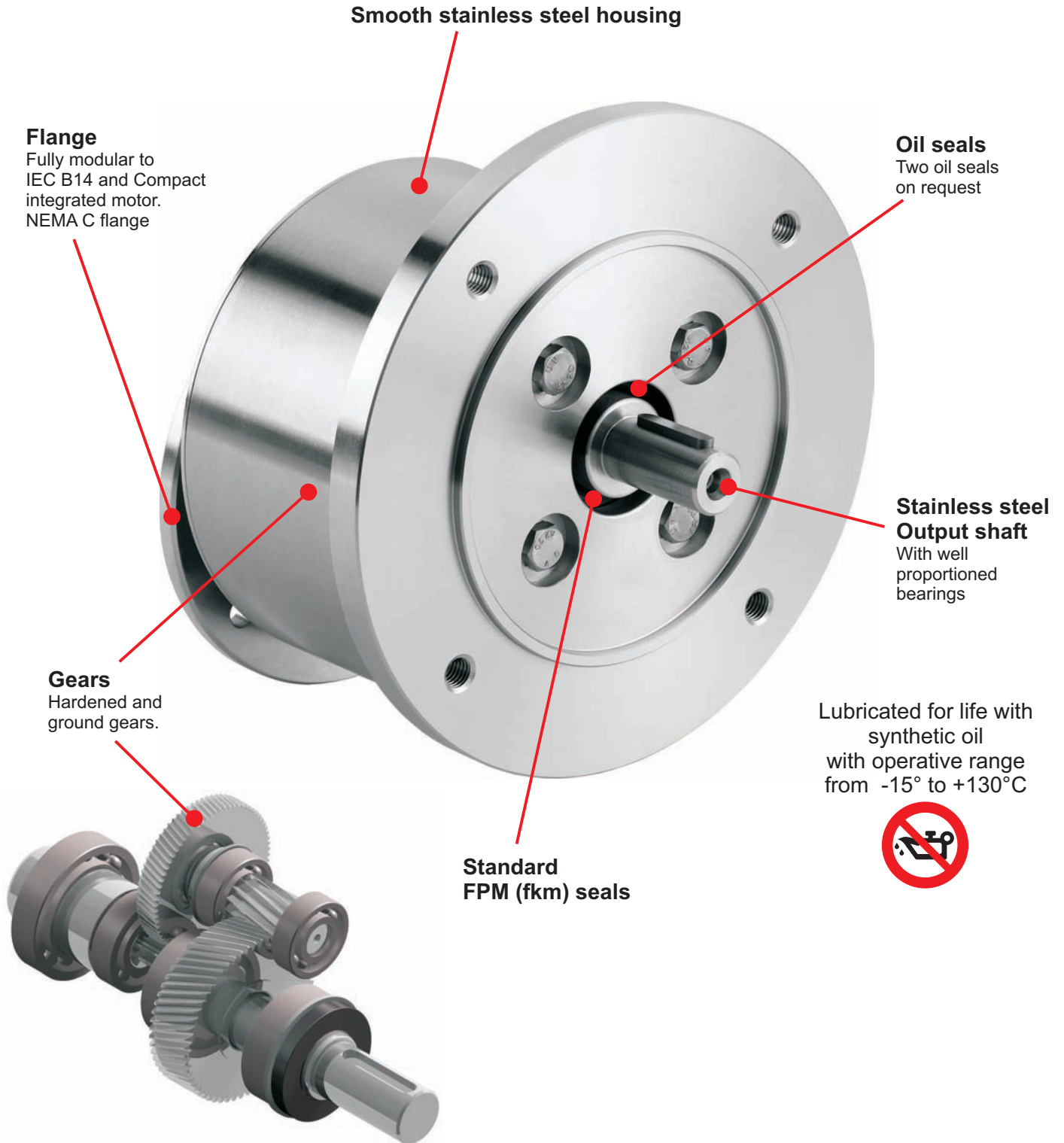
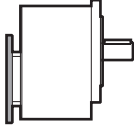
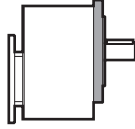
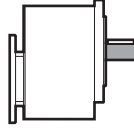
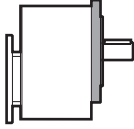
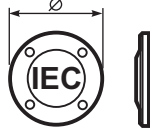
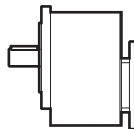
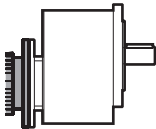
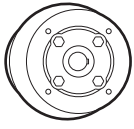
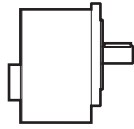
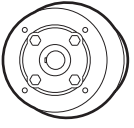

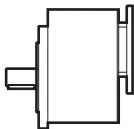
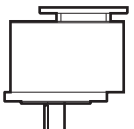
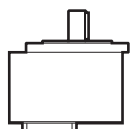
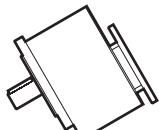


# Stainless steel in line gearboxes

A modular and compact product



Type - Tipo Typ - Tipo	Size - Grandezza Grösse - Tomaño	Mounting Montaggio Montage Tipo de montaje	Ratio - Rapporto Untersetzung Relación	Output shaft Albero lento Abtriebswelle Eje solida	Output flange Flangia uscita Ausgangsflansch Brida en salida	Motor size Grandezza motore Motor Grösse Tamaño motor	Mounting position Posizione montaggio Einbaulage Position de montaje
<b>P</b>	<b>411I</b>	<b>-F</b>	<b>1.57</b>	<b>C</b>	<b>4</b>	<b>Q</b>	<b>B5</b>
 <b>P</b>	<b>411I</b> <b>511I</b> <b>402I</b> <b>602I</b>	 <b>-F</b>  Foot mounting is not available	See technical data table  Vedi tabelle dati tecnici.  Ver tabla datos técnicos	 → <b>STANDARD</b>			 <b>B5</b> <b>STANDARD</b>
 <b>M</b>				<b>411I</b> <b>S</b> → ∅14 <b>C</b> → ∅19	<b>411I</b> <b>3</b> → ∅160 <b>4</b> → ∅200	<b>411I - 402I</b> <b>Q</b> 71B14 (∅105) <b>R</b> 80B14 (∅120) <b>T</b> 90B14 (∅140)	 <b>B6</b>
 <b>B</b> Only for local assembly				<b>511I</b> <b>E</b> → ∅24 <b>G</b> → ∅28	<b>511I</b> <b>4</b> → ∅200 <b>5</b> → ∅250	<b>511I - 602I</b> <b>R</b> 80B14 (∅120) <b>T</b> 90B14 (∅140) <b>U</b> 100-112 B14 (∅160)	 <b>B7</b>
				<b>402I</b> <b>E</b> → ∅24	<b>402I</b> <b>4</b> → ∅200	<b>Without flange</b> <b>Senza flangia</b> 	 <b>B8</b>
				<b>602I</b> <b>I</b> → ∅35	<b>602I</b> <b>5</b> → ∅250	<b>411I - 402I</b> <b>1</b> → ∅14 (71B5) <b>2</b> → ∅19 (80B5) <b>3</b> → ∅24 (90B5)	 <b>V1</b>
						<b>511I - 602I</b> <b>2</b> → ∅19 (80B5) <b>3</b> → ∅24 (90B5) <b>4</b> → ∅28 (100B5)	 <b>V3</b>
							 <b>V8</b>

## On request

**A** Double input / output oil seals

**B** Food lube

- B5 is supplied with standard oil quantity

- Please specify in the order if you required other mounting positions



#### QUICK SELECTION / Selezione veloce

input speed ( $n_1$ ) = 1400 min<sup>-1</sup>

Output Speed $n_2$ [min <sup>-1</sup> ]	Ratio $i$	Motor power $P_{1M}$ [kW]	Output torque $M_{2M}$ [Nm]	Service factor $f.s.$	Nominal power $P_{1R}$ [kW]	Nominal torque $M_{2R}$ [Nm]	B5 motor flanges not available				Available B14 motor flanges				Output Shaft		
							-	-	-	-	Q	R	T	-			Ratio code
398	<b>3.52</b>	1.5	34	2.3	<b>3.5</b>	<b>80</b>	-	-	-	-	C	C	-	-	2821	standard ø24	-
320	<b>4.37</b>	1.5	43	2.1	<b>3.1</b>	<b>90</b>	-	-	-	-	C	C	-	-	2818		
252	<b>5.55</b>	1.5	54	1.8	<b>2.8</b>	<b>100</b>	-	-	-	-	C	C	-	-	2813		
220	<b>6.36</b>	1.5	62	1.5	<b>2.3</b>	<b>95</b>	-	-	-	-	C	C	-	-	1921		
191	<b>7.33</b>	1.5	72	1.7	<b>2.5</b>	<b>120</b>	-	-	-	-	C	C	-	-	2812		
177	<b>7.89</b>	1.5	77	1.6	<b>2.3</b>	<b>120</b>	-	-	-	-	C	C	-	-	1918		
139	<b>10.06</b>	1.5	99	1.5	<b>2.3</b>	<b>150</b>	-	-	-	-	C	C	-	-	1913		
120	<b>11.66</b>	1.5	114	1.5	<b>2.3</b>	<b>174</b>	-	-	-	-	C	C	-	-	1713		
106	<b>13.26</b>	1.5	130	1.2	<b>1.8</b>	<b>160</b>	-	-	-	-	C	C	-	-	1912		
102	<b>13.68</b>	1.5	134	1.1	<b>1.6</b>	<b>144</b>	-	-	-	-	C	C	-	-	1513		
91	<b>15.37</b>	1.5	151	1.1	<b>1.6</b>	<b>160</b>	-	-	-	-	C	C	-	-	1712		
86	<b>16.20</b>	1.5	159	0.9	<b>1.3</b>	<b>138</b>	-	-	-	-	C	C	-	-	1910		
78	<b>18.04</b>	1.5	177	0.9	<b>1.4</b>	<b>160</b>	-	-	-	-	C	C	-	-	1512		
74	<b>18.80</b>	1.1	135	1.0	<b>1.1</b>	<b>138</b>	-	-	-	-	C	C	-	-	1710		
65	<b>21.54</b>	1.1	155	1.0	<b>1.1</b>	<b>160</b>	-	-	-	-	C	C	-	-	1312		
63	<b>22.29</b>	1.1	161	1.0	<b>1.1</b>	<b>167</b>	-	-	-	-	C	C	-	-	1013		
53	<b>26.30</b>	0.75	129	1.1	<b>0.80</b>	<b>138</b>	-	-	-	-	C	C	-	-	1310		
47.6	<b>29.40</b>	0.75	144	1.1	<b>0.83</b>	<b>160</b>	-	-	-	-	C	C	-	-	1012		
39	<b>35.91</b>	0.55	129	1.1	<b>0.59</b>	<b>138</b>	-	-	-	-	C	C	-	-	1010		
36.5	<b>38.37</b>	0.55	138	1.2	<b>0.64</b>	<b>160</b>	-	-	-	-	C	C	-	-	912		
29.9	<b>46.86</b>	0.55	169	0.8	<b>0.45</b>	<b>138</b>	-	-	-	-	C	C	-	-	910		
27.6	<b>50.67</b>	0.37	123	1.1	<b>0.40</b>	<b>132</b>	-	-	-	-	C	C	-	-	712		
22.6	<b>61.88</b>	0.37	150	0.9	<b>0.34</b>	<b>138</b>	-	-	-	-	C	C	-	-	710		

The dynamic efficiency is **0.96** for all ratios

Motor Flanges Available Flange Motore Disponibili B) Supplied with Reduction Bushing Fornito con Bussola di Riduzione B) Available on Request without reduction bushing Disponibile a Richiesta senza Bussola di Riduzione C) Motor Flange Holes Position Posizione Fori Flangia Motore

**Life lubrication - Fully synthetic oil**  
Mounting position to be specified - B6-B7-B8-V1-V3-V8

- EN** Unit 4021 is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. For complete documentation please visit our web site.
- I** Il riduttore 4021 viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Per la documentazione completa consulta il nostro sito.
- D** Das Getriebe 4021 ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. Die komplette Dokumentation, Wartungs- und Inbetriebnahmeanleitungen finden Sie unter.
- E** El reductor tamaño 4021 se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna. Para documentación completa, consultar nuestra Web.

### RADIAL AND AXIAL LOADS

Output shaft  
Albero di uscita

$F_{eq} = FR \cdot \frac{46}{X+21}$

$n_2$	FA	FR	$n_2$	FA	FR	$n_2$	FA	FR
300	310	1550	140	406	2030	70	540	2700
250	330	1650	120	448	2240	40	600	3000
200	360	1800	85	480	2400	15	600	3000

P4021-F... Output flange  
flangia di uscita

Wormbox weight  
peso riduttore **11.4 kg**

Detail Y

50

ø200 kit code: KIC40.9.013

174

g6

7

ø24 h6

f1

c1

k1

M8x19

s1

e1

Output shafts / albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø 24x50	8	27	M8x19
*On request A richiesta	-	-	-	-

Output flanges / flange di uscita

	a1 ø	b1	c1	e1	f1	s1
Standard	200	130	13.5	165	3.5	M10x13
*On request A richiesta	-	-	-	-	-	-

Input flanges / flange di entrata

	g6	k1	kit code
	105 (71B14)	186	KI63.4.047
	120 (80B14)	187	KI63.4.046
	140 (90B14)	188	KI63.4.041



QUICK SELECTION / Selezione veloce							input speed (n <sub>1</sub> ) = 1400 min <sup>-1</sup>									
Output Speed n <sub>2</sub> [min <sup>-1</sup> ]	Ratio i	Motor power P <sub>1M</sub> [kW]	Output torque M <sub>2M</sub> [Nm]	Service factor f.s.	Nominal power P <sub>1R</sub> [kW]	Nominal torque M <sub>2R</sub> [Nm]	B5 motor flanges not available				Available B14 motor flanges			Output Shaft 	Ratios code 	
							-	-	-	-	Q	R	T			
892	<b>1.57</b>	1.5	15.7	1.3	<b>1.90</b>	<b>20</b>	-	-	-	-	C	C		2844	standard ø19  On request ø14	-
493	<b>2.84</b>	1.5	28.4	1.2	<b>1.84</b>	<b>35</b>	-	-	-	-	C	C		1954		
426	<b>3.29</b>	1.5	32.9	1.2	<b>1.73</b>	<b>38</b>	-	-	-	-	C	C		1756		
362	<b>3.87</b>	1.5	38.7	1.0	<b>1.54</b>	<b>40</b>	-	-	-	-	C	C		1558		
303	<b>4.62</b>	1.5	46.1	1.0	<b>1.54</b>	<b>47</b>	-	-	-	-	C	C		1360		
222	<b>6.30</b>	1.1	46.0	1.0	<b>1.10</b>	<b>46</b>	-	-	-	-	C	C		1063		
170	<b>8.22</b>	0.55	30.4	1.2	<b>0.69</b>	<b>38</b>	-	-	-	-	C	C		974		
130	<b>10.86</b>	0.37	26.8	1.0	<b>0.38</b>	<b>28</b>	-	-	-	-	C	C		776		

The dynamic efficiency is **0.98** for all ratios

Motor Flanges Available Flange Motore Disponibili    
 B Supplied with Reduction Bushing Fornito con Bussola di Riduzione    
 B Available on Request without reduction bushing Disponibile a Richiesta senza Bussola di Riduzione    
 C Motor Flange Holes Position Posizione Fori Flangia Motore

**EN** Unit **4111** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. For complete documentation please visit our web site.

**I** Il riduttore **4111** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Per la documentazione completa consulta il nostro sito.

**D** Das Getriebe **4111** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. Die komplette Dokumentation, Wartungs- und Inbetriebnahmeanleitungen finden Sie unter.

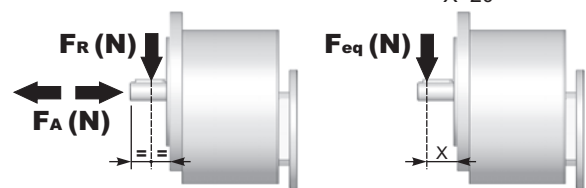
**E** El reductor tamaño **4111** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna. Para documentación completa, consultar nuestra Web.

### Life lubrication - Fully synthetic oil

Mounting position to be specified - B6-B7-B8-V1-V3-V8

### RADIAL AND AXIAL LOADS

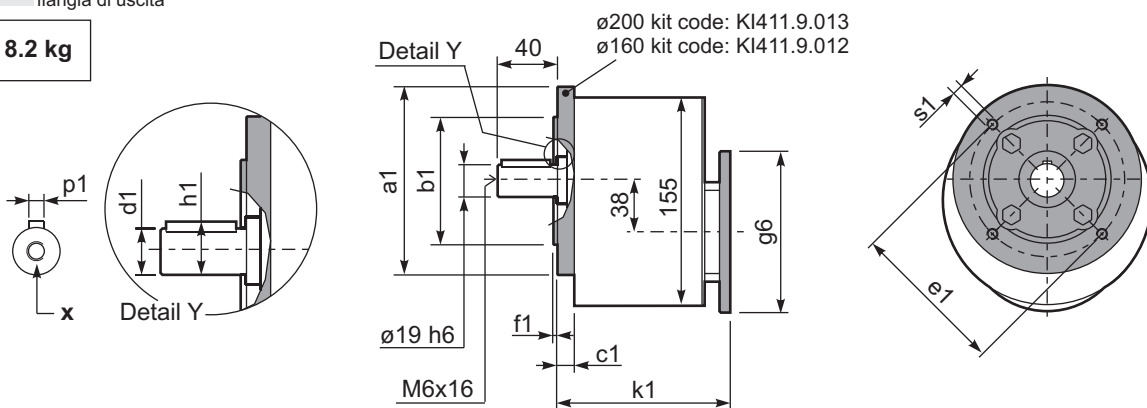
Output shaft  
Albero di uscita



n <sub>2</sub>	FA	FR	n <sub>2</sub>	FA	FR	n <sub>2</sub>	FA	FR
700	182	910	400	230	1150	200	290	1450
600	100	1000	300	250	1250	140	320	1600

P4111-F... Output flange  
flangia di uscita

Wormbox weight  
peso riduttore **8.2 kg**



Output shafts / albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø 19x40	6	21.5	M6x16
*On request A richiesta	ø 14x30	5	16	M5x13

Output flanges / flange di uscita

	a1 ø	b1	c1	e1	f1	s1
Standard	200	130	12.5	165	3.5	M10x12
*On request A richiesta	160	110	12.5	130	3.5	M8x12

Input flanges / flange di entrata

	g6	k1	kit code
	105 (71B14)	127.5	KI63.4.047
	120 (80B14)	128.5	KI63.4.046
	140 (90B14)	129.5	KI63.4.041

\* Please contact us for minimum quantity / Contattarci per quantità minima.

**SELECT THIS TYPE AND THIS SPECIFIC SIZE ON THE WEB PAGES TO GET COMPLETE TECHNICAL DATA.**  
Selezionare tipo e grandezza specifica nel sito web per la documentazione completa.



### QUICK SELECTION / Selezione veloce

input speed ( $n_1$ ) = 1400 min<sup>-1</sup>

Output Speed $n_2$ [min <sup>-1</sup> ]	Ratio $i$	Motor power $P_{1M}$ [kW]	Output torque $M_{2M}$ [Nm]	Service factor f.s.	Nominal power $P_{1R}$ [kW]	Nominal torque $M_{2R}$ [Nm]	motor flanges B5 not available				Available B14 motor flanges				Output Shaft 	Ratios code	
							-	-	-	-	R	T	U	-			
1077	1.30	4	34	1.2	4.6	40	-	-	-	-	80	90	100	112	3039	standard ø28  On request ø24	-
571	2.45	4	64	1.1	4.3	70	-	-	-	-	-	-	-	2049			
423	3.31	4	87	1.0	4.1	90	-	-	-	-	-	-	-	1653			
325	4.31	4	113	1.0	3.8	110	-	-	-	-	-	-	-	1356			
266	5.27	3	104	1.1	3.1	110	-	-	-	-	-	-	-	1158			
184	7.63	2.2	111	1.0	2.2	110	-	-	-	-	-	-	-	861			
133	10.50	1.1	77	1.0	1.1	80	-	-	-	-	-	-	-	663			

The dynamic efficiency is **0.98** for all ratios

**Motor Flanges Available**  
Flange Motore Disponibili

**B) Supplied with Reduction Bushing**  
Fornito con Bussola di Riduzione

**B) Available on Request without reduction bushing**  
Disponibile a Richiesta senza Bussola di Riduzione

**C) Motor Flange Holes Position**  
Posizione Fori Flangia Motore

**EN** Unit 5111 is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.  
For complete documentation please visit our web site.

**I** Il riduttore 5111 viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.  
Per la documentazione completa consulta il nostro sito.

**D** Das Getriebe 5111 ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.  
Die komplette Dokumentation, Wartungs- und Inbetriebnahmeanleitungen finden Sie unter.

**E** El reductor tamaño 5111 se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna.  
Para documentación completa, consultar nuestra Web.

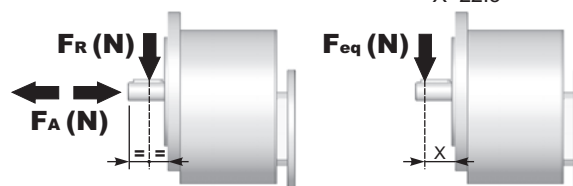
### Life lubrication - Fully synthetic oil

Mounting position to be specified - B6-B7-B8-V1-V3-V8

### RADIAL AND AXIAL LOADS

Output shaft  
Albero di uscita

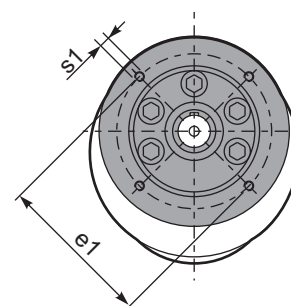
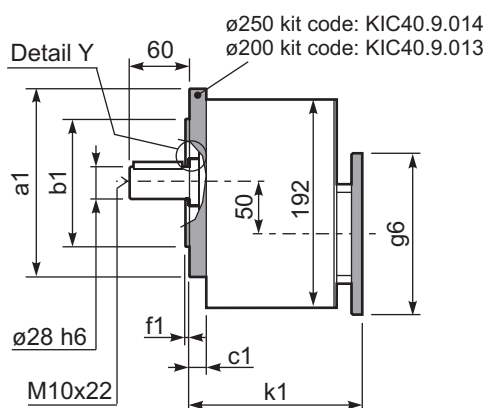
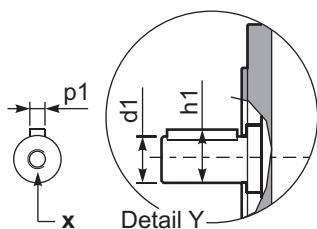
$$F_{eq} = F_R \cdot \frac{52.5}{X+22.5}$$



$n_2$	FA	FR	$n_2$	FA	FR	$n_2$	FA	FR
700	294	1470	400	370	1850	200	460	2300
600	320	1600	300	400	2000	140	510	2550

P5111-F... Output flange  
flangia di uscita

**Wormbox weight**  
peso riduttore **14.0 kg**



Output shafts / albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø 28x60	8	31	M10x22
*On request A richiesta	ø 24x50	8	27	M6x16
	-	-	-	-

Output flanges / flange di uscita

	a1 ø	b1	c1	e1	f1	s1
Standard	250	180	13.5	215	3.5	M12x13
*On request A richiesta	200	130	13.5	165	3.5	M10x13
	-	-	-	-	-	-

Input flanges / flange di entrata

	g6	k1	kit code
	120 (80B14)	150.5	KIC50.4.046
	140 (90B14)	150.5	KIC50.4.045
	160 (100B14)	161.5	KIC50.4.047

\* Please contact us for minimum quantity / Contattarci per quantità minima.

**SELECT THIS TYPE AND THIS SPECIFIC SIZE ON THE WEB PAGES TO GET COMPLETE TECHNICAL DATA.**  
Selezionare tipo e grandezza specifica nel sito web per la documentazione completa.





#### QUICK SELECTION / Selezione veloce

input speed (n<sub>1</sub>) = 1400 min<sup>-1</sup>

Output Speed n <sub>2</sub> [min <sup>-1</sup> ]	Ratio i	Motor power P <sub>1M</sub> [kW]	Output torque M <sub>2M</sub> [Nm]	Service factor f.s.	Nominal power P <sub>1R</sub> [kW]	Nominal torque M <sub>2R</sub> [Nm]	motor flanges B5 not available				Available B14 motor flanges				Output Shaft		
							-	-	-	-	R	T	U	-			Ratio code
388	<b>3.61</b>	4	93	1.8	7.0	165	-	-	-	-	80	90	100	112	standard ø35	3018	-
331	<b>4.23</b>	4	108	1.8	7.2	200	-	-	-	-	-	-	-	3016		-	
279	<b>5.01</b>	4	129	1.9	7.3	240	-	-	-	-	-	-	-	3014		-	
231	<b>6.07</b>	4	156	1.7	6.8	270	-	-	-	-	-	-	-	3012		-	
206	<b>6.81</b>	4	174	1.9	7.6	340	-	-	-	-	-	-	-	2018		-	
176	<b>7.96</b>	4	204	1.8	7.1	370	-	-	-	-	-	-	-	2016		-	
148	<b>9.45</b>	4	242	1.7	6.5	400	-	-	-	-	-	-	-	2014		-	
122	<b>11.43</b>	4	293	1.4	5.3	400	-	-	-	-	-	-	-	2012		-	
99	<b>14.21</b>	4	372	1.1	4.3	400	-	-	-	-	-	-	-	2010		-	
84	<b>16.62</b>	4	435	1.2	4.6	501	-	-	-	-	-	-	-	1314		-	
70	<b>20.10</b>	4	527	0.9	3.8	499	-	-	-	-	-	-	-	1112		-	
57	<b>24.61</b>	3	483	1.0	3.1	492	-	-	-	-	-	-	-	1312		-	
56	<b>24.98</b>	3	491	0.8	2.4	400	-	-	-	-	-	-	-	1310		-	
47.6	<b>29.41</b>	2.2	424	1.0	2.3	440	-	-	-	-	-	-	-	814		-	
39.3	<b>35.58</b>	1.85	431	1.2	2.1	499	-	-	-	-	-	-	-	812		-	
34.6	<b>40.50</b>	1.1	292	1.1	1.2	310	-	-	-	-	-	-	-	614		-	
31.7	<b>44.23</b>	1.5	434	0.9	1.4	400	-	-	-	-	-	-	-	810		-	
28.6	<b>49.00</b>	1.1	353	1.0	1.1	368	-	-	-	-	-	-	-	612		-	
23.0	<b>60.90</b>	1.1	439	0.9	1.0	400	-	-	-	-	-	-	-	610		-	

The dynamic efficiency is **0.96** for all ratios

- Motor Flanges Available  
Flange Motore Disponibili
- B) Supplied with Reduction Bushing  
Fornito con Bussola di Riduzione
- B) Available on Request without reduction bushing  
Disponibile a Richiesta senza Bussola di Riduzione
- C) Motor Flange Holes Position  
Posizione Fori Flangia Motore

#### Life lubrication - Fully synthetic oil

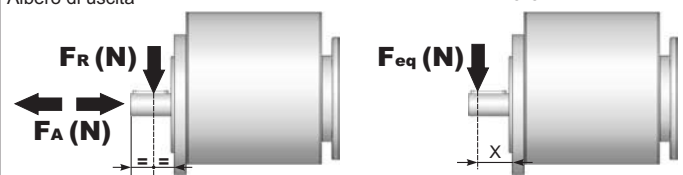
Mounting position to be specified - B6-B7-B8-V1-V3-V8

- EN** Unit 6021 is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.  
For complete documentation please visit our web site.
- I** Il riduttore 6021 viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.  
Per la documentazione completa consulta il nostro sito.
- D** Das Getriebe 6021 ist mit mit synthetischem Öl gefüllt und ist lebensdauer geschmiert.  
Die komplette Dokumentation, Wartungs- und Inbetriebnahmeanleitungen finden Sie unter.
- E** El reductor tamaño 6021 se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.  
Para documentación completa, consultar nuestra Web.

#### RADIAL AND AXIAL LOADS

Output shaft  
Albero di uscita

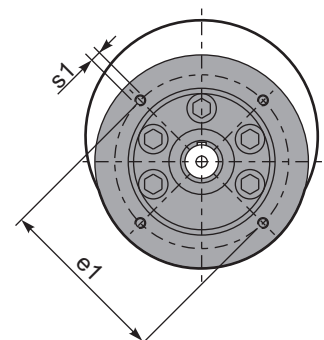
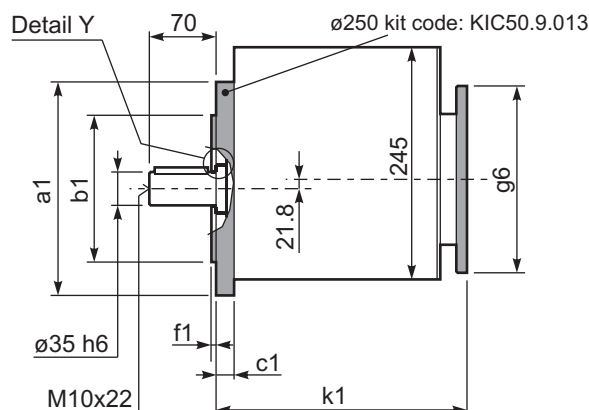
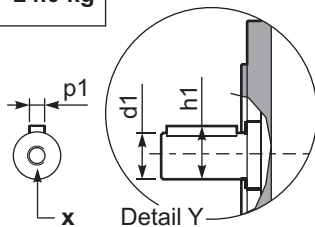
$$F_{eq} = F_R \cdot \frac{60.5}{X+25.5}$$



n <sub>2</sub>	FA	FR	n <sub>2</sub>	FA	FR	n <sub>2</sub>	FA	FR
300	560	2800	140	740	3700	70	890	4200
250	600	3000	120	760	3800	40	1160	5800
200	640	3200	85	840	4000	15	1300	6500

P6021-F ... Output flange  
flangia di uscita

Wormbox weight  
peso riduttore **24.0 kg**



Output shafts / albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø 35x70	10	38	M10x22
*On request A richiesta	-	-	-	-

Output flanges / flange di uscita

	a1	ø	b1	c1	e1	f1	s1
Standard	250	180	19.5	215	4	M12x19	
*On request A richiesta	-	-	-	-	-	-	-

Input flanges / flange di entrata

	g6	k1	kit code
	120 (80B14)	251	KIC50.4.046
	140 (90B14)	251	KIC50.4.045
	160 (100B14)	262	KIC50.4.047

- SELECT THIS TYPE AND THIS SPECIFIC SIZE ON THE WEB PAGES TO GET COMPLETE TECHNICAL DATA.**  
Selezionare tipo e gandezza specifica nel sito web per la documentazione completa.