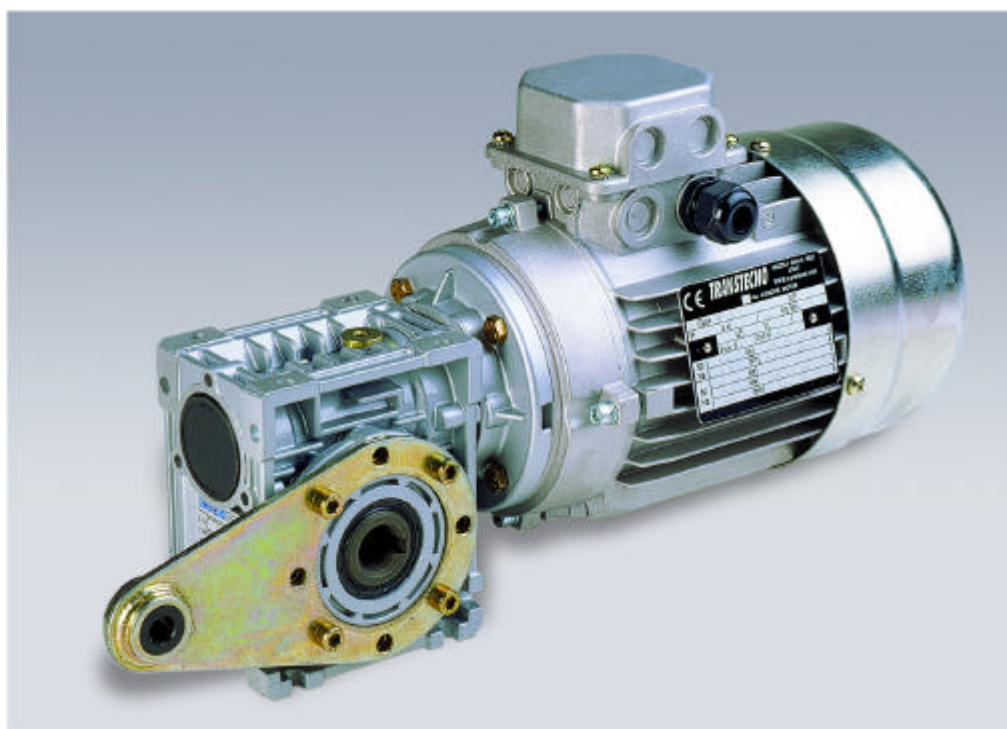
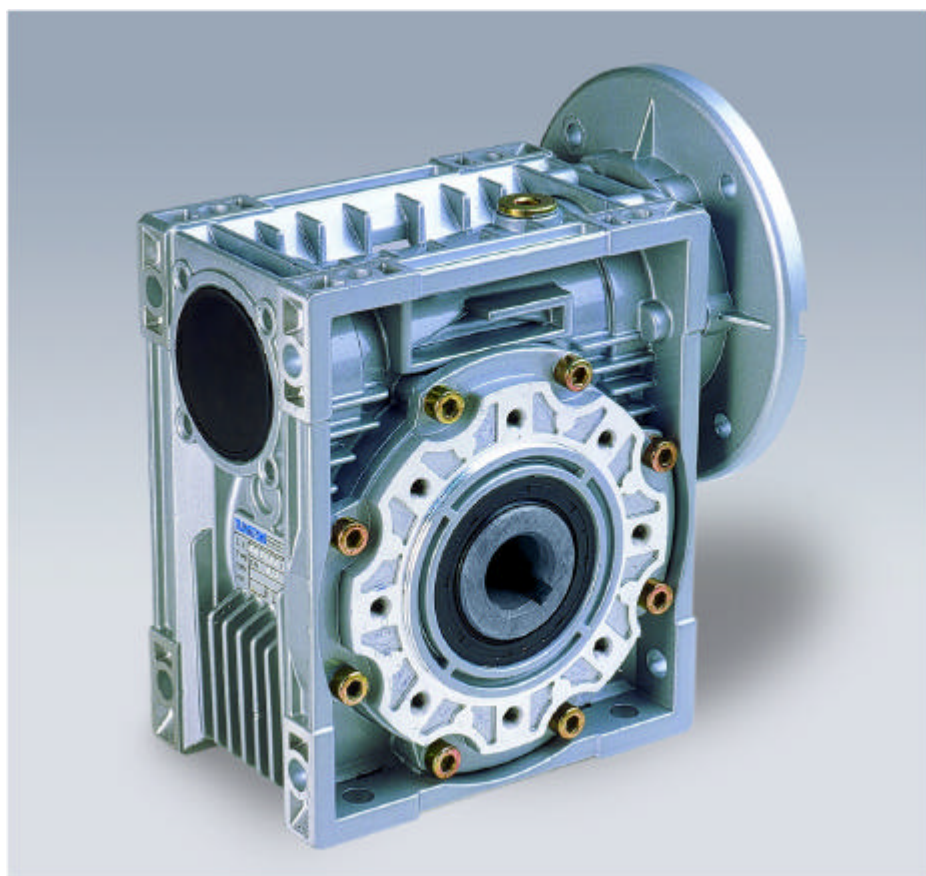


RIDUTTORI A VITE SENZA FINE SERIE CM



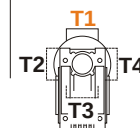
Caratteristiche tecniche / Technical characteristics

I riduttori a vite senza fine della serie CM proposti da **TRANSTECNO** hanno le seguenti caratteristiche principali: *CM wormgearboxes offered by **TRANSTECNO** have the following characteristics:*

- Le grandezze 030, 040, 050, 063, 075 e 090 sono costruite con carcassa in Alluminio, le altre grandezze in ghisa.
- Grande coppia in uscita.
- Funzionamento fluido e silenzioso.
- Adatti per ogni tipo di applicazione.
- The frames 030, 040, 050, 063, 075 and 090 are constructed with the Aluminium body, larger sizes are made of cast iron.
- High output torque capacity.
- Quiet operation.
- Versatile for many application.

Designazione / Designation

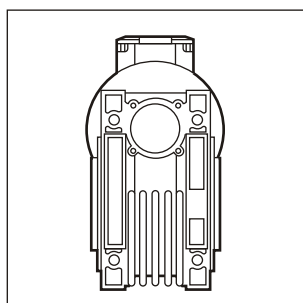
RIDUTTORE / GEARBOX							MOTORE / MOTOR				
CM	050	FD	20	P71	B5	B3	71B4	B5	230/400	50Hz	T1
Tipo Type	Grandezza Size	Versione Version	Rapporto Ratio	IEC	Forma costruttiva Version	Pos. di montaggio Mounting position	Grandezza Size	Forma costruttiva Version	Tensione Voltage	Frequenza Frequency	Pos. morsetti Terminal box pos.
CM	030 040 050 063 075 090 110 130	U FD FS FBD FBS FLD FLS	vedi tabelle see tables	IEC 56.. — 132..	B5 B14	B3 B8 B6 B7 V5 V6	IEC 56.. — 132..	B5 B14	—	50Hz 60Hz	T1 T2 T3 T4



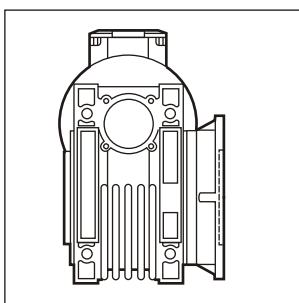
Versioni / Versions

I riduttori CM sono disponibili in quattro versioni:

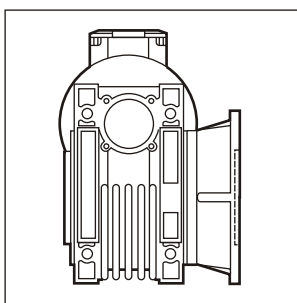
CM gear units are available in four different versions:



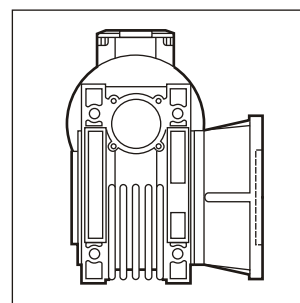
U



F



FB



FL

Simbologia / Symbols

n_1	[min ⁻¹]	Velocità in ingresso / Input speed
n_2	[min ⁻¹]	Velocità in uscita / Output speed
i		Rapporto di riduzione / Ratio
P_1	[kW]	Potenza in entrata / Input power
M_n	[Nm]	Coppia nominale in uscita / Nominal output torque
M_2	[Nm]	Coppia in uscita in funzione di P_1 / Output torque referred to P_1

sf		Fattore di servizio / Service factor
RD	%	Rendimento dinamico / Dynamic efficiency
R_2	[N]	Carico radiale ammissibile in uscita / Permitted output radial load

Dati di dentatura / Toothing data

	Dati della coppia vite-corona Worm wheel data	Rapporto / Ratio										
		7.5	10	15	20	25	30	40	50	60	80	100
CM030	Mx	1.44	1.44	1.44	1.1	1.7	1.44	1.1	0.89	0.74	0.56	
	Z	4	3	2	2	1	1	1	1	1	1	
	b	18°55'	14°25'	9°44'	7°49'	5°33'	4°54'	3°55'	3°17'	2°43'	2°07'	
	hd (1400min ⁻¹)	83	82	77	73	68	66	59	55	52	45	
	hs	66	64	55	51	41	39	33	30	26	22	
CM040	Mx	2.05	2.05	2.05	1.56	1.27	2.05	1.56	1.27	1.06	0.8	0.65
	Z	4	3	2	2	2	1	1	1	1	1	1
	b	23°54'	18°23'	12°30'	10°03'	8°45'	6°19'	5°04'	4°24'	3°42'	2°52'	2°29'
	hd (1400min ⁻¹)	86	84	81	77	71	68	65	63	58	55	47
	hs	70	65	59	54	50	45	40	35	30	26	21
CM050	Mx	2.56	2.56	2.56	1.95	1.58	2.56	1.95	1.58	1.32	1	0.8
	Z	4	3	2	2	2	1	1	1	1	1	1
	b	23°49'	18°19'	12°27'	10°03'	8°33'	6°18'	5°04'	4°18'	3°38'	2°52'	2°17'
	hd (1400min ⁻¹)	86	84	81	78	75	71	67	63	58	52	47
	hs	69	65	59	55	50	43	38	34	31	25	21
CM063	Mx	3.25	3.25	3.25	2.48	2	3.25	2.48	2	1.68	1.27	1.02
	Z	4	3	2	2	2	1	1	1	1	1	1
	b	24°31'	18°53'	12°51'	10°29'	8°45'	6°30'	5°17'	4°24'	3°49'	2°59'	2°26'
	hd (1400min ⁻¹)	87	85	82	80	77	73	69	66	60	55	50
	hs	70	65	58	55	50	44	40	35	31	26	22
CM075	Mx	3.95	3.95	3.95	3	2.42	3.95	3	2.42	2.02	1.54	1.24
	Z	4	3	2	2	2	1	1	1	1	1	1
	b	26°38'	20°37'	14°05'	11°19'	9°29'	7°09'	5°43'	4°46'	4°01'	3°17'	2°44'
	hd (1400min ⁻¹)	88	86	83	80	78	74	70	67	63	58	53
	hs	71	68	60	56	51	44	40	35	32	26	23
CM090	Mx	4.84	4.84	4.84	3.69	2.98	4.84	3.69	2.98	2.5	1.89	1.52
	Z	4	3	2	2	2	1	1	1	1	1	1
	b	29°05'	22°39'	15°33'	12°50'	10°53'	7°55'	6°30'	5°29'	4°46'	3°45'	3°06'
	hd (1400min ⁻¹)	88	87	84	83	81	75	74	72	69	63	58
	hs	72	70	63	59	55	47	43	41	38	31	25
CM110	Mx	5.875	5.875	5.875	4.62	3.73	5.875	4.62	3.73	3.13	2.37	1.91
	Z	4	3	2	2	2	1	1	1	1	1	1
	b	28°15'	21°57'	15°02'	14°42'	12°33'	7°39'	7°29'	6°21'	5°33'	4°27'	3°39'
	hd (1400min ⁻¹)	89	87	84	84	83	77	76	74	72	66	62
	hs	71	68	61	60	58	46	45	42	41	35	26
CM130	Mx	6.97	6.97	6.97	5.4	4.37	6.97	5.4	4.37	3.67	2.77	2.23
	Z	4	3	2	2	2	1	1	1	1	1	1
	b	28°43'	22°20'	15°19'	13°47'	11°54'	7°48'	7°00'	6°01'	5°16'	4°08'	3°27'
	hd (1400min ⁻¹)	89	88	86	84	83	79	76	76	73	71	64
	hs	72	70	62	60	57	47	45	41	37	32	28

Lubrificazione / Lubrication

I riduttori nelle grandezze CM030-CM090 sono forniti completi di lubrificante long-life, pertanto non richiedono alcuna manutenzione.

I riduttori CM110 e CM130 sono invece forniti privi di lubrificante; l'utente dovrà provvedere al riempimento dei gruppi prima della loro messa in servizio utilizzando uno dei lubrificanti consigliati nella tabella sottostante o altri con analoghe caratteristiche.

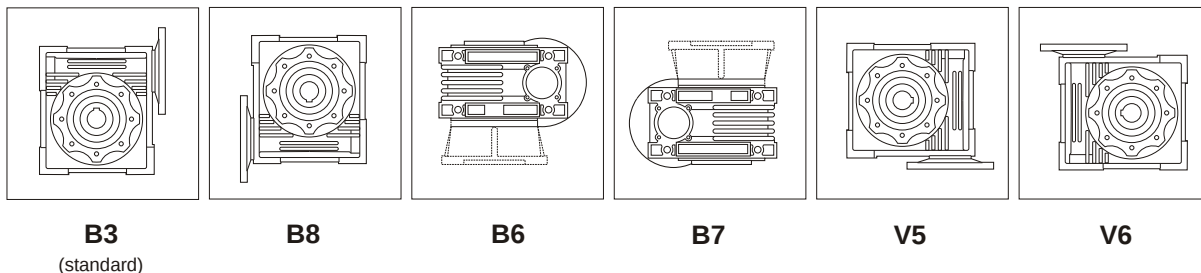
Unit sizes CM030 up to CM090 are supplied with lubrication and are ready for use.

Sizes CM110 and CM130 are supplied without lubrication and must be filled with suitable type and quantity of oil. (See attached table)

	Lubrificanti consigliati / Suggested lubricants						
	IP	SHELL	AGIP	ESSO	MOBIL	CASTROL	BP
CM040-CM090	Telium VSF	Tivela Oil SC320	Blasia S320	S320	Glygoyle 30	Alphasyn PG320	Energol SG-XP320
CM110-CM130	Mellana Oil	Omala Oil 320	Blasia 320	—	Mobil Gear 320	—	—

Posizioni di montaggio / Mounting positions

Posizioni di montaggio / Mounting positions



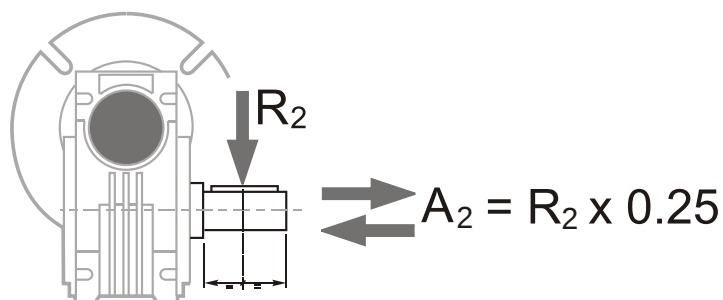
Per i riduttori lubrificati a vita non è necessaria alcuna manutenzione; per gli altri (CM110 e CM130), effettuare la prima sostituzione del lubrificante dopo 400 ore e, successivamente, ogni 4000 ore di funzionamento.

Unit sizes CM30 up to CM90 do not require any maintenance. Unit sizes CM110 and CM130 must have oil changed after 400 hours and thereafter every 4000 hours.

Quantità di olio (litri) / Oil quantity (liters)						
	B3	B8	B6	B7	V5	V6
CM030	0.04					
CM040	0.08					
CM050	0.15					
CM063	0.30					
CM075	0.55					
CM090	1.0					
CM110	3.0	2.2	2.5	2.5	3.0	3.0
CM130	4.5	3.3	3.5	3.5	4.5	4.5

Lubrificati a vita
Life lubricated

Carichi radiali / Radial loads



n ₂ [min ⁻¹]	R ₂ [N]							
	CM030	CM040	CM050	CM063	CM075	CM090	CM110	CM130
187	770	1000	1340	1380	1860	2360	2850	3800
140	820	1100	1520	1760	2470	2520	2990	4040
93	880	1260	1700	1830	2830	2620	3420	4560
70	990	1420	1940	2030	3250	2780	3940	5030
56	1040	1570	2200	2260	3460	3740	4610	6270
47	1080	1630	2270	2290	3620	3930	4940	6650
35	1100	1680	2340	2410	3880	4040	5410	7120
28	1180	1780	2520	2620	4090	4620	5890	7790
23	1240	1890	2710	2830	4300	4850	6270	8310
18	1410	2200	2990	3250	4670	5770	7410	9780
14	1570	2410	3360	3460	4930	6090	7840	10160

0.37						
71B4 (1400 min ⁻¹)	187	16	2.2	7.5	CM040	B5/B14
	140	21	1.8	10		B5/B14
	93	31	1.2	15		B5/B14
	70	39	1.0	20		B5/B14
	56	45	0.9	25		B5/B14
	187	16	3.9	7.5	CM050	B5/B14
	140	21	3.2	10		B5/B14
	93	31	2.3	15		B5/B14
	70	39	1.7	20		B5/B14
	56	47	1.5	25		B5/B14
47	54	1.5	30	B5/B14		
35	68	1.2	40	B5/B14		
28	80	1.0	50		B5/B14	

Dati tecnici / Technical data

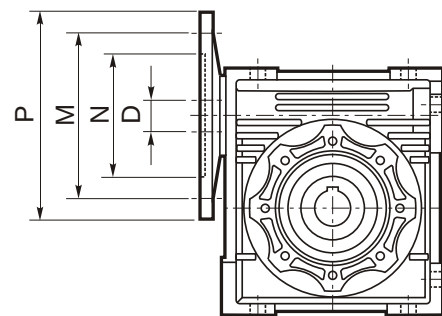
P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	sf	i			P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	sf	i				
0.37							0.75								
71B4 (1400 min ⁻¹)	35	70	2.0	40	CM063	B5/B14	80B4 (1400 min ⁻¹)	18	270	1.8	80	CM110	B5		
	28	83	1.6	50		B5/B14		14	317	1.4	100		B5		
	23	91	1.3	60		B5/B14									
	18	111	1.0	80		B5/B14									
	14	126	0.9	100		B5/B14									
	28	85	2.2	50	CM075	B5		90S4 (1400 min ⁻¹)	187	49	2.5	7.5	CM063	B5/B14	
	23	95	1.8	60		B5			140	64	2.0	10		B5/B14	
	18	117	1.4	80		B5			93	92	1.4	15		B5/B14	
	14	134	1.1	100		B5			70	120	1.1	20		B5/B14	
0.55							1.1								
80A4 (1400 min ⁻¹)	187	24	2.5	7.5	CM050	B5/B14	90LA4 (1400 min ⁻¹)		187	50	2.9	7.5	CM075	B5/B14	
	140	32	2.1	10		B5/B14			140	65	2.4	10		B5/B14	
	93	46	1.6	15		B5/B14			93	93	1.7	15		B5/B14	
	70	59	1.2	20		B5/B14			70	120	1.4	20		B5/B14	
	56	70	1.0	25		B5/B14		56	146	1.1	25	B5/B14			
	47	80	1.0	30		B5/B14		47	167	1.0	30	B5/B14			
								35	210	0.9	40	B5/B14			
	93	46	2.9	15	CM063	B5/B14		35	222	1.5	40	CM090	B5/B14		
	70	60	2.2	20		B5/B14		28	270	1.1	50		B5/B14		
	56	72	1.9	25		B5/B14		23	311	1.0	60		B5/B14		
	47	82	1.8	30		B5/B14									
	35	104	1.4	40		B5/B14		23	324	1.8	60		CM110	B5	
	28	124	1.1	50		B5/B14		18	396	1.2	80			B5	
	23	135	0.9	60		B5/B14		14	465	1.0	100			B5	
	35	105	1.8	40		CM075		B5/B14	18	426	1.9		80	CM130	B5
	28	126	1.4	50	B5/B14			14	480	1.5	100	B5			
	23	142	1.2	60	B5/B14										
	18	174	0.9	80	B5/B14										
	14	199	0.8	100	B5/B14										
23	155	1.9	60	CM090	B5/B14										
18	189	1.4	80		B5/B14										
14	218	1.1	100		B5/B14										
14	233	1.9	100	CM110	B5										
0.75							1.5								
80B4 (1400 min ⁻¹)	187	33	1.8	7.5	CM050	B5/B14	90LA4 (1400 min ⁻¹)	187	67	1.8	7.5	CM063	B5/B14		
	140	43	1.5	10		B5/B14		140	87	1.5	10		B5/B14		
	93	62	1.1	15		B5/B14		93	126	1.0	15		B5/B14		
								70	164	0.8	20	B5/B14			
	187	33	3.7	7.5	CM063	B5/B14		187	68	2.1	7.5	CM075	B5/B14		
	140	43	2.9	10		B5/B14		140	88	1.8	10		B5/B14		
	93	63	2.1	15		B5/B14		93	127	1.3	15		B5/B14		
	70	82	1.6	20		B5/B14		70	164	1.0	20		B5/B14		
	56	98	1.4	25		B5/B14		56	200	0.8	25		B5/B14		
	47	112	1.3	30		B5/B14									
	35	141	1.0	40		B5/B14		56	207	1.4	25		CM090	B5/B14	
								47	230	1.4	30			B5/B14	
						35		303	1.1	40	B5/B14				
						28		368	0.8	50	B5/B14				
	70	82	2.1	20	CM075	B5/B14		35	311	2.1	40	CM110	B5		
	56	100	1.6	25		B5/B14		28	379	1.6	50		B5		
	47	114	1.5	30		B5/B14		23	442	1.3	60		B5		
	35	143	1.3	40		B5/B14		18	540	1.0	80		B5		
	28	171	1.0	50		B5/B14		18	581	1.5	80		CM130	B5	
	23	193	0.9	60		B5/B14		14	655	1.1	100			B5	
28	184	1.7	50	CM090	B5/B14										
23	212	1.4	60		B5/B14										
18	258	1.0	80		B5/B14										
14	297	0.9	100		B5/B14										

Dati tecnici / Technical data

P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	sf	i			P ₁ [kW]	n ₂ [min ⁻¹]	M ₂ [Nm]	sf	i							
1.85							3.0											
90LB4 (1400 min ⁻¹)	187	82	1.5	7.5	CM063	B5/B14	100LB4 (1400 min ⁻¹)	93	258	2.2	15	CM110	B5					
	140	107	1.2	10		B5/B14		70	344	1.7	20		B5					
	93	155	0.9	15		B5/B14		56	425	1.3	25		B5					
	187	83	1.7	7.5	CM075	B5/B14		47	473	1.3	30		B5					
	140	109	1.5	10		B5/B14		35	622	1.0	40		B5					
	93	157	1.0	15		B5/B14		35	622	1.6	40	CM130	B5					
	70	202	0.8	20		B5/B14		28	778	1.3	50		B5					
	56	246	0.7	25		B5/B14		23	896	1.0	60		B5					
	93	160	1.9	15		CM090		B5/B14	4.0									
	70	209	1.5	20	B5/B14		112M4 (1400 min ⁻¹)	187	180	1.5	7.5		CM090	B5/B14				
	56	256	1.2	25	B5/B14			140	237	1.2	10	B5/B14						
	47	284	1.2	30	B5/B14			187	182	2.7	7.5	CM110	B5					
	35	374	0.9	40	B5/B14			140	237	2.3	10		B5					
	47	289	2.2	30	CM110	B5		93	344	1.6	15		B5					
35	384	1.7	40	B5		70	458	1.3	20	B5								
28	467	1.3	50	B5		56	566	1.0	25	B5								
23	545	1.0	60	B5		47	630	1.0	30	B5								
18	717	1.2	80	CM130	B5	187 140 93 70 56 47 35 28	182 240 352 458 566 647 829 1037	3.9 3.3 2.5 1.9 1.5 1.9 1.2 1.0	7.5 10 15 20 25 30 40 50	CM130	B5							
14	808	0.9	100		B5						B5							
2.2											5.5							
100LA4 (1400 min ⁻¹)	187	99	1.4	7.5	CM075						B5/B14	132S4 (1400 min ⁻¹)	187	250	2.0	7.5	CM110	B5
	140	129	1.2	10							B5/B14		140	326	1.7	10		B5
	93	187	0.9	15							B5/B14		93	473	1.2	15		B5
	187	99	2.6	7.5	CM090						B5/B14		70	630	0.9	20		B5
	140	131	2.2	10							B5/B14			187	250	2.8		7.5
	93	189	1.6	15							B5/B14	140		330	2.4	10	B5	
	70	249	1.3	20							B5/B14	93		484	1.8	15	B5	
	56	304	1.0	25		B5/B14	70	630	1.4	20	B5							
	47	338	1.0	30		B5/B14	56	778	1.1	25	B5							
	70	252	2.3	20	CM110	B5	47	889	1.4	30	B5							
	56	311	1.8	25		B5	7.5											
	47	347	1.8	30		B5	132MA4 (1400 min ⁻¹)	187	341	1.5	7.5	CM110	B5					
	35	456	1.4	40		B5		140	445	1.2	10		B5					
	28	555	1.1	50		B5		187	341	2.1	7.5	CM130	B5					
35	456	2.2	40	CM130	B5	140		450	1.8	10	B5							
28	570	1.8	50		B5	93		660	1.3	15	B5							
23	657	1.4	60		B5	70		860	1.0	20	B5							
18	852	1.0	80		B5	56		1062	0.8	25	B5							
3.0							7.5											
100LB4 (1400 min ⁻¹)	187	135	1.1	7.5	CM075	B5/B14	132MA4 (1400 min ⁻¹)	187	341	1.5	7.5	CM110	B5					
	140	176	0.9	10		B5/B14		140	445	1.2	10		B5					
	187	135	1.9	7.5	CM090	B5/B14		187	341	2.1	7.5		CM130	B5				
	140	178	1.6	10		B5/B14		140	450	1.8	10			B5				
	93	258	1.2	15		B5/B14		93	660	1.3	15			B5				
	70	340	0.9	20		B5/B14		70	860	1.0	20			B5				
						B5/B14		56	1062	0.8	25			B5				

Motori applicabili / IEC Motor adapters

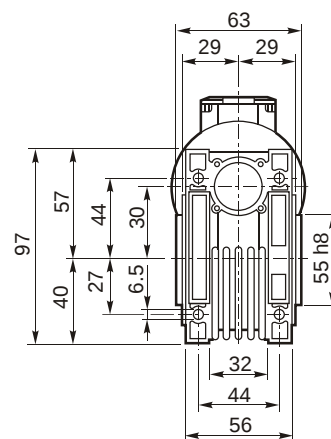
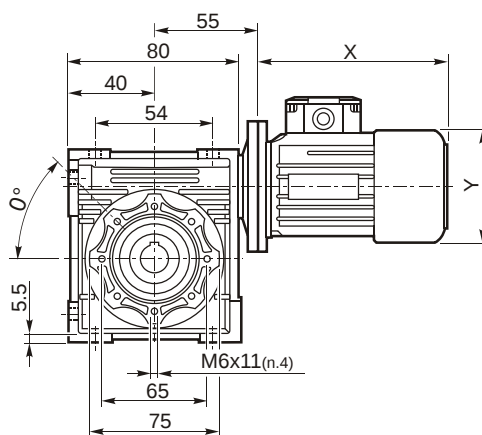
	IEC	N	M	P	D	i										
						7.5	10	15	20	25	30	40	50	60	80	100
CM030	63B5	95	115	140	11											
	63B14	60	75	90												
	56B5	80	100	120	9											
	56B14	50	65	80												
CM040	71B5	110	130	160	14											
	71B14	70	85	105												
	63B5	95	115	140	11											
	63B14	60	75	90												
	56B5	80	100	120	9											
CM050	80B5	130	165	200	19											
	80B14	80	100	120												
	71B5	110	130	160	14											
	71B14	70	85	105												
	63B5	95	115	140	11											
CM063	90B5	130	165	200	24											
	90B14	95	115	140												
	80B5	130	165	200	19											
	80B14	80	100	120												
	71B5	110	130	160	14											
	71B14	70	85	105												
CM075	100/112B5	180	215	250	28											
	100/112B14	110	130	160												
	90B5	130	165	200	24											
	90B14	95	115	140												
	80B5	130	165	200	19											
	80B14	80	100	120												
	71B5	110	130	160	14											
CM090	100/112B5	180	215	250	28											
	100/112B14	110	130	160												
	90B5	130	165	200	24											
	90B14	95	115	140												
	80B5	130	165	200	19											
	80B14	80	100	120												
CM110	132B5	230	265	300	38											
	100/112B5	180	215	250	28											
	90B5	130	165	200	24											
	80B5	130	165	200	19											
CM130	132B5	230	265	300	38											
	100/112B5	180	215	250	28											
	90B5	130	165	200	24											



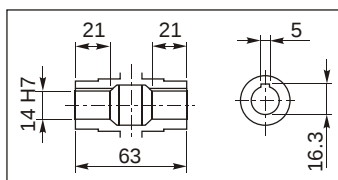
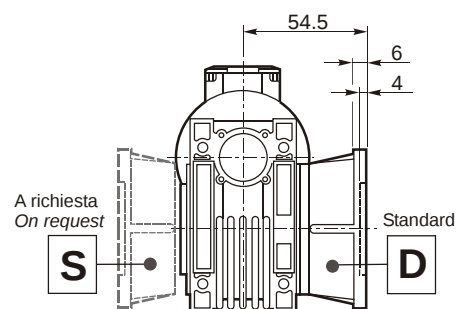
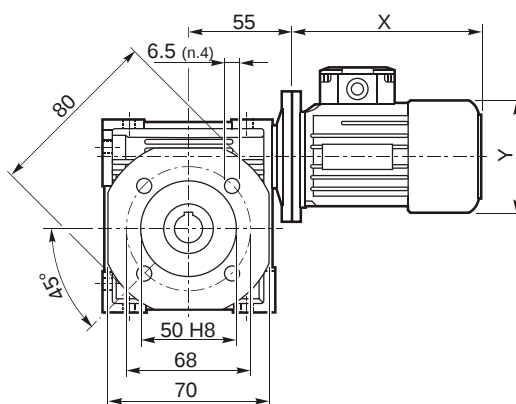
N.B.
Le aree evidenziate in grigio indicano l'applicabilità della corrispondente grandezza motore.
N.B. Grey areas indicate motor inputs available on each size of unit.

Dimensioni / Dimensions

CM 030 U

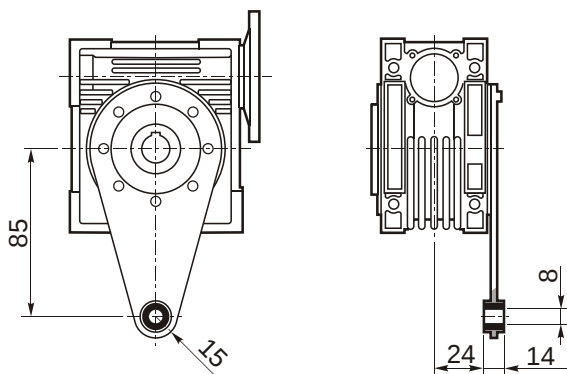


CM 030 F

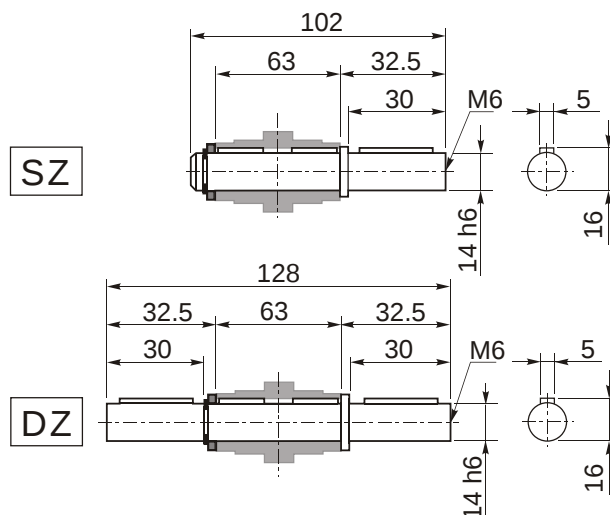


Albero lento cavo / Hollow output shaft

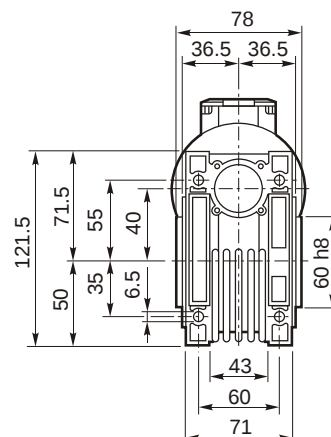
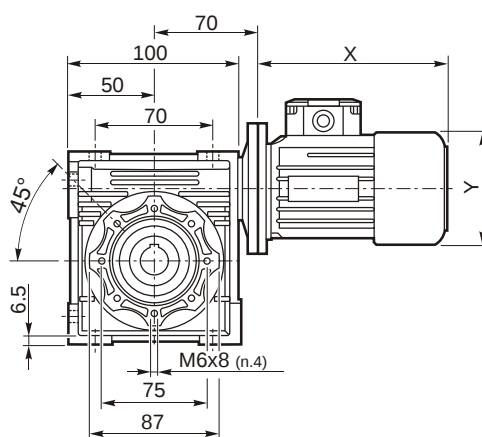
Braccio di reazione / Torque arm



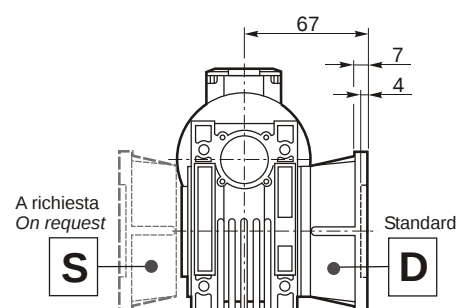
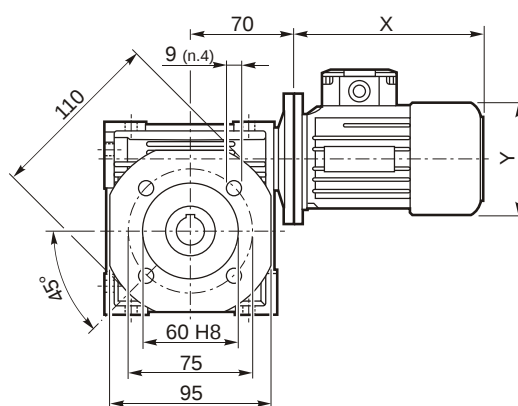
Alberi lenti / Output shafts



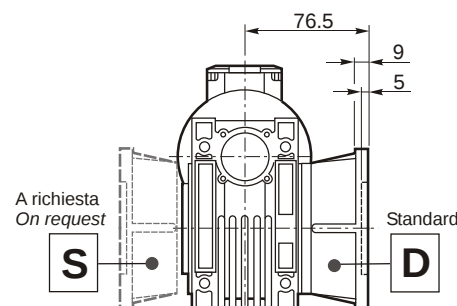
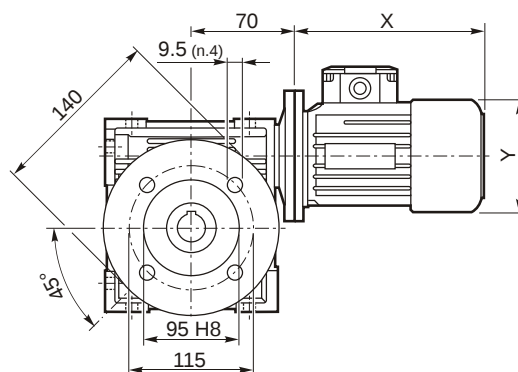
CM 040 U



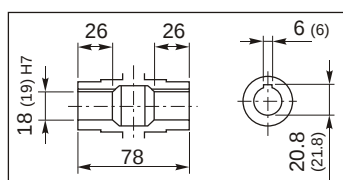
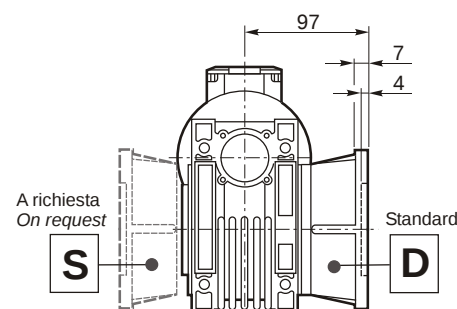
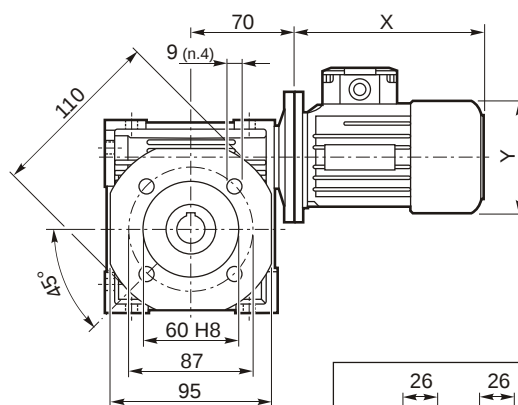
CM 040 F



CM 040 FB



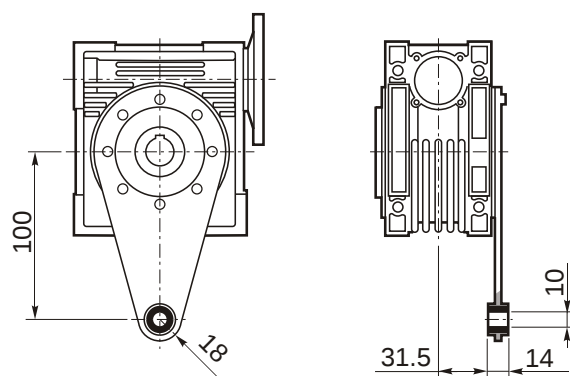
CM 040 FL



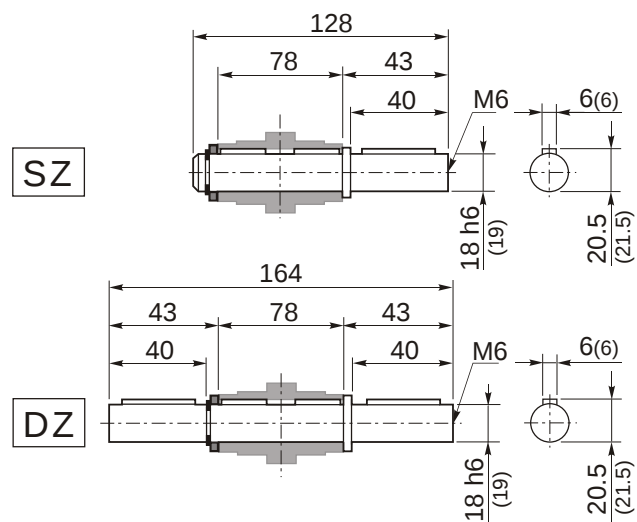
Albero lento cavo / Hollow output shaft

Dimensioni / Dimensions

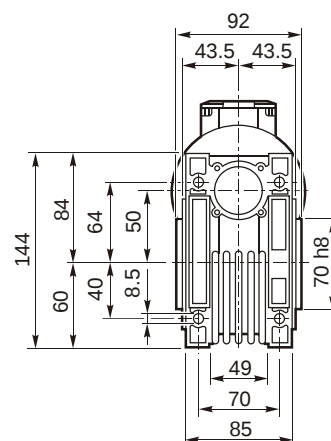
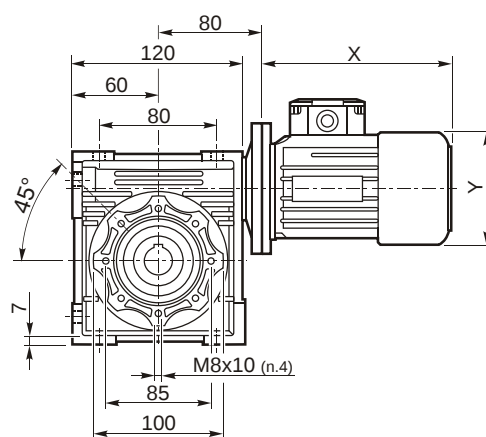
Braccio di reazione / Torque arm



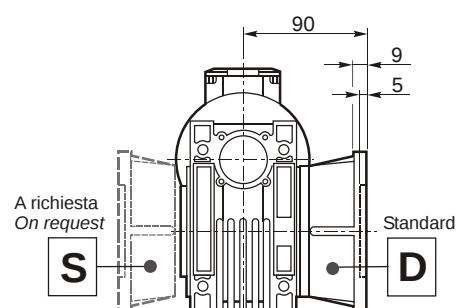
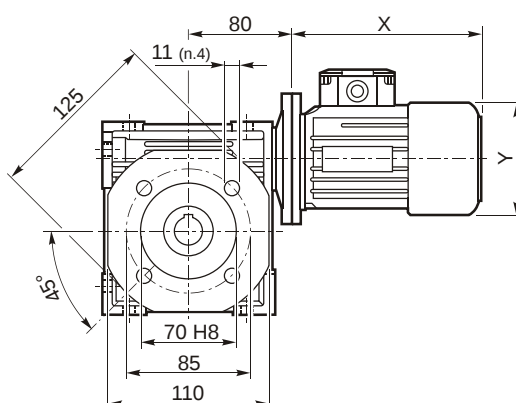
Alberi lenti / Output shafts



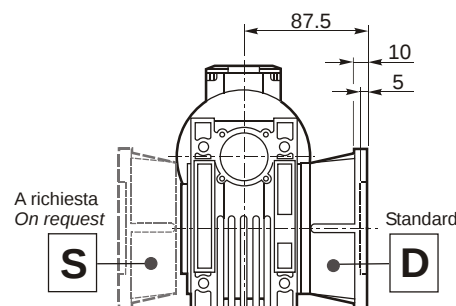
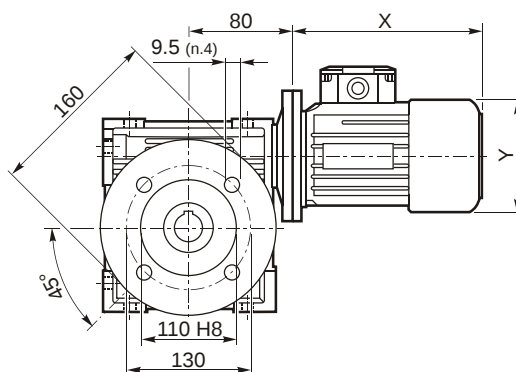
CM 050 U



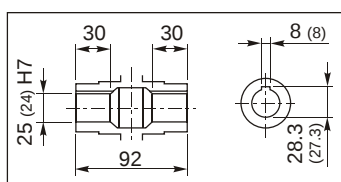
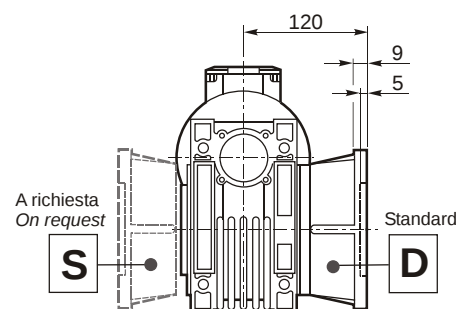
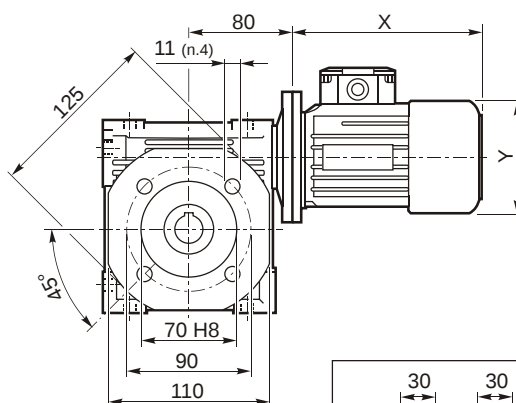
CM 050 F



CM 050 FB



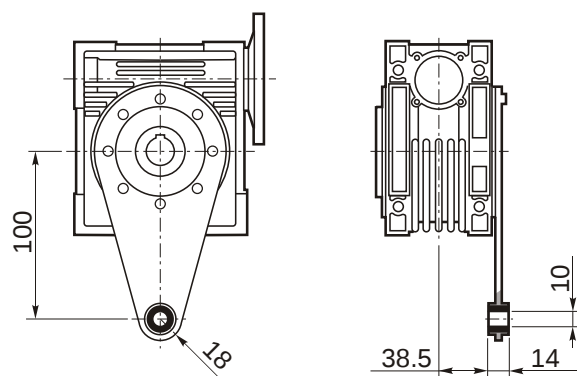
CM 050 FL



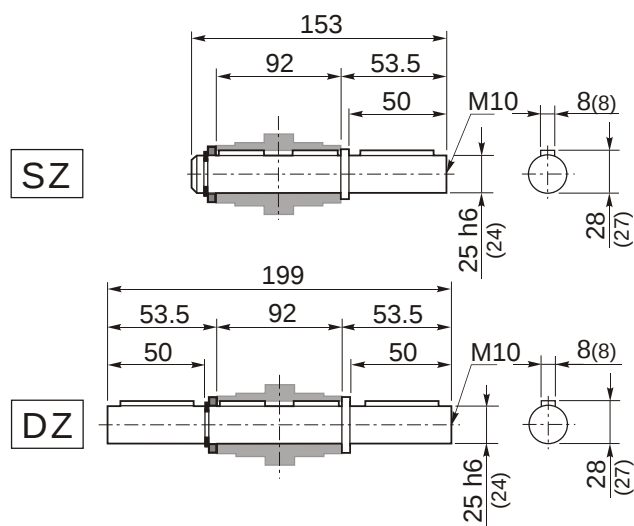
Albero lento cavo / Hollow output shaft

Dimensioni / Dimensions

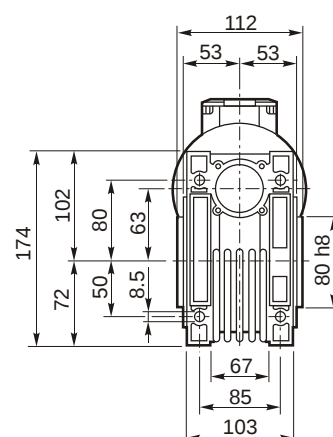
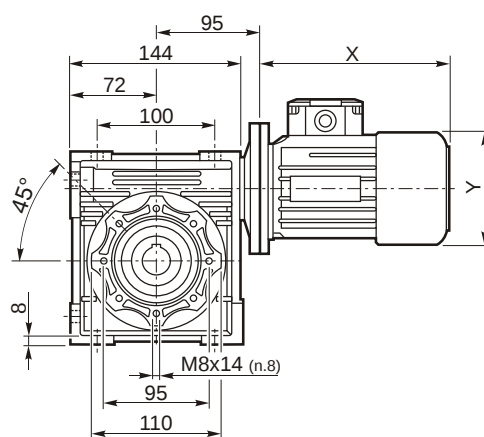
Braccio di reazione / Torque arm



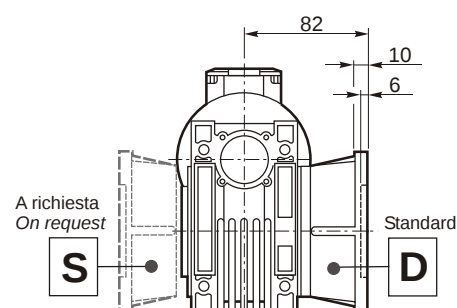
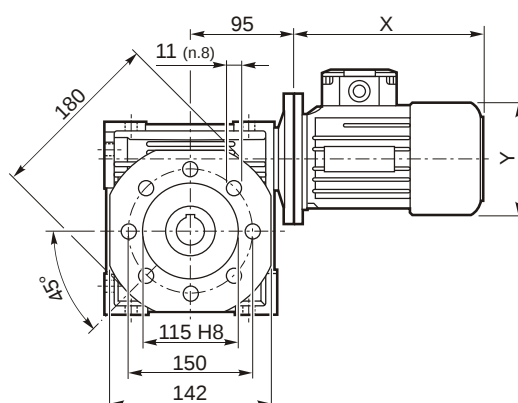
Alberi lenti / Output shafts



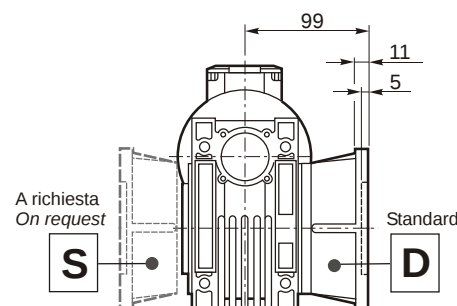
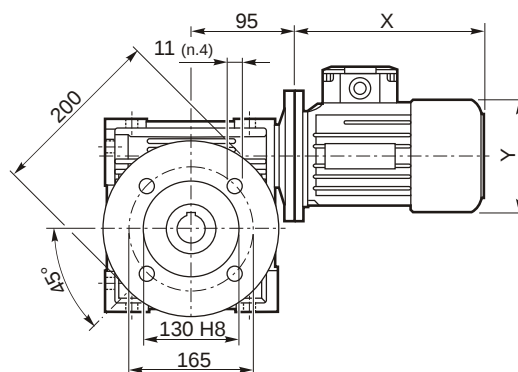
CM 063 U



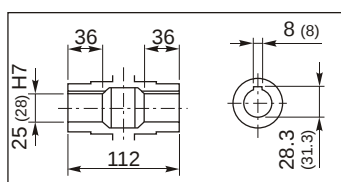
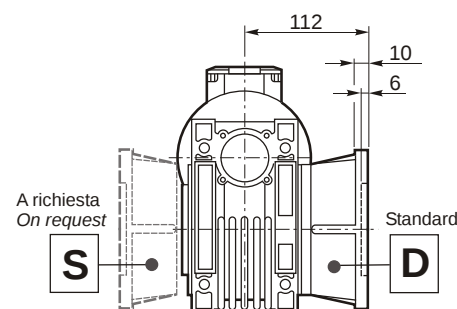
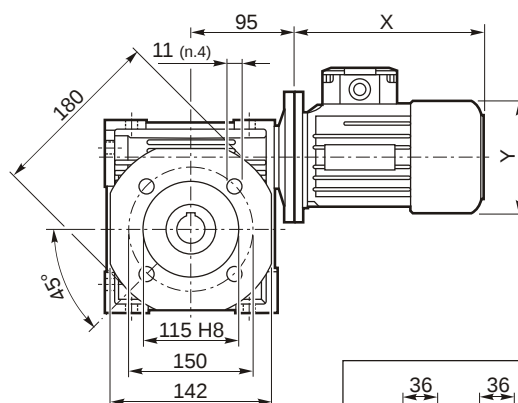
CM 063 F



CM 063 FB



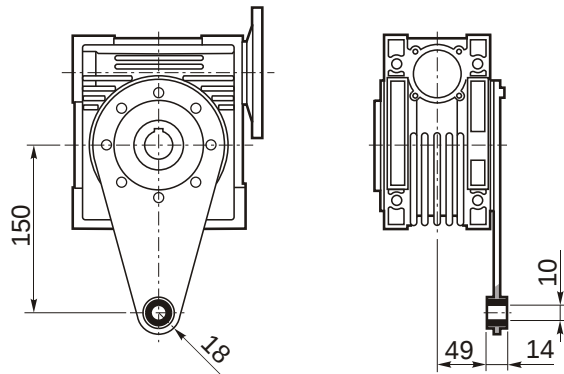
CM 063 FL



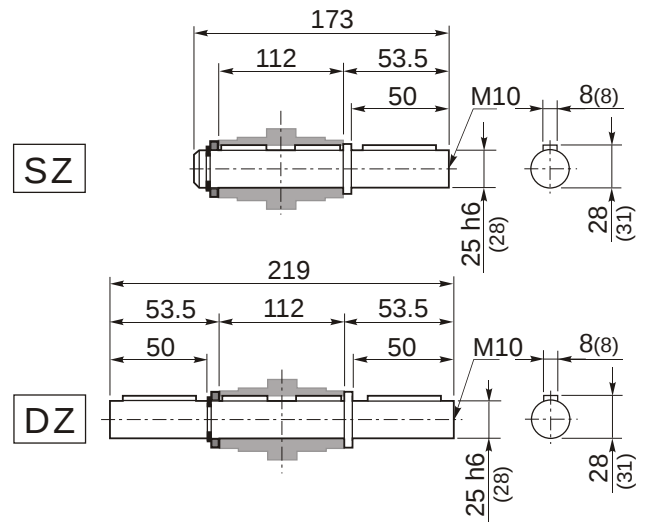
Albero lento cavo / Hollow output shaft

Dimensioni / Dimensions

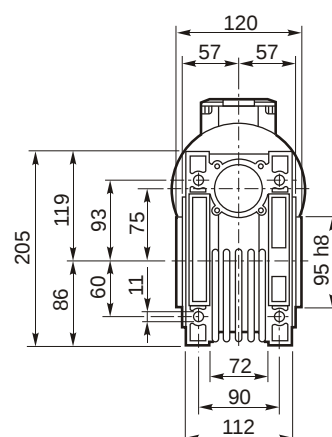
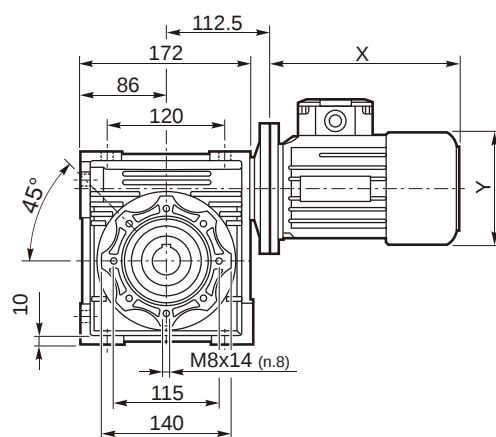
Braccio di reazione / Torque arm



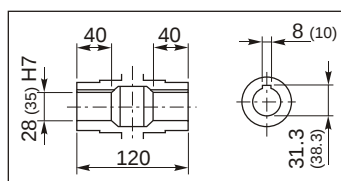
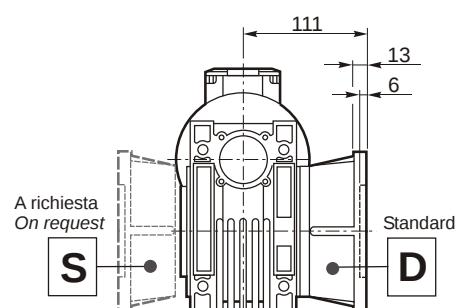
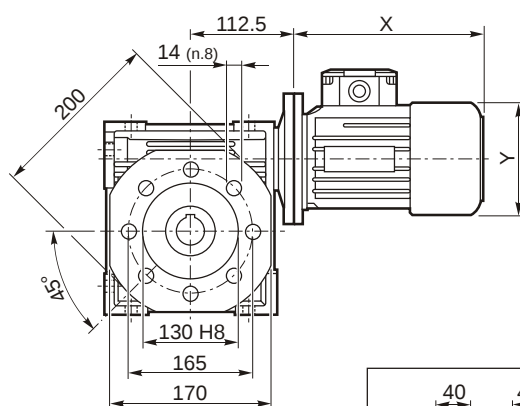
Alberi lenti / Output shafts



CM 075 U

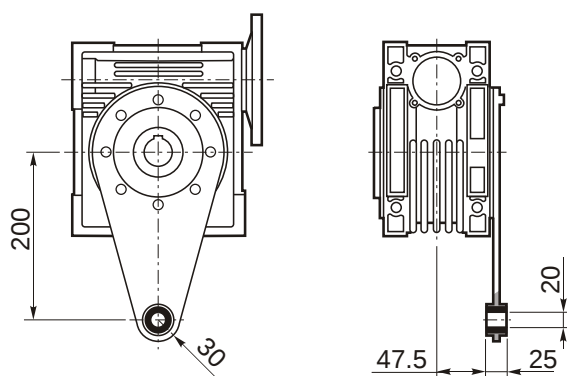


CM 075 F

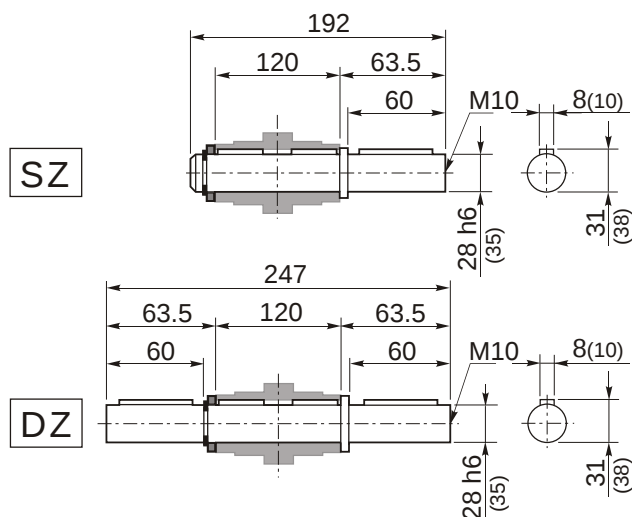


Albero lento cavo / Hollow output shaft

Braccio di reazione / Torque arm

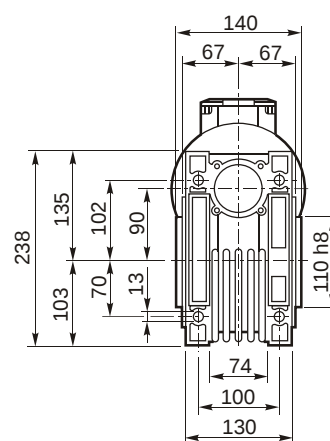
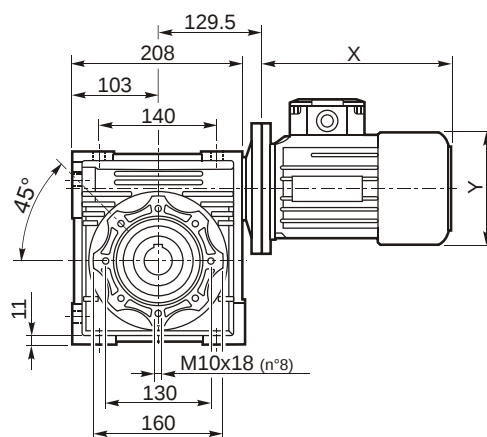


Alberi lenti / Output shafts

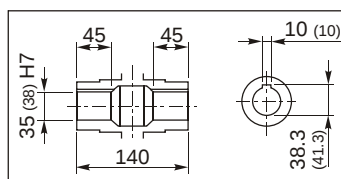
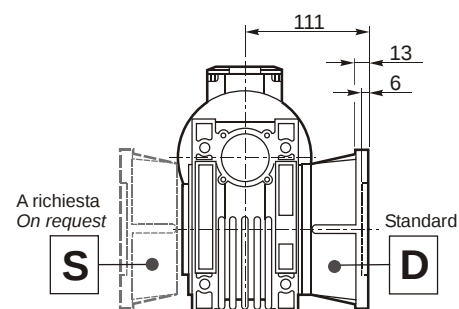
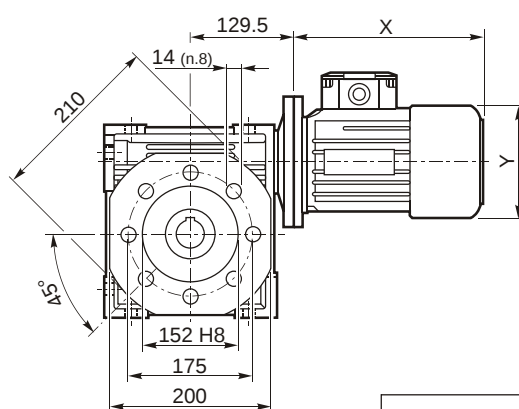


Dimensioni / Dimensions

CM 090 U

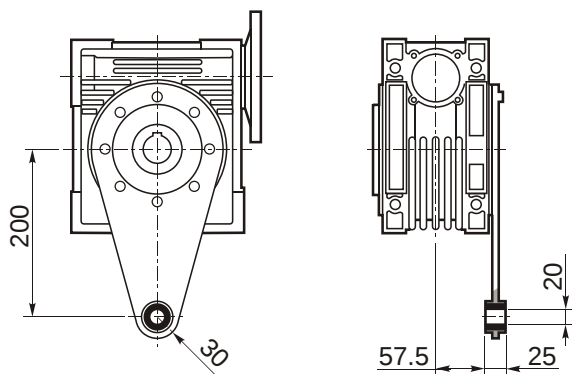


CM 090 F

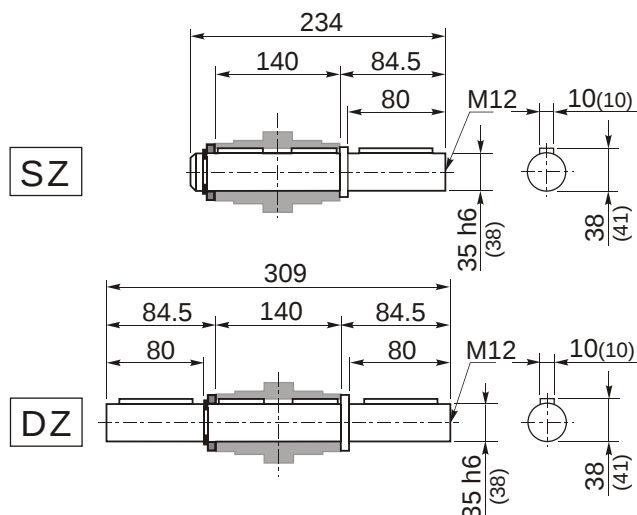


Albero lento cavo / Hollow output shaft

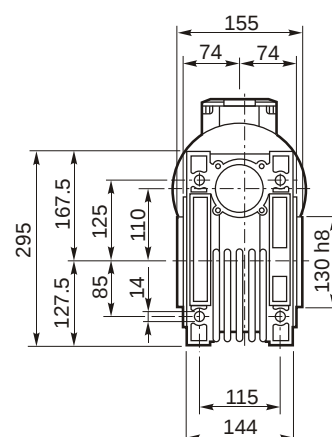
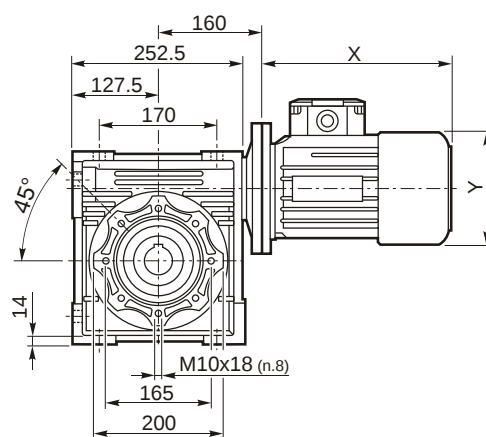
Braccio di reazione / Torque arm



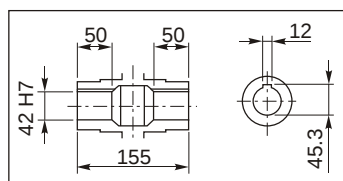
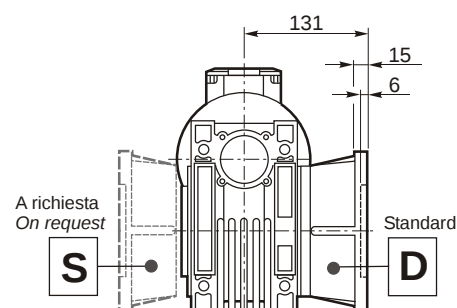
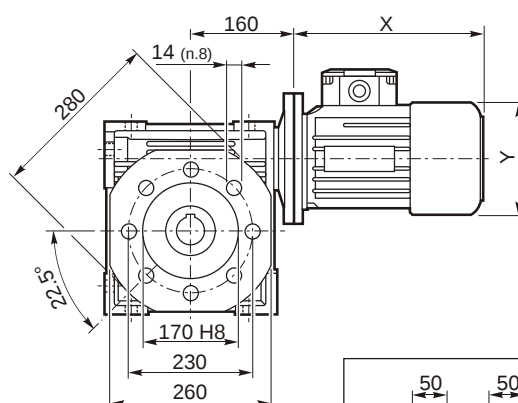
Alberi lenti / Output shafts



CM 110 U

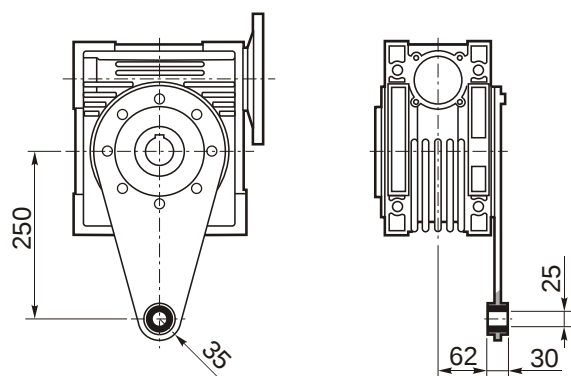


CM 110 F

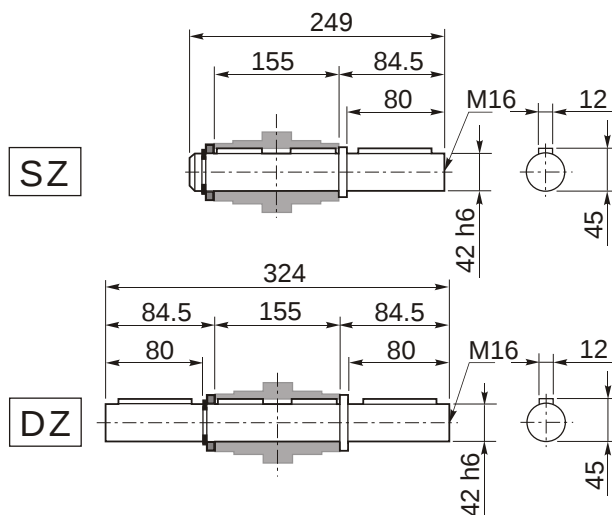


Albero lento cavo / Hollow output shaft

Braccio di reazione / Torque arm

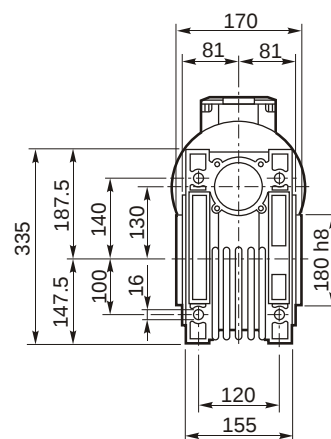
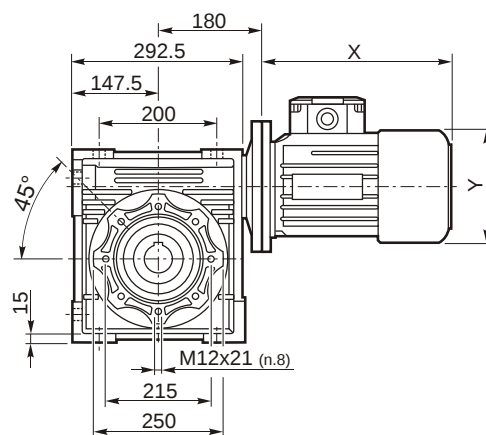


Alberi lenti / Output shafts

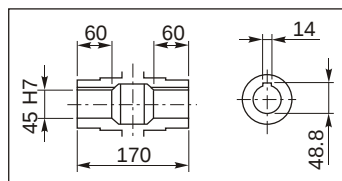
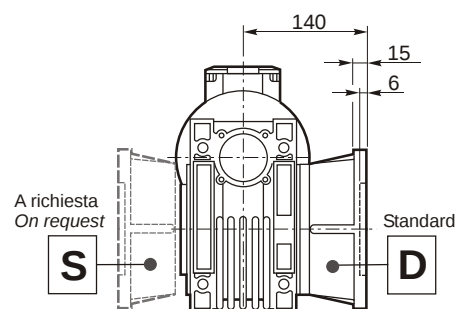
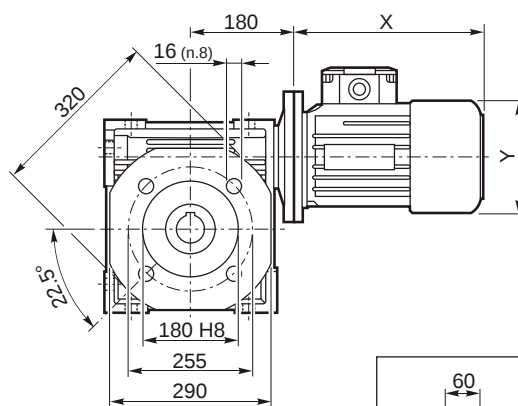


Dimensioni / Dimensions

CM 130 U

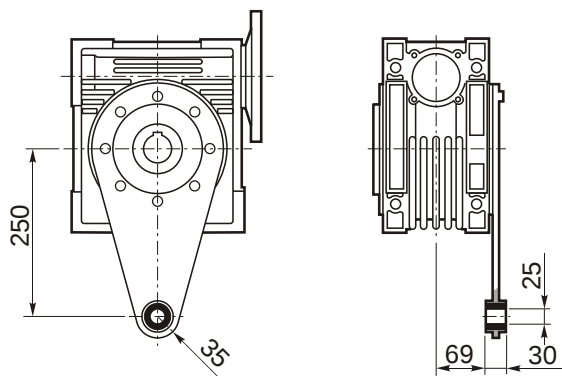


CM 130 F



Albero lento cavo / Hollow output shaft

Braccio di reazione / Torque arm



Alberi lenti / Output shafts

