

**HYDRA**

## 6 | STANDARD RANGES

Universal expansion joint  
for low pressure (exhaust-gas) with weld ends

Type URG

### Designation

The designation consists of two parts

1. the series, defined by 3 letters
2. the nominal size, defined by 10 digits

### Example:

Type URG: HYDRA universal exhaust-gas expansion joint with weld ends

### Standard version/materials:

multi-ply bellows: 1.4541

weld ends: P 235 TR1 (1.0254)

operating temperature: up to 550°C

### Designation (example):

U	R	G	0	1	.	0	1	5	0	.	1	4	4	.	0
Type			Nominal pressure (PN 1)			Nominal diameter (DN150)			Movement absorption, nominal ( $2\delta = \pm 72 = 144$ mm)			Inner sleeve (0 = without)			

### Order text

Please state the following with your order:

- for standard versions  
-> order number
- for different materials  
-> designation  
-> details of materials

The expansion joints for low pressure (exhaust-gas) are designed for non-pressurised applications (PS < 0.5 bar gauge pressure).

The Pressure Equipment Directive 97/23/EC does not apply to this operating condition.

**Note:** Tell us the dimensions that deviate from the standard dimensions and we can match the expansion joint to your specification.

## Universal expansion joints

for low pressure with weld ends

## Type URG 01...

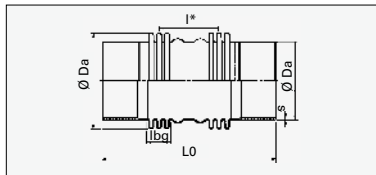
PN 1

## Universal expansion joints

for low pressure with weld ends

## Type URG 01...

PN 1



Type URG

Nennweite	Nominal axial movement absorption	Type <b>URG 01 ...</b>	Order No. standard version	Overall length	Weight approx.	Centre-to-centre spacing of bellows	Weld ends	
							outside diameter	wall thickness
DN	2δ <sub>N</sub>	—	—	Lo	G	I*	D	s
—	mm	—	—	mm	kg	mm	mm	mm
50	56	..0050.056.0	425696	480	1.5	257	60.3	4
65	83	..0065.083.0	425697	520	2.2	279	76.1	4
80	95	..0080.095.0	425698	530	2.6	280	88.9	4
100	119	..0100.119.0	425699	550	3.4	291	114.3	4
125	144	..0125.144.0	425700	550	4.2	286	139.7	4
150	144	..0150.144.0	423544	563	5	299	168.3	4
200	160	..0200.160.0	423545	572	6.6	292	219.1	4
250	168	..0250.168.0	423546	572	8.2	293	273	4
300	196	..0300.196.0	423547	562	9.7	269	323.9	4
350	180	..0350.180.0	423548	582	10.6	302	355.6	4
400	156	..0400.156.0	423549	552	16.5	266	406.4	4
450	140	..0450.140.0	423550	552	17.9	282	457	4
500	136	..0500.136.0	423551	602	21	310	508	4

<sup>1)</sup> Movement absorption: The movements (axial, angular, lateral) are to be regarded as alternatives, i.e. the sum of their proportions in percentages should not exceed 100%.

Bellows			Nominal movement absorption <sup>1)</sup> for 1000 loading cycles		Adjusting force rate rate		
outside diameter	corrugated length	effective cross-section	angular	lateral	axial	lateral	
Da	lbg	A	2α <sub>N</sub>	2λ <sub>N</sub>	c <sub>δ</sub>	c <sub>λ</sub>	c <sub>ρ</sub>
mm	mm	cm <sup>2</sup>	degrees	mm	N/mm	N/mm	N/mm bar
89	81	45	41	200	45	1.9	0.2
107	81	68	49	195	33	1.9	0.4
121	90	88	49	196	33	2.3	0.7
148	99	136	49	202	32	3.2	1.2
174	104	186	51	204	35	5	1.5
203	104	263	43	181	33	6.2	2.3
255	120	430	37	149	33	11	4.2
312	119	658	32	127	37	19	5.5
365	133	913	31	112	36	29	8.6
400	120	1101	26	109	40	31	8.1
458	126	1439	20	71	77	100	9.6
513	110	1817	16	62	88	128	12
569	92	2244	14	62	105	156	13