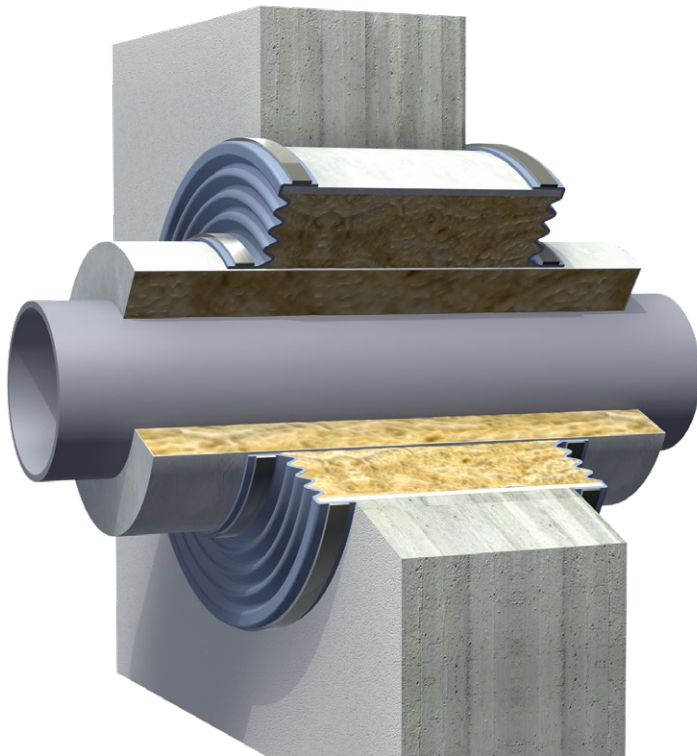
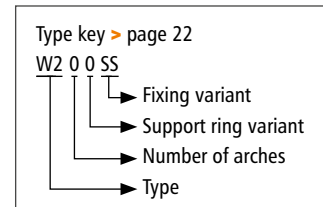


## W200SS + W200SS for wall pipes up to $\varnothing$ 400 mm, medium pipes up to $\varnothing$ 150 mm



### > Type W200SS + W200SS




## Fire penetration seal for wall tubes up to $\varnothing$ 400 mm

**Design:** Air- and splash water-tight fire bulkhead sealing for 120 min fire resistance for pipe penetrations through walls and ceilings. Bothsided, straight or folded penetration seal membranes with all-directional movement capability, made from extremely flexible thin silicone materials, and with fixing clamps (type W200SS) or multi-part backing flanges (type W200FS). Available round or rectangular styles, also offset designs for pipe misalignment and spilt wrap designs available for field installation around existing penetrating pipe applications. Fire resistance test acc. DIN EN 1366-3, approval acc. DIN 4102 part 11. Technical details must be followed according to Building Authority Approval.

**Diameters:** System approval for wall pipes up to  $\varnothing$  400 mm and for medium pipes up to  $\varnothing$  150 mm

**Length:** W200SS or W200FS standard 60 mm  
Custom length on request

**Pressure:** Up to  $\pm$  20 mbar

**Movement:** For axial and lateral movements  (> page 327)

**Wall pipe:** Distance "a" between individual penetrations:  
for wall pipes  $\varnothing \leq 200$  mm  $a \geq 100$  mm,  $\varnothing > 200$  mm  $a \geq 200$  mm  
Wall pipe thickness (> page 327)

**Application:**  
Power plants, plant construction, turbine houses, R120 fire penetration sealing for pipes with axial and lateral movements

Tested according to DIN 4102  
Section 11 General  
Building Supervision Certificate  
MPA Braunschweig  
No. P-3740/4280-MPA BS



Request assembly instructions at:  
[www.ditec-adam.de/en/contact](http://www.ditec-adam.de/en/contact)

<b>Medium pipe insulation:</b>	Mineral wool insulation (materials class A1, melting point > 1000°C) The surface of this insulating material should be shielded with galvanised or stainless steel sheet with a thickness of min. 0.8 mm Length and thickness (> page 327)
<b>Ring gap:</b>	Distance between wall and medium pipe or medium pipe insulation from 10 mm to 100 mm Ring gap stuffing with mineral wool (materials class A1, melting point > 1000°C) Stuffing density $\geq 120 \text{ kg/m}^3$ (usually supplied by others) Ring gap insulation of ceiling penetrations must be secured against slippage using several brackets around the circumference
<b>Pipe hanger:</b>	Distance of next pipe hanger to wall / ceiling: 400 mm for $\leq \varnothing 150 \text{ mm}$ and 1,400 mm for $> \varnothing 150 \text{ mm}$ medium pipe diameter
<b>Wall/ceiling thickness:</b>	Min. 240 mm concrete, reinforced concrete or gas concrete

## Bellows elastomers

Elastomers		
up to 200°C	Silicone Q	Air, water, saltwater atmosphere Special compound
	Silicone (special)	Special compound with certifications for nuclear applications

## Clamps

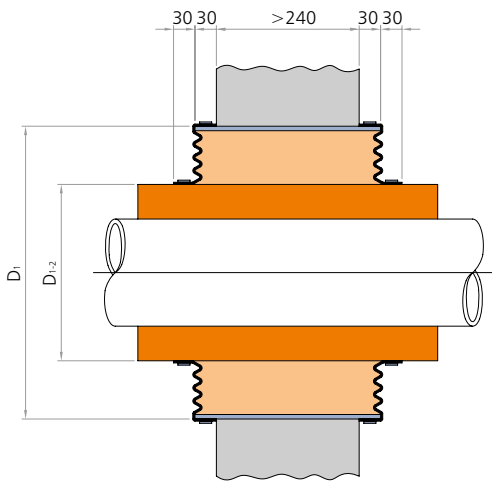
<b>Design:</b>	Screw thread belt or small clamps	
<b>Width:</b>	Screw thread belt:	1/2"
	Small clamp:	depending on $\varnothing$ : 9–12 mm
<b>Materials:</b>	Screw thread belt with threaded screw lug:	1.4310
	Small clamp, belt and housing:	1.4016 (Screw steel galvanised)

## Backing flanges

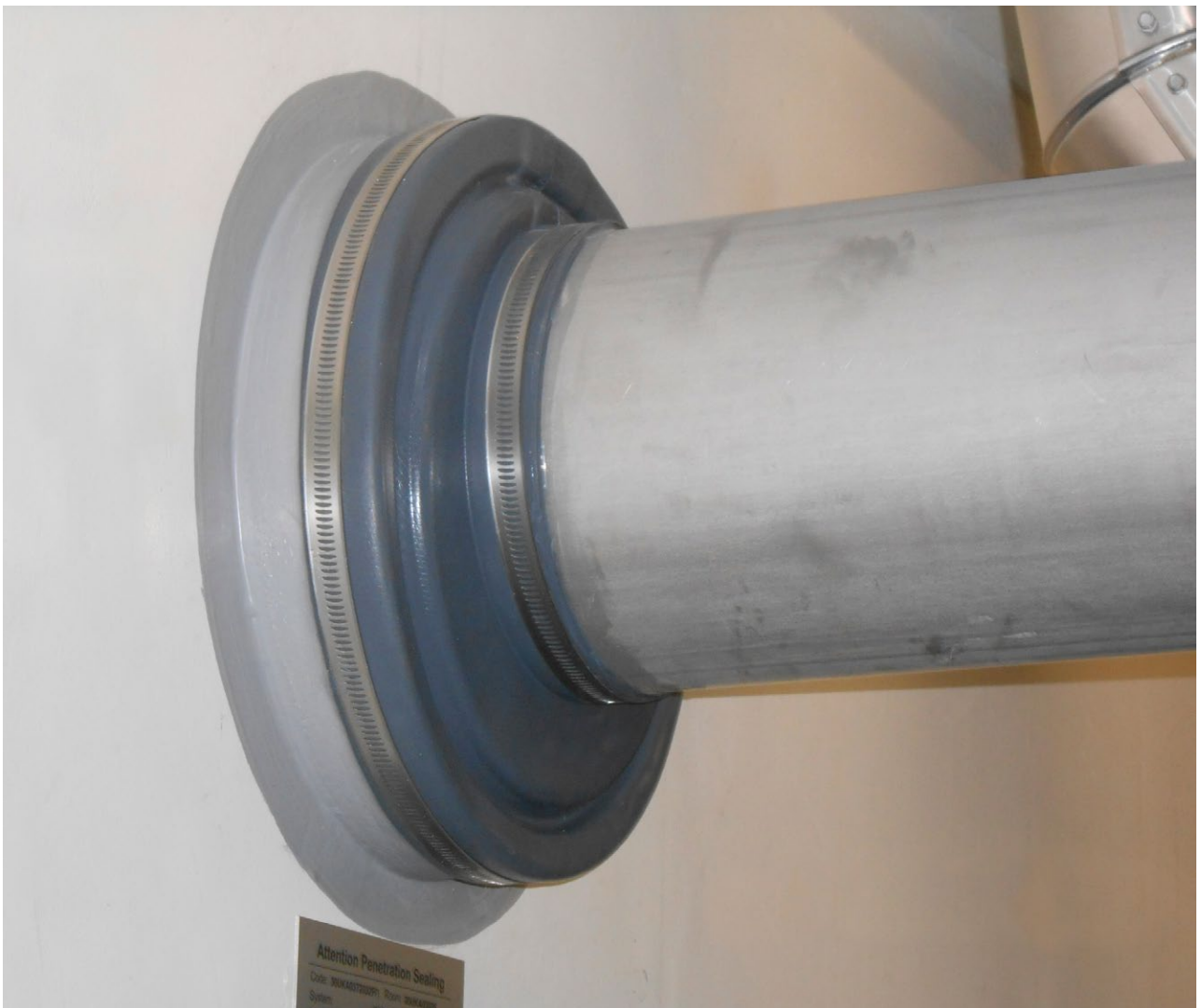
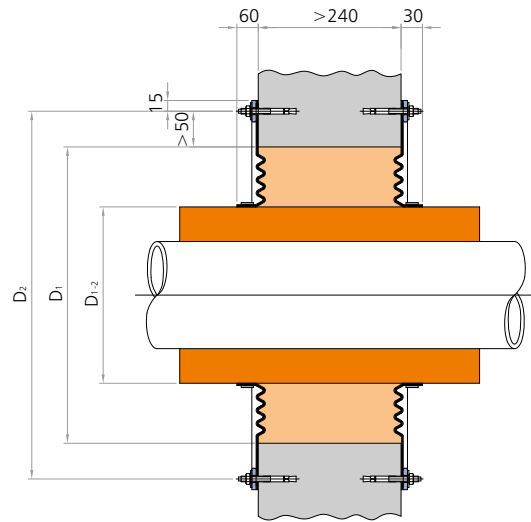
<b>Design:</b>	Multi-part clamping flange with clearance holes
<b>Flange norms:</b>	According to specification
<b>Materials:</b>	Carbon steel, stainless steel
<b>Coating:</b>	Primed, hot-dip galvanised, special paint

### 326 Penetration seals

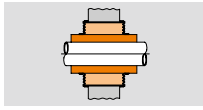
Cross section W200SS + W200SS



Cross section W200FS + W200FS



Flexible air-tight fire penetration seal of type W200SS + W200SS in a nuclear power plant



## W200SS + W200SS

Potential combinations		Wall pipe Thickness mm	Required medium pipe insulation		W200SS + W200SS Movement				
Wall pipe D <sub>1</sub> mm	Medium pipe D <sub>1-2</sub> mm		Length ≥ mm	Thickness mm					
50	10	≥ 3,2 ≤ 14,2			15	15	13		
	15				14	14	12		
	20				12	12	10		
	25				9	9	8		
	32				6	6	5		
65	15	≥ 3,2 ≤ 14,2			19	19	16		
	20				17	17	15		
	25				15	15	13		
80	10	≥ 3,2 ≤ 14,2			25	25	22		
	15				24	24	20		
	20				22	22	19		
	25				19	19	17		
100	15	≥ 3,2 ≤ 14,2			33	33	28		
	20				31	31	26		
	25				28	28	24		
	32				11	11	10		
	40				9	9	8		
125	20	≥ 3,0 ≤ 14,2			39	39	34		
	25				37	37	32		
	32				20	20	17		
	40				18	18	15		
	50				7	7	6		
150	32	≥ 3,0 ≤ 14,2			30	30	26		
	40				28	28	24		
	50				17	17	14		
	65				11	11	10		
	80				7	7	6		
200	40	≥ 3,0 ≤ 14,2			46	46	39		
	50				35	35	30		
	65				29	29	25		
	80				700	30	25	25	21
	100				700	30	16	16	13
250	65	≥ 3,0 ≤ 14,2			48	48	41		
	80				700	30	43	43	37
	100				700	30	35	35	30
	125				700	30	26	26	22
	150				700	30	16	16	13
300	65	≥ 3,0 ≤ 14,2			66	66	56		
	80				700	30	61	61	53
	100				700	30	52	52	45
	125				700	30	43	43	37
	150				700	30	33	33	29
350	80	≥ 3,0 ≤ 14,2			70	70	60		
	100				700	30	63	63	54
	125				700	30	55	55	47
	150				700	30	45	45	38
400	100	≥ 3,0 ≤ 14,2			70	70	60		
	125				700	30	70	70	60
	150				700	30	62	62	53

Above data refer to wall penetrations only; for ceiling penetration please contact our sales department.  
Other combinations possible.

The movements listed are based on a concentric position of the medium pipe in relation to the wall pipe as well as minimal medium pipe insulation thicknesses and a maximum ring gap of 100 mm.  
Larger movements on request.