

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

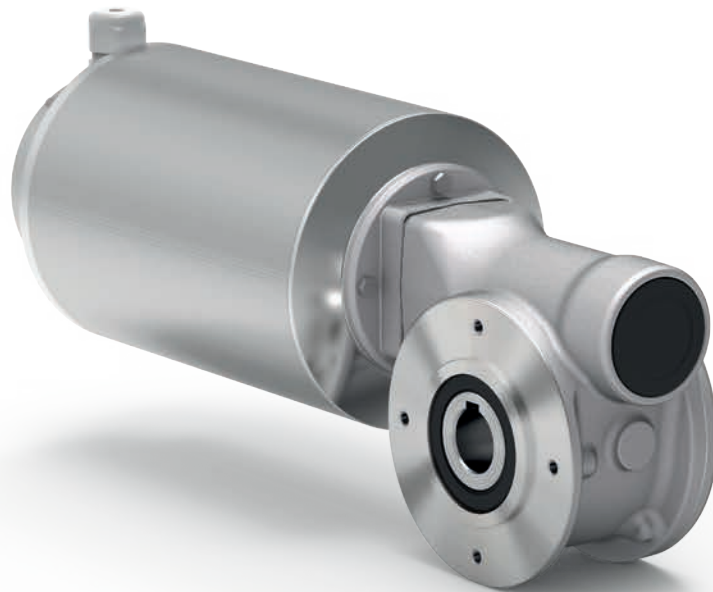
IP66

CE




















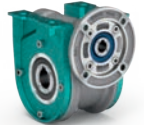
On req.
A rich.

IP69k

Ex
ATEX



How to order Codifica

P	D45	UNI	N	10	0	MA	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>
P 	Worm gearboxes <i>Riduttori a vite senza fine</i>	UNI 	N 	See technical data table <i>Vedi tabelle dati tecnici</i>	0 Hollow <i>Mozzo</i> 	→ Standard D30 - 3D3 MA → ø14	C Cast iron / Carbon steel <i>Ghisa</i>
M 	D30 D45 D50 D63 D85	FLC 	  		S Solid output shaft <i>Albero in uscita</i> 	D45 - 4D3 MB → ø18 MC → ø19 MD → ø20	I Stainless steel (Output hollow shaft ø38 is not available in stainless steel) <i>(L'albero cavo ø38 non è disponibile in acciaio inox)</i>
B 		FLL 	Select L or R position for output flange <i>Selezionare la posizione L o R per la flangia in uscita</i>		ME → ø24 MF → ø25 D63 - 6D3 6D4 MG → ø28 MH → ø30		
R 	Combined worm gearboxes not available for type B <i>Riduttori a vite senza fine combinati non disponibili per tipo B</i>	BRI Stainless steel <i>Acciaio inox</i> BRZ Zinc plated <i>Zincato</i> 	L Left <i>Sinistra</i> 			D85 - 8D4 MK → ø35 ML → ø38	The quill input hollow bore is always in carbon steel <i>Il foro cavo in entrata è sempre in acciaio</i>
		PAI Stainless steel <i>Acciaio inox</i> PAB Zinc plated <i>Zincato</i> 	R Right <i>Destra</i> 				
	3D3 4D3 5D3 6D3 6D4 8D4	PVI Stainless steel <i>Acciaio inox</i> PVB Zinc plated <i>Zincato</i> 				Output male shaft is available only for standard bore <i>Albero maschio in uscita è disponibile solo per fori standard</i>	
		PBB Zinc plated <i>Zincato</i> 					

N	C	-R	B3	ST	A	---	For M type specify terminal box position <i>Per tipo M specificare posizione morsettera</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>	Mounting position <i>Posizione di montaggio</i>	
Left <i>Sinistra</i>	Right <i>Destra</i>	Motor flanges <i>Flange motore</i>	B3	ST Standard bore * Kit R standard <i>Foro standard * Kit R standard</i>	A Standard in aluminum <i>Standard in alluminio</i>	Only for combined units See technical data table <i>Solo per i riduttori combinati Vedi tabelle dati tecnici.</i>	A
				Input bore without reduction bushing -O → 9mm -P → 11mm -Q → 14mm -R → 19mm -T → 24mm -U → 28mm			B
N Without protection cap <i>Senza coperchietto di protezione</i>	N Without protection cap <i>Senza coperchietto di protezione</i>	IEC B5 -A → 56 B5 (ø120) -B → 63 B5 (ø140) -C → 71 B5 (ø160) -D → 80 B5 (ø200) -E → 90 B5 (ø200) -F → 100-112B5 (ø250)	B8 	Coupling	N NTT coating <i>NTT Rivestimento</i>		C
		IEC B14 -O → 56 B14 (ø80) -P → 63 B14 (ø90) -Q → 71 B14 (ø105) -R → 80 B14 (ø120) -T → 90 B14 (ø140) -U → 100-112B14 (ø160)	B6 	Standard (IEC) -A → 9mm -B → 11mm -C → 14mm -D → 19mm -E → 24mm -F → 28mm	Not available for combined gearboxes <i>Non disponibile per riduttori combinati</i>		D
C Closed <i>Chiuso</i>	C Closed <i>Chiuso</i>	BRUSHLESS BA → 40/63-M5 BB → 50/70-M5 BC → 60/75-M5 BD → 70/90-M6 BE → 80/100-M6 BF → 95/115-M8 BG → 110/145-M8 BH → 130/165-M8	B7 	Brushless * -1 → 9mm -2 → 11mm -3 → 14mm -4 → 19mm -5 → 22mm -6 → 24mm	V Painted <i>Verniciato</i>		
		Brushless-Tech catalogue is available in our website <i>Catalogo Brushless-Tech è disponibile nel nostro sito web</i>	V5 	Ready for input coupling <i>Predisposto per giunto</i>	Ral 7035		
		Without flange <i>Senza flangia</i> -M → Metric	V6 	-0 Type B <i>Tipo B</i> -0 Type R <i>Tipo R</i>			
		Type R <i>Tipo R</i> -0 → Metric		* With reduction bushing where applicable <i>* Con bussola di riduzione dove prevista</i>			

Input speed (n_1) = 1400 min⁻¹

Output speed n_2 [min ⁻¹]	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		B14 motor flanges		Dynamic efficiency RD	Tooth module [mm]	Ratio code
							-A 56	-B 63	-O 56	-P 63			
280	5	0.18	5	3.3	0.60	17	B		B-C		82	1.26	09
200	7	0.18	7	2.4	0.44	17	B		B-C		80	1.44	01
140	10	0.18	10	1.8	0.32	17	B		B-C		78	1.44	02
93	15	0.18	13	1.4	0.25	19	B		B-C		73	1.44	03
70	20	0.18	17	1.1	0.20	19	B		B-C		70	1.09	04
47	30	0.12	15	1.4	0.17	21	B		B-C		62	1.44	05
35	40	0.12	19	1.1	0.13	20	B		B-C		57	1.09	06
23	61	0.09	19	1.1	0.10	20	B		B-C		50	0.72	07
17.5	80	0.06	16	1.0	0.06	16	B		B-C		48	0.56	08
14	100	0.06*	16	0.5	0.03	8	B		B-C		40	0.45	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 D30 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 D30 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:
0.03 L

Quantità olio per tutte le posizioni: 0.03 L

Shell
Omala S4 WE 320

Eni
Telium VSF 320

Tab. 1

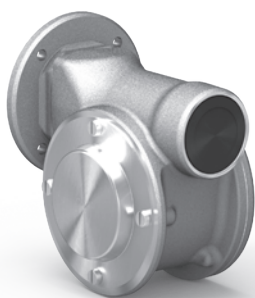
Suggested

Suggerito

Stainless steel protection cap (on request).

Coperchio di protezione in acciaio inox a richiesta.

Kit cod. KN300209



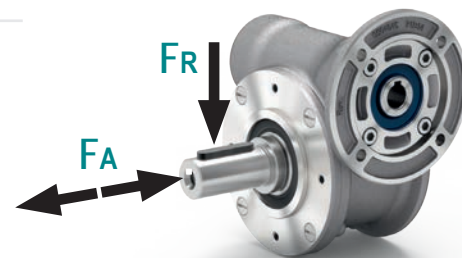
Radial and axial loads

Carichi radiali e assiali

Output shaft

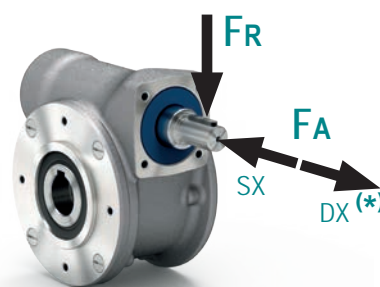
Albero di uscita

n_2 [min ⁻¹]	F_A [N]	F_R [N]
200	120	600
150	140	700
100	160	800
75	180	900
50	200	1000
25	250	1250
15	280	1400



Input shaft

Albero in entrata



n_1 [min ⁻¹]	F_A [N]	F_R [N]
1400	20	100

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

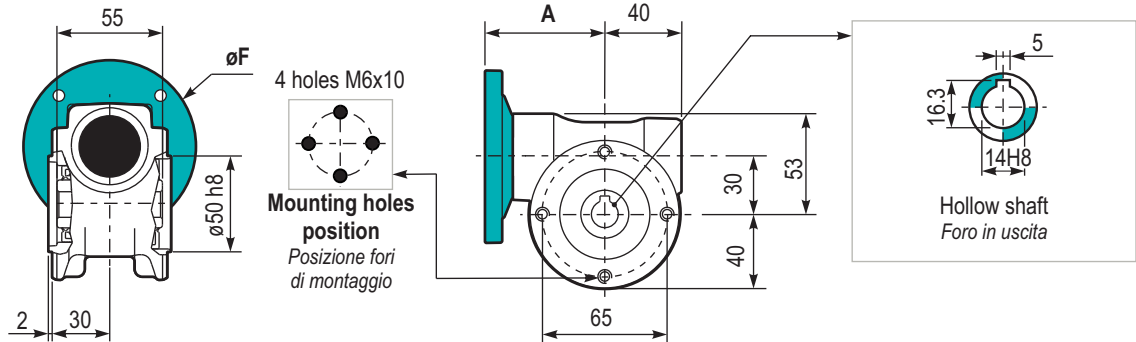
* Non sono consentiti forti carichi assiali con direzione DX

Tab. 2

PD30UNI.. Basic gearbox
Riduttore base

Gearbox weight
Peso riduttore **1.05 kg**

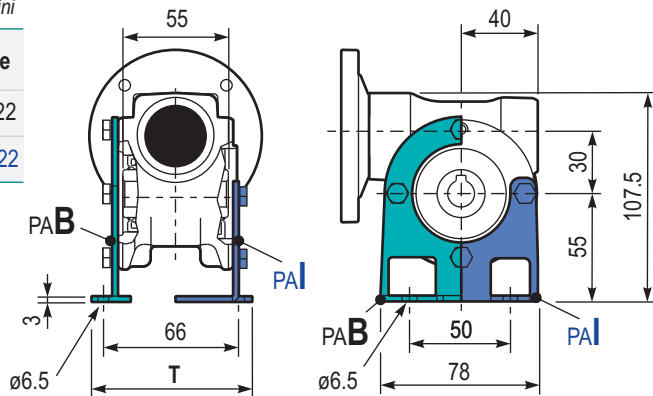
M. flanges	Kit code	øF	A
56B5	KD304041	120	62
63B5	KD304042	140	63
56B14	KD304046	80	62
63B14	KD304045	90	63



PD30PA... Feet
Piedini

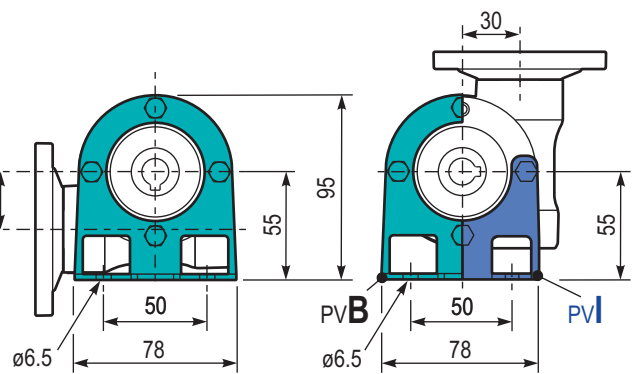
Type	T	Kit code
B**	87	K0309022
I*	80	KN309022

** Zink plated
* Stainless steel

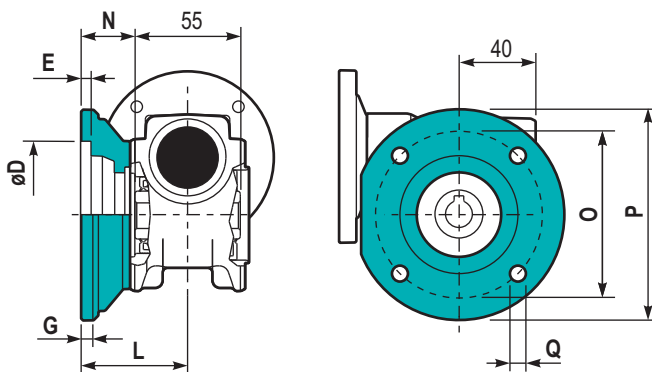


PD30PBB.. Feet
Piedini

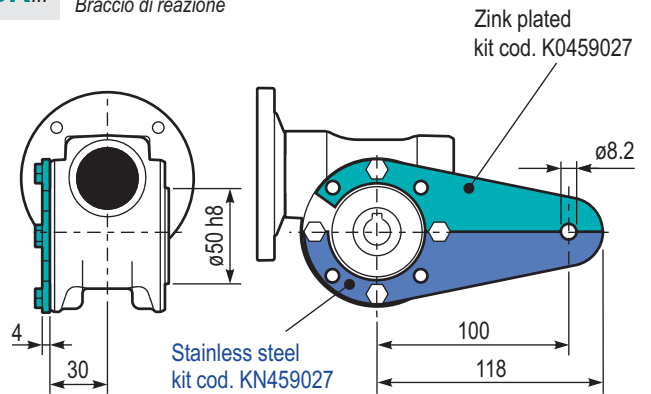
PD30PV... Feet
Piedini



PD30FL.. Output flange
Flangia uscita

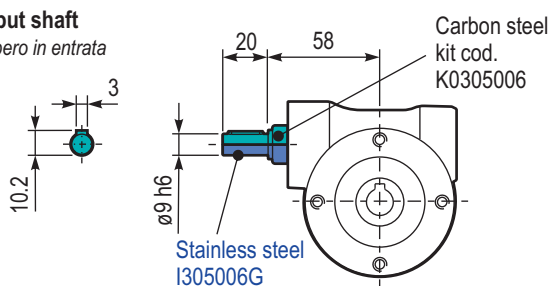


PD30BR... Reaction arm
Braccio di reazione



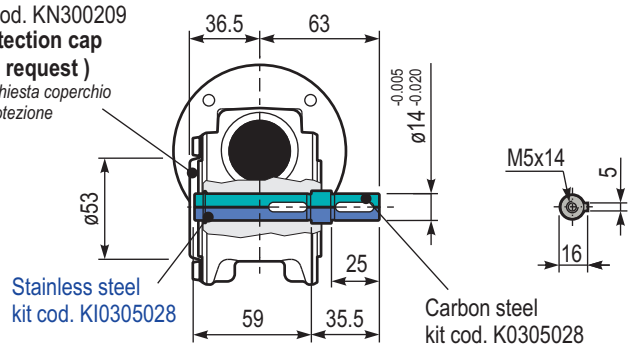
Type	øD	E	G	L	N	O	P	Q	Kit code
C	50 ^{+0.15} / _{+0.05}	6	6	50.5	23	68	80	7	K0309010
L	60 ^{+0.15} / _{+0.05}	6	6	55.5	28	87	110	8.5	K0459010

RD30UNI.. Input shaft
Albero in entrata



PD30..SMA Single output shaft
Albero semplice in uscita

kit cod. KN300209
Protection cap
(on request)
A richiesta coperchio di protezione



Input speed (n_1) = 1400 min⁻¹

Output speed n_2 [min ⁻¹]	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			B14 motor flanges			Dynamic efficiency RD	Tooth module [mm]	Ratio code
							-B 63	-C 71		-O 56	-P 63	-Q 71			
200	7	0.37	14	2.2	0.80	30	B			B-C	B-C		80	2.2	01
140	10	0.37	20	1.5	0.57	30	B			B-C	B-C		79	2.2	02
100	14	0.37	27	1.1	0.41	30	B			B-C	B-C		77	2.4	03
67	21	0.37	36	1.2	0.43	41	B			B-C	B-C		67	1.6	04
50	28	0.25	31	1.3	0.33	41	B			B-C	B-C		65	2.5	05
38	37	0.25	40	1.0	0.26	41	B			B-C	B-C		63	1.8	06
30	46	0.25	46	0.9	0.22	41	B			B-C	B-C		59	1.5	07
23	60	0.18	41	1.0	0.18	41	B			B-C	B-C		56	1.2	08
20	70	0.12	31	1.0	0.12	30	B			B-C	B-C		54	1.0	09
13.7	102	0.09	31	1.0	0.09	29	B			B-C	B-C		49	0.72	10

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: 0.09 L <i>Quantità olio per tutte le posizioni: 0.09 L</i>	Shell Omala S4 WE 320	Eni Telium VSF 320
--	--------------------------	-----------------------

Tab. 1

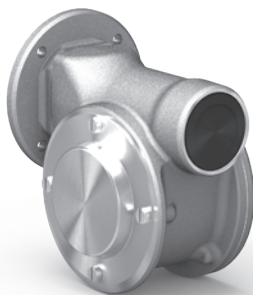
Suggested

Suggerito

Stainless steel protection cap (on request).

Coperchio di protezione in acciaio inox a richiesta.

Kit cod. KN300209



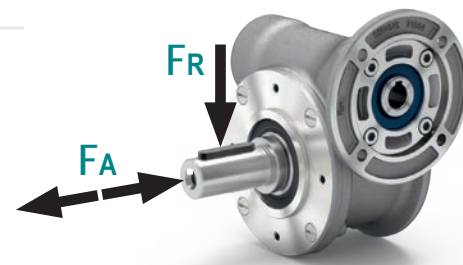
Radial and axial loads

Carichi radiali e assiali

Output shaft

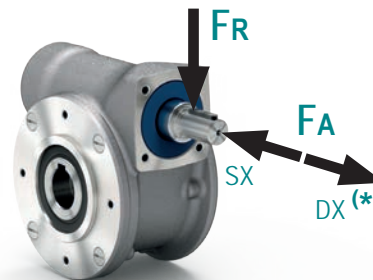
Albero di uscita

n_2 [min ⁻¹]	F_A [N]	F_R [N]
200	180	900
150	200	1000
100	220	1100
75	240	1200
50	260	1400
25	300	1800
15	400	2000



Input shaft

Albero in entrata



n_1 [min ⁻¹]	F_A [N]	F_R [N]
1400	42	210

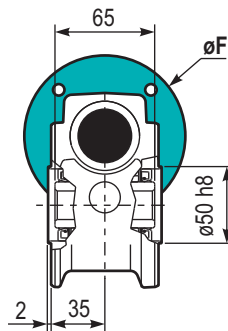
* Strong axial loads in the DX direction are not allowed.

* Non sono consentiti forti carichi assiali con direzione DX

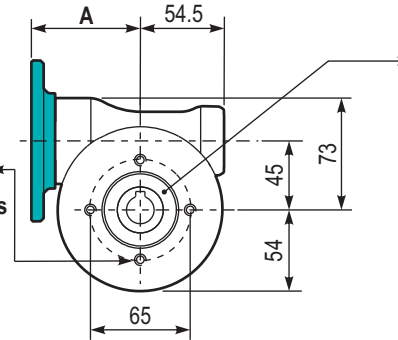
Tab. 2

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

M. flanges	Kit code	øF	A
63B5	KD454041	138	74
71B5	KD454042	160	71.5
56B14	KD454049	80	71.5
63B14	KD454047	90	74
71B14	KD454045	105	71.5

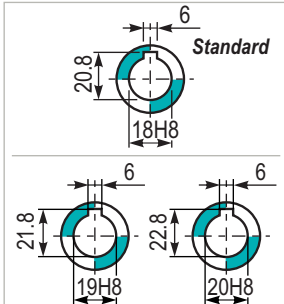


4 holes M6x14
Mounting holes position
Posizione fori di montaggio



Gearbox weight
Peso riduttore 2.40 kg

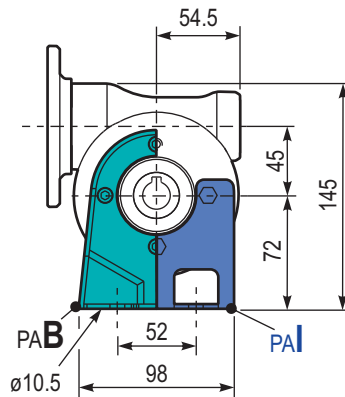
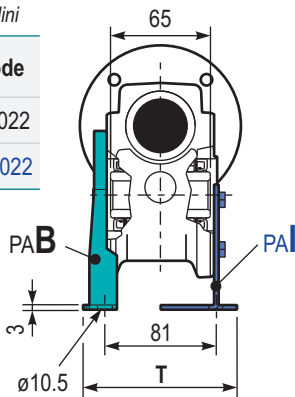
Hollow shaft
Foro in uscita



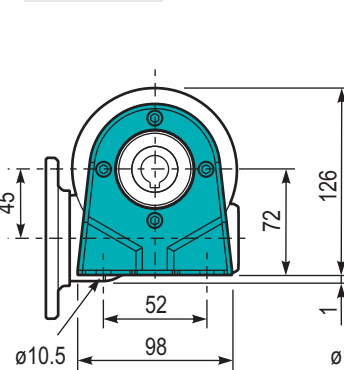
PD45**PA**... Feet
Piedini

Type	T	Kit code
B**	102	K0459022
I*	100	KN459022

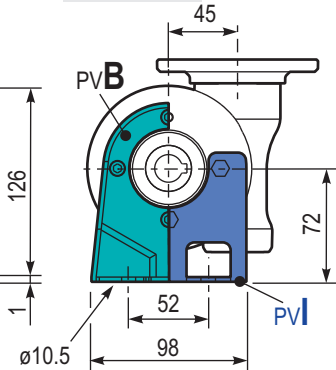
** Zink plated
* Stainless steel



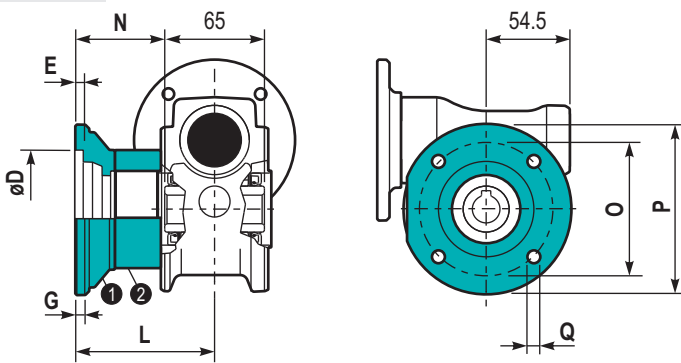
PD45**PBB**.. Feet
Piedini



PD45**PV**... Feet
Piedini

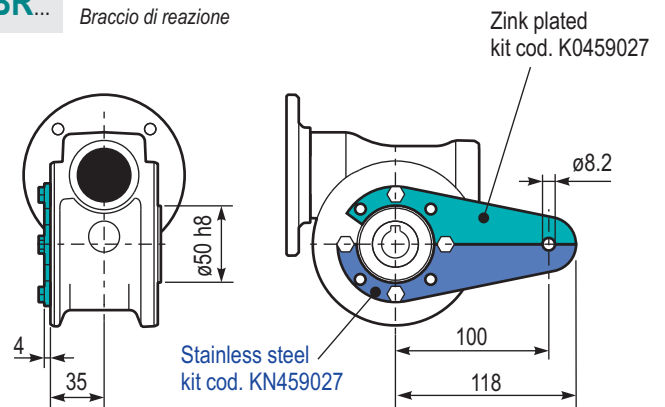


PD45**FL**.. Output flange
Flangia uscita



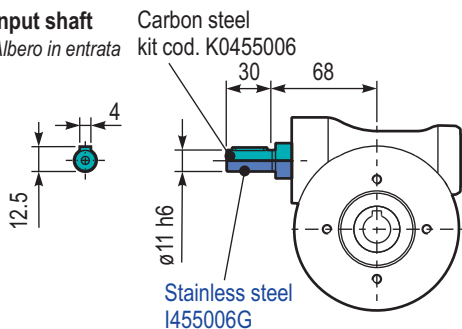
Type	øD	E	G	L	N	O	P	Q	Kit code
C	60 ^{+0.15} / _{+0.05}	9	9	60.5	28	87	110	8.5	① K0459010 ② -
L	60 ^{+0.15} / _{+0.05}	9	9	90.5	58	87	110	8.5	① K0459010 ② K0450200

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



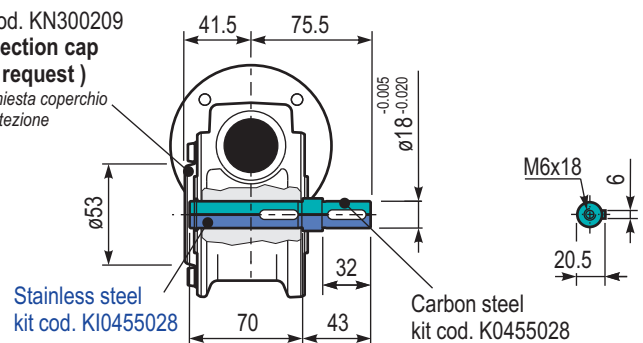
RD45UNI..

Input shaft
Albero in entrata



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

kit cod. KN300209
Protection cap
(on request)
A richiesta coperchio di protezione



Input speed (n_1) = 1400 min⁻¹

Output speed n_2 [min ⁻¹]	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				B14 motor flanges				Dynamic efficiency RD	Tooth module $[mm]$	Ratio code
							-B 63	-C 71	-D 80	-O 56	-P 63	-Q 71	-R 80				
200	7	0.75	29	1.9	1.5	57	B	B			B-C	B		82	2.5	01	
140	10	0.75	41	1.5	1.1	62	B	B			B-C	B		80	2.4	02	
100	14	0.75	57	1.2	0.90	68	B	B			B-C	B		79	2.6	03	
78	18	0.55	51	1.2	0.67	62	B	B			B-C	B		75	2.0	04	
54	26	0.55	67	1.0	0.54	66	B	B			B-C	B		69	2.7	05	
47	30	0.55	79	0.9	0.50	72	B	B			B-C	B		70	2.5	12	
39	36	0.37	63	1.2	0.43	72	B				B-C	B-C		69	2.1	06	
33	43	0.37	72	1.0	0.35	68	B				B-C	B-C		66	1.8	07	
28	50	0.25	53	1.2	0.31	66	B				B-C	B-C		62	1.5	13	
23	60	0.25	59	1.0	0.26	62	B				B-C	B-C		58	1.3	08	
21	68	0.25	66	0.9	0.22	58	B				B-C	B-C		57	1.2	09	
17.5	80	0.18	53	1.1	0.19	57	B				B-C	B-C		54	1.0	10	
14	100	0.12	41	1.3	0.15	51	B				B-C	B-C		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: 0.14 L	Shell Omala S4 WE 320	Eni Telium VSF 320
Quantità olio per tutte le posizioni: 0.14 L		

Tab. 1

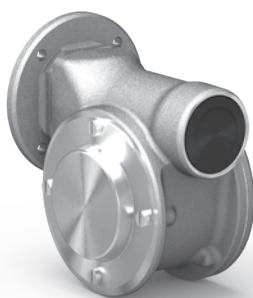
Suggested

Suggerito

Stainless steel protection cap (on request).

Coperchio di protezione in acciaio inox a richiesta.

Kit cod. KN500209



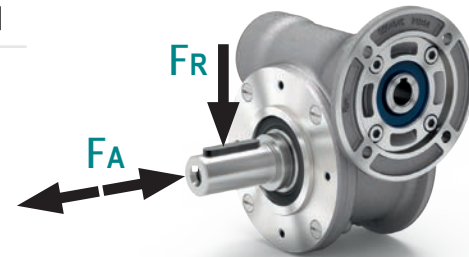
Radial and axial loads

Carichi radiali e assiali

Output shaft

Albero di uscita

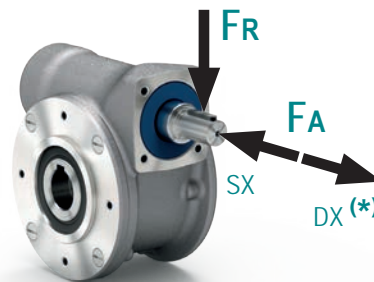
n_2 [min ⁻¹]	FA [N]	FR [N]
200	240	1200
150	280	1400
100	300	1500
75	340	1700
50	380	1900
25	480	2500
15	560	2800



Input shaft

Albero in entrata

n_1 [min ⁻¹]	FA [N]	FR [N]
1400	76	380

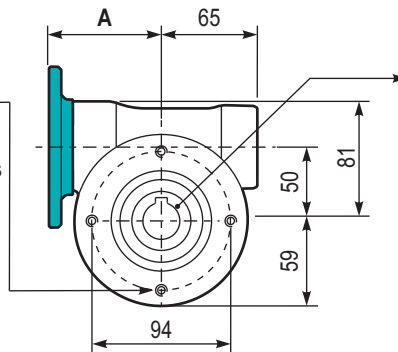
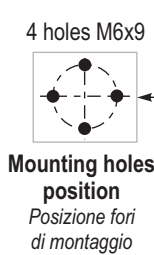
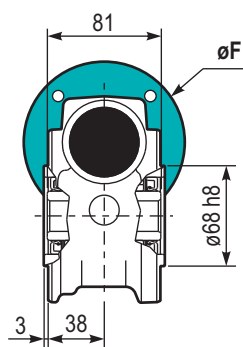


* Strong axial loads in the DX direction are not allowed.
* Non sono consentiti forti carichi assiali con direzione DX

Tab. 2

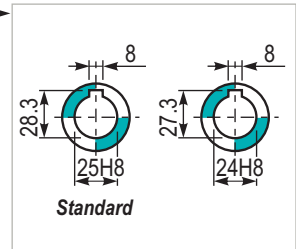
PD50 **UNI..** Basic gearbox
Riduttore base

M. flanges	Kit code	øF	A
63B5	KD504041	138	78.5
71B5	KD504042	160	76
80B5	KD504043	200	76.5
56B14	KD504049	80	76
63B14	KD504047	90	78.5
71B14	KD504045	105	76
80B14	KD504046	120	76.5



Gearbox weight
Peso riduttore **3.00 kg**

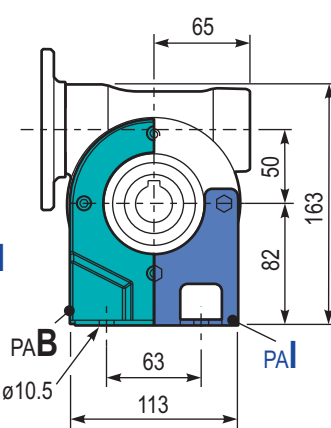
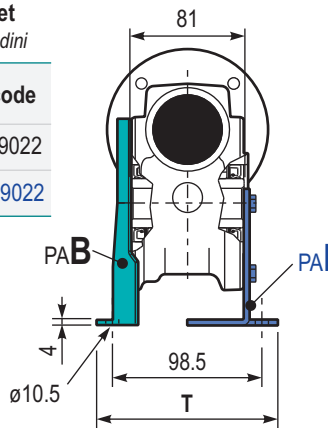
Hollow shaft
Foro in uscita



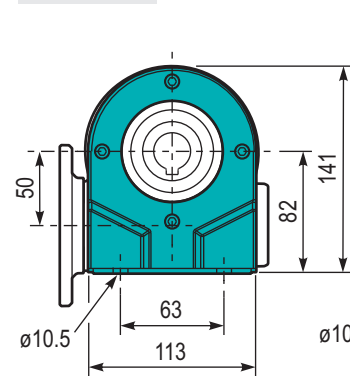
PD50 **PA...** Feet
Piedini

Type	T	Kit code
B**	123	K0509022
I*	122	KN509022

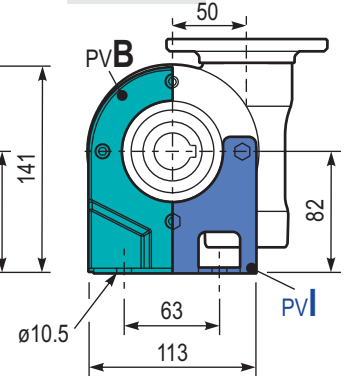
** Zink plated
* Stainless steel



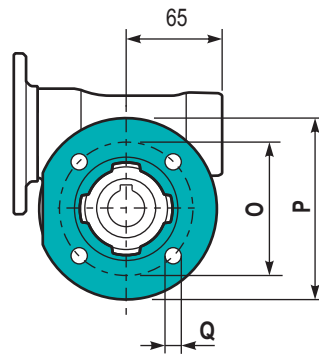
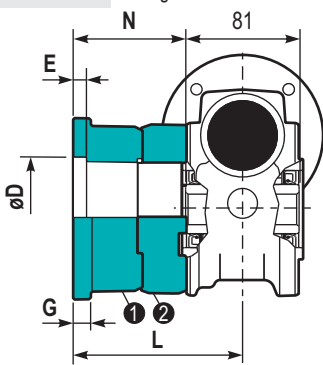
PD50 **PBB..** Feet
Piedini



PD50 **PV...** Feet
Piedini

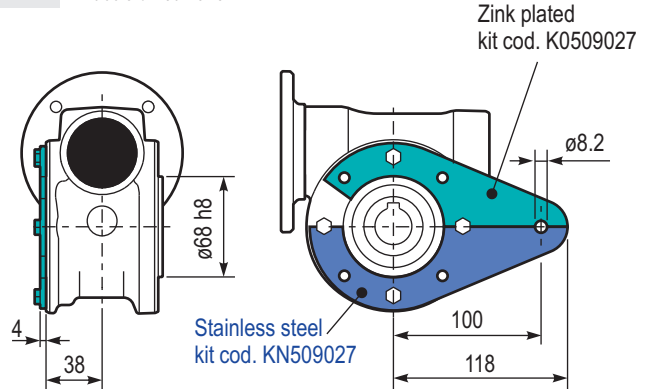


PD50 **FL..** Output flange
Flangia uscita



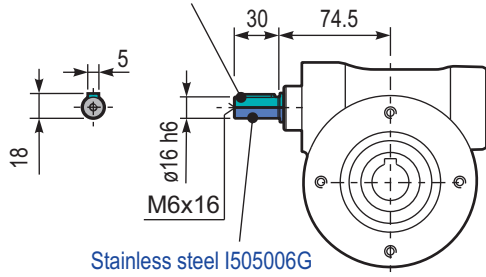
Type	øD	E	G	L	N	O	P	Q	Kit code
C	70 ^{+0.20} / _{+0.15}	9	12	85	44.5	90	123	10.5	① K0509010 ② -
L	70 ^{+0.20} / _{+0.15}	9	12	114.5	74	90	123	10.5	① K0509010 ② K0500200

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



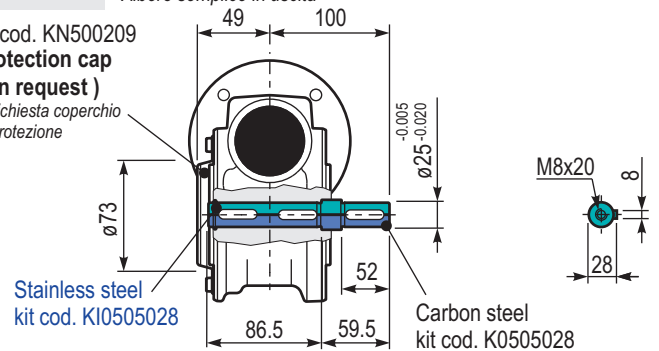
RD50UNI.. Input shaft
Albero in entrata

Carbon steel kit cod. K0505006 PAM71
Carbon steel kit cod. K0505007 PAM80



PD50 **SMF** Single output shaft
Albero semplice in uscita

kit cod. KN500209
Protection cap (on request)
A richiesta coperchio di protezione



Input speed (n_1) = 1400 min⁻¹

Output speed n_2 [min ⁻¹]	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				B14 motor flanges			Dynamic efficiency RD	Tooth module [mm]	Ratio code	
							-B 63	-C 71	-D 80	-E 90	-Q 71	-R 80	-T 90				
200	7	1.8	71	1.8	3.2	125		B	B			B-C	B-C		83	3.1	01
140	10	1.8	99	1.4	2.4	134		B	B			B-C	B-C		81	3.1	02
93	15	1.5	121	1.1	1.7	138		B	B			B-C	B-C		79	3.1	03
74	19	1.1	111	1.2	1.4	138		B	B			B-C	B-C		78	2.6	04
58	24	1.1	135	1.0	1.2	142		B	B			B-C	B-C		75	2.0	05
47	30	1.1	167	0.9	0.96	146		B	B			B-C	B-C		74	3.2	06
39	36	0.75	125	1.2	0.88	147		B	B			B-C	B-C		68	2.7	07
35	40	0.75	135	1.0	0.78	140		B	B	B		B-C	B-C		66	2.5	13
31	45	0.55	111	1.2	0.67	135	B	B				B-C	C		66	2.1	08
23	60	0.55	140	0.9	0.51	130	B	B				B-C	C		62	1.6	12
21	67	0.55	151	0.8	0.45	124	B	B				B-C	C		60	1.5	09
17.5	80	0.37	115	1.0	0.38	119	B	B				B-C	C		57	1.3	10
14.9	94	0.37	123	1.0	0.36	119	B	B				B-C	C		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: 0.40 L	Shell Omala S4 WE 320	Eni Telium VSF 320
Quantità olio per tutte le posizioni: 0.40 L		

Tab. 1

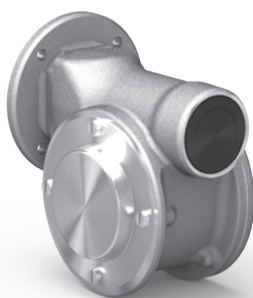
Suggested

Suggerito

Stainless steel protection cap (on request).

Coperchio di protezione in acciaio inox a richiesta.

Kit cod. KN630209



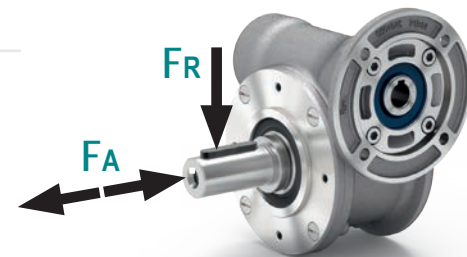
Radial and axial loads

Carichi radiali e assiali

Output shaft

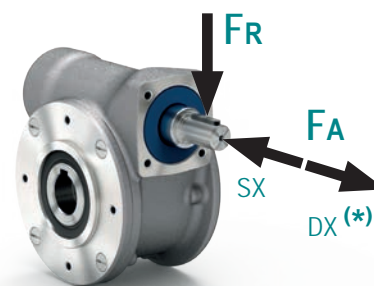
Albero di uscita

n_2 [min ⁻¹]	F_A [N]	F_R [N]
200	360	1800
150	400	2000
100	460	2300
75	500	2500
50	600	3000
25	700	3800
15	800	4000



Input shaft

Albero in entrata



n_1 [min ⁻¹]	F_A [N]	F_R [N]
1400	90	450

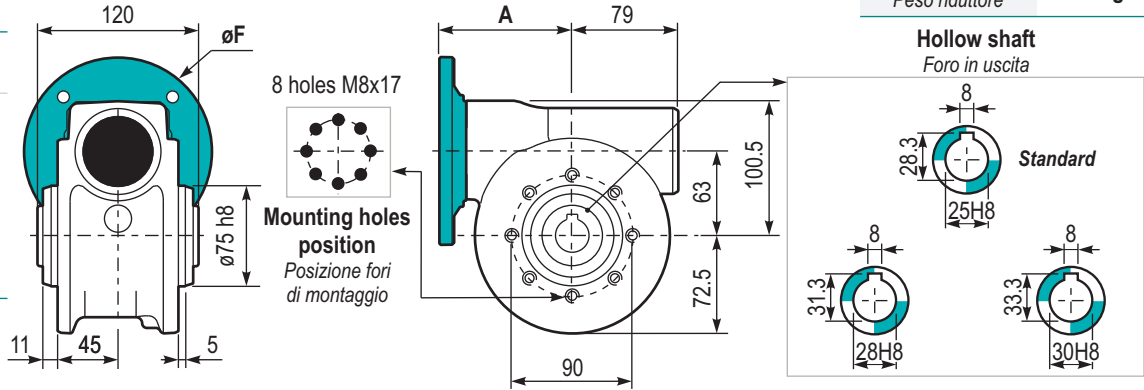
* Strong axial loads in the DX direction are not allowed.

* Non sono consentiti forti carichi assiali con direzione DX

Tab. 2

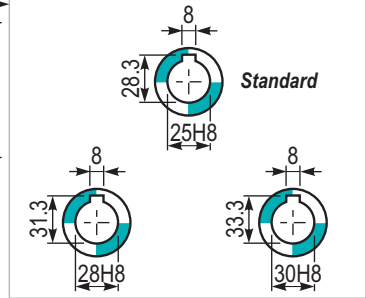
PD63 **UNI..** Basic gearbox
Riduttore base

M. flanges	Kit code	øF	A
63B5	KD634041	140	99.5
71B5	KD634042	160	97.5
80/90B5	KD634043	200	99.5
71B14	KD634047	105	97.5
80B14	KD634046	120	99.5
90B14	KD634041	140	99.5



Gearbox weight
Peso riduttore **6.00 kg**

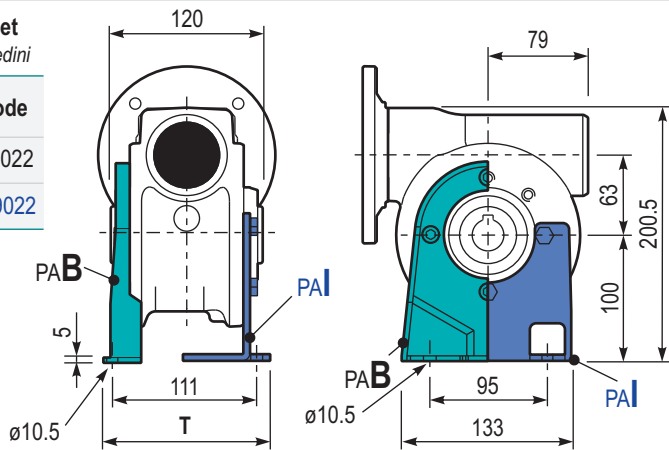
Hollow shaft
Foro in uscita



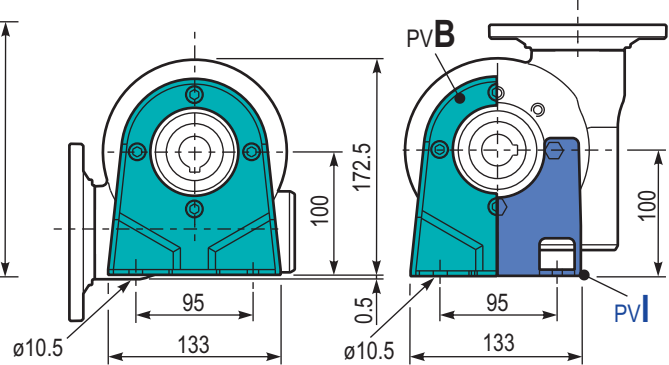
PD63 **PA...** Feet
Piedini

Type	T	Kit code
B**	144	K0639022
I*	130	KN639022

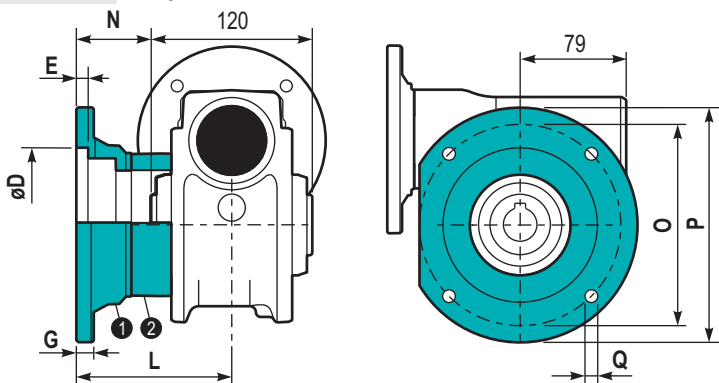
** Zink plated
* Stainless steel



PD63 **PBB..** Feet
Piedini

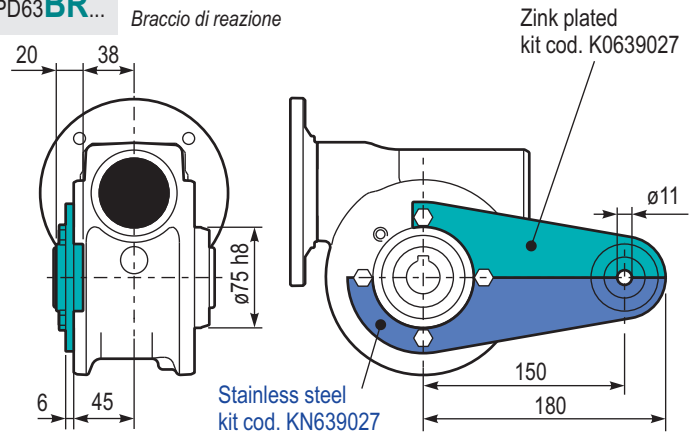


PD63 **FL..** Output flange
Flangia uscita

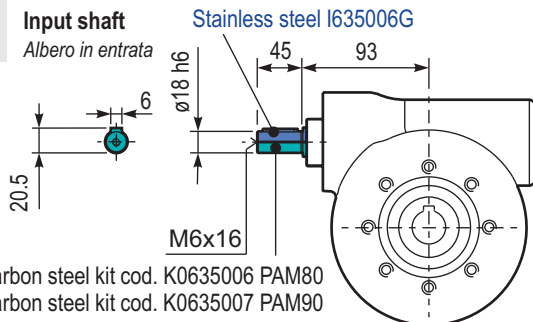


Type	øD	E	G	L	N	O	P	Q	Kit code
C	115 ^{+0.20} _{-0.15}	7	13	86	26	150	175	11	① K0639010 ② -
L	115 ^{+0.20} _{-0.15}	7	13	116	56	150	175	11	① K0639010 ② K0630200

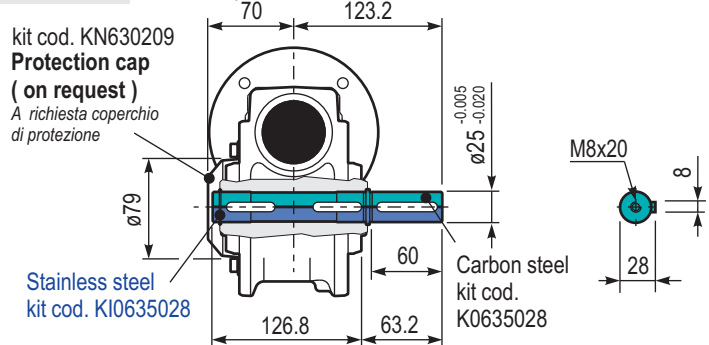
PD63 **BR...** Reaction arm
Braccio di reazione



RD63UNI.. Input shaft
Albero in entrata



PD63.. **SMF** Single output shaft
Albero semplice in uscita



Input speed (n_1) = 1400 min⁻¹

Output speed n_2 [min ⁻¹]	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				B14 motor flanges			Dynamic efficiency RD	Tooth module [mm]	Ratio code
							-C 71	-D 80	-E 90	-F 100 112	-R 80	-T 90	-U 100 112			
200	7	4.0	168	1.5	6.1	257		B	B		B	B		88	4.23	01
140	10	4.0	218	1.3	5.2	284		B	B		B	B		80	4.2	02
100	14	3.0	223	1.4	4.1	305		B	B		B	B		78	4.5	03
70	20	2.2	237	1.2	2.7	294		B	B		B	B		79	3.4	04
64	22	2.2	258	1.1	2.5	294		B	B		B	B		78	3.1	05
50	28	2.2	315	1.1	2.4	347		B	B		B	B		75	4.7	06
37	38	1.5	276	1.2	1.8	336	B	B			B			71	3.5	07
30	46	1.5	320	1.0	1.5	326	B	B			B			68	3.1	08
27	52	1.1	258	1.1	1.2	289	B	B			B			66	2.7	09
21	67	1.1	327	0.9	0.97	289	B	B			B			65	2.1	10
18.9	74	0.75	220	1.2	0.91	268	B	B			B			58	1.9	11
14.6	96	0.55	191	1.3	0.70	242	B	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: 1.20 L	Shell Omala S4 WE 320	Eni Telium VSF 320
Quantità olio per tutte le posizioni: 1.20 L		

Tab. 1

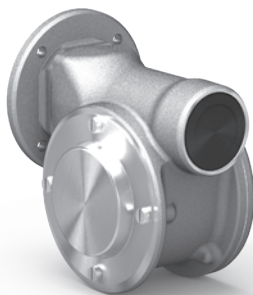
Suggested

Suggerito

Stainless steel protection cap (on request).

Coperchio di protezione in acciaio inox a richiesta.

Kit cod. KN850209



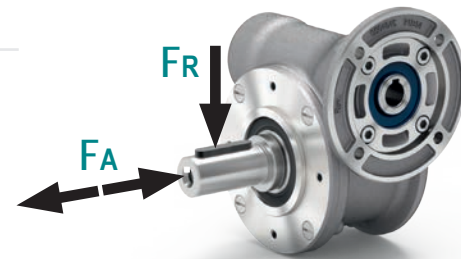
Radial and axial loads

Carichi radiali e assiali

Output shaft

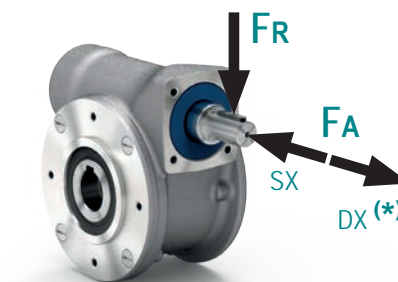
Albero di uscita

n_2 [min ⁻¹]	FA [N]	FR [N]
200	500	2500
150	580	2900
100	600	3000
75	700	3500
50	800	4000
25	1000	5000
15	1160	5800



Input shaft

Albero in entrata



n_1 [min ⁻¹]	FA [N]	FR [N]
1400	130	650

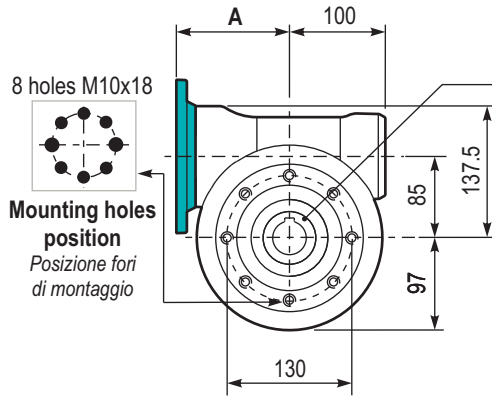
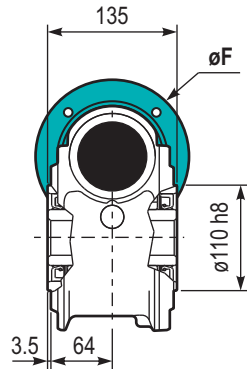
* Strong axial loads in the DX direction are not allowed.

* Non sono consentiti forti carichi assiali con direzione DX

Tab. 2

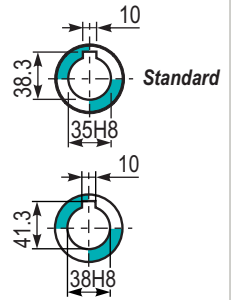
PD85 **UNI..** Basic gearbox
Riduttore base

M. flanges	Kit code	øF	A
71B5	KD234041	160	116.5
80/90B65	KD234042	200	118.5
100/112B5	KD234043	250	127.5
80B14	KD854046	120	118.5
90B14	KD854045	140	118.5
100/112B14	KD854047	160	127.5



Gearbox weight
Peso riduttore 11.00 kg

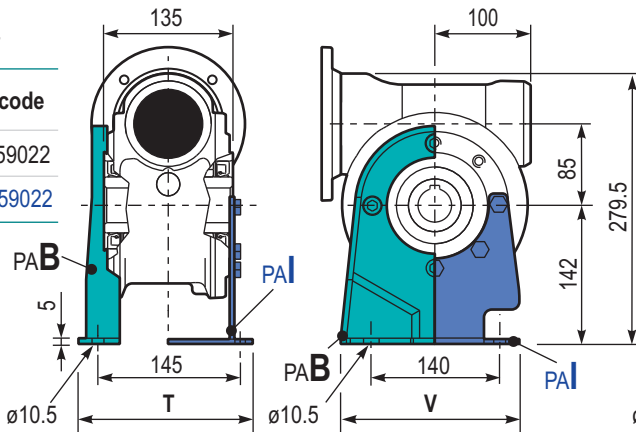
Hollow shaft
Foro in uscita



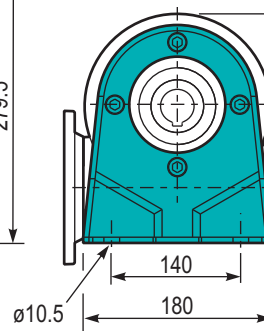
PD85 **PA...** Feet
Piedini

Type	T	V	Kit code
B**	182	180	K0859022
I*	176	172	KN859022

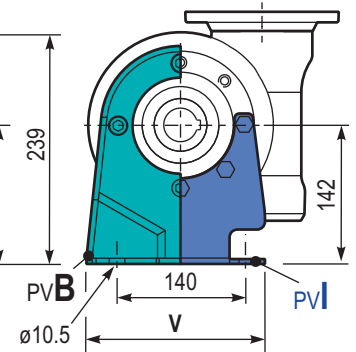
** Zink plated
* Stainless steel



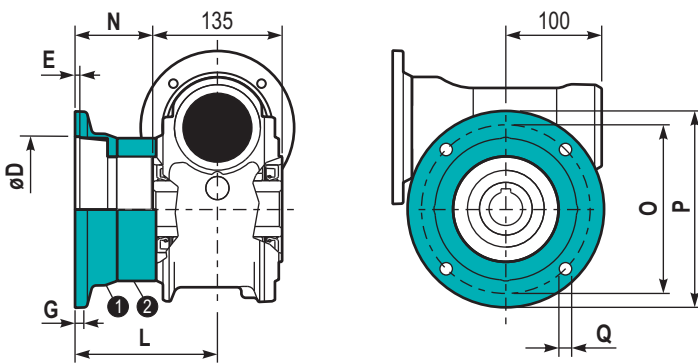
PD85 **PBB..** Feet
Piedini



PD85 **PV...** Feet
Piedini

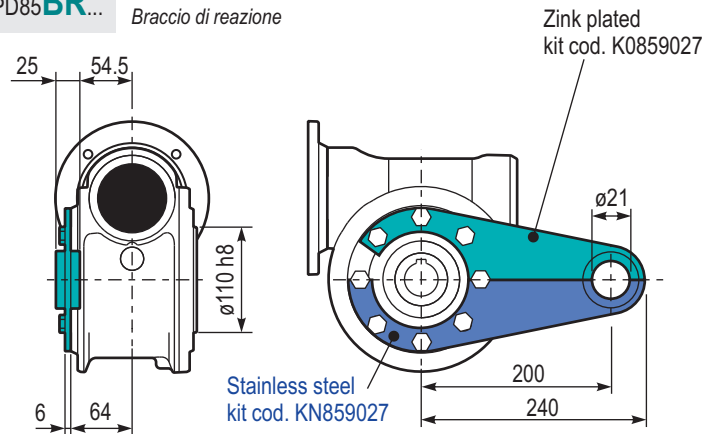


PD85 **FL..** Output flange
Flangia uscita



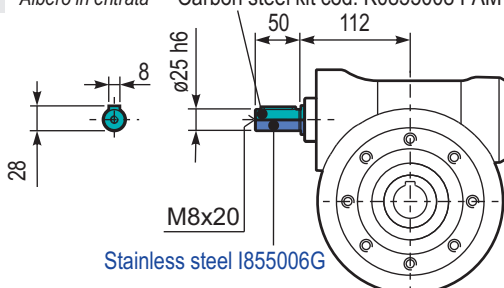
Type	øD	E	G	L	N	O	P	Q	Kit code
C	152 ^{+0.06} / _{-0.00}	5	16	108	40.5	176	205	13	① K0859010 ② - ③ -
L	152 ^{+0.06} / _{-0.00}	5	16	148.5	81	176	205	13	① K0859010 ② K0850201

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



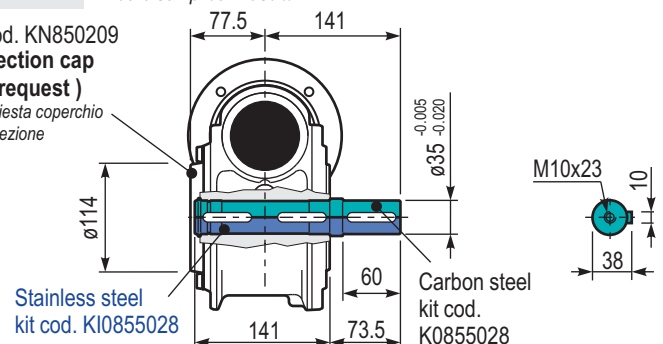
RD85 **UNI..**

Input shaft
Albero in entrata
Carbon steel kit cod. K0855007 PAM90
Carbon steel kit cod. K0855008 PAM100





PD85 **SMK** Single output shaft
Albero semplice in uscita

kit cod. KN850209
Protection cap
(on request)
A richiesta coperchio di protezione




D45 Ratios/Rating

Rapporti/Selezione D45

Ratio	Max output torque ** M_{2R} [Nm]	Tooth module  [mm]	Standard input bore	Ratio code 
i _a				
7	35	2.2	ø14	01
10	35	2.2	ø14	02
14	35	2.4	ø14	03
21	47	1.6	ø14	04
28	47	2.5	ø14	05
37	47	1.8	ø14	06
46	47	1.5	ø14	07
60	47	1.2	ø14	08
70	35	1.0	ø14	09
102	34	0.72	ø14	10

211D Ratios/Power

Rapporti/potenza 211D

Ratio	Max input power ** P_{1M} [kW]	Standard output shaft 	Ratios code
i _b			
2.05	0.37	ø14	01
2.35	0.37	ø14	02
2.80	0.37	ø14	03
3.38	0.37	ø14	04
4.70	0.37	ø14	05
6.22	0.37	ø14	06
8.29	0.37	ø14	07
9.83	0.25	ø14	08



211D Motor flanges

Flange motore 211D

	Kit code	g6	A
63B5	KD454041	138	99.5
71B5	KD454042	160	97
56B14	KD454049	80	97
63B14	KD454047	90	99.5
71B14	KD454045	105	97

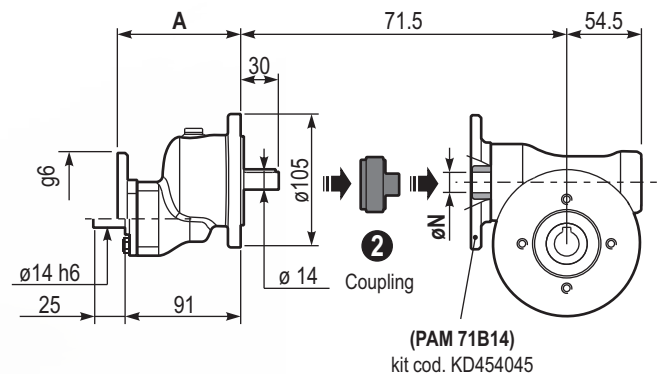
How to connect D45+211D

Come collegare D45 + 211D

Worm gearbox		Ratio multiplier	Connection kit	
Standard input bore	Output shaft	With standard input bore	With coupling	
D45	øN	211D		
Ratios from 1/7 - 1/102	ø14	ø14	Reduction bushing is not necessary	KB14P

D45 weight <i>Peso D45</i>	2.40 kg
-------------------------------	---------

211D weight <i>Peso 211D</i>	1.40 kg
---------------------------------	---------



Ratios range: from 1/14 to 1/1003

Range rapporti: da 1/14 a 1/1003

Lubrication

Lubrificazione

Unit D45+211D 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.

Il riduttore tipo D45+211D viene fornito con olio sintetico e lubrificazione tipo "long life".

Disponibile a richiesta olio alimentare.

Vedi Tabella 1 per oli e quantità consigliati.

For all details on lubrication and plugs check our website.

Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web.

D45: 0.09 L	SHELL: Omala S4 WE 320	ENI: Telium VSF 320
211D: 0.05 L	SHELL: Omala S4 WE 320	ENI: Telium VSF 320

Calculate total ratio and output speed

Calcola il rapporto totale e la velocità di uscita

Ratios range: from 1/14 to 1/1003

Range rapporti: da 1/14 a 1/1003

$$i_{TOT} = i_a \cdot i_b$$

Ex.: 1/102 x 1/9.83 = 1/1003 (Max ratio)

Output speed (n₂)

Velocità di uscita

$$n_2 = n_1 : i_{TOT}$$

Ex.: 1448 : 1003 = 1.44 rpm

i_a : D45 ratio - Rapporto D45

i_b : 211D ratio - Rapporto 211D

** Make sure input power for 211D and output torque for D45 is as catalogue ratios.

** Prestare attenzione a selezionare la potenza in entrata del 211D ed il momento torcente del D45 secondo le tabelle del catalogo.

n₁ Input speed

Velocità di ingresso



VFD series with ratio multiplier RCD series

Riduttori a vite senza fine in alluminio con precoppia serie RCD

D50 211D

D50 Ratios/Rating

Rapporti/Selezione D50


Ratio	Max output torque ** M_{2R} [Nm]	Tooth module  [mm]	Standard input bore	Ratio code 
i _a				
7	65	2.5	∅19	01
10	71	2.4	∅19	02
14	78	2.6	∅19	03
18	71	2.0	∅19	04
26	76	2.7	∅19	05
30	83	2.5	∅19	12
36	83	2.1	∅14	06
43	78	1.8	∅14	07
50	76	1.5	∅14	13
60	71	1.3	∅14	08
68	66	1.2	∅14	09
80	65	1.0	∅14	10
100	59	0.8	∅14	11

D50 weight
Peso D50

3.00 kg

211D Ratios/Power

Rapporti/potenza 211D

Ratio	Max input power ** P_{1M} [kW]	Output shaft 	Ratios code
i _b			
2.05	0.37	∅14	01
2.35	0.37	∅14	02
2.80	0.37	∅14	03
3.38	0.37	∅14	04
4.70	0.37	∅14	05
6.22	0.37	∅14	06
8.29	0.37	∅14	07
9.83	0.25	∅14	08

211D weight
Peso 211D

1.40 kg



211D Motor flanges

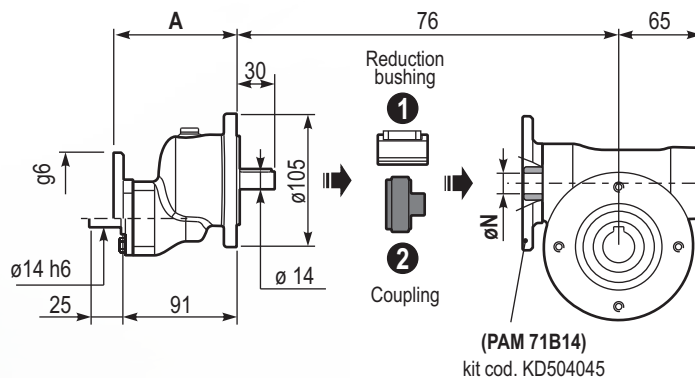
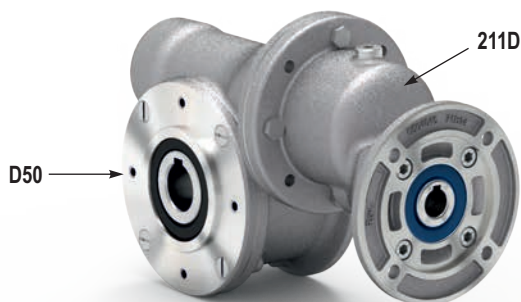
Flange motore 211D

	kit code	g6	A
63B5	KD454041	138	99.5
71B5	KD454042	160	97
56B14	KD454049	80	97
63B14	KD454047	90	99.5
71B14	KD454045	105	97

How to connect D50+211D

Come collegare D50 + 211D

Worm gearbox		Ratio multiplier	Connection kit	
Standard input bore		Output shaft	With standard input bore	With coupling
D50	∅N	211D		
Ratios from 1/7 ÷ 1/30	∅19	∅14	KBR14/19	KC14P
Ratios from 1/36 ÷ 1/100	∅14		Reduction bushing is not necessary	



Ratios range: from 1/14 to 1/983

Range rapporti: da 1/14 a 1/983

Lubrication

Lubrificazione

Unit D50+211D 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.

Il riduttore tipo D50+211D viene fornito con olio sintetico e lubrificazione tipo "long life".

Disponibile a richiesta olio alimentare.

Vedi Tabella 1 per oli e quantità consigliati.

For all details on lubrication and plugs check our website.

Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web.

D50: 0.14 L	SHELL: Omala S4 WE 320	ENI: Telium VSF 320
211D: 0.05 L	SHELL: Omala S4 WE 320	ENI: Telium VSF 320

tab. 1

Calculate total ratio and output speed

Calcola il rapporto totale e la velocità di uscita

Ratios range: from 1/14 to 1/983

Range rapporti: da 1/14 a 1/983

$$i_{TOT} = i_a \cdot i_b$$

Ex.: 1/100 x 1/9.83 = 1/983 (Max ratio)

Output speed (n₂)

Velocità di uscita

$$n_2 = n_1 : i_{TOT}$$

Ex.: 1448 : 983 = 1.47 rpm

i_a : D50 ratio - Rapporto D50

i_b : 211D ratio - Rapporto 211D

** Make sure input power for 211D and output torque for D50 is as catalogue ratios.



** Prestare attenzione a selezionare la potenza in entrata del 211D ed il momento torcente del D50 secondo le tabelle del catalogo.

n₁ Input speed

Velocità di ingresso

D63 Ratios/Rating

Rapporti/Selezione D63


Ratio	Max output torque ** M_{2R} [Nm]	Tooth module  [mm]	Standard input bore	Ratio code 
i _a				
7	144	3.1	ø24	01
10	155	3.1	ø24	02
15	158	3.1	ø24	03
19	158	2.6	ø24	04
24	163	2.0	ø24	05
30	168	3.2	ø24	06
36	169	2.7	ø24	07
40	161	2.5	ø24	13
45	156	2.1	ø19	08
60	150	1.6	ø19	12
67	142	1.5	ø19	09
80	136	1.3	ø19	10
94	136	1.1	ø19	11

D63 weight
Peso D63

6.00 kg

211D Ratios/Power

Rapporti/potenza 211D

Ratio	Max input power ** P_{1M} [kW]	Standard output shaft 	Ratios code
i _b			
2.05	0.37	ø14	01
2.35	0.37	ø14	02
2.80	0.37	ø14	03
3.38	0.37	ø14	04
4.70	0.37	ø14	05
6.22	0.37	ø14	06
8.29	0.37	ø14	07
9.83	0.25	ø14	08

211D weight
Peso 211D

1.40 kg

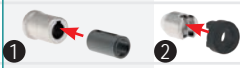
211D Motor flanges

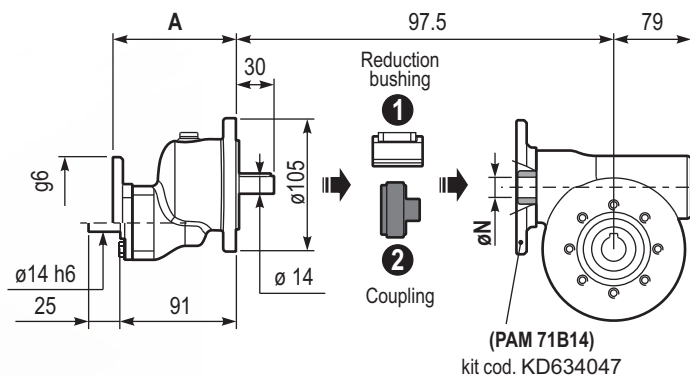
Flange motore 211D

	kit code	g6	A
63B5	KD454041	138	99.5
71B5	KD454042	160	97
56B14	KD454049	80	97
63B14	KD454047	90	99.5
71B14	KD454045	105	97

How to connect D63+211D

Come collegare D63 + 211D

Worm gearbox	Ratio multiplier	Connection kit	
		With standard input bore	With coupling
Standard input bore	Output shaft		
D63	øN	211D	
Ratios from 1/7 ÷ 1/40	ø24	ø14	KBR14/24
Ratios from 1/45 ÷ 1/94	ø19		KD14P



Ratios range: from 1/14 to 1/924

Range rapporti: da 1/14 a 1/924

Lubrication

Lubrificazione

Unit D63+211D 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.

Il riduttore tipo D63+211D viene fornito con olio sintetico e lubrificazione tipo "long life".

Disponibile a richiesta olio alimentare.

Vedi Tabella 1 per oli e quantità consigliati.

For all details on lubrication and plugs check our website.

Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web.

D63: 0.40 L	SHELL: Omala S4 WE 320	ENI: Telium VSF 320
211D: 0.05 L	SHELL: Omala S4 WE 320	ENI: Telium VSF 320

Calculate total ratio and output speed

Calcola il rapporto totale e la velocità di uscita

Ratios range: from 1/14 to 1/924

Range rapporti: da 1/14 a 1/924

$$i_{TOT} = i_a \cdot i_b$$

Ex.: 1/94 x 1/9.83 = 1/924 (Max ratio)

Output speed (n₂)

Velocità di uscita

$$n_2 = n_1 : i_{TOT}$$

Ex.: 1448 : 924 = 1.57 rpm

i_a : D63 ratio - Rapporto D63

i_b : 211D ratio - Rapporto 211D

** Make sure input power for 211D and output torque for D63 is as catalogue ratios.

** Prestare attenzione a selezionare la potenza in entrata del 211D ed il momento torcente del D63 secondo le tabelle del catalogo.

n₁ Input speed



Velocità di ingresso

VFD series with ratio multiplier RCD series


Riduttori a vite senza fine in alluminio con precoppia serie RCD

D85 211D

D85 Ratios/Rating Rapporti/Selezione D85

Ratio	Max output torque $**M_{2R}$ [Nm]	Tooth module  [mm]	Standard input bore	Ratio code 
i_a				
7	296	4.23	ø28	01
10	326	4.2	ø28	02
14	350	4.5	ø28	03
20	338	3.4	ø28	04
22	338	3.1	ø28	05
28	398	4.7	ø28	06
38	386	3.5	ø24	07
46	374	3.1	ø24	08
52	332	2.7	ø24	09
67	332	2.1	ø24	10
74	308	1.9	ø24	11
96	278	1.5	ø24	12

211D Ratios/Power Rapporti/potenza 211D

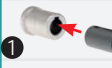

Ratio	Max input power $**P_{1M}$ [kW]	Standard output shaft	Ratios code 
i_b			
2.05	0.37	ø14	01
2.35	0.37	ø14	02
2.80	0.37	ø14	03
3.38	0.37	ø14	04
4.70	0.37	ø14	05
6.22	0.37	ø14	06
8.29	0.37	ø14	07
9.83	0.25	ø14	08

211D Motor flanges Flange motore 211D

	kit code	g6	A
63B5	KD454041	138	99.5
71B5	KD454042	160	97
56B14	KD454049	80	97
63B14	KD454047	90	99.5
71B14	KD454045	105	97

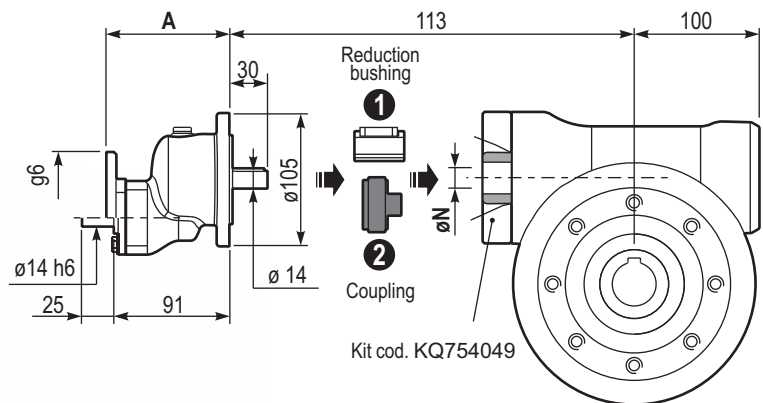
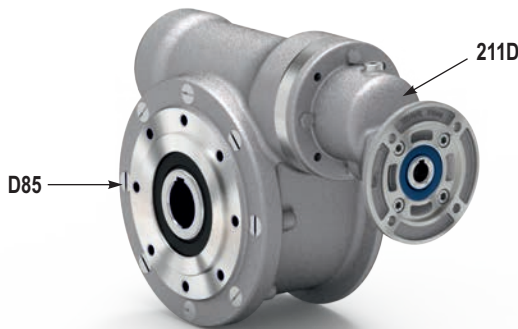
How to connect D85+211D

Come collegare D85 + 211D

Worm gearbox Standard input bore	Ratio multiplier Output shaft	Connection kit	
		With standard input bore	With coupling
D85	øN		
Ratios from 1/7 ÷ 1/28	ø28	KBR14/28	KE14P
Ratios from 1/38 ÷ 1/96	ø24	KBR14/24	

D85 weight
Peso D85 **11.0 kg**

211D weight
Peso 211D **1.40 kg**



Ratios range: from 1/14 to 1/944

Range rapporti: da 1/14 a 1/924

Lubrication

Lubrificazione

Unit D85+211D 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.

Il riduttore tipo D85+211D viene fornito con olio sintetico e lubrificazione tipo "long life".

Disponibile a richiesta olio alimentare.

Vedi Tabella 1 per oli e quantità consigliati.

For all details on lubrication and plugs check our website.

Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web.

D85: 1.20 L	SHELL: Omala S4 WE 320	ENI: Telium VSF 320
211D: 0.05 L	SHELL: Omala S4 WE 320	ENI: Telium VSF 320

tab. 1

Calculate total ratio and output speed

Calcola il rapporto totale e la velocità di uscita

Ratios range: from 1/14 to 1/944

Range rapporti: da 1/14 a 1/924

$$i_{TOT} = i_a \cdot i_b$$

Ex.: $1/96 \times 1/9.83 = 1/944$ (Max ratio)

Output speed (n_2)

Velocità di uscita

$$n_2 = n_1 : i_{TOT}$$

Ex.: $1448 : 944 = 1.53$ rpm

i_a : D85 ratio - Rapporto D85

i_b : 211D ratio - Rapporto 211D

** Make sure input power for 211D and output torque for D85 is as catalogue ratios.

** Prestare attenzione a selezionare la potenza in entrata del 211D ed il momento torcente del D85 secondo le tabelle del catalogo.

n_1 Input speed

Velocità di ingresso

Input speed (n_1) = 1400 min⁻¹

Output speed n_2 [min ⁻¹]	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		B14 motor flanges		Dynamic efficiency RD	Tooth module [mm]	Ratio code
							-A	-B	-O	-P			
9.3	150	0.06	29	1.2	0.07	35	B		B-C		48	1.44	01
6.7	210	0.06	39	0.9	0.05	35	B		B-C		45	1.44	02
4.7	300	0.06*	35	<0.8	0.05	35	B		B-C		36	1.44	03
3.1	450	0.06*	35	<0.8	0.03	35	B		B-C		33	1.44	04
2.3	600	0.06*	35	<0.8	0.03	35	B		B-C		30	1.44	05
1.6	900	0.06*	35	<0.8	0.02	35	B		B-C		27	1.44	06
1.2	1200	0.06*	35	<0.8	0.02	35	B		B-C		26	1.44	07
0.8	1830	0.06*	35	<0.8	0.01	35	B		B-C		24	1.44	08
0.6	2400	0.06*	35	<0.8	0.01	35	B		B-C		22	1.44	09

* 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}

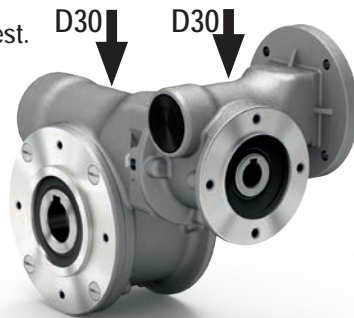
-  **Motor flanges available**
Flange motore disponibili
-  **B) Supplied with reduction bushing**
Fornito con bussola di riduzione
-  **B) Available on request without reduction bushing**
Disponibile a richiesta senza bussola di riduzione
-  **C) Motor flange holes position**
Posizione fori flangia motore

Lubrication

Lubrificazione

Unit 3D3 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 3D3 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.



D30: 0.03 L	Shell Omala S4 WE 320	Eni Telium VSF 320
-------------	--------------------------	-----------------------

For all details on lubrication and plugs check our website. **Tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web.

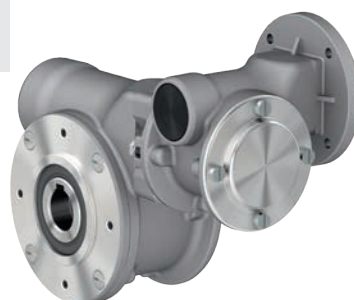
Suggested

Suggerito

Stainless steel protection cap (on request).

Coperchio di protezione in acciaio inox a richiesta.

Kit cod. KN300209



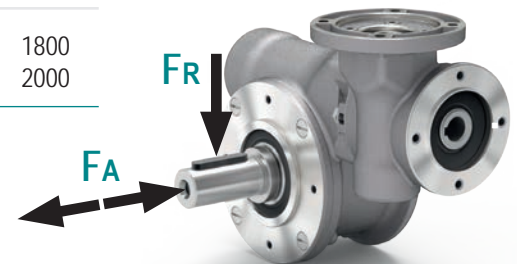
Radial and axial loads

Carichi radiali e assiali

Output shaft

Albero di uscita

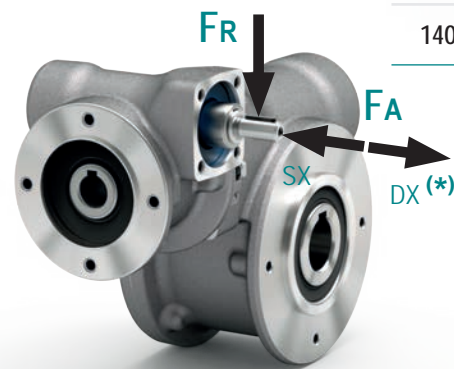
n_2 [min ⁻¹]	FA [N]	FR [N]
25	300	1800
15	400	2000



Input shaft

Albero in entrata

n_1 [min ⁻¹]	FA [N]	FR [N]
1400	20	100



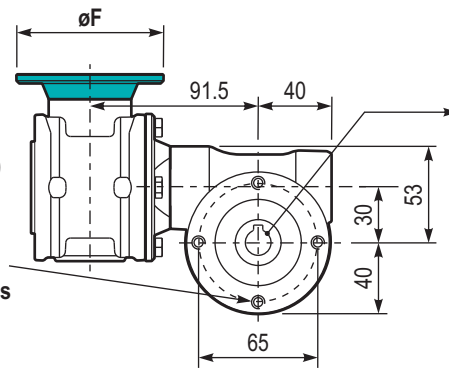
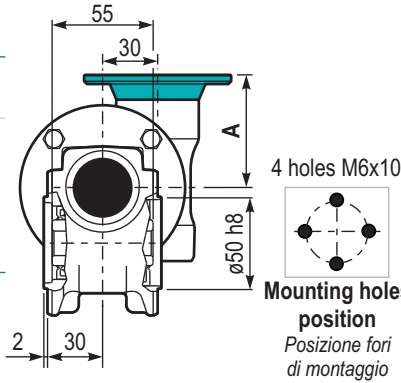
* Strong axial loads in the DX direction are not allowed.

* Non sono consentiti forti carichi assiali con direzione DX

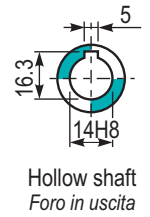
Tab. 2

P3D3UNI.. Basic gearbox
Riduttore base

M. flanges	Kit code	øF	A
56B5	KD304041	120	62
63B5	KD304042	140	63
56B14	KD304046	80	62
63B14	KD304045	90	63



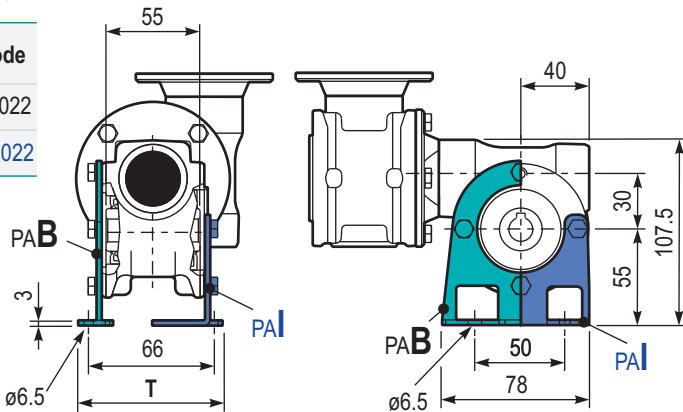
Gearbox weight
Peso riduttore 2.15 kg



P3D3PA... Feet
Piedini

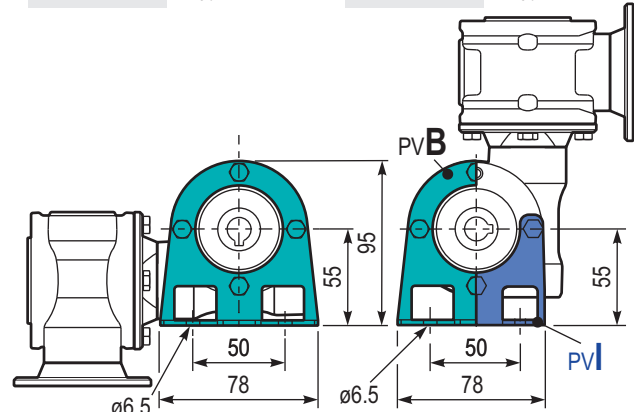
Type	T	Kit code
B**	87	K0309022
I*	80	KN309022

** Zink plated
* Stainless steel

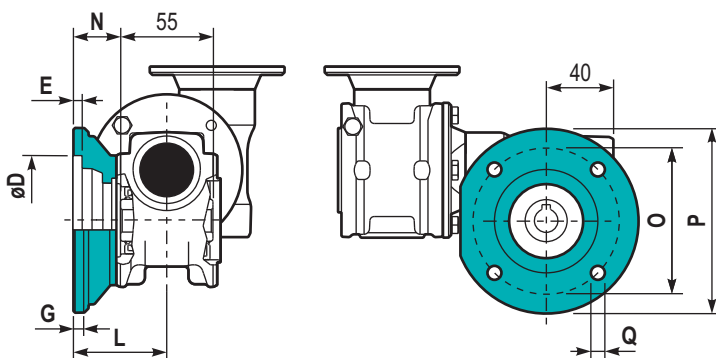


P3D3PBB... Feet
Piedini

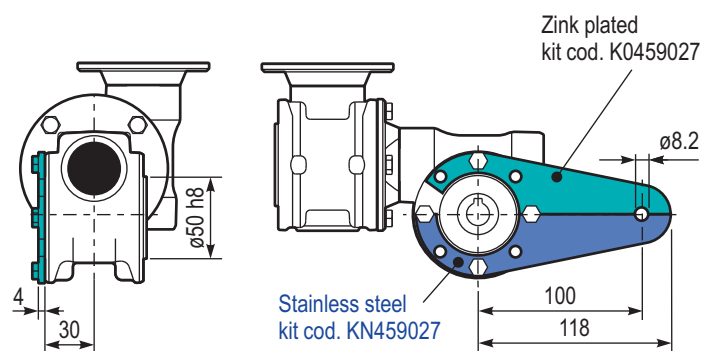
P3D3PV... Feet
Piedini



P3D3FL... Output flange
Flangia uscita

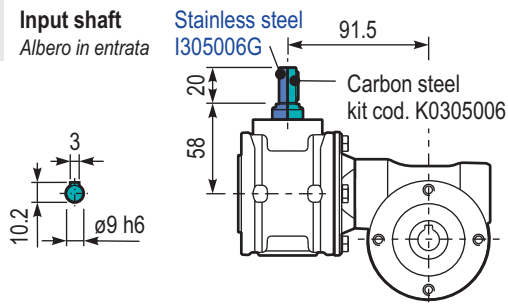


P3D3BR... Reaction arm
Braccio di reazione



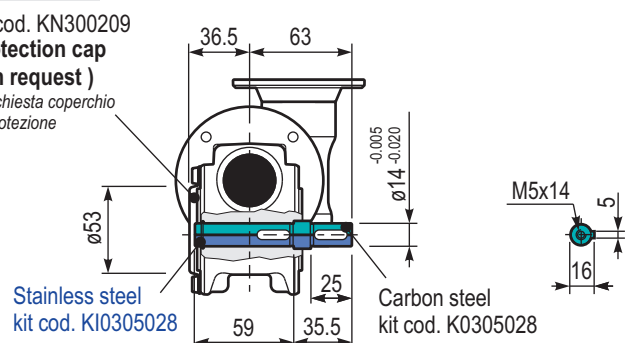
Type	øD	E	G	L	N	O	P	Q	Kit code
C	50 ^{+0.15} / _{+0.05}	6	6	50.5	23	68	80	7	K0309010
L	60 ^{+0.15} / _{+0.05}	6	6	55.5	28	87	110	8.5	K0459010

R3D3UNI.. Input shaft
Albero in entrata



P3D3..SMA Single output shaft
Albero semplice in uscita

kit cod. KN300209
Protection cap (on request)
A richiesta coperchio di protezione



Input speed (n_1) = 1400 min⁻¹

Output speed n_2 [min ⁻¹]	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		B14 motor flanges		Dynamic efficiency RD	Tooth module [mm]	Ratio code
							-A 56	-B 63	-O 56	-P 63			
10.0	140	0.12	57	1.2	0.14	69	B		B-C		50	2.2	01
7.0	200	0.12	79	0.9	0.11	69	B		B-C		48	2.2	02
5.0	280	0.06	52	1.3	0.08	69	B		B-C		45	2.4	03
3.3	420	0.06	62	1.1	0.07	69	B		B-C		36	1.6	04
2.5	560	0.06	76	0.9	0.05	69	B		B-C		33	2.5	05
1.9	740	0.06	91	0.8	0.05	69	B		B-C		30	1.8	06
1.5	920	0.06*	69	<0.8	0.04	69	B		B-C		27	1.5	07
1.3	1120	0.06*	69	<0.8	0.03	69	B		B-C		26	2.5	08
0.9	1480	0.06*	69	<0.8	0.03	69	B		B-C		24	1.8	09
0.8	1840	0.06*	69	<0.8	0.02	69	B		B-C		22	1.5	10
0.6	2400	0.06*	69	<0.8	0.02	69	B		B-C		21	1.2	11

* 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



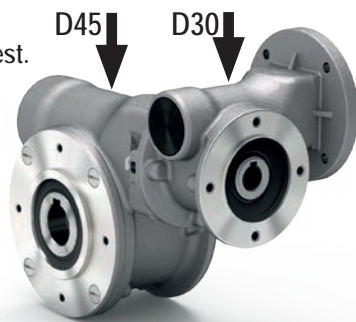
C) Motor flange holes position
Posizione fori flangia motore

Lubrication

Lubrificazione

Unit 4D3 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 4D3 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.



D45: 0.09 L

D30: 0.03 L

Shell

Omala S4 WE 320

Eni

Telium VSF 320

For all details on lubrication and plugs check our website.
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web.

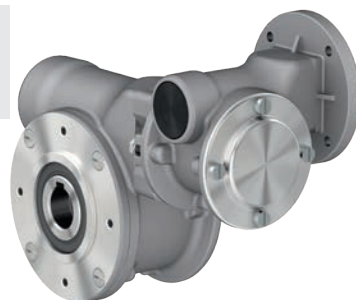
Tab. 1

Suggested

Suggerito

Stainless steel protection cap (on request).

Coperchio di protezione in acciaio inox a richiesta.



Kit cod. KN300209

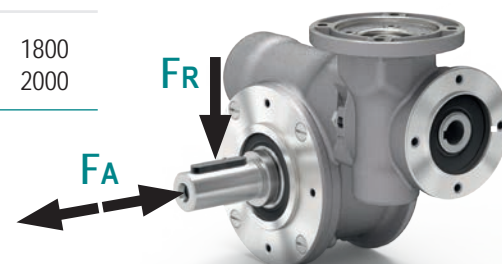
Radial and axial loads

Carichi radiali e assiali

Output shaft

Albero di uscita

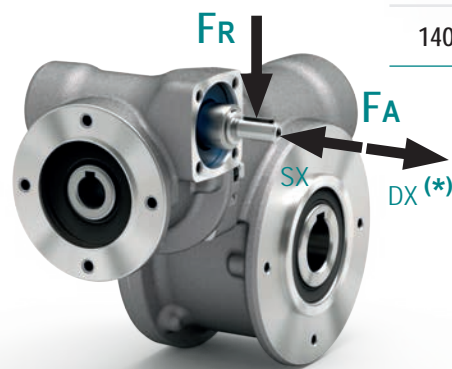
n_2 [min ⁻¹]	FA [N]	FR [N]
25	300	1800
15	400	2000



Input shaft

Albero in entrata

n_1 [min ⁻¹]	FA [N]	FR [N]
1400	20	100



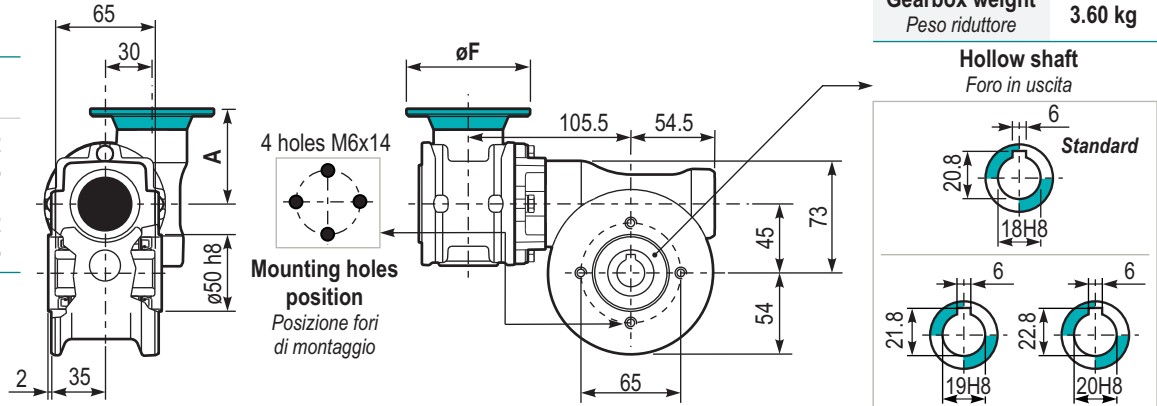
* Strong axial loads in the DX direction are not allowed.

** Non sono consentiti forti carichi assiali con direzione DX*

Tab. 2

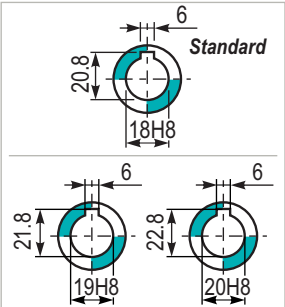
P4D3UNI.. Basic gearbox
Riduttore base

M. flanges	Kit code	øF	A
56B5	KD304041	120	62
63B5	KD304042	140	63
56B14	KD304046	80	62
63B14	KD304045	90	63



Gearbox weight
Peso riduttore **3.60 kg**

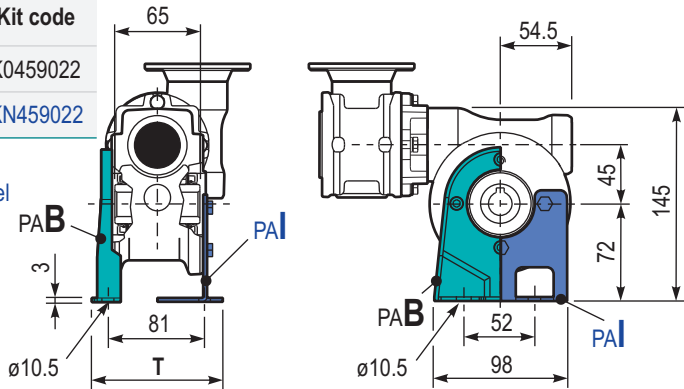
Hollow shaft
Foro in uscita



P4D3PA... Feet
Piedini

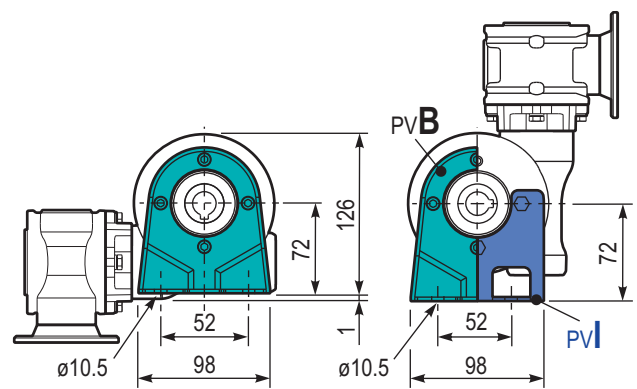
Type	T	Kit code
B**	102	K0459022
I*	100	KN459022

** Zink plated
* Stainless steel

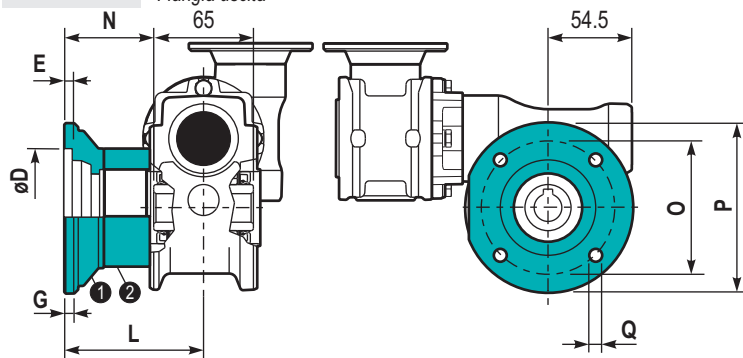


P4D3PBB... Feet
Piedini

P4D3PV... Feet
Piedini

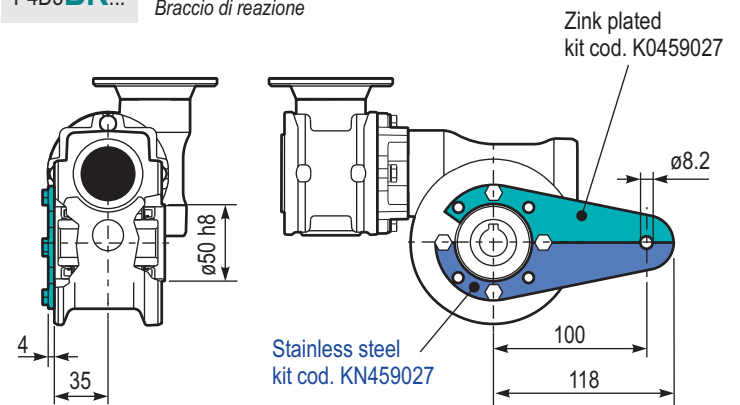


P4D3FL... Output flange
Flangia uscita

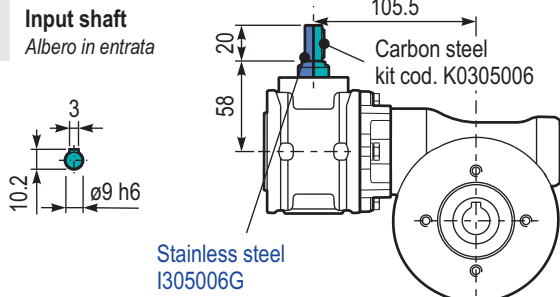


Type	øD	E	G	L	N	O	P	Q	Kit code
C	60 ^{+0.15} / _{+0.05}	9	9	60.5	28	87	110	8.5	① K0459010 ② - ③ K0450200
L	60 ^{+0.15} / _{+0.05}	9	9	90.5	58	87	110	8.5	① K0459010 ② K0450200

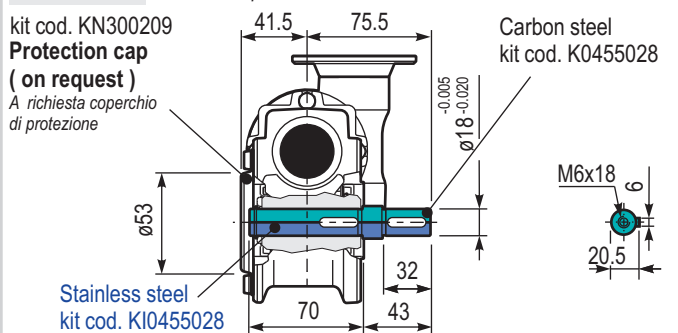
P4D3BR... Reaction arm
Braccio di reazione



R4D3UNI... Input shaft
Albero in entrata



P4D3..SMB Single output shaft
Albero semplice in uscita



Input speed (n_1) = 1400 min⁻¹

Output speed n_2 [min ⁻¹]	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		B14 motor flanges		Dynamic efficiency RD	Tooth module [mm]	Ratio code
							-A	-B	-O	-P			
5.6	252	0.12	97	1.1	0.14	109	B		B-C		47	2.1	01
3.9	360	0.12	124	0.9	0.11	109	B		B-C		42	2.1	02
2.6	540	0.09	129	0.8	0.08	109	B		B-C		39	2.1	03
1.9	720	0.06	106	1.0	0.06	109	B		B-C		36	2.1	04
1.6	860	0.06	113	1.0	0.06	109	B		B-C		32	1.8	05
1.2	1200	0.06	133	0.8	0.05	109	B		B-C		27	1.3	06
1.0	1440	0.06*	109	<0.8	0.04	109	B		B-C		26	2.1	07
0.8	1720	0.06*	109	<0.8	0.04	109	B		B-C		25	1.8	08
0.6	2400	0.06*	109	<0.8	0.03	104	B		B-C		21	1.3	09

* 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

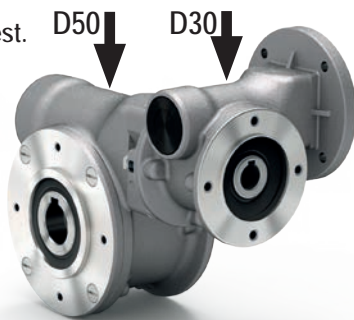
C) Motor flange holes position
 Posizione fori flangia motore

Lubrication

Lubrificazione

Unit 5D3 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 5D3 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.



D50: 0.14 L

D30: 0.03 L

Shell

Omala S4 WE 320

Eni

Telium VSF 320

For all details on lubrication and plugs check our website.
 Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web.

Tab. 1

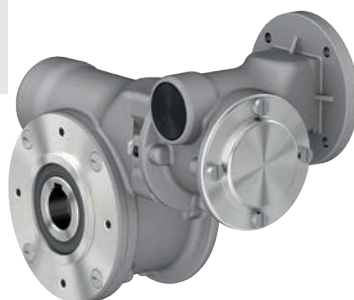
Suggested

Suggerito

Stainless steel protection cap (on request).

Coperchio di protezione in acciaio inox a richiesta.

Kit cod. KN300209



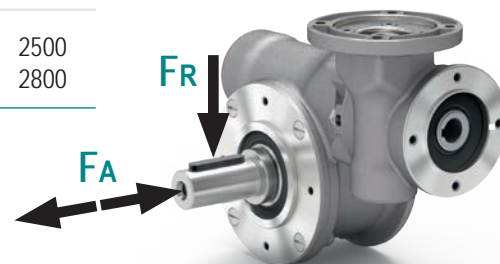
Radial and axial loads

Carichi radiali e assiali

Output shaft

Albero di uscita

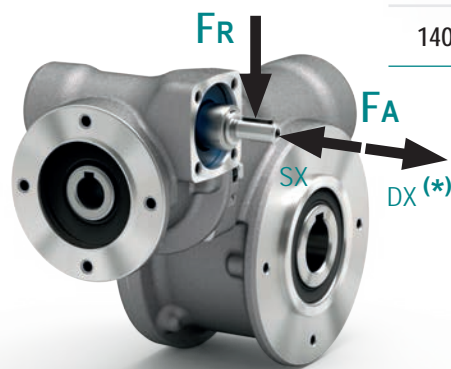
n_2 [min ⁻¹]	F_A [N]	F_R [N]
25	480	2500
15	560	2800



Input shaft

Albero in entrata

n_1 [min ⁻¹]	F_A [N]	F_R [N]
1400	20	100



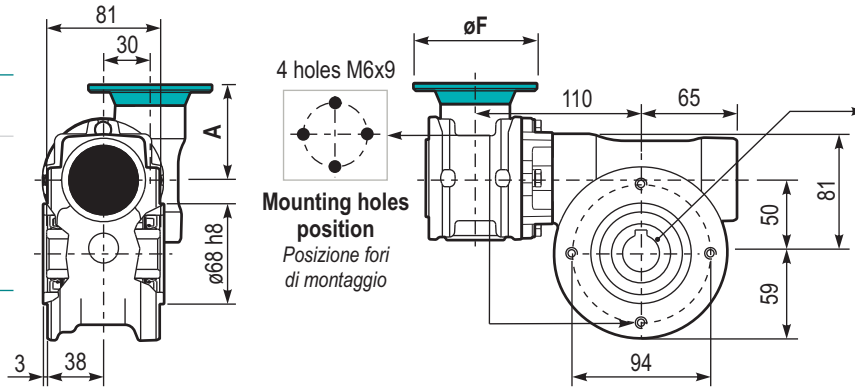
* Strong axial loads in the DX direction are not allowed.

* Non sono consentiti forti carichi assiali con direzione DX

Tab. 2

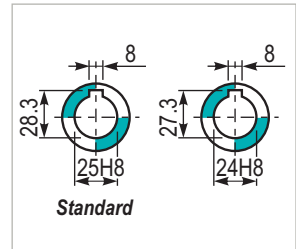
P5D3 **UNI..** Basic gearbox
Riduttore base

M. flanges	Kit code	øF	A
56B5	KD304041	120	62
63B5	KD304042	140	63
56B14	KD304046	80	62
63B14	KD304045	90	63



Gearbox weight
Peso riduttore **4.20 kg**

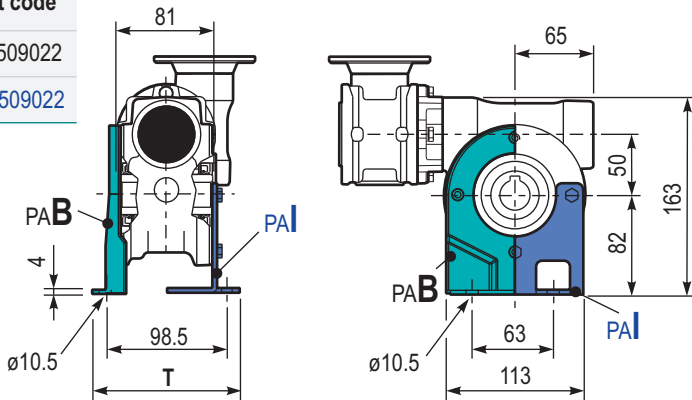
Hollow shaft
Foro in uscita



P5D3 **PA...** Feet
Piedini

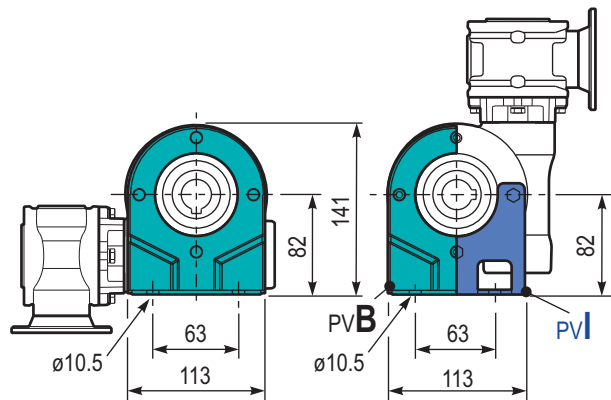
Type	T	Kit code
B**	123	K0509022
I*	122	KN509022

** Zink plated
* Stainless steel

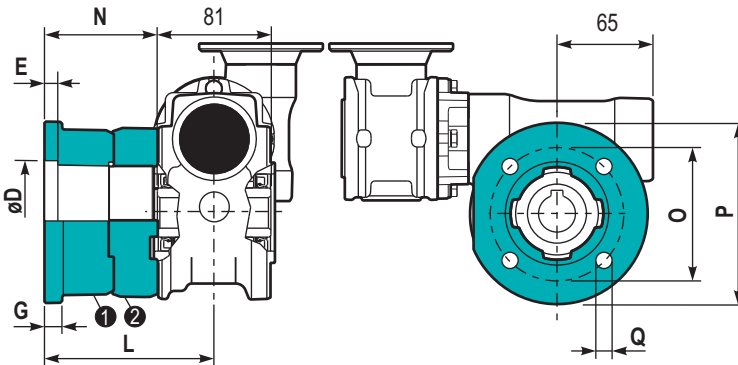


P5D3 **PBB..** Feet
Piedini

P5D3 **PV...** Feet
Piedini

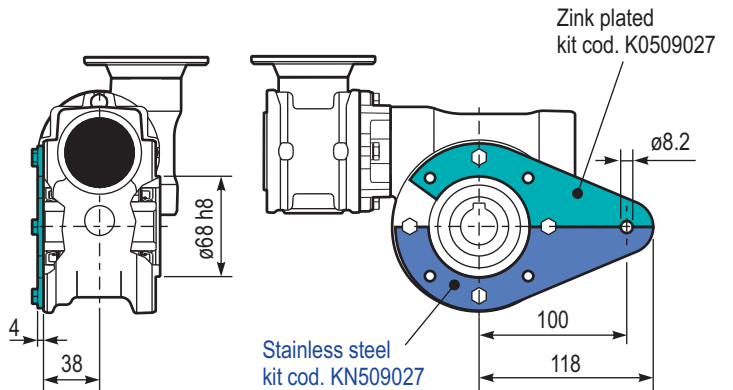


P5D3 **FL..** Output flange
Flangia uscita

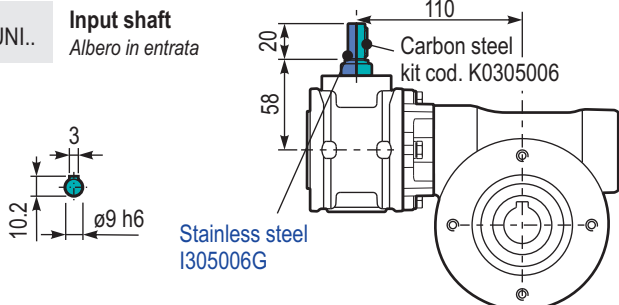


Type	øD	E	G	L	N	O	P	Q	Kit code
C	70 ^{+0.20} / _{+0.15}	9	12	85	44.5	90	123	10.5	① K0509010 ② -
L	70 ^{+0.20} / _{+0.15}	9	12	114.5	74	90	123	10.5	① K0509010 ② K0500200

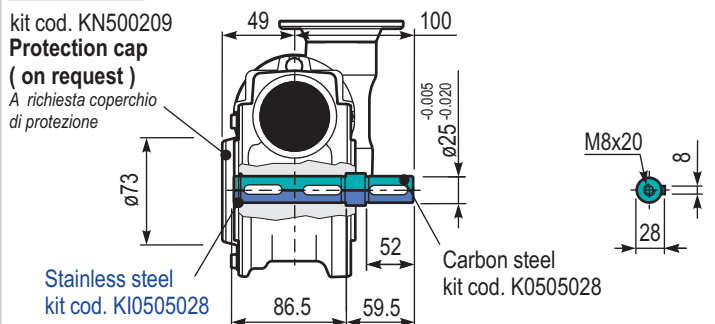
P5D3 **BR...** Reaction arm
Braccio di reazione



R5D3 **UNI..** Input shaft
Albero in entrata



P5D3 **SMF** Single output shaft
Albero semplice in uscita



Input speed (n_1) = 1400 min⁻¹

Output speed n_2 [min ⁻¹]	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		B14 motor flanges		Dynamic efficiency RD	Tooth module [mm]	Ratio code
							-A	-B	-O	-P			
5.6	252	0.18	142	1.6	0.29	230	B	B	B-C	B-C	46	2.7	01
3.9	360	0.18	181	1.3	0.23	230	B	B	B-C	B-C	41	2.7	02
2.6	540	0.12	164	1.4	0.17	230	B	B	B-C	B-C	37	2.7	03
1.9	720	0.12	200	1.1	0.14	230	B	B	B-C	B-C	34	2.7	04
1.3	1080	0.12	265	0.9	0.10	230	B	B	B-C	B-C	30	2.7	05
1.0	1440	0.12*	230	<0.8	0.09	230	B	B	B-C	B-C	27	2.7	06
0.5	2745	0.12*	230	<0.8	0.05	230	B	B	B-C	B-C	23	2.1	07

* 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

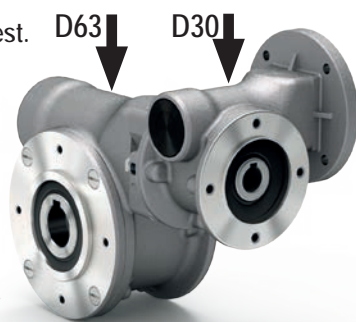
C) Motor flange holes position
Posizione fori flangia motore

Lubrication

Lubrificazione

Unit 6D3 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 6D3 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.



D63: 0.40 L
D30: 0.03 L

Shell
Omala S4 WE 320

Eni
Telium VSF 320

For all details on lubrication and plugs check our website.
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web.

Tab. 1

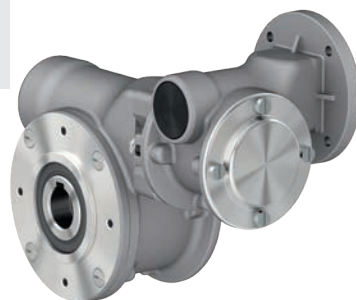
Suggested

Suggerito

Stainless steel protection cap (on request).

Coperchio di protezione in acciaio inox a richiesta.

Kit cod. KN300209



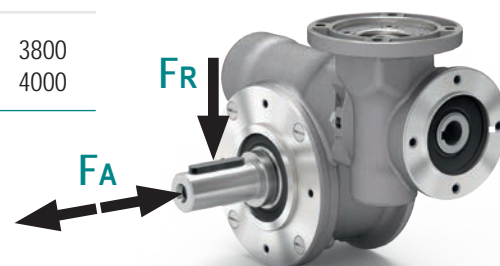
Radial and axial loads

Carichi radiali e assiali

Output shaft

Albero di uscita

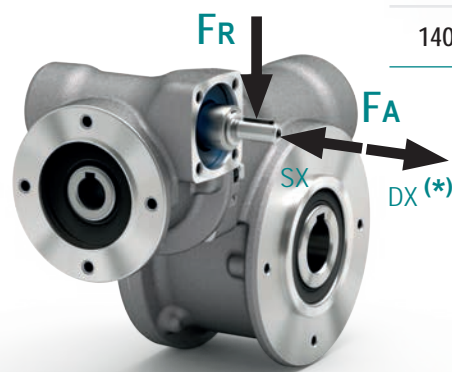
n_2 [min ⁻¹]	FA [N]	FR [N]
25	700	3800
15	800	4000



Input shaft

Albero in entrata

n_1 [min ⁻¹]	FA [N]	FR [N]
1400	20	100

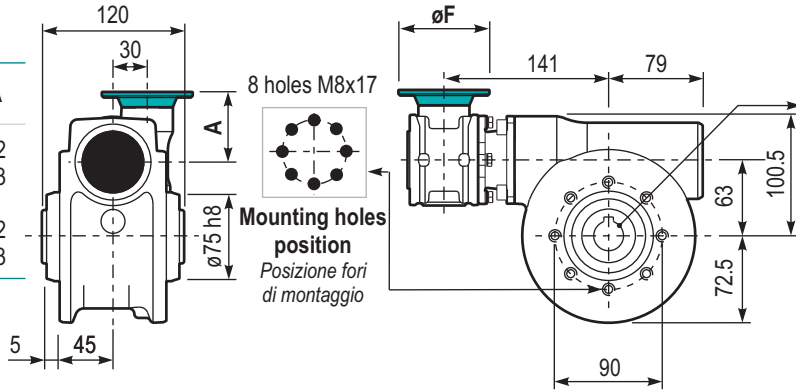


* Strong axial loads in the DX direction are not allowed.
* Non sono consentiti forti carichi assiali con direzione DX

Tab. 2

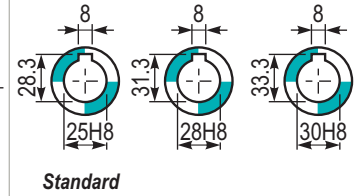
P6D3UNI.. Basic gearbox
Riduttore base

M. flanges	Kit code	øF	A
56B5	KD304041	120	62
63B5	KD304042	140	63
56B14	KD304046	80	62
63B14	KD304045	90	63



Gearbox weight
Peso riduttore **7.50 kg**

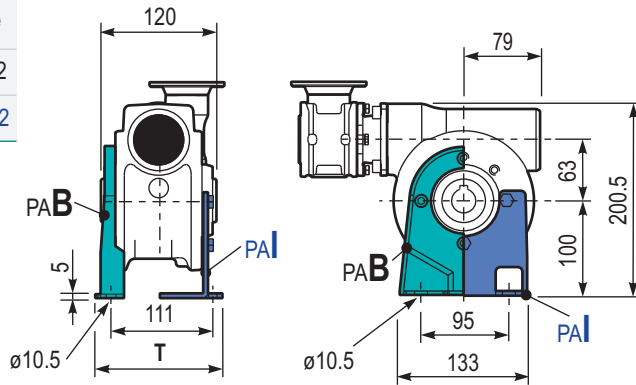
Hollow shaft
Foro in uscita



P6D3PA... Feet
Piedini

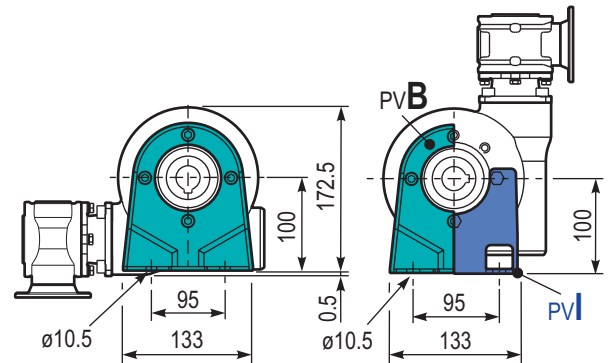
Type	T	Kit code
B**	144	K0639022
I*	130	KN639022

** Zink plated
* Stainless steel

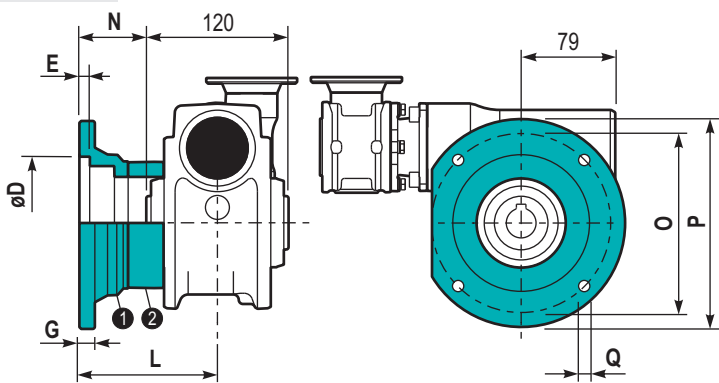


P6D3PBB.. Feet
Piedini

P6D3PV... Feet
Piedini

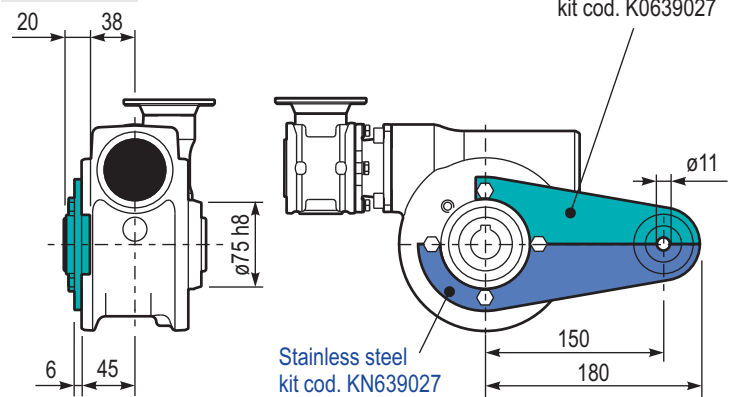


P6D3FL.. Output flange
Flangia uscita

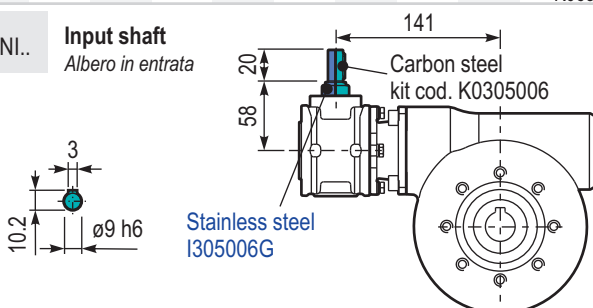


Type	øD	E	G	L	N	O	P	Q	Kit code
C	115 ^{+0.20} / _{-0.15}	7	13	86	26	150	175	11	① K0639010 ② -
L	115 ^{+0.20} / _{-0.15}	7	13	116	56	150	175	11	① K0639010 ② K0630200

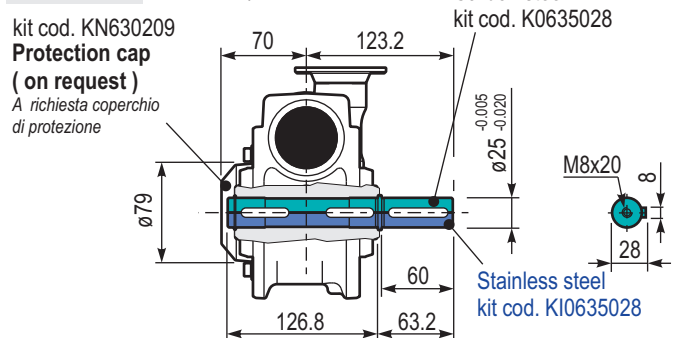
P6D3BR... Reaction arm
Braccio di reazione



R6D3UNI.. Input shaft
Albero in entrata



P6D3..SMF Single output shaft
Albero semplice in uscita



Input speed (n_1) = 1400 min⁻¹

Output speed n_2 [min ⁻¹]	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			B14 motor flanges			Dynamic efficiency RD	Tooth module [mm]	Ratio code
							-B 63	-C 71	-O 56	-P 63	-Q 71				
5.6	252	0.25	198	1.3	0.33	265	B		B-C	B-C		46	2.7	01	
3.9	360	0.18	186	1.4	0.26	265	B		B-C	B-C		42	2.7	02	
2.8	504	0.18	241	1.1	0.20	265	B		B-C	B-C		39	2.7	03	
1.9	756	0.12	204	1.3	0.16	265	B		B-C	B-C		33	2.7	04	
1.4	1008	0.12	256	1.0	0.12	265	B		B-C	B-C		31	2.7	05	
1.1	1332	0.12*	265	<0.8	0.10	265	B		B-C	B-C		30	2.7	06	
0.8	1656	0.12*	265	<0.8	0.08	265	B		B-C	B-C		28	2.7	07	
0.6	2160	0.12*	265	<0.8	0.07	265	B		B-C	B-C		26	2.7	08	
0.6	2520	0.12*	265	<0.8	0.06	265	B		B-C	B-C		25	2.7	09	

* 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



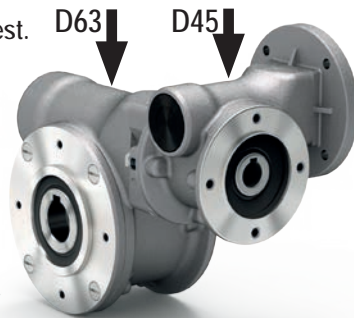
C) Motor flange holes position
Posizione fori flangia motore

Lubrication

Lubrificazione

Unit 6D4 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 6D4 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.



D63: 0.40 L

Shell

Eni

D45: 0.09 L

Omala S4 WE 320

Telium VSF 320

For all details on lubrication and plugs check our website.
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web.

Tab. 1

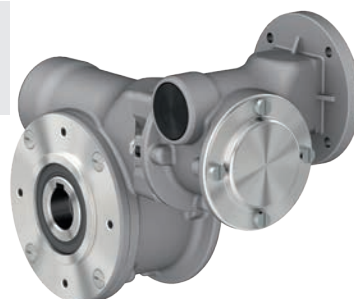
Suggested

Suggerito

Stainless steel protection cap (on request).

Coperchio di protezione in acciaio inox a richiesta.

Kit cod. KN300209



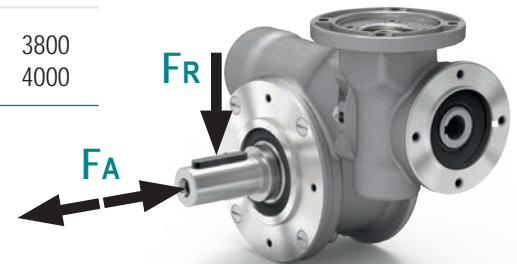
Radial and axial loads

Carichi radiali e assiali

Output shaft

Albero di uscita

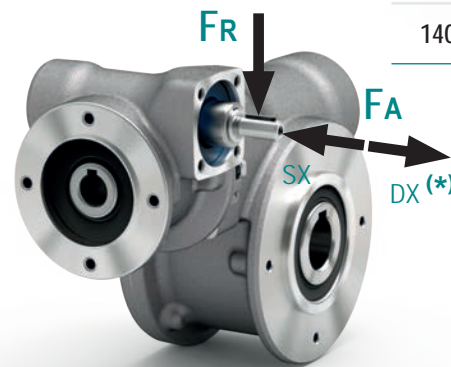
n_2 [min ⁻¹]	FA [N]	FR [N]
25	700	3800
15	800	4000



Input shaft

Albero in entrata

n_1 [min ⁻¹]	FA [N]	FR [N]
1400	42	210



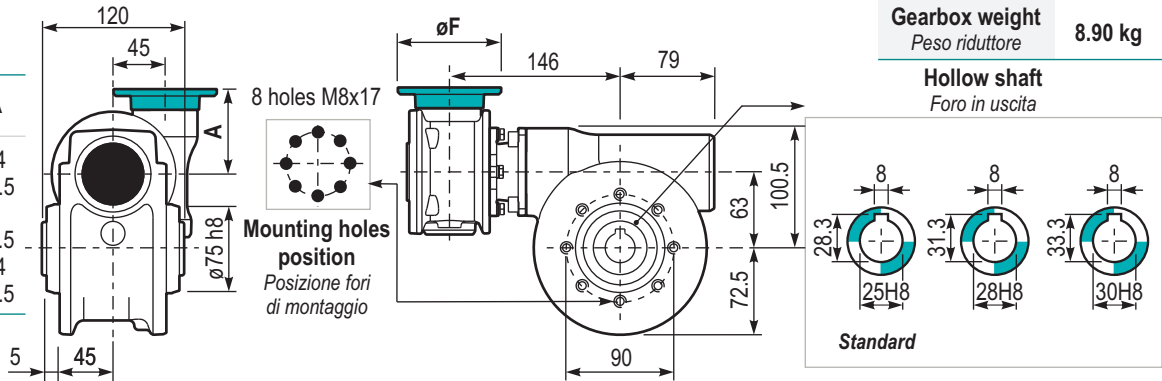
* Strong axial loads in the DX direction are not allowed.

* Non sono consentiti forti carichi assiali con direzione DX

Tab. 2

P6D4UNI.. Basic gearbox
Riduttore base

M. flanges	Kit code	øF	A
63B5	KD454041	138	74
71B5	KD454042	160	71.5
56B14	KD454049	80	71.5
63B14	KD454047	90	74
71B14	KD454045	105	71.5



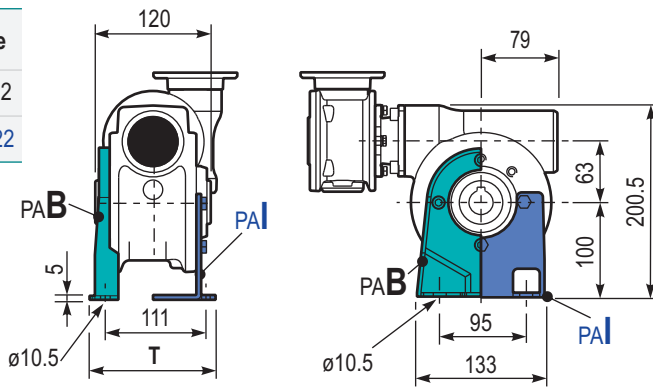
Gearbox weight
Peso riduttore **8.90 kg**

Hollow shaft
Foro in uscita

P6D4PA... Feet
Piedini

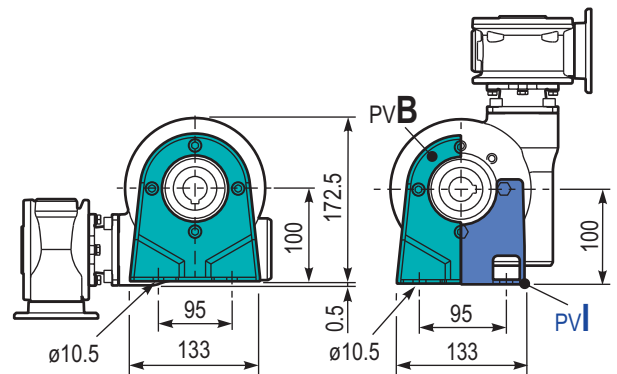
Type	T	Kit code
B**	144	K0639022
I*	130	KN639022

** Zink plated
* Stainless steel

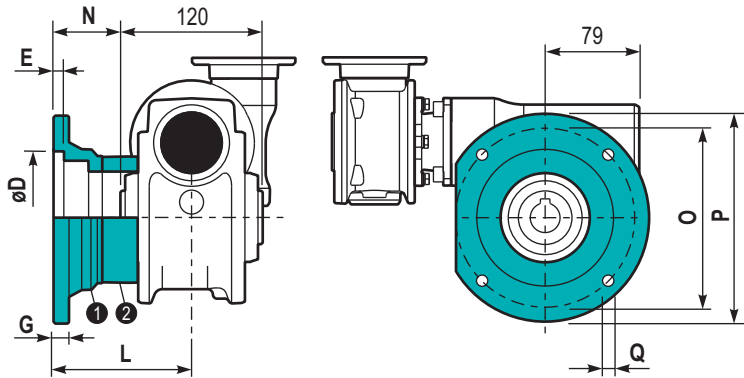


P6D4PBB... Feet
Piedini

P6D4PV... Feet
Piedini

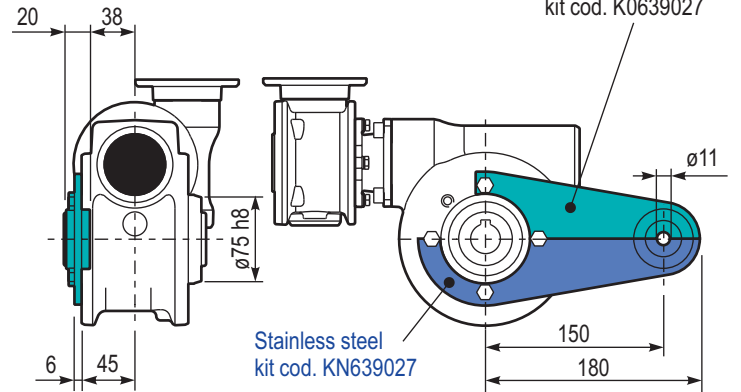


P6D4FL... Output flange
Flangia uscita



Type	øD	E	G	L	N	O	P	Q	Kit code
C	115 ^{+0.20} / _{-0.15}	7	13	86	26	150	175	11	① K0639010 ② -
L	115 ^{+0.20} / _{-0.15}	7	13	116	56	150	175	11	① K0639010 ② K0630200

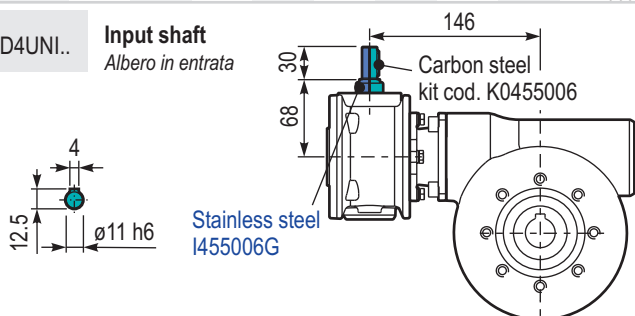
P6D4BR... Reaction arm
Braccio di reazione



Zink plated
kit cod. K0639027

Stainless steel
kit cod. KN639027

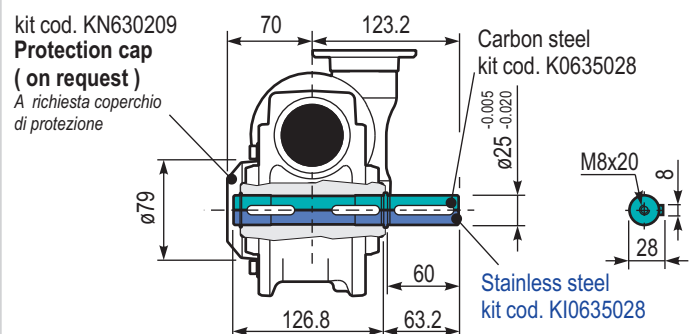
R6D4UNI.. Input shaft
Albero in entrata



Stainless steel
I455006G

Carbon steel
kit cod. K0455006

P6D4...SMF Single output shaft
Albero semplice in uscita



kit cod. KN630209
Protection cap
(on request)
A richiesta coperchio di protezione

Carbon steel
kit cod. K0635028

Stainless steel
kit cod. KI0635028

Input speed (n_1) = 1400 min⁻¹

Output speed n_2 [min ⁻¹]	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			B14 motor flanges			Dynamic efficiency RD	Tooth module [mm]	Ratio code
							-B 63	-C 71	-O 56	-P 63	-Q 71				
10	140	0.37	205	1.8	0.66	368	B		B-C	B-C		58	4.5	01	
7.1	196	0.37	257	1.4	0.53	368	B		B-C	B-C		52	4.7	02	
5.0	280	0.37	332	1.6	0.58	518	B		B-C	B-C		47	4.7	03	
3.6	392	0.37	435	1.2	0.44	518	B		B-C	B-C		44	4.7	04	
2.4	588	0.25	371	1.4	0.35	518	B		B-C	B-C		37	4.7	05	
1.8	784	0.25	455	1.1	0.28	518	B		B-C	B-C		34	4.7	06	
1.4	1036	0.18	420	1.2	0.22	518	B		B-C	B-C		33	4.7	07	
1.1	1288	0.18	474	1.1	0.20	518	B		B-C	B-C		30	4.7	08	
0.7	1960	0.12	449	1.2	0.14	518	B		B-C	B-C		28	4.7	09	
0.5	2856	0.12	584	0.9	0.11	518	B		B-C	B-C		25	4.7	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

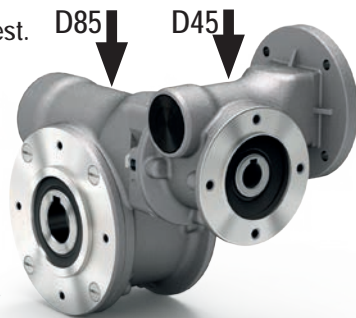
Unit 8D4 is supplied with synthetic oil to assure long life lubrication.

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 8D4 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.



D85: 1.20 L

Shell

Omala S4 WE 320

Eni

Telium VSF 320

For all details on lubrication and plugs check our website.
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web.

Tab. 1

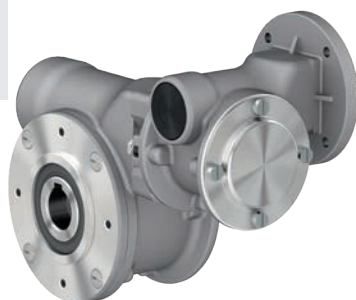
Suggested

Suggerito

Stainless steel protection cap (on request).

Coperchio di protezione in acciaio inox a richiesta.

Kit cod. KN300209



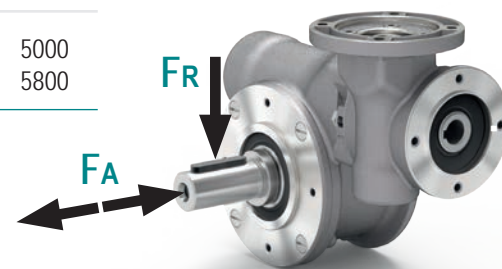
Radial and axial loads

Carichi radiali e assiali

Output shaft

Albero di uscita

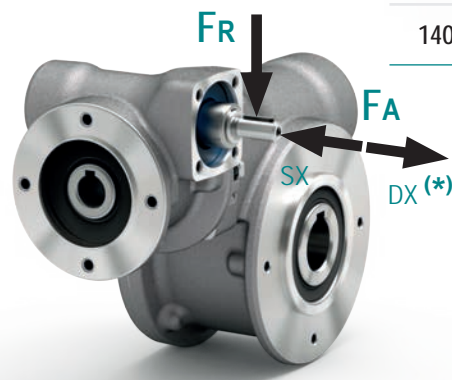
n_2 [min ⁻¹]	FA [N]	FR [N]
25	1000	5000
15	1160	5800



Input shaft

Albero in entrata

n_1 [min ⁻¹]	FA [N]	FR [N]
1400	42	210



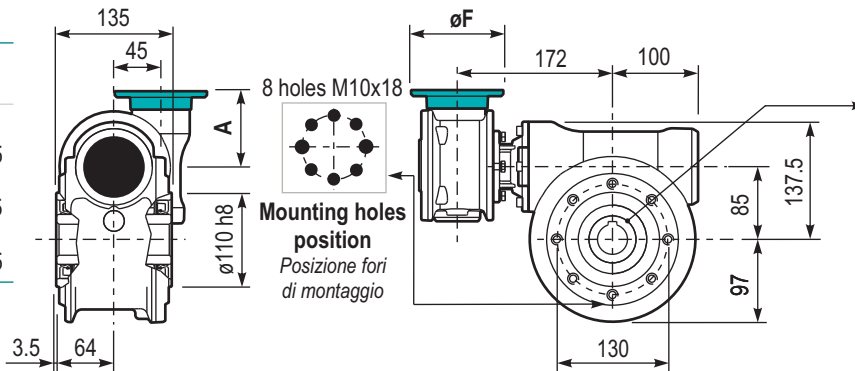
* Strong axial loads in the DX direction are not allowed.

* Non sono consentiti forti carichi assiali con direzione DX

Tab. 2

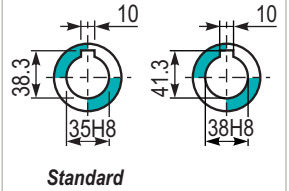
P8D4UNI.. Basic gearbox
Riduttore base

M. flanges	Kit code	øF	A
63B5	KD454041	138	74
71B5	KD454042	160	71.5
56B14	KD454049	80	71.5
63B14	KD454047	90	74
71B14	KD454045	105	71.5



Gearbox weight
Peso riduttore **19.50 kg**

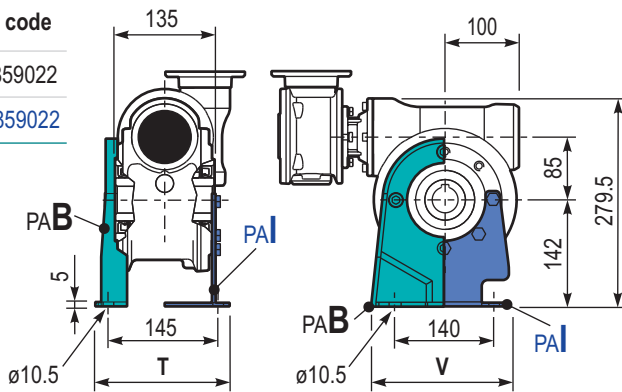
Hollow shaft
Foro in uscita



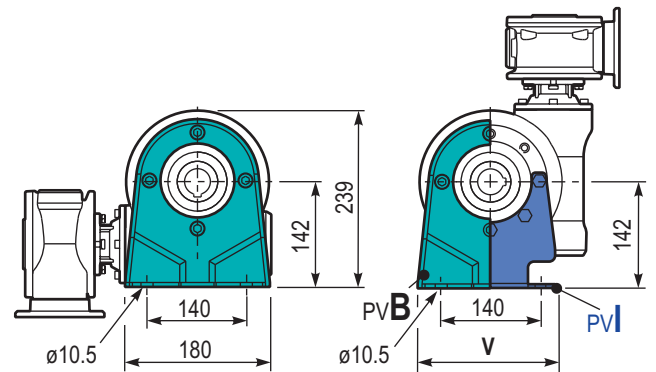
P8D4PA.. Feet
Piedini

Type	T	V	Kit code
B**	182	180	K0859022
I*	176	172	KN859022

** Zink plated
* Stainless steel

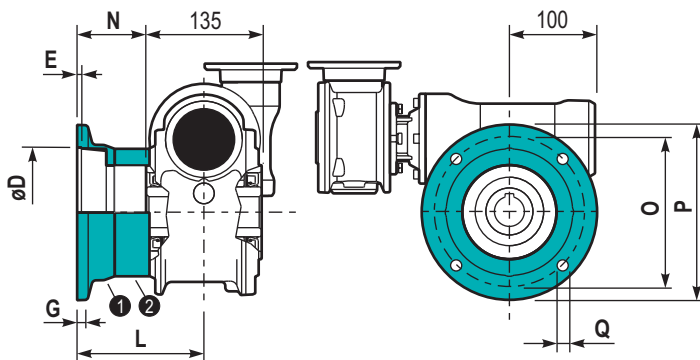


P8D4PBB.. Feet
Piedini



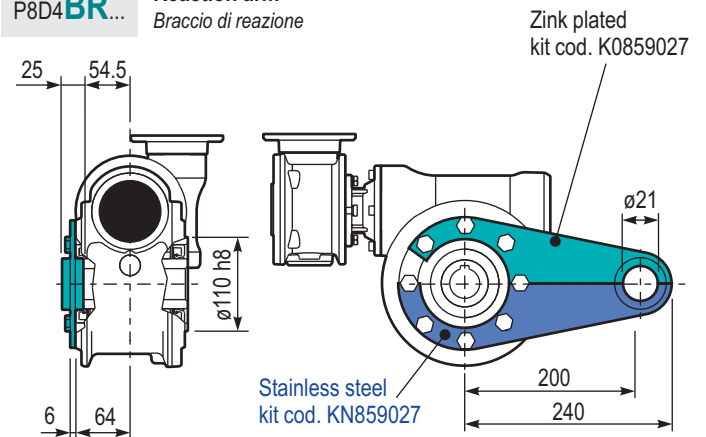
P8D4PV... Feet
Piedini

P8D4FL.. Output flange
Flangia uscita

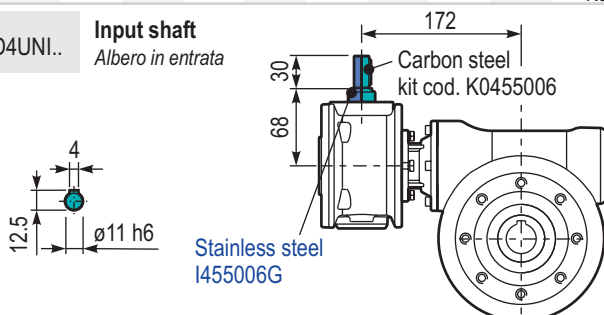


Type	øD	E	G	L	N	O	P	Q	Kit code
C	152 ^{+0.06} _{-0.00}	5	16	108	40.5	176	205	13	① K0859010 ② -
L	152 ^{+0.06} _{-0.00}	5	16	148.5	81	176	205	13	① K0859010 ② K0850201

P8D4BR.. Reaction arm
Braccio di reazione



R8D4UNI.. Input shaft
Albero in entrata



P8D4..SMK Single output shaft
Albero semplice in uscita

