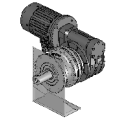
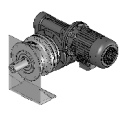
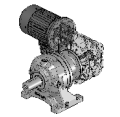
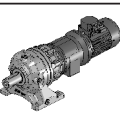
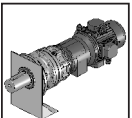
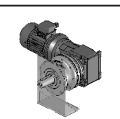
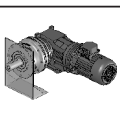
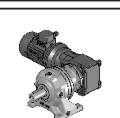
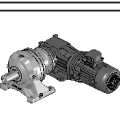


Posizioni di montaggio - Lubrificazione
Mounting positions - Lubrication
Einbaulagen - Schmierung

PART V

i				V2
EX				V4
EX				V6
EXV		A-B C-D		V8
EXV		L-M N-O		V9
EXV		A-B C-D		V10
EXV		L-M N-O		V12
EXA				V14
EXO		A-B C-D		V16
EXO		L-M N-O		V17
EXO		A-B C-D		V18
EXO		L-M N-O		V20



1.5 Lubrificazione

Gli oli disponibili appartengono generalmente a tre grandi famiglie:

- 1) Oli minerali
- 2) Oli sintetici Poli-Alfa-Olefine
- 3) Oli sintetici Poli-Glicole

La scelta più appropriata è generalmente legata alle condizioni di impiego. riduttori non particolarmente caricati e con un ciclo di impiego discontinuo, senza escursioni termiche importanti, possono certamente essere lubrificati con olio minerale.

Nei casi di impiego gravoso, quando i riduttori saranno prevedibilmente caricati molto ed in modo continuativo, con conseguente prevedibile innalzamento della temperatura, è bene utilizzare lubrificanti sintetici tipo polialfaolefine (PAO).

Gli oli di tipo poliglicole (PG) sono da utilizzare strettamente nel caso di applicazioni con forti strisciamenti fra i contatti, ad esempio nelle viti senza fine. Debbono essere impiegati con grande attenzione poiché non sono compatibili con gli altri oli e sono invece completamente miscibili con l'acqua. Questo fenomeno è particolarmente pericoloso poiché non si nota, ma deprime velocemente le caratteristiche lubrificanti dell'olio.

Oltre a questi già menzionati, ricordiamo che esistono gli oli per l'industria alimentare. Questi trovano specifico impiego nell'industria alimentare in quanto sono prodotti speciali non nocivi alla salute. Vari produttori forniscono oli appartenenti a tutte le famiglie con caratteristiche molto simili. Più avanti proponiamo una tabella comparativa.

Input speed n_1 (min ⁻¹)	Absorbed power (kW)	Lubrication system	Viscosity ISO VG at 40° (cSt)	
			i 10	i 10
2000 < n_1 5000	P < 7.5	Forced or Oil splash	68	68
	7.5 P 22		68	150
	P > 22		150	220
1000 < n_1 2000	P < 7.5	Forced or Oil splash	68	150
	7.5 P 37		150	220
	P > 37		220	320
300 < n_1 1000	P < 15	Forced Oil splash	68	150
			150	220
	15 P 55	Forced Oil splash	150	220
			220	320
	P > 55	Forced Oil splash	220	320
50 < n_1 300			320	460
	P < 22	Forced Oil splash	150	220
			220	320
	22 P 75	Forced Oil splash	220	320
			320	460
	P > 75	Forced Oil splash	320	460
			460	680

Nel caso di lubrificazione forzata con pompa, qualora siano richieste ISO VG > 220 e/o temperature < 10°C, consultarci.

La tabella è valida per velocità periferiche normali; in caso di velocità > 13m/s, consultarci.

1.5 Lubrication

Available oils are typically grouped into three major classes:

- 1) Mineral oils
- 2) Poly-Alpha-Olefin synthetic oils
- 3) Polyglycol synthetic oils

Oil is normally selected in accordance with environmental and operating conditions. Mineral oil is the appropriate choice for moderate load, non-continuous duty applications free from temperature extremes.

In severe applications, where gear units are to operate under heavy loads in continuous duty and high temperatures are expected, synthetic Poly-Alpha-Olefin oils (PAO) are the preferred choice.

Polyglycol oils (PG) should only be used in applications involving high sliding friction, as is the case with worm shafts. These particular oils should be used with great care, as they are not compatible with other oils, but are totally mixable with water. The oil mixed with water cannot be told from uncontaminated oil, but will degrade very rapidly.

In addition to the oils mentioned above, there are food-grade oils. These are special oils harmless to human health for use in the food industry. Oils with similar characteristics are available from a number of manufacturers. A comparative overview table is provided at the next pages.

In case of forced lubrication by pump, when ISO VG > 220 and/or temperatures < 10°C, are requested, it is advisable to contact us.

The table is valid for normal peripheral speeds; in case of speed > 13 m/s, contact us.

1.5 Schmierung

Die verfügbaren Öle gehören im Allgemeinen drei großen Familien an:

- 1) Mineralöle
- 2) Polyalphaolefine-Synthetiköle
- 3) Polyglykol-Synthetiköle

Die angemessene Wahl ist im Allgemeinen an die Einsatzbedingungen gebunden. Getriebe, die keinen besonders schweren Belastungen ausgesetzt sind und einem unregelmäßigen Einsatzzyklus unterliegen, ohne starke thermische Ausschläge, können problemlos mit Mineralöl geschmiert werden.

Bei einem Einsatz unter harten Bedingungen, d.h. wenn die Getriebe stark und andauernd belastet werden, woraus sich ein sicherer Temperaturanstieg ergibt, sollten Synthetiköle, Typ Polyalphaolefine (PAO), verwendet werden.

Die Öle, Typ Polyglykole (PG), sind ausschließlich für einen Einsatz ausgelegt, bei denen es zu starken Reibungen zwischen den in Kontakt stehenden Elementen kommt, z.B. bei Schnecken. Bei ihrem Einsatz in besondere Aufmerksamkeit erforderlich, da sie nicht mit anderen Ölen kompatibel sind, sich jedoch vollständig mit Wasser vermischen lassen. Diese Tatsache erweist sich daher als besonders gefährlich, da sie sich nicht feststellen lässt, jedoch die Schmiereigenschaften des Öls bereits nach kurzer Zeit unterdrückt.

Über die bereits genannten Öle hinaus, gibt es auch Öle, die speziell für die Lebensmittelindustrie ausgelegt sind. Diese finden demzufolge dort ihren Einsatz, da es sich dabei um spezielle Produkte handelt, die für die Gesundheit unschädlich sind. Die den jeweiligen Familien angehörigen Ölsorten werden von verschiedenen Herstellern angeboten; sie weisen jeweils sehr ähnliche Eigenschaften auf. Auf der folgenden Seite finden Sie eine entsprechende Vergleichstabelle.

Frequenza cambi olio [h]
Oil change intervals [h]
Frequenz - Ölwechsel [h]

Tipo olio Oil type Öltyp	Temperatura olio Oil temperature Öltemperatur		
	65°C	80°C	90°C
Minerale Mineral Mineralöl	8000	3000	1000
Sintetico Synthetic Synthetiköl	20000	15000	9000

Im Fall einer Zwangsschmierung über eine Pumpe, falls die ISO VG > 220 und/oder Temperaturen < 10°C gefordert werden, setzen Sie sich bitte mit uns in Verbindung.

Die Tabelle ist für normale Umfangsgeschwindigkeiten gültig. Bei Geschwindigkeiten > 13m/s, setzen Sie sich bitte mit uns in Verbindung.

Produttore Manufacturer Hersteller	Oli Minerali Mineral oils Mineralöle			Oli Sintetici Polialfaolefine (PAO) Poly-Alpha-Olefin synthetic oils (PAO) Polyalphaolefine- Synthetiköle (PAO)			Oli Sintetici Poliglicoli (PG) Polyglycol synthetic oils (PG) Polyglykol-Synthetiköle (PG)		
	ISO VG	ISO VG	ISO VG	ISO VG	ISO VG	ISO VG	ISO VG	ISO VG	ISO VG
	150	220	320	150	220	320	150	220	320
AGIP	Blasia 150	Blasia 220	Blasia 320	-	Blasia SX 220	Blasia SX 320	Blasia S 150	Blasia S 220	Blasia S 320
ARAL	Degol BG 150 Plus	Degol BG 220 Plus	Degol BG 320 Plus	Degol PAS 150	Degol PAS 220	Degol PAS 320	Degol GS 150	Degol GS 220	Degol GS 320
BP	Energol GR-XP 150	Energol GR-XP 220	Energol GR-XP 320	Energol EPX 150	Energol EPX 220	Energol EPX 320	Energol SG 150	Energol SG-XP 220	Energol SG-XP 320
CASTROL	Alpha SP 150	Alpha SP 220	Alpha SP 320	Alphasyn EP 150	Alphasyn EP 220	Alphasyn EP 320	Alphasyn PG 150	Alphasyn PG 220	Alphasyn PG 320
CHEVRON	Ultra Gear 150	Ultra Gear 220	Ultra Gear 320	Tegra Synthetic Gear 150	Tegra Synthetic Gear 220	Tegra Synthetic Gear 320	HiPerSYN 150	HiPerSYN 220	HiPerSYN 320
ESSO	Spartan EP 150	Spartan EP 220	Spartan EP 320	Spartan S EP 150	Spartan S EP 220	Spartan S EP 320	Glycolube 150	Glycolube 220	Glycolube 320
KLÜBER	Klüberoil GEM 1-150	Klüberoil GEM 1-220	Klüberoil GEM 1-320	Klübersynth EG 4-150	Klübersynth EG 4-220	Klübersynth EG 4-320	Klübersynth GH 6-150	Klübersynth GH 6-220	Klübersynth GH 6-320
MOBIL	Mobilgear XMP 150	Mobilgear XMP 220	Mobilgear XMP 320	Mobilgear SHC XMP 150	Mobilgear SHC XMP 220	Mobilgear SHC XMP 320	Glygoyle 22	Glygoyle 30	Glygoyle HE320
MOLIKOTE	L-0115	L-0122	L-0132	L-1115	L-1122	L-1132	-	-	-
OPTIMOL	Optigear BM 150	Optigear BM 220	Optigear BM 320	Optigear Synthetic A 150	Optigear Synthetic A 220	Optigear Synthetic A 320	Optiflex A 150	Optiflex A 220	Optiflex A 320
Q8	Goya 150	Goya 220	Goya 320	El Greco 150	El Greco 220	El Greco 320	Gade 150	Gade 220	Gade 320
SHELL	Omala 150	Omala 220	Omala 320	Omala HD 150	Omala HD 220	Omala HD 320	Tivela S 150	Tivela S 220	Tivela S 320
TEXACO	Meropa 150	Meropa 220	Meropa 320	Pinnacle EP 150	Pinnacle EP 220	Pinnacle EP 320	-	Synlube CLP 220	Synlube CLP 320
TOTAL	Carter EP 150	Carter EP 220	Carter EP 320	Carter SH 150	Carter SH 220	Carter SH 320	Carter SY 150	Carter SY 220	Carter SY 320
TRIBOL	1100/150	1100/220	1100/320	1510/150	1510/220	1510/320	800/150	800/220	800/320

Lubrificanti sintetici per uso alimentare / Food-grade synthetic lubricants / Schmiermittel Synthetik für Lebensmittelbereich

AGIP				Rocol Foodlube Hi-Torque 150	—	Rocol Foodlube Hi-Torque 320			
ESSO				—	Gear Oil FM 220	—			
KLÜBER				Klüberoil 4 UH1 N 150	Klüberoil 4 UH1 N 220	Klüberoil 4 UH1 N 320			
MOBIL				DTE FM 150	DTE FM 220	DTE FM 320			
SHELL				Cassida Fluid GL 150	Cassida Fluid GL 220	Cassida Fluid GL 320			

Se la temperatura ambiente $T < 0^{\circ}\text{C}$ ridurre di una gradazione la viscosità prevista in tabella, viceversa aumentarla di una se $T > 40^{\circ}\text{C}$.

Le temperature ammissibili per gli oli minerali sono:
(-10 = $T = 90$) $^{\circ}\text{C}$ (fino a 100 $^{\circ}\text{C}$ per periodi limitati).

Le temperature ammissibili per gli oli sintetici sono:
(-20 = $T = 110$) $^{\circ}\text{C}$ (fino a 120 $^{\circ}\text{C}$ per periodi limitati).

Per temperature dell'olio esterne a quelle ammissibili per il minerale e per aumentare l'intervallo di sostituzione del lubrificante adottare olio sintetico a base di polialfaolefine.

If the environment temperature $T < 0^{\circ}\text{C}$, decrease viscosity class by one, vice versa increase by one if $T > 40^{\circ}\text{C}$.

Permissible temperatures for mineral oil are:

(-10 = $T = 90$) $^{\circ}\text{C}$, up to 100 $^{\circ}\text{C}$ for a short time.

Permissible temperatures for synthetic oil are:
(-20 = $T = 110$) $^{\circ}\text{C}$, up to 120 $^{\circ}\text{C}$ for a short time.

If the oil temperature is not permissible for mineral oil and for decreasing frequency of oil change, use synthetic oil with polyalphaolefins (PAOs).

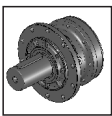
Bei einer Umgebungstemperatur $T < 0^{\circ}\text{C}$ den von der Tabelle vorgesehenen Viskositätsgrad um eine Gradation mindern und, im entgegengesetzten Fall, bei einer Temperatur $T > 40^{\circ}\text{C}$, um eine anheben.

Für Mineralöle zulässige Temperaturen:

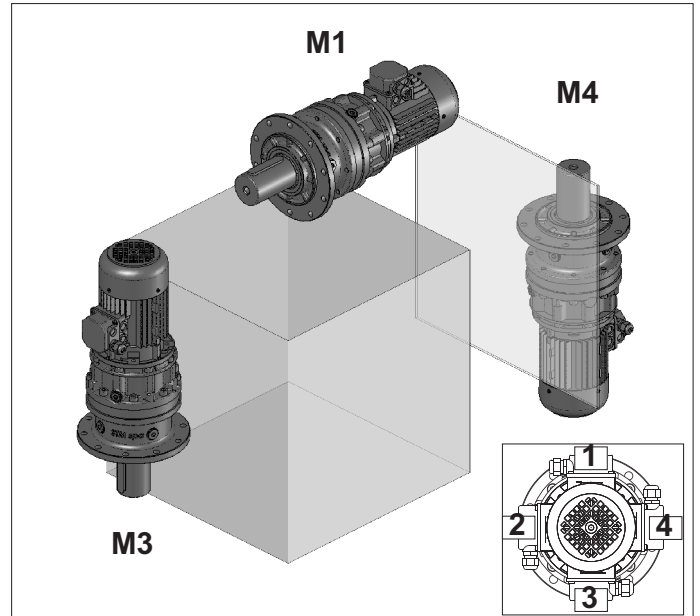
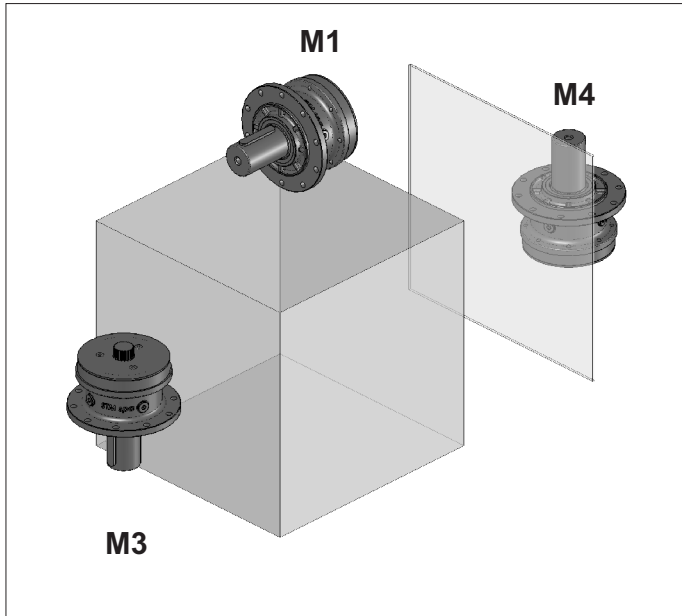
(-10 = $T = 90$) $^{\circ}\text{C}$ (bis 100 $^{\circ}\text{C}$ über begrenzte Zeiträume).

Für Synthetiköle zulässige Temperaturen:
(-20 = $T = 110$) $^{\circ}\text{C}$ (bis 120 $^{\circ}\text{C}$ über begrenzte Zeiträume).

Bei Temperaturen, die diese für Mineralöle zulässigen Werte überschreiten und um die Auswechselzeiten verlängern zu können, sollte Synthetiköl auf Basis von Polyalphaolefinen verwendet werden.



R - M - H - F - FC - FU - FB - FS - FP



M1	M2	M3	M4	M5	M6

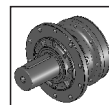
N.B. schema rappresentativo anche per 2 , 3 e 4 stadi

▽ Carico / *Breather plug* / Einfüll-u. Entlüftungsschraube

▼ Livello / *Level plug* / Schauglas

● Scarico / *Drain plug* / Ablassschraube

⊕ Sfiato / *Vent plug* / Entlüftungsstopfen



Quantità di lubrificante / Lubricant quantity / Schmiermittelmenge [Kg]																
								Posizione di montaggio Mounting position Einbaulage						Stato di fornitura State of supply Lieferzustand	N° tappi No. of plugs Anzahl Betriebschraubei	Posizione di montaggio Mounting position Montageposition
			R F FC FU FB	H	M	FS	FP	M1	M2	M3	M4	M5	M6			
EX	10	101												Riduttori predisposti per lubrificazione ad olio* Gearboxes supplied ready for oil lubrication Getriebe sind für Ölschmierung vorgesehen	---	Necessaria Necessary Erforderlich
		102														
		103														
		104														
	20	201														
		202														
		203														
		204														
	25	251														
		252														
		253														
		254														
	30	301														
		302														
		303														
		304														
	40	402														
		403														
		404														
	50	501														
		502														
		503														
		504														
	70	701														
		702														
		703														
		704														
	800	801														
		802														
		803														
		804														
	90	902														
		903														
		904														
	100	1001														
		1002														
		1003														
		1004														
	150	1501														
		1502														
		1503														
		1504														
	180	1802														
		1802														
		1803														
	250	2501														
		2502														
		2503														
2504																
280	2802															
	2803															
	2804															

Riduttori predisposti per
lubrificazione ad olio*
Gearboxes supplied
ready for oil lubrication
Getriebe sind für
Ölschmierung
vorgesehen

Necessaria
Necessary
Erforderlich

Le quantità di olio sono approssimative; per una corretta lubrificazione occorre fare riferimento al livello segnato sul riduttore.

Oil quantities listed in the table are approximate; to ensure correct lubrication, please refer to the level mark on the gear unit.

Bei den Ölmengenangaben handelt es sich um approximative Werte; für den Erhalt einer korrekten Schmierung muss Bezug auf den am Getriebe gekennzeichneten Füllstand genommen werden.

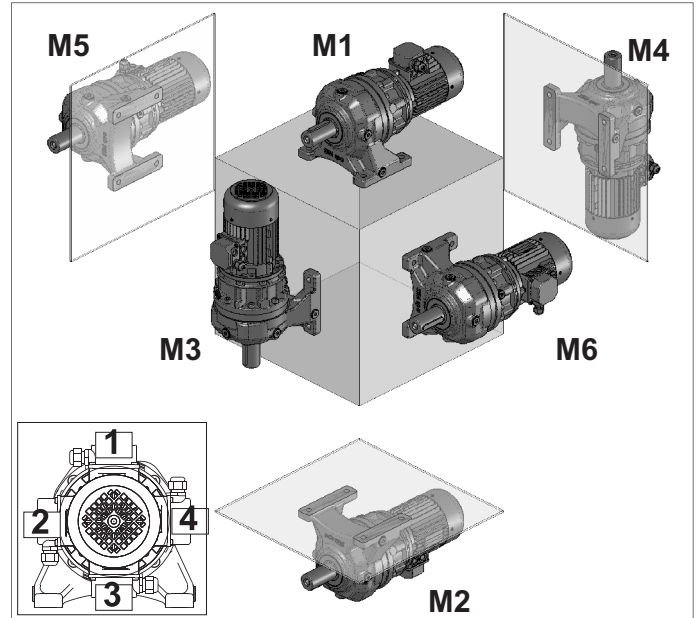
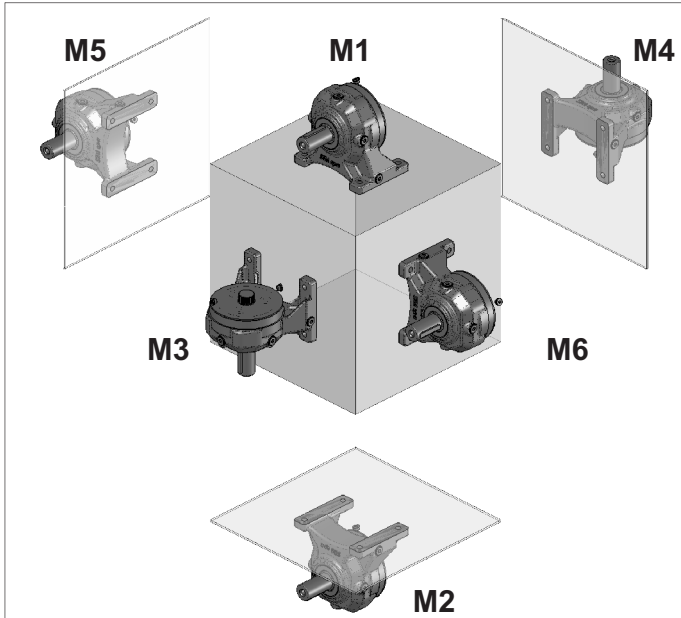
*Su richiesta possono essere forniti completi di lubrificante sintetico del tipo **Tivela Oil S320 (Shell)**.

*On request they can be supplied oil filled with synthetic lubricant 0 by **Tivela Oil S320 (Shell)**.

*Auf Anfrage können Sie mit synthetischem Öl **Typ Tivela Oil S320 (Shell)** geliefert werden.



P



M1	M2	M3	M4	M5	M6

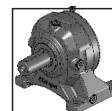
N.B. schema rappresentativo anche per 2 , 3 e 4 stadi

▽ Carico / *Breather plug* / Einfüll-u. Entlüftungsschraube

▼ Livello / *Level plug* / Schauglas

● Scarico / *Drain plug* / Ablassschraube

○ Sfiato / *Vent plug* / Entlüftungstopfen



Quantità di lubrificante / Lubricant quantity / Schmiermittelmenge [Kg]									
			Posizione di montaggio Mounting position Einbaulage						Stato di fornitura State of supply Lieferzustand
			P	M1	M2	M3	M4	M5	
EX	10	101							Riduttori predisposti per lubrificazione ad olio* Gearboxes supplied ready for oil lubrication Getriebe sind für Ölschmierung vorgesehen
		102							
		103							
		104							
	20	201							
		202							
		203							
		204							
	25	251							
		252							
		253							
		254							
	30	301							
		302							
		303							
		304							
	40	402							
		403							
		404							
	50	501							
		502							
		503							
		504							
	70	701							
		702							
		703							
		704							
	800	801							
		802							
		803							
		804							
	90	902							
		903							
		904							
	100	1001							
		1002							
		1003							
		1004							
	150	1501							
		1502							
		1503							
		1504							
	180	1802							
		1802							
		1803							
	250	2501							
		2502							
		2503							
		2504							
	280	2802							
		2803							
		2804							

Necessaria
Necessary
Erforderlich

Le quantità di olio sono approssimative; per una corretta lubrificazione occorre fare riferimento al livello segnato sul riduttore.

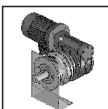
Oil quantities listed in the table are approximate; to ensure correct lubrication, please refer to the level mark on the gear unit.

Bei den Ölmengenangaben handelt es sich um approximative Werte; für den Erhalt einer korrekten Schmierung muss Bezug auf den am Getriebe gekennzeichneten Füllstand genommen werden.

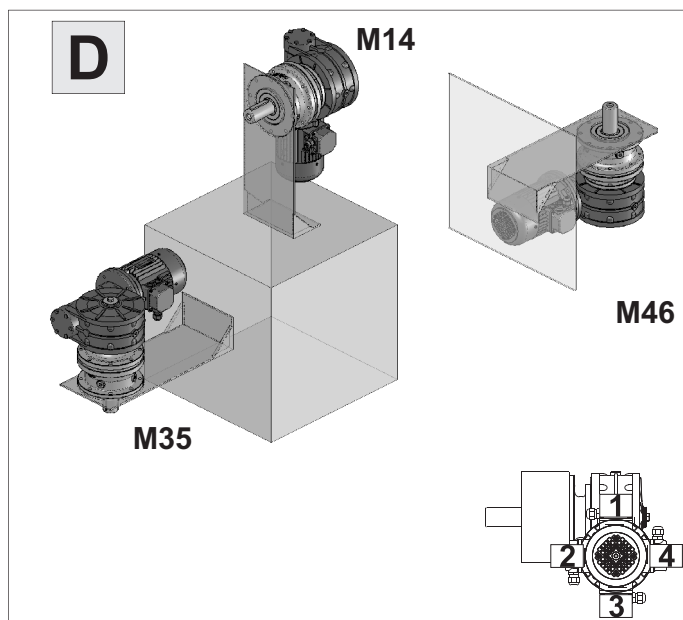
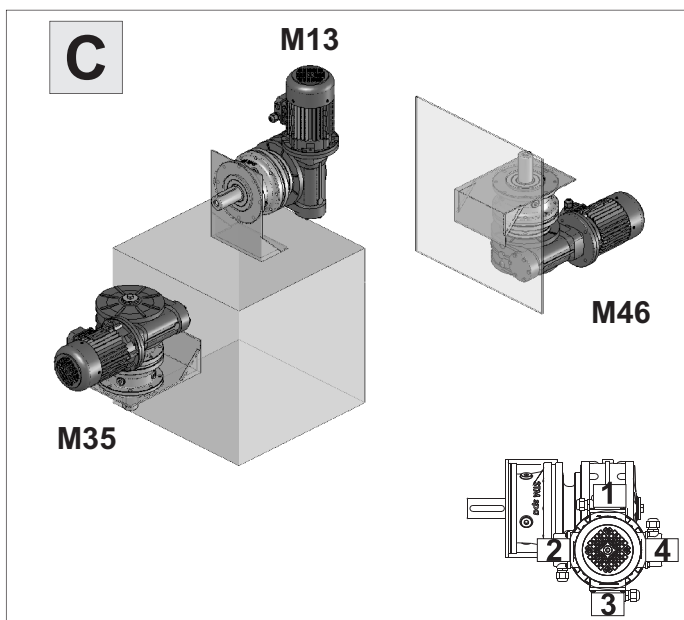
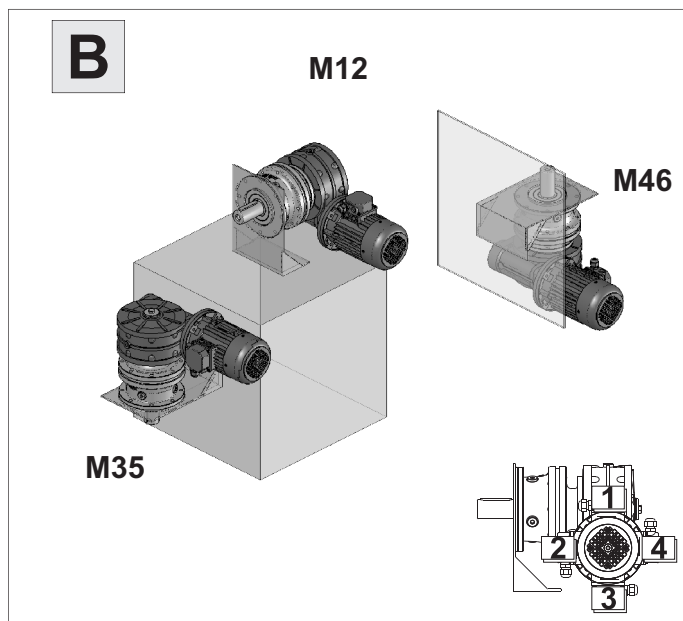
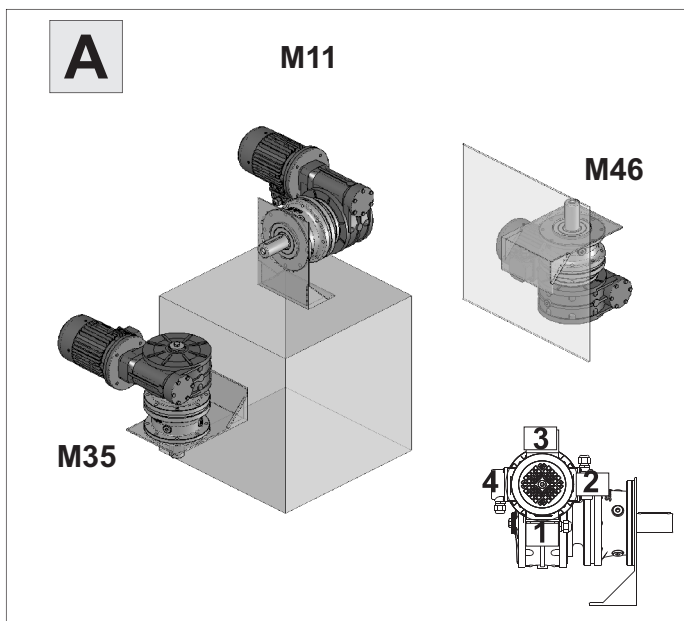
*Su richiesta possono essere forniti completi di lubrificante sintetico del tipo **Tivela Oil S320 (Shell)**.

*On request they can be supplied oil filled with synthetic lubricant 0 by **Tivela Oil S320 (Shell)**.

*Auf Anfrage können Sie mit synthetischem Öl **Typ Tivela Oil S320 (Shell)** geliefert werden.



R - M - H - F - FC - FS - FP



M11	M12	M13	M14	M35	M46

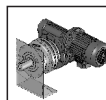
N.B. schema rappresentativo anche per 2 , 3 e 4 stadi

▽ Carico / Breather plug / Einfüll-u. Entlüftungsschraube

▼ Livello / Level plug / Schauglas

● Scarico / Drain plug / Ablassschraube

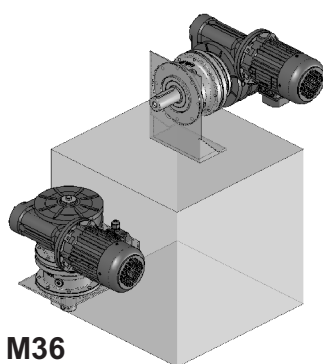
☺ Sfiato / Vent plug / Entlüftungsstopfen



R - M - H - F - FC - FS - FP

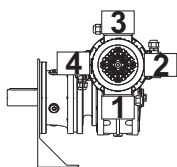
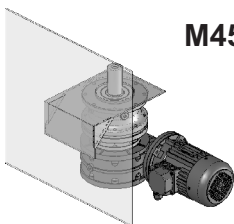
L

M11



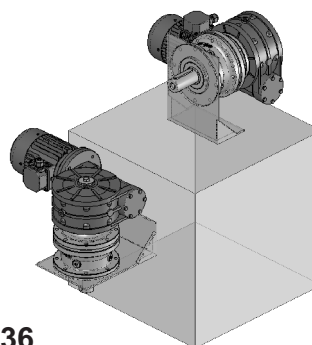
M36

M45



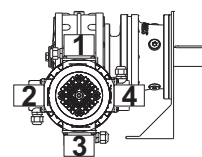
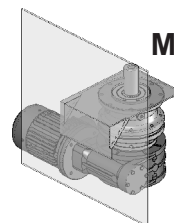
M

M12



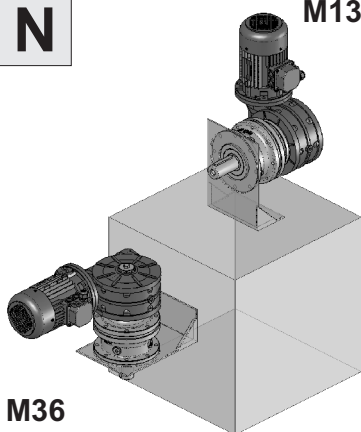
M36

M45



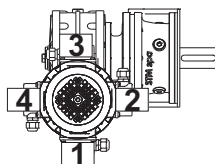
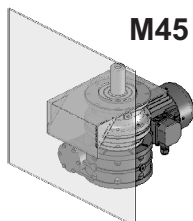
N

M13



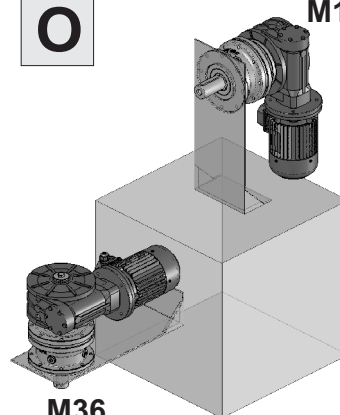
M36

M45



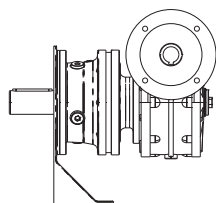
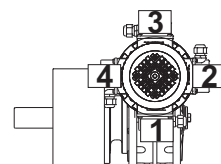
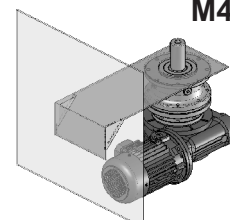
O

M14

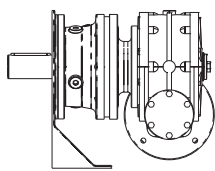


M36

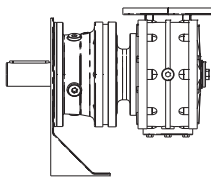
M45



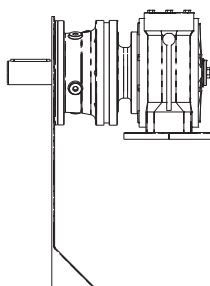
M11



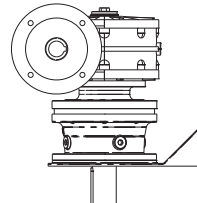
M12



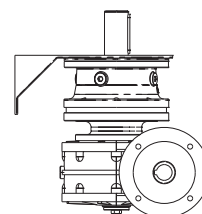
M13



M14



M36



M45

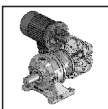
N.B. schema rappresentativo anche per 2 , 3 e 4 stadi

▽ Carico / Breather plug / Einfüll-u. Entlüftungsschraube

▼ Livello / Level plug / Schauglas

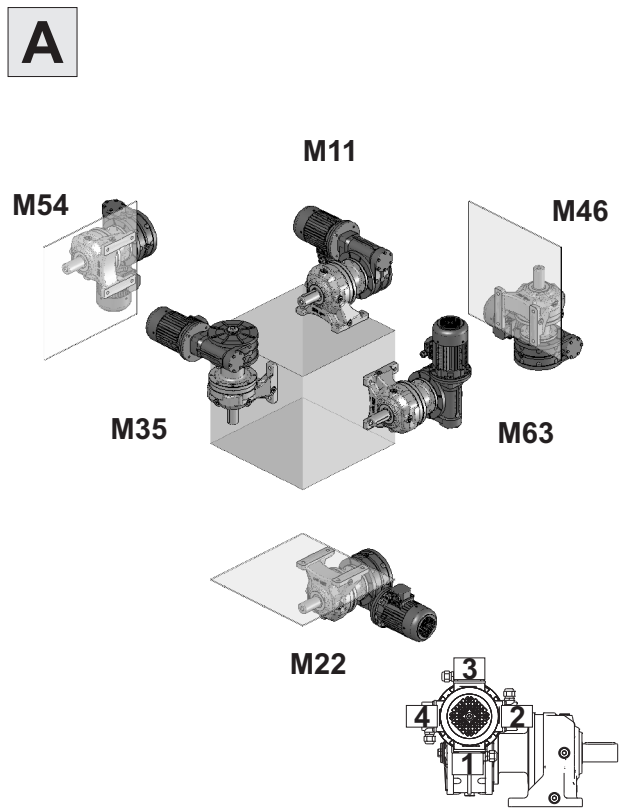
● Scarico / Drain plug / Ablassschraube

☺ Sfiato / Vent plug / Entlüftungstopfen

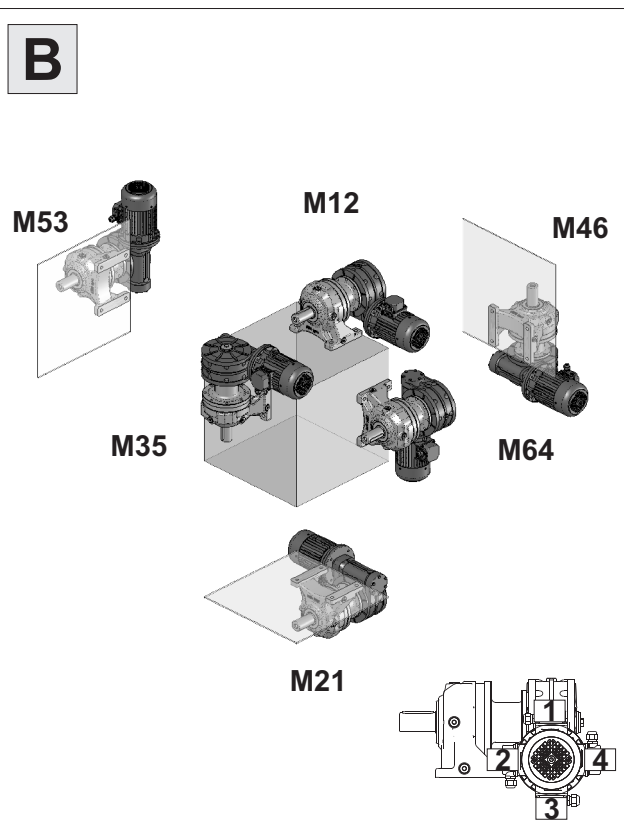


P

M11	M22	M35
M46	M54	M63



M12	M21	M35
M46	M53	M64



N.B. schema rappresentativo anche per 2 , 3 e 4 stadi

▽ Carico / Breather plug / Einfüll-u. Entlüftungsschraube

▼ Livello / Level plug / Schauglas

● Scarico / Drain plug / Ablassschraube

☰ Sfiato / Vent plug / Entlüftungsstopfen



P

M13	M24	M35
M46	M51	M62

C

M51

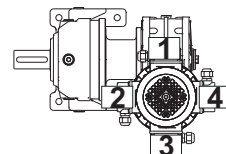
M13

M46

M35

M62

M24



M14	M23	M35
M46	M52	M61

D

M52

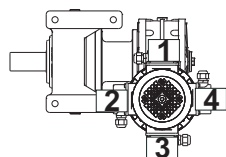
M14

M46

M35

M61

M23



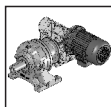
N.B. schema rappresentativo anche per 2 , 3 e 4 stadi

▽ Carico / *Breather plug* / Einfüll-u. Entlüftungsschraube

▼ Livello / *Level plug* / Schauglas

● Scarico / *Drain plug* / Ablassschraube

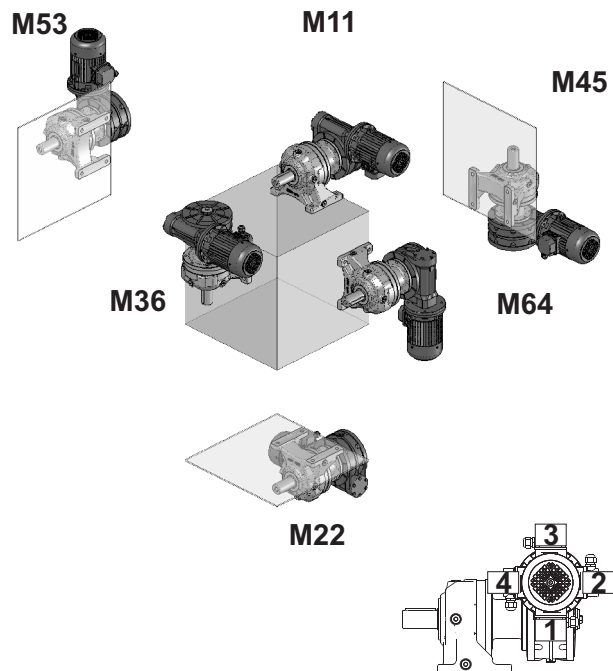
⊕ Sfiato / *Vent plug* / Entlüftungsstopfen



P

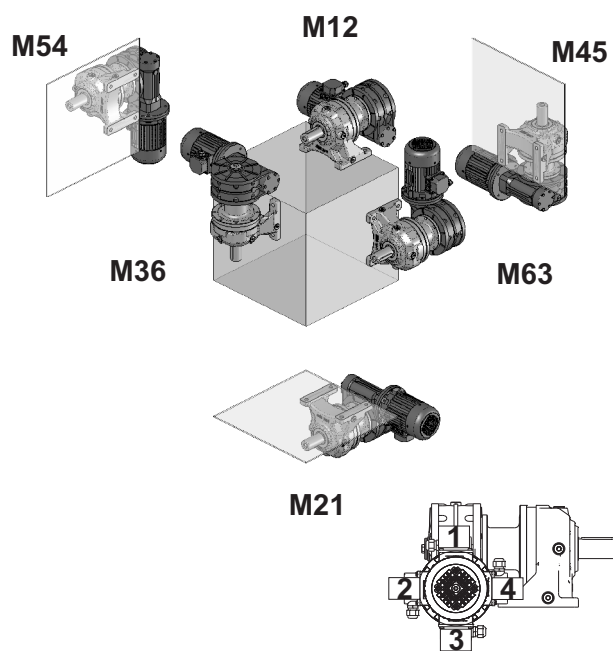
M11	M22	M36
M45	M53	M64

L



M12	M21	M36
M45	M54	M63

M



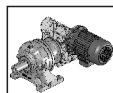
N.B. schema rappresentativo anche per 2 , 3 e 4 stadi

▽ Carico / *Breather plug* / Einfüll-u. Entlüftungsschraube

▼ Livello / *Level plug* / Schauglas

● Scarico / *Drain plug* / Ablassschraube

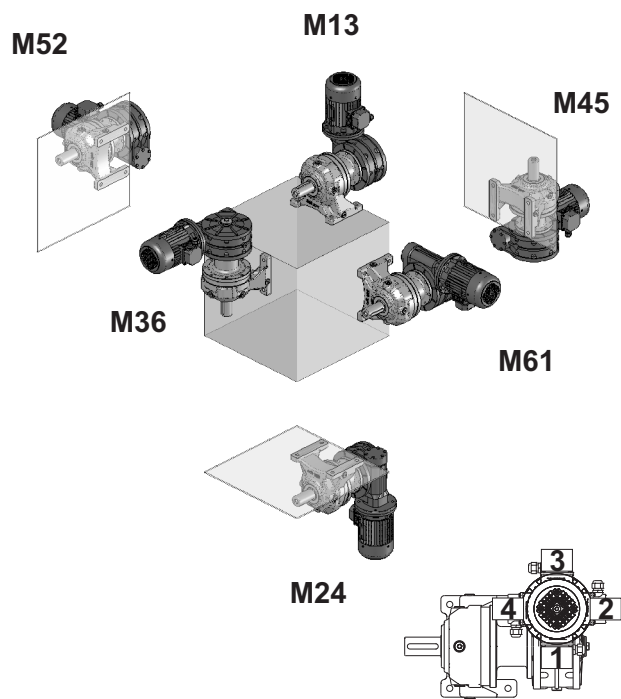
☺ Sfiato / *Vent plug* / Entlüftungsstopfen



P

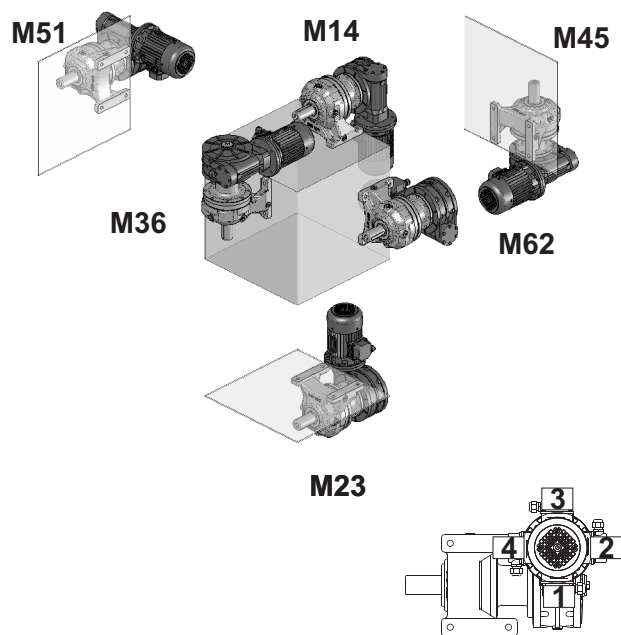
M13	M24	M36
M45	M52	M61

N



M14	M23	M36
M45	M51	M62

O



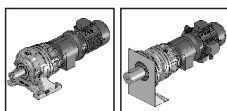
N.B. schema rappresentativo anche per 2 , 3 e 4 stadi

▽ Carico / Breather plug / Einfüll-u. Entlüftungsschraube

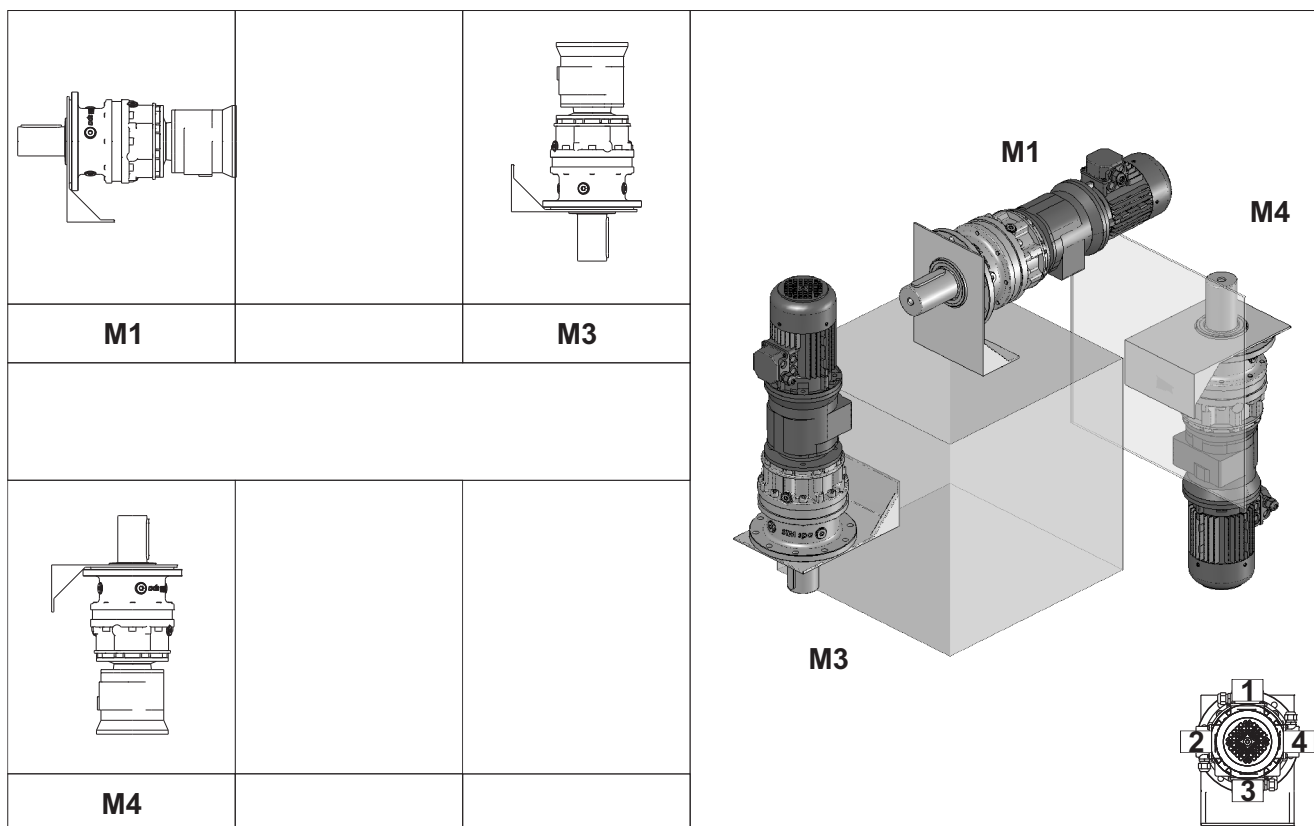
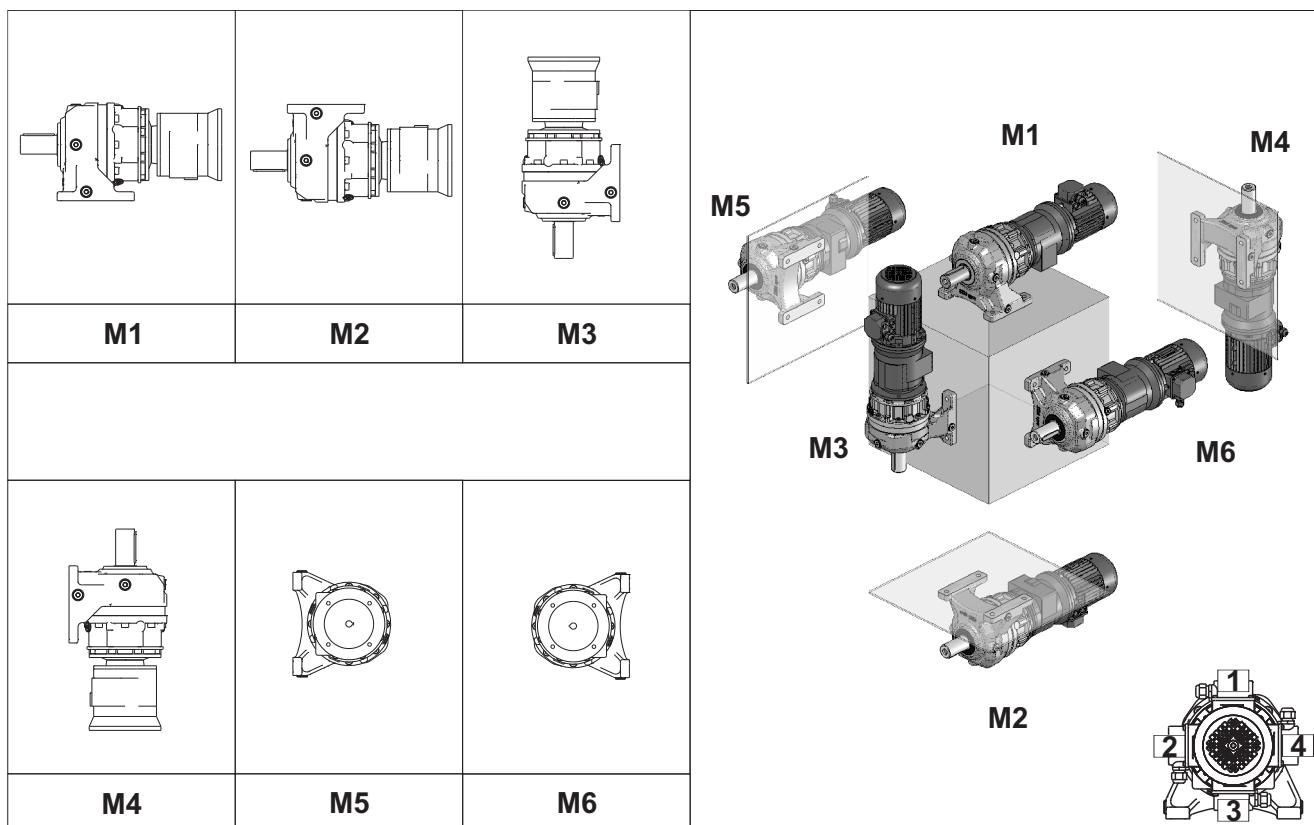
▼ Livello / Level plug / Schauglas

● Scarico / Drain plug / Ablassschraube

☹ Sfiato / Vent pung / Entlüftungsstopfen



P - R - M - H - F - FC - FU - FB - FS - FP



N.B. schema rappresentativo anche per 2, 3 e 4 stadi

▽ Carico / Breather plug / Einfüll-u. Entlüftungsschraube

▼ Livello / Level plug / Schauglas

● Scarico / Drain plug / Ablassschraube

☹ Sfiato / Vent plug / Entlüftungsstopfen



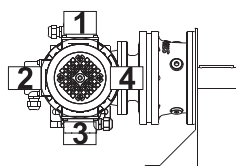
R - M - H - F - FC - FU - FB - FS - FP

A

M11

M46

M35

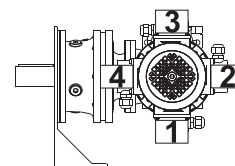


B

M12

M46

M35

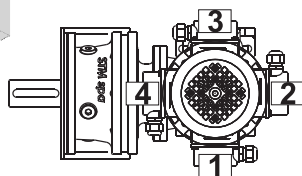


C

M13

M46

M35

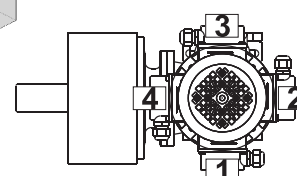


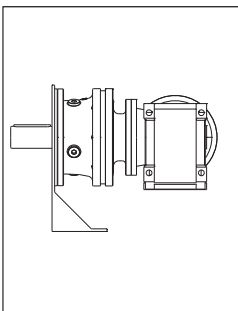
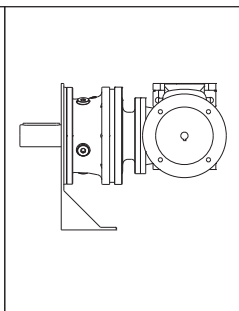
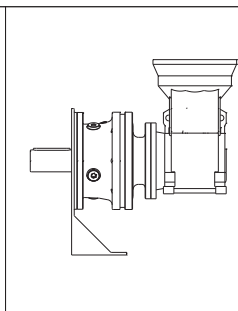
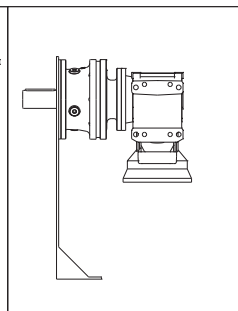
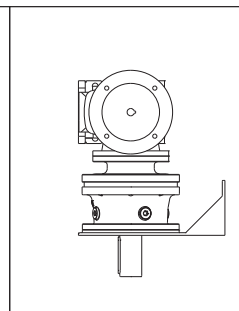
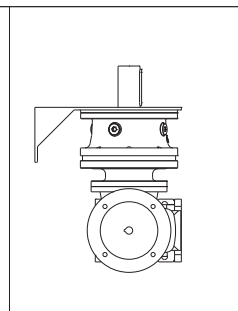
D

M14

M46

M35



					
M11	M12	M13	M14	M35	M46

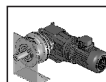
N.B. schema rappresentativo anche per 2, 3 e 4 stadi

▽ Carico / Breather plug / Einfüll-u. Entlüftungsschraube

▼ Livello / Level plug / Schauglas

● Scarico / Drain plug / Ablassschraube

☼ Sfiato / Vent plug / Entlüftungsstopfen



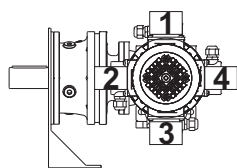
R - M - H - F - FC - FU - FB - FS - FP

L

M11

M45

M36

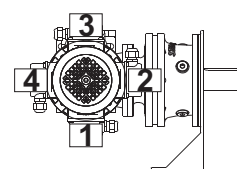


M

M12

M45

M36

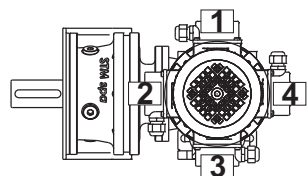


N

M13

M45

M36

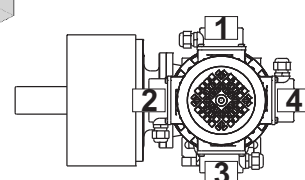


O

M14

M45

M36



M11	M12	M13	M14	M36	M45

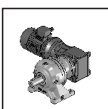
N.B. schema rappresentativo anche per 2, 3 e 4 stadi

▽ Carico / *Breather plug* / Einfüll-u. Entlüftungsschraube

▼ Livello / *Level plug* / Schauglas

● Scarico / *Drain plug* / Ablassschraube

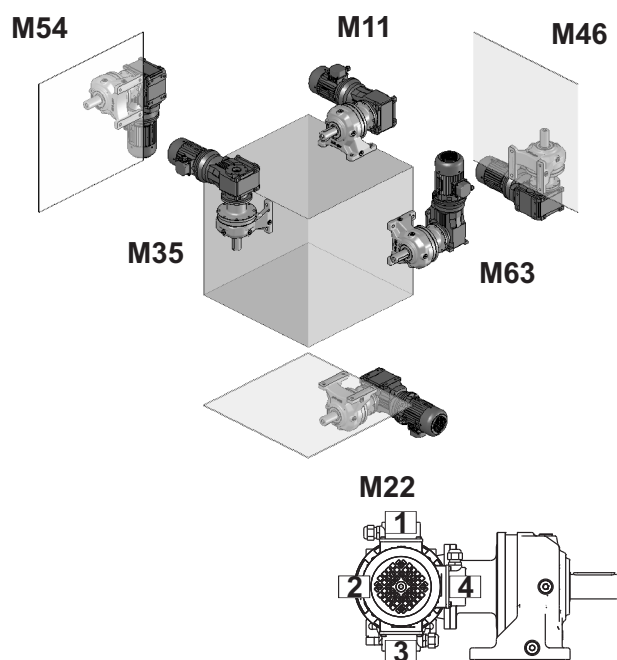
☺ Sfiato / *Vent pung* / Entlüftungsstopfen



P

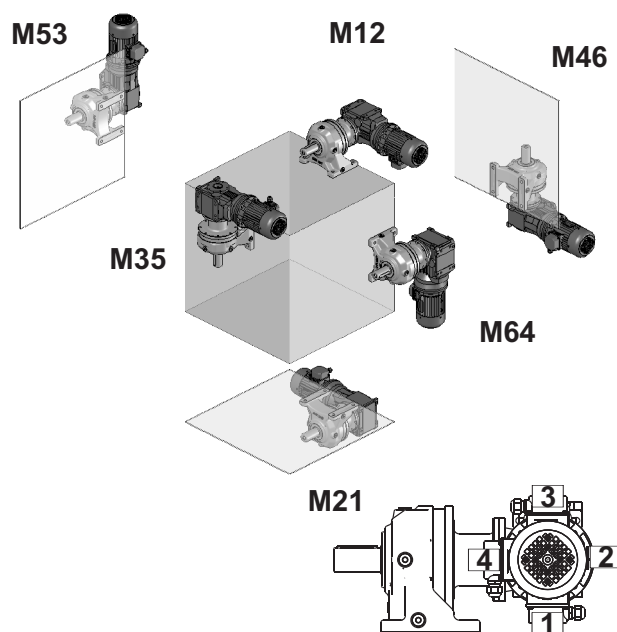
M11	M22	M35
M46	M54	M63

A



M12	M21	M35
M46	M53	M64

B



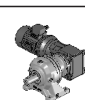
N.B. schema rappresentativo anche per 2 , 3 e 4 stadi

▽ Carico / Breather plug / Einfüll-u. Entlüftungsschraube

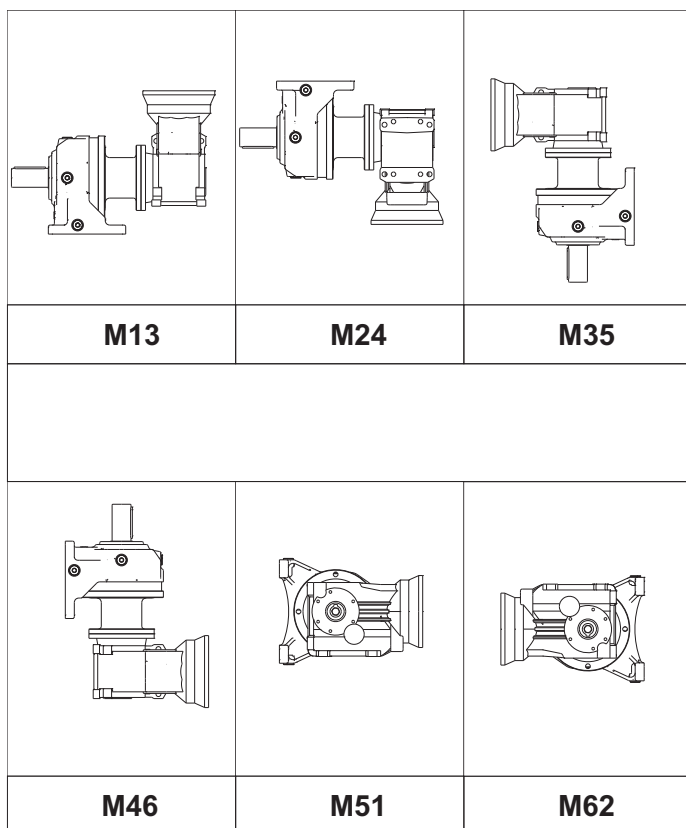
▼ Livello / Level plug / Schauglas

● Scarico / Drain plug / Ablassschraube

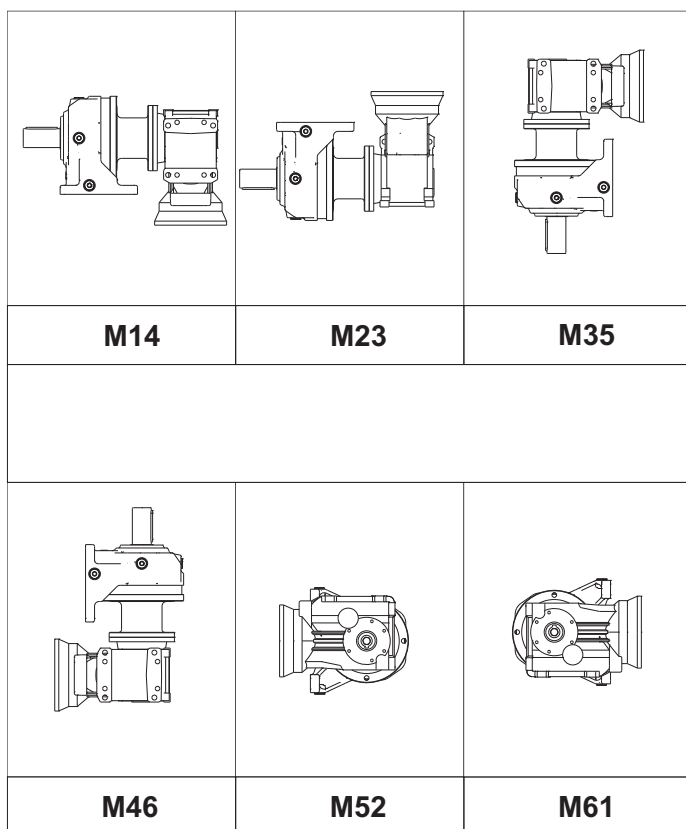
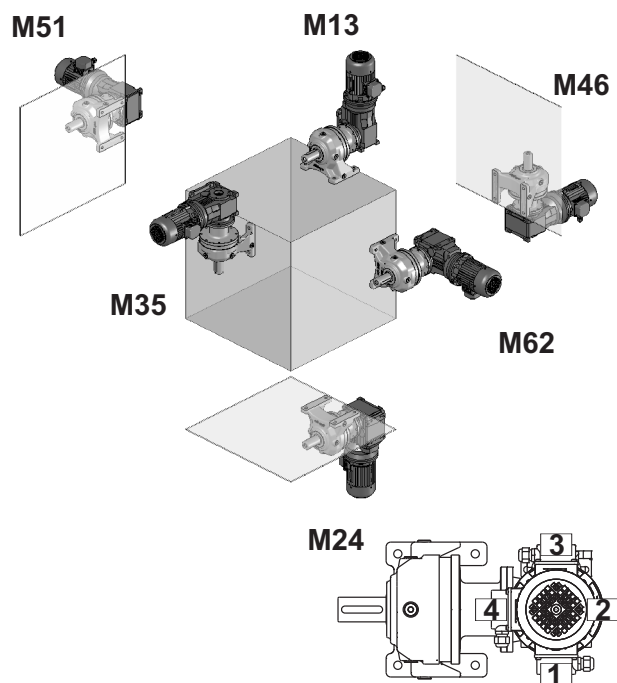
☺ Sfiato / Vent pung / Entlüftungsstopfen



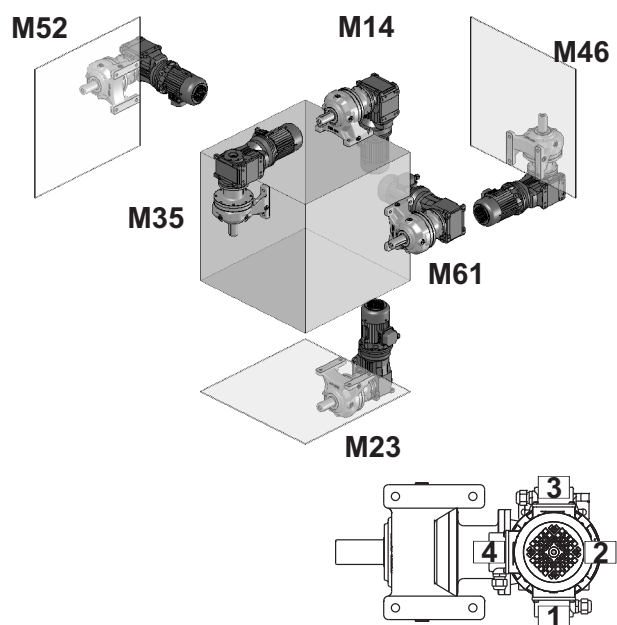
P



C



D



N.B. schema rappresentativo anche per 2 , 3 e 4 stadi

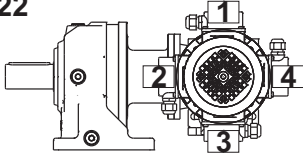
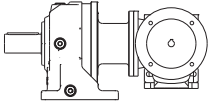
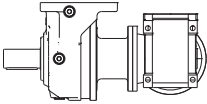
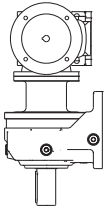
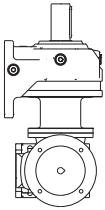
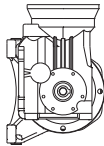
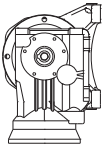
▽ Carico / *Breather plug* / Einfüll-u. Entlüftungsschraube

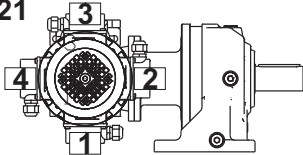
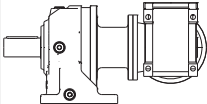
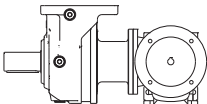
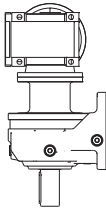
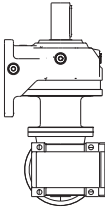
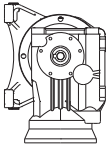
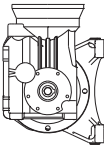
▼ Livello / *Level plug* / Schauglas

● Scarico / *Drain plug* / Ablassschraube

☺ Sfiato / *Vent plug* / Entlüftungsstopfen

P

L			M53 M11 M45 M36 M64 M22 		
					
M11	M22	M36			
					
M45	M53	M64			

M			M54 M12 M45 M36 M63 M21 		
					
M12	M21	M36			
					
M45	M54	M63			

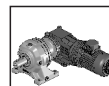
N.B. schema rappresentativo anche per 2 , 3 e 4 stadi

- ▽

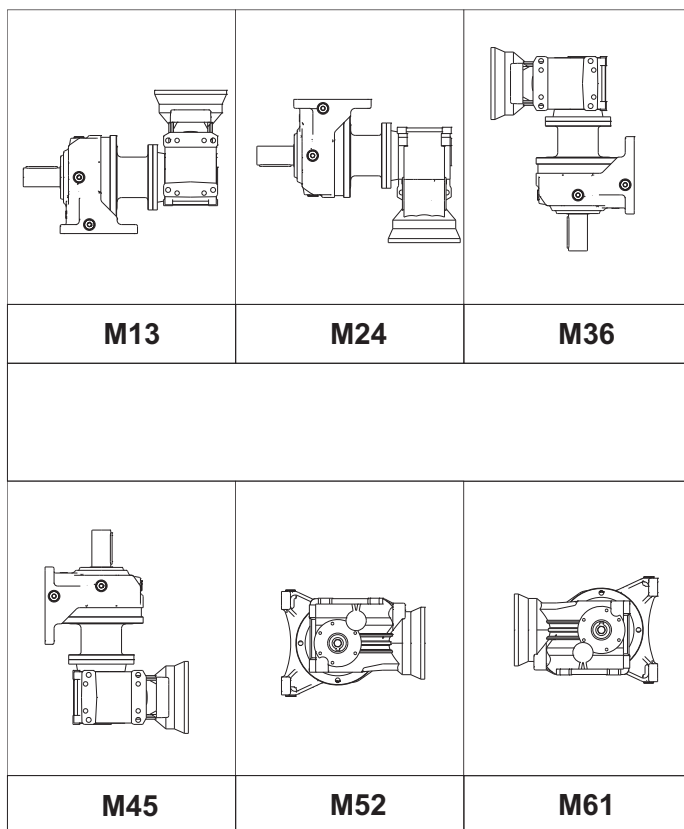
Carico / Breather plug / Einfüll-u. Entlüftungsschraube
- ▼

Livello / Level plug / Schauglas
- Scarico / Drain plug / Ablassschraube
- ⊕

Sfiato / Vent pung / Entlüftungsstopfen



P



N

M52

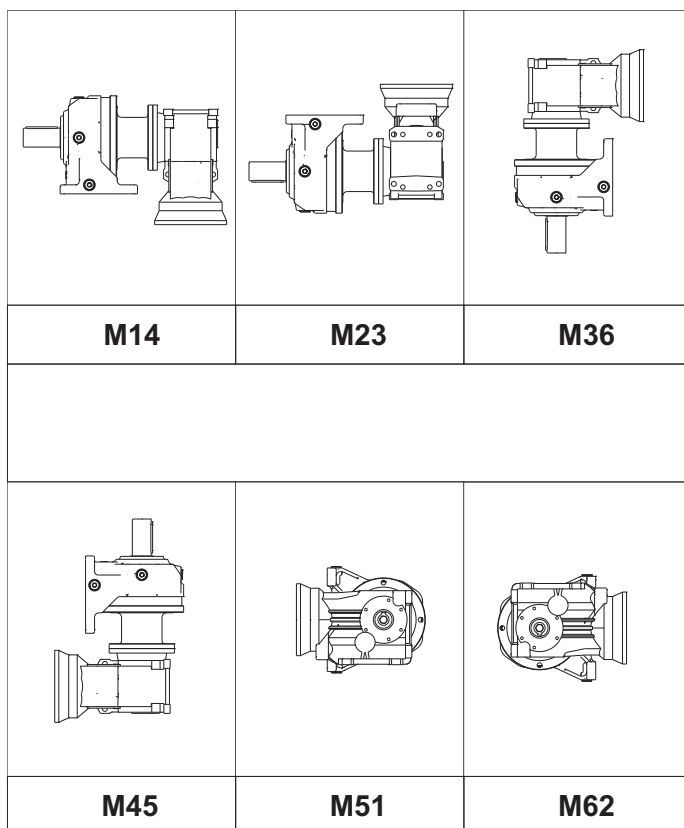
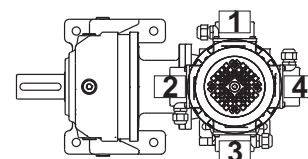
M13

M45

M36

M61

M24



O

M51

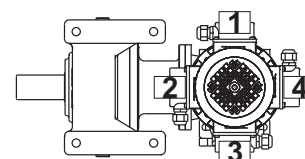
M14

M45

M36

M62

M23



N.B. schema rappresentativo anche per 2, 3 e 4 stadi

▽ Carico / Breather plug / Einfüll-u. Entlüftungsschraube

▼ Livello / Level plug / Schauglas

● Scarico / Drain plug / Ablassschraube

☺ Sfiato / Vent plug / Entlüftungsstopfen