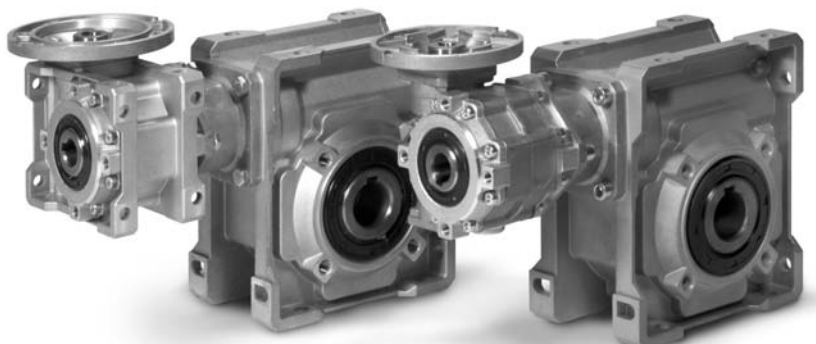
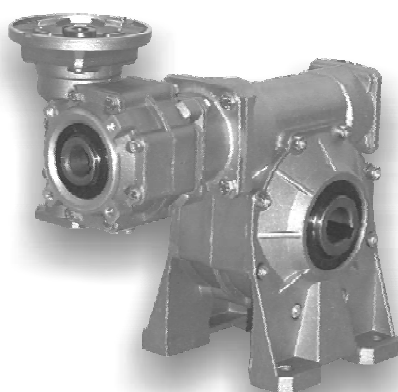


<b>5.0</b>	<b>RIDUTTORI A VITE SENZA FINE COMBINATI</b>	<b>COMBINED WORM GEAR- BOXES</b>	<b>KOMBINIERTE- SCHNECKENGETRIEBE</b>	
5.1	Caratteristiche	<i>Characteristics</i>	Merkmale	78
5.2	Designazione	<i>Designation</i>	Bezeichnung	78
5.3	Lubrificazione e posizioni di montaggio	<i>Lubrication and mounting position</i>	Schmierung und Einbaulage	82
5.4	Dati tecnici	<i>Technical data</i>	Technische Daten	85
5.5	Dimensioni	<i>Dimensions</i>	Abmessungen	90
5.6	Limitatore di coppia cavo passante	<i>Torque limiter with through hollow shaft</i>	Drehmomentbegrenzer mit durchgehender Hohlwelle	96
5.7	Esecuzione con vite bisporgente	<i>Double extended worm shaft design</i>	Versionen mit doppelseitig herausragender Schneckenwelle	98
5.8	Accessori	<i>Accessories</i>	Zubehör	99
5.9	Lista parti di ricambio	<i>Spare parts list</i>	Ersatzteilliste	100

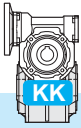


**XX**

**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 copatta 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 Verbindstück) lieferbar.

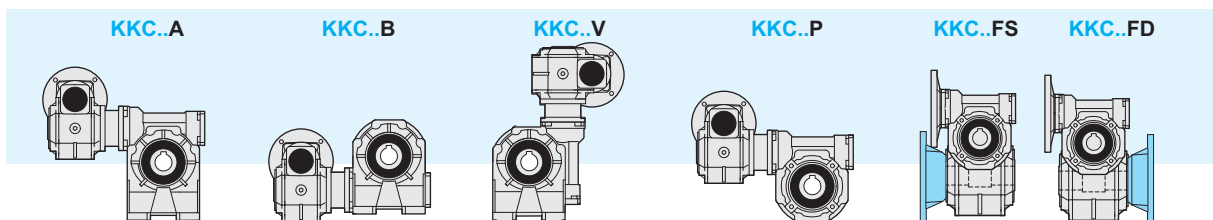
Die Hohlwelle gehört zur serienmäßigen Ausstattung. Eine breite Auswahl an Zubehör ist erhältlich: zweiter Antrieb, Kegelrollenlager auf Schneckenrad, Abtriebsflansch, standard oder doppelseitig herausragende Abtriebswelle, Drehmomentbegrenzer mit durchgehender Hohlwelle, Drehmomentstütze.

### 5.2 Designazione

### 5.2 Designation

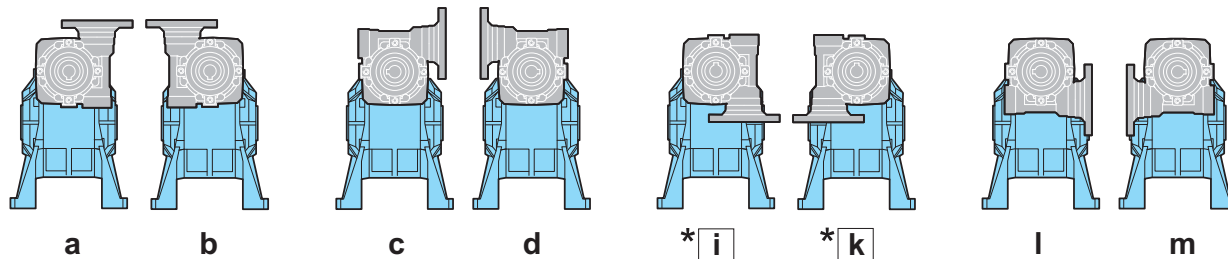
### 5.2 Bezeichnung

Riduttore entrata Gearbox at input Getriebe am Abtrieb	Macchina uscita Gearbox at output Getriebe am Abtrieb	Tipo entrata Input type Antriebsart	Grandezza Size Größe	Rapporto rid. Ratio Umsetzung	Predispos. att. mot. Motor coupling Motoranschluss	Versione Version Version	Forma costruttiva Execution Bauform	Posizione di mont. Mounting position Einbauage	Limitatore di coppia. Torque limiter Drehmomentbegrenzer	Seconda entrata Additional input Zusatzantrieb	Albero uscita Output shaft Abtriebswelle	Braccio di reazione Torque arm Drehmomentstütze
<b>K</b>	<b>K</b>	<b>C</b>	<b>50/110</b>	<b>1200</b>	<b>P.A.M.</b>	<b>F1</b>	<b>a</b>	<b>B3</b>	<b>LD</b>	<b>SeA1</b>	<b>H</b>	<b>BR</b>
Riduttore a vite senza fine combinato Combined worm gearbox Doppelschneckengetriebe			30/30 30/40 30/50 30/63 40/63 40/75 40/90 50/75 50/90 50/110 63/110	150 200 300 450 600 900 1200 1500 1950 2500 3250 4000 5000 10000	56 63 71 80 90	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 SeA2	H SD SS DD	BR

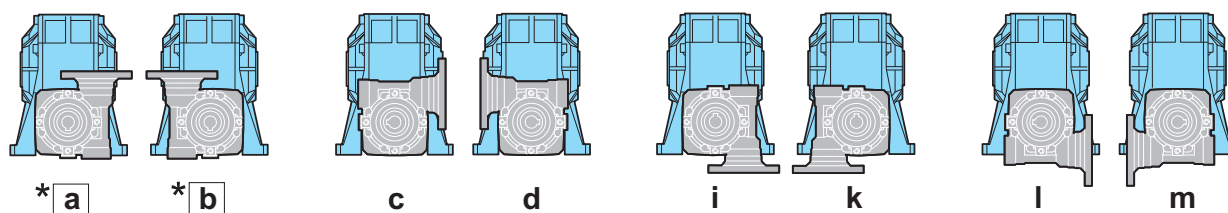


Forma costruttiva / version / Bauform

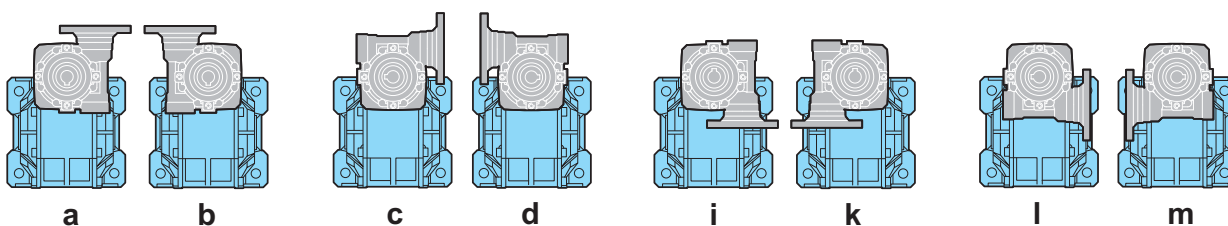
A



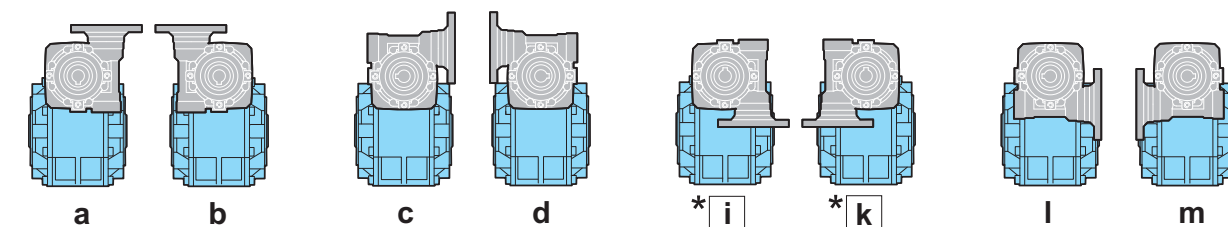
B



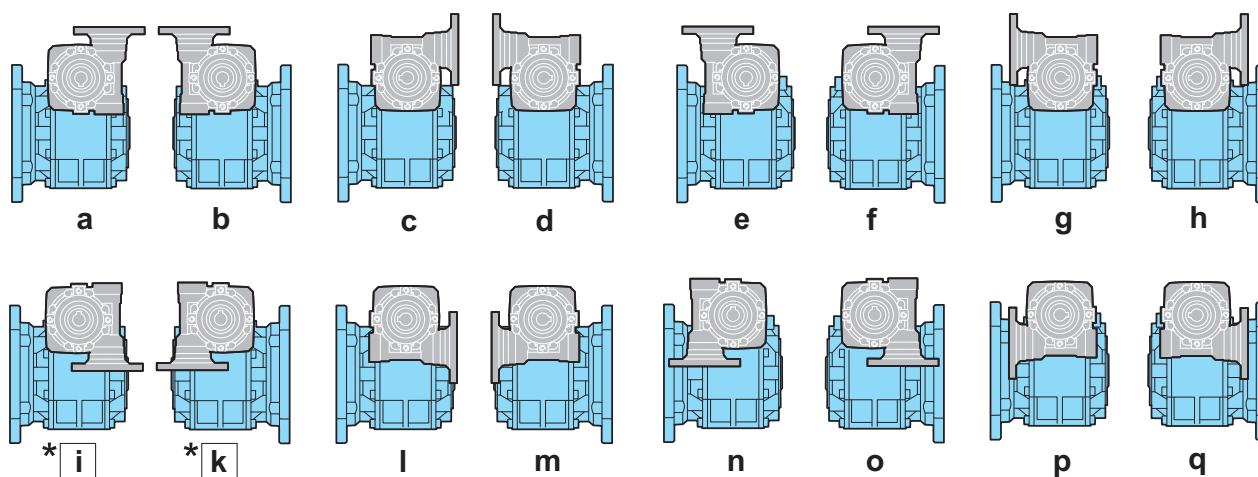
V



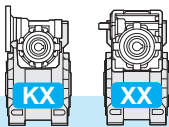
P



F



\*  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)

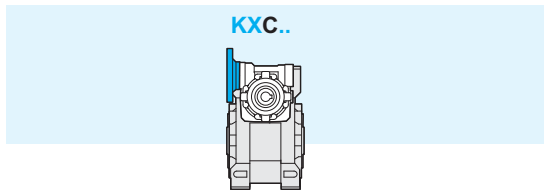


5.2 Designazione

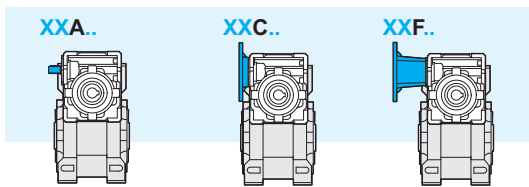
5.2 Designation

5.2 Bezeichnung

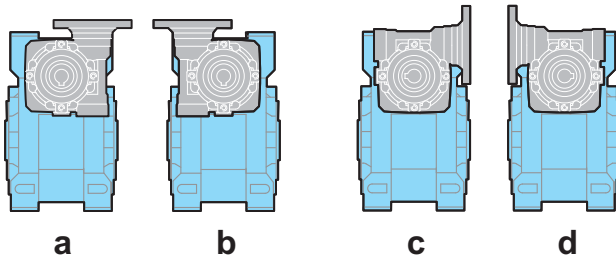
Riduttore entrata Gearbox at input Getriebe am Antrieb	Macchina uscita Gearbox at output Getriebe am Abtrieb	Tipo entrata Input type Antriebsart	Grandezza Size Größe	Rapporto rid. Ratio Untersetzung	Predispos. att. mot. Motor coupling Motoranschluss	Versione Version Version	Forma costruttiva Execution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



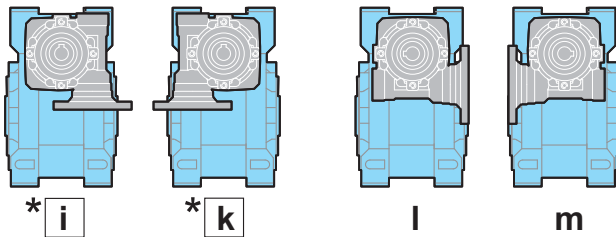
Riduttore entrata Gearbox at input Getriebe am Antrieb	Macchina uscita Gearbox at output Getriebe am Abtrieb	Tipo entrata Input type Antriebsart	Grandezza Size Größe	Rapporto rid. Ratio Untersetzung	Predispos. att. mot. Motor coupling Motoranschluss	Versione Version Version	Forma costruttiva Execution 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
<b>X</b>	<b>X</b>	<b>C</b>	<b>50/110</b>	<b>1200</b>	<b>P.A.M.</b>	<b>F1</b>	<b>a</b>	<b>B3</b>	<b>LD</b>	<b>SeA1</b>	<b>H</b>	<b>BR</b>
<b>Riduttore a vite senza fine combinato</b> <b>Combined worm gearbox</b> <b>Doppelschneckengetriebe</b>		  	30/30 30/40 30/50 30/63 40/63 40/75 40/90 50/75 50/90 50/110 63/110	150 200 300 450 600 900 1200 1500 1950 2500 3250 4000 5000 10000	56 63 71 80 90	P F (1-2-3)	ab cd ef gh ik im no pq	B3 B6 B7 B8 V5 V6	  	 	H  SD  SS  DD 	



Forma costruttiva / version / Bauform



a b c d

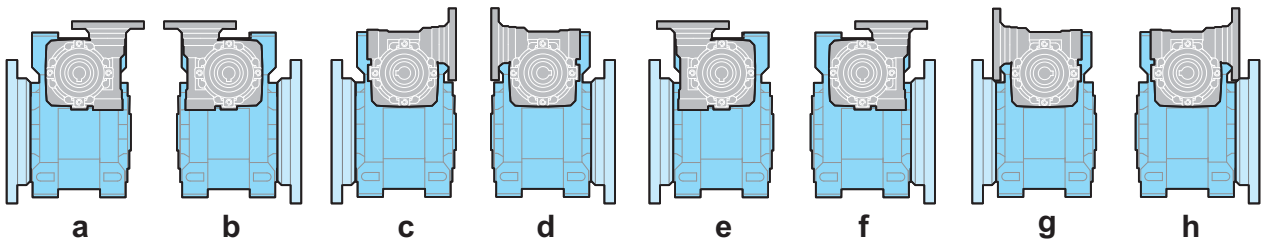


\*i \*k l m

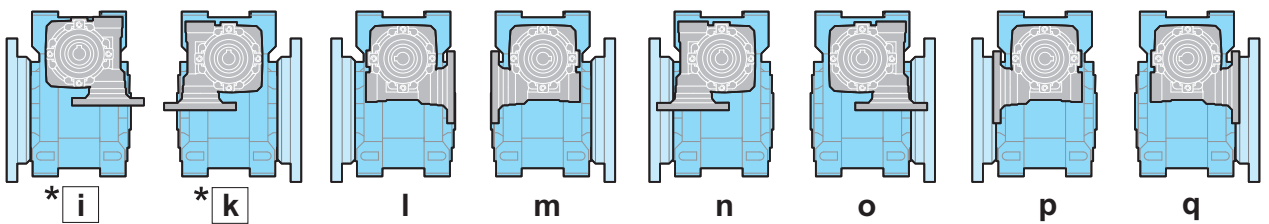


Forma costruttiva non realizzabile su:  
Version not feasible on:  
Bauform nicht ausführbar für:

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



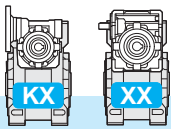
a b c d e f g h



\*i \*k l m n o p q

P

F



5.3 **Lubrificazione e posizioni di montaggio**

5.3 **Lubrication and mounting position**

5.3 **Schmierung und Einbaulage**

I riduttori a vite senza fine combinati sono forniti completi di lubrificante sintetico.

Combined worm gearboxes are supplied with synthetic lubricant.

Kombinierte Schneckengetriebe werden mit synthetischem Schmiermittel geliefert.

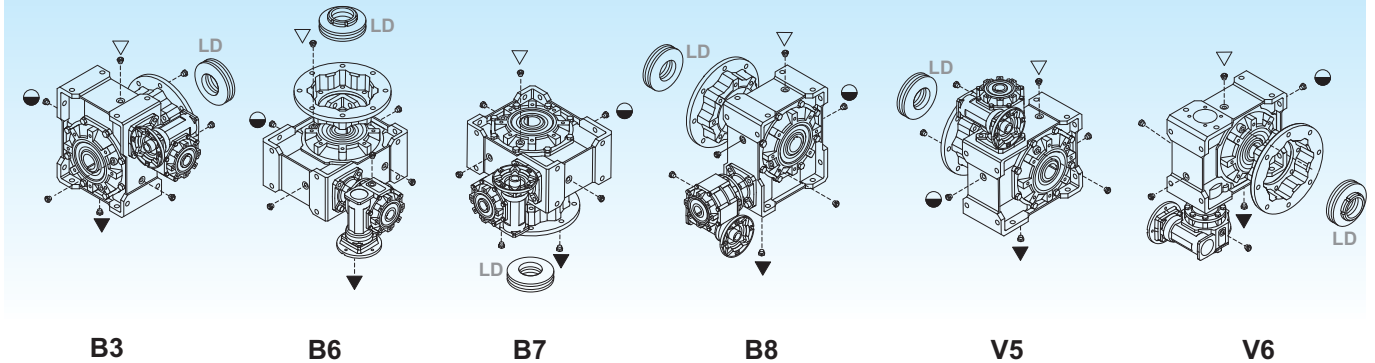
Si raccomanda di precisare sempre in fase di ordine la forma costruttiva e la posizione di lavoro desiderata.

Always specify the version and the mounting position when ordering.

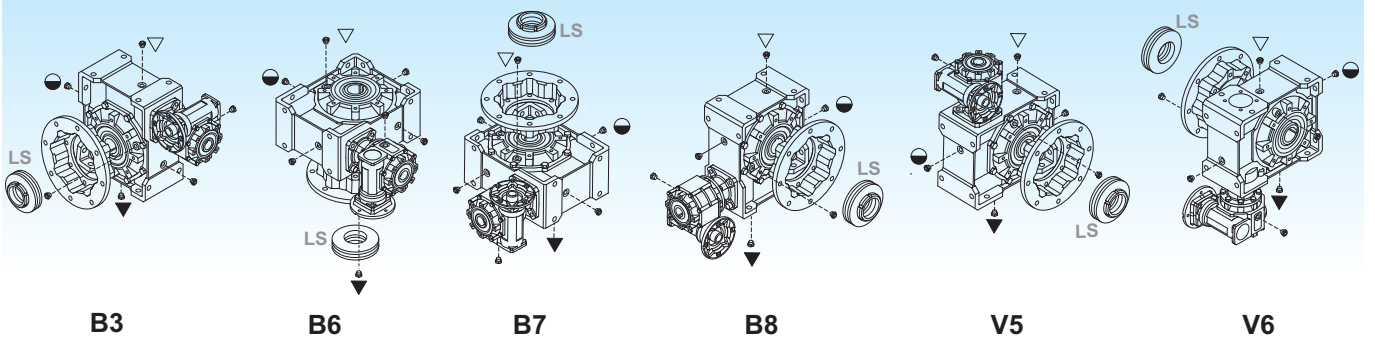
Im Auftrag sind immer Einbaulage und Bauform anzugeben.

**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

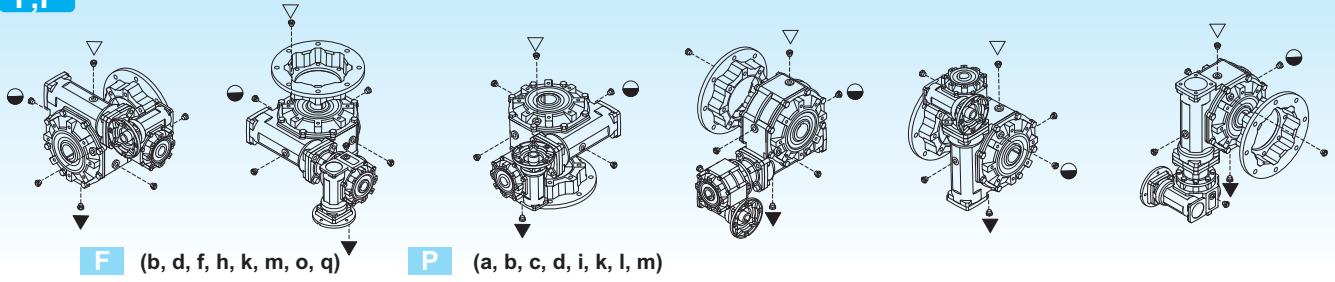
Nei corpi in alluminio 30, 40, 50, 63, 75 è presente un solo tappo di riempimento olio.

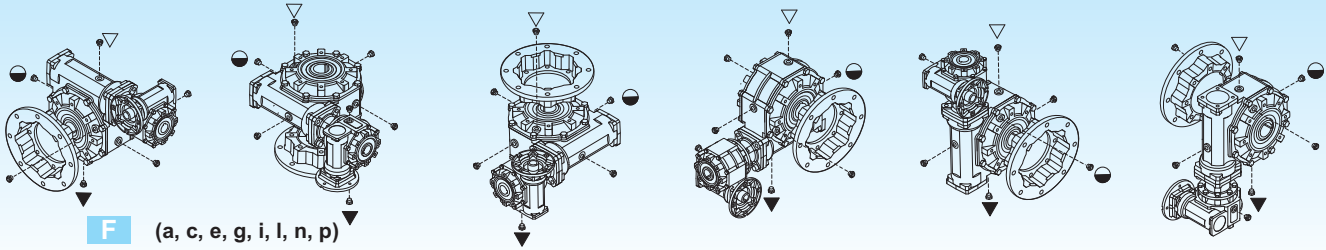
30, 40, 50, 63 and 75 aluminium housings have one oil filling plug only.

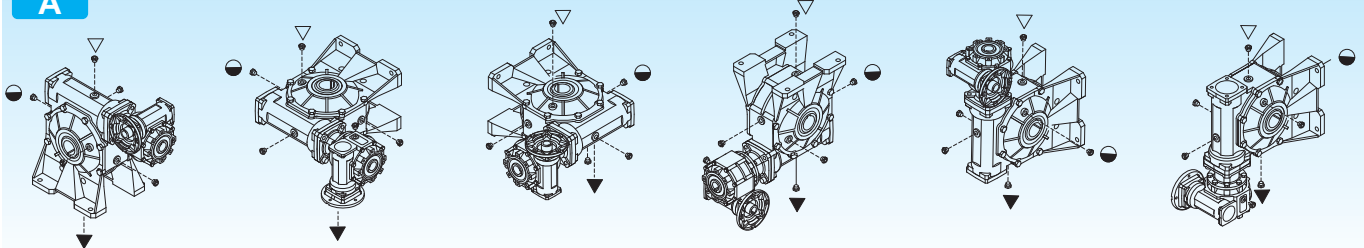
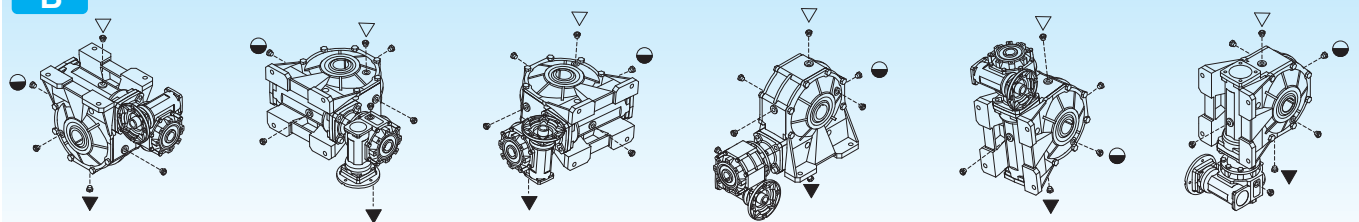
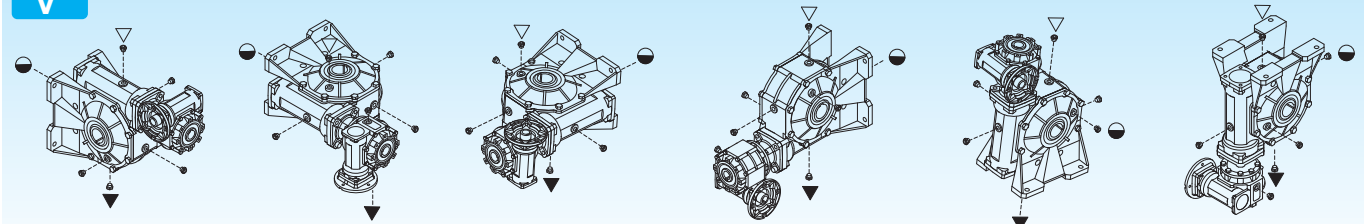
30, 40, 50, 63 and 75 Aluminiumgehäuse verfügen über 1 Einfüllschraube.

		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	
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	2.2
	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)

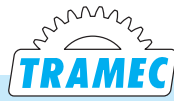
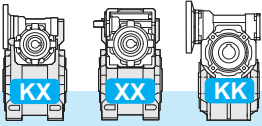
**P** (a, b, c, d, i, k, l, m)

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

**A**

**B**

**V**

**B3**
**B6**
**B7**
**B8**
**V5**
**V6**

		Q.tà olio / Oil quantity / Schmiermittelmenge [lit]												
		Combinato tipo : <b>KKC</b>												
		30/30	30/40	30/50	30/63	40/63	40/75	40/90	50/75	50/90	50/110	63/110		
Posizioni di montaggio Mounting positions Einbaulage	<b>B3</b>	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	
	<b>B6</b>	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	
	<b>B7</b>	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	
	<b>B8</b>	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	
	<b>V5</b>	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	
	<b>V6</b>	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



**Posizione morsetteria**

**Terminal board position**

**Lage der Klemmenkaste**

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



5.4 Dati tecnici

5.4 Technical data

5.4 Technische Daten

30/30	$n_1 = 1400$				KXC - XXC - XXF - KKC								XXA			
	$i_n$	30		$n_2$ [min <sup>-1</sup> ]	$T_2$ [Nm]	$P_1$ [kW]	FS'	Input - IEC						$T_{2M}$ [Nm]	P [kW]	Rd
		$i_1$	$i_2$					KC - XC		XF		B14				
								B5/B14	B5	B14	B5	B14				
150	10	15	9.3	32	0.06	1.2	63	56	63	56	63	56	37	0.070	0.51	
200		20	7.0	39	0.06	0.8							32	0.050	0.47	
300	15	30	4.7	52*	0.06	0.8*	63	56	63	56	63	56	39	0.045	0.42	
450			3.1	73*	0.06	0.5*							39	0.032	0.40	
600	20	30	2.3	91*	0.06	0.4*	63	56	63	56	63	56	39	0.026	0.37	
900			1.6	125*	0.06	0.3*							39	0.019	0.34	
1200	40	50	1.2	149*	0.06	0.3*	63	56	63	56	63	56	39	0.016	0.30	
1500			0.9	173*	0.06	0.2*							39	0.014	0.28	
1950	65	50	0.7	209*	0.06	0.2*	63	56	63	56	63	56	39	0.011	0.26	
2500			0.6	235*	0.06	0.1*							30	0.008	0.23	
3250	80	100	0.4	283*	0.06	0.11*	63	56	63	56	63	56	30	0.006	0.21	
4000			0.4	328*	0.06	0.09*							30	0.005	0.20	
5000	100	100	0.3	385*	0.06	0.08*	63	56	63	56	63	56	30	0.005	0.19	
10000			0.1	609*	0.06	0.03*							17	0.002	0.15	

3.0

30/40	$n_1 = 1400$				KXC - XXC - XXF - KKC								XXA			
	$i_n$	30		$n_2$ [min <sup>-1</sup> ]	$T_2$ [Nm]	$P_1$ [kW]	FS'	Input - IEC						$T_{2M}$ [Nm]	P [kW]	Rd
		$i_1$	$i_2$					KC - XC		XF		B14				
								B5/B14	B5	B14	B5	B14				
150	10	15	9.3	72	0.13	1.1	63	56	63	56	63	56	82	0.148	0.54	
200		20	7.0	76	0.11	1.0							76	0.110	0.51	
300	15	30	4.7	79	0.09	1.0	63	56	63	56	63	56	82	0.094	0.43	
450			3.1	74	0.06	1.1							82	0.067	0.40	
600	20	30	2.3	92	0.06	0.9	63	56	63	56	63	56	82	0.054	0.37	
900			1.6	126*	0.06	0.6*							82	0.039	0.34	
1200	40	50	1.2	151*	0.06	0.5*	63	56	63	56	63	56	82	0.033	0.31	
1500			0.9	176*	0.06	0.5*							82	0.028	0.29	
1950	65	50	0.7	212*	0.06	0.4*	63	56	63	56	63	56	82	0.023	0.27	
2500			0.6	236*	0.06	0.3*							68	0.017	0.23	
3250	80	100	0.4	285*	0.06	0.24*	63	56	63	56	63	56	68	0.014	0.21	
4000			0.4	330*	0.06	0.21*							68	0.012	0.20	
5000	100	100	0.3	387*	0.06	0.18*	63	56	63	56	63	56	68	0.011	0.19	
10000			0.1	626*	0.06	0.06*							35	0.003	0.15	

4.0

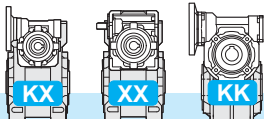
30/50	$n_1 = 1400$				KXC - XXC - XXF - KKC								XXA			
	$i_n$	30		$n_2$ [min <sup>-1</sup> ]	$T_2$ [Nm]	$P_1$ [kW]	FS'	Input - IEC						$T_{2M}$ [Nm]	P [kW]	Rd
		$i_1$	$i_2$					KC - XC		XF		B14				
								B5/B14	B5	B14	B5	B14				
150	10	15	9.3	124	0.22	1.2	63	56	63	56	63	56	149	0.265	0.55	
200		20	7.0	129	0.18	1.1							144	0.201	0.52	
300	15	30	4.7	118	0.13	1.3	63	56	63	56	63	56	150	0.166	0.44	
450			3.1	140	0.11	1.1							150	0.118	0.42	
600	20	30	2.3	143	0.09	1.0	63	56	63	56	63	56	150	0.094	0.39	
900			1.6	131	0.06	1.1							150	0.069	0.36	
1200	40	50	1.2	156	0.06	1.0	63	56	63	56	63	56	150	0.058	0.32	
1500			0.9	182	0.06	0.8							150	0.049	0.30	
1950	65	50	0.7	220*	0.06	0.7*	63	56	63	56	63	56	150	0.041	0.28	
2500			0.6	253*	0.06	0.5*							125	0.030	0.25	
3250	80	100	0.4	305*	0.06	0.41*	63	56	63	56	63	56	125	0.025	0.23	
4000			0.4	354*	0.06	0.35*							125	0.021	0.22	
5000	100	100	0.3	414*	0.06	0.30*	63	56	63	56	63	56	125	0.018	0.20	
10000			0.1	645*	0.06	0.11*							69	0.006	0.16	

6.0

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

\* **WARNING:** Maximum admissible 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:  $T_{2M} = T_2 \times FS'$



5.4 Dati tecnici

5.4 Technical data

5.4 Technische Daten

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



8.5

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



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 admissible 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:  $T_{2M} = T_2 \times FS'$

5.4 Dati tecnici

5.4 Technical data

5.4 Technische Daten

40/75	n <sub>1</sub> = 1400			KXC - XXC - XXF - KKC								XXA						
	i <sub>n</sub>	40	75	n <sub>2</sub>	T <sub>2</sub>	P <sub>1</sub>	FS'	Input - IEC						T <sub>2M</sub>	P	Rd		
		i <sub>1</sub>	i <sub>2</sub>					KC - XC		XF			B14					
								B5/B14	B5									
150		15	9.3	322	<b>0.55</b>	1.3	71	—						409	0.698	0.57		
200	10	20	7.0	417	<b>0.55</b>	1.1												
300			4.7	358	<b>0.37</b>	1.2												
450	15		3.1	346	<b>0.25</b>	1.2												
600	20		2.3	390	<b>0.22</b>	1.1												
900	30	30	1.6	309	<b>0.13</b>	1.4												
1200	40		1.2	388	<b>0.13</b>	1.1												
1500	50		0.9	379	<b>0.11</b>	1.1												
1950	65		0.7	368	<b>0.09</b>	1.1												
2500	50		0.6	296	<b>0.06</b>	1.3												
3250	65	50	0.4	352	<b>0.06</b>	1.08	—											
4000	80		0.4	417	<b>0.06</b>	0.91												
5000	100		0.3	491*	<b>0.06</b>	0.78*												
10000	100	100	0.1	762*	<b>0.06</b>	0.30*								418	0.121	0.34		
								63		71	63	56	71	63	—	418	0.102	0.31
																418	0.077	0.29
																381	0.065	0.26
																381	0.055	0.25
																381	0.047	0.24
																232	0.018	0.19

14.5

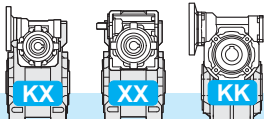
50/75	n <sub>1</sub> = 1400			KXC - XXC - XXF - KKC								XXA						
	i <sub>n</sub>	50	75	n <sub>2</sub>	T <sub>2</sub>	P <sub>1</sub>	FS'	Input - IEC						T <sub>2M</sub>	P	Rd		
		i <sub>1</sub>	i <sub>2</sub>					KC - XC		XF			B14					
								B5/B14	B5									
150		15	9.3	409	<b>0.75</b>	1.0	80	—						409	0.750	0.57		
200	10	20	7.0	422	<b>0.55</b>	1.0												
300			4.7	363	<b>0.37</b>	1.2												
450	15		3.1	350	<b>0.25</b>	1.2												
600	20		2.3	418	<b>0.25</b>	1.0												
900	30	30	1.6	418	<b>0.18</b>	1.0												
1200	40		1.2	406	<b>0.13</b>	1.0												
1500	50		0.9	470	<b>0.13</b>	0.9												
1950	65		0.7	572*	<b>0.13</b>	0.7*												
2500	50		0.6	674*	<b>0.13</b>	0.6*												
3250	65	50	0.4	819*	<b>0.13</b>	0.47*	—											
4000	80		0.4	939*	<b>0.13</b>	0.41*												
5000	100		0.3	1108*	<b>0.13</b>	0.34*												
10000	100	100	0.1	1719*	<b>0.13</b>	0.13*								418	0.116	0.35		
								71		80	71	63	80	71	—	418	0.095	0.33
																381	0.074	0.30
																381	0.060	0.28
																381	0.053	0.26
																381	0.045	0.25
																232	0.018	0.19

16.5

\* **ATTENZIONE:** la coppia massima utilizzabile [T<sub>2M</sub>] deve essere calcolata utilizzando il fattore di servizio: T<sub>2M</sub> = T<sub>2</sub> x FS'

\* **WARNING:** Maximum admissible torque [T<sub>2M</sub>] must be calculated using the following service factor : T<sub>2M</sub> = T<sub>2</sub> x FS'

\* **ACHTUNG:** das max. anwendbare Drehmoment [T<sub>2M</sub>] muss mit folgendem Betriebsfaktor berechnet werden: T<sub>2M</sub> = T<sub>2</sub> x FS'



5.4 Dati tecnici

5.4 Technical data

5.4 Technische Daten

40/90	n <sub>1</sub> = 1400			KXC - XXC - XXF - KKC								XXA						
	i <sub>n</sub>	40	90	n <sub>2</sub>	T <sub>2</sub>	P <sub>1</sub>	FS'	Input - IEC						T <sub>2M</sub>	P	Rd		
		i <sub>1</sub>	i <sub>2</sub>					KC - XC		XF			B5/B14				B5	B14
	150		15	9.3	327	<b>0.55</b>	1.3	71	—	71	63	56	71	63	—	<b>435</b>	0.732	0.58
	200	10	20	7.0	424	<b>0.55</b>	1.3									<b>660</b>	0.727	0.56
	300			4.7	542	<b>0.55</b>	1.2									<b>673</b>	0.683	0.48
	450	15		3.1	520	<b>0.37</b>	1.3									<b>673</b>	0.478	0.46
	600	20		2.3	668	<b>0.37</b>	1.0									<b>673</b>	0.373	0.44
	900	30	30	1.6	605	<b>0.25</b>	1.1									<b>673</b>	0.278	0.39
	1200	40		1.2	668	<b>0.22</b>	1.0									<b>673</b>	0.221	0.37
	1500	50		0.9	630	<b>0.18</b>	1.0									<b>660</b>	0.188	0.34
	1950	65		0.7	542	<b>0.13</b>	1.1									<b>620</b>	0.149	0.31
	2500	50		0.6	564	<b>0.11</b>	1.1									<b>634</b>	0.124	0.30
	3250	65	50	0.4	549	<b>0.09</b>	1.15									<b>634</b>	0.104	0.28
	4000	80		0.4	651	<b>0.09</b>	0.97									<b>634</b>	0.088	0.27
	5000	100		0.3	767	<b>0.09</b>	0.83	<b>634</b>	0.074	0.25								
	10000	100	100	0.1	1173*	<b>0.09</b>	0.34*	<b>401</b>	0.031	0.19								

**Kg**  
27.0

50/90	n <sub>1</sub> = 1400			KXC - XXC - XXF - KKC								XXA						
	i <sub>n</sub>	50	90	n <sub>2</sub>	T <sub>2</sub>	P <sub>1</sub>	FS'	Input - IEC						T <sub>2M</sub>	P	Rd		
		i <sub>1</sub>	i <sub>2</sub>					KC - XC		XF			B5/B14				B5	B14
	150		15	9.3	541	<b>0.90</b>	1.2	80	—	80	71	63	80	71	—	<b>655</b>	1.089	0.59
	200	10	20	7.0	584	<b>0.75</b>	1.2									<b>709</b>	0.910	0.57
	300			4.7	548	<b>0.55</b>	1.2									<b>673</b>	0.675	0.49
	450	15		3.1	527	<b>0.37</b>	1.3									<b>673</b>	0.473	0.46
	600	20		2.3	463	<b>0.25</b>	1.5									<b>673</b>	0.363	0.45
	900	30	30	1.6	632	<b>0.25</b>	1.1									<b>673</b>	0.266	0.41
	1200	40		1.2	573	<b>0.18</b>	1.2									<b>673</b>	0.212	0.39
	1500	50		0.9	662	<b>0.18</b>	1.0									<b>673</b>	0.183	0.36
	1950	65		0.7	582	<b>0.13</b>	1.2									<b>673</b>	0.150	0.34
	2500	50		0.6	701	<b>0.13</b>	0.9									<b>634</b>	0.118	0.32
	3250	65	50	0.4	853*	<b>0.13</b>	0.74*									<b>634</b>	0.097	0.30
	4000	80		0.4	977*	<b>0.13</b>	0.65*									<b>634</b>	0.084	0.28
	5000	100		0.3	1153*	<b>0.13</b>	0.55*	<b>634</b>	0.071	0.26								
	10000	100	100	0.1	1764*	<b>0.13</b>	0.23*	<b>401</b>	0.030	0.20								

**Kg**  
29.0

\* **ATTENZIONE:** la coppia massima utilizzabile [T<sub>2M</sub>] deve essere calcolata utilizzando il fattore di servizio: T<sub>2M</sub> = T<sub>2</sub> x FS'

\* **WARNING:** Maximum admissible torque [T<sub>2M</sub>] must be calculated using the following service factor : T<sub>2M</sub> = T<sub>2</sub> x FS'

\* **ACHTUNG:** das max. anwendbare Drehmoment [T<sub>2M</sub>] muss mit folgendem Betriebsfaktor berechnet werden: T<sub>2M</sub> = T<sub>2</sub> x FS'

5.4 Dati tecnici

5.4 Technical data

5.4 Technische Daten

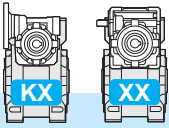
50/110	n <sub>1</sub> = 1400			KXC - XXC - XXF - KKC										XXA			
	i <sub>n</sub>	50 110		n <sub>2</sub> [min <sup>-1</sup> ]	T <sub>2</sub> [Nm]	P <sub>1</sub> [kW]	FS'	Input - IEC						T <sub>2M</sub> [Nm]	P [kW]	Rd	
		i <sub>1</sub>	i <sub>2</sub>					KC - XC		XF		B5	B14				
							B5/B14										
150	10	15	9.3	557	0.9	1.4	80	71	80	71	63	80	71	—	785	1.269	0.60
200		20	7.0	712	0.9	1.4									1000	1.265	0.58
300	15	20	4.7	928	0.9	1.3	80	71	80	71	63	80	71	—	1165	1.130	0.50
450			3.1	1105	0.75	1.1									1165	0.791	0.48
600	30	30	2.3	1054	0.55	1.1	80	71	80	71	63	80	71	—	1165	0.608	0.47
900			1.6	968	0.37	1.2									1165	0.445	0.43
1200	40	30	1.2	823	0.25	1.4	80	71	80	71	63	80	71	—	1165	0.354	0.40
1500			0.9	952	0.25	1.2									1165	0.306	0.37
1950	50	30	0.7	1018	0.22	1.1	80	71	80	71	63	80	71	—	1150	0.248	0.35
2500			0.6	1009	0.18	1.1									1119	0.200	0.33
3250	65	50	0.4	886	0.13	1.26	80	71	80	71	63	80	71	—	1119	0.164	0.31
4000			0.4	1015	0.13	1.10									1119	0.143	0.29
5000	100	50	0.3	1198	0.13	0.93	80	71	80	71	63	80	71	—	1119	0.121	0.27
10000			0.1	1854*	0.13	0.39*									727	0.051	0.21

63/110	n <sub>1</sub> = 1400			KXC - XXC - XXF - KKC										XXA			
	i <sub>n</sub>	63 110		n <sub>2</sub> [min <sup>-1</sup> ]	T <sub>2</sub> [Nm]	P <sub>1</sub> [kW]	FS'	Input - IEC						T <sub>2M</sub> [Nm]	P [kW]	Rd	
		i <sub>1</sub>	i <sub>2</sub>					KC - XC		XF		B5	B14				
							B5/B14										
150	10	15	9.3	939	1.5	1.2	90	80	90	80	71	90	80	—	1123	1.793	0.61
200		20	7.0	1200	1.5	1.0									1229	1.536	0.59
300	15	20	4.7	1148	1.1	1.0	90	80	90	80	71	90	80	—	1165	1.116	0.51
450			3.1	1119	0.75	1.0									1165	0.781	0.49
600	30	30	2.3	1081	0.55	1.1	90	80	90	80	71	90	80	—	1165	0.593	0.48
900			1.6	995	0.37	1.2									1165	0.433	0.44
1200	40	30	1.2	1165	0.37	1.0	90	80	90	80	71	90	80	—	1165	0.370	0.40
1500			0.9	998	0.25	1.2									1165	0.292	0.39
1950	50	30	0.7	1217	0.25	1.0	90	80	90	80	71	90	80	—	1165	0.239	0.37
2500			0.6	1469	0.25	0.8									1119	0.190	0.34
3250	65	50	0.4	1792*	0.25	0.62*	90	80	90	80	71	90	80	—	1119	0.156	0.32
4000			0.4	2097*	0.25	0.53*									1119	0.133	0.31
5000	100	50	0.3	2395*	0.25	0.47*	90	80	90	80	71	90	80	—	1119	0.117	0.28
10000			0.1	3706*	0.25	0.20*									727	0.049	0.22

\* **ATTENZIONE:** la coppia massima utilizzabile [T<sub>2M</sub>] deve essere calcolata utilizzando il fattore di servizio: T<sub>2M</sub> = T<sub>2</sub> x FS'

\* **WARNING:** Maximum admissible torque [T<sub>2M</sub>] must be calculated using the following service factor : T<sub>2M</sub> = T<sub>2</sub> x FS'

\* **ACHTUNG:** das max. anwendbare Drehmoment [T<sub>2M</sub>] muss mit folgendem Betriebsfaktor berechnet werden: T<sub>2M</sub> = T<sub>2</sub> x FS'

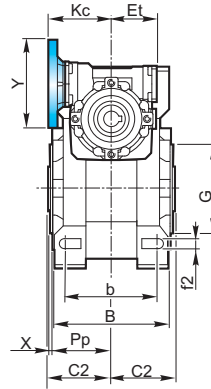
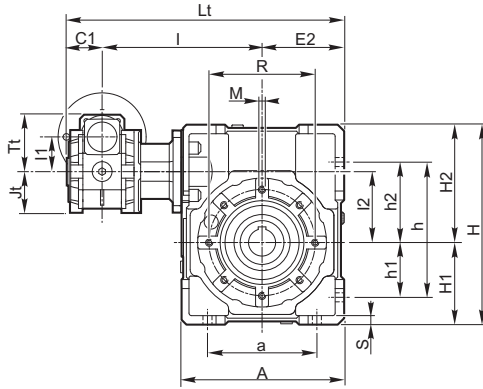


5.5 Dimensioni

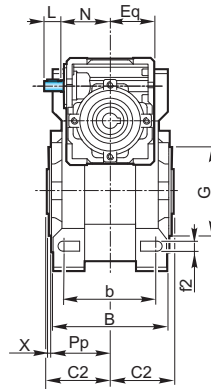
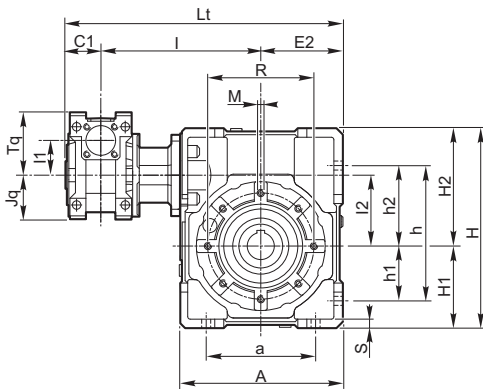
5.5 Dimensions

5.5 Abmessungen

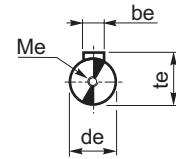
**KXC**



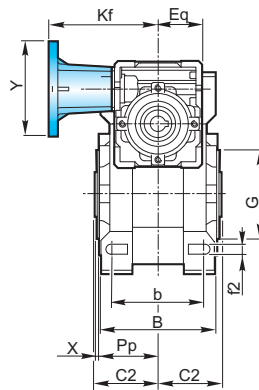
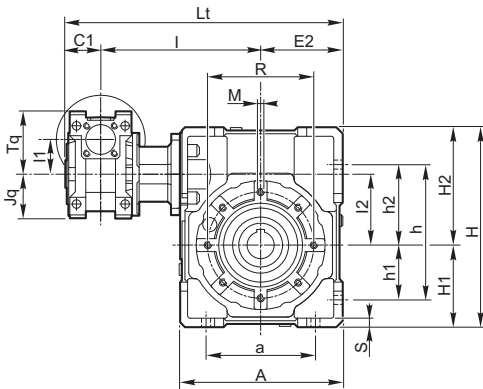
**XXA**



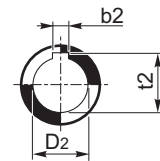
Albero entrata  
Input shaft  
Antriebswelle



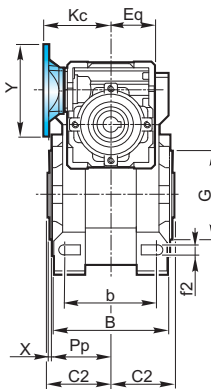
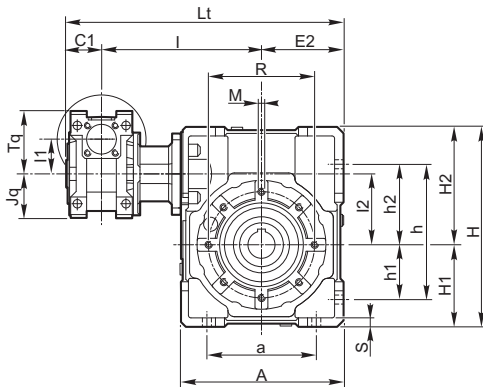
**XXF**



Albero uscita cavo  
Output hollow shaft  
Abtriebshohlwelle



**XXC**

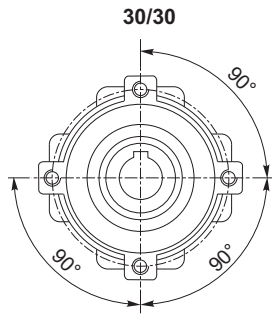


5.5 Dimensioni

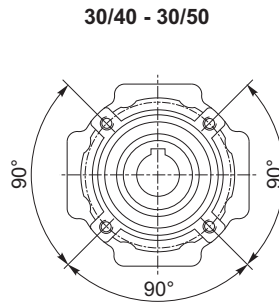
5.5 Dimensions

5.5 Abmessungen

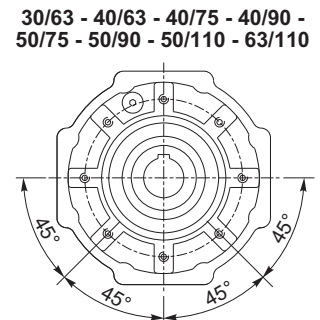
Flangia pendolare / Shaft-mounted flange / Aufsteckflansch



4 Fori / Holes / Bohrungen



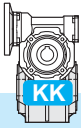
4 Fori / Holes / Bohrungen



8 Fori / Holes / Bohrungen

	KXC - XXC - XXF - XXA																						
	a	A	b	be	b <sub>2</sub>	B	C <sub>1</sub>	C <sub>2</sub>	de	D <sub>2</sub> H7	Et	Eq	E <sub>2</sub>	f <sub>2</sub>	G h8	h	h <sub>1</sub>	h <sub>2</sub>	H	H <sub>1</sub>	H <sub>2</sub>		
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	50	6.5	60	90	35	55	125	50	75
30/50	80	125	70		8	8	85		46	11	24			—	60	8.5	70	104	40	64	150	60	90
30/63	100	147	85	4	8	—	103	39	56	25	—	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	60	60	86	11	95	153	60	93	219.5	86	133.5
40/90	140	203	100	4	10	—	130	39	70	11	35	—	51	50	103	13	110	172	70	102	248.5	103	145.5
50/90				46				14					60	60									
50/110	170	252.5	115	5	12	—	143	39	77.5	19	42	—	51	50	127.5	14	130	210	85	125	310.5	127.5	183
63/110				46				19					60	60									

	KXC - XXC - XXF - XXA																				
	l	l <sub>1</sub>	l <sub>2</sub>	Jt	Jq	K <sub>c</sub>	K <sub>q</sub>	L	L <sub>t</sub>	M	Me	N	P <sub>p</sub>	R	S	Tt	Tq	Te	t <sub>2</sub>	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	57			115	10	31.3				33.3	2	
40/75	174.5	50	75	53.5	60	82	82	25	299.5	M8x14	M5x13	67.5	57	115	10	82.5	90	16	38.3	—	2
50/75	190		322						M8x14	57			115	10	31.3				33.3	2	
40/90	184.5	40	90	43.5	50	75	75	20	326.5	M10x18	M4x12	57.5	67	130	12	68.5	75	12.2	38.3	—	2
50/90	200		349						M10x18	67			130	12	38.3				—	2	
50/110	226	63	110	53.5	60	82	82	25	399.5	M8x20	M5x13	67.5	74	165	14	82.5	90	16	45.3	—	2.5
63/110	236		419.5						M8x20				74	165	14				45.3	—	2.5

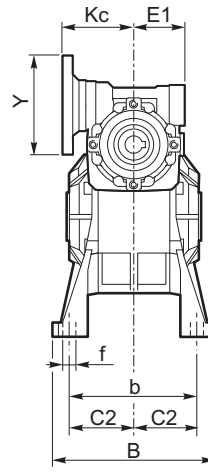
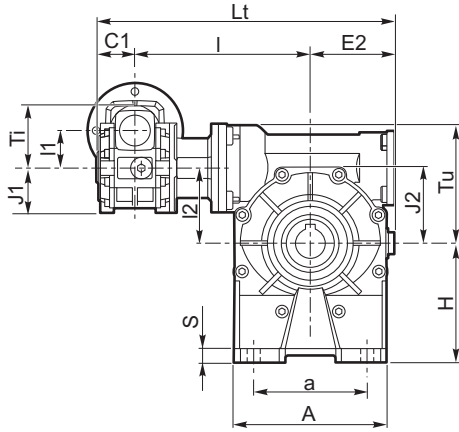


5.5 Dimensioni

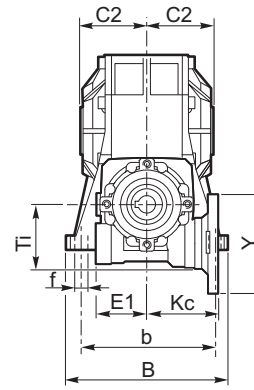
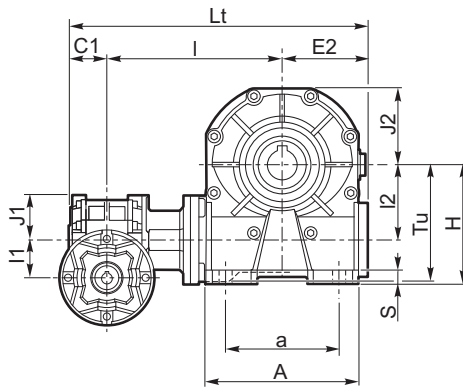
5.5 Dimensions

5.5 Abmessungen

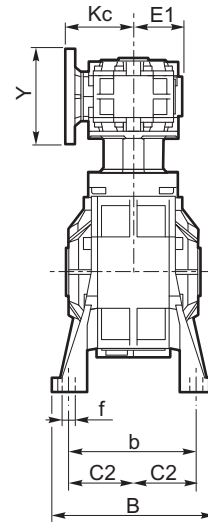
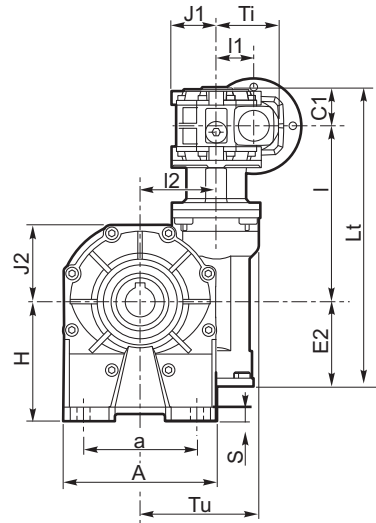
KKC\_A



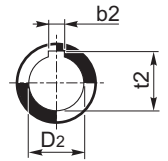
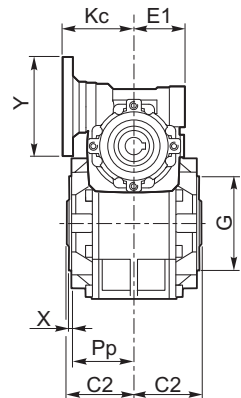
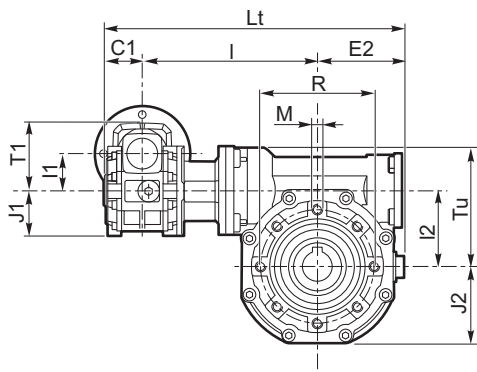
KKC\_B



KKC\_V



KKC\_P



Albero uscita cavo  
Output hollow shaft  
Abtriebs-Hohlwelle

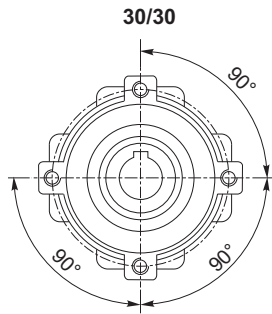


5.5 **Dimensioni**

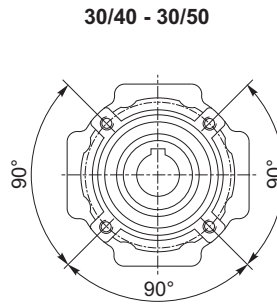
5.5 **Dimensions**

5.5 **Abmessungen**

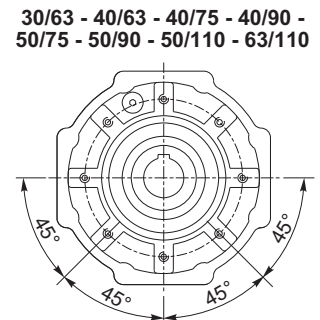
Flangia pendolare / Shaft-mounted flange / Aufsteckflansch



4 Fori / Holes / Bohrungen



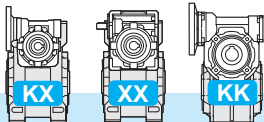
4 Fori / Holes / Bohrungen



8 Fori / Holes / Bohrungen

	KKC																									
	A		a		B		b		f		H		S		b <sub>2</sub>	C <sub>1</sub>	C <sub>2</sub>	D <sub>2</sub> H7	E <sub>1</sub>	E <sub>2</sub>	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	39	18	19	41	51	60				
30/50	106		63-85		119		99		9		85	82	8	8	8	8	46	25	24	41	60	70				
30/63	127.5		95		136		111		11		100		12	8	—		56		—	51	71	80				
40/63																										
40/75	155.5		120		140		115		11		115		12	8	—		39		—	60	28	(30)	—	60	85	95
50/75																										
40/90	190		140		168		140	146	13	11	135	142		14	10	—	39	70		—	51	103	110			
50/90																										
50/110	250		200		210		162	181	13	13	171	170		17	15	12	—	77.5		—	71	127.5	130			
63/110																										

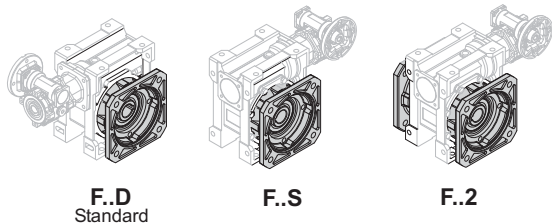
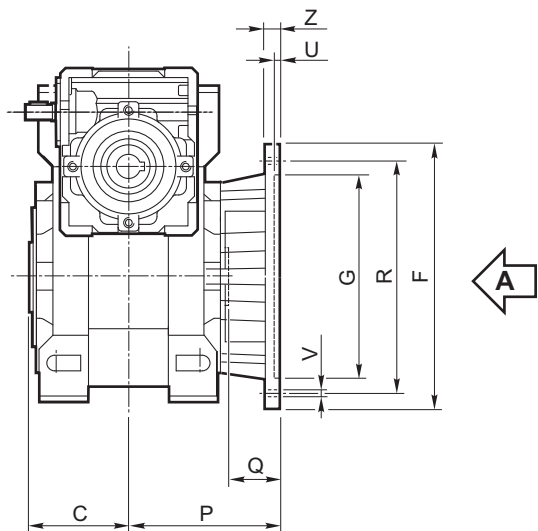
	KKC														
	I	I <sub>1</sub>	I <sub>2</sub>	J <sub>1</sub>	J <sub>2</sub>	K <sub>c</sub>	L <sub>t</sub>	M	P <sub>p</sub>	R	T <sub>i</sub>	T <sub>u</sub>	t <sub>2</sub>	X	
30/30	100	31.5	31.5	37.5	37.5	57	171.5	M6x8	29	65	52.5	52.5	16.3	—	1.5
30/40	122		40		43.5		203.5	M6x10	36.5	75		68.5	20.8	21.8	1.5
30/50	132		50		53.5		223.5	M8x10	43.5	85		82.5	27.3	1.5	
30/63	145	40	63	43.5	64	75	248.5	M8x14	53	95	68.5	100.5	28.3	—	2
40/63	150						261								
40/75	176.5	50	75	53.5	78	82	301.5	M8x14	57	115	82.5	116.5	31.3	—	2
50/75	192						324								
40/90	186.5	50	90	43.5	100	75	328.5	M10x18	67	130	82.5	131.5	38.3	—	2
50/90	202						351								
50/110	226	63	110	53.5	122	82	399.5	M8x20	74	165	82.5	161.5	45.3	—	2.5
63/110	236						419.5								



Flangia uscita

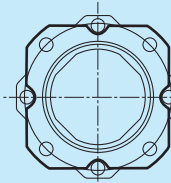
Output flange

Abtriebsflansch



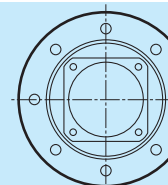
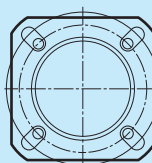
Vista da A / View from A / Ansicht von A

30/30
F1
—
—



30/30

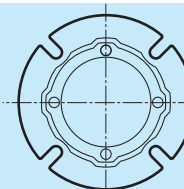
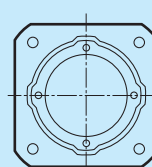
30/40	30/50
F1	F1
F2	—
—	—



30/40	30/50
—	—
—	F2
F3	—

30/40 - 30/50

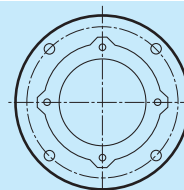
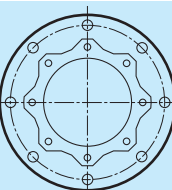
30/63	40/75
40/63	50/75
F1	F1
F2	—
—	—



30/63	40/75
40/63	50/75
—	—
—	F2
F3	—

30/63 - 40/63 - 40/75 - 50/75

40/90	50/110
50/90	63/110
—	F1
—	—
—	—



40/90	50/110
50/90	63/110
F1	—
F2	F2
F3	—

40/90 - 50/90 - 50/110 - 63/110

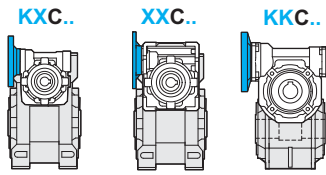
KX XX KK	Tipo Type Typ	C	F		G H8	P	Q	R	U	V			Z
												∅	
30/30	F1	31.5		66	50	54.5	23	68	4	n* 4		6.5	6
	F2												
	F3												
30/40	F1	39		85	60	67	28	75-90	4	n* 4		9	8
	F2			85	60	97	58	75-90	4	n* 4		9	8
	F3			140	95	80	41	115	5		n* 7	9	10
30/50	F1	46		94	70	90	44	85-100	5	n* 4		11	10
	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												

5.5 Dimensioni

5.5 Dimensions

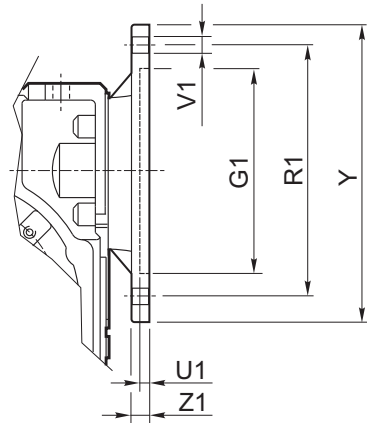
5.5 Abmessungen

Flangia entrata / Input flange / Antriebsflansch



PM = 1

PM = 2



KXC XXC KKC	IEC	G <sub>H7</sub>	PM		R <sub>1</sub>	U <sub>1</sub>	V <sub>1</sub>			Y	Z <sub>1</sub>	Diametro fori PAM / Holes diameter IEC Bohrungsdurchmesser IEC																												
			1	2			∅						150	200	300	450	600	900	1200	1500	1950	3250	4000	5000																
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	9	9	9	9	9	
	56 B14	50		•	65	3.5	6			4	80	8	9	9	9	9	9	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	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	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	80	8	/	/	/	/	/	/	/	/	/	/	/	/	/	9	9	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	11	11	11	11	
	63 B14	60		•	75	3.5	6			4	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	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	/	/	/	/	/	/	/	/	/	/	/	/	/		
	71 B14	70		•	85	3.5	7			4	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	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	11
	63 B14	60		•	75	3.5	6			4	90	8	/	/	/	/	/	/	/	/	/	/	/	/	/	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	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	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	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	/	/	/	/	/	/	/	/	/	/	/	/	/	
	80 B14	80	•	•	100	4	7		8		120	10	19	19	19	19	19	19	19	19	19	19	19	19	19	19	/	/	/	/	/	/	/	/	/	/	/	/	/	
63/110	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
	71 B14	70		•	85	3.5	7			4	105	10	/	/	/	/	/	/	/	/	/	/	/	/	/	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	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	
	80 B14	80		•	100	4	7			4	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	19	19	19	
	90 B5	130	•	•	165	4.5	11		8		200	10	24	24	24	24	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	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 sind mit den bestehenden Flanschen möglich.



5.5 Dimensioni

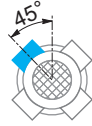
5.5 Dimensions

5.5 Abmessungen

Flangia entrata / Input flange / Antriebsflansch

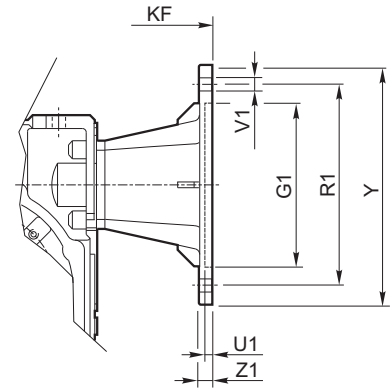
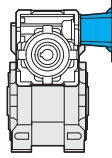


PM = 1



PM = 2

XXF..



XXF	IEC	PM		G <sub>1</sub> H7	K <sub>F</sub>	R <sub>1</sub>	U <sub>1</sub>	V <sub>1</sub>			Y	Z <sub>1</sub>	
		1	2					Ø					
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	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

5.6 Limitatore di coppia cavo passante

5.6 Torque limiter with through hollow shaft

5.6 Drehmomentbegrenzer mit durchgehender Hohlwelle

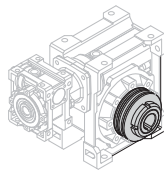
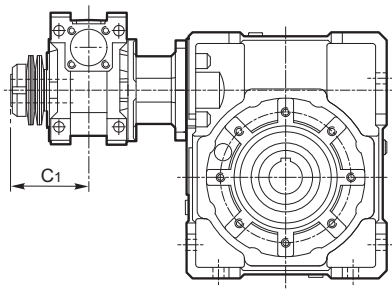
XX-KX KK	N°. giri della ghiera di regolazione / N°. revolutions of ring nut / Nr. Umdrehungen der Mutter												
	1	1 1/4	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 1/2	3 3/4	4
30/30	22	27	33	38	43								
30/40	55	64	73	87									
30/50	75	97	120	157									
30/63		127	155	180	205	232	260	282					
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							

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).

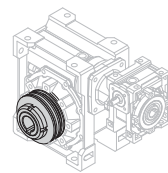
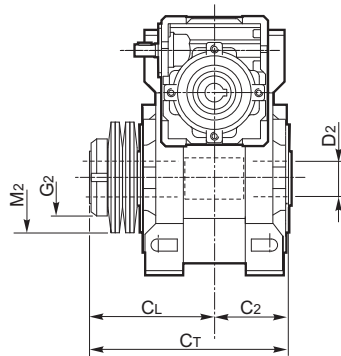
Die in der Tabelle angegebenen Werte beziehen sich auf die LS und LD Versionen (Getriebe am Abtrieb).

5.6 Limitatore di coppia cavo passante



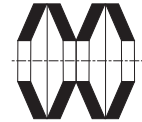
LD LS

5.6 Torque limiter with through hollow shaft

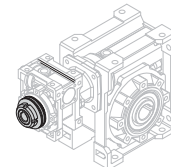


5.6 Drehmomentbegrenzer mit durchgehender Hohlwelle

Disposizione delle molle  
Washers' arrangement  
Lage der Feder



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



L1\*

XX - KX	C2	CL	CT	D2 H7	G2	M2
LD LS						
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

XX - KX	C1
L1	
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

\* Limitatore L1 nei combinati

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.

\* L1 torque limiter in combined gearboxes

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.

\* L1 Rutschkupplung in kombinierten Getrieben

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

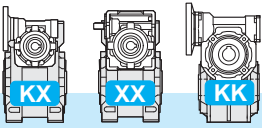
Der Eichungswert der L1 Rutschkupplung, auch der mindeste, erzeugt an das zweite Getriebe ein sehr hohes Drehmoment, das oft den max. zulässigen Wert überschreitet.

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.

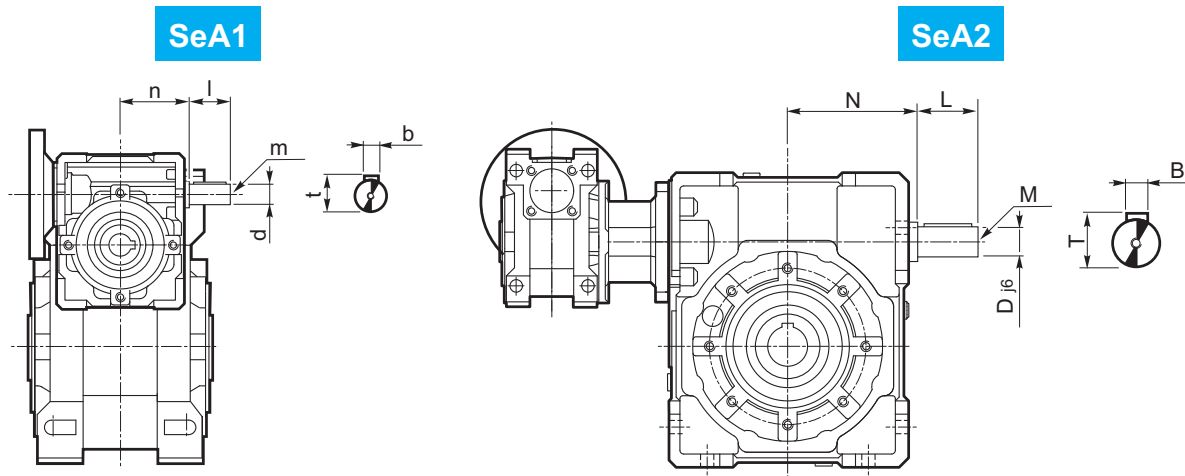
Folglich wird die Rutschkupplung am Antrieb (L1) frei gestellt, d. h. der Kunde soll die Rutschkupplung nach seiner Bedürfnisse eichen.



5.7 Esecuzione con vite bisporgente

5.7 Double extended worm shaft design

5.7 Versionen mit Doppelseitig Herausragender Schneckenwelle



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

5.8 Accessori

5.8 Accessories

5.8 Zubehör

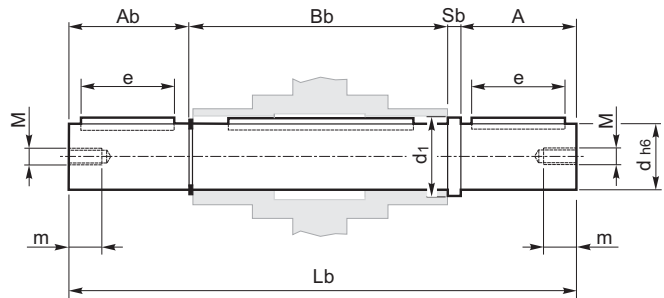
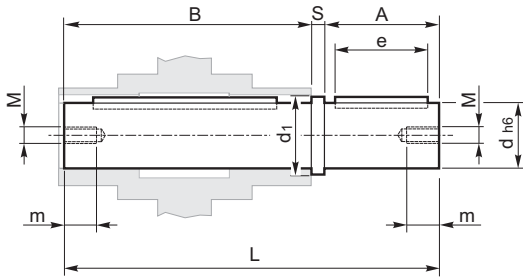
Albero lento

Output shaft

Abtriebswelle

Albero lento semplice  
Single output shaft  
Standard Abtriebswelle

Albero lento doppio  
Double output shaft  
Doppelte Abtriebswelle

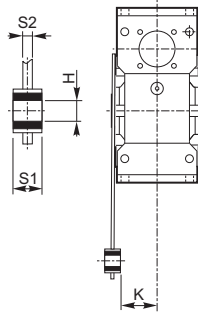
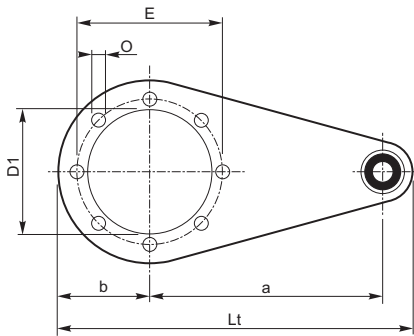


KK-KX-XX	A	A <sub>b</sub>	B	B <sub>b</sub>	d (h6)	d <sub>1</sub>	e	L	L <sub>b</sub>	M	m	S	S <sub>b</sub>
30/30	30	29	62	64	14	18.5	20	94.5	126	M6	16	2.5	2.5
30/40	40	39	77	79	18	23.5	30	120	161	M6	16	3	3
30/50	50	49	90	93	25	31.5	40	143.5	195	M8	22	3.5	3.5
30/63 40/63	50	49	111	113	25	31.5	40	165	216	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

Braccio di reazione

Torque arm

Drehmomentstütze



KK KX XX	a	b	D <sub>1</sub>	E	H	K	L <sub>t</sub>	O	S1	S2
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

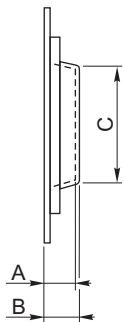
Kit di protezione:

Protection Kit:

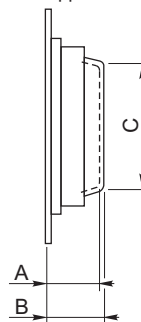
Kit

Albero cavo / Hollow shaft / Hohlwelle

Limitatore di coppia / Torque limiter / Drehmomentstütze



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



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

Opzioni disponibili:

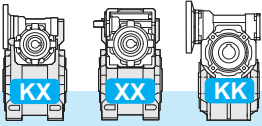
Available options:

Auf Anfrage ist folgendes Zubehör erhältlich:

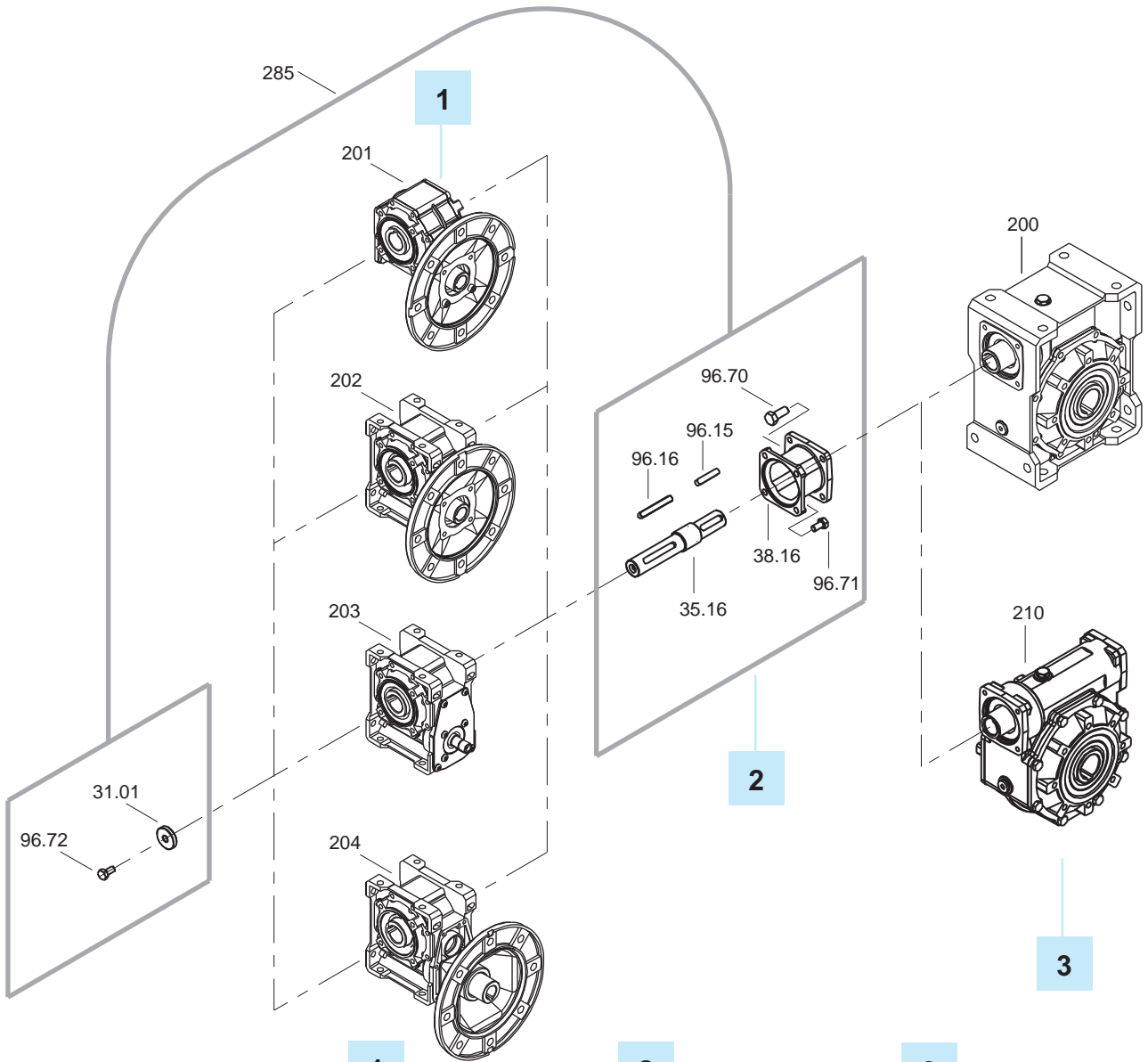
Cuscinetti a rulli conici corona

Tapered roller bearings on worm wheel

Kegelrollenlager für Schneckenrad



**KXC - XXC - XXA - XXF - KKC**



**1**

**2**

**3**

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