

 **wates**





## Hakkımızda

İstanbul Genleşme ve Hidrofor Tankları A.Ş. 2011 yılında hidrofor tankını teknoloji ve kreatif iş anlayışı ile buluşturma hedefiyle kurulmuştur. Firmamız tescilli Wates markası genleşme tankları üretmeye başlamıştır.

Günümüzde Wates, Kocaeli'nin Gebze ilçesinde toplam 15.000 m2 kapalı alana sahip olup 70'den fazla ülkeye ihracat yapmaktadır.

Wates en yeni teknoloji makine ve ekipman yatırımlarıyla müşteri memnuniyetini ön planda tutarak, genleşme tankı sektöründe öncü isim konumundadır.

Firmamız daima kaliteli hizmet, zamanında teslim ve uygun fiyat ile müşterilerine bugün ve gelecekte hizmet vermeye devam edecektir.



## About us

İstanbul Genleşme ve Hidrofor Tankları A.Ş. was established in 2011 with the aim of bringing the expansion tank with technology and creative business approach. Started to produce registered Wates branded expansion tanks.

Today, Wates has a total closed area of 15.000 m2 in Gebze, Kocaeli and exports to more than 70 countries.

Wates is the pioneer in the expansion tank sector, keeping customer satisfaction at the forefront with the latest technology machinery and equipment investment.

Today and in the future our company will always continue to serve customers with quality service, timely delivery and reasonable price.





---

## A propos de nous



La société İstanbul Genleşme ve Hidrofor Tankları A.Ş. a été fondée en 2011 dans le but de réunir le réservoir de surpresseur avec la technologie et l'approche créative d'affaires.

Notre société a commencé à produire les vases d'expansion sous la marque déposée Wates.

Aujourd'hui Wates possède un espace couvert de 15.000 m<sup>2</sup> au total à l'arrondissement de Gebze de Kocaeli et exporte vers plus de 70 pays. En tenant au premier plan la satisfaction du client avec ses investissements en machines et équipements de dernière technologie Wates est en position de leader dans le secteur de vase d'expansion.

Notre société continuera à fournir ses services à ses clients dans le futur comme aujourd'hui avec un service de qualité, la livraison dans les délais et les prix raisonnables.

---

## Sobre Nosotros



İstanbul Genleşme ve Hidrofor Tankları A.Ş. se estableció en 2011 con el objetivo de combinar el tanque hidrofórico con la tecnología y el concepto creativo de negocio. Nuestra empresa comenzó a producir tanques de expansión de marca Wates registrados oficialmente.

Hoy, Wates tiene un área cerrada total de 15.000 m<sup>2</sup> en Gebze, Kocaeli y exporta a más de 70 países.

Wates es el pionero en la industria de tanques de expansión, manteniendo la satisfacción del cliente a la vanguardia con sus últimas inversiones en la maquinaria y los equipos de tecnología.

Nuestra empresa siempre continuará sirviendo a sus clientes con un servicio de calidad, entrega oportuna y precios razonables.

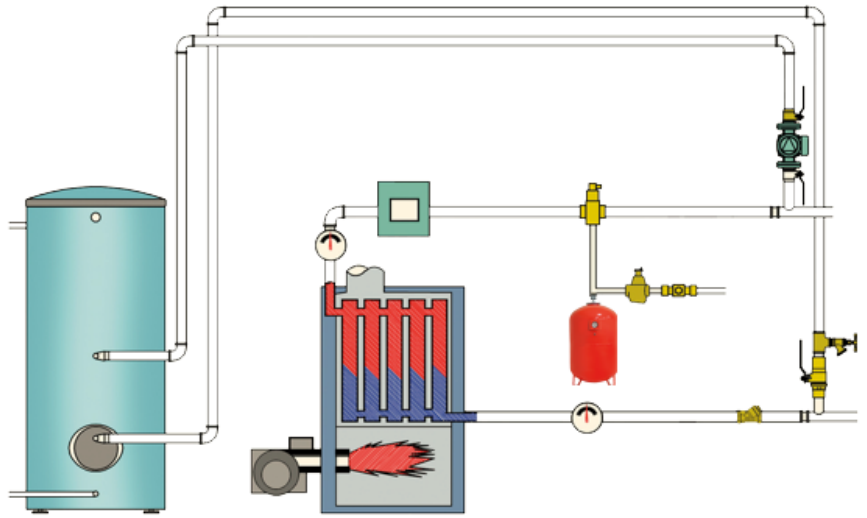


# Isıtma Sistemleri İçin Kapalı Genleşme Tankı

Closed Expansion Tank For Heating Systems

Vase d'expansion fermé pour les systèmes de chauffage

Tangue de Expensión Cerrado para Sistemas de Calefacción



# 6 Bar Dikey Kapalı Genleşme Tankı Serisi

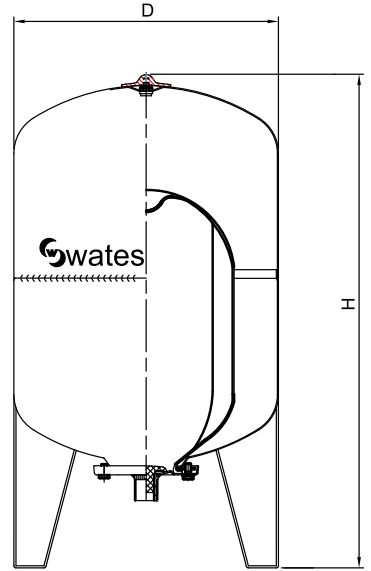
## 6 Bar Vertical Closed Expansion Tank Series

Série de vases d'expansion fermés, verticaux, de 6 bars

Tanque de Expansion Vertical/Cerrado (6 Bares)



<p><b>Kapalı ısıtma sistemleri için değiştirilebilir membranlı genleşme tankı</b> Expansion tank with replaceable membrane for closed heating systems Vase d'expansion a membrane remplaçable pour les systèmes fermés de chauffage Tanque de expansion con membrana intercambiable para sistemas de calefacción cerrados</p>	
<p><b>CE direktifi uyarınca işaretlenmiş</b> CE marked according to directive Marqué conformément à la directive CE Marcado de acuerdo con la directiva CE</p>	<p><b>PED 2014 / 68 / EU</b></p>
<p><b>Maksimum Çalışma Basıncı</b> Maximum working pressure Pression maximum de service Presion maxima de trabajo</p>	<p><b>6 BAR</b></p>
<p><b>Standart Önceden Belirlenmiş Basıncı</b> Standart pre-set pressure Pression normale prédéterminée Presion predeterminada estandar</p>	<p><b>2 BAR</b></p>
<p><b>Çalışma Sıcaklığı</b> Working temperature Température de fonctionnement Temperatura de funcionamiento</p>	<p><b>-10 °C / +100 °C</b></p>
<p><b>Membran Türü</b> Membrane type Type de membrane Tipo de membrana</p>	<p><b>EPDM</b></p>



### Teknik Özellikler Technical Specifications

Spécifications Techniques Especificaciones Técnicas

Model Model Modèle Modelo	Hacim Volume Volume Volumen	Ön Gaz Basıncı Pre-Charge Pressure Prè-pression de Gaz Presion Previa	Bağlantı Connection Connexion Conexion	Çap Dia Diametre Diametro	Yükseklik Height Hauteur Altura
WAT 6 K	24 LT	2	1"	280	470
WAT 6 K	35 LT	2	1"	380	470
WAT 6 K	50 LT	2	1"	380	750
WAT 6 K	60 LT	2	1"	380	810
WAT 6 K	80 LT	2	1"	460	915
WAT 6 K	100 LT	2	1"	460	990
WAT 6 K	150 LT	2	1"	500	1100
WAT 6 K	200 LT	2	1-1/4"	585	1120
WAT 6 K	300 LT	2	1-1/4"	635	1230
WAT 6 K	500 LT	2	1-1/4"	750	1550
WAT 6 K	750 LT	2	2"	800	1850
WAT 6 K	900 LT	2	2"	800	1950
WAT 6 K	1000 LT	2	2"	800	2180

\* İstedığınız her ürün paslanmaz flanş kapaklı ve butil membranlı olarak üretilebilmektedir.

Stainless steel flange and butyl membrane is available for all ranges.

Chaque produit que vous demanderez peut être fabriqué avec couvercle de bride en inox et membrane en butyle.

Cada producto solicitado por usted se puede producir con cubierta de brida inoxidable y membrana de butilo.

#### Renk Seçenekleri

Color Available / Options de Coloris / Opciones de Color



# 6 Bar Ters Flanşlı Kapalı Genleşme Tankı Serisi

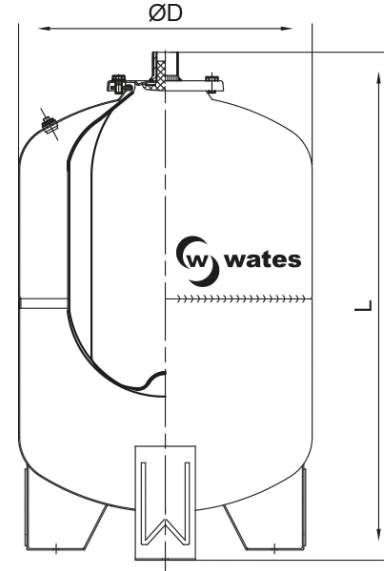
## 6 Bar Upper Flanged Closed Expansion Tank Series

Série de vases d'expansion fermés de 6 bars a bride renversée

Tanque de Expansion Cerrado con Bridas Inversas (6 Bares)



<b>Kapalı ısıtma sistemleri için değiştirilebilir membranlı genleşme tankı</b> Expansion tank with replaceable membrane for closed heating systems Vase d'expansion a membrane remplaçable pour les systèmes fermés de chauffage Tanque de expansion con membrana intercambiable para sistemas de calefacción cerrados	
<b>CE direktifi uyarınca işaretlenmiş</b> CE marked according to directive Marqué conformément à la directive CE Marcado de acuerdo con la directiva CE	<b>PED 2014 / 68 / EU</b>
<b>Maksimum Çalışma Basıncı</b> Maximum working pressure Pression maximum de service Presion maxima de trabajo	<b>6 BAR</b>
<b>Standart Önceden Belirlenmiş Basıncı</b> Standart pre-set pressure Pression normale prédéterminée Presion predeterminada estandar	<b>2 BAR</b>
<b>Çalışma Sıcaklığı</b> Working temperature Température de fonctionnement Temperatura de funcionamiento	<b>-10 °C / +100 °C</b>
<b>Membran Türü</b> Membrane type Type de membrane Tipo de membrana	<b>EPDM</b>



### Teknik Özellikler Technical Specifications

Spécifications Techniques Especificaciones Técnicas

Model Modèle Modelo	Hacim Volume Volume Volumen	Ön Gaz Basıncı Pre-Charge Pressure Prè-pression de Gaz Presion Previa	Bağlantı Connection Connexion Conexion	Çap Dia Diametre Diametro	Yükseklik Height Hauteur Altura
WAT 6 R	35 LT	2	1"	380	470
WAT 6 R	50 LT	2	1"	380	620
WAT 6 R	60 LT	2	1"	380	720
WAT 6 R	80 LT	2	1"	460	700
WAT 6 R	100 LT	2	1"	460	815
WAT 6 R	150 LT	2	1"	500	970
WAT 6 R	200 LT	2	1-1/4"	585	970
WAT 6 R	300 LT	2	1-1/4"	635	1115
WAT 6 R	500 LT	2	1-1/4"	750	1370

\* İsteddiğiniz her ürün paslanmaz flanş kapaklı ve butil membranlı olarak üretilebilmektedir.

Stainless steel flange and butyl membrane is available for all ranges.

Chaque produit que vous demanderez peut être fabriqué avec couvercle de bride en inox et membrane en butyle.

Cada producto solicitado por usted se puede producir con cubierta de brida inoxidable y membrana de butilo.

#### Renk Seçenekleri

Color Available / Options de Coloris / Opciones de Color



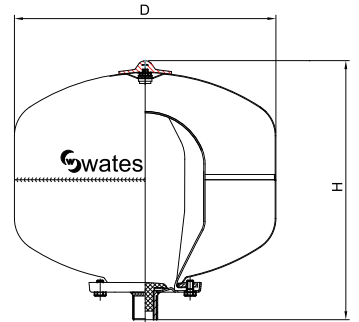
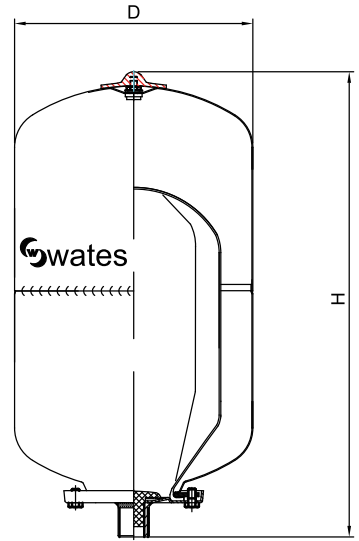


# 10 Bar Dikey Genleşme Tankı Serisi

## 10 Bar Vertical Pressure Tank Series

Série de vases d'expansion fermés, verticaux, de 10 bars

Tanque de Expansion Vertical (10 Bares)



**Pompa sistemleri için değiştirilebilir membranlı genleşme tankı**  
Pressure tank with replaceable membrane for booster set  
Vase d'expansion a membrane remplaçable pour les systèmes de pompe  
Tanque de expansion con membrana intercambiable para sistemas de bombeo

**CE direktifi uyarınca işaretlenmiş**  
CE marked according to directive  
Marqué conformément à la directive CE  
Marcado de acuerdo con la directiva CE

**PED 2014 / 68 / EU**

**Maksimum Çalışma Basıncı**  
Maximum working pressure  
Pression maximum de service  
Presion maxima de trabajo

**10 BAR**

**Standart Önceden Belirlenmiş Basınç**  
Standart pre-set pressure  
Pression normale prédéterminée  
Presion predeterminada estandar

**2 BAR**

**Çalışma Sıcaklığı**  
Working temperature  
Température de fonctionnement  
Temperatura de funcionamiento

**-10 °C / +100 °C**

**Membran Türü**  
Membrane type  
Type de membrane  
Tipo de membrana

**EPDM**

### Teknik Özellikler Technical Specifications

Spécifications Techniques Especificaciones Técnicas

Model Model Modèle Modelo	Hacim Volume Volume Volumen	Ön Gaz Basıncı Pre-Charge Pressure Prè-pression de Gaz Presion Previa	Bağlantı Connection Connexion Conexion	Çap Dia Diametre Diametro	Yükseklik Height Hauteur Altura
WAT 10 L	2 LT	2	1"	120	242
WAT 10 L	5 LT	2	1"	160	300
WAT 10 L	8 LT	2	1"	202	320
WAT 10 L	12 LT	2	1"	280	300
WAT 10 L	19 LT	2	1"	280	430
WAT 10 L	24 LT	2	1"	280	470
WAT 10 L	35 LT	2	1"	380	470
WAT 10 L	50 LT	2	1"	380	620

### 10 Bar Küre Genleşme Tankının Teknik Özellikleri

10 Bar Technical Specifications of Oval Pressure Tank  
Spécifications Techniques des Vases d'expansion Spheriques de 10 bars  
Especificaciones Tecnicas para Tanque de Expansion Esfera (10 Bares)

Model Model Modèle Modelo	Hacim Volume Volume Volumen	Ön Gaz Basıncı Pre-Charge Pressure Prè-pression de Gaz Presion Previa	Bağlantı Connection Connexion Conexion	Çap Dia Diametre Diametro	Yükseklik Height Hauteur Altura
WAT 10 O	24 LT	2	1"	360	330

\* İsteddiğiniz her ürün paslanmaz flanş kapaklı ve butil membranlı olarak üretilebilmektedir.

Stainless steel flange and butyl membrane is available for all ranges.

Chaque produit que vous demanderez peut être fabriqué avec couvercle de bride en inox et membrane en butyle.

Cada producto solicitado por usted se puede producir con cubierta de brida inoxidable y membrana de butilo.

### Renk Seçenekleri

Color Available / Options de Coloris / Opciones de Color

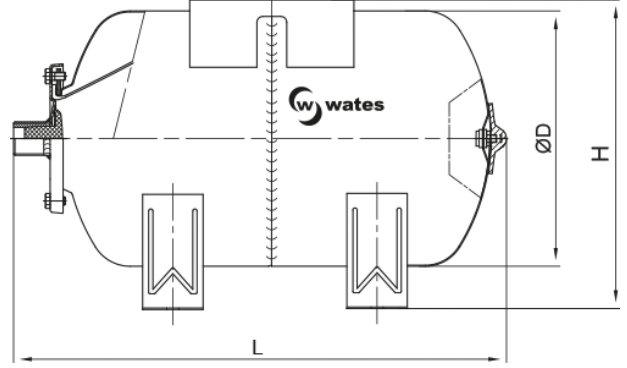


# 10 Bar Yatık Genleşme Tankı Serisi

## 10 Bar Horizontal Pressure Tank Series

Série de vases d'expansion horizontaux de 10 bars

Tanque de Expansion Horizontal (10 Bares)



<b>Pompa sistemleri için değiştirilebilir membranlı genleşme tankı</b> Pressure tank with replaceable membrane for booster set Vase d'expansion a membrane remplaçable pour les systèmes de pompe Tanque de expansion con membrana intercambiable para sistemas de bombeo	
<b>CE direktifi uyarınca işaretlenmiş</b> CE marked according to directive Marqué conformément à la directive CE Marcado de acuerdo con la directiva CE	<b>PED 2014 / 68 / EU</b>
<b>Maksimum Çalışma Basıncı</b> Maximum working pressure Pression maximum de service Presion maxima de trabajo	<b>10 BAR</b>
<b>Standart Önceden Belirlenmiş Basınç</b> Standart pre-set pressure Pression normale prédéterminée Presion predeterminada estandar	<b>2 BAR</b>
<b>Çalışma Sıcaklığı</b> Working temperature Température de fonctionnement Temperatura de funcionamiento	<b>-10 °C / +100 °C</b>
<b>Membran Türü</b> Membrane type Type de membrane Tipo de membrana	<b>EPDM</b>

### Teknik Özellikler Technical Specifications

Spécifications Techniques Especificaciones Técnicas

Model Model Modèle Modelo	Hacim Volume Volume Volumen	Ön Gaz Basıncı Pre-Charge Pressure Pré-pression de Gaz Presion Previa	Bağlantı Connection Connexion Conexion	Çap Dia Diametre Diametro	Yükseklik Height Hauteur Altura
WAT 10 H	24LT	2	1"	280	470
WAT 10 H	50 LT	2	1"	380	620
WAT 10 H	60 LT	2	1"	380	700
WAT 10 H	80 LT	2	1"	460	750
WAT 10 H	100 LT	2	1"	460	800

\* İsteddiğiniz her ürün paslanmaz flanş kapaklı ve butil membranlı olarak üretilebilmektedir.

Stainless steel flange and butyl membrane is available for all ranges.

Chaque produit que vous demanderez peut être fabriqué avec couvercle de bride en inox et membrane en butyle.

Cada producto solicitado por usted se puede producir con cubierta de brida inoxidable y membrana de butilo.

#### Renk Seçenekleri

Color Available / Options de Coloris / Opciones de Color



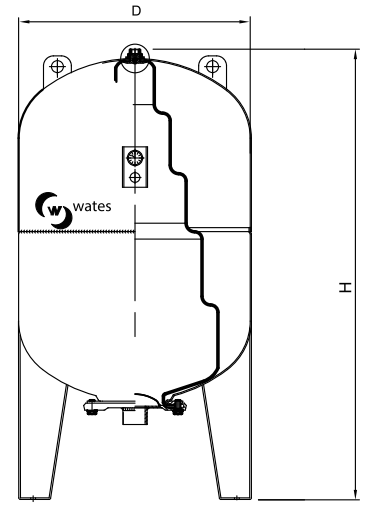


# 10 Bar Dikey Genleşme Tankı Serisi

## 10 Bar Vertical Pressure Tank Series

Série de vases d'expansion fermés, verticaux, de 10 bars

Tanque de Expansion Vertical (10 Bares)



**Pompa sistemleri için değiştirilebilir membranlı genleşme tankı**  
Pressure tank with replaceable membrane for booster set  
Vase d'expansion a membrane remplaçable pour les systèmes de pompe  
Tanque de expansion con membrana intercambiable para sistemas de bombeo

**CE direktifi uyarınca işaretlenmiş**  
CE marked according to directive  
Marqué conformément à la directive CE  
Marcado de acuerdo con la directiva CE

**PED 2014 / 68 / EU**

**Maksimum Çalışma Basıncı**  
Maximum working pressure  
Pression maximum de service  
Presion maxima de trabajo

**10 BAR**

**Standart Önceden Belirlenmiş Basınç**  
Standart pre-set pressure  
Pression normale prédéterminée  
Presion predeterminada estandar

**4 BAR**

**Çalışma Sıcaklığı**  
Working temperature  
Température de fonctionnement  
Temperatura de funcionamiento

**-10 °C / +100 °C**

**Membran Türü**  
Membrane type  
Type de membrane  
Tipo de membrana

**EPDM**

### Teknik Özellikler Technical Specifications

Spécifications Techniques Especificaciones Técnicas

Model Model Modèle Modelo	Hacim Volume Volume Volumen	Ön Gaz Basıncı Pre-Charge Pressure Pré-pression de Gaz Presion Previa	Bağlantı Connection Connexion Conexion	Çap Dia Diametre Diametro	Yükseklik Height Hauteur Altura	Model Model Modèle Modelo	Hacim Volume Volume Volumen	Ön Gaz Basıncı Pre-Charge Pressure Pré-pression de Gaz Presion Previa	Bağlantı Connection Connexion Conexion	Çap Dia Diametre Diametro	Yükseklik Height Hauteur Altura
WAT 10 V	50 LT	4	1"	380	750	WAT 10 V	1000 LT	4	2"	800	2180
WAT 10 V	60 LT	4	1"	380	810	WAT 10 V	1250 LT	4	2"	958	2220
WAT 10 V	80 LT	4	1"	460	915	WAT 10 V	1500 LT	4	2"	958	2380
WAT 10 V	100 LT	4	1"	460	990	WAT 10 V	2000 LT	4	2"	1100	2520
WAT 10 V	150 LT	4	1"	500	1100	WAT 10 V	2500 LT	4	2"	1200	2500
WAT 10 V	200 LT	4	1-1/4"	585	1120	WAT 10 V	3000 LT	4	2-1/2"	1200	2800
WAT 10 V	300 LT	4	1-1/4"	635	1230	WAT 10 V	4000 LT	4	3"	1500	2940
WAT 10 V	500 LT	4	1-1/4"	750	1550	WAT 10 V	5000 LT	4	3"	1500	3600
WAT 10 V	750 LT	4	2"	800	1810	WAT 10 V	10000 LT	4	DIN 100	1600	5750
WAT 10 V	900 LT	4	2"	800	1950						

\* İstedığınız her ürün paslanmaz flanş kapaklı ve butil membranlı olarak üretilebilmektedir.

Stainless steel flange and butyl membrane is available for all ranges.

Chaque produit que vous demanderez peut être fabriqué avec couvercle de bride en inox et membrane en butyle.

Cada producto solicitado por usted se puede producir con cubierta de brida inoxidable y membrana de butilo.

#### Renk Seçenekleri

Color Available / Options de Coloris / Opciones de Color

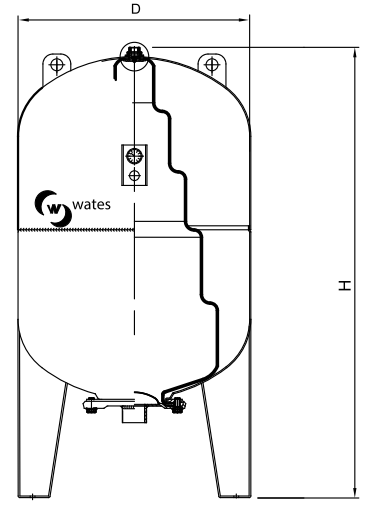


# 16 Bar Dikey Genleşme Tankı Serisi

## 16 Bar Vertical Pressure Tank Series

Série de vases d'expansion fermés, verticaux, de 16 bars

Tanque de Expansion Vertical (16 Bares)



**Pompa sistemleri için değiştirilebilir membranlı genleşme tankı**  
Pressure tank with replaceable membrane for booster set  
Vase d'expansion a membrane remplaçable pour les systèmes de pompe  
Tanque de expansion con membrana intercambiable para sistemas de bombeo

**CE direktifi uyarınca işaretlenmiş**  
CE marked according to directive  
Marqué conformément à la directive CE  
Marcado de acuerdo con la directiva CE

**PED 2014 / 68 / EU**

**Maksimum Çalışma Basıncı**  
Maximum working pressure  
Pression maximum de service  
Presion maxima de trabajo

**16 BAR**

**Standart Önceden Belirlenmiş Basıncı**  
Standart pre-set pressure  
Pression normale prédéterminée  
Presion predeterminada estandar

**4 BAR**

**Çalışma Sıcaklığı**  
Working temperature  
Température de fonctionnement  
Temperatura de funcionamiento

**-10 °C / +100 °C**

**Membran Türü**  
Membrane type  
Type de membrane  
Tipo de membrana

**EPDM**

### Teknik Özellikler Technical Specifications

Spécifications Techniques Especificaciones Técnicas

Model Model Modèle Modelo	Hacim Volume Volume Volumen	Ön Gaz Basıncı Pre-Charge Pressure Pré-pression de Gaz Presion Previa	Bağlantı Connection Connexion Conexión	Çap Dia Diametre Diámetro	Yükseklik Height Hauteur Altura	Model Model Modèle Modelo	Hacim Volume Volume Volumen	Ön Gaz Basıncı Pre-Charge Pressure Pré-pression de Gaz Presion Previa	Bağlantı Connection Connexion Conexión	Çap Dia Diametre Diámetro	Yükseklik Height Hauteur Altura
WAT 16 V	8 LT	4	1"	220	320	WAT 16 V	500 LT	4	1-1/4"	750	1550
WAT 16 V	12 LT	4	1"	280	300	WAT 16 V	750 LT	4	2"	800	1850
WAT 16 V	19 LT	4	1"	280	430	WAT 16 V	1000 LT	4	2"	800	2180
WAT 16 V	24 LT	4	1"	280	470	WAT 16 V	1250 LT	4	2"	958	2220
WAT 16 V	35 LT	4	1"	380	470	WAT 16 V	1500 LT	4	2"	958	2380
WAT 16 V	50 LT	4	1"	380	750	WAT 16 V	2000 LT	4	2"	1100	2520
WAT 16 V	60 LT	4	1"	380	810	WAT 16 V	2500 LT	4	2"	1200	2500
WAT 16 V	80 LT	4	1"	460	915	WAT 16 V	3000 LT	4	2-1/2"	1200	2800
WAT 16 V	100 LT	4	1"	460	990	WAT 16 V	4000 LT	4	3"	1500	2940
WAT 16 V	150 LT	4	1"	500	1100	WAT 16 V	5000 LT	4	3"	1500	3600
WAT 16 V	200 LT	4	1-1/4"	585	1120	WAT 16 V	10000 LT	4	DIN 100	1600	5750
WAT 16 V	300 LT	4	1-1/4"	635	1230						

\* İstedığınız her ürün paslanmaz flanş kapaklı ve butil membranlı olarak üretilebilmektedir.

Stainless steel flange and butyl membrane is available for all ranges.

Chaque produit que vous demanderez peut être fabriqué avec couvercle de bride en inox et membrane en butyle.

Cada producto solicitado por usted se puede producir con cubierta de brida inoxidable y membrana de butilo.

Renk Seçenekleri

Color Available / Options de Coloris / Opciones de Color

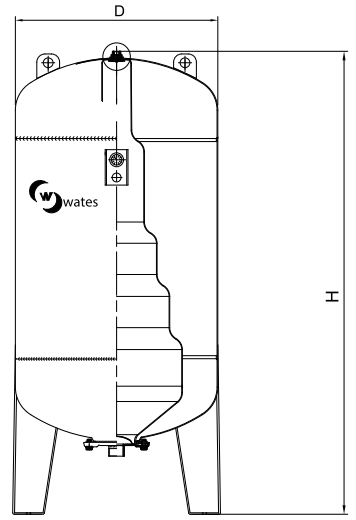


# 25 Bar Dikey Genleşme Tankı Serisi

## 25 Bar Vertical Pressure Tank Series

Série de vases d'expansion fermés, verticaux, de 25 bars

Tanque de Expansion Vertical (25 Bares)



<p><b>Pompa sistemleri için değiştirilebilir membranlı genleşme tankı</b>          Pressure tank with replaceable membrane for booster set          Vase d'expansion a membrane remplaçable pour les systèmes de pompe          Tanque de expansion con membrana intercambiable para sistemas de bombeo</p>	
<p><b>CE direktifi uyarınca işaretlenmiş</b>          CE marked according to directive          Marqué conformément à la directive CE          Marcado de acuerdo con la directiva CE</p>	<p><b>PED 2014 / 68 / EU</b></p>
<p><b>Maksimum Çalışma Basıncı</b>          Maximum working pressure          Pression maximum de service          Presion maxima de trabajo</p>	<p><b>25 BAR</b></p>
<p><b>Standart Önceden Belirlenmiş Basınç</b>          Standart pre-set pressure          Pression normale prédéterminée          Presion predeterminada estandar</p>	<p><b>4 BAR</b></p>
<p><b>Çalışma Sıcaklığı</b>          Working temperature          Température de fonctionnement          Temperatura de funcionamiento</p>	<p><b>-10 °C / +100 °C</b></p>
<p><b>Membran Türü</b>          Membrane type          Type de membrane          Tipo de membrana</p>	<p><b>EPDM</b></p>

### Teknik Özellikler Technical Specifications

Spécifications Techniques Especificaciones Técnicas

Model Modèle Modelo	Hacim Volume Volumen	Ön Gaz Basıncı Pre-Charge Pressure Prè-pression de Gaz Presion Previa	Bağlantı Connection Connexion Conexion	Çap Dia Diametre Diametro	Yükseklik Height Hauteur Altura	Model Modèle Modelo	Hacim Volume Volumen	Ön Gaz Basıncı Pre-Charge Pressure Prè-pression de Gaz Presion Previa	Bağlantı Connection Connexion Conexion	Çap Dia Diametre Diametro	Yükseklik Height Hauteur Altura
WAT 25 V	8 LT	4	1"	219	330	WAT 25 V	750 LT	4	2"	800	1850
WAT 25 V	24 LT	4	1"	280	470	WAT 25 V	1000 LT	4	2"	800	2180
WAT 25 V	50 LT	4	1"	380	750	WAT 25 V	1500 LT	4	2"	958	2380
WAT 25 V	60 LT	4	1"	380	810	WAT 25 V	2000 LT	4	2"	1100	2520
WAT 25 V	80 LT	4	1"	450	910	WAT 25 V	2500 LT	4	2"	1200	2550
WAT 25 V	100 LT	4	1"	450	960	WAT 25 V	3000 LT	4	2-1/2"	1200	2800
WAT 25 V	150 LT	4	1"	500	1100	WAT 25 V	4000 LT	4	3"	1500	2940
WAT 25 V	200 LT	4	1-1/4"	600	1120	WAT 25 V	5000 LT	4	3"	1500	3600
WAT 25 V	300 LT	4	1-1/4"	640	1230	WAT 25 V	10000 LT	4	DIN 100	1600	5750
WAT 25 V	500 LT	4	1-1/4"	750	1550						

\* İstedığınız her ürün paslanmaz flanş kapaklı ve butil membranlı olarak üretilebilmektedir.

Stainless steel flange and butyl membrane is available for all ranges.

Chaque produit que vous demanderez peut être fabriqué avec couvercle de bride en inox et membrane en butyle.

Cada producto solicitado por usted se puede producir con cubierta de brida inoxidable y membrana de butilo.

#### Renk Seçenekleri

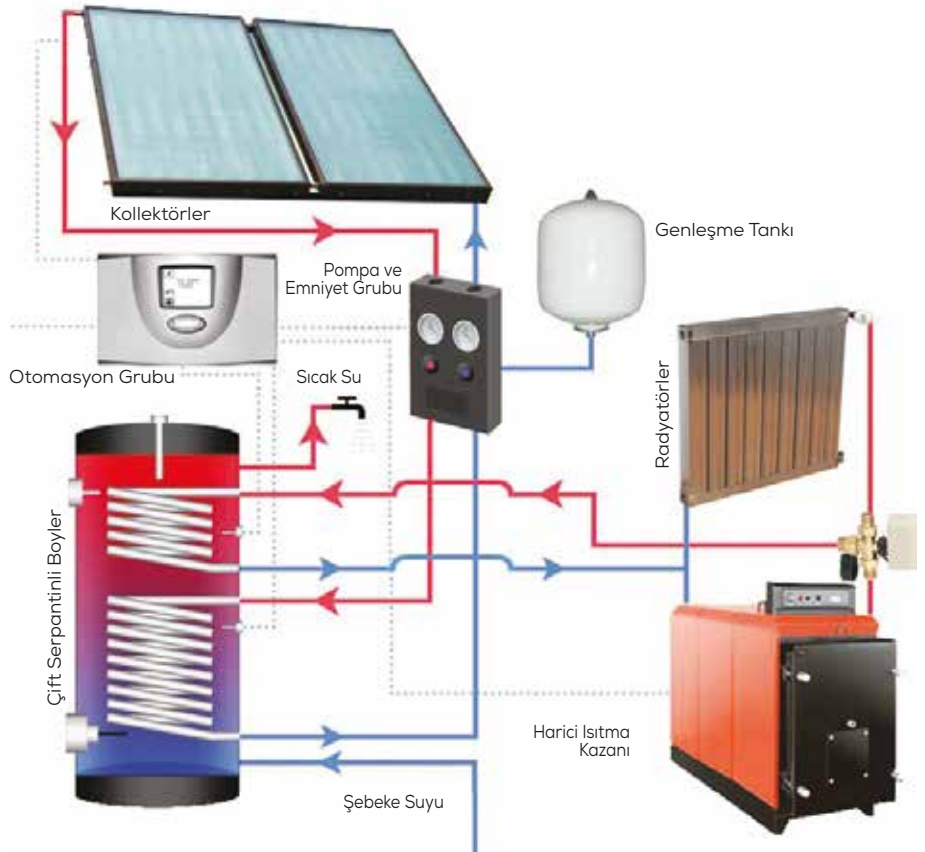
Color Available / Options de Color / Opciones de Color



# Güneş Enerjisi Sistemleri İçin Genleşme Tankı

## Expansion Tank For Solar Systems

Vase d'expansion fermé pour les systèmes d'énergie solarie  
Tangue de Expensión Cerrado para Sistemas de Energia Solar



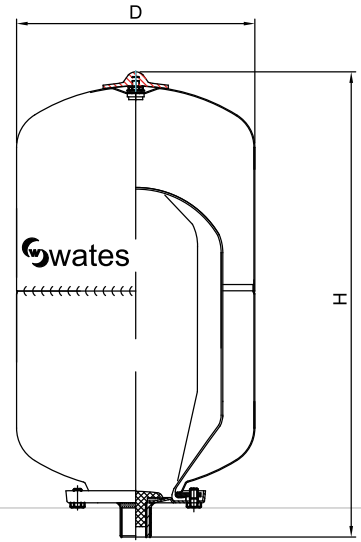


# 10 Bar Güneş Enerji Sistemleri İçin Kapalı Genleşme Tankı Serisi

## 10 Bar Closed Expansion Tank Series For Solar Systems

Vase d'expansion fermé de 10 bars pour les systemes d'énergie solarie

Tanque de Expansion Cerrado para Sistemas de Energia Solar (10 Bares)



<b>Kapalı ısıtma sistemleri için değiştirilebilir membranlı genişleme tankı</b> Expansion tank with replaceable membrane for closed heating systems Vase d'expansion a membrane remplaçable pour les systèmes fermés de chauffage Tanque de expansion con membrana intercambiable para sistemas de calefacción cerrados	
<b>CE direktifi uyarınca işaretlenmiş</b> CE marked according to directive Marqué conformément à la directive CE Marcado de acuerdo con la directiva CE	<b>PED 2014 / 68 / EU</b>
<b>Maksimum Çalışma Basıncı</b> Maximum working pressure Pression maximum de service Presion maxima de trabajo	<b>10 BAR</b>
<b>Standart Önceden Belirlenmiş Basıncı</b> Standart pre-set pressure Pression normale prédéterminée Presion predeterminada estandar	<b>2 BAR</b>
<b>Çalışma Sıcaklığı</b> Working temperature Température de fonctionnement Temperatura de funcionamiento	<b>-10 °C / +140 °C</b>
<b>Membran Türü</b> Membrane type Type de membrane Tipo de membrana	<b>EPDM</b>

### Teknik Özellikler Technical Specifications

Spécifications Techniques Especificaciones Técnicas

Model Modèle Modelo	Hacim Volume Volume Volumen	Ön Gaz Basıncı Pre-Charge Pressure Prè-pression de Gaz Presion Previa	Bağlantı Connection Connexion Conexion	Çap Dia Diametre Diametro	Yükseklik Height Hauteur Altura	Model Modèle Modelo	Hacim Volume Volume Volumen	Ön Gaz Basıncı Pre-Charge Pressure Prè-pression de Gaz Presion Previa	Bağlantı Connection Connexion Conexion	Çap Dia Diametre Diametro	Yükseklik Height Hauteur Altura
WAT 10 S	2 LT	2	1"	120	242	WAT 10 S	50 LT	2	1"	380	620
WAT 10 S	5 LT	2	1"	160	300	WAT 10 S	50 LT	4	1"	380	750
WAT 10 S	8 LT	2	1"	202	320	WAT 10 S	60 LT	4	1"	380	810
WAT 10 S	12 LT	2	1"	280	300	WAT 10 S	80 LT	4	1"	460	915
WAT 10 S	19 LT	2	1"	280	430	WAT 10 S	100 LT	4	1"	460	990
WAT 10 S	24 LT	2	1"	280	470	WAT 10 S	150 LT	4	1"	500	1100
WAT 10 S	35 LT	2	1"	380	470	WAT 10 S	200 LT	4	1-1/4"	585	1120

\* İstedığınız her ürün paslanmaz flanş kapaklı ve butil membranlı olarak üretilebilmektedir.

Stainless steel flange and butyl membrane is available for all ranges.

Chaque produit que vous demanderez peut être fabriqué avec couvercle de bride en inox et membrane en butyle.

Cada producto solicitado por usted se puede producir con cubierta de brida inoxidable y membrana de butilo.

#### Renk Seçenekleri

Color Available / Options de Coloris / Opciones de Color



# 10 Bar Paslanmaz Çelik Kapalı Genleşme Tankı Serisi

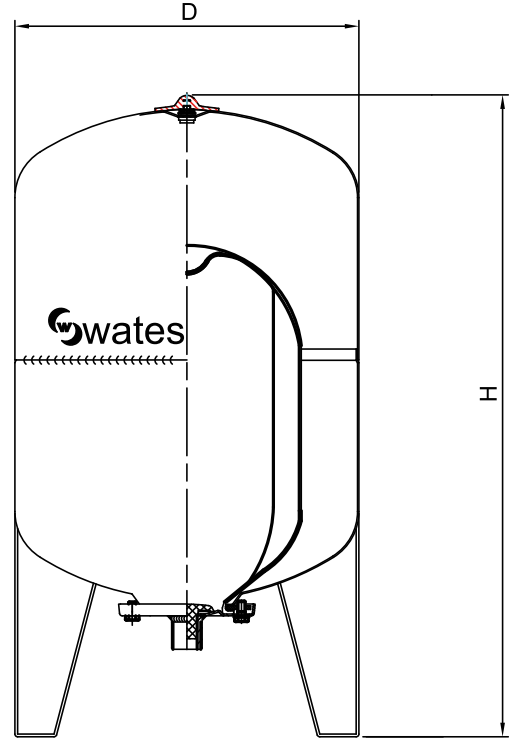
## 10 Bar Stainless Steel Closed Pressure Tank Series

Série de vases d'expansion fermés de 10 bars en acier inoxydable

Tanque de Expansion Cerrado de Acero Inoxidable (10 Bares)



<b>Kapalı ısıtma sistemleri için değiştirilebilir membranlı genleşme tankı</b> Expansion tank with replaceable membrane for closed heating systems Vase d'expansion a membrane remplaçable pour les systèmes fermés de chauffage Tanque de expansion con membrana intercambiable para sistemas de calefacción cerrados	
<b>CE direktifi uyarınca işaretlenmiş</b> CE marked according to directive Marqué conformément à la directive CE Marcado de acuerdo con la directiva CE	<b>PED 2014 / 68 / EU</b>
<b>Maksimum Çalışma Basıncı</b> Maximum working pressure Pression maximum de service Presion maxima de trabajo	<b>10 BAR</b>
<b>Standart Önceden Belirlenmiş Basıncı</b> Standart pre-set pressure Pression normale prédéterminée Presion predeterminada estandar	<b>2 BAR</b>
<b>Çalışma Sıcaklığı</b> Working temperature Température de fonctionnement Temperatura de funcionamiento	<b>-10 °C / +100 °C</b>
<b>Membran Türü</b> Membrane type Type de membrane Tipo de membrana	<b>EPDM</b>



## Teknik Özellikler Technical Specifications

Spécifications Techniques Especificaciones Técnicas

Model Model Modèle Modelo	Hacim Volume Volume Volumen	Ön Gaz Basıncı Pre-Charge Pressure Prè-pression de Gaz Presion Previa	Bağlantı Connection Connexion Conexion	Çap Dia Diametre Diametro	Yükseklik Height Hauteur Altura
WAT 10 SS	24 LT	2	1"	280	470
WAT 10 SS	50 LT	4	1"	380	750
WAT 10 SS	60 LT	4	1"	380	810
WAT 10 SS	80 LT	4	1"	460	915
WAT 10 SS	100 LT	4	1"	460	990
WAT 10 SS	150 LT	4	1"	500	1100
WAT 10 SS	200 LT	4	1-1/4"	585	1120
WAT 10 SS	300 LT	4	1-1/4"	635	1230
WAT 10 SS	500 LT	4	1-1/4"	750	1550

\* İsteddiğiniz her ürün paslanmaz flanş kapaklı ve butil membranlı olarak üretilebilmektedir.

Stainless steel flange and butyl membrane is available for all ranges.

Chaque produit que vous demanderez peut être fabriqué avec couvercle de bride en inox et membrane en butyle.

Cada producto solicitado por usted se puede producir con cubierta de brida inoxidable y membrana de butilo.

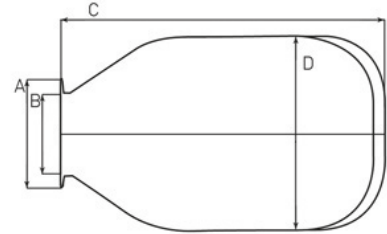
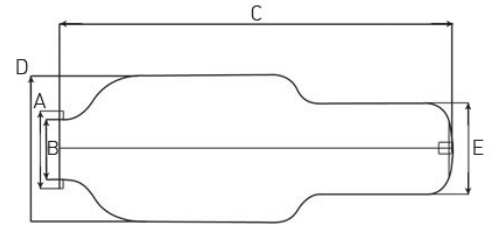
# MEMBRAN

## Membrane / Membrane / Membrana

### Tek Flanşlı / Single Flange

**Teknik Özellikler** Technical Specifications  
Spécifications Techniques Especificaciones Técnicas

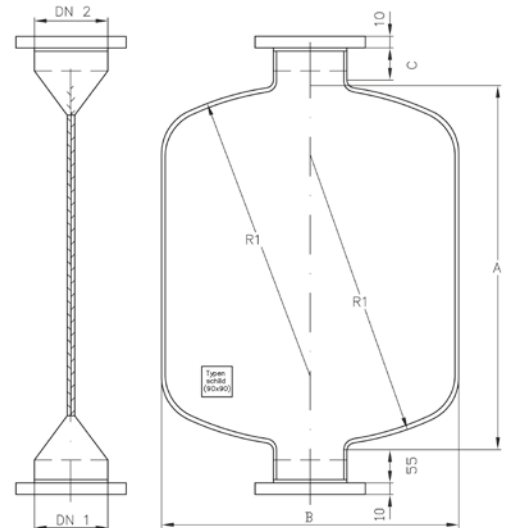
Boyut ve Kapasite Size and Capacity Dimensions et Capacité Tamano y Capacidad	Flanş Flange (B/A) Bride (B/A) Brida (B/A)	Yükseklik Height Hauteur Altura	Çap Dia Diametre Diametro
2-3 LT	45/65	135	80
5-8 LT	45/65	155	105
8-12 LT	45/65	200	115
12-18 LT	45/65	265	135
24 LT	80/100	260	200
35-50 LT	80/100	335	210
50-80 LT	80/100	500	220
35-50 LT With Tail	80/100	310+45	180
80-100 LT With Tail	80/100	640+130	200
80-100 LT	80/100	630	120/140
100-150 LT	80/100	730	180/270
150-200 LT	80/100	810	240/270
200-300 LT	150/200	1000	230/380
500-750 LT	150/200	1350	280/440
750-1000 LT	150/200	1800	340/470
1000-1500 LT	200/260	2100	420/500
2000-4000 LT	248/313	2560	405/780



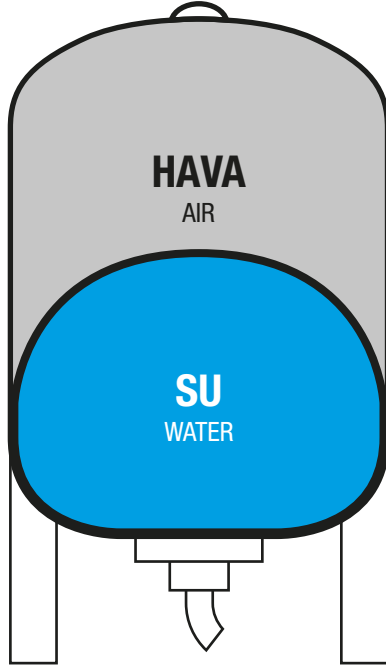
### Çift Flanşlı / Double Flange

**Teknik Özellikler** Technical Specifications  
Spécifications Techniques Especificaciones Técnicas

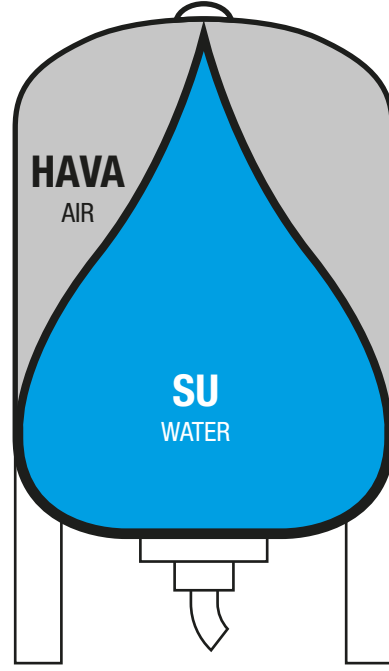
Boyut ve Kapasite Size and Capacity Dimensions et Capacité Tamano y Capacidad	Yükseklik Height Hauteur Altura	Çap Dia Diametre Diametro	DN1	DN1
5000 LT	3400	2250	150	250
6000 LT	4365	2100	150	250
7000 LT	4815	2100	150	250
8000 LT	5515	2100	150	250
10000 LT	5615	2100	150	250



# MEMBRAN



**ASKISIZ MEMBRANLI TANK**  
MEMBRANE TANK WITHOUT TIEROD



**ASKILI MEMBRANLI TANK**  
MEMBRANE TANK WITH TIEROD

## Kapalı Genleşme Depolarının Sistemde Kullanılmasının Faydaları;

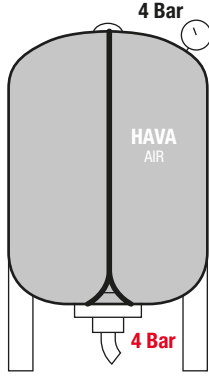
- › Isıtma tesisatı kapalı sisteme döneceğinden hava ile teması bulunmayacak ve korozyon oluşmayacaktır.
- › Su sadece membranla temas eder ve bu nedenle korozyon oluşma olasılığı ortadan kalkacaktır.
- › Membranın değiştirilmesi kolaydır.
- › Duvara sürtmeyen membran, daha uzun ömürlü olacaktır.
- › Kapalı sistemde su buharlaşıp kaybolmayacağından, su eksilmesi olmayacaktır.
- › Kapalı sistemde basınç dağılımı eşdeğer olacağından, sistemde ısınma daha dengeli olacaktır.
- › Bir hava besleyici gereksinimini ortadan kaldırır.
- › Kapalı genleşme deposu ısıtma sistemine yakın montaj yapılabilir bu yüzden daha az enerjiye ve işçiliğe ihtiyaç vardır.
- › Montajı hızlı ve bakımı kolaydır.
- › Düşük maliyetli ve az yer kaplamasından dolayı yerden tasarruf edilir.

## Benefits Of Using Closed Expansion Tanks In The System;

- › As the heating system returns to a closed system, there will be no contact with air and no corrosion will occur.
- › The water only comes into contact with the membrane and therefore the possibility of corrosion will be eliminated.
- › Replacing the membrane is easy.
- › The membrane that does not touch the wall will be used longer.
- › In the closed system, water will not evaporate and will not be lost.
- › Since the pressure distribution in the closed system will be equivalent, the heating in the system will be more balanced.
- › Eliminates the need for an air feeder.
- › The closed expansion tank can be installed close to the heating system, so less energy and labor is needed.
- › Assembly is quick and easy to repair. (maintain)
- › Closed expansion tank is low cost takes up little space.



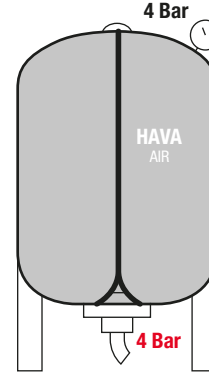
## Kapalı Genleşme Depolarının Sistemde Kullanılmasının Faydaları;



### 1. Tank

Tank Sisteme Bağlanıyor

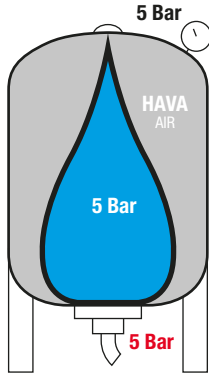
The tank is connected to the system



### 2. Tank

Pompa suyu basmaya başlıyor

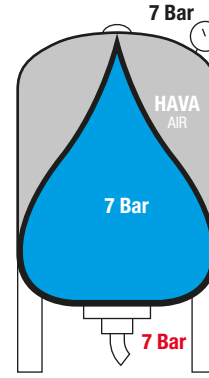
The pump start to pump water



### 3. Tank

Pompa suyu basmaya devam ediyor

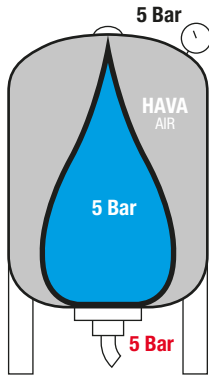
Pump continues to pump water



### 4. Tank

Çalışmakta olan pompa duruyor

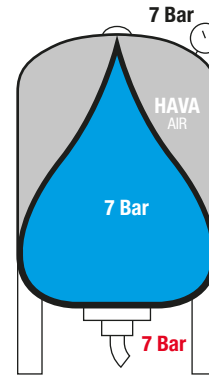
Pump in operation stops



### 5. Tank

Pompa çalışmıyor ve su tanktan boşaltılıyor

The pump does not start and water is drained from the tank



### 6. Tank

Durmakta olan pompa tekrardan çalışmaya başlıyor

The pump that is stopped is restarting

# HEATING SYSTEM APPLICATION

## Calculation of the Tank Volume

Tank volume (lt) can be calculated with the next formula.

- V<sub>tank</sub> : Expansion tank volume (lt)
- V<sub>su</sub> : Total water volume in the installation (lt)
- e : Expansion coefficient of the heating water
- P<sub>min</sub> : Absolute static pressure of the water in installation (bar)
- P<sub>max</sub> : Max. absolute pressure that can be applied to the system. This is also the value for open the safety valve (bar).

$$V_{\text{tank}} = \frac{V_{\text{water}} \cdot e}{1 - \frac{P_{\text{min}}}{P_{\text{max}}}}$$

## Calculation

**Water :** The total volume of the water in the installation (lt). When the absolute calculation is difficult, the following table can be used.

TABLE: 1 RADIATOR WATER VOLUMES ACCORDING TO THE BOILER CAPACITY

Heating Element	Water Volume (lt) required for each 1000 kcal/hr	Water Volume (lt) required for each 1 kW
Convactor	6	5.2
Panel Radiator	9.7	8.33
Cast Radiator	14	12
Steel Radiator	14	12
Floor Heating	21.5	18.5

e : The expansion coefficient for the water heating from 10° to 90° is taken 0,0355 .

P<sub>min</sub> : The absolute static pressure of the water in the installation where the expansion tank is connected. (1 m. building height: 1 mSS=0.1 bar)

P<sub>max</sub>: Maximum absolute pressure that can be applied to the system. This is at the same time the value for opening the safety valve (bar).

**Not:** To make the tank selection without any calculation, Alarko Closed Expansion Tank Selection Table can be used.

## Sample Calculation

Examp: What is the tank volume to be used in a building with 8 normal+1 basement storey using 450.000 kcal/hr capacity boiler and panel radiator? Safety valve opening pressure is set to 4 bar. The expansion tank is located next to the boiler at the basement.

The calculation of the total water volume in the system. For panel radiator, 9,7 coefficient is found from the Table 1. V<sub>water</sub>=400.000 . 9,7/1000=3880 lt. Generally, the volume of the boiler and piping is neglectable as compared to the radiator volumes. However, an increase of 10 % of the radiator volumes can be considered for the boiler and piping system. V<sub>water</sub>=3880+0,1 . 3880=4268,00 lt

P<sub>min</sub>: The absolute static pressure of the water in the installation where the expansion tank is connected. 8 storey +1 basement =9 storeysx3 m/storey =27mSS=2.7 bar (pressure difference)

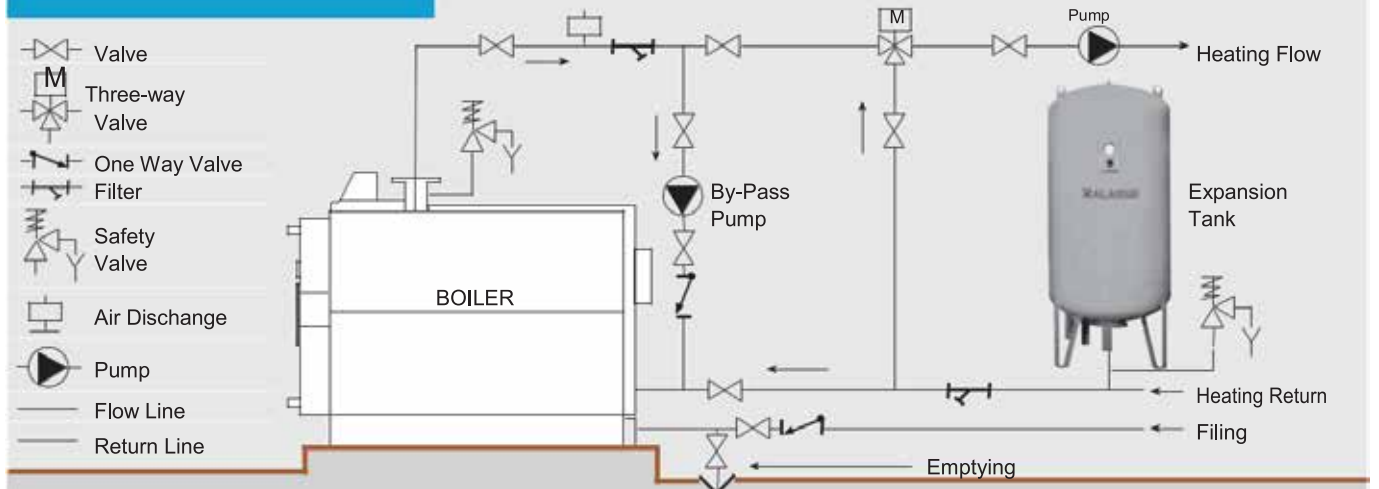
Absolute pressure=2.7 bar+1 bar=3.7 bar. P<sub>min</sub>=3.7 bar.

e: The expansion coefficient for the water heating from 10° to 90° is taken =0.0355 . P<sub>max</sub>: Maximum absolute pressure that can be applied to the system. This is at the same time the value for opening the safety valve, that is 4 bars. Absolute pressure=4 bar+1 bar=5 bar.

$$V_{\text{tank}} = \frac{V_{\text{water}} \cdot e}{1 - \frac{P_{\text{min}}}{P_{\text{max}}}} = \frac{4268,0 \cdot 0,0355}{1 - \frac{3,7}{5}} = 582,7 \text{ lt}$$

The closer tank volume bigger than this value is 750 lt. The correct selection should be GT 750.

## SAMPLE SYSTEM DRAWING



## WARNINGS

- ☒ The expansion tanks should absolutely be used with safety valve. Valve manufacturers inform about the utmost capacity with which their products are used. However, general the Table 2 can be used for this selection.
- ☒ There should not be any valve between the boiler, safety valve and expansion tank. ☒ The expansion tank should be adjusted so that the front pressure shall be (P<sub>min</sub>) 0.1 bar lower than the minimum statically pressure of the system.
- ☒ The connection of the tank either to the flow or return pipe does not effect the selection of the tank.
- ☒ The expansion tank liquid is used with fuel or natural gas boilers. It is not used with coal boilers.

TABLE: 2

BOILER CAPACITY (kcal/hr)	SAFETY VALVE
Up to 45.000	1/2"
45.000-90.000	3/4"
90.000-175.000	1"
175.000-300.000	1 1/4"
300.000-500.000	1 1/2"
More then 750.000	2"

# SANITARY SYSTEM APPLICATION

## Calculation of the Tank Volume

$$V_{\text{tank}} = Q_{\text{max}} \frac{P_{\text{max}}}{3 \cdot \Delta P \cdot a}$$

**Qmax :** The maximum flow ratio given by pump to system. In case of new system installed, the maximum flow ratio needed by the building should be calculated from table 3 and table 4. Maximum Required Flow Ratio= Daily Consumption (Table 3). Factor (Table 4) (lt/hr)

TABLE: 3 WATER CONSUMPTION PER PERSON FOR SAMPLE LOCALITIES

LOCATION TYPE		DAILY CONSUMPTION PER PERSON (lt/person)
House	with washbasin	60-80
	with shower	80-115
	with bathtub	120-200
Hotel	with shower	100
	with bathtub	150-200
Hospital		200-500
School		5
Nursery		80-100
Kinder garden		100-150
Barracks		60-80
Restaurant		10-20
Garden Irrigation		1,5 lt/m <sup>2</sup> at ones
Car Washing		100 lt/day

TABLE: 4 MULTIPLYING FACTOR FOR WATER CONSUMPTION PER PERSON

LOCATION TYPE		FACTOR
Houses	1-5 apartment	0.66
	6-10 apartment	0.45
	11-20 apartment	0.40
	21-50 apartment	0.35
	51-100 apartment	0.30
	100 apartment and more	0.25
Hotels	1-20 beds	0.40
	20-50 beds	0.40-0.30
	50 beds and more	0.30-0.20
Hastaneler	50-500 beds	0.30-0.20
	500-1000 beds	0.20-0.15
	1000-2000 beds	0.15-0.10
Schools		0.30
Nursery		0.40
Barracks		0.40-0.30
Business Centers		0.30

**Pmax:** Maximum absolute pressure in the system. In domestic applications, it is enough to have the maximum pressure 2-3 bar higher than the minimum pressure.

**Pmin:** Minimum absolute pressure in the system.

$$1,2 \cdot \left( \begin{array}{l} \text{Static pressure} \\ \text{Necessary pressure for} \\ \text{caused by the + highest and farthest} \\ \text{building height} \end{array} \right) \text{ locality (for houses 1,5 bar)}$$

**ΔP:** Pressure difference (Pmax-Pmin) (bar)

**a :** The maximum start up number of the pump motor (number of motor stop-operate in 1 hour). It is defined by the manufacturer of the pump. Generally, it is around 10-15.

## Sample Calculation

Examp: A 6-storey and 48-room hotel shall drag water from its well with submersible pump and use in its installation. There stay maximum 96 persons in the hotel. What should the expansion tank selected be?

**Qmax:** Maximum flow ratio

$$Q_{\text{max}} = 96 \text{ persons} \times 200 \text{ lt/person (Table 3)} \times 0,3 \text{ (Table 4)}$$

$$Q_{\text{max}} = 5760 \text{ lt/hour}$$

**a:** Let's take maximum reverse motion of the pump in an 1 hour =15.

**Pmin:** 6 storeysx3 m/storey+5 m (basement)=23 m=23mSS=2 bar

$$P_{\text{min}} \text{ (indicator)} = 1,2 (2 \text{ bar} + 1,5 \text{ bar}) = 4,2 \text{ bar}$$

$$\text{Absolute pressure} = 4,2 \text{ bar} + 1 \text{ bar}$$

$$P_{\text{min}} = 5,2 \text{ bar.}$$

**Pmax:** Let's lower the maximum utilization pressure higher than the 3 bar.

$$P_{\text{max}} = 5,2 \text{ bar} + 3 \text{ bar} = 8,2 \text{ bar}$$

$$\text{Pressure Difference} = 8,2 - 5,2 = 3 \text{ bar}$$

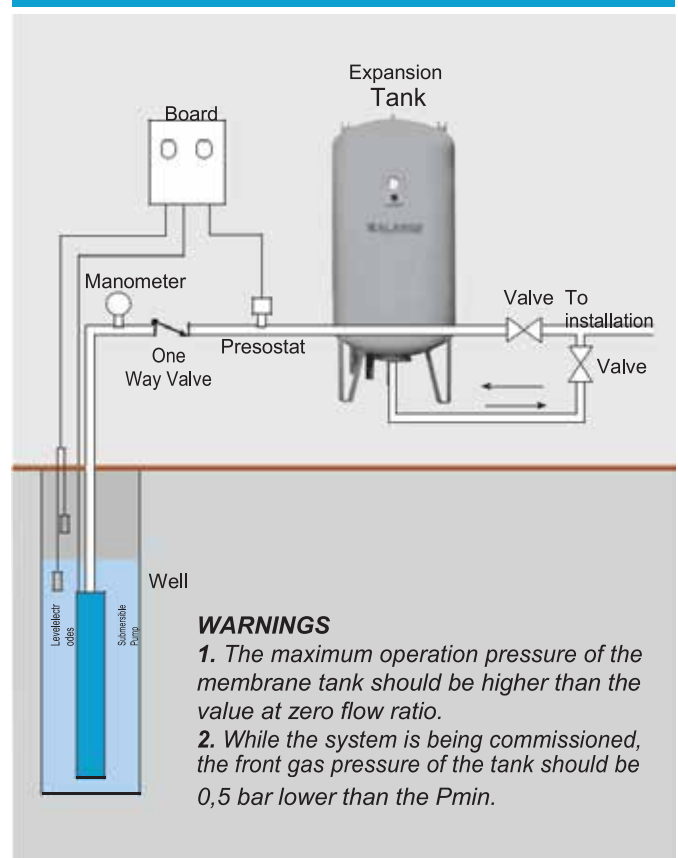
**ΔP:** ΔP=3 bar

$$V_{\text{tank}} = 5760 \frac{8,2}{3 \cdot 3 \cdot 15} = 345,60 \text{ litre.}$$

The standard tank volume bigger than this value is 500 Lt. The correct selection should be GT 500.

*Not : As can be seen from the example, the depth of the well is not important in this calculation.*

## SAMPLE SYSTEM DRAWING



### WARNINGS

1. The maximum operation pressure of the membrane tank should be higher than the value at zero flow ratio.
2. While the system is being commissioned, the front gas pressure of the tank should be 0,5 bar lower than the Pmin.

# YEDEK PARÇALAR

## Spare Parts / Pièces de Rechange / Requestos

**Membran Çalışma Kontrol Sensörü ve Basınç Ölçer**  
Membrane Working Control Panel And Pressure Tranmilter  
Capteur de controle du fonctionnement de la membrane et jauge de pression  
Sensor Operativo de Membrana y Medidor de Pression



### Manometre

Manometer / Manomètre / Manometro



Ø50 Bağlantı 0-25 Bar  
Ø50 Connection 0-25 Bar

### Beşyol

5 Way Connection / Vanne a cinq voies  
Valvula de Cinco Vias



1" Giriş 1" Çıkış  
1" Connection 1" Outlet  
1" Entree 1" Sortie  
1" Entrada 1" Salida

### Basınç Saatleri

Pressure Switch / Pressostats  
Interruptores de Presion



Monofaze / Trifaze Mevcuttur  
Monofaze / Trifaze is Available  
Disponibles en Monophase / Triphase  
Momofasicos / Trifasicos Disponibles

### Flanş Kapağı

Counter Flange / Couvercle de Bride / Cubierta de Brida



Ölçüler Dimensions Dimensions	Galvaniz Galvanize Galvanizado	Boyalı Painted Pintado	Paslanmaz Stainless Steel Inoxydable Inoxidable	3/4"X	1"Y	1 1/4"X	1 1/2"X	2"X	2,5"X	3"X
Ø 140	S	-	O	O	S	O	-	-	-	-
Ø 240	O	S	O	-	-	S	O	S/O	-	-
Ø 300	O	S	O	-	-	-	O	S	O	O
Ø 380	O	S	O	-	-	-	O	-	S/O	S/O



# YEDEK PARÇALAR

## Spare Parts / Pièces de Rechange / Requestos

### Membran Askısı

Membrane Hook / Suspente de Membrane / Colgador de Membrana



Kapasite Capacity Capacité Capacidad	Çap (D) Dia (D) Diametre (D) Diametro (D)	Yükseklik (H) Height (H) Hauteur (H) Altura (H)
80-500 LT	Ø65	60 mm
750-1000 LT	Ø70	60 mm
1500-2500 LT	Ø80	65 mm

### Felx Bağlantı Hortumu

Flexible Hoses / Tuyau Flexible de Connexion / Manguera de Conexion Flexible

Bağlantı Connection Connexion Conexion	Boyutlar Size Dimensions Dimensiones
1"	50-150 cm
1 1/4"	50-150 cm



Bağlantı Connection Connexion Conexion	Boyutlar Size Dimensions Dimensiones
1 1/2"	50-150 cm
2"	50-150 cm



# SERTİFİKALAR

## Certificates / Certificats / Certificados




### AT TİP İNCELEME SERTİFİKASI / EC TYPE EXAMINATION

**Holder Of Certificate (Sertifika Sahibi) :** İSTANBUL GENLEŞME VE HİDROFOR TANKLARI MAKİNE SAN VE TİC.AŞ.

**Company Address (Şirket Adresi) :** Muallimköy Mah. Gazı Değir Cad. No:82 Gebze / Kocaeli / Türkiye

**Production Address (Üretim Adresi) :** Muallimköy Mah. Gazı Değir Cad. No:82 Gebze / Kocaeli / Türkiye

**Trade Mark (Ticari Marka) :** WATES

**Product (Ürün) :** Kapalı Genleşme Tankı / Closed Expansion Vessel

**Model(s) (Modeller) :** ES6 Lüle / They have shown in the attached list

The technical documentation review and evaluation of the product(s) was done for above described production(s) according to 97/23/EC Pressure Equipment Directive Annex II Model B EC Type Examination of the company whose information given above and it was found suitable for conditions of Technical Regulation/Harmonized Standards / Yukarıda belirtilen verileri olan Kuruluşun üretimini gerçekleştirdiği ürünlerin teknik dokümanlarının inceleme ve Değerlendirilmesinin Çerçevesinde 97/23/AT Basınç Ekipmanları Yönetmeliğinin (Ek II Model B AT Tip İnceleme Sistemi) kapsamında gerçekleştirilmiş ve Teknik Dokümanları/Yüklenişinin Standartlarına uygun olduğu tespit edilmiştir.

For affixing the Notified Body number with CE mark, a company has to carry out one of the models mentioned in 97/23/EC Pressure Equipment Directive Annex II / Kuruluşun CE İşareti ile birlikte Ürünlerinin Kuruluş Kimlik Numarasını Aşağıdaki İçin 97/23/AT Basınç Ekipmanları Yönetmeliği EK II ile belirlenen gözlemler modüllerinden birini uygulamaya geçirmelidir.

Sertifika No / Certificate No: 538-C01-00-TR-PED-14-082

Rapor Numarası / Report No: R-538-PED-001

Sertifika Tarihi / Certificate Date: 11.12.2015

Revizyon Tarihi / Revision Date: 24.08.2017

Geçerlilik Tarihi / Validity Date: 11.12.2020

Yaz / Place: İSTANBUL

General Manager / Genel Müdür



Manufacturer will inform TCS International Certification about every modification that can affect safety of equipments / Üretici, Ürünlerinin Belgelendirme ve İzleme Sistemini Güncelleme ile ilişkili her değişiklikten önce TCS ile bilgilendirilmelidir.

11.12.2015 09:13:00 (30)





### AB ÜRETİM KALİTE GÜVENÇE

#### EU PRODUCTION QUALITY ASSURANCE

**Holder Of Certificate (Sertifika Sahibi) :** İSTANBUL GENLEŞME VE HİDROFOR TANKLARI MAKİNE SAN VE TİC.AŞ.

**Company Address (Şirket Adresi) :** MUALLİMKÖY MAH. GAZI DEĞİR CAD. NO:82 GEBZE / KOCAELİ / TÜRKİYE

**Production Company (Üretim Şirketi) :** İSTANBUL GENLEŞME VE HİDROFOR TANKLARI MAKİNE SAN VE TİC.AŞ.

**Production Address (Üretim Adresi) :** MUALLİMKÖY MAH. GAZI DEĞİR CAD. NO:82 GEBZE / KOCAELİ / TÜRKİYE

**Trade Mark (Ticari Marka) :** WATES

**Product Type & Description (Ürün Tipi ve Tanımı) :** Kapalı Genleşme Tankı / Closed Expansion Vessel

**Model(s) (Modeller) :** ES6 Lüle / They have shown in the attached list

EU Type Examination Certificate No (AB Tipi Üretim Sertifikası No) : 538-C01-00-TR-PED-14-082

This Certificate is issued to the company whose information given above, has been evaluated according to the 2014/68/EU Pressure Equipment Directive, Annex II, Model B Production Quality Assurance and it was found that technical documentation is suitable for the harmonized standards / Yukarıda belirtilen verileri olan Kuruluşun üretimini sağladığı Kuruluşun Belgelendirme ve İzleme Sistemini Çerçevesinde 2014/68/EU Basınç Ekipmanları Yönetmeliğinin (Ek II Model B Üretim Kalite Güvence Sistemi) kapsamında değerlendirilmiş ve Teknik Dokümanlarının Uygunluğunun Standartlarına uygun olduğu tespit edilmiştir.

Thanks to this certificate, the company is authorized to affix CE mark as shown above in the products listed above in the scope of the evaluated quality system of the company. TCS has right to evaluate the company by the planned/assessed surveillance activities. / Bu Sertifikaya Kuruluşun değerlendirilme sürecinde kalite sisteminde ISO 9001:2015 kapsamında değerlendirilmiş ve teknik dokümanları yerinde bulunan şekilde uygun olduğu tespit edilmiştir. TCS planlanmış gözetim faaliyetleri kapsamında değerlendirilme faaliyetlerine hak kazanmıştır.

Sertifika No / Certificate No: PED\_20\_207\_00

Rapor Numarası / Report No: R-438-PED-238

Sertifika Tarihi / Certificate Date: 10.07.2020

Sertifika Son Baskın Tarihi / Certificate Validity Date: 09.07.2021

Belgelendirme Periyodu / Certification Period: 3 yıl

Sertifika Geçerlilik Tarihi / Certificate Validity Date: 10.07.2022

General Manager / Genel Müdür



Manufacturer will inform TCS International Certification about every modification that can affect safety of equipments / Üretici, Ürünlerinin Belgelendirme ve İzleme Sistemini Güncelleme ile ilişkili her değişiklikten önce TCS ile bilgilendirilmelidir.

11.12.2015 09:13:00 (30)



### TÜRK STANDARLARI ENSTİTÜSÜ

#### TÜRK STANDARLARINA UYGUNLUK BELGESİ

### TURKISH STANDARDS INSTITUTION

#### CERTIFICATE OF CONFORMITY TO TURKISH STANDARDS

Belge Numarası / Reference Number of Licence: 049961-TSE-02/01

Belgenin İlk Veriliş Tarihi / Date of First Issue of Licence: 21.04.2020

Belgenin Son Geçerlilik Tarihi / Licence Valid Until: 21.04.2022

Belge Sahibi Kuruluşun Adı / Name of the Licence Holder: İSTANBUL GENLEŞME VE HİDROFOR TANKLARI MAKİNE SANAYİ VE TİCARET ANONİM ŞİRKETİ

Belge Sahibi Kuruluşun Adresi / Address of the Licence Holder: MUALLİMKÖY MAH. GAZI DEĞİR CAD. NO:82 GEBZE KOCAELİ/TÜRKİYE

Üretim Yeri Adı / Name of the Manufacturing Place: İSTANBUL GENLEŞME VE HİDROFOR TANKLARI MAKİNE SANAYİ VE TİCARET ANONİM ŞİRKETİ

Üretim Yeri Adresi / Address of the Manufacturing Place: MUALLİMKÖY MAH. GAZI DEĞİR CAD. NO:82 GEBZE KOCAELİ / TÜRKİYE

İptal Edilen Belge Numarası (Varsa) / Indication of Superseded Licence (if any): w wates

Tescilli Ticari Markası / Registered Trade Mark: w wates

İlgili Türk Standardı / Related Turkish Standard: TS EN 13831 / 09.11.2010

Belge Kapsamı / Scope of Licence: WAT TİCARİ MODELİN EN YÜKSEK ÇALIŞMA BASINCI 25 BAR OLAN, SU TESİSATLARI İÇİN DİYAFRAMLI KAPALI GENLEŞME TANKI

e-İmza ile onaylandı / 16.04.2021

Belgelendirme Merkezi Başkanı Adına AKDOĞAN BÜLLÜT

TSE İSTANBUL BELGELENDİRME MÜDÜRÜ V.

1/1





### CERTIFICATE

İSTANBUL GENLEŞME VE HİDROFOR TANKLARI MAKİNE SANAYİ VE TİCARET ANONİM ŞİRKETİ

Muallimköy Mah. Gazı Değir Cad. 82 Gebze, Kocaeli, TÜRKİYE

Holder ve Kapalı Genleşme Tankı Üretici  
Production of Closed Expansion Tank and Hydrofor

TCS Belgelendirme Sistemini/Standartlarını ve uygulamalarını aşağıdaki Kuruluş Üretiminin Çerçevesinde kullanılarak TCS Belgelendirme ve İzleme Sistemi ile uyumlu olarak kullanmaktadır / TCS Certification and Quality Management System used for assessment of

### ISO 9001:2015

İstatistiksel süreçler kontrolü kapsamında yerinde gözlemlenmiştir / Compliant for the following activities:

Sertifika No / Certificate No: QM-00-00 150K22-TR

Sertifika Tarihi / Certificate Date: 01.12.2015

Sertifika Son Baskın Tarihi / Certificate Validity Date: 01.12.2020

İstatistiksel Süreç Kontrolü / Statistical Process Control: 11.08.2014 - 01.12.2021

İSTATİSTİKSEL SÜREÇ KONTROLÜ / 01.12.2021

General Manager / Genel Müdür



Manufacturer will inform TCS International Certification about every modification that can affect safety of equipments / Üretici, Ürünlerinin Belgelendirme ve İzleme Sistemini Güncelleme ile ilişkili her değişiklikten önce TCS ile bilgilendirilmelidir.

11.12.2015 09:13:00 (30)

# SERTİFİKALAR

## Certificates / Certificats / Certificados





**İstanbul genişme ve Hidrofor Tankları**

**Makine San. ve Tic. A.Ş.**

**A.** Muallimköy Mh. Gazidede Cd. No:82

Gebze Kocaeli, TR

**T.** +90 262 600 00 12

**F.** +90 262 600 00 14

**M.** info@wates.com.tr

**W.** www.wates.com.tr