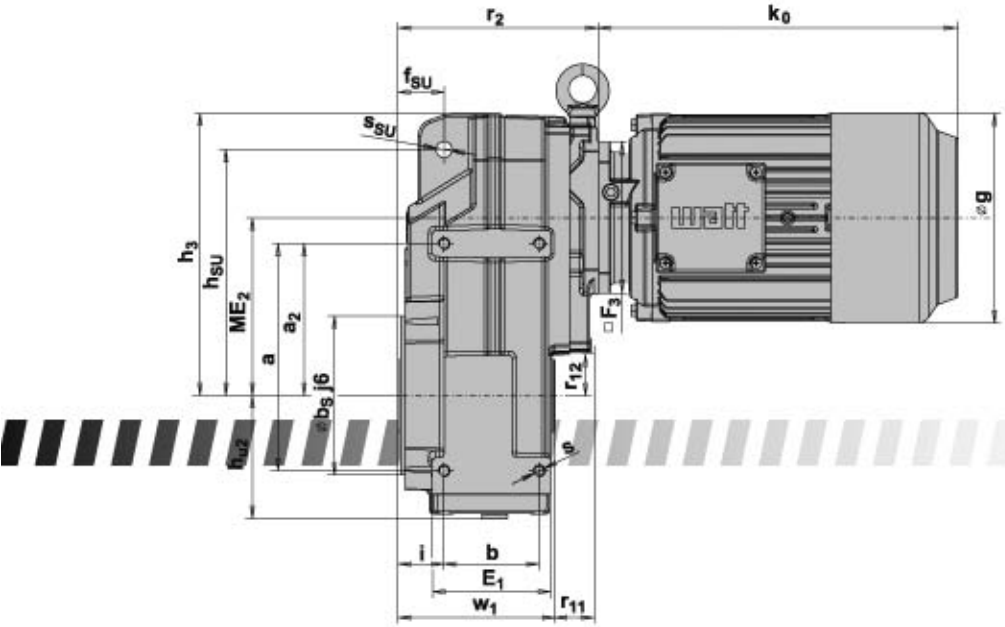
AUFSTECKGETRIEBEMOTOREN

MASSBILDER

2

SHAFT MOUNTED GEARED MOTORS

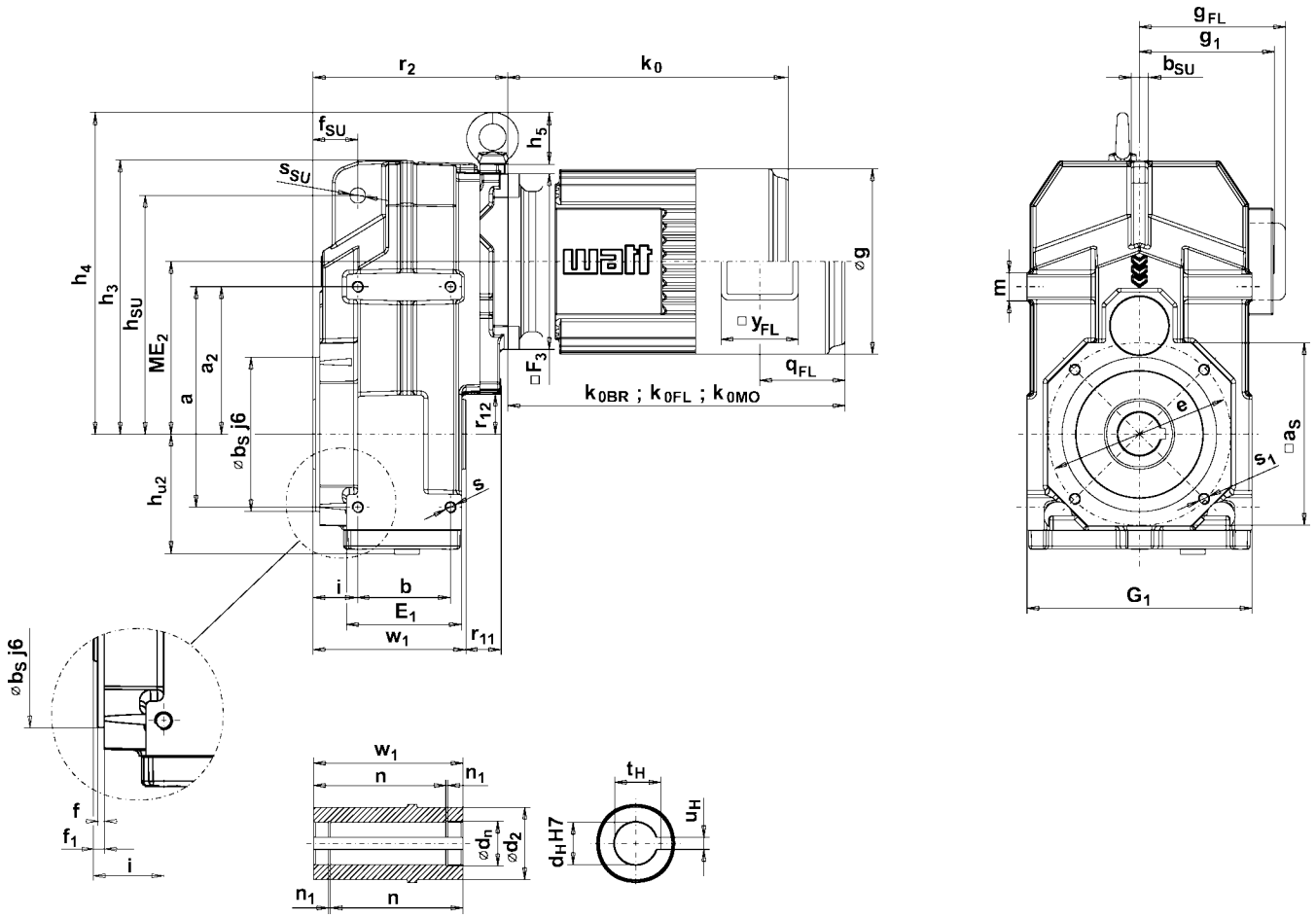
DIMENSION SHEETS



A

UNIBLOCK

AS. 46A - AS. 56A,S



d_n ... Seegerringdurchmesser / circlip diameter

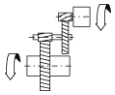
Type	Hauptabmessungen Main dimensions																		
	a	a_2	a_S	b	b_S	b_{SU}	e	E_1	f	f_1	f_{SU}	G_1	h_3	h_4	h_5	h_{SU}	h_{u2}	i	m
A.. 46A,S	140	95	100	62	80	12	100	78	3	5	31,5	150	173	-	-	158	74	27	18
A.. 56A,S	157	105	130	66 [3]	110	12	130	82 [3]	3	5	32	160	195	229	36	170	85	32 [3]	18

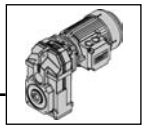
Type	Hohlwelle Hollow shaft										
	d_H	d_n	d_1	d_2	n	n_1	n_2	n_3	t_H	u_H	w_1
A.. 46A,S	20	21	-	45	92,2	1,3			22,8	6	100
	25	26,2	-	45	86,2	1,3	-	-	28,3	8	100
	*30	31,4	-	45	86,2	1,3	-	-	33,3	8	100
A.. 56A,S	25	26,2	-	50	101,7	1,3	-	-	28,3	8	109
	30	31,4	-	50	95,2	1,3	-	-	33,3	8	109
	*35	37	-	50	94,9	1,6	-	-	38,3	10	109

[3] Abmessungen b, E_1 und i nicht austauschbar zu A.. 55A,S
[3] Dimensions b, E_1 and i not interchangeable to A.. 55A,S

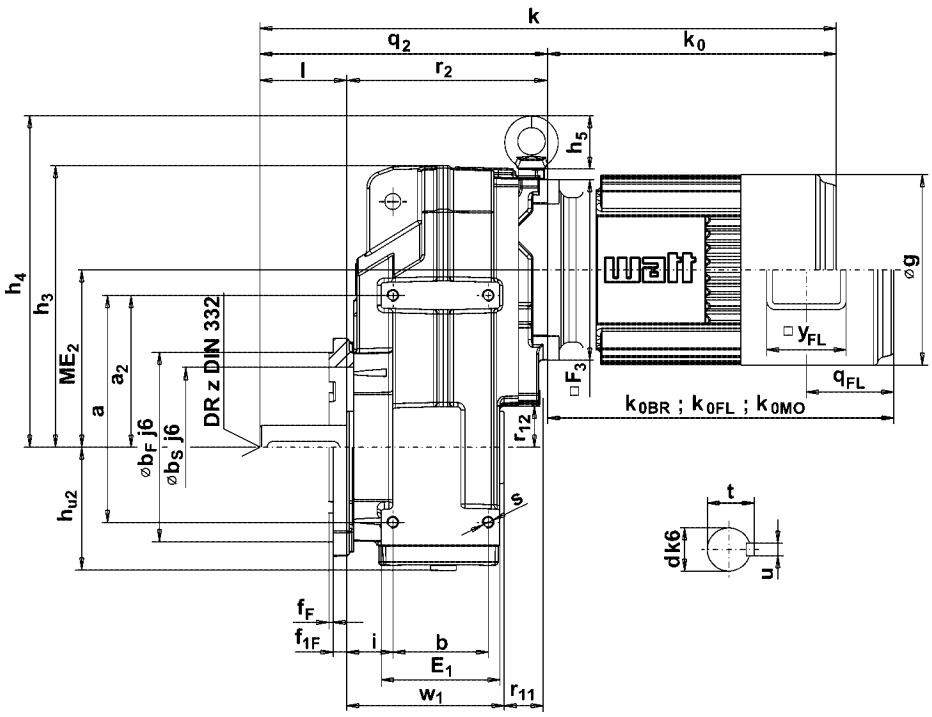
Ringschraube wird nicht mitgeliefert
Eye bolt not included

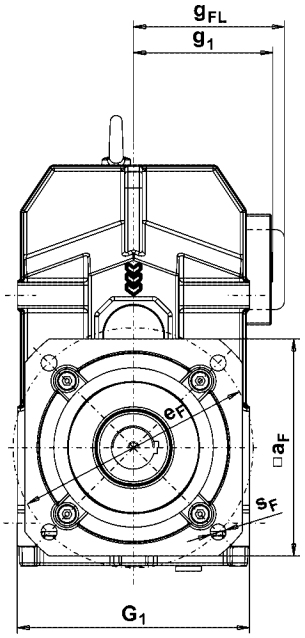
Nuten nach DIN 6885 Bl. 1
Keyways as per DIN 6885 sh. 1

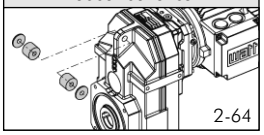
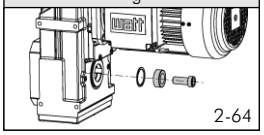
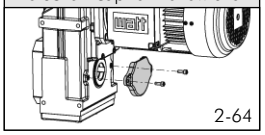
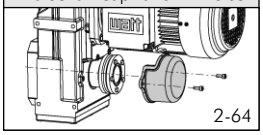
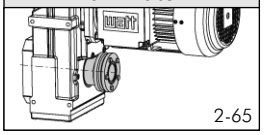




AF. 46A - AF. 56A,S





Gummipufferset Rubber buffer set	Befestigungsset Fixing kit	Hohlwellen-Abdeckkappe Protection-cap for hollow shaft	Schrumpfscheibe-Abdeckkappe Protection-cap for shrink disc	Schrumpfscheibe Shrink disc
 2-64	 2-64	 2-64	 2-64	 2-65

Hauptabmessungen Main dimensions						Abtriebsflanschabmessungen Output flange dimensions					AF	Abtriebswelle Output shaft					Type
ME_2	r_{11}	r_{12}	s	s_1	s_{SU}	a_F ≙ IEC∅		b_F 1)	e_F	f_F	f_{1F}	s_F	d 2)	l	t	u	z	
104	17,5	25	M8x12	M6x10	11	125	*160	110	130	3	5	9	20	40	22,5	6	M6	**A.. 46A,S**
						150	200	130	165	3	5	11	25	50	28	8	M10	
													*30	60	33	8	M10	
122,8	25	27	M8x12	M8x14	11	150	*200	130	165	3	9	11	30	60	33	8	M10	**A.. 56A,S**
						200	250	180	215	4	9	14	*35	70	38	10	M12	

Type	Maximale Motorabmessungen (7WA,WA) Maximum motor dimensions (7WA,WA)										Maximale Hauptabmessungen (Baureihe 7WA, WA) Maximum main dimensions (Model range 7WA, WA)					
											A.. 46A,S			**A.. 56A,S**		
	$□F_3$ 8)	g	g_1	g_{FL}	k_0	k_{0BR}	k_{0FL}	k_{0MO}	q_{FL}	y_{FL}	k 9)	q_2 9)	r_2	k 9)	q_2 9)	r_2
64K,N	125	130	117	115	205	250	309	361	73	95	387	182	122	414	209	139
72K,N	125	146	127	123	225	277	341	396	73	95	407	182	122	434	209	139
81K,N	125	165	137	138	260	304	387	439	73	95	442	182	122	469	209	139
91S,L	125	182	145	142	297	372	403	482	83	95	479	182	122	506	209	139
101L,LA	150	208	154	153	322	396	458	518	83	95	-	-	-	536	214	144
114M,ML	150	230	173	165	380	467	525	590	83	95	-	-	-	594	214	144

k_0 , k_{0BR} , k_{0FL} , k_{0MO} .... siehe Seite 9-48
see page 9-48

1) ≤ ∅ 230mm nach/to ISO "j6"
> ∅ 230mm nach/to ISO "h6"

2) ∅ 14 - 50mm nach/to ISO "k6"
> ∅ 50mm nach/to ISO "m6"

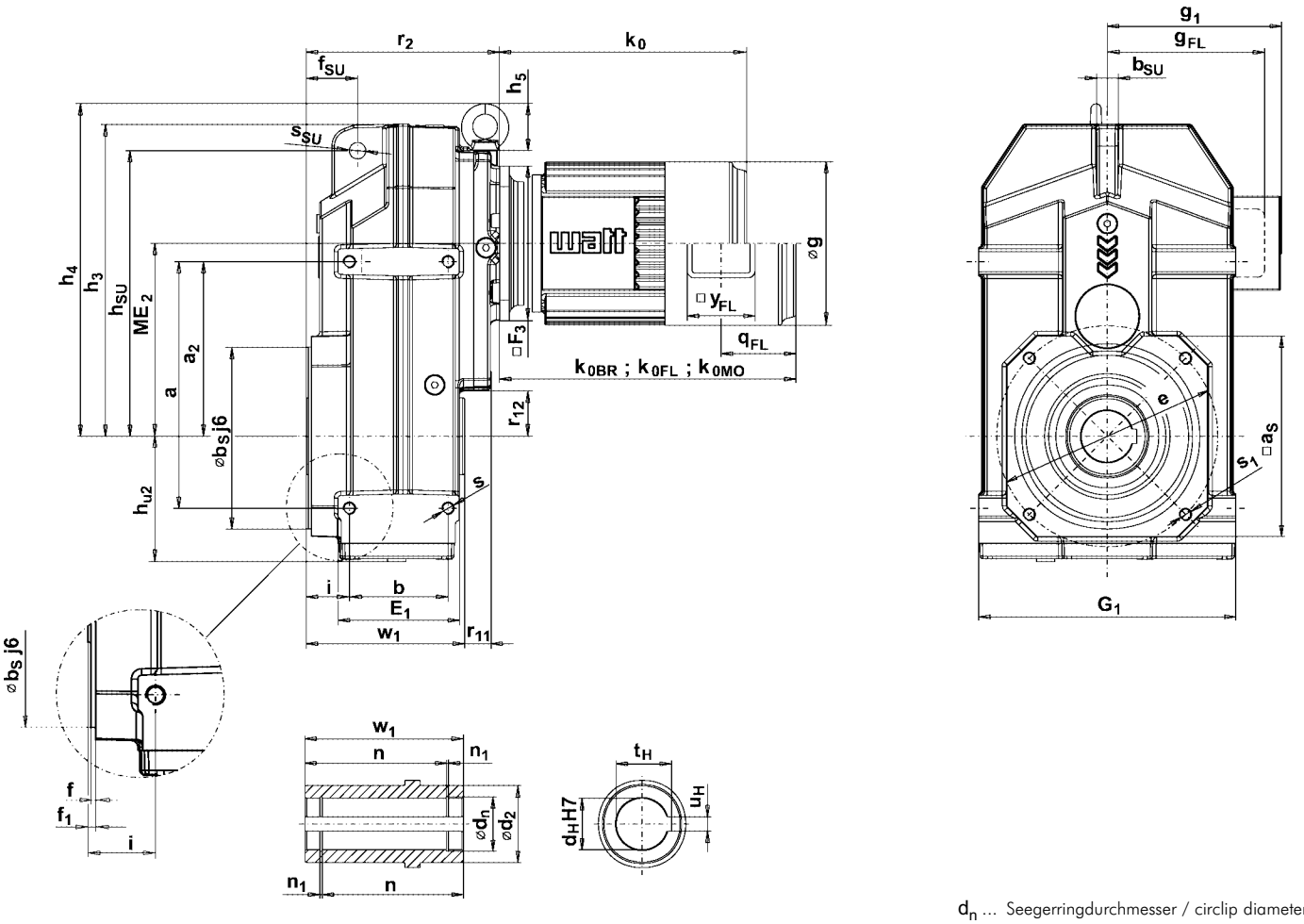
8) Motordirektanbau siehe Seite 8-66
8) Motor direct fixing see page 8-66

9) Maße gelten für Standard Abtriebswellen
9) Dimensions are valid for standard output shafts

* STANDARD DIMENSION

Abnormale Abtriebs-, Hohlwellen bzw. Abtriebsflansche gegen Mehrpreis
Non standard output, hollow shaft resp. output flange against extra charge

AS. 66A,S - AS. 86A,S



d_n ... Seegerringdurchmesser / circlip diameter

Type	Hauptabmessungen Main dimensions																		
	a	a_2	a_S	b	b_S	b_{SU}	e	E_1	f	f_1	f_{SU}	G_1	h_3	h_4	h_5	h_{SU}	h_{u2}	i	m
A.. 66A,S	190	130	150	90 3)	130	17	165	108 3)	3	5	41	200	238	278	45	218	103	42 3)	22
A.. 76A,S	240	170	195	96 3)	180	20	215	118 3)	3	5	50	250	304	324	45	278	122	42 3)	25
A.. 86A,S	310	210	196	121 3)	180	25	215	149 3)	3	5	62	310	372	394	53	346	138	40 3)	32

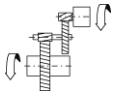
Type	Hohlwelle Hollow shaft							
	d_H	d_n	d_2	n	n_1	t_H	u_H	w_1
A.. 66A,S	*40	42,5	65	132,1	1,85	43,3	12	144
	45	47,5	65	127,6	1,85	48,8	14	144
A.. 76A,S	*50	53	75	137,3	2,15	53,8	14	154
	!60	63	75	137,3	2,15	62,3	18	154
A.. 86A,S	*60	63	90	161,3	2,15	64,4	18	182

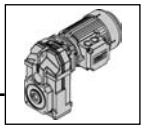
3) Abmessungen b, E_1 und i nicht austauschbar zu A.. 65A,S; 75A,S und 85A,S
3) Dimensions b, E_1 and i not interchangeable to A.. 65A,S; 75A,S and 85A,S

! Nuten nach DIN 6885 Bl. 3 (niedrige Form)
! keyways as per DIN 6885 sh. 3 (low shape)

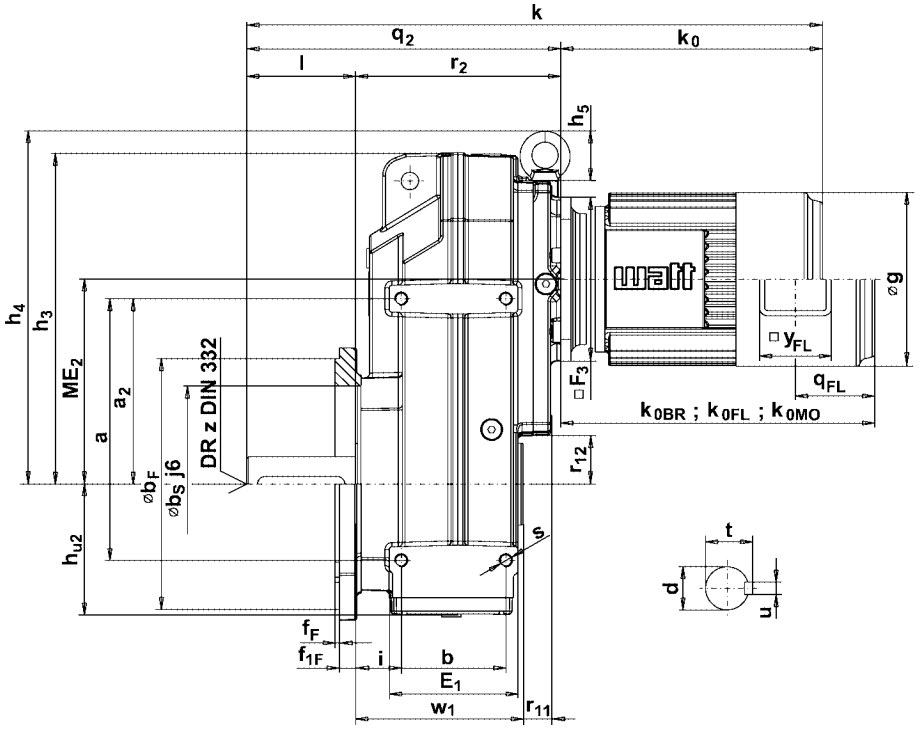
Ringschraube wird nicht mitgeliefert
Eye bolt not included

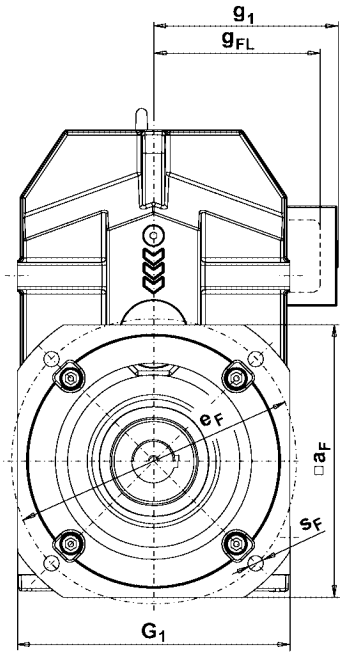
Nuten nach DIN 6885 Bl. 1
Keyways as per DIN 6885 sh. 1

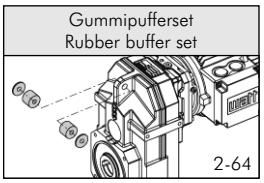


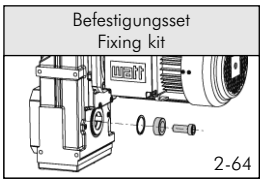


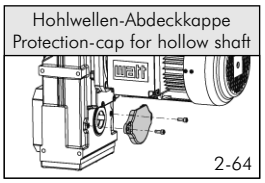
AF. 66A,S - AF. 86A,S

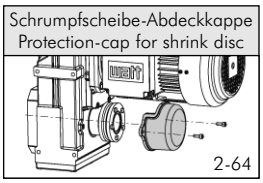


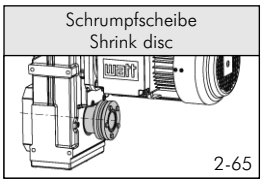



Gummipufferset
Rubber buffer set
2-64


Befestigungsset
Fixing kit
2-64


Hohlwellen-Abdeckkappe
Protection-cap for hollow shaft
2-64


Schrumpfscheibe-Abdeckkappe
Protection-cap for shrink disc
2-64


Schrumpfscheibe
Shrink disc
2-65

Hauptabmessungen Main dimensions						Abtriebsflanschabmessungen Output flange dimensions						AF	Abtriebswelle Output shaft					Type
ME_2	r_{11}	r_{12}	s	s_1	s_{SU}	a_F ≙ IEC∅		b_F 1)	e_F	f_F	f_{1F}	s_F	d 2)	l	t	u	z	
157,1	21	38	M10x17	M10x17	14	200	*250	180	215	3,5	11	14	*40	80	43	12	M16	**A.. 66A,S**
						250	300	230	265	4	11	14	45	90	48,5	14	M16	
187,8	26	45	M12x20	M12x20	16	250	*300	230	265	4	15	14	*50	100	53,5	14	M16	**A.. 76A,S**
						280	350	250	300	4	15	18						
232	28	70	M16x24	M16x24	20	250	*300	230	265	4	15	14	*60	110	64	18	M20	**A.. 86A,S**
						280	350	250	300	4	15	18						

Type	Maximale Motorabmessungen (7WA,WA) Maximum motor dimensions (7WA,WA)										Maximale Hauptabmessungen (Baureihe 7WA, WA) Maximum main dimensions (Model range 7WA, WA)								
											A.. 66A,S			**A.. 76A,S**			**A.. 86A,S**		
	□ F_3 8)	g	g_1	g_{FL}	k_0	k_{0BR}	k_{0FL}	k_{0MO}	q_{FL}	y_{FL}	k 9)	q_2 9)	r_2	k 9)	q_2 9)	r_2	k 9)	q_2 9)	r_2
64K,N	125	130	117	115	205	250	309	361	73	95	455	250	170	488	283	183	-	-	-
72K,N	125	146	127	123	225	277	341	396	73	95	475	250	170	508	283	183	-	-	-
81K,N	125	165	137	138	260	304	387	439	73	95	510	250	170	543	283	183	-	-	-
91S,L	125	182	145	142	297	372	403	482	83	95	547	250	170	580	283	183	-	-	-
101L,LA	150	208	154	153	322	396	458	518	83	95	577	255	175	610	288	188	646	324	214
114M,ML	150	230	173	165	380	467	525	590	83	95	635	255	175	668	288	188	704	324	214
134S,M.	200	268	193	185	419	522	579	634	93	95	691	272	192	724	305	205	760	341	231
161M,L	250	324	232	212	512	623	698	761	93	95	-	-	-	-	-	-	853	341	231
181M,L	250	380	275	225	648	749	805	858	93	90	-	-	-	-	-	-	989	341	231

k_0 , k_{0BR} , k_{0FL} , k_{0MO} .... siehe Seite 9-48
see page 9-48

1) ≤ ∅ 230mm nach/to ISO "j6"
> ∅ 230mm nach/to ISO "h6"

2) ∅ 14 - 50mm nach/to ISO "k6"
> ∅ 50mm nach/to ISO "m6"

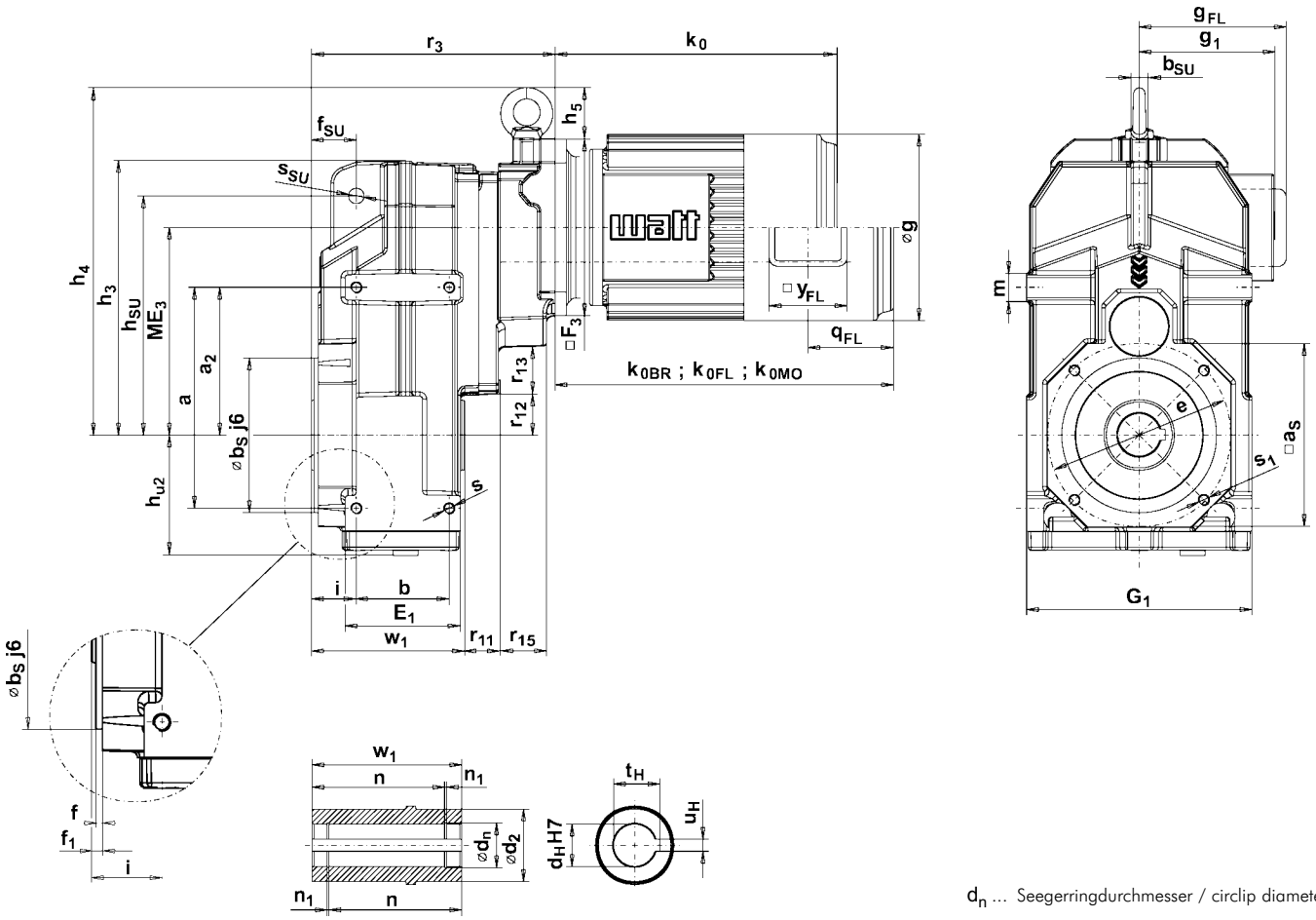
8) Motordirektanbau siehe Seite 8-66
8) Motor direct fixing see page 8-66

9) Maße gelten für Standard Abtriebswellen
9) Dimensions are valid for standard output shafts

* STANDARD DIMENSION

Abnormale Abtriebs-, Hohlwellen bzw. Abtriebsflansche gegen Mehrpreis
Non standard output, hollow shaft resp. output flange against extra charge

AS. 56C - AS. 86C



d_n ... Seegerringdurchmesser / circlip diameter

Type	Hauptabmessungen Main dimensions																		
	a	a_2	a_S	b	b_S	b_{SU}	e	E_1	f	f_1	f_{SU}	G_1	h_3	h_4	h_5	h_{SU}	h_{u2}	i	m
A.. 56C	157	105	130	66 3)	110	12	130	82 3)	3	5	32	160	195	247	36	170	85	32 3)	18
A.. 66C	190	130	150	90 3)	130	17	165	108 3)	3	5	41	200	238	298	45	218	103	42 3)	22
A.. 76C	240	170	195	96 3)	180	20	215	118 3)	3	5	50	250	304	330	45	278	122	42 3)	25
A.. 86C	310	210	196	121 3)	180	25	215	149 3)	3	5	62	310	372	392	53	346	138	40 3)	32

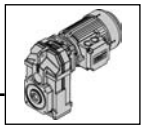
Type	Hohlwelle Hollow shaft							
	d_H	d_n	d_2	n	n_1	t_H	u_H	w_1
A.. 56C	25	26,2	50	101,7	1,3	28,3	8	109
	30	31,4	50	95,2	1,3	33,3	8	109
	*35	37	50	94,9	1,6	38,3	10	109
A.. 66C	*40	42,5	65	132,1	1,85	43,3	12	144
	45	47,5	65	127,6	1,85	48,8	14	144
A.. 76C	*50	53	75	137,3	2,15	53,8	14	154
	160	63	75	137,3	2,15	62,3	18	154
A.. 86C	*60	63	90	161,3	2,15	64,4	18	182

3) Abmessungen b, E_1 und i nicht austauschbar zu A.. 55C; 65C; 75C und 85C
3) Dimensions b, E_1 and i not interchangeable to A.. 55C; 65C; 75C und 85C

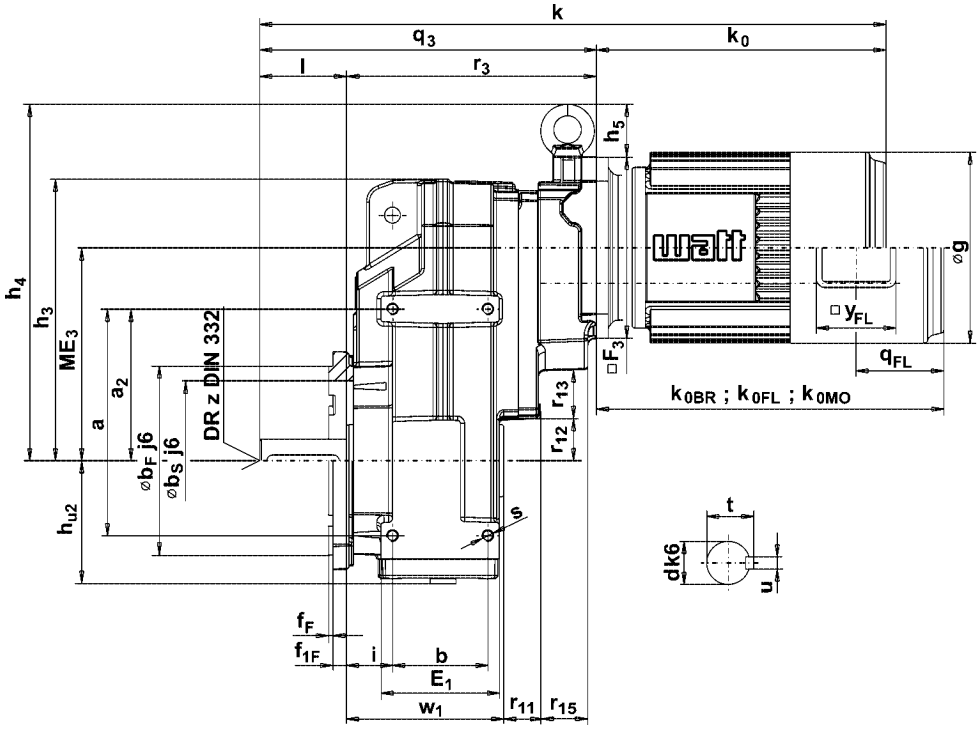
! Nuten nach DIN 6885 Bl. 3 (niedrige Form)
! keyways as per DIN 6885 sh. 3 (low shape)

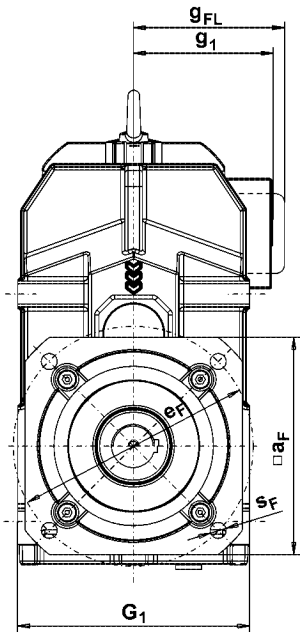
Ringschraube wird nicht mitgeliefert
Eye bolt not included

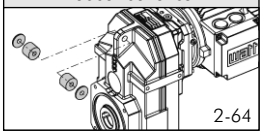
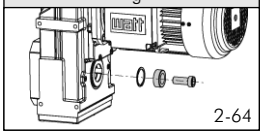
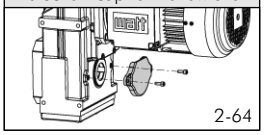
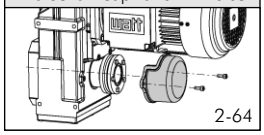
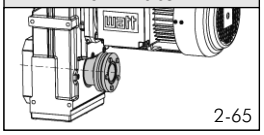
Nuten nach DIN 6885 Bl. 1
Keyways as per DIN 6885 sh. 1



AF. 56C - AF. 86C





Gummipufferset Rubber buffer set	Befestigungsset Fixing kit	Hohlwellen-Abdeckkappe Protection-cap for hollow shaft	Schrumpfscheibe-Abdeckkappe Protection-cap for shrink disc	Schrumpfscheibe Shrink disc
 2-64	 2-64	 2-64	 2-64	 2-65

Hauptabmessungen Main dimensions								Abtriebsflanschabmessungen Output flange dimensions AF							Abtriebswelle Output shaft					Type
ME_3	r_{11}	r_{12}	r_{13}	r_{15}	s	s_1	s_{SU}	a_F ≙ IEC∅		b_F 1)	e_F	f_F	f_{1F}	s_F	d 2)	l	t	u	z	
147,4	27	27	33	30	M8x12	M8x14	11	150	*200	130	165	3	9	11	30	60	33	8	M10	**A.. 56C**
								200	250	180	215	4	9	14	*35	70	38	10	M12	
185,5	24	38	61	31	M10x17	M10x17	14	200	*250	180	215	3,5	11	14	*40	80	43	12	M16	**A.. 66C**
								250	300	230	265	4	11	14	50	100	53,5	14	M16	
218,5	28	45	79	37	M12x20	M12x20	16	250	*300	230	265	4	15	14	*50	100	53,5	14	M16	**A.. 76C**
								280	350	250	300	4	15	18						
268	28	70	103	37	M16x24	M16x24	20	250	*300	230	265	4	15	14	*60	110	64	18	M20	**A.. 86C**
								280	350	250	300	4	15	18						

Type	Maximale Motorabmessungen (7WA,WA) Maximum motor dimensions (7WA,WA)										Maximale Hauptabmessungen (Baureihe 7WA, WA) Maximum main dimensions (Model range 7WA, WA)											
											A.. 56C			**A.. 66C**			**A.. 76C**			**A.. 86C**		
	□ F_3 8)	g	g_1	g_{FL}	k_0	k_{0BR}	k_{0FL}	k_{0MO}	q_{FL}	y_{FL}	$k^{9)}$	q_3 9)	r_3	$k^{9)}$	q_3 9)	r_3	$k^{9)}$	q_3 9)	r_3	$k^{9)}$	q_3 9)	r_3
64K,N	125	130	117	115	205	250	309	361	73	95	448	243	173	489	284	204	529	324	224	569	364	254
72K,N	125	146	127	123	225	277	341	396	73	95	468	243	173	509	284	204	549	324	224	589	364	254
81K,N	125	165	137	138	260	304	387	439	73	95	503	243	173	544	284	204	584	324	224	624	364	254
91S,L	125	182	145	142	297	372	403	482	83	95	540	243	173	581	284	204	621	324	224	661	364	254
101L,LA	150	208	154	153	322	396	458	518	83	95	-	-	-	-	-	-	651	329	229	691	369	259
114M,ML	150	230	173	165	380	467	525	590	83	95	-	-	-	-	-	-	709	329	229	749	369	259

k_0 , k_{0BR} , k_{0FL} , k_{0MO} .... siehe Seite 9-48
see page 9-48

1) ≤ ∅ 230mm nach/to ISO "j6"
> ∅ 230mm nach/to ISO "h6"

2) ∅ 14 - 50mm nach/to ISO "k6"
> ∅ 50mm nach/to ISO "m6"

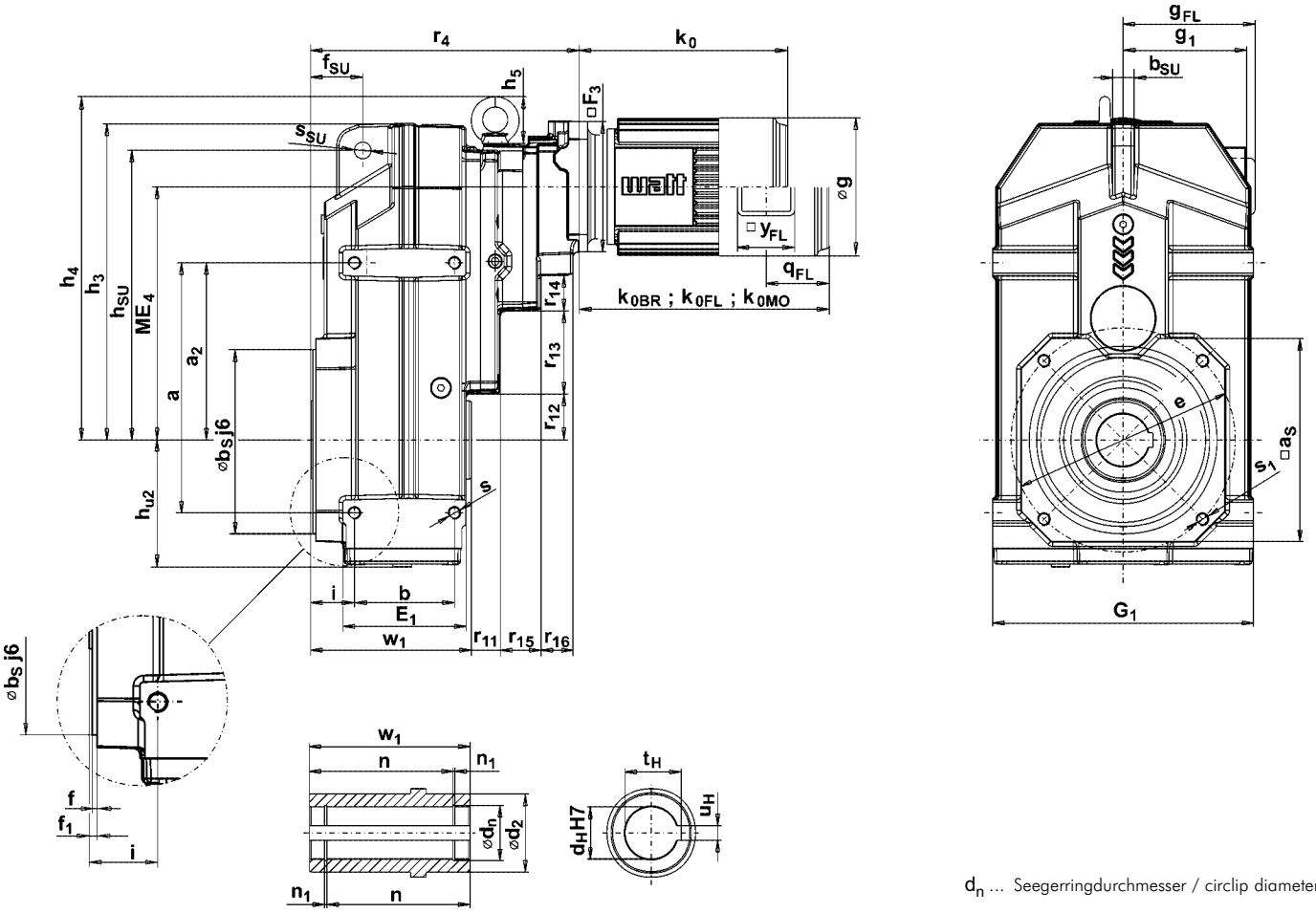
8) Motordirektanbau siehe Seite 8-66
8) Motor direct fixing see page 8-66

9) Maße gelten für Standard Abtriebswellen
9) Dimensions are valid for standard output shafts

* STANDARD DIMENSION

Abnormale Abtriebs-, Hohlwellen bzw. Abtriebsflansche gegen Mehrpreis
Non standard output, hollow shaft resp. output flange against extra charge

AS. 76D - AS. 86D



d_n ... Seegerringdurchmesser / circlip diameter

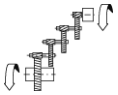
Type	Hauptabmessungen Main dimensions																		
	a	a_2	a_S	b	b_S	b_{SU}	e	E_1	f	f_1	f_{SU}	G_1	h_3	h_4	h_5	h_{SU}	h_{u2}	i	m
A.. 76D	240	170	195	96 [3]	180	20	215	118 [3]	3	5	50	250	304	330	45	278	122	42 [3]	25
A.. 86D	310	210	196	121 [3]	180	25	215	149 [3]	3	5	62	310	372	392	53	346	138	40 [3]	32

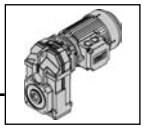
Type	Hohlwelle Hollow shaft							
	d_H	d_n	d_2	n	n_1	t_H	u_H	w_1
A.. 76D	*50	53	75	137,3	2,15	53,8	14	154
	160	63	75	137,3	2,15	62,3	18	154
A.. 86D	*60	63	90	161,3	2,15	64,4	18	182

[3] Abmessungen b, E_1 und i nicht austauschbar zu A.. 75D und 85D
[3] Dimensions b, E_1 and i not interchangeable to A.. 75D and 85D

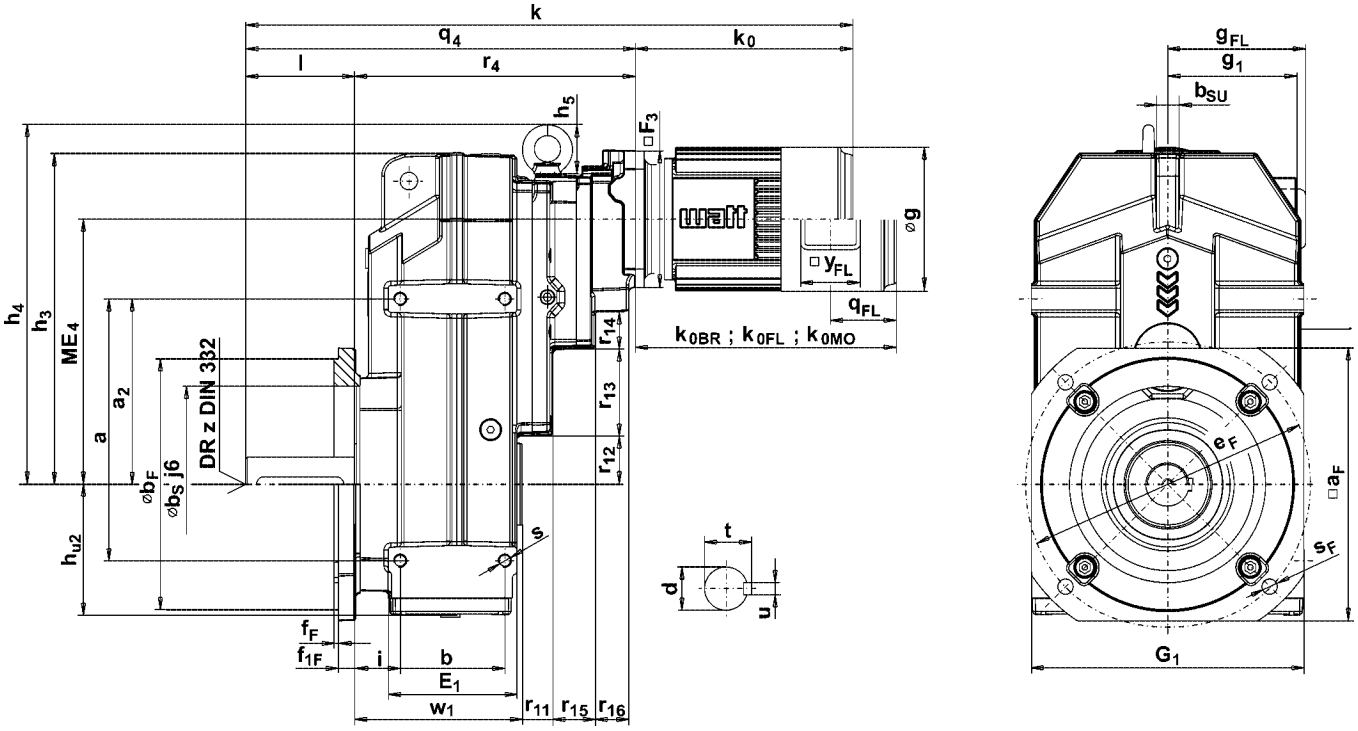
Ringschraube wird nicht mitgeliefert
Eye bolt not included

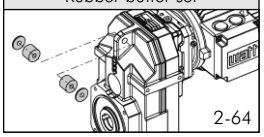
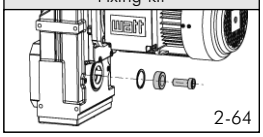
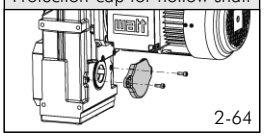
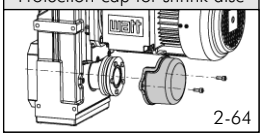
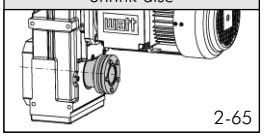
Nuten nach DIN 6885 Bl. 1
Keyways as per DIN 6885 sh. 1





AF. 76D - AF. 86D



Gummipufferset Rubber buffer set	Befestigungsset Fixing kit	Hohlwellen-Abdeckkappe Protection-cap for hollow shaft	Schrumpfscheibe-Abdeckkappe Protection-cap for shrink disc	Schrumpfscheibe Shrink disc
 2-64	 2-64	 2-64	 2-64	 2-65

Hauptabmessungen Main dimensions										Abtriebsflanschabmessungen Output flange dimensions AF							Abtriebswelle Output shaft					Type
ME_4	r_{11}	r_{12}	r_{13}	r_{14}	r_{15}	r_{16}	s	s_1	s_{SU}	a_F ≙ IEC∅		b_F 1)	e_F	f_F	f_{1F}	s_F	d 2)	l	t	u	z	
243,1	28	45	79	33	39	30	M12x20	M12x20	16	250	*300	230	265	4	15	14	*50	100	53,5	14	M16	**A.. 76D**
										280	350	250	300	4	15	18						
292,6	28	70	103	33	39	30	M16x24	M16x24	20	250	*300	230	265	4	15	14	*60	110	64	18	M20	**A.. 86D**
										280	350	250	300	4	15	18						

Type	Maximale Motorabmessungen (7WA,WA) Maximum motor dimensions (7WA,WA)										Maximale Hauptabmessungen (Baureihe 7WA, WA) Maximum main dimensions (Model range 7WA, WA)					
											A.. 76D			**A.. 86D**		
	□F_3 8)	g	g_1	g_{FL}	k_0	k_{0BR}	k_{0FL}	k_{0MO}	q_{FL}	y_{FL}	k 9)	q_4 9)	r_4	k 9)	q_4 9)	r_4
64K,N	125	130	117	115	205	250	309	361	73	95	563	358	258	603	398	288
72K,N	125	146	127	123	225	277	341	396	73	95	583	358	258	623	398	288
81K,N	125	165	137	138	260	304	387	439	73	95	618	358	258	658	398	288
91S,L	125	182	145	142	297	372	403	482	83	95	655	358	258	695	398	288

k_0 , k_{0BR} , k_{0FL} , k_{0MO} .... siehe Seite 9-48
see page 9-48

1) ≤ ∅ 230mm nach/to ISO "j6"
> ∅ 230mm nach/to ISO "h6"

2) ∅ 14 - 50mm nach/to ISO "k6"
> ∅ 50mm nach/to ISO "m6"

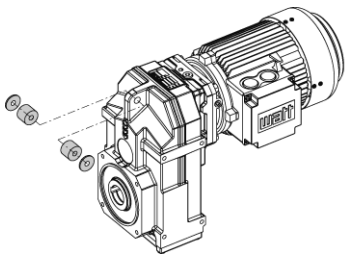
8) Motordirektanbau siehe Seite 8-66
8) Motor direct fixing see page 8-66

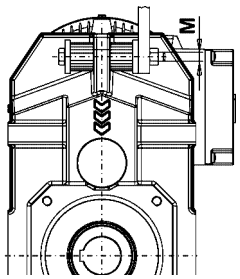
9) Maße gelten für Standard Abtriebswellen
9) Dimensions are valid for standard output shafts

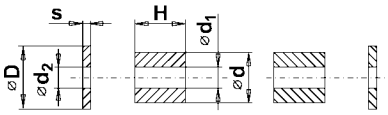
* STANDARD DIMENSION

Abnormale Abtriebs-, Hohlwellen bzw. Abtriebsflansche gegen Mehrpreis
Non standard output, hollow shaft resp. output flange against extra charge

Gummipufferset
Rubber buffer set



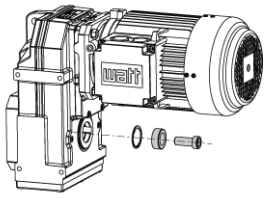


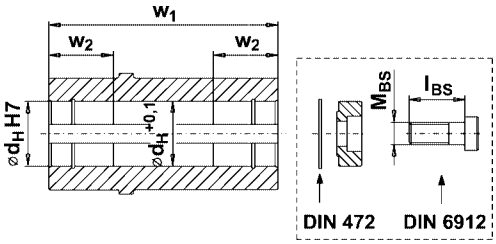


Type	d	d_1	d_2	D	H	M	s	Set/Kit 1)
A.. 46.	25	10,5	9	28	20	M8	3	GMPSD025
A.. 56.	25	10,5	9	28	20	M8	3	GMPSD025
A.. 66.	32	13,5	11	34	32	M10	3	GMPSD032
A.. 76.	40	13,5	13,5	44	32	M12	4	GMPSD040
A.. 86.	50	17	17	56	32	M16	5	GMPSD050

1) 1 Set besteht aus 2 Gummipuffer und 2 Scheiben /
1 Kit consits of 2 rubber buffer and 2 metal discs

Befestigungsset
Fixing kit





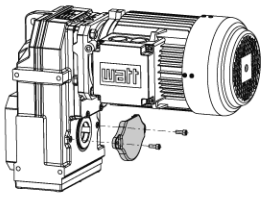
Nuten nach DIN 6885 Bl. 1
Keyways as per DIN 6885 sh. 1

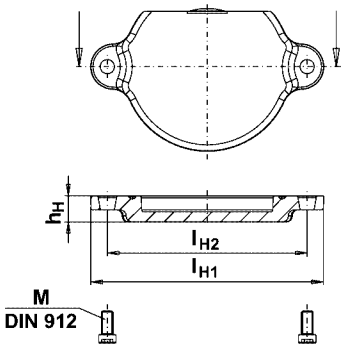
! Nuten nach DIN 6885 Bl. 3 (niedrige Form)
! keyways as per DIN 6885 sh. 3 (low shape)

Type	d_H	l_{BS}	M_{BS}	w_1	w_2	Set/Kit 2)
A.. 46.	20	20	M6	100	33	GMBSD020M06
	25	25	M10	100	33	GMBSD025M10
	*30	25	M10	100	33	GMBSD030M10
A.. 56.	25	25	M10	109	31	GMBSD025M10
	30	25	M10	109	31	GMBSD030M10
	*35	30	M12	109	31	GMBSD035M12
A.. 66.	*40	40	M16	144	35	GMBSD040M16
	45	40	M16	144	35	GMBSD045M16
A.. 76.	*50	40	M16	154	39	GMBSD050M16
	!60	50	M20	154	39	GMBSD060M20
A.. 86.	*60	50	M20	182	39	GMBSD060M20

2) 1 Set: 1 Scheibe mit Sicherungsring und Schraube /
1 Kit: 1 disc with circlip and screw

Hohlwellen-Abdeckkappe
Protection-cap for hollow shaft

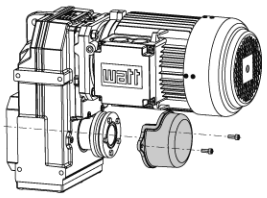


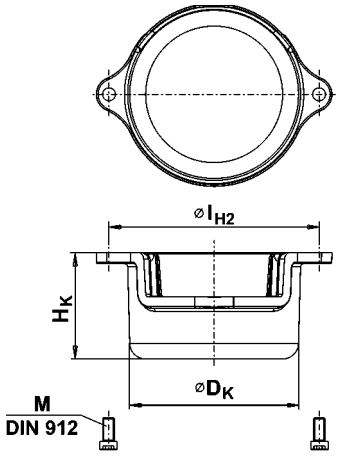


Type	l_{H1}	l_{H2}	h_H	M	Set/Kit 3)
A.. 46.	103	86	13	M6x16	AAK086
A.. 56.	117	100	13	M6x16	FAK100
A.. 66.	149	132	13	M6x16	FAK132
A.. 76.	159	142	15	M6x16	FAK142
A.. 86.	201	180	18	M8x20	FAK180

3) 1 Set: 1 Hohlwellen-Abdeckkappe mit 2 Schrauben /
1 Kit: 1 protection-cap for hollowshaft with 2 screws

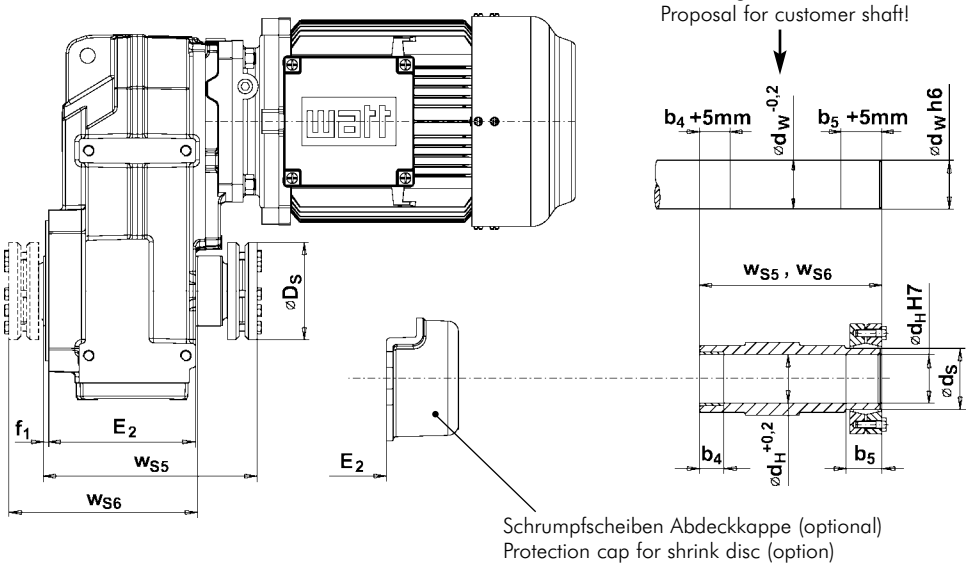
Schrumpfscheibe-Abdeckkappe
Protection-cap for shrink disc



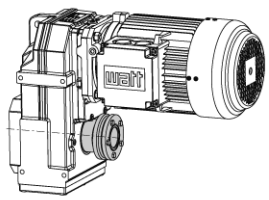


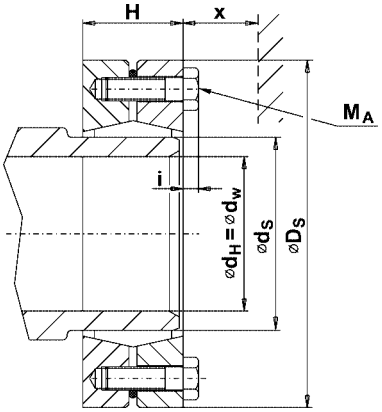
Type	D_K	l_{H2}	H_K	M	Set/Kit 4)
A.. 46.	nicht möglich / not possible				
A.. 56.	96	100	70	M6x80	FAK100SSET
A.. 66.	109	132	67	M6x16	FAK132SSET
A.. 76.	135	142	86	M6x80	FAK142SSET
A.. 86.	160	180	88	M8x20	FAK180SSET

4) 1 Set: 1 Schrumpfscheiben-Abdeckkappe mit 2 Schrauben /
1 Kit: 1 protection-cap for shrink disc with 2 screws

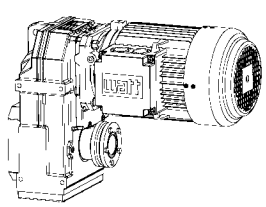


Schrumpfscheibe
Shrink disc

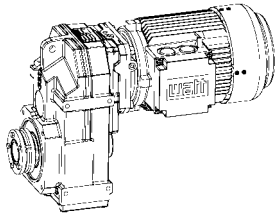




Lage / Position:



Seite / Side 5



Seite / Side 6

Type	Schrumpfscheibe auf Seite 5 Shrink disc on side 5 *)	°)	b_4	b_5	E_2	f_1	w_{S5}	w_{S6}	d_H d_W	d_S	D_S	H	i	M_{Smax} [Nm]	M_A [Nm]
A.. 46.	WAR 64.	-	20	21	92	5	145	126	30	36	72	23,5	4	570	12
A.. 56.	WAR 81.	WAR 72.	20	24	101	5	163	138	35	44	80	25,5	4	780	12
A.. 66.	WAR 114.	WAR 101.	20	27	136	5	199	174	40	50	90	27,5	4	1160	12
A.. 76.	WAR 134.	WAR 114.	30	28	144	5	215	-	50	62	110	30,5	4	2200	12
A.. 86.	WAR 161.	WAR 134.	30	29	170	5	244	-	65	75	138	32,5	5,3	3950	30

*) max. anbaubare Motortype bei Direktanbau ohne Schrumpfscheiben-Abdeckkappe

°) max. anbaubare Motortype bei Direktanbau mit Schrumpfscheiben-Abdeckkappe

M_{Smax} . . Maximal zulässiges Abtriebsdrehmoment
Zwischen Kundenwelle und Hohlwelle wurde der Reibwert μ=0,12 angenommern bei absolut öl- und fettfreien Wellen (trocken) liegt das zul. Drehmoment 25% höher. Die Spannschrauben sind mit Molykote versehen, die Kegelflächen mit Spezialschmierstoff. /

M_A . . . erforderliches Anzugsmoment der Spannschrauben

Motoranbau mittels Adapter auf Anfrage.

Die Länge der kundenseitigen Wellen muß mit der Länge der Hohlwelle (w_{S5}, w_{S6}) übereinstimmen.
Der Wellendurchmesser muß nach ISO h6 ausgeführt sein.

*) max. size of motor type for direct motor fixing without protection-cap for shrink disc

°) max. size of motor type for direct motor fixing with protection-cap for shrink disc

M_{Smax} . . maximum permissible output torque
Friction coefficient μ=0,12 between customer shaft and hollow shaft. With absolutely oil-free and dry shafts, the permissible tor que is 25% higher. The screws are provided with Molykote, the conical surfaces with special lubricant.

M_A . . . necessary fixing torque for screws

Motor fixing with adapter on request.

The length of the customer´s shaft must correspond with the length of the hollow shaft (w_{S5}, w_{S6}).
Shaft diameter has to be machined according to ISO h6.