

hp-Single-pumping unit series MOG

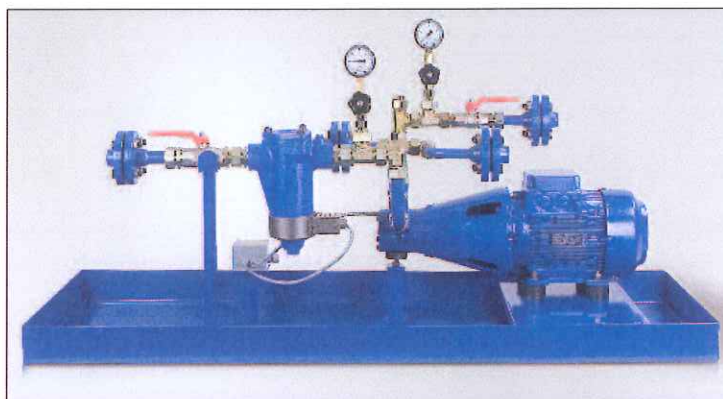
5.0

Single pumping unit for fuel oil in screwed or flanged compact execution, as a feed- or delivery aggregates for oil supply of automatic oil burners - equivalent DIN/EN 4755/2. Produced, tested, registered and marked according to the test standard DIN/EN 12514/1.

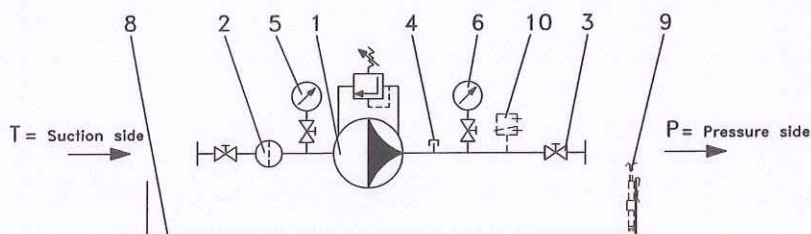
Order text

Single pumping unit series MOG

Series MOG: Refer to key
 Discharge: l/h
 Medium:
 Working pressure: bar
 Motor: kW V/50 Hz
 Accessoires: Series key



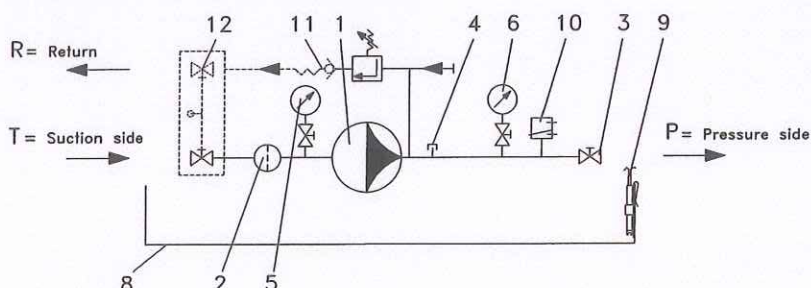
Scheme I: MOG 50, MOG 51, MOG 53 and MOG 55 (without return)



Packing List:

1. hp-motor pump with overflow valve
2. single filter
3. ball valve
4. prefill opening
5. vacuum gauge
6. pressure gauge
8. oil pan

Scheme II: MOG 52 and MOG 54 (with return)



Accessories:

9. oil leakage detection Type HMW LH
10. electrical pressure switch S
- pressure transmitter DT
11. nonreturn valve (only for Scheme 2, not by using Pos. 12) RV
12. double ball valve DK

Key for determination of the order numbers:

for example: **MOG ...**

Series	Size	Accessories*
50 = feed pump aggregate (6 bar and 9 bar), ¹⁾ fuel oil EL + L, Kerosene 51 = feed pump aggregate (9 bar), fuel oil M, S + ES, coaltar oil 52 = delivery aggregate (30 bar), fuel oil EL + L, Kerosene 53 = delivery aggregate 30 bar, fuel oil M, S, + ES 54 = delivery aggregate 40 bar, fuel oil EL + L 55 = delivery aggregate 40 bar, fuel oil M, S + ES	Discharge see chart FL = flanged execution	A = pump and filter with electrical stationary heating and connecting box (only for Scheme 1) RV = non-return valve (only for Scheme 2) DK = double ball valve (only for MOG 52 and MOG 54) E1 = with optical filter indicator (only for flanged execution "FL") E2 = with optical and electrical filter indicator (only for flanged execution "FL") LH = oil leakage detection Type HMW S¹⁾ = electrical pressure switch for pipe burst monitoring and dry running protection DT = pressure transmitter

* Listening classification letters after each other

¹⁾ For use as feed pump aggregate for the supply with fuel oil per DIN 4736 do not exceed the working pressure of 6 bar.

Note: it is absolutely imperative that the user install an electric pressure switch (acting as a "lower limit controller"), as pipe pressure safety device, on the equipment to which the pump is to be connected. This prerequisite can be met by ordering accessory "S" and "DT".

hp-Single-pumping unit series MOG

5.1

Single pumping unit for fuel oil in screwed or flanged compact execution, as a feed- or delivery aggregates for oil supply of automatic oil burners – equivalent DIN/EN 4755/2. Produced, tested, registered and marked according to the test standard DIN/EN 12514/1.



General details:

- Operating viscosity:** The motor output data applies for fluids with a viscosity up to 80 cSt. From 80 cSt to 150 cSt, the motor must be one power stage size stronger.
Available at a surcharge upon request.
- Max. suction head:** Measured in terms of the manometer (Pos. 5) = -0,6 bar
- Max. inlet pressure:** Pressure load of the axial face seal: -0,6 – +5 bar
- Max. nozzle loss:** 70% of discharge at p_{max} .



Single pumping unit MOG 50 according to scheme I without bypass

Connections* Suction/pressure screwed/flanged	Aggregate type		Discharge at 1400 min ⁻¹		Pump type series VB	Motor output ¹⁾ in kW	Execution according to scheme I		Max. pressure in bar
	Refer to key of made of operation	Discharge rating	at 0 – 9 bar in l/h	at p_{max} in l/h			Screwed Article-no.	Flanged Article-no.	
Pipe 12	MOG 50	01	45	–	VBP	0,18	0510101	–	designed for max. working pressure of 9 bar
Pipe 12	MOG 50	02	80	–	VBM	0,18	0510102	–	
Pipe 12	MOG 50	03	120	–	VBG	0,18	0510103	–	
Pipe 12	MOG 50	04	160	–	VBF	0,18	0510104	–	
Pipe 18/DN 15	MOG 50	05	300	–	VBGP	0,18	0510105	–	
Pipe 18/DN 15	MOG 50	06	450	–	VBGM	0,37	0510106	–	
Pipe 18/DN 15	MOG 50	07	600	–	VBGG	0,37	0510107	–	
DN 25	MOG 50	08	1000	–	VBHP	0,75	0510108	–	per DIN/EN 12514-1 max. working pressure of 6 bar
DN 25	MOG 50	09	1500	–	VBHM	0,75	0510109	–	
DN 25	MOG 50	10	2000	–	VBHG	1,1	0510110	–	
DN 32	MOG 50	11	3000	–	VBHGP	1,5	–	0510211	
DN 32	MOG 50	12	4500	–	VBHGM	2,2	–	0510212	
DN 40	MOG 50	13	6000	–	VBHGG	3,0	–	0510213	

Single pumping unit MOG 51 according to scheme I without bypass

Pipe 18	MOG 51	01	45	–	VBP	0,18	0510114	–	designed for max. pressure of 9 bar
Pipe 18	MOG 51	02	80	–	VBM	0,18	0510115	–	
Pipe 18	MOG 51	03	120	–	VBG	0,18	0510116	–	
Pipe 18	MOG 51	04	160	–	VBF	0,18	0510117	–	
Pipe 18/DN 15	MOG 51	05	300	–	VBGP	0,18	0510118	0510218	
Pipe 18/DN 15	MOG 51	06	450	–	VBGM	0,37	0510119	0510219	
Pipe 18/DN 15	MOG 51	07	600	–	VBGG	0,37	0510120	0510220	
DN 25	MOG 51	08	1000	–	VBHP	0,75	–	0510221	
DN 25	MOG 51	09	1500	–	VBHM	0,75	–	0510222	
DN 25	MOG 51	10	2000	–	VBHG	1,1	–	0510223	
DN 32	MOG 51	11	3000	–	VBHGP	1,5	–	0510224	
DN 32	MOG 51	12	4500	–	VBHGM	2,2	–	0510225	
DN 40	MOG 51	13	6000	–	VBHGG	3,0	–	0510226	

Dimensions refer page 58/59.

* To insure proper pump function, all pipe connections must be sized as per the principles of fluid technology using the phase quantity and in accordance with the given conditions at the installation site. The size of the pump and/or device connections is not indicative of the size of the pipe connection which must be used.

hp-Single-pumping unit series MOG

5.2

Single pumping unit for fuel oil in screwed or flanged compact execution, as a feed- or delivery aggregate for oil supply of automatic oil burners – equivalent DIN/EN 4755/2. Produced, tested, registered and marked according to the test standard DIN/EN 12514/1.

General details:

Operating viscosity:	The motor output data applies for fluids with a viscosity up to 150 cSt.
Max. suction head:	Measured in terms of the manometer (Pos. 5) = -0,6 bar
Max. inlet pressure:	Pressure load of the axial face seal: -0,6 to max. 5 bar (refer picture page 18)
Max. nozzle loss:	70% of discharge at p_{max}

Single pumping unit MOG 53 according to scheme I without bypass

Connections**	Fuel oil-aggregate-type refer to key of made of operation	Discharge rating	Discharge at 1400 min ⁻¹		Pump type	Motor output ¹⁾ kW	Article-no.		Stationary heating accessory „A“	Max. pressure bar
			at 0 – 9 bar	at p_{max}			According scheme I Screwed	Flanged „FL“		
Pipe 18/DN 15	MOG 53	05	300	240	VBGP	0,75	0510130	–	refer price list	designed for max. pressure of 30 bar
Pipe 18/DN 15	MOG 53	06	450	390	VBGM	1,1	0510131	–		
Pipe 18/DN 15	MOG 53	07	600	540	VBGG	1,5	0510132	–		
DN 25	MOG 53	08	1000	700	VBHP	2,2	0510133	–		
DN 25	MOG 53	09	1500	1200	VBHM	3,0	0510134	–		
DN 25	MOG 53	10	2000	1700	VBHG	4,0	0510135	–		
DN 32	MOG 53	11	3000	2200	VBHGP	5,5	–	0510236		
DN 32	MOG 53	12	4500	3600	VBHGM	7,5	–	0510237		
DN 40	MOG 53	13	6000	4800	VBHGG	7,5	–	0510238		
Pipe 18/DN 15	MOG 55	05	300	200	VBGP	0,75	0510140	0510240	refer price list	designed for max. pressure of 40 bar
Pipe 18/DN 15	MOG 55	06	450	360	VBGM	1,5	0510141	0510241		
Pipe 18/DN 15	MOG 55	07	600	480	VBGG	2,2	0510142	0510242		
DN 25	MOG 55	08	1000	600	VBHP	3,0	0510143	0510243		
DN 25	MOG 55	09	1500	1000	VBHM	4,0	0510144	0510244		
DN 25	MOG 55	10	2000	1400	VBHG	5,5	0510145	0510245		
DN 32	MOG 55	11	3000	2000	VBHGP	7,5	–	0510246		
DN 32	MOG 55	12	4500	3200	VBHGM	7,5	–	0510247		

Dimensions refer page 58/59.

Article-no. for accessoires

A = Pump and filter with electrical stationary heating and connecting box

E1 = with optical filter indicator 0820221

E2 = with optical and electrical filter indicator 0820222

LH = Oil leakage detection, (without running protection) 0720705

S = with electrical pressure switch for pipe burst monitoring (without running protection) Type FF4 0820290
Type DSA 0820292

DT = Pressure transmitter Type 0720695

* To insure proper pump function, all pipe connections must be sized as per the principles of fluid technology using the phase quantity and in accordance with the given conditions at the installation site. The size of the pump and/or device connections is not indicative of the size of the pipe connection which must be used.

Note for the screwed version: When using a Cu pipe it is imperative that the appropriate EO supporting sleeve be used for EO threaded pipe attachments for DIN 1630 and 2391 steel pipes.

hp-Single-pumping unit series MOG

5.3

General details:

Operating viscosity: The motor output data applies for fluids with a viscosity up to 150 cSt.

Max. suction head: Measured in terms of the manometer

Max. inlet pressure: Pressure load of the axial face seal: -0,6 to max. 5 bar (refer picture page 18)

Max. nozzle loss: 70% of discharge at p_{max}

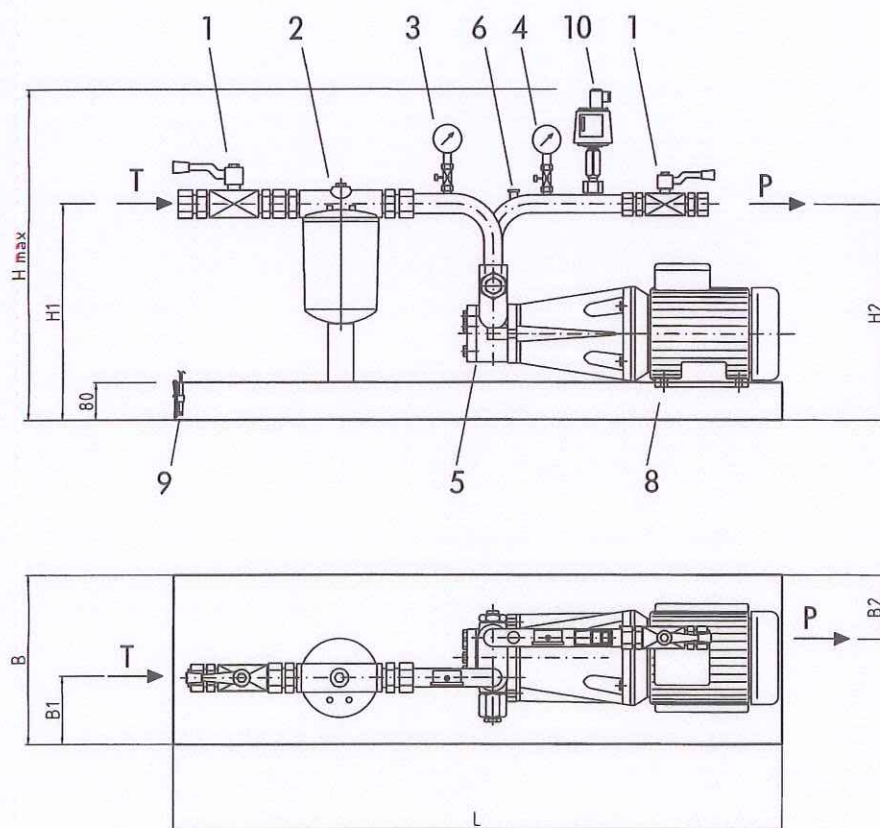


Single pumping unit MOG 52/54 according to scheme II, with bypass

Connections*	Fuel oil-aggregate-type		Discharge at 1400 min ⁻¹		Pump type VBR	Motor output ¹⁾	Execution according to scheme I			Max. pressure
	refer to key of made of operation	Discharge - rating					Screwed	Flanged	with double ball valve according scheme II	
Screwed/flanged			at 0 - 9 bar	at p _{max}	at p _{max}	kW	Article-no.	Article-no.	flanged „FL“	bar
Pipe 12/DN 15	MOG 52	01	45	30	VBRP	0,18	0510148	-	-	designed for max. pressure of 30 bar
Pipe 12/DN 15	MOG 52	02	80	60	VBRM	0,18	0510149	-	-	
Pipe 12/DN 15	MOG 52	03	120	100	VBRG	0,18	0510150	-	-	
Pipe 12/DN 15	MOG 52	04	160	140	VBRF	0,37	0510151	-	-	
Pipe 18/DN 15	MOG 52	05	300	240	VBGRP	0,75	0510152	0510252	0820110	
Pipe 18/DN 15	MOG 52	06	450	390	VBGRM	0,75	0510153	0510253	0820110	
Pipe 18/DN 15	MOG 52	07	600	540	VBGRG	1,1	0510154	0510254	0820110	
DN 25	MOG 52	08	1000	700	VBHRP	1,5	0510155	0510255	0820111	
DN 25	MOG 52	09	1500	1200	VBHRM	2,2	0510156	0510256	0820112	
DN 25	MOG 52	10	2000	1700	VBHRG	3,0	0510157	0510257	2820112	
DN 32	MOG 52	11	3000	2200	VBHGRP	4,0	-	0510258	0820113	
DN 32	MOG 52	12	4500	3600	VBHGRM	5,5	-	0510259	0820113	
DN 40	MOG 52	13	6000	4800	VBHGRG	7,5	-	0510260	0820114	
Pipe 18/DN 15	MOG 54	05	300	200	VBGRP	0,75	0510165	0510265	0820110	designed for max. pressure of 40 bar
Pipe 18/DN 15	MOG 54	06	450	360	VBGRM	1,1	0510166	0510266	0820110	
Pipe 18/DN 15	MOG 54	07	600	480	VBGRG	1,5	0510167	0510267	0820110	
DN 25	MOG 54	08	1000	600	VBHRP	2,2	0510168	0510268	0820111	
DN 25	MOG 54	09	1500	1000	VBHRM	3,0	0510169	0510269	0820112	
DN 25	MOG 54	10	2000	1400	VBHRG	4,0	0510170	0510270	0820112	
DN 32	MOG 54	11	3000	2200	VBHGRP	5,5	-	0510271	0820113	
DN 32	MOG 54	12	4500	3200	VBHGRM	7,5	-	0510272	0820113	

Dimensions refer page 58/59.

hp-Single-pumping unit series MOG

5.3.1
Dimensional drawing MOG according scheme I

Packaging list:

- 1 Overflow valve
- 2 Filter
- 3 Vakuum manometer
- 4 Manometer
- 5 hp-Motor pump group with hp-internal gear pump with internal grated overflow valve, connector and motor B3/B14, B3/B5
- 6 Pressure gauge
- 8 Oil pan

Accessories:

- | | |
|---|---------|
| 9 Oil leakage detection | LH |
| 10 Electrical pressure switch or pressure transmitter | S
DT |

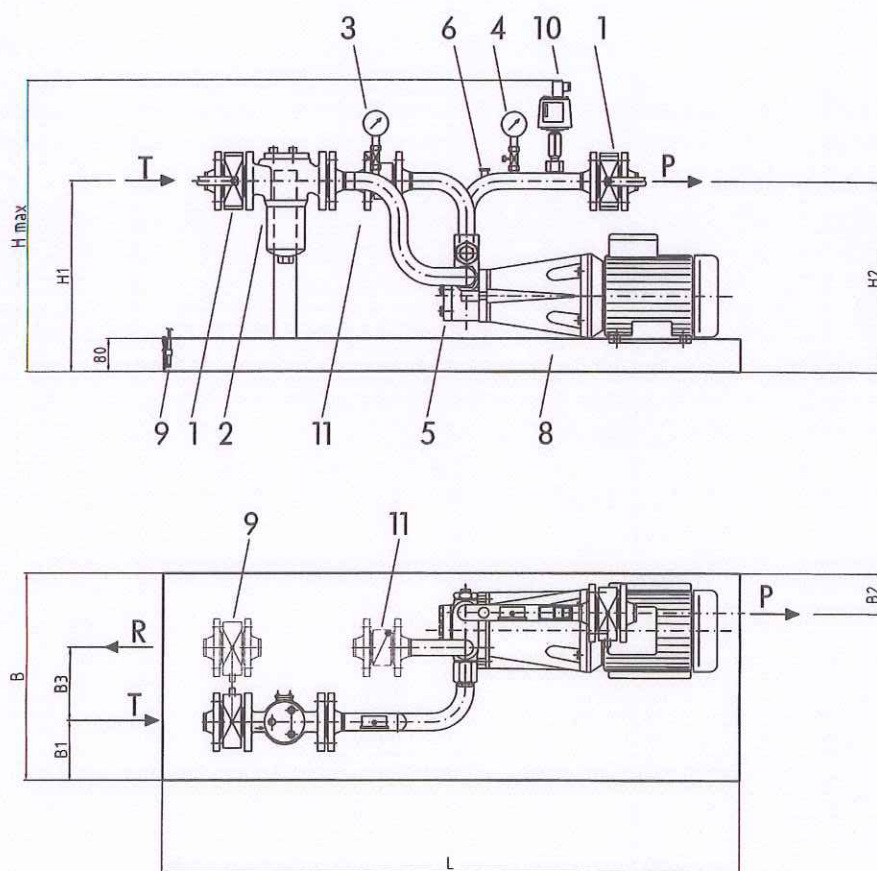
Series	Dimensions	L MOG 50	L MOG 51, 53, 55	B	B1 ±10	B2 ±10	H max. = required installation highest mm	H1 ±10	H2 ±10
	mm	mm	mm	mm	mm	mm		mm	mm
MOG	01	700	1000	270	115	115	600	320	320
	02	700	1000	270	115	115	600	320	320
	03	700	1000	270	115	115	600	320	320
	04	700	1000	270	115	115	600	320	320
	05	840	1000	270	115	115	650	400	400
	06	840	1000	270	115	115	650	400	400
	07	840	1000	270	115	115	650	400	400
	08	1050	1200	360	147	147	850	460	460
	09	1050	1200	360	147	147	850	460	460
	10	1050	1200	360	147	147	850	460	460
	11	1400	1400	500	200	200	1000	600	600
	12	1400	1400	500	200	200	1000	600	600
	13	1400	1400	500	200	200	1000	600	600

Please note the enclosed operation, installation and maintenance instruction!

hp-Single-pumping unit series MOG

5.3.2

Dimensional drawing MOG according scheme II



Packaging list:

- 1 Overflow valve
- 2 Filter
- 3 Vakuum manometer
- 4 Manometer
- 5 hp-Motor pump group with hp-internal gear pump with internal grated overflow valve, connector and motor B3/B14, B3/B5
- 6 Pressure gauge
- 8 Oil pan

Accessories:

- | | |
|---|---------|
| 9 Oil leakage detection | LH |
| 10 Electrical pressure switch or pressure transmitter | S
DT |
| 11 Non return valve (not when using accessory 12) | RV |
| 12 Double ball valve (only MOG 52 and 54) | DK |

Series	Dimensions	L	L1	B	B1 ±10	B2 ±10	B3 ±10	H max. = required install- ation highest	H1 ±10	H2 ±10
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
MOG	01	700	150	270	50	60	120	600	180	350
	02	700	150	270	50	60	120	600	180	350
	03	700	150	270	50	60	120	600	180	350
	04	700	150	270	50	60	120	600	180	350
	05	1050	350	360	80	100	140	650	250	430
	06	1050	350	360	80	100	140	650	250	430
	07	1050	350	360	80	100	140	650	250	430
52	08	1400	350	360	100	97	100	850	460	460
	09	1400	350	360	100	97	100	850	460	460
	10	1400	350	360	100	97	100	850	460	460
54	11	1600	500	500	150	150	100	1000	500	600
	12	1600	500	500	150	150	100	1000	500	600
	13	1600	500	500	150	150	100	1000	500	600

Please note the enclosed operation, installation and maintenance instruction!