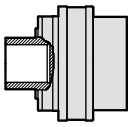
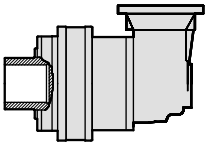
Size 030 - 3500 Nm

ST-030 Technical data



Stages	Ratio	$T_{2N(1.2M)}$ (1)	$T_{2N(6M)}$ (1)	T_{2Peak} (2)	n_{1N} (3)	n_{1Max} (4)	P_t (5)	η
	i	(Nm)	(Nm)	(Nm)	(rpm)	(rpm)	(kW)	(%)
1	3.77	3520	2650	7040	1500	2800	20	98
	4.12	3190	2400	6380	1500	2800	20	98
	5.16	2660	2000	5320	1500	2800	20	98
	6.00	2230	1680	4460	1500	2800	20	98
	7.25	1730	1300	3460	1500	2800	20	98
2	13.4	3520	2650	7040	1500	2800	12	96
	16.2	3520	2650	7040	1500	2800	12	96
	18.4	2660	2000	5320	1500	2800	12	96
	23.1	3190	2400	6380	1500	2800	12	96
	28.9	2660	2000	5320	1500	2800	12	96
	34.9	2660	2000	5320	1500	2800	12	96
	40.5	2230	1680	4460	1500	2800	12	96
	48.9	1730	1300	3460	1500	2800	12	96
	62.8	1730	1300	3460	1500	2800	12	96
3	47.8	3520	2650	7040	1500	2800	8	94
	52.2	3190	2400	6380	1500	2800	8	94
	57.6	3520	2650	7040	1500	2800	8	94
	62.9	3190	2400	6380	1500	2800	8	94
	75.2	3520	2650	7040	1500	2800	8	94
	82.1	3190	2400	6380	1500	2800	8	94
	90.7	3520	2650	7040	1500	2800	8	94
	99.0	3190	2400	6380	1500	2800	8	94
	119.3	3190	2400	6380	1500	2800	8	94
	129.4	3190	2400	6380	1500	2800	8	94
	149.4	2660	2000	5320	1500	2800	8	94
	155.9	3190	2400	6380	1500	2800	8	94
	162.0	2660	2000	5320	1500	2800	8	94
	173.5	2230	1680	4460	1500	2800	8	94
	195.3	2660	2000	5320	1500	2800	8	94
	235.4	2660	2000	5320	1500	2800	8	94
	273.4	2230	1680	4460	1500	2800	8	94
	302.2	2660	2000	5320	1500	2800	8	94
	330.3	1730	1300	3460	1500	2800	8	94
	424.1	1730	1300	3460	1500	2800	8	94
4	351.9	3190	2400	6380	1500	2800	4	92
	365.8	2660	2000	5320	1500	2800	4	92
	388.5	3520	2650	7040	1500	2800	4	92
	413.9	3520	2650	7040	1500	2800	4	92
	424.2	3190	2400	6380	1500	2800	4	92
	468.2	3520	2650	7040	1500	2800	4	92
	511.3	3190	2400	6380	1500	2800	4	92
	554.3	3190	2400	6380	1500	2800	4	92
	611.9	3520	2650	7040	1500	2800	4	92
	668.3	3190	2400	6380	1500	2800	4	92
	737.6	3520	2650	7040	1500	2800	4	92
	805.4	3190	2400	6380	1500	2800	4	92
	857.9	3190	2400	6380	1500	2800	4	92
	907.4	2660	2000	5320	1500	2800	4	92
	1052.5	3190	2400	6380	1500	2800	4	92
	1121.1	3190	2400	6380	1500	2800	4	92
	1318.3	2660	2000	5320	1500	2800	4	92
	1589.0	2660	2000	5320	1500	2800	4	92
	1845.3	2230	1680	4460	1500	2800	4	92
	2369.3	2230	1680	4460	1500	2800	4	92

SX-030 Technical data



Stages	Ratio	$T_{2N(1.2M)}$ (1)	$T_{2N(6M)}$ (1)	T_{2Peak} (2)	n_{1N} (3)	n_{1Max} (4)	P_t (5)	η
	i	(Nm)	(Nm)	(Nm)	(rpm)	(rpm)	(kW)	(%)
2	12.1	3190	2400	6380	1500	2800	12	96
	15.1	2660	2000	5320	1500	2800	12	96
	17.6	2230	1680	4460	1500	2800	12	96
	21.2	1730	1300	3460	1500	2800	12	96
3	39.4	3520	2650	7040	1500	2800	8	94
	47.4	3520	2650	7040	1500	2800	8	94
	53.8	2660	2000	5320	1500	2800	8	94
	67.7	3190	2400	6380	1500	2800	8	94
	75.3	2230	1680	4460	1500	2800	8	94
	84.8	2660	2000	5320	1500	2800	8	94
	91.0	1730	1300	3460	1500	2800	8	94
	102.2	2660	2000	5320	1500	2800	8	94
	118.7	2230	1680	4460	1500	2800	8	94
	143.4	1730	1300	3460	1500	2800	8	94
	184.1	1730	1300	3460	1500	2800	8	94
4	139.9	3520	2650	7040	1500	2800	4	92
	168.6	3520	2650	7040	1500	2800	4	92
	184.1	3190	2400	6380	1500	2800	4	92
	220.4	3520	2650	7040	1500	2800	4	92
	240.7	3190	2400	6380	1500	2800	4	92
	265.6	3520	2650	7040	1500	2800	4	92
	290.1	3190	2400	6380	1500	2800	4	92
	320.2	3520	2650	7040	1500	2800	4	92
	349.6	3190	2400	6380	1500	2800	4	92
	421.9	2230	1680	4460	1500	2800	4	92
	448.8	3190	2400	6380	1500	2800	4	92
	474.7	2660	2000	5320	1500	2800	4	92
	508.5	2230	1680	4460	1500	2800	4	92
	551.3	2230	1680	4460	1500	2800	4	92
	614.4	1730	1300	3460	1500	2800	4	92
	664.5	2230	1680	4460	1500	2800	4	92
	734.7	2660	2000	5320	1500	2800	4	92
	801.0	2230	1680	4460	1500	2800	4	92
	1242.7	1730	1300	3460	1500	2800	4	92

(1) T_{2N} values are calculated at $n_1=n_{1n}$, continuous duty cycle, uniform operation and KA=1 according to ISO 6336. $T_{2N(1.2M)}$ has been calculated for 1200000 of revolutions at the output shaft, and $T_{2N(6M)}$ has been calculated for 6000000 of revolutions at the output shaft. The application factor f_s must be considered for each duty cycle and machine type.

(2) T_{2Peak} is the maximum output torque the gearbox can tolerate during startups, inversions or other peaks. This value should never be used for continuous operation or for intermittent operation with frequent accelerations.

(3) n_{1n} is the rated input speed for continuous operation

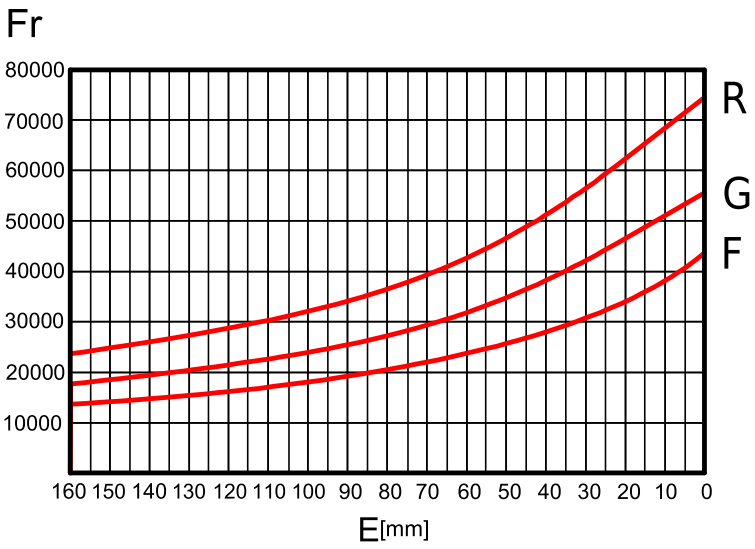
(4) n_{1max} is the maximum input speed for intermittent service. For continuous operation at speeds over n1n please inquire.

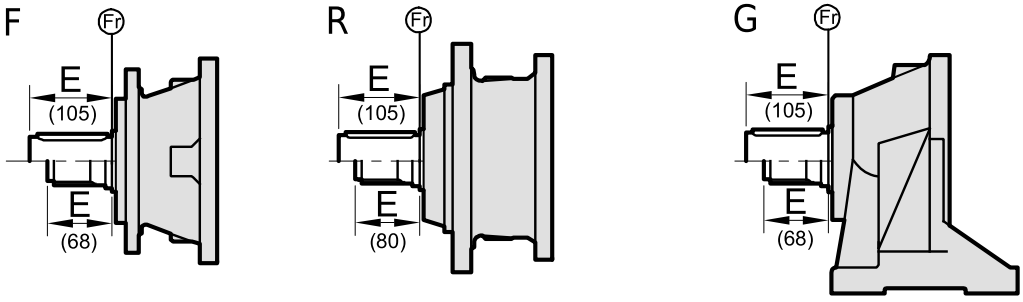
(5) Pt is the thermal power rating, that is the power in kW that, at 20°C, the gearbox can transmit during continuous operation, at $n_1=n_{1n}$ and lubricated with ISO-VG-220 oil without it exceeding 90°C. It depends on ambient temperature.

Output Shaft Radial Load Capacity

Radial Load Capacity is only given for gearboxes with solid shafts (Smooth Solid Shaft with Key (P) and DIN 5480 Splined Shaft (W)) for a design life of 6 million revolutions of the output shaft ($6 \cdot 10^6$). These values can be adjusted for other number of revolutions of the output shaft applying the Output Bearing Lifetime Factor (f_{obl})

Radial Load capacity depends on gearbox version and application point. Find the value for your machine using this chart.





Output Shaft Axial Load Capacity

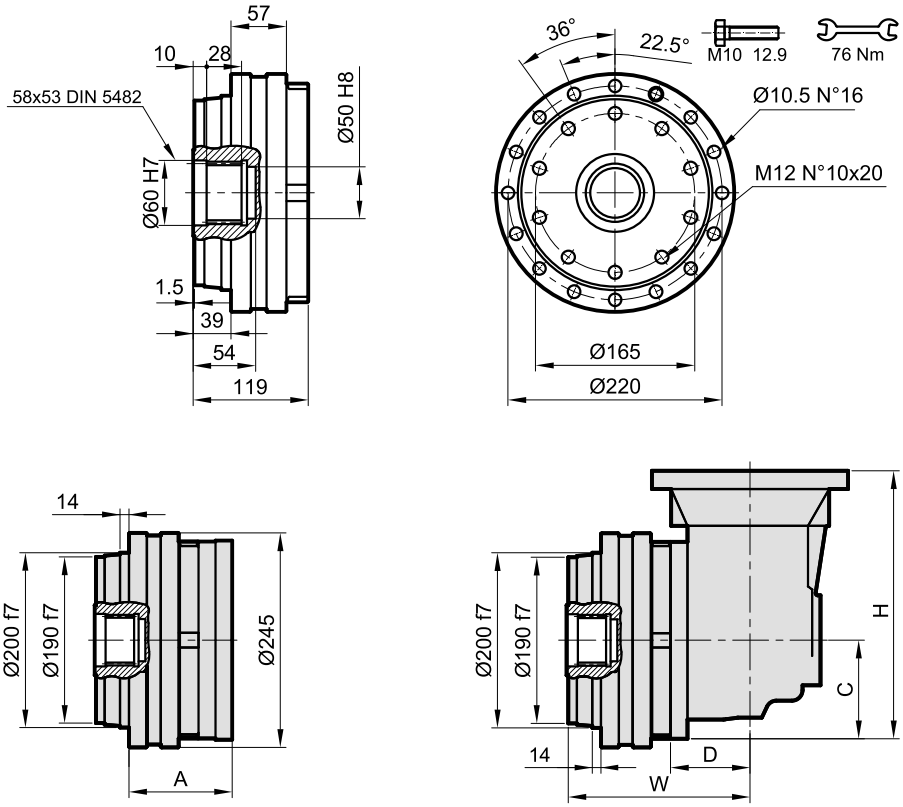
Axial Load Capacity is only given for gearboxes with solid shafts (Smooth Solid Shaft with Key (P) and DIN 5480 Splined Shaft (W)) for a design life of 6 million revolutions of the output shaft ($6 \cdot 10^6$). These values can be adjusted for other number of revolutions of the output shaft applying the Output Bearing Lifetime Factor (f_{obl})

Axial Load Capacity depends on the direction of the load:

	Version	Push	Pull
F_a	F	32000 N	32000 N
	R, G	48000 N	32000 N

Dimensions

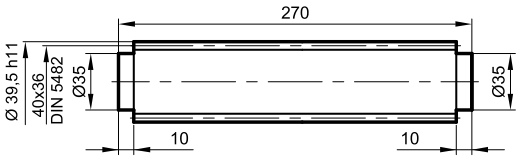
S□-E-030-□□-N58×54



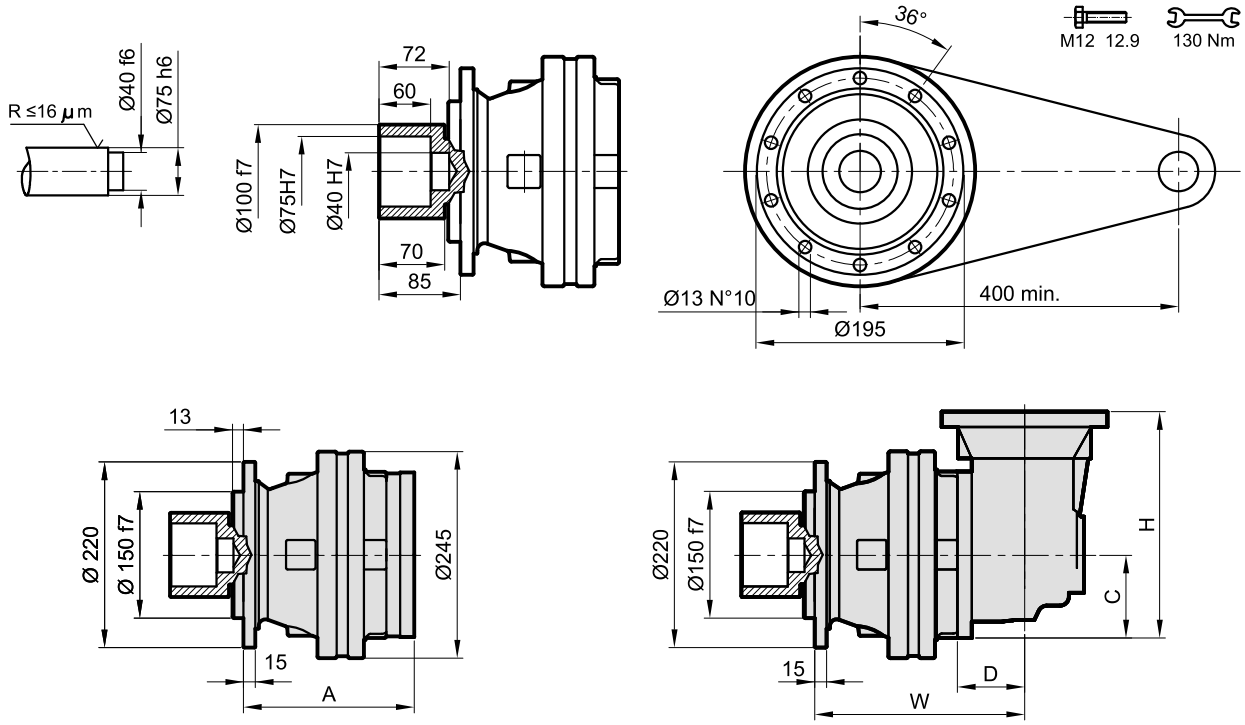
Stages	A	W	D	C	H	ST Mass (1)	SX Mass (1)
1	80	-	-	-	-	19.5	-
2	128	193	75	92.5	253.5	25.9	36.9
3	176	241	75	92.5	253.5	32.4	43.4
4	224	289	75	92.5	253.5	39.1	50.1

(1) Mass in kg for gearboxes without input modules (solid input shaft, motor flange, etc) or accessories. To obtain actual mass, add the mass for your chosen input module, please inquire.

Accessories
SA-S-58×53



S□-F-030-□□-H75×72

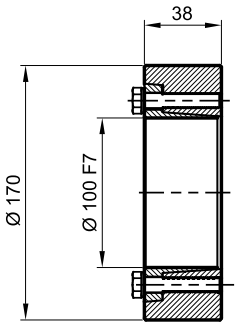


Stages	A	W	D	C	H	ST Mass (1)	SX Mass (1)
1	167	-	-	-	-	31.8	-
2	215	242.5	75	92.5	253.5	38.2	49.2
3	263	290.5	75	92.5	253.5	40.7	55.7
4	311	338.5	75	92.5	253.5	51.4	62.4

(1) Mass in kg for gearboxes without input modules (solid input shaft, motor flange, etc) or accessories. To obtain actual mass, add the mass for your chosen input module, please inquire.

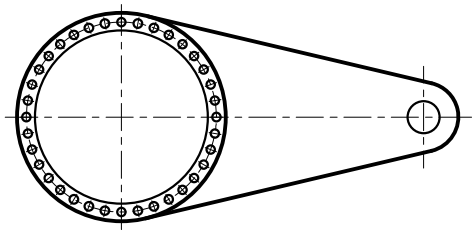
Accessories

SA-H-100



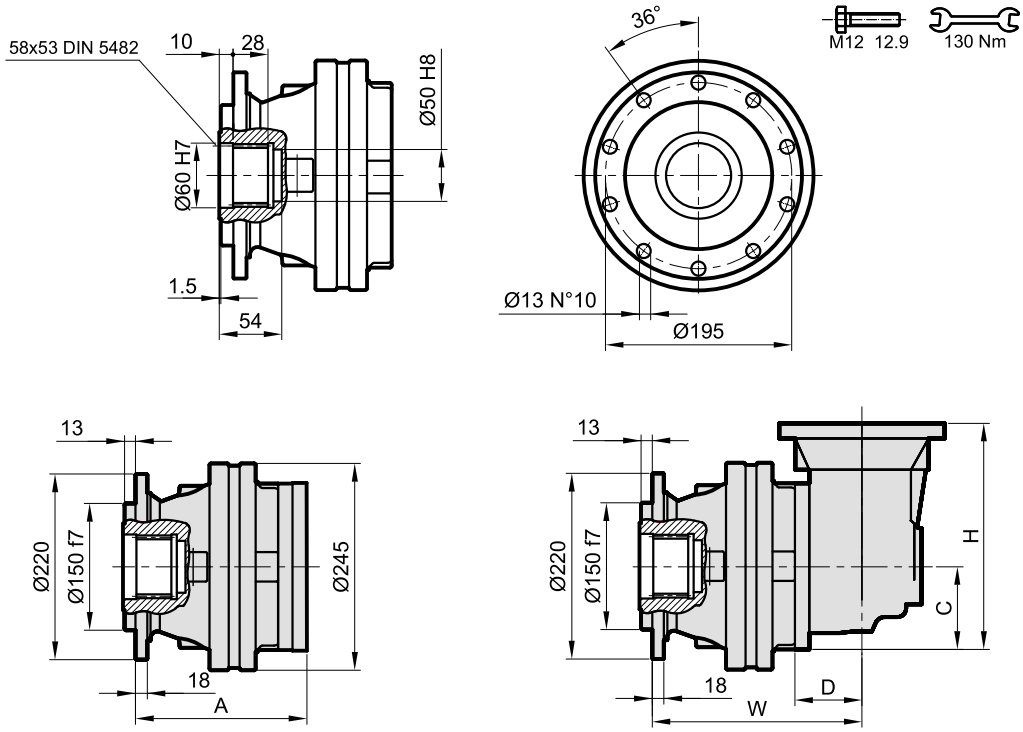
Max. Torque: 8.9 kNm
Screw Tightening Torque: 76 Nm

SA-T-□-150-195-10×13-□-□



See the chapter on Torque Arms

S□-F-030-□□-N58×54

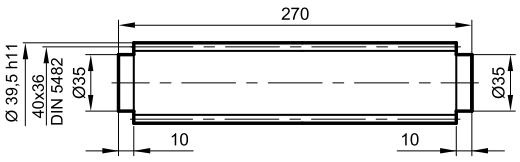


Stages	A	W	D	C	H	ST Mass (1)	SX Mass (1)
1	167	-	-	-	-	28.7	-
2	215	242.5	75	92.5	253.5	35.1	46.1
3	263	290.5	75	92.5	253.5	41.6	52.6
4	311	338.5	75	92.5	253.5	48.3	59.3

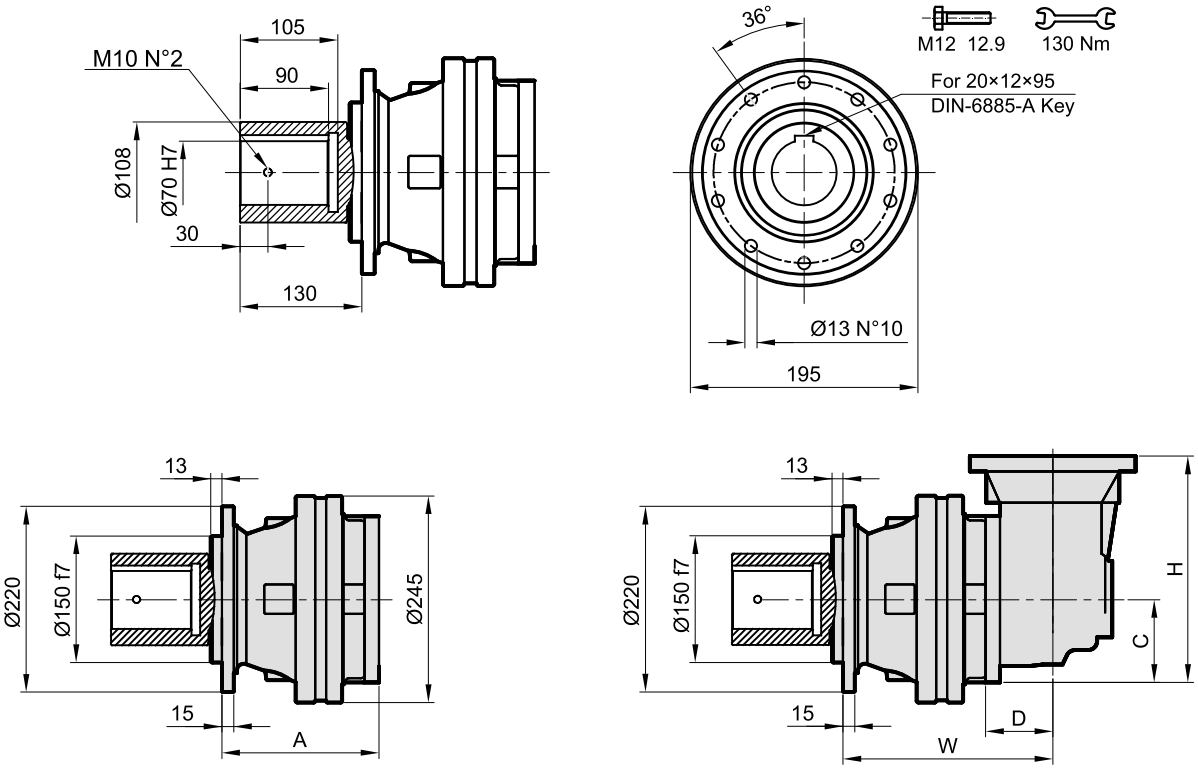
(1) Mass in kg for gearboxes without input modules (solid input shaft, motor flange, etc) or accessories. To obtain actual mass, add the mass for your chosen input module, please inquire.

Accessories

SA-S-58×53



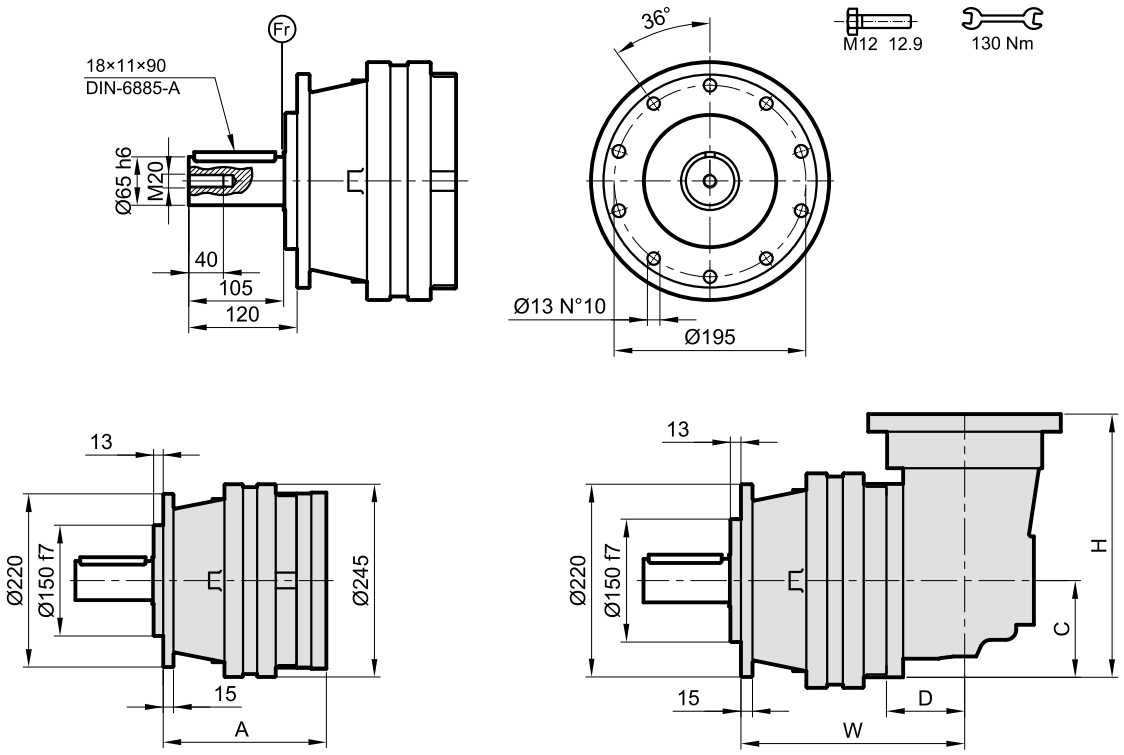
S□-F-030-□□-K70×105



Stages	A	W	D	C	H	ST Mass (1)	SX Mass (1)
1	167	-	-	-	-	34.5	-
2	215	242.5	75	92.5	253.5	40.9	51.9
3	263	290.5	75	92.5	253.5	47.4	58.4
4	316	338.5	75	92.5	253.5	54.1	65.1

(1) Mass in kg for gearboxes without input modules (solid input shaft, motor flange, etc) or accessories. To obtain actual mass, add the mass for your chosen input module, please inquire.

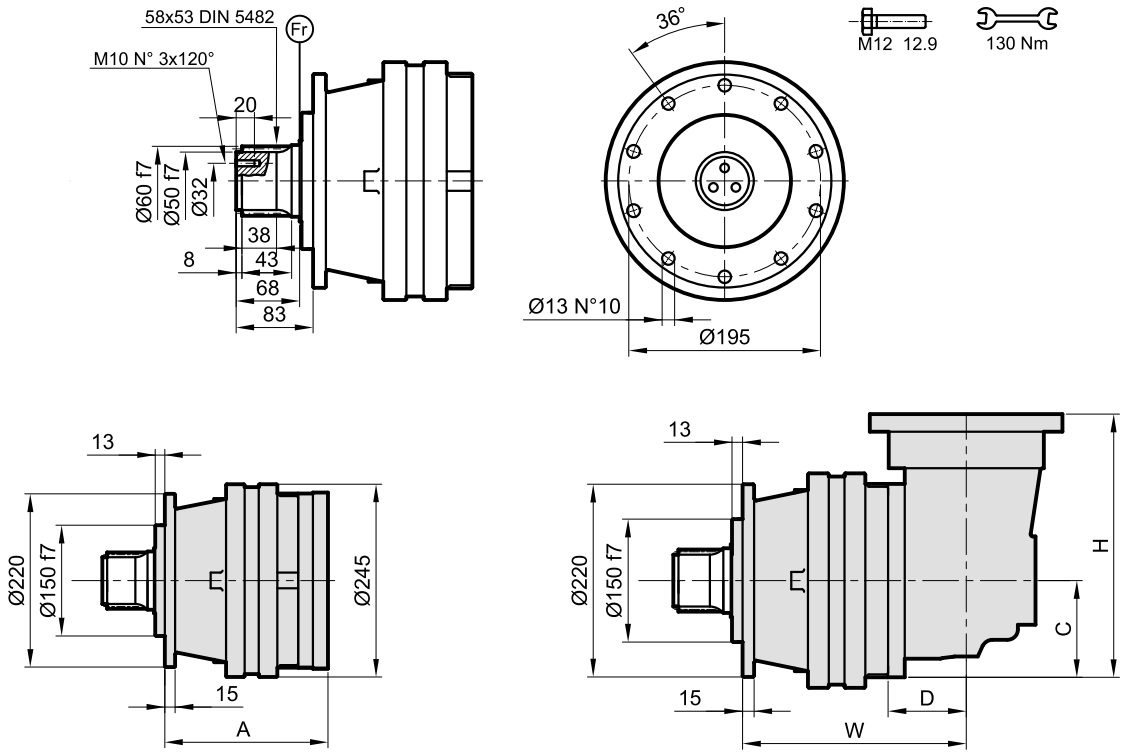
S□-F-030-□□-P65×105



Stages	A	W	D	C	H	ST Mass (1)	SX Mass (1)
1	167	-	-	-	-	32.2	-
2	215	242.5	75	92.5	253.5	38.6	49.6
3	263	290.5	75	92.5	253.5	45.1	56.1
4	311	338.5	75	92.5	253.5	51.8	62.8

(1) Mass in kg for gearboxes without input modules (solid input shaft, motor flange, etc) or accessories. To obtain actual mass, add the mass for your chosen input module, please inquire.

S□-F-030-□□-W58×68

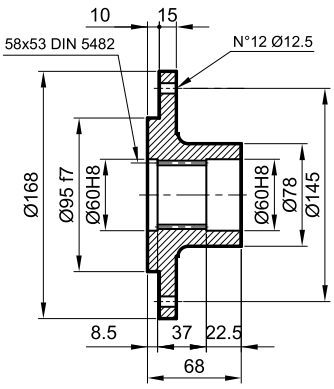


Stages	A	W	D	C	H	ST Mass (1)	SX Mass (1)
1	167	-	-	-	-	32.2	-
2	215	242.5	75	92.5	253.5	38.6	49.6
3	263	290.5	75	92.5	253.5	45.1	56.1
4	311	338.5	75	92.5	253.5	51.8	62.8

(1) Mass in kg for gearboxes without input modules (solid input shaft, motor flange, etc) or accessories. To obtain actual mass, add the mass for your chosen input module, please inquire.

Accessories

SA-F-58×53-S



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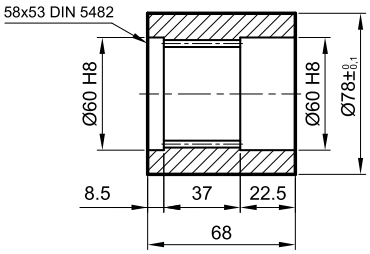
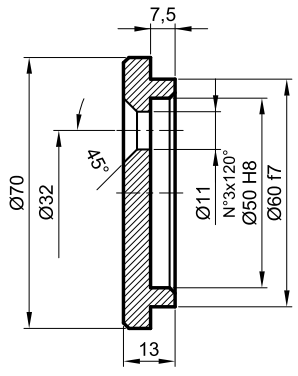
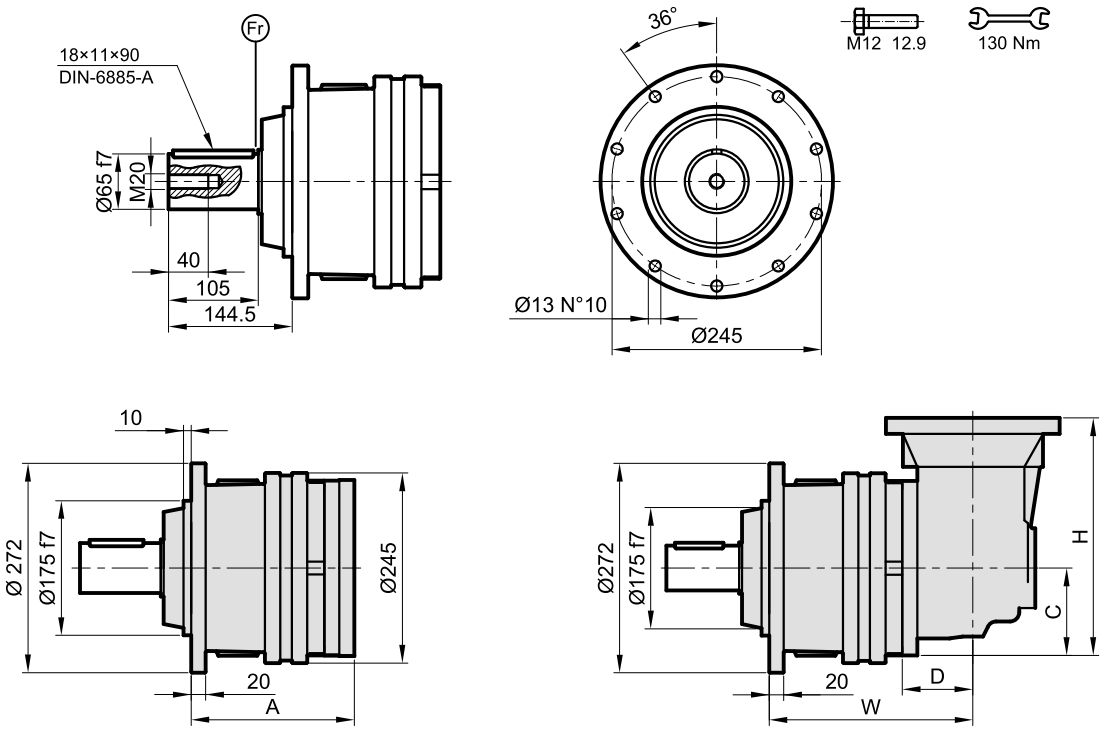


SA-P-60



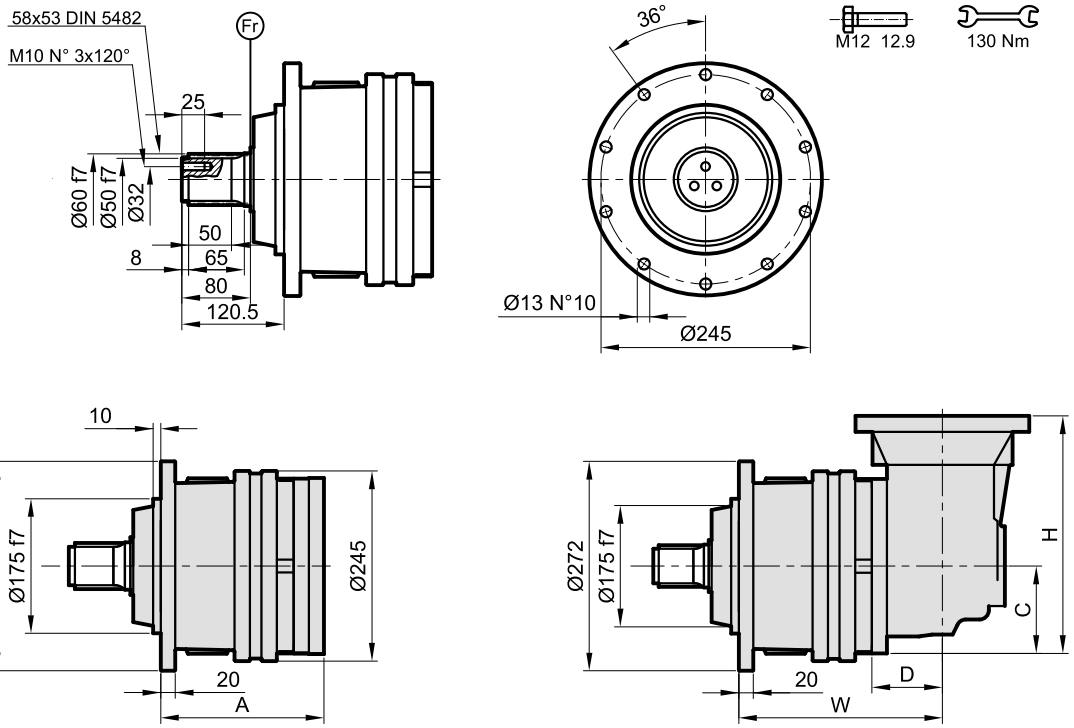
S□-R-030-□□-P65×105



Stages	A	W	D	C	H	ST Mass (1)	SX Mass (1)
1	174	-	-	-	-	38.3	-
2	222	249	75	92.5	253.5	44.7	55.7
3	270	297	75	92.5	253.5	51.2	62.2
4	319	345	75	92.5	253.5	57.9	68.9

(1) Mass in kg for gearboxes without input modules (solid input shaft, motor flange, etc) or accessories. To obtain actual mass, add the mass for your chosen input module, please inquire.

S□-R-030-□□-W58×80

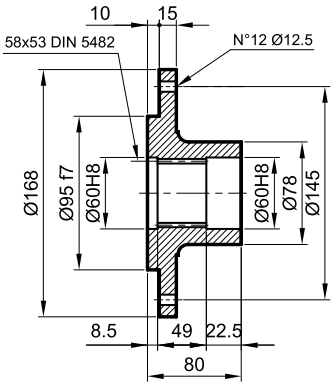


Stages	A	W	D	C	H	ST Mass (1)	SX Mass (1)
1	174	-	-	-	-	38.3	-
2	222	249	75	92.5	253.5	44.7	55.7
3	270	297	75	92.5	253.5	51.2	62.2
4	319	345	75	92.5	253.5	57.9	68.9

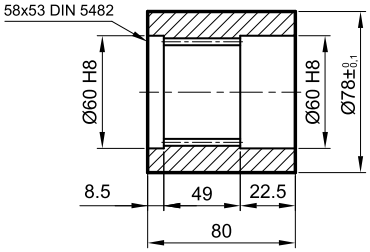
(1) Mass in kg for gearboxes without input modules (solid input shaft, motor flange, etc) or accessories. To obtain actual mass, add the mass for your chosen input module, please inquire.

Accessories

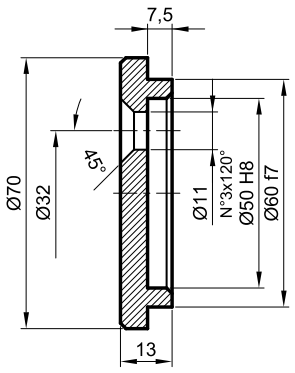
SA-F-58×53-R



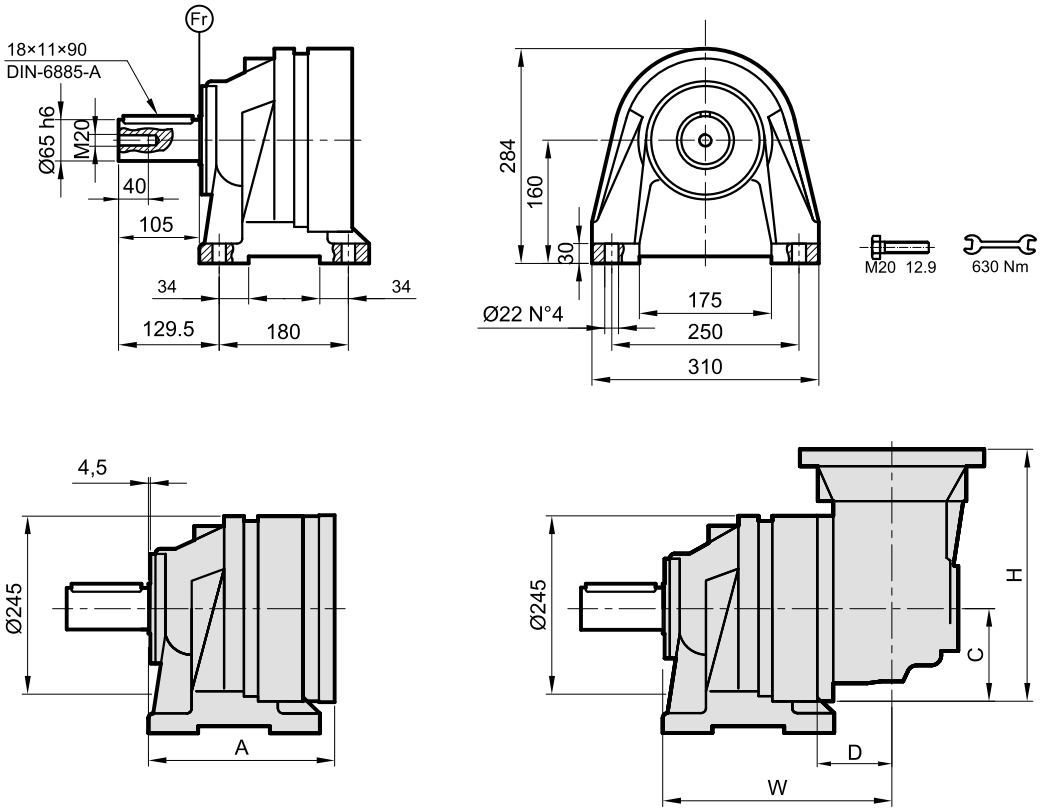
SA-B-58×53-R



SA-P-60



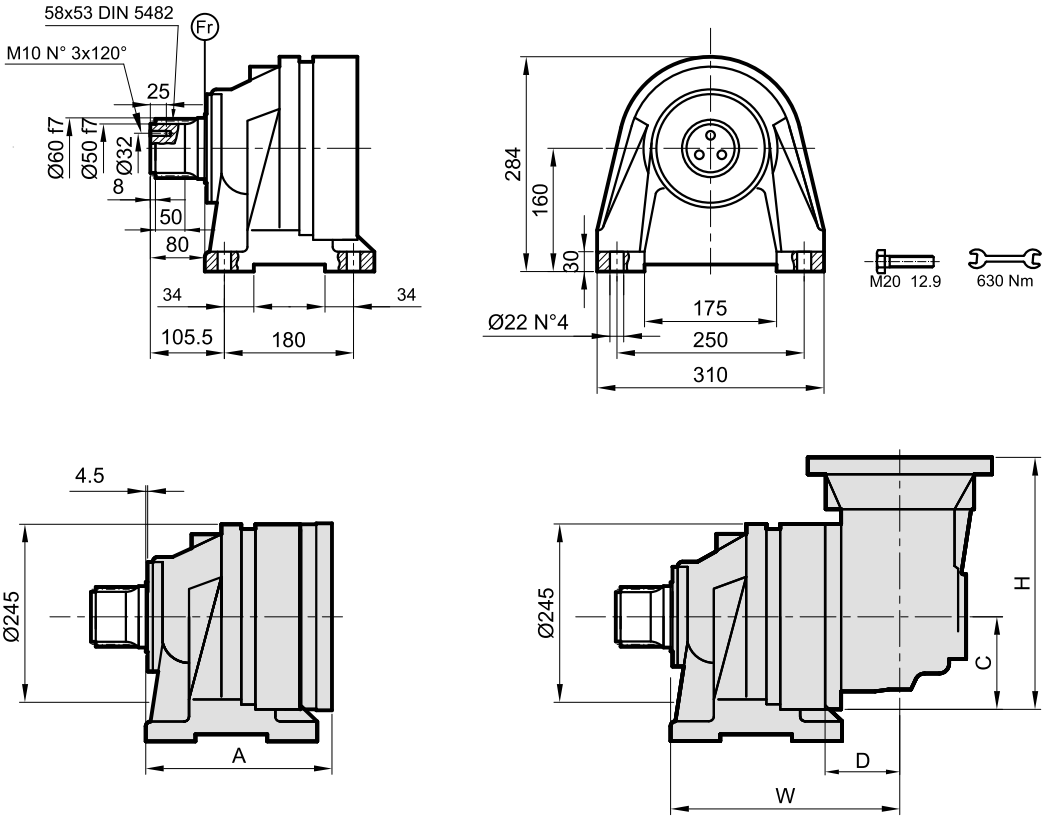
S□-G-030-□□-P65×105



Stages	A	W	D	C	H	ST Mass (1)	SX Mass (1)
1	215	-	-	-	-	46	-
2	263	290	75	92.5	253.5	52.4	63.4
3	311	338	75	92.5	253.5	58.9	69.9
4	359	386	75	92.5	253.5	65.6	76.6

(1) Mass in kg for gearboxes without input modules (solid input shaft, motor flange, etc) or accessories. To obtain actual mass, add the mass for your chosen input module, please inquire.

S□-R-030-□□-W58×80

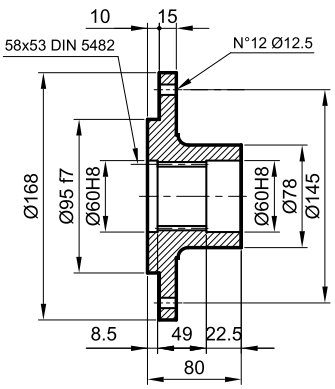


Stages	A	W	D	C	H	ST Mass (1)	SX Mass (1)
1	215	-	-	-	-	46	-
2	263	290	75	92.5	253.5	52.4	63.4
3	311	338	75	92.5	253.5	58.9	69.9
4	359	386	75	92.5	253.5	65.6	76.6

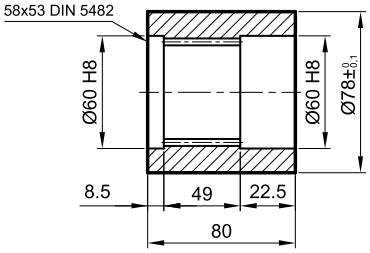
(1) Mass in kg for gearboxes without input modules (solid input shaft, motor flange, etc) or accessories. To obtain actual mass, add the mass for your chosen input module, please inquire.

Accessories

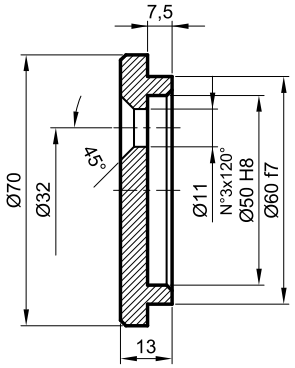
SA-F-58×53-R



SA-B-58×53-R

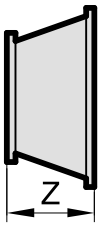


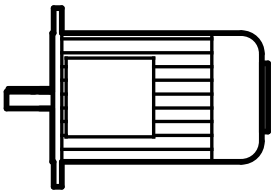
SA-P-60



Inputs

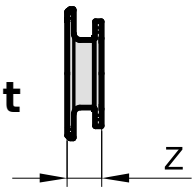
IEC Motor Input

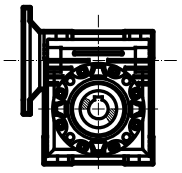




IEC	71	80	90	100	112	132	160	180
Stages	Z	Z	Z	Z	Z	Z	Z	Z
1	35.5	61.5	61.5	71	71	104	120.5	120.5
2	35.5	61.5	61.5	71	71	104	120.5	120.5
3	35.5	61.5	61.5	71	71	104	120.5	120.5
4	35.5	61.5	61.5	71	71	104	120.5	120.5

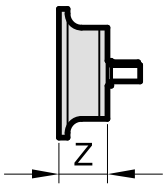
Worm Gearbox Input





Stages	SVS-050 SQS-050	SVS-063 SQS-063	SVS-075 SQS-075	SVS-090 SQS-090	SVS-110 SQS-110
	Z	Z	Z	Z	Z
1	80	80	57	57	57
2	80	80	57	57	57
3	80	80	57	57	57
4	80	80	57	57	57

Solid Shaft Input



Stages	E25×50 E28×50	E35×50 E42×82	E48×82.5 E65×105	E70×120 E80×130	E90×140 E100×140
	Z		Z	Z	Z
1	122		159	-	-
2	122		-	-	-
3	122		-	-	-
4	122		-	-	-