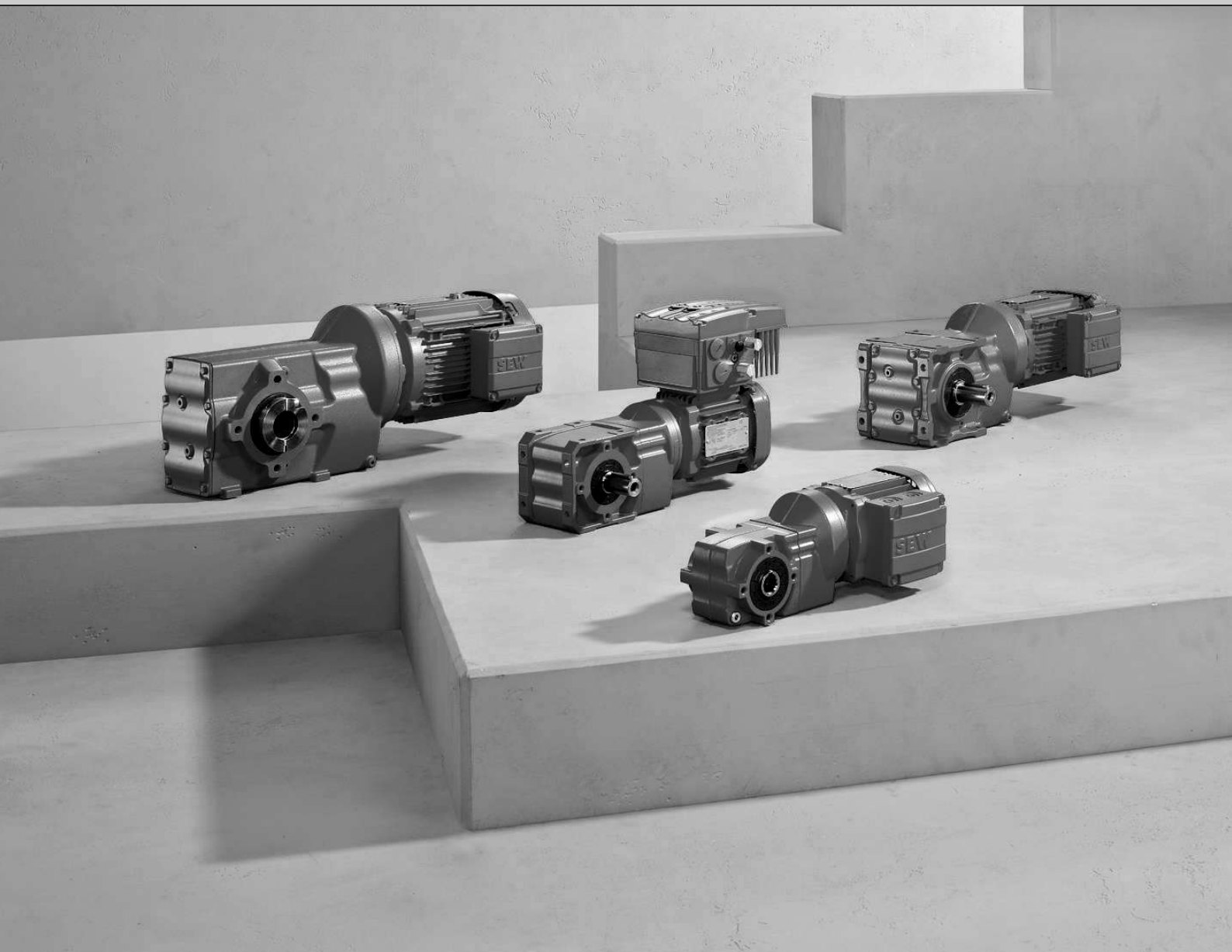




SEW
EURODRIVE

Latest News K..9



Two-Stage Helical-Bevel Gear Units

K..19, K..29, K..39, K..49



Contents

1	Product description	4
1.1	Characteristics and features	4
1.2	Design	4
1.3	Target industries and target applications	5
1.4	Designs	6
1.4.1	K..19/K..29 gear units	6
1.4.2	K..39/K..49 gear units	8
1.5	Torque arm	9
1.6	Overview of motor and gear unit combinations	10
2	Technical data	11
2.1	Technical data of K..9	11
2.2	Lubricant table	12
2.2.1	Key.....	12
2.2.2	Lubricant table	13
2.3	Selection tables for K..9 / DR..	14
2.4	Dimension sheets for K..9 / DR..	23
2.5	Selection tables for K..9 / AM	43
2.6	Dimension sheets for K..9 / AM	49
2.7	Selection tables for K..9 / CMP..	69
2.8	Dimension sheets for K..9 / CMP..	81
2.9	Selection tables for K..9 / DRL..	101
2.10	Dimension sheets for K..9 / DRL..	113
2.11	Selection tables for K..9 / DRC..	133
2.12	Dimension sheets for K..9 / DRC..	141
2.13	Selection tables for K..9 / AQ	161
2.14	Dimension sheets for K..9 / AQA, AQH	173
2.15	Dimension sheets for AQ	193
2.16	Selection tables for K..9 / AD	194
2.17	Dimension sheets for AD	197
3	Benefits	198
4	Documentation and software	199
4.1	Documentation	199
4.2	Online documentation and CAD data	199
4.3	Project planning tool	199

1 Product description

1.1 Characteristics and features

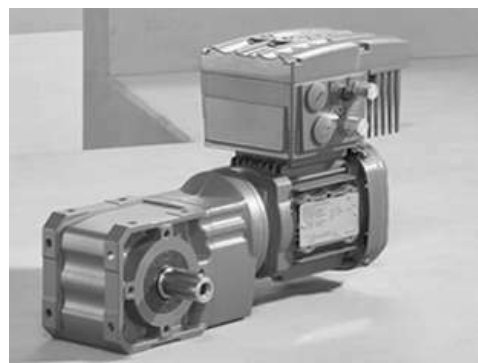
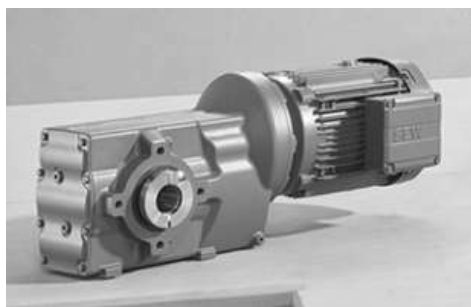
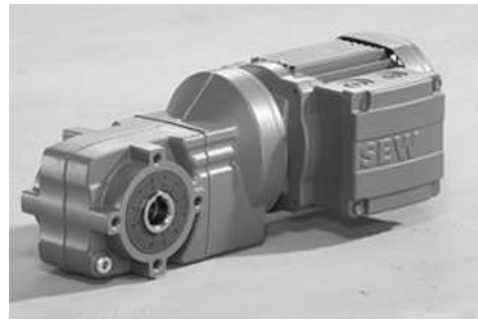
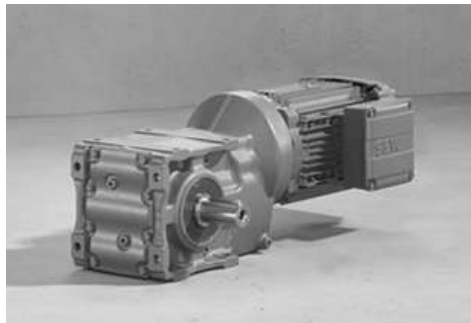
K..9 helical-bevel gear units are right-angle gear units that are designed analogously to the modular concept of the 7-series. Sizes K..19 to K..49 are added to the existing K gear unit series and offer energy-efficient, two-stage helical-bevel gear units for the lower to medium torque range. A variety of motor types and adapters can be mounted to these gear units as they come equipped with an LIA flange interface on the input end. K..9 gear units can be combined with DR.., DRC.., CMP.. and LSPM motors as well as with the range of adapters of the 7-series gear units.

The following technical features were implemented in the K..9 gear units:

- Right-angle gear units in the torque range from 80 to 500 Nm
- Two-stage helical-bevel gear unit with hypoid gearing in the second stage
- LIA flange interface for mounting a wide range of motors and adapters
- Can be combined with DRC.., DR.., CMP.. and LSPM motors
- Can be combined with the range of adapters of 7-series gear units
- Gearing efficiency over 90% (up to 96%) for all gear ratios
- Two-piece aluminum die-cast housing for K..19/K..29
- Single-piece gray cast iron housing for K..39/K..49

1.2 Design

The design meets all requirements for an economical solution and offers all the benefits of the modular SEW-EURODRIVE system.



1.3 Target industries and target applications

K..9 gear units are particularly suited for use in the following areas:

- Industries:
 - Automotive industry
 - Transport and logistics
 - Food industry
 - Beverage industry
 - Airport logistics
 - ...
- Applications:
 - Horizontal conveyors, such as roller and belt conveyors
 - Vertical conveyors, such as lifting stations and transfer units
 - ...

1 Product description





Designs

1.4 Designs

1.4.1 K..19/K..29 gear units






The K..19/K..29 gear units are available as foot-mounted housing with 3 base strips or as shaft-mounted housing:

Foot-mounted housing with 3 base strips

		
<p>Solid shaft with key</p> <p>K19.. K29..</p>	<p>Hollow shaft with key-way</p> <p>KA19B.. KA29B..</p>	<p>Hollow shaft with key-way and flange</p> <p>KAF19B.. KAF29B..</p>
		
<p>Solid shaft with key and flange</p> <p>KF19B.. KF29B..</p>	<p>Hollow shaft with shrink disk</p> <p>As standard, the shrink disk is located at position B and is hardly visible from this perspective. The picture depicts the shrink disk at position A.</p> <p>KH19B.. KH29B..</p>	<p>Hollow shaft with shrink disk and flange</p> <p>The shrink disk is located at position B and is only visible in the background from this perspective.</p> <p>KHF19B.. KHF29B..</p>

21932387/EN – 05/2015

Shaft-mounted housing

		
<p>Solid shaft with key and flange KF19.. KF29..</p>	<p>Hollow shaft with keyway KA19.. KA29..</p>	<p>Hollow shaft with keyway and flange KAF19.. KAF29..</p>
	 <p style="text-align: right;">14410341771</p>	
<p>Hollow shaft with shrink disk As standard, the shrink disk is located at position B and is hardly visible from this perspective. The picture depicts the shrink disk at position A. KH19.. KH29..</p>	<p>Hollow shaft with shrink disk and flange The shrink disk is located at position B and is only visible in the background from this perspective. KHF19.. KHF29..</p>	

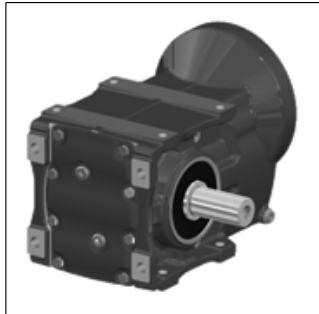
1 Product description

Designs

1.4.2 K..39/K..49 gear units

The K..39/K..49 gear units are also available as foot-mounted housing with 3 base strips or as shaft-mounted housing:

Foot-mounted housing with 3 base strips

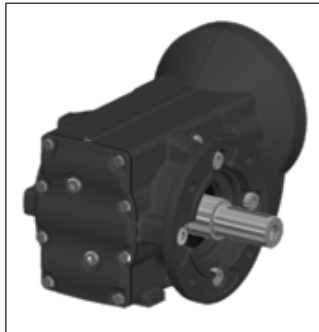


Solid shaft with key

K39..

K49..

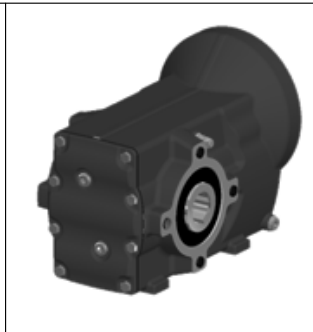
Shaft-mounted housing



Solid shaft with key and flange

KF39..

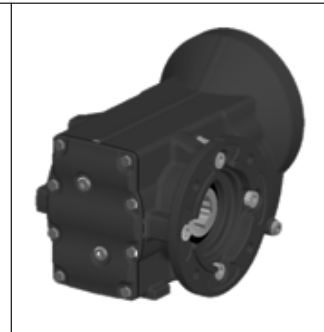
KF49..



Hollow shaft with keyway

KA39..

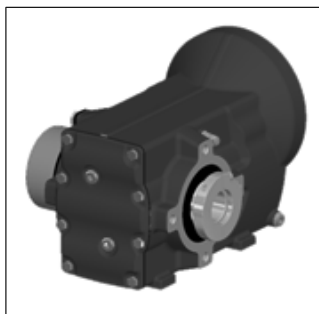
KA49..



Hollow shaft with keyway and flange

KAF39..

KAF49..



Hollow shaft with TorqLOC® hollow shaft mounting system

KT39..

KT49..

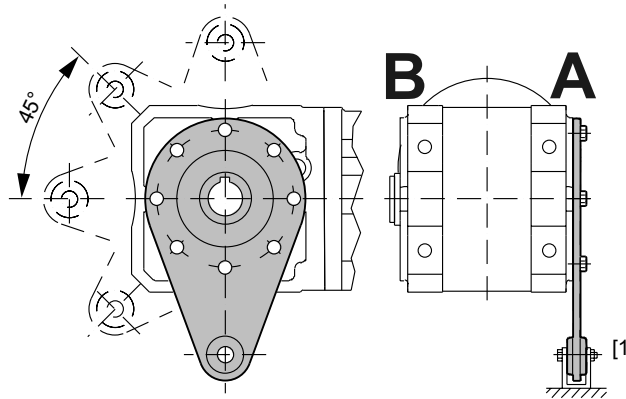
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1.5 Torque arm

For gear units in shaft-mounted housing design with hollow shaft, a torque arm is available as an option for all gear unit sizes. The optional torque arm is indicated by /T in the type designation.

The torque arm is installed on the output side of the gear unit. It can be installed in steps of 45°.

The following figure shows the torque support for the helical-bevel gear units K..19 – K..49:



9007206972372491

[1] Bushing

[A] Connection side

[B] Connection side

The following figure shows an example of a KA19/T gear unit with installed torque arm:



14751997323

The screws for installation of the torque arm can be ordered optionally.

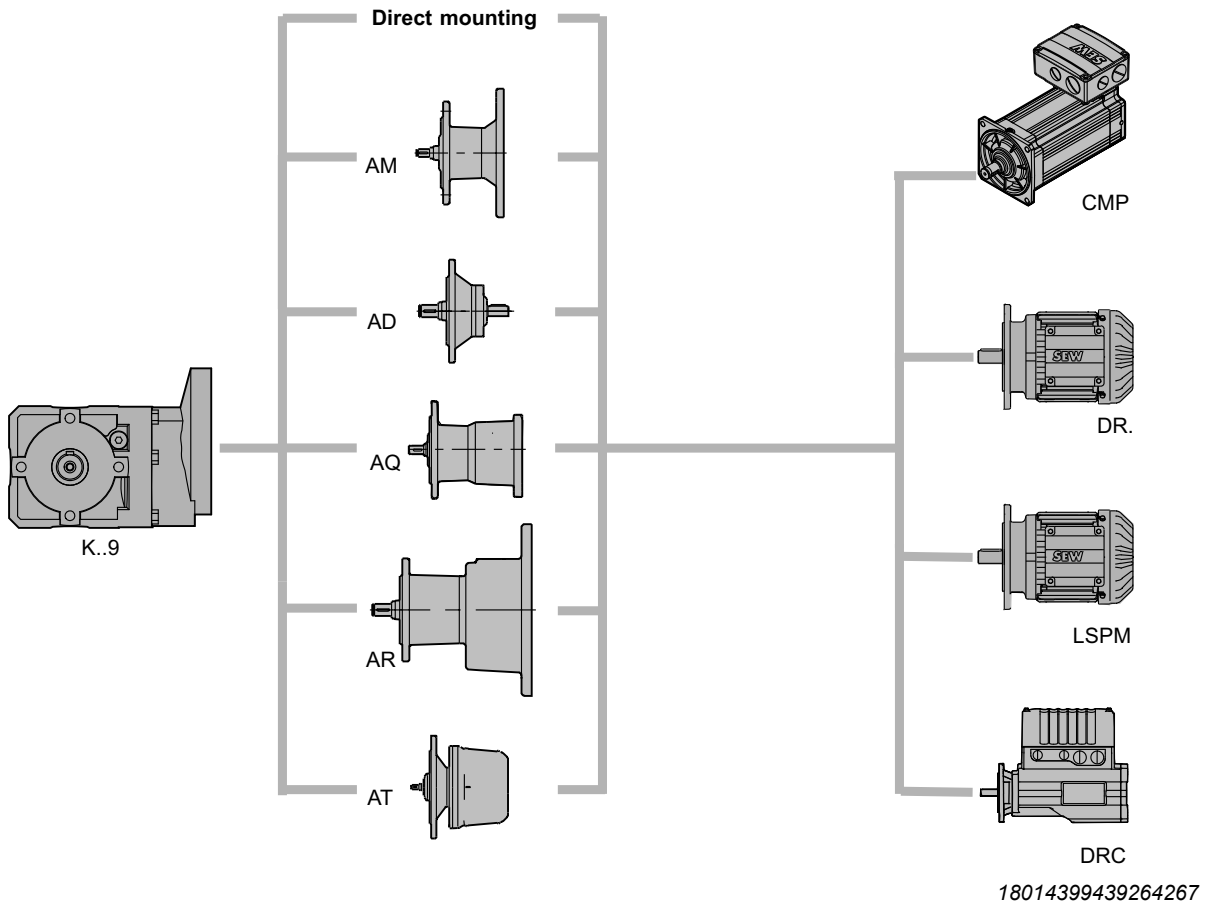
Gear unit type	Screw size	Number of screws	Part number Bag with screws
K..19	M8×20 – 8.8	4	18760570
K..29	M8×22 – 8.8	4	18760694
K..39	M10×30 – 8.8	4	18760597
K..49	M12×35 – 8.8	4	18760600

1 Product description

Overview of motor and gear unit combinations

1.6 Overview of motor and gear unit combinations

The following figure shows the adapter and motor combinations possible for K..9 gear units:



2 Technical data

2.1 Technical data of K..9

The following table lists the technical data for K..9 gear units:

Series	K..19	K..29	K..39	K..49
M_{amax} in Nm	80	130	300	500
F_{Ramax} in N	4500	6000	7500	9000
Shaft height in mm	50	63	80	100
Solid shaft in mm	20 × 40	25 × 50	30 × 60	35 × 70
Hollow shaft KA.. in mm	20	25 and 30 ¹⁾	30 / 35	35 / 40
Shrink disk KH.. in mm	20	25	--	--
TorqLOC® KT.. in mm	--	--	30 / 35	35 / 40
Flange diameter KF.. in mm	120 / 160	160 / 200	160	200
Gear ratio i	4.50 – 58.68	3.19 – 71.93	2.81 – 58.24	4.0 – 75.20
Dimensions L × W × H in mm	166 × 103 × 131	197 × 117 × 147	250 × 150 × 202	306 × 174 × 250



1) For size KA.29., 2 standard shafts with a diameter of 25 mm or 30 mm are offered. The 30 mm hollow shaft requires a low key according to DIN 6885-3.

2.2 Lubricant table

The lubricant table on the following page shows the permitted lubricants for SEW-EURODRIVE gear units. Observe the following key to the lubricant table.

2.2.1 Key

The following table shows the abbreviations and icons used in the lubricant table and explains what they mean:

Abbreviation/ icon	Meaning
	Synthetic-based lubricant
CLP PG	Polyglycol (W gear units, conform to USDA-H1)
CLP HC	Synthetic hydrocarbons
E	Ester oil (water hazard classification 1 (German regulation: WKG 1))
HCE	Synthetic hydrocarbons + ester oil (USDA H1 certification)
HLP	Hydraulic oil
	Lubricant for the food industry (food-grade oil)
	Biodegradable oil (lubricant for agriculture, forestry, and water management)

2.2.2 Lubricant table

01 751 09 04

	6)	DIN (ISO)	ISO/NLGI	Mobil®	Shell	bp	AGIP	ELMAGO	Castrol	FUCHS	TOTAL
R.. K37-187 (HK..) F..	Standard -15	CLP (CC)	VG 220	Mobilgear 600 XP 220	Shell Omala S2 G 220	BP Energol GR-XP 220	Küboroil GEM 1-220 N	Meropa 220	Tribol 1100/220	Renolin CLP 220	Carter EP 220
	+80	CLP PG	VG 220	Mobil Glygoyle 220	Shell Omala S4 GX 220	BP Energol SG-XP 220	Kübersynth GH 6-220	Synlubre CLP 220	Optiflex A 220	Renolin PG 220	Carter SY 220
	+60	CLP HC	VG 220	Mobil SHC 630	Shell Omala S4 GX 150		Kübersynth GEM 4-220 N	Pinnacle EP 150	Optiflex X 220	Renolin Unisyn CLP 220	Carter SH 220
	+40	CLP HC	VG 150	Mobil SHC 629	Shell Omala S2 G 150	BP Energol GR-XP 150	Kübersynth GEM 4-150 N	Pinnacle EP 150	Optigear Synthetic X 150	Renolin Unisyn CLP 150	Carter SH 150
K..19 - K..49	+25	CLP (CC)	VG 150	Mobilgear 600 XP 150	Shell Omala S2 G 150		Küboroil GEM 1-150 N	Meropa 150	Optigear BM 100	Renolin CLP 150	Carter EP 150
	+20	CLP HC	VG 88	Mobil SHC 626	Shell Omala S4 GX 88		Küboroil GEM 1-88 N			Renolin Unisyn CLP 88	
	+0	CLP HC	VG 32	Mobil SHC 624		Kübor-Summit HySyn FG-32	Kübersynth GH 6-460	Cetus PAO 46	Optilub HY 32	Renolin Unisyn OL 32	Dacnis SH 32
	Standard +60	CLP PG	VG 460			Kübersynth UH1 6-460					
S..(HS..)	+80	H1 PG	VG 460								
	Standard 0	CLP (CC)	VG 680	Mobilgear 600 XP 680	Shell Omala S2 G 680	BP Energol GR-XP 680	Küboroil GEM 1-680 N	Meropa 680	Tribol 1100/680	Renolin SEW 680	Carter EP 680
	+60	CLP PG	VG 680	Mobil Glygoyle 680	Shell Omala S4 WE 680	BP Energol SG-XP 680	Kübersynth GH 6-680	Synlubre CLP 680	Optiflex A 680	Renolin PG 680	
	+40	CLP HC	VG 460	Mobil SHC 634	Shell Omala S4 GX 460		Kübersynth GEM 4-460 N	Pinnacle EP 460	Optigear Synthetic X 460	Renolin Unisyn CLP 460	Carter SH 460
R.. K37-187 (HK..) F.. S..(HS..)	+30	CLP HC	VG 150	Mobil SHC 629	Shell Omala S4 GX 150		Kübersynth GEM 4-150 N	Pinnacle EP 150	Optigear Synthetic X 150	Renolin Unisyn CLP 150	Carter SH 150
	+10	CLP (CC)	VG 150	Mobilgear 600 XP 150	Shell Omala S2 G 150	BP Energol GR-XP 150	Küboroil GEM 1-150 N	Meropa 150	Optigear BM 150	Renolin CLP 150	Carter EP 150
	+40	CLP PG	VG 220	Mobil Glygoyle 220	Shell Omala S4 WE 220	BP Energol SG-XP 220	Kübersynth GH 6-220	Synlubre CLP 220	Optiflex A 220	Renolin PG 220	Carter SY 220
	+20	CLP HC	VG 68	Mobil SHC 626	Shell Omala S4 GX 68		Küboroil GEM 1-68 N			Renolin Unisyn CLP 68	
W..(HW..)	0	CLP HC	VG 32	Mobil SHC 624			Kübor-Summit HySyn FG-32	Cetus PAO 46	Alphasyn T32	Renolin Unisyn OL 32	Dacnis SH 32
	+40	CLPHC NSF H1	VG 460				Küboroil 4UH1-460 N		Optilub GT 460	Cassida Fluid GL 460	
	+30		VG 220				Küboroil 4UH1-220 N		Optilub GT 220	Cassida Fluid GL 220	
	0	E	VG 68				Küboroil 4UH1-68 N		Optilub HY 68	Cassida Fluid HF 68	
P.S.F..	+40	SEW PG	VG 460				Küborbio CA2-460			Plantogear 460 S	
	+10	API GL5	SAE 75W90 (-VG 100)	Mobil Synth Gear Oil 75W90							
	+60	H1 PG	VG 460				Kübersynth UH1 6-460				
	+80	CLP PG	VG 220				Kübersynth GH 6-220				
P.S.C..	+60	H1 PG	VG 460				Kübersynth UH1 6-460				
	0	CLP HC	VG 32	Mobil SHC 624							
	Standard +80	CLP (CC)	VG 220	Mobilgear 600 XP 220							
	+40	DIN 51 818	NLGI 00	Mobilux EP 004							
B.S.F..	+40	DIN 51 818	NLGI 1				Kübersynth UH1 14-151				
	+40	CLP HC	VG 32	Mobil SHC 624							
	Standard +60	CLP PG	VG 220				Kübersynth GH 6-220				
	+60	H1 PG	VG 460				Kübersynth UH1 6-460				

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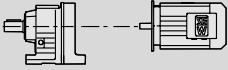
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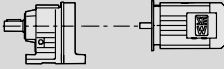
INFORMATION



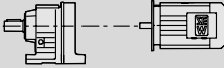
This lubricant recommendation in no way represents a guarantee as to the quality of the lubricant delivered by each respective supplier. Each lubricant manufacturer is responsible for the quality of their product. Thus the lubricant table is not binding. It may be necessary to contact SEW-EURODRIVE.

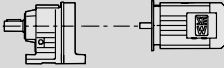
2.3 Selection tables for K..9 / DR..


P_m = 0.12 kW											m kg
n_a rpm	M_a Nm	i	F_{Ra}¹⁾ N	SEW f_B							
1.5	615	908	9000	0.80							
1.7	545	802	9000	0.90							
2.0	460	701	9000	1.10							
2.1	445	645	9000	1.10							
2.3	385	595	9000	1.30							
2.5	360	543	9000	1.35							
2.8	315	501	9000	1.60	K	49R37	DR	63S4	43		
3.1	285	449	9000	1.75	KF	49R37	DR	63S4	45		
3.4	245	401	9000	2.0	KA	49R37	DR	63S4	40		
3.8	225	360	9000	2.2	KAF	49R37	DR	63S4	45		
4.2	205	330	9000	2.4							
4.6	197	300	9000	2.5							
5.0	172	274	9000	2.9							
5.7	149	243	9000	3.3							
6.4	138	217	9000	3.6							
7.2	130	193	9000	3.9							
2.7	330	504	7500	0.90							
3.0	315	454	7500	0.95							
3.5	265	399	7500	1.10							
3.8	250	365	7500	1.20							
4.4	205	312	7500	1.45							
4.6	200	299	7500	1.50	K	39R17	DR	63S4	24		
5.4	172	254	7500	1.75	KF	39R17	DR	63S4	26		
5.9	154	234	7500	1.95	KA	39R17	DR	63S4	23		
6.6	140	210	7500	2.1	KAF	39R17	DR	63S4	24		
7.3	128	189	7500	2.3							
7.9	120	174	7500	2.5							
8.8	104	156	7500	2.9							
9.7	96	142	7500	3.1							
12	78	117	7500	3.8							
19	60	71.93	5190	2.2							
21	55	66.25	5200	2.4	K	29	DR	63S4	10		
23	51	61.28	5210	2.6	KF	29	DR	63S4	11		
25	46	54.89	5230	2.8	KA	29	DR	63S4	9.8		
27	42	50.35	5240	3.1	KAF	29	DR	63S4	11		
32	36	42.87	5260	3.6							
24	49	58.68	4460	1.45							
26	45	53.88	4480	1.55							
28	41	49.69	4500	1.70							
31	37	44.48	4500	1.85							
34	34	40.63	4500	2.00							
40	28	34.29	4500	2.2							
43	26	31.74	4500	3.0							
47	24	29.29	4500	2.5							
47	24	29.14	4500	3.3	K	19	DR	63S4	8.5		
51	23	27.16	4500	2.7	KF	19	DR	63S4	8.8		
51	22	26.88	4500	3.6	KA	19	DR	63S4	8.0		
57	20	24.06	4460	4.0	KAF	19	DR	63S4	8.4		
63	18	21.98	4340	4.4							
74	15	18.55	4120	5.2							
87	13	15.84	3920	6.1							
94	12	14.69	3830	6.6							
109	11	12.70	3660	7.6							
117	9.8	11.84	3580	8.0							
134	8.6	10.32	3430	8.9							
144	8.0	9.58	3370	7.9							

P_m = 0.18 kW									m
n_a	M_a	i	F_{Ra}¹⁾	SEW					kg
rpm	Nm		N	f_B					
2.4	595	543	9000	0.85					
2.6	530	501	9000	0.95					
2.9	475	449	9000	1.05					
3.3	415	401	9000	1.20					
3.7	380	360	9000	1.30					
4.0	345	330	9000	1.45	K	49R37	DR	63M4	43
4.4	325	300	9000	1.55	KF	49R37	DR	63M4	45
4.8	285	274	9000	1.70	KA	49R37	DR	63M4	40
5.4	250	243	9000	1.95	KAF	49R37	DR	63M4	45
6.1	230	217	9000	2.2					
6.8	210	193	9000	2.4					
7.5	190	176	9000	2.6					
8.7	158	152	9000	3.2					
11	133	125	9000	3.8					
4.2	335	312	7500	0.90					
4.4	325	299	7500	0.90					
5.2	280	254	7500	1.05					
5.6	250	234	7500	1.20					
6.3	225	210	7500	1.30	K	39R17	DR	63M4	24
7.0	205	189	7500	1.45	KF	39R17	DR	63M4	26
7.6	195	174	7500	1.55	KA	39R17	DR	63M4	23
8.4	171	156	7500	1.75	KAF	39R17	DR	63M4	24
9.3	157	142	7500	1.90					
11	128	117	7500	2.3					
18	81	75	7500	3.6					
18	94	71.93	5090	1.40					
20	86	66.25	5110	1.50					
22	80	61.28	5130	1.65					
24	71	54.89	5160	1.80					
26	66	50.35	5170	2.00					
31	56	42.87	5200	2.3	K	29	DR	63M4	10
34	51	38.90	5220	2.6	KF	29	DR	63M4	11
36	48	36.96	5220	2.5	KA	29	DR	63M4	9.8
37	47	35.83	5230	2.8	KAF	29	DR	63M4	11
40	43	33.15	5240	3.0					
44	39	30.11	5110	2.9					
44	39	29.69	5130	3.4					
48	35	27.23	5010	3.7					
53	32	24.91	4840	3.4					
22	76	58.68	4280	0.90					
24	70	53.88	4330	1.00					
27	65	49.69	4360	1.10					
30	58	44.48	4410	1.20					
32	53	40.63	4440	1.25					
38	45	34.29	4480	1.45					
42	41	31.74	4500	1.95					
45	38	29.29	4500	1.60					
45	38	29.14	4500	2.1					
49	35	27.16	4490	1.70	K	19	DR	63M4	8.5
49	35	26.88	4500	2.3	KF	19	DR	63M4	8.8
55	31	24.06	4410	2.6	KA	19	DR	63M4	8.0
60	29	21.98	4300	2.8	KAF	19	DR	63M4	8.4
71	24	18.55	4090	3.3					
83	21	15.84	3900	3.9					
90	19	14.69	3820	4.2					
104	17	12.70	3650	4.8					
111	15	11.84	3580	5.1					
128	13	10.32	3430	5.7					
138	12	9.58	3380	5.0					
163	11	8.09	3200	7.6					
191	9.0	6.91	3050	8.9					

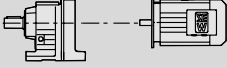
21932387/EN – 05/2015

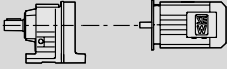
P_m = 0.25 kW									
n_a rpm	M_a Nm	i	F_{Ra}¹⁾ N	SEW f_B					m kg
3.2	610	401	9000	0.80					
3.6	550	360	9000	0.90					
3.9	505	330	9000	1.00					
4.3	470	300	9000	1.05					
4.7	420	274	9000	1.20	K	49R37	DR	63L4	44
5.3	370	243	9000	1.35	KF	49R37	DR	63L4	45
6.0	335	217	9000	1.50	KA	49R37	DR	63L4	41
6.7	305	193	9000	1.65	KAF	49R37	DR	63L4	46
7.4	275	176	9000	1.80					
8.6	230	152	9000	2.2					
10	194	125	9000	2.6					
13	151	99	9000	3.3					
5.6	365	234	7500	0.80					
6.2	330	210	7500	0.90					
6.9	300	189	7500	1.00	K	39R17	DR	63L4	25
7.5	275	174	7500	1.10	KF	39R17	DR	63L4	26
8.3	245	156	7500	1.20	KA	39R17	DR	63L4	24
9.2	225	142	7500	1.35	KAF	39R17	DR	63L4	25
11	185	117	7500	1.60					
17	117	75	7500	2.5					
17	138	75.20	9000	3.4	K	49	DR	63L4	35
19	129	70.19	9000	3.4	KF	49	DR	63L4	37
					KA	49	DR	63L4	32
					KAF	49	DR	63L4	37
22	107	58.24	7500	2.8	K	39	DR	63L4	22
26	91	49.69	7500	3.3	KF	39	DR	63L4	23
					KA	39	DR	63L4	21
					KAF	39	DR	63L4	22
18	132	71.93	4970	1.00					
20	122	66.25	5000	1.05					
21	113	61.28	5030	1.15					
24	101	54.89	5070	1.30					
26	92	50.35	5090	1.40					
30	79	42.87	5130	1.65					
33	71	38.90	5170	1.80					
35	68	36.96	5170	1.80	K	29	DR	63L4	11
36	66	35.83	5180	2.00	KF	29	DR	63L4	12
39	61	33.15	5170	2.1	KA	29	DR	63L4	10
43	55	30.11	4980	2.1	KAF	29	DR	63L4	11
44	55	29.69	5020	2.4					
48	50	27.23	4900	2.6					
52	46	24.91	4740	2.4					
56	43	23.19	4690	3.0					
59	41	22.08	4580	2.6					
65	37	19.99	4500	3.5					
29	82	44.48	4240	0.85					
32	75	40.63	4300	0.90					
38	63	34.29	4380	1.00					
41	58	31.74	4400	1.35					
44	54	29.29	4410	1.15					
45	54	29.14	4430	1.50					
48	50	27.16	4330	1.20					
48	49	26.88	4430	1.60					
54	44	24.06	4300	1.80					
59	40	21.98	4200	2.00	K	19	DR	63L4	9.2
70	34	18.55	4010	2.4	KF	19	DR	63L4	9.5
82	29	15.84	3840	2.8	KA	19	DR	63L4	8.7
88	27	14.69	3760	3.0	KAF	19	DR	63L4	9.1
102	23	12.70	3600	3.4					
110	22	11.84	3530	3.6					
126	19	10.32	3390	4.0					
136	18	9.58	3360	3.6					
161	15	8.09	3190	5.4					
188	13	6.91	3040	6.3					
203	12	6.41	2960	6.8					
235	10	5.54	2830	7.9					
252	9.5	5.16	2770	8.4					

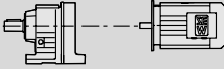
P_m = 0.37 kW									
n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B					m kg
5.0	600	274	9000	0.85					
5.7	530	243	9000	0.95					
6.4	475	217	9000	1.05	K	49R37	DRS	71S4	46
7.2	430	193	9000	1.15	KF	49R37	DRS	71S4	47
7.8	390	176	9000	1.30	KA	49R37	DRS	71S4	43
9.1	330	152	9000	1.50	KAF	49R37	DRS	71S4	48
11	275	125	9000	1.80					
14	215	99	9000	2.3					
8.8	345	156	7500	0.85	K	39R17	DRS	71S4	26
9.7	315	142	7500	0.95	KF	39R17	DRS	71S4	28
12	260	117	7500	1.15	KA	39R17	DRS	71S4	25
18	166	75	7500	1.75	KAF	39R17	DRS	71S4	27
18	193	75.20	9000	2.5	K	49	DRS	71S4	37
20	180	70.19	9000	2.5	KF	49	DRS	71S4	39
23	154	60.27	9000	3.2	KA	49	DRS	71S4	34
					KAF	49	DRS	71S4	39
24	149	58.24	7500	2.0	K	39	DRS	71S4	24
28	127	49.69	7500	2.4	KF	39	DRS	71S4	25
32	111	43.45	7500	2.7	KA	39	DRS	71S4	23
33	106	41.28	7500	2.8	KAF	39	DRS	71S4	24
38	93	36.22	7500	3.2					
25	141	54.89	4940	0.90					
27	129	50.35	4980	1.00					
32	110	42.87	5000	1.15					
37	95	36.96	4860	1.30					
46	77	30.11	4650	1.50	K	29	DRS	71S4	13
46	76	29.69	4720	1.70	KF	29	DRS	71S4	14
51	70	27.23	4620	1.85	KA	29	DRS	71S4	12
55	64	24.91	4450	1.70	KAF	29	DRS	71S4	13
60	59	23.19	4440	2.2					
62	57	22.08	4330	1.85					
69	51	19.99	4270	2.5					
85	42	16.29	4050	3.1					
47	75	29.29	4050	0.80					
51	70	27.16	3990	0.85					
57	62	24.06	4030	1.30					
63	56	21.98	3940	1.40					
74	47	18.55	3780	1.70					
87	41	15.84	3640	1.95					
94	38	14.69	3570	2.1					
109	33	12.70	3430	2.5	K	19	DRS	71S4	11
117	30	11.84	3370	2.6	KF	19	DRS	71S4	11
134	26	10.32	3240	2.9	KA	19	DRS	71S4	11
144	25	9.58	3230	2.6	KAF	19	DRS	71S4	11
171	21	8.09	3080	3.9					
200	18	6.91	2930	4.5					
215	16	6.41	2870	4.9					
249	14	5.54	2740	5.6					
267	13	5.16	2680	6.0					
307	12	4.50	2570	6.9					

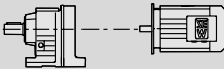
P_m = 0.55 kW									
n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B					m kg
7.7	595	176	9000	0.85	K	49R37	DRS	71M4	47
9.0	505	152	9000	1.00	KF	49R37	DRS	71M4	48
11	420	125	9000	1.20	KA	49R37	DRS	71M4	44
14	330	99	9000	1.50	KAF	49R37	DRS	71M4	49
18	255	75	7500	1.15	K	39R17	DRS	71M4	28
					KF	39R17	DRS	71M4	29
					KA	39R17	DRS	71M4	27
					KAF	39R17	DRS	71M4	28

21932387/EN – 05/2015

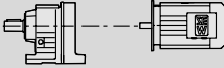
P_m = 0.55 kW									
n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B					m kg
18	290	75.20	9000	1.65					
19	270	70.19	9000	1.65					
23	230	60.27	9000	2.2	K	49	DRS	71M4	38
26	200	52.94	9000	2.4	KF	49	DRS	71M4	40
27	194	50.29	9000	2.6	KA	49	DRS	71M4	36
31	172	44.44	9000	2.9	KAF	49	DRS	71M4	40
36	147	37.98	9000	3.4					
23	220	58.24	7500	1.35					
27	192	49.69	7500	1.55					
31	168	43.45	7500	1.80	K	39	DRS	71M4	25
33	159	41.28	7500	1.90	KF	39	DRS	71M4	26
38	140	36.22	7500	2.1	KA	39	DRS	71M4	24
44	119	30.72	7500	2.5	KAF	39	DRS	71M4	25
49	107	27.73	7410	2.8					
56	94	24.40	7170	3.2					
59	89	23.04	7070	3.4					
37	143	36.96	4410	0.85					
45	116	30.11	4290	1.00					
46	115	29.69	4400	1.15					
50	105	27.23	4330	1.25					
55	96	24.91	4160	1.15	K	29	DRS	71M4	14
59	90	23.19	4200	1.45	KF	29	DRS	71M4	15
62	85	22.08	4060	1.25	KA	29	DRS	71M4	14
68	77	19.99	4060	1.70	KAF	29	DRS	71M4	14
84	63	16.29	3880	2.1					
101	52	13.47	3700	2.5					
114	46	11.94	3590	2.8					
137	38	9.90	3510	2.9					
159	33	8.53	3360	3.7					
57	93	24.06	3730	0.85					
62	85	21.98	3670	0.95					
73	72	18.55	3560	1.10					
86	61	15.84	3450	1.30					
93	57	14.69	3390	1.40					
107	49	12.70	3280	1.65	K	19	DRS	71M4	12
115	46	11.84	3230	1.75	KF	19	DRS	71M4	13
132	40	10.32	3120	1.90	KA	19	DRS	71M4	12
142	37	9.58	3150	1.70	KAF	19	DRS	71M4	12
168	31	8.09	3010	2.6					
197	27	6.91	2880	3.0					
212	25	6.41	2820	3.2					
246	21	5.54	2700	3.7					
263	20	5.16	2640	4.0					
302	17	4.50	2540	4.6					


P_m = 0.75 kW									
n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B					m kg
12	545	125	9000	0.90	K	49R37	DRN	80M4	51
15	430	99	9000	1.15	KF	49R37	DRN	80M4	53
					KA	49R37	DRN	80M4	48
					KAF	49R37	DRN	80M4	53
19	330	75	7500	0.90	K	39R17	DRN	80M4	32
					KF	39R17	DRN	80M4	34
					KA	39R17	DRN	80M4	31
					KAF	39R17	DRN	80M4	33
24	295	60.27	9000	1.65					
27	260	52.94	9000	1.90					
29	250	50.29	9000	2.0	K	49	DRN	80M4	43
32	220	44.44	9000	2.3	KF	49	DRN	80M4	45
38	189	37.98	9000	2.6	KA	49	DRN	80M4	40
41	173	34.81	9000	2.9	KAF	49	DRN	80M4	45
47	152	30.55	8960	3.3					
50	144	28.95	8840	3.5					

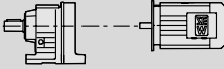
P_m = 0.75 kW										
n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B					m kg	
29	245	49.69	7500	1.20						
33	215	43.45	7500	1.40						
35	205	41.28	7500	1.45						
40	180	36.22	7390	1.65						
47	153	30.72	7140	1.95	K	39	DRN	80M4	30	
52	138	27.73	6990	2.2	KF	39	DRN	80M4	31	
59	121	24.40	6790	2.5	KA	39	DRN	80M4	29	
62	115	23.04	6700	2.6	KAF	39	DRN	80M4	30	
73	98	19.62	6440	3.0						
81	89	17.83	6290	3.3						
93	77	15.44	6060	3.6						
58	124	24.91	3780	0.90						
62	115	23.19	3870	1.15						
65	110	22.08	3720	0.95						
72	99	19.99	3780	1.30						
88	81	16.29	3630	1.60	K	29	DRN	80M4	19	
107	67	13.47	3490	1.95	KF	29	DRN	80M4	20	
121	59	11.94	3400	2.2	KA	29	DRN	80M4	18	
146	49	9.90	3370	2.2	KAF	29	DRN	80M4	19	
157	46	9.17	3190	2.8						
169	42	8.53	3230	2.9						
193	37	7.48	3030	3.3						
207	35	6.95	3050	3.2						
78	92	18.55	3260	0.85						
91	79	15.84	3190	1.00						
98	73	14.69	3150	1.10						
113	63	12.70	3060	1.25						
122	59	11.84	3020	1.35	K	19	DRN	80M4	17	
140	51	10.32	2940	1.50	KF	19	DRN	80M4	17	
178	40	8.09	2870	2.00	KA	19	DRN	80M4	16	
208	34	6.91	2760	2.3	KAF	19	DRN	80M4	17	
225	32	6.41	2700	2.5						
260	28	5.54	2600	2.9						
279	26	5.16	2550	3.1						
320	22	4.50	2450	3.6						

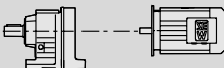
P_m = 1.1 kW										
n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B					m kg	
24	435	60.27	9000	1.15						
27	380	52.94	9000	1.30						
29	360	50.29	9000	1.40						
33	320	44.44	9000	1.55						
38	270	37.98	8800	1.80	K	49	DRN	90S4	48	
42	250	34.81	8660	2.00	KF	49	DRN	90S4	50	
48	220	30.55	8430	2.3	KA	49	DRN	90S4	45	
50	205	28.95	8340	2.4	KAF	49	DRN	90S4	50	
57	183	25.34	8100	2.7						
64	165	22.83	7900	3.0						
73	145	20.03	7660	3.5						
29	355	49.69	6810	0.85						
33	310	43.45	6760	0.95						
35	295	41.28	6740	1.00						
40	260	36.22	6660	1.15						
47	220	30.72	6520	1.35						
52	200	27.73	6420	1.50						
60	176	24.40	6290	1.70	K	39	DRN	90S4	36	
63	166	23.04	6230	1.80	KF	39	DRN	90S4	38	
74	142	19.62	6040	2.1	KA	39	DRN	90S4	35	
82	129	17.83	5920	2.2	KAF	39	DRN	90S4	37	
94	111	15.44	5740	2.5						
108	97	13.44	5560	2.8						
114	92	12.73	5760	2.7						
120	87	12.09	5680	2.9						
137	77	10.61	5480	3.7						

21932387/EN – 05/2015

P_m = 1.1 kW									
n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B					m kg
73	144	19.99	3360	0.90					
89	118	16.29	3290	1.10					
108	97	13.47	3210	1.35					
122	86	11.94	3150	1.50					
147	71	9.90	3210	1.55	K	29	DRN	90S4	25
159	66	9.17	2990	1.95	KF	29	DRN	90S4	26
171	62	8.53	3100	2.00	KA	29	DRN	90S4	24
195	54	7.48	2870	2.3	KAF	29	DRN	90S4	25
209	50	6.95	2940	2.2					
253	42	5.75	2800	2.7					
285	37	5.10	2710	3.0					
115	92	12.70	2760	0.85					
123	85	11.84	2740	0.90					
141	74	10.32	2690	1.00					
180	58	8.09	2720	1.35	K	19	DRN	90S4	23
211	50	6.91	2620	1.60	KF	19	DRN	90S4	23
227	46	6.41	2580	1.75	KA	19	DRN	90S4	22
263	40	5.54	2490	2.0	KAF	19	DRN	90S4	23
282	37	5.16	2440	2.2					
323	32	4.50	2360	2.5					

P_m = 1.5 kW									
n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B					m kg
28	515	52.94	8280	0.95					
29	490	50.29	8260	1.00					
33	435	44.44	8200	1.15					
38	370	37.98	8080	1.35					
42	340	34.81	7990	1.45					
48	295	30.55	7850	1.65	K	49	DRN	90L4	51
50	280	28.95	7780	1.75	KF	49	DRN	90L4	53
58	245	25.34	7610	2.0	KA	49	DRN	90L4	48
64	220	22.83	7470	2.2	KAF	49	DRN	90L4	53
73	196	20.03	7280	2.6					
83	173	17.67	7090	2.9					
93	154	15.67	6900	3.2					
109	131	13.38	6650	3.6					
40	355	36.22	5840	0.85					
48	300	30.72	5830	1.00					
53	270	27.73	5800	1.10					
60	235	24.40	5740	1.25					
63	225	23.04	5700	1.35					
74	192	19.62	5600	1.55	K	39	DRN	90L4	39
82	175	17.83	5520	1.65	KF	39	DRN	90L4	41
95	151	15.44	5390	1.85	KA	39	DRN	90L4	38
109	132	13.44	5260	2.0	KAF	39	DRN	90L4	40
115	125	12.73	5560	2.0					
121	119	12.09	5490	2.2					
138	104	10.61	5310	2.7					
162	88	9.00	5080	3.4					
180	80	8.12	4950	3.8					
90	160	16.29	2910	0.80					
108	132	13.47	2890	1.00					
122	117	11.94	2860	1.10					
159	90	9.17	2780	1.45					
171	84	8.53	2940	1.45	K	29	DRN	90L4	28
195	73	7.48	2690	1.70	KF	29	DRN	90L4	29
210	68	6.95	2820	1.65	KA	29	DRN	90L4	27
254	56	5.75	2690	2.00	KAF	29	DRN	90L4	28
287	50	5.10	2620	2.2					
373	38	3.92	2440	3.3					
458	31	3.19	2310	3.5					

P_m = 2.2 kW									
n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B					m kg
38	550	37.98	6820	0.90					
42	500	34.81	6840	1.00					
47	440	30.55	6840	1.15					
50	415	28.95	6830	1.20					
57	365	25.34	6780	1.35					
64	330	22.83	6720	1.50	K	49	DRN	100LS4	55
72	290	20.03	6620	1.70	KF	49	DRN	100LS4	57
82	255	17.67	6510	1.95	KA	49	DRN	100LS4	53
93	225	15.67	6400	2.2	KAF	49	DRN	100LS4	58
108	194	13.38	6220	2.4					
128	165	11.37	6450	3.0					
139	151	10.42	6310	3.2					
159	132	9.14	6090	3.8					
59	350	24.40	4770	0.85					
63	330	23.04	4800	0.90					
74	280	19.62	4820	1.05					
81	255	17.83	4820	1.10					
94	220	15.44	4790	1.25					
108	195	13.44	4730	1.40	K	39	DRN	100LS4	43
137	154	10.61	5040	1.85	KF	39	DRN	100LS4	45
161	130	9.00	4860	2.3	KA	39	DRN	100LS4	42
178	118	8.12	4740	2.6	KAF	39	DRN	100LS4	44
203	104	7.15	4600	2.9					
215	98	6.75	4530	3.1					
252	83	5.75	4350	3.3					
278	76	5.22	4240	3.4					
320	66	4.52	4080	3.7					
368	57	3.94	3930	3.8					

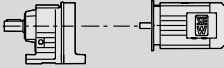
P_m = 3.0 kW									
n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B					m kg
48	600	30.55	5690	0.85					
50	565	28.95	5740	0.90					
57	495	25.34	5820	1.00					
64	445	22.83	5860	1.10					
73	390	20.03	5860	1.25					
82	345	17.67	5840	1.45	K	49	DRN	100L4	63
93	305	15.67	5800	1.60	KF	49	DRN	100L4	64
109	260	13.38	5710	1.80	KA	49	DRN	100L4	60
128	220	11.37	6160	2.2	KAF	49	DRN	100L4	65
140	200	10.42	6050	2.3					
159	180	9.14	5860	2.8					
168	170	8.66	5790	2.9					
192	149	7.58	5600	3.4					
213	134	6.83	5460	3.7					
82	350	17.83	4010	0.85					
94	300	15.44	4090	0.90					
108	260	13.44	4120	1.00					
137	205	10.61	4720	1.35					
162	177	9.00	4580	1.70	K	39	DRN	100L4	50
179	160	8.12	4490	1.90	KF	39	DRN	100L4	52
204	141	7.15	4380	2.1	KA	39	DRN	100L4	49
216	133	6.75	4320	2.3	KAF	39	DRN	100L4	51
253	113	5.75	4170	2.4					
279	103	5.22	4080	2.5					
322	89	4.52	3940	2.7					
370	77	3.94	3800	2.8					
518	55	2.81	3480	3.1					

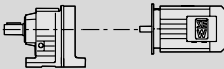
21932387/EN – 05/2015

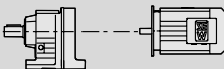
2

Technical data

Selection tables for K..9 / DR..

P_m = 4.0 kW									
n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B				m kg	
64	595	22.83	4780	0.85					
73	520	20.03	4920	0.95					
83	460	17.67	5010	1.10					
93	405	15.67	5060	1.20					
109	345	13.38	5080	1.35					
129	295	11.37	5810	1.65	K	49	DRN	112M4	72
141	270	10.42	5720	1.75	KF	49	DRN	112M4	73
160	235	9.14	5580	2.1	KA	49	DRN	112M4	69
169	225	8.66	5520	2.2	KAF	49	DRN	112M4	74
193	198	7.58	5360	2.5					
214	178	6.83	5240	2.8					
244	156	5.99	5080	3.2					
277	138	5.29	4930	3.5					
312	122	4.69	4780	3.8					
163	230	9.00	4240	1.30					
180	210	8.12	4180	1.40					
205	187	7.15	4100	1.60	K	39	DRN	112M4	60
217	176	6.75	4060	1.70	KF	39	DRN	112M4	61
255	150	5.75	3950	1.85	KA	39	DRN	112M4	59
280	136	5.22	3880	1.90	KAF	39	DRN	112M4	60
324	118	4.52	3760	2.0					
372	103	3.94	3650	2.1					
521	73	2.81	3370	2.3					

P_m = 5.5 kW									
n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B				m kg	
93	560	15.67	3950	0.85					
109	480	13.38	4130	1.00					
160	325	9.14	5160	1.50					
169	310	8.66	5130	1.60	K	49	DRN	132S4	83
193	270	7.58	5020	1.85	KF	49	DRN	132S4	85
214	245	6.83	4930	2.0	KA	49	DRN	132S4	80
244	215	5.99	4810	2.3	KAF	49	DRN	132S4	85
276	190	5.29	4690	2.6					
312	169	4.69	4570	2.8					
365	144	4.00	4410	3.1					

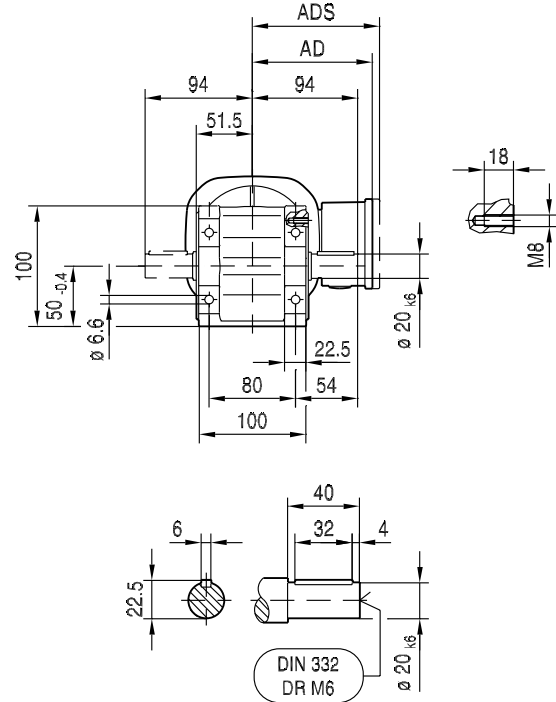
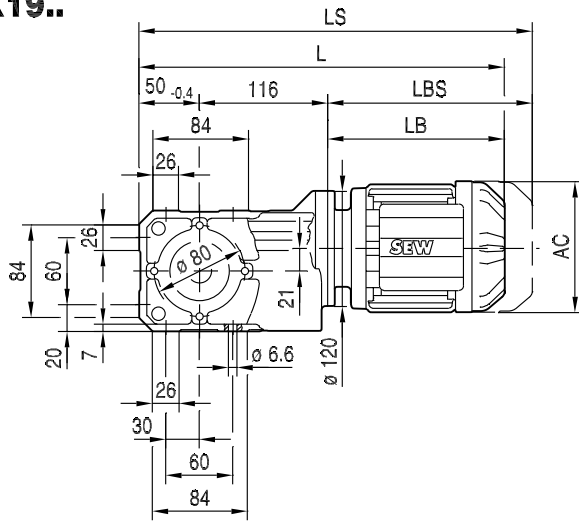
P_m = 7.5 kW									
n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B				m kg	
161	445	9.14	4610	1.10					
169	420	8.66	4600	1.20					
194	365	7.58	4560	1.35	K	49	DRN	132M4	100
215	330	6.83	4510	1.50	KF	49	DRN	132M4	105
245	290	5.99	4440	1.70	KA	49	DRN	132M4	98
278	255	5.29	4370	1.90	KAF	49	DRN	132M4	105
313	225	4.69	4280	2.0					
367	195	4.00	4170	2.2					

21932387/EN – 05/2015

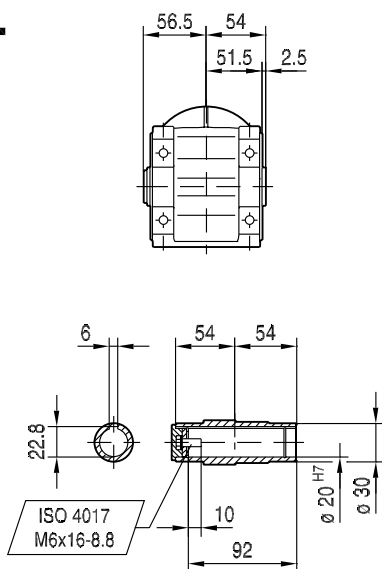
2.4 Dimension sheets for K..9 / DR..

33 008 00 15

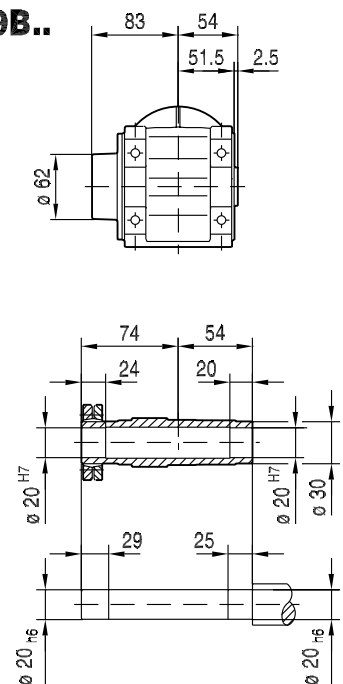
K19..



KA19B..



KH19B..

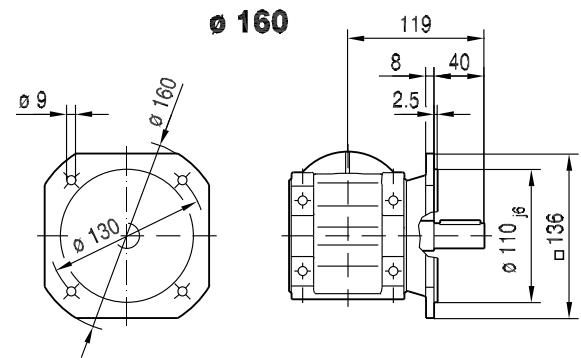
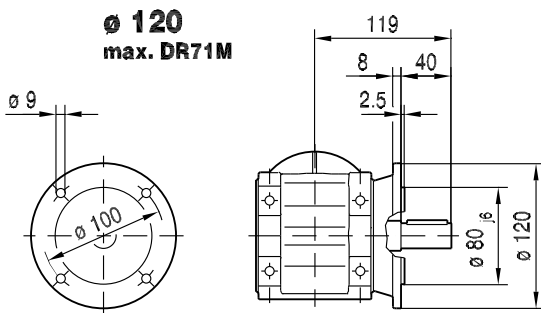
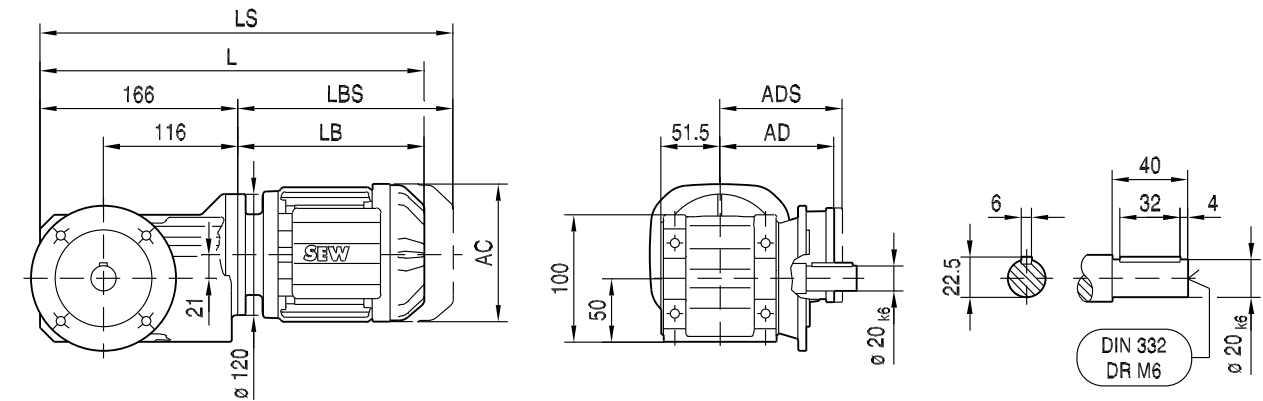


21932387/EN - 05/2015

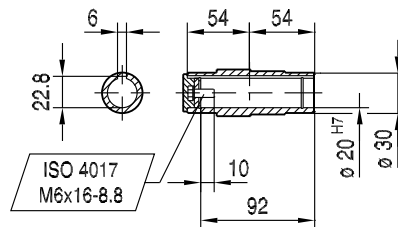
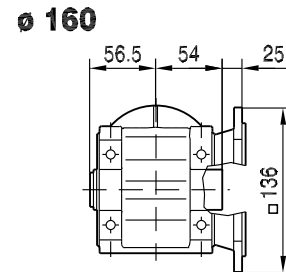
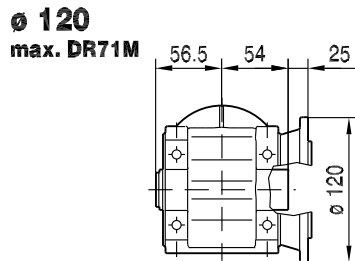
	DR63..	DR71S	DR71M	DRN80M	DRN90S			
AC	132	139	139	156	179			
AD	105	119	119	128	140			
ADS	105	129	129	139	150			
L	357	368	393	448	449			
LS	412	436	461	529	543			
LB	191	202	227	282	283			
LBS	246	270	295	363	377			

33 009 00 15

KF19B..



KAF19B..

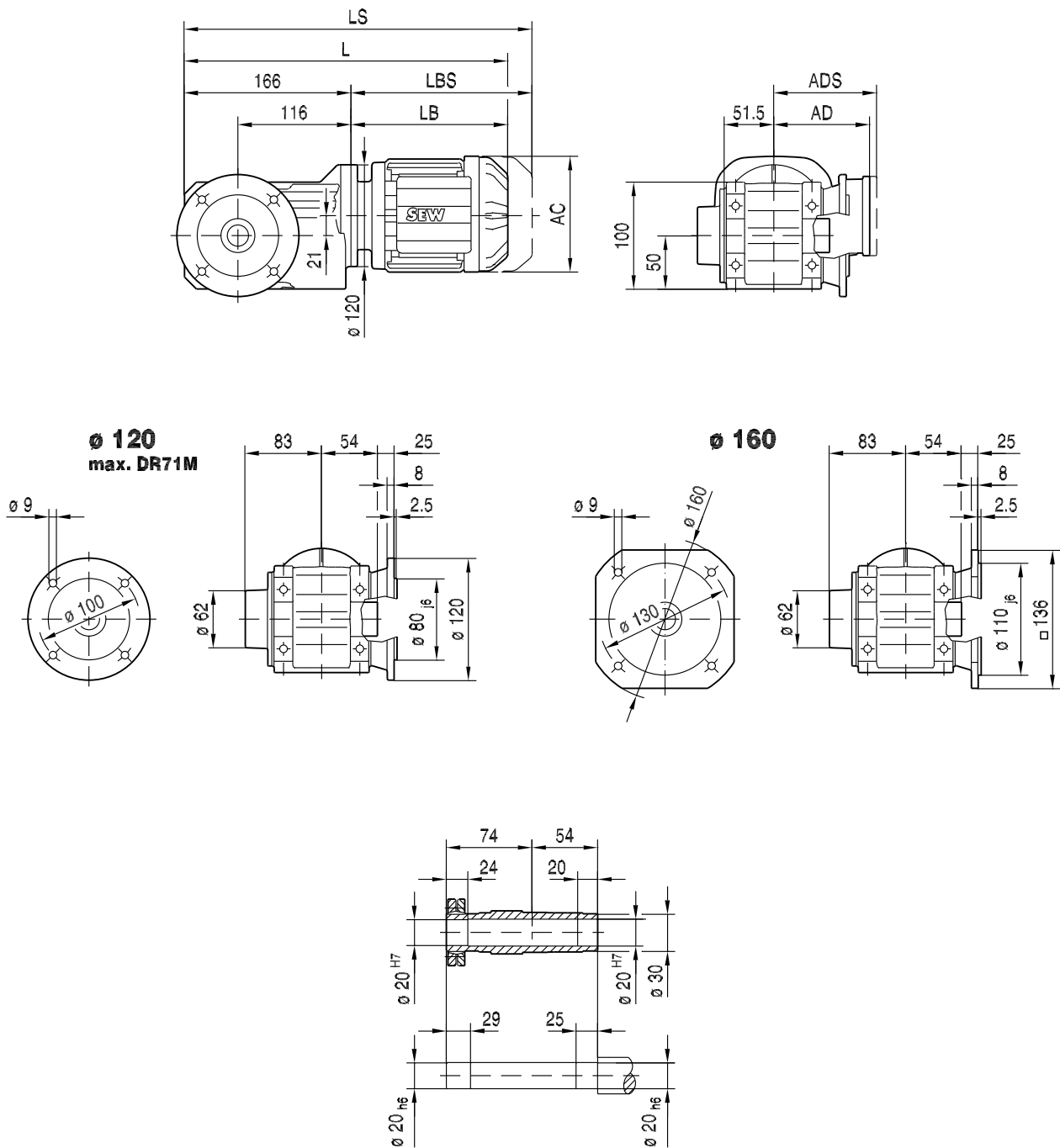


	DR63..	DR71S	DR71M	DRN80M	DRN90S		
AC	132	139	139	156	179		
AD	105	119	119	128	140		
ADS	105	129	129	139	150		
L	357	368	393	448	449		
LS	412	436	461	529	543		
LB	191	202	227	282	283		
LBS	246	270	295	363	377		

KHF19B..

33 010 00 15

2

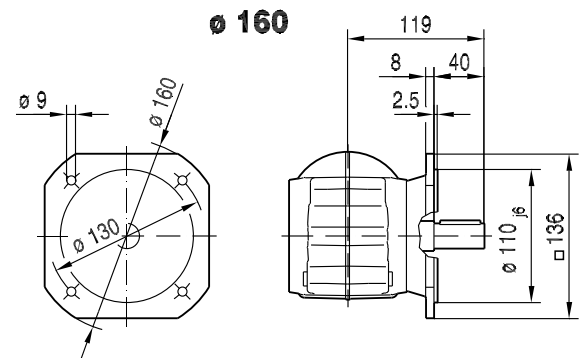
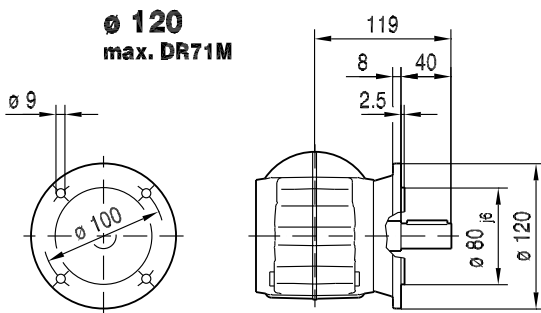
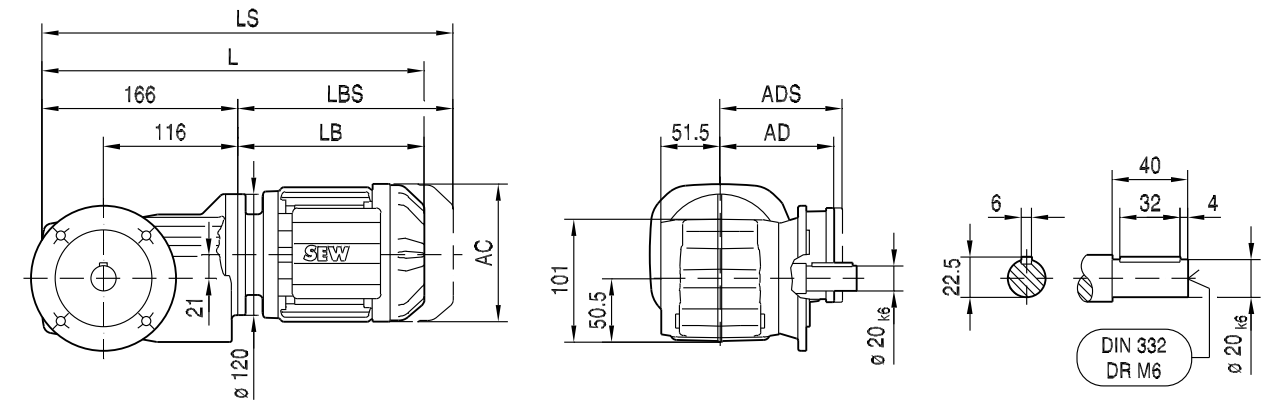


21932387/EN – 05/2015

	DR63..	DR71S	DR71M	DRN80M	DRN90S		
AC	132	139	139	156	179		
AD	105	119	119	128	140		
ADS	105	129	129	139	150		
L	357	368	393	448	449		
LS	412	436	461	529	543		
LB	191	202	227	282	283		
LBS	246	270	295	363	377		

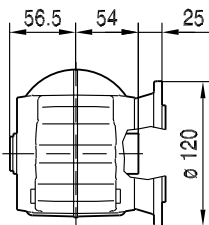
33 011 00 15

KF19..

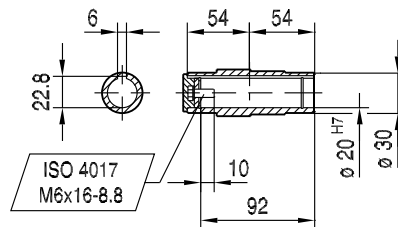
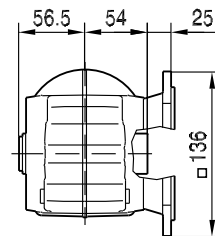


KAF19..

$\phi 120$
max. DR71M



$\phi 160$

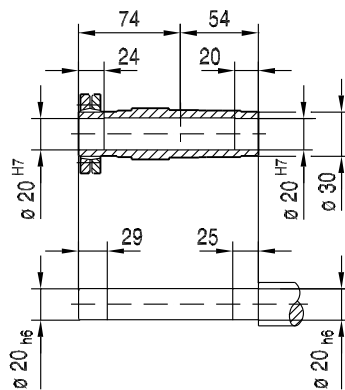
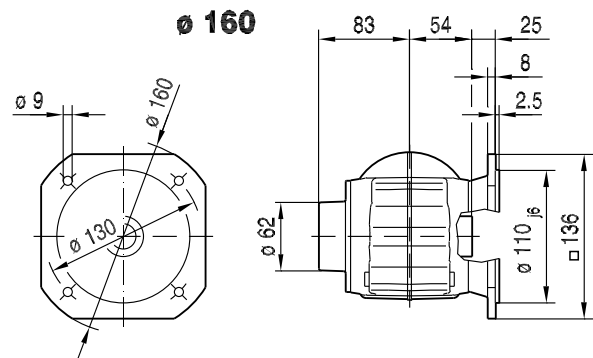
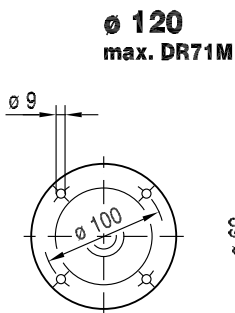
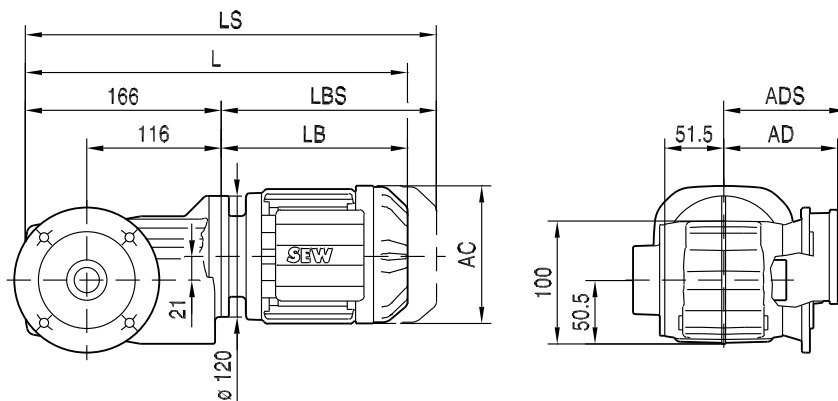


	DR63..	DR71S	DR71M	DRN80M	DRN90S			
AC	132	139	139	156	179			
AD	105	119	119	128	140			
ADS	105	129	129	139	150			
L	357	368	393	448	449			
LS	412	436	461	529	543			
LB	191	202	227	282	283			
LBS	246	270	295	363	377			

KHF19..

33 013 00 15

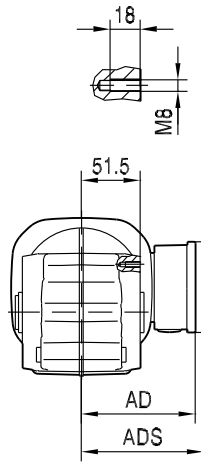
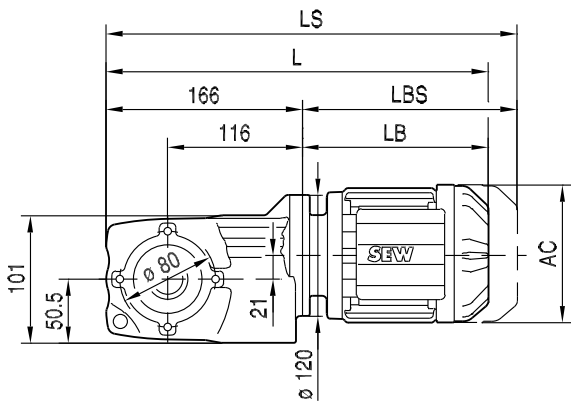
2



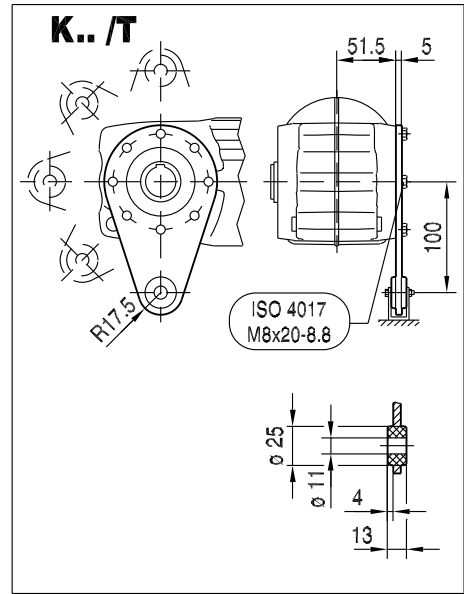
	DR63..	DR71S	DR71M	DRN80M	DRN90S		
AC	132	139	139	156	179		
AD	105	119	119	128	140		
ADS	105	129	129	139	150		
L	357	368	393	448	449		
LS	412	436	461	529	543		
LB	191	202	227	282	283		
LBS	246	270	295	363	377		

21932387/EN – 05/2015

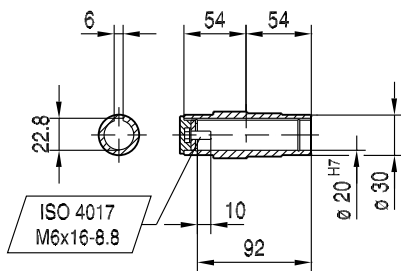
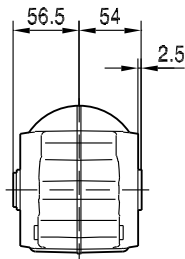
KA19..



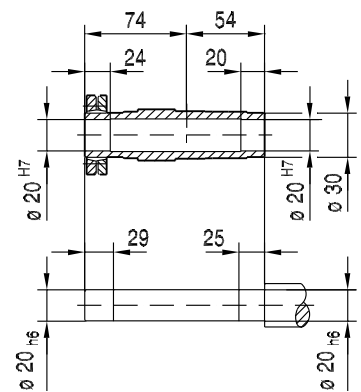
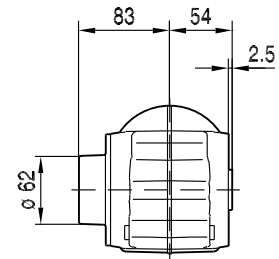
33 014 00 15



KA19..



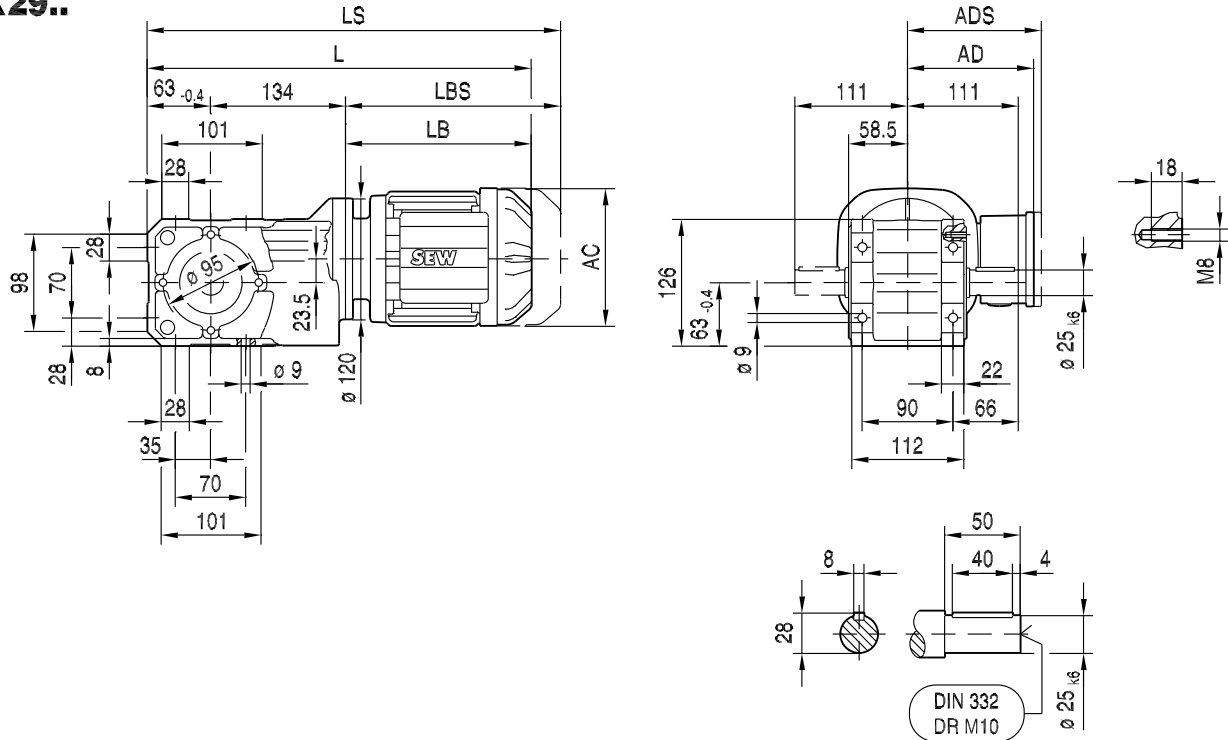
KH19..



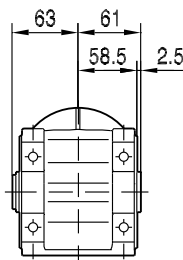
	DR63..	DR71S	DR71M	DRN80M	DRN90S			
AC	132	139	139	156	179			
AD	105	119	119	128	140			
ADS	105	129	129	139	150			
L	357	368	393	448	449			
LS	412	436	461	529	543			
LB	191	202	227	282	283			
LBS	246	270	295	363	377			

33 015 00 15

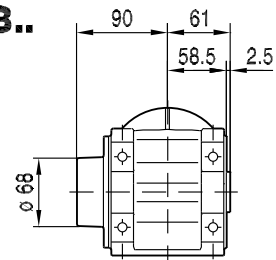
K29..



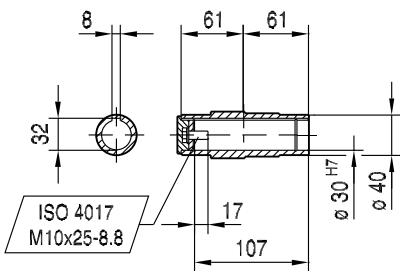
KA29B..



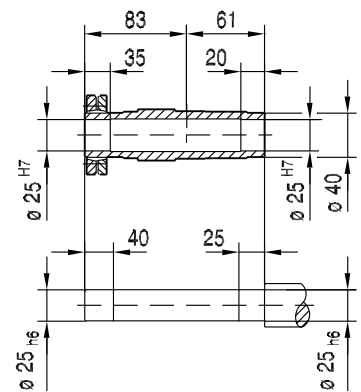
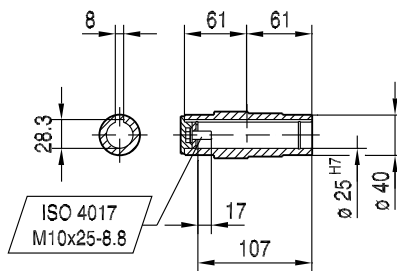
KH29B..



Ø 30 H7
DIN 6885-3



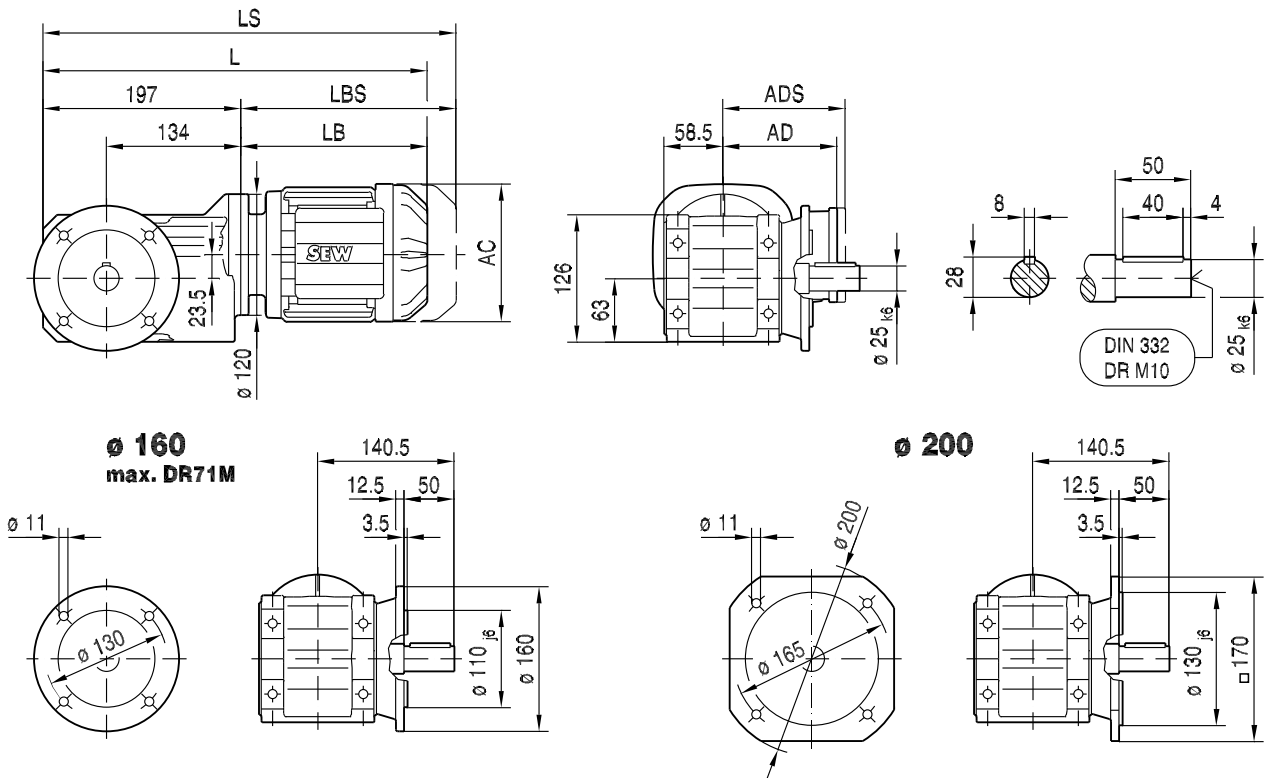
Ø 25 H7



21932387/EN - 05/2015

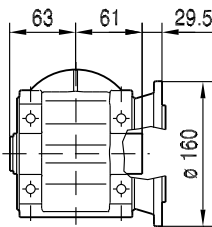
	DR63..	DR71S	DR71M	DRN80M	DRN90S	DRN90L		
AC	132	139	139	156	179	179		
AD	105	119	119	128	140	140		
ADS	105	129	129	139	150	150		
L	388	399	424	479	480	512		
LS	443	467	492	560	574	606		
LB	191	202	227	282	283	315		
LBS	246	270	295	363	377	409		

KF29B..

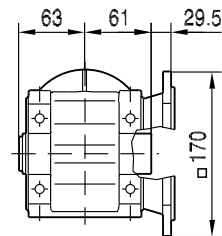


KAF29B..

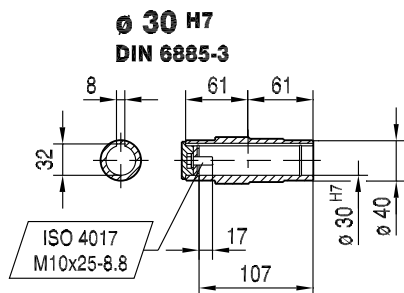
ø 160
max. DR71M



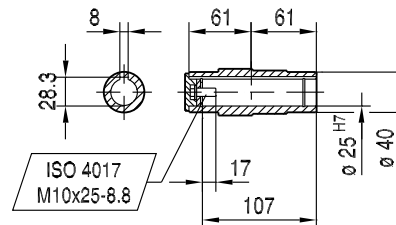
ø 200



ø 160
max. DR71M



ø 25 H7

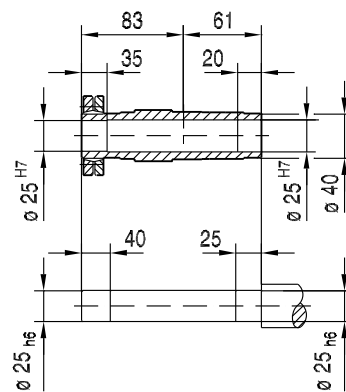
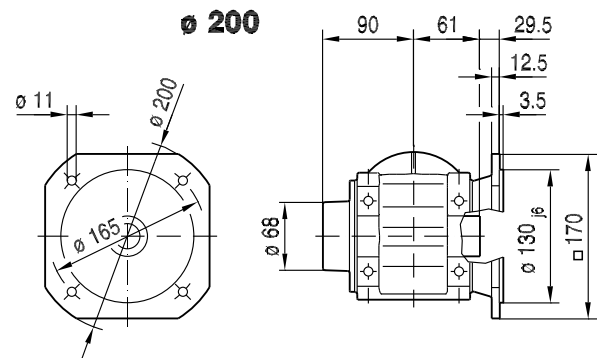
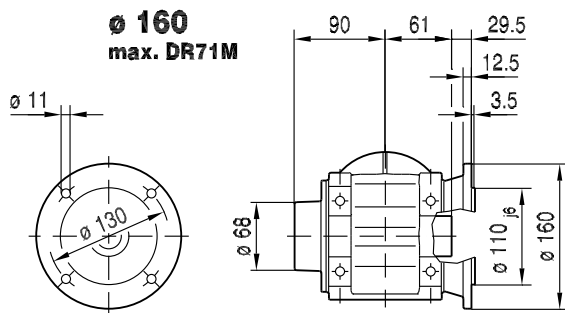
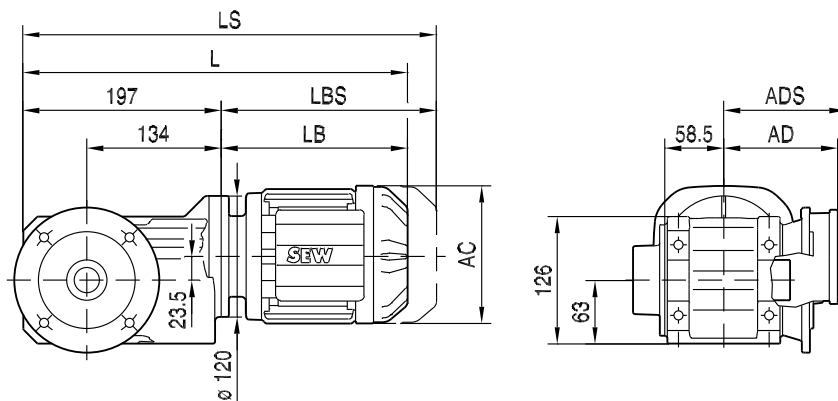


	DR63..	DR71S	DR71M	DRN80M	DRN90S	DRN90L		
AC	132	139	139	156	179	179		
AD	105	119	119	128	140	140		
ADS	105	129	129	139	150	150		
L	388	399	424	479	480	512		
LS	443	467	492	560	574	606		
LB	191	202	227	282	283	315		
LBS	246	270	295	363	377	409		

KHF29B..

33 017 00 15

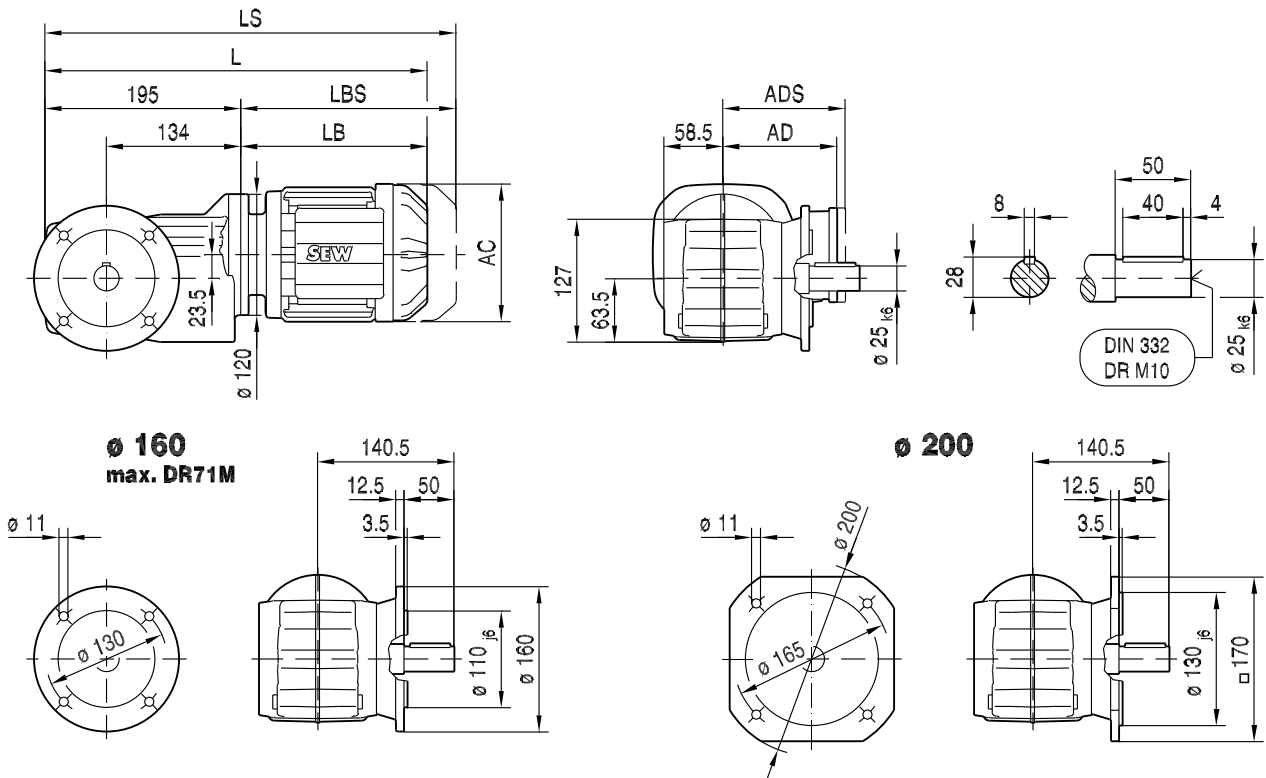
2



	DR63..	DR71S	DR71M	DRN80M	DRN90S	DRN90L		
AC	132	139	139	156	179	179		
AD	105	119	119	128	140	140		
ADS	105	129	129	139	150	150		
L	388	399	424	479	480	512		
LS	443	467	492	560	574	606		
LB	191	202	227	282	283	315		
LBS	246	270	295	363	377	409		

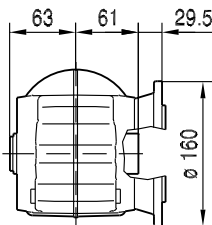
21932387/EN – 05/2015

KF29..

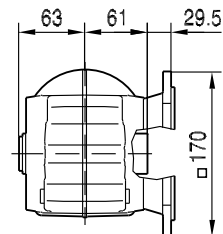


KAF29..

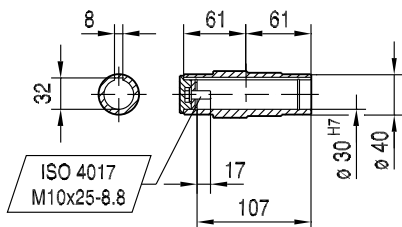
ø 160
max. DR71M



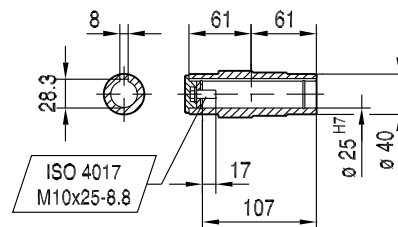
ø 200



ø 30 H7
DIN 6885-3



ø 25 H7

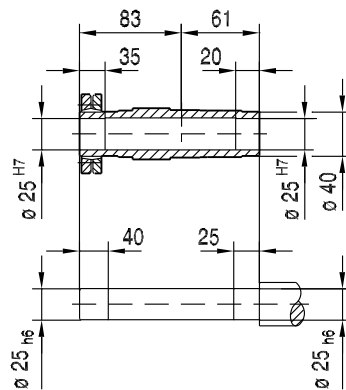
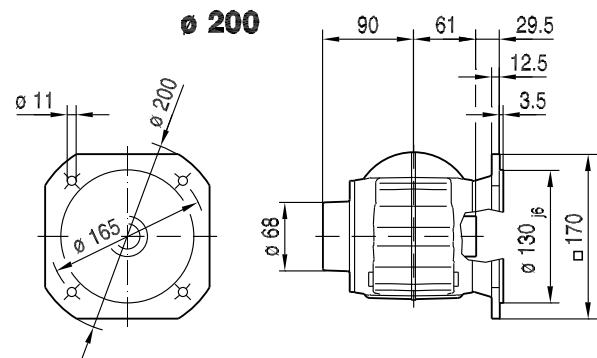
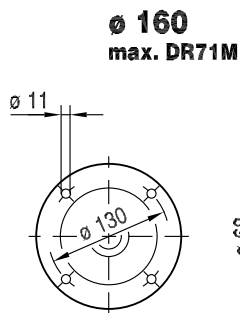
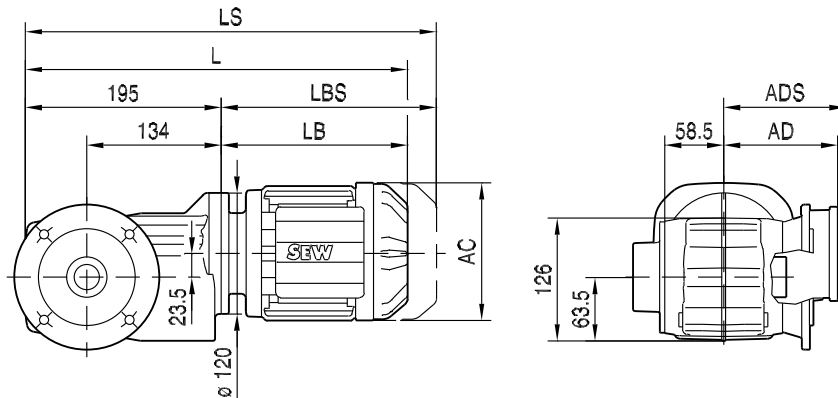


	DR63..	DR71S	DR71M	DRN80M	DRN90S	DRN90L		
AC	132	139	139	156	179	179		
AD	105	119	119	128	140	140		
ADS	105	129	129	139	150	150		
L	386	397	422	477	478	510		
LS	441	465	490	558	572	604		
LB	191	202	227	282	283	315		
LBS	246	270	295	363	377	409		

KHF29..

33 019 00 15

2

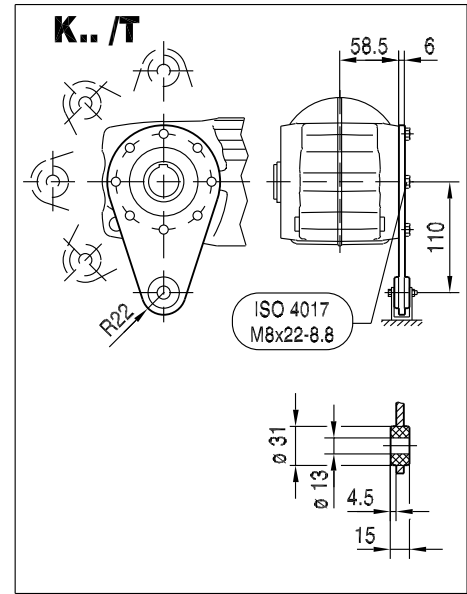
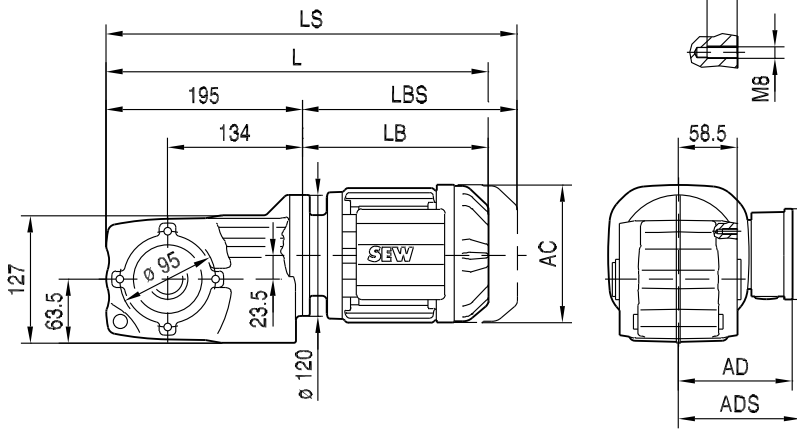


	DR63..	DR71S	DR71M	DRN80M	DRN90S	DRN90L		
AC	132	139	139	156	179	179		
AD	105	119	119	128	140	140		
ADS	105	129	129	139	150	150		
L	386	397	422	477	478	510		
LS	441	465	490	558	572	604		
LB	191	202	227	282	283	315		
LBS	246	270	295	363	377	409		

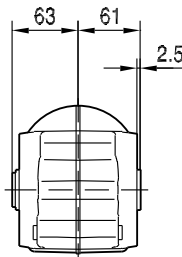
21932387/EN – 05/2015

33 020 00 15

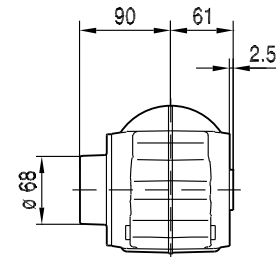
KA29..



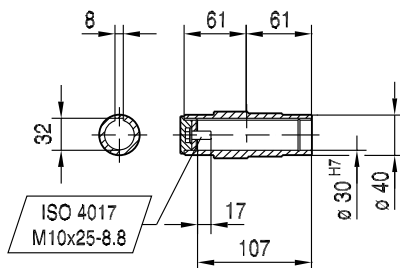
KA29..



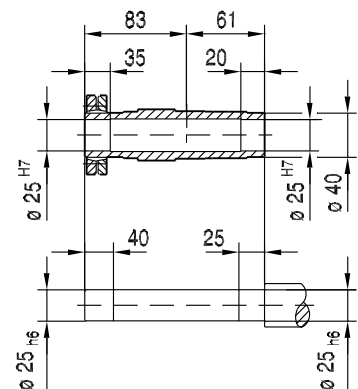
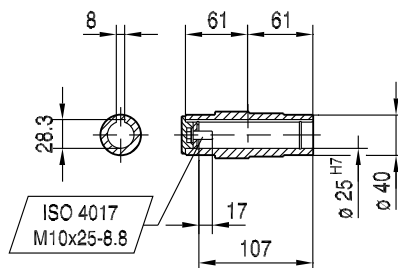
KH29..



ø 30 H7
DIN 6885-3



ø 25 H7

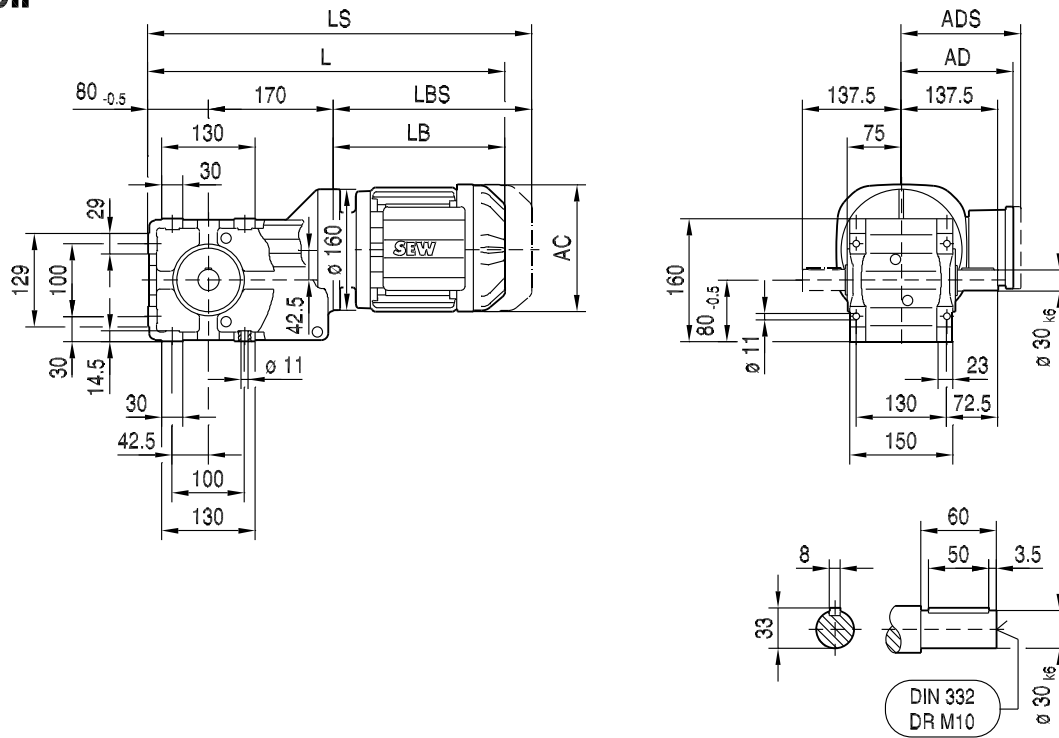


	DR63..	DR71S	DR71M	DRN80M	DRN90S	DRN90L		
AC	132	139	139	156	179	179		
AD	105	119	119	128	140	140		
ADS	105	129	129	139	150	150		
L	386	397	422	477	478	510		
LS	441	465	490	558	572	604		
LB	191	202	227	282	283	315		
LBS	246	270	295	363	377	409		

21932387/EN – 05/2015

K39..

33 021 00 14



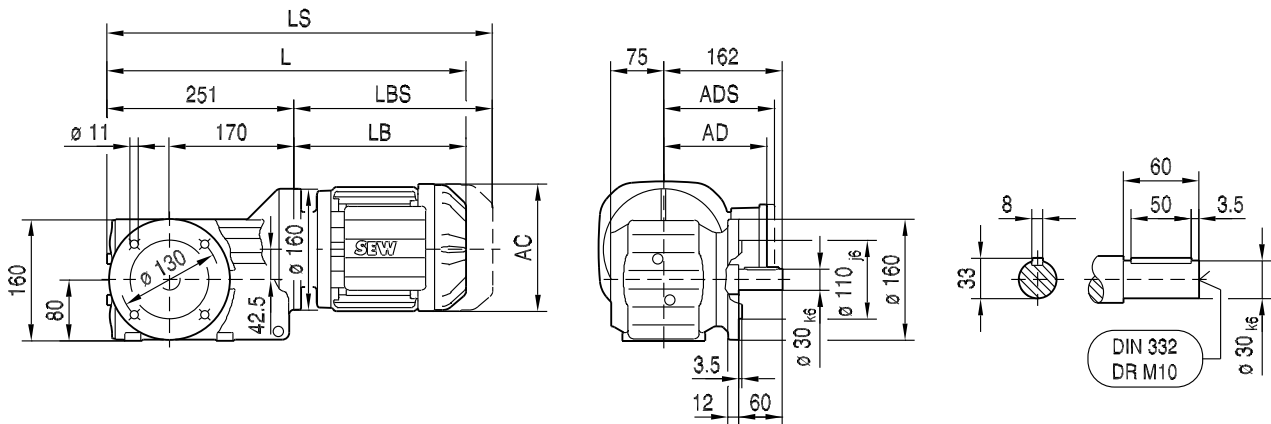
2

21932387/EN – 05/2015

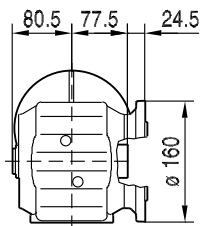
	DR63..	DR71S	DR71M	DRN80M	DRN90S	DRN90L	DRN100LS	DRN100L	DRN112M
AC	132	139	139	156	179	179	197	197	221
AD	105	119	119	128	140	140	157	157	170
ADS	105	129	129	139	150	150	158	158	172
L	435	446	471	525	527	559	555	605	636
LS	490	514	539	606	620	652	649	699	748
LB	185	196	221	275	277	309	305	355	386
LBS	240	264	289	356	370	402	399	449	498

33 022 00 14

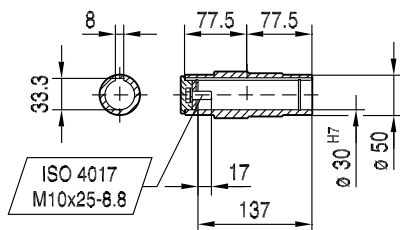
KF39..



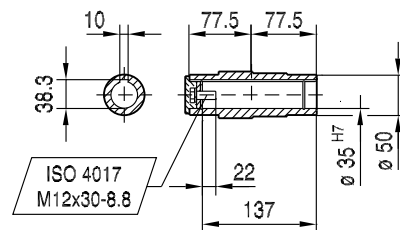
KAF39..



$\phi 30$ H7

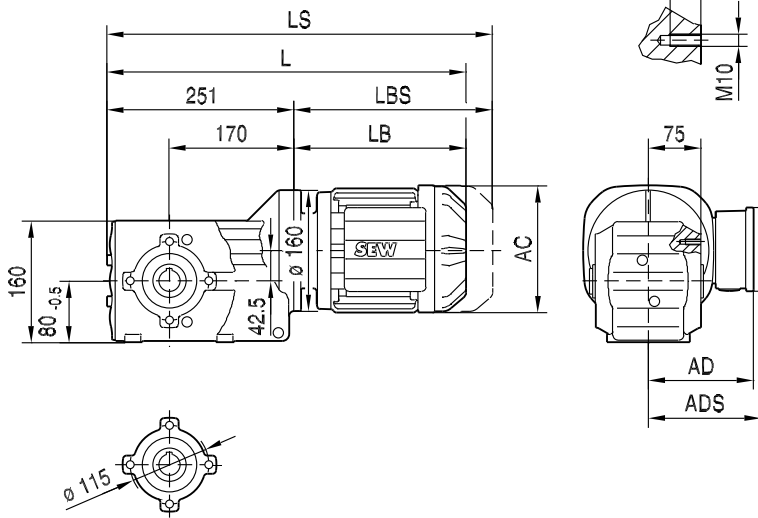


$\phi 35$ H7

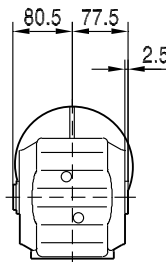
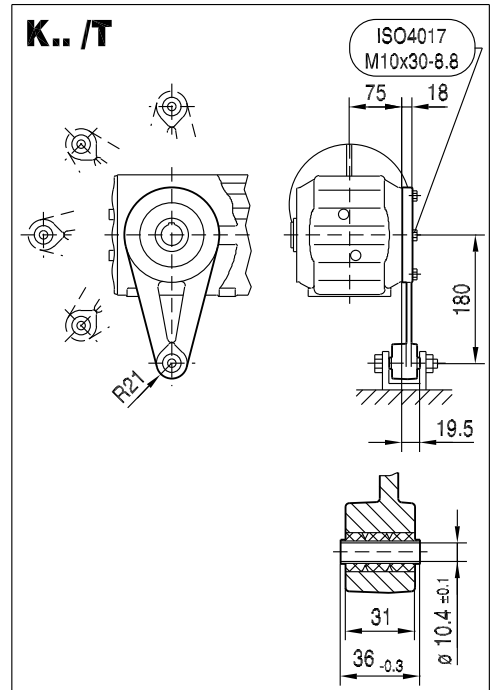


	DR63..	DR71S	DR71M	DRN80M	DRN90S	DRN90L	DRN100LS	DRN100L	DRN112M
AC	132	139	139	156	179	179	197	197	221
AD	105	119	119	128	140	140	157	157	170
ADS	105	129	129	139	150	150	158	158	172
L	436	447	472	526	528	560	556	606	637
LS	491	515	540	607	621	653	650	700	749
LB	185	196	221	275	277	309	305	355	386
LBS	240	264	289	356	370	402	399	449	498

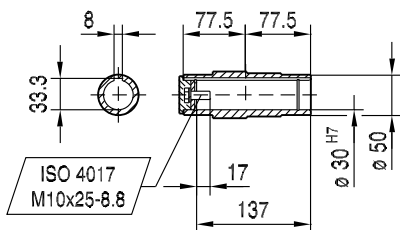
KA39..



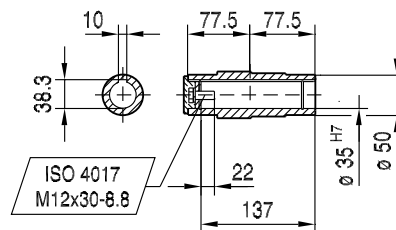
33 023 00 14



Ø 30 H7



Ø 35 H7

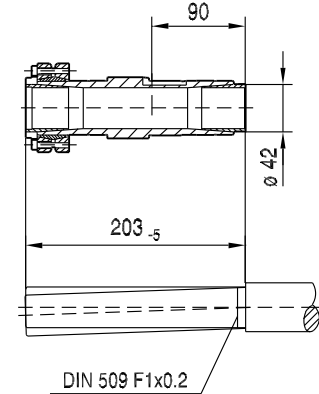
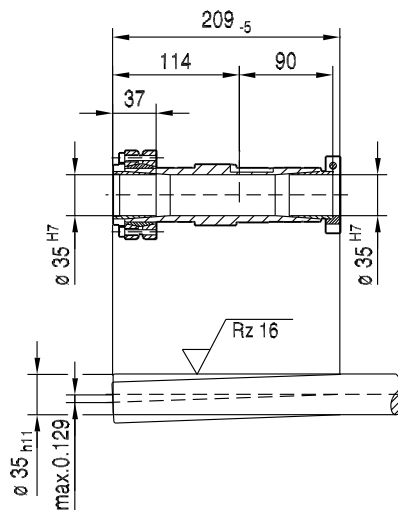
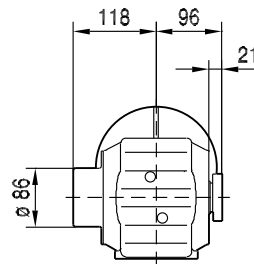
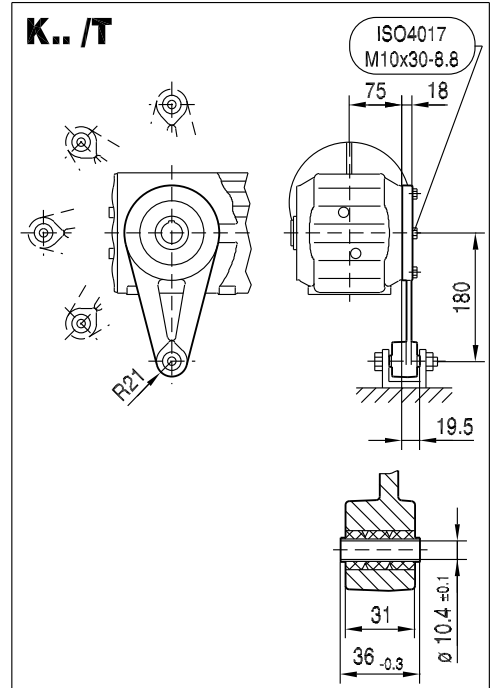
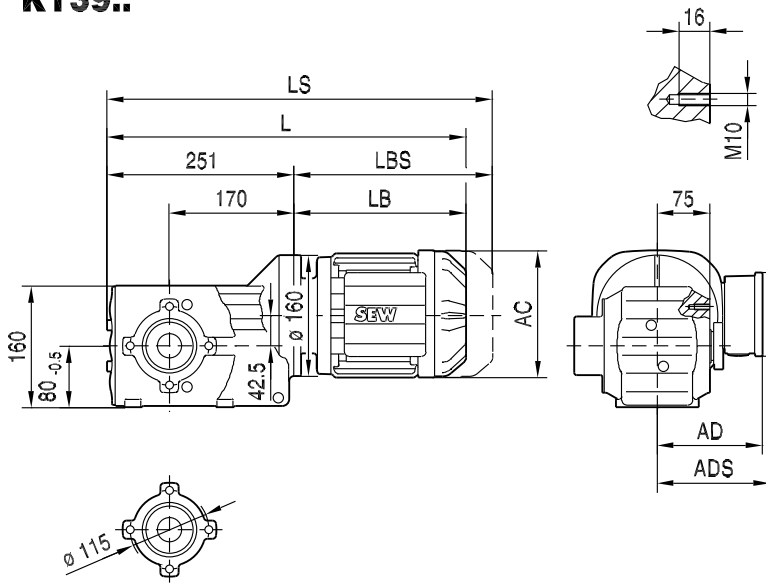


21932387/EN – 05/2015

	DR63..	DR71S	DR71M	DRN80M	DRN90S	DRN90L	DRN100LS	DRN100L	DRN112M
AC	132	139	139	156	179	179	197	197	221
AD	105	119	119	128	140	140	157	157	170
ADS	105	129	129	139	150	150	158	158	172
L	436	447	472	526	528	560	556	606	637
LS	491	515	540	607	621	653	650	700	749
LB	185	196	221	275	277	309	305	355	386
LBS	240	264	289	356	370	402	399	449	498

33 024 00 14

KT39..

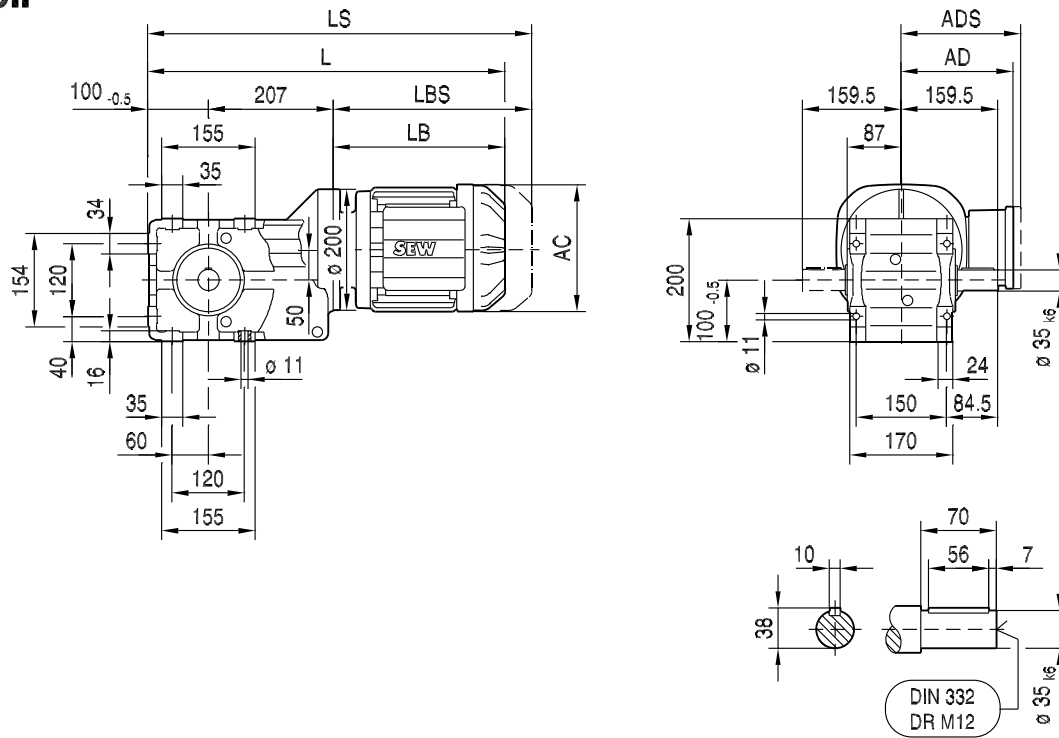


	DR63..	DR71S	DR71M	DRN80M	DRN90S	DRN90L	DRN100LS	DRN100L	DRN112M
AC	132	139	139	156	179	179	197	197	221
AD	105	119	119	128	140	140	157	157	170
ADS	105	129	129	139	150	150	158	158	172
L	436	447	472	526	528	560	556	606	637
LS	491	515	540	607	621	653	650	700	749
LB	185	196	221	275	277	309	305	355	386
LBS	240	264	289	356	370	402	399	449	498

21932387/EN – 05/2015

K49..

33 025 00 14



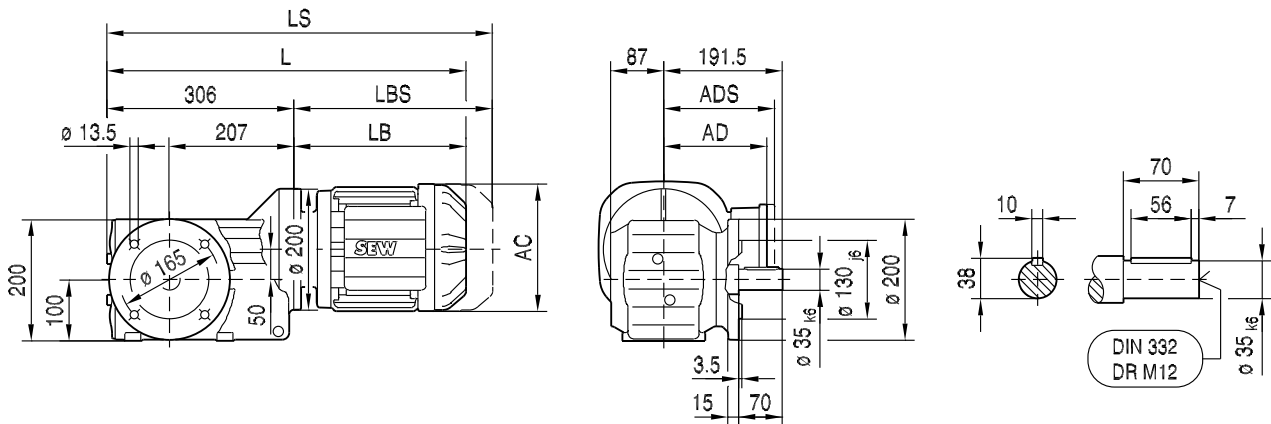
2

21932387/EN – 05/2015

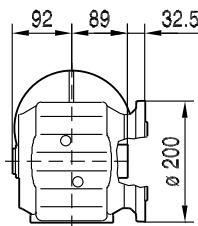
	DR63..	DR71S	DR71M	DRN80M	DRN90S	DRN90L	DRN100LS	DRN100L	DRN112M	DRN132S	DRN132M
AC	132	139	139	156	179	179	197	197	221	221	261
AD	105	119	119	128	140	140	157	157	170	170	228
ADS	105	129	129	139	150	150	158	158	172	172	228
L	485	496	521	575	577	609	605	655	686	736	754
LS	540	564	589	656	670	702	699	749	798	848	892
LB	178	189	214	268	270	302	298	348	379	429	447
LBS	233	257	282	349	363	395	392	442	491	541	585

33 026 00 14

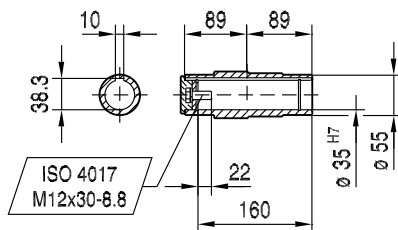
KF49..



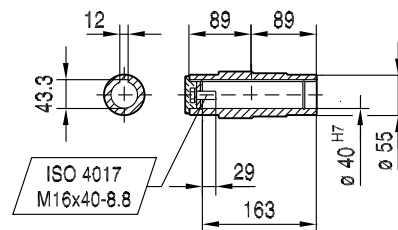
KAF49..



$\phi 35$ H7



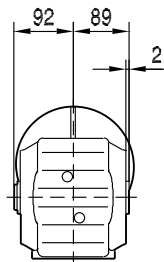
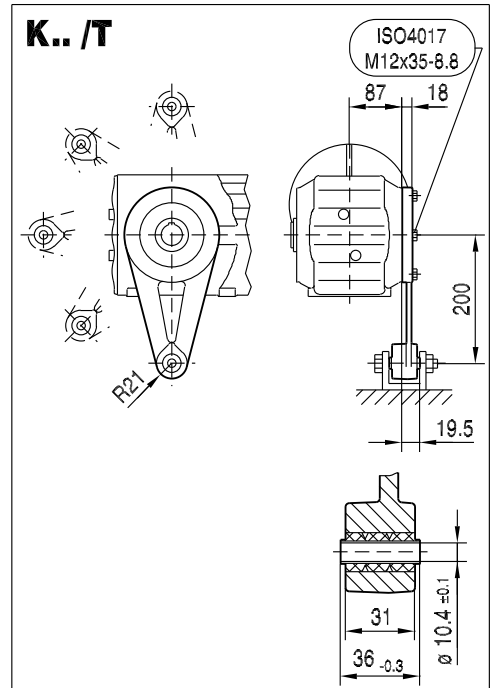
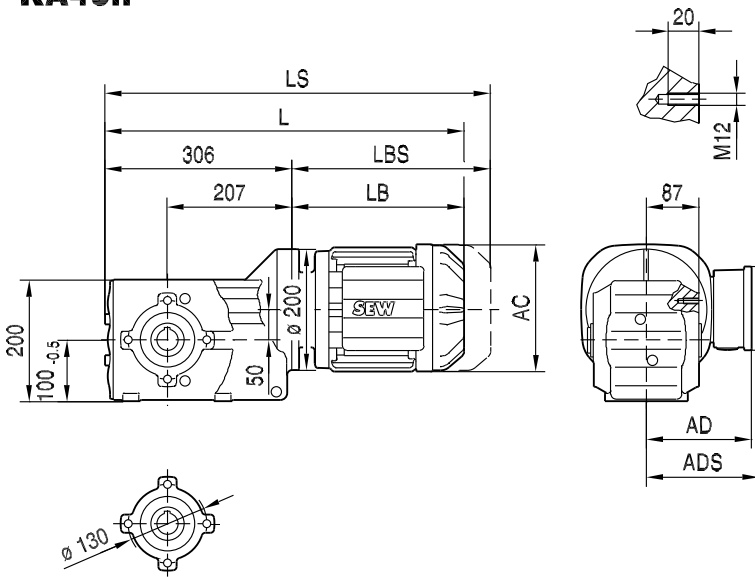
$\phi 40$ H7



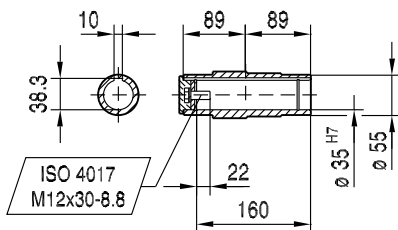
	DR63..	DR71S	DR71M	DRN80M	DRN90S	DRN90L	DRN100LS	DRN100L	DRN112M	DRN132S	DRN132M
AC	132	139	139	156	179	179	197	197	221	221	261
AD	105	119	119	128	140	140	157	157	170	170	228
ADS	105	129	129	139	150	150	158	158	172	172	228
L	484	495	520	574	576	608	604	654	685	735	753
LS	539	563	588	655	669	701	698	748	797	847	891
LB	178	189	214	268	270	302	298	348	379	429	447
LBS	233	257	282	349	363	395	392	442	491	541	585

KA49..

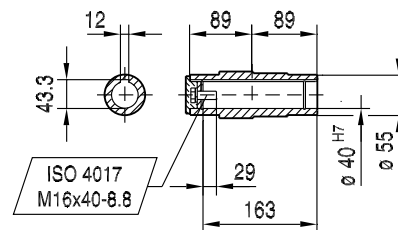
33 027 00 14



Ø 35 H7



Ø 40 H7

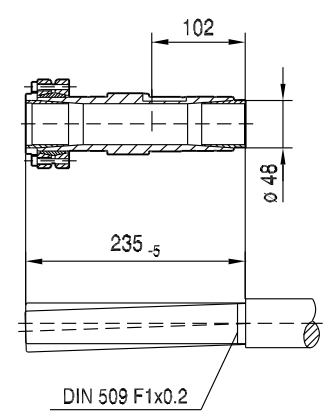
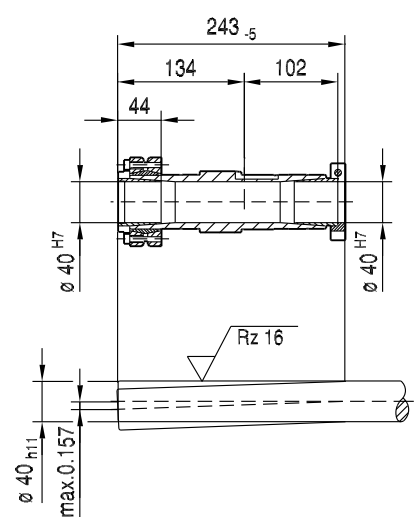
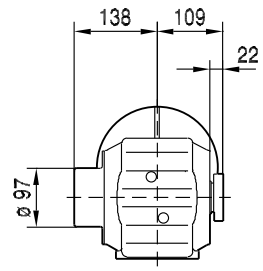
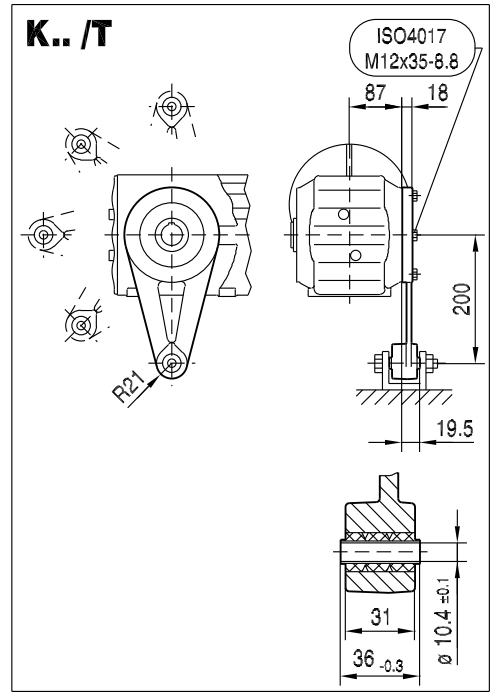
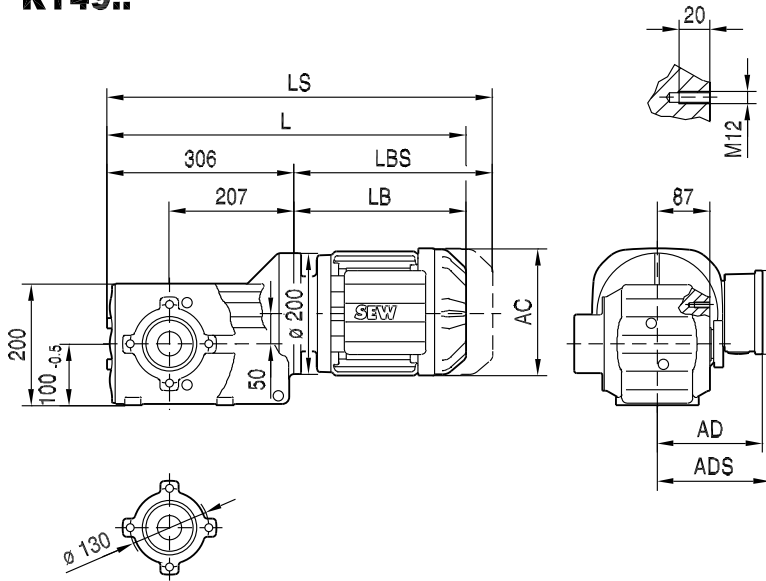


21932387/EN – 05/2015

	DR63..	DR71S	DR71M	DRN80M	DRN90S	DRN90L	DRN100LS	DRN100L	DRN112M	DRN132S	DRN132M
AC	132	139	139	156	179	179	197	197	221	221	261
AD	105	119	119	128	140	140	157	157	170	170	228
ADS	105	129	129	139	150	150	158	158	172	172	228
L	484	495	520	574	576	608	604	654	685	735	753
LS	539	563	588	655	669	701	698	748	797	847	891
LB	178	189	214	268	270	302	298	348	379	429	447
LBS	233	257	282	349	363	395	392	442	491	541	585


33 028 00 14



KT49..






	DR63..	DR71S	DR71M	DRN80M	DRN90S	DRN90L	DRN100LS	DRN100L	DRN112M	DRN132S	DRN132M
AC	132	139	139	156	179	179	197	197	221	221	261
AD	105	119	119	128	140	140	157	157	170	170	228
ADS	105	129	129	139	150	150	158	158	172	172	228
L	484	495	520	574	576	608	604	654	685	735	753
LS	539	563	588	655	669	701	698	748	797	847	891
LB	178	189	214	268	270	302	298	348	379	429	447
LBS	233	257	282	349	363	395	392	442	491	541	585

2.5 Selection tables for K..9 / AM


K19, n _e = 1400 1/min					80 Nm			
i	n _a [1/min]	M _{a max} [Nm]	F _{Ra} [N]	Φ _(/R) [']	AM			
					63	71	80	90
 2								
4.50	311	80	2010	-				
5.16	271	80	2140	-				
5.54	253	80	2200	-				
6.41	218	80	2340	-				
6.91	203	80	2420	-				
8.09	173	80	2590	-				
9.58	146	63	2910	-				
10.32	136	76	2720	-				
11.84	118	79	2850	-				
12.70	110	80	2930	-				
14.69	95	80	3110	-				
15.84	88	80	3210	-				
18.55	75	80	3430	-				
21.98	64	80	3680	-				
24.06	58	80	3820	-				
26.88	52	80	3990	-				
27.16	52	60	4090	-				
29.14	48	80	4120	-				
29.29	48	61	4200	-				
31.74	44	80	4260	-				
34.29	41	64	4370	-				
40.63	34	67	4350	-				
44.48	31	69	4340	-				
49.69	28	70	4330	-				
53.88	26	70	4330	-				
58.68	24	70	4330	-				



K19, m [kg]			AM			
K	IEC	s	63	71	80	90
			 2	6.7	6.9	9.3
	NEMA	s	-	56	143	145
		 2	-	7.3	9.3	9.4
KF: + 0.30 kg / KA: + -0.45 kg / KAF: + -- kg						

K29, n _e = 1400 1/min					130 Nm			
i	n _a [1/min]	M _{a max} [Nm]	F _{Ra} [N]	Φ _(/R) [']	AM			
					63	71	80	90
 2								
3.19	439	110	1830	-				
3.92	357	126	1910	-				
5.10	275	110	2260	-				
5.75	243	112	2370	-				
6.95	201	112	2580	-				
7.48	187	123	2300	-				
8.53	164	122	2740	-				
9.17	153	130	2470	-				
9.90	141	110	3000	-				
11.94	117	130	2810	-				
13.47	104	130	2970	-				
16.29	86	130	3240	-				
19.99	70	130	3550	-				
22.08	63	105	3820	-				
23.19	60	130	3790	-				
24.91	56	109	3980	-				
27.23	51	130	4060	-				
29.69	47	130	4210	-				
30.11	46	115	4250	-				
33.15	42	130	4410	-				
35.83	39	130	4560	-				
36.96	38	122	4560	-				
38.90	36	130	4720	-				
42.87	33	128	4790	-				
50.35	28	130	4980	-				
54.89	26	130	4980	-				
61.28	23	130	4980	-				
66.25	21	130	4980	-				
71.93	19	130	4980	-				

K29, m [kg]		AM				
K	IEC	s	63	71	80	90
		 2	8.5	8.7	11	11
	NEMA	s	-	56	143	145
		 2	-	9.1	11	11

KF: + 1.0 kg / KA: + -0.45 kg / KAF: + 0.35 kg

K39, n _e = 1400 1/min					300 Nm					
i	n _a [1/min]	M _{a max} [Nm]	F _{Ra} [N]	φ _(/R) [']	AM					
					63	71	80	90	100	112
 2										
2.81	498	170	2870	-						
3.94	355	215	3070	-						
4.52	310	240	3130	-						
5.22	268	260	3240	-						
5.75	243	275	3300	-						
6.75	207	300	3430	-						
7.15	196	300	3530	-						
8.12	172	300	3760	-						
9.00	156	300	3950	-						
10.61	132	285	4360	-						
12.09	116	255	4790	-						
12.73	110	250	4930	-						
13.44	104	270	4160	-						
15.44	91	280	4380	-						
17.83	79	290	4630	-						
19.62	71	295	4820	-						
23.04	61	300	5180	-						
24.40	57	300	5330	-						
27.73	50	300	5670	-						
30.72	46	300	5960	-						
36.22	39	300	6440	-						
41.28	34	300	6840	-						
43.45	32	300	7000	-						
49.69	28	300	7440	-						
58.24	24	300	7500	-						


K39, m [kg]			AM					
K	IEC	s	63	71	80	90	100	112
		 2	20	20	22	22	27	27
	NEMA	s	-	56	143	145	182	184
		 2	-	20	22	22	26	26



KF: + 1.5 kg / KA: + -1.0 kg / KAF: + 0.50 kg

2





Technical data

Selection tables for K..9 / AM

K49, n _e = 1400 1/min					500 Nm						
i	n _a [1/min]	M _{a max} [Nm]	F _{Ra} [N]	φ _(/R) [']	63	71	80	AM 90	100	112	132S/M
 2											
4.00	350	440	3110	-							
4.69	299	465	3270	-							
5.29	265	485	3400	-							
5.99	234	500	3570	-							
6.83	205	500	3840	-							
7.58	185	500	4050	-							
8.66	162	500	4340	-							
9.14	153	500	4460	-							
10.42	134	480	4860	-							
11.37	123	495	5000	-							
13.38	105	470	4320	-							
15.67	89	490	4590	-							
17.67	79	500	4860	-							
20.03	70	500	5220	-							
22.83	61	500	5610	-							
25.34	55	500	5940	-							
28.95	48	500	6370	-							
30.55	46	500	6550	-							
34.81	40	500	7000	-							
37.98	37	500	7310	-							
44.44	32	500	7900	-							
50.29	28	500	8380	-							
52.94	26	500	8590	-							
60.27	23	500	9000	-							
70.19	20	445	9000	-							
75.20	19	475	9000	-							

K49, m [kg]		AM							
K	IEC	s	63	71	80	90	100	112	132S/M
		 2	32	32	35	35	39	39	46
	NEMA	s	-	56	143	145	182	184	213/215
		 2	-	33	35	35	38	38	44
KF: + 1.7 kg / KA: + -2.8 kg / KAF: + 2.1 kg									

21932387/EN – 05/2015

K49R37, n _e = 1400 1/min					500 Nm			
i	n _a [1/min]	M _{a max} [Nm]	F _{Ra} [N]	φ _(/R) [']	AM			
					63	71	80	90
 2  2								
99	14	500	9000	-				
125	11	500	9000	-				
152	9.2	500	9000	-				
176	8.0	500	9000	-				
193	7.3	500	9000	-				
217	6.5	500	9000	-				
243	5.8	500	9000	-				
274	5.1	500	9000	-				
300	4.7	500	9000	-				
330	4.2	500	9000	-				
360	3.9	500	9000	-				
401	3.5	500	9000	-				
449	3.1	500	9000	-				
501	2.8	500	9000	-				
543	2.6	500	9000	-				
595	2.4	500	9000	-				
645	2.2	500	9000	-				
701	2.0	500	9000	-				
802	1.7	500	9000	-				
908	1.5	500	9000	-				
1000	1.4	500	9000	-				
1120	1.2	500	9000	-				
1228	1.1	500	9000	-				
1309	1.1	500	9000	-				
1424	0.98	500	9000	-				
1521	0.92	500	9000	-				
1632	0.86	500	9000	-				
1741	0.80	500	9000	-				
1941	0.72	500	9000	-				
2118	0.66	500	9000	-				
2372	0.59	500	9000	-				
2545	0.55	500	9000	-				
2773	0.50	500	9000	-				
3081	0.45	500	9000	-				
3580	0.39	500	9000	-				
4034	0.35	500	9000	-				
5120	0.27	500	9000	-				
5991	0.23	500	9000	-				
7137	0.20	500	9000	-				
 2  3								
99	14	500	9000	-				
125	11	500	9000	-				
152	9.2	500	9000	-				
176	8.0	500	9000	-				
193	7.3	500	9000	-				
217	6.5	500	9000	-				
243	5.8	500	9000	-				
274	5.1	500	9000	-				
300	4.7	500	9000	-				
330	4.2	500	9000	-				

21932387/EN – 05/2015

K49R37, $n_e = 1400$ 1/min					500 Nm			
i	n_a [1/min]	$M_{a\ max}$ [Nm]	F_{Ra} [N]	$\Phi_{(R)}$ [']	AM			
					63	71	80	90
360	3.9	500	9000	-				
401	3.5	500	9000	-				
449	3.1	500	9000	-				
501	2.8	500	9000	-				
543	2.6	500	9000	-				
595	2.4	500	9000	-				
645	2.2	500	9000	-				
701	2.0	500	9000	-				
802	1.7	500	9000	-				
908	1.5	500	9000	-				
1000	1.4	500	9000	-				
1120	1.2	500	9000	-				
1228	1.1	500	9000	-				
1309	1.1	500	9000	-				
1424	0.98	500	9000	-				
1521	0.92	500	9000	-				
1632	0.86	500	9000	-				
1741	0.80	500	9000	-				
1941	0.72	500	9000	-				
2118	0.66	500	9000	-				
2372	0.59	500	9000	-				
2545	0.55	500	9000	-				
2773	0.50	500	9000	-				
3081	0.45	500	9000	-				
3580	0.39	500	9000	-				
4034	0.35	500	9000	-				
5120	0.27	500	9000	-				
5991	0.23	500	9000	-				
7137	0.20	500	9000	-				

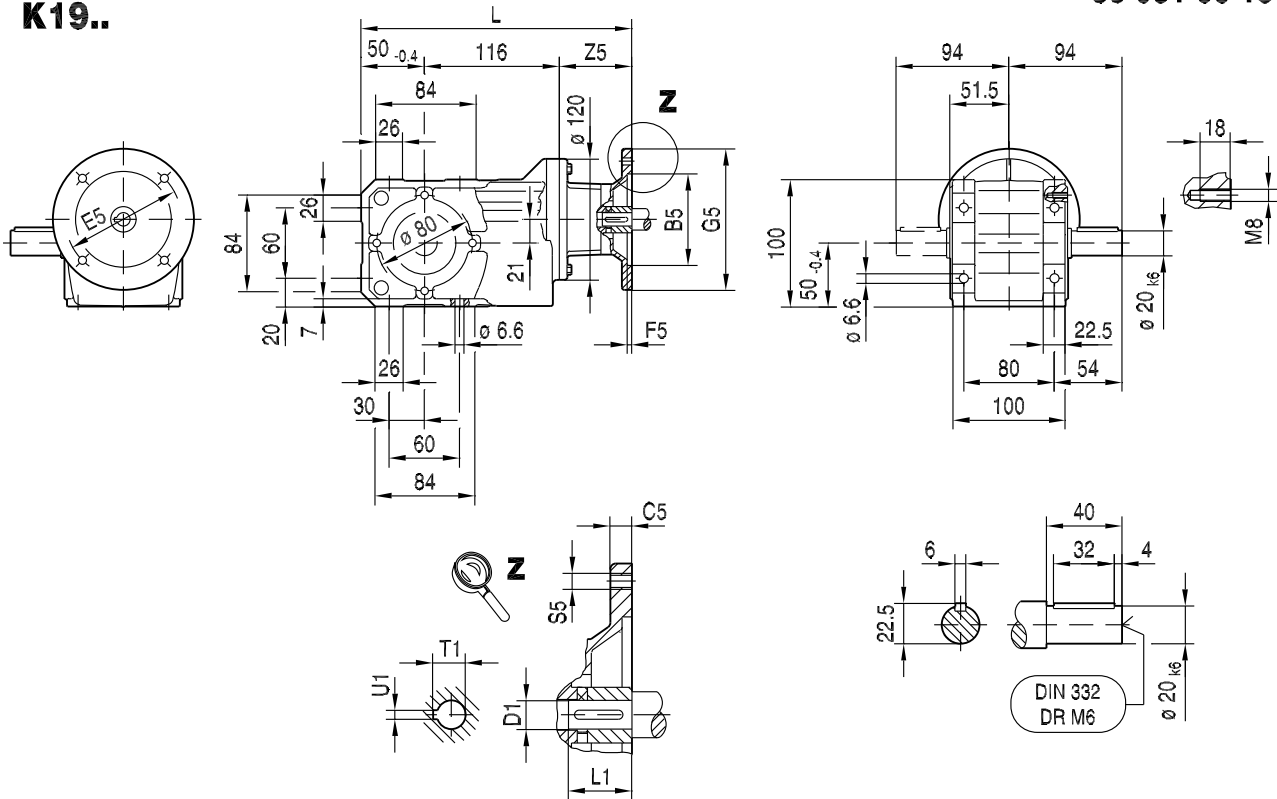
K49R37, m [kg]			AM			
K	IEC	s	63	71	80	90
			42	42	45	45
			42	42	45	45
	NEMA	s	-	56	143	145
			-	43	45	45
		-	43	45	45	

KF: + 1.7 kg / KA: + -2.8 kg / KAF: + 2.1 kg

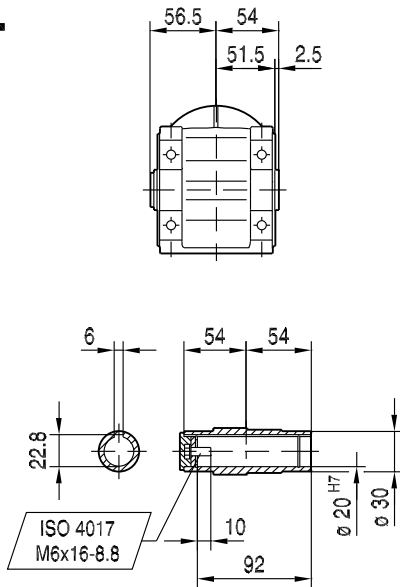
2.6 Dimension sheets for K..9 / AM

33 081 00 15

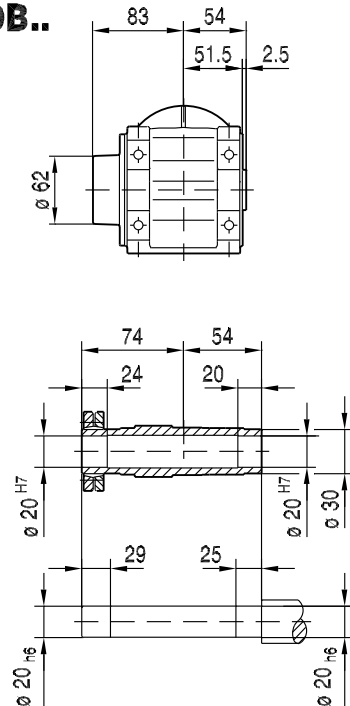
K19..



KA19B..



KH19B..

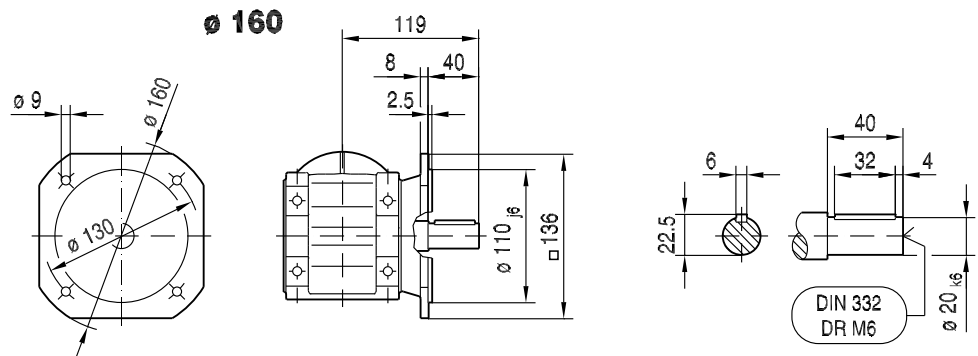
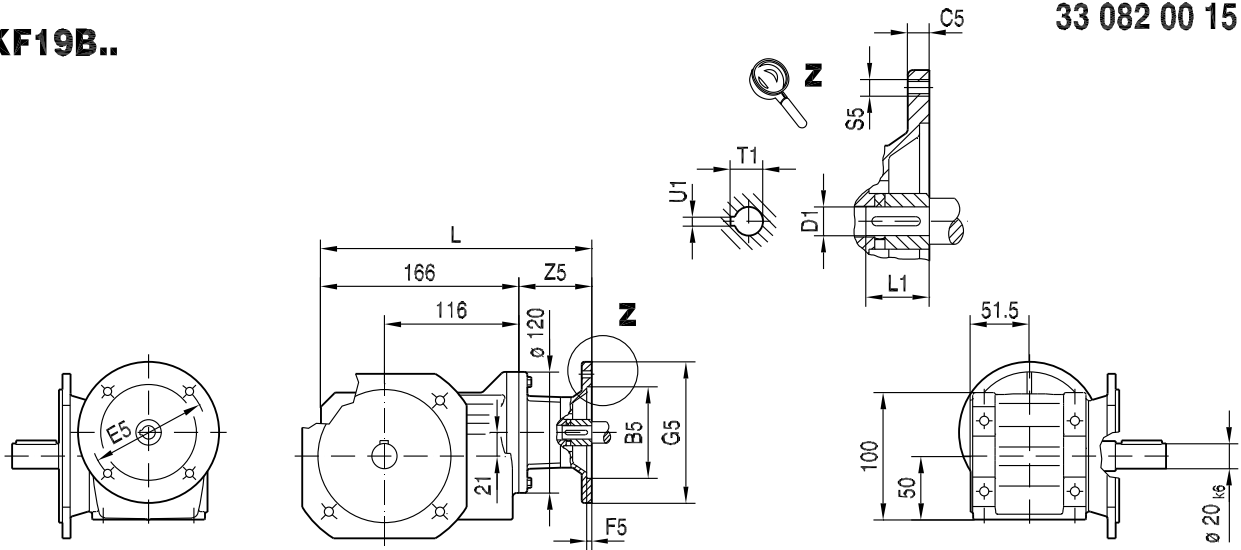


	B5	C5	E5	F5	G5	L	S5	Z5	D1	L1	T1	U1
AM63	95	10	115	3.5	140	238	M8	72	11	23	12.8	4
AM71	110	10	130	4	160	238	M8	72	14	30	16.3	5
AM80	130	12	165	4.5	200	272	M10	106	19	40	21.8	6
AM90	130	12	165	4.5	200	272	M10	106	24	50	27.3	8

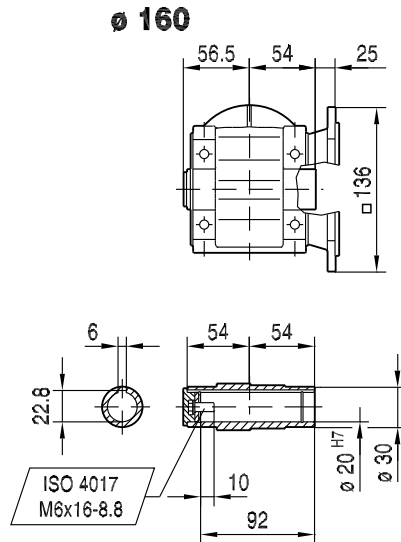
21932387/EN - 05/2015

33 082 00 15

KF19B..



KAF19B..



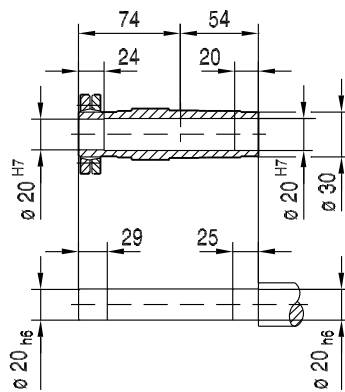
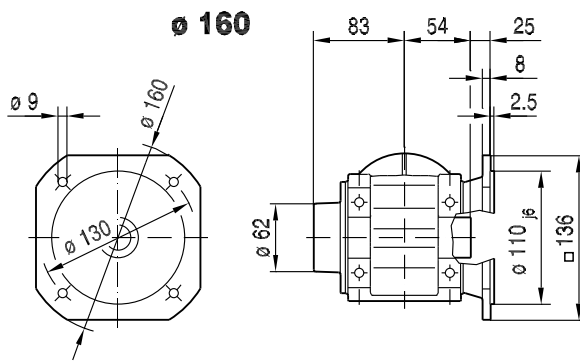
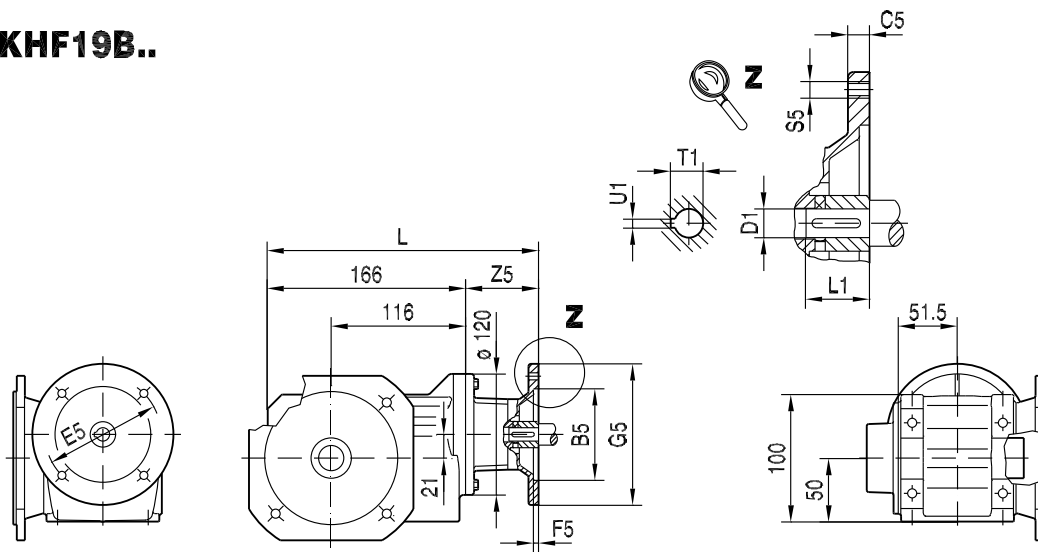
	B5	C5	E5	F5	G5	L	S5	Z5	D1	L1	T1	U1
AM63	95	10	115	3.5	140	238	M8	72	11	23	12.8	4
AM71	110	10	130	4	160	238	M8	72	14	30	16.3	5
AM80	130	12	165	4.5	200	272	M10	106	19	40	21.8	6
AM90	130	12	165	4.5	200	272	M10	106	24	50	27.3	8

21932387/EN – 05/2015

KHF19B..

33 083 00 15

2

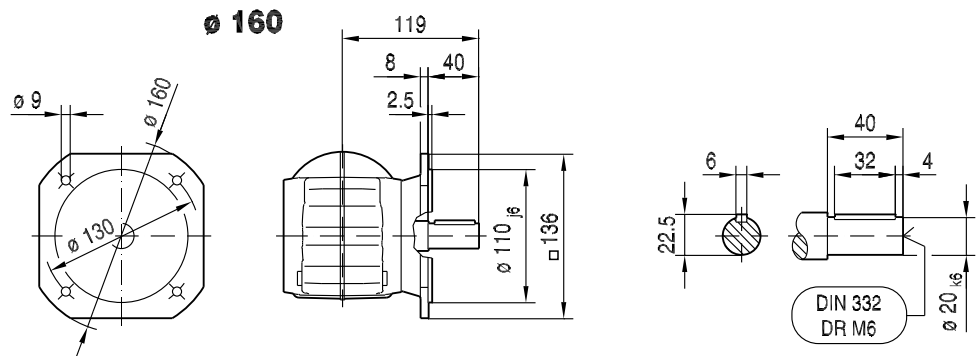
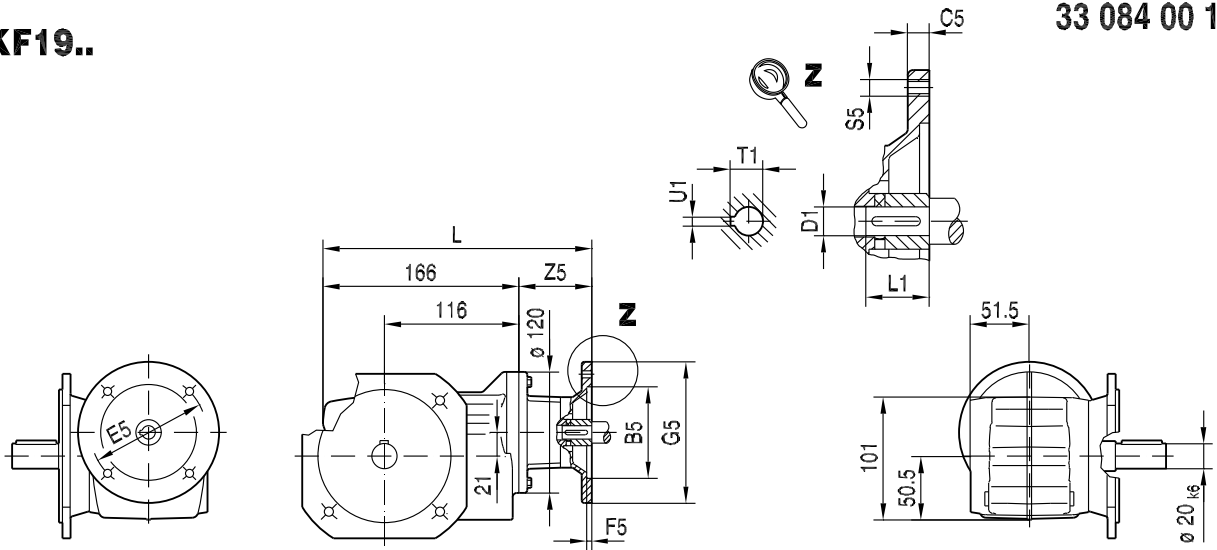


	B5	C5	E5	F5	G5	L	S5	Z5	D1	L1	T1	U1
AM63	95	10	115	3.5	140	238	M8	72	11	23	12.8	4
AM71	110	10	130	4	160	238	M8	72	14	30	16.3	5
AM80	130	12	165	4.5	200	272	M10	106	19	40	21.8	6
AM90	130	12	165	4.5	200	272	M10	106	24	50	27.3	8

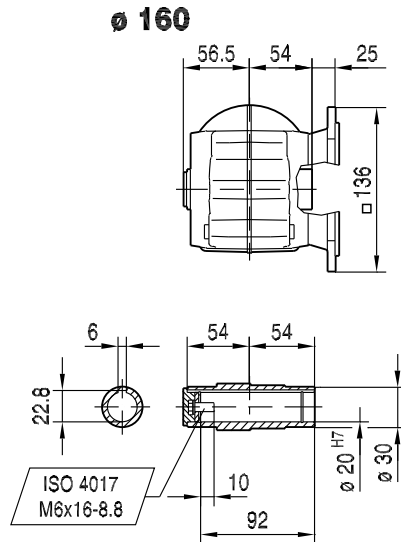
21932387/EN – 05/2015

KF19..

33 084 00 15



KAF19..

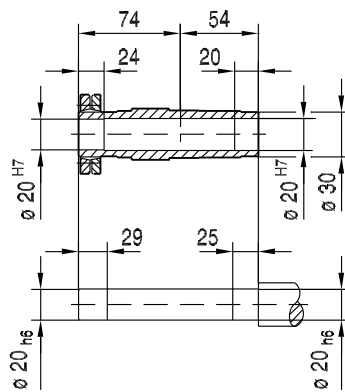
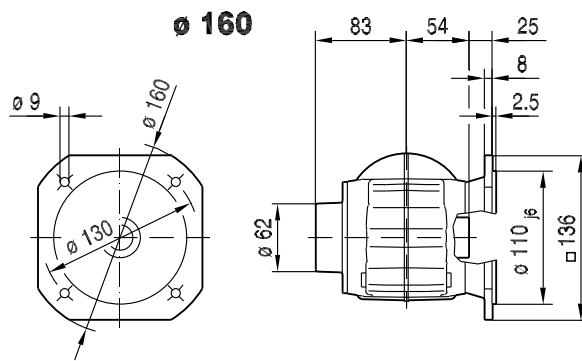
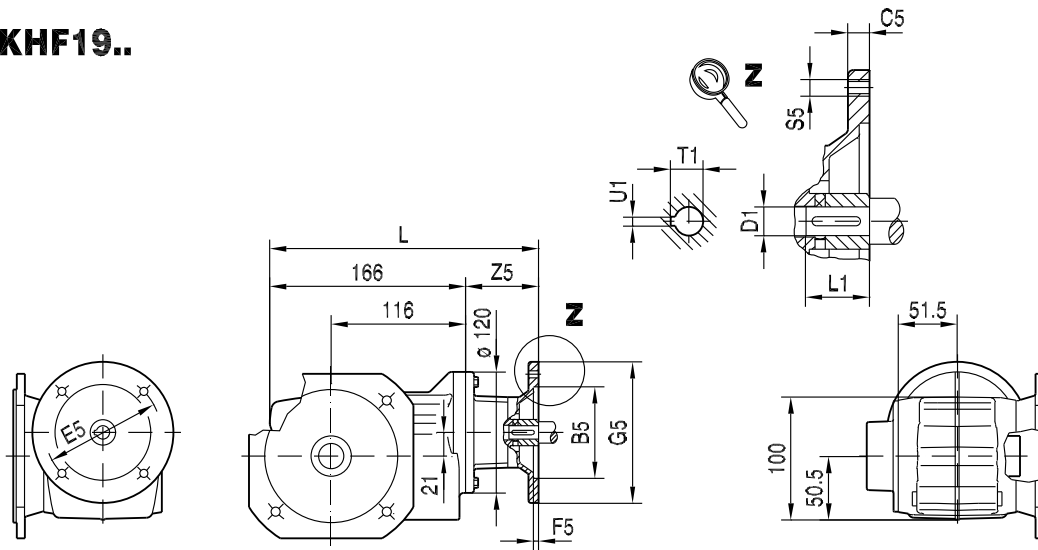


	B5	C5	E5	F5	G5	L	S5	Z5	D1	L1	T1	U1
AM63	95	10	115	3.5	140	238	M8	72	11	23	12.8	4
AM71	110	10	130	4	160	238	M8	72	14	30	16.3	5
AM80	130	12	165	4.5	200	272	M10	106	19	40	21.8	6
AM90	130	12	165	4.5	200	272	M10	106	24	50	27.3	8

21932387/EN – 05/2015

KHF19..

33 085 00 15

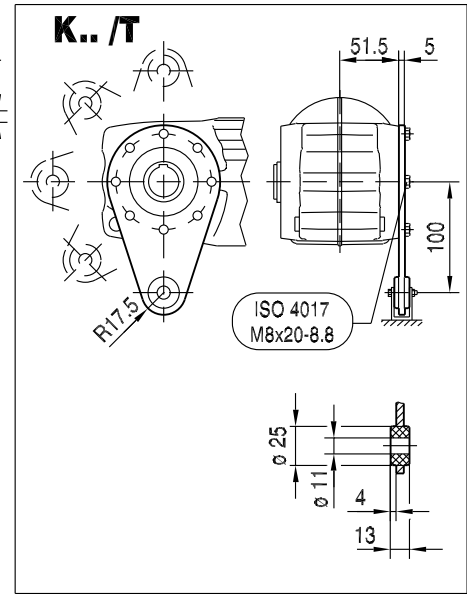
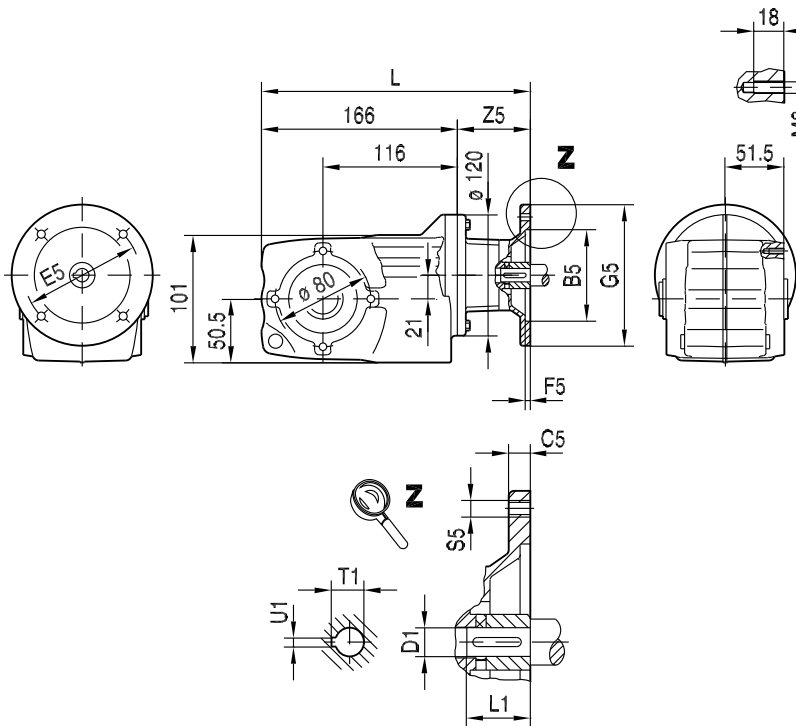


	B5	C5	E5	F5	G5	L	S5	Z5	D1	L1	T1	U1
AM63	95	10	115	3.5	140	238	M8	72	11	23	12.8	4
AM71	110	10	130	4	160	238	M8	72	14	30	16.3	5
AM80	130	12	165	4.5	200	272	M10	106	19	40	21.8	6
AM90	130	12	165	4.5	200	272	M10	106	24	50	27.3	8

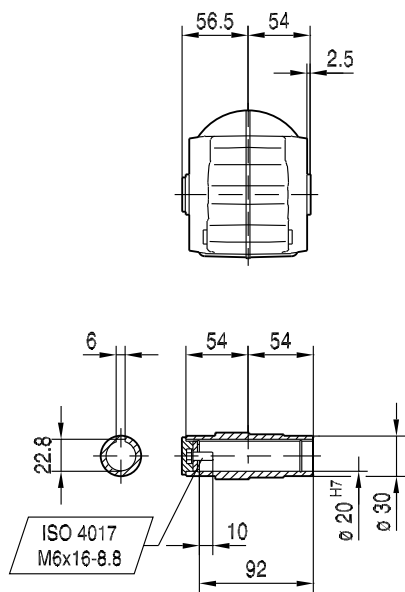
21932387/EN – 05/2015

33 086 00 15

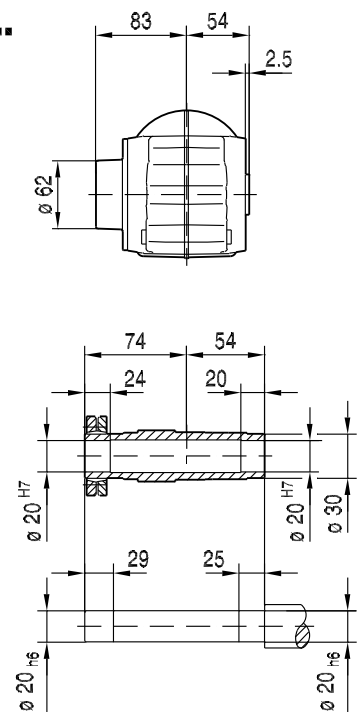
KA19..



KA19..



KH19..

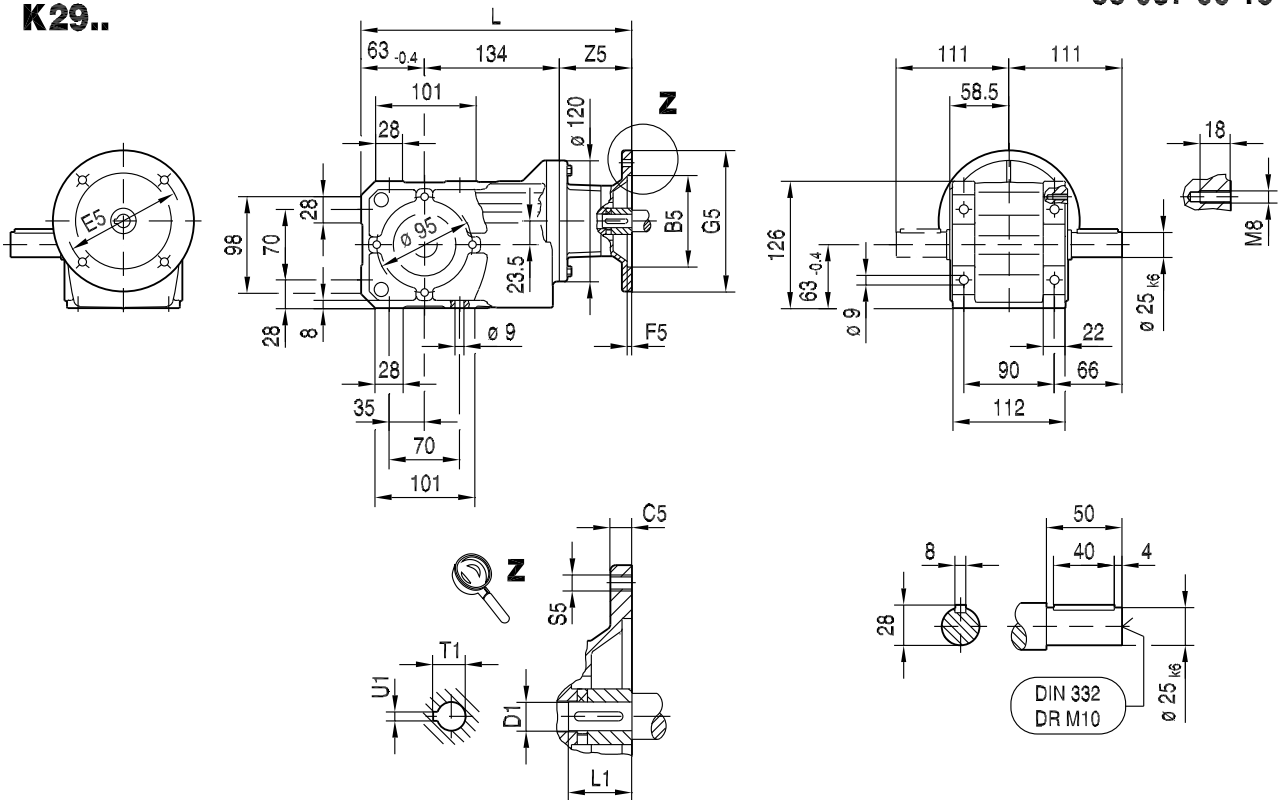


	B5	C5	E5	F5	G5	L	S5	Z5	D1	L1	T1	U1
AM63	95	10	115	3.5	140	238	M8	72	11	23	12.8	4
AM71	110	10	130	4	160	238	M8	72	14	30	16.3	5
AM80	130	12	165	4.5	200	272	M10	106	19	40	21.8	6
AM90	130	12	165	4.5	200	272	M10	106	24	50	27.3	8

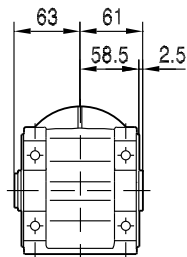
21932387/EN – 05/2015

33 087 00 15

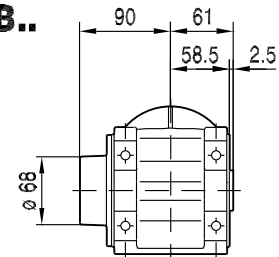
K29..



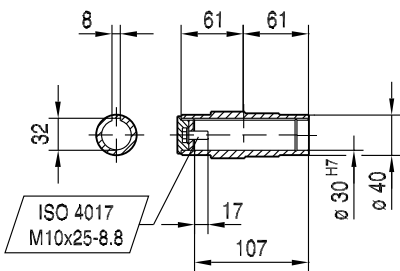
KA29B..



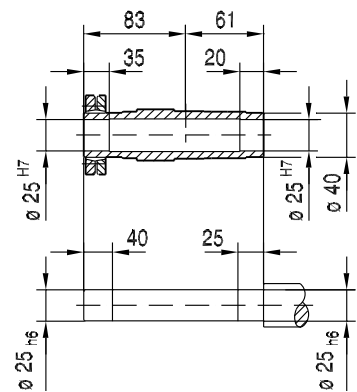
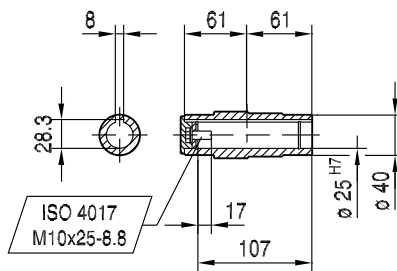
KH29B..



ø 30 H7
DIN 6885-3



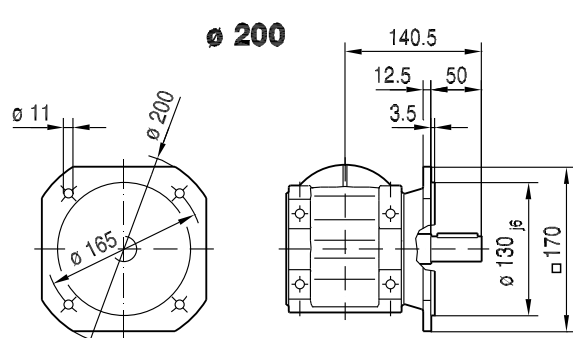
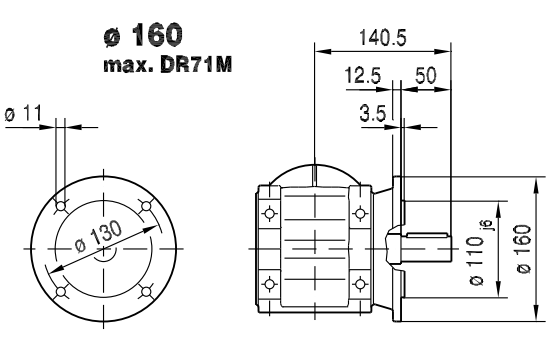
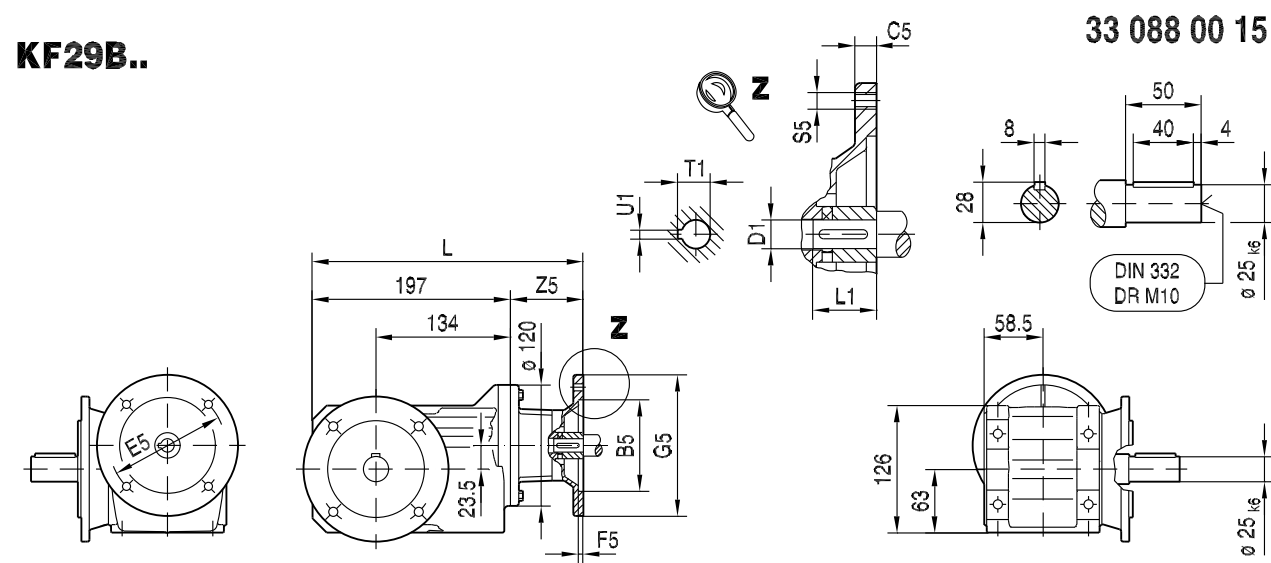
ø 25 H7



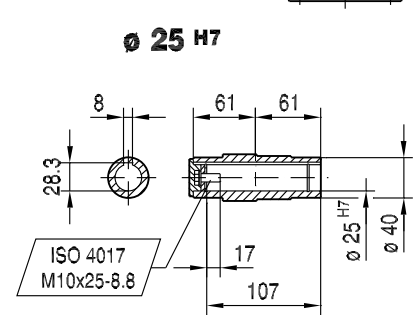
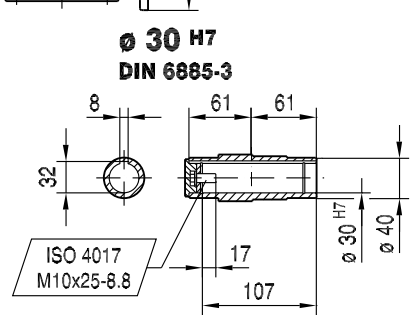
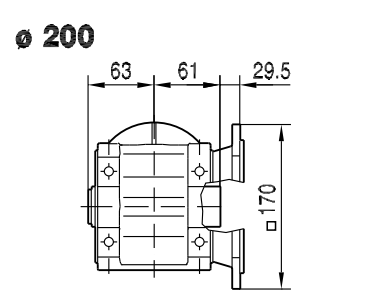
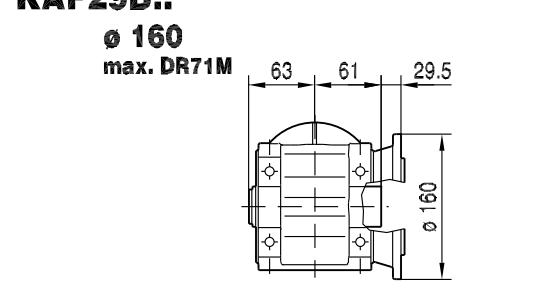
	B5	C5	E5	F5	G5	L	S5	Z5	D1	L1	T1	U1
AM63	95	10	115	3.5	140	269	M8	72	11	23	12.8	4
AM71	110	10	130	4	160	269	M8	72	14	30	16.3	5
AM80	130	12	165	4.5	200	303	M10	106	19	40	21.8	6
AM90	130	12	165	4.5	200	303	M10	106	24	50	27.3	8

KF29B..

33 088 00 15



KAF29B..

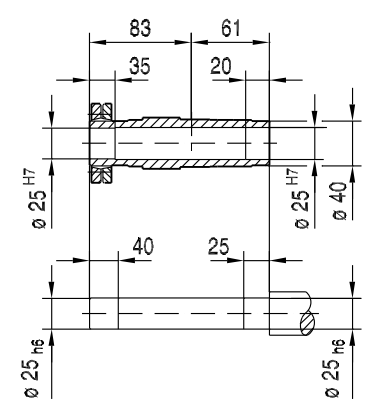
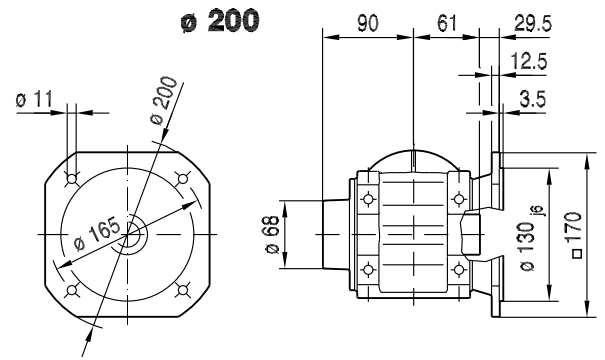
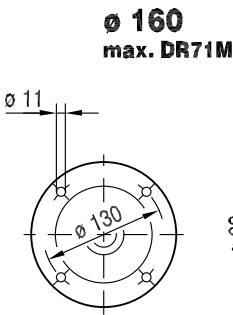
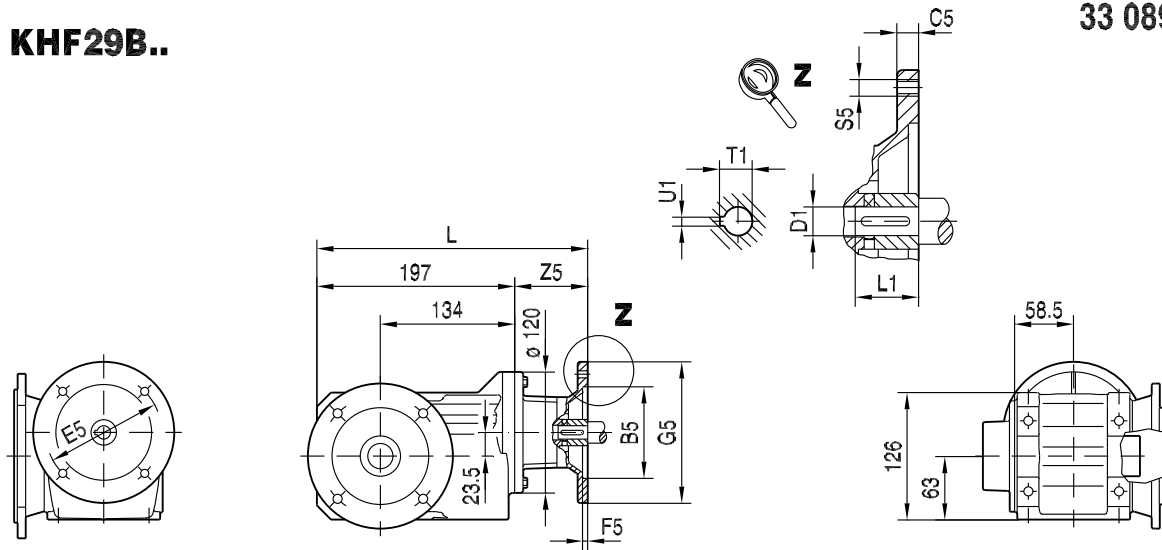


	B5	C5	E5	F5	G5	L	S5	Z5	D1	L1	T1	U1
AM63	95	10	115	3.5	140	269	M8	72	11	23	12.8	4
AM71	110	10	130	4	160	269	M8	72	14	30	16.3	5
AM80	130	12	165	4.5	200	303	M10	106	19	40	21.8	6
AM90	130	12	165	4.5	200	303	M10	106	24	50	27.3	8

21932387/EN – 05/2015

KHF29B..

33 089 00 15

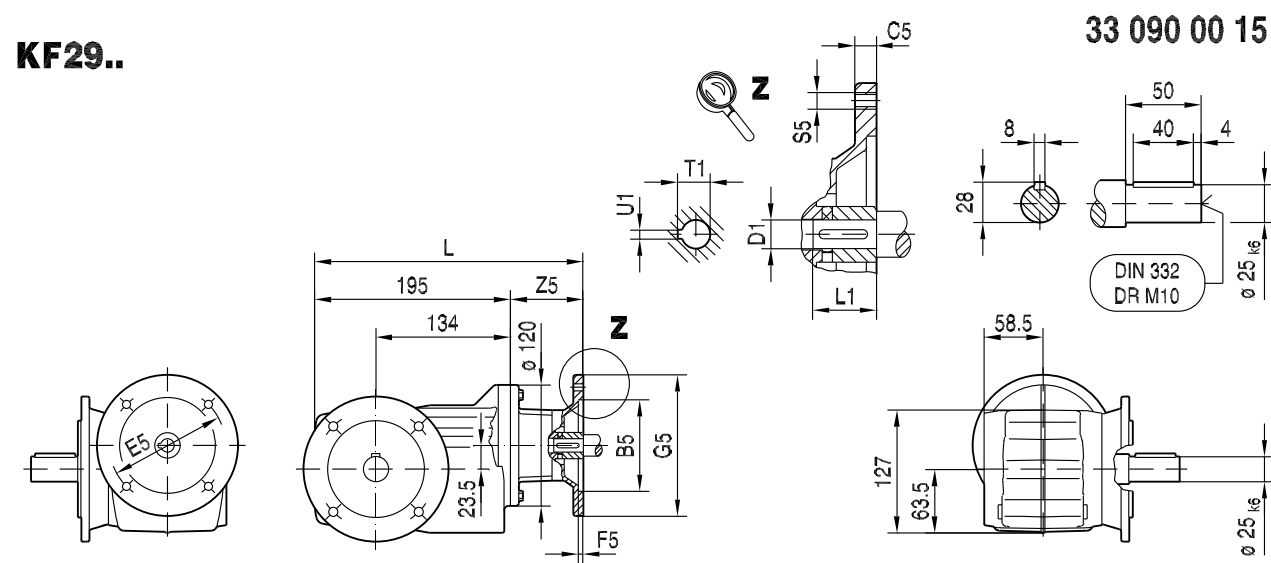


	B5	C5	E5	F5	G5	L	S5	Z5	D1	L1	T1	U1
AM63	95	10	115	3.5	140	269	M8	72	11	23	12.8	4
AM71	110	10	130	4	160	269	M8	72	14	30	16.3	5
AM80	130	12	165	4.5	200	303	M10	106	19	40	21.8	6
AM90	130	12	165	4.5	200	303	M10	106	24	50	27.3	8

21932387/EN – 05/2015

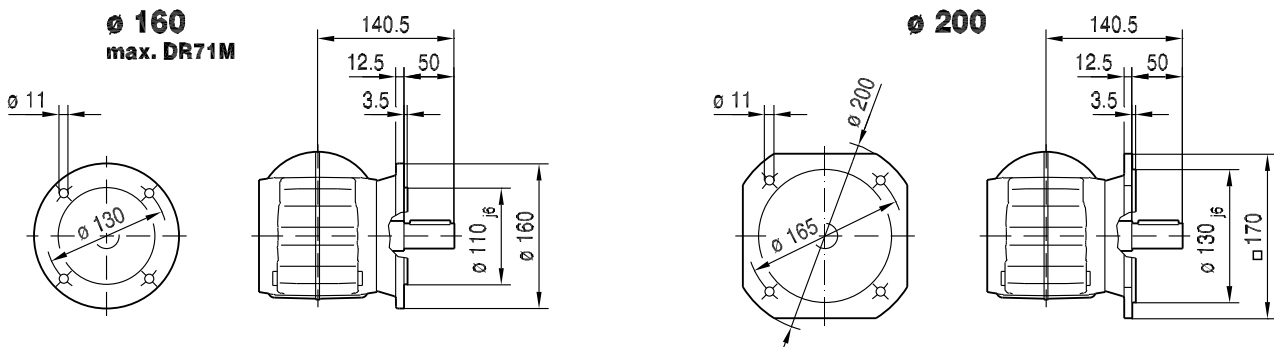
KF29..

33 090 00 15



Ø 160
max. DR71M

Ø 200



KAF29..

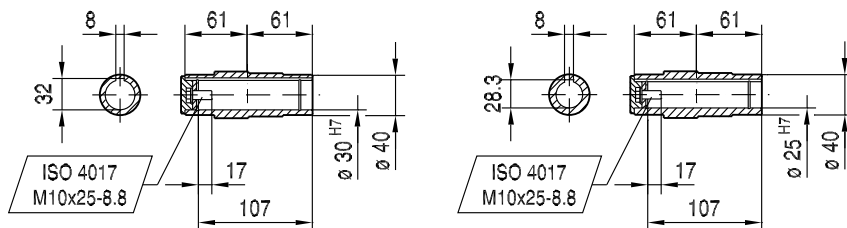
Ø 160
max. DR71M

Ø 200



Ø 30 H7
DIN 6885-3

Ø 25 H7

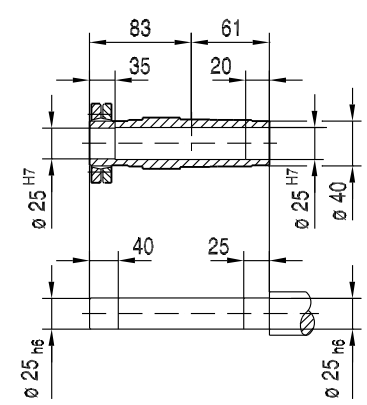
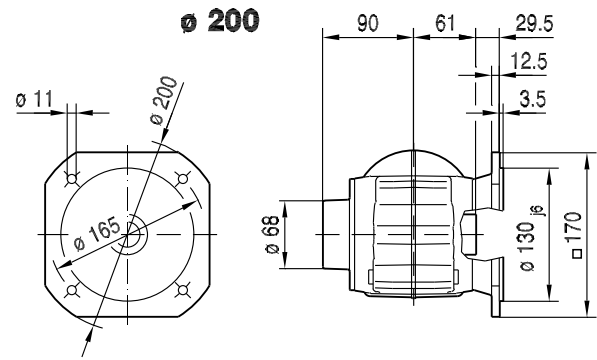
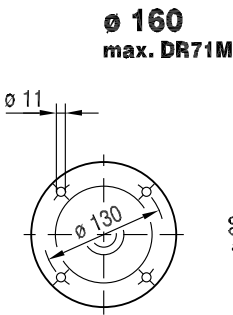
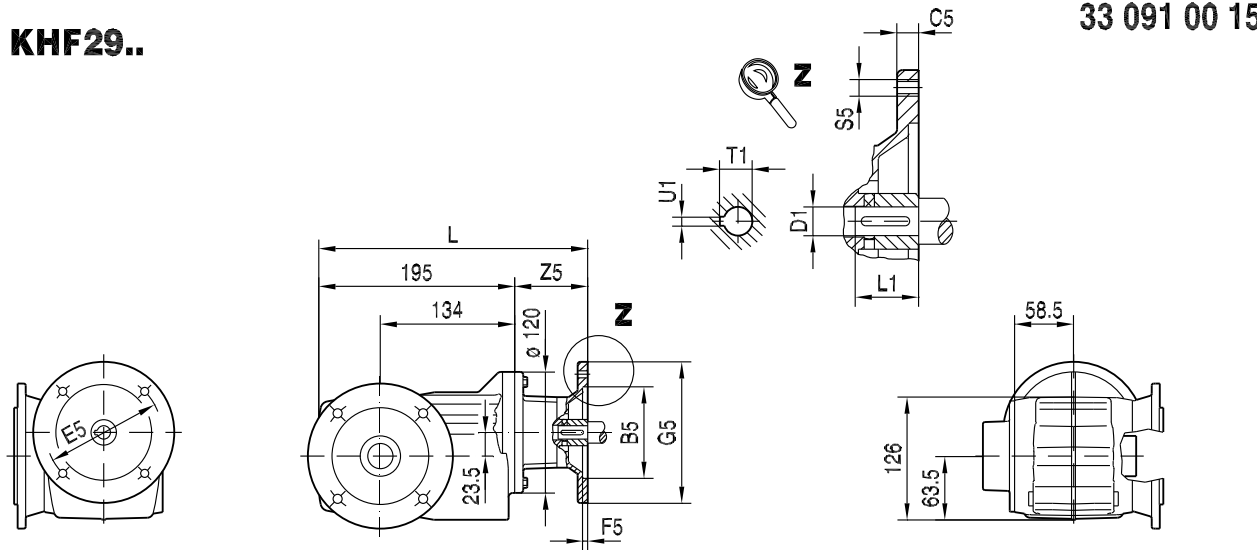


	B5	C5	E5	F5	G5	L	S5	Z5	D1	L1	T1	U1
AM63	95	10	115	3.5	140	267	M8	72	11	23	12.8	4
AM71	110	10	130	4	160	267	M8	72	14	30	16.3	5
AM80	130	12	165	4.5	200	301	M10	106	19	40	21.8	6
AM90	130	12	165	4.5	200	301	M10	106	24	50	27.3	8

21932387/EN – 05/2015

KHF29..

33 091 00 15

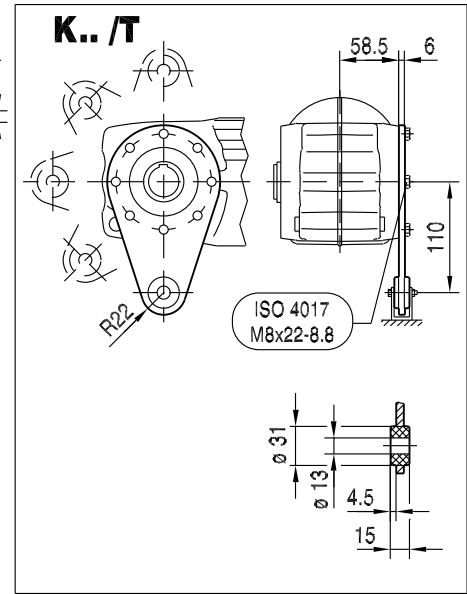
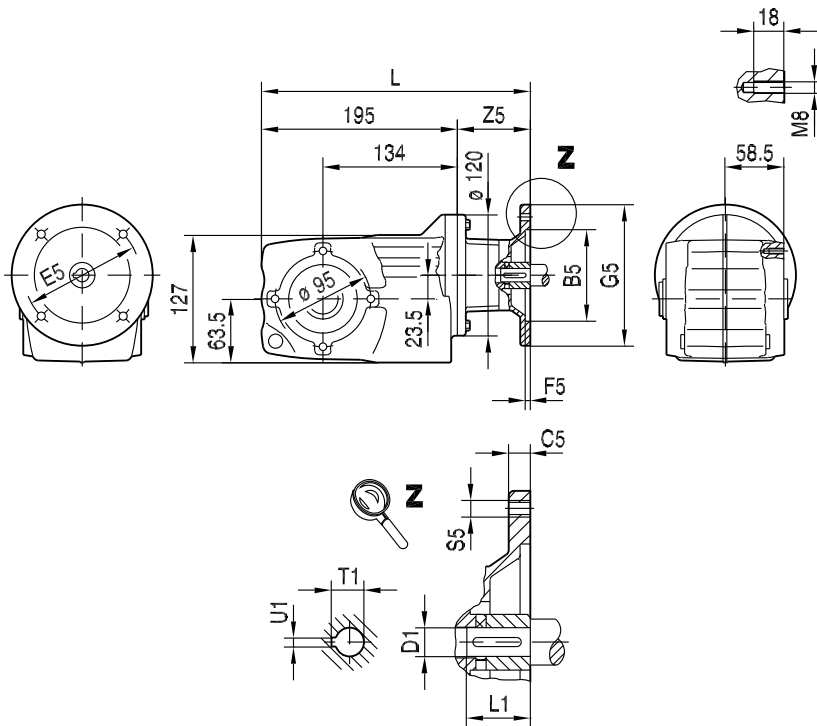


	B5	C5	E5	F5	G5	L	S5	Z5	D1	L1	T1	U1
AM63	95	10	115	3.5	140	267	M8	72	11	23	12.8	4
AM71	110	10	130	4	160	267	M8	72	14	30	16.3	5
AM80	130	12	165	4.5	200	301	M10	106	19	40	21.8	6
AM90	130	12	165	4.5	200	301	M10	106	24	50	27.3	8

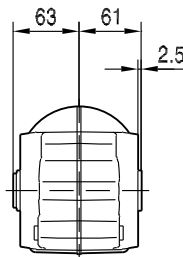
21932387/EN – 05/2015

33 092 00 15

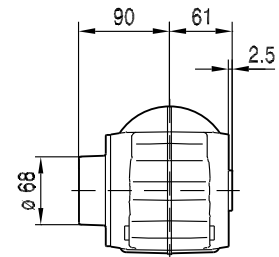
KA29..



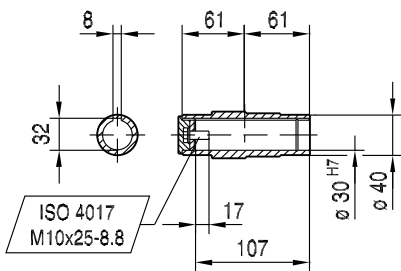
KA29..



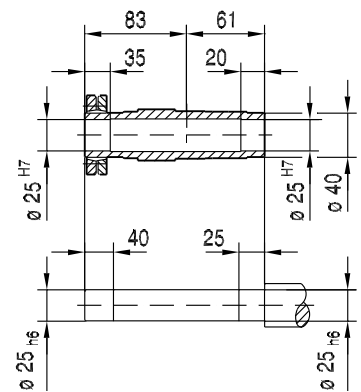
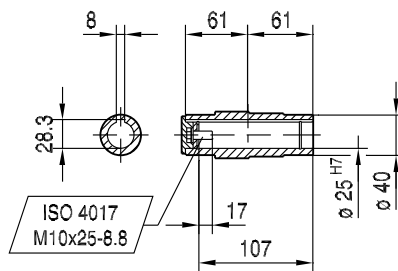
KH29..



Ø 30 H7
DIN 6885-3



Ø 25 H7



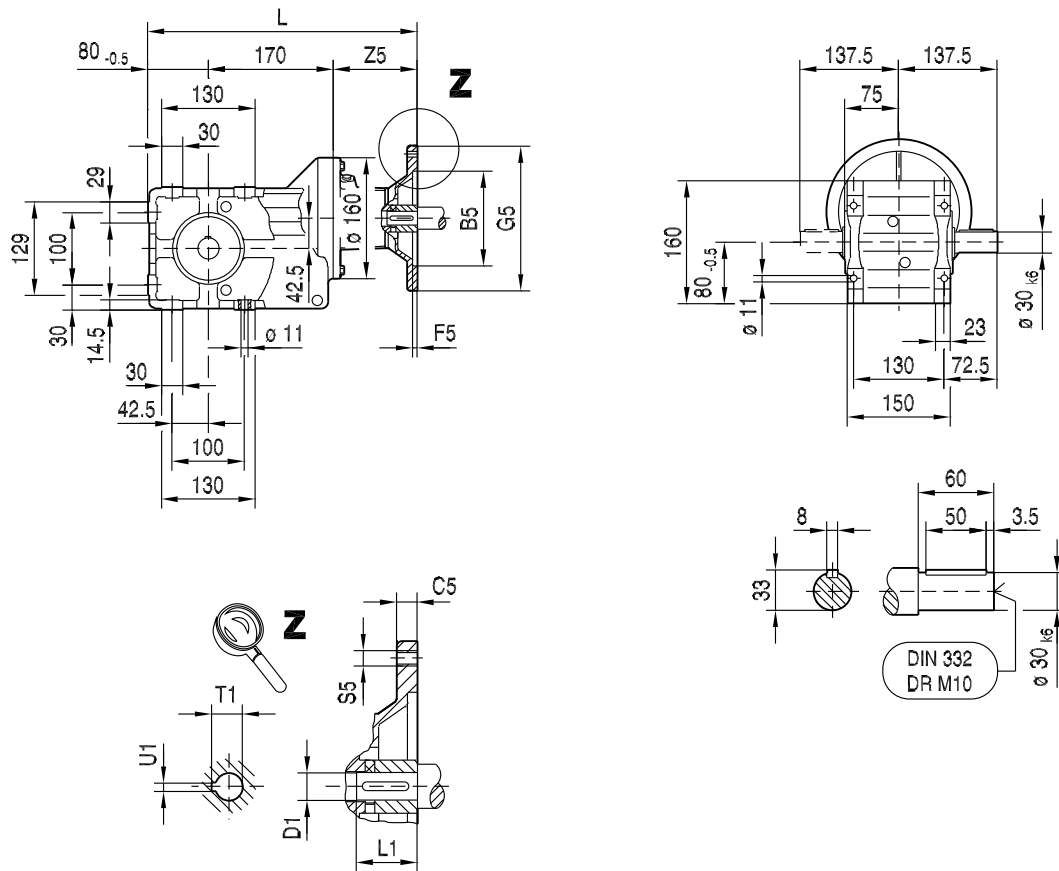
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AM63	95	10	115	3.5	140	267	M8	72	11	23	12.8	4
AM71	110	10	130	4	160	267	M8	72	14	30	16.3	5
AM80	130	12	165	4.5	200	301	M10	106	19	40	21.8	6
AM90	130	12	165	4.5	200	301	M10	106	24	50	27.3	8

21932387/EN – 05/2015

33 052 00 15

K39..

2

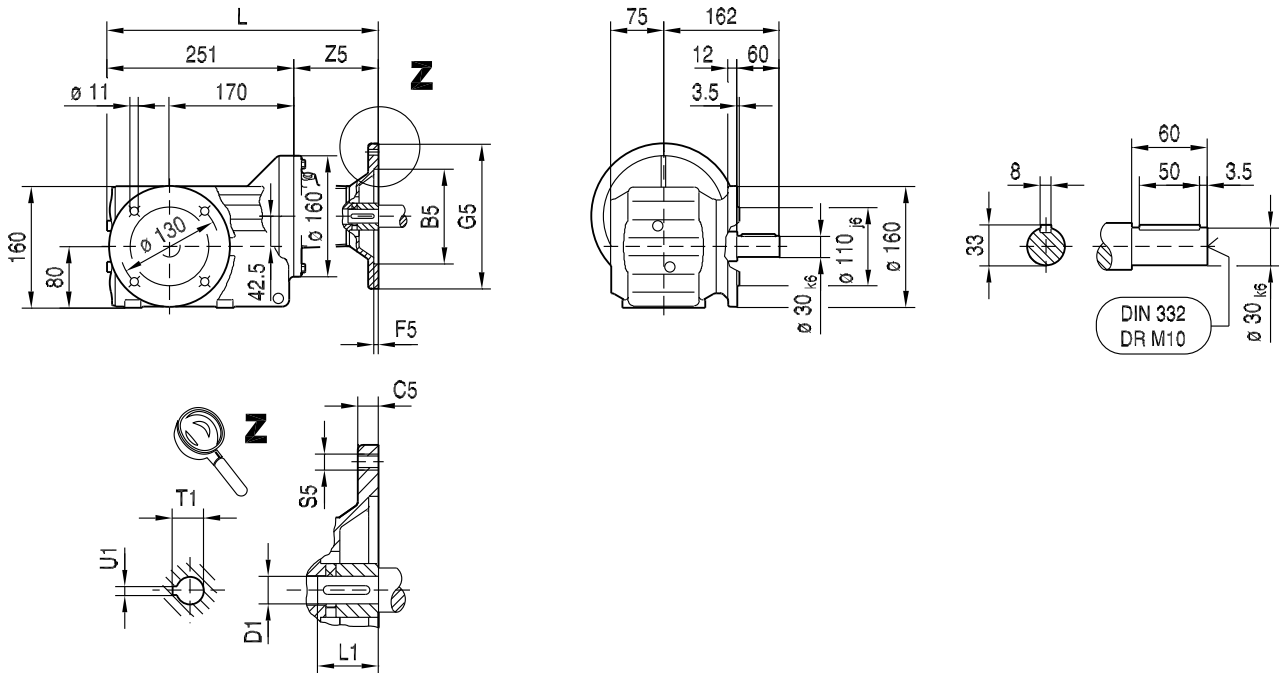


21932387/EN - 05/2015

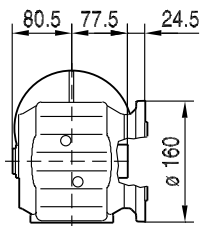
	B5	C5	E5	F5	G5	L	S5	Z5	D1	L1	T1	U1
AM63	95	10	115	3.5	140	316	M8	66	11	23	12.8	4
AM71	110	10	130	4	160	316	M8	66	14	30	16.3	5
AM80	130	12	165	4.5	200	349	M10	99	19	40	21.8	6
AM90	130	12	165	4.5	200	349	M10	99	24	50	27.3	8
AM100	180	15	215	5	250	384	M12	134	28	60	31.3	8
AM112	180	15	215	5	250	384	M12	134	28	60	31.3	8

33 053 00 15

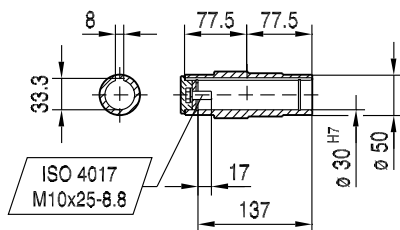
KF39..



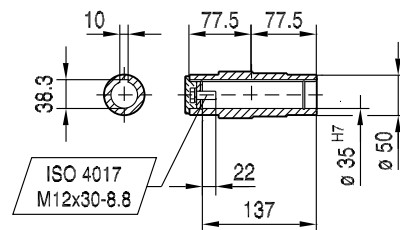
KAF39..



Ø 30 H7



Ø 35 H7

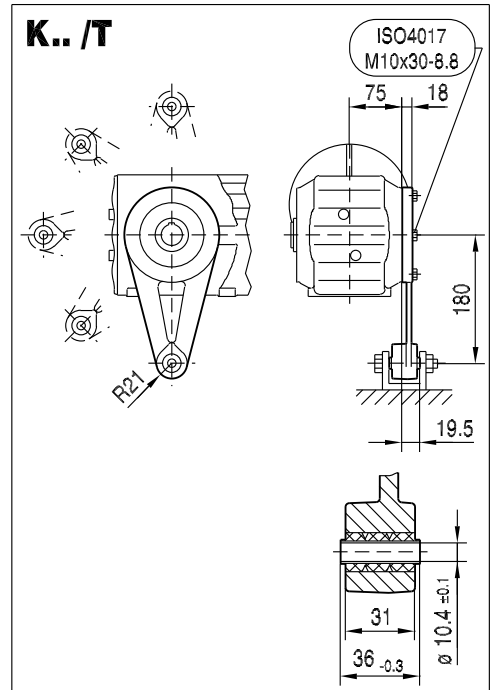
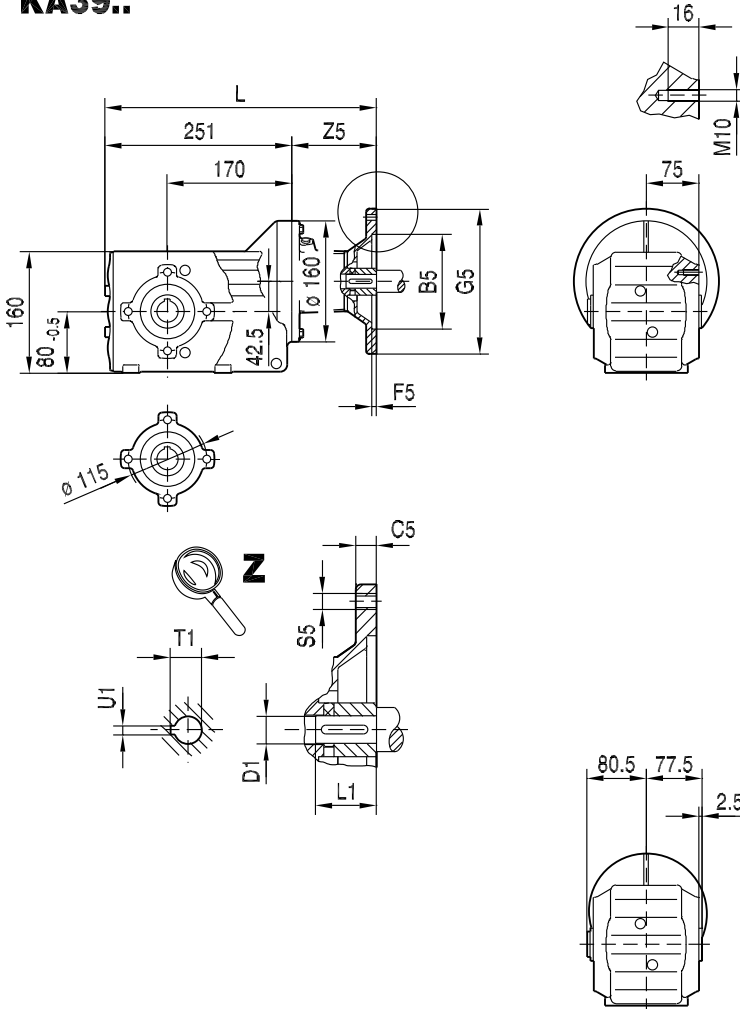


	B5	C5	E5	F5	G5	L	S5	Z5	D1	L1	T1	U1
AM63	95	10	115	3.5	140	317	M8	66	11	23	12.8	4
AM71	110	10	130	4	160	317	M8	66	14	30	16.3	5
AM80	130	12	165	4.5	200	350	M10	99	19	40	21.8	6
AM90	130	12	165	4.5	200	350	M10	99	24	50	27.3	8
AM100	180	15	215	5	250	385	M12	134	28	60	31.3	8
AM112	180	15	215	5	250	385	M12	134	28	60	31.3	8

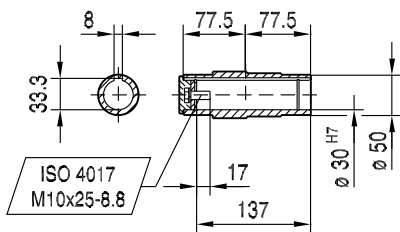
21932387/EN – 05/2015

KA39..

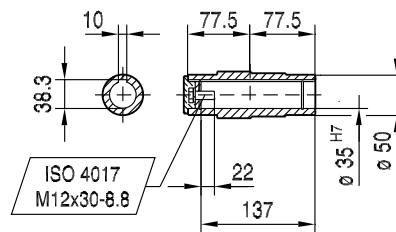
33 054 00 15



Ø 30 H7



Ø 35 H7

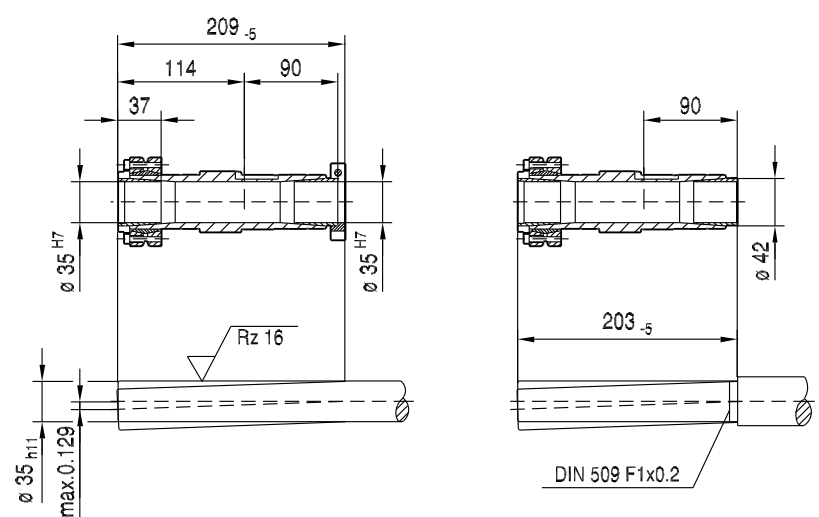
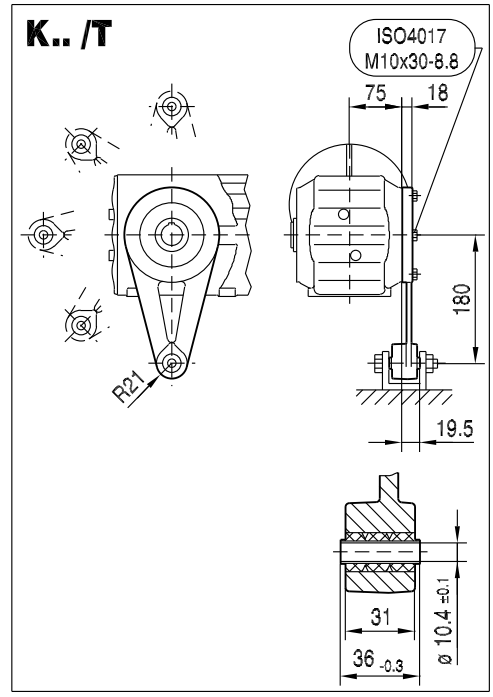
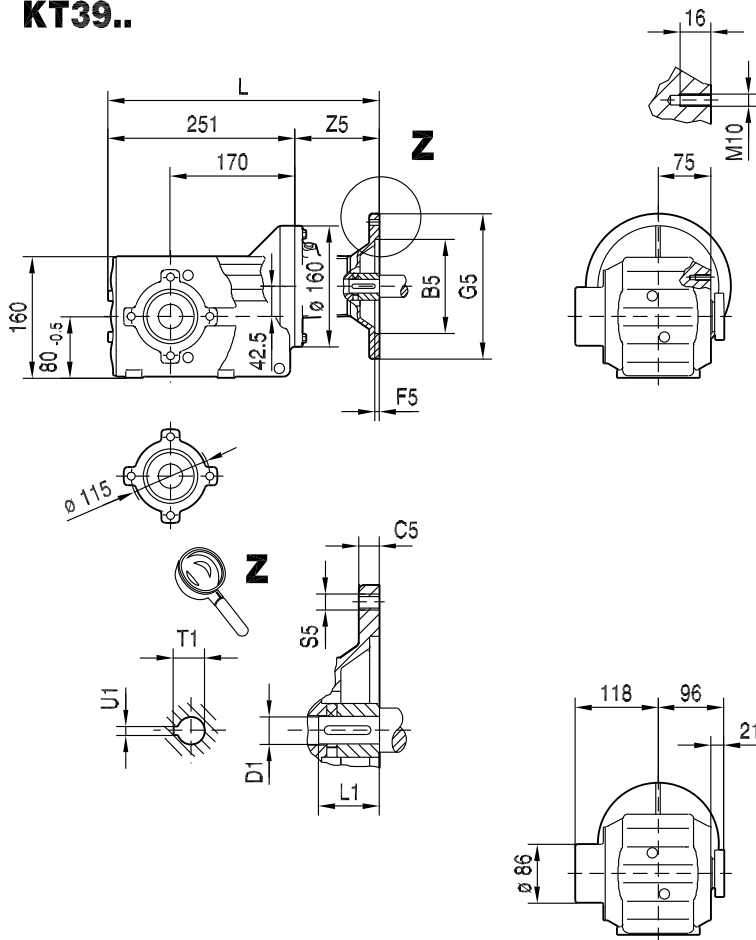


21932387/EN – 05/2015

	B5	C5	E5	F5	G5	L	S5	Z5	D1	L1	T1	U1
AM63	95	10	115	3.5	140	317	M8	66	11	23	12.8	4
AM71	110	10	130	4	160	317	M8	66	14	30	16.3	5
AM80	130	12	165	4.5	200	350	M10	99	19	40	21.8	6
AM90	130	12	165	4.5	200	350	M10	99	24	50	27.3	8
AM100	180	15	215	5	250	385	M12	134	28	60	31.3	8
AM112	180	15	215	5	250	385	M12	134	28	60	31.3	8

33 055 00 15

KT39..



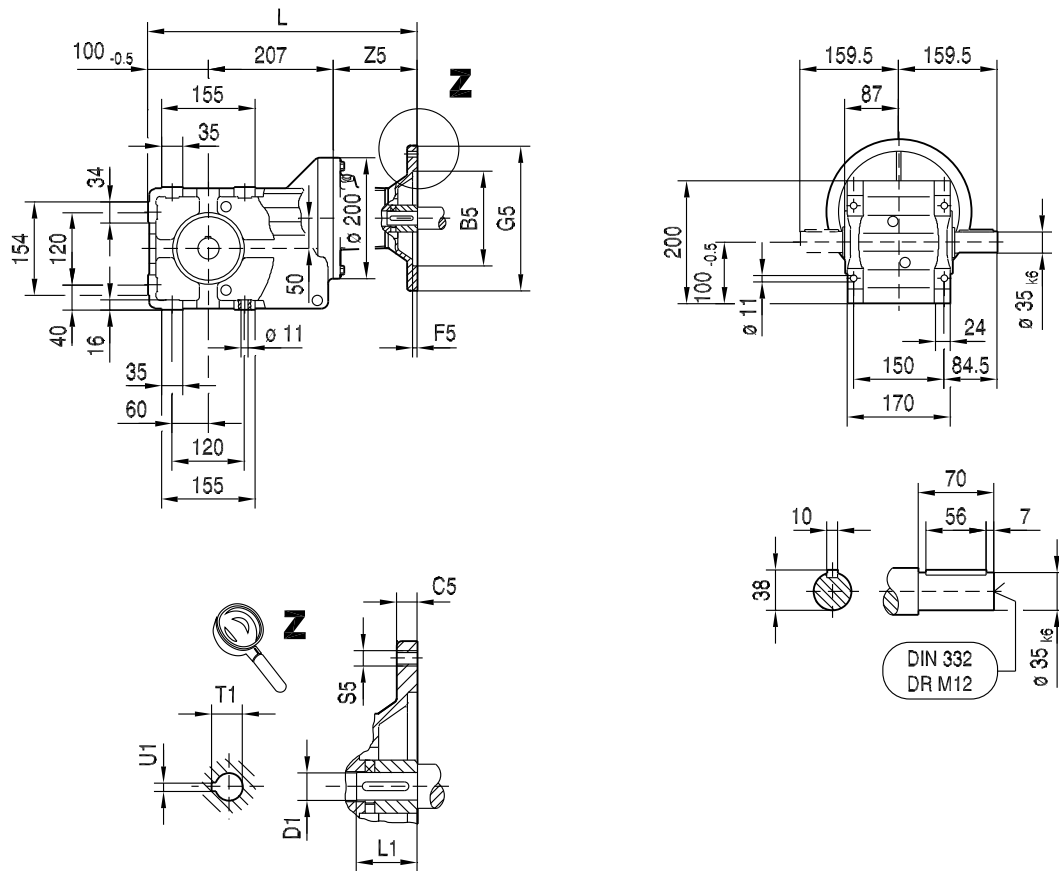
	B5	C5	E5	F5	G5	L	S5	Z5	D1	L1	T1	U1
AM63	95	10	115	3.5	140	317	M8	66	11	23	12.8	4
AM71	110	10	130	4	160	317	M8	66	14	30	16.3	5
AM80	130	12	165	4.5	200	350	M10	99	19	40	21.8	6
AM90	130	12	165	4.5	200	350	M10	99	24	50	27.3	8
AM100	180	15	215	5	250	385	M12	134	28	60	31.3	8
AM112	180	15	215	5	250	385	M12	134	28	60	31.3	8

21932387/EN – 05/2015

33 056 00 15

K49..

2

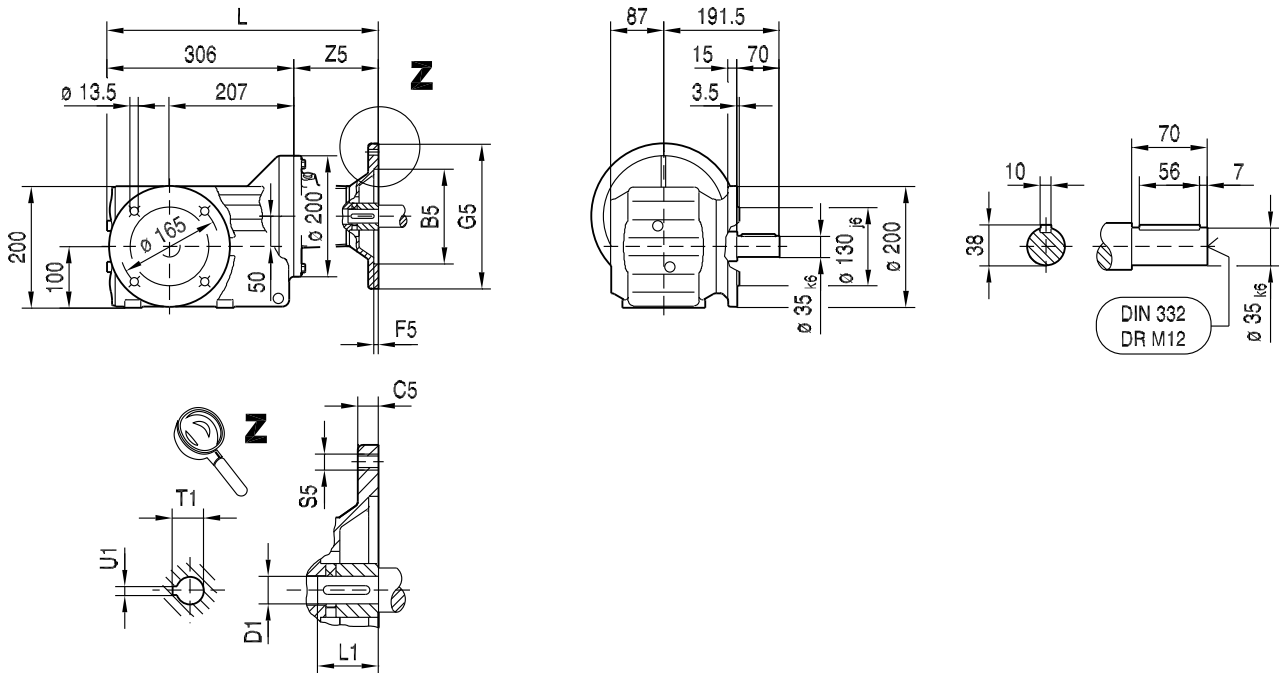


21932387/EN - 05/2015

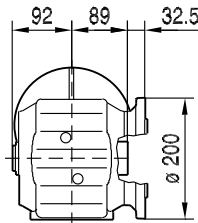
	B5	C5	E5	F5	G5	L	S5	Z5	D1	L1	T1	U1
AM63	95	10	115	3.5	140	367	M8	60	11	23	12.8	4
AM71	110	10	130	4	160	367	M8	60	14	30	16.3	5
AM80	130	12	165	4.5	200	399	M10	92	19	40	21.8	6
AM90	130	12	165	4.5	200	399	M10	92	24	50	27.3	8
AM100	180	15	215	5	250	433	M12	126	28	60	31.3	8
AM112	180	15	215	5	250	433	M12	126	28	60	31.3	8
AM132S/M	230	16	265	5	300	486	M12	179	38	80	41.3	10

33 057 00 15

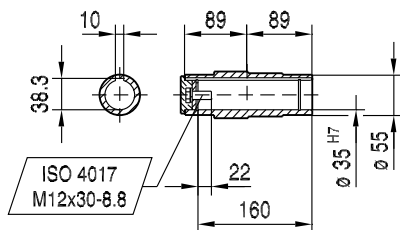
KF49..



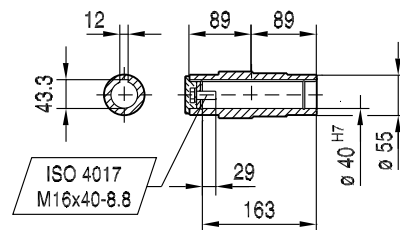
KAF49..



Ø 35 H7



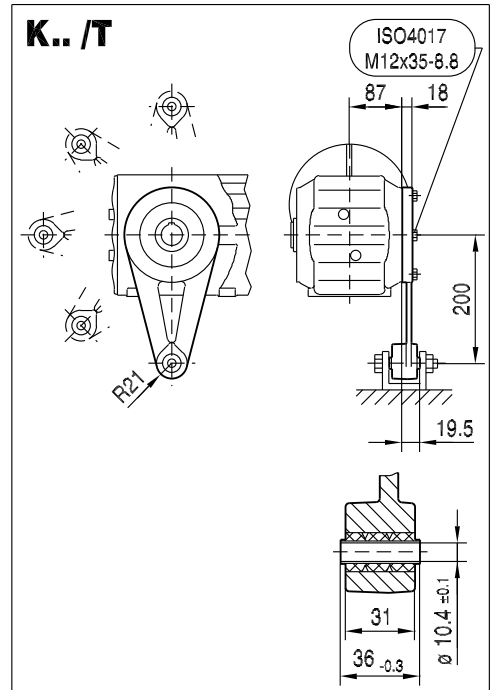
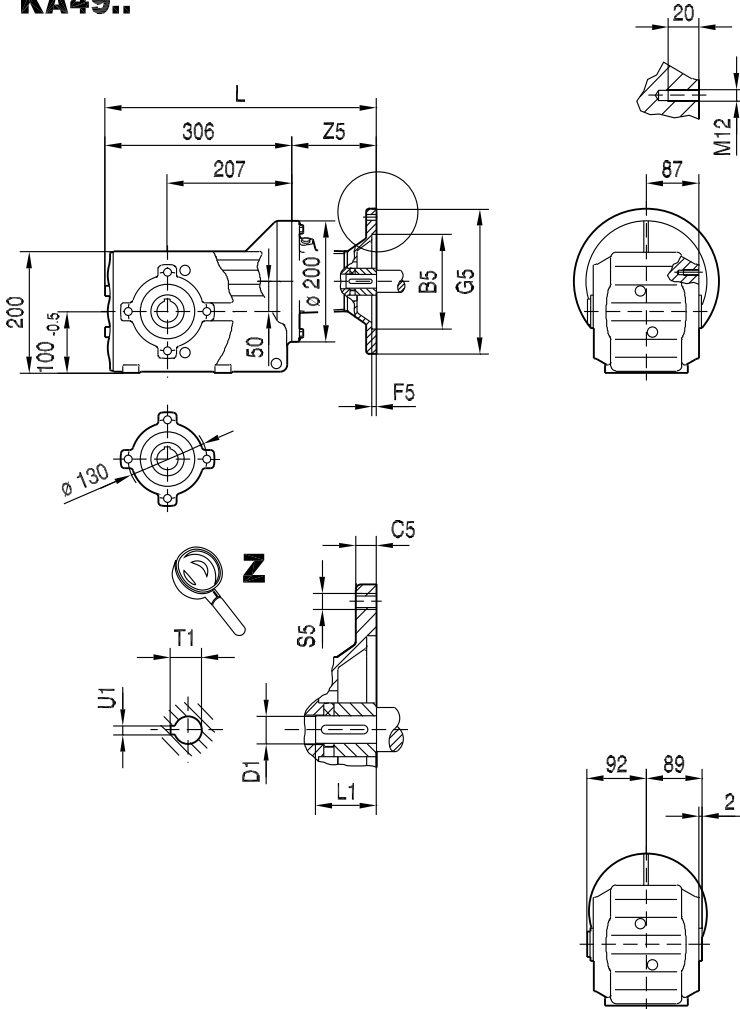
Ø 40 H7



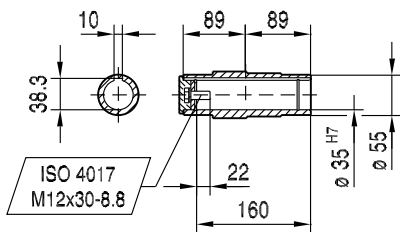
	B5	C5	E5	F5	G5	L	S5	Z5	D1	L1	T1	U1
AM63	95	10	115	3.5	140	366	M8	60	11	23	12.8	4
AM71	110	10	130	4	160	366	M8	60	14	30	16.3	5
AM80	130	12	165	4.5	200	398	M10	92	19	40	21.8	6
AM90	130	12	165	4.5	200	398	M10	92	24	50	27.3	8
AM100	180	15	215	5	250	432	M12	126	28	60	31.3	8
AM112	180	15	215	5	250	432	M12	126	28	60	31.3	8
AM132S/M	230	16	265	5	300	485	M12	179	38	80	41.3	10

KA49..

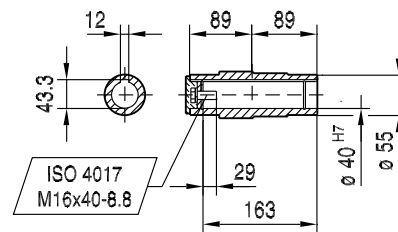
33 058 00 15



Ø 35 H7



Ø 40 H7

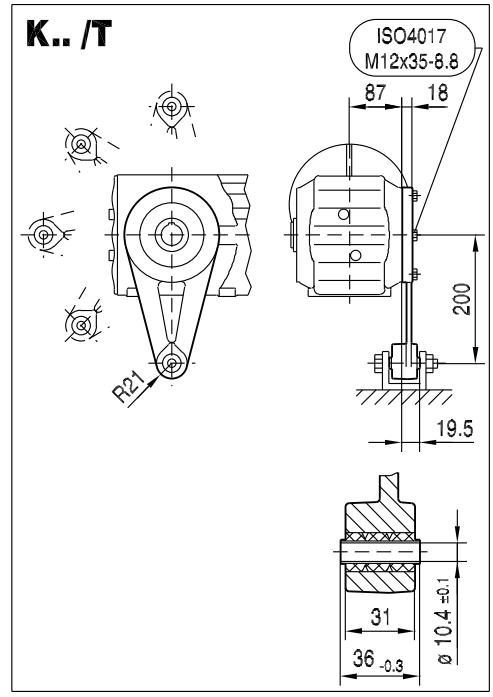
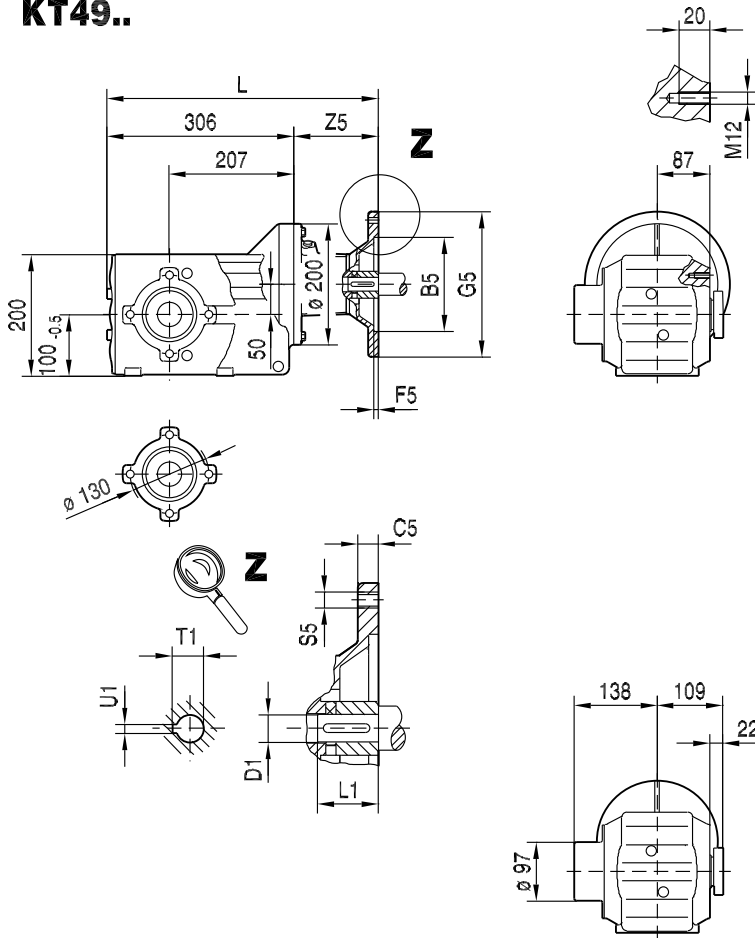


21932387/EN – 05/2015

	B5	C5	E5	F5	G5	L	S5	Z5	D1	L1	T1	U1
AM63	95	10	115	3.5	140	366	M8	60	11	23	12.8	4
AM71	110	10	130	4	160	366	M8	60	14	30	16.3	5
AM80	130	12	165	4.5	200	398	M10	92	19	40	21.8	6
AM90	130	12	165	4.5	200	398	M10	92	24	50	27.3	8
AM100	180	15	215	5	250	432	M12	126	28	60	31.3	8
AM112	180	15	215	5	250	432	M12	126	28	60	31.3	8
AM132S/M	230	16	265	5	300	485	M12	179	38	80	41.3	10


33 059 00 15


KT49..



	B5	C5	E5	F5	G5	L	S5	Z5	D1	L1	T1	U1
AM63	95	10	115	3.5	140	366	M8	60	11	23	12.8	4
AM71	110	10	130	4	160	366	M8	60	14	30	16.3	5
AM80	130	12	165	4.5	200	398	M10	92	19	40	21.8	6
AM90	130	12	165	4.5	200	398	M10	92	24	50	27.3	8
AM100	180	15	215	5	250	432	M12	126	28	60	31.3	8
AM112	180	15	215	5	250	432	M12	126	28	60	31.3	8
AM132S/M	230	16	265	5	300	485	M12	179	38	80	41.3	10

2.7 Selection tables for K..9 / CMP..

K19, M _{aDyn} [Nm]							80 Nm
i	40M	50S	50M	CMP 50L	63S	63M	71S
 2							
4.50	17	23	45	67	48	>88	84
5.16	19	26	52	77	56	>88	>88
5.54	20	28	55	83	60	>88	>88
6.41	24	32	64	>88	69	>88	>88
6.91	25	35	69	>88	74	>88	>88
8.09	30	41	81		87		
9.58	35	48					
10.32	38	52	>83	>83	>83	>83	>83
11.84	43	59	>86	>86	>86	>86	>86
12.70	46	63	>88	>88	>88	>88	>88
14.69	54	73	>88	>88	>88	>88	>88
15.84	58	79	>88	>88	>88	>88	>88
18.55	68	>88	>88		>88		
21.98	80	>88					
24.06	88	>88					
26.88							
27.16	>66	>66	>66	>66	>66	>66	>66
29.14							
29.29	>67	>67	>67	>67	>67	>67	>67
31.74							
34.29	>70	>70	>70		>70		
40.63	>73	>73					
44.48	>75	>75					
49.69							
53.88							
58.68							

K19, m [kg]				CMP			
s	40M	50S	50M	50L	63S	63M	71S
 2	5.9	7.6	8.5	9.4	9.7	11	13

KF: + 0.30 kg / KA: + -0.45 kg / KAF: + -- kg

2

Technical data

Selection tables for K..9 / CMP..

CMP..			C _{TG}				
i	n _{epk} [1/min]	eta [%]	K [Nm/"]	KF [Nm/"]	KA [Nm/"]	KAF [Nm/"]	
4.50	4500	97	5.1	4.4	8.5	8.5	
5.16	4500	97	5.1	4.4	8.5	8.5	
5.54	4500	97	5.1	4.4	8.5	8.5	
6.41	4500	97	5.1	4.4	8.5	8.5	
6.91	4500	97	5.1	4.4	8.5	8.5	
8.09	4500	97	5.1	4.5	8.6	8.6	
9.58	4500	97	5.1	4.5	8.6	8.6	
10.32	4500	96	6.2	5.2	12	12	
11.84	4500	96	6.2	5.2	12	12	
12.70	4500	96	5.1	4.5	8.6	8.6	
14.69	4500	96	6.2	5.2	12	12	
15.84	4500	96	6.2	5.2	12	12	
18.55	4500	96	6.2	5.2	12	12	
21.98	4500	96	6.2	5.2	12	12	
24.06	4500	96	6.2	5.2	12	12	
26.88	4500	96	6.2	5.2	12	12	
27.16	4500	91	6.2	5.2	12	12	
29.14	4500	96	6.2	5.2	12	12	
29.29	4500	91	6.2	5.2	12	12	
31.74	4500	96	6.2	5.2	12	12	
34.29	4500	91	6.2	5.2	12	12	
40.63	4500	91	6.2	5.2	12	12	
44.48	4500	91	6.2	5.2	12	12	
49.69	4500	91	6.2	5.2	12	12	
53.88	4500	91	6.2	5.2	12	12	
58.68	4500	91	6.2	5.2	12	12	

K19
 2

21932387/EN – 05/2015


CMP.. n _e = 1400							F _{Ramax}				F _{Rapk}			
i	M _{amax} [Nm]	M _{apk} [Nm]	M _{aEmergOff} [Nm]	n _{ak} [1/min]	J _G 10 ⁻⁴ [kg*m ²]	K [N]	KF [N]	KA [N]	KAF [N]	K [N]	KF [N]	KA [N]	KAF [N]	
4.50	80	88	132	433	0.38	2010	1620	2500	2500	4190	3630	4500	4500	
5.16	80	88	132	424	0.30	2140	1720	2650	2650	4190	3630	4500	4500	
5.54	80	88	132	419	0.27	2200	1780	2730	2730	4190	3630	4500	4500	
6.41	80	88	132	410	0.21	2340	1890	2900	2900	4190	3630	4500	4500	
6.91	80	88	132	407	0.18	2420	1950	3000	3000	4190	3630	4500	4500	
8.09	80	88	132	399	0.14	2590	2080	3200	3200	4190	3630	4500	4500	
9.58	63	69	104	731	0.11	2910	2340	3600	3600	4340	3670	4500	4500	
10.32	76	83	124	102	0.22	2720	2190	3370	3370	4230	3610	4500	4500	
11.84	79	86	129	90	0.18	2850	2300	3530	3530	4210	3600	4500	4500	
12.70	80	88	132	83	0.16	2930	2360	3630	3630	4190	3600	4500	4500	
14.69	80	88	132	82	0.13	3110	2510	3860	3860	4190	3600	4500	4500	
15.84	80	88	132	81	0.12	3210	2590	3980	3980	4190	3600	4500	4500	
18.55	80	88	132	81	0,092	3430	2760	4250	4250	4190	3600	4500	4500	
21.98	80	88	132	81	0,072	3680	2960	4500	4500	4190	3600	4500	4500	
24.06	80	88	132	81	0,063	3820	3080	4500	4500	4190	3600	4500	4500	
26.88	80	88	132	80	0,054	3990	3220	4500	4500	4190	3600	4500	4500	
27.16	60	66	99	38	0.13	4090	3290	4500	4500	4360	3630	4500	4500	
29.14	80	88	132	80	0,048	4120	3320	4500	4500	4190	3600	4500	4500	
29.29	61	67	100	36	0.11	4200	3380	4500	4500	4350	3630	4500	4500	
31.74	80	88	132	80	0,042	4260	3440	4500	4500	4190	3600	4500	4500	
34.29	64	70	105	31	0,090	4370	3570	4500	4500	4330	3620	4500	4500	
40.63	67	73	110	27	0,071	4350	3630	4500	4500	4310	3610	4500	4500	
44.48	69	75	112	24	0,062	4340	3620	4500	4500	4290	3600	4500	4500	
49.69	70	77	116	22	0,053	4330	3620	4500	4500	4280	3600	4500	4500	
53.88	70	77	116	22	0,047	4330	3620	4500	4500	4280	3600	4500	4500	
58.68	70	77	116	22	0,042	4330	3620	4500	4500	4280	3600	4500	4500	


K19
 2

2

Technical data

Selection tables for K..9 / CMP..

K29, M _{aDyn} [Nm]								130 Nm
i	CMP							
	50S	50M	50L	63S	63M	63L	71S	71M
 2								
3.19	16	32	48	34	66	94	59	95
3.92	20	39	59	42	81	116	73	117
5.10	26	51	76	55	106	>121	95	>121
5.75	29	57	86	62	119	>123	107	>123
6.95	35	69	104	75	>123	>123	>123	>123
7.48	37	74	111	80	>135	>135	>135	>135
8.53	43	85	127	92	>134		>134	
9.17	46	91	136	98	>143	>143	>143	>143
9.90	50	99		107				
11.94	60	118	>143	127	>143	>143	>143	>143
13.47	67	133	>143	>143	>143	>143	>143	>143
16.29	81	>143	>143	>143	>143	>143	>143	>143
19.99	100	>143	>143	>143	>143		>143	
22.08	104	>115	>115	>115	>115	>115	>115	>115
23.19	116	>143		>143				
24.91	118	>119	>119	>119	>119	>119	>119	>119
27.23	136							
29.69	>143							
30.11	>126	>126	>126	>126	>126	>126	>126	>126
33.15								
35.83								
36.96	>134	>134	>134	>134	>134		>134	
38.90								
42.87	>140	>140		>140				
50.35	>143							
54.89	>143							
61.28								
66.25								
71.93								

K29, m [kg]				CMP				
s	50S	50M	50L	63S	63M	63L	71S	71M
 2	9.4	10	11	11	13	14	14	16

KF: + 1.0 kg / KA: + -0.45 kg / KAF: + 0.35 kg

CMP..				C _{TG}			
i	n _{epk} [1/min]	eta [%]	K [Nm/"]	KF [Nm/"]	KA [Nm/"]	KAF [Nm/"]	
3.19	4500	97	8.3	7.4	16	16	
3.92	4500	97	8.3	7.4	16	16	
5.10	4500	97	8.4	7.5	17	17	
5.75	4500	97	8.4	7.5	17	17	
6.95	4500	97	8.4	7.5	17	17	
7.48	4500	96	10	8.8	25	25	
8.53	4500	97	8.4	7.5	17	17	
9.17	4500	96	10	8.8	25	25	
9.90	4500	97	8.4	7.5	17	17	
11.94	4500	96	10	8.8	25	25	
13.47	4500	96	10	8.8	25	25	
16.29	4500	96	10	8.8	25	25	
19.99	4500	96	10	8.8	25	25	
22.08	4500	91	8.6	7.6	18	18	
23.19	4500	96	10	8.8	25	25	
24.91	4500	91	8.6	7.6	18	18	
27.23	4500	96	10	8.8	25	25	
29.69	4500	96	10	8.8	25	25	
30.11	4500	91	8.6	7.6	18	18	
33.15	4500	96	10	8.8	25	25	
35.83	4500	96	10	8.8	25	25	
36.96	4500	92	8.6	7.6	18	18	
38.90	4500	95	10	8.8	25	25	
42.87	4500	91	8.6	7.6	18	18	
50.35	4500	91	8.6	7.6	18	18	
54.89	4500	91	8.6	7.6	18	18	
61.28	4500	91	8.6	7.6	18	18	
66.25	4500	91	8.6	7.6	18	18	
71.93	4500	91	8.6	7.6	18	18	

K29
 2

2


Technical data


Selection tables for K..9 / CMP..

CMP..							F _{Ramax}				F _{Rapk}			
n _e = 1400							K	KF	KA	KAF	K	KF	KA	KAF
i	M _{amax} [Nm]	M _{apk} [Nm]	M _{aEmergOff} [Nm]	n _{ak} [1/min]	J _G 10 ⁻⁴ [kg*m ²]		[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]
3.19	110	121	182	1082	1.6		1830	1200	1860	1860	5070	6000	6000	6000
3.92	126	138	205	722	1.1		1910	1240	1920	1920	5030	6000	6000	6000
5.10	110	121	182	1080	0.68		2260	1500	2320	2320	5070	6000	6000	6000
5.75	112	123	184	1030	0.55		2370	1580	2440	2440	5070	6000	6000	6000
6.95	112	123	184	1007	0.39		2580	1720	2660	2660	5070	6000	6000	6000
7.48	123	135	200	138	0.74		2300	1480	2300	2300	4980	6000	6000	6000
8.53	122	134	200	755	0.27		2740	1830	2830	2830	5040	6000	6000	6000
9.17	130	143	210	112	0.55		2470	1600	2480	2480	4960	6000	6000	6000
9.90	110	121	182	707	0.21		3000	2020	3120	3120	5070	6000	6000	6000
11.94	130	143	210	112	0.37		2810	1830	2840	2840	4960	6000	6000	6000
13.47	130	143	210	111	0.30		2970	1950	3010	3010	4960	6000	6000	6000
16.29	130	143	210	111	0.22		3240	2140	3300	3300	4960	6000	6000	6000
19.99	130	143	210	111	0.16		3550	2350	3640	3640	4960	6000	6000	6000
22.08	105	115	172	47	0.33		3820	2560	3950	3950	5020	6000	6000	6000
23.19	130	143	210	110	0.12		3790	2520	3900	3900	4960	6000	6000	6000
24.91	109	119	178	42	0.27		3980	2660	4120	4120	5010	6000	6000	6000
27.23	130	143	210	110	0,098		4060	2710	4190	4190	4960	6000	6000	6000
29.69	130	143	210	110	0,086		4210	2820	4360	4360	4960	6000	6000	6000
30.11	115	126	189	35	0.20		4250	2850	4400	4400	4990	6000	6000	6000
33.15	130	143	210	110	0,073		4410	2960	4580	4580	4960	6000	6000	6000
35.83	130	143	210	110	0,065		4560	3060	4740	4740	4960	6000	6000	6000
36.96	122	134	200	28	0.14		4560	3060	4730	4730	4960	6000	6000	6000
38.90	130	143	210	110	0,057		4720	3170	4910	4910	4960	6000	6000	6000
42.87	128	140	210	24	0.11		4790	3210	4970	4970	4940	6000	6000	6000
50.35	130	143	210	22	0,090		4980	3430	5300	5300	4930	6000	6000	6000
54.89	130	143	210	23	0,079		4980	3560	5510	5510	4930	6000	6000	6000
61.28	130	143	210	23	0,068		4980	3730	5770	5770	4930	6000	6000	6000
66.25	130	143	210	22	0,060		4980	3860	5970	5970	4930	6000	6000	6000
71.93	130	143	210	23	0,053		4980	4000	6000	6000	4930	6000	6000	6000

K29
 2

21932387/EN – 05/2015

K39, M _{aDyn} [Nm]										300 Nm
i	CMP									
	50S	50M	50L	63S	63M	63L	71S	71M	71L	80S
 2										
2.81		27	41	30	57	81	51	82	125	112
3.94		39	58	42	81	115	73	116	177	159
4.52	23	45	67	48	93	132	83	134	200	183
5.22	26	52	77	56	107	152	96	154	235	210
5.75	29	57	85	61	118	168	106	170	255	230
6.75	34	67	100	72	139	197	124	200	300	270
7.15	36	71	106	76	147	205	132	210	320	285
8.12	41	80	120	87	167	235	150	240	365	325
9.00	45	89	133	96	185	260	166	265	>385	360
10.61	53	105	157	113	215	305	196	310		
12.09	60	120	179	129	245		220			
12.73	64	126	188	136	260		230			
13.44		126	188	136	260	370	230	375	>405	>405
15.44	73	145	215	156	300	>410	265	>410	>410	>410
17.83	84	167	245	180	345	>410	310	>410	>410	>410
19.62	93	184	270	198	380	>410	340	>410	>410	>410
23.04	109	215	320	230	>410	>410	400	>410	>410	>410
24.40	115	225	340	245	>410	>410	>410	>410	>410	>410
27.73	131	255	385	280	>410	>410	>410	>410	>410	>410
30.72	145	285	>410	310	>410	>410	>410	>410	>410	>410
36.22	171	335	>410	365	>410	>410	>410	>410		
41.28	195	385	>410	>410	>410		>410			
43.45	205	405	>410	>410	>410		>410			
49.69	235	>410		>410						
58.24	275									


K39, m [kg]				CMP						
s	50S	50M	50L	63S	63M	63L	71S	71M	71L	80S
 2	20	21	22	22	24	25	25	27	29	32

KF: + 1.5 kg / KA: + -1.0 kg / KAF: + 0.50 kg

2

Technical data

Selection tables for K..9 / CMP..

CMP..				C _{TG}			
	i	n _{epk} [1/min]	eta [%]	K [Nm/"]	KF [Nm/"]	KA [Nm/"]	KAF [Nm/"]
K39  2	2.81	4500	95	15	14	30	30
	3.94	4500	96	15	14	30	30
	4.52	4500	96	15	14	30	30
	5.22	4500	96	15	14	30	30
	5.75	4500	96	15	14	30	30
	6.75	4500	96	15	14	30	30
	7.15	4500	96	15	14	30	30
	8.12	4500	96	15	14	30	30
	9.00	4500	96	15	14	30	30
	10.61	4500	96	15	14	37	37
	12.09	4500	96	15	14	37	37
	12.73	4500	96	15	14	37	37
	13.44	4500	91	20	19	67	67
	15.44	4500	91	20	19	67	67
	17.83	4500	91	20	19	67	67
	19.62	4500	91	20	19	67	67
	23.04	4500	91	20	19	67	67
	24.40	4500	91	20	19	67	67
	27.73	4500	91	20	19	67	67
	30.72	4500	91	20	19	67	67
36.22	4500	91	20	19	67	67	
41.28	4500	91	20	19	67	67	
43.45	4500	91	20	19	67	67	
49.69	4500	91	20	19	67	67	
58.24	4500	91	20	19	67	67	


CMP.. n _e = 1400							F _{Ramax}				F _{Rapk}			
i	M _{amax} [Nm]	M _{apk} [Nm]	M _{aEmergOff} [Nm]	n _{ak} [1/min]	J _G 10 ⁻⁴ [kg*m ²]	K [N]	KF [N]	KA [N]	KAF [N]	K [N]	KF [N]	KA [N]	KAF [N]	
2.81	170	255	285	811	7.9	2870	2460	2180	2180	7500	6260	7500	7500	
3.94	215	320	365	378	4.6	3070	2630	2260	2260	7500	6180	7500	7500	
4.52	240	360	405	257	3.6	3130	2680	1730	1730	7500	6130	7500	7500	
5.22	260	390	440	192	2.9	3240	2770	960	960	7500	6090	7500	7500	
5.75	275	410	465	158	2.5	3300	2830	290	290	7470	6060	7500	7500	
6.75	300	435	510	130	2.0	3430	2940	0	0	7300	6020	7500	7500	
7.15	300	435	510	129	1.8	3530	3020	157	157	7300	6020	7500	7500	
8.12	300	385	510	193	1.4	3760	3220	2080	2080	7500	6090	7500	7500	
9.00	300	385	510	192	1.2	3950	3380	2860	2860	7500	6090	7500	7500	
10.61	285	370	485	218	0.91	4360	3730	3250	3250	7500	6110	7500	7500	
12.09	255	295	430	464	0.65	4790	4110	3700	3700	7500	6210	7500	7500	
12.73	250	295	425	463	0.58	4930	4220	3830	3830	7500	6210	7500	7500	
13.44	270	405	455	27	2.6	4160	3560	2830	2830	7500	5980	7500	7500	
15.44	280	410	475	26	2.2	4380	3750	2990	2990	7490	5960	7500	7500	
17.83	290	410	490	25	1.8	4630	3960	3180	3180	7490	5960	7500	7500	
19.62	295	410	500	25	1.5	4820	4120	3330	3330	7490	5960	7500	7500	
23.04	300	410	510	24	1.3	5180	4440	3630	3630	7490	5960	7500	7500	
24.40	300	410	510	24	1.2	5330	4560	3760	3760	7490	5960	7500	7500	
27.73	300	410	510	24	0.95	5670	4860	4070	4070	7490	5960	7500	7500	
30.72	300	410	510	24	0.82	5960	5100	4320	4320	7490	5960	7500	7500	
36.22	300	410	510	23	0.65	6440	5520	4740	4740	7490	5960	7500	7500	
41.28	300	410	510	23	0.44	6840	5860	5100	5100	7490	5960	7500	7500	
43.45	300	410	510	23	0.39	7000	6000	5240	5240	7490	5960	7500	7500	
49.69	300	410	510	23	0.32	7440	6150	5630	5630	7490	5960	7500	7500	
58.24	300	410	510	23	0.26	7500	6150	6110	6110	7490	5960	7500	7500	


K39
 2

2

Technical data

Selection tables for K..9 / CMP..

K49, M _{aDyn} [Nm]									500 Nm	
i	63S	63M	63L	71S	CMP			80S	80M	100S
					71M	71L				
 2										
4.00	43	82	117	74	118	180	162	240	260	
4.69	50	96	137	86	139	210	190	280	305	
5.29	56	109	154	98	156	235	210	315	345	
5.99	64	123	175	110	177	265	240	355	390	
6.83	73	140	199	126	200	305	275	410	445	
7.58	81	156	220	140	220	340	305	455	495	
8.66	92	178	250	160	255	385	350	520	565	
9.14	97	188	265	168	270	410	365	545	595	
10.42	111	210	300	192	305	465	420			
11.37	121	230	330	205	335	510	455			
13.38	137	260	370	235	375	575	515	>605	>605	
15.67	160	305	435	275	440	>605	>605	>605	>605	
17.67	180	345	490	310	500	>605	>605	>605	>605	
20.03	200	390	560	350	565	>605	>605	>605	>605	
22.83	230	445	>605	400	>605	>605	>605	>605	>605	
25.34	255	495	>605	445	>605	>605	>605	>605	>605	
28.95	295	565	>605	510	>605	>605	>605	>605	>605	
30.55	310	600	>605	535	>605	>605	>605	>605	>605	
34.81	355	>605	>605	>605	>605	>605	>605			
37.98	385	>605	>605	>605	>605	>605	>605			
44.44	450	>605	>605	>605	>605					
50.29	510	>605		>605						
52.94	540	>605		>605						
60.27	>605									
70.19										
75.20										

K49, m [kg]					CMP				
s	63S	63M	63L	71S	71M	71L	80S	80M	100S
 2	33	35	36	38	40	42	43	45	50

KF: + 1.7 kg / KA: + -2.8 kg / KAF: + 2.1 kg

CMP..			C _{TG}				
i	n _{epk} [1/min]	eta [%]	K [Nm/"]	KF [Nm/"]	KA [Nm/"]	KAF [Nm/"]	
	4.00	4500	96	27	26	77	77
	4.69	4500	96	27	26	77	77
	5.29	4500	96	27	26	77	77
	5.99	4500	96	27	26	77	77
	6.83	4500	96	27	26	77	77
	7.58	4500	96	27	26	77	77
	8.66	4500	96	27	26	77	77
	9.14	4500	96	27	26	77	77
	10.42	4500	96	27	26	77	77
	11.37	4500	96	27	26	77	77
	13.38	4500	92	35	32	48	48
	15.67	4500	92	35	32	48	48
	17.67	4500	92	35	32	48	48
	20.03	4500	92	35	32	48	48
	22.83	4500	92	35	32	48	48
	25.34	4500	92	35	32	48	48
	28.95	4500	92	35	32	48	48
	30.55	4500	92	35	32	48	48
	34.81	4500	92	35	32	48	48
	37.98	4500	92	35	32	48	48
	44.44	4500	92	35	32	48	48
	50.29	4500	92	35	32	48	48
	52.94	4500	92	35	32	48	48
	60.27	4500	91	35	32	48	48
	70.19	4500	91	35	32	48	48
	75.20	4500	91	35	32	48	48

K49
 2

2

Technical data

Selection tables for K..9 / CMP..

CMP..							F _{Ramax}				F _{Rapk}			
n _e = 1400							K	KF	KA	KAF	K	KF	KA	KAF
i	M _{amax} [Nm]	M _{apk} [Nm]	M _{aEmergOff} [Nm]	n _{ak} [1/min]	J _G 10 ⁻⁴ [kg*m ²]		[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]
4.00	440	605	745	218	11		3110	2390	0	0	9000	9000	9000	9000
4.69	465	605	790	217	8.8		3270	2600	0	0	9000	9000	9000	9000
5.29	485	605	820	217	7.2		3400	2770	0	0	9000	9000	9000	9000
5.99	500	605	850	219	5.9		3570	3030	0	0	9000	9000	9000	9000
6.83	500	605	850	218	4.8		3840	3250	0	0	9000	9000	9000	9000
7.58	500	605	850	218	4.1		4050	3440	1030	1030	9000	9000	9000	9000
8.66	500	605	850	218	3.3		4340	3680	3790	3790	9000	9000	9000	9000
9.14	500	605	850	218	3.1		4460	3780	3910	3910	9000	9000	9000	9000
10.42	480	585	810	238	2.4		4860	4120	4330	4330	9000	9000	9000	9000
11.37	495	605	840	218	2.1		5000	4240	4450	4450	9000	9000	9000	9000
13.38	470	605	795	46	6.5		4320	3660	3510	3510	9000	9000	9000	9000
15.67	490	605	830	45	5.2		4590	3890	3750	3750	9000	9000	9000	9000
17.67	500	605	850	44	4.4		4860	4120	3990	3990	9000	9000	9000	9000
20.03	500	605	850	43	3.7		5220	4420	4350	4350	9000	9000	9000	9000
22.83	500	605	850	43	3.1		5610	4750	4750	4750	9000	9000	9000	9000
25.34	500	605	850	42	2.8		5940	5030	5070	5070	9000	9000	9000	9000
28.95	500	605	850	42	2.3		6370	5400	5510	5510	9000	9000	9000	9000
30.55	500	605	850	42	2.1		6550	5550	5690	5690	9000	9000	9000	9000
34.81	500	605	850	42	1.7		7000	5930	6140	6140	9000	9000	9000	9000
37.98	500	605	850	41	1.5		7310	6200	6450	6450	9000	9000	9000	9000
44.44	500	605	850	41	1.2		7900	6690	7040	7040	9000	9000	9000	9000
50.29	500	605	850	41	0.83		8380	7100	7530	7530	9000	9000	9000	9000
52.94	500	605	850	41	0.75		8590	7280	7730	7730	9000	9000	9000	9000
60.27	500	605	850	41	0.61		9000	7740	8280	8280	9000	9000	9000	9000
70.19	445	605	755	40	0.50		9000	8630	9000	9000	9000	9000	9000	9000
75.20	475	605	800	41	0.43		9000	8720	9000	9000	9000	9000	9000	9000

K49
 2

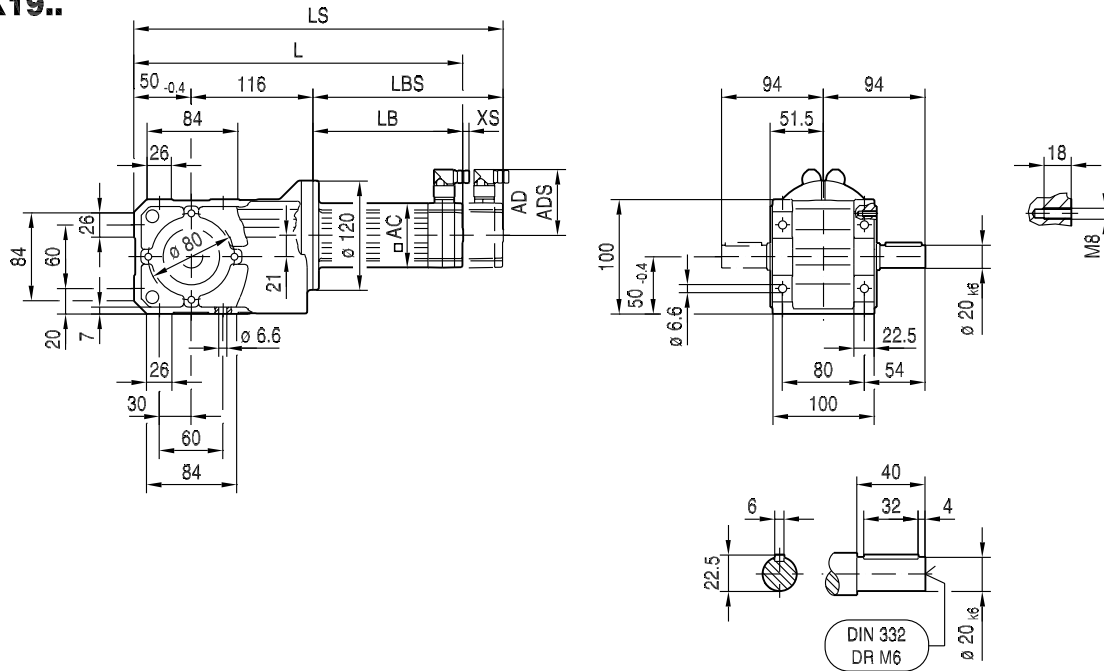
21932387/EN – 05/2015

2.8 Dimension sheets for K..9 / CMP..

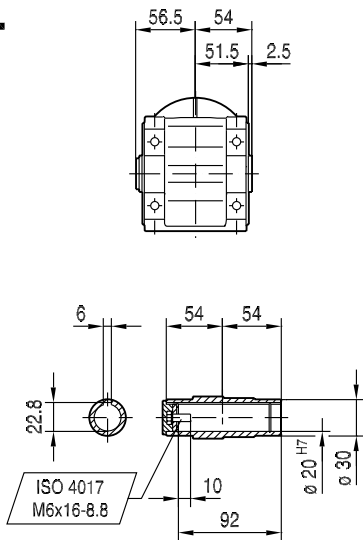
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2

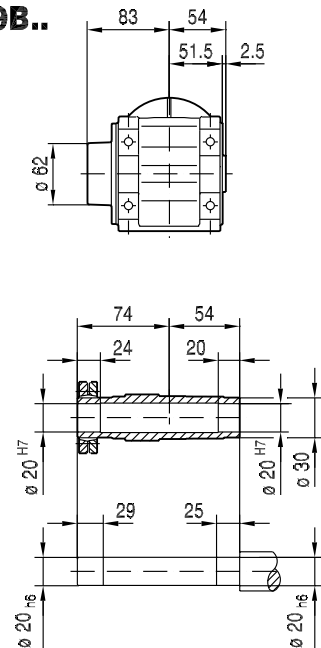
K19..



KA19B..



KH19B..

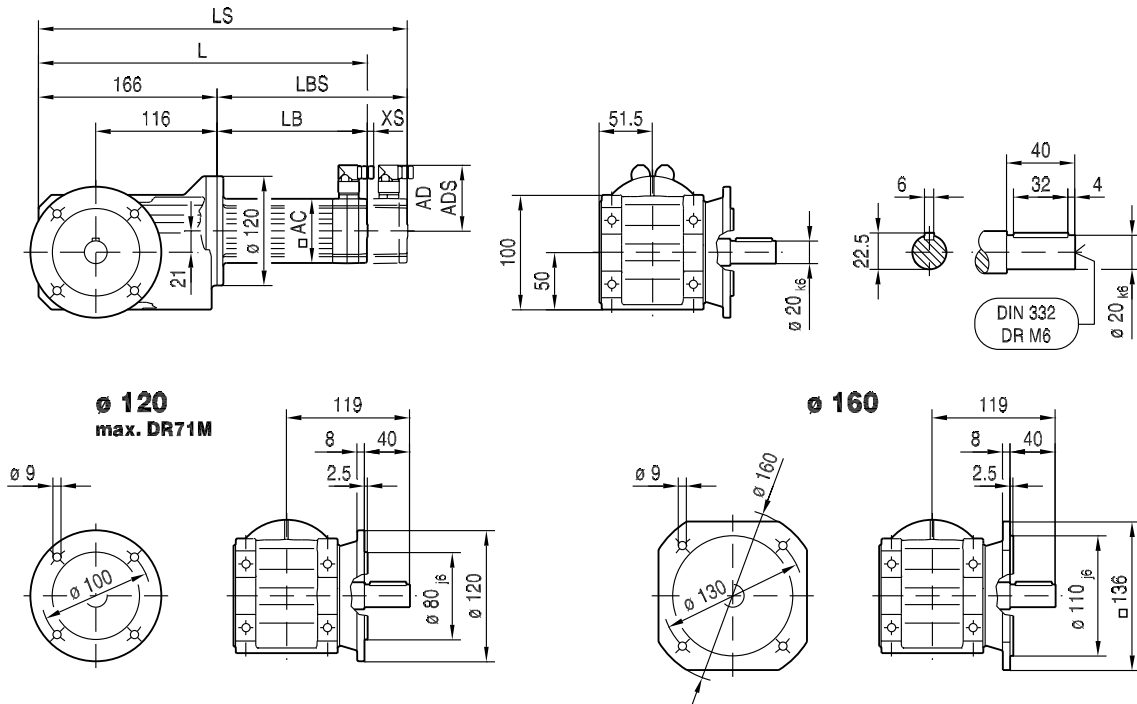


	CMP40M	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP71S
AC	57	73	73	73	88	88	116
AD	78	86	86	86	92	92	102
ADS	78	86	86	86	92	92	104
L	309	311	350	389	346	396	338
LS	339	340	379	418	374	424	403
LB	143	145	184	223	180	230	172
LBS	173	174	213	252	208	258	237
XS	19	18	18	18	14	14	11

21932387/EN – 05/2015

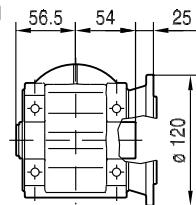
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KF19B..

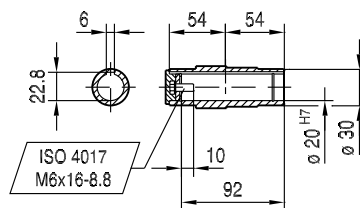
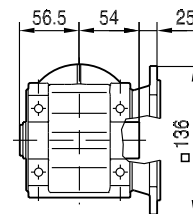


KAF19B..

120
max. DR71M



160



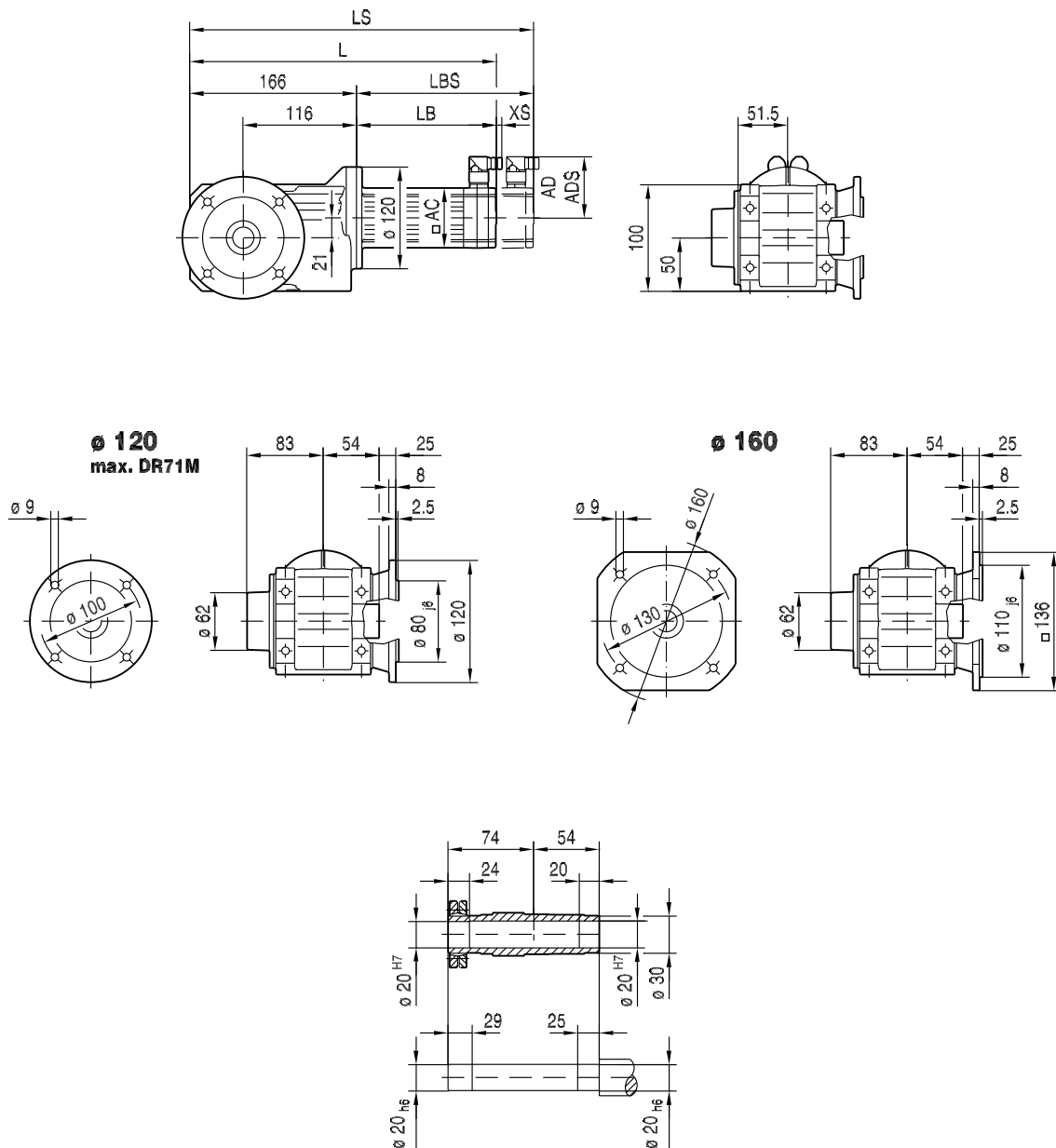
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AC	57	73	73	73	88	88	116
AD	78	86	86	86	92	92	102
ADS	78	86	86	86	92	92	104
L	309	311	350	389	346	396	338
LS	339	340	379	418	374	424	403
LB	143	145	184	223	180	230	172
LBS	173	174	213	252	208	258	237
XS	19	18	18	18	14	14	11

21932387/EN – 05/2015

KHF19B..

33 071 00 15

2

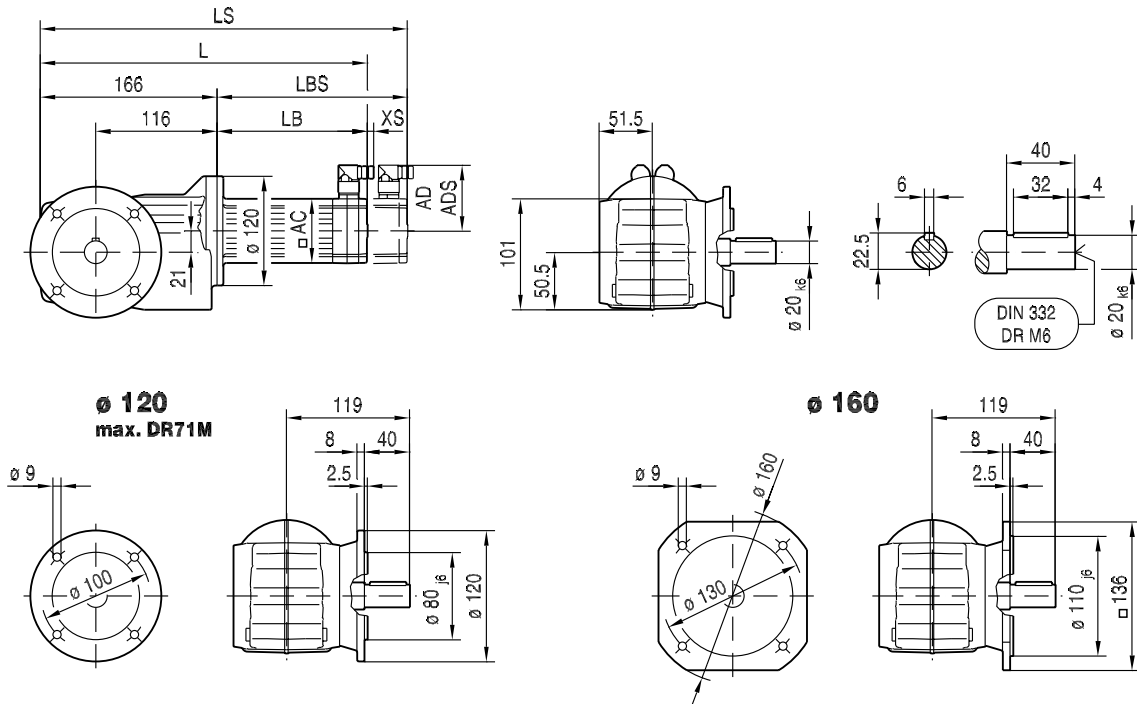


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AC	57	73	73	73	88	88	116
AD	78	86	86	86	92	92	102
ADS	78	86	86	86	92	92	104
L	309	311	350	389	346	396	338
LS	339	340	379	418	374	424	403
LB	143	145	184	223	180	230	172
LBS	173	174	213	252	208	258	237
XS	19	18	18	18	14	14	11

21932387/EN – 05/2015

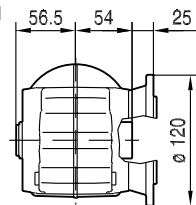
33 072 00 15

KF19..

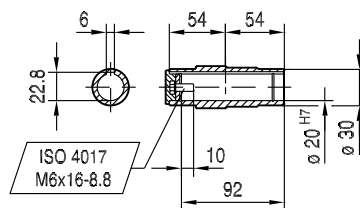
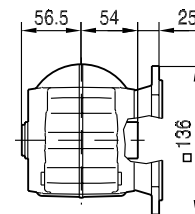


KAF19..

120
max. DR71M



160



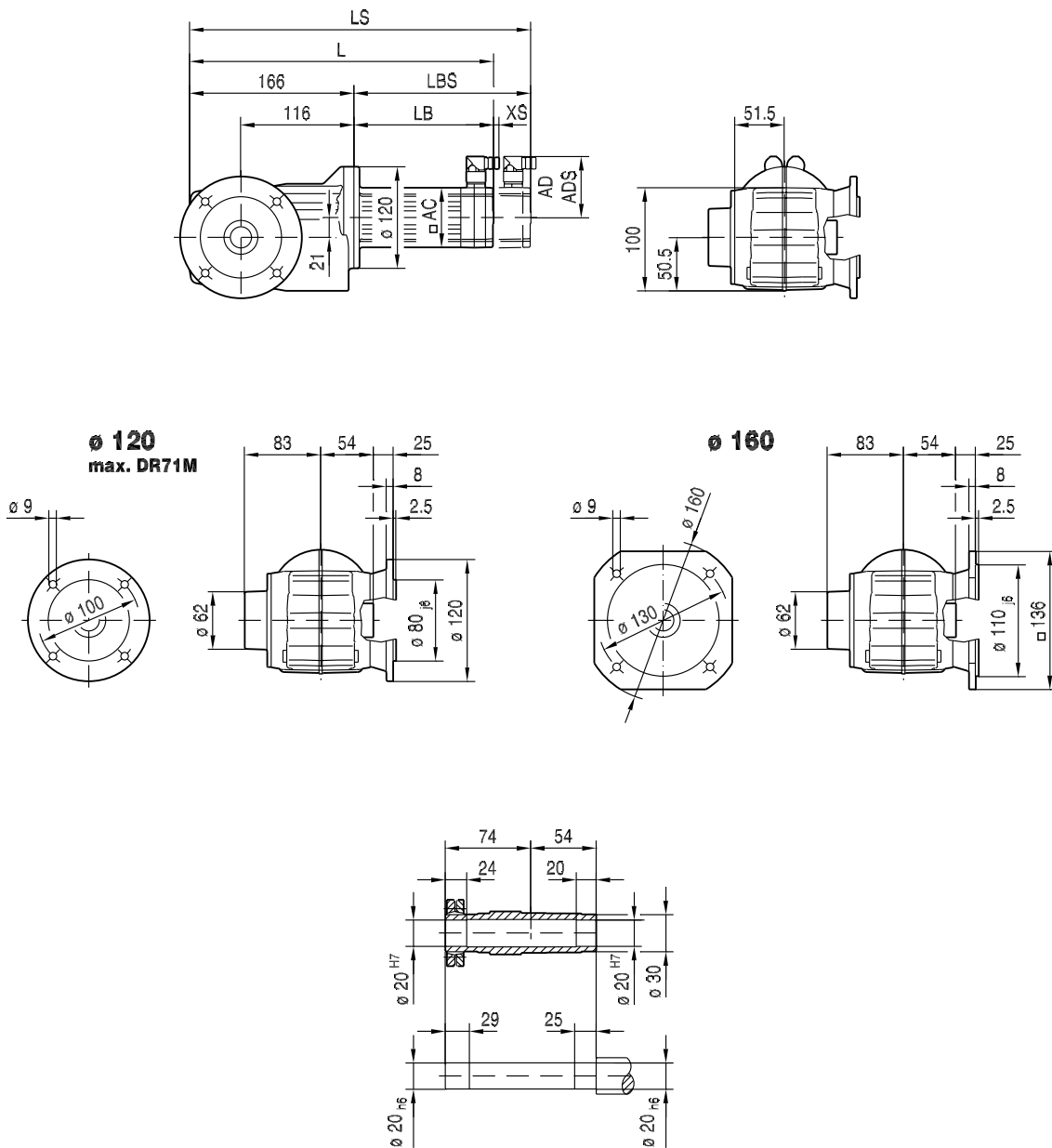
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AD	78	86	86	86	92	92	102
ADS	78	86	86	86	92	92	104
L	309	311	350	389	346	396	338
LS	339	340	379	418	374	424	403
LB	143	145	184	223	180	230	172
LBS	173	174	213	252	208	258	237
XS	19	18	18	18	14	14	11

21932387/EN – 05/2015

KHF19..

33 073 00 15

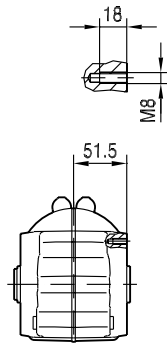
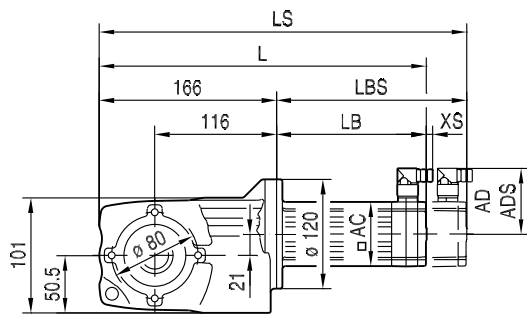
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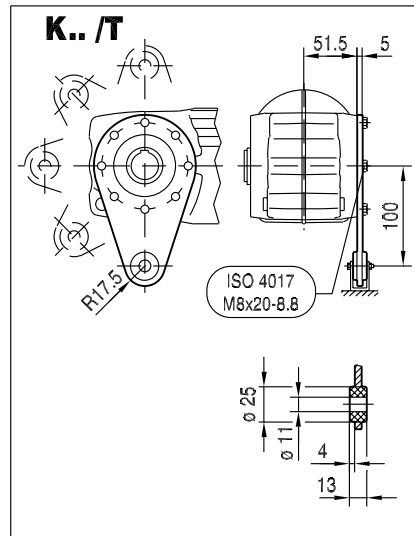
	CMP40M	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP71S
AC	57	73	73	73	88	88	116
AD	78	86	86	86	92	92	102
ADS	78	86	86	86	92	92	104
L	309	311	350	389	346	396	338
LS	339	340	379	418	374	424	403
LB	143	145	184	223	180	230	172
LBS	173	174	213	252	208	258	237
XS	19	18	18	18	14	14	11

21932387/EN – 05/2015

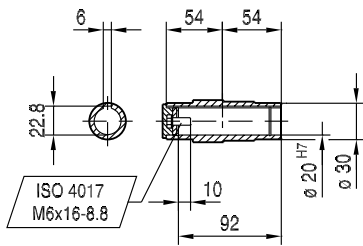
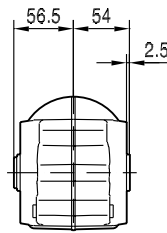
KA19..



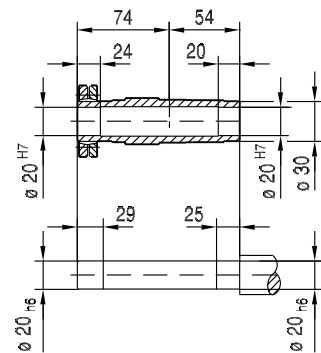
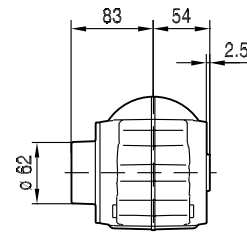
33 074 00 15



KA19..



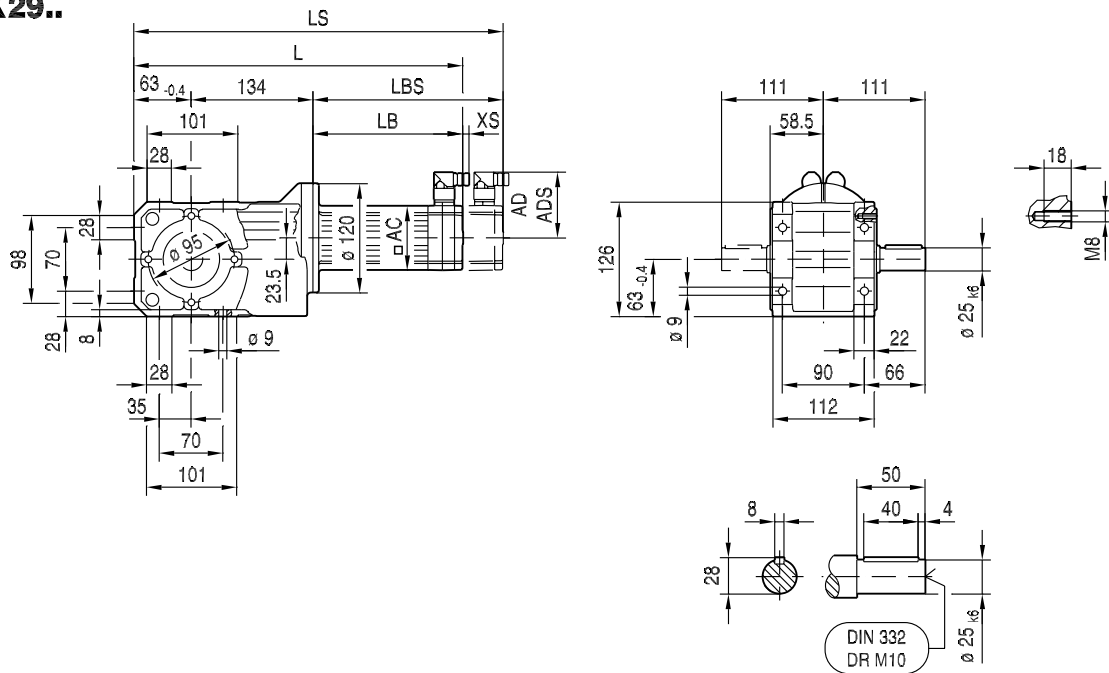
KH19..



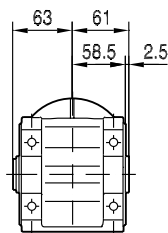
	CMP40M	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP71S
AC	57	73	73	73	88	88	116
AD	78	86	86	86	92	92	102
ADS	78	86	86	86	92	92	104
L	309	311	350	389	346	396	338
LS	339	340	379	418	374	424	403
LB	143	145	184	223	180	230	172
LBS	173	174	213	252	208	258	237
XS	19	18	18	18	14	14	11

33 075 00 15

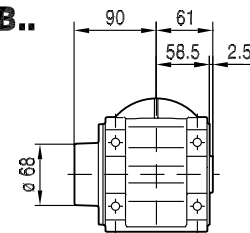
K29..



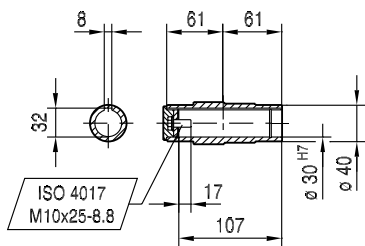
KA29B..



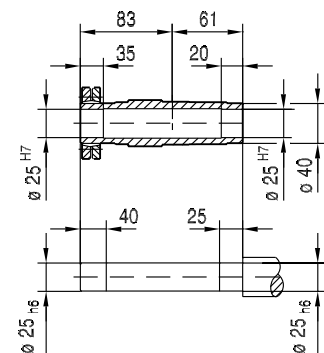
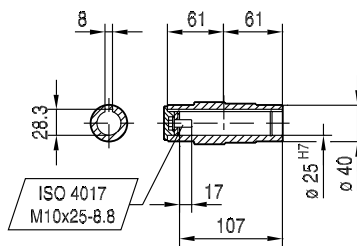
KH29B..



$\phi 30$ H7
DIN 6985-3



$\phi 25$ H7

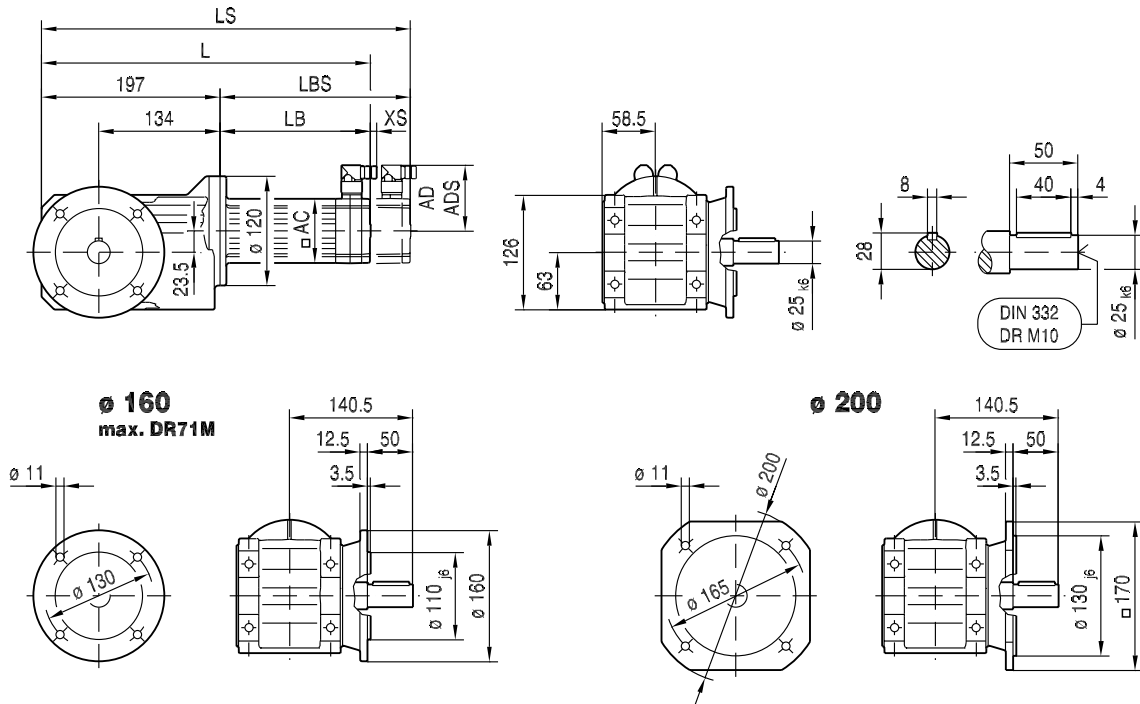


	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L	CMP71S	CMP71M
AC	73	73	73	88	88	88	116	116
AD	86	86	86	92	92	92	102	102
ADS	86	86	86	92	92	92	104	104
L	342	381	420	377	427	480	369	397
LS	371	410	449	405	455	509	434	462
LB	145	184	223	180	230	283	172	200
LBS	174	213	252	208	258	312	237	265
XS	18	18	18	14	14	14	11	11

21932387/EN - 05/2015

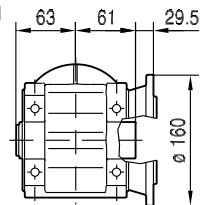
33 076 00 15

KF29B..

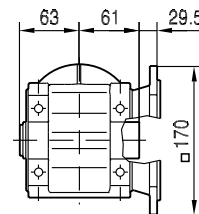


KAF29B..

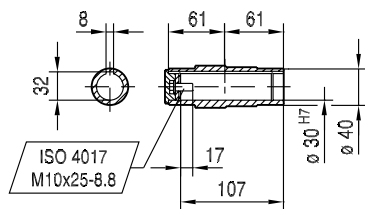
$\varnothing 160$
max. DR71M



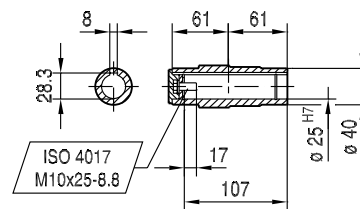
$\varnothing 200$



$\varnothing 30$ H7
DIN 6885-3



$\varnothing 25$ H7



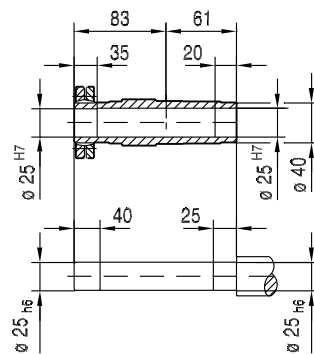
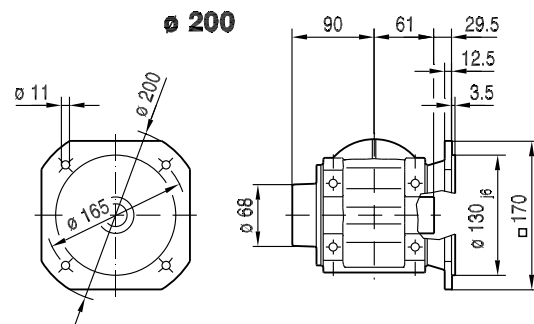
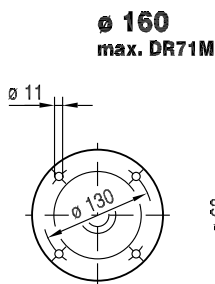
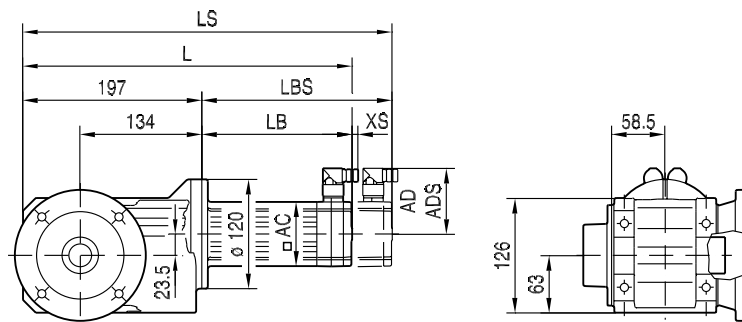
	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L	CMP71S	CMP71M
AC	73	73	73	88	88	88	116	116
AD	86	86	86	92	92	92	102	102
ADS	86	86	86	92	92	92	104	104
L	342	381	420	377	427	480	369	397
LS	371	410	449	405	455	509	434	462
LB	145	184	223	180	230	283	172	200
LBS	174	213	252	208	258	312	237	265
XS	18	18	18	14	14	14	11	11

21932387/EN – 05/2015

KHF29B..

33 077 00 15

2

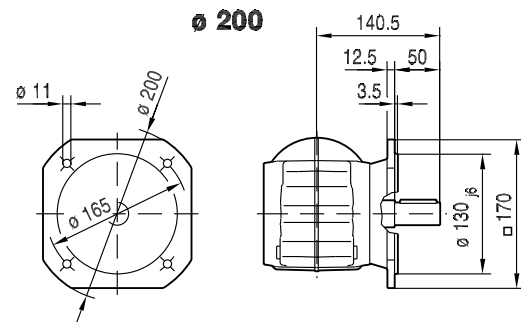
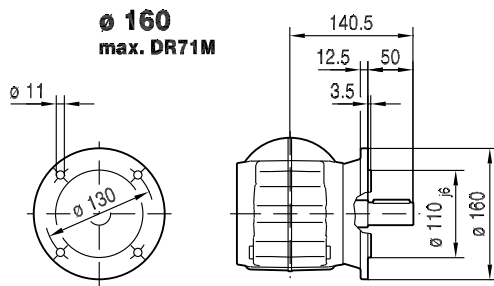
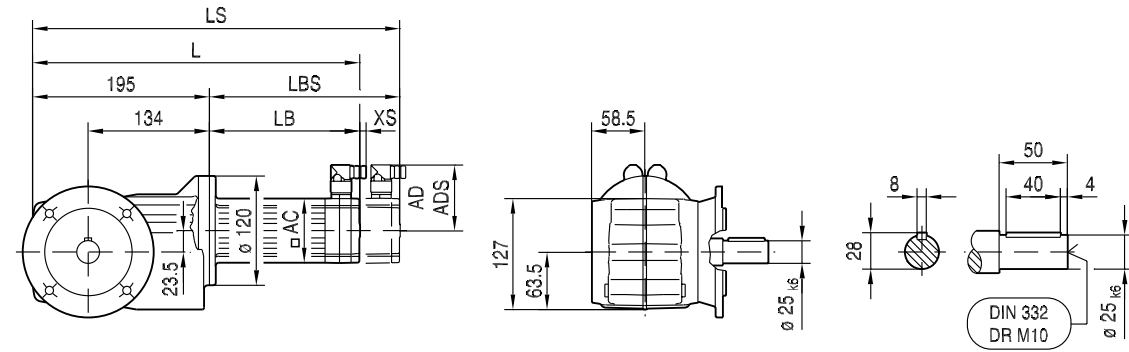


	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L	CMP71S	CMP71M
AC	73	73	73	88	88	88	116	116
AD	86	86	86	92	92	92	102	102
ADS	86	86	86	92	92	92	104	104
L	342	381	420	377	427	480	369	397
LS	371	410	449	405	455	509	434	462
LB	145	184	223	180	230	283	172	200
LBS	174	213	252	208	258	312	237	265
XS	18	18	18	14	14	14	11	11

21932387/EN – 05/2015

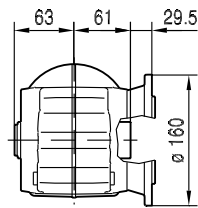
33 078 00 15

KF29..

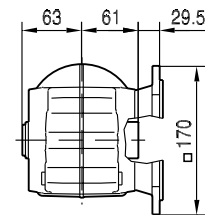


KAF29..

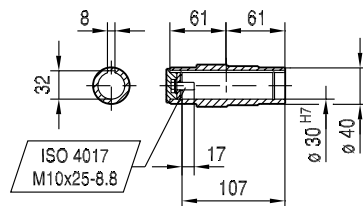
Ø 160
max. DR71M



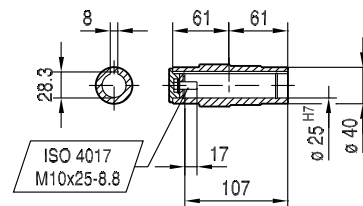
Ø 200



Ø 30 H7
DIN 6885-3



Ø 25 H7



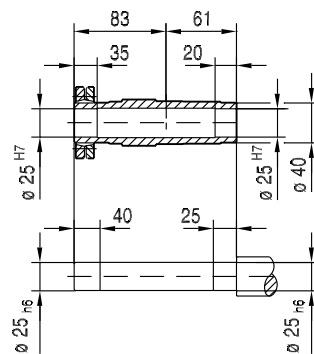
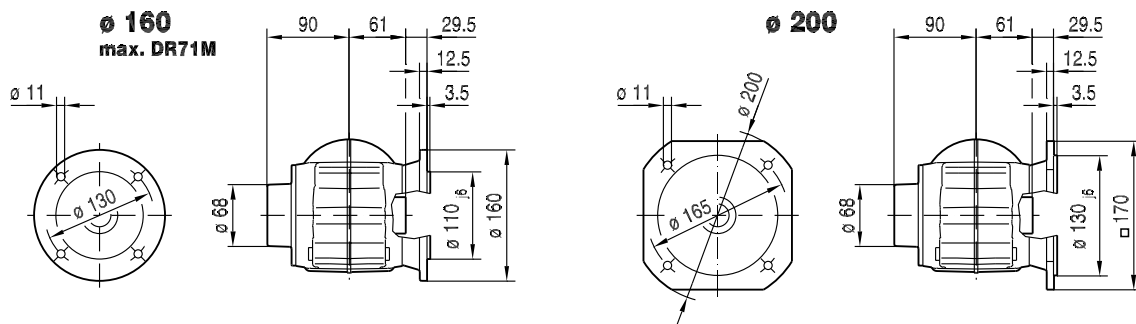
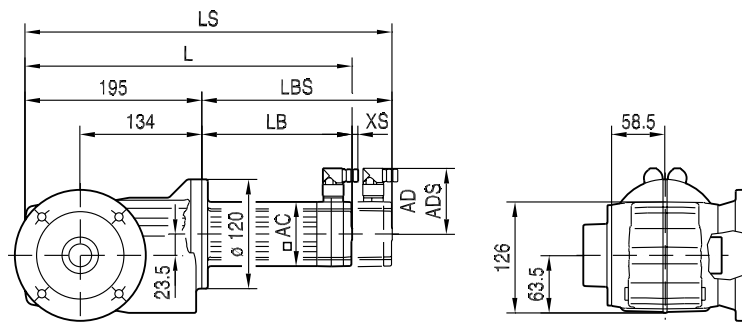
	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L	CMP71S	CMP71M
AC	73	73	73	88	88	88	116	116
AD	86	86	86	92	92	92	102	102
ADS	86	86	86	92	92	92	104	104
L	340	379	418	375	425	478	367	395
LS	369	408	447	403	453	507	432	460
LB	145	184	223	180	230	283	172	200
LBS	174	213	252	208	258	312	237	265
XS	18	18	18	14	14	14	11	11

21932387/EN – 05/2015

KHF29..

33 079 00 15

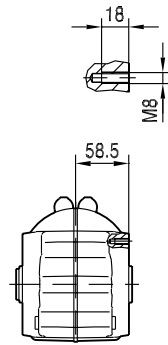
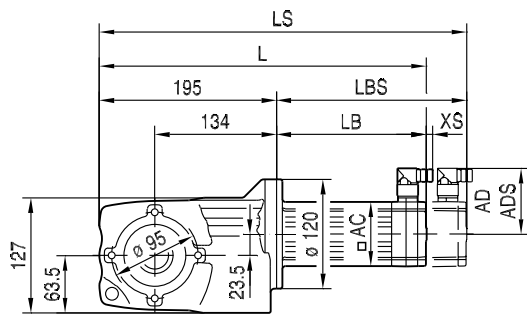
2



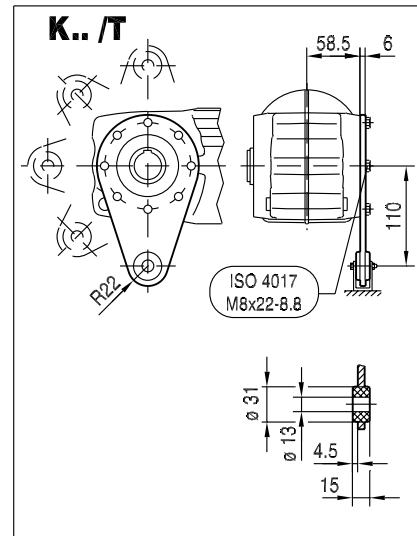
	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L	CMP71S	CMP71M
AC	73	73	73	88	88	88	116	116
AD	86	86	86	92	92	92	102	102
ADS	86	86	86	92	92	92	104	104
L	340	379	418	375	425	478	367	395
LS	369	408	447	403	453	507	432	460
LB	145	184	223	180	230	283	172	200
LBS	174	213	252	208	258	312	237	265
XS	18	18	18	14	14	14	11	11

21932387/EN – 05/2015

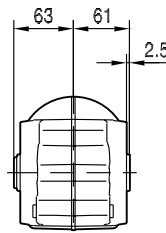
KA29..



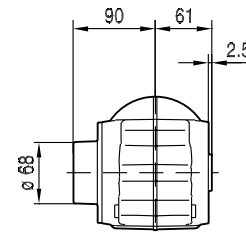
33 080 00 15



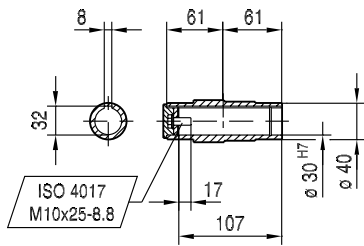
KA29..



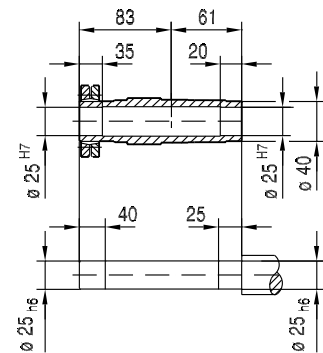
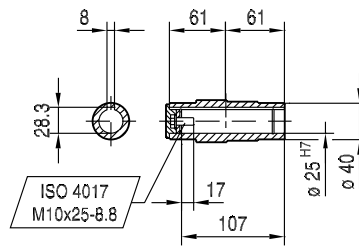
KH29..



$\varnothing 30$ H7 DIN 6985-3



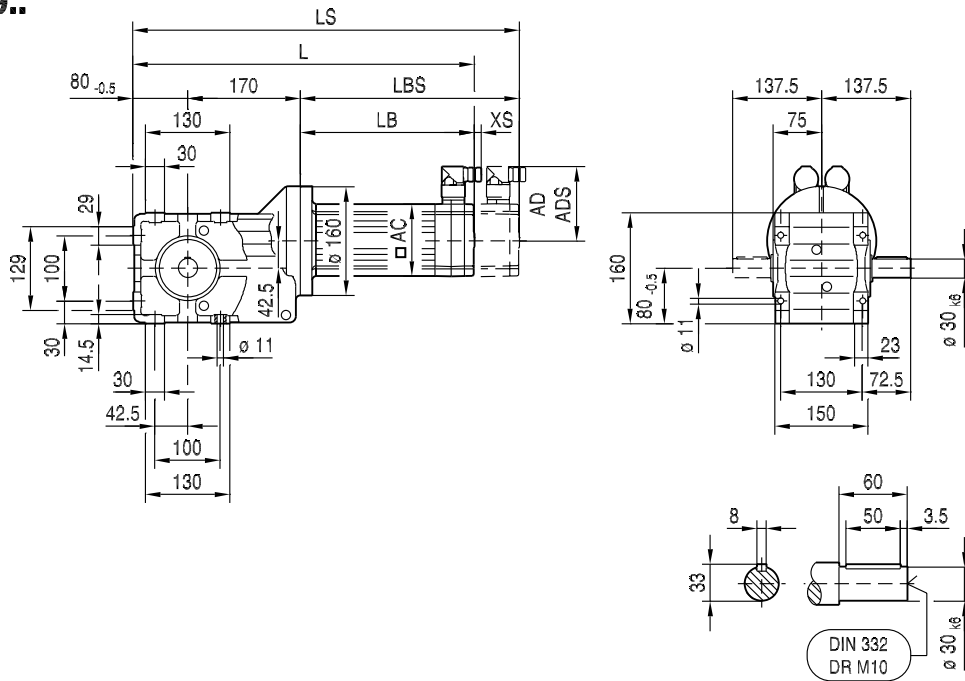
$\varnothing 25$ H7



	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L	CMP71S	CMP71M
AC	73	73	73	88	88	88	116	116
AD	86	86	86	92	92	92	102	102
ADS	86	86	86	92	92	92	104	104
L	340	379	418	375	425	478	367	395
LS	369	408	447	403	453	507	432	460
LB	145	184	223	180	230	283	172	200
LBS	174	213	252	208	258	312	237	265
XS	18	18	18	14	14	14	11	11

K39..

33 036 00 15



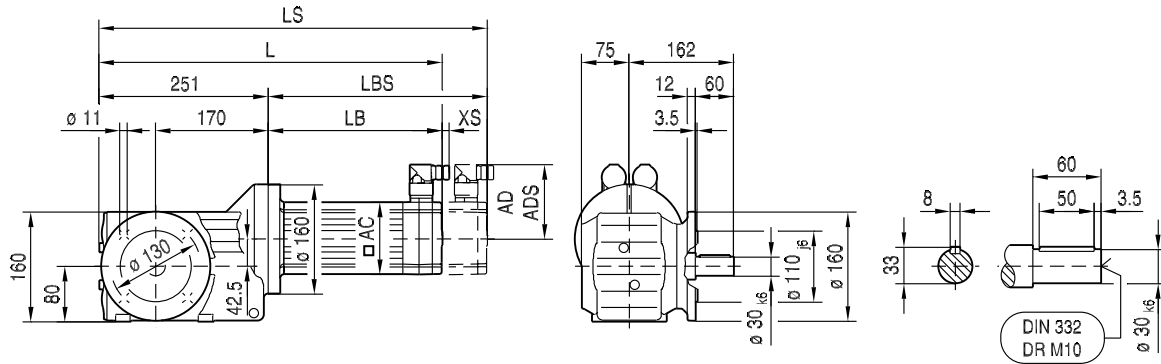
2

	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L	CMP71S	CMP71M	CMP71L	CMP80S
AC	73	73	73	88	88	88	116	116	115	137
AD	86	86	86	92	92	92	102	102	102	134
ADS	86	86	86	92	92	92	104	104	104	137
L	389	428	467	423	473	523	416	441	491	456
LS	418	457	496	452	502	552	481	506	556	534
LB	139	178	217	173	223	273	166	191	241	206
LBS	168	207	246	202	252	302	231	256	306	284
XS	18	18	18	14	14	14	11	11	11	37

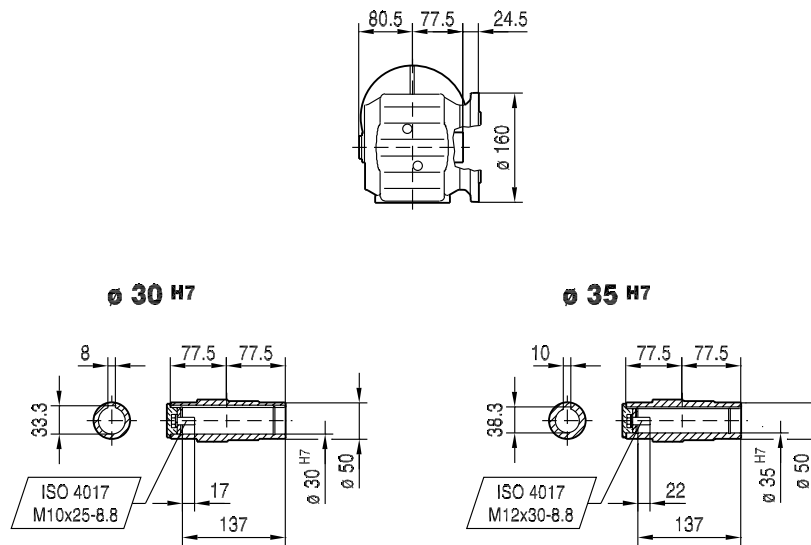
21932387/EN – 05/2015

33 037 00 15

KF39..



KAF39..

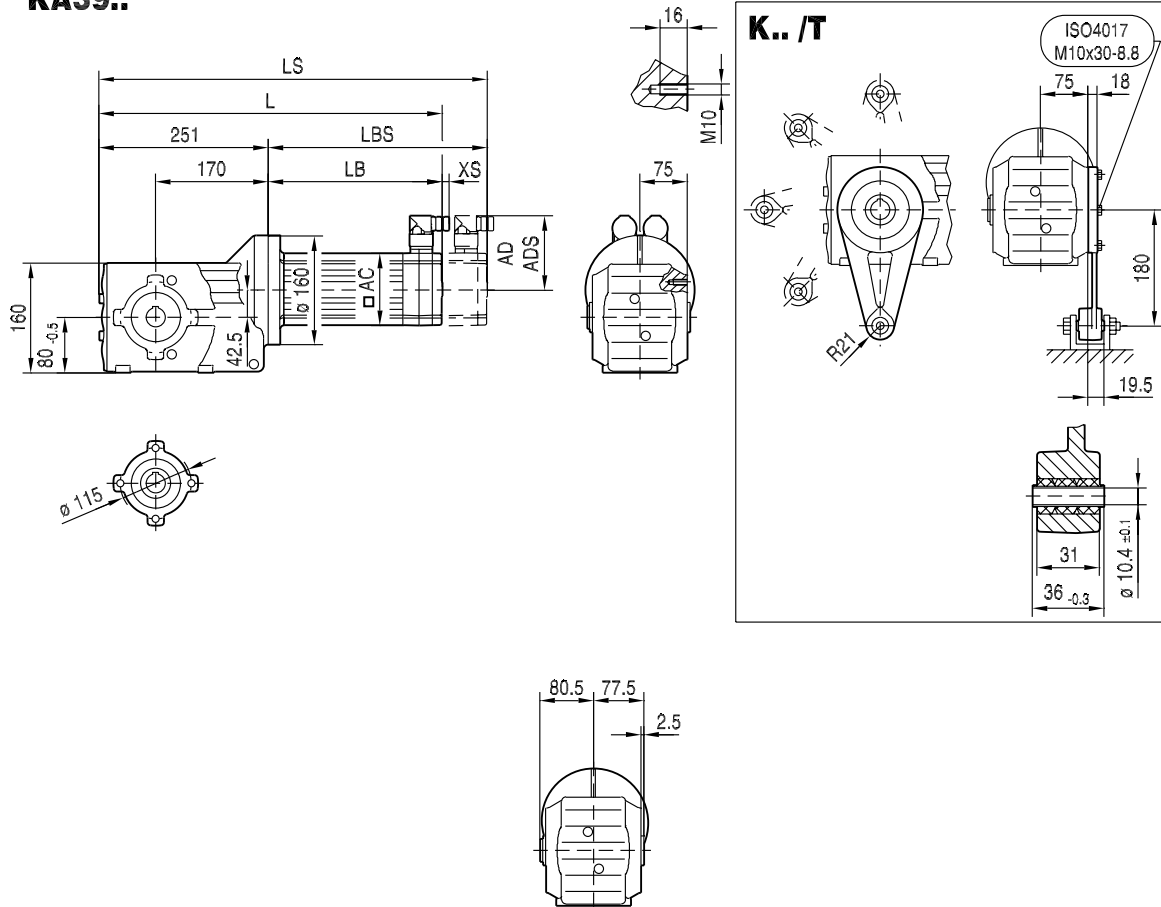


	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L	CMP71S	CMP71M	CMP71L	CMP80S
AC	73	73	73	88	88	88	116	116	115	137
AD	86	86	86	92	92	92	102	102	102	134
ADS	86	86	86	92	92	92	104	104	104	137
L	390	429	468	424	474	524	417	442	492	457
LS	419	458	497	453	503	553	482	507	557	535
LB	139	178	217	173	223	273	166	191	241	206
LBS	168	207	246	202	252	302	231	256	306	284
XS	18	18	18	14	14	14	11	11	11	37

21932387/EN – 05/2015

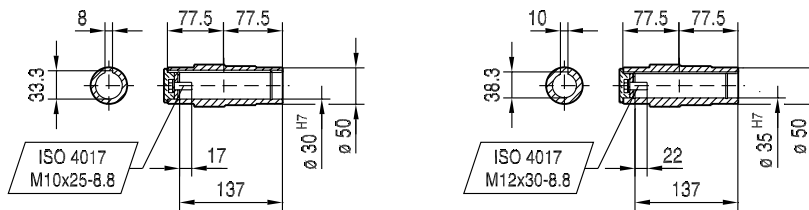
KA39..

33 038 00 15



∅ 30 H7

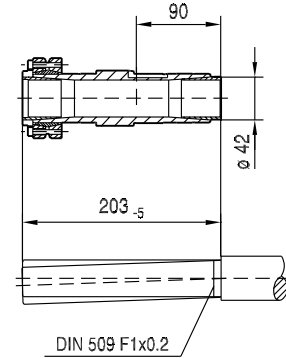
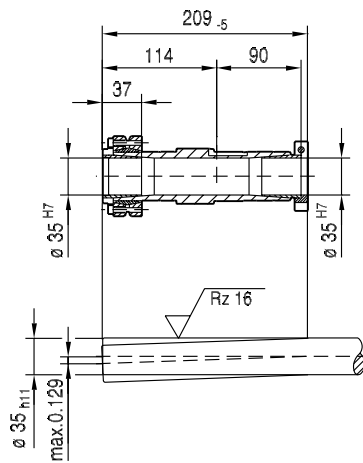
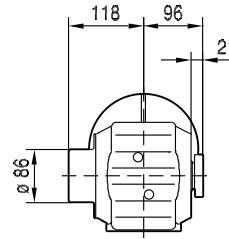
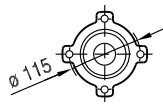
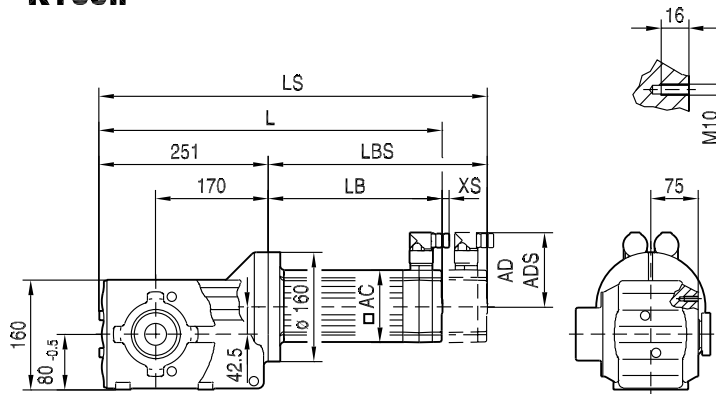
∅ 35 H7



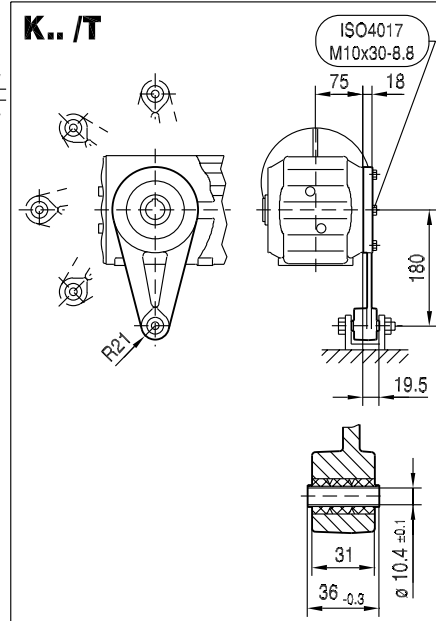
	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L	CMP71S	CMP71M	CMP71L	CMP80S
AC	73	73	73	88	88	88	116	116	115	137
AD	86	86	86	92	92	92	102	102	102	134
ADS	86	86	86	92	92	92	104	104	104	137
L	390	429	468	424	474	524	417	442	492	457
LS	419	458	497	453	503	553	482	507	557	535
LB	139	178	217	173	223	273	166	191	241	206
LBS	168	207	246	202	252	302	231	256	306	284
XS	18	18	18	14	14	14	11	11	11	37

21932387/EN – 05/2015

KT39..



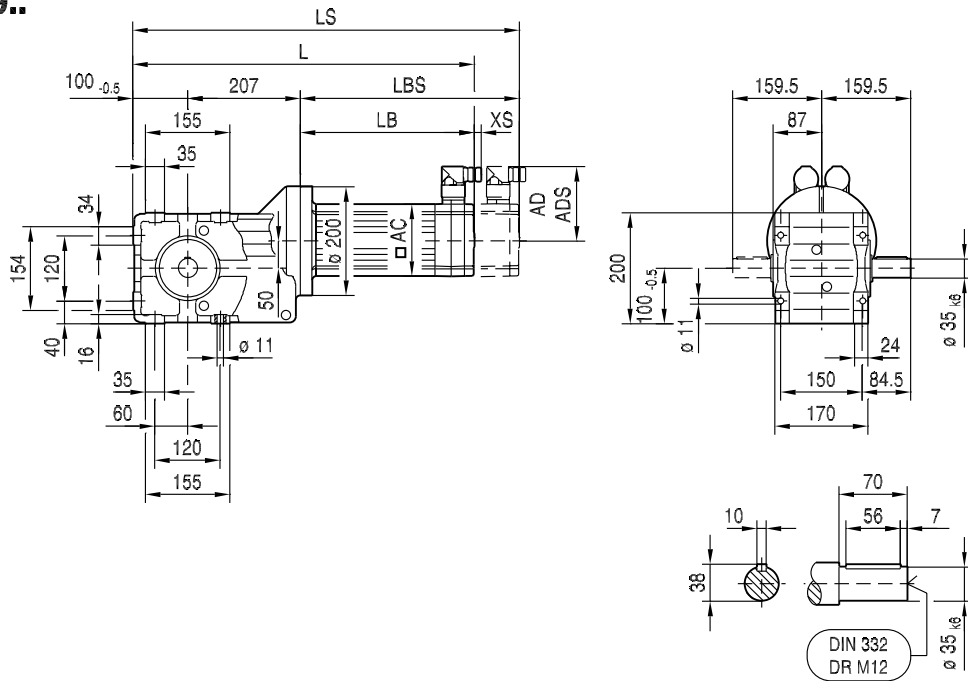
33 039 00 15



	CMP50S	CMP50M	CMP50L	CMP63S	CMP63M	CMP63L	CMP71S	CMP71M	CMP71L	CMP80S
AC	73	73	73	88	88	88	116	116	115	137
AD	86	86	86	92	92	92	102	102	102	134
ADS	86	86	86	92	92	92	104	104	104	137
L	390	429	468	424	474	524	417	442	492	457
LS	419	458	497	453	503	553	482	507	557	535
LB	139	178	217	173	223	273	166	191	241	206
LBS	168	207	246	202	252	302	231	256	306	284
XS	18	18	18	14	14	14	11	11	11	37

K49..

33 040 00 15

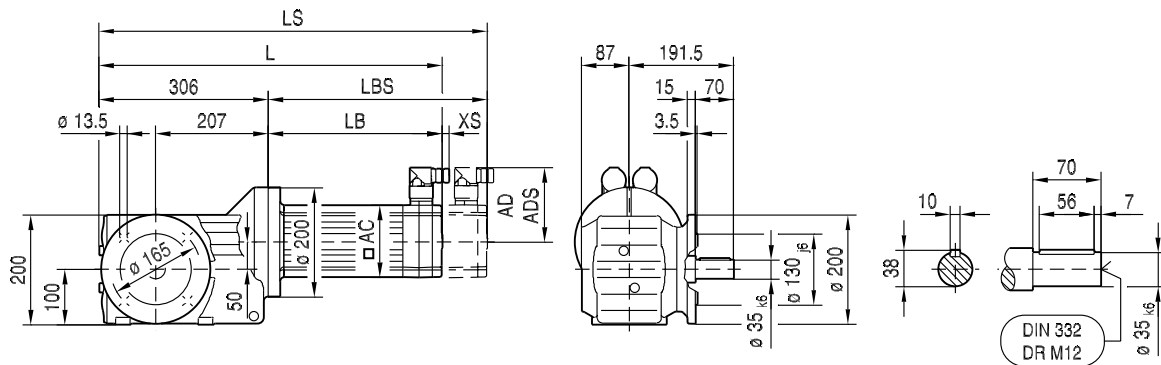


	CMP63S	CMP63M	CMP63L	CMP71S	CMP71M	CMP71L	CMP80S	CMP80M	CMP100S
AC	88	88	88	116	116	115	137	137	162
AD	92	92	92	102	102	102	134	134	146
ADS	92	92	92	104	104	104	137	137	147
L	474	524	574	465	490	540	505	539	537
LS	503	553	603	530	555	605	583	617	633
LB	167	217	267	158	183	233	198	232	230
LBS	196	246	296	223	248	298	276	310	326
XS	14	14	14	11	11	11	37	37	37

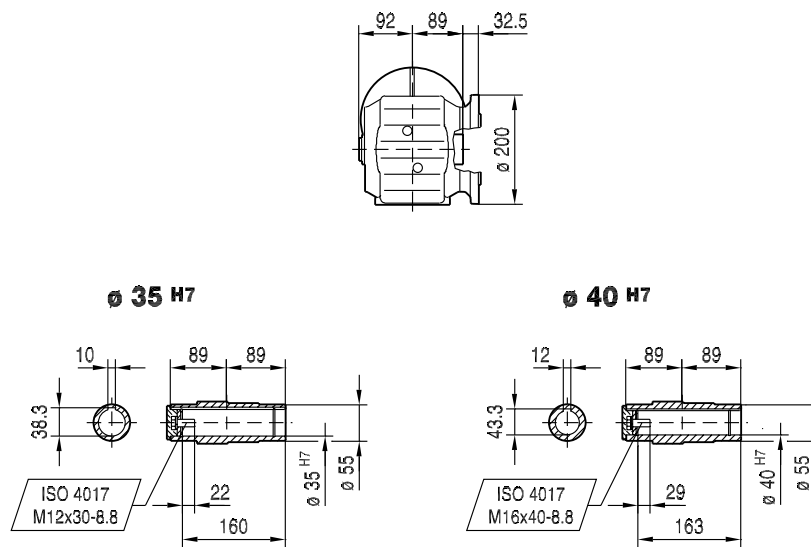
21932387/EN – 05/2015

33 041 00 15

KF49..



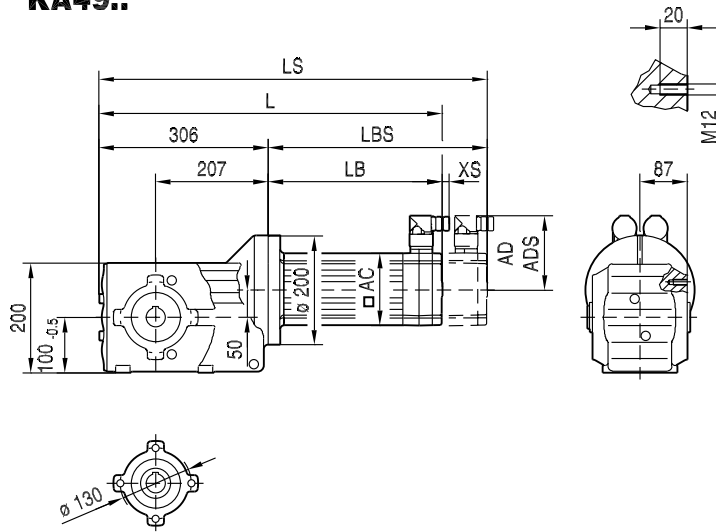
KAF49..



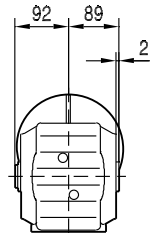
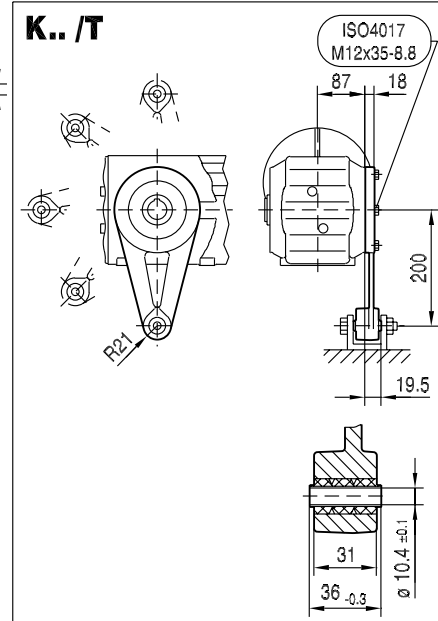
	CMP63S	CMP63M	CMP63L	CMP71S	CMP71M	CMP71L	CMP80S	CMP80M	CMP100S
AC	88	88	88	116	116	115	137	137	162
AD	92	92	92	102	102	102	134	134	146
ADS	92	92	92	104	104	104	137	137	147
L	473	523	573	464	489	539	504	538	536
LS	502	552	602	529	554	604	582	616	632
LB	167	217	267	158	183	233	198	232	230
LBS	196	246	296	223	248	298	276	310	326
XS	14	14	14	11	11	11	37	37	37

21932387/EN – 05/2015

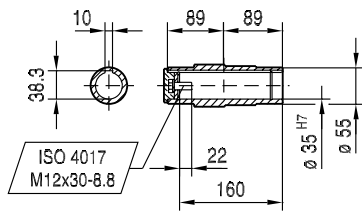
KA49..



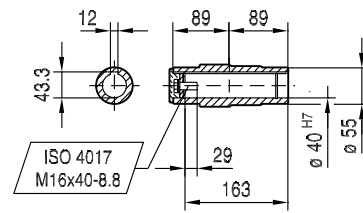
33 042 00 15



Ø 35 H7



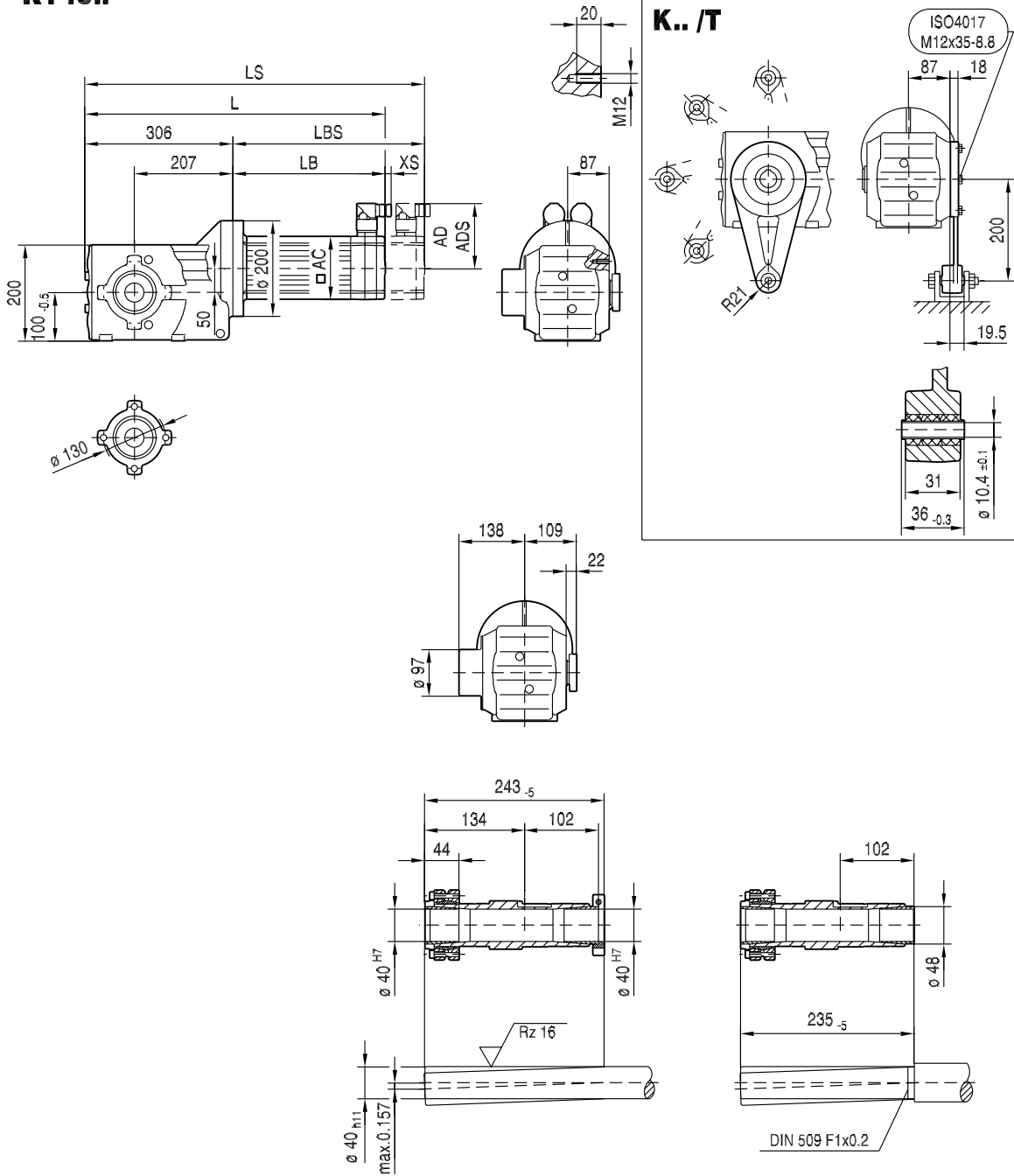
Ø 40 H7



	CMP63S	CMP63M	CMP63L	CMP71S	CMP71M	CMP71L	CMP80S	CMP80M	CMP100S
AC	88	88	88	116	116	115	137	137	162
AD	92	92	92	102	102	102	134	134	146
ADS	92	92	92	104	104	104	137	137	147
L	473	523	573	464	489	539	504	538	536
LS	502	552	602	529	554	604	582	616	632
LB	167	217	267	158	183	233	198	232	230
LBS	196	246	296	223	248	298	276	310	326
XS	14	14	14	11	11	11	37	37	37

21932387/EN – 05/2015

KT49..



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ISO4017
M12x35-8.8

DIN 509 F1x0.2

	CMP63S	CMP63M	CMP63L	CMP71S	CMP71M	CMP71L	CMP80S	CMP80M	CMP100S
AC	88	88	88	116	116	115	137	137	162
AD	92	92	92	102	102	102	134	134	146
ADS	92	92	92	104	104	104	137	137	147
L	473	523	573	464	489	539	504	538	536
LS	502	552	602	529	554	604	582	616	632
LB	167	217	267	158	183	233	198	232	230
LBS	196	246	296	223	248	298	276	310	326
XS	14	14	14	11	11	11	37	37	37

2.9 Selection tables for K..9 / DRL..

M _{aDyn} [Nm]		DRL						
		71S		71M		80S		80M
i		D1	D2	D1	D2	D1	D2	D1
K19  2	4.50	22	37	31	61	44	>88	57
	5.16	25	43	35	70	50	>88	65
	5.54	27	46	38	75	54	>88	70
	6.41	31	53	44	87	62	>88	81
	6.91	34	57	47	>88	67	>88	87
	8.09	39	67	55		78		>88
	9.58	46		65				
	10.32	50	>83	69	>83	>83	>83	>83
	11.84	57	>86	80	>86	>86	>86	>86
	12.70	61	>88	85	>88	>88	>88	>88
	14.69	71	>88	>88	>88	>88	>88	>88
	15.84	76	>88	>88	>88	>88	>88	>88
	18.55	>88	>88	>88		>88		>88
	21.98	>88		>88				
	24.06	>88		>88				
	26.88							
	27.16	>66	>66	>66	>66	>66	>66	>66
	29.14							
	29.29	>67	>67	>67	>67	>67	>67	>67
	31.74							
34.29	>70	>70	>70		>70		>70	
40.63	>73		>73					
44.48	>75		>75					
49.69								
53.88								
58.68								

m [kg]		DRL			
s		71S	71M	80S	80M
K19	 2	12	13	15	18

KF: + 0.3 kg / KA: + -0.5 kg / KAF: + 0.0 kg

2

Technical data

Selection tables for K..9 / DRL..

DRL..				C _{TG}			
i	n _{epk} [1/min]	eta [%]	K [Nm/"]	KF [Nm/"]	KA [Nm/"]	KAF [Nm/"]	
4.50	4500	97	5.1	4.4	8.5	8.5	
5.16	4500	97	5.1	4.4	8.5	8.5	
5.54	4500	97	5.1	4.4	8.5	8.5	
6.41	4500	97	5.1	4.4	8.5	8.5	
6.91	4500	97	5.1	4.4	8.5	8.5	
8.09	4500	97	5.1	4.5	8.6	8.6	
9.58	4500	97	5.1	4.5	8.6	8.6	
10.32	4500	96	6.2	5.2	12	12	
11.84	4500	96	6.2	5.2	12	12	
12.70	4500	96	5.1	4.5	8.6	8.6	
14.69	4500	96	6.2	5.2	12	12	
15.84	4500	96	6.2	5.2	12	12	
18.55	4500	96	6.2	5.2	12	12	
21.98	4500	96	6.2	5.2	12	12	
24.06	4500	96	6.2	5.2	12	12	
26.88	4500	96	6.2	5.2	12	12	
27.16	4500	91	6.2	5.2	12	12	
29.14	4500	96	6.2	5.2	12	12	
29.29	4500	91	6.2	5.2	12	12	
31.74	4500	96	6.2	5.2	12	12	
34.29	4500	91	6.2	5.2	12	12	
40.63	4500	91	6.2	5.2	12	12	
44.48	4500	91	6.2	5.2	12	12	
49.69	4500	91	6.2	5.2	12	12	
53.88	4500	91	6.2	5.2	12	12	
58.68	4500	91	6.2	5.2	12	12	

K19
 2

21932387/EN – 05/2015


DRL..							F _{Ramax}				F _{Rapk}			
n _e = 1400							K	KF	KA	KAF	K	KF	KA	KAF
i	M _{amax} [Nm]	M _{apk} [Nm]	M _{aEmergOff} [Nm]	n _{ak} [1/min]	J _G 10 ⁻⁴ [kg*m ²]		[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]
4.50	80	88	132	433	0.38		2010	1620	2500	2500	4190	3630	4500	4500
5.16	80	88	132	424	0.30		2140	1720	2650	2650	4190	3630	4500	4500
5.54	80	88	132	419	0.27		2200	1780	2730	2730	4190	3630	4500	4500
6.41	80	88	132	410	0.21		2340	1890	2900	2900	4190	3630	4500	4500
6.91	80	88	132	407	0.18		2420	1950	3000	3000	4190	3630	4500	4500
8.09	80	88	132	399	0.14		2590	2080	3200	3200	4190	3630	4500	4500
9.58	63	69	104	731	0.11		2910	2340	3600	3600	4340	3670	4500	4500
10.32	76	83	124	102	0.22		2720	2190	3370	3370	4230	3610	4500	4500
11.84	79	86	129	90	0.18		2850	2300	3530	3530	4210	3600	4500	4500
12.70	80	88	132	83	0.16		2930	2360	3630	3630	4190	3600	4500	4500
14.69	80	88	132	82	0.13		3110	2510	3860	3860	4190	3600	4500	4500
15.84	80	88	132	81	0.12		3210	2590	3980	3980	4190	3600	4500	4500
18.55	80	88	132	81	0,092		3430	2760	4250	4250	4190	3600	4500	4500
21.98	80	88	132	81	0,072		3680	2960	4500	4500	4190	3600	4500	4500
24.06	80	88	132	81	0,063		3820	3080	4500	4500	4190	3600	4500	4500
26.88	80	88	132	80	0,054		3990	3220	4500	4500	4190	3600	4500	4500
27.16	60	66	99	38	0.13		4090	3290	4500	4500	4360	3630	4500	4500
29.14	80	88	132	80	0,048		4120	3320	4500	4500	4190	3600	4500	4500
29.29	61	67	100	36	0.11		4200	3380	4500	4500	4350	3630	4500	4500
31.74	80	88	132	80	0,042		4260	3440	4500	4500	4190	3600	4500	4500
34.29	64	70	105	31	0,090		4370	3570	4500	4500	4330	3620	4500	4500
40.63	67	73	110	27	0,071		4350	3630	4500	4500	4310	3610	4500	4500
44.48	69	75	112	24	0,062		4340	3620	4500	4500	4290	3600	4500	4500
49.69	70	77	116	22	0,053		4330	3620	4500	4500	4280	3600	4500	4500
53.88	70	77	116	22	0,047		4330	3620	4500	4500	4280	3600	4500	4500
58.68	70	77	116	22	0,042		4330	3620	4500	4500	4280	3600	4500	4500


K19
 2

2

Technical data

Selection tables for K..9 / DRL..

M _{aDyn} [Nm]		DRL							
		71S		71M		80S		80M	90L
i		D1	D2	D1	D2	D1	D2	D1	D1
K29  2	3.19	15	26	22	43	31	77	40	77
	3.92	19	32	27	53	38	95	49	95
	5.10	25	42	35	69	49	>121	64	>121
	5.75	28	47	39	78	56	>123	73	>123
	6.95	34	57	47	94	67	>123	88	>123
	7.48	36	61	50	101	72	>135	93	>135
	8.53	41	70	58	116	83	>134	108	
	9.17	44	75	62	123	88	>143	114	>143
	9.90	48	82	67		96		>121	
	11.94	57	97	80	>143	115	>143	>143	>143
	13.47	65	110	91	>143	129	>143	>143	>143
	16.29	78	133	109	>143	>143	>143	>143	>143
	19.99	96	>143	134	>143	>143	>143	>143	
	22.08	100	>115	>115	>115	>115	>115	>115	>115
	23.19	111	>143	>143		>143		>143	
	24.91	113	>119	>119	>119	>119	>119	>119	>119
	27.23	131		>143					
	29.69	143		>143					
	30.11	>126	>126	>126	>126	>126	>126	>126	>126
	33.15								
	35.83								
	36.96	>134	>134	>134	>134	>134	>134	>134	
	38.90								
42.87	>140	>140	>140		>140		>140		
50.35	>143		>143						
54.89	>143		>143						
61.28									
66.25									
71.93									

m [kg]		DRL				
s		71S	71M	80S	80M	90L
K29  2		14	15	17	20	27

KF: + 1.0 kg / KA: + -0.5 kg / KAF: + 0.4 kg


DRL..			C _{TG}				
i	n _{epk} [1/min]	eta [%]	K [Nm/"]	KF [Nm/"]	KA [Nm/"]	KAF [Nm/"]	
	3.19	4500	97	8.3	7.4	16	16
	3.92	4500	97	8.3	7.4	16	16
	5.10	4500	97	8.4	7.5	17	17
	5.75	4500	97	8.4	7.5	17	17
	6.95	4500	97	8.4	7.5	17	17
	7.48	4500	96	10	8.8	25	25
	8.53	4500	97	8.4	7.5	17	17
	9.17	4500	96	10	8.8	25	25
	9.90	4500	97	8.4	7.5	17	17
	11.94	4500	96	10	8.8	25	25
	13.47	4500	96	10	8.8	25	25
	16.29	4500	96	10	8.8	25	25
	19.99	4500	96	10	8.8	25	25
	22.08	4500	91	8.6	7.6	18	18
	23.19	4500	96	10	8.8	25	25
	24.91	4500	91	8.6	7.6	18	18
	27.23	4500	96	10	8.8	25	25
	29.69	4500	96	10	8.8	25	25
	30.11	4500	91	8.6	7.6	18	18
	33.15	4500	96	10	8.8	25	25
	35.83	4500	96	10	8.8	25	25
	36.96	4500	92	8.6	7.6	18	18
	38.90	4500	95	10	8.8	25	25
	42.87	4500	91	8.6	7.6	18	18
	50.35	4500	91	8.6	7.6	18	18
	54.89	4500	91	8.6	7.6	18	18
	61.28	4500	91	8.6	7.6	18	18
	66.25	4500	91	8.6	7.6	18	18
	71.93	4500	91	8.6	7.6	18	18

K29
 2


2


Technical data

Selection tables for K..9 / DRL..

DRL..							F _{Ramax}				F _{Rapk}			
n _e = 1400	i	M _{amax} [Nm]	M _{apk} [Nm]	M _{aEmergOff} [Nm]	n _{ak} [1/min]	J _G 10 ⁻⁴ [kg*m ²]	K [N]	KF [N]	KA [N]	KAF [N]	K [N]	KF [N]	KA [N]	KAF [N]
 K29	3.19	110	121	182	1082	1.6	1830	1200	1860	1860	5070	6000	6000	6000
	3.92	126	138	205	722	1.1	1910	1240	1920	1920	5030	6000	6000	6000
	5.10	110	121	182	1080	0.68	2260	1500	2320	2320	5070	6000	6000	6000
	5.75	112	123	184	1030	0.55	2370	1580	2440	2440	5070	6000	6000	6000
	6.95	112	123	184	1007	0.39	2580	1720	2660	2660	5070	6000	6000	6000
	7.48	123	135	200	138	0.74	2300	1480	2300	2300	4980	6000	6000	6000
	8.53	122	134	200	755	0.27	2740	1830	2830	2830	5040	6000	6000	6000
	9.17	130	143	210	112	0.55	2470	1600	2480	2480	4960	6000	6000	6000
	9.90	110	121	182	707	0.21	3000	2020	3120	3120	5070	6000	6000	6000
	11.94	130	143	210	112	0.37	2810	1830	2840	2840	4960	6000	6000	6000
	13.47	130	143	210	111	0.30	2970	1950	3010	3010	4960	6000	6000	6000
	16.29	130	143	210	111	0.22	3240	2140	3300	3300	4960	6000	6000	6000
	19.99	130	143	210	111	0.16	3550	2350	3640	3640	4960	6000	6000	6000
	22.08	105	115	172	47	0.33	3820	2560	3950	3950	5020	6000	6000	6000
	23.19	130	143	210	110	0.12	3790	2520	3900	3900	4960	6000	6000	6000
	24.91	109	119	178	42	0.27	3980	2660	4120	4120	5010	6000	6000	6000
	27.23	130	143	210	110	0,098	4060	2710	4190	4190	4960	6000	6000	6000
	29.69	130	143	210	110	0,086	4210	2820	4360	4360	4960	6000	6000	6000
	30.11	115	126	189	35	0.20	4250	2850	4400	4400	4990	6000	6000	6000
	33.15	130	143	210	110	0,073	4410	2960	4580	4580	4960	6000	6000	6000
	35.83	130	143	210	110	0,065	4560	3060	4740	4740	4960	6000	6000	6000
	36.96	122	134	200	28	0.14	4560	3060	4730	4730	4960	6000	6000	6000
	38.90	130	143	210	110	0,057	4720	3170	4910	4910	4960	6000	6000	6000
	42.87	128	140	210	24	0.11	4790	3210	4970	4970	4940	6000	6000	6000
	50.35	130	143	210	22	0,090	4980	3430	5300	5300	4930	6000	6000	6000
	54.89	130	143	210	23	0,079	4980	3560	5510	5510	4930	6000	6000	6000
	61.28	130	143	210	23	0,068	4980	3730	5770	5770	4930	6000	6000	6000
	66.25	130	143	210	22	0,060	4980	3860	5970	5970	4930	6000	6000	6000
71.93	130	143	210	23	0,053	4980	4000	6000	6000	4930	6000	6000	6000	

21932387/EN – 05/2015

M _{aDyn} [Nm]		DRL										
		71S		71M		80S		80M		90L		100L
i		D1	D2	D1	D2	D1	D2	D1	D2	D1	D2	D1
K39  2	2.81		23		37	27	67	35	80	67	123	107
	3.94		32		53	38	95	49	113	95	174	151
	4.52	22	37	30	61	43	108	56	130	108	200	174
	5.22	25	43	35	70	50	125	65	150	125	230	200
	5.75	28	47	39	77	55	138	72	166	138	250	220
	6.75	32	55	45	91	65	162	84	194	162	295	255
	7.15	34	58	48	96	69	172	89	205	172	315	270
	8.12	39	66	55	109	78	195	101	230	195	355	310
	9.00	43	73	60	121	86	215	112	255	215	>385	345
	10.61	51	87	71	143	102	250	132	305	250		>370
	12.09	58	99	81	162	116	290	151				
	12.73	61	104	86	171	122	>295	159				
	13.44		104		171	122	305	159	365	305	>405	>405
	15.44	70	119	98	197	141	350	183	>410	350	>410	>410
	17.83	81	138	114	225	162	405	210	>410	405	>410	>410
	19.62	89	152	125	245	179	>410	230	>410	>410	>410	>410
	23.04	105	178	147	290	205	>410	270	>410	>410	>410	>410
	24.40	111	189	155	310	220	>410	285	>410	>410	>410	>410
	27.73	126	210	177	350	250	>410	325	>410	>410	>410	>410
	30.72	140	235	196	390	275	>410	360	>410	>410	>410	>410
36.22	165	280	230	>410	325	>410	>410	>410	>410		>410	
41.28	188	315	260	>410	375	>410	>410					
43.45	198	335	275	>410	395	>410	>410					
49.69	225	380	315		>410		>410					
58.24	260		370									


m [kg]		DRL					
s		71S	71M	80S	80M	90L	100L
K39	 2	24	26	28	31	39	46

KF: + 1.5 kg / KA: + -1.0 kg / KAF: + 0.5 kg


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Technical data

Selection tables for K..9 / DRL..

DRL..				C _{TG}			
	i	n _{epk} [1/min]	eta [%]	K [Nm/"]	KF [Nm/"]	KA [Nm/"]	KAF [Nm/"]
K39  2	2.81	4500	95	15	14	30	30
	3.94	4500	96	15	14	30	30
	4.52	4500	96	15	14	30	30
	5.22	4500	96	15	14	30	30
	5.75	4500	96	15	14	30	30
	6.75	4500	96	15	14	30	30
	7.15	4500	96	15	14	30	30
	8.12	4500	96	15	14	30	30
	9.00	4500	96	15	14	30	30
	10.61	4500	96	15	14	37	37
	12.09	4500	96	15	14	37	37
	12.73	4500	96	15	14	37	37
	13.44	4500	91	20	19	67	67
	15.44	4500	91	20	19	67	67
	17.83	4500	91	20	19	67	67
	19.62	4500	91	20	19	67	67
	23.04	4500	91	20	19	67	67
	24.40	4500	91	20	19	67	67
	27.73	4500	91	20	19	67	67
	30.72	4500	91	20	19	67	67
36.22	4500	91	20	19	67	67	
41.28	4500	91	20	19	67	67	
43.45	4500	91	20	19	67	67	
49.69	4500	91	20	19	67	67	
58.24	4500	91	20	19	67	67	


21932387/EN – 05/2015


DRL..							F _{Ramax}				F _{Rapk}			
n _e = 1400	i	M _{amax} [Nm]	M _{apk} [Nm]	M _{aEmergOff} [Nm]	n _{ak} [1/min]	J _G 10 ⁻⁴ [kg*m ²]	K [N]	KF [N]	KA [N]	KAF [N]	K [N]	KF [N]	KA [N]	KAF [N]
K39 	2.81	170	255	285	811	7.9	2870	2460	2180	2180	7500	6260	7500	7500
	3.94	215	320	365	378	4.6	3070	2630	2260	2260	7500	6180	7500	7500
	4.52	240	360	405	257	3.6	3130	2680	1730	1730	7500	6130	7500	7500
	5.22	260	390	440	192	2.9	3240	2770	960	960	7500	6090	7500	7500
	5.75	275	410	465	158	2.5	3300	2830	290	290	7470	6060	7500	7500
	6.75	300	435	510	130	2.0	3430	2940	0	0	7300	6020	7500	7500
	7.15	300	435	510	129	1.8	3530	3020	157	157	7300	6020	7500	7500
	8.12	300	385	510	193	1.4	3760	3220	2080	2080	7500	6090	7500	7500
	9.00	300	385	510	192	1.2	3950	3380	2860	2860	7500	6090	7500	7500
	10.61	285	370	485	218	0.91	4360	3730	3250	3250	7500	6110	7500	7500
	12.09	255	295	430	464	0.65	4790	4110	3700	3700	7500	6210	7500	7500
	12.73	250	295	425	463	0.58	4930	4220	3830	3830	7500	6210	7500	7500
	13.44	270	405	455	27	2.6	4160	3560	2830	2830	7500	5980	7500	7500
	15.44	280	410	475	26	2.2	4380	3750	2990	2990	7490	5960	7500	7500
	17.83	290	410	490	25	1.8	4630	3960	3180	3180	7490	5960	7500	7500
	19.62	295	410	500	25	1.5	4820	4120	3330	3330	7490	5960	7500	7500
	23.04	300	410	510	24	1.3	5180	4440	3630	3630	7490	5960	7500	7500
	24.40	300	410	510	24	1.2	5330	4560	3760	3760	7490	5960	7500	7500
	27.73	300	410	510	24	0.95	5670	4860	4070	4070	7490	5960	7500	7500
	30.72	300	410	510	24	0.82	5960	5100	4320	4320	7490	5960	7500	7500
36.22	300	410	510	23	0.65	6440	5520	4740	4740	7490	5960	7500	7500	
41.28	300	410	510	23	0.44	6840	5860	5100	5100	7490	5960	7500	7500	
43.45	300	410	510	23	0.39	7000	6000	5240	5240	7490	5960	7500	7500	
49.69	300	410	510	23	0.32	7440	6150	5630	5630	7490	5960	7500	7500	
58.24	300	410	510	23	0.26	7500	6150	6110	6110	7490	5960	7500	7500	

2


Technical data


Selection tables for K..9 / DRL..

M_{aDyn} [Nm]		DRL												
		71S		71M		80S		80M		90L		100L		132S
i		D1	D2	D1	D2	D1	D2	D1	D2	D1	D2	D1	D2	D1
	4.00		33		54	38	96	50	115	96	177	154	325	305
	4.69		38		63	45	113	59	135	113	205	180	380	360
	5.29		43		71	51	127	66	152	127	230	200	430	405
	5.99	29	49	40	81	58	144	75	173	144	260	230	485	460
	6.83	33	56	46	92	66	164	85	197	164	300	260	555	520
	7.58	36	62	51	102	73	182	95	215	182	330	290	>605	580
	8.66	42	71	58	116	83	205	108	245	205	380	330	>605	>605
	9.14	44	75	61	123	88	215	114	260	215	400	350	>605	>605
	10.42	50	85	70	140	100	250	130	300	250	460	400		
	11.37	55	93	76	153	109	270	142	325	270	500	435		
	13.38		105		172	123	305	160	365	305	565	490	>605	>605
	15.67		123		200	144	360	187	430	360	>605	575	>605	>605
	17.67		138		225	163	405	210	485	405	>605	>605	>605	>605
	20.03	92	157	129	255	184	460	235	550	460	>605	>605	>605	>605
	22.83	105	179	147	290	210	525	270	>605	525	>605	>605	>605	>605
	25.34	117	198	163	325	230	580	300	>605	580	>605	>605	>605	>605
	28.95	133	225	186	370	265	>605	345	>605	>605	>605	>605	>605	>605
	30.55	141	235	197	390	280	>605	365	>605	>605	>605	>605	>605	>605
	34.81	160	270	220	445	320	>605	415	>605	>605	>605	>605		
	37.98	175	295	240	485	345	>605	450	>605	>605	>605	>605		
44.44	200	345	285	570	405	>605	530	>605	>605		>605			
50.29	230	390	320	>605	460	>605	600							
52.94	240	410	340	>605	485	>605	>605							
60.27	270	465	380		545		>605							
70.19	315		445											
75.20	340		475											

m [kg]		DRL							
s		71S	71M	80S	80M	90L	100L	132S	
K49	 2	38	39	42	44	51	59	74	

KF: + 1.7 kg / KA: + -2.8 kg / KAF: + 2.1 kg

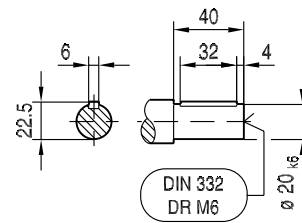
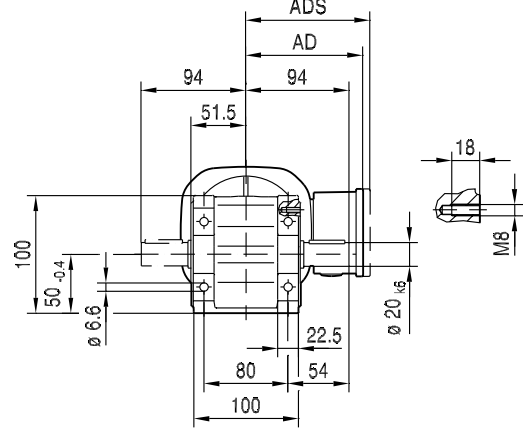
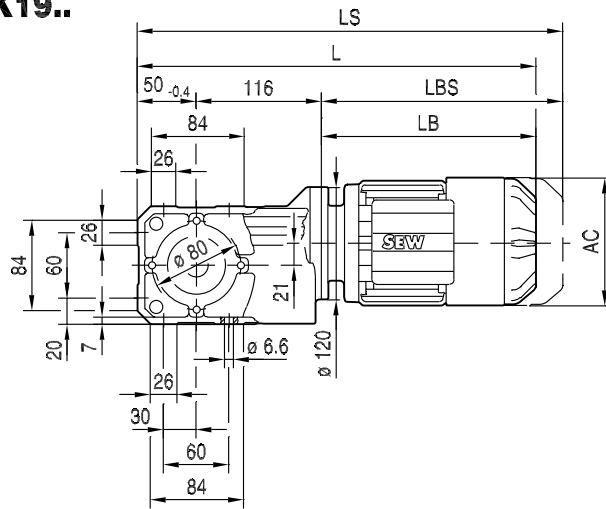
DRL..			C _{TG}				
i	n _{epk} [1/min]	eta [%]	K [Nm/"]	KF [Nm/"]	KA [Nm/"]	KAF [Nm/"]	
K49  2	4.00	4500	96	27	26	77	77
	4.69	4500	96	27	26	77	77
	5.29	4500	96	27	26	77	77
	5.99	4500	96	27	26	77	77
	6.83	4500	96	27	26	77	77
	7.58	4500	96	27	26	77	77
	8.66	4500	96	27	26	77	77
	9.14	4500	96	27	26	77	77
	10.42	4500	96	27	26	77	77
	11.37	4500	96	27	26	77	77
	13.38	4500	92	35	32	48	48
	15.67	4500	92	35	32	48	48
	17.67	4500	92	35	32	48	48
	20.03	4500	92	35	32	48	48
	22.83	4500	92	35	32	48	48
	25.34	4500	92	35	32	48	48
	28.95	4500	92	35	32	48	48
	30.55	4500	92	35	32	48	48
	34.81	4500	92	35	32	48	48
	37.98	4500	92	35	32	48	48
	44.44	4500	92	35	32	48	48
	50.29	4500	92	35	32	48	48
	52.94	4500	92	35	32	48	48
60.27	4500	91	35	32	48	48	
70.19	4500	91	35	32	48	48	
75.20	4500	91	35	32	48	48	

DRL..							F _{Ramax}				F _{Rapk}			
n _e = 1400	i	M _{amax} [Nm]	M _{apk} [Nm]	M _{aEmergOff} [Nm]	n _{ak} [1/min]	J _G 10 ⁻⁴ [kg*m ²]	K [N]	KF [N]	KA [N]	KAF [N]	K [N]	KF [N]	KA [N]	KAF [N]
K49  2	4.00	440	605	745	218	11	3110	2390	0	0	9000	9000	9000	9000
	4.69	465	605	790	217	8.8	3270	2600	0	0	9000	9000	9000	9000
	5.29	485	605	820	217	7.2	3400	2770	0	0	9000	9000	9000	9000
	5.99	500	605	850	219	5.9	3570	3030	0	0	9000	9000	9000	9000
	6.83	500	605	850	218	4.8	3840	3250	0	0	9000	9000	9000	9000
	7.58	500	605	850	218	4.1	4050	3440	1030	1030	9000	9000	9000	9000
	8.66	500	605	850	218	3.3	4340	3680	3790	3790	9000	9000	9000	9000
	9.14	500	605	850	218	3.1	4460	3780	3910	3910	9000	9000	9000	9000
	10.42	480	585	810	238	2.4	4860	4120	4330	4330	9000	9000	9000	9000
	11.37	495	605	840	218	2.1	5000	4240	4450	4450	9000	9000	9000	9000
	13.38	470	605	795	46	6.5	4320	3660	3510	3510	9000	9000	9000	9000
	15.67	490	605	830	45	5.2	4590	3890	3750	3750	9000	9000	9000	9000
	17.67	500	605	850	44	4.4	4860	4120	3990	3990	9000	9000	9000	9000
	20.03	500	605	850	43	3.7	5220	4420	4350	4350	9000	9000	9000	9000
	22.83	500	605	850	43	3.1	5610	4750	4750	4750	9000	9000	9000	9000
	25.34	500	605	850	42	2.8	5940	5030	5070	5070	9000	9000	9000	9000
	28.95	500	605	850	42	2.3	6370	5400	5510	5510	9000	9000	9000	9000
	30.55	500	605	850	42	2.1	6550	5550	5690	5690	9000	9000	9000	9000
	34.81	500	605	850	42	1.7	7000	5930	6140	6140	9000	9000	9000	9000
	37.98	500	605	850	41	1.5	7310	6200	6450	6450	9000	9000	9000	9000
44.44	500	605	850	41	1.2	7900	6690	7040	7040	9000	9000	9000	9000	
50.29	500	605	850	41	0.83	8380	7100	7530	7530	9000	9000	9000	9000	
52.94	500	605	850	41	0.75	8590	7280	7730	7730	9000	9000	9000	9000	
60.27	500	605	850	41	0.61	9000	7740	8280	8280	9000	9000	9000	9000	
70.19	445	605	755	40	0.50	9000	8630	9000	9000	9000	9000	9000	9000	
75.20	475	605	800	41	0.43	9000	8720	9000	9000	9000	9000	9000	9000	

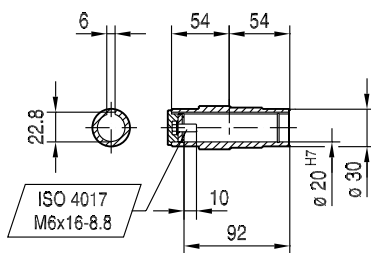
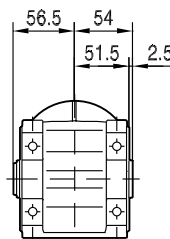
2.10 Dimension sheets for K..9 / DRL..

33 093 00 15

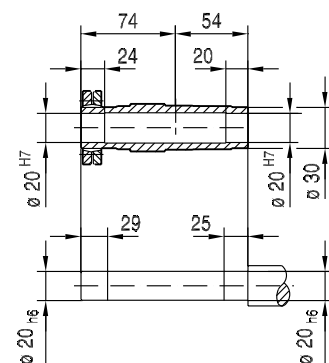
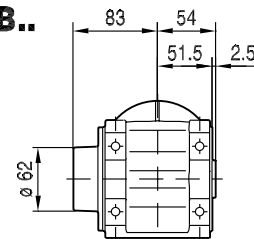
K19..



KA19B..



KH19B..

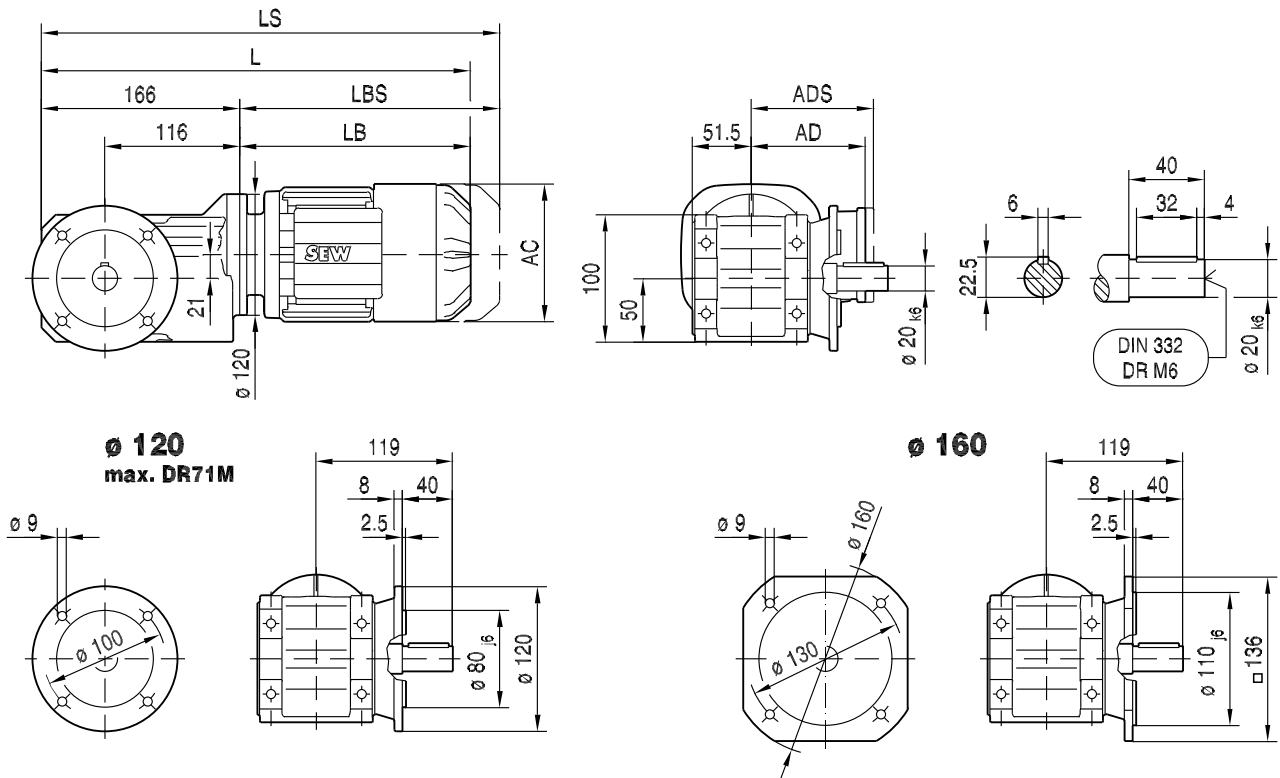


	DRL71S	DRL71M	DRL80S	DRL80M				
AC	139	139	156	156				
AD	119	119	128	128				
ADS	129	129	139	139				
L	454	479	498	529				
LS	518	543	578	609				
LB	288	313	332	363				
LBS	352	377	412	443				

21932387/EN – 05/2015

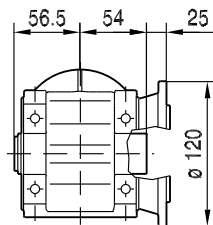
33 094 00 15

KF19B..

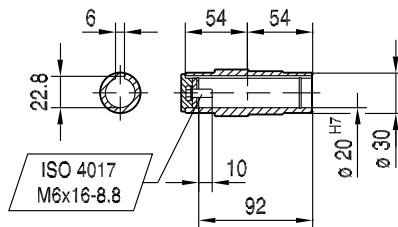
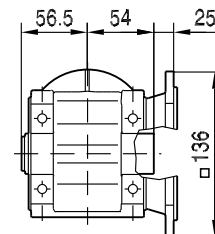


KAF19B..

120
max. DR71M



160

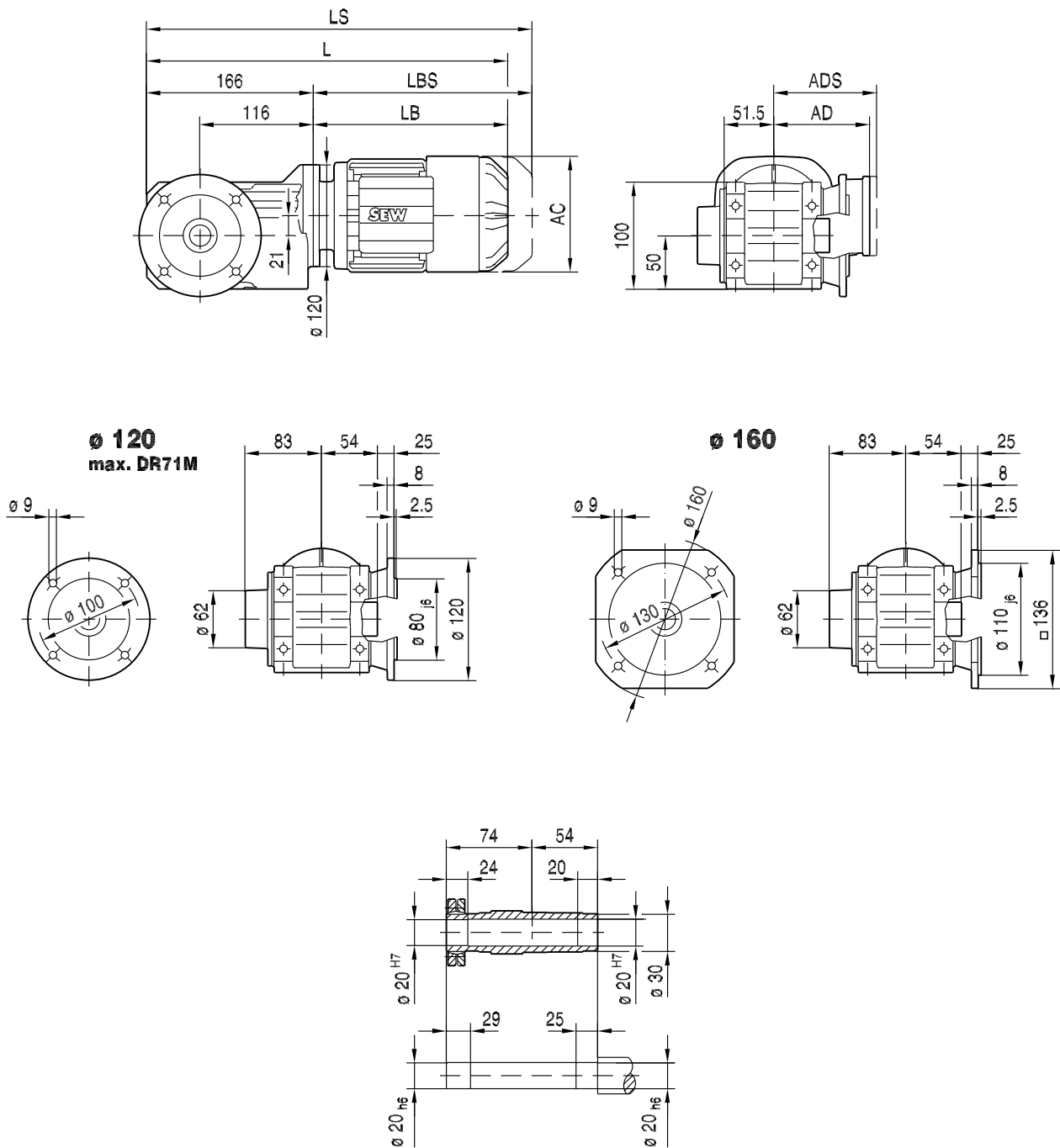


	DRL71S	DRL71M	DRL80S	DRL80M			
AC	139	139	156	156			
AD	119	119	128	128			
ADS	129	129	139	139			
L	454	479	498	529			
LS	518	543	578	609			
LB	288	313	332	363			
LBS	352	377	412	443			

KHF19B..

33 095 00 15

2

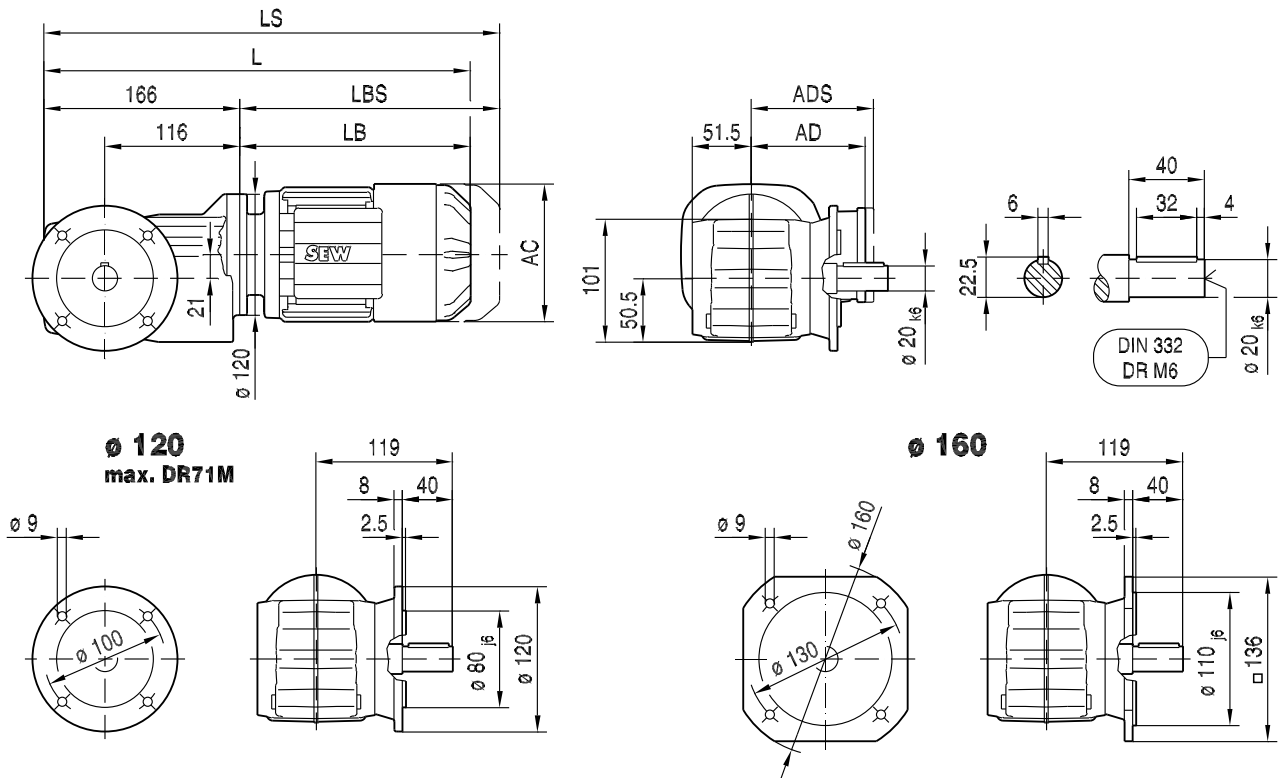


21932387/EN – 05/2015

	DRL71S	DRL71M	DRL80S	DRL80M			
AC	139	139	156	156			
AD	119	119	128	128			
ADS	129	129	139	139			
L	454	479	498	529			
LS	518	543	578	609			
LB	288	313	332	363			
LBS	352	377	412	443			

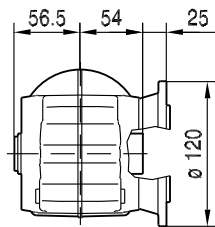
33 096 00 15

KF19..

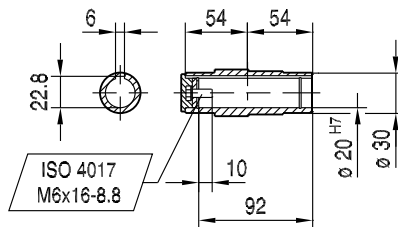
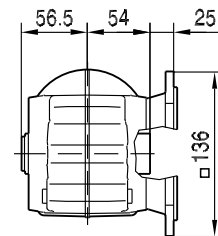


KAF19..

$\phi 120$
max. DR71M



$\phi 160$



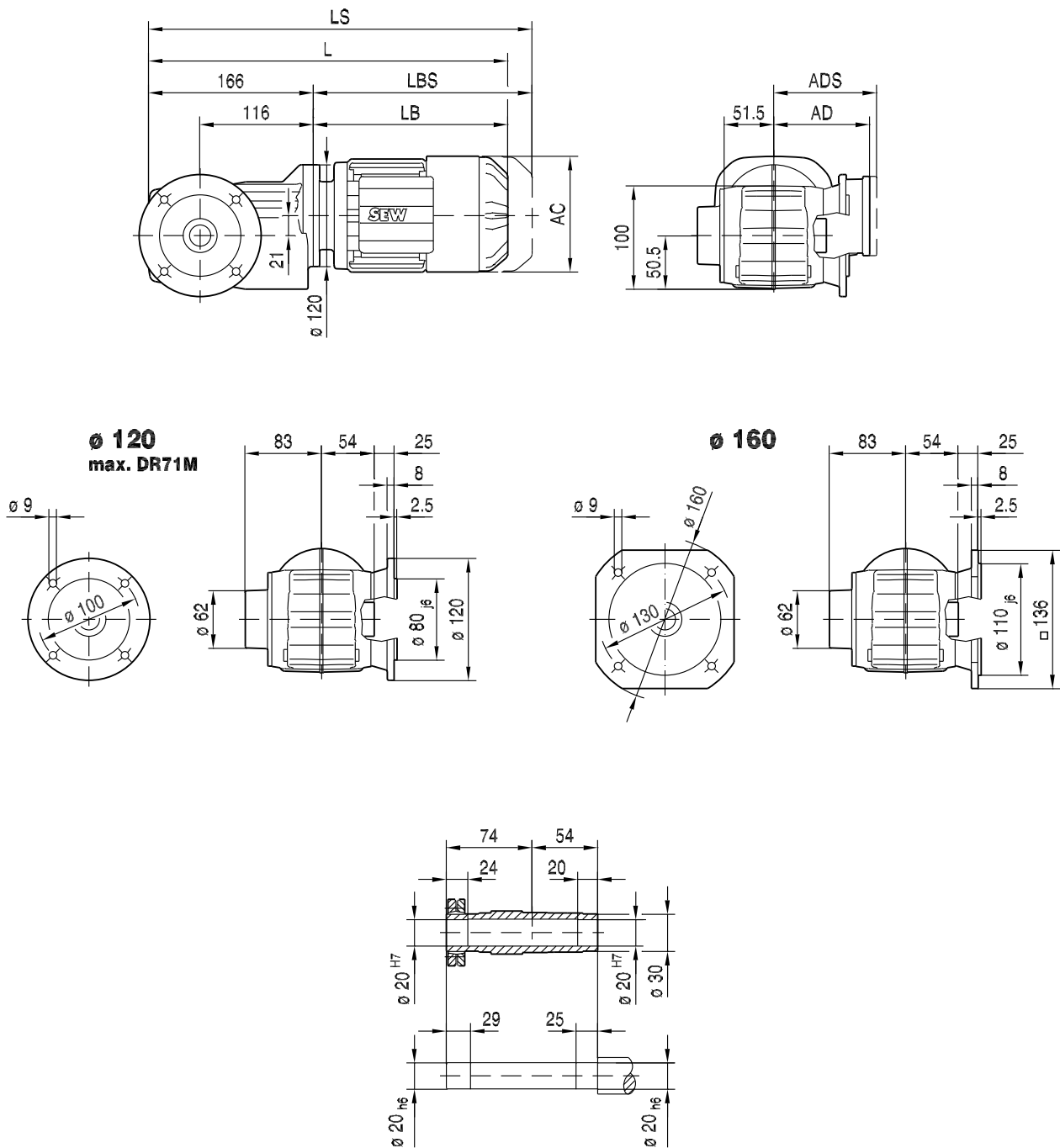
	DRL71S	DRL71M	DRL80S	DRL80M			
AC	139	139	156	156			
AD	119	119	128	128			
ADS	129	129	139	139			
L	454	479	498	529			
LS	518	543	578	609			
LB	288	313	332	363			
LBS	352	377	412	443			

21932387/EN – 05/2015

KHF19..

33 097 00 15

2

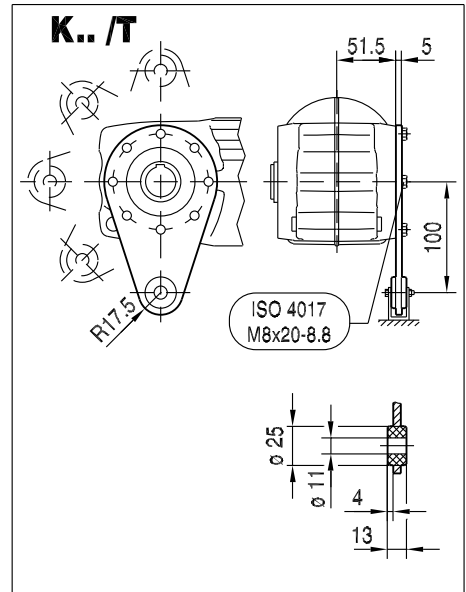
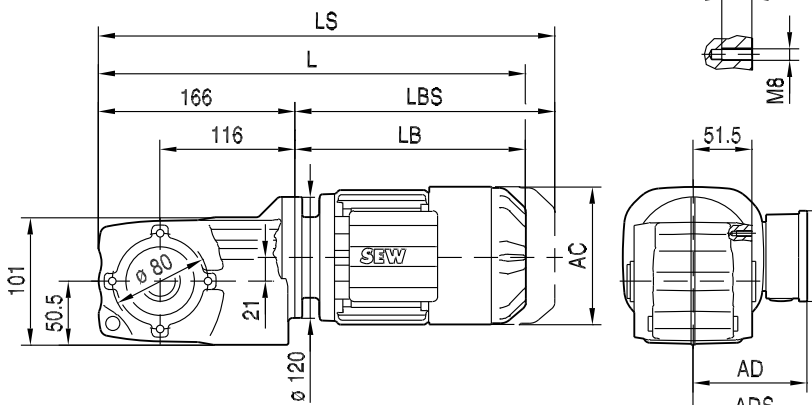


21932387/EN – 05/2015

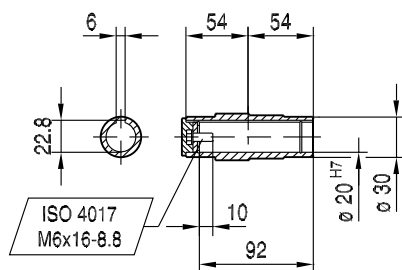
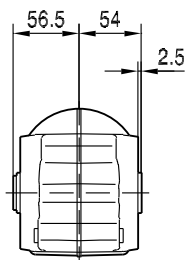
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AC	139	139	156	156			
AD	119	119	128	128			
ADS	129	129	139	139			
L	454	479	498	529			
LS	518	543	578	609			
LB	288	313	332	363			
LBS	352	377	412	443			

33 098 00 15

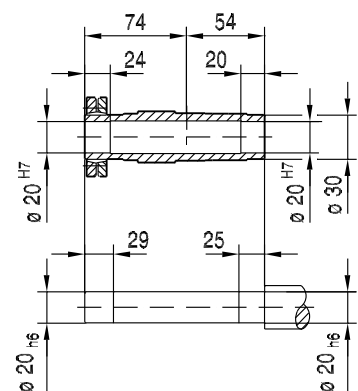
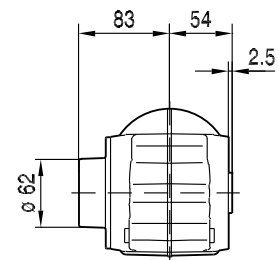
KA19..



KA19..



KH19..

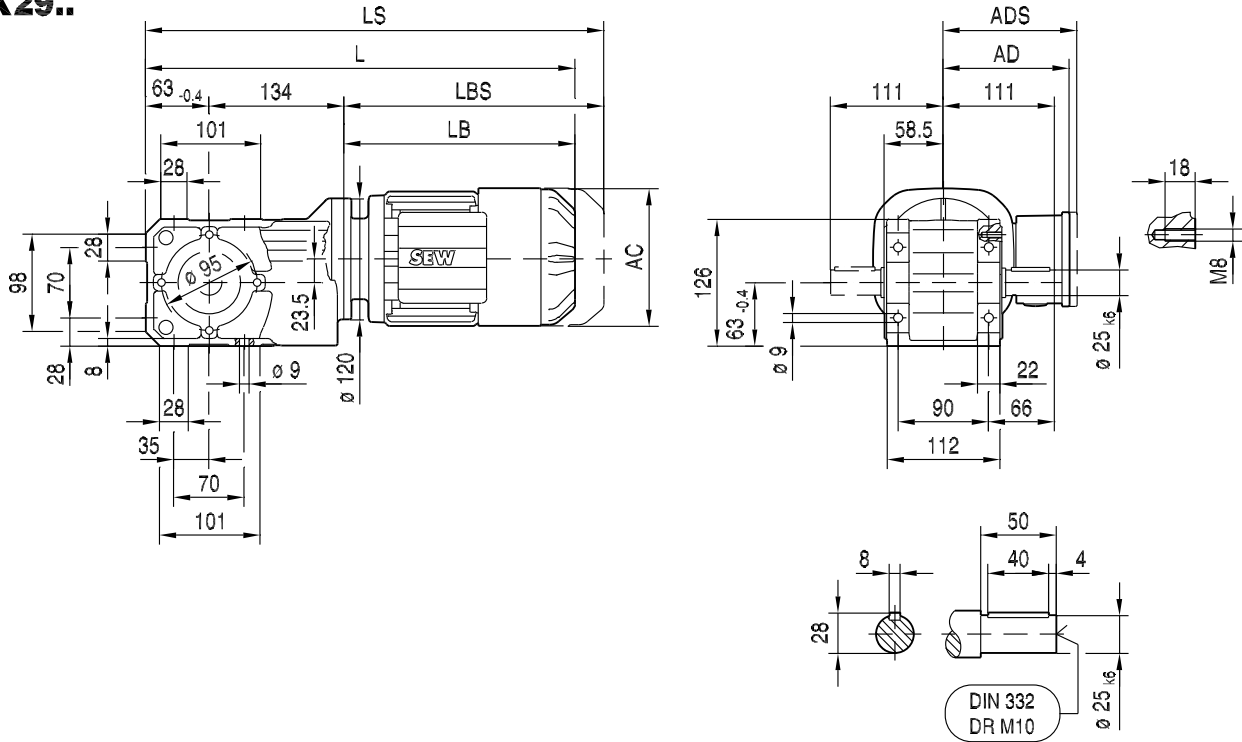


	DRL71S	DRL71M	DRL80S	DRL80M				
AC	139	139	156	156				
AD	119	119	128	128				
ADS	129	129	139	139				
L	454	479	498	529				
LS	518	543	578	609				
LB	288	313	332	363				
LBS	352	377	412	443				

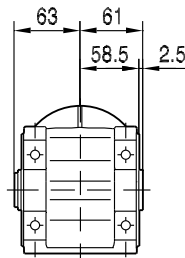
21932387/EN – 05/2015

33 099 00 15

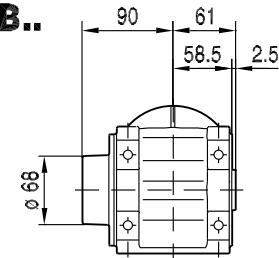
K29..



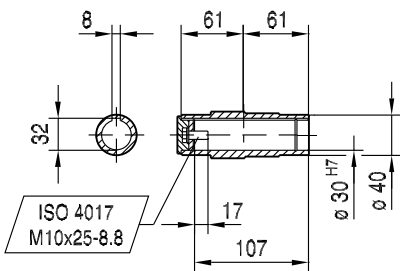
KA29B..



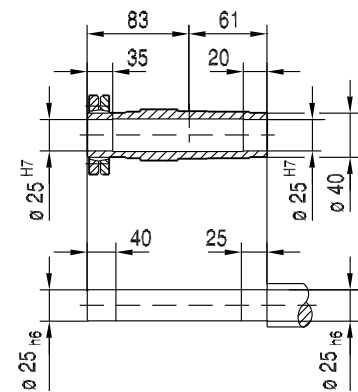
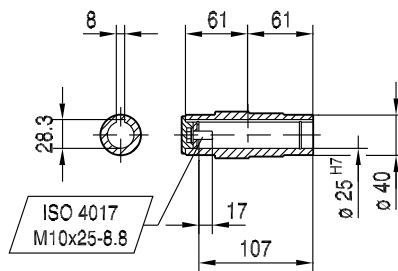
KH29B..



**Ø 30 H7
DIN 6885-3**



Ø 25 H7

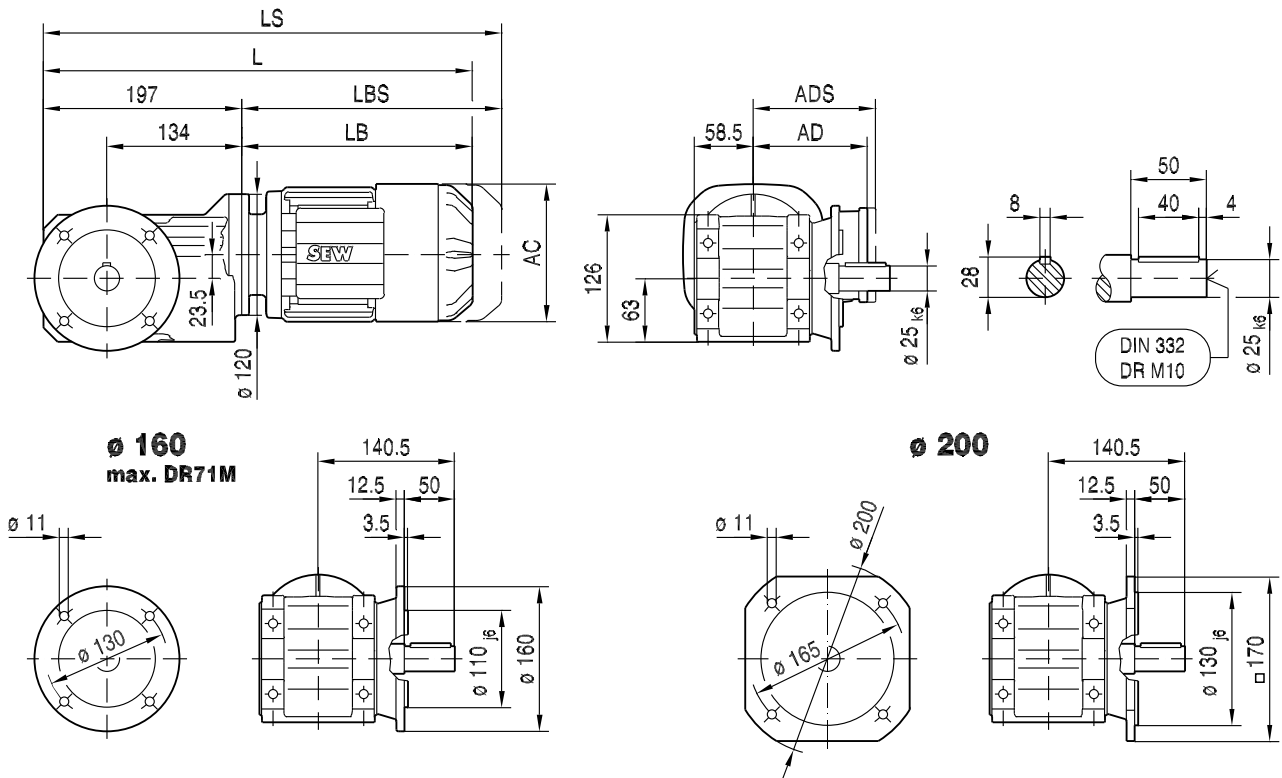


21932387/EN - 05/2015

	DRL71S	DRL71M	DRL80S	DRL80M	DRL90L		
AC	139	139	156	156	179		
AD	119	119	128	128	140		
ADS	129	129	139	139	150		
L	485	510	529	560	577		
LS	549	574	609	640	663		
LB	288	313	332	363	380		
LBS	352	377	412	443	466		

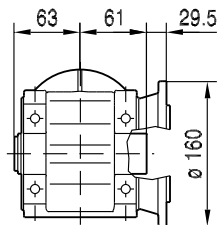
33 100 00 15

KF29B..

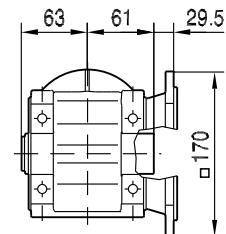


KAF29B..

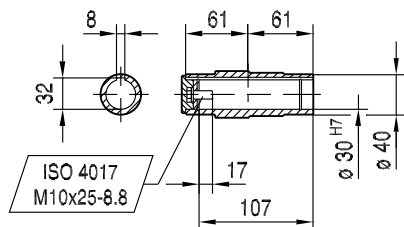
160
max. DR71M



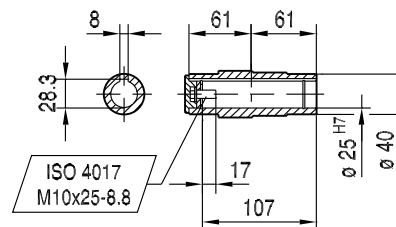
200



30 H7
DIN 6885-3



25 H7

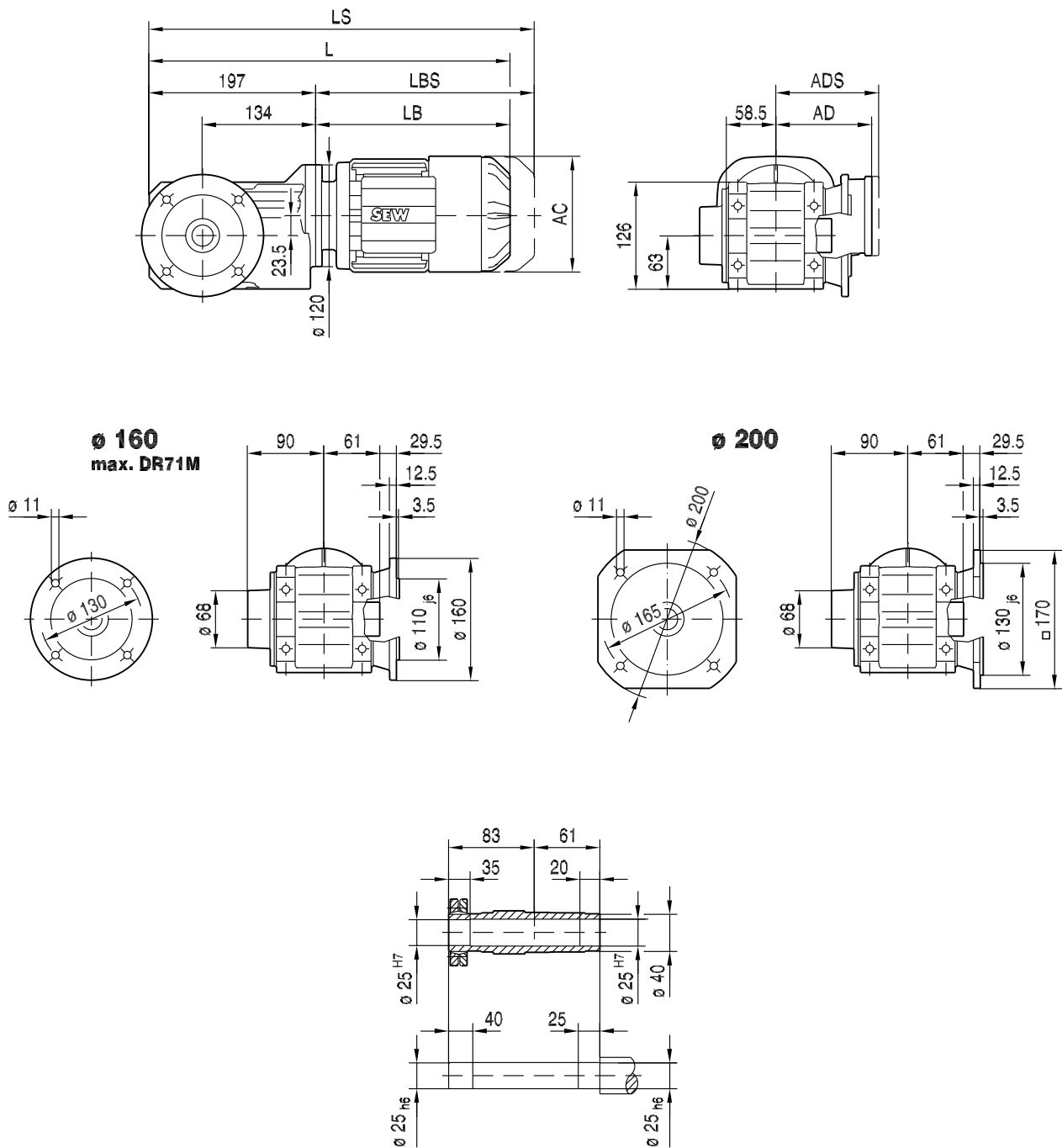


	DRL71S	DRL71M	DRL80S	DRL80M	DRL90L		
AC	139	139	156	156	179		
AD	119	119	128	128	140		
ADS	129	129	139	139	150		
L	485	510	529	560	577		
LS	549	574	609	640	663		
LB	288	313	332	363	380		
LBS	352	377	412	443	466		

KHF29B..

33 101 00 15

2

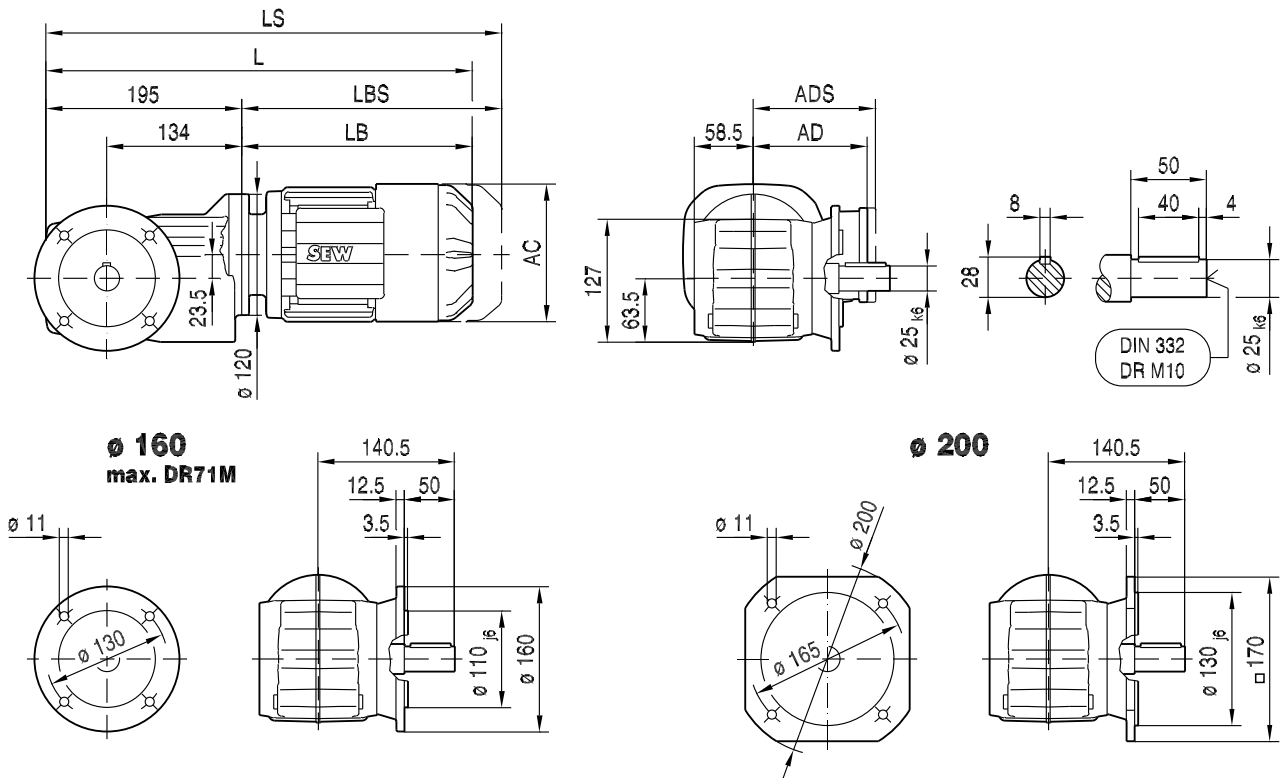


21932387/EN – 05/2015

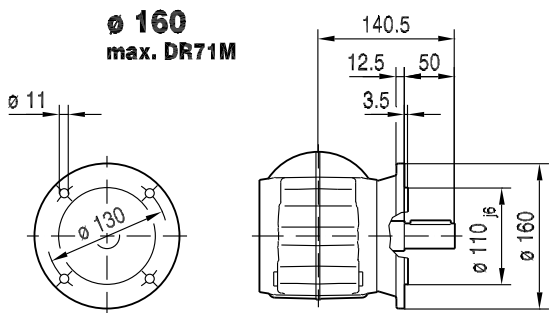
	DRL71S	DRL71M	DRL80S	DRL80M	DRL90L			
AC	139	139	156	156	179			
AD	119	119	128	128	140			
ADS	129	129	139	139	150			
L	485	510	529	560	577			
LS	549	574	609	640	663			
LB	288	313	332	363	380			
LBS	352	377	412	443	466			

33 102 00 15

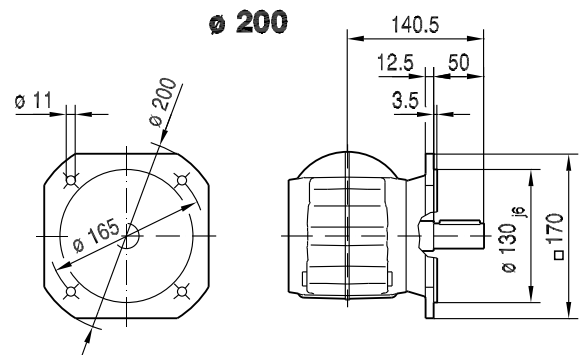
KF29..



$\phi 160$
max. DR71M

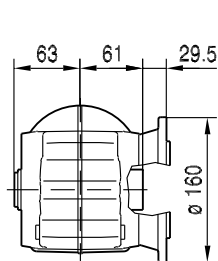


$\phi 200$

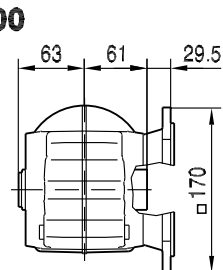


KAF29..

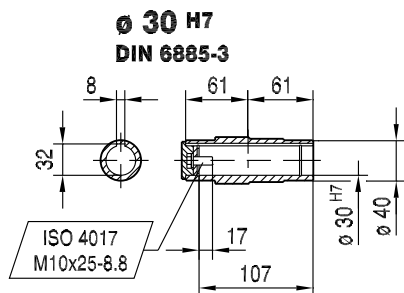
$\phi 160$
max. DR71M



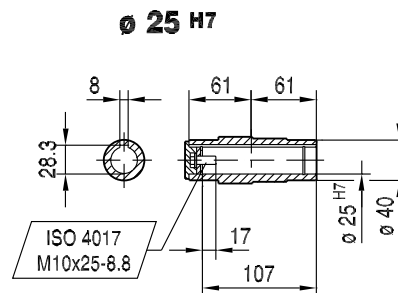
$\phi 200$



$\phi 30 \text{ H7}$
DIN 6885-3



$\phi 25 \text{ H7}$

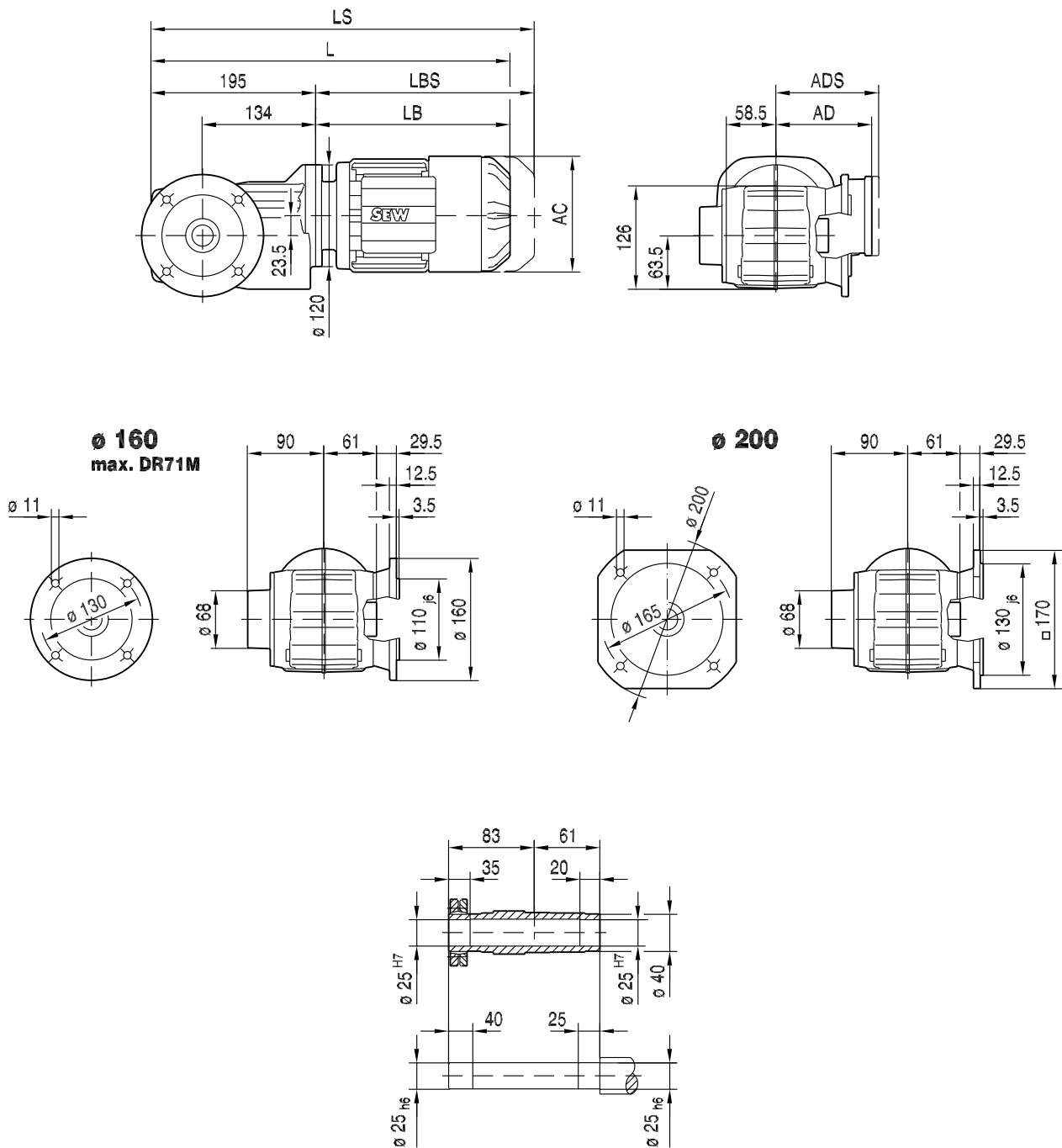


	DRL71S	DRL71M	DRL80S	DRL80M	DRL90L		
AC	139	139	156	156	179		
AD	119	119	128	128	140		
ADS	129	129	139	139	150		
L	483	508	527	558	575		
LS	547	572	607	638	661		
LB	288	313	332	363	380		
LBS	352	377	412	443	466		

KHF29..

33 103 00 15

2

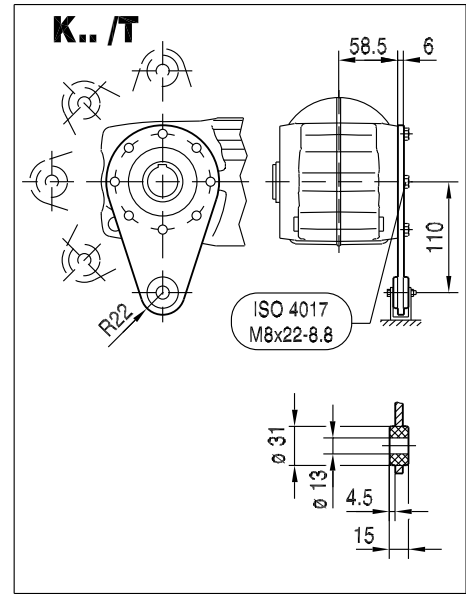
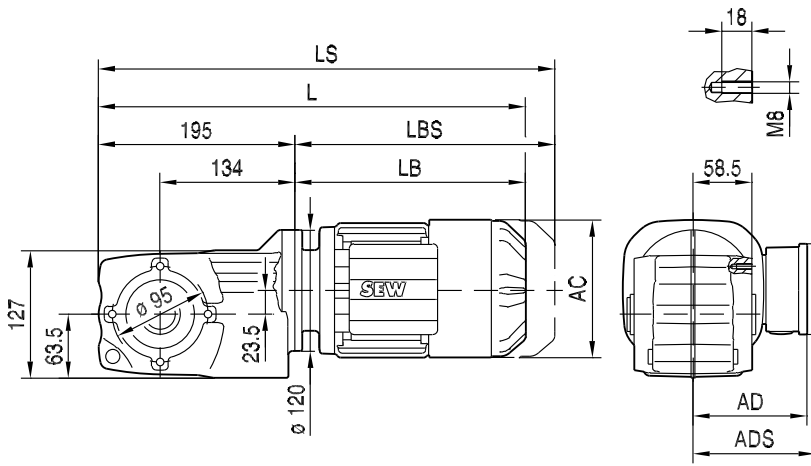


21932387/EN – 05/2015

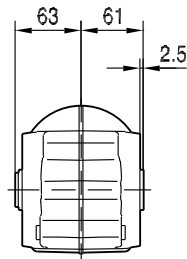
	DRL71S	DRL71M	DRL80S	DRL80M	DRL90L			
AC	139	139	156	156	179			
AD	119	119	128	128	140			
ADS	129	129	139	139	150			
L	483	508	527	558	575			
LS	547	572	607	638	661			
LB	288	313	332	363	380			
LBS	352	377	412	443	466			

33 104 00 15

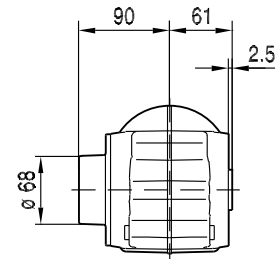
KA29..



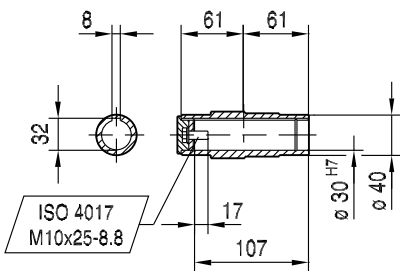
KA29..



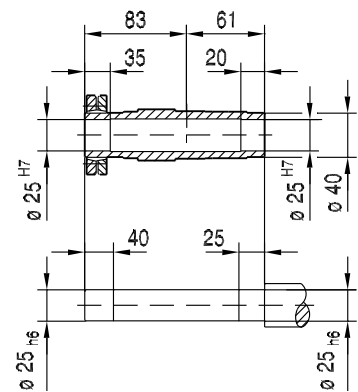
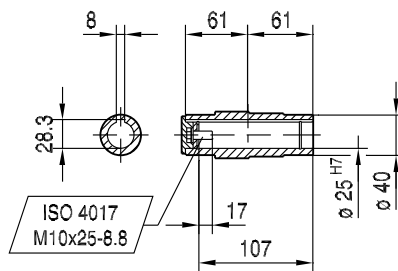
KH29..



Ø 30 H7
DIN 6885-3



Ø 25 H7



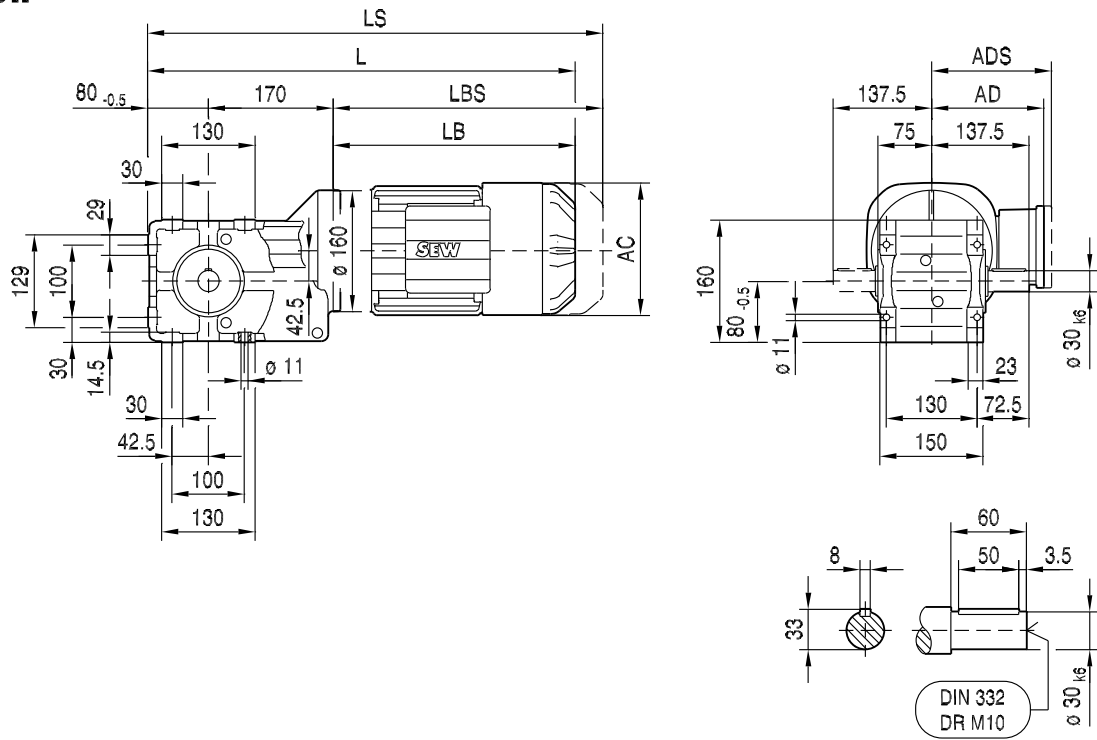
	DRL71S	DRL71M	DRL80S	DRL80M	DRL90L		
AC	139	139	156	156	179		
AD	119	119	128	128	140		
ADS	129	129	139	139	150		
L	483	508	527	558	575		
LS	547	572	607	638	661		
LB	288	313	332	363	380		
LBS	352	377	412	443	466		

21932387/EN – 05/2015

K39..

33 044 00 15

2

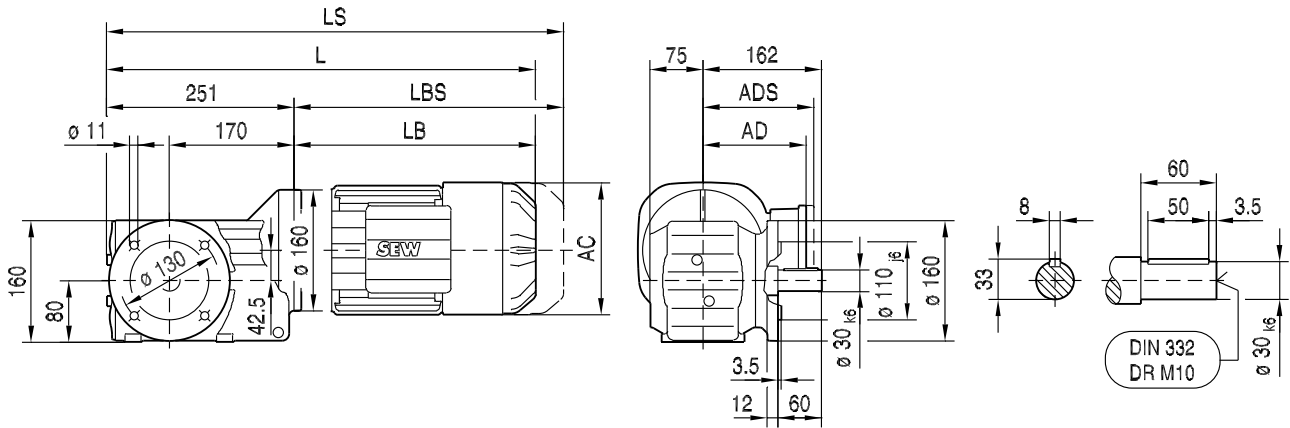


21932387/EN – 05/2015

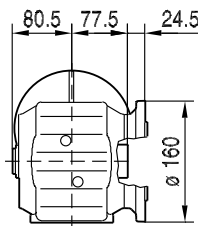
	DRL71S	DRL71M	DRL80S	DRL80M	DRL90L	DRL100L		
AC	139	139	156	156	179	197		
AD	119	119	128	128	140	157		
ADS	129	129	139	139	150	158		
L	530	555	576	607	621	680		
LS	595	620	656	687	707	767		
LB	280	305	326	357	371	430		
LBS	345	370	406	437	457	517		

33 045 00 15

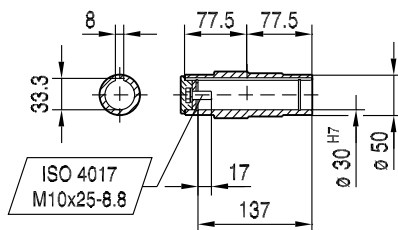
KF39..



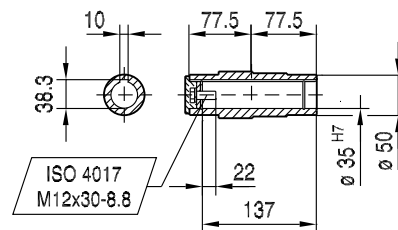
KAF39..



$\phi 30 H7$



$\phi 35 H7$

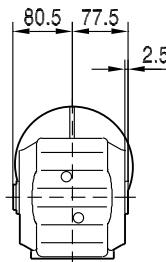
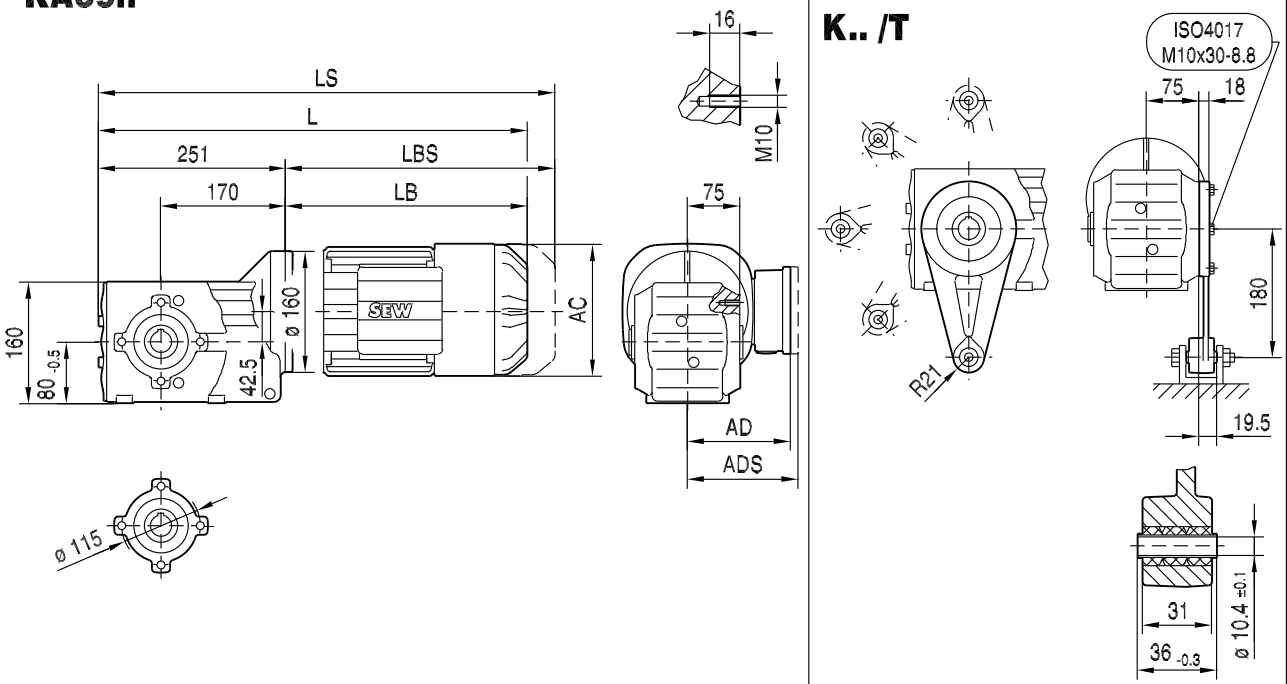


	DRL71S	DRL71M	DRL80S	DRL80M	DRL90L	DRL100L		
AC	139	139	156	156	179	197		
AD	119	119	128	128	140	157		
ADS	129	129	139	139	150	158		
L	531	556	577	608	622	681		
LS	596	621	657	688	708	768		
LB	280	305	326	357	371	430		
LBS	345	370	406	437	457	517		

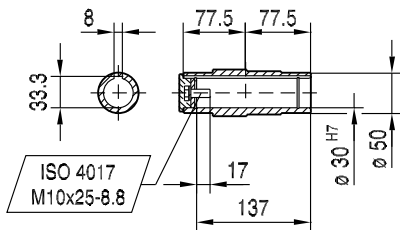
21932387/EN – 05/2015

KA39..

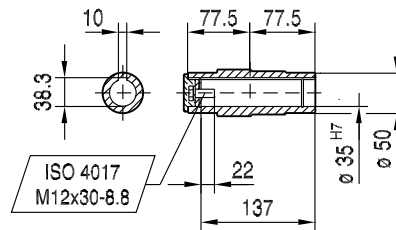
33 046 00 15



Ø 30 H7



Ø 35 H7

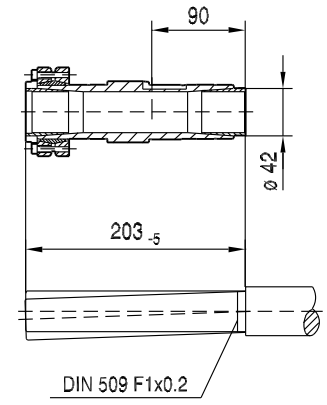
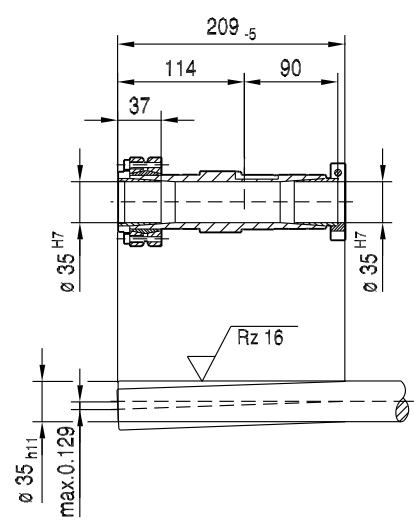
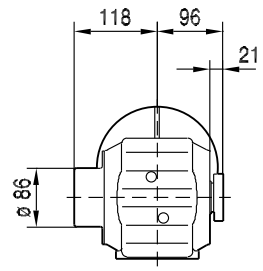
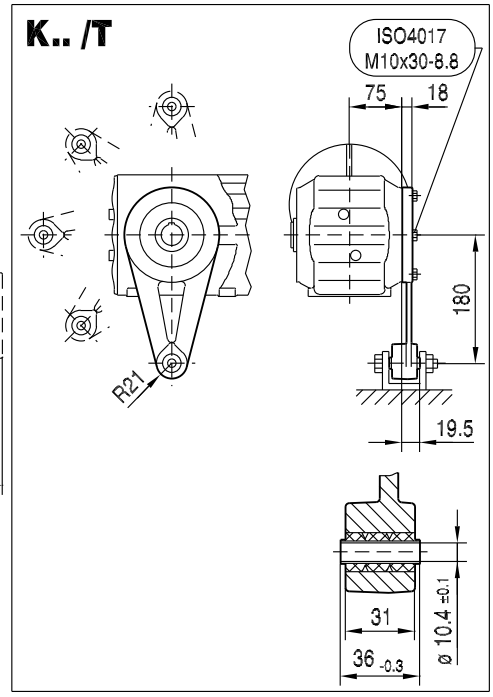
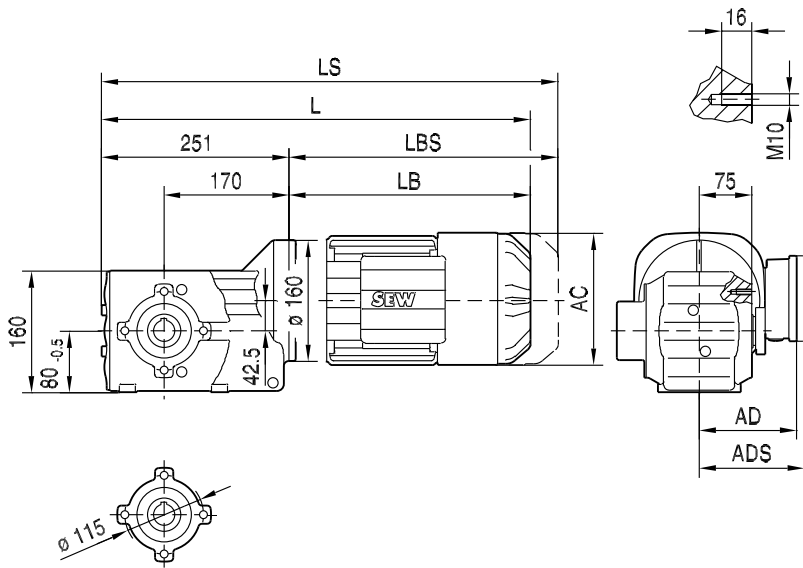


21932387/EN – 05/2015

	DRL71S	DRL71M	DRL80S	DRL80M	DRL90L	DRL100L		
AC	139	139	156	156	179	197		
AD	119	119	128	128	140	157		
ADS	129	129	139	139	150	158		
L	531	556	577	608	622	681		
LS	596	621	657	688	708	768		
LB	280	305	326	357	371	430		
LBS	345	370	406	437	457	517		

33 047 00 15

KT39..

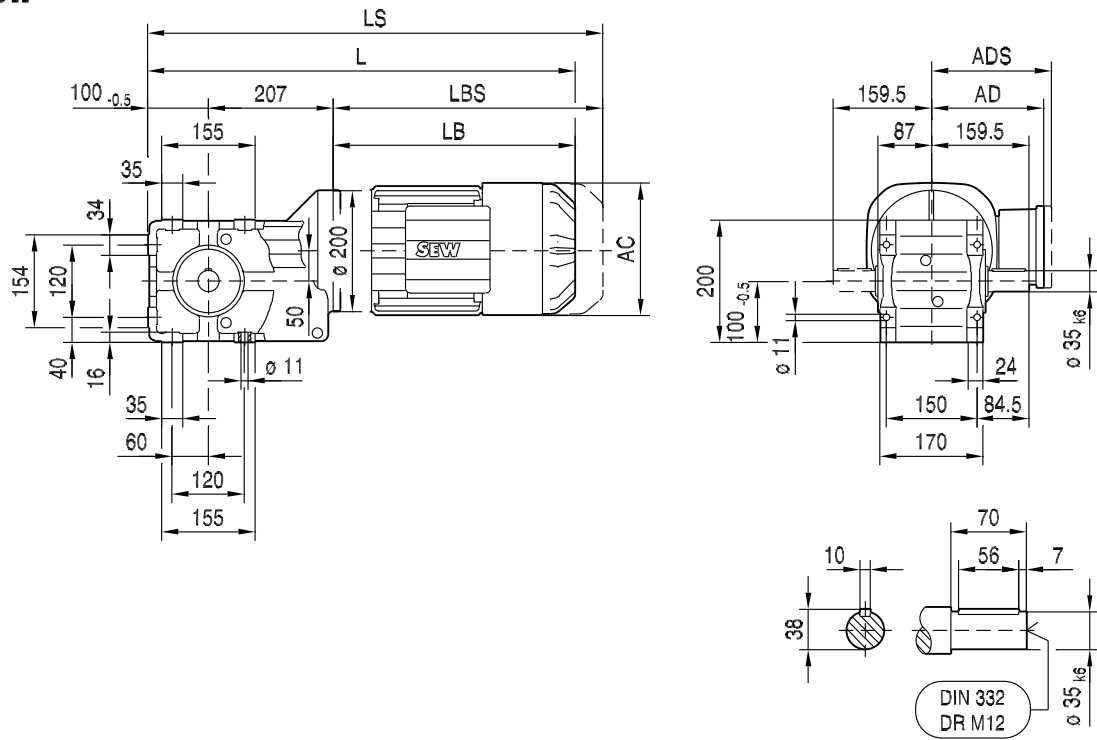


	DRL71S	DRL71M	DRL80S	DRL80M	DRL90L	DRL100L		
AC	139	139	156	156	179	197		
AD	119	119	128	128	140	157		
ADS	129	129	139	139	150	158		
L	531	556	577	608	622	681		
LS	596	621	657	688	708	768		
LB	280	305	326	357	371	430		
LBS	345	370	406	437	457	517		

21932387/EN – 05/2015

K49..

33 048 00 15



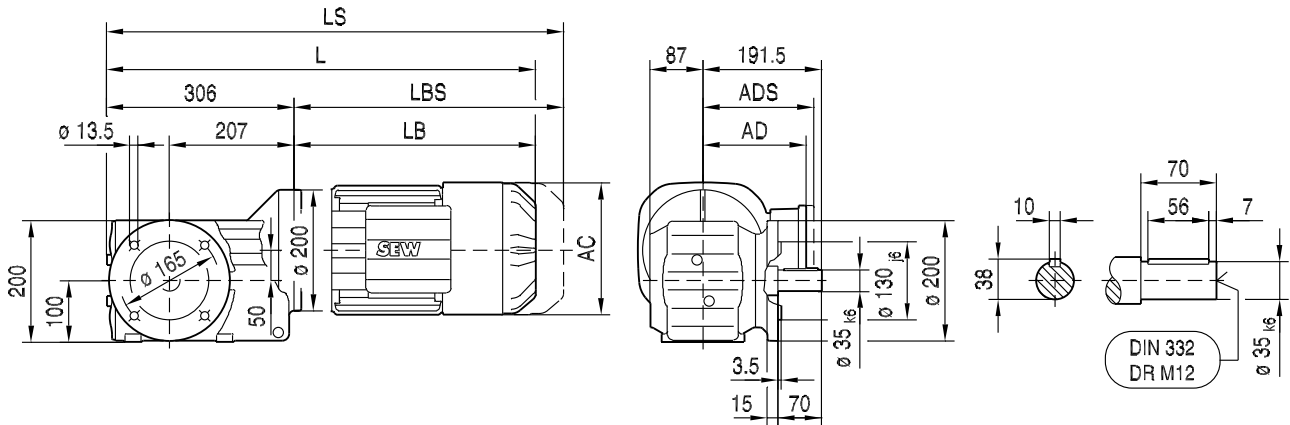
2

21932387/EN – 05/2015

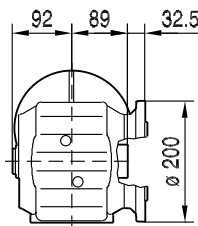
	DRL71S	DRL71M	DRL80S	DRL80M	DRL90L	DRL100L	DRL132S	
AC	139	139	156	156	179	197	221	
AD	119	119	128	128	140	157	170	
ADS	129	129	139	139	150	158	172	
L	580	605	626	657	671	730	811	
LS	645	670	706	737	757	817	919	
LB	273	298	319	350	364	423	504	
LBS	338	363	399	430	450	510	612	

33 049 00 15

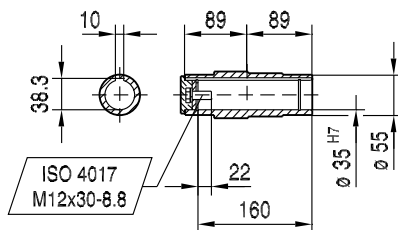
KF49..



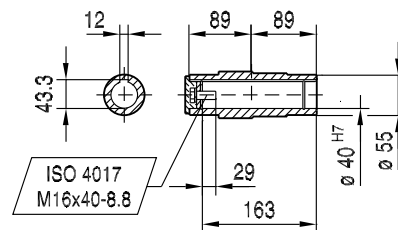
KAF49..



$\phi 35$ H7



$\phi 40$ H7

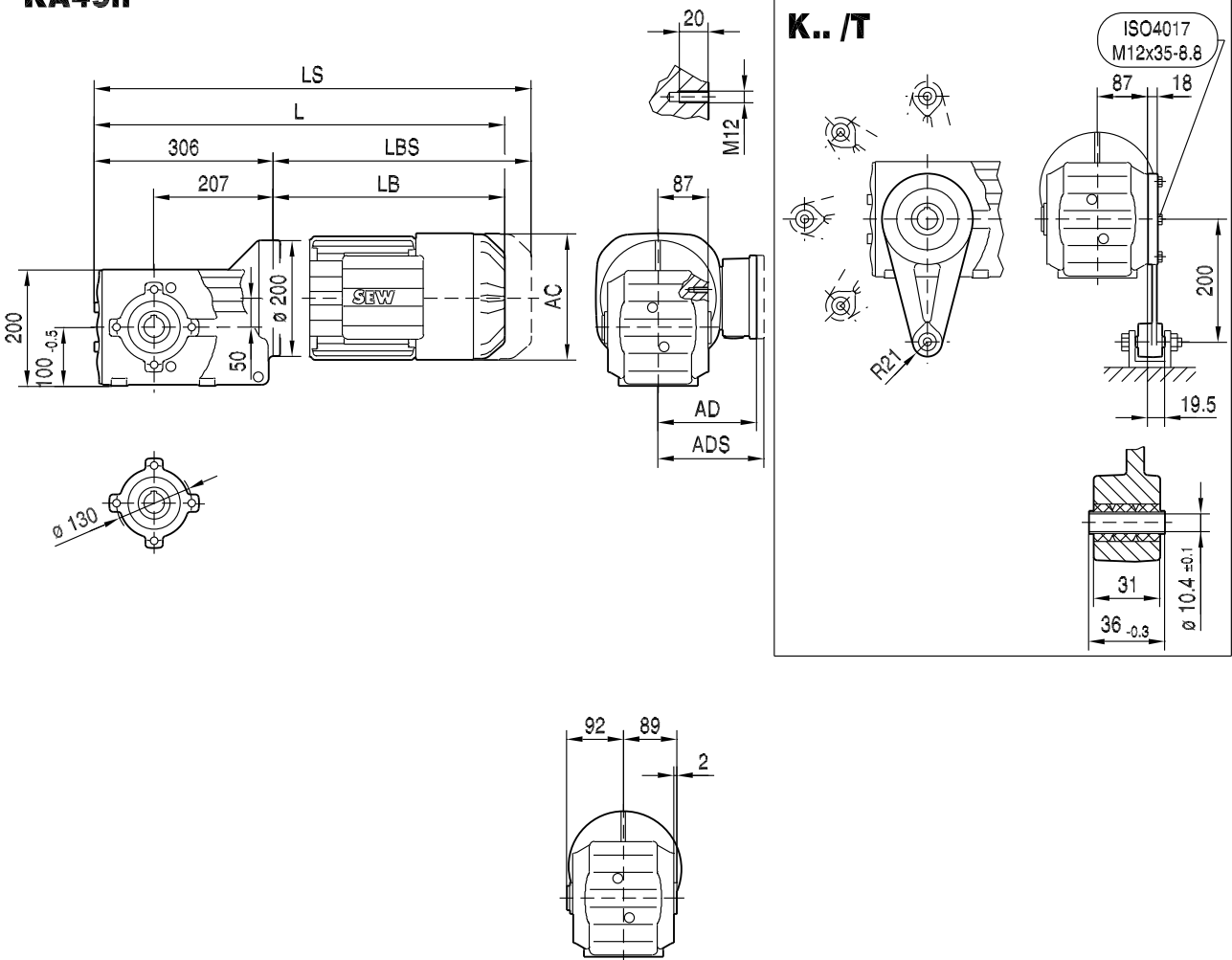


	DRL71S	DRL71M	DRL80S	DRL80M	DRL90L	DRL100L	DRL132S	
AC	139	139	156	156	179	197	221	
AD	119	119	128	128	140	157	170	
ADS	129	129	139	139	150	158	172	
L	579	604	625	656	670	729	810	
LS	644	669	705	736	756	816	918	
LB	273	298	319	350	364	423	504	
LBS	338	363	399	430	450	510	612	

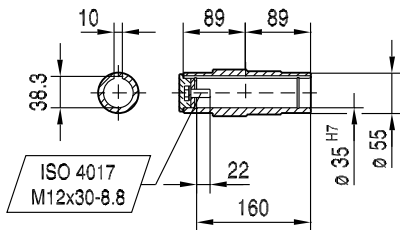
21932387/EN – 05/2015

KA49..

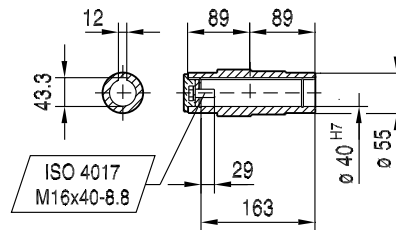
33 050 00 15



Ø 35 H7



Ø 40 H7

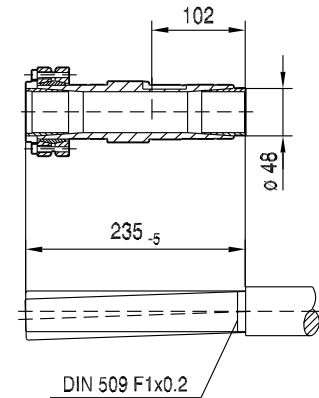
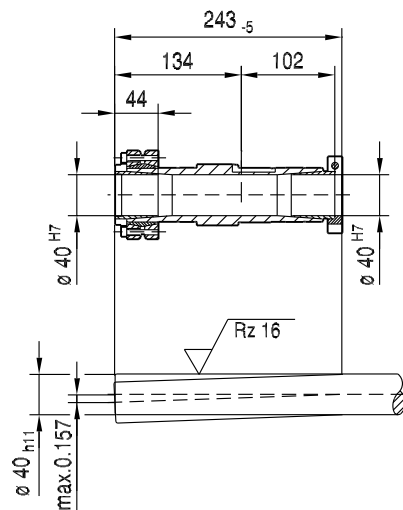
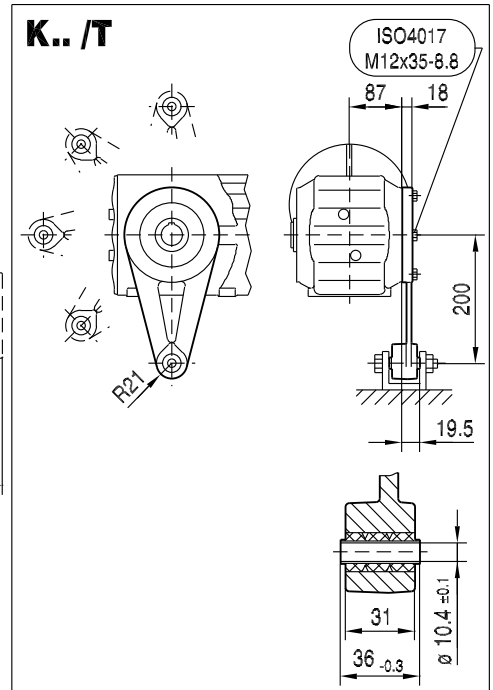
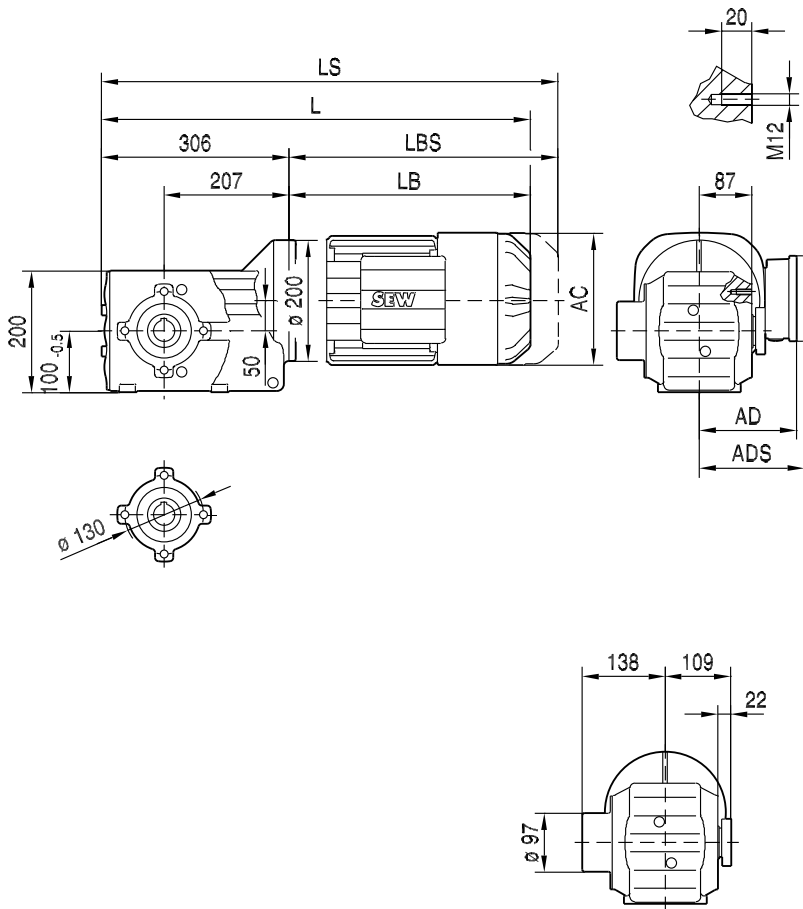


21932387/EN – 05/2015

	DRL71S	DRL71M	DRL80S	DRL80M	DRL90L	DRL100L	DRL132S	
AC	139	139	156	156	179	197	221	
AD	119	119	128	128	140	157	170	
ADS	129	129	139	139	150	158	172	
L	579	604	625	656	670	729	810	
LS	644	669	705	736	756	816	918	
LB	273	298	319	350	364	423	504	
LBS	338	363	399	430	450	510	612	

33 051 00 15


KT49..




	DRL71S	DRL71M	DRL80S	DRL80M	DRL90L	DRL100L	DRL132S	
AC	139	139	156	156	179	197	221	
AD	119	119	128	128	140	157	170	
ADS	129	129	139	139	150	158	172	
L	579	604	625	656	670	729	810	
LS	644	669	705	736	756	816	918	
LB	273	298	319	350	364	423	504	
LBS	338	363	399	430	450	510	612	

21932387/EN – 05/2015

2.11 Selection tables for K..9 / DRC..

			DRC1		DRC2		M _{aEmergOff} [Nm]	i
	na ₁ [min ⁻¹]	na ₂₀₀₀ [min ⁻¹]	M _a [Nm]	M _{apk} [Nm]	M _a [Nm]	M _{apk} [Nm]		
K19  2	0.22	444	12	29	31	79	132	4.50
	0.19	388	13	33	36	>88	132	5.16
	0.18	361	14	36	39	>88	132	5.54
	0.16	312	16	41	45	>88	132	6.41
	0.14	289	18	44	48	>88	132	6.91
	0.12	247	21	52			132	8.09
	0.10	209	25	62			104	9.58
	0.10	194	26	66	71	>83	124	10.32
	0.08	169	30	75	>79	>86	129	11.84
	0.08	157	32	81	>80	>88	132	12.70
	0.07	136	37	>88	>80	>88	132	14.69
	0.06	126	40	>88	>80	>88	132	15.84
	0.05	108	47	>88			132	18.55
	0.05	91	56	>88			132	21.98
	0.04	83	61	>88			132	24.06
	0.04	74					132	26.88
	0.04	74	>60	>66	>60	>66	99	27.16
	0.03	69					132	29.14
	0.03	68	>61	>67	>61	>67	100	29.29
	0.03	63					132	31.74
	0.03	58	>64	>70			105	34.29
	0.02	49	>67	>73			110	40.63
	0.02	45	>69	>75			112	44.48
0.02	40					116	49.69	
0.02	37					116	53.88	
0.02	34					116	58.68	

m [kg]		DRC1	DRC2
K19	 2	24	30

KF: + 0.3 kg / KA: + -0.5 kg / KAF: + 0.0 kg

2


Technical data


Selection tables for K..9 / DRC..

DRC..							F _{Ramax}				F _{Rapk}			
n _e = 1400							K	KF	KA	KAF	K	KF	KA	KAF
i	M _{amax} [Nm]	M _{apk} [Nm]	M _{aEmergOff} [Nm]	n _{ak} [1/min]	J _G 10 ⁻⁴ [kg*m ²]		[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]
4.50	80	88	132	433	0.38		2010	1620	2500	2500	4190	3630	4500	4500
5.16	80	88	132	424	0.30		2140	1720	2650	2650	4190	3630	4500	4500
5.54	80	88	132	419	0.27		2200	1780	2730	2730	4190	3630	4500	4500
6.41	80	88	132	410	0.21		2340	1890	2900	2900	4190	3630	4500	4500
6.91	80	88	132	407	0.18		2420	1950	3000	3000	4190	3630	4500	4500
8.09	80	88	132	399	0.14		2590	2080	3200	3200	4190	3630	4500	4500
9.58	63	69	104	731	0.11		2910	2340	3600	3600	4340	3670	4500	4500
10.32	76	83	124	102	0.22		2720	2190	3370	3370	4230	3610	4500	4500
11.84	79	86	129	90	0.18		2850	2300	3530	3530	4210	3600	4500	4500
12.70	80	88	132	83	0.16		2930	2360	3630	3630	4190	3600	4500	4500
14.69	80	88	132	82	0.13		3110	2510	3860	3860	4190	3600	4500	4500
15.84	80	88	132	81	0.12		3210	2590	3980	3980	4190	3600	4500	4500
18.55	80	88	132	81	0,092		3430	2760	4250	4250	4190	3600	4500	4500
21.98	80	88	132	81	0,072		3680	2960	4500	4500	4190	3600	4500	4500
24.06	80	88	132	81	0,063		3820	3080	4500	4500	4190	3600	4500	4500
26.88	80	88	132	80	0,054		3990	3220	4500	4500	4190	3600	4500	4500
27.16	60	66	99	38	0.13		4090	3290	4500	4500	4360	3630	4500	4500
29.14	80	88	132	80	0,048		4120	3320	4500	4500	4190	3600	4500	4500
29.29	61	67	100	36	0.11		4200	3380	4500	4500	4350	3630	4500	4500
31.74	80	88	132	80	0,042		4260	3440	4500	4500	4190	3600	4500	4500
34.29	64	70	105	31	0,090		4370	3570	4500	4500	4330	3620	4500	4500
40.63	67	73	110	27	0,071		4350	3630	4500	4500	4310	3610	4500	4500
44.48	69	75	112	24	0,062		4340	3620	4500	4500	4290	3600	4500	4500
49.69	70	77	116	22	0,053		4330	3620	4500	4500	4280	3600	4500	4500
53.88	70	77	116	22	0,047		4330	3620	4500	4500	4280	3600	4500	4500
58.68	70	77	116	22	0,042		4330	3620	4500	4500	4280	3600	4500	4500

K19
 2

21932387/EN – 05/2015

			DRC1		DRC2		M _{aEmergOff} [Nm]	i
	na ₁ [min ⁻¹]	na ₂₀₀₀ [min ⁻¹]	M _a [Nm]	M _{apk} [Nm]	M _a [Nm]	M _{apk} [Nm]		
K29  2	0.31	627	8.2	20	22	56	182	3.19
	0.26	510	10	25	27	68	205	3.92
	0.20	392	13	33	36	89	182	5.10
	0.17	348	15	37	40	100	184	5.75
	0.14	288	18	45	49	121	184	6.95
	0.13	267	19	48	52	129	200	7.48
	0.12	234	22	55	60	>134	200	8.53
	0.11	218	23	58	63	>143	210	9.17
	0.10	202	25	64			182	9.90
	0.08	168	30	76	83	>143	210	11.94
	0.07	148	34	86	93	>143	210	13.47
	0.06	123	41	104	113	>143	210	16.29
	0.05	100	51	127	>130	>143	210	19.99
	0.05	91	53	>115	>105	>115	172	22.08
	0.04	86	59	>143			210	23.19
	0.04	80	60	>119	>109	>119	178	24.91
	0.04	73	69	>143			210	27.23
	0.03	67	76	>143			210	29.69
	0.03	66	73	>126	>115	>126	189	30.11
	0.03	60					210	33.15
	0.03	56					210	35.83
	0.03	54	90	>134	>122	>134	200	36.96
	0.03	51					210	38.90
	0.02	47	103	>140			210	42.87
0.02	40	121	>143			210	50.35	
0.02	36	>130	>143			210	54.89	
0.02	33					210	61.28	
0.02	30					210	66.25	
0.01	28					210	71.93	

m [kg]		DRC1	DRC2
K29	 2	26	32

KF: + 1.0 kg / KA: + -0.5 kg / KAF: + 0.4 kg

2


Technical data


Selection tables for K..9 / DRC..

DRC..							F _{Ramax}				F _{Rapk}			
n _e = 1400							K	KF	KA	KAF	K	KF	KA	KAF
i	M _{amax} [Nm]	M _{apk} [Nm]	M _{aEmergOff} [Nm]	n _{ak} [1/min]	J _G 10 ⁻⁴ [kg*m ²]		[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]
3.19	110	121	182	1082	1.6		1830	1200	1860	1860	5070	6000	6000	6000
3.92	126	138	205	722	1.1		1910	1240	1920	1920	5030	6000	6000	6000
5.10	110	121	182	1080	0.68		2260	1500	2320	2320	5070	6000	6000	6000
5.75	112	123	184	1030	0.55		2370	1580	2440	2440	5070	6000	6000	6000
6.95	112	123	184	1007	0.39		2580	1720	2660	2660	5070	6000	6000	6000
7.48	123	135	200	138	0.74		2300	1480	2300	2300	4980	6000	6000	6000
8.53	122	134	200	755	0.27		2740	1830	2830	2830	5040	6000	6000	6000
9.17	130	143	210	112	0.55		2470	1600	2480	2480	4960	6000	6000	6000
9.90	110	121	182	707	0.21		3000	2020	3120	3120	5070	6000	6000	6000
11.94	130	143	210	112	0.37		2810	1830	2840	2840	4960	6000	6000	6000
13.47	130	143	210	111	0.30		2970	1950	3010	3010	4960	6000	6000	6000
16.29	130	143	210	111	0.22		3240	2140	3300	3300	4960	6000	6000	6000
19.99	130	143	210	111	0.16		3550	2350	3640	3640	4960	6000	6000	6000
22.08	105	115	172	47	0.33		3820	2560	3950	3950	5020	6000	6000	6000
23.19	130	143	210	110	0.12		3790	2520	3900	3900	4960	6000	6000	6000
24.91	109	119	178	42	0.27		3980	2660	4120	4120	5010	6000	6000	6000
27.23	130	143	210	110	0,098		4060	2710	4190	4190	4960	6000	6000	6000
29.69	130	143	210	110	0,086		4210	2820	4360	4360	4960	6000	6000	6000
30.11	115	126	189	35	0.20		4250	2850	4400	4400	4990	6000	6000	6000
33.15	130	143	210	110	0,073		4410	2960	4580	4580	4960	6000	6000	6000
35.83	130	143	210	110	0,065		4560	3060	4740	4740	4960	6000	6000	6000
36.96	122	134	200	28	0.14		4560	3060	4730	4730	4960	6000	6000	6000
38.90	130	143	210	110	0,057		4720	3170	4910	4910	4960	6000	6000	6000
42.87	128	140	210	24	0.11		4790	3210	4970	4970	4940	6000	6000	6000
50.35	130	143	210	22	0,090		4980	3430	5300	5300	4930	6000	6000	6000
54.89	130	143	210	23	0,079		4980	3560	5510	5510	4930	6000	6000	6000
61.28	130	143	210	23	0,068		4980	3730	5770	5770	4930	6000	6000	6000
66.25	130	143	210	22	0,060		4980	3860	5970	5970	4930	6000	6000	6000
71.93	130	143	210	23	0,053		4980	4000	6000	6000	4930	6000	6000	6000

K29
 2

21932387/EN – 05/2015

	na ₁ [min ⁻¹]	na ₂₀₀₀ [min ⁻¹]	DRC1		DRC2		M _{aEmergOff} [Nm]	i
			M _a [Nm]	M _{apk} [Nm]	M _a [Nm]	M _{apk} [Nm]		
K39  2	0.36	712			19	48	285	2.81
	0.25	508			27	68	365	3.94
	0.22	442	11	29	31	78	405	4.52
	0.19	383	13	33	36	90	440	5.22
	0.17	348	15	37	40	99	465	5.75
	0.15	296	17	43	47	117	510	6.75
	0.14	280	18	45	49	124	510	7.15
	0.12	246	21	52	56	140	510	8.12
	0.11	222	23	57	62	156	510	9.00
	0.09	189	27	67	73	183	485	10.61
	0.08	165	31	77	84	205	430	12.09
	0.08	157	32	81	88	215	425	12.73
	0.07	149			88	220	455	13.44
	0.06	130	37	93	101	250	475	15.44
	0.06	112	43	107	117	290	490	17.83
	0.05	102	47	118	129	320	500	19.62
	0.04	87	56	139	151	375	510	23.04
	0.04	82	59	147	160	395	510	24.40
	0.04	72	67	167	182	>410	510	27.73
	0.03	65	74	185	200	>410	510	30.72
0.03	55	87	215	235	>410	510	36.22	
0.02	48	100	245	270	>410	510	41.28	
0.02	46	105	260	280	>410	510	43.45	
0.02	40	120	295			510	49.69	
0.02	34	140	350			510	58.24	

m [kg]		DRC1	DRC2
K39	 2	37	43

KF: + 1.5 kg / KA: + -1.0 kg / KAF: + 0.5 kg

2


Technical data


Selection tables for K..9 / DRC..

DRC..							F _{Ramax}				F _{Rapk}			
n _e = 1400		M _{amax}	M _{apk}	M _{aEmergOff}	n _{ak}	J _G 10 ⁻⁴	K	KF	KA	KAF	K	KF	KA	KAF
i	[Nm]	[Nm]	[Nm]	[1/min]	[kg*m ²]	[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]
2.81	170	255	285	811	7.9	2870	2460	2180	2180	7500	6260	7500	7500	
3.94	215	320	365	378	4.6	3070	2630	2260	2260	7500	6180	7500	7500	
4.52	240	360	405	257	3.6	3130	2680	1730	1730	7500	6130	7500	7500	
5.22	260	390	440	192	2.9	3240	2770	960	960	7500	6090	7500	7500	
5.75	275	410	465	158	2.5	3300	2830	290	290	7470	6060	7500	7500	
6.75	300	435	510	130	2.0	3430	2940	0	0	7300	6020	7500	7500	
7.15	300	435	510	129	1.8	3530	3020	157	157	7300	6020	7500	7500	
8.12	300	385	510	193	1.4	3760	3220	2080	2080	7500	6090	7500	7500	
9.00	300	385	510	192	1.2	3950	3380	2860	2860	7500	6090	7500	7500	
10.61	285	370	485	218	0.91	4360	3730	3250	3250	7500	6110	7500	7500	
12.09	255	295	430	464	0.65	4790	4110	3700	3700	7500	6210	7500	7500	
12.73	250	295	425	463	0.58	4930	4220	3830	3830	7500	6210	7500	7500	
13.44	270	405	455	27	2.6	4160	3560	2830	2830	7500	5980	7500	7500	
15.44	280	410	475	26	2.2	4380	3750	2990	2990	7490	5960	7500	7500	
17.83	290	410	490	25	1.8	4630	3960	3180	3180	7490	5960	7500	7500	
19.62	295	410	500	25	1.5	4820	4120	3330	3330	7490	5960	7500	7500	
23.04	300	410	510	24	1.3	5180	4440	3630	3630	7490	5960	7500	7500	
24.40	300	410	510	24	1.2	5330	4560	3760	3760	7490	5960	7500	7500	
27.73	300	410	510	24	0.95	5670	4860	4070	4070	7490	5960	7500	7500	
30.72	300	410	510	24	0.82	5960	5100	4320	4320	7490	5960	7500	7500	
36.22	300	410	510	23	0.65	6440	5520	4740	4740	7490	5960	7500	7500	
41.28	300	410	510	23	0.44	6840	5860	5100	5100	7490	5960	7500	7500	
43.45	300	410	510	23	0.39	7000	6000	5240	5240	7490	5960	7500	7500	
49.69	300	410	510	23	0.32	7440	6150	5630	5630	7490	5960	7500	7500	
58.24	300	410	510	23	0.26	7500	6150	6110	6110	7490	5960	7500	7500	


K39
 2

21932387/EN – 05/2015

			DRC1		DRC2		DRC3		DRC4		M _{aEmergOff} [Nm]	i
	na ₁ [min ⁻¹]	na ₂₀₀₀ [min ⁻¹]	M _a [Nm]	M _{apk} [Nm]	M _a [Nm]	M _{apk} [Nm]	M _a [Nm]	M _{apk} [Nm]	M _a [Nm]	M _{apk} [Nm]		
K49  2	0.25	500			28	69	55	137	73	139	745	4.00
	0.21	426			32	81	64	161	86	163	790	4.69
	0.19	378			37	91	73	182	97	184	820	5.29
	0.17	334	15	38	41	104	82	205	110	205	850	5.99
	0.15	293	17	43	47	118	94	230	125	235	850	6.83
	0.13	264	19	48	52	131	104	260	139	260	850	7.58
	0.12	231	22	55	60	150	119	295	159	300	850	8.66
	0.11	219	23	58	63	158	126	310	168	315	850	9.14
	0.10	192	27	66	72	180	143	355	191	360	810	10.42
	0.09	176	29	72	79	196	156	390	205	395	840	11.37
	0.07	149			89	220	176	440	235	445	795	13.38
	0.06	128			104	255	205	515	275	520	830	15.67
	0.06	113			117	290	230	580	310	590	850	17.67
	0.05	100	49	122	133	330	260	>605	350	>605	850	20.03
	0.04	88	56	139	151	375	300	>605	400	>605	850	22.83
	0.04	79	62	154	168	415	330	>605	445	>605	850	25.34
	0.03	69	71	176	192	475	380	>605	>500	>605	850	28.95
	0.03	65	74	186	200	505	400	>605	>500	>605	850	30.55
	0.03	57	85	210	230	575	455	>605	>500	>605	850	34.81
	0.03	53	93	230	250	>605	>500	>605	>500	>605	850	37.98
0.02	45	108	270	290	>605					850	44.44	
0.02	40	123	305	330	>605					850	50.29	
0.02	38	129	320	350	>605					850	52.94	
0.02	33	145	360							850	60.27	
0.01	28	169	420							755	70.19	
0.01	27	181	450							800	75.20	

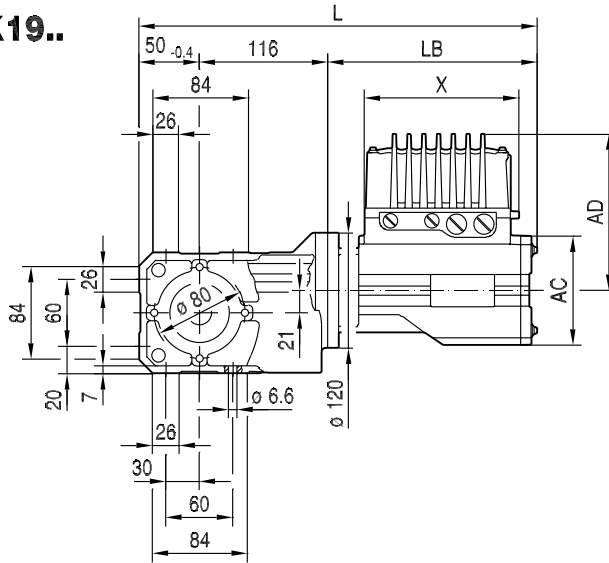
m [kg]		DRC1	DRC2	DRC3	DRC4
K49	 2	50	56	86	60

KF: + 1.7 kg / KA: + -2.8 kg / KAF: + 2.1 kg

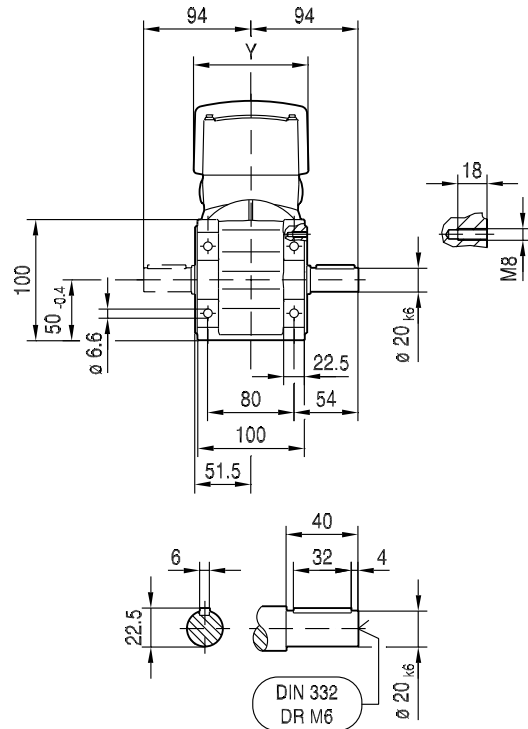
DRC..							F _{Ramax}				F _{Rapk}			
n _e = 1400		M _{amax}	M _{apk}	M _{aEmergOff}	n _{ak}	J _G 10 ⁻⁴	K	KF	KA	KAF	K	KF	KA	KAF
i		[Nm]	[Nm]	[Nm]	[1/min]	[kg*m ²]	[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]
K49  2	4.00	440	605	745	218	11	3110	2390	0	0	9000	9000	9000	9000
	4.69	465	605	790	217	8.8	3270	2600	0	0	9000	9000	9000	9000
	5.29	485	605	820	217	7.2	3400	2770	0	0	9000	9000	9000	9000
	5.99	500	605	850	219	5.9	3570	3030	0	0	9000	9000	9000	9000
	6.83	500	605	850	218	4.8	3840	3250	0	0	9000	9000	9000	9000
	7.58	500	605	850	218	4.1	4050	3440	1030	1030	9000	9000	9000	9000
	8.66	500	605	850	218	3.3	4340	3680	3790	3790	9000	9000	9000	9000
	9.14	500	605	850	218	3.1	4460	3780	3910	3910	9000	9000	9000	9000
	10.42	480	585	810	238	2.4	4860	4120	4330	4330	9000	9000	9000	9000
	11.37	495	605	840	218	2.1	5000	4240	4450	4450	9000	9000	9000	9000
	13.38	470	605	795	46	6.5	4320	3660	3510	3510	9000	9000	9000	9000
	15.67	490	605	830	45	5.2	4590	3890	3750	3750	9000	9000	9000	9000
	17.67	500	605	850	44	4.4	4860	4120	3990	3990	9000	9000	9000	9000
	20.03	500	605	850	43	3.7	5220	4420	4350	4350	9000	9000	9000	9000
	22.83	500	605	850	43	3.1	5610	4750	4750	4750	9000	9000	9000	9000
	25.34	500	605	850	42	2.8	5940	5030	5070	5070	9000	9000	9000	9000
	28.95	500	605	850	42	2.3	6370	5400	5510	5510	9000	9000	9000	9000
	30.55	500	605	850	42	2.1	6550	5550	5690	5690	9000	9000	9000	9000
	34.81	500	605	850	42	1.7	7000	5930	6140	6140	9000	9000	9000	9000
	37.98	500	605	850	41	1.5	7310	6200	6450	6450	9000	9000	9000	9000
44.44	500	605	850	41	1.2	7900	6690	7040	7040	9000	9000	9000	9000	
50.29	500	605	850	41	0.83	8380	7100	7530	7530	9000	9000	9000	9000	
52.94	500	605	850	41	0.75	8590	7280	7730	7730	9000	9000	9000	9000	
60.27	500	605	850	41	0.61	9000	7740	8280	8280	9000	9000	9000	9000	
70.19	445	605	755	40	0.50	9000	8630	9000	9000	9000	9000	9000	9000	
75.20	475	605	800	41	0.43	9000	8720	9000	9000	9000	9000	9000	9000	

2.12 Dimension sheets for K..9 / DRC..

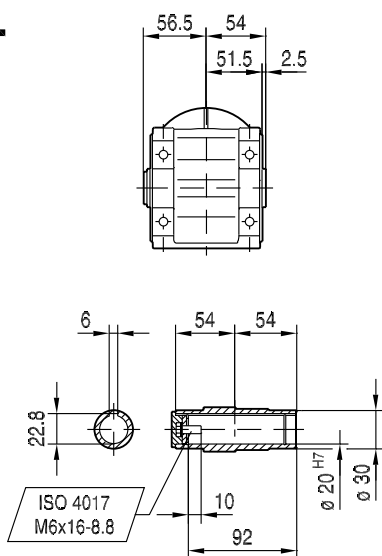
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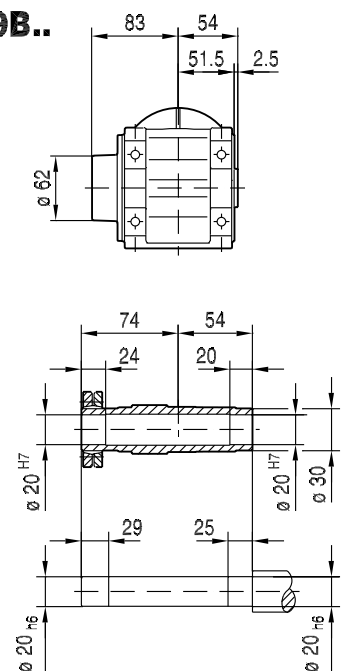
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KA19B..



KH19B..

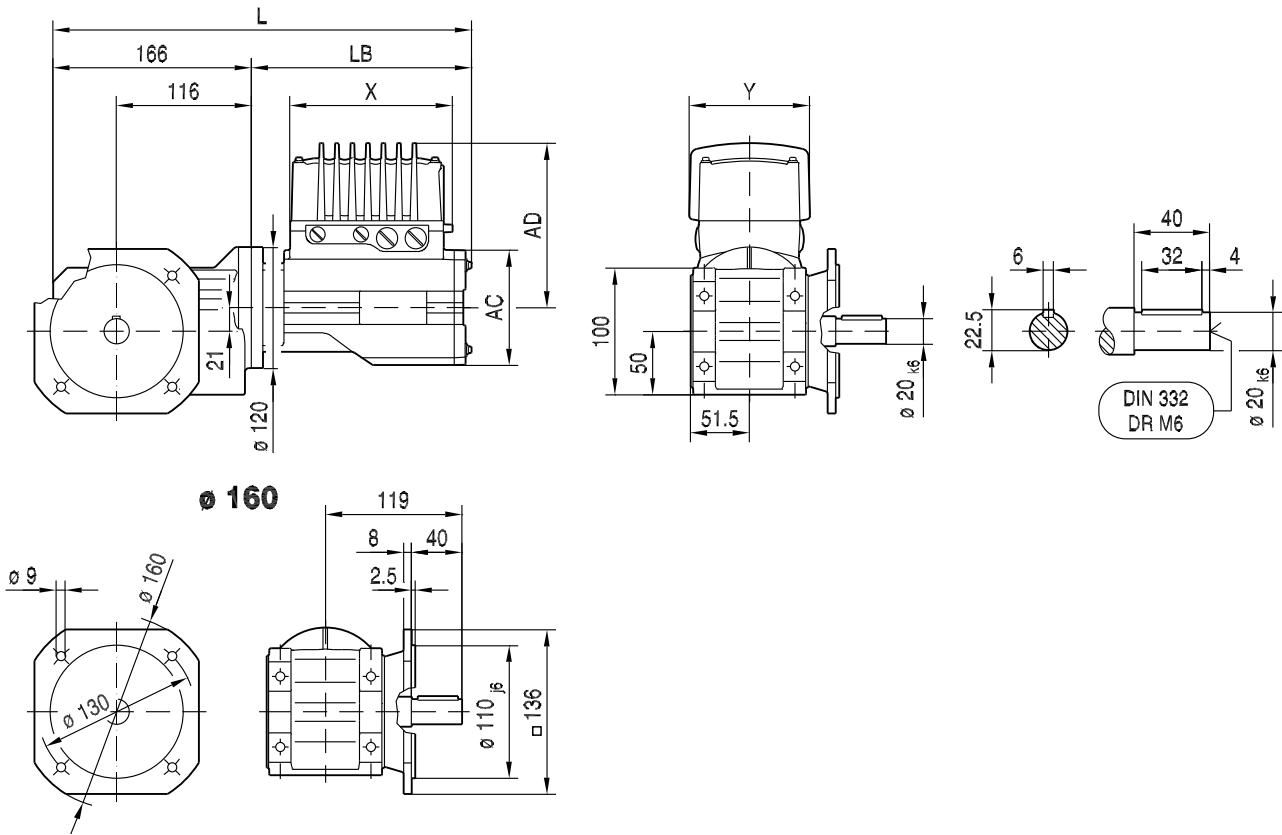


21932387/EN – 05/2015

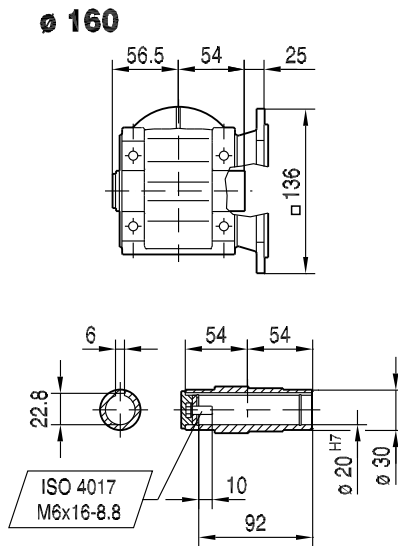
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AC	128	154						
AD/ADS	185	218						
L/LS	460	476						
LB/LBS	294	310						
X	202	223						
Y	134	160						

33 106 00 15

KF19B..



KAF19B..



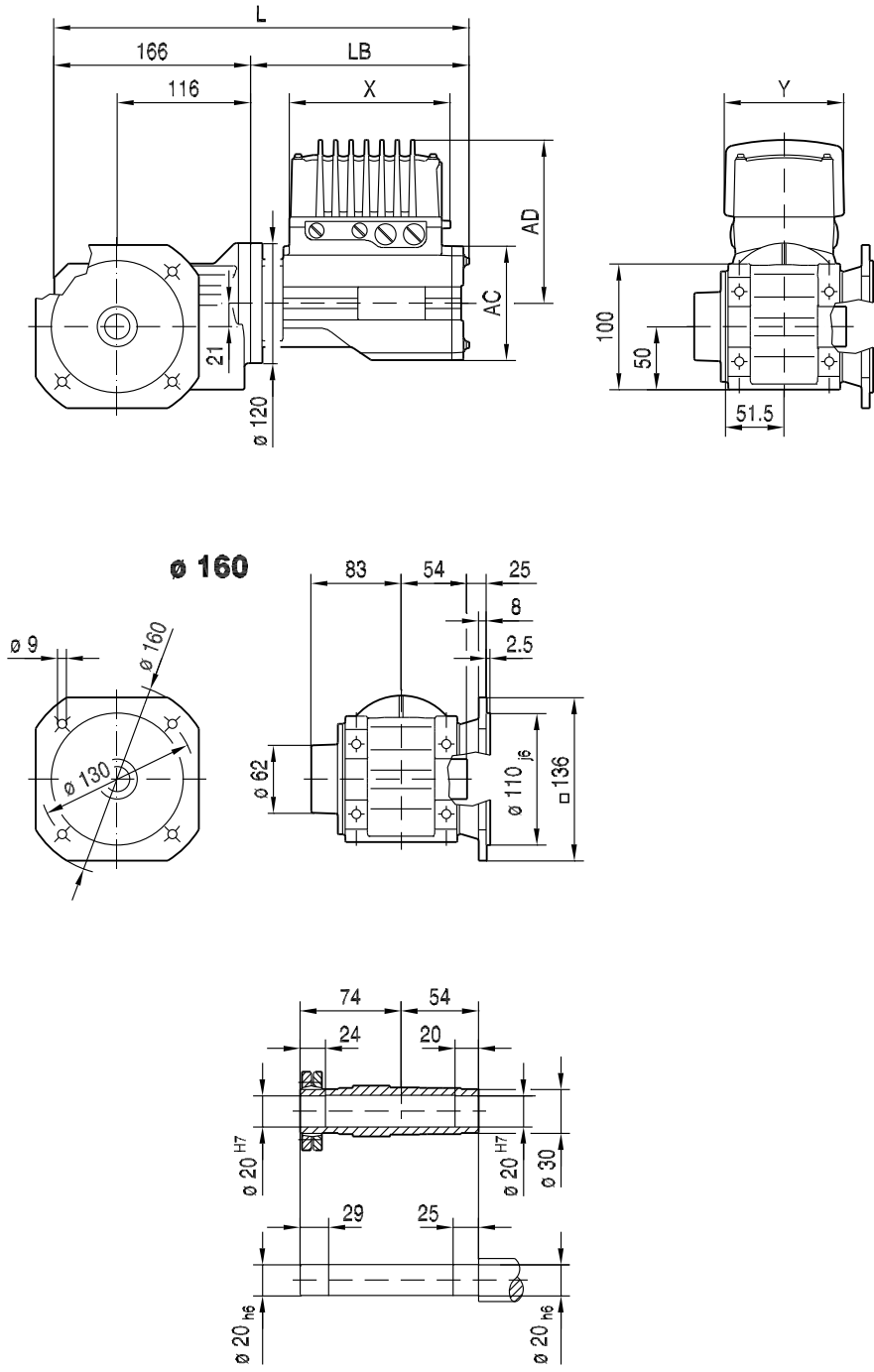
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AD/ADS	185	218					
L/LS	460	476					
LB/LBS	294	310					
X	202	223					
Y	134	160					

21932387/EN – 05/2015

KHF19B..

33 107 00 15

2

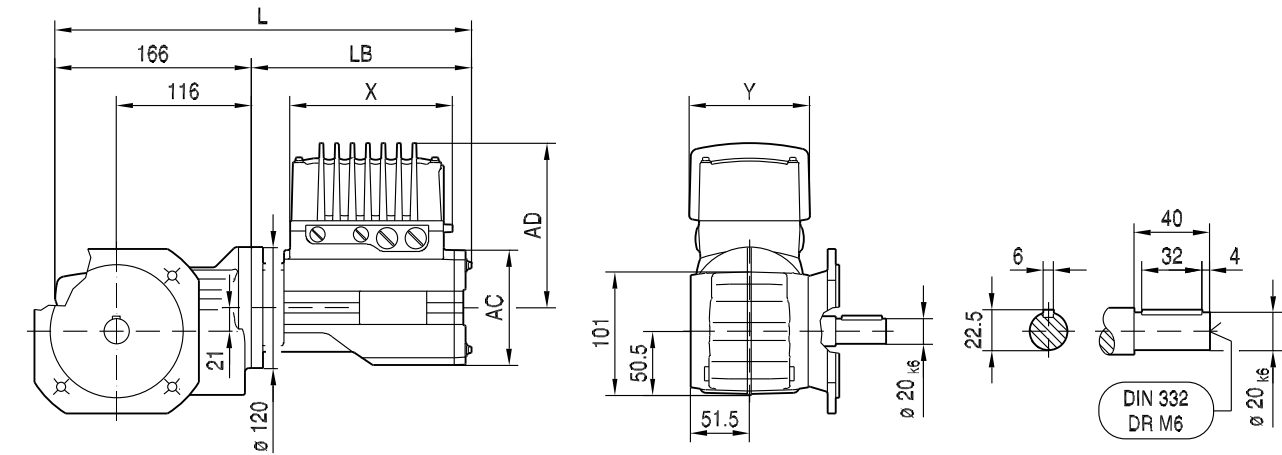


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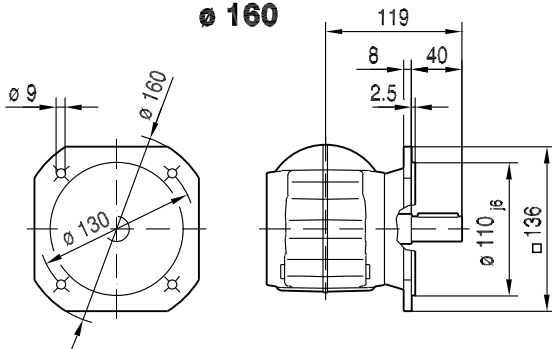
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AD/ADS	185	218					
L/LS	460	476					
LB/LBS	294	310					
X	202	223					
Y	134	160					

33 108 00 15

KF19..

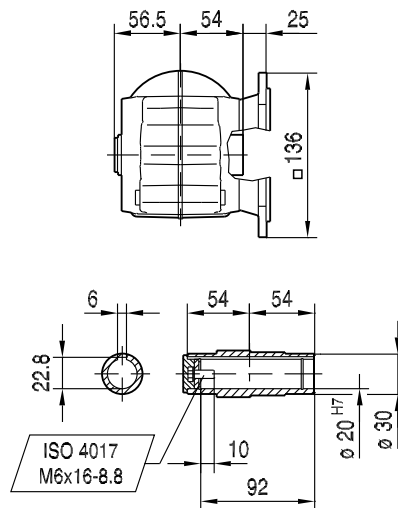


$\varnothing 160$



KAF19..

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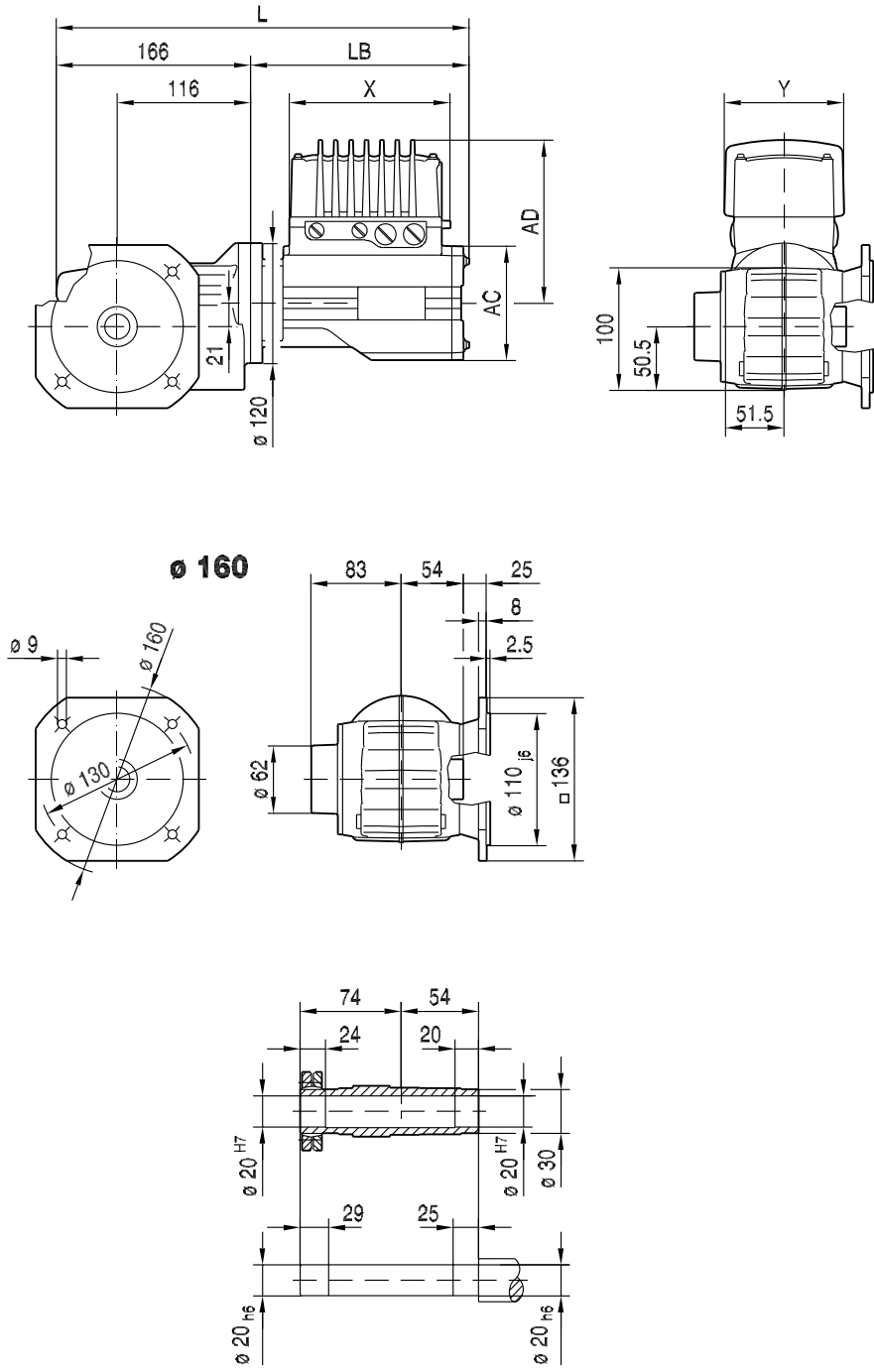
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LB/LBS	294	310					
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Y	134	160					

21932387/EN – 05/2015

KHF19..

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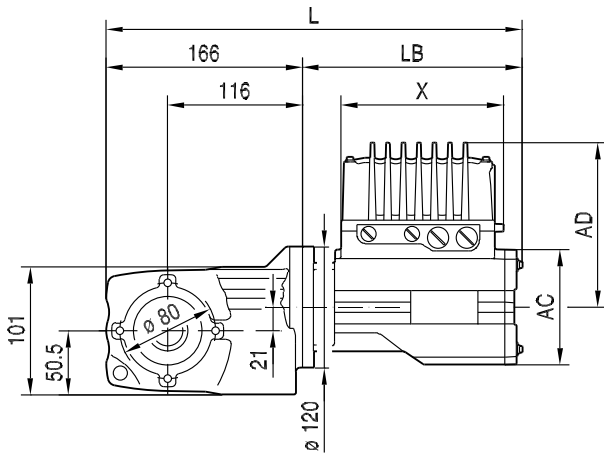
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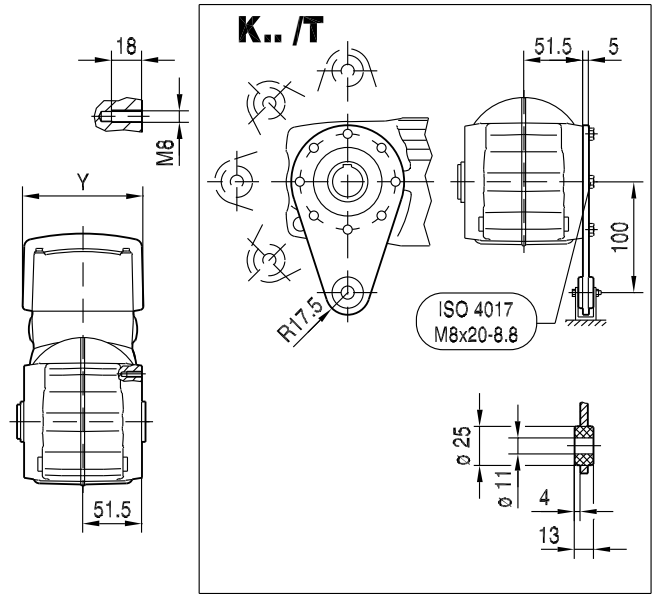
21932387/EN – 05/2015

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L/LS	460	476					
LB/LBS	294	310					
X	202	223					
Y	134	160					

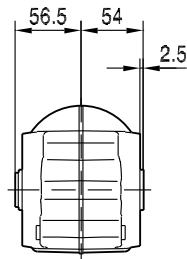
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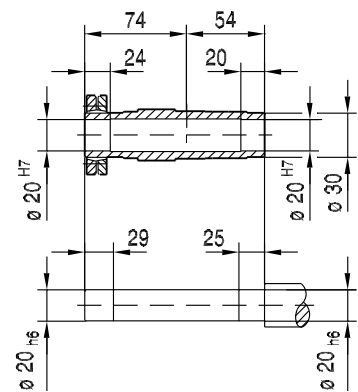
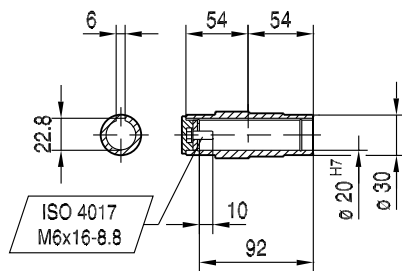
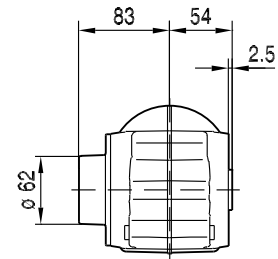
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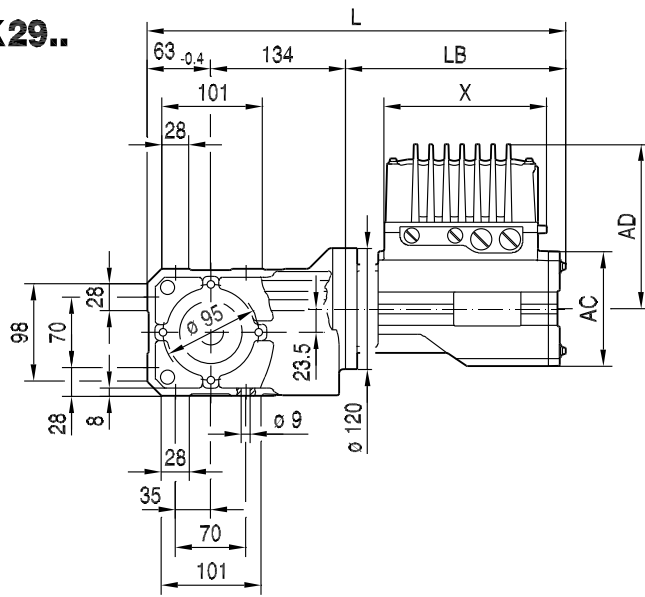
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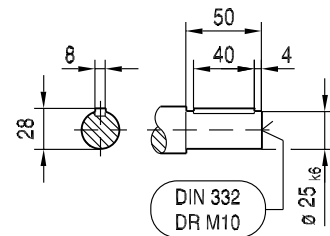
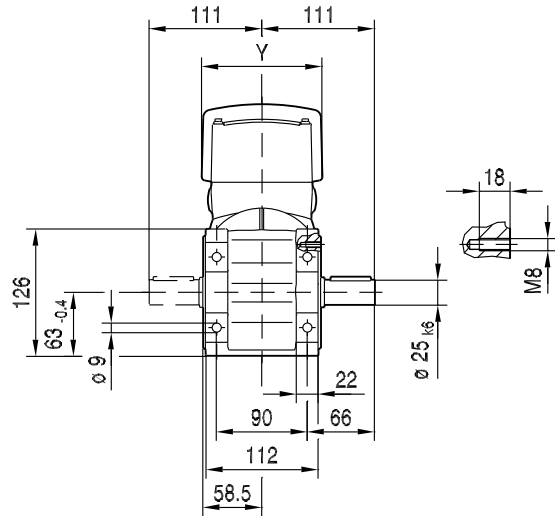
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AD/ADS	185	218					
L/LS	460	476					
LB/LBS	294	310					
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Y	134	160					

21932387/EN – 05/2015

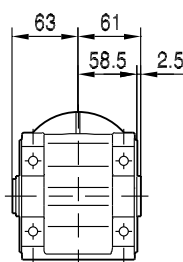
K29..



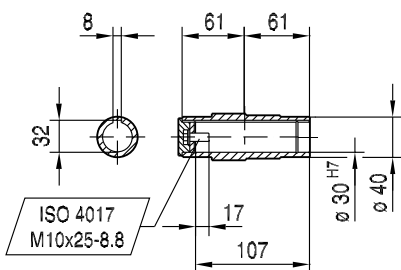
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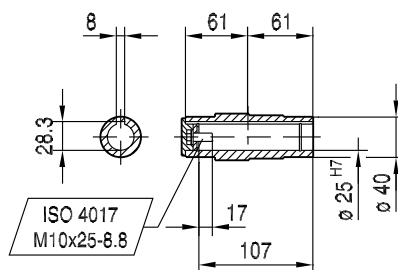
KA29B..



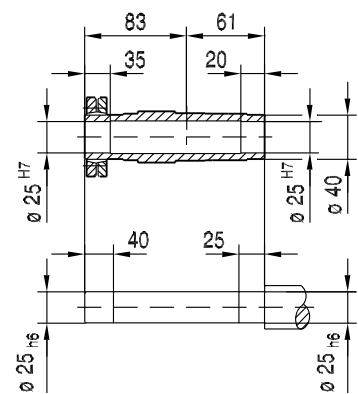
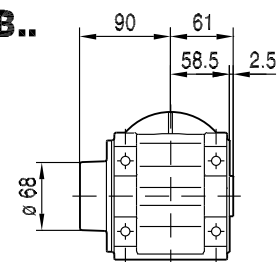
**∅ 30 H7
DIN 6885-3**



∅ 25 H7



KH29B..

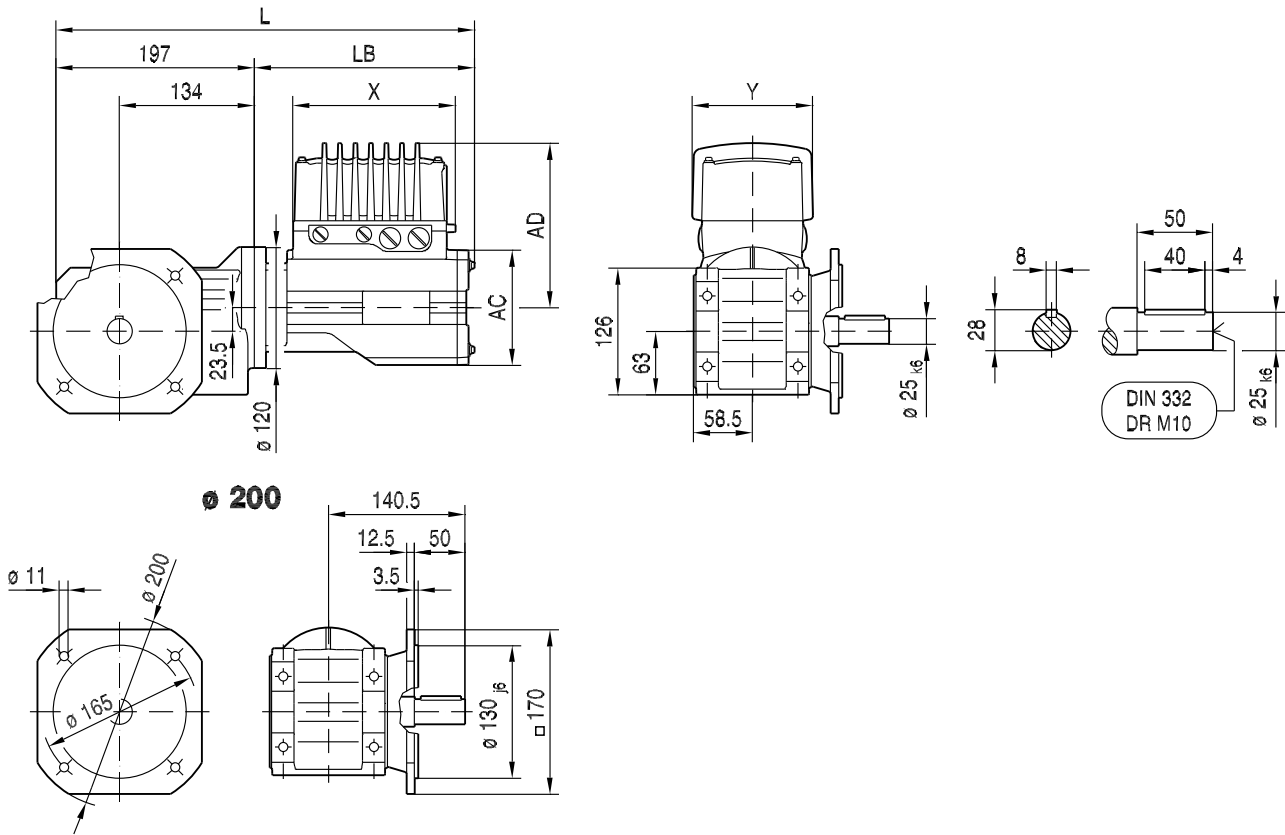


21932387/EN – 05/2015

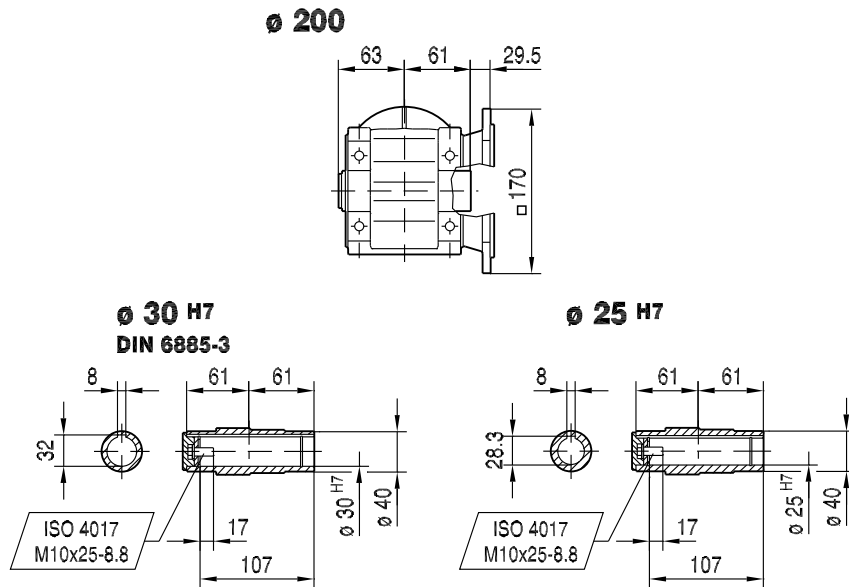
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AC	128	154					
AD/ADS	185	218					
L/LS	491	507					
LB/LBS	294	310					
X	202	223					
Y	134	160					

33 112 00 15

KF29B..



KAF29B..



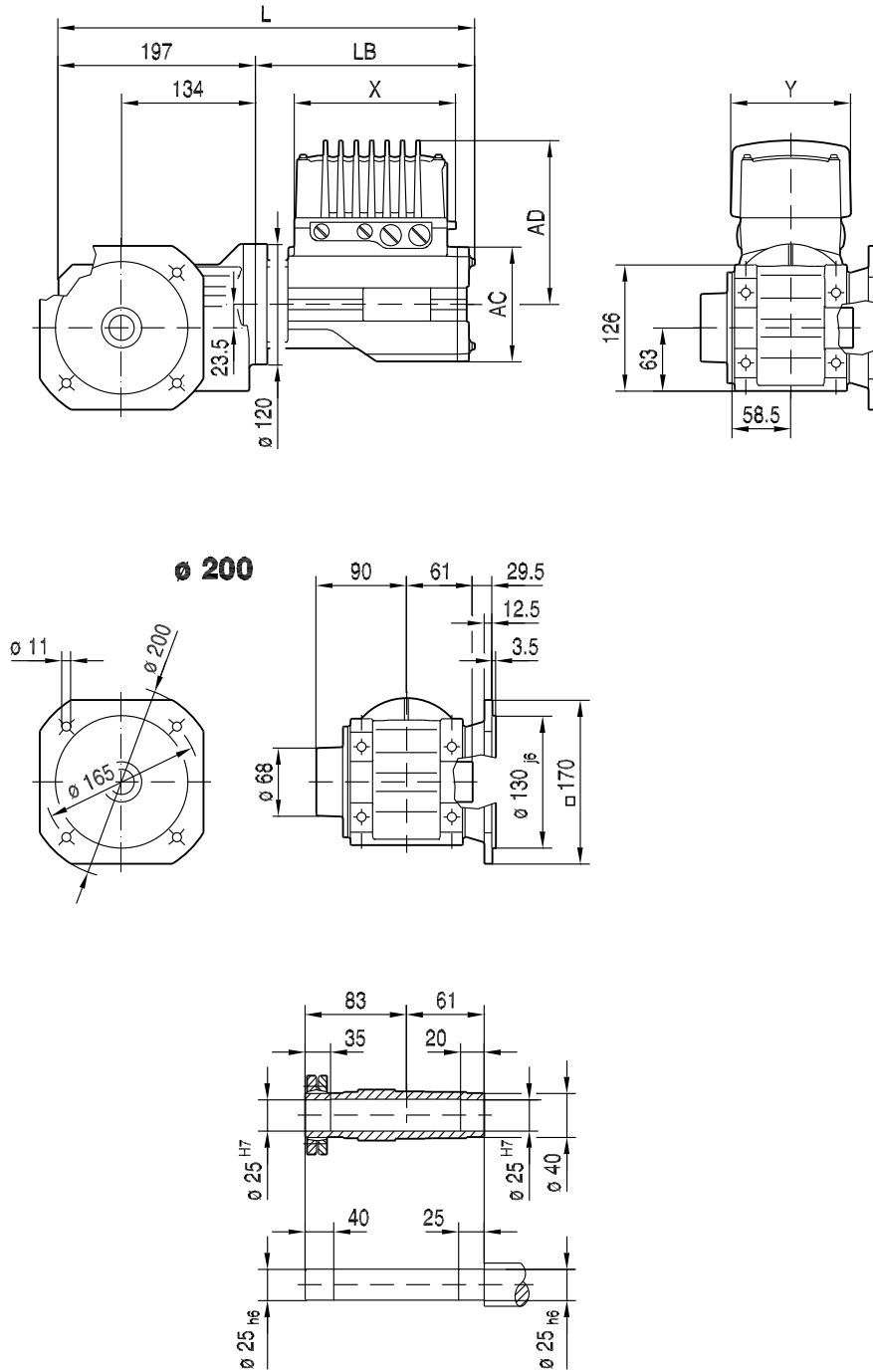
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21932387/EN – 05/2015

KHF29B..

33 113 00 15

2

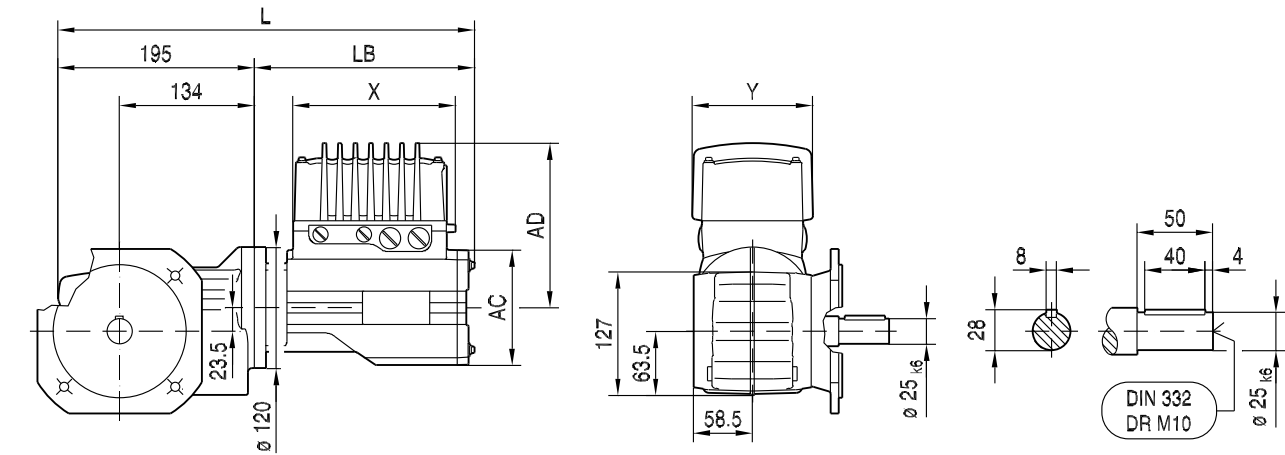


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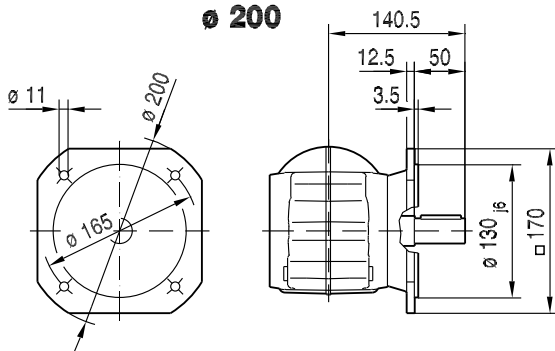
	DRC1	DRC2					
AC	128	154					
AD/ADS	185	218					
L/LS	491	507					
LB/LBS	294	310					
X	202	223					
Y	134	160					

33 114 00 15

KF29..

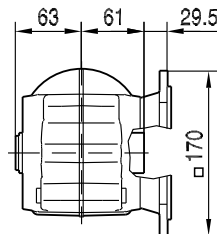


ø 200

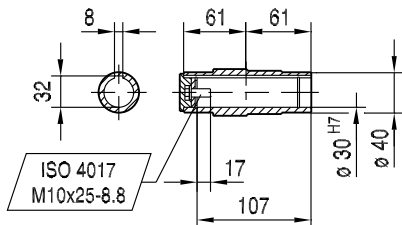


KAF29..

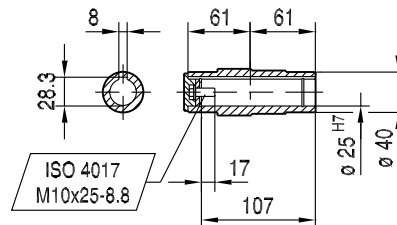
ø 200



ø 30 H7
DIN 6885-3



ø 25 H7



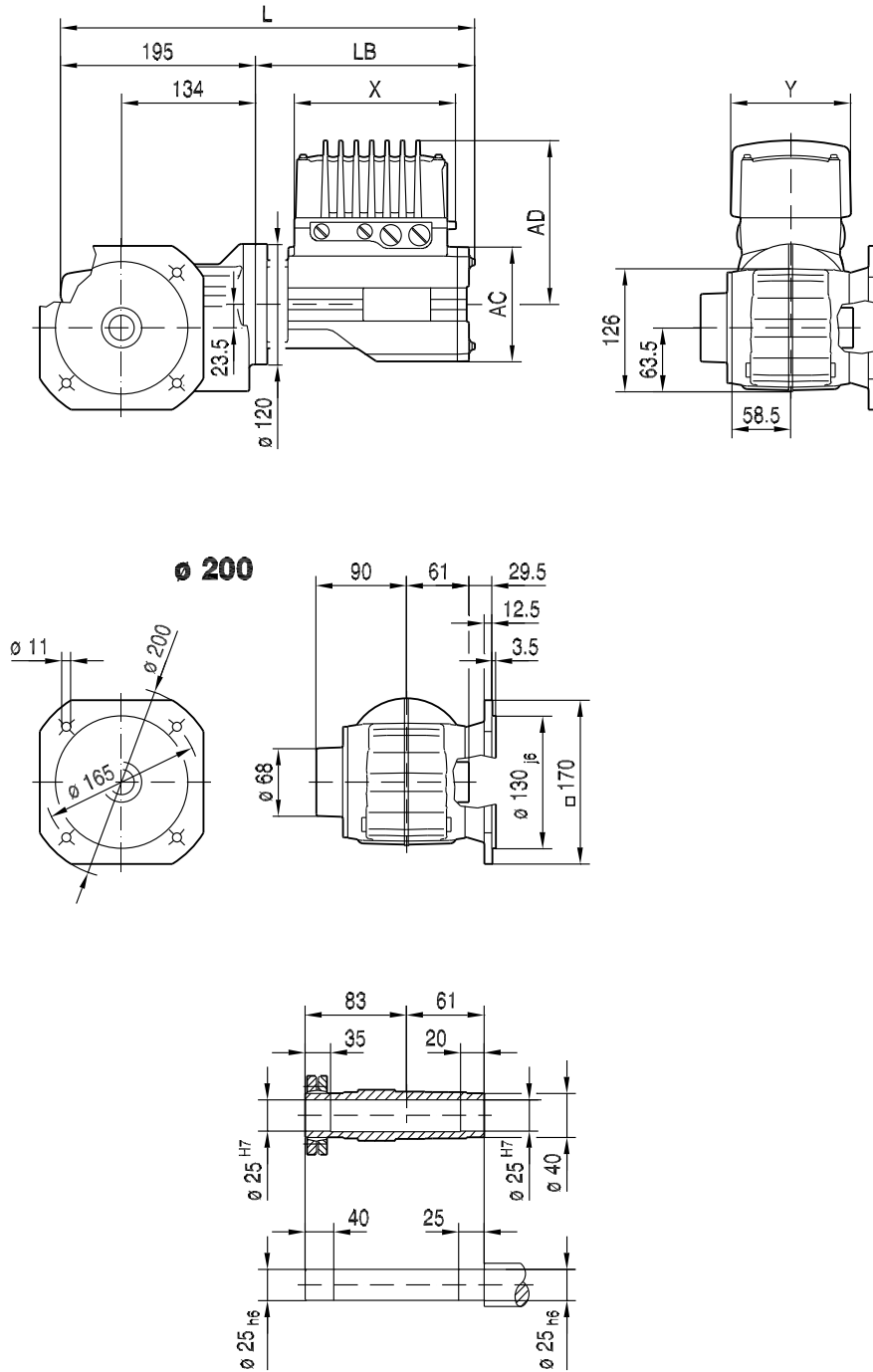
	DRC1	DRC2					
AC	128	154					
AD/ADS	185	218					
L/LS	489	505					
LB/LBS	294	310					
X	202	223					
Y	134	160					

21932387/EN – 05/2015

KHF29..

33 115 00 15

2

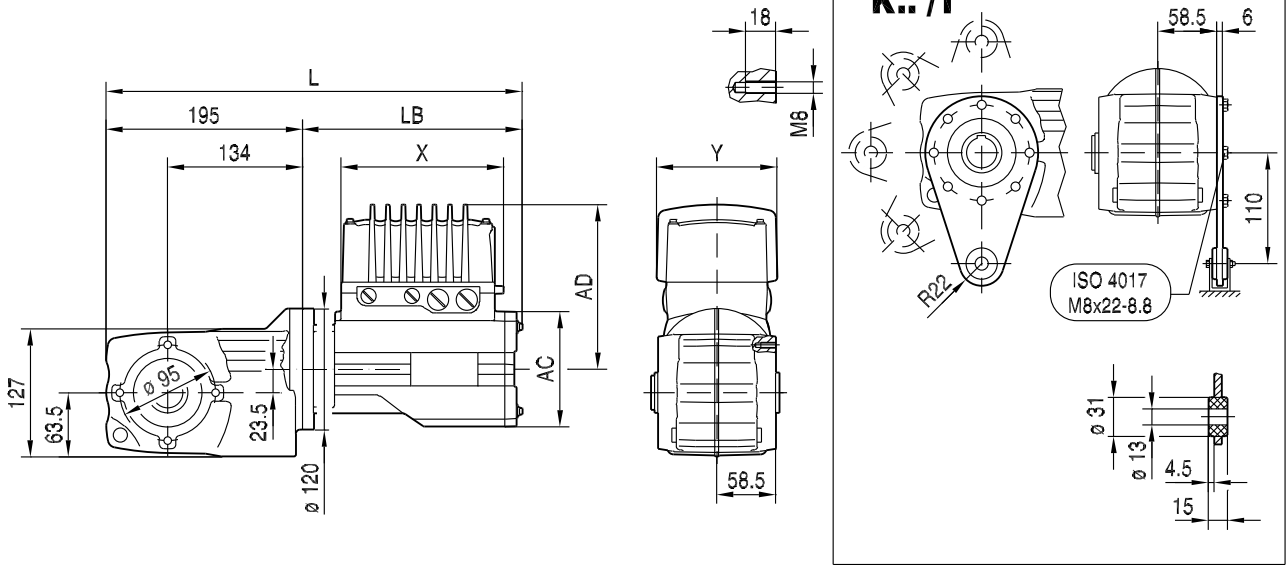


21932387/EN – 05/2015

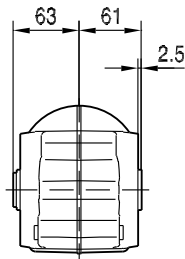
	DRC1	DRC2					
AC	128	154					
AD/ADS	185	218					
L/LS	489	505					
LB/LBS	294	310					
X	202	223					
Y	134	160					

33 116 00 15

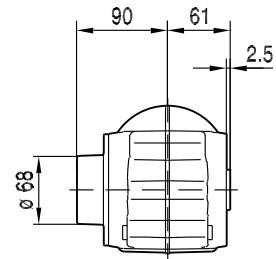
KA29..



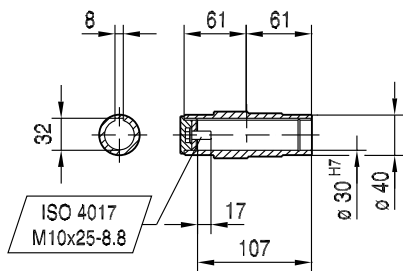
KA29..



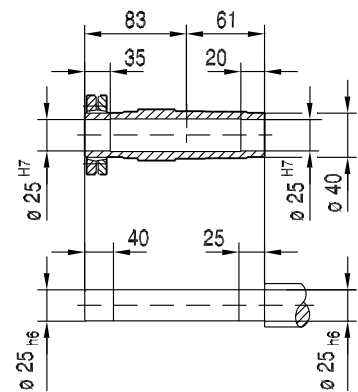
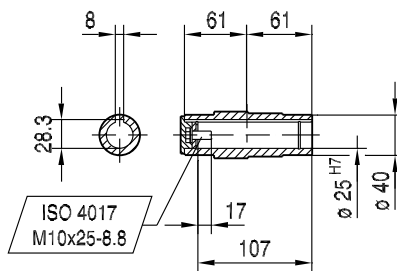
KH29..



Ø 30 H7
DIN 6885-3



Ø 25 H7



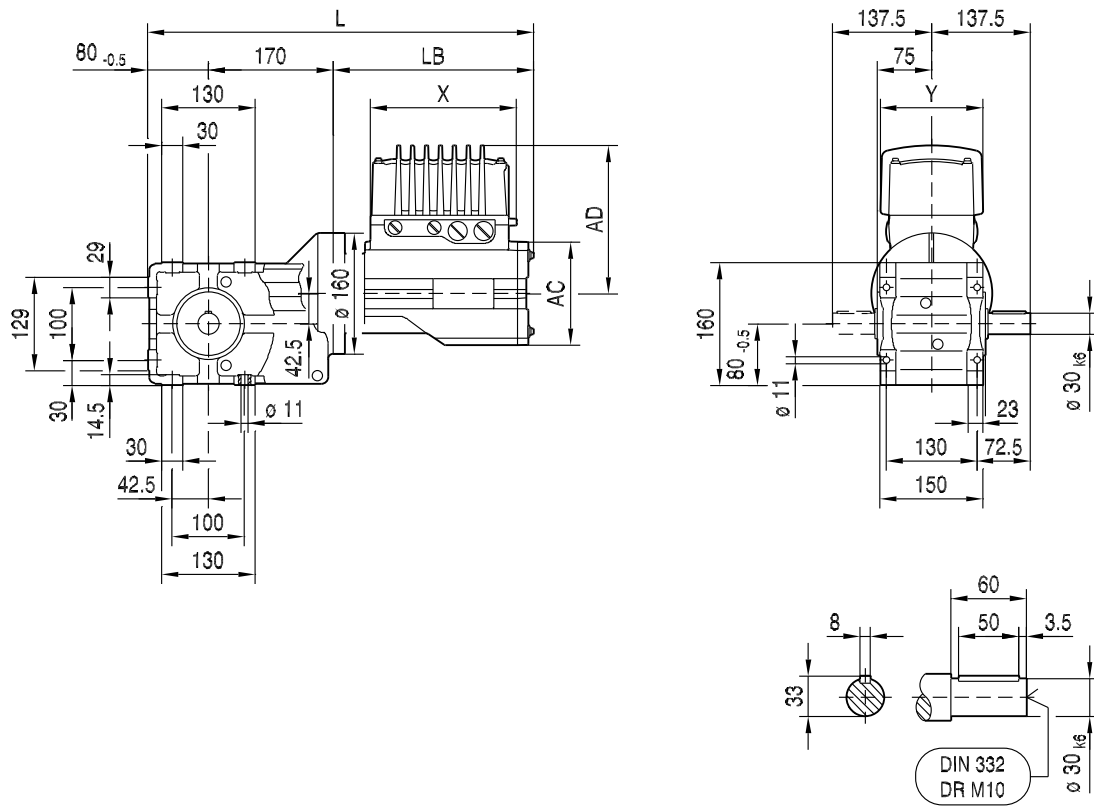
	DRC1	DRC2					
AC	128	154					
AD/ADS	185	218					
L/LS	489	505					
LB/LBS	294	310					
X	202	223					
Y	134	160					

21932387/EN – 05/2015

K39..

33 029 00 15

2

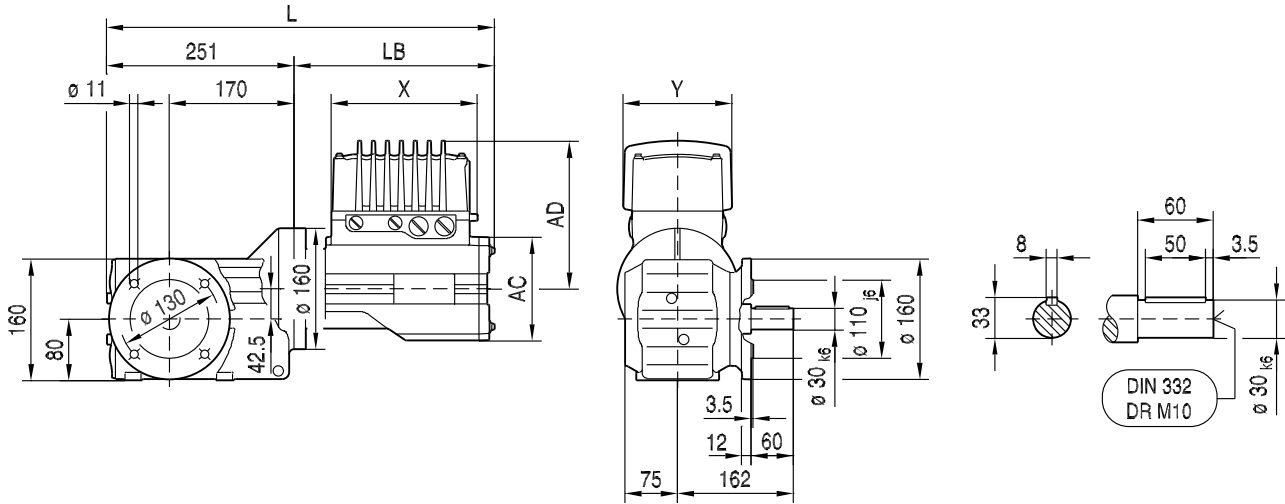


21932387/EN – 05/2015

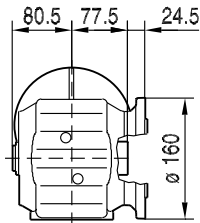
	DRC1	DRC2					
AC	128	154					
AD/ADS	185	218					
L/LS	537	554					
LB/LBS	287	304					
X	202	223					
Y	134	160					

33 028 00 15

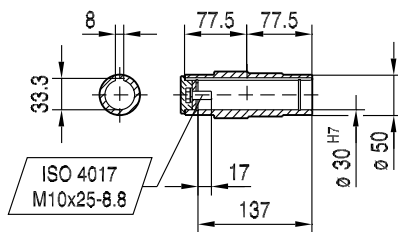
KF39..



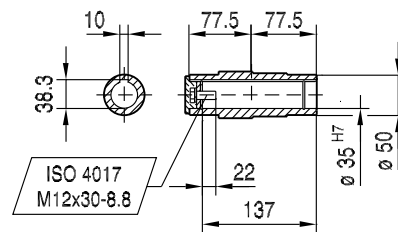
KAF39..



$\phi 30 H7$



$\phi 35 H7$

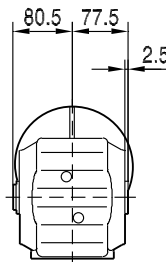
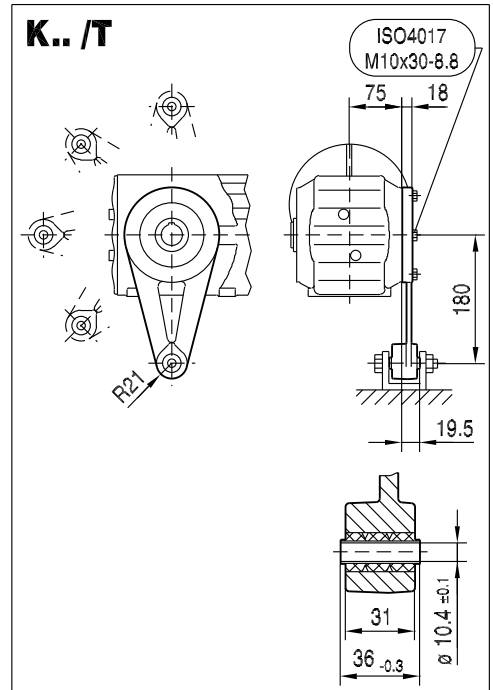
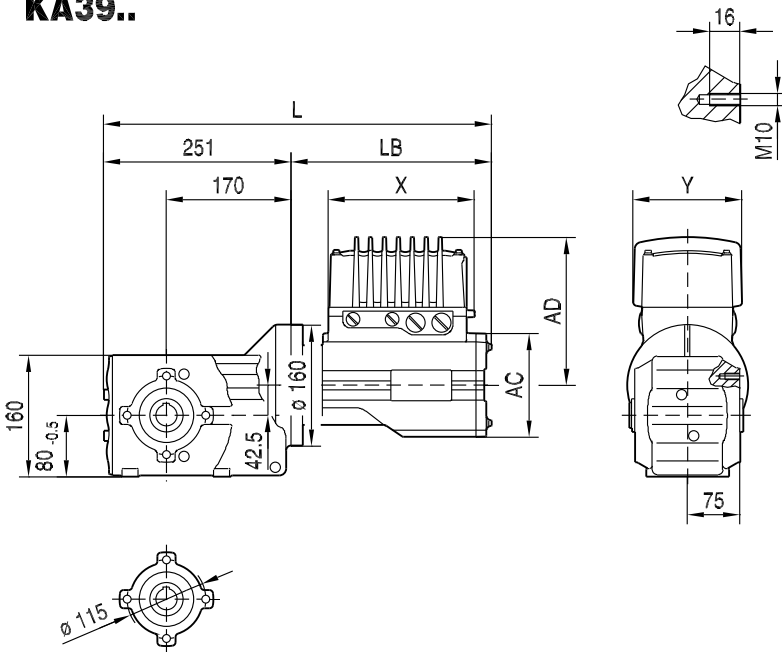


	DRC1	DRC2					
AC	128	154					
AD/ADS	185	218					
L/LS	538	555					
LB/LBS	287	304					
X	202	223					
Y	134	160					

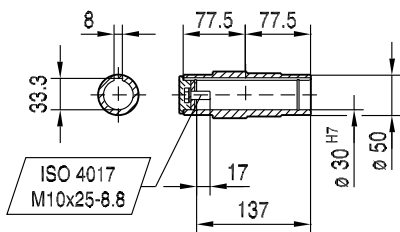
21932387/EN – 05/2015

KA39..

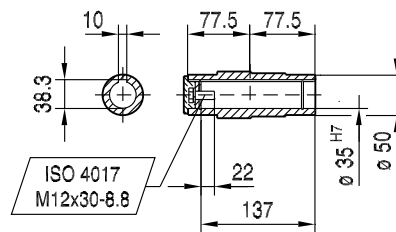
33 030 00 15



Ø 30 H7



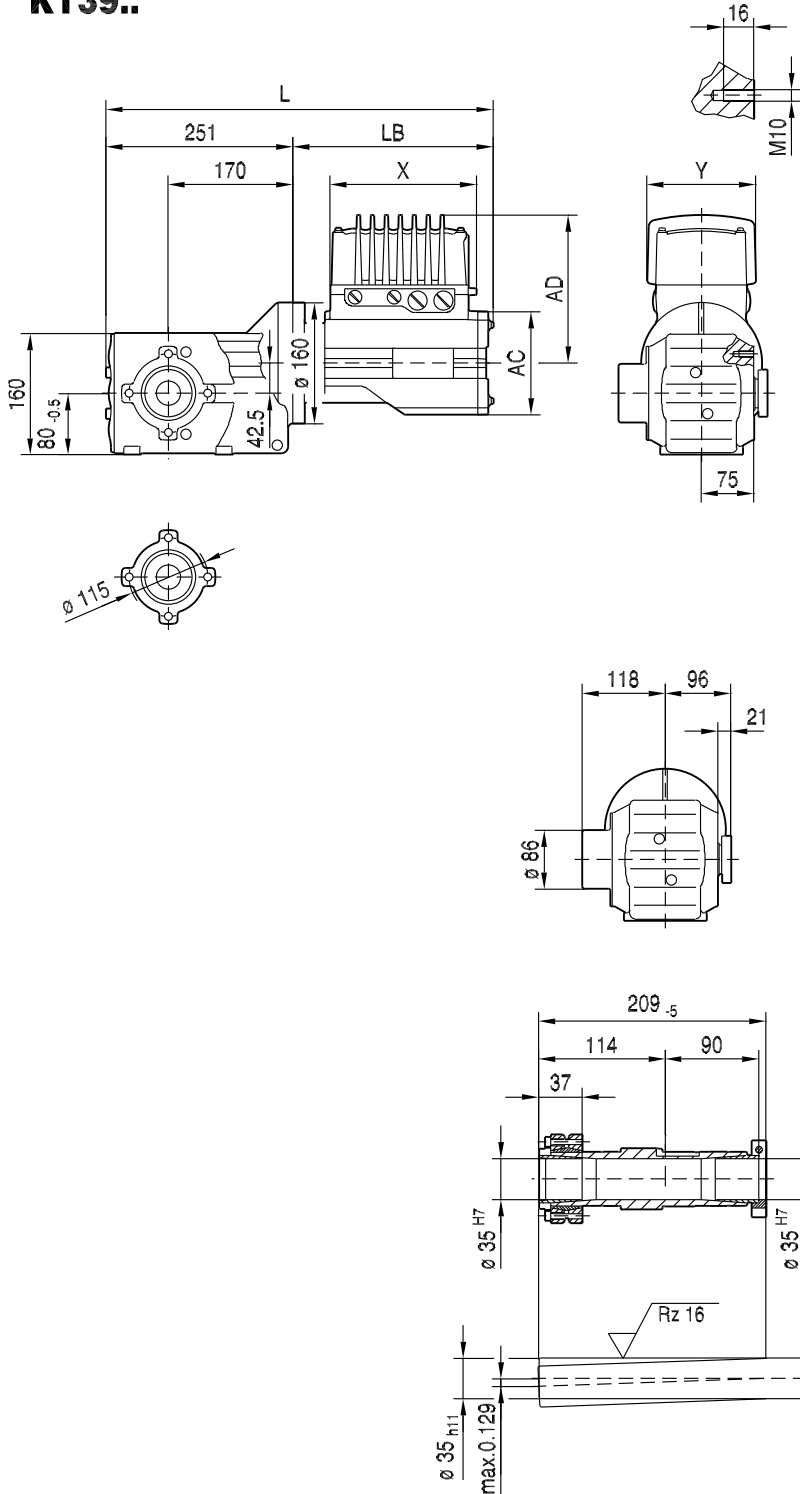
Ø 35 H7



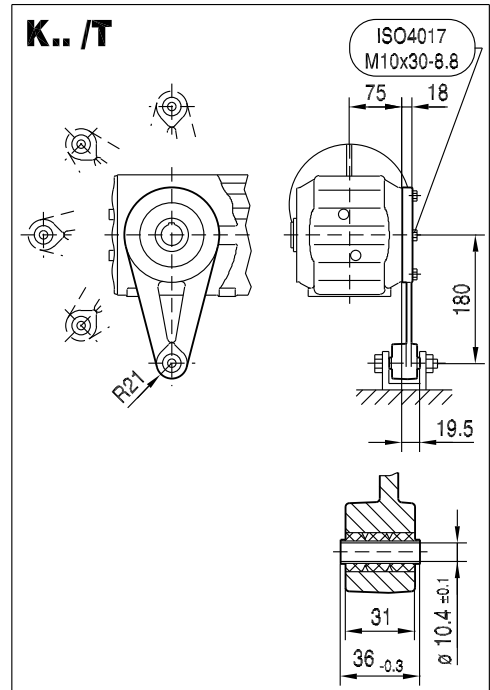
21932387/EN – 05/2015

	DRC1	DRC2					
AC	128	154					
AD/ADS	185	218					
L/LS	538	555					
LB/LBS	287	304					
X	202	223					
Y	134	160					

KT39..



33 031 00 15



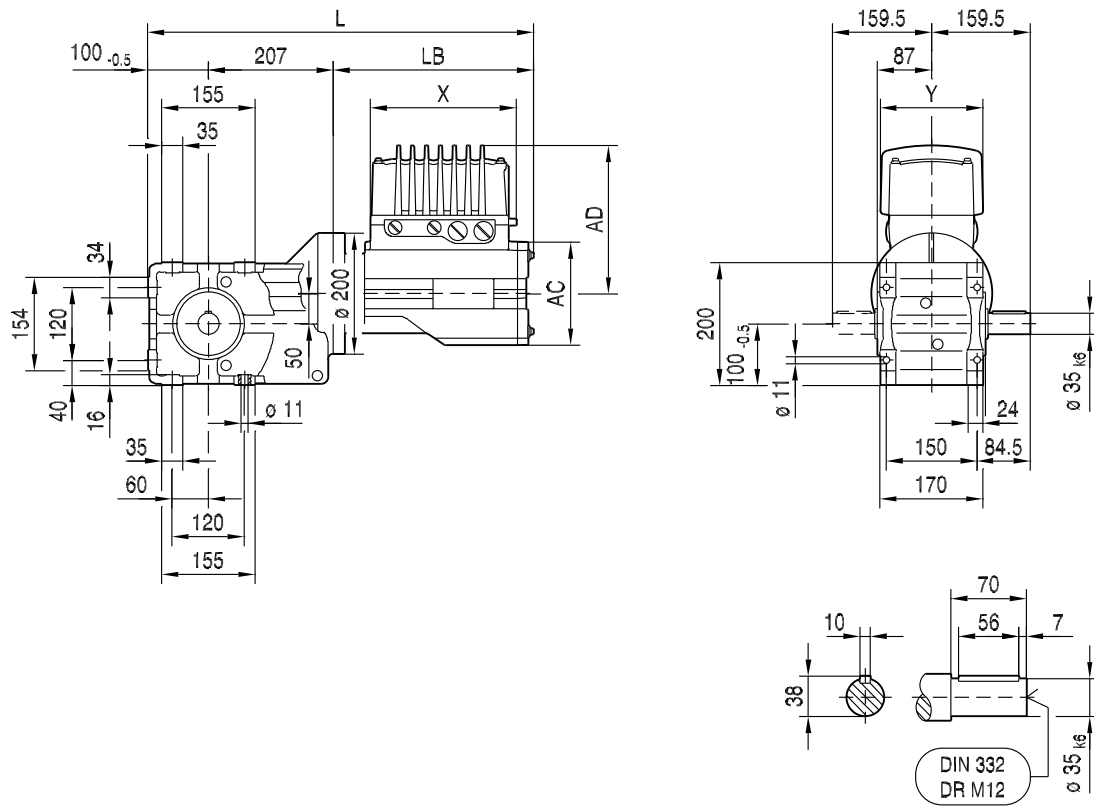
	DRC1	DRC2					
AC	128	154					
AD/ADS	185	218					
L/LS	538	555					
LB/LBS	287	304					
X	202	223					
Y	134	160					

21932387/EN – 05/2015

K49..

33 032 00 15

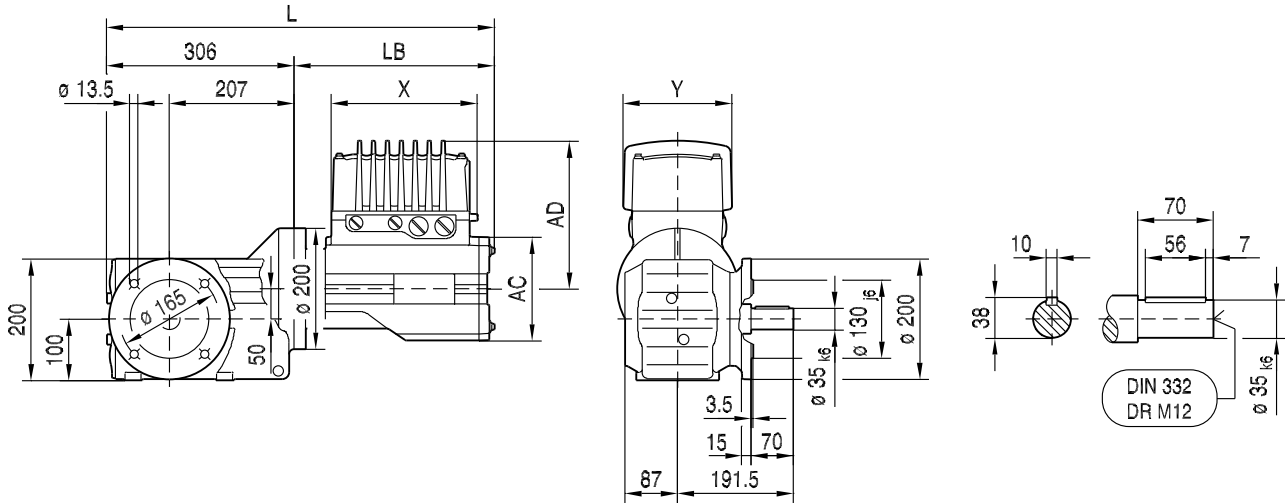
2



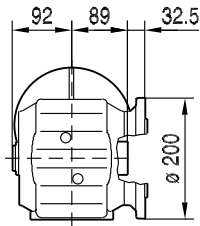
21932387/EN – 05/2015

	DRC1	DRC2	DRC3	DRC4				
AC	128	154	198	198				
AD/ADS	185	218	261	261				
L/LS	588	605	720	720				
LB/LBS	281	298	413	413				
X	202	223	334	334				
Y	134	160	192	192				

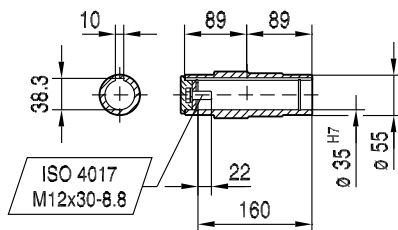
KF49..



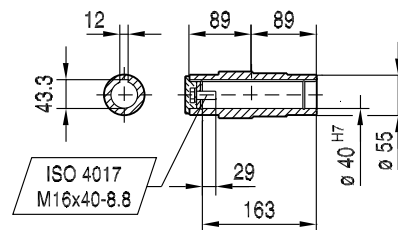
KAF49..



$\phi 35 H7$



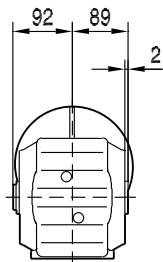
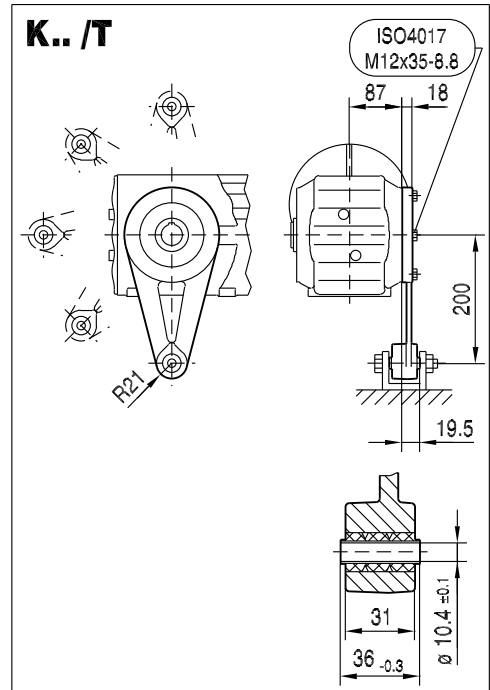
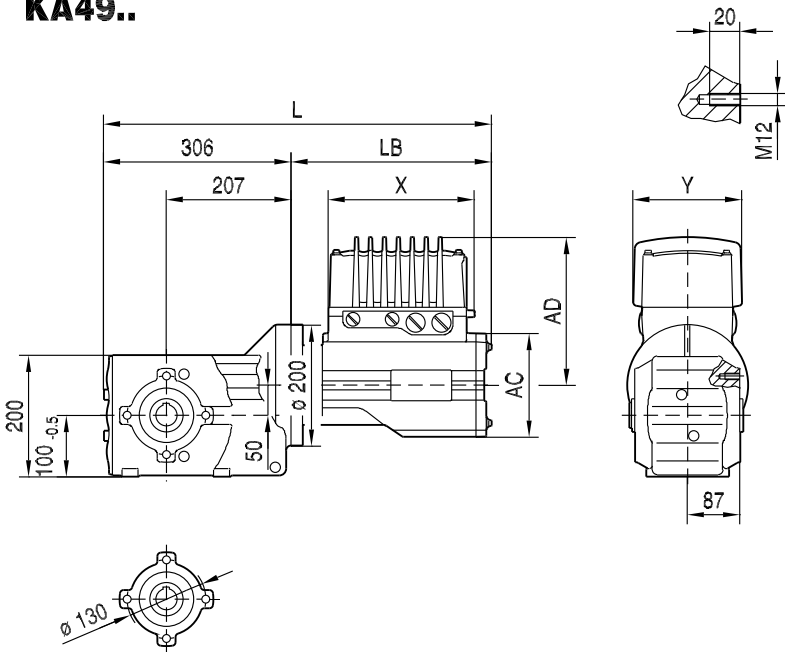
$\phi 40 H7$



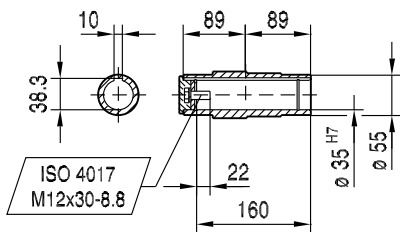
	DRC1	DRC2	DRC3	DRC4				
AC	128	154	198	198				
AD/ADS	185	218	261	261				
L/LS	587	604	719	719				
LB/LBS	281	298	413	413				
X	202	223	334	334				
Y	134	160	192	192				

KA49..

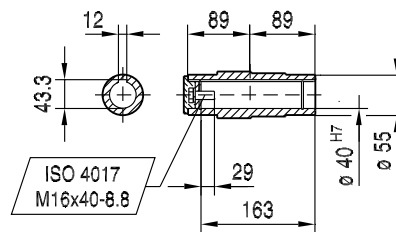
33 034 00 15



Ø 35 H7



Ø 40 H7

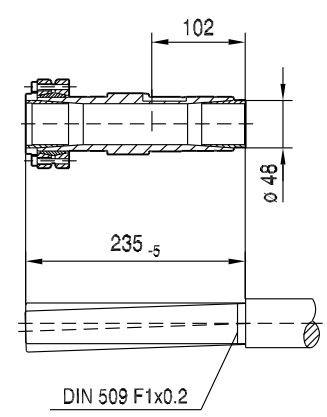
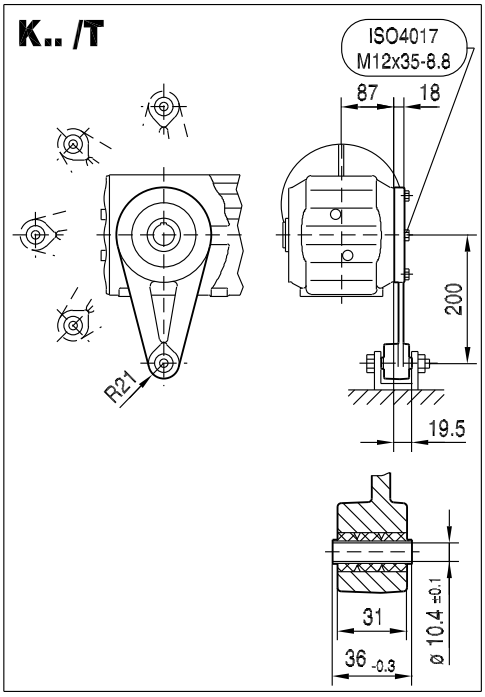
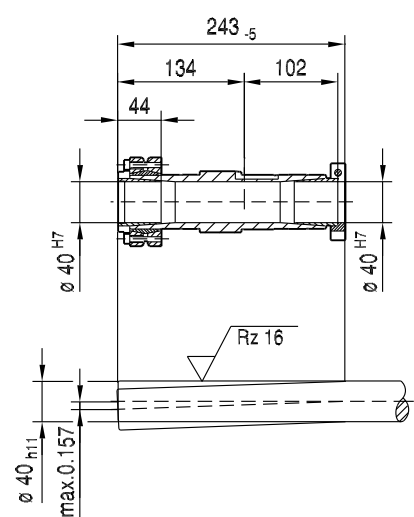
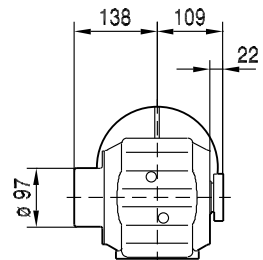
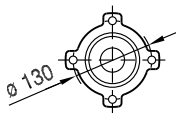
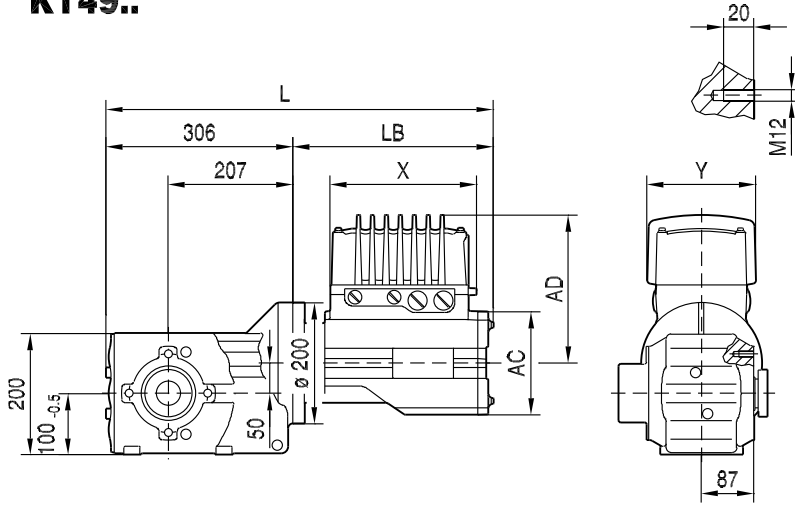


21932387/EN – 05/2015

	DRC1	DRC2	DRC3	DRC4				
AC	128	154	198	198				
AD/ADS	185	218	261	261				
L/LS	587	604	719	719				
LB/LBS	281	298	413	413				
X	202	223	334	334				
Y	134	160	192	192				

33 035 00 15


KT49..




	DRC1	DRC2	DRC3	DRC4				
AC	128	154	198	198				
AD/ADS	185	218	261	261				
L/LS	587	604	719	719				
LB/LBS	281	298	413	413				
X	202	223	334	334				
Y	134	160	192	192				

21932387/EN – 05/2015

2.13 Selection tables for K..9 / AQ


[Nm]	i	AQ.											
		M _{amax} M _{apk} M _{aEmergOff}											
		80/1-3			100/1-4			115/1-2			115/3		
K19  2	4.50	34	37	56	64	70	105	64	70	105	64	70	105
	5.16	36	40	60	68	75	113	68	75	113	68	75	113
	5.54	37	41	62	70	77	116	70	77	116	70	77	116
	6.41	39	43	65	74	81	122	74	81	122	74	81	122
	6.91	41	45	68	76	84	126	76	84	126	76	84	126
	8.09	43	47	71	80	88	132	80	88	132	80	88	132
	9.58	45	50	75	62	68	102	62	68	102	62	68	102
	10.32	76	83	125	76	83	125	76	83	125	76	83	125
	11.84	79	86	129	79	86	129	79	86	129	79	86	129
	12.70	80	88	132	80	88	132	80	88	132	80	88	132
	14.69	80	88	132	80	88	132	80	88	132	80	88	132
	15.84	80	88	132	80	88	132	80	88	132	80	88	132
	18.55	80	88	132	80	88	132	80	88	132	80	88	132
	21.98	80	88	132	80	88	132	80	88	132	80	88	132
	24.06	80	88	132	80	88	132	80	88	132	80	88	132
	26.88												
	27.16	60	66	99	60	66	99	60	66	99	60	66	99
	29.14												
	29.29	61	67	101	61	67	101	61	67	101	61	67	101
	31.74												
34.29	64	70	105	64	70	105	64	70	105	64	70	105	
40.63	67	73	110	67	73	110	67	73	110	67	73	110	
44.48	69	75	113	69	75	113	69	75	113	69	75	113	
49.69													
53.88													
58.68													

K19, m [kg]		AQ.			
s		80/1-3	100/1-4	115/1-2	115/3
 2		7.8	8.5	9.0	9.0
KF: + 0.30 kg / KA: + -0.45 kg / KAF: + -- kg					

K19, J _A / c _{TA}		AQ.			
		80/1-3	100/1-4	115/1-2	115/3
J _A 10 ⁻⁴	[kgm ²]	0.77	1.4	1.4	3.1
c _{TA}	[Nm/°]	0.25	0.25	0.25	0,625

K19							F_{Ramax}				F_{Rapk}			
$n_e = 1400$		M_{amax}	M_{apk}	M_{aEmergOff}	n_{ak}	J_{GA} 10⁻⁴	K	KF	KA	KAF	K	KF	KA	KAF
	i	[Nm]	[Nm]	[Nm]	[1/min]	[kg*m²]	[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]
	4.50	80	88	132	433	0.38	2010	1620	2500	2500	4190	3630	4500	4500
	5.16	80	88	132	424	0.30	2140	1720	2650	2650	4190	3630	4500	4500
	5.54	80	88	132	419	0.27	2200	1780	2730	2730	4190	3630	4500	4500
	6.41	80	88	132	410	0.21	2340	1890	2900	2900	4190	3630	4500	4500
	6.91	80	88	132	407	0.18	2420	1950	3000	3000	4190	3630	4500	4500
	8.09	80	88	132	399	0.14	2590	2080	3200	3200	4190	3630	4500	4500
	9.58	63	69	104	731	0.11	2910	2340	3600	3600	4340	3670	4500	4500
	10.32	76	83	124	102	0.22	2720	2190	3370	3370	4230	3610	4500	4500
	11.84	79	86	129	90	0.18	2850	2300	3530	3530	4210	3600	4500	4500
	12.70	80	88	132	83	0.16	2930	2360	3630	3630	4190	3600	4500	4500
	14.69	80	88	132	82	0.13	3110	2510	3860	3860	4190	3600	4500	4500
	15.84	80	88	132	81	0.12	3210	2590	3980	3980	4190	3600	4500	4500
	18.55	80	88	132	81	0,092	3430	2760	4250	4250	4190	3600	4500	4500
	21.98	80	88	132	81	0,072	3680	2960	4500	4500	4190	3600	4500	4500
	24.06	80	88	132	81	0,063	3820	3080	4500	4500	4190	3600	4500	4500
	26.88	80	88	132	80	0,054	3990	3220	4500	4500	4190	3600	4500	4500
	27.16	60	66	99	38	0.13	4090	3290	4500	4500	4360	3630	4500	4500
	29.14	80	88	132	80	0,048	4120	3320	4500	4500	4190	3600	4500	4500
	29.29	61	67	100	36	0.11	4200	3380	4500	4500	4350	3630	4500	4500
	31.74	80	88	132	80	0,042	4260	3440	4500	4500	4190	3600	4500	4500
	34.29	64	70	105	31	0,090	4370	3570	4500	4500	4330	3620	4500	4500
	40.63	67	73	110	27	0,071	4350	3630	4500	4500	4310	3610	4500	4500
	44.48	69	75	112	24	0,062	4340	3620	4500	4500	4290	3600	4500	4500
	49.69	70	77	116	22	0,053	4330	3620	4500	4500	4280	3600	4500	4500
	53.88	70	77	116	22	0,047	4330	3620	4500	4500	4280	3600	4500	4500
	58.68	70	77	116	22	0,042	4330	3620	4500	4500	4280	3600	4500	4500


K19
 2


AQ.	C _{TG}						
	i	n _{epk} [1/min]	eta [%]	K [Nm/"]	KF [Nm/"]	KA [Nm/"]	KAF [Nm/"]
K19  2	4.50	4500	97	5.1	4.4	8.5	8.5
	5.16	4500	97	5.1	4.4	8.5	8.5
	5.54	4500	97	5.1	4.4	8.5	8.5
	6.41	4500	97	5.1	4.4	8.5	8.5
	6.91	4500	97	5.1	4.4	8.5	8.5
	8.09	4500	97	5.1	4.5	8.6	8.6
	9.58	4500	97	5.1	4.5	8.6	8.6
	10.32	4500	96	6.2	5.2	12	12
	11.84	4500	96	6.2	5.2	12	12
	12.70	4500	96	5.1	4.5	8.6	8.6
	14.69	4500	96	6.2	5.2	12	12
	15.84	4500	96	6.2	5.2	12	12
	18.55	4500	96	6.2	5.2	12	12
	21.98	4500	96	6.2	5.2	12	12
	24.06	4500	96	6.2	5.2	12	12
	26.88	4500	96	6.2	5.2	12	12
	27.16	4500	91	6.2	5.2	12	12
	29.14	4500	96	6.2	5.2	12	12
	29.29	4500	91	6.2	5.2	12	12
	31.74	4500	96	6.2	5.2	12	12
34.29	4500	91	6.2	5.2	12	12	
40.63	4500	91	6.2	5.2	12	12	
44.48	4500	91	6.2	5.2	12	12	
49.69	4500	91	6.2	5.2	12	12	
53.88	4500	91	6.2	5.2	12	12	
58.68	4500	91	6.2	5.2	12	12	

2

Technical data

Selection tables for K..9 / AQ

[Nm]	i	AQ.											
		80/1-3			100/1-4			115/1-2			115/3		
		M _{amax} M _{apk} M _{aEmergOff}											
K29  2	3.19	32	35	53	51	51	77	51	51	77	62	68	102
	3.92	36	40	60	62	62	93	62	62	93	69	76	114
	5.10	41	45	68	79	82	123	79	82	123	79	87	131
	5.75	44	48	72	82	90	135	82	90	135	82	90	135
	6.95	47	52	78	88	97	146	88	97	146	88	97	146
	7.48	75	82	123	117	117	176	117	117	176	123	135	203
	8.53	50	55	83	94	103	155	94	103	155	94	103	155
	9.17	84	92	138	130	143	215	130	143	215	130	143	215
	9.90	52	57	86	98	108	162	98	108	162	98	108	162
	11.94	96	106	159	130	143	215	130	143	215	130	143	215
	13.47	101	111	167	130	143	215	130	143	215	130	143	215
	16.29	108	119	179	130	143	215	130	143	215	130	143	215
	19.99	115	127	191	130	143	215	130	143	215	130	143	215
	22.08	105	115	173	105	115	173	105	115	173	105	115	173
	23.19	120	132	198	130	143	215	130	143	215	130	143	215
	24.91	109	119	179	109	119	179	109	119	179	109	119	179
	27.23	125	138	207	130	143	215	130	143	215	130	143	215
	29.69	128	141	212	130	143	215	130	143	215	130	143	215
	30.11	115	126	189	115	126	189	115	126	189	115	126	189
	33.15												
	35.83												
	36.96	122	134	201	122	134	201	122	134	201	122	134	201
	38.90												
	42.87	128	140	210	128	140	210	128	140	210	128	140	210
	50.35	130	143	215	130	143	215	130	143	215	130	143	215
	54.89	130	143	215	130	143	215	130	143	215	130	143	215
61.28													
66.25													
71.93													

K29, m [kg]		AQ.			
s	80/1-3	100/1-4	115/1-2	115/3	
 2	9.6	10	11	11	

KF: + 1.0 kg / KA: + -0.45 kg / KAF: + 0.35 kg

K29, J _A / c _{TA}		AQ.			
		80/1-3	100/1-4	115/1-2	115/3
J _A 10 ⁻⁴	[kgm ²]	0.77	1.4	1.4	3.1
c _{TA}	[Nm/"]	0.25	0.25	0.25	0,625


21932387/EN – 05/2015


K29 $n_e = 1400$							F_{Ramax}				F_{Rapk}			
i	M _{amax} [Nm]	M _{apk} [Nm]	M _{aEmergOff} [Nm]	n _{ak} [1/min]	J _{GA} 10 ⁻⁴ [kg*m ²]	K [N]	KF [N]	KA [N]	KAF [N]	K [N]	KF [N]	KA [N]	KAF [N]	
3.19	110	121	182	1082	1.6	1830	1200	1860	1860	5070	6000	6000	6000	
3.92	126	138	205	722	1.1	1910	1240	1920	1920	5030	6000	6000	6000	
5.10	110	121	182	1080	0.68	2260	1500	2320	2320	5070	6000	6000	6000	
5.75	112	123	184	1030	0.55	2370	1580	2440	2440	5070	6000	6000	6000	
6.95	112	123	184	1007	0.39	2580	1720	2660	2660	5070	6000	6000	6000	
7.48	123	135	200	138	0.74	2300	1480	2300	2300	4980	6000	6000	6000	
8.53	122	134	200	755	0.27	2740	1830	2830	2830	5040	6000	6000	6000	
9.17	130	143	210	112	0.55	2470	1600	2480	2480	4960	6000	6000	6000	
9.90	110	121	182	707	0.21	3000	2020	3120	3120	5070	6000	6000	6000	
11.94	130	143	210	112	0.37	2810	1830	2840	2840	4960	6000	6000	6000	
13.47	130	143	210	111	0.30	2970	1950	3010	3010	4960	6000	6000	6000	
16.29	130	143	210	111	0.22	3240	2140	3300	3300	4960	6000	6000	6000	
19.99	130	143	210	111	0.16	3550	2350	3640	3640	4960	6000	6000	6000	
22.08	105	115	172	47	0.33	3820	2560	3950	3950	5020	6000	6000	6000	
23.19	130	143	210	110	0.12	3790	2520	3900	3900	4960	6000	6000	6000	
24.91	109	119	178	42	0.27	3980	2660	4120	4120	5010	6000	6000	6000	
27.23	130	143	210	110	0,098	4060	2710	4190	4190	4960	6000	6000	6000	
29.69	130	143	210	110	0,086	4210	2820	4360	4360	4960	6000	6000	6000	
30.11	115	126	189	35	0.20	4250	2850	4400	4400	4990	6000	6000	6000	
33.15	130	143	210	110	0,073	4410	2960	4580	4580	4960	6000	6000	6000	
35.83	130	143	210	110	0,065	4560	3060	4740	4740	4960	6000	6000	6000	
36.96	122	134	200	28	0.14	4560	3060	4730	4730	4960	6000	6000	6000	
38.90	130	143	210	110	0,057	4720	3170	4910	4910	4960	6000	6000	6000	
42.87	128	140	210	24	0.11	4790	3210	4970	4970	4940	6000	6000	6000	
50.35	130	143	210	22	0,090	4980	3430	5300	5300	4930	6000	6000	6000	
54.89	130	143	210	23	0,079	4980	3560	5510	5510	4930	6000	6000	6000	
61.28	130	143	210	23	0,068	4980	3730	5770	5770	4930	6000	6000	6000	
66.25	130	143	210	22	0,060	4980	3860	5970	5970	4930	6000	6000	6000	
71.93	130	143	210	23	0,053	4980	4000	6000	6000	4930	6000	6000	6000	



AQ.				C _{TG}			
i	n _{epk} [1/min]	eta [%]	K [Nm/"]	KF [Nm/"]	KA [Nm/"]	KAF [Nm/"]	
3.19	4500	97	8.3	7.4	16	16	
3.92	4500	97	8.3	7.4	16	16	
5.10	4500	97	8.4	7.5	17	17	
5.75	4500	97	8.4	7.5	17	17	
6.95	4500	97	8.4	7.5	17	17	
7.48	4500	96	10	8.8	25	25	
8.53	4500	97	8.4	7.5	17	17	
9.17	4500	96	10	8.8	25	25	
9.90	4500	97	8.4	7.5	17	17	
11.94	4500	96	10	8.8	25	25	
13.47	4500	96	10	8.8	25	25	
16.29	4500	96	10	8.8	25	25	
19.99	4500	96	10	8.8	25	25	
22.08	4500	91	8.6	7.6	18	18	
23.19	4500	96	10	8.8	25	25	
24.91	4500	91	8.6	7.6	18	18	
27.23	4500	96	10	8.8	25	25	
29.69	4500	96	10	8.8	25	25	
30.11	4500	91	8.6	7.6	18	18	
33.15	4500	96	10	8.8	25	25	
35.83	4500	96	10	8.8	25	25	
36.96	4500	92	8.6	7.6	18	18	
38.90	4500	95	10	8.8	25	25	
42.87	4500	91	8.6	7.6	18	18	
50.35	4500	91	8.6	7.6	18	18	
54.89	4500	91	8.6	7.6	18	18	
61.28	4500	91	8.6	7.6	18	18	
66.25	4500	91	8.6	7.6	18	18	
71.93	4500	91	8.6	7.6	18	18	

K29
 2

[Nm]	i	AQ.																				
		M _{amax}					M _{apk}					M _{aEmergOff}										
		80/1-3			100/1-4			115/1-2			115/3			140/1			140/2-4			160/1		
K39  2	2.81	44	46	69	46	46	69	46	46	69	83	124	129	163	163	245	170	200	281	170	200	281
	3.94	53	64	90	64	64	96	64	64	96	99	148	168	205	225	338	205	260	349	205	260	349
	4.52	56	74	95	74	74	111	74	74	111	105	158	179	215	260	366	215	290	366	215	290	366
	5.22	60	85	102	85	85	128	85	85	128	112	168	190	230	300	391	230	325	391	230	325	391
	5.75	62	93	105	94	94	141	94	94	141	116	174	197	235	330	400	235	345	400	235	345	400
	6.75	67	100	114	110	110	165	110	110	165	124	186	211	250	375	425	250	375	425	250	375	425
	7.15	68	102	116	117	117	176	117	117	176	126	189	214	255	380	434	255	380	434	255	380	434
	8.12	70	105	119	129	133	200	129	133	200	129	194	219	265	385	451	265	385	451	265	385	451
	9.00	72	108	122	133	147	221	133	147	221	133	200	226	270	375	459	270	375	459	270	375	459
	10.61	75	112	128	139	174	236	139	174	236	139	205	236	285	330	485	285	330	485	285	330	485
	12.09	79	118	134	145	198	247	145	198	247	145	215	247									
	12.73	79	118	134	145	205	247	145	205	247	145	215	247									
	13.44	172	205	292	205	205	308	205	205	308	270	405	459	270	405	459	270	405	459	270	405	459
	15.44	183	235	311	235	235	353	235	235	353	280	410	476	280	410	476	280	410	476	280	410	476
	17.83	194	275	330	275	275	413	275	275	413	290	410	493	290	410	493	290	410	493	290	410	493
	19.62	200	300	340	295	300	450	295	300	450	295	410	502	295	410	502	295	410	502	295	410	502
	23.04	215	320	366	300	355	510	300	355	510	300	410	510	300	410	510	300	410	510	300	410	510
	24.40	220	330	374	300	375	510	300	375	510	300	410	510	300	410	510	300	410	510	300	410	510
	27.73	225	335	383	300	410	510	300	410	510	300	410	510	300	410	510	300	410	510	300	410	510
	30.72	230	345	391	300	410	510	300	410	510	300	410	510	300	410	510	300	410	510	300	410	510
36.22	240	360	408	300	410	510	300	410	510	300	410	510	300	410	510	300	410	510	300	410	510	
41.28	250	375	425	300	410	510	300	410	510	300	410	510										
43.45	255	380	434	300	410	510	300	410	510	300	410	510										
49.69	260	390	442	300	410	510	300	410	510	300	410	510										
58.24	270	405	459	300	410	510	300	410	510	300	410	510										

K39, m [kg]		AQ.						
s		80/1-3	100/1-4	115/1-2	115/3	140/1	140/2-4	160/1
 2		21	22	22	22	27	27	27

KF: + 1.5 kg / KA: + -1.0 kg / KAF: + 0.50 kg

K39, J _A / c _{TA}		AQ.						
		80/1-3	100/1-4	115/1-2	115/3	140/1	140/2-4	160/1
J _A 10 ⁻⁴	[kgm ²]	0.77	1.4	1.4	3.1	5.1	10.0	10.0
c _{TA}	[Nm/"]	0.25	0.25	0.25	0,625	0,625	1.0	1.0

2

Technical data

Selection tables for K..9 / AQ


K39							F_{Ramax}				F_{Rapk}			
$n_e = 1400$		M_{amax}	M_{apk}	M_{aEmergOff}	n_{ak}	J_{GA} 10⁻⁴	K	KF	KA	KAF	K	KF	KA	KAF
	i	[Nm]	[Nm]	[Nm]	[1/min]	[kg*m ²]	[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]
	2.81	170	255	285	811	7.9	2870	2460	2180	2180	7500	6260	7500	7500
	3.94	215	320	365	378	4.6	3070	2630	2260	2260	7500	6180	7500	7500
	4.52	240	360	405	257	3.6	3130	2680	1730	1730	7500	6130	7500	7500
	5.22	260	390	440	192	2.9	3240	2770	960	960	7500	6090	7500	7500
	5.75	275	410	465	158	2.5	3300	2830	290	290	7470	6060	7500	7500
	6.75	300	435	510	130	2.0	3430	2940	0	0	7300	6020	7500	7500
	7.15	300	435	510	129	1.8	3530	3020	157	157	7300	6020	7500	7500
	8.12	300	385	510	193	1.4	3760	3220	2080	2080	7500	6090	7500	7500
	9.00	300	385	510	192	1.2	3950	3380	2860	2860	7500	6090	7500	7500
	10.61	285	370	485	218	0.91	4360	3730	3250	3250	7500	6110	7500	7500
	12.09	255	295	430	464	0.65	4790	4110	3700	3700	7500	6210	7500	7500
	12.73	250	295	425	463	0.58	4930	4220	3830	3830	7500	6210	7500	7500
	13.44	270	405	455	27	2.6	4160	3560	2830	2830	7500	5980	7500	7500
	15.44	280	410	475	26	2.2	4380	3750	2990	2990	7490	5960	7500	7500
	17.83	290	410	490	25	1.8	4630	3960	3180	3180	7490	5960	7500	7500
	19.62	295	410	500	25	1.5	4820	4120	3330	3330	7490	5960	7500	7500
	23.04	300	410	510	24	1.3	5180	4440	3630	3630	7490	5960	7500	7500
	24.40	300	410	510	24	1.2	5330	4560	3760	3760	7490	5960	7500	7500
	27.73	300	410	510	24	0.95	5670	4860	4070	4070	7490	5960	7500	7500
	30.72	300	410	510	24	0.82	5960	5100	4320	4320	7490	5960	7500	7500
	36.22	300	410	510	23	0.65	6440	5520	4740	4740	7490	5960	7500	7500
	41.28	300	410	510	23	0.44	6840	5860	5100	5100	7490	5960	7500	7500
	43.45	300	410	510	23	0.39	7000	6000	5240	5240	7490	5960	7500	7500
	49.69	300	410	510	23	0.32	7440	6150	5630	5630	7490	5960	7500	7500
	58.24	300	410	510	23	0.26	7500	6150	6110	6110	7490	5960	7500	7500


K39
 2

21932387/EN – 05/2015

AQ.				C _{TG}			
i	n _{epk} [1/min]	eta [%]	K [Nm/"]	KF [Nm/"]	KA [Nm/"]	KAF [Nm/"]	
2.81	4500	95	15	14	30	30	
3.94	4500	96	15	14	30	30	
4.52	4500	96	15	14	30	30	
5.22	4500	96	15	14	30	30	
5.75	4500	96	15	14	30	30	
6.75	4500	96	15	14	30	30	
7.15	4500	96	15	14	30	30	
8.12	4500	96	15	14	30	30	
9.00	4500	96	15	14	30	30	
10.61	4500	96	15	14	37	37	
12.09	4500	96	15	14	37	37	
12.73	4500	96	15	14	37	37	
13.44	4500	91	20	19	67	67	
15.44	4500	91	20	19	67	67	
17.83	4500	91	20	19	67	67	
19.62	4500	91	20	19	67	67	
23.04	4500	91	20	19	67	67	
24.40	4500	91	20	19	67	67	
27.73	4500	91	20	19	67	67	
30.72	4500	91	20	19	67	67	
36.22	4500	91	20	19	67	67	
41.28	4500	91	20	19	67	67	
43.45	4500	91	20	19	67	67	
49.69	4500	91	20	19	67	67	
58.24	4500	91	20	19	67	67	

K39
 2

[Nm]	i	AQ.																							
		M _{amax} M _{apk} M _{aEmergOff}																							
		80/1-3			100/1-4			115/1-2			115/3			140/1			140/2-4			160/1			190/1-3		
K49 	4.00	64	65	98	65	65	98	65	65	98	121	178	184	230	230	345	250	375	400	250	375	400	395	500	640
	4.69	69	76	114	76	76	114	76	76	114	130	195	216	265	270	405	265	395	451	265	395	451	425	565	723
	5.29	73	86	124	86	86	129	86	86	129	136	200	231	280	305	458	280	420	476	280	420	476	445	605	757
	5.99	76	98	129	98	98	147	98	98	147	143	210	243	295	345	502	295	440	502	295	440	502	465	605	791
	6.83	80	112	136	112	112	168	112	112	168	149	220	253	305	395	519	305	455	519	305	455	519	485	605	825
	7.58	84	124	143	124	124	186	124	124	186	156	230	265	320	435	544	320	480	544	320	480	544	500	605	850
	8.66	87	130	148	142	142	213	142	142	213	162	240	275	335	500	570	335	500	570	335	500	570	500	605	850
	9.14	89	134	151	149	149	224	149	149	224	165	245	281	340	510	578	340	510	578	340	510	578	500	605	850
	10.42	92	138	156	170	170	255	170	170	255	170	255	289	350	525	595	350	525	595	350	525	595			
	11.37	93	140	158	172	186	279	172	186	279	172	255	292	350	525	595	350	525	595	350	525	595			
	13.38	200	205	308	205	205	308	205	205	308	380	560	615	470	605	799	470	605	799	470	605	799	470	605	799
	15.67	215	240	360	240	240	360	240	240	360	410	605	697	490	605	833	490	605	833	490	605	833	490	605	833
	17.67	230	270	391	270	270	405	270	270	405	430	605	731	500	605	850	500	605	850	500	605	850	500	605	850
	20.03	240	310	408	305	305	458	305	305	458	450	605	765	500	605	850	500	605	850	500	605	850	500	605	850
	22.83	250	350	425	350	350	525	350	350	525	470	605	799	500	605	850	500	605	850	500	605	850	500	605	850
	25.34	265	390	451	390	390	585	390	390	585	490	605	833	500	605	850	500	605	850	500	605	850	500	605	850
	28.95	275	410	468	445	445	668	445	445	668	500	605	850	500	605	850	500	605	850	500	605	850	500	605	850
	30.55	280	420	476	470	470	705	470	470	705	500	605	850	500	605	850	500	605	850	500	605	850	500	605	850
	34.81	290	435	493	500	535	803	500	535	803	500	605	850	500	605	850	500	605	850	500	605	850			
	37.98	290	435	493	500	585	850	500	585	850	500	605	850	500	605	850	500	605	850	500	605	850			
44.44	305	455	519	500	605	850	500	605	850	500	605	850	500	605	850	500	605	850	500	605	850				
50.29	315	470	536	500	605	850	500	605	850	500	605	850													
52.94	320	480	544	500	605	850	500	605	850	500	605	850													
60.27	325	485	553	500	605	850	500	605	850	500	605	850													
70.19	330	495	561	445	605	757	445	605	757	445	605	757													
75.20	330	495	561	475	605	808	475	605	808	475	605	808													


K49, m [kg]		AQ.							
s		80/1-3	100/1-4	115/1-2	115/3	140/1	140/2-4	160/1	190/1-3
	2	33	34	34	34	39	39	39	48

KF: + 1.7 kg / KA: + -2.8 kg / KAF: + 2.1 kg

K49, J _A / c _{TA}		AQ.							
		80/1-3	100/1-4	115/1-2	115/3	140/1	140/2-4	160/1	190/1-3
J _A 10 ⁻⁴	[kgm ²]	0.77	1.4	1.4	3.1	5.1	10.0	10.0	25.0
c _{TA}	[Nm/"]	0.25	0.25	0.25	0,625	0,625	1.0	1.0	2.08

K49							F_{Ramax}				F_{Rapk}			
n_e = 1400		M_{amax}	M_{apk}	M_{aEmergOff}	n_{ak}	J_{GA} 10⁻⁴	K	KF	KA	KAF	K	KF	KA	KAF
	i	[Nm]	[Nm]	[Nm]	[1/min]	[kg*m²]	[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]
	4.00	440	605	745	218	11	3110	2390	0	0	9000	9000	9000	9000
	4.69	465	605	790	217	8.8	3270	2600	0	0	9000	9000	9000	9000
	5.29	485	605	820	217	7.2	3400	2770	0	0	9000	9000	9000	9000
	5.99	500	605	850	219	5.9	3570	3030	0	0	9000	9000	9000	9000
	6.83	500	605	850	218	4.8	3840	3250	0	0	9000	9000	9000	9000
	7.58	500	605	850	218	4.1	4050	3440	1030	1030	9000	9000	9000	9000
	8.66	500	605	850	218	3.3	4340	3680	3790	3790	9000	9000	9000	9000
	9.14	500	605	850	218	3.1	4460	3780	3910	3910	9000	9000	9000	9000
	10.42	480	585	810	238	2.4	4860	4120	4330	4330	9000	9000	9000	9000
	11.37	495	605	840	218	2.1	5000	4240	4450	4450	9000	9000	9000	9000
	13.38	470	605	795	46	6.5	4320	3660	3510	3510	9000	9000	9000	9000
	15.67	490	605	830	45	5.2	4590	3890	3750	3750	9000	9000	9000	9000
	17.67	500	605	850	44	4.4	4860	4120	3990	3990	9000	9000	9000	9000
	20.03	500	605	850	43	3.7	5220	4420	4350	4350	9000	9000	9000	9000
	22.83	500	605	850	43	3.1	5610	4750	4750	4750	9000	9000	9000	9000
	25.34	500	605	850	42	2.8	5940	5030	5070	5070	9000	9000	9000	9000
	28.95	500	605	850	42	2.3	6370	5400	5510	5510	9000	9000	9000	9000
	30.55	500	605	850	42	2.1	6550	5550	5690	5690	9000	9000	9000	9000
	34.81	500	605	850	42	1.7	7000	5930	6140	6140	9000	9000	9000	9000
	37.98	500	605	850	41	1.5	7310	6200	6450	6450	9000	9000	9000	9000
	44.44	500	605	850	41	1.2	7900	6690	7040	7040	9000	9000	9000	9000
	50.29	500	605	850	41	0.83	8380	7100	7530	7530	9000	9000	9000	9000
	52.94	500	605	850	41	0.75	8590	7280	7730	7730	9000	9000	9000	9000
	60.27	500	605	850	41	0.61	9000	7740	8280	8280	9000	9000	9000	9000
	70.19	445	605	755	40	0.50	9000	8630	9000	9000	9000	9000	9000	9000
	75.20	475	605	800	41	0.43	9000	8720	9000	9000	9000	9000	9000	9000



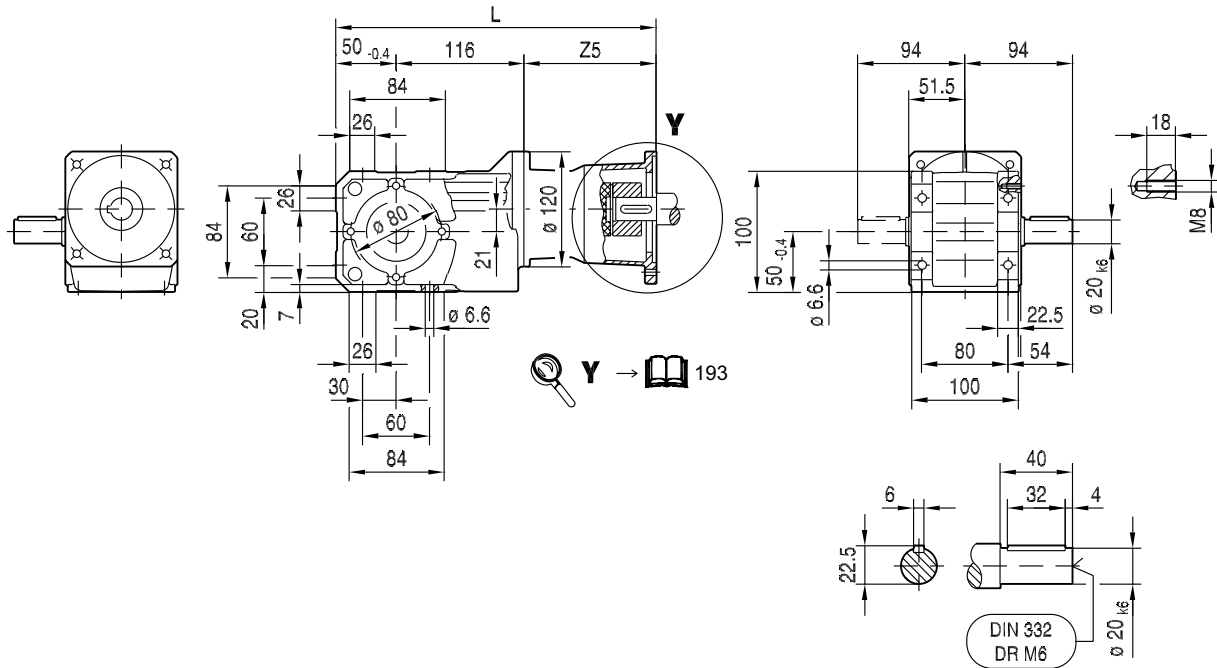
AQ.				C _{TG}			
	i	n _{epk} [1/min]	eta [%]	K [Nm/"]	KF [Nm/"]	KA [Nm/"]	KAF [Nm/"]
K49  2	4.00	4500	96	27	26	77	77
	4.69	4500	96	27	26	77	77
	5.29	4500	96	27	26	77	77
	5.99	4500	96	27	26	77	77
	6.83	4500	96	27	26	77	77
	7.58	4500	96	27	26	77	77
	8.66	4500	96	27	26	77	77
	9.14	4500	96	27	26	77	77
	10.42	4500	96	27	26	77	77
	11.37	4500	96	27	26	77	77
	13.38	4500	92	35	32	48	48
	15.67	4500	92	35	32	48	48
	17.67	4500	92	35	32	48	48
	20.03	4500	92	35	32	48	48
	22.83	4500	92	35	32	48	48
	25.34	4500	92	35	32	48	48
	28.95	4500	92	35	32	48	48
	30.55	4500	92	35	32	48	48
	34.81	4500	92	35	32	48	48
	37.98	4500	92	35	32	48	48
	44.44	4500	92	35	32	48	48
	50.29	4500	92	35	32	48	48
52.94	4500	92	35	32	48	48	
60.27	4500	91	35	32	48	48	
70.19	4500	91	35	32	48	48	
75.20	4500	91	35	32	48	48	

2.14 Dimension sheets for K..9 / AQA, AQH

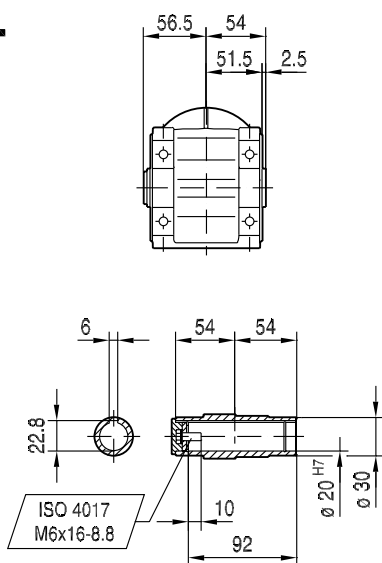
33 117 00 15

2

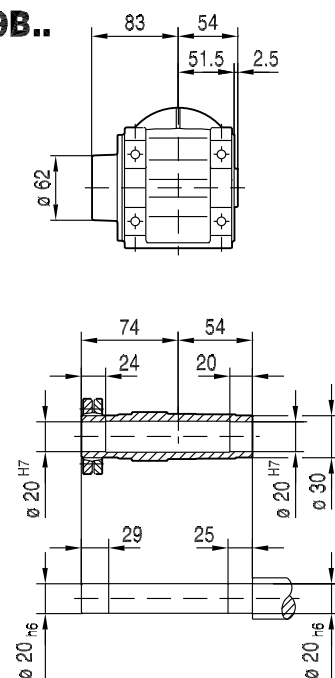
K19..



KA19B..



KH19B..

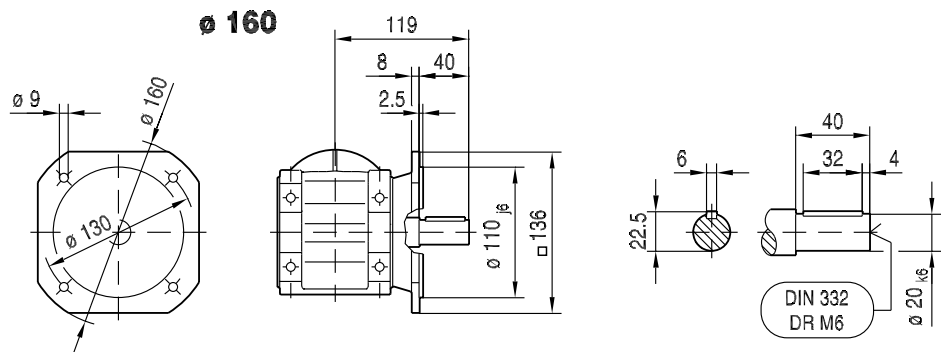
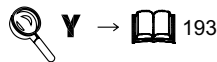
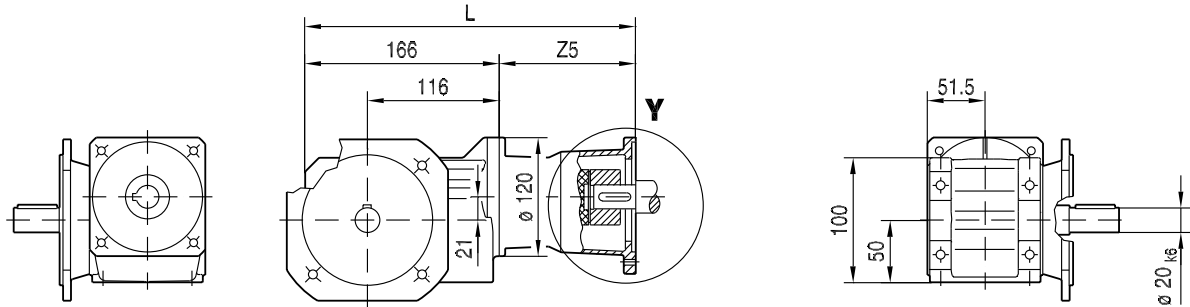


	AQ80/1-3	AQ100/1-2	AQ100/3-4	AQ115/1-3				
Z5	104.5	129.5	143.5	152.5				
L	271	296	310	319				

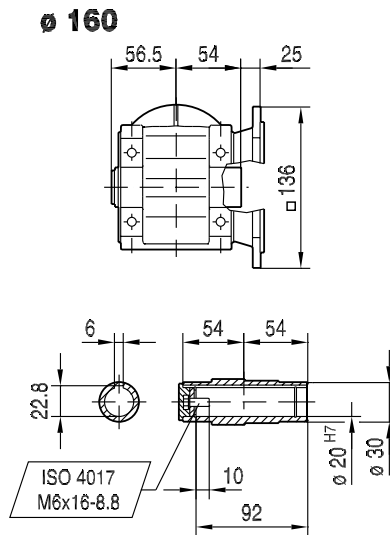
21932387/EN – 05/2015

33 118 00 15

KF19B..



KAF19B..



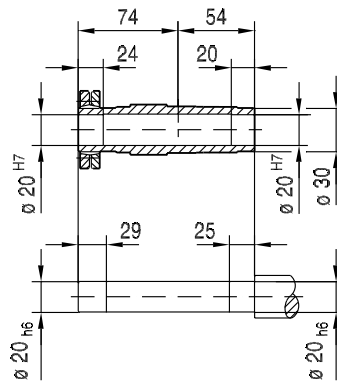
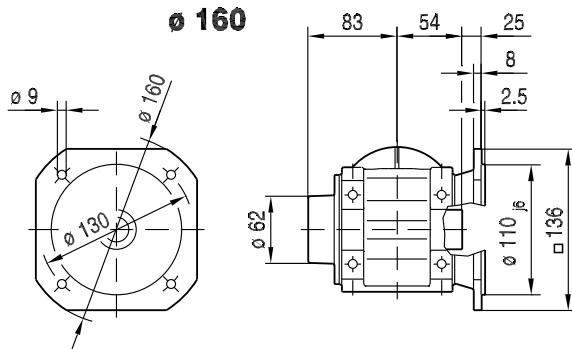
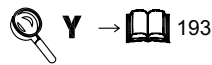
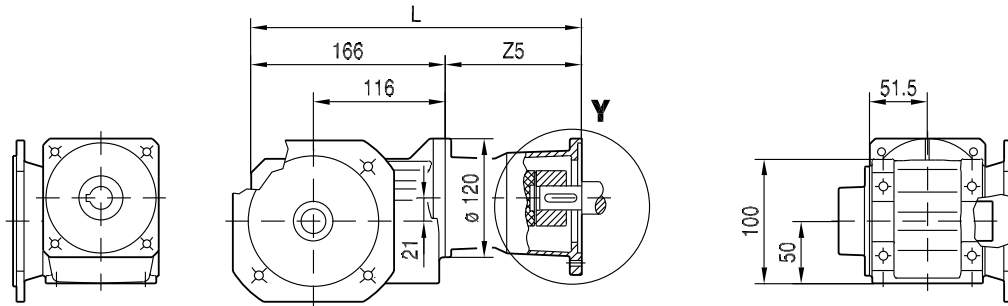
	AQ80/1-3	AQ100/1-2	AQ100/3-4	AQ115/1-3				
Z5	104.5	129.5	143.5	152.5				
L	271	296	310	319				

21932387/EN – 05/2015

KHF19B..

33 119 00 15

2

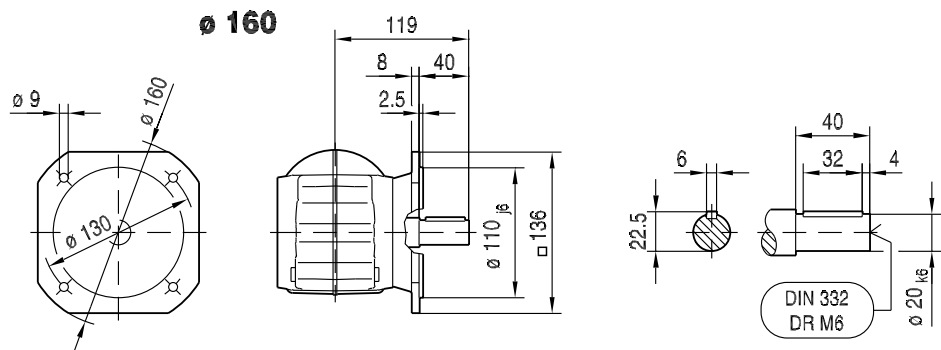
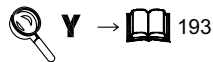
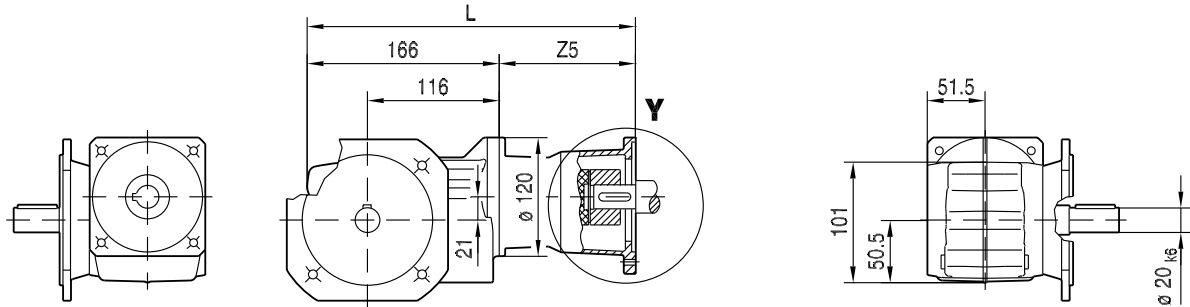


	AQ80/1-3	AQ100/1-2	AQ100/3-4	AQ115/1-3				
Z5	104.5	129.5	143.5	152.5				
L	271	296	310	319				

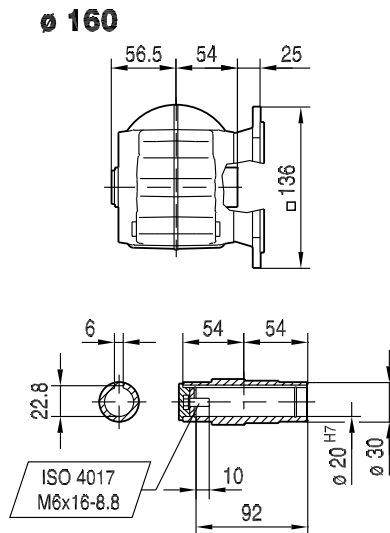
21932387/EN – 05/2015

33 120 00 15

KF19..



KAF19..

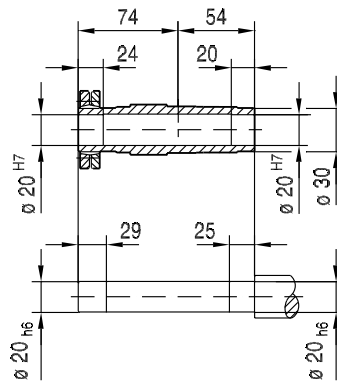
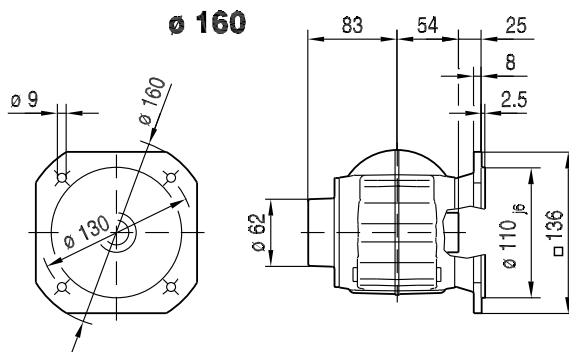
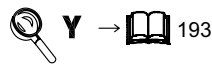
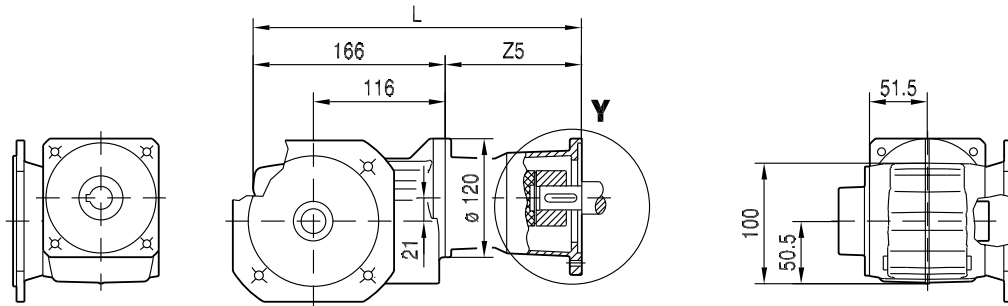


	AQ80/1-3	AQ100/1-2	AQ100/3-4	AQ115/1-3				
Z5	104.5	129.5	143.5	152.5				
L	271	296	310	319				

KHF19..

33 121 00 15

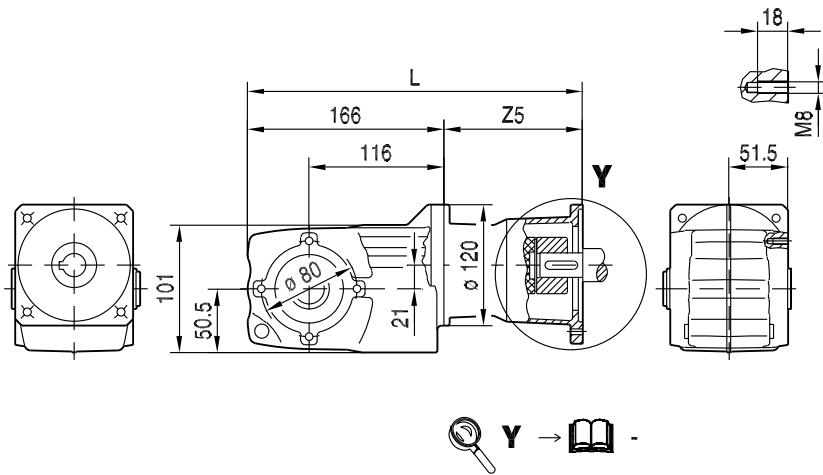
2



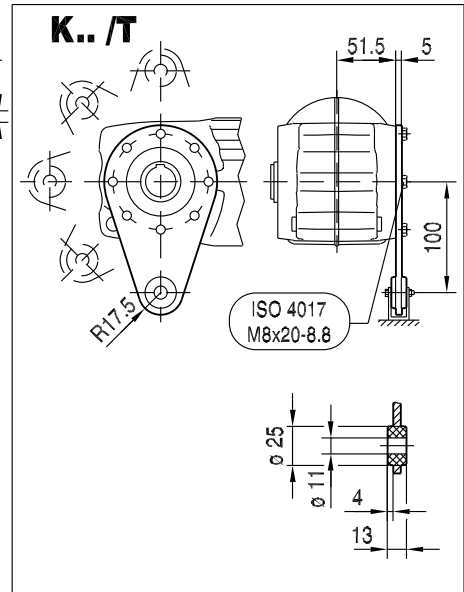
	AQ80/1-3	AQ100/1-2	AQ100/3-4	AQ115/1-3				
Z5	104.5	129.5	143.5	152.5				
L	271	296	310	319				

21932387/EN – 05/2015

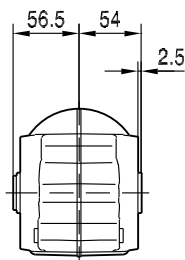
KA19..



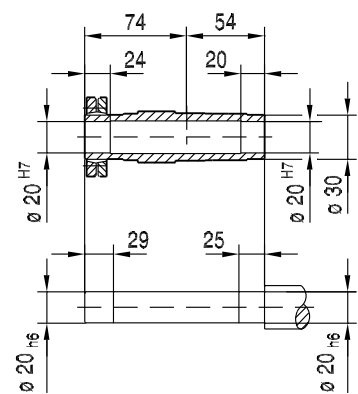
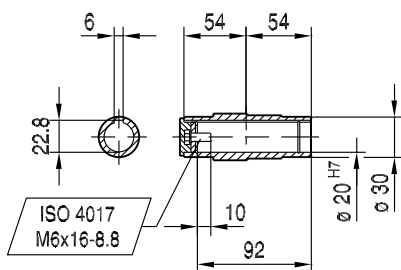
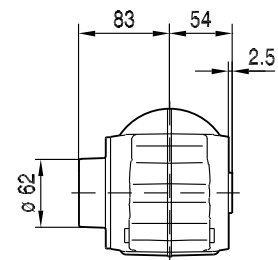
33 122 00 15



KA19..



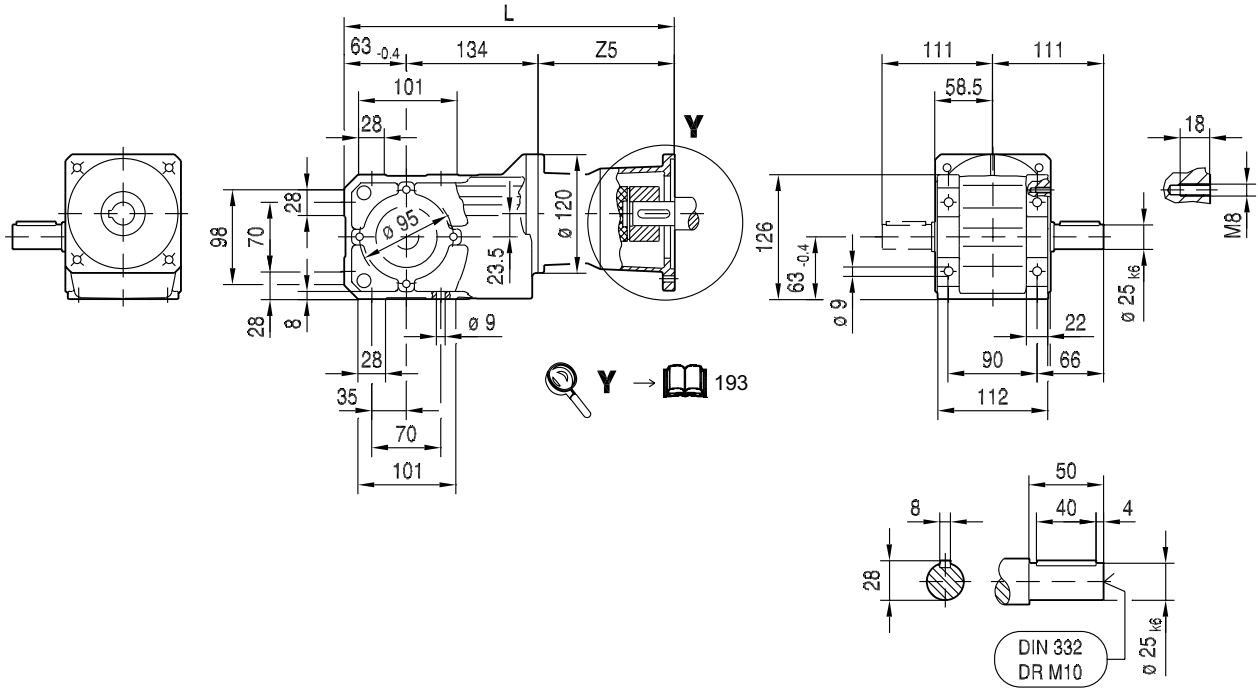
KH19..



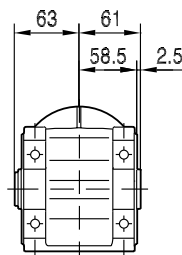
	AQ80/1-3	AQ100/1-2	AQ100/3-4	AQ115/1-3				
Z5	104.5	129.5	143.5	152.5				
L	271	296	310	319				

33 123 00 15

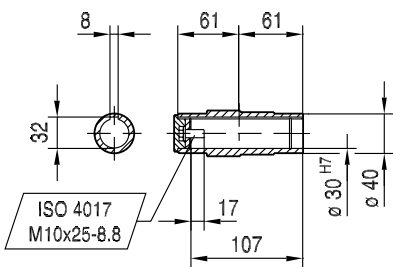
K29..



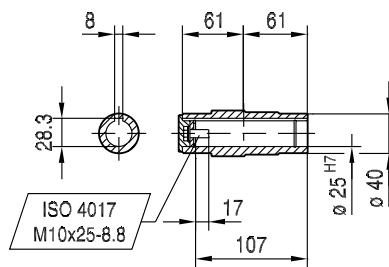
KA29B..



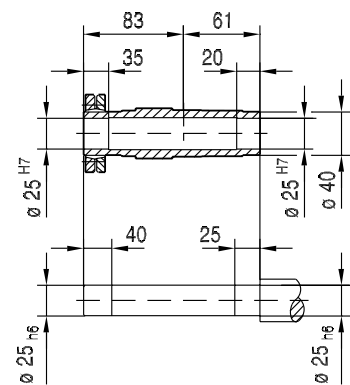
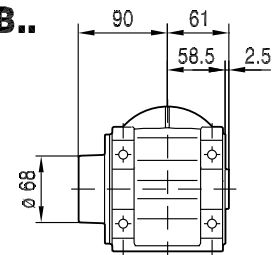
∅ 30 H7
DIN 6885-3



∅ 25 H7



KH29B..

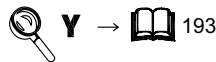
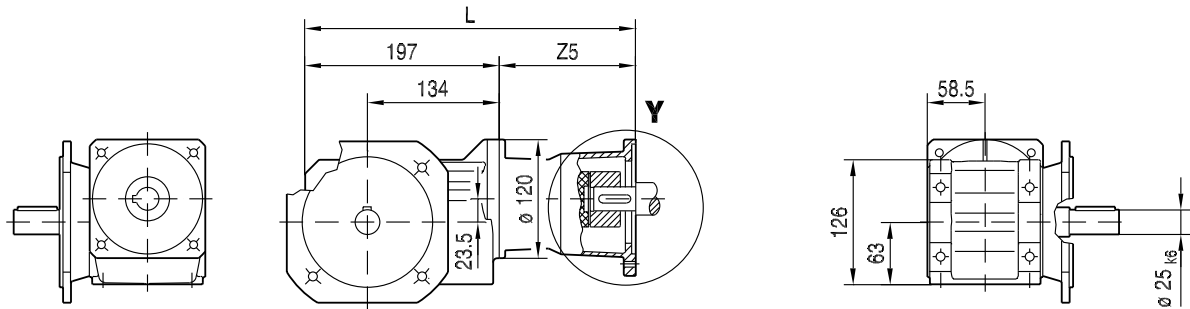


21932387/EN – 05/2015

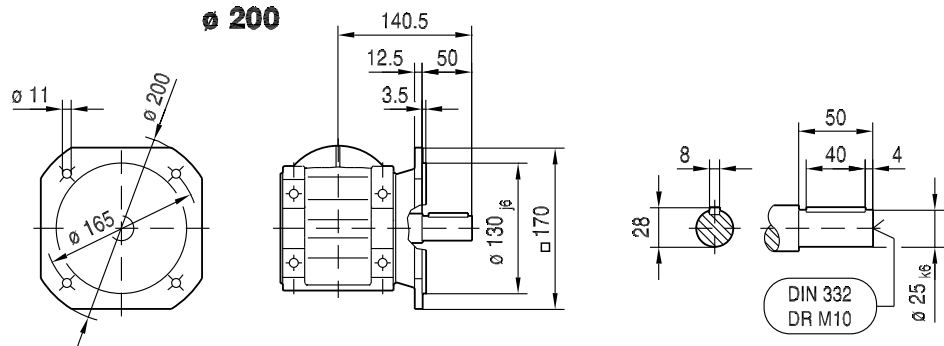
	AQ80/1-3	AQ100/1-2	AQ100/3-4	AQ115/1-3				
Z5	104.5	129.5	143.5	152.5				
L	302	327	341	350				

33 124 00 15

KF29B..

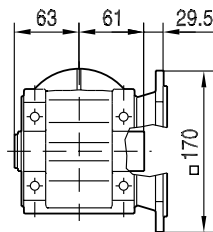


Ø 200

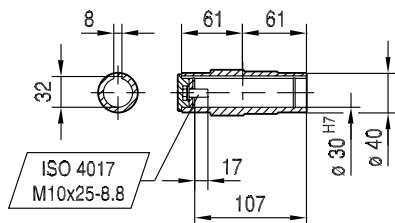


KAF29B..

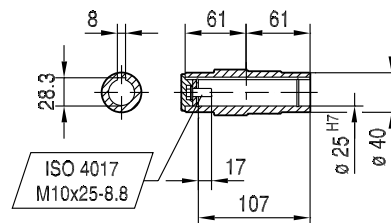
Ø 200



Ø 30 H7
DIN 6885-3



Ø 25 H7



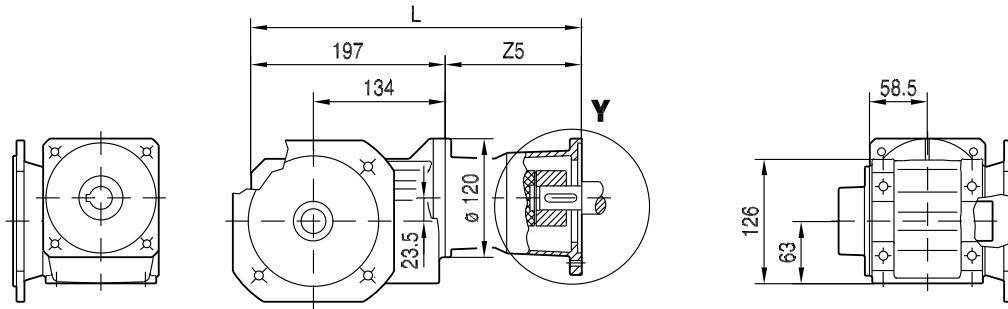
	AQ80/1-3	AQ100/1-2	AQ100/3-4	AQ115/1-3				
Z5	104.5	129.5	143.5	152.5				
L	302	327	341	350				

21932387/EN – 05/2015

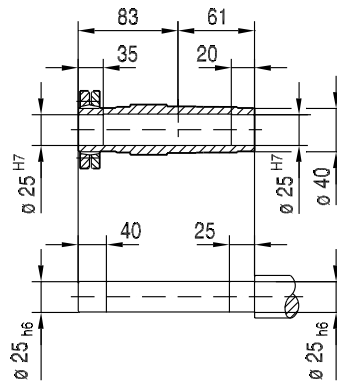
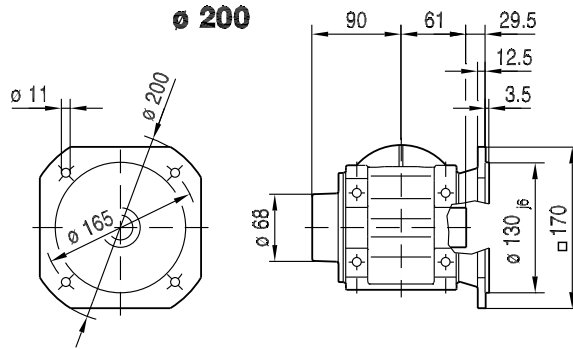
KHF29B..

33 125 00 15

2



Y → 193

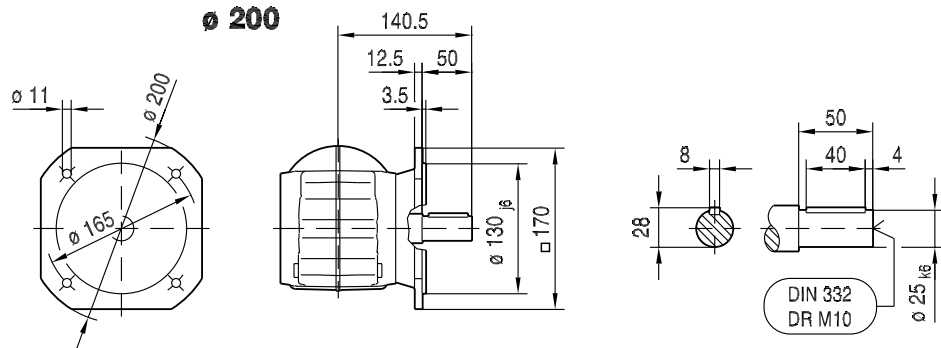
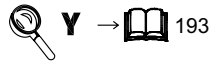
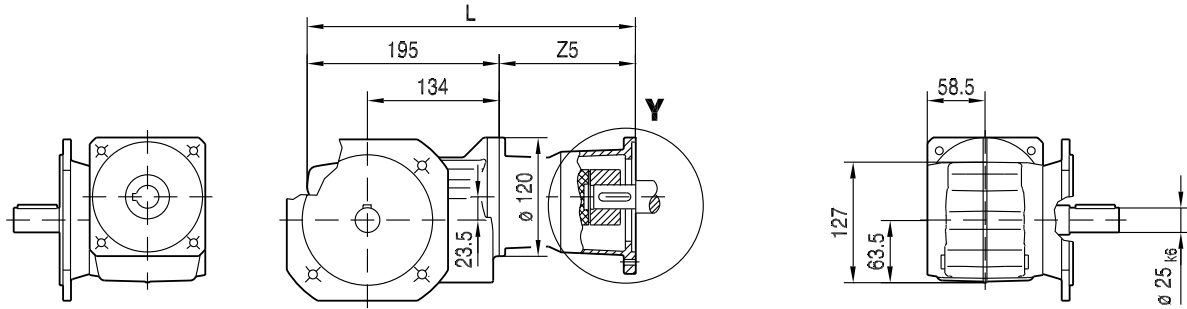


	AQ80/1-3	AQ100/1-2	AQ100/3-4	AQ115/1-3				
Z5	104.5	129.5	143.5	152.5				
L	302	327	341	350				

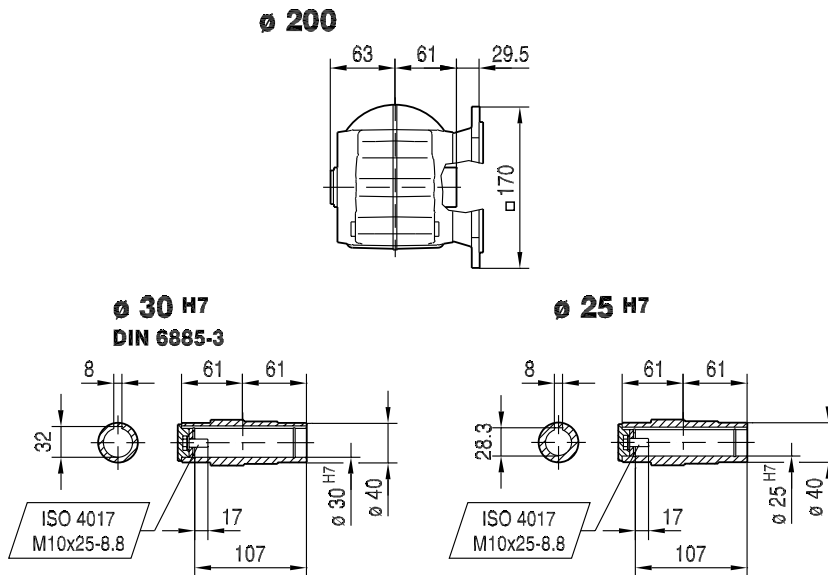
21932387/EN – 05/2015

33 126 00 15

KF29..



KAF29..



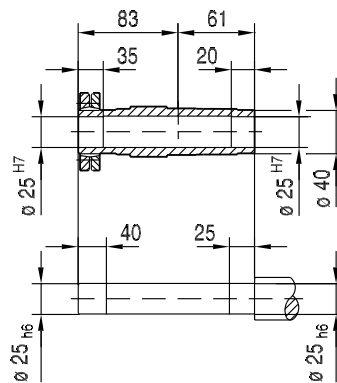
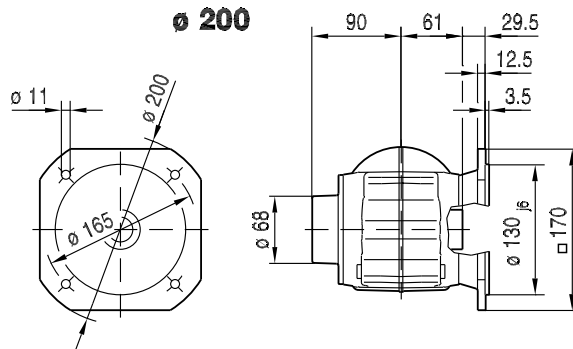
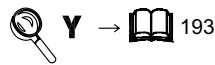
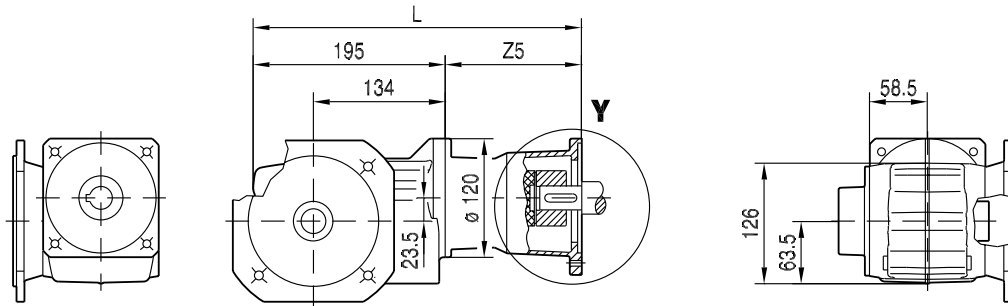
	AQ80/1-3	AQ100/1-2	AQ100/3-4	AQ115/1-3				
Z5	104.5	129.5	143.5	152.5				
L	300	325	339	348				

21932387/EN – 05/2015

KHF29..

33 127 00 15

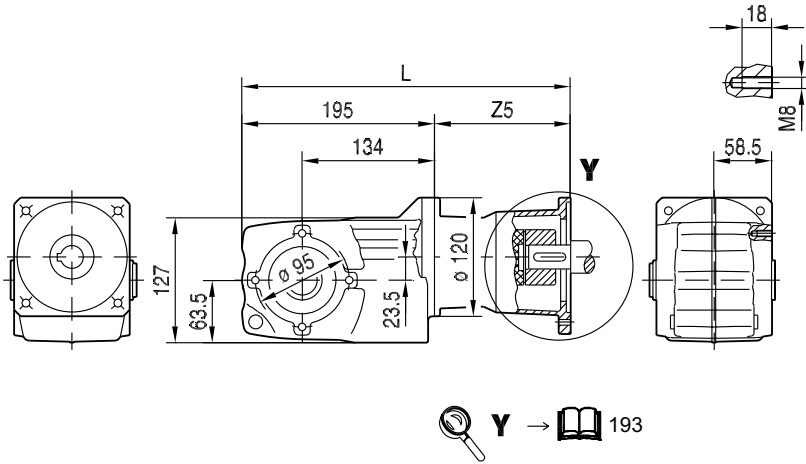
2



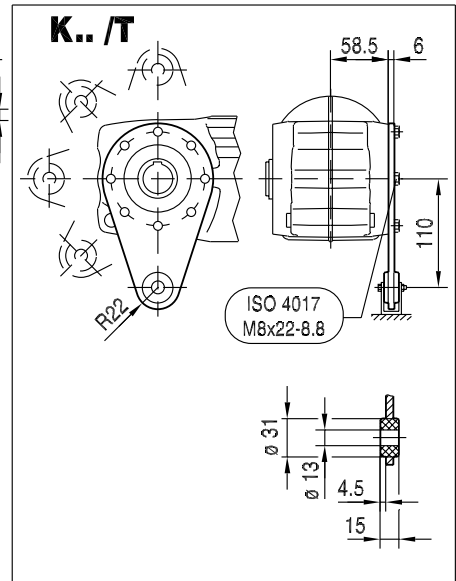
	AQ80/1-3	AQ100/1-2	AQ100/3-4	AQ115/1-3				
Z5	104.5	129.5	143.5	152.5				
L	300	325	339	348				

21932387/EN – 05/2015

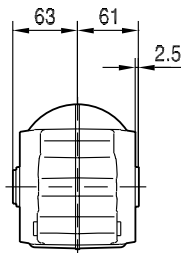
KA29..



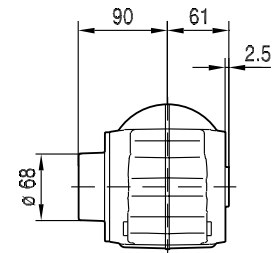
33 128 00 15



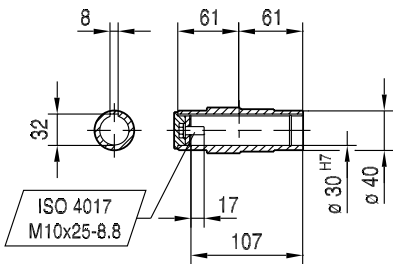
KA29..



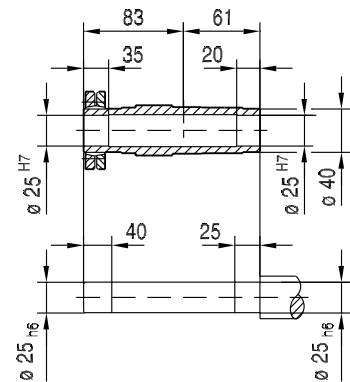
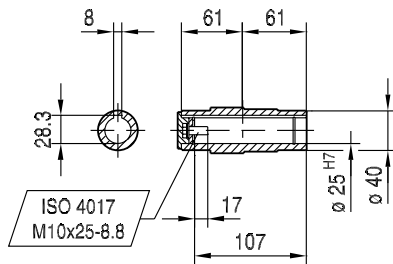
KH29..



Ø 30 H7
DIN 6885-3



Ø 25 H7

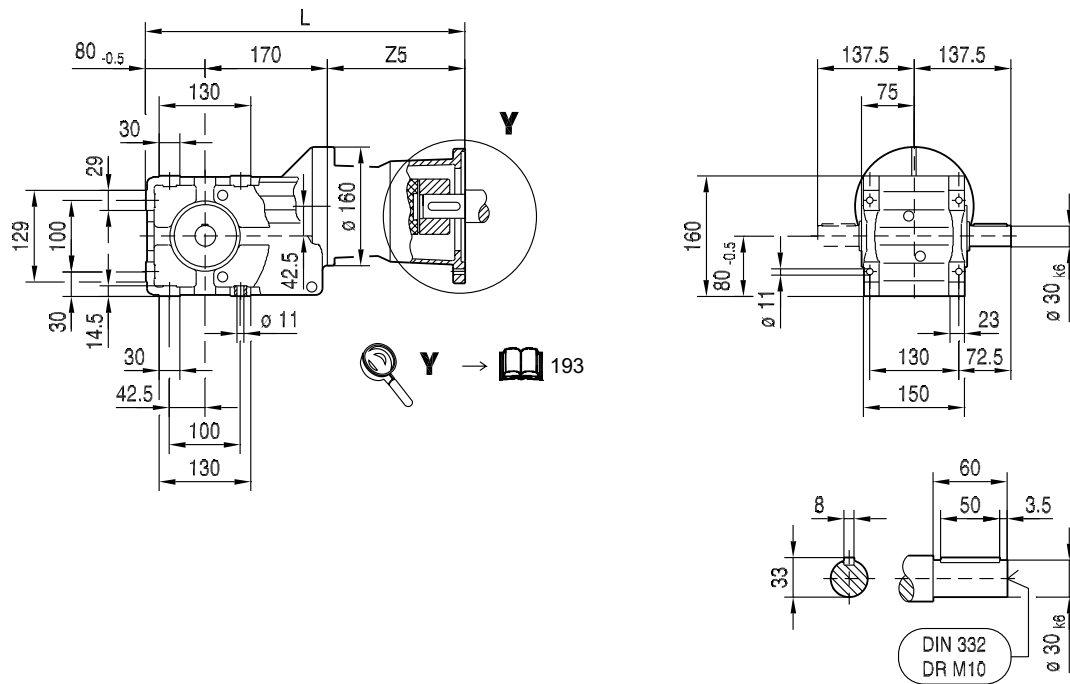


	AQ80/1-3	AQ100/1-2	AQ100/3-4	AQ115/1-3				
Z5	104.5	129.5	143.5	152.5				
L	300	325	339	348				

33 060 00 15

2

K39..

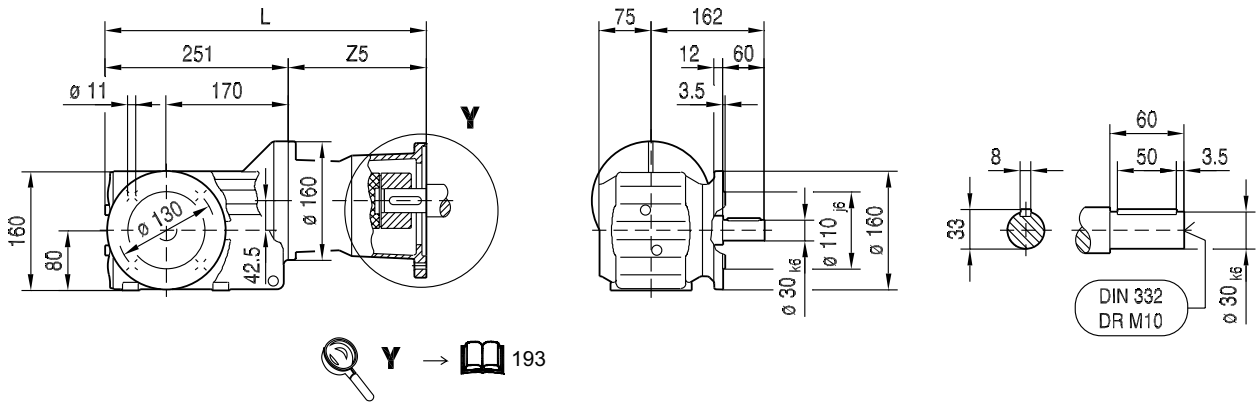


21932387/EN – 05/2015

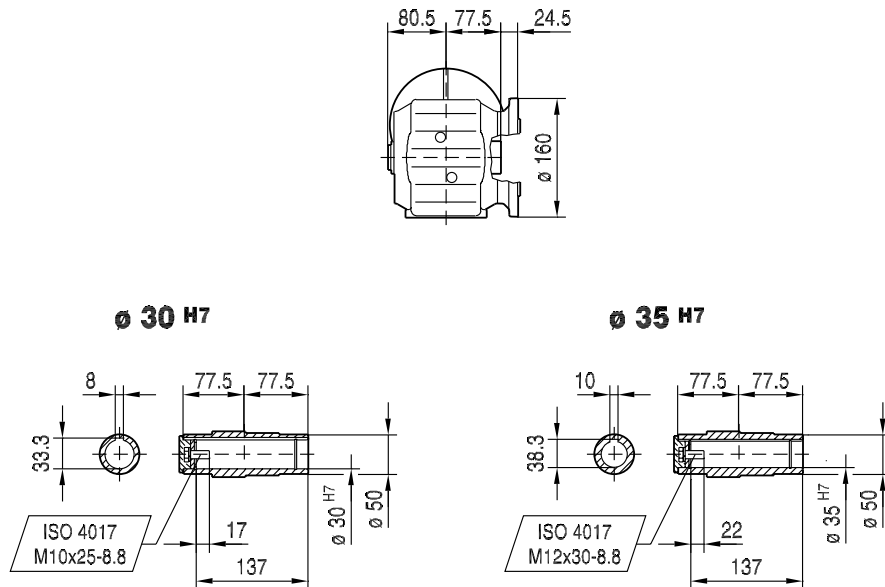
	AQ80/1-3	AQ100/1-2	AQ100/3-4	AQ115/1-3	AQ140/1-2	AQ140/3-4	AQ160/1	
Z5	98	123	137	146	175	188	188	
L	348	373	387	396	425	438	438	

33 061 00 15

KF39..



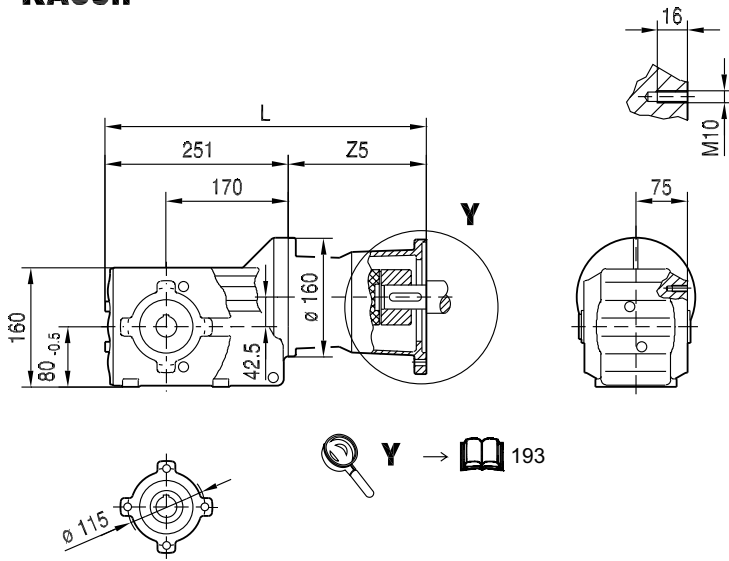
KAF39..



	AQ80/1-3	AQ100/1-2	AQ100/3-4	AQ115/1-3	AQ140/1-2	AQ140/3-4	AQ160/1	
Z5	98	123	137	146	175	188	188	
L	349	374	388	397	426	439	439	

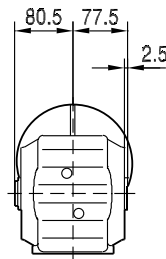
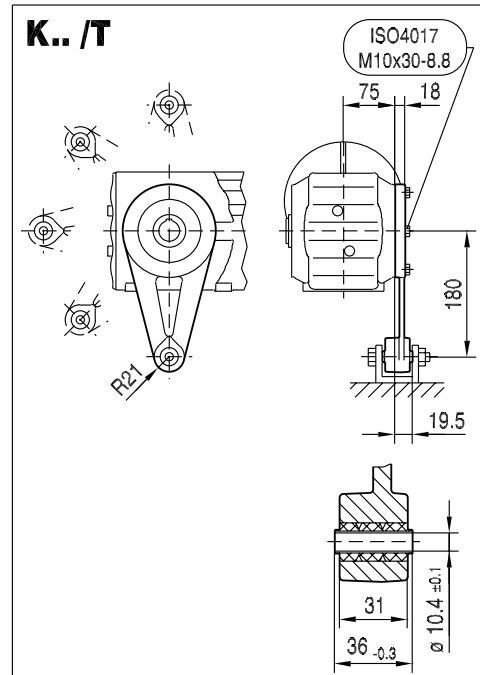
21932387/EN – 05/2015

KA39..

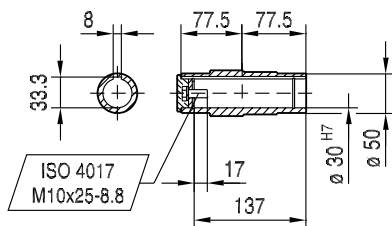


Y → 193

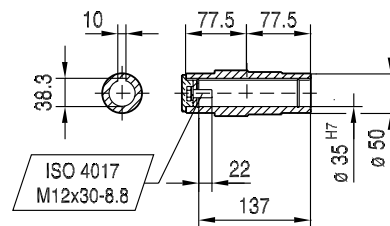
33 062 00 15



∅ 30 H7



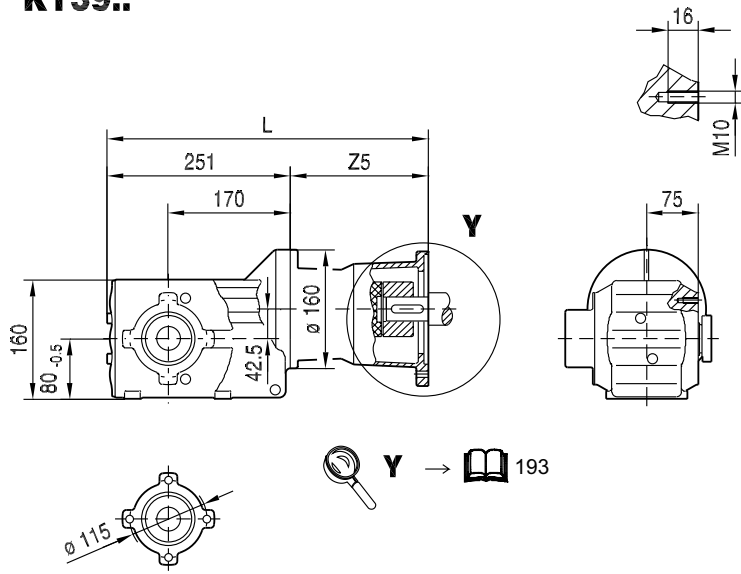
∅ 35 H7



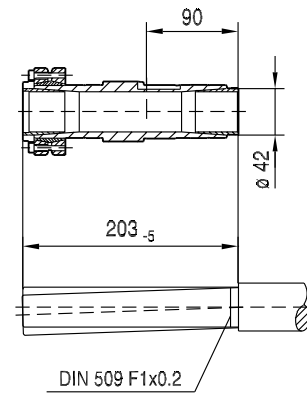
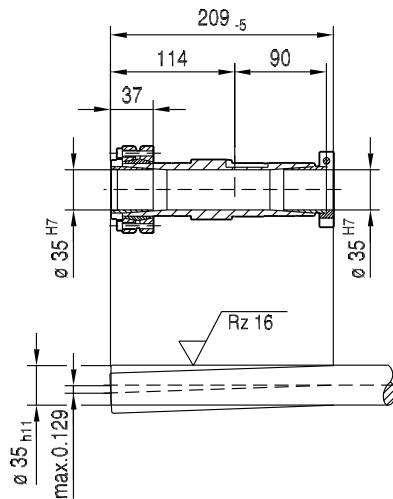
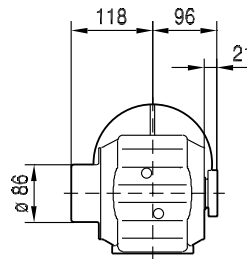
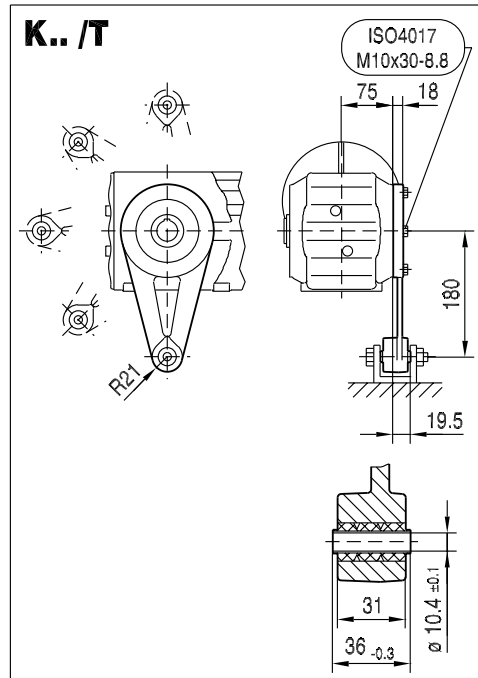
21932387/EN – 05/2015

	AQ80/1-3	AQ100/1-2	AQ100/3-4	AQ115/1-3	AQ140/1-2	AQ140/3-4	AQ160/1	
Z5	98	123	137	146	175	188	188	
L	349	374	388	397	426	439	439	

KT39..



33 063 00 15

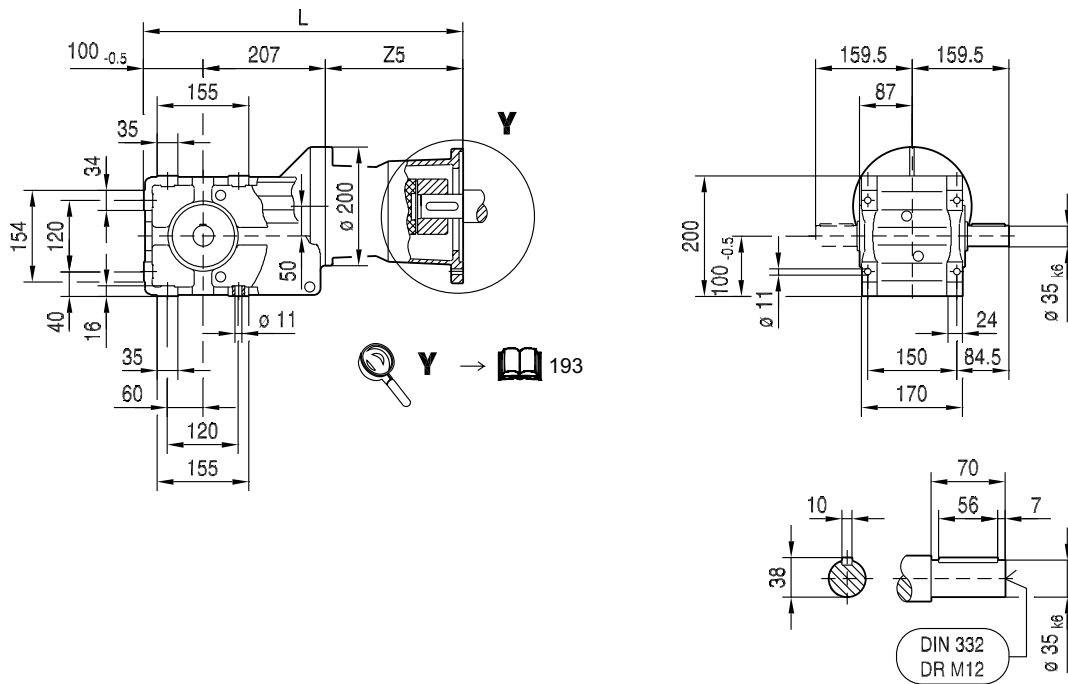


	AQ80/1-3	AQ100/1-2	AQ100/3-4	AQ115/1-3	AQ140/1-2	AQ140/3-4	AQ160/1	
Z5	98	123	137	146	175	188	188	
L	349	374	388	397	426	439	439	

K49..

33 064 00 15

2

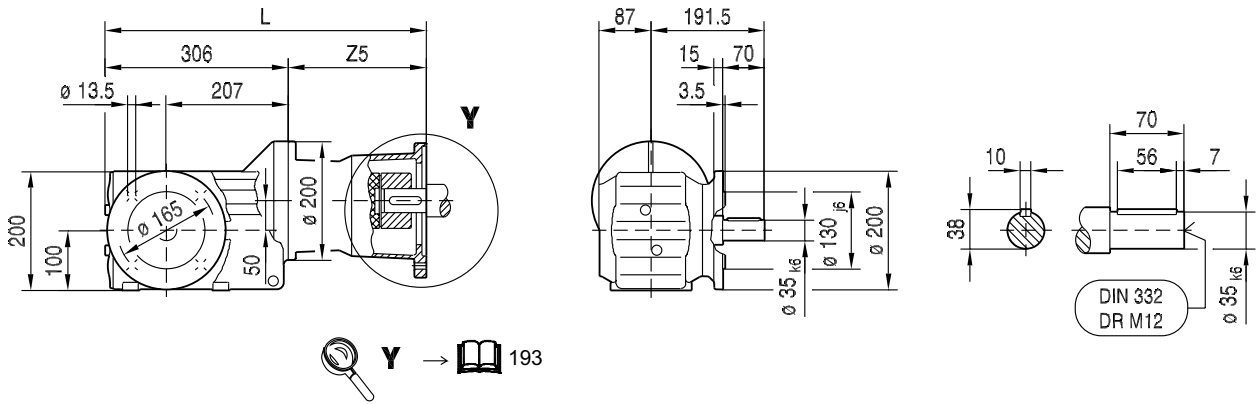


	AQ80/1-3	AQ100/1-2	AQ100/3-4	AQ115/1-3	AQ140/1-2	AQ140/3-4	AQ160/1	AQ190/1-2	AQ190/3
Z5	92	116	130	139	167	180	180	225.5	249.5
L	399	423	437	446	474	487	487	533	557

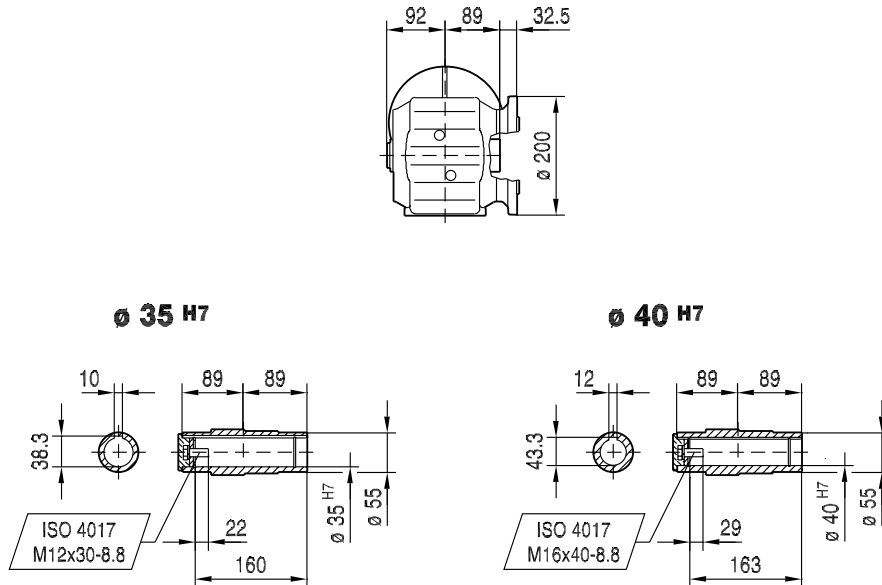
21932387/EN – 05/2015

33 065 00 15

KF49..



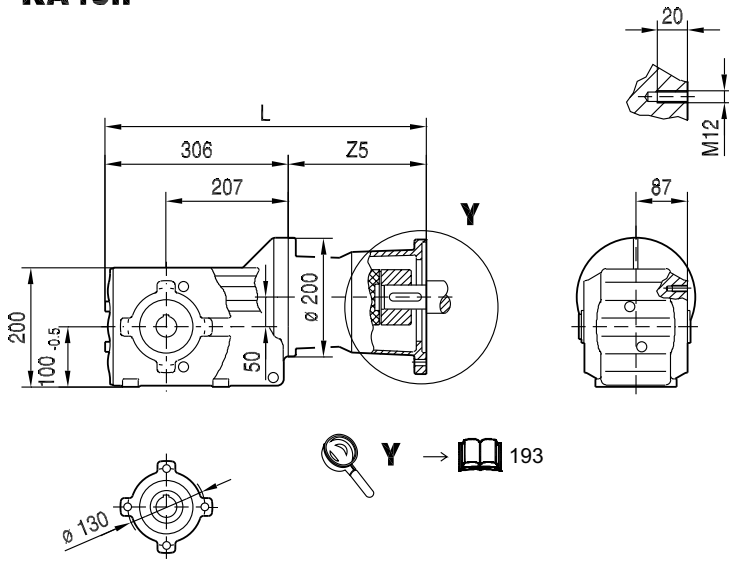
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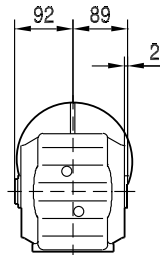
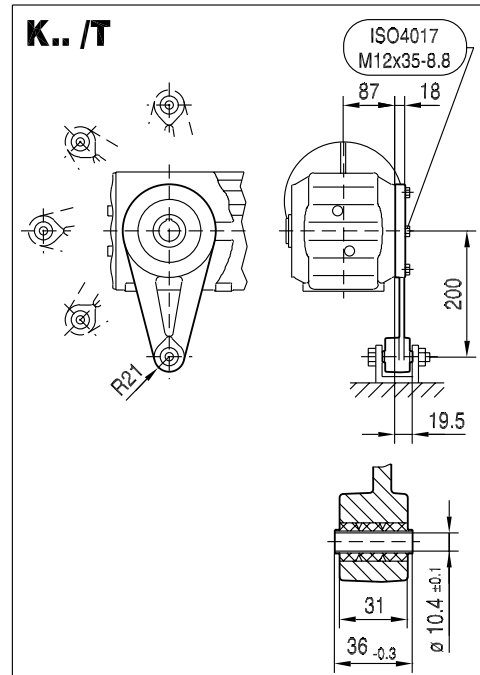
	AQ80/1-3	AQ100/1-2	AQ100/3-4	AQ115/1-3	AQ140/1-2	AQ140/3-4	AQ160/1	AQ190/1-2	AQ190/3
Z5	92	116	130	139	167	180	180	225.5	249.5
L	398	422	436	445	473	486	486	532	556

21932387/EN – 05/2015

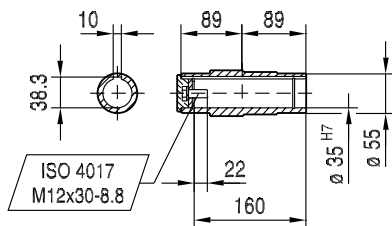
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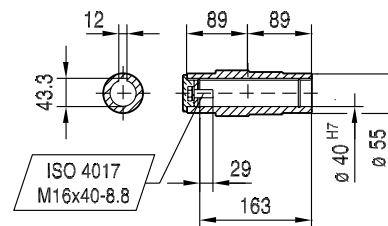
33 066 00 15



Ø 35 H7



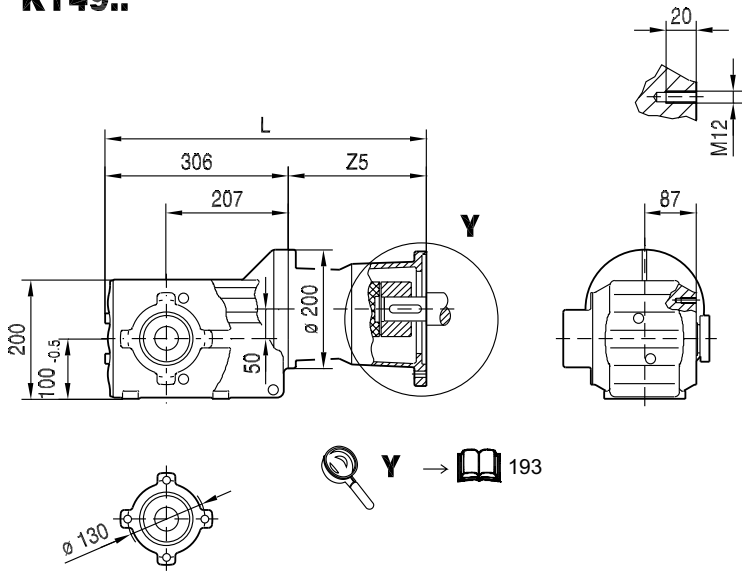
Ø 40 H7



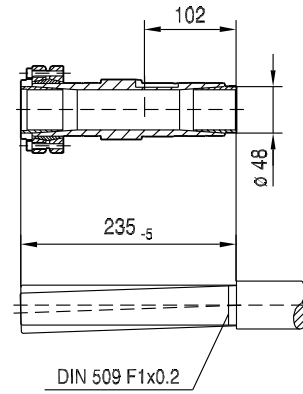
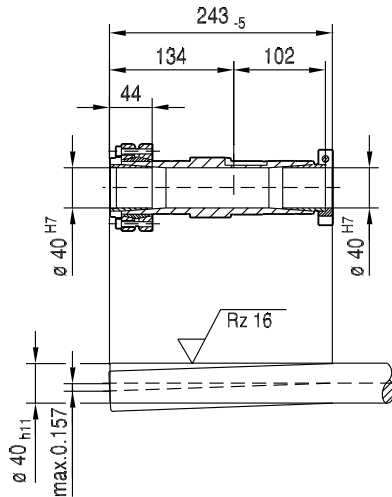
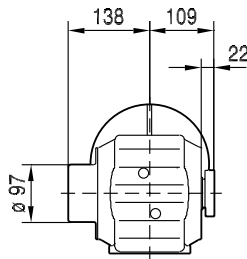
21932387/EN – 05/2015

	AQ80/1-3	AQ100/1-2	AQ100/3-4	AQ115/1-3	AQ140/1-2	AQ140/3-4	AQ160/1	AQ190/1-2	AQ190/3
Z5	92	116	130	139	167	180	180	225.5	249.5
L	398	422	436	445	473	486	486	532	556

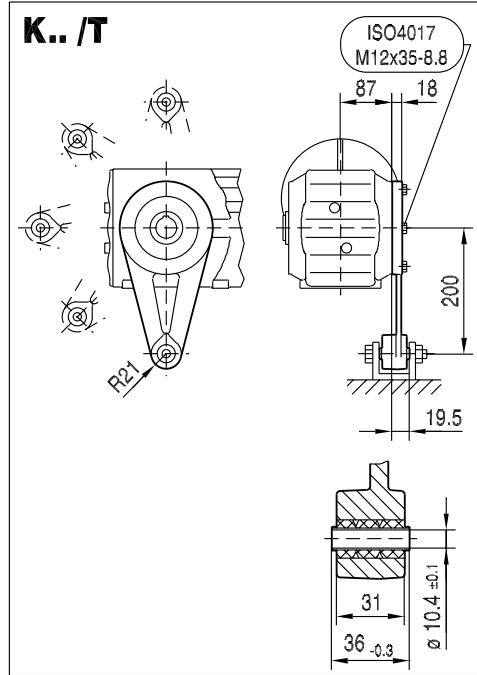
KT49..



Y → 193

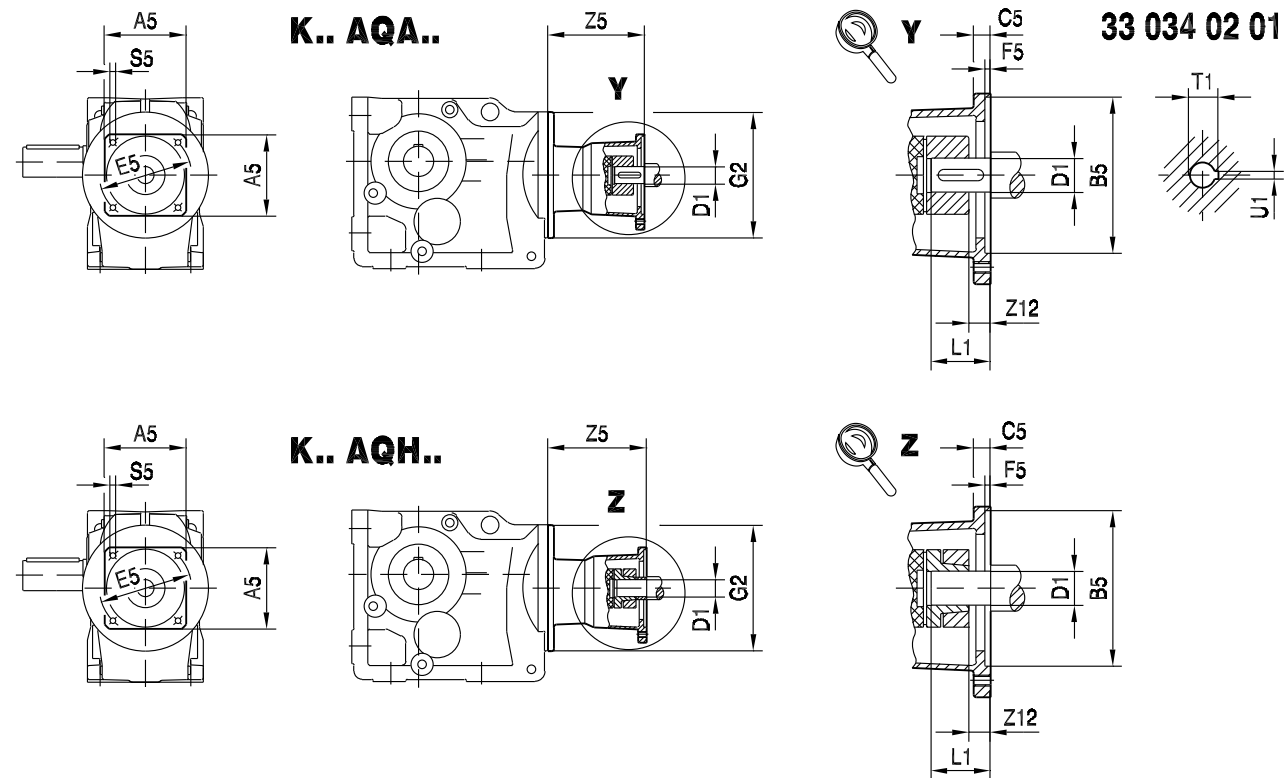


33 067 00 15



	AQ80/1-3	AQ100/1-2	AQ100/3-4	AQ115/1-3	AQ140/1-2	AQ140/3-4	AQ160/1	AQ190/1-2	AQ190/3
Z5	92	116	130	139	167	180	180	225.5	249.5
L	398	422	436	445	473	486	486	532	556

2.15 Dimension sheets for AQ


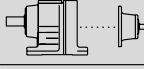






	A5	B5	C5	E5	F5	S5	Z12 (AQA)	Z12 (AQH)	D1	L1	T1	U1
AQ_80/1	82	60	8	75	3.5	M5	5.5	5.5	11	23	12.8	4
AQ_80/2	82	60	8	75	3.5	M5	5.5	5.5	14	30	16.3	5
AQ_80/3	82	50	8	95	3	M6	5.5	5.5	14	30	16.3	5
AQ_100/1	100	80	10	100	4	M6	0	0	14	30	16.3	5
AQ_100/2	100	95	12	115	4	M8	0	0	14	30	16.3	5
AQ_100/3	100	80	10	100	4	M6	2	14	19	40	21.8	6
AQ_100/4	100	95	12	115	4	M8	2	14	19	40	21.8	6
AQ_115/1	115	95	12	130	5	M8	11	23	19	40	21.8	6
AQ_115/2	115	110	12	130	5	M8	11	23	19	40	21.8	6
AQ_115/3	115	110	12	130	5	M8	16	16	24	50	27.3	8
AQ_140/1	140	110	15	165	5	M10	16	16	24	50	27.3	8
AQ_140/2	140	130	15	165	5	M10	16	16	24	50	27.3	8
AQ_140/3	140	130	15	165	5	M10	22	22	32	60	35.3	10
AQ_140/4	140	130	15	165	5	M10	22	22	28	60	31.3	8
AQ_160/1	162	155	15	190	5	M10	22	22	32	60	35.3	10
AQ_190/1	190	130	16	215	5	M12	24	24	32	60	35.3	10
AQ_190/2	190	180	16	215	5	M12	24	24	32	60	35.3	10
AQ_190/3	190	180	16	215	5	M12	34	34	38	80	41.3	10

A5: Square dimension
B5: Centering Ø
C5: Flange thickness
E5: Hole circle Ø




F5: Centering depth
S5: Tapped hole
D1: Coupling bore Ø
L1: Max. motor shaft insertion depth

2.16 Selection tables for K..9 / AD

i	n _a [rpm]	M _{a,max} [Nm]	P _e [kW]	F _{Ra} ¹⁾ [N]	F _{Re} [N]	φ _(VR)			m [kg]	
K19 AD.. , n_e = 1400 rpm										80 Nm
44.48	31	69	0.28	4340	615	-	-			
40.63	34	67	0.30	4350	615	-	-			
34.29	41	64	0.34	4370	610	-	-			
29.29	48	61	0.38	4200	610	-	-			
27.16	52	60	0.40	4090	605	-	-	K 19	AD1	6.2
24.06	58	80	0.54	3820	230	-	-	KF 19	AD1	6.5
21.98	64	80	0.60	3680	215	-	-	KA 19	AD1	5.8
18.55	75	80	0.70	3430	174	-	-	KAF 19	AD1	6.2
15.84	88	80	0.82	3210	131	-	-			197
14.69	95	80	0.88	3110	108	-	-			
12.70	110	80	1.0	2930	58	-	-			
11.84	118	79	1.1	2850	1600	-	-			
10.32	136	76	1.2	2720	1590	-	-			
9.58	146	63	1.0	2910	600	-	-			
8.09	173	80	1.5	2590	1310	-	-	K 19	AD2	7.3
6.91	203	80	1.8	2420	1280	-	-	KF 19	AD2	7.6
6.41	219	80	2.0	2340	1260	-	-	KA 19	AD2	6.9
5.54	253	80	2.3	2200	1230	-	-	KAF 19	AD2	7.3
5.16	271	80	2.4	2140	1210	-	-			197
4.50	311	73	2.5	2070	1230	-	-			
K29 AD.. , n_e = 1400 rpm										130 Nm
54.89	26	130	0.41	4980	425	-	-			
50.35	28	130	0.44	4980	415	-	-			
42.87	33	128	0.51	4790	400	-	-			
36.96	38	122	0.56	4560	400	-	-			
30.11	46	115	0.65	4250	395	-	-			
29.69	47	128	0.69	4230	3	-	-	K 29	AD1	8.0
27.23	51	125	0.74	4100	6	-	-	KF 29	AD1	9.0
24.91	56	109	0.75	3980	385	-	-	KA 29	AD1	7.5
23.19	60	120	0.83	3880	6	-	-	KAF 29	AD1	8.4
22.08	63	105	0.81	3820	380	-	-			197
19.99	70	130	1.0	3550	1540	-	-			
16.29	86	130	1.3	3240	1520	-	-			
13.47	104	130	1.5	2970	1490	-	-			
11.94	117	130	1.7	2810	1470	-	-			
9.90	141	110	1.7	3000	1240	-	-			
9.17	153	130	2.3	2470	1400	-	-	K 29	AD2	9.1
8.53	164	113	2.0	2800	1190	-	-	KF 29	AD2	10
7.48	187	123	2.6	2300	1370	-	-	KA 29	AD2	8.7
6.95	201	110	2.4	2590	1160	-	-	KAF 29	AD2	9.5
5.75	243	112	3.0	2370	1090	-	-			197
5.10	275	110	3.3	2260	1060	-	-			
3.92	358	126	4.9	1910	800	-	-			
3.19	439	110	5.3	1830	820	-	-			
K39 AD.. , n_e = 1400 rpm										300 Nm

i	n _a [rpm]	Ma _{max} [Nm]	P _e [kW]	F _{Ra} ¹⁾ [N]	F _{Re} [N]	ψ _(R)			m [kg]	
58.24	24	300	0.85	7500	960	-	-			
49.69	28	300	0.99	7440	1540	-	-			
43.45	32	300	1.1	7000	1530	-	-			
41.28	34	300	1.2	6840	1530	-	-			
36.22	39	300	1.4	6440	1510	-	-			
30.72	46	300	1.6	5960	1490	-	-			
27.73	50	300	1.8	5670	1480	-	-			
24.40	57	300	2.0	5330	1460	-	-			
23.04	61	300	2.1	5180	1450	-	-			
19.62	71	295	2.4	4820	1430	-	-			
17.83	79	290	2.6	4630	1420	-	-			
17.06	82	114	1.0	6360	635	-	-			
15.44	91	280	2.9	4380	1400	-	-	K 39	AD2	20
14.56	96	190	2.0	5570	1160	-	-	KF 39	AD2	22
13.44	104	270	3.2	4160	1380	-	-	KA 39	AD2	19
12.73	110	192	2.3	5260	1130	-	-	KAF 39	AD2	21
12.09	116	187	2.4	5180	1140	-	-			
10.61	132	285	4.1	4360	600	-	-			
9.60	146	250	4.2	3640	1320	-	-			
9.00	156	300	5.1	3950	360	-	-			
8.12	172	285	5.3	3840	420	-	-			
7.15	196	265	5.6	3730	535	-	-			
6.75	207	255	5.7	3690	585	-	-			
5.75	244	225	5.9	3590	725	-	-			
5.22	268	210	6.1	3520	760	-	-			
4.52	309	191	6.4	3410	795	-	-			
3.94	356	171	6.6	3320	840	-	-			
2.81	498	128	6.9	3110	940	-	-			
K49 AD.. , n_e = 1400 rpm										500 Nm
75.20	19	475	1.0	9000	545	-	-			
70.19	20	445	1.0	9000	660	-	-			
60.27	23	500	1.4	9000	1420	-	-			
52.94	26	500	1.5	8590	1410	-	-			
50.29	28	500	1.6	8380	1410	-	-			
44.44	32	500	1.8	7900	1380	-	-			
42.10	32	500	1.8	7860	1370	-	-			
37.98	37	500	2.1	7310	1360	-	-			
34.81	40	500	2.3	7000	1350	-	-			
30.55	46	500	2.6	6550	1330	-	-			
28.95	48	500	2.8	6370	1320	-	-			
25.34	55	500	3.2	5940	1290	-	-	K 49	AD2	33
22.83	61	500	3.5	5610	1260	-	-	KF 49	AD2	34
22.50	62	150	1.0	8470	555	-	-	KA 49	AD2	30
21.00	67	140	1.0	8310	675	-	-	KAF 49	AD2	35
20.03	70	500	4.0	5220	1220	-	-			
18.04	78	260	2.2	7300	1110	-	-			
17.67	79	500	4.6	4860	1190	-	-			
15.84	88	260	2.5	6940	1090	-	-			
15.67	89	490	5.0	4590	1160	-	-			
15.05	93	255	2.6	6830	1110	-	-			
13.38	105	470	5.7	4320	1130	-	-			
13.30	105	420	4.8	5740	142	-	-			
12.60	106	420	4.9	5710	86	-	-			
11.75	126	450	6.5	4000	1060	-	-			
11.37	123	415	5.6	5370	1520	-	-			
10.42	134	395	5.8	5250	1560	-	-			
9.14	153	500	8.3	4460	940	-	-			
8.66	162	500	8.8	4340	880	-	-			
7.58	185	500	10.0	4050	735	-	-	K 49	AD3	36
6.83	205	500	11.1	3840	560	-	-	KF 49	AD3	38
5.99	234	500	12.7	3570	380	-	-	KA 49	AD3	33
5.29	265	485	13.9	3400	310	-	-	KAF 49	AD3	38
4.69	299	465	15.1	3270	285	-	-			
4.00	350	435	16.5	3130	275	-	-			
3.52	422	365	16.7	3140	505	-	-			

21932387/EN – 05/2015

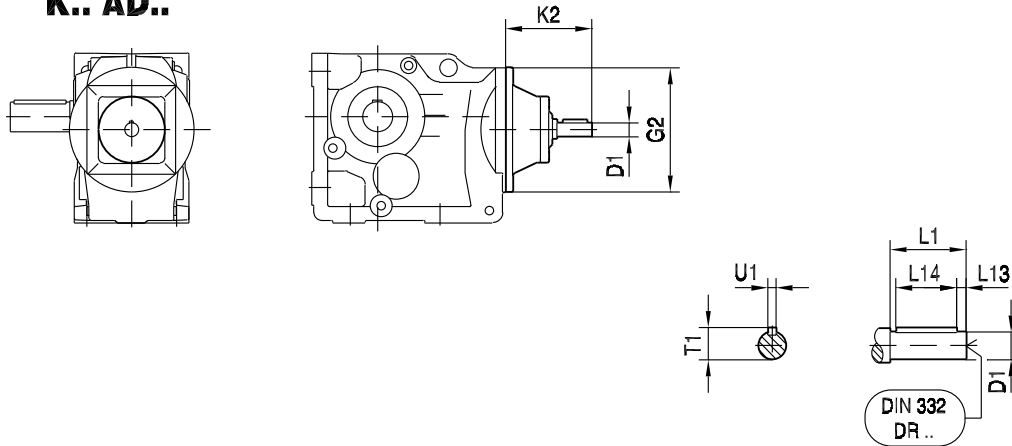
i	n _a [rpm]	Ma _{max} [Nm]	P _e [kW]	F _{Ra} ¹⁾ [N]	F _{Re} [N]	ψ _(R)			m [kg]	
7137	0.20	500	<0.05	9000	820	-	-			
5991	0.23	500	<0.05	9000	820	-	-			
5120	0.27	500	<0.05	9000	820	-	-			
4034	0.35	500	<0.05	9000	820	-	-			
3580	0.39	500	<0.05	9000	820	-	-			
3081	0.45	500	0.05	9000	820	-	-			
2773	0.50	500	0.05	9000	820	-	-	K 49R37	AD1	41
2545	0.55	500	0.06	9000	820	-	-	KF 49R37	AD1	42
2372	0.59	500	0.06	9000	820	-	-	KA 49R37	AD1	38
2118	0.66	500	0.06	9000	810	-	-	KAF 49R37	AD1	43
1941	0.72	500	0.07	9000	810	-	-			
1741	0.80	500	0.07	9000	810	-	-			
1632	0.86	500	0.08	9000	810	-	-			
1521	0.92	500	0.08	9000	810	-	-			
1228	1.1	500	0.10	9000	810	-	-			
1000	1.4	500	0.11	9000	810	-	-			
1424	0.98	500	0.08	9000	800	-	-			
1309	1.1	500	0.09	9000	800	-	-			
1120	1.2	500	0.10	9000	795	-	-			
908	1.5	500	0.12	9000	795	-	-			
802	1.8	500	0.13	9000	790	-	-			
701	2.0	500	0.15	9000	795	-	-			
645	2.2	500	0.15	9000	775	-	-			
595	2.4	500	0.17	9000	790	-	-			
543	2.6	500	0.18	9000	775	-	-			
501	2.8	500	0.20	9000	785	-	-			
449	3.1	500	0.22	9000	780	-	-	K 49R37	AD1	41
401	3.5	500	0.24	9000	780	-	-	KF 49R37	AD1	42
360	3.9	500	0.26	9000	770	-	-	KA 49R37	AD1	38
330	4.2	500	0.28	9000	765	-	-	KAF 49R37	AD1	43
300	4.7	500	0.30	9000	745	-	-			
274	5.1	500	0.33	9000	755	-	-			
243	5.8	500	0.37	9000	750	-	-			
217	6.4	500	0.41	9000	730	-	-			
193	7.2	500	0.45	9000	595	-	-			
176	8.0	500	0.50	9000	635	-	-			
152	9.2	500	0.58	9000	660	-	-			
125	11	500	0.69	9000	535	-	-			
99	14	500	0.87	9000	480	-	-			

2.17 Dimension sheets for AD

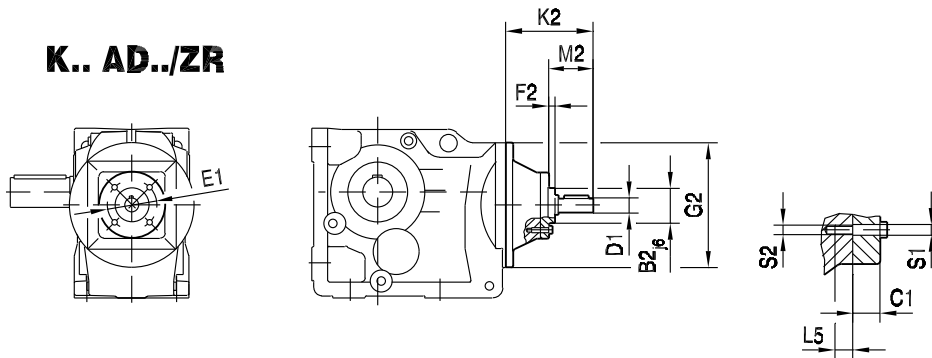
K.. AD..

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2



K.. AD../ZR



		B2	C1	E1	F2	G2	K2	L5	M2	S1	S2	D1	L1	L13	L14	T1	U1
K..19, K..29	AD1	-	-	-	-	120	102	-	-	-	-	16	40	4	32	18	5
	AD2, AD2/ZR	55	13.5	80	8		130	12	50	9	M8	19	40	4	32	21.5	6
K..39	AD2, AD2/ZR	55	13.5	80	8	160	123	12	50	9	M8	19	40	4	32	21.5	6
	AD3, AD3/ZR	70	15.5	105	8		159	16	60	11	M10	24	50	5	40	27	8
K..49	AD2, AD2/ZR	55	13.5	80	8	200	116	12	50	9	M8	19	40	4	32	21.5	6
	AD3, AD3/ZR	70	15.5	105	8		151	16	60	11	M10	24	50	5	40	27	8
	AD4, AD4/ZR	100	16	130	13		224	20	95.5	13.5	M12	38	80	5	70	41	10

3 Benefits

- Low energy consumption, particularly in combination with DRC.. motors
- High reliable torque ratings
- Low life cycle costs
- Gearing efficiency > 90% (up to 96%)
- Sustainable and future-proof investment
- Compatible with existing solutions
- Wide range of SEW-EURODRIVE motors and adapters can be mounted via the LIA interface.
- Can be combined with DRC.., DR.., LSPM, DRU.. and CMP.. motors
- Versatile use
- Reduced number of variants due to variable mounting options
- Cost savings in the design, processing, and logistics

4 Documentation and software

4.1 Documentation

The following documentation will be available at the time of the sales launch:

Publication	Edition	Part number	
		German	English
Latest News "Two-Stage Helical-Bevel Gear Units Sizes K..19 – K..49"	05/2015	21932379	21932387
Operating instructions "Gear Units Series R..7, F..7, K..7, K..9, S..7, SPIROPLAN® W"	05/2015	21932778	21932786
Flyer "New standards for 2-stage helical-bevel gear units: Sizes K..19, K..29, and NEW sizes K..39, K..49"	05/2015	22113096	22113118

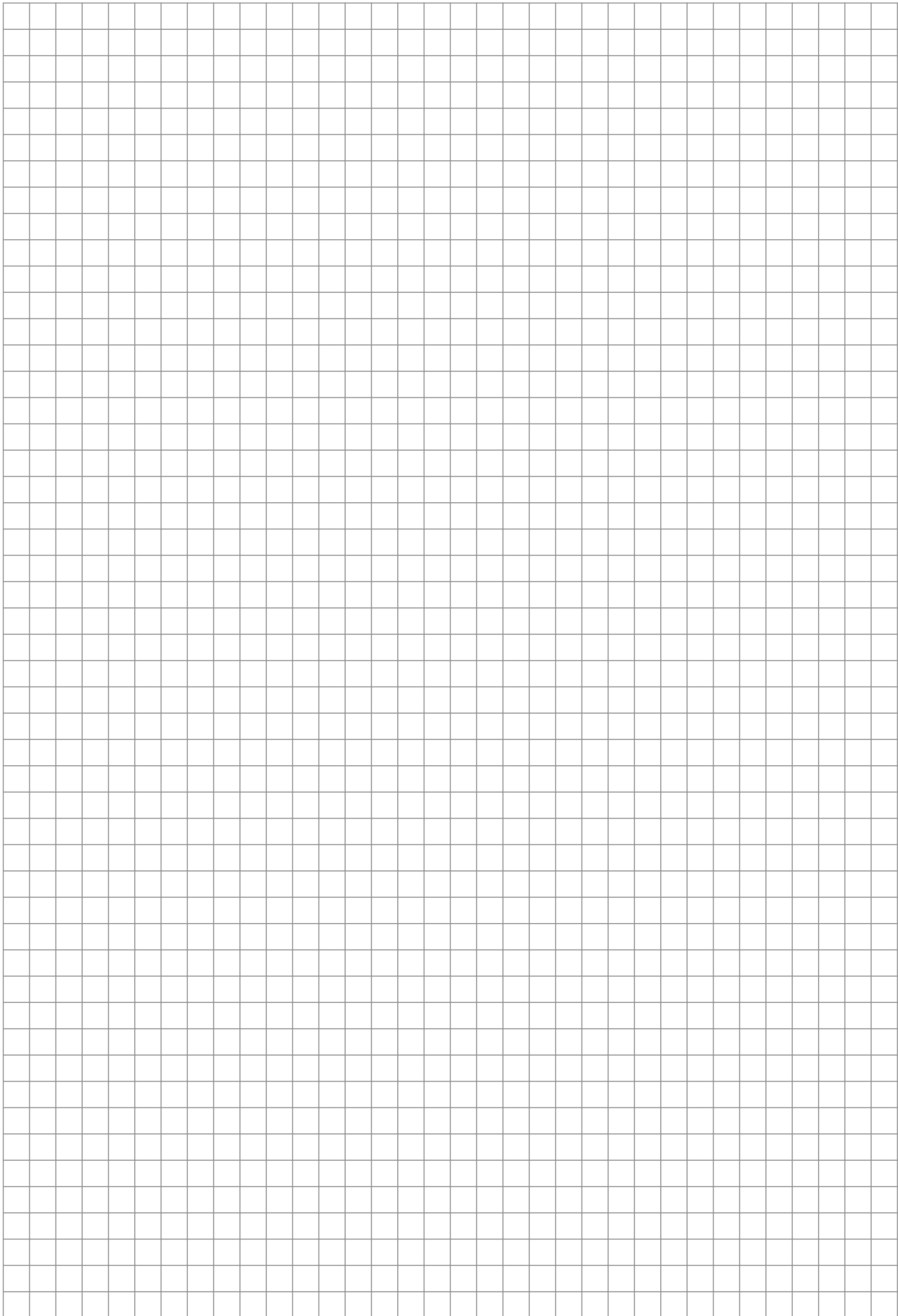
4.2 Online documentation and CAD data

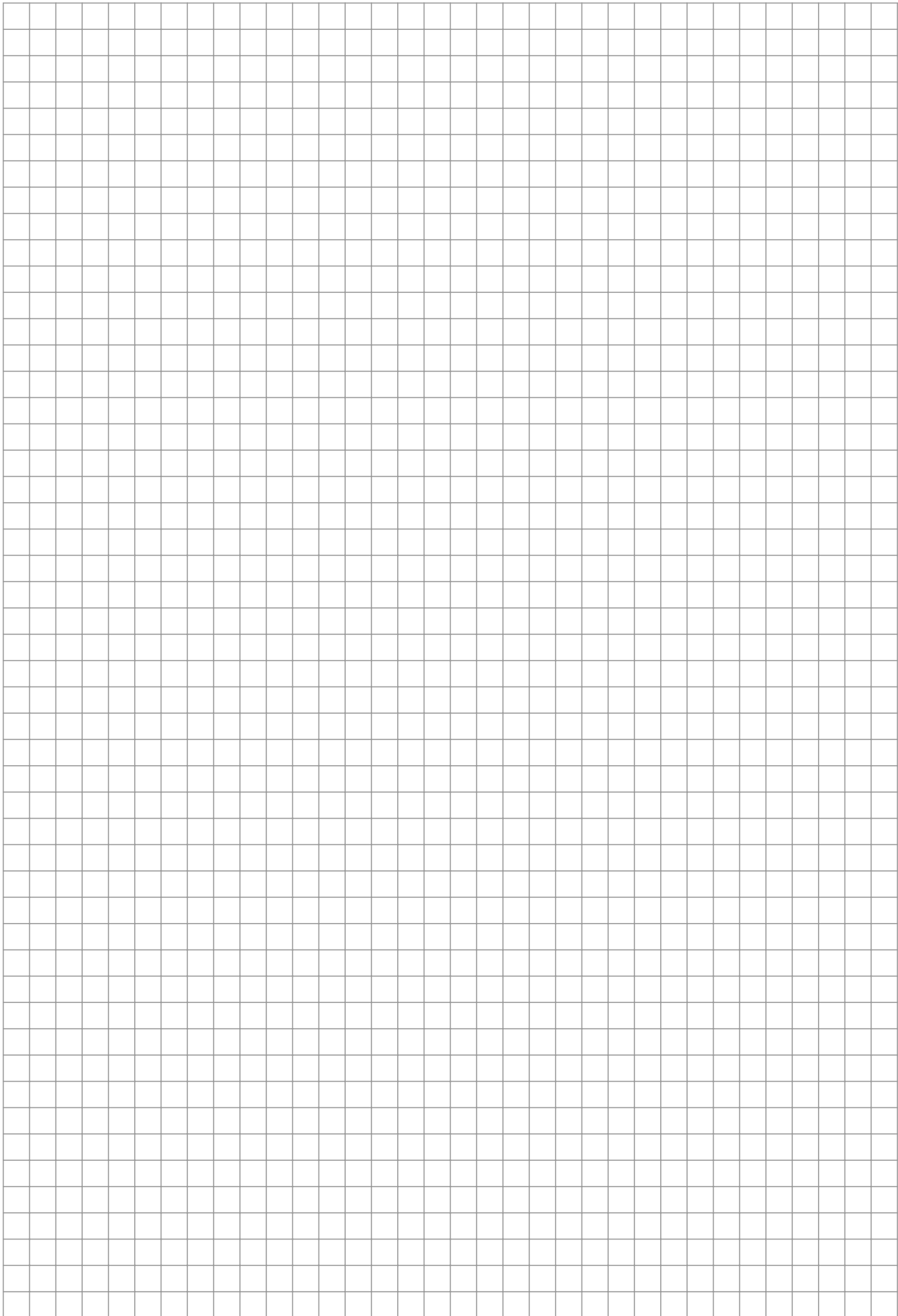
The documentation for the K..9 gear units is available on the documentation page of the SEW-EURODRIVE website. CAD data is available via the Online Support of the website.

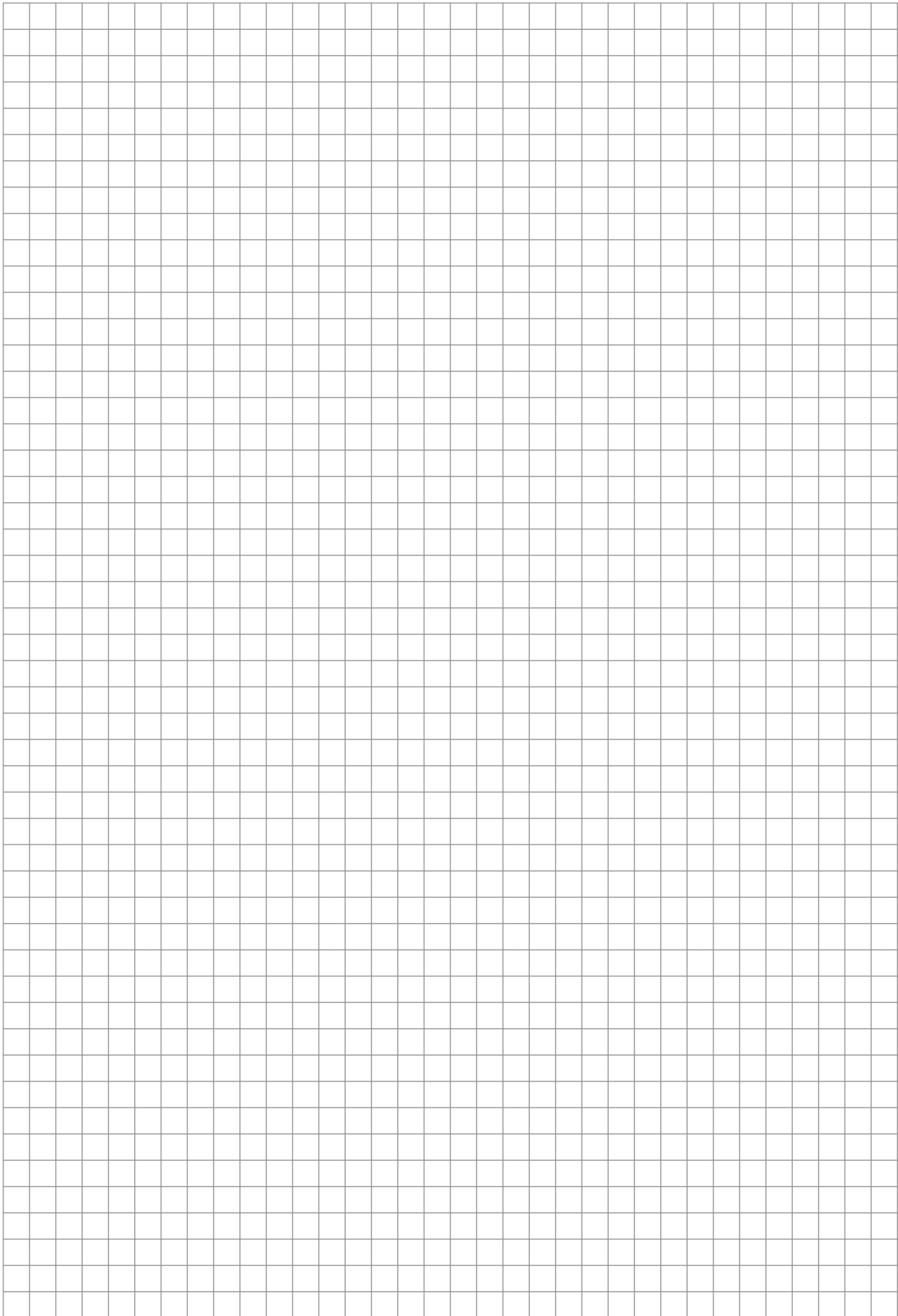
4.3 Project planning tool

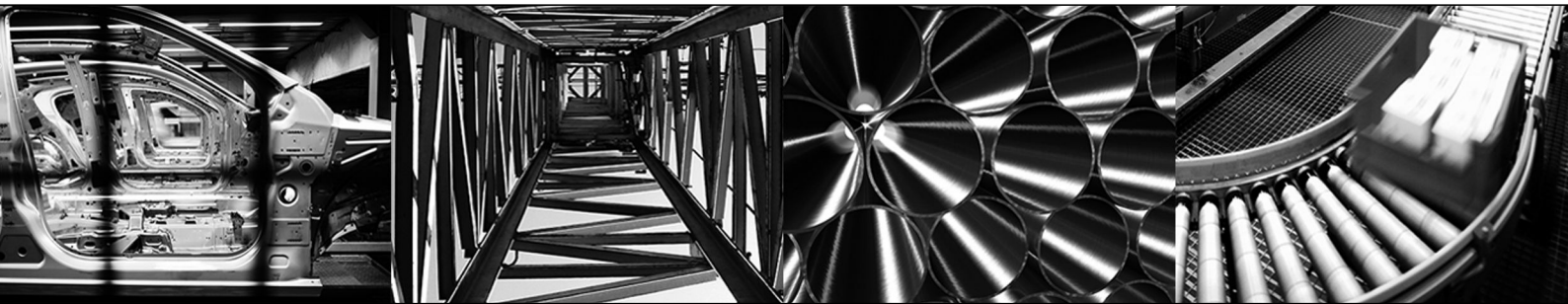
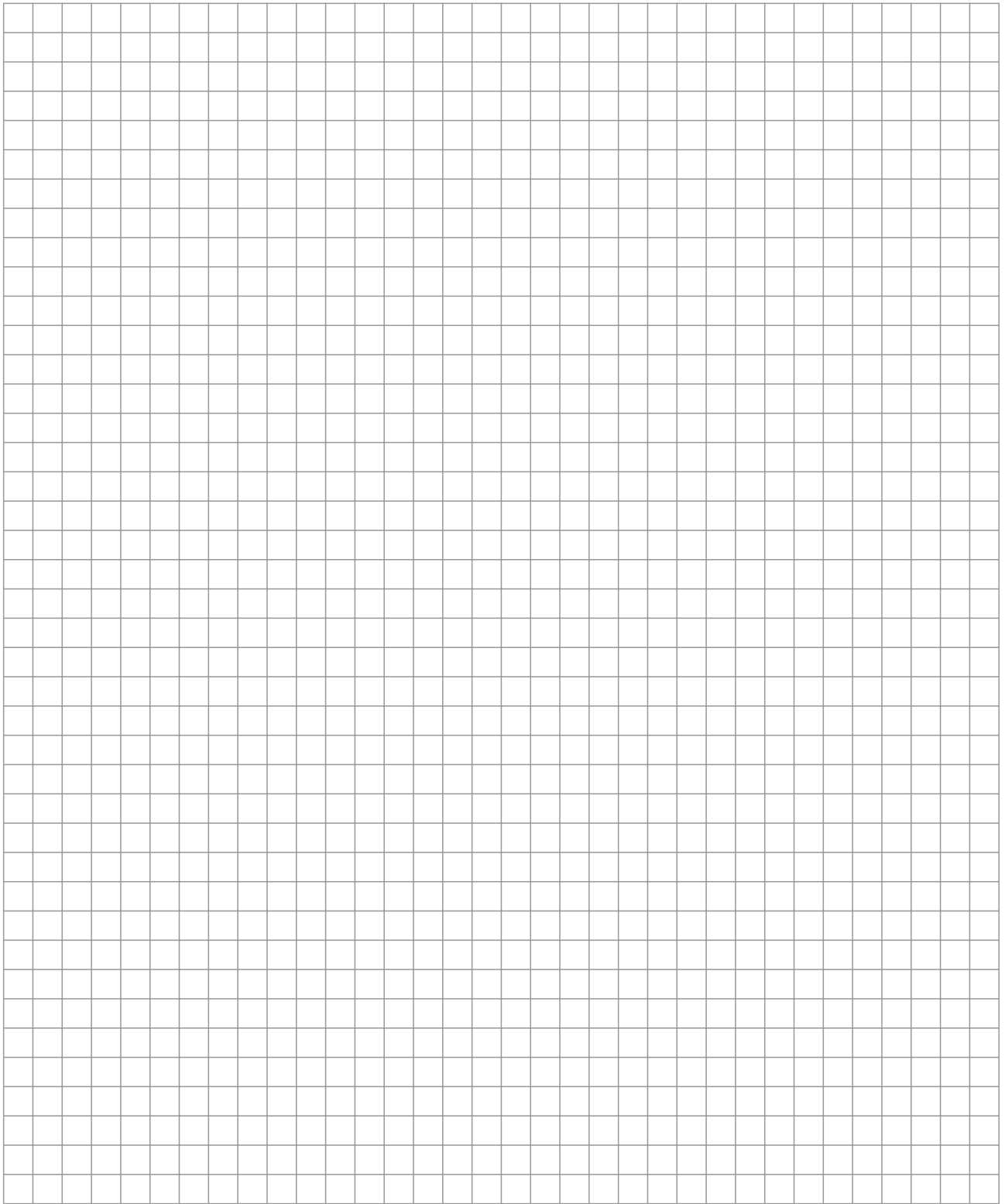
Gear units K..19 / K..29 are available in SEW-Workbench version 2.12 and later.

Gear units K..39 / K..49 are available in SEW-Workbench version 2.17 and later.











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Driving the world

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