



Rubber Expansion / Flexible Joint

LS Connector

(PT-LS)

FEATURES

Absorption of Movement

All parts other than flanges are flexible. Large movement can be absorbed with small overall length.

Classification of Eccentricity

LS Connector is classified in 4 types of lateral movement, which are 20mm, 50mm, 100mm, 200mm

Classification of Pressure

Aboveground/ Underground Applications	Classification of Pressure	Max Operating Pressure (MPa)
Aboveground Application	Middle Pressure	0.5
	High Pressure	1.0
Underground Application	Middle Pressure	0.5
	High Pressure	1.0
Negative Pressure Application	-0.1MPa (-760mmHg)	

About Negative Pressure

Please contact us when in usage under the high negative pressure conditions, such as 24 hours operation or the negative pressure close to full vacuum, or frequent pump on/off

Classification of Pressure

Max. Working Temp.

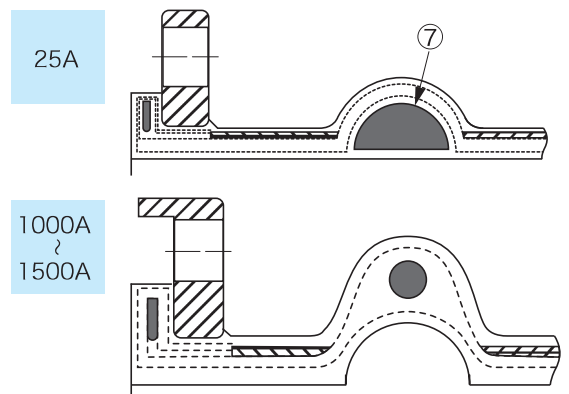
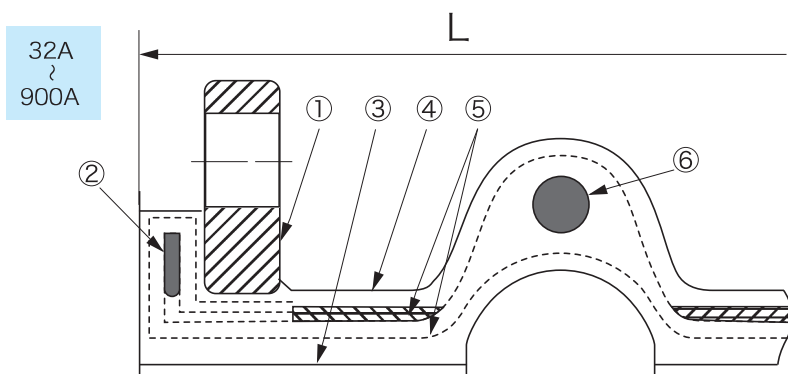
Classification of Lateral Movement

For 20mm, 50mm, 100mm, 200mm

Please consult us

For higher pressure applications, please consult us.

STRUCTURE



No.	Parts	Material	No.	Parts	Material
①	Flange	Mild Steel	⑤	Reinforcing Fabric	Synthetic Fiber
②	End Reinforcing Ring	Mild Steel	⑥	Reinforcing Ring	Mild Steel
③	Inside Rubber	Synthetic Rubber	⑦	Filler	Special High Polymer Rubber
④	Outside Rubber	Synthetic Rubber			

- Aboveground and underground types are available.
- The above figures show the underground type.
- The size 20A and 25A are filled arch type.
- The filled arch type is also producible more than 32A.

LS Connector

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DIMENSIONS AND ALLOWABLE MOVEMENTS

Nominal Dia.	20mm Lateral Movement 1 - Bellow				50mm Lateral Movement 2 - Bellow				100mm Lateral Movement 3 - Bellow				200mm Lateral Movement 4 - Bellow			
	L	Elon.	Comp.	Mass	L	Elon.	Comp.	Mass	L	Elon.	Comp.	Mass	L	Elon.	Comp.	Mass
mm	mm	mm	mm	kg	mm	mm	mm	kg	mm	mm	mm	kg	mm	mm	mm	kg
15	150	15	20	1.9	250	30	45	2.2	350	40	60	2.8	450	40	60	3.4
20	150	15	20	2.3	250	30	45	2.6	350	40	60	3.2	450	40	60	3.8
25	150	15	20	2.6	250	30	45	2.9	350	40	60	3.6	450	40	60	4.3
32	150	15	20	3.0	250	30	45	3.4	350	40	60	4.4	450	40	60	5.3
40	150	15	20	3.6	250	30	45	4.0	350	40	60	5.2	450	40	60	6.3
50	150	15	20	4.4	250	30	45	4.9	350	40	60	6.2	450	40	60	7.4
65	150	15	20	5.2	250	30	45	5.9	350	40	60	8.0	450	40	60	9.5
80	150	20	20	6.0	300	30	45	6.7	350	40	60	9.1	450	40	60	11
100	150	20	20	7.2	300	30	45	8.4	350	40	60	11	450	40	60	13
125	150	20	20	10	300	30	45	12	350	40	60	15	450	40	60	17
150	200	20	20	13	300	30	45	16	500	40	60	20	600	40	60	22
200	200	20	20	18	300	30	45	21	500	40	60	26	600	40	60	28
250	200	20	20	26	300	30	45	31	500	40	60	37	600	40	60	43
300	200	20	20	33	300	30	45	39	550	40	60	46	650	40	60	55
350	200	25	30	42	350	40	50	50	550	50	70	59	650	50	70	68
400	200	25	30	50	350	40	50	60	550	50	70	74	650	50	70	85
450	200	25	30	61	350	40	50	74	550	50	70	95	650	50	70	105
500	250	25	30	71	350	40	50	87	550	50	70	110	650	50	70	125
600	250	25	30	99	400	40	50	121	550	50	70	145	650	50	70	168
700	250	25	30	116	400	40	50	137	650	50	70	170	750	50	70	197
800	300	25	30	133	400	40	50	156	650	50	70	190	750	50	70	225
900	300	25	30	150	400	40	50	178	650	50	70	220	750	50	70	254
1000	300	25	30	170	450	40	50	197	700	50	70	250	800	50	70	287
1100	300	25	30	190	450	40	50	225	700	50	70	280	800	50	70	324
1200	300	25	30	217	450	40	50	254	700	50	70	310	800	50	70	357
1350	300	25	30	260	450	40	50	300	700	50	70	370	800	50	70	420
1500	350	25	30	405	450	40	50	460	750	50	70	590	950	50	70	680

L : Overall Length Elon. : Elongation Comp. : Compression

- Mass indicates the weight for underground type.
- Please use each movement within allowable movements.
- Please note that the information in the above table is for single movement only. In case of complex movements, please do adjustment by using the following formula.

$$C.A.E. (C.A.C) = A.A.E.(A.A.C) \times \left\{ 1 - \left(\frac{T.M}{A.T.M} + \frac{A.M}{A.A.M} \right) \right\}$$

C.A.E. (C.A.C): Corret Comprassions Movement

A.A.E. (A.A.C): Allowable Elongation Movement (Allowable Compression Movement)

A.T.M. : Allowable Transverse Movement

A.A.M. : Allowable Angular Movement

Note:

This brochure may be revised without prior notice. We apologize in advance for any inconvenience this may cause.