SONED®

CENTRALIZED LUBRICATION

Multiple Line System

Multiple Line Systems are designed for a safe, efficient oil or grease lubrication.

Lubricating systems are composed by a defined number of adjustable flow piston pumps that sends lubricant to each individual lubricating point.

These lubricating pumps may be driven by different types of driving such as manual, electrical or mechanic (rotating, cam, eccentric, etc.). Their reservoirs have adequate size for each project, which results in large flexible choice for their applications.

Flow diagram

Legend

Multiple outlet pump for grease

Progressive Distributors

Automatic Lubricating Pump for Oil and Grease
Model BR

Description

Automatic Lubricating Pump SONED® model BR with multiple outlets constitutes the simplest and safest automatic lubricating method. Electrical driven, it is indicated for machines in general that use metered quantities of oil or grease as lubricant.

Their pumping elements (pistons) are easily installed and removed and are available in three options of flow.

Lubricating Pump model BR may directly feed each lubricating point or be connected to progressive dividers.

Reservoirs are transparent so you may see lubricant level . This system is intensively used in small size machines, such as injection machines, lathes, reamer machines, etc.

	H
OIL	395,7
GREASE	378

(Continues...)

Automatic Lubricating Pump for Oil and Grease
Model BR

(Continued)

BRG Pump

Code	Reference	Model	Level Switch Minimum *	V Voltage
2575	BRG-1110-1	BRG-1		110
10103	BRG-1110-1CN	BRG-1	***	110
10935	BRG-1220-1	BRG-1		220
10942	BRG-1220-1CN	BRG-1	***	220
10923	BRG-1110-2	BRG-2		110
10929	BRG-1110-2CN	BRG-2	***	110
10936	BRG-1220-2	BRG-2		220
10943	BRG-1220-2CN	BRG-2	***	220
10924	BRG-1110-3	BRG-3		110
10930	BRG-1110-3CN	BRG-3	***	110
10937	BRG-1220-3	BRG-3		220
10944	BRG-1220-3CN	BRG-3	***	220
10925	BRG-1110-4	BRG-4		110
10931	BRG-1110-4CN	BRG-4	***	110
10938	BRG-1220-4	BRG-4		220
10945	BRG-1220-4CN	BRG-4	***	220
10926	BRG-1110-5	BRG-5		110
10932	BRG-1110-5CN	BRG-5	***	110
10939	BRG-1220-5	BRG-5		220
10946	BRG-1220-5CN	BRG-5	***	220
10927	BRG-1110-6	BRG-6		110
10933	BRG-1110-6CN	BRG-6	***	110
10940	BRG-1220-6	BRG-6		220
10947	BRG-1220-6CN	BRG-6	***	220
10928	BRG-1110-7	BRG-7		110
10934	BRG-1110-7CN	BRG-7	***	110
10941	BRG-1220-7	BRG-7		220
10948	BRG-1220-7CN	BRG-7	***	220

BRO Pump

Code	Reference	Model	Level Switch Minimum NA / NF	V Voltage
2576	BRO-1110-1	BRO-1		110
10104	BRO-1110-1CN	BRO-1	***	110
10961	BRO-1220-1	BRO-1		220
10968	BRO-1220-1CN	BRO-1	***	220
10949	BRO-1110-2	BRO-2		110
10955	BRO-1110-2CN	BRO-2	***	110
10962	BRO-1220-2	BRO-2		220
10969	BRO-1220-2CN	BRO-2	***	220
10950	BRO-1110-3	BRO-3		110
10956	BRO-1110-3CN	BRO-3	***	110
10963	BRO-1220-3	BRO-3		220
3904	BRO-1220-3CN	BRO-3	***	220
10951	BRO-1110-4	BRO-4		110
10957	BRO-1110-4CN	BRO-4	***	110
10964	BRO-1220-4	BRO-4		220
10970	BRO-1220-4CN	BRO-4	***	220
10952	BRO-1110-5	BRO-5		110
10958	BRO-1110-5CN	BRO-5	***	110
10965	BRO-1220-5	BRO-5		220
10971	BRO-1220-5CN	BRO-5	***	220
10953	BRO-1110-6	BRO-6		110
10959	BRO-1110-6CN	BRO-6	***	110
10966	BRO-1220-6	BRO-6		220
10972	BRO-1220-6CN	BRO-6	***	220
10954	BRO-1110-7	BRO-7		110
10960	BRO-1110-7CN	BRO-7	***	110
10967	BRO-1220-7	BRO-7		220
10973	BRO-1220-7CN	BRO-7	***	220

* Please, inform contact leveL switch NO or NC for BRG.

Specifications

No. of outlets	1 to 7
Outlet pressure (max.)	70 kg/cm^2 (oil) / 100 kg/cm^2 (grease)
Outlet flow (constant)	1, 2 or 3 cm^3/min.
Driving	Gearmotor
Voltage	110 V or 220 V - 50/60 Hz
Protection	IP 54
Continuous operation	Maximum 5 minutes
Level switch (max.)	250 V AC - 150 V DC 1.5 A (Optional)
Lubricant	Oil or grease up to NLGI 2
Capacity of reservoir	2 liters
Power	60 W
Electrical Current	0.6 A

Purchasing information

- Quantity, model, lubricant -oil (O) or grease (G), no. of outlets, flows, tension 110 (1) or 220 (2).
  Example: 02 BRO 5 (1.1.2.2.1) 1

- Note: Layout of outlets is as above sequence.
  Example: For a 4-outlet pump, positions shall be 1, 5, 3 and 7.

Automatic Lubricating Pump for Oil
Model LR

Description

Lubricating Pump SONED® Model LR constitutes the simplest forced, metered automatic lubricating method for machines in general.

Constituted by a variable number of small piston pumps (extensions) assembled on closed boxes that are the lubricant reservoir itself, it provides easy installation and connections at outlet. Points to be lubricated may be steel, copper or nylon tube made or other materials. Standard fittings complete the installation.

Each pump (extension), with independent regulation, injects metered quantities of lubricant at both near and far away posted points.

It may be driven by the original machine driving (alternate or continuous) by means of pulleys, sprockets, elastic coupling, and yet by an independent motor.

Dimensions in millimeters

Extensions	A	B	C	D	E	F	G	H	I	Liters
1 - 2	145	158	65	68	55	31	68	39	72,5	1,5
3 - 4 - 5	230	185	100	115	60	28	115	35	115	3
6 - 7 - 8	280	185	90	140	60	30	140	40	140	4
9 - 10 -11 - 12	404	185	110	260	60	30	260	30	202	5,5

Specifications

- Nº of outlets: 1 to 12. For special cases, two LR pumps assemled together may be supplied to increase number of outlets up to 24.
- Pressure per extension: Up to 150 kg/cm²
- Flow per extension: Adjustable from 0 to 0,15 cm³ per turn
- Lubricant: 1000 cSt oil, maximum
- Driving:

  1 - Standard sprocket - ST
  2 - Rotative straight with sprocket - TX / CB / HB
  3 - Rotative straight - EL
  4 - Rotative with speed reduction - AS
  5 - Rotative with speed reduction - EB
  6 - Gearmotor - MRV ou MR
  7 - Special drives under request

Purchasing information

- For ordering Lubricating Pumps SONED®, please refer to drive types and constructive layout and inform: quantity / model / number of extensions /drive type and construction layout

Examples: 2/LR/4/ST3 or 1/LR/6/EL2 or 4/LR/2/TX3

- In case of MR type Lubricating Pump, also please inform motor electrical tension. When there is backpressure, as in the case of cylinders of steam motors, compressors, etc., it is recommended to install our double check valve reference VD at lubricant inlet point.

(Continue...)

Automatic Lubricating Pump for Oil
Model LR

(Continued)

Driving Types

ST type - Oscillating with sprocket - Maximum 120 rpm
Driving angle - Minimum 10º - Maximum 60º

1 2 3 4

Purchasing codes

Code	Reference	Model	Code	Reference	Model	Code	Reference	Model	Code	Reference	Model
1852	LR-1101-01	LR-01 ST-01	1853	LR-1102-01	LR-01 ST-02	1854	LR-1103-01	LR-01 ST-03	1855	LR-1104-01	LR-01 ST-04
1876	LR-1101-02	LR-02 ST-01	1877	LR-1102-02	LR-02 ST-02	1878	LR-1103-02	LR-02 ST-03	1879	LR-1104-02	LR-02 ST-04
1900	LR-1101-03	LR-03 ST-01	1901	LR-1102-03	LR-03 ST-02	1902	LR-1103-03	LR-03 ST-03	1903	LR-1104-03	LR-03 ST-04
1924	LR-1101-04	LR-04 ST-01	1925	LR-1102-04	LR-04 ST-02	1926	LR-1103-04	LR-04 ST-03	1927	LR-1104-04	LR-04 ST-04
1948	LR-1101-05	LR-05 ST-01	1949	LR-1102-05	LR-05 ST-02	1950	LR-1103-05	LR-05 ST-03	1951	LR-1104-05	LR-05 ST-04
1972	LR-1101-06	LR-06 ST-01	1973	LR-1102-06	LR-06 ST-02	1974	LR-1103-06	LR-06 ST-03	1975	LR-1104-06	LR-06 ST-04
1996	LR-1101-07	LR-07 ST-01	1997	LR-1102-07	LR-07 ST-02	1999	LR-1103-07	LR-07 ST-03	2000	LR-1104-07	LR-07 ST-04
2020	LR-1101-08	LR-08 ST-01	2021	LR-1102-08	LR-08 ST-02	2022	LR-1103-08	LR-08 ST-03	2023	LR-1104-08	LR-08 ST-04
2044	LR-1101-09	LR-09 ST-01	2045	LR-1102-09	LR-09 ST-02	2046	LR-1103-09	LR-09 ST-03	2047	LR-1104-09	LR-09 ST-04
2068	LR-1101-10	LR-10 ST-01	2069	LR-1102-10	LR-10 ST-02	2070	LR-1103-10	LR-10 ST-03	2071	LR-1104-10	LR-10 ST-04
2092	LR-1101-11	LR-11 ST-01	2093	LR-1102-11	LR-11 ST-02	2094	LR-1103-11	LR-11 ST-03	2095	LR-1104-11	LR-11 ST-04
2116	LR-1101-12	LR-12 ST-01	2117	LR-1102-12	LR-12 ST-02	2118	LR-1103-12	LR-12 ST-03	2119	LR-1104-12	LR-12 ST-04

EL type
Rotative straight with sprocket

Maximum 50 rpm

1 2

Purchasing codes

Code	Reference	Model	Code	Reference	Model
1844	LR-1501-01	LR-01 EL-01	1845	LR-1502-01	LR-01 EL-02
1868	LR-1501-02	LR-02 EL-01	1869	LR-1502-02	LR-02 EL-02
1892	LR-1501-03	LR-03 EL-01	1893	LR-1502-03	LR-03 EL-02
1916	LR-1501-04	LR-04 EL-01	1917	LR-1502-04	LR-04 EL-02
1940	LR-1501-05	LR-05 EL-01	1941	LR-1502-05	LR-05 EL-02
1964	LR-1501-06	LR-06 EL-01	1965	LR-1502-06	LR-06 EL-02
1988	LR-1501-07	LR-07 EL-01	1989	LR-1502-07	LR-07 EL-02
2012	LR-1501-08	LR-08 EL-01	2013	LR-1502-08	LR-08 EL-02
2036	LR-1501-09	LR-09 EL-01	2037	LR-1502-09	LR-09 EL-02
2060	LR-1501-10	LR-10 EL-01	2061	LR-1502-10	LR-10 EL-02
2084	LR-1501-11	LR-11 EL-01	2085	LR-1502-11	LR-11 EL-02
2108	LR-1501-12	LR-12 EL-01	2109	LR-1502-12	LR-12 EL-02

(Continue...)

Automatic Lubricating Pump for Oil
Model LR

(Continued)

Driving Types

TX type

Rotative straight with sprocket - Maximum 50 rpm

Obs.: It may be supplied either with CB type sprocket or HB type pulley.

1 2 3 4

Purchasing codes

TX Type

Code	Reference	Model	Code	Reference	Model	Code	Reference	Model	Code	Reference	Model
1856	LR-1401-01	LR-01 TX-01	1857	LR-1402-01	LR-01 TX-02	1858	LR-1403-01	LR-01 TX-03	1859	LR-1404-01	LR-01 TX-04
1880	LR-1401-02	LR-02 TX-01	1881	LR-1402-02	LR-02 TX-02	1882	LR-1403-02	LR-02 TX-03	1883	LR-1404-02	LR-02 TX-04
1904	LR-1401-03	LR-03 TX-01	1905	LR-1402-03	LR-03 TX-02	1906	LR-1403-03	LR-03 TX-03	1907	LR-1404-03	LR-03 TX-04
1928	LR-1401-04	LR-04 TX-01	1929	LR-1402-04	LR-04 TX-02	1930	LR-1403-04	LR-04 TX-03	1931	LR-1404-04	LR-04 TX-04
1952	LR-1401-05	LR-05 TX-01	1953	LR-1402-05	LR-05 TX-02	1954	LR-1403-05	LR-05 TX-03	1955	LR-1404-05	LR-05 TX-04
1976	LR-1401-06	LR-06 TX-01	1977	LR-1402-06	LR-06 TX-02	1978	LR-1403-06	LR-06 TX-03	1979	LR-1404-06	LR-06 TX-04
2000	LR-1401-07	LR-07 TX-01	2001	LR-1402-07	LR-07 TX-02	2002	LR-1403-07	LR-07 TX-03	2003	LR-1404-07	LR-07 TX-04
2024	LR-1401-08	LR-08 TX-01	2025	LR-1402-08	LR-08 TX-02	2026	LR-1403-08	LR-08 TX-03	2027	LR-1404-08	LR-08 TX-04
2048	LR-1401-09	LR-09 TX-01	2049	LR-1402-09	LR-09 TX-02	2050	LR-1403-09	LR-09 TX-03	2051	LR-1404-09	LR-09 TX-04
2072	LR-1401-10	LR-10 TX-01	2073	LR-1402-10	LR-10 TX-02	2074	LR-1403-10	LR-10 TX-03	2075	LR-1404-10	LR-10 TX-04
2096	LR-1401-11	LR-11 TX-01	2097	LR-1402-11	LR-11 TX-02	2098	LR-1403-11	LR-11 TX-03	2099	LR-1404-11	LR-11 TX-04
2120	LR-1401-12	LR-12 TX-01	2121	LR-1402-12	LR-12 TX-02	2122	LR-1403-12	LR-12 TX-03	2123	LR-1404-12	LR-12 TX-04

CB Type

Code	Reference	Model	Code	Reference	Model	Code	Reference	Model	Code	Reference	Model
1838	LR-1201-01	LR-01 CB-01	1839	LR-1202-01	LR-01 CB-02	1840	LR-1203-01	LR-01 CB-03	1841	LR-1204-01	LR-01 CB-04
1862	LR-1201-02	LR-02 CB-01	1863	LR-1202-02	LR-02 CB-02	1864	LR-1203-02	LR-02 CB-03	1865	LR-1204-02	LR-02 CB-04
1886	LR-1201-03	LR-03 CB-01	1887	LR-1202-03	LR-03 CB-02	1888	LR-1203-03	LR-03 CB-03	1889	LR-1204-03	LR-03 CB-04
1910	LR-1201-04	LR-04 CB-01	1911	LR-1202-04	LR-04 CB-02	1912	LR-1203-04	LR-04 CB-03	1913	LR-1204-04	LR-04 CB-04
1934	LR-1201-05	LR-05 CB-01	1935	LR-1202-05	LR-05 CB-02	1936	LR-1203-05	LR-05 CB-03	1937	LR-1204-05	LR-05 CB-04
1958	LR-1201-06	LR-06 CB-01	1959	LR-1202-06	LR-06 CB-02	1960	LR-1203-06	LR-06 CB-03	1961	LR-1204-06	LR-06 CB-04
1982	LR-1201-07	LR-07 CB-01	1983	LR-1202-07	LR-07 CB-02	1984	LR-1203-07	LR-07 CB-03	1985	LR-1204-07	LR-07 CB-04
2006	LR-1201-08	LR-08 CB-01	2007	LR-1202-08	LR-08 CB-02	2008	LR-1203-08	LR-08 CB-03	2009	LR-1204-08	LR-08 CB-04
2030	LR-1201-09	LR-09 CB-01	2031	LR-1202-09	LR-09 CB-02	2032	LR-1203-09	LR-09 CB-03	2033	LR-1204-09	LR-09 CB-04
2054	LR-1201-10	LR-10 CB-01	2055	LR-1202-10	LR-10 CB-02	2056	LR-1203-10	LR-10 CB-03	2057	LR-1204-10	LR-10 CB-04
2078	LR-1201-11	LR-11 CB-01	2079	LR-1202-11	LR-11 CB-02	2080	LR-1203-11	LR-11 CB-03	2081	LR-1204-11	LR-11 CB-04
2102	LR-1201-12	LR-12 CB-01	2103	LR-1202-12	LR-12 CB-02	2104	LR-1203-12	LR-12 CB-03	2105	LR-1204-12	LR-12 CB-04

(Continue...)

Automatic Lubricating Pump for Oil
Model LR

(Continued)

HB Type

Code	Reference	Model	Code	Reference	Model	Code	Reference	Model	Code	Reference	Model
1846	LR-1301-01	LR-01 HB-01	1847	LR-1302-01	LR-01 HB-02	1848	LR-1303-01	LR-01 HB-03	1849	LR-1304-01	LR-01 HB-04
1870	LR-1301-02	LR-02 HB-01	1871	LR-1302-02	LR-02 HB-02	1872	LR-1303-02	LR-02 HB-03	1873	LR-1304-02	LR-02 HB-04
1894	LR-1301-03	LR-03 HB-01	1895	LR-1302-03	LR-03 HB-02	1896	LR-1303-03	LR-03 HB-03	1897	LR-1304-03	LR-03 HB-04
1918	LR-1301-04	LR-04 HB-01	1919	LR-1302-04	LR-04 HB-02	1920	LR-1303-04	LR-04 HB-03	1921	LR-1304-04	LR-04 HB-04
1942	LR-1301-05	LR-05 HB-01	1943	LR-1302-05	LR-05 HB-02	1944	LR-1303-05	LR-05 HB-03	1945	LR-1304-05	LR-05 HB-04
1966	LR-1301-06	LR-06 HB-01	1967	LR-1302-06	LR-06 HB-02	1968	LR-1303-06	LR-06 HB-03	1969	LR-1304-06	LR-06 HB-04
1990	LR-1301-07	LR-07 HB-01	1991	LR-1302-07	LR-07 HB-02	1992	LR-1303-07	LR-07 HB-03	1993	LR-1304-07	LR-07 HB-04
2014	LR-1301-08	LR-08 HB-01	2015	LR-1302-08	LR-08 HB-02	2016	LR-1303-08	LR-08 HB-03	2017	LR-1304-08	LR-08 HB-04
2038	LR-1301-09	LR-09 HB-01	2039	LR-1302-09	LR-09 HB-02	2040	LR-1303-09	LR-09 HB-03	2041	LR-1304-09	LR-09 HB-04
2062	LR-1301-10	LR-10 HB-01	2063	LR-1302-10	LR-10 HB-02	2064	LR-1303-10	LR-10 HB-03	2065	LR-1304-10	LR-10 HB-04
2086	LR-1301-11	LR-11 HB-01	2087	LR-1302-11	LR-11 HB-02	2088	LR-1303-11	LR-11 HB-03	2089	LR-1304-11	LR-11 HB-04
2110	LR-1301-12	LR-12 HB-01	2111	LR-1302-12	LR-12 HB-02	2112	LR-1303-12	LR-12 HB-03	2113	LR-1304-12	LR-12 HB-04

AS Type

Rotative with speed reducer

Maximum 1750 RPM

Reduction ratio 1:60

1 2

Purchasing codes

Code	Reference	Model	Code	Reference	Model
1836	LR-1601-01	LR-01 AS-01	1837	LR-1602-01	LR-01 AS-02
1860	LR-1601-02	LR-02 AS-01	1861	LR-1602-02	LR-02 AS-02
1884	LR-1601-03	LR-03 AS-01	1885	LR-1602-03	LR-03 AS-02
1908	LR-1601-04	LR-04 AS-01	1909	LR-1602-04	LR-04 AS-02
1932	LR-1601-05	LR-05 AS-01	1933	LR-1602-05	LR-05 AS-02
1956	LR-1601-06	LR-06 AS-01	1957	LR-1602-06	LR-06 AS-02
1980	LR-1601-07	LR-07 AS-01	1981	LR-1602-07	LR-07 AS-02
2004	LR-1601-08	LR-08 AS-01	2005	LR-1602-08	LR-08 AS-02
2028	LR-1601-09	LR-09 AS-01	2029	LR-1602-09	LR-09 AS-02
2052	LR-1601-10	LR-10 AS-01	2053	LR-1602-10	LR-10 AS-02
2076	LR-1601-11	LR-11 AS-01	2077	LR-1602-11	LR-11 AS-02
2100	LR-1601-12	LR-12 AS-01	2101	LR-1602-12	LR-12 AS-02

Tipo EB

Rotative with speed reducer

Maximum 1750 RPM

Reduction ratio 1:60

Please, indicate desired rotation and speed reducer shft position.

1 2

Purchasing codes

Code	Reference	Model	Code	Reference	Model
1842	LR-1701-01	LR-01 EB-01	1843	LR-1702-01	LR-01 EB-02
1866	LR-1701-02	LR-02 EB-01	1867	LR-1702-02	LR-02 EB-02
1890	LR-1701-03	LR-03 EB-01	1891	LR-1702-03	LR-03 EB-02
1914	LR-1701-04	LR-04 EB-01	1915	LR-1702-04	LR-04 EB-02
1938	LR-1701-05	LR-05 EB-01	1939	LR-1702-05	LR-05 EB-02
1962	LR-1701-06	LR-06 EB-01	1963	LR-1702-06	LR-06 EB-02
1986	LR-1701-07	LR-07 EB-01	1987	LR-1702-07	LR-07 EB-02
2010	LR-1701-08	LR-08 EB-01	2011	LR-1702-08	LR-08 EB-02
2034	LR-1701-09	LR-09 EB-01	2035	LR-1702-09	LR-09 EB-02
2058	LR-1701-10	LR-10 EB-01	2059	LR-1702-10	LR-10 EB-02
2082	LR-1701-11	LR-11 EB-01	2083	LR-1702-11	LR-11 EB-02
2106	LR-1701-12	LR-12 EB-01	2107	LR-1702-12	LR-12 EB-02

(Continue...)

Automatic Lubricating Pump for Oil
Model LR

(Continued)

MRV Type
Independent with speed reducer

1 2

Purchasing codes

Code	Reference	Model	Code	Reference	Model
1851	LR-1901-01	LR-01 MRV-01	10215	LR-1902-01	LR-01 MRV-02
1875	LR-1901-02	LR-02 MRV-01	10214	LR-1902-02	LR-02 MRV-02
1899	LR-1901-03	LR-03 MRV-01	10216	LR-1902-03	LR-03 MRV-02
1923	LR-1901-04	LR-04 MRV-01	10217	LR-1902-04	LR-04 MRV-02
1947	LR-1901-05	LR-05 MRV-01	10218	LR-1902-05	LR-05 MRV-02
1971	LR-1901-06	LR-06 MRV-01	10219	LR-1902-06	LR-06 MRV-02
1995	LR-1901-07	LR-07 MRV-01	10220	LR-1902-07	LR-07 MRV-02
2019	LR-1901-08	LR-08 MRV-01	10221	LR-1902-08	LR-08 MRV-02
2043	LR-1901-09	LR-09 MRV-01	10222	LR-1902-09	LR-09 MRV-02
2067	LR-1901-10	LR-10 MRV-01	10223	LR-1902-10	LR-10 MRV-02
2091	LR-1901-11	LR-11 MRV-01	10224	LR-1902-11	LR-11 MRV-02
2115	LR-1901-12	LR-12 MRV-01	10225	LR-1902-12	LR-12 MRV-02

MR Type
Independent with motor and speed reducer

Reduction ratio - 1: 60

1 2

Purchasing codes

Code	Reference	Model	Code	Reference	Model
1850	LR-1801-01	LR-01 MR-01	10213	LR-1802-01	LR-01 MR-02
1874	LR-1801-02	LR-02 MR-01	10202	LR-1802-02	LR-02 MR-02
1898	LR-1801-03	LR-03 MR-01	10203	LR-1802-03	LR-03 MR-02
1922	LR-1801-04	LR-04 MR-01	10204	LR-1802-04	LR-04 MR-02
1946	LR-1801-05	LR-05 MR-01	10205	LR-1802-05	LR-05 MR-02
1970	LR-1801-06	LR-06 MR-01	10206	LR-1802-06	LR-06 MR-02
1934	LR-1801-07	LR-07 MR-01	10207	LR-1802-07	LR-07 MR-02
2018	LR-1801-08	LR-08 MR-01	10208	LR-1802-08	LR-08 MR-02
2042	LR-1801-09	LR-09 MR-01	10209	LR-1802-09	LR-09 MR-02
2066	LR-1801-10	LR-10 MR-01	10210	LR-1802-10	LR-10 MR-02
2090	LR-1801-11	LR-11 MR-01	10211	LR-1802-11	LR-11 MR-02
2114	LR-1801-12	LR-12 MR-01	10212	LR-1802-12	LR-12 MR-02

Automatic Lubricating Pump for Oil
Model LOS-AP

Description

Lubricating Pump SONED® Model LOS - AP constitutes the simplest automatic lubricating method, both forced and metered, for machines in general that require high operating pressures.

Constituted by a variable number of small piston pumps (extensions) mounted on closed boxes that are the lubricant reservoir itself, it provides easy installation and connections at outlet. Points to be lubricated may be steel, copper or nylon tube made or other materials. Standard fittings complete the installation.

Each pump (extension), with independent regulation, injects metered quantities of lubricant at both near and far away posted points.

It may be driven by the original machine driving by means of pulleys, sprockets, elastic coupling, and yet by an independent motor.

Note: Each lubricating box (module) is dimensioned up to four extensions. For a larger number of extensions, it is necessary to couple as much modules as necessary

Specifications

No. of outlets	1 to 24.
Pressure per extension	Up to 600 kg/cm²
Flow per extension	Adjustable from 0 to 0.20 cm³ per turn
Reservoir capacity	2 liters per module
Lubricant	1000 cSt oil, maximum

Driving
1 - Straight rotative - EL
2 - Rotative with speed reducer - EB
3 - Gearmotor - MRV or MR
4 - Oscilating with sprocket - ST
5 - Special driving under request

Dimensions in millimeters

Extensions	A	B	Liters
1-2-3-4	308	190	2
5-6-7-8	408	380	4
9-10-11-12	688	570	6
13-14-15-16	878	760	8
17-18-19-20	1068	950	10
21-22-23-24	1258	1140	12

Purchasing information

- For ordering Lubricating Pumps SONED®, please refer to drive types and constructive layout and inform: Quantity / model / number of extensions / drive type and constructive layout

Examples: 2/LOS-AP/4/EL 1 or 1/LOS-AP/16 MR 1 or 4/LOS-AP/8/EB2

- In case of MR type Lubricating Pump, also please inform electrical motor voltage. When there is backpressure, as in the case of cylinders of steam motors, compressors, mixers, etc., it is recommended to install our double check valve reference VD at lubricant inlet point.

(Continue...)

Automatic Lubricating Pump for Oil
Model LOS-AP

(Continued)

Driving types

EL type
Rotative straight
Maximum 50 rpm

Purchasing codes

Code	Reference	Model	Code	Reference	Model
2389	LOS-1501-01	LOS-AP-01 EL-01	2390	LOS-1502-01	LOS-AP-01 EL-02
2395	LOS-1501-02	LOS-AP-02 EL-01	2396	LOS-1502-02	LOS-AP-02 EL-02
2401	LOS-1501-03	LOS-AP-03 EL-01	2402	LOS-1502-03	LOS-AP-03 EL-02
2407	LOS-1501-04	LOS-AP-04 EL-01	2408	LOS-1502-04	LOS-AP-04 EL-02
2413	LOS-1501-05	LOS-AP-05 EL-01	2414	LOS-1502-05	LOS-AP-05 EL-02
2419	LOS-1501-06	LOS-AP-06 EL-01	2420	LOS-1502-06	LOS-AP-06 EL-02
2425	LOS-1501-07	LOS-AP-07 EL-01	2426	LOS-1502-07	LOS-AP-07 EL-02
2431	LOS-1501-08	LOS-AP-08 EL-01	2432	LOS-1502-08	LOS-AP-08 EL-02
2437	LOS-1501-09	LOS-AP-09 EL-01	2438	LOS-1502-09	LOS-AP-09 EL-02
2443	LOS-1501-10	LOS-AP-10 EL-01	2444	LOS-1502-10	LOS-AP-10 EL-02
2449	LOS-1501-11	LOS-AP-11 EL-01	2450	LOS-1502-11	LOS-AP-11 EL-02
2455	LOS-1501-12	LOS-AP-12 EL-01	2456	LOS-1502-12	LOS-AP-12 EL-02
2461	LOS-1501-13	LOS-AP-13 EL-01	2462	LOS-1502-13	LOS-AP-13 EL-02
2466	LOS-1501-14	LOS-AP-14 EL-01	2467	LOS-1502-14	LOS-AP-14 EL-02
2471	LOS-1501-15	LOS-AP-15 EL-01	2472	LOS-1502-15	LOS-AP-15 EL-02
2476	LOS-1501-16	LOS-AP-16 EL-01	2477	LOS-1502-16	LOS-AP-16 EL-02

EB type
Rotative with speed reducer
Maximum 1750 rpm

Reduction ratio - 1: 60

Note: Please indicate rotation and speed reducer shaft position.

Purchasing codes

Code	Reference	Model	Code	Reference	Model
2387	LOS-1701-01	LOS-AP-01 EB-01	2388	LOS-1702-01	LOS-AP-01 EB-02
2393	LOS-1701-02	LOS-AP-02 EB-01	2394	LOS-1702-02	LOS-AP-02 EB-02
2399	LOS-1701-03	LOS-AP-03 EB-01	2400	LOS-1702-03	LOS-AP-03 EB-02
2405	LOS-1701-04	LOS-AP-04 EB-01	2406	LOS-1702-04	LOS-AP-04 EB-02
2411	LOS-1701-05	LOS-AP-05 EB-01	2412	LOS-1702-05	LOS-AP-05 EB-02
2417	LOS-1701-06	LOS-AP-06 EB-01	2418	LOS-1702-06	LOS-AP-06 EB-02
2423	LOS-1701-07	LOS-AP-07 EB-01	2424	LOS-1702-07	LOS-AP-07 EB-02
2429	LOS-1701-08	LOS-AP-08 EB-01	2430	LOS-1702-08	LOS-AP-08 EB-02
2435	LOS-1701-09	LOS-AP-09 EB-01	2436	LOS-1702-09	LOS-AP-09 EB-02
2441	LOS-1701-10	LOS-AP-10 EB-01	2442	LOS-1702-10	LOS-AP-10 EB-02
2447	LOS-1701-11	LOS-AP-11 EB-01	2448	LOS-1702-11	LOS-AP-11 EB-02
2453	LOS-1701-12	LOS-AP-12 EB-01	2454	LOS-1702-12	LOS-AP-12 EB-02
2459	LOS-1701-13	LOS-AP-13 EB-01	2460	LOS-1702-13	LOS-AP-13 EB-02
2464	LOS-1701-14	LOS-AP-14 EB-01	2465	LOS-1702-14	LOS-AP-14 EB-02
2469	LOS-1701-15	LOS-AP-15 EB-01	2470	LOS-1702-15	LOS-AP-15 EB-02
2474	LOS-1701-16	LOS-AP-16 EB-01	2475	LOS-1702-16	LOS-AP-16 EB-02

(Continue...)

Automatic Lubricating Pump for Oil
Model LOS-AP

(Continued)

MR type
Independent with motor and speed reducer

Reduction ratio - 1:60

Purchasing codes

Code	Reference	Model	Code	Reference	Model
2391	LOS-1801-01	LOS-AP-01 MR-01	10070	LOS-1802-01	LOS-AP-01 MR-02
2397	LOS-1801-02	LOS-AP-02 MR-01	10071	LOS-1802-02	LOS-AP-02 MR-02
2403	LOS-1801-03	LOS-AP-03 MR-01	10072	LOS-1802-03	LOS-AP-03 MR-02
2409	LOS-1801-04	LOS-AP-04 MR-01	10073	LOS-1802-04	LOS-AP-04 MR-02
2415	LOS-1801-05	LOS-AP-05 MR-01	10074	LOS-1802-05	LOS-AP-05 MR-02
2421	LOS-1801-06	LOS-AP-06 MR-01	10075	LOS-1802-06	LOS-AP-06 MR-02
2427	LOS-1801-07	LOS-AP-07 MR-01	10076	LOS-1802-07	LOS-AP-07 MR-02
2433	LOS-1801-08	LOS-AP-08 MR-01	10077	LOS-1802-08	LOS-AP-08 MR-02
2439	LOS-1801-09	LOS-AP-09 MR-01	10078	LOS-1802-09	LOS-AP-09 MR-02
2445	LOS-1801-10	LOS-AP-10 MR-01	10079	LOS-1802-10	LOS-AP-10 MR-02
2451	LOS-1801-11	LOS-AP-11 MR-01	10080	LOS-1802-11	LOS-AP-11 MR-02
2457	LOS-1801-12	LOS-AP-12 MR-01	10081	LOS-1802-12	LOS-AP-12 MR-02
2463	LOS-1801-13	LOS-AP-13 MR-01	10082	LOS-1802-13	LOS-AP-13 MR-02
2468	LOS-1801-14	LOS-AP-14 MR-01	8723	LOS-1802-14	LOS-AP-14 MR-02
2473	LOS-1801-15	LOS-AP-15 MR-01	10083	LOS-1802-15	LOS-AP-15 MR-02
2478	LOS-1801-16	LOS-AP-16 MR-01	10084	LOS-1802-16	LOS-AP-16 MR-02

MRV type
Independent with gearmotor

Reduction ratio - 1:60

Purchasing codes

Code	Reference	Model	Code	Reference	Model
2392	LOS-1901-01	LOS-AP-01 MRV-01	10058	LOS-1902-01	LOS-AP-01 MRV-02
2398	LOS-1901-02	LOS-AP-02 MRV-01	10059	LOS-1902-02	LOS-AP-02 MRV-02
2404	LOS-1901-03	LOS-AP-03 MRV-01	10060	LOS-1902-03	LOS-AP-03 MRV-02
2410	LOS-1901-04	LOS-AP-04 MRV-01	10061	LOS-1902-04	LOS-AP-04 MRV-02
2416	LOS-1901-05	LOS-AP-05 MRV-01	10062	LOS-1902-05	LOS-AP-05 MRV-02
2422	LOS-1901-06	LOS-AP-06 MRV-01	10063	LOS-1902-06	LOS-AP-06 MRV-02
2428	LOS-1901-07	LOS-AP-07 MRV-01	10064	LOS-1902-07	LOS-AP-07 MRV-02
2434	LOS-1901-08	LOS-AP-08 MRV-01	10065	LOS-1902-08	LOS-AP-08 MRV-02
2440	LOS-1901-09	LOS-AP-09 MRV-01	10066	LOS-1902-09	LOS-AP-09 MRV-02
2446	LOS-1901-10	LOS-AP-10 MRV-01	10067	LOS-1902-10	LOS-AP-10 MRV-02
2452	LOS-1901-11	LOS-AP-11 MRV-01	10068	LOS-1902-11	LOS-AP-11 MRV-02
2458	LOS-1901-12	LOS-AP-12 MRV-01	10069	LOS-1902-12	LOS-AP-12 MRV-02

(Continue...)

Automatic Lubricating Pump for Oil
Model LOS-AP

(Continued)

ST type
Oscilanting with sprocket - Maximum 120 bpm
Driving angle - Minimum 10º - Maximum 60º

1 2 3 4

Purchasing codes

Code	Reference	Model	Code	Reference	Model	Code	Reference	Model	Code	Reference	Model
9475	LOS-1101-01	LOS-AP-01 ST-01	10826	LOS-1102-01	LOS-AP-01 ST-02	10841	LOS-1103-01	LOS-AP-01 ST-03	10851	LOS-1104-01	LOS-AP-01 ST-04
9336	LOS-1101-02	LOS-AP-02 ST-01	10827	LOS-1102-02	LOS-AP-02 ST-02	10842	LOS-1103-02	LOS-AP-02 ST-03	10852	LOS-1104-02	LOS-AP-02 ST-04
10810	LOS-1101-03	LOS-AP-03 ST-01	10829	LOS-1102-03	LOS-AP-03 ST-02	10843	LOS-1103-03	LOS-AP-03 ST-03	10853	LOS-1104-03	LOS-AP-03 ST-04
10811	LOS-1101-04	LOS-AP-04 ST-01	10830	LOS-1102-04	LOS-AP-04 ST-02	10844	LOS-1103-04	LOS-AP-04 ST-03	10854	LOS-1104-04	LOS-AP-04 ST-04
10812	LOS-1101-05	LOS-AP-05 ST-01	10833	LOS-1102-05	LOS-AP-05 ST-02	10845	LOS-1103-05	LOS-AP-05 ST-03	10855	LOS-1104-05	LOS-AP-05 ST-04
10820	LOS-1101-06	LOS-AP-06 ST-01	10834	LOS-1102-06	LOS-AP-06 ST-02	9898	LOS-1103-06	LOS-AP-06 ST-03	10856	LOS-1104-06	LOS-AP-06 ST-04
10821	LOS-1101-07	LOS-AP-07 ST-01	10835	LOS-1102-07	LOS-AP-07 ST-02	10828	LOS-1103-07	LOS-AP-07 ST-03	10857	LOS-1104-07	LOS-AP-07 ST-04
10822	LOS-1101-08	LOS-AP-08 ST-01	10836	LOS-1102-08	LOS-AP-08 ST-02	10846	LOS-1103-08	LOS-AP-08 ST-03	10858	LOS-1104-08	LOS-AP-08 ST-04
10328	LOS-1101-09	LOS-AP-09 ST-01	10837	LOS-1102-09	LOS-AP-09 ST-02	10847	LOS-1103-09	LOS-AP-09 ST-03	10859	LOS-1104-09	LOS-AP-09 ST-04
10823	LOS-1101-10	LOS-AP-10 ST-01	10838	LOS-1102-10	LOS-AP-10 ST-02	10848	LOS-1103-10	LOS-AP-10 ST-03	10860	LOS-1104-10	LOS-AP-10 ST-04
10824	LOS-1101-11	LOS-AP-11 ST-01	10839	LOS-1102-11	LOS-AP-11 ST-02	10849	LOS-1103-11	LOS-AP-11 ST-03	10861	LOS-1104-11	LOS-AP-11 ST-04
10825	LOS-1101-12	LOS-AP-12 ST-01	10840	LOS-1102-12	LOS-AP-12 ST-02	10850	LOS-1103-12	LOS-AP-12 ST-03	10862	LOS-1104-12	LOS-AP-12 ST-04

SONED®

CENTRALIZED LUBRICATION

Automatic Lubricating Pump for Grease
Model LGS

Description

Of rigorous technical construction, it is the ideal solution for automatic, forced and metered lubrication of a countless number of equipment and machines.

Constituted by a variable number of small piston pumps radially arranged and fed by a common reservoir, each pump (extension), with independent regulation, injects metered quantities of lubricant at both near and far away posted points through small diameter tubing. All its main components are internal, protected and self-lubricated with grease from the reservoir itself.

Several driving types and a variety of positions allow application in a large number of brand new machines or machines already in operation.

Usual applications: rubber mixers, presses, vertical pumps, rock crusher, rolling mill, etc.

Lubricating Pump SONED® Model LGS decreases maintenance problems, so reducing labor costs and increasing production.

A - Adjusting screws
S - Number of outlets from 1 to 6
T - Number of outlets from 7 to 12

Specifications

No. of outlets	1 to 12
Pressure per extension	Up to 150 kg/cm²
Flow per extension	Adjustable from 0 to 0.03 cm³ per turn
Capacity of reservoir	1.5 kg
Lubricant	Grease NGLI-2 maximum

Driving

1 - Standard sprocket - ST
2 - Rotative straight - HB/CB/RT
3 - Rotative with speed reducer - EB
4 - Gearmotor - MRV or MR
5 - Special driving under request

Purchasing information

- Quantity / model / number of extensions /drive type and constructive layout
  Examples: 2 / LGS / 4 / ST1 - 1 / LGS / 8 / MR1

Automatic Lubricating Pump for Grease
Model LGS

(Continued)

Driving types

ST type
Oscilanting with sprocket
Maximum 120 bpm

Driving angle
Minimum: 10º
Maximum: 60º

Purchasing codes

Code	Reference	Model	Code	Reference	Model
2135	LGS-1101-01	LGS-01 ST-01	2136	LGS-1102-01	LGS-01 ST-02
2147	LGS-1101-02	LGS-02 ST-01	2148	LGS-1102-02	LGS-02 ST-02
2159	LGS-1101-03	LGS-03 ST-01	2160	LGS-1102-03	LGS-03 ST-02
2171	LGS-1101-04	LGS-04 ST-01	2172	LGS-1102-04	LGS-04 ST-02
2183	LGS-1101-05	LGS-05 ST-01	2184	LGS-1102-05	LGS-05 ST-02
2195	LGS-1101-06	LGS-06 ST-01	2196	LGS-1102-06	LGS-06 ST-02
2207	LGS-1101-07	LGS-07 ST-01	2208	LGS-1102-07	LGS-07 ST-02
2219	LGS-1101-08	LGS-08 ST-01	2220	LGS-1102-08	LGS-08 ST-02
2231	LGS-1101-09	LGS-09 ST-01	2232	LGS-1102-09	LGS-09 ST-02
2243	LGS-1101-10	LGS-10 ST-01	2244	LGS-1102-10	LGS-10 ST-02
2255	LGS-1101-11	LGS-11 ST-01	2256	LGS-1102-11	LGS-11 ST-02
2267	LGS-1101-12	LGS-12 ST-01	2268	LGS-1102-12	LGS-12 ST-02

EB type
Rotative with speed reducer
Maximum 1750 rpm

Reduction ratio - 1:60

Note:
Please specify rotation

Purchasing codes

Code	Reference	Model	Code	Reference	Model
2127	LGS-1701-01	LGS-01 EB-01	2128	LGS-1702-01	LGS-01 EB-02
2139	LGS-1701-02	LGS-02 EB-01	2140	LGS-1702-02	LGS-02 EB-02
2151	LGS-1701-03	LGS-03 EB-01	2152	LGS-1702-03	LGS-03 EB-02
2163	LGS-1701-04	LGS-04 EB-01	2164	LGS-1702-04	LGS-04 EB-02
2175	LGS-1701-05	LGS-05 EB-01	2176	LGS-1702-05	LGS-05 EB-02
2187	LGS-1701-06	LGS-06 EB-01	2188	LGS-1702-06	LGS-06 EB-02
2199	LGS-1701-07	LGS-07 EB-01	2200	LGS-1702-07	LGS-07 EB-02
2211	LGS-1701-08	LGS-08 EB-01	2212	LGS-1702-08	LGS-08 EB-02
2223	LGS-1701-09	LGS-09 EB-01	2224	LGS-1702-09	LGS-09 EB-02
2235	LGS-1701-10	LGS-10 EB-01	2236	LGS-1702-10	LGS-10 EB-02
2247	LGS-1701-11	LGS-11 EB-01	2248	LGS-1702-11	LGS-11 EB-02
2259	LGS-1701-12	LGS-12 EB-01	2260	LGS-1702-12	LGS-12 EB-02

(Continue...)

Automatic Lubricating Pump for Grease
Model LGS

(Continued)

HB type
Rotative straight with pulley
Maximum 50 rpm

Note:
It may be supplied with
sprocket model RT or CB

Purchasing codes

HB type

Code	Reference	Model	Code	Reference	Model
2129	LGS-1301-01	LGS-01 HB-01	2130	LGS-1302-01	LGS-01 HB-02
2141	LGS-1301-02	LGS-02 HB-01	2142	LGS-1302-02	LGS-02 HB-02
2153	LGS-1301-03	LGS-03 HB-01	2154	LGS-1302-03	LGS-03 HB-02
2165	LGS-1301-04	LGS-04 HB-01	2166	LGS-1302-04	LGS-04 HB-02
2177	LGS-1301-05	LGS-05 HB-01	2178	LGS-1302-05	LGS-05 HB-02
2189	LGS-1301-06	LGS-06 HB-01	2190	LGS-1302-06	LGS-06 HB-02
2201	LGS-1301-07	LGS-07 HB-01	2202	LGS-1302-07	LGS-07 HB-02
2213	LGS-1301-08	LGS-08 HB-01	2214	LGS-1302-08	LGS-08 HB-02
2225	LGS-1301-09	LGS-09 HB-01	2226	LGS-1302-09	LGS-09 HB-02
2237	LGS-1301-10	LGS-10 HB-01	2238	LGS-1302-10	LGS-10 HB-02
2249	LGS-1301-11	LGS-11 HB-01	2250	LGS-1302-11	LGS-11 HB-02
2261	LGS-1301-12	LGS-12 HB-01	2262	LGS-1302-12	LGS-12 HB-02

RT type

Code	Reference	Model	Code	Reference	Model
2133	LGS-2101-01	LGS-01 RT-01	2134	LGS-2102-01	LGS-01 RT-02
2145	LGS-2101-02	LGS-02 RT-01	2146	LGS-2102-02	LGS-02 RT-02
2157	LGS-2101-03	LGS-03 RT-01	2158	LGS-2102-03	LGS-03 RT-02
2169	LGS-2101-04	LGS-04 RT-01	2170	LGS-2102-04	LGS-04 RT-02
2181	LGS-2101-05	LGS-05 RT-01	2182	LGS-2102-05	LGS-05 RT-02
2193	LGS-2101-06	LGS-06 RT-01	2194	LGS-2102-06	LGS-06 RT-02
2205	LGS-2101-07	LGS-07 RT-01	2206	LGS-2102-07	LGS-07 RT-02
2217	LGS-2101-08	LGS-08 RT-01	2218	LGS-2102-08	LGS-08 RT-02
2229	LGS-2101-09	LGS-09 RT-01	2230	LGS-2102-09	LGS-09 RT-02
2241	LGS-2101-10	LGS-10 RT-01	2242	LGS-2102-10	LGS-10 RT-02
2253	LGS-2101-11	LGS-11 RT-01	2254	LGS-2102-11	LGS-11 RT-02
2265	LGS-2101-12	LGS-12 RT-01	2266	LGS-2102-12	LGS-12 RT-02

CB type

Code	Reference	Model	Code	Reference	Model
2125	LGS-1201-01	LGS-01 CB-01	2126	LGS-1202-01	LGS-01 CB-02
2137	LGS-1201-02	LGS-02 CB-01	2138	LGS-1202-02	LGS-02 CB-02
2149	LGS-1201-03	LGS-03 CB-01	2150	LGS-1202-03	LGS-03 CB-02
2161	LGS-1201-04	LGS-04 CB-01	2162	LGS-1202-04	LGS-04 CB-02
2173	LGS-1201-05	LGS-05 CB-01	2174	LGS-1202-05	LGS-05 CB-02
2185	LGS-1201-06	LGS-06 CB-01	2186	LGS-1202-06	LGS-06 CB-02
2197	LGS-1201-07	LGS-07 CB-01	2198	LGS-1202-07	LGS-07 CB-02
2209	LGS-1201-08	LGS-08 CB-01	2210	LGS-1202-08	LGS-08 CB-02
2221	LGS-1201-09	LGS-09 CB-01	2222	LGS-1202-09	LGS-09 CB-02
2233	LGS-1201-10	LGS-10 CB-01	2234	LGS-1202-10	LGS-10 CB-02
2245	LGS-1201-11	LGS-11 CB-01	2246	LGS-1202-11	LGS-11 CB-02
2257	LGS-1201-12	LGS-12 CB-01	2258	LGS-1202-12	LGS-12 CB-02

(Continue...)

Automatic Lubricating Pump for Grease
Model LGS

(Continued)

MRV type
Independent with motorgear

Reduction ratio - 1:60

Purchasing codes

Code	Reference	Model
2132	LGS-1901-01	LGS-01 MRV
2144	LGS-1901-02	LGS-02 MRV
2156	LGS-1901-03	LGS-03 MRV
2168	LGS-1901-04	LGS-04 MRV
2180	LGS-1901-05	LGS-05 MRV
2192	LGS-1901-06	LGS-06 MRV
2204	LGS-1901-07	LGS-07 MRV
2216	LGS-1901-08	LGS-08 MRV
2228	LGS-1901-09	LGS-09 MRV
2240	LGS-1901-10	LGS-10 MRV
2252	LGS-1901-11	LGS-11 MRV
2264	LGS-1901-12	LGS-12 MRV

MR type
Independent with motor and speed reducer

Reduction ratio - 1:60

Purchasing codes

Code	Reference	Model
2131	LGS-1801-01	LGS-01 MR
2143	LGS-1801-02	LGS-02 MR
2155	LGS-1801-03	LGS-03 MR
2167	LGS-1801-04	LGS-04 MR
2179	LGS-1801-05	LGS-05 MR
2191	LGS-1801-06	LGS-06 MR
2203	LGS-1801-07	LGS-07 MR
2215	LGS-1801-08	LGS-08 MR
2227	LGS-1801-09	LGS-09 MR
2239	LGS-1801-10	LGS-10 MR
2251	LGS-1801-11	LGS-11 MR
2263	LGS-1801-12	LGS-12 MR

SONED®

CENTRALIZED LUBRICATION

Automatic Lubricating Pump for Grease
Model LG

Description

Lubricating Pump SONED® Model LG is constituted by a variable number of small piston pumps with radial layout. They are fed by a common reservoir. The machine itself drives the pump,

Each pump (extension) injects metered quantities of lubricant at both near and far away posted points (bearings, guides, etc.) through small diameter tubing. All main components are internal, protected and self-lubricated with the grease from reservoir.

Several driving types in different positions allow countless applications in new machines or machines already in operation. Common, frequent applications are rubber mixers, presses, vertical pumps, rock crushers and rolling mills.

Specifications

No. of outlets	1 to 14.
Pressure per extension	Up to 150 kg/cm²
Flow per extension	Adjustable from 0 to 0.18 cm³ per turn of inlet shaft
Capacity of reservoir	1 - 4 kg / 2 - 10 kg
Lubricant	Grease NGLI-2 maximum

Driving
1 - Standard sprocket - ST
2 - Straight rotative - HB/CB/RT
3 - Rotative with speed reduction - EB
4 - Motorgear - MRV ou MR
5 - Special driving under request

Purchasing information

- Quantity / model / number of extensions /driving type and constructive layout / capacity of reservoir
  Examples: 1/LG/8/ST-1-1 or 2/LG/4/EB-01-1

(Continue...)

Automatic Lubricating Pump for Grease
Model LG

(Continued)

Driving types

ST type
Oscilanting with sprocket
Maximum 120 rpm

Driving angle:
Minimum 10º
Maximum 60º

Purchasing codes

Code	Reference	Model
2280	LG-1101-01	LG-01 ST
2288	LG-1101-02	LG-02 ST
2296	LG-1101-03	LG-03 ST
2304	LG-1101-04	LG-04 ST
2312	LG-1101-05	LG-05 ST
2320	LG-1101-06	LG-06 ST
2328	LG-1101-07	LG-07 ST
2336	LG-1101-08	LG-08 ST
2344	LG-1101-09	LG-09 ST
2352	LG-1101-10	LG-10 ST
2360	LG-1101-11	LG-11 ST
2368	LG-1101-12	LG-12 ST
2376	LG-1101-13	LG-13 ST
2384	LG-1101-14	LG-14 ST

EB type
Rotative with speed reducer
Maximum 1750 rpm

Reduction ratio - 1:60

Note:
Please specify rotation

Purchasing codes

Code	Reference	Model
2274	LG-1701-01	LG-01 EB
2282	LG-1701-02	LG-02 EB
2290	LG-1701-03	LG-03 RB
2298	LG-1701-04	LG-04 RB
2306	LG-1701-05	LG-05 EB
2314	LG-1701-06	LG-06 EB
2322	LG-1701-07	LG-07 EB
2330	LG-1701-08	LG-08 EB
2338	LG-1701-09	LG-09 EB
2346	LG-1701-10	LG-10 EB
2354	LG-1701-11	LG-11 EB
2362	LG-1701-12	LG-12 EB
2370	LG-1701-13	LG-13 EB
2378	LG-1701-14	LG-14 EB

(Continue...)

Automatic Lubricating Pump for Grease
Model LG

(Continued)

HB type
Rotative straight with pulley
Maximum 50 rpm

Note:
It may be supplied with sprocket RT or CB model

Purchasing codes

HB type

Code	Reference	Model
2276	LG-1301-01	LG-01 HB
2284	LG-1301-02	LG-02 HB
2292	LG-1301-03	LG-03 HB
2300	LG-1301-04	LG-04 HB
2308	LG-1301-05	LG-05 HB
2316	LG-1301-06	LG-06 HB
2324	LG-1301-07	LG-07 HB
2332	LG-1301-08	LG-08 HB
2340	LG-1301-09	LG-09 HB
2348	LG-1301-10	LG-10 HB
2356	LG-1301-11	LG-11 HB
2364	LG-1301-12	LG-12 HB
2372	LG-1301-13	LG-13 HB
2380	LG-1301-14	LG-14 HB

RT type

Code	Reference	Model
2279	LG-2101-01	LG-01 RT
2287	LG-2101-02	LG-02 RT
2295	LG-2101-03	LG-03 RT
2303	LG-2101-04	LG-04 RT
2311	LG-2101-05	LG-05 RT
2319	LG-2101-06	LG-06 RT
2327	LG-2101-07	LG-07 RT
2335	LG-2101-08	LG-08 RT
2343	LG-2101-09	LG-09 RT
2351	LG-2101-10	LG-10 RT
2359	LG-2101-11	LG-11 RT
2367	LG-2101-12	LG-12 RT
2375	LG-2101-13	LG-13 RT
2383	LG-2101-14	LG-14 RT

CB type

Code	Reference	Model
2273	LG-1201-01	LG-01 CB
2281	LG-1201-02	LG-02 CB
2289	LG-1201-03	LG-03 CB
2297	LG-1201-04	LG-04 CB
2305	LG-1201-05	LG-05 CB
2313	LG-1201-06	LG-06 CB
2321	LG-1201-07	LG-07 CB
2329	LG-1201-08	LG-08 CB
2337	LG-1201-09	LG-09 CB
2345	LG-1201-10	LG-10 CB
2353	LG-1201-11	LG-11 CB
2361	LG-1201-12	LG-12 CB
2369	LG-1201-13	LG-13 CB
2377	LG-1201-14	LG-14 CB

(Continue...)

Automatic Lubricating Pump for Grease
Model LG

(Continued)

MRH type
Independent with gearmotor

Reduction ratio - 1:60

Purchasing codes

Code	Reference	Model
2278	LG-2201-01	LG-01 MRH
2286	LG-2201-02	LG-02 MRH
2294	LG-2201-03	LG-03 MRH
2302	LG-2201-04	LG-04 MRH
2310	LG-2201-05	LG-05 MRH
2318	LG-2201-06	LG-06 MRH
2326	LG-2201-07	LG-07 MRH
2334	LG-2201-08	LG-08 MRH
2342	LG-2201-09	LG-09 MRH
2350	LG-2201-10	LG-10 MRH
2358	LG-2201-11	LG-11 MRH
2368	LG-2201-12	LG-12 MRH
2374	LG-2201-13	LG-13 MRH
2382	LG-2201-14	LG-14 MRH

MR type
Independent with motor and speed reducer

Reduction ratio - 1:60

Purchasing codes

Code	Reference	Model
2277	LG-1801-01	LG-01 MR
2285	LG-1801-02	LG-02 MR
2293	LG-1801-03	LG-03 MR
2301	LG-1801-04	LG-04 MR
2309	LG-1801-05	LG-05 MR
2317	LG-1801-06	LG-06 MR
2325	LG-1801-07	LG-07 MR
2333	LG-1801-08	LG-08 MR
2341	LG-1801-09	LG-09 MR
2349	LG-1801-10	LG-10 MR
2357	LG-1801-11	LG-11 MR
2365	LG-1801-12	LG-12 MR
2373	LG-1801-13	LG-13 MR
2381	LG-1801-14	LG-14 MR

SONED®

CENTRALIZED LUBRICATION

Manual Lubricating Pump for Grease
Model LGM

Description

Simple and sturdy construction, equipped with a single movable part, this is the ideal solution for forced lubrication of machines and equipment that periodically require grease. Connection of extension with points of lubrication is done by means of small diameter tubing. Lubrication points may be nearby or faraway posted.

Intensively used in presses, guillotines, crimping presses and injection machines.

Lubricating Pump SONED® model LGM decreases maintenance problems so reducing labor costs and increasing production.

Note: In order to meet other applications, Lubricating Pump Model LGM may be supplied in its special version for automation by means of pneumatic cylinders, cams and backstops installed on movable parts of the machine, etc.

Specifications

• No. of outlets	1 to 12
• Pressure	50 kg/cm² (maximum)
• Flow per outlet	0.5 cm³ per action
• Flow, total maximum	5 cm³ per action
• Reservoir	1 / 1.5 kg with level indicating stem
• Lubricant	Grease NGLI-2 maximum
• Driving 1 - Manual - ST 2 - Mechanical - CR 3 - Special driving under request	

Purchasing information

- Quantity / model / number of extensions /drive type and construction layout
  Examples:1 / LGM / 02 / CR / LGM / 04 /ST

Important:
By previous request, Lubricating Pump LGM may be supplied with several flows for metering lubricant at bearings with different requirements.

(Continue...)

Manual Lubricating Pump for Grease
Model LGM

(Continued)

Driving types

ST type - Manual

Purchasing codes

Code	Reference	Model
2480	LGM-1101-01	LGM-01 ST
2484	LGM-1101-02	LGM-02 ST
2485	LGM-1101-03	LGM-03 ST
2486	LGM-1101-04	LGM-04 ST
2487	LGM-1101-05	LGM-05 ST
2488	LGM-1101-06	LGM-06 ST
2489	LGM-1101-07	LGM-07 ST
2490	LGM-1101-08	LGM-08 ST
2491	LGM-1101-09	LGM-09 ST
2492	LGM-1101-10	LGM-10 ST
2493	LGM-1101-11	LGM-11 ST
2494	LGM-1101-12	LGM-12 ST

CR type - Mechanical

Purchasing codes

Code	Reference	Model
10094	LGM-2301-01	LGM-01 CR
2482	LGM-2301-02	LGM-02 CR
2479	LGM-2301-03	LGM-03 CR
2481	LGM-2301-04	LGM-04 CR
2483	LGM-2301-05	LGM-05 CR
10719	LGM-2301-06	LGM-06 CR
10720	LGM-2301-07	LGM-07 CR
10721	LGM-2301-08	LGM-08 CR
10722	LGM-2301-09	LGM-09 CR
10723	LGM-2301-10	LGM-10 CR
10724	LGM-2301-11	LGM-11 CR
10725	LGM-2301-12	LGM-12 CR

Manual Lubricating Pump for Oil
Model LMO

Description

Used in machines and equipment that depend on manual, periodical lubrication such as presses, plastic injection machines, printing machines, textile machines, machine tool, etc. Easy operation due to its compact size. Low acquisition and maintenance costs.

As this pump has a minimum movable parts, it safely lubricates all points of the system each time lever is actuated. Lever returns to its original position via spring action.

Note: In order to meet other applications, Lubricating Pump Model LMO may be supplied in its special version for automation by means of pneumatic cylinders, cams and backstops installed on movable parts of the machine, etc.

Specifications

No. of outlets	1 to 12
Flow per outlet	0.5 cm^3 per action
Flow, total maximum	5 cm^3 per action
Pressure	50 kg/cm^2 maximum
Reservoir	800 cm^3 (transparent for visible oil level)
Lubricant	Oil 1000 cSt maximum
Driving 1 - Manual - ST 2 - Mechanical - CR 3 - Special driving under request	

Important:
By previous request, Lubricating Pump LGO may be supplied with different flows at different outlets for metering lubricant at bearings with different requirements. Being that the case, flows shall be kept within respective limits.

(Continue...)

Manual Lubricating Pump for Oil
Model LMO

(Continued)

Driving types

ST type - Manual

Purchasing codes

Code	Reference	Model
2496	LMO-1101-01	LMO-01 ST
2498	LMO-1101-02	LMO-02 ST
2499	LMO-1101-03	LMO-03 ST
2500	LMO-1101-04	LMO-04 ST
2501	LMO-1101-05	LMO-05 ST
2502	LMO-1101-06	LMO-06 ST
2503	LMO-1101-07	LMO-07 ST
2504	LMO-1101-08	LMO-08 ST
2505	LMO-1101-09	LMO-09 ST
2506	LMO-1101-10	LMO-10 ST
2507	LMO-1101-11	LMO-11 ST
2508	LMO-1101-12	LMO-12 ST

CR type - Mechanical

Purchasing codes

Code	Reference	Model
10095	LMO-2301-01	LMO-01 CR
10096	LMO-2301-02	LMO-02 CR
2495	LMO-2301-03	LMO-03 CR
2497	LMO-2301-04	LMO-04 CR
10726	LMO-2301-05	LMO-05 CR
10727	LMO-2301-06	LMO-06 CR
10728	LMO-2301-07	LMO-07 CR
10729	LMO-2301-08	LMO-08 CR
10730	LMO-2301-09	LMO-09 CR
10731	LMO-2301-10	LMO-10 CR
10732	LMO-2301-11	LMO-11 CR
10733	LMO-2301-12	LMO-12 CR