



05 - Materials - technical features

- Elastomer and plastic materials table
- Grease - technical specifications
- Lubricants for machine tools
- Recommended oils for pneumatic circuits

ELASTOMER AND PLASTIC MATERIALS

CODE (According to ISO 1629)	Working temperature	Chemical description
ELASTOMERS		
EPDM	-40°C ÷ +100°C	ethylene propylene diene monomer
FFPM - FFKM	-5°C ÷ +200°C	Elastomero perfluorurato
FPM - FKM	-5°C ÷ +150°C	Fluoro rubber
HNBR	-5°C ÷ +120°C	Hydrogenated acrylonitrile butadiene
NBR	-5°C ÷ +70°C	Nitrile rubber
PUR	-30°C ÷ +80°C	Polyurethan
EU	-30°C ÷ +80°C	Injection molding polyurethan
PLASTIC MATERIALS		
PTFE	-150°C ÷ +200°C	Polytetrafluoroethylene
POM	-40°C ÷ +110°C	Acetalic resin
PA	-40°C ÷ +120°C	Polyamide (Nylon)
PC	-100°C ÷ +130°C	Polycarbonate
PBT	-40°C ÷ +130°C	Polybutylene terephthalate

GREASE SPECIFICATIONS

Polymer 400

Mineral grease fluorinated with PTFE that fills the microasperity of metallic surfaces to the molecular level, preceding metal-metal contact and so reducing operating temperature, friction and the wear. Green coloured, soft, and adhesive. Has excellent washout resistance, operating temperature from -20°C to +160°C.

Excellent adhesive properties make the grease extremely long lasting.

Producer: Oil Center research-USA, distributor tecnolubeseal-Italia.

Used on valves; cylinders series 1380-1600(Ø25-32-40), guided compact cylinders series 6100 and 6200 series slide units.

Molycote PG 54

Silicon based grease with lithium thickener.

White-pink coloured, soft, water resistant, operating temperature from -50°C to +180°C.

Low friction coefficient makes this grease suitable for applications where good sliding properties are requested.

Good adhesive properties make the grease long lasting.

Producer: Down Corning Corporation-USA

Normally used on "LOW FRICTION" cylinder series 1319-1380-1280.

Molycote 111

Dimethyl silicone based grease with inorganic thickener. Has a heavy-consistency (class 2 & 3) which makes it suitable for low speed applications where a smooth movement is required

Temperature range from -40°C to +200°C with good resistance to water. Very good adhesive properties; extremely long lasting.

Producer: Down Corning Corporation-USA. Normally used on rodless cylinder series 1600 Ø50-63 and on slow speed applications.

Paraliq GA 351

Paraffin oil based grease with silver soap thickener. Adhesive, with a temperature range from -40 to 120°C. Suitable for food applications, is a medium lasting grease. Producer: Klüber Lubrication - Germany

Berlub FR B

Synthetic based mineral grease with special lithium soap thickener. Resistant to water, both hot and cold, to steam and detergents. Very good adhesive properties, rust preventing capabilities, temperature range from -50 to +140°C.

Long lasting grease ideal for low temperature applications improves sliding properties of elastomers on steel and non ferrous materials

Producer: Bechem.

Used on low temperature applications.

Turtemp II/400RS 2

Mineral grease white colour, pasty and smooth with perfluoric thickener.

Temperature range from -30°C to +260°C

Compatible with all materials (it is recommended to clean all surfaces before applying the grease in order to increase adhesivity and performance) prevents electrostatic charges build up.

Producer: Lubcon-Germania.

Suitable for oxygen and medical applications

TABLE OF THE SYMBOLS OF UNI 7164 AND ISO 3498 STANDARDS
IN CORRESPONDENCE WITH THE LUBRICANTS OF THE COMPANY LISTED

CLASSE	SIMBOLI ISO E UNI	CAMPO DI APPLICAZ.	Agip	api	ARAL	ARCO	barelli	bellini	BERGOLINE	BP	BRYTOL INDUSTRIAL OILS	Castrol
A	AM 68	LUBRIFIC. A PERDITA	RAVULA 68 ACER 68	API MF-68	ARAL DURAL MR 68	GASCON 68	MIN 68	TRANSMISSION 68	ACCA 68	M 68	T R M 68	MAGNA 68
	CB 32	INGRANAGGI MODERATA CARICATI	ACER 32	API MI-32 API CS-32	ARAL DURAL MR 46 ARAL VITAM EF 32	RUBILENE 32	N7/AOS 32	SPRINTER AS 32	BERGOLUID 32	ENERGOL HP 32	CM 32	MAGNA 32
	CB 68		ACER 68	API MF-68 API CS-68	ARAL DURAL MR 68 ARAL VITAM GF 68	RUBILENE 68	N7/AOS 68	SPRINTER AS 68	BERGOLUID 68	ENERGOL HP 68	CM 68	MAGNA 68
C	CB 150		ACER 150	API MF-150 API CS-150	ARAL DURAL MR 150 ARAL DECOL TU 150	RUBILENE 150	N7/AOS 150	SPRINTER AS 150	BERGOLUID 150	ENERGOL CS 150	CM 150	MAGNA 150
	CC 150	INGRANAGGI MOLTO CARICATI	BLASIA 150	API DT-150	ARAL DECOL BG 150	PENNANT NL 150	G.E.P. 150	RED R4 150	BERGOLIED EP 150	ENERGOL GR-XP 150	DENTOL EP 150	ALPHA SP 150
	CC 320		BLASIA 320	API DT-320	ARAL DECOL BG 320	PENNANT NL 320	G.E.P. 320	RED R4 320	BERGOLIED EP 320	ENERGOL GR-XP 320	ALPHA SP 320	DENTOL EP 320
F	FB 5	MACCHINE CUSCINETTI E FRIZIONI ACCOPPATE	BLASIA 450	API DT-460	ARAL DECOL BG 460	PENNANT NL 460	G.E.P. 460	RED R4 460	BERGOLIED EP 460	ENERGOL GR-XP 460	DENTOL EP 460	ALPHA SP 460
	FB 10		OSD 10	API CS-5	ARAL DURAL SR 5	DURO OIL 10	VELDS A 10	SPRINTER ADPV 5	ENERGOL HP 5	ENERGOL HP 5	MOVOL 5	MAGNA AB 5
G	G 32	GUIDE	OSD 15	API CS-10	ARAL DURAL SR 10	DURO OIL 10	VELDS A 10	SPRINTER ADPV 10	BERGOSPIN 10	ENERGOL HP 10	MOVOL 10	HYSPIN AWS 10
	G 68		OSD 68	API CS-22	ARAL DURAL SR 22	DURO OIL 22	TIARDO 22	SPRINTER ADPV 22	BERGOSPIN 22	ENERGOL HP 22	MOVOL 22	HYSPIN AWS 22
H	H 32	SISTEMI IDROSTATICI	EXIDIA 32	API MX-32	ARAL DEGANIT B 32	TRUSLIDE 32	TIARDO BK 32	WAY 32	ENGINE K 32	ENERGOL GHL 32	VATAK 32	MAGNA GC 32
	H 46		EXIDIA 46	API MX-46	ARAL DEGANIT B 46	TRUSLIDE 46	M.P. 56	WAY 56	ENGINE K 56	ENERGOL GHL 56	VATAK 56	MAGNA BG 46
	H 68		EXIDIA 68	API MX-68	ARAL DEGANIT B 68	TRUSLIDE 68	M.P. 220	WAY 220	ENGINE K 220	ENERGOL GHL 220	VATAK 220	MAGNA BG 68
*	H 220	SISTEMI IDROSTATICI	EXIDIA 220	API MX-220	ARAL DEGANIT B 220	TRUSLIDE 220	M.P. 220	WAY 220	ENGINE K 220	ENERGOL GHL 220	VATAK 220	MAGNA BG 68
	H 32		USO 32	API CS-32 AW API CS-32 AW	ARAL VITAM GF 32	DURO OIL AW 32	TIARDO 32	SPRINTER ADPV 32	PARATER S 32 PARAVIS HP P 32	ENERGOL HLP-D 32 ENERGOL HLP-D 32	AROS 32 HYDRO D 32	HYSPIN AWS 32
	H 46		USO 46	API CS-46 AW API CS-46 AW	ARAL VITAM GF 46	DURO OIL AW 46	TIARDO 46	SPRINTER ADPV 46	PARATER S 46 PARAVIS HP P 46	ENERGOL HLP-D 46 ENERGOL HLP-D 46	AROS 46 HYDRO D 46	HYSPIN AWS 46
X	H 68	SISTEMI IDROSTATICI	USO 68	API CS-68 AW API CS-68 AW	ARAL VITAM GF 68	DURO OIL AW 68	TIARDO 68	SPRINTER ADPV 68	PARATER S 68 PARAVIS HP P 68	ENERGOL HLP-D 68 ENERGOL HLP-D 68	AROS 68 HYDRO D 68	HYSPIN AWS 68
	H 32		EXIDIA 32	API CS-32 EP API CS-68 EP	ARAL DEGANIT B 68	TRUSLIDE 32	TIARDO BK 32	WAY S1 32	ENGINE K 32	ENERGOL GHL 32	VATAK 32 HYDRO D 32	MAGNA GC 32
X	XM 1	GRASSI MULTIFUNZIONALI	EXIDIA 63	API CS-68 EP	ARAL DEGANIT B 68	TRUSLIDE 68	TIARDO BK 68	WAY S1 68	ENGINE K 46	ENERGOL GHL 68	VATAK 68 HYDRO D 68	MAGNA PX 66
	XM 2		GR MU EP 1	APGREASE PGR 1	ARAL ARALUB HL 1	LITHOLINE H EP GR 1	LITIO EP 1	GREASE LI EP 1	RULTEK 900 EP 1	GREASE LTX1 GREASE LTX-EP	BRYGREASE LT 1	SPIEEROL APT 1
	XM 3		GR MU EP 2	APGREASE LTX S APGREASE PGR 2	ARAL ARALUB HL 2	LITHOLINE H EP GR 2	LITIO EP 2	GREASE LI EP 2	RULTEK 900 N. 2 EP 2	GREASE LTX2 GREASE LTX2-EP	BRYGREASE LT 2	SPIEEROL APT 2
		GR MU EP 3	APGREASE PGR 3	ARAL ARALUB LF 3	LITHOLINE H EP GR 3	PILMUT 3	GREASE LI EP 3	RULTEK 900 N. 3	GREASE LTX3	BRYGREASE LT 3	SPIEEROL APT 3	

Provided by S.T.A.N.I.M.U.C. - Turin

* Oils recommended for pneumatic system

TABLE OF THE SYMBOLS OF UNI 7164 AND ISO 3498 STANDARDS
IN CORRESPONDENCE WITH THE LUBRICANTS OF THE COMPANY LISTED

CLASSE	Simboli delle UNI	CAMPO DI USO E APPLICAZ.	COMLUBE	elf	ESSO	EURAL	FINA	FUCHS	IGLTA	IP	ISADIL Chevron A licensee of Chevron products	KUBER
A	AM 68	LUBRIFICAZIONE A FERRITA	LG AN 68	MOVINA 68	MURAY 68	ERAL 68	ARVAN 68	RENOLIN 68	BEARING 68	IP HADRIA OIL 68	CIRCULATING OIL 68	CRUCOLAN 68
	CB 32	INGRANAGGI MODERATI CARICATI	OLEOL HH CB 32	POLYTELS 32	TERESSO 32 NUTO 32	BRIGHT 32	SOLINA 32	RENOLIN 32	FILETE V 32 PRESTAN 32	IP HERMEA OIL 32 IP HYDRUS OIL 32	CIRCULATING OIL 46	CRUCOLAN 32
	CB 68		OLEOL HH CB 68	POLYTELS 68	TERESSO 68 NUTO 68	BRIGHT 68	SOLINA 68	RENOLIN 68	FILETE V 68 PRESTAN 68	IP HERMEA OIL 68 IP HYDRUS OIL 68	CIRCULATING OIL 68	CRUCOLAN 68
	CB 150		OLEOL HH CB 150	POLYTELS 150	NUTO 150	BRIGHT 150	SOLINA 150	RENOLIN 150	FILETE V 150 PRESTAN 150	IP HERMEA OIL 150 IP HYDRUS OIL 150	CIRCULATING OIL 150	CRUCOLAN 150
C	CC 150	INGRANAGGI MULTI CARICATI	OLGEAR EP CC 150	REDUCTELF SP 150	SPARTAN EP 150	ELTON EP 150	GRAN 150	RENEP COMPOUND 104	RILEN EP 150	IP MELLANA OIL 150	NL GEAR COMPOUND 150	LAMORA 150
	CC 320		OLGEAR EP CC 320	REDUCTELF SP 320	SPARTAN EP 320	ELTON EP 320	GRAN 320	RENEP COMPOUND 103 RENEP SUPER 6	RILEN EP 320	IP MELLANA OIL 320	NL GEAR COMPOUND 320	LAMORA 320
	CC 460		OLGEAR EP CC 460	REDUCTELF SP 460	SPARTAN EP 460	ELTON EP 460	GRAN 460	RENEP COMPOUND 110 RENEP SUPER HD	RILEN EP 460	IP MELLANA OIL 460	NL GEAR COMPOUND 460	LAMORA 460
	FD 5		MACCHINE E STRUMENTI ACCORPATE	OLEOL HM FD 5	SPINELF 5	NUTO H 5	NEDEL 5	HYDRAN 10	RENOLIN MR 1	FILETE V 5	IP HYDRUS OIL 05	CRUCOLAN 5
FD 10	MACCHINE E STRUMENTI ACCORPATE	OLEOL HM FD 10	SPINELF 10	SPINNESSO 10	NEDEL 10	HYDRAN 10	RENOLIN MR 10	FILETE V 10	IP HYDRUS OIL 10	CRUCOLAN 10		
FD 22		OLEOL HM FD 22	SPINELF 22	SPINNESSO 22	NEDEL 22	HYDRAN 22	RENOLIN MR 5	FILETE V 22	IP HYDRUS OIL 22	CRUCOLAN 22		
G 32		GUIDE	WAY LUBE EP G 32	MIGLIA 32	FEBIS K 32	ARIF T 32	ARTAC EP 32	RENOLIN MR 10	NOURPOP V 32	IP BANTIA OIL HG 32	LAMORA SUPER PC LADD 32	
G 68	GUIDE	WAY LUBE EP G 68	MIGLIA 68	FEBIS K 68	ARIF T 68	ARTAC EP 68	RE-NEP 2	NOURPOP V 68	IP BANTIA OIL HG 68	WAY OIL 68	LAMORA SUPER PC LADD 68	
G 220		WAY LUBE EP G 220	MIGLIA 220	FEBIS K 220	ARIF T 220	ARTAC EP 220	RE-NEP 5	NOURPOP V 220	IP BANTIA OIL G 220	WAY OIL 220	LAMORA SUPER PC LADD 220	
HM 32	SISTEMI IDRISTATICI	OLEOL HM 32	ELFOLNA 32	NUTO H 32 NUTO HP 32	HYDER 32	HYDRAN 32	RENOLIN B 32	FILETE V 32	IP HYDRUS OIL 32 IP HYDRUS OIL X 32	EP HYDRAULIC OIL 32	LAMORA 32	
HM 46		OLEOL HM 46	ELFOLNA 46	NUTO H 46	HYDER 46	HYDRAN 46	RENOLIN B 46	FILETE V 46	IP HYDRUS OIL 46 IP HYDRUS OIL X 46	EP HYDRAULIC OIL 46	LAMORA 46	
HM 68		OLEOL HM 68	ELFOLNA 68	NUTO H 68 NUTO HP 68	HYDER 68	HYDER 68	HYDRAN 68	RENOLIN B 68	FILETE V 68	IP HYDRUS OIL 68 IP HYDRUS OIL X 68	EP HYDRAULIC OIL 68	LAMORA 68
HG 32	SISTEMI IDRISTATICI E GUIDE	OLEOL HG 32	HYGLISS 32	FEBIS K 32	TERCAL 32	HYDRAN CIN 32	RENOLIN MR 10	FILETE VE 32	IP BANTIA OIL HG 32	HWS 280	LAMORA 32	
HG 68		OLEOL HG 68	HYGLISS 68	FEBIS K 68	TERCAL 68	HYDRAN CIN 68	RENOLIN MR 20 RENEP 2	FILETE VE 68	IP BANTIA OIL HG 68	HWS 280	LAMORA 68	
XM 1	GRASSI MULTIFUNZIONALI	L-HITGREASE XM 1	ROLEXA 1 EPEXA 1	BEACON EP 1	LITNER EP 1	MARSON EPL 1	RENOLIT 1	VEGA 1	IP ATHESIA GR 1 IP ATHESIA GREP 1	DURALITH GREASE EP 1	CENTOFLEX 1 EP	
XM 2		L-HITGREASE XM 2	ROLEXA 2 EPEXA 2	BEACON 2 ESSO GP GREASE	LITNER EP 2	MARSON EPL 2	RENOLIT 2	VEGA 2	IP ATHESIA GR 2 IP ATHESIA GREP 2	DURALITH GREASE EP 2	CENTOFLEX 2 EP	
XM 3		L-HITGREASE XM 3	ROLEXA 3	BEACON 3	BEACON 3	LITNER EP 3	MARSON EPL 3	RENOLIT 3 RENOLIT FEP 3	VEGA 3	IP ATHESIA GR 3	DURALITH GREASE EP 3	CENTOFLEX 3 EP

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IN CORRESPONDENCE WITH THE LUBRICANTS OF THE COMPANY LISTED

CLASSE	STABILI ISO E UNI	CAMPO DI USO E APPLICAZ.			Mobil							
A	AA 68	LUBRIFICAZIONE PER MACCHINE A PEDANA	INDUSTRIAL 68	MACHINERY 68	RUBEX 400	OLIO EHT 15	T 68	TECROL 68	VERDI 68	LEMANIA 68	CARREA OIL P 68	TRM 6
	CB 32		OLINEO 32	MILLIVIS 32	MOBIL VACTRA OIL LIGHT	OLIO EHT 13	R 32	VITROL 32	VERDI 32	ARM 32-V	VITREA OIL 32 TELLUS OIL C32	SINOLUBE GR 3
	CB 68	INGRANAGGI A MODERATA CARICATI	OLINEO 68	MILLIVIS 68	MOBIL VACTRA OIL HEAVY MEDIUM	OLIO EHT 15	R 68	VITROL 68	VERDI 68	ARM 68-V	VITREA OIL 68 TELLUS OIL C68	SINOLUBE GR 5
	CB 150		OLINEO 150	MILLIVIS 150	MOBIL VACTRA OIL EXTRA HEAVY	OLIO BHISSCOLINA 120	R 150	VITROL 150	VERDI 150	ARM 150-V	VITREA OIL 150 TELLUS OIL C150	SINOLUBE GR 12
C	CC 150	INGRANAGGI A CARICATI	DACTA EP 150	GEAR OIL EP 150	MOBILGEAR 659	OLIO ERPOL 150	EPZ 150	REDOL EP 150	GOYA 150	EP 150	OMALA OIL 150	SINTREX EP 12
	CC 320		DACTA EP 320	GEAR OIL EP 320	MOBILGEAR 652	OLIO ERPOL 320	EPZ 320	REDOL EP 320	GOYA 320	EP 320	OMALA OIL 320	SINTREX EP 24
	CC 460		DACTA EP 460	GEAR OIL EP 460	MOBILGEAR 654	OLIO ERPOL 460	EPZ 460	REDOL EP 460	GOYA 460	EP 460	OMALA OIL 460	SINTREX EP 32
F	FD 5	MANDRINI, CUSCINETTI E FRIZIONI ACCOPPIATE	OLEODIN 5	MILLIVIS 5	MOBIL VELODITE OIL No. 4	OLIO EHT 10	HTF 5	DRDOL 10	PUCCONI 4P		TELLUS OIL C5	SINOLUBE HV 50
	FD 10		OLEODIN 10	MILLIVIS 10	MOBIL VELODITE OIL E MOBIL DTE 21	OLIO EHT 10	HTF 9	DRDOL 10	HAYDON 10	LR 10	TELLUS OIL C10	SINOLUBE HV 100
	FD 22		OLEODIN 22	MILLIVIS 22	MOBIL VELODITE OIL D MOBIL DTE 22	OLIO EHT 12	HTF 22	DRDOL 22	HAYDON 22	LR 22	TELLUS OIL C22 TELLUS OIL 22	SINOLUBE HV 200
G	G 32	GUIDE	SLEDD 32	OLG 32	MOBIL VACTRA OIL No. 1	OLIO TRAX 13	GS 32	ARDOL S 32	WAGNER 32		TONNA OIL 132	SINOLUBE GS 3
	G 68		SLEDD 68	OLG 68	MOBIL VACTRA OIL No. 2	OLIO TRAX 15	GS 68	ARDOL S 68	WAGNER 63	ARM 68-EP	TONNA OIL T68	SINOLUBE GS 5
	G 220		SLEDD 220	OLG 220	MOBIL VACTRA OIL No. 4	OLIO ANTIDACCIA 1450	GS 220	ARDOL S 220	WAGNER 220	ARM 220 EP	TONNA OIL T220	SINOLUBE GS 14
H	HM 32	SISTEMI IDROSTATICI	OLEODIN 32	TELEODIN 32	MOBIL DTE 24	OLIO EHT 13 H	HTF 32	DRDOL 32	HAYDON 32	LI 32	TELLUS OIL 32 HYDRAULIC OIL 32	SINOLUBE 3
	HM 46		OLEODIN 46	TELEODIN 46	MOBIL DTE 25	OLIO EHT 14 H	HTF 46	DRDOL 46	HAYDON 46	LI 46	TELLUS OIL 46 HYDRAULIC OIL 46	SINOLUBE 4
	HM 68		OLEODIN 68	TELEODIN 68	MOBIL DTE 26	OLIO EHT 15 H	HTF 68	DRDOL 68	HAYDON 68	LI 68	TELLUS OIL 68 HYDRAULIC OIL 68	SINOLUBE 5
*	HD 32	SISTEMI IDROSTATICI E GUIDE	SLEDD GC 32	TELEODIN EP 32	MOBIL VACUOLINE OIL 1405	OLIO DYN 32	RCS 32	ARDOL S 22	WAGNER 32	LI 32-EP	TONNA OIL T32	SINOLUBE MB 3
	HC 68		SLEDD GC 68	TELEODIN EP 68	MOBIL VACUOLINE OIL 1409	OLIO DYN 68	RCS 68	ARDOL S 32	WAGNER 68	LI 68-EP	TONNA OIL T68	SINOLUBE MB 5
X	XM 1	GRASSI PER STRUTTURE ZENITALI	ROLLER EP 1	UNIVERSAL GREASE 1 UNIVERSAL GREASE EP 1	MOBIL PLEX 46	GRASSO SFERUL LF	LAMBDA 1 EP	LT GREASE 1	REMBRANDT EP 1	LITE/EP 1	ALVANIA EP GREASE 1 SUPER GREASE EP 1	BEARING EP 1
	XM 2		ROLLER EP 2	UNIVERSAL GREASE 2 UNIVERSAL GREASE EP 2	MOBIL PLEX 47	GRASSO SFERUL LC	JOTA 2/S	LT GREASE 2	REMBRANDT EP 2	LITE/EP 2	ALVANIA GREASE R2 SUPER GREASE R2	BEARING EP 2
	XM 3		ROLLER EP 3	UNIVERSAL GREASE 3 UNIVERSAL GREASE EP 3	MOBIL PLEX 48	GRASSO SFERUL LD	JOTA 3 FS	LT GREASE 3	REMBRANDT EP 3	MERCURY 3	ALVANIA GREASE R3 SUPER GREASE R3	BEARING EP 3

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IN CORRESPONDENCE WITH THE LUBRICANTS OF THE COMPANY LISTED

C-ASSE	SIMBOLI ISO E UNI	CARICO IN APPLICAZ.	TAMMOIL	TENNEX	STAR	TOTAL	Vabriol	VALVOLINE	Vanguard	ISOL	WEBER
A	AM 68	LUBRIFIC. A PERDITA	TAMULUBE OIL 68	HYDROLIN 68 VERTEX 68	OMNIS 68 ALCOPI OIL 60	CORTIS 68	METRA 68	CHR 68	KOMUL ST 68	SIGNAL TR 68 (5)	WEBER WEGON 68
B	CB 32		INDUSTRIAL OIL 32	COMTEX 32 VERTEX 32	OMNIS 32 RANNO OIL HD 32	DORTIS 32 AZOLLA ZS 32	METRA 32	CHR 32	KOMUL ST 32	SIGNAL VL 32 (3) SIGNAL NU 32 (3)	WEBER WA 32
C	CB 68	INGRANAGGI MODERATI/M. CARICATI	INDUSTRIAL OIL 68	COMTEX 68 VERTEX 68	OMNIS 68 RANNO OIL HD 68	CORTIS 68 AZOLLA ZS 68	METRA 68	CHR 68	KOMUL ST 68	SIGNAL VL 68 (5) SIGNAL NU 68 (5)	WEBER WA 68
	CB 150		HYDRAULIC OIL 150	COMTEX 150 VERTEX 150	OMNIS 150 RANNO OIL HD 150	CORTIS 150 AZOLLA ZS 150	METRA 150	CHR 150	KOMUL ST 150	SIGNAL VL 150 (10) SIGNAL NU 150 (10)	WEBER WA 150
	CC 150	INGRANAGGI MOLTO CARICATI	CARTER EP LUBRIC. 150	FACTOR 150	MEROPA 150	CARTER EP 150	GEARLUBE EP 150	GEAR EP 150	GEARING EP 150	SIGNAL VL EP 150 (10)	WEBER FARRO EP 150
	CC 320		CARTER EP LUBRIC. 320	FACTOR 320	MEROPA 320	CARTER EP 320	GEARLUBE EP 320	GEAR EP 320	GEARING EP 320	SIGNAL VL EP 320 (27)	WEBER FARRO E.P. 320
	CC 460		CARTER EP LUBRIC. 460	FACTOR 460	MEROPA 460	CARTER EP 460	GEARLUBE EP 460	GEAR EP 460	GEARING EP 460	SIGNAL VL EP 460 (31)	WEBER FARRO E.P. 460
F	FD 5	MANDRINI CUSCINETTI E FRIZIONI ADEGUATE	TAMSPINDLE OIL 10	EDON 5 VELCO 5	300 OIL 5	AZOLLA ZS 5	RINOL 5	ETC 5	KOMUL SRV 5	SIGNAL ELROS 5 (12)	WEBER W.L. 10
	FD 10		TAMSPINDLE OIL 10	EDON 10 VELCO 10	SPINTEX OIL 10	AZOLLA ZS 10	RINOL 10	ETC 10	KOMUL SRV 10	SIGNAL OO 10 (1)	WEBER W.L. 15
	FD 22		TAMSPINDLE OIL 22	EDON 22 VELCO 22	SPINTEX OIL 22	AZOLLA ZS 22	RINOL 22	ETC 22	KOMUL SRV 22	SIGNAL OO 22 (2)	WEBER W.L. 22
G	G 32		TAMWAY OIL 32	BARTON 11	WAY LUBRICANT 68	DROSERA MS 32	METRA K 32	GES 32	C.O. SPECIAL 32	SIGNAL VLJU 32 (3)	WEBER WEBSTICK 32
	G 68	GUIDE	TAMWAY OIL 68	BARTON 20	WAY LUBRICANT 68	DROSERA MS 66	METRA K 68	GES 68	STOL 68	SIGNAL VL/SG 68 (3)	WEBER WEBSTICK 68
	G 220		TAMWAY OIL 220	BARTON 44	WAY LUBRICANT 220	DROSERA MS 220	METRA K 220	GES 220	S'OL 220	SIGNAL VL/SG 220 (12)	WEBER WEBSTICK 220
	HM 32		HYDRAULIC OIL 32	EDON 32 VELCO 32	RANNO OIL HD 32	AZOLLA ZS 32	GAMMA X 32	HYDRAULIC H.P. 32	HYDRAULIC 32	SIGNAL OO 32 (3)	WEBER VL 32 WEBER VL HP 32
	HM 46	SISTEMI IDROSTATICI	HYDRAULIC OIL 46	EDON 46 VELCO 46	RANNO OIL HD 46	AZOLLA ZS 46	GAMMA X 46	HYDRAULIC H.P. 46	HYDRAULIC 46	SIGNAL OO 46 (4)	WEBER VL 46
	HM 68		HYDRAULIC OIL 68	EDON 68 VELCO 68	RANNO OIL HD 68	AZOLLA ZS 68	GAMMA X 68	HYDRAULIC H.P. 68	HYDRAULIC 68	SIGNAL OO 68 (5)	WEBER VL 68 WEBER VL HP 68
H *	HE 32	SISTEMI IDROSTATICI E GUIDE	TAMWAY OIL 32	BARTON 11	CLEARTEX D RANNO OIL HD 32	DROSERA MS 32	METRA K 32	GES 32	C.O. SPECIAL 32	SIGNAL VLJU 32 (3)	WEBER WEBSTICK 32
	HE 68		TAMWAY OIL 68	BARTON 20	RANNO OIL HD 32	DROSERA MS 68	METRA K 68 METRA 1 68	GES 68	C.O. SPECIAL 66	SIGNAL VLJU 68 (5)	WEBER WEBSTICK 68
X	XM 1	GRASSI MULTIFUNZIONALI	TAMULITH GREASE 1 EP	GRASSO C-1 SPECIAL GRASSO MF 180/1	MULTIFAK EP 1 MULTIFAK 1	MULTIS EP 1	CS/MPL 1 GREASE CS/EP 1 GREASE	L 1 GREASE L 1 EP GREASE	LICO 1	SIGNAL ROLSEFF EP 1	WEBERGREASE MP E.P. 1
	XM 2		TAMULITH GREASE 2 EP	GRASSO C-2 SPECIAL GRASSO MF 180/2	MULTIFAK EP 2 MULTIFAK MP 2	MULTIS EP 2	CS/MPL 2 GREASE CS/EP 2 GREASE	L 2 GREASE L 2 EP GREASE	LICO 2	SIGNAL ROLSEFF EP 2	WEBERGREASE MP E.P. 2
	XM 3		TAMULITH GREASE 3	GRASSO C-3 SPECIAL GRASSO MF 180/3	MULTIFAK HD 3	MULTIS EP 3	CS/MPL 3 GREASE CS/EP 3 GREASE	L 3 GREASE L 3 EP GREASE	LICO 3	SIGNAL ROLSEFF EP 3	WEBERGREASE MP 3

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* Oils recommended for pneumatic system

CLASSE	SIMBOLI ISO E UNI	CAMPO DI APPLICAZIONE	Agip	api	ARAL	ARCO	barelli	IPET	BERGOLINE	BP	BRYTOL INDUSTRIALS	Castrol
F	FD 22	MANDRINI, CUSCINETTI E FRIZIONI ACCOPPIATE	OSO 15	API CS-22	ARAL DURAL SR 22	DURO OIL 22	TIARO 22	SPRINTER ADPV 22	BERGOSPIN 22	ENERGOL HP 22	MOVIOIL 22	HYSPIN AWS 22
H	HG 32	SISTEMI IDRAULICI E GUIDE	EMIDA 32	API CS-32 EP	TRUSLUDE 32	TRUSLUDE 32	TIARO BK 32	VIRY SI 32	ENGINE K 32	ENERGOL GHL 32	VATAK 32 HYDRO D 32	MAGNA GC 32
CLASSE	SIMBOLI ISO E UNI	CAMPO DI APPLICAZIONE	COMLUBE	elf	ESSO	EURAL	FINA	FUCHS	IGLFA	IP	ISADIL	LABRA
F	FD 22	MANDRINI, CUSCINETTI E FRIZIONI ACCOPPIATE	OLEO, HM FD 22	SPINELF 22	SPINESSO 22	NEDEL 22	HYDRAN 22	RENOLIN MR 5	FILETE V 22	IP HYDRUS OIL 22	SPINDLE OIL 22 X	CRUCOLAN 22
H	HG 32	SISTEMI IDRAULICI E GUIDE	OLEO, HG 32	HYGLISS 32	FEBIS K 32	TERCAL 32	HYDRAN GIM 32	RENOLIN MR 10	FILETE VE 32	IP BANITA OIL HG 32	HWS 280	LAMPORA 32
CLASSE	SIMBOLI ISO E UNI	CAMPO DI APPLICAZIONE	LUBRA	MILIOIL	Mobil	MOBILIT	OLLIO FIAT	Persian Oil	Q8	ROL	Shell	SINOL
F	FD 22	MANDRINI, CUSCINETTI E FRIZIONI ACCOPPIATE	OLEODIN 22	MILLVIS 22	MOBIL VELOCITE OIL D MOBIL ODTE 22	DUO EHT 12	HIT 22	IDROL 22	HAYDN 22	LR 22	TELLUS OIL C22 TELLUS OIL 22	SINGLUBE HV 200
H	HG 32	SISTEMI IDRAULICI E GUIDE	SLEDOL GC 32	TELEDIMAX EP 32	MOBIL VACUOLINE OIL 1405	OLIO DTM 32	RGS 32	AROL S 22	WAGNER 32	LI 32-EP	TONIA OIL 132	SINGLUBE MR 3
CLASSE	SIMBOLI ISO E UNI	CAMPO DI APPLICAZIONE	TAMOIL	TEMTEX	STAR	TOTAL	Vabriol	VALVOLINE	Vanguard	WESCO	WEBER	
F	FD 22	MANDRINI, CUSCINETTI E FRIZIONI ACCOPPIATE	TAMSPINOLE OIL 10 TAMSPINOLE OIL 22	ECTON 22 VELOX 22	SPINTEX OIL 22	AZOLLA ZS 22	RINOL 22	ETC 22	KOMOL SRV 22	SIGNAL CO 22 (2)	WEBER W.L. 22	
H	HG 32	SISTEMI IDRAULICI E GUIDE	TAMWAY OIL 32	BARTON 11	CLEARTEX D RANDO OIL-HO 32	DROSSERA MS 32	MEPRA 32 MEPRA 1 32	GES 32	C.O. SPECIAL 32	SIGNAL VLUJ 32 (3)	WEBER WERSSTICK 32	

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