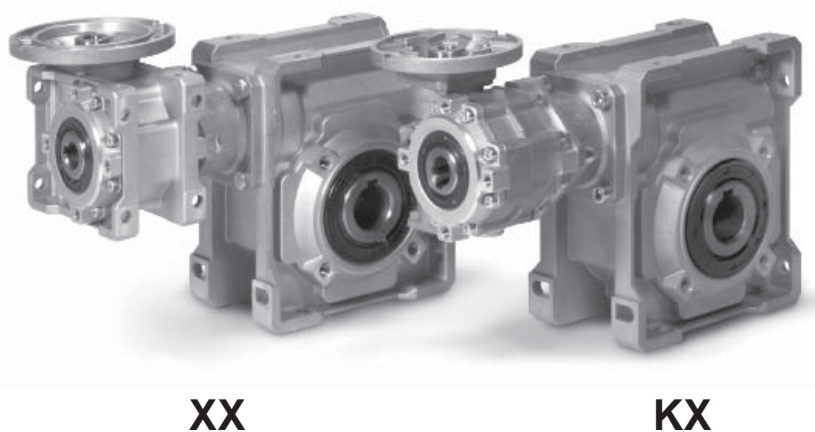


5.0	RIDUTTORI A VITE SENZA FINE COMBINATI	COMBINED WORM GEARBOXES	KOMBINIERTE- SCHNECKENGETRIEBE	
5.1	Caratteristiche	<i>Characteristics</i>	Merkmale	86
5.2	Designazione	<i>Designation</i>	Bezeichnung	86
5.3	Lubrificazione e posizioni di montaggio	<i>Lubrication and mounting position</i>	Schmierung und Einbaulage	90
5.4	Posizione morsettiera	<i>Terminal board position</i>	Lage der Klemmenkaste	92
5.5	Dati tecnici	<i>Technical data</i>	Technische Daten	93
5.6	Dimensioni	<i>Dimensions</i>	Abmessungen	98
5.7	Limitatore di coppia cavo passante	<i>Torque limiter with through hollow shaft</i>	Drehmomentbegrenzer mit durchgehender Hohlwelle	105
5.8	Esecuzione con vite bisporgente	<i>Double extended worm shaft design</i>	<i>Versionen mit doppelseitig herausragender Schneckenwelle</i>	106
5.9	Accessori	<i>Accessories</i>	Zubehör	107
5.10	Lista parti di ricambio	<i>Spare parts list</i>	Ersatzteilliste	108

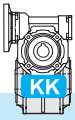


XX

KX



KK



5.1 Caratteristiche

La combinazione di due riduttori a vite senza fine comporta rendimenti molto bassi, ma l'elevata riduzione di velocità ottenuta in uno spazio ridottissimo rende comunque interessante, e a volte insostituibile, questa soluzione. I riduttori a vite senza fine combinati sono disponibili nelle serie KX, XX e KK.

Le serie KX e KK sono disponibili esclusivamente nella versione p.a.m.

La serie XX è invece disponibile nella versione alberata XXA e nelle due versioni con predisposizione attacco motore in forma compatta XXC o con campana e giunto XXF.

Sono forniti con albero cavo di serie ed esiste un'ampia gamma di accessori: seconda entrata, cuscinetti conici sulla corona, flangia uscita, albero lento con 1 o 2 sporgenze, limitatore di coppia con cavo passante, braccio di reazione.

5.1 Characteristics

The combination of two worm gearboxes provides very low efficiency, however the fact that substantial reduction in speed can be obtained in an extremely reduced space makes this solution very interesting and sometimes irreplaceable. Combined worm gearboxes are available in series: KX, XX and KK.

The KX and KK series are available for IEC version only.

The XX series is available in the XXA version with shaft and in two versions with motor coupling: XXC (compact) and XXF (with bell and joint).

The hollow shaft is supplied as standard. A broad range of accessories is available: second input, tapered roller bearings on the worm wheel, output flange, single or double extended output shaft, torque limiter with through hollow shaft, torque arm.

5.1 Merkmale

Die Kombination zweier Schneckengetriebe bringt sehr niedrigen Wirkungsgrad mit sich, es handelt sich jedoch um eine interessante und manchmal unersetzbare Lösung, weil hohe Drehzahlverringern in einem beträchtlich reduzierten Raum erhalten werden kann. Kombinierte Schneckengetriebe sind in Serien erhältlich: KX, XX und KK.

Die Serien KX und KK sind nur mit IEC-Motoranbau verfügbar.


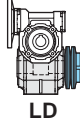
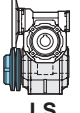
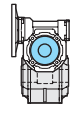
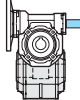
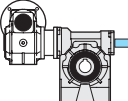





Die Serie XX ist mit Welle (XXA Version), oder mit Kupplung für Motoranschluss (XXC kompakt und XXF mit Glocke und Verbindsstück) lieferbar.

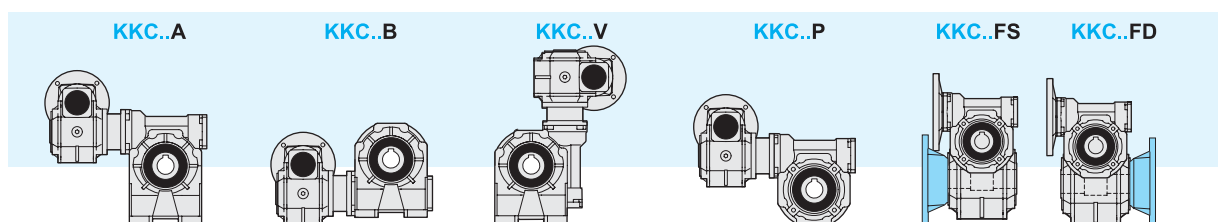
Die Hohlwelle gehört zur serienmäßigen Ausstattung. Eine breite Auswahl an Zubehör ist erhältlich: zweiter Antrieb, Kegelrollenlager auf Schneckenrad, Abtriebsflansch, Standard oder doppelseitig herausragende Abtriebswelle, Drehmomentbegrenzer mit durchgehender Hohlwelle, Drehmomentstütze.

5.2 Designazione

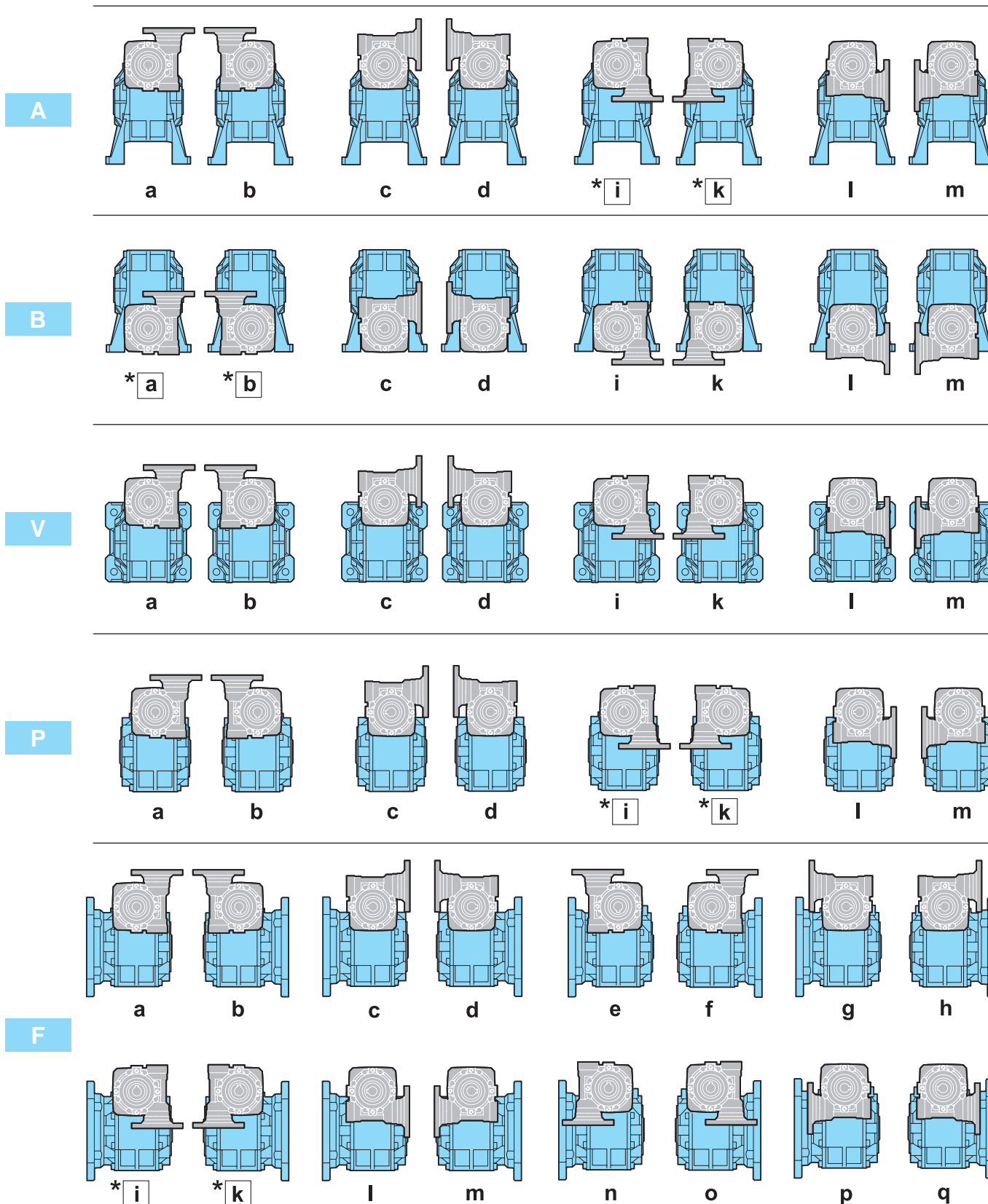
5.2 Designation

5.2 Bezeichnung

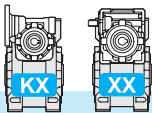
Riduttore entrata Gearbox at input Getriebe am	Macchina uscita Gearbox at output Getriebe am Abtrieb	Tipo entrata Input type Antriebsart	Grandezza Size Größe	Rapporto rid. Ratio Untersetzung	Predispos.att. mot. Motor coupling Motoranschluss	Versione Version Version	Forma costruttiva Execution Bauform	Posizione di mont. Mounting position Einbaulage	Limitatore di coppia. Torque limiter Drehmomentbegrenzer	Seconda entrata Additional input Zusatzantrieb	Albero uscita Output shaft Abtriebswelle	Braccio di reazione Torque arm Drehmomentstütze
K	K	C	50/110 1200	P.A.M.	F1	a	B3	LD	SeA1	H	BR	
Riduttore a vite senza fine combinato Combined worm gearbox Doppelschneckengetriebe				150 200 300 450 600 900 1200 1500 1950 2500 3250 4000 5000 10000	56 63 71 80 90	P F (1-2-3) A (1-2) B (1-2) V (1-2)	ab cd ef gh ik im no pq	B3 B6 B7 B8 V5 V6	 LD  LS  L1	 SeA1  SeA1	 H  SD  SS  DD	 BR



Forma costruttiva / version / Bauform




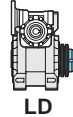
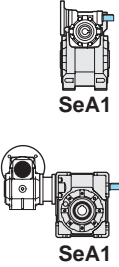


* Forma costruttiva non realizzabile su: / Version not feasible on: / Bauform nicht ausführbar für:
30/30, 30/40, 30/50 PAM 63B5 (ø 140), 40/63 PAM 71B5 (ø 160)

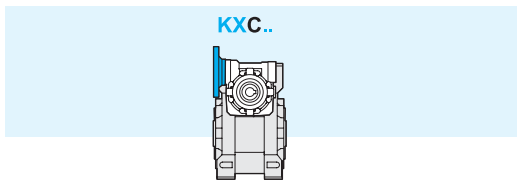





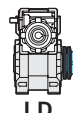



5.2 Designazione

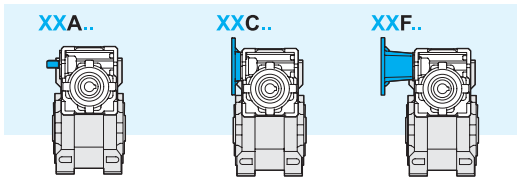
5.2 Designation

5.2 Bezeichnung

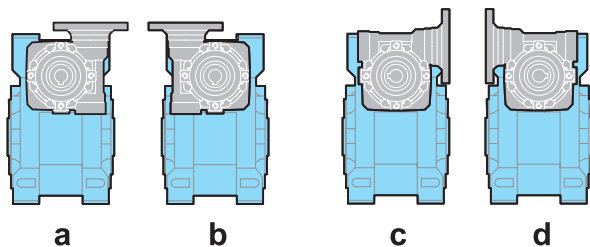
Riduttore entrata Gearbox at input Getriebe am Macchina uscita Gearbox at output Getriebe am Abtrieb	Tipo entrata Input type Antriebsart	Grandezza Size Größe	Rapporto rid. Ratio Untersetzung	Predispos.att. mot. Motor coupling Motoranschluss	Versione Version Version	Forma costruttiva Execution Bauform	Posizione di mont. Mounting position Einbaulage	Limitatore di coppia. Torque limiter Drehmoment- begrenzer	Seconda entrata Additional input Zusatzantrieb	Albero uscita Output shaft Abtriebswelle	Braccio di reazione Torque arm Drehmomentstütze
K	X	C	50/110 1200	P.A.M.	F1	a	B3	LD	SeA1	H	BR
Riduttore a vite senza fine combinato Combined worm gearbox Doppelschneckengetriebe	 C	30/30	150	56 63 71 80 90	P F (1-2-3)	ab	B3 B6 B7 B8 V5 V6	 LD	 SeA1	 H	 BR
		30/40	200			cd					
		30/50	300			ef					
		30/63	450			gh					
		40/63	600			ik					
		40/75	900			lm					
		40/90	1200			no					
		50/75	1500			pq					
		50/90	1950								
		50/110	2500								
		63/110	3250								
		63/130	4000								
	5000										
	10000										



Riduttore entrata Gearbox at input Getriebe am Macchina uscita Gearbox at output Getriebe am Abtrieb	Tipo entrata Input type Antriebsart	Grandezza Size Größe	Rapporto rid. Ratio Untersetzung	Predispos.att. mot. Motor coupling Motoranschluss	Versione Version Version	Forma costruttiva Execution Bauform	Posizione di mont. Mounting position Einbaulage	Limitatore di coppia. Torque limiter Drehmoment- begrenzer	Seconda entrata Additional input Zusatzantrieb	Albero uscita Output shaft Abtriebswelle	Braccio di reazione Torque arm Drehmomentstütze
X	X	C	50/110 1200	P.A.M.	F1	a	B3	LD	SeA1	H	BR
Riduttore a vite senza fine combinato Combined worm gearbox Doppelschneckengetriebe	 A  C  F	30/30	150	56 63 71 80 90	P F (1-2-3)	ab	B3 B6 B7 B8 V5 V6	 LD	 SeA1	 H	 BR
		30/40	200			cd					
		30/50	300			ef					
		30/63	450			gh					
		40/63	600			ik					
		40/75	900			lm					
		40/90	1200			no					
		50/75	1500			pq					
		50/90	1950								
		50/110	2500								
		63/110	3250								
		63/130	4000								
	5000										
	10000										

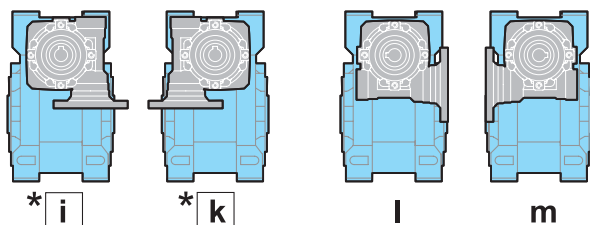


Forma costruttiva / version / Bauform



a b c d

P

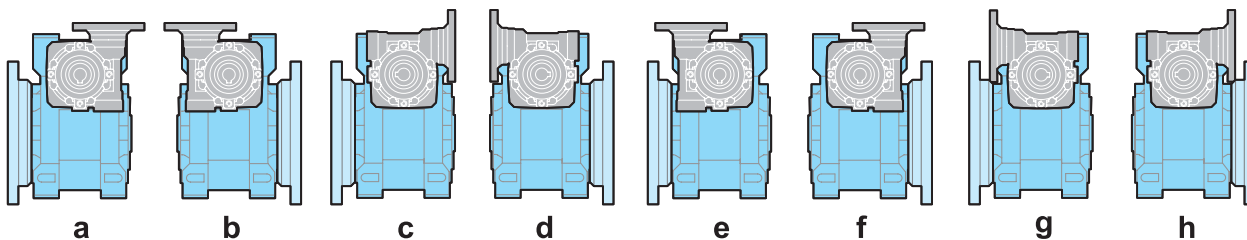


*i *k l m



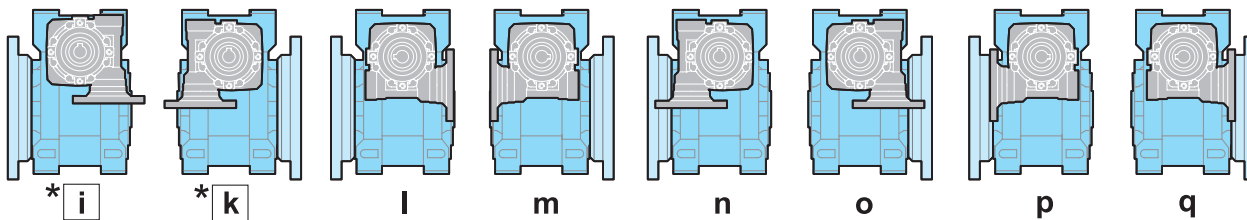
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Version not feasible on:
Bauform nicht ausführbar für:

30/30, 30/40, 30/50 PAM 63B5 (ø 140),
40/63 PAM 71B5 (ø 160)

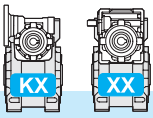


a b c d e f g h

F



*i *k l m n o p q



5.3 Lubrificazione e posizioni di montaggio

I riduttori a vite senza fine combinati sono forniti completi di lubrificante sintetico a base PAG con indice di viscosità ISO VG320. Si raccomanda di precisare sempre in fase di ordine la forma costruttiva e la posizione di lavoro desiderata.

5.3 Lubrication and mounting position

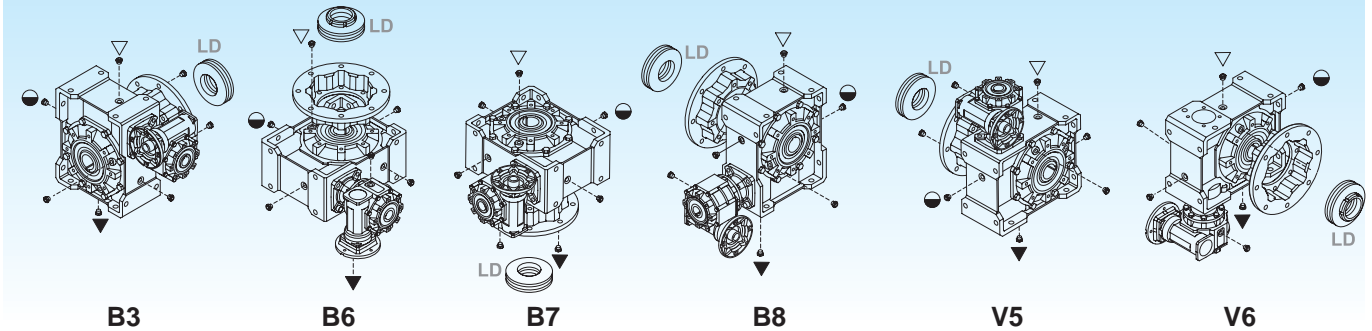
Combined worm gearboxes are supplied with synthetic lubricant, PAG base, viscosity index ISO VG320. Always specify the version and the mounting position when ordering.

5.3 Schmierung und Einbaulage

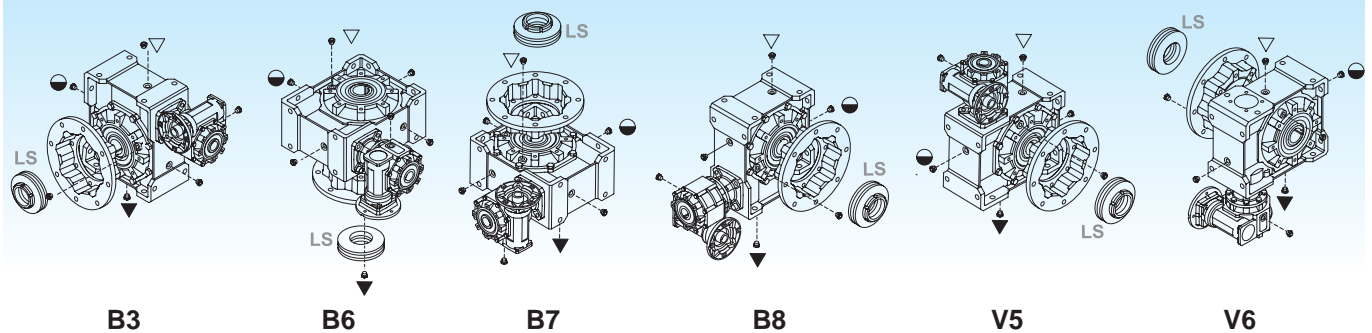
Kombinierte Schneckengetriebe werden mit synthetischem Schmiermittel auf PAG Basis und Viskosität Index ISO VG320 geliefert. Im Auftrag sind immer Einbaulage und Bauform anzugeben.

F (b, d, f, h, k, m, o, q)

P (a, b, c, d, i, k, l, m)



F (a, c, e, g, i, l, n, p)



- ▽ Carico e sfiato / Filling and breather
Einfüll und Entlüftung
- Livello / Level / Ölstand
- ▼ Scarico / Drain / Ablass

Nei corpi in alluminio 30, 40, 50, 63, 75 è presente un solo tappo di riempimento olio.

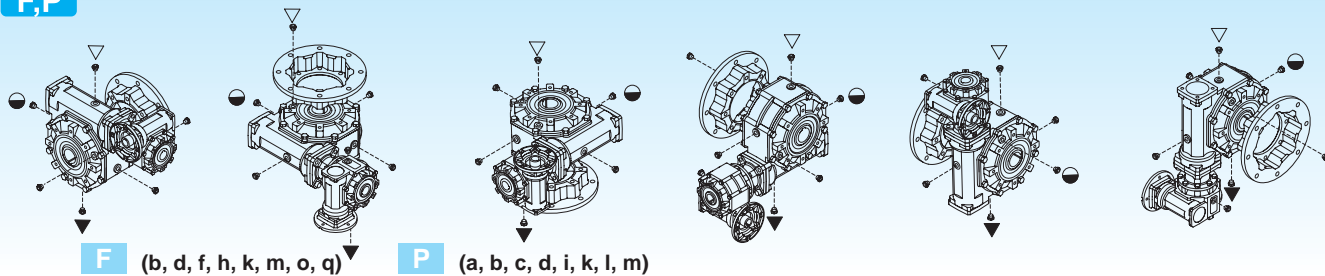
Aluminium housings size 30, 40, 50, 63 and 75 have one filling plug only.

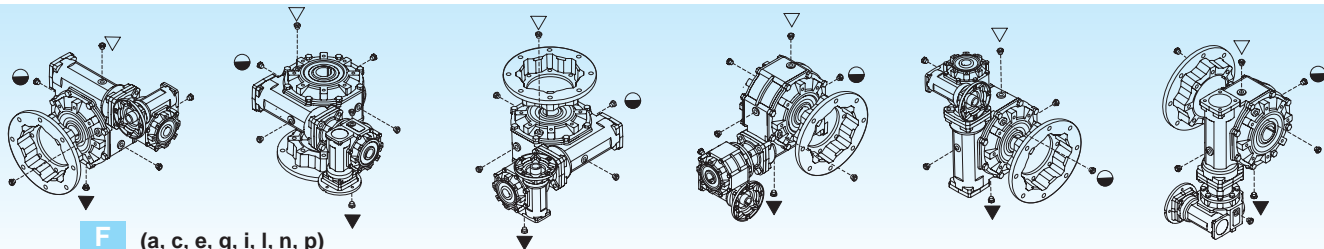
Gehäuse aus Aluminium Größe 30, 40, 50, 63 und 75 verfügen über nur eine Einfüllschraube.

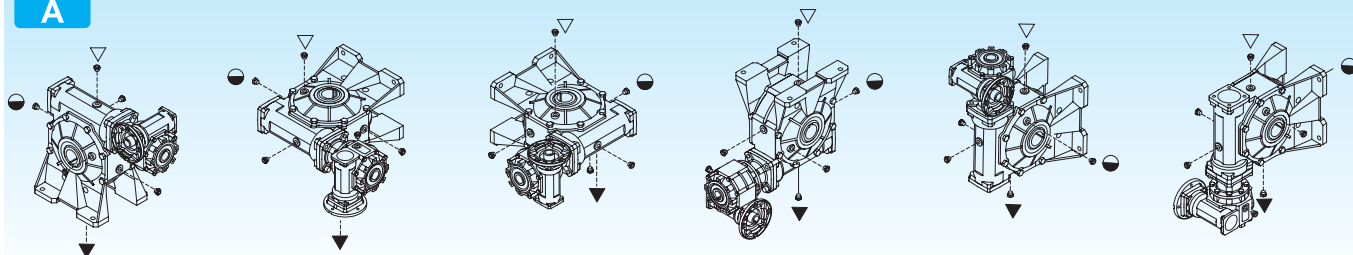
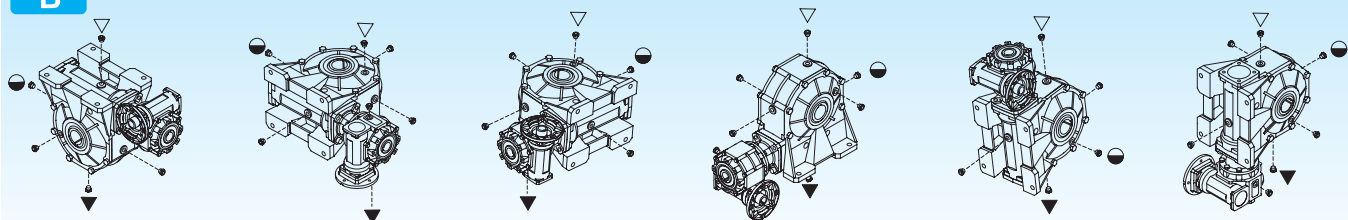
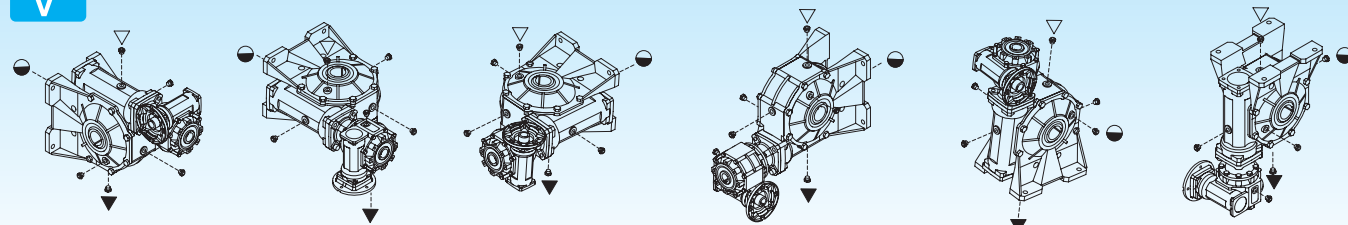
		Q.tà olio / Oil quantity / Schmiermittelmenge [lt]											
		XXA - XXC - KXC - XXF											
		30/30	30/40	30/50	30/63	40/63	40/75	40/90	50/75	50/90	50/110	63/110	63/130
Posizioni di montaggio Mounting positions Einbaulage	B3	IN	0.015				0.04			0.08			
		OUT	0.015	0.04	0.08	0.16	0.16	0.26	1.1	0.26	1.1	2.2	0.16
	B6	IN	0.015				0.04			0.08			
		OUT	0.015	0.04	0.08	0.16	0.16	0.26	0.9	0.26	0.9	1.8	1.8
	B7	IN	0.015				0.04			0.08			
		OUT	0.015	0.04	0.08	0.16	0.16	0.26	0.9	0.26	0.9	1.8	1.8
	B8	IN	0.015				0.04			0.08			
		OUT	0.015	0.04	0.08	0.16	0.16	0.26	0.8	0.26	0.8	1.6	1.6
	V5	IN	0.015				0.04			0.08			
		OUT	0.015	0.04	0.08	0.16	0.16	0.26	1.2	0.26	1.2	2.4	2.4
	V6	IN	0.015				0.04			0.08			
		OUT	0.015	0.04	0.08	0.16	0.16	0.26	1.2	0.26	1.2	2.4	2.4

IN = Riduttore entrata / Gearbox at input / Getriebe am Antrieb
OUT = Riduttore uscita / Gearbox at output / Getriebe am Abtrieb



F,P

F (b, d, f, h, k, m, o, q)

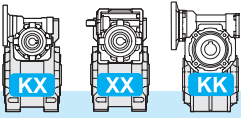
P (a, b, c, d, i, k, l, m)

F (a, c, e, g, i, l, n, p)

A

B

V

B3
B6
B7
B8
V5
V6

		Q.tà olio / Oil quantity / Schmiermittelmenge [lt]											
		Combinato tipo: KC											
		30/30	30/40	30/50	30/63	40/63	40/75	40/90	50/75	50/90	50/110	63/110	63/130
Posizioni di montaggio Mounting positions Einbaulage	B3	IN	0.015				0.04			0.08			0.16
		OUT	0.015	0.04	0.08	0.16	0.16	0.26	1.1	0.26	1.1	2.4	2.4
	B6	IN	0.015				0.04			0.08			0.16
		OUT	0.015	0.04	0.08	0.16	0.16	0.26	0.9	0.26	0.9	2	2
	B7	IN	0.015				0.04			0.08			0.16
		OUT	0.015	0.04	0.08	0.16	0.16	0.26	0.9	0.26	0.9	2	2
	B8	IN	0.015				0.04			0.08			0.16
		OUT	0.015	0.04	0.08	0.16	0.16	0.26	1.3	0.26	1.3	2.38	2.8
	V5	IN	0.015				0.04			0.08			0.16
		OUT	0.015	0.04	0.08	0.16	0.16	0.26	1.2	0.26	1.2	2.7	2.7
	V6	IN	0.015				0.04			0.08			0.16
		OUT	0.015	0.04	0.08	0.16	0.16	0.26	1.2	0.26	1.2	2.7	2.7

IN = Riduttore entrata / Gearbox at input / Getriebe am Antrieb

OUT = Riduttore uscita / Gearbox at output / Getriebe am Abtrieb



5.4 Posizione morsettiera

5.4 Terminal board position

5.4 Lage der Klemmenkaste

<p>B3</p>	<p>B6</p>	<p>B7</p>
<p>B8</p>	<p>V5</p>	<p>V6</p>

Specificare sempre in fase di ordinazione la posizione di montaggio e la forma costruttiva.

Specify the version and the mounting position when ordering.

Bei der Bestellung immer die gewünschte Montageposition und Bauform angeben.

5.5 Dati tecnici

5.5 Technical data

5.5 Technische Daten

30/30	$n_1 = 1400$					XXA		KXC - XXC - XXF - KKC										
	in	30		n_2 [min ⁻¹]	Rd	T_{2M} [Nm]	P [kW]	T_2 [Nm]	P_1 [kW]	FS'	Input - IEC							
		i_1	i_2								KC - XC		XF					
											B5/B14		B5		B14			
150	10	15	9.3	0.51	37	0.070	32	0.06	1.2	—	63	56	—	63	56	—	63	56
200			7.0	0.47	32	0.050	39	0.06	0.8									
300			4.7	0.42	39	0.045	52*	0.06	0.8*									
450	20	30	3.1	0.40	39	0.032	73*	0.06	0.5*									
600			2.3	0.37	39	0.026	91*	0.06	0.4*									
900			1.6	0.34	39	0.019	125*	0.06	0.3*									
1200	50	100	1.2	0.30	39	0.016	149*	0.06	0.3*									
1500			0.9	0.28	39	0.014	173*	0.06	0.2*									
1950			0.7	0.26	39	0.011	209*	0.06	0.2*									
2500	80	100	0.6	0.23	30	0.008	235*	0.06	0.1*									
3250			0.4	0.21	30	0.006	283*	0.06	0.11*									
4000			0.4	0.20	30	0.005	328*	0.06	0.09*									
5000	100	100	0.3	0.19	30	0.005	385*	0.06	0.08*									
10000			0.1	0.15	17	0.002	609*	0.06	0.03*									

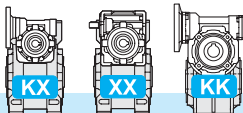
30/40	$n_1 = 1400$					XXA		KXC - XXC - XXF - KKC										
	in	30		n_2 [min ⁻¹]	Rd	T_{2M} [Nm]	P [kW]	T_2 [Nm]	P_1 [kW]	FS'	Input - IEC							
		i_1	i_2								KC - XC		XF					
											B5/B14		B5		B14			
150	10	15	9.3	0.54	82	0.148	72	0.13	1.1	—	63	56	—	63	56	—	63	56
200			7.0	0.51	76	0.110	76	0.11	1.0									
300			4.7	0.43	82	0.094	79	0.09	1.0									
450	20	30	3.1	0.40	82	0.067	74	0.06	1.1									
600			2.3	0.37	82	0.054	92	0.06	0.9									
900			1.6	0.34	82	0.039	126*	0.06	0.6*									
1200	50	100	1.2	0.31	82	0.033	151*	0.06	0.5*									
1500			0.9	0.29	82	0.028	176*	0.06	0.5*									
1950			0.7	0.27	82	0.023	212*	0.06	0.4*									
2500	80	100	0.6	0.23	68	0.017	236*	0.06	0.3*									
3250			0.4	0.21	68	0.014	285*	0.06	0.24*									
4000			0.4	0.20	68	0.012	330*	0.06	0.21*									
5000	100	100	0.3	0.19	68	0.011	387*	0.06	0.18*									
10000			0.1	0.15	35	0.003	626*	0.06	0.06*									

30/50	$n_1 = 1400$					XXA		KXC - XXC - XXF - KKC										
	in	30		n_2 [min ⁻¹]	Rd	T_2 [Nm]	P [kW]	T_2 [Nm]	P_1 [kW]	FS'	Input - IEC							
		i_1	i_2								KC - XC		XF					
											B5/B14		B5		B14			
150	10	15	9.3	0.55	149	0.265	124	0.22	1.2	—	63	56	—	63	56	—	63	56
200			7.0	0.52	144	0.201	129	0.18	1.1									
300			4.7	0.44	150	0.166	118	0.13	1.3									
450	20	30	3.1	0.42	150	0.118	140	0.11	1.1									
600			2.3	0.39	150	0.094	143	0.09	1.0									
900			1.6	0.36	150	0.069	131	0.06	1.1									
1200	50	100	1.2	0.32	150	0.058	156	0.06	1.0									
1500			0.9	0.30	150	0.049	182	0.06	0.8									
1950			0.7	0.28	150	0.041	220*	0.06	0.7*									
2500	80	100	0.6	0.25	125	0.030	253*	0.06	0.5*									
3250			0.4	0.23	125	0.025	305*	0.06	0.41*									
4000			0.4	0.22	125	0.021	354*	0.06	0.35*									
5000	100	100	0.3	0.20	125	0.018	414*	0.06	0.30*									
10000			0.1	0.16	69	0.006	645*	0.06	0.11*									

* **ATTENZIONE:** la coppia massima utilizzabile $[T_{2M}]$ deve essere calcolata utilizzando il fattore di servizio: $T_{2M} = T_2 \times FS'$

* **WARNING:** Maximum allowable torque $[T_{2M}]$ must be calculated using the following service factor: $T_{2M} = T_2 \times FS'$

* **ACHTUNG:** das max. anwendbare Drehmoment $[T_{2M}]$ muss mit folgendem Betriebsfaktor berechnet werden: $T_{2M} = T_2 \times FS'$



5.5 Dati tecnici

5.5 Technical data

5.5 Technische Daten

30/63	$n_1 = 1400$					XXA		KXC - XXC - XXF - KKC											
	in	30	63	n_2	Rd	T_{2M}	P	T_2	P_1	FS'	Input - IEC								
		i_1	i_2								KC - XC		XF						
											B5/B14		B5		B14				
	150	10	15	9.3	0.56	228	0.400	126	0.22	1.8	—	63	56	—	63	56	—	63	56
	200		20	7.0	0.54	279	0.378	162	0.22	1.7									
	300	15		4.7	0.46	268	0.285	207	0.22	1.3									
	450			3.1	0.43	268	0.202	238	0.18	1.1									
	600	20		2.3	0.40	268	0.162	215	0.13	1.2									
	900	30		1.6	0.37	268	0.118	250	0.11	1.1									
	1200			1.2	0.33	268	0.099	243	0.09	1.1									
	1500	50		0.9	0.31	268	0.085	189	0.06	1.4									
	1950	65		0.7	0.29	268	0.071	228	0.06	1.2									
	2500	50		0.6	0.26	222	0.050	265	0.06	0.8									
	3250	65	50	0.4	0.24	222	0.042	319*	0.06	0.70*									
	4000			0.4	0.23	222	0.036	369*	0.06	0.60*									
	5000	80		0.3	0.21	222	0.031	433*	0.06	0.51*									
	10000	100	100	0.1	0.16	138	0.012	663*	0.06	0.21*									



8.5

40/63	$n_1 = 1400$					XXA		KXC - XXC - XXF - KKC											
	in	40	63	n_2	Rd	T_{2M}	P	T_2	P_1	FS'	Input - IEC								
		i_1	i_2								KC - XC		XF						
											B5/B14		B5		B14				
	150	10	15	9.3	0.56	261	0.452	214	0.37	1.2	71	63	—	71	63	56	71	63	—
	200		20	7.0	0.55	279	0.373	277	0.37	1.0									
	300	15		4.7	0.46	268	0.282	238	0.25	1.1									
	450			3.1	0.44	268	0.197	244	0.18	1.1									
	600	20		2.3	0.43	268	0.154	226	0.13	1.2									
	900	30		1.6	0.38	268	0.115	257	0.11	1.0									
	1200			1.2	0.36	268	0.091	264	0.09	1.0									
	1500	50		0.9	0.33	268	0.079	203	0.06	1.3									
	1950	65		0.7	0.30	268	0.067	241	0.06	1.1									
	2500	50		0.6	0.28	222	0.047	284	0.06	0.8									
	3250	65	50	0.4	0.25	222	0.039	338*	0.06	0.66*									
	4000			0.4	0.24	222	0.033	400*	0.06	0.55*									
	5000	80		0.3	0.23	222	0.028	471*	0.06	0.47*									
	10000	100	100	0.1	0.18	138	0.011	722*	0.06	0.19*									



9.5

* **ATTENZIONE:** la coppia massima utilizzabile [T_{2M}] deve essere calcolata utilizzando il fattore di servizio: $T_{2M} = T_2 \times FS'$

* **WARNING:** Maximum allowable torque [T_{2M}] must be calculated using the following service factor: $T_{2M} = T_2 \times FS'$

* **ACHTUNG:** das max. anwendbare Drehmoment [T_{2M}] muss mit folgendem Betriebsfaktor berechnet werden: $T_{2M} = T_2 \times FS'$

5.5 Dati tecnici

5.5 Technical data

5.5 Technische Daten

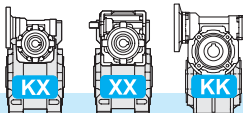
40/75	$n_1 = 1400$					XXA		KXC - XXC - XXF - KKC																		
	in	40	75	n_2	Rd	T_{2M}	P	T_2	P_1	FS'	Input - IEC															
		i_1	i_2								KC - XC		XF													
											B5/B14		B5		B14											
150	10	15	9.3	0.57	409	0.698	322	0.55	1.3	71	63	71	63	56	71	63	—									
200		20	7.0	0.56	442	0.583	417	0.55	1.1																	
300	30	50	4.7	0.47	418	0.432	358	0.37	1.2									—	56	71	63	56	71	63	—	
450			15	3.1	0.45	418	0.302	346	0.25																	1.2
600			20	2.3	0.43	418	0.236	390	0.22																	1.1
900			30	1.6	0.39	418	0.176	309	0.13																	1.4
1200			40	1.2	0.36	418	0.140	388	0.13																	1.1
1500			50	0.9	0.34	418	0.121	379	0.11																	1.1
1950			65	0.7	0.31	418	0.102	368	0.09																	1.1
2500			50	0.6	0.29	381	0.077	296	0.06																	1.3
3250	65	0.4	0.26	381	0.065	352	0.06	1.08	—	56	71	63	56	71	63	—										
4000	80	0.4	0.25	381	0.055	417	0.06	0.91																		
5000	100	0.3	0.24	381	0.047	491*	0.06	0.78*																		
10000	100	0.1	0.19	232	0.018	762*	0.06	0.30*																		

50/75	$n_1 = 1400$					XXA		KXC - XXC - XXF - KKC																		
	in	50	75	n_2	Rd	T_{2M}	P	T_2	P_1	FS'	Input - IEC															
		i_1	i_2								KC - XC		XF													
											B5/B14		B5		B14											
150	10	15	9.3	0.57	409	0.750	409	0.75	1.0	80	71	80	71	63	80	71	—									
200		20	7.0	0.56	442	0.576	422	0.55	1.0																	
300	30	50	4.7	0.48	418	0.427	363	0.37	1.2									—	63	80	71	63	80	71	—	
450			15	3.1	0.46	418	0.299	350	0.25																	1.2
600			20	2.3	0.42	418	0.250	418	0.25																	1.0
900			30	1.6	0.40	418	0.180	418	0.18																	1.0
1200			40	1.2	0.38	418	0.134	406	0.13																	1.0
1500			50	0.9	0.35	418	0.116	470	0.13																	0.9
1950			65	0.7	0.33	418	0.095	572*	0.13																	0.7*
2500			50	0.6	0.30	381	0.074	674*	0.13																	0.6*
3250	65	0.4	0.28	381	0.060	819*	0.13	0.47*																		
4000	80	0.4	0.26	381	0.053	939*	0.13	0.41*																		
5000	100	0.3	0.25	381	0.045	1108*	0.13	0.34*																		
10000	100	0.1	0.19	232	0.018	1719*	0.13	0.13*																		

* **ATTENZIONE:** la coppia massima utilizzabile $[T_{2M}]$ deve essere calcolata utilizzando il fattore di servizio: $T_{2M} = T_2 \times FS'$

* **WARNING:** Maximum allowable torque $[T_{2M}]$ must be calculated using the following service factor: $T_{2M} = T_2 \times FS'$

* **ACHTUNG:** das max. anwendbare Drehmoment $[T_{2M}]$ muss mit folgendem Betriebsfaktor berechnet werden: $T_{2M} = T_2 \times FS'$



5.5 Dati tecnici

5.5 Technical data

5.5 Technische Daten

40/90	$n_1 = 1400$					XXA		KXC - XXC - XXF - KKC									
	in	40	90	n_2	Rd	T_{2M}	P	T_2	P_1	FS'	Input - IEC						
		i_1	i_2								KC - XC		XF			B5/B14	B5
150	10	15	9.3	0.58	435	0.732	327	0.55	1.3	71	63	71	63	56	71	63	—
200		20	7.0	0.56	560	0.727	424	0.55	1.3								
300	15	30	4.7	0.48	673	0.683	542	0.55	1.2	—	56	71	63	56	71	63	—
450			3.1	0.46	673	0.478	520	0.37	1.3								
600	20	30	2.3	0.44	673	0.373	668	0.37	1.0	—	56	71	63	56	71	63	—
900	30		1.6	0.39	673	0.278	605	0.25	1.1								
1200	40	50	1.2	0.37	673	0.221	668	0.22	1.0	—	56	71	63	56	71	63	—
1500	50		0.9	0.34	660	0.188	630	0.18	1.0								
1950	65	50	0.7	0.31	620	0.149	542	0.13	1.1	—	56	71	63	56	71	63	—
2500	50		0.6	0.30	634	0.124	564	0.11	1.1								
3250	65	80	0.4	0.28	634	0.104	549	0.09	1.15	—	56	71	63	56	71	63	—
4000	80		0.4	0.27	634	0.088	651	0.09	0.97								
5000	100	100	0.3	0.25	634	0.074	767	0.09	0.83	—	56	71	63	56	71	63	—
10000			0.1	0.19	401	0.031	1173*	0.09	0.34*								

27.0

50/90	$n_1 = 1400$					XXA		KXC - XXC - XXF - KKC									
	in	50	90	n_2	Rd	T_{2M}	P	T_2	P_1	FS'	Input - IEC						
		i_1	i_2								KC - XC		XF			B5/B14	B5
150	10	15	9.3	0.59	655	1.089	541	0.90	1.2	80	71	80	71	63	80	71	—
200		20	7.0	0.57	709	0.910	584	0.75	1.2								
300	15	30	4.7	0.49	673	0.675	548	0.55	1.2	—	63	80	71	63	80	71	—
450			3.1	0.46	673	0.473	527	0.37	1.3								
600	20	30	2.3	0.45	673	0.363	463	0.25	1.5	—	63	80	71	63	80	71	—
900	30		1.6	0.41	673	0.266	632	0.25	1.1								
1200	40	50	1.2	0.39	673	0.212	573	0.18	1.2	—	63	80	71	63	80	71	—
1500	50		0.9	0.36	673	0.183	662	0.18	1.0								
1950	65	50	0.7	0.34	673	0.150	582	0.13	1.2	—	63	80	71	63	80	71	—
2500	50		0.6	0.32	634	0.118	701	0.13	0.9								
3250	65	80	0.4	0.30	634	0.097	853*	0.13	0.74*	—	63	80	71	63	80	71	—
4000	80		0.4	0.28	634	0.084	977*	0.13	0.65*								
5000	100	100	0.3	0.26	634	0.071	1153*	0.13	0.55*	—	63	80	71	63	80	71	—
10000			0.1	0.20	401	0.030	1764*	0.13	0.23*								

29.0

* **ATTENZIONE:** la coppia massima utilizzabile [T_{2M}] deve essere calcolata utilizzando il fattore di servizio: $T_{2M} = T_2 \times FS'$

* **WARNING:** Maximum allowable torque [T_{2M}] must be calculated using the following service factor : $T_{2M} = T_2 \times FS'$

* **ACHTUNG:** das max. anwendbare Drehmoment [T_{2M}] muss mit folgendem Betriebsfaktor berechnet werden: $T_{2M} = T_2 \times FS'$

5.5 Dati tecnici

5.5 Technical data

5.5 Technische Daten

50/110	$n_1 = 1400$					XXA		KXC - XXC - XXF - KKC										
	in	50		n_2 [min ⁻¹]	Rd	T_{2M} [Nm]	P [kW]	T_2 [Nm]	P_1 [kW]	FS'	Input - IEC							
		i_1	i_2								KC - XC		XF					
											B5/B14		B5		B14			
150	10	15	9.3	0.60	785	1.269	557	0.9	1.4	80	71	—	80	71	63	80	71	—
200			7.0	0.58	1000	1.265	712	0.9	1.4									
300	30	20	4.7	0.50	1165	1.130	928	0.9	1.3									
450			3.1	0.48	1165	0.791	1105	0.75	1.1									
600			2.3	0.47	1165	0.608	1054	0.55	1.1									
900			1.6	0.43	1165	0.445	968	0.37	1.2									
1200			1.2	0.40	1165	0.354	823	0.25	1.4									
1500			0.9	0.37	1165	0.306	952	0.25	1.2									
1950			0.7	0.35	1150	0.248	1018	0.22	1.1									
2500			0.6	0.33	1119	0.200	1009	0.18	1.1									
3250	50	80	0.4	0.31	1119	0.164	886	0.13	1.26	—	63	—	80	71	63	80	71	—
4000			0.4	0.29	1119	0.143	1015	0.13	1.10									
5000			0.3	0.27	1119	0.121	1198	0.13	0.93									
10000	100	100	0.1	0.21	727	0.051	1854*	0.13	0.39*									



49.0

63/110	$n_1 = 1400$					XXA		KXC - XXC - XXF - KKC										
	in	63		n_2 [min ⁻¹]	Rd	T_{2M} [Nm]	P [kW]	T_2 [Nm]	P_1 [kW]	FS'	Input - IEC							
		i_1	i_2								KC - XC		XF					
											B5/B14		B5		B14			
150	10	15	9.3	0.61	1123	1.793	939	1.5	1.2	90	80	—	90	80	71	90	80	—
200			7.0	0.59	1229	1.536	1200	1.5	1.0									
300	30	20	4.7	0.51	1165	1.116	1148	1.1	1.0									
450			3.1	0.49	1165	0.781	1119	0.75	1.0									
600			2.3	0.48	1165	0.593	1081	0.55	1.1									
900			1.6	0.44	1165	0.433	995	0.37	1.2									
1200			1.2	0.40	1165	0.370	1165	0.37	1.0									
1500			0.9	0.39	1165	0.292	998	0.25	1.2									
1950			0.7	0.37	1165	0.239	1217	0.25	1.0									
2500			0.6	0.34	1119	0.190	1469	0.25	0.8									
3250	50	80	0.4	0.32	1119	0.156	1792*	0.25	0.62*	—	71	—	90	80	71	90	80	—
4000			0.4	0.31	1119	0.133	2097*	0.25	0.53*									
5000			0.3	0.28	1119	0.117	2395*	0.25	0.47*									
10000	100	100	0.1	0.22	727	0.049	3706*	0.25	0.20*									



52.0

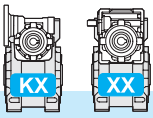
63/130	$n_1 = 1400$					XXA		KXC - XXC - XXF - KKC										
	in	63		n_2 [min ⁻¹]	Rd	T_{2M} [Nm]	P [kW]	T_2 [Nm]	P_1 [kW]	FS'	Input - IEC							
		i_1	i_2								KC - XC		XF					
											B5/B14		B5		B14			
150	10	15	9.3	0.64	1438	2.2	1176	1.8	1.2	90	80	—	90	80	71	90	80	—
200			7	0.61	1831	2.2	1498	1.8	1.2									
300	30	20	4.7	0.53	1890	1.7	1627	1.5	1.2									
450			3.1	0.49	1890	1.3	1655	1.1	1.1									
600			2.3	0.47	1890	0.98	1731	0.9	1.1									
900			1.6	0.42	1890	0.73	1934	0.75	1									
1200			1.2	0.39	1890	0.59	1756	0.55	1.1									
1500			0.9	0.36	1890	0.51	2026	0.55	0.9									
1950			0.7	0.34	1890	0.42	1673	0.37	1.1									
2500			0.6	0.33	1920	0.34	2082	0.37	0.9									
3250	50	80	0.4	0.3	1920	0.29	1663	0.25	1.2	—	71	—	90	80	71	90	80	—
4000			0.4	0.29	1920	0.24	1978	0.25	1.1									
5000			0.3	0.26	1920	0.22	2217	0.25	0.9									
10000	100	100	0.1	0.2	1276	0.09	3411	0.25	0.4									



* **ATTENZIONE:** la coppia massima utilizzabile [T_{2M}] deve essere calcolata utilizzando il fattore di servizio: $T_{2M} = T_2 \times FS'$

* **WARNING:** Maximum allowable torque [T_{2M}] must be calculated using the following service factor: $T_{2M} = T_2 \times FS'$

* **ACHTUNG:** das max. anwendbare Drehmoment [T_{2M}] muss mit folgendem Betriebsfaktor berechnet werden: $T_{2M} = T_2 \times FS'$

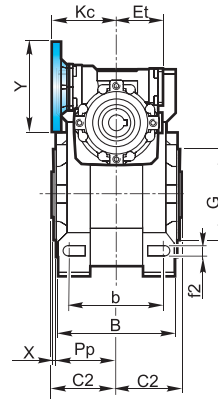
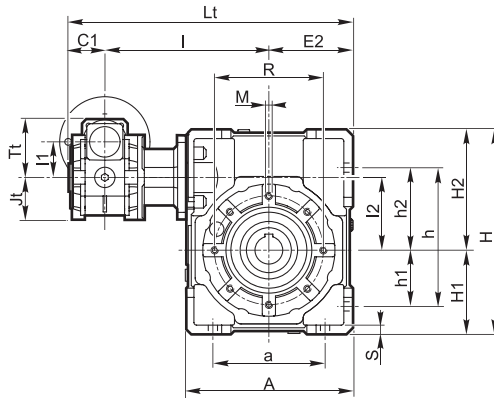


5.6 Dimensioni

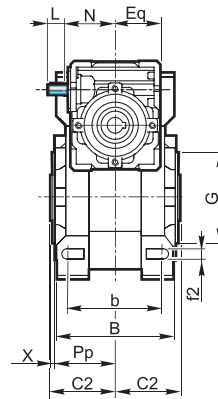
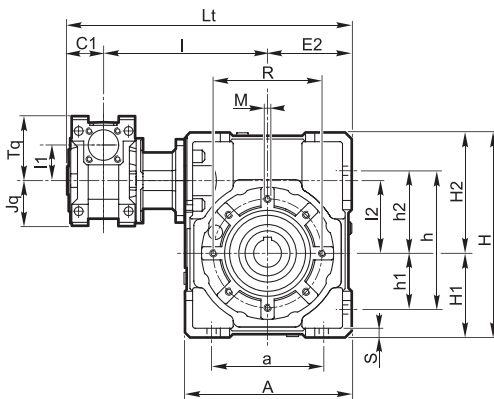
5.6 Dimensions

5.6 Abmessungen

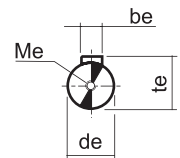
KXC



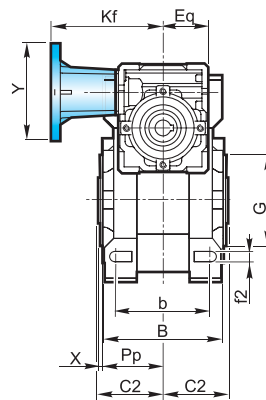
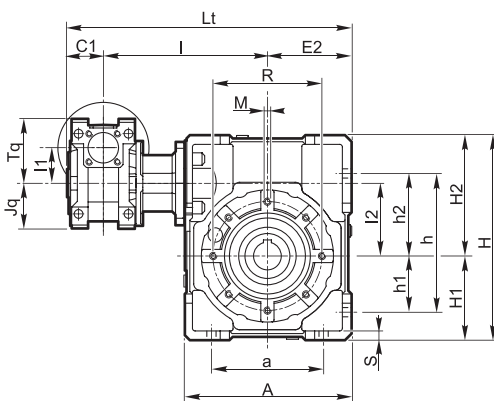
XXA



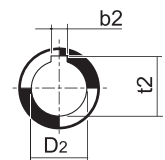
Albero entrata
Input shaft
Antriebswelle



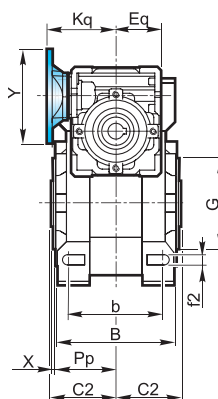
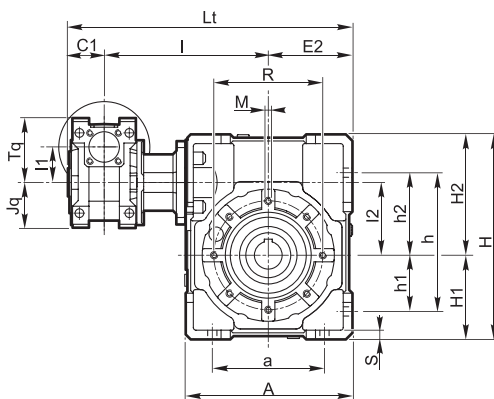
XXF



Albero uscita cavo
Output hollow shaft
Abtriebshohlwelle



XXC

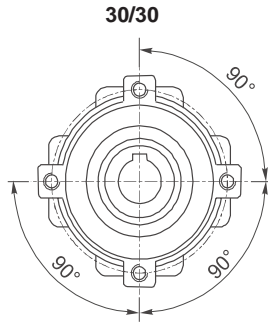


5.6 Dimensioni

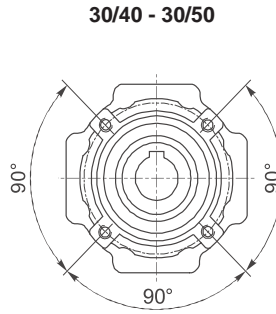
5.6 Dimensions

5.6 Abmessungen

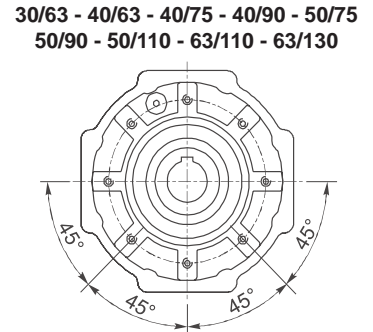
Flangia pendolare / Side cover for shaft mounting / Aufsteckflansch



4 Fori / Holes / Bohrungen



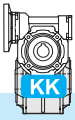
4 Fori / Holes / Bohrungen



8 Fori / Holes / Bohrungen

KXC - XXC - XXF -XXA																								
	a	A	b	be	b ₂	B	C ₁	C ₂	de	D ₂ H7	Et	Eq	E ₂	f ₂	G h8	h	h ₁	h ₂	H	H ₁	H ₂			
30/30	54	80	44	3	5	—	56	31.5	31.5	14	—	41	40	40	6.5	55	71	27	44	97	40	57		
30/40	70	105	60		6	6	71		39	9	18			19	24	50	6.5	60	90	35	55	125	50	75
30/50	80	125	70		8	8	85		46	25	—			60		8.5	70	104	40	64	150	60	90	
30/63	100	147	85	4	8	—	103	39	11	51	50	72	9	80	130	50	80	182	72	110				
40/63																								
40/75	120	176	90	5	8	8	112	46	60	14	28	30	86	11	95	153	60	93	219.5	86	133.5			
50/75																								
40/90	140	203	100	4	10	—	130	39	70	51	50	103	13	110	172	70	102	248.5	103	145.5				
50/90																								
50/110	170	252.5	115	5	12	—	143	46	14	60	60	127.5	14	130	210	85	125	310.5	127.5	183				
63/110																								
63/130	200	292.5	120	6	14	14	155	56	85	19	45	48	—	72	147.5	15	180	240	100	140	355	147.5	207.5	

KXC - XXC - XXF -XXA																					
	l	l ₁	l ₂	Jt	Jq	K _c	K _q	L	L _t	M	Me	N	P _p	R	S	Tt	Tq	t _e	t ₂	X	
30/30	100	31.5	31.5	37.5	40	57	57	15	171.5	M6x8	M4x10	44.5	29	65	5.5	52.5	57	10.2	16.3	—	1.5
30/40	122		40						203.5	M6x10			36.5	75	6				20.8	21.8	1.5
30/50	132		50						223.5	M8x10			43.5	85	7				27.3	1.5	
30/63	145	40	63	43.5	50	75	75	20	248.5	M8x14	M4x12	57.5	53	95	8	68.5	75	12.5	28.3	—	2
40/63	150		261						M8x14												
40/75	174.5	75	53.5	60	82	82	25	322	M8x14	M5x13	67.5	57	115	10	82.5	90	16	31.3	33.3	2	
50/75	190	50	43.5	50	75	75	20	326.5	M10x18	M4x12	57.5	67	130	12	68.5	75	12.2	38.3	—	2	
40/90	184.5	40	90	53.5	60	82	82	25	349	M5x13	67.5	74	165	14	82.5	90	16	45.3	—	2.5	
50/90	200	50	399.5	M10x18																	
50/110	226	110	64	72	97	95	30	419.5	M10x18	M8x20	77.5	81	215	15	100.5	110	21.5	48.8	51.8	3	
63/110	236	63	—	72	97	95	30	459.5	M12x20	M8x20	77.5	—	110	21.5	—	110	21.5	48.8	51.8	3	
63/130	256	63	130	—	72	97	95	30	459.5	M12x20	M8x20	77.5	—	110	21.5	—	110	21.5	48.8	51.8	3

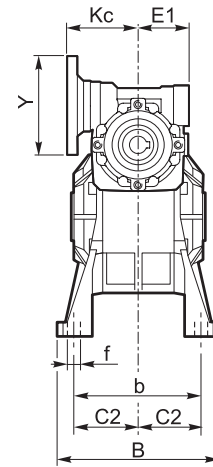
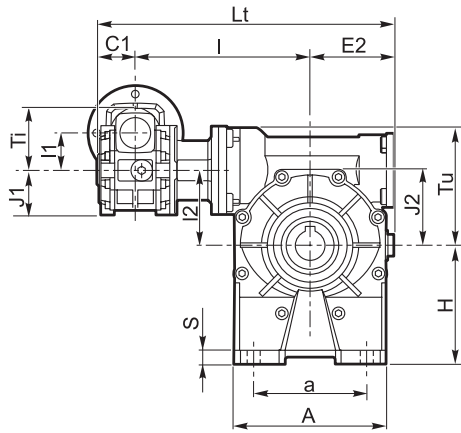


5.6 Dimensioni

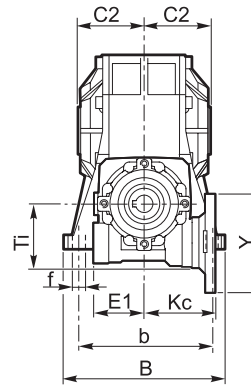
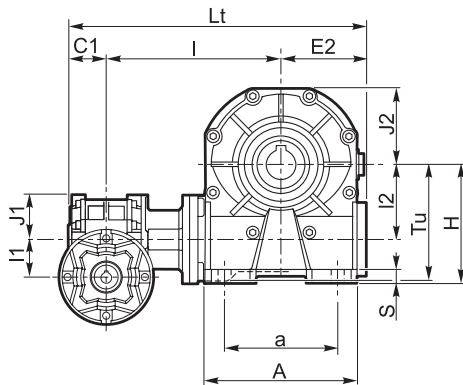
5.6 Dimensions

5.6 Abmessungen

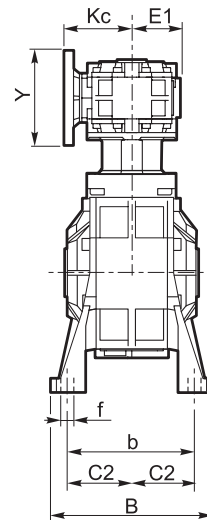
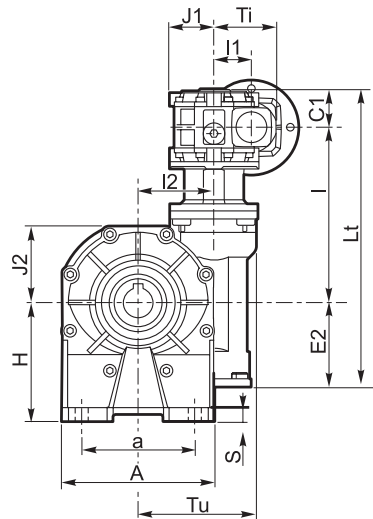
KKC_A



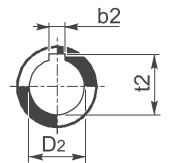
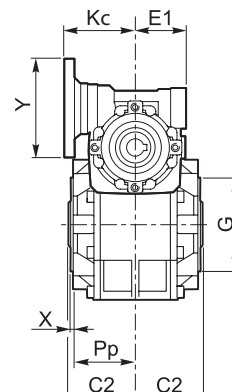
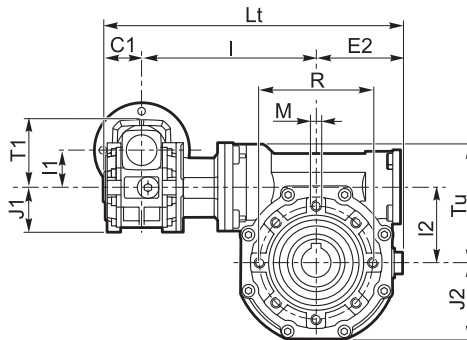
KKC_B



KKC_V



KKC_P



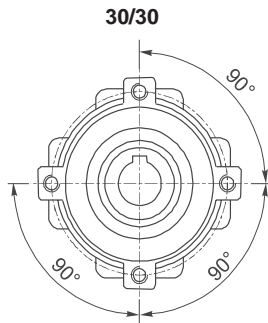
Albero uscita cavo
Output hollow shaft
Abtriebs-Hohlwelle

5.6 Dimensioni

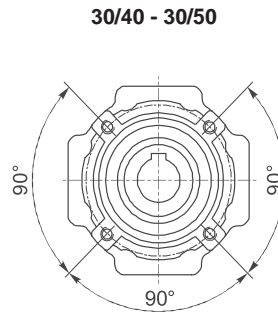
5.6 Dimensions

5.6 Abmessungen

Flangia pendolare / Side cover for shaft mounting / Aufsteckflansch

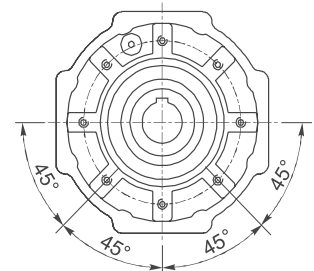


4 Fori / Holes / Bohrungen



4 Fori / Holes / Bohrungen

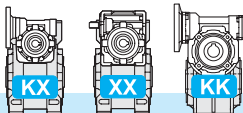
30/63 - 40/63 - 40/75 - 40/90 - 50/75
50/90 - 50/110 - 63/110 - 60/130



8 Fori / Holes / Bohrungen

	KKC																						
	A		a		B		b		f		H		S		b ₂	C ₁	C ₂	D2 H7	E ₁	E ₂	G h8		
	1	2	1	2	1	2	1	2	1	2	1	2	1	2									
30/30	67		40-52		78		66		6.5		52	55	5	8	5	—	31.5	14	—	41	55		
30/40	86.5		70	52	98		84	81	7	8.5	71	72	6	6	6	6	31.5	39	18	19	41	51	60
30/50	106		63-85		119		99		9		85	82	8	8	8	8	31.5	46	25	24	41	60	70
30/63	127.5		95		136		111		11		100		8	—	—	—	31.5	56	25	—	—	71	80
40/63																	39				51		
40/75	155.5		120		140		115		11		115		8	—	—	—	39	60	28	30	60	85	95
50/75																	46	60	28	30	60	85	95
40/90	190		140		168		140	146	13	11	135	142	10	—	—	—	39	70	35	—	51	103	110
50/90																	46	70	35	—	60	103	110
50/110	250		200		210		162	181	13	13	171	170	12	—	—	—	46	77.5	42	—	60	127.5	130
63/110																	56	77.5	42	—	71	127.5	130
63/130	295		235	220	229		190	191	15		200	195	14	14	14	14	56	85	45	48	71	147.5	180

	KKC															
	I	I ₁	I ₂	J ₁	J ₂	K _c	L _t	M	P _p	R	T _i	T _u	t ₂	X		
30/30	100		31.5		37.5		171.5	M6x8	29	65		T _u	16.3	—	1.5	
30/40	122		40		43.5		203.5	M6x10	36.5	75		52.5	20.8	21.8	1.5	
30/50	132		50		53.5		223.5	M8x10	43.5	85		68.5	27.3	1.5		
30/63	145		63		64		248.5	M8x14	53	95		82.5	28.3	—	2	
40/63	150						261									
40/75	176.5	40		43.5		75	301.5	M8x14	57	115		68.5	100.5	—	2	
40/75	192	50	75	53.5	78	82	324	M8x14	57	115		82.5	116.5	31.3	—	2
40/90	186.5	40		43.5		75	328.5					68.5	116.5	—	2	
50/90	202		90		100		351	M10x18	67	130		82.5	131.5	38.3	—	2
50/110	226	50		53.5		82	399.5					82.5	131.5	—	2	
63/110	236	63	110	64	122	97	419.5	M10x18	74	165		100.5	161.5	45.3	—	2.5
63/130	256	63	130	64	131	97	459.5	M12x20	81	215		100.5	181	48.8	51.8	3

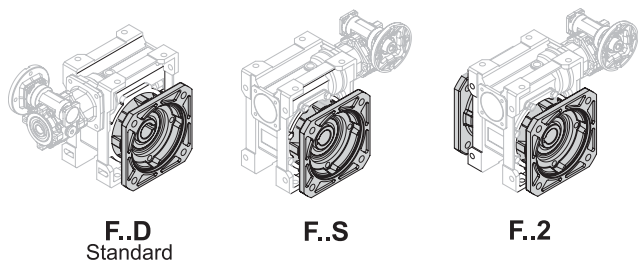
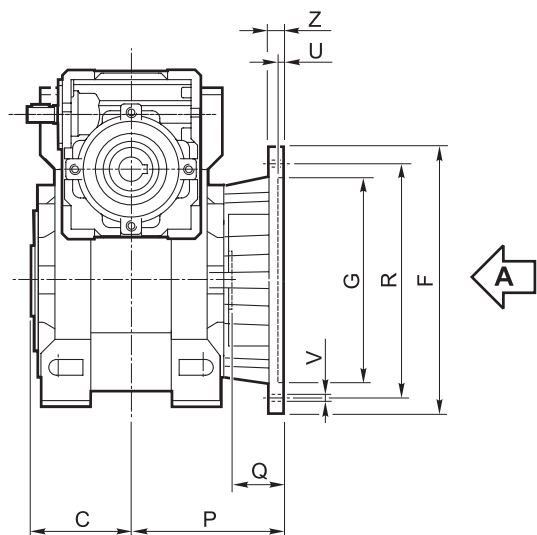


5.6 Dimensioni

5.6 Dimensions

5.6 Abmessungen

Flangia uscita / Output flange / Abtriebsflansch



Vista da A / View from A / Ansicht von A

30/30 F1 — —		63/130 F1 F2 —	
30/30		63/130	
30/40 F1 F2 —	30/50 F1 — —		30/40 — — F3
30/40 - 30/50			
30/63 40/63 F1 F2 —	40/75 50/75 F1 — —		30/63 40/63 50/75 — — F2 F3 —
30/63 - 40/63 - 40/75 - 50/75			
40/90 50/90 — — —	50/110 63/110 F1 — —		40/90 50/90 63/110 F1 — F2 F2 F3 —
40/90 - 50/90 - 50/110 - 63/110			

KX XX KK	Tipo Type Typ	C	F		G H8	P	Q	R	U	V			Z	
														∅
30/30	F1	31.5		66	50	54.5	23	68	4	n° 4		6.5	6	
	F2													
	F3													
30/40	F1	39		85	60	67	28	75-90	4	n° 4		9	8	
	F2			85	60	97	58	75-90	4	n° 4		9	8	
	F3		140		95	80	41	115	5		n° 7	9	10	
30/50	F1	46		94	70	90	44	85-100	5	n° 4		11	10	
	F2			160		110	89	43	130	5		n° 7	11	11
	F3													
30/63 40/63	F1	56		142	115	82	26	150	5	n° 4		11	11	
	F2			142	115	112	56	150	5	n° 4		11	11	
	F3		160		110	80.5	24.5	130	5	n° 4		11	12	
40/75 50/75	F1	60		160	130	111	51	165	5	n° 4		13	12	
	F2			160	110	90	30	130	6	n° 4		11	13	
	F3													
40/90 50/90	F1	70		200	152	111	41	175	5	n° 4		13	12	
	F2			200	152	151	81	175	5	n° 4		13	13	
	F3			200	130	110	40	165	6	n° 4		11	11	
50/110 63/110	F1	77.5		260	170	131	53.5	230	6		n° 8	13	15	
	F2			250	180	150	72.5	215	5	n° 4		15	16	
	F3													
63/130	F1	85		320	180	140	55	255	7		n° 8 *	16	16	
	F2			300	230			265						
	F3													

* Foratura ruotata di 22.5°

* Drilling turned of 22.5°

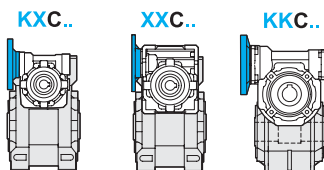
* Durchbohrung 22.5° versetzt

5.6 Dimensioni

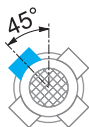
5.6 Dimensions

5.6 Abmessungen

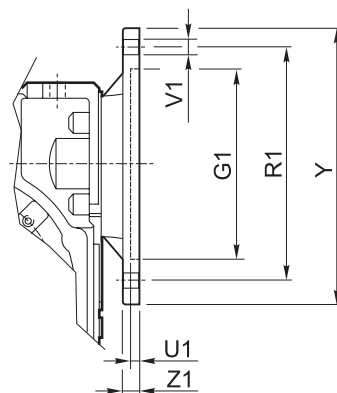
Flangia entrata / Input flange / Antriebsflansch



PM = 1



PM = 2



KXC XXC KKC	IEC	G ₁ H7	PM		R ₁	U ₁	V ₁			Y	Z ₁	Diametro fori PAM / Holes diameter IEC IEC Durchmesser																								
			1	2			∅						150	200	450	600	900	1200	1500	1950	4000	5000														
													300					2500	3250		10000															
30/30 30/40 30/50 30/63	56 B5	80	•	•	100	4	7			8	120	8	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9		
	56 B14	50	•	•	65	3.5	6			8	80	8	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9		
	63 B5	95	•	•	115	4	9			8	140	8	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	
	63 B14	60	•	•	75	4	6			8	90	8	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	
40/63 40/75 40/90	56 B5	80	•	•	100	4	7			8	120	9	/	/	/	/	/	/	/	/	/	/	9*	9	9	9	9	9	9	9	9	9	9	9		
	56 B14	50	•	•	65	3.5	6		4	8	80	8	/	/	/	/	/	/	/	/	/	/	9*	9	9	9	9	9	9	9	9	9	9	9		
	63 B5	95	•	•	115	4	9			8	140	9	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	
	63 B14	60	•	•	75	3.5	6		4	8	90	8	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	
	71 B5	110	•	•	130	4.5	9			8	160	10	14	14	14	14	14	14	14	14	14	14	/	/	/	/	/	/	/	/	/	/	/	/	/	
71 B14	70	•	•	85	3.5	7			8	105	8	14	14	14	14	14	14	14	14	14	14	/	/	/	/	/	/	/	/	/	/	/	/	/		
50/75 50/90 50/110	63 B5	95	•	•	115	4	9			8	140	9	/	/	/	/	/	/	/	/	/	11*	11*	11	11	11	11	11	11	11	11	11	11	11	11	
	63 B14	60	•	•	75	3.5	6		4	8	90	8	/	/	/	/	/	/	/	/	/	11*	11*	11	11	11	11	11	11	11	11	11	11	11	11	
	71 B5	110	•	•	130	4.5	9			8	160	10	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
	71 B14	70	•	•	85	3.5	7		4	8	105	8	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
	80 B5	130	•	•	165	4.5	11			8	200	10	19	19	19	19	19	19	19	19	19	19	/	/	/	/	/	/	/	/	/	/	/	/	/	/
80 B14	80	•	•	100	4	7			8	120	10	19	19	19	19	19	19	19	19	19	19	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
63/110 63/130	71 B5	110	•	•	130	4.5	9			8	160	10	/	/	/	/	/	/	/	/	/	14*	14*	14	14	14	14	14	14	14	14	14	14	14	14	
	71 B14	70	•	•	85	3.5	7		4	8	105	10	/	/	/	/	/	/	/	/	/	14*	14*	14	14	14	14	14	14	14	14	14	14	14	14	
	80 B5	130	•	•	165	4.5	11			8	200	10	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
	80 B14	80	•	•	100	4	7		4	8	120	10	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
	90 B5	130	•	•	165	4.5	11			8	200	10	24	24	24	24	24	24	24	24	24	24	/	/	/	/	/	/	/	/	/	/	/	/	/	/
90 B14	95	•	•	115	4	8.5			8	140	10	24	24	24	24	24	24	24	24	24	24	/	/	/	/	/	/	/	/	/	/	/	/	/	/	

* Speciale

* Special

*Sonderausführung

N.B.: E' possibile realizzare anche tutte le composizioni ibride ottenibili dalle flange esistenti.

N.B.: it is possible to create hybrid combinations with the existing flanges.

ANMERKUNG: Mischkombinationen mit der verfügbaren Flanschen sind möglich.



5.6 Dimensioni

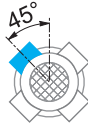
5.6 Dimensions

5.6 Abmessungen

Flangia entrata / Input flange / Antriebsflansch

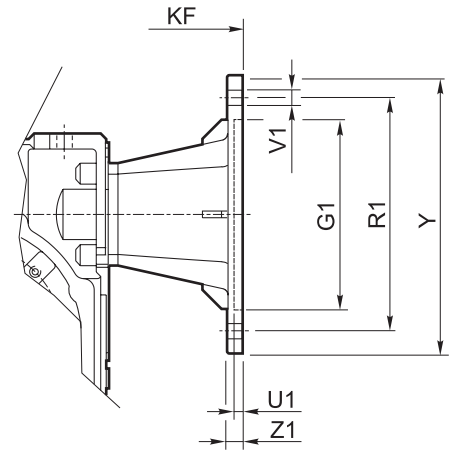
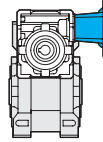


PM = 1



PM = 2

XXF..



XXF	IEC	PM		G ₁ H7	K _F	R ₁	U ₁	Ø	V ₁			Y	Z ₁
		1	2										
30/30 30/40 30/50 30/63	56 B5	•	•	80	82.5	100	3.5	7		8		120	8
	56 B14		•	50	82.5	65	3.5	6			4	80	8
	63 B5	•	•	95	85.5	115	4	9		8		140	10
	63 B14	•	•	60	85.5	75	3.5	6		8		90	8
40/63 40/75 40/90	56 B5	•	•	80	101.5	100	3.5	7		8		120	8
	63 B5	•	•	95	104.5	115	4	9		8		140	10
	63 B14	•	•	60	104.5	75	3.5	6		8		90	8
	71 B5	•	•	110	111.5	130	4.5	9		8		160	10
	71 B14	•	•	70	111.5	85	4	7		8		105	10
50/75 50/90 50/110	63 B5	•	•	95	119.5	115	4	9		8		140	10
	71 B5	•	•	110	126.5	130	4.5	9		8		160	10
	71 B14		•	70	126.5	85	3.5	7			4	105	10
	80 B5	•	•	130	136.5	165	4.5	11		8		200	10
	80 B14	•	•	80	136.5	100	4	7		8		120	10
63/110 63/130	71 B5	•	•	110	141.5	130	4.5	9		8		160	10
	80/90 B5	•	•	130	161.5	165	4.5	11		8		200	10
	80 B14	•	•	80	151.5	100	4	7		8		120	10
	90 B14	•	•	95	161.5	115	4	9		8		140	10

5.7 Limitatore di coppia cavo passante

5.7 Torque limiter with through hollow shaft

5.7 Drehmomentbegrenzer mit durchgehender Hohlwelle

XX-KX KK	N°. giri della ghiera di regolazione / N°. revolutions of ring nut / Nr. Umdrehungen der Mutter												
	1	1 1/4	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	1/2	3 3/4	4
30/30	22	27	33	38	43								
30/40	55	64	73	87									
30/50	75	97	120	157									
30/63		127	155	180	205	232	260	282					
40/63													
40/75			235	265	295	327	360	407	455				
50/75													
40/90			320	349	400	440	475	517	550	595	630	650	670
50/90													
50/110													
63/110	720	815	910	1000	1100	1250							
63/130													

I valori riportati in tabella si riferiscono ai limitatori nelle versioni LS e LD (riduttore uscita).

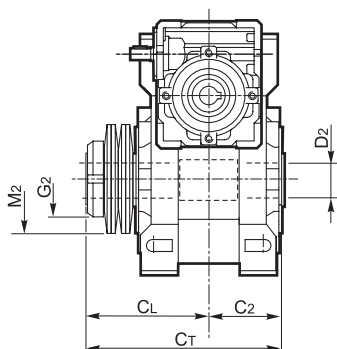
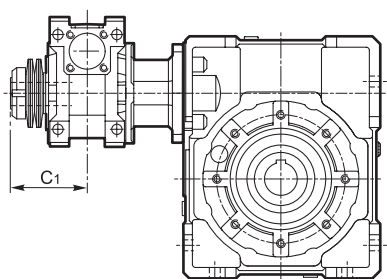
The values listed in the table refer to torque limiters in the LS and LD versions (output gearbox).

Die in der Tabelle angegebenen Werte beziehen sich auf die LS und LD Versionen (Getriebe am Abtrieb).

5.7 Limitatore di coppia cavo passante

5.7 Torque limiter with through hollow shaft

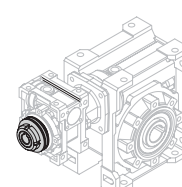
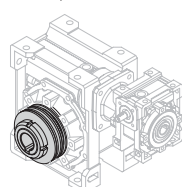
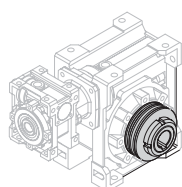
5.7 Drehmomentbegrenzer mit durchgehender Hohlwelle



Disposizione delle molle
Washers' arrangement
Lage der Feder



IN SERIE (min. coppia, max. sensibilità)
SERIES (min. torque, max sensitivity)
SERIE (min. Moment, max. Empfindlichkeit)



LD

LS

L1*

XX - KX LD - LS	C ₂	C _L	C _t	D ₂ H7	M ₂	G ₂
30/30	31.5	55.5	87	14	M25x1.5	50x25.4x1.5
30/40	39	65	104	18 (19)	M30x1.5	56x30.5x2
30/50	46	76	122	25 (24)	M40x1.5	63x40.5x2.5
30/63 40/63	56	91	147	25	M40x1.5	71x40.5x2.5
40/75 50/75	60	100	160	28 (30)	M50x1.5	90x50.5x3.5
40/90 50/90	70	109	179	35 (32)	M50x1.5	100x51x3.5
50/110 63/110	77.5	127.5	205	42	M60x2	125x61x5
63/130						

XX - KX L1	C ₁
30/30 30/40 30/50 30/63	55.5
40/63 40/75 40/90	65
50/75 50/90	76
63/110	91
63/130	91

* Limitatore L1 nei combinati

* L1 torque limiter in combined gearboxes

* L1 Rutschkupplung in kombinierten getrieben

La versione con limitatore sul riduttore in entrata (L1), anche se composta da componenti standard, deve considerarsi una esecuzione speciale dal punto di vista dell'utilizzo.

Infatti il valore di taratura del limitatore L1, anche se al valore minimo, genera una coppia sul secondo riduttore molto elevata, spesso al di sopra del limite massimo ammesso.

Anche la precisione di taratura, di conseguenza, è molto bassa: infatti ogni variazione della coppia sul primo riduttore va moltiplicata per il rapporto del riduttore uscita.

La scelta del limitatore in entrata (L1) non può assolutamente essere motivata dal prezzo inferiore rispetto a quello in uscita.

L'utilità di questa versione potrebbe invece nascere dalla necessità di avere una limitazione nella trasmissione della potenza del motore ma, nel contempo, di avere sul riduttore in uscita una irreversibilità senza il rischio di slittamento.

Per queste ragioni il limitatore in entrata (L1) viene fornito in posizione libera, cioè con taratura a cura del cliente secondo le proprie esigenze.

The version with torque limiter on the gearbox at input (L1), although made of standard component, is to be regarded as a special execution from the utilization point of view.

Actually, the L1 limiter calibration value, even though set to its minimum, generates on the second gearbox a very high torque which often exceeds the maximum admissible value.

As a consequence, calibration is not precise: any variation of the torque on the first gearbox is to be multiplied by the ratio of the gearbox at output.

The choice of the limiter at input (L1) cannot be based on the fact that the price of the limiter at input is lower than that at output.

Nevertheless, this is a good solution if the application requires at the same time both the limitation of the power transmitted by the motor and irreversibility on the second gearbox in order to prevent sliding. For the above mentioned reasons, the torque limiter at input (L1) is supplied in free position, i.e. the customer will carry out the limiter calibration according to the customer's requirements.

Die Ausführung mit Rutschkupplung an dem Getriebe am Antrieb (L1), obwohl aus Standard Bestandteile, ist eine Sonderausführung mit Bezug auf die Anwendung.

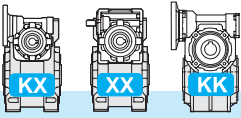
Der Eichungswert der L1 Rutschkupplung, auch der mindeste, erzeugt an das zweite Getriebe ein sehr hohes Drehmoment, das oft den max. zulässigen Wert überschreitet.

Daraus folgt, dass die Eichung nicht präzise ist: jede Änderung des Drehmoments an dem ersten Getriebe soll mit dem Verhältnis des zweiten Getriebes multipliziert werden.

Der Grund für die Wahl der Rutschkupplung am Antrieb (L1) darf nicht der niedriger Preis sein.

Diese Ausführung ist jedoch bemerkenswert, falls die Applikation sowohl die Begrenzung der Motorleistung als auch die Irreversibilität des zweiten Getriebes verlangt.

Folglich wird die Rutschkupplung am Antrieb (L1) frei gestellt, d. h. der Kunde soll die Rutschkupplung nach seiner Bedürfnisse eichen.

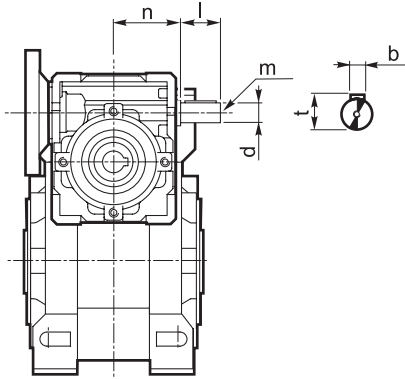


5.8 Esecuzione con vite bisporgente

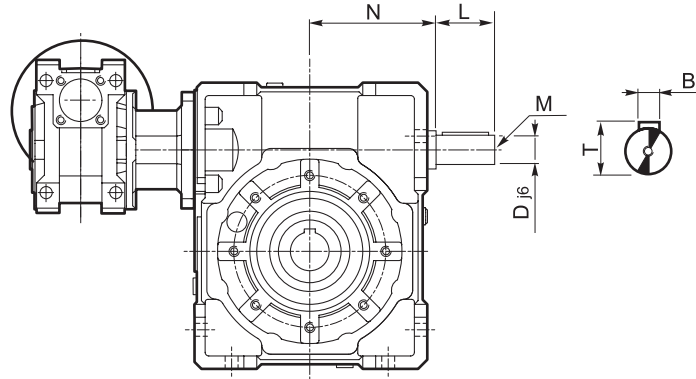
5.8 Double extended worm shaft design

5.8 Versionen mit Doppelseitig Herausragender Schneckenwelle

SeA1



SeA2



L'entrata supplementare del riduttore in uscita (SeA2) non può essere utilizzata come comando in quanto il relativo movimento risulta impedito dalla irreversibilità del primo riduttore.

Utilizzato come asse condotto, avrà velocità corrispondente a quella di ingresso ridotta del rapporto del primo riduttore.

The second input shaft of the output gearbox (SeA2) can not be utilized as a drive because its motion will be stopped by the reversibility of the first gearbox.

If utilized as a drive shaft its speed will be equal to the input speed decreased by the ratio of the first gearbox.

Die verlängerte Schneckenwelle des zweiten Getriebes (SeA2) kann nicht als Antrieb verwendet werden, da die Selbsthemmung des ersten Getriebes entgegengewirkt.

Wird sie als Abtriebswelle verwendet, besitzt sie eine um die Untersetzung des ersten Getriebes entsprechend reduzierte Drehzahl und Drehmoment.

KXC - XXC XXF - XXA KKC	SeA1							SeA2						
	b	d j6	l	m	n		t	B	D j6	L	M	N		T
					KX	XX						KX	XX	
30/30	3	9	15	M4x10	42.5	42.5	10.2	3	9	15	M4x10	42.5	42.5	10.2
30/40	3	9	15	M4x10	42.5	42.5	10.2	4	11	20	M4x12	52.5	52.5	12.5
30/50	3	9	15	M4x10	42.5	42.5	10.2	5	14	25	M5x13	62.5	62.5	16
30/63	3	9	15	M4x10	42.5	42.5	10.2	6	19	30	M8x20	72.5	74.5	21.5
40/63	4	11	20	M4x12	52.5	52.5	12.5	6	19	30	M8x20	72.5	74.5	21.5
40/75	4	11	20	M4x12	52.5	52.5	12.5	8	24	40	M8x20	93	91	27
50/75	5	14	25	M5x13	62.5	62.5	16	8	24	40	M8x20	93	91	27
40/90	4	11	20	M4x12	52.5	52.5	12.5	8	24	40	M8x20	108	108	27
50/90	5	14	25	M5x13	62.5	62.5	16	8	24	40	M8x20	108	108	27
50/110	5	14	25	M5x13	62.5	62.5	16	8	28	50	M8x20	132	132	31
63/110	6	19	30	M8x20	72.5	74.5	21.5	8	28	50	M8x20	132	132	31
63/130	6	19	30	M8x20	72.5	74.5	21.5	10	38	70	M10x25	152	152	41

5.9 Accessori

5.9 Accessories

5.9 Accessories

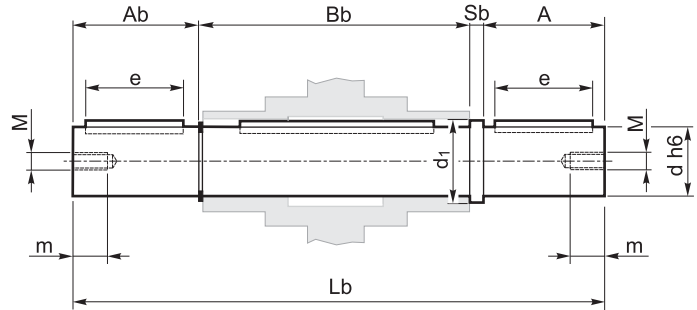
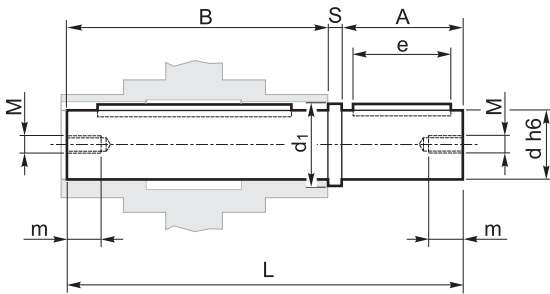
Albero lento

Albero lento semplice
Single output shaft
Standard Abtriebswelle

Output shaft

Abtriebswelle

Albero lento doppio
Double output shaft
Doppelte Abtriebswelle

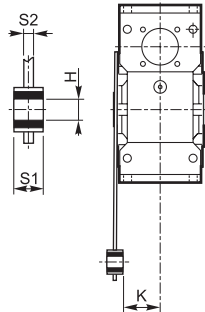
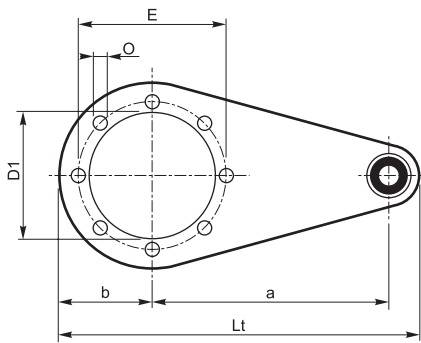


KK-KX-XX	A	A _b	B	B _b	d _{h6}	d ₁	e	L	L _b	M	m	S	S _b
30/30	30	29	62	64	14	18.5	20	94.5	126	M6	16	2.5	2.5
30/40	40	39	77	79	18	23.5	30	120	161	M6	16	3	3
30/50	50	49	90	93	25	31.5	40	143.5	195	M8	22	3.5	3.5
30/63 40/63	50	49	111	113	25	31.5	40	165	216	M8	22	4	4
40/75 50/75	60	59	119	121	28	34.5	50	183	244	M8	22	4	4
40/90 50/90	80	78.5	139	141.5	35	41.5	60	224	305	M10	28	5	5
50/110 63/110	80	77.5	154.5	157	42	49.5	60	242.5	322.5	M10	28	8	8
63/130	80	78	168	172	45	54.5	70	253	335	M16	36	5	5

Braccio di reazione

Torque arm

Drehmomentstütze



KK KX XX	a	b	D ₁	E	H	K	L _t	O	S ₁	S ₂
30/30	85	37.5	55	65	8	24	141.5	7	14	4
30/40	100	45	60	75	10	31.5	167	7	14	4
30/50	100	50	70	85	10	39	172	9	14	5
30/63 40/63	150	55	80	95	10	49	227	9	14	6
40/75 50/75	200	70	95	115	20	47.5	302	9	25	6
40/90 50/90	200	80	110	130	20	57.5	312	11	25	6
50/110 63/110	250	100	130	165	25	62	390	11	30	6
63/130	250	125	180	215	25	69	415	13	30	6

Kit di protezione: solo su versione P

Protection Kit: only for P version

Schutzvorrichtung: nur für Version P

Albero cavo / Hollow shaft / Hohlwelle

Limitatore di coppia / Torque limiter / Drehmomentbegrenzer

KK KX XX	A		B		C	
	IN	OUT	IN	OUT	IN	OUT
30/30	12	12	13	13	39	39
30/40	12	14	13	15.5	39	44
30/50	12	15	13	16.5	39	54
30/63	12	17	13	19	39	60
40/63	14	17	15.5	19	44	60
40/75	14	18	15.5	20	44	70
50/75	15	18	16.5	20	54	70
40/90	14	21.5	15.5	24	44	80
50/90	15	21.5	16.5	24	54	80
50/110	15	22	16.5	25	54	96
63/110	17	22	19	25	60	96
63/130	17	22	19	25	60	96

KK KX XX	A		B		C	
	IN	OUT	IN	OUT	IN	OUT
30/30	36	36	37	37	36	36
30/40	36	40	37	41.5	36	44
30/50	36	47	37	48.5	36	53
30/63	36	52	37	54	36	55
40/63	40	52	41.5	54	44	55
40/75	40	58	41.5	60	44	68
50/75	47	58	48.5	60	53	68
40/90	40	60.5	41.5	63	44	70
50/90	47	60.5	48.5	63	53	70
50/110	47	72	48.5	75	53	85
63/110	52	72	54	75	55	85
63/130	52	72	54	75	55	85

Opzioni disponibili:

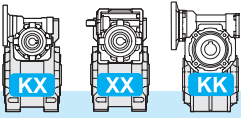
Available options:

Auf Anfrage ist folgendes Zubehör erhältlich:

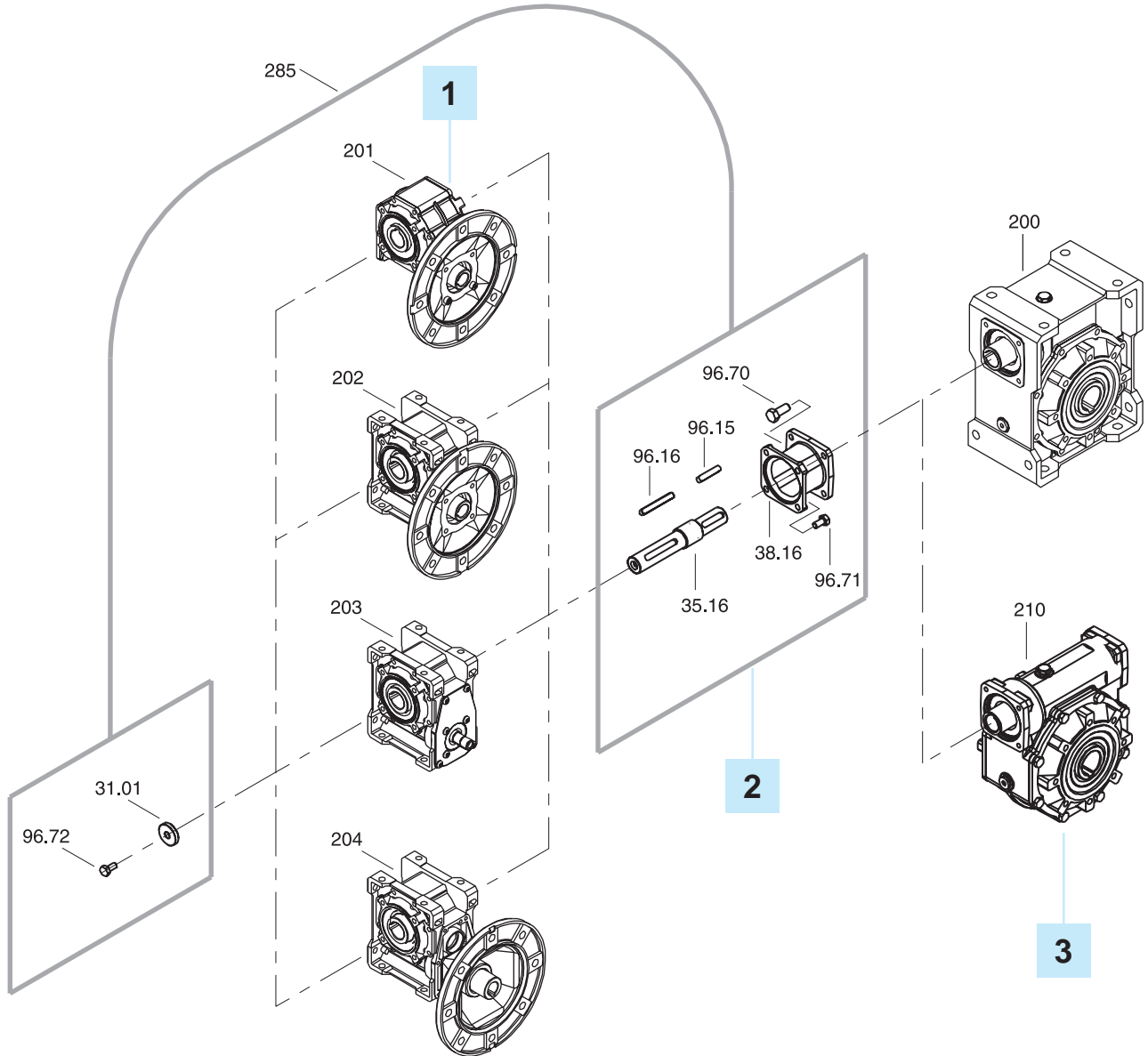
Cuscinetti a rulli conici corona

Tapered roller bearing for wormgear

Kegelrollenlager für Schneckenrad



KXC - XXC - XXA - XXF - KKC



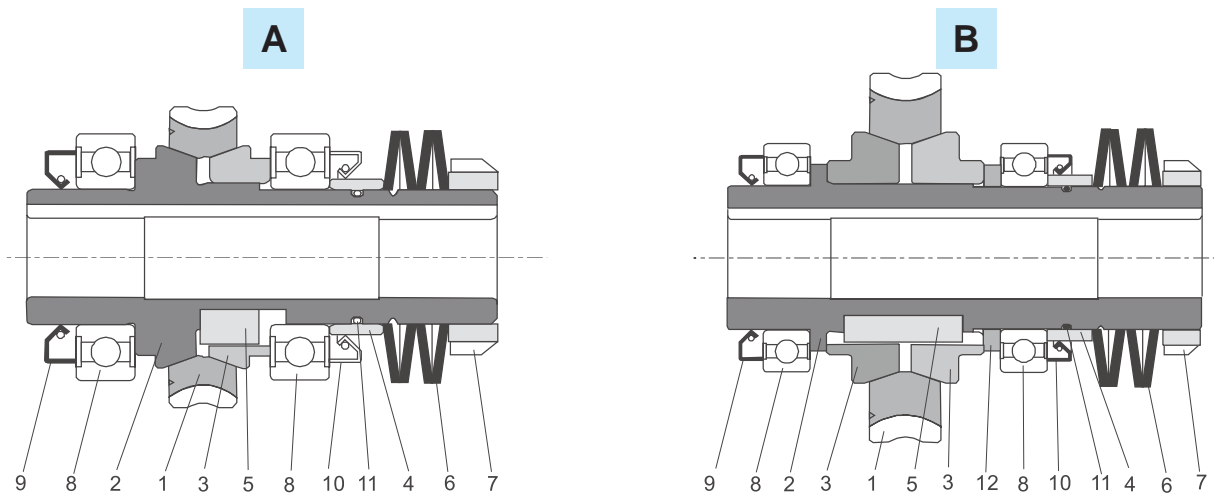
	1	2	3
	IN X..P - K..P	KIT	OUT XC - KC
30/30	X30 KC30	KIT 30/30 (2850002010)	30/9
30/40		KIT 30/40 (2850002013)	40/11
30/50		KIT 30/50 (2850002016)	50/14
30/63		KIT 30/63 (2850002019)	63/19
40/63	X40 KC40	KIT 40/63 (2850002028)	63/19
40/75		KIT 40/75-90 (2850002031)	75/24
40/90			90/24
50/75	X50 KC50	KIT 50/75-90 (2850002034)	75/24
50/90		KIT 50/110 (2850002049)	90/24
50/110			110/28
63/110	X63 KC63	KIT 63/110-130 (2850002052)	110/28
63/130	X63 KC63	KIT 63/110-130 (2850002052)	110/28

X - H - K - KX - XX - KK

Limitatore di coppia cavo passante

Torque limiter with through hollow shaft

Drehmomentbegrenzer mit durchgehende Hohlwelle



A		B					
X - H - K							
30 (LD - LS)	40 (LD - LS)	50 (LD - LS)	63 (LD - LS)	75 (LD - LS)	90 (LD - LS)	110 (LD - LS)	130 (LD - LS)
KX - XX - KK							
30/30 (L1-LD-LS) 30/40 (L1) 30/50 (L1) 30/63 (L1)	30/40 (LD - LS) 40/63 (L1) 40/75 (L1) 40/90 (L1)	30/50 (LD - LS) 50/75 (L1) 50/90 (L1) 50/110 (L1)	30/63 (LD - LS) 40/63 (LD - LS) 63/110 (L1)	40/75 (LD - LS) 50/75 (LD - LS)	40/90 (LD - LS) 50/90 (LD - LS)	50/110 (LD - LS) 63/110 (LD - LS)	63/130 (LD - LS)
1 Corona in bronzo / Bronze wheel / Bronzerad /							
2 Albero cavo limitatore / Hollow shaft torque limiter / Rutschkupplungs-Hohlwelle							
3 Anello di frizione / Friction ring / Reibring							
4 Distanziale molle / Washers' distance ring / Federdistanzring							
5 Linguetta / key / Passfeder							
8x7x10AB	10x8x13AB	12x8x18AB	12x8x40A	16x10x40A	16x10x50A	18x11x60A	
6 Molle a tazza / Belleville washers / Tellerfeder							
7 Ghiera / Metal ring / Metall Ring							
8 6005 25x47x12	6006 30x55x13	6008 40x68x15	6008 40x68x15	6010 50x80x16	6010 50x80x16	6012 60x95x18	
9 25x40x7	30x47x7	40x62x8	40x62x8	50x72x8	50x72x8	60x85x8	
10 30x40x5	35x47x7	48x62x8	48x62x8	58x72x8	58x72x8	70x85x8	
11 OR2087 21.95x1.78	OR2106 26.7x1.78	OR 36.27x1.78	OR 36.27x1.78	OR2187 47.37x1.78	OR2187 47.37x1.78	OR2225 56.87x1.78	
12 —		Distanziale / Spacer / Abstandshülse					

