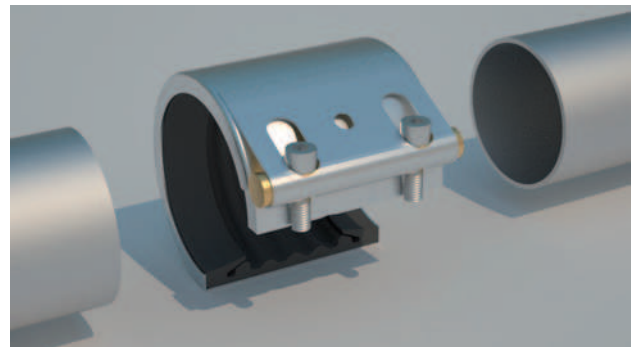


# STRAUB-FLEX

## The flexible – connection and compensator in one

STRAUB-FLEX is the axially flexible coupling for all pipe materials. This type of coupling not only connects pipes, it simultaneously compensates the axial movement, giving a significant added value to the coupling. STRAUB-FLEX absorbs noise and vibrations optimally.



Sectional view

Working pressure up to 16 / 25 bar  
 Outside diameters 48.3 up to 4064 mm  
 (available for all pipes from 172 mm up to 4064 mm)  
 Temperature range -20°C up to +180°C

Example for ordering:  
 STRAUB-FLEX 1L 76.1 mm, EPDM/SS



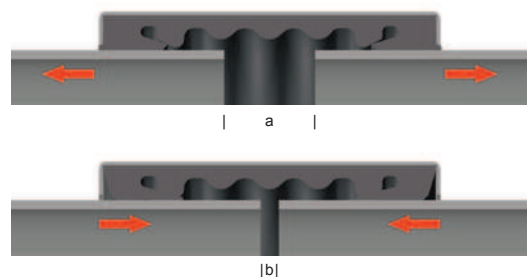
STRAUB-FLEX used as a compensator on unstable ground



For the installation of an adapter piece

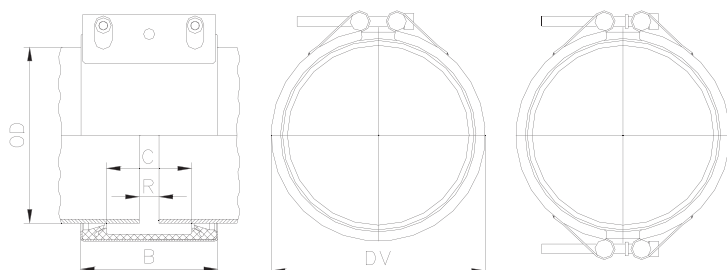
## Compensation of axial movement

Max. axial movement	
STRAUB-type	$\Delta l$ (a-b) [mm]
FLEX 1 / OPEN-FLEX 1	5
FLEX 2 / OPEN-FLEX 2	10
FLEX 3 / OPEN-FLEX 3	15
FLEX 3.5 / OPEN-FLEX 3.5	15
FLEX 4 / OPEN-FLEX 4	20



# STRAUB-FLEX 2 Ø 172.0 - 2032.0 mm

Components / Materials	W1	W2	W4 (only for L-version)	W5
Casing	AISI A106, hot-dip galv.	AISI 316 L / 316 TI	AISI 304	AISI 316 L / 316 TI / S32101 (LDX)
Bolts	AISI 4135	AISI 4135	AISI 316 L	A4 - 80
Bars	AISI 12 L 14, galvanised	AISI 12 L 14, galvanised	AISI 316 L	AISI 316 L
Strip insert (option)	AISI 316 L / HDPE	AISI 316 L / HDPE	AISI 316 L / HDPE	AISI 316 L / PVDF
<b>Sealing sleeve EPDM</b>	Temp.: -20°C up to +100°C Medium: all qualities of water, waste water, air, solids and chemical products			
<b>Sealing sleeve NBR</b>	Temp.: -20°C up to +80°C Medium: water, gas, oil, fuel and other hydrocarbons			
<b>Sealing sleeve FPM / FKM</b>	Temp.: -20°C up to +180°C Medium: ozone, oxygen, acids, gas, oil and fuel (only with strip insert)			



- B Width of pipe coupling:  
 FLEX 2 L = 138 mm  
 FLEX 2 LS = 139 mm  
 FLEX 2 LU = 141 mm  
 FLEX 2 LV = 141 mm  
 FLEX 2 H = 142 mm  
 FLEX 2 XS = 148 mm
- DV Outside diameter of the coupling installed = OD+27 mm  
 C Distance between sealing lips = 91 mm  
 R<sub>max.</sub> Distance between pipe ends with strip insert = 35 mm  
 Distance between pipe ends without strip insert = 10 mm

Pipe OD [mm]	Clamping range [mm]	Working pressure PS [bar]						Torque rate [Nm]						
		L	LS	LU	LV (LDX)	H	XS	L	LS	LU	LV (LDX)	H	XS	
172.0	170 - 174	13.0						10						
180.0	178 - 182	12.0	16.5	25.0				10	15	30				
200.0	198 - 202	11.0	15.0	25.0				10	15	30				
<b>219.1</b>	<b>217 - 222</b>	<b>10.0</b>	<b>13.5</b>	<b>25.0</b>				<b>10</b>	<b>15</b>	<b>30</b>				
250.0	248 - 253	9.0	12.0	24.0				10	15	30				
267.0	264 - 270	8.0	11.0	22.5				15	15	30				
<b>273.0</b>	<b>270 - 276</b>	<b>8.0</b>	<b>11.0</b>	<b>22.0</b>	<b>25.0</b>	<b>25.0</b>	<b>25.0</b>	<b>15</b>	<b>15</b>	<b>30</b>	<b>40</b>	<b>30</b>	<b>110</b>	
304.0	301 - 307	7.0	10.0	19.5	25.0	25.0	25.0	15	20	30	40	30	110	
<b>323.9</b>	<b>321 - 327</b>	<b>7.0</b>	<b>9.5</b>	<b>18.5</b>	<b>25.0</b>	<b>25.0</b>	<b>25.0</b>	<b>15</b>	<b>20</b>	<b>30</b>	<b>40</b>	<b>40</b>	<b>30</b>	<b>110</b>
<b>355.6</b>	<b>353 - 358</b>	<b>6.0</b>	<b>8.5</b>	<b>17.0</b>	<b>25.0</b>	<b>25.0</b>	<b>25.0</b>	<b>15</b>	<b>20</b>	<b>30</b>	<b>40</b>	<b>30</b>	<b>110</b>	
<b>406.4</b>	<b>404 - 409</b>	<b>5.5</b>	<b>7.5</b>	<b>15.0</b>	<b>25.0</b>	<b>22.0</b>	<b>25.0</b>	<b>20</b>	<b>20</b>	<b>30</b>	<b>50</b>	<b>40</b>	<b>120</b>	
<b>457.2</b>	<b>454 - 460</b>	<b>5.0</b>	<b>6.5</b>	<b>13.0</b>	<b>25.0</b>	<b>19.0</b>	<b>25.0</b>	<b>20</b>	<b>20</b>	<b>40</b>	<b>50</b>	<b>40</b>	<b>120</b>	
<b>508.0</b>	<b>505 - 511</b>	<b>4.5</b>	<b>6.0</b>	<b>12.0</b>	<b>24.0</b>	<b>17.0</b>	<b>25.0</b>	<b>20</b>	<b>25</b>	<b>40</b>	<b>60</b>	<b>40</b>	<b>120</b>	
<b>558.8</b>	<b>556 - 562</b>	<b>4.0</b>	<b>5.5</b>	<b>10.5</b>	<b>22.0</b>	<b>16.0</b>	<b>25.0</b>	<b>25</b>	<b>25</b>	<b>40</b>	<b>60</b>	<b>50</b>	<b>140</b>	
<b>609.6</b>	<b>606 - 613</b>	<b>3.5</b>	<b>5.0</b>	<b>10.0</b>	<b>20.0</b>	<b>14.0</b>	<b>25.0</b>	<b>25</b>	<b>25</b>	<b>40</b>	<b>60</b>	<b>50</b>	<b>140</b>	
711.2	708 - 715		4.0	8.5	17.0	12.0	25.0			30	50	70	50	140
762.0	758 - 766		4.0	8.0	16.0	12.0	23.5			30	50	70	60	160
812.8	809 - 817		3.5	7.5	15.0	11.0	22.0			30	50	70	60	160
914.4	910 - 918		3.5	6.5	13.0	10.0	20.0			35	60	80	60	160
1016.0	1012 - 1020		3.0	6.0	11.0	9.0	18.0			35	60	80	70	160
1117.6	1114 - 1122		2.5	5.5	10.0	8.0	16.0			40	60	80	70	180
1219.2	1215 - 1224		2.5	5.0	9.0	7.0	15.0			40	60	90	70	180
1320.8	1316 - 1325		2.5	4.5	8.5	7.0	15.0			40	60	90	70	180
1422.4	1418 - 1427		2.0	4.0	8.0	6.0	14.0			40	60	90	70	180
1524.0	1519 - 1529		2.0	4.0	8.0	6.0	14.0			40	60	90	80	200
1600.0	1595 - 1605		2.0	4.0	7.5	6.0	13.0			40	60	90	80	200
1625.6	1621 - 1631			3.0	7.0	6.0	13.0				80	100	85	200
1727.2	1722 - 1732			3.0	6.5	5.5	12.0				80	100	90	200
1828.8	1824 - 1834			2.5	6.0	5.0	11.0				90	110	95	220
1930.4	1925 - 1935			2.0	6.0	4.5	10.0				100	120	100	220
2032.0	2027 - 2037			2.0	5.5	4.0	10.0				100	120	110	240

STRAUB produces custom made couplings from 172.0 up to 2032.0 mm

### Remarks:

- Follow fitting / disassembly instructions
- Available in one- or two-piece version
- PS = Working pressure considering the application loads  
 Test pressure = PS x 1.5 (for example industry, water supply etc.)  
 Burst pressure = approx. PS x 2
- Strip inserts are required for special applications, see page 43
- L-, LS- and LU-version in W2 or W5
- LV(LDX)-version in W5
- H- and XS-version in W1

For IPS sizes in bold see page 54 for actual OD

Typing errors may occur. Technical details are subject to change