Caratteristiche tecniche — *Technical features*

I riduttori combinati a vite senza fine della serie CMM hanno le seguenti caratteristiche principali :

- Carcassa in alluminio nelle grandezze 026, 030, 040, 050, 063, 075, 090 e 110. La grandezza 130 è costruita con carcassa in ghisa;
- Le grandezze 090, 110 e 130 sono fornite con cuscinetti a rulli conici sulla vite;
- Lubrificazione permanente con olio sintetico.

CMM range combination gearboxes have the following main features:

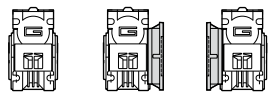
- Die-cast aluminum housing on sizes 026, 030, 040, 050, 063, 075, 090 and 110. Cast iron housing on size 130;
- Double taper roller bearing on sizes 090, 110 and 130;
- Permanent synthetic oil long-life lubrication.

Designazione — *Classification*

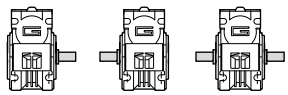
RIDUTTORE / *GEARBOX*

CMM	030/063	FD	20	71	B5	SZDX	BRSX	90	B3	US1	VS
Tipo *Type*	Grandezza *Size*	Versione *Version*	Rapporto *Ratio*	IEC	Forma costruttiva Version	Albero di uscita *Output shaft*	Braccio di reazione *Torque arm*	Angolo *Angle*	Pos. di montaggio Mounting position	*Esecuzione di montaggio Mounting execution*	Opzioni *Options*
CMM  **CMMIS** 	**026/026** **026/030** **026/040** **026/050** **030/040** **030/050** **030/063** **040/075** **040/090** **050/110** **063/130**	**U** **FD** **FS** **FBD** **FBS** **FLD** **FLS**	vedi tabelle-*see tables*	**56..** **—** **90..**	**B5** **B14**	**SZDX** **SZSX** **DZ**	**BRDX** **BRSX**	**0°** **90°** **180°** **270°**	**B3** **B8** **B6** **B7** **V5** **V6**	**UB1** **UB2** **US1** **US2** **UV1** **UV2** **UC1** **UC2**	**VS1** **VS2**

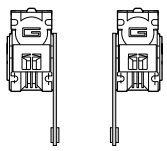
Versione Riduttore *Gearbox Version*



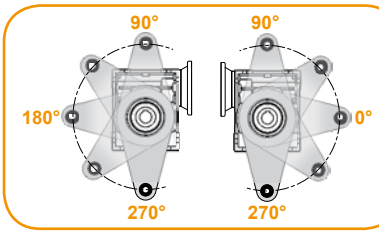
Albero di uscita *Output shaft*



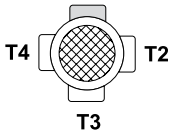
Braccio di reazione *Torque arm*



Angolo *Angle*

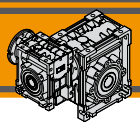


MOTORE CM / *CM MOTOR*

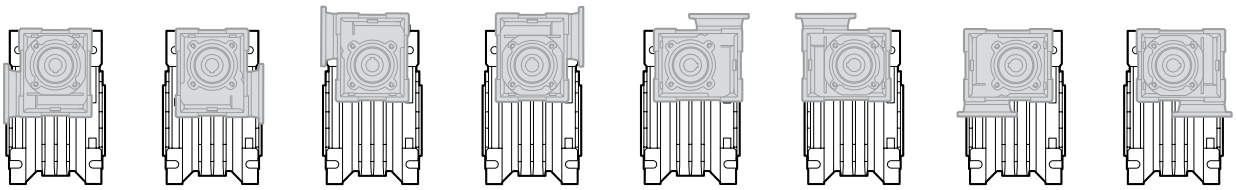
0.25kW	4p	3ph	50Hz	T1
Potenza *Power*  Vedi tabelle *See tables*	Poli *Poles*	Fasi *Phases*	Frequenza *Frequency*	Pos. morsettiera *Terminal box pos.*
	2p **4p** **6p** **8p**	**1ph** **3ph**	**50Hz** **60Hz**	**T1** (Std) 

Simbologia — *Symbols*

n_1	[min^{-1}]	Velocità in ingresso / *Input speed*	M_2	[Nm]	Coppia in uscita in funzione di P_1 / *Output torque referred to P_1*
n_2	[min^{-1}]	Velocità in uscita / *Output speed*	sf		Fattore di servizio / *Service factor*
i		Rapporto di riduzione / *Ratio*	R_2	[N]	Carico radiale ammissibile in uscita / *Permitted output radial load*
P_1	[kW]	Potenza in entrata / *Input power*	A_2	N]	Carico assiale ammissibile in uscita / *Permitted output axial load*



Esecuzioni di montaggio — *Mounting executions*



UB1 UB2 US1 US2 UV1 UV2 UC1 UC2

Combinazioni rapporti — *Combination ratio*

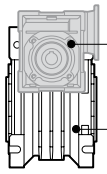
CMM 026/026 - CMM 026/030 - CMM 026/040 - CMM 026/050

	i (i_1 x i_2)											
	150	**225**	**300**	**450**	**600**	**900**	**1200**	**1500**	**1800**	**2400**	**3000**	**3600**
i_1	10	15	10	15	20	30	40	50	60	60	60	60
i_2	15	15	30	30	30	30	30	30	30	40	50	60

CMM 030/040 - CMM 030/050 - CMM 030/063 - CMM 040/075 - CMM 040/090 - CMM 050/110 - CMM 063/130

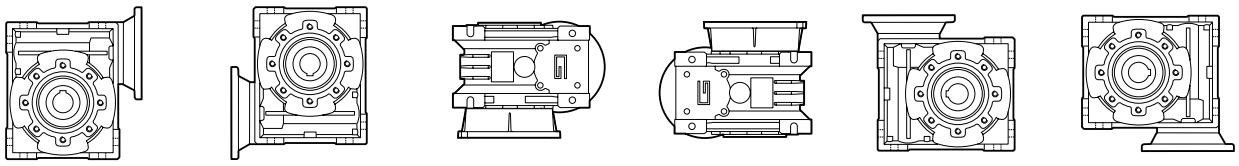
	i (i_1 x i_2)															
	75	**100**	**150**	**200**	**250**	**300**	**400**	**500**	**600**	**750**	**900**	**1200**	**1500**	**1800**	**2400**	**3000**
i_1	7.5	10	10	10	10	10	10	10	20	25	30	40	50	60	60	60
i_2	10	10	15	20	25	30	40	50	30	30	30	30	30	30	40	50

Lubrificazione — *Lubrication*



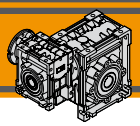
	CMM										
	026/026	**026/030**	**026/040**	**026/050**	**030/040**	**030/050**	**030/063**	**040/075**	**040/090**	**050/110**	**063/130**
1	026				030			040		050	063
	Lubrificazione a vita *Life lubricated*										
2	026	030	040	050	040	050	063	075	090	110	130
	Lubrificazione a vita *Life lubricated*										

Posizioni di montaggio / *Mounting positions*



B3 (standard) **B8** **B6** **B7** **V5** **V6**

	Quantità di olio (litri) / ***Oil quantity*** *(litres)*						
	B3	**B8**	**B6**	**B7**	**V5**	**V6**	
CM026	0.015						Lubrificati a vita *Life lubrication*
CM030	0.03						
CM040	0.07						
CM050	0.1						
CM063	0.25						
CM075	0.4						
CM090	0.85						
CM110	1.5						
CM130	4.5	3.3	3.5	3.5	4.5	3.3	



Dati tecnici

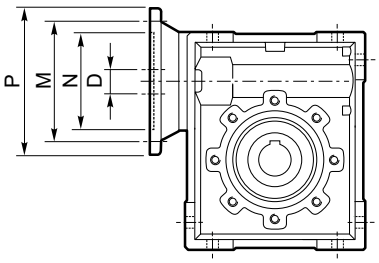
Technical data

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
0.55						
71C4 (1400 min^{-1})	**2.8**	973	*1.2*	500	**CMM**	B5/B14
	2.3	1191	*1.2*	600	**050/110**	B5/B14
	1.9	1433	*1.0*	750		B5/B14
	1.6	1629	*0.9*	900		B5/B14
	1.2	2127	*0.9*	1200	**CMM**	B5/B14
	0.9	2451	*0.8*	1500	**063/130**	B5/B14
80A4 (1400 min^{-1})	**18.7**	198	*6.3*	75	**CMM**	B5/B14
	14.0	258	*4.8*	100	**050/110**	B5/B14
	9.3	364	*3.7*	150		B5/B14
	7.0	478	*2.7*	200		B5/B14
	5.6	574	*2.1*	250		B5/B14
	4.7	641	*2.3*	300		B5/B14
	3.5	829	*1.6*	400		B5/B14
	2.8	973	*1.2*	500		B5/B14
	2.3	1191	*1.2*	600		B5/B14
	1.9	1433	*1.0*	750		B5/B14
	1.6	1629	*0.9*	900		B5/B14
	5.6	589	*2.8*	250	**CMM**	B5/B14
	4.7	639	*3.2*	300	**063/130**	B5/B14
	3.5	813	*2.2*	400		B5/B14
	2.8	984	*1.6*	500		B5/B14
	2.3	1203	*1.7*	600		B5/B14
	1.9	1449	*1.4*	750		B5/B14
	1.6	1671	*1.2*	900		B5/B14
	1.2	2127	*0.9*	1200		B5/B14
	0.9	2451	*0.8*	1500		B5/B14
0.75						
80B4 (1400 min^{-1})	**18.7**	270	*4.6*	75	**CMM**	B5/B14
	14.0	352	*3.5*	100	**050/110**	B5/B14
	9.3	496	*2.7*	150		B5/B14
	7.0	652	*2.0*	200		B5/B14
	5.6	783	*1.5*	250		B5/B14
	4.7	874	*1.7*	300		B5/B14
	3.5	1131	*1.2*	400		B5/B14
	2.8	1326	*0.9*	500		B5/B14
	2.3	1625	*0.9*	600		B5/B14
	1.9	1954	*0.8*	750		B5/B14
	7.0	660	*2.7*	200	**CMM**	B5/B14
	5.6	803	*2.0*	250	**063/130**	B5/B14
	4.7	871	*2.4*	300		B5/B14
	3.5	1109	*1.6*	400		B5/B14
	2.8	1342	*1.2*	500		B5/B14
	2.3	1641	*1.3*	600		B5/B14
	1.9	1975	*1.0*	750		B5/B14
	1.6	2279	*0.9*	900		B5/B14
1.1						
80C4 (1400 min^{-1})	**18.7**	397	*3.1*	75	**CMM**	B5/B14
	14.0	517	*2.4*	100	**050/110**	B5/B14
	9.3	727	*1.9*	150		B5/B14
	7.0	957	*1.4*	200		B5/B14
	5.6	1148	*1.0*	250		B5/B14
	4.7	1282	*1.2*	300		B5/B14
	3.5	1658	*0.8*	400		B5/B14
	7.0	968	*1.9*	200	**CMM**	B5/B14
	5.6	1178	*1.4*	250	**063/130**	B5/B14
	4.7	1278	*1.6*	300		B5/B14
	3.5	1626	*1.1*	400		B5/B14
	2.8	1968	*0.8*	500		B5/B14
	2.3	2407	*0.9*	600		B5/B14

P_1 [kW]	n_2 [min^{-1}]	M_2 [Nm]	sf	i		IEC
1.1						
90S4 (1400 min^{-1})	**18.7**	406	*4.1*	75	**CMM**	B5/B14
	14.0	529	*3.2*	100	**063/130**	B5/B14
	9.3	745	*2.6*	150		B5/B14
	7.0	968	*1.9*	200		B5/B14
	5.6	1178	*1.4*	250		B5/B14
	4.7	1278	*1.6*	300		B5/B14
	3.5	1626	*1.1*	400		B5/B14
	2.8	1968	*0.8*	500		B5/B14
	2.3	2407	*0.9*	600		B5/B14
1.5						
90L4 (1400 min^{-1})	**18.7**	554	*3.0*	75	**CMM**	B5/B14
	14.0	722	*2.3*	100	**063/130**	B5/B14
	9.3	1016	*1.9*	150		B5/B14
	7.0	1320	*1.4*	200		B5/B14
	5.6	1606	*1.0*	250		B5/B14
	4.7	1742	*1.2*	300		B5/B14
	3.5	2218	*0.8*	400		B5/B14
1.85						
90LB4 (1400 min^{-1})	**18.7**	683	*2.5*	75	**CMM**	B5/B14
	14.0	890	*1.9*	100	**063/130**	B5/B14
	9.3	1254	*1.5*	150		B5/B14
	7.0	1628	*1.1*	200		B5/B14
	5.6	1981	*0.8*	250		B5/B14
	4.7	2149	*1.0*	300		B5/B14

Motori applicabili

IEC Motor adapters



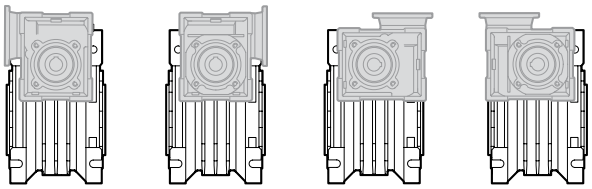
N.B.

Le aree evidenziate in grigio indicano l'applicabilità della corrispondente grandezza motore.

Grey areas indicate motor inputs available on each size of unit.

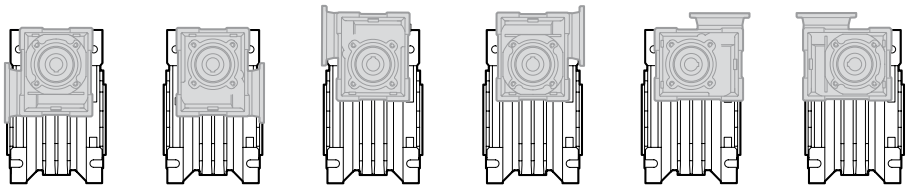
B/BS = Boccola di riduzione in acciaio

B/BS = Metal shaft sleeve



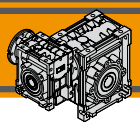
US1 **US2** **UV1** **UV2**

CMM	IEC	N	M	P	D	i_1						
						10	15	20	30	40	50	60
026/026	**56B14**	50	65	80	9							



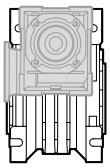
UB1 **UB2** **US1** **US2** **UV1** **UV2**

CMM	IEC	N	M	P	D	i_1						
						10	15	20	30	40	50	60
026/030 **026/040** **026/050**	**56B14**	50	65	80	9							

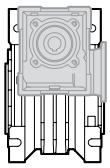


Motori applicabili

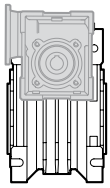
IEC Motor adapters



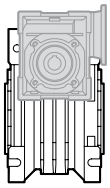
UB1



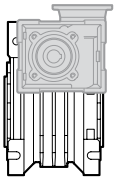
UB2



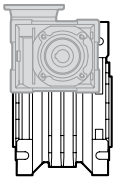
US1



US2

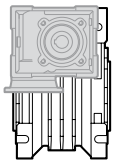


UV1

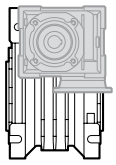


UV2

CMM	IEC	N	M	P	D	i_1								
						7.5	10	15	20	25	30	40	50	60
030/040 030/050 030/063	63B5	95	115	140	11									
	63B14	60	75	90										
	56B5	80	100	120	9	B	B	B	B	B	B	B	B	
	56B14	50	65	80										
040/075 040/090	71B5	110	130	160	14									
	71B14	70	85	105										
	63B5	95	115	140	11	B	B	B	B	B	B	B		
	63B14	60	75	90										
	56B5	80	100	120	9	BS	BS	BS	BS	BS	BS	BS	B	B
	56B14	50	65	80										
050/110	80B5	130	165	200	19									
	80B14	80	100	120										
	71B5	110	130	160	14	B	B	B	B	B	B			
	71B14	70	85	105										
	63B5	95	115	140	11	BS	BS	BS	BS	BS	BS	B	B	B
	63B14	60	75	90										
063/130	90B5	130	165	200	24									
	90B14	95	115	140										
	80B5	130	165	200	19	B	B	B	B	B	B			
	80B14	80	100	120										
	71B5	110	130	160	14	BS	BS	BS	BS	BS	BS	B	B	B
	71B14	70	85	105										
	63B5	95	115	140	11							BS	BS	BS



UC1



UC2

CMM	IEC	N	M	P	D	i_1								
						7.5	10	15	20	25	30	40	50	60
030/040 030/050	63B14	60	75	90	11									
	56B5	80	100	120	9	B	B	B	B	B	B	B	B	
	56B14	50	65	80										
030/063	63B5	95	115	140	11									
	63B14	60	75	90										
	56B5	80	100	120	9	B	B	B	B	B	B	B	B	
	56B14	50	65	80										
040/075 040/090	71B14	70	85	105	14									
	63B5	95	115	140	11	B	B	B	B	B	B			
	63B14	60	75	90										
	56B5	80	100	120	9	BS	BS	BS	BS	BS	BS	BS	B	B
	56B14	50	65	80										
050/110	80B14	80	100	120	19									
	71B5	110	130	160	14	B	B	B	B	B	B			
	71B14	70	85	105										
	63B5	95	115	140	11	BS	BS	BS	BS	BS	BS	B	B	B
	63B14	60	75	90										
063/130	90B14	95	115	140	24									
	80B14	80	100	120	19	B	B	B	B	B	B			
	71B5	110	130	160	14	BS	BS	BS	BS	BS	BS	B	B	B
	71B14	70	85	105										
	63B5	95	115	140	11							BS	BS	BS

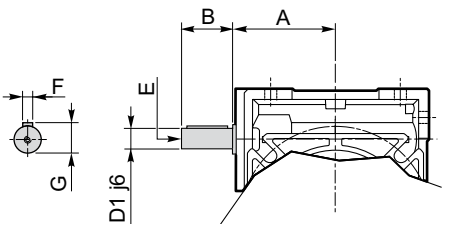
Dimensioni — *Dimensions*

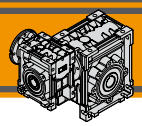
	CMM..U - CMM..F - CMM..FB - CMM..FL																
	A	C	D H8	E	F	G	G1	H	H1	I	I1	K	L	M	N h8	N1	N2
026/026	45	70	12	83	22	47.5	50	35	34	26	26	34	42	55	45	22.5	21
026/030	54	80	14	97	32	47.5	63	40	34	30	26	44	56	65	55	29	21
026/040	70	100	18	121.5	43	47.5	78	50	34	40	26	60	71	75	60	36.5	21
026/050	80	120	25	144	49	47.5	92	60	34	50	26	70	85	85	70	43.5	21

	CMM..U - CMM..F - CMM..FB - CMM..FL												
	O	P	Q	R	R1	S	T	V	Z	KE	a	b	t	Kg
026/026	6	—	37	49	49	5	15	21	76	7	—	4	13.8	1.6
026/030	6.5	75	44	57	49	5.5	22	27	81	M6x11(n.4)	90°	5	16.3	2.4
026/040	6.5	87	55	71.5	49	6.5	26	35	91.5	M6x8(n.4)	45°	6	20.8	3.5
026/050	8.5	98	64	84	49	7	30	40	100.5	M8x10(n.4)	45°	8	28.3	5.0

		CMM..F								CMM..FB								CMM..FL							
	a1	KA	KB	KC	KM	KN H8	KO	KP	KQ	KA	KB	KC	KM	KN H8	KO	KP	KQ	KA	KB	KC	KM	KN H8	KO	KP	KQ
026/026	45°	45	6	4.5	55-69	40	6.5(n.4)	75	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
026/030	45°	54.5	6	4	68	50	6.5(n.4)	80	70								—								
026/040	45°	67	7.5	4.5	80-95	60	9(n.4)	110	95	80	8.5	5	115-125	95	9.5(n.4)	140	112	97	7.5	4.5	80-95	60	9(n.4)	110	95
026/050	45°	90	9	5	90-110	70	11(n.4)	125	110	89	9	5	130-145	110	9.5(n.4)	160	132	120	9	5	90-110	70	11(n.4)	125	110

	CMMIS					
	A	B	D1 j6	E	F	M
026/026 026/030 026/040 026/050	45	20	9	M4	3	10.2





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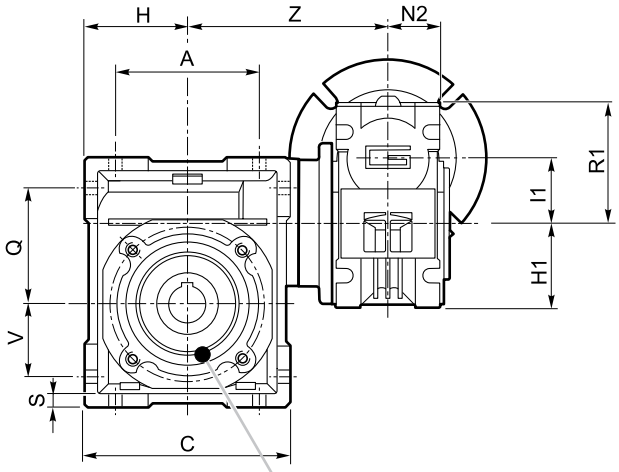

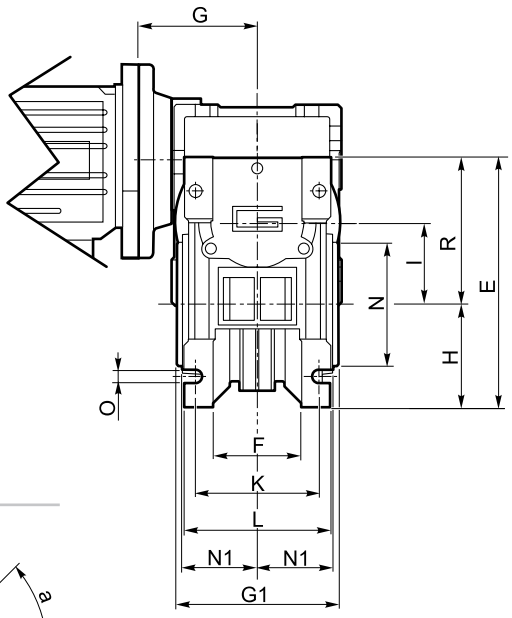

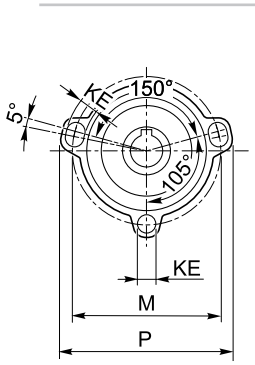

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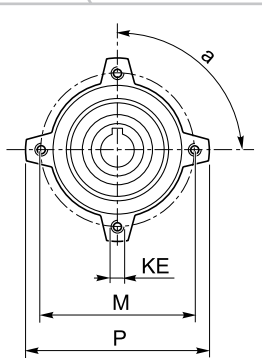

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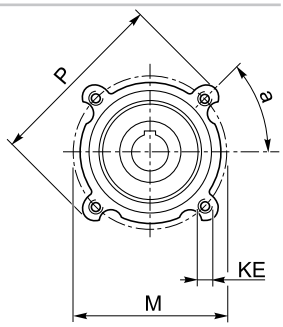

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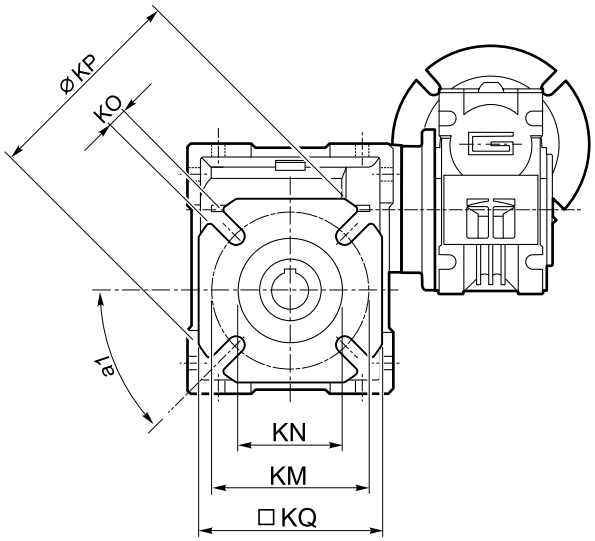
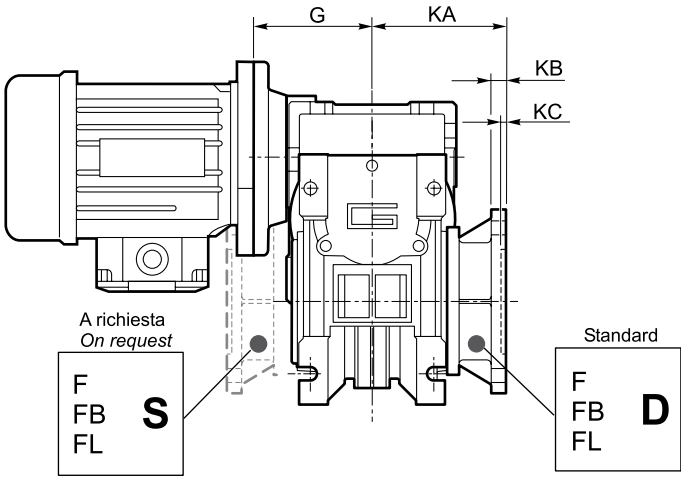
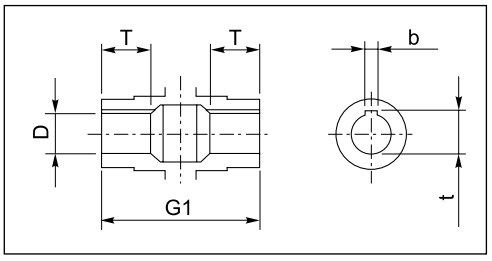
..026/050





CMM026/..F
CMM026/..FB
CMM026/..FL



Albero lento cavo / *Hollow output shaft*

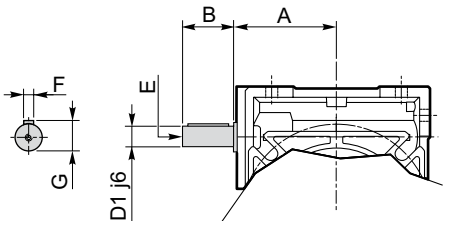
Dimensioni — *Dimensions*

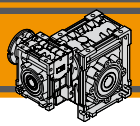
	CMM.. - CMM..F - CMM..FB - CMM..FL																
	A	C	D H8	E	F	G	G1	H	H1	I	I1	K	L	M	N h8	N1	N2
030/040	70	100	18	121.5	43	55	78	50	40	40	30	60	71	75	60	36.5	29
030/050	80	120	25	144	49	55	92	60	40	50	30	70	85	85	70	43.5	29
030/063	100	144	25	174	67	55	112	72	40	63	30	85	104	95	80	53	29
040/075	120	172	28	205	72	70	120	86	50	75	40	90	112	115	95	57	36.5
040/090	140	208	35	238	74	70	140	103	50	90	40	100	130	130	110	67	36.5
050/110	170	252.5	42	295	—	80	155	127.5	60	110	50	115	144	165	130	74	43.5
063/130	200	292.5	45	335	—	95	170	147.5	72	130	63	120	155	215	180	81	53

	CMM.. - CMM..F - CMM..FB - CMM..FL												
	O	P	Q	R	R1	S	T	V	Z	KE	a	b	t	Kg
030/040	6.5	87	55	71.5	57	6.5	26	35	122	M6x8(n.4)	45°	6	20.8 (21.8)	3.9
030/050	8.5	98	64	84	57	7	30	40	132	M8x10(n.4)	45°	8	28.3 (27.3)	5.0
030/063	8.5	110	80	102	57	8	36	50	145	M8x10(n.8)	45°	8	28.3	7.0
040/075	11	140	93	119	71.5	10	40	60	165	M8x14(n.8)	45°	8	31.3	12.0
040/090	13	160	102	135	71.5	11	45	70	182	M10x18(n.8)	45°	10	38.3	15.6
050/110	14	200	125	167.5	84	14	50	85	225	M10x18(n.8)	45°	12	45.3	30.2
063/130	16	250	140	187.5	102	15	60	100	245	M12x21(n.8)	45°	14	48.8	55.0

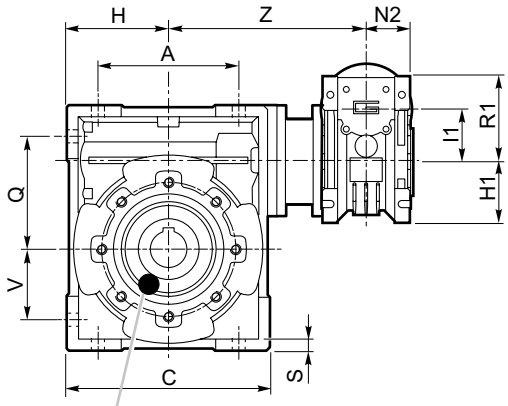
		CMP..F								CMP..FB							CMP..FL							
	a1	KA	KB	KC	KM	KN H8	KO	KP	KQ	KA	KB	KC	KM	KN H8	KO	KP	KA	KB	KC	KM	KN H8	KO	KP	KQ
030/040	45°	67	7.5	4	80-95	60	9(n.4)	110	95	80	8.5	5	115-125	95	9.5(n.4)	140	97	7.5	4.5	80-95	60	9(n.4)	110	95
030/050	45°	90	9	5	90-110	70	11(n.4)	125	110	89	9	5	130-145	110	9.5(n.4)	160	120	9	5	90-110	70	11(n.4)	125	110
030/063	45°	82	10	6	150-160	115	11(n.4)	180	142	98	10	5	165-180	130	11(n.4)	200	112	10	6	150-160	115	11(n.4)	180	142
040/075	45°	111	13	6	165-180	130	14(n.4)	200	170	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
040/090	45°	111	13	6	175-190	152	14(n.4)	210	200	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
050/110	45°	131	15	6	230	170	14(n.8)	280	260	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
063/130	22.5°	140	15	6	255	180	16(n.8)	320	290	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

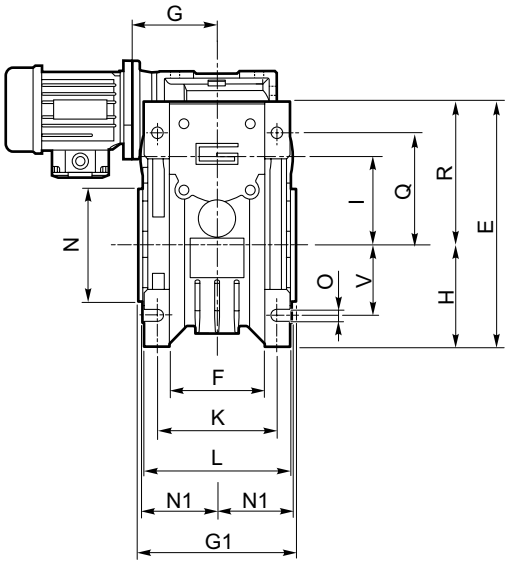
	CMMIS					
	A	B	D1 j6	E	F	M
030/040 030/050 030/063	51	20	9	M4	3	10.2
040/075 040/090	66	23	11	M5	4	12.5
050/110	76	30	14	M6	5	16
063/130	94.5	40	19	M6	6	21.5

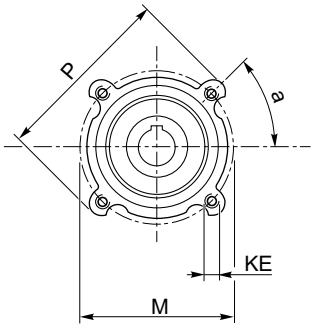




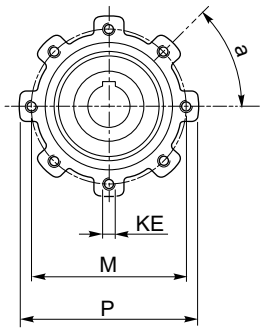
CMM..U



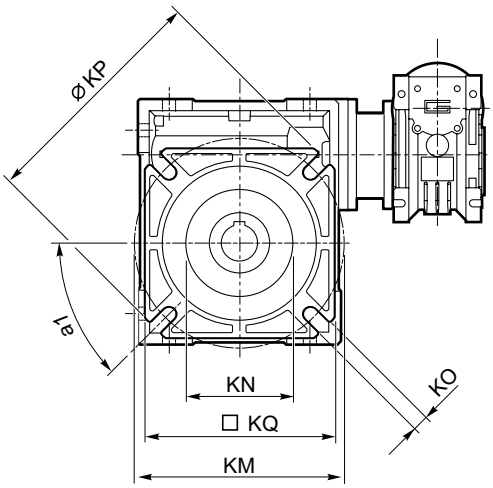




..030/040
..030/050



..030/063 ..040/075
..040/090 ..050/110
..063/130



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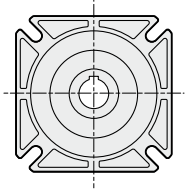
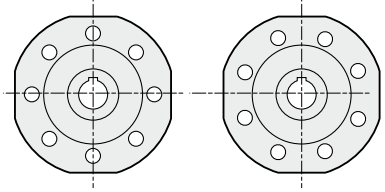
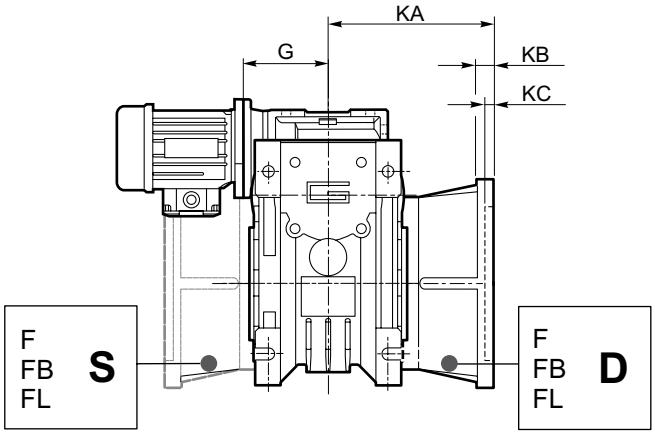
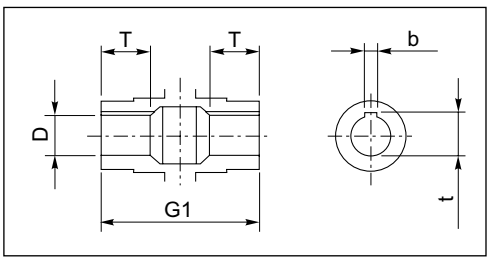
CMM..FB (../040 - ../063)
CMM..FL (../040 - ../063)



CMM..F
(../110 ../130)







Albero lento cavo / *Hollow output shaft*