD in mm		Number of elements		Position of wedges in connecting section			
PE/ PVC	Steel	GGG	from	to	compl. GKO	half GKO	1	2	3	4
400			397	402	3	1			3	1
	400		406	411	3	1		1	3	
		400	429	439	3	1	1	3		
450			448	452	4				3	1
			456	462	4			1	3	
500			498	504	4	1			2	3
	500		508	513	4	1			4	1
		500	532	542	4	1		3	2	
			538	542	5					5
			559	564	5				4	1
	600		610	615	5		2	3		
600			630	635	5	1			6	
		600	635	645	5	1		1	5	
			660	665	6				3	3
	700		711	716	6			5	1	
		700	738	748	6		4	2		
			762	767	7				2	5
800			796	802	7				7	
	800		813	819	7			3	4	
		800	842	852	7		1	6		
			864	870	8				1	7
	900		914	920	8			1	7	
		900	945	955	8			6	2	
	1000		1016	1022	9				7	2
		1000	1048	1058	9			4	5	
			1057	1063	9			6	3	
			1118	1125	10				6	4
	1200		1219	1226	11				6	5
			1321	1328	11		1	10		
	1400		1422	1430	12			9	3	
			1524	1532	13			7	6	
	1600		1626	1634	14			5	9	
			1727	1736	15			3	12	
	1800		1829	1838	16			1	15	
			1930	1939	17				16	1
	2000		2032	2041	17			16	1	
			2134	2144	18			14	4	
	2200		2235	2245	19			12	7	
			2337	2347	20			10	10	
	2400		2438	2448	21			8	13	