

Dimensional drawings worm-geared motors

367-404

- Standard
- Tandem Gearbox

Additional Dimension Sheet

- Shrink disc couplings (SSV)
- Shrink disc couplings with (SSV) cover
- Rubber buffer for torque restraint
- Position of the torque arm
- Threaded foot, left
- Foot plate, left
- Assembly tools for hollow shaft
- Shaft cap (VK)
- Shaft cover (VD)

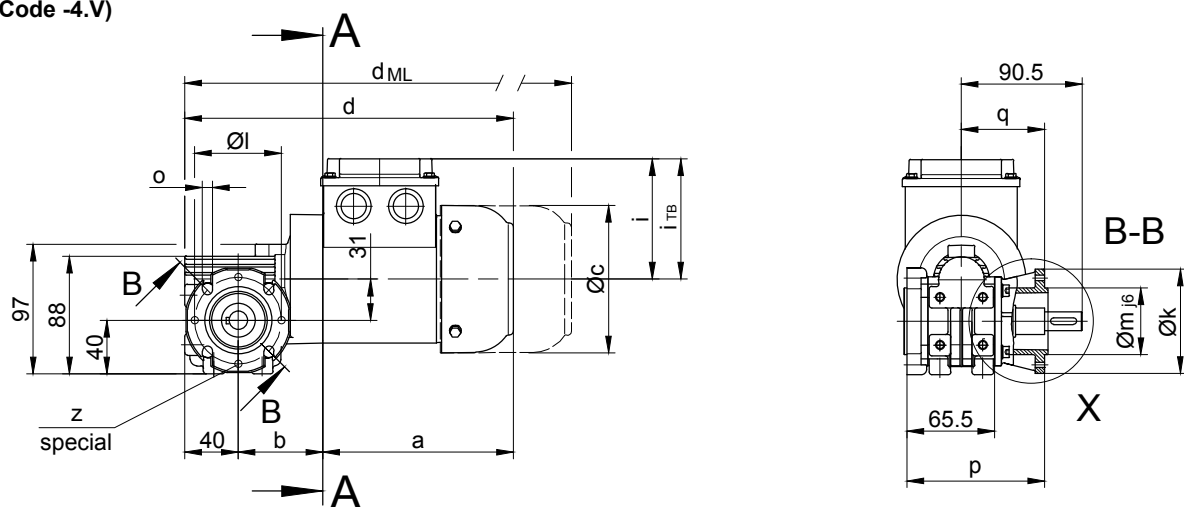
BS-series worm-geared motors

Dimension

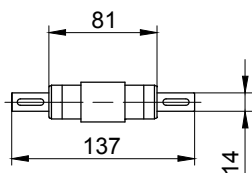
BS02

Flange with clearance holes at front

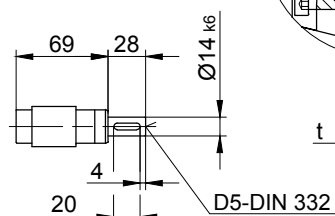
Code -3.V
(Code -4.V)



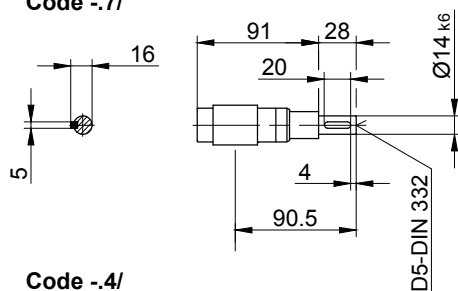
Code -3/



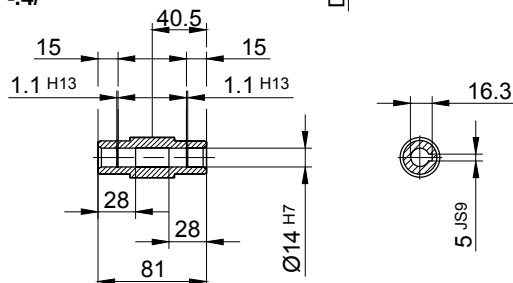
Code -1/



Code -7/

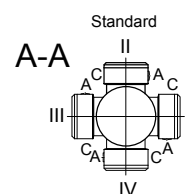


Code -4/



Flange dimensions

BS02	k	l	m	n	o	p	q	s	t	z
standard -37V/	80	65	50	7	5.5	103	62.5	2.5	28	-
spezial -37V/	80	65	50	7	5.5	103	62.5	2.5	28	4xM5
big -47V/	110	80	60	8	6.6	103	62.5	2.5	28	-
spezial -47V/	110	80	60	8	6.6	103	62.5	2.5	28	4xM6



Type	a*	b	c	d*	u	i	Design with motor extensions				
							i _{TB}	E..	G	E..-G	RR/RL
								d _{ML} *	d _{ML} *	d _{ML} *	d _{ML} *
BS02-../D04..	143	63.5	111	246.5	178	90	112	290	309	352	-
BS02-../D05..	170	65.5	123	275.5	188	100	117	317.5	378.5	420	-
BS02-../D06..	170	65.5	123	275.5	188	100	119	317.5	378.5	420	-
BS02-../D07..	190	65.5	123	295.5	188	100	119	337.5	398.5	440	-



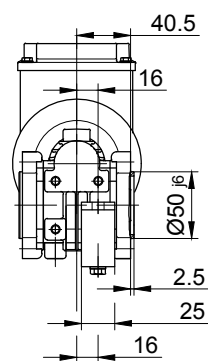
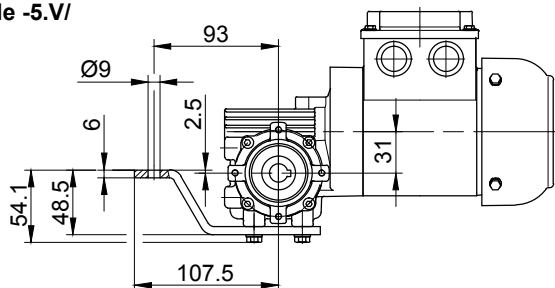
The dimensions "a*", "d*" and "d_{ML}" change dependent on the motor design.
Design state "A" = Standard Length
Type Example: BK70-74V/DPE08XA4
Comment: No change to the dimensions shown

Design state "B" = Extended Length
Type Example: BK70-74V/DPE08XB4
Comment: Motor length changes please see Chapter 16 - Additional dimension sheet - Motor Length Comparison

The actual gearbox design can vary from the geometry shown.

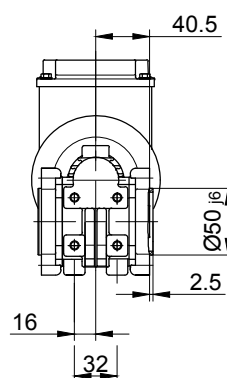
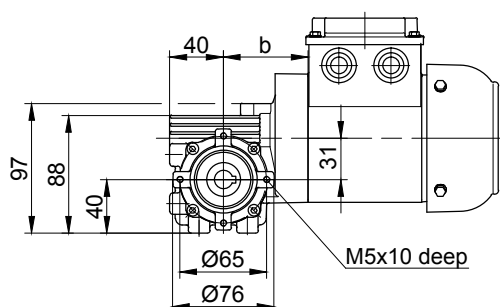
Torque arm at front

Code -5.V/



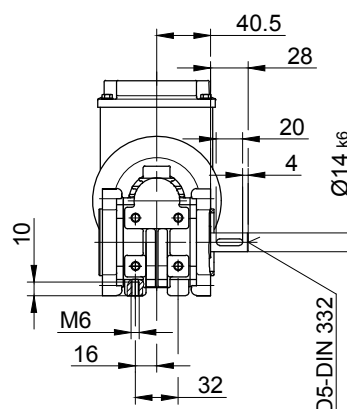
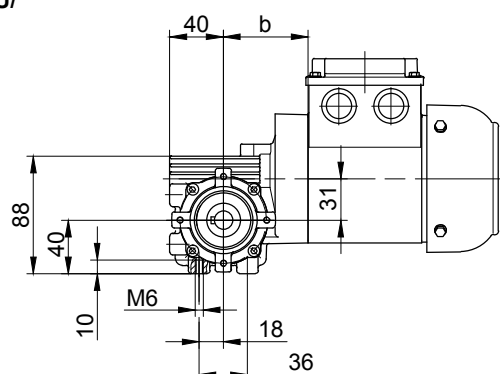
Flange with tapped holes at front

Code -7.V/



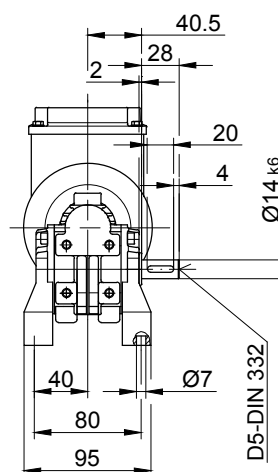
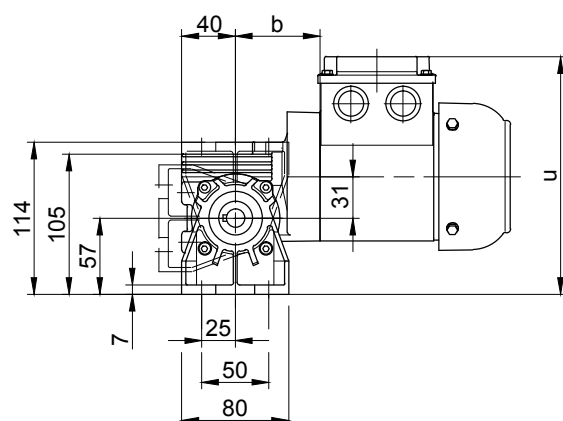
Foot with tapped holes at bottom

Code -6.U/



Foot with clearance holes at bottom

Code -1.U/



The actual gearbox design can vary from the geometry shown.

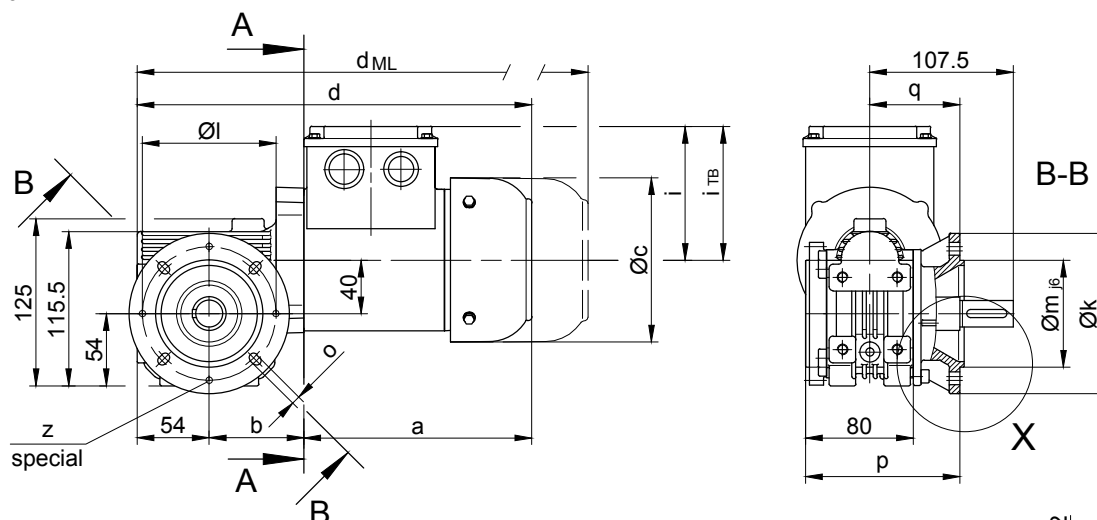
BS-series worm-geared motors

Dimension

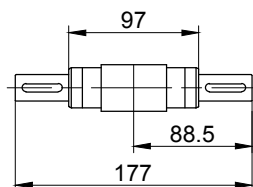
BS03

Flange with clearance holes at front

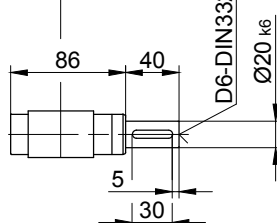
Code -3.V/



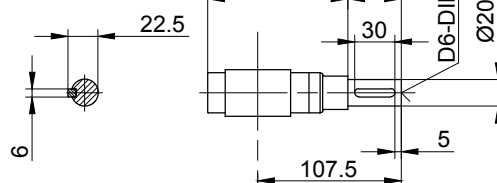
Code -3/



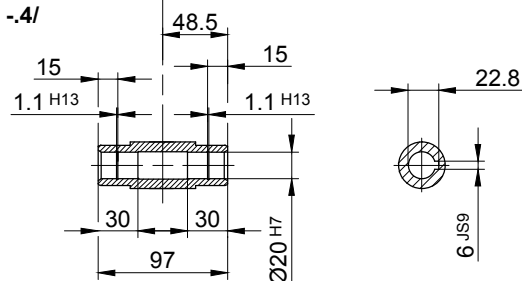
Code -1/



Code -7/

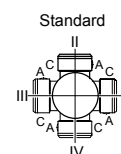


Code -4/



Flange dimensions

BS03	k	l	m	n	o	p	q	s	t	z
standard -37V/	120	100	80	8	6.6	115	67.5	3	40	-
special -37V/	120	100	80	8	6.6	115	67.5	3	40	4xM6



A-A

Type	a*	b	c	d*	u	v	i	Design with motor extensions				
								i _{TB}	E../ES..	G	E../ES..-G	RR/RL
									d _{ML} *	d _{ML} *	d _{ML} *	d _{ML} *
BS03-../D05..	170	71	123	295	213	70	100	117	337	398	439.5	-
BS03-../D06..	170	71	123	295	213	70	100	119	337	398	439.5	-
BS03-../D07..	190	71	123	315	213	70	100	119	357	418	459.5	-
BS03-../D..08..	200	115	156	425	228	-	115	136.5	491	532	598.5	491



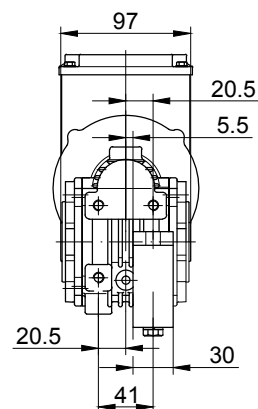
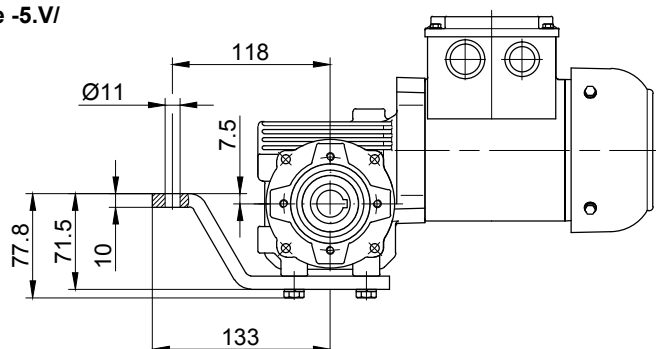
The dimensions "a*" "d*" and "d_{ML}" change dependent on the motor design.
Design state "A" = Standard Length
 Type Example: BK70-74V/DPE08XA4
 Comment: No change to the dimensions shown

Design state "B" = Extended Length
 Type Example: BK70-74V/DPE08XB4
 Comment: Motor length changes please see Chapter 16 - Additional dimension sheet - Motor Length Comparison

The actual gearbox design can vary from the geometry shown.

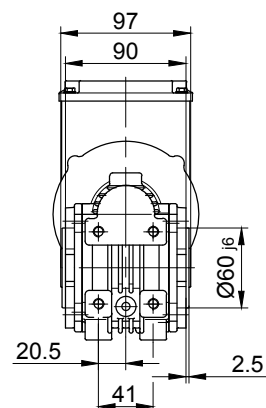
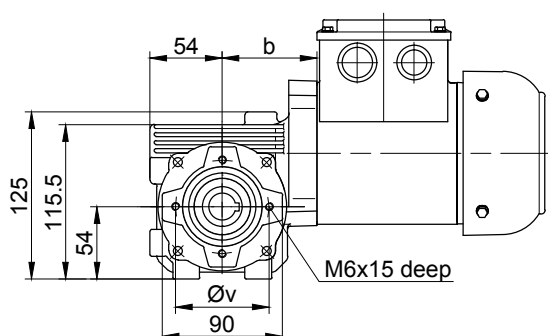
Torque arm at front

Code -5.V/



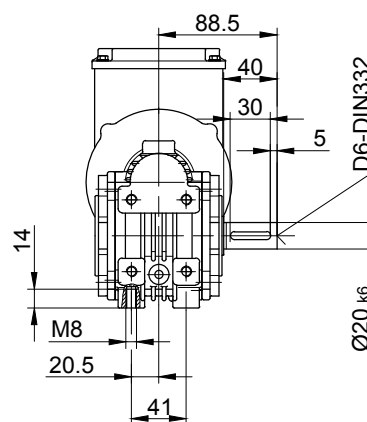
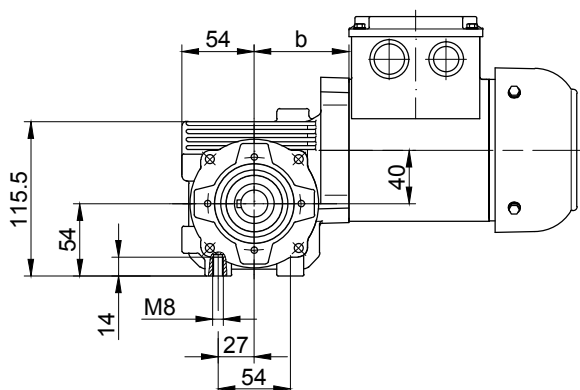
Flange with tapped holes at front

Code -7.V/



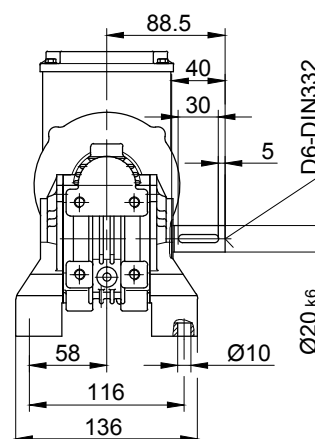
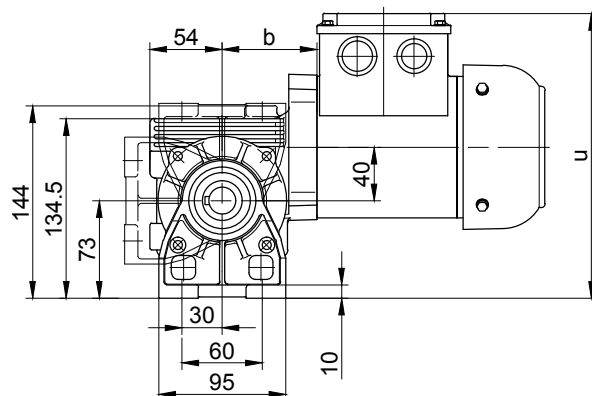
Foot with tapped holes at bottom

Code -6.U/



Foot with clearance holes at bottom

Code -1.U/



The actual gearbox design can vary from the geometry shown.

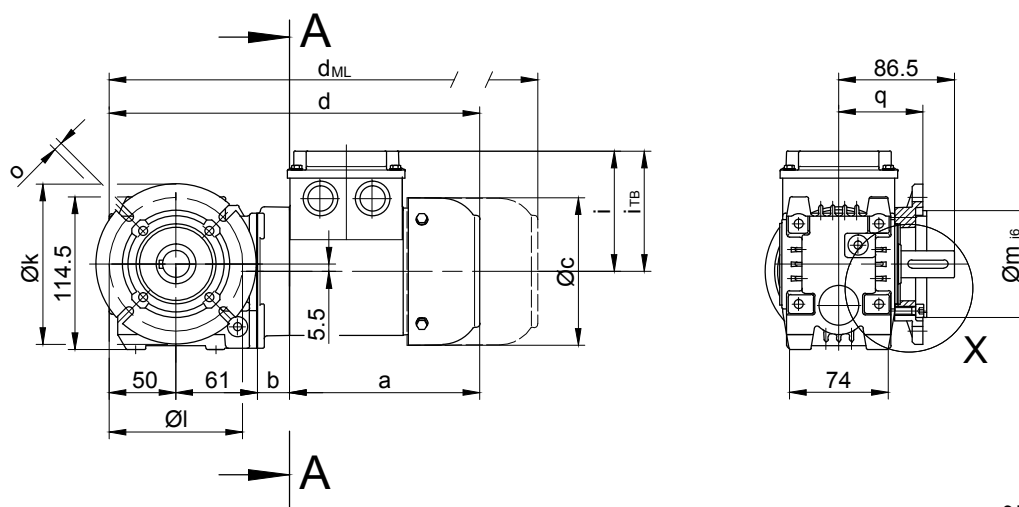
BS-series worm-geared motors

Dimension

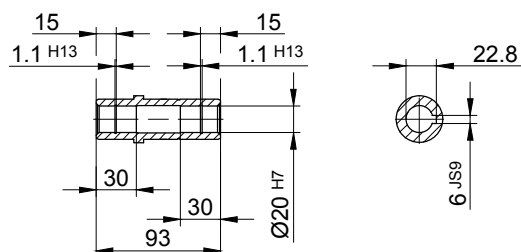
BS04

Flange with clearance holes at front

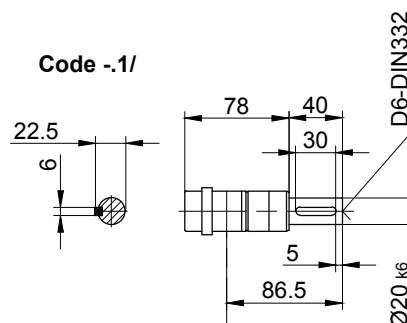
Code -3.V/



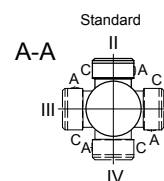
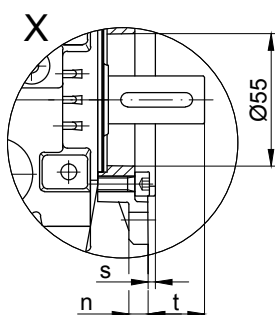
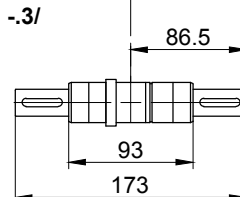
Code -4/



Code -1/



Code -3/



Flange dimensions

BS04	k	l	m	n	o	p	q	s	t
Standard -3.V/	120	100	80	8	6.6	110.5	63	3	23.5

Type	a*	b	c	d*	i	Design with motor extensions				
						i _{TB}	E.. d _{ML} *	G d _{ML} *	E..-G d _{ML} *	RR/RL d _{ML} *
BS04-../D04..	143	24	111	278	90	112	321.5	340.5	383.5	-
BS04-../D05..	170	26	123	307	100	117	349	410	451.5	-
BS04-../D06..	170	26	123	307	100	119	349	410	451.5	-
BS04-../D07..	190	26	123	327	100	119	369	430	471.5	-

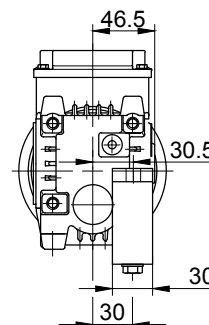
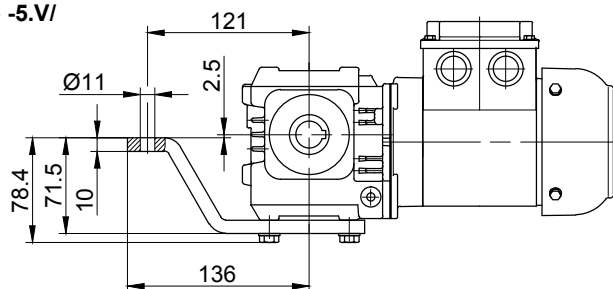


The dimensions "a*", "d*" and "d_{ML}" change dependent on the motor design.
Design state "A" = Standard Length
 Type Example: BK70-74V/DPE08XA4
 Comment: No change to the dimensions shown

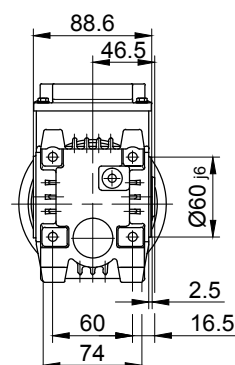
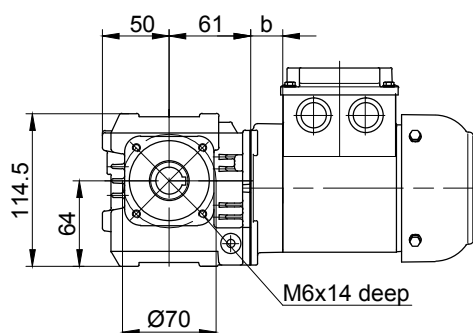
Design state "B" = Extended Length
 Type Example: BK70-74V/DPE08XB4
 Comment: Motor length changes please see Chapter 16 - Additional dimension sheet - Motor Length Comparison

The actual gearbox design can vary from the geometry shown.

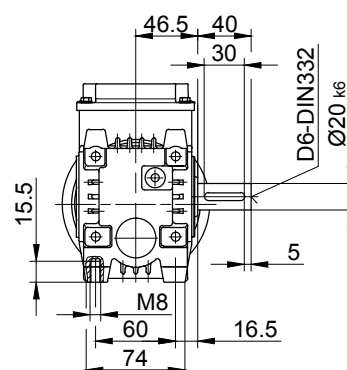
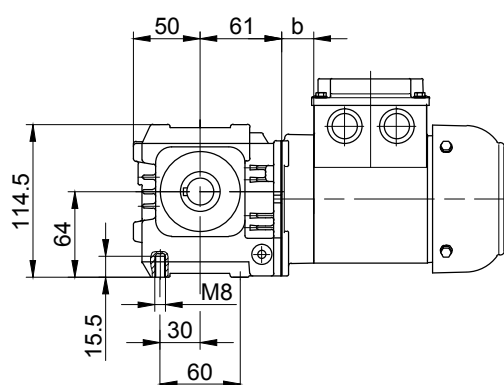
Torque arm at front
Code -5.V/



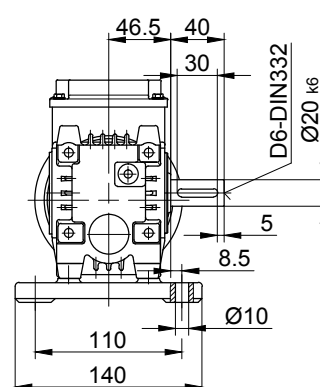
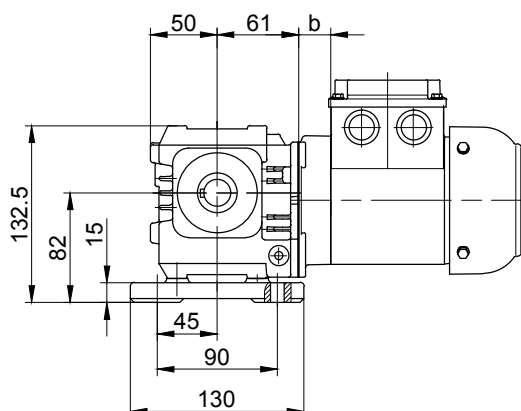
Flange with tapped holes at front
Code -7.V/



Foot with tapped holes at bottom
Code -6.U/



Foot with clearance holes at bottom
Code -1.U/



The actual gearbox design can vary from the geometry shown.

BS-series worm-geared motors

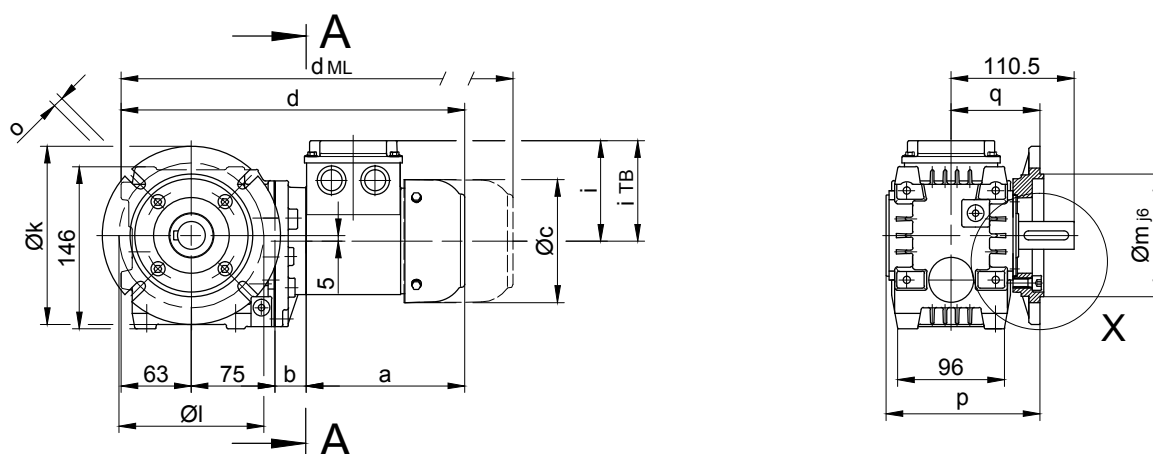
Dimension

BS06

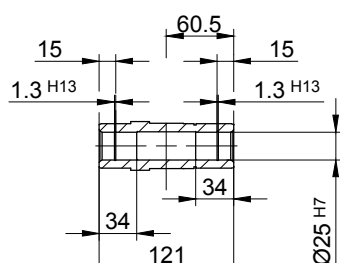
Flange with clearance holes at front

Code -3.V/

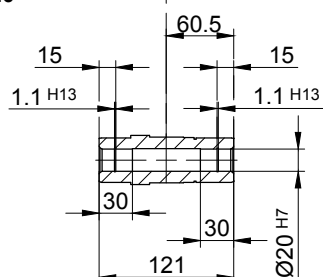
(Code -4.V/)



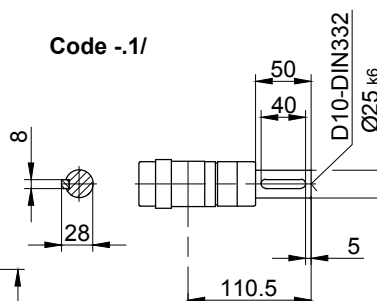
Code -4/ Standard



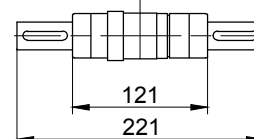
Code -4/K20



Code -1/

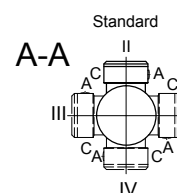


Code -3/



Flange dimensions

BS06	k	l	m	n	o	p	q	s	t
Standard -3.V/	140	115	95	10	9	138.5	80	3	30.5
big -4.V/	160	130	110	10	9	138.5	80	3.5	30.5



Type	a*	b	c	d*	i	Design with motor extensions				
						i _{TB}	E../ES..	G	E../ES..-G	RR/RL
							d _{ML} *	d _{ML} *	d _{ML} *	d _{ML} *
BS06-../D04..	143	28	111	309	90	112	352.5	371.5	414.5	-
BS06-../D05..	170	30	123	338	100	117	380	441	482.5	-
BS06-../D06..	170	30	123	338	100	119	380	441	482.5	-
BS06-../D07..	190	30	123	358	100	119	400	461	502.5	-
BS06-../D..08..	200	74	156	412	115	136.5	478	519	585.5	478



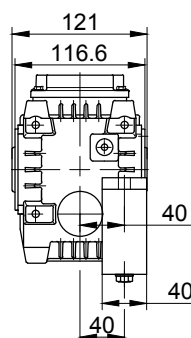
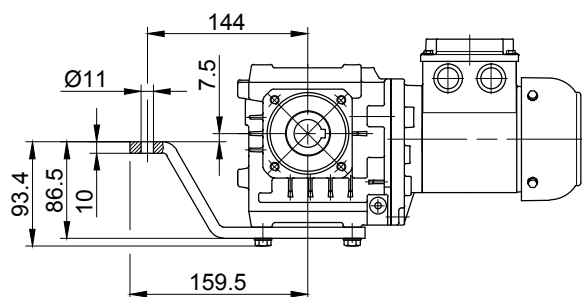
The dimensions "a*", "d*" and "d_{ML}" change dependent on the motor design.
Design state "A" = Standard Length
 Type Example: BK70-74V/DPE08XA4
 Comment: No change to the dimensions shown

Design state "B" = Extended Length
 Type Example: BK70-74V/DPE08XB4
 Comment: Motor length changes please see Chapter 16 - Additional dimension sheet - Motor Length Comparison

The actual gearbox design can vary from the geometry shown.

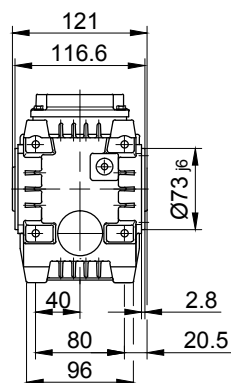
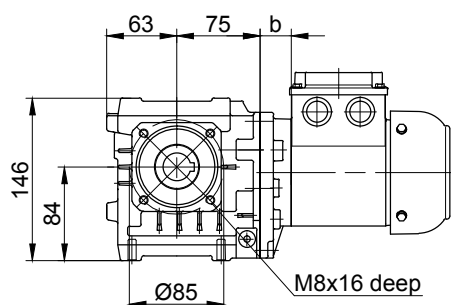
Torque arm at front

Code -5.V/



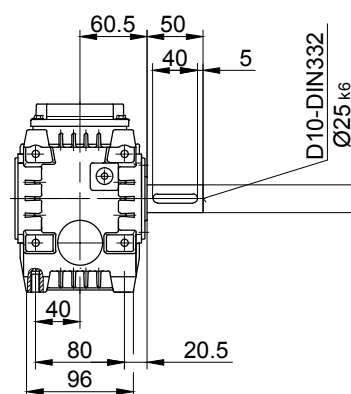
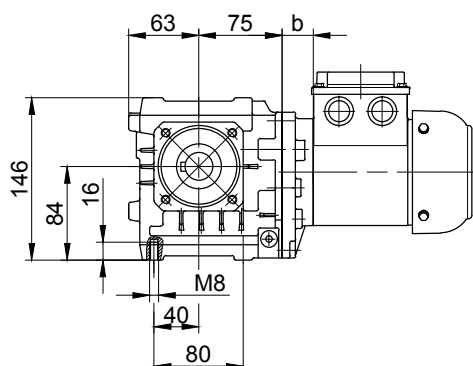
Flange with tapped holes at front

Code -7.V/



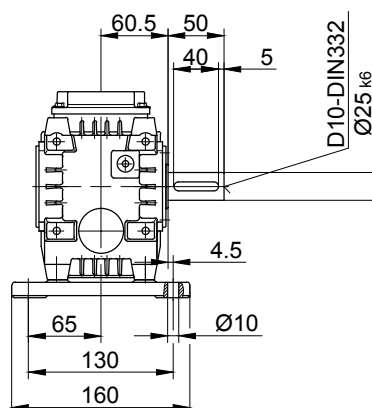
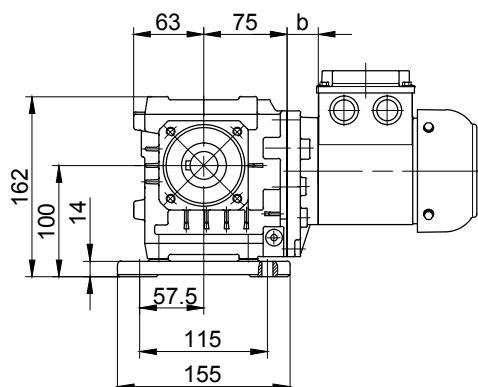
Foot with tapped holes at bottom

Code -6.U/



Foot with clearance holes at bottom

Code -1.U/



The actual gearbox design can vary from the geometry shown.

BS-series worm-geared motors

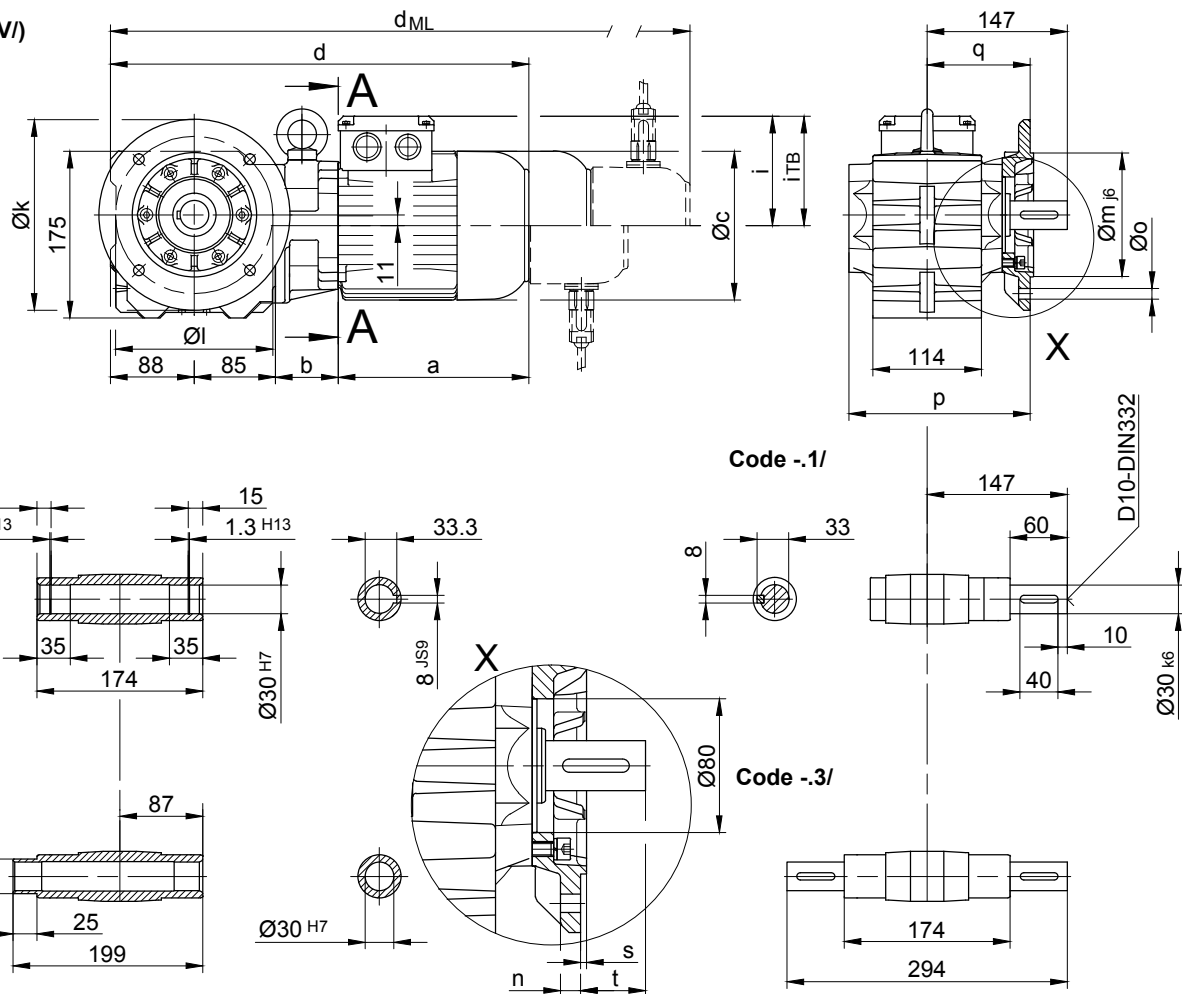
Dimension

BS10 - BS10Z

Flange with clearance holes at front

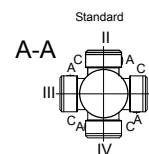
Code -3.V/

(Code -2.V/)



Flange dimensions

BS10(Z)	k	l	m	n	o	p	q	s	t
Standard -3.V/	200	165	130	12	11	190	108	3.5	39
small -2.V/	160	130	110	10	9	183	101	3.5	46



Type	a^*	b	c	d^*	i	i_{TB}	Design with motor extensions			
							E../ES..	G	E../ES..-G	RR/RL
BS10Z-../D04..	143	86	111	402	90	112	d_{ML}^*	d_{ML}^*	d_{ML}^*	-
BS10-../D05..	170	62	123	405	100	117	447	508	549.5	-
BS10Z-../D05..	170	88	123	431	100	117	473	534	575.5	-
BS10-../D06..	170	62	123	405	100	119	447	508	549.5	-
BS10Z-../D06..	170	88	123	431	100	119	473	534	575.5	-
BS10-../D07..	190	62	123	425	100	119	467	528	569.5	-
BS10Z-../D07..	190	88	123	451	100	119	493	554	595.5	-
BS10-../D..08..	200	66	156	439	115	136.5	505	546	612.5	505
BS10Z-../D..08..	200	132	156	505	115	136.5	571	612	678.5	571
BS10-../D..09..	251	80.5	181	504.5	124	158	597.5	611.5	702	597.5



The dimensions " a^* ", " d^* " and " d_{ML}^* " change dependent on the motor design.
Design state "A" = Standard Length
 Type Example: BK70-74V/DPE08XA4
 Comment: No change to the dimensions shown

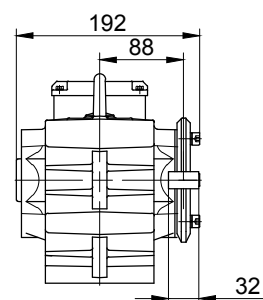
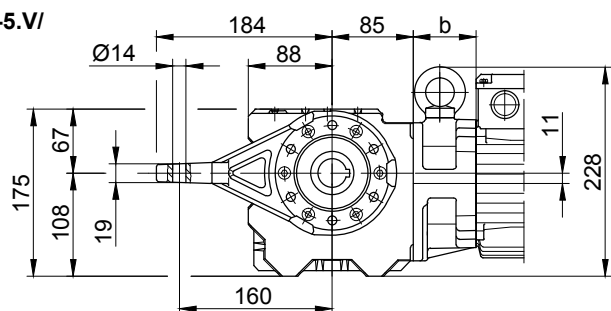
Design state "B" = Extended Length
 Type Example: BK70-74V/DPE08XB4
 Comment: Motor length changes please see Chapter 16 - Additional dimension sheet - Motor Length Comparison

The actual gearbox design can vary from the geometry shown.

BS10 - BS10Z

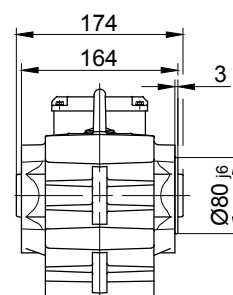
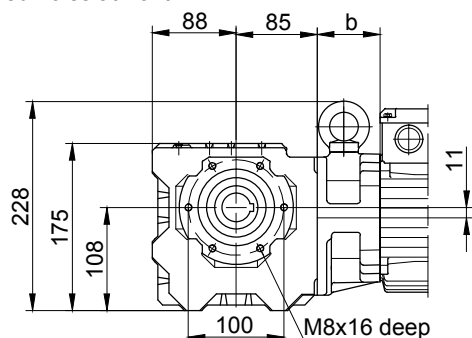
Torque arm at front

Code -5.V/



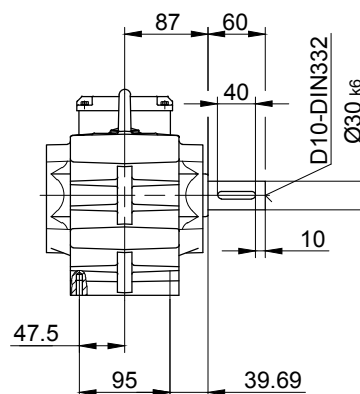
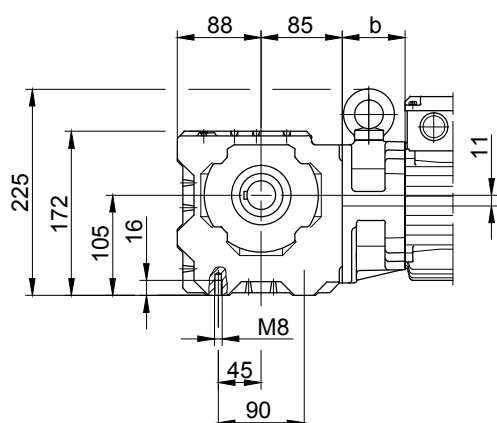
Flange with tapped holes at front

Code -7.V/



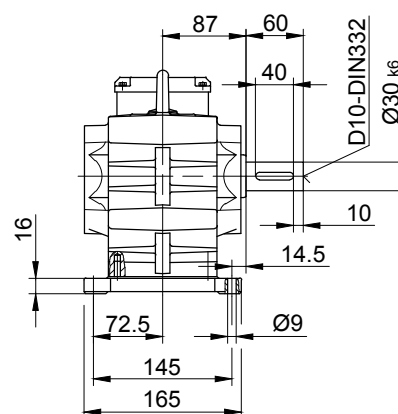
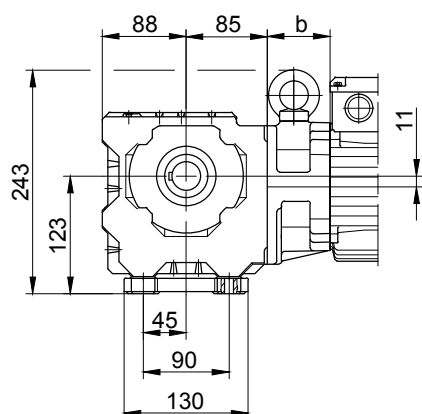
Foot with tapped holes at bottom

Code -6.U/



Foot with clearance holes at bottom

Code -1.U/



The actual gearbox design can vary from the geometry shown.

BS-series worm-geared motors

Dimension

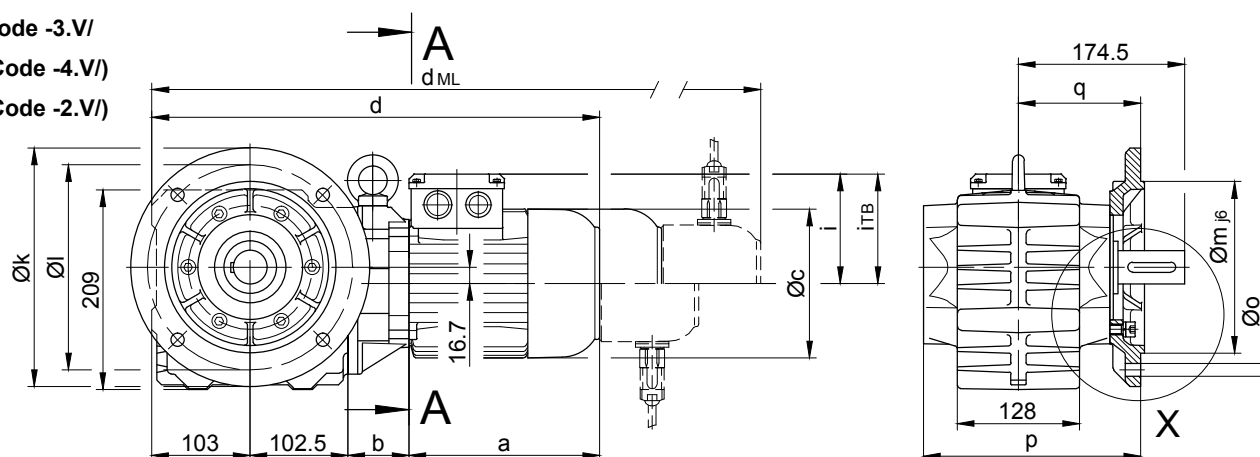
BS20 - BS20Z

Flange with clearance holes at front

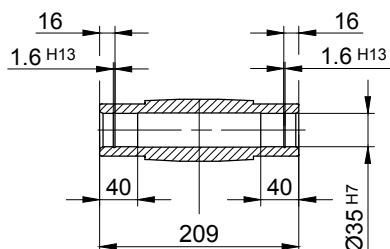
Code -3.V/

(Code -4.V/)

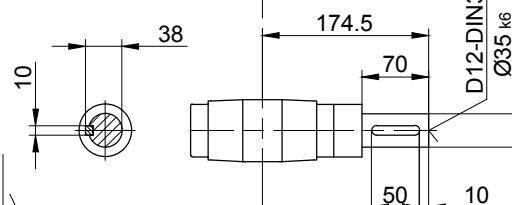
(Code -2.V/)



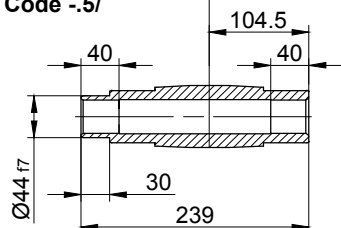
Code -4/



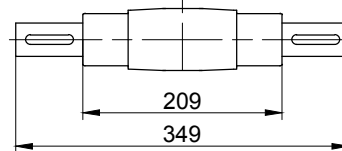
Code -1/



Code -5/

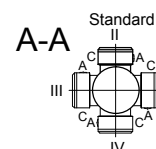


Code -3/



Flange dimensions

BS20(Z)	k	l	m	n	o	p	q	s	t
Standard -3.V/	250	215	180	16	13.5	227.5	128	4	46.5
small -2.V/	200	165	130	12	11	224.5	125	3.5	49.5
big -4.V/	300	265	230	20	13.5	233.5	134	4	40.5



Type	a*	b	c	d*	i	Design with motor extensions				
						i_{TB}	E../ES..	G	E../ES..-G	RR/RL
							d_{ML}^*	d_{ML}^*	d_{ML}^*	d_{ML}^*
BS20Z-../D04..	143	100	111	448.5	90	112	492	511	554	-
BS20-../D05..	170	60	123	435.5	100	117	477.5	538.5	580	-
BS20Z-../D05..	170	102	123	477.5	100	117	519.5	580.5	622	-
BS20-../D06..	170	60	123	435.5	100	119	477.5	538.5	580	-
BS20Z-../D06..	170	102	123	477.5	100	119	519.5	580.5	622	-
BS20-../D07..	190	60	123	455.5	100	119	497.5	558.5	600	-
BS20Z-../D07..	190	102	123	497.5	100	119	539.5	600.5	642	-
BS20-../D..08..	200	64	156	469.5	115	136.5	535.5	576.5	643	535.5
BS20Z-../D..08..	200	146	156	551.5	115	136.5	617.5	658.5	725	617.5
BS20-../D..09..	251	78.5	181	535	124	158	628	642	732.5	628



The dimensions "a*", "d*" and "d_{ML}" change dependent on the motor design.
Design state "A" = Standard Length
 Type Example: BK70-74V/DPE08XA4
 Comment: No change to the dimensions shown

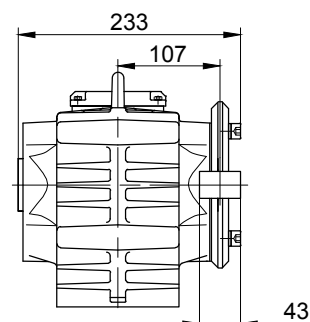
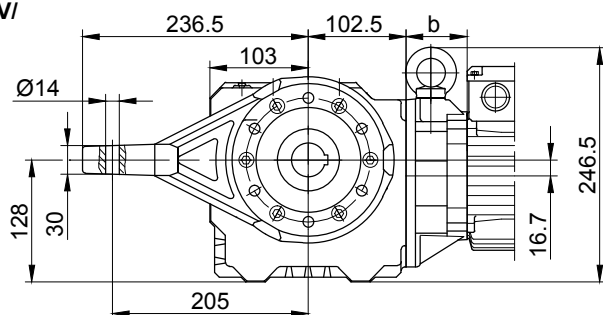
Design state "B" = Extended Length
 Type Example: BK70-74V/DPE08XB4
 Comment: Motor length changes please see Chapter 16 - Additional dimension sheet - Motor Length Comparison

The actual gearbox design can vary from the geometry shown.

BS20 - BS20Z

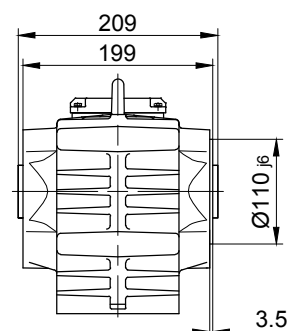
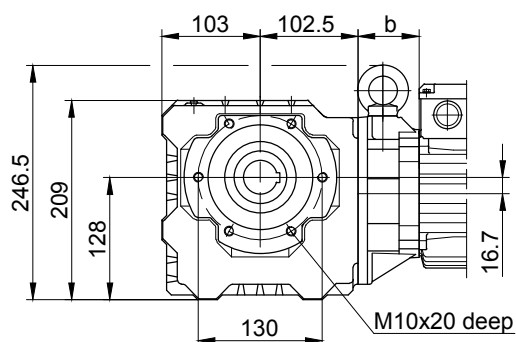
Torque arm at front

Code -5.V/



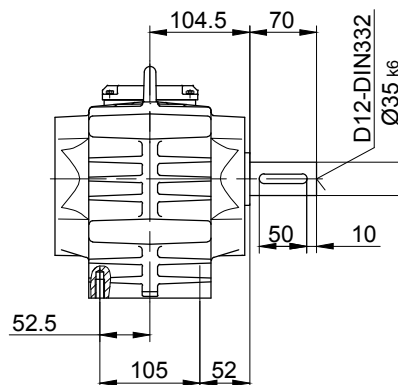
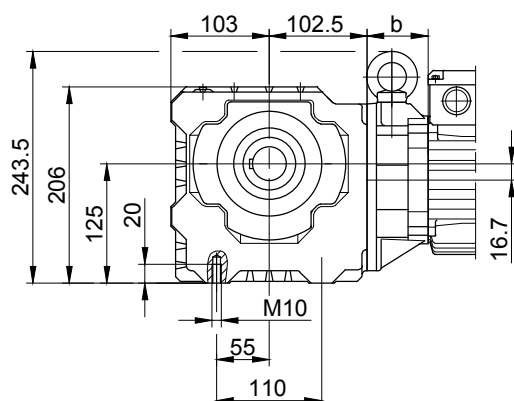
Flange with tapped holes at front

Code -7.V/



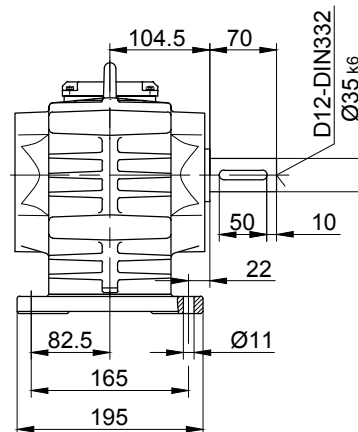
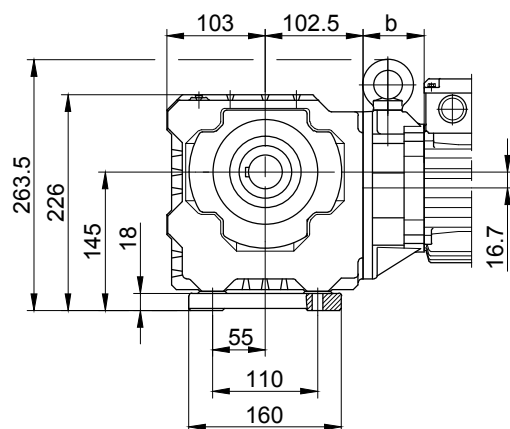
Foot with tapped holes at bottom

Code -6.U/



Foot with clearance holes at bottom

Code -1.U/



The actual gearbox design can vary from the geometry shown.

BS-series worm-geared motors

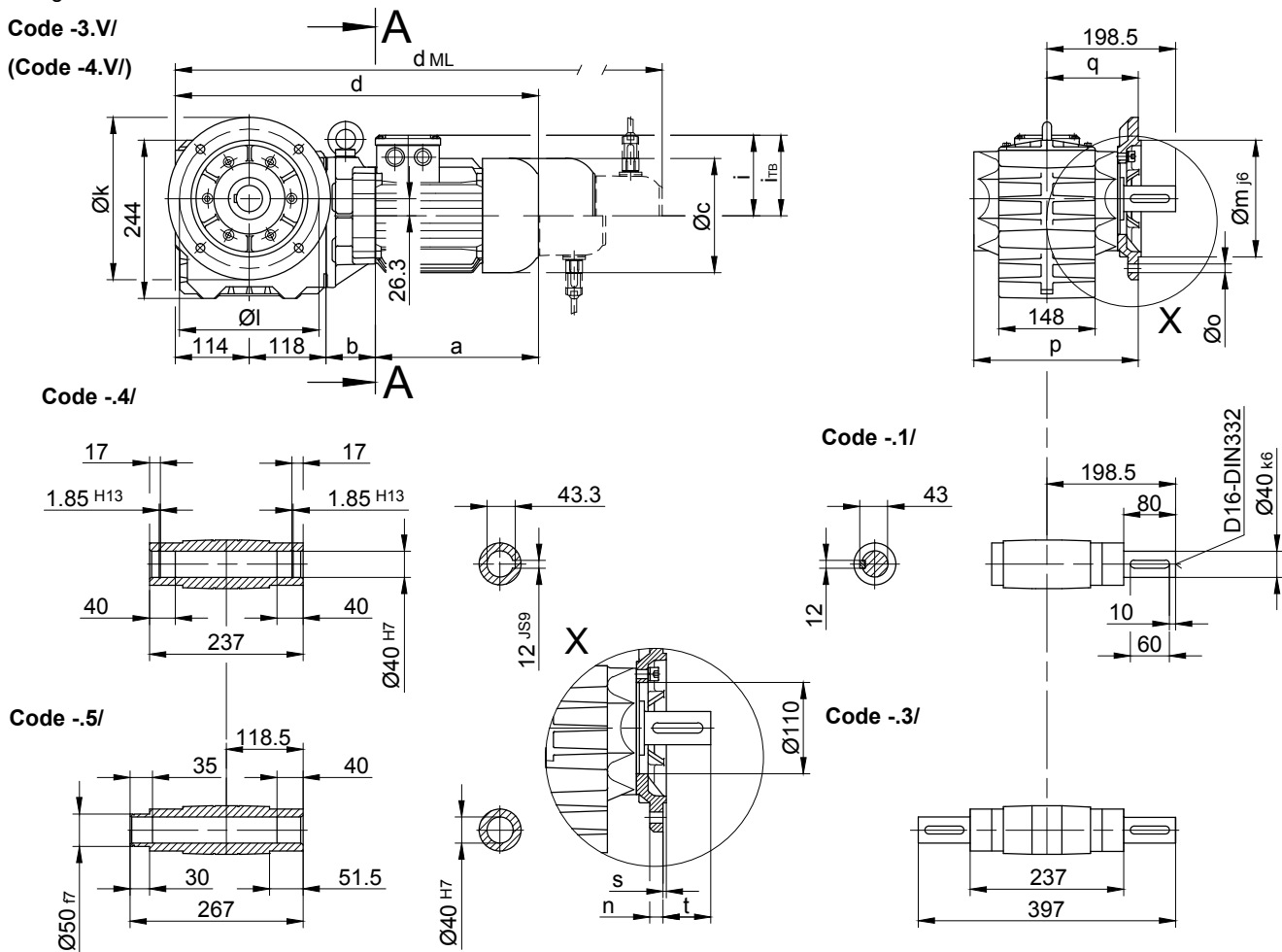
Dimension

BS30 - BS30Z

Flange with clearance holes at front

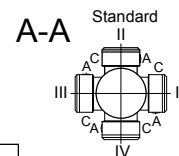
Code -3.V/

(Code -4.V/)



Flange dimensions

BS30(Z)	k	l	m	n	o	p	q	s	t
Standard -3.V/	250	215	180	16	13.5	253.5	141	4	57.5
big -4.V/	300	265	230	20	13.5	259.5	147	4	51.5



Type	a*	b	c	d*	i	i _{TB}	Design with motor extensions			
							E../ES..	G	E../ES..-G	RR/RL
BS30-../D05..	170	58	123	460	100	117	d _{ML} *	d _{ML} *	d _{ML} *	-
BS30Z-../D05..	170	133.5	123	535.5	100	117	502	563	604.5	-
BS30-../D06..	170	58	123	460	100	119	577.5	638.5	680	-
BS30Z-../D06..	170	133.5	123	535.5	100	119	502	563	604.5	-
BS30-../D07..	190	58	123	480	100	119	577.5	638.5	680	-
BS30Z-../D07..	190	133.5	123	555.5	100	119	522	583	624.5	-
BS30-../D..08..	200	62	156	494	115	136.5	597.5	658.5	700	-
BS30Z-../D..08..	200	137.5	156	569.5	115	136.5	560	601	667.5	560
BS30-../D..09..	251	76.5	181	559.5	124	158	635.5	676.5	743	635.5
BS30Z-../D..09..	251	152	181	635	124	158	652.5	666.5	757	652.5
BS30-../D..11..	319	83	228	634	181	181	728	742	832.5	728
BS30Z-../D..11..	319	228	228	634	181	181	732	741	836.5	732



The dimensions "a*", "d*" and "d_{ML}" change dependent on the motor design.
Design state "A" = Standard Length
 Type Example: BK70-74V/DPE08XA4
 Comment: No change to the dimensions shown

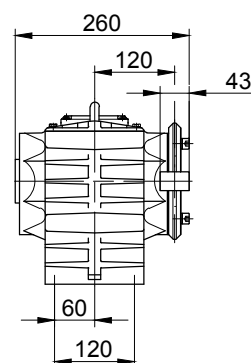
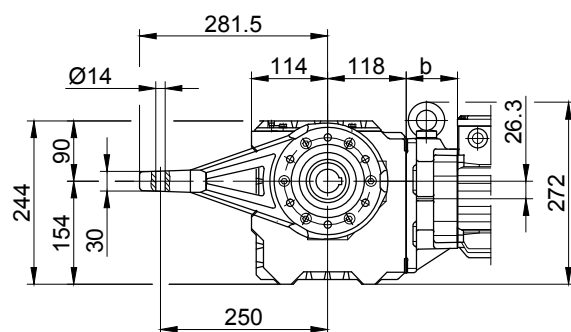
Design state "B" = Extended Length
 Type Example: BK70-74V/DPE08XB4
 Comment: Motor length changes please see Chapter 16 - Additional dimension sheet - Motor Length Comparison

The actual gearbox design can vary from the geometry shown.

BS30 - BS30Z

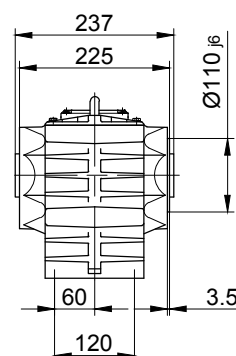
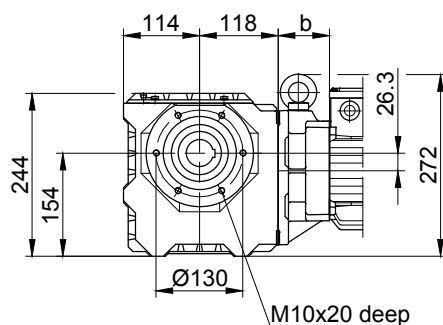
Torque arm at front

Code -5.V/



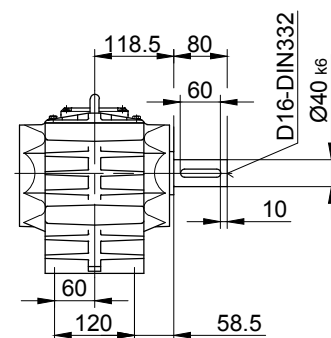
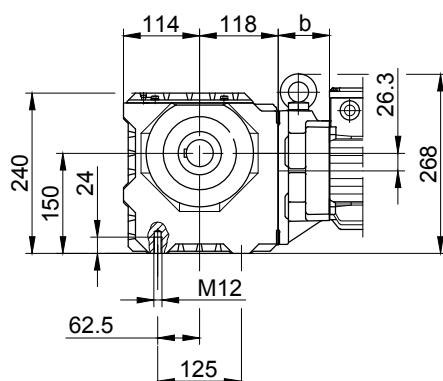
Flange with tapped holes at front

Code -7.V/



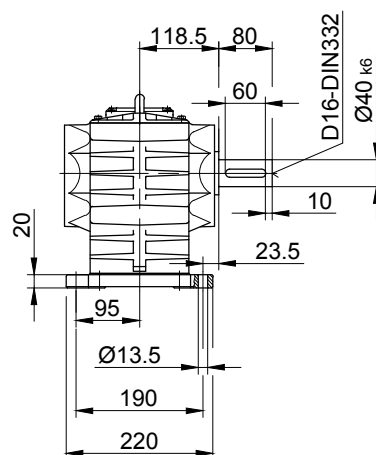
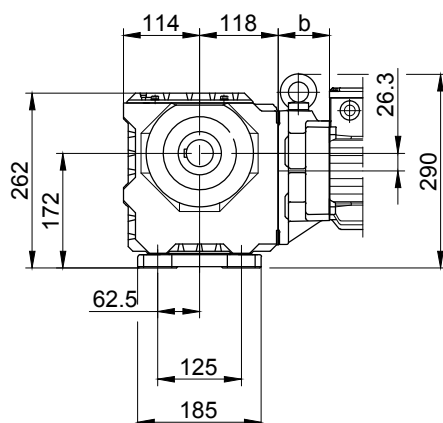
Foot with tapped holes at bottom

Code -6.U/



Foot with clearance holes at bottom

Code -1.U/



The actual gearbox design can vary from the geometry shown.

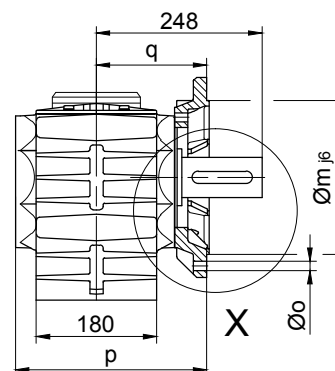
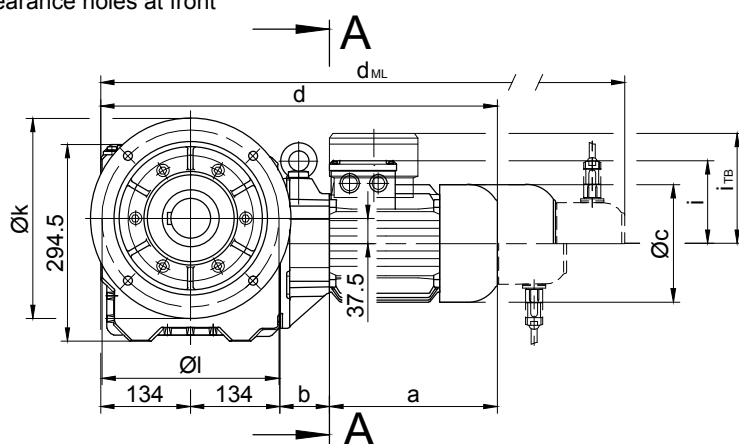
BS-series worm-geared motors

Dimension

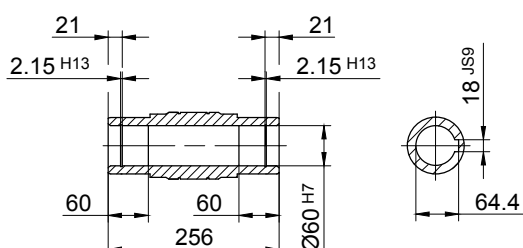
BS40 - BS40Z

Flange with clearance holes at front

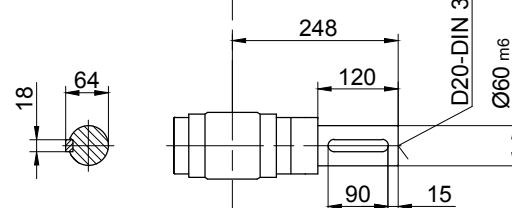
Code -3.V/



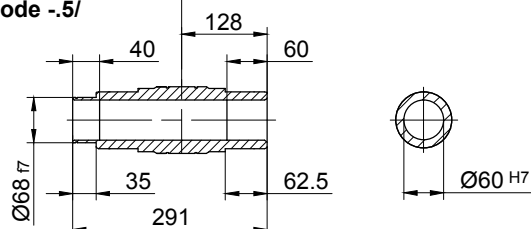
Code -4/



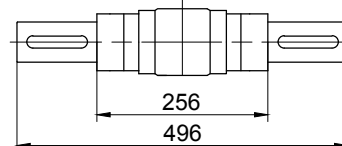
Code -1/



Code -5/

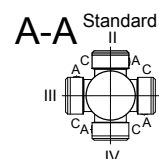


Code -3/



Flange dimensions

BS40(Z)	k	l	m	n	o	p	q	s	t
Standard -3.V/	300	265	230	20	13.5	286	165	4	83



Type	a*	b	c	d*	i	Design with motor extensions				
						i _{TB}	E../ES..	G	E../ES..-G	RR/RL
							d _{ML} *	d _{ML} *	d _{ML} *	d _{ML}
BS40Z-../D05..	170	138.5	123	576.5	100	117	618.5	679.5	721	-
BS40Z-../D06..	170	138.5	123	576.5	100	119	618.5	679.5	721	-
BS40Z-../D07..	190	138.5	123	596.5	100	119	638.5	699.5	741	-
BS40-../D..08..	200	60	156	528	115	136.5	594	635	701.5	594
BS40Z-../D..08..	200	142.5	156	610.5	115	136.5	676.5	717.5	784	676.5
BS40-../D..09..	251	74.5	181	593.5	124	158	686.5	700.5	791	686.5
BS40Z-../D..09..	251	157	181	676	124	158	769	783	873.5	769
BS40-../D..11..	319	81	228	668	181	181	766	775	870.5	766



The dimensions "a*", "d*" and "d_{ML}*" change dependent on the motor design.
Design state "A" = Standard Length
 Type Example: BK70-74V/DPE08XA4
 Comment: No change to the dimensions shown

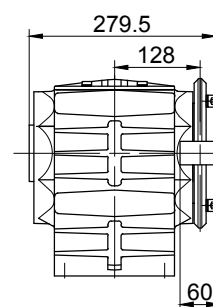
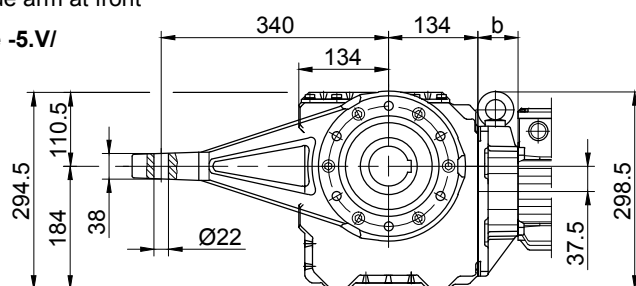
Design state "B" = Extended Length
 Type Example: BK70-74V/DPE08XB4
 Comment: Motor length changes please see Chapter 16 - Additional dimension sheet - Motor Length Comparison

The actual gearbox design can vary from the geometry shown.

BS40 - BS40Z

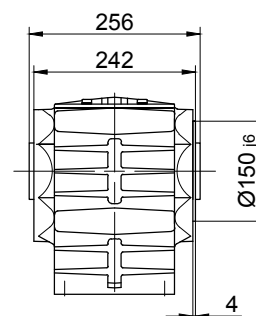
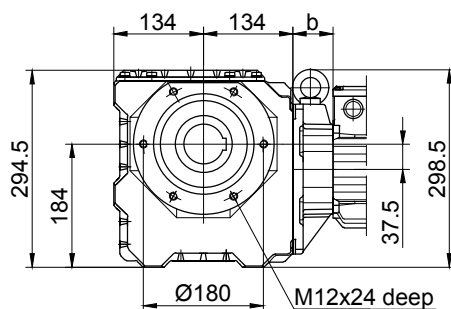
Torque arm at front

Code -5.V/



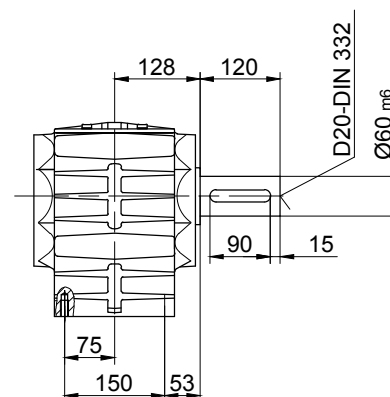
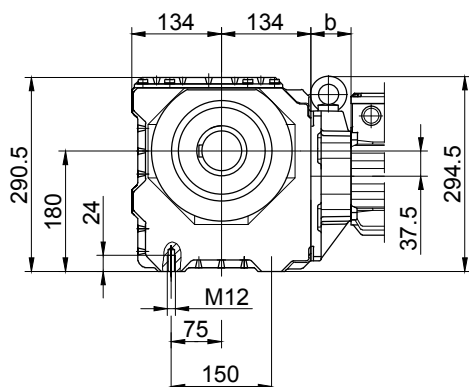
Flange with tapped holes at front

Code -7.V/



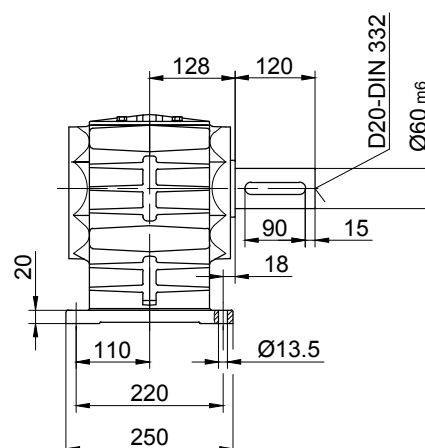
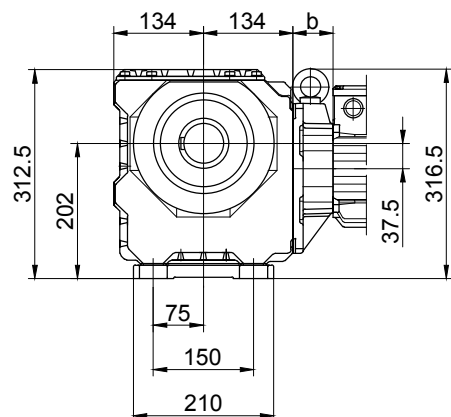
Foot with tapped holes at bottom

Code -6.U/



Foot with clearance holes at bottom

Code -1.U/



The actual gearbox design can vary from the geometry shown.

BS-series worm-geared motors

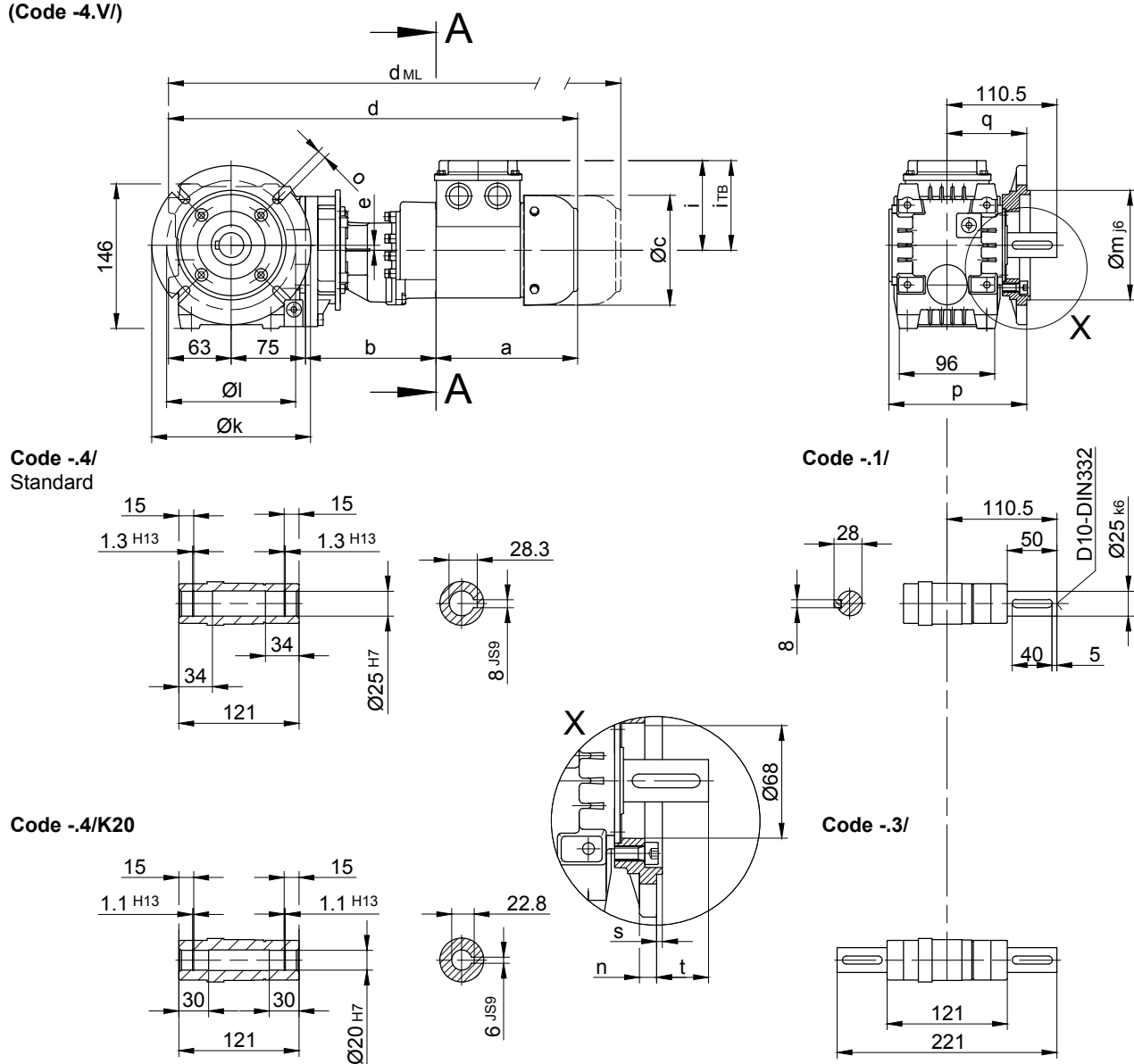
Dimension

BS06G04

Flange with clearance holes at front

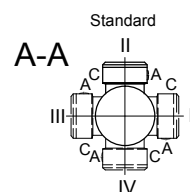
Code -3.V/

(Code -4.V/)



Flange dimensions

BS06G...	k	l	m	n	o	p	q	s	t
Standard -3.V/	140	115	95	10	9	138.5	80	3	30.5
big -4.V/	160	130	110	10	9	138.5	80	3.5	30.5

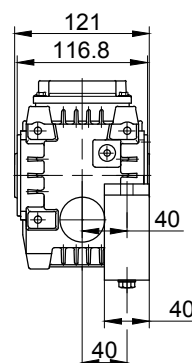
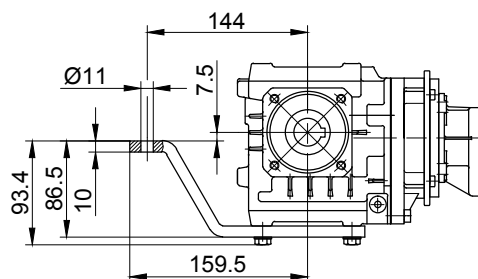


Type	a	b	c	d	e	i	Design with motor extensions				
							i_{TB}	E..	G	E..-G	RR/RL
								d_{ML}	d_{ML}	d_{ML}	d_{ML}
BS06G04-.../D04..	143	135	111	416	5	90	112	459.5	478.5	521.5	-

The actual gearbox design can vary from the geometry shown.

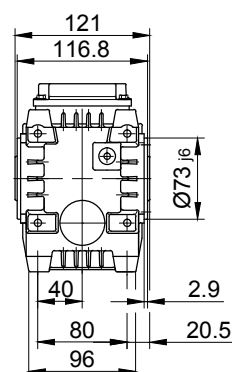
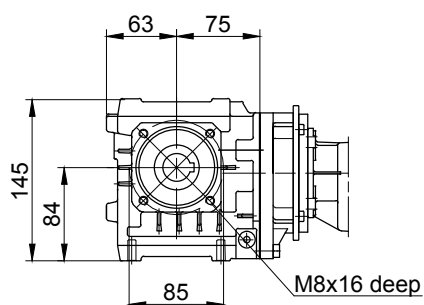
Torque arm at front

Code -5.V/



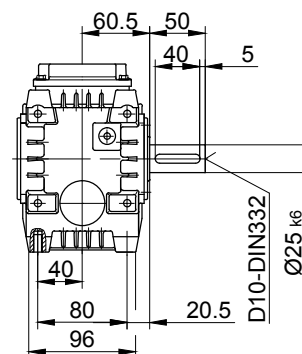
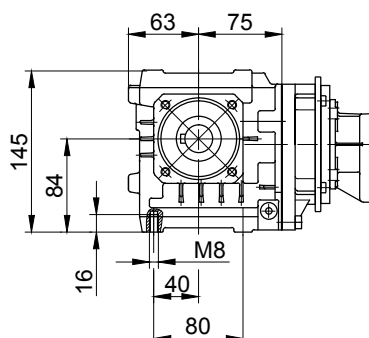
Flange with tapped holes at front

Code -7.V/



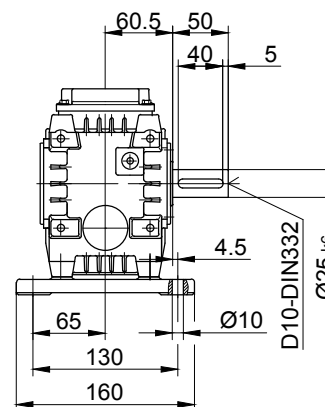
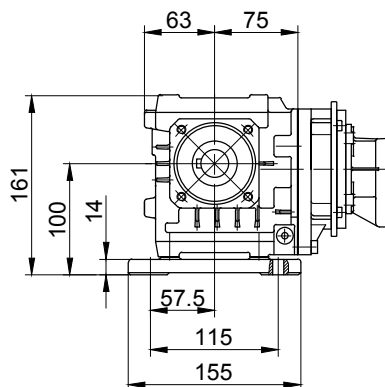
Foot with tapped holes at bottom

Code -6.U/



Foot with clearance holes at bottom

Code -1.U/



BS-series worm-geared motors

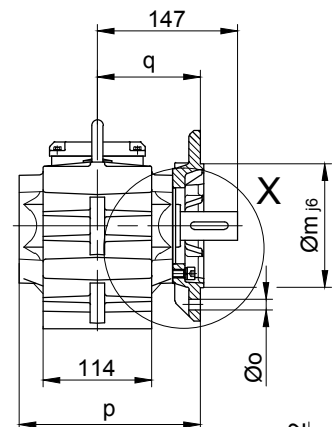
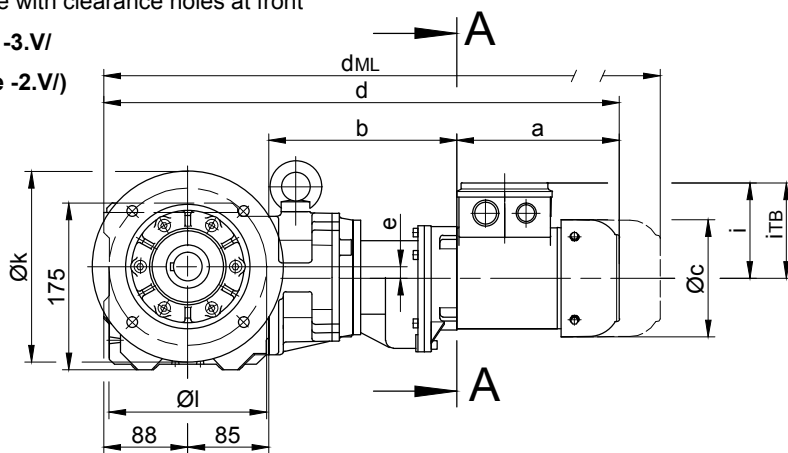
Dimension

BS10G06

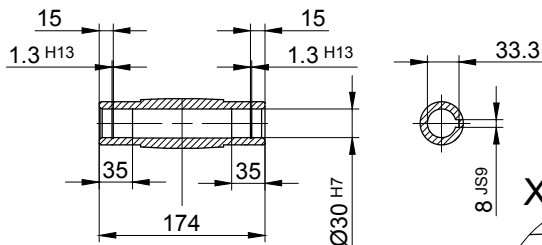
Flange with clearance holes at front

Code -3.V/

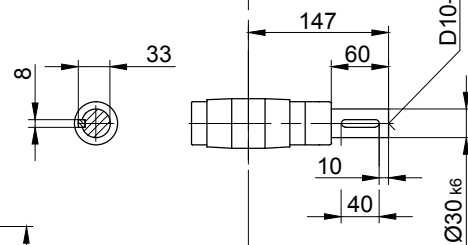
(Code -2.V/)



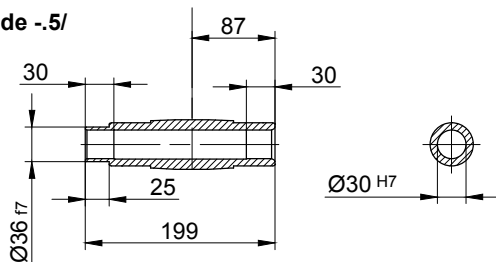
Code -4/



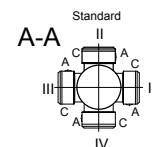
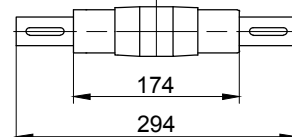
Code -1/



Code -5/



Code -3/



Flange dimensions

BS10G..	k	l	m	n	o	p	q	s	t
Standard -3.V/	200	165	130	12	11	190	108	3.5	39
small -2.V/	160	130	110	10	9	183	101	3.5	46

Type	a*	b	c	d*	e	i	Design with motor extensions				
							i _{TB}	E../ES..	G	E../ES..-G	RR/RL
								d _{ML} *	d _{ML} *	d _{ML} *	d _{ML} *
BS10G06-../D04..	143	195	111	511	12	90	112	554.5	573.5	616.5	-
BS10G06-../D05..	170	197	123	540	12	100	117	582	643	684.5	-
BS10G06-../D06..	170	197	123	540	12	100	119	582	643	684.5	-
BS10G06-../D07..	190	197	123	560	12	100	119	602	663	704.5	-
BS10G06-../D..08..	200	241	156	614	12	115	136.5	680	721	787.5	680



The dimensions "a*", "d*" and "d_{ML}" change dependent on the motor design.
Design state "A" = Standard Length
 Type Example: BK70-74V/DPE08XA4
 Comment: No change to the dimensions shown

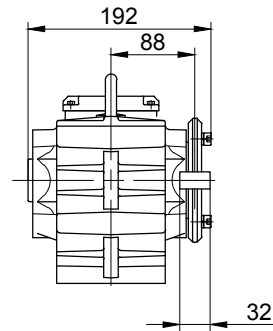
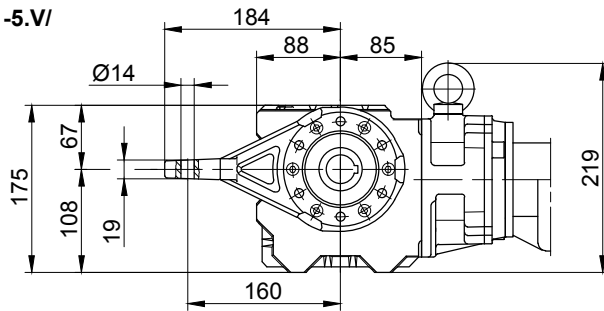
Design state "B" = Extended Length
 Type Example: BK70-74V/DPE08XB4
 Comment: Motor length changes please see Chapter 16 - Additional dimension sheet - Motor Length Comparison

The actual gearbox design can vary from the geometry shown.

BS10G06

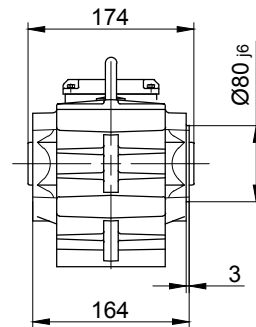
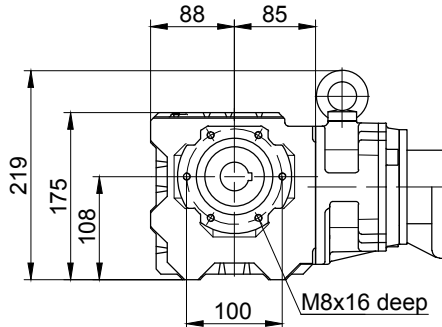
Torque arm at front

Code -5.V/



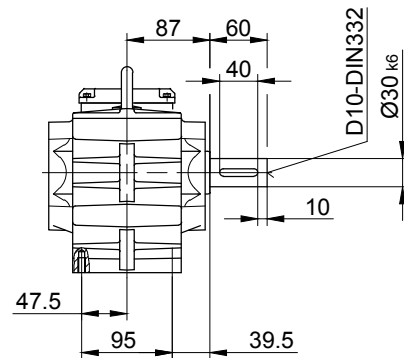
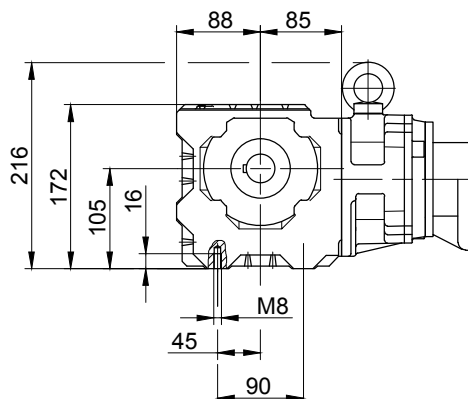
Flange with tapped holes at front

Code -7.V/



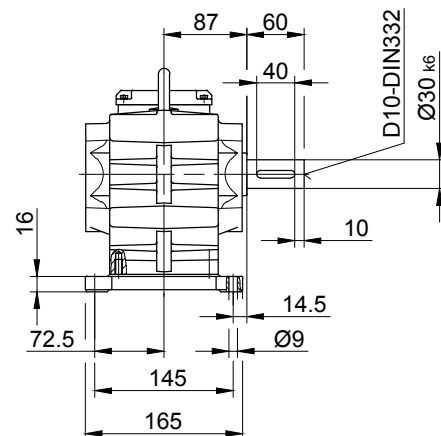
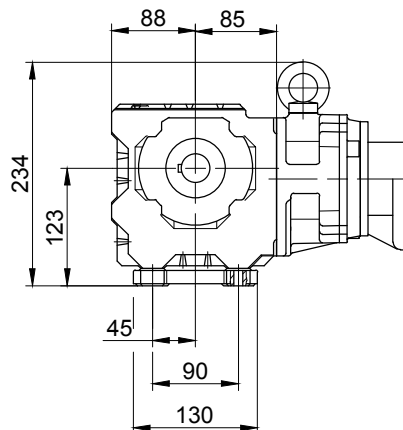
Foot with tapped holes at bottom

Code -6.U/



Foot with clearance holes at bottom

Code -1.U/



The actual gearbox design can vary from the geometry shown.

BS-series worm-geared motors

Dimension

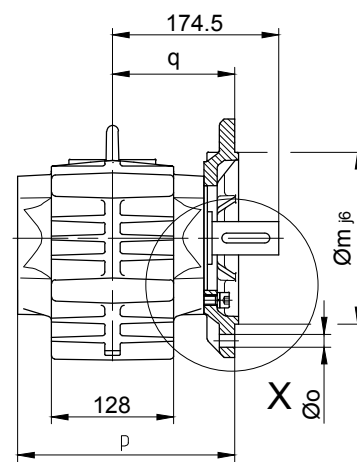
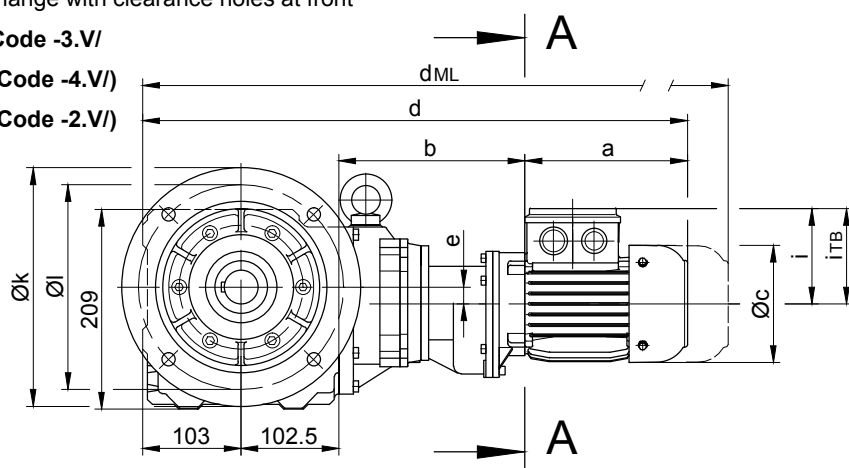
BS20G06

Flange with clearance holes at front

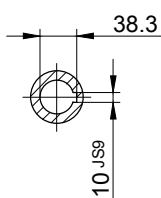
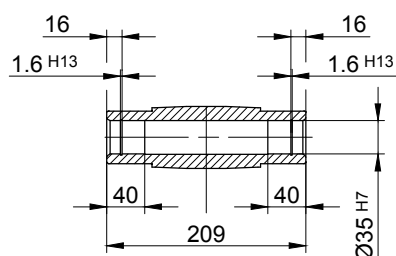
Code -3.V/

(Code -4.V/)

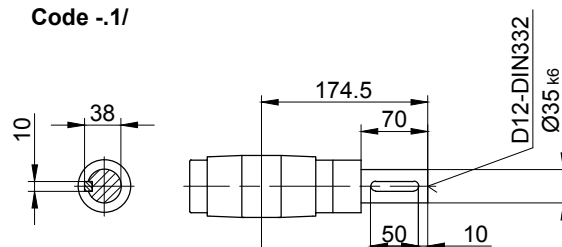
(Code -2.V/)



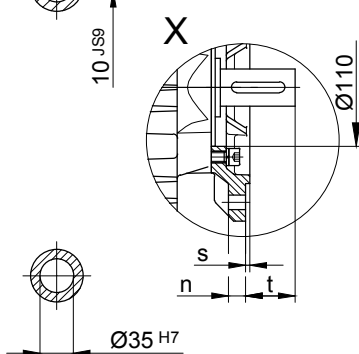
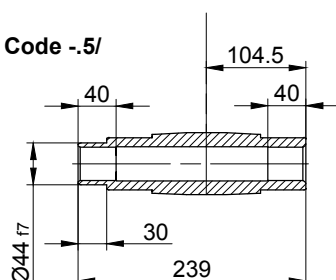
Code -4/



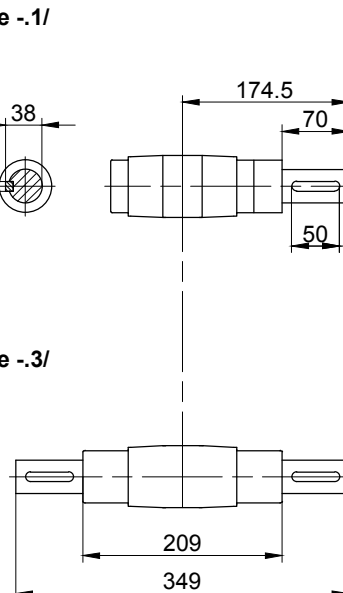
Code -1/



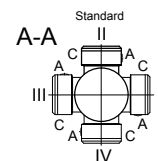
Code -5/



Code -3/



Flange dimensions



BS20G..	k	l	m	n	o	p	q	s	t
Standard -3.V/	250	215	180	16	13.5	227.5	128	4	46.5
small -2.V/	200	165	130	12	11	224.5	125	3.5	49.5
big -4.V/	300	265	230	20	13.5	233.5	134	4	40.5

Type	a*	b	c	d*	e	i	Design with motor extensions				
							i _{TB}	ES../ZS..	G	ES../ZS..-G	RR/RL
								d _{ML} *	d _{ML} *	d _{ML} *	d _{ML} *
BS20G06-../D04..	143	193	111	541.5	18	90	112	585	604	647	-
BS20G06-../D05..	170	195	123	570.5	18	100	117	612.5	673.5	715	-
BS20G06-../D06..	170	195	123	570.5	18	100	119	612.5	673.5	715	-
BS20G06-../D07..	190	195	123	590.5	18	100	119	632.5	693.5	735	-
BS20G06-../D..08..	200	239	156	644.5	18	115	136.5	710.5	751.5	818	710.5



The dimensions "a*", "d*" and "d_{ML}*" change dependent on the motor design.
Design state "A" = Standard Length
 Type Example: BK70-74V/DPE08XA4
 Comment: No change to the dimensions shown

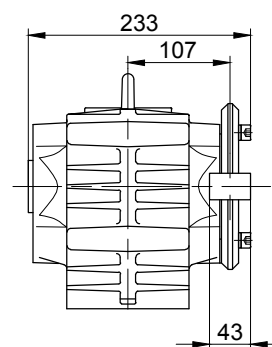
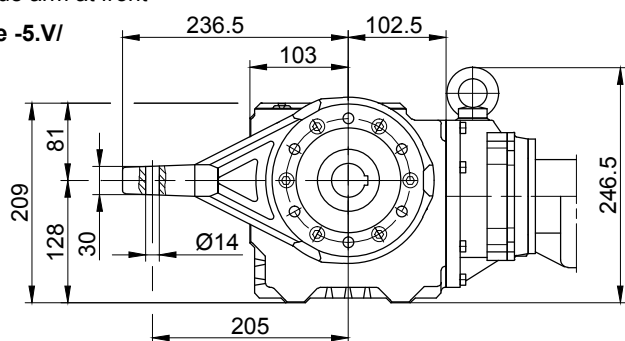
Design state "B" = Extended Length
 Type Example: BK70-74V/DPE08XB4
 Comment: Motor length changes please see Chapter 16 - Additional dimension sheet - Motor Length Comparison

The actual gearbox design can vary from the geometry shown.

BS20G06

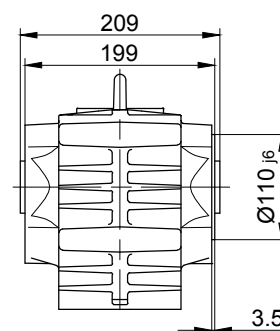
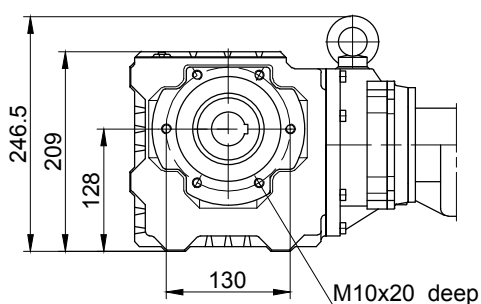
Torque arm at front

Code -5.V/



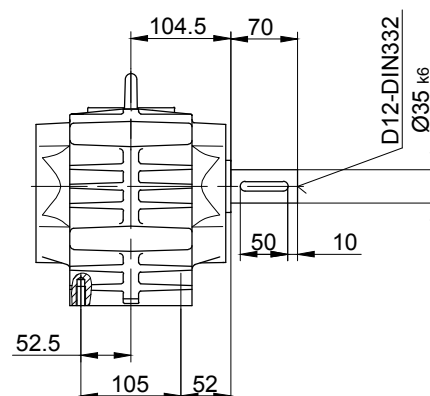
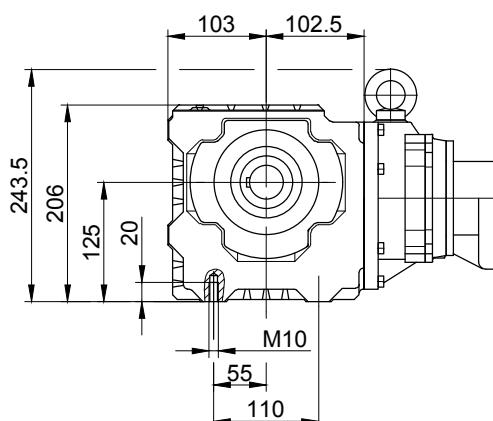
Flange with tapped holes at front

Code -7.V/



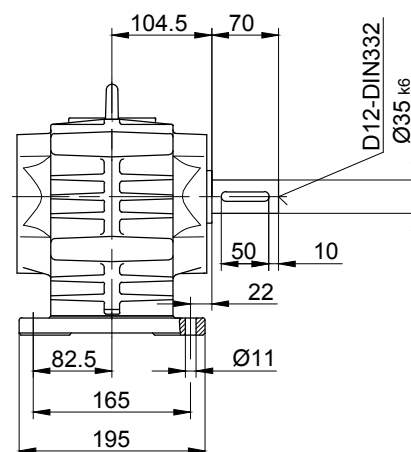
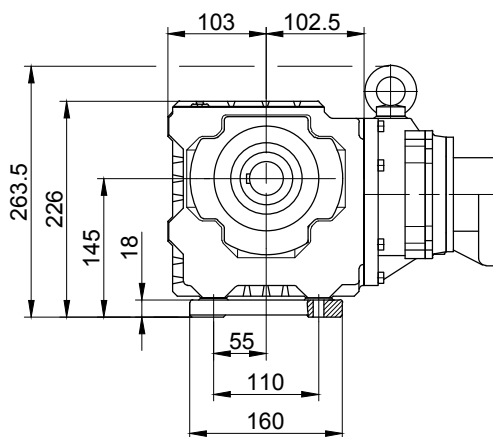
Foot with tapped holes at bottom

Code -6.U/



Foot with clearance holes at bottom

Code -1.U/



The actual gearbox design can vary from the geometry shown.

BS-series worm-geared motors

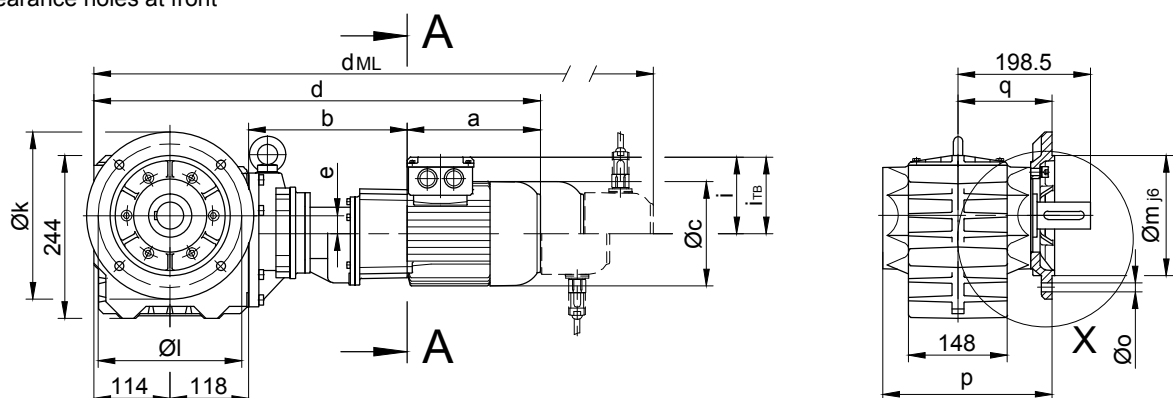
Dimension

BS30G06

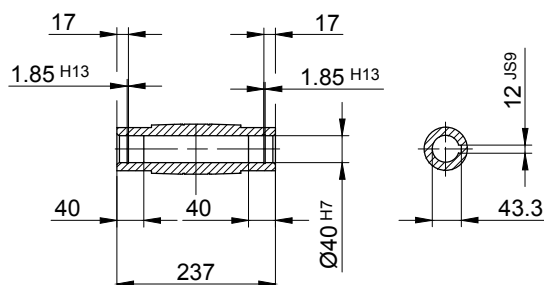
Flange with clearance holes at front

Code -3.V/

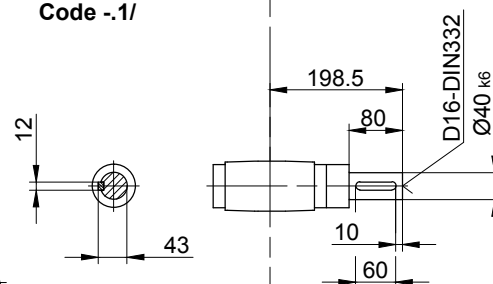
(Code -4.V/)



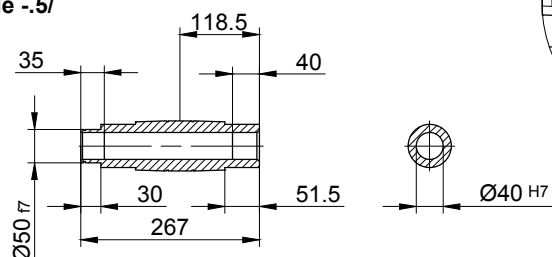
Code -4/



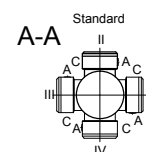
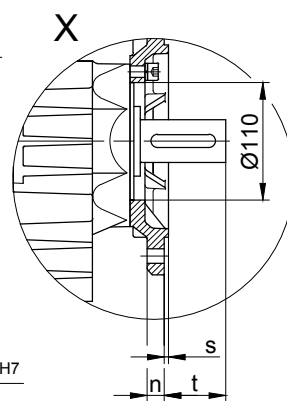
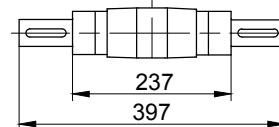
Code -1/



Code -5/



Code -3/



A-A

Flange dimensions

BS30G..	k	l	m	n	o	p	q	s	t
Standard -3.V/	250	215	180	16	13.5	253.5	141	4	57.5
big -4.V/	300	265	230	20	13.5	259.5	147	4	51.5

Type	a*	b	c	d*	e	i	Design with motor extensions				
							i_{TB}	E../ES..	G	E../ES..-G	RR/RL
BS30G06-../D04..	143	191	111	566	27	90	112	d_{ML}^*	d_{ML}^*	d_{ML}^*	-
BS30G06-../D05..	170	193	123	595	27	100	117	609.5	628.5	671.5	-
BS30G06-../D06..	170	193	123	595	27	100	119	637	698	739.5	-
BS30G06-../D07..	190	193	123	615	27	100	119	637	698	739.5	-
BS30G06-../D07..	190	193	123	615	27	100	119	657	718	759.5	-
BS30G06-../D..08..	200	237	156	669	27	115	136.5	735	776	842.5	735



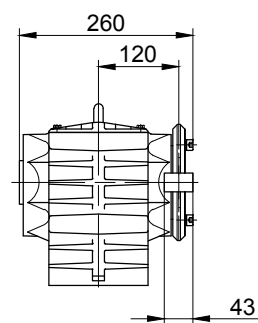
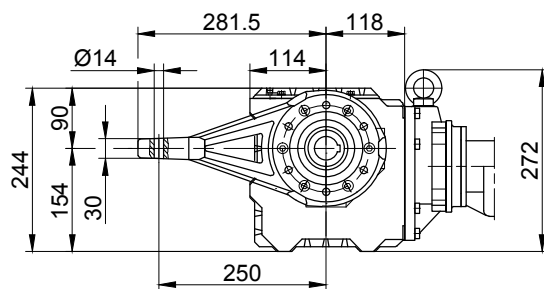
The dimensions "a*", "d*" and "d_{ML}" change dependent on the motor design.
Design state "A" = Standard Length
 Type Example: BK70-74V/DPE08XA4
 Comment: No change to the dimensions shown

Design state "B" = Extended Length
 Type Example: BK70-74V/DPE08XB4
 Comment: Motor length changes please see Chapter 16 - Additional dimension sheet - Motor Length Comparison

The actual gearbox design can vary from the geometry shown.

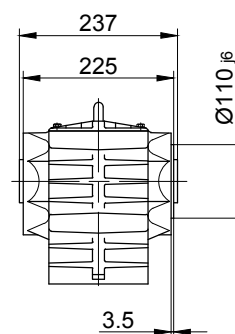
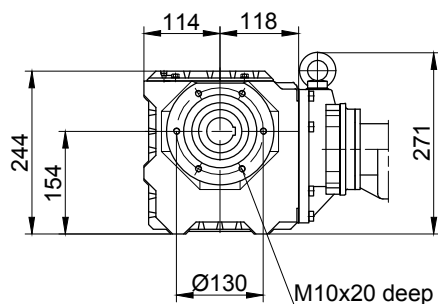
Torque arm at front

Code -5.V/



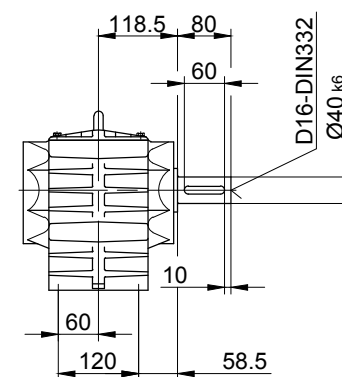
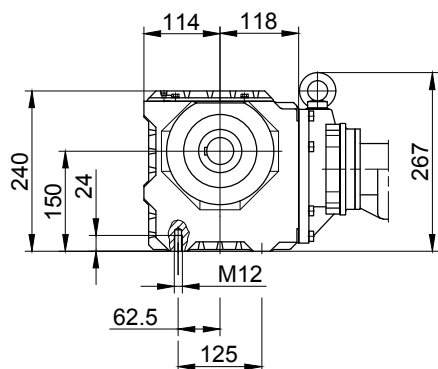
Flange with tapped holes at front

Code -7.V/



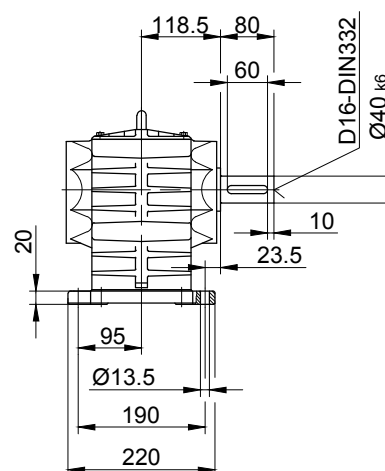
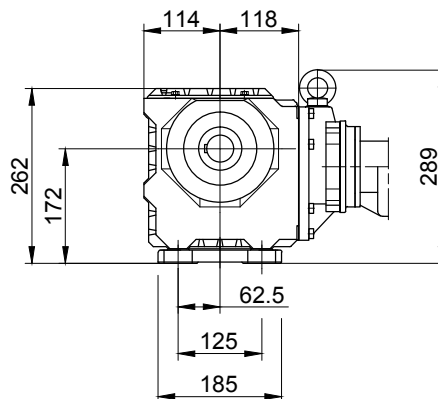
Foot with tapped holes at bottom

Code -6.U/



Foot with clearance holes at bottom

Code -1.U/



The actual gearbox design can vary from the geometry shown.

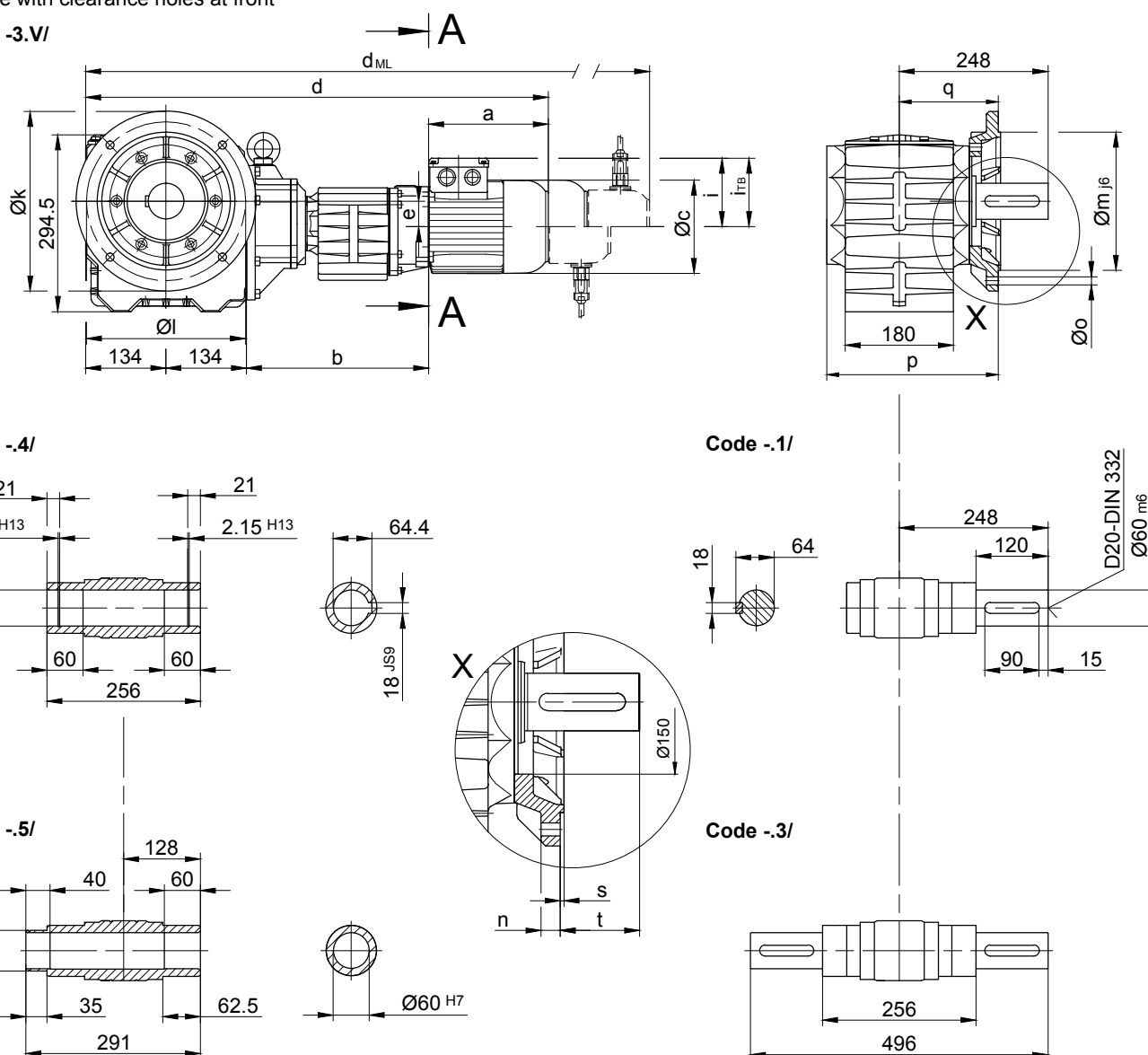
BS-series worm-geared motors

Dimension

BS40G10

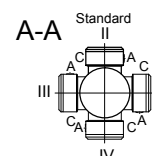
Flange with clearance holes at front

Code -3.V/



Flange dimensions

BS40G..	k	l	m	n	o	p	q	s	t
Standard -3.V/	300	265	230	20	13.5	286	165	4	83



Type	a*	b	c	d*	e	i	Design with motor extensions				
							i _{TB}	E../ES..	G	E../ES..-G	RR/RL
								d _{ML} *	d _{ML} *	d _{ML} *	d _{ML} *
BS40G10-../D05..	170	300	123	738	43	100	117	780	841	882.5	-
BS40G10-../D06..	170	300	123	738	43	100	119	780	841	882.5	-
BS40G10-../D07..	190	300	123	758	43	100	119	800	861	902.5	-
BS40G10-../D..08..	200	304	156	772	43	115	136.5	838	879	945.5	838
BS40G10-../D..09..	251	318.5	181	837.5	43	124	158	930.5	944.5	1035	930.5



The dimensions "a*", "d*" and "d_{ML}*" change dependent on the motor design.

Design state "A" = Standard Length

Type Example: BK70-74V/DPE08XA4

Comment: No change to the dimensions shown

Design state "B" = Extended Length

Type Example: BK70-74V/DPE08XB4

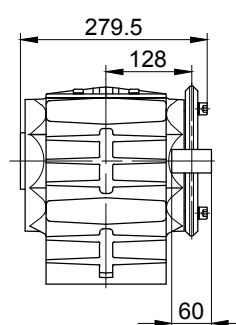
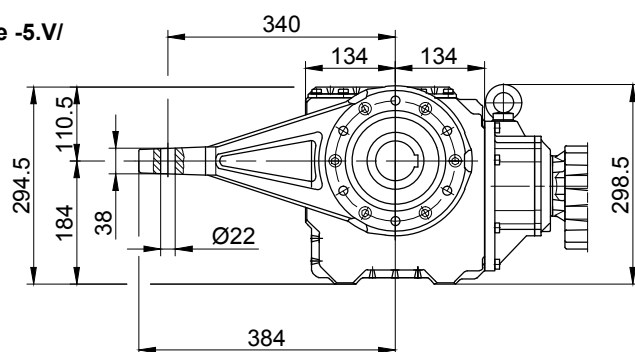
Comment: Motor length changes please see Chapter 16 - Additional dimension sheet - Motor Length Comparison

The actual gearbox design can vary from the geometry shown.

BS40G10

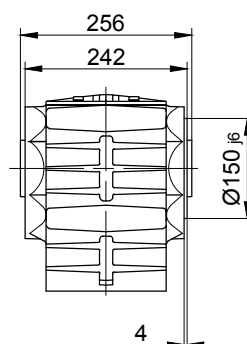
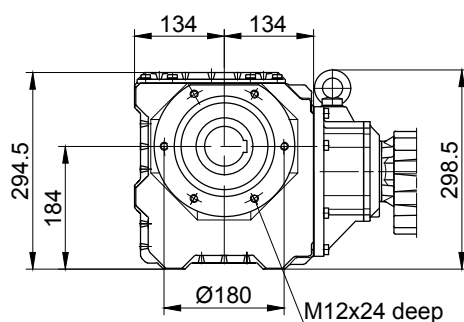
Torque arm at front

Code -5.V/



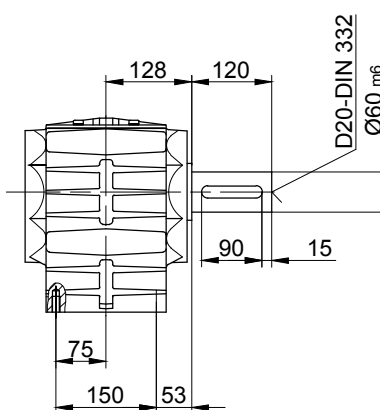
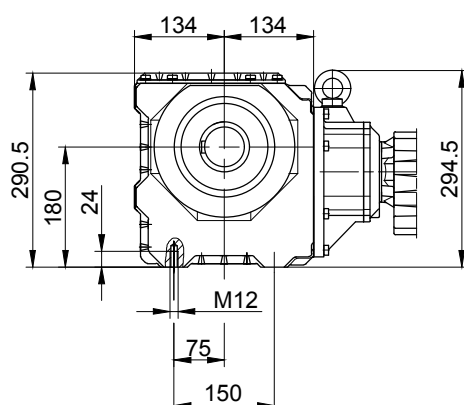
Flange with tapped holes at front

Code -7.V/



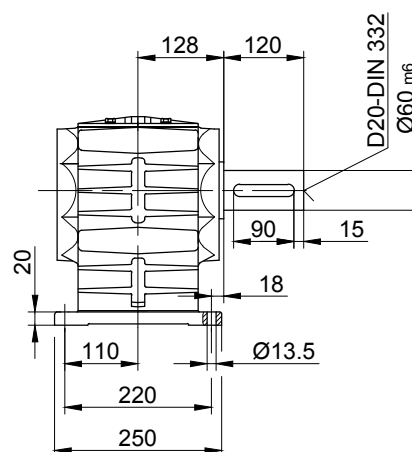
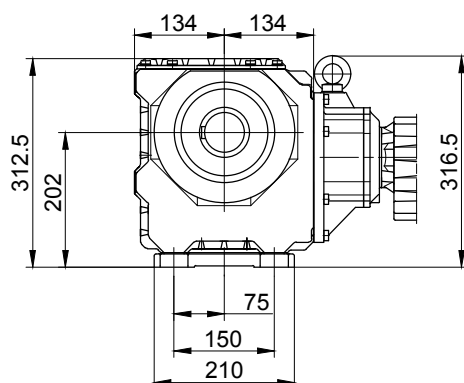
Foot with tapped holes at bottom

Code -6.U/



Foot with clearance holes at bottom

Code -1.U/

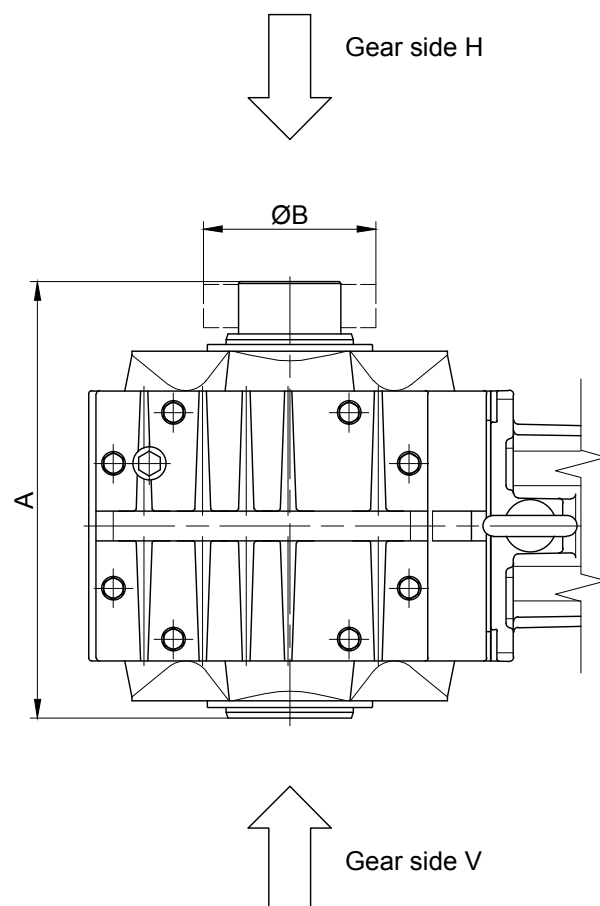


The actual gearbox design can vary from the geometry shown.

Shrink disc couplings (SSV)

(Code BS10Z-.5/...)

(Code BS10Z-.5A/...)



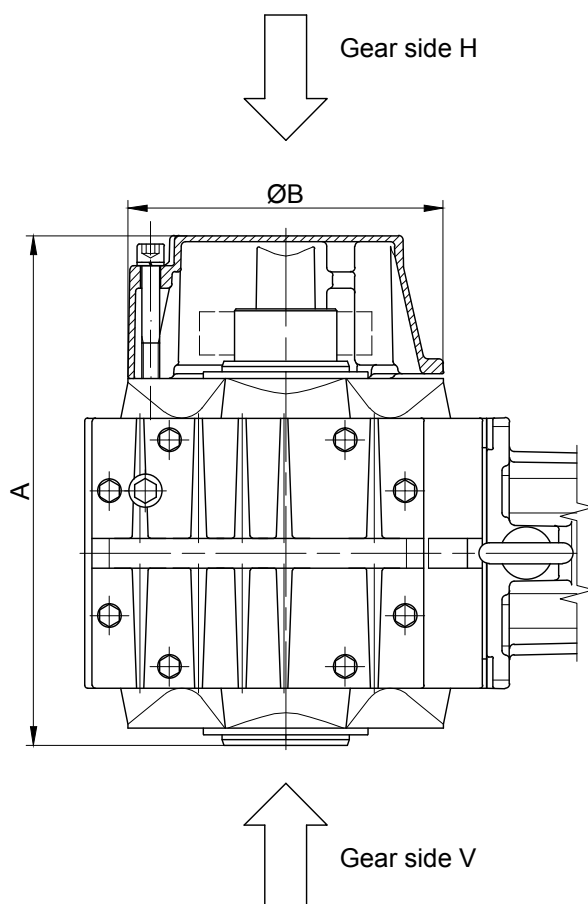
Type	SSV Ringfeder	SSV STÜWE	A	B
BS10	RfN 4161 036x072	HSD 36-22x36	199	72
BS20	RfN 4161 044x080	HSD 44-22x44	239	80
BS30	RfN 4161 050x090	HSD 50-22x50	267	90
BS40	RfN 4161 062x110	HSD 68-22x68	291	115

The actual gearbox design can vary from the geometry shown.

Shrink disc couplings with (SSV) cover

(Code BS10Z-.5A/...)

(Code BS10Z-.5A/...)

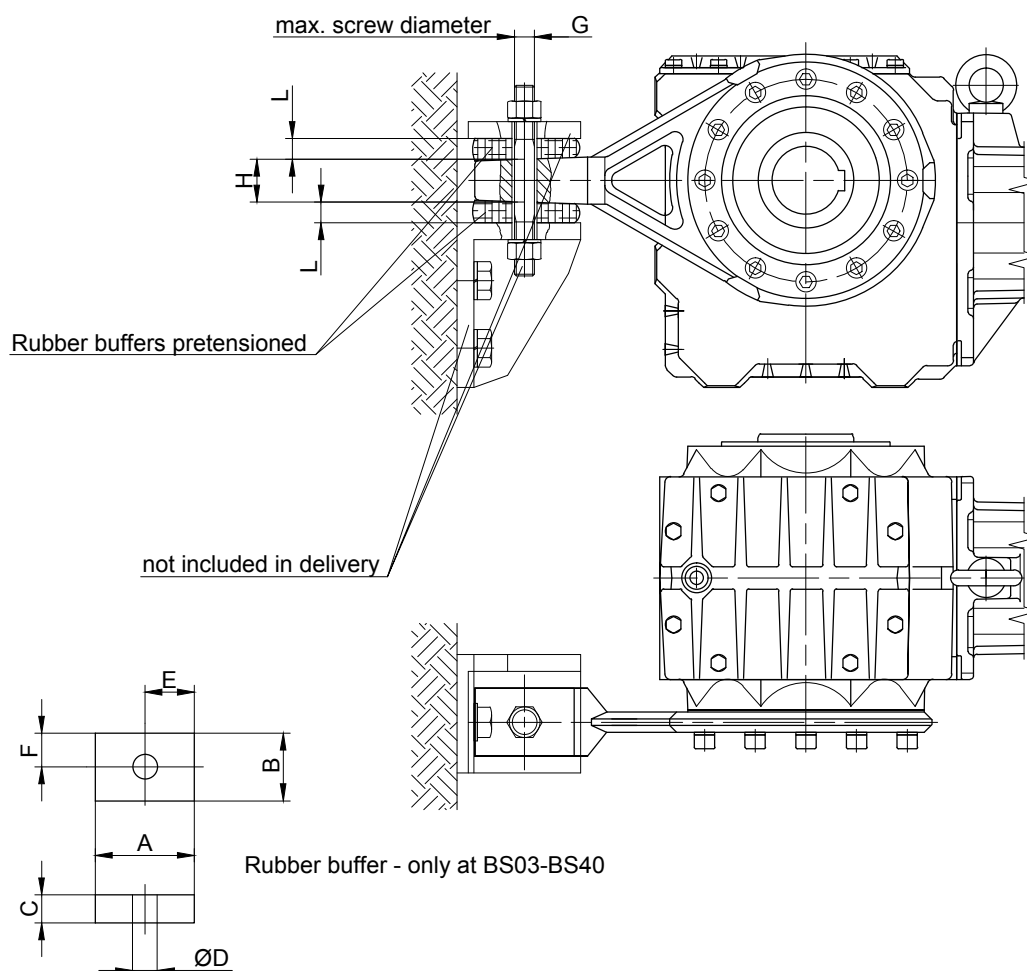


13

Type	SSV Ringfeder	SSV STÜWE	A	B
BS10	RfN 4161 036x072	HSD 36-22x36	221	120
BS20	RfN 4161 044x080	HSD 44-22x44	286	160
BS30	RfN 4161 050x090	HSD 50-22x50	313	160
BS40	RfN 4161 062x110	HSD 68-22x68	340	210

The actual gearbox design can vary from the geometry shown.

Rubber buffer for torque arm



Material: Natural rubber
Hardness 50±5 Shore A

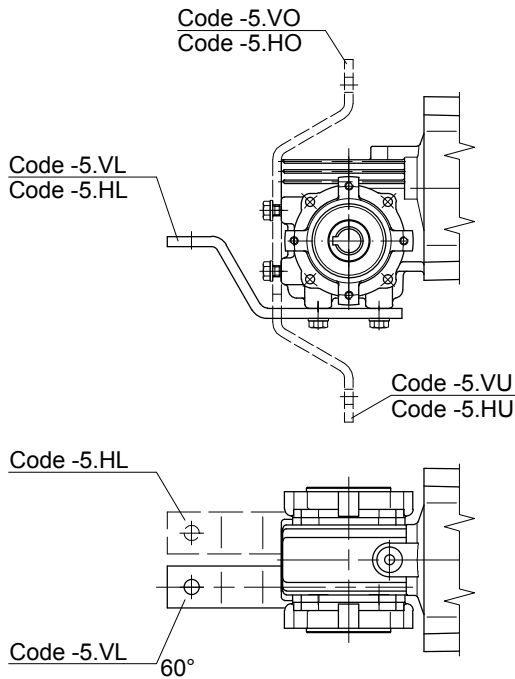
Dimensions of the transverse hole:
see dimensioned sketch of the respective
shaft mounted gearbox

Gear	Pos.	Dimensions (mm)								
		A	B	C	D	E	F	G	H	L
BS02	-	-	-	-	-	-	-	M8	6	-
BS03	Pos.0	30	30	12	12	15	15	M8	10	10.5
BS04	Pos.0	30	30	12	12	15	15	M8	10	10.5
BS06	Pos.0	30	30	12	12	15	15	M10	10	10
BS10	Pos.1	48	32	15	14	24	16	M10	19	13
BS20	Pos.2	63	43	20	14	31.5	21.5	M10	30	17.5
BS30	Pos.2	63	43	20	14	31.5	21.5	M10	30	17
BS40	Pos.3	88	60	25	22	44	30	M18	38	22

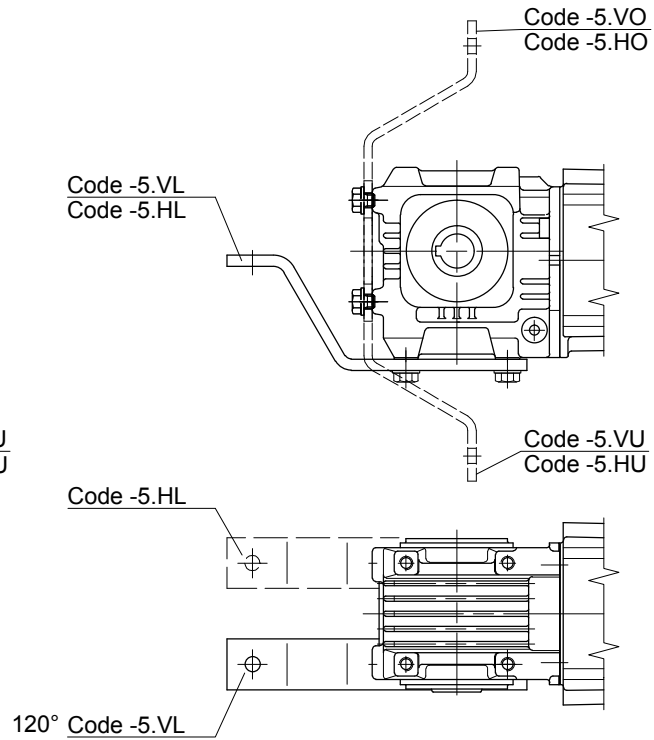
The actual gearbox design can vary from the geometry shown.

Position of the torque arm

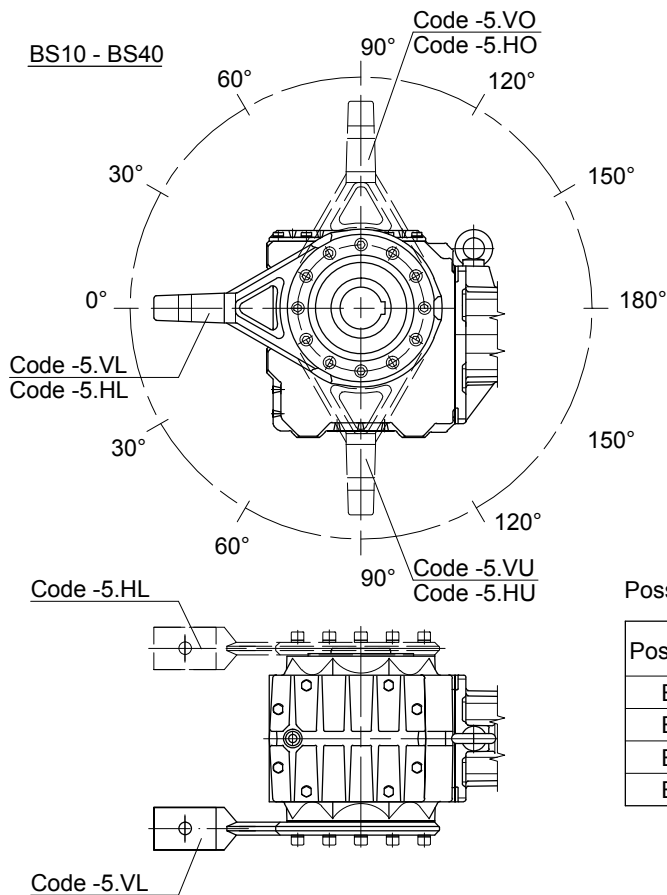
BS02 / BS03



BS04 / BS06



BS10 - BS40



Possible locations.

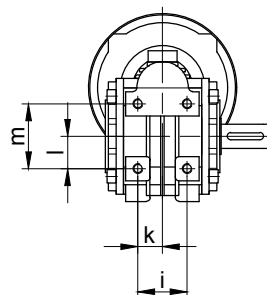
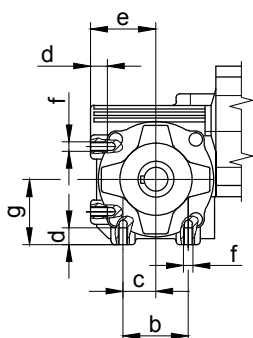
Position	VL/HL	VO / HO VU / HU					VR/HR
BS10	0°	30°	60°	90°	120°	150°	-
BS20	0°	30°	60°	90°	120°	150°	-
BS30	0°	30°	60°	90°	120°	150°	-
BS40	0°	30°	60°	90°	120°	150°	-

The actual gearbox design can vary from the geometry shown.

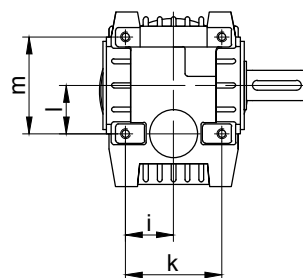
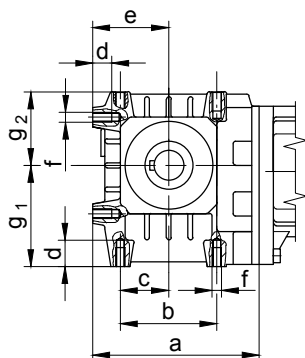
BS-series worm-geared motors

Additional Dimension Sheet

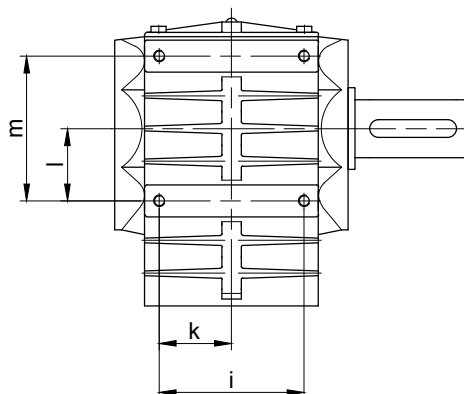
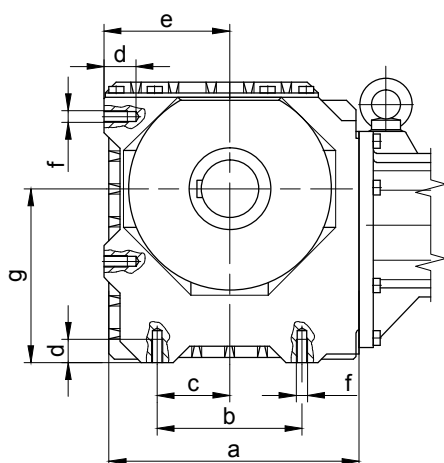
Threaded foot, left



Type	a	b	c	d	e	f	g	-	i	k	l	m
BS02	-	36	18	10	40	M6	40	-	32	16	18	36
BS03	-	54	27	14	54	M8	54	-	41	20.5	27	54



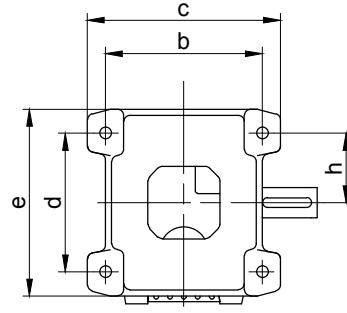
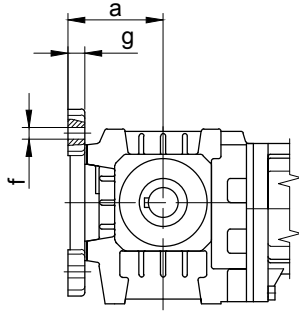
Type	a	b	c	d	e	f	g ₁	g ₂	i	k	l	m
BS04	111	60	30	15.5	50	M8	64	49.5	30	60	30	60
BS06	138	80	40	16	63	M8	84	61	40	80	40	80



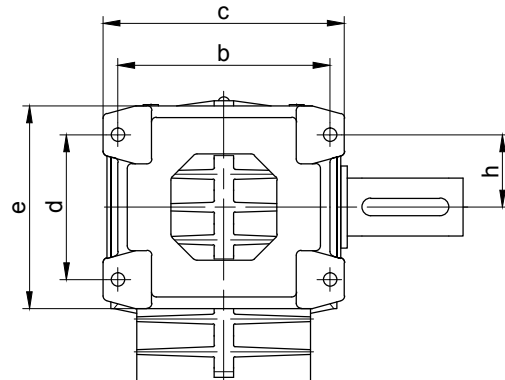
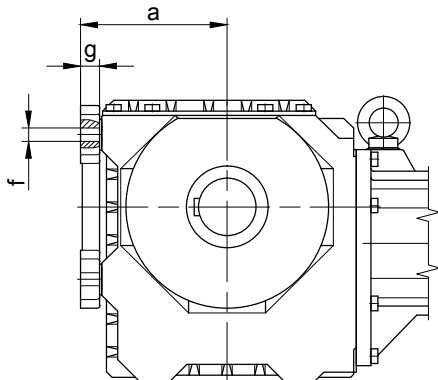
Type	a	b	c	d	e	f	g	-	i	k	l	m
BS10-BS10Z	170	90	45	16	85	M8	105	-	95	47.5	45	90
BS20-BS20Z	202.5	110	55	20	100	M10	125	-	105	52.5	55	110
BS30-BS30Z	228	125	62.5	24	110	M12	150	-	120	60	62.5	125
BS40-BS40Z	264	150	75	24	130	M12	180	-	150	75	75	150

The actual gearbox design can vary from the geometry shown.

Foot plate, left



Type	a	b	c	d	e	f	g	h
BS04	68	110	140	90	130	10	15	45
BS06	79	130	160	115	155	10	14	57.5



Type	a	b	c	d	e	f	g	h
BS10-BS10Z	103	145	165	90	130	Ø9	16	72.5
BS20-BS20Z	120	165	195	110	160	Ø11	18	55
BS30-BS30Z	132	190	220	125	185	Ø13.5	20	62.5
BS40-BS40Z	152	220	250	150	210	Ø13.5	20	75

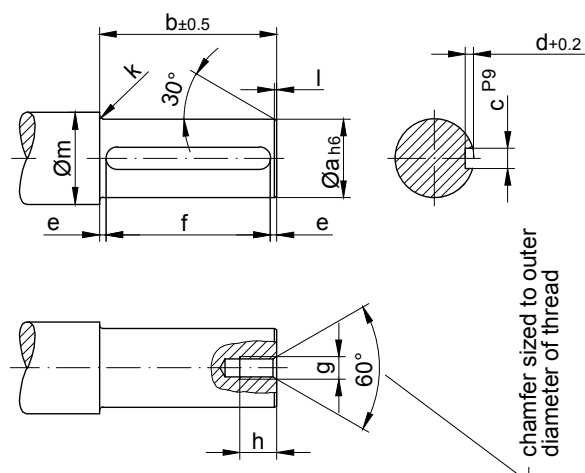
The actual gearbox design can vary from the geometry shown.

BS-series worm-geared motors

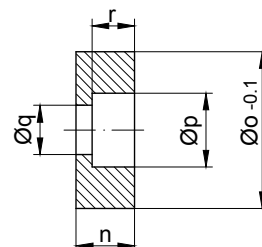
Additional Dimension Sheet

Assembly tools for hollow shaft and keyway

Pos.1 Shaft

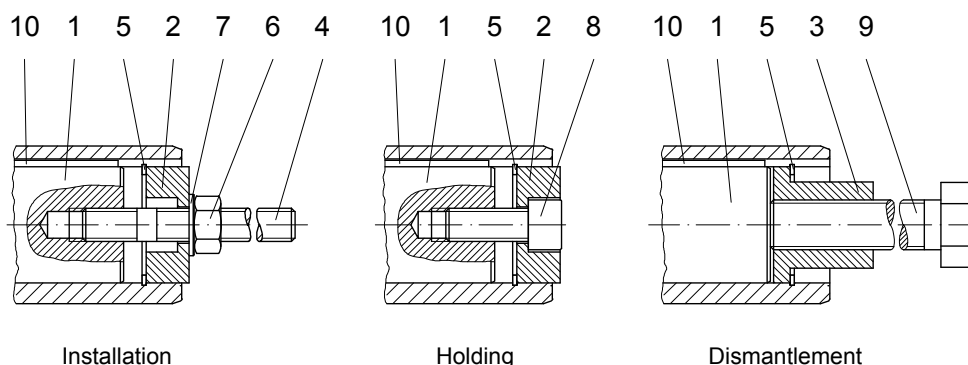


*Pos.2 Disc



✓, edges cut
Material:
C45 DIN 17200

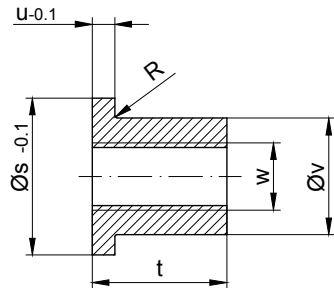
Type	Dimensions (mm)															
	Pos.1 Shaft											Pos.2 Disc				
	a	b	c	d	e	f	g	h	k	l	m	n	o	p	q	r
BS03	20	75	6	3.5	6	63 ^{+0.3}	M6	16	2	1.5	28	13.5	19.8	11	6.6	6.5
BS04	20	71	6	3.5	7.5	56 ^{+0.3}	M6	16	2	1.5	28	13.5	19.8	11	6.6	6.5
BS06	25	99	8	4	9.5	80 ^{+0.3}	M8	18	2.5	1.5	33	13.5	24.8	15	9	8.5
BS10	30	152	8	4	6	140 ^{+0.5}	M10	20	3	1.5	38	15	29.8	18	11	10
BS20	35	186	10	5	13	160 ^{+0.5}	M10	20	3	1.5	43	16	34.8	18	11	10
BS30	40	212	12	5	6	200 ^{+0.5}	M12	22	3	2	48	18	39.8	20	13.5	12
BS40	60	227	18	7	13.5	200 ^{+0.5}	M20	38	3.5	2	68	24	59.8	33	22	18



The parts shown are necessary for assembly. ONLY *specified parts are enclosed in the assembly kit. Suitable measures are to be used to secure Bolt Pos.9 against loosening.

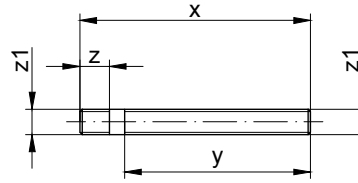
Assembly tools for hollow shaft and keyway

Pos.3 Sleeve



✓, edges cut
Material: C45 DIN 17200

Pos.4 Stud bolt



Material: Steel, tensile strength
≥ 1000N/mm²
threads rolled

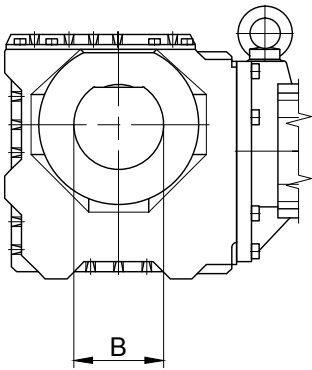
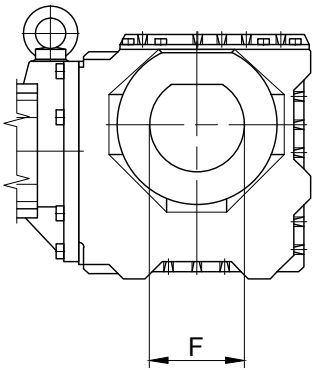
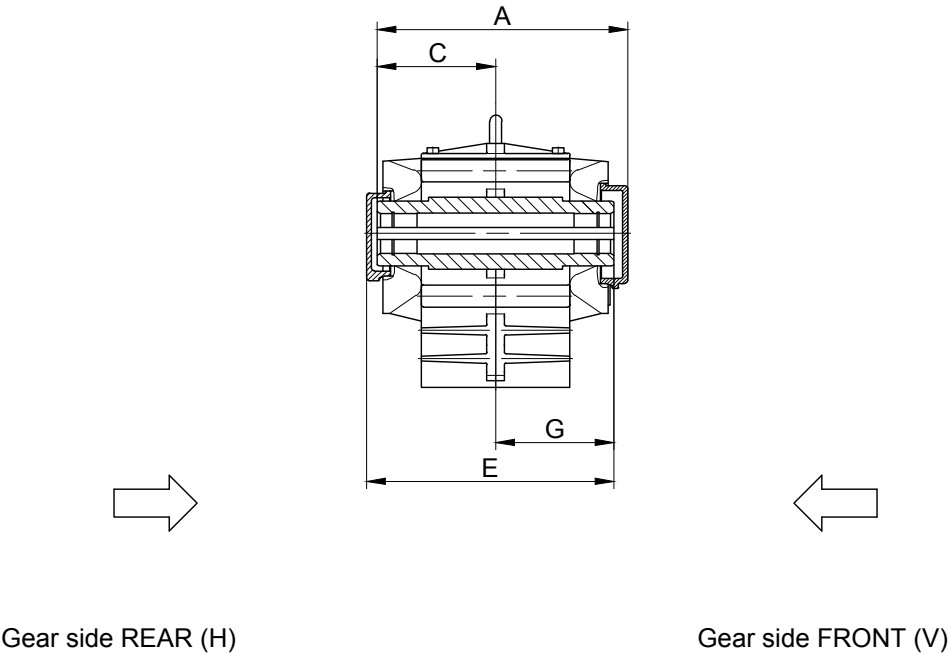
Type	Dimensions (mm)										* Retainer ring DIN 472	Hexagon nut DIN 934-8	Disc DIN 125-St	* Filister head screw DIN 912-8.8	Starting torque (Nm)	Hexagon bolt DIN EN 24017-8.8	Key DIN 6885 Width x Height x Length
	Pos.3 Sleeve						Pos.4 Stud bolt										
	s	t	u	v	w	R	x	y	z	z1							
											Pos.5	Pos.6	Pos.7	Pos.8		Pos.9	Pos.10
BS03	19.8	24	5	11	M8	-	120	90	18	M6	20x1.0	M6	6.4	M6x25	5	M8x110	A 8x7x63
BS04	19.8	24	5	11	M8	-	120	90	18	M6	20x1.0	M6	6.4	M6x25		M8x110	A 8x7x56
BS06	19.8	24	5	15.4	M12	0.8	150	120	20	M8	25x1.2	M8	8.4	M8x30		M12x140	A 8x7x80
BS10	29.8	28	5	19.8	M14	0.8	210	175	23	M10	30x1.2	M10	10.5	M10x30	8	M14x190	A 8x7x140
BS20	34.9	28	5	23	M14	-	250	215	23	M10	35x1.5	M10	10.5	M10x35		M14x230	A10x8x160
BS30	39.9	40	6	27.7	M20	0.8	280	240	28	M12	40x1.75	M12	13	M12x35	16	M20x270	A 12x8x200
BS40	59.8	60	6	44	M30	-	320	260	45	M20	60x2.0	M20	21	M20x50	42	M30x310	A 18x11x200

The parts shown are necessary for assembly. ONLY *specified parts are enclosed in the assembly kit.
Suitable measures are to be used to secure Bolt Pos.9 against loosening.

Optional:	Type	Order Text
	BS03	Id.Nr.4104013 Assembly tool "holding"
	BS04	Id.Nr.4104013 Assembly tool "holding"
	BS06	Id.Nr.4103921 Assembly tool "holding"
	BS10	Id.Nr.4103939 Assembly tool "holding"
	BS20	Id.Nr.4103947 Assembly tool "holding"
	BS30	Id.Nr.4103955 Assembly tool "holding"
	BS40	Id.Nr.4103971 Assembly tool "holding"

The actual gearbox design can vary from the geometry shown.

Shaft Cap (VK)



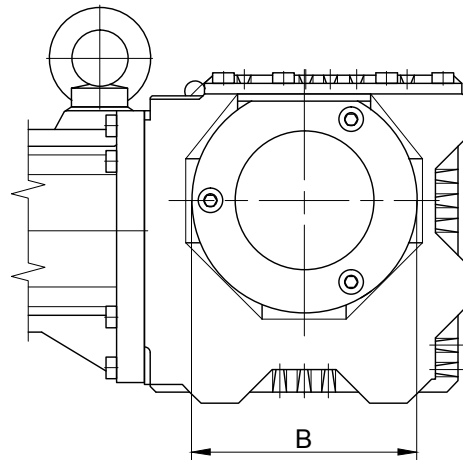
Sealing cap REAR			
Type	E	F	G
BS10	186	68	87
BS30	250.5	100	132
BS40	276	130	128

Sealing cap FRONT			
Type	A	B	C
BS20	221	78	104.5

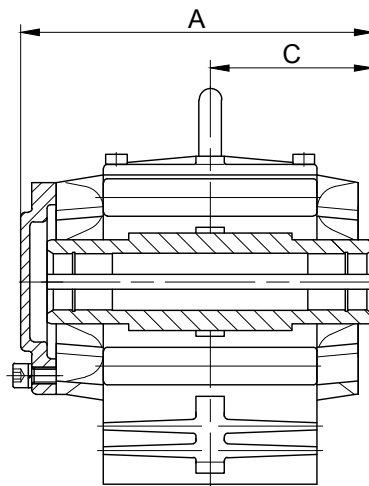
The actual gearbox design can vary from the geometry shown.

Shaft Cover (VD)

Gear side REAR (H)



Gear side REAR (H)



Gear side FRONT (V)



Type	A	B	C
BS04	99.5	68	46.5
BS06	128.5	81	60.5
BS10	185	Ø120	87
BS20	224.5	Ø160	104.5
BS30	251.5	Ø160	118.5
BS40	275	Ø210	128

The actual gearbox design can vary from the geometry shown.

