

## The starting base for avoiding dust accumulation

(Clean aluminum motors also available)

*La base di partenza per evitare l'accumulo di polvere  
(disponibili anche con motori in alluminio)*

**ALUMINUM**

IP66








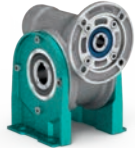









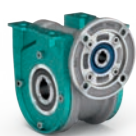
CE








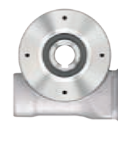

















On req.  
A rich.

IP69k



# How to order Codifica

P	D45	UNI	N	10	0	IB	C
Type <i>Tipo</i>	Size <i>Grandezza</i>	Mounting <i>Montaggio</i>	Position <i>Posizione</i>	Ratio <i>Rapporto</i>	Hub Output shaft <i>Mozzo corona Albero uscita</i>	Diameter <i>Diametro</i>	Input / output shaft material <i>Materiale alberi in entrata e uscita</i>
<b>P</b> 	<b>Worm gearboxes</b> <i>Riduttori a vite senza fine</i>	<b>UNI</b> 	<b>N</b> 	See technical data table <i>Vedi tabelle dati tecnici</i>	<b>0</b> Hollow Mozzo 	<b>→ Standard</b> D45	<b>C</b> Cast iron / Carbon steel <i>Ghisa</i> <b>I</b> Stainless steel <i>In acciaio inox</i>
<b>M</b> 	<b>D45</b> <b>D50</b> <b>D63</b> <b>D85</b>	<b>FLC</b> 	 	Select L or R position for output flange <i>Selezionare la posizione L o R per la flangia in uscita</i>	<b>S</b> Solid output shaft <i>Albero in uscita</i> 	<b>IB</b> → ø0.750" D50 <b>ID</b> → ø1.000" D63	The quill input hollow bore is always in carbon steel <i>Il foro cavo in entrata è sempre in acciaio</i>
<b>B</b> 		<b>FLL</b> 	<b>L</b> Left <i>Sinistra</i> 		<b>IE</b> → ø1.125" <b>IF</b> → ø1.250" D85		
<b>R</b> 		<b>BRI</b> Stainless steel <i>Acciaio inox</i> <b>BRZ</b> Zinc plated <i>Zincato</i> 			<b>R</b> Right <i>Destra</i> 	<b>IH</b> → ø1.500" Output male shaft is available only for standard bore <i>Albero maschio in uscita è disponibile solo per fori standard</i>	
		<b>PAI</b> Stainless steel <i>Acciaio inox</i> <b>PAB</b> Zinc plated <i>Zincato</i> 			<b>PVI</b> Stainless steel <i>Acciaio inox</i> <b>PVB</b> Zinc plated <i>Zincato</i> 	<b>PBB</b> Zinc plated <i>Zincato</i> 	

N	C	-W	B3	UW	A	For M type specify terminal box position <i>Per tipo M specificare posizione morsettiera</i>
Protection cap <i>Coperchio di protezione</i>		Motor size <i>Grandezza motore</i>	Mounting position <i>Posizione di montaggio</i>	Input bore <i>Foro entrata</i>	Coating <i>Trattamento</i>	
Left <i>Sinistra</i>	Right <i>Destra</i>	Motor flanges <i>Flange motore</i>	B3	Standard bore <i>Foro standard</i>	A Standard in aluminum <i>Standard in alluminio</i>	A
						
N Without protection cap <i>Senza coperchietto di protezione</i>	N Without protection cap <i>Senza coperchietto di protezione</i>	NEMA -W → 56C (ø6.5") -X → 143/5TC (ø6.5") -Y → 182/4TC (ø8.88")	B8 	UW → ø0.625" UX → ø0.875" UY → ø1.125"	N NTT coating <i>NTT Rivestimento</i> 	B 
		Without flange <i>Senza flangia</i> 	B6 		V Painted <i>Verniciato</i> 	C 
C Closed <i>Chiuso</i>	C Closed <i>Chiuso</i>	-N → Nema	B7 	ST Standard Kit R <i>Kit R standard</i>	Ral 7035 	D 
		Type R <i>Tipo R</i> 	B7	With coupling <i>Con giunto</i> 		
		-Z → Nema	V5 	-W → ø0.625" -X → ø0.875" -Y → ø1.125"		
			V6 	Ready for input coupling <i>Predisposto per giunto</i> 		
				-0 Type B <i>Tipo B</i>		

Input speed ( $n_1$ ) = 1750 min<sup>-1</sup>

Output speed $n_2$ [min <sup>-1</sup> ]	Ratio $i$	Motor power $P_{1M}$ [HP]	Output torque $M_{2M}$ [lb in]	Service factor $f.s$	Nominal power $P_{1R}$ [HP]	Nominal torque $M_{2R}$ [lb in]	Available NEMA motor flanges		Dynamic efficiency $RD$	Tooth module [mm]	Ratio code
							-W 56C	-			
250.0	7	1	202	1.3	1.29	257			80	2.2	01
175.0	10	0.75	213	1.2	0.91	257			79	2.2	02
125.0	14	0.5	194	1.3	0.67	257			77	2.4	03
83.3	21	0.5	253	1.4	0.69	345			67	1.6	04
62.5	28	0.5	328	1.1	0.53	345			65	2.5	05
47.3	37	0.33	277	1.2	0.42	345			63	1.8	06
38.0	46	0.33	323	1.1	0.36	345			59	1.5	07
29.2	60	0.25	303	1.1	0.29	345			56	1.2	08
25.0	70	0.25	340	0.8	0.19	257			54	1.0	09
17.2	102	0.25*	450	<0.8	0.14	248			49	0.72	10

\* Power higher than the maximum one which can be supported by the gearbox. Select according to the torque  $M_{2R}$

\* Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente  $M_{2R}$

-  **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

## Lubrication

### Lubrificazione

Unit D45 is supplied with synthetic oil to assure long life lubrication. Food grade oil is available on request.

See Table 1 for lubrication and recommended quantity.

See Table 2 for possible radial and axial loads on the gearbox.

*Il riduttore tipo D45 viene fornito con olio sintetico e lubrificazione tipo "long life".*

*Disponibile a richiesta olio alimentare.*

*Vedi Tabella 1 per oli e quantità consigliati.*

*Vedi Tabella 2 per i carichi radiali e assiali applicabili al riduttore.*

Oil quantity for all positions: 3.17 oz. <i>Quantità olio per tutte le posizioni: 3.17 oz.</i>	Shell Omala S4 WE 320	Eni Telium VSF 320
--	--------------------------	-----------------------

Tab. 1

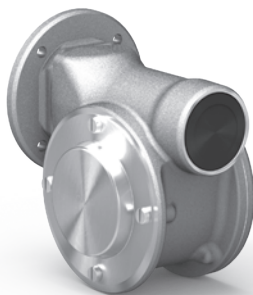
## Suggested

### Suggerito

Stainless steel protection cap (on request).

*Coperchio di protezione in acciaio inox a richiesta.*

Kit cod. KN300209



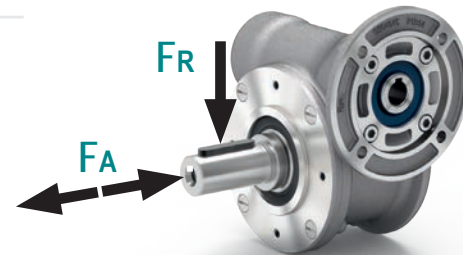
## Radial and axial loads

### Carichi radiali e assiali

#### Output shaft

##### Albero di uscita

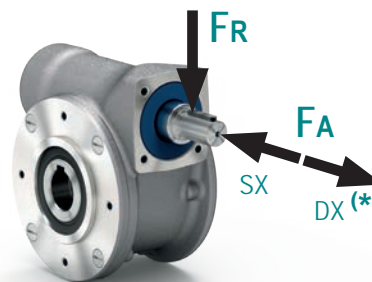
$n_2$ [min <sup>-1</sup> ]	FA [lb]	FR [lb]
200	40	202
150	45	225
100	49	247
75	54	270
50	58	315
25	67	405
15	90	450



#### Input shaft

##### Albero in entrata

$n_1$ [min <sup>-1</sup> ]	FA [lb]	FR [lb]
1750	9	47



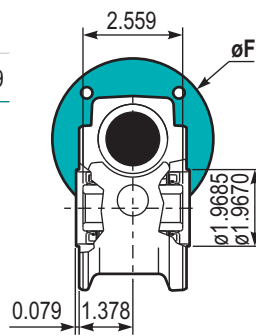
\* Strong axial loads in the DX direction are not allowed.

\* Non sono consentiti forti carichi assiali con direzione DX

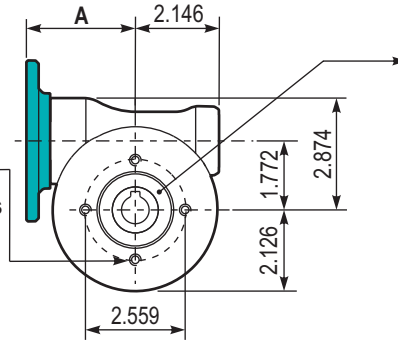
Tab. 2

PD45**UNI**.. Basic gearbox  
Riduttore base

M. flanges	Kit code	øF	A
56C	KUD454041	6.5	3.709

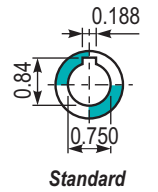


4 holes  
M6x0.55  
Mounting holes  
position  
Posizione fori  
di montaggio



Gearbox weight  
Peso riduttore 5.30 lb

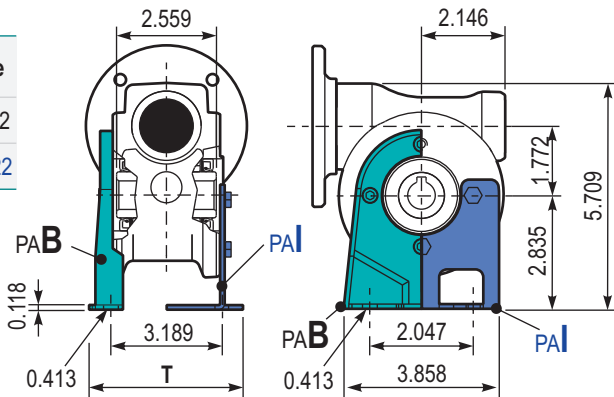
Hollow shaft  
Foro in uscita



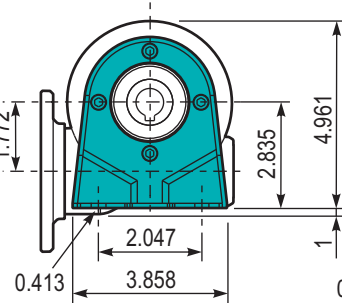
PD45**PA**... Feet  
Piedini

Type	T	Kit code
B**	4.016	K0459022
I*	3.937	KN459022

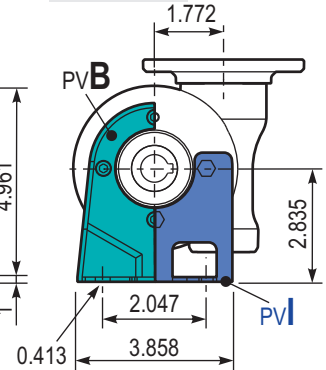
\*\* Zink plated  
\* Stainless steel



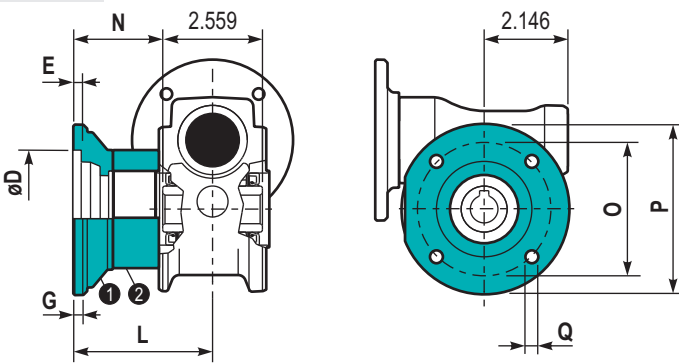
PD45**PBB**.. Feet  
Piedini



PD45**PV**... Feet  
Piedini

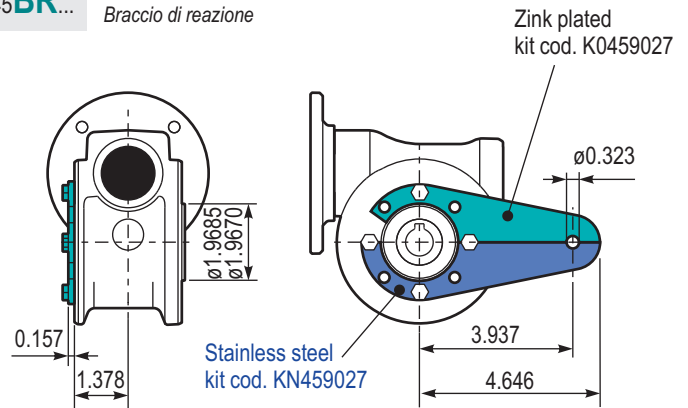


PD45**FL**.. Output flange  
Flangia uscita

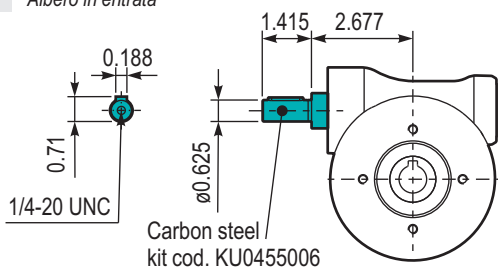


Type	øD	E	G	L	N	O	P	Q	Kit code
C	2.3681 2.3642	0.35	0.35	2.382	1.102	3.425	4.331	0.33	① K0459010 ② -
L	2.3681 2.3642	0.35	0.35	3.563	2.283	3.425	4.331	0.33	① K0459010 ② K0450200

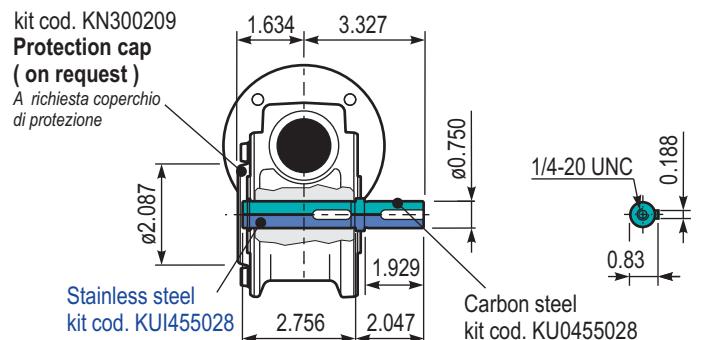
PD45**BR**... Reaction arm  
Braccio di reazione



RD45**UNI**.. Input shaft  
Albero in entrata



PD45..**SIB** Single output shaft  
Albero semplice in uscita





Input speed ( $n_1$ ) = 1750 min<sup>-1</sup>

Output speed $n_2$ [min <sup>-1</sup> ]	Ratio $i$	Motor power $P_{1M}$ [HP]	Output torque $M_{2M}$ [lb in]	Service factor $f.s$	Nominal power $P_{1R}$ [HP]	Nominal torque $M_{2R}$ [lb in]	Available NEMA motor flanges		Dynamic efficiency $RD$	Tooth module [mm]	Ratio code
							-W 56C	-			
250.0	7	2	413	1.2	2.34	478			82	2.5	01
175.0	10	1.5	432	1.2	1.84	522			80	2.4	02
125.0	14	1	398	1.4	1.46	575			79	2.6	03
97.2	18	1	486	1.1	1.09	522			75	2.0	04
67.3	26	0.75	485	1.2	0.87	558			69	2.7	05
58.3	30	0.75	567	1.1	0.82	611			70	2.5	12
48.6	36	0.5	447	1.4	0.69	611			69	2.1	06
40.7	43	0.5	511	1.1	0.57	575			66	1.8	07
35.0	50	0.5	558	1.0	0.51	558			62	1.5	13
29.2	60	0.33	414	1.3	0.42	522			58	1.3	08
25.7	68	0.33	461	1.1	0.35	487			57	1.2	09
21.9	80	0.25	389	1.2	0.31	478			54	1.0	10
17.5	100	0.25	450	1.0	0.24	434			50	0.8	11

- 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

## Lubrication Lubrificazione

Unit D50 is supplied with synthetic oil to assure long life lubrication. Food grade oil is available on request. See Table 1 for lubrication and recommended quantity. See Table 2 for possible radial and axial loads on the gearbox.

Il riduttore tipo D50 viene fornito con olio sintetico e lubrificazione tipo "long life". Disponibile a richiesta olio alimentare. Vedi Tabella 1 per oli e quantità consigliati. Vedi Tabella 2 per i carichi radiali e assiali applicabili al riduttore.

Oil quantity for all positions: 4.93 oz. Quantità olio per tutte le posizioni: 4.93 oz.	Shell Omala S4 WE 320	Eni Telium VSF 320
---	--------------------------	-----------------------

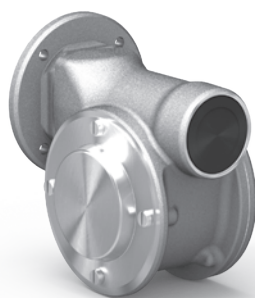
Tab. 1

## Suggested Suggerito

Stainless steel protection cap (on request).

Coperchio di protezione in acciaio inox a richiesta.

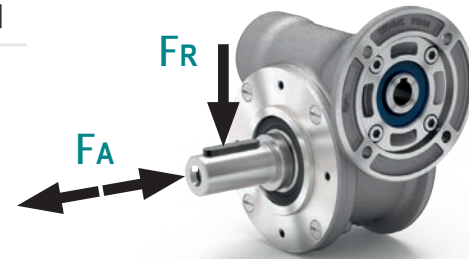
Kit cod. KN500209



## Radial and axial loads Carichi radiali e assiali

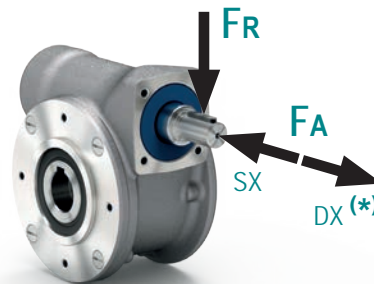
### Output shaft Albero di uscita

$n_2$ [min <sup>-1</sup> ]	$F_A$ [lb]	$F_R$ [lb]
200	54	270
150	63	315
100	67	337
75	76	382
50	85	427
25	108	562
15	126	629



### Input shaft Albero in entrata

$n_1$ [min <sup>-1</sup> ]	$F_A$ [lb]	$F_R$ [lb]
1750	17	85

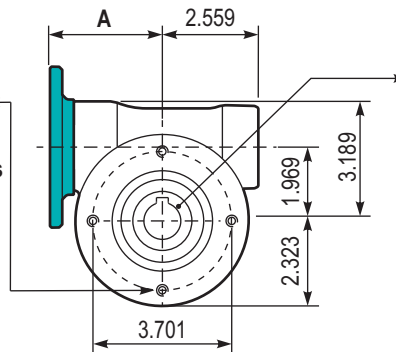
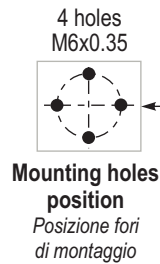
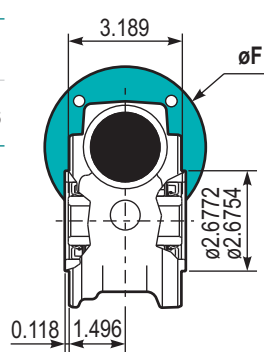


\* Strong axial loads in the DX direction are not allowed.  
\* Non sono consentiti forti carichi assiali con direzione DX

Tab. 2

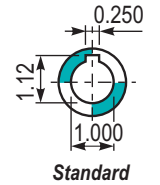
PD50 **UNI..** Basic gearbox  
Riduttore base

M. flanges	Kit code	øF	A
56C	KUD504041	6.5	3.886



Gearbox weight  
Peso riduttore **6.61 lb**

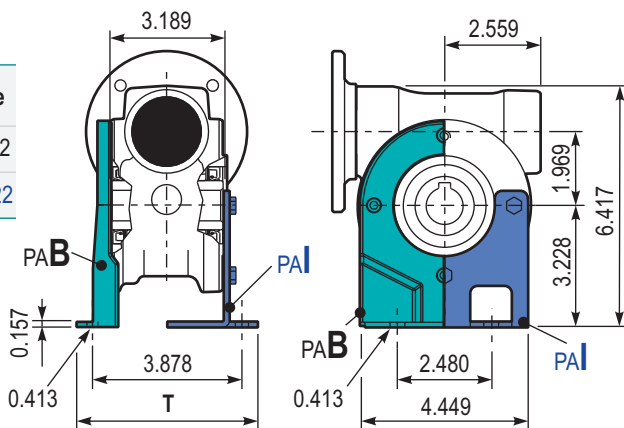
Hollow shaft  
Foro in uscita



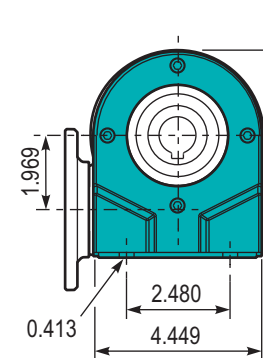
PD50 **PA...** Feet  
Piedini

Type	T	Kit code
B**	4.843	K0509022
I*	4.803	KN509022

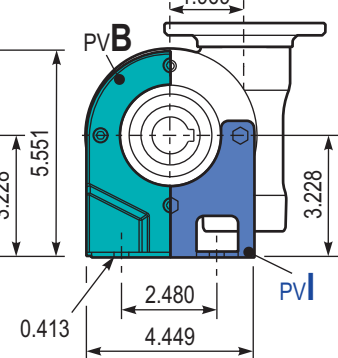
\*\* Zink plated  
\* Stainless steel



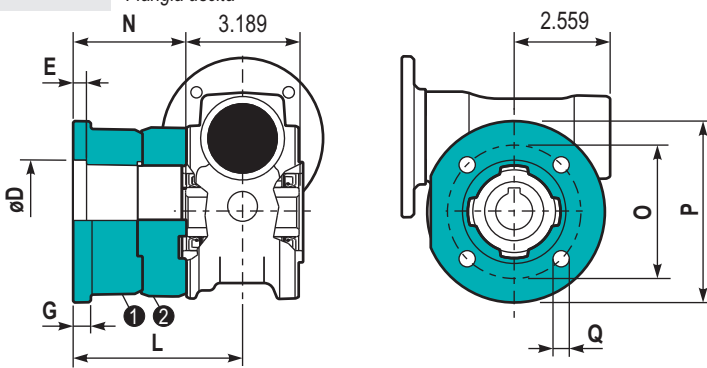
PD50 **PBB..** Feet  
Piedini



PD50 **PV...** Feet  
Piedini

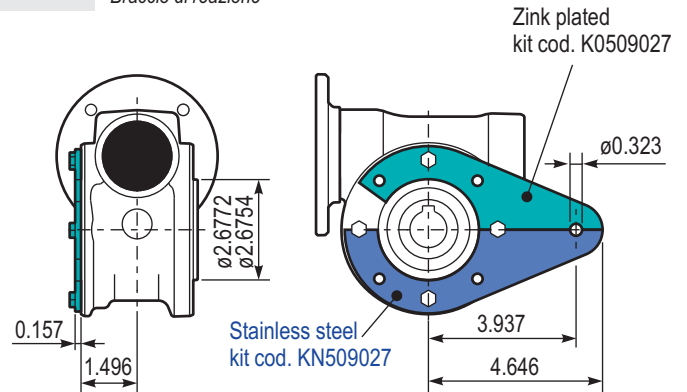


PD50 **FL..** Output flange  
Flangia uscita

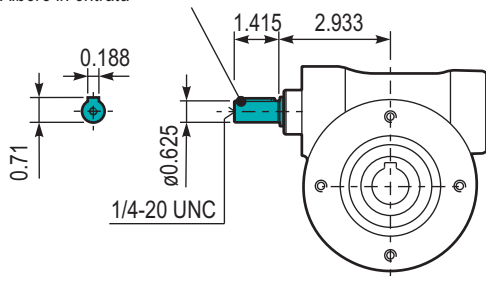


Type	øD	E	G	L	N	O	P	Q	Kit code
C	2.7638 2.7618	0.35	0.47	3.346	1.752	3.543	4.843	0.41	① K0509010 ② -
L	2.7638 2.7618	0.35	0.47	4.508	2.913	3.543	4.843	0.41	① K0509010 ② K0500200

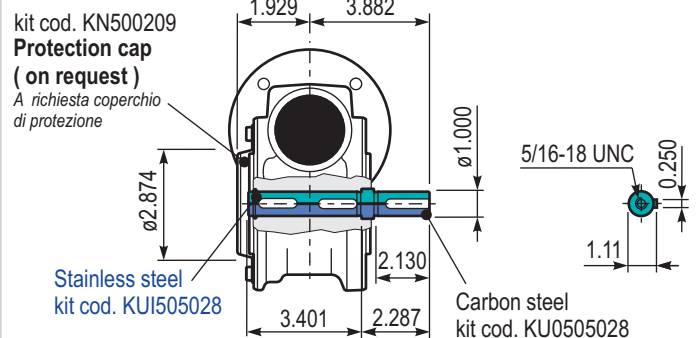
PD50 **BR...** Reaction arm  
Braccio di reazione



**RD50UNI..** Input shaft  
Albero in entrata Carbon steel kit cod. KU0455006



PD50.. **SID** Single output shaft  
Albero semplice in uscita



Input speed ( $n_1$ ) = 1750 min<sup>-1</sup>

Output speed $n_2$ [min <sup>-1</sup> ]	Ratio $i$	Motor power $P_{1M}$ [HP]	Output torque $M_{2M}$ [lb in]	Service factor $f.s$	Nominal power $P_{1R}$ [HP]	Nominal torque $M_{2R}$ [lb in]	Available NEMA motor flanges		Dynamic efficiency RD	Tooth module [mm]	Ratio code
							-W 56C	-X 143-5TC			
250.0	7	2	419	2.5	5.10	1053	B		83	3.1	01
175.0	10	2	583	1.9	3.93	1133	B		81	3.1	02
116.7	15	2	854	1.4	2.75	1159	B		79	3.1	03
92.1	19	2	1068	1.1	2.20	1159	B		78	2.6	04
72.9	24	1.5	972	1.2	1.87	1195	B		75	2.0	05
58.3	30	1.5	1199	1.0	1.56	1230	B		74	3.2	06
48.6	36	1	882	1.4	1.42	1239	B		68	2.7	07
43.8	40	1	951	1.2	1.25	1177	B		66	2.5	13
38.9	45	1	1070	1.1	1.08	1142	B		66	2.1	08
29.2	60	0.75	1005	1.1	0.83	1097	B		62	1.6	12
26.1	67	0.5	724	1.4	0.73	1044	B		60	1.5	09
21.9	80	0.5	821	1.2	0.62	1000	B		57	1.3	10
18.6	94	0.5	880	1.1	0.58	1000	B		52	1.1	11

**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

## Lubrication

### Lubrificazione

Unit D63 is supplied with synthetic oil to assure long life lubrication. Food grade oil is available on request. See Table 1 for lubrication and recommended quantity. See Table 2 for possible radial and axial loads on the gearbox.

Il riduttore tipo D63 viene fornito con olio sintetico e lubrificazione tipo "long life". Disponibile a richiesta olio alimentare. Vedi Tabella 1 per oli e quantità consigliati. Vedi Tabella 2 per i carichi radiali e assiali applicabili al riduttore.

Oil quantity for all positions: 14.08 oz. <i>Quantità olio per tutte le posizioni: 14.08 oz.</i>	Shell Omala S4 WE 320	Eni Telium VSF 320
--	--------------------------	-----------------------

Tab. 1

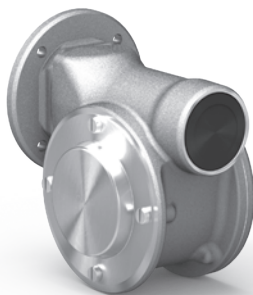
## Suggested

### Suggerito

Stainless steel protection cap (on request).

Coperchio di protezione in acciaio inox a richiesta.

Kit cod. KN630209



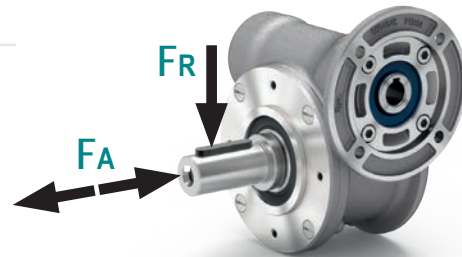
## Radial and axial loads

### Carichi radiali e assiali

#### Output shaft

##### Albero di uscita

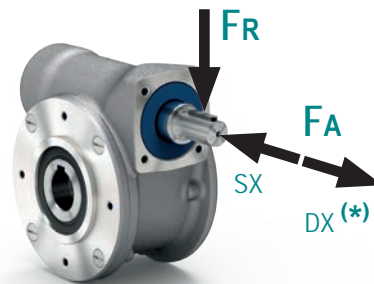
$n_2$ [min <sup>-1</sup> ]	FA [lb]	FR [lb]
200	81	404.5
150	90	450
100	103.5	517
75	112.5	562
50	135	674.5
25	157	854
15	180	899



#### Input shaft

##### Albero in entrata

$n_1$ [min <sup>-1</sup> ]	FA [lb]	FR [lb]
1750	20	101



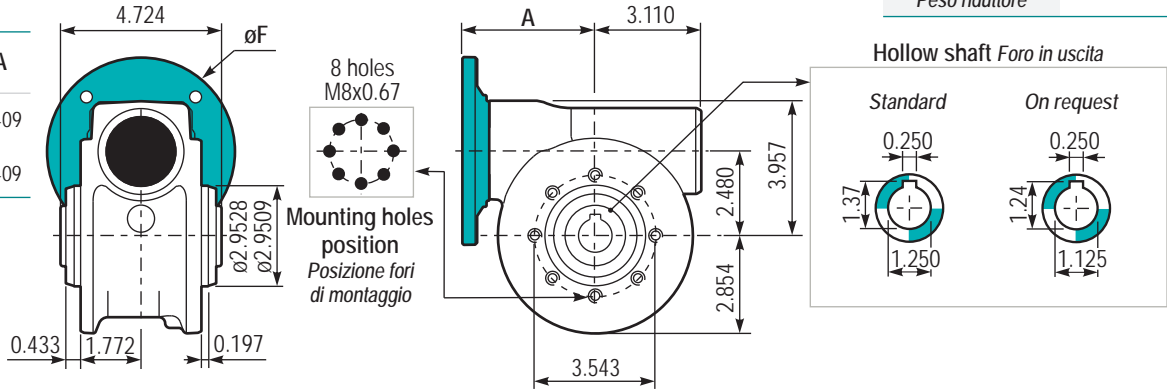
\* Strong axial loads in the DX direction are not allowed.  
\* Non sono consentiti forti carichi assiali con direzione DX

Tab. 2



PD63UNI.. Basic gearbox  
Riduttore base

M. flanges	Kit code	øF	A
56C	KUD634041	6.50	4.409
143/5 TC	KUD634041	6.50	4.409

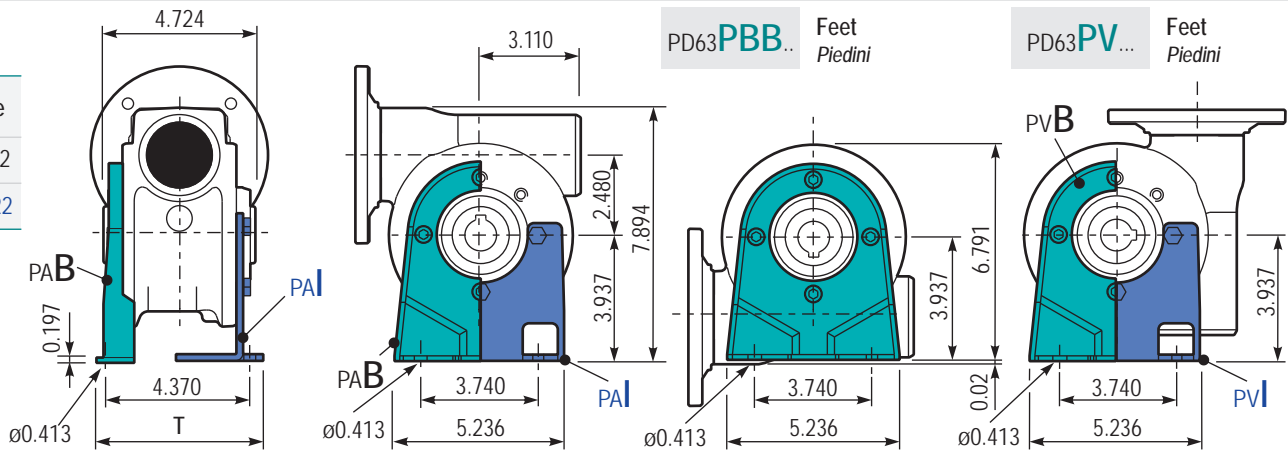


Gearbox weight  
Peso riduttore 13.23 lb

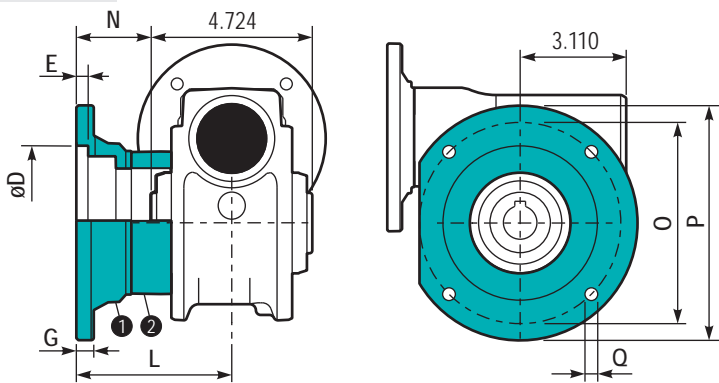
PD63PA... Feet  
Piedini

Type	T	Kit code
B**	5.669	K0639022
I*	5.118	KN639022

\*\* Zink plated  
\* Stainless steel

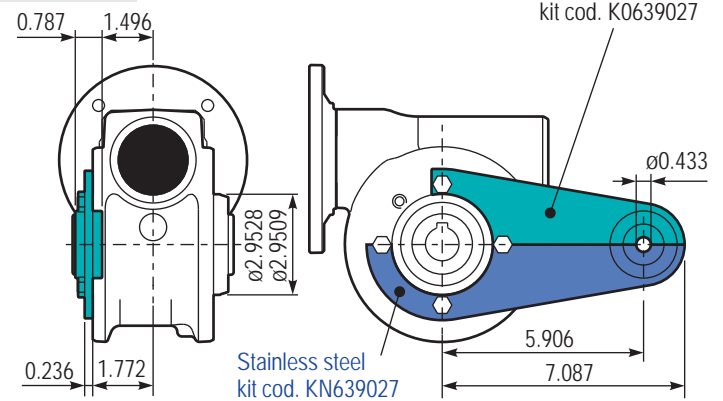


PD63FL.. Output flange  
Flangia uscita

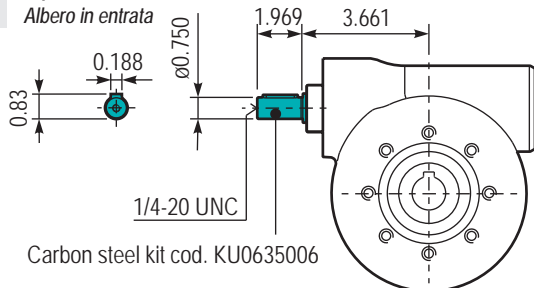


Type	øD	E	G	L	N	O	P	Q	Kit code
C	4.5354	0.28	0.51	3.386	1.024	5.906	6.890	0.43	1 K0639010
	4.5335								2
L	4.5354	0.28	0.51	4.567	2.205	5.906	6.890	0.43	1 K0639010
	4.5335								2 K0630200

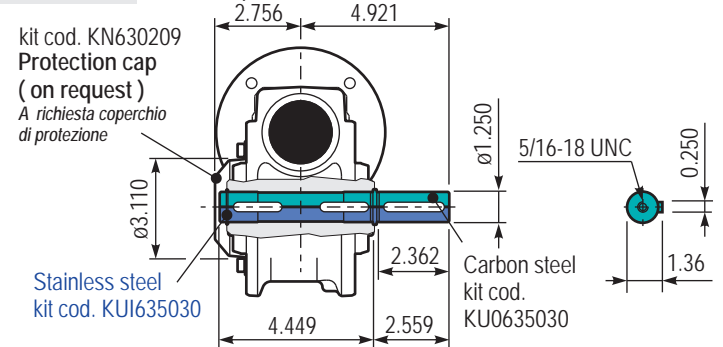
PD63BR.. Reaction arm  
Braccio di reazione



RD63UNI.. Input shaft  
Albero in entrata



PD63..SIE Single output shaft  
Albero semplice in uscita



Input speed ( $n_1$ ) = 1750 min<sup>-1</sup>

Output speed $n_2$ [min <sup>-1</sup> ]	Ratio $i$	Motor power $P_{1M}$ [HP]	Output torque $M_{2M}$ [lb in]	Service factor $f.s$	Nominal power $P_{1R}$ [HP]	Nominal torque $M_{2R}$ [lb in]	Available NEMA motor flanges			Dynamic efficiency RD	Tooth module [mm]	Ratio code
							-W 56C	-X 143-5TC	-Y 182-4TC			
250.0	7	5	1109	2.0	9.90	2168	B	B		88	4.23	01
175.0	10	5	1441	1.7	8.40	2390	B	B		80	4.2	02
125.0	14	5	1967	1.3	6.61	2567	B	B		78	4.5	03
87.5	20	3	1707	1.5	4.41	2478	B	B		79	3.4	04
79.5	22	3	1854	1.3	4.06	2478	B	B		78	3.1	05
62.5	28	3	2269	1.3	3.91	2921	B	B		75	4.7	06
46.1	38	3	2915	1.0	2.95	2832	B	B		71	3.5	07
38.0	46	2	2253	1.2	2.47	2744	B	B		68	3.1	08
33.7	52	2	2472	1.0	1.99	2434	B	B		66	2.7	09
26.1	67	1.5	2353	1.0	1.57	2434	B	B		65	2.1	10
23.6	74	1.5	2319	1.0	1.48	2257	B	B		58	1.9	11
18.2	96	1	1833	1.1	1.13	2036	B	B		53	1.5	12

**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

## Lubrication

Lubrificazione

Unit D85 is supplied with synthetic oil to assure long life lubrication. Food grade oil is available on request. See Table 1 for lubrication and recommended quantity. See Table 2 for possible radial and axial loads on the gearbox.

Il riduttore tipo D85 viene fornito con olio sintetico e lubrificazione tipo "long life". Disponibile a richiesta olio alimentare. Vedi Tabella 1 per oli e quantità consigliati. Vedi Tabella 2 per i carichi radiali e assiali applicabili al riduttore.

**Oil quantity for all positions:**  
42.23 oz.

Quantità olio per tutte le posizioni: 42.23 oz.

**Shell**  
Omala S4 WE 320

**Eni**  
Telium VSF 320

Tab. 1

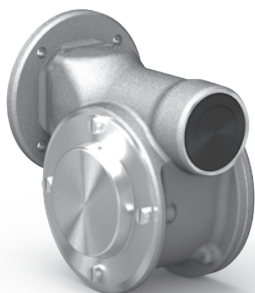
## Suggested

Suggerito

**Stainless steel protection cap (on request).**

Coperchio di protezione in acciaio inox a richiesta.

Kit cod. KN850209



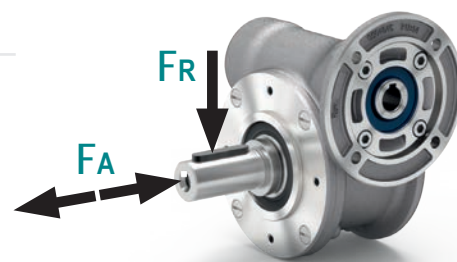
## Radial and axial loads

Carichi radiali e assiali

### Output shaft

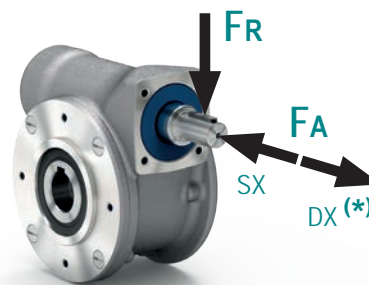
Albero di uscita

$n_2$ [min <sup>-1</sup> ]	FA [lb]	FR [lb]
200	112	562
150	130	652
100	135	674
75	157	787
50	180	899
25	225	1124
15	261	1304



### Input shaft

Albero in entrata



$n_1$ [min <sup>-1</sup> ]	FA [lb]	FR [lb]
1750	36	182

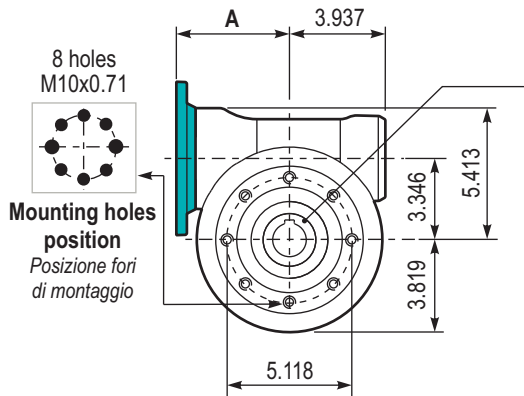
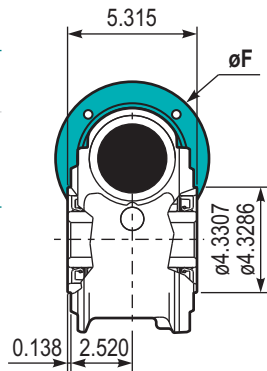
\* Strong axial loads in the DX direction are not allowed.

\* Non sono consentiti forti carichi assiali con direzione DX

Tab. 2

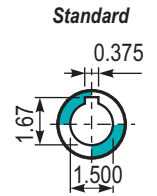
PD85 **UNI..** Basic gearbox  
Riduttore base

M. flanges	Kit code	øF	A
56C	KUD854041	6.50	4.823
143/5 TC	KUD854041	6.50	4.823
182/4 TC	KUD854042	8.88	5.527



Gearbox weight  
Peso riduttore 24.25 lb

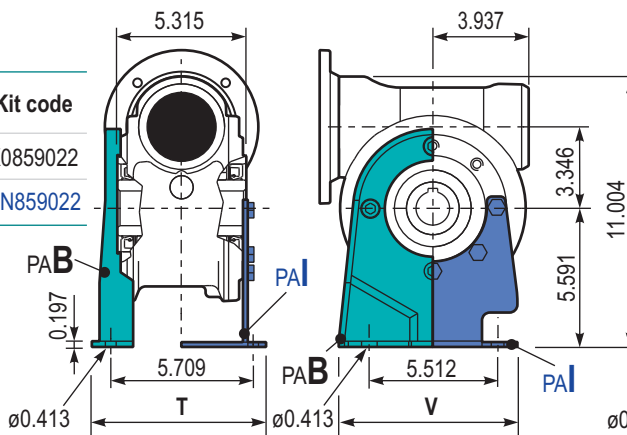
Hollow shaft  
Foro in uscita



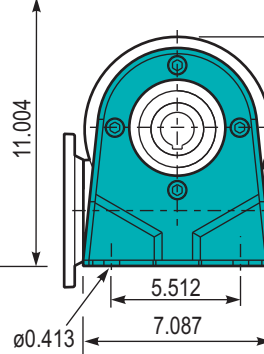
PD85 **PA...** Feet  
Piedini

Type	T	V	Kit code
B**	7.165	7.087	K0859022
I*	6.929	6.772	KN859022

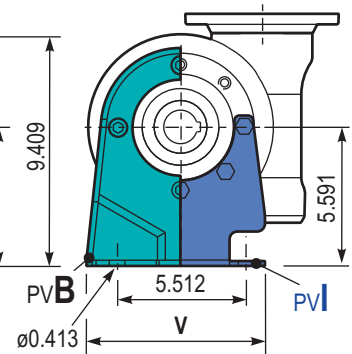
\*\* Zink plated  
\* Stainless steel



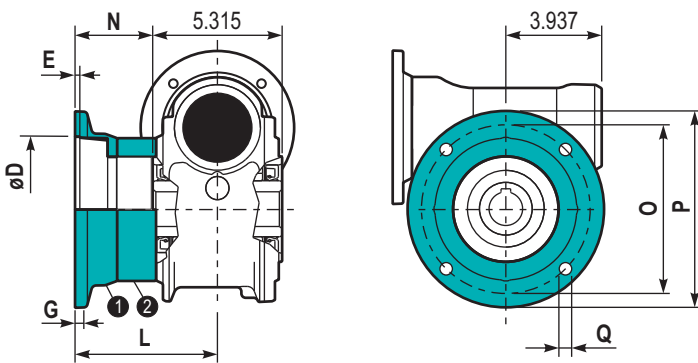
PD85 **PBB..** Feet  
Piedini



PD85 **PV...** Feet  
Piedini

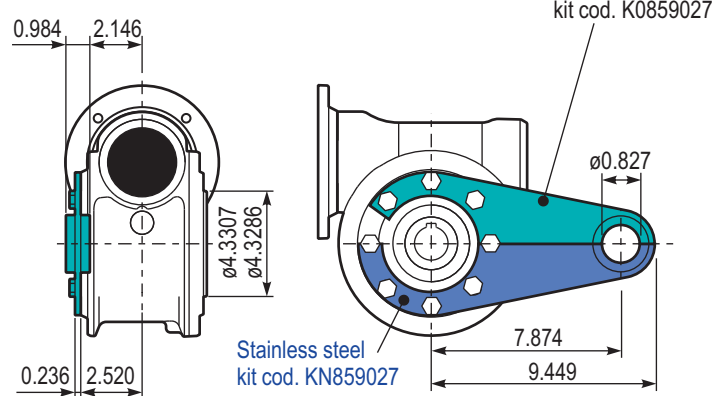


PD85 **FL..** Output flange  
Flangia uscita

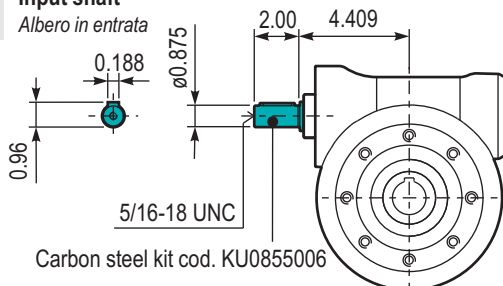


Type	øD	E	G	L	N	O	P	Q	Kit code
C	5.9867	0.20	0.63	4.252	1.594	6.929	8.071	0.51	① K0859010
	5.9843								② -
L	5.9867	0.20	0.63	5.846	3.189	6.929	8.071	0.51	③ K0859010
	5.9843								④ K0850201

PD85 **BR...** Reaction arm  
Braccio di reazione



RD85 **UNI..** Input shaft  
Albero in entrata



PD85.. **SIH** Single output shaft  
Albero semplice in uscita

