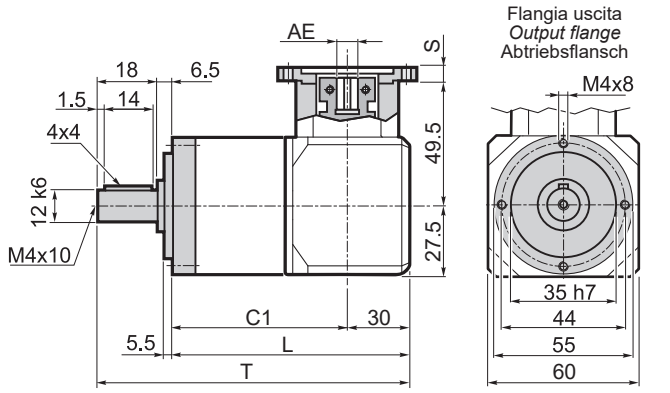
1.9 Dati tecnici — *1.9 Technical data* — 1.9 Technische Daten

TEP 55																			Stadi *Steps* Stufenzahl	
Stadi *Steps* Stufenzahl	2					3														
i	**3**	**4**	**5**	**7**	**10**	**9**	**12**	**15**	**16**	**20**	**25**	**28**	**35**	**40**	**50**	**70**	**100**		**2**	**3**
$T2_N$	9	12	15	12	10	14	16	16	16	16	16	16	16	16	16	14	12	**n_{1nom}**	3500	
$T2_A$	13	17	22	22	20	24	28	28	28	28	28	28	28	28	28	24	22	**n_{1max}**	5000	
$T2_S$	26	34	44	44	40	48	56	56	56	56	56	56	56	56	56	48	44	**LpA**	< 65	
J	Vedi pag. 5 / See page 5 / Siehe auf Seite 5																	**Lh**	20000	
R_t	0.85				0.8	0.85											0.8	**F_{R2}**	300	
R_d	0.94					0.91												**F_{A2}**	450	
Kg	1.3					2.3												**α_{max}**	17 '	20 '

1.10 Dimensioni — *1.10 Dimensions* — 1.10 Abmessungen

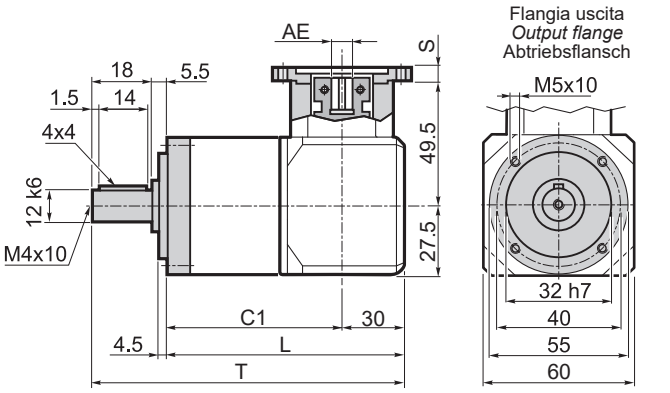
Dimensioni generali e uscite / *General and output dimensions* / General-und Abtriebsabmessungen

AA



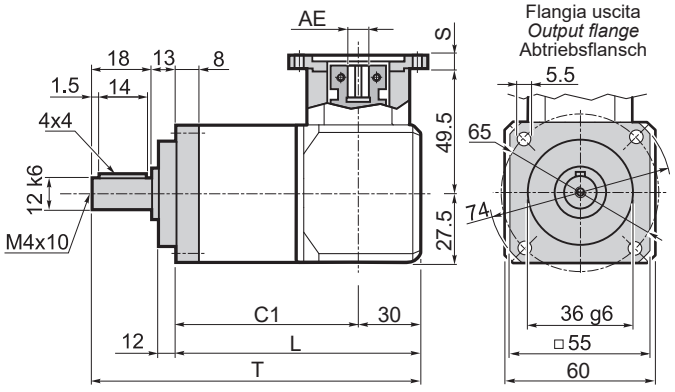
Stadi / *Steps* / Stufenzahl	2	3	
C1	65	84	AE= 6 - 6.35 - 7 - 8 - 9 - 9.52 - 11
L	95	114	
T	119.5	138.5	

TT



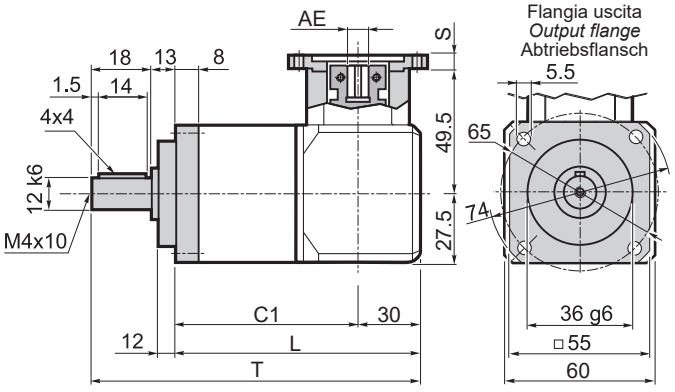
Stadi / *Steps* / Stufenzahl	2	3	
C1	66	85	AE= 6 - 6.35 - 7 - 8 - 9 - 9.52 - 11
L	96	115	
T	119.5	138.5	

AQ



Stadi / *Steps* / Stufenzahl	2	3	
C1	58.5	77.5	AE= 6 - 6.35 - 7 - 8 - 9 - 9.52 - 11
L	88.5	107.5	
T	119.5	138.5	

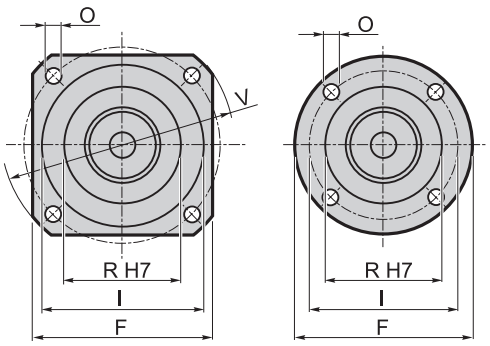
TQ

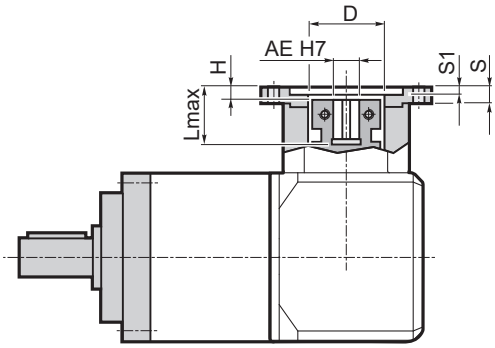


Stadi / *Steps* / Stufenzahl	2	3	
C1	58.5	77.5	AE= 6 - 6.35 - 7 - 8 - 9 - 9.52 - 11
L	88.5	107.5	
T	119.5	138.5	

Dimensioni entrate / *Input dimensions* / Antriebsabmessungen

Flangia entrata
Input flange
Antriebsflansch





Flange entrata / *Input flange* / Antriebsflansch										Albero entrata / *Input shaft* / Antriebswelle													
										AE													
										6		6.35		7		8		9		9.52		11	
	F	Q	V	I	R (H7)	O	S	S1	D	L max	H	L max	H	L max	H	L max	H	L max	H	L max	H	L max	H
P01*	60	=	=	43.82	22	4.5	10	3	22	30	7	30	7	30	7	30	7	30	7	30	7	30	7
P02*	=	60	80	66.67	38.1	5.5	10	3	32	30	7	30	7	30	7	30	7	30	7	30	7	30	7
P03*	=	60	80	63	40	5.5	10	3.5	32	30	7	30	7	30	7	30	7	30	7	30	7	30	7
P04	=	70	90	75	60	6.5	10.5	3.5	32	30.5	7.5	30.5	7.5	30.5	7.5	30.5	7.5	30.5	7.5	30.5	7.5	30.5	7.5
P05	105	=	=	85	70	6.5	10.5	3.5	32	30.5	7.5	30.5	7.5	30.5	7.5	30.5	7.5	30.5	7.5	30.5	7.5	30.5	7.5
P06	=	80	110	98.42	73.02	6	11	3.5	35	31	8	31	8	31	8	31	8	31	8	31	8	31	8
P07	=	95	120	100	80	6.5	11.5	4	32	31.5	8.5	31.5	8.5	31.5	8.5	31.5	8.5	31.5	8.5	31.5	8.5	31.5	8.5
P08	=	98	130	115	95	9	11.5	4	32	31.5	8.5	31.5	8.5	31.5	8.5	31.5	8.5	31.5	8.5	31.5	8.5	31.5	8.5
P09	=	116	160	130	110	9	12	4.5	32	32	9	32	9	32	9	32	9	32	9	32	9	32	9
P10*	60	=	=	39	26	4.5	10	3	26	30	7	30	7	30	7	30	7	30	7	30	7	30	7
P11*	60	=	=	42	32	4.5	10	3	32	30	7	30	7	30	7	30	7	30	7	30	7	30	7
P12*	65	=	=	46	32	4.5	10	3.5	32	30	7	30	7	30	7	30	7	30	7	30	7	30	7
P13*	80	=	=	65	50	5.5	10	3.5	32	30	7	30	7	30	7	30	7	30	7	30	7	30	7
P14*	60	=	=	39	20	4.5	10	2.5	20	30	7	30	7	30	7	30	7	30	7	30	7	30	7
P15	=	75	100	90	60	5.8	12	3.5	32	32	9	32	9	32	9	32	9	32	9	32	9	32	9
P16*	60	=	=	45	30	3.5	14	7	30	34	11	34	11	34	11	34	11	34	11	34	11	34	11
P17	=	60	82	70	50	4.5	16.5	8	32	36.5	13.5	36.5	13.5	36.5	13.5	36.5	13.5	36.5	13.5	36.5	13.5	36.5	13.5
P18	=	60	80	60	50	M4	10.5	3.5	32	30.5	7.5	30.5	7.5	30.5	7.5	30.5	7.5	30.5	7.5	30.5	7.5	30.5	7.5
P19*	60	=	=	36	25	4.5	10	3	25	30	7	30	7	30	7	30	7	30	7	30	7	30	7
P20	=	60	82	70	50	5.5	10.5	3.5	32	30.5	7.5	30.5	7.5	30.5	7.5	30.5	7.5	30.5	7.5	30.5	7.5	30.5	7.5
P21*	60	=	=	46	30	4.5	10	3	30	30	7	30	7	30	7	30	7	30	7	30	7	30	7
P22	=	60	80	70.71	36	4.5	10	2	32	30	7	30	7	30	7	30	7	30	7	30	7	30	7
P23	=	62	85	70	50	5.5	15.5	3.5	32	35.5	12.5	35.5	12.5	35.5	12.5	35.5	12.5	35.5	12.5	35.5	12.5	35.5	12.5
P24	=	75	100	90	70	5.8	12	3.5	32	32	9	32	9	32	9	32	9	32	9	32	9	32	9
P25	=	70	95	85	55	5.8	12	3.5	32	32	9	32	9	32	9	32	9	32	9	32	9	32	9
P26*	=	60	80	65.5	34	5.5	10	3.5	33	30	7	30	7	30	7	30	7	30	7	30	7	30	7
P27	=	80	110	95	50	6.5	12	3.5	32	32	9	32	9	32	9	32	9	32	9	32	9	32	9
P28	=	60	80	66.67	38.1	M4	9	2.5	32	29	6	29	6	29	6	29	6	29	6	29	6	29	6
P29	60	=	=	45	30	M3	11	4	32	31	8	31	8	31	8	31	8	31	8	31	8	31	8
P30	=	70	95	85	60	5.8	12	3.5	32	32	9	32	9	32	9	32	9	32	9	32	9	32	9
P31	=	62	85	70	50	M4	11	3.5	32	31	8	31	8	31	8	31	8	31	8	31	8	31	8
P32	=	60	80	65	40	M5	10	3.5	32	30	7	30	7	30	7	30	7	30	7	30	7	30	7
P33	=	85	115	99	60	5.5	11	3.5	35	31	8	31	8	31	8	31	8	31	8	31	8	31	8
P34	=	65	87	73.54	40	M4	10	3.5	32	30	7	30	7	30	7	30	7	30	7	30	7	30	7
P35	=	60	80	70.71	36	M4	14	2	32	34	11	34	11	34	11	34	11	34	11	34	11	34	11
P36	=	85	115	98.42	73.02	6	15	3.5	35	35	12	35	12	35	12	35	12	35	12	35	12	35	12
P37	=	95	120	100	80	6.5	16.5	5	32	36.5	13.5	36.5	13.5	36.5	13.5	36.5	13.5	36.5	13.5	36.5	13.5	36.5	13.5
P38	60	=	=	48	30	M3	11	7	32	31	8	31	8	31	8	31	8	31	8	31	8	31	8
P41*	68	=	=	50	30	5.5	10	10	30	30	7	30	7	30	7	30	7	30	7	30	7	30	7
P43	=	60	80	66.67	50	M5	9	2.5	32	29	6	29	6	29	6	29	6	29	6	29	6	29	6
P44*	60	=	=	32	25	4.5	9	2.5	20	29	6	29	6	29	6	29	6	29	6	29	6	29	6
P45	=	62	85	73.54	50	M5	10	3	32	30	7	30	7	30	7	30	7	30	7	30	7	30	7
P46	70	=	=	55	45	4.5	9	3	32	29	6	29	6	29	6	29	6	29	6	29	6	29	6

* Per assemblare il motore è necessario smontare la flangia dal riduttore (vedere **schema di montaggio 2** a pag. 19).

** Before the mounting of the motor it is necessary to remove the flange from the gearbox (see **structural arrangement 2** at the top of the page 19).*

* Vor dem Einbauen des Motors soll die Getriebeflansch abmontiert werden (siehe **Bauanleitung 2** auf Seite 19).

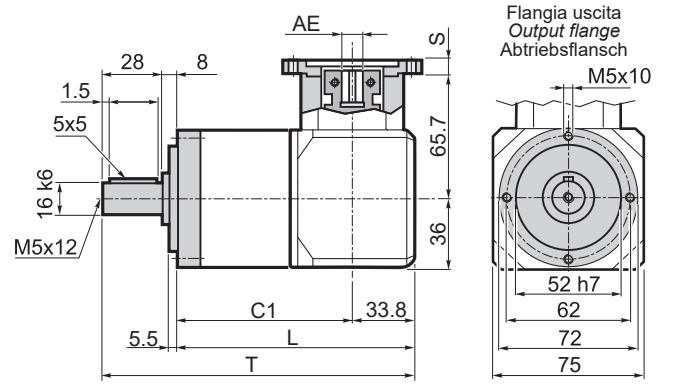
1.9 Dati tecnici / *1.9 Technical data* / 1.9 Technische Daten

TEP 75																		Stadi *Steps* Stufenzahl	
Stadi *Steps* Stufenzahl	2					3													
i	**3**	**4**	**5**	**7**	**10**	**9**	**12**	**15**	**16**	**20**	**25**	**28**	**35**	**40**	**50**	**70**	**100**		**2**	**3**
$T2_N$	18	25	30	28	20	26	32	36	36	36	36	36	36	36	36	30	22	**n_{1nom}**	3000	
$T2_A$	30	40	50	45	40	50	60	60	60	60	60	60	60	60	60	50	45	**n_{1max}**	4500	
$T2_S$	60	80	100	90	80	100	120	120	120	120	120	120	120	120	120	100	90	**LpA**	< 68	
J	Vedi pag. 5 / See page 5 / Siehe auf Seite 5																	**Lh**	20000	
R_t	2.5				2	2.5											2	**F_{R2}**	1800	
R_d	0.94					0.91												**F_{A2}**	1400	
Kg	2.4					3												**α_{max}**	15 '	18 '

1.10 Dimensioni / *1.10 Dimensions* / 1.10 Abmessungen

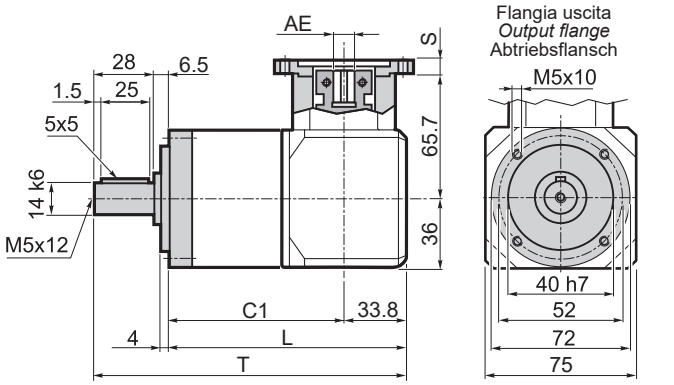
Dimensioni generali e uscite / *General and output dimensions* / General-und Abtriebsabmessungen

AA



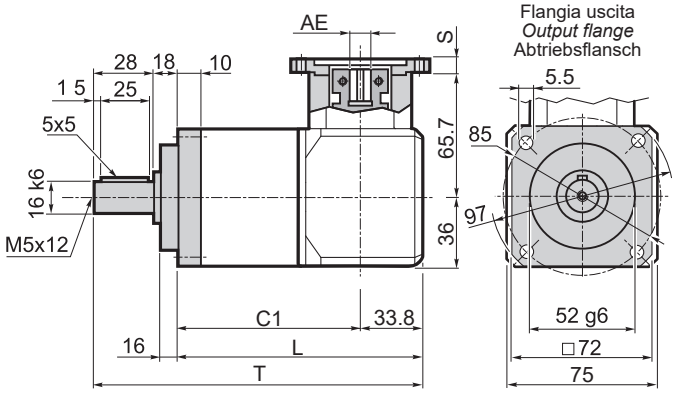
Stadi / *Steps* / Stufenzahl	2	3	
C1	84.7	107.2	AE= 6-6.35-7-8-9-9.52-11-12-12.7-14
L	118.5	141	
T	154.5	177	

TT



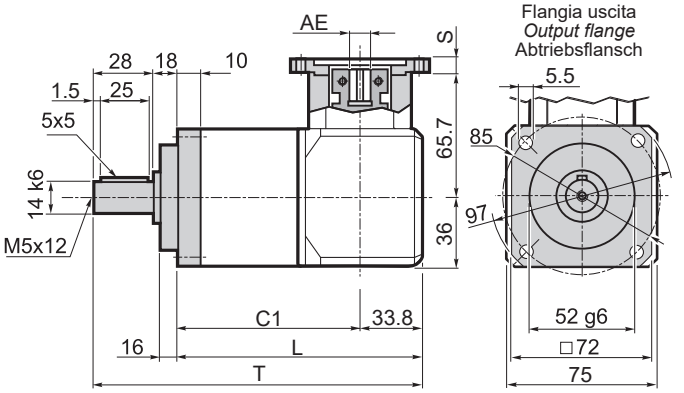
Stadi / *Steps* / Stufenzahl	2	3	
C1	86.2	108.7	AE= 6-6.35-7-8-9-9.52-11-12-12.7-14
L	120	142.5	
T	154.5	177	

AQ



Stadi / *Steps* / Stufenzahl	2	3	
C1	74.7	97.2	AE= 6-6.35-7-8-9-9.52-11-12-12.7-14
L	108.5	131	
T	154.5	177	

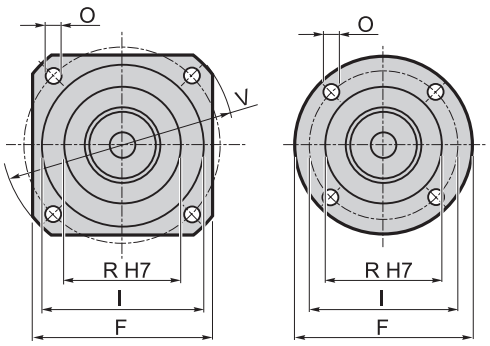
TQ

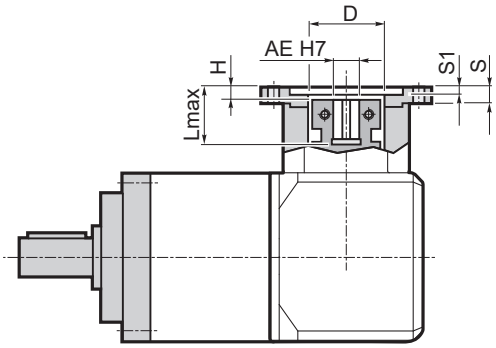


Stadi / *Steps* / Stufenzahl	2	3	
C1	74.7	97.2	AE= 6-6.35-7-8-9-9.52-11-12-12.7-14
L	108.5	131	
T	154.5	177	

Dimensioni entrate / *Input dimensions* / Antriebsabmessungen

Flangia entrata
Input flange
Antriebsflansch





Flange entrata / *Input flange* / Antriebsflansch										Albero entrata / *Input shaft* / Antriebswelle																			
										AE																			
										6		6.35		7		8		9		9.52		11		12		12.7		14	
	F	Q	V	I	R (H7)	O	S	S1	D	L max	H	L max	H	L max	H	L max	H	L max	H	L max	H	L max	H	L max	H	L max	H	L max	H
P01*	60	=	=	43.82	22	4.5	10	3	22	35	4.5	35	4.5	35	4.5	26	6.5	26	6.5	35	6.5	26	6.5	35	6.5	35	6.5	35	6.5
P02*	=	60	80	66.67	38.1	5.5	10	3	32	35	4.5	35	4.5	35	4.5	26	6.5	26	6.5	35	6.5	26	6.5	35	6.5	35	6.5	35	6.5
P03*	=	60	80	63	40	5.5	10	3.5	32	35	4.5	35	4.5	35	4.5	26	6.5	26	6.5	35	6.5	26	6.5	35	6.5	35	6.5	35	6.5
P04	=	70	90	75	60	6.5	10.5	3.5	32	35.5	5	35.5	5	35.5	5	26.5	7	26.5	7	35.5	7	26.5	7	35.5	7	35.5	7	35.5	7
P05	105	=	=	85	70	6.5	10.5	3.5	32	35.5	5	35.5	5	35.5	5	26.5	7	26.5	7	35.5	7	26.5	7	35.5	7	35.5	7	35.5	7
P06	=	80	110	98.42	73.02	6	11	3.5	35	36	5.5	36	5.5	36	5.5	27	7.5	27	7.5	36	7.5	27	7.5	36	7.5	36	7.5	36	7.5
P07	=	95	120	100	80	6.5	11.5	4	32	36.5	6	36.5	6	36.5	6	27.5	8	27.5	8	36.5	8	27.5	8	36.5	8	36.5	8	36.5	8
P08	=	98	130	115	95	9	11.5	4	32	36.5	6	36.5	6	36.5	6	27.5	8	27.5	8	36.5	8	27.5	8	36.5	8	36.5	8	36.5	8
P09	=	116	160	130	110	9	12	4.5	32	37	6.5	37	6.5	37	6.5	28	8.5	28	8.5	37	8.5	28	8.5	37	8.5	37	8.5	37	8.5
P10*	60	=	=	39	26	4.5	10	3	26	35	4.5	35	4.5	35	4.5	26	6.5	26	6.5	35	6.5	26	6.5	35	6.5	35	6.5	35	6.5
P11*	60	=	=	42	32	4.5	10	3	32	35	4.5	35	4.5	35	4.5	26	6.5	26	6.5	35	6.5	26	6.5	35	6.5	35	6.5	35	6.5
P12*	65	=	=	46	32	4.5	10	3.5	32	35	4.5	35	4.5	35	4.5	26	6.5	26	6.5	35	6.5	26	6.5	35	6.5	35	6.5	35	6.5
P13*	80	=	=	65	50	5.5	10	3.5	32	35	4.5	35	4.5	35	4.5	26	6.5	26	6.5	35	6.5	26	6.5	35	6.5	35	6.5	35	6.5
P14*	60	=	=	39	20	4.5	10	2.5	20	35	4.5	35	4.5	35	4.5	26	6.5	26	6.5	35	6.5	26	6.5	35	6.5	35	6.5	35	6.5
P15	=	75	100	90	60	5.8	12	3.5	32	37	6.5	37	6.5	37	6.5	28	8.5	28	8.5	37	8.5	28	8.5	37	8.5	37	8.5	37	8.5
P16*	60	=	=	45	30	3.5	14	7	30	39	8.5	39	8.5	39	8.5	30	10.5	30	10.5	39	10.5	30	10.5	39	10.5	39	10.5	39	10.5
P17	=	60	82	70	50	4.5	16.5	8	32	41.5	11	41.5	11	41.5	11	32.5	13	32.5	13	41.5	13	32.5	13	41.5	13	41.5	13	41.5	13
P18	=	60	80	60	50	M4	10.5	3.5	32	35.5	5	35.5	5	35.5	5	26.5	7	26.5	7	35.5	7	26.5	7	35.5	7	35.5	7	35.5	7
P19*	60	=	=	36	25	4.5	10	3	25	35	4.5	35	4.5	35	4.5	26	6.5	26	6.5	35	6.5	26	6.5	35	6.5	35	6.5	35	6.5
P20	=	60	82	70	50	5.5	10.5	3.5	32	35.5	5	35.5	5	35.5	5	26.5	7	26.5	7	35.5	7	26.5	7	35.5	7	35.5	7	35.5	7
P21*	60	=	=	46	30	4.5	10	3	30	35	4.5	35	4.5	35	4.5	26	6.5	26	6.5	35	6.5	26	6.5	35	6.5	35	6.5	35	6.5
P22	=	60	80	70.71	36	4.5	10	2	32	35	4.5	35	4.5	35	4.5	26	6.5	26	6.5	35	6.5	26	6.5	35	6.5	35	6.5	35	6.5
P23	=	62	85	70	50	5.5	15.5	3.5	32	40.5	10	40.5	10	40.5	10	31.5	12	31.5	12	40.5	12	31.5	12	40.5	12	40.5	12	40.5	12
P24	=	75	100	90	70	5.8	12	3.5	32	37	6.5	37	6.5	37	6.5	28	8.5	28	8.5	37	8.5	28	8.5	37	8.5	37	8.5	37	8.5
P25	=	70	95	85	55	5.8	12	3.5	32	37	6.5	37	6.5	37	6.5	28	8.5	28	8.5	37	8.5	28	8.5	37	8.5	37	8.5	37	8.5
P26*	=	60	80	65.5	34	5.5	10	3.5	33	35	4.5	35	4.5	35	4.5	26	6.5	26	6.5	35	6.5	26	6.5	35	6.5	35	6.5	35	6.5
P27	=	80	110	95	50	6.5	12	3.5	32	37	6.5	37	6.5	37	6.5	28	8.5	28	8.5	37	8.5	28	8.5	37	8.5	37	8.5	37	8.5
P28	=	60	80	66.67	38.1	M4	9	2.5	32	34	3.5	34	3.5	34	3.5	25	5.5	25	5.5	34	5.5	25	5.5	34	5.5	34	5.5	34	5.5
P29	60	=	=	45	30	M3	11	4	32	36	5.5	36	5.5	36	5.5	27	7.5	27	7.5	36	7.5	27	7.5	36	7.5	36	7.5	36	7.5
P30	=	70	95	85	60	5.8	12	3.5	32	37	6.5	37	6.5	37	6.5	28	8.5	28	8.5	37	8.5	28	8.5	37	8.5	37	8.5	37	8.5
P31	=	62	85	70	50	M4	11	3.5	32	36	5.5	36	5.5	36	5.5	27	7.5	27	7.5	36	7.5	27	7.5	36	7.5	36	7.5	36	7.5
P32	=	60	80	65	40	M5	10	3.5	32	35	4.5	35	4.5	35	4.5	26	6.5	26	6.5	35	6.5	26	6.5	35	6.5	35	6.5	35	6.5
P33	=	85	115	99	60	5.5	11	3.5	32	36	5.5	36	5.5	36	5.5	27	7.5	27	7.5	36	7.5	27	7.5	36	7.5	36	7.5	36	7.5
P34	=	65	87	73.54	40	M4	10	3.5	32	35	4.5	35	4.5	35	4.5	26	6.5	26	6.5	35	6.5	26	6.5	35	6.5	35	6.5	35	6.5
P35	=	60	80	70.71	36	M4	14	2	32	39	8.5	39	8.5	39	8.5	30	10.5	30	10.5	39	10.5	30	10.5	39	10.5	39	10.5	39	10.5
P36	=	85	115	98.42	73.02	6	15	3.5	35	40	9.5	40	9.5	40	9.5	35	11.5	31	11.5	40	11.5	35	11.5	40	11.5	40	11.5	40	11.5
P37	=	95	120	100	80	6.5	16.5	5	32	41.5	11	41.5	11	41.5	11	32.5	13	32.5	13	41.5	13	32.5	13	41.5	13	41.5	13	41.5	13
P38	60	=	=	48	30	M3	11	7	32	36	5.5	36	5.5	36	5.5	27	7.5	27	7.5	36	7.5	27	7.5	36	7.5	36	7.5	36	7.5
P41*	68	=	=	50	30	5.5	10	10	30	35	4.5	35	4.5	35	4.5	26	6.5	26	6.5	35	6.5	26	6.5	35	6.5	35	6.5	35	6.5
P43	=	60	80	66.67	50	M5	9	2.5	32	34	3.5	34	3.5	34	3.5	25	5.5	25	5.5	34	5.5	25	5.5	34	5.5	34	5.5	34	5.5
P44	60	=	=	32	25	4.5	9	2.5	20	34	3.5	34	3.5	34	3.5	25	5.5	25	5.5	34	5.5	25	5.5	34	5.5	34	5.5	34	5.5
P45	=	62	85	73.54	50	M5	10	3	32	35	4.5	35	4.5	35	4.5	26	6.5	26	6.5	35	6.5	26	6.5	35	6.5	35	6.5	35	6.5
P46	70	=	=	55	45	4.5	9	3	32	34	3.5	34	3.5	34	3.5	25	5.5	25	5.5	34	5.5	25	5.5	34	5.5	34	5.5	34	5.5
P47	=	90	118	104	83	6.5	14	3.5	32	39	8.5	39	8.5	39	8.5	30	10.5	30	10.5	39	10.5	30	10.5	39	10.5	39	10.5	39	10.5

* Per assemblare il motore è necessario smontare la flangia dal riduttore (vedere **schema di montaggio 2** a pag. 19).

** Before the mounting of the motor it is necessary to remove the flange from the gearbox (see **structural arrangement 2** at the top of the page 19).*

* Vor dem Einbauen des Motors soll die Getriebeflansch abmontiert werden (siehe **Bauanleitung 2** auf Seite 19).

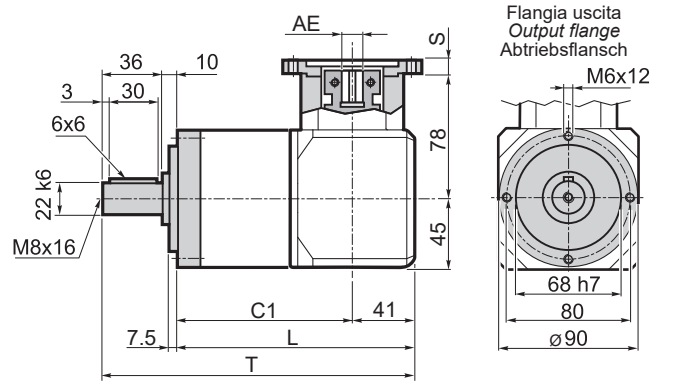
1.9 Dati tecnici — *1.9 Technical data* — 1.9 Technische Daten

TEP 90																			Stadi *Steps* Stufenzahl	
Stadi *Steps* Stufenzahl	2					3														
i	**3**	**4**	**5**	**7**	**10**	**9**	**12**	**15**	**16**	**20**	**25**	**28**	**35**	**40**	**50**	**70**	**100**		**2**	**3**
$T2_N$	32	42	54	55	50	65	70	75	75	75	75	75	75	75	75	65	55	**n_{1nom}**	3000	
$T2_A$	50	66	84	90	80	100	110	120	120	120	120	120	120	120	120	100	90	**n_{1max}**	4500	
$T2_S$	100	132	168	180	160	200	220	240	240	240	240	240	240	240	240	200	180	**LpA**	< 68	
J	Vedi pag. 6 / See page 6 / Siehe auf Seite 6																	**Lh**	20000	
R_t	6.5				6	6.5											6	**F_{R2}**	2600	
R_d	0.94					0.91												**F_{A2}**	2000	
Kg	4.6					5.5												**α_{max}**	15 '	18 '

1.10 Dimensioni — *1.10 Dimensions* — 1.10 Abmessungen

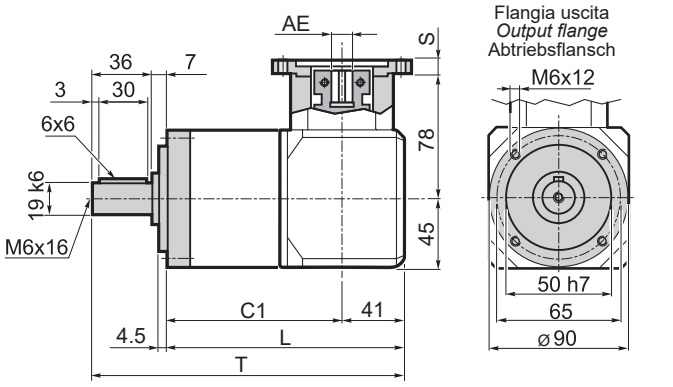
Dimensioni generali e uscite / *General and output dimensions* / General-und Abtriebsabmessungen

AA



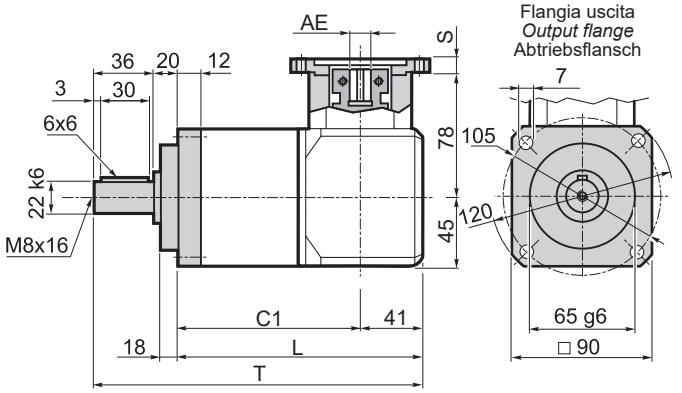
Stadi / *Steps* / Stufenzahl	2	3	
C1	99	128	AE= 9-9.52-11-12-12.7-14-15.87-16-19
L	140	169	
T	186	215	

TT



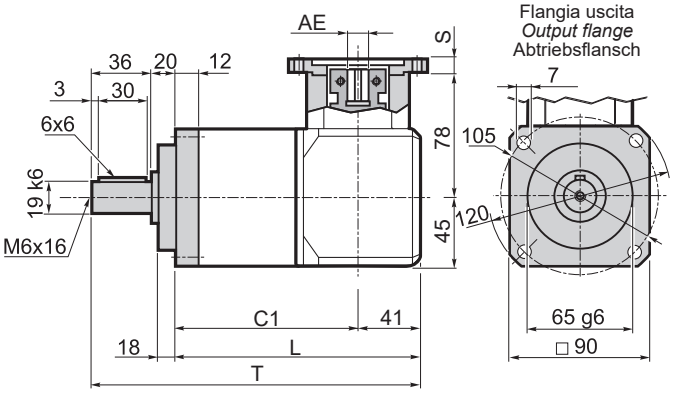
Stadi / *Steps* / Stufenzahl	2	3	
C1	102	131	AE= 9-9.52-11-12-12.7-14-15.87-16-19
L	143	172	
T	186	215	

AQ



Stadi / *Steps* / Stufenzahl	2	3	
C1	89	118	AE= 9-9.52-11-12-12.7-14-15.87-16-19
L	130	159	
T	186	215	

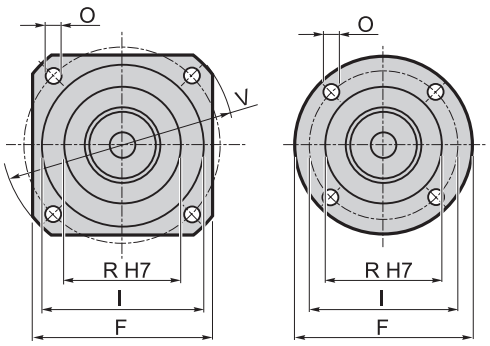
TQ

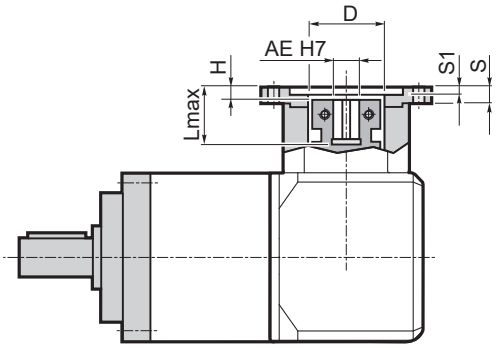


Stadi / *Steps* / Stufenzahl	2	3	
C1	89	118	AE= 9-9.52-11-12-12.7-14-15.87-16-19
L	130	159	
T	186	215	

Dimensioni entrate / *Input dimensions* / Antriebsabmessungen

Flangia entrata
Input flange
Antriebsflansch





Flange entrata / *Input flange* / Antriebsflansch										Albero entrata / *Input shaft* / Antriebswelle																	
										AE																	
										9		9.525		11		12		12.7		14		15.87		16		19	
	F	Q	V	I	R (H7)	O	S	S1	D	L max	H	L max	H	L max	H	L max	H	L max	H	L max	H	L max	H	L max	H	L max	H
P01*	80	=	=	66.67	38.1	5.5	12	3	38.1	44	6.5	44	9	29	9	44	9	44	9	44	9	44	9	44	9	44	9
P02	=	106.5	140	125.72	55.52	7	11	3	45	43	5.5	43	8	28	8	43	8	43	8	43	8	43	8	43	8	43	8
P03*	=	80	90	75	60	5.5	12	3.5	45	44	6.5	44	9	29	9	44	9	44	9	44	9	44	9	44	9	44	9
P04*	105	=	=	85	70	6.5	12	3.5	45	44	6.5	44	9	29	9	44	9	44	9	44	9	44	9	44	9	44	9
P05	=	82.5	110	98.425	73.02	6.5	12	3	45	44	6.5	44	9	29	9	44	9	44	9	44	9	44	9	44	9	44	9
P06	=	90	120	100	80	6.5	13	4	45	45	7.5	45	10	30	10	45	10	45	10	45	10	45	10	45	10	45	10
P07	=	100	135	115	95	8.5	13	4.5	45	45	7.5	45	10	30	10	45	10	45	10	45	10	45	10	45	10	45	10
P08	=	116	160	130	110	9	13	4.5	45	45	7.5	45	10	30	10	45	10	45	10	45	10	45	10	45	10	45	10
P09*	80	=	=	39	26	4.5	12	4	26	44	6.5	44	9	29	9	44	9	44	9	44	9	44	9	44	9	44	9
P10*	80	=	=	65	50	5.5	12	3.5	45	44	6.5	44	9	29	9	44	9	44	9	44	9	44	9	44	9	44	9
P11	=	150	182	166	115	9	32	11	50x14	64	26.5	64	29	49	29	64	29	64	29	64	29	64	29	64	29	64	29
P12*	=	80	105	90	70	6.5	12	3.5	32	44	6.5	44	9	29	9	44	9	44	9	44	9	44	9	44	9	44	9
P14*	105	=	=	90	70	6	19	9	32	51	13.5	51	16	36	16	51	16	51	16	51	16	51	16	51	16	51	16
P15*	80	=	=	70	50	4.5	17	8	45	49	11.5	49	14	34	14	49	14	49	14	49	14	49	14	49	14	49	14
P16	=	142	190	165	130	11	13	4.5	45	45	7.5	45	10	30	10	45	10	45	10	45	10	45	10	45	10	45	10
P17*	80	=	=	63	40	5.5	12	3.5	40	44	6.5	44	9	29	9	44	9	44	9	44	9	44	9	44	9	44	9
P18	=	130	170	145	110	M8	31	7	32	63	25.5	63	28	48	28	63	28	63	28	63	28	63	28	63	28	63	28
P19*	=	80	105	90	60	6.5	12	3.5	32	44	6.5	44	9	29	9	44	9	44	9	44	9	44	9	44	9	44	9
P20*	=	80	105	85	55	5.5	12	3.5	36	44	6.5	44	9	29	9	44	9	44	9	44	9	44	9	44	9	44	9
P21	=	80	110	95	50	M6	12	3.5	45	44	6.5	44	9	29	9	44	9	44	9	44	9	44	9	44	9	44	9
P22	80	=	=	70	50	M4	12	4	45	44	6.5	44	9	29	9	44	9	44	9	44	9	44	9	44	9	44	9
P23	=	80	90	75	60	M5	12	3.5	45	44	6.5	44	9	29	9	44	9	44	9	44	9	44	9	44	9	44	9
P24	80	=	=	46	30	M4	12	4	30	44	6.5	44	9	29	9	44	9	44	9	44	9	44	9	44	9	44	9
P26	80	=	=	65	40	M5	12	3.5	40	44	6.5	44	9	29	9	44	9	44	9	44	9	44	9	44	9	44	9
P27	=	80	105	82.02	36.8	M6	14	10	36.8	46	8.5	46	11	31	11	46	11	46	11	46	11	46	11	46	11	46	11
P28	=	90	120	100	80	6.5	28	4	45	60	22.5	60	25	45	25	60	25	60	25	60	25	60	25	60	25	60	25
P29*	80	=	=	66.67	50	5.5	12	3	45	44	6.5	44	9	29	9	44	9	44	9	44	9	44	9	44	9	44	9
P30	=	115	155	130	80	9	13	4	45	45	7.5	45	10	30	10	45	10	45	10	45	10	45	10	45	10	45	10
P31*	=	80	105	56	44	M6	14	10	36.8	46	8.5	46	11	31	11	46	11	46	11	46	11	46	11	46	11	46	11
P32	=	80	105	90	70	M6	12	3.5	32	44	6.5	44	9	29	9	44	9	44	9	44	9	44	9	44	9	44	9
P33	=	130	165	145	110	9	13	4.5	45	45	7.5	45	10	30	10	45	10	45	10	45	10	45	10	45	10	45	10
P34	=	90	120	100	80	M6	19	5	45	51	13.5	51	16	36	16	51	16	51	16	51	16	51	16	51	16	51	16
P36	=	100	135	115	95	M8	25	4.5	45	57	19.5	57	22	42	22	57	22	57	22	57	22	57	22	57	22	57	22
P37	=	85	115	98.99	60	M6	12	3.5	32	44	6.5	44	9	29	9	44	9	44	9	44	9	44	9	44	9	44	9
P38	80	=	=	70	50	M5	12	4	45	44	6.5	44	9	29	9	44	9	44	9	44	9	44	9	44	9	44	9
P39	=	90	120	100	80	6.5	13	4.5	45	45	7.5	45	10	30	10	45	10	45	10	45	10	45	10	45	10	45	10
P40	=	80	90	75	60	M6	12	3.5	45	44	6.5	44	9	29	9	44	9	44	9	44	9	44	9	44	9	44	9
P42	=	110	145	125.72	55.5	M8	28	3	45	60	22.5	60	25	45	25	60	25	60	25	60	25	60	25	60	25	60	25
P44*	=	80	105	90	70	6	13	4	32	45	7.5	45	10	30	10	45	10	45	10	45	10	45	10	45	10	45	10
P46	=	100	135	115	95	8.5	17	8	45	49	11.5	49	14	34	14	49	14	49	14	49	14	49	14	49	14	49	14

* Per assemblare il motore è necessario smontare la flangia dal riduttore (vedere **schema di montaggio 2** a pag. 19).

** Before the mounting of the motor it is necessary to remove the flange from the gearbox (see **structural arrangement 2** at the top of the page 19).*

* Vor dem Einbauen des Motors soll die Getriebeflansch abmontiert werden (siehe **Bauanleitung 2** auf Seite 19).

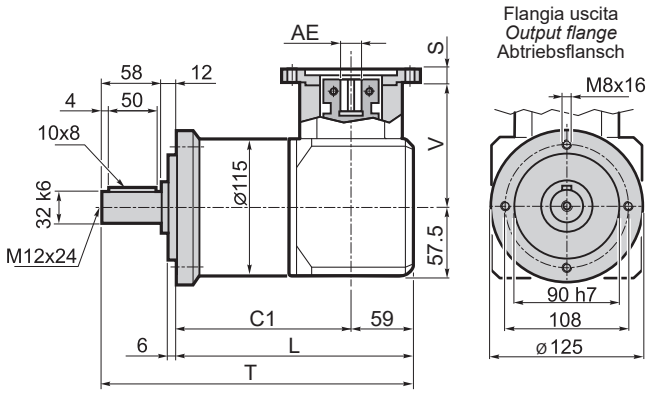
1.9 Dati tecnici — *1.9 Technical data* — 1.9 Technische Daten

TEP 120																		Stadi *Steps* Stufenzahl	
Stadi *Steps* Stufenzahl	2					3													
i	**3**	**4**	**5**	**7**	**10**	**9**	**12**	**15**	**16**	**20**	**25**	**28**	**35**	**40**	**50**	**70**	**100**		**2**	**3**
$T2_N$	60	80	100	140	100	150	180	180	180	180	180	180	180	180	180	170	110	**n_{1nom}**	2500	
$T2_A$	108	144	180	220	180	240	290	290	290	290	290	290	290	290	290	270	200	**n_{1max}**	4000	
$T2_S$	216	288	360	440	380	500	600	600	600	600	600	600	600	600	600	540	400	**LpA**	< 70	
J	Vedi pag. 7 / See page 7 / Siehe auf Seite 7																	**Lh**	20000	
R_t	16				14.5	16											14.5	**F_{R2}**	4500	
R_d	0.94					0.91												**F_{A2}**	4000	
Kg	11.7					12.2												**α_{max}**	12 '	15 '

1.10 Dimensioni — *1.10 Dimensions* — 1.10 Abmessungen

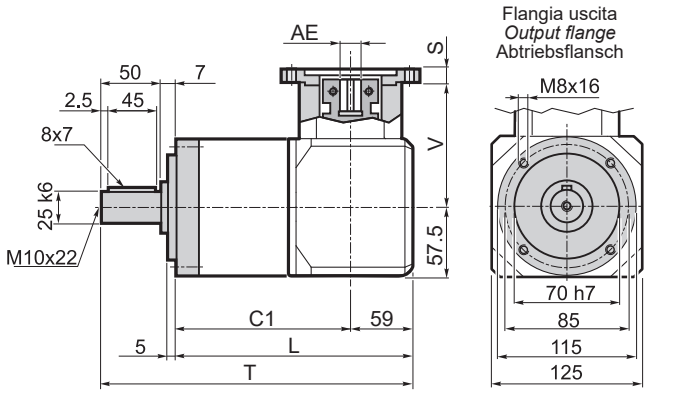
Dimensioni generali e uscite / *General and output dimensions* / General-und Abtriebsabmessungen

AA



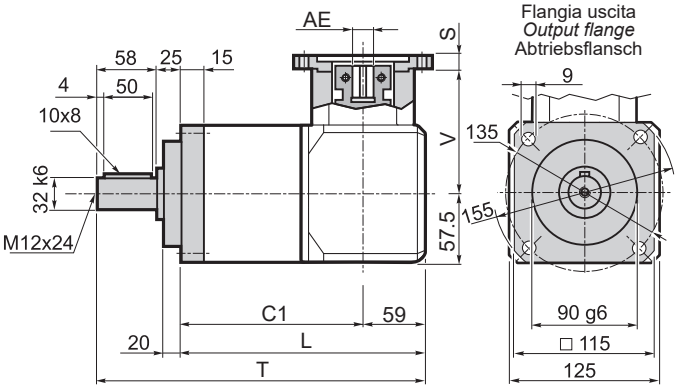
Stadi / *Steps* / Stufenzahl	2	3	
C1	134.5	167.1	AE= 14-15.87-16-19 22-24-25-28
L	193.5	226.1	
T	263.5	296.1	
V	89		AE= 14-15.87-16-19
	108		AE= 22-24-25-28

TT



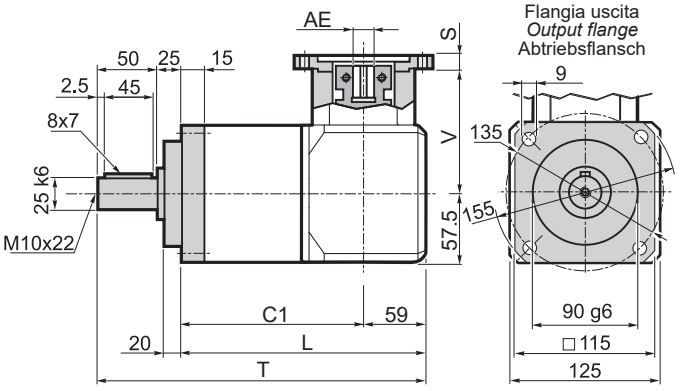
Stadi / *Steps* / Stufenzahl	2	3	
C1	139.5	172.1	AE= 14-15.87-16-19 22-24-25-28
L	198.5	231.1	
T	255.5	288.1	
V	89		AE= 14-15.87-16-19
	108		AE= 22-24-25-28

AQ



Stadi / *Steps* / Stufenzahl	2	3	
C1	121.5	154.1	AE= 14-15.87-16-19 22-24-25-28
L	180.5	213.1	
T	263.5	296.1	
V	89		AE= 14-15.87-16-19
	108		AE= 22-24-25-28

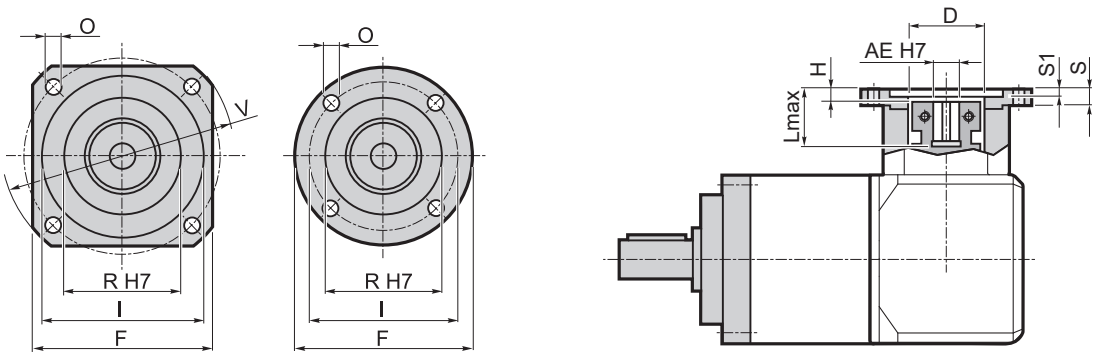
TQ



Stadi / *Steps* / Stufenzahl	2	3	
C1	121.5	154.1	AE= 14-15.87-16-19 22-24-25-28
L	180.5	213.1	
T	263.5	296.1	
V	89		AE= 14-15.87-16-19
	108		AE= 22-24-25-28

Dimensioni entrate / *Input dimensions* / Antriebsabmessungen

Flangia entrata
Input flange
Antriebsflansch



Flange entrata / *Input flange* / Antriebsflansch										Albero entrata / *Input shaft* / Antriebswelle															
										14		15.87		16		19		22		24		25		28	
	F	Q	V	I	R (H7)	O	S	S1	D	L max	H	L max	H	L max	H	L max	H	L max	H	L max	H	L max	H	L max	H
P01*	=	115	140	125.72	55.52	6.5	13	3	55.52	35	6	43	6	43	6	43	6	62	6	62	6	62	6	62	6
P02*	115	=	=	75	60	5.5	13	3.5	60	35	6	43	6	43	6	43	6	62	6	62	6	62	6	62	6
P03*	115	=	=	85	70	6.5	13	3.5	60	35	6	43	6	43	6	43	6	62	6	62	6	62	6	62	6
P04*	115	=	=	98.42	73.02	6.5	13	3	60	35	6	43	6	43	6	43	6	62	6	62	6	62	6	62	6
P05*	120	=	=	100	80	6.5	13	4	60	35	6	43	6	43	6	43	6	62	6	62	6	62	6	62	6
P06*	=	115	140	115	95	9	13	4.5	60	35	6	43	6	43	6	43	6	62	6	62	6	62	6	62	6
P07	=	115	160	130	110	8.5	13	4.5	60	35	6	43	6	43	6	43	6	62	6	62	6	62	6	62	6
P08	=	142	190	165	130	11	13	4.5	60	35	6	43	6	43	6	43	6	62	6	62	6	62	6	62	6
P09	=	192	250	215	180	13	14	4.5	60	36	7	44	7	44	7	44	7	63	7	63	7	63	7	63	7
P10*	115	=	=	65	50	6.5	13	3.5	50	35	6	43	6	43	6	43	6	62	6	62	6	62	6	62	6
P11	=	130	170	145	110	M 8	31	7	60	53	24	61	24	61	24	61	24	80	24	80	24	80	24	80	24
P12	=	130	170	145	110	M 8	17	7	60	39	10	47	10	47	10	47	10	66	10	66	10	66	10	66	10
P13	=	115	160	130	110	M 8	13	4.5	60	35	6	43	6	43	6	43	6	62	6	62	6	62	6	62	6
P14*	115	=	=	70	50	6.5	13	3.5	50	35	6	43	6	43	6	43	6	62	6	62	6	62	6	62	6
P15	115	=	=	90	70	M5	11	3.5	60	33	4	41	4	41	4	41	4	60	4	60	4	60	4	60	4
P17*	115	=	=	90	70	6.5	13	3.5	60	35	6	43	6	43	6	43	6	62	6	62	6	62	6	62	6
P18	=	115	155	130	95	8.5	13	4.5	60	35	6	43	6	43	6	43	6	62	6	62	6	62	6	62	6
P19*	115	=	=	95	50	6.5	13	3.5	50	35	6	43	6	43	6	43	6	62	6	62	6	62	6	62	6
P20	115	=	=	99	60	M6	13	4	60	35	6	43	6	43	6	43	6	62	6	62	6	62	6	62	6
P21*	130	=	=	106	82.5	12.5	26.3	15	60	48.5	19.5	56.5	19.5	56.6	19.5	56.5	19.5	75.5	19.5	75.5	19.5	75.5	19.5	75.5	19.5
P22	=	144	190	165	110	11	15	4.5	60	37	8	45	8	45	8	45	8	64	8	64	8	64	8	64	8
P23*	115	=	=	63	40	5.5	11	3.5	40	33	4	41	4	41	4	41	4	60	4	60	4	60	4	60	4
P24	120	=	=	100	80	M6	18	7	60	40	11	48	11	48	11	48	11	67	11	67	11	67	11	67	11
P25	=	115	155	115	95	M8	27	4.5	60	49	20	57	20	57	20	57	20	76	20	76	20	76	20	76	20
P26	=	115	155	131.95	55.52	M8	27	4.5	60	49	20	57	20	57	20	57	20	76	20	76	20	76	20	76	20
P27	170	=	=	148	114	8.5	13	4	60	35	6	43	6	43	6	43	6	62	6	62	6	62	6	62	6
P28	=	115	140	115	95	M8	16	7	63	38	9	45	9	46	9	46	9	65	9	65	9	65	9	65	9
P29	133.5	=	=	121.5	60	M6	13	13	60	35	6	43	6	43	6	43	6	62	6	62	6	62	6	62	6

* Per assemblare il motore è necessario smontare la flangia dal riduttore (vedere **schema di montaggio 2** a pag. 19).

** Before the mounting of the motor it is necessary to remove the flange from the gearbox (see **structural arrangement 2** at the top of the page 19).*

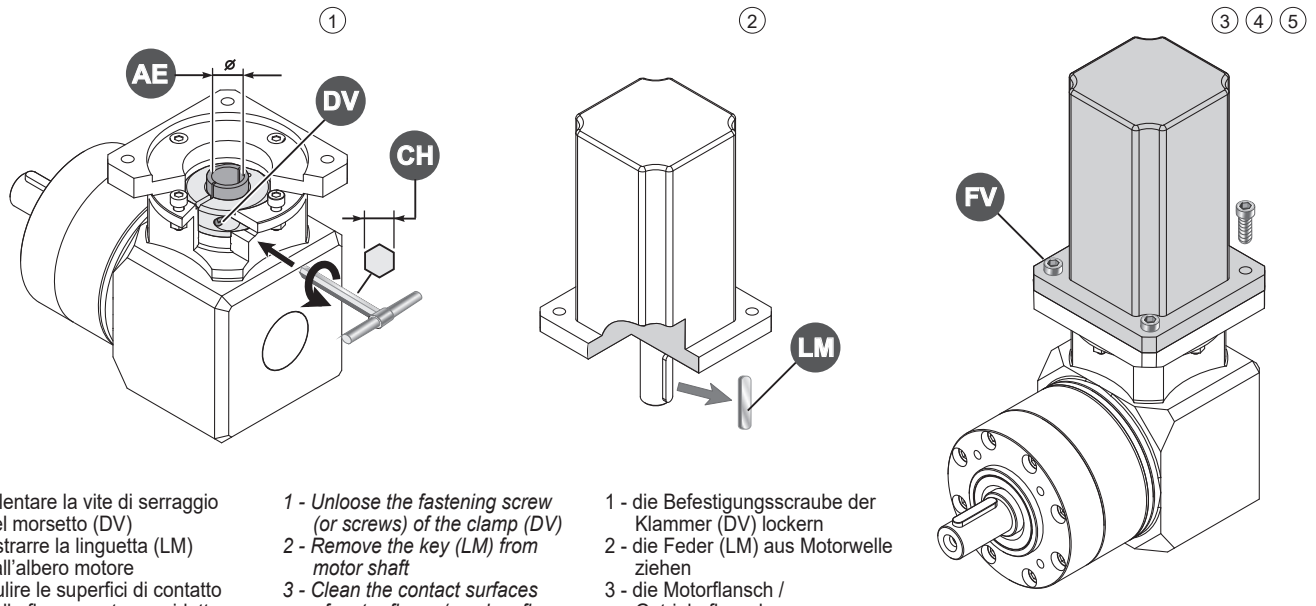
* Vor dem Einbauen des Motors soll die Getriebeflansch abmontiert werden (siehe **Bauanleitung 2** auf Seite 19).

1.11 Istruzioni per il montaggio del motore

1.11 Instructions for assembly of motor

1.11 Anleitung für motormontage

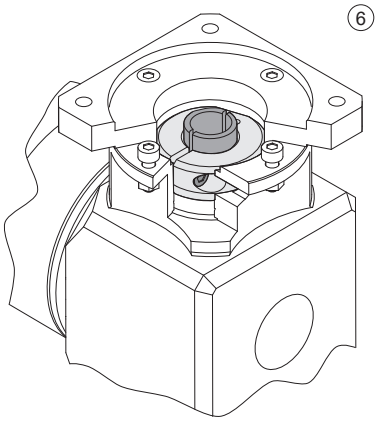
1 Schema di montaggio / *Assembly drawing* / Bauanleitung 1

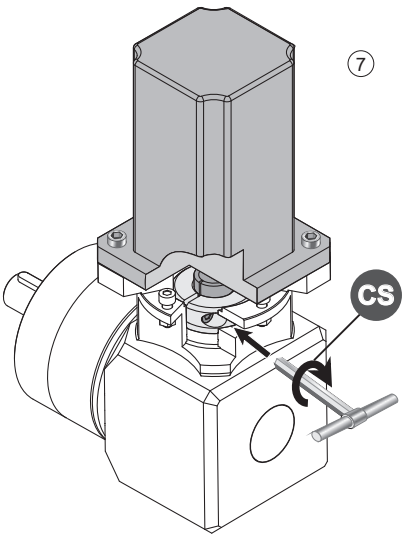


1 - Allentare la vite di serraggio del morsetto (DV)
2 - Estrarre la linguetta (LM) dall'albero motore
3 - Pulire le superfici di contatto delle flange motore e riduttore
4 - Calettare il motore sul riduttore evitando urti
5 - Stringere le viti di assemblaggio (FV) in modo alternato
6 - Assicurarsi che il morsetto venga serrato posizionandolo verso il motore e rispettando la fasatura dei tagli
7 - Serrare la vite (o le viti) del morsetto (DV) alla coppia (CS) indicata in tabella

1 - Unloose the fastening screw (or screws) of the clamp (DV)
2 - Remove the key (LM) from motor shaft
3 - Clean the contact surfaces of motor flange/gearbox flange
4 - Avoid impacts while fitting motor to gearbox
5 - Tighten the assembling scews (FV) alternatively
6 - Fix the clamp towards the motor and tighten it in compliance with the cuts timing
7 - Tighten the clamp screw,or screws (DV) according to the torque (CS) reported in the table

1 - die Befestigungsscraube der Klammer (DV) lockern
2 - die Feder (LM) aus Motorwelle ziehen
3 - die Motorflansch / Getriebeflansch Kontaktfläche reinigen
4 - Motor und Getriebe ohne Stöße verkeilen
5 - die Befestigungsscrauben (FV) abwechselnd anziehen
6 - Die Klammer soll zum Motor angezogen. Dabei soll die Zuendeinstellung de Schnitte geachtet
7 - die Schraube (oder Schrauben) der Klammer (DV) zu dem in der Tabelle angegebenen Anzugsmoment anziehen





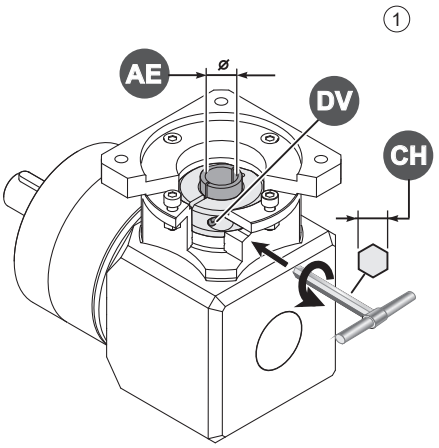
TEP 55	**AE**	6	6.35	7	8	9	9.52	11			
	DV	M4 x 16									
	NV	1									
	CH	3									
	CS [Nm]	4.8									
TEP 75	**AE**	6	6.35	7	8	9	9.52	11	12	12.7	14
	DV	M4 x 16									
	NV	1									
	CH	3									
	CS [Nm]	4.8									
TEP 90	**AE**	9	9.52	11	12	12.7	14	15.87	16	19	
	DV	M4 x 16						M5 x 20			
	NV	1						1			
	CH	3						4			
	CS [Nm]	4.8						9.4			
TEP 120	**AE**	14	15.87	16	19	22	24	25	28		
	DV	M4 x 16	M5 x 20			M6 x 20					
	NV	1	1			2					
	CH	3	4			5					
	CS [Nm]	4.8	9.4			16.2					

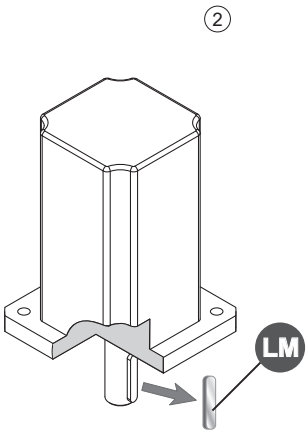
Tutte le viti hanno classe di resistenza 12.9
All screws supplied according to strenght class 12.9
Alle Schrauben nach Festigkeitsklasse 12.9 geliefert

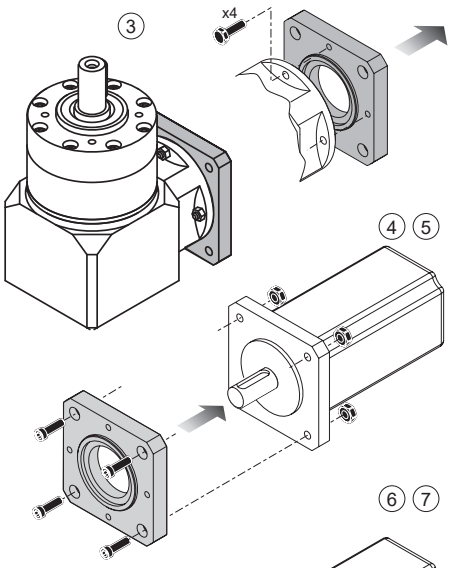
AE= Albero entrata / *Input shaft* / Antriebswelle
DV= Diametro vite / *Screw diameter* / Schraubendurchmesser
NV= Numero viti / *Number of screw* / Schraubenanzahl
CS= Coppia di serraggio / *Setting torque* / Spannungsmoment

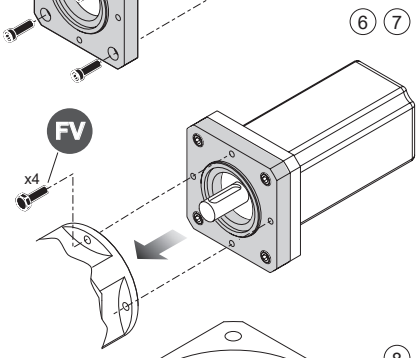
1.11 Istruzioni per il montaggio del motore — *1.11 Instructions for assembly of motor* — 1.11 Anleitung für motormontage

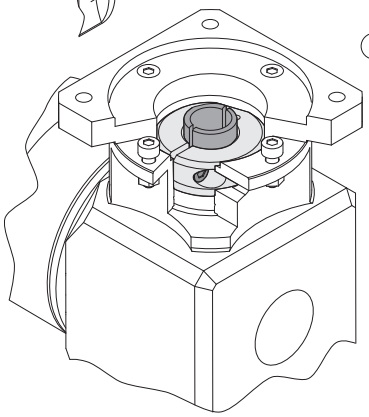
2 **Schema di montaggio** / *Assembly drawing* / **Bauanleitung 2**

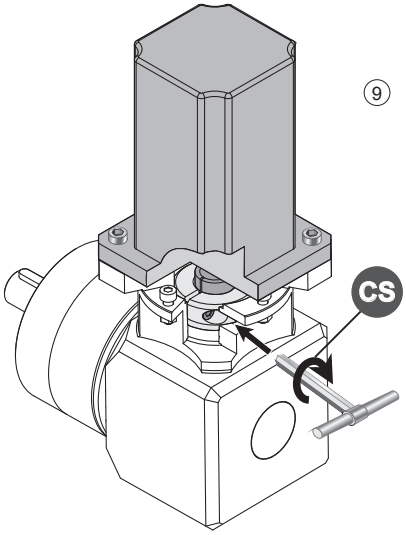












1 - Allentare la vite di serraggio del morsetto (DV)
2 - Estrarre la linguetta (LM) dall'albero motore
3 - Smontare la flangia dal riduttore
4 - Pulire le superfici di contatto delle flange motore e riduttore
5 - Fissare la flangia sul motore
6 - Calettare il motore sul riduttore evitando urti
7 - Stringere le viti di assemblaggio (FV) in modo alternato
8 - Assicurarsi che il morsetto venga serrato posizionandolo verso il motore e rispettando la fasatura dei tagli
9 - Serrare la vite (o le viti) del morsetto (DV) alla coppia (CS) indicata in tabella

1 - Unloose the fastening screw (or screws) of the clamp (DV)
2 - Remove the key (LM) from motor shaft
3 - Remove the flange from the gearbox
4 - Clean the contact surfaces of motor flange/gearbox flange
5 - Fix the flange on the motor
6 - Avoid impacts while fitting motor to gearbox
7 - Tighten the assembling scews (FV) alternatively
8 - Fix the clamp towards the motor and tighten it in compliance with the cuts timing
9 - Tighten the clamp screw,or screws (DV) according to the torque (CS) reported in the table

1 - die Befestigungsscraube der Klammer (DV) lockern
2 - die Feder (LM) aus Motorwelle ziehen
3 - die Flansch von Getriebe abmontieren
4 - die Motorflansch / Getriebeflansch Kontaktfläche reinigen
5 - die Flansch an Motor befestigen
6 - Motor und Getriebe ohne Stöße verkeilen
7 - die Befestigungsscrauben (FV) abwechselnd anziehen
8 - Die Klammer soll zum Motor angezogen. Dabei soll die Zuendeinstellung de Schnitte geachtet
9 - die Schraube (oder Schrauben) der Klammer (DV) zu dem in der Tabelle angegebenen Anzugsmoment anziehen

TEP 55	**AE**	**6**	**6.35**	**7**	**8**	**9**	**9.52**	**11**			
	DV	M4 x 16									
	NV	1									
	CH	3									
	CS [Nm]	4.8									
TEP 75	**AE**	**6**	**6.35**	**7**	**8**	**9**	**9.52**	**11**	**12**	**12.7**	**14**
	DV	M4 x 16									
	NV	1									
	CH	3									
	CS [Nm]	4.8									
TEP 90	**AE**	**9**	**9.52**	**11**	**12**	**12.7**	**14**	**15.87**	**16**	**19**	
	DV	M4 x 16						M5 x 20			
	NV	1						1			
	CH	3						4			
	CS [Nm]	4.8						9.4			
TEP 120	**AE**	**14**	**15.87**	**16**	**19**	**22**	**24**	**25**	**28**		
	DV	M4 x 16	M5 x 20			M6 x 20					
	NV	1	1			2					
	CH	3	4			5					
	CS [Nm]	4.8	9.4			16.2					

Tutte le viti hanno classe di resistenza 12.9
All screws supplied according to strenght class 12.9
Alle Schrauben nach Festigkeitsklasse 12.9 geliefert
AE= Albero entrata / *Input shaft* / Antriebswelle
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CS= Coppia di serraggio / *Setting torque* / Spannungsmoment