7 Important Notes on Selection Tables an Dimension Sheets

7.1 Notes on the selection tables

M_{aDyn} [Nm]		CMP							DS		
	i	40M	50S	50M	50L	63S	63M	63L	56M	56L	56H
PSC221 1	3	11	15	31	>40	33	>40	>40	11	23	>40
	5	19	26	>42	>42	>42	>42	>42	19	38	>42
	7	26	36	>39	>39	>39	>39		26	>39	>39
	10	>37	>37						>37	>37	

Dynamic output torque M_{aDyn} of the drive

Gear unit reduction ratio

Gear unit size with number of gear unit stages

	The dark-gray fields contain preferred combinations
	Please contact SEW-EURODRIVE for more information about the light-gray fields.
	White fields mean: Combination not possible

NOTE

In fields marked with ">...", M_{aDyn} must not exceed the maximum permitted torque M_{apk} in short-term duty because the motor may overload the gear unit. The motor current I_{max} must be limited during startup.

m [kg]		CMP							DS		
	s	40M	50S	50M	50L	63S	63M	63L	56M	56L	56H
PSC221	1	3.2	4.0	5.0	5.9	6.3	7.8	9.3	4.2	5.2	5.9
PSC222	2	3.8	4.7	5.6	6.5	7.0	8.5	10.0	4.8	5.8	6.5

? Mass of the drive

s Number of gear unit stages

				M1;M3;M5-6			M2			M4			φ
	i	n_{epk} [rpm]	η [%]	a_0	a_1	a_2	a_0	a_1	a_2	a_0	a_1	a_2	[']
PSC221 1	3	7000	99	101.00	-0.093	0	106.00	-0.104	0	109.00	-0.110	0	10
	5	7000	99	160.00	-0.181	0	163.00	-0.190	0	167.00	-0.200	0	10
	7	7000	99	186.00	-0.257	0	187.00	-0.264	0	186.00	-0.267	0	10
	10	7000	99	158.00	-0.178	0	161.00	-0.184	0	164.00	-0.194	0	10

i Gear unit reduction ratio

n_{epk} Maximum permitted input speed for short-time duty

η Efficiency of the gear unit (at M_{apk}, n_e=1500 rpm, mounting position M1, S1 operation)

φ Circumferential backlash

a_0, a_1, a_2 Gear unit constants as regards the rise in temperature in the gear unit

CMP / DS	i	M_{amax} [Nm]	M_{apk} [Nm]	$M_{aNotaus}$ [Nm]	n_{ak} [rpm]	J_G 10^{-4} kgm^2	c_T PSC [Nm/']	F_{Ramax} PSC [N]	F_{Rapk} PSC [N]
PSC221 1	3	29	40	60	1500	0.17	3.46	1170	2000
	5	34	42	63	720	0.058	3.44	1390	2000
	7	32	39	59	800	0.030	3.28	1550	2000
	10	30	37	56	700	0.014	2.92	1750	2000

i	Gear unit reduction ratio
M_{amax}	Maximum permitted output torque for continuous duty
M_{apk}	Maximum permitted output torque for short-time duty
$M_{aNotaus}$	Maximum permitted output emergency stop torque, max. 1000 emergency stops
n_{ak}	Breakpoint speed (output)
J_G	Mass moment of inertia of the gear unit with reference to the input shaft
c_T	Torsional rigidity of the gear unit / gear unit with adapter
F_{Ramax}	Maximum permitted overhung load at the output shaft for continuous duty, load application point is the center of the shaft end
F_{Rapk}	Maximum permitted overhung load at the output shaft for short-time duty, load application point is the center of the shaft end

7.2 Notes on the dimension sheets

Scope of delivery

= Standard parts supplied by SEW-EURODRIVE.

= Standard parts not supplied by SEW-EURODRIVE.

Tolerances

Shaft heights

The following tolerances apply to the indicated dimensions:

h ≤ 250 mm → -0.5 mm
h > 250 mm → -1 mm

Foot-mounted gear units: Check the mounted motor because it may project below the mounting surface.

Shaft ends

Diameter tolerance:

∅ ≤ 50 mm → ISO k6
∅ > 50 mm → ISO m6

Center bores according to DIN 332, shape DR:

∅	= 7...10 mm	→ M3	∅	> 30...38 mm	→ M12
∅	> 10...13 mm	→ M4	∅	> 38...50 mm	→ M16
∅	> 13...16 mm	→ M5	∅	> 50...85 mm	→ M20
∅	> 16...21 mm	→ M6	∅	> 85...130 mm	→ M24
∅	> 21...24 mm	→ M8	∅	> 130 mm	→ M30
∅	> 24...30 mm	→ M10			

Keys: according to DIN 6885 (domed type)

Hollow shafts

Diameter tolerance:

∅ → ISO H7 measured with plug gauge

Keys: according to DIN 6885 (domed type)

Exception: Key for WA37 with shaft ∅ 25 mm according to DIN 6885-3 (low form)

Multiple-spline shafts

Dm = Measuring roller diameter

Me = Check size

Flanges

Centering shoulder tolerance:

∅ ≤ 230 mm (flange sizes A120...A300) → ISO j6

∅ > 230 mm (flange sizes A350...A660) → ISO h6

Up to three different flange dimensions are available for each size of helical gear unit, Spiroplan® gear unit, AC (brake) motor and explosion-proof AC (brake) motor. The respective dimension drawings will show the flanges approved for each size.

Eyebolts, suspension eye lugs

R07...R27 helical gear units and the Spiroplan® gearmotors W..10 to W..30 are delivered without special transportation fixtures. All other gear units and motors are equipped with cast-on suspension eye lugs, screw-on suspension eye lugs or screw-on eyebolts.

Gear unit/motor type	Screw-on,		cast-on suspension eye lugs
	lifting eyebolts	Eyebolts	
R..37-R..57	-	•	-
R..67-R..107	•	-	-
RX57-RX67	-	•	-
RX77-RX107	•	-	-
F..27-F..157	-	-	•
K..37-K..157	-	-	•
K..167-K..187	•	-	-
W..37	-	•	-
S..37-S..47	-	•	-
S..57-S..97	-	-	•
BS.F502..802	-	•	-
PS.F621..921	-	•	-
PS.F622..922	-	•	-

Breather valves

The gear unit dimension drawings always show the screw plugs. The corresponding screw plug is replaced by an activated breather valve at the factory depending on the ordered mounting position M1...M6. The result may be slightly altered contour dimensions.

Shrink disk connection

Hollow shaft gear unit with shrink disk connection: If required, please request a detailed data sheet on shrink discs, data sheet no. 33 753 ..95.

Splined hollow shaft

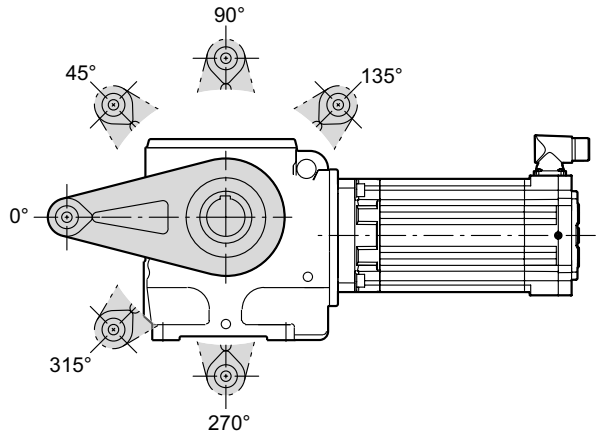
FV.. hollow shaft gear units in sizes 27 ... 107 and KV.. in sizes 37 ... 107 are delivered with a splined hollow shaft according to DIN 5480.

Rubber buffer for FA/FH/FV/FT

Preload rubber buffer by the indicated value mL. The characteristic curve of spring for the rubber buffers is available at SEW-EURODRIVE on request.

Position of the torque arm

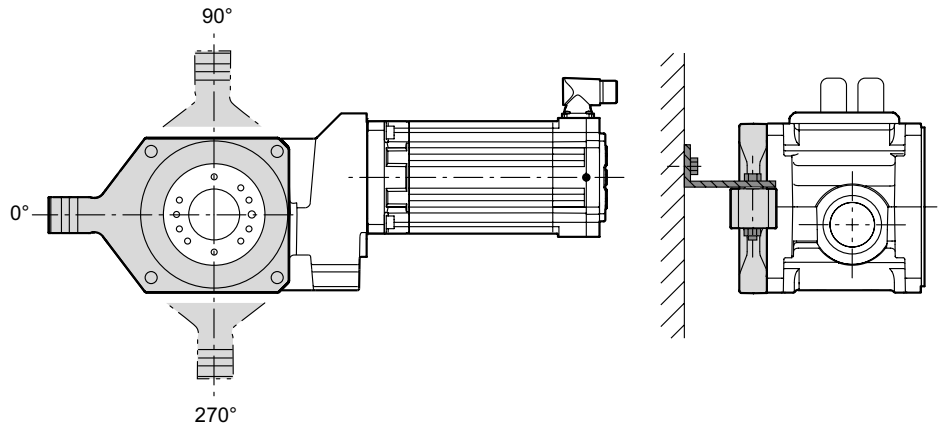
The following illustration shows the possible torque arm positions for helical-worm, Spiroplan® and BS.F gear units as well as the respective angles:



63237AXX

Figure 38: Position of the torque arm for S and W gear units

Specifications regarding torque arms of helical-worm gearmotors are found in the dimension sheets from page 440, specifications regarding the torque arms of Spiroplan® gearmotors are found in the dimension sheets from page 488.



63240AXX

Figure 39: Position of the torque arm of BS.F gear units

Specifications regarding the torque arms of helical-bevel gearmotors are found on page 564.

Tolerances and chamfers of flange block gear units

Internal centering	→ ISO H7
External centering	→ ISO h7

For additional information turn to page 565 or page 628.

Front and foot-end mounting of BS.F..B gear units

For detailed information, refer to page 563.

7.3 Gearmotor dimensions

Motor options

The motor dimensions may change when installing motor options. Refer to the dimension drawings of the motor options.

Special designs

The terminal box dimensions in special designs might vary from the standard.

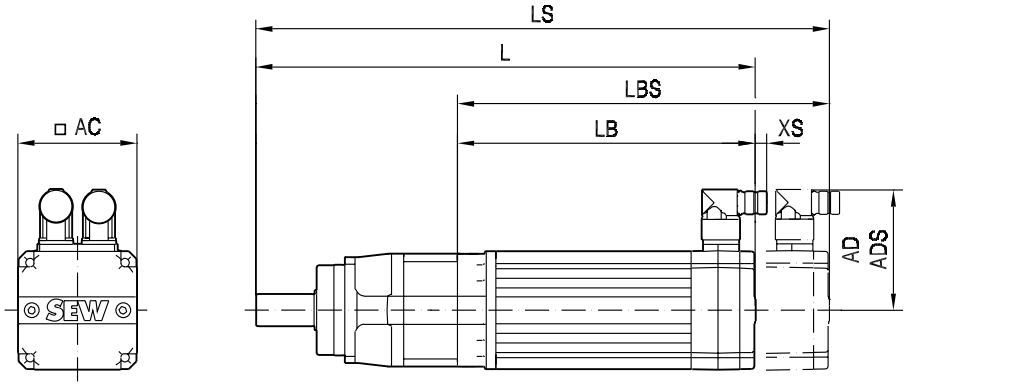
EN 50347

European standard EN 50347 became effective in August 2001. This standard adopts the dimension designations for three-phase AC motors for sizes 56 to 315M and flange sizes 65 to 740 from the IEC 72-1 standard.

The new dimension designations given in EN 50347 / IEC 72-1 are used for the dimensions in question in the dimension tables of the dimensions sheets.

Gearmotor dimensions

The following is an overview of the gearmotor dimensions:



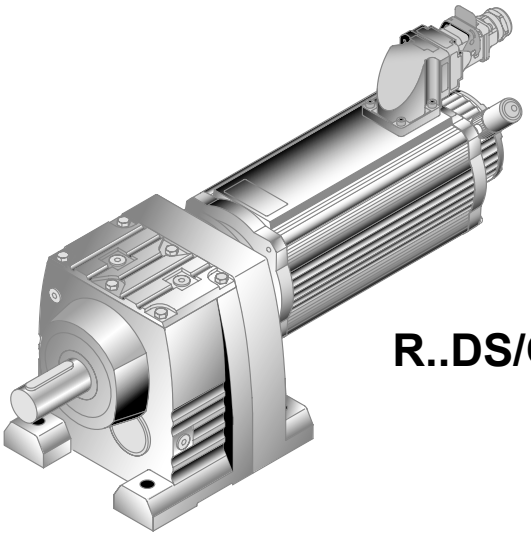
63003axx

L	Total length of gearmotor	AC	Diameter of motor
LS	Total length of gearmotor including brake	AD	Center of motor shaft to top part of terminal box
LB	Length of motor	ADS	Center of brakemotor shaft to top part of terminal box
LBS	Length of brakemotor	XS	Projecting length of the plug connector beyond the motor housing

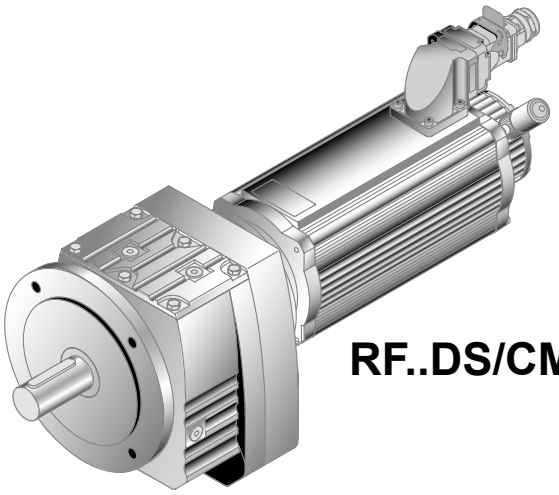
	NOTE
	For motors with other feedback systems than resolvers, possible additional lengths must be considered.

8 R..CMP, DS, CM

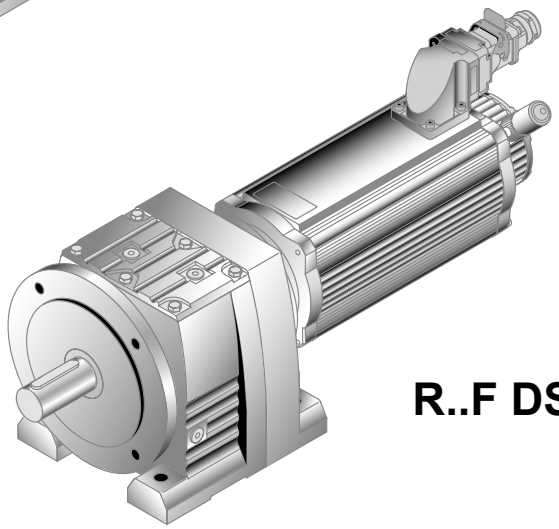
8.1 R, RF, R..F, RX, RXF..CMP / DS / CM



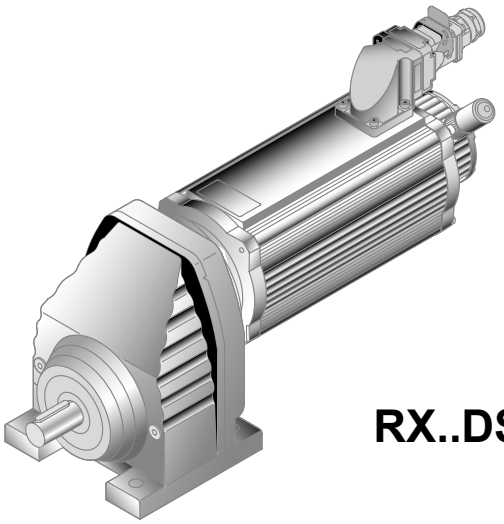
R..DS/CM..



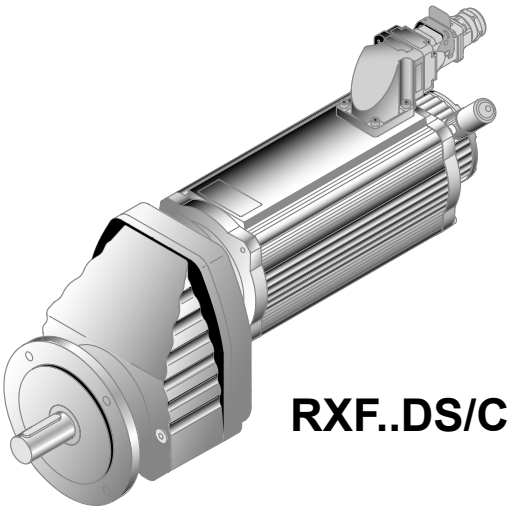
RF..DS/CM..



R..F DS/CM..



RX..DS/CM..



RXF..DS/CM..

52490AXX

8.2 RX 57 / CMP / DS / CM [Nm]

M_{aDyn} [Nm]		CMP						DS			CM							
	i	50S	50M	50L	63S	63M	63L	56M	56L	56H	71S	71M	71L	90S	90M	90L	112S	112M
RX57 1	1.3	6.6	13	20	14	27	39	4.8	9.7	19	21	27	40	50	67	>90	>90	>90
	1.48	7.5	15	22	16	31	44	5.5	11	22	24	31	46	57	76	>90	>90	>90
	1.65	8.4	17	25	18	35	49	6.1	12	25	27	35	51	64	84	>90	>90	
	1.92	9.8	19	29	21	40	57	7.2	14	29	31	40	59	75	>90	>90	>90	
	2.04	10	21	31	22	43	61	7.6	15	30	33	43	63	79	>90	>90	>90	
	2.37	12	24	36	26	50	71	8.8	18	35	38	50	73	>90	>90			
	2.64	13	27	40	29	55	79	9.8	20	39	43	56	81	>90	>90			
	2.91	15	29	44	32	61		11	22	43	47	61						
	3.14	16	32	47	34	66	>90	12	23	47	51	66	>90	>90				
	3.55	18	36	54	39	74		13	26	53	57	75						
	3.79	19	38	57	41	79		14	28	56	61	80						
	4.35	22	44		47			16	32	65								
	5.07	26						19	37									
	5.5	28						20	41									

m [kg]		CMP						DS			CM							
	s	50S	50M	50L	63S	63M	63L	56M	56L	56H	71S	71M	71L	90S	90M	90L	112S	112M
RX57	1	13	14	14	15	16	18	12	13	13	18	19	23	27	29	34	36	40
RXF: + 1.9 kg																		

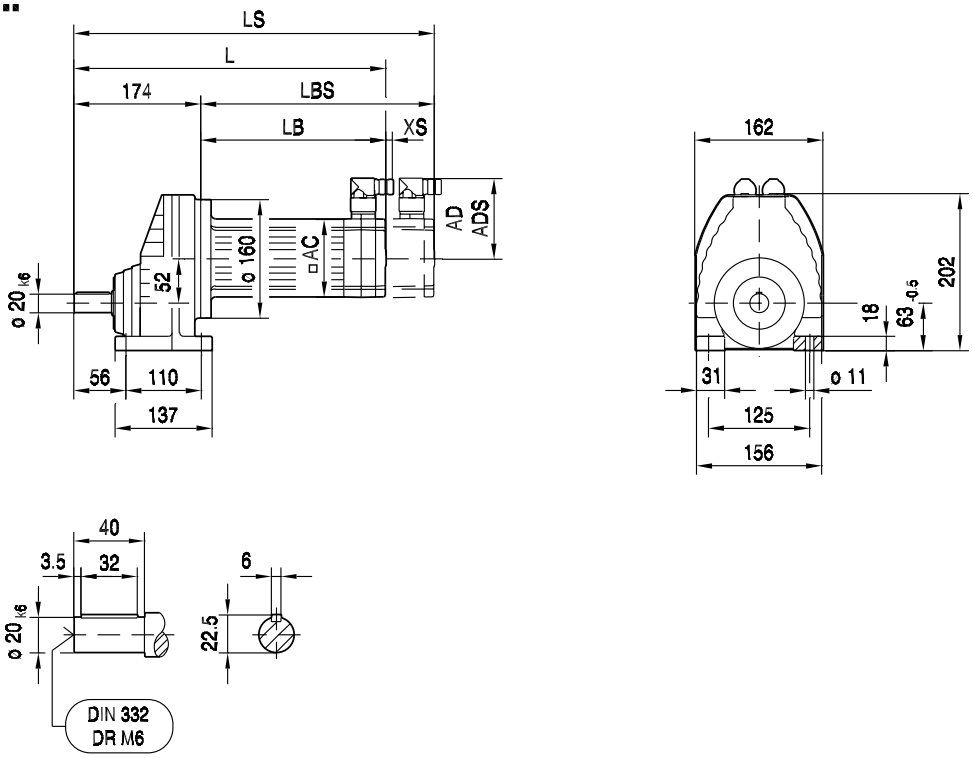
CMP.. / DS.. / CM..				c_T	
	i	n_{epk} [1/min]	η [%]	RX [Nm/"]	RXF [Nm/"]
RX57 1	1.3	2483	98	4.22	4.22
	1.48	2827	98	4.22	4.22
	1.65	3151	98	4.22	4.22
	1.92	3667	98	4.22	4.22
	2.04	3896	98	4.22	4.22
	2.37	4500	98	4.22	4.22
	2.64	4500	98	4.22	4.22
	2.91	4500	98	4.22	4.22
	3.14	4500	98	4.22	4.22
	3.55	4500	98	4.22	4.22
	3.79	4500	98	4.22	4.22
	4.35	4500	98	4.22	4.22
	5.07	4500	97	4.22	4.22
	5.5	4500	97	4.22	4.22

CMP.. / DS.. / CM..							F_{Ramax}		F_{Rapk}	
	i	M_{amax} [Nm]	M_{apk} [Nm]	$M_{aNotaus}$ [Nm]	n_{ak} [1/min]	J_G 10^{-4} [kgm^2]	RX [N]	RXF [N]	RX [N]	RXF [N]
RX57 1	1.3	63	90	107	1154	1.9	132	132	3940	3940
	1.48	68	90	116	1014	1.4	112	112	3950	3950
	1.65	69	90	117	1091	1.2	430	430	3960	3960
	1.92	69	90	117	1250	0.94	880	880	3970	3970
	2.04	69	90	117	1324	0.85	1070	1070	3970	3970
	2.37	69	90	117	1477	0.64	1500	1500	3980	3980
	2.64	69	90	117	1629	0.55	1810	1810	3980	3980
	2.91	67	90	114	1856	0.44	2170	2170	3980	3980
	3.14	65	90	111	2197	0.42	2320	2320	3990	3990
	3.55	69	90	117	1972	0.35	2420	2420	3990	3990
	3.79	69	90	117	1847	0.32	2480	2480	3990	3990
	4.35	68	90	116	1609	0.26	2640	2640	4000	4000
	5.07	36	54	61	1381	0.21	3030	3030	4210	4210
	5.5	39	58	66	1273	0.18	3100	3100	4190	4190

8.3 RX 57 / CMP / DS / CM [mm]

01 013 00 07

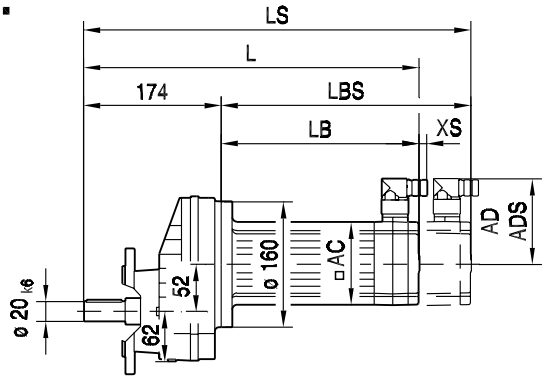
RX57..

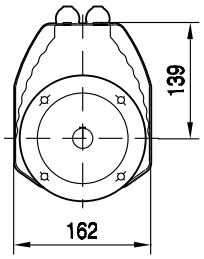


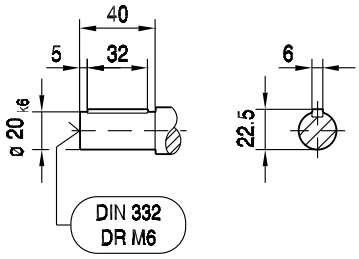
(→ 📖 150)	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L		
AC	73	73	73	88	88	88		
AD	82	82	82	89	89	89		
ADS	82	82	82	89	89	89		
L	313	352	391	347	397	447		
LS	342	381	420	376	426	476		
LB	139	178	217	173	223	273		
LBS	168	207	246	202	252	302		
XS	18	18	18	14	14	14		

01 014 00 07

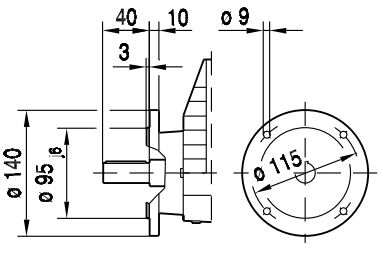
RXF57..



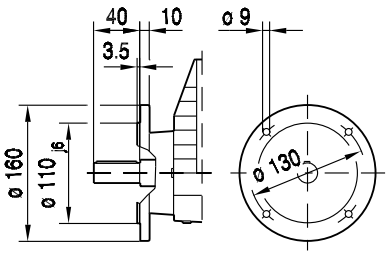




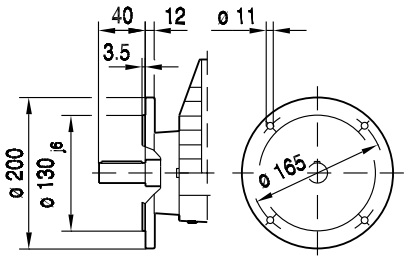
ø 140



ø 160



ø 200

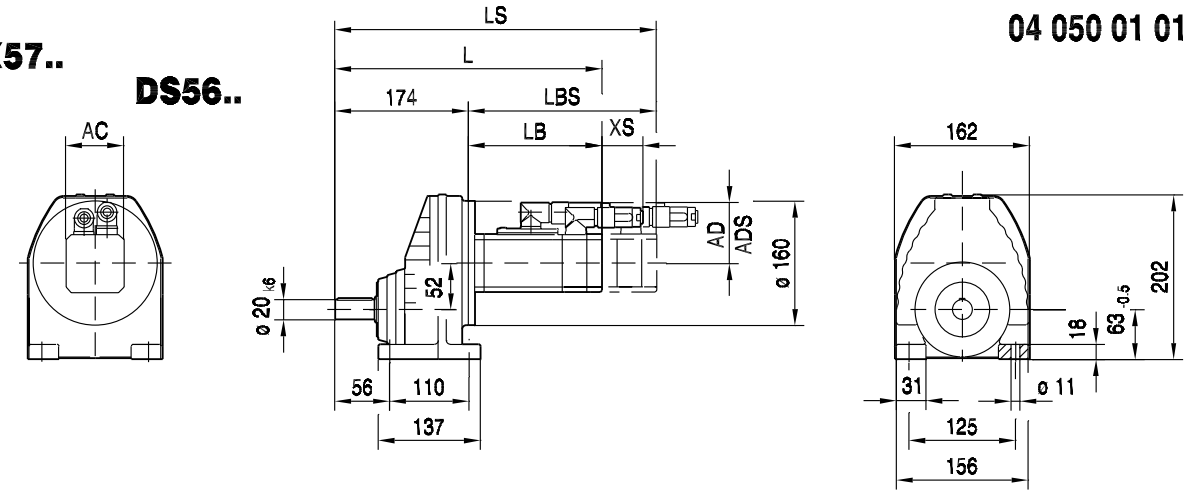


(→ 📖 150)	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L		
AC	73	73	73	88	88	88		
AD	82	82	82	89	89	89		
ADS	82	82	82	89	89	89		
L	313	352	391	347	397	447		
LS	342	381	420	376	426	476		
LB	139	178	217	173	223	273		
LBS	168	207	246	202	252	302		
XS	18	18	18	14	14	14		

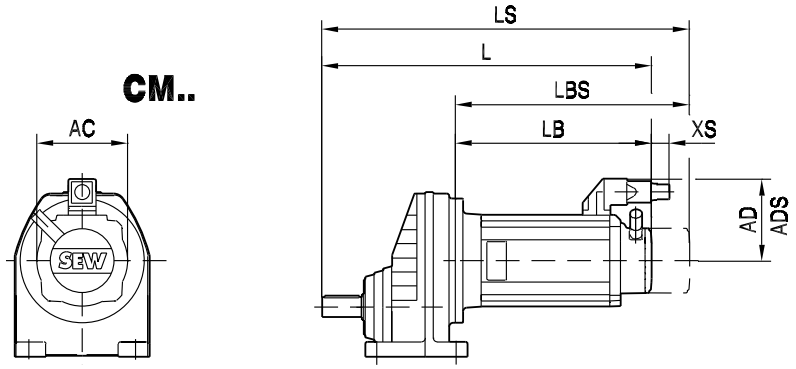
RX57..

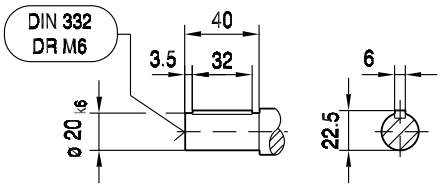
DS56..

04 050 01 01



CM..



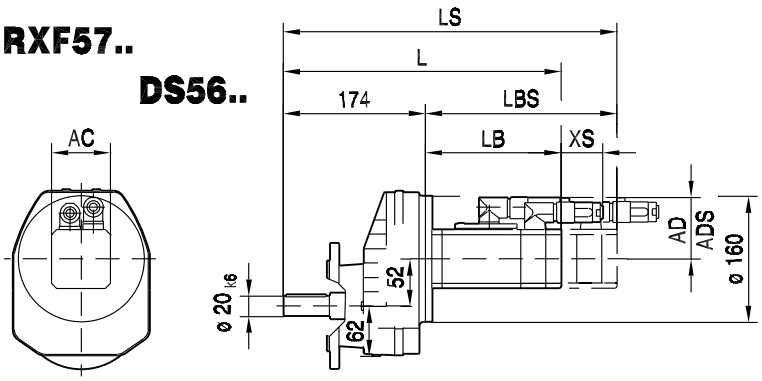


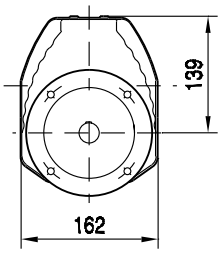
(→ 📖 150)	DS56H	CM71S	CM71M	CM71L	CM90S	CM90M	CM90L	CM112S	CM112M		
AC	73	117	117	117	142	142	142	186	186		
AD	77	122	122	122	140	140	140	162	162		
ADS	77	122	122	122	140	140	140	162	162		
L	440	406	426	466	458	485	543	498	522		
LS	440	488	508	548	554	581	639	588	612		
LB	266	232	252	292	284	311	369	324	348		
LBS	266	314	334	374	380	407	465	414	438		
XS	51	45	45	45	50	50	50	36	36		

04 051 01 01

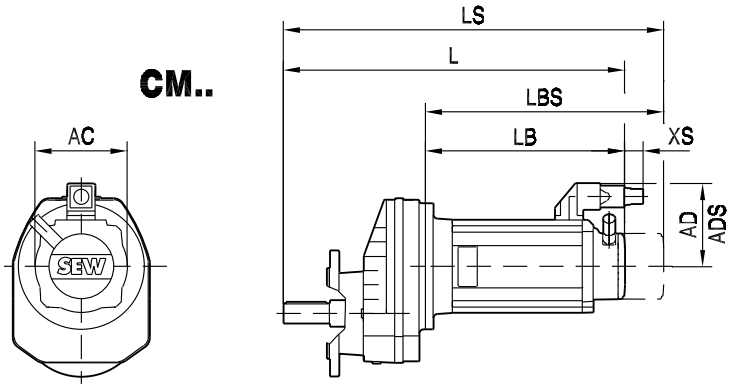
RXF57..

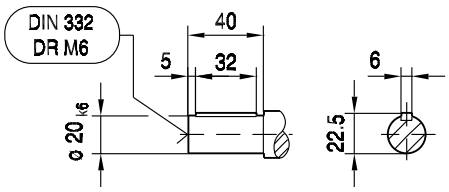
DS56..



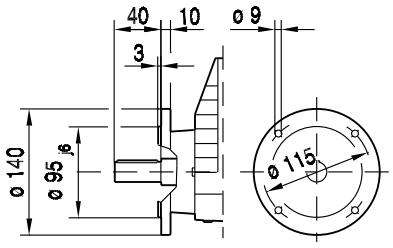


CM..

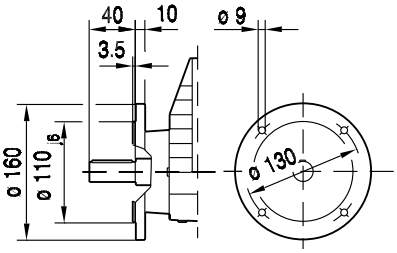




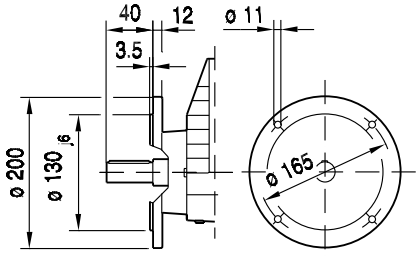
ø 140



ø 160



ø 200



(→ 📖 150)	DS56H	CM71S	CM71M	CM71L	CM90S	CM90M	CM90L	CM112S	CM112M		
AC	73	117	117	117	142	142	142	186	186		
AD	77	122	122	122	140	140	140	162	162		
ADS	77	122	122	122	140	140	140	162	162		
L	440	406	426	466	458	485	543	498	522		
LS	440	488	508	548	554	581	639	588	612		
LB	266	232	252	292	284	311	369	324	348		
LBS	266	314	334	374	380	407	465	414	438		
XS	51	45	45	45	50	50	50	36	36		

8.4 RX 67 / CMP / DS / CM [Nm]

M_{aDyn} [Nm]		CMP						DS			CM							
	i	50S	50M	50L	63S	63M	63L	56M	56L	56H	71S	71M	71L	90S	90M	90L	112S	112M
RX67 1	1.4		14	21	15	29	42			21	23	29	43	54	72	104	113	149
	1.61	8.2	16	24	18	34	48	6.0	12	24	26	34	50	62	82	119	130	>171
	1.86	9.5	19	28	20	39	55	6.9	14	28	30	39	57	72	95	138	150	>187
	2.04	10	21	31	22	43	61	7.6	15	30	33	43	63	79	104	151	165	
	2.4	12	24	36	26	50	72	8.9	18	36	39	51	74	93	123	>163	>163	
	2.54	13	26	38	28	53	76	9.5	19	38	41	54	78	99	130	>162	>162	
	2.89	15	29	44	31	61	86	11	22	43	47	61	89	112	>142			
	3.2	16	32	48	35	67	95	12	24	48	52	67	98	124	>142			
	3.77	19	38	57	41	79	112	14	28	56	61	79	116	>130				
	4.3	22	43	65	47	90		16	32	64	70	91						
	4.53	23	46	68	49	95		17	34	67	73	95						
	5.18	26	52		56			19	39	77								
	6.07	31						22	45									

m [kg]		CMP						DS			CM							
	s	50S	50M	50L	63S	63M	63L	56M	56L	56H	71S	71M	71L	90S	90M	90L	112S	112M
RX67	1	15	16	17	17	19	20	15	16	16	21	22	25	30	32	37	38	43
RXF: + 4.0 kg																		

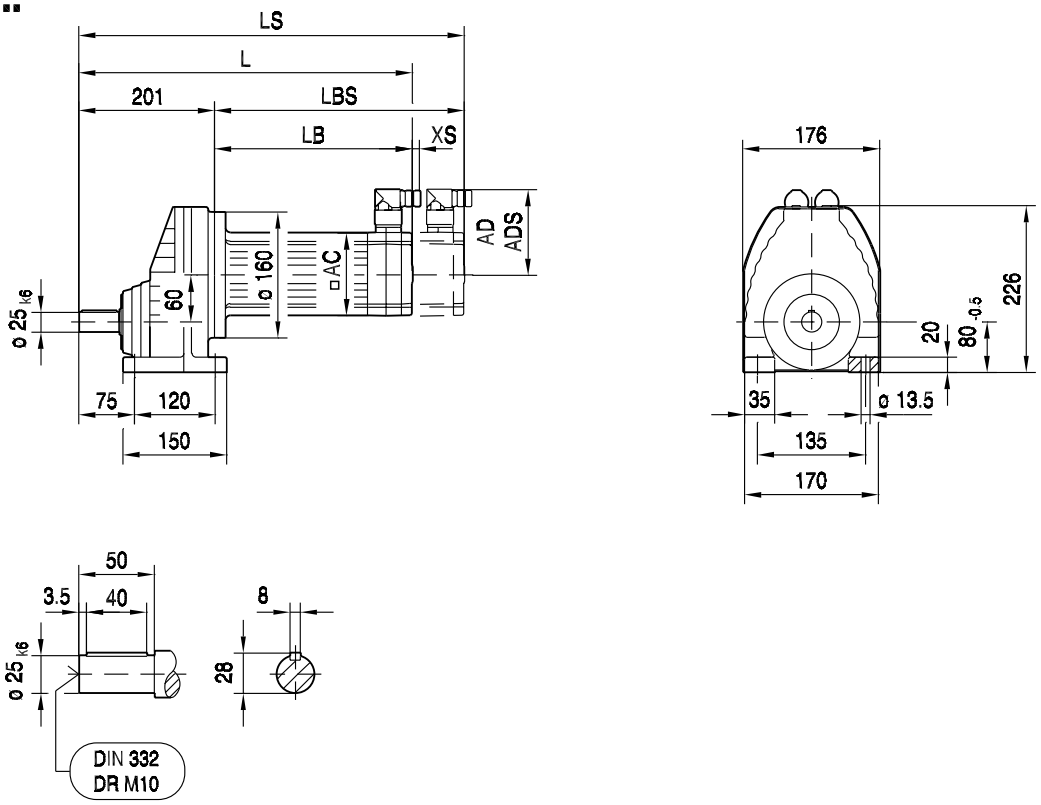
CMP.. / DS.. / CM..		n_{epk}	η	c_T	
	i	[1/min]	[%]	RX [Nm/°]	RXF [Nm/°]
RX67 1	1.4	2507	98	8.13	8.13
	1.61	2883	98	8.13	8.13
	1.86	3330	98	8.13	8.13
	2.04	3653	98	8.13	8.13
	2.4	4297	98	8.13	8.13
	2.54	4500	98	8.13	8.13
	2.89	4500	98	8.13	8.13
	3.2	4500	98	8.13	8.13
	3.77	4500	98	8.13	8.13
	4.3	4500	98	8.13	8.13
	4.53	4500	98	8.13	8.13
	5.18	4500	98	8.13	8.13
	6.07	4500	97	8.13	8.13

CMP.. / DS.. / CM..							F_{Ramax}		F_{Rapk}	
	i	M_{amax} [Nm]	M_{apk} [Nm]	$M_{aNotaus}$ [Nm]	n_{ak} [1/min]	J_G 10^{-4} [kgm^2]	RX [N]	RXF [N]	RX [N]	RXF [N]
RX67 1	1.4	104	156	177	1071	3.2	205	205	5450	5450
	1.61	114	171	194	932	2.6	245	245	5380	5380
	1.86	126	187	214	806	2.1	225	225	5300	5300
	2.04	134	186	228	735	1.8	230	230	5310	5310
	2.4	123	163	209	1125	1.4	1530	1530	5460	5460
	2.54	118	162	201	1339	1.3	2000	2000	5470	5470
	2.89	106	142	180	1972	1.0	2640	2640	5590	5590
	3.2	100	142	170	2188	0.88	2800	2800	5590	5590
	3.77	87	130	148	1857	0.69	3090	3090	5660	5660
	4.3	80	109	136	1628	0.47	3300	3300	5770	5770
	4.53	82	110	139	1545	0.42	3350	3350	5760	5760
	5.18	75	110	128	1351	0.34	3580	3580	5760	5760
	6.07	43	64	73	1153	0.28	4000	4000	5970	5970

8.5 RX 67 / CMP / DS / CM [mm]

01 015 00 07

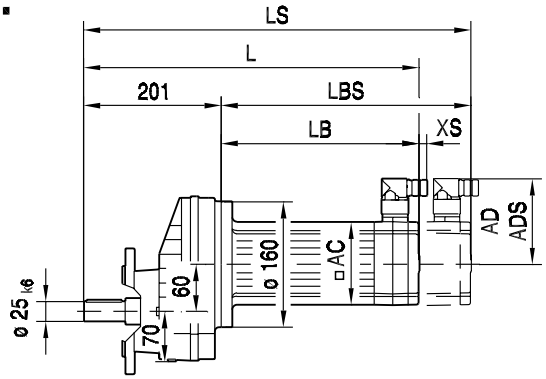
RX67..

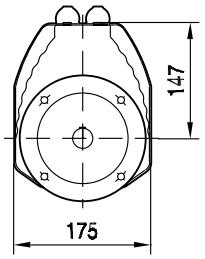


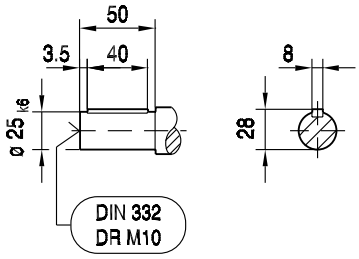
(→ 📖 150)	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L		
AC	73	73	73	88	88	88		
AD	82	82	82	89	89	89		
ADS	82	82	82	89	89	89		
L	340	379	418	374	424	474		
LS	369	408	447	403	453	503		
LB	139	178	217	173	223	273		
LBS	168	207	246	202	252	302		
XS	18	18	18	14	14	14		

01 016 00 07

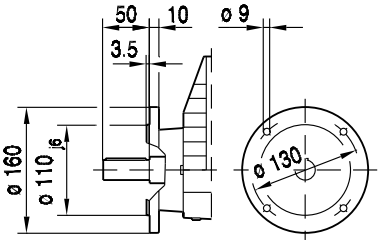
RXF67..



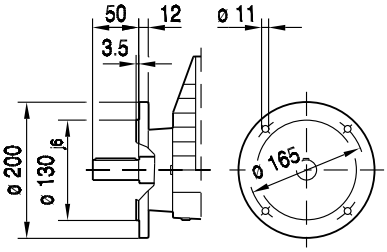




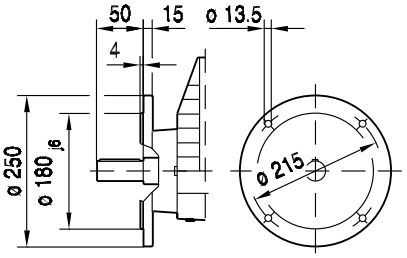
ø 160



ø 200



ø 250

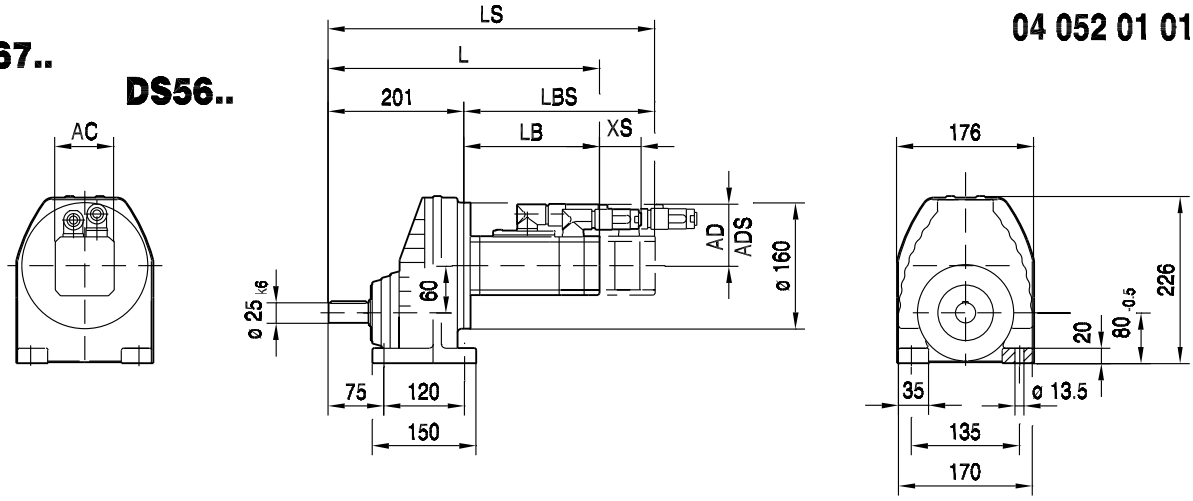


(→ 📖 150)	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L		
AC	73	73	73	88	88	88		
AD	82	82	82	89	89	89		
ADS	82	82	82	89	89	89		
L	340	379	418	374	424	474		
LS	369	408	447	403	453	503		
LB	139	178	217	173	223	273		
LBS	168	207	246	202	252	302		
XS	18	18	18	14	14	14		

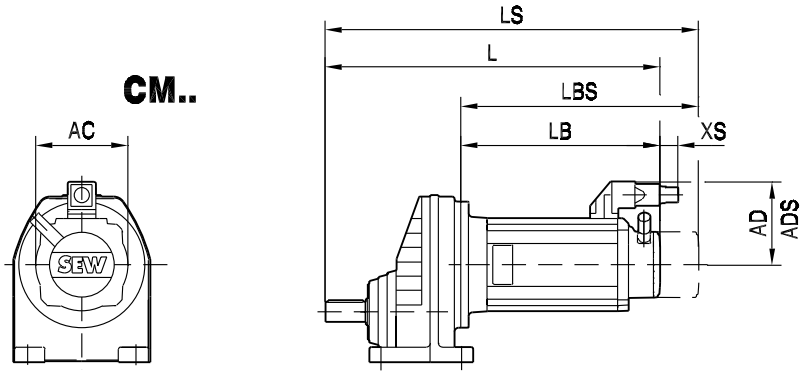
RX67..

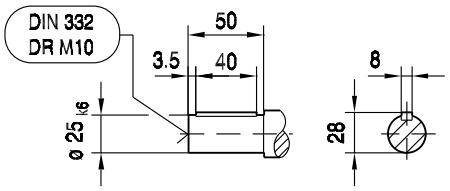
DS56..

04 052 01 01



CM..



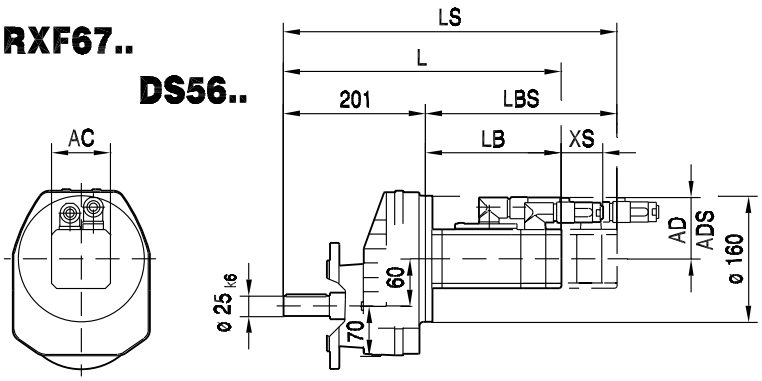


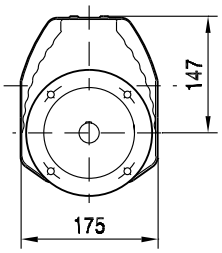
(→ 📖 150)	DS56H	CM71S	CM71M	CM71L	CM90S	CM90M	CM90L	CM112S	CM112M		
AC	73	117	117	117	142	142	142	186	186		
AD	77	122	122	122	140	140	140	162	162		
ADS	77	122	122	122	140	140	140	162	162		
L	467	433	453	493	485	512	570	525	549		
LS	467	515	535	575	581	608	666	615	639		
LB	266	232	252	292	284	311	369	324	348		
LBS	266	314	334	374	380	407	465	414	438		
XS	51	45	45	45	50	50	50	36	36		

04 053 01 01

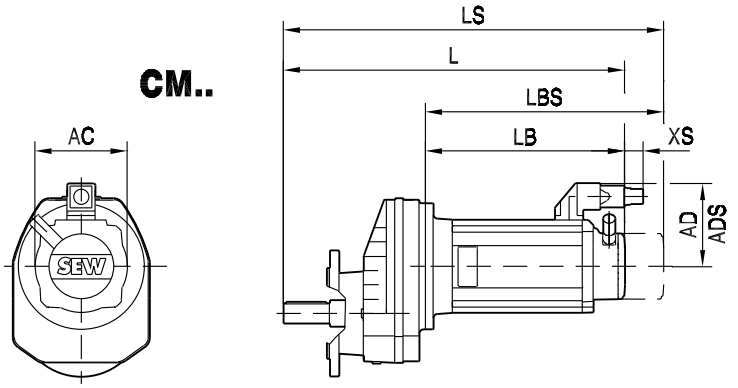
RXF67..

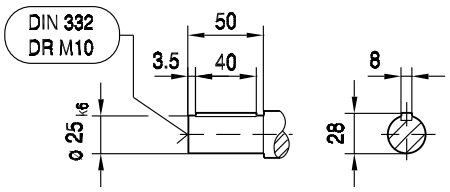
DS56..



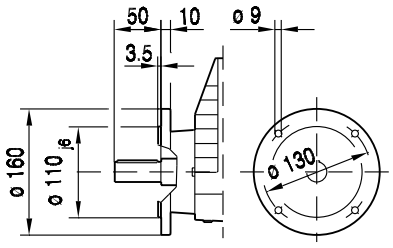


CM..

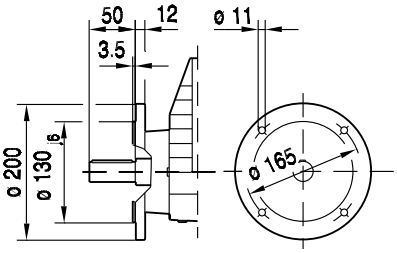




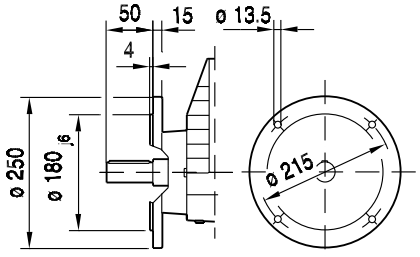
ø 160



ø 200



ø 250



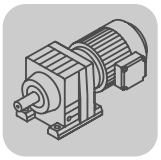
(→ 📖 150)	DS56H	CM71S	CM71M	CM71L	CM90S	CM90M	CM90L	CM112S	CM112M		
AC	73	117	117	117	142	142	142	186	186		
AD	77	122	122	122	140	140	140	162	162		
ADS	77	122	122	122	140	140	140	162	162		
L	467	433	453	493	485	512	570	525	549		
LS	467	515	535	575	581	608	666	615	639		
LB	266	232	252	292	284	311	369	324	348		
LBS	266	314	334	374	380	407	465	414	438		
XS	51	45	45	45	50	50	50	36	36		

8.6 RX 77 / CMP / CM [Nm]

M_{aDyn} [Nm]		CMP			CM								
	i	63S	63M	63L	71S	71M	71L	90S	90M	90L	112S	112M	112L
RX77 1	1.42	15	30	42	23	30	44	55	73	105	115	151	219
	1.67	18	35	50	27	35	51	65	85	124	135	178	258
	1.88	20	39	56	30	40	58	73	96	139	152	200	>280
	2.13	23	45	63	34	45	66	83	109	158	172	226	>300
	2.43	26	51	72	39	51	75	94	124	180	196	258	>305
	2.7	29	57	80	44	57	83	105	138	200	218		
	3.08	34	65	92	50	65	95	120	158	228	248		
	3.25	35	68	97	53	68	100	126	166	241	>260		
	3.7	40	78	110	60	78	114	144	189				
	4.04	44	85	120	65	85	124	157	207				
	4.73	51	99	141	76	100	146	184					
	5.35	58	112		87	113							
	5.63	61	118		91	119							
	6.41	70											
	7.47												
	8												

m [kg]		CMP			CM								
	s	63S	63M	63L	71S	71M	71L	90S	90M	90L	112S	112M	112L
RX77	1	26	28	29	30	31	35	39	42	47	48	52	67
RXF: + 2.3 kg													

CMP.. / CM..				c_T	
	i	n_{epk} [1/min]	η [%]	RX [Nm/']	RXF [Nm/']
RX77 1	1.42	2164	98	16.83	16.83
	1.67	2545	98	16.83	16.83
	1.88	2865	98	16.83	16.83
	2.13	3246	98	16.83	16.83
	2.43	3703	98	16.83	16.83
	2.7	4114	98	16.83	16.83
	3.08	4500	98	16.83	16.83
	3.25	4500	98	16.83	16.83
	3.7	4500	98	16.83	16.83
	4.04	4500	98	16.83	16.83
	4.73	4500	98	16.83	16.83
	5.35	4500	98	16.83	16.83
	5.63	4500	98	16.83	16.83
	6.41	4500	98	16.83	16.83
	7.47	4500	97	16.83	16.83
	8	4500	97	16.83	16.83



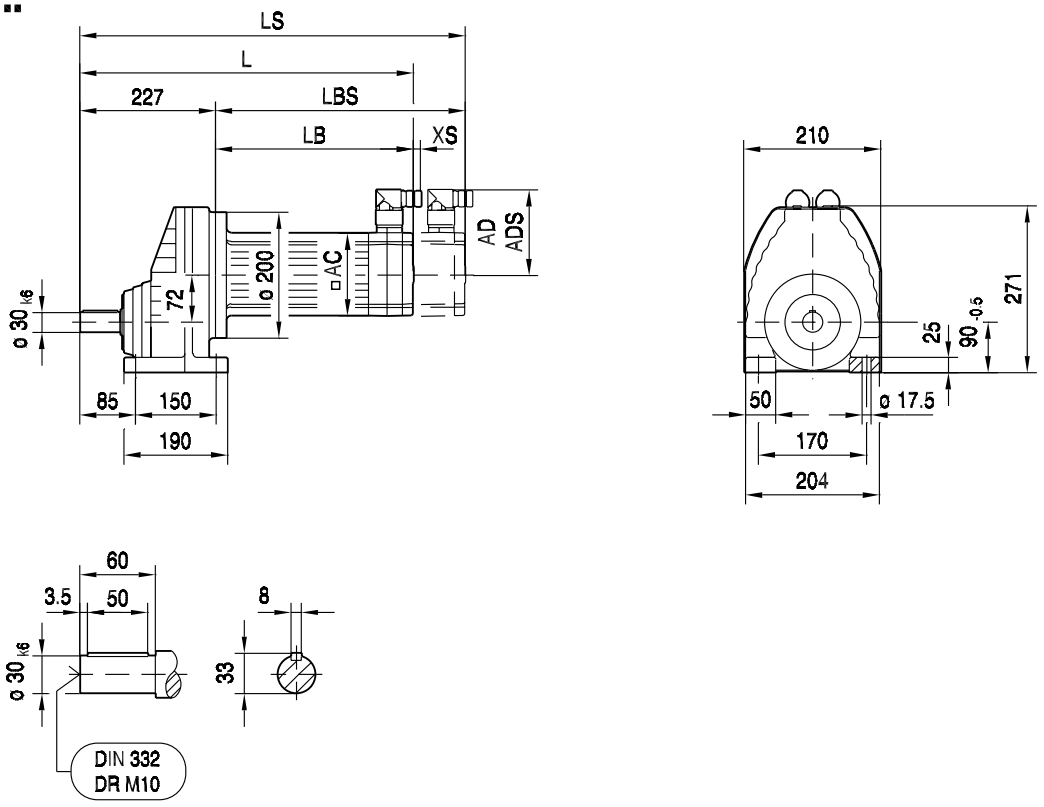
R..CMP, DS, CM
RX 77 / CMP / CM [Nm]

CMP.. / CM..							F_{Ramax}		F_{Rapk}	
	i	M_{amax} [Nm]	M_{apk} [Nm]	$M_{aNotaus}$ [Nm]	n_{ak} [1/min]	$J_G\ 10^{-4}$ [kgm^2]	RX [N]	RXF [N]	RX [N]	RXF [N]
RX77 1	1.42	155	232	264	1056	7.6	315	315	10000	10000
	1.67	173	259	294	898	6.0	315	315	10000	10000
	1.88	187	280	318	798	5.0	335	335	10000	10000
	2.13	200	300	340	704	4.1	435	435	10000	10000
	2.43	215	305	366	658	3.4	510	510	10000	10000
	2.7	215	285	366	741	3.0	1110	1110	10000	10000
	3.08	193	260	328	1104	2.5	2560	2560	10000	10000
	3.25	182	260	309	1385	2.3	3200	3200	10000	10000
	3.7	153	215	260	1892	1.9	4290	4290	10000	10000
	4.04	143	214	243	1733	1.6	4500	4500	10000	10000
	4.73	123	184	209	1480	1.3	4900	4900	10000	10000
	5.35	103	154	175	1308	0.90	5240	5240	10000	10000
	5.63	110	165	187	1243	0.81	5300	5300	10000	10000
	6.41	103	154	175	1092	0.66	5600	5600	10000	10000
	7.47	53	79	90	937	0.53	6200	6200	10000	10000
	8	57	85	97	875	0.46	6330	6330	10000	10000

8.7 RX 77 / CMP / CM [mm]

01 017 00 07

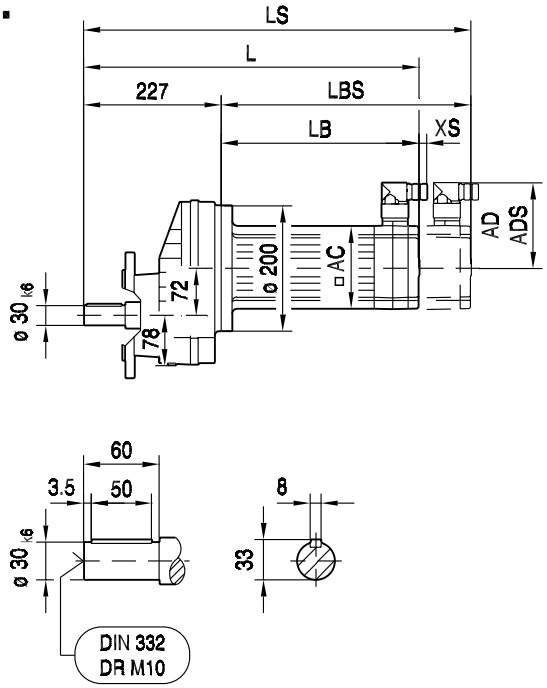
RX77..

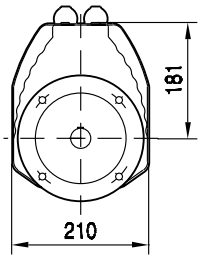


(→ 📖 150)	CMP63S	CMP63M	CMP63L					
AC	88	88	88					
AD	89	89	89					
ADS	89	89	89					
L	394	444	494					
LS	423	473	523					
LB	167	217	267					
LBS	196	246	296					
XS	14	14	14					

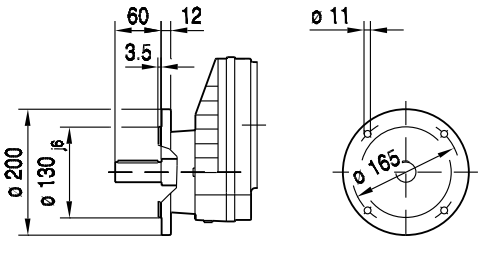
01 018 00 07

RXF77..

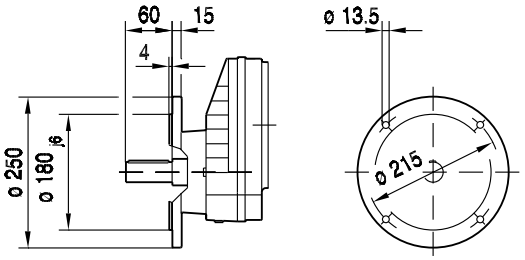




ø 200



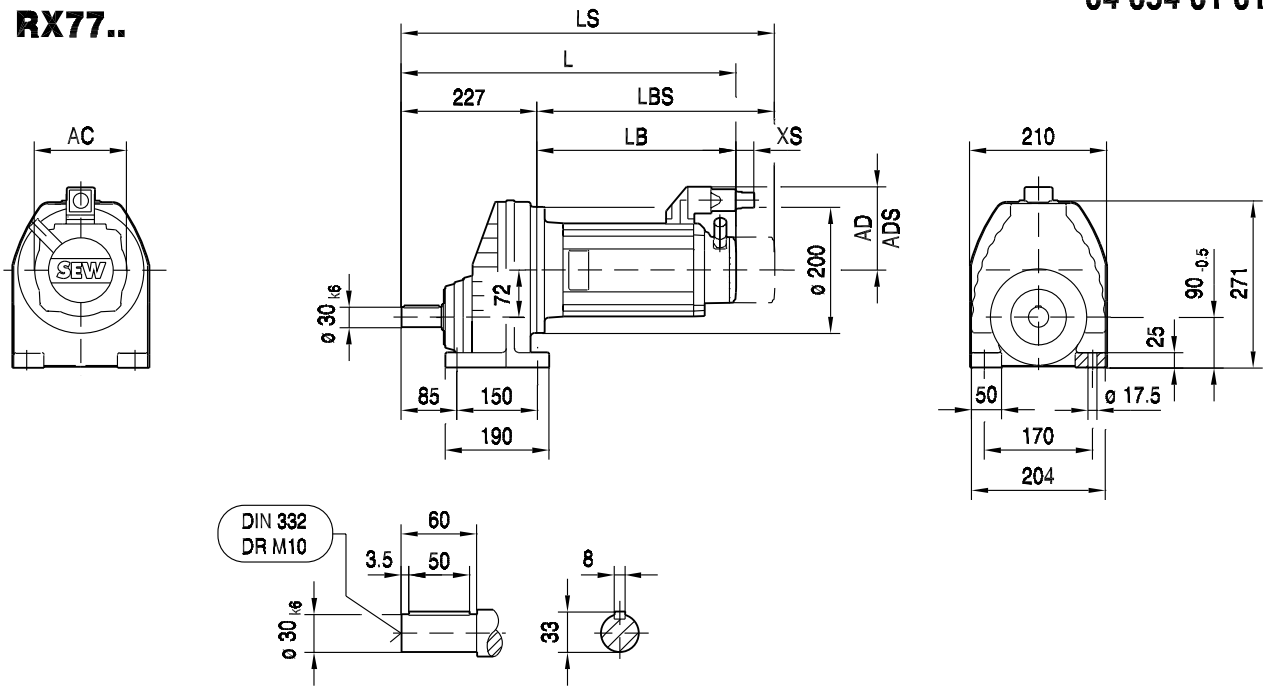
ø 250



(→ 150)	CMP63S	CMP63M	CMP63L					
AC	88	88	88					
AD	89	89	89					
ADS	89	89	89					
L	394	444	494					
LS	423	473	523					
LB	167	217	267					
LBS	196	246	296					
XS	14	14	14					

RX77..

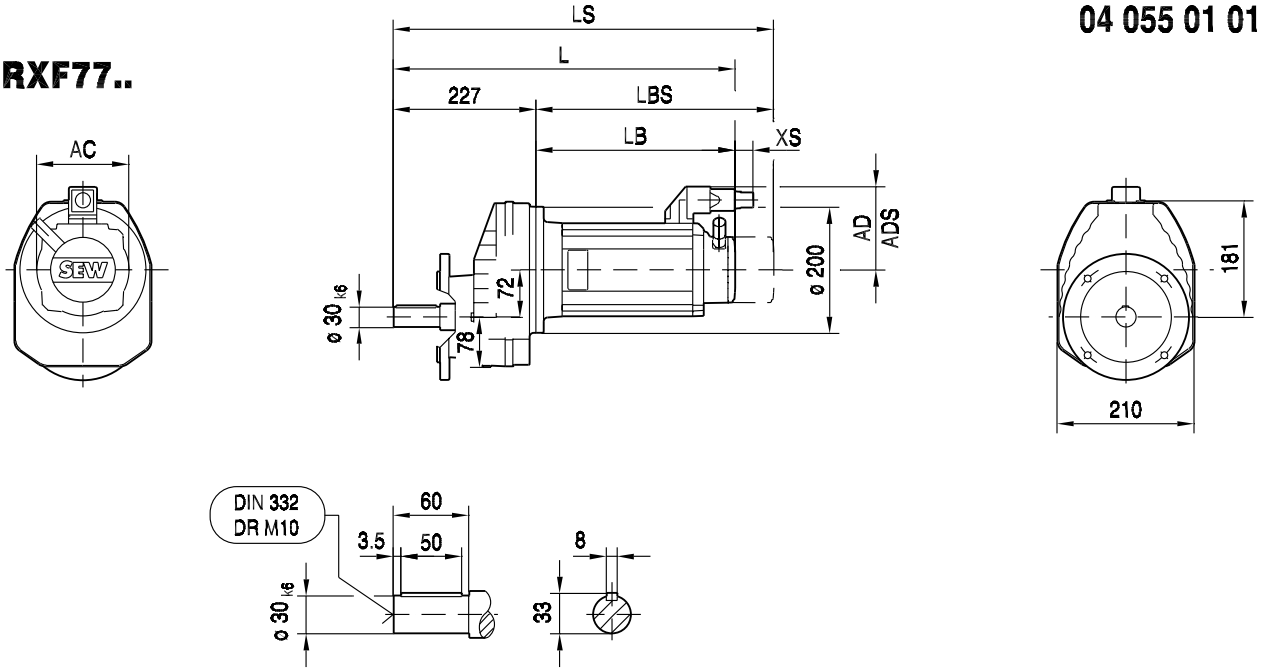
04 054 01 01



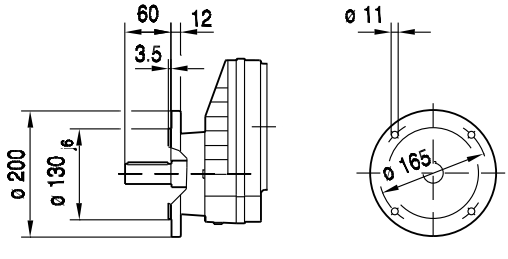
(→ 150)	CM71S	CM71M	CM71L	CM90S	CM90M	CM90L	CM112S	CM112M	CM112L		
AC	117	117	117	142	142	142	186	186	186		
AD	122	122	122	140	140	140	162	162	162		
ADS	122	122	122	140	140	140	162	162	162		
L	453	473	512	503	530	584	539	566	628		
LS	535	555	594	599	626	680	629	656	718		
LB	226	246	285	276	303	357	312	339	401		
LBS	308	328	367	372	399	453	402	429	491		
XS	45	45	45	50	50	50	36	36	36		

RXF77..

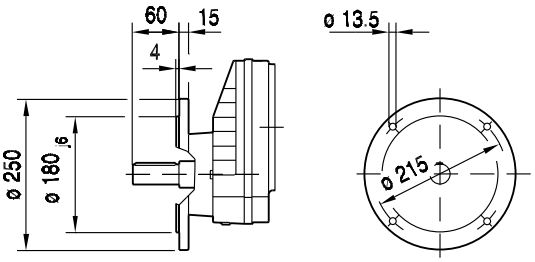
04 055 01 01



ø 200



ø 250



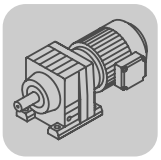
(→ 📖 150)	CM71S	CM71M	CM71L	CM90S	CM90M	CM90L	CM112S	CM112M	CM112L		
AC	117	117	117	142	142	142	186	186	186		
AD	122	122	122	140	140	140	162	162	162		
ADS	122	122	122	140	140	140	162	162	162		
L	453	473	512	503	530	584	539	566	628		
LS	535	555	594	599	626	680	629	656	718		
LB	226	246	285	276	303	357	312	339	401		
LBS	308	328	367	372	399	453	402	429	491		
XS	45	45	45	50	50	50	36	36	36		

8.8 RX 87 / CM [Nm]

M_{aDyn} [Nm]		CM						
	i	90S	90M	90L	112S	112M	112L	112H
RX87 1	1.39			103	112	148	215	324
	1.6	62	82	119	129	170	247	373
	1.93	75	99	143	156	205	298	450
	2.15	83	110	159	173	229	332	501
	2.48	96	127	184	200	264	383	>540
	2.76	107	141	204	223	293	426	>535
	3.09	120	158	229	249	329	477	
	3.48	135	178	258	281	370	537	
	3.78	147	193	280	305			
	4.5	175	230	333	363			
	5.07	197	259					
	5.56	216	284					
	6.45	250						
	7.2							
	7.63							
	8.65							

m [kg]		CM						
	s	90S	90M	90L	112S	112M	112L	112H
RX87	1	57	59	64	64	68	83	90
RXF: + 5.0 kg								

CM..		n_{epk}	η	c_T	
	i	[1/min]	[%]	RX [Nm/']	RXF [Nm/']
RX87 1	1.39	2170	98	33.62	33.62
	1.6	2498	98	33.62	33.62
	1.93	3013	98	33.62	33.62
	2.15	3356	98	33.62	33.62
	2.48	3871	98	33.62	33.62
	2.76	4308	98	33.62	33.62
	3.09	4500	98	33.62	33.62
	3.48	4500	98	33.62	33.62
	3.78	4500	98	33.62	33.62
	4.5	4500	98	33.62	33.62
	5.07	4500	98	33.62	33.62
	5.56	4500	98	33.62	33.62
	6.45	4500	98	33.62	33.62
	7.2	4500	98	33.62	33.62
	7.63	4500	98	33.62	33.62
	8.65	4500	98	33.62	33.62



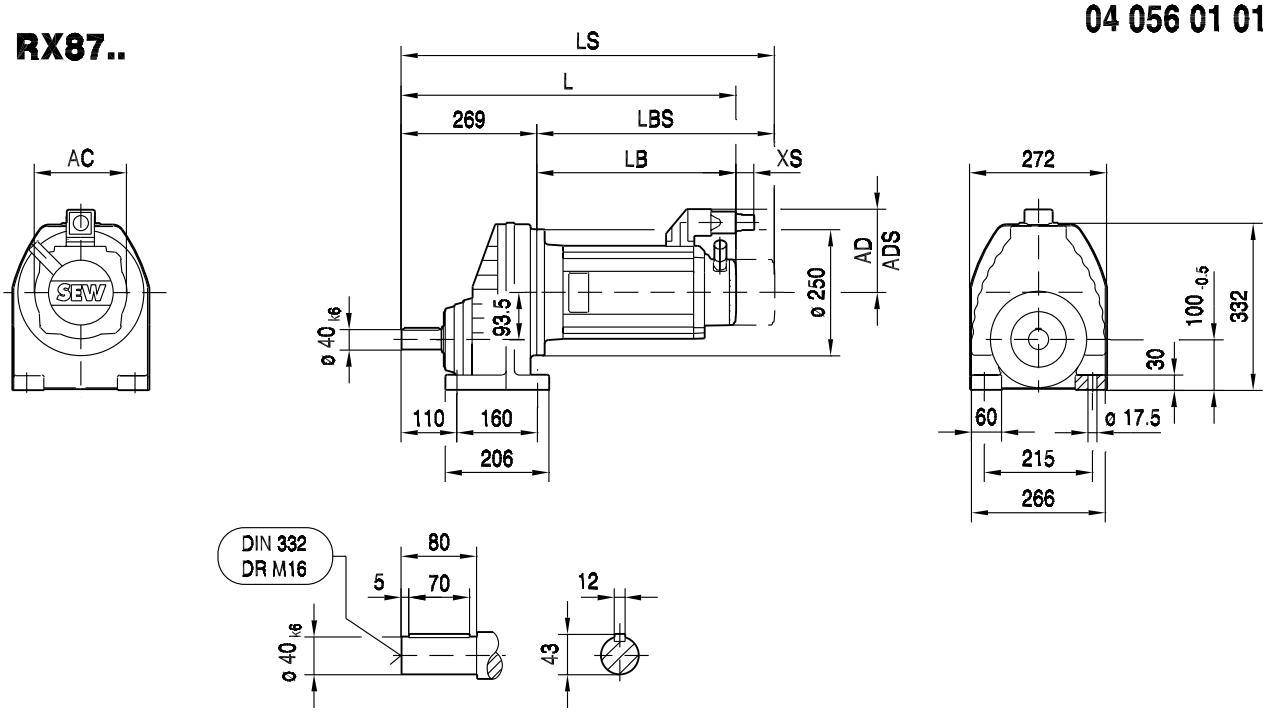
R..CMP, DS, CM
RX 87 / CM [Nm]

CM..	i	M_{amax} [Nm]	M_{apk} [Nm]	$M_{aNotaus}$ [Nm]	n_{ak} [1/min]	$J_G\ 10^{-4}$ [kgm^2]	F_{Ramax} RX [N]	F_{Ramax} RXF [N]	F_{Rapk} RX [N]	F_{Rapk} RXF [N]
RX87 1	1.39	290	435	493	1007	25	74	74	12700	12700
	1.6	315	472	536	875	19	74	74	12500	12500
	1.93	355	532	604	725	15	185	185	12300	12300
	2.15	385	540	655	651	13	42	42	12300	12300
	2.48	405	540	689	605	11	470	470	12300	12300
	2.76	405	535	689	652	9.4	1200	1200	12400	12400
	3.09	405	540	689	744	8.1	1950	1950	12400	12400
	3.48	405	540	689	805	6.9	2730	2730	12400	12400
	3.78	305	457	519	1852	6.2	5030	5030	12700	12700
	4.5	290	435	493	1556	4.8	5500	5500	12800	12800
	5.07	250	375	425	1381	3.9	5980	5980	13000	13000
	5.56	225	337	383	1259	3.4	6320	6320	13000	13000
	6.45	192	288	326	1085	2.7	6850	6850	13000	13000
	7.2	140	210	238	972	1.8	7380	7380	13000	13000
	7.63	149	223	253	917	1.6	7490	7490	13000	13000
	8.65	139	208	236	809	1.3	7890	7890	13000	13000

8.9 RX 87 / CM [mm]

04 056 01 01

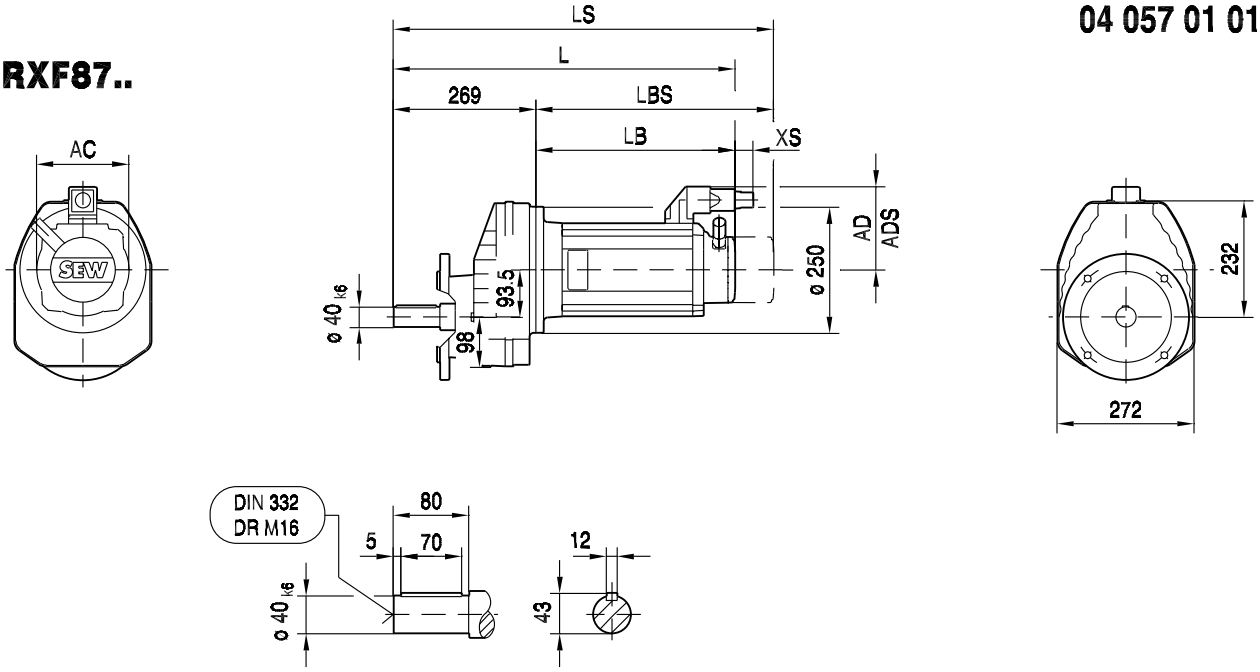
RX87..



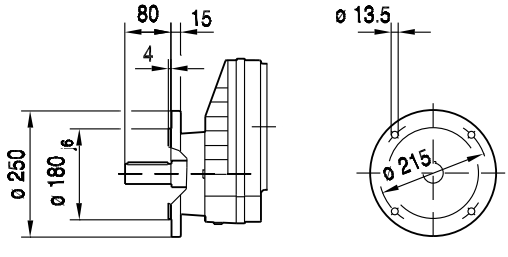
(→ 150)	CM90S	CM90M	CM90L	CM112S	CM112M	CM112L	CM112H				
AC	142	142	142	186	186	186	186				
AD	140	140	140	162	162	162	162				
ADS	140	140	140	162	162	162	162				
L	541	568	622	576	603	665	795				
LS	637	664	718	666	693	755	860				
LB	272	299	353	307	334	396	526				
LBS	368	395	449	397	424	486	591				
XS	50	50	50	36	36	36	36				

04 057 01 01

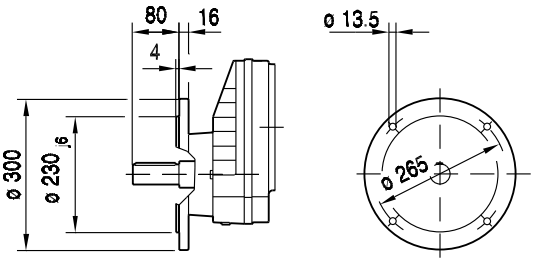
RXF87..



ø 250



ø 300



(→ 📖 150)	CM90S	CM90M	CM90L	CM112S	CM112M	CM112L	CM112H				
AC	142	142	142	186	186	186	186				
AD	140	140	140	162	162	162	162				
ADS	140	140	140	162	162	162	162				
L	541	568	622	576	603	665	795				
LS	637	664	718	666	693	755	860				
LB	272	299	353	307	334	396	526				
LBS	368	395	449	397	424	486	591				
XS	50	50	50	36	36	36	36				

8.10 RX 97 / CM [Nm]

M_{aDyn} [Nm]		CM						
	i	90S	90M	90L	112S	112M	112L	112H
RX97 1	1.42			105	115	151	219	331
	1.64			122	132	174	253	383
	1.96			145	158	208	303	457
	2.24	87	115	166	181	238	346	522
	2.64	102	135	196	213	281	407	616
	2.92	113	149	216	236	310	451	681
	3.3	128	169	244	266	351	509	770
	3.64	141	186	270	294	387	562	>800
	4.04	157	207	299	326	430	624	
	4.52	175	231	335	365	481	698	
	4.91	191	251	364	396			
	5.79	225	296	429	467			
	6.56	255	336					
	7.16	278	366					
	8.23	319						

m [kg]		CM						
	s	90S	90M	90L	112S	112M	112L	112H
RX97	1	81	83	88	88	92	105	115
RXF: + 8.6 kg								

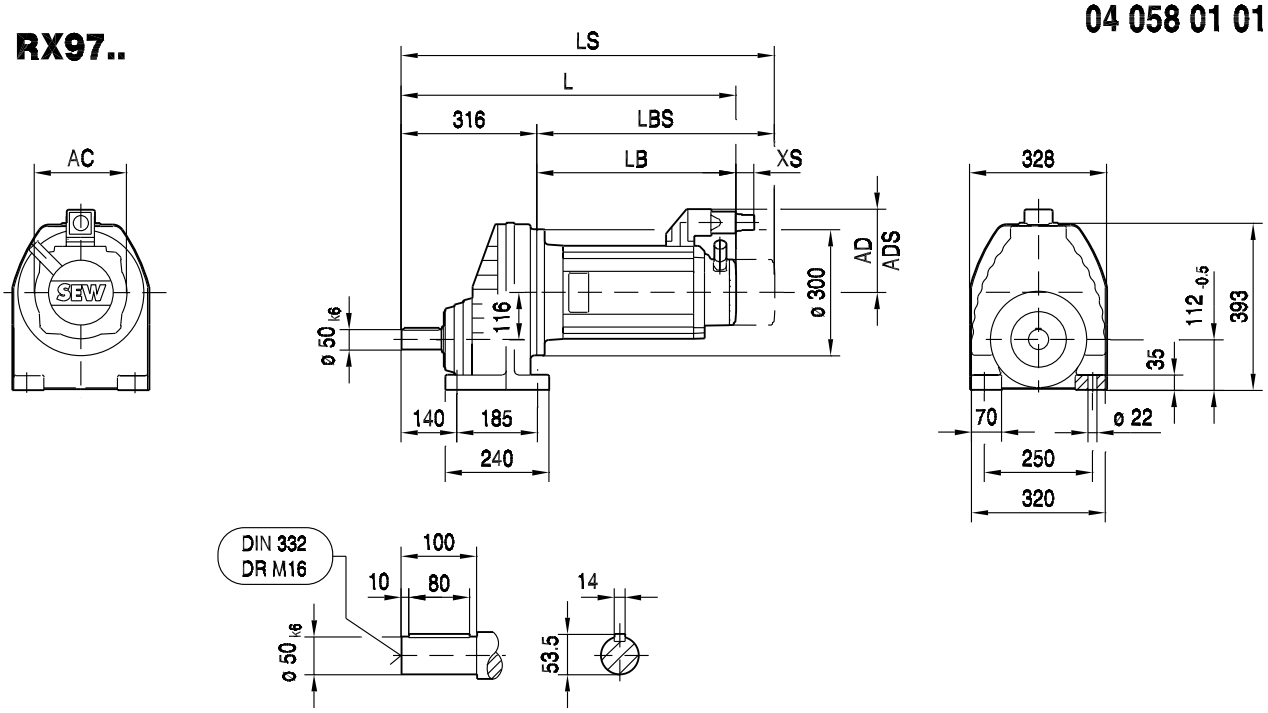
CM..				c_T	
	i	n_{epk} [1/min]	η [%]	RX [Nm/']	RXF [Nm/']
RX97 1	1.42	2187	98	58.39	58.39
	1.64	2526	98	58.39	58.39
	1.96	3019	98	58.39	58.39
	2.24	3450	98	58.39	58.39
	2.64	4066	98	58.39	58.39
	2.92	4497	98	58.39	58.39
	3.3	4500	98	58.39	58.39
	3.64	4500	98	58.39	58.39
	4.04	4500	98	58.39	58.39
	4.52	4500	98	58.39	58.39
	4.91	4500	98	58.39	58.39
	5.79	4500	98	58.39	58.39
	6.56	4500	98	58.39	58.39
	7.16	4500	98	58.39	58.39
	8.23	4500	98	58.39	58.39

CM..							F_{Ramax}		F_{Rapk}	
	i	M_{amax} [Nm]	M_{apk} [Nm]	$M_{aNotaus}$ [Nm]	n_{ak} [1/min]	J_G 10^{-4} [kgm^2]	RX [N]	RXF [N]	RX [N]	RXF [N]
RX97 1	1.42	455	682	774	986	61	132	132	20000	20000
	1.64	505	757	859	854	51	51	51	20000	20000
	1.96	570	800	969	714	41	19	19	20000	20000
	2.24	595	800	1012	670	33	495	495	20000	20000
	2.64	595	800	1012	795	28	1980	1980	20000	20000
	2.92	595	800	1012	856	24	2810	2810	20000	20000
	3.3	595	800	1012	909	20	3730	3730	20000	20000
	3.64	595	800	1012	962	18	4530	4530	20000	20000
	4.04	595	800	1012	1015	15	5380	5380	20000	20000
	4.52	595	800	1012	1062	13	6180	6180	20000	20000
	4.91	395	592	672	1426	12	7220	7220	20000	20000
	5.79	420	630	714	1209	9.2	7630	7630	20000	20000
	6.56	300	450	510	1067	5.8	8500	8500	20000	20000
	7.16	260	390	442	978	5.1	8950	8950	20000	20000
	8.23	225	337	383	851	4.0	9560	9560	20000	20000

8.11 RX 97 / CM [mm]

04 058 01 01

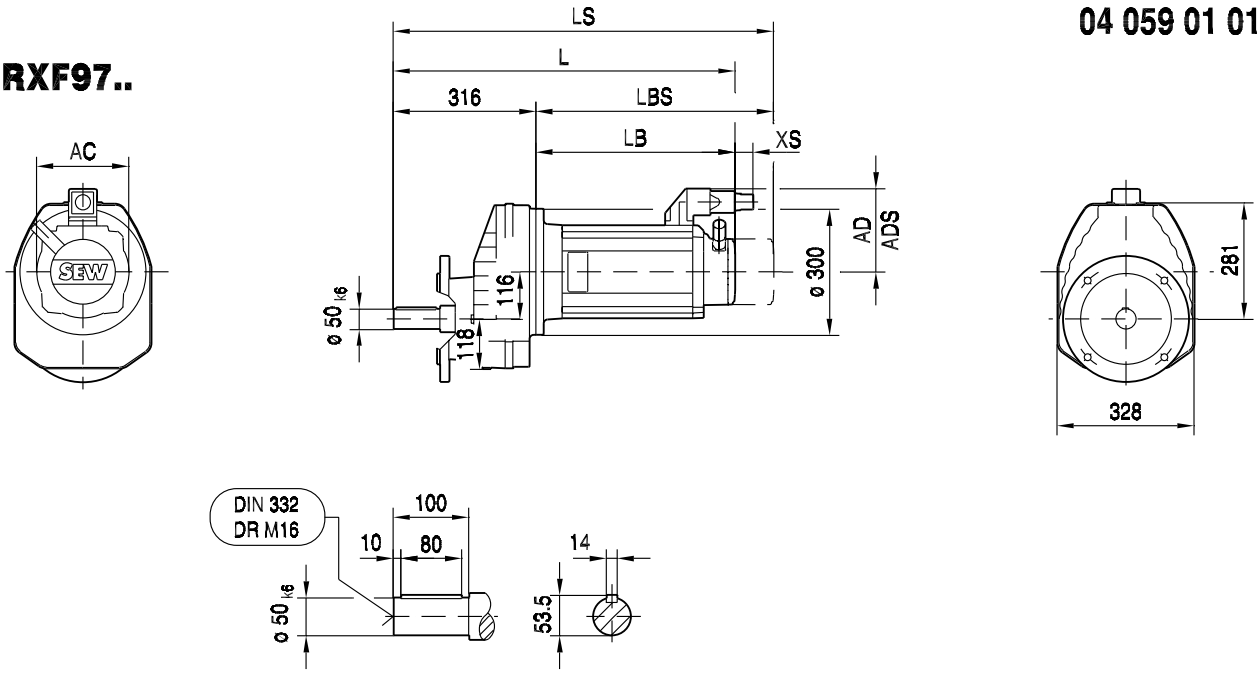
RX97..



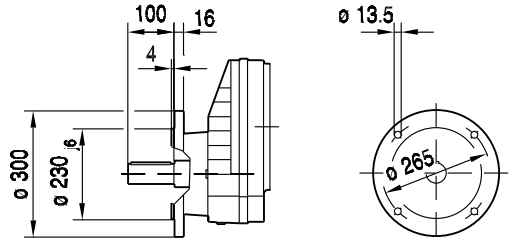
(→ 150)	CM90S	CM90M	CM90L	CM112S	CM112M	CM112L	CM112H				
AC	142	142	142	186	186	186	186				
AD	140	140	140	162	162	162	162				
ADS	140	140	140	162	162	162	162				
L	582	609	663	618	645	707	837				
LS	678	705	759	708	735	797	902				
LB	266	293	347	302	329	391	521				
LBS	362	389	443	392	419	481	586				
XS	50	50	50	36	36	36	36				

RXF97..

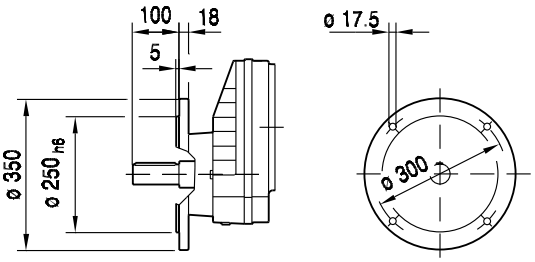
04 059 01 01



ø 300



ø 350



(→ 📖 150)	CM90S	CM90M	CM90L	CM112S	CM112M	CM112L	CM112H				
AC	142	142	142	186	186	186	186				
AD	140	140	140	162	162	162	162				
ADS	140	140	140	162	162	162	162				
L	582	609	663	618	645	707	837				
LS	678	705	759	708	735	797	902				
LB	266	293	347	302	329	391	521				
LBS	362	389	443	392	419	481	586				
XS	50	50	50	36	36	36	36				

8.12 RX 107 / CM [Nm]

M_{aDyn} [Nm]		CM			
	i	112S	112M	112L	112H
RX107 1	1.44		153	222	336
	1.71	138	182	264	399
	1.95	157	207	301	455
	2.3	186	245	355	536
	2.64	213	281	407	616
	3.07	248	326	474	716
	3.38	273	359	522	788
	3.81	307	405	588	889
	4.2	339	447	648	980
	4.65	375	494	718	
	5.19	419	552	801	
	5.61	452			
	6.63	535			

m [kg]		CM			
	s	112S	112M	112L	112H
RX107	1	125	125	140	145
RXF: + 16.8 kg					

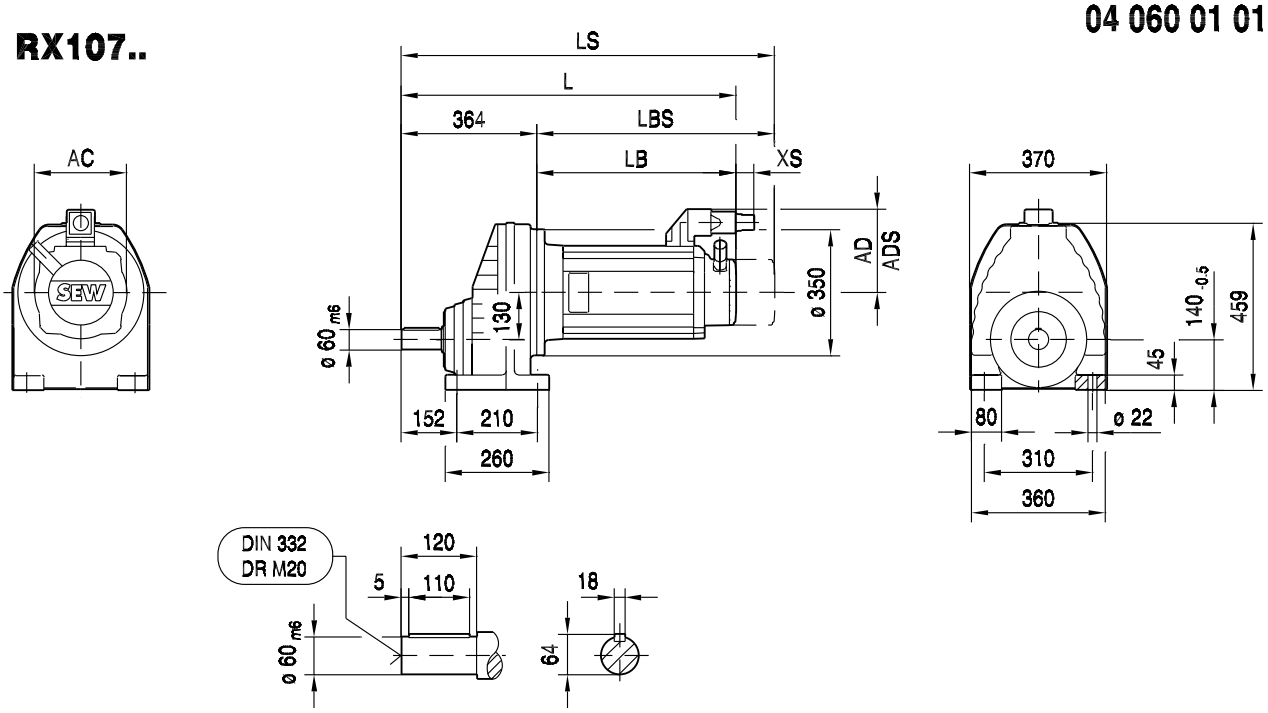
CM..				c_T	
	i	n_{epk} [1/min]	η [%]	RX [Nm/°]	RXF [Nm/°]
RX107 1	1.44	2101	98	92.86	92.86
	1.71	2495	98	92.86	92.86
	1.95	2845	98	92.86	92.86
	2.3	3356	98	92.86	92.86
	2.64	3852	98	92.86	92.86
	3.07	4479	98	92.86	92.86
	3.38	4500	98	92.86	92.86
	3.81	4500	98	92.86	92.86
	4.2	4500	98	92.86	92.86
	4.65	4500	98	92.86	92.86
	5.19	4500	98	92.86	92.86
	5.61	4500	98	92.86	92.86
	6.63	4500	98	92.86	92.86

CM..							F_{Ramax}		F_{Rapk}	
	i	M_{amax} [Nm]	M_{apk} [Nm]	$M_{aNotaus}$ [Nm]	n_{ak} [1/min]	J_G 10^{-4} [kgm^2]	RX [N]	RXF [N]	RX [N]	RXF [N]
RX107 1	1.44	645	967	1097	972	111	315	315	30000	30000
	1.71	705	1057	1199	819	84	480	480	30000	30000
	1.95	765	1090	1301	769	70	555	555	30000	30000
	2.3	830	1110	1411	696	57	900	900	30000	30000
	2.64	830	1120	1411	720	47	2160	2160	30000	30000
	3.07	830	1130	1411	814	39	3600	3600	30000	30000
	3.38	830	1130	1411	858	34	4490	4490	30000	30000
	3.81	830	1140	1411	919	29	5550	5550	30000	30000
	4.2	830	1150	1411	952	25	6420	6420	30000	30000
	4.65	695	1042	1182	1505	19	7450	7450	30000	30000
	5.19	695	1042	1182	1349	17	7850	7850	30000	30000
	5.61	455	682	774	1248	15	9080	9080	30000	30000
	6.63	460	690	782	1056	12	9700	9700	30000	30000

8.13 RX 107 / CM [mm]

04 060 01 01

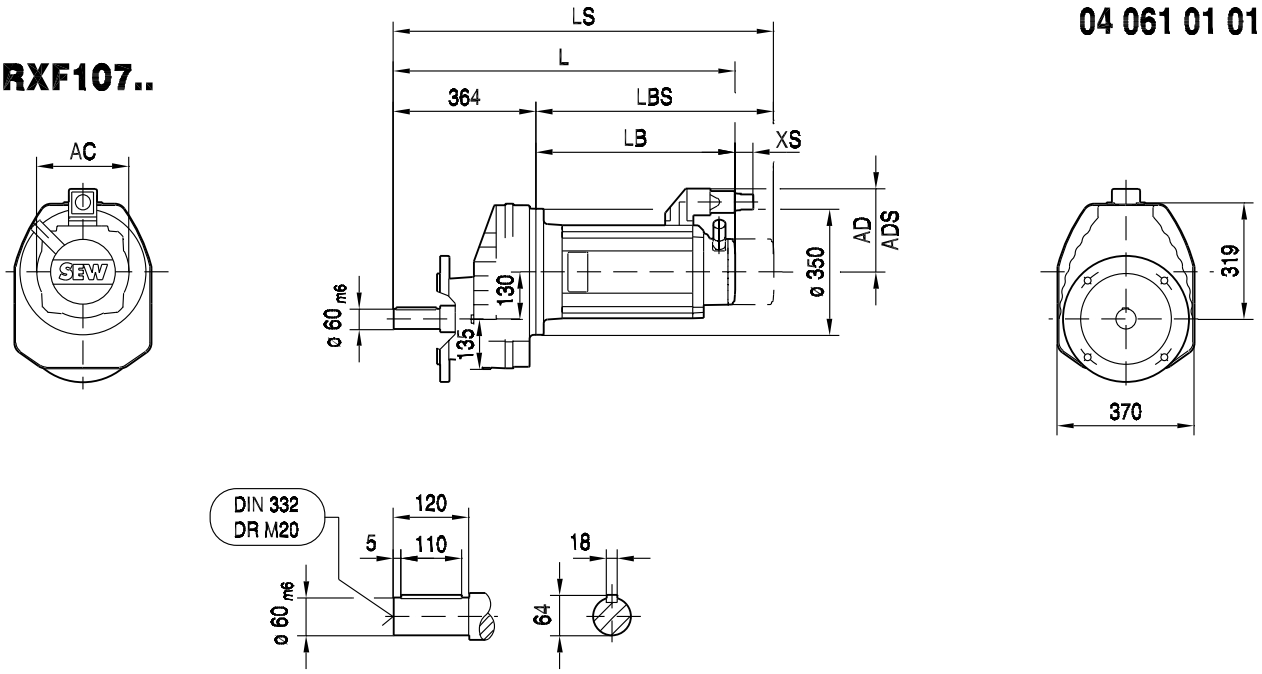
RX107..



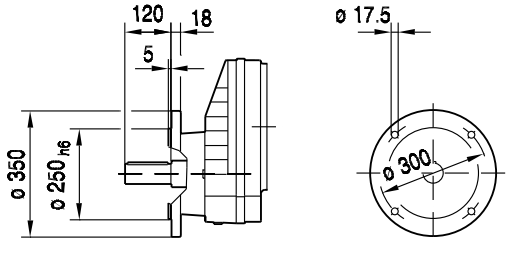
(→ 150)	CM112S	CM112M	CM112L	CM112H							
AC	186	186	186	186							
AD	162	162	162	162							
ADS	162	162	162	162							
L	660	687	749	879							
LS	750	777	839	944							
LB	296	323	385	515							
LBS	386	413	475	580							
XS	36	36	36	36							

RXF107..

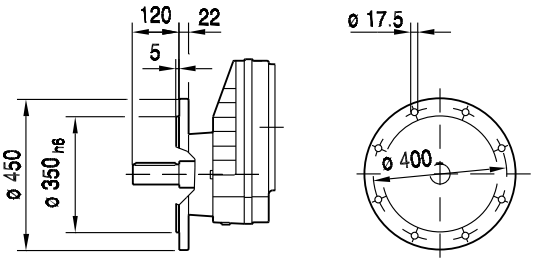
04 061 01 01



ø 350



ø 450



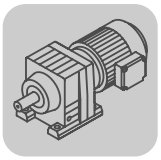
(→ 📖 150)	CM112S	CM112M	CM112L	CM112H							
AC	186	186	186	186							
AD	162	162	162	162							
ADS	162	162	162	162							
L	660	687	749	879							
LS	750	777	839	944							
LB	296	323	385	515							
LBS	386	413	475	580							
XS	36	36	36	36							

8.14 R 07 / CMP [Nm]

M_{aDyn} [Nm]	i	CMP 40M
R07 2	3.21	12
	3.68	14
	3.95	15
	4.57	17
	4.92	18
	5.76	21
	6.83	25
	7.48	28
	7.85	29
	9.01	33
	9.67	35
	11.18	41
	12.06	44
	14.12	>51
	16.73	>51
	18.31	>51
R07 3	21.73	>51
	23.32	>51
	26.97	>51
	29.08	>51
	34.05	>51
	38.51	>51
	40.34	>51
	41.31	>51
	44.16	>51
	47.78	>51
	51.52	>51
	60.32	>51
	71.47	>51
	78.24	>51

m [kg]	s	CMP 40M
R07	2	4.2
R07	3	4.3
RF: + 0.0 kg		

CMP..	i	n_{epk} [1/min]	η [%]	c_T R [Nm/']	c_T RF [Nm/']
R07 2	3.21	3872	97	2.78	2.68
	3.68	4439	97	2.78	2.68
	3.95	4500	97	2.78	2.68
	4.57	4500	97	2.78	2.68
	4.92	4500	97	2.78	2.68
	5.76	4500	97	2.78	2.68
	6.83	4500	97	2.78	2.68
	7.48	4500	97	2.78	2.68
	7.85	4500	96	3.92	3.73
	9.01	4500	96	3.92	3.73
	9.67	4500	96	3.92	3.73
	11.18	4500	96	3.92	3.73
	12.06	4500	96	3.92	3.73
	14.12	4500	96	3.92	3.73
	16.73	4500	96	3.92	3.73
	18.31	4500	96	3.92	3.73



R..CMP, DS, CM
R 07 / CMP [Nm]

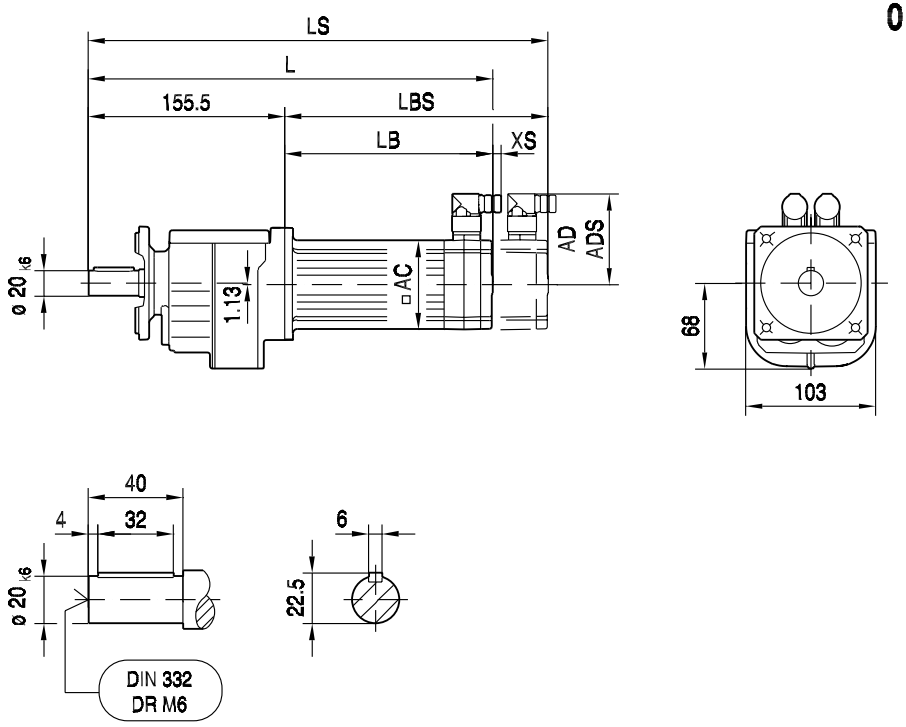
CMP..	i	n_{epk} [1/min]	η [%]	c_T R [Nm/"]	c_T RF [Nm/"]
R07 3	21.73	4500	93	4.06	3.85
	23.32	4500	93	4.06	3.85
	26.97	4500	93	4.06	3.85
	29.08	4500	93	4.06	3.85
	34.05	4500	93	4.06	3.85
	38.51	4500	91	4.06	3.86
	40.34	4500	92	4.06	3.85
	41.31	4500	91	4.06	3.86
	44.16	4500	92	4.06	3.85
	47.78	4500	90	4.06	3.86
	51.52	4500	90	4.06	3.86
	60.32	4500	90	4.06	3.86
	71.47	4500	89	4.06	3.86
	78.24	4500	88	4.06	3.86

CMP..	i	M_{amax} [Nm]	M_{apk} [Nm]	$M_{aNotaus}$ [Nm]	n_{ak} [1/min]	$J_G\ 10^{-4}$ [kgm^2]	F_{Ramax} R [N]	F_{Ramax} RF [N]	F_{Rapk} R [N]	F_{Rapk} RF [N]
R07 2	3.21	31	46	53	561	0.24	495	415	1530	1250
	3.68	33	46	56	516	0.19	500	420	1530	1250
	3.95	34	46	58	506	0.17	505	425	1530	1250
	4.57	36	46	61	460	0.13	520	435	1530	1250
	4.92	37	46	63	427	0.12	530	445	1530	1250
	5.76	40	46	68	365	0.090	530	440	1530	1250
	6.83	43	46	73	307	0.070	535	450	1530	1250
	7.48	43	46	73	321	0.060	595	500	1530	1250
	7.85	49	51	83	166	0.20	645	585	1500	1220
	9.01	50	51	85	166	0.16	685	620	1500	1220
	9.67	50	51	85	165	0.14	710	645	1500	1220
	11.18	50	51	85	179	0.11	760	695	1500	1220
	12.06	50	51	85	182	0.10	790	720	1500	1220
	14.12	50	51	85	184	0.080	850	780	1500	1220
	16.73	50	51	85	191	0.060	920	840	1500	1220
	18.31	50	51	85	191	0.050	960	880	1500	1220
R07 3	21.73	50	51	85	161	0.16	1040	950	1500	1220
	23.32	50	51	85	163	0.14	1080	980	1500	1220
	26.97	50	51	85	163	0.11	1150	1050	1500	1220
	29.08	50	51	85	162	0.10	1190	1080	1500	1220
	34.05	50	51	85	162	0.080	1270	1160	1500	1220
	38.51	50	51	85	171	0.14	1340	1220	1500	1220
	40.34	50	51	85	164	0.060	1370	1230	1500	1220
	41.31	50	51	85	169	0.13	1380	1230	1500	1220
	44.16	50	51	85	159	0.050	1420	1230	1500	1220
	47.78	50	51	85	147	0.10	1470	1230	1500	1220
	51.52	50	51	85	136	0.090	1510	1230	1500	1220
	60.32	50	51	85	116	0.070	1510	1230	1500	1220
	71.47	50	51	85	98	0.060	1510	1230	1500	1220
	78.24	50	51	85	89	0.050	1510	1230	1500	1220

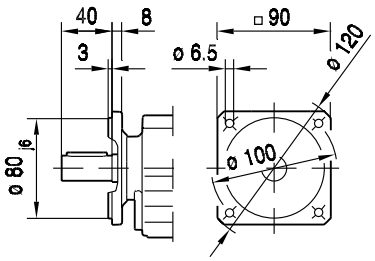
8.15 R 07 / CMP [mm]

01 026 00 07

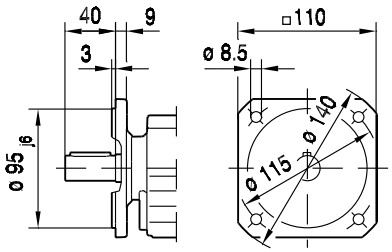
RF07..



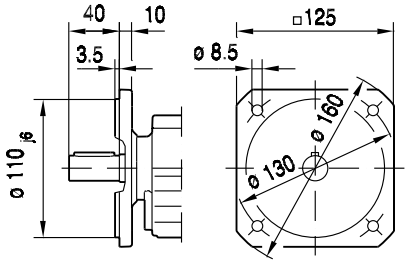
ø 120



ø 140



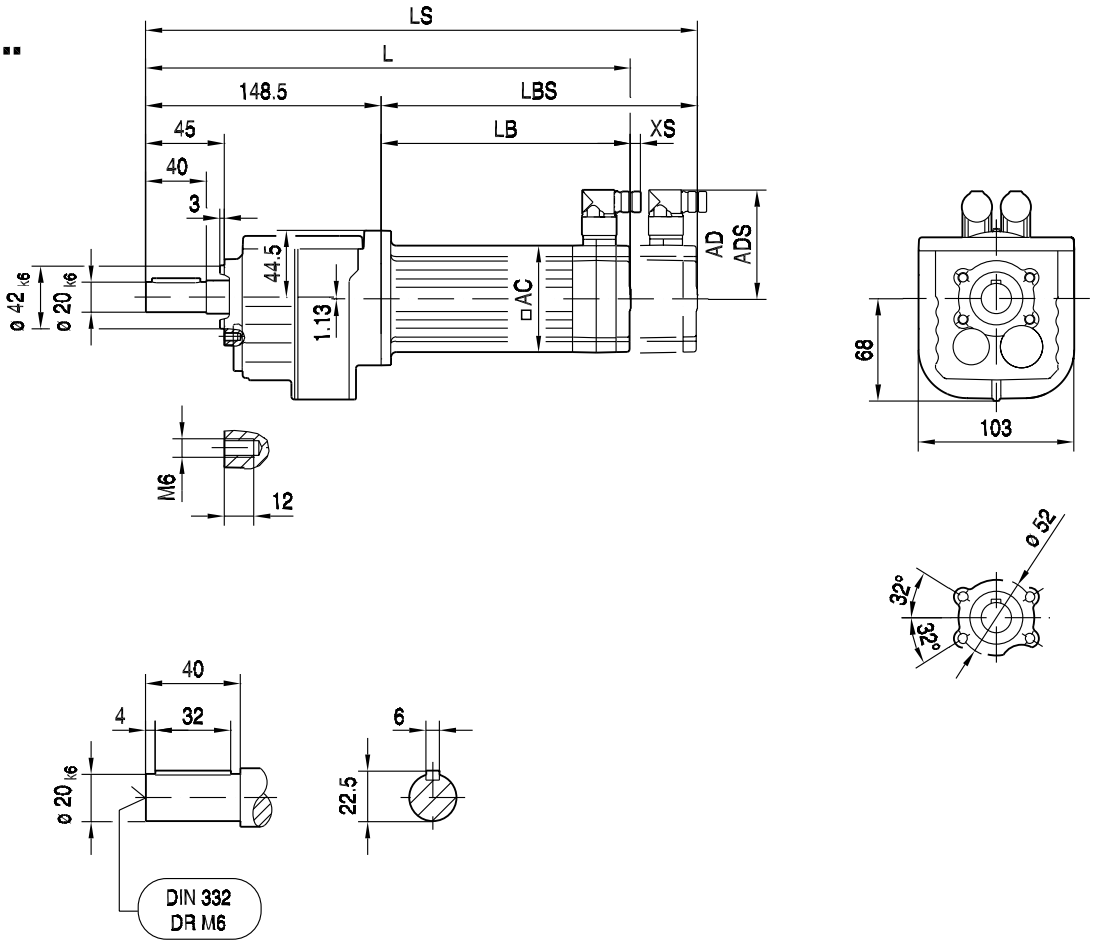
ø 160



(→ 📖 150)	CMP40M							
AC	57							
AD	75							
ADS	75							
L	291							
LS	321							
LB	136							
LBS	166							
XS	19							

01 027 00 07

RZ07..



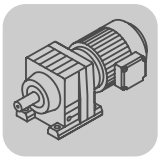
(→ 📖 150)	CMP40M							
AC	57							
AD	75							
ADS	75							
L	273							
LS	303							
LB	136							
LBS	166							
XS	19							

8.16 R 17 / CMP / DS [Nm]

M_{aDyn} [Nm]	i	CMP	DS	
		50S	56M	56L
R17 2	3.83	19	14	28
	4.51	23	17	33
	5.09	26	19	38
	5.76	29	21	42
	6.15	31	23	45
	7.04	36	26	52
	7.55	38	28	56
	8.63	43	31	63
	10.15	51	37	74
	11.45	57	42	84
	12.98	65	47	>86
	13.84	69	50	>86
	15.84	79	58	>86
	16.99	85	62	>86
	19.71	>86	72	>86
	23.15	>86	84	>86
	25.23	>86	>86	>86
R17 3	24.07	>86	85	>86
	28.32	>86	>86	>86
	31.94	>86	>86	>86
	36.2	>86	>86	>86
	38.61	>86	>86	>86
	44.18	>86	>86	>86
	47.44	>86	>86	>86
	53.76	>86	>86	>86
	57.35	>86	>86	>86
	65.61	>86	>86	>86
	70.39	>86	>86	>86
	81.64	>86	>86	>86

m [kg]	s	CMP	DS	
		50S	56M	56L
R17	2	6.8	5.7	6.7
R17	3	7.1	6.0	7.0
RF: + -0.1 kg				

CMP.. / DS..	i	n_{epk} [1/min]	η [%]	c_T R [Nm/"]	c_T RF [Nm/"]
R17 2	3.83	4500	97	3.04	2.96
	4.51	4500	97	3.04	2.96
	5.09	4500	97	3.04	2.96
	5.76	4500	97	3.04	2.96
	6.15	4500	97	3.04	2.96
	7.04	4500	97	3.04	2.96
	7.55	4500	97	3.04	2.96
	8.63	4500	96	4.43	4.26
	10.15	4500	96	4.43	4.26
	11.45	4500	96	4.43	4.26
	12.98	4500	96	4.43	4.26
	13.84	4500	96	4.43	4.26
	15.84	4500	96	4.43	4.26
	16.99	4500	96	4.43	4.26
	19.71	4500	96	4.43	4.26
	23.15	4500	96	4.43	4.26
	25.23	4500	96	4.43	4.26



R..CMP, DS, CM
R 17 / CMP / DS [Nm]

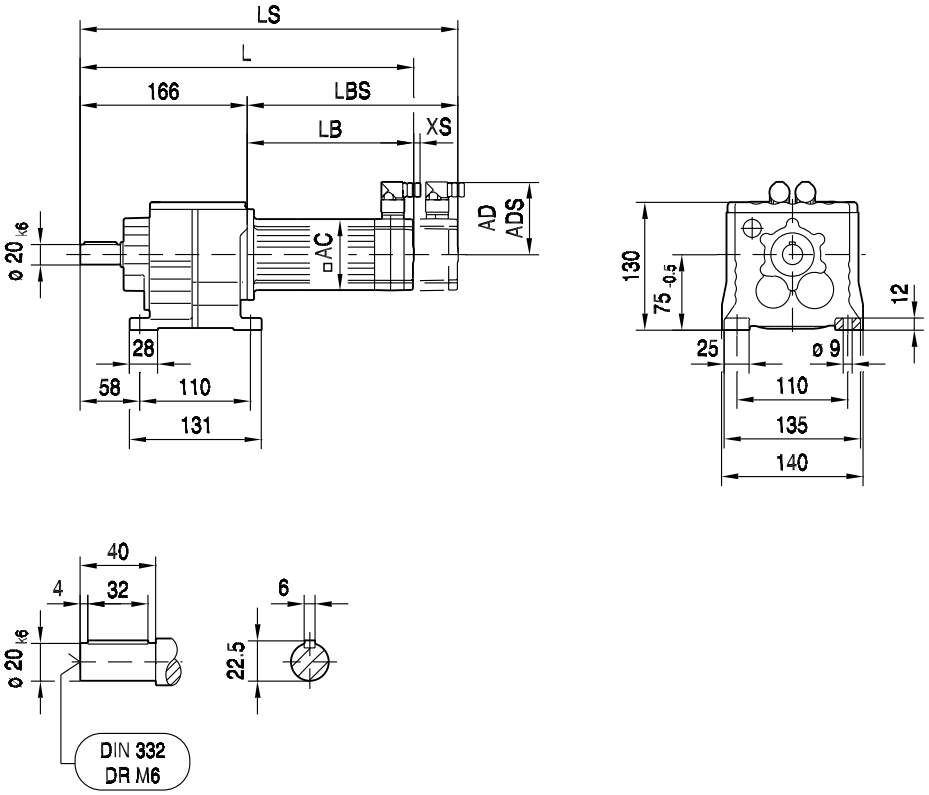
CMP.. / DS..	i	n_{epk} [1/min]	η [%]	c_T R [Nm/"]	c_T RF [Nm/"]
R17 3	24.07	4500	93	4.61	4.43
	28.32	4500	93	4.61	4.43
	31.94	4500	93	4.61	4.43
	36.2	4500	93	4.61	4.43
	38.61	4500	93	4.61	4.43
	44.18	4500	93	4.61	4.43
	47.44	4500	92	4.62	4.44
	53.76	4500	92	4.62	4.44
	57.35	4500	92	4.62	4.44
	65.61	4500	92	4.62	4.44
	70.39	4500	91	4.62	4.44
	81.64	4500	91	4.62	4.44

CMP.. / DS..	i	M_{amax} [Nm]	M_{apk} [Nm]	$M_{aNotaus}$ [Nm]	n_{ak} [1/min]	J_G 10^{-4} [kgm^2]	F_{Ramax} R [N]	F_{Ramax} RF [N]	F_{Rapk} R [N]	F_{Rapk} RF [N]
R17 2	3.83	45	52	77	366	0.46	820	755	2500	2200
	4.51	48	54	82	310	0.35	870	795	2500	2200
	5.09	51	55	87	275	0.29	890	820	2500	2190
	5.76	53	59	90	243	0.24	930	860	2500	2180
	6.15	54	57	92	228	0.22	950	880	2500	2190
	7.04	55	58	94	227	0.18	1010	930	2500	2180
	7.55	56	59	95	225	0.16	1040	950	2500	2180
	8.63	72	86	122	162	0.39	1090	1000	1700	1510
	10.15	77	86	131	138	0.30	1140	1050	1700	1510
	11.45	81	86	138	122	0.26	1180	1080	1700	1510
	12.98	85	86	145	108	0.21	1230	1130	1700	1510
	13.84	85	86	145	108	0.20	1270	1160	1700	1510
	15.84	85	86	145	114	0.16	1350	1240	1700	1510
	16.99	85	86	145	112	0.15	1400	1280	1700	1510
	19.71	85	86	145	117	0.12	1500	1380	1700	1510
	23.15	85	86	145	117	0.090	1620	1480	1700	1510
	25.23	85	86	145	119	0.080	1680	1540	1700	1510
R17 3	24.07	85	86	145	104	0.41	1650	1510	1700	1510
	28.32	85	86	145	106	0.32	1770	1560	1700	1510
	31.94	85	86	145	103	0.27	1770	1560	1700	1510
	36.2	85	86	145	105	0.22	1770	1560	1700	1510
	38.61	85	86	145	104	0.20	1770	1560	1700	1510
	44.18	85	86	145	104	0.17	1770	1560	1700	1510
	47.44	85	86	145	110	0.25	1770	1560	1700	1510
	53.76	85	86	145	108	0.21	1770	1560	1700	1510
	57.35	85	86	145	108	0.19	1770	1560	1700	1510
	65.61	85	86	145	107	0.16	1770	1560	1700	1510
	70.39	85	86	145	99	0.14	1770	1560	1700	1510
	81.64	85	86	145	86	0.11	1770	1560	1700	1510

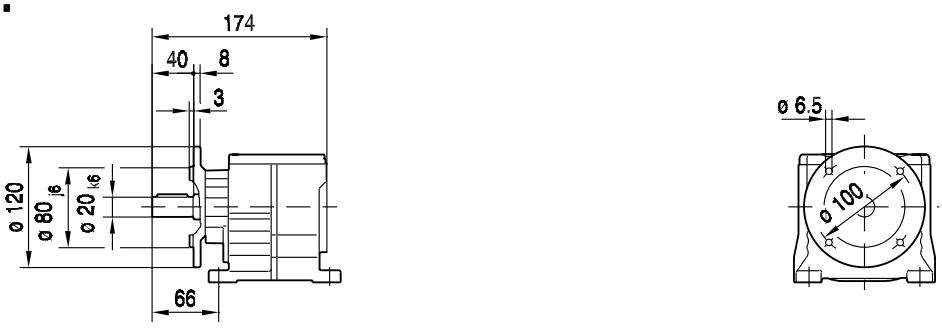
8.17 R 17 / CMP / DS [mm]

01 028 00 07

R17..



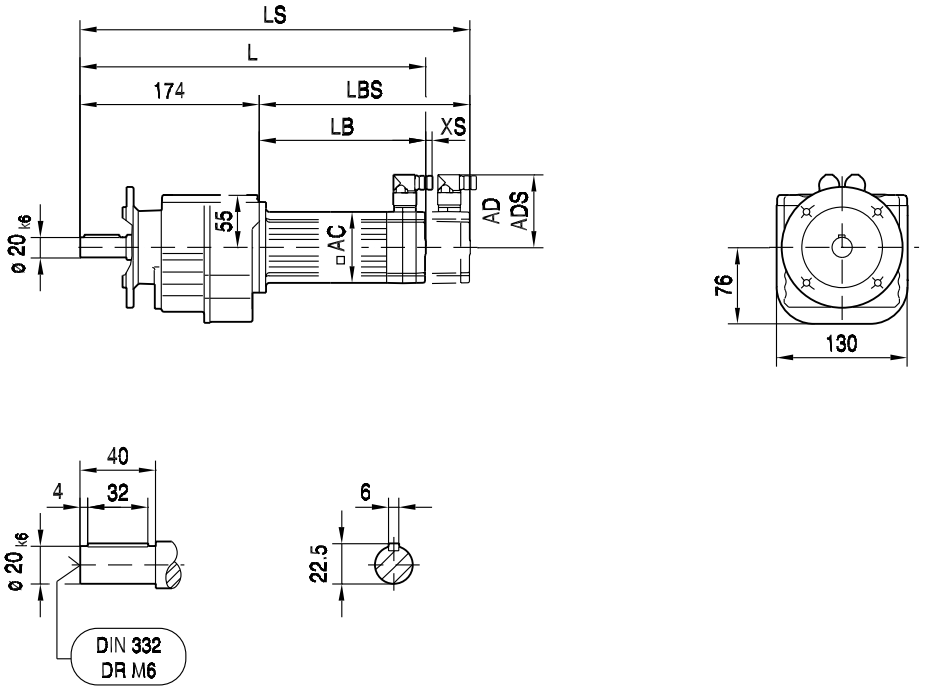
R17F..



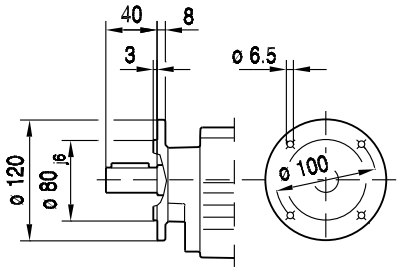
(→ 📖 150)	CMP50S							
AC	73							
AD	82							
ADS	82							
L	319							
LS	348							
LB	153							
LBS	182							
XS	18							

01 029 00 07

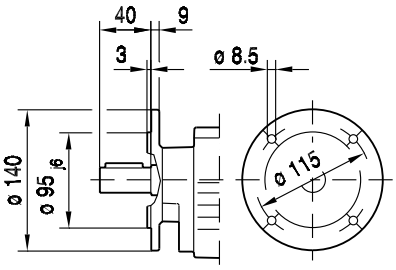
RF17..



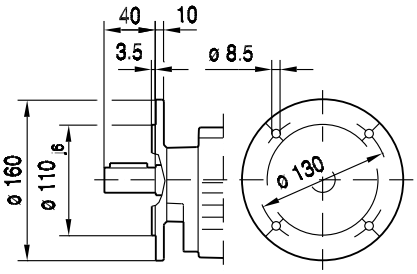
ø 120



ø 140



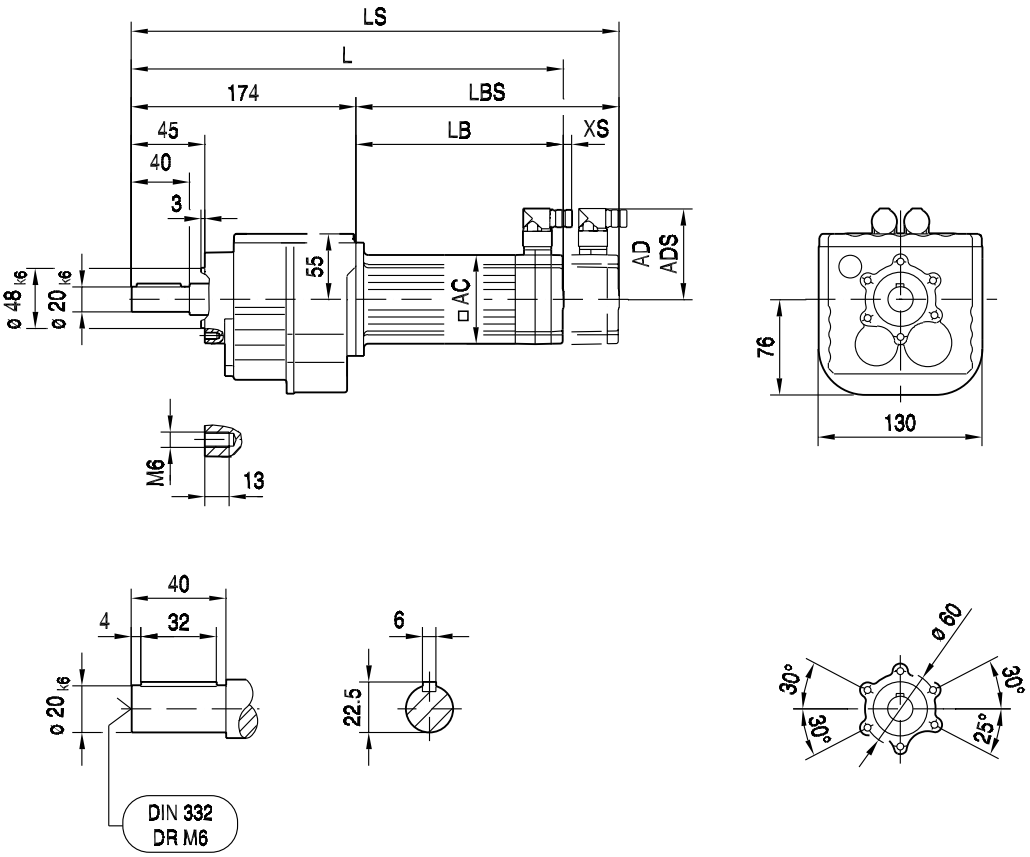
ø 160



(→ 📖 150)	CMP50S							
AC	73							
AD	82							
ADS	82							
L	327							
LS	356							
LB	153							
LBS	182							
XS	18							

01 030 00 07

RZ17..

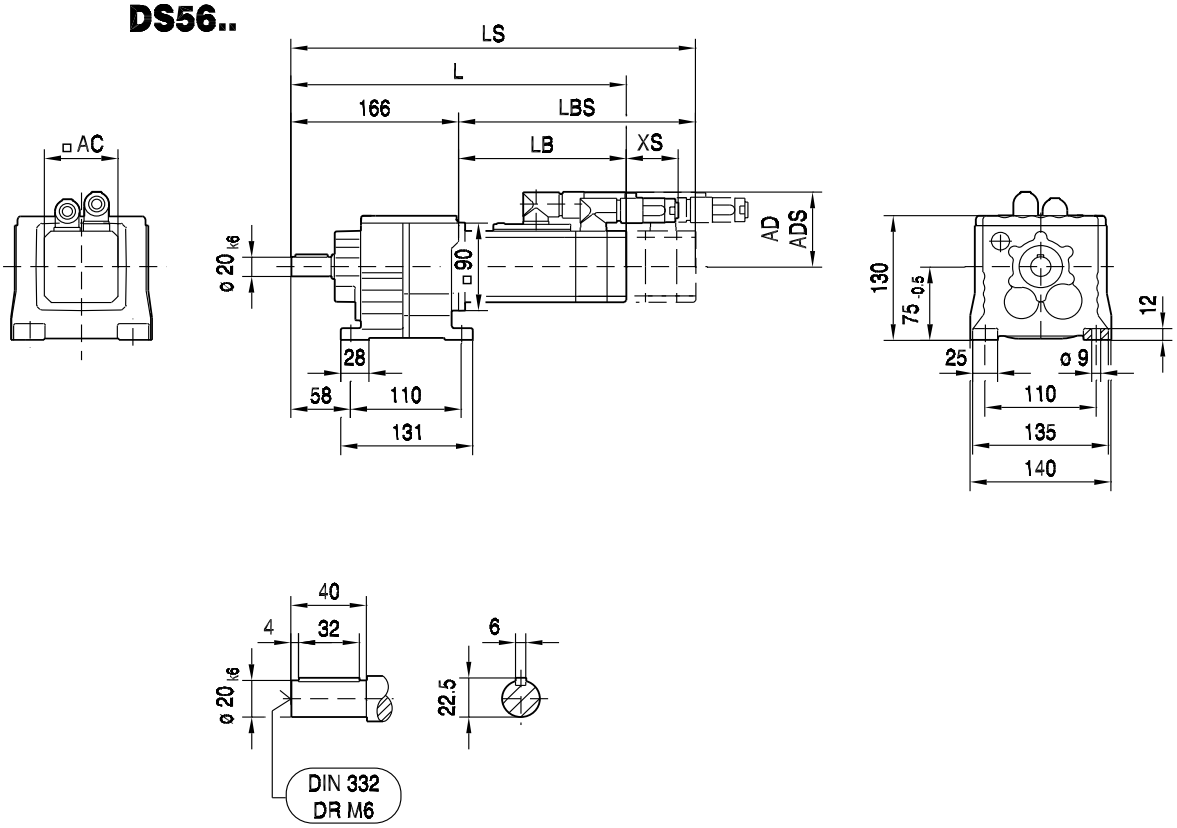


(→ 150)	CMP50S							
AC	73							
AD	82							
ADS	82							
L	319							
LS	348							
LB	153							
LBS	182							
XS	18							

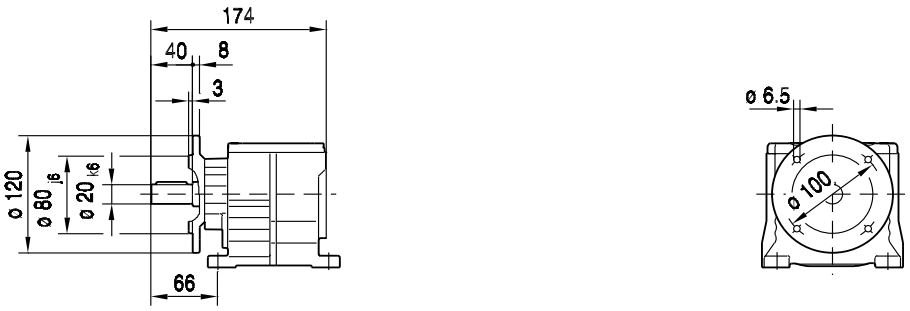
01 052 00 08

R17..

DS56..



R17F..

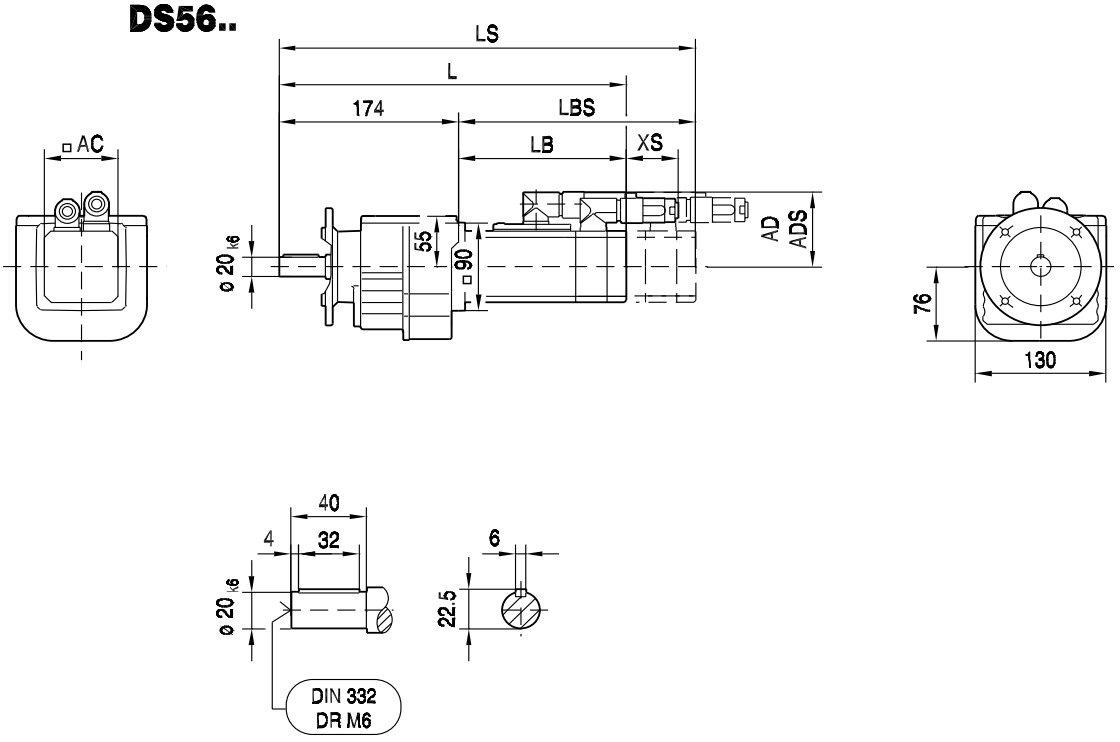


(→ 📖 150)	DS56M	DS56L						
AC	73	73						
AD	71	71						
ADS	77	77						
L	305	337						
LS	335	367						
LB	139	171						
LBS	169	201						
XS	70	70						

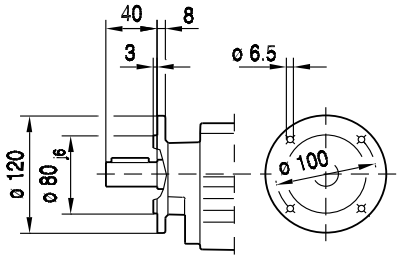
01 053 00 08

RF17..

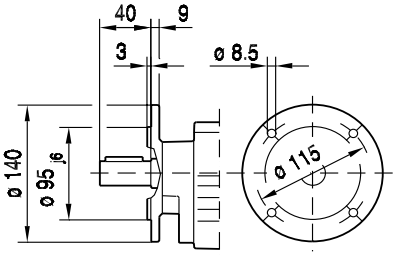
DS56..



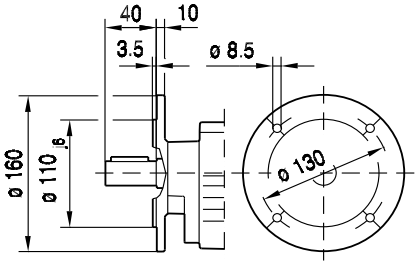
ø 120



ø 140



ø 160

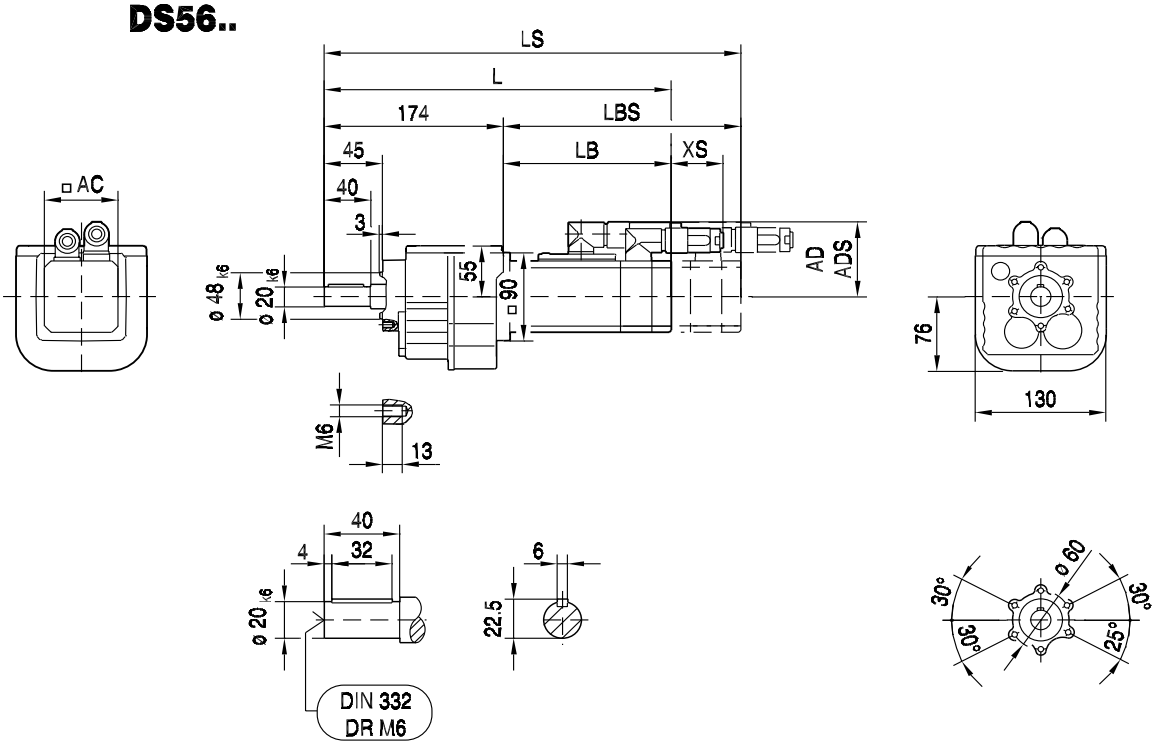


(→ 150)	DS56M	DS56L						
AC	73	73						
AD	71	71						
ADS	77	77						
L	313	345						
LS	343	375						
LB	139	171						
LBS	169	201						
XS	70	70						

01 054 00 08

RZ17..

DS56..

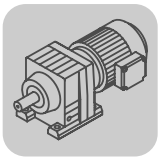


(→ 📖 150)	DS56M	DS56L						
AC	73	73						
AD	71	71						
ADS	77	77						
L	305	337						
LS	335	367						
LB	139	171						
LBS	169	201						
XS	70	70						

8.18 R 27 / CMP / DS / CM [Nm]

M_{aDyn} [Nm]		CMP							DS			CM			
	i	40M	50S	50M	50L	63S	63M	63L	56M	56L	56H	71S	71M	71L	90S
R27 2	3.37	12	17	33	50	36	69	98	12	25	49	53	70	102	>118
	4	15	20	40	59	43	82	117	15	29	58	63	83	121	>127
	4.27	16	21	42	63	46	88	125	16	31	62	68	88	129	>130
	5	18	25	49	74	53	103	>142	18	36	73	79	103	>142	>142
	5.6	20	28	55	83	60	115	>144	20	41	82	89	116	>144	>144
	6.59	24	33	65	97	70	135	>145	24	48	96	104	136	>145	>145
	7.63	28	38	75	113	81	>148		28	56	111	121	>148		
	8.16	30	41	81	121	87	>148		30	60	119	129	>148		
	9.41	34	47	93		100			34	69	137				
	10.13	37	51	100	>136	108	>136	>136	37	74	>136	>136	>136	>136	>136
	11.86	43	59	117	>136	126	>136	>136	43	87	>136	>136	>136	>136	>136
	13.28	48	66	131	>136	>136	>136	>136	48	97	>136	>136	>136	>136	>136
	15.63	57	78	>136	>136	>136	>136	>136	57	114	>136	>136	>136	>136	>136
	18.08	66	90	>136	>136	>136	>136		66	132	>136	>136	>136		
	19.35	71	97	>136	>136	>136	>136		71	>136	>136	>136	>136		
	22.32	81	111	>136		>136			81	>136	>136				
	26.09	95	130						95	>136					
	28.37	103	>136						103	>136					
R27 3	24.47	86	118	>136	>136	>136	>136	>136	86	>136	>136	>136	>136	>136	>136
	28.78	102	>136	>136	>136	>136	>136	>136	102	>136	>136	>136	>136	>136	>136
	32.47	115	>136	>136	>136	>136	>136	>136	115	>136	>136	>136	>136	>136	>136
	36.79	130	>136	>136	>136	>136	>136		130	>136	>136	>136	>136		
	39.25	>136	>136	>136	>136	>136	>136	>136	>136	>136	>136	>136	>136	>136	>136
	44.9	>136	>136	>136	>136	>136	>136		>136	>136	>136	>136	>136		
	48.17	>136	>136	>136	>136	>136	>136		>136	>136	>136	>136	>136		
	55.87	>136	>136	>136		>136			>136	>136	>136				
	61.3	>136	>136	>136	>136	>136	>136	>136	>136	>136	>136	>136	>136	>136	>136
	69.47	>136	>136	>136	>136	>136	>136		>136	>136	>136	>136	>136		
	74.11	>136	>136	>136	>136	>136	>136	>136	>136	>136	>136	>136	>136	>136	>136
	84.78	>136	>136	>136	>136	>136	>136		>136	>136	>136	>136	>136		
	90.96	>136	>136	>136	>136	>136	>136		>136	>136	>136	>136	>136		
	105.49	>136	>136	>136		>136			>136	>136	>136				
	123.91	>136	>136						>136	>136					
	135.09	>136	>136						>136	>136					

m [kg]		CMP							DS			CM			
	s	40M	50S	50M	50L	63S	63M	63L	56M	56L	56H	71S	71M	71L	90S
R27	2	5.5	7.2	8.1	9.0	9.2	11	12	5.8	6.8	7.5	12	13	17	21
R27	3	5.7	7.4	8.3	9.2	9.5	11	12	6.1	7.1	7.8	12	13	17	21
RF: + -0.1 kg															



R..CMP, DS, CM
R 27 / CMP / DS / CM [Nm]

CMP.. / DS.. / CM..	i	n_{epk} [1/min]	η [%]	c_T R [Nm/"]	c_T RF [Nm/"]
R27 2	3.37	4500	96	7.24	7.07
	4	4500	96	7.24	7.07
	4.27	4500	96	7.24	7.07
	5	4500	96	7.24	7.07
	5.6	4500	96	7.24	7.07
	6.59	4500	96	7.24	7.07
	7.63	4500	96	7.24	7.07
	8.16	4500	96	7.24	7.07
	9.41	4500	96	7.24	7.07
	10.13	4500	96	9.0	8.75
	11.86	4500	96	9.0	8.75
	13.28	4500	96	9.0	8.75
	15.63	4500	96	9.0	8.75
	18.08	4500	96	9.0	8.75
	19.35	4500	96	9.0	8.75
	22.32	4500	96	9.0	8.75
	26.09	4500	96	9.0	8.75
	28.37	4500	96	9.0	8.75
R27 3	24.47	4500	93	9.03	8.77
	28.78	4500	93	9.03	8.77
	32.47	4500	93	9.03	8.77
	36.79	4500	93	9.03	8.77
	39.25	4500	93	9.03	8.77
	44.9	4500	93	9.03	8.77
	48.17	4500	93	9.03	8.77
	55.87	4500	92	9.03	8.77
	61.3	4500	91	9.07	8.81
	69.47	4500	91	9.07	8.81
	74.11	4500	91	9.07	8.81
	84.78	4500	90	9.07	8.81
	90.96	4500	90	9.07	8.81
	105.49	4500	90	9.07	8.81
	123.91	4500	89	9.07	8.81
	135.09	4500	89	9.07	8.81

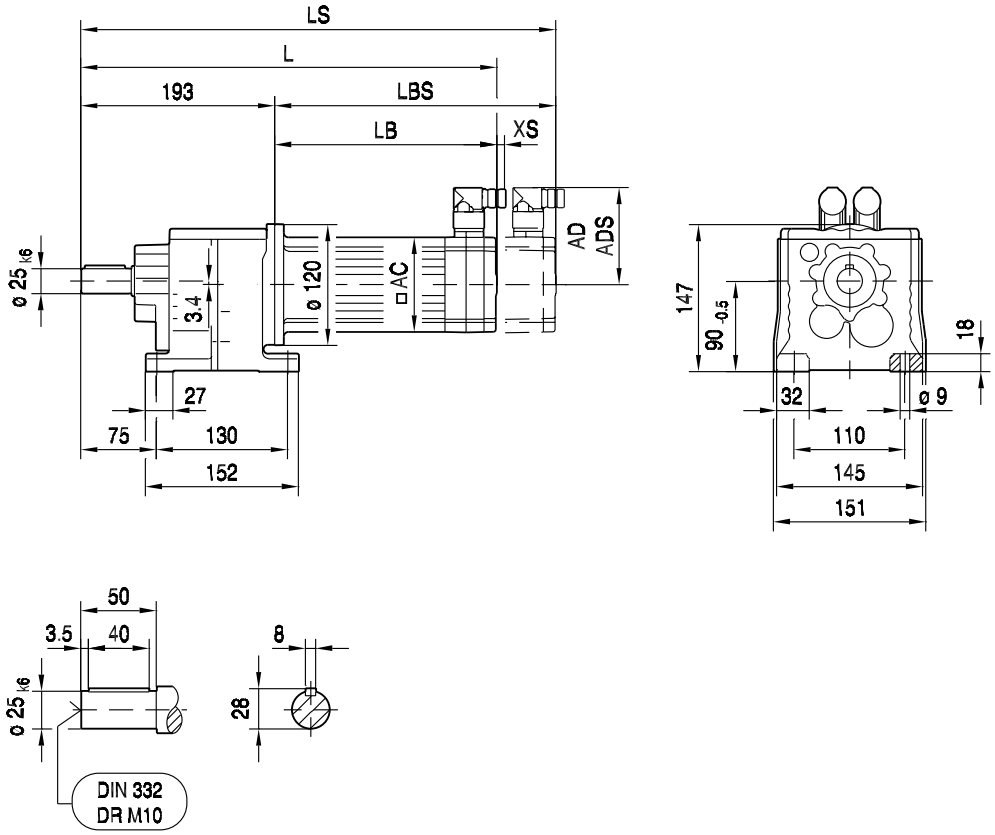
CMP.. / DS.. / CM..	i	M_{amax} [Nm]	M_{apk} [Nm]	$M_{aNotaus}$ [Nm]	n_{ak} [1/min]	J_G 10^{-4} [kgm^2]	F_{Ramax} R [N]	F_{Ramax} RF [N]	F_{Rapk} R [N]	F_{Rapk} RF [N]
R27 2	3.37	79	118	134	415	1.1	900	790	4290	3690
	4	85	127	145	350	0.85	900	800	4250	3660
	4.27	87	130	148	328	0.76	920	810	4230	3640
	5	95	142	162	280	0.58	860	760	4180	3590
	5.6	99	144	168	250	0.48	880	775	4170	3580
	6.59	106	145	180	212	0.36	880	775	4160	3580
	7.63	112	148	190	183	0.29	900	795	4150	3570
	8.16	116	148	197	172	0.26	870	770	4150	3570
	9.41	122	149	207	149	0.21	900	795	4140	3560
	10.13	122	136	207	138	0.61	1890	1670	4210	3620
	11.86	129	136	219	118	0.47	1980	1750	4210	3620
	13.28	130	136	221	120	0.39	2140	1910	4210	3620
	15.63	130	136	221	122	0.29	2290	2170	4210	3620
	18.08	130	136	221	122	0.24	2440	2310	4210	3620
	19.35	130	136	221	124	0.22	2510	2380	4210	3620
	22.32	130	136	221	125	0.18	2660	2520	4210	3620
	26.09	130	136	221	126	0.14	2840	2690	4210	3620
	28.37	130	136	221	130	0.12	2940	2780	4210	3620

CMP.. / DS.. / CM..							F_{Ramax}		F_{Rapk}	
	i	M_{amax} [Nm]	M_{apk} [Nm]	$M_{aNotaus}$ [Nm]	n_{ak} [1/min]	J_G 10^{-4} [kgm^2]	R [N]	RF [N]	R [N]	RF [N]
R27 3	24.47	130	136	221	98	0.49	2760	2620	4210	3620
	28.78	130	136	221	97	0.37	2950	2800	4210	3620
	32.47	130	136	221	99	0.31	3100	2940	4210	3620
	36.79	130	136	221	98	0.25	3260	3090	4210	3620
	39.25	130	136	221	97	0.22	3350	3170	4210	3620
	44.9	130	136	221	98	0.18	3530	3340	4210	3620
	48.17	130	136	221	98	0.16	3630	3430	4210	3620
	55.87	130	136	221	98	0.13	3840	3640	4210	3620
	61.3	130	136	221	106	0.26	3980	3640	4210	3620
	69.47	130	136	221	101	0.22	4180	3640	4210	3620
	74.11	130	136	221	94	0.20	4230	3640	4210	3620
	84.78	130	136	221	83	0.16	4230	3640	4210	3620
	90.96	130	136	221	77	0.15	4230	3640	4210	3620
	105.49	130	136	221	66	0.12	4230	3640	4210	3620
	123.91	130	136	221	56	0.090	4230	3640	4210	3620
	135.09	130	136	221	52	0.080	4230	3640	4210	3620

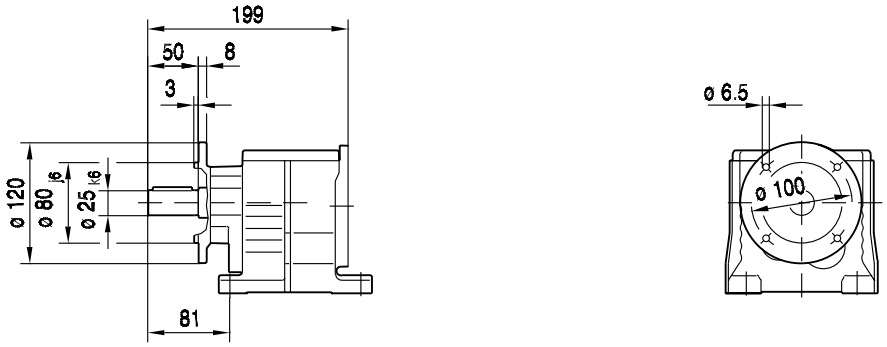
8.19 R 27 / CMP / DS / CM [mm]

01 031 00 07

R27..



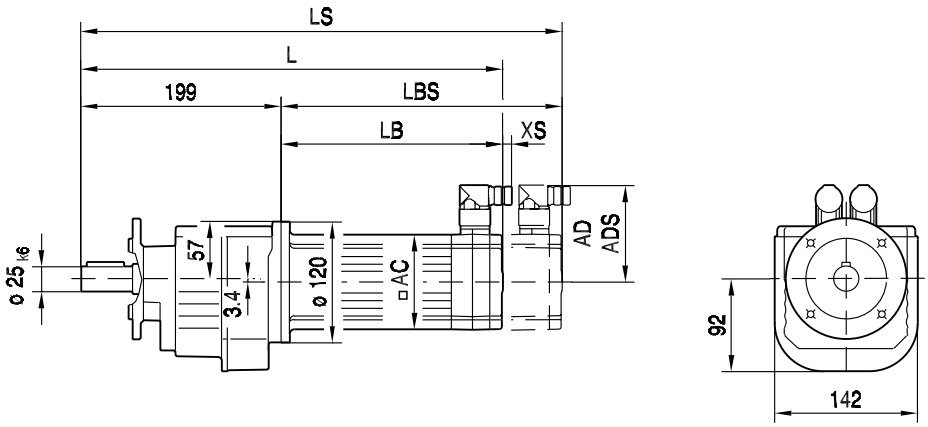
R27F..

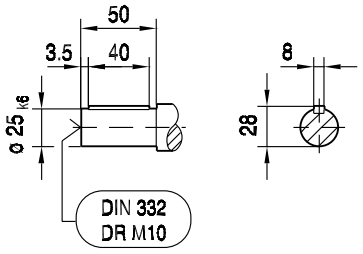


(→ 📖 150)	CMP40M	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L	
AC	57	73	73	73	88	88	88	
AD	75	82	82	82	89	89	89	
ADS	75	82	82	82	89	89	89	
L	336	338	377	416	373	423	476	
LS	366	367	406	445	401	451	505	
LB	143	145	184	223	180	230	283	
LBS	173	174	213	252	208	258	312	
XS	19	18	18	18	14	14	14	

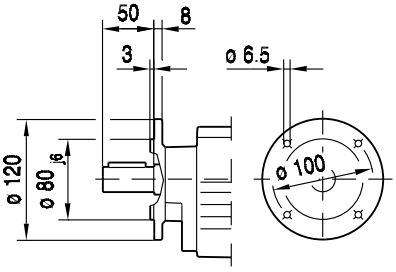
01 032 00 07

RF27..

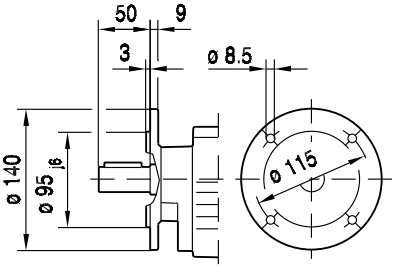




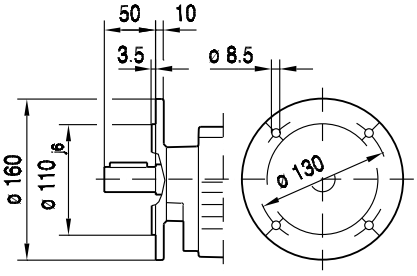
ø 120



ø 140



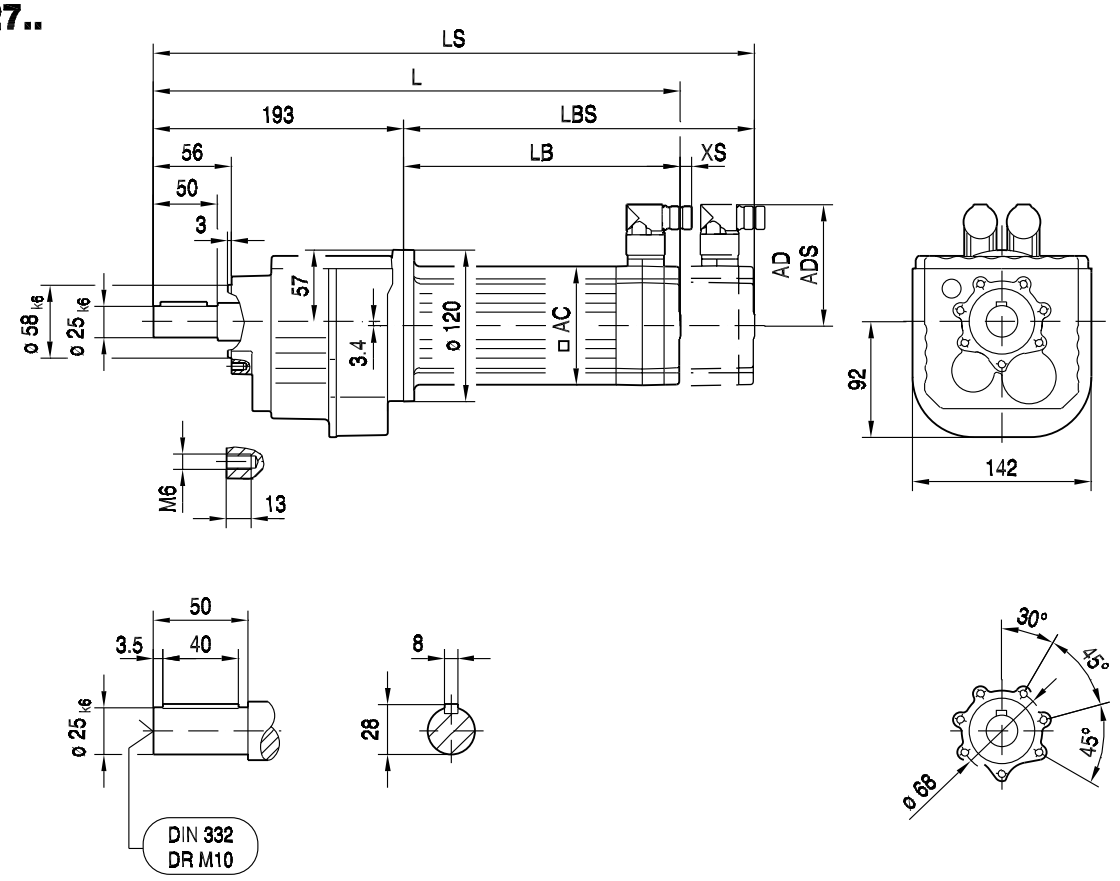
ø 160



(→ 📖 150)	CMP40M	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L	
AC	57	73	73	73	88	88	88	
AD	75	82	82	82	89	89	89	
ADS	75	82	82	82	89	89	89	
L	342	344	383	422	379	429	482	
LS	372	373	412	451	407	457	511	
LB	143	145	184	223	180	230	283	
LBS	173	174	213	252	208	258	312	
XS	19	18	18	18	14	14	14	

01 033 00 07

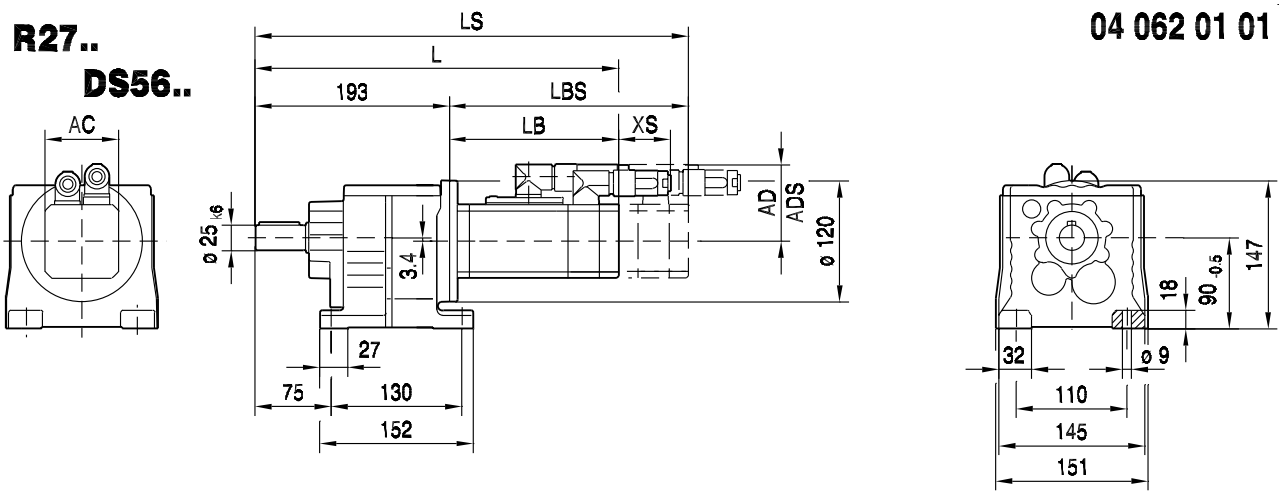
RZ27..



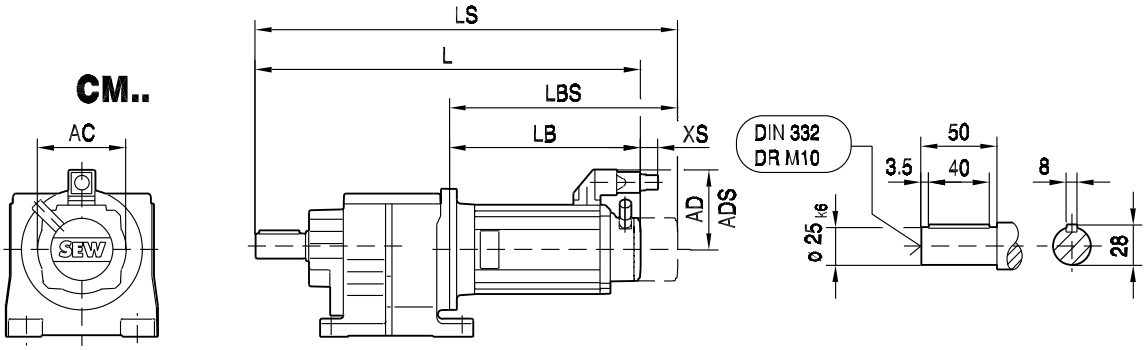
(→ 📖 150)	CMP40M	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L	
AC	57	73	73	73	88	88	88	
AD	75	82	82	82	89	89	89	
ADS	75	82	82	82	89	89	89	
L	336	338	377	416	373	423	476	
LS	366	367	406	445	401	451	505	
LB	143	145	184	223	180	230	283	
LBS	173	174	213	252	208	258	312	
XS	19	18	18	18	14	14	14	

R27..
DS56..

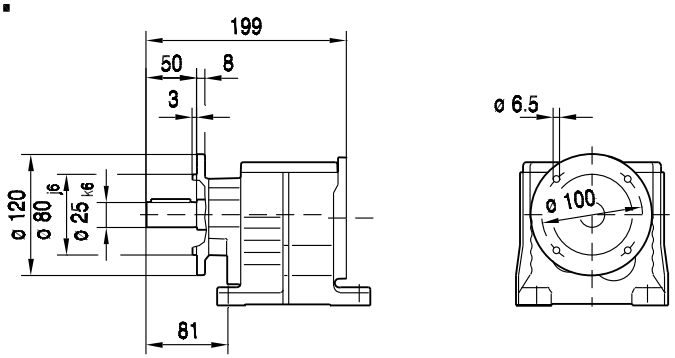
04 062 01 01



CM..



R27F..

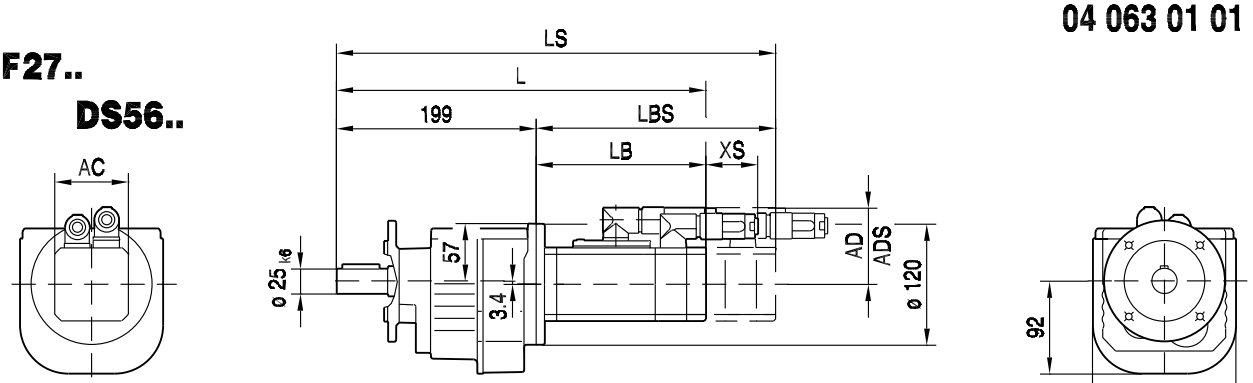


(→ 150)	DS56M	DS56L	DS56H	CM71S	CM71M	CM71L	CM90S				
AC	73	73	73	117	117	117	142				
AD	71	71	77	122	122	122	140				
ADS	77	77	77	122	122	122	140				
L	330	362	465	431	451	494	486				
LS	360	392	465	513	533	576	582				
LB	137	169	272	238	258	301	293				
LBS	167	199	272	320	340	383	389				
XS	70	70	51	45	45	45	50				

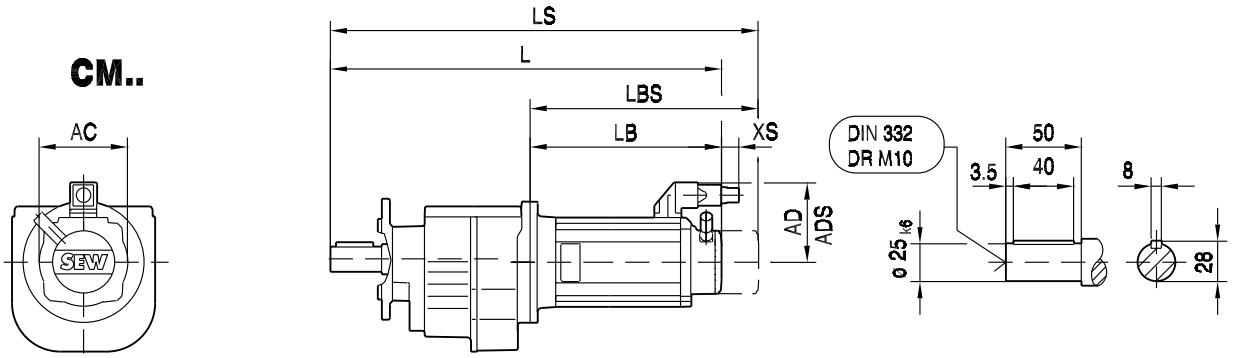
04 063 01 01

RF27..

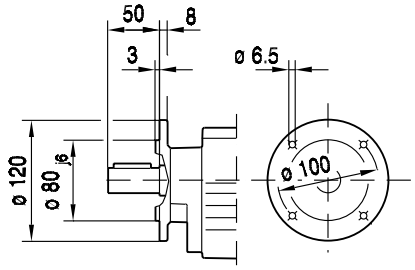
DS56..



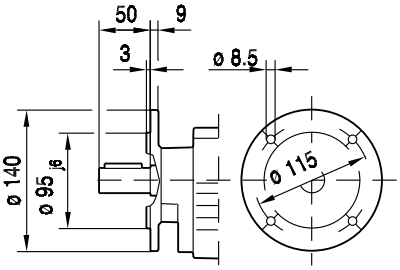
CM..



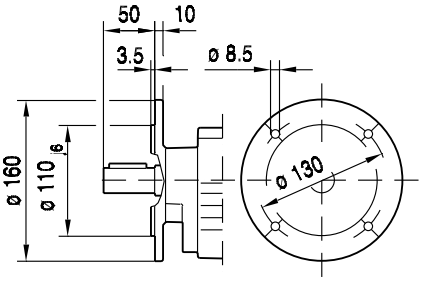
ø 120



ø 140



ø 160

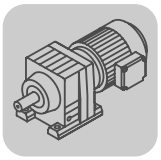


(→ 📖 150)	DS56M	DS56L	DS56H	CM71S	CM71M	CM71L	CM90S				
AC	73	73	73	117	117	117	142				
AD	71	71	77	122	122	122	140				
ADS	77	77	77	122	122	122	140				
L	336	368	471	437	457	500	492				
LS	366	398	471	519	539	582	588				
LB	137	169	272	238	258	301	293				
LBS	167	199	272	320	340	383	389				
XS	70	70	51	45	45	45	50				

8.20 R 37 / CMP / DS / CM [Nm]

M_{aDyn} [Nm]		CMP							DS			CM			
	i	40M	50S	50M	50L	63S	63M	63L	56M	56L	56H	71S	71M	71L	90S
R37 2	3.41	13	17	34	51	37	71	101	13	25	50	55	71	104	131
	4.05	15	20	40	60	44	84	119	15	30	60	65	84	123	>153
	4.32	16	22	43	65	47	90	127	16	32	64	69	90	132	>155
	5.06	19	26	51	76	54	105	149	19	37	75	81	106	154	>156
	5.67	21	29	57	85	61	118	>156	21	42	84	91	118	>156	>156
	6.67	25	34	67	100	72	138	>166	25	49	98	107	139	>166	>166
	7.97	29	40	79	118	85	164	>205	29	58	116	126	165	>205	>205
	9.47	35	47	94	140	101	195	>205	35	69	138	150	195	>205	>205
	10.11	37	50	100	149	108	>205	>205	37	74	148	160	>205	>205	>205
	11.83	43	59	117	175	126	>205	>205	43	86	173	187	>205	>205	>205
	13.25	48	66	131	196	141	>205	>205	48	97	193	>205	>205	>205	>205
	15.6	57	78	154	>205	166	>205	>205	57	114	>205	>205	>205	>205	>205
	18.05	66	90	178	>205	192	>205		66	132	>205	>205	>205		
	19.31	70	96	191	>205	>205	>205		70	141	>205	>205	>205		
	22.27	81	111	>205		>205			81	162	>205				
	26.03	95	130						95	190					
	28.32	103	141						103	>205					
R37 3	24.42	87	119	>205	>205	>205	>205	>205	87	174	>205	>205	>205	>205	>205
	28.73	103	140	>205	>205	>205	>205	>205	103	>205	>205	>205	>205	>205	>205
	32.4	116	158	>205	>205	>205	>205	>205	116	>205	>205	>205	>205	>205	>205
	36.72	131	179	>205	>205	>205	>205		131	>205	>205	>205	>205		
	39.17	140	191	>205	>205	>205	>205	>205	140	>205	>205	>205	>205	>205	>205
	44.81	160	>205	>205	>205	>205	>205		160	>205	>205	>205	>205		
	48.08	172	>205	>205	>205	>205	>205		172	>205	>205	>205	>205		
	55.76	199	>205	>205		>205			199	>205	>205				
	61.18	>205	>205	>205	>205	>205	>205	>205	>205	>205	>205	>205	>205	>205	>205
	69.33	>205	>205	>205	>205	>205	>205		>205	>205	>205	>205	>205		
	73.96	>205	>205	>205	>205	>205	>205	>205	>205	>205	>205	>205	>205	>205	>205
	84.61	>205	>205	>205	>205	>205	>205		>205	>205	>205	>205	>205		
	90.77	>205	>205	>205	>205	>205	>205		>205	>205	>205	>205	>205		
	105.28	>205	>205	>205		>205			>205	>205	>205				
	123.66	>205	>205						>205	>205					
	134.82	>205	>205						>205	>205					

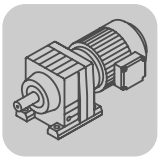
m [kg]		CMP							DS			CM			
	s	40M	50S	50M	50L	63S	63M	63L	56M	56L	56H	71S	71M	71L	90S
R37	2	11	13	14	15	15	17	18	12	13	13	18	19	22	27
R37	3	12	13	14	15	15	17	18	12	13	14	18	19	23	27
RF: + 1.5 kg															



R..CMP, DS, CM
R 37 / CMP / DS / CM [Nm]

CMP.. / DS.. / CM..	i	n_{epk} [1/min]	η [%]	c_T R [Nm/']	c_T RF [Nm/']	φ /R [']
R37 2	3.41	3587	97	9.66	9.5	14
	4.05	4261	97	9.66	9.5	13
	4.32	4500	97	9.66	9.5	13
	5.06	4500	97	9.66	9.5	13
	5.67	4500	97	9.66	9.5	12
	6.67	4500	97	9.66	9.5	12
	7.97	4500	96	12.68	12.41	8
	9.47	4500	96	12.68	12.41	8
	10.11	4500	96	12.68	12.41	8
	11.83	4500	96	12.68	12.41	8
	13.25	4500	96	12.68	12.41	8
	15.6	4500	96	12.68	12.41	8
	18.05	4500	96	12.68	12.41	8
	19.31	4500	96	12.68	12.41	7
	22.27	4500	96	12.68	12.41	7
	26.03	4500	96	12.68	12.41	7
	28.32	4500	96	12.68	12.41	7
R37 3	24.42	4500	94	12.77	12.49	9
	28.73	4500	94	12.77	12.49	9
	32.4	4500	94	12.77	12.49	9
	36.72	4500	94	12.77	12.49	9
	39.17	4500	94	12.77	12.49	9
	44.81	4500	94	12.77	12.49	9
	48.08	4500	94	12.77	12.49	9
	55.76	4500	94	12.77	12.49	9
	61.18	4500	93	12.85	12.57	8
	69.33	4500	92	12.85	12.57	8
	73.96	4500	92	12.85	12.57	8
	84.61	4500	92	12.85	12.57	8
	90.77	4500	92	12.85	12.57	8
	105.28	4500	92	12.85	12.57	8
	123.66	4500	92	12.85	12.57	8
	134.82	4500	91	12.85	12.57	8

CMP.. / DS.. / CM..	i	M_{amax} [Nm]	M_{apk} [Nm]	$M_{aNotaus}$ [Nm]	n_{ak} [1/min]	J_G 10^{-4} [kgm^2]	F_{Ramax} R [N]	F_{Ramax} RF [N]	F_{Rapk} R [N]	F_{Rapk} RF [N]
R37 2	3.41	112	147	190	411	1.4	900	800	5500	5500
	4.05	122	153	207	346	1.1	840	750	5440	5440
	4.32	126	155	214	324	0.95	820	725	5430	5430
	5.06	135	156	230	277	0.72	790	700	5420	5420
	5.67	142	156	241	247	0.59	760	675	5420	5420
	6.67	144	166	245	210	0.43	1000	890	5320	5320
	7.97	156	205	265	176	0.96	1720	1520	4880	4880
	9.47	167	205	284	148	0.74	1760	1560	4880	4880
	10.11	170	205	289	138	0.66	1820	1620	4880	4880
	11.83	183	205	311	118	0.51	1810	1610	4880	4880
	13.25	190	205	323	106	0.43	1880	1670	4880	4880
	15.6	200	205	340	90	0.31	2010	1780	4880	4880
	18.05	200	205	340	94	0.26	2390	2120	4880	4880
	19.31	200	205	340	93	0.23	2570	2280	4880	4880
	22.27	200	205	340	99	0.19	2970	2640	4880	4880
	26.03	185	205	315	127	0.15	3860	3420	4880	4880
	28.32	200	205	340	99	0.13	3690	3270	4880	4880

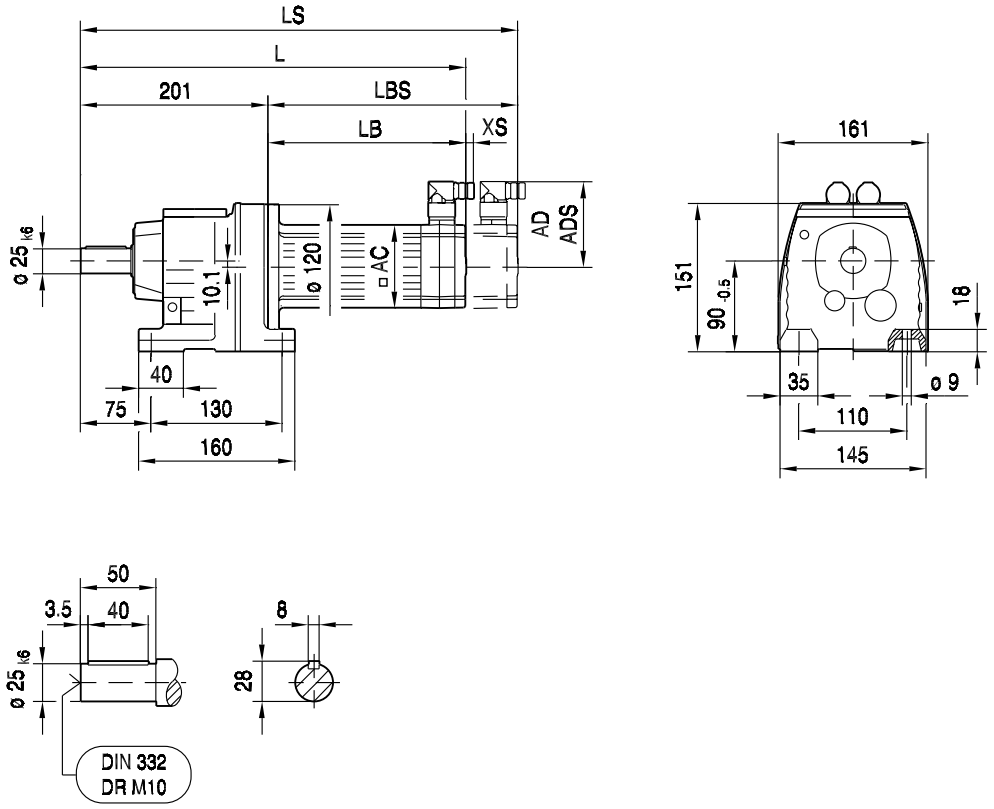


CMP.. / DS.. / CM..							F_{Ramax}		F_{Rapk}	
	i	M_{amax} [Nm]	M_{apk} [Nm]	$M_{aNotaus}$ [Nm]	n_{ak} [1/min]	$J_G\ 10^{-4}$ [kgm^2]	R [N]	RF [N]	R [N]	RF [N]
R37 3	24.42	200	205	340	70	0.53	3240	2870	4880	4880
	28.73	200	205	340	70	0.39	3740	3310	4880	4880
	32.4	200	205	340	71	0.31	4120	3650	4880	4880
	36.72	200	205	340	71	0.25	4540	4020	4880	4880
	39.17	200	205	340	71	0.23	4760	4220	4880	4880
	44.81	200	205	340	71	0.19	4940	4640	4880	4880
	48.08	200	205	340	73	0.17	4940	4870	4880	4880
	55.76	200	205	340	74	0.13	4940	4940	4880	4880
	61.18	200	205	340	75	0.26	4940	4940	4880	4880
	69.33	200	205	340	75	0.22	4940	4940	4880	4880
	73.96	200	205	340	76	0.20	4940	4940	4880	4880
	84.61	200	205	340	76	0.16	4940	4940	4880	4880
	90.77	200	205	340	76	0.15	4940	4940	4880	4880
	105.28	200	205	340	66	0.12	4940	4940	4880	4880
	123.66	200	205	340	57	0.090	4940	4940	4880	4880
	134.82	200	205	340	52	0.080	4940	4940	4880	4880

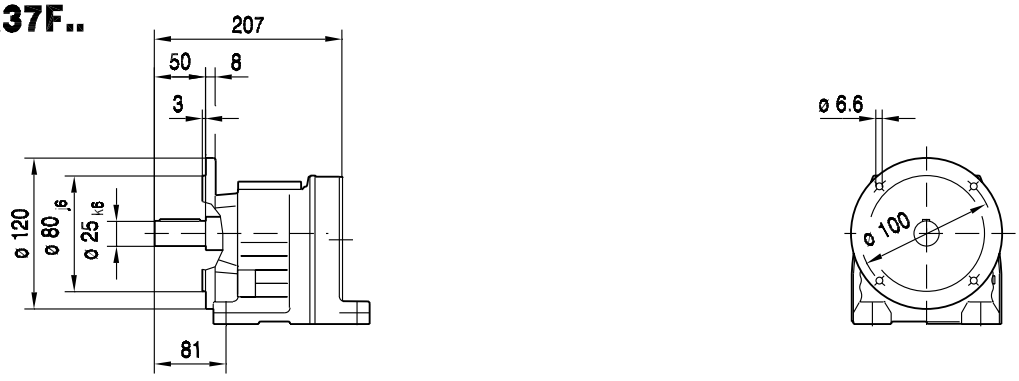
8.21 R 37 / CMP / DS / CM [mm]

01 034 00 07

R37..



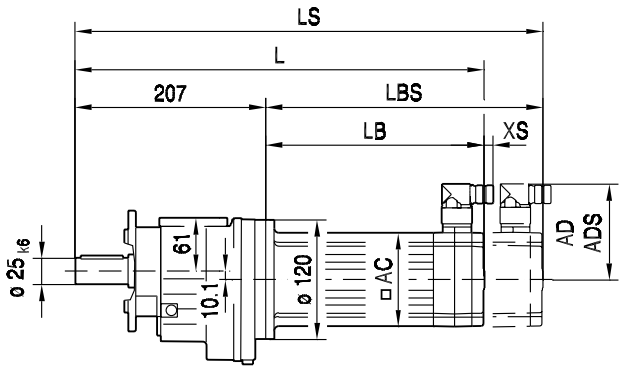
R37F..

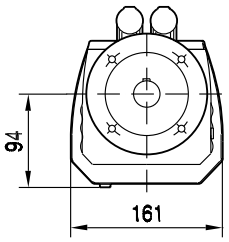


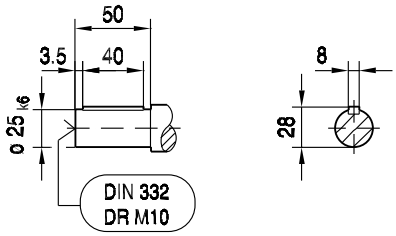
(→ 📖 150)	CMP40M	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L	
AC	57	73	73	73	88	88	88	
AD	75	82	82	82	89	89	89	
ADS	75	82	82	82	89	89	89	
L	344	346	385	424	381	431	484	
LS	374	375	414	453	409	459	513	
LB	143	145	184	223	180	230	283	
LBS	173	174	213	252	208	258	312	
XS	19	18	18	18	14	14	14	

01 035 00 07

RF37..

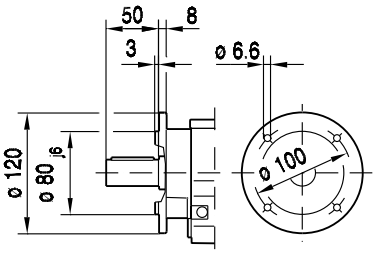




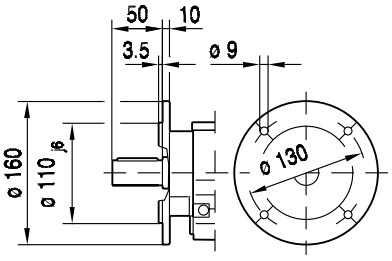


8

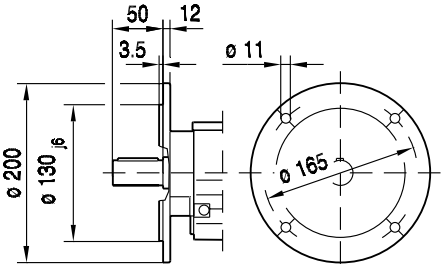
ø 120



ø 160



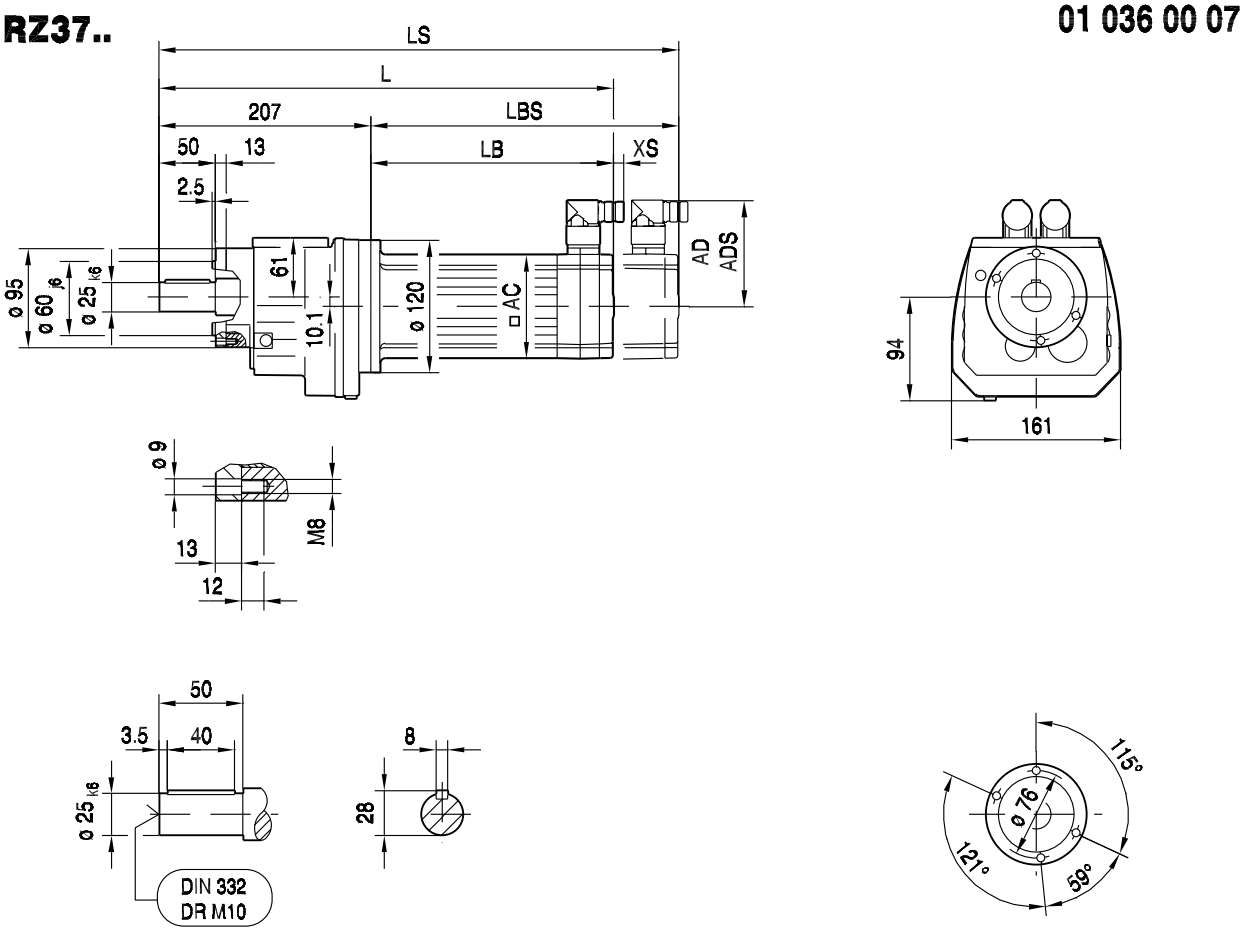
ø 200



(→ 📖 150)	CMP40M	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L	
AC	57	73	73	73	88	88	88	
AD	75	82	82	82	89	89	89	
ADS	75	82	82	82	89	89	89	
L	350	352	391	430	387	437	490	
LS	380	381	420	459	415	465	519	
LB	143	145	184	223	180	230	283	
LBS	173	174	213	252	208	258	312	
XS	19	18	18	18	14	14	14	

RZ37..

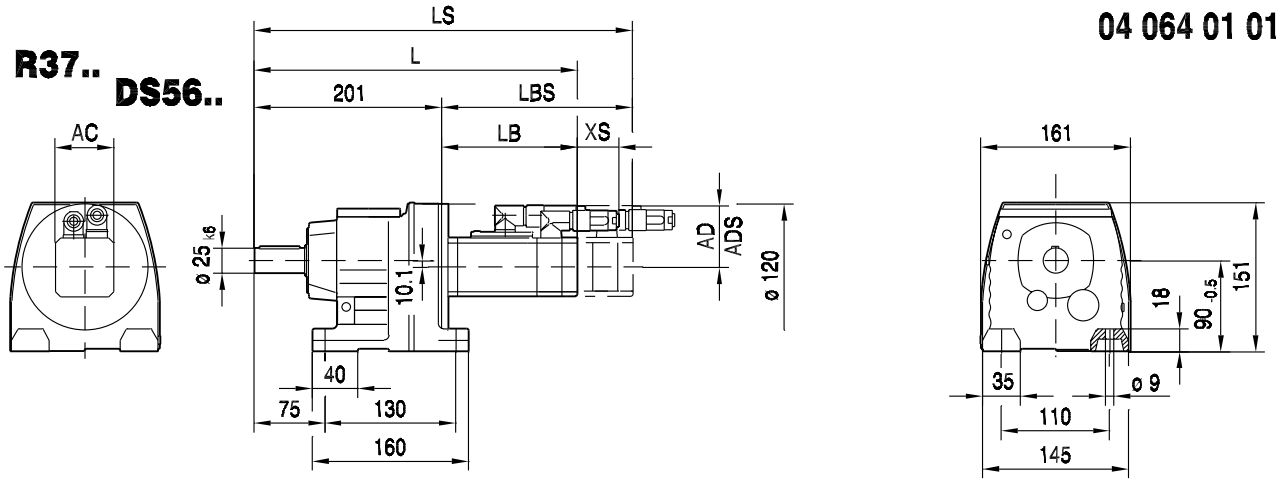
01 036 00 07



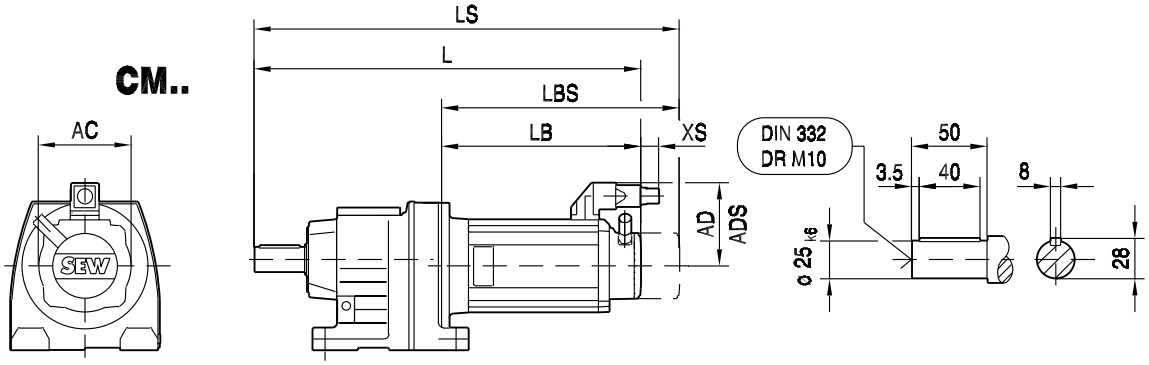
(→ 📖 150)	CMP40M	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L	
AC	57	73	73	73	88	88	88	
AD	75	82	82	82	89	89	89	
ADS	75	82	82	82	89	89	89	
L	350	352	391	430	387	437	490	
LS	380	381	420	459	415	465	519	
LB	143	145	184	223	180	230	283	
LBS	173	174	213	252	208	258	312	
XS	19	18	18	18	14	14	14	

04 064 01 01

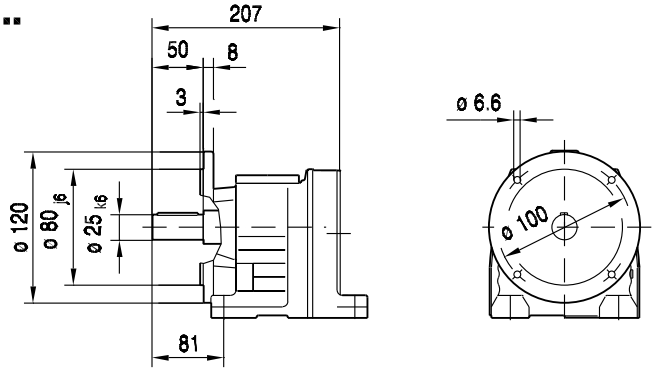
R37.. DS56..



CM..



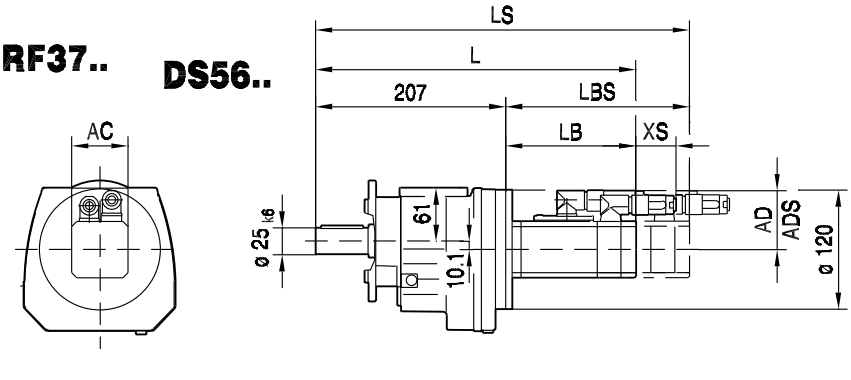
R37F..

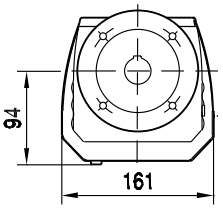


(→ 📖 150)	DS56M	DS56L	DS56H	CM71S	CM71M	CM71L	CM90S				
AC	73	73	73	117	117	117	142				
AD	71	71	77	122	122	122	140				
ADS	77	77	77	122	122	122	140				
L	338	370	473	439	459	502	494				
LS	368	400	473	521	541	584	590				
LB	137	169	272	238	258	301	293				
LBS	167	199	272	320	340	383	389				
XS	70	70	51	45	45	45	50				

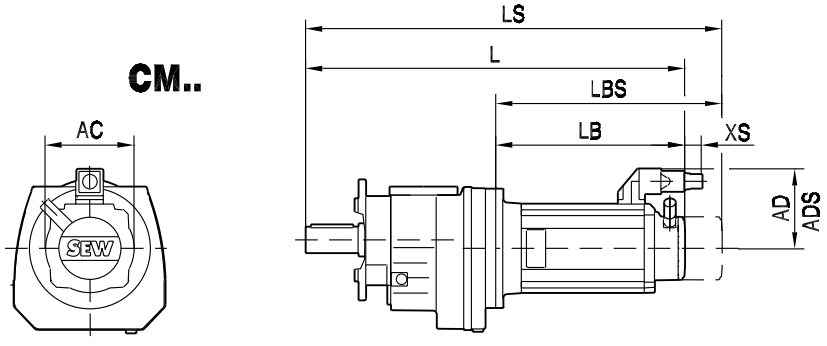
04 065 01 01

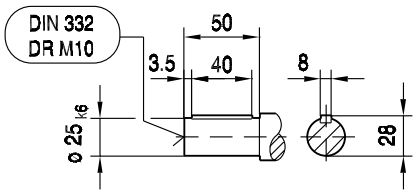
RF37.. **DS56..**



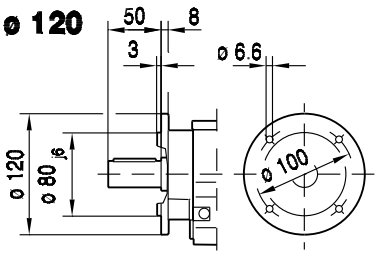


CM..

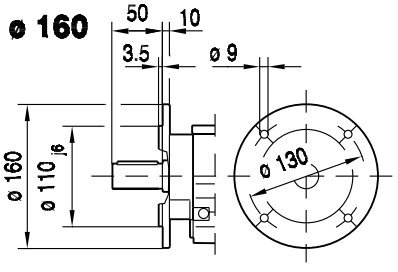




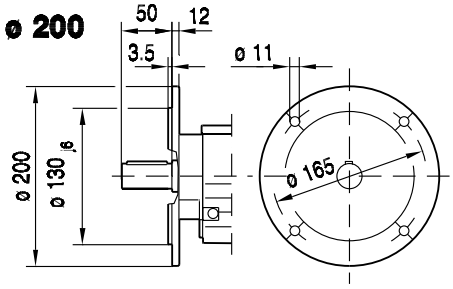
ø 120



ø 160



ø 200

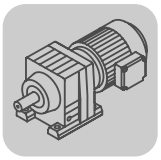


(→ 📖 150)	DS56M	DS56L	DS56H	CM71S	CM71M	CM71L	CM90S				
AC	73	73	73	117	117	117	142				
AD	71	71	77	122	122	122	140				
ADS	77	77	77	122	122	122	140				
L	344	376	479	445	465	508	500				
LS	374	406	479	527	547	590	596				
LB	137	169	272	238	258	301	293				
LBS	167	199	272	320	340	383	389				
XS	70	70	51	45	45	45	50				

8.22 R 47 / CMP / DS / CM [Nm]

M_{aDyn} [Nm]		CMP						DS			CM						
	i	50S	50M	50L	63S	63M	63L	56M	56L	56H	71S	71M	71L	90S	90M	90L	112S
R47 2	3.83	19	38	57	41	80	113	14	28	56	61	80	117	147	>166	>166	>166
	4.34	22	43	65	47	90	128	16	32	64	69	91	132	167	>170	>170	>170
	4.85	24	48	72	52	101	143	18	36	72	78	101	148	>175	>175	>175	>175
	5.64	28	56	84	61	117	166	21	42	83	90	118	172	>180	>180	>180	>180
	6	30	59	89	64	123	175	22	44	88	95	124	181	>182	>182	>182	>182
	6.96	35	69	103	74	143	>187	25	51	102	110	144	>187	>187	>187		
	7.76	39	77	115	83	159	>190	28	57	113	123	160	>190	>190	>190		
	8.01	40	79	118	85	165	234	29	58	117	127	165	241	>300	>300	>300	>300
	9.07	45	90	134	97	186	265	33	66	132	144	187	273	>305	>305	>305	>305
	10.15	51	100	150	108	209	296	37	74	148	161	209	>305	>305	>305	>305	>305
	11.79	59	117	174	126	242	>305	43	86	172	187	243	>305	>305	>305	>305	>305
	12.54	63	124	185	134	258	>305	46	91	183	199	259	>305	>305	>305	>305	>305
	14.56	73	144	215	155	299	>305	53	106	212	231	301	>305	>305	>305		
	16.22	81	160	240	173	>305	>305	59	118	237	257	>305	>305	>305	>305		
	17.89	89	177	264	191	>305		65	131	261	283	>305					
	19.27	96	191	285	205	>305	>305	70	141	281	>305	>305	>305	>305			
	21.81	109	216	>305	232	>305		80	159	>305	>305	>305					
	23.28	116	230	>305	248	>305		85	170	>305	>305	>305					
	26.74	133	264		285			98	195	>305							
	31.12	155						114	227								
	33.79	169						123	247								
R47 3	23.59	115	228	>305	246	>305	>305	84	169	>305	>305	>305	>305	>305			
	26.7	131	259	>305	279	>305	>305	95	191	>305	>305	>305	>305	>305			
	29.88	146	289	>305	>305	>305	>305	107	213	>305	>305	>305	>305	>305			
	34.73	170	>305	>305	>305	>305	>305	124	248	>305	>305	>305	>305	>305			
	36.93	181	>305	>305	>305	>305	>305	132	264	>305	>305	>305	>305	>305			
	42.87	210	>305	>305	>305	>305	>305	153	>305	>305	>305	>305	>305	>305			
	47.75	233	>305	>305	>305	>305	>305	171	>305	>305	>305	>305	>305	>305			
	52.69	258	>305	>305	>305	>305		188	>305	>305	>305	>305					
	56.73	277	>305	>305	>305	>305	>305	203	>305	>305	>305	>305	>305	>305			
	64.21	>305	>305	>305	>305	>305		227	>305	>305	>305	>305					
	68.54	>305	>305	>305	>305	>305		242	>305	>305	>305	>305					
	76.23	>305	>305	>305	>305	>305		267	>305	>305	>305	>305					
	84.9	>305	>305	>305	>305	>305		297	>305	>305	>305	>305					
	93.68	>305	>305	>305	>305	>305		>305	>305	>305	>305	>305					
	100.86	>305	>305	>305	>305	>305		>305	>305	>305	>305	>305					
	114.17	>305	>305	>305	>305	>305		>305	>305	>305	>305	>305					
	121.87	>305	>305	>305	>305	>305		>305	>305	>305	>305	>305					
	139.99	>305	>305		>305			>305	>305	>305							
	162.94	>305						>305	>305								
	176.88	>305						>305	>305								

m [kg]		CMP						DS			CM						
	s	50S	50M	50L	63S	63M	63L	56M	56L	56H	71S	71M	71L	90S	90M	90L	112S
R47	2	16	17	18	18	20	21	16	17	17	22	23	26	31	33	38	39
R47	3	17	18	19	19	20	22	16	17	18	22	23	27	31	34	39	40
RF: + 0.1 kg																	



R..CMP, DS, CM
R 47 / CMP / DS / CM [Nm]

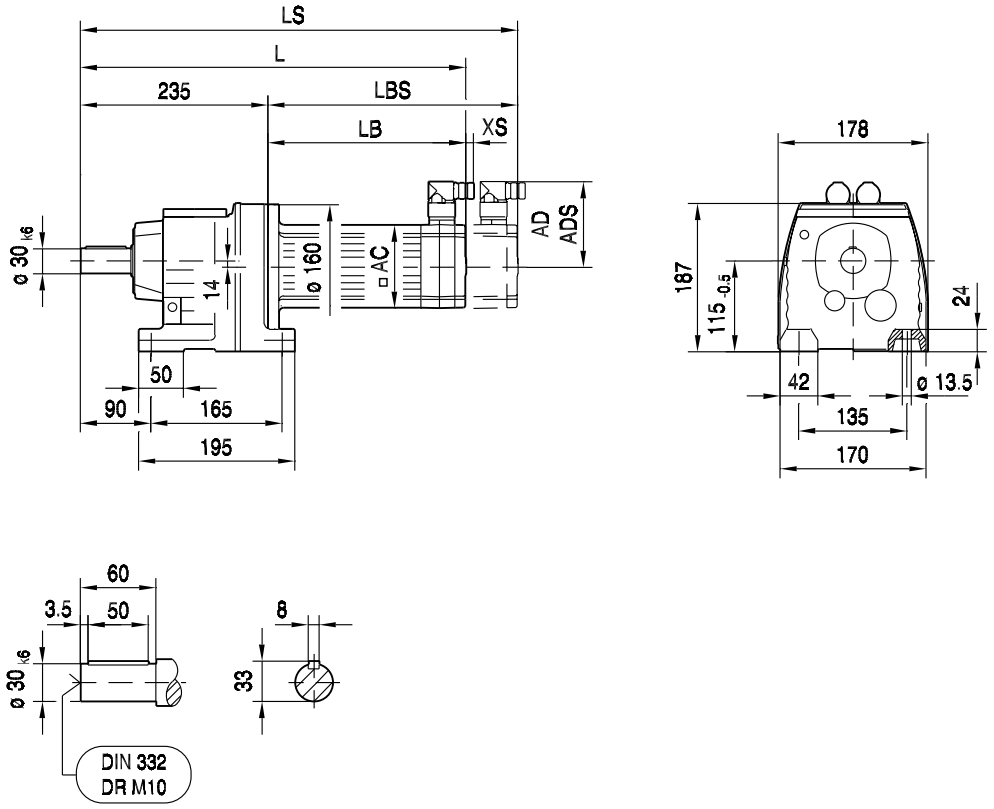
CMP.. / DS.. / CM..	i	n_{epk} [1/min]	η [%]	c_T R [Nm/']	c_T RF [Nm/']	φ /R [']
R47 2	3.83	3657	97	11.15	11.15	11
	4.34	4144	97	11.15	11.15	11
	4.85	4500	97	11.15	11.15	10
	5.64	4500	97	11.15	11.15	10
	6	4500	96	11.15	11.15	10
	6.96	4500	96	11.15	11.15	10
	7.76	4500	96	11.15	11.15	10
	8.01	4500	96	14.61	14.61	8
	9.07	4500	96	14.61	14.61	8
	10.15	4500	96	14.61	14.61	7
	11.79	4500	96	14.61	14.61	7
	12.54	4500	96	14.61	14.61	7
	14.56	4500	96	14.61	14.61	7
	16.22	4500	96	14.61	14.61	7
	17.89	4500	96	14.61	14.61	7
	19.27	4500	96	14.61	14.61	7
	21.81	4500	96	14.61	14.61	7
	23.28	4500	96	14.61	14.61	7
	26.74	4500	96	14.61	14.61	7
	31.12	4500	96	14.61	14.61	7
	33.79	4500	96	14.61	14.61	7
R47 3	23.59	4500	94	15.16	15.16	8
	26.7	4500	94	15.16	15.16	8
	29.88	4500	94	15.16	15.16	8
	34.73	4500	94	15.16	15.16	8
	36.93	4500	94	15.16	15.16	8
	42.87	4500	94	15.16	15.16	8
	47.75	4500	94	15.16	15.16	8
	52.69	4500	94	15.16	15.16	8
	56.73	4500	94	15.16	15.16	8
	64.21	4500	93	15.16	15.16	8
	68.54	4500	93	15.16	15.16	8
	76.23	4500	92	15.19	15.19	7
	84.9	4500	92	15.19	15.19	7
	93.68	4500	92	15.19	15.19	7
	100.86	4500	92	15.19	15.19	7
	114.17	4500	92	15.19	15.19	7
	121.87	4500	92	15.19	15.19	7
	139.99	4500	92	15.19	15.19	7
	162.94	4500	91	15.19	15.19	7
	176.88	4500	91	15.19	15.19	7

CMP.. / DS.. / CM..							F_{Ramax}		F_{Rapk}	
	i	M_{amax} [Nm]	M_{apk} [Nm]	$M_{aNotaus}$ [Nm]	n_{ak} [1/min]	J_G 10^{-4} [kgm^2]	R [N]	RF [N]	R [N]	RF [N]
R47 2	3.83	144	166	245	392	2.6	2080	2080	5960	5960
	4.34	146	170	248	415	2.0	2190	2190	5940	5940
	4.85	150	175	255	392	1.7	2280	2280	5930	5930
	5.64	155	180	264	372	1.3	2410	2410	5920	5920
	6	156	182	265	383	1.2	2470	2470	5910	5910
	6.96	159	187	270	374	0.93	2620	2620	5890	5890
	7.76	163	190	277	361	0.77	2720	2720	5880	5880
	8.01	205	300	349	200	2.0	2690	2690	5420	5420
	9.07	220	305	374	165	1.6	2780	2780	5390	5390
	10.15	230	305	391	158	1.3	2880	2880	5390	5390
	11.79	245	305	417	136	1.0	3020	3020	5390	5390
	12.54	250	305	425	128	0.95	3080	3080	5390	5390
	14.56	265	305	451	110	0.74	3230	3230	5390	5390
	16.22	275	305	468	99	0.63	3350	3350	5390	5390
	17.89	290	305	493	84	0.51	3390	3390	5390	5390
	19.27	295	305	502	83	0.48	3530	3530	5390	5390
	21.81	300	305	510	78	0.39	3710	3710	5390	5390
	23.28	300	305	510	82	0.36	3820	3820	5390	5390
	26.74	300	305	510	82	0.29	4050	4050	5390	5390
	31.12	220	305	374	212	0.23	4610	4610	5390	5390
	33.79	240	305	408	163	0.20	4680	4680	5390	5390
R47 3	23.59	300	305	510	85	1.7	3840	3840	5390	5390
	26.7	300	305	510	86	1.4	4050	4050	5390	5390
	29.88	300	305	510	84	1.2	4240	4240	5390	5390
	34.73	300	305	510	84	0.93	4520	4520	5390	5390
	36.93	300	305	510	84	0.85	4630	4630	5390	5390
	42.87	300	305	510	86	0.67	4930	4930	5390	5390
	47.75	300	305	510	86	0.56	5140	5140	5390	5390
	52.69	300	305	510	85	0.47	5350	5350	5390	5390
	56.73	300	305	510	85	0.44	5420	5420	5390	5390
	64.21	300	305	510	86	0.37	5420	5420	5390	5390
	68.54	300	305	510	86	0.33	5420	5420	5390	5390
	76.23	300	305	510	89	0.60	5420	5420	5390	5390
	84.9	300	305	510	82	0.52	5420	5420	5390	5390
	93.68	300	305	510	75	0.43	5420	5420	5390	5390
	100.86	300	305	510	69	0.41	5420	5420	5390	5390
	114.17	300	305	510	61	0.34	5420	5420	5390	5390
	121.87	300	305	510	57	0.31	5420	5420	5390	5390
	139.99	300	305	510	50	0.25	5420	5420	5390	5390
	162.94	300	305	510	43	0.20	5420	5420	5390	5390
	176.88	300	305	510	40	0.18	5420	5420	5390	5390

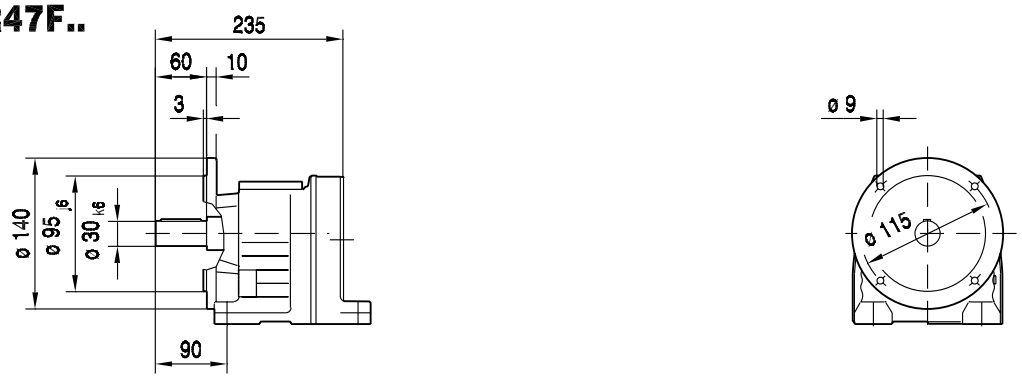
8.23 R 47 / CMP / DS / CM [mm]

01 037 00 07

R47..



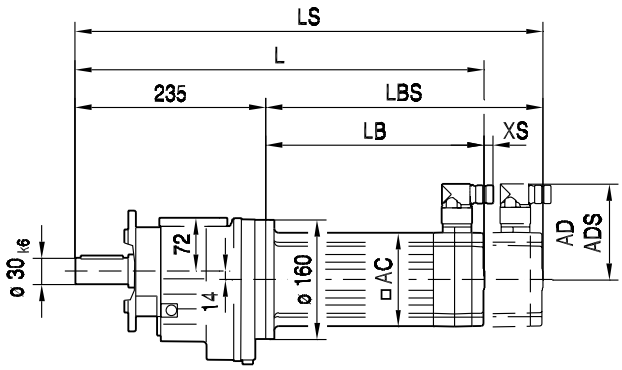
R47F..

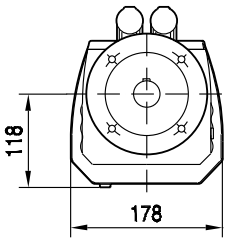


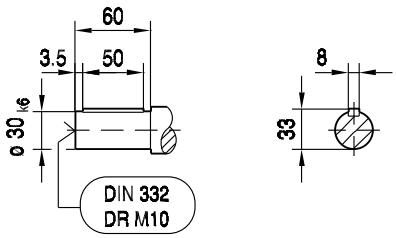
(→ 📖 150)	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L		
AC	73	73	73	88	88	88		
AD	82	82	82	89	89	89		
ADS	82	82	82	89	89	89		
L	374	413	452	408	458	508		
LS	403	442	481	437	487	537		
LB	139	178	217	173	223	273		
LBS	168	207	246	202	252	302		
XS	18	18	18	14	14	14		

01 038 00 07

RF47..

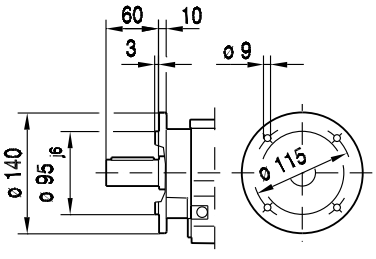




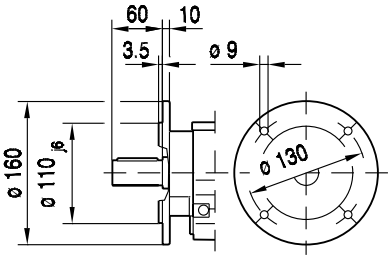


8

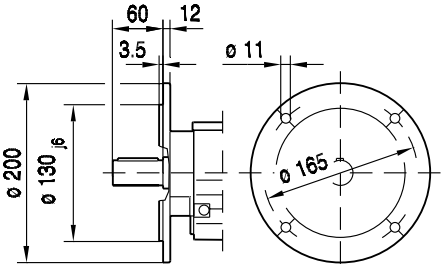
ø 140



ø 160



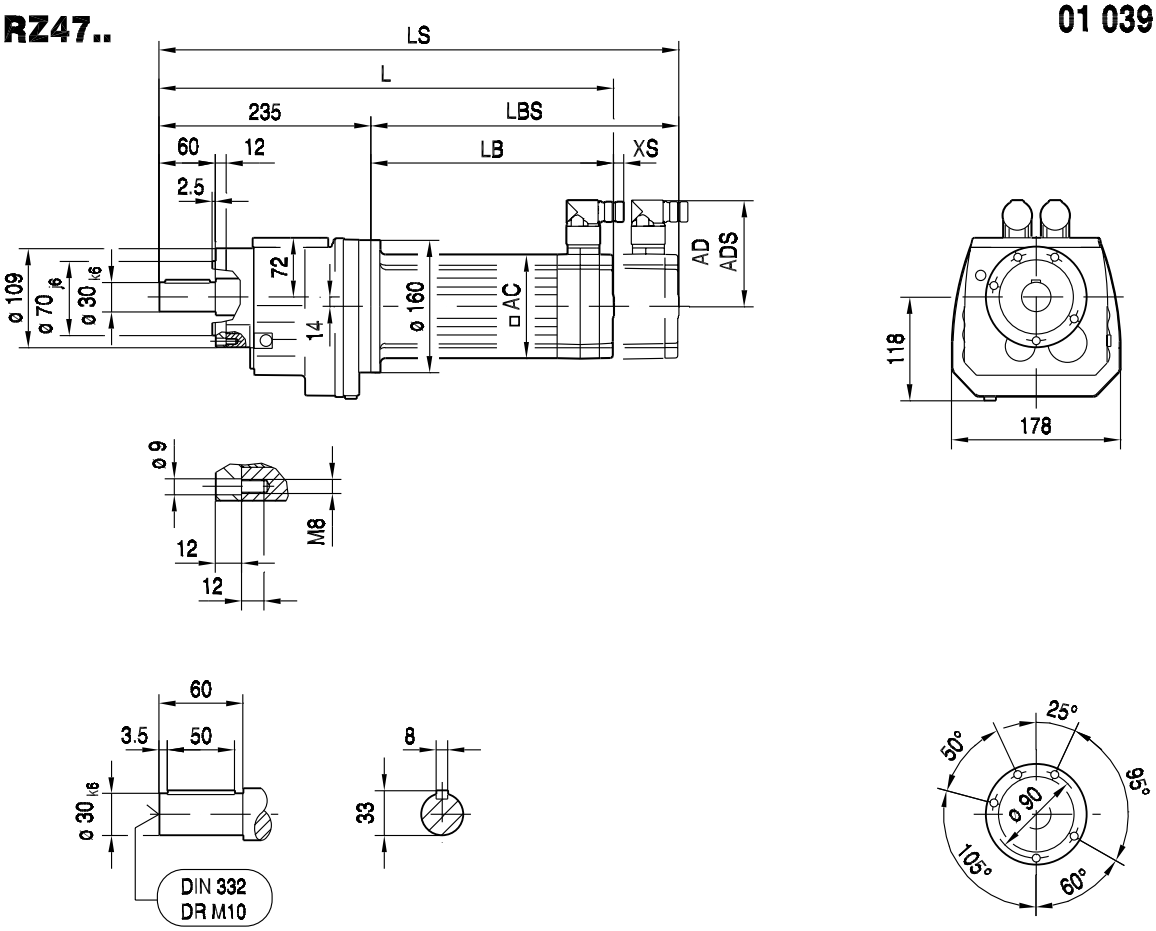
ø 200



(→ 150)	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L		
AC	73	73	73	88	88	88		
AD	82	82	82	89	89	89		
ADS	82	82	82	89	89	89		
L	374	413	452	408	458	508		
LS	403	442	481	437	487	537		
LB	139	178	217	173	223	273		
LBS	168	207	246	202	252	302		
XS	18	18	18	14	14	14		

RZ47..

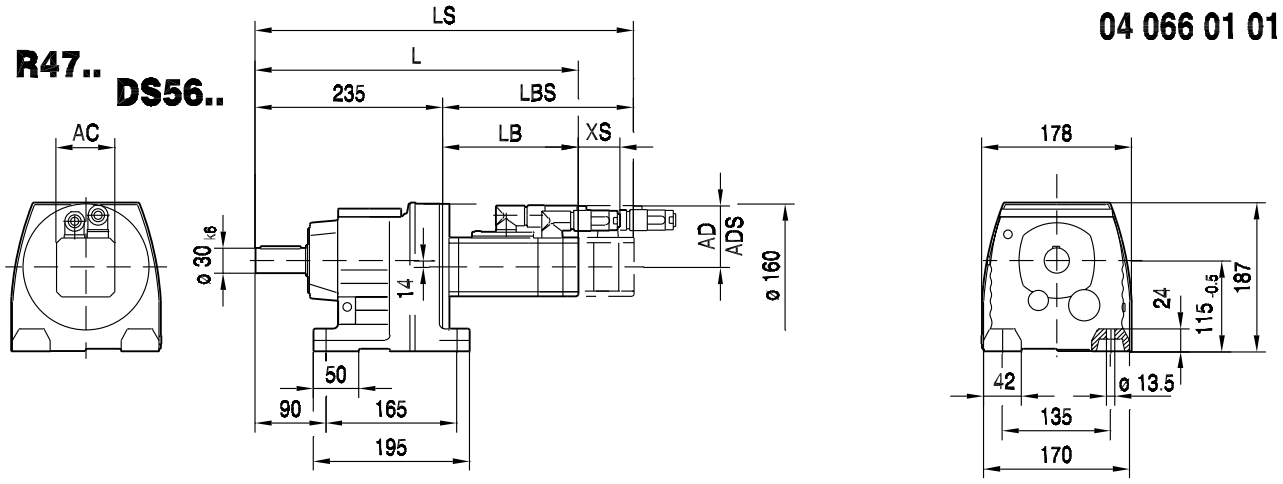
01 039 00 07



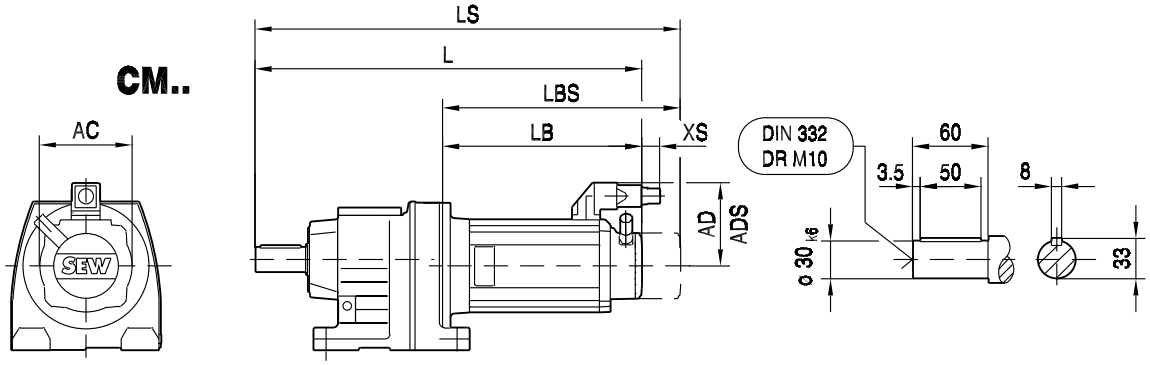
(→ 📖 150)	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L		
AC	73	73	73	88	88	88		
AD	82	82	82	89	89	89		
ADS	82	82	82	89	89	89		
L	374	413	452	408	458	508		
LS	403	442	481	437	487	537		
LB	139	178	217	173	223	273		
LBS	168	207	246	202	252	302		
XS	18	18	18	14	14	14		

04 066 01 01

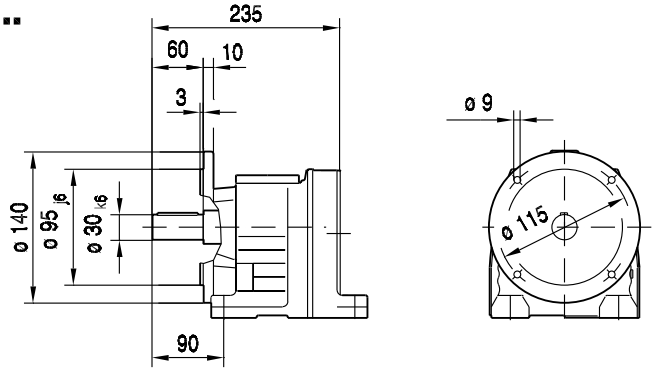
R47.. DS56..



CM..



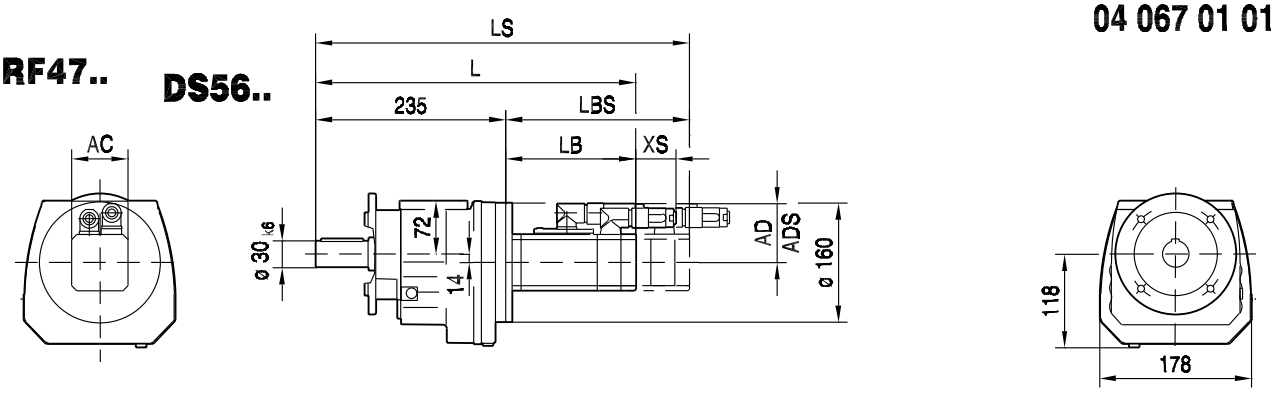
R47F..



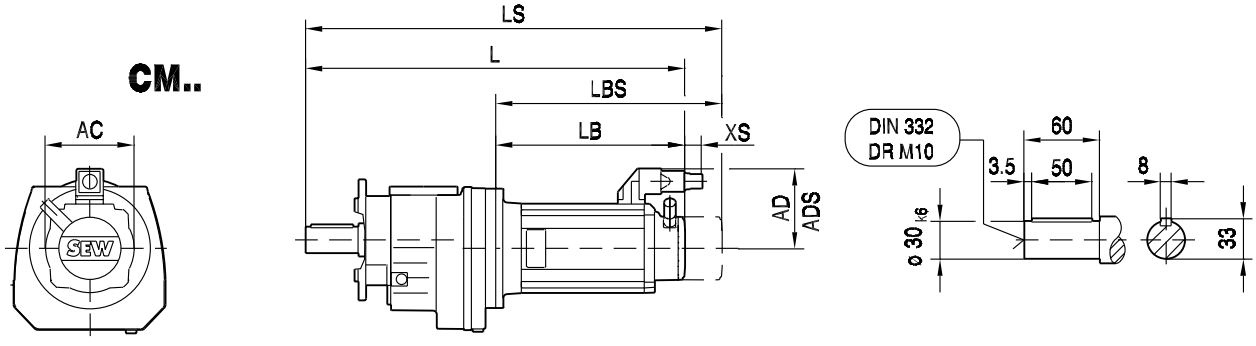
(→ 150)	DS56H	CM71S	CM71M	CM71L	CM90S	CM90M	CM90L	CM112S			
AC	73	117	117	117	142	142	142	186			
AD	77	122	122	122	140	140	140	162			
ADS	77	122	122	122	140	140	140	162			
L	501	467	487	527	519	546	604	559			
LS	501	549	569	609	615	642	700	649			
LB	266	232	252	292	284	311	369	324			
LBS	266	314	334	374	380	407	465	414			
XS	51	45	45	45	50	50	50	36			

04 067 01 01

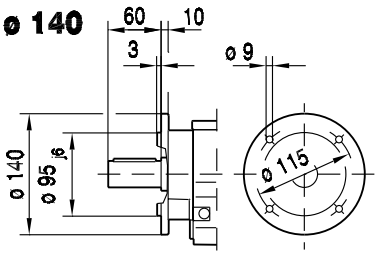
RF47.. **DS56..**



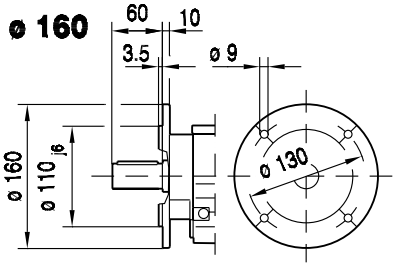
CM..



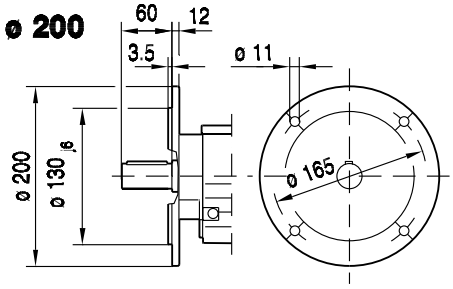
ø 140



ø 160



ø 200

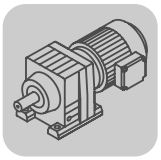


(→ 📖 150)	DS56H	CM71S	CM71M	CM71L	CM90S	CM90M	CM90L	CM112S			
AC	73	117	117	117	142	142	142	186			
AD	77	122	122	122	140	140	140	162			
ADS	77	122	122	122	140	140	140	162			
L	501	467	487	527	519	546	604	559			
LS	501	549	569	609	615	642	700	649			
LB	266	232	252	292	284	311	369	324			
LBS	266	314	334	374	380	407	465	414			
XS	51	45	45	45	50	50	50	36			

8.24 R 57 / CMP / DS / CM [Nm]

M_{aDyn} [Nm]		CMP						DS			CM							
	i	50S	50M	50L	63S	63M	63L	56M	56L	56H	71S	71M	71L	90S	90M	90L	112S	112M
R57 2	4.39		44	66	47	91	129			65	70	92	134	169	222	322	350	>420
	5.05	25	50	75	54	105	149	19	37	74	81	105	154	194	256	370	403	>425
	5.82	29	58	87	63	121	172	21	43	86	93	121	177	224	295	>425	>425	>425
	6.41	32	64	96	69	133	189	24	47	95	103	134	195	246	325	>425	>425	
	7.53	38	75	112	81	156	222	28	56	111	121	157	229	289	381	>425	>425	
	7.97	40	80	119	86	165	235	29	59	118	128	166	243	306	404	>425	>425	
	9.06	46	91	135	98	188	267	33	67	134	145	189	276	348	>425			
	9.35	47	93	140	101	194	276	34	69	138	150	195	285	359	>455	>455	>455	>455
	10.79	54	108	161	116	224	318	40	80	159	173	225	329	414	>455	>455	>455	>455
	11.88	60	119	177	128	247	350	44	88	175	190	248	362	>455	>455	>455	>455	
	13.95	70	139	208	150	290	411	51	103	206	223	291	425	>455	>455	>455	>455	
	14.77	74	148	221	159	307	436	54	109	218	236	308	450	>455	>455	>455	>455	
	16.79	85	168	251	181	349	>455	62	124	248	269	350	>455	>455	>455			
	18.6	94	186	278	200	386	>455	69	137	274	298	388	>455	>455	>455			
	21.93	111	219	328	236	>455	>455	81	162	323	351	>455	>455	>455				
	24.99	126	250	373	269	>455		92	184	368	400	>455						
	26.31	133	263	393	283	>455		97	194	388	421	>455						
R57 3	26.97	133	264	395	284	>455	>455	97	195	389	423	>455	>455	>455	>455	>455	>455	
	30.18	149	295	442	318	>455	>455	109	218	436	>455	>455	>455	>455	>455	>455	>455	
	35.07	173	343	>455	370	>455	>455	127	253	>455	>455	>455	>455	>455	>455	>455	>455	
	37.3	184	365	>455	393	>455	>455	135	269	>455	>455	>455	>455	>455	>455	>455	>455	
	43.3	214	424	>455	>455	>455	>455	156	313	>455	>455	>455	>455	>455	>455			
	48.23	238	>455	>455	>455	>455	>455	174	348	>455	>455	>455	>455	>455	>455			
	53.22	263	>455	>455	>455	>455		192	384	>455	>455	>455						
	57.29	283	>455	>455	>455	>455	>455	207	414	>455	>455	>455	>455	>455				
	64.85	320	>455	>455	>455	>455		234	>455	>455	>455	>455						
	69.23	342	>455	>455	>455	>455		250	>455	>455	>455	>455						
	80.55	394	>455	>455	>455	>455	>455	288	>455	>455	>455	>455	>455	>455	>455			
	89.71	439	>455	>455	>455	>455	>455	320	>455	>455	>455	>455	>455	>455	>455			
	98.99	>455	>455	>455	>455	>455		354	>455	>455	>455	>455						
	106.58	>455	>455	>455	>455	>455	>455	381	>455	>455	>455	>455	>455	>455				
	120.63	>455	>455	>455	>455	>455		431	>455	>455	>455	>455						
	128.77	>455	>455	>455	>455	>455		>455	>455	>455	>455	>455						
	147.92	>455	>455		>455			>455	>455	>455								
	172.17	>455						>455	>455									
	186.89	>455						>455	>455									

m [kg]		CMP						DS			CM							
	s	50S	50M	50L	63S	63M	63L	56M	56L	56H	71S	71M	71L	90S	90M	90L	112S	112M
R57	2	21	22	23	23	25	26	20	21	22	26	28	31	35	38	43	44	49
R57	3	22	23	24	24	26	27	21	22	23	27	29	32	36	39	44	45	50
RF: + 3.4 kg / RM: + 15.4 kg																		



R..CMP, DS, CM
R 57 / CMP / DS / CM [Nm]

CMP.. / DS.. / CM..	i	n_{epk} [1/min]	η [%]	c_T R [Nm/°]	c_T RF [Nm/°]	c_T RM [Nm/°]	φ /R [°]
R57 2	4.39	4500	97	21.0	21.0	16.94	10
	5.05	4500	97	21.0	21.0	16.94	10
	5.82	4500	97	21.0	21.0	16.94	10
	6.41	4500	97	21.0	21.0	16.94	9
	7.53	4500	97	21.0	21.0	16.94	9
	7.97	4500	97	21.0	21.0	16.94	9
	9.06	4500	97	21.0	21.0	16.94	9
	9.35	4500	97	25.46	25.46	19.73	7
	10.79	4500	97	25.46	25.46	19.73	7
	11.88	4500	97	25.46	25.46	19.73	7
	13.95	4500	97	25.46	25.46	19.73	7
	14.77	4500	97	25.46	25.46	19.73	7
	16.79	4500	97	25.46	25.46	19.73	7
	18.6	4500	97	25.46	25.46	19.73	7
	21.93	4500	97	25.46	25.46	19.73	7
	24.99	4500	97	25.46	25.46	19.73	6
	26.31	4500	97	25.46	25.46	19.73	6
R57 3	26.97	4500	95	26.36	26.36	20.26	8
	30.18	4500	95	26.36	26.36	20.26	8
	35.07	4500	95	26.36	26.36	20.26	8
	37.3	4500	95	26.36	26.36	20.26	8
	43.3	4500	95	26.36	26.36	20.26	8
	48.23	4500	95	26.36	26.36	20.26	8
	53.22	4500	95	26.36	26.36	20.26	8
	57.29	4500	95	26.36	26.36	20.26	8
	64.85	4500	95	26.36	26.36	20.26	8
	69.23	4500	95	26.36	26.36	20.26	7
	80.55	4500	94	26.42	26.42	20.3	7
	89.71	4500	94	26.42	26.42	20.3	7
	98.99	4500	94	26.42	26.42	20.3	7
	106.58	4500	94	26.42	26.42	20.3	7
	120.63	4500	94	26.42	26.42	20.3	7
	128.77	4500	94	26.42	26.42	20.3	7
	147.92	4500	94	26.42	26.42	20.3	7
	172.17	4500	93	26.42	26.42	20.3	7
	186.89	4500	93	26.42	26.42	20.3	7

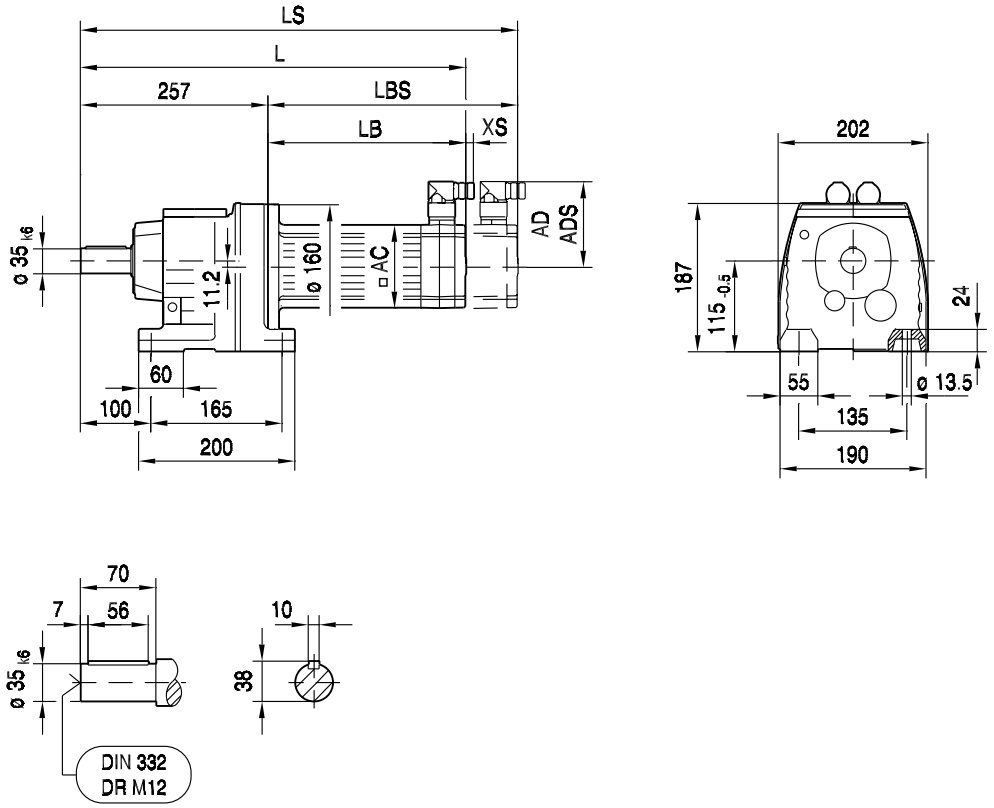
CMP.. / DS.. / CM..	i	M_{amax} [Nm]	M_{apk} [Nm]	$M_{aNotaus}$ [Nm]	n_{ak} [1/min]	J_G 10^{-4} [kgm^2]	F_{Ramax} R [N]	F_{Ramax} RF [N]	F_{Ramax} RM [N]	F_{Rapk} R [N]	F_{Rapk} RF [N]	F_{Rapk} RM [N]
R57 2	4.39	280	420	476	319	4.3	1900	1900	4000	7230	7230	4000
	5.05	305	425	519	277	3.4	1730	1730	4000	7210	7210	4000
	5.82	320	425	544	241	2.7	1820	1820	4000	7210	7210	4000
	6.41	335	425	570	218	2.3	1770	1770	4000	7210	7210	4000
	7.53	350	425	595	226	1.8	1950	1950	4000	7210	7210	4000
	7.97	355	425	604	213	1.6	2020	2020	4000	7210	7210	4000
	9.06	375	425	638	188	1.3	2010	2010	4000	7210	7210	4000
	9.35	370	455	629	193	2.8	3180	3180	4000	7080	7080	4000
	10.79	390	455	663	167	2.2	3330	3330	4000	7080	7080	4000
	11.88	405	455	689	143	1.9	3430	3430	4000	7080	7080	4000
	13.95	430	455	731	122	1.6	3610	3610	4000	7080	7080	4000
	14.77	435	455	740	115	1.4	3690	3690	4000	7080	7080	4000
	16.79	450	455	765	107	1.1	3860	3860	4000	7080	7080	4000
	18.6	450	455	765	108	0.94	4050	4050	4000	7080	7080	4000
	21.93	450	455	765	109	0.73	4370	4370	4000	7080	7080	4000
	24.99	450	455	765	108	0.51	4640	4640	4000	7080	7080	4000
	26.31	450	455	765	110	0.45	4750	4750	4000	7080	7080	4000

CMP.. / DS.. / CM..							F_{Ramax}			F_{Rapk}		
	i	M_{amax} [Nm]	M_{apk} [Nm]	$M_{aNotaus}$ [Nm]	n_{ak} [1/min]	$J_G\ 10^{-4}$ [kgm^2]	R [N]	RF [N]	RM [N]	R [N]	RF [N]	RM [N]
R57 3	26.97	450	455	765	63	1.5	4800	4800	4000	7080	7080	4000
	30.18	450	455	765	63	1.3	5040	5040	4000	7080	7080	4000
	35.07	450	455	765	66	0.97	5390	5390	4000	7080	7080	4000
	37.3	450	455	765	64	0.89	5530	5530	4000	7080	7080	4000
	43.3	450	455	765	65	0.70	5900	5900	4000	7080	7080	4000
	48.23	450	455	765	64	0.60	6170	6170	4000	7080	7080	4000
	53.22	450	455	765	66	0.49	6430	6430	4000	7080	7080	4000
	57.29	450	455	765	65	0.46	6630	6630	4000	7080	7080	4000
	64.85	450	455	765	65	0.38	6980	6980	4000	7080	7080	4000
	69.23	450	455	765	65	0.35	7100	7100	4000	7080	7080	4000
	80.55	450	455	765	56	0.62	7100	7100	4000	7080	7080	4000
	89.71	450	455	765	56	0.54	7100	7100	4000	7080	7080	4000
	98.99	450	455	765	56	0.45	7100	7100	4000	7080	7080	4000
	106.58	450	455	765	55	0.42	7100	7100	4000	7080	7080	4000
	120.63	450	455	765	56	0.35	7100	7100	4000	7080	7080	4000
	128.77	450	455	765	54	0.32	7100	7100	4000	7080	7080	4000
	147.92	450	455	765	47	0.26	7100	7100	4000	7080	7080	4000
	172.17	450	455	765	41	0.21	7100	7100	4000	7080	7080	4000
	186.89	450	455	765	37	0.18	7100	7100	4000	7080	7080	4000

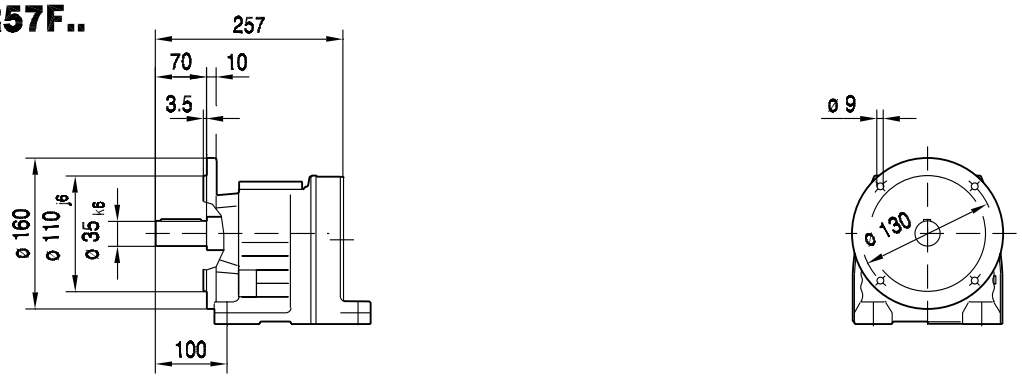
8.25 R 57 / CMP / DS / CM [mm]

01 040 00 07

R57..



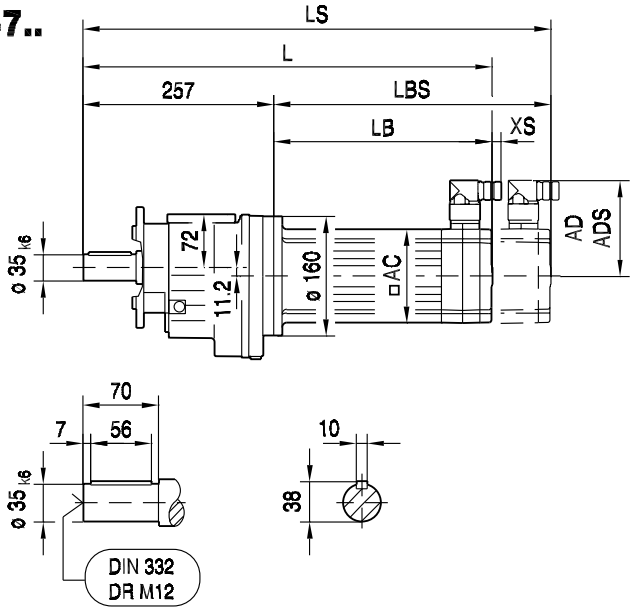
R57F..

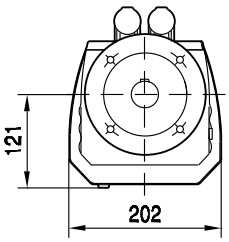


(→ 📖 150)	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L		
AC	73	73	73	88	88	88		
AD	82	82	82	89	89	89		
ADS	82	82	82	89	89	89		
L	396	435	474	430	480	530		
LS	425	464	503	459	509	559		
LB	139	178	217	173	223	273		
LBS	168	207	246	202	252	302		
XS	18	18	18	14	14	14		

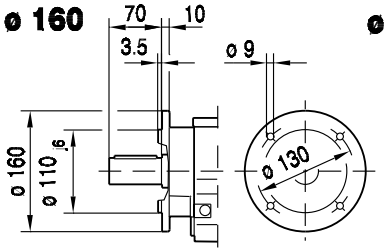
RF57..

01 041 00 07

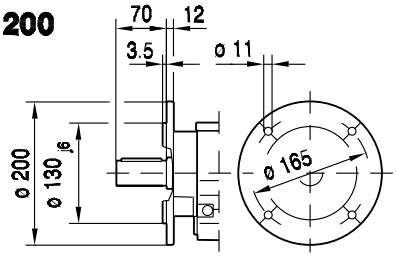




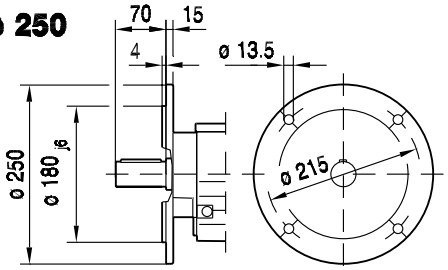
ø 160



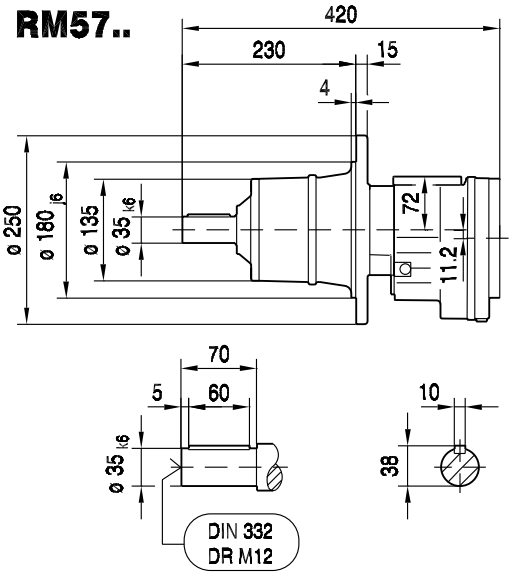
ø 200

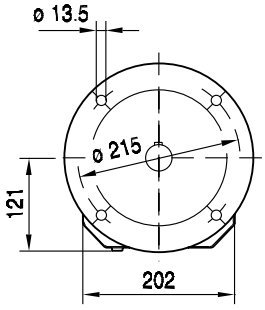


ø 250



RM57..

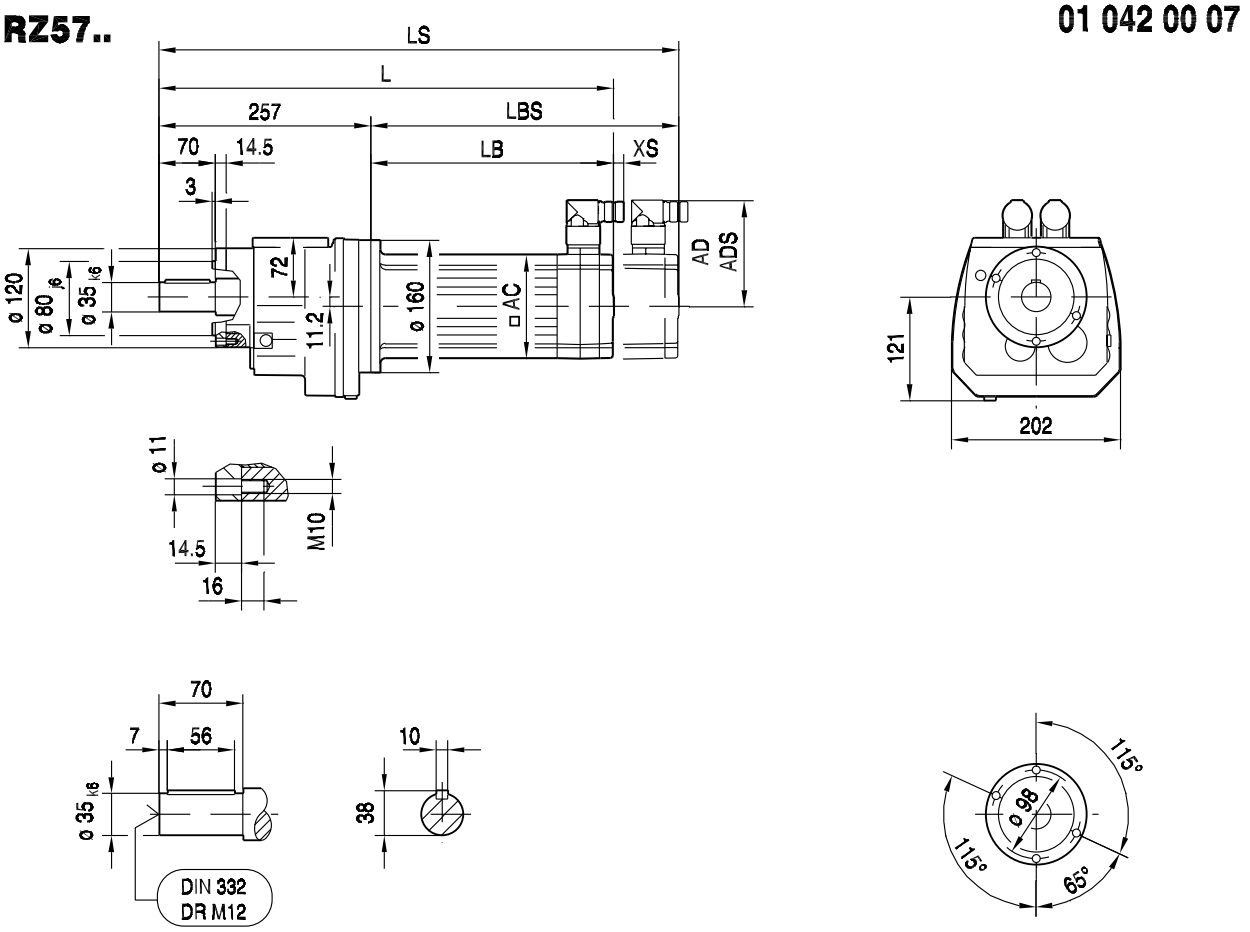




(→ 📖 150)	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L		
AC	73	73	73	88	88	88		
AD	82	82	82	89	89	89		
ADS	82	82	82	89	89	89		
L	396	435	474	430	480	530		
LS	425	464	503	459	509	559		
LB	139	178	217	173	223	273		
LBS	168	207	246	202	252	302		
XS	18	18	18	14	14	14		

RZ57..

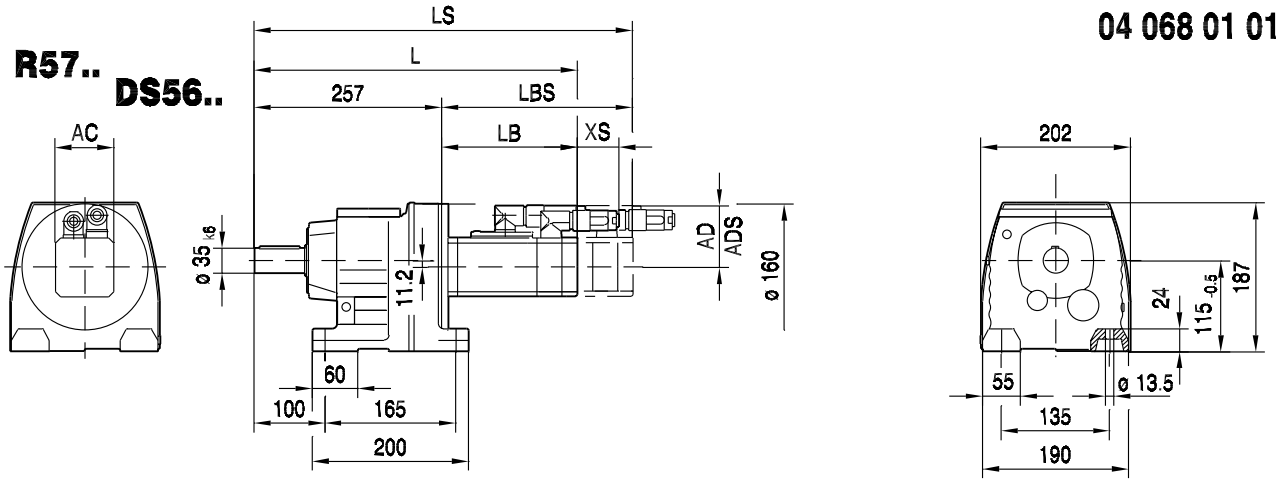
01 042 00 07



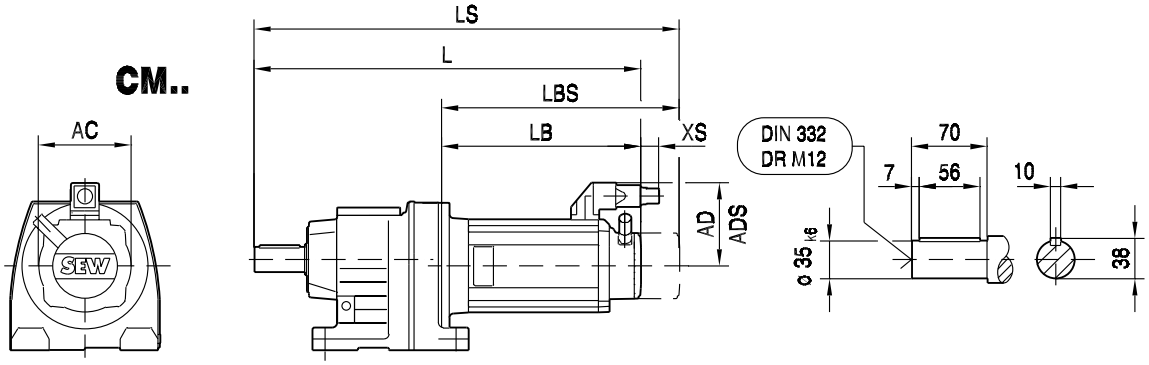
(→ 📖 150)	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L		
AC	73	73	73	88	88	88		
AD	82	82	82	89	89	89		
ADS	82	82	82	89	89	89		
L	396	435	474	430	480	530		
LS	425	464	503	459	509	559		
LB	139	178	217	173	223	273		
LBS	168	207	246	202	252	302		
XS	18	18	18	14	14	14		

04 068 01 01

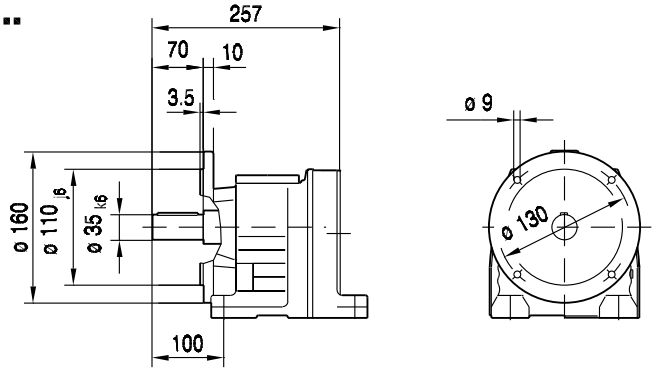
R57.. DS56..



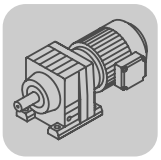
CM..



R57F..



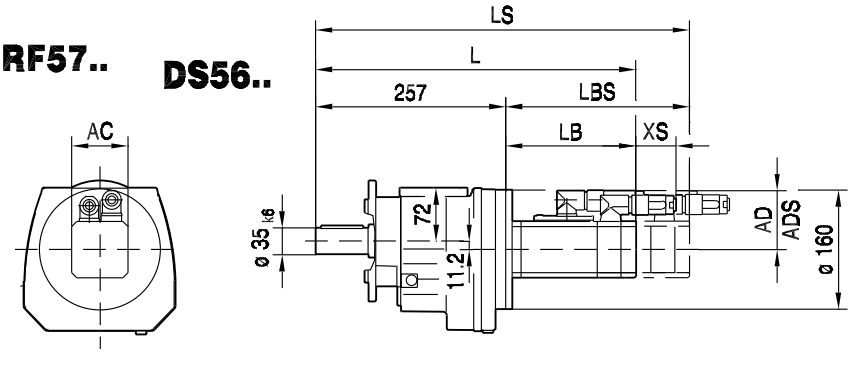
(→ 150)	DS56H	CM71S	CM71M	CM71L	CM90S	CM90M	CM90L	CM112S	CM112M		
AC	73	117	117	117	142	142	142	186	186		
AD	77	122	122	122	140	140	140	162	162		
ADS	77	122	122	122	140	140	140	162	162		
L	523	489	509	549	541	568	626	581	605		
LS	523	571	591	631	637	664	722	671	695		
LB	266	232	252	292	284	311	369	324	348		
LBS	266	314	334	374	380	407	465	414	438		
XS	51	45	45	45	50	50	50	36	36		



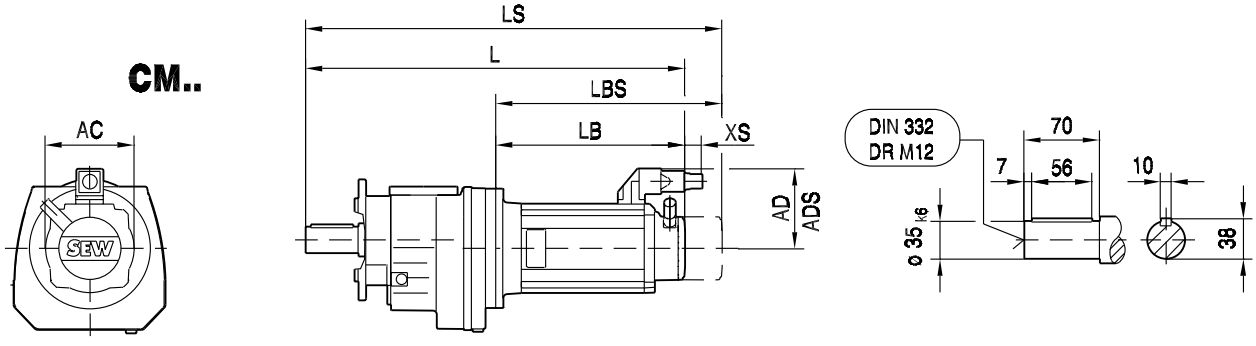
R..CMP, DS, CM
R 57 / CMP / DS / CM [mm]

04 069 01 01

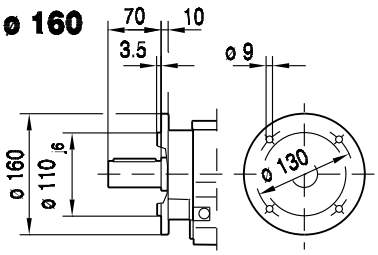
RF57.. **DS56..**



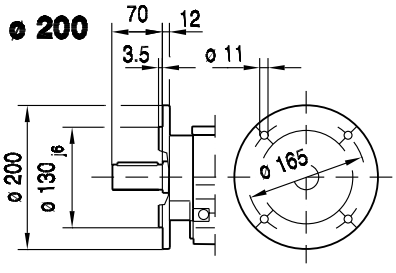
CM..



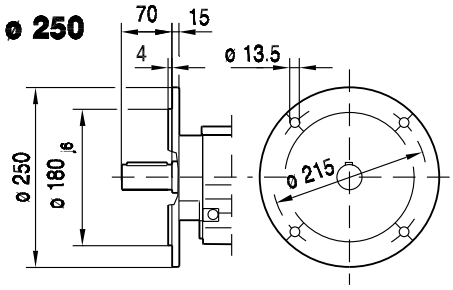
ø 160



ø 200



ø 250

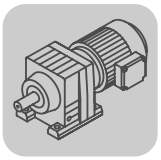


(→ 📖 150)	DS56H	CM71S	CM71M	CM71L	CM90S	CM90M	CM90L	CM112S	CM112M		
AC	73	117	117	117	142	142	142	186	186		
AD	77	122	122	122	140	140	140	162	162		
ADS	77	122	122	122	140	140	140	162	162		
L	523	489	509	549	541	568	626	581	605		
LS	523	571	591	631	637	664	722	671	695		
LB	266	232	252	292	284	311	369	324	348		
LBS	266	314	334	374	380	407	465	414	438		
XS	51	45	45	45	50	50	50	36	36		

8.26 R 67 / CMP / DS / CM [Nm]

M_{aDyn} [Nm]		CMP						DS			CM							
	i	50S	50M	50L	63S	63M	63L	56M	56L	56H	71S	71M	71L	90S	90M	90L	112S	112M
	4.29		43	64	46	89	127			63	69	89	131	165	217	315	342	>405
	4.93	25	49	74	53	102	145	18	36	73	79	103	150	189	250	362	394	>435
	5.7	29	57	85	61	118	168	21	42	84	91	119	174	219	289	418	455	>465
	6.27	32	63	94	68	130	185	23	46	92	100	131	191	241	317	460	>485	
	7.36	37	74	110	79	153	217	27	54	109	118	153	224	283	373	>485	>485	
	7.79	39	78	116	84	162	230	29	57	115	125	162	237	299	394	>485	>485	
	8.7		87	130	94	181	257			128	139	181	265	334	441	638	>660	>660
R67	10	50	100	149	108	208	295	37	74	147	160	209	305	384	506	>665	>665	>665
R67 2	11.54	58	115	172	124	240	340	43	85	170	185	241	351	443	584	>665	>665	>665
	12.7	64	127	190	137	264	374	47	94	187	203	265	387	488	643	>665	>665	
	14.91	75	149	223	161	310	440	55	110	220	239	311	454	573	>665	>665	>665	
	15.79	80	158	236	170	328	466	58	116	233	253	329	481	607	>665	>665	>665	
	17.95	91	179	268	193	373	529	66	132	265	287	374	547	>665	>665			
	19.89	100	199	297	214	413	587	73	147	293	318	415	606	>665	>665			
	23.44	118	234	350	252	487	>665	86	173	346	375	489	>665	>665				
	26.72	135	267	399	288	555		98	197	394	428	557						
	28.13	142	281	420	303	584		104	207	415	450	587						
	28.83	142	282	422	304	586	>595	104	208	416	452	589	>595	>595	>595	>595	>595	
	32.27	159	316	472	340	>595	>595	116	233	466	506	>595	>595	>595	>595	>595	>595	
	37.5	185	367	549	395	>595	>595	135	271	542	588	>595	>595	>595	>595	>595	>595	
	39.88	197	390	583	421	>595	>595	144	288	576	>595	>595	>595	>595	>595	>595	>595	
	46.29	229	453	>600	488	>600	>600	167	334	>600	>600	>600	>600	>600	>600			
	51.56	255	505	>600	544	>600	>600	186	372	>600	>600	>600	>600	>600	>600			
	56.89	281	557	>600	600	>600		205	411	>600	>600	>600						
	61.26	303	599	>600	>600	>600	>600	221	442	>600	>600	>600	>600	>600				
R67	69.75	345	>660	>660	>660	>660	>660	252	504	>660	>660	>660	>660	>660	>660	>660	>660	
R67 3	74.17	366	>660	>660	>660	>660	>660	268	536	>660	>660	>660	>660	>660	>660	>660	>660	
	86.11	425	>660	>660	>660	>660	>660	311	622	>660	>660	>660	>660	>660	>660			
	95.91	474	>660	>660	>660	>660	>660	346	>660	>660	>660	>660	>660	>660	>660			
	105.83	523	>660	>660	>660	>660		382	>660	>660	>660	>660						
	113.94	563	>660	>660	>660	>660	>660	411	>660	>660	>660	>660	>660	>660				
	128.97	637	>660	>660	>660	>660		466	>660	>660	>660	>660						
	137.67	>660	>660	>660	>660	>660		492	>660	>660	>660	>660						
	158.14	>660	>660		>660			565	>660	>660								
	184.07	>660						657	>660									
	199.81	>660						>660	>660									

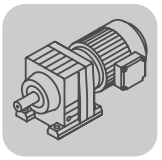
m [kg]		CMP						DS			CM							
	s	50S	50M	50L	63S	63M	63L	56M	56L	56H	71S	71M	71L	90S	90M	90L	112S	112M
R67	2	28	29	30	30	31	33	27	28	29	33	34	38	42	45	50	51	55
R67	3	29	30	31	31	32	34	28	29	30	34	35	39	43	46	50	52	56
RF: + 3.2 kg / RM: + 19.0 kg																		



R..CMP, DS, CM
R 67 / CMP / DS / CM [Nm]

CMP.. / DS.. / CM..	i	n_{epk} [1/min]	η [%]	c_T R [Nm/']	c_T RF [Nm/']	c_T RM [Nm/']	φ /R [']
R67 2	4.29	3700	97	24.26	24.26	22.19	10
	4.93	4252	97	24.26	24.26	22.19	9
	5.7	4500	97	24.26	24.26	22.19	9
	6.27	4500	97	24.26	24.26	22.19	9
	7.36	4500	97	24.26	24.26	22.19	8
	7.79	4500	97	24.26	24.26	22.19	8
	8.7	4500	97	31.76	31.76	28.3	7
	10	4500	97	31.76	31.76	28.3	7
	11.54	4500	97	31.76	31.76	28.3	7
	12.7	4500	97	31.76	31.76	28.3	6
	14.91	4500	97	31.76	31.76	28.3	6
	15.79	4500	97	31.76	31.76	28.3	6
	17.95	4500	97	31.76	31.76	28.3	6
	19.89	4500	97	31.76	31.76	28.3	6
	23.44	4500	97	31.76	31.76	28.3	6
	26.72	4500	97	31.76	31.76	28.3	6
	28.13	4500	97	31.76	31.76	28.3	6
R67 3	28.83	4500	95	33.07	33.07	29.34	7
	32.27	4500	95	33.07	33.07	29.34	7
	37.5	4500	95	33.07	33.07	29.34	7
	39.88	4500	95	33.07	33.07	29.34	7
	46.29	4500	95	33.07	33.07	29.34	7
	51.56	4500	95	33.07	33.07	29.34	7
	56.89	4500	95	33.07	33.07	29.34	7
	61.26	4500	95	33.07	33.07	29.34	7
	69.75	4500	95	33.16	33.16	29.41	7
	74.17	4500	95	33.16	33.16	29.41	7
	86.11	4500	95	33.16	33.16	29.41	6
	95.91	4500	95	33.16	33.16	29.41	6
	105.83	4500	95	33.16	33.16	29.41	6
	113.94	4500	95	33.16	33.16	29.41	6
	128.97	4500	95	33.16	33.16	29.41	6
	137.67	4500	94	33.16	33.16	29.41	6
	158.14	4500	94	33.16	33.16	29.41	6
	184.07	4500	94	33.16	33.16	29.41	6
	199.81	4500	93	33.16	33.16	29.41	6

CMP.. / DS.. / CM..	i	M_{amax} [Nm]	M_{apk} [Nm]	$M_{aNotaus}$ [Nm]	n_{ak} [1/min]	J_G 10^{-4} [kgm^2]	F_{Ramax} R [N]	F_{Ramax} RF [N]	F_{Ramax} RM [N]	F_{Rapk} R [N]	F_{Rapk} RF [N]	F_{Rapk} RM [N]
R67 2	4.29	270	405	459	326	5.9	5000	5000	8720	9300	9300	9800
	4.93	290	435	493	284	4.6	5210	5210	9120	9100	9100	9760
	5.7	310	465	527	246	3.6	5450	5450	9560	8870	8870	9710
	6.27	330	485	561	223	3.0	5590	5590	9850	8710	8710	9680
	7.36	370	485	629	190	2.4	5790	5790	9850	8710	8710	9680
	7.79	380	485	646	180	2.1	5830	5830	9840	8710	8710	9680
	8.7	440	660	748	161	4.0	5960	5960	9750	5350	5350	9330
	10	470	665	799	140	3.2	6220	6220	9700	4700	4700	9320
	11.54	500	665	850	130	2.5	6500	6500	9660	4700	4700	9320
	12.7	520	665	884	118	2.2	6640	6640	9620	4700	4700	9320
	14.91	550	665	935	101	1.7	6980	6980	9560	4700	4700	9320
	15.79	560	665	952	95	1.6	7130	7130	9540	4700	4700	9320
	17.95	590	665	1003	84	1.2	7330	7330	9480	4700	4700	9320
	19.89	600	665	1020	75	1.0	7560	7560	9460	4700	4700	9320
	23.44	560	665	952	94	0.80	8010	8010	9540	4700	4700	9320
	26.72	540	665	918	105	0.56	8210	8210	9580	4700	4700	9320
	28.13	540	665	918	103	0.50	8210	8210	9580	4700	4700	9320

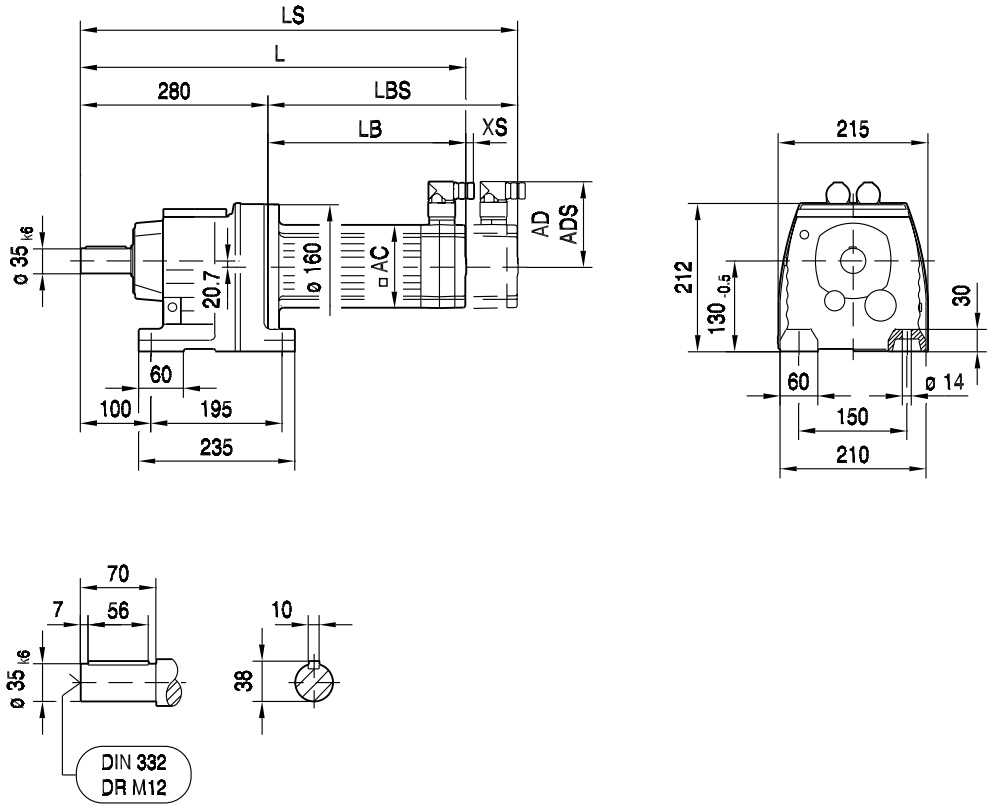


CMP.. / DS.. / CM..							F_{Ramax}			F_{Rapk}		
	i	M_{amax} [Nm]	M_{apk} [Nm]	$M_{aNotaus}$ [Nm]	n_{ak} [1/min]	$J_G\ 10^{-4}$ [kgm^2]	R [N]	RF [N]	RM [N]	R [N]	RF [N]	RM [N]
R67 3	28.83	520	595	884	49	1.5	8400	8400	9620	7620	7620	9470
	32.27	540	595	918	43	1.3	8210	8210	9580	7620	7620	9470
	37.5	570	595	969	37	1.0	7900	7900	9520	7620	7620	9470
	39.88	580	595	986	35	0.93	7790	7790	9500	7620	7620	9470
	46.29	600	600	1020	32	0.72	7560	7560	9460	7620	7620	9470
	51.56	600	600	1020	33	0.61	7560	7560	9460	7620	7620	9470
	56.89	600	600	1020	33	0.50	7560	7560	9460	7620	7620	9470
	61.26	600	600	1020	33	0.47	7560	7560	9460	7620	7620	9470
	69.75	600	660	1020	29	0.88	7560	7560	9460	5350	5350	9330
	74.17	600	660	1020	28	0.81	7560	7560	9460	5350	5350	9330
	86.11	600	660	1020	29	0.63	7560	7560	9460	5350	5350	9330
	95.91	600	660	1020	29	0.54	7560	7560	9460	5350	5350	9330
	105.83	600	660	1020	29	0.45	7560	7560	9460	5350	5350	9330
	113.94	600	660	1020	30	0.42	7560	7560	9460	5350	5350	9330
	128.97	600	660	1020	29	0.36	7560	7560	9460	5350	5350	9330
	137.67	600	660	1020	30	0.32	7560	7560	9460	5350	5350	9330
	158.14	600	660	1020	30	0.26	7560	7560	9460	5350	5350	9330
	184.07	600	660	1020	30	0.21	7560	7560	9460	5350	5350	9330
	199.81	600	660	1020	30	0.19	7560	7560	9460	5350	5350	9330

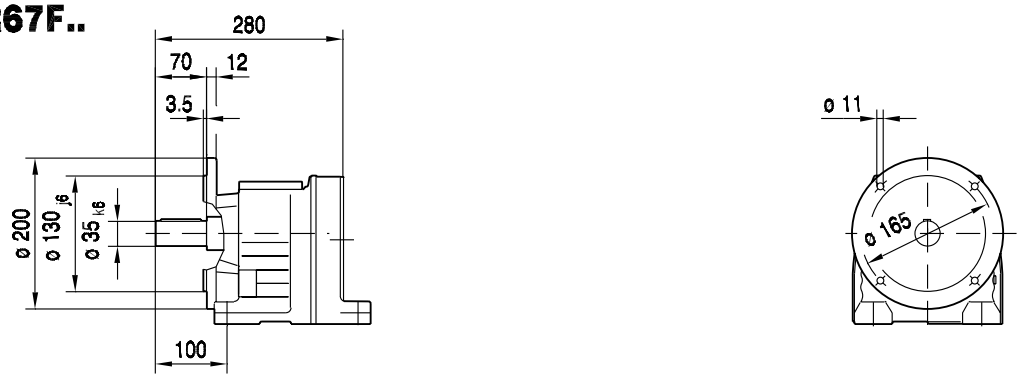
8.27 R 67 / CMP / DS / CM [mm]

01 043 00 07

R67..



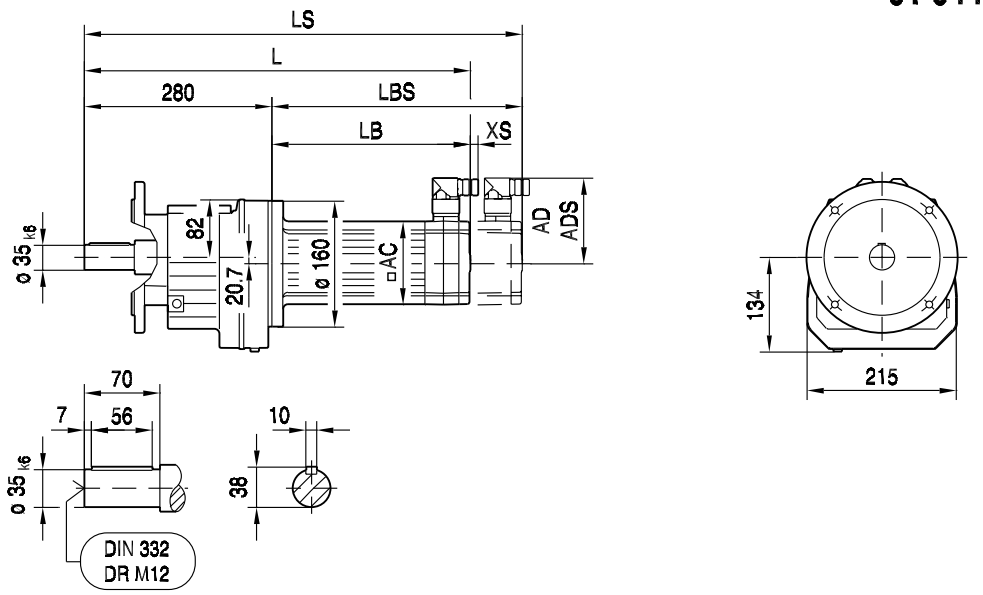
R67F..



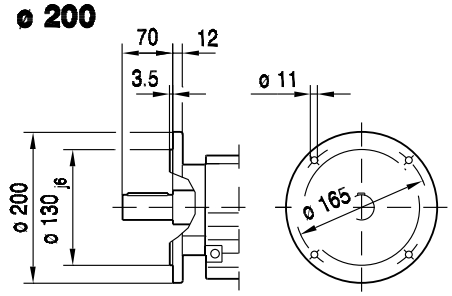
(→ 📖 150)	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L		
AC	73	73	73	88	88	88		
AD	82	82	82	89	89	89		
ADS	82	82	82	89	89	89		
L	419	458	497	453	503	553		
LS	448	487	526	482	532	582		
LB	139	178	217	173	223	273		
LBS	168	207	246	202	252	302		
XS	18	18	18	14	14	14		

01 044 00 07

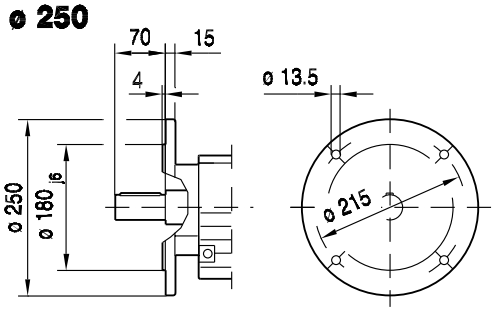
RF67..



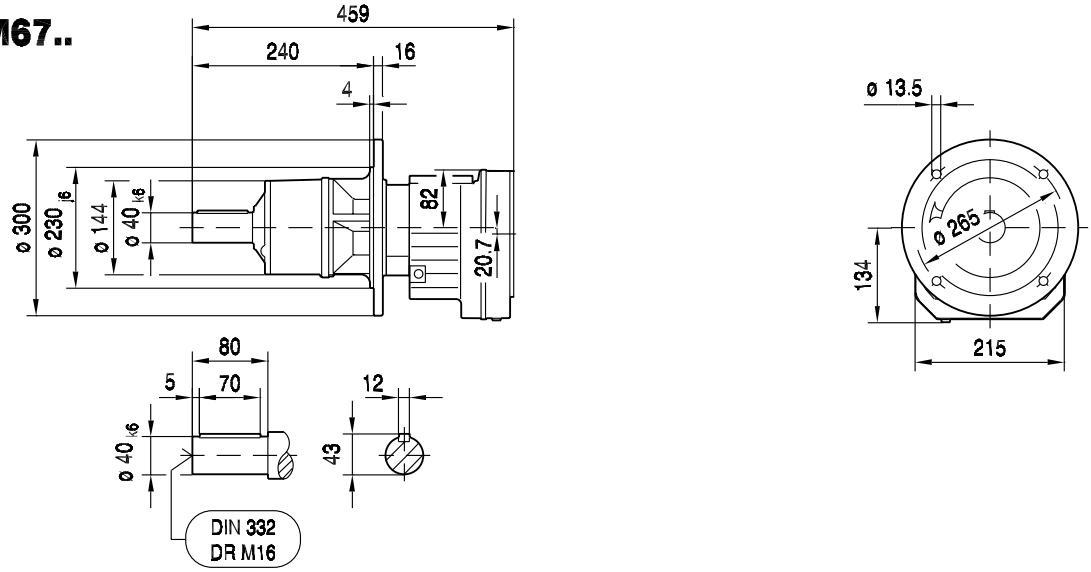
ø 200



ø 250



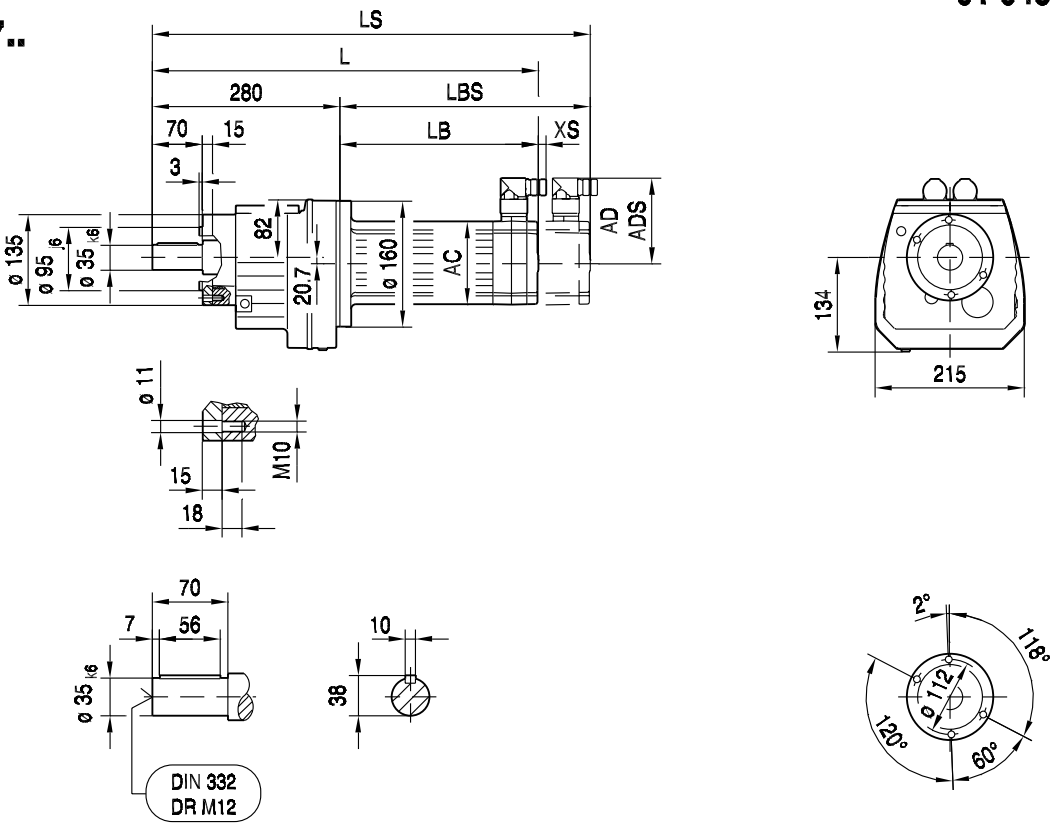
RM67..



(→ 150)	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L		
AC	73	73	73	88	88	88		
AD	82	82	82	89	89	89		
ADS	82	82	82	89	89	89		
L	419	458	497	453	503	553		
LS	448	487	526	482	532	582		
LB	139	178	217	173	223	273		
LBS	168	207	246	202	252	302		
XS	18	18	18	14	14	14		

01 045 00 07

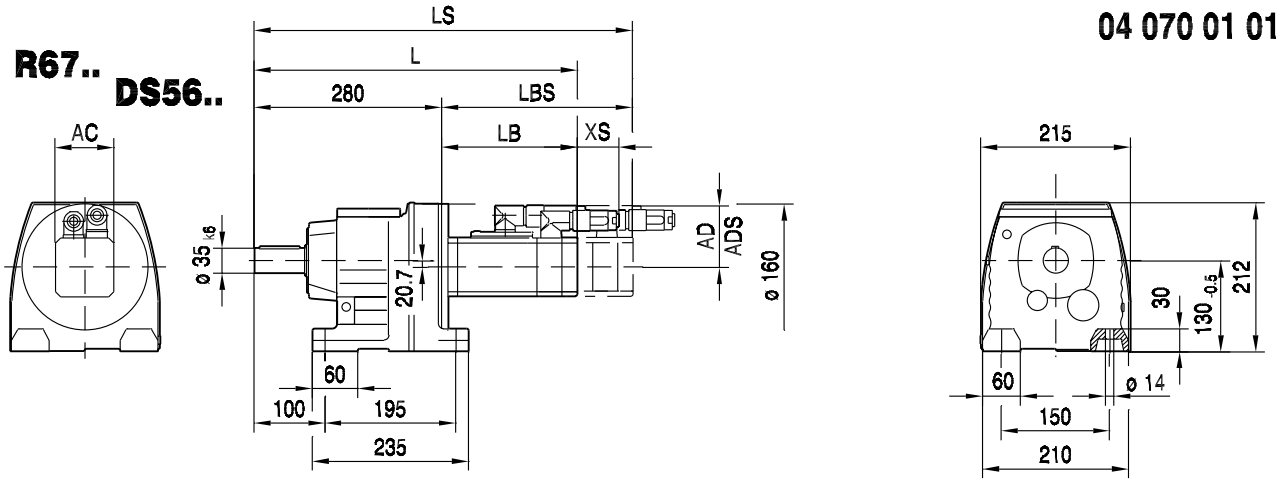
RZ67..



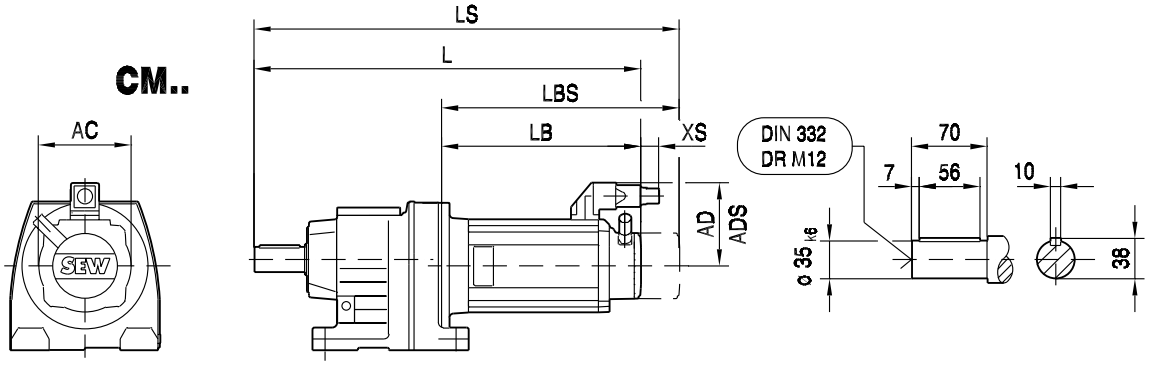
(→ 📖 150)	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L		
AC	73	73	73	88	88	88		
AD	82	82	82	89	89	89		
ADS	82	82	82	89	89	89		
L	419	458	497	453	503	553		
LS	448	487	526	482	532	582		
LB	139	178	217	173	223	273		
LBS	168	207	246	202	252	302		
XS	18	18	18	14	14	14		

04 070 01 01

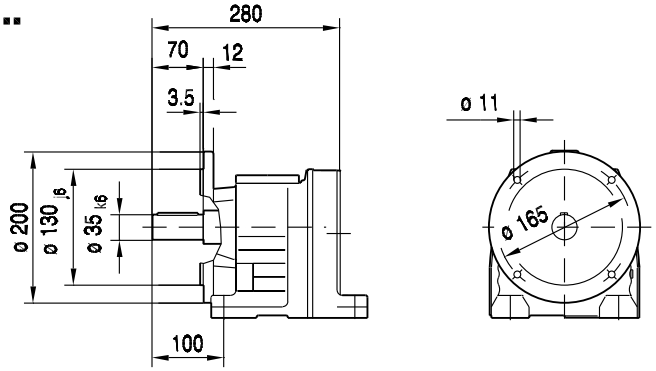
R67.. DS56..



CM..



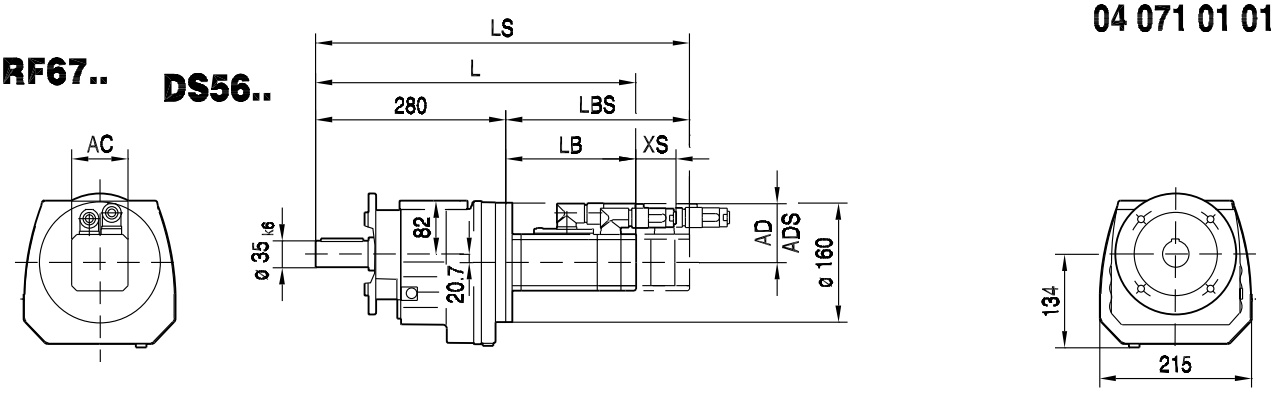
R67F..



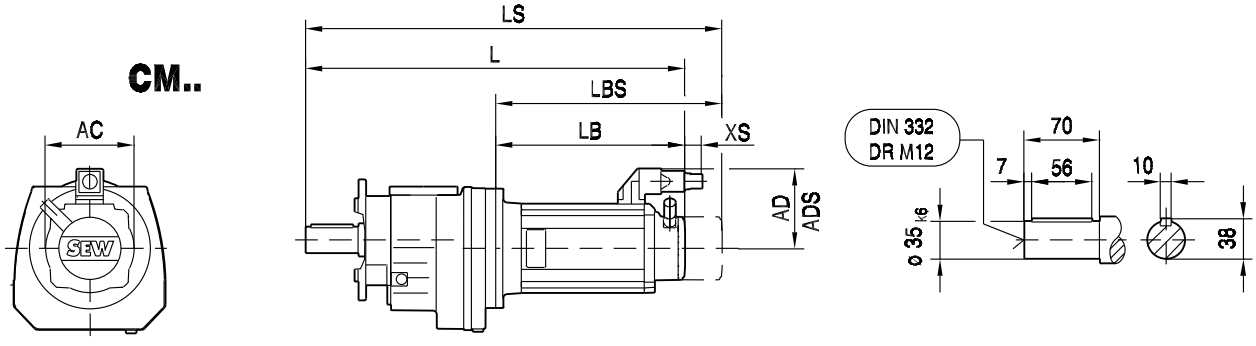
(→ 📖 150)	DS56H	CM71S	CM71M	CM71L	CM90S	CM90M	CM90L	CM112S	CM112M		
AC	73	117	117	117	142	142	142	186	186		
AD	77	122	122	122	140	140	140	162	162		
ADS	77	122	122	122	140	140	140	162	162		
L	546	512	532	572	564	591	649	604	628		
LS	546	594	614	654	660	687	745	694	718		
LB	266	232	252	292	284	311	369	324	348		
LBS	266	314	334	374	380	407	465	414	438		
XS	51	45	45	45	50	50	50	36	36		

04 071 01 01

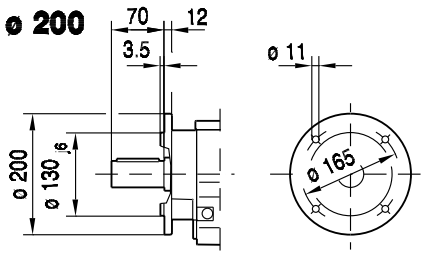
RF67.. **DS56..**



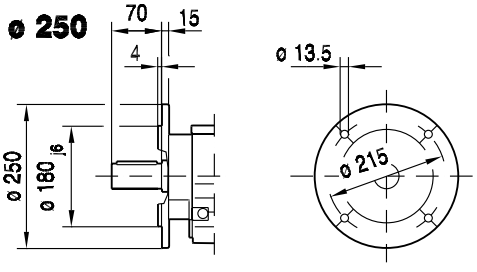
CM..



ø 200



ø 250



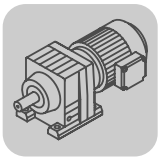
(→ 📖 150)	DS56H	CM71S	CM71M	CM71L	CM90S	CM90M	CM90L	CM112S	CM112M		
AC	73	117	117	117	142	142	142	186	186		
AD	77	122	122	122	140	140	140	162	162		
ADS	77	122	122	122	140	140	140	162	162		
L	546	512	532	572	564	591	649	604	628		
LS	546	594	614	654	660	687	745	694	718		
LB	266	232	252	292	284	311	369	324	348		
LBS	266	314	334	374	380	407	465	414	438		
XS	51	45	45	45	50	50	50	36	36		

8.28 R 77 / CMP / CM [Nm]

M_{aDyn} [Nm]		CMP			CM								
	i	63S	63M	63L	71S	71M	71L	90S	90M	90L	112S	112M	112L
R77 2	5.31	57	110	157	85	111	162	204	269	389	424	559	>765
	5.99	64	124	177	96	125	182	230	303	439	478	630	>810
	6.79	73	141	200	109	142	207	261	344	498	542	715	>840
	7.74	83	161	228	124	161	236	297	392	568	618	815	>840
	8.59	92	178	253	137	179	262	330	435	630	686		
	9.64	104	200	284	154	201	294	370	488	707	770	>900	>900
	10.88	117	226	321	174	227	331	418	551	798	869	>900	>900
	12.33	133	256	364	197	257	376	474	624	>900	>900	>900	>900
	14.05	151	292	414	225	293	428	540	711	>900	>900	>900	>900
	15.6	168	324	460	250	325	475	599	790	>900	>900		
	17.82	192	370	525	285	372	543	685	>900	>900	>900		
	18.8	202	390	554	301	392	573	722	>900	>900	>900		
	21.43	231	445	632	343	447	653	823	>900				
	23.37	252	485	689	374	487	712	898	>900				
R77 3	25.23	269	518	736	400	521	761	>900	>900	>900	>900	>900	>900
	29	309	596	846	459	599	874	>900	>900	>900	>900	>900	>900
	33.47	357	688	>900	530	691	>900	>900	>900	>900	>900	>900	>900
	36.83	388	749	>900	577	752	>900	>900	>900	>900	>900		
	43.26	456	879	>900	678	884	>900	>900	>900	>900	>900		
	45.81	483	>900	>900	718	>900	>900	>900	>900	>900	>900		
	52.07	549	>900	>900	816	>900	>900	>900	>900				
	57.68	608	>900	>900	>900	>900	>900	>900	>900				
	65.77	694	>900	>900	>900	>900	>900	>900	>900	>900	>900		
	77.24	814	>900	>900	>900	>900	>900	>900	>900	>900	>900		
	81.8	863	>900	>900	>900	>900	>900	>900	>900	>900	>900		
	92.97	>900	>900	>900	>900	>900	>900	>900	>900				
	102.99	>900	>900	>900	>900	>900	>900	>900	>900				
	121.42	>900	>900	>900	>900	>900	>900	>900					
	138.39	>900	>900		>900	>900							
	145.67	>900	>900		>900	>900							
	166.59	>900											
	195.24												

m [kg]		CMP			CM								
	s	63S	63M	63L	71S	71M	71L	90S	90M	90L	112S	112M	112L
R77	2	35	36	38	39	40	43	48	50	55	56	61	76
R77	3	36	37	39	40	41	45	49	52	57	58	62	77
RF: + 5.7 kg / RM: + 30.7 kg													

CMP.. / CM..				c_T			φ
	i	n_{epk} [1/min]	η [%]	R [Nm/']	RF [Nm/']	RM [Nm/']	/R [']
R77 2	5.31	4500	97	41.5	41.5	46.24	8
	5.99	4500	97	41.5	41.5	46.24	8
	6.79	4500	97	41.5	41.5	46.24	8
	7.74	4500	97	41.5	41.5	46.24	8
	8.59	4500	97	41.5	41.5	46.24	7
	9.64	4500	97	50.71	50.71	57.99	7
	10.88	4500	97	50.71	50.71	57.99	7
	12.33	4500	97	50.71	50.71	57.99	6
	14.05	4500	97	50.71	50.71	57.99	6
	15.6	4500	97	50.71	50.71	57.99	6
	17.82	4500	97	50.71	50.71	57.99	6
	18.8	4500	97	50.71	50.71	57.99	6
	21.43	4500	97	50.71	50.71	57.99	6
	23.37	4500	97	50.71	50.71	57.99	6



R..CMP, DS, CM
R 77 / CMP / CM [Nm]

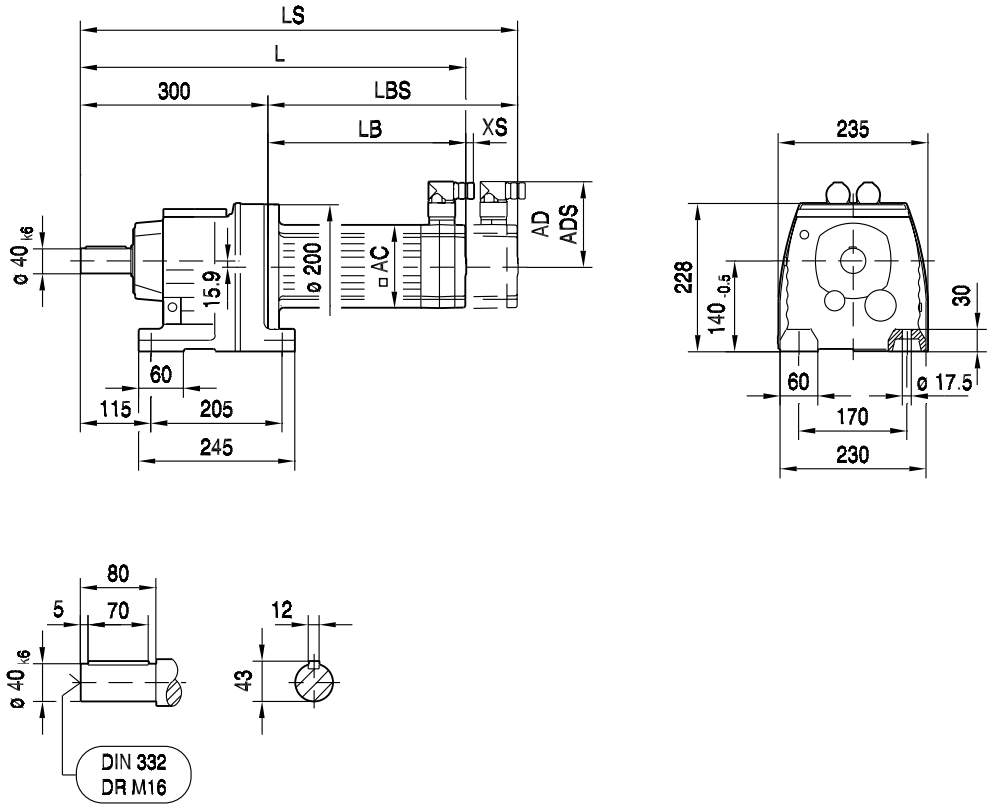
CMP.. / CM..	i	n_{epk} [1/min]	η [%]	c_T R [Nm/']	c_T RF [Nm/']	c_T RM [Nm/']	φ /R [']
R77 3	25.23	4500	96	52.95	52.95	60.93	7
	29	4500	96	52.95	52.95	60.93	7
	33.47	4500	96	52.95	52.95	60.93	7
	36.83	4500	95	52.95	52.95	60.93	7
	43.26	4500	95	52.95	52.95	60.93	7
	45.81	4500	95	52.95	52.95	60.93	7
	52.07	4500	95	52.95	52.95	60.93	7
	57.68	4500	95	52.95	52.95	60.93	7
	65.77	4500	95	53.09	53.09	61.12	7
	77.24	4500	95	53.09	53.09	61.12	7
	81.8	4500	95	53.09	53.09	61.12	6
	92.97	4500	95	53.09	53.09	61.12	6
	102.99	4500	95	53.09	53.09	61.12	6
	121.42	4500	94	53.09	53.09	61.12	6
	138.39	4500	94	53.09	53.09	61.12	6
	145.67	4500	94	53.09	53.09	61.12	6
	166.59	4500	94	53.09	53.09	61.12	6
	195.24	4500	93	53.09	53.09	61.12	6

CMP.. / CM..	i	M_{amax} [Nm]	M_{apk} [Nm]	$M_{aNotaus}$ [Nm]	n_{ak} [1/min]	J_G 10^{-4} [kgm^2]	F_{Ramax} R [N]	F_{Ramax} RF [N]	F_{Ramax} RM [N]	F_{Rapk} R [N]	F_{Rapk} RF [N]	F_{Rapk} RM [N]
R77 2	5.31	510	765	867	264	7.7	3990	3990	12700	10400	10400	13000
	5.99	540	810	918	234	6.4	3990	3990	13000	10000	10000	13000
	6.79	580	840	986	206	5.2	3850	3850	13000	9730	9730	13000
	7.74	610	840	1037	181	4.2	3940	3940	13000	9730	9730	13000
	8.59	630	840	1071	175	3.7	4110	4110	13000	9730	9730	13000
	9.64	630	900	1071	145	6.6	6300	6300	13000	9110	9110	13000
	10.88	660	900	1122	129	5.5	6490	6490	13000	9110	9110	13000
	12.33	690	900	1173	114	4.5	6740	6740	13000	9110	9110	13000
	14.05	720	900	1224	100	3.7	7050	7050	13000	9110	9110	13000
	15.6	740	900	1258	90	3.3	7390	7390	13000	9110	9110	13000
	17.82	780	900	1326	79	2.7	7620	7620	13000	9110	9110	13000
	18.8	780	900	1326	74	2.5	7980	7980	13000	9110	9110	13000
	21.43	820	900	1394	65	2.0	8250	8250	13000	9110	9110	13000
	23.37	820	900	1394	64	1.7	8870	8870	13000	9110	9110	13000
R77 3	25.23	780	900	1326	59	3.7	10100	10100	13000	9110	9110	13000
	29	820	900	1394	52	3.0	9920	9920	13000	9110	9110	13000
	33.47	820	900	1394	51	2.2	9920	9920	13000	9110	9110	13000
	36.83	820	900	1394	52	1.9	9920	9920	13000	9110	9110	13000
	43.26	820	900	1394	53	1.6	9920	9920	13000	9110	9110	13000
	45.81	820	900	1394	52	1.4	9920	9920	13000	9110	9110	13000
	52.07	820	900	1394	54	1.1	9920	9920	13000	9110	9110	13000
	57.68	820	900	1394	54	0.97	9920	9920	13000	9110	9110	13000
	65.77	820	900	1394	38	1.6	9920	9920	13000	9110	9110	13000
	77.24	820	900	1394	38	1.3	9920	9920	13000	9110	9110	13000
	81.8	820	900	1394	38	1.2	9920	9920	13000	9110	9110	13000
	92.97	820	900	1394	39	0.99	9920	9920	13000	9110	9110	13000
	102.99	820	900	1394	38	0.86	9920	9920	13000	9110	9110	13000
	121.42	820	900	1394	39	0.68	9920	9920	13000	9110	9110	13000
	138.39	820	900	1394	38	0.46	9920	9920	13000	9110	9110	13000
	145.67	820	900	1394	38	0.42	9920	9920	13000	9110	9110	13000
	166.59	820	900	1394	38	0.34	9920	9920	13000	9110	9110	13000
	195.24	820	900	1394	36	0.27	9920	9920	13000	9110	9110	13000

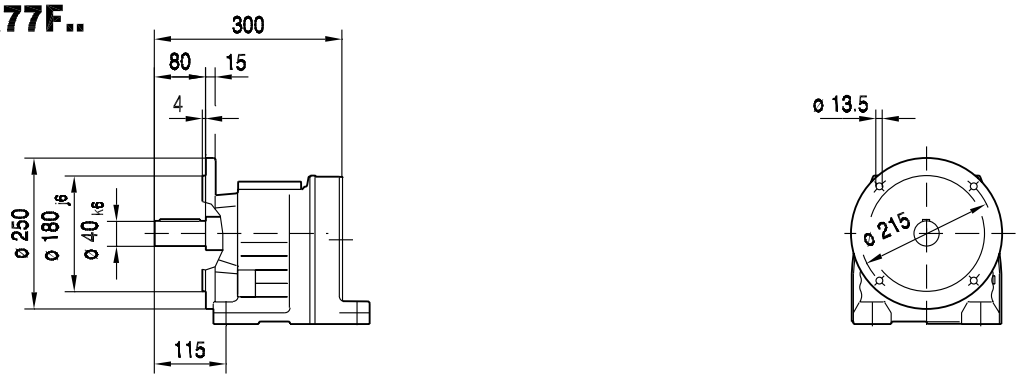
8.29 R 77 / CMP / CM [mm]

01 046 00 07

R77..



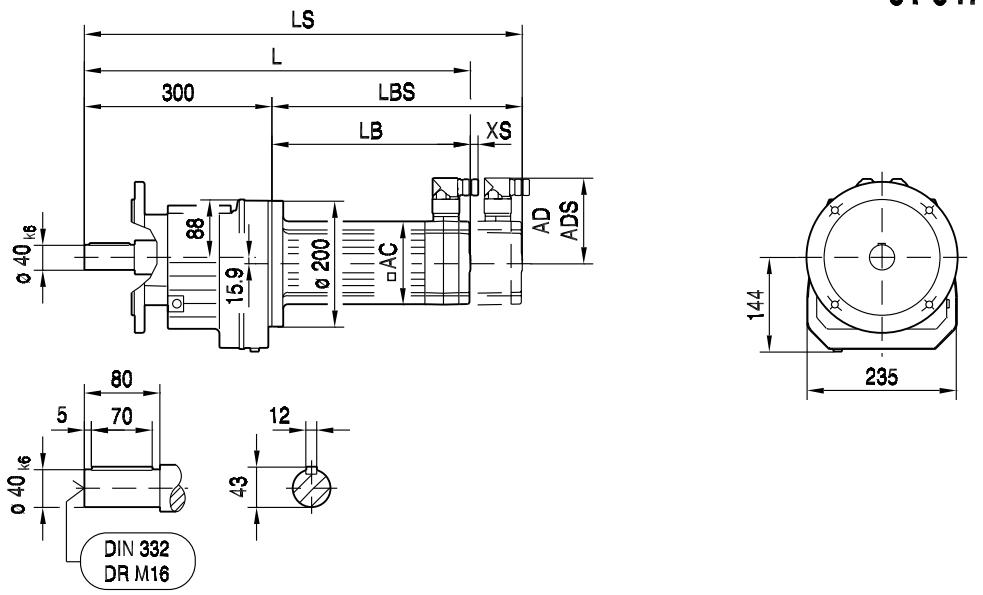
R77F..



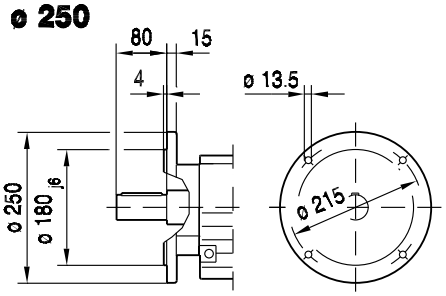
(→ 150)	CMP63S	CMP63M	CMP63L					
AC	88	88	88					
AD	89	89	89					
ADS	89	89	89					
L	467	517	567					
LS	496	546	596					
LB	167	217	267					
LBS	196	246	296					
XS	14	14	14					

01 047 00 07

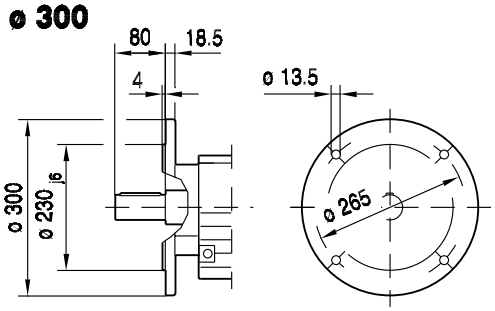
RF77..



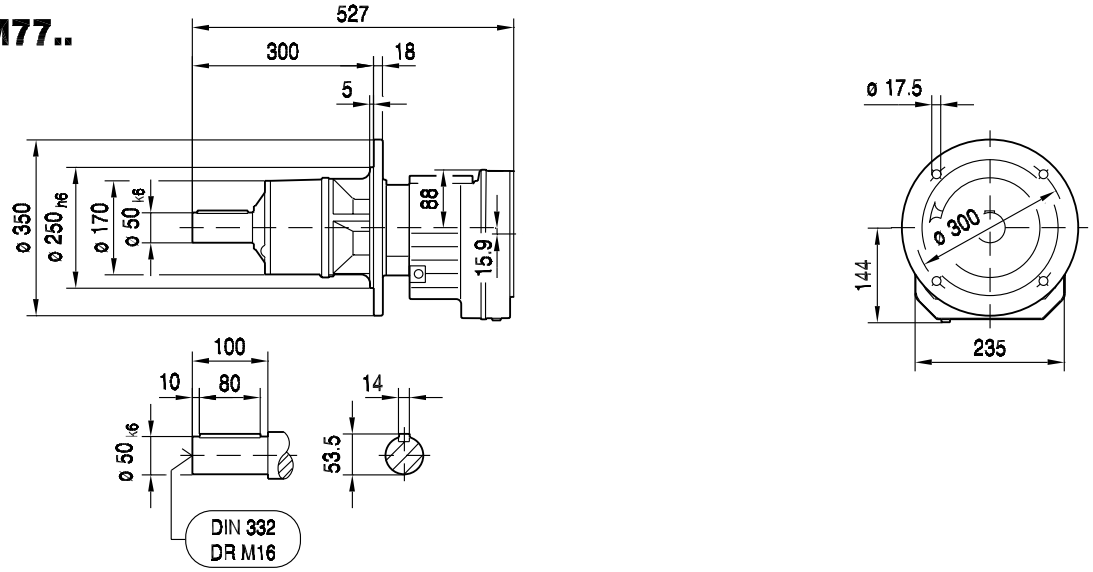
ø 250



ø 300



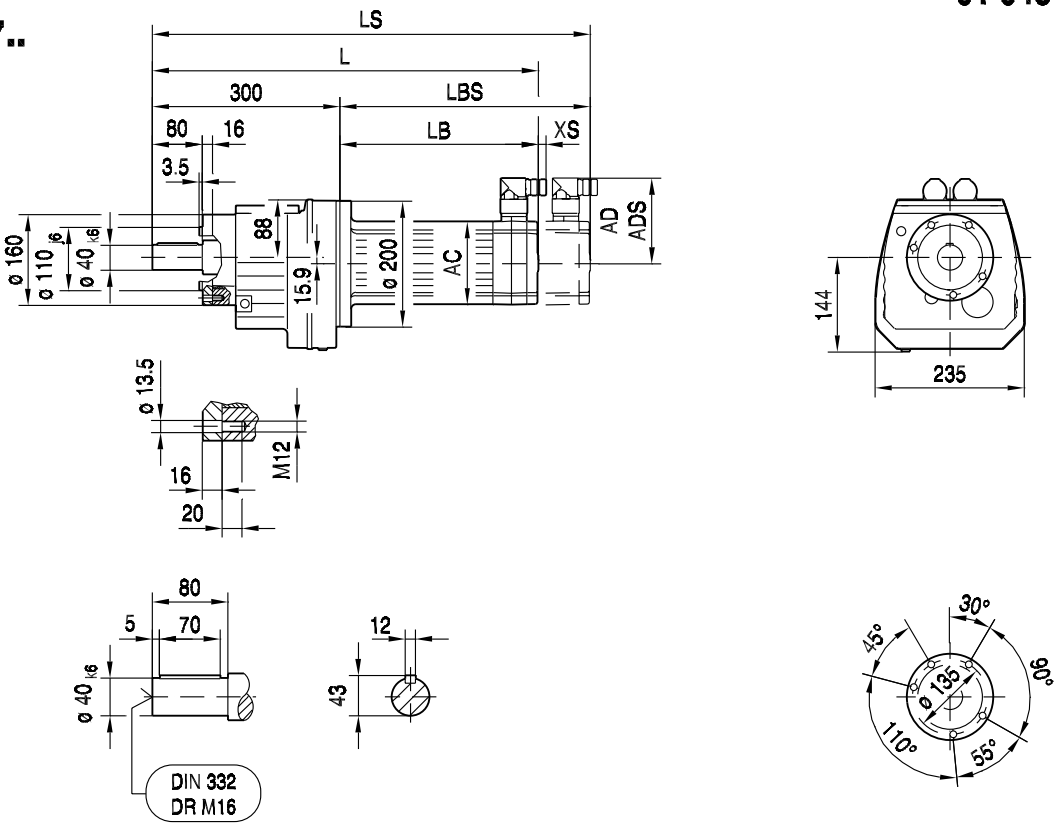
RM77..



(→ 150)	CMP63S	CMP63M	CMP63L					
AC	88	88	88					
AD	89	89	89					
ADS	89	89	89					
L	467	517	567					
LS	496	546	596					
LB	167	217	267					
LBS	196	246	296					
XS	14	14	14					

01 048 00 07

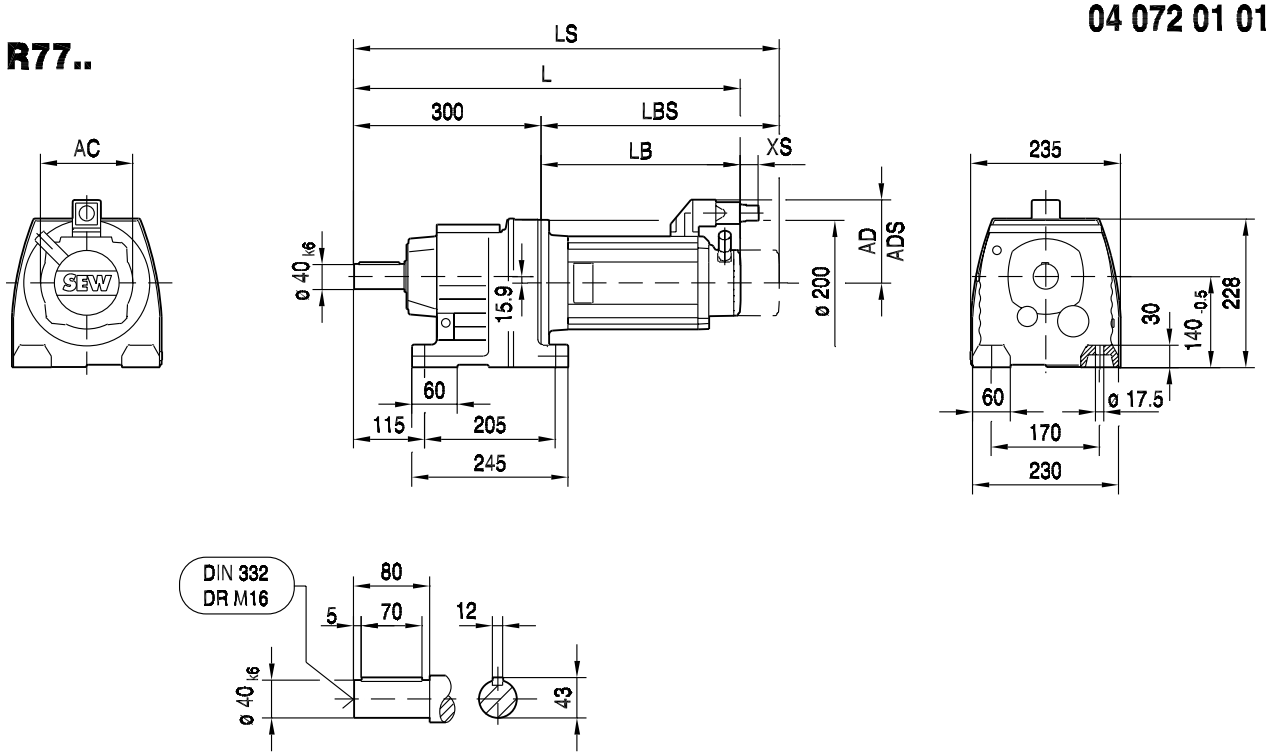
RZ77..



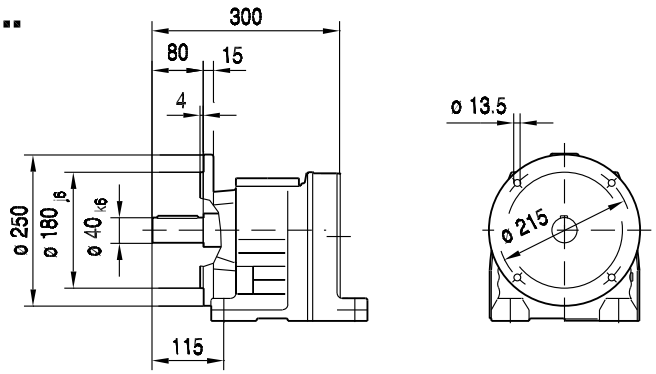
(→ 📖 150)	CMP63S	CMP63M	CMP63L					
AC	88	88	88					
AD	89	89	89					
ADS	89	89	89					
L	467	517	567					
LS	496	546	596					
LB	167	217	267					
LBS	196	246	296					
XS	14	14	14					

04 072 01 01

R77..



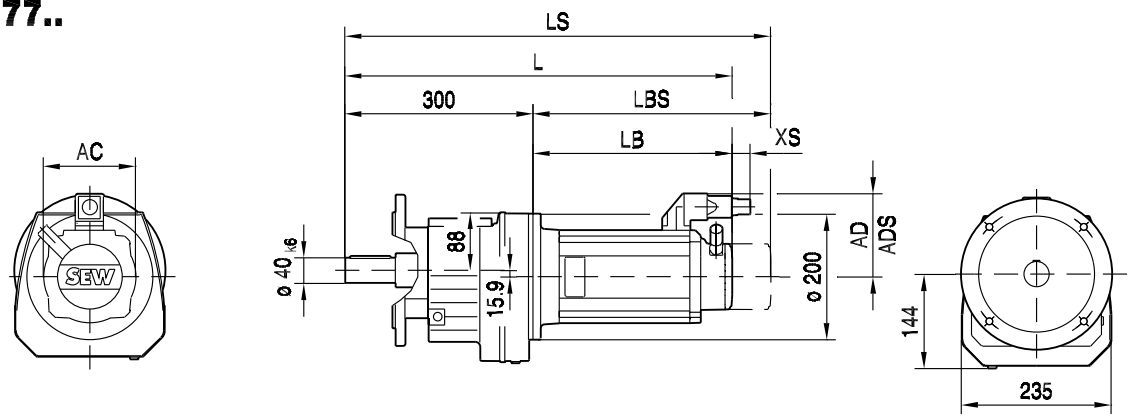
R77F..

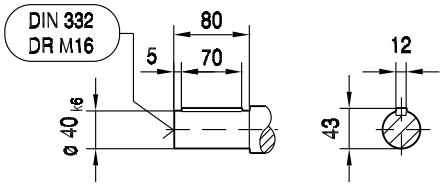


(→ 📖 150)	CM71S	CM71M	CM71L	CM90S	CM90M	CM90L	CM112S	CM112M	CM112L		
AC	117	117	117	142	142	142	186	186	186		
AD	122	122	122	140	140	140	162	162	162		
ADS	122	122	122	140	140	140	162	162	162		
L	526	546	585	576	603	657	612	639	701		
LS	608	628	667	672	699	753	702	729	791		
LB	226	246	285	276	303	357	312	339	401		
LBS	308	328	367	372	399	453	402	429	491		
XS	45	45	45	50	50	50	36	36	36		

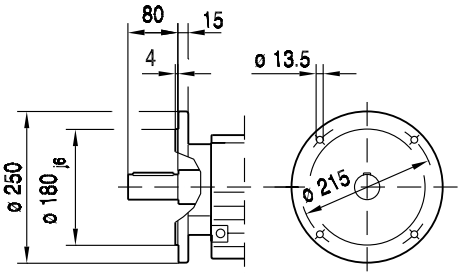
04 073 01 01

RF77..

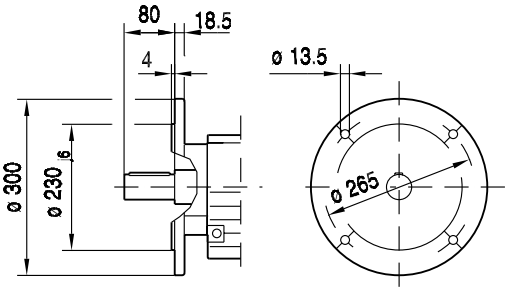




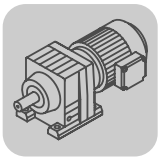
ø 250



ø 300



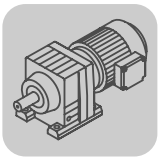
(→ 📖 150)	CM71S	CM71M	CM71L	CM90S	CM90M	CM90L	CM112S	CM112M	CM112L		
AC	117	117	117	142	142	142	186	186	186		
AD	122	122	122	140	140	140	162	162	162		
ADS	122	122	122	140	140	140	162	162	162		
L	526	546	585	576	603	657	612	639	701		
LS	608	628	667	672	699	753	702	729	791		
LB	226	246	285	276	303	357	312	339	401		
LBS	308	328	367	372	399	453	402	429	491		
XS	45	45	45	50	50	50	36	36	36		



8.30 R 87 / CM [Nm]

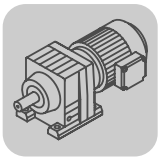
M_{aDyn} [Nm]		CM						
	i	**90S**	**90M**	**90L**	**112S**	**112M**	**112L**	**112H**
R87 2	5.3	204	268	389	423	558	810	1224
	6.39	245	324	469	510	673	976	>1270
	7.13	274	361	523	569	750	1089	>1270
	8.22	316	416	603	656	865	1256	>1270
	9.14	351	463	670	730	962	>1270	>1270
	9.9	380	501	726	790	1042	1512	>1550
	11.93	458	604	875	952	1256	>1550	>1550
	13.33	512	675	978	1064	1403	>1550	>1550
	15.35	590	777	1126	1225	>1550	>1550	>1550
	17.08	656	865	1253	1364	>1550	>1550	>1550
	19.1	734	967	1401	1525	>1550	>1550	
	21.51	826	1089	>1550	>1550	>1550	>1550	
	23.4	899	1185	>1550	>1550			
	27.84	1069	1410	>1550	>1550			
	31.4	1206	>1550					
	34.4	1321	>1550					
R87 3	27.88	1060	1397	>1550	>1550	>1550	>1550	>1550
	32.66	1242	>1550	>1550	>1550	>1550	>1550	>1550
	36.84	1401	>1550	>1550	>1550	>1550	>1550	>1550
	41.74	>1550	>1550	>1550	>1550	>1550	>1550	
	47.58	>1550	>1550	>1550	>1550	>1550	>1550	
	52.82	>1550	>1550	>1550	>1550			
	60.35	>1550	>1550	>1550	>1550			
	63.68	>1550	>1550	>1550	>1550			
	72.57	>1550	>1550					
	81.92	>1550	>1550	>1550	>1550	>1550	>1550	
	93.38	>1550	>1550	>1550	>1550	>1550	>1550	
	103.65	>1550	>1550	>1550	>1550			
	118.43	>1550	>1550	>1550	>1550			
	124.97	>1550	>1550	>1550	>1550			
	142.41	>1550	>1550					
	155.34	>1550	>1550					
	181.77	>1550						
	205.71							
	216.54							
	246.54							

m [kg]		CM						
	s	**90S**	**90M**	**90L**	**112S**	**112M**	**112L**	**112H**
R87	2	75	77	82	82	86	100	110
R87	3	76	79	84	84	88	105	110
RF: + 7.1 kg / RM: + 36.8 kg								



CM..	i	n_{epk} [1/min]	η [%]	c_T R [Nm/']	c_T RF [Nm/']	c_T RM [Nm/']	φ /R [']
R87 2	5.3	4500	97	75.67	75.67	77.6	7
	6.39	4500	97	75.67	75.67	77.6	7
	7.13	4500	97	75.67	75.67	77.6	7
	8.22	4500	97	75.67	75.67	77.6	7
	9.14	4500	97	75.67	75.67	77.6	6
	9.9	4500	97	93.17	93.17	95.62	6
	11.93	4500	97	93.17	93.17	95.62	6
	13.33	4500	97	93.17	93.17	95.62	6
	15.35	4500	97	93.17	93.17	95.62	6
	17.08	4500	97	93.17	93.17	95.62	6
	19.1	4500	97	93.17	93.17	95.62	6
	21.51	4500	97	93.17	93.17	95.62	6
	23.4	4500	97	93.17	93.17	95.62	6
	27.84	4500	97	93.17	93.17	95.62	6
	31.4	4500	97	93.17	93.17	95.62	5
	34.4	4500	97	93.17	93.17	95.62	5
R87 3	27.88	4500	96	96.73	96.73	99.38	7
	32.66	4500	96	96.73	96.73	99.38	7
	36.84	4500	96	96.73	96.73	99.38	7
	41.74	4500	96	96.73	96.73	99.38	7
	47.58	4500	96	96.73	96.73	99.38	7
	52.82	4500	96	96.73	96.73	99.38	6
	60.35	4500	96	96.73	96.73	99.38	6
	63.68	4500	96	96.73	96.73	99.38	6
	72.57	4500	96	96.73	96.73	99.38	6
	81.92	4500	95	97.05	97.05	99.71	6
	93.38	4500	95	97.05	97.05	99.71	6
	103.65	4500	95	97.05	97.05	99.71	6
	118.43	4500	95	97.05	97.05	99.71	6
	124.97	4500	95	97.05	97.05	99.71	6
	142.41	4500	95	97.05	97.05	99.71	6
	155.34	4500	94	97.05	97.05	99.71	6
	181.77	4500	94	97.05	97.05	99.71	6
	205.71	4500	94	97.05	97.05	99.71	6
	216.54	4500	94	97.05	97.05	99.71	6
	246.54	4500	93	97.05	97.05	99.71	6

CM..	i	M_{amax} [Nm]	M_{apk} [Nm]	$M_{aNotaus}$ [Nm]	n_{ak} [1/min]	J_G 10^{-4} [kgm^2]	F_{Ramax} R [N]	F_{Ramax} RF [N]	F_{Ramax} RM [N]	F_{Rapk} R [N]	F_{Rapk} RF [N]	F_{Rapk} RM [N]
R87 2	5.3	910	1270	1547	264	25	8980	8980	16600	18600	18600	20000
	6.39	1020	1270	1734	219	19	9450	9450	17700	18600	18600	20000
	7.13	1070	1270	1819	196	16	9780	9780	18300	18600	18600	20000
	8.22	1160	1270	1972	170	13	10200	10200	19200	18600	18600	20000
	9.14	1210	1270	2057	153	11	10500	10500	19800	18600	18600	20000
	9.9	1180	1550	2006	141	21	10400	10400	20000	16900	16900	20000
	11.93	1230	1550	2091	117	17	11200	11200	20000	16900	16900	20000
	13.33	1280	1550	2176	105	14	11600	11600	20000	16900	16900	20000
	15.35	1340	1550	2278	91	12	12100	12100	20000	16900	16900	20000
	17.08	1390	1550	2363	82	10	12600	12600	19900	16900	16900	20000
	19.1	1440	1550	2448	79	8.7	13000	13000	19900	16900	16900	20000
	21.51	1500	1550	2550	70	7.3	13600	13600	19800	16900	16900	20000
	23.4	1550	1550	2635	60	6.6	13900	13900	19700	16900	16900	20000
	27.84	1550	1550	2635	61	5.1	15000	15000	19700	16900	16900	20000
	31.4	1550	1550	2635	61	4.1	7820	7820	19700	16900	16900	20000
	34.4	1500	1550	2550	70	3.6	9480	9480	19800	16900	16900	20000



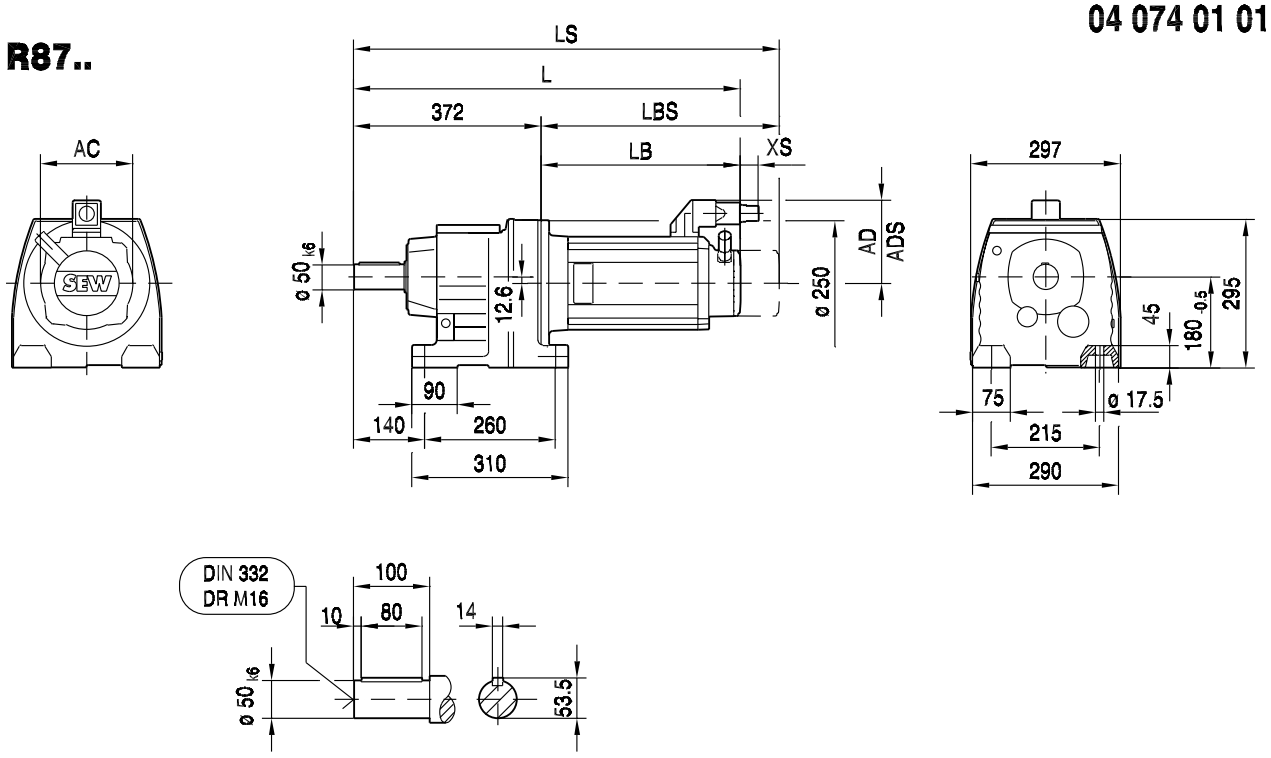
R..CMP, DS, CM
R 87 / CM [Nm]

CM..							F_{Ramax}			F_{Rapk}		
	i	M_{amax} [Nm]	M_{apk} [Nm]	$M_{aNotaus}$ [Nm]	n_{ak} [1/min]	$J_G\ 10^{-4}$ [kgm^2]	R [N]	RF [N]	RM [N]	R [N]	RF [N]	RM [N]
R87 3	27.88	1500	1550	2550	54	9.8	15100	15100	19800	16900	16900	20000
	32.66	1550	1550	2635	49	7.6	16000	16000	19700	16900	16900	20000
	36.84	1550	1550	2635	49	6.2	16800	16800	19700	16900	16900	20000
	41.74	1550	1550	2635	50	5.1	16900	16900	19700	16900	16900	20000
	47.58	1550	1550	2635	50	4.1	16900	16900	19700	16900	16900	20000
	52.82	1550	1550	2635	51	3.6	13500	13500	19700	16900	16900	20000
	60.35	1550	1550	2635	51	2.9	15200	15200	19700	16900	16900	20000
	63.68	1550	1550	2635	50	2.7	15800	15800	19700	16900	16900	20000
	72.57	1550	1550	2635	51	2.2	16900	16900	19700	16900	16900	20000
	81.92	1550	1550	2635	51	4.0	16900	16900	19700	16900	16900	20000
	93.38	1550	1550	2635	51	3.3	16900	16900	19700	16900	16900	20000
	103.65	1550	1550	2635	52	3.0	16900	16900	19700	16900	16900	20000
	118.43	1550	1550	2635	52	2.4	16900	16900	19700	16900	16900	20000
	124.97	1550	1550	2635	52	2.3	16900	16900	19700	16900	16900	20000
	142.41	1550	1550	2635	49	1.9	16900	16900	19700	16900	16900	20000
	155.34	1550	1550	2635	45	1.6	16900	16900	19700	16900	16900	20000
	181.77	1550	1550	2635	39	1.3	16900	16900	19700	16900	16900	20000
	205.71	1550	1550	2635	34	0.90	16900	16900	19700	16900	16900	20000
	216.54	1550	1550	2635	32	0.81	16900	16900	19700	16900	16900	20000
	246.54	1550	1550	2635	28	0.66	16900	16900	19700	16900	16900	20000

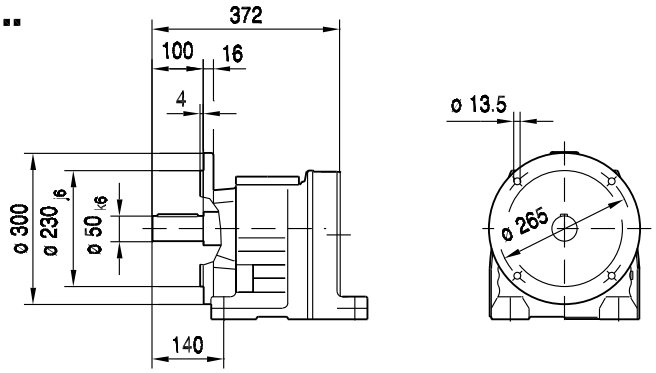
8.31 R 87 / CM [mm]

04 074 01 01

R87..



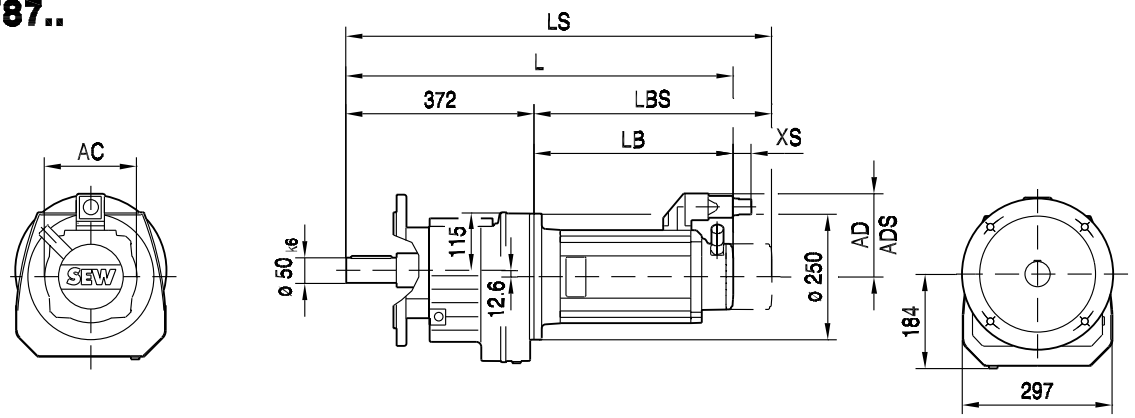
R87F..

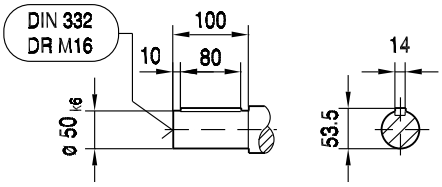


(→ 150)	CM90S	CM90M	CM90L	CM112S	CM112M	CM112L	CM112H				
AC	142	142	142	186	186	186	186				
AD	140	140	140	162	162	162	162				
ADS	140	140	140	162	162	162	162				
L	644	671	725	679	706	768	898				
LS	740	767	821	769	796	858	963				
LB	272	299	353	307	334	396	526				
LBS	368	395	449	397	424	486	591				
XS	50	50	50	36	36	36	36				

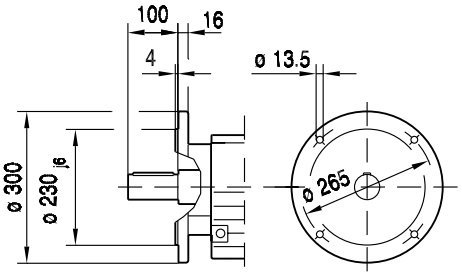
04 075 01 01

RF87..

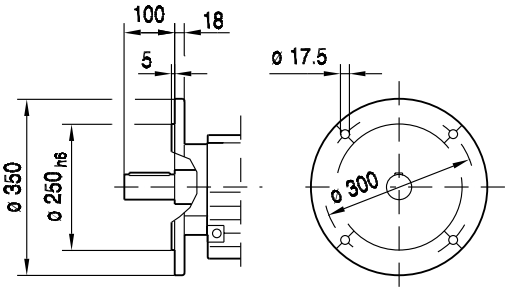




ø 300



ø 350

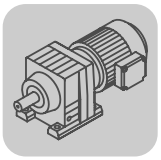


(→ 📖 150)	CM90S	CM90M	CM90L	CM112S	CM112M	CM112L	CM112H				
AC	142	142	142	186	186	186	186				
AD	140	140	140	162	162	162	162				
ADS	140	140	140	162	162	162	162				
L	644	671	725	679	706	768	898				
LS	740	767	821	769	796	858	963				
LB	272	299	353	307	334	396	526				
LBS	368	395	449	397	424	486	591				
XS	50	50	50	36	36	36	36				

8.32 R 97 / CM [Nm]

M_{aDyn} [Nm]		CM						
	i	90S	90M	90L	112S	112M	112L	112H
R97 2	4.5			330	359	474	687	1039
	5.2			381	415	547	794	1200
	6.21			455	496	654	949	1434
	7.12	273	361	522	568	749	1088	1644
	8.39	322	425	615	670	883	1282	1937
	9.29	357	470	681	742	978	1419	2145
	10.83			794	865	1140	1655	2500
	12.39	476	627	909	989	1304	1893	2860
	14.62	562	740	1072	1167	1539	2234	>3090
	16.17	621	819	1186	1291	1702	2470	>3090
	18.24	701	924	1338	1456	1920	2787	>3090
	20.14	774	1020	1477	1608	2120	3077	>3090
	22.37	859	1133	1640	1786	2354	>3090	
	25.03	961	1267	1835	1998	2634	>3090	
	27.19	1044	1377	1994	2171			
	32.05	1231	1623	2350	2559			
R97 3	27.58	1048	1382	2002	2179	2873	>3090	>3090
	33.25	1264	1666	2413	2627	>3090	>3090	>3090
	37.13	1412	1861	2695	2934	>3090	>3090	>3090
	42.78	1626	2144	>3090	>3090	>3090	>3090	>3090
	47.58	1809	2384	>3090	>3090	>3090	>3090	>3090
	53.21	2023	2666	>3090	>3090	>3090	>3090	
	59.92	2278	3003	>3090	>3090	>3090	>3090	
	65.21	2479	>3090	>3090	>3090			
	72.17	2715	>3090	>3090	>3090	>3090	>3090	>3090
	83.15	>3090	>3090	>3090	>3090	>3090	>3090	>3090
	92.48	>3090	>3090	>3090	>3090	>3090	>3090	>3090
	103.44	>3090	>3090	>3090	>3090	>3090	>3090	
	116.48	>3090	>3090	>3090	>3090	>3090	>3090	
	126.75	>3090	>3090	>3090	>3090			
	150.78	>3090	>3090	>3090	>3090			
	170.02	>3090	>3090					
	186.3	>3090	>3090					
	216.28	>3090						
	241.25							
	255.71							
	289.74							

m [kg]		CM						
	s	90S	90M	90L	112S	112M	112L	112H
R97	2	115	115	120	120	125	140	150
R97	3	120	120	125	125	130	145	150
RF: + 17.2 kg / RM: + 68.5 kg								



R..CMP, DS, CM
R 97 / CM [Nm]

CM..	i	n_{epk} [1/min]	η [%]	c_T R [Nm/']	c_T RF [Nm/']	c_T RM [Nm/']	φ /R [']
R97 2	4.5	3597	97	127.46	127.46	111.86	6
	5.2	3924	97	127.46	127.46	111.86	6
	6.21	4378	97	127.46	127.46	111.86	6
	7.12	4500	97	127.46	127.46	111.86	6
	8.39	4500	97	127.46	127.46	111.86	6
	9.29	4500	97	127.46	127.46	111.86	6
	10.83	4500	97	154.58	154.58	132.22	6
	12.39	4500	97	154.58	154.58	132.22	6
	14.62	4500	97	154.58	154.58	132.22	6
	16.17	4500	97	154.58	154.58	132.22	6
	18.24	4500	97	154.58	154.58	132.22	6
	20.14	4500	97	154.58	154.58	132.22	5
	22.37	4500	97	154.58	154.58	132.22	5
	25.03	4500	97	154.58	154.58	132.22	5
	27.19	4500	97	154.58	154.58	132.22	5
	32.05	4500	97	154.58	154.58	132.22	5
R97 3	27.58	4500	96	163.15	163.15	138.44	6
	33.25	4500	96	163.15	163.15	138.44	6
	37.13	4500	96	163.15	163.15	138.44	6
	42.78	4500	96	163.15	163.15	138.44	6
	47.58	4500	96	163.15	163.15	138.44	6
	53.21	4500	96	163.15	163.15	138.44	6
	59.92	4500	96	163.15	163.15	138.44	6
	65.21	4500	96	163.15	163.15	138.44	6
	72.17	4500	95	163.68	163.68	138.82	6
	83.15	4500	95	163.68	163.68	138.82	6
	92.48	4500	95	163.68	163.68	138.82	6
	103.44	4500	95	163.68	163.68	138.82	6
	116.48	4500	95	163.68	163.68	138.82	6
	126.75	4500	95	163.68	163.68	138.82	6
	150.78	4500	95	163.68	163.68	138.82	6
	170.02	4500	95	163.68	163.68	138.82	6
	186.3	4500	95	163.68	163.68	138.82	6
	216.28	4500	94	163.68	163.68	138.82	6
	241.25	4500	94	163.68	163.68	138.82	6
	255.71	4500	94	163.68	163.68	138.82	6
	289.74	4500	93	163.68	163.68	138.82	6

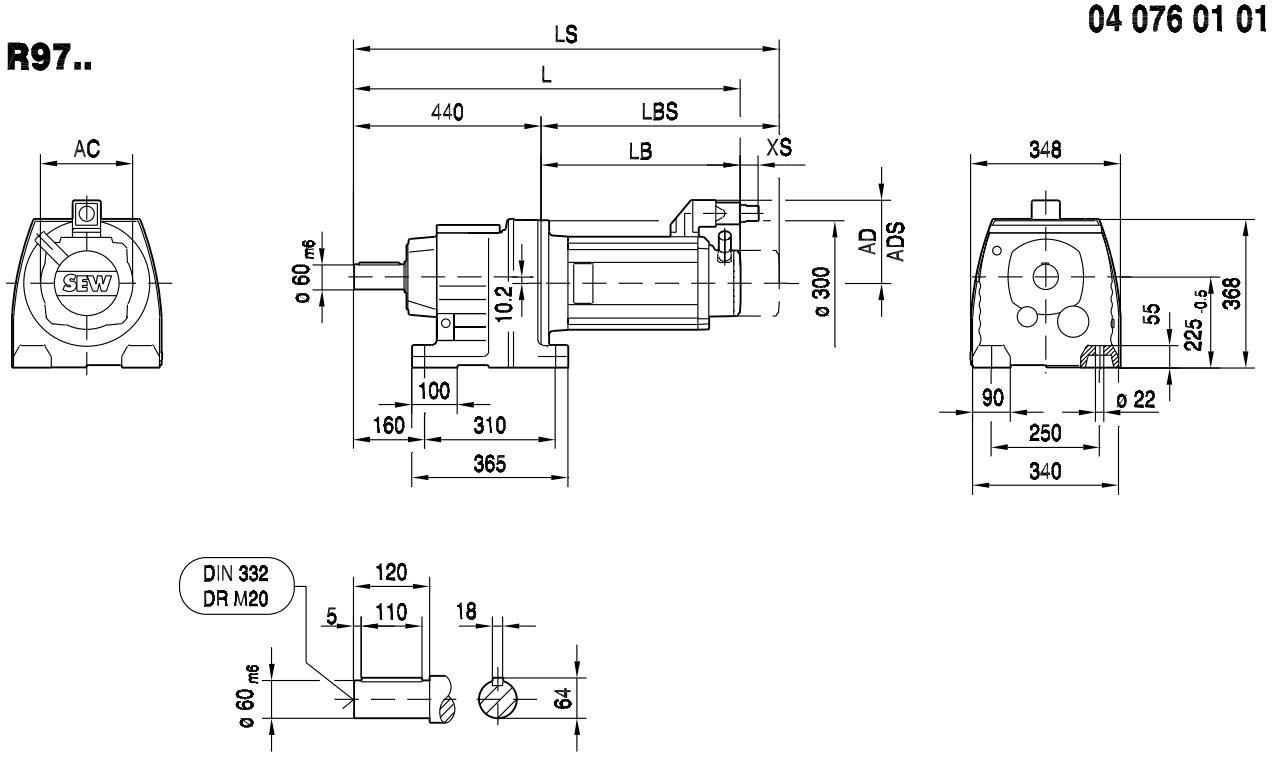
CM..	i	M_{amax} [Nm]	M_{apk} [Nm]	$M_{aNotaus}$ [Nm]	n_{ak} [1/min]	J_G 10^{-4} [kgm^2]	F_{Ramax} R [N]	F_{Ramax} RF [N]	F_{Ramax} RM [N]	F_{Rapk} R [N]	F_{Rapk} RF [N]	F_{Rapk} RM [N]
R97 2	4.5	1630	2445	2771	244	80	9500	9500	17900	24400	24400	26300
	5.2	1780	2560	3026	192	65	9850	9850	18700	23800	23800	26100
	6.21	1890	2560	3213	161	51	10500	10500	19900	23800	23800	26100
	7.12	2000	2560	3400	140	41	10900	10900	20800	23800	23800	26100
	8.39	2030	2560	3451	131	33	11700	11700	22000	23800	23800	26100
	9.29	2030	2560	3451	129	28	12200	12200	22800	23800	23800	26100
	10.83	2090	3090	3553	129	46	12100	12100	23700	16000	16000	24500
	12.39	2190	3090	3723	113	37	12700	12700	24800	16000	16000	24500
	14.62	2300	3090	3910	103	30	13400	13400	26200	16000	16000	24500
	16.17	2400	3090	4080	87	26	13800	13800	26200	16000	16000	24500
	18.24	2500	3090	4250	77	22	14400	14400	26100	16000	16000	24500
	20.14	2610	3090	4437	70	19	14800	14800	26000	16000	16000	24500
	22.37	2720	3090	4624	63	16	15300	15300	25800	16000	16000	24500
	25.03	2830	3090	4811	56	14	15900	15900	25700	16000	16000	24500
	27.19	2560	3090	4352	74	13	8380	8380	26000	16000	16000	24500
	32.05	2560	3090	4352	75	9.8	10600	10600	26000	16000	16000	24500

CM..	i	M_{amax} [Nm]	M_{apk} [Nm]	$M_{aNotaus}$ [Nm]	n_{ak} [1/min]	$J_G\ 10^{-4}$ [kgm^2]	F_{Ramax} R [N]	F_{Ramax} RF [N]	F_{Ramax} RM [N]	F_{Rapk} R [N]	F_{Rapk} RF [N]	F_{Rapk} RM [N]
R97 3	27.58	2670	3090	4539	54	24	16900	16900	25900	16000	16000	24500
	33.25	2890	3090	4913	45	19	17900	17900	25600	16000	16000	24500
	37.13	3000	3090	5100	40	16	18600	18600	25400	16000	16000	24500
	42.78	3000	3090	5100	37	13	19800	19800	25400	16000	16000	24500
	47.58	3000	3090	5100	38	11	19800	19800	25400	16000	16000	24500
	53.21	3000	3090	5100	39	9.5	19800	19800	25400	16000	16000	24500
	59.92	3000	3090	5100	40	8.0	19800	19800	25400	16000	16000	24500
	65.21	3000	3090	5100	40	7.1	19800	19800	25400	16000	16000	24500
	72.17	3000	3090	5100	35	14	18000	18000	25400	16000	16000	24500
	83.15	3000	3090	5100	35	11	19800	19800	25400	16000	16000	24500
	92.48	3000	3090	5100	35	9.8	19800	19800	25400	16000	16000	24500
	103.44	3000	3090	5100	35	8.4	19800	19800	25400	16000	16000	24500
	116.48	3000	3090	5100	35	7.0	19800	19800	25400	16000	16000	24500
	126.75	3000	3090	5100	36	6.3	19800	19800	25400	16000	16000	24500
	150.78	3000	3090	5100	35	4.9	19800	19800	25400	16000	16000	24500
	170.02	3000	3090	5100	35	4.0	19800	19800	25400	16000	16000	24500
	186.3	3000	3090	5100	35	3.5	19800	19800	25400	16000	16000	24500
	216.28	3000	3090	5100	32	2.8	19800	19800	25400	16000	16000	24500
	241.25	3000	3090	5100	29	1.8	19800	19800	25400	16000	16000	24500
	255.71	3000	3090	5100	27	1.6	19800	19800	25400	16000	16000	24500
	289.74	3000	3090	5100	24	1.3	19800	19800	25400	16000	16000	24500

8.33 R 97 / CM [mm]

04 076 01 01

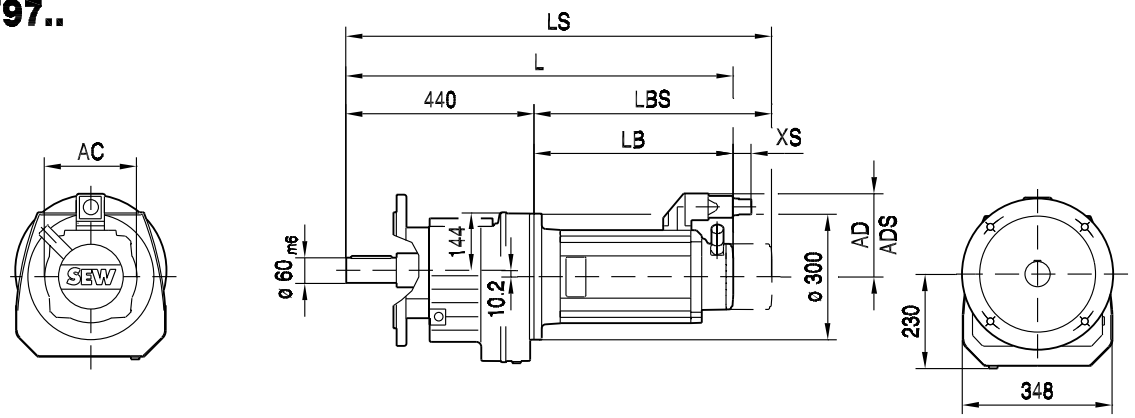
R97..

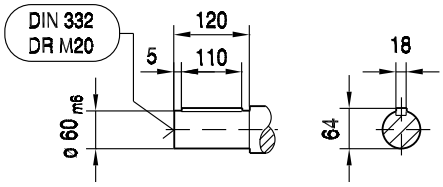


(→ 📖 150)	CM90S	CM90M	CM90L	CM112S	CM112M	CM112L	CM112H				
AC	142	142	142	186	186	186	186				
AD	140	140	140	162	162	162	162				
ADS	140	140	140	162	162	162	162				
L	706	733	787	742	769	831	961				
LS	802	829	883	832	859	921	1026				
LB	266	293	347	302	329	391	521				
LBS	362	389	443	392	419	481	586				
XS	50	50	50	36	36	36	36				

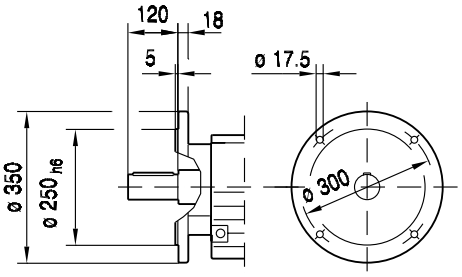
04 077 01 01

RF97..

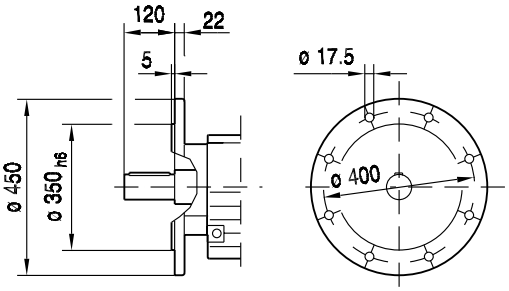




ø 350



ø 450



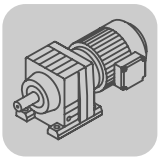
(→ 150)	CM90S	CM90M	CM90L	CM112S	CM112M	CM112L	CM112H				
AC	142	142	142	186	186	186	186				
AD	140	140	140	162	162	162	162				
ADS	140	140	140	162	162	162	162				
L	706	733	787	742	769	831	961				
LS	802	829	883	832	859	921	1026				
LB	266	293	347	302	329	391	521				
LBS	362	389	443	392	419	481	586				
XS	50	50	50	36	36	36	36				

8.34 R 107 / CM [Nm]

M_{aDyn} [Nm]		CM			
	i	112S	112M	112L	112H
R107 2	4.92		518	752	1136
	5.82	465	613	889	1344
	6.66	532	701	1017	1538
	7.86	627	827	1201	1815
	8.56		901	1308	1976
	10.13	809	1066	1548	2339
	11.59	925	1220	1771	2676
	13.66	1090	1438	2087	3154
	15.65	1249	1647	2391	3613
	18.21	1454	1917	2782	4204
	20.07	1602	2112	3066	>4360
	22.62	1806	2381	3456	>4360
	24.9	1988	2621	3804	>4360
	27.58	2202	2903	4214	
	30.77	2456	3238	>4360	
R107 3	29.49	2306	3040	>4360	>4360
	35.26	2786	3673	>4360	>4360
	40.37	3190	4205	>4360	>4360
	47.63	3763	>4360	>4360	>4360
	52.68	4162	>4360	>4360	>4360
	59.41	>4360	>4360	>4360	>4360
	65.6	>4360	>4360	>4360	>4360
	72.88	>4360	>4360	>4360	
	78.57	>4360	>4360	>4360	>4360
	92.7	>4360	>4360	>4360	>4360
	102.53	>4360	>4360	>4360	>4360
	115.63	>4360	>4360	>4360	>4360
	127.68	>4360	>4360	>4360	>4360
	141.83	>4360	>4360	>4360	
	158.68	>4360	>4360	>4360	
	172.34	>4360			
	203.16	>4360			
	229.95				
	251.15				

m [kg]		CM			
	s	112S	112M	112L	112H
R107	2	180	180	195	200
R107	3	185	190	205	205
RF: + 6.0 kg / RM: + 94.0 kg					

CM..					c_T		φ
	i	n_{epk} [1/min]	η [%]	R [Nm/']	RF [Nm/']	RM [Nm/']	/R [']
R107 2	4.92	3197	97	207.85	207.85	174.68	9
	5.82	3597	97	207.85	207.85	174.68	9
	6.66	3924	97	207.85	207.85	174.68	9
	7.86	4378	97	207.85	207.85	174.68	9
	8.56	4500	97	249.7	249.7	203.32	7
	10.13	4500	97	249.7	249.7	203.32	7
	11.59	4500	97	249.7	249.7	203.32	7
	13.66	4500	97	249.7	249.7	203.32	7
	15.65	4500	97	249.7	249.7	203.32	7
	18.21	4500	97	249.7	249.7	203.32	7
	20.07	4500	97	249.7	249.7	203.32	7
	22.62	4500	97	249.7	249.7	203.32	7
	24.9	4500	97	249.7	249.7	203.32	7
	27.58	4500	97	249.7	249.7	203.32	7
	30.77	4500	97	249.7	249.7	203.32	7



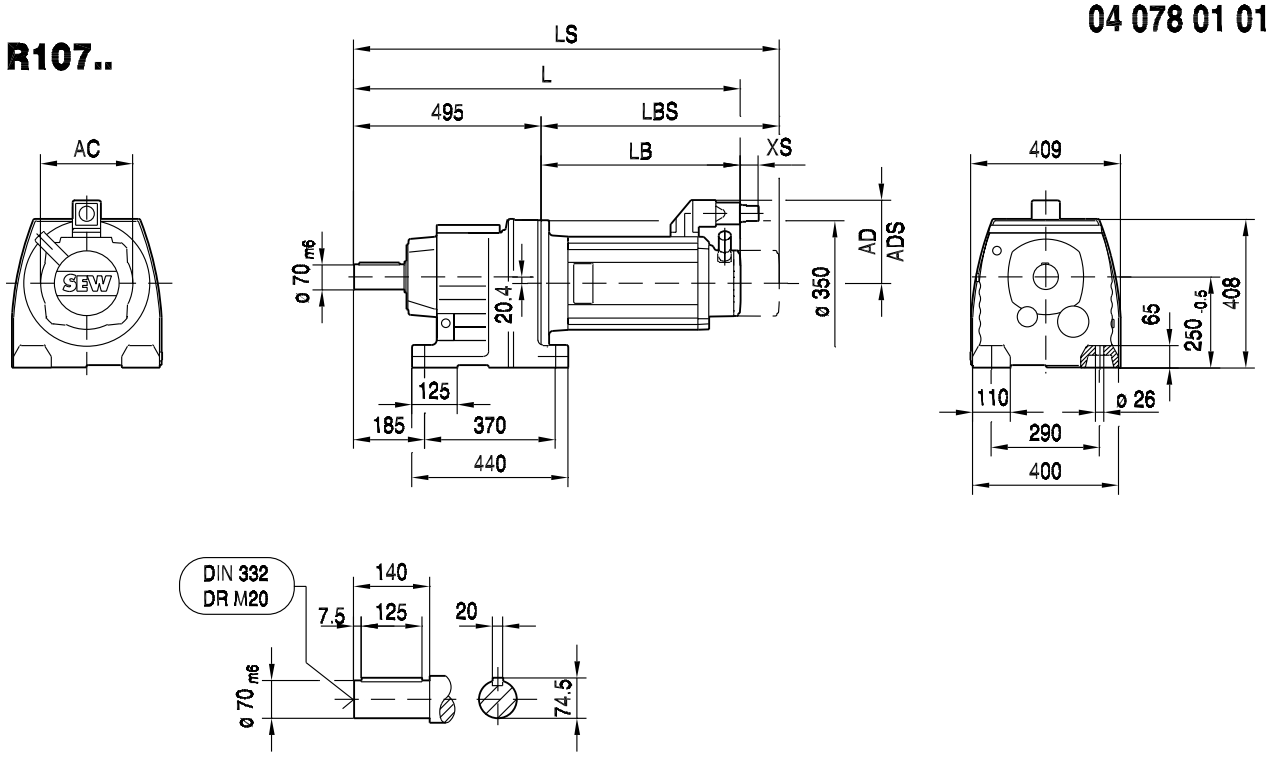
CM..	i	n_{epk} [1/min]	η [%]	c_T R [Nm/']	c_T RF [Nm/']	c_T RM [Nm/']	φ /R [']
R107 3	29.49	4500	95	259.15	259.15	209.55	7
	35.26	4500	96	259.15	259.15	209.55	7
	40.37	4500	96	259.15	259.15	209.55	7
	47.63	4500	96	259.15	259.15	209.55	7
	52.68	4500	96	259.15	259.15	209.55	7
	59.41	4500	96	259.15	259.15	209.55	7
	65.6	4500	96	259.15	259.15	209.55	7
	72.88	4500	96	259.15	259.15	209.55	7
	78.57	4500	95	259.94	259.94	210.06	7
	92.7	4500	95	259.94	259.94	210.06	7
	102.53	4500	95	259.94	259.94	210.06	7
	115.63	4500	95	259.94	259.94	210.06	7
	127.68	4500	95	259.94	259.94	210.06	7
	141.83	4500	95	259.94	259.94	210.06	7
	158.68	4500	95	259.94	259.94	210.06	7
	172.34	4500	95	259.94	259.94	210.06	7
	203.16	4500	94	259.94	259.94	210.06	7
	229.95	4500	94	259.94	259.94	210.06	7
	251.15	4500	94	259.94	259.94	210.06	7

CM..	i	M_{amax} [Nm]	M_{apk} [Nm]	$M_{aNotaus}$ [Nm]	n_{ak} [1/min]	J_G 10^{-4} [kgm^2]	F_{Ramax} R [N]	F_{Ramax} RF [N]	F_{Ramax} RM [N]	F_{Rapk} R [N]	F_{Rapk} RF [N]	F_{Rapk} RM [N]
R107 2	4.92	2900	3820	4930	467	144	11300	11300	21100	31800	31800	33500
	5.82	2970	3820	5049	515	108	12100	12100	22400	31800	31800	33500
	6.66	2970	3820	5049	586	88	12800	12800	23500	31800	31800	33500
	7.86	2970	3820	5049	700	70	13800	13800	24900	31800	31800	33500
	8.56	4300	4360	7310	245	129	11300	11300	24400	29100	29100	32100
	10.13	4300	4360	7310	237	97	12400	12400	26000	29100	29100	32100
	11.59	4300	4360	7310	242	80	13300	13300	27300	29100	29100	32100
	13.66	4300	4360	7310	242	64	14400	14400	29000	29100	29100	32100
	15.65	4300	4360	7310	236	52	15400	15400	30500	29100	29100	32100
	18.21	4300	4360	7310	236	43	16600	16600	32300	29100	29100	32100
	20.07	4300	4360	7310	234	37	17300	17300	32800	29100	29100	32100
	22.62	4300	4360	7310	234	31	18300	18300	32800	29100	29100	32100
	24.9	4300	4360	7310	237	27	19200	19200	32800	29100	29100	32100
	27.58	4300	4360	7310	232	21	20100	20100	32800	29100	29100	32100
	30.77	4300	4360	7310	227	18	21100	21100	32800	29100	29100	32100
R107 3	29.49	4300	4360	7310	85	60	20700	20700	32800	29100	29100	32100
	35.26	4300	4360	7310	88	47	22400	22400	32800	29100	29100	32100
	40.37	4300	4360	7310	87	38	23800	23800	32800	29100	29100	32100
	47.63	4300	4360	7310	88	31	25500	25500	32800	29100	29100	32100
	52.68	4300	4360	7310	89	27	26600	26600	32800	29100	29100	32100
	59.41	4300	4360	7310	89	22	28000	28000	32800	29100	29100	32100
	65.6	4300	4360	7310	90	19	29200	29200	32800	29100	29100	32100
	72.88	4300	4360	7310	89	17	29500	29500	32800	29100	29100	32100
	78.57	4300	4360	7310	46	34	29500	29500	32800	29100	29100	32100
	92.7	4300	4360	7310	47	28	29500	29500	32800	29100	29100	32100
	102.53	4300	4360	7310	48	25	29500	29500	32800	29100	29100	32100
	115.63	4300	4360	7310	48	20	29500	29500	32800	29100	29100	32100
	127.68	4300	4360	7310	49	18	29500	29500	32800	29100	29100	32100
	141.83	4300	4360	7310	49	15	29500	29500	32800	29100	29100	32100
	158.68	4300	4360	7310	44	13	29500	29500	32800	29100	29100	32100
	172.34	4300	4360	7310	41	12	29500	29500	32800	29100	29100	32100
	203.16	4300	4360	7310	34	9.2	29500	29500	32800	29100	29100	32100
	229.95	4300	4360	7310	30	5.9	29500	29500	32800	29100	29100	32100
	251.15	4300	4360	7310	28	5.1	29500	29500	32800	29100	29100	32100

8.35 R 107 / CM [mm]

04 078 01 01

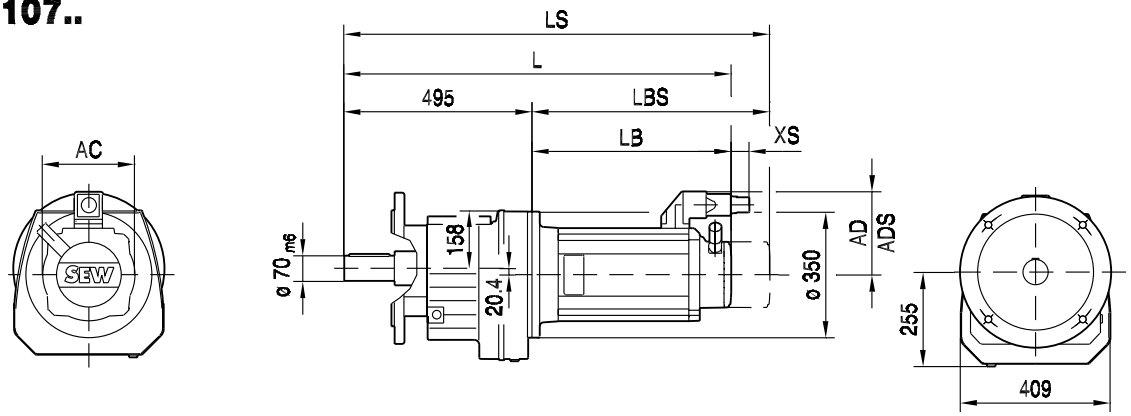
R107..

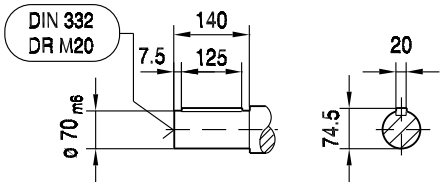


(→ 150)	CM112S	CM112M	CM112L	CM112H							
AC	186	186	186	186							
AD	162	162	162	162							
ADS	162	162	162	162							
L	791	818	880	1010							
LS	881	908	970	1075							
LB	296	323	385	515							
LBS	386	413	475	580							
XS	36	36	36	36							

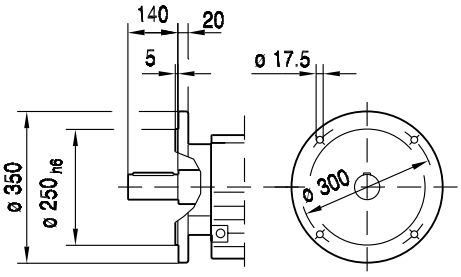
04 079 01 01

RF107..

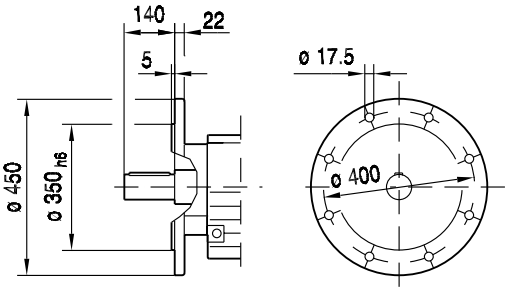




ø 350



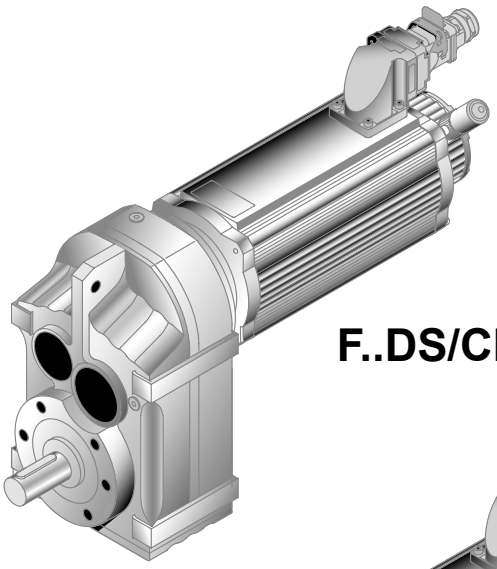
ø 450



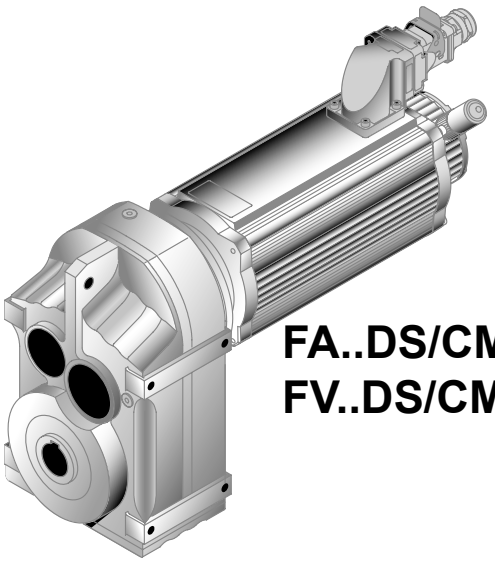
(→ 📖 150)	CM112S	CM112M	CM112L	CM112H							
AC	186	186	186	186							
AD	162	162	162	162							
ADS	162	162	162	162							
L	791	818	880	1010							
LS	881	908	970	1075							
LB	296	323	385	515							
LBS	386	413	475	580							
XS	36	36	36	36							

9 F..CMP, DS, CM

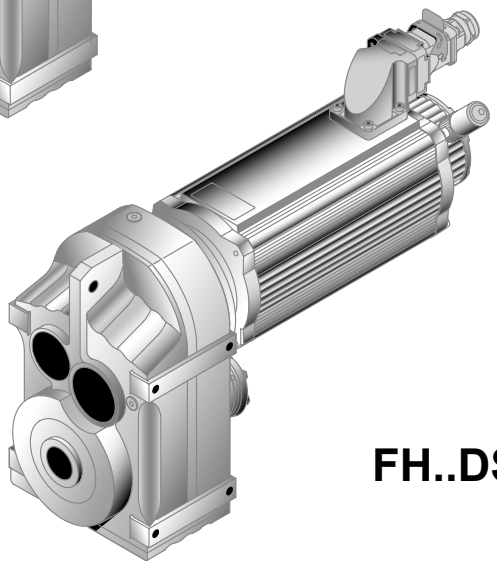
9.1 F, FA, FV, FH, FF, FAF, FVF, FHF, FA..B, FV..B, FH..B, FAZ, FVZ, FAF, FVF..CMP / DS / CM



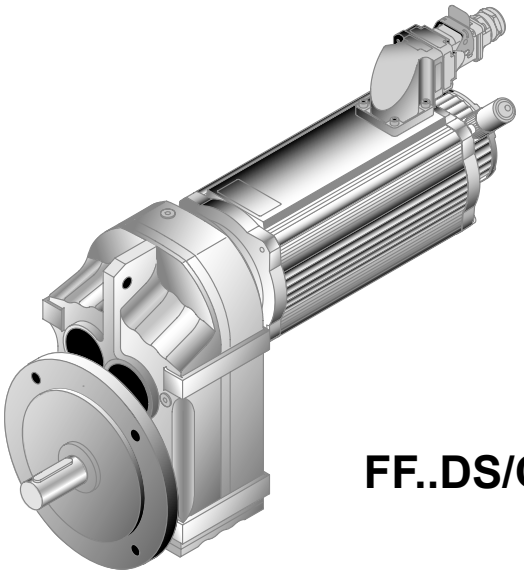
F..DS/CM..



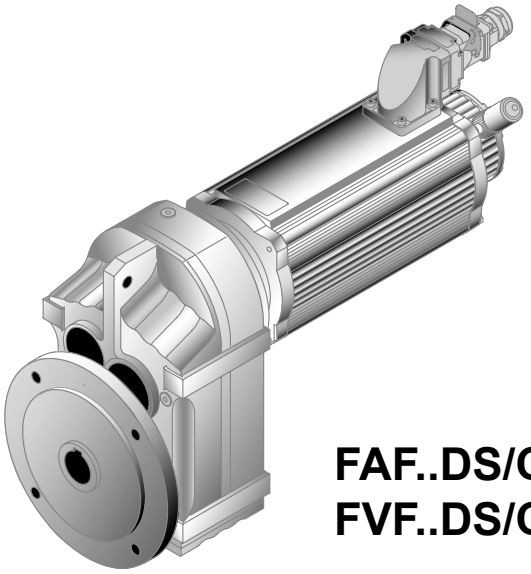
FA..DS/CM..
FV..DS/CM..



FH..DS/CM..

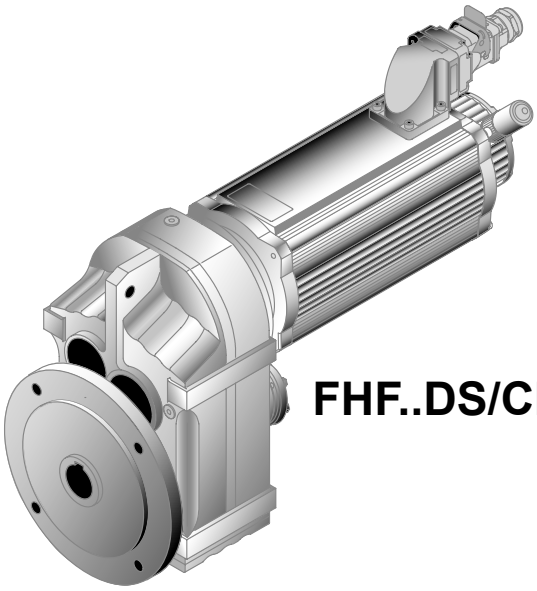


FF..DS/CM..

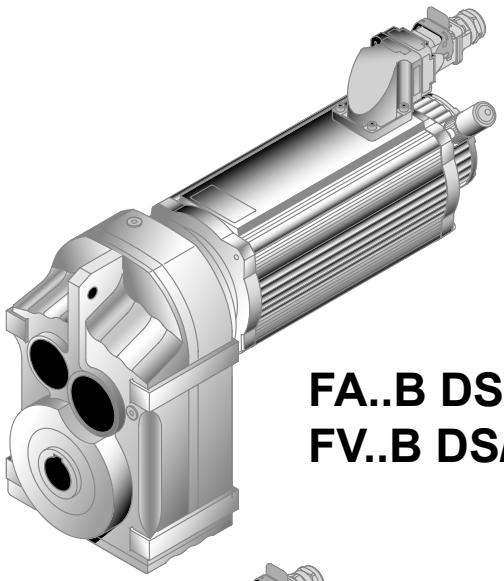


FAF..DS/CM..
FVF..DS/CM..

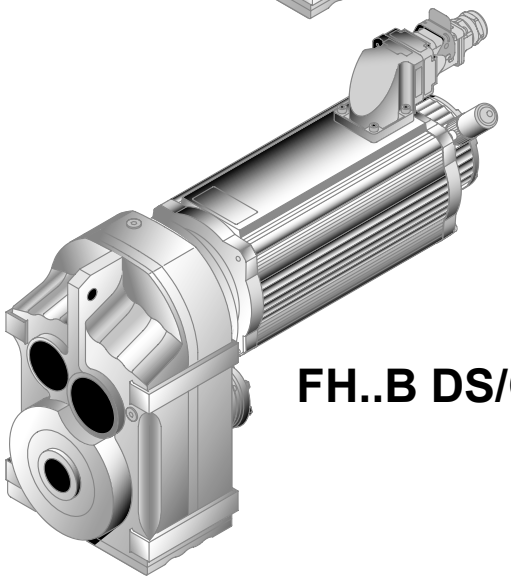
52497AXX



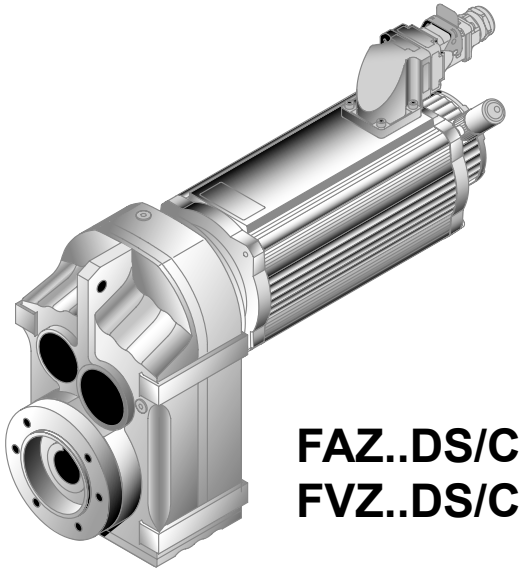
FHF..DS/CM..



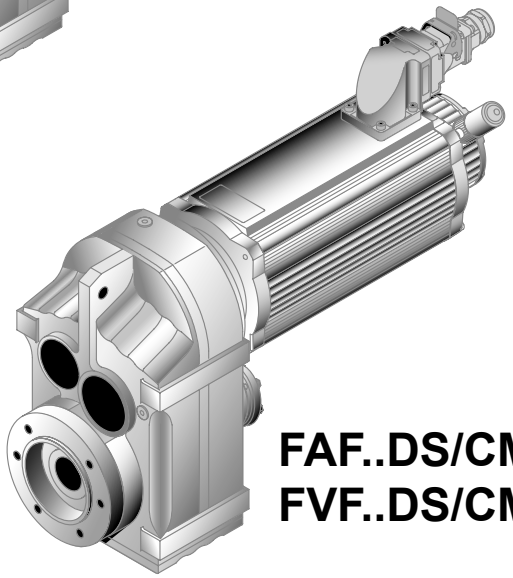
FA..B DS/CM..
FV..B DS/CM..



FH..B DS/CM..



FAZ..DS/CM..
FVZ..DS/CM..



FAF..DS/CM..
FVF..DS/CM..

52495AXX

9.2 F 27 / CMP / DS / CM [Nm]

M_{aDyn} [Nm]		CMP							DS			CM			
	i	40M	50S	50M	50L	63S	63M	63L	56M	56L	56H	71S	71M	71L	90S
FA27 2	4.16	15	21	42	62	45	86	123	15	31	61	67	87	127	>130
	4.93	18	25	49	74	53	102	>144	18	36	73	79	103	>144	>144
	5.27	19	27	53	79	57	109	>150	19	39	78	84	110	>150	>150
	6.17	23	31	62	92	66	128	>163	23	45	91	99	129	>163	>163
	6.91	25	35	69	103	74	143	>163	25	51	102	111	144	>163	>163
	8.13	30	41	81	121	88	>163	>163	30	60	120	130	>163	>163	>163
	9.4	35	47	94	140	101	>163		35	69	139	150	>163		
	9.88	36	49	98	146	105	>157	>157	36	72	144	156	>157	>157	>157
	10.55	38	53	104	156	112	>157	>157	38	77	154	>157	>157	>157	>157
	12.35	45	62	122	>157	132	>157	>157	45	90	>157	>157	>157	>157	>157
	13.84	50	69	137	>157	147	>157	>157	50	101	>157	>157	>157	>157	>157
	16.28	59	81	>157	>157	>157	>157	>157	59	119	>157	>157	>157	>157	>157
	18.84	69	94	>157	>157	>157	>157		69	137	>157	>157	>157		
	20.15	74	101	>157	>157	>157	>157		74	147	>157	>157	>157		
	23.25	85	116	>157		>157			85	>157	>157				
	27.18	99	136						99	>157					
	29.56	108	148						108	>157					
FA27 3	33.83	121	>157	>157	>157	>157	>157	>157	121	>157	>157	>157	>157	>157	>157
	38.33	137	>157	>157	>157	>157	>157		137	>157	>157	>157	>157		
	40.89	146	>157	>157	>157	>157	>157	>157	146	>157	>157	>157	>157	>157	>157
	46.78	>157	>157	>157	>157	>157	>157		>157	>157	>157	>157	>157		
	50.19	>157	>157	>157	>157	>157	>157		>157	>157	>157	>157	>157		
	56.62	>157	>157	>157	>157	>157	>157	>157	>157	>157	>157	>157	>157	>157	>157
	63.86	>157	>157	>157	>157	>157	>157	>157	>157	>157	>157	>157	>157	>157	>157
	72.37	>157	>157	>157	>157	>157	>157		>157	>157	>157	>157	>157		
	77.21	>157	>157	>157	>157	>157	>157	>157	>157	>157	>157	>157	>157	>157	>157
	88.32	>157	>157	>157	>157	>157	>157		>157	>157	>157	>157	>157		
	94.76	>157	>157	>157	>157	>157	>157		>157	>157	>157	>157	>157		
	109.9	>157	>157	>157		>157			>157	>157	>157				
	129.09	>157	>157						>157	>157					
	140.74	>157	>157						>157	>157					

m [kg]		CMP							DS			CM			
	s	40M	50S	50M	50L	63S	63M	63L	56M	56L	56H	71S	71M	71L	90S
FA27	2	7.1	8.8	9.7	11	11	12	14	7.4	8.4	9.2	13	15	18	23
FA27	3	7.4	9.1	10.0	11	11	13	14	7.7	8.7	9.4	14	15	18	23
FAF: + 0.7 kg / F: + 0.5 kg / FF: + 1.3 kg															

CMP.. / DS.. / CM..		n_{epk}	η	c_T			
				FA	FAF	F	FF
	i	[1/min]	[%]	[Nm/°]	[Nm/°]	[Nm/°]	[Nm/°]
FA27 2	4.16	4120	97	46.16	46.16	20.52	18.43
	4.93	4500	97	46.16	46.16	20.52	18.43
	5.27	4500	97	46.16	46.16	20.52	18.43
	6.17	4500	97	46.16	46.16	20.52	18.43
	6.91	4500	97	46.16	46.16	20.52	18.43
	8.13	4500	97	46.16	46.16	20.52	18.43
	9.4	4500	97	46.16	46.16	20.52	18.43
	9.88	4500	96	82.95	82.95	25.56	22.39
	10.55	4500	96	82.95	82.95	25.56	22.39
	12.35	4500	96	82.95	82.95	25.56	22.39
	13.84	4500	96	82.95	82.95	25.56	22.39
	16.28	4500	96	82.95	82.95	25.56	22.39
	18.84	4500	96	82.95	82.95	25.56	22.39
	20.15	4500	96	82.95	82.95	25.56	22.39
	23.25	4500	96	82.95	82.95	25.56	22.39
	27.18	4500	96	82.95	82.95	25.56	22.39
	29.56	4500	96	82.95	82.95	25.56	22.39



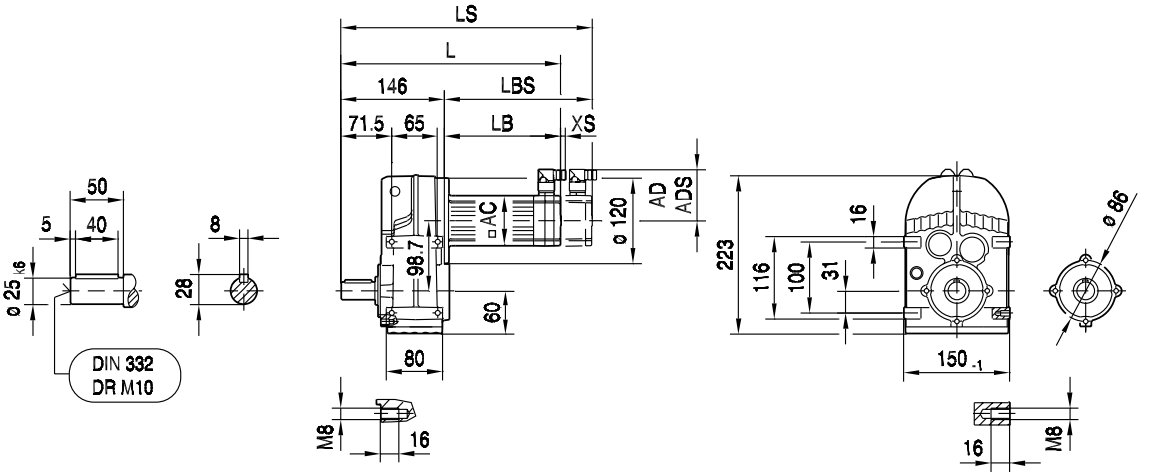
CMP.. / DS.. / CM..	i	n_{epk} [1/min]	η [%]	c_T FA [Nm/']	FAF [Nm/']	F [Nm/']	FF [Nm/']
FA27 3	33.83	4500	94	94.87	94.87	26.59	23.17
	38.33	4500	94	94.87	94.87	26.59	23.17
	40.89	4500	94	94.87	94.87	26.59	23.17
	46.78	4500	94	94.87	94.87	26.59	23.17
	50.19	4500	94	94.87	94.87	26.59	23.17
	56.62	4500	93	99.28	99.28	26.92	23.43
	63.86	4500	93	99.28	99.28	26.92	23.43
	72.37	4500	93	99.28	99.28	26.92	23.43
	77.21	4500	93	99.28	99.28	26.92	23.43
	88.32	4500	93	99.28	99.28	26.92	23.43
	94.76	4500	93	99.28	99.28	26.92	23.43
	109.9	4500	93	99.28	99.28	26.92	23.43
	129.09	4500	93	99.28	99.28	26.92	23.43
	140.74	4500	93	99.28	99.28	26.92	23.43

CMP.. / DS.. / CM..	i	M_{amax} [Nm]	M_{apk} [Nm]	$M_{aNotaus}$ [Nm]	n_{ak} [1/min]	J_G 10^{-4} [kgm^2]	F_{Ramax} FA [N]	FAF [N]	F [N]	FF [N]	F_{Rapk} FA [N]	FAF [N]	F [N]	FF [N]
FA27 2	4.16	87	130	148	361	1.4	1810	1810	1380	1180	4500	4500	4500	4500
	4.93	96	144	163	304	1.0	1860	1860	1420	1210	4500	4500	4500	4500
	5.27	100	150	170	266	0.90	1880	1880	1440	1220	4500	4500	4500	4500
	6.17	109	163	185	227	0.68	1940	1940	1480	1260	4500	4500	4500	4500
	6.91	114	163	194	217	0.56	2000	2000	1530	1300	4500	4500	4500	4500
	8.13	123	163	209	172	0.42	2080	2080	1580	1350	4500	4500	4500	4500
	9.4	130	163	221	160	0.33	2170	2170	1660	1410	4500	4500	4500	4500
	9.88	130	157	221	202	0.74	2400	2400	1830	1560	4500	4500	4500	4500
	10.55	130	157	221	209	0.67	2490	2490	1900	1620	4500	4500	4500	4500
	12.35	130	157	221	211	0.51	2700	2700	2060	1760	4500	4500	4500	4500
	13.84	130	157	221	210	0.43	2860	2860	2180	1860	4500	4500	4500	4500
	16.28	130	157	221	209	0.32	3110	3110	2370	2020	4500	4500	4500	4500
	18.84	130	157	221	212	0.26	3340	3340	2550	2170	4500	4500	4500	4500
	20.15	130	157	221	213	0.23	3450	3450	2630	2240	4500	4500	4500	4500
	23.25	130	157	221	215	0.19	3690	3690	2820	2400	4500	4500	4500	4500
	27.18	130	157	221	217	0.15	3970	3970	3030	2580	4500	4500	4500	4500
	29.56	130	157	221	220	0.13	4120	4120	3140	2680	4500	4500	4500	4500
FA27 3	33.83	130	157	221	166	0.31	4380	4380	3340	2850	4500	4500	4500	4500
	38.33	130	157	221	167	0.26	4500	4500	3530	3010	4500	4500	4500	4500
	40.89	130	157	221	166	0.23	4500	4500	3640	3100	4500	4500	4500	4500
	46.78	130	157	221	150	0.18	4500	4500	3860	3290	4500	4500	4500	4500
	50.19	130	157	221	139	0.17	4500	4500	3980	3390	4500	4500	4500	4500
	56.62	130	157	221	124	0.31	4500	4500	4180	3570	4500	4500	4500	4500
	63.86	130	157	221	110	0.26	4500	4500	4400	3750	4500	4500	4500	4500
	72.37	130	157	221	97	0.22	4500	4500	4500	3960	4500	4500	4500	4500
	77.21	130	157	221	91	0.20	4500	4500	4500	4060	4500	4500	4500	4500
	88.32	130	157	221	79	0.16	4500	4500	4500	4290	4500	4500	4500	4500
	94.76	130	157	221	74	0.15	4500	4500	4500	4420	4500	4500	4500	4500
	109.9	130	157	221	64	0.12	4500	4500	4500	4500	4500	4500	4500	4500
	129.09	130	157	221	54	0.090	4500	4500	4500	4500	4500	4500	4500	4500
	140.74	130	157	221	50	0.080	4500	4500	4500	4500	4500	4500	4500	4500

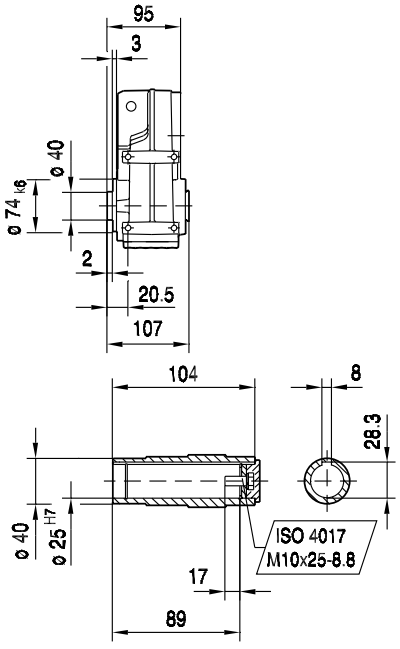
9.3 F 27 / CMP / DS / CM [mm]

42 008 00 07

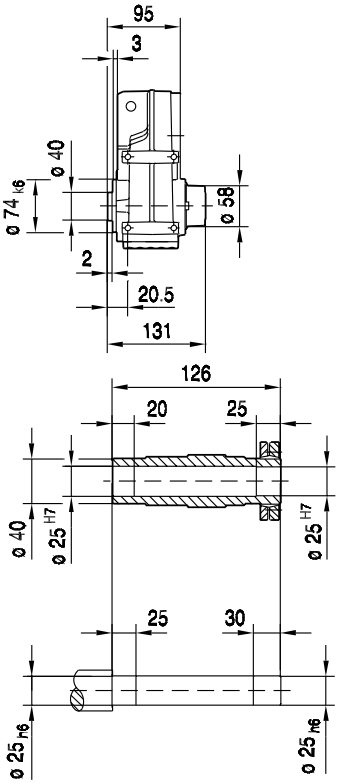
F27..



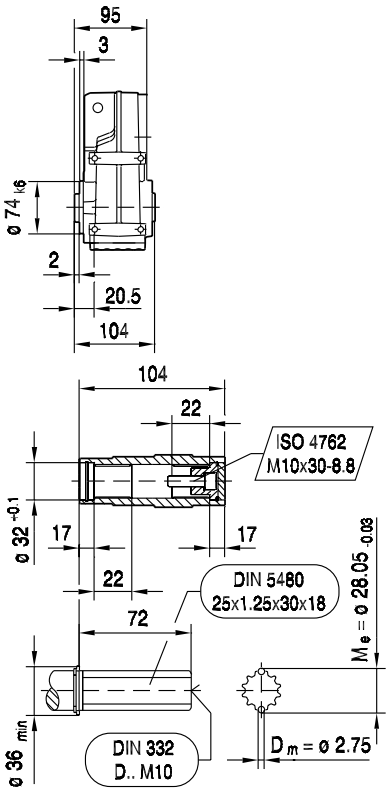
FA27B..



FH27B..



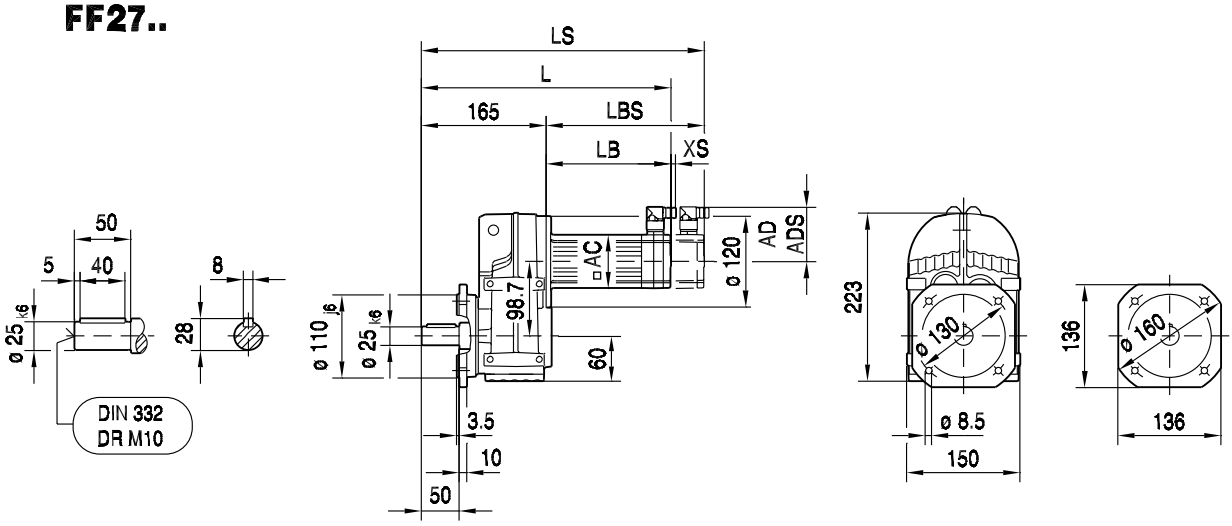
FV27B..



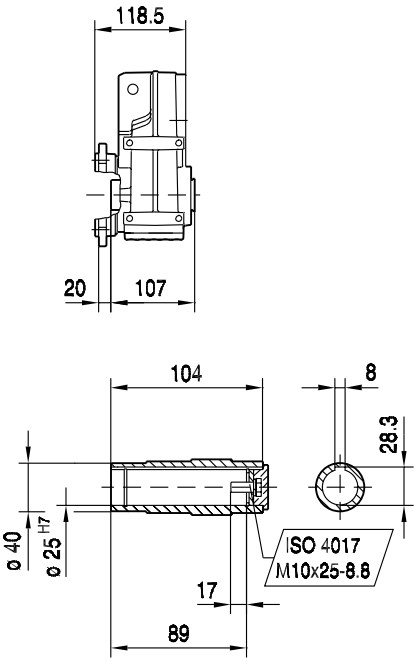
(→ 150)	CMP40M	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L	
AC	57	73	73	73	88	88	88	
AD	75	82	82	82	89	89	89	
ADS	75	82	82	82	89	89	89	
L	289	291	330	369	326	376	429	
LS	319	320	359	398	354	404	458	
LB	143	145	184	223	180	230	283	
LBS	173	174	213	252	208	258	312	
XS	19	18	18	18	14	14	14	

42 009 00 07

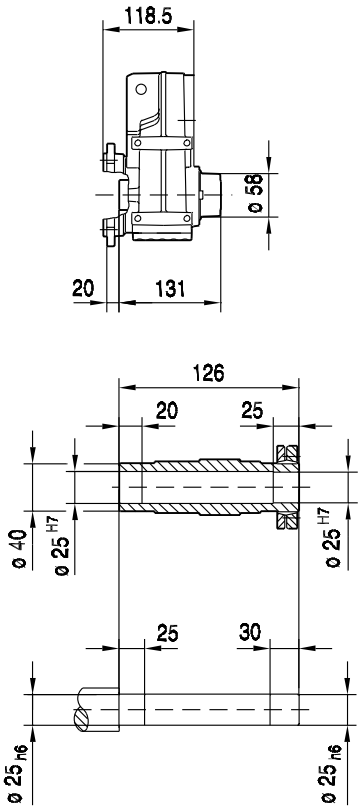
FF27..



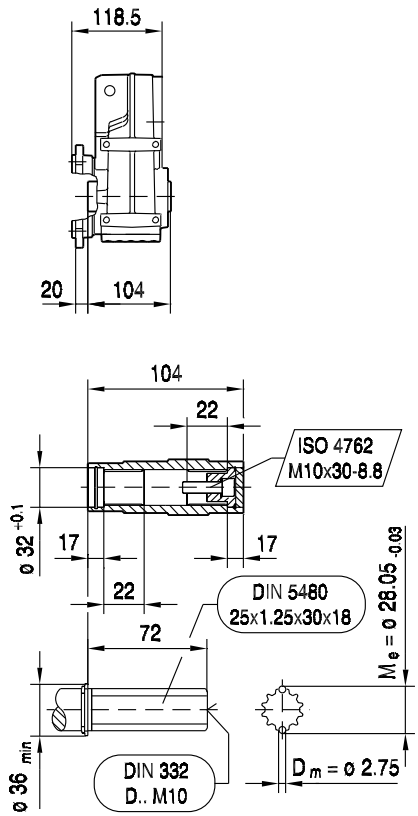
FAF27..



FHF27..



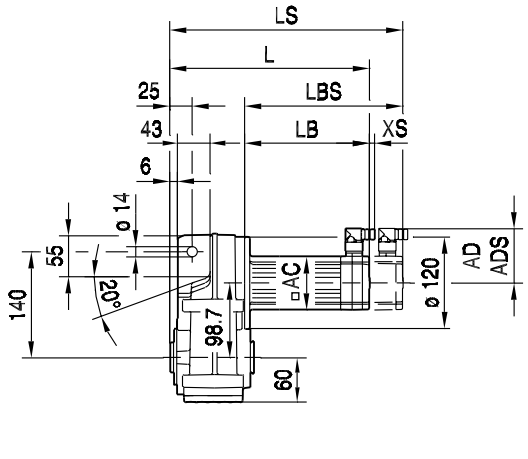
FVF27..

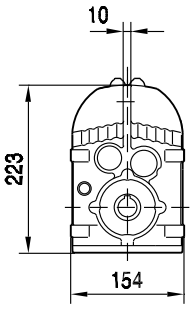


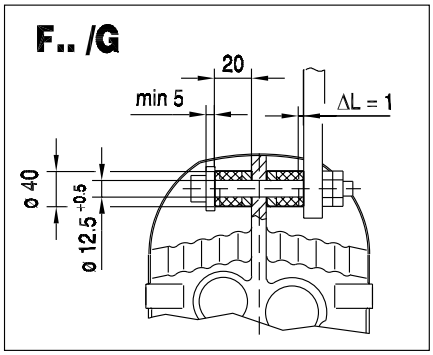
(→ 📖 150)	CMP40M	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L	
AC	57	73	73	73	88	88	88	
AD	75	82	82	82	89	89	89	
ADS	75	82	82	82	89	89	89	
L	308	310	349	388	345	395	448	
LS	338	339	378	417	373	423	477	
LB	143	145	184	223	180	230	283	
LBS	173	174	213	252	208	258	312	
XS	19	18	18	18	14	14	14	

FA27..

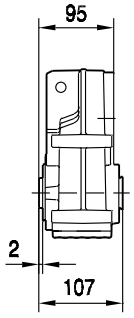
42 010 00 07

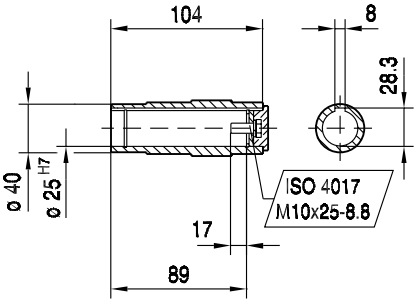




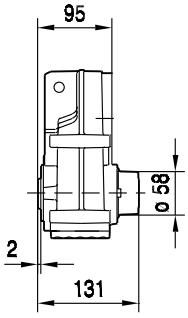


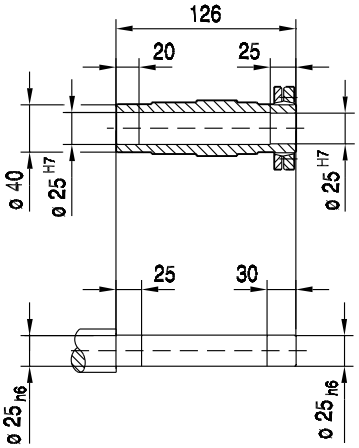
FA27..



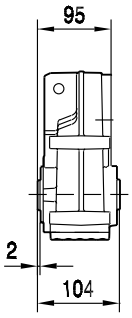


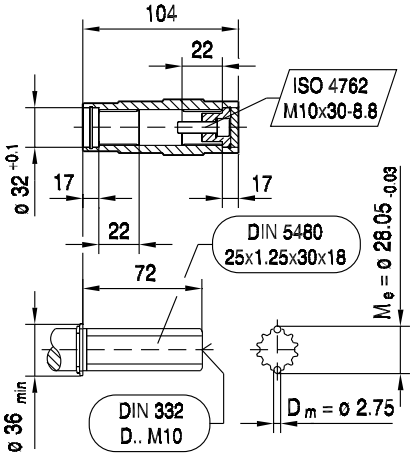
FH27..





FV27..

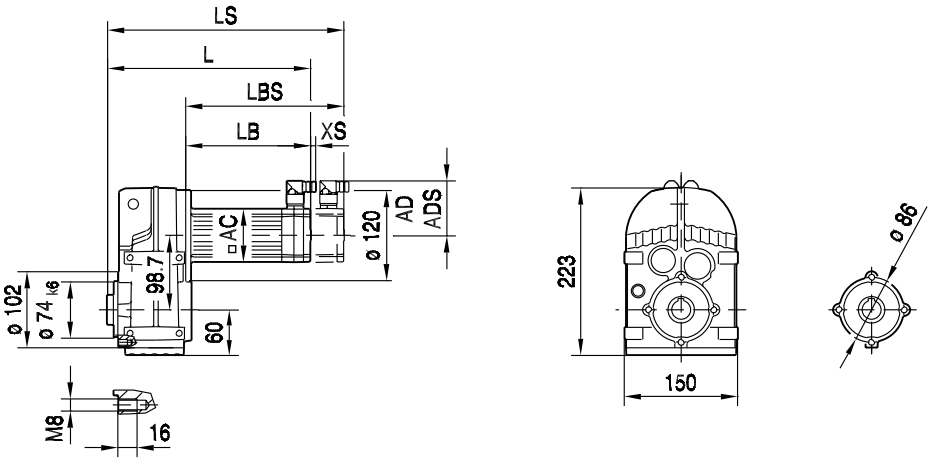




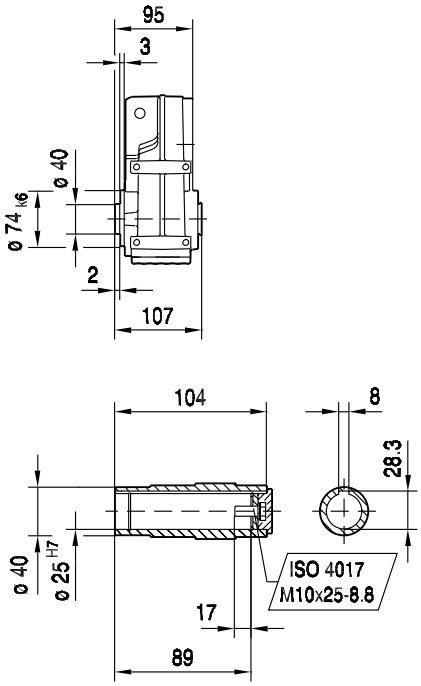
(→ 150)	CMP40M	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L	
AC	57	73	73	73	88	88	88	
AD	75	82	82	82	89	89	89	
ADS	75	82	82	82	89	89	89	
L	238	240	279	318	275	325	378	
LS	268	269	308	347	303	353	407	
LB	143	145	184	223	180	230	283	
LBS	173	174	213	252	208	258	312	
XS	19	18	18	18	14	14	14	

FAZ27..

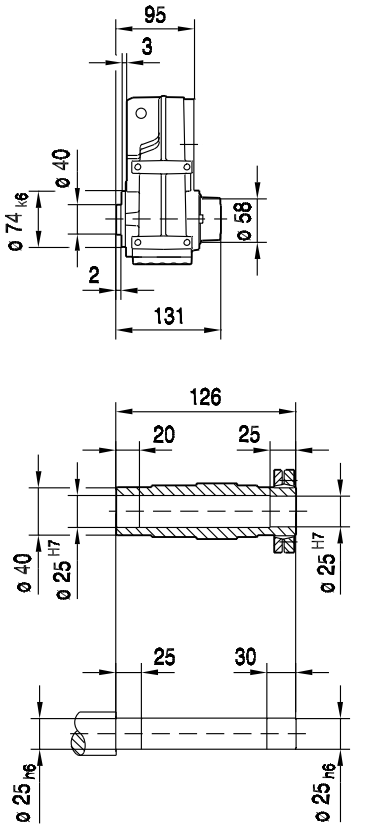
42 011 00 07



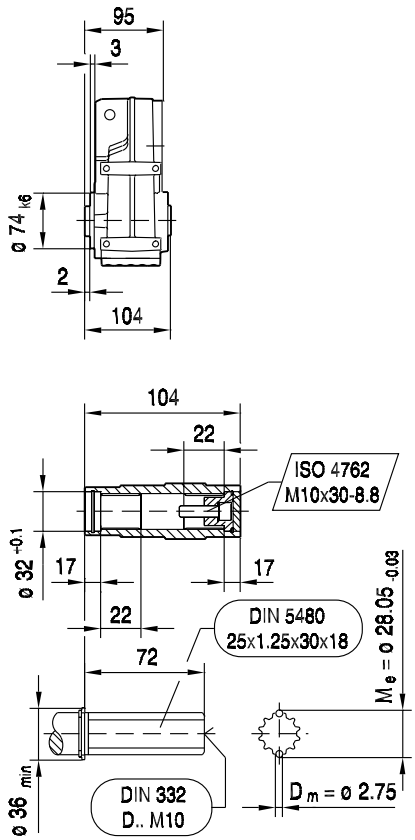
FAZ27..



FHZ27..



FVZ27..

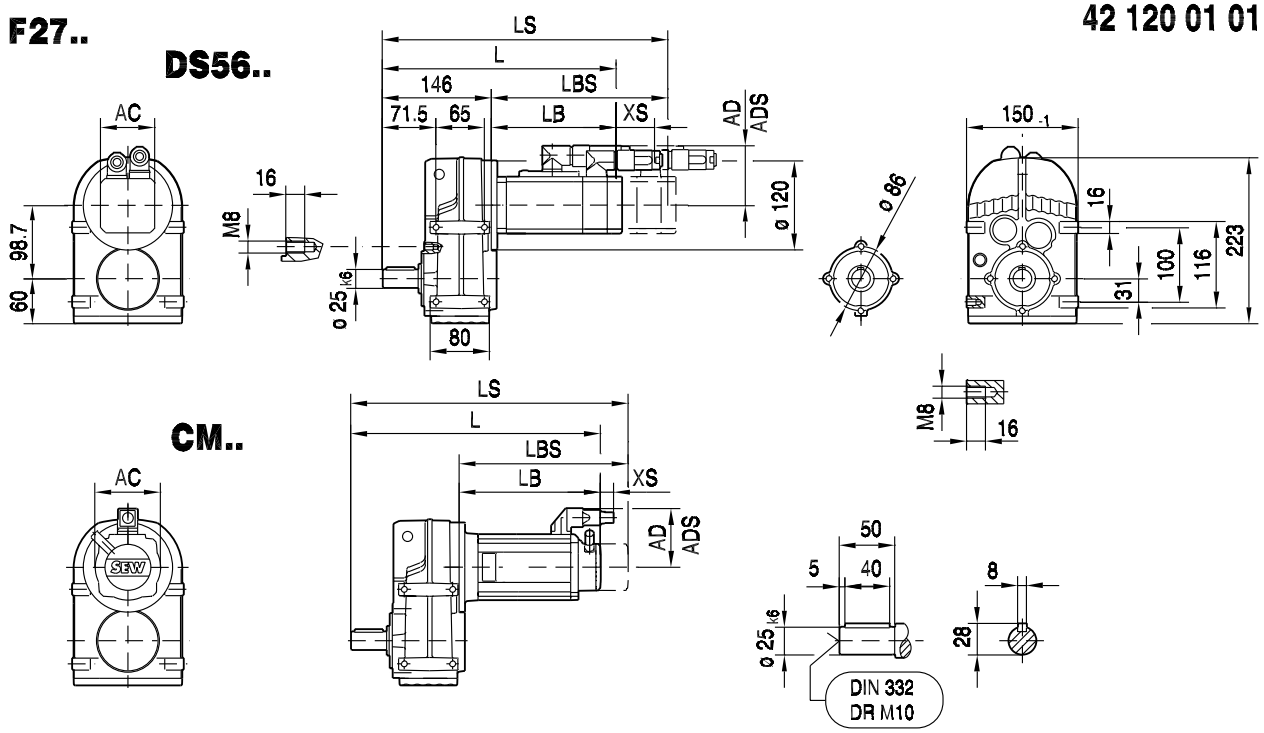


(→ 📖 150)	CMP40M	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L	
AC	57	73	73	73	88	88	88	
AD	75	82	82	82	89	89	89	
ADS	75	82	82	82	89	89	89	
L	238	240	279	318	275	325	378	
LS	268	269	308	347	303	353	407	
LB	143	145	184	223	180	230	283	
LBS	173	174	213	252	208	258	312	
XS	19	18	18	18	14	14	14	

42 120 01 01

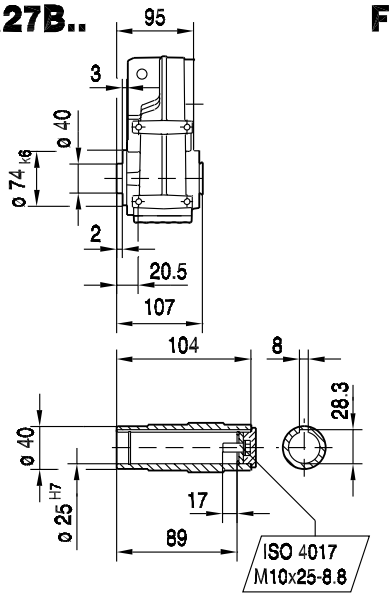
F27..

DS56..

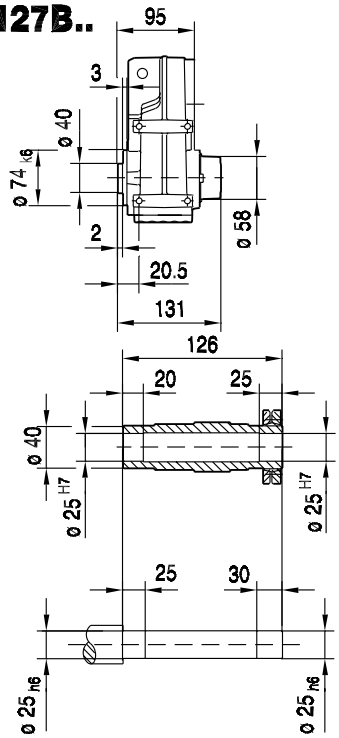


CM..

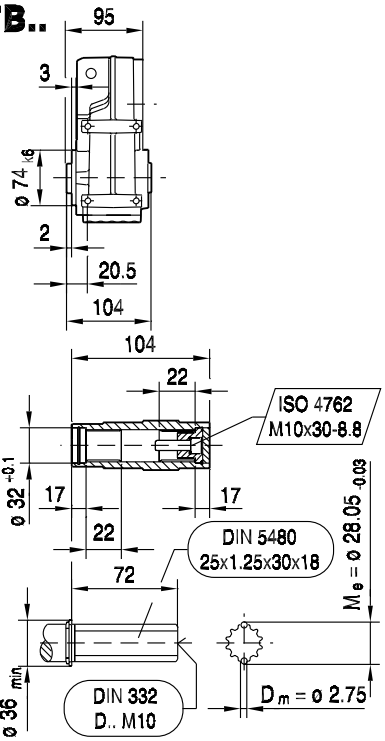
FA27B..



FH27B..



FV27B..

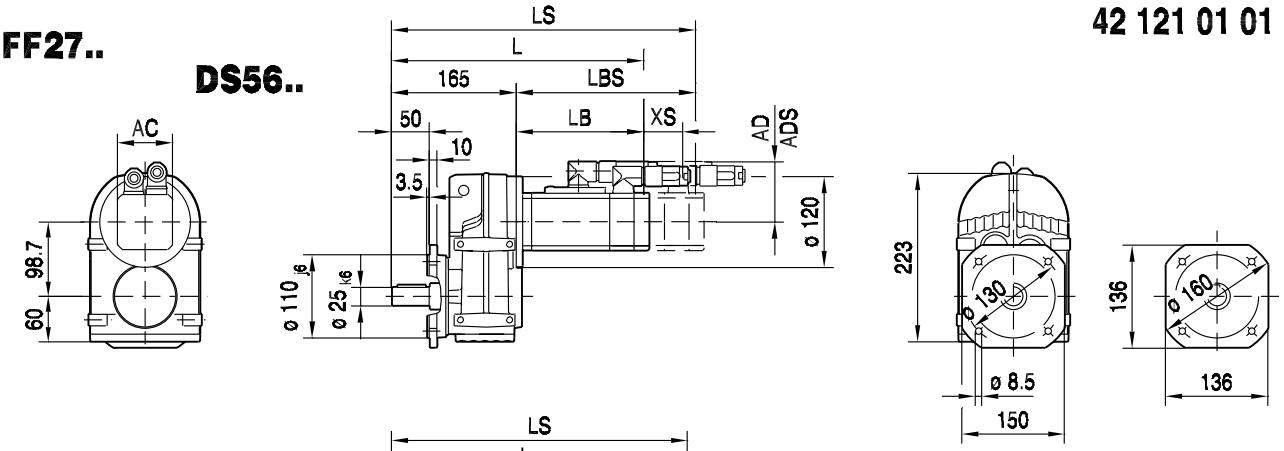


(→ 150)	DS56M	DS56L	DS56H	CM71S	CM71M	CM71L	CM90S				
AC	73	73	73	117	117	117	142				
AD	71	71	77	122	122	122	140				
ADS	77	77	77	122	122	122	140				
L	283	315	418	384	404	447	439				
LS	313	345	418	466	486	529	535				
LB	137	169	272	238	258	301	293				
LBS	167	199	272	320	340	383	389				
XS	70	70	51	45	45	45	50				

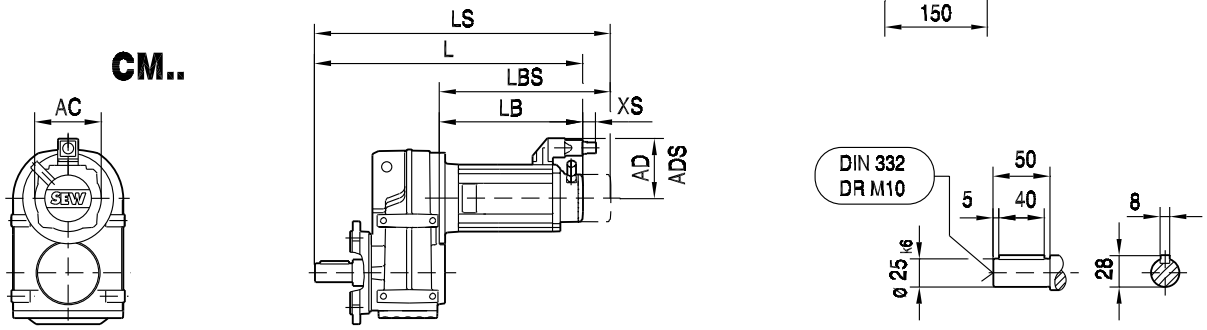
42 121 01 01

FF27..

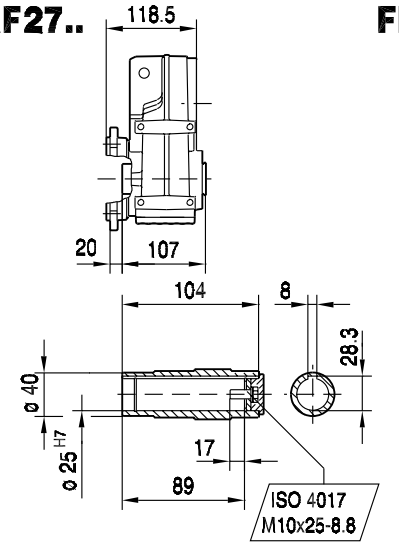
DS56..



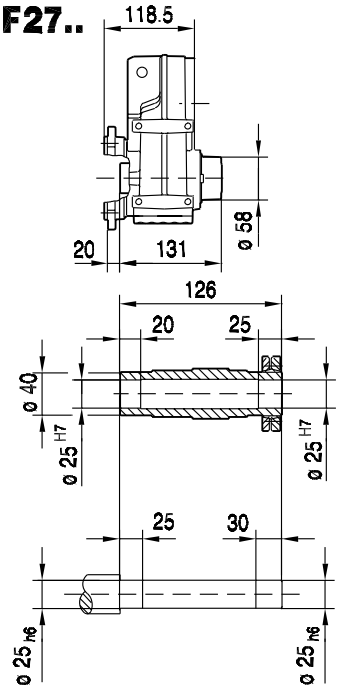
CM..



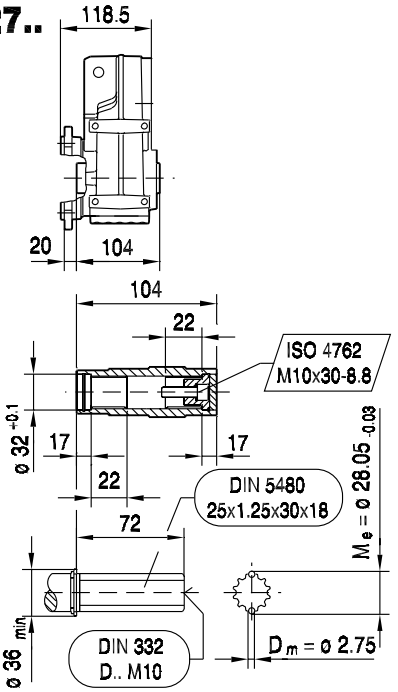
FAF27..



FHF27..

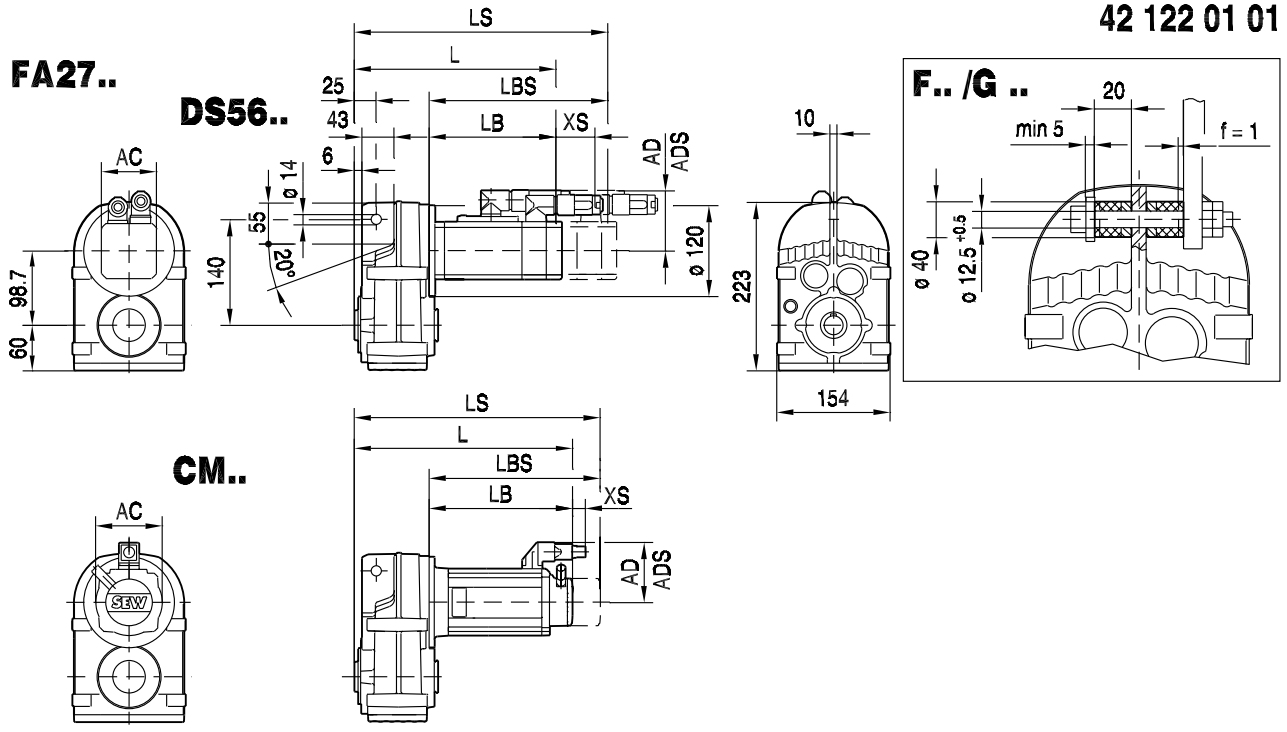


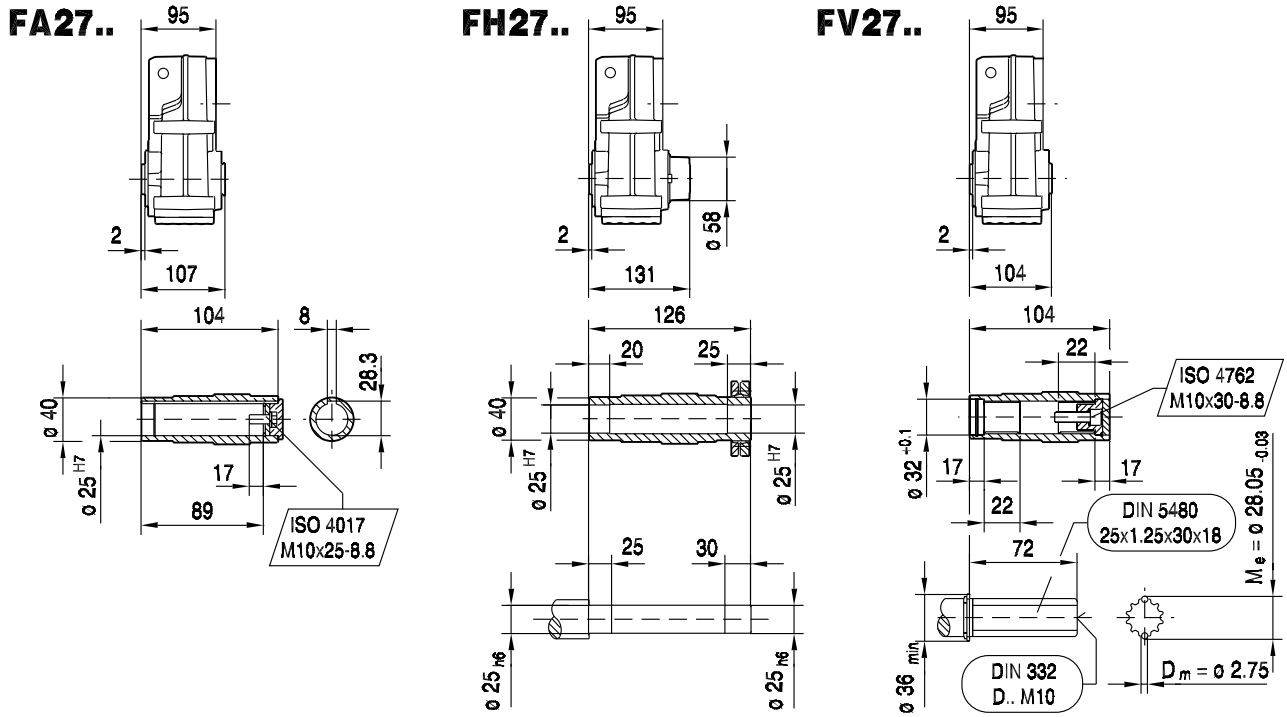
FVF27..



(→ 📖 150)	DS56M	DS56L	DS56H	CM71S	CM71M	CM71L	CM90S				
AC	73	73	73	117	117	117	142				
AD	71	71	77	122	122	122	140				
ADS	77	77	77	122	122	122	140				
L	302	334	437	403	423	466	458				
LS	332	364	437	485	505	548	554				
LB	137	169	272	238	258	301	293				
LBS	167	199	272	320	340	383	389				
XS	70	70	51	45	45	45	50				

42 122 01 01

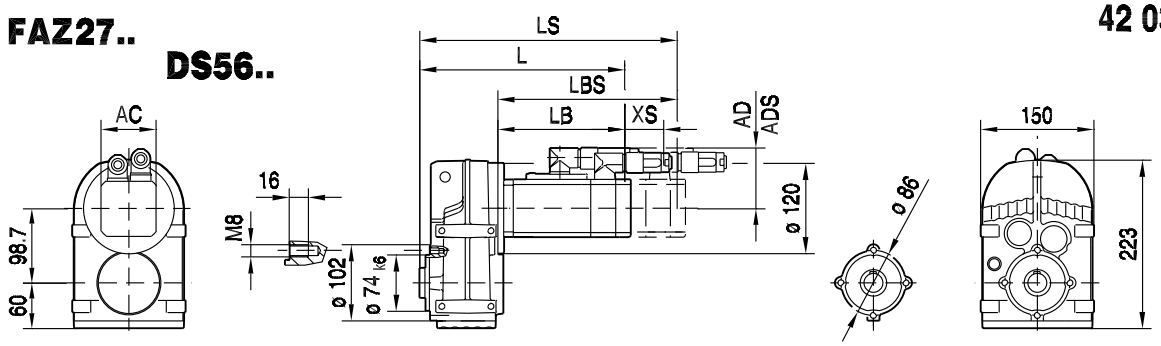




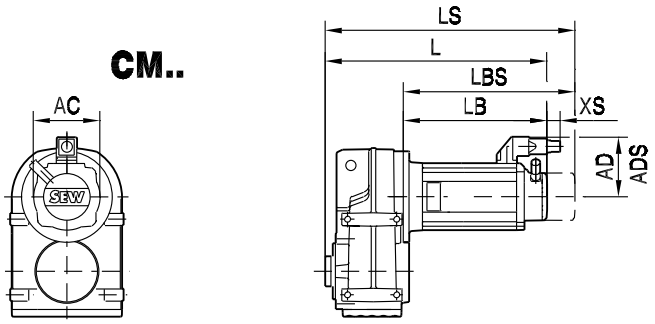
(→ 150)	DS56M	DS56L	DS56H	CM71S	CM71M	CM71L	CM90S				
AC	73	73	73	117	117	117	142				
AD	71	71	77	122	122	122	140				
ADS	77	77	77	122	122	122	140				
L	232	264	367	333	353	396	388				
LS	262	294	367	415	435	478	484				
LB	137	169	272	238	258	301	293				
LBS	167	199	272	320	340	383	389				
XS	70	70	51	45	45	45	50				

42 038 00 04

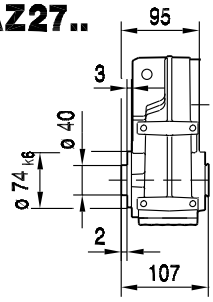
FAZ27..
DS56..



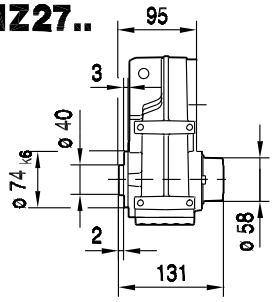
CM..



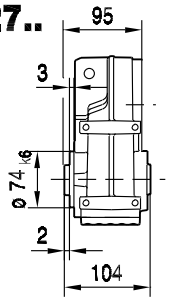
FAZ27..

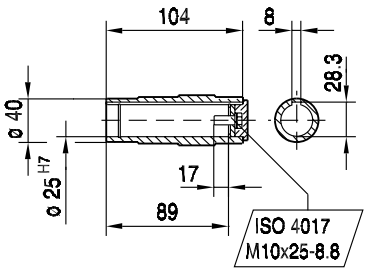


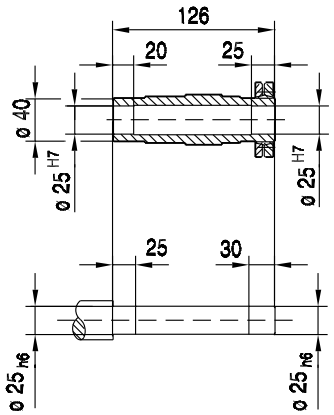
FHZ27..

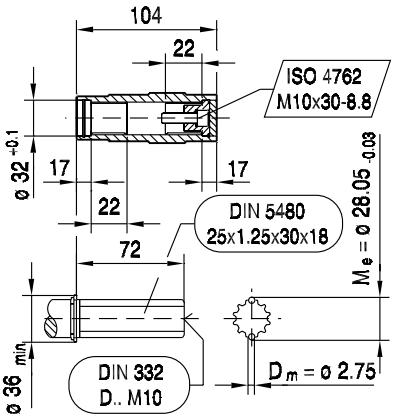


FVZ27..









(→ 150)	DS56M	DS56L	DS56H	CM71S	CM71M	CM71L	CM90S				
AC	73	73	73	117	117	117	142				
AD	71	71	77	122	122	122	140				
ADS	77	77	77	122	122	122	140				
L	232	264	367	333	353	396	388				
LS	262	294	367	415	435	478	484				
LB	137	169	272	238	258	301	293				
LBS	167	199	272	320	340	383	389				
XS	70	70	51	45	45	45	50				

9.4 F 37 / CMP / DS / CM [Nm]

M_{aDyn} [Nm]		CMP							DS			CM			
	i	40M	50S	50M	50L	63S	63M	63L	56M	56L	56H	71S	71M	71L	90S
FA37 2	3.77	14	19	38	56	41	78	111	14	28	56	60	79	115	145
	4.22	16	21	42	63	45	88	124	16	31	62	68	88	129	162
	4.9	18	25	49	73	53	102	144	18	36	72	78	102	149	>180
	5.21	19	26	52	78	56	108	154	19	38	77	83	109	159	>187
	6.05	22	31	60	90	65	126	178	22	45	89	97	126	184	>188
	6.74	25	34	67	101	73	140	>188	25	50	99	108	141	>188	>188
	7.44	27	38	74	111	80	154		27	55	110	119	155		
	8.01	30	40	80	120	86	166	236	30	59	118	128	167	>240	>240
	8.97	33	45	90	134	97	186	>240	33	66	132	144	187	>240	>240
	10.42	38	53	104	156	112	216	>240	38	77	154	167	217	>240	>240
	11.08	41	56	111	166	119	230	>240	41	82	163	177	231	>240	>240
	12.87	47	65	129	192	139	>240	>240	47	95	190	206	>240	>240	>240
	14.33	53	72	143	214	154	>240	>240	53	106	211	229	>240	>240	>240
	15.81	58	80	158	236	170	>240		58	117	233	>240	>240		
	17.03	63	86	170	>240	183	>240	>240	63	126	>240	>240	>240	>240	>240
	19.27	71	97	193	>240	207	>240		71	142	>240	>240	>240		
	20.57	76	104	206	>240	221	>240		76	152	>240	>240	>240		
	23.63	87	119	236		>240			87	174	>240				
FA37 3	23.88	86	118	234	>240	>240	>240	>240	86	172	>240	>240	>240	>240	>240
	28.09	101	139	>240	>240	>240	>240	>240	101	203	>240	>240	>240	>240	>240
	31.69	114	157	>240	>240	>240	>240	>240	114	229	>240	>240	>240	>240	>240
	35.91	130	177	>240	>240	>240	>240		130	>240	>240	>240	>240		
	38.31	138	189	>240	>240	>240	>240	>240	138	>240	>240	>240	>240	>240	>240
	43.83	158	217	>240	>240	>240	>240		158	>240	>240	>240	>240		
	47.02	170	232	>240	>240	>240	>240		170	>240	>240	>240	>240		
	51.7	185	>240	>240	>240	>240	>240	>240	185	>240	>240	>240	>240	>240	>240
	54.54	197	>240	>240		>240			197	>240	>240				
	58.32	208	>240	>240	>240	>240	>240	>240	208	>240	>240	>240	>240	>240	>240
	66.09	236	>240	>240	>240	>240	>240		236	>240	>240	>240	>240		
	70.5	>240	>240	>240	>240	>240	>240	>240	>240	>240	>240	>240	>240	>240	>240
	80.65	>240	>240	>240	>240	>240	>240		>240	>240	>240	>240	>240		
	86.53	>240	>240	>240	>240	>240	>240		>240	>240	>240	>240	>240		
	100.36	>240	>240	>240		>240			>240	>240	>240				
	117.88	>240	>240						>240	>240					
	128.51	>240	>240						>240	>240					

m [kg]		CMP							DS			CM			
	s	40M	50S	50M	50L	63S	63M	63L	56M	56L	56H	71S	71M	71L	90S
FA37	2	13	15	16	17	17	19	20	14	15	15	20	21	24	29
FA37	3	13	15	16	17	17	19	20	14	15	16	20	21	25	29
FAF: + 1.5 kg / F: + 0.5 kg / FF: + 2.3 kg															



CMP.. / DS.. / CM..	i	n_{epk} [1/min]	η [%]	c_T FA [Nm/']	FAF [Nm/']	F [Nm/']	FF [Nm/']	φ /R [']
	3.77	4500	97	40.8	40.8	19.56	15.17	12
	4.22	4500	97	40.8	40.8	19.56	15.17	11
	4.9	4500	97	40.8	40.8	19.56	15.17	11
	5.21	4500	97	40.8	40.8	19.56	15.17	10
	6.05	4500	97	40.8	40.8	19.56	15.17	10
	6.74	4500	97	40.8	40.8	19.56	15.17	10
	7.44	4500	97	40.8	40.8	19.56	15.17	10
	8.01	4500	97	84.43	84.43	26.0	18.77	7
FA37	8.97	4500	97	84.43	84.43	26.0	18.77	7
2	10.42	4500	97	84.43	84.43	26.0	18.77	7
	11.08	4500	97	84.43	84.43	26.0	18.77	7
	12.87	4500	97	84.43	84.43	26.0	18.77	7
	14.33	4500	97	84.43	84.43	26.0	18.77	7
	15.81	4500	97	84.43	84.43	26.0	18.77	6
	17.03	4500	97	84.43	84.43	26.0	18.77	6
	19.27	4500	97	84.43	84.43	26.0	18.77	6
	20.57	4500	97	84.43	84.43	26.0	18.77	6
	23.63	4500	97	84.43	84.43	26.0	18.77	6
	23.88	4500	95	93.52	93.52	26.8	19.19	8
	28.09	4500	95	93.52	93.52	26.8	19.19	8
	31.69	4500	95	93.52	93.52	26.8	19.19	8
	35.91	4500	95	93.52	93.52	26.8	19.19	8
	38.31	4500	95	93.52	93.52	26.8	19.19	8
	43.83	4500	95	93.52	93.52	26.8	19.19	8
	47.02	4500	95	93.52	93.52	26.8	19.19	8
	51.7	4500	94	97.21	97.21	27.1	19.34	7
FA37	54.54	4500	95	93.52	93.52	26.8	19.19	8
3	58.32	4500	94	97.21	97.21	27.1	19.34	7
	66.09	4500	94	97.21	97.21	27.1	19.34	7
	70.5	4500	94	97.21	97.21	27.1	19.34	7
	80.65	4500	94	97.21	97.21	27.1	19.34	7
	86.53	4500	94	97.21	97.21	27.1	19.34	7
	100.36	4500	94	97.21	97.21	27.1	19.34	7
	117.88	4500	94	97.21	97.21	27.1	19.34	7
	128.51	4500	94	97.21	97.21	27.1	19.34	7

CMP.. / DS.. / CM..	i	M_{amax} [Nm]	M_{apk} [Nm]	$M_{aNotaus}$ [Nm]	n_{ak} [1/min]	J_G 10^{-4} [kgm^2]	F_{Ramax} FA [N]	FAF [N]	F [N]	FF [N]	F_{Rapk} FA [N]	FAF [N]	F [N]	FF [N]
	3.77	105	157	179	451	2.8	2470	2470	1970	2220	7000	7000	4810	5860
	4.22	110	165	187	427	2.3	2550	2550	2030	2300	7000	7000	4730	5820
	4.9	120	180	204	367	1.8	2630	2630	2100	2380	7000	7000	4560	5740
	5.21	125	187	213	326	1.6	2660	2660	2120	2410	7000	7000	4470	5700
	6.05	135	188	230	281	1.2	2750	2750	2190	2510	7000	7000	4460	5700
	6.74	140	188	238	267	1.0	2850	2850	2270	2600	7000	7000	4460	5700
	7.44	145	188	247	242	0.83	2940	2940	2350	2680	7000	7000	4460	5700
	8.01	170	240	289	200	1.5	2960	2960	2360	2710	7000	7000	3610	4100
FA37	8.97	175	240	298	190	1.3	3080	3080	2460	2820	7000	7000	3610	4100
2	10.42	185	240	315	163	1.0	3230	3230	2580	2960	7000	7000	3610	4100
	11.08	190	240	323	144	0.94	3290	3290	2620	3020	7000	7000	3610	4100
	12.87	200	240	340	124	0.74	3450	3450	2750	3170	7000	7000	3610	4100
	14.33	200	240	340	126	0.63	3650	3650	2910	3330	7000	7000	3610	4100
	15.81	200	240	340	127	0.52	3840	3840	3070	3490	7000	7000	3610	4100
	17.03	200	240	340	129	0.48	3990	3990	3180	3610	7000	7000	3610	4100
	19.27	200	240	340	130	0.40	4250	4250	3390	3820	7000	7000	3610	4100
	20.57	200	240	340	131	0.36	4390	4390	3500	3940	7000	7000	3610	4100
	23.63	200	240	340	135	0.29	4690	4690	3740	4190	7000	7000	3610	4100



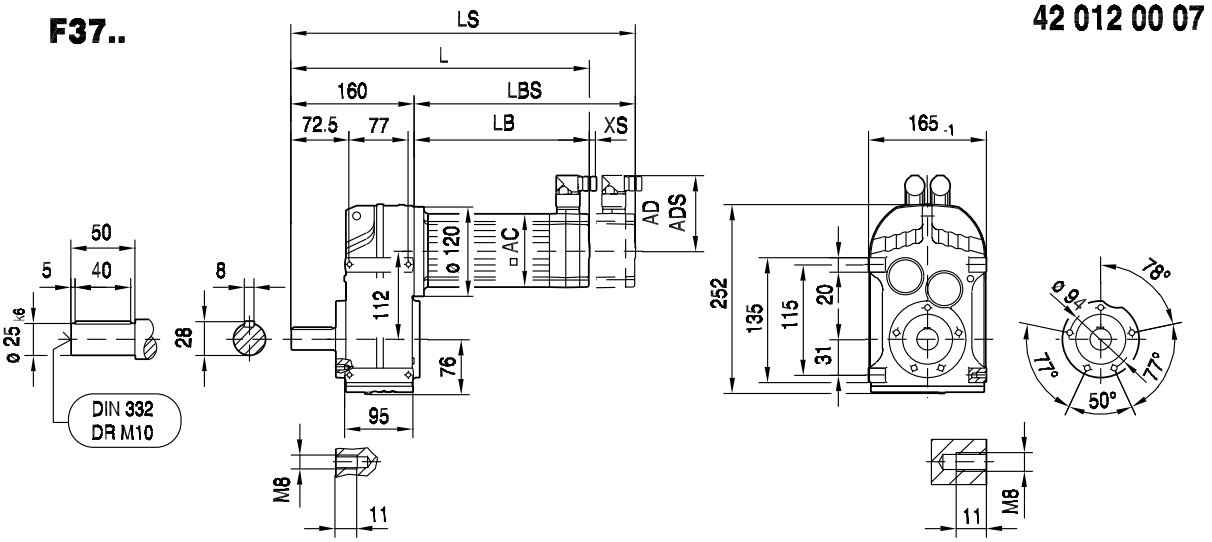
F..CMP, DS, CM
F 37 / CMP / DS / CM [Nm]

CMP.. / DS.. / CM..							F_{Ramax}				F_{Rapk}			
	i	M_{amax} [Nm]	M_{apk} [Nm]	$M_{aNotaus}$ [Nm]	n_{ak} [1/min]	J_G 10^{-4} [kgm^2]	FA [N]	FAF [N]	F [N]	FF [N]	FA [N]	FAF [N]	F [N]	FF [N]
FA37 3	23.88	200	240	340	96	0.60	4720	4720	3760	4210	7000	7000	3610	4100
	28.09	200	240	340	96	0.45	5090	5090	4060	4520	7000	7000	3610	4100
	31.69	200	240	340	95	0.35	5380	5380	4290	4760	7000	7000	3610	4100
	35.91	200	240	340	97	0.29	5700	5700	4290	5020	7000	7000	3610	4100
	38.31	200	240	340	97	0.26	5870	5870	4290	5160	7000	7000	3610	4100
	43.83	200	240	340	96	0.21	6240	6240	4290	5460	7000	7000	3610	4100
	47.02	200	240	340	96	0.19	6430	6430	4290	5620	7000	7000	3610	4100
	51.7	200	240	340	95	0.34	6710	6710	4290	5670	7000	7000	3610	4100
	54.54	200	240	340	97	0.15	6860	6860	4290	5670	7000	7000	3610	4100
	58.32	200	240	340	96	0.27	7000	7000	4290	5670	7000	7000	3610	4100
	66.09	200	240	340	95	0.23	7000	7000	4290	5670	7000	7000	3610	4100
	70.5	200	240	340	95	0.21	7000	7000	4290	5670	7000	7000	3610	4100
	80.65	200	240	340	87	0.17	7000	7000	4290	5670	7000	7000	3610	4100
	86.53	200	240	340	81	0.15	7000	7000	4290	5670	7000	7000	3610	4100
	100.36	200	240	340	70	0.12	7000	7000	4290	5670	7000	7000	3610	4100
	117.88	200	240	340	59	0.10	7000	7000	4290	5670	7000	7000	3610	4100
	128.51	200	240	340	54	0.080	7000	7000	4290	5670	7000	7000	3610	4100

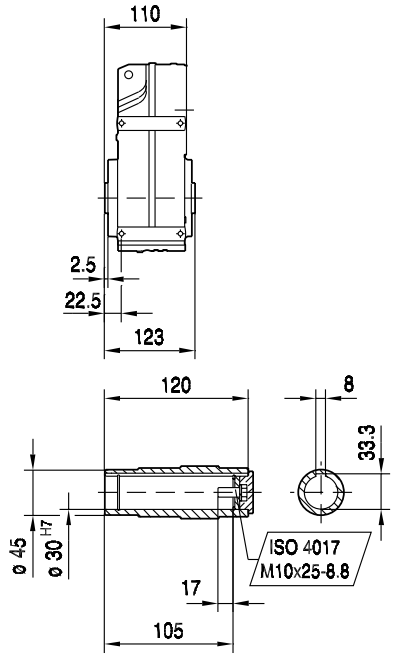
9.5 F 37 / CMP / DS / CM [mm]

F37..

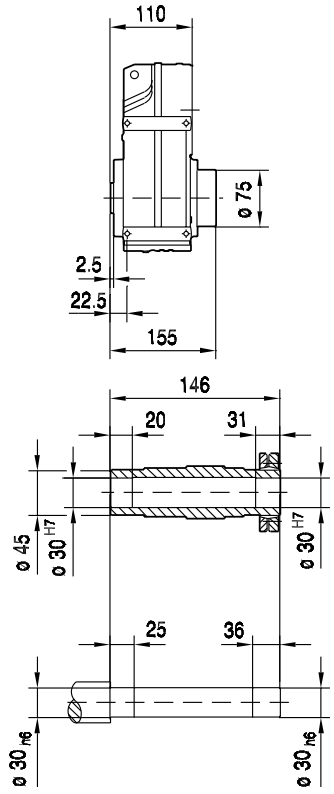
42 012 00 07



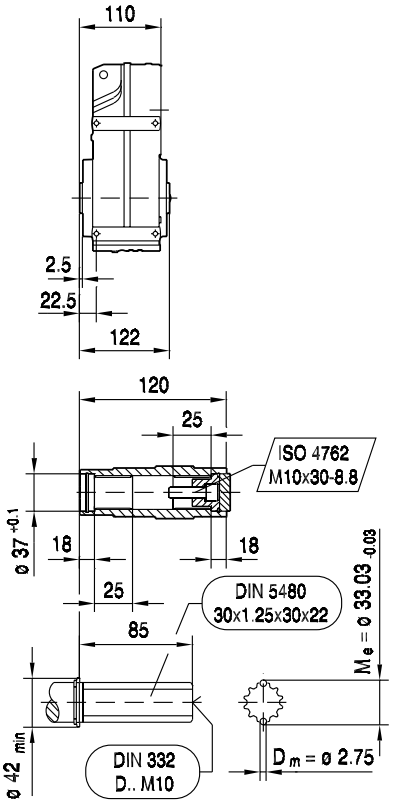
FA37B..



FH37B..



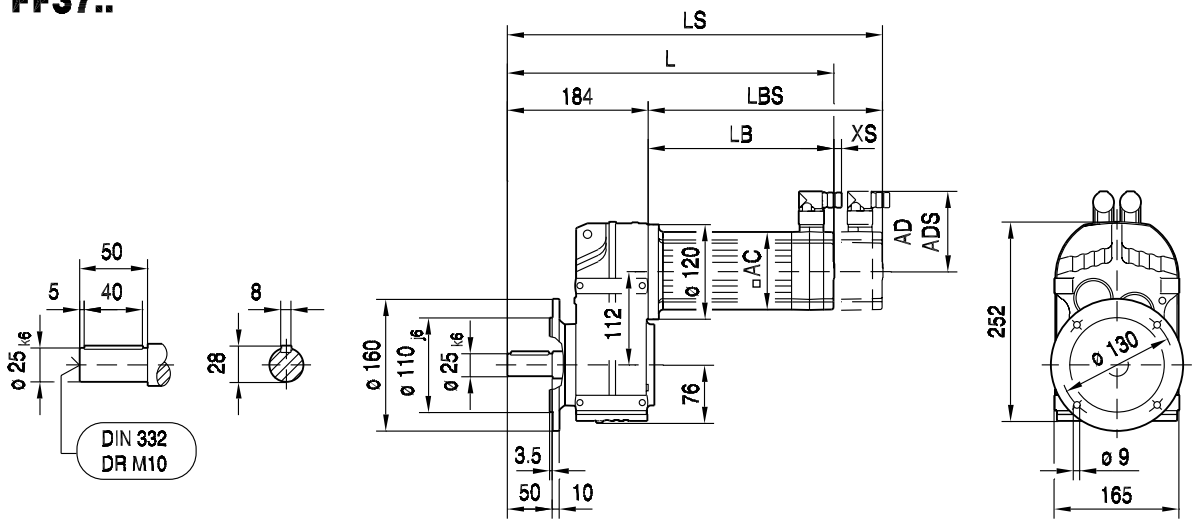
FV37B..



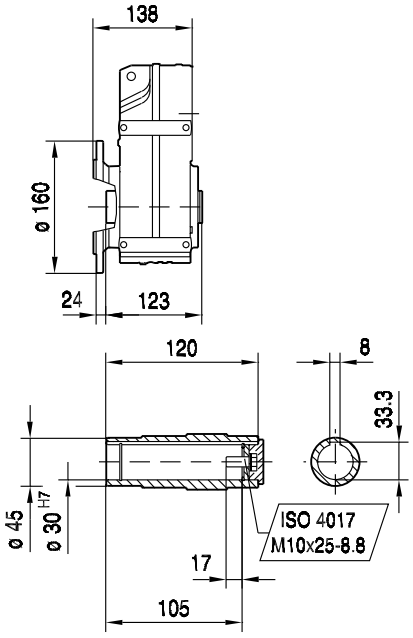
(→ 150)	CMP40M	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L	
AC	57	73	73	73	88	88	88	
AD	75	82	82	82	89	89	89	
ADS	75	82	82	82	89	89	89	
L	303	305	344	383	340	390	443	
LS	333	334	373	412	368	418	472	
LB	143	145	184	223	180	230	283	
LBS	173	174	213	252	208	258	312	
XS	19	18	18	18	14	14	14	

42 013 00 07

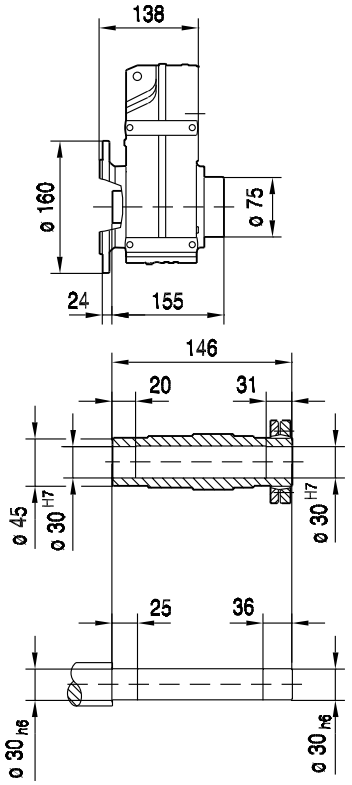
FF37..



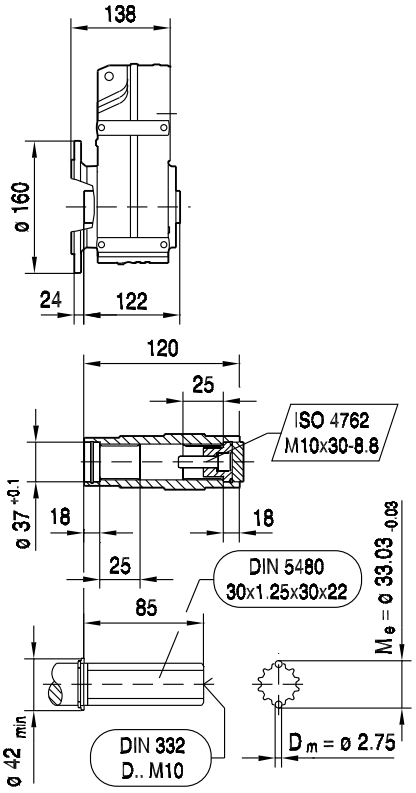
FAF37..



FHF37..



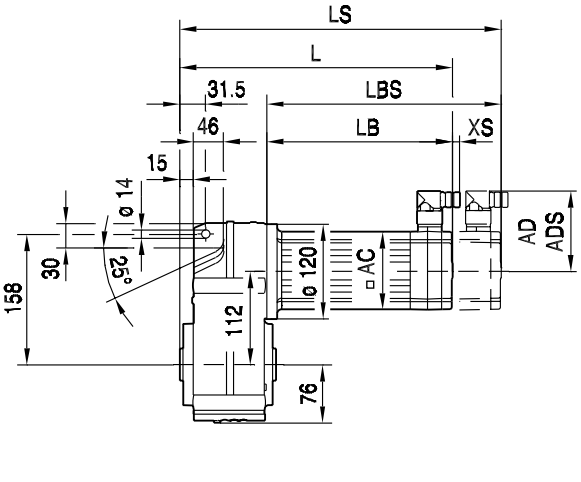
FVF37..

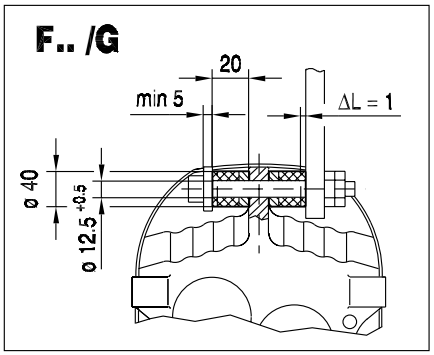


(→ 150)	CMP40M	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L	
AC	57	73	73	73	88	88	88	
AD	75	82	82	82	89	89	89	
ADS	75	82	82	82	89	89	89	
L	327	329	368	407	364	414	467	
LS	357	358	397	436	392	442	496	
LB	143	145	184	223	180	230	283	
LBS	173	174	213	252	208	258	312	
XS	19	18	18	18	14	14	14	

FA37..

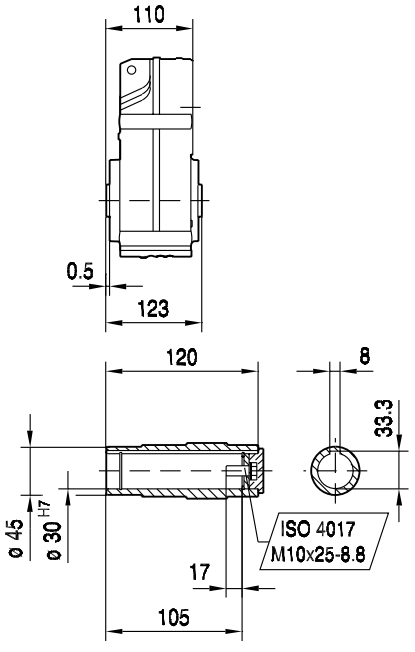
42 014 00 07



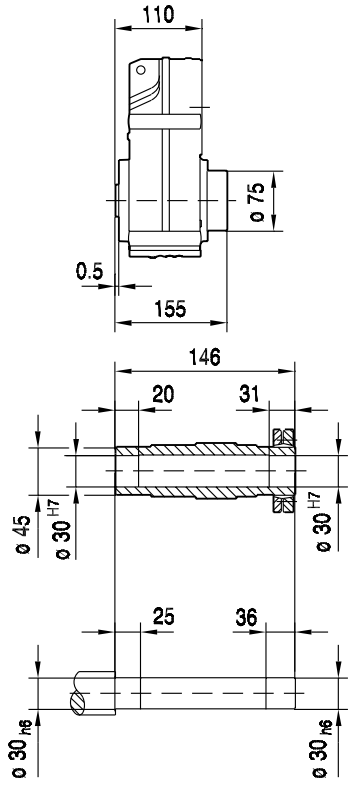


9

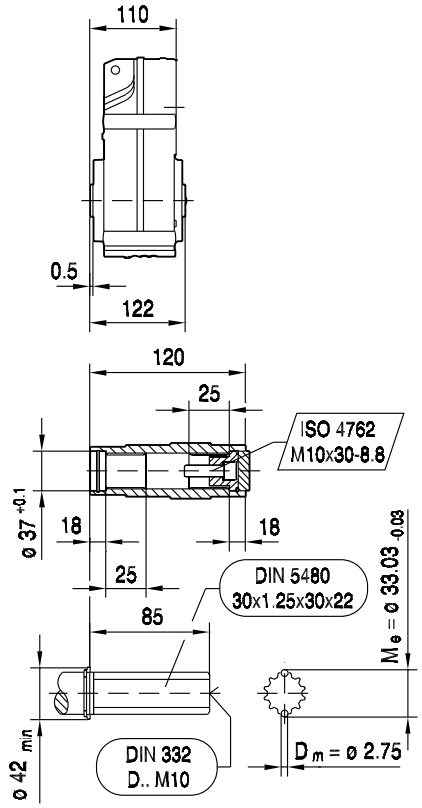
FA37..



FH37..



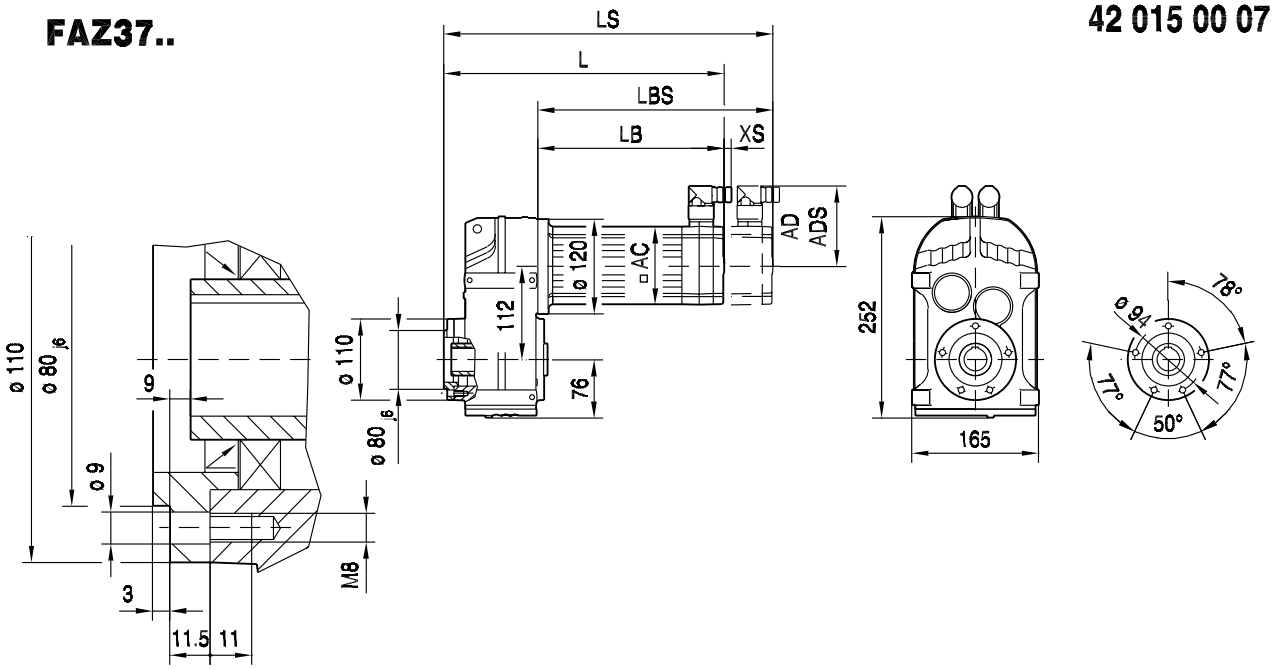
FV37..



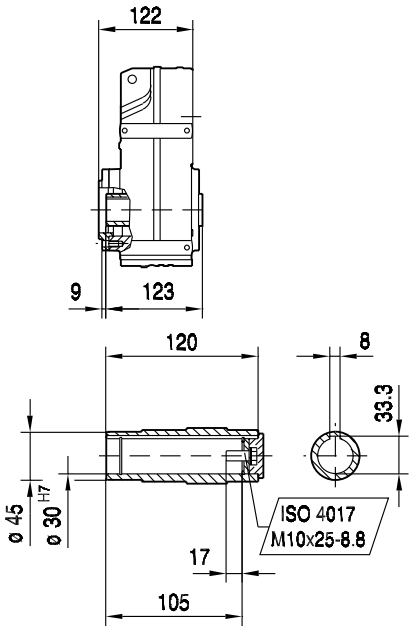
(→ 150)	CMP40M	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L	
AC	57	73	73	73	88	88	88	
AD	75	82	82	82	89	89	89	
ADS	75	82	82	82	89	89	89	
L	253	255	294	333	290	340	393	
LS	283	284	323	362	318	368	422	
LB	143	145	184	223	180	230	283	
LBS	173	174	213	252	208	258	312	
XS	19	18	18	18	14	14	14	

FAZ37..

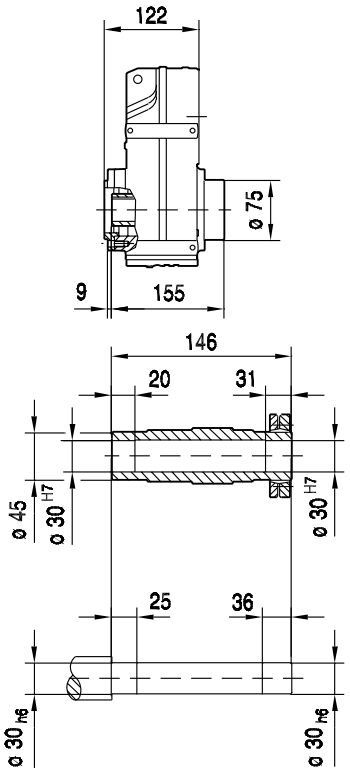
42 015 00 07



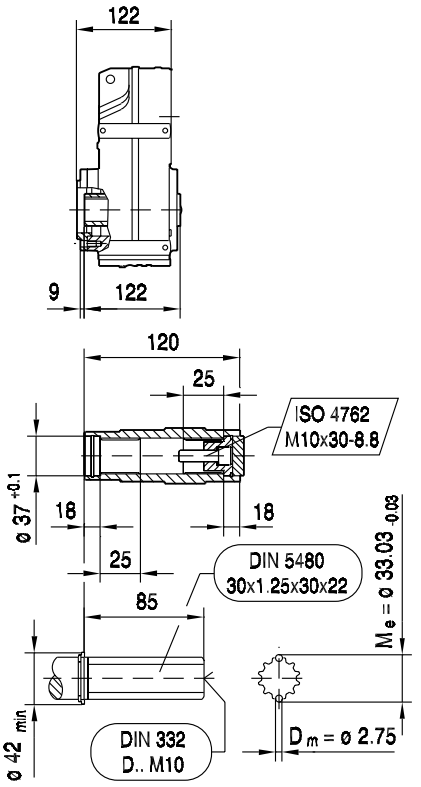
FAZ37..



FHZ37..



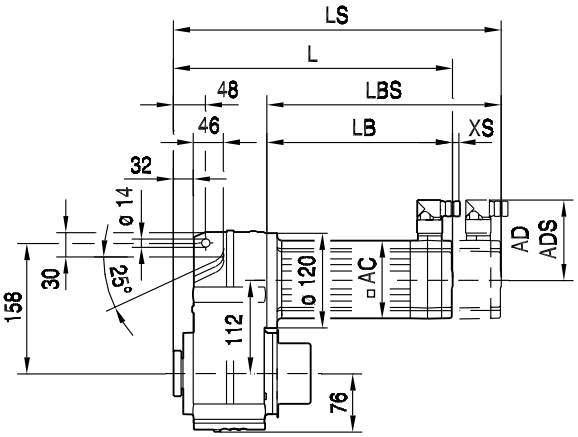
FVZ37..

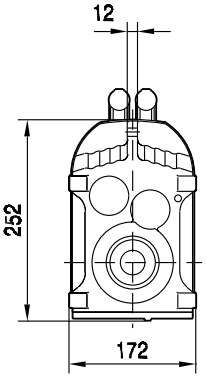


(→ 📖 150)	CMP40M	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L	
AC	57	73	73	73	88	88	88	
AD	75	82	82	82	89	89	89	
ADS	75	82	82	82	89	89	89	
L	265	267	306	345	302	352	405	
LS	295	296	335	374	330	380	434	
LB	143	145	184	223	180	230	283	
LBS	173	174	213	252	208	258	312	
XS	19	18	18	18	14	14	14	

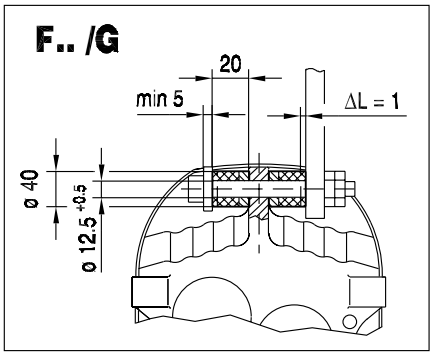
FT37..

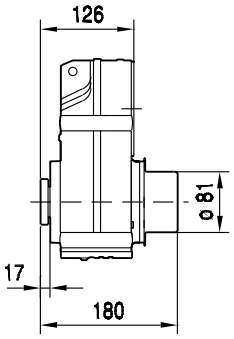
42 016 00 07

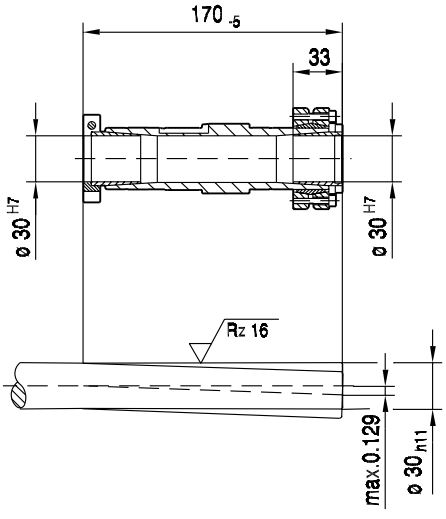


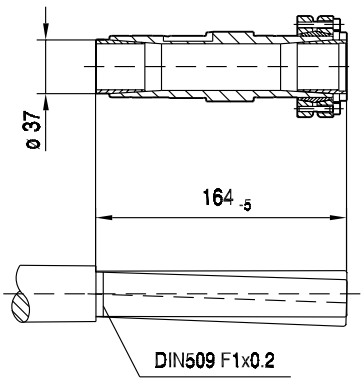


F.. /G

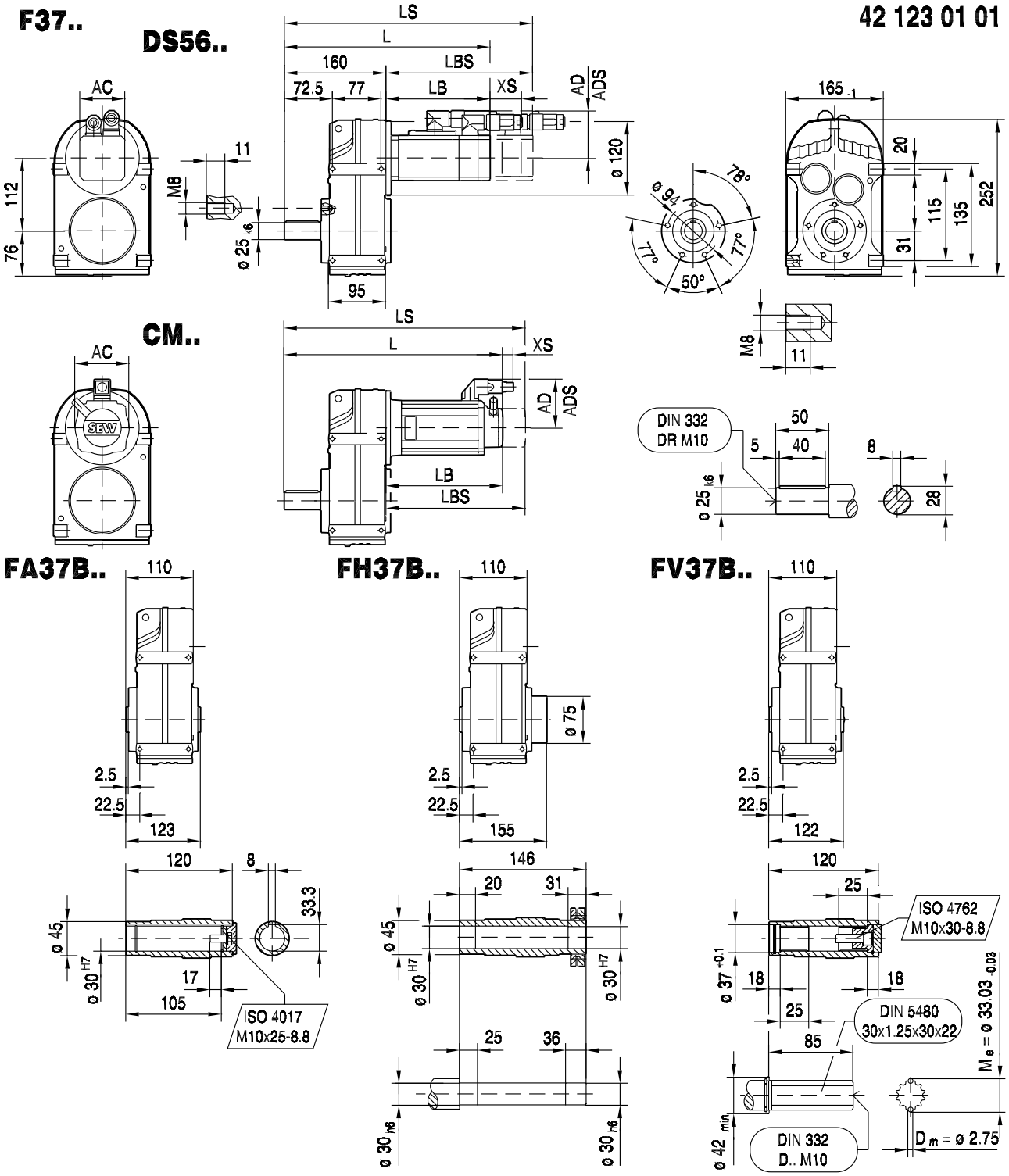








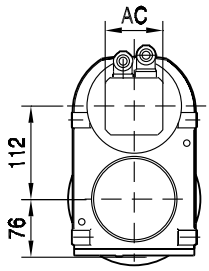
(→ 📖 150)	CMP40M	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L	
AC	57	73	73	73	88	88	88	
AD	75	82	82	82	89	89	89	
ADS	75	82	82	82	89	89	89	
L	269	271	310	349	306	356	409	
LS	299	300	339	378	334	384	438	
LB	143	145	184	223	180	230	283	
LBS	173	174	213	252	208	258	312	
XS	19	18	18	18	14	14	14	



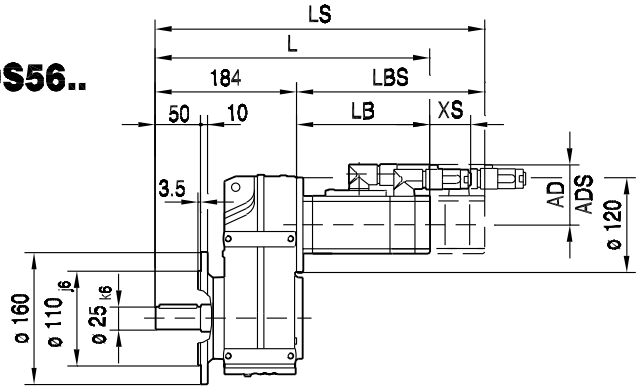
(→ 150)	DS56M	DS56L	DS56H	CM71S	CM71M	CM71L	CM90S				
AC	73	73	73	117	117	117	142				
AD	71	71	77	122	122	122	140				
ADS	77	77	77	122	122	122	140				
L	297	329	432	398	418	461	453				
LS	327	359	432	480	500	543	549				
LB	137	169	272	238	258	301	293				
LBS	167	199	272	320	340	383	389				
XS	70	70	51	45	45	45	50				

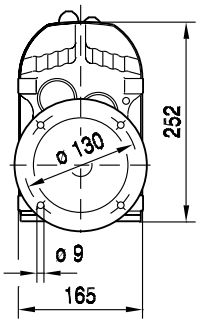
42 124 01 01

FF37..

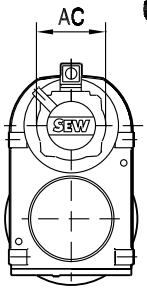


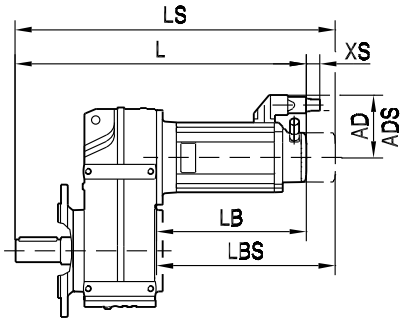
DS56..

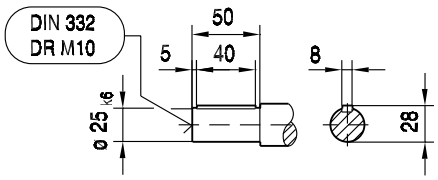




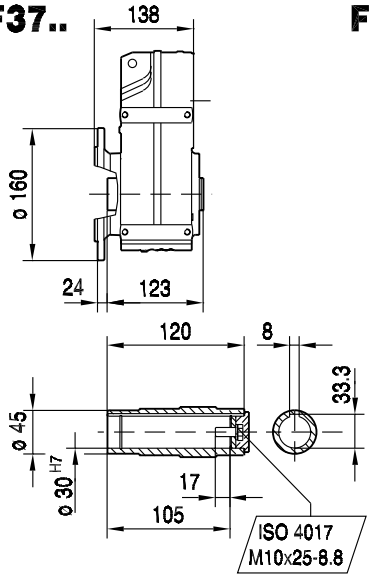
CM..



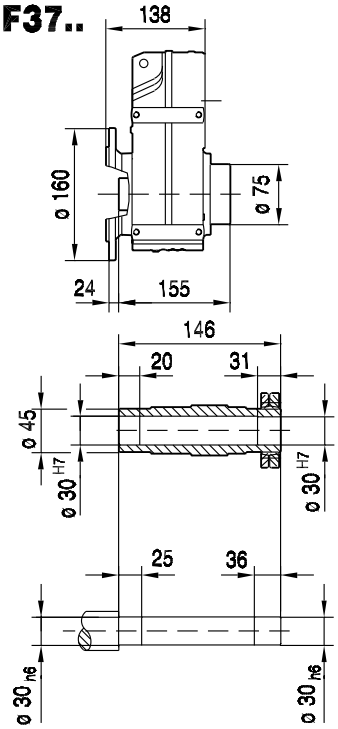




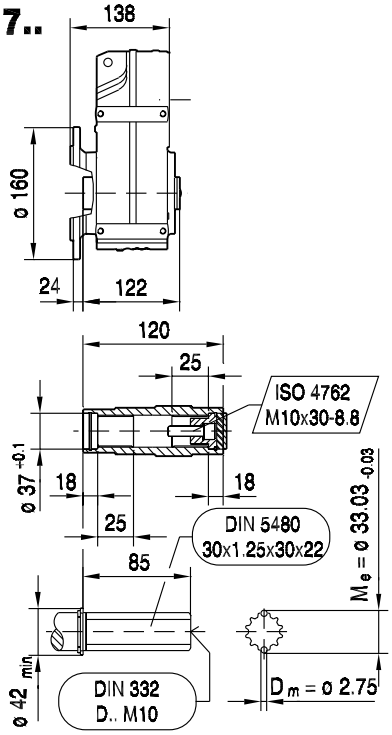
FAF37..



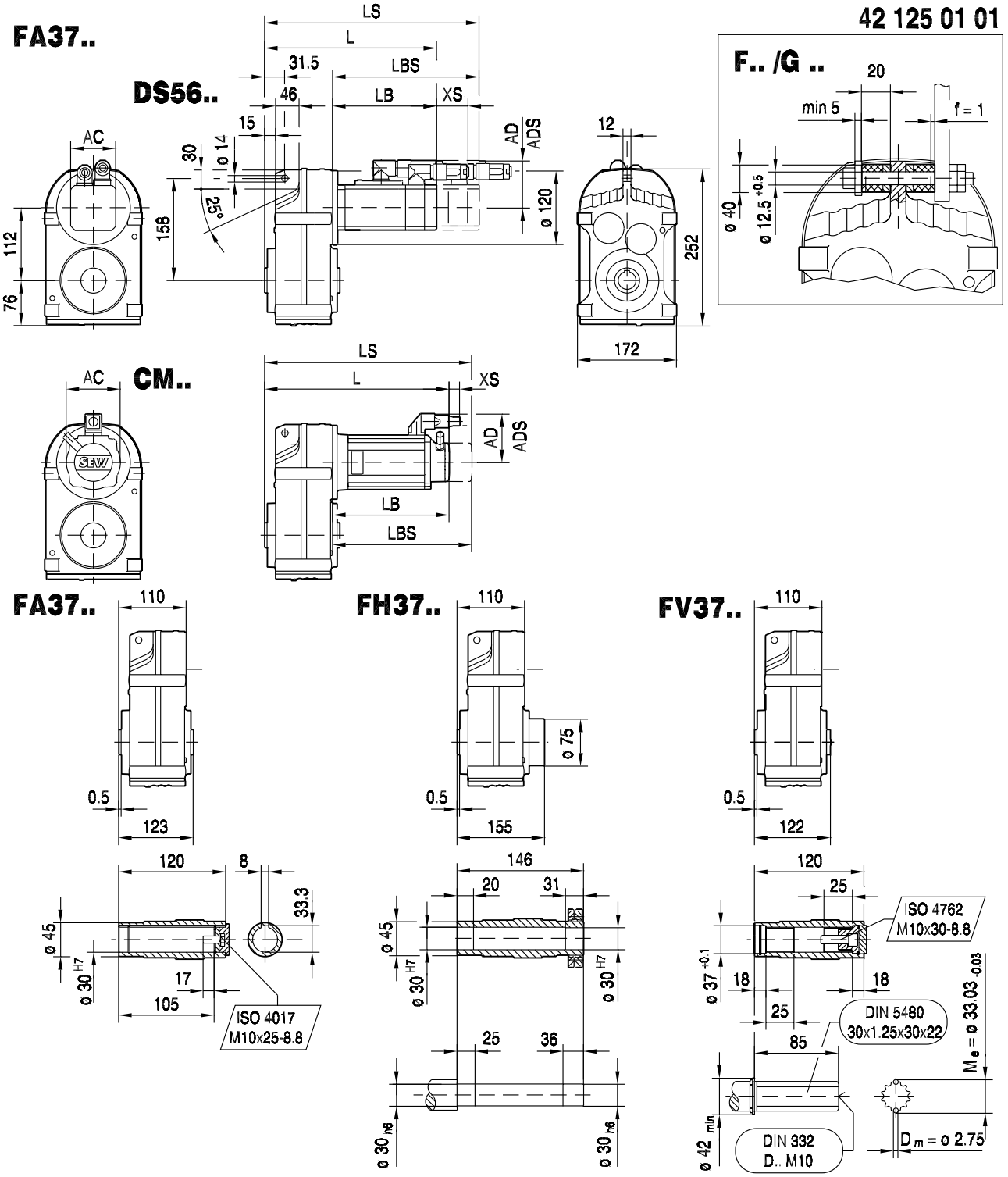
FHF37..



FVF37..



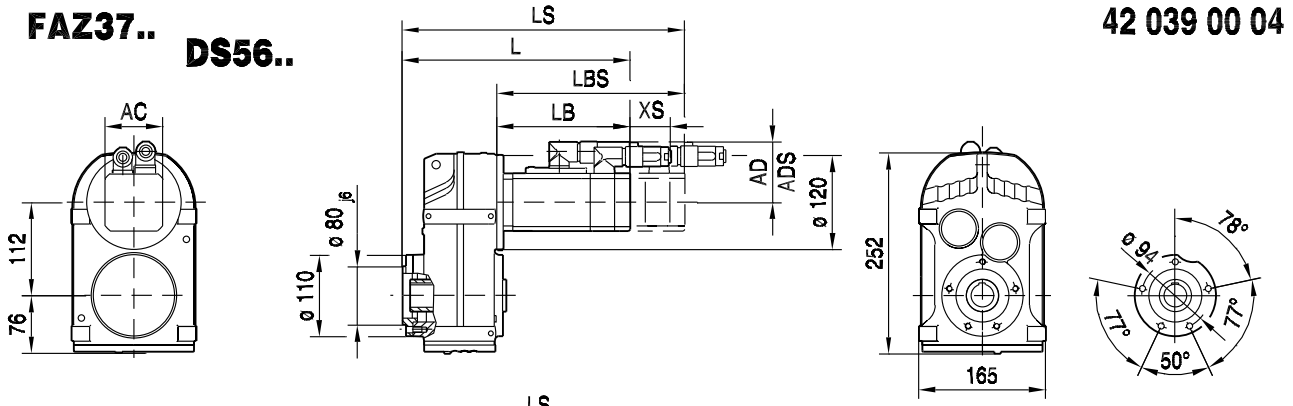
(→ 150)	DS56M	DS56L	DS56H	CM71S	CM71M	CM71L	CM90S				
AC	73	73	73	117	117	117	142				
AD	71	71	77	122	122	122	140				
ADS	77	77	77	122	122	122	140				
L	321	353	456	422	442	485	477				
LS	351	383	456	504	524	567	573				
LB	137	169	272	238	258	301	293				
LBS	167	199	272	320	340	383	389				
XS	70	70	51	45	45	45	50				



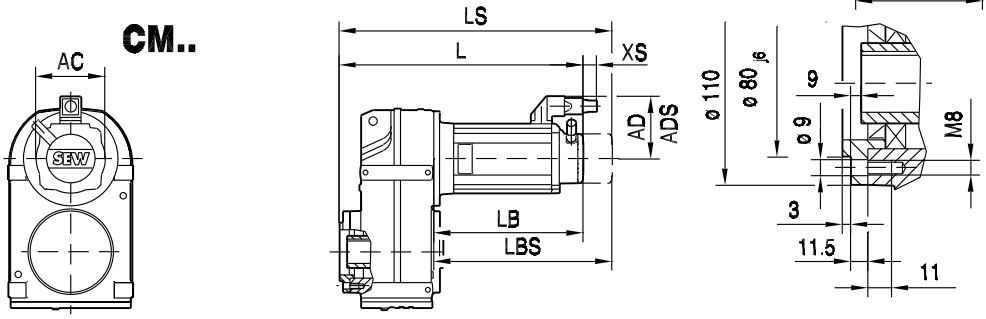
(→ 150)	DS56M	DS56L	DS56H	CM71S	CM71M	CM71L	CM90S				
AC	73	73	73	117	117	117	142				
AD	71	71	77	122	122	122	140				
ADS	77	77	77	122	122	122	140				
L	247	279	382	348	368	411	403				
LS	277	309	382	430	450	493	499				
LB	137	169	272	238	258	301	293				
LBS	167	199	272	320	340	383	389				
XS	70	70	51	45	45	45	50				

FAZ37.. DS56..

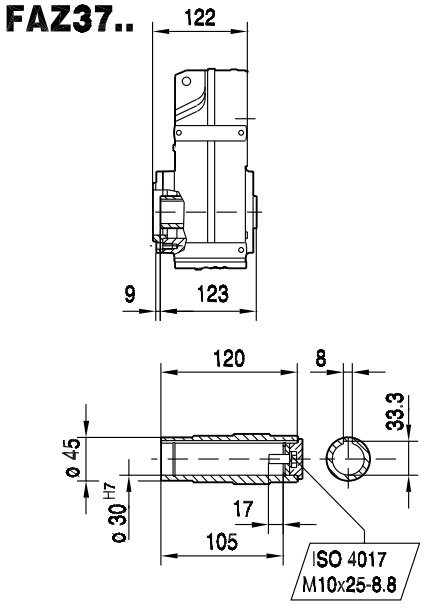
42 039 00 04



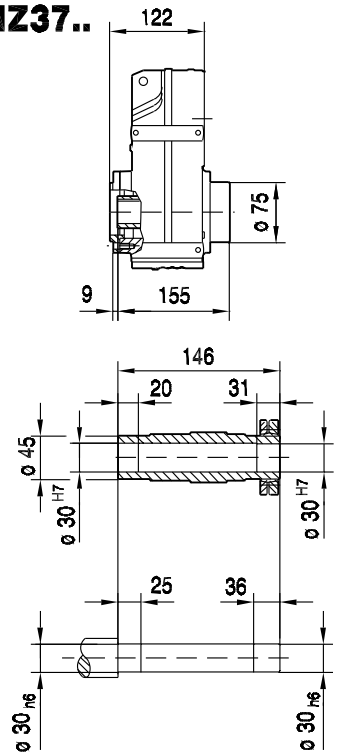
CM..



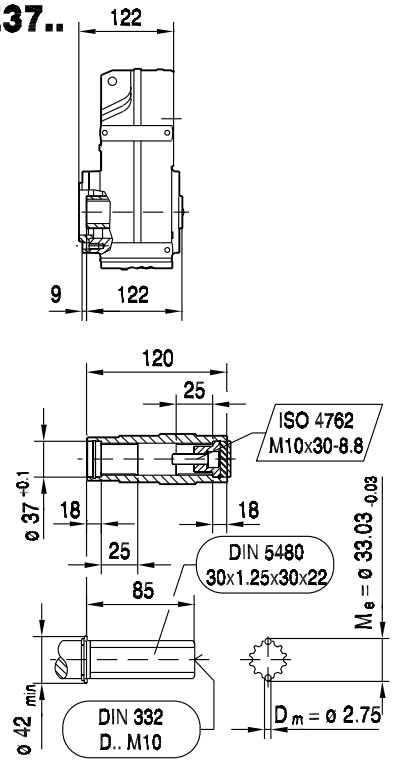
FAZ37..



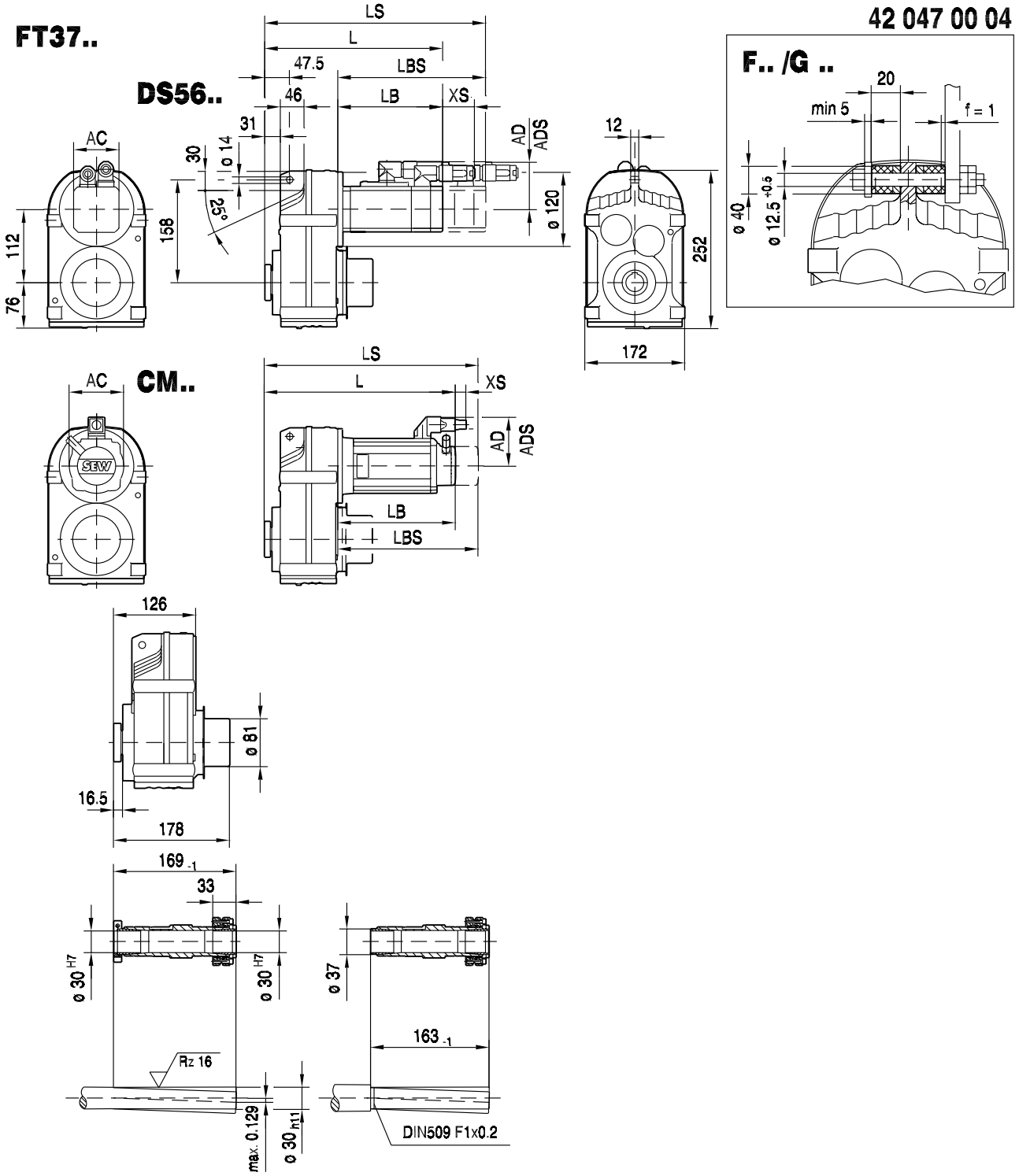
FHZ37..



FVZ37..



(→ 150)	DS56M	DS56L	DS56H	CM71S	CM71M	CM71L	CM90S				
AC	73	73	73	117	117	117	142				
AD	71	71	77	122	122	122	140				
ADS	77	77	77	122	122	122	140				
L	259	291	394	360	380	423	415				
LS	289	321	394	442	462	505	511				
LB	137	169	272	238	258	301	293				
LBS	167	199	272	320	340	383	389				
XS	70	70	51	45	45	45	50				



(→ 📖 150)	DS56M	DS56L	DS56H	CM71S	CM71M	CM71L	CM90S				
AC	73	73	73	117	117	117	142				
AD	71	71	77	122	122	122	140				
ADS	77	77	77	122	122	122	140				
L	263	295	398	364	384	427	419				
LS	293	325	398	446	466	509	515				
LB	137	169	272	238	258	301	293				
LBS	167	199	272	320	340	383	389				
XS	70	70	51	45	45	45	50				



9.6 F 47 / CMP / DS / CM [Nm]

M_{aDyn} [Nm]		CMP							DS			CM			
	i	40M	50S	50M	50L	63S	63M	63L	56M	56L	56H	71S	71M	71L	90S
FA47 2	4.99	18	25	50	75	54	104	147	18	37	74	80	104	152	192
	5.76	21	29	58	86	62	120	170	21	42	85	92	120	175	221
	6.34	23	32	63	95	68	132	187	23	47	93	101	132	193	244
	7.44	27	38	74	111	80	154	219	27	55	110	119	155	227	286
	7.88	29	40	79	118	85	164	232	29	58	116	126	164	240	303
	8.96	33	45	90	134	96	186	264	33	66	132	143	187	273	344
	10.97	40	55	110	164	118	228	323	40	81	162	176	229	334	421
	12.66	47	64	126	189	136	263	373	47	93	187	203	264	386	>435
	13.93	51	70	139	208	150	289	411	51	103	205	223	291	424	>435
	16.36	60	83	163	244	176	340	>435	60	121	241	262	341	>435	>435
	17.33	64	87	173	259	187	360	>435	64	128	256	277	361	>435	>435
	19.7	73	99	197	294	212	409	>435	73	145	290	315	411	>435	>435
	21.82	80	110	218	326	235	>435	>435	80	161	322	349	>435	>435	>435
	25.72	95	130	257	384	277	>435	>435	95	190	379	412	>435	>435	>435
	29.32	108	148	293	>435	316	>435		108	216	432	>435	>435		
	30.86	114	156	308	>435	332	>435		114	227	>435	>435	>435		
FA47 3	28.88	104	143	283	423	305	>435	>435	104	209	417	>435	>435	>435	>435
	34.29	124	169	336	>435	362	>435	>435	124	248	>435	>435	>435	>435	>435
	36.61	132	181	358	>435	386	>435	>435	132	264	>435	>435	>435	>435	>435
	42.86	155	212	419	>435	>435	>435	>435	155	309	>435	>435	>435	>435	>435
	48	173	237	>435	>435	>435	>435	>435	173	347	>435	>435	>435	>435	>435
	56.49	204	279	>435	>435	>435	>435	>435	204	408	>435	>435	>435	>435	>435
	65.36	236	323	>435	>435	>435	>435		236	>435	>435	>435	>435		
	68.09	243	333	>435	>435	>435	>435	>435	243	>435	>435	>435	>435	>435	>435
	79.72	285	390	>435	>435	>435	>435	>435	285	>435	>435	>435	>435	>435	>435
	89.29	319	>435	>435	>435	>435	>435	>435	319	>435	>435	>435	>435	>435	>435
	105.09	375	>435	>435	>435	>435	>435	>435	375	>435	>435	>435	>435	>435	>435
	121.57	434	>435	>435	>435	>435	>435		434	>435	>435	>435	>435		
	130.07	>435	>435	>435	>435	>435	>435		>435	>435	>435	>435	>435		
	150.06	>435	>435	>435		>435			>435	>435	>435				
	175.38	>435	>435						>435	>435					
	190.76	>435	>435						>435	>435					

m [kg]		CMP							DS			CM			
	s	40M	50S	50M	50L	63S	63M	63L	56M	56L	56H	71S	71M	71L	90S
FA47	2	18	19	20	21	21	23	24	18	19	20	24	25	29	33
FA47	3	18	20	21	22	22	24	25	19	20	20	25	26	29	34
FAF: + 2.7 kg / F: + 0.8 kg / FF: + 3.9 kg															

CMP.. / DS.. / CM..				c_T				φ
	i	n_{epk} [1/min]	η [%]	FA [Nm/']	FAF [Nm/']	F [Nm/']	FF [Nm/']	/R [']
FA47 2	4.99	4500	97	99.45	99.45	34.16	30.29	9
	5.76	4500	97	99.45	99.45	34.16	30.29	9
	6.34	4500	97	99.45	99.45	34.16	30.29	8
	7.44	4500	97	99.45	99.45	34.16	30.29	8
	7.88	4500	97	99.45	99.45	34.16	30.29	8
	8.96	4500	97	99.45	99.45	34.16	30.29	8
	10.97	4500	97	124.68	124.68	36.72	32.28	6
	12.66	4500	97	124.68	124.68	36.72	32.28	6
	13.93	4500	97	124.68	124.68	36.72	32.28	6
	16.36	4500	97	124.68	124.68	36.72	32.28	6
	17.33	4500	97	124.68	124.68	36.72	32.28	6
	19.7	4500	97	124.68	124.68	36.72	32.28	6
	21.82	4500	97	124.68	124.68	36.72	32.28	6
	25.72	4500	97	124.68	124.68	36.72	32.28	6
	29.32	4500	97	124.68	124.68	36.72	32.28	6
	30.86	4500	97	124.68	124.68	36.72	32.28	6



F..CMP, DS, CM
F 47 / CMP / DS / CM [Nm]

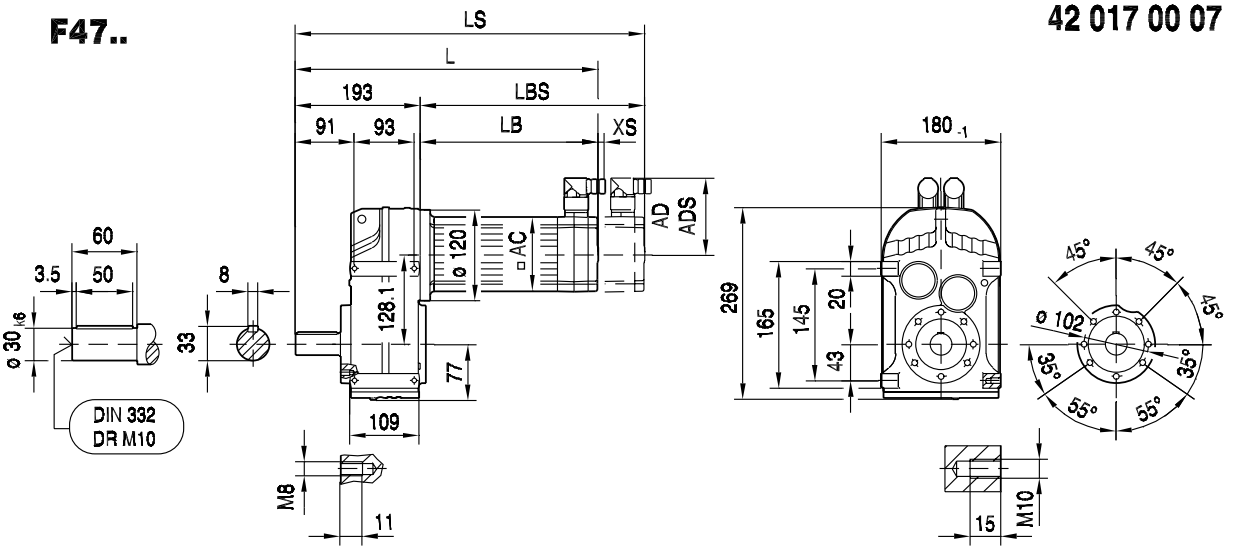
CMP.. / DS.. / CM..	i	n_{epk} [1/min]	η [%]	c_T FA [Nm/']	FAF [Nm/']	F [Nm/']	FF [Nm/']	φ /R [']
FA47 3	28.88	4500	95	136.29	136.29	37.66	33.01	7
	34.29	4500	95	136.29	136.29	37.66	33.01	7
	36.61	4500	95	136.29	136.29	37.66	33.01	7
	42.86	4500	95	136.29	136.29	37.66	33.01	7
	48	4500	95	136.29	136.29	37.66	33.01	7
	56.49	4500	95	136.29	136.29	37.66	33.01	7
	65.36	4500	95	136.29	136.29	37.66	33.01	7
	68.09	4500	94	137.7	137.7	37.77	33.09	6
	79.72	4500	94	137.7	137.7	37.77	33.09	6
	89.29	4500	94	137.7	137.7	37.77	33.09	6
	105.09	4500	94	137.7	137.7	37.77	33.09	6
	121.57	4500	94	137.7	137.7	37.77	33.09	6
	130.07	4500	94	137.7	137.7	37.77	33.09	6
	150.06	4500	94	137.7	137.7	37.77	33.09	6
	175.38	4500	94	137.7	137.7	37.77	33.09	6
	190.76	4500	94	137.7	137.7	37.77	33.09	6

CMP.. / DS.. / CM..	i	M_{amax} [Nm]	M_{apk} [Nm]	$M_{aNotaus}$ [Nm]	n_{ak} [1/min]	J_G 10^{-4} [kgm^2]	F_{Ramax} FA [N]	FAF [N]	F [N]	FF [N]	F_{Rapk} FA [N]	FAF [N]	F [N]	FF [N]
FA47 2	4.99	320	435	544	341	4.4	1160	1160	2310	2410	10000	10000	900	900
	5.76	340	435	578	295	3.4	1180	1180	2390	2500	10000	10000	900	900
	6.34	350	435	595	284	2.9	1230	1230	2470	2580	10000	10000	900	900
	7.44	380	435	646	242	2.3	1190	1190	2530	2660	10000	10000	900	900
	7.88	380	435	646	254	2.1	1280	1280	2630	2750	10000	10000	900	900
	8.96	330	435	561	424	1.6	1970	1970	3250	3310	10000	10000	900	900
	10.97	400	435	680	346	2.6	2060	2060	3440	3510	10000	10000	900	900
	12.66	400	435	680	371	2.1	2320	2320	3740	3790	10000	10000	900	900
	13.93	400	435	680	388	1.8	2510	2510	3950	3990	10000	10000	900	900
	16.36	400	435	680	403	1.5	2840	2840	4320	4340	10000	10000	900	900
	17.33	400	435	680	398	1.4	2960	2960	4450	4470	10000	10000	900	900
	19.7	400	435	680	355	1.1	3230	3230	4770	4770	10000	10000	900	900
	21.82	400	435	680	321	0.96	3460	3460	5030	5020	10000	10000	900	900
	25.72	400	435	680	272	0.75	3850	3850	5460	5430	10000	10000	900	900
	29.32	400	435	680	239	0.52	4170	4170	5830	5780	10000	10000	900	900
	30.86	400	435	680	227	0.46	4300	4300	5920	5920	10000	10000	900	900
FA47 3	28.88	400	435	680	111	1.1	4130	4130	5790	5740	10000	10000	900	900
	34.29	400	435	680	111	0.85	4580	4580	5920	5920	10000	10000	900	900
	36.61	400	435	680	112	0.76	4750	4750	5920	5920	10000	10000	900	900
	42.86	400	435	680	112	0.58	5190	5190	5920	5920	10000	10000	900	900
	48	400	435	680	113	0.48	5520	5520	5920	5920	10000	10000	900	900
	56.49	400	435	680	113	0.36	6020	6020	5920	5920	10000	10000	900	900
	65.36	400	435	680	107	0.29	6490	6490	5920	5920	10000	10000	900	900
	68.09	400	435	680	103	0.61	6620	6620	5920	5920	10000	10000	900	900
	79.72	400	435	680	88	0.48	7160	7160	5920	5920	10000	10000	900	900
	89.29	400	435	680	78	0.40	7570	7570	5920	5920	10000	10000	900	900
	105.09	400	435	680	67	0.30	8180	8180	5920	5920	10000	10000	900	900
	121.57	400	435	680	58	0.25	8760	8760	5920	5920	10000	10000	900	900
	130.07	400	435	680	54	0.23	9040	9040	5920	5920	10000	10000	900	900
	150.06	400	435	680	47	0.18	9640	9640	5920	5920	10000	10000	900	900
	175.38	400	435	680	40	0.14	10000	10000	5920	5920	10000	10000	900	900
	190.76	400	435	680	37	0.13	10000	10000	5920	5920	10000	10000	900	900

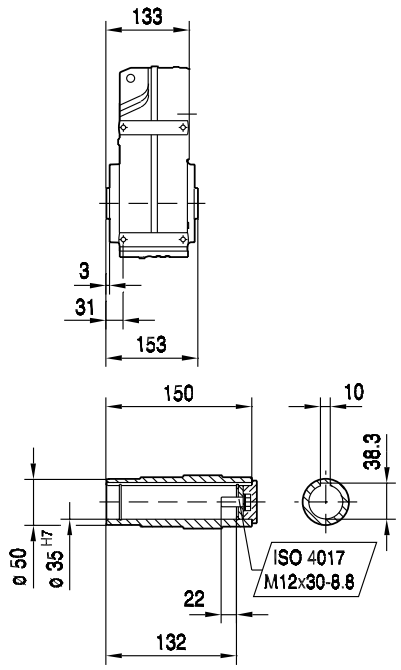
9.7 F 47 / CMP / DS / CM [mm]

F47..

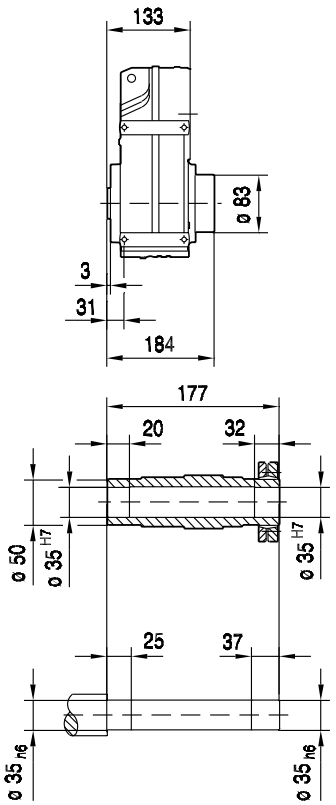
42 017 00 07



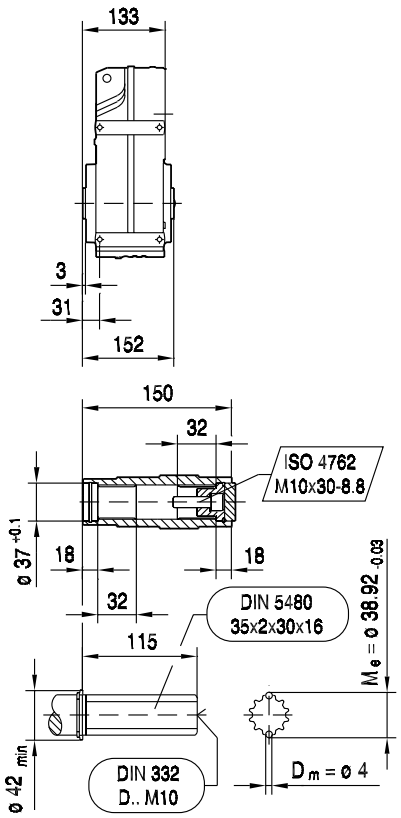
FA47B..



FH47B..



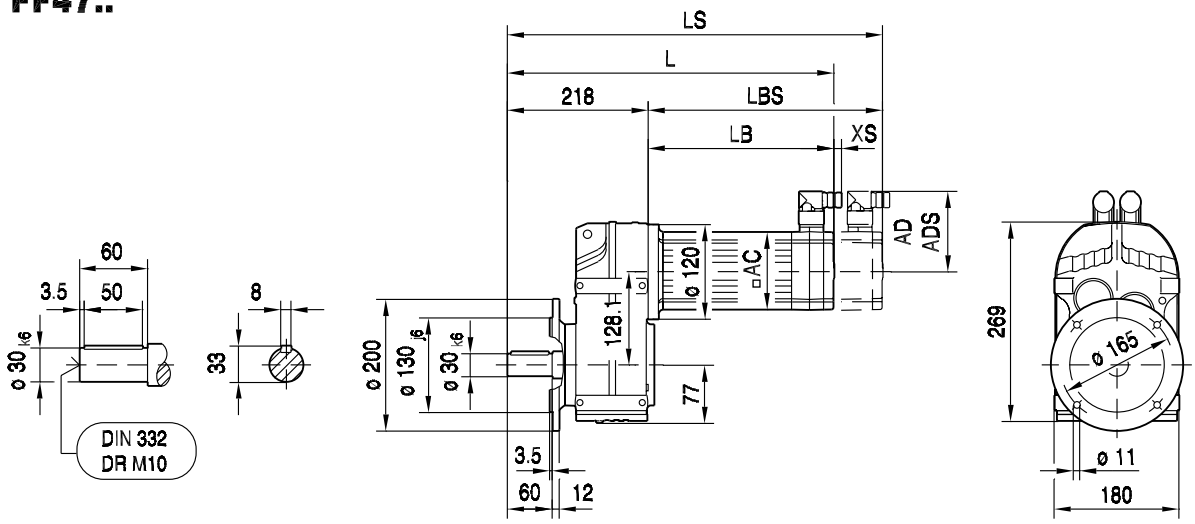
FV47B..



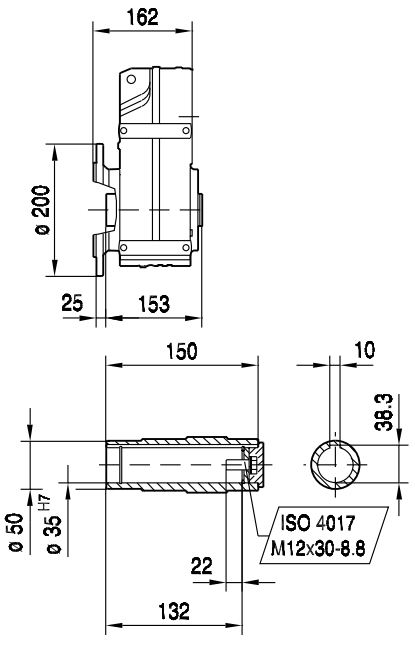
(→ 150)	CMP40M	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L	
AC	57	73	73	73	88	88	88	
AD	75	82	82	82	89	89	89	
ADS	75	82	82	82	89	89	89	
L	336	338	377	416	373	423	476	
LS	366	367	406	445	401	451	505	
LB	143	145	184	223	180	230	283	
LBS	173	174	213	252	208	258	312	
XS	19	18	18	18	14	14	14	

42 018 00 07

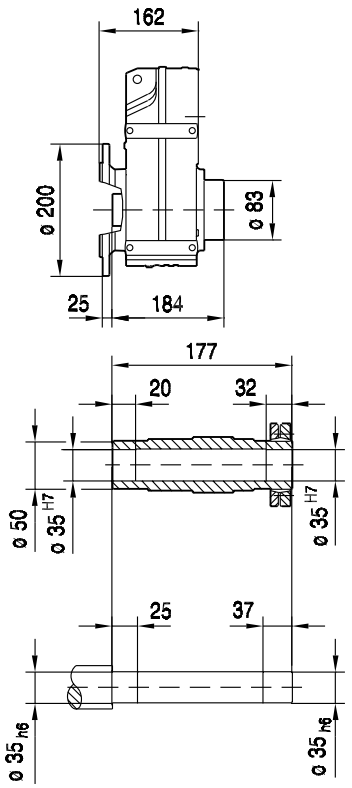
FF47..



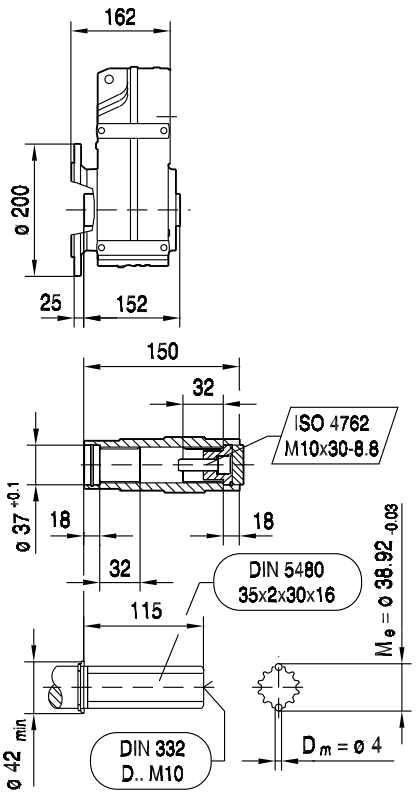
FAF47..



FHF47..



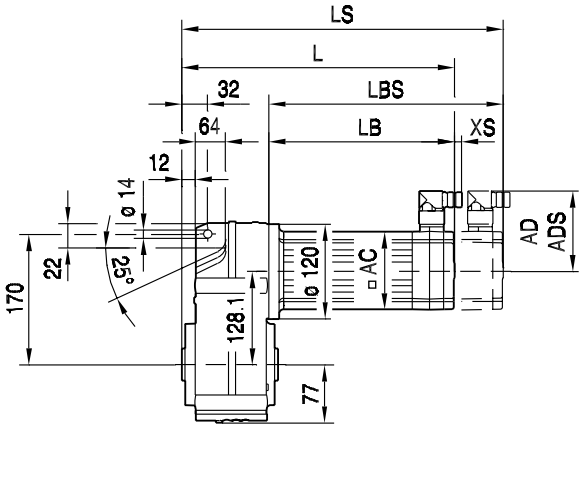
FVF47..

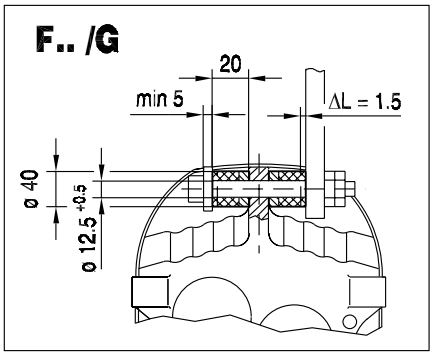


(→ 150)	CMP40M	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L	
AC	57	73	73	73	88	88	88	
AD	75	82	82	82	89	89	89	
ADS	75	82	82	82	89	89	89	
L	361	363	402	441	398	448	501	
LS	391	392	431	470	426	476	530	
LB	143	145	184	223	180	230	283	
LBS	173	174	213	252	208	258	312	
XS	19	18	18	18	14	14	14	

FA47..

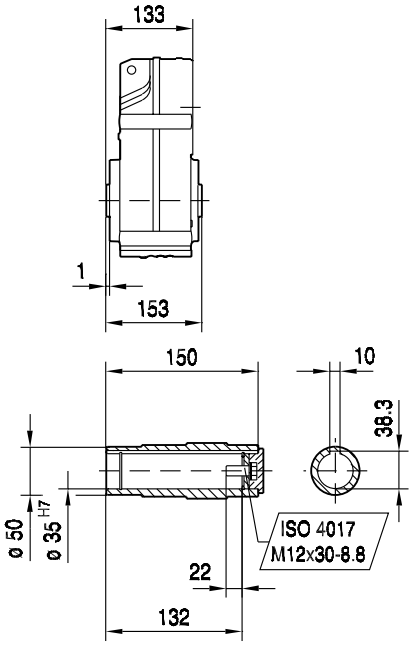
42 019 00 07



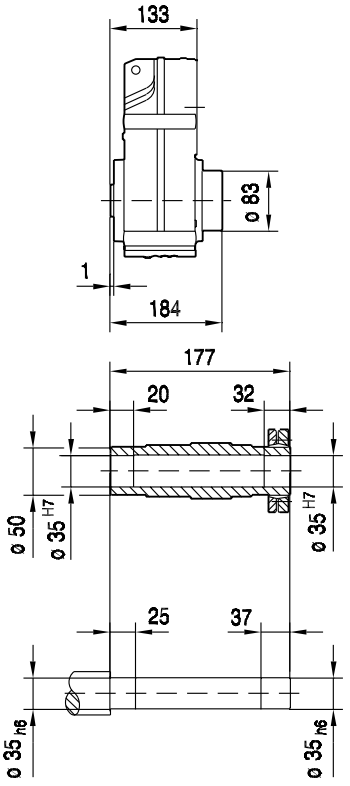


9

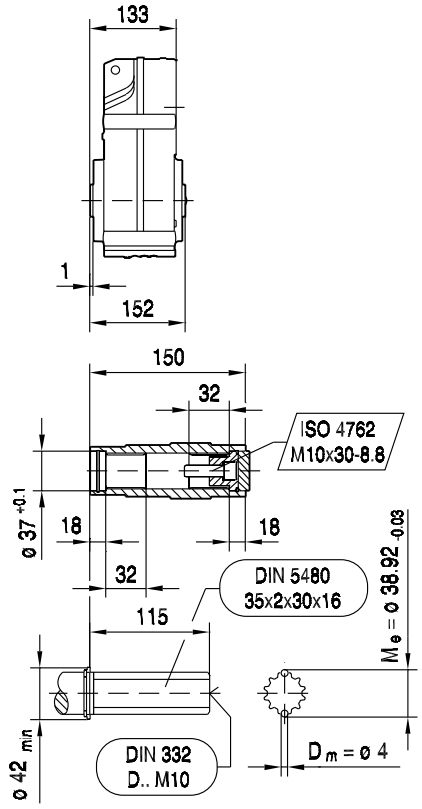
FA47..



FH47..



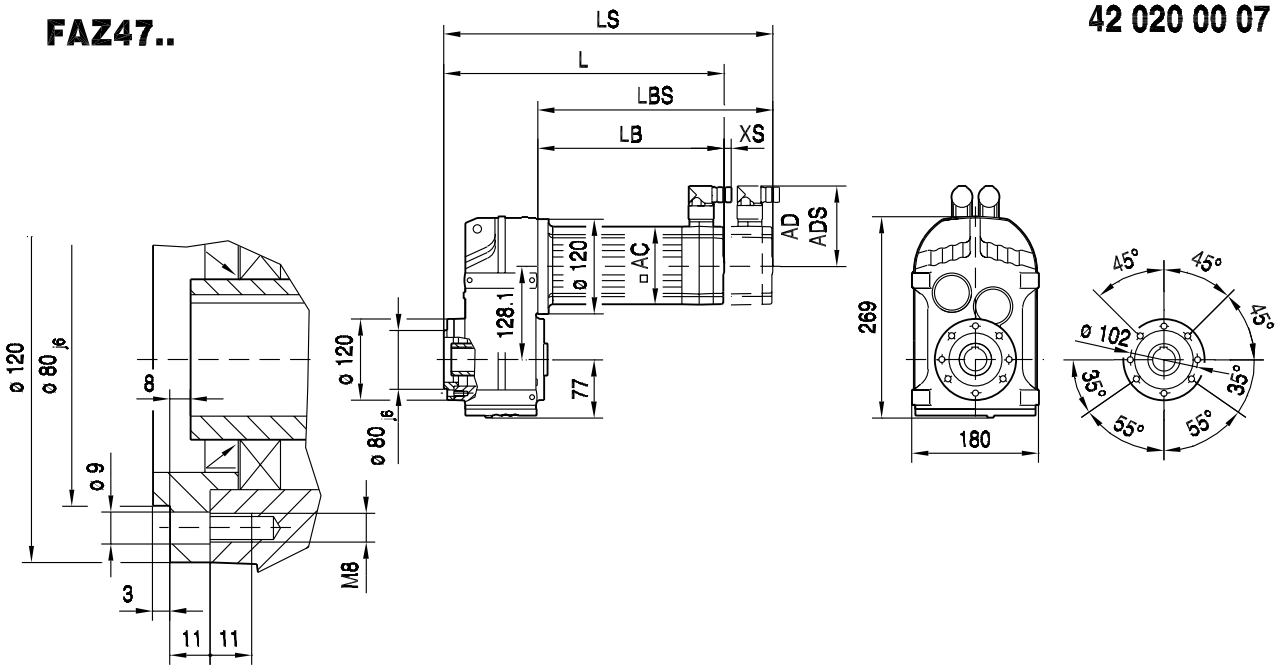
FV47..



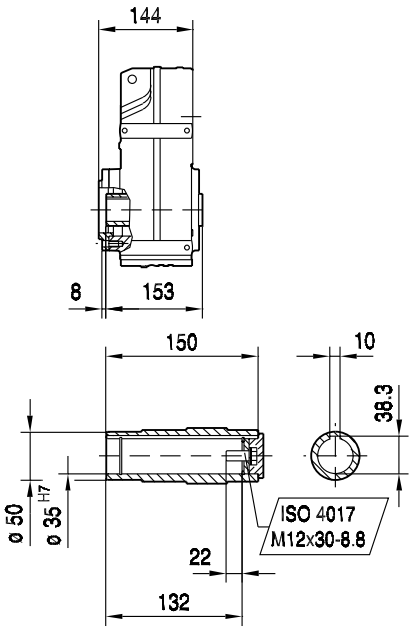
(→ 150)	CMP40M	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L	
AC	57	73	73	73	88	88	88	
AD	75	82	82	82	89	89	89	
ADS	75	82	82	82	89	89	89	
L	276	278	317	356	313	363	416	
LS	306	307	346	385	341	391	445	
LB	143	145	184	223	180	230	283	
LBS	173	174	213	252	208	258	312	
XS	19	18	18	18	14	14	14	

FAZ47..

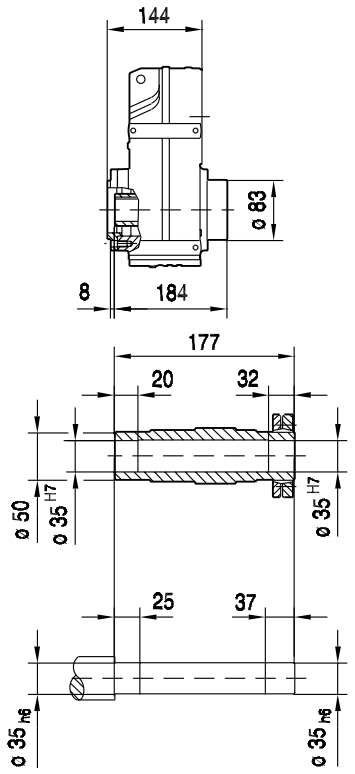
42 020 00 07



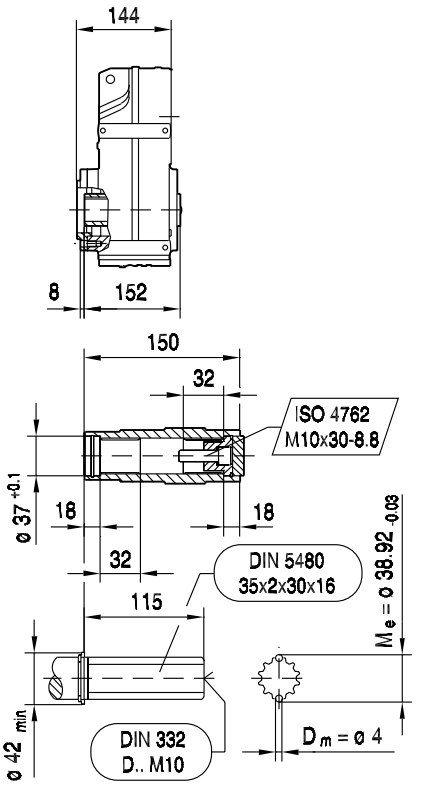
FAZ47..



FHZ47..



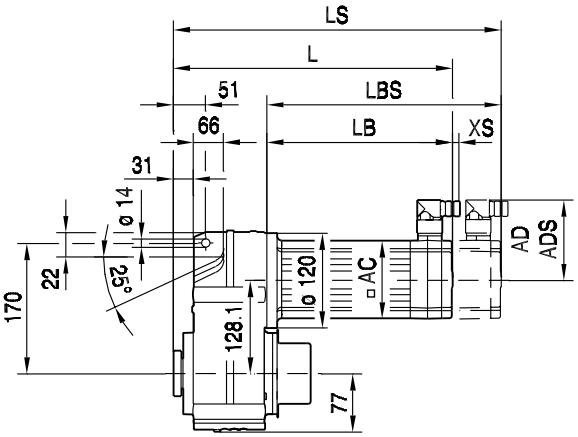
FVZ47..

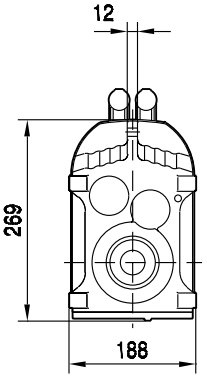


(→ 📖 150)	CMP40M	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L	
AC	57	73	73	73	88	88	88	
AD	75	82	82	82	89	89	89	
ADS	75	82	82	82	89	89	89	
L	287	289	328	367	324	374	427	
LS	317	318	357	396	352	402	456	
LB	143	145	184	223	180	230	283	
LBS	173	174	213	252	208	258	312	
XS	19	18	18	18	14	14	14	

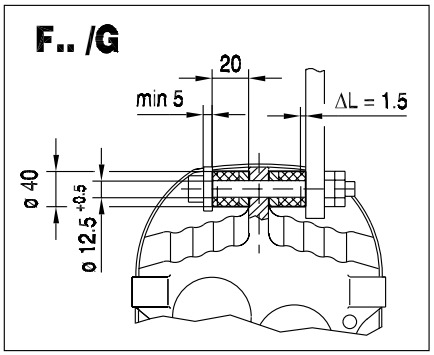
FT47..

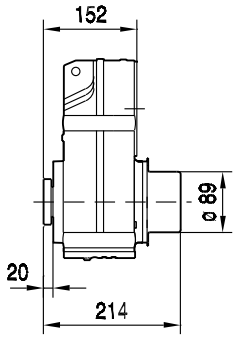
42 021 00 07

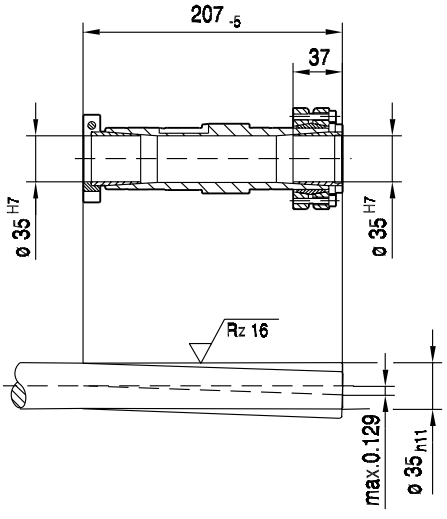


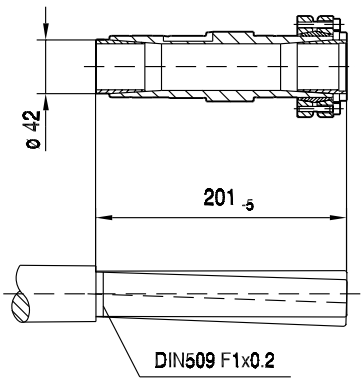


F.. /G

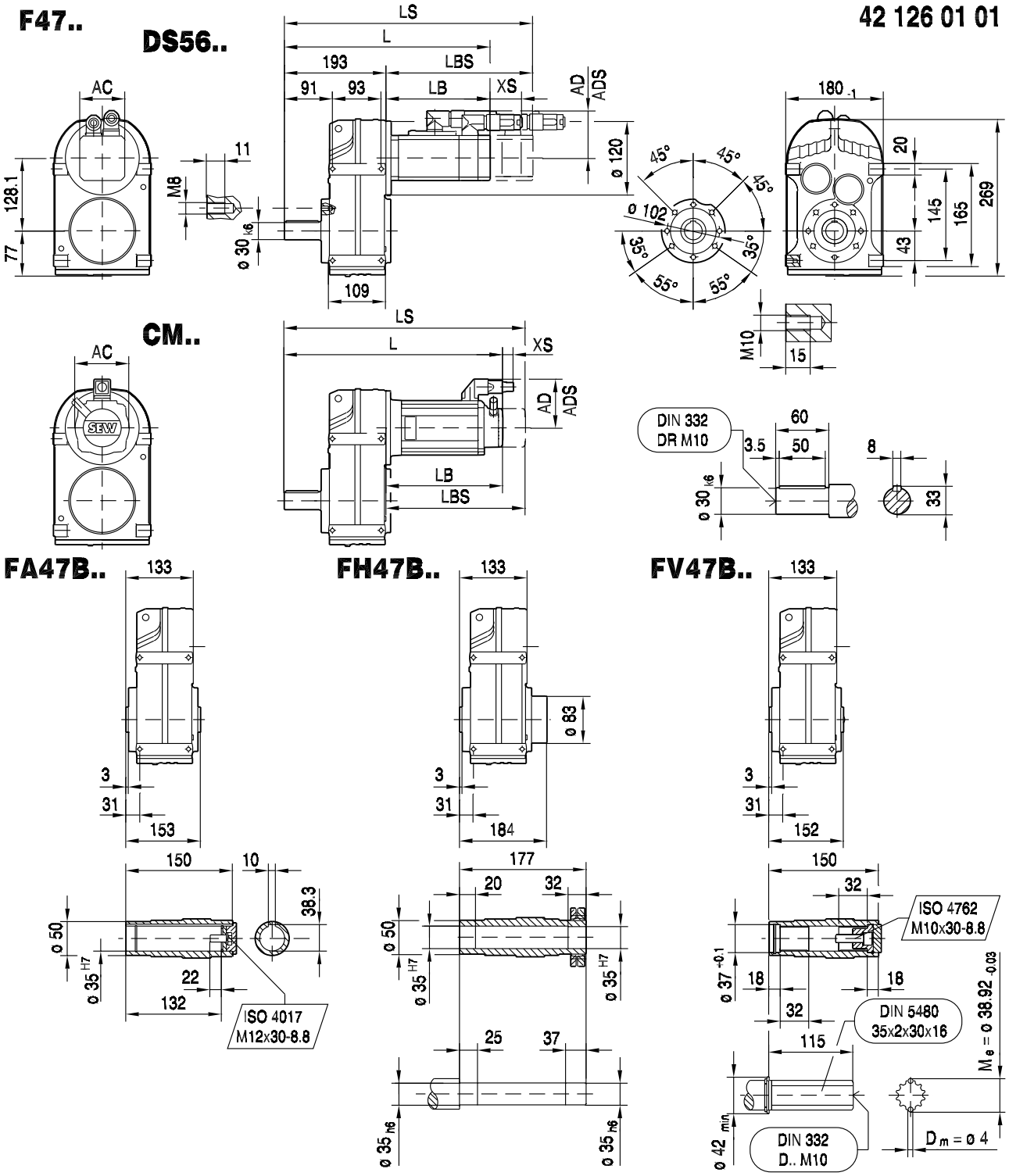








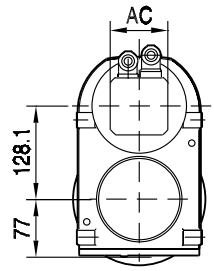
(→ 150)	CMP40M	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L	
AC	57	73	73	73	88	88	88	
AD	75	82	82	82	89	89	89	
ADS	75	82	82	82	89	89	89	
L	294	296	335	374	331	381	434	
LS	324	325	364	403	359	409	463	
LB	143	145	184	223	180	230	283	
LBS	173	174	213	252	208	258	312	
XS	19	18	18	18	14	14	14	



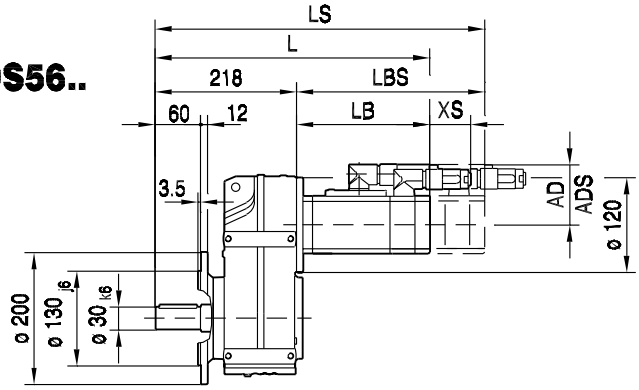
(→ 150)	DS56M	DS56L	DS56H	CM71S	CM71M	CM71L	CM90S				
AC	73	73	73	117	117	117	142				
AD	71	71	77	122	122	122	140				
ADS	77	77	77	122	122	122	140				
L	330	362	465	431	451	494	486				
LS	360	392	465	513	533	576	582				
LB	137	169	272	238	258	301	293				
LBS	167	199	272	320	340	383	389				
XS	70	70	51	45	45	45	50				

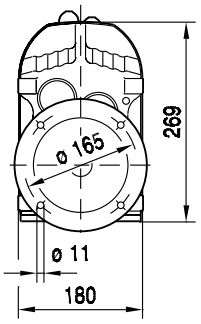
42 127 01 01

FF47..

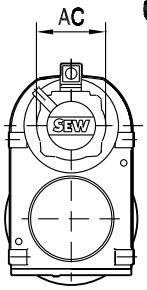


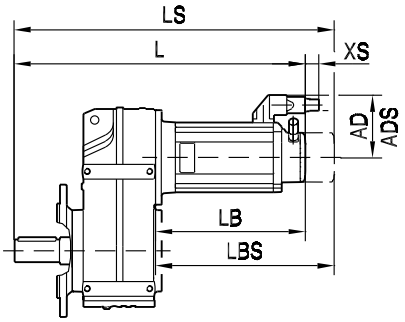
DS56..

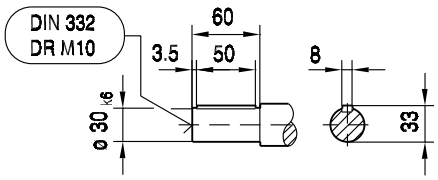




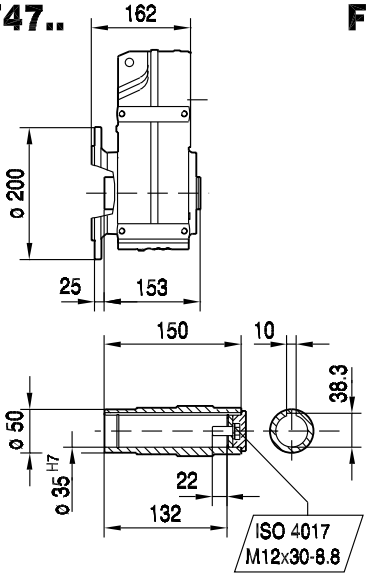
CM..



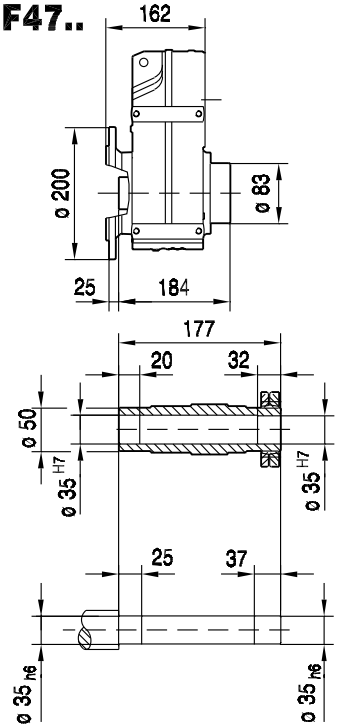




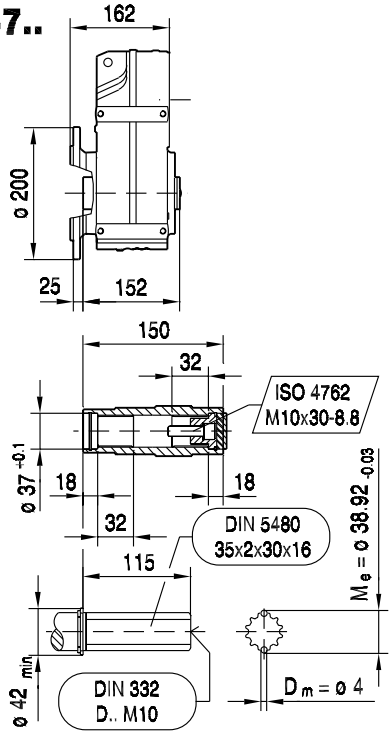
FAF47..



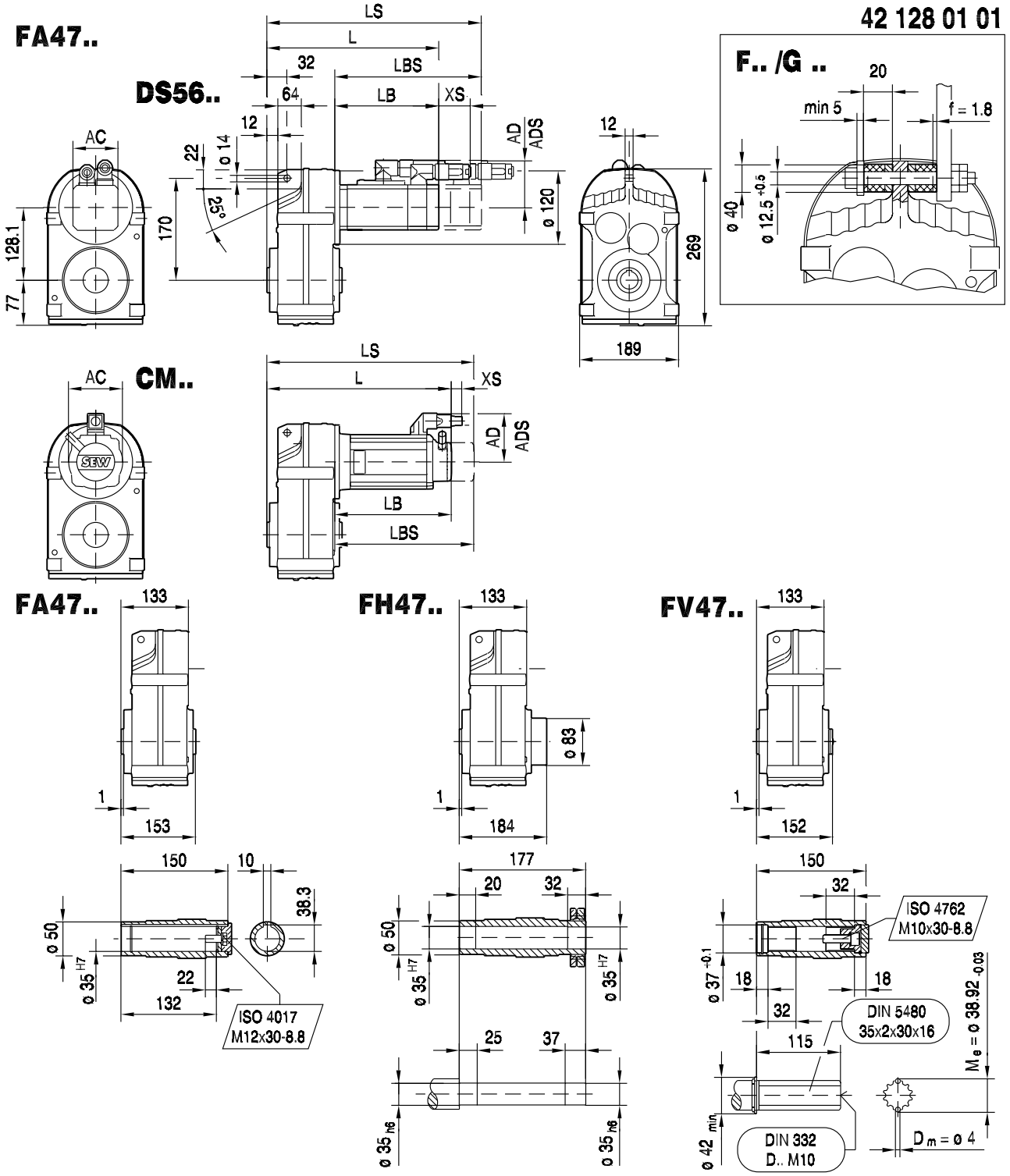
FHF47..



FVF47..



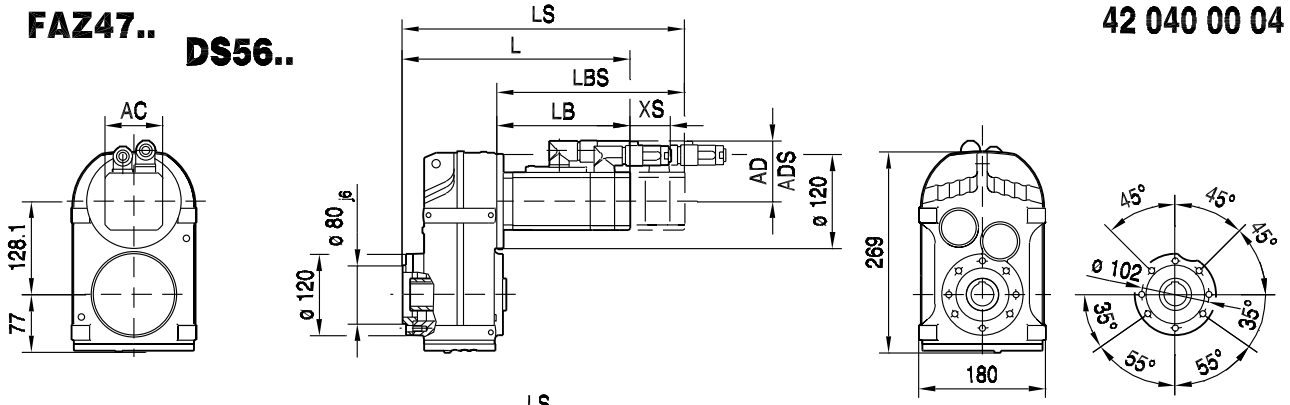
(→ 150)	DS56M	DS56L	DS56H	CM71S	CM71M	CM71L	CM90S				
AC	73	73	73	117	117	117	142				
AD	71	71	77	122	122	122	140				
ADS	77	77	77	122	122	122	140				
L	355	387	490	456	476	519	511				
LS	385	417	490	538	558	601	607				
LB	137	169	272	238	258	301	293				
LBS	167	199	272	320	340	383	389				
XS	70	70	51	45	45	45	50				



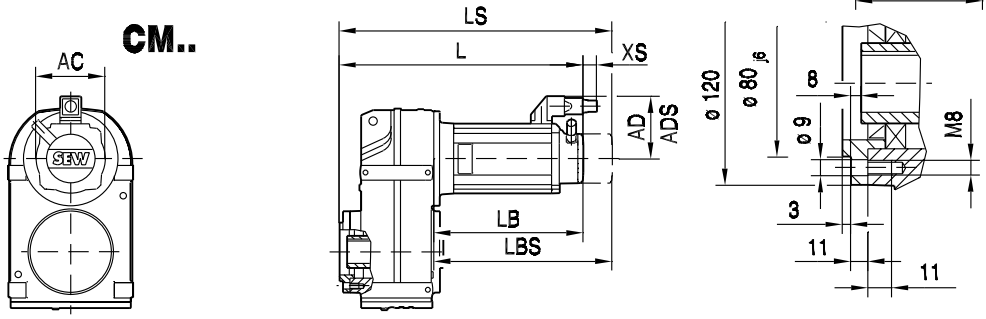
(→ 150)	DS56M	DS56L	DS56H	CM71S	CM71M	CM71L	CM90S				
AC	73	73	73	117	117	117	142				
AD	71	71	77	122	122	122	140				
ADS	77	77	77	122	122	122	140				
L	270	302	405	371	391	434	426				
LS	300	332	405	453	473	516	522				
LB	137	169	272	238	258	301	293				
LBS	167	199	272	320	340	383	389				
XS	70	70	51	45	45	45	50				

FAZ47.. DS56..

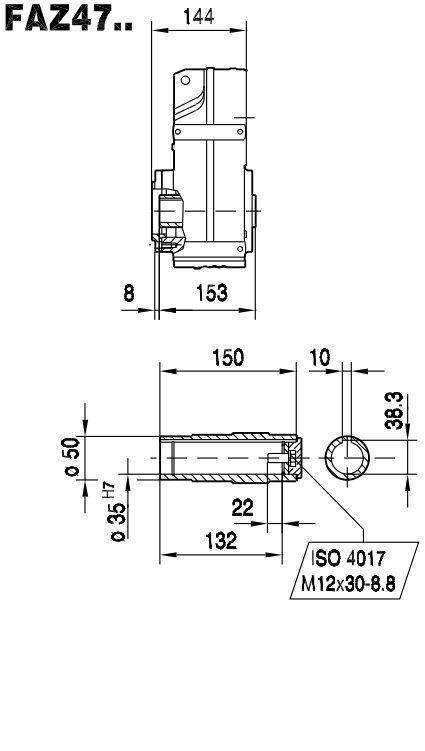
42 040 00 04



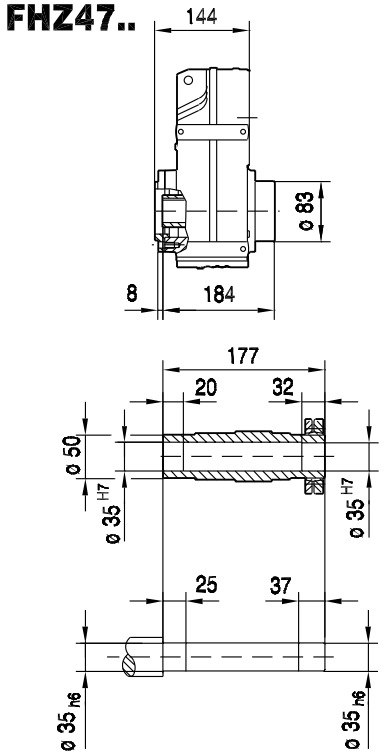
CM..



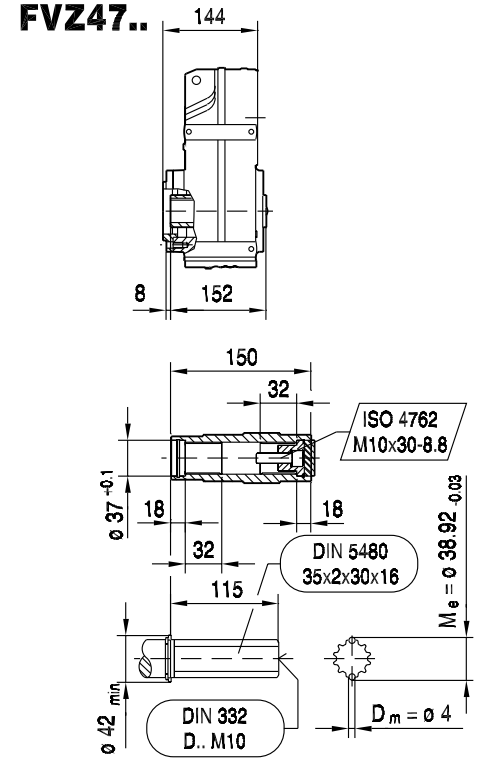
FAZ47..



FHZ47..



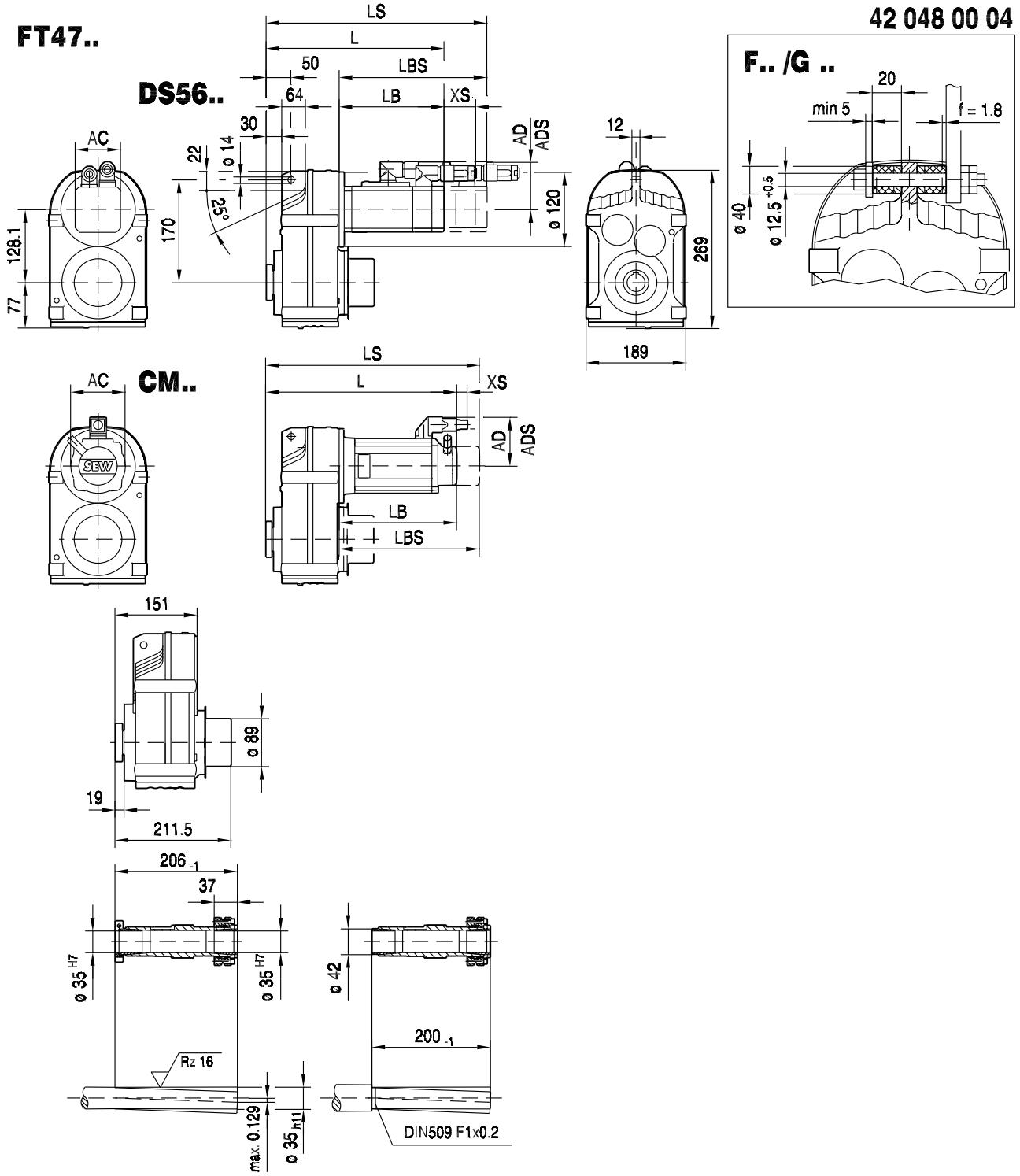
FVZ47..



(→ 150)	DS56M	DS56L	DS56H	CM71S	CM71M	CM71L	CM90S				
AC	73	73	73	117	117	117	142				
AD	71	71	77	122	122	122	140				
ADS	77	77	77	122	122	122	140				
L	281	313	416	382	402	445	437				
LS	311	343	416	464	484	527	533				
LB	137	169	272	238	258	301	293				
LBS	167	199	272	320	340	383	389				
XS	70	70	51	45	45	45	50				



F..CMP, DS, CM
F 47 / CMP / DS / CM [mm]



(→ 📖 150)	DS56M	DS56L	DS56H	CM71S	CM71M	CM71L	CM90S				
AC	73	73	73	117	117	117	142				
AD	71	71	77	122	122	122	140				
ADS	77	77	77	122	122	122	140				
L	288	320	423	389	409	452	444				
LS	318	350	423	471	491	534	540				
LB	137	169	272	238	258	301	293				
LBS	167	199	272	320	340	383	389				
XS	70	70	51	45	45	45	50				

9.8 F 57 / CMP / DS / CM [Nm]

M_{aDyn} [Nm]		CMP						DS			CM						
	i	50S	50M	50L	63S	63M	63L	56M	56L	56H	71S	71M	71L	90S	90M	90L	112S
FA57 2	5.18	26	52	77	56	108	153	19	38	76	83	108	158	199	262	380	414
	5.98	30	60	89	64	124	176	22	44	88	96	125	182	230	303	439	>475
	6.58	33	66	98	71	137	194	24	49	97	105	137	200	253	333	>480	>480
	7.73	39	77	115	83	160	228	28	57	114	124	161	235	297	391	>480	>480
	8.19	41	82	122	88	170	242	30	60	121	131	171	249	315	415	>485	>485
	9.31	47	93	139	100	193	275	34	69	137	149	194	284	358	>460		
	10.64	54	106	159	115	221	314	39	78	157	170	222	324	409	539	>645	>645
	12.29	62	123	184	132	255	362	45	91	181	197	256	374	472	622	>645	>645
	13.52	68	135	202	146	281	399	50	100	199	216	282	412	519	>645	>645	>645
	15.88	80	159	237	171	330	468	59	117	234	254	331	484	610	>645	>645	>645
	16.81	85	168	251	181	349	496	62	124	248	269	351	512	>645	>645	>645	>645
	19.11	96	191	285	206	397	564	70	141	282	306	399	582	>645	>645		
	21.17	107	212	316	228	439	624	78	156	312	339	442	645	>645	>645		
	24.96	126	249	373	269	518	>645	92	184	368	399	521	>645	>645			
	28.45	144	284	425	306	591		105	210	419	455	593					
	29.94	151	299	447	322	621		110	221	441	479	624					
	34.24	173	342		369			126	252	505							
	40.13	202						148	296								
FA57 3	30.15	149	295	441	318	613	>645	109	218	435	473	616	>645	>645	>645	>645	>645
	35.79	177	350	524	377	>645	>645	129	258	517	561	>645	>645	>645	>645	>645	>645
	38.21	189	374	559	403	>645	>645	138	276	552	599	>645	>645	>645	>645	>645	>645
	44.73	221	438	>645	472	>645	>645	161	323	>645	>645	>645	>645	>645	>645		
	50.1	247	490	>645	528	>645	>645	181	362	>645	>645	>645	>645	>645	>645		
	58.97	291	577	>645	622	>645	>645	213	426	>645	>645	>645	>645	>645			
	68.22	337	>645	>645	>645	>645		246	493	>645	>645	>645					
	72.98	361	>645	>645	>645	>645		263	527	>645	>645	>645					
	83.46	412	>645	>645	>645	>645	>645	301	603	>645	>645	>645	>645	>645	>645		
	93.47	462	>645	>645	>645	>645	>645	337	>645	>645	>645	>645	>645	>645	>645		
	110.01	543	>645	>645	>645	>645	>645	397	>645	>645	>645	>645	>645	>645			
	127.27	629	>645	>645	>645	>645		459	>645	>645	>645	>645					
	136.16	>645	>645	>645	>645	>645		492	>645	>645	>645	>645					
	157.09	>645	>645		>645			567	>645	>645							
	183.6	>645						>645	>645								
	199.7	>645						>645	>645								

m [kg]		CMP						DS			CM						
	s	50S	50M	50L	63S	63M	63L	56M	56L	56H	71S	71M	71L	90S	90M	90L	112S
FA57	2	26	27	28	29	30	32	26	27	27	32	33	36	41	43	48	50
FA57	3	27	28	29	29	31	32	26	27	28	32	34	37	41	44	49	50
FAF: + 5.5 kg / F: + 0.2 kg / FF: + 6.6 kg																	



F..CMP, DS, CM
F 57 / CMP / DS / CM [Nm]

CMP.. / DS.. / CM..	i	n_{epk} [1/min]	η [%]	c_T FA [Nm/']	FAF [Nm/']	F [Nm/']	FF [Nm/']	φ /R [']
FA57 2	5.18	4468	97	119.5	119.5	43.41	37.56	9
	5.98	4500	97	119.5	119.5	43.41	37.56	9
	6.58	4500	97	119.5	119.5	43.41	37.56	8
	7.73	4500	97	119.5	119.5	43.41	37.56	8
	8.19	4500	97	119.5	119.5	43.41	37.56	8
	9.31	4500	97	119.5	119.5	43.41	37.56	8
	10.64	4500	97	149.98	149.98	46.87	40.12	6
	12.29	4500	97	149.98	149.98	46.87	40.12	6
	13.52	4500	97	149.98	149.98	46.87	40.12	6
	15.88	4500	97	149.98	149.98	46.87	40.12	6
	16.81	4500	97	149.98	149.98	46.87	40.12	6
	19.11	4500	97	149.98	149.98	46.87	40.12	6
	21.17	4500	97	149.98	149.98	46.87	40.12	6
	24.96	4500	97	149.98	149.98	46.87	40.12	6
	28.45	4500	97	149.98	149.98	46.87	40.12	6
	29.94	4500	97	149.98	149.98	46.87	40.12	6
	34.24	4500	97	149.98	149.98	46.87	40.12	6
	40.13	4500	97	149.98	149.98	46.87	40.12	6
FA57 3	30.15	4500	95	169.49	169.49	48.62	41.39	7
	35.79	4500	95	169.49	169.49	48.62	41.39	7
	38.21	4500	95	169.49	169.49	48.62	41.39	7
	44.73	4500	95	169.49	169.49	48.62	41.39	7
	50.1	4500	95	169.49	169.49	48.62	41.39	7
	58.97	4500	95	169.49	169.49	48.62	41.39	7
	68.22	4500	95	169.49	169.49	48.62	41.39	6
	72.98	4500	95	169.49	169.49	48.62	41.39	6
	83.46	4500	95	171.38	171.38	48.77	41.51	6
	93.47	4500	95	171.38	171.38	48.77	41.51	6
	110.01	4500	95	171.38	171.38	48.77	41.51	6
	127.27	4500	95	171.38	171.38	48.77	41.51	6
	136.16	4500	95	171.38	171.38	48.77	41.51	6
	157.09	4500	95	171.38	171.38	48.77	41.51	6
	183.6	4500	95	171.38	171.38	48.77	41.51	6
	199.7	4500	95	171.38	171.38	48.77	41.51	6

CMP.. / DS.. / CM..	i	M_{amax} [Nm]	M_{apk} [Nm]	$M_{aNotaus}$ [Nm]	n_{ak} [1/min]	J_G 10^{-4} [kgm^2]	F_{Ramax} FA [N]	FAF [N]	F [N]	FF [N]	F_{Rapk} FA [N]	FAF [N]	F [N]	FF [N]
FA57 2	5.18	415	475	706	405	5.8	2020	2020	3460	3670	11500	11500	9910	8490
	5.98	420	475	714	452	4.5	2240	2240	3730	3940	11500	11500	9910	8490
	6.58	420	480	714	502	3.8	2430	2430	3940	4140	11500	11500	9880	8460
	7.73	420	480	714	595	2.9	2760	2760	4310	4500	11500	11500	9880	8460
	8.19	420	485	714	623	2.6	2880	2880	4450	4640	11500	11500	9840	8440
	9.31	420	460	714	666	2.0	3170	3170	4760	4950	11500	11500	10000	8580
	10.64	600	645	1020	207	3.2	2470	2470	4320	4590	11500	11500	6930	6930
	12.29	600	645	1020	212	2.6	2810	2810	4710	4970	11500	11500	6930	6930
	13.52	600	645	1020	207	2.2	3050	3050	4980	5230	11500	11500	6930	6930
	15.88	600	645	1020	214	1.8	3470	3470	5450	5690	11500	11500	6930	6930
	16.81	600	645	1020	214	1.6	3630	3630	5620	5860	11500	11500	6930	6930
	19.11	600	645	1020	215	1.3	3980	3980	6020	6260	11500	11500	6930	6930
	21.17	600	645	1020	217	1.1	4280	4280	6350	6580	11500	11500	6930	6930
	24.96	575	645	978	252	0.84	4970	4970	7060	7260	11500	11500	6930	6930
	28.45	535	645	910	246	0.59	5690	5690	7760	7930	11500	11500	6930	6930
	29.94	545	645	927	234	0.53	5790	5790	7890	8060	11500	11500	6930	6930
	34.24	500	645	850	204	0.43	6580	6580	8670	8500	11500	11500	6930	6930
	40.13	290	435	493	174	0.34	8750	8750	10500	9550	11500	11500	10400	8850

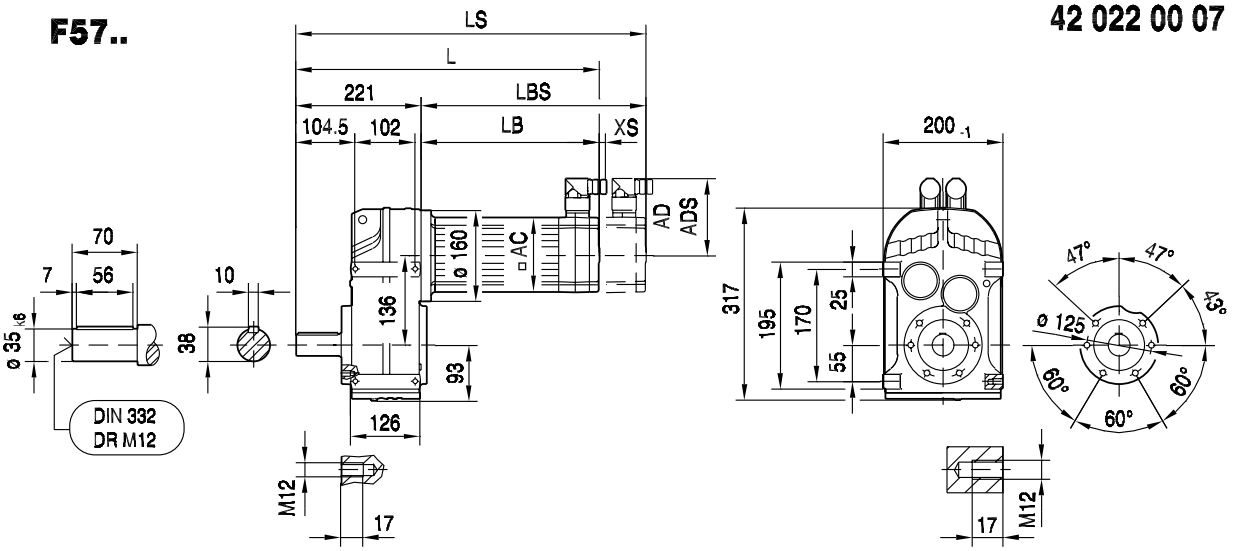


CMP.. / DS.. / CM..							F_{Ramax}				F_{Rapk}			
	i	M_{amax} [Nm]	M_{apk} [Nm]	$M_{aNotaus}$ [Nm]	n_{ak} [1/min]	J_G 10^{-4} [kgm^2]	FA [N]	FAF [N]	F [N]	FF [N]	FA [N]	FAF [N]	F [N]	FF [N]
FA57 3	30.15	590	645	1003	50	1.3	5460	5460	7650	7850	11500	11500	6930	6930
	35.79	600	645	1020	47	0.94	5980	5980	8250	7900	11500	11500	6930	6930
	38.21	600	645	1020	50	0.84	6210	6210	8510	7900	11500	11500	6930	6930
	44.73	600	645	1020	49	0.64	6790	6790	9160	7900	11500	11500	6930	6930
	50.1	600	645	1020	50	0.52	7230	7230	9200	7900	11500	11500	6930	6930
	58.97	600	645	1020	51	0.38	7890	7890	9200	7900	11500	11500	6930	6930
	68.22	600	645	1020	51	0.31	8510	8510	9200	7900	11500	11500	6930	6930
	72.98	600	645	1020	51	0.28	8810	8810	9200	7900	11500	11500	6930	6930
	83.46	600	645	1020	42	0.51	9420	9420	9200	7900	11500	11500	6930	6930
	93.47	600	645	1020	42	0.42	9960	9960	9200	7900	11500	11500	6930	6930
	110.01	600	645	1020	42	0.31	10800	10800	9200	7900	11500	11500	6930	6930
	127.27	600	645	1020	42	0.26	11500	11500	9200	7900	11500	11500	6930	6930
	136.16	600	645	1020	43	0.23	11500	11500	9200	7900	11500	11500	6930	6930
	157.09	600	645	1020	43	0.19	11500	11500	9200	7900	11500	11500	6930	6930
	183.6	600	645	1020	38	0.15	11500	11500	9200	7900	11500	11500	6930	6930
	199.7	600	645	1020	35	0.13	11500	11500	9200	7900	11500	11500	6930	6930

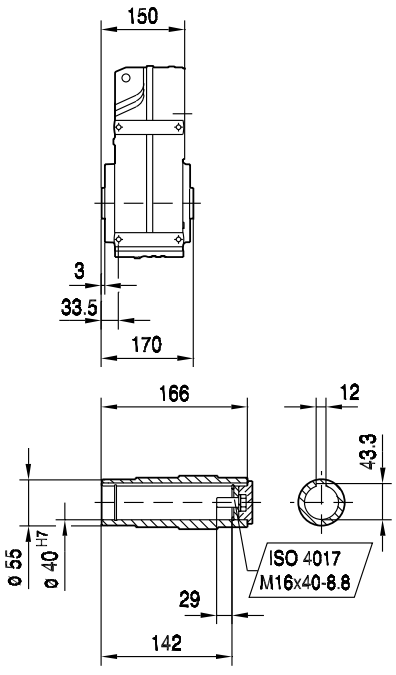
9.9 F 57 / CMP / DS / CM [mm]

F57..

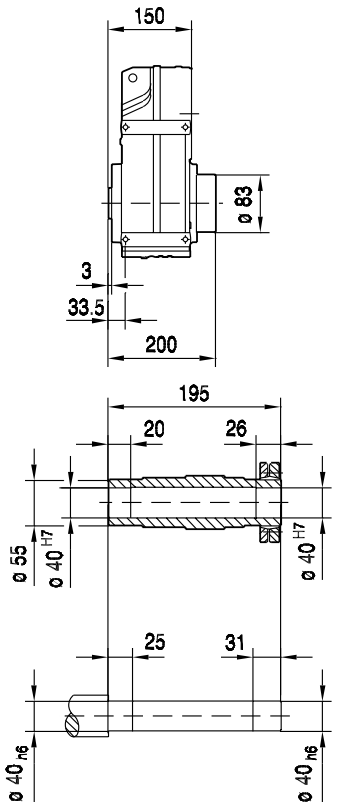
42 022 00 07



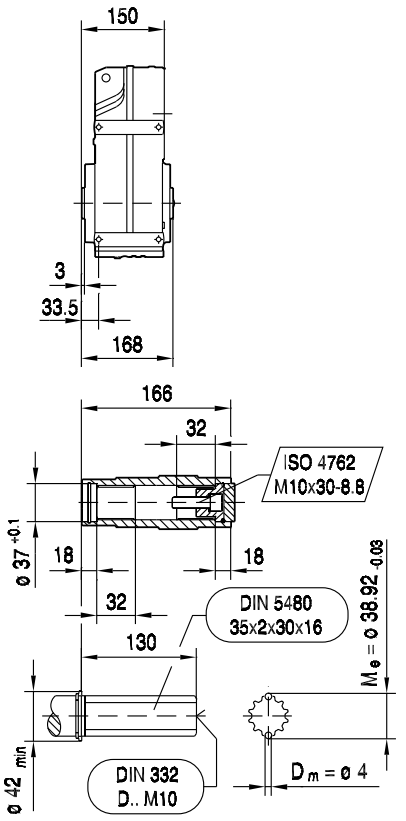
FA57B..



FH57B..



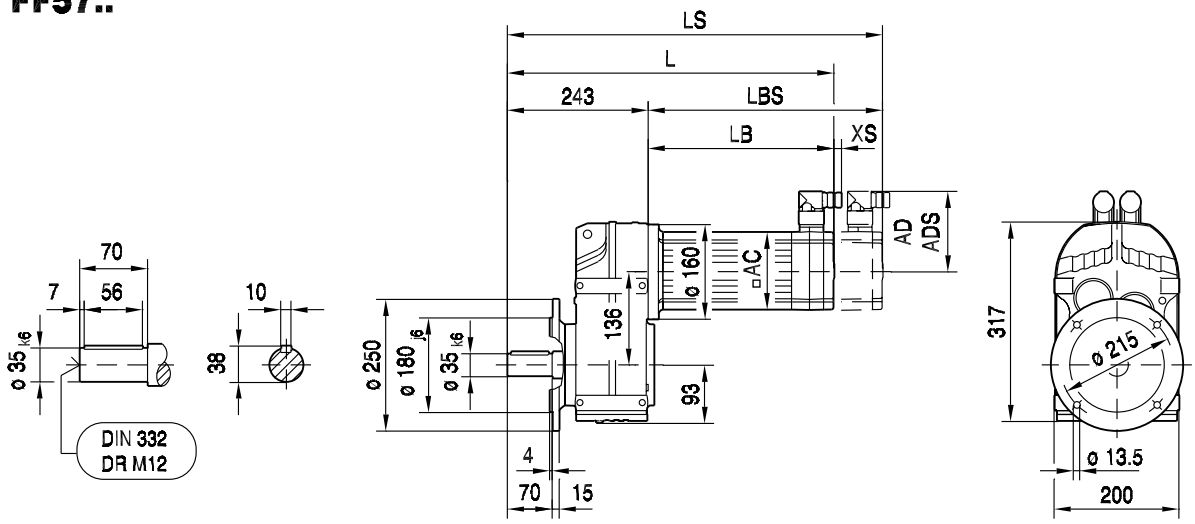
FV57B..



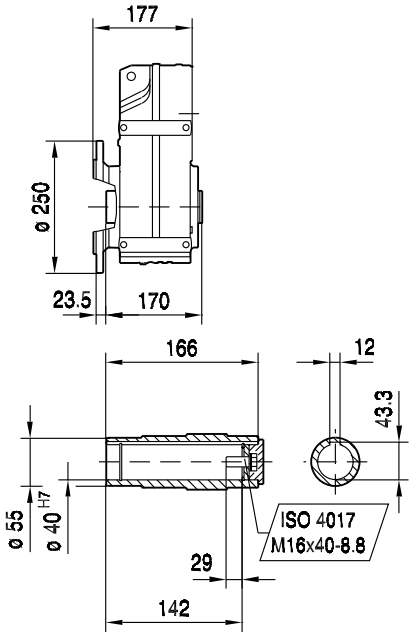
(→ 150)	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L		
AC	73	73	73	88	88	88		
AD	82	82	82	89	89	89		
ADS	82	82	82	89	89	89		
L	360	399	438	394	444	494		
LS	389	428	467	423	473	523		
LB	139	178	217	173	223	273		
LBS	168	207	246	202	252	302		
XS	18	18	18	14	14	14		

FF57..

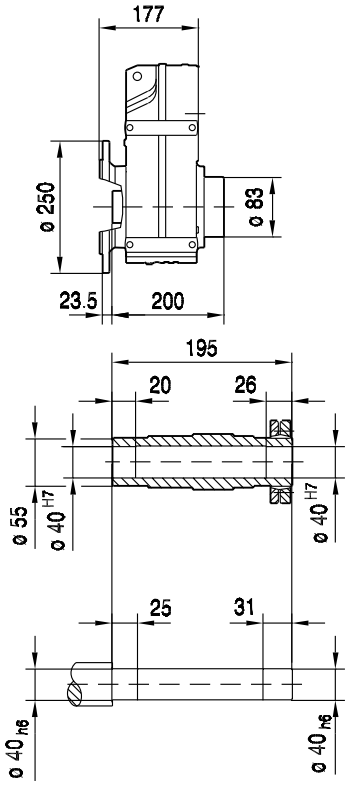
42 023 00 07



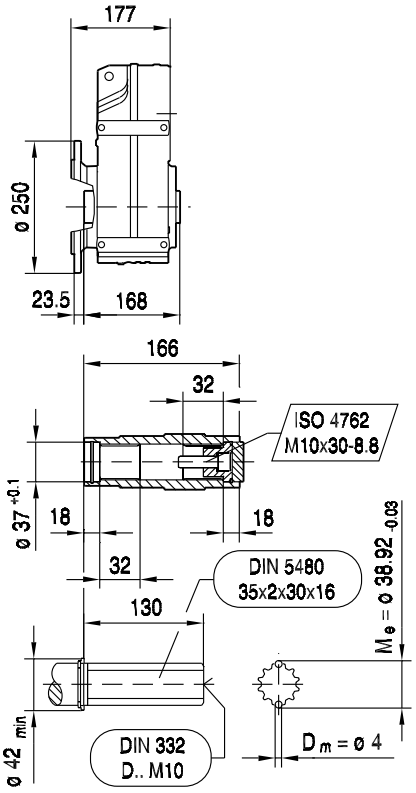
FAF57..



FHF57..



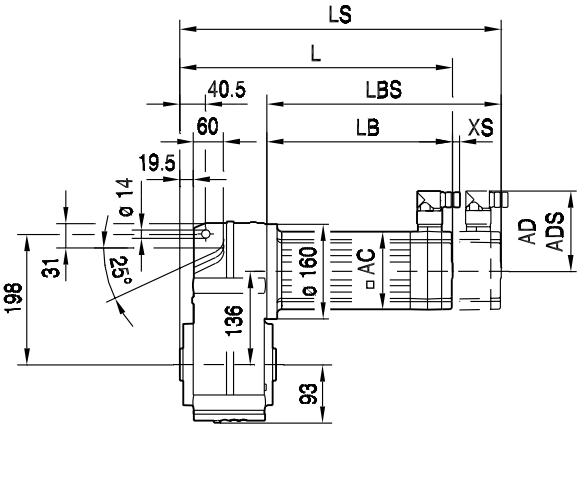
FVF57..

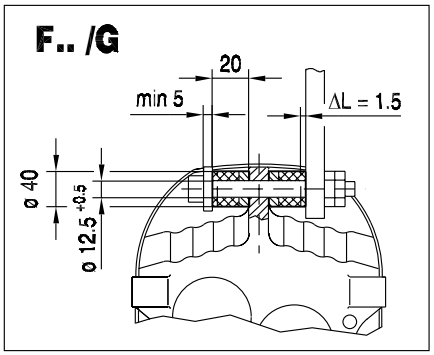


(→ 150)	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L		
AC	73	73	73	88	88	88		
AD	82	82	82	89	89	89		
ADS	82	82	82	89	89	89		
L	382	421	460	416	466	516		
LS	411	450	489	445	495	545		
LB	139	178	217	173	223	273		
LBS	168	207	246	202	252	302		
XS	18	18	18	14	14	14		

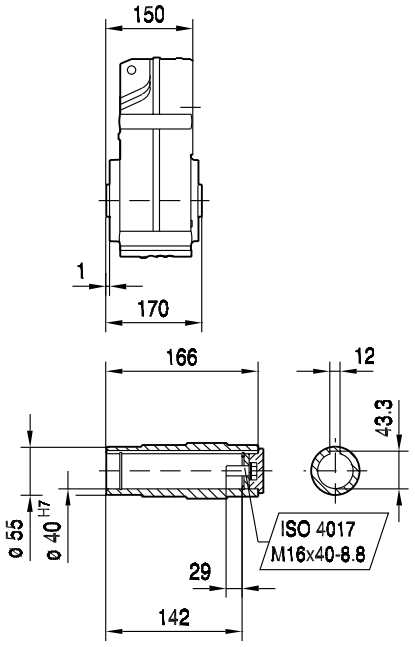
FA57..

42 024 00 07

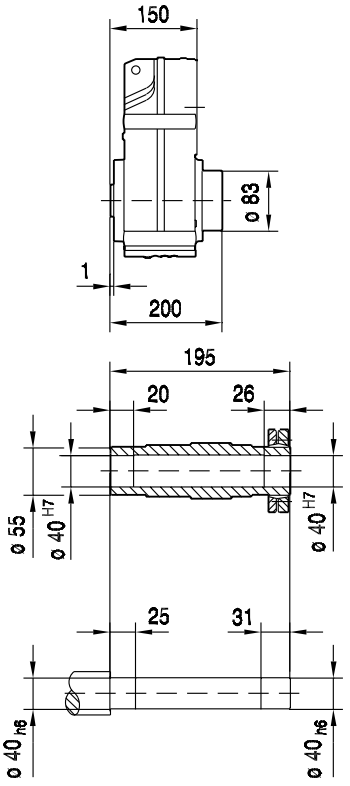




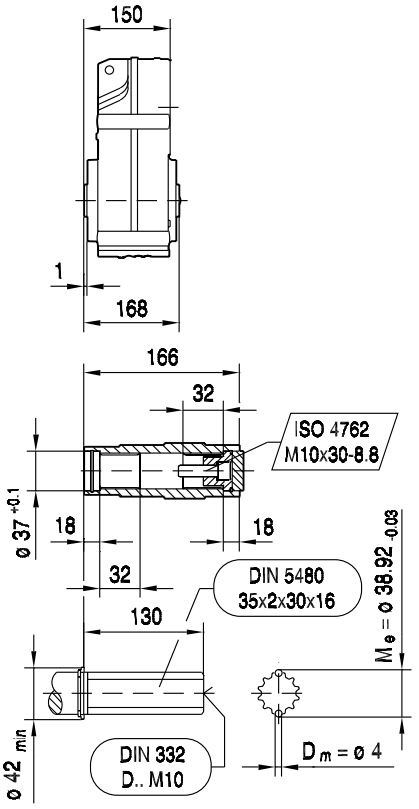
FA57..



FH57..



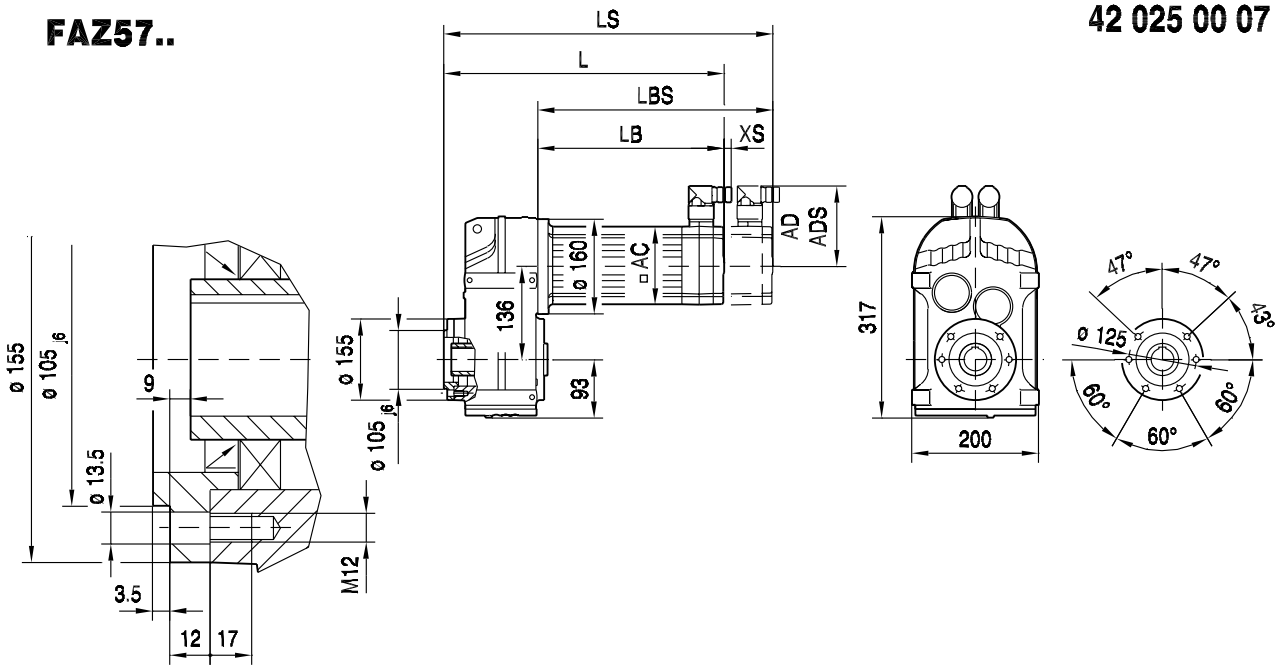
FV57..



(→ 150)	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L		
AC	73	73	73	88	88	88		
AD	82	82	82	89	89	89		
ADS	82	82	82	89	89	89		
L	289	328	367	323	373	423		
LS	318	357	396	352	402	452		
LB	139	178	217	173	223	273		
LBS	168	207	246	202	252	302		
XS	18	18	18	14	14	14		

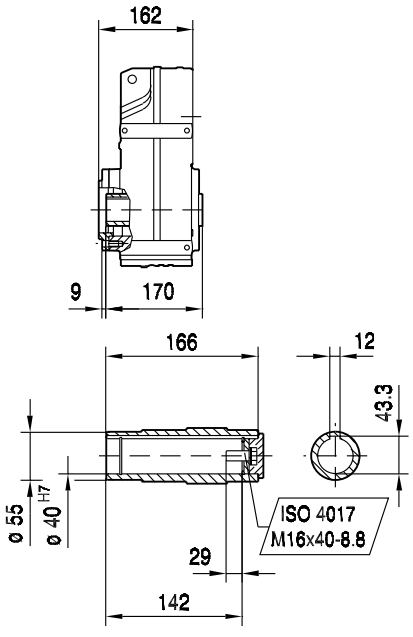
FAZ57..

42 025 00 07

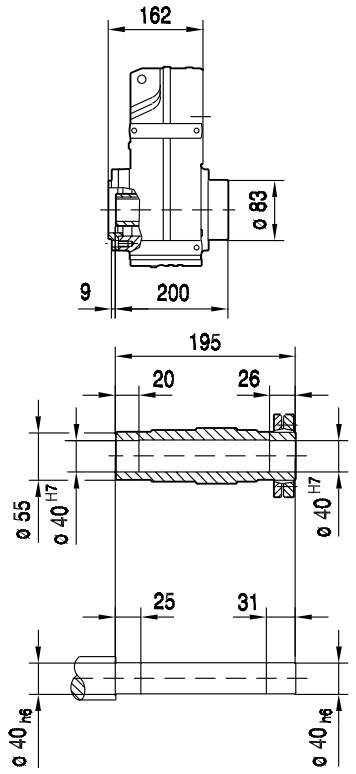


9

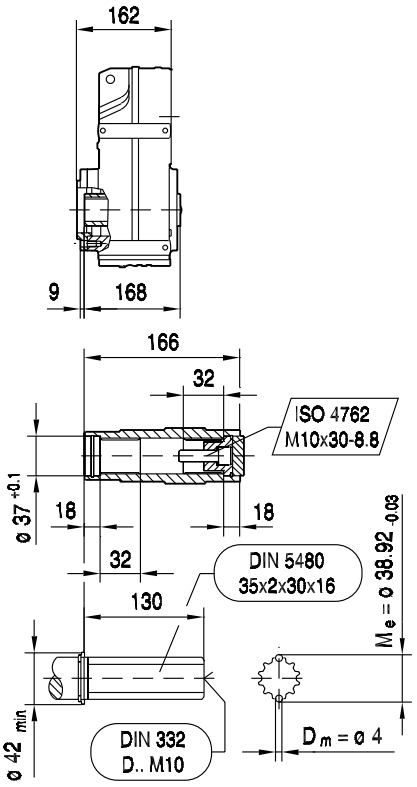
FAZ57..



FHZ57..



FVZ57..

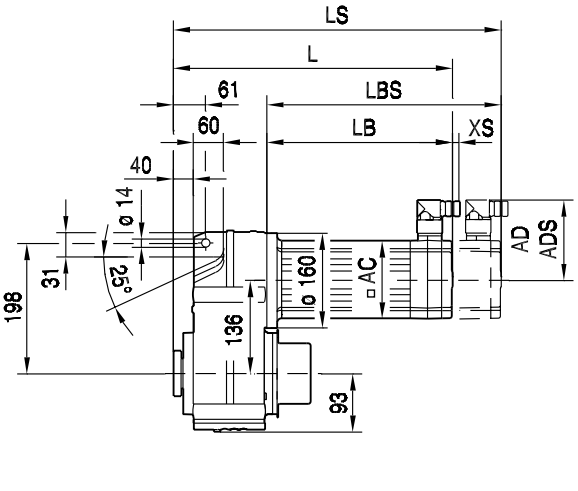


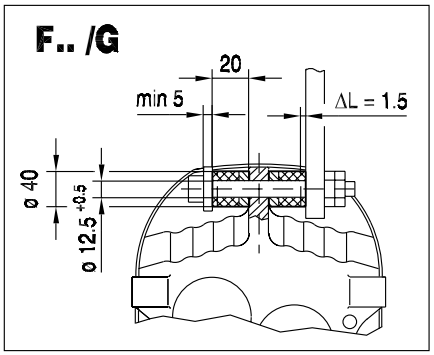
(→ 150)	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L		
AC	73	73	73	88	88	88		
AD	82	82	82	89	89	89		
ADS	82	82	82	89	89	89		
L	301	340	379	335	385	435		
LS	330	369	408	364	414	464		
LB	139	178	217	173	223	273		
LBS	168	207	246	202	252	302		
XS	18	18	18	14	14	14		

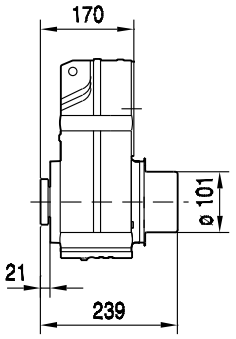


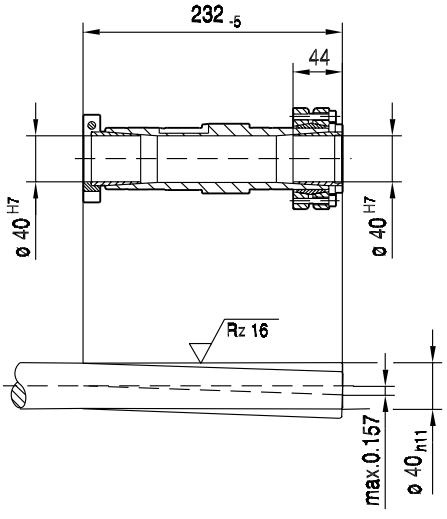
FT57..

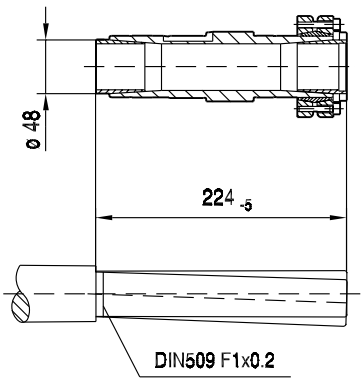
42 026 00 07





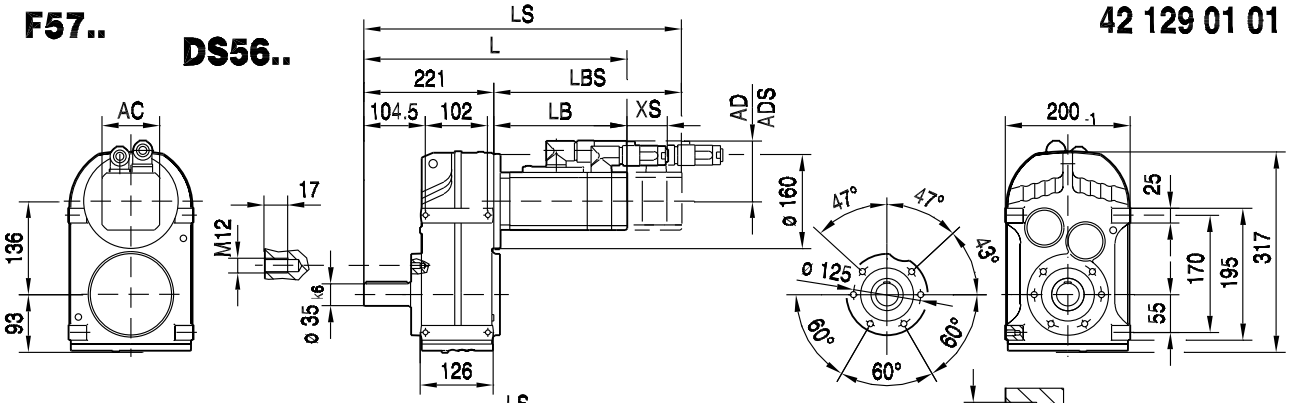




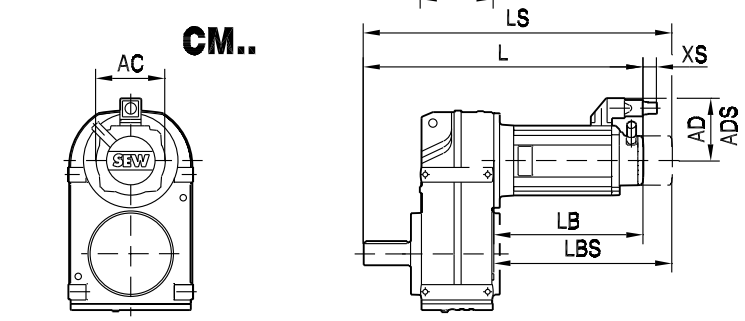


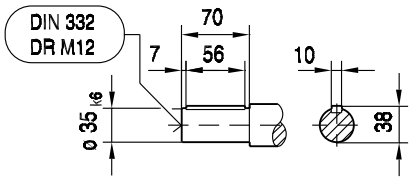
(→ 📖 150)	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L		
AC	73	73	73	88	88	88		
AD	82	82	82	89	89	89		
ADS	82	82	82	89	89	89		
L	308	347	386	342	392	442		
LS	337	376	415	371	421	471		
LB	139	178	217	173	223	273		
LBS	168	207	246	202	252	302		
XS	18	18	18	14	14	14		

F57.. **DS56..** **42 129 01 01**

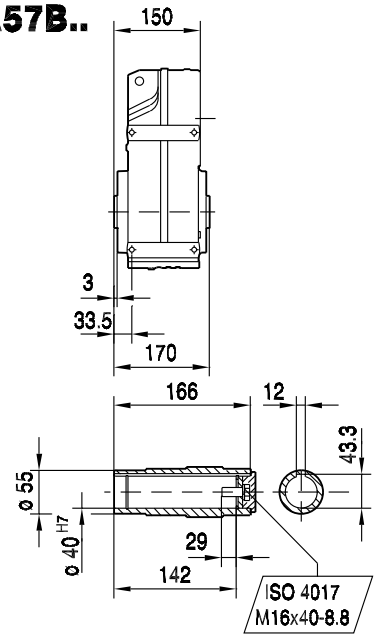


CM..

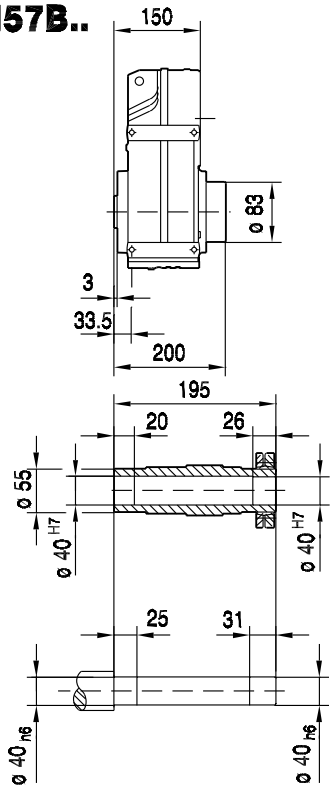




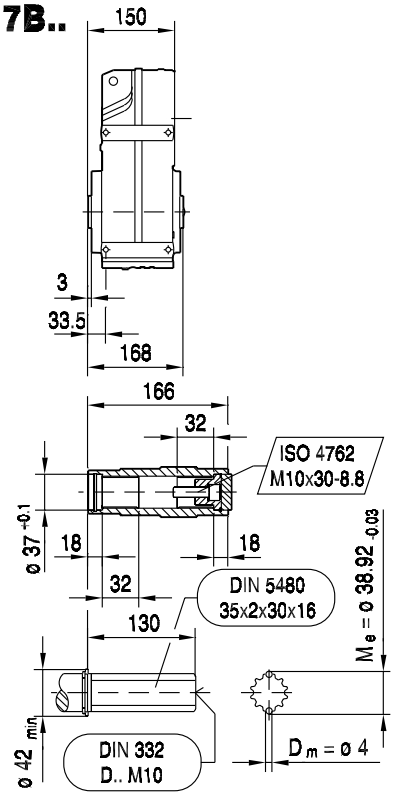
FA57B..



FH57B..



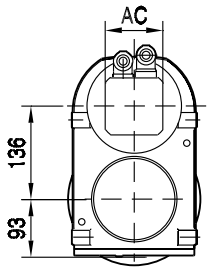
FV57B..



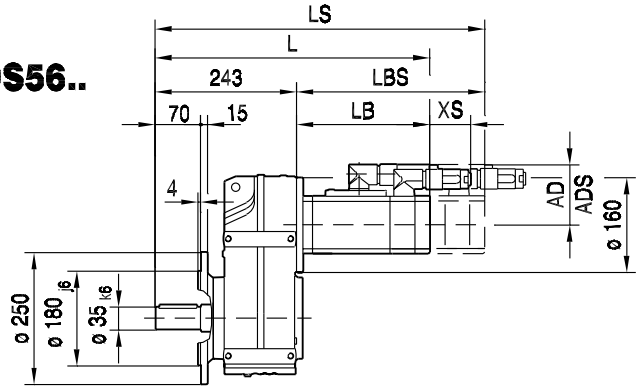
(→ 150)	DS56H	CM71S	CM71M	CM71L	CM90S	CM90M	CM90L	CM112S			
AC	73	117	117	117	142	142	142	186			
AD	77	122	122	122	140	140	140	162			
ADS	77	122	122	122	140	140	140	162			
L	487	453	473	513	505	532	590	545			
LS	487	535	555	595	601	628	686	635			
LB	266	232	252	292	284	311	369	324			
LBS	266	314	334	374	380	407	465	414			
XS	51	45	45	45	50	50	50	36			

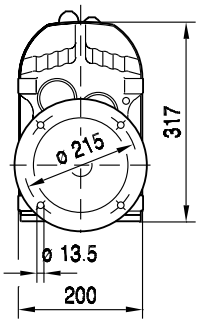
42 130 01 01

FF57..

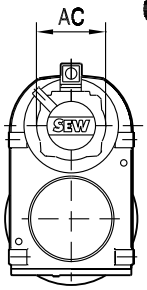


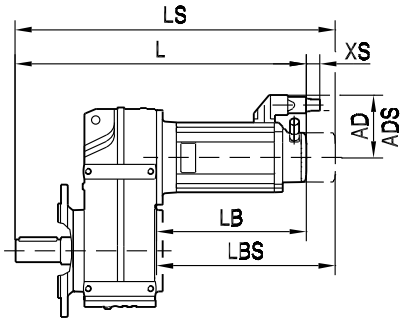
DS56..

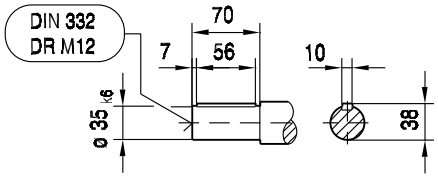




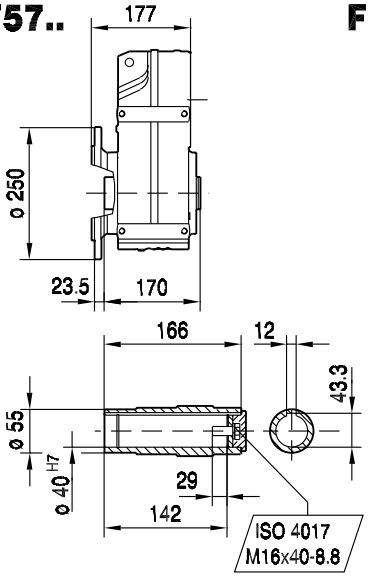
CM..



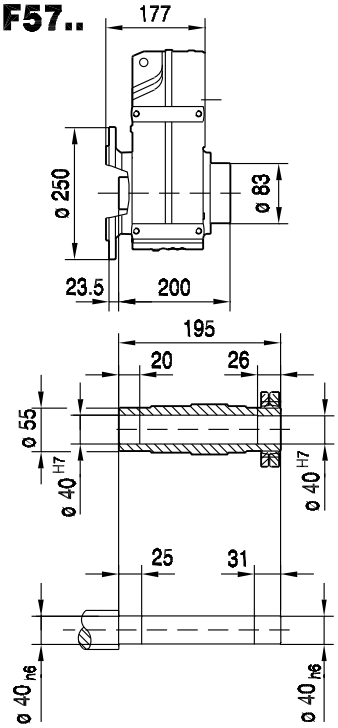




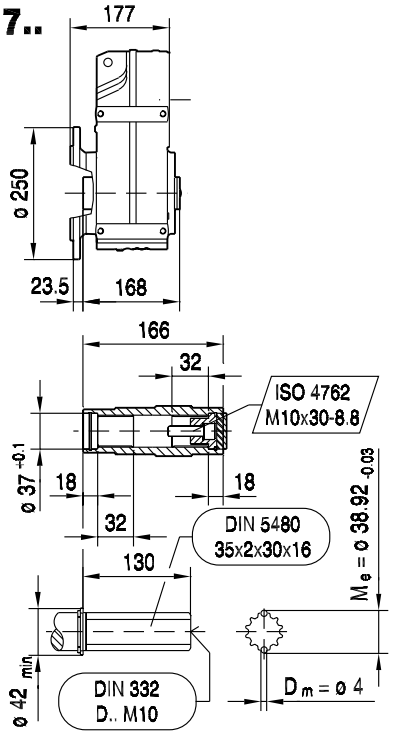
FAF57..



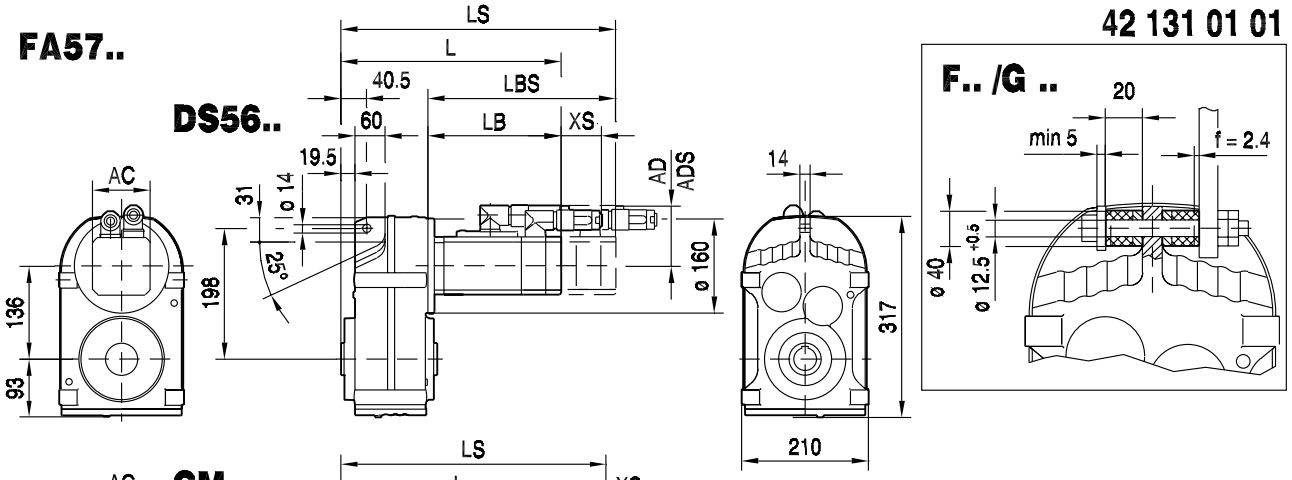
FHF57..

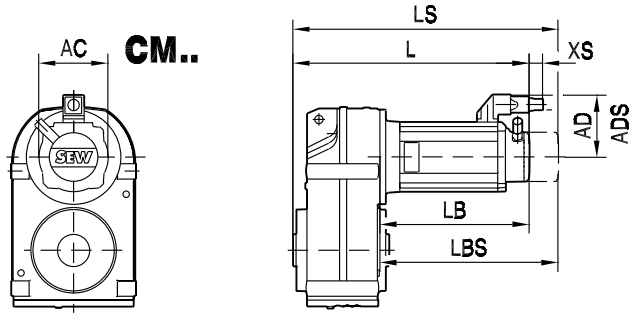


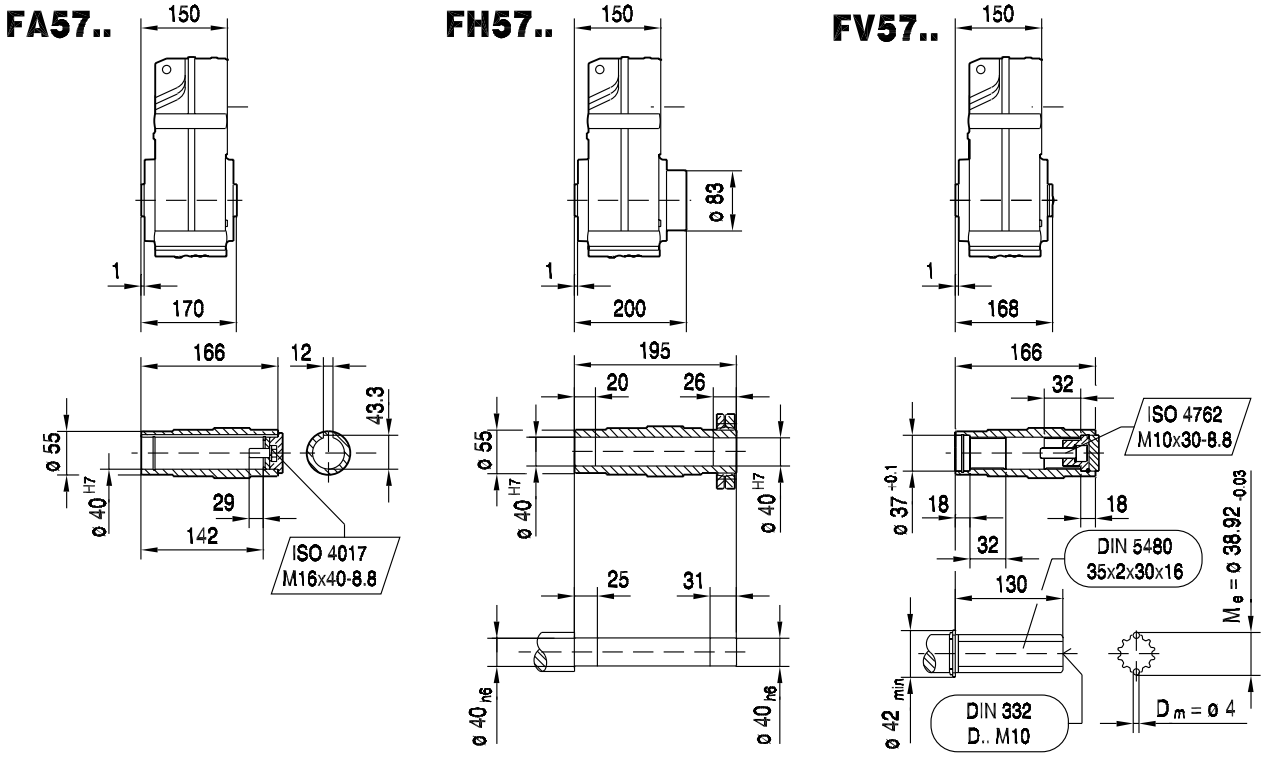
FVF57..



(→ 📖 150)	DS56H	CM71S	CM71M	CM71L	CM90S	CM90M	CM90L	CM112S			
AC	73	117	117	117	142	142	142	186			
AD	77	122	122	122	140	140	140	162			
ADS	77	122	122	122	140	140	140	162			
L	509	475	495	535	527	554	612	567			
LS	509	557	577	617	623	650	708	657			
LB	266	232	252	292	284	311	369	324			
LBS	266	314	334	374	380	407	465	414			
XS	51	45	45	45	50	50	50	36			



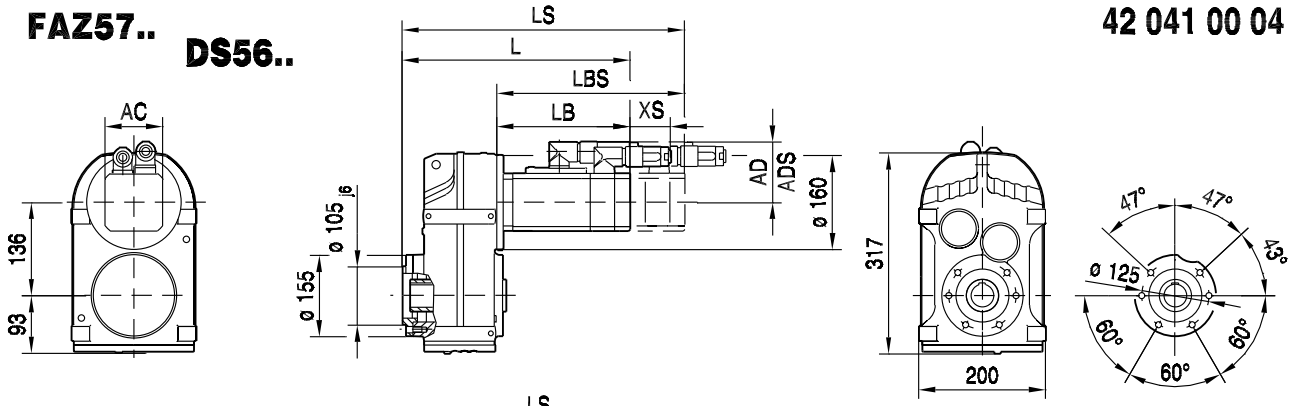




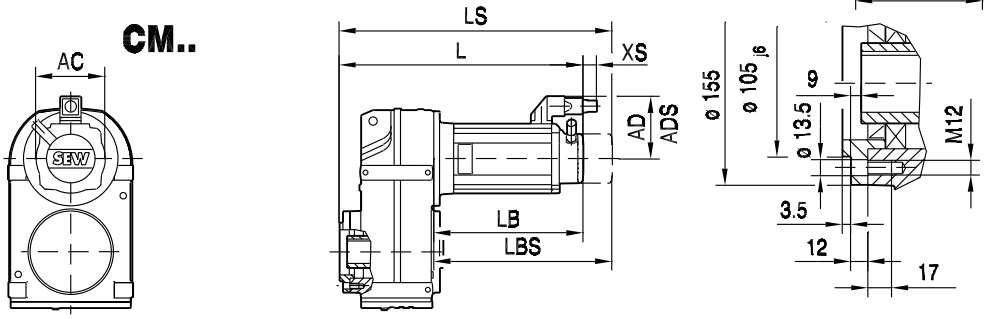
(→ 150)	DS56H	CM71S	CM71M	CM71L	CM90S	CM90M	CM90L	CM112S			
AC	73	117	117	117	142	142	142	186			
AD	77	122	122	122	140	140	140	162			
ADS	77	122	122	122	140	140	140	162			
L	416	382	402	442	434	461	519	474			
LS	416	464	484	524	530	557	615	564			
LB	266	232	252	292	284	311	369	324			
LBS	266	314	334	374	380	407	465	414			
XS	51	45	45	45	50	50	50	36			

FAZ57.. **DS56..**

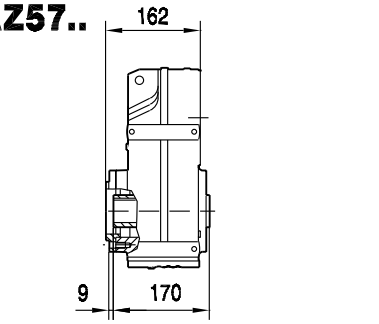
42 041 00 04



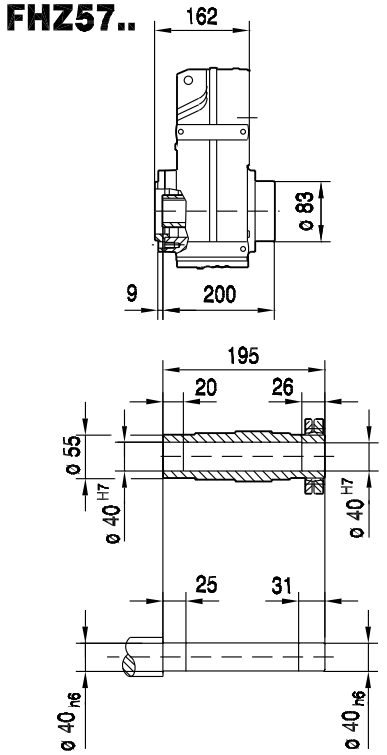
CM..



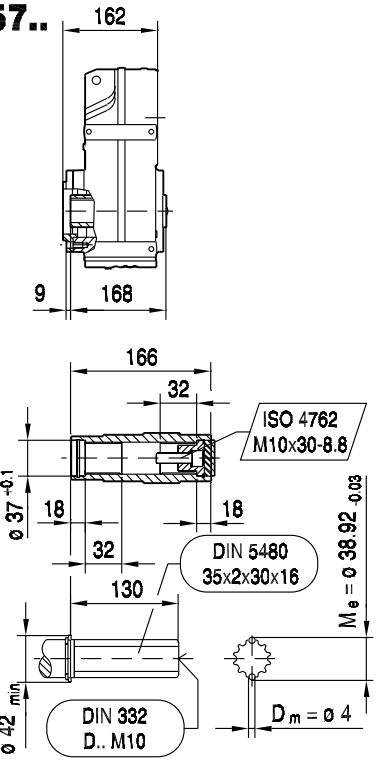
FAZ57..



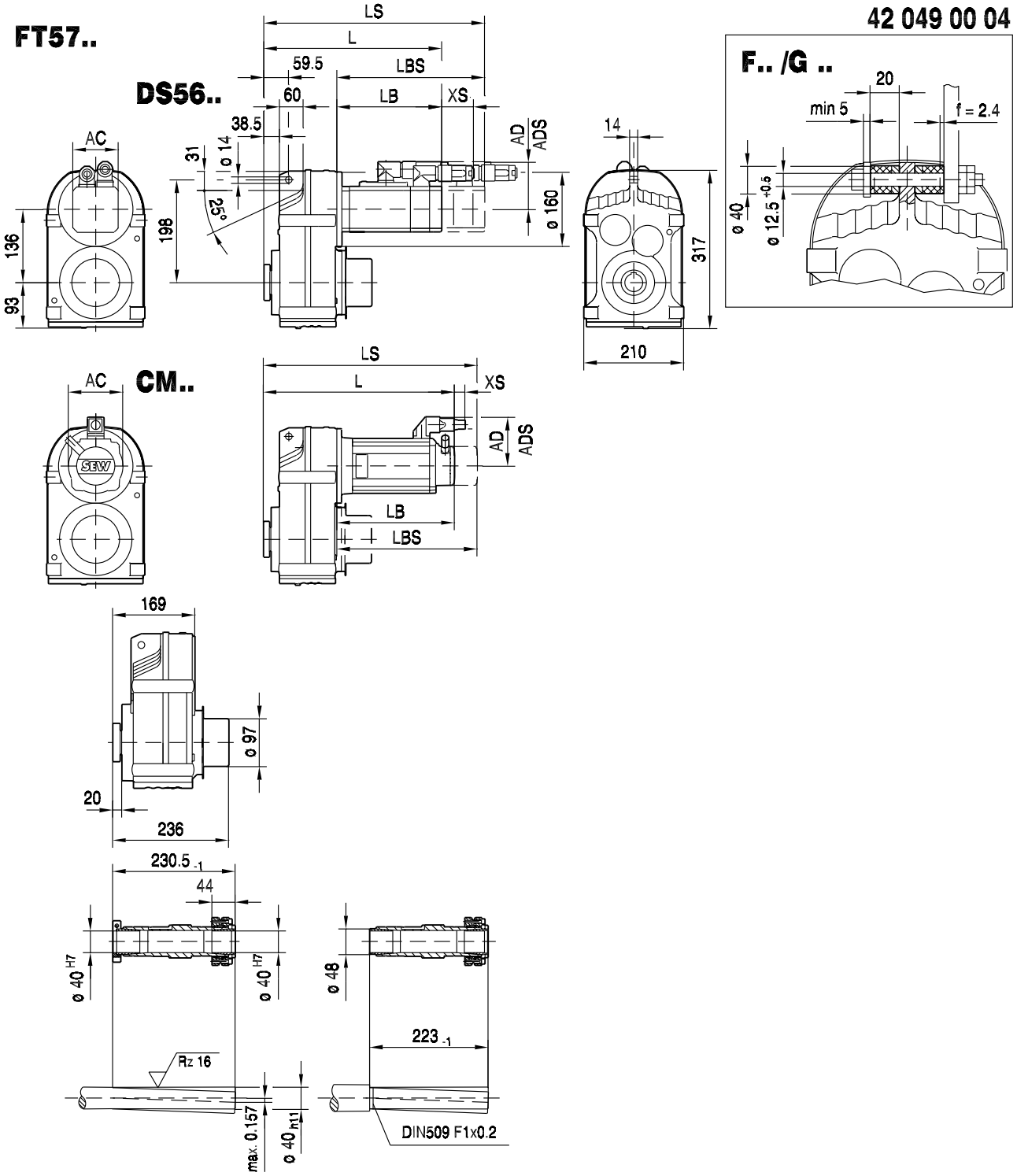
FHZ57..



FVZ57..



(→ 📖 150)	DS56H	CM71S	CM71M	CM71L	CM90S	CM90M	CM90L	CM112S			
AC	73	117	117	117	142	142	142	186			
AD	77	122	122	122	140	140	140	162			
ADS	77	122	122	122	140	140	140	162			
L	428	394	414	454	446	473	531	486			
LS	428	476	496	536	542	569	627	576			
LB	266	232	252	292	284	311	369	324			
LBS	266	314	334	374	380	407	465	414			
XS	51	45	45	45	50	50	50	36			



(→ 📖 150)	DS56H	CM71S	CM71M	CM71L	CM90S	CM90M	CM90L	CM112S			
AC	73	117	117	117	142	142	142	186			
AD	77	122	122	122	140	140	140	162			
ADS	77	122	122	122	140	140	140	162			
L	435	401	421	461	453	480	538	493			
LS	435	483	503	543	549	576	634	583			
LB	266	232	252	292	284	311	369	324			
LBS	266	314	334	374	380	407	465	414			
XS	51	45	45	45	50	50	50	36			

9.10 F 67 / CMP / DS / CM [Nm]

M_{aDyn} [Nm]		CMP						DS			CM							
	i	50S	50M	50L	63S	63M	63L	56M	56L	56H	71S	71M	71L	90S	90M	90L	112S	112M
FA67 2	3.97		40	59	43	82	117			59	64	83	121	152	201	291	317	418
	4.66		47	70	50	97	137			69	75	97	142	179	236	342	372	490
	5.25		52	78	57	109	155			77	84	109	160	202	266	385	419	553
	5.95	30	59	89	64	124	175	22	44	88	95	124	181	229	301	436	475	626
	6.78	34	68	101	73	141	200	25	50	100	109	141	207	260	343	497	541	>710
	7.53	38	75	112	81	156	222	28	56	111	121	157	229	289	381	552	601	
	8.6	43	86	128	93	179	254	32	63	127	138	179	262	330	435	631	687	
	9.08	46	91	136	98	188	268	33	67	134	145	189	277	349	460	666	>715	
	9.66		97	144	104	201	285			142	155	201	294	371	489	708	771	>920
	11.31		113	169	122	235	334			167	181	236	344	434	573	829	903	>920
	12.76		127	191	137	265	376			188	204	266	389	490	646	>920	>920	>920
	14.46	73	144	216	156	300	426	53	107	213	231	302	440	555	732	>920	>920	>920
	16.48	83	165	246	177	342	486	61	121	243	264	344	502	633	834	>920	>920	>920
	18.29	92	183	273	197	380	539	67	135	270	293	381	557	703	>920	>920	>920	
	20.9	105	209	312	225	434	616	77	154	308	335	436	637	803	>920	>920	>920	
	22.05	111	220	329	237	458	650	81	163	325	353	460	672	847	>920	>920	>920	
	25.13	127	251	375	271	522	741	93	185	371	402	524	765	>920	>920			
	27.41	138	274	409	295	569	808	101	202	404	439	572	835	>920	>920			
	32.08	162	321	479	345	666	>920	118	236	473	513	669	>920	>920				
	36.3	183	363	542	391	754		134	268	535	581	757						
FA67 3	34.01	168	333	498	359	691	>920	123	246	491	533	695	>920	>920	>920	>920	>920	
	39.26	194	384	574	414	798	>920	142	283	567	615	802	>920	>920	>920	>920	>920	
	43.2	213	423	632	456	878	>920	156	312	624	677	882	>920	>920	>920	>920	>920	
	50.74	251	496	742	535	>920	>920	183	366	733	795	>920	>920	>920	>920	>920	>920	
	53.73	265	526	786	567	>920	>920	194	388	776	842	>920	>920	>920	>920	>920	>920	
	61.07	302	598	893	644	>920	>920	220	441	882	>920	>920	>920	>920	>920			
	67.65	334	662	>920	713	>920	>920	244	488	>920	>920	>920	>920	>920	>920			
	79.76	394	780	>920	841	>920	>920	288	576	>920	>920	>920	>920	>920				
	90.59	448	886	>920	>920	>920	>920	327	654	>920	>920	>920	>920	>920	>920	>920	>920	
	95.94	474	>920	>920	>920	>920	>920	346	693	>920	>920	>920	>920	>920	>920	>920	>920	
	109.04	539	>920	>920	>920	>920	>920	394	787	>920	>920	>920	>920	>920	>920			
	120.79	597	>920	>920	>920	>920	>920	436	872	>920	>920	>920	>920	>920	>920			
	142.4	703	>920	>920	>920	>920	>920	514	>920	>920	>920	>920	>920	>920				
	162.31	802	>920	>920	>920	>920		586	>920	>920	>920	>920						
	170.85	844	>920	>920	>920	>920		617	>920	>920	>920	>920						
	195.39	>920	>920		>920			705	>920	>920								
	228.99	>920						827	>920									

m [kg]		CMP						DS			CM							
	s	50S	50M	50L	63S	63M	63L	56M	56L	56H	71S	71M	71L	90S	90M	90L	112S	112M
FA67	2	30	31	32	32	33	35	29	30	31	35	36	40	44	47	52	53	57
FA67	3	31	32	33	33	35	36	30	31	32	36	37	41	45	48	53	54	58
FAF: + 6.3 kg / F: + 2.8 kg / FF: + 8.9 kg																		



CMP.. / DS.. / CM..	i	n_{epk} [1/min]	η [%]	c_T FA [Nm/']	FAF [Nm/']	F [Nm/']	FF [Nm/']	φ /R [']
	3.97	4500	97	128.91	128.91	68.48	62.4	10
	4.66	4500	97	128.91	128.91	68.48	62.4	9
	5.25	4500	97	128.91	128.91	68.48	62.4	9
	5.95	4500	97	128.91	128.91	68.48	62.4	9
	6.78	4500	97	128.91	128.91	68.48	62.4	9
	7.53	4500	97	128.91	128.91	68.48	62.4	8
	8.6	4500	97	128.91	128.91	68.48	62.4	8
	9.08	4500	97	128.91	128.91	68.48	62.4	8
	9.66	4500	97	172.89	172.89	79.18	71.17	6
FA67	11.31	4500	97	172.89	172.89	79.18	71.17	6
2	12.76	4500	97	172.89	172.89	79.18	71.17	6
	14.46	4500	97	172.89	172.89	79.18	71.17	6
	16.48	4500	97	172.89	172.89	79.18	71.17	6
	18.29	4500	97	172.89	172.89	79.18	71.17	6
	20.9	4500	97	172.89	172.89	79.18	71.17	5
	22.05	4500	97	172.89	172.89	79.18	71.17	5
	25.13	4500	97	172.89	172.89	79.18	71.17	5
	27.41	4500	97	172.89	172.89	79.18	71.17	5
	32.08	4500	97	172.89	172.89	79.18	71.17	5
	36.3	4500	97	172.89	172.89	79.18	71.17	5
	34.01	4500	95	187.35	187.35	82.08	73.5	6
	39.26	4500	95	187.35	187.35	82.08	73.5	6
	43.2	4500	95	187.35	187.35	82.08	73.5	6
	50.74	4500	95	187.35	187.35	82.08	73.5	6
	53.73	4500	95	187.35	187.35	82.08	73.5	6
	61.07	4500	95	187.35	187.35	82.08	73.5	6
	67.65	4500	95	187.35	187.35	82.08	73.5	6
	79.76	4500	95	187.35	187.35	82.08	73.5	6
FA67	90.59	4500	95	188.88	188.88	82.37	73.73	6
3	95.94	4500	95	188.88	188.88	82.37	73.73	6
	109.04	4500	95	188.88	188.88	82.37	73.73	6
	120.79	4500	95	188.88	188.88	82.37	73.73	6
	142.4	4500	95	188.88	188.88	82.37	73.73	6
	162.31	4500	95	188.88	188.88	82.37	73.73	6
	170.85	4500	95	188.88	188.88	82.37	73.73	6
	195.39	4500	95	188.88	188.88	82.37	73.73	6
	228.99	4500	95	188.88	188.88	82.37	73.73	6

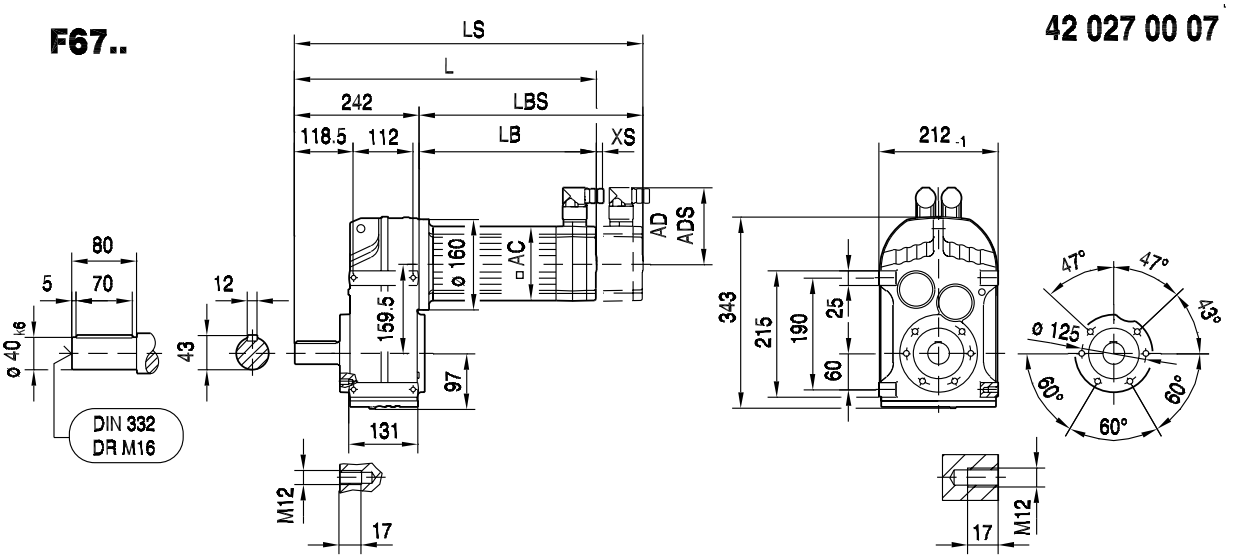


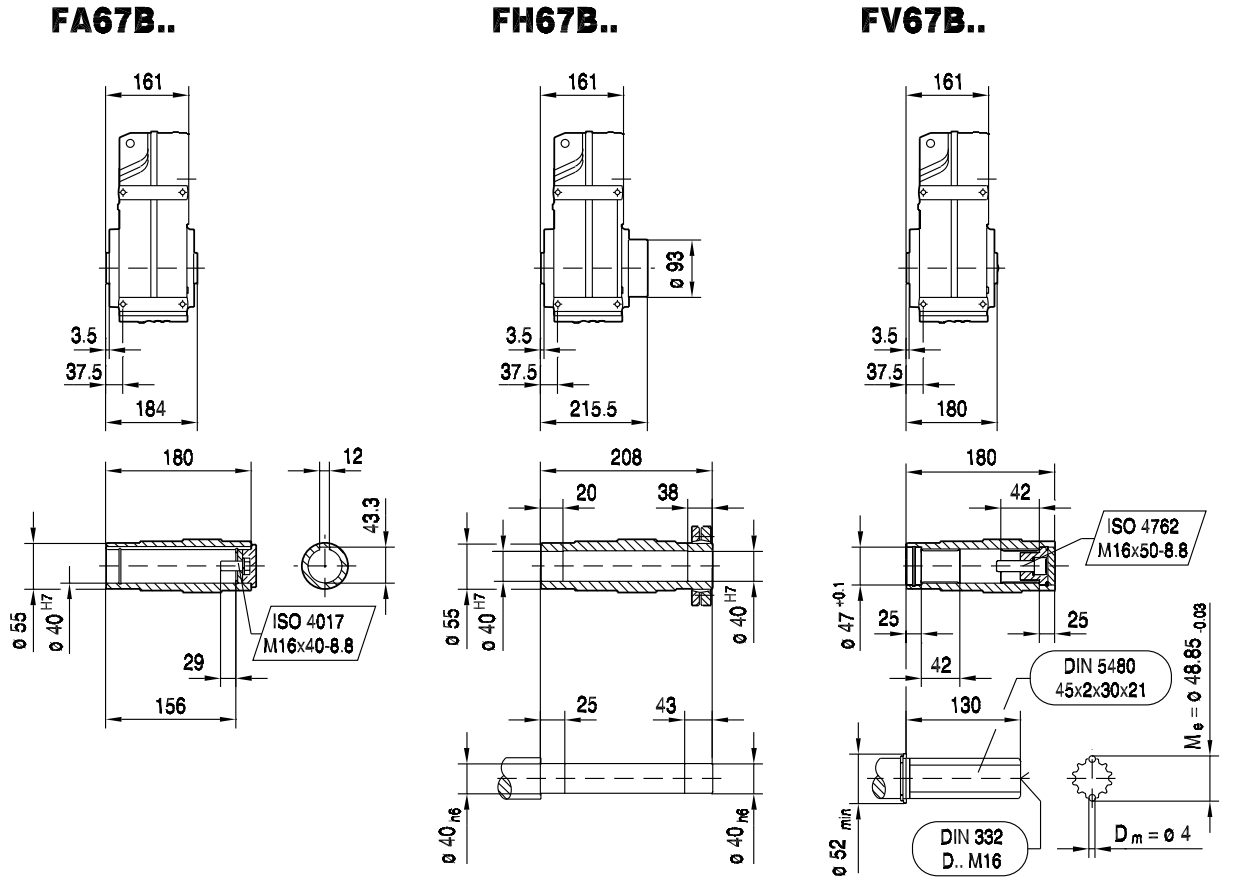
F..CMP, DS, CM

F 67 / CMP / DS / CM [Nm]

CMP.. / DS.. / CM..							F_{Ramax}				F_{Rapk}			
	i	M_{amax} [Nm]	M_{apk} [Nm]	$M_{aNotaus}$ [Nm]	n_{ak} [1/min]	J_G 10^{-4} [kgm^2]	FA [N]	FAF [N]	F [N]	FF [N]	FA [N]	FAF [N]	F [N]	FF [N]
FA67 2	3.97	500	695	850	403	16	1220	1220	8390	8620	13000	13000	11300	11300
	4.66	560	700	952	322	12	1020	1020	8590	8860	13000	13000	11300	11300
	5.25	590	705	1003	286	10.0	1010	1010	8850	9140	13000	13000	11200	11200
	5.95	610	705	1037	286	8.0	1090	1090	9200	9500	13000	13000	11200	11200
	6.78	620	710	1054	295	6.3	1280	1280	9660	9950	13000	13000	11200	11200
	7.53	610	715	1037	332	5.5	1570	1570	10100	10400	13000	13000	11200	11200
	8.6	570	715	969	442	4.4	2180	2180	10900	11200	13000	13000	11200	11200
	9.08	530	715	901	573	4.0	2620	2620	11400	11600	13000	13000	11200	11200
	9.66	820	920	1394	186	8.5	1580	1580	10300	10300	13000	13000	9310	9310
	11.31	820	920	1394	203	6.7	1960	1960	10300	10300	13000	13000	9310	9310
	12.76	820	920	1394	212	5.6	2260	2260	10300	10300	13000	13000	9310	9310
	14.46	820	920	1394	228	4.6	2580	2580	10300	10300	13000	13000	9310	9310
	16.48	820	920	1394	237	3.8	2940	2940	10300	10300	13000	13000	9310	9310
	18.29	820	920	1394	252	3.4	3230	3230	10300	10300	13000	13000	9310	9310
	20.9	820	920	1394	263	2.7	3620	3620	10300	10300	13000	13000	9310	9310
	22.05	820	920	1394	268	2.5	3780	3780	10300	10300	13000	13000	9310	9310
	25.13	820	920	1394	275	2.0	4190	4190	10300	10300	13000	13000	9310	9310
	27.41	820	920	1394	255	1.7	4470	4470	10300	10300	13000	13000	9310	9310
	32.08	820	920	1394	218	1.4	5000	5000	10300	10300	13000	13000	9310	9310
	36.3	820	920	1394	193	0.98	5440	5440	10300	10300	13000	13000	9310	9310
FA67 3	34.01	740	920	1258	44	2.8	5730	5730	11000	11000	13000	13000	9310	9310
	39.26	780	920	1326	38	2.2	5980	5980	10700	10700	13000	13000	9310	9310
	43.2	820	920	1394	35	1.9	6080	6080	10300	10300	13000	13000	9310	9310
	50.74	820	920	1394	34	1.6	6710	6710	10300	10300	13000	13000	9310	9310
	53.73	820	920	1394	34	1.4	6940	6940	10300	10300	13000	13000	9310	9310
	61.07	820	920	1394	34	1.1	7480	7480	10300	10300	13000	13000	9310	9310
	67.65	820	920	1394	35	0.97	7930	7930	10300	10300	13000	13000	9310	9310
	79.76	820	920	1394	36	0.76	8680	8680	10300	10300	13000	13000	9310	9310
	90.59	820	920	1394	56	1.4	9290	9290	10300	10300	13000	13000	9310	9310
	95.94	820	920	1394	56	1.2	9570	9570	10300	10300	13000	13000	9310	9310
	109.04	820	920	1394	57	0.98	10200	10200	10300	10300	13000	13000	9310	9310
	120.79	820	920	1394	57	0.85	10800	10800	10300	10300	13000	13000	9310	9310
	142.4	820	920	1394	49	0.68	11700	11700	10300	10300	13000	13000	9310	9310
	162.31	820	920	1394	43	0.47	12400	12400	10300	10300	13000	13000	9310	9310
	170.85	820	920	1394	41	0.42	12700	12700	10300	10300	13000	13000	9310	9310
	195.39	820	920	1394	36	0.34	13000	13000	10300	10300	13000	13000	9310	9310
	228.99	820	920	1394	31	0.27	13000	13000	10300	10300	13000	13000	9310	9310

9.11 F 67 / CMP / DS / CM [mm]

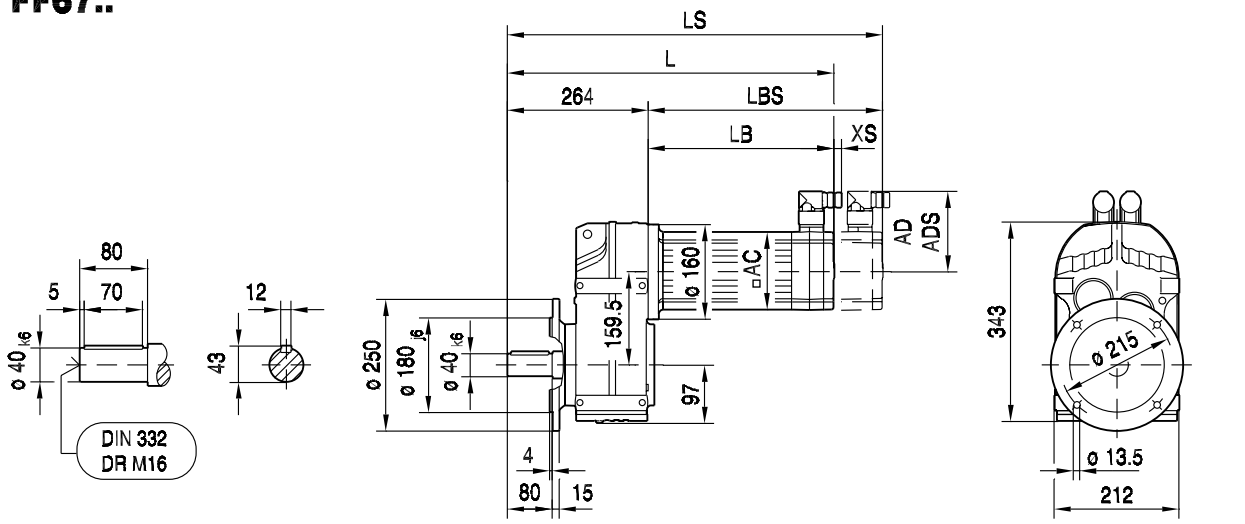




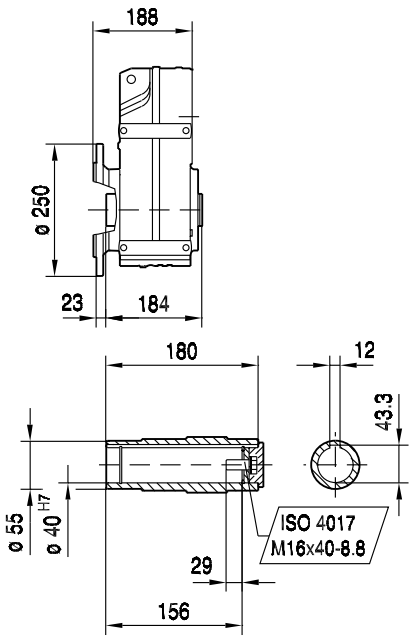
(→ 150)	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L		
AC	73	73	73	88	88	88		
AD	82	82	82	89	89	89		
ADS	82	82	82	89	89	89		
L	381	420	459	415	465	515		
LS	410	449	488	444	494	544		
LB	139	178	217	173	223	273		
LBS	168	207	246	202	252	302		
XS	18	18	18	14	14	14		

FF67..

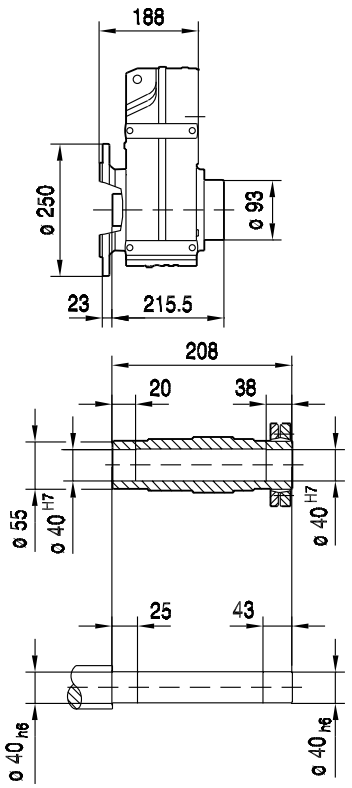
42 028 00 07



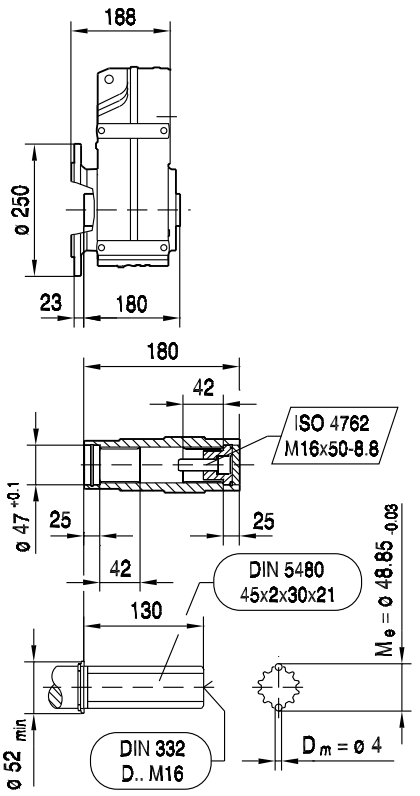
FAF67..



FHF67..



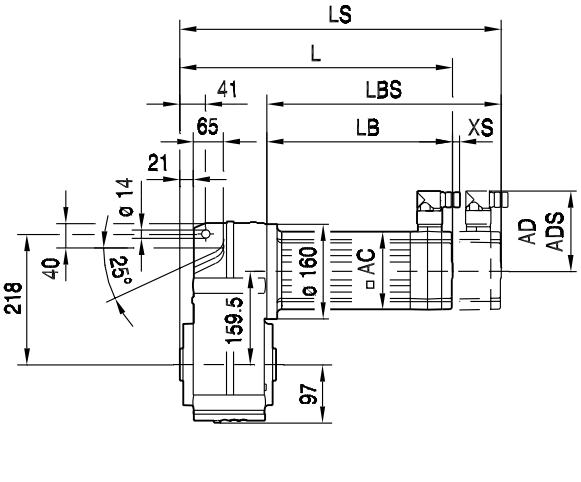
FVF67..

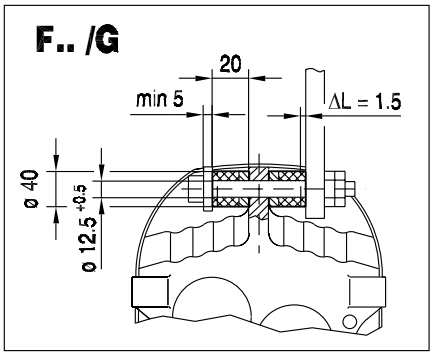


(→ 📖 150)	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L		
AC	73	73	73	88	88	88		
AD	82	82	82	89	89	89		
ADS	82	82	82	89	89	89		
L	403	442	481	437	487	537		
LS	432	471	510	466	516	566		
LB	139	178	217	173	223	273		
LBS	168	207	246	202	252	302		
XS	18	18	18	14	14	14		

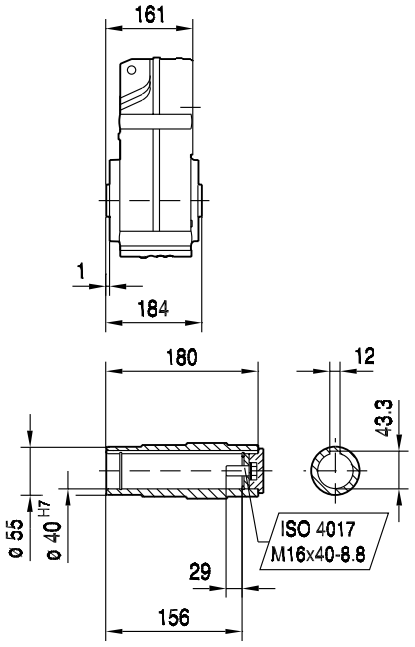
FA67..

42 029 00 07

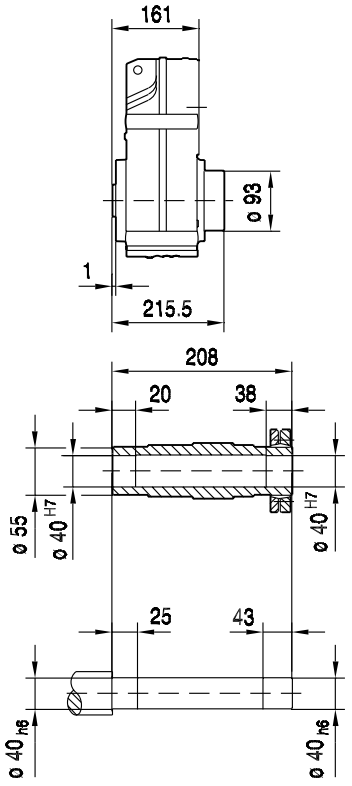




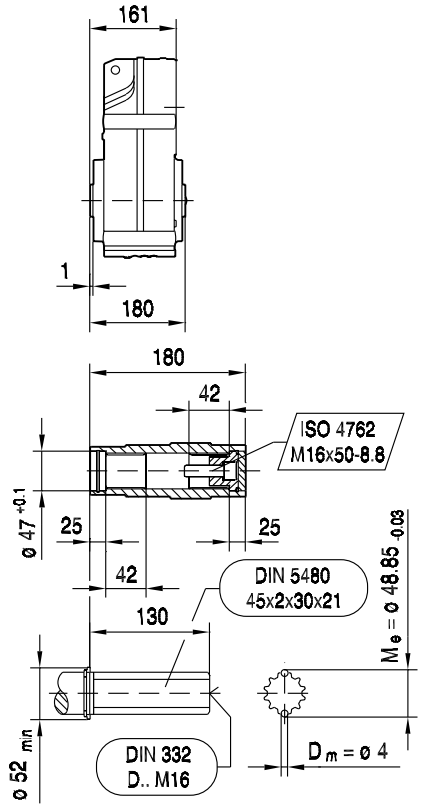
FA67..



FH67..



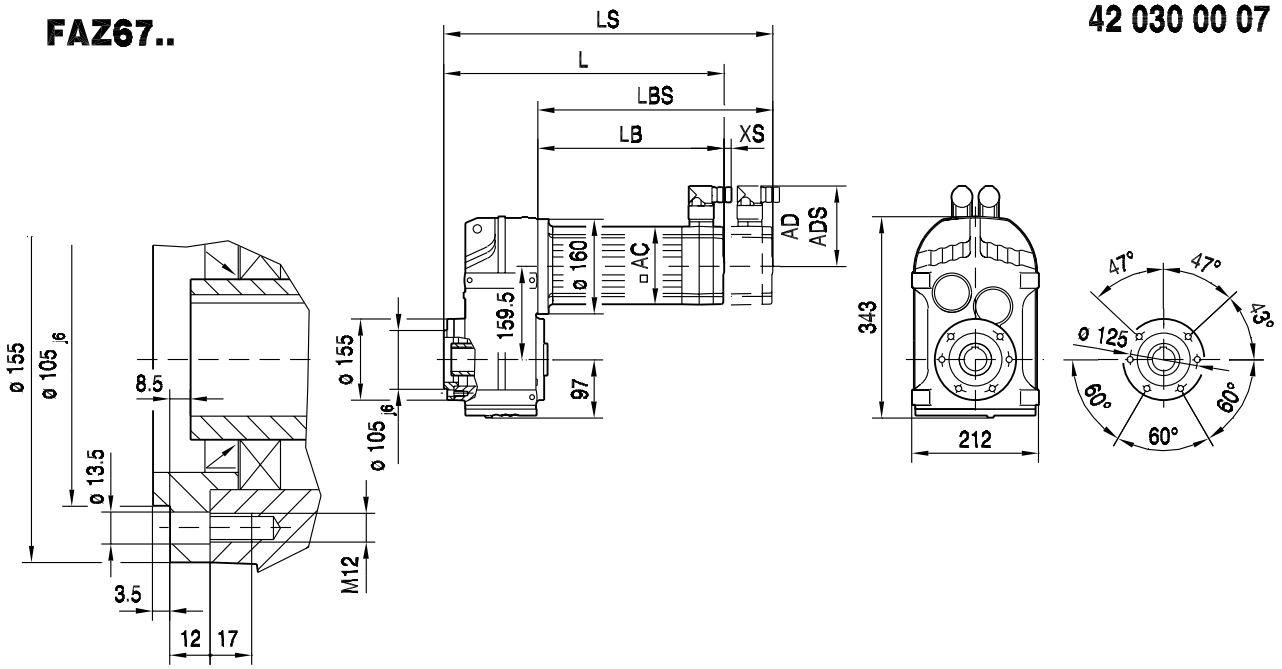
FV67..



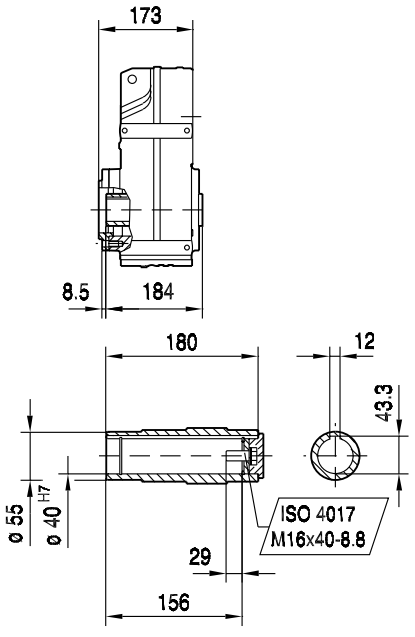
(→ 150)	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L		
AC	73	73	73	88	88	88		
AD	82	82	82	89	89	89		
ADS	82	82	82	89	89	89		
L	300	339	378	334	384	434		
LS	329	368	407	363	413	463		
LB	139	178	217	173	223	273		
LBS	168	207	246	202	252	302		
XS	18	18	18	14	14	14		

FAZ67..

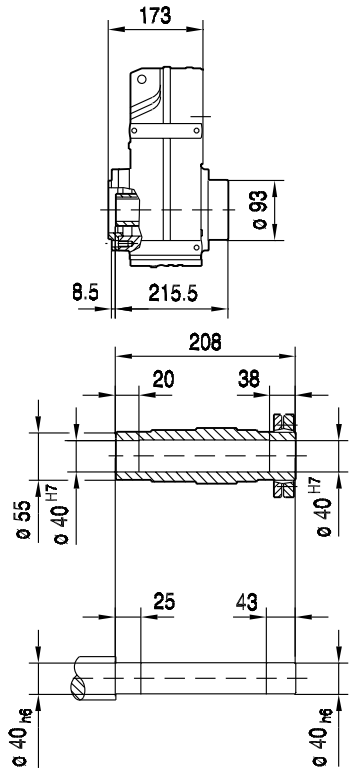
42 030 00 07



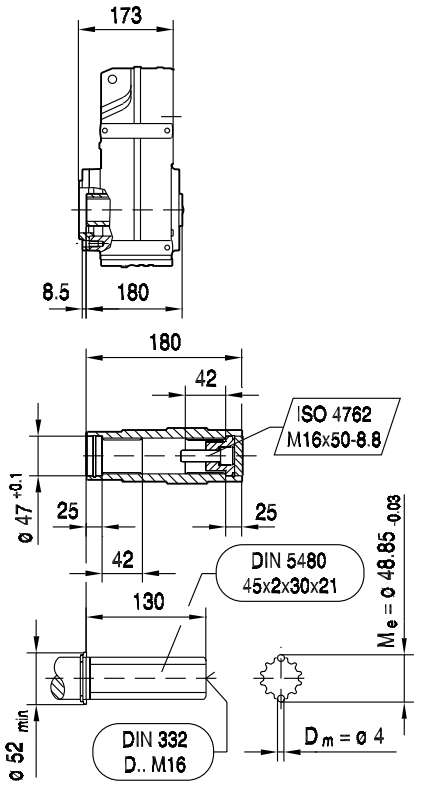
FAZ67..



FHZ67..



FVZ67..

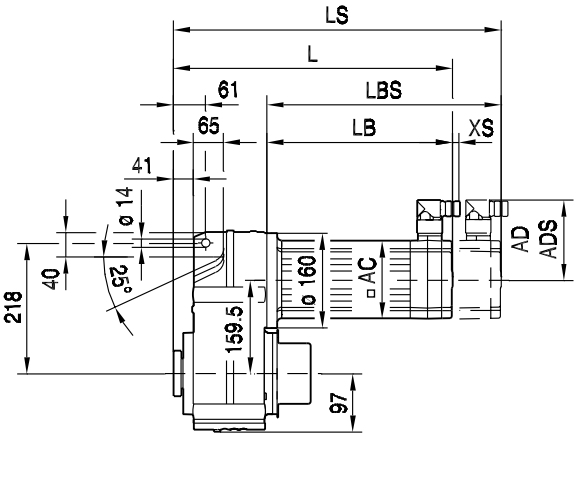


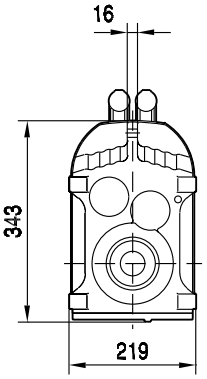
(→ 150)	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L		
AC	73	73	73	88	88	88		
AD	82	82	82	89	89	89		
ADS	82	82	82	89	89	89		
L	312	351	390	346	396	446		
LS	341	380	419	375	425	475		
LB	139	178	217	173	223	273		
LBS	168	207	246	202	252	302		
XS	18	18	18	14	14	14		

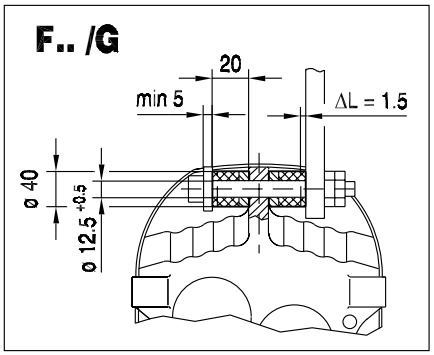


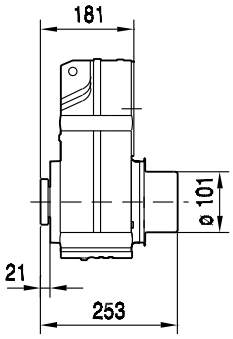
FT67..

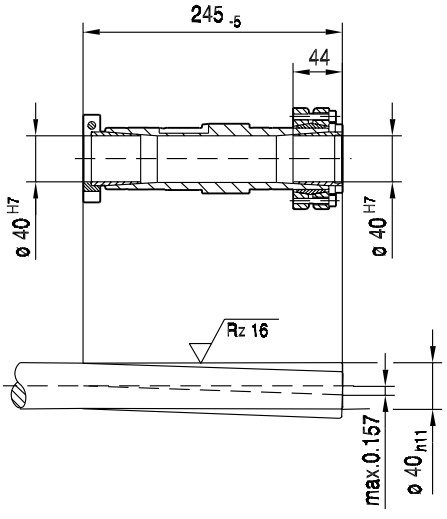
42 031 00 07

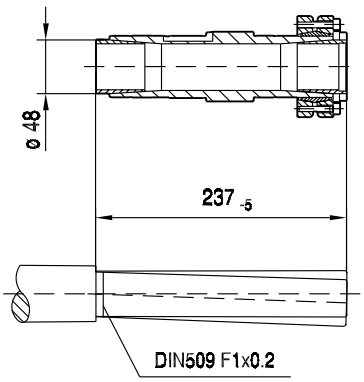




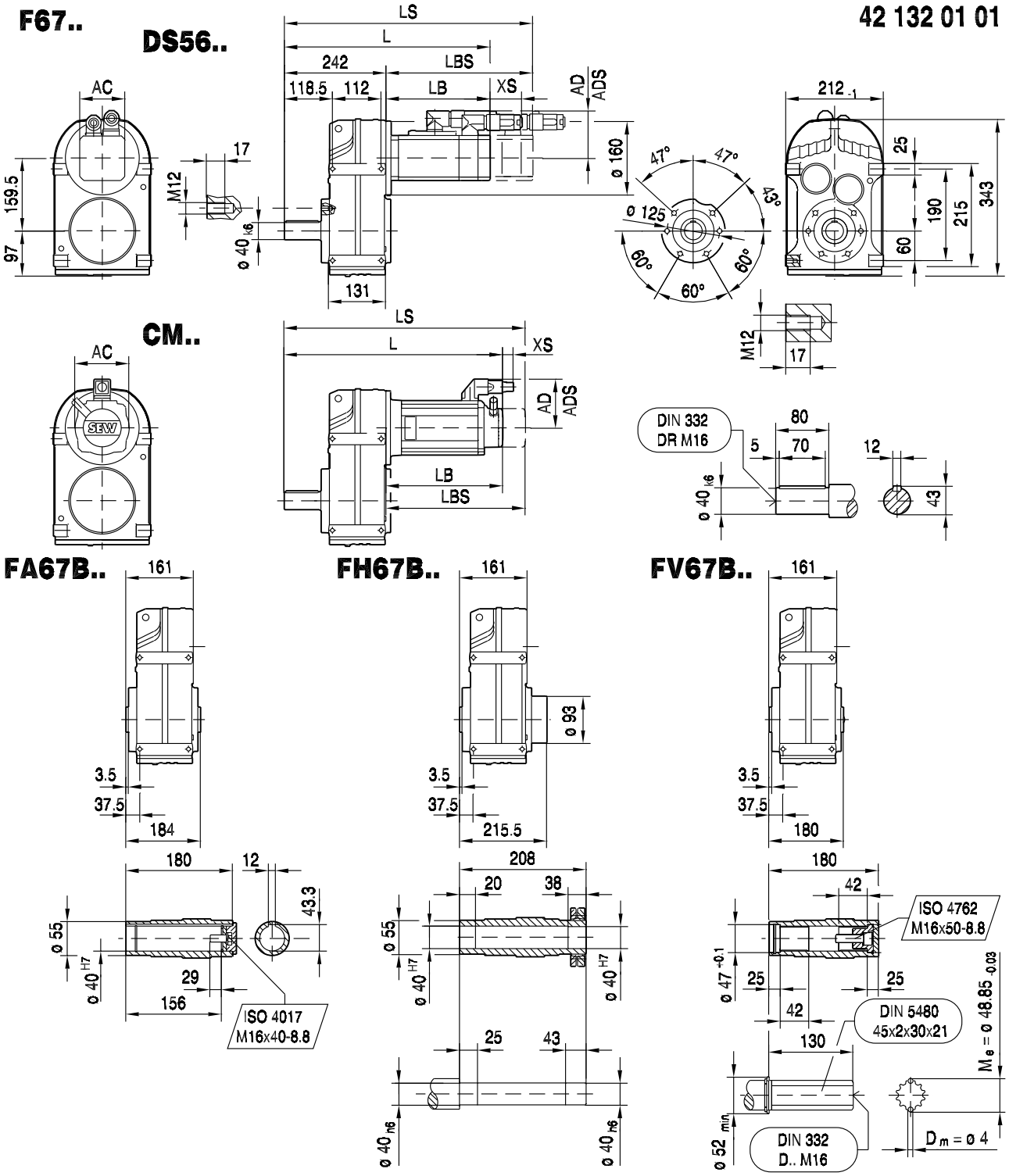








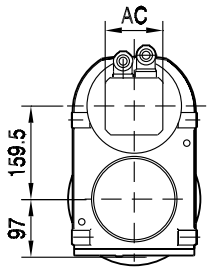
(→ 📖 150)	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L		
AC	73	73	73	88	88	88		
AD	82	82	82	89	89	89		
ADS	82	82	82	89	89	89		
L	319	358	397	354	404	454		
LS	348	387	426	382	432	482		
LB	139	178	217	173	223	273		
LBS	168	207	246	202	252	302		
XS	18	18	18	14	14	14		



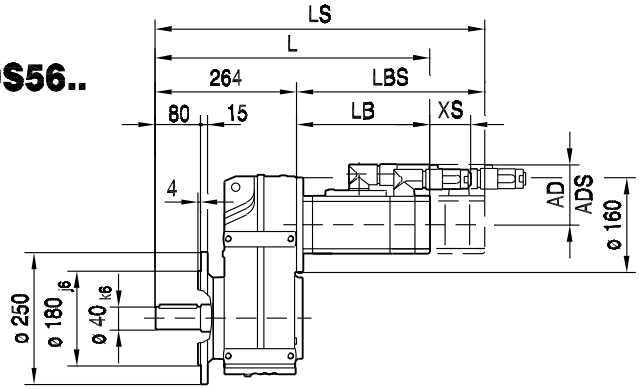
(→ 📖 150)	DS56H	CM71S	CM71M	CM71L	CM90S	CM90M	CM90L	CM112S	CM112M		
AC	73	117	117	117	142	142	142	186	186		
AD	77	122	122	122	140	140	140	162	162		
ADS	77	122	122	122	140	140	140	162	162		
L	508	474	494	534	526	553	611	566	590		
LS	508	556	576	616	622	649	707	656	680		
LB	266	232	252	292	284	311	369	324	348		
LBS	266	314	334	374	380	407	465	414	438		
XS	51	45	45	45	50	50	50	36	36		

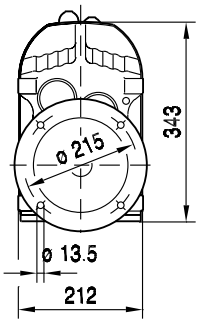
42 133 01 01

FF67..

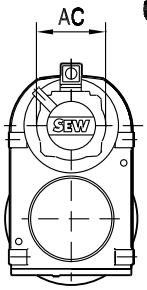


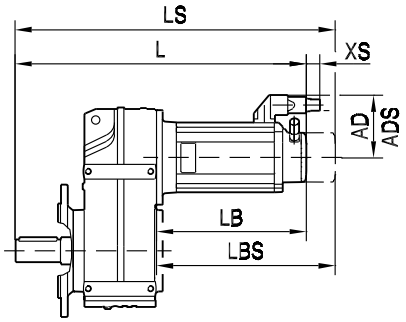
DS56..

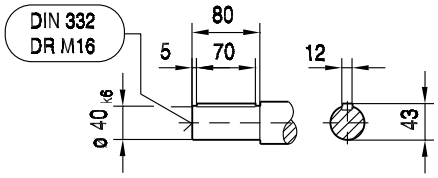




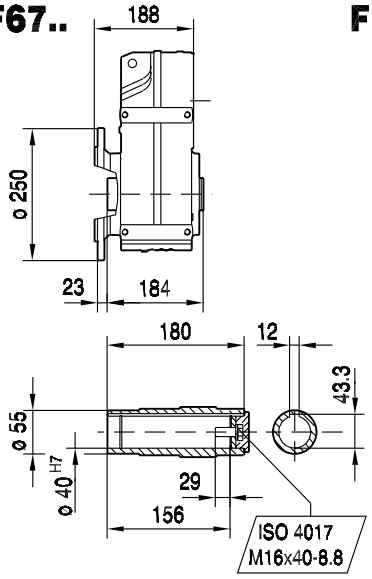
CM..



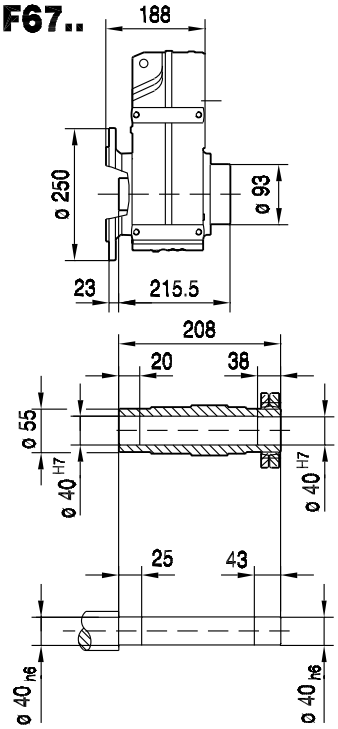




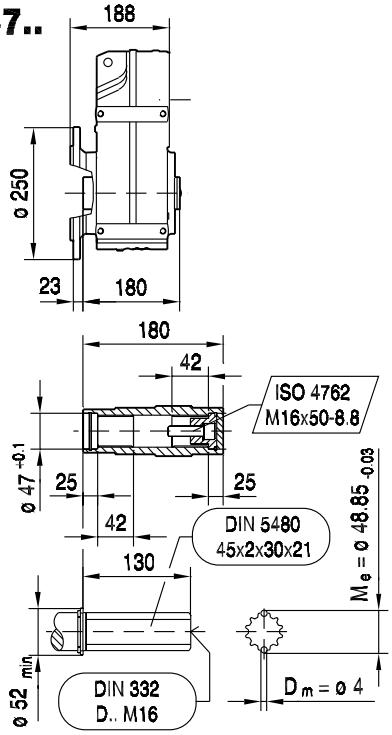
FAF67..



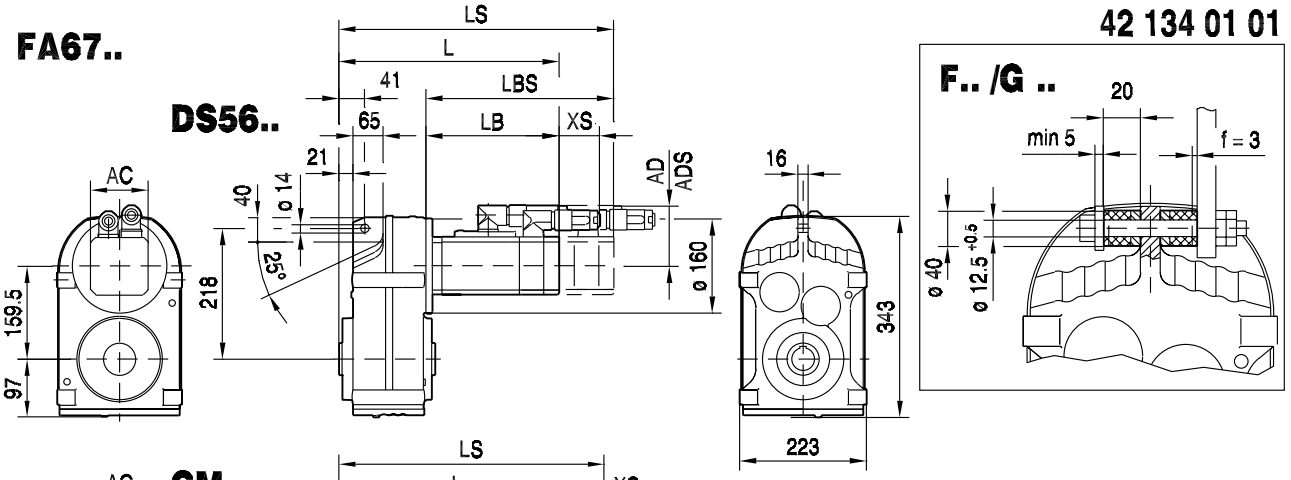
FHF67..

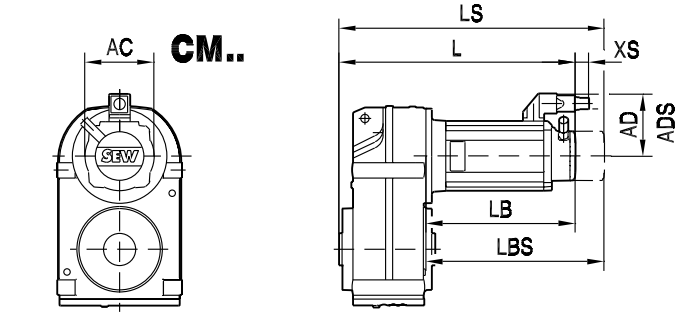


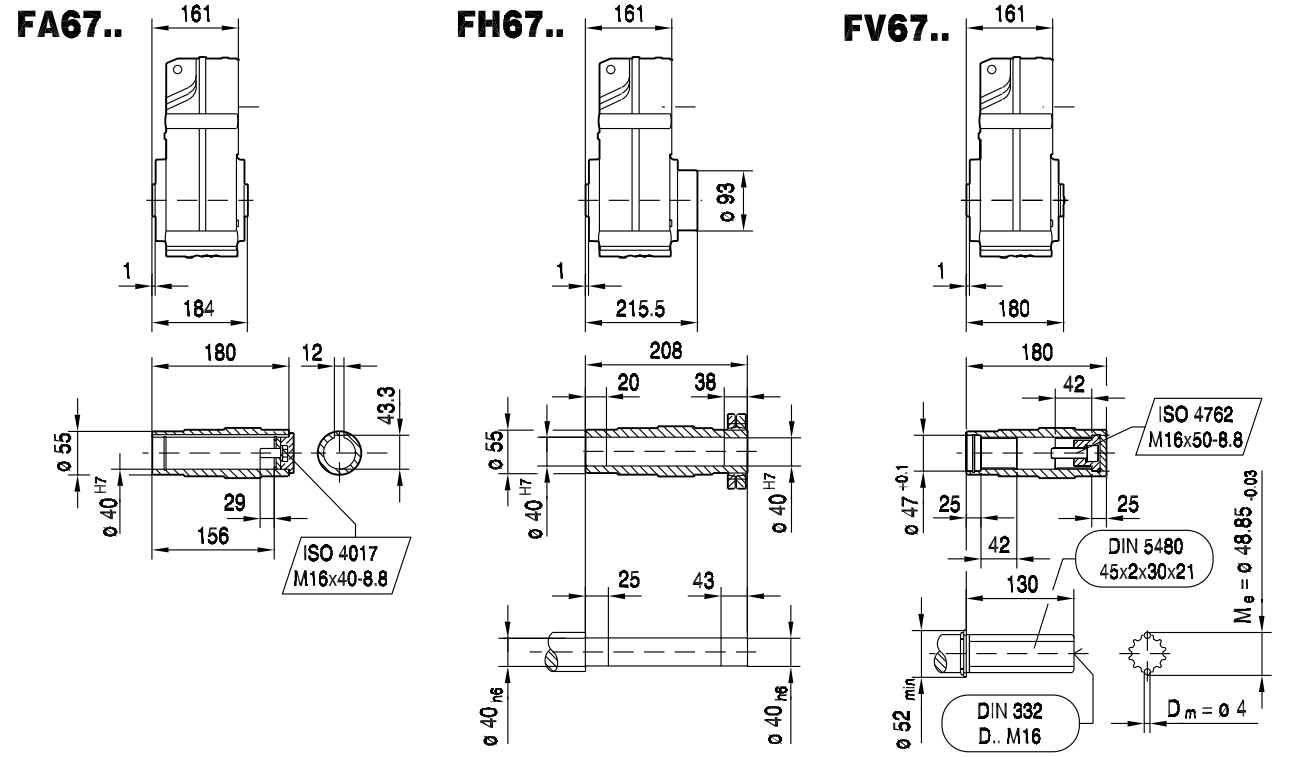
FVF67..



(→ 150)	DS56H	CM71S	CM71M	CM71L	CM90S	CM90M	CM90L	CM112S	CM112M		
AC	73	117	117	117	142	142	142	186	186		
AD	77	122	122	122	140	140	140	162	162		
ADS	77	122	122	122	140	140	140	162	162		
L	530	496	516	556	548	575	633	588	612		
LS	530	578	598	638	644	671	729	678	702		
LB	266	232	252	292	284	311	369	324	348		
LBS	266	314	334	374	380	407	465	414	438		
XS	51	45	45	45	50	50	50	36	36		



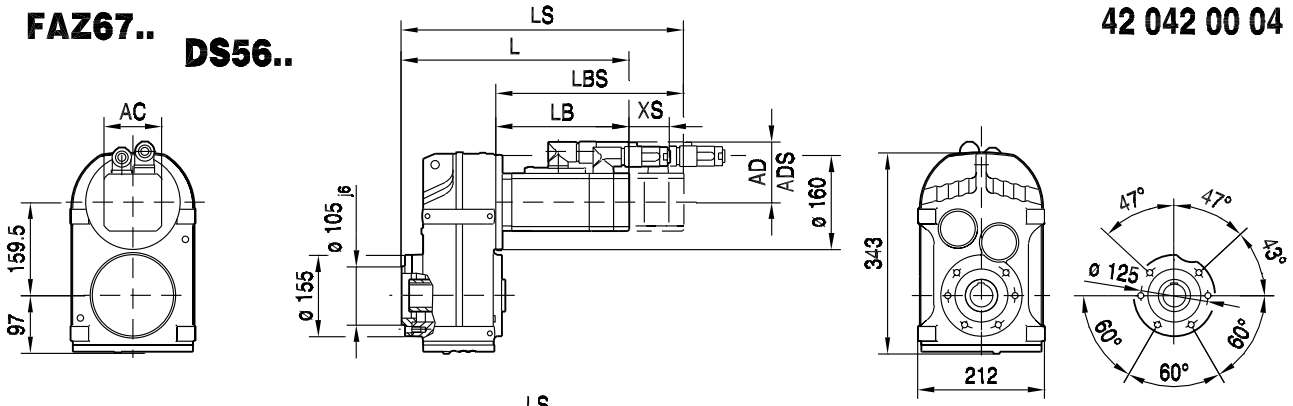




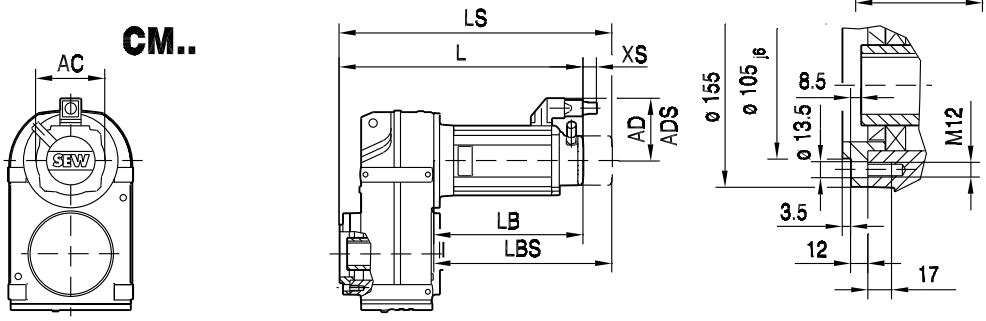
(→ 150)	DS56H	CM71S	CM71M	CM71L	CM90S	CM90M	CM90L	CM112S	CM112M		
AC	73	117	117	117	142	142	142	186	186		
AD	77	122	122	122	140	140	140	162	162		
ADS	77	122	122	122	140	140	140	162	162		
L	427	393	413	453	445	472	530	485	509		
LS	427	475	495	535	541	568	626	575	599		
LB	266	232	252	292	284	311	369	324	348		
LBS	266	314	334	374	380	407	465	414	438		
XS	51	45	45	45	50	50	50	36	36		

FAZ67.. DS56..

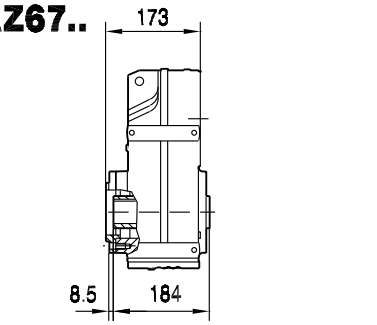
42 042 00 04



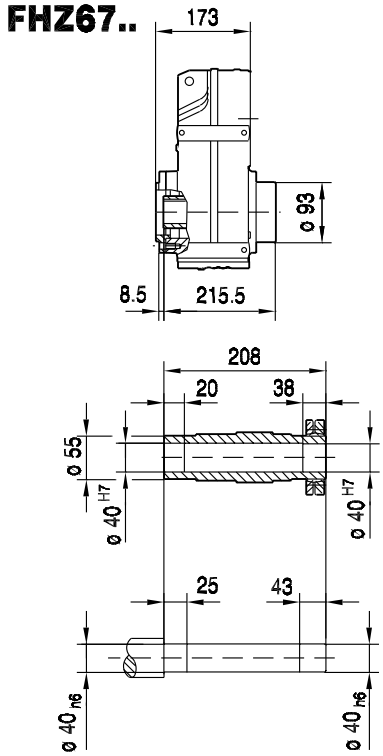
CM..



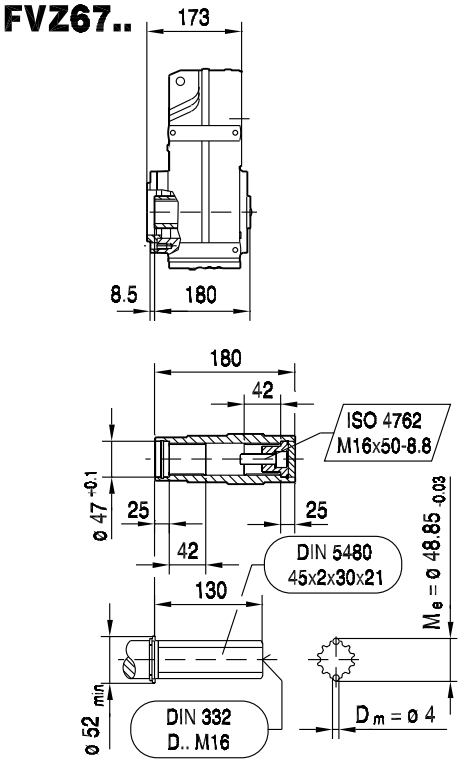
FAZ67..



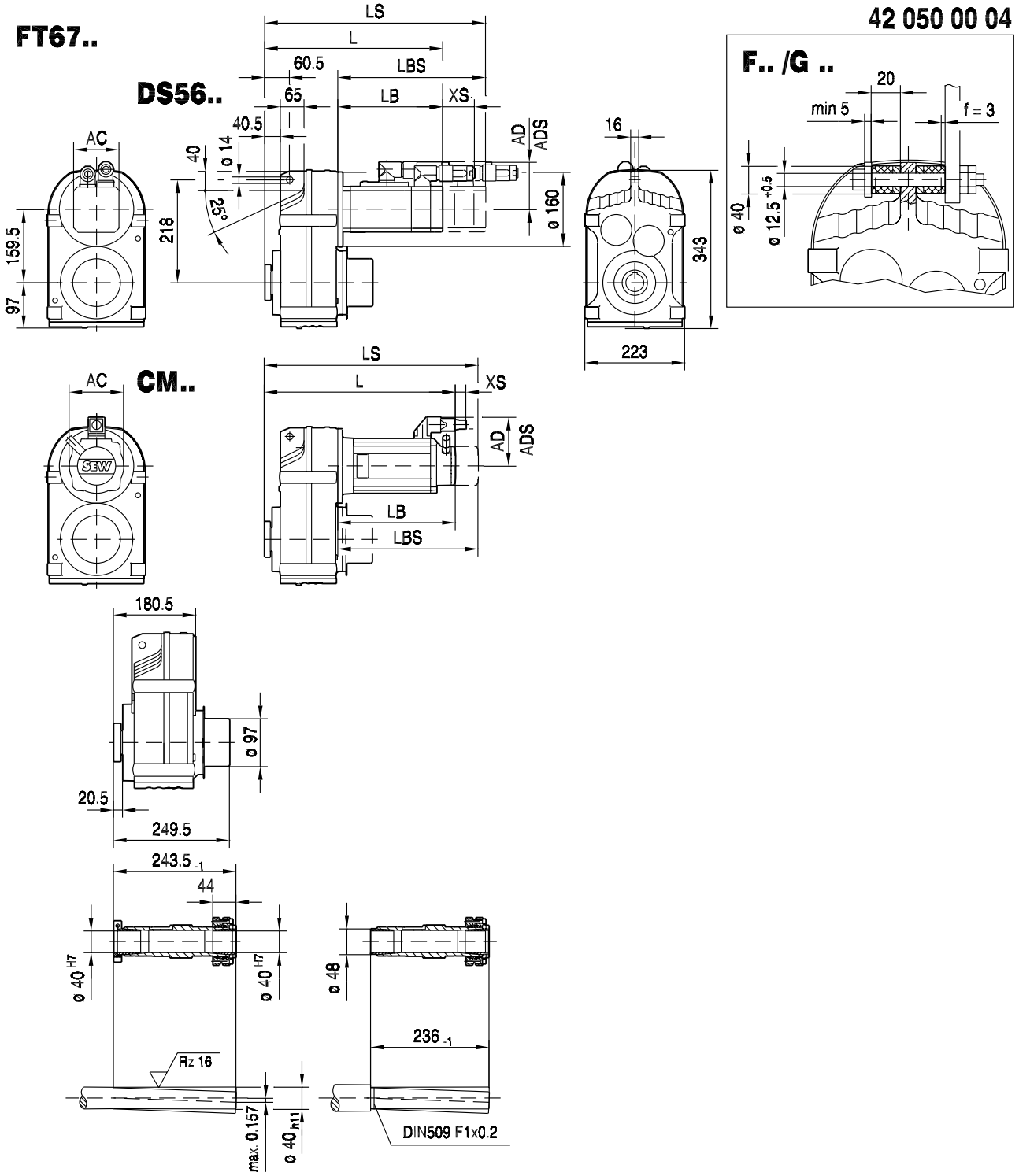
FHZ67..



FVZ67..



(→ 150)	DS56H	CM71S	CM71M	CM71L	CM90S	CM90M	CM90L	CM112S	CM112M		
AC	73	117	117	117	142	142	142	186	186		
AD	77	122	122	122	140	140	140	162	162		
ADS	77	122	122	122	140	140	140	162	162		
L	439	405	425	465	457	484	542	497	521		
LS	439	487	507	547	553	580	638	587	611		
LB	266	232	252	292	284	311	369	324	348		
LBS	266	314	334	374	380	407	465	414	438		
XS	51	45	45	45	50	50	50	36	36		



(→ 📖 150)	DS56H	CM71S	CM71M	CM71L	CM90S	CM90M	CM90L	CM112S	CM112M		
AC	73	117	117	117	142	142	142	186	186		
AD	77	122	122	122	140	140	140	162	162		
ADS	77	122	122	122	140	140	140	162	162		
L	446	412	432	472	465	492	550	505	529		
LS	446	494	514	554	560	587	645	595	619		
LB	266	232	252	292	284	311	369	324	348		
LBS	266	314	334	374	380	407	465	414	438		
XS	51	45	45	45	50	50	50	36	36		

9.12 F 77 / CMP / CM [Nm]

M_{aDyn} [Nm]		CMP			CM								
	i	63S	63M	63L	71S	71M	71L	90S	90M	90L	112S	112M	112L
FA77 2	4.28			126			130	164	217	314	342	450	654
	5.16			152			157	198	261	378	412	543	788
	5.76	62	120	170	92	120	175	221	292	422	460	606	880
	6.64	71	138	196	106	138	202	255	336	487	530	699	1014
	7.39	80	153	218	118	154	225	284	374	542	590	778	1129
	8.26	89	171	244	132	172	252	317	418	606	659	869	1262
	9.3	100	193	274	149	194	283	357	471	682	742	979	>1330
	10.93			322			333	420	553	802	873	1150	>1530
	12.2	131	253	360	195	254	372	469	618	895	974	1284	>1530
	14.06	151	292	415	225	293	428	540	712	1031	1122	1480	>1530
	15.64	168	325	461	250	326	476	601	792	1147	1249	>1530	>1530
	17.49	188	363	516	280	365	533	672	886	1283	1396	>1530	>1530
	19.7	212	409	581	315	411	600	757	997	1445	>1530	>1530	>1530
	21.43	231	445	632	343	447	653	823	1085	>1530	>1530		
	25.5	275	529	752	408	532	777	980	1291	>1530	>1530		
	28.75	310	597	848	460	600	876	1104	1456				
	31.51	339	654	929	504	657	960	1210	>1530				
	36.58	394	759	1079	585	763	1114	1405					
FA77 3	25.54	269	519	738	400	522	762	961	1267	>1530	>1530	>1530	>1530
	29.91	315	608	864	469	611	892	1125	1483	>1530	>1530	>1530	>1530
	33.74	356	686	974	529	689	1006	1269	>1530	>1530	>1530	>1530	>1530
	38.23	403	777	1104	599	781	1140	1438	>1530	>1530	>1530	>1530	>1530
	43.58	460	886	1259	683	890	1300	>1530	>1530	>1530	>1530	>1530	>1530
	48.37	510	983	1397	758	988	1443	>1530	>1530	>1530	>1530		
	55.27	583	1124	>1530	866	1129	>1530	>1530	>1530	>1530	>1530		
	58.32	615	1186	>1530	914	1191	>1530	>1530	>1530	>1530	>1530		
	66.46	701	1351	>1530	1042	1357	>1530	>1530	>1530				
	72.5	765	1474	>1530	1136	1481	>1530	>1530	>1530				
	75.02	791	1525	>1530	1176	>1530	>1530	>1530	>1530	>1530	>1530		
	85.52	902	>1530	>1530	1341	>1530	>1530	>1530	>1530	>1530	>1530		
	94.93	1001	>1530	>1530	1488	>1530	>1530	>1530	>1530	>1530	>1530		
	108.46	1144	>1530	>1530	>1530	>1530	>1530	>1530	>1530	>1530	>1530		
	114.45	1207	>1530	>1530	>1530	>1530	>1530	>1530	>1530	>1530	>1530		
	130.42	1375	>1530	>1530	>1530	>1530	>1530	>1530	>1530				
	142.27	1500	>1530	>1530	>1530	>1530	>1530	>1530	>1530				
	166.47	>1530	>1530	>1530	>1530	>1530	>1530	>1530					
	188.4	>1530	>1530		>1530	>1530							
	198.31	>1530	>1530		>1530	>1530							
	225.79	>1530											
	262.93												
	281.71												

m [kg]		CMP			CM								
	s	63S	63M	63L	71S	71M	71L	90S	90M	90L	112S	112M	112L
FA77	2	54	55	57	57	59	62	67	69	74	75	80	94
FA77	3	55	56	58	59	60	64	68	71	76	77	81	96
FAF: + 6.6 kg / F: + 3.8 kg / FF: + 14.4 kg													



F..CMP, DS, CM
F 77 / CMP / CM [Nm]

CMP.. / CM..	i	n_{epk} [1/min]	η [%]	c_T FA [Nm/']	c_T FAF [Nm/']	c_T F [Nm/']	c_T FF [Nm/']	φ /R [']
FA77 2	4.28	4500	97	263.21	263.21	131.94	106.2	8
	5.16	4500	97	263.21	263.21	131.94	106.2	8
	5.76	4500	97	263.21	263.21	131.94	106.2	8
	6.64	4500	97	263.21	263.21	131.94	106.2	8
	7.39	4500	97	263.21	263.21	131.94	106.2	7
	8.26	4500	97	263.21	263.21	131.94	106.2	7
	9.3	4500	97	263.21	263.21	131.94	106.2	7
	10.93	4500	97	351.36	351.36	150.92	118.16	6
	12.2	4500	97	351.36	351.36	150.92	118.16	5
	14.06	4500	97	351.36	351.36	150.92	118.16	5
	15.64	4500	97	351.36	351.36	150.92	118.16	5
	17.49	4500	97	351.36	351.36	150.92	118.16	5
	19.7	4500	97	351.36	351.36	150.92	118.16	5
	21.43	4500	97	351.36	351.36	150.92	118.16	5
	25.5	4500	97	351.36	351.36	150.92	118.16	5
	28.75	4500	97	351.36	351.36	150.92	118.16	5
	31.51	4500	97	351.36	351.36	150.92	118.16	5
	36.58	4500	97	351.36	351.36	150.92	118.16	5
FA77 3	25.54	4500	95	388.05	388.05	157.3	122.04	6
	29.91	4500	95	388.05	388.05	157.3	122.04	6
	33.74	4500	95	388.05	388.05	157.3	122.04	6
	38.23	4500	95	388.05	388.05	157.3	122.04	6
	43.58	4500	95	388.05	388.05	157.3	122.04	6
	48.37	4500	95	388.05	388.05	157.3	122.04	6
	55.27	4500	95	388.05	388.05	157.3	122.04	6
	58.32	4500	95	388.05	388.05	157.3	122.04	6
	66.46	4500	95	388.05	388.05	157.3	122.04	6
	72.5	4500	95	388.05	388.05	157.3	122.04	6
	75.02	4500	95	394.36	394.36	158.33	122.65	6
	85.52	4500	95	394.36	394.36	158.33	122.65	6
	94.93	4500	95	394.36	394.36	158.33	122.65	5
	108.46	4500	95	394.36	394.36	158.33	122.65	5
	114.45	4500	95	394.36	394.36	158.33	122.65	5
	130.42	4500	95	394.36	394.36	158.33	122.65	5
	142.27	4500	95	394.36	394.36	158.33	122.65	5
	166.47	4500	95	394.36	394.36	158.33	122.65	5
	188.4	4500	95	394.36	394.36	158.33	122.65	5
	198.31	4500	95	394.36	394.36	158.33	122.65	5
	225.79	4500	95	394.36	394.36	158.33	122.65	5
	262.93	4500	95	394.36	394.36	158.33	122.65	5
	281.71	4500	95	394.36	394.36	158.33	122.65	5

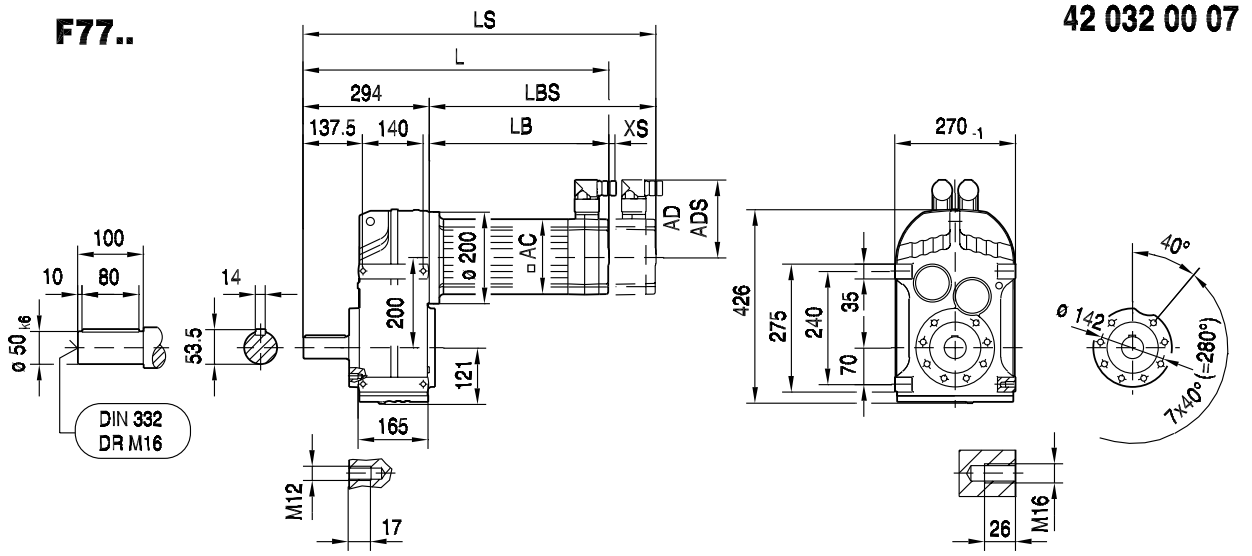


CMP.. / CM..							F_{Ramax}				F_{Rapk}			
	i	M_{amax} [Nm]	M_{apk} [Nm]	$M_{aNotaus}$ [Nm]	n_{ak} [1/min]	J_G 10^{-4} [kgm^2]	FA [N]	FAF [N]	F [N]	FF [N]	FA [N]	FAF [N]	F [N]	FF [N]
	4.28	1010	1310	1717	327	42	630	630	10200	10900	20000	20000	16900	17400
	5.16	1080	1320	1836	271	31	640	640	10700	11500	20000	20000	16800	17400
	5.76	1080	1320	1836	295	26	930	930	11300	12000	20000	20000	16800	17400
	6.64	1080	1320	1836	346	20	1310	1310	12000	12700	20000	20000	16800	17400
	7.39	1080	1330	1836	365	17	1610	1610	12500	13300	20000	20000	16800	17400
	8.26	1080	1330	1836	400	14	1940	1940	13100	13900	20000	20000	16800	17400
	9.3	1080	1330	1836	430	12	2300	2300	13800	14600	20000	20000	16800	17400
	10.93	1500	1530	2550	183	19	2080	2080	14200	15100	20000	20000	15500	17000
FA77	12.2	1500	1530	2550	205	16	2450	2450	14900	15800	20000	20000	15500	17000
2	14.06	1500	1530	2550	220	13	2940	2940	15700	16700	20000	20000	15500	17000
	15.64	1500	1530	2550	237	11	3330	3330	15700	17100	20000	20000	15500	17000
	17.49	1500	1530	2550	252	9.5	3750	3750	15700	17100	20000	20000	15500	17000
	19.7	1500	1530	2550	264	7.9	4220	4220	15700	17100	20000	20000	15500	17000
	21.43	1500	1530	2550	275	7.1	4560	4560	15700	17100	20000	20000	15500	17000
	25.5	1500	1530	2550	275	5.5	5300	5300	15700	17100	20000	20000	15500	17000
	28.75	1430	1530	2431	243	4.4	6190	6190	16200	17300	20000	20000	15500	17000
	31.51	1380	1530	2346	222	3.8	6870	6870	16500	17500	20000	20000	15500	17000
	36.58	1110	1530	1887	191	3.0	8990	8990	17900	18300	20000	20000	15500	17000
	25.54	1450	1530	2465	59	10	5560	5560	16100	17300	20000	20000	15500	17000
	29.91	1500	1530	2550	50	7.8	6010	6010	15700	17100	20000	20000	15500	17000
	33.74	1500	1530	2550	50	6.4	6580	6580	15700	17100	20000	20000	15500	17000
	38.23	1500	1530	2550	50	5.2	7190	7190	15700	17100	20000	20000	15500	17000
	43.58	1500	1530	2550	50	4.3	7850	7850	15700	17100	20000	20000	15500	17000
	48.37	1500	1530	2550	52	3.8	8410	8410	15700	17100	20000	20000	15500	17000
	55.27	1500	1530	2550	52	3.0	9140	9140	15700	17100	20000	20000	15500	17000
	58.32	1500	1530	2550	51	2.8	9450	9450	15700	17100	20000	20000	15500	17000
	66.46	1500	1530	2550	53	2.2	10200	10200	15700	17100	20000	20000	15500	17000
	72.5	1500	1530	2550	52	1.9	10700	10700	15700	17100	20000	20000	15500	17000
FA77	75.02	1500	1530	2550	53	4.0	11000	11000	15700	17100	20000	20000	15500	17000
3	85.52	1500	1530	2550	53	3.3	11800	11800	15700	17100	20000	20000	15500	17000
	94.93	1500	1530	2550	54	3.0	12500	12500	15700	17100	20000	20000	15500	17000
	108.46	1500	1530	2550	53	2.5	13400	13400	15700	17100	20000	20000	15500	17000
	114.45	1500	1530	2550	54	2.3	13800	13800	15700	17100	20000	20000	15500	17000
	130.42	1500	1530	2550	54	1.9	14800	14800	15700	17100	20000	20000	15500	17000
	142.27	1500	1530	2550	49	1.6	15400	15400	15700	17100	20000	20000	15500	17000
	166.47	1500	1530	2550	42	1.3	16700	16700	15700	17100	20000	20000	15500	17000
	188.4	1500	1530	2550	37	0.91	17700	17700	15700	17100	20000	20000	15500	17000
	198.31	1500	1530	2550	35	0.82	18100	18100	15700	17100	20000	20000	15500	17000
	225.79	1500	1530	2550	31	0.67	19300	19300	15700	17100	20000	20000	15500	17000
	262.93	1500	1530	2550	27	0.54	20000	20000	15700	17100	20000	20000	15500	17000
	281.71	1500	1530	2550	25	0.47	20000	20000	15700	17100	20000	20000	15500	17000

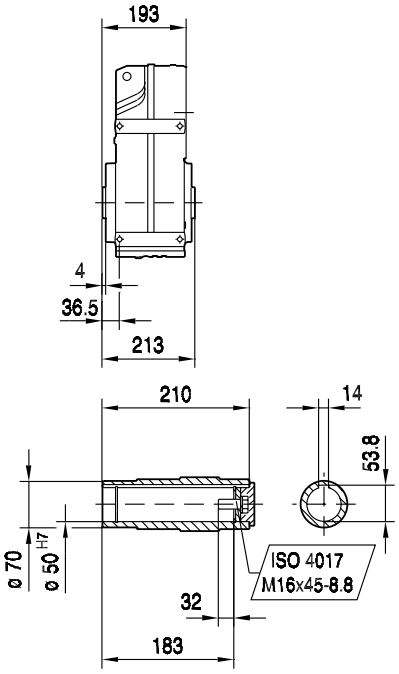
9.13 F 77 / CMP / CM [mm]

F77..

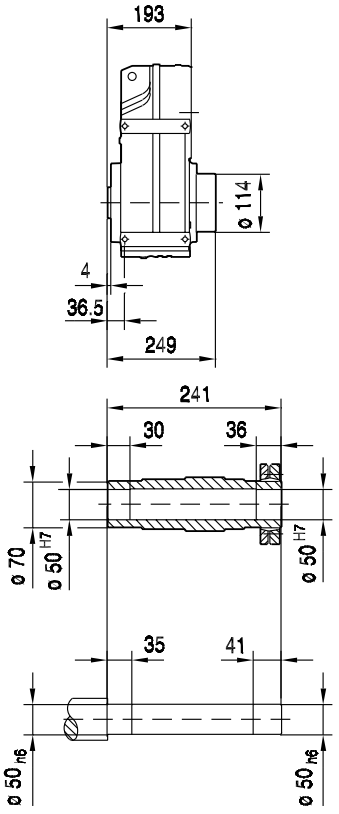
42 032 00 07



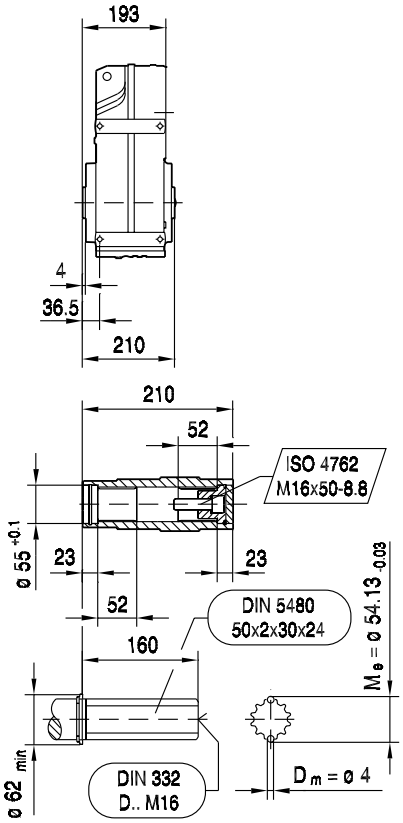
FA77B..



FH77B..



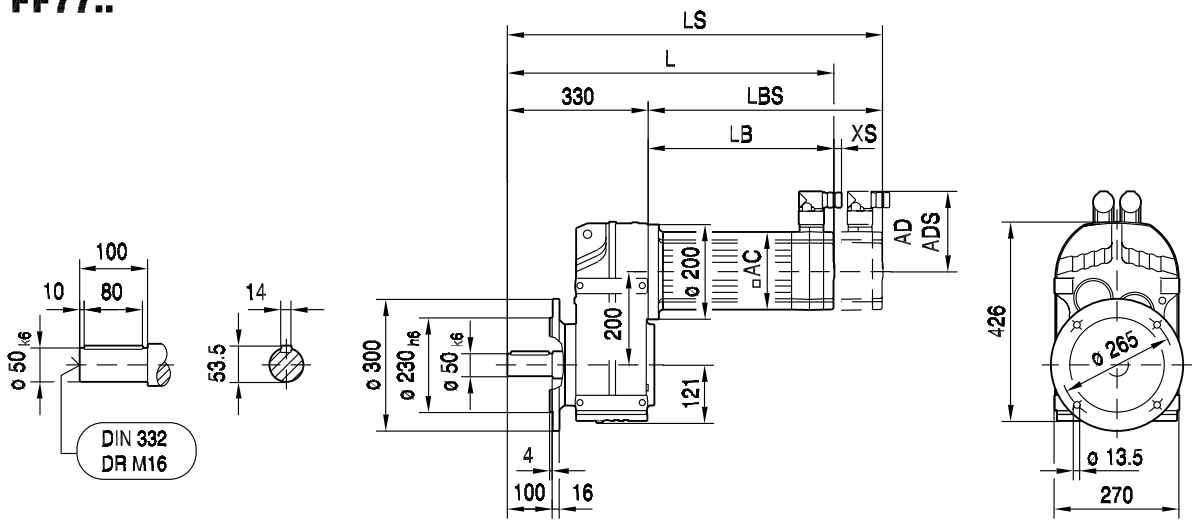
FV77B..



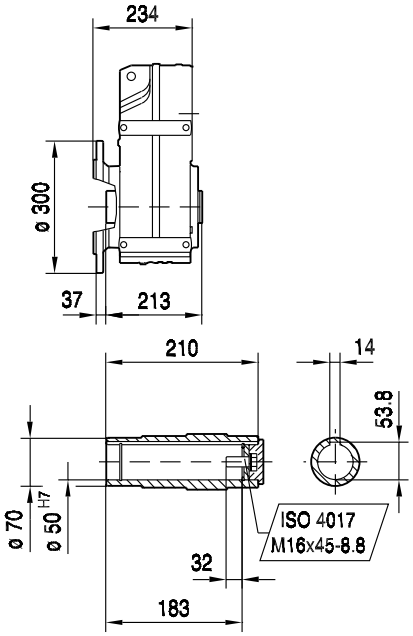
(→ 150)	CMP63S	CMP63M	CMP63L					
AC	88	88	88					
AD	89	89	89					
ADS	89	89	89					
L	461	511	561					
LS	490	540	590					
LB	167	217	267					
LBS	196	246	296					
XS	14	14	14					

FF77..

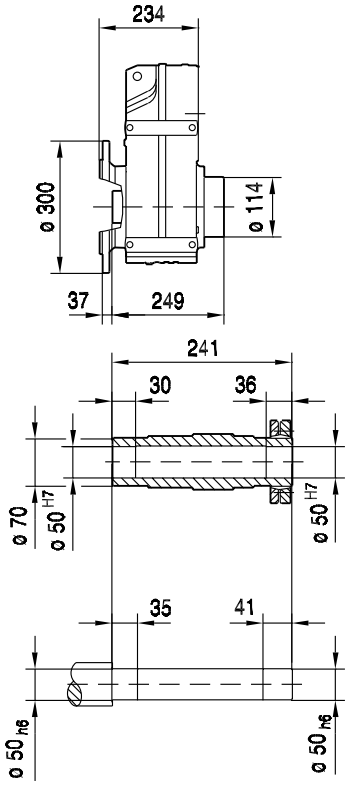
42 033 00 07



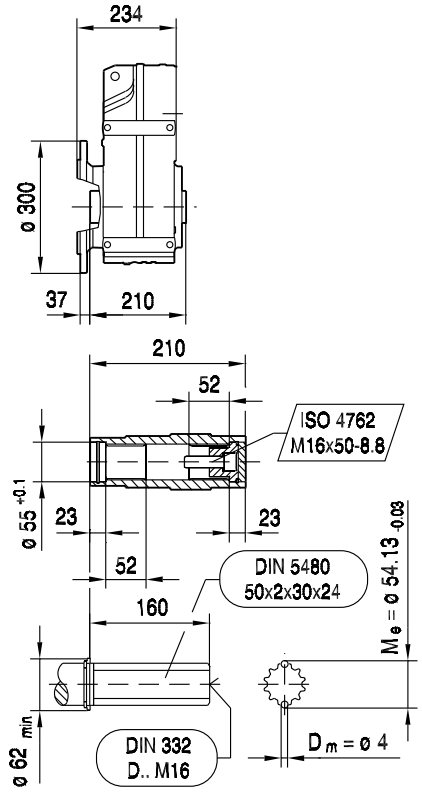
FAF77..



FHF77..



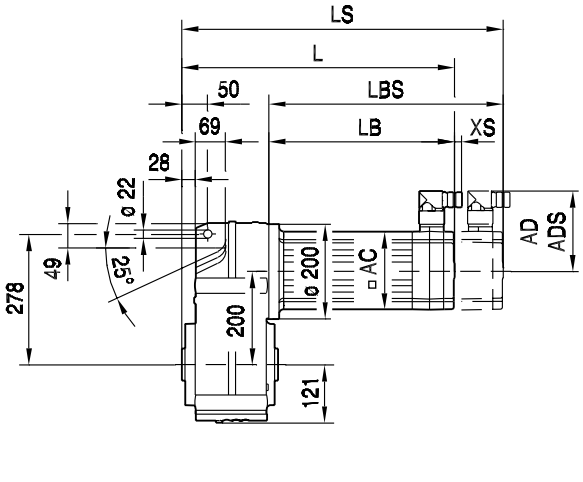
FVF77..

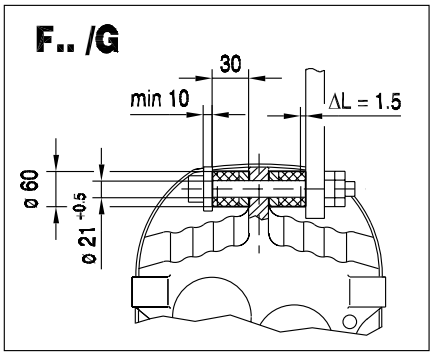


(→ 150)	CMP63S	CMP63M	CMP63L					
AC	88	88	88					
AD	89	89	89					
ADS	89	89	89					
L	497	547	597					
LS	526	576	626					
LB	167	217	267					
LBS	196	246	296					
XS	14	14	14					

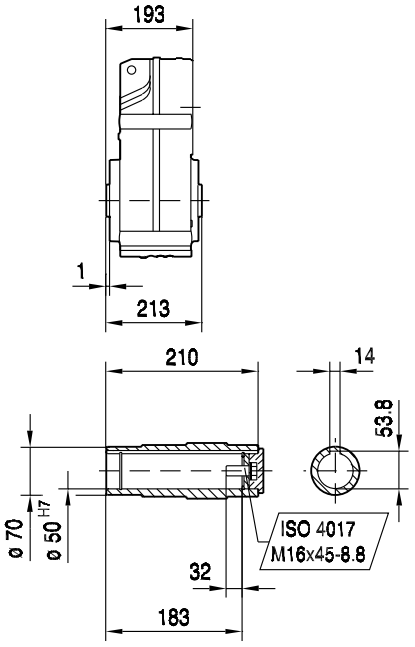
FA77..

42 034 00 07

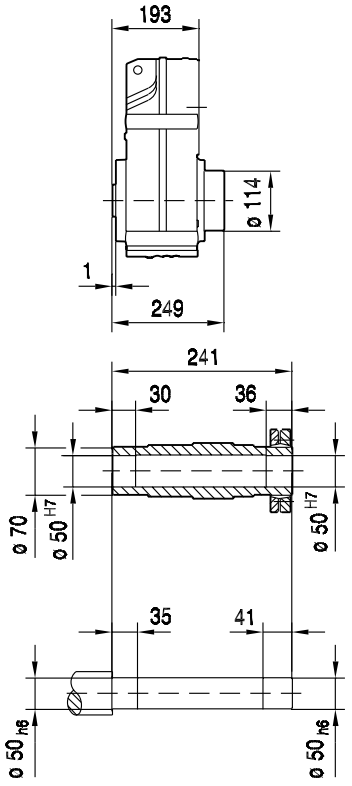




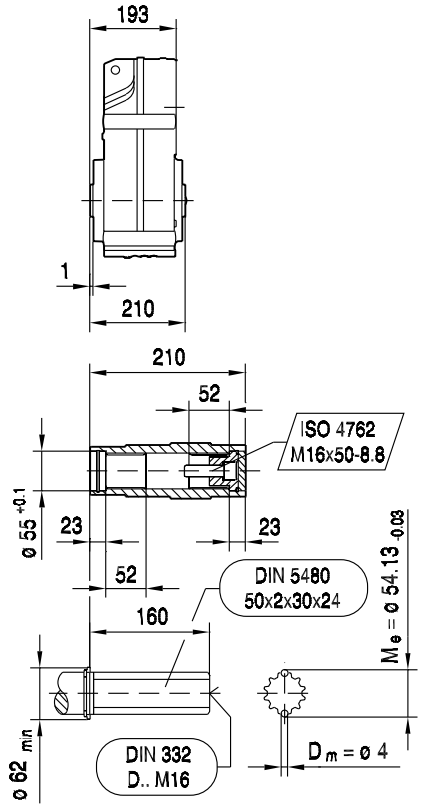
FA77..



FH77..



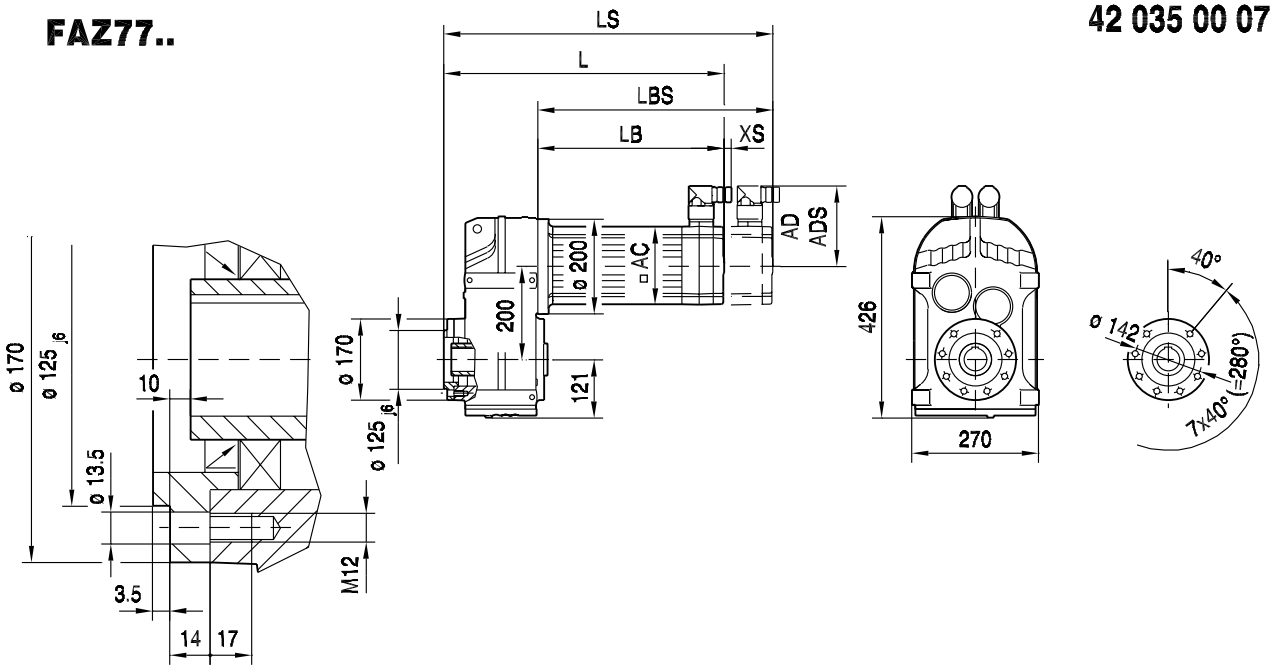
FV77..



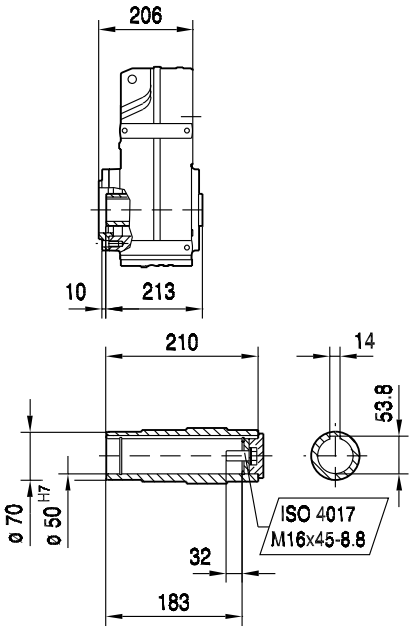
(→ 150)	CMP63S	CMP63M	CMP63L					
AC	88	88	88					
AD	89	89	89					
ADS	89	89	89					
L	360	410	460					
LS	389	439	489					
LB	167	217	267					
LBS	196	246	296					
XS	14	14	14					

FAZ77..

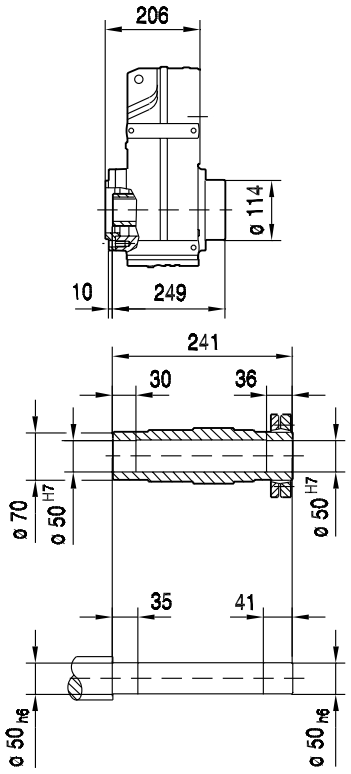
42 035 00 07



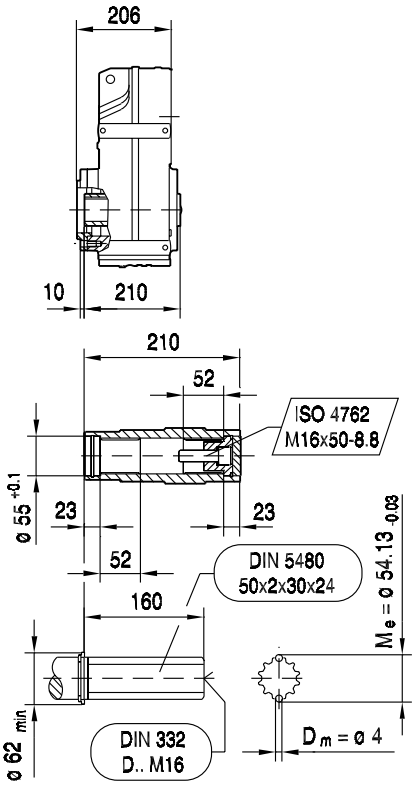
FAZ77..



FHZ77..



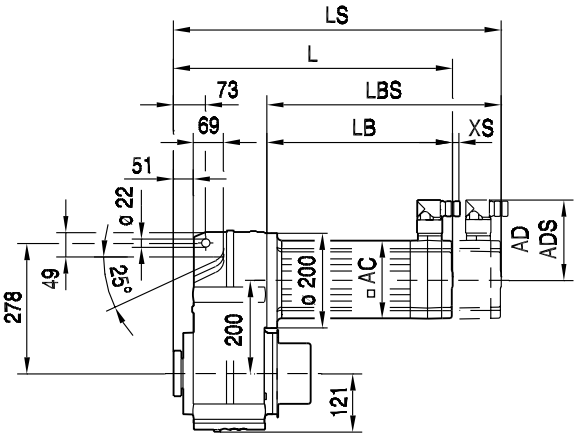
FVZ77..

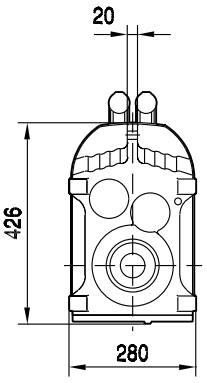


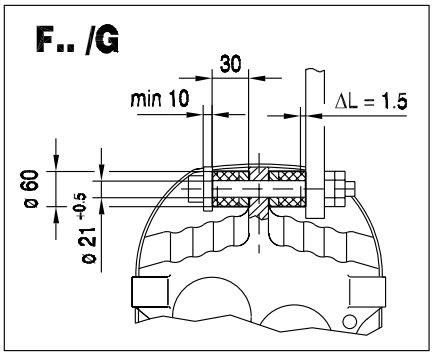
(→ 150)	CMP63S	CMP63M	CMP63L					
AC	88	88	88					
AD	89	89	89					
ADS	89	89	89					
L	373	423	473					
LS	402	452	502					
LB	167	217	267					
LBS	196	246	296					
XS	14	14	14					

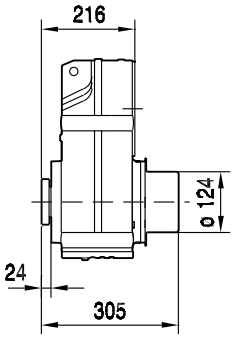
FT77..

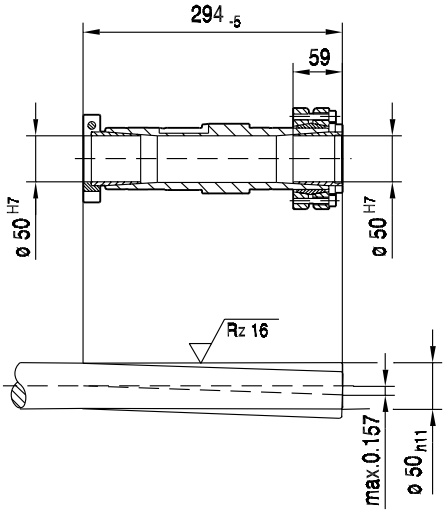
42 036 00 07

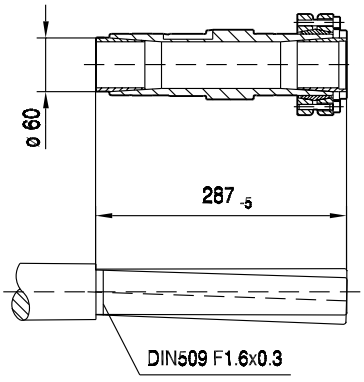








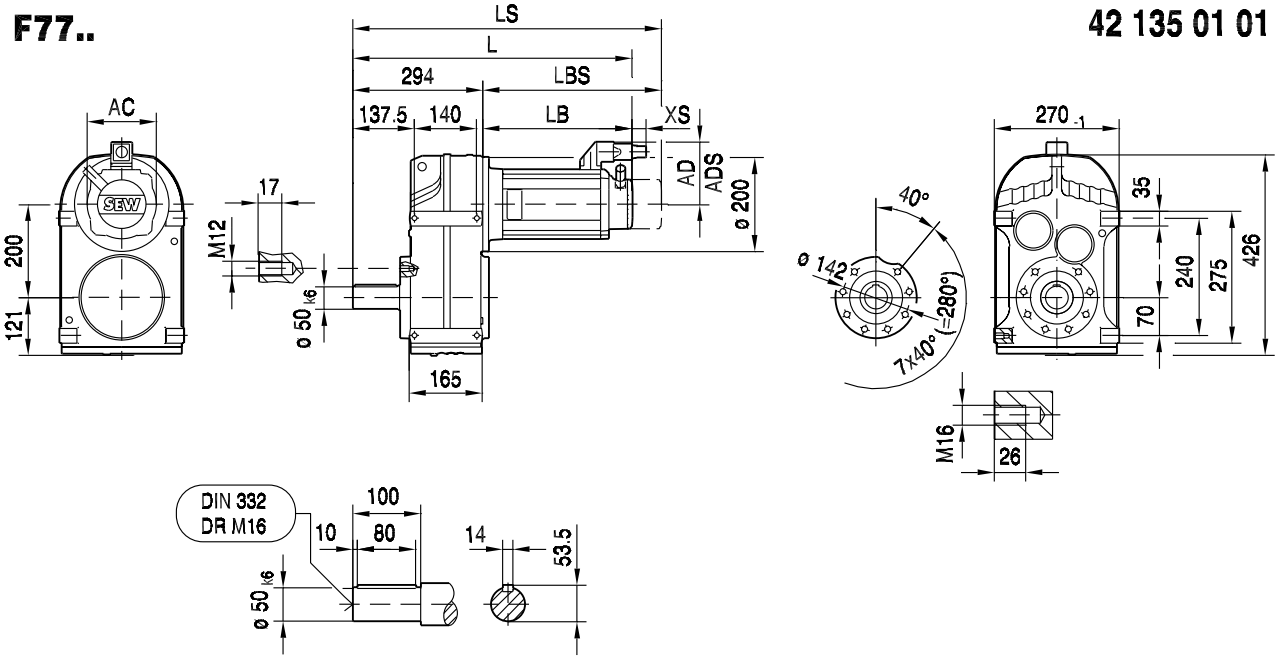




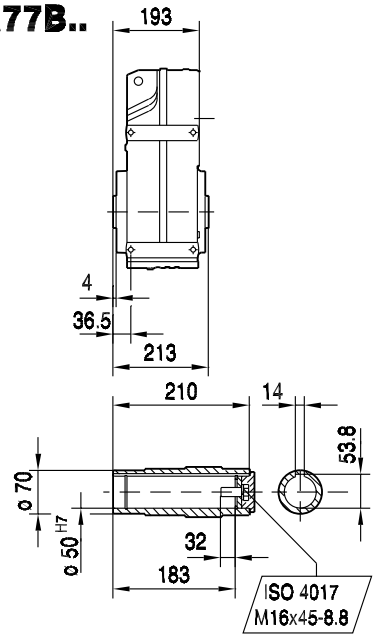
(→ 📖 150)	CMP63S	CMP63M	CMP63L					
AC	88	88	88					
AD	89	89	89					
ADS	89	89	89					
L	382	432	482					
LS	410	460	510					
LB	167	217	267					
LBS	196	246	296					
XS	14	14	14					

F77..

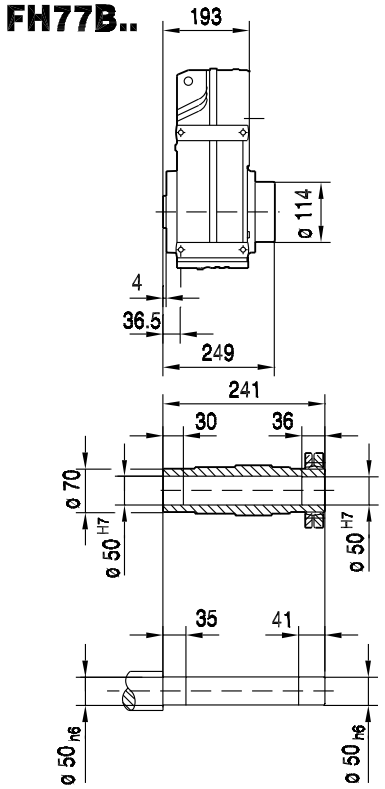
42 135 01 01



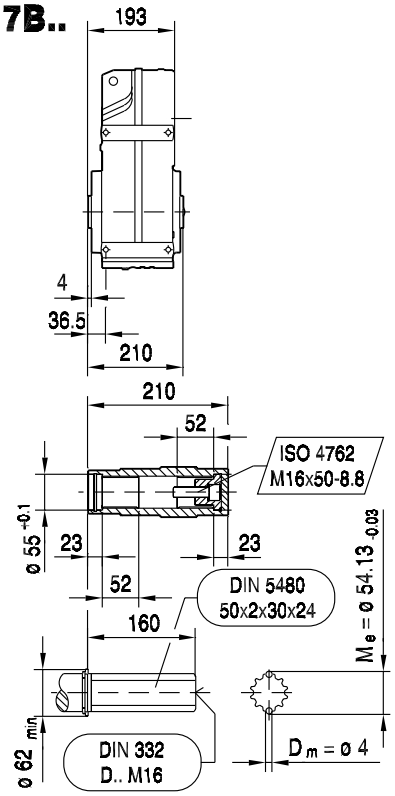
FA77B..



FH77B..



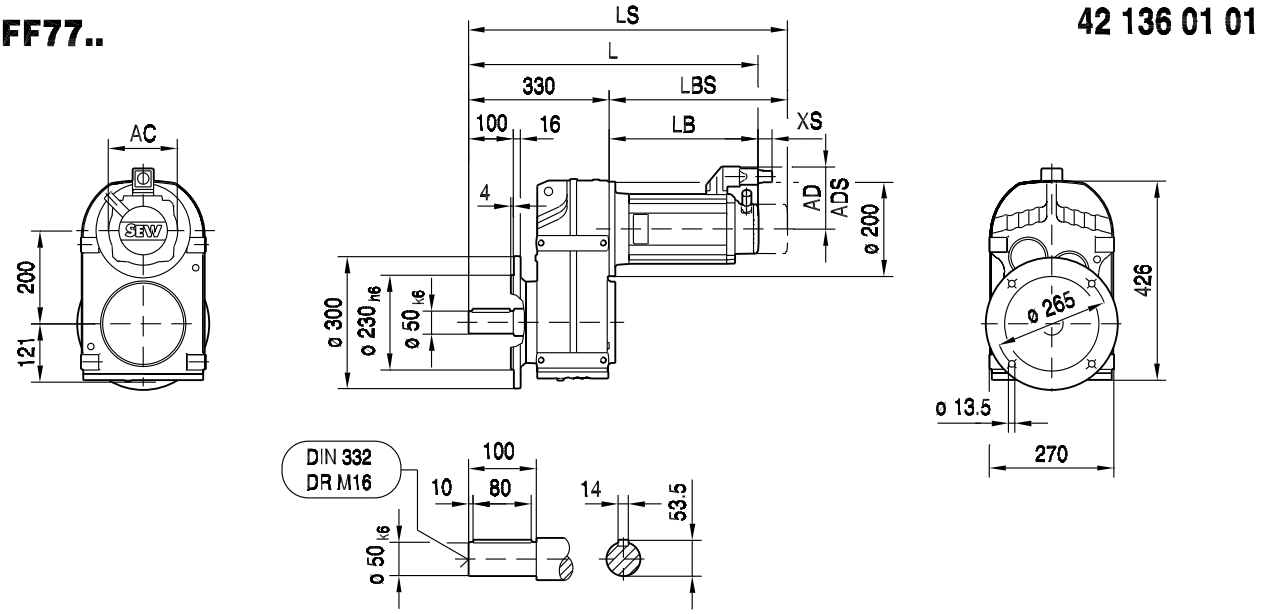
FV77B..



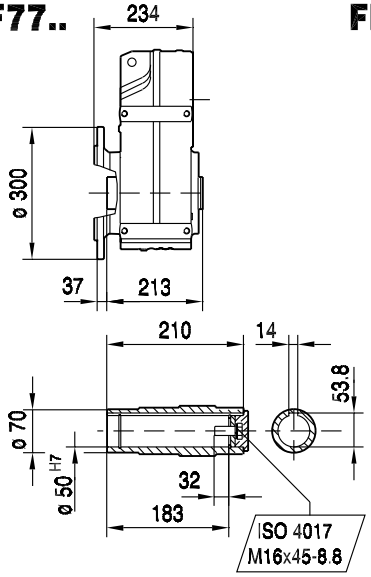
(→ 150)	CM71S	CM71M	CM71L	CM90S	CM90M	CM90L	CM112S	CM112M	CM112L		
AC	117	117	117	142	142	142	186	186	186		
AD	122	122	122	140	140	140	162	162	162		
ADS	122	122	122	140	140	140	162	162	162		
L	520	540	579	570	597	651	606	633	695		
LS	602	622	661	666	693	747	696	723	785		
LB	226	246	285	276	303	357	312	339	401		
LBS	308	328	367	372	399	453	402	429	491		
XS	45	45	45	50	50	50	36	36	36		

FF77..

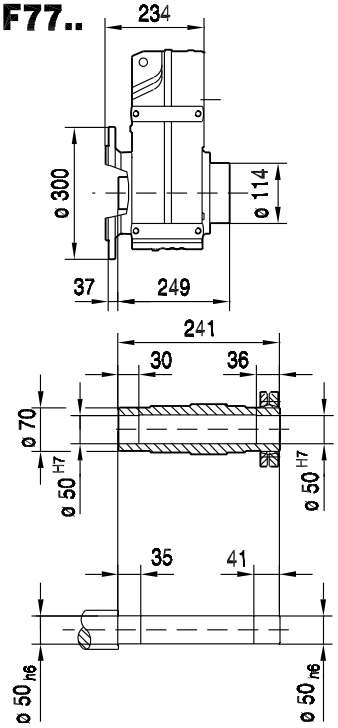
42 136 01 01



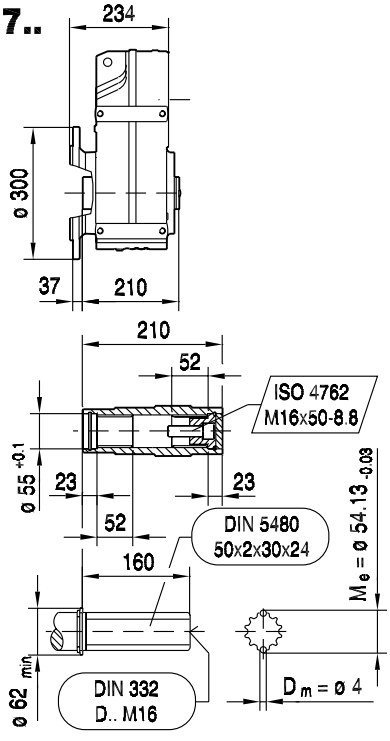
FAF77..



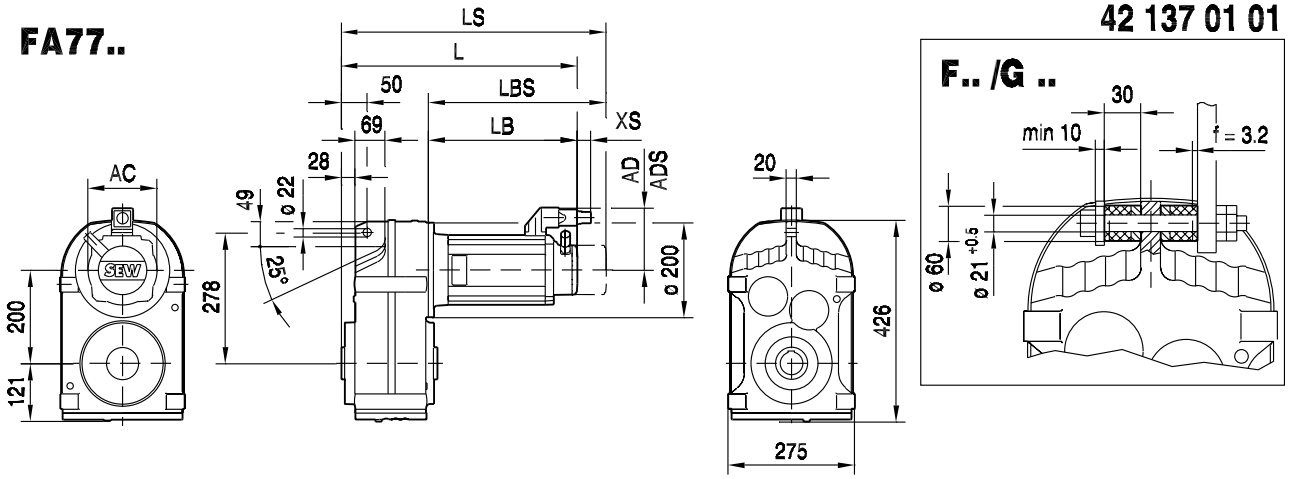
FHF77..

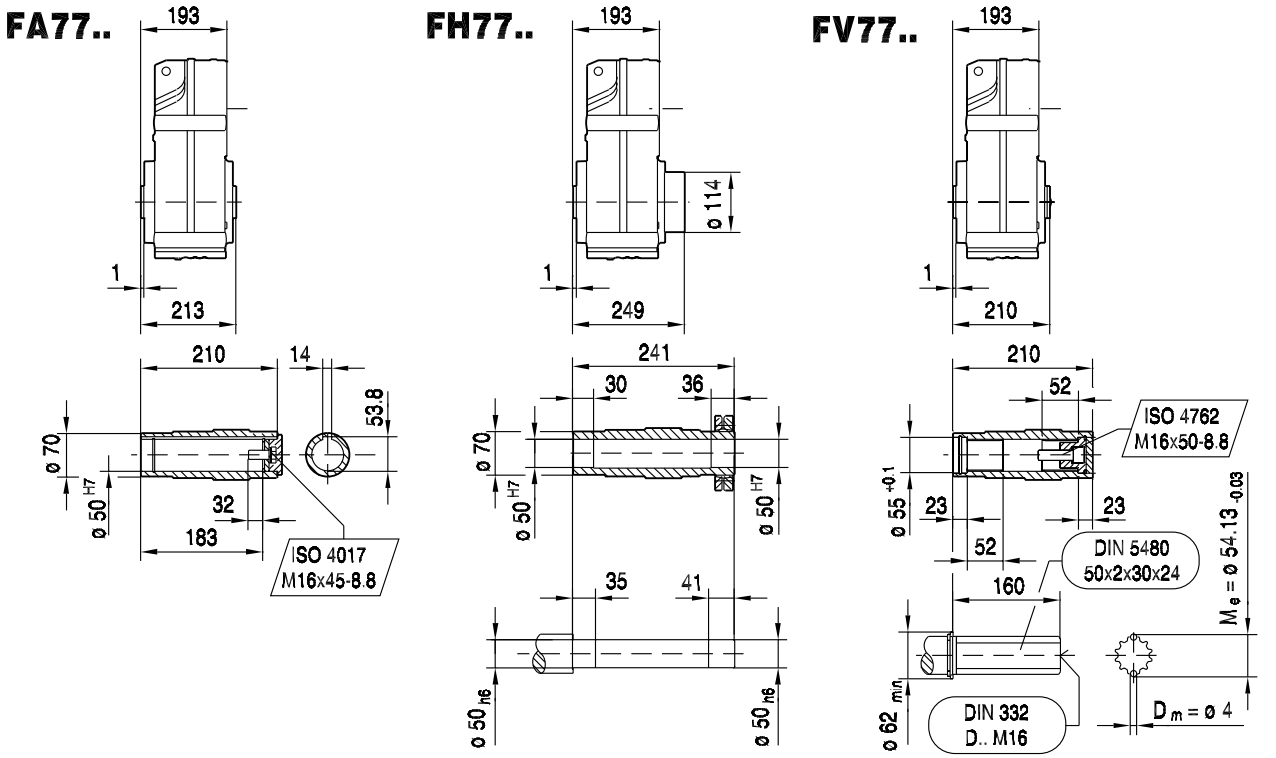


FVF77..



(→ 150)	CM71S	CM71M	CM71L	CM90S	CM90M	CM90L	CM112S	CM112M	CM112L		
AC	117	117	117	142	142	142	186	186	186		
AD	122	122	122	140	140	140	162	162	162		
ADS	122	122	122	140	140	140	162	162	162		
L	556	576	615	606	633	687	642	669	731		
LS	638	658	697	702	729	783	732	759	821		
LB	226	246	285	276	303	357	312	339	401		
LBS	308	328	367	372	399	453	402	429	491		
XS	45	45	45	50	50	50	36	36	36		





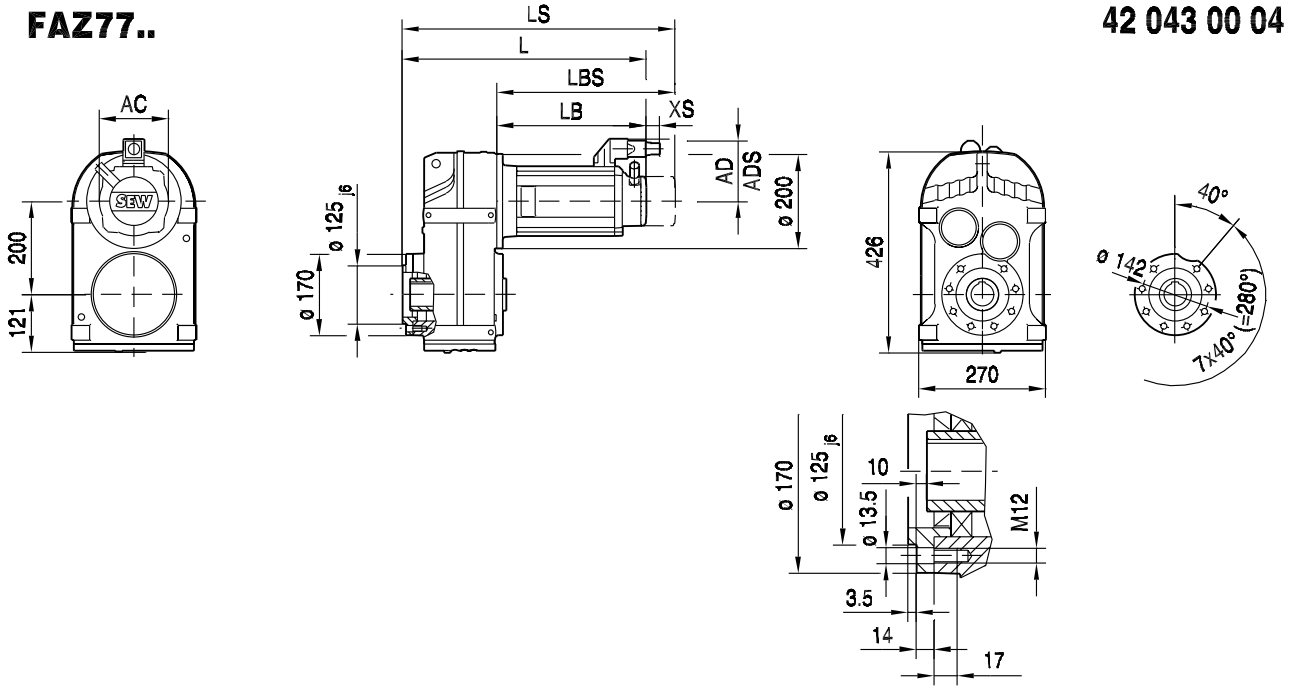
(→ 150)	CM71S	CM71M	CM71L	CM90S	CM90M	CM90L	CM112S	CM112M	CM112L		
AC	117	117	117	142	142	142	186	186	186		
AD	122	122	122	140	140	140	162	162	162		
ADS	122	122	122	140	140	140	162	162	162		
L	419	439	478	469	496	550	505	532	594		
LS	501	521	560	565	592	646	595	622	684		
LB	226	246	285	276	303	357	312	339	401		
LBS	308	328	367	372	399	453	402	429	491		
XS	45	45	45	50	50	50	36	36	36		



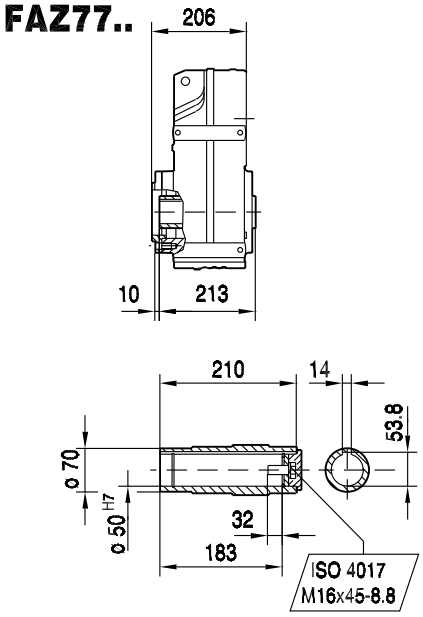
F..CMP, DS, CM
F 77 / CMP / CM [mm]

FAZ77..

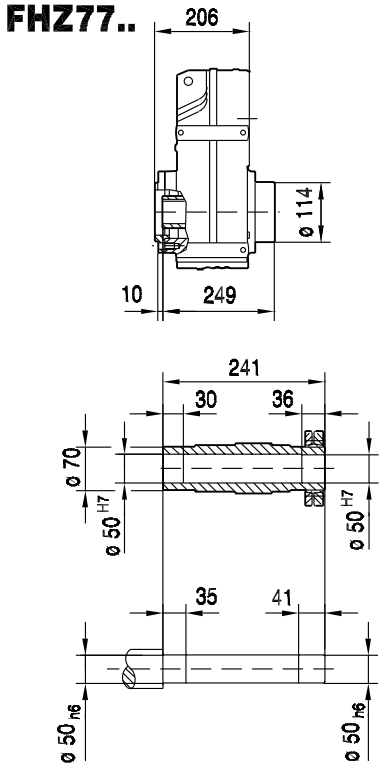
42 043 00 04



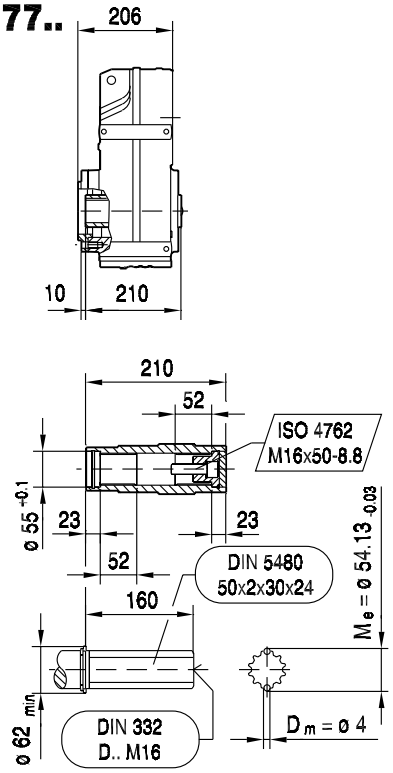
FAZ77..



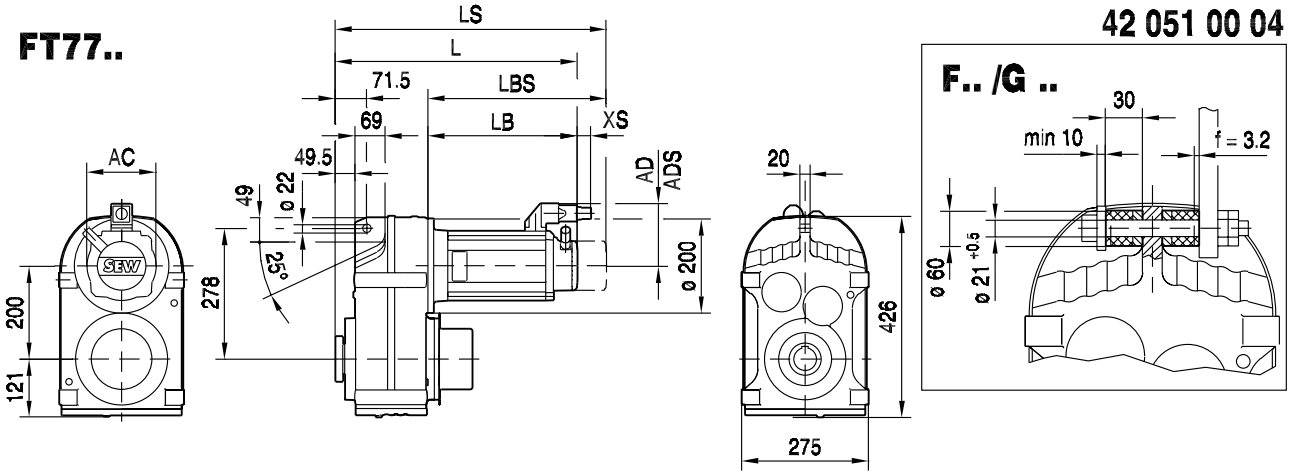
FHZ77..

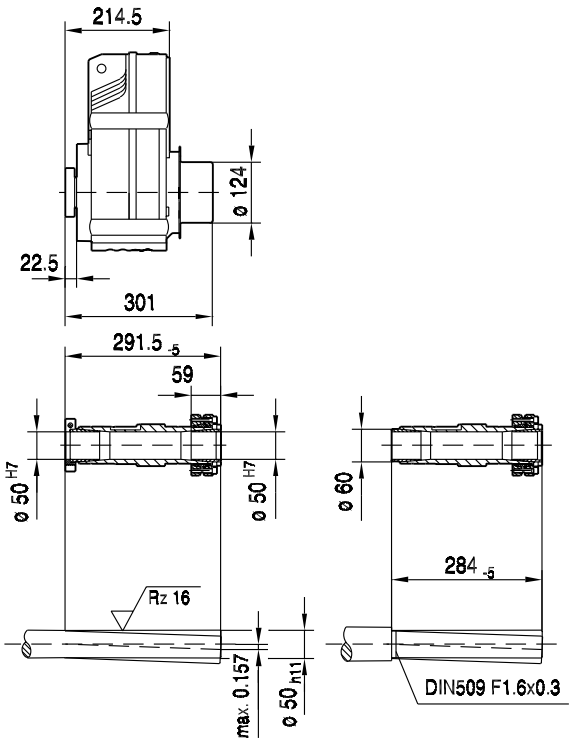


FVZ77..



(→ 📖 150)	CM71S	CM71M	CM71L	CM90S	CM90M	CM90L	CM112S	CM112M	CM112L		
AC	117	117	117	142	142	142	186	186	186		
AD	122	122	122	140	140	140	162	162	162		
ADS	122	122	122	140	140	140	162	162	162		
L	432	452	491	482	509	563	518	545	607		
LS	514	534	573	578	605	659	608	635	697		
LB	226	246	285	276	303	357	312	339	401		
LBS	308	328	367	372	399	453	402	429	491		
XS	45	45	45	50	50	50	36	36	36		





(→ 📖 150)	CM71S	CM71M	CM71L	CM90S	CM90M	CM90L	CM112S	CM112M	CM112L		
AC	117	117	117	142	142	142	186	186	186		
AD	122	122	122	140	140	140	162	162	162		
ADS	122	122	122	140	140	140	162	162	162		
L	440	460	499	491	518	572	527	554	616		
LS	522	542	581	586	613	667	617	644	706		
LB	226	246	285	276	303	357	312	339	401		
LBS	308	328	367	372	399	453	402	429	491		
XS	45	45	45	50	50	50	36	36	36		



9.14 F 87 / CM [Nm]

M_{aDyn} [Nm]		CM						
	i	90S	90M	90L	112S	112M	112L	112H
FA87 2	4.12			302	329	434	629	951
	4.92			361	393	518	752	1136
	5.63	216	285	413	449	593	860	1300
	6.65	255	337	488	531	700	1016	1535
	7.35	282	372	539	587	774	1123	1697
	8.29	318	420	608	662	872	1267	1914
	9.58			703	765	1008	1464	2212
	11.46			840	915	1206	1751	2646
	13.12	504	664	962	1047	1381	2004	3029
	15.48	595	784	1135	1236	1629	2365	>3090
	17.12	658	867	1255	1367	1802	2616	>3090
	19.31	742	978	1416	1542	2032	2950	>3090
	21.32	819	1080	1563	1702	2244	>3090	>3090
	23.68	910	1199	1737	1890	2492	>3090	
	26.5	1018	1342	1943	2116	2789	>3090	
	28.78	1105	1457	2110	2298			
	33.92	1303	1718	2487	2708			
FA87 3	29.2	1099	1448	2097	2283	3010	>3090	>3090
	35.19	1324	1745	2527	2751	>3090	>3090	>3090
	39.3	1478	1949	2823	3073	>3090	>3090	>3090
	45.28	1703	2245	>3090	>3090	>3090	>3090	>3090
	50.36	1895	2497	>3090	>3090	>3090	>3090	>3090
	56.75	2135	2814	>3090	>3090	>3090	>3090	
	68.4	2573	>3090	>3090	>3090	>3090	>3090	
	76.39	2874	>3090	>3090	>3090	>3090	>3090	
	88.01	>3090	>3090	>3090	>3090	>3090	>3090	
	97.89	>3090	>3090	>3090	>3090	>3090	>3090	
	109.49	>3090	>3090	>3090	>3090	>3090	>3090	
	123.29	>3090	>3090	>3090	>3090	>3090	>3090	
	134.16	>3090	>3090	>3090	>3090			
	159.61	>3090	>3090	>3090	>3090			
	179.97	>3090	>3090					
	197.2	>3090	>3090					
	228.93	>3090						
	255.37							
	270.68							

m [kg]		CM						
	s	90S	90M	90L	112S	112M	112L	112H
FA87	2	105	110	115	110	115	130	140
FA87	3	110	110	115	115	120	135	140
FAF: + 12.7 kg / F: + 5.7 kg / FF: + 21.3 kg								



CM..	i	n_{epk} [1/min]	η [%]	c_T FA [Nm/']	FAF [Nm/']	F [Nm/']	FF [Nm/']	φ /R [']
FA87 2	4.12	3924	97	465.26	465.26	196.68	186.3	7
	4.92	4378	97	465.26	465.26	196.68	186.3	7
	5.63	4500	97	465.26	465.26	196.68	186.3	7
	6.65	4500	97	465.26	465.26	196.68	186.3	7
	7.35	4500	97	465.26	465.26	196.68	186.3	7
	8.29	4500	97	465.26	465.26	196.68	186.3	7
	9.58	4500	97	711.06	711.06	230.34	216.23	7
	11.46	4500	97	711.06	711.06	230.34	216.23	7
	13.12	4500	97	711.06	711.06	230.34	216.23	7
	15.48	4500	97	711.06	711.06	230.34	216.23	7
	17.12	4500	97	711.06	711.06	230.34	216.23	7
	19.31	4500	97	711.06	711.06	230.34	216.23	7
	21.32	4500	97	711.06	711.06	230.34	216.23	7
	23.68	4500	97	711.06	711.06	230.34	216.23	7
	26.5	4500	97	711.06	711.06	230.34	216.23	7
	28.78	4500	97	711.06	711.06	230.34	216.23	7
	33.92	4500	97	711.06	711.06	230.34	216.23	7
FA87 3	29.2	4500	95	832.99	832.99	241.8	226.31	8
	35.19	4500	95	832.99	832.99	241.8	226.31	8
	39.3	4500	95	832.99	832.99	241.8	226.31	8
	45.28	4500	95	832.99	832.99	241.8	226.31	8
	50.36	4500	95	832.99	832.99	241.8	226.31	7
	56.75	4500	95	846.09	846.09	242.89	227.26	7
	68.4	4500	95	846.09	846.09	242.89	227.26	7
	76.39	4500	95	846.09	846.09	242.89	227.26	7
	88.01	4500	95	846.09	846.09	242.89	227.26	7
	97.89	4500	95	846.09	846.09	242.89	227.26	7
	109.49	4500	95	846.09	846.09	242.89	227.26	7
	123.29	4500	95	846.09	846.09	242.89	227.26	7
	134.16	4500	95	846.09	846.09	242.89	227.26	7
	159.61	4500	95	846.09	846.09	242.89	227.26	7
	179.97	4500	95	846.09	846.09	242.89	227.26	7
	197.2	4500	95	846.09	846.09	242.89	227.26	7
	228.93	4500	95	846.09	846.09	242.89	227.26	7
	255.37	4500	95	846.09	846.09	242.89	227.26	7
	270.68	4500	95	846.09	846.09	242.89	227.26	7

CM..	i	M_{amax} [Nm]	M_{apk} [Nm]	$M_{aNotaus}$ [Nm]	n_{ak} [1/min]	J_G 10^{-4} [kgm^2]	F_{Ramax} FA [N]	FAF [N]	F [N]	FF [N]	F_{Rapk} FA [N]	FAF [N]	F [N]	FF [N]
FA87 2	4.12	1460	1940	2482	340	114	3020	3020	5980	11800	30000	30000	26400	23400
	4.92	1530	1960	2601	346	85	3310	3310	6430	12600	30000	30000	26300	23400
	5.63	1530	1960	2601	391	67	3850	3850	7020	13400	30000	30000	26300	23400
	6.65	1530	1970	2601	466	52	4550	4550	7790	14400	30000	30000	26300	23400
	7.35	1530	1970	2601	490	44	5000	5000	8280	15000	30000	30000	26300	23400
	8.29	1530	1980	2601	531	36	5550	5550	8890	15800	30000	30000	26200	23300
	9.58	2880	3090	4896	146	63	275	275	5050	11000	30000	30000	16000	16000
	11.46	3000	3090	5100	122	49	575	575	5580	11800	30000	30000	16000	16000
	13.12	3000	3090	5100	114	40	1300	1300	6370	13100	30000	30000	16000	16000
	15.48	3000	3090	5100	110	32	2220	2220	7390	14700	30000	30000	16000	16000
	17.12	3000	3090	5100	105	28	2810	2810	8040	15800	30000	30000	16000	16000
	19.31	3000	3090	5100	104	23	3540	3540	8840	17000	30000	30000	16000	16000
	21.32	3000	3090	5100	98	20	4160	4160	9520	18000	30000	30000	16000	16000
	23.68	3000	3090	5100	97	17	4850	4850	10300	19100	30000	30000	16000	16000
	26.5	3000	3090	5100	98	15	5610	5610	11100	19800	30000	30000	16000	16000
	28.78	2450	3090	4165	191	13	8940	8940	13900	22500	30000	30000	16000	16000
	33.92	2610	3090	4437	150	10	9340	9340	14600	22200	30000	30000	16000	16000

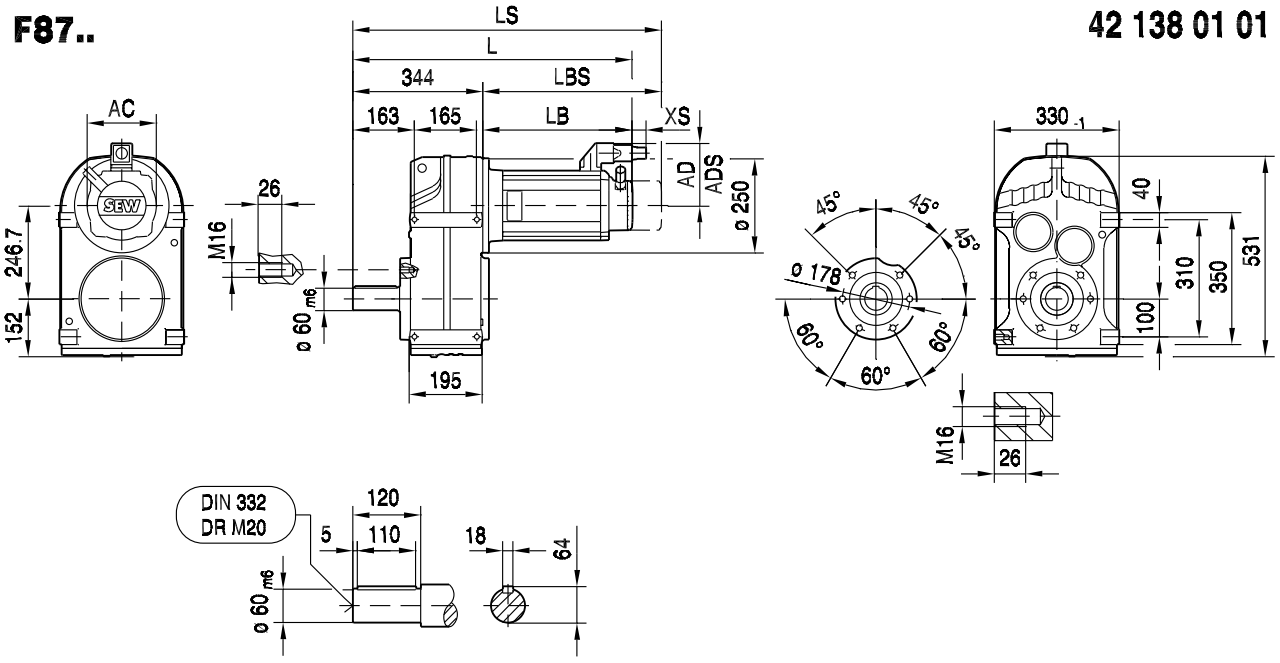


CM..							F_{Ramax}				F_{Rapk}			
	i	M_{amax} [Nm]	M_{apk} [Nm]	$M_{aNotaus}$ [Nm]	n_{ak} [1/min]	$J_G\ 10^{-4}$ [kgm^2]	FA [N]	FAF [N]	F [N]	FF [N]	FA [N]	FAF [N]	F [N]	FF [N]
FA87 3	29.2	2510	3090	4267	48	25	8740	8740	13800	22400	30000	30000	16000	16000
	35.19	2610	3090	4437	40	19	9610	9610	14900	22200	30000	30000	16000	16000
	39.3	2720	3090	4624	36	16	9910	9910	15400	22000	30000	30000	16000	16000
	45.28	2820	3090	4794	31	13	10500	10500	16200	21700	30000	30000	16000	16000
	50.36	2940	3090	4998	28	11	10800	10800	16800	21500	30000	30000	16000	16000
	56.75	3000	3090	5100	32	20	11600	11600	17700	19800	30000	30000	16000	16000
	68.4	3000	3090	5100	32	16	13300	13300	19600	19800	30000	30000	16000	16000
	76.39	3000	3090	5100	31	14	14300	14300	19800	19800	30000	30000	16000	16000
	88.01	3000	3090	5100	32	11	15800	15800	19800	19800	30000	30000	16000	16000
	97.89	3000	3090	5100	32	9.9	16900	16900	19800	19800	30000	30000	16000	16000
	109.49	3000	3090	5100	32	8.3	18100	18100	19800	19800	30000	30000	16000	16000
	123.29	3000	3090	5100	32	7.0	19400	19400	19800	19800	30000	30000	16000	16000
	134.16	3000	3090	5100	32	6.3	20400	20400	19800	19800	30000	30000	16000	16000
	159.61	3000	3090	5100	32	4.9	22500	22500	19800	19800	30000	30000	16000	16000
	179.97	3000	3090	5100	32	4.0	24100	24100	19800	19800	30000	30000	16000	16000
	197.2	3000	3090	5100	32	3.5	25300	25300	19800	19800	30000	30000	16000	16000
	228.93	3000	3090	5100	31	2.8	27300	27300	19800	19800	30000	30000	16000	16000
	255.37	3000	3090	5100	27	1.8	28900	28900	19800	19800	30000	30000	16000	16000
	270.68	3000	3090	5100	26	1.6	29800	29800	19800	19800	30000	30000	16000	16000

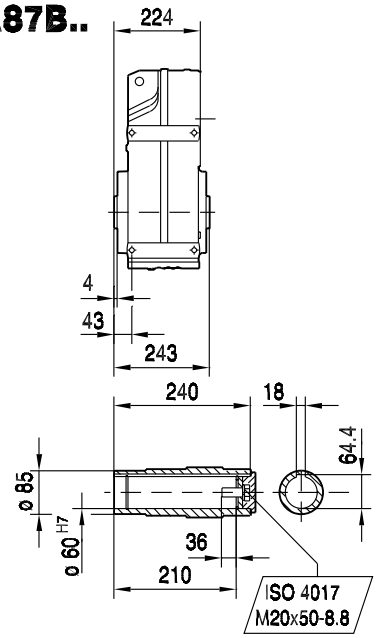
9.15 F 87 / CM [mm]

F87..

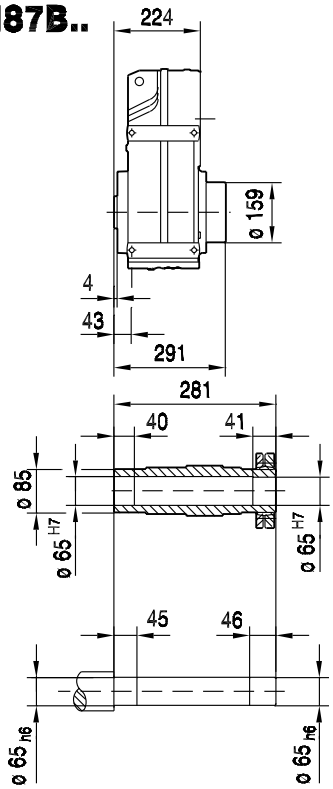
42 138 01 01



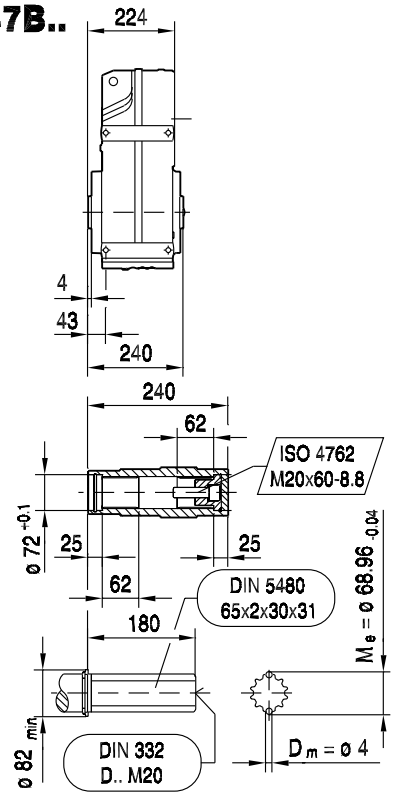
FA87B..



FH87B..



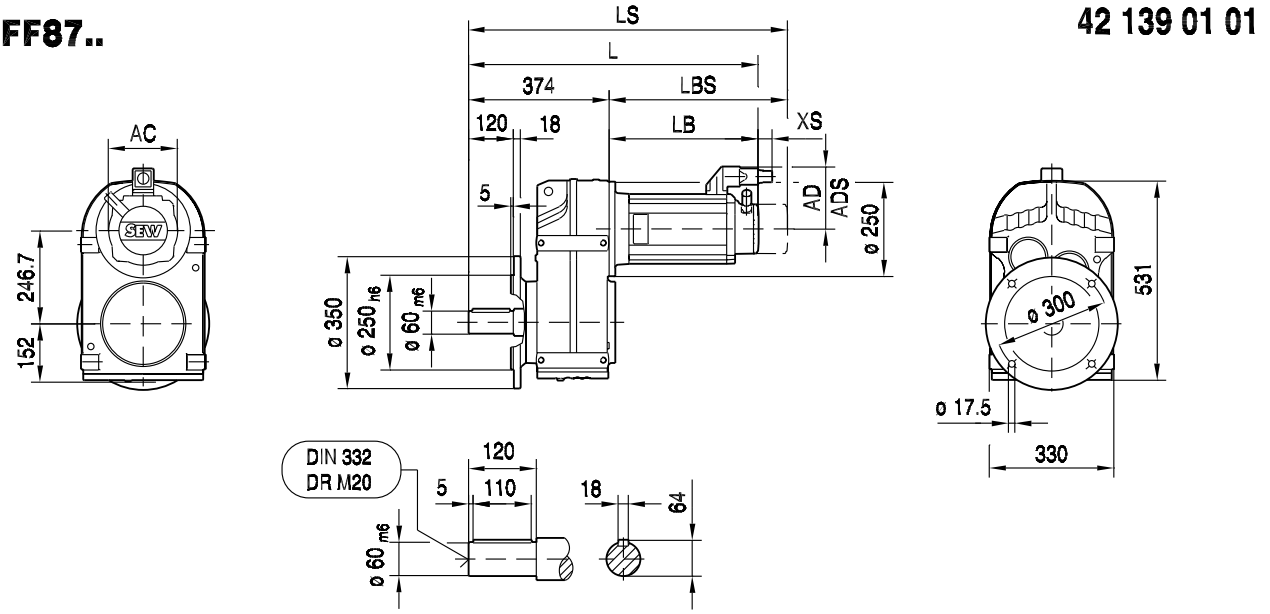
FV87B..



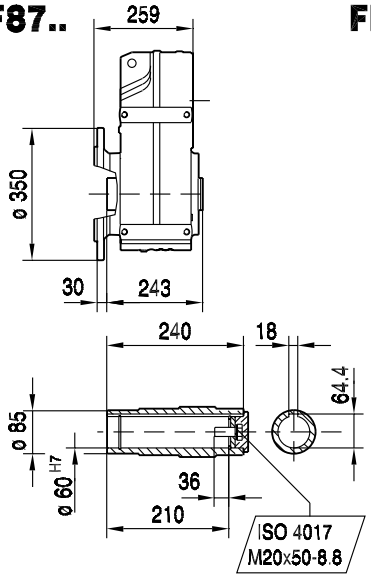
(→ 150)	CM90S	CM90M	CM90L	CM112S	CM112M	CM112L	CM112H				
AC	142	142	142	186	186	186	186				
AD	140	140	140	162	162	162	162				
ADS	140	140	140	162	162	162	162				
L	616	643	697	651	678	740	870				
LS	712	739	793	741	768	830	935				
LB	272	299	353	307	334	396	526				
LBS	368	395	449	397	424	486	591				
XS	50	50	50	36	36	36	36				

FF87..

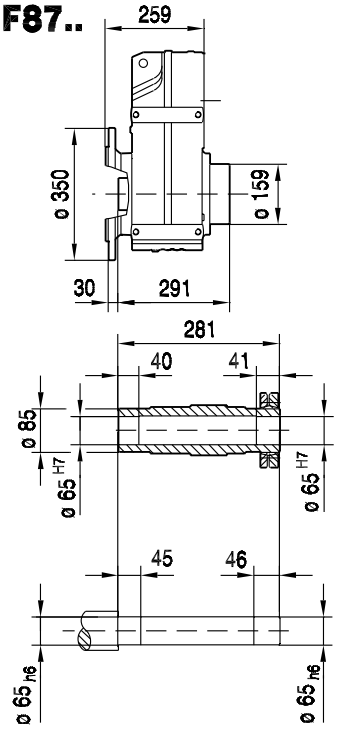
42 139 01 01



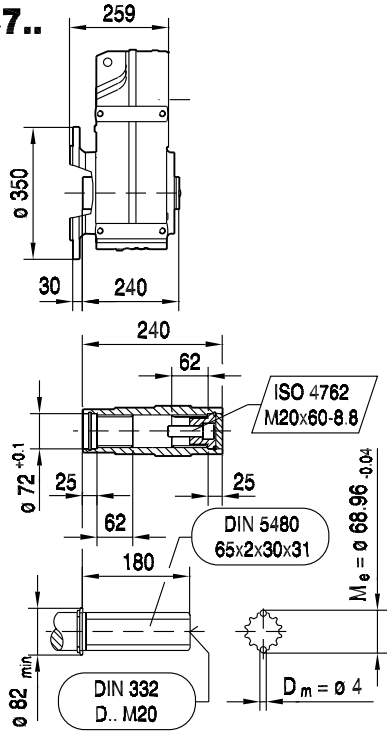
FAF87..



FHF87..

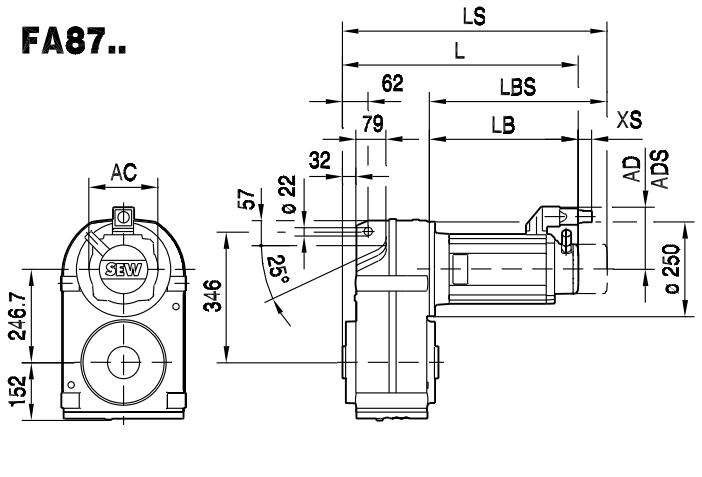


FVF87..



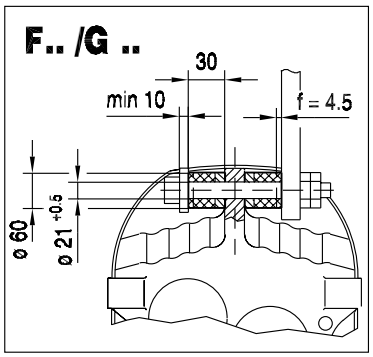
(→ 📖 150)	CM90S	CM90M	CM90L	CM112S	CM112M	CM112L	CM112H				
AC	142	142	142	186	186	186	186				
AD	140	140	140	162	162	162	162				
ADS	140	140	140	162	162	162	162				
L	646	673	727	681	708	770	900				
LS	742	769	823	771	798	860	965				
LB	272	299	353	307	334	396	526				
LBS	368	395	449	397	424	486	591				
XS	50	50	50	36	36	36	36				

FA87..

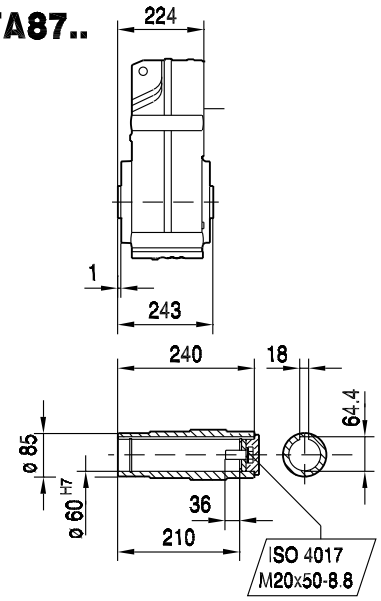


42 140 01 01

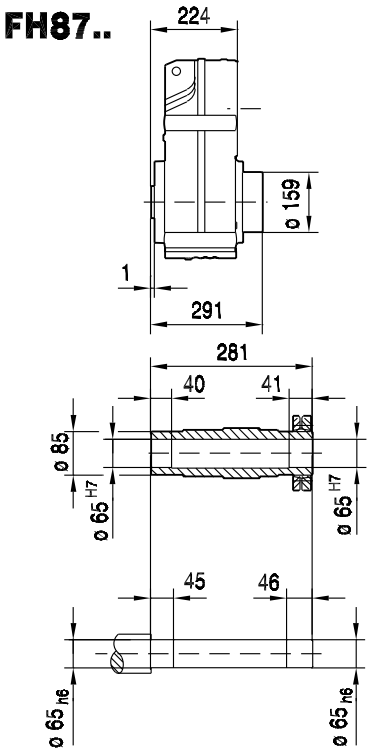
F.. /G ..



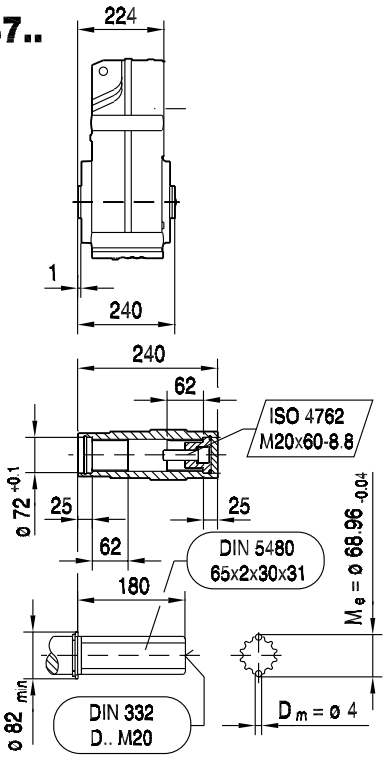
FA87..



FH87..



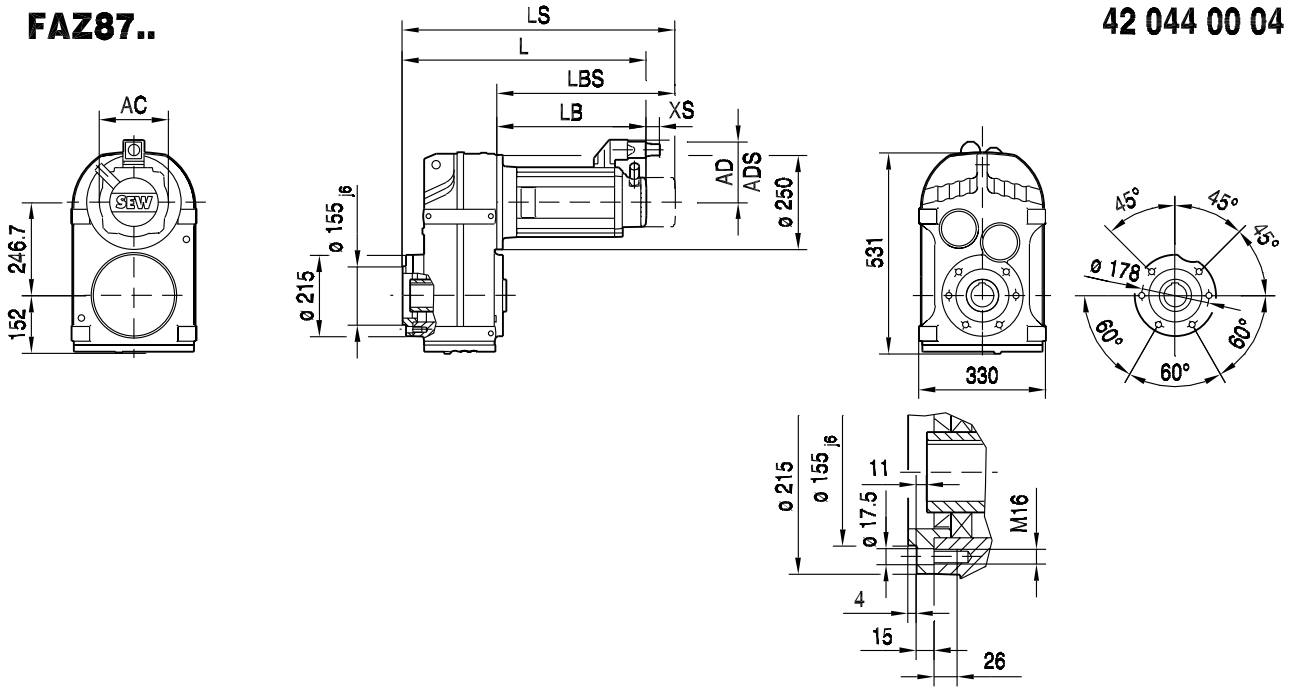
FV87..



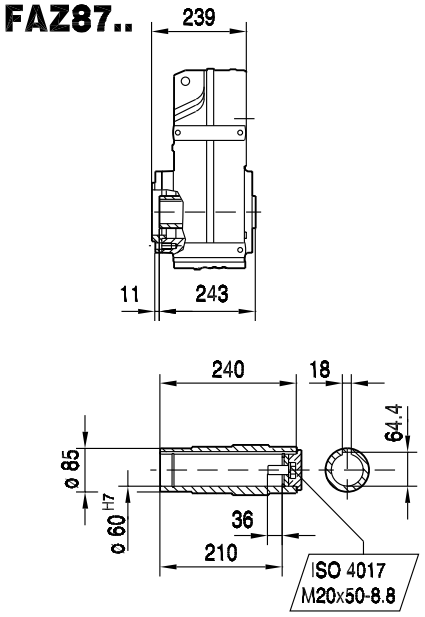
(→ 150)	CM90S	CM90M	CM90L	CM112S	CM112M	CM112L	CM112H				
AC	142	142	142	186	186	186	186				
AD	140	140	140	162	162	162	162				
ADS	140	140	140	162	162	162	162				
L	496	523	577	531	558	620	750				
LS	592	619	673	621	648	710	815				
LB	272	299	353	307	334	396	526				
LBS	368	395	449	397	424	486	591				
XS	50	50	50	36	36	36	36				

FAZ87..

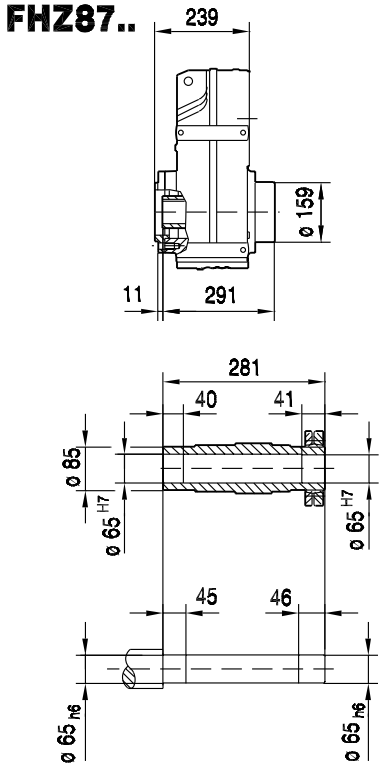
42 044 00 04



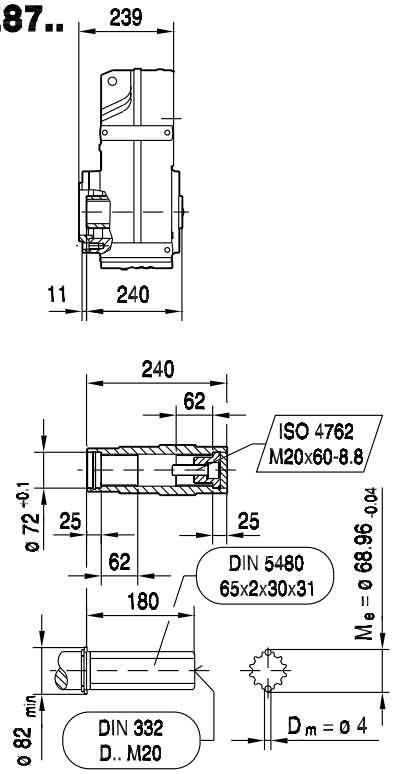
FAZ87..



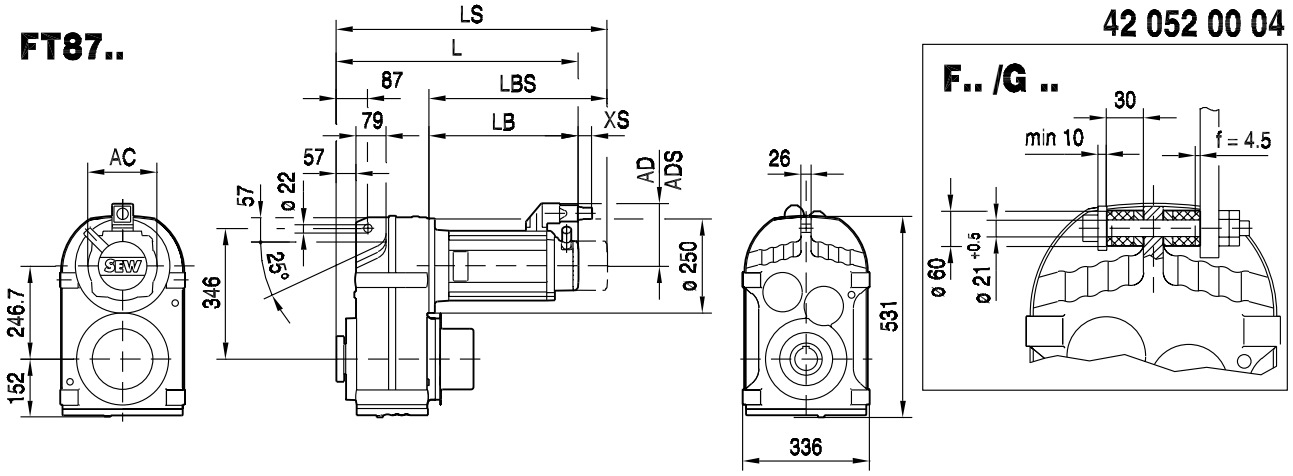
FHZ87..

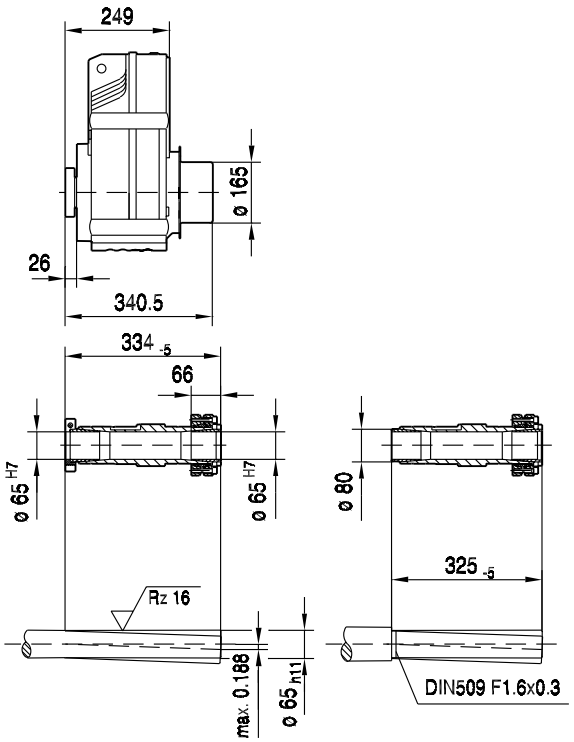


FVZ87..



(→ 150)	CM90S	CM90M	CM90L	CM112S	CM112M	CM112L	CM112H				
AC	142	142	142	186	186	186	186				
AD	140	140	140	162	162	162	162				
ADS	140	140	140	162	162	162	162				
L	511	538	592	546	573	635	765				
LS	607	634	688	636	663	725	830				
LB	272	299	353	307	334	396	526				
LBS	368	395	449	397	424	486	591				
XS	50	50	50	36	36	36	36				





(→ 📖 150)	CM90S	CM90M	CM90L	CM112S	CM112M	CM112L	CM112H				
AC	142	142	142	186	186	186	186				
AD	140	140	140	162	162	162	162				
ADS	140	140	140	162	162	162	162				
L	521	548	602	556	583	645	775				
LS	617	644	698	646	673	735	840				
LB	272	299	353	307	334	396	526				
LBS	368	395	449	397	424	486	591				
XS	50	50	50	36	36	36	36				

9.16 F 97 / CM [Nm]

M_{aDyn} [Nm]		CM						
	i	90S	90M	90L	112S	112M	112L	112H
FA97 2	3.87					407	591	893
	4.57			335	365	481	698	1055
	5.23			384	418	550	799	1207
	6.17			452	493	649	943	1424
	7.07	272	358	518	564	744	1080	1632
	8.22	316	416	603	656	865	1256	1898
	9.06	348	459	664	723	954	1384	2092
	11.16			818	891	1175	1705	2576
	12.77			936	1019	1344	1951	2948
	15.06			1104	1202	1585	2301	3477
	17.25	663	873	1265	1377	1815	2635	3982
	20.07	771	1016	1472	1602	2112	3066	>4360
	22.11	849	1120	1621	1765	2327	3378	>4360
	24.92	957	1262	1827	1989	2623	3807	>4360
	27.44	1054	1389	2012	2191	2888	4192	>4360
	30.39	1167	1539	2229	2426	3198	>4360	
	33.91	1303	1717	2487	2707	3569	>4360	
	36.64	1407	1855	2687	2925			
	43.28	1662	2191	3174	3455			
FA97 3	32.5			2334	2541	3350	>4360	>4360
	38.86			2791	3038	4005	>4360	>4360
	44.49	1674	2206	3195	3478	>4360	>4360	>4360
	52.49	1975	2603	3770	4104	>4360	>4360	>4360
	58.06	2184	2879	4170	>4360	>4360	>4360	>4360
	65.47	2463	3247	>4360	>4360	>4360	>4360	>4360
	72.29	2720	3585	>4360	>4360	>4360	>4360	>4360
	75.63			>4360	>4360	>4360	>4360	>4360
	80.31	3021	3983	>4360	>4360	>4360	>4360	
	86.59	3258	4294	>4360	>4360	>4360	>4360	>4360
	89.85	3380	>4360	>4360	>4360	>4360	>4360	
	97.58	3671	>4360	>4360	>4360			
	102.16	3843	>4360	>4360	>4360	>4360	>4360	>4360
	112.99	4251	>4360	>4360	>4360	>4360	>4360	>4360
	127.42	>4360	>4360	>4360	>4360	>4360	>4360	>4360
	140.71	>4360	>4360	>4360	>4360	>4360	>4360	>4360
	156.3	>4360	>4360	>4360	>4360	>4360	>4360	
	174.87	>4360	>4360	>4360	>4360	>4360	>4360	
	189.92	>4360	>4360	>4360	>4360			
	223.88	>4360	>4360	>4360	>4360			
	253.41	>4360	>4360					
	276.77	>4360	>4360					

m [kg]		CM						
	s	90S	90M	90L	112S	112M	112L	112H
FA97	2	165	170	175	175	180	195	200
FA97	3	175	175	180	180	185	200	205
FAF: + 21.7 kg / F: + 7.5 kg / FF: + 40.3 kg								

CM..	i	n_{epk} [1/min]	η [%]	c_T FA [Nm/']	FAF [Nm/']	F [Nm/']	FF [Nm/']	φ /R [']
FA97 2	3.87	3197	97	626.57	626.57	324.27	283.43	9
	4.57	3597	97	626.57	626.57	324.27	283.43	9
	5.23	3924	97	626.57	626.57	324.27	283.43	9
	6.17	4378	97	626.57	626.57	324.27	283.43	9
	7.07	4500	97	626.57	626.57	324.27	283.43	9
	8.22	4500	97	626.57	626.57	324.27	283.43	9
	9.06	4500	97	626.57	626.57	324.27	283.43	9
	11.16	4500	97	873.12	873.12	379.77	324.94	6
	12.77	4500	97	873.12	873.12	379.77	324.94	6
	15.06	4500	97	873.12	873.12	379.77	324.94	6
	17.25	4500	97	873.12	873.12	379.77	324.94	6
	20.07	4500	97	873.12	873.12	379.77	324.94	6
	22.11	4500	97	873.12	873.12	379.77	324.94	6
	24.92	4500	97	873.12	873.12	379.77	324.94	6
	27.44	4500	97	873.12	873.12	379.77	324.94	6
	30.39	4500	97	873.12	873.12	379.77	324.94	6
	33.91	4500	97	873.12	873.12	379.77	324.94	6
	36.64	4500	97	873.12	873.12	379.77	324.94	6
	43.28	4500	97	873.12	873.12	379.77	324.94	6
FA97 3	32.5	4500	95	955.89	955.89	394.63	335.76	6
	38.86	4378	95	955.89	955.89	394.63	335.76	6
	44.49	4500	95	955.89	955.89	394.63	335.76	6
	52.49	4500	95	955.89	955.89	394.63	335.76	6
	58.06	4500	95	955.89	955.89	394.63	335.76	6
	65.47	4500	95	955.89	955.89	394.63	335.76	6
	72.29	4500	95	955.89	955.89	394.63	335.76	6
	75.63	4378	95	964.96	964.96	396.17	336.87	6
	80.31	4500	95	955.89	955.89	394.63	335.76	6
	86.59	4500	95	964.96	964.96	396.17	336.87	6
	89.85	4500	95	955.89	955.89	394.63	335.76	6
	97.58	4500	95	955.89	955.89	394.63	335.76	6
	102.16	4500	95	964.96	964.96	396.17	336.87	6
	112.99	4500	95	964.96	964.96	396.17	336.87	6
	127.42	4500	95	964.96	964.96	396.17	336.87	6
	140.71	4500	95	964.96	964.96	396.17	336.87	6
	156.3	4500	95	964.96	964.96	396.17	336.87	6
	174.87	4500	95	964.96	964.96	396.17	336.87	6
	189.92	4500	95	964.96	964.96	396.17	336.87	6
	223.88	4500	95	964.96	964.96	396.17	336.87	6
	253.41	4500	95	964.96	964.96	396.17	336.87	6
	276.77	4500	95	964.96	964.96	396.17	336.87	6



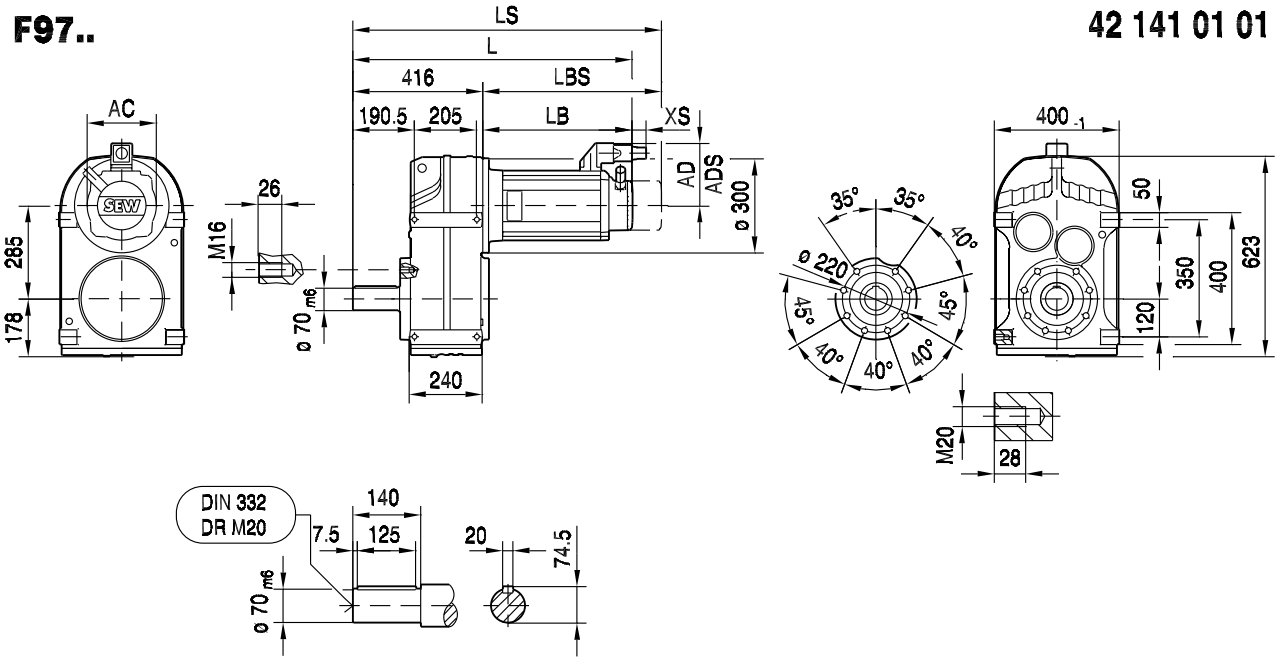
F..CMP, DS, CM
F 97 / CM [Nm]

CM..	i	M_{amax} [Nm]	M_{apk} [Nm]	$M_{aNotaus}$ [Nm]	n_{ak} [1/min]	J_G 10^{-4} [kgm^2]	F_{Ramax} FA [N]	F_{Ramax} FAF [N]	F_{Ramax} F [N]	F_{Ramax} FF [N]	F_{Rapk} FA [N]	F_{Rapk} FAF [N]	F_{Rapk} F [N]	F_{Rapk} FF [N]
FA97 2	3.87	1800	2700	3060	465	266	10300	10300	9960	16500	40000	40000	33600	30600
	4.57	2050	3000	3485	328	193	10200	10200	9950	16800	40000	40000	32900	30300
	5.23	2150	3020	3655	325	153	10700	10700	10400	17400	40000	40000	32800	30300
	6.17	2250	3030	3825	324	116	11400	11400	11100	18300	40000	40000	32800	30200
	7.07	2360	3040	4012	297	92	11900	11900	11500	19000	40000	40000	32800	30200
	8.22	2360	3050	4012	328	72	13100	13100	12600	20300	40000	40000	32800	30200
	9.06	2360	3050	4012	353	61	13900	13900	13400	21100	40000	40000	32800	30200
	11.16	4100	4360	6970	143	104	9710	9710	10000	18700	40000	40000	29700	28200
	12.77	4300	4360	7310	141	85	10100	10100	10500	19400	40000	40000	29700	28200
	15.06	4300	4360	7310	153	67	11700	11700	11900	21100	40000	40000	29700	28200
	17.25	4300	4360	7310	157	55	13100	13100	13200	22500	40000	40000	29700	28200
	20.07	4300	4360	7310	149	45	14700	14700	14600	24100	40000	40000	29700	28200
	22.11	4300	4360	7310	149	39	15700	15700	15600	25200	40000	40000	29700	28200
	24.92	4300	4360	7310	144	33	17100	17100	16800	26600	40000	40000	29700	28200
	27.44	4300	4360	7310	142	28	18200	18200	17900	27800	40000	40000	29700	28200
	30.39	4300	4360	7310	141	22	19500	19500	19000	28300	40000	40000	29700	28200
	33.91	4300	4360	7310	139	19	20900	20900	20300	28300	40000	40000	29700	28200
	36.64	3070	4360	5219	191	17	27000	27000	25500	30200	40000	40000	29700	28200
	43.28	3070	4360	5219	162	13	29300	29300	27600	30200	40000	40000	29700	28200
FA97 3	32.5	4300	4360	7310	52	60	20300	20300	19800	28300	40000	40000	29700	28200
	38.86	4300	4360	7310	51	48	22700	22700	21900	28300	40000	40000	29700	28200
	44.49	4300	4360	7310	52	39	24500	24500	23600	28300	40000	40000	29700	28200
	52.49	4300	4360	7310	51	31	26900	26900	25800	28300	40000	40000	29700	28200
	58.06	4300	4360	7310	52	27	28500	28500	27200	28300	40000	40000	29700	28200
	65.47	4300	4360	7310	52	23	30400	30400	29000	28300	40000	40000	29700	28200
	72.29	4300	4360	7310	53	20	32000	32000	29900	28300	40000	40000	29700	28200
	75.63	4300	4360	7310	56	42	32800	32800	29900	28300	40000	40000	29700	28200
	80.31	4300	4360	7310	52	17	33800	33800	29900	28300	40000	40000	29700	28200
	86.59	4300	4360	7310	57	34	35100	35100	29900	28300	40000	40000	29700	28200
	89.85	4300	4360	7310	52	14	35700	35700	29900	28300	40000	40000	29700	28200
	97.58	4300	4360	7310	52	13	37200	37200	29900	28300	40000	40000	29700	28200
	102.16	4300	4360	7310	58	28	38100	38100	29900	28300	40000	40000	29700	28200
	112.99	4300	4360	7310	58	25	40000	40000	29900	28300	40000	40000	29700	28200
	127.42	4300	4360	7310	55	20	40000	40000	29900	28300	40000	40000	29700	28200
	140.71	4300	4360	7310	50	18	40000	40000	29900	28300	40000	40000	29700	28200
	156.3	4300	4360	7310	45	15	40000	40000	29900	28300	40000	40000	29700	28200
	174.87	4300	4360	7310	40	13	40000	40000	29900	28300	40000	40000	29700	28200
	189.92	4300	4360	7310	37	12	40000	40000	29900	28300	40000	40000	29700	28200
	223.88	4300	4360	7310	31	9.2	40000	40000	29900	28300	40000	40000	29700	28200
	253.41	4300	4360	7310	28	5.9	40000	40000	29900	28300	40000	40000	29700	28200
	276.77	4300	4360	7310	25	5.1	40000	40000	29900	28300	40000	40000	29700	28200

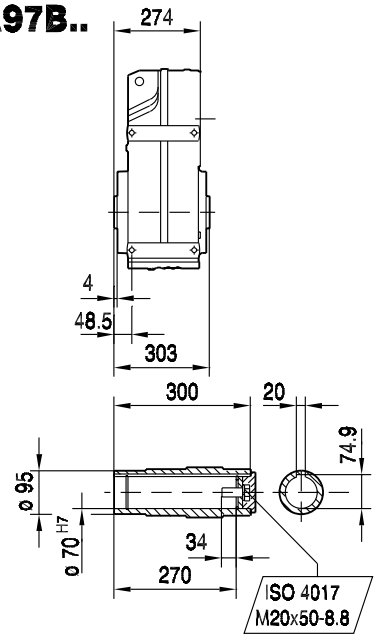
9.17 F 97 / CM [mm]

F97..

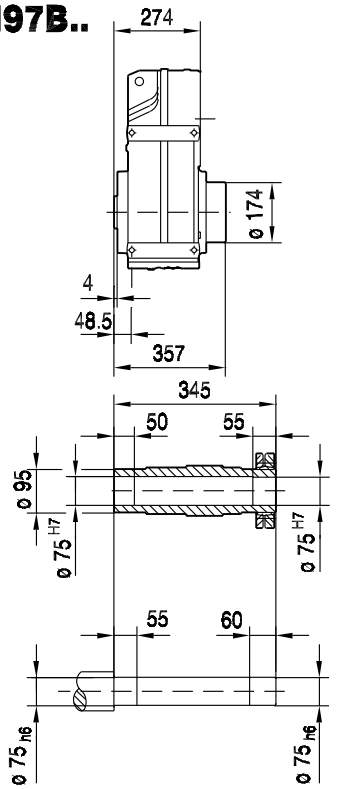
42 141 01 01



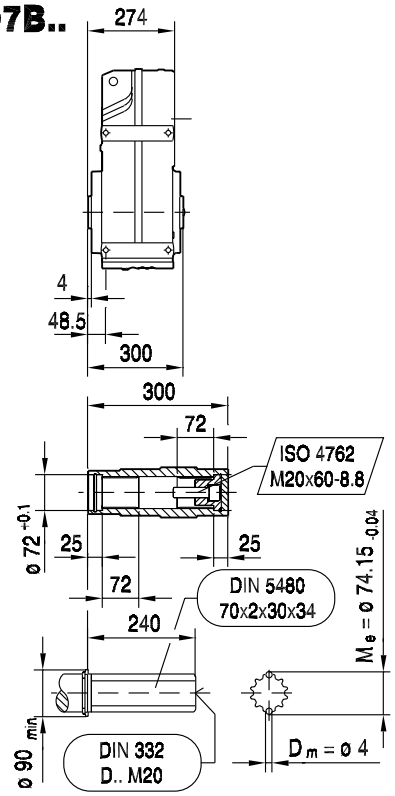
FA97B..



FH97B..



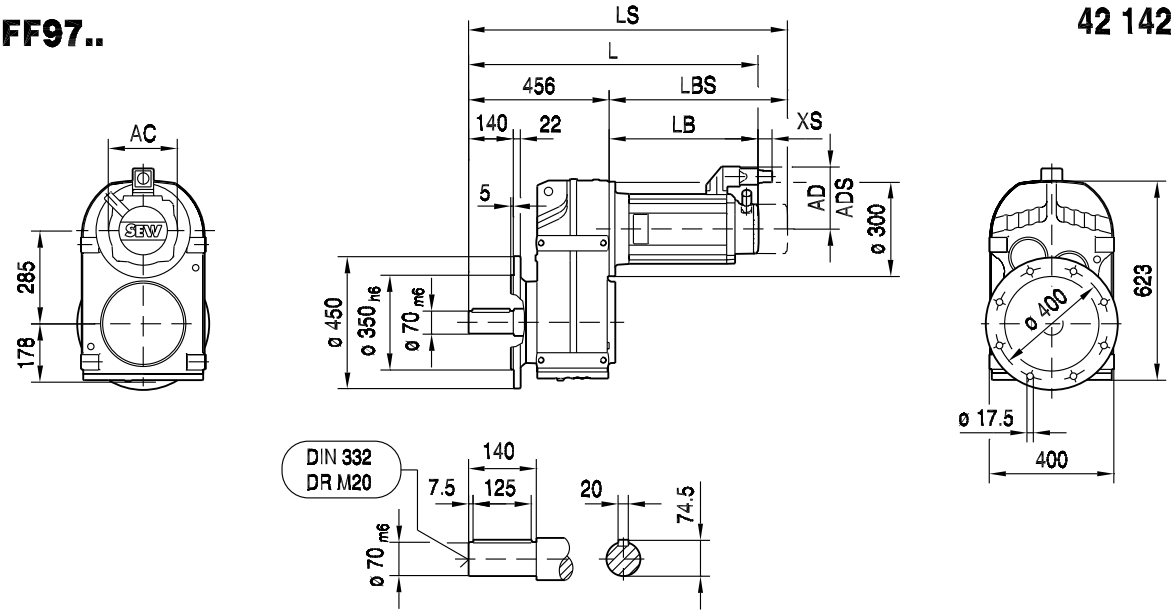
FV97B..



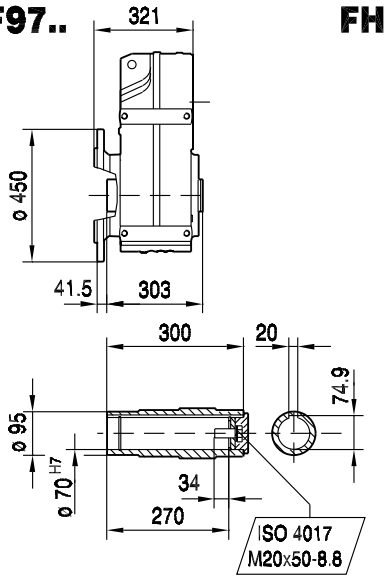
(→ 150)	CM90S	CM90M	CM90L	CM112S	CM112M	CM112L	CM112H				
AC	142	142	142	186	186	186	186				
AD	140	140	140	162	162	162	162				
ADS	140	140	140	162	162	162	162				
L	682	709	763	718	745	807	937				
LS	778	805	859	808	835	897	1002				
LB	266	293	347	302	329	391	521				
LBS	362	389	443	392	419	481	586				
XS	50	50	50	36	36	36	36				

FF97..

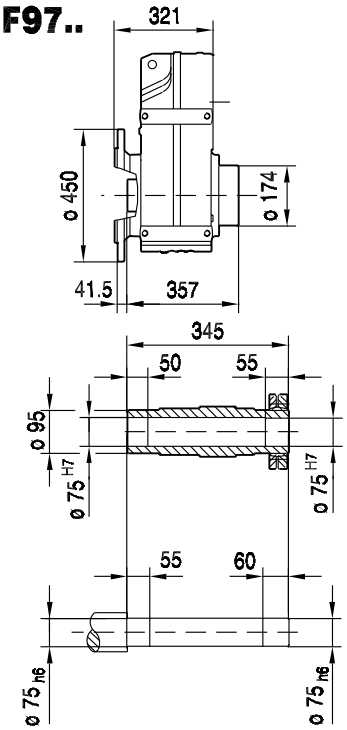
42 142 01 01



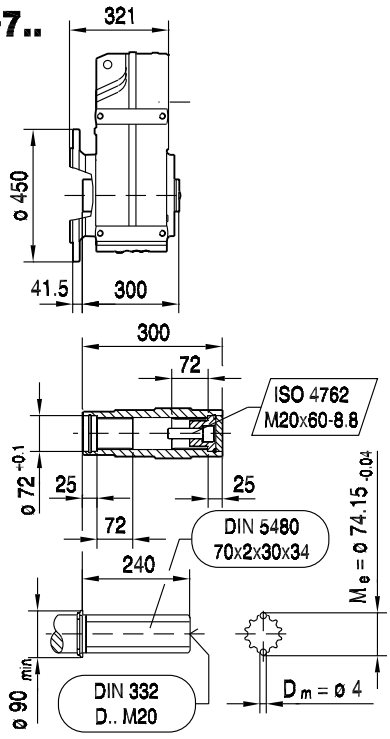
FAF97..



FHF97..

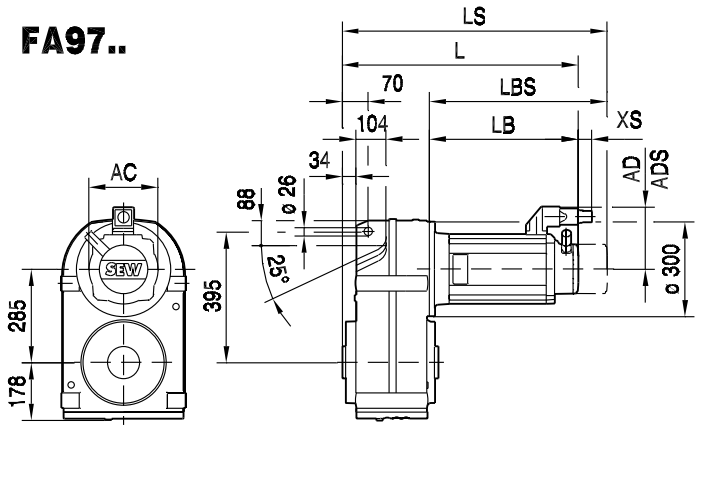


FVF97..



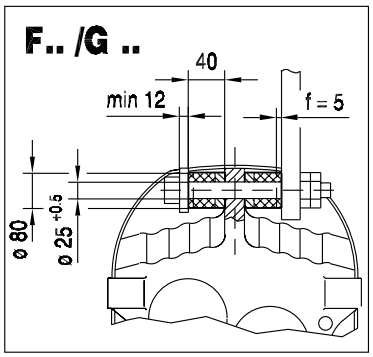
(→ 📖 150)	CM90S	CM90M	CM90L	CM112S	CM112M	CM112L	CM112H				
AC	142	142	142	186	186	186	186				
AD	140	140	140	162	162	162	162				
ADS	140	140	140	162	162	162	162				
L	722	749	803	758	785	847	977				
LS	818	845	899	848	875	937	1042				
LB	266	293	347	302	329	391	521				
LBS	362	389	443	392	419	481	586				
XS	50	50	50	36	36	36	36				

FA97..

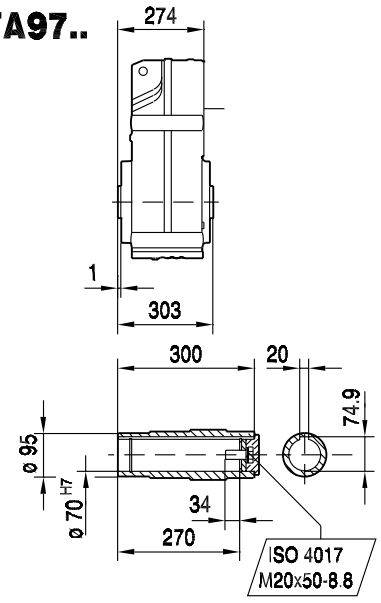


42 143 01 01

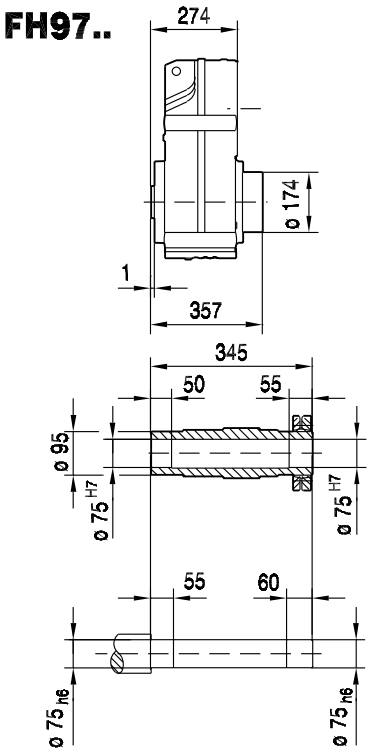
F.. /G ..



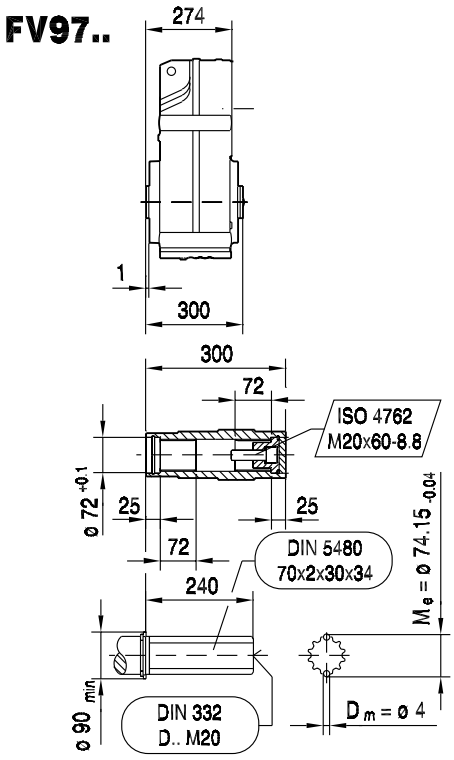
FA97..



FH97..



FV97..



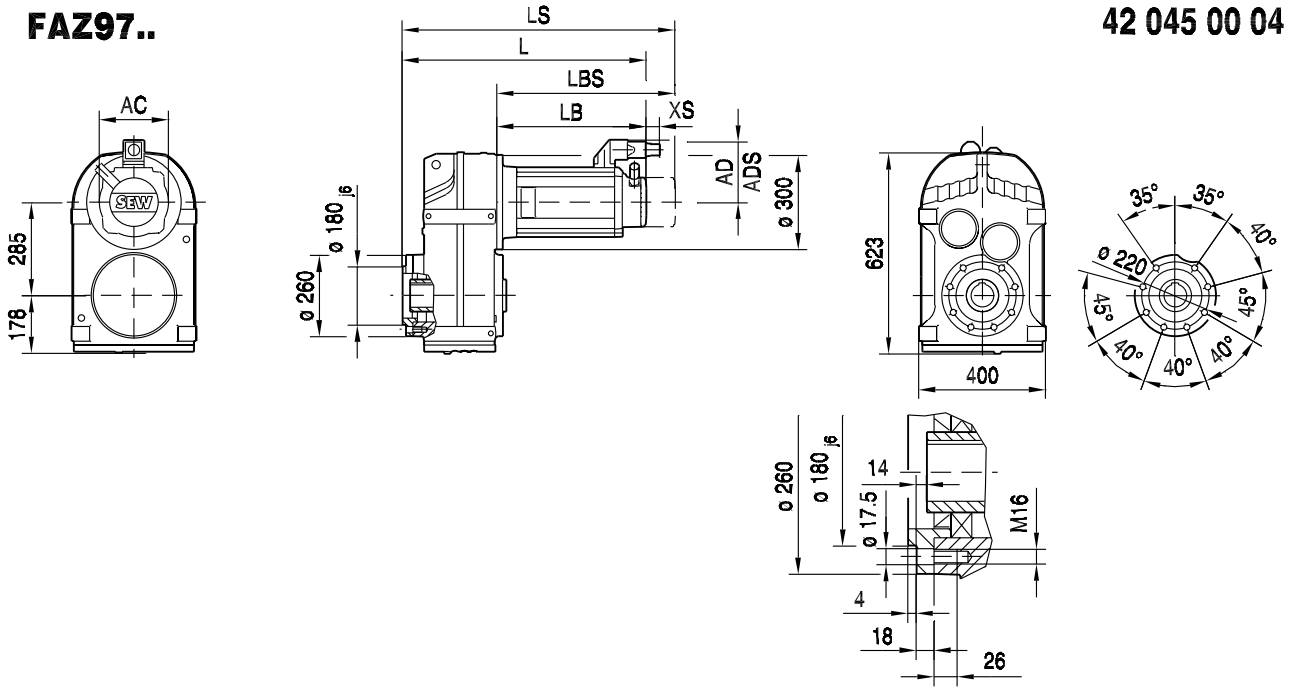
(→ 150)	CM90S	CM90M	CM90L	CM112S	CM112M	CM112L	CM112H				
AC	142	142	142	186	186	186	186				
AD	140	140	140	162	162	162	162				
ADS	140	140	140	162	162	162	162				
L	540	567	621	576	603	665	795				
LS	636	663	717	666	693	755	860				
LB	266	293	347	302	329	391	521				
LBS	362	389	443	392	419	481	586				
XS	50	50	50	36	36	36	36				



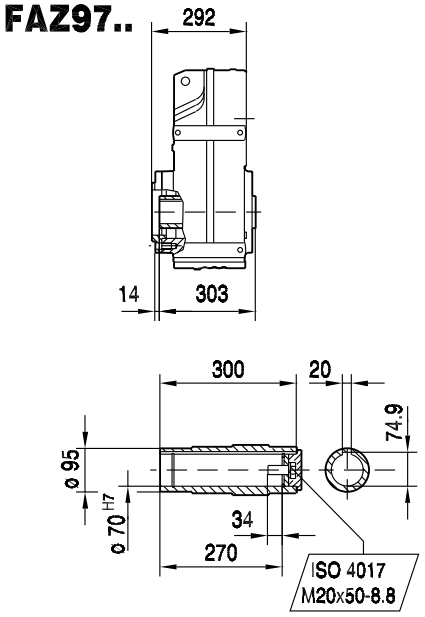
F..CMP, DS, CM
F 97 / CM [mm]

FAZ97..

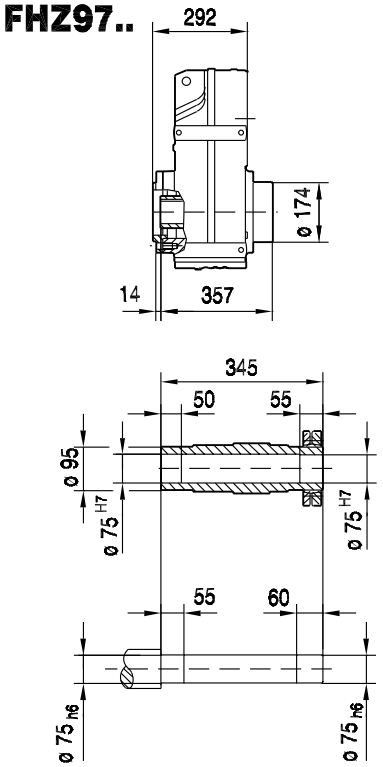
42 045 00 04



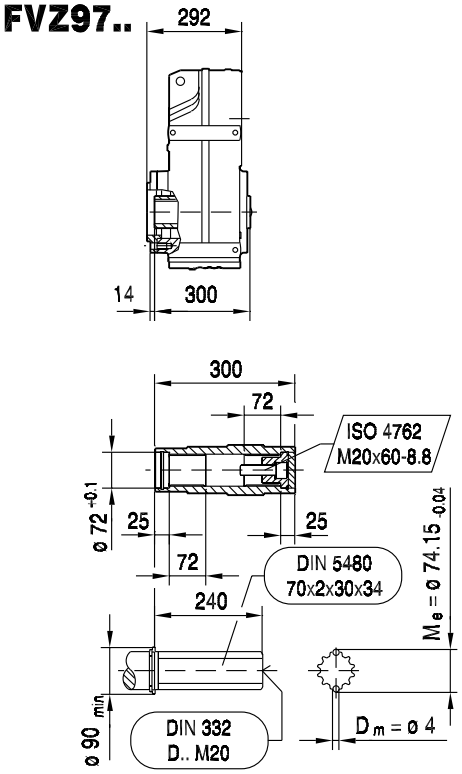
FAZ97..



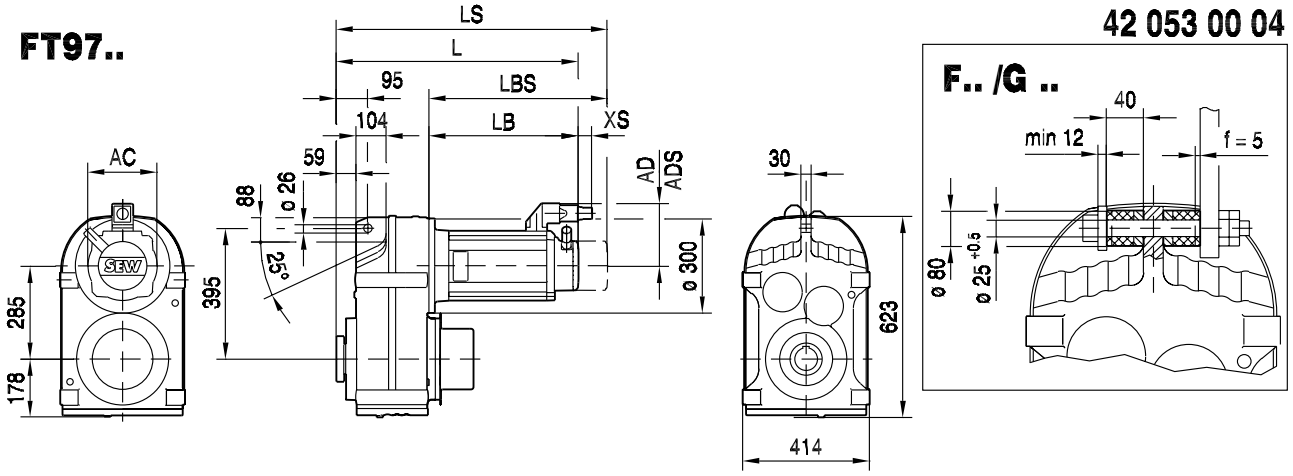
FHZ97..

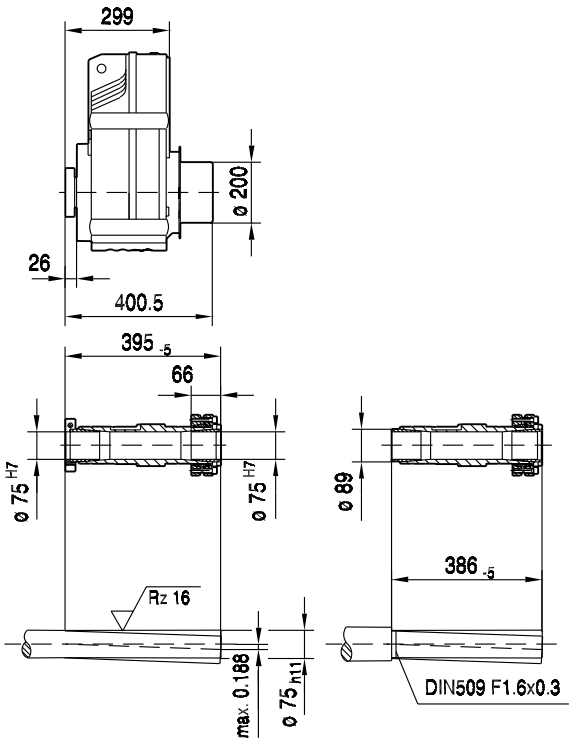


FVZ97..



(→ 📖 150)	CM90S	CM90M	CM90L	CM112S	CM112M	CM112L	CM112H				
AC	142	142	142	186	186	186	186				
AD	140	140	140	162	162	162	162				
ADS	140	140	140	162	162	162	162				
L	558	585	639	594	621	683	813				
LS	654	681	735	684	711	773	878				
LB	266	293	347	302	329	391	521				
LBS	362	389	443	392	419	481	586				
XS	50	50	50	36	36	36	36				





(→ 📖 150)	CM90S	CM90M	CM90L	CM112S	CM112M	CM112L	CM112H				
AC	142	142	142	186	186	186	186				
AD	140	140	140	162	162	162	162				
ADS	140	140	140	162	162	162	162				
L	565	592	646	601	628	690	820				
LS	661	688	742	691	718	780	885				
LB	266	293	347	302	329	391	521				
LBS	362	389	443	392	419	481	586				
XS	50	50	50	36	36	36	36				

9.18 F 107 / CM [Nm]

M_{aDyn} [Nm]		CM			
	i	112S	112M	112L	112H
FA107 2	5.03				1161
	6.22		655	950	1436
	7.4	591	779	1131	1708
	8.37	668	881	1279	1932
	9.69	774	1020	1480	2237
	9.96				2299
	12.33		1298	1884	2847
	14.67	1171	1544	2241	3387
	16.58	1324	1745	2533	3828
	19.2	1533	2021	2933	4433
	21.76	1737	2290	3324	5024
	25.14	2007	2646	3841	5804
	27.57	2201	2902	4212	6365
	33.79	2697	3556	5162	7801
FA107 3	31.8		3278	4758	7190
	37.61	2941	3877	5627	8504
	43.03	3364	4435	6438	>8860
	50.73	3966	5229	7590	>8860
	58.12	4544	5991	8696	>8860
	67.62	5287	6970	>8860	>8860
	74.52	5826	7681	>8860	>8860
	83.99	6567	8657	>8860	>8860
	88.49	6919	>8860	>8860	>8860
	92.47	7230	>8860	>8860	>8860
	101.38	7926	>8860	>8860	>8860
	117.94	>8860	>8860	>8860	>8860
	129.97	>8860	>8860	>8860	>8860
	146.49	>8860	>8860	>8860	>8860
	161.28	>8860	>8860	>8860	>8860
	178.64	>8860	>8860	>8860	
	199.31	>8860	>8860	>8860	
	215.37	>8860			
	254.4	>8860			

m [kg]		CM			
	s	112S	112M	112L	112H
FA107	2	245	250	265	270
FA107	3	255	260	275	280
FAF: + 21.0 kg / F: + 16.6 kg / FF: + 43.9 kg					

CM..				c_T				φ
	i	n_{epk} [1/min]	η [%]	FA [Nm/']	FAF [Nm/']	F [Nm/']	FF [Nm/']	/R [']
FA107 2	5.03	2797	97	1358.8	1358.8	722.45	666.16	7
	6.22	3197	97	1358.8	1358.8	722.45	666.16	7
	7.4	3597	97	1358.8	1358.8	722.45	666.16	7
	8.37	3924	97	1358.8	1358.8	722.45	666.16	7
	9.69	4500	97	1358.8	1358.8	722.45	666.16	7
	9.96	4500	97	1612.39	1612.39	788.37	721.81	5
	12.33	4500	97	1612.39	1612.39	788.37	721.81	5
	14.67	4500	97	1612.39	1612.39	788.37	721.81	5
	16.58	4500	97	1612.39	1612.39	788.37	721.81	5
	19.2	4500	97	1612.39	1612.39	788.37	721.81	5
	21.76	4500	97	1612.39	1612.39	788.37	721.81	5
	25.14	4500	97	1612.39	1612.39	788.37	721.81	5
	27.57	4500	97	1612.39	1612.39	788.37	721.81	5
	33.79	4500	97	1612.39	1612.39	788.37	721.81	5

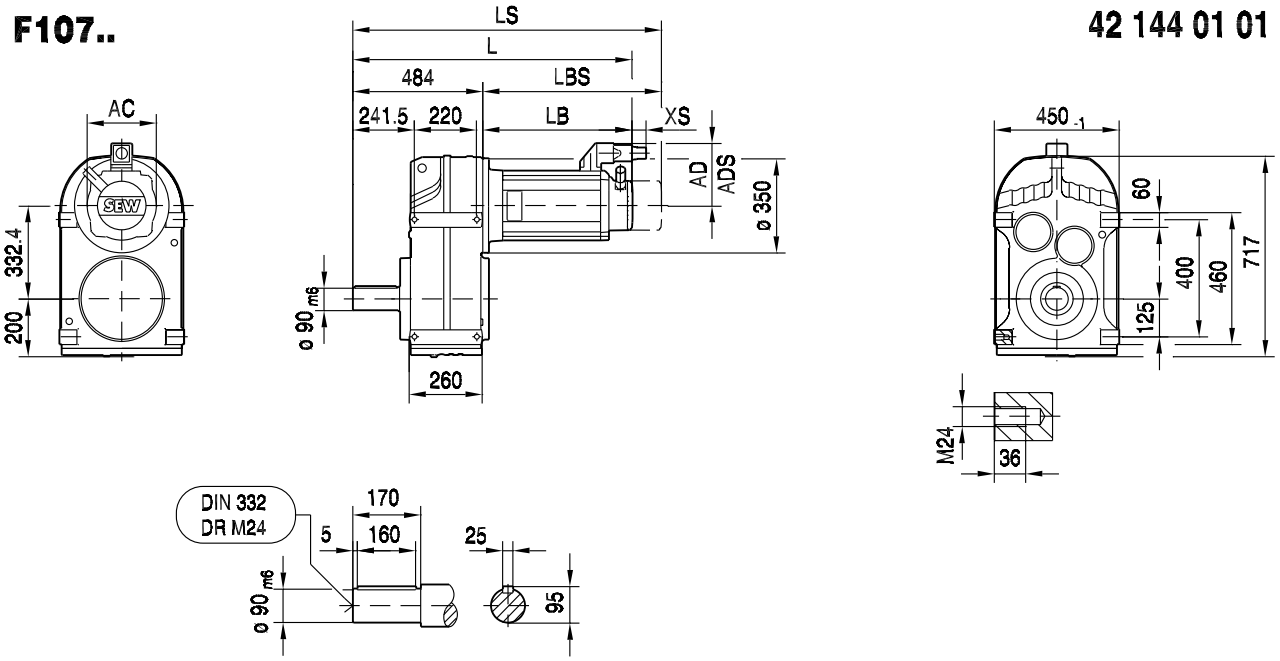


CM..	i	n_{epk} [1/min]	η [%]	c_T FA [Nm/']	FAF [Nm/']	F [Nm/']	FF [Nm/']	φ /R [']
	31.8	3197	95	1805.54	1805.54	831.89	758.12	6
	37.61	3597	95	1805.54	1805.54	831.89	758.12	6
	43.03	3924	95	1805.54	1805.54	831.89	758.12	6
	50.73	4378	95	1805.54	1805.54	831.89	758.12	6
	58.12	4500	95	1805.54	1805.54	831.89	758.12	6
	67.62	4500	95	1805.54	1805.54	831.89	758.12	6
	74.52	4500	95	1805.54	1805.54	831.89	758.12	6
	83.99	4500	95	1805.54	1805.54	831.89	758.12	6
FA107	88.49	4378	95	1823.33	1823.33	835.64	761.24	5
3	92.47	4500	95	1805.54	1805.54	831.89	758.12	6
	101.38	4500	95	1823.33	1823.33	835.64	761.24	5
	117.94	4500	95	1823.33	1823.33	835.64	761.24	5
	129.97	4500	95	1823.33	1823.33	835.64	761.24	5
	146.49	4500	95	1823.33	1823.33	835.64	761.24	5
	161.28	4500	95	1823.33	1823.33	835.64	761.24	5
	178.64	4500	95	1823.33	1823.33	835.64	761.24	5
	199.31	4500	95	1823.33	1823.33	835.64	761.24	5
	215.37	4500	95	1823.33	1823.33	835.64	761.24	5
	254.4	4500	95	1823.33	1823.33	835.64	761.24	5

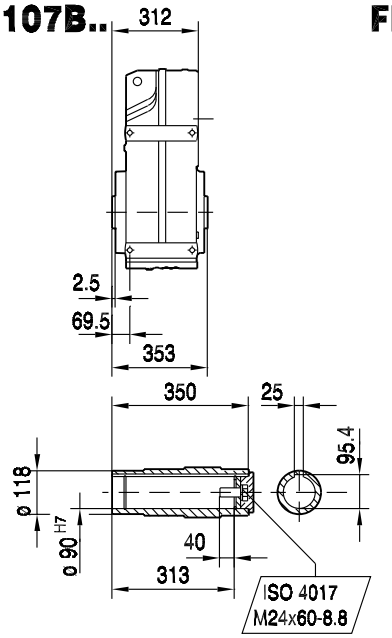
CM..	i	M_{amax} [Nm]	M_{apk} [Nm]	$M_{aNotaus}$ [Nm]	n_{ak} [1/min]	J_G 10^{-4} [kgm^2]	F_{Ramax} FA [N]	FAF [N]	F [N]	FF [N]	F_{Rapk} FA [N]	FAF [N]	F [N]	FF [N]
	5.03	4600	6240	7820	417	439	4520	39000	16400	19200	65000	65000	52500	55300
	6.22	4600	6240	7820	498	311	6920	42600	19000	22200	65000	65000	52500	55300
	7.4	4600	6240	7820	541	236	8400	45800	21300	24800	65000	65000	52500	55300
	8.37	4800	6240	8160	490	195	8720	47400	22000	25600	65000	65000	52500	55300
	9.69	4910	6240	8347	485	154	9670	50000	23500	27300	65000	65000	52500	55300
	9.96	6500	8860	11050	171	280	6200	47000	21500	25300	65000	65000	46500	45600
FA107	12.33	7000	8860	11900	138	209	6580	49800	22600	26600	65000	65000	46500	45600
2	14.67	7680	8860	13056	102	164	6050	51500	22400	26500	65000	65000	46500	45600
	16.58	7840	8860	13328	97	138	6870	53800	23900	28200	65000	65000	46500	45600
	19.2	7840	8860	13328	94	112	8600	57400	26500	31200	65000	65000	46500	45600
	21.76	7840	8860	13328	92	92	10100	60600	28800	33800	65000	65000	46500	45600
	25.14	7840	8860	13328	88	76	12000	64500	31500	36800	65000	65000	46500	45600
	27.57	7840	8860	13328	87	66	13200	65000	33300	38800	65000	65000	46500	45600
	33.79	7400	8860	12580	104	43	17700	65000	38300	44900	65000	65000	46500	45600
	31.8	7680	8860	13056	69	125	15800	65000	36500	42700	65000	65000	46500	45600
	37.61	7680	8860	13056	74	94	18300	65000	39500	46300	65000	65000	46500	45600
	43.03	7680	8860	13056	79	77	20300	65000	42000	49000	65000	65000	46500	45600
	50.73	7680	8860	13056	85	62	23000	65000	45100	51100	65000	65000	46500	45600
	58.12	7680	8860	13056	88	51	25300	65000	47800	51100	65000	65000	46500	45600
	67.62	7680	8860	13056	92	42	28000	65000	49800	51100	65000	65000	46500	45600
	74.52	7680	8860	13056	94	37	29900	65000	49800	51100	65000	65000	46500	45600
	83.99	7680	8860	13056	83	31	32200	65000	49800	51100	65000	65000	46500	45600
FA107	88.49	7680	8860	13056	79	56	33200	65000	49800	51100	65000	65000	46500	45600
3	92.47	7680	8860	13056	76	27	34100	65000	49800	51100	65000	65000	46500	45600
	101.38	7680	8860	13056	69	47	36000	65000	49800	51100	65000	65000	46500	45600
	117.94	7680	8860	13056	59	39	39300	65000	49800	51100	65000	65000	46500	45600
	129.97	7680	8860	13056	54	34	41400	65000	49800	51100	65000	65000	46500	45600
	146.49	7680	8860	13056	48	29	44200	65000	49800	51100	65000	65000	46500	45600
	161.28	7680	8860	13056	43	25	46600	65000	49800	51100	65000	65000	46500	45600
	178.64	7680	8860	13056	39	19	49100	65000	49800	51100	65000	65000	46500	45600
	199.31	7680	8860	13056	35	16	52000	65000	49800	51100	65000	65000	46500	45600
	215.37	7680	8860	13056	33	15	54000	65000	49800	51100	65000	65000	46500	45600
	254.4	7680	8860	13056	28	12	58600	65000	49800	51100	65000	65000	46500	45600

9.19 F 107 / CM [mm]

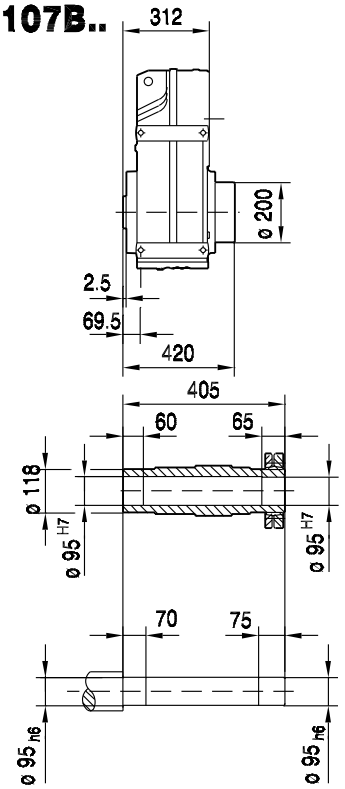
F107..



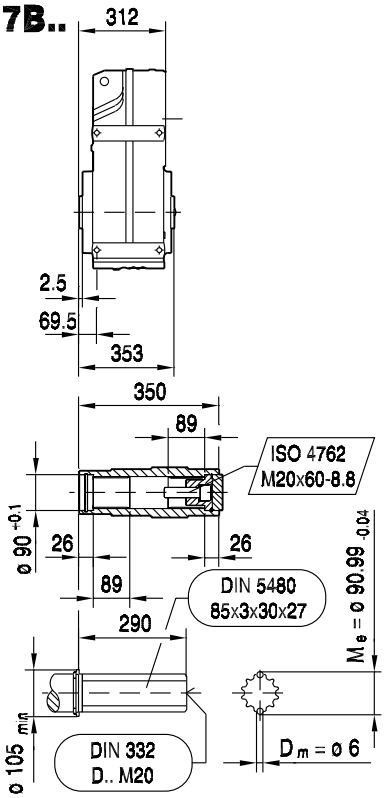
FA107B..



FH107B..



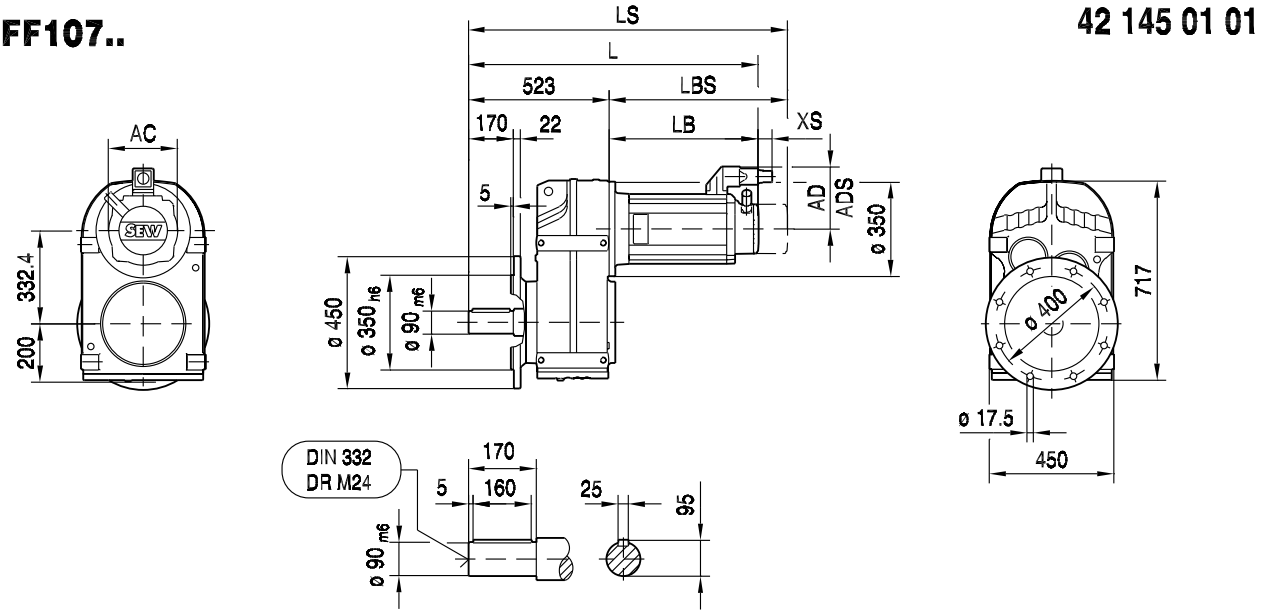
FV107B..



(→ 150)	CM112S	CM112M	CM112L	CM112H							
AC	186	186	186	186							
AD	162	162	162	162							
ADS	162	162	162	162							
L	780	807	869	999							
LS	870	897	959	1064							
LB	296	323	385	515							
LBS	386	413	475	580							
XS	36	36	36	36							

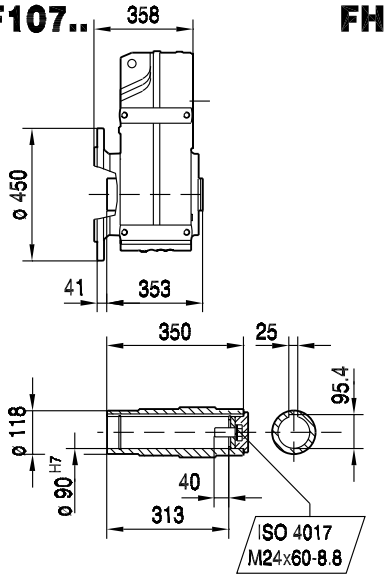
FF107..

42 145 01 01

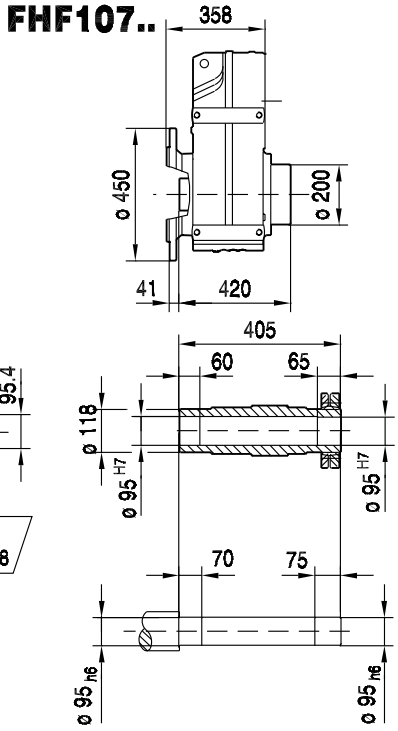


9

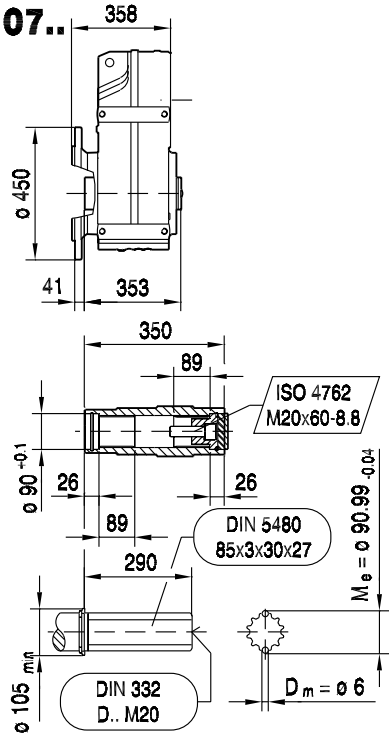
FAF107..



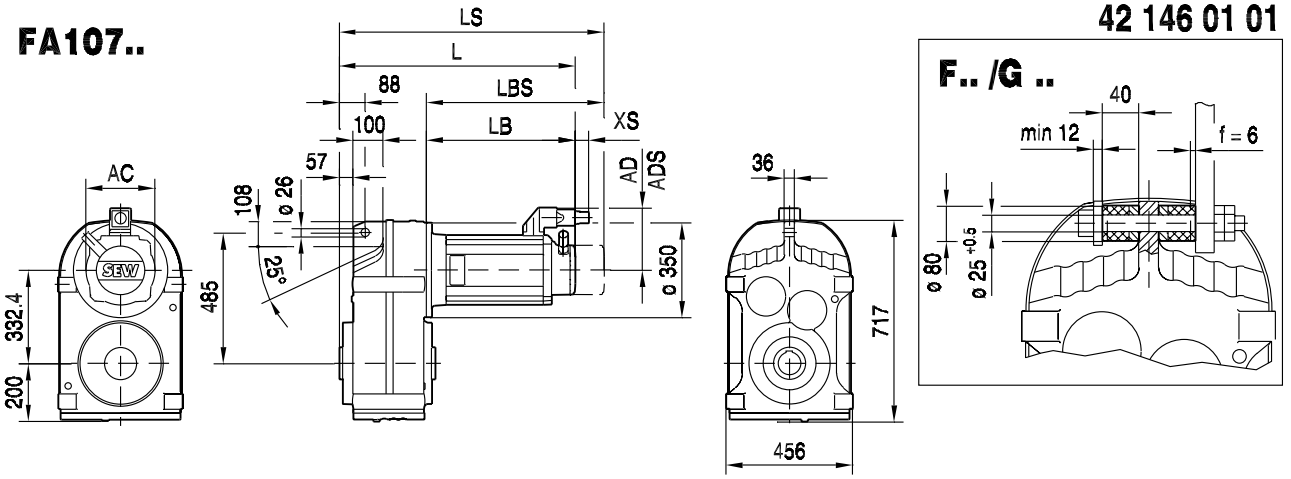
FHF107..

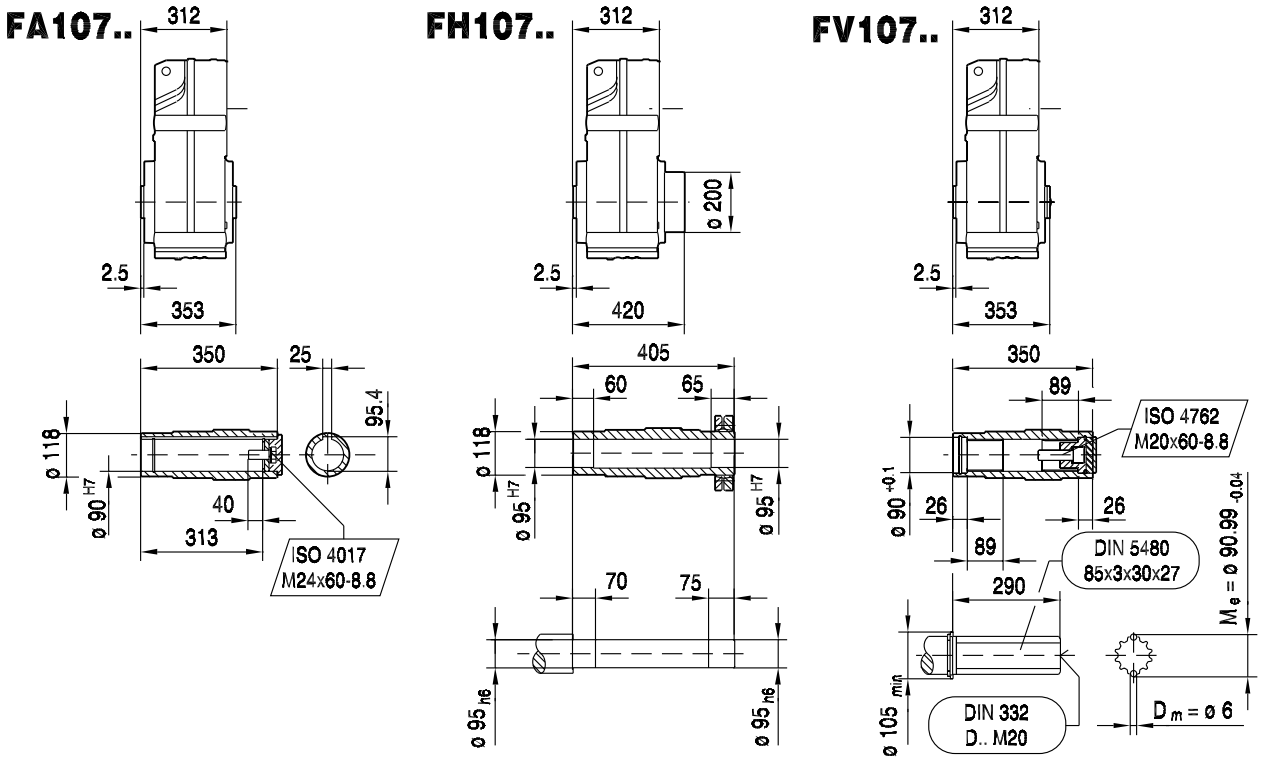


FVF107..



(→ 150)	CM112S	CM112M	CM112L	CM112H							
AC	186	186	186	186							
AD	162	162	162	162							
ADS	162	162	162	162							
L	819	846	908	1038							
LS	909	936	998	1103							
LB	296	323	385	515							
LBS	386	413	475	580							
XS	36	36	36	36							

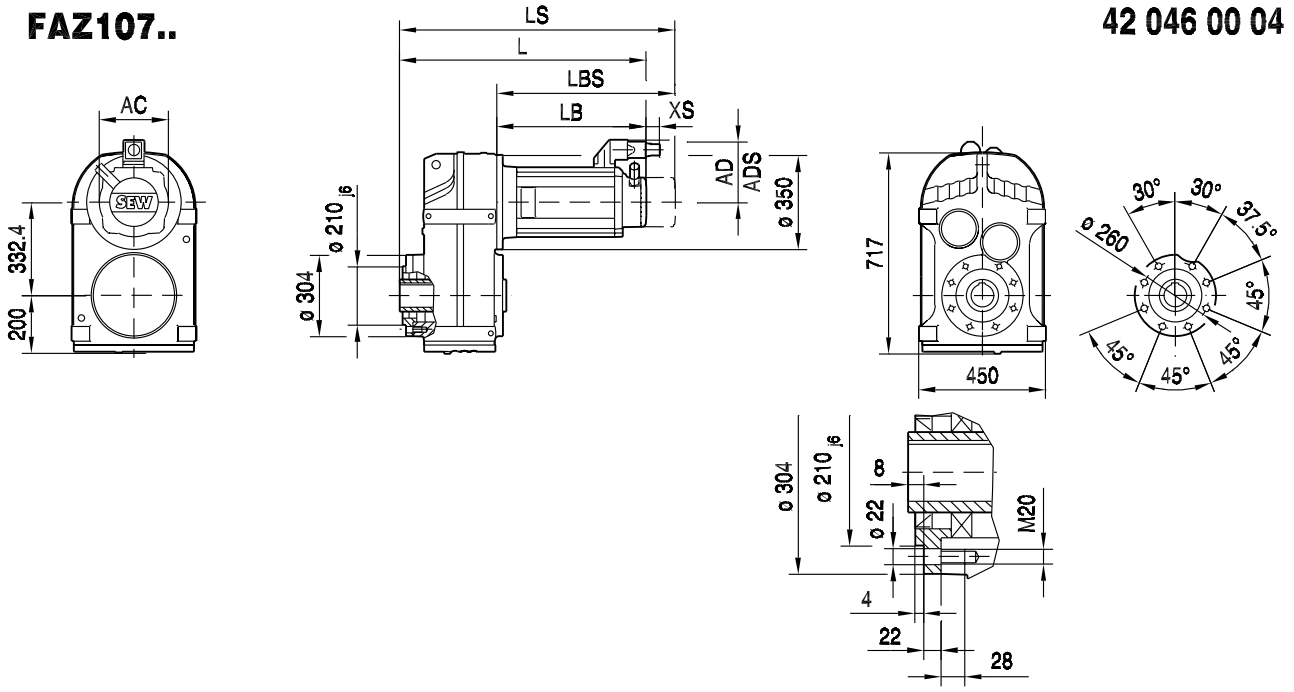




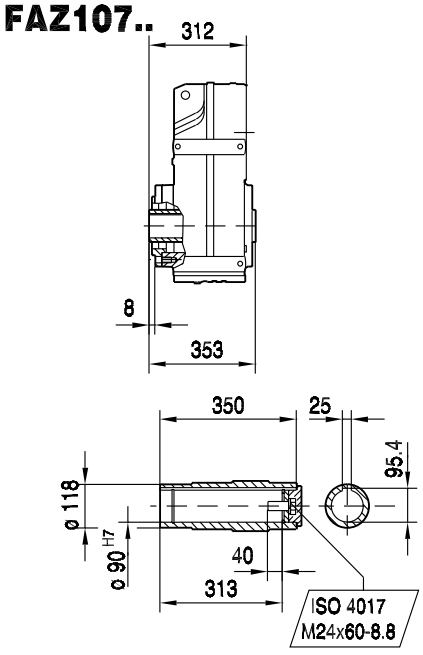
(→ 📖 150)	CM112S	CM112M	CM112L	CM112H							
AC	186	186	186	186							
AD	162	162	162	162							
ADS	162	162	162	162							
L	608	635	697	827							
LS	698	725	787	892							
LB	296	323	385	515							
LBS	386	413	475	580							
XS	36	36	36	36							

FAZ107..

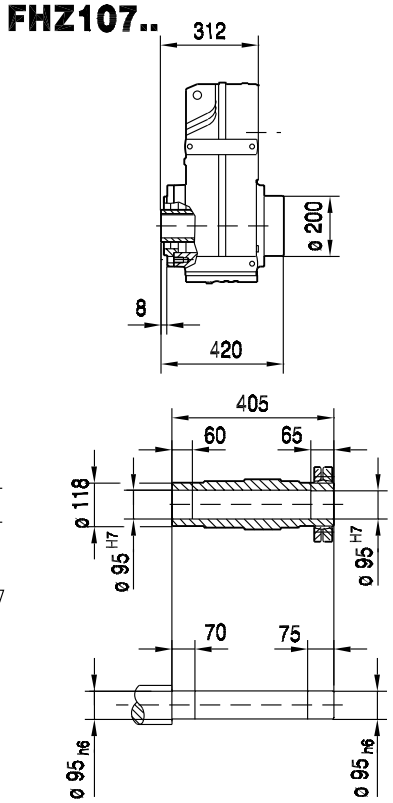
42 046 00 04



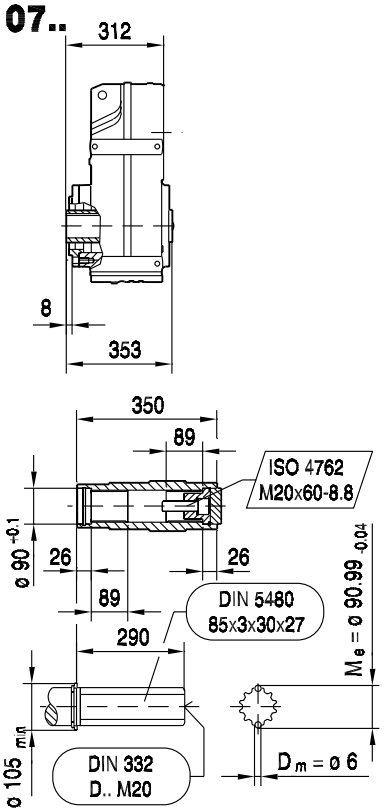
FAZ107..



FHZ107..



FVZ107..



(→ 150)	CM112S	CM112M	CM112L	CM112H							
AC	186	186	186	186							
AD	162	162	162	162							
ADS	162	162	162	162							
L	608	635	697	827							
LS	698	725	787	892							
LB	296	323	385	515							
LBS	386	413	475	580							
XS	36	36	36	36							