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## Notes


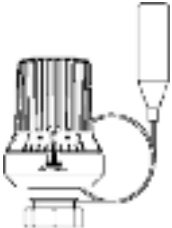




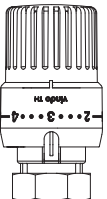

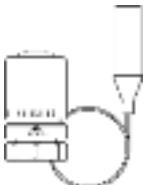
Oventrop's Standard Terms and Conditions of Sale and Warranty apply.

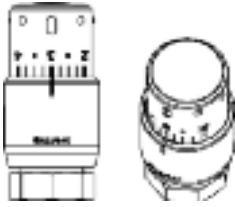

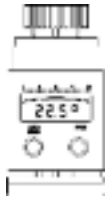
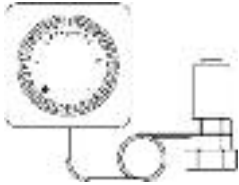
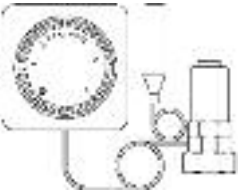
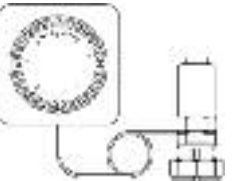
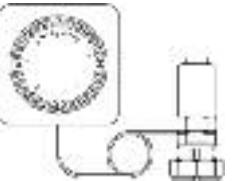
If not stated otherwise, all hydronic parts in this list are suitable for hot water with an operating temperature of up to 240 °F and an operating pressure of up to 50 psi.


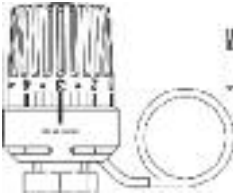


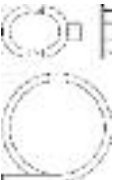
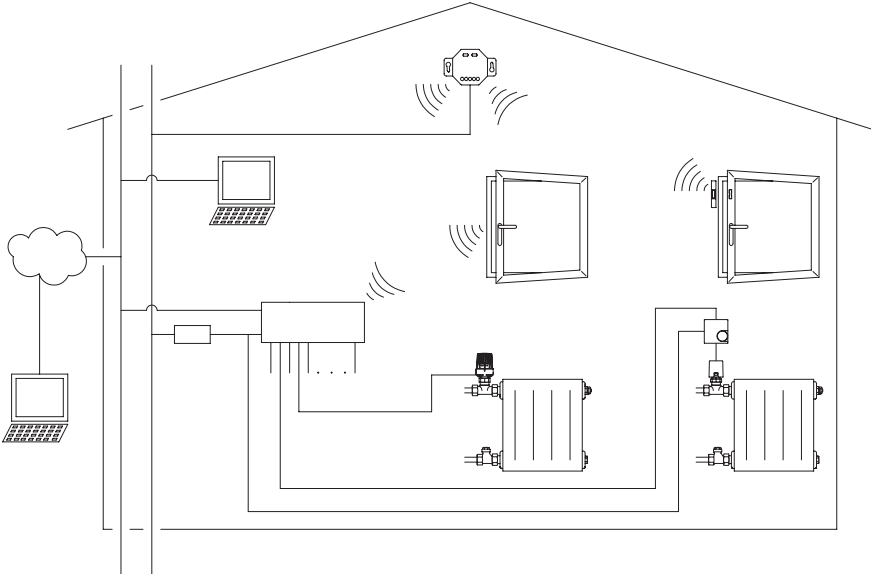
This list reflects some 100 items from the Oventrop product line of approximately 4,000 items. We will be updating our product range for the USA on a regular basis.

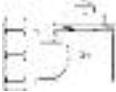





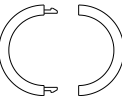

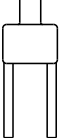
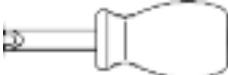
For information on additional items, please visit our website  
**[www.oventrop-us.com](http://www.oventrop-us.com)**

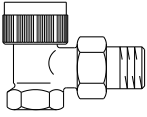
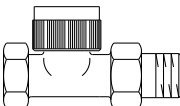
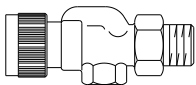
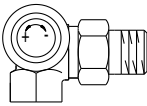
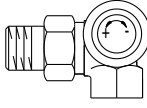


Upon request we will gladly investigate availability and pricing of items not mentioned in this book.

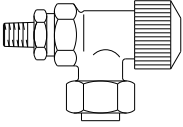
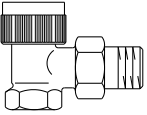
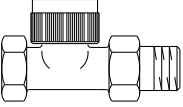
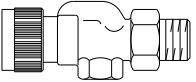
Item	Box qty.	Thread	Item no.	Information
 <p><b>Thermostat "Uni XH"</b> with liquid sensor</p>				<p>These actuators provide a simple means of controlling space temperature by adjusting the flow rate through the heater. Modulating (not on-off) control that enables automatic matching of heat loss.</p> <p>Temperature setting may be limited or locked.</p> <ul style="list-style-type: none"> <li>- Memory disc to mark favorite setpoint</li> <li>- "0" setting = positive "off"</li> <li>- "X" setting = freeze protection</li> <li>- Temperature range 42 - 84 °F</li> <li>- Markings on the dial 0X 1-5</li> </ul>
white model	(100)	M 30 x 1.5	<b>101 13 65</b>	
same with remote sensor				
capillary 6 1/2 feet	(10)	M 30 x 1.5	<b>101 15 65</b>	
capillary 16 feet	(10)	M 30 x 1.5	<b>101 15 66</b>	
				
 <p><b>Thermostat "Uni XD"</b> with liquid sensor</p>				<p>"XD" thermostats can be fitted without adapter to Danfoss valves, series RA (squeeze connection) and Buderus radiators with integrated valve assembly.</p>
white model	(50)	squeeze	<b>101 13 75</b>	
same with remote sensor				
capillary 6 1/2 feet	(10)	squeeze	<b>101 15 75</b>	
				
 <p><b>Thermostat "Uni LH"</b> with liquid sensor</p>				<p>Temperature setting may be limited or locked.</p> <ul style="list-style-type: none"> <li>- Memory disc to mark favorite setpoint</li> <li>- "0" setting = positive "off"</li> <li>- "X" setting = freeze protection</li> <li>- Temperature range 42 - 84 °F</li> <li>- Tamper-resistant</li> </ul>
white model	(10)	M 30 x 1.5	<b>101 14 65</b>	
chrome model	(10)	M 30 x 1.5	<b>101 14 69</b>	
				
 <p><b>Thermostat "Vindo"</b> with liquid sensor</p>	(10)	M 30 x 1.5 squeeze	<b>101 30 66</b> <b>101 30 76</b>	
 <p><b>Thermostat "Uni DH"</b> with wax sensor compact model</p>				<ul style="list-style-type: none"> <li>- "0" setting = positive "off"</li> <li>- "X" setting = freeze protection</li> <li>- Temperature range 42 - 84 °F</li> </ul>
white model	(100)	M 30 x 1.5	<b>101 10 65</b>	
same with remote sensor				
capillary 6 1/2 feet	(10)	M 30 x 1.5	<b>101 11 65</b>	No "positive off" setting
				

Item	Box qty.	Thread	Item no.	Information	
 <p><b>Thermostat "Uni SH"</b> with liquid sensor Connection thread M 30 x 1.5 Marking "Uni SH" hidden inside</p>				With easy-to-read setting device.	
			<b>101 20 65</b>	Maximum heating water temperature: 258 °F With '0' setting, temperature range 44 - 82 °F graduation on cap 0 x 1 - 5	
	white/chrome plated model		<b>101 20 85</b>	With mounted design cover	
 <p><b>Thermostat "Uni LHB"</b> with liquid sensor Connection thread M 30 x 1.5</p>				Lockshield configuration with integrated anti-theft device and increased flexional strength.	
	white model		<b>101 14 10</b>	Without '0' setting, temperature range 44 - 82 °F graduation on cap x 1 - 5	
 <p><b>"R-Tronic"</b> Connection thread M 30 x 1.5 Electronic radiator controller</p>				Electronic controller for individual room. Temperature control according to adjustable Timed program. Battery operated. With child-proof lock, frost protection, and window function.	
			<b>115 01 66</b>	Temperature range: 41 - 86 °F	
 <p><b>Thermostat with remote control "Uni LH"</b></p>				Wall mounted remote control (for radiators, baseboard, floor heating).	
	white model				
	capillary 6 1/2 feet	(25)	M 30 x 1.5		<b>101 22 95</b>
 <p>white model with additional remote sensor</p>				Temperature setting may be limited or locked by means of hidden set tabs. - "0" setting = positive "off" - "X" setting = freeze protection - Temperature range 42 - 84 °F	
	capillary 16 feet	(25)	M 30 x 1.5		<b>101 22 96</b>
	capillary 33 feet	(10)	M 30 x 1.5		<b>101 22 97</b>
 <p><b>Thermostat with remote control "Uni LD"</b></p>				Same features as above, plus a remote sensor.	
	white model				
capillary 6 1/2 feet	(10)	M 30 x 1.5	<b>101 23 95</b>		
capillary 16 feet	(10)	M 30 x 1.5	<b>101 23 96</b>		
 <p><b>Thermostat with remote control "Uni LD"</b></p>				"LD" thermostats can be fitted without adapter to Danfoss valves, series RA (squeeze connection) and Buderus radiators with integrated valve assembly.	
	white model				
capillary 6 1/2 feet	(10)	squeeze	<b>101 22 75</b>		

Item	Item no.	Information
	<p><b>“DynaTemp 100/16”</b> Application router with 16 outputs, 16 inputs and wireless receiver “SecuSignal”</p>	<p><b>115 30 16</b></p> <p>The “DynaTemp 100/16” is an application router with integrated software for a programmable individual room temperature control via LAN networks. With integrated wireless receiver “SecuSignal” for integration of the window handles “SecuSignal” of the company HOPPE AG. The solar powered window contacts, 16 outputs (output voltage 24 V) can be used to activate a maximum of 64 thermostats “Uni LHZ.”</p>
	<p><b>Thermostat “Uni LHZ”</b> Connection cable 39 inches long Connection thread M 30 x 1.5 Marking “DynaTemp” on lower side</p>	<p><b>115 30 00</b></p> <p>The 16 inputs can be used to query the status of wireless window contacts.</p> <p>The thermostat “Uni LHZ” allows a timed temperature control via an integrated electrically heated liquid sensor. Operation and use are identical with that of a standard thermostat. If the thermostat is energized, it switches to temperature setback.</p>
	<p><b>Window contact</b> solar powered, white model</p>	<p><b>115 30 70</b></p> <p>The thermostat “Uni LHZ” can be activated via the application router “DynaTemp 100/16” via LAN networks and internet.</p>
	<p><b>Repeater - flush mounting</b> 115V</p>	<p><b>115 30 60</b></p> <p>Without ‘0’ setting, Temperature range: 44 - 82 °F Graduation on cap: X 1 - 4 Operating current: 24 V Temperature setback: 13 °F Connection cable: 6.5 ft.</p> <p>The repeater serves to amplify the signal between the window handles “SecuSignal” and the “DynaTemp 100/16” router.</p>
	<p><b>Wall connection set</b> for “Uni LHZ”</p>	<p><b>115 03 90</b></p> <p>Used as additional protection for the wall installation (in a flush box) of the connection cable of the thermostat “Uni LHZ”.</p>
		<p><b>System illustration:</b></p> <ol style="list-style-type: none"> <li>1) “DynaTemp 100/16”</li> <li>2) Thermostat “Uni LHZ”</li> <li>3) Window handle “SecuSignal”</li> <li>4) Window contact</li> <li>5) Flush repeater</li> <li>6) Electrothermal actuator 24 V</li> <li>7) Room thermostat 24 V</li> </ol>
		<p>“SecuSignal”, <a href="http://www.hoppe.com">www.hoppe.com</a></p>

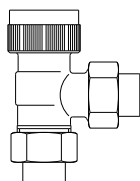
Item	Box qty.	Item no.	Information
	(10)	<b>101 14 50</b>	For Oventrop radiator valves with connection M 30 x 1.5.
	(10)	<b>101 14 52</b>	For Danfoss radiator valves series RA.
	(10)	<b>101 14 45</b>	
			Transposes setting numbers from horizontal to vertical reading.
Thermostat mounted right side	(50)	<b>101 13 96</b>	
Thermostat mounted left side	(50)	<b>101 13 97</b>	
	(25)	<b>101 17 66</b>	Prevents unauthorized removal of thermostat. Includes Allen key. Minimum order quantity = 5
	(10)	<b>101 19 11</b>	
	(50)	<b>101 13 93</b>	Minimum order quantity = 5
	(10)	<b>101 25 65</b>	
		<b>198 91 00</b>	
		<b>101 14 97</b>	To set the nominal temperature value at the thermostat.

Item	Box qty.	Thread	Item no.	Information
<p><b>Zone/radiator valves</b> with M 30 x 1.5 threaded actuator connection, brass, nickel plated</p>				
<p><b>"Series AZ" (for hot water)</b></p>				
<p>These valves can be used with four types of actuators:</p> <ol style="list-style-type: none"> <li>1. Manual adjuster (included)</li> <li>2. Thermostatic (non-electric)</li> <li>3. Thermostatic remote capillary (non-electric)</li> <li>4. 24 V electric for on/off control</li> </ol>				
<p><b>Angle pattern valve</b> <span style="float: right;">NPT/NPT</span></p>				
				
		1/2"	(25)	<b>188 90 04</b>
		3/4"	(25)	<b>188 90 06</b>
		1"	(10)	<b>188 90 08</b>
	1 1/4"	(10)	<b>188 90 10</b>	
<p><b>Straight pattern valve</b> <span style="float: right;">NPT/NPT</span></p>				
				
		1/2"	(25)	<b>188 91 04</b>
		3/4"	(25)	<b>188 91 06</b>
		1"	(10)	<b>188 91 08</b>
	1 1/4"	(10)	<b>188 91 10</b>	<p>All valve inserts are replaceable under working conditions by means of the special tool "Demo-Bloc." System does not need to be drained.</p>
<p><b>Reversed angle pattern valve</b> <span style="float: right;">NPT/NPT</span></p>				
				
		1/2"	(25)	<b>188 92 04</b>
	3/4"	(25)	<b>188 92 06</b>	
<p><b>Double angle pattern valve</b> <span style="float: right;">NPT/NPT</span></p>				
				
		1/2" left hand side connection	(25)	<b>169 40 62</b>
				
		1/2" right hand side connection	(25)	<b>169 40 63</b>
<p><b>One-pipe radiator injection valves with constant bypass and shut off</b></p>				
<p>The constant bypass of the one-pipe radiator injection valves is adjusted to a radiator flow share of 35%. The insertion tube is 6" long, has a diameter of 7/16" and the distance between pipe centres is 50 mm.</p>				
<p>Connections 1/2" to radiator 3/4" (R 20) to system</p>				
<p>with horizontal insertion tube <span style="float: right;"><b>118 35 61</b></span></p>				
				
<p>with vertical insertion tube <span style="float: right;"><b>118 35 71</b></span></p>				
				<p>The one-pipe radiator injection valve with vertical insertion tube is especially suitable for towel radiators. (The technical instructions of the radiator manufacturers need to be observed.)</p>

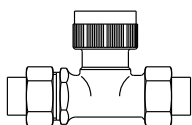
Item	Box qty.	Thread	Item no.	Information
<b>"Series S" (for low pressure steam, max. 15 psi)</b>				
<b>Steam Radiator Valve</b>				
	One-pipe steam radiator valve	NPT		M 30 x 1.0 Actuator thread.
	1/8"	(25)	<b>188 85 51</b>	Add adapter item no. 101 14 45.
<b>Angle pattern valve</b>				
	1/2"	(25)	<b>189 90 04</b>	These valves can be used with four types of actuators: 1. Manual adjuster (included) 2. Thermostatic (non-electric) 3. Thermostatic remote capillary (non-electric) 4. 24 V electric for on/off control
	3/4"	(25)	<b>189 90 06</b>	
	1"	(25)	<b>189 90 08</b>	
	1 1/4"	(25)	<b>189 90 10</b>	
<b>Straight pattern valve</b>				
	1/2"	(25)	<b>189 91 04</b>	All valve inserts are replaceable under working conditions by means of the special tool "Demo-Bloc." System does not need to be drained.
	3/4"	(25)	<b>189 91 06</b>	
	1"	(25)	<b>189 91 08</b>	
	1 1/4"	(25)	<b>189 91 10</b>	
<b>Reversed angle pattern valve</b>				
	1/2"		<b>189 92 04</b>	
	3/4"		<b>189 92 06</b>	

Item	Box qty.	Thread	Item no.	Information
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**Zone/radiator valves**  
with M 30 x 1.5 threaded  
actuator connection,  
brass, nickel plated,  
standard AZ insert



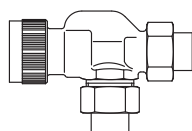
Angle pattern valve		sweat/sweat		Includes (2) unions and sweat tails.
1/2"	(25)		<b>169 44 04</b>	
3/4"	(25)		<b>169 44 06</b>	



Straight pattern valve		sweat/sweat		
1/2"	(25)		<b>169 44 14</b>	
3/4"	(25)		<b>169 44 16</b>	
3/4"	(25)		<b>169 44 16 ZV</b>	
3/4"	(25)		<b>169 44 16 ZVO</b>	

\*1694416ZV includes (1) 1012496 electrothermal actuator (LH) connection thread M 30 x 1.5, normally closed, 24 V, 2 Watt with end switch.

\*1694416ZVO includes (1) 1012486 electrothermal actuator connection thread M 30 x 1.5, normally open, 24 V.



Reversed angle pattern valve		sweat/sweat	
1/2"			<b>169 44 24</b>
3/4"			<b>169 44 26</b>


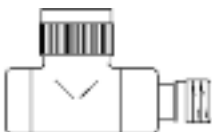




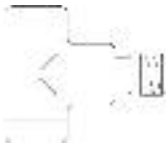














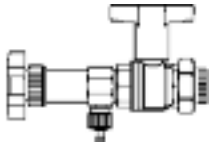
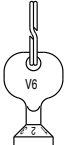
Sweat tailpiece for zone radiator valves				
1/2"	(100)		<b>198 76 51</b>	
3/4"			<b>198 76 52</b>	
1"			<b>198 76 53</b>	
1 1/4"			<b>198 76 54</b>	

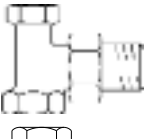
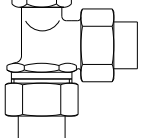
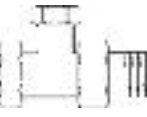
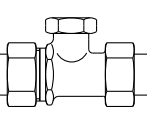
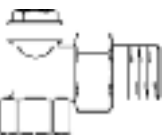

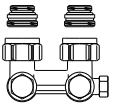




If ordered separately.



<b>Two-way zone valve</b> with 24V actuator two-wire Cv: 3.3				
3/4"		sweat/sweat	<b>168 07 52</b>	
3/4"		thread/thread	<b>168 07 06</b>	

Item	Thread	Item no.	Information
<b>Radiator valves "Series E"</b> actuator connection M 30 x 1.5			Designer series for use with towel racks or panel radiators.
	Angle pattern valve	BSP	Gold plated or anthracite models upon request.
	1/2" chrome plated 1/2" white powder coated	<b>116 30 52</b> <b>116 30 62</b>	
	Straight pattern valve	BSP	Awards:
	1/2" chrome plated 1/2" white powder coated	<b>116 31 52</b> <b>116 31 62</b>	
	Double angle pattern valve	BSP	 Design Award of North Rhine Westphalia, Award of Honour for Industrial Products
	left hand side connection 1/2" chrome plated 1/2" white powder coated	<b>116 34 52</b> <b>116 34 62</b>	
	right hand side connection		 Industrial Design Forum Hannover Award iF
	1/2" chrome plated <b>116 34 53</b> 1/2" white powder coated	<b>116 34 63</b>	
<b>Service valve "Combi E"</b>			Normally used on return side of radiator or towel rack. Allows isolation, balancing with fill and drain capability.
	Angle pattern	BSP	 Design Innovation of Design Centre Essen Award for High Quality of Design
	1/2" chrome plated 1/2" white powder coated	<b>116 60 52</b> <b>116 60 62</b>	
	Straight pattern	BSP	 Pragothem, Prague
	1/2" chrome plated 1/2" white powder coated	<b>116 70 52</b> <b>116 70 62</b>	
			 German Institute for Copper Berlin Award "Product and Brass"
			Admission to "The New Collection" for Exemplary Design Munich, "Design Laboratory" Museum of Art and Commerce Hamburg and Design Museum London.

Item	C <sub>v</sub>	Item no.	Information	
<b>Valve inserts</b> for all valves M 30 x 1.5, excluding 101 70 60				
	Valve insert "Series AZ"	1.28	<b>118 70 60</b>	Standard with Oventrop zone/radiator valves M 30 x 1.5 Highest Cv.
	Valve insert "Series AZ" M 30 x 1.0		<b>101 70 60</b>	
	Valve insert "Series AV 6" with presetting	0.75	<b>118 70 57</b>	Adjustable Cv valve insert, allows technician to balance flow rate. Six different settings.
	Valve insert "Series ADV 6" "Landlord model"	0.75	<b>118 60 01</b>	Same as "Series AV 6", but with additional feature that, if thermostat is removed, flow will be restricted to 5% of normal flow.
	Valve insert with stainless steel seat	0.70	<b>118 62 00</b>	Especially for steam installations.
	Special valve insert	0.52	<b>118 70 70</b>	Low Cv to correct reversed supply/return hookup.
	Valve insert "Series KT"	0.58	<b>114 71 69</b>	Opens valve upon rising temperature.
	Valve insert "Series TM"		<b>106 70 85</b>	Insert for pressure differential of up to 40 psi (for commercial baseboard, etc.).
	1/2"	1.1		
	3/4"	1.2		
	1"	1.3		
	1 1/4"	1.6		
	Gland nut Set = 5 pieces		<b>101 75 01</b>	Wrench size 14 mm Minimum order quantity = 5
	<b>"Demo-Bloc"</b> special tool for replacing Oventrop valve inserts under working conditions for both M 30 x 1,0 and M 30 x 1,5 thread connections		<b>118 80 51</b>	
	<b>Key</b> for flow rate setting on AV 6 / ADV 6 inserts		<b>118 39 61</b>	

Item	Box qty.	Thread	Item no.	Information
<b>Service valve "Combi 2"</b>				
balancing, shut-off				
Angle pattern nickel plated				
		NPT inlet NPT tailpiece		
	1/2"	(100)	<b>109 10 82</b>	Used on the return side of radiators, baseboard or floor heat to provide balancing and shut-off capability. Use 5/32" (4 mm) Allen key.
	3/4"		<b>109 10 83</b>	
	1/2"	(100)	<b>109 10 92</b>	
	3/4"	(100)	<b>109 10 93</b>	
Includes (2) unions and sweat tails.				
Straight pattern nickel plated				
		NPT inlet NPT tailpiece		
	1/2"	(100)	<b>109 11 82</b>	Includes (2) unions and sweat tails.
	3/4"	(25)	<b>109 11 83</b>	
	1/2"	(100)	<b>109 11 92</b>	
<b>Service valve "Combi 4"</b>				
balancing with memory position, shut-off, filling and draining				
Angle pattern nickel plated				
		NPT inlet NPT tailpiece		
	1/2"		<b>109 06 82</b>	
	3/4"		<b>109 06 83</b>	
	1/2"		<b>109 07 82</b>	
	3/4"		<b>109 07 83</b>	
<b>"Multiflex" fittings</b>				
for panel radiators with bottom tapplings and built-in valve assembly (such as Buderus, DiaNorm)				
Diverter valves				
	1/2" angle	(10)	<b>101 59 34</b>	For series loop systems, allows setting of flow to next radiators in loop. Isolation capability. Factory setting 35%.
	same, straight		<b>101 59 33</b>	
	2-pipe isolating valve 1/2" angle	(10)	<b>101 58 14</b>	
	same, straight		<b>101 58 13</b>	
	Adapter from 1/2" female to 3/4" male (Euroconus)	(10)	<b>102 82 53</b>	For use with compression fittings.
<b>"Euroconus"</b>				
compression fittings for floor heat manifolds, "Unibox," panel radiators, etc.				
	US-PEX 3/8"	(100)	<b>164 68 49</b>	Sold in pairs.
	US-PEX 1/2"	(100)	<b>164 68 50</b>	
	US-PEX 5/8"	(100)	<b>164 68 51</b>	
	Copper 1/2"	(100)	<b>101 68 44</b>	With soft seal rubber fitting. With brass compression fitting. Sold in pairs.
	Copper 1/2"	(100)	<b>101 68 64</b>	

Item	Box qty.	Item no.	Information
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### Electrothermal actuators

Electrothermal actuators control the room temperature and can be used with conventional radiators, manifolds for underfloor heating systems, radiant and chilled ceiling systems and fan coil units. The actuators are protected against overvoltage.



**Electrothermal actuator (LH)**  
 connection thread M 30 x 1.5  
 "compact design"  
 normally closed, 24 V, 2 Watt  
 with end switch

(100) **101 24 96**

For floor heat manifolds and zone valves. Slow acting to prevent water hammer. Cable 32" (4 wires). End switch can be used to start a pump through a line voltage relay.

power "off", normally closed

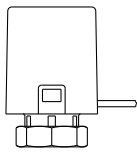
**101 28 16**

power "off", normally open

**101 28 26**

**Adapter for Electrothermal actuator (LH)**  
 for connection to M30x1.0 threaded valves

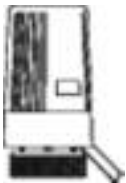
**101 28 90**



**Electrothermal actuator**  
 connection thread M 30 x 1.5  
 normally closed, 24 V

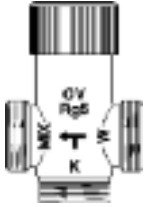
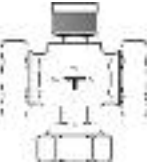
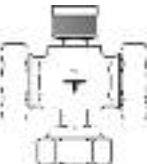
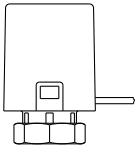
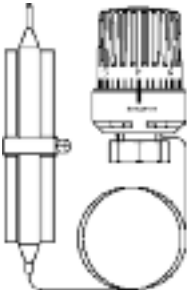
**101 24 86**

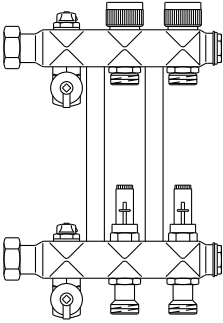
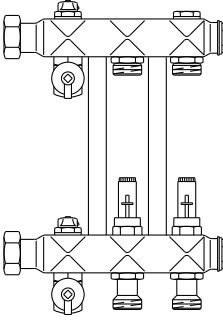
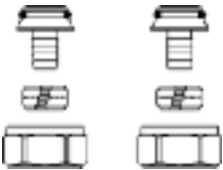




For mixing and diverting valves. Can be converted to normally open. Cable 40" (2 wires).

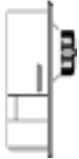



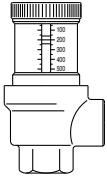



**Electromotive Actuator**  
 24V, proportional actuator for temperature mixing  
 Connection thread M 30 x 1.5  
 For use with 3 way mixing valve

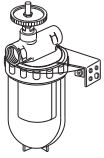
**101 29 51**

Item	C <sub>v</sub>	Box qty.	Thread	Item no.	Information
				<b>130 02 00</b>	For small radiant heating jobs, Temperature range 86 °F – 158 °F. <b>Do not use for potable water.</b>
		1,4			
					Actuator connection M 30 x 1.5
	3/4"	5,2	Union	<b>113 17 06</b>	With 3 unions to accept threaded or sweat tailpieces (not included).
	1"	7,6	Union	<b>113 17 08</b>	
	1 1/2"	11,0	Union	<b>113 17 12</b>	
					Actuator connection M 30 x 1.5
	3/4"	5,2	Union	<b>113 02 06</b>	With 3 unions to accept threaded or sweat tailpieces (not included).
	1"	7,6	Union	<b>113 02 08</b>	
	1 1/2"	11,0	Union	<b>113 02 10</b>	
<b>Sweat tailpiece/3-fold</b>					
	3/4"			<b>198 76 72</b>	
	1"			<b>198 76 73</b>	
	1 1/4"			<b>113 01 96</b>	
	1 1/2"			<b>198 76 75</b>	
<b>NPT tailpiece/3-fold</b>					
	3/4"		NPT	<b>170 60 06</b>	
	1"		NPT	<b>170 60 08</b>	
	1 1/4"		NPT	<b>170 60 10</b>	
	1 1/2"		NPT	<b>170 60 12</b>	
		(10)		<b>101 24 86</b>	Can be converted to normally open. Cable 40", 2 wire. Protected against overvoltage.
					connection M 30 x 1.5 normally closed
		(10)		<b>114 28 62</b>	Temperature range 85 – 140 °F. M 30 x 1.5 connection. Capillary 6 1/2 ft.
		(10)		<b>114 28 63</b>	Temperature range 85 – 158 °F. M 30 x 1.5 connection. Capillary 6 1/2 ft.
				<b>101 29 51</b>	
					<b>Electromotive Actuator</b> 24V, proportional actuator for temperature mixing Connection thread M 30 x 1.5 For use with 3 way mixing valve

Item	Thread	Item no.	Information		
	<b>Stainless steel manifold 1" for underfloor heating systems with inline zone valves and "flowmeters"</b> flat sealing, with valve inserts M 30 x 1.5 for thermostatic and electronic control		Application: Stainless steel manifold for radiant floor systems.  Description: Assembled manifold with fill/drain valves, vent plugs and end caps. Branch connections 3/4" male threads (R 20) for compression fittings. Inline zone valves and flow meters. Sound-absorbing brackets. 1" sweat tails.		
	for 2 branches		<b>140 41 72</b>		
	for 3 branches		<b>140 41 73</b>		
	for 4 branches		<b>140 41 74</b>		
	for 5 branches		<b>140 41 75</b>		
	for 6 branches		<b>140 41 76</b>		
	for 7 branches		<b>140 41 77</b>		
	for 8 branches		<b>140 41 78</b>		
	for 9 branches		<b>140 41 79</b>		
	for 10 branches		<b>140 41 80</b>		
	for 11 branches		<b>140 41 81</b>		
	for 12 branches		<b>140 41 82</b>		
		<b>Stainless steel manifold 1" for underfloor heating systems with "flowmeters" but valveless</b> flat sealing, with valve inserts M 30 x 1.5 for thermostatic and electronic actuators		Application: Stainless steel manifold for radiant floor, radiator or baseboard systems.  Description: Assembled manifold with fill/drain valves, vent plugs and end caps. Branch connections 3/4" male threads (R 20) for compression fittings. Supply side valveless, return side with flow meters. Sound-absorbing brackets. 1" sweat tails.	
for 2 branches			<b>140 42 72</b>		
for 3 branches			<b>140 42 73</b>		
for 4 branches			<b>140 42 74</b>		
for 5 branches			<b>140 42 75</b>		
for 6 branches			<b>140 42 76</b>		
for 7 branches			<b>140 42 77</b>		
for 8 branches			<b>140 42 78</b>		
for 9 branches			<b>140 42 79</b>		
for 10 branches			<b>140 42 80</b>		
for 11 branches			<b>140 42 81</b>		
for 12 branches			<b>140 42 82</b>		
		<b>Euroconus"</b> compression fittings for floor heat manifolds, "Unibox," panel radiators, etc.			
	US-PEX 3/8"	(100)	<b>164 68 49</b>	Sold in pairs	
	US-PEX 1/2"	(100)	<b>164 68 50</b>		
US-PEX 5/8"	(100)	<b>164 68 51</b>			
	<b>Sweat tailpiece</b> 1"		BSP/sweat	<b>140 70 08</b>	If purchased separately.
	<b>Coupling</b> nickel plated 3/4" x 1"		BSP/BSP	<b>140 72 06</b>	Connects (2) manifolds. <b>Maximum number of loops not to exceed (12).</b>
	<b>Sweat tailpiece with thermometer</b> 1"		BSP/sweat	<b>140 98 06</b>	
	<b>Double feed adapter</b> 3/4" x 1"		BSP/NPT	<b>140 71 06</b>	To feed a manifold from both sides.

Item	Box qty.	Thread	Item no.	Information	
			<b>102 26 32</b>	<b>"Unibox E T"</b> for radiant floor control supply temperature control  All in one, wallmounted room thermostat and zone valve. Simply route piping (PEX or copper) up and down in the stud cavity to the "Unibox" for modulating thermostatic control of floor heat or baseboard.	
			<b>102 26 31</b>	<b>"Unibox E RTL"</b> for radiant floor, limits return temperature	
			<b>102 26 33</b>	<b>"Unibox E plus"</b> combination of supply temperature control and return temperature limitation	
			<b>102 26 62</b>	<b>"Unibox E BV"</b> Individual room temperature control with bypass for underfloor heating systems without distributor/collector	
	<b>Pressure actuated bypass valve</b> bronze/brass with indicator			Adjustable from 2 - 17 ft. of head (ip). To maintain adequate boiler flow and reduce system velocity noises. Normally piped between supply and return pipes downstream from pump. Opens up as needed (when zones close).	
	3/4"	(20)	NPT		<b>165 98 06</b>
	1"	(6)	NPT		<b>165 98 08</b>
	<b>Automatic airvent</b> brass			Air bleed can be removed from a system, taken apart and cleaned without draining.  With automatic stop valve.	
	1/8"	(100)	NPT		<b>108 83 81</b>
	1/2"	(100)	NPT		<b>108 83 84</b>

Item	Item no.	Information
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**Fuel Oil Filters, Transparent Cup**

UL listed under # 58 AB.

Brass head, built-in fire/isolation valve,  
10 micron sintered plastic element

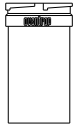
3/8" female NPT connections

Standard "S" filter, 23 GpH **263 27 61**

Magnum "M" filter, 34 pH **263 27 71**

Bracket **212 68 03**

Special wrench **212 66 91**



**Fuel Filter Replacement Elements (include O-Ring)**

Sintered plastic 10 micron for "S" Filter **263 28 61**

Sintered plastic for "M" Filter **263 28 71**

Nickel mesh 50 micron (for "S" Filter only) **212 61 00**

Sintered bronze 10 micron (for "S" Filter only) **212 60 54**



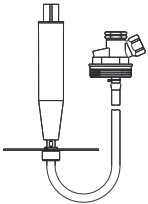
**Fuel filter Spare Parts**

Replacement "S" cup **212 67 51**

Replacement "M" cup **212 67 55**

Replacement brass union **212 66 00**

Replacement O-ring **212 65 00**



**Floating Suction Kit**

Fuel oil is drawn 2" from the surface.

2" NPT tank, 3/8" fuel line connection  
Includes check valve and 6ft of suction line  
for 1-pipe systems **205 36 51**  
for 2-pipe systems **205 36 53**

Item	Item no.	Information
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**“Regumat-130” DN 25 (1”)**

**Regumat M3**

“Regumat M3-130 DN 25” consisting of one isolation device with two ball valves and two thermometers, one check valve, one three-way mixing valve with optional presettable bypass and one insulation case.

**168 52 85**

With the boiler connection system “Regumat,” Oventrop offers all components which are required for the connection of boiler, pump, and pipework. The products are supplied as a complete system for size DN 25 (1”). Oventrop boiler valves are made of brass or bronze.

All Oventrop boiler valves are designed for a pressure of PN 10 (145 psi).

Advantages:

- high functional efficiency
- all components from one supplier
- complete systems available
- high quality materials
- time-saving installation
- insulation housing helps prevent energy loss

**Regumat M4**

“Regumat M4-130 DN 25” consisting of one isolation device with two ball valves and two thermometers, one check valve, one four-way mixing valve with optional presettable bypass and one insulation case.

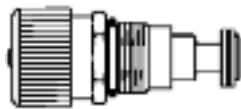
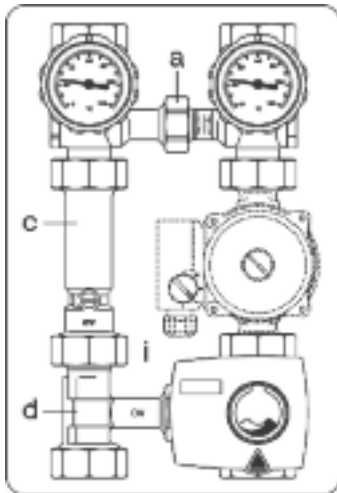
(1)

**168 54 85**

“Regumat M3, M4-130” DN 25 (1”)

Pump length 130 mm.

With three- or four-way mixing valve with optional presettable bypass and insulation housing.



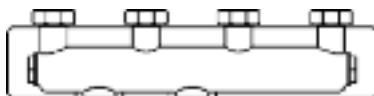
**135 33 90**

Differential pressure relief device for converting "Regumat" M3+M4 - 130



**135 20 96**

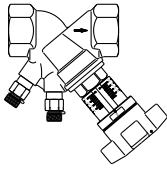
Wall bracket for "Regumat -130"



**135 15 71**

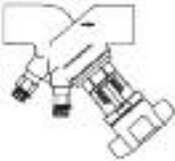
Manifold distributor with insulation for "Regumat - 130"

Item	Item no.
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### Bronze balancing valve with NPT thread

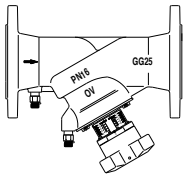
DN15	1/2"	106 10 04
DN 20	3/4"	106 10 06
DN25	1"	106 10 08
DN32	1-1/4"	106 10 10
DN40	1-1/2"	106 10 12
DN 50	2"	106 10 16



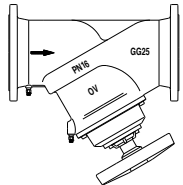
### Bronze balancing valve with solder connection

DN15	1/2"	106 05 51
DN 20	3/4"	106 05 52
DN25	1"	106 05 53
DN32	1-1/4"	106 05 54
DN40	1-1/2"	106 05 55
DN 50	2"	106 05 56

### Flanged cast iron balancing valve (ANSI)

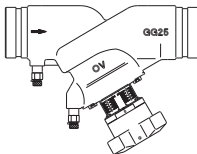


DN 20	3/4"	106 29 46
DN 25	1"	106 29 47
DN32	1-1/4"	106 29 48
DN40	1-1/2"	106 29 49
DN 50	2"	106 29 50
DN 65	2-1/2"	106 29 51
DN80	3"	106 29 52
DN 100	4"	106 29 53
DN 125	5"	106 29 54
DN 150	6"	106 29 55

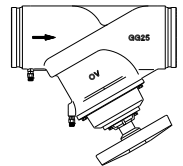


DN 200	8"	106 29 56
DN 250	10"	106 29 57
DN 300	12"	106 29 58

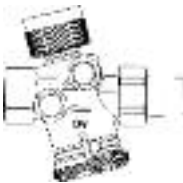
### Cast iron balancing valve with groove connection



DN 65	2-1/2"	106 30 51
DN80	3"	106 30 52
DN 100	4"	106 30 53
DN 125	5"	106 30 54
DN 150	6"	106 30 55



DN 200	8"	106 30 56
DN 250	10"	106 30 57
DN 300	12"	106 30 58



### Regulating valve for fan-coil units 'Cocon Q'

with test points

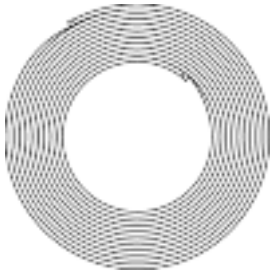
DN 15	1/2"	167 62 04
DN 20	3/4"	167 60 06

without test points

DN 15	1/2"	167 57 04
DN 20	3/4"	167 55 06

Item

Item no.



**PE-Xc plastic pipes "Copex"**

1/2" OV-PEX O2 Barrier Pipe  
length per roll 300'  
length per roll 1000'

**460 00 02 - 300**  
**460 00 02 - 000**

5/8" OV-PEX O2 Barrier Pipe  
length per roll 100'  
length per roll 1000'

**460 00 03 - 100**  
**460 00 03 - 000**

3/4" OV-PEX O2 Barrier Pipe  
length per roll 100'  
length per roll 300'  
length per roll 500'  
length per roll 1000'

**460 00 04 - 100**  
**460 00 04 - 300**  
**460 00 04 - 500**  
**460 00 04 - 000**

1" OV-PEX O2  
length per roll 100'  
length per roll 300'

**460 00 05 - 100**  
**460 00 05 - 300**

**Oventrop Corporation - Limited Warranty**

Oventrop Corporation warrants to its "Customers" that all Oventrop products, used for heating and plumbing applications and sold in accordance with these warranty provisions, shall be free from defects in material and workmanship. "Customer" as used herein shall mean an end-user of Oventrop products.

Five (5) years for all components from the date of purchase, unless otherwise specified in writing. In order to be eligible for a warranty claim, Products sold

- (1) must be installed and maintained professionally according to the relevant assembly instructions and the product manual,
- (2) must only be used for purposes provided in the Oventrop Corporation's product description or assembly instructions,
- (3) must be exposed only to gaseous or liquid media approved for the product by Oventrop Corporation, and
- (4) shall not be combined with products of other manufacturers unless otherwise stated in the product manual.

Oventrop Corporation's sole obligation hereunder shall be, at its option, to issue credit, repair or replace any component or part thereof which is proved to be defective. The limited warranty does not cover cost for transportation or labor charges (including installation and removal) unless such charges are authorized in writing in advance by the Oventrop Corporation. Any repairs without the express written consent of Oventrop Corporation shall render this limited warranty invalid. Oventrop Corporation disclaims allowances for dismounting and consequential losses and damages. Warranty claims must be received by Oventrop Corporation within the applicable warranty period and within thirty (30) days from the cause for the claim occurred or was discovered. Upon receipt of prompt notice of a warranty claim, Oventrop Corporation shall have ten (10) business days in which to determine whether it acknowledges responsibility for any asserted defects in material or workmanship and the appropriate action to be taken.

This limited warranty and any claims arising from the breach of warranty, or any other claim arising hereunder, shall be governed and construed under the laws of the state of New York. No other persons than Oventrop Corporation employees have any expressed or implied authority to bind Oventrop Corporation to any agreement or warranty of any kind without the express written consent of Oventrop Corporation

**Disclaimer of Warranties:**

OVENTROP CORPORATION DISCLAIMS ANY WARRANTY NOT PROVIDED HEREIN INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY AND IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. IT IS EXPRESSLY UNDERSTOOD THAT OVENTROP CORPORATION IS NOT RESPONSIBLE FOR ANY CONSEQUENTIAL OR OTHER DAMAGES THAT MAY ARISE FROM USING OVENTROP CORPORATION SYSTEM COMPONENTS. DAMAGE RESULTING FROM WATER FREEZING IN THE TUBING DOES NOT CONSTITUTE A DEFECT IN MATERIAL OR WORKMANSHIP, AND SHALL NOT BE COVERED BY THIS WARRANTY. OVENTROP TUBING MAY NOT BE STORED IN DIRECT SUNLIGHT FOR ANY PERIOD LONGER THAN THREE WEEKS, OR THIS LIMITED WARRANTY BECOMES INVALID. OVENTROP CORPORATION DISCLAIMS ANY STATUTORY OR IMPLIED WARRANTY OF HABITABILITY. OVENTROP CORPORATION FURTHER DISCLAIMS ANY RESPONSIBILITY FOR LOSSES, EXPENSES, INCONVENIENCES, SPECIAL, INDIRECT, SECONDARY, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING FROM OWNERSHIP OR USE OF THE ARTICLES SOLD HEREUNDER. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE FACE HEREOF.

Oventrop Corp. 2007

OVENTROP CORP.  
TERMS AND CONDITIONS OF SALE

These General Terms and Conditions of Sale and Delivery (these "Terms") are applicable to all U.S. customers (the "Customers" and each, individually, a "Customer") of Oventrop Corp., a Delaware corporation (the "Company").

1. Terms and Conditions of Sale:

1.1 Company shall sell and deliver to Customer and Customer shall purchase and accept from Company the products (herein, the "Products") described on or in any confirmed order, agreement or quotation, or any combination thereof (the "Order"), pursuant to the terms and conditions of the Order and those specified below, which taken together shall constitute the entire agreement between Company and Customer regarding the Products (herein, this "Agreement").

1.2 No other terms or conditions shall be of any effect unless otherwise specifically agreed to by Company in a separate written agreement duly signed by an officer of Company. Customer will be deemed to have assented to all Terms if any part of the Products is accepted by Customer. If Customer finds any Term not acceptable, Customer must so notify Company at once and must reject the Products delivered under this Agreement. Any additional or different terms or conditions contained in Customer's order or response hereto shall be deemed objected to by Company and shall be of no effect. No general terms and conditions of a Customer shall at any time form a part of the content of any contract or agreement between the Customer and the Company, even if they are not further expressly rejected by the Company.

1.3 No Order is binding upon the Company until the earlier of acceptance of the Order in writing or the delivery of the Products to the Customer. Notwithstanding any prior acceptance of an Order by Company, Company shall have no obligation if the Customer is in breach of any of its obligations hereunder, or any other agreement between the Customer and Company, at the time Company's performance was due.

1.4 All verbal agreements concerning the terms of any Order, including agreements made by telephone, shall have no force and effect unless and until acknowledged by the Company in writing.

1.5 Customer shall bear all costs associated with the cancellation or modification of the Order.

2. Technical Data and Information in Catalogs: All technical data and specifications in catalogs, installation instructions, product documentation, price lists, etc. are bench marks only and are not warranted or guaranteed in any manner by the Company. Oventrop may from time to time adjust such technical data and specifications without notice.

3. Prices:

3.1 Unless otherwise stated, all price quotations are EX WORKS (per Incoterms 2000) and do not include costs for packaging, postage or other freight charges, insurance or taxes, if any.

3.2 Products prices will be governed by the Company's current prices in effect from time. A price list is available on request.

3.3 Prices quoted in a currency other than United States Dollars are based on the official exchange rate on the date of the quote. Prices will be invoiced on the basis of the currency exchange rate in effect on the date of confirmation of any Order.

3.4 Company may without notice to Customer increase the price of the Products by the amount of any new or increased tax or duty (excluding franchise, net income and excess profits taxes) which Company may be required to pay on the manufacture, sale, transportation, delivery, export, import or use of the Products or the materials required for their manufacture or which affects the cost of such materials

4. Terms of Payment:

4.1 Payment terms are net 30 days from the date of invoice.

4.2 Prices for future deliveries of Products will be governed by the Company's current price list then in effect, which is available on request. All pricing information contained in catalogs or price lists of Oventrop is subject to confirmation by Company.

4.3 Company may change its prices and delivery terms for Products in its sole discretion, by giving Buyer at least ten (10) days prior notice that there will be a change.

4.4 Company may without notice to Buyer increase the price of the Products by the amount of any new or increased tax (excluding franchise, net income and excess profits taxes) which Company may be required to pay on the manufacture, sale, transportation, import, export, delivery or use of the Products or the materials required for their manufacture or which affects the cost of such materials

5. Taxes: Purchaser agrees to provide Oventrop with its assigned tax exemption number and agrees to pay, in addition to the purchase price, all applicable sales, use, excise, value added or other similar taxes.

6. Delivery Terms

6.1 Except as specified elsewhere herein or in any other as otherwise agreed to in writing between Company and Buyer, orders for Products may not be cancelled without Company's prior written consent and the payment of cancellation charges. Company shall specify the cancellation charges upon inquiry by Buyer.

6.2 Title to and risk of loss for the Products shall pass to Buyer upon Company's delivery thereof to carrier and any reference in these terms and conditions to "deliver" shall refer to such delivery.

6.3 The Customer shall not be liable to Buyer for delays in delivery or damage to Products while in transit, irrespective of whether Customer or Buyer determined the mode of transportation

7. Force Majeure: The Company shall not be liable to Buyer or any other person for any failure or delay in the performance of any obligation under this Agreement due to events beyond its reasonable control, including, but not limited to, fire, storm, flood, earthquake, explosion, accident, acts of the public enemy, wars, riots and public disorder, sabotage, strikes, lockouts, labor disputes, labor shortages, work slowdown, stoppages or delays, shortages or failures or delays of energy, materials, supplies or equipment, transportation embargoes or delays, acts of God, breakdown in machinery or equipment, and, except as otherwise set forth in this Agreement, acts or regulations or priorities of the federal, state or local governments. Buyer shall not be liable for delay or failure to take Products as ordered due to any such event, except that Buyer shall be liable to the Company for such delay or failure with respect to Products already in transit or specially made for Buyer which are not readily saleable without loss to the Company. When the event operating to excuse performance by either party shall cease, this Agreement shall continue in full force until all deliveries have been completed

8. Indemnification by Customer:

8.1 Except in cases of Company's willful misconduct or gross negligence, Customer agrees to diligently defend, and to hold harmless and indemnify, Company and its directors, officers, employees, shareholders, affiliates, agents and representatives (the "Company Indemnitees") from and against any and all liability, claims, lawsuits, losses, demands, damages, costs and expenses, including, without limitation, attorney's fees and costs, expert's fees and costs, and court costs, and in each case as such costs are incurred (the "Losses"), (i) arising directly or indirectly out of any use of the Products, whether authorized or unauthorized, and irrespective of whether such claim alleges personal injury, product liability, strict or absolute liability, breach of contract or implied contract or warranty, or any other claim of any nature on any theory of recovery, except to the extent such Losses have been incurred as a direct result of a breach of Company's warranty pursuant to Section 10 or Company's gross negligence or willful misconduct, or (ii) arising out of any breach or misrepresentation of any of Customer's representations or covenants or other terms of this Agreement, including, without limitation, any failure to use or supervise use of the Products strictly in accordance with the User Manual.

8.2 Company will promptly notify Customer of any claim, suit or proceeding that Customer may have indemnification obligations with respect to under this Section; provided, however, that any failure by Company to provide prompt written notice hereunder shall excuse Customer only to the extent that Customer is prejudiced by such failure to give notice. Company shall cooperate with Customer with regard to the defense of any suit or threatened suit. Customer may assume control of the defense of any such claim, proceeding or suit and shall have the authority to settle or otherwise dispose of any such suit or threatened suit, and to appeal any adverse judgment which may be entered, except that Customer must obtain Company's prior written consent to any settlement unless the settlement involves solely the payment of money and all of such payment is payable by Customer, its insurers, and parties other than the Company Indemnitees.

8.3 Customer shall notify Company in writing within 10 days of Customer's receipt of knowledge of any accident or safety incident involving the Products which results in personal injury or damage to property, or any government or similar investigation, claim or inquiry involving the Products. Customer shall fully cooperate with Company in the investigation and determination of the cause of any such accident or incident, and shall make available to Company all statements, reports and tests made by Customer or made available to Customer by others. The furnishing of such information to Company and any investigation by Company of such information or incident report shall not in any way constitute any assumption of any liability for such accident or incident by Company, nor shall it affect the indemnification obligations above.

8.4 Customer represents and warrants that it has in place the necessary insurance and liability waivers to cover the use and operation of the Products by Customer's personnel, customers, and third-party users. In addition, Customer represents and warrants that it maintains a policy of insurance at levels sufficient to support the indemnification obligations assumed by it in this Agreement. Customer will notify Company promptly if Customer's coverage is materially reduced or cancelled.

9. Choice of law and forum: These terms and conditions and any order shall be construed and the rights of the parties shall be interpreted in accordance with the laws of New York. The parties agree that courts located in the New York City, borough of Manhattan, shall be the exclusive forum for any dispute arising hereunder or with respect to any order. The parties expressly waive any objections based on personal jurisdiction or venue and consent to service of process by certified mail, return receipt requested.

10. Limited Warranty: For Warranty terms, see ATTACHMENT A.