Lubricant pump P203 for multi-line lubrication systems AC versions without PCB

Original Assembly Instructions following machinery directive 2006/42/EC



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4. Technical data

4.1 General te	chnical data						
Operating pressure		max. 350 bar [5076 psi]	Rated voltage	110 - 260 VAC (± 10 %)			
Number of pump elements		max. 3	Frequency	50-60 Hz (± 5 %) 1-phase			
Direction of rotation	on	clockwise	Recommended back-up fuse	e 6,0 A slow-blow 110 - 260 V			
sound pressure level		< 70 dB (A)	Switch-on current limitation	< 40 A peak (cold start @25 °C / 77 °F)			
Nominal speed		20 rpm	Operating voltage of motor	24 V DC			
Relative duty cycle ¹⁾		S3 25 ED 120 min	Output (signal)	floating			
Ambient temperature ¹⁾		-25 °C to +70 °C [-13 °F to +158 °F]	Max. switching capacity	72 VA			
Installation position ²⁾		vertical, i.e. reservoir at top.	Max. switching voltage	30 V DC			
Protection type and class		see next page	Max. switching current	700 mA			
			- Current consumption	typically 1.78 A at 110 V AC up to 0.82 A at 260 V AC			
		ases up to NLGI 2	Weight of the empty pump				
Lubricants ³⁾	- Lubrication oils temperature	of at least 40 mm²/s (cST) at ambient	02 litres, approx. 6.5 kg [0.53 gal. approx. 14.3 lbs.]			
		ee chapter Lubricants)	04 litres, approx. 9.0 kg [9.0 kg [1.06 gal. approx. 19.8 lbs.]			
Filling		specific pump type via:	08 litres, approx. 10 kg [2.11 gal. approx. 22.0 lbs.]				
	- Filler fitting	or reservoirs without follower plate)	11 litres, approx. 12 kg [2.90 gal. approx. 26.5 lbs.]			
	- Optional filling		15 litres, approx. 14 kg	3.96 gal. approx. 30.9 lbs.]			

1) The lower limit of the ambient temperature presupposes the pumpability of the lubricant used at the respective actually existing temperature. The maximum admissible ambient temperature depends on the load and is mainly determined by the runtime and the operating pressure. The stated relative duty cycle refers to lubricants of NLGI 2, an ambient temperature of 60 °C [140 °F] and a medium back pressure of 160 bar on the pump element. In case of temperatures \geq 60° °C and heavy load (higher pressure) the maximum duty cycle should be reduced. 3) Pumps with UL approval may only be operated up to a maximum permissible ambient temperature of +60 °C, regardless of the load. 2) Pumps with follower plate allow for a rotating installation as well, e. g. in wind turbine generators. Maximum speed and maximum distance to the rotation axis on request. For pumps without follower plate and expected inclined position (e.g. In case of construction or agricultural machinery) the following applies:

- The maximum filling must be reduced according to the expected inclined position (< MAX marking).

- The minimum filling must be increased as of an expected inclination of > 30 ° (> MIN marking), as otherwise a reduced lubricant volume in the suction area of the pump could result in a functional impairment.

3) Observe the limits stated in chapter Limits of use of the intermittent low-level indication.

6. Installation

6.3 Mechanical connection

6.3.1 Minimum assembly dimensions

Ensure sufficient space for maintenance work or for attachment of further components to build a centralized lubrication system to the pump by leaving a free space of at least 100 mm [3.94 in.] into each direction in addition to the stated dimensions.

Reservoir version	Reservoir size ~ Height (H) mm [in.]					Reservoir size ~ Width (W) mm [in.]				Reservoir size ~ Depth (D) mm [in.]					
litre	2	4	8	11	15	2	4	8	11	15	2	4	8	11	15
gal.	[0.53]	[1.06]	[2.11]	[2.90]	[3.96]	[0.53]	[1.06]	[2.11]	[2.90]	[3.96]	[0.53]	[1.06]	[2.11]	[2.90]	[3.96]
XN	325	355	458	\succ	708	213	230	250	\geq	240	224	250	250	\geq	244
	[12.79]	[13.98]	[18.03]	\geq	[27.87]	[8.39]	[9.06]	[9.84]	\geq	[9.45]	[8.81]	[9.84]	[9.84]	\geq	[9.60]
XNFL	244	\geq	$>\!$	$>\!$	$>\!$	232	\geq	\geq	\geq	$>\!$	250	$>\!$	\triangleright	\geq	\geq
	[9.61]	\geq	$\geq \leq$	\geq	$\geq \leq$	[9.13]	\geq	\geq	\geq	\geq	[9.84]	\geq	\geq	\geq	\geq
XNBO	360	350	457	611	729	211	232	232	227	216	224	250	250	224	244
	[14.17]	[13.78]	[18]	[24.06]	[28.7]	[8.30]	[9.13]	[9.13]	[8.93]	[8.50]	[8.82]	[9.84]	[9.84]	[8.82]	[9.61]
XNBA	$>\!$	360	467	$>\!$	$>\!$	\geq	250	230	\geq	$>\!$	\geq	250	251	\geq	\geq
	$>\!$	[14.17]	[18.36]	$>\!$	\geq	\geq	[9.84]	[9.06]	\geq	\geq	\geq	[9.84]	[9.88]	\geq	\geq
XL	330	355	465	$>\!$	729	213	230	230	$>\!$	230	224	250	250	\geq	250
	[13	[13.98]	[18.30]	$>\!$	[28.70]	[8.30]	[9.06]	[9.06]	$>\!$	[9.06]	[8.82]	[9.84]	[9.84]	\geq	[9.84]
XLBO	360	355	457	618	730	213	250	230	220	220	224	250	251	250	244
	[14.17]	[13.98	[17.99	[24.33	[28.74	[8.30]	[9.84	[9.06]	[8.66	[8.66	[8.82	[9.84	[9.88	[9.84	[9.61
XLBA	$>\!$	365	467	$>\!$	$>\!$	\geq	250	230	$>\!$	$>\!$	\geq	250	251	\succ	\triangleright
	\geq	[14.37]	[18.39]	\geq	\geq	\geq	[9.84]	[9.06]	\geq	\geq	\geq	[9.84]	[9.88]	\geq	
XC	325	355	458	\geq	\geq	213	230	250	\geq	\geq	224	250	250	\geq	\geq
	[12.80]	[13.98]	[18.03]	\geq	\geq	[8.30]	[9.06]	[9.06]	\geq	\geq	[8.82]	[9.84]	[9.84]	\geq	\geq

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