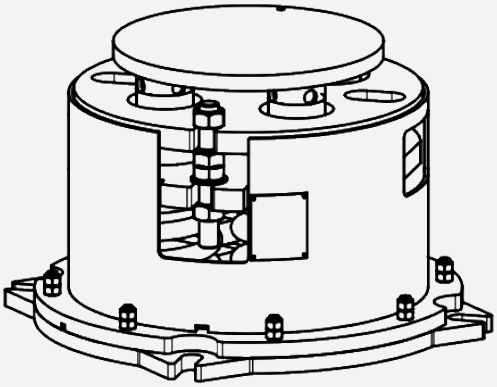
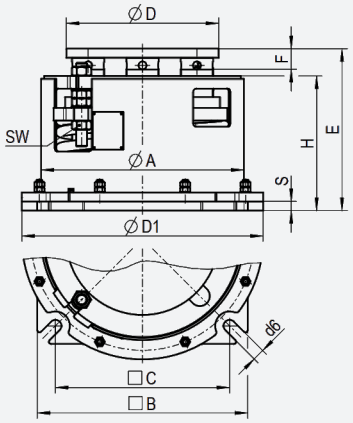
SPRING SUPPORT

TYPE 28 .. 19-HD
STANDARD DESIGN





To balance slight vertical displacements of the pipelines, spring components are used as supports. These components function on the basis of preset helical coil springs, which exert a variable supporting load over the range of movement in accordance with their specified spring characteristics.

	ØA	□B	□C	ØD	ØD1	d6	E	F	H	S	SW	Load range [kN]	Travel range [mm]	Spring rate [N/mm]	Temp. permanent [°C]	Temp. short-term [°C]	Weight [kg]
281119-HD	510	530	440	420	600	33	405	60	330	25	46	53.33 - 160	0 - 50	2133.3	80	150	250
281219-HD	510	530	440	420	600	33	535	60	450	25	46	53.33 - 160	0 - 100	1066.6	80	150	281
281319-HD	510	530	440	420	600	33	835	60	730	25	46	53.33 - 160	0 - 200	533.3	80	150	396
282119-HD	560	580	490	420	665	33	450	65	370	25	46	66.66 - 200	0 - 50	2666.6	80	150	340
282219-HD	560	580	490	420	665	33	585	65	500	25	46	66.66 - 200	0 - 100	1333.3	80	150	383
282319-HD	560	580	490	420	665	33	880	65	775	25	46	66.66 - 200	0 - 200	666.6	80	150	497
283119-HD	610	630	530	450	720	33	460	65	380	25	46	80 - 240	0 - 50	3200	80	150	407
283219-HD	610	630	530	450	720	33	595	65	510	25	46	80 - 240	0 - 100	1600	80	150	460
283319-HD	610	630	530	450	720	33	890	65	785	25	46	80 - 240	0 - 200	800	80	150	592
284119-HD	610	630	530	450	720	39	505	70	425	30	55	100 - 300	0 - 50	4000	80	150	465
284219-HD	610	630	530	450	720	39	685	70	595	30	55	100 - 300	0 - 100	2000	80	150	548
284319-HD	610	630	530	450	720	39	1075	70	965	30	55	100 - 300	0 - 200	1000	80	150	799
285119-HD	610	630	530	480	720	39	560	75	475	35	65	133.33 - 400	0 - 50	5333.3	80	150	520
285219-HD	610	630	530	480	720	39	750	75	655	35	65	133.33 - 400	0 - 100	2666.6	80	150	613
285319-HD	610	630	530	480	720	39	1135	75	1020	35	65	133.33 - 400	0 - 200	1333.3	80	150	836

The dimensions E are reduced by the corresponding spring travel under load.

Corrosivity category and protection version: C4(h) / HD (hot-dip galvanized).

The permissible loads on the components are shown according to load groups and load cases. The definition of the load cases are in line with DIN EN 13480-3, ASME B31.1, ASME B31.3, MSS SP-58, ASME III, Div. I Subsection NF, RCC-M and KTA 3205.

In design, in stress and load calculations, as well as in production, the relevant European and other international standards are taken into account.

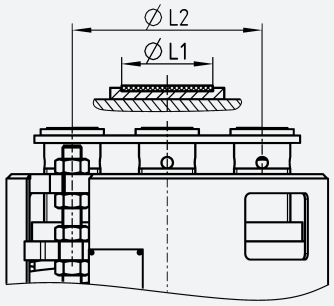
Design with sliding plate max. contact temperature:

Type 28..17-HD (up to 180 °C)

	ØL1	ØL2
281.17-HD	80	300
282.17-HD	80	300
283.17-HD	110	310
284.17-HD	110	310
285.17-HD	150	300

Type 28..16-HD (up to 350 °C)

	ØL1	ØL2
281.16-HD	80	300
282.16-HD	80	300
283.16-HD	110	310
284.16-HD	110	310
285.16-HD	150	300



When slide plates are used, the E dimension increases by 2mm.

Further information refer to the chapters PG0 and PG2 of the catalogue "Standard Supports".