

If Bends have to Adapt Themselves ...

KALFLEX Bends are Both Flexible and Wear Resistant

The problem is well known. Rigid piping systems cannot be used to connect components that move due to vibrations, thermal expansion or as a result of intended movements. Normally, the available solutions are expensive.

Kalenborn offers a new answer to this problem: KALFLEX – the flexible bend that is easily installed with normal flanging.

The core elements of the system are abrasion resistant segments that fit into each other. The segments are capable of moving in relation to each other, providing the desired flexibility.

The segments are enclosed in a rubber jacket containing a fabric insert, producing the needed stability and tightness.

Available sizes range from 19 to 200 mm ID, covering pipe sizes used in many pneumatic conveying systems.

This new system allows a variety of flange and coupling connections, ensuring rapid and easy installation.

Technical data:

- internal diameters 19 - 200 mm
- temperatures -30 °C / -22 °F up to +110 °C / +230 °F
- pressure up to 10 bars
- flexible radius and angle positions
- UV-, ozon and weather resistant
- flanges per DIN 2642

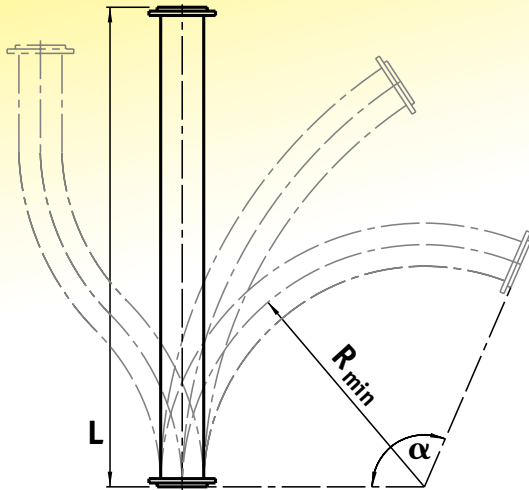
Advantages offered by KALFLEX:

- flexible and adaptable
- highly wear resistant
- easy to install
- well suited for spare parts program
- useful for diverter valves
- used as vibration reducing element
- used as expansion joint
- well suited in case of narrow space
- compensation of load cells



Flexible but Wear Resistant:

KALMETALL-C Ensure High Wear Resistance of Bends



$$\alpha = \frac{L \times 360}{R \times 2 \times \pi} = \frac{L}{R} \times 57,3$$

KALMETALL-C wear resistant hard cast

The wear resistant KALMETALL-C segments used in KALFLEX bends are casted. The selected hard cast quality is standard wise KALMETALL-C 153. This hard cast quality offers resistance against wear caused by impact and sliding abrasion. Other hard cast qualities on request.

KALOCER high alumina ceramics

The segments can also be made of KALOCER high alumina ceramics, useful in cases of extreme sliding abrasion. Diameters are available from 50 to 125 mm.

Choose from the list of standard flexible bends in KALMETALL-C

Other dimensions and lengths available on request

Internal Diameter	Dimensions					Weight		
	Lengths			Radius	Loose Flange*	L _{min}	L _{max}	per Step
	L _{min}	L _{max}	Step	R _{min}	Nominal Bore			
mm	mm	mm	mm	mm		kg	kg	kg
19	210	1510	50	250	25	4.7	12.5	0.3
24	210	1510	50	250	32	5.9	15.8	0.38
32	288	1548	70	300	40	7.5	20.1	0.7
40	285	1558	67	350	50	10.3	31.2	1.1
50	284	2070	94	459	65	13.6	44	1.6
65	345	2055	95	600	80	17.1	54.9	2.1
80	345	2530	95	800	100	19.9	79.7	2.6
100	365	2550	95	1000	125	26.5	102.4	3.3
125	410	2590	95	1200	150	34.7	128.2	4.25
150	410	2542	107	1400	175**	48.5	153	5.5
175	430	2110	105	1400	200	53.5	157.5	6.5
200	430	2155	115	1400	200	59	171.5	7.5

* DIN 2642

** similar to DIN 2576

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The Wear Protection People