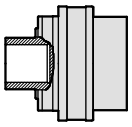
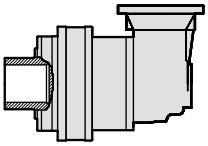
Size 010 - 1100 Nm

ST-010 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	3.55	1100	832	2220	1500	2800	12	98
	4.28	1100	832	2220	1500	2800	12	98
	5.60	800	601	1590	1500	2800	12	98
	6.75	700	539	1402	1500	2800	12	98
	8.67	450	343	925	1500	2800	12	98
2	12.6	1100	832	2220	1500	2800	8	96
	15.2	1100	832	2220	1500	2800	8	96
	19.9	1100	832	2220	1500	2800	8	96
	24.0	1100	832	2220	1500	2800	8	96
	28.9	1100	832	2220	1500	2800	8	96
	31.4	800	601	1590	1500	2800	8	96
	37.8	800	601	1590	1500	2800	8	96
	45.6	700	539	1402	1500	2800	8	96
	58.5	700	539	1402	1500	2800	8	96
3	45.0	1100	832	2220	1500	2800	5	94
	54.2	1100	832	2220	1500	2800	5	94
	65.3	1100	832	2220	1500	2800	5	94
	70.8	1100	832	2220	1500	2800	5	94
	78.7	1100	832	2220	1500	2800	5	94
	85.3	1100	832	2220	1500	2800	5	94
	102.8	1100	832	2220	1500	2800	5	94
	111.5	1100	832	2220	1500	2800	5	94
	134.4	1100	832	2220	1500	2800	5	94
	162.0	1100	832	2220	1500	2800	5	94
	172.6	1100	832	2220	1500	2800	5	94
	208.0	1100	601	1590	1500	2800	5	94
	211.6	800	601	1590	1500	2800	5	94
	250.7	1100	832	2220	1500	2800	5	94
	255.2	800	601	1590	1500	2800	5	94
	271.7	800	601	1590	1500	2800	5	94
	307.6	700	539	1402	1500	2800	5	94
	327.6	800	601	1590	1500	2800	5	94
	394.9	700	539	1402	1500	2800	5	94
4	337.1	1100	832	2220	1500	2800	1.5	92
	365.7	1100	832	2220	1500	2800	1.5	92
	396.5	1100	832	2220	1500	2800	1.5	92
	440.7	1100	832	2220	1500	2800	1.5	92
	477.9	1100	832	2220	1500	2800	1.5	92
	531.1	1100	832	2220	1500	2800	1.5	92
	575.9	1100	832	2220	1500	2800	1.5	92
	624.4	1100	832	2220	1500	2800	1.5	92
	694.2	1100	832	2220	1500	2800	1.5	92
	752.6	1100	832	2220	1500	2800	1.5	92
	836.6	1100	832	2220	1500	2800	1.5	92
	907.1	1100	832	2220	1500	2800	1.5	92
	966.4	1100	832	2220	1500	2800	1.5	92
	1093.5	1100	832	2220	1500	2800	1.5	92
	1144.4	1100	832	2220	1500	2800	1.5	92
	1185.4	800	601	1590	1500	2800	1.5	92
	1317.8	1100	832	2220	1500	2800	1.5	92
	1404.0	1100	832	2220	1500	2800	1.5	92
	1522.0	800	601	1590	1500	2800	1.5	92
	1692.0	1100	832	2220	1500	2800	1.5	92

SX-010 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	10.4	1100	832	2220	1500	2800	8	96
	12.6	1100	832	2220	1500	2800	8	96
	16.4	800	601	1590	1500	2800	8	96
	19.8	700	539	1402	1500	2800	8	96
3	37.0	1100	832	2220	1500	2800	5	94
	44.6	1100	832	2220	1500	2800	5	94
	53.8	1100	832	2220	1500	2800	5	94
	58.4	1100	832	2220	1500	2800	5	94
	70.3	1100	832	2220	1500	2800	5	94
	84.8	1100	832	2220	1500	2800	5	94
	91.9	800	601	1590	1500	2800	5	94
	110.8	800	601	1590	1500	2800	5	94
	133.5	700	539	1402	1500	2800	5	94
	171.4	700	539	1402	1500	2800	5	94
4	131.7	1100	832	2220	1500	2800	1.5	92
	158.7	1100	832	2220	1500	2800	1.5	92
	191.3	1100	832	2220	1500	2800	1.5	92
	207.4	1100	832	2220	1500	2800	1.5	92
	230.5	1100	832	2220	1500	2800	1.5	92
	250.0	1100	832	2220	1500	2800	1.5	92
	301.3	1100	832	2220	1500	2800	1.5	92
	326.7	1100	832	2220	1500	2800	1.5	92
	363.1	1100	832	2220	1500	2800	1.5	92
	393.8	1100	832	2220	1500	2800	1.5	92
	474.7	1100	832	2220	1500	2800	1.5	92
	505.6	1100	832	2220	1500	2800	1.5	92
	514.6	800	601	1590	1500	2800	1.5	92
	609.4	1100	832	2220	1500	2800	1.5	92
	734.5	1100	832	2220	1500	2800	1.5	92
	796.3	800	601	1590	1500	2800	1.5	92
	959.9	800	601	1590	1500	2800	1.5	92
	1157.0	700	539	1402	1500	2800	1.5	92
	1232.4	800	601	1590	1500	2800	1.5	92
	1485.5	700	539	1402	1500	2800	1.5	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

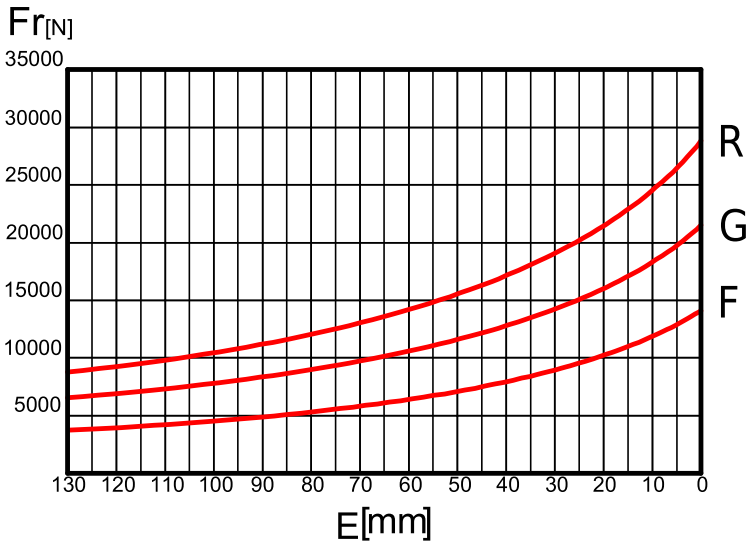
(4) n_{1max} is the maximum input speed for intermittent service. For continuous operation at speeds over n1n please inquire.

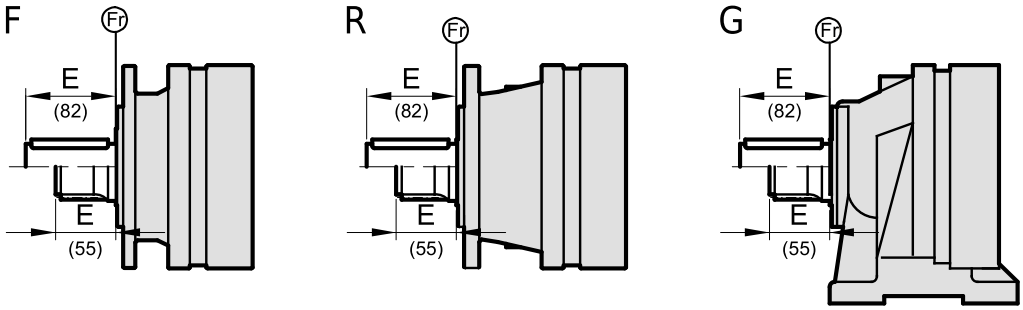
(5) Pt is the thermal power rating, that is the power in kW that, at 20°C, the gearbox can transmit during continuous operation, at $n_1=n_{1n}$ and lubricated with ISO-VG-220 oil without it exceeding 90°C. It depends on ambient temperature.

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

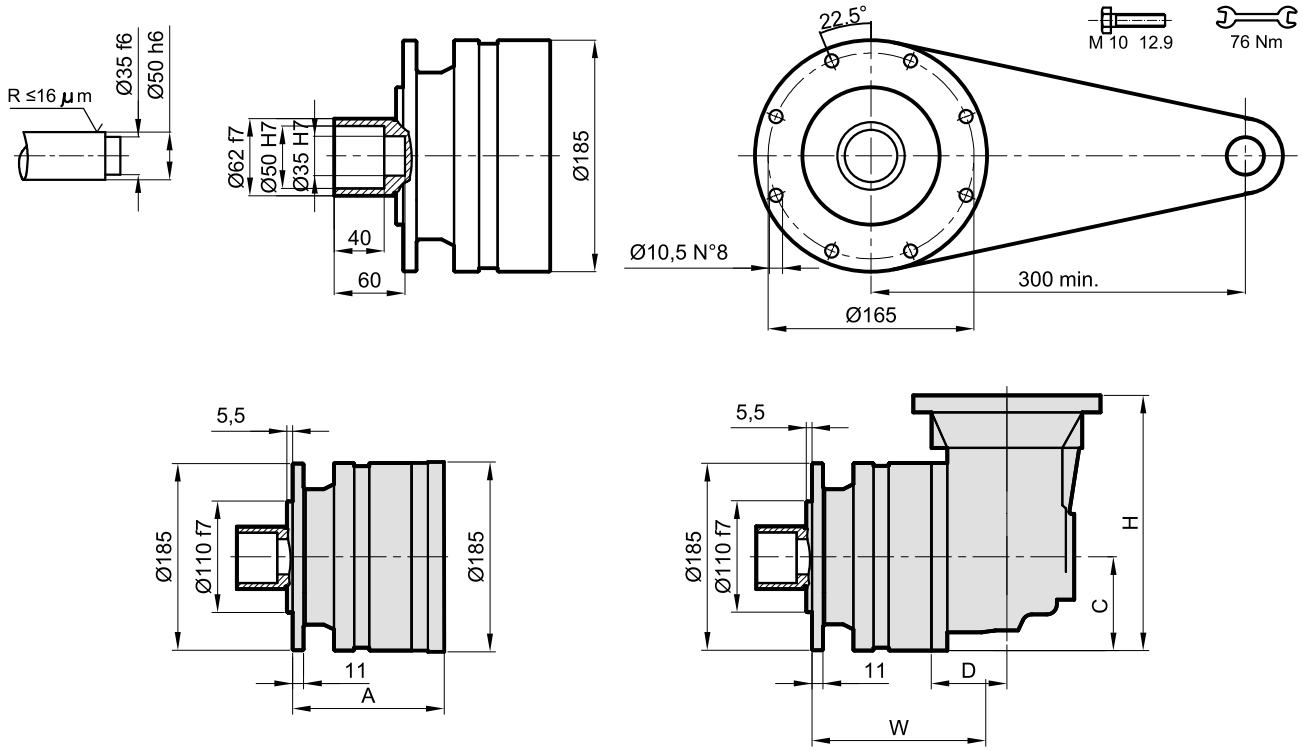
Axial Load Capacity is only given for gearboxes with solid shafts (Smooth Solid Shaft with Key (P) and DIN 5480 Splined Shaft (W)) for a design life of 6 million revolutions of the output shaft ($6 \cdot 10^6$). These values can be adjusted for other number of revolutions of the output shaft applying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

Axial Load Capacity depends on the direction of the load:

	Version	Push	Pull
F_a	F	16000 N	16000 N
	R, G	18000 N	18000 N

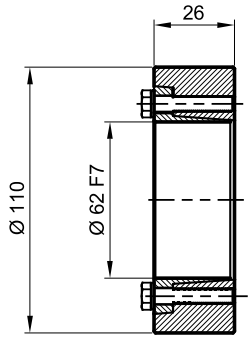
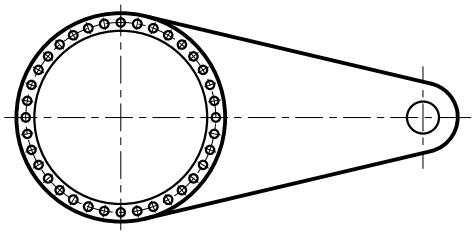
Dimensions

S□-F-010-□□-H50×60

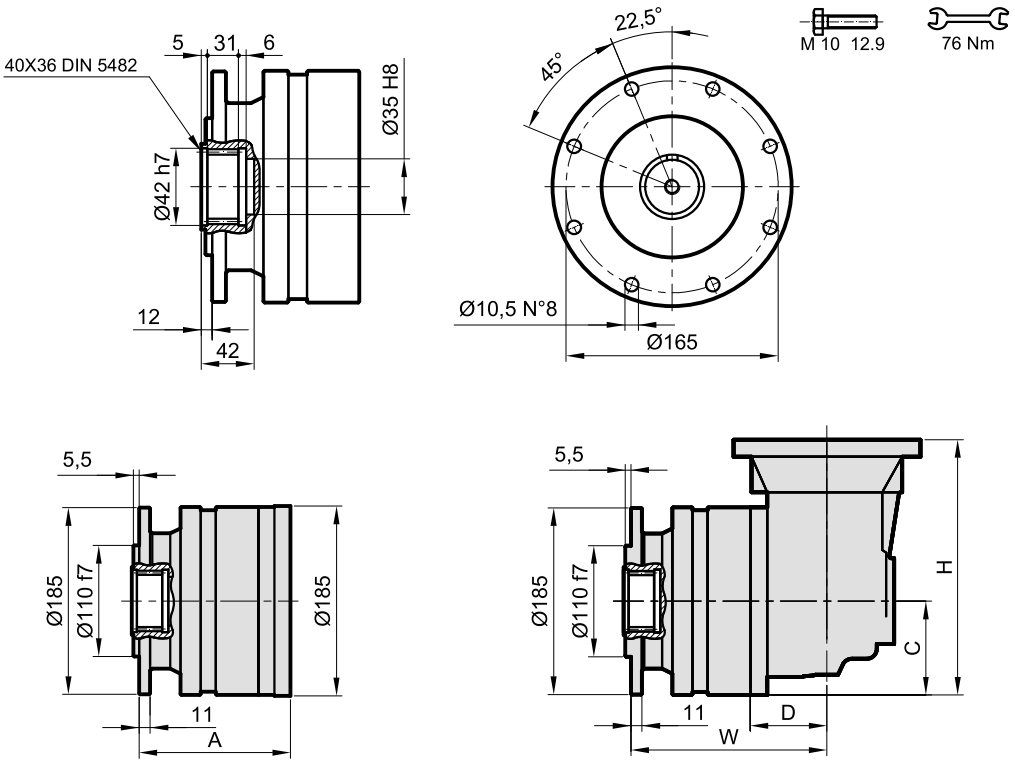


Stages	A	W	D	C	H	ST Mass (1)	SX Mass (1)
1	105	-	-	-	-	13.5	-
2	153	180	75	92.5	253.5	19.7	30.7
3	201	228	75	92.5	253.5	26	36.9
4	249	276	75	92.5	253.5	32.3	43.1

(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-H-62	**SA-T-□-110-165-8×10.5-□-□**
 Max. Torque: 2.5 kNm Screw Tightening Torque: 38.5 Nm	 See the chapter on Torque Arms

S□-F-010-□□-N40×42

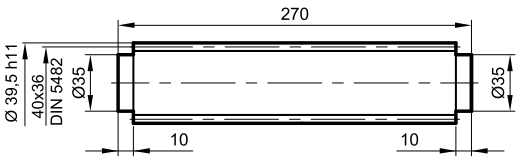


Stages	A	W	D	C	H	ST Mass (1)	SX Mass (1)
1	105	-	-	-	-	12.1	-
2	153	180	75	92.5	253.5	17.9	29.3
3	201	228	75	92.5	253.5	24.8	35.1
4	249	276	75	92.5	253.5	31	42

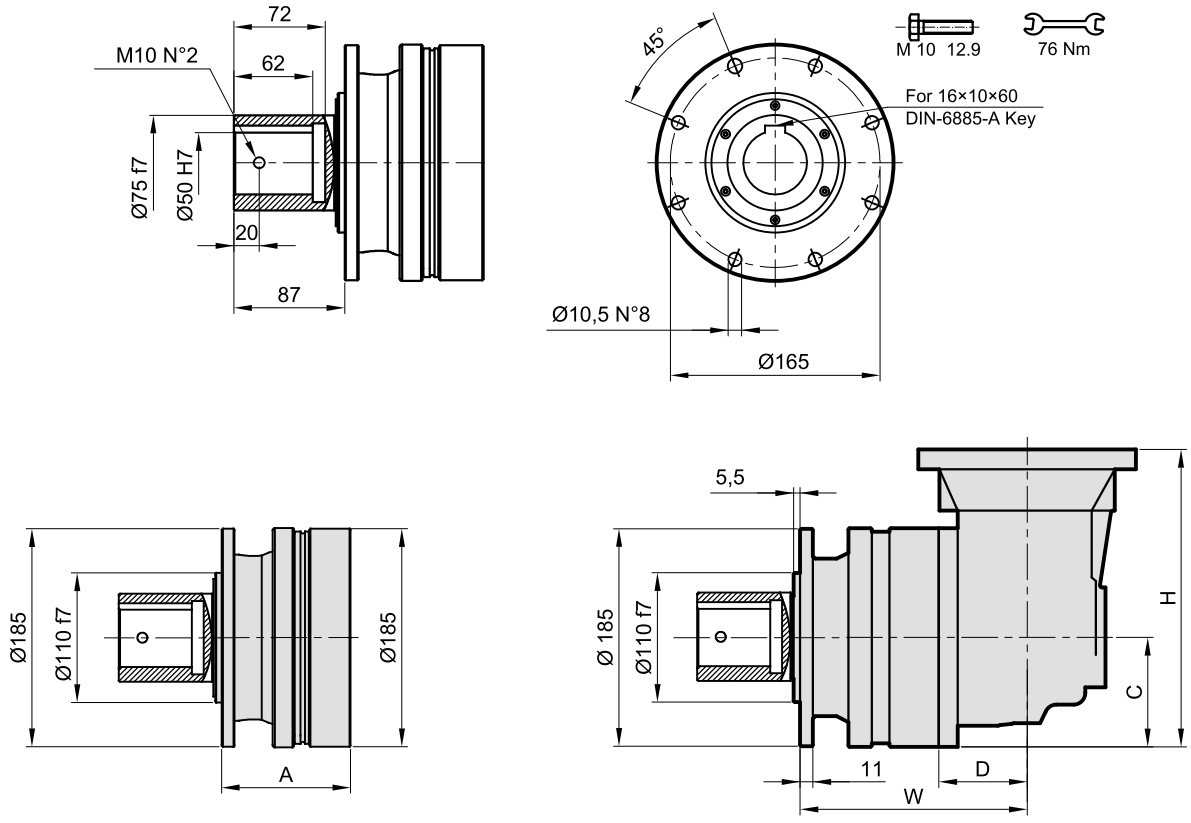
(1) Mass in kg for gearboxes without input modules (solid input shaft, motor flange, etc) or accessories. To obtain actual mass, add the mass for your chosen input module, please inquire.

Accessories

SA-S-40×36



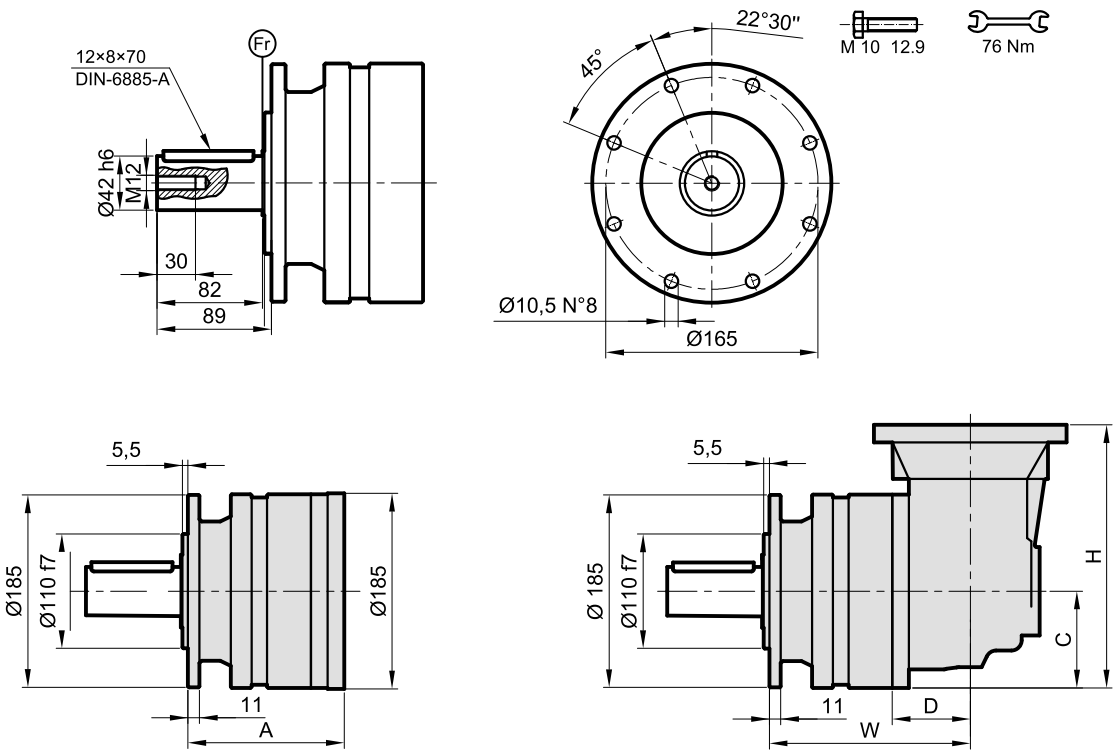
S□-F-010-□□-K50×72



Stages	A	W	D	C	H	ST Mass (1)	SX Mass (1)
1	105	-	-	-	-	14.3	-
2	153	180	75	92.5	253.5	20.6	31.5
3	201	228	75	92.5	253.5	26.9	37.8
4	249	276	75	92.5	253.5	33.2	44.1

(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.

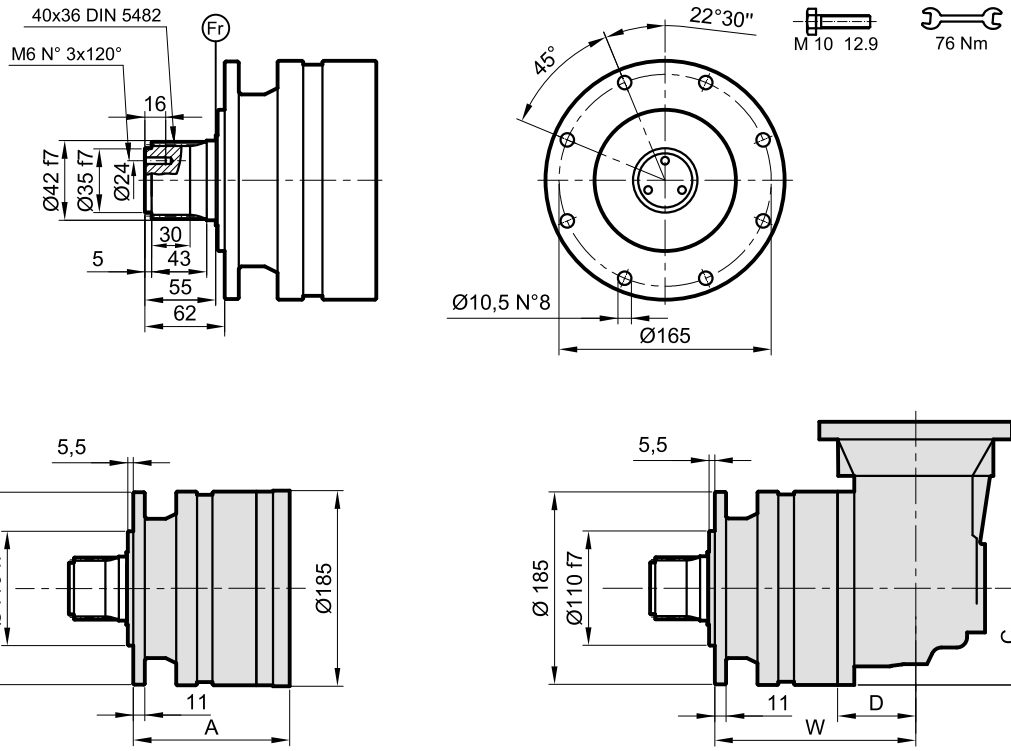
S□-F-010-□□-P42×82



Stages	A	W	D	C	H	ST Mass (1)	SX Mass (1)
1	105					13.9	-
2	153	180	75	92.5	253.5	20.1	31.1
3	201	228	75	92.5	253.5	26.4	37.3
4	249	276	75	92.5	253.5	32.7	43.6

(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□-F-010-□□-W40×55

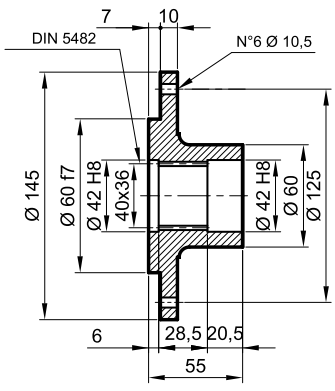


Stages	A	W	D	C	H	ST Mass (1)	SX Mass (1)
1	105					13.9	-
2	153	180	75	92.5	253.5	20.1	31.1
3	201	228	75	92.5	253.5	26.4	37.3
4	249	276	75	92.5	253.5	32.7	43.6

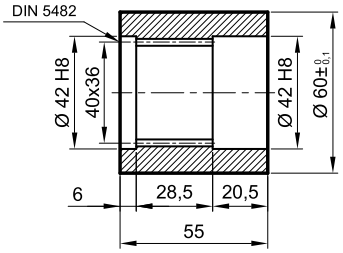
(1) Mass in kg for gearboxes without input modules (solid input shaft, motor flange, etc) or accessories. To obtain actual mass, add the mass for your chosen input module, please inquire.

Accessories

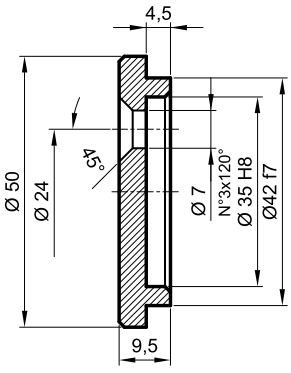
SA-F-40×36-S



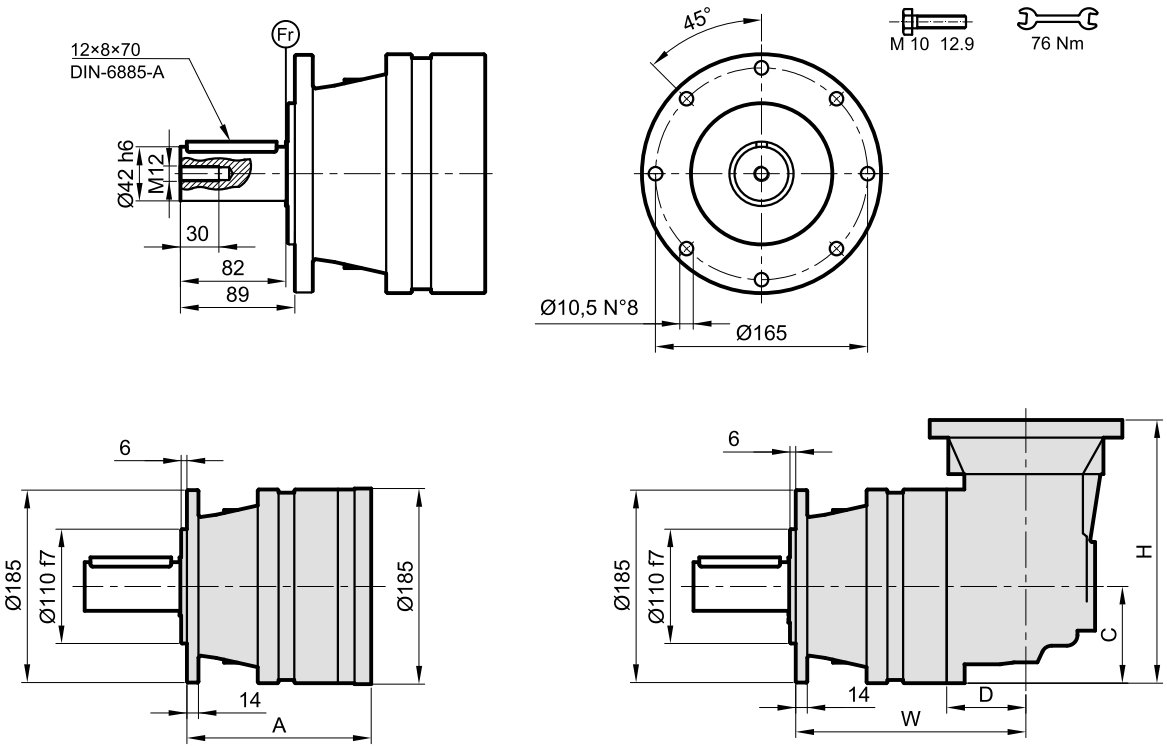
SA-B-40×36-S



SA-P-42



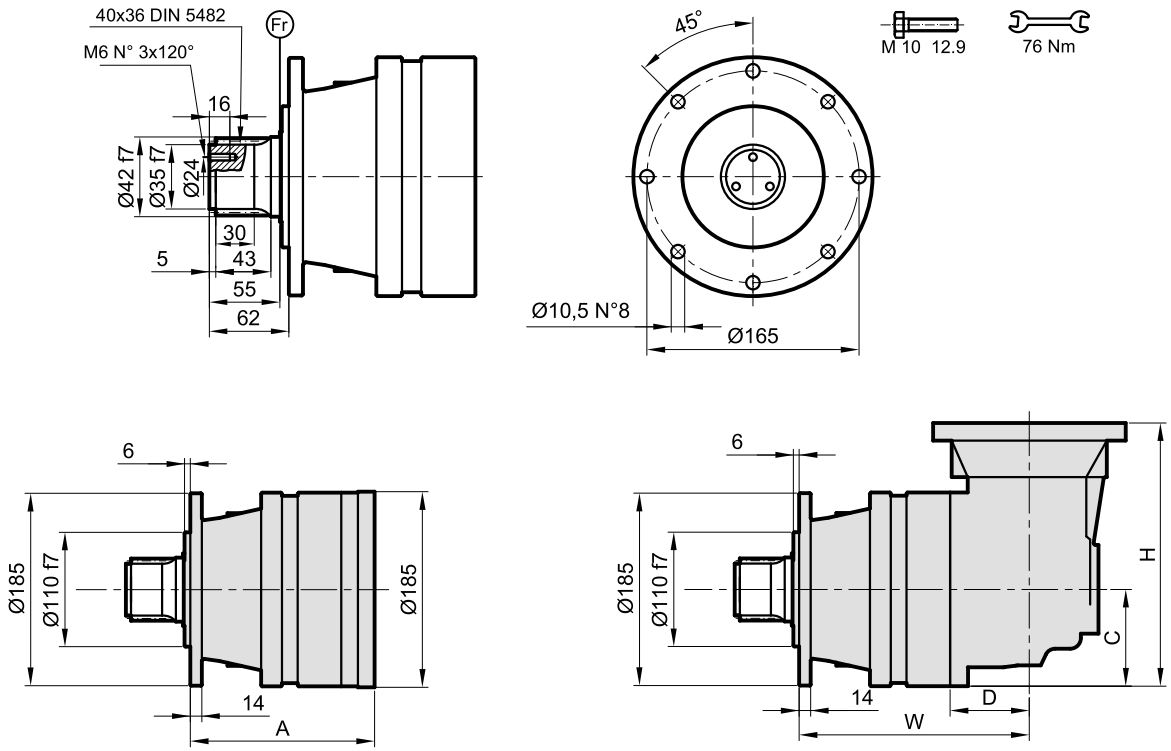
S□-R-010-□□-P42×82



Stages	A	W	D	C	H	ST Mass (1)	SX Mass (1)
1	135	-	-	-	-	15.4	-
2	183	210	75	92.5	253.5	21.7	32.6
3	231	258	75	92.5	253.5	28.1	38.9
4	279	306	75	92.5	253.5	34.3	45.3

(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.

S□-R-010-□□-W40×55

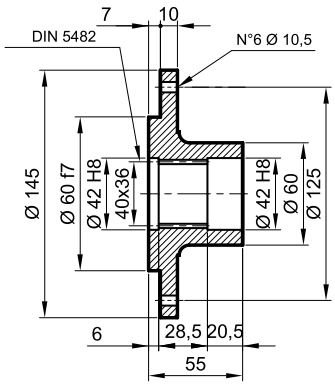


Stages	A	W	D	C	H	ST Mass (1)	SX Mass (1)
1	135	-	-	-	-	15.4	-
2	183	210	75	92.5	253.5	21.7	32.6
3	231	258	75	92.5	253.5	28.1	38.9
4	279	306	75	92.5	253.5	34.3	45.3

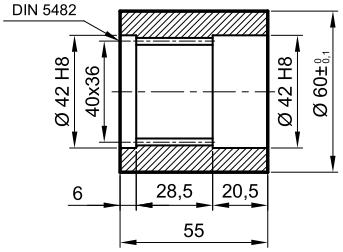
(1) Mass in kg for gearboxes without input modules (solid input shaft, motor flange, etc) or accessories. To obtain actual mass, add the mass for your chosen input module, please inquire.

Accessories

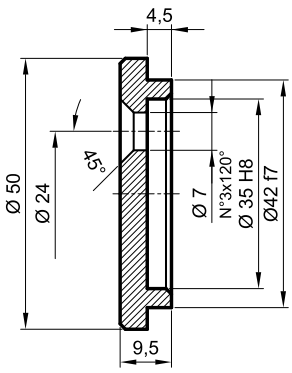
SA-F-40×36-S



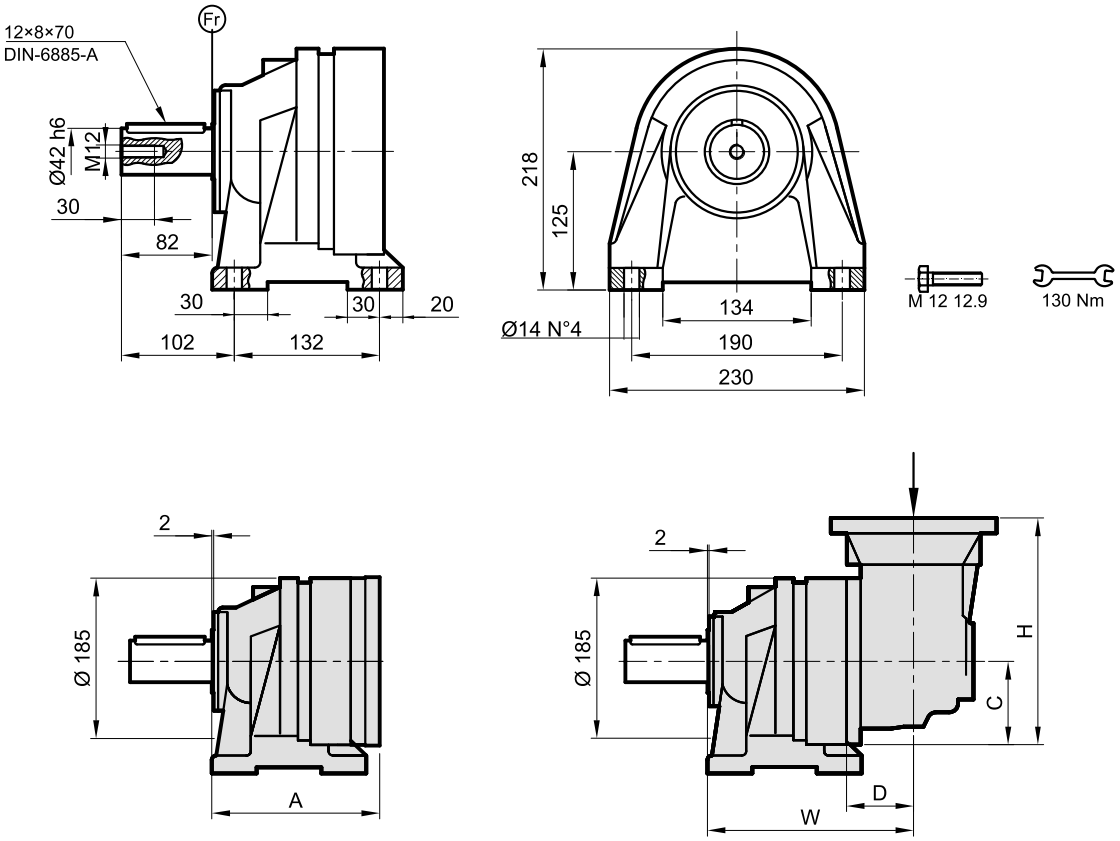
SA-B-40×36-S



SA-P-42



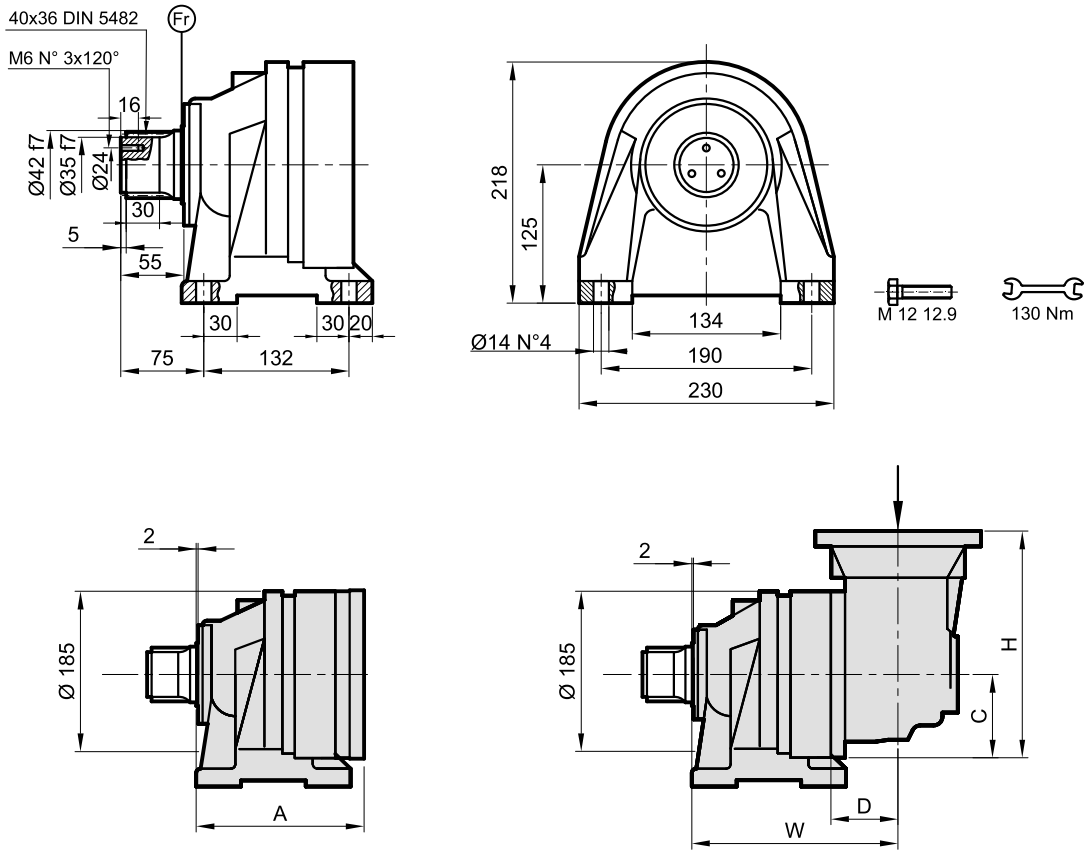
S□-G-010-□□-P42×82



Stages	A	W	D	C	H	ST Mass (1)	SX Mass (1)
1	144	-	-	-	-	17.6	-
2	192	220	75	92.5	253.5	23.9	34.8
3	240	268	75	92.5	253.5	30.2	41.1
4	288	316	75	92.5	253.5	36.5	47.4

(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.

S□-G-010-□□-W40×55

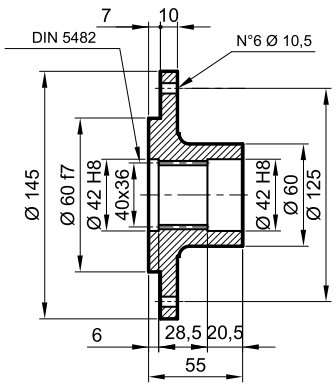


Stages	A	W	D	C	H	ST Mass (1)	SX Mass (1)
1	144	-	-	-	-	17.6	-
2	192	220	75	92.5	253.5	23.9	34.8
3	240	268	75	92.5	253.5	30.2	41.1
4	288	316	75	92.5	253.5	36.5	47.4

(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-F-40×36-S



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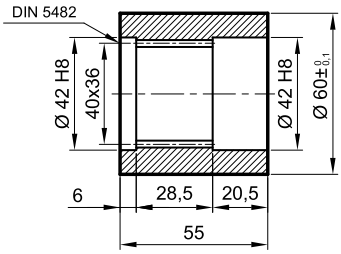
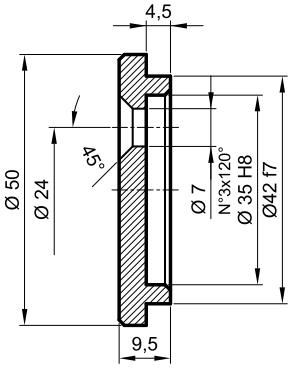
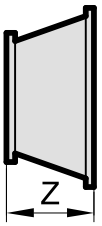


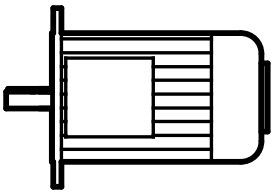
SA-P-42



Inputs

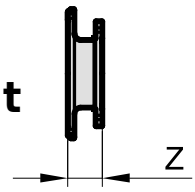
IEC Motor Input

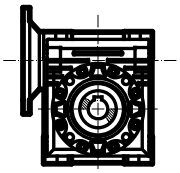




IEC	71	80	90	100	112	132	160	180
Stages	Z	Z	Z	Z	Z	Z	Z	Z
1	35.5	61.5	61.5	71	71	104	120.5	120.5
2	35.5	61.5	61.5	71	71	104	120.5	120.5
3	35.5	61.5	61.5	71	71	104	120.5	120.5
4	35.5	61.5	61.5	71	71	104	120.5	120.5

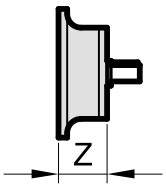
Worm Gearbox Input





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		-	-	-
2	122		-	-	-
3	122		-	-	-
4	122		-	-	-