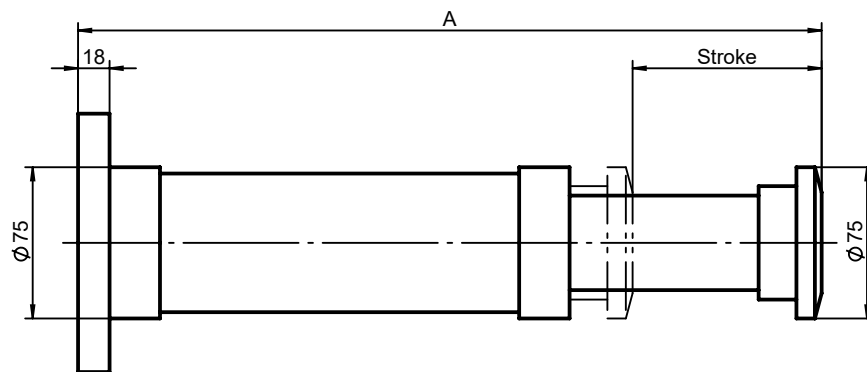
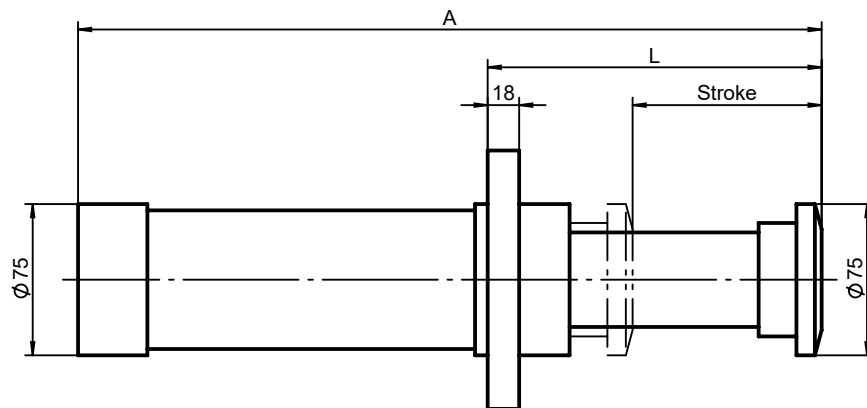
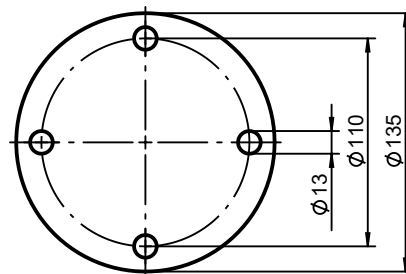


Type FF:

Type EF:

Flange:


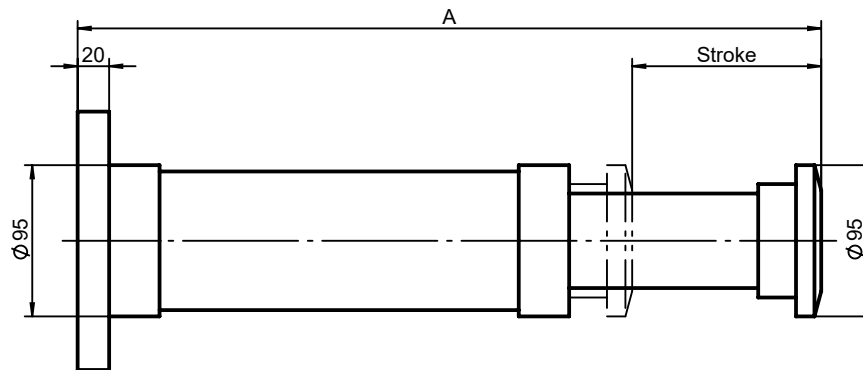
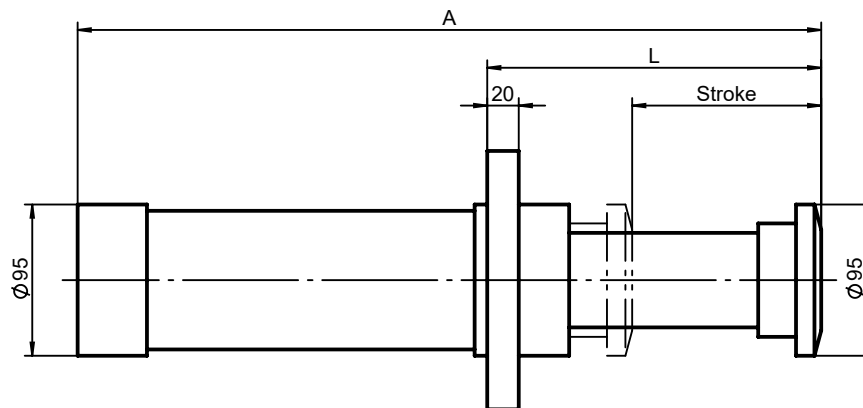
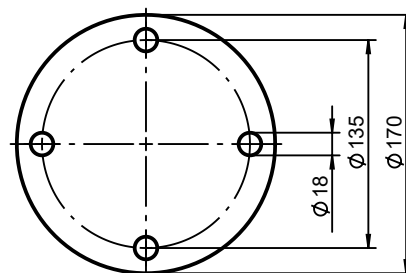
EF = front flange mounting
FF = foot (bottom) flange mounting

All dimensions in mm
Alterations reserved
without notice

Stroke	Energy / Stroke	* Energy / h	Max. buffer force	Inward force	Weight	** Perm. angular deviation FF degree	** Perm. angular deviation EF degree	A	L
EF / FF mm	EF / FF kNm (kJ)	EF / FF kNm (kJ)	EF / FF kN	EF / FF kN	EF / FF kg			EF / FF mm	EF mm
50	4,5	400	100	5,0	6,6	4,5	5,5	270	145
100	9,0	650	100	6,0	8,2	3,2	4,0	410	195
150	13,6	950	100	6,0	9,8	2,1	2,9	550	245
200	18,1	1250	100	7,0	11,2	1,5	2,3	685	295
250	22,7	1600	100	7,0	12,6	1,3	2,1	825	345
300	27,2	1900	100	7,0	14,0	1,2	1,9	965	395
350	28,6	2000	90	7,0	15,5	1,1	1,8	1105	445
400	29,0	2100	80	7,5	16,9	1,0	1,7	1235	495
450	28,6	2200	70	7,5	18,2	-	1,6	1375	545
500	27,2	2200	60	7,5	19,5	-	1,5	1515	595

*) At an ambient temperature of 30°C.

**) Relating to the max. permissible buffer force.

Type FF:

Type EF:

Flange:


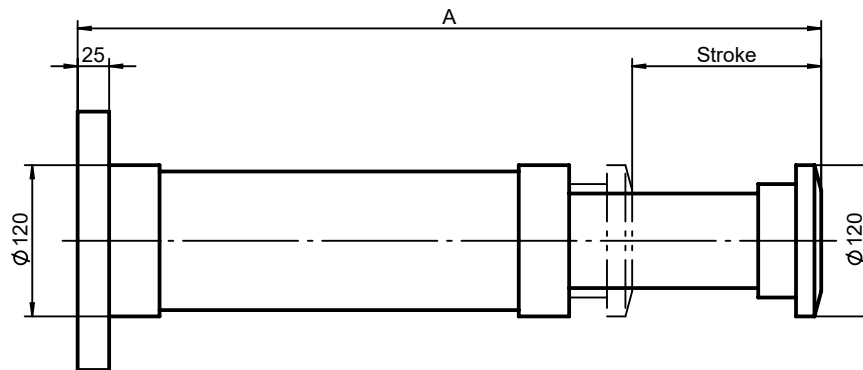
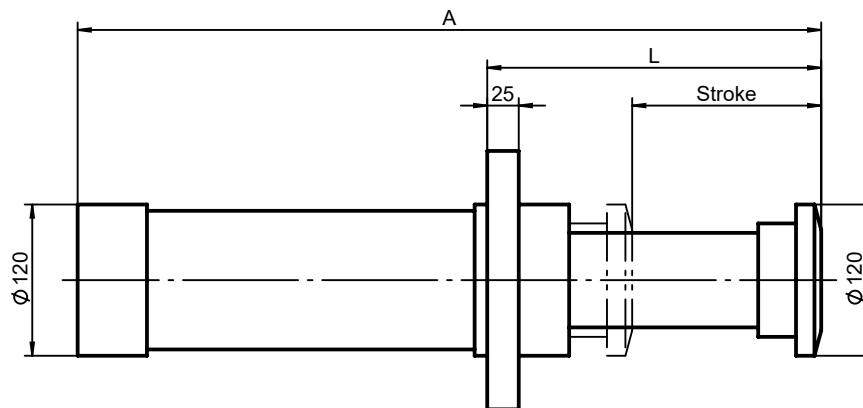
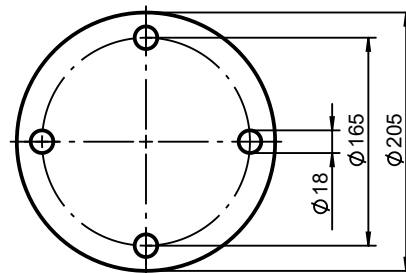
EF = front flange mounting
FF = foot (bottom) flange mounting

All dimensions in mm
Alterations reserved
without notice

Stroke	Energy / Stroke	* Energy / h	Max. buffer force	Inward force	Weight	** Perm. angular deviation FF degree	** Perm. angular deviation EF degree	A	L
EF / FF mm	EF / FF kNm (kJ)	EF / FF kNm (kJ)	EF / FF kN	EF / FF kN	EF / FF kg			EF / FF mm	EF mm
50	7,7	600	170	8,0	10,5	4,2	5,0	280	155
100	15,4	1200	170	8,0	13,5	3,2	4,0	425	205
150	23,1	1600	170	9,0	16,0	2,2	3,0	560	255
200	30,9	1850	170	10,0	18,0	1,8	2,4	700	305
250	38,6	2100	170	11,0	20,5	1,6	2,2	835	355
300	46,3	2400	170	11,0	23,0	1,5	2,1	975	405
350	50,9	2600	160	12,0	25,5	1,4	2,0	1115	455
400	54,5	2800	150	12,0	28,0	1,3	1,9	1255	505
450	57,2	2900	140	12,0	30,5	1,2	1,8	1395	555
500	59,0	3000	130	12,0	33,0	1,1	1,6	1535	605
550	60,0	3000	120	15,0	35,0	-	1,5	1650	655
600	60,0	3000	110	15,0	37,0	-	1,4	1785	705
650	59,0	3000	100	15,0	39,5	-	1,3	1925	755
700	57,2	3200	90	15,0	42,0	-	1,2	2060	805
750	54,5	3200	80	15,0	44,5	-	1,1	2200	855
800	50,9	3200	70	15,0	47,0	-	1,0	2340	905

*) At an ambient temperature of 30°C.

**) Relating to the max. permissible buffer force.

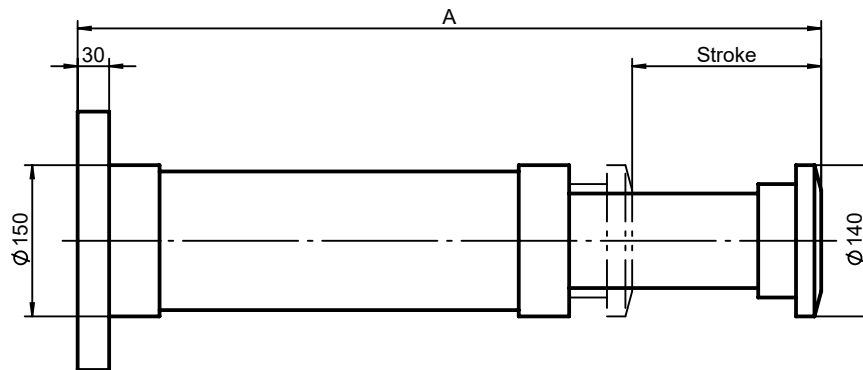
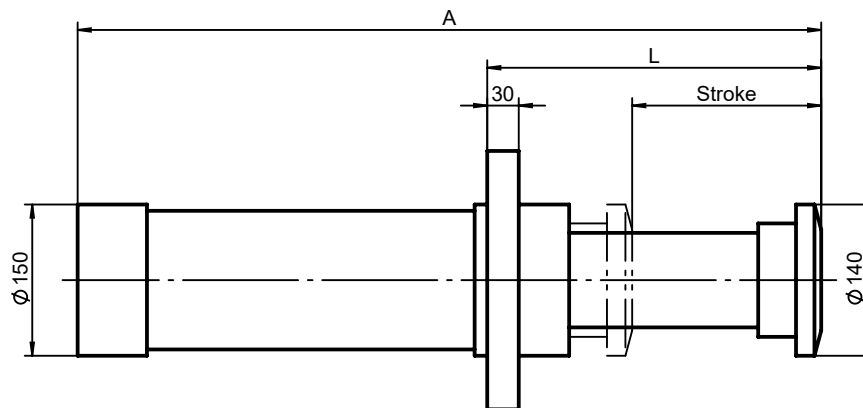
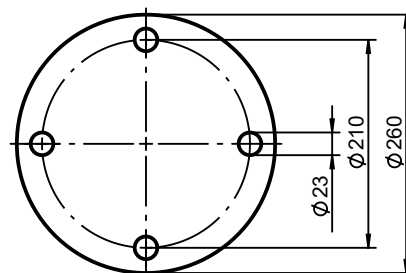
Type FF:

Type EF:

Flange:

 EF = front flange mounting
FF = foot (bottom) flange mounting

 All dimensions in mm
Alterations reserved
without notice

Stroke	Energy / Stroke	* Energy / h	Max. buffer force	Inward force	Weight	** Perm. angular deviation FF degree	** Perm. angular deviation EF degree	A	L
EF / FF mm	EF / FF kNm (kJ)	EF / FF kNm (kJ)	EF / FF kN	EF / FF kN	EF / FF kg			EF / FF mm	EF mm
50	11,8	600	260	12,0	20	4,2	5,5	290	175
100	23,6	1000	260	12,0	24	3,5	4,8	440	225
150	35,4	1700	260	12,0	28	3,0	4,0	590	275
200	47,2	2200	260	12,0	33	2,4	3,2	740	325
250	59,0	2600	260	15,0	36	2,0	2,8	870	375
300	68,1	2800	250	15,0	40	1,8	2,5	1015	425
350	76,3	3000	240	15,0	45	1,5	2,2	1160	475
400	83,6	3200	230	17,5	48	1,2	2,0	1285	525
450	90,0	3500	220	17,5	52	1,1	1,8	1430	575
500	95,4	3800	210	17,5	56	1,0	1,6	1570	625
550	100,0	4000	200	17,5	60	0,9	1,5	1715	675
600	103,6	4200	190	17,5	65	0,8	1,4	1860	725
650	106,3	4300	180	17,5	69	-	1,3	2000	775
700	108,1	4400	170	17,5	73	-	1,2	2145	825
750	109,0	4400	160	17,5	76	-	1,1	2290	875
800	109,0	4500	150	20,0	79	-	1,0	2395	925
900	106,3	4500	130	20,0	88	-	0,9	2685	1025
1000	100,0	4500	110	20,0	96	-	0,8	2970	1125

*) At an ambient temperature of 30°C.

**) Relating to the max. permissible buffer force.

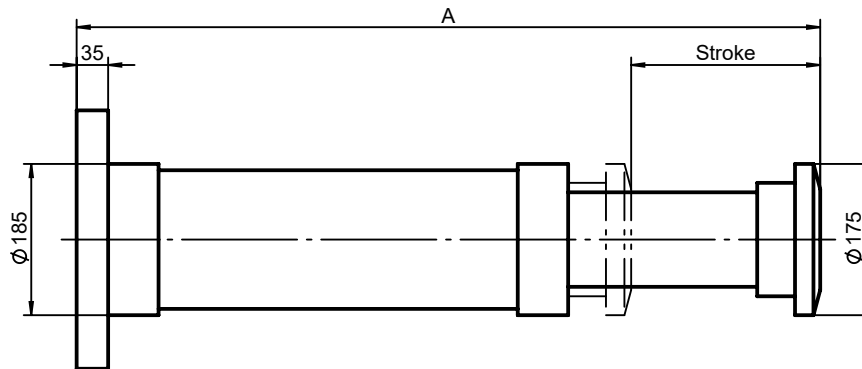
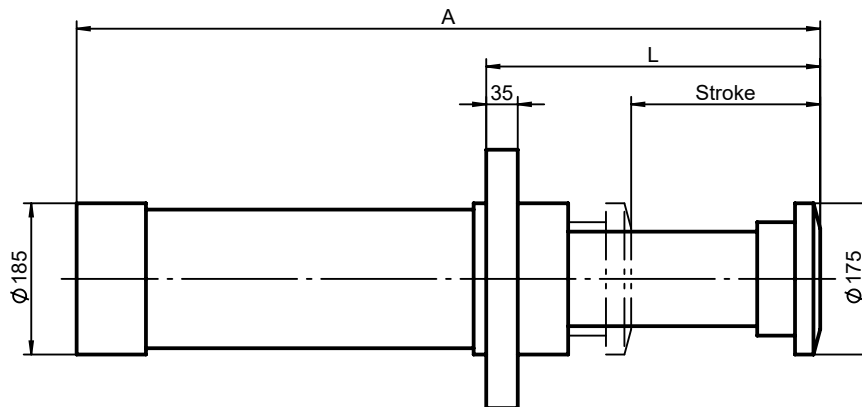
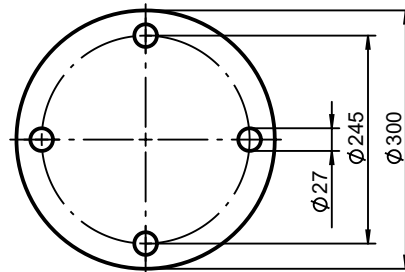
Type FF:

Type EF:

Flange:

 EF = front flange mounting
FF = foot (bottom) flange mounting

 All dimensions in mm
Alterations reserved
without notice

Stroke	Energy / Stroke	* Energy / h	Max. buffer force	Inward force	Weight	** Perm. angular deviation FF degree	** Perm. angular deviation EF degree	A	L
EF / FF mm	EF / FF kNm (kJ)	EF / FF kNm (kJ)	EF / FF kN	EF / FF kN	EF / FF kg			EF / FF mm	EF mm
100	39	1700	430	20	42	5,0	6,0	460	255
150	59	2300	430	20	49	4,5	5,2	600	305
200	78	2750	430	25	57	4,0	4,5	735	355
250	98	3300	430	25	63	3,5	4,0	875	405
300	117	4000	430	25	70	3,0	3,5	1015	455
350	134	4800	420	25	77	2,2	3,0	1165	505
400	149	5500	410	30	84	1,8	2,5	1280	555
450	163	5850	400	30	90	1,6	2,2	1420	605
500	177	6150	390	30	95	1,4	2,0	1560	655
550	190	6450	380	30	100	1,2	1,9	1695	705
600	202	6700	370	30	106	1,0	1,8	1840	755
650	212	7000	360	30	112	-	1,7	1980	805
700	222	7300	350	30	117	-	1,6	2120	855
750	232	7600	340	30	123	-	1,5	2260	905
800	240	7800	330	30	129	-	1,4	2400	955
900	245	8000	300	30	144	-	1,2	2675	1055
1000	245	8200	270	30	160	-	1,0	2955	1155

*) At an ambient temperature of 30°C.

**) Relating to the max. permissible buffer force.

Type FF:

Type EF:

Flange:


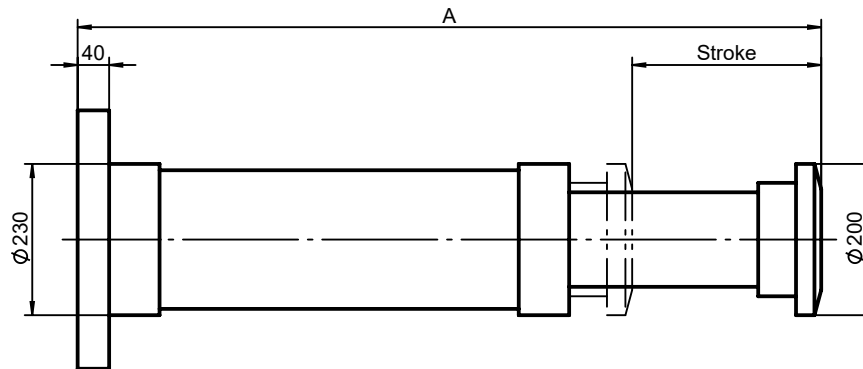
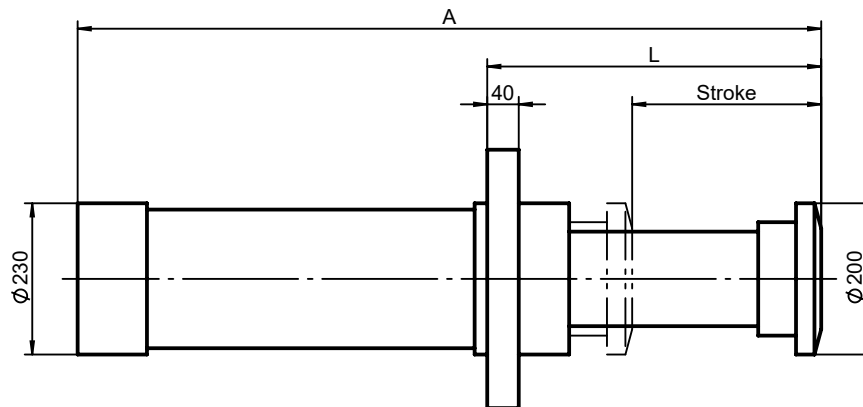
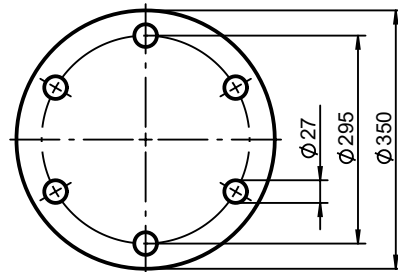
EF = front flange mounting
FF = foot (bottom) flange mounting

All dimensions in mm
Alterations reserved
without notice

Stroke	Energy / Stroke	* Energy / h	Max. buffer force	Inward force	Weight	** Perm. angular deviation FF	** Perm. angular deviation EF	A	L
EF / FF mm	EF / FF kNm (kJ)	EF / FF kNm (kJ)	EF / FF kN	EF / FF kN	EF / FF kg	FF degree	EF degree	EF / FF mm	EF mm
100	62	1800	680	55	60	5,5	6,5	470	251
150	93	2700	680	55	72	5,0	6,0	590	301
200	124	3500	680	55	83	4,4	5,4	730	351
250	155	4300	680	55	95	3,8	4,8	870	401
300	185	5000	680	60	108	3,0	4,0	1000	451
400	247	6500	680	60	133	2,2	3,2	1270	551
500	300	7300	660	60	148	1,5	2,8	1550	651
600	349	8000	640	70	162	1,0	2,4	1800	751
700	394	9000	620	80	182	-	2,2	2050	851
800	436	10000	600	90	198	-	2,0	2300	951
900	474	11000	580	90	215	-	1,8	2560	1051
1000	509	12000	560	90	230	-	1,6	2830	1151
1200	567	13000	520	95	260	-	1,2	3350	1351

*) At an ambient temperature of 30°C.

**) Relating to the max. permissible buffer force.

Type FF:

Type EF:

Flange:


EF = front flange mounting
FF = foot (bottom) flange mounting

All dimensions in mm
Alterations reserved
without notice

Stroke	Energy / Stroke	* Energy / h	Max. buffer force	Inward force	Weight	** Perm. angular deviation FF	** Perm. angular deviation EF	A	L
EF / FF mm	EF / FF kNm (kJ)	EF / FF kNm (kJ)	EF / FF kN	EF / FF kN	EF / FF kg	FF degree	EF degree	EF / FF mm	EF mm
300	218	5800	800	85	175	2,4	4,0	1080	420
400	290	7000	800	85	206	2,2	3,5	1370	520
500	363	8300	800	85	237	1,8	3,2	1660	620
600	436	9500	800	85	268	1,3	3,0	1950	720
700	509	10500	800	85	299	-	2,8	2240	820
800	581	11500	800	85	330	-	2,6	2530	920
900	638	12000	780	90	361	-	2,4	2820	1020
1000	690	13500	760	90	391	-	2,2	3100	1120
1100	740	14200	740	120	407	-	2,0	3300	1220
1200	785	15000	720	160	427	-	1,8	3500	1320
1300	827	15300	700	160	454	-	1,6	3780	1420
1400	865	15700	680	160	481	-	1,4	4050	1520
1500	900	16000	660	160	511	-	1,2	4330	1620
1600	930	17000	640	160	539	-	1,0	4600	1720

*) At an ambient temperature of 30°C.

**) Relating to the max. permissible buffer force.