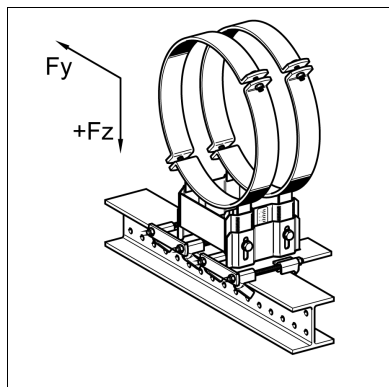




Working loads for Pipe Shoe LD - HV

Basis for assessment EC 3, working loads for supports at their delivered height (90 mm, 150 mm or 200 mm)

The load values apply to pipe shoes from the HCP range as well as to the high temperature pipe shoes. The load values are based on room temperature. For higher temperatures, the corresponding temperature correction values according to the attached table must be taken into account.

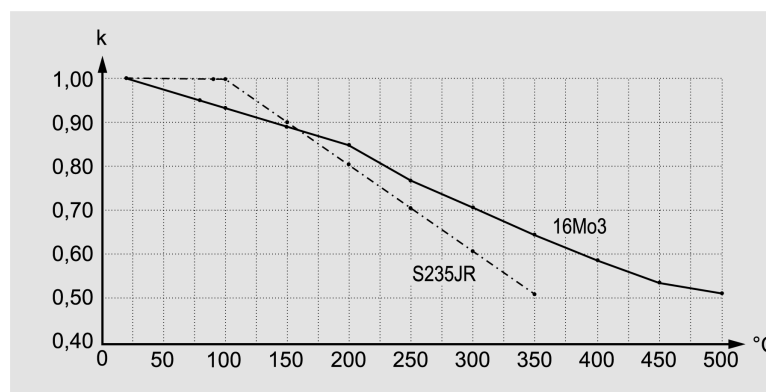
Axial fixed point forces F_x can only be attained by the professional use of anti-slip protections (e.g. cleats, stoppers). Those have to be planned during the design of the piping and are on the responsibility of the piping manufacturer.

The tests for lifting forces - F_z were performed using a combination of a pipe shoe LD - HV and a guiding or fixed points sets. This results in the values for - F_z in the following combinations:

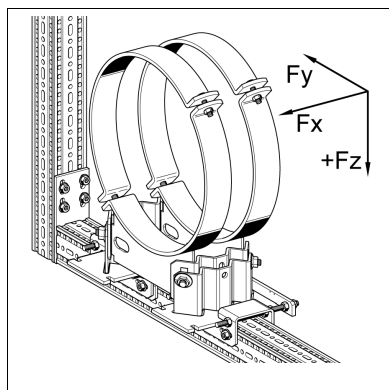
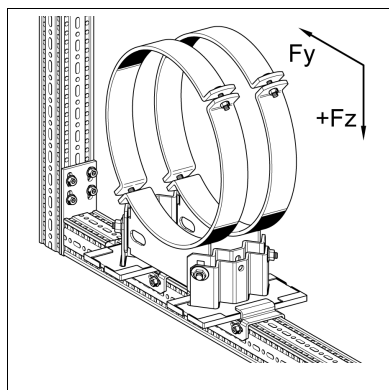
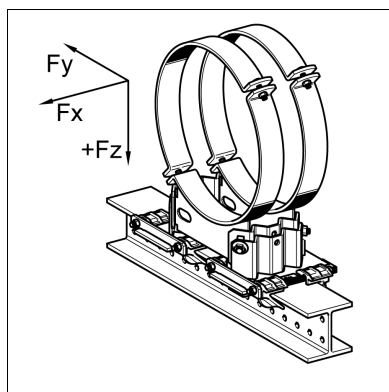
- beam connection with the **FS** guiding set or the **XS** fixed point set.
- Connection to siFramo with the guiding bracket **FW F** or the fixed point bracket **XW F**

Further statical product datas are available on request.

Material-dependent temperature correction values (k)



Temperature	16Mo3	S235JR
20°C	1.00	1.00
80°C	0.95	1.00
100°C	0.93	1.00
150°C	0.89	0.90
200°C	0.85	0.81
250°C	0.77	0.71
300°C	0.71	0.61
350°C	0.64	0.52
400°C	0.58	-
450°C	0.53	-
500°C	0.51	-



LD - HV	D [mm]	DN	F _x [kN]	F _y [kN]	+ F _z [kN]	- F _z FS 80/120 [kN]	- F _z FW F 80 [kN]	- F _z XS 80/120 [kN]	- F _z XW F 80 [kN]
90	215-221	200	37.2	12.9	32.8	28	12.2	32.8	32.8
90	222-229		37.2	12.9	32.8	28	12.2	32.8	32.8
90	230-237		37.2	12.9	32.8	28	12.2	32.8	32.8
90	238-245		37.2	12.9	32.8	28	12.2	32.8	32.8
90	246-254		37.2	12.9	32.8	28	12.2	32.8	32.8
90	255-262		37.2	12.9	32.8	28	12.2	32.8	32.8
90	259-266		37.2	12.9	32.8	28	12.2	32.8	32.8
90	266-273	250	37.2	12.9	32.8	28	12.2	32.8	32.8
90	274-282		37.2	12.9	32.8	28	12.2	32.8	32.8
90	283-291		37.2	12.9	32.8	28	12.2	32.8	32.8
90	292-300		37.2	12.9	32.8	28	12.2	32.8	32.8
90	301-309		37.2	12.9	32.8	28	12.2	32.8	32.8
90	310-317		37.2	12.9	32.8	28	12.2	32.8	32.8
90	317-324	300	37.2	12.9	32.8	28	12.2	32.8	32.8
90	325-333		37.2	12.9	32.8	28	12.2	32.8	32.8
90	334-342		37.2	12.9	32.8	28	12.2	32.8	32.8
90	343-350		37.2	12.9	32.8	28	12.2	32.8	32.8
90	349-356	350	37.2	13.1	32.8	28	12.2	32.8	32.8
90	358-365		36.2	12.7	32.8	28	12.2	32.8	32.8
90	366-374		35.2	12.5	32.8	28	12.2	32.8	32.8
90	375-382		34.3	12.3	32.8	28	12.2	32.8	32.8
90	381-388		33.7	12.2	32.8	28	12.2	32.8	32.8
90	389-396		32.8	12.0	32.8	28	12.2	32.8	32.8
90	397-407	400	31.6	11.9	32.8	28	12.2	32.8	32.8
90	408-418		30.4	11.5	32.8	28	12.2	32.8	32.8
90	419-429		29.2	11.2	32.8	28	12.2	32.8	32.8
90	430-440		28.0	11.0	32.8	28	12.2	32.8	32.8
90	441-451		26.8	10.7	32.8	28	12.2	32.8	32.8
90	447-457		26.2	10.6	32.8	28	12.2	32.8	32.8
90	458-468		25.0	10.3	32.8	28	12.2	32.8	32.8
90	467-477		24.0	10.1	32.8	28	12.2	32.8	32.8
90	477-487		22.9	9.9	32.8	28	12.2	32.8	32.8
90	488-498		21.7	9.6	32.8	28	12.2	32.8	32.8
90	498-508	500	20.8	9.4	32.8	28	12.2	32.8	32.8
90	509-519		19.4	9.1	32.8	28	12.2	32.8	32.8
90	520-530		18.2	8.9	32.8	28	12.2	32.8	32.8
90	531-541		17.0	8.6	32.8	28	12.2	32.8	32.8
90	542-552		15.8	8.3	32.8	28	12.2	32.8	32.8
90	553-563		14.6	8.1	32.8	28	12.2	32.8	32.8
90	564-574		13.4	7.8	32.8	28	12.2	32.8	32.8
90	575-585		12.2	7.6	32.8	28	12.2	32.8	32.8
90	586-596		11.1	7.3	32.8	28	12.2	32.8	32.8
90	594-604		10.2	7.1	32.8	28	12.2	32.8	32.8
90	600-610	600	9.5	7.2	32.8	28	12.2	32.8	32.8

Basis for assessment EC 3, working loads for Supports in delivery status

Sliding Support LD - HV + Guiding Set FS resp. Fixed Point Set XS

Sliding Support LD - HV + Guiding Bracket FW F 80 resp. Fixed Point Bracket XW F 80

LD - HV	D [mm]	DN	F _x [kN]	F _y [kN]	+ F _z [kN]	- F _z FS 80/120 [kN]	- F _z FW F 80 [kN]	- F _z XS 80/120 [kN]	- F _z XW F 80 [kN]
150	215-221	200	30.8	12.7	32.8	28	12.2	32.8	32.8
150	222-229		30.8	12.7	32.8	28	12.2	32.8	32.8
150	230-237		30.8	12.7	32.8	28	12.2	32.8	32.8
150	238-245		30.8	12.7	32.8	28	12.2	32.8	32.8
150	246-254		30.8	12.7	32.8	28	12.2	32.8	32.8
150	255-262		30.8	12.7	32.8	28	12.2	32.8	32.8
150	259-266		30.8	12.7	32.8	28	12.2	32.8	32.8
150	266-273	250	30.8	12.7	32.8	28	12.2	32.8	32.8
150	274-282		30.8	12.7	32.8	28	12.2	32.8	32.8
150	283-291		30.8	12.7	32.8	28	12.2	32.8	32.8
150	292-300		30.8	12.7	32.8	28	12.2	32.8	32.8
150	301-309		30.8	12.7	32.8	28	12.2	32.8	32.8
150	310-317		30.8	12.7	32.8	28	12.2	32.8	32.8
150	317-324	300	30.8	12.7	32.8	28	12.2	32.8	32.8
150	325-333		30.8	12.7	32.8	28	12.2	32.8	32.8
150	334-342		30.8	12.7	32.8	28	12.2	32.8	32.8
150	343-350		30.8	12.7	32.8	28	12.2	32.8	32.8
150	349-356	350	30.8	12.9	32.8	28	12.2	32.8	32.8
150	358-365		30.8	12.4	32.8	28	12.2	32.8	32.8
150	366-374		29.2	12.2	32.8	28	12.2	32.8	32.8
150	375-382		28.5	12.0	32.8	28	12.2	32.8	32.8
150	381-388		28.0	11.8	32.8	28	12.2	32.8	32.8
150	389-396		27.2	11.6	32.8	28	12.2	32.8	32.8
150	397-407	400	26.3	11.5	32.8	28	12.2	32.8	32.8
150	408-418		25.3	11.1	32.8	28	12.2	32.8	32.8
150	419-429		24.3	10.8	32.8	28	12.2	32.8	32.8
150	430-440		23.3	10.5	32.8	28	12.2	32.8	32.8
150	441-451		22.3	10.2	32.8	28	12.2	32.8	32.8
150	447-457		21.8	10.0	32.8	28	12.2	32.8	32.8
150	458-468		20.8	9.8	32.8	28	12.2	32.8	32.8
150	467-477		20.0	9.5	32.8	28	12.2	32.8	32.8
150	477-487		19.1	9.3	32.8	28	12.2	32.8	32.8
150	488-498		18.1	9.0	32.8	28	12.2	32.8	32.8
150	498-508	500	17.3	8.8	32.8	28	12.2	32.8	32.8
150	509-519		16.2	8.4	32.8	28	12.2	32.8	32.8
150	520-530		15.2	8.1	32.8	28	12.2	32.8	32.8
150	531-541		14.3	7.9	32.8	28	12.2	32.8	32.8
150	542-552		13.3	7.6	32.8	28	12.2	32.8	32.8
150	553-563		12.3	7.3	32.8	28	12.2	32.8	32.8
150	564-574		11.3	7.0	32.8	28	12.2	32.8	32.8
150	575-585		10.3	6.7	32.8	28	12.2	32.8	32.8
150	586-596		9.3	6.4	32.8	28	12.2	32.8	32.8
150	594-604		8.6	6.2	32.8	28	12.2	32.8	32.8
150	600-610	600	8.1	6.3	32.8	28	12.2	32.8	32.8

Basis for assessment EC 3, working loads for Supports in delivery status
 Sliding Support LD - HV + Guiding Set FS resp. Fixed Point Set XS
 Sliding Support LD - HV + Guiding Bracket FW F 80 resp. Fixed Point Bracket
 XW F 80

LD - HV	D [mm]	DN	F _x [kN]	F _y [kN]	+ F _z [kN]	- F _z FS 80/120 [kN]	- F _z FW F 80 [kN]	- F _z XS 80/120 [kN]	- F _z XW F 80 [kN]
200	215-221	200	24.6	11.1	32.8	28	12.2	32.8	32.8
200	222-229		24.6	11.1	32.8	28	12.2	32.8	32.8
200	230-237		24.6	11.1	32.8	28	12.2	32.8	32.8
200	238-245		24.6	11.1	32.8	28	12.2	32.8	32.8
200	246-254		24.6	11.1	32.8	28	12.2	32.8	32.8
200	255-262		24.6	11.1	32.8	28	12.2	32.8	32.8
200	259-266		24.6	11.1	32.8	28	12.2	32.8	32.8
200	266-273	250	24.6	11.1	32.8	28	12.2	32.8	32.8
200	274-282		24.6	11.1	32.8	28	12.2	32.8	32.8
200	283-291		24.6	11.1	32.8	28	12.2	32.8	32.8
200	292-300		24.6	11.1	32.8	28	12.2	32.8	32.8
200	301-309		24.6	11.1	32.8	28	12.2	32.8	32.8
200	310-317		24.6	11.1	32.8	28	12.2	32.8	32.8
200	317-324	300	24.6	11.1	32.8	28	12.2	32.8	32.8
200	325-333		24.6	11.1	32.8	28	12.2	32.8	32.8
200	334-342		24.6	11.1	32.8	28	12.2	32.8	32.8
200	343-350		24.6	11.1	32.8	28	12.2	32.8	32.8
200	349-356	350	25.0	11.3	32.8	28	12.2	32.8	32.8
200	358-365		24.1	10.9	32.8	28	12.2	32.8	32.8
200	366-374		23.5	10.8	32.8	28	12.2	32.8	32.8
200	375-382		23.1	10.6	32.8	28	12.2	32.8	32.8
200	381-388		22.7	10.5	32.8	28	12.2	32.8	32.8
200	389-396		22.2	10.3	32.8	28	12.2	32.8	32.8
200	397-407	400	21.6	10.2	32.8	28	12.2	32.8	32.8
200	408-418		20.9	9.8	32.8	28	12.2	32.8	32.8
200	419-429		20.3	9.6	32.8	28	12.2	32.8	32.8
200	430-440		19.6	9.4	32.8	28	12.2	32.8	32.8
200	441-451		19.0	9.2	32.8	28	12.2	32.8	32.8
200	447-457		18.6	9.0	32.8	28	12.2	32.8	32.8
200	458-468		17.9	8.8	32.8	28	12.2	32.8	32.8
200	467-477		17.4	8.6	32.8	28	12.2	32.8	32.8
200	477-487		16.8	8.4	32.8	28	12.2	32.8	32.8
200	488-498		16.1	8.2	32.8	28	12.2	32.8	32.8
200	498-508	500	15.7	8.1	32.8	28	12.2	32.8	32.8
200	509-519		14.9	7.8	32.8	28	12.2	32.8	32.8
200	520-530		14.2	7.5	32.8	28	12.2	32.8	32.8
200	531-541		13.6	7.3	32.8	28	12.2	32.8	32.8
200	542-552		12.9	7.1	32.8	28	12.2	32.8	32.8
200	553-563		12.3	6.9	32.8	28	12.2	32.8	32.8
200	564-574		11.6	6.6	32.8	28	12.2	32.8	32.8
200	575-585		11.0	6.4	32.8	28	12.2	32.8	32.8
200	586-596		10.3	6.2	32.8	28	12.2	32.8	32.8
200	594-604		9.8	6.0	32.8	28	12.2	32.8	32.8
200	600-610	600	9.5	6.1	32.8	28	12.2	32.8	32.8

Basis for assessment EC 3, working loads for Supports in delivery status

Sliding Support LD - HV + Guiding Set FS resp. Fixed Point Set XS

Sliding Support LD - HV + Guiding Bracket FW F 80 resp. Fixed Point Bracket XW F 80