

High-performance cooling of applications with hydraulic and lubricating oils



A compact and high-performance cooler series comprising twelve sizes was developed for high-performance cooling of hydraulic and lubricating oils.

Applications

- Construction machines
- Agricultural machines
- Rail technology
- Machine tools
- Hydraulic power packs
- Wind power
- Hydraulic presses
- Iron and steel industry etc.

Applicable for cooling of:

- Hydraulic oil
- Gear oil
- Lubricating grease
- Water-glycol (min. 40 % glycol)

Structure

- Cooler core (plate and bar) made of aluminium with industrial lamina in black (RAL 9005)
- Fan cover made of steel in black (RAL 9005)
- Fan made of nylon PAG
- Protective grid made of steel in black (RAL 9005)
- Fan 12 V/24 V IP68, 230V/400V, 400V/690V, IP55
- Fan with hydraulic drive

Marine design:

- Refrigerating grid coated via KTL immersion process
- Frame, fan cover, protection grid coated by KTL
- Electric motor with special painting and protection IP56

ATEX design:

- Electric motor in ATEX design  II 2 G Exell T3
- Special fan

Accessories, protective grid, TSC

- Thermal bypass valves, oil temperature valves OTV, see page 26/27

The OAC coolers should be protected from direct solar radiation.

Selection system

To select the suitable cooler you need to know the following details:

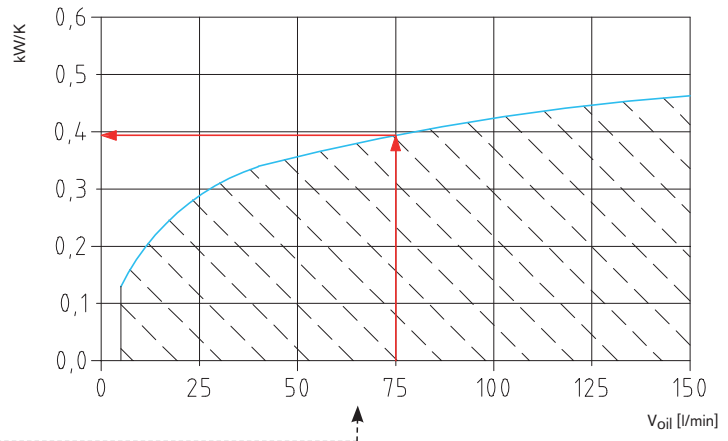
Q [kW]	Heat to be dissipated
V [l/min]	Oil flow
T _{oil} [°C]	Inlet temperature of oil into cooler
T _L [°C]	Inlet temperature of ambient air into cooler

Example of calculation

Details given:

- Q = 12 kW
- V = 75 l/min
- T_{oil} = 65 °C
- T_L = 30 °C

Performance diagramme OAC 400



Calculation of specific cooling capacity

Inlet temperature difference ETD [°C] = T_{oil} - T_L

Specific cooling capacity required P_{requ.} = Q/ETD

The specific cooling capacity required must fall below the performance curve! → 12 kW/(65°C - 30°C) = 0.34 kW/°C

The following was selected: OAC 400

The actual cooling effect of the cooler is 0.39 kW/°C x 35°C = 13.65 kW

Calculation of pressure loss

The pressure loss in the curves of the different data sheets is based on a viscosity of 30 cSt

The effective pressure loss is calculated as follows:

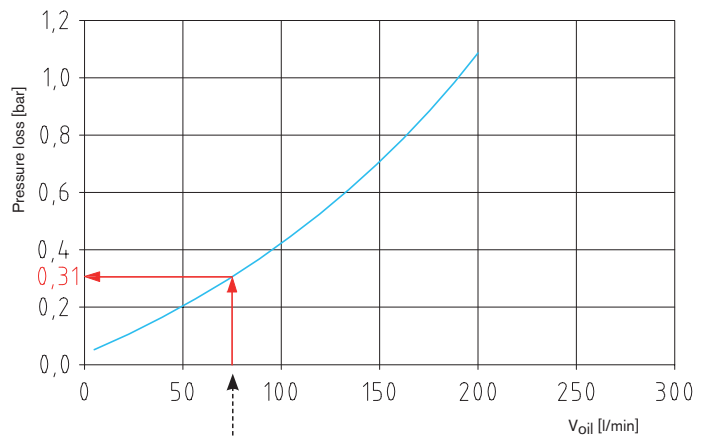
Pressure loss (from curve) x factor = effective pressure loss

Example

- V_{oil}: 75 l/min
- Viscosity: 20 cSt

→ 0,31 bar x 0,75 = 0,233 bar

Pressure loss 30 cSt



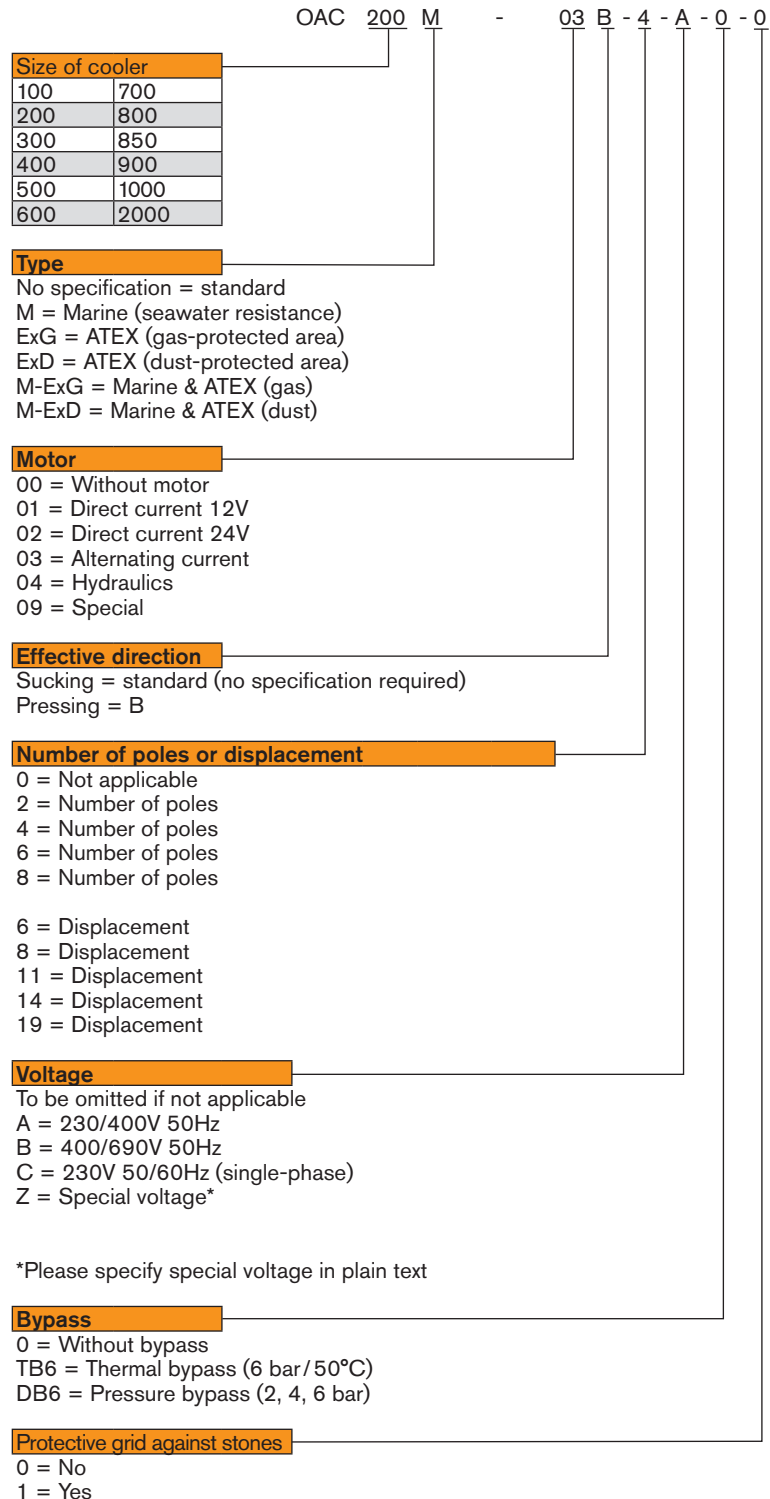
Conversion factor pressure loss

cSt	10	15	20	30	40	50	60	80	100
Factor	0,5	0,65	0,75	1	1,2	1,4	1,6	2,1	2,8

Oil/air coolers type OAC

Cooling systems

Type code of industrial coolers oil/air



Oil/air coolers type OAC

Cooling systems

Technical data

12V and 24V fan drive										
Cooler type ¹⁾	Voltage [V]	Drive [kW]	Speed [rpm]	Amperage [A]	Protection	Fan Ø [mm]	Perm. pressure [bar]		Max. volume flow [l/min]	Mass [kg]
							Static	Dynamic		
OAC 100-01	12	0,09	3950	7,2	IP68	190			50	6
OAC 100-02	24	0,06	3625	2,6	IP68	190			50	6
OAC 200-01	12	0,10	2838	8,2	IP68	280			100	11
OAC 200-02	24	0,11	2925	4,4	IP68	280			100	11
OAC 300-01	12	0,22	3080	18,4	IP68	350			160	16
OAC 300-02	24	0,23	2730	9,4	IP68	350			160	16
OAC 400-01	12	0,22	3080	18,4	IP68	350			200	22
OAC 400-02	24	0,23	2730	9,4	IP68	350	26	14	200	22
OAC 500-01	12	0,24	2600	20,2	IP68	385			200	30
OAC 500-02	24	0,24	2700	9,8	IP68	385			200	30
OAC 600-01	12	2x0,10	2838	2x8,2	IP68	280			250	43
OAC 600-02	24	2x0,11	2925	2x4,4	IP68	280			250	43
OAC 700-01	12	2x0,24	2600	2x20,2	IP68	385			350	53
OAC 700-02	24	2x0,24	2700	2x9,8	IP68	385			350	53
OAC 800-01	12	2x0,24	2600	2x20,2	IP68	385			350	81
OAC 800-02	24	2x0,24	2700	2x9,8	IP68	385			350	81

Oil/air cooler type OAC eco							
Cooler type ¹⁾	Voltage [V]	Drive [kW]	Speed n [rpm]	Max. volume flow [l/min]	Current [A]	Protection	Fan Ø [mm]
OAC 300 eco	24	0,38	3400	160	14,5	IP 65	305
OAC 400 eco				200			
OAC 500 eco		0,34	2570	200	13		
OAC 600 eco	250						

230V/400V with 50Hz; 460V with 60Hz fan drive														
Cooler type ²⁾	Driving power [kW]		Speed [RPM]		Amperage [A]		Protection		Fan	Noise	Perm. pressure [bar]		Max. volume flow	Mass
	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	Standard	Marine	ø-mm	[dB(A)]	Static	Dynamic	[l/min]	[kg]
OAC 100-03 C	0,07	0,08	2500	2700	0,29	0,33	IP54	-	250	64			50	16
OAC 200-03 C	0,12	0,16	2450	2650	0,55	0,72	IP54	-	250	69			100	16
OAC 200-03	0,18	0,21	1350	1650	0,58	0,57	IP55	IP56	280	66			100	16
OAC 300-03	0,37	0,43	1370	1670	1,04	1,02	IP55	IP56	380	76			160	24
OAC 300-03 D	0,14	0,17	1400	1600	0,35	0,32	IP44	-	350	72	26	14	160	21
OAC 400-03	0,37	0,43	1370	1670	1,04	1,02	IP55	IP56	380	76			200	29
OAC 500-03	0,37	0,43	1370	1670	1,04	1,02	IP55	IP56	380	78			200	37
OAC 600-03	0,75	0,86	1440	1740	1,79	1,72	IP55	IP56	520	78			250	57
OAC 700-03	0,75	0,86	1440	1740	1,79	1,72	IP55	IP56	520	78			350	70
OAC 800-03	1,5	1,75	1435	1730	3,3	3,3	IP55	IP56	630	78			350	97
OAC 850-03	2,2	2,55	965	1165	5,2	4,75	IP55	IP56	750	79			350	130
OAC 900-03	2,2	-	965	-	5,2	-	IP55	IP56	900	85			450	173
OAC 1000-03-6	2,2	-	965	-	5,2	-	IP55	IP56	900	87			700	187
OAC 1000-03-4	7,5kW	-	1465	-	14,3	-	IP55	IP56	900	97	21	14	700	212
OAC 2000-03-6	7,5kW	-	980	-	16	-	IP55	IP56	1000	92			700	357
OAC 2000-03-4	18,5kW	-	1470	-	35	-	IP55	IP56	1000	100			700	429

NEW

Fan with hydraulic drive									
Cooler type ¹⁾	Displacement [ccm]	Speed [RPM]	Fan - ø [mm]	Noise [dB(A)]	Perm. pressure [bar]		Max. volume flow [l/min]	Mass [kg]	
					Static	Dynamic			
OAC 200-04-06	6,30		280	66			100	15	
OAC 300-04-06	6,30		380	75				21	
OAC 300-04-08	7,90		380	75			160	21	
OAC 300-04-11	10,90		380	75				21	
OAC 400-04-06	6,30		380	74				25	
OAC 400-04-08	7,90		380	74			200	25	
OAC 400-04-11	10,9		380	74				25	
OAC 500-04-06	6,3		380	74				34	
OAC 500-04-08	7,9		380	74			200	34	
OAC 500-04-11	10,9		380	74				34	
OAC 600-04-06	6,3	1500	520	78	26	14		50	
OAC 600-04-08	7,9		520	78			250	50	
OAC 600-04-11	10,9		520	78				50	
OAC 700-04-06	6,3		520	78				60	
OAC 700-04-08	7,9		520	78			250	60	
OAC 700-04-11	10,9		520	78				60	
OAC 800-04-11	10,9		630	78				88	
OAC 800-04-14	13,9		630	78			350	88	
OAC 850-04-11	10,9		750	79				110	
OAC 850-04-14	13,9		750	79			350	110	
OAC 900-04-14	13,9	1000	900	85				155	
OAC 900-04-19	18,8		900	85			450	155	
OAC 900-04-19	28,2	1500	900	95	21	14		155	
OAC 1000-04-19	18,8	1000	900	85				188	
OAC 1000-04-19	28,2	1500	900	97			530	188	
OAC 2000-04-44	44,1	1000	1000	92				295	
OAC 2000-04-44	66,2	1500	1000	100			700	295	

¹⁾ Max. media temperature: 110 °C (higher temperatures on request) / Max. ambient temperature: 60 °C

²⁾ Max. media temperature: 110 °C (higher temperatures on request) / Max. ambient temperature: 40 °C

Oil/air cooler type OAC eco

Cooling systems

Reducing noise and saving energy



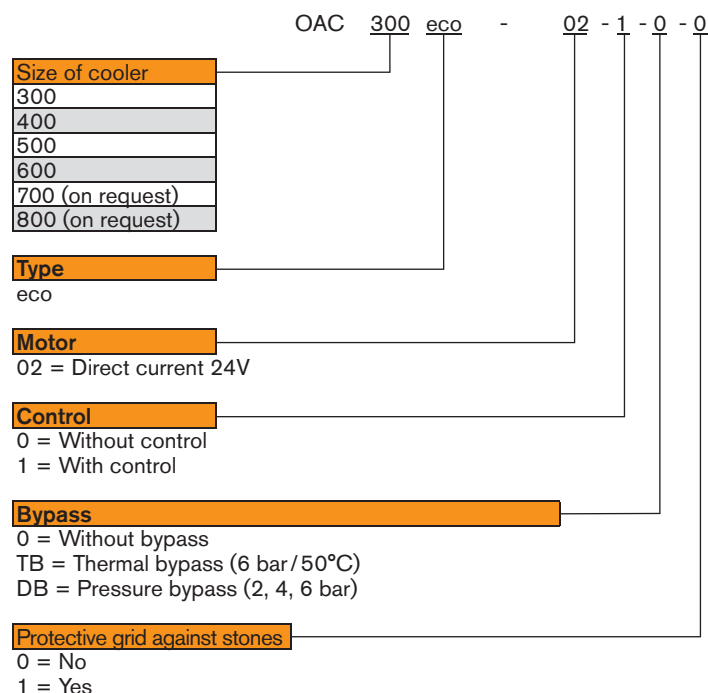
- Energy consumption optimised to requirements
- Variable speed fan motor
- Infinitely variable adaptation of cooling capacity oriented to requirements
- Operating voltage 24V
- Protective class IP65
- Up to 25 kW cooling capacity with ΔT : 40°K
- CE certification
- High-performance cooler core made of aluminium for a maximum static operating pressure of 10 bar
- Three temperature curves pre-set
- Cleaning operation & program change at the touch of a button during operation
- Oil inlet temperature is permanently displayed

Structure

- Cooler core made of aluminium
- Fan cover made of steel
- Fan made of nylon incl. protective grid
- Motor 24V, IP65
- Temperature Fan Speed Control (TFSC)
- Temperature sensor

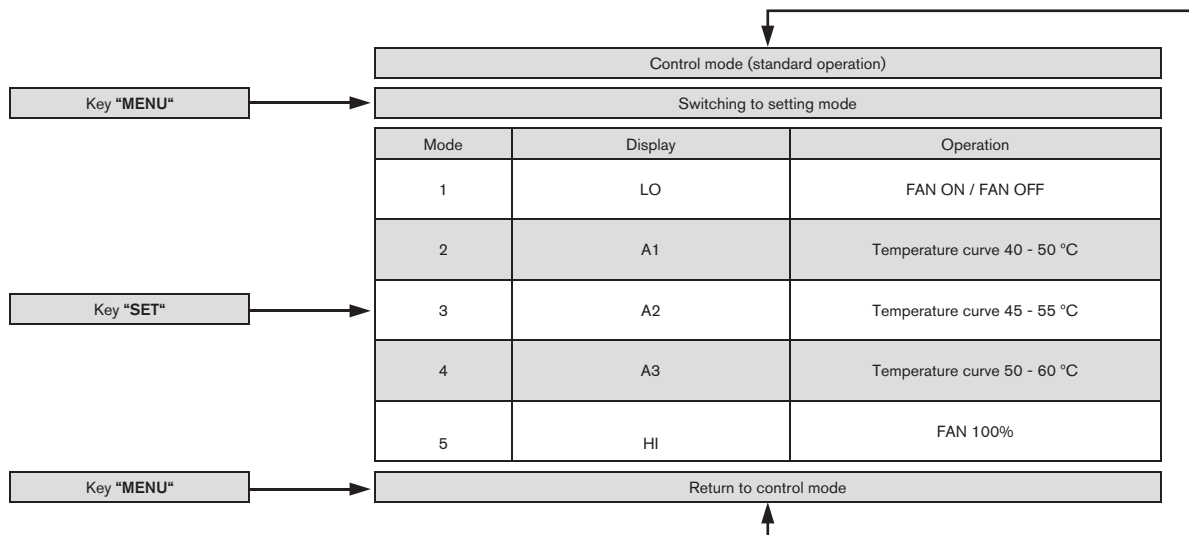
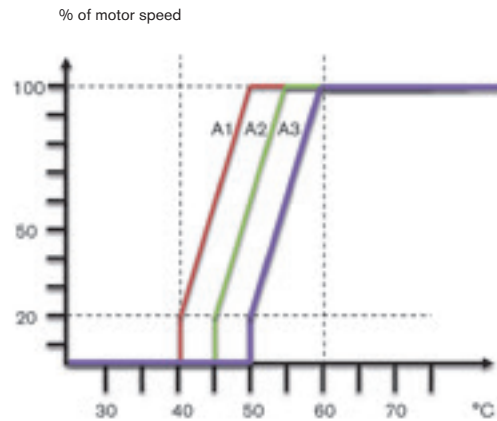
The OAC eco series is based on the previous standard, reduces noise which is generated and the energy consumption without accepting any loss in performance.

Type code

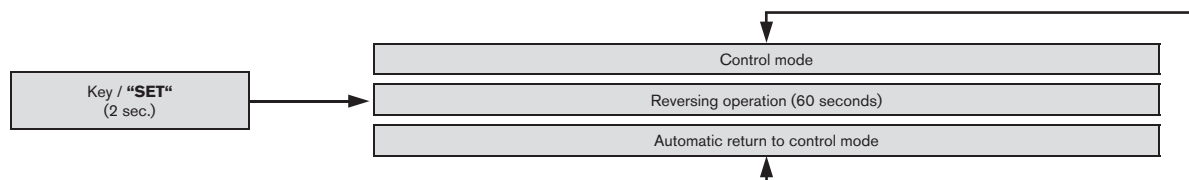


Operation

The control module TFSC is part of the cooler series eco controlling the speed of the motor. For that purpose the temperature value of the sensor is directly assigned to the motor speed. For various loads three temperature curves defined by the manufacturer are available (mode 2, 3, 4). In addition the fan can be permanently switched on or off, mode 1 and 5.



TSFC is operated via three buttons. The device is switched on or off via „ON/OFF“, while it is started in the control mode which is set as a standard by the manufacturer (mode 2). Via „MENU“ you can switch between control mode and setting mode (mode 1, 2, 3, 4, 5). With the control mode the current temperature of the sensor is displayed, with the setting mode the operating mode selected is displayed. The key „SET“ serves for changing the parameters 1-5.



Pressing the SET key may call the cleaning operation in addition. Here the fan rotates with full speed during 60 seconds in opposite direction. In the meantime the display counts back the remaining time in seconds. On completion the device restarts in the control mode. The cleaning operation can be interrupted by pressing the key „MENU“ at any time.

Oil/air coolers type OAC

Cooling systems

Diagrammes of performance and pressure loss

Performance diagramme

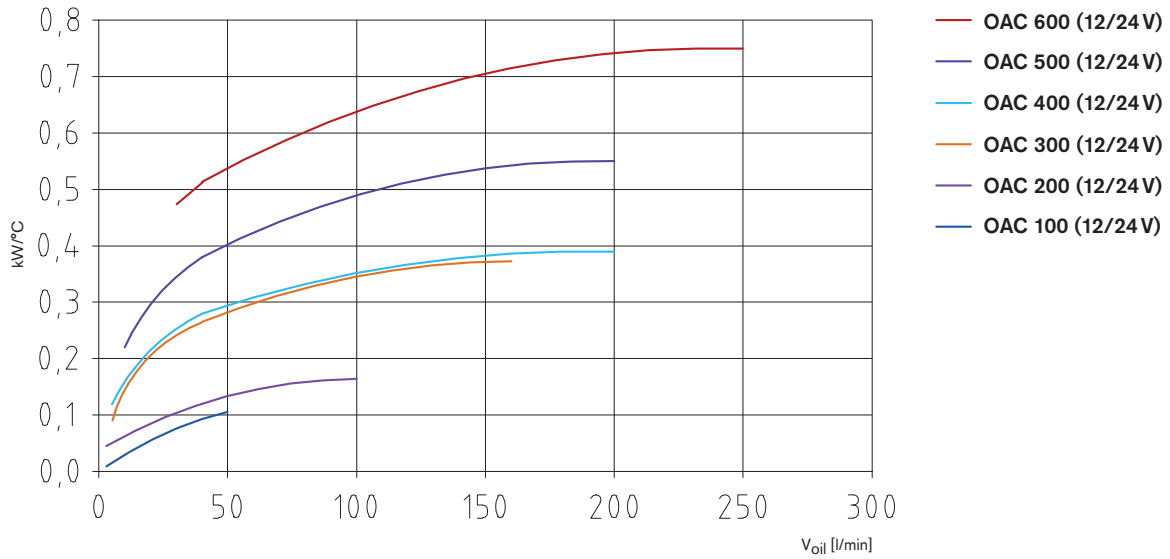
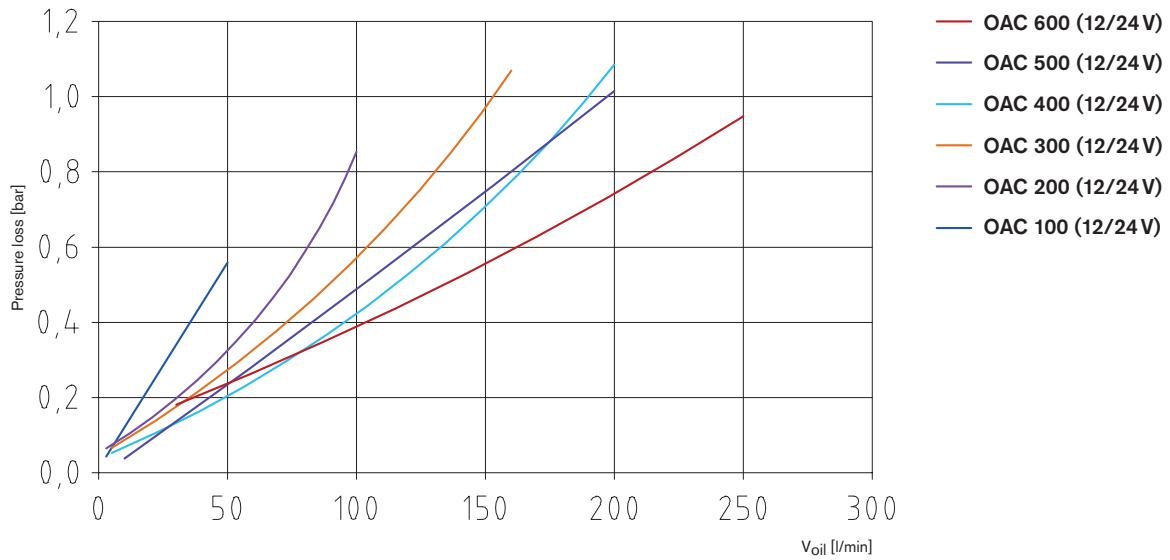


Diagramme of pressure loss



Conversion factor pressure loss									
cSt	10	15	20	30	40	50	60	80	100
Factor	0,5	0,65	0,75	1	1,2	1,4	1,6	2,1	2,8

Performance diagramme

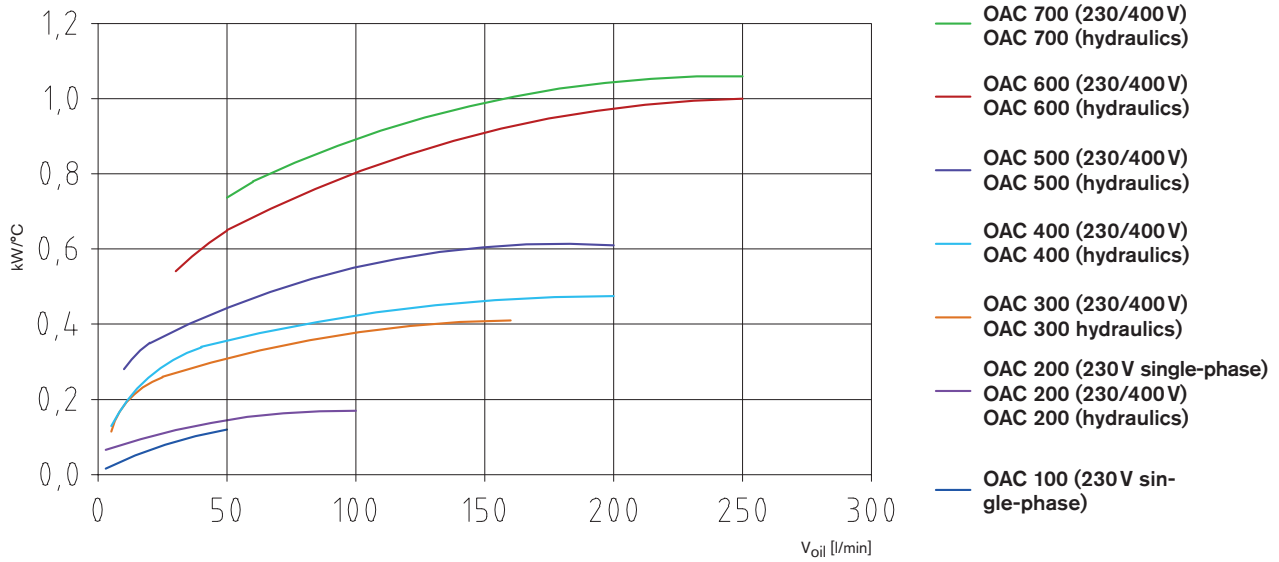
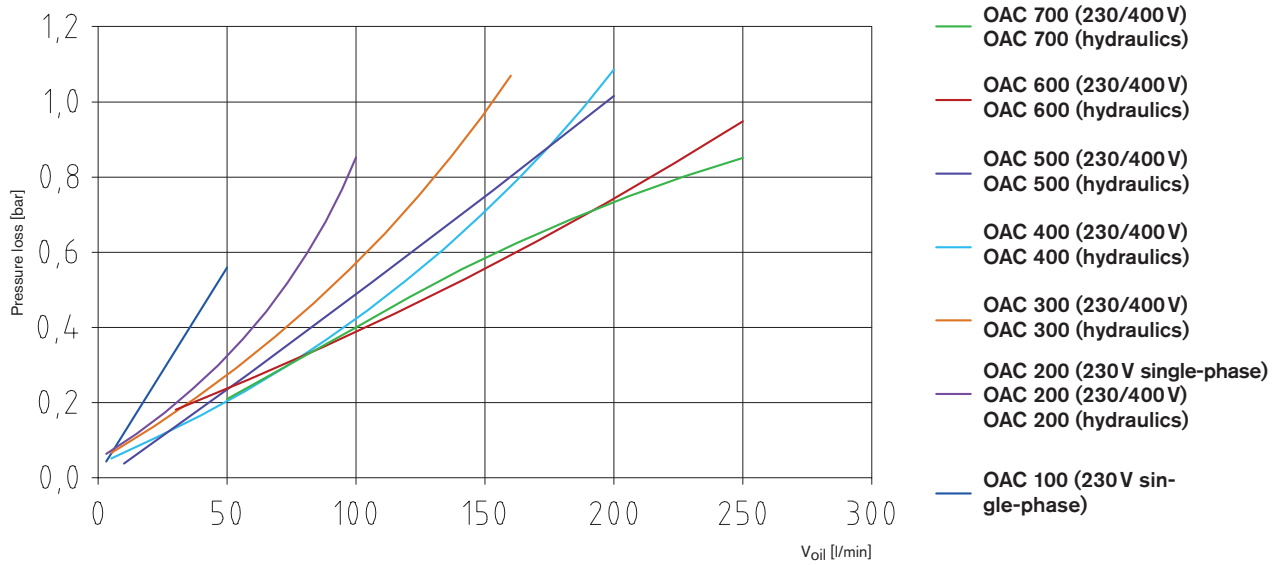


Diagramme of pressure loss



Conversion factor pressure loss									
cSt	10	15	20	30	40	50	80	100	
Factor	0,5	0,65	0,75	1	1,2	1,4	1,6	2,1	2,8

Oil/air coolers type OAC

Cooling systems

Diagramme of performance and pressure loss

Performance diagramme

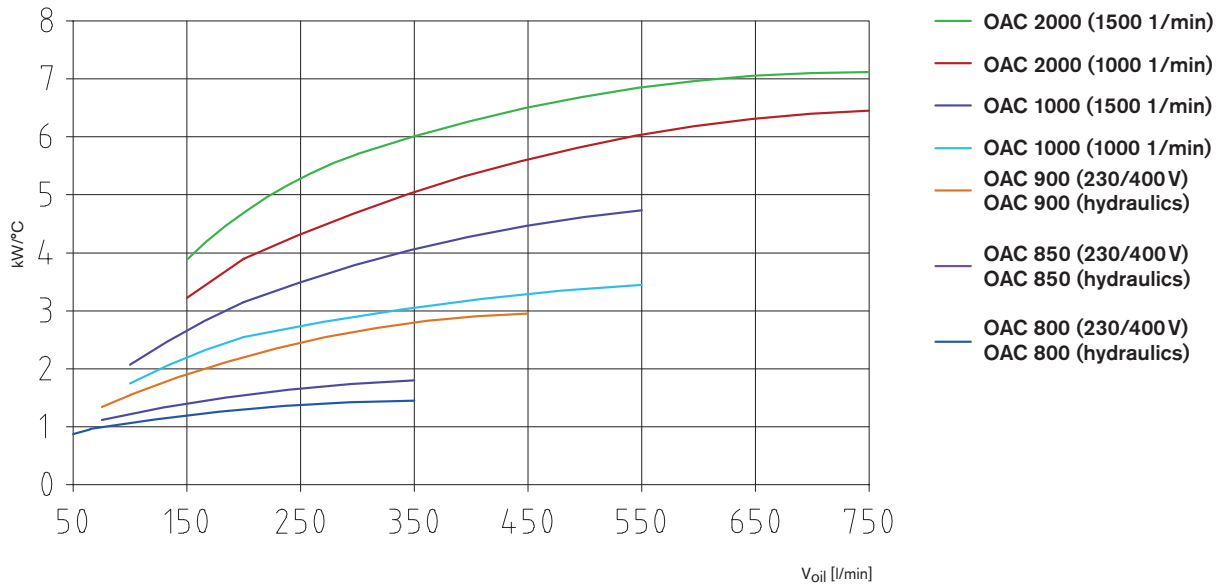
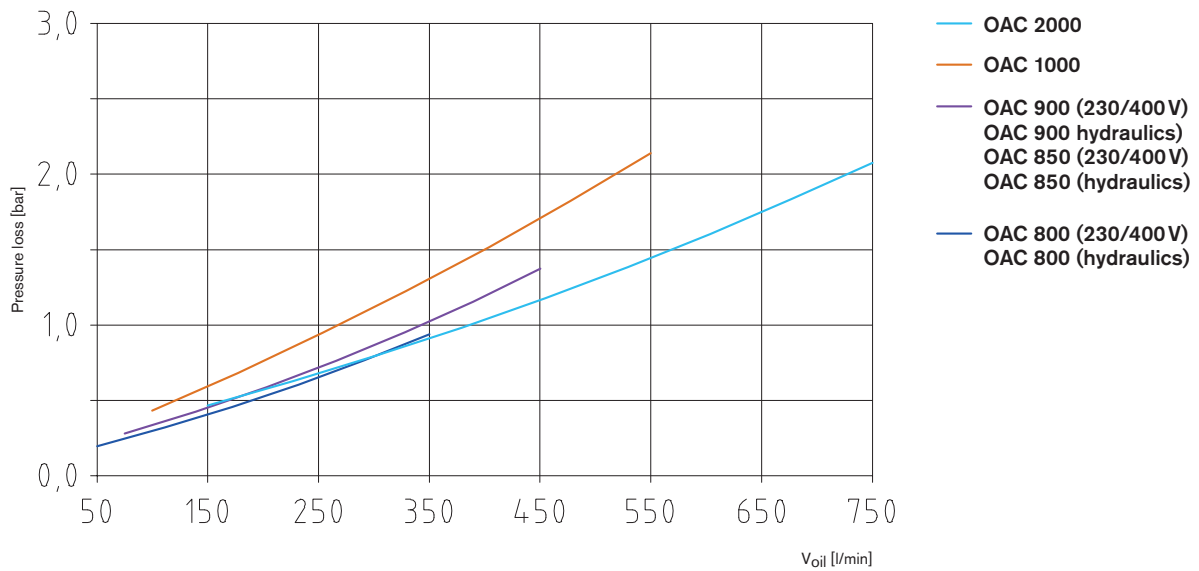


Diagramme of pressure loss

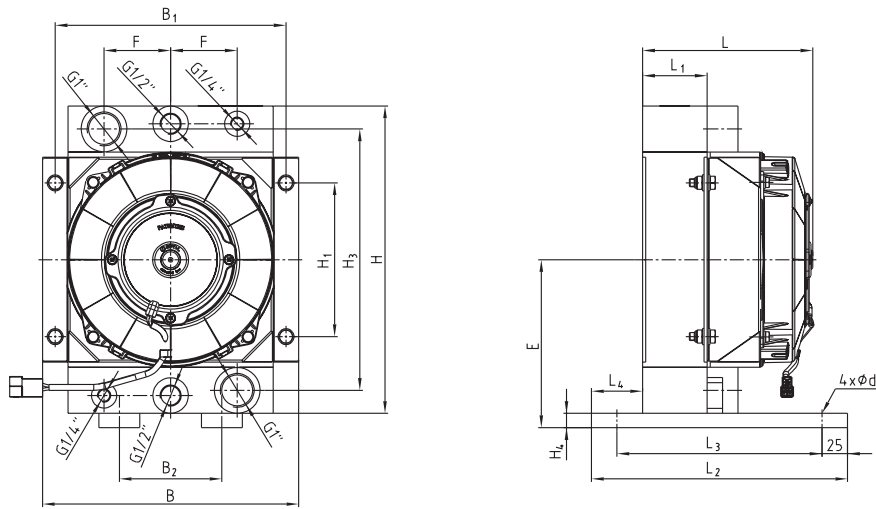


Conversion factor pressure loss									
cSt	10	15	20	30	40	50	60	80	100
Factor	0,5	0,65	0,75	1	1,2	1,4	1,6	2,1	2,8

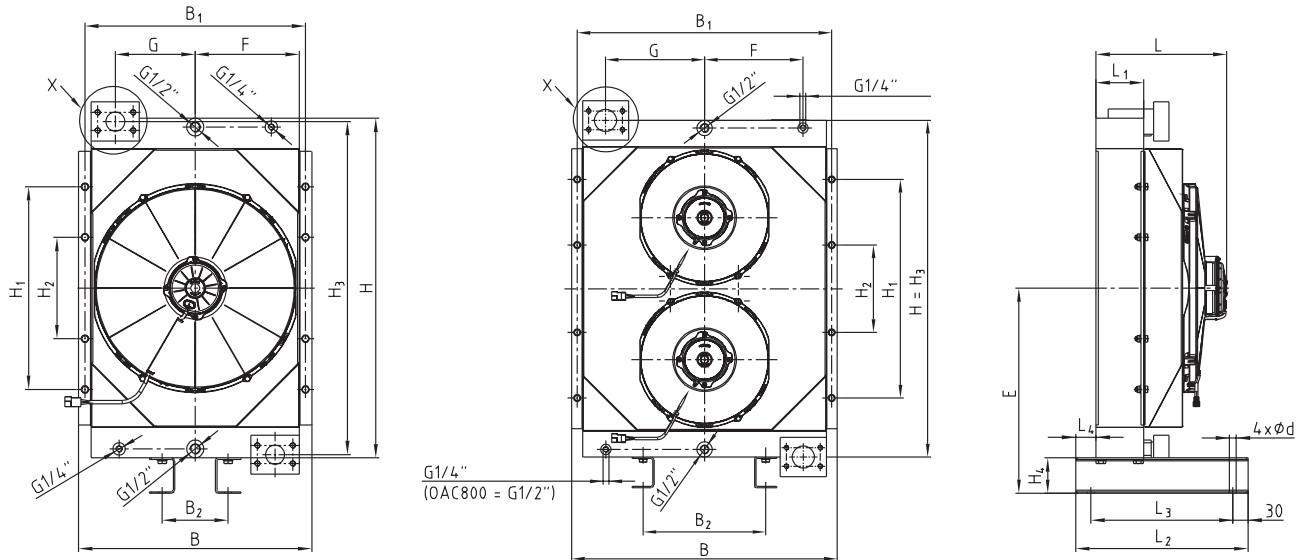
Oil/air coolers type OAC

Cooling systems

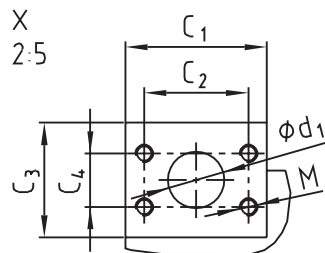
Dimensions of OAC 100 - 600 (12/24V)



OAC 100 - OAC 400 12V/24V



OAC 500/600 12V/24V



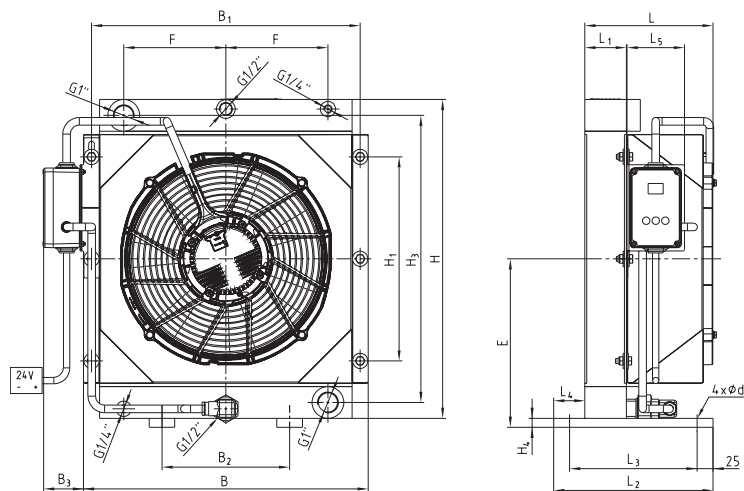
Oil/air cooler type OAC 12V/24V

Cooler type	Dimensions [mm]																								
	L	L ₁	L ₂	L ₃	L ₄	B	B ₁	B ₂	H	H ₁	H ₂	H ₃	H ₄	H ₅	d	d ₁	C ₁	C ₂	C ₃	C ₄	SAE flange	M	F	G	E
OAC 100-01	167	65	250	200	50	250	225	100	300	150	-	255	14	-	14	-	-	-	-	-	-	-	65	-	164
OAC 100-02	167	65	250	200	50	350	325	174	410	240	-	360	14	-	14	-	-	-	-	-	-	-	115	-	219
OAC 200-01	230	65	250	200	49	446	421	200	500	320	-	450	14	-	14	-	-	-	-	-	-	-	160	-	264
OAC 200-02	230	65	250	200	49	446	421	200	500	320	-	450	14	-	14	-	-	-	-	-	-	-	160	-	264
OAC 300-01	260	95	280	230	55,5	446	421	200	500	320	-	450	14	-	14	-	-	-	-	-	-	-	160	-	264
OAC 300-02	260	95	280	230	55,5	446	421	200	500	320	-	450	14	-	14	-	-	-	-	-	-	-	160	-	264
OAC 400-01	259	95	340	280	40	460	435	130	670	400	200	657	70	-	13,5	38	95	69,9	77	35,7	1 1/2"	M12	150	157,5	405
OAC 400-02	259	95	340	280	40	460	435	130	670	400	200	657	70	-	13,5	38	95	69,9	77	35,7	1 1/2"	M12	150	157,5	405
OAC 500-01	222	95	340	280	40	607	582	280	770	500	200	770	70	-	13,5	51	105	77,8	90	42,9	2"	M12	225	226	-
OAC 500-02	222	95	340	280	40	607	582	280	770	500	200	770	70	-	13,5	51	105	77,8	90	42,9	2"	M12	225	226	-
OAC 600-01	222	95	340	280	40	607	582	280	770	500	200	770	70	-	13,5	51	105	77,8	90	42,9	2"	M12	225	226	-
OAC 600-02	222	95	340	280	40	607	582	280	770	500	200	770	70	-	13,5	51	105	77,8	90	42,9	2"	M12	225	226	-

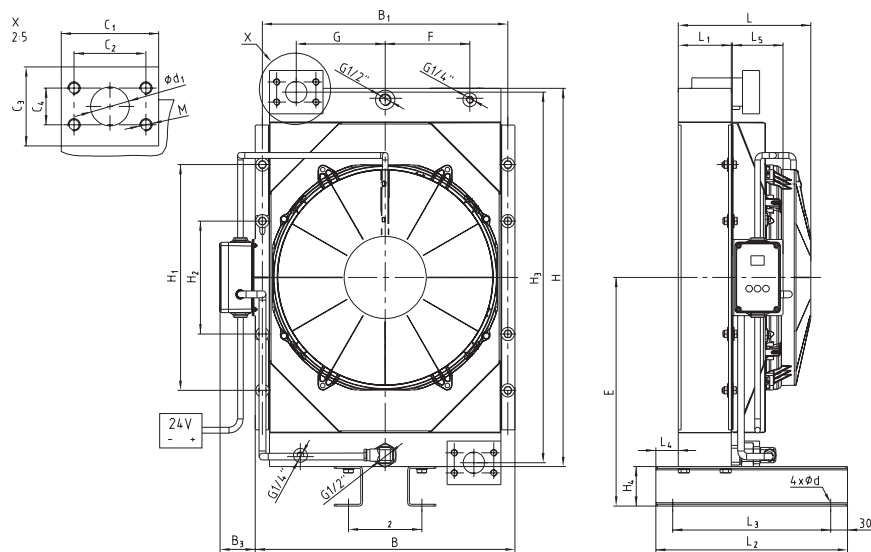
Oil/air coolers type OAC eco

Cooling systems

Dimensions of OAC eco 300 - 600 (24V)



OAC 300 - OAC 400 eco



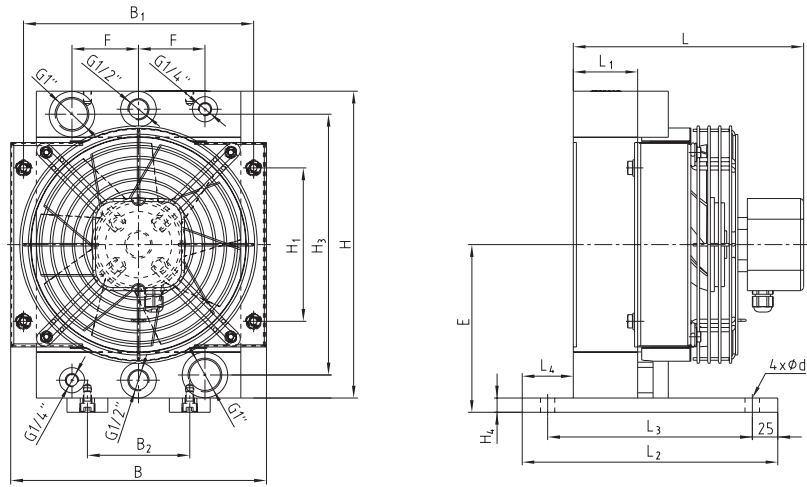
OAC 500 - OAC 600 eco

Oil/air cooler type OAC eco																											
Cooler type	Dimensions [mm]																										
	L	L ₁	L ₂	L ₃	L ₄	L ₅	B	B ₁	B ₂	B ₃	H	H ₁	H ₂	H ₃	H ₄	d	d ₁	C ₁	C ₂	C ₃	C ₄	SAE flange	M	F	G	E	
OAC 300 eco -02	201	65	250	200	49	90	446	421	200	63	500	320	-	450	14	14	-	-	-	-	-	-	-	-	160	-	264
OAC 400 eco -02	231	95	280	230	55,5	90	446	421	200	63	500	320	-	450	14	14	-	-	-	-	-	-	-	-	160	-	264
OAC 500 eco -02	234,7	94	340	280	40	90	460	435	130	63	670	400	200	657	70	13,5	38	95	69,9	77	35,7	1 1/2"	M12	150	157	405	
OAC 600 eco -02	294,7	94	340	280	40	90	607	582	280	63	770	500	200	770	70	13,5	51	105	77,8	90	42,9	2"	M12	225	226	455	

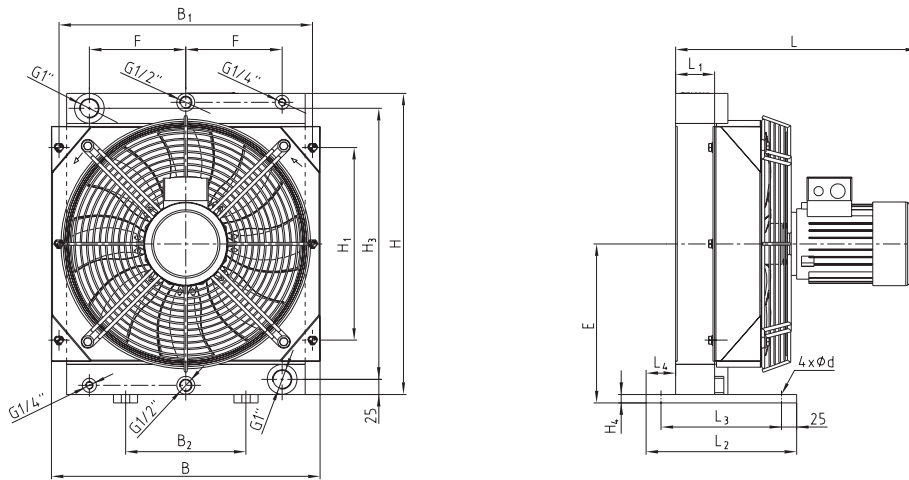
Oil/air coolers type OAC

Cooling systems

Dimensions of OAC 100 - 400 (230/400V)



OAC 100 - OAC 200 230V (single-phase)



OAC 200 - OAC 400 230V/400V

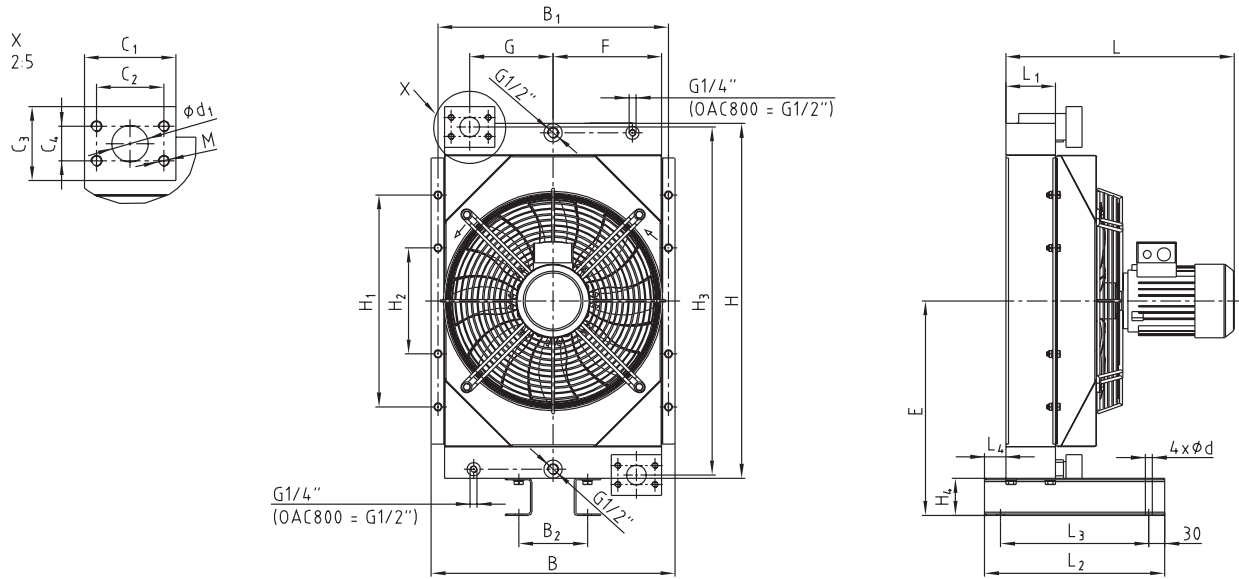
Oil/air cooler type OAC 230V/400V

Cooler type	Dimensions [mm]																								
	L	L ₁	L ₂	L ₃	L ₄	B	B ₁	B ₂	H	H ₁	H ₂	H ₃	H ₄	H ₅	d	d ₁	C ₁	C ₂	C ₃	C ₄	M	F	G	E	
OAC 100-03-C	225	63	250	200	50	250	225	100	200	150	-	255	14	-	14	-	-	-	-	-	-	-	65	-	164
OAC 200-03-C	273	63	250	200	50	350	325	174	410	240	-	360	14	-	14	-	-	-	-	-	-	-	115	-	219
OAC 200-03	334	65	250	200	50	350	325	174	410	240	-	360	14	-	14	-	-	-	-	-	-	-	115	-	219
OAC 300-03	404	65	250	200	49	446	421	200	500	320	-	450	14	-	14	-	-	-	-	-	-	-	160	-	264
OAC 400-03	434	95	280	230	55,5	446	421	200	500	320	-	450	14	-	14	-	-	-	-	-	-	-	160	-	264

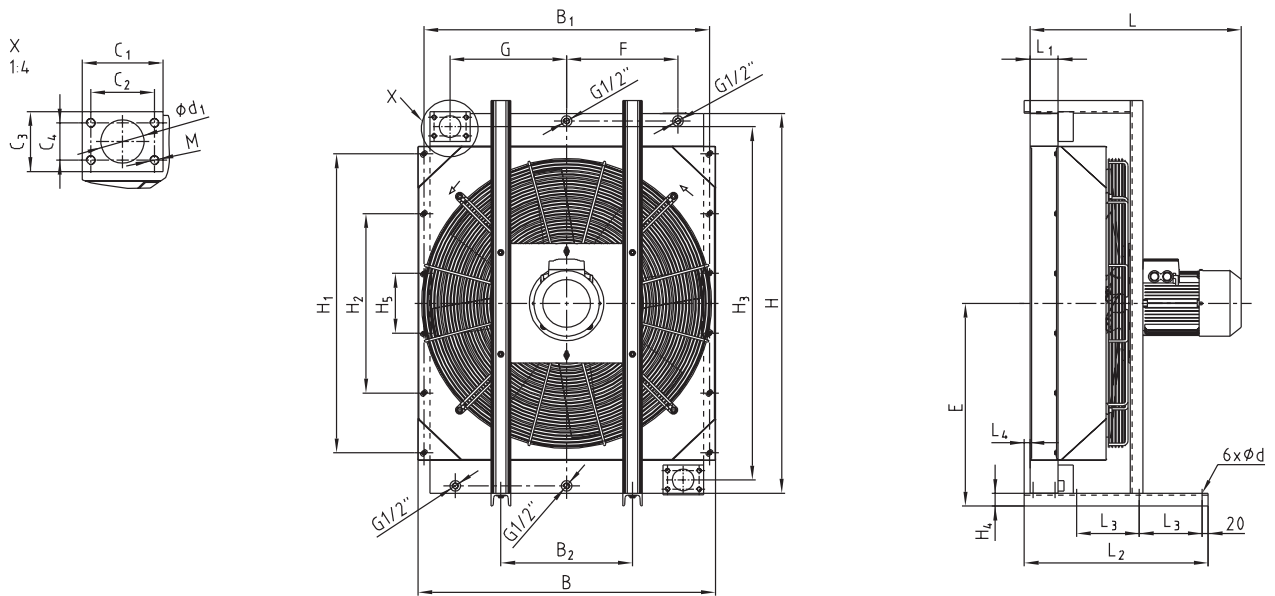
Oil/air coolers type OAC

Cooling systems

Dimensions of OAC 500-2000 (230/400/690V)



OAC 500 - OAC 800 230V/400V



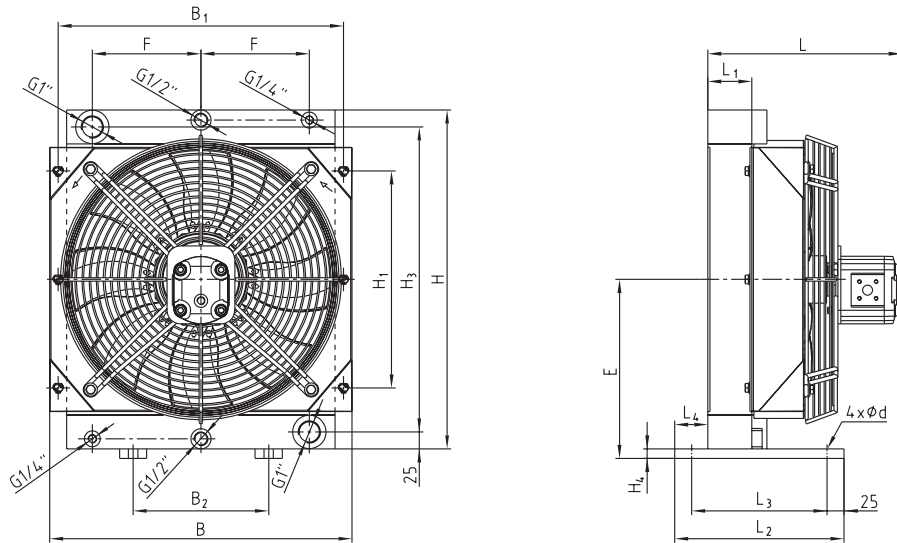
OAC 850 - OAC 2000 230V/400V (400V/690V)

Oil/air cooler type OAC 230V/400V

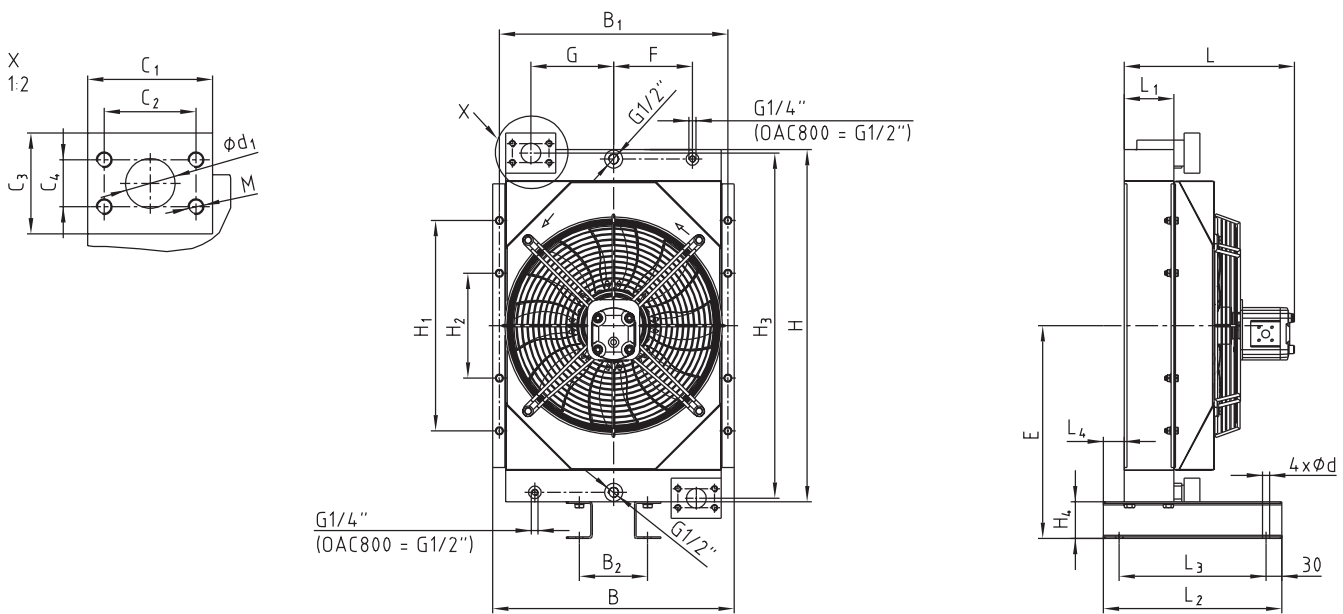
Cooler type	Dimensions [mm]																									
	L	L ₁	L ₂	L ₃	L ₄	B	B ₁	B ₂	H	H ₁	H ₂	H ₃	H ₄	H ₅	d	d ₁	C ₁	C ₂	C ₃	C ₄	SAE flange	M	F	G	E	
OAC 500-03	431	95	340	280	40	460	435	130	670	400	200	657	70	-	13,5	38	95	69,9	77	35,7	1 1/2"	M12	150	157,5	405	
OAC 600-03	532	95	340	280	40	607	582	280	770	500	200	770	70	-	13,5	51	105	77,8	90	42,9	2"	M12	225	226	455	
OAC 700-03	542	95	340	280	40	608	582	280	920	700	300	920	70	-	13,5	51	105	77,8	90	42,9	2"	M12	225	226	530	
OAC 800-03	665	140	450	390	40	701	676	280	920	700	300	920	70	-	13,5	51	105	77,8	90	42,9	2"	M12	272	273	530	
OAC 850-03	667	95	500	180	-	870	835	350	960	690	230	910	42	-	14	51	105	77,8	90	42,9	2"	M12	350	340	523	
OAC 900-03	670	95	590	210	-	995	955	440	1270	1000	600	1182	42	200	14	73	135	106,5	100	62	3"	M16	372,5	390	678	
OAC 1000-03-06	690	113	615	210	-	995	955	440	1270	1000	600	1182	42	200	14	73	135	106,5	100	62	3"	M16	372,5	390	678	
OAC 1000-03-04	729	113	615	210	-	995	955	440	1270	1000	600	1182	42	200	14	73	135	106,5	100	62	3"	M16	372,5	390	678	
OAC 2000-03-06	900	140	750	210	-	1286	1246	525	1420	1000	600	1332	45	200	14	73	135	106,5	100	62	3"	M16	532	532	756	
OAC 2000-03-04	980	140	750	210	-	1286	1246	525	1420	1000	600	1332	45	200	14	73	135	106,5	100	62	3"	M16	532	532	756	

Oil/air coolers type OAC Cooling systems

Dimensions of OAC 200 - 800 (hydraulic)



OAC 200 - OAC 400 hydraulic



OAC 500 - OAC 800 hydraulic

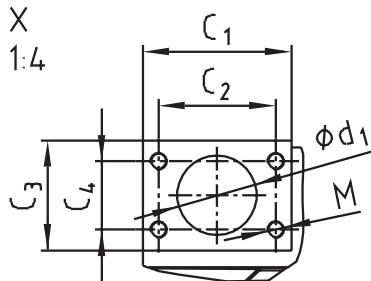
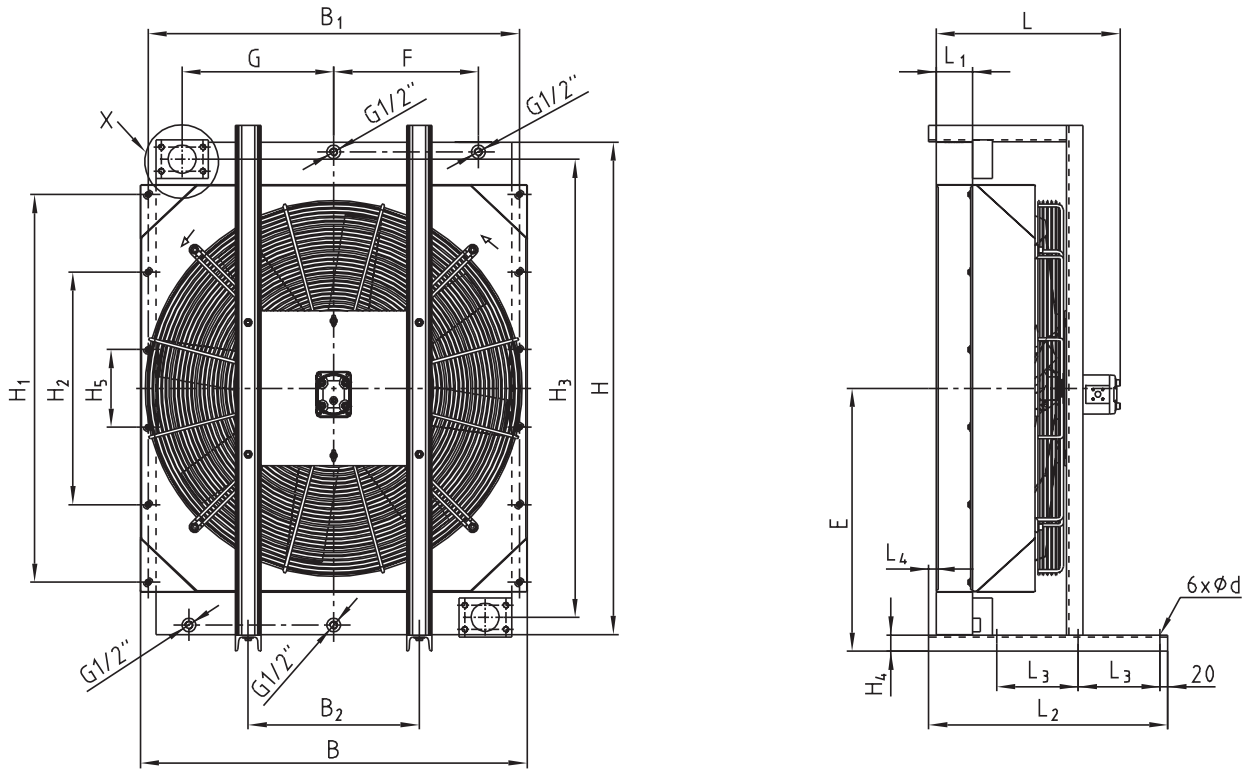
Oil/air cooler type OAC hydraulic

Cooler type	Dimensions [mm]																									
	L	L ₁	L ₂	L ₃	L ₄	B	B ₁	B ₂	H	H ₁	H ₂	H ₃	H ₄	H ₅	d	d ₁	C ₁	C ₂	C ₃	C ₄	SAE flange	M	F	G	E	
OAC 200-04	245	65	250	200	50	350	325	174	410	240	-	360	14	-	14	-	-	-	-	-	-	-	-	115	-	219
OAC 300-04	295	65	250	200	49	446	421	200	500	320	-	450	14	-	14	-	-	-	-	-	-	-	-	160	-	264
OAC 400-04	325	95	280	230	55,5	446	421	200	500	320	-	450	14	-	14	-	-	-	-	-	-	-	-	160	-	264
OAC 500-04	323	95	340	280	40	460	435	130	670	400	200	657	70	-	13,5	38	95	69,9	77	35,7	1 1/2"	M12	150	157,5	405	
OAC 600-04	400	95	340	280	40	607	582	280	770	500	200	770	70	-	13,5	51	105	77,8	90	42,9	-	M12	225	226	455	
OAC 700-04	411	95	340	280	40	608	582	280	920	700	300	920	70	-	13,5	51	105	77,8	90	42,9	2"	M12	225	226	530	
OAC 800-04	546	140	450	390	40	701	676	280	920	700	300	920	70	-	13,5	51	105	77,8	90	42,9	-	M12	272	273	530	

Oil/air coolers type OAC

Cooling systems

Dimensions of OAC 850 - 2000 (hydraulic)



OAC 850 - OAC 2000 hydraulic

Oil/air cooler type OAC hydraulic																									
Cooler type	Dimensions [mm]																				SAE flange	M	F	G	E
	L	L ₁	L ₂	L ₃	L ₄	B	B ₁	B ₂	H	H ₁	H ₂	H ₃	H ₄	H ₅	d	d ₁	C ₁	C ₂	C ₃	C ₄					
OAC 850-04	475	95	590	210	-	870	835	350	960	690	230	910	42	-	14	51	105	77,8	90	42,9	2"	M12	350	340	523
OAC 900-04	475	95	615	210	19,5	995	955	440	1270	1000	600	1182	42	200	14	73	135	106,5	100	62	3"	M16	372,5	390	678
OAC 1000-04	505	113	615	210	-	995	955	440	1270	1000	600	1182	42	200	14	73	135	106,5	100	62	3"	M16	372,5	390	678
OAC 2000-04	620	140	750	210	-	1286	1246	525	1420	1000	600	1332	45	200	14	73	135	106,5	100	62	3"	M16	532	532	756

Oil/air coolers / cooling-pumping unit OPC

Cooling systems

Bypass flow cooling with integrated pump



The OPC oil cooler unit is a system specifically developed for cooling in the bypass flow as an independent unit. The unit consists of a cooler, fan, electric motor, pump and may be supplemented by a filter on request of the customer.

Applications

- Machine tools
- Elevators
- Test benches
- Add-on coolers
- Bypass flow cooling

Applicable for cooling of:

- Hydraulic oil
- Gear oil
- Lubricating grease
- Water-glycol (min. 40 % glycol)

Structure

- Cooler core (plate and bar) made of aluminium with industrial lamina in black (RAL 9005)
- Fan cover made of steel in black (RAL 9005)
- Fan made of nylon PAG
- Protective grid made of steel in black (RAL 9005)
- Electric motor 230 V/400 V, IP55
- Bellhousing and coupling
- Gear feed pump with pressure relief valve 0-15 bar, recommended setting 5 bar, max. media temp. 80 °C (higher temperature on request)
- Filter with visual maintenance display, as an option

Marine design:

- Cooler core with CDP coating
- Frame, protective grid, cover with CDP coating
- Electric motor with special painting and protection IP56

ATEX design:

- Electric motor in ATEX design  II 2 G Exell T3
- Special fan

Accessories, protective grid, TSC

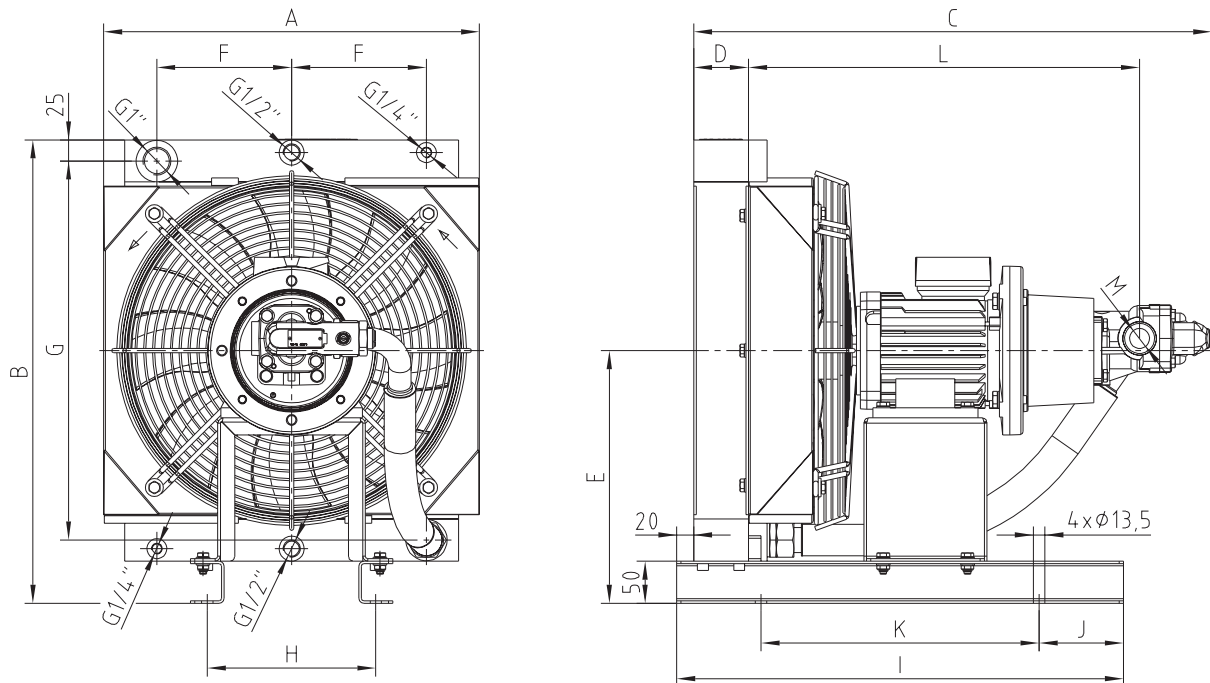
- Thermal bypass valves, oil temperature valves OTV, see page 26/27

The OAC coolers should be protected from direct solar radiation.

Oil/air coolers / cooling-pumping unit OPC

Cooling systems

Dimensions of OPC 200 - 400 (230/400V)



OPC 200 - OPC 400

Technical data																							
Cooler type	Voltage	Current [A]	Speed [rpm]	l/min	kW/°C	A	B	C	D	E	F	G	H	I	J	K	L	M	Weight [kg]				
						OPC 200-4D-0,75kW	230/400V 50Hz	1,8	1400	5,5	0,07			572									
OPC 200-12D-0,75kW	16,7	0,09	350	460	596	65				255	115	360	174	530	100	330	426	G 3/4"	35				
OPC 200-16D-0,75kW	21,4	0,10			596															435	G 1"		
OPC 300-4D-0,75kW	5,5	0,12																					
OPC 300-12D-0,75kW	16,7	0,23	446	550	615	65				300	160	450	200	530	100	330	464	G 3/4"	42				
OPC 300-16D-0,75kW	21,4	0,25			638																473	G 1"	
OPC 400-4D-0,75kW	5,5	0,13																					
OPC 400-12D-0,75kW	16,7	0,24	446	550	645																465	G 3/4"	
OPC 400-16D-0,75kW	21,4	0,27			668	95				300	160	450	200	550	75	400	474	SAE		46			
OPC 400-32D-0,75kW	42,7	0,34			720																474	1 1/2	

Any questions? Please contact us.

Morskate Aandrijvingen BV
 Oosterveldsingel 47A
 7558 PJ Hengelo (Ov)
 The Netherlands

NL
 T +31 (0)74 - 760 11 11
 info@morskateaanrijvingen.nl
 www.morskateaanrijvingen.nl

DE
 T +49 692 - 222 34 95
 info@morskateantriebstechnik.de
 www.morskateantriebstechnik.de

EN
 T +31 (0)74 - 760 11 11
 info@morskatedrivetechnology.com
 www.morskatedrivetechnology.com