

# ES-10,11

Bellows

Sleeve

Ball

Single type

Double type

PTEE

Copper pipe



ES-10-100

## ■Features

1. Complies with SHASE-S003 Sleeve Type Expansion Joints.
2. Large expansion/compression length can lessen the pipe joint and anchor.
3. No need for lubrication and easy maintenance by original packing. Smooth sliding and excellent airtightness.
4. Outstanding corrosion resistance and wear resistance due to hard chrome plating on the sleeve surface.

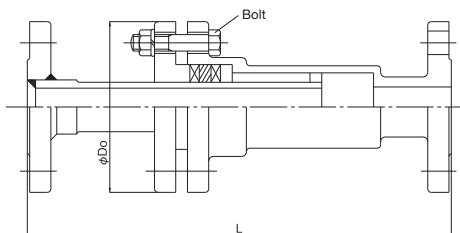
## ■Specifications

Model		ES-10-100	ES-10-200	ES-11-100	ES-11-200
Application		Steam, Air, Cold and hot water, Oil, Other non-dangerous fluids			
Maximum pressure		1.0 MPa		2.0 MPa	
Maximum temperature		220°C			
Max. axial extension		20 mm	40 mm	20 mm	40 mm
Max. axial compression		80 mm	160 mm	80 mm	160 mm
Material	Body	Ductile cast iron *1	Rolled steel	Ductile cast iron or Rolled steel *2	Rolled steel
	Sleeve	Carbon steel (HCr plating)			
Connection		JIS 10K RF flanged		JIS 20K RF flanged	
Pressure resistance test (water)		1.5 MPa		3.0 MPa	

\*1 Cast iron for over 250A.

\*2 Ductile cast iron for 25 to 100A, and rolled steel for 125 to 300A.

## ■ Dimensions (mm) and Weights (kg)



### · ES-10-100 · ES-11-100

Nominal size	Face-to-face dimension L			Max. axial extension $\delta$	Do	Nominal size of bolt thread	Quantity
	Set length	Max. operating length	Min. operating length				
* 20A	380	400	300	100	100	M12 x 60	4
25A	380	400	300	100	114	M12 x 60	4
32A	380	400	300	100	124	M12 x 65	4
40A	380	400	300	100	130	M12 x 65	6
50A	380	400	300	100	142	M12 x 65	6
65A	430	450	350	100	175	M16 x 75	6
80A	430	450	350	100	188	M16 x 75	6
100A	430	450	350	100	216	M16 x 80	8
125A	500	520	420	100	242(270)	M16 x 80	10
150A	500	520	420	100	290(305)	M20 x 90	10
200A	500	520	420	100	340(350)	M20 x 90	12
250A	580	600	500	100	400(430)	M22 x 100	12
300A	580	600	500	100	465(480)	M22 x 110	16

The value in ( ) is dimension of ES-11-100.

\* 20A for ES-11-100 is not available.

### · ES-10-200 · ES-11-200

Nominal size	Face-to-face dimension L			Max. axial extension $\delta$	Do	Nominal size of bolt thread	Quantity
	Set length	Max. operating length	Min. operating length				
25A	560	600	400	200	114(125)	M12 x 60	4
32A	560	600	400	200	124(135)	M12 x 65	4
40A	560	600	400	200	130(140)	M12 x 65	6
50A	560	600	400	200	142(155)	M12 x 65	6
65A	600	640	440	200	175(175)	M16 x 75	6
80A	600	640	440	200	188(200)	M16 x 75	6
100A	640	680	480	200	216(225)	M16 x 80	8
125A	640	680	480	200	242(270)	M16 x 80	10
150A	690	730	530	200	290(305)	M20 x 90	10
200A	690	730	530	200	340(350)	M20 x 90	12
250A	740	780	580	200	400(430)	M22 x 100	12
300A	740	780	580	200	465(480)	M22 x 110	16

The value in ( ) is dimension of ES-11-200.