



**OVS** GENERATION 2

ADVANCED HEAT EXCHANGERS

OIL SEPARATORS



### INFORMAZIONI TECNICHE

I separatori verticali d'olio OVS, installati a valle dei compressori, garantiscono un'efficiente separazione tra il fluido frigorigeno e l'olio lubrificante utilizzato nei compressori stessi. Sono impiegabili tutti i tipi di refrigeranti, purché compatibili con i materiali di costruzione.

In caso di ammoniaca (NH<sub>3</sub>) è necessario utilizzare i separatori bi-stadio equipaggiati di filtri coalescenti.

### MATERIALI

I separatori verticali d'olio OVS sono costruiti in acciaio al carbonio di elevata qualità, rispettando i requisiti della Direttiva Europea P.E.D. 2014/68/UE per certificazione CE e i requisiti degli standard ASTM/ASME per certificazione ASME VIII div.1

Altre tipologie di materiali sono disponibili su richiesta.

### ACCESSORI

I seguenti accessori sono disponibili su richiesta:

- Indicatore di livello elettrico
- Indicatore di livello ottico
- Resistenze elettriche complete di pozzetto
- Termostato
- Filtro coalescente
- Kit di fissaggio per filtro coalescente

### PROVE, NORMATIVE, LIMITI D'IMPIEGO

#### APPLICAZIONI CIVILE/INDUSTRIALE:

- Marcatura CE: approvazione e collaudo secondo la Direttiva Europea 2014/68/UE (P.E.D.)
- Marcatura ASME: approvazione e collaudo secondo la normativa ASME VIII divisione 1

#### APPLICAZIONI MARINE/NAVALE:

Tutti i separatori possono anche essere approvati per uso navale con le principali società di classifica (RINA, BVM, LRS, DNVGL, ABS etc.). Contattare l'ufficio commerciale di ONDA S.p.A. per conoscere limiti e campi di impiego.

La tabella seguente riassume i limiti d'impiego generalmente applicati.

### TERMINI DI VENDITA - GARANZIA

I termini di vendita e di garanzia sono disponibili nel sito internet

I dati dimensionali contenuti in questo catalogo sono puramente indicativi, in quanto soggetti alle tolleranze di fabbricazione.

Onda S.p.A. si riserva il diritto di apportare a tali dimensioni tutte le modifiche ritenute, in qualsiasi momento, utili e convenienti.

### TECHNICAL NOTES

The OVS vertical oil separators, installed on the compressor discharge line, guarantee an efficient separation between refrigerant and lubricating oil.

All refrigerants are suitable, provided they are compatible with materials used for construction.

In case of ammonia (NH<sub>3</sub>) it's necessary to select a two-stage vertical oil separator, with coalescent filters.

### MATERIALS

The OVS vertical oil separators are made of high-quality carbon steel, in accordance with the requirements of the European Directive (P.E.D.). 2014/68/UE for the CE stamp and the requirements of the ASTM/ASME standard for the ASME VIII div.1 stamp.

### ACCESSORIES

The following accessories are available on request:

- Electrical level gauge
- Optical level gauge (as alternative)
- Electrical heaters with socket
- Thermostat
- Coalescent filter
- Installation kit for coalescent filter

### VESSELS CODES AND WORKING LIMITS

#### INDUSTRIAL / RESIDENTIAL APPLICATIONS:

- CE marking: approval process and test in accordance with the European Directive 2014/68/UE (P.E.D.)
- ASME marking: approval process and test in accordance with the ASME VIII div.1 rules

#### MARINE / NAVAL APPLICATIONS:

All separators may be approved also for naval use with major naval classification societies (RINA, BVM, LRS, DNVGL, ABS etc.).

Please contact Onda sales dept. to check application possibilities and limits.

The following table mentions more common working limits.

### SALES TERMS – WARRANTY

Sales terms and warranty conditions are available in our web site.

The dimensional data present in this catalogue have to be taken as purely indicative, since they are subjected to manufacturing tolerances.

At any time, Onda S.p.A. reserves the right to make all changes deemed useful and convenient.

### Separatori d'olio / Oil Separators

	Temperatura di progetto - Design temperature Min / Max	Pressione di progetto - Design Pressure
CE	- 10 ÷ 150 °C	FV/33 bar
ASME	- 20 ÷ 300 °F	FV/450 psi

### INSTALLAZIONE ED USO

Consultare il manuale di uso e manutenzione (scaricabile dal sito [www.onda-it.com](http://www.onda-it.com)) per una corretta installazione ed manutenzione dei separatori verticali d'olio OVS.

### INSTALLATION AND OPERATION

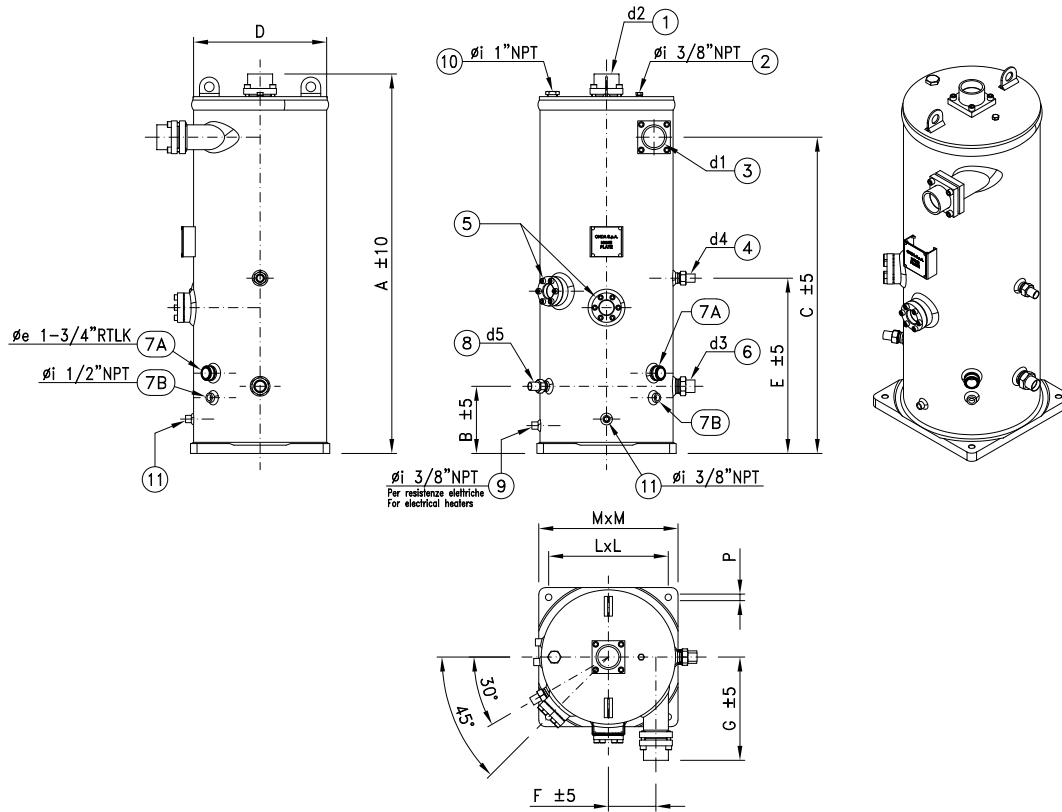
Please read the instruction manual (downloadable from our website [www.onda-it.com](http://www.onda-it.com)) for a right installation and maintenance of our vertical oil separator OVS.

**REALIZZAZIONE DI PRODOTTI PERSONALIZZATI**

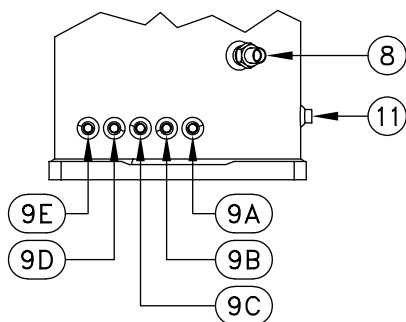
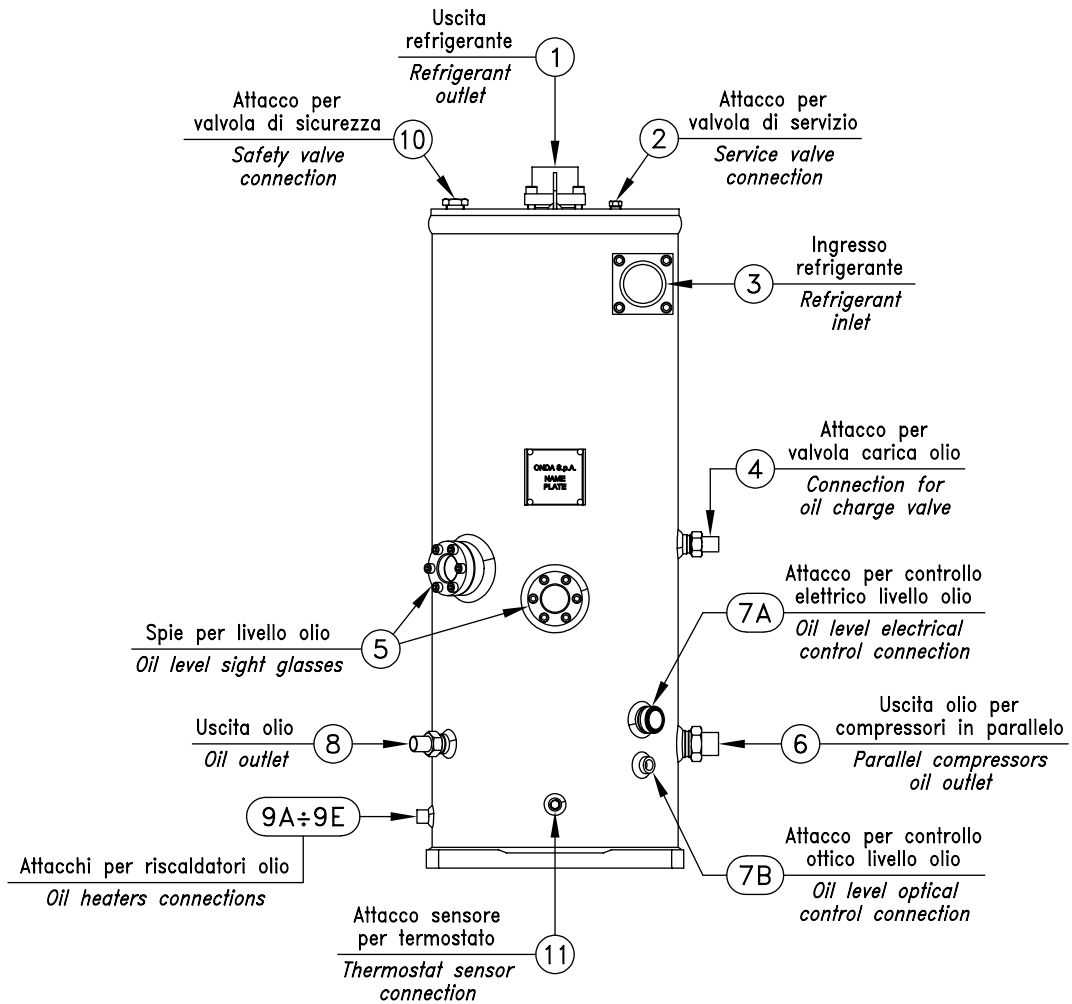
**DESIGN & MANUFACTURING CUSTOMIZED PRODUCTS**

### LEGENDA / NOMENCLATURE

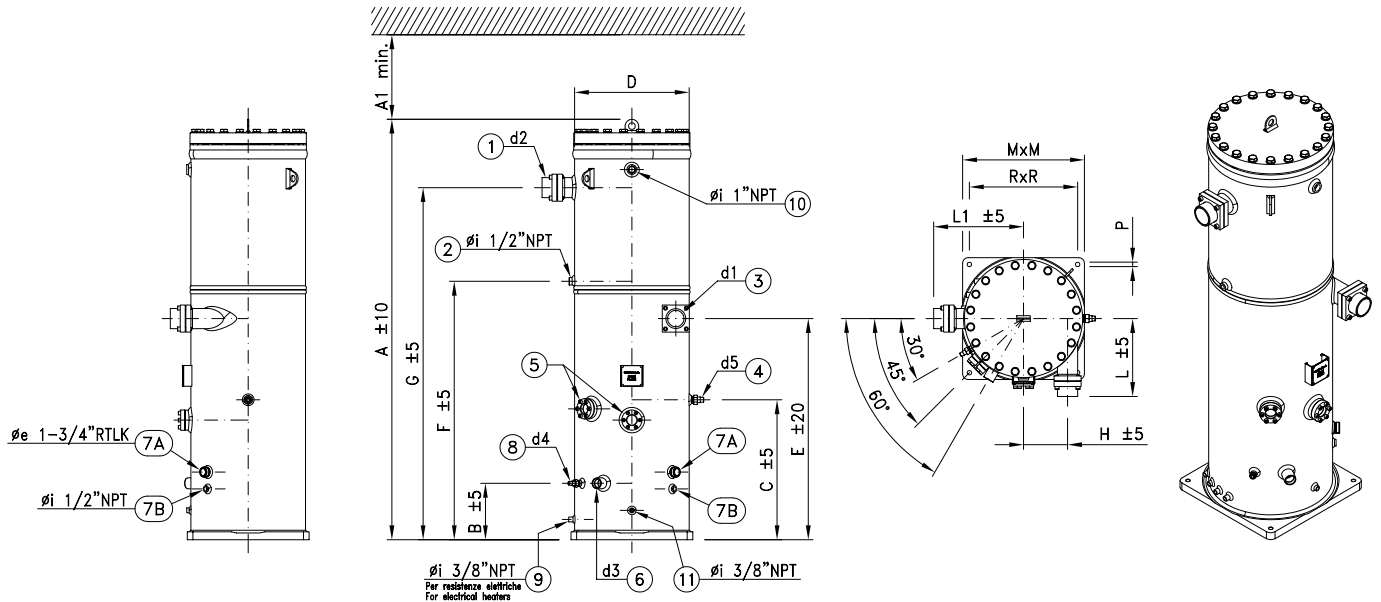
- OD = Diametro esterno / Outside diameter
- ODS = Diametro esterno tubo a brasare / Outside soldering diameter
- RTLK = Connessione rotalock / Rotalock connection
- FL = Connessione flangiata / Flanged connection
- NPT = Filettatura americana conica per tubi / American Standard Taper pipe threads



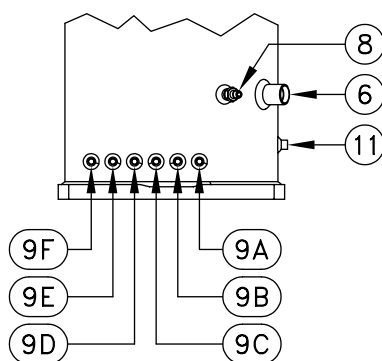
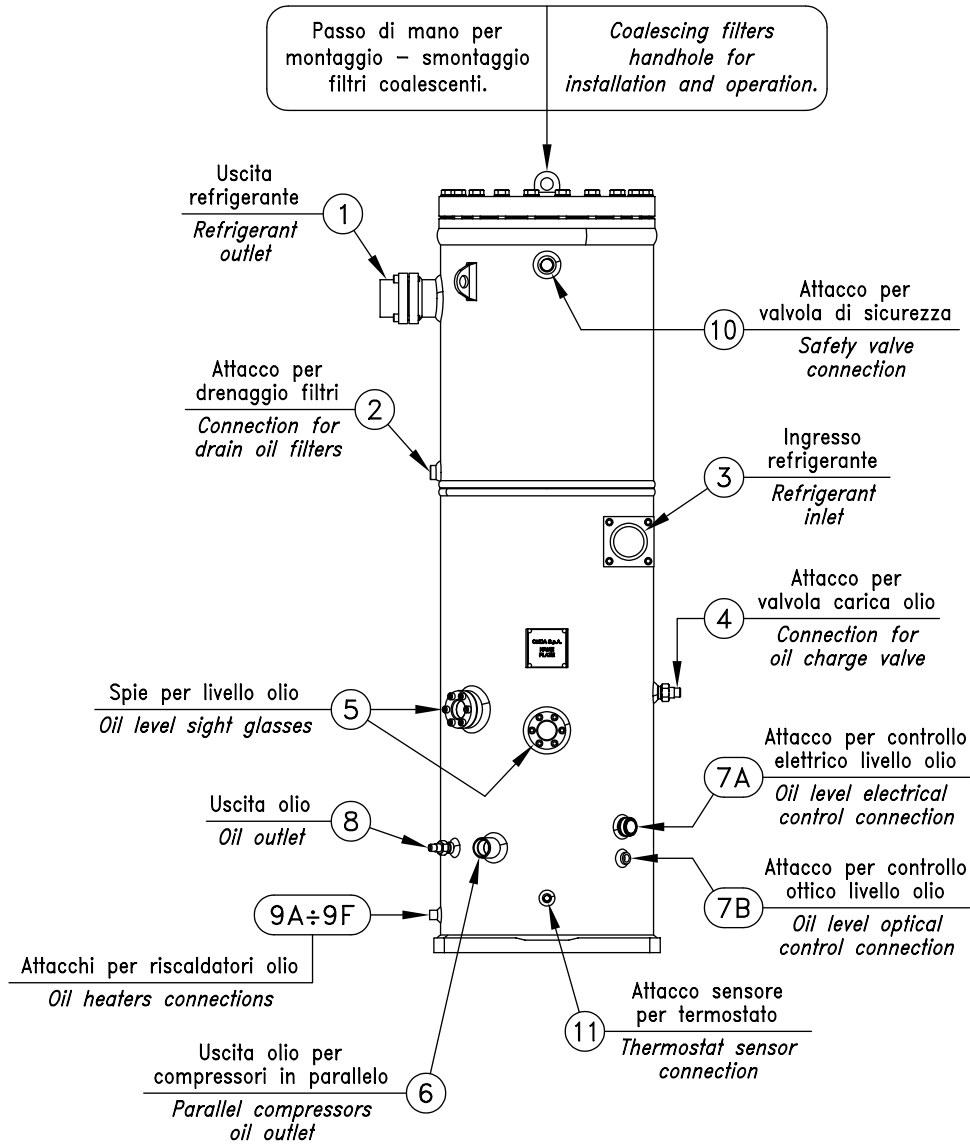
MODELLO / MODEL		OVS 32.40/1	OVS 41.120/1	OVS 51.220/1	OVS 61.330/1	OVS 71.560/1	
POTENZA COMPRESSORE COMPRESSOR CAPACITY	R404 evap -8°C/Cond +40°C	200	450	850	1300	2200	
	R404 evap -25°C/Cond +40°C	100	220	450	700	1100	
DATI NOMINALI NOMINAL DATA	Volume Olio / Oil volume	19	50	90	130	230	
	Volume Totale / Total volume	50	125	240	365	620	
DIMENSIONI DIMENSIONS	D	323,9	406,4	508	609,6	711,2	
	A	778	1158	1403	1476	1831	
	B	150	205	200	245	285	
	C	590	965	1190	1260	1595	
	E	370	535	600	620	725	
	F	120	145	195	235	260	
	G	275	315	350	365	440	
	LxL	300x300	365x365	480x480	570x570	650x650	
	MxM	340x340	425x425	540x540	640x640	750x750	
P	Ø14	Ø18	Ø18	Ø22	Ø26		
CONNESSIONI CONNECTIONS	d1	(FL) ODS 54	(FL) OD 76	(FL) OD 89	(FL) OD 114	(FL) OD 141	
	d2	(FL) ODS 42	(FL) OD 76	(FL) OD 89	(FL) OD 114	(FL) OD 141	
	d3	-	(RTLK) ODS 35	(FL) ODS 42	(FL) ODS 54	(FL) OD 76	
	d4	-	(RTLK) ODS 22	(RTLK) ODS 22	(RTLK) ODS 22	(RTLK) ODS 35	(RTLK) ODS 35
	d5	-	(RTLK) ODS 22	(RTLK) ODS 22	(RTLK) ODS 22	(RTLK) ODS 22	(RTLK) ODS 35
	N° resistenze elettriche / Electrical heaters No.	-	1	2	3	4	5
PESO / WEIGHT		95	170	330	520	845	



	9A	9B	9C	9D	9E
OVS 32.40/1	YES	NO	NO	NO	NO
OVS 41.120/1	YES	YES	NO	NO	NO
OVS 51.220/1	YES	YES	YES	NO	NO
OVS 61.330/1	YES	YES	YES	YES	NO
OVS 71.560/1	YES	YES	YES	YES	YES

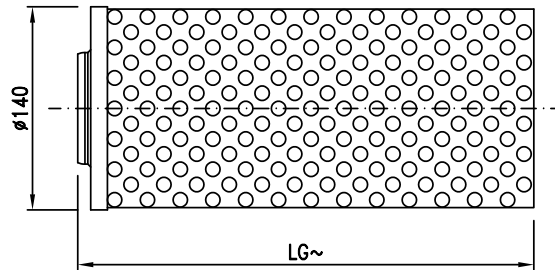


MODELLO / MODEL		OVS 32.90.1/2	OVS 41.170.2/2	OVS 51.310.3/2	OVS 61.470.4/2	OVS 61.500.6/2	OVS 71.600.7/2	OVS 71.700.7D/2	
POTENZA COMPRESSORE COMPRESSOR CAPACITY	NH3 evap -8°C/Cond +40°C	kW	300	600	950	1250	1900	2200	3800
	NH3 evap -25°C/Cond +40°C		250	500	800	1050	1600	1900	3200
DATI NOMINALI NOMINAL DATA	Volume Olio / Oil volume	dm <sup>3</sup>	21	50	93	130	130	245	245
	Volume Totale / Total volume		90	170	310	470	470	740	880
	N° filtri coalescenti Coalescing filters No		1	2	3	4	6	7	7D
DIMENSIONI DIMENSIONS	D	mm	323,9	406,4	508	609,6	609,6	711,2	711,2
	A		1363	1608	1863	1977	1977	2257	2637
	A1 min.		460	460	460	460	460	460	770
	B		150	155	250	260	260	350	350
	C		390	505	620	620	620	795	795
	E		630	775	980	1190	1190	1460	1460
	F		755	920	1145	1360	1360	1665	1665
	G		1120	1325	1560	1650	1650	1925	2305
	H		120	145	195	235	235	260	240
	L		275	310	345	368	368	440	465
	L1		300	337	398	423	423	474	495
	MxM		340x340	425x425	540x540	640x640	640x640	750x750	750x750
RxR	300x300	365x365	480x480	570x570	570x570	650x650	650x650		
P	Ø14	Ø18	Ø18	Ø22	Ø22	Ø26	Ø26		
CONNESSIONI CONNECTIONS	d1	mm	(FL) OD 60,3	(FL) OD 73,03	(FL) OD 88,9	(FL) OD 114,3	(FL) OD 114,3	(FL) OD 141,3	(FL) OD 168,3
	d2		(FL) OD 48,3	(FL) OD 73,03	(FL) OD 88,9	(FL) OD 114,3	(FL) OD 114,3	(FL) OD 141,3	(FL) OD 168,3
	d3		(RTLK) OD 21,3	OD 48,3	OD 48,3	OD 60,3	OD 60,3	OD 88,9	OD 88,9
	d4		(RTLK) OD 17,1	(RTLK) OD 17,1	(RTLK) OD 17,1	(RTLK) OD 21,3	OD 33,4	OD 42,2	OD 42,2
	d5		(RTLK) OD 21,3	(RTLK) OD 21,3	(RTLK) OD 21,3	(RTLK) OD 33,4	OD 42,2	OD 42,2	OD 42,2
	N° resistenze elettriche Electrical heaters No.	-	2	3	4	5	5	6	6
PESO / WEIGHT		kg	160	275	470	710	715	1095	1195



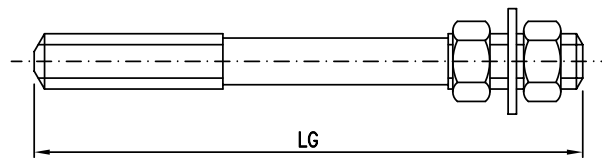
	9A	9B	9C	9D	9E	9F
OVS 32.90.1/2	YES	YES	NO	NO	NO	NO
OVS 41.170.2/2	YES	YES	YES	NO	NO	NO
OVS 51.310.3/2	YES	YES	YES	YES	NO	NO
OVS 61.470.4/2	YES	YES	YES	YES	YES	NO
OVS 61.500.6/2	YES	YES	YES	YES	YES	NO
OVS 71.600.7/2	YES	YES	YES	YES	YES	YES
OVS 71.700.7D/2	YES	YES	YES	YES	YES	YES

FILTRO COALESCENTE  
COALESCING FILTER



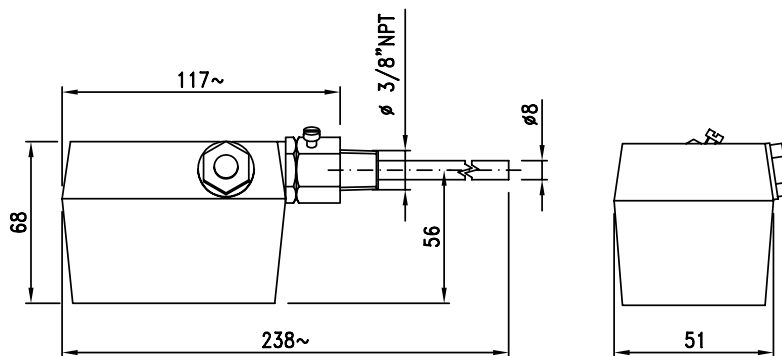
	LG	CODICE/CODE
OVS 32.90.1/2 ÷ OVS 71.600.7/2	390~	<b>M5600100</b>
OVS 71.700.7D/2	700~	<b>97VA00081</b>

KIT SISTEMA DI FISSAGGIO FILTRO  
KIT FOR FILTER SUPPORT SYSTEM



	LG	CODICE/CODE
OVS 32.90.1/2 ÷ OVS 71.600.7/2	460	<b>F7040001</b>
OVS 71.700.7D/2	700	<b>FKIT0075</b>

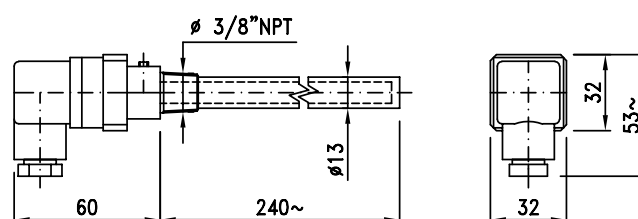
TERMOSTATO  
THERMOSTAT



	CODICE/CODE
OVS..../1	<b>M2705010</b>
OVS..../2	<b>M2705015</b>

Certificazioni: **CE**  
Certification:

RESISTENZA ELETTRICA COMPLETA DI POZZETTO 230V 140W  
ELECTRIC HEATER COMPLETE WITH SOCKET 230V 140W

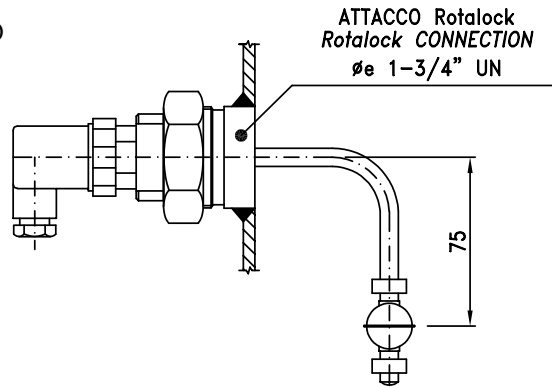


CODICE/CODE
<b>M2707010</b>

Certificazioni: **CE**  
Certification:



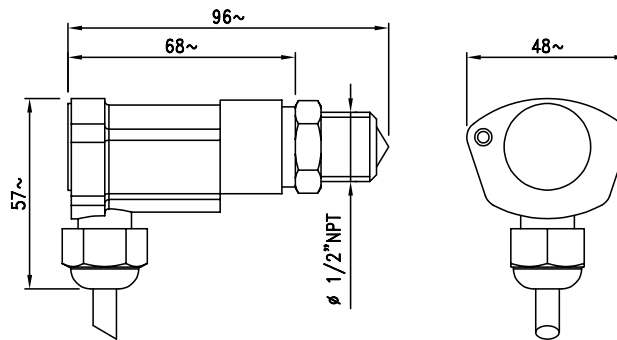
INDICATORE ELETTRICO DI LIVELLO  
ELECTRICAL LEVEL GAUGE




Certificazioni: **CE**  
Certification:

TIPO/TYPE	CODICE/CODE
<b>AP1300-001/0</b>	<b>M2703020</b>

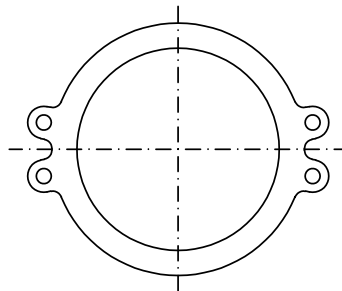
INDICATORE OTTICO DI LIVELLO AC 50/60 Hz 230V 3VA  
OPTICAL LEVEL MONITORING UNIT AC 50/60 Hz 230V 3VA



Certificazioni: **CE**   
Certification:

CODICE/CODE
<b>M2703025</b>
<b>+</b>
<b>M2703026</b> (1/2" NPT nipple)

GUARNIZIONE PER PASSO DI MANO (OVS/2)  
GASKET FOR HANDHOLE (OVS/2)



	D	CODICE/CODE
OVS 32 .../2	Ø 323,9	<b>07FA00086</b>
OVS 41 .../2	Ø 406,4	<b>07FA00090</b>
OVS 51 .../2	Ø 508	<b>07FA00092</b>
OVS 61 .../2	Ø 609,6	<b>07FA00097</b>
OVS 71 .../2	Ø 711,2	<b>07FA00098</b>



NOTE / NOTES

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---





## **ONDA** S.p.A.

[onda@onda-it.com](mailto:onda@onda-it.com)  
[www.onda-it.com](http://www.onda-it.com)

### **PLANT 1 Headquarters**

Via Dante Alighieri, 27B  
36065 Mussolente (VI)  
Italy  
t. +39 0424 87633

### **PLANT 2**

Via L. Baden Powell, 11  
36045 Lonigo (VI)  
Italy  
t. +39 0444 720720

### **PLANT 3**

Via Vittoria, 158A  
36065 Mussolente (VI)  
Italy  
t. +39 0424 87506

### **PLANT 4**

**Onda USA L.L.C.**  
600 London Rd  
Delaware, OH 43015  
t. +1 614 321 3342

### **Onda France S.A.R.L.**

320, Avenue Berthelot  
69008 Lyon France  
t. +33 472784606  
m. +33 608341000  
[www.onda-fr.com](http://www.onda-fr.com)  
[onda@onda-fr.com](mailto:onda@onda-fr.com)

### **Onda USA L.L.C.**

600 London Rd  
Delaware, OH 43015  
t. +1 614 321 3342  
[www.onda-us.com](http://www.onda-us.com)  
[onda@onda-us.com](mailto:onda@onda-us.com)

### **Onda RU**

Mayakovskogo Street, 18a, Khimki,  
Moscow Region, Russia 141402  
t. +7 495 971 88 53  
m. +7 916 676 16 54  
[www.onda-it.com](http://www.onda-it.com)  
[info@onda-ru.com](mailto:info@onda-ru.com)

### **Onda Nordic OY**

Lentolantie 22  
36220 Kangasala Tampere, Finland  
t. +35 8331437300  
m. +35 8409012999  
[www.wttgroup.fi](http://www.wttgroup.fi)  
[pasi.makinen@wttgroup.fi](mailto:pasi.makinen@wttgroup.fi)

### **Onda Shanghai**

Heat Exchanger Co., Ltd.  
瓊蕙啞（上海）热交换有限公司  
Shanghai, Changning District,  
Anhua Road 492, Building 1 Tower A, Room 126  
上海市长宁区安化路492号1幢（A座）126室A092  
t. +86 021 6056 4838 (ext.1000)  
m. +33 6 08 34 10 00