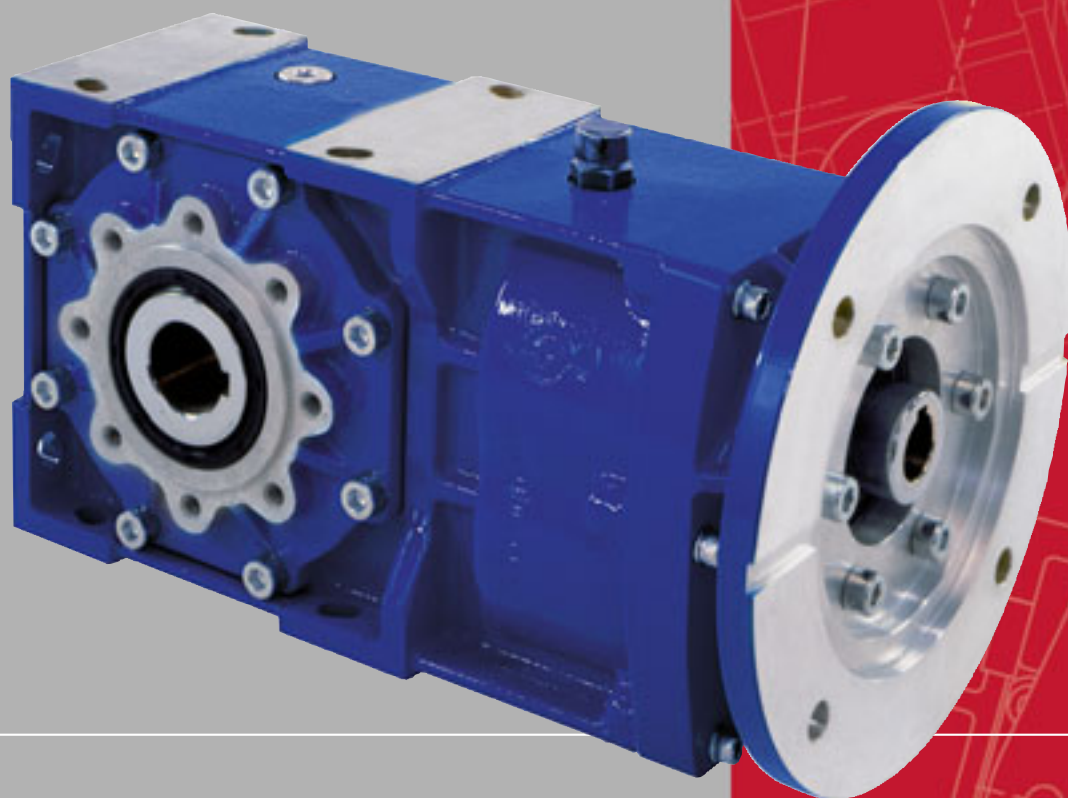




**G.M.s.r.l.**  
Ghirri Motoriduttori

# Serie **MO**



## Prestazioni - Performance - Leistungen - Performances - Prestaciones

P1 (Kw)	HP	N1 (min-1)	N2 (min-1)	Mt (Nm)	fs	i	Tipo	IEC
0,12	0,16	1400	141	8	13,4	9,96	MO 10/2	63A-4
			113	10	11,4	12,34		
			86	13	9,1	16,35		
			67	16	7,5	20,86		
			55	20	6,5	25,50		
			44	25	5,5	31,88		
			35	32	4,5	40,54		
			31	35	4,1	45,33		
			21	50	2,9	65,81		
			16	66	2,3	87,18		
			13	84	1,9	111,27		
			10	102	1,5	136,00		
			8,2	128	1,2	170,00		
			6,5	158	1,0	216,21		
		5,8	150	1,0	241,78			
		910	8,2	129	1,3	111,27	MO 10/3	63B-6
			6,7	156	1,0	136,00		
			5,4	160	1,0	170,00		
			4,3	245	1,3	211,56		
			4,2	160	1,0	216,21		
			3,8	160	1,0	241,78		
			3,6	294	1,1	251,08		
			7,8	135	1,3	87,18		
		680	6,1	175	1,0	111,27	MO 10/3	71B-8
			5,0	160	1,0	136,00		
			4,0	262	1,2	168,74		
			4,0	160	1,0	170,00		
			3,2	328	1,0	211,56		
3,1	160		1,0	216,21				
2,8	160		1,0	241,78				
2,7	389		0,9	251,08				
0,18	0,25	1380	139	12	8,8	9,96	MO 10/2	63B-4
			112	15	7,5	12,34		
			84	19	6,0	16,35		
			66	25	4,9	20,86		
			54	30	4,2	25,50		
			43	38	3,6	31,88		
			34	48	3,0	40,54		
			30	54	2,7	45,33		
			21	75	1,9	65,81		
			16	100	1,5	87,18		
			12	128	1,2	111,27		
			10	156	1,0	136,00		
			8,1	195	0,8	170,00		
			6,5	242	1,3	211,56		
		6,4	248	0,6	216,21			
		5,5	288	1,0	251,08			
		920	14	113	1,4	65,81	MO 10/3	71A-6
			11	150	1,1	87,18		
			8,3	191	0,8	111,27		
			6,8	234	0,7	136,00		
			6,7	237	1,3	138,16		
			5,5	290	1,1	168,74		
			4,3	364	0,9	211,56		
			3,7	432	0,7	251,08		
		680	6,3	253	1,3	108,80	MO 20/3	80A-8
			4,9	321	1,0	138,16		
			4,0	392	0,8	168,74		
			3,2	492	0,7	211,56		
3,0	535		1,1	229,99				

**Prestazioni - Performance - Leistungen - Performances - Prestaciones**

P1 (Kw)	HP	N1 (min-1)	N2 (min-1)	Mt (Nm)	fs	i	Tipo	IEC
0,25	0,33	<b>1370</b>	138	16	6,3	9,96	<b>MO 10/2</b>	63C-4 o 71A-4
			111	20	5,3	12,34		
			84	27	4,3	16,35		
			66	35	3,5	20,86		
			54	42	3,0	25,50		
			43	53	2,6	31,88		
			34	67	2,1	40,54		
			30	75	1,9	45,33		
			21	106	1,3	65,81		
			16	140	1,1	87,18		
			12	178	0,9	111,27		
			10	218	0,7	136,00		
			9,9	222	1,4	138,16		
			8,1	271	1,1	168,74		
			6,5	339	0,9	211,56		
		5,5	403	0,7	251,08			
		<b>920</b>	23	100	1,5	40,54	<b>MO 10/2</b>	71B-6
			20	112	1,4	45,33		
			14	157	1,0	65,81		
			11	208	0,8	87,18		
			11	209	1,6	87,54		
			8,5	260	1,2	108,80		
			6,7	330	1,0	138,16		
			5,5	403	0,8	168,74		
			4,8	457	1,3	191,25		
		4,0	549	1,1	229,99			
		<b>700</b>	22	103	1,5	31,88	<b>MO 10/2</b>	80B-8
17	131		1,2	40,54				
15	147		1,1	45,33				
11	203		1,8	64,76				
8,0	275		1,3	87,54				
6,4	341		1,0	108,80				
5,4	408		1,5	130,08				
5,1	434		0,8	138,16				
4,7	471		1,3	150,23				
3,7	600		1,0	191,25				
3,0	722		0,8	229,99				
2,9	770		1,4	245,47				
0,37	0,5		<b>1420</b>	143	24	4,4		
		115		29	3,7	12,34		
		87		39	3,0	16,35		
		68		49	2,5	20,86		
		56		60	2,1	25,50		
		45		75	1,8	31,88		
		35		96	1,5	40,54		
		31		107	1,4	45,33		
		22		151	0,9	65,81		
		16		200	0,7	87,18		
		16		200	1,6	87,54		
		13		249	1,3	108,80		
		10		316	0,9	138,16		
		8,4		386	0,8	168,74		
		7,4		438	1,4	191,25		
		6,2	527	1,1	229,99			
		<b>925</b>	29	116	1,3	31,88	<b>MO 10/2</b>	80A-6
			23	147	1,0	40,54		
			20	165	0,9	45,33		
			14	228	1,5	64,76		
			11	308	1,1	87,54		
			8,5	382	0,8	108,80		
			7,1	457	1,3	130,08		
			6,2	528	1,1	150,23		
			4,8	672	1,5	191,25		
			4,8	672	0,9	191,25		
			4,0	808	0,7	229,99		
			3,8	863	1,2	245,47		
			<b>700</b>	15	226	1,6		
		7,0		466	1,3	100,29		
		5,4		604	1,0	130,08		
		4,7		698	0,9	150,23		
		4,5		716	1,4	154,15		
3,7	888	1,2		191,25				
3,7	888	0,7		191,25				
2,9	1140	0,9		245,47				

## Prestazioni - Performance - Leistungen - Performances - Prestaciones

P1 (Kw)	HP	N1 (min-1)	N2 (min-1)	Mt (Nm)	fs	i	Tipo	IEC				
0,55	0,75	1400	141	35	2,9	9,96	MO 10/2	80A-4				
			113	44	2,5	12,34						
			86	58	2,0	16,35						
			67	74	1,6	20,86						
			55	91	1,4	25,50						
			44	114	1,2	31,88						
			35	144	1,0	40,54						
			31	162	0,9	45,33						
			22	224	1,4	64,76						
			16	302	1,1	87,54						
			13	376	0,8	108,80						
			11	449	1,3	130,08						
			9,3	519	1,2	150,23						
			7,3	660	0,9	191,25						
		6,1	794	0,8	229,99							
		0,55	0,75	925	5,7	847	1,2	245,47	MO 40/3	80B-6		
					44	113	1,2	20,86				
					36	139	1,0	25,50				
					29	172	0,9	31,88				
					20	254	1,3	47,08				
					14	338	1,0	64,76				
					9,2	524	1,1	100,29				
					7,1	680	0,9	130,08				
					6,2	785	0,8	150,23				
					6,0	805	1,3	154,15				
					4,8	999	1,0	191,25				
					3,8	1282	0,8	245,47				
22	226				1,5	31,64						
18	283				1,2	39,67						
15	336	1,0	47,08									
0,55	0,75	700	8,8	548	1,1	79,33	MO 30/3	90L-8				
			7,0	692	0,9	100,29						
			5,2	934	1,2	135,31						
			4,5	1064	1,0	154,15						
			3,7	1320	0,8	191,25						
			142	48	2,2	9,96						
			114	60	1,8	12,34						
			86	79	1,5	16,35						
			68	101	1,2	20,86						
			55	123	1,0	25,50						
			44	154	0,9	31,88						
0,75	1	1410	44	150	1,95	31,64	MO 20/2	80B-4				
			36	191	1,7	39,67						
			35	196	0,7	40,54						
			30	227	1,4	47,08						
			22	303	1,0	64,76						
			14	469	1,3	100,29						
			11	608	1,0	130,08						
			9,4	702	0,9	150,23						
			9,1	720	1,4	154,15						
			7,4	894	1,2	191,25						
			5,7	1147	0,9	245,47						
			36	189	1,7	25,90						
			29	231	1,4	31,64						
			23	290	1,1	39,67						
		20	344	1,0	47,08							
		0,75	1	930	15	429	1,4	60,50	MO 30/3	90S-6		
					12	562	1,1	79,33				
					9,3	711	0,8	100,29				
					8,7	756	1,5	106,66				
					6,9	959	1,1	135,31				
					6,0	1092	0,9	154,15				
					18	384	1,6	39,46				
				15	461	1,3	47,46					
				0,75	1	700	8,1	809	1,4	85,92	MO 30/2	100LA-8
							6,6	1004	1,1	106,66		
							5,2	1274	0,9	135,31		

**Prestazioni** - Performance - Leistungen - Performances - Prestaciones

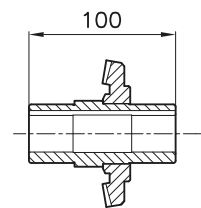
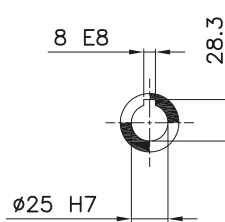
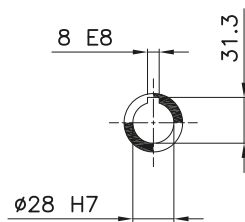
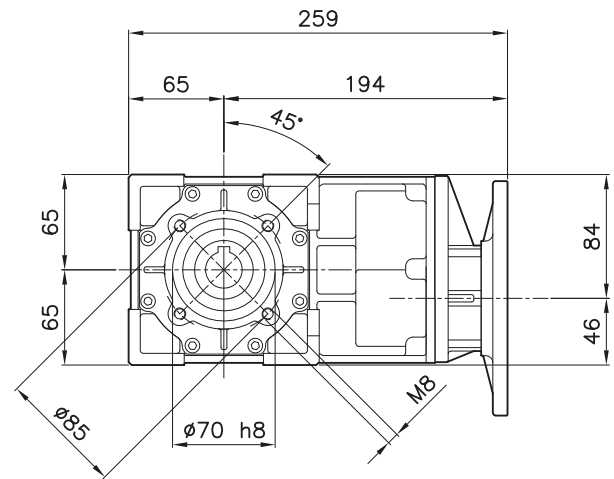
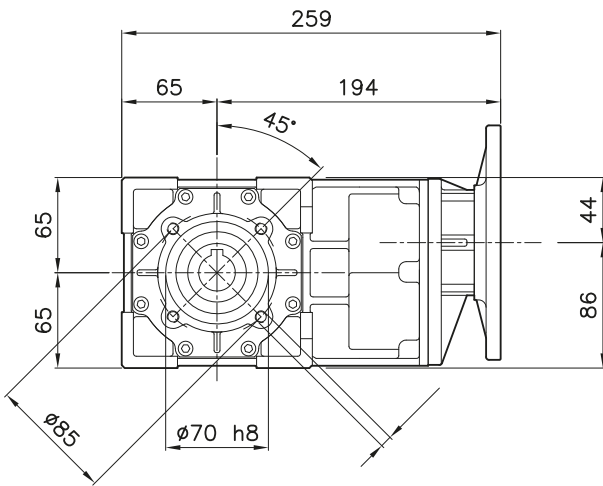
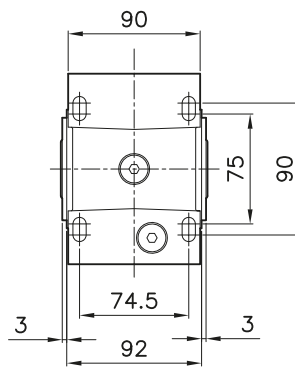
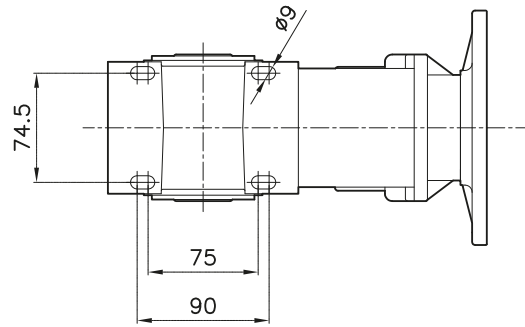
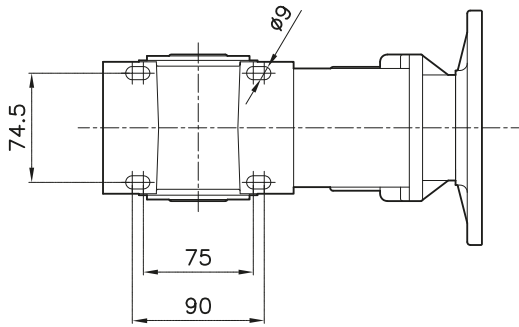
P1 (Kw)	HP	N1 (min-1)	N2 (min-1)	Mt (Nm)	fs	i	Tipo	IEC
1,1	1,5	1410	134	74	3,3	10,51	MO 20/2	90S-4
			116	86	3,0	12,14		
			86	116	2,3	16,41		
			68	144	1,6	20,40		
			55	183	1,4	25,90		
			45	224	1,1	31,64		
			36	281	0,9	47,08		
			30	333	1,4	39,67		
			23	415	1,1	60,50		
			18	544	0,9	79,33		
			14	687	0,8	100,29		
			10	927	1,2	135,31		
		9,1	1057	1,0	154,15			
		7,4	1311	0,8	191,25			
		44	226	1,4	20,40			
		35	287	1,1	25,90			
		28	351	0,9	31,64			
		23	438	1,4	39,67			
		23	440	0,7	39,67			
		19	526	1,1	47,46			
		15	650	0,9	60,50			
		11	852	0,7	79,33			
		10	923	1,2	85,92			
		8,4	1145	1,0	106,66			
6,7	1453	0,8	135,31					
23	442	1,4	31,00					
18	563	1,1	39,46					
15	677	0,9	47,46					
10	923	1,2	66,86					
8,1	1186	1,0	85,92					
6,6	1473	0,7	106,66					
1,5	2	1420	135	101	2,4	10,51	MO 20/2	90L-4
			117	116	2,2	12,14		
			87	157	1,7	16,41		
			70	196	1,4	20,40		
			55	248	1,2	25,90		
			45	303	1,0	31,64		
			36	378	1,6	39,46		
			30	455	1,3	47,46		
			23	561	1,1	60,50		
			18	736	0,8	79,33		
			17	797	1,4	85,92		
			13	990	1,1	106,66		
		10	1256	0,9	135,31			
		34	406	1,5	26,84			
		29	469	1,3	31,00			
		23	597	1,0	39,46			
		19	718	0,8	47,46			
		19	722	1,5	47,73			
		13	979	1,1	66,86			
		10	1258	0,9	85,92			
		34	402	1,5	20,70			
		26	522	1,1	26,86			
		23	603	1,0	31,00			
		19	723	1,5	37,19			
15	928	1,2	47,73					
10	1259	0,9	66,86					
2,2	3	1430	141	142	4,2	10,15	MO 30/2	100LA-4
			115	174	3,4	12,48		
			87	228	2,6	16,37		
			69	289	2,1	20,70		
			53	375	1,6	26,84		
			46	433	1,4	31,00		
			36	551	1,1	39,46		
			30	662	0,9	47,46		
			21	904	1,2	66,86		
			17	1161	1,0	85,92		
			13	1442	0,8	106,66		
			43	459	1,3	20,70		
		34	595	1,0	26,84			
		29	687	0,9	31,00			
		24	825	1,3	37,19			
		19	1059	1,0	47,73			
		13	1436	0,8	66,86			
		23	855	1,3	29,97			
		19	1060	1,0	37,19			
		15	1361	0,8	47,73			

## Prestazioni - Performance - Leistungen - Performances - Prestaciones

P1 (Kw)	HP	N1 (min-1)	N2 (min-1)	Mt (Nm)	fs	i	Tipo	IEC
3	4	<b>1410</b>	141	193	3,1	10,51	<b>MO 30/2</b>	100LB-4
			115	238	2,5	12,48		
			70	312	1,9	16,37		
			55	394	1,5	20,70		
			53	511	1,2	26,84		
			46	590	1,0	31,00		
		<b>900</b>	30	908	1,2	47,73	<b>MO 40/2</b>	132SA-6
			21	1232	0,9	66,86	<b>MO 40/3</b>	
			34	796	1,4	26,31	<b>MO 40/2</b>	
			30	906	1,2	29,97		
			24	1125	1,0	37,19		
			34	806	1,4	20,74		
<b>700</b>	27	1023	1,1	26,31	<b>MO 40/2</b>	132MA-8		
	23	1165	0,9	29,97				
4	5,5	<b>1435</b>	141	257	2,3	10,15	<b>MO 30/2</b>	112M-4
			115	316	1,9	12,48		
			88	414	1,4	16,37		
			86	418	2,5	16,71	<b>MO 40/2</b>	
			69	523	1,1	20,70	<b>MO 30/2</b>	
			69	524	2,0	20,74	<b>MO 40/2</b>	
			55	665	1,6	26,31	<b>MO 40/2</b>	
			53	679	0,9	26,84	<b>MO 30/2</b>	
			48	758	1,4	29,97	<b>MO 40/2</b>	
		39	941	1,1	37,19			
		30	1207	0,9	47,73			
		<b>900</b>	43	836	1,3	20,74	<b>MO 40/2</b>	132MA-6
			34	1061	1,0	26,31		
			30	1208	0,9	29,97		
		<b>700</b>	42	866	1,2	16,71	<b>MO 40/2</b>	160MA-8
			34	1075	1,0	20,74		
			34	1075	1,0	20,74		
			34	1075	1,0	20,74		
5,5	7,5	<b>1435</b>	129	387	2,3	11,26	<b>MO 40/2</b>	132SA-4
			112	447	2,1	13,00		
			87	575	1,7	16,71		
			70	714	1,4	20,74		
			55	905	1,1	26,31		
			48	1031	1,0	29,97		
		39	1280	0,8	37,19	<b>MO 40/2</b>		
		54	926	1,1	16,71			
		43	1150	0,9	20,74			
		62	803	1,2	11,26			
		54	927	1,1	13,00			
		42	1191	0,9	16,71			
7,5	10	<b>1450</b>	129	528	1,7	11,26	<b>MO 40/2</b>	132MA-4
			112	610	1,5	13,00		
			87	784	1,2	16,71		
			70	973	1,0	20,74		
		55	1235	0,8	26,31	<b>MO 40/2</b>		
		80	851	1,1	11,26			
		69	983	1,0	13,00			
		54	1263	0,8	16,71			
		62	1095	0,9	11,26			
54	1264	0,8	13,00					
11	15	<b>1460</b>	130	770	1,2	11,26	<b>MO 40/2</b>	160M-4
			112	889	1,0	13,00		
		87	1142	0,8	16,71	<b>MO 40/2</b>		
		80	1249	0,8	11,26			
69	1442	0,7	13,00					
15	20	<b>1455</b>	129	1053	0,9	11,26	<b>MO 40/2</b>	160L-4

**MO 10/2**

**MO 10/3**



**A richiesta**

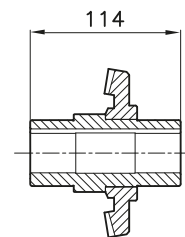
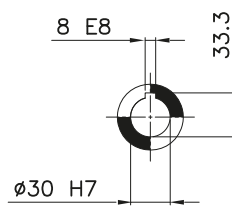
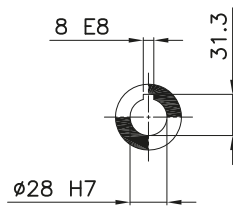
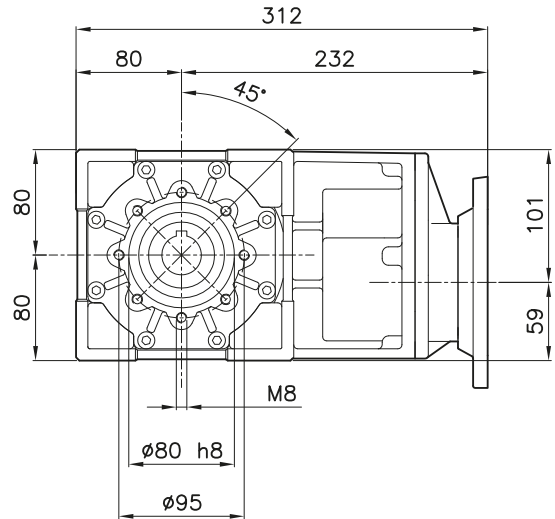
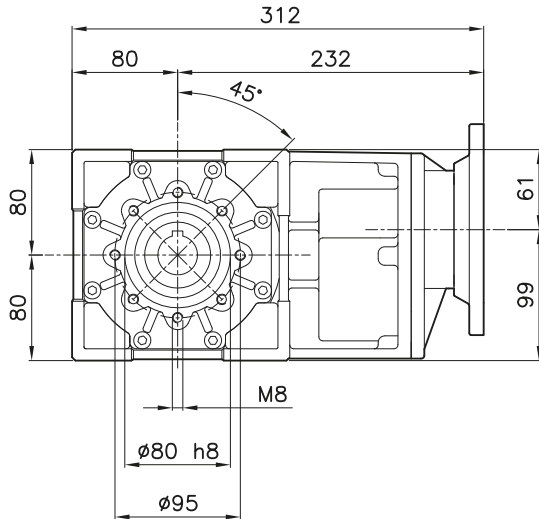
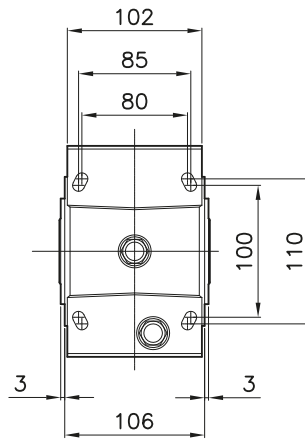
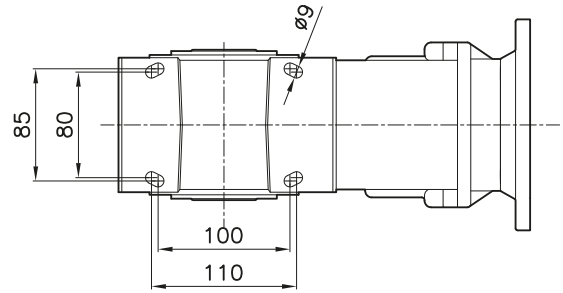
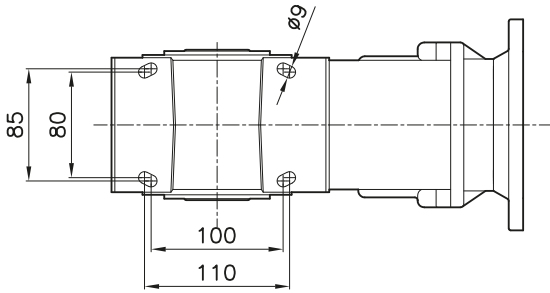
Optional - Auf Wunsch  
Sur demande - A pedido

**Standard**

Standard - Standard  
Standard - Estandar

**MO 20/2**

**MO 20/3**



**A richiesta**

Optional - Auf Wunsch  
Sur demande - A pedido

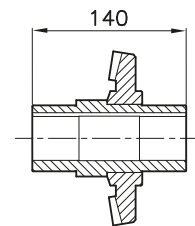
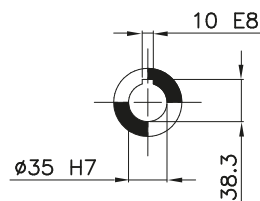
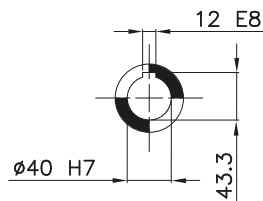
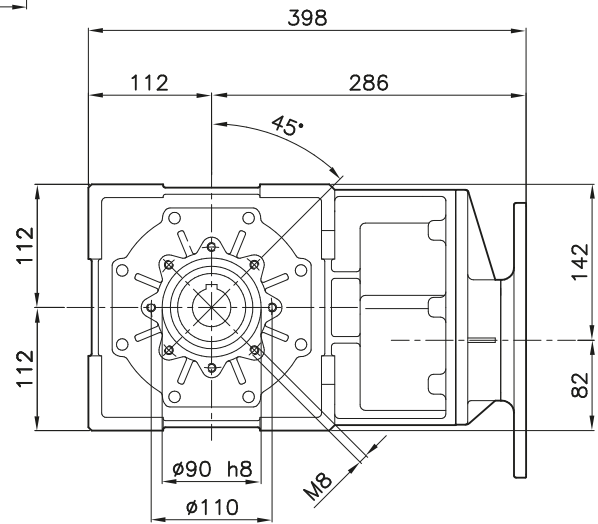
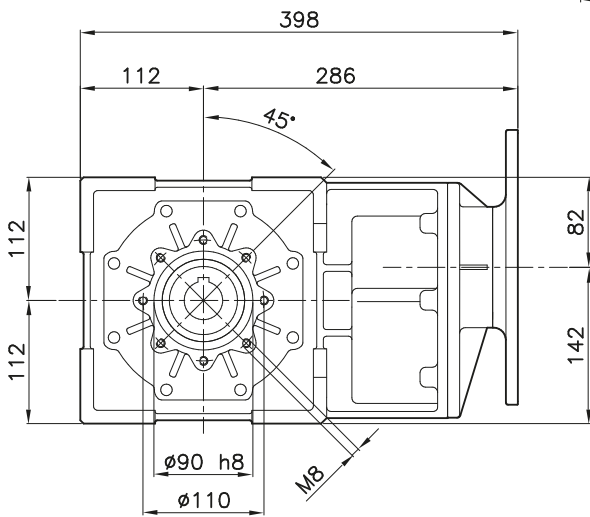
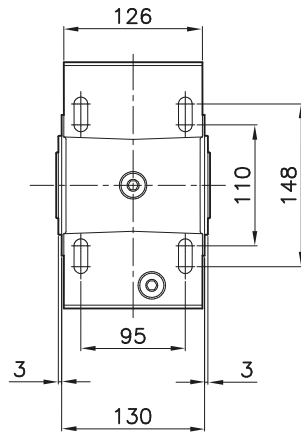
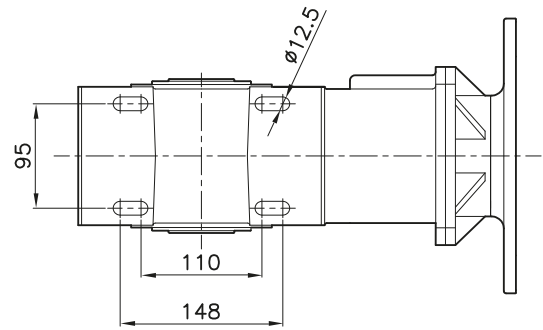
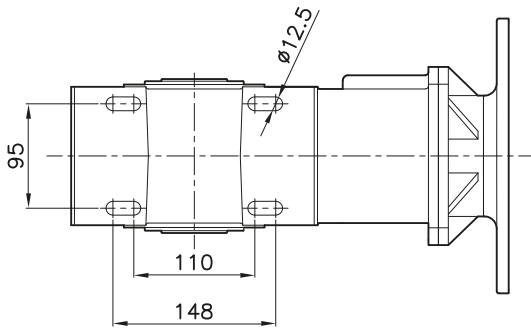
**Standard**

Standard - Standard  
Standard - Estandar



**MO 30/2**

**MO 30/3**



**A richiesta**

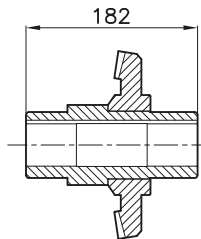
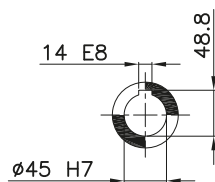
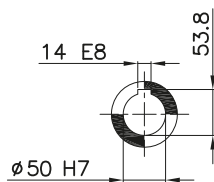
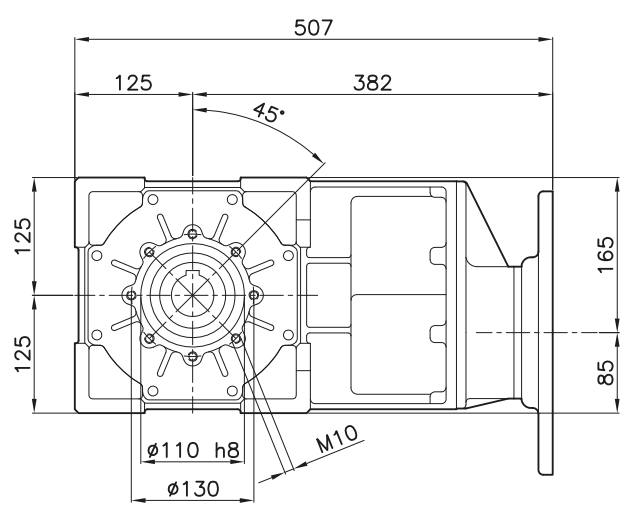
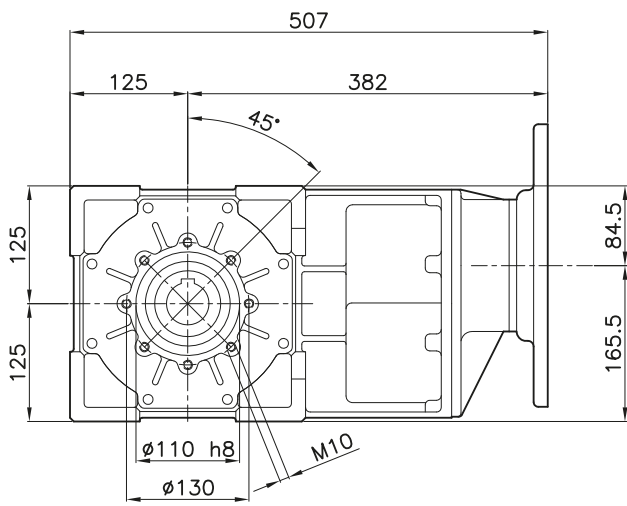
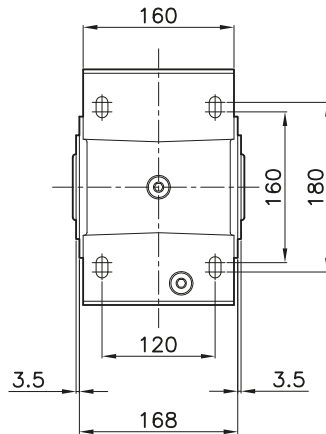
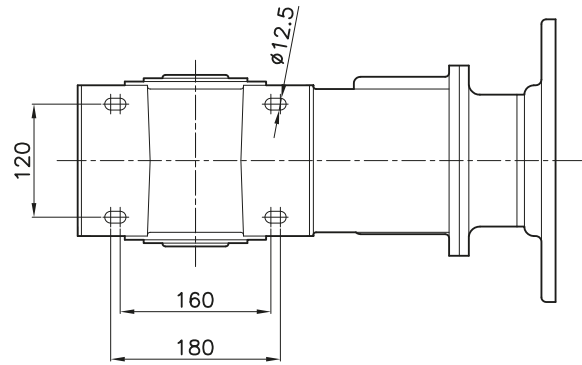
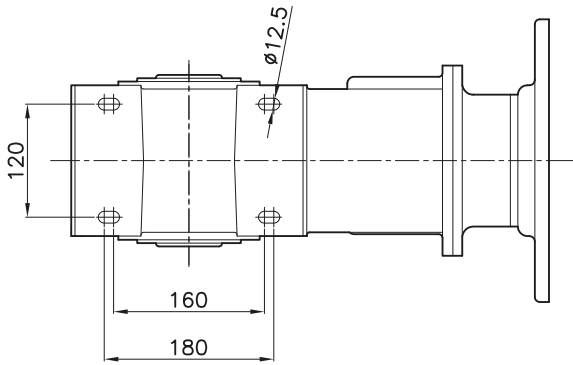
Optional - Auf Wunsch  
Sur demande - A pedido

**Standard**

Standard - Standard  
Standard - Estandar

**MO 40/2**

**MO 40/3**



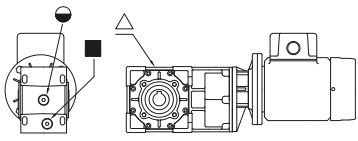
**A richiesta**

Optional - Auf Wunsch  
Sur demande - A pedido

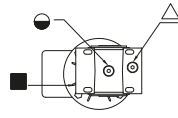
**Standard**

Standard - Standard  
Standard - Estandar

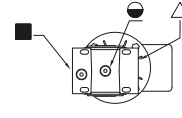
**POSIZIONI DI MONTAGGIO MO../2** - MOUNTING POSITION - BAUFORM - POSITION DE MONTAGE - POSICION DE MONTAJE



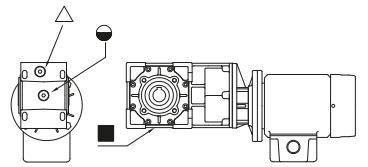
B3



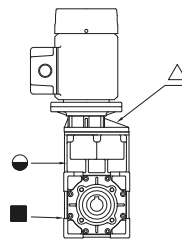
B6



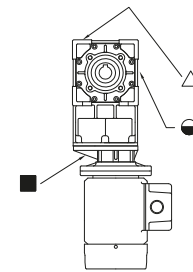
B7



B8



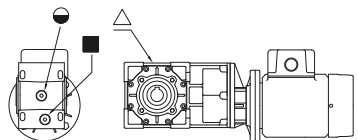
V5



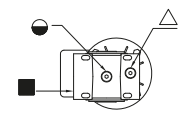
V6

- △ = **SFIATO**  
BREATHER PLUG  
EINFÜLLSTOPFEN  
BOUCHON D'EVENT  
TAPON RESPIRADERO
- = **LIVELLO**  
LEVEL PLUG  
OLSTAND  
BOUCHON NIVEAU  
TAPON DE NIVEL
- = **SCARICO**  
FILLING PLUG  
ABLASSTOPFEN  
BOUCHON DE VIDANCE  
TAPON DE VACACIO

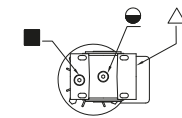
**POSIZIONI DI MONTAGGIO MO../3** - MOUNTING POSITION - BAUFORM - POSITION DE MONTAGE - POSICION DE MONTAJE



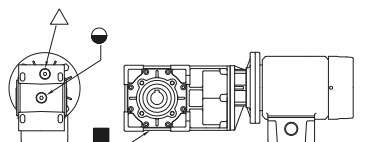
B3



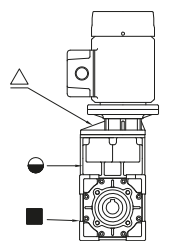
B6



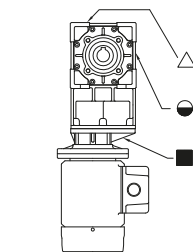
B7



B8



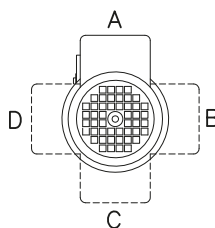
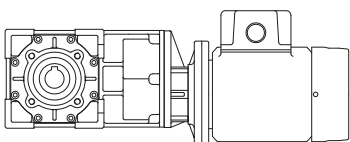
V5



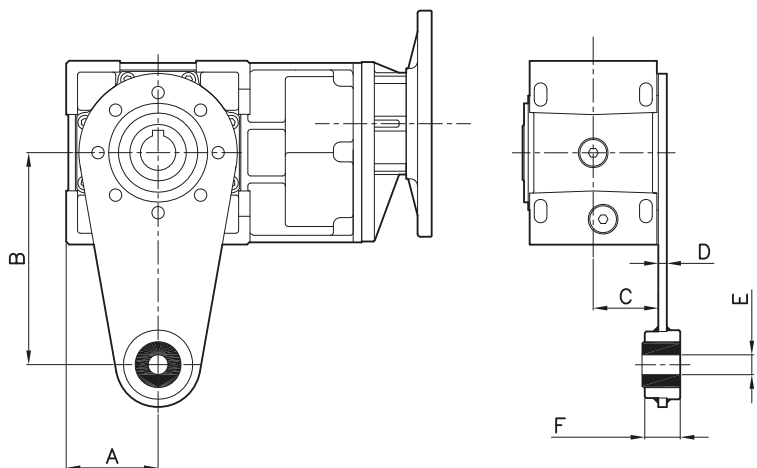
V6

- △ = **SFIATO**  
BREATHER PLUG  
EINFÜLLSTOPFEN  
BOUCHON D'EVENT  
TAPON RESPIRADERO
- = **LIVELLO**  
LEVEL PLUG  
OLSTAND  
BOUCHON NIVEAU  
TAPON DE NIVEL
- = **SCARICO**  
FILLING PLUG  
ABLASSTOPFEN  
BOUCHON DE VIDANCE  
TAPON DE VACACIO

**POSIZIONI MORSETTERIA** - TERMINAL BOX POSITION - KLEMMENKASTENLAGE - POSITION BOITE A BORME - MONTAJE DEL MOTORI

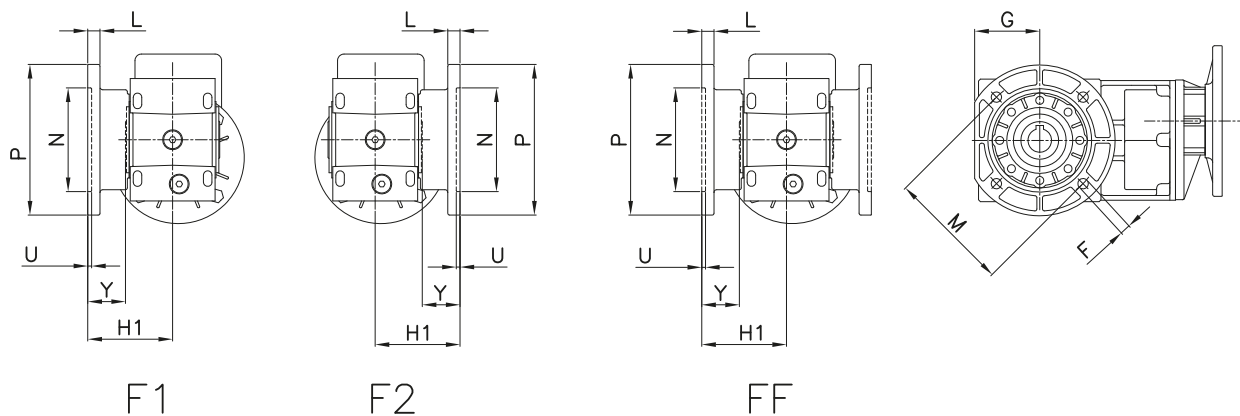


## BRACCI DI REAZIONE - TORQUE ARMS - DREHMOMENTSTUTZWE - BRAS DE REACTION - BRAZO DE REACCION



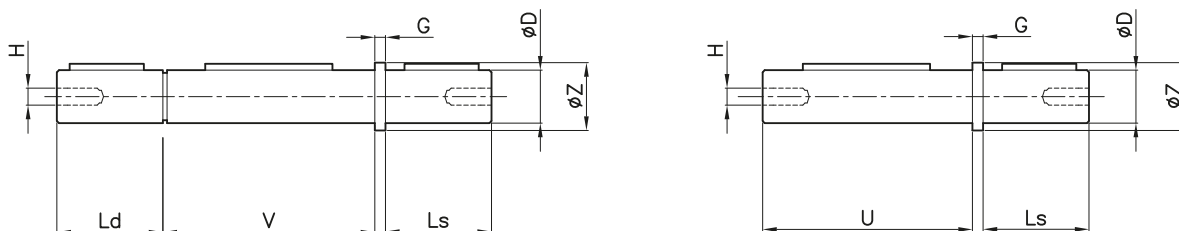
	A	B	C	D	E	F
<b>MO10</b>	65	150	46	6	14	25
<b>MO20</b>	80	150	52	6	14	25
<b>MO30</b>	112	175	65	6	20	25
<b>MO40</b>	125	200	84	6	20	25

## FLANGE DI USCITA - OUTPUT FLANGES - ABTRIEBSFLANSCH - FLANGE DE SORTIE - BRIDA DE SALIDA



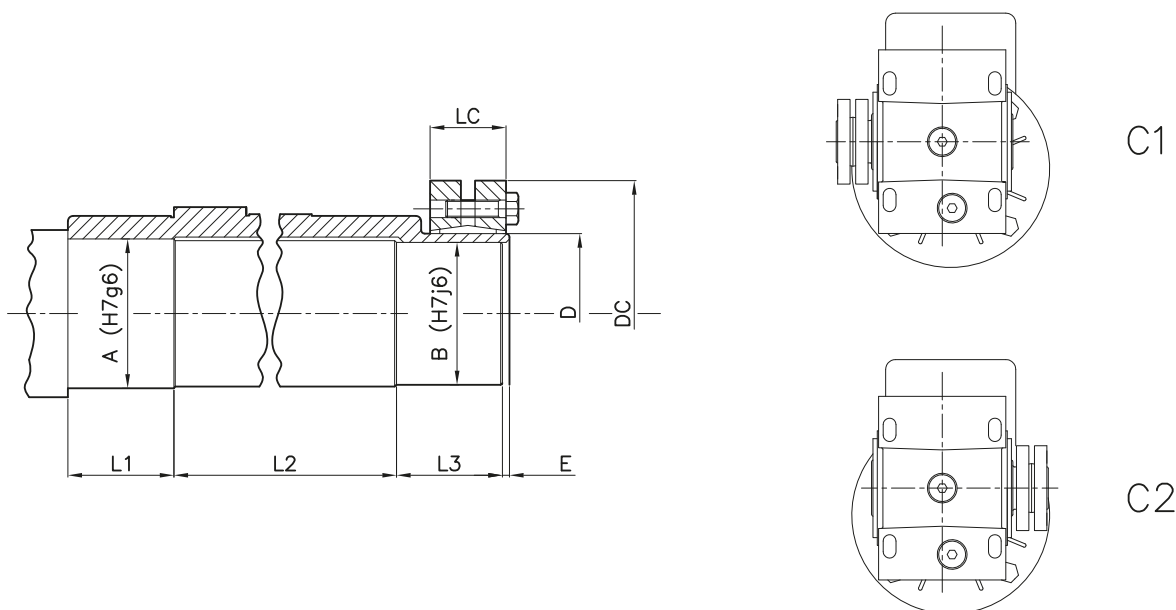
	P	M	N	L	U	Y	H1	F	G
<b>MO10</b>	160	130	110	11	4	40	90	11	69
<b>MO20</b>	180	150	115	12	4	30	88	16	//
<b>MO30</b>	200	165	130	12	4	27	97	13	//
<b>MO40</b>	210	175	152	12	4,5	34	128,5	13	//

**ALBERO LENTO** - OUTPUT SHAFT - WELLENENDE - ARBRE LENT - EJE DE SALIDA



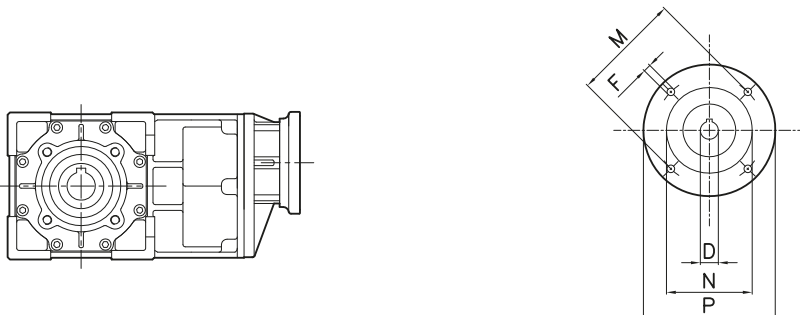
	D	G	H	Ls	Ld	U	V	Z
<b>MO10</b>	25	5	M8	50	48,8	99	101,2	32
<b>MO20</b>	30	5	M8	60	58,5	113	115,5	36
<b>MO30</b>	35	5	M10	68	66,5	139	141,5	42
<b>MO40</b>	45	6	M10	78	76,25	181	183,75	52

**ALBERO LENTO CAVO CON CALETTATORE** - HOLLOW OUTPUT SHAFT WITH SHRINK DISC - ABTRIEBSHOHLWELLE MIT SCHRUMPFSCHEIBE  
 - ARBRE LENT AVEC FRETTE DE SERRAGE - EJE DE SALIDA Y ARO DE APRIETE



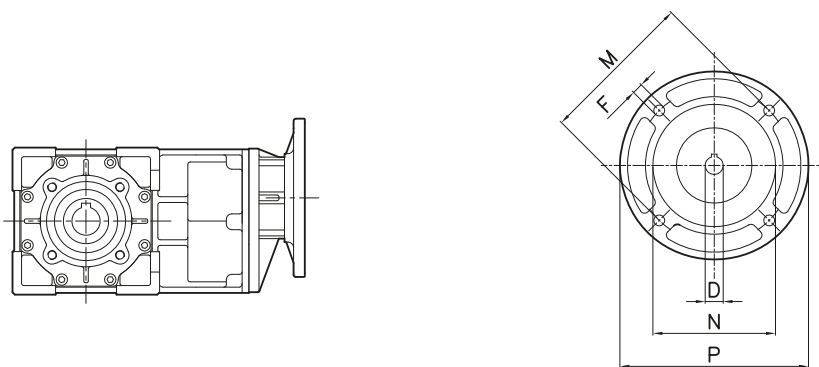
	A	B	E	L1	L2	L3	DC	LC	D	Tc (Nm)
<b>MO10</b>	27	25	2	30	63	30	60	21,5	30	4
<b>MO20</b>	30	28	2	34	70	34	72	23,5	36	12
<b>MO30</b>	42	40	2	41	88,5	41	90	27,5	50	12
<b>MO40</b>	52	50	2	51	113,5	51	110	30,5	62	12

## FLANGIA ATTACCO MOTORE (PAM) - MOTOR INPUT FLANGE - MOTOR-BEFESTIGUNGS-FLANSCH - BRIDE D'ATTELAGE MOTEUR - BRIDA DE CONEXION MOTOR



	IEC	D	F	M	N	P
<b>B14</b>	63	11	5,5	75	60	90
	71	14	7	85	70	105
	80	19	7	100	80	120
	90	24	9	115	95	140
	100	28	9	130	110	160
	112	28	9	130	110	160
	132	38	11,5	165	130	200
	160	42	13,5	215	180	250

## FLANGE DI USCITA - OUTPUT FLANGES - ABTRIEBSFLANSCH - FLANGE DE SORTIE - BRIDA DE SALIDA

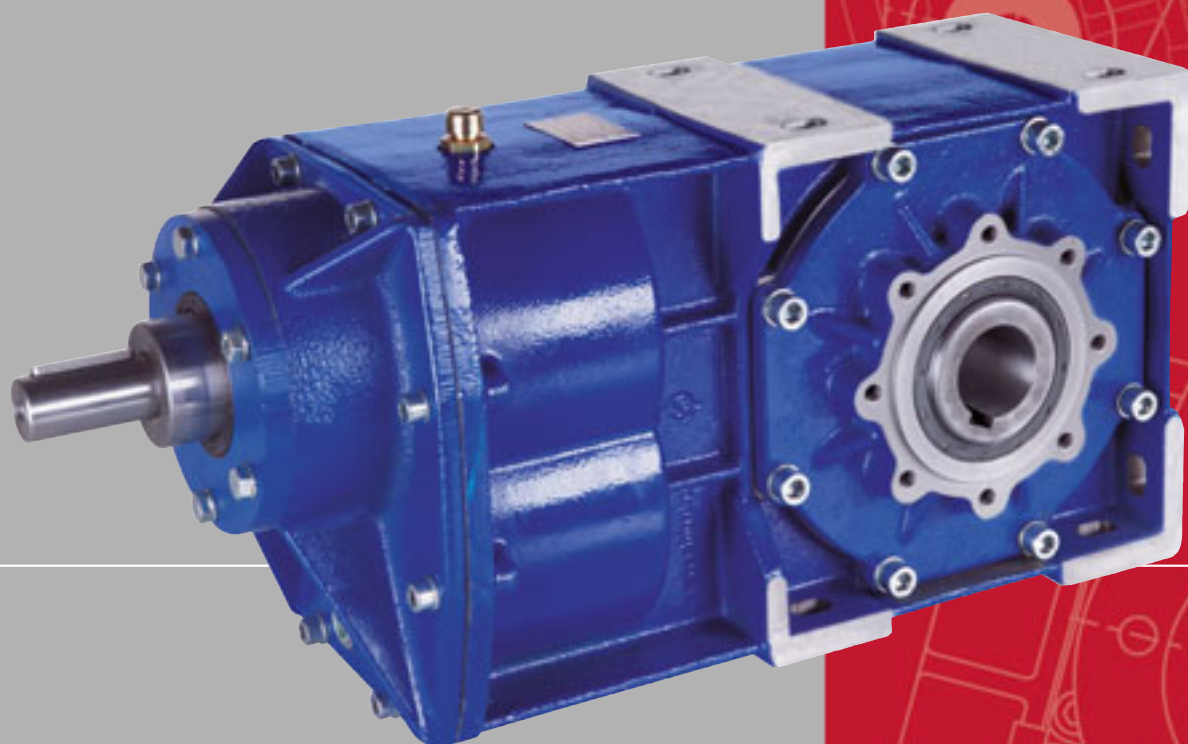


	IEC	D	F	M	N	P
<b>B5</b>	63	11	9,5	115	95	140
	71	14	9,5	130	110	160
	80	19	11,5	165	130	200
	90	24	11,5	165	130	200
	100	28	14	215	180	250
	112	28	14	215	180	250
	132	38	14	265	230	300
	160	42	18	300	230	350



**G.M.s.r.l.**  
Ghirri Motoriduttori

# Serie **RO**



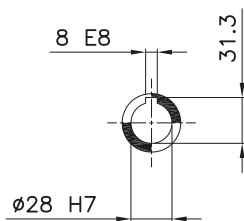
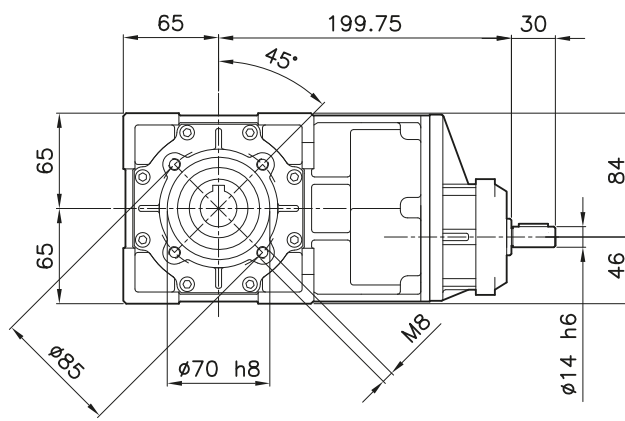
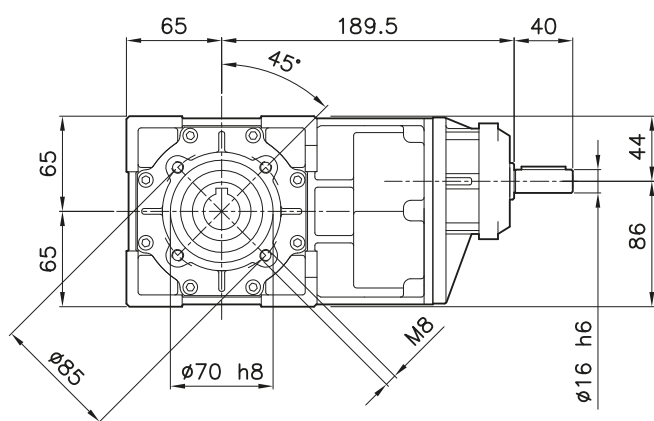
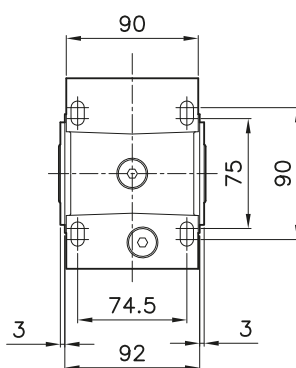
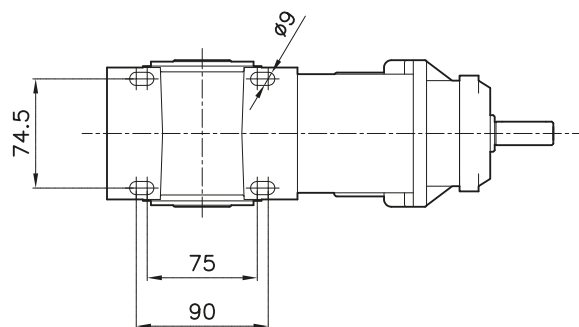
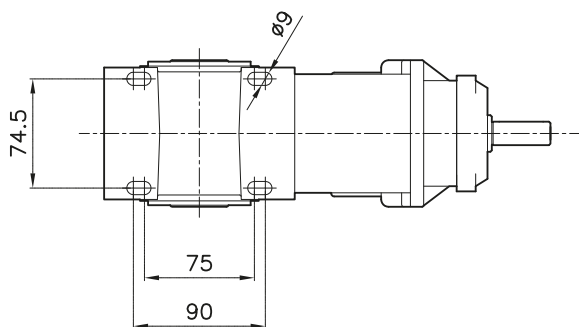
## Prestazioni - Performance - Leistungen - Performances - Prestaciones

N2 (min-1)	IR	N1 (min-1)	M2 (Nm)	P1 (Kw)	TIPO	Fr1 (N)	Fr2 (N)	Fa2 (N)
281,1	9,96	<b>2800</b>	91	2,85	<b>R010/2</b>	271	3802	760
226,9	12,34		97	2,43		503	4068	814
171,3	16,35		103	1,94		534	4447	889
134,0	20,89		108	1,60		553	4806	961
109,8	25,50		112	1,36		563	5124	1025
87,8	31,88		117	1,13		568	5502	1100
69,1	40,54		123	0,94		563	5939	1188
61,8	45,33		126	0,86		566	6151	1230
42,5	65,81		132	0,64		823	6944	1389
32,1	87,18		140	0,51		857	7596	1519
25,2	111,27	143	0,41	884	8245	1649		
20,6	136,00	145	0,34	900	8802	1760		
16,5	170,00	149	0,29	916	9470	1894		
13,0	216,21	156	0,23	929	9622	1924		
11,6	241,78	152	0,20	937	9658	1932		
140,6	9,96	<b>1400</b>	104	1,61	<b>R010/2</b>	571	4759	952
113,5	12,34		109	1,36		608	5090	1018
85,6	16,35		115	1,09		644	5561	1112
67,0	20,89		122	0,90		664	6006	1201
54,9	25,50		127	0,77		671	6394	1279
43,9	31,88		136	0,66		663	6841	1368
34,5	40,54		142	0,54		664	7394	1479
30,9	45,33		144	0,49		670	7664	1533
21,3	65,81		140	0,34		976	8736	1747
16,1	87,18		148	0,27		1013	9557	1911
12,6	111,27	154	0,22	1038	9624	1925		
10,3	136,00	162	0,19	1057	9602	1920		
8,2	170,00	160	0,15	1075	9597	1919		
6,5	216,21	163	0,12	1089	9545	1909		
5,8	241,78	152	0,10	1101	9676	1935		
90,4	9,96	<b>900</b>	112	1,12	<b>R010/2</b>	629	5486	1097
72,9	12,34		118	0,95		669	5865	1173
55,0	16,35		125	0,76		707	6405	1281
43,1	20,89		135	0,64		721	6906	1381
35,3	25,50		141	0,55		716	7331	1466
28,2	31,88		148	0,46		729	7877	1575
22,2	40,54		155	0,39		729	8510	1702
19,9	45,33		155	0,34		739	8825	1765
13,7	65,81		154	0,24		1063	9620	1924
10,3	87,18		162	0,19		1105	9566	1913
8,1	111,27	163	0,15	1138	9573	1915		
6,6	136,00	159	0,12	1159	9568	1914		
5,3	170,00	149	0,09	1182	9629	1926		
4,2	216,21	190	0,09	1197	9603	1921		
3,7	241,78	165	0,07	1204	9615	1923		
70,3	9,96	<b>700</b>	117	0,91	<b>R010/2</b>	671	5945	1189
56,7	12,34		125	0,78		711	6355	1271
42,8	16,35		131	0,62		749	6937	1387
33,5	20,89		143	0,53		748	7455	1491
27,5	25,50		149	0,45		758	7940	1588
22,0	31,88		153	0,37		777	8539	1708
17,3	40,54		158	0,30		783	9231	1846
15,4	45,33		159	0,27		809	9599	1920
10,6	65,81		165	0,20		1119	9571	1914
8,0	87,18		164	0,15		1161	9514	1903
6,3	111,27	168	0,12	1195	9503	1901		
5,1	136,00	154	0,09	1224	9601	1920		
4,1	170,00	149	0,07	1242	9584	1917		
3,2	216,21	163	0,06	1260	9605	1921		
2,9	241,78	152	0,05	1266	9614	1923		

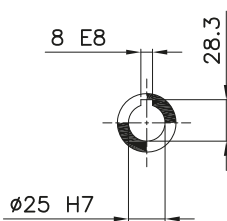


RO 10/2

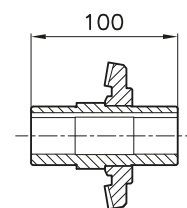
RO 10/3



**A richiesta**  
 Optional - Auf Wunsch  
 Sur demande - A pedido



**Standard**  
 Standard - Standard  
 Standard - Estandar

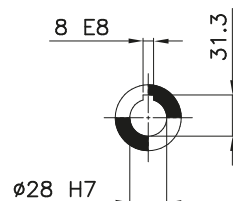
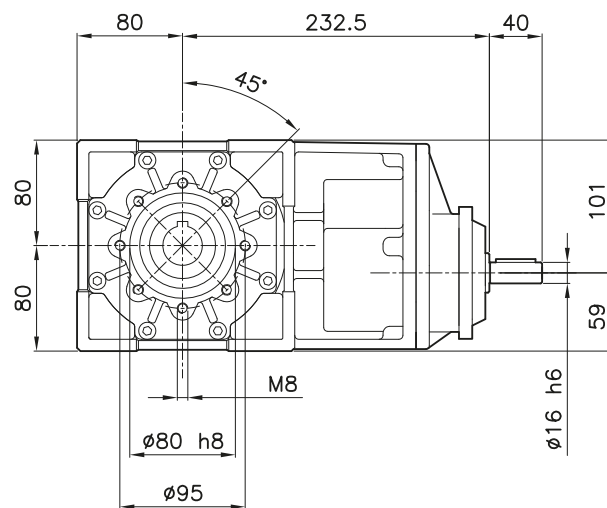
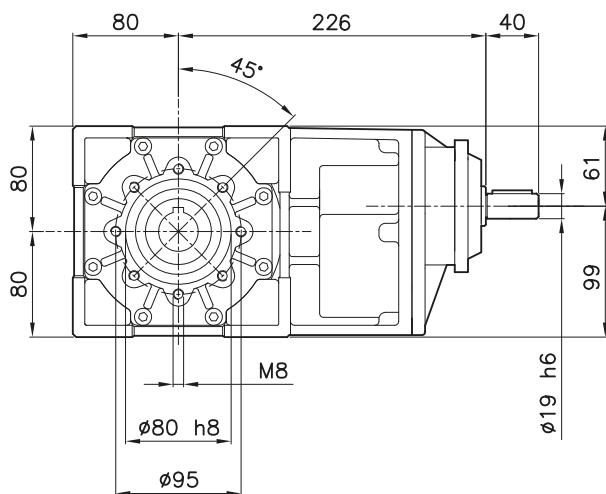
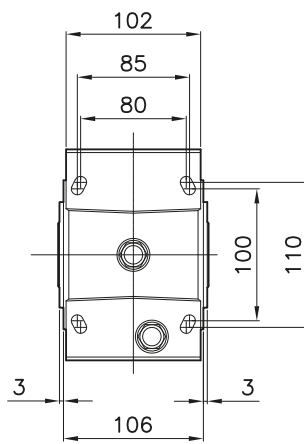
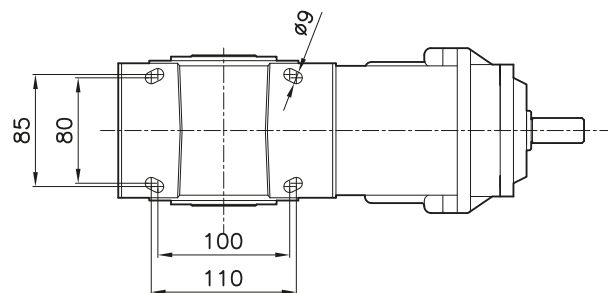
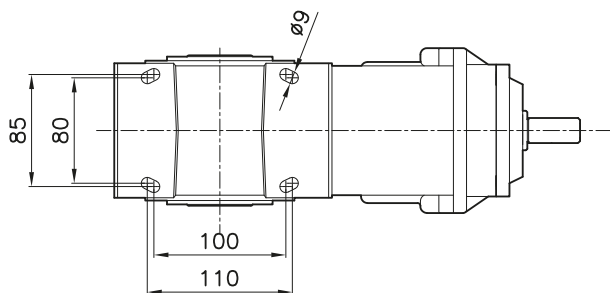


## Prestazioni - Performance - Leistungen - Performances - Prestaciones

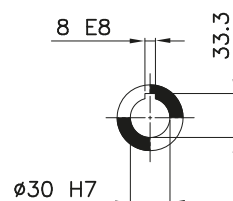
N2 (min-1)	IR	N1 (min-1)	M2 (Nm)	P1 (Kw)	TIPO	Fr1 (N)	Fr2 (N)	Fa2 (N)		
266,4	10,51	<b>2800</b>	217	6,37	<b>R020/2</b>	217	4460	892		
230,6	12,14		225	5,72		262	4670	934		
170,6	16,41		240	4,51		336	5147	1029		
137,3	20,40		250	3,78		372	5524	1105		
108,1	25,90		264	3,15		397	5972	1194		
88,5	31,64		273	2,66		419	6389	1278		
70,6	39,67		285	2,22		420	6880	1376		
59,5	47,08		294	1,93		418	7281	1456		
43,2	64,76		300	1,46		615	8165	1633		
32,0	87,54		300	1,08		942	9139	1828		
25,7	108,80	<b>2800</b>	300	0,87	<b>R020/3</b>	1000	9830	1966		
20,3	138,16		298	0,68		1027	10622	2124		
16,6	168,74		300	0,56		1051	11449	2290		
13,2	211,56		302	0,45		1072	11488	2298		
11,2	251,08		303	0,38		1086	11532	2306		
133,2	10,51		<b>1400</b>	245		3,60	<b>R020/2</b>	277	5628	1126
115,3	12,14			255		3,24		331	5892	1178
85,3	16,41	271		2,55	415	6489		1298		
68,6	20,40	283		2,14	464	6969		1394		
54,1	25,90	300		1,79	484	7523		1505		
44,2	31,64	299		1,46	502	8034		1607		
35,3	39,67	301		1,17	513	8658		1732		
29,7	47,08	299		0,98	616	9298		1860		
21,6	64,76	300		0,73	888	10433		2087		
16,0	87,54	300		0,54	1155	11372		2274		
12,9	108,80	<b>1400</b>	297	0,43	<b>R020/3</b>	1192	11358	2272		
10,1	138,16		298	0,34		1233	11490	2298		
8,3	168,74		300	0,28		1253	11472	2294		
6,6	211,56		295	0,22		1270	11415	2283		
5,6	251,08		303	0,19		1286	11529	2306		
85,6	10,51		<b>900</b>	265		2,50	<b>R020/2</b>	328	6519	1304
74,1	12,14			275		2,25		385	6823	1365
54,8	16,41	299		1,81	471	7508		1502		
44,1	20,40	300		1,46	505	8039		1608		
34,7	25,90	300		1,15	545	8694		1739		
28,4	31,64	300		0,94	581	9301		1860		
22,7	39,67	300		0,75	678	10128		2026		
19,1	47,08	299		0,63	674	10704		2141		
13,9	64,76	300		0,47	971	11268		2254		
10,3	87,54	302		0,35	1276	11261		2252		
8,3	108,80	<b>900</b>	301	0,28	<b>R020/3</b>	1326	11405	2281		
6,5	138,16		300	0,22		1358	11395	2279		
5,3	168,74		300	0,18		1380	11391	2278		
4,3	211,56		292	0,14		1400	11406	2281		
3,6	251,08		297	0,12		1411	11359	2272		
66,6	10,51		<b>700</b>	277		2,03	<b>R020/2</b>	373	7084	1417
57,7	12,14			289		1,84		433	7413	1483
42,7	16,41	300		1,41	508	8139		1628		
34,3	20,40	299		1,13	551	8722		1744		
27,0	25,90	299		0,89	593	9430		1886		
22,1	31,64	299		0,73	636	10094		2019		
17,6	39,67	298		0,58	719	10961		2192		
14,9	47,08	299		0,49	742	11164		2233		
10,8	64,76	304		0,37	1005	11142		2228		
8,0	87,54	300		0,27	1344	11187		2237		
6,4	108,80	<b>700</b>	304	0,22	<b>R020/3</b>	1393	11294	2259		
5,1	138,16		298	0,17		1426	11278	2256		
4,1	168,74		300	0,14		1453	11351	2270		
3,3	211,56		295	0,11		1471	11280	2256		
2,8	251,08		287	0,09		1482	11221	2244		

RO 20/2

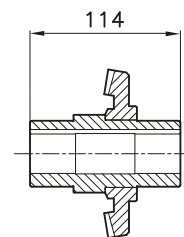
RO 20/3



**A richiesta**  
Optional - Auf Wunsch  
Sur demande - A pedido



**Standard**  
Standard - Standard  
Standard - Estandar

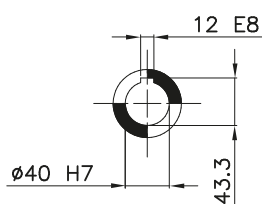
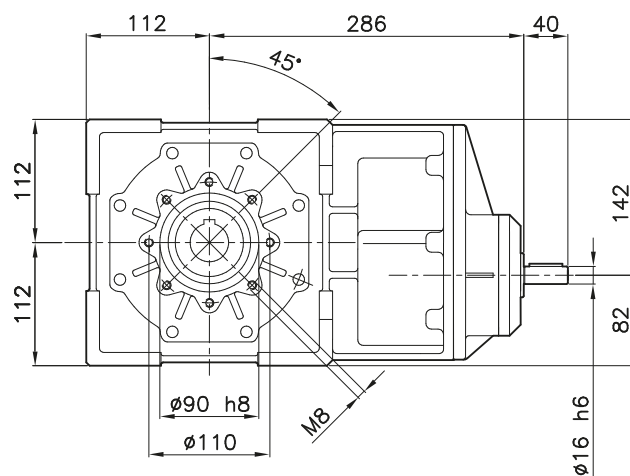
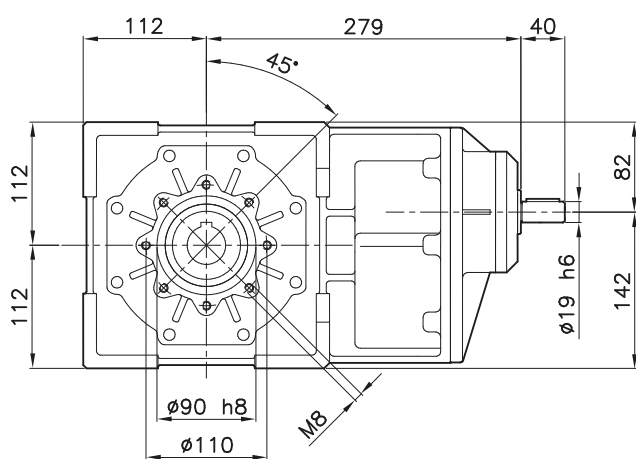
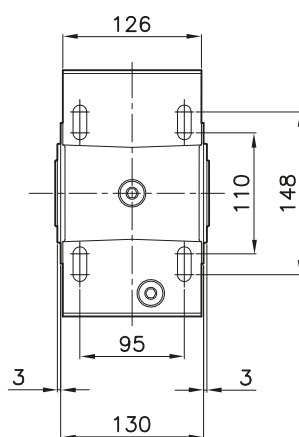
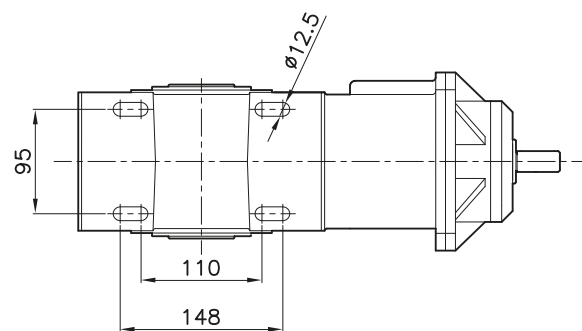
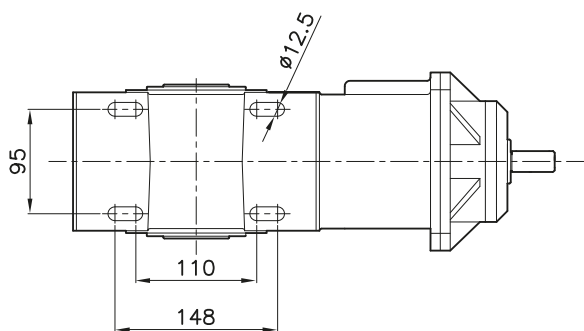


## Prestazioni - Performance - Leistungen - Performances - Prestaciones

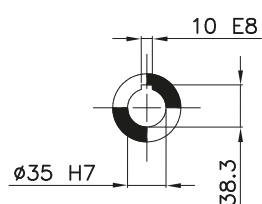
N2 (min-1)	IR	N1 (min-1)	M2 (Nm)	P1 (Kw)	TIPO	Fr1 (N)	Fr2 (N)	Fa2 (N)
275,9	10,15	<b>2800</b>	600	18,24	<b>R030/2</b>	387	5356	1071
224,4	12,48		600	14,84		594	5917	1163
171,0	16,37		600	11,31		684	6337	1267
135,3	20,70		600	8,95		786	6898	1380
104,3	26,84		600	6,90		857	7571	1514
90,3	31,00		600	5,97		883	7971	1594
71,0	39,46		600	4,69		997	8810	1762
59,0	47,46		600	3,90		1071	9502	1900
46,3	60,50		601	3,13		1055	10472	2094
35,3	79,33		599	2,38		1175	11642	2328
27,9	100,29	601	1,89	1255	12734	2547		
21,5	130,08	598	1,45	1325	14038	2808		
18,6	150,23	600	1,26	1357	14806	2961		
14,6	191,25	601	0,99	1400	15750	3150		
12,2	229,99	598	0,82	1427	15750	3150		
137,9	10,15	<b>1400</b>	580	8,82	<b>R030/2</b>	475	6829	1366
112,2	12,48		560	6,92		667	7356	1471
85,5	16,37		600	5,66		890	8148	1630
67,6	20,70		600	4,47		1112	8985	1797
52,2	26,84		600	3,45		1304	9985	2115
45,2	31,00		601	2,99		1391	10574	2324
35,5	39,46		601	2,35		1512	11618	2494
29,5	47,46		600	1,95		1587	12471	2733
23,1	60,50		599	1,56		1327	13665	3021
17,6	79,33		599	1,19		1447	15105	3150
14,0	100,29	598	0,94	1528	15750	3150		
10,8	130,08	602	0,73	1598	15750	3150		
9,3	150,23	600	0,63	1629	15750	3150		
7,3	191,25	594	0,49	1673	15750	3150		
6,1	229,99	598	0,41	1700	15750	3150		
88,7	10,15	<b>900</b>	600	5,86	<b>R030/2</b>	600	8024	1605
72,1	12,48		600	4,77		917	8751	1750
55,0	16,37		601	3,64		1252	9776	1955
43,5	20,70		601	2,88		1476	10734	2147
33,5	26,84		601	2,22		1668	11874	2375
29,0	31,00		600	1,92		1755	12546	2509
22,8	39,46		601	1,51		1876	13739	2748
19,0	47,46		598	1,25		1951	14715	2942
14,9	60,50		597	1,00		1517	15700	3150
11,3	79,33		603	0,77		1637	15700	3150
9,0	100,29	604	0,61	1717	15700	3150		
6,9	130,08	603	0,47	1787	15700	3150		
6,0	150,23	593	0,40	1819	15700	3150		
4,7	191,25	604	0,32	1862	15700	3150		
3,9	229,99	590	0,26	1889	15700	3150		
69,0	10,15	<b>700</b>	600	4,56	<b>R030/2</b>	832	8913	1783
56,1	12,48		600	3,71		1157	9697	1939
42,8	16,37		600	2,83		1492	10803	2161
33,8	20,70		601	2,24		1717	11835	2367
27,0	25,90		299	0,89		593	9430	1886
26,1	26,84		598	1,72		1911	13066	2613
22,60	31,00		599	1,49		1998	13790	2758
17,7	39,46		598	1,17		2120	15077	3015
11,6	60,50		599	0,78		1624	15800	3150
8,8	79,33		604	0,60		1743	15800	3150
7,0	100,29	598	0,47	1824	15800	3150		
5,4	130,08	594	0,36	1894	15800	3150		
4,7	150,23	591	0,31	1925	15800	3150		
3,7	191,25	607	0,25	1969	15800	3150		
3,0	229,99	613	0,21	1996	15800	3150		

RO 30/2

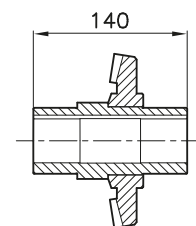
RO 30/3



**A richiesta**  
Optional - Auf Wunsch  
Sur demande - A pedido



**Standard**  
Standard - Standard  
Standard - Estandar

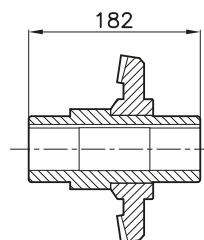
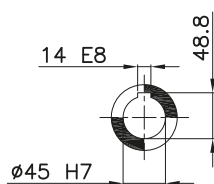
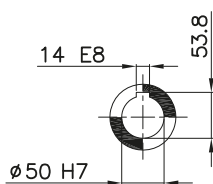
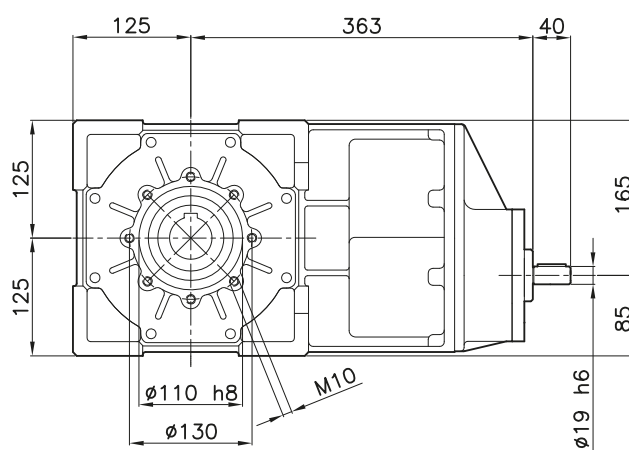
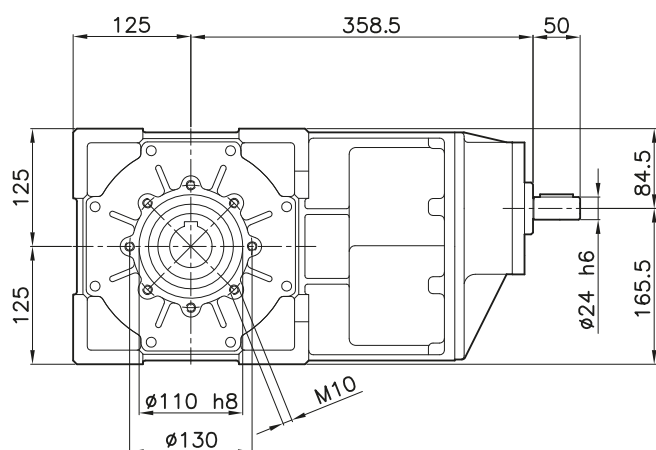
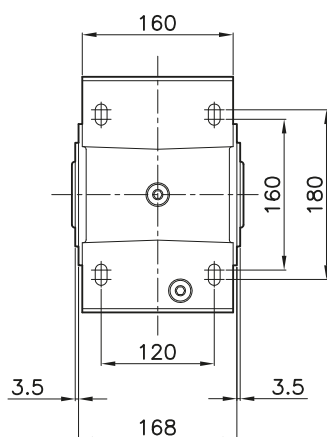
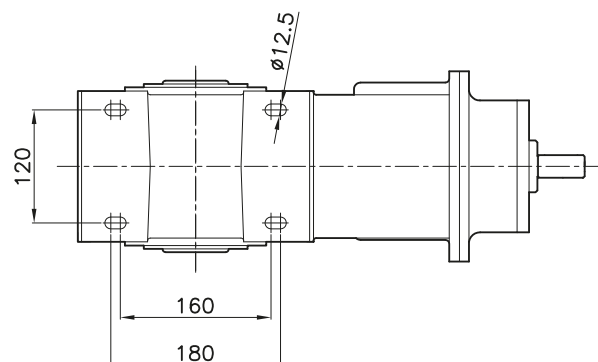
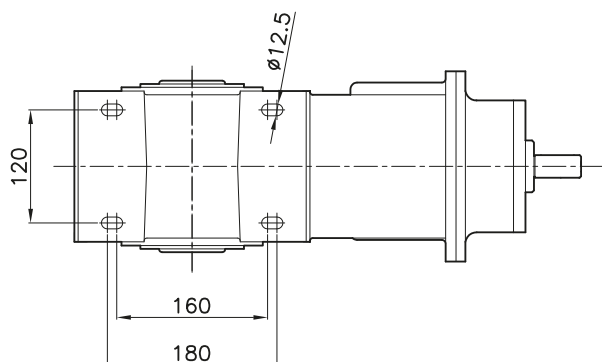


## Prestazioni - Performance - Leistungen - Performances - Prestaciones

N2 (min-1)	IR	N1 (min-1)	M2 (Nm)	P1 (Kw)	TIPO	Fr1 (N)	Fr2 (N)	Fa2 (N)
248,7	11,26	<b>2800</b>	1005	24,55	<b>R040/2</b>	1161	7280	1456
215,4	13,00		1033	24,52		1310	7686	1537
167,6	16,71		1073	19,82		1512	8430	1686
135,0	20,74		1100	16,37		1637	9122	1824
106,4	26,31		1070	12,55		1729	9942	1988
93,4	29,97		1093	11,26		1761	10418	2084
75,3	37,19		1100	9,13		1809	11275	2255
58,7	47,73		1079	6,98		1828	12339	2468
41,9	66,86		1079	5,09		2355	13766	2753
32,6	85,92		1038	3,81		2490	15184	3037
26,3	106,66	1045	3,09	2596	16655	3331		
20,7	135,31	1000	2,33	2679	18259	3652		
18,2	154,15	1002	2,05	2709	19122	3824		
14,6	191,25	1049	1,73	2768	20751	4150		
11,4	245,47	1082	1,39	2822	20913	4183		
124,3	11,26	<b>1400</b>	900	12,33	<b>R040/2</b>	1315	9213	1843
107,7	13,00		920	10,92		1486	9721	1944
83,8	16,71		950	8,77		1720	10650	2130
67,5	20,74		974	7,25		1906	11570	2314
53,2	26,31		1020	5,98		2013	12598	2520
46,7	29,97		1039	5,35		2057	13201	2640
37,6	37,19		1082	4,49		2085	142,33	2847
29,3	47,73		1052	3,40		2388	15967	3193
20,9	66,86		1098	2,59		2836	18000	3600
16,3	85,92		1128	2,07		2971	19700	3940
13,1	106,66	1103	1,63	3088	20782	4156		
10,3	135,31	1099	1,28	3173	20737	4147		
9,1	154,15	1037	1,06	3234	21144	4229		
7,3	191,25	1031	0,85	3287	21170	4234		
5,7	245,47	997	0,64	3338	21314	4263		
79,9	11,26	<b>900</b>	972	8,56	<b>R040/2</b>	1644	10957	2191
69,2	13,00		985	7,52		1873	11595	2319
53,9	16,71		1029	6,11		2108	12666	2533
43,4	20,74		1064	5,09		2266	13680	2736
34,2	26,31		1101	4,15		2402	14901	2980
30,0	29,97		1054	3,49		2697	15931	3186
24,2	37,19		1083	2,89		2768	17202	3440
18,9	47,73		1102	2,29		2890	18895	3779
13,5	66,86		1102	1,67		3228	20853	4171
10,5	85,92		1182	1,33		3393	21074	4215
8,4	106,66	1105	1,05	3490	21103	4221		
6,7	135,31	1095	0,82	3584	21308	4262		
5,8	154,15	1034	0,68	3629	21478	4296		
4,7	191,25	1038	0,55	3673	21370	4274		
3,7	245,47	1042	0,43	3709	21099	4220		
62,2	11,26	<b>700</b>	1000	6,85	<b>R040/2</b>	1833	12024	2405
53,8	13,00		1033	6,13		2006	12652	2530
41,9	16,71		1072	4,95		2275	13836	2767
33,8	20,74		1102	4,10		2475	14975	2995
26,6	26,31		1101	3,23		2887	16650	3330
23,4	29,97		1099	2,83		2925	17407	3481
18,8	37,19		1099	2,28		3088	18906	3781
14,7	47,73		1120	1,81		3170	20673	4135
10,5	66,86		1103	1,30		3477	20954	4191
8,1	85,92		1134	1,04		3513	21166	4233
6,6	106,66	1096	0,81	3603	21136	4227		
5,2	135,31	1099	0,64	3699	21378	4276		
4,5	154,15	1029	0,53	3734	21359	4272		
3,7	191,25	1043	0,43	3773	21099	4220		
2,9	245,47	1090	0,35	3816	20958	4192		

RO 40/2

RO 40/3



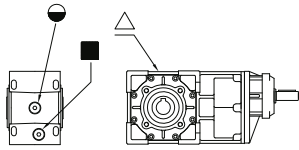
**A richiesta**

Optional - Auf Wunsch  
Sur demande - A pedido

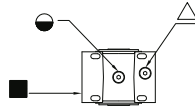
**Standard**

Standard - Standard  
Standard - Estandar

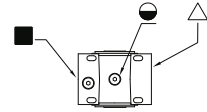
## POSIZIONI DI MONTAGGIO RO../2 - MOUNTING POSITION - BAUFORM - POSITION DE MONTAGE - POSICION DE MONTAJE



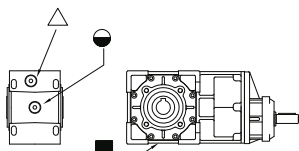
B3



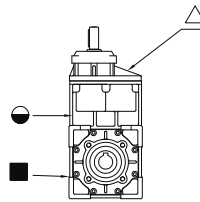
B6



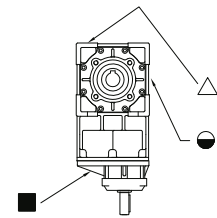
B7



B8



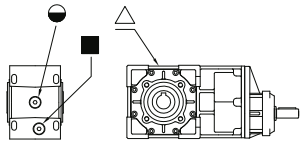
V5



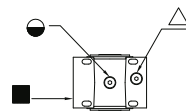
V6

△ = SFIATO  
 BREATHER PLUG  
 EINFÜLLSTOPFEN  
 BOUCHON D'EVENT  
 TAPON RESPIRADERO  
 ● = LIVELLO  
 LEVEL PLUG  
 OLSTAND  
 BOUCHON NIVEAU  
 TAPON DE NIVEL  
 ■ = SCARICO  
 FILLING PLUG  
 ABLASSTOPFEN  
 BOUCHON DE VIDANCE  
 TAPON DE VACACIO

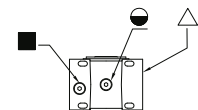
## POSIZIONI DI MONTAGGIO RO../3 - MOUNTING POSITION - BAUFORM - POSITION DE MONTAGE - POSICION DE MONTAJE



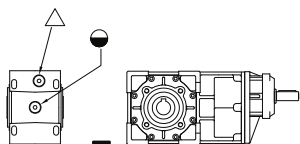
B3



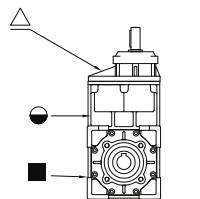
B6



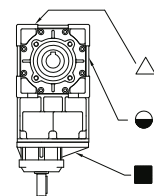
B7



B8



V5



V6

△ = SFIATO  
 BREATHER PLUG  
 EINFÜLLSTOPFEN  
 BOUCHON D'EVENT  
 TAPON RESPIRADERO  
 ● = LIVELLO  
 LEVEL PLUG  
 OLSTAND  
 BOUCHON NIVEAU  
 TAPON DE NIVEL  
 ■ = SCARICO  
 FILLING PLUG  
 ABLASSTOPFEN  
 BOUCHON DE VIDANCE  
 TAPON DE VACACIO



Prima della consegna , tutti i riduttori vengono sottoposti ad un test di funzionamento a vuoto. Durante il periodo di garanzia si raccomanda di non procedere allo smontaggio del riduttore senza l'autorizzazione del fabbricante , in caso contrario , nessuna garanzia verrà riconosciuta.

E' molto importante per l'installazione del riduttore e/o motoriduttore attenersi alle seguenti norme :

- > Curare l'allineamento tra il riduttore e il motore e tra il riduttore e la macchina operatrice.
- > Assicurarsi che il fissaggio del riduttore sia stabile onde evitare qualsiasi vibrazione.
- > Il montaggio degli organi sugli alberi (cavi o pieni) deve essere eseguito a regola d'arte , evitando forzature , in modo da garantire un corretto accoppiamento senza danneggiare i cuscinetti o altre parti del riduttore . la lavorazione di tali organi deve essere eseguita in tolleranza ISO H7.
- > In occasione di eventuali verniciature del riduttore provvedere alla protezione delle parti rotanti , dei dispositivi di controllo (spie livello olio ) e in modo particolare gli anelli tenuta olio , al fine di non pregiudicarne la funzionalità.
- > Prima della messa in funzione della macchina occorre verificare che la posizione del livello dell'olio e del tappo sfiato sia idonea alla posizione di montaggio del riduttore e che l'olio sia presente nella quantità necessaria ad una corretta lubrificazione dei cinematismi interni.
- > Nel caso d'installazione all'aperto o in ambienti particolarmente aggressivi è consigliabile usare una verniciatura anticorrosiva , e una protezione con grasso idrorepellente per le parti rotanti.
- > Quando il riduttore viene fornito senza motore occorre controllare che le tolleranze dell'albero e della flangia motore siano corrispondenti alle norme IEC. Pulire accuratamente albero , centraggio e piano flangia da eventuali tracce di sporco o di vernice. Procedere quindi all'accoppiamento che deve avvenire senza forzature.
- > La messa in funzione del riduttore deve avvenire gradualmente evitando l'applicazione immediata del carico massimo.

Nel caso si prevedano sovraccarichi , urti o possibilità di bloccaggio durante il funzionamento , occorre prevedere l'installazione di dispositivi di sicurezza quali giunti , limitatori di coppia o dispositivi elettrici atti a salvaguardare il riduttore o il motoriduttore.

Accertare periodicamente l'inesistenza di perdite di lubrificante dovute a usura degli anelli di tenuta olio o da eventuali danneggiamenti degli stessi e il mantenimento del corretto livello di lubrificante.

Inoltre è opportuno mantenere pulite le superfici esterne dei riduttori e le ventole dei motori elettrici sui motoriduttori al fine di mantenere una corretta ventilazione e scambio termico della carcassa riduttore.

I riduttori possono essere tenuti a magazzino inattivi (in normale ambiente industriale ) senza particolari precauzioni per un periodo di circa 6 mesi , qualora il periodo di inutilizzo fosse superiore suggeriamo di ripristinare le protezioni superficiali sulle parti rotanti e di effettuare il completo riempimento di lubrificante ( che va però ripristinato al giusto livello al momento della messa in funzione)

## Stato di consegna

## Installazione

## Uso e manutenzione

## Stoccaggio

# USE AND MAINTENANCE

## Condition upon delivery

All reducers undergo a no-load functioning test prior to delivery and are already set for installation in the assembly position requested by the customer.

## Important

Do not disassemble the reducer during the warranty period without the manufacturer's authorisation as this will invalidate the warranty.

## Installation

It is very important that the following standards be met when installing the gear reducer and/or gearmotor :

- > Make sure that the gear reducer is aligned with the motor and with the operating machine
- > Ensure that the reducer is secured firmly so as to prevent any vibration.
- > The elements (cable or solid) must be mounted on the shafts in a workmanlike manner, without forcing, to ensure that the couplings are sound, thereby avoiding any damage to the bearings or other parts of the reducer. The elements in question must be machined to ISO H7 tolerance levels.
- > If the reducer is painted, the rotating parts, control devices (oil indicator lamps) and particularly the oil seals, should be protected to ensure that they are kept in good working order.
- > Before putting the machine into operation, make sure that the oil level indicator and the drain plug are correctly positioned in relation to the position in which the reducer has been mounted and that there is adequate oil to lubricate the internal working parts.
- > If the machine is installed in the open air or in environments subjected to particularly harsh conditions, a rust-proofing paint should be used and water-repellent grease should be applied to the rotating parts.
- > When the reducer is supplied without a motor, check that the shaft and motor flange tolerances satisfy IEC Standards. Clean off any traces of dirt or paint from the shaft, centring pin and flange plate. Couple the elements without forcing them in any way.
- > The reducer must be put into operation gradually and not used immediately at maximum load.

## Use

If overloading, impact or blockages are likely to occur while the machine is working, safety devices should be fitted such as joints, torque limiters or electrical equipment capable of safeguarding the reducer or gearmotor.

## Maintenance

Check periodically for any lubricant leakages due to over-worn oil seals, damaged seals and check also that the level of lubricant is correct.

The external surfaces of the reducers and the electric motor fans in the gearmotors should also be kept clean to ensure adequate ventilation and heat exchange in the reducer casing.

## Storage

The reducers can be stored in an inoperative condition (normal industrial environment) without having to take any special precautions for a period of about 6 months; if they remain inoperative for a longer period, the surface protective devices on the rotating parts should be reset and the lubricant topped up completely (to be adjusted to the correct level when the reducer is put back into operation)