



THE ENERGY SAVING AND ASSEMBLY FRIENDLY INSULATION CAP SYSTEM

Polyurethane (PUR) is a type of plastic with particularly good insulating properties. Both cold and heat insulating, the foam is used in a variety of products and in the construction industry. If the insulating capacity plays a particularly important role, the low lambda value of less than 0.024 W / mK results in large energy savings. As duroplastic (hardened PUR) it can be formed into numerous shapes.

One of our best known products is the insulating cap. It is used for the insulation of venues and district heating installations. In addition, heat-insulating polyurethane is installed as insulating components in window profiles and strips.

Tinby offers a range of insulation caps for almost every manufacturer and fitting. All cutouts are made at the factory so that they can be mounted on site with just one hand. Maintenance work can be carried out easily and quickly in this way. The high quality of the insulating caps reduces the wear of the individual components even with frequent changes.

A uniform overall picture of the system insulation is provided by various surfaces: All insulating caps are available in polystyrene (PS) or aluminum coarse grain sheet, deepdrawn (AL).

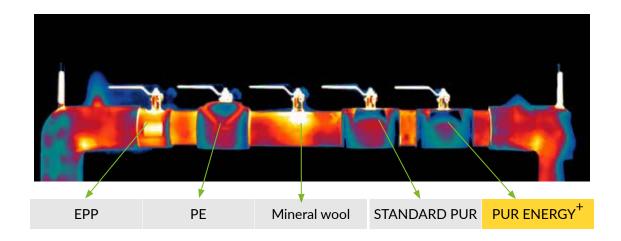




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INSULATION & ENERGY LOSS

- HIGH INSULATION
- ENERGY SAVING
- EASY TO ASSEMBLE AND REUSE
- PRODUCED BY TINBY







INSULATION CAPS

PRODUCED BY TINBY

To meet the global environmental challenges, reducing energy loss and and thereby improve insulation new and preexisting buildings is necessary. Tinby produces and delivers insulation caps made from polyurethan (PUR) for the contruction industry. They reduce the energy loss of buildings, can be reused with a simply change of valve and retains its high ability to insulate even small wall thickness. PUR-Insulation is a part of improving the energy efficiency of buildings and reducing the emission of CO2.

In 2020 the European Union has passed regulation for buildings during both for new building and hanges made to preexisting contruction, which means that the loss of energy will be reduced by 30%. This reduction can be attained by better and smarter insulation in buildings.

HIGH INSULATION ABILITIES W/ A LOW FOAM THICKNESS

To achieve the high demands for insulation, you either need to use a thicker layer of insulation, which often wont be able to fit, or use insulation caps from Tinby. Beause of the Lambda value in the caps the thickness of the foam is not increased. For that reason, they can be used with in smaller spaces. Both in the case of newer buildings and during renovations of existing buildings, the cap can be split with a simple tool and adapted on the spot.

Long term there is a large amount of the energy saved, because of the longevity of the material and the high performance throughout the building's lifetime.

REUSABLE

The insulation caps are easy to assamble on newer as well as preexisting installations and are developed to make the valves changeable without damaging the surrounding

FACTS ON TINBYS INSULATION CAPS

- λ-value: 0,24 W/m*C
- Can handle most acids and is not attacked by rot, fungus or mildew.
- Fire Class B2 according to DIN 4102
- In the future the insulation caps from Tinby will be coated with polytyrol (PS). It is more sustainable when disposing.
- Pay-back period: 2 years (replacement of miniral wool, EPP or mirco-cellular rubber: : 5 år)
- Tinby also offers pipe sections in PUR-foam without a shell. It is a benificial insulation solution both economically and in safety that is also used against condensation.

insulation. The caps can handle most acids, is not attached by rot, fungus or mildew, does not attract moisture and as opposed to mineral wool is not heat conductive. Therefore, the insulation caps from Tinby can be reused.

PAY-BACK PERIOD

If you insulate used Tinbys polyurethan-foam you get a pay-back time of less than 2 years for newer buildings. If you replace the mineral wool, EPP or micro-cellular rubber the pay-back time is less than 5 years.

We have the material, technical knowhow and the production facilities.



TOPO ENERGY BOX ALU

Insulation corresponding to EnEV consisting of two molded foam half shells with sheathing made of aluminum coarse grain sheet metal, which are fixed with guide elements (tongue and groove system) and clamping straps. The surface of the Energy Box in ALU design is diffusion-tight. It can therefore also be used for the cold water area. At media temperatures below $12\,^{\circ}$ C, all joints and joints must be protected against condensation by being carefully taped with aluminum adhesive tape; eventually it may additionally be sealed with silicone.



PUR-foam Lambda = 0,024 Fire class B 2

Tensioning bands / tension springs made of corrosionresistant material

Insulation	
Material:	PUR-Foam
Insulation capability:	0,024 W/m*K
Weight:	60 kg/m³ +/- 5
Temperature for insulation:	max. +130° C
Fire class accordingly: DIN 4102:	B2, normal inflammable (highest possible classification for PUR foam!)

Shell	
Material:	Aluminium foil (AL)
Color:	metal color, Aluminium
Fire class accordingly: DIN 4102:	A, not flammable

CONNECTION TECHNOLOGY

Tongue and groove system and outside clamping tongue / bands made of corrosion-resistant material



TOPO ENERGY BOX PS

The EnEV-compliant insulation consisting of two molded foam PUR half shells with PS sheath, which are fixed with guide elements (tongue and groove system) and straps. At media temperatures below $12\,^{\circ}$ C, all joints and jointsmust be protected against condensation by being carefully sealed with silicone.



PUR-foam Lambda = 0,024 Fire class B 2

Tensioning bands / tension springs made of corrosionresistant material

Insulation	
Material:	PUR-Foam
Insulation capability:	0,024 W/m*K
Weight:	60 kg/m³ +/- 5
Temperature for insulation:	max. +130° C
Fire class accordingly: DIN 4102:	B2, normal inflammable (highest possible classification for PUR foam!)

Shell	
Material:	Polystyrene (PS)
Color:	Grey (RAL 7035)
Fire class accordingly: DIN 4102:	B1, svært antændeligt

CONNECTION TECHNOLOGY

Tongue and groove system and outside clamping tongue / bands made of corrosion-resistant material



TOPO DHS INSULATION CAPS FOR DISTRICT HEATING SYSTEMS

Insulation corresponding to EnEV consisting of two molded foam half-shells which are fixed with guide elements (tongue and groove system) and clamping straps. At media temperatures below $12\,^{\circ}$ C, all joints and joints must be protected against condensation by being carefully sealed with silicone.



N	MATERIAL
Material:	PUR-Foam
Insulation capability:	0,024 W/m*K
Weight:	60 kg/m³ +/- 5
Temperature for insulation:	max. +130° C
Fire class accordingly: DIN 4102:	B2, normal inflammable (highest possible classification for PUR foam!)

	INSULATION SHELL
Material:	-
Color:	-
Fire class accordingly DIN 4102:	-



THE SOLUTION IS A TOPO ENERGY BOX INSULATION CAP

A TOPO Energy Box insulation cap is a insulation unit, which can easily be assembled, disassembled and reused without the need for tools. TOPO Energy Box insulation caps effectively solves a variety of insulation tasks for valves. Polyurethan has a practical lambda value of less than 0,028 W/m°C. Therefore, a large sum of energy is saved by using insulation caps from Tinby. TOPO insulation caps are tried and approved for fire call B2 after DIN 4102. Refering to Technische Universität braunschweig, Germany, Report no. 3207/8950-a-Fe/wi.

EASY TO ASSEMBLE

TOPO caps are made to easily adapt with a saw or knife. The adaptation is necessary for many older installations, where the distance between pipe and wall is not prepared for insulation.

TOPO caps are a standard program that fits most valves. If there is a need for an insulation cap that is not found in our standard program, Tinby can execute to job from idea to finished product.

- High insulation capacity with a low wall thickness.
- Easy to assemble and disassemble on both new and pre existing installations.
- Can be reused.
- Can be assembled to make the insulation diffusion thight (the installation is protected against condensation and corrosion).
- Can be used in narrow spaces, because of the ability to split and adapt the cap using few tools.
- They are developed to make sure valves can be changed without damaging the surrounding insulation.
- Fire Class B2 according to DIN 4102.
- Can handle most acids and is not attacked by rot, fungus or mildew.
- Does not draw moisture and as opposed to mineral wool it is not diathermic.
- The caps are coated with a plastic film on the outside.







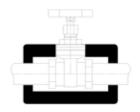


TYPE OVERVIEW WITH SOCKET CONNECTION

Serie GVM (p. 23) for gate valves, straight seat valves and check valves with socket connection

Serie HCM (p. 19) for TA rotary seat valves in sleeve design

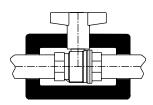
Serie HSG (p. 20) Kemper Mulitherm, Heimeier-Stra-to and Heimeier-Vario

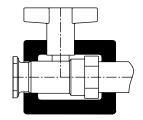


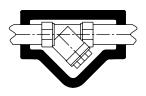
Serie KHM (p. 21) for ball valves with socket connection

Serie PKH (p. 22) for pump ball valves

Serie SFM p. 25) Strainers and check valves in sleeve design



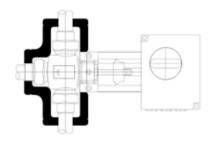


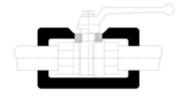


Serie DWM (p. 24) til trevejsventiler med muffetilslutning

Serie UKM (p. 18) for all common ball valves

Serie USV (p. 18) all common angle seat valves



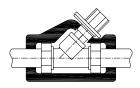




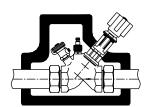
Serie SVK (p. 16) for angle seat valve MNG-Kombi II and III

Serie SVM ps. 15) for valves with angularly seated spindle and socket connection

Serie OMG (p. 17) for Oventrop Hydrocontrol with socket connection



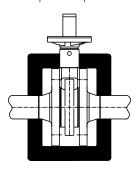




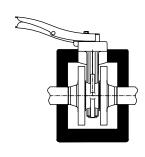


TYPE OVERVIEW WITH FLANGE CONNECTION

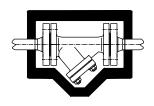
Serie BSC (p. 26) for KSB Boa Super Compact



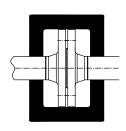
Serie FKL (p. 29) for butterfly valves, flap check valves and compensators



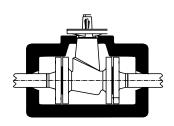
Serie SVF (p. 32) for strainers, angle seat and freeflow valves with flange connection



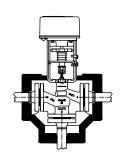
Serie FPA (p. 27) for bottle pairs and blind flanges



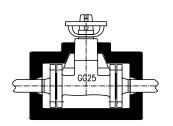
Serie FVK (p. 30) for short ball, diaphragm, straight seat and flange valves to DIN length F4



Serie DWV (p. 28) for three-way control valves with flanged connection



Serie FVL (p. 31) for long ball, diaphragm, straight seat and flange valves to DIN length F1



VALVE OVERVIEW

ABA BEUL		Tuno				
ABA BEUL	Piston valve with threaded connection	Type GVM				
	Regulating valve with threaded connection					
ARI						
	Shut-off valve Euro Wedi, FTF 1 Shut-off valve Euro Wedi, AGV 14 Shut-off valve FABA-Plus, FTF 1 Line regulating valve Astra, FTF 1 Check valve with flange connection Dirt trap with flange connection Disc check valve CHECKO-D Butterfly valve type ZESA Butterfly valve type GESA	FVL FVK FVL SVF SVF FKL FKL				
Bender						
	Straight seat valve with threaded connection Angle seat valve with threaded connection Strainer with threaded connection Ball valve with threaded connection Piston spool with threaded connection	GVM USV SFM UKM GVM				
Böhmer						
	Ball valve with threaded connection	UKM				
Broen						
	Ball valve with threaded connection	UKM				
Bruse						
	Angle seat valve with threaded connection Ball valve with threaded connection	USV UKM				
DANFOSS						
	Control valve Three-way flange Control valve two-way flange Control valve Three-way sleeve Control valve white way sleeve Dirt trap with flange connection String valves with threaded connection	DWV FVL DWM GVM SVF HCM				
DURAMAR						
	Ball valve with threaded connection Angle seat valve with threaded connection Sleeve slide, check valve Pump slide with threaded connection	UKM USV GVM PKH				
EBRO Armaturen						
	Butterfly valve type Z 011 Check valve type RSK Backflow barrier type RV 10	FKL FKL SVF				
FROMME Armaturen						
	Wedge flat slide, FTF 14 Through valve, FTF 1 Strainer	FVK FVL SVF				
G-Bee						

	Ball valve with threaded connection	UKM
GEFA		
	Butterfly valves Ball valve with threaded connection	FKL KHM
GESTRA		
	Gravity circulation DISCO check valve Strainer with threaded connection Dirt catcher with flange connection Intermediate flange Strainer SZ Shut-off valves GAV	FKL FKL SFM SVF FKL FVL
GIACOMINI		
	Ball valve with threaded connection Gate valve Strainer with threaded connection Check valve with threaded connection	UKM GVM SFM SFM
HERMANN SCHMIDT		
	Gate valve Angle seat valve with threaded connection Check valve with threaded connection Strainer with threaded connection Ball valve with threaded connection	GVM USV SFM SFM UKM
HONEYWELL	Dan varve with threaded connection	OTAL
	Strainer with threaded connection Dirt trap with flange connection Free-flow valve Alwa Throttle valve Alwa-Kombi-4 MNG KOMBI III Plus MNG KOMBI III (without emptying) Line regulating and shut-off valve Kombi-F Ring throttle Centra through valve flange Centra through valve thread Centra three-way mixer with sleeve Centra three-way valve flange Centra three-way valve flange Centra three-way valve flange Centra three-way valve flange	SFM SVF USV SVK SVK SVK FVL FKL FVL GVM DWM DWV DWV DWW
IMT		
	Ball valve with threaded connection Strainer with threaded connection Check valve with threaded connection	UKM SFM SFM
JRG Gunzenhauser		
	Gate valve Ball valve with threaded connection Angle seat valve with threaded connection	GVM UKM USV
KEMPER		
	Flange fittings, FTF1 Angle seat valve with flange connection Sleeves straight seat Multi-Therm Circulation Control Valve Combined backflow preventer Multi-Fix Circulation Control Valve Angle seat valve without draining Angle seat valve with drain Strainer with threaded connection	FVL SVF GVM HSG SVM SVK USV OMG SFM



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VALVE OVERVIEW

LUEDA OL COSTO		
KIEBACK+PETER		
	3-way valve with flange connection 2-way valve with flange connection 3-way valve with threaded connection 2-way valve with threaded connection	DWV FVL DWM GVM
KLINGER		
	Kugelhahn mit Gewindeanschluss Kolbenschieberventil, FTF1	UKM FVL
KSB		
	Control valve BOA-Control SAR Shut-off valve BOA-Super-Compact Shut-off valve BOA-Compact, FTF14 Shut-off valve BOA-Compact IMS, FTF14	HCM BSC FVK FVK
	Shut-off valve BOA-W, FTF1 Shut-off valve BOA-H, FTF1 Diaphragm valve Sisto, FTF1 Butterfly valve BOAX-S Strainer BOA-S Check valve BOA-R Check valve BOA-RVK	FVL FVL FKL SVF SVF FKL
LANDIS & STAEFA		
	3-way valve with flange connection 2-way valve with flange connection 3-way valve with threaded connection 2-way valve with threaded connection	DWV FVL DWM GVM
LUDEMANN		
	Strainer with flange connection Ball valve with threaded connection	SVF UKM
OVENTROP		
	Line regulating valve Hydrocontrol Flange control valve Hydrocontrol Balancing valve Hycocon	OMG SVF HSG
	Differential pressure regulator Hydromat	auf Anfrage
	Ball valve with threaded connection Straight seat valve with threaded connection	UKM GVM
	Angle seat valve with threaded connection	USV
	Butterfly valve center flange version Butterfly valve intermediate construction version	FKL FKL
	Check valve with threaded connection Check valve with flange connection check valve Intermediate version Strainer with flange	SFM SVF FKL SVF
	connection Strainer with threaded connection Aquastrom free-flow valves	SFM OMG
DOCCMENED	Aquastrom free-flow valves with flangee	SVF
ROSSWEINER	Piston valve with threaded connection	GVM
	Circulation valve with threaded connection	SVK
SAUTER		
	Throttle intermediate construction version	FKL
	3-way valve with flange connection 2-way valve with flange connection 3-way valve with threaded connection 2-way valve with threaded connection	DWV FVL DWM GVM

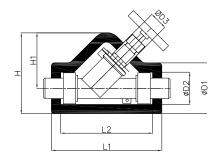
SCHLÖSSER		
	Free-flow valve with threaded connection	USV
	Non-return valve with threaded	SFM
	connection	
SCHMIEDING Armaturen		
	Angle seat valve with threaded connection	USV
	Ball valve with threaded connection	UKM
	Piston spool with threaded connection Butterfly valve type ECLI	GVM FKL
SCHUBERT+SALZER	Sattorn, varie type 202.	
	Angle seat valve with threaded	USV
	connection 3-way valve with threaded connection	DWM
	Angle seat check valve	SFM
	Strainer with threaded connection	SFM
SEPPELFRICKE		
	Angle seat valve with threaded connection	SVK
	Ball valve with threaded connection	UKM
	Straight seat valve with threaded connection	GVM
	Backflow preventer	SFM
CEEDATEC	Circulation valve	SFM
SFERATEC	Delli vali va viitle thoras da di ascono atico	LUZNA
	Ball valve with threaded connection Sleeve slide with threaded connection	UKM GVM
	3-way valve with threaded connection	DWM
Samson		
	3-way valve with flange connection 2-way valve with flange connection	DWV FVL
	Butterfly valve intermediate	FKL
TA LIEU CELE	construction version	
TA HEIMEIER	Line regulating value CTAD / CTAD C /	LICAA
	Line regulating valve STAD / STAD-C / STAD-R	HCM
	Zone control valve TBV-C 3-way valve with threaded connection	SVK DWM
	2-way valve with threaded connection	GVM
	Shut-off valve STS Ball valve Globo H	HCM KHM
	Pump ball valve Globo P + PS	PKH
TACONOVA		
	Balancing valves Sleeve version	SFM
	Balancing valves Flange design 3-way valve with threaded connection	SVF DWM
Viega		
	Angle seat valve with threaded	USV
	connection Circulation regulating valve Ball valve with threaded connection	HSG UKM
Wiesa	San raive with an educa connection	J.(1.1
	Ball valve with threaded connection	UKM
	Muff strainer	GVM
	Muff strainer Muff kickback door	SFM SFM
	butterfly valve	FKL



For the definition of the drainage hole of our Energy Box Emptying left in the direction of flow When emptying on the left, please tick here Emptying left Emptying in the middle in the flow direction When emptying in the middle, please tick here Emptying in the middle Emptying right in the direction of flow When emptying right, please tick here Emptying right

The existing drain hole can be determined on site and tick here in this form and fax us. Then we will choose the right insulation cap for you.





Valves

Free-flow valve alwa Free flow angle seat valve Angle Seat Valve

Free-flow valve, angle seat valve

Makes / manufacturers

MNG Kemper Oventrop Seppelfricke

Specification text Aluminum SURFACE - Energy Box, Alu

Energy Box, aluminum for insulation in the range up to +130 degrees Celsius of the series SVM for valves with inclined spindle and check valves with socket connection. In accordance with the EnEV, consisting of two PUR half-shells encased in aluminum coarse grain sheet metal and fixed with straps.



Measurements in mm											
ArtNr.	DN	Inches	L1	L2	D1	D2	D3	Н	Н1	Weight (g)	Price in EURO
SVM-AL-010	10	3/8"	104	80	54	30	22	81	54	90	20,70
SVM-AL-015	15	1/2"	138	114	61	37	22	98	69	105	21,30
SVM-AL-020	20	3/4"	155	125	77	47	29	121	82	115	21,60
SVM-AL-025	25	1"	178	148	82	52	29	131	90	135	24,60
SVM-AL-032	32	1 1/4"	202	162	104	64	29	160	105	190	26,90
SVM-AL-040	40	1 ½"	224	174	120	70	29	186	125	280	29,20
SVM-AL-050	50	2"	248	188	141	82	29	223	153	480	33,30

Dimension D3 is adjusted depending on the valve

Tender specification PS SURFACE - Energy Box, PS

Energy Box, PS for insulation in the range up to +130 degrees Celsius of the series SVM for valves with inclined spindle and check valves with socket connection. According to the EnEV, consisting of two PUR half-shells, which are covered with PS foil and fixed with straps.



Measurements in mm											
ArtNr.	DN	Inches	L1	L2	D1	D2	D3	Н	Н1	Weight (g)	Price in EURO
SVM-PS-010	10	3/8"	104	80	54	30	22	81	54	90	16,40
SVM-PS-015	15	1/2"	138	114	61	37	22	98	69	105	16,70
SVM-PS-020	20	3/4"	155	125	77	47	29	121	82	115	17,50
SVM-PS-025	25	1"	178	148	82	52	29	131	90	135	19,80
SVM-PS-032	32	1 1/4"	202	162	104	64	29	160	105	190	21,60
SVM-PS-040	40	1 ½"	224	174	120	70	29	186	125	280	24,30
SVM-PS-050	50	2"	248	188	141	82	29	223	153	480	27,30



L2 L1

Valves

Angle seat valve Kombi II + III Regulating valve Circulation regulating valve Circulation valve

Angle Seat Valve

Makes / manufacturers

MNG ABA Beul Kemper Rossweiner Seppelfricke

Specification text Aluminum SURFACE, ALU SVK

Energy Box, aluminum for insulation in the range up to +130 degrees Celsius of the series SVK for angle seat valve MNG Kombi II and Kombi III. In accordance with the EnEV, consisting of two PUR half-shells, which are coated with aluminum coarse grain sheet metal and fixed with straps.

ALU-SURFACE



Measurements in mm											
ArtNr.	DN	Inches	L1	L2	D1	D2	D3	Н	H1	Weight (g)	Price in EURO
SVK-AL-010	10	3/8"	120	96	57	33	32	77	47	85	*
SVK-AL-015	15	1/2"	130	104	62	38	32	91	58	105	*
SVK-AL-020	20	3/4"	139	113	71	45	32	104	67	115	*
SVK-AL-025	25	1"	163	128	85	56	32	112	69	120	*
SVK-AL-032	32	1 1/4"	184	147	99	59	40	137	86	135	*
SVK-AL-040	40	1 ½"	200	160	109	69	40	146	88	155	*
SVK-AL-050	50	2"	240	190	140	90	40	187	113	230	*

Dimension D3 is adjusted depending on the valve

q

Tender specification PS SURFACE, PS SVK

Energy Box, PS for insulation in the range up to +130 degrees Celsius of the series SVK for angle seat valve MNG Kombi II and Kombi III. According to the EnEV consisting of two PUR half-shells, which are coated with PS foil and fixed with straps.

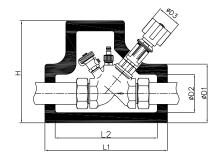
PS-SURFACE



Measurements in mm												
ArtNr.	DN	In- ches	L1	L2	D1	D2	D3	Н	Н1	Weight (g)	Price in EURO	
SVK-PS-010	10	3/8"	120	96	57	33	32	77	47	85	16,40	
SVK-PS-015	15	1/2"	130	104	62	38	32	91	58	105	16,70	
SVK-PS-020	20	3/4"	139	113	71	45	32	104	67	115	17,50	
SVK-PS-025	25	1"	163	128	85	56	32	112	69	120	19,80	
SVK-PS-032	32	1 1/4"	184	147	99	59	40	137	86	135	21,60	
SVK-PS-040	40	1 ½"	200	160	109	69	40	146	88	155	24,30	
SVK-PS-050	50	2"	240	190	140	90	40	187	113	230	27,30	



^{*} Price upon request



Valves Makes / manufacturers

Balancing valve HydrocontrolOventropAquastrom Free-flow valveOventropAlu ALWA K + ALWA KFRMNG

Specification text Aluminum SURFACE, Alu OMG

Energy Box, aluminum for insulation in the range up to +130 degrees Celsius of the series OMG for Oven-trop Hydrocontrol in sleeve design. In accordance with the EnEV, consisting of two PUR half-chalices encased in aluminum coarse grain sheet metal and fixed with straps.

Measurements in mm												
ArtNr.	DN	In- ches	L1	L2	D1	D2	D3	Н	Weight (g)	Price in EURO		
OMG-AL-010	10	3/8"	180	155	70	46	-	145	90	*		
OMG-AL-015	15	1/2"	180	155	70	46	-	145	90	*		
OMG-AL-020	20	3/4"	200	170	85	55	-	156	125	*		
OMG-AL-025	25	1"	200	170	85	55	-	156	125	*		
OMG-AL-032	32	1 1/4"	240	200	115	75	-	200	150	*		
OMG-AL-040	40	1 ½"	250	205	135	75	-	210	190	*		
OMG-AL-050	50	2"	265	210	150	90	-	245	210	*		
OMG-AL-065	65	2 ½"	280	220	175	105	-	255	270	*		

Dimension D3 is adjusted depending on the valve

Tender specification PS SURFACE, PS OMG

Energy Box, PS for insulation in the range up to +130 degrees Celsius of the OMG series for Oven-trop Hydrocontrol in sleeve design. According to the EnEV, consisting of two PUR half-shells, which are covered with PS foil and fixed with straps.

Measurements in mm												
ArtNr.	DN	In- ches	L1	L2	D1	D2	D3	Н	Weight (g)	Price in EURO		
OMG-PS-010	10	3/8"	180	155	70	46	-	145	90	18,30		
OMG-PS-015	15	1/2"	180	155	70	46	-	145	90	19,00		
OMG-PS-020	20	3/4"	200	170	85	55	-	156	125	19,00		
OMG-PS-025	25	1"	200	170	85	55	-	156	125	21,80		
OMG-PS-032	32	1 1/4"	240	200	115	75	-	200	150	23,30		
OMG-PS-040	40	1 ½"	250	205	135	75		210	190	25,30		
OMG-PS-050	50	2"	265	210	150	90	-	245	210	27,80		
OMG-PS-065	65	2 ½"	280	220	175	105	-	255	270	36,90		

Dimension D3 is adjusted depending on the valve

ALU-SURFACE

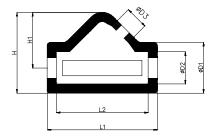


PS-SURFACE



^{*} Price upon request

SERIE USV



Valves Makes / manufacturers

All common angle seat valves

Tender specification PS SURFACE, PS USV

Energy Box, PS for insulation in the range up to +130 degrees Celsius of the series UPS for all common valves with angularly arranged spindle and drains with socket connection. According to the EnEV consisting of two PUR half-shells, which are coated with PS foil and fixed with straps.

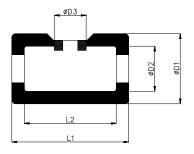
PS-SURFACE



Measurements in mm											
ArtNr.	DN	In- ches	L1	L2	D1	D2	D3	Н	H1	Weight (g)	Price in EURO
USV-PS-010	10	3/8"	104	80	54	30	22	81	54	90	18,30
USV-PS-015	15	1/2"	138	114	61	37	22	98	69	105	19,00
USV-PS-020	20	3/4"	155	125	77	47	29	121	82	115	19,00
USV-PS-025	25	1"	178	148	82	52	29	131	90	135	21,80
USV-PS-032	32	1 1/4"	202	162	104	64	29	160	105	190	23,30
USV-PS-040	40	1 ½"	224	174	120	70	29	186	125	280	25,30
USV-PS-050	50	2"	248	188	141	82	29	223	153	480	27,80

Dimension D3 is adjusted depending on the valve

SERIE UKM



Valves Makes / manufacturers

All common ball valves with socket connection

Tender specification PS SURFACE, PS UKM

Specification text Aluminum SURFACE - Energy Box, PS
Energy Box, PS for insulation in the range up to +130 degrees Celsius of the series
UKM for all common ball valves with socket connection. According to the EnEV,
consisting of two PUR half-shells, which are covered with PS foil and fixed with straps.

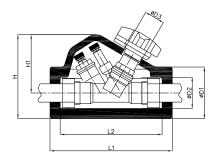
PS-SURFACE



Measurements in mm											
ArtNr.	DN	Inches	L1	L2	D1	D2	D3	Weight (g)	Price in EURO		
UKM-PS-010	10	3/8"	101	77	54	30	29	50	16,40		
UKM-PS-015	15	1/2"	121	97	62	38	29	65	16,70		
UKM-PS-020	20	3/4"	139	109	74	44	29	90	17,50		
UKM-PS-025	25	1"	155	125	85	55	29	115	19,80		
UKM-PS-032	32	1 1/4"	209	169	106	66	29	135	21,60		
UKM-PS-040	40	1 ½"	185	135	125	75	35	125	24,30		
UKM-PS-050	50	2"	220	160	156	96	35	290	27,30		



SERIE HCM



Valves

Line regulating valves STS, STAD, STAM, STAP Threaded rope valves Control valve BOA-Control SAR

Makes / manufacturers

TA Heimeier Danfoss KSB

ALU-SURFACE



Specification text Aluminum SURFACE, Alu HCM

Energy Box, aluminum for insulation in the range up to ± 130 degrees Celsius of the HCM series for TA-ST regulating valves in sleeve design. In accordance with the EnEV, consisting of two PUR half-chalices encased in aluminum coarse grain sheet metal and fixed with straps.

Measurements in mm												
ArtNr.	DN	IIn- hes	L1	L2	D1	D2	D3	В	Н	Н1	Weight (g)	Price in EURO
HCM-AL-010	10	3/8"	180	150	76	46	29	116	124	85	90	*
HCM-AL-015	15	1/2"	180	150	76	46	29	116	124	85	90	*
HCM-AL-020	20	3/4"	180	150	76	46	29	116	124	85	90	*
HCM-AL-025	25	1"	200	170	84	54	29	126	136	94	125	*
HCM-AL-032	32	1 1/4"	230	190	99	59	29	135	153	103	150	*
HCM-AL-040	40	1 ½"	250	205	122	72	29	143	179	118	190	*
HCM-AL-050	50	2"	291	241	125	95	29	166	178	116	210	*

Dimension D3 is adjusted depending on the valve

PS-SURFACE



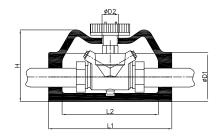
Tender specification PS SURFACE, PS HCM

Energy Box, PS for insulation in the range up to ± 130 degrees Celsius of the HCM series for TA-ST regulating valves in sleeve design. According to the EnEV, consisting of two PUR half-shells, which are covered with PS foil and fixed with straps.

Measurements in mm												
ArtNr.	DN	IIn- hes	L1	L2	D1	D2	D3	В	Н	Н1	Weight (g)	Price in EURO
HCM-PS-010	10	3/8"	180	150	76	46	29	116	124	85	90	18,30
HCM-PS-015	15	1/2"	180	150	76	46	29	116	124	85	90	19,00
HCM-PS-020	20	3/4"	180	150	76	46	29	116	124	85	90	19,00
HCM-PS-025	25	1"	200	170	84	54	29	126	136	94	125	21,80
HCM-PS-032	32	1 1/4"	230	190	99	59	29	135	153	103	150	23,30
HCM-PS-040	40	1 ½"	250	205	122	72	29	143	179	118	190	25,30
HCM-PS-050	50	2"	291	241	125	95	29	166	178	116	210	27,80



^{*}Price upon request



Valves

Multi-Therm Circulation Valve Flow Control Valve Hycocon Circulation Control Valve

Makes / manufacturers

Kemper Oventrop Viega

Specification text Aluminum SURFACE, Alu HSG

Energy Box, aluminum for insulation in the range up to +130 degrees Celsius of the HSG series for Kemper Multi-Therm. In accordance with the EnEV, consisting of two PUR half-shells encased with aluminum coarse grain sheet metal and fixed with straps.



Measurements	in mm									
ArtNr.	DN	In- ches	L1	L2	D1	D2	D3	Н	Weight (g)	Price in EURO
HSG-AL-010	10	3/8"	220	190	73	27	-	113	140	*
HSG-AL-015	15	1/2"	220	190	73	27	-	113	140	*
HSG-AL-020	20	3/4"	220	190	73	27	-	113	140	*
HSG-AL-025	25	1"	220	172	88	27	-	128	140	*
HSG-AL-032	32	1 1/4"	228	182	105	29	-	138	180	*
HSG-AL-040	40	1 ½"	241	197	122	29	-	152	240	*
HSG-AL-050	50	2"	247	197	148	29	-	178	240	*

Dimension D3 is adjusted depending on the valve

Tender specification PS surface, PS HSG

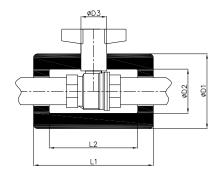
Energy Box, PS for insulation up to +130 degrees Celsius of the HSG series for Kemper Multi-Therm. In accordance with the EnEV consisting of two PUR half-shells, which are jacketed with PS foil and fixed with straps.



Measurements in mm											
ArtNr.	DN	In- ches	L1	L2	D1	D2	D3	Н	Weight (g)	Price in EURO	
HSG-PS-010	10	3/8"	220	190	73	27	-	113	140	19,20	
HSG-PS-015	15	1/2"	220	190	73	27	-	113	140	19,20	
HSG-PS-020	20	3/4"	220	190	73	27	-	113	140	19,20	
HSG-PS-025	25	1"	220	172	88	27	-	128	140	21,90	
HSG-PS-032	32	1 1/4"	228	182	105	29	-	138	180	23,70	
HSG-PS-040	40	1 ½"	241	197	122	29	-	152	240	26,70	
HSG-PS-050	50	2"	247	197	148	29	-	178	240	29,70	



^{*}Price upon request



Valves	Makes / manufacturers
Ball valve, Globo H	Heimeier
Ball valve, Optibal	Oventrop

Specification text Aluminum surface, Alu KHM

Energy Box, aluminum for insulation in the range up to +130 degrees Celsius of the series KHM for heating ball valves with socket connection. In accordance with the EnEV, consisting of two PUR half-shells, which are coated with aluminum coarse grain sheet metal and fixed with straps.



Measurements in mm												
ArtNr.	DN	Inches	L1	L2	D1	D2	D3	Weight (g)	Price in EURO			
KHM-AL-010	10	3/8"	101	77	54	30	29	50	*			
KHM-AL-015	15	1/2"	121	97	62	38	29	65	*			
KHM-AL-020	20	3/4"	139	109	74	44	29	90	*			
KHM-AL-025	25	1"	155	125	85	55	29	115	*			
KHM-AL-032	32	1 1/4"	209	169	106	66	29	135	*			
KHM-AL-040	40	1 ½"	185	135	125	75	35	125	*			
KHM-AL-050	50	2"	220	160	156	96	35	290	*			

Dimension D3 is adjusted depending on the valve

Tender specification PS surface, PS KHM

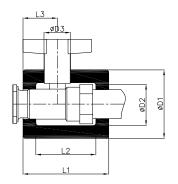
Energy Box, PS for insulation in the range up to +130 degrees Celsius of the series KHM for heating ball valves with socket connection. According to the EnEV consisting of two PUR half-shells, which are coated with PS foil and fixed with straps.



Measurements in mm												
ArtNr.	DN	Inches	L1	L2	D1	D2	D3	Weight (g)	Price in EURO			
KHM-PS-010	10	3/8"	101	77	54	30	29	50	11,60			
KHM-PS-015	15	1/2"	121	97	62	38	29	65	11,90			
KHM-PS-020	20	3/4"	139	109	74	44	29	90	12,50			
KHM-PS-025	25	1"	155	125	85	55	29	115	14,10			
KHM-PS-032	32	1 1/4"	209	169	106	66	29	135	17,00			
KHM-PS-040	40	1 ½"	185	135	125	75	35	125	20,40			
KHM-PS-050	50	2"	220	160	156	96	35	290	24,50			



^{*}Price upon request



Valves	Makes / manufacturers
Pump ball valve Globo-P	Heimeier
Pump ball valve	Oventrop

Specification text Aluminum surface, Alu PKH

Energy Box, aluminum for insulation in the range up to +130 degrees Celsius of series PKH for pump-ball valves. In accordance with the EnEV, consisting of two PUR half-shells encased with aluminum coarse grain sheet metal and fixed with straps.

Measurements in mm Weight Price in DN L1 L2 L3 D1 D3 Art.-Nr. Inches D2 (g) EURO PKH-AL-025 25/25 1 x 1" 100 70 37 80 50 29 70 PKH-AL-031 32/25 1 1/4 x 1" 110 80 45 102 62 29 75 PKH-AL-032 32/32 1 1/4 x 1 1/4" 110 45 102 62 75

Dimension	D3 is	adiusted	depending	on	the	valve

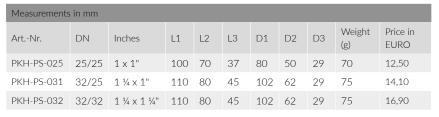
^{*}Price upon request

ALU-SURFACE



Tender specification PS surface, PS PKH

Energy Box, PS for insulation in the range up to ± 130 degrees Celsius of series PKH for pump-ball valves. According to the EnEV consisting of two PUR half-shells, which are coated with PS foil and fixed with straps.



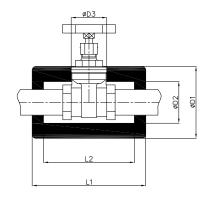
Dimension D3 is adjusted depending on the valve

PS-SURFACE





SERIE GVM



ALU-SURFACE

Valves Makes / manufacturers

Piston valves with thread ABA Beul Straight seat valves & piston valves with thread Bender two-way control valve Danfoss Gate valve Duramar

and all manufacturers to DIN length

Specification text Aluminum surface, Alu GVM

Energy Box, aluminum for insulation in the range up to +130 degrees Celsius of the GVM series for gate valves, straight seat valves and non-return caps with socket connection. In accordance with the EnEV, consisting of two PUR half-shells encased in aluminum coarse grain sheet metal and fixed with straps.

Measurements in mm													
ArtNr.	DN	Inches	L1	L2	D1	D2	D3	Weight (g)	Price in EURO				
GVM-AL-010	10	3/8"	99	75	64	34	-	75	*				
GVM-AL-015	15	1/2"	99	75	64	34	-	80	*				
GVM-AL-020	20	3/4"	111	81	71	41	-	115	*				
GVM-AL-025	25	1"	150	120	95	55	-	120	*				
GVM-AL-032	32	1 1/4"	165	125	100	60	-	135	*				
GVM-AL-040	40	1 ½"	180	130	115	65	-	160	*				
GVM-AL-050	50	2"	215	155	150	90	-	300	*				

Dimension D3 is adjusted depending on the valve

Tender specification PS surface, PS GVM

Energy Box, PS for insulation in the range up to +130 degrees Celsius of the series GVM series for gate valves, straight seat valves and check caps with socket connection. According to the EnEV, consisting of two PUR half-shells, which are covered with PS foil and fixed with straps.

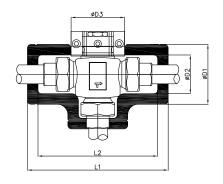
PS-SURFACE



Measurements in mm												
ArtNr.	DN	Inches	L1	L2	D1	D2	D3	Weight (g)	Price in EURO			
GVM-PS-010	10	3/8"	101	77	54	30	-	50	16,40			
GVM-PS-015	15	1/2"	121	97	62	38	-	65	16,70			
GVM-PS-020	20	3/4"	139	109	74	44	-	90	17,50			
GVM-PS-025	25	1"	155	125	85	55	-	115	19,80			
GVM-PS-032	32	1 1/4"	209	169	106	66	-	135	21,60			
GVM-PS-040	40	1 ½"	185	135	125	75	-	125	24,30			
GVM-PS-050	50	2"	220	160	156	96	-	290	27,30			



^{*}Price upon request



Valves Makes / manufacturers

For all common three-way valves with threaded connection

Specification text Aluminum surface, DWM

Energy Box, aluminum for insulation in the range up to +130 degrees Celsius of the series DWM for three-way valves with socket connection. In accordance with the EnEV, consisting of two PUR half-shells encased in aluminum coarse grain sheet metal and fixed with straps.

Measurements in mm Weight Price in Art.-Nr. DN Inches L1 L2 D1 D2 D3 EURO (g) DWM-AL-010 10 3/8" 101 77 54 30 29 50 23,70 DWM-AL-015 1/2" 121 97 62 38 29 65 23,90 DWM-AL-020 3/4" 139 109 74 44 29 90 24,20 DWM-AL-025 25 1" 155 125 85 55 29 115 26,90 DWM-AL-032 32 1 1/4" 209 169 106 66 29 135 29,30 DWM-AL-040 1 ½" 185 135 125 75 35 125 30,80 DWM-AL-050 50 2" 220 160 156 96 35 290 35,40

Dimension D3 is adjusted depending on the valve

ALU-SURFACE



Tender specification PS surface, DWM

Energy Box, PS for insulation in the range up to +130 degrees Celsius of the series DWM for three-way valves with socket connection. According to the EnEV consisting of two PUR half-shells, which are coated with PS foil and fixed with straps.

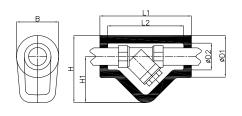
Measurements in mm Price in Weight Art.-Nr. DN Inches L1 L2 D1 D2 D3 **EURO** (g) DWM-PS-010 10 77 54 50 101 30 29 19,20 DWM-PS-015 15 1/2" 97 65 19,20 121 62 38 29 DWM-PS-020 20 3/4" 139 109 74 44 29 90 19,20 DWM-PS-025 25 155 125 55 29 115 21,90 1" 85 DWM-PS-032 32 1 1/4" 209 169 106 66 29 135 23,70 DWM-PS-040 40 1 ½" 185 135 125 75 35 125 26,70 DWM-PS-050 50 220 160 156 96 35 290 29,70

Dimension D3 is adjusted depending on the valve

PS-SURFACE







/alves Makes / manufacturers

For all common strainers with threaded connection

Specification text Aluminum surface, SFM

Energy Box, aluminum for insulation in the range up to +130 degrees Celsius of the series SFM for mudguard in sleeve design. In accordance with the EnEV, consisting of two PUR half-shells encased in aluminum coarse grain sheet metal and fixed with straps.

ALU-SURFACE

Measurements in mm													
ArtNr.	DN	Inches	L1	L2	D1	D2	В	Н	Н1	Weight (g)	Price in EURO		
SFM-AL-010	10	3/8"	104	80	54	30	54	81	54	95	*		
SFM-AL-015	15	1/2"	138	114	61	37	61	98	69	105	*		
SFM-AL-020	20	3/4"	155	125	77	47	77	121	82	160	*		
SFM-AL-025	25	1"	178	148	82	52	82	131	90	220	*		
SFM-AL-032	32	1 1/4"	202	162	104	64	104	160	105	250	*		
SFM-AL-040	40	1 ½"	224	174	120	70	120	186	125	300	*		
SFM-AL-050	50	2"	248	188	141	82	141	223	153	500	*		

Dimension D3 is adjusted depending on the valve

Tender specification PS surface, PS SFM

Energy Box, PS for insulation in the range up to +130 degrees Celsius of the series SFM for dirt trap in sleeve design. According to the EnEV consisting of two PUR half-shells, which are coated with PS foil and fixed with straps.



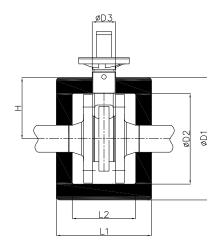


Measurements in mm													
ArtNr.	DN	In- ches	L1	L2	D1	D2	В	Н	H1	Weight (g)	Price in EURO		
SFM-PS-010	10	3/8"	104	80	54	30	54	81	54	95	16,40		
SFM-PS-015	15	1/2"	138	114	61	37	61	98	69	105	16,40		
SFM-PS-020	20	3/4"	155	125	77	47	77	121	82	160	17,50		
SFM-PS-025	25	1"	178	148	82	52	82	131	90	220	19,80		
SFM-PS-032	32	1 1/4"	202	162	104	64	104	160	105	250	21,60		
SFM-PS-040	40	1 ½"	224	174	120	70	120	186	125	300	24,30		
SFM-PS-050	50	2"	248	188	141	82	141	223	153	500	27,30		



^{*}Price upon request

Makes / manufacturers



BOA Super Compact KSB

Specification text Aluminum surface, BSC

Valves

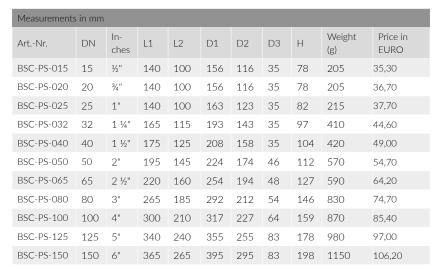
Energy Box, aluminum for insulation in the range up to +130 degrees Celsius of the series BSC for KSB - BOA Super Compact. In accordance with the EnEV, consisting of two PUR half-shells encased in aluminum coarse grain sheet metal and fixed with straps.



Dimension D3 is adjusted depending on the valve

Tender specification PS surface, BSC

Energy Box, PS for insulation in the range up to +130 degrees Celsius of the series BSC for KSB - BOA Super Compact. According to the EnEV consisting of two PUR half-shells, which are coated with PS foil and fixed with straps.



Dimension D3 is adjusted depending on the valve

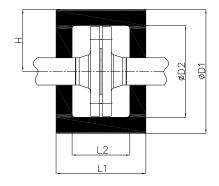
ALU-SURFACE



PS-SURFACE



^{*}Price upon request



Valves Makes / manufacturers

Flanges couples Blind flanges

Specification text Aluminum surface, FPA

Energy Box, aluminum for insulation in the range up to +130 degrees Celsius of the FPA series for flank pairs and blind flanges. In accordance with the EnEV, consisting of two PUR half-shells encased in aluminum coarse grain sheet metal and fixed with straps.



ALU-SURFACE

Measurements in mm													
ArtNr.	VVS nr.	DN	Inches	L1	L2	D1	D2	Н	Weight (g)	Price in EURO			
FPA-AL-015	499261004	15	1/2"	123	83	156	116	78	190	*			
FPA-AL-020	499261006	20	3/4"	123	83	156	116	78	190	*			
FPA-AL-025	499261008	25	1"	123	83	163	123	81,5	200	*			
FPA-AL-032	499261010	32	1 1/4"	140	90	193	143	96,5	380	*			
FPA-AL-040	499261011	40	1 ½"	144	94	208	158	104	395	*			
FPA-AL-050	499261012	50	2"	150	100	224	174	112	405	*			
FPA-AL-065	499261013	65	2 ½"	160	100	254	194	127	455	*			
FPA-AL-080	499261014	80	3"	190	110	292	212	146	750	*			
FPA-AL-100	499261016	100	4"	204	114	317	227	158	805	*			
FPA-AL-125	499261017	125	5"	210	110	355	255	177	900	*			
FPA-AL-150	499261018	150	6"	215	115	395	295	197	1000	*			

Dimension D3 is adjusted depending on the valve

Tender specification PS surface, FPA

Energy Box, PS for insulation in the range up to +130 degrees Celsius of the FPA series for flank pairs and blind flanges. According to the EnEV consisting of two PUR half-shells, which are coated with PS foil and fixed with straps.

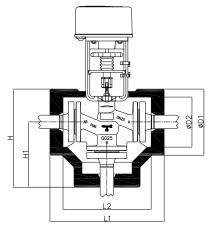


PS-SURFACE

Measurements in mm												
ArtNr.	VVS nr.	DN	Inches	L1	L2	D1	D2	Н	Weight (g)	Price in EURO		
FPA-PS-015	499261104	15	1/2"	123	83	156	116	78	190	26,80		
FPA-PS-020	499261106	20	3/4"	123	83	156	116	78	190	26,90		
FPA-PS-025	499261108	25	1"	123	83	163	123	81,5	200	27,30		
FPA-PS-032	499261110	32	1 1/4"	140	90	193	143	96,5	380	28,50		
FPA-PS-040	499261111	40	1 ½"	144	94	208	158	104	395	31,30		
FPA-PS-050	499261112	50	2"	150	100	224	174	112	405	34,20		
FPA-PS-065	499261113	65	2 ½"	160	100	254	194	127	455	42,30		
FPA-PS-080	499261114	80	3"	190	110	292	212	146	750	48,40		
FPA-PS-100	499261116	100	4"	204	114	317	227	158	805	53,50		
FPA-PS-125	499261117	125	5"	210	110	355	255	177	900	60,00		
FPA-PS-150	499261118	150	6"	215	115	395	295	197	1000	67,50		



^{*}Price upon request



ALU-SURFACE



Valves

Three-way flange control valve
Three-way mixer with flange connection
Three-way valve with flange connection
Three-way valve with flange connection
Three-way valve with flange connection

Makes / manufacturers

Danfoss Honeywell Honeywell Kieback + Peter Landis & Staefa

Specification text Aluminum surface, DWV

Energy Box, aluminum for insulation in the range up to ± 130 degrees Celsius of the series DWV for three-way valves with flange connection. In accordance with the EnEV, consisting of two PUR half-shells encased in aluminum coarse grain sheet metal and fixed with straps.

Measurements in mm												
ArtNr.	DN	Inches	L1	L2	D1	D2	Н	H1	Weight (g)	Price in EURO		
DWV-AL-015	15	1/2"	275	235	150	110	210	135	660	37,60		
DWV-AL-020	20	3/4"	275	235	150	110	210	135	660	39,00		
DWV-AL-025	25	1"	280	240	160	120	225	145	690	40,80		
DWV-AL-032	32	1 1/4"	330	280	195	145	277	180	780	46,20		
DWV-AL-040	40	1 ½"	345	295	205	155	282	180	790	48,90		
DWV-AL-050	50	2"	390	330	232	172	306	190	1050	54,90		
DWV-AL-065	65	2 ½"	475	405	272	192	351	215	1590	68,20		
DWV-AL-080	80	3"	495	415	300	210	385	235	2902	81,60		
DWV-AL-100	100	4"	550	470	327	227	408	245	2810	101,00		
DWV-AL-125	125	5"	615	525	360	260	485	285	3210	121,70		
DWV-AL-150	150	6"	695	595	390	290	515	320	3610	140,10		

Dimension D3 is adjusted depending on the valve

Tender specification PS surface, DWV

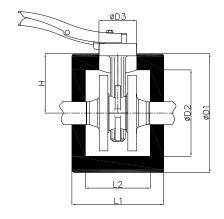
Energy Box, PS for insulation in the range up to ± 130 degrees Celsius of the series DWV for three-way valves with flange connection. According to the EnEV consisting of two PUR half-shells, which are coated with PS foil and fixed with straps.



Measurements in mm												
ArtNr.	DN	Inches	L1	L2	D1	D2	Н	Н1	Weight (g)	Price in EURO		
DWV-PS-015	15	1/2"	275	235	150	110	210	135	660	57,30		
DWV-PS-020	20	3/4"	275	235	150	110	210	135	660	58,50		
DWV-PS-025	25	1"	280	240	160	120	225	145	690	62,20		
DWV-PS-032	32	1 1/4"	330	280	195	145	277	180	780	70,70		
DWV-PS-040	40	1 ½"	345	295	205	155	282	180	790	80,30		
DWV-PS-050	50	2"	390	330	232	172	306	190	1050	94,60		
DWV-PS-065	65	2 1/2"	475	405	272	192	351	215	1590	112,90		
DWV-PS-080	80	3"	495	415	300	210	385	235	2902	138,40		
DWV-PS-100	100	4"	550	470	327	227	408	245	2810	174,70		
DWV-PS-125	125	5"	615	525	360	260	485	285	3210	204,10		
DWV-PS-150	150	6"	695	595	390	290	515	320	3610	216,80		



SERIE FKL



Valves	Makes / manufacturers
Shut-off flap ZESA / GESA	Ari
Shut-off flap Z011	Ebro
Butterfly valves	GEFA
DISCO check valve	Gestra
Shut-off valve BoaX-S	KSB

Specification text Aluminum surface, FKL

Energy Box, aluminum for insulation in the range up to +130 degrees Celsius of the series FKL for shut-off valves, flap check valves and compensators. In accordance with the EnEV, consisting of two PUR half-shells encased in aluminum coarse grain sheet metal and fixed with clamping straps.

Measurements in mm												
ArtNr.	DN	Inches	L1	L2	D1	D2	D3	Н	Weight (g)	Price in EURO		
FKL-AL-015	15	1/2"	140	100	156	116	38	78	205	33,30		
FKL-AL-020	20	3/4"	140	100	156	116	38	78	205	34,50		
FKL-AL-025	25	1"	140	100	163	123	38	81,5	215	37,00		
FKL-AL-032	32	1 1/4"	150	100	193	143	38	96,5	410	39,70		
FKL-AL-040	40	1 ½"	150	100	208	158	38	104	415	41,90		
FKL-AL-050	50	2"	160	110	224	174	38	112	550	44,70		
FKL-AL-065	65	2 ½"	179	119	254	194	41	127	570	49,70		
FKL-AL-080	80	3"	215	135	292	212	51	146	810	60,40		
FKL-AL-100	100	4"	230	140	317	227	51	158	835	71,60		
FKL-AL-125	125	5"	260	160	355	225	92	177,5	940	81,90		
FKL-AL-150	150	6"	260	160	395	295	92	197,5	1090	96,80		

Dimension D3 is adjusted depending on the valve

ALU-SURFACE



Tender specification PS surface, FKL

Energy Box, PS for insulation in the range up to +130 degrees Celsius of the series FKL for shut-off valves, flap check valves and compensators. According to the EnEV consisting of two PUR half-shells, which are coated with PS foil and fixed with straps.

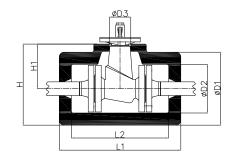
Measurements in mm											
Measurement	S III IIIIII		_		_	_		_	_		
ArtNr.	DN	Inches	L1	L2	D1	D2	D3	Н	Weight (g)	Price in EURO	
FKL-PS-015	15	1/2"	140	100	156	116	38	78	205	27,30	
FKL-PS-020	20	3/4"	140	100	156	116	38	78	205	27,80	
FKL-PS-025	25	1"	140	100	163	123	38	81,5	215	31,30	
FKL-PS-032	32	1 1/4"	150	100	193	143	38	96,5	410	35,30	
FKL-PS-040	40	1 ½"	150	100	208	158	38	104	415	42,00	
FKL-PS-050	50	2"	160	110	224	174	38	112	550	45,70	
FKL-PS-065	65	2 ½"	179	119	254	194	41	127	570	51,40	
FKL-PS-080	80	3"	215	135	292	212	51	146	810	59,70	
FKL-PS-100	100	4"	230	140	317	227	51	158	835	66,10	
FKL-PS-125	125	5"	260	160	355	225	92	177,5	940	79,60	
FKL-PS-150	150	6"	260	160	395	295	92	197,5	1090	96,30	

Dimension D3 is adjusted depending on the valve

PS-SURFACE







Valves	Makes / manufacture

Shut-off valve Euro Wedi FTF 14ARIWedge gate valve, FTF 14FrommeShut-off valve BOA-CompactKSBShut-off valve BOA-Compact IMSKSB

Specification text Aluminum surface, FVK

Energy Box, aluminum for insulation in the range up to +130 degrees Celsius of the series FVK for short ball, diaphragm, straight seat valves and flanges according to DIN length, F4. According to the EnEV, consisting of two PUR half-shells encased in aluminum coarse grain sheet metal and fixed with straps.

ALU-SURFACE

Measurements in mm													
ArtNr.	DN	Inches	L1	L2	D1	D2	D3	Н	H1	Weight (g)	Price in EURO		
FVK-AL-015	15	1/2"	230	190	140	100		170	100	450	*		
FVK-AL-020	20	3/4"	240	200	150	110		180	105	620	*		
FVK-AL-025	25	1"	245	205	160	120		185	105	1010	*		
FVK-AL-032	32	1 1/4"	260	210	195	145		220	123	1150	*		
FVK-AL-040	40	1 ½"	280	230	205	155		248	145	1200	*		
FVK-AL-050	50	2"	300	240	232	172		266	150	1250	*		
FVK-AL-065	65	2 ½"	335	265	272	192		321	185	1310	*		
FVK-AL-080	80	3"	355	275	300	210		350	200	1410	*		
FVK-AL-100	100	4"	375	295	327	227		374	210	1490	*		
FVK-AL-125	125	5"	405	315	359	260		435	255	1640	*		
FVK-AL-150	150	6"	435	335	390	290		495	300	1730	*		

Dimension D3 is adjusted depending on the valve

Tender specification PS surface, FVK

Energy Box, PS for insulation in the range up to +130 degrees Celsius of the FVK series for short ball, diaphragm, straight seat valves and flanges according to DIN length, F4. According to the EnEV consisting of two PUR half-shells, which are coated with PS foil and fixed with straps.





Measurement	Measurements in mm												
ArtNr.	DN	Inches	L1	L2	D1	D2	D3	Н	Н1	Weight (g)	Price in EURO		
FVK-PS-015	15	1/2"	230	190	140	100		170	100	450	35,10		
FVK-PS-020	20	3/4"	240	200	150	110		180	105	620	35,30		
FVK-PS-025	25	1"	245	205	160	120		185	105	1010	37,10		
FVK-PS-032	32	1 1/4"	260	210	195	145		220	123	1150	42,40		
FVK-PS-040	40	1 ½"	280	230	205	155		248	145	1200	48,00		
FVK-PS-050	50	2"	300	240	232	172		266	150	1250	53,80		
FVK-PS-065	65	2 ½"	335	265	272	192		321	185	1310	62,00		
FVK-PS-080	80	3"	355	275	300	210		350	200	1410	73,50		
FVK-PS-100	100	4"	375	295	327	227		374	210	1490	85,00		
FVK-PS-125	125	5"	405	315	359	260		435	255	1640	96,50		
FVK-PS-150	150	6"	435	335	390	290		495	300	1730	109,90		



^{*}Price upon request

Valves

Shut-off valve Euro Wedi, FABA-Plus, Astra in length FTF 1Flow Valve, FTF 1 Shut-off valve GAV Line regulating and shut-off valve Kombi-F Shut-off valve Boa-H, Boa-W, Sisto

Makes / manufacturers

FROMME Gestra Honeywell KSB

Specification text Aluminum surface, FVL

Energy Box, aluminum for insulation in the range up to +130 degrees Celsius of the series FVL for long ball, diaphragm, straight seat valves and flanges according to DIN length, F1. According to the EnEV, consisting of two PUR half-shells encased in aluminum coarse grain sheet metal and fixed with straps.

ALU-SURFACE

ArtNr.	DN	ch
FVL-AL-015	15	1/2
FVL-AL-020	20	3/4
FVL-AL-025	25	1'

Measurements in mm

ArtNr.	DN	In- ches	L1	L2	D1	D2	D3	Н	H1	Weight (g)	Price in EURO
FVL-AL-015	15	1/2"	245	205	140	100	38	170	100	470	*
FVL-AL-020	20	3/4"	275	235	150	110	38	180	105	640	*
FVL-AL-025	25	1"	280	240	160	120	38	185	105	1040	*
FVL-AL-032	32	1 1/4"	330	280	195	145	38	220	123	1170	*
FVL-AL-040	40	1 ½"	345	295	205	155	38	240	138	1270	*
FVL-AL-050	50	2"	390	330	232	172	38	261	145	1290	*
FVL-AL-065	65	2 ½"	475	405	272	192	38	306	170	1370	*
FVL-AL-080	80	3"	495	415	300	210	43	350	200	1510	*
FVL-AL-100	100	4"	550	470	327	227	43	374	210	1690	*
FVL-AL-125	125	5"	675	525	359	260	43	435	255	1730	*
FVL-AL-150	150	6"	695	595	390	290	51	495	300	1805	*

Dimension D3 is adjusted depending on the valve

Energy Box, PS FVL

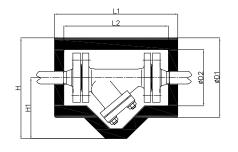
Energy Box, PS for insulation in the range up to +130 degrees Celsius of the series FVL for long ball, diaphragm, straight seat valves and flanges according to DIN length, F1. According to the EnEV consisting of two PUR half-shells, which are coated with PS foil and fixed with straps.



and fixed with straps.													
Measurements in mm													
ArtNr.	DN	Inches	L1	L2	D1	D2	D3	Н	H1	Weight (g)	Price in EURO		
FVL-PS-015	15	1/2"	245	205	140	100	38	170	100	470	37,70		
FVL-PS-020	20	3/4"	275	235	150	110	38	180	105	640	38,70		
FVL-PS-025	25	1"	280	240	160	120	38	185	105	1040	41,70		
FVL-PS-032	32	1 1/4"	330	280	195	145	38	220	123	1170	48,20		
FVL-PS-040	40	1 ½"	345	295	205	155	38	240	138	1270	54,90		
FVL-PS-050	50	2"	390	330	232	172	38	261	145	1290	65,70		
FVL-PS-065	65	2 ½"	475	405	272	192	38	306	170	1370	79,90		
FVL-PS-080	80	3"	495	415	300	210	43	350	200	1510	98,10		
FVL-PS-100	100	4"	550	470	327	227	43	374	210	1690	125,60		
FVL-PS-125	125	5"	675	525	359	260	43	435	255	1730	141,60		
FVL-PS-150	150	6"	695	595	390	290	51	495	300	1805	170,70		



^{*}Price upon request



Valves	Makes / manufacturers
Strainer with flange connection	ARI

Strainer with flange connection Strainer FTF1

Angle seat valve with flange connection Strainer BOA-S

Check valve BOA-R

Fromme Kemper KSB

Danfoss

Specification text Aluminum surface, SVF

Energy Box, aluminum for insulation in the range up to +130 degrees Celsius of the SVF series for dirt collectors, angle seat and free-flow valves with flange connection. In accordance with the EnEV, consisting of two PUR half-shells encased in aluminum coarse grain sheet metal and fixed with straps.



Measurements in mm												
ArtNr.	DN	Inches	L1	L2	D1	D2	Н	H1	Weight (g)	Price in EURO		
SVF-AL-015	15	1/2"	245	205	140	100	195	125	470	35,00		
SVF-AL-020	20	3/4"	275	235	150	110	208	133	640	37,80		
SVF-AL-025	25	1"	280	240	160	120	236	156	1040	39,30		
SVF-AL-032	32	1 1/4"	330	280	195	145	262	164,5	1170	44,80		
SVF-AL-040	40	1 ½"	345	295	205	155	298	195,5	1270	47,30		
SVF-AL-050	50	2"	390	330	232	172	328	212	1290	52,70		
SVF-AL-065	65	2 ½"	475	405	272	192	412	276	1370	64,50		
SVF-AL-080	80	3"	495	415	300	210	465	315	1510	77,00		
SVF-AL-100	100	4"	550	470	327	227	493	329,5	1690	94,40		
SVF-AL-125	125	5"	615	525	359	260	560	380,5	1730	110,90		
SVF-AL-150	150	6"	695	595	390	290	620	425	1805	127,20		

Dimension D3 is adjusted depending on the valve

Tender specification PS surface, SVF

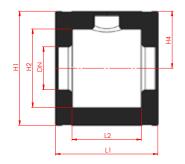
Energy Box, PS for insulation in the range up to +130 degrees Celsius of the series SVF for dirt collectors, angle seat and free-flow valves with flange connection. According to the EnEV consisting of two PUR half-shells, which are coated with PS foil and fixed with straps.



Measurement	s in mm									
ArtNr.	DN	Inches	L1	L2	D1	D2	Н	H1	Weight (g)	Price in EURO
SVF-PS-015	15	1/2"	245	205	140	100	195	125	470	37,70
SVF-PS-020	20	3/4"	275	235	150	110	208	133	640	38,70
SVF-PS-025	25	1"	280	240	160	120	236	156	1040	41,70
SVF-PS-032	32	1 ¼"	330	280	195	145	262	164,5	1170	48,20
SVF-PS-040	40	1 ½"	345	295	205	155	298	195,5	1270	54,90
SVF-PS-050	50	2"	390	330	232	172	328	212	1290	65,70
SVF-PS-065	65	2 ½"	475	405	272	192	412	276	1370	79,90
SVF-PS-080	80	3"	495	415	300	210	465	315	1510	98,10
SVF-PS-100	100	4"	550	470	327	227	493	329,5	1690	125,60
SVF-PS-125	125	5"	615	525	359	260	560	380,5	1730	141,60
SVF-PS-150	150	6"	695	595	390	290	620	425	1805	170,70



SFRIF DHS AK



Valves Makes / manufacturers

With flange connection For mostly butterfly valves KSB BOA SuperCompact valves COMAP

Specification text, DHS AK

DHS Energy Box without PS surface for insulation in the range up to ± 130 degrees Celsius of the DHS AK series for district heating valves. The cap consists of two polyurethane half-shells, which are mounted with galvanized clamps. In order to prevent water vapor diffusion, we recommend the use of a sealing paste in the temperature range of ± 130 °C to ± 12 °C.

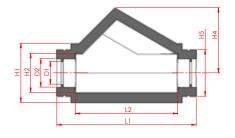


Measureme	Measurements in mm											
ArtNr.	Туре	L1	L2	H1	H2	H4	Price in EURO					
1602801	DN25	170	128	158	115	78	17,19					
1602802	DN32	180	140	180	142	90	19,74					
1602803	DN40	185	142	195	152	97	22,56					
1602804	DN50	208	167	208	165	105	27,13					
1602805	DN65	220	165	250	190	125	32,63					
1602806	DN80	260	180	282	204	142	40,15					
1602807	DN100	290	195	325	225	162	51,50					

SERIE DHS MS

Valves Makes / manufacturers

For angle seat valves with thread and socket connection



Specification text, DHS MS

DHS Energy Box without PS surface for insulation in the range up to \pm 130 ° Celsius of the series DHS MS for district heating valves. The cap is used on tilted flanged, lift and punch valves as well as on mud flaps. The cap consists of two half shells made of polyurethane, which can be easily assembled with retaining rings.

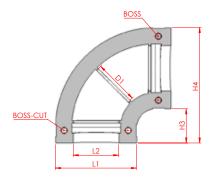
To prevent water vapor diffusion, a sealing paste must be used in the temperature range -8 $^{\circ}$ C to + 12 $^{\circ}$ C.



Measurements in mm										
ArtNr.	Туре	L1	L2	H1	H2	H4	H5	D1	D2	Price in EURO
1602701	DN25/32	210	150	83	54	92	67	34	43	9,13
1602702	DN40/50	300	220	127	84	140	100	48,5	61	11,15
1602703	DN65/80	355	258	185	121	198	148	78	90	14,91



SERIE DHS B



Valves Makes / manufacturers

Pipe elbow pieces 50%

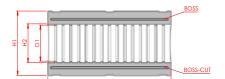
Specification text, DHS B

DHS Energy Box without PS surface for insulation in the range up to +130 degrees Celsius of the series DHS B for district heating valves. The cap consists of two pipe half-shells made of polyurethane, which can be fastened with Velcro or clips. The cap can be easily removed if necessary and then fastened again.



Measurements in mm										
ArtNr.	Туре	L1	L2	НЗ	H4	Price in EURO				
1603101	DN15/25	50	28	25	75	5,64				
1603102	DN25/32	67	43	34	100	6,45				
1603103	DN40/50	100	62	42	142	8,46				
1603104	DN65/80	147	92	77	224	15,44				
1603105	DN100	205	115	90	295	23,90				
1603106	DN125	250	142	100	350	28,20				

SERIE DHS R



Valves Makes / manufacturers

Pipe pieces 50%

Specification text, DHS R

Energy box without PS surface for insulation in the range up to + 130 ° Celsius of the series DHS R for district heating valves. Length 500 mm. The cap consists of two pipe half-shells made of polyurethane, which are easily sealed and assembled with stainless steel retaining rings. The cap can be easily removed if necessary and then fastened again. To prevent water vapor diffusion, a sealing paste must be used in the temperature range -8 ° C to + 12 ° C.



Measureme	Measurements in mm										
ArtNr.	Туре	L1	H1	H2	D1	Price in EURO					
1603001	DN15/20	500	50	28	22	8,46					
1603002	DN25/32	500	67	43	33	10,34					
1603003	DN40/50	500	100	60	48	21,75					
1603004	DN65/80	500	150	90	76	24,98					
1603005	DN100	500	204	124	115	31,96					
1603006	DN125	500	250	150	140	45,25					

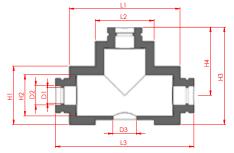


SERIE DHS DM

Valves

Makes / manufacturers

For three-way valves with thread and socket connection



Specification text, DHS DM

Insulation jacket consisting of two half-shells with a spring and groove on the adjoining surfaces, which prevent slipping and are held together with electro-galvanized spring rings or bands. To prevent water vapor diffusion, sealing paste must be used at temperatures from -8°C to +12°C.



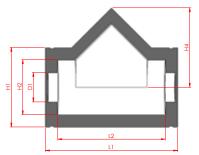
Measurem	Measurements in mm											
ArtNr.	Туре	L1	L2	L3	H1	H2	НЗ	H4	D1	D2	D3	Price in EURO
1603401	DN15/20	160	85	200	85	60	145	102	23	28	*	10,34
1603402	DN25/32	190	117	230	112	84	170	110	36	44	*	13,70
1603403	DN40/50	220	135	279	130	100	200	135	51	61	*	13,70

^{*} Intended for carving

ENERGY BOX DHS F

Makes / manufacturers

For free flow valves with flanges



Specification text, DHS F

DHS Energy Box without PS surface for insulation in the range up to + 130 ° Celsius for district heating valves. The cap consists of two polyurethane half-shells, which are mounted with galvanized clamps. In order to prevent water vapor diffusion, we recommend the use of a sealing paste in the temperature range of -8 $^{\circ}$ C to + 12 $^{\circ}$ C.

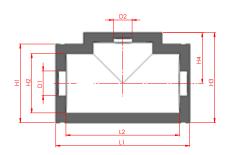


Measureme	Measurements in mm											
ArtNr.	Туре	L1	L2	H1	H2	H4	D1	Price in EURO				
1602901	DN20	270	240	147	102	135	*	15,85				
1602902	DN25	258	218	158	116	148	*	17,19				
1602903	DN32	290	250	182	142	155	*	19,74				
1602904	DN40	310	270	192	152	185	*	22,56				
1602905	DN50	365	315	205	167	220	*	26,99				
1602906	DN65	420	355	246	187	248	*	32,50				
1602907	DN80	467	389	285	202	272	*	40,15				
1602908	DN100	540	440	325	225	325	*	51,16				
1602909 * Intended f	DN125	585	485	353	270	367	*	64,83				

Intended for carving



SERIE DHS FL



Valves Makes / manufacturers

For flange connection

Specification text, DHS FL

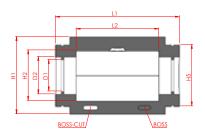
Energy box without PS surface for insulation in the range up to \pm 130 ° Celsius of the series DHS FL for district heating valves. The cap consists of two polyurethane half-shells, which are mounted with galvanized clamps. In order to prevent water vapor diffusion, we recommend the use of a sealing paste in the temperature range of -8 ° C to + 12 ° C.



Measurements in mm										
ArtNr.	Туре	L1	L2	H1	H2	НЗ	H4	D1	D2	Pris i DKK
1603201	DN20	255	220	137	105	152	83	*	*	23,63
1603202	DN25	262	220	161	120	180	100	*	*	25,65
1603203	DN32	290	250	182	142	203	111	*	*	29,27
1603204	DN40	312	272	193	152	225	127	*	*	33,84
1603205	DN50	370	320	205	165	243	138	*	*	40,42
1603206	DN65	423	355	248	187	284	160	*	*	48,61
1603207	DN100	540	440	327	225	375	207	*	*	73,18

^{*} Intended for carving

SERIE DHS KH



alves Makes / manufacturers

For valves with threaded or socket connection

Specification text, DHS KH

Energy Box without PS surface for insulation in the range up to + 130 $^{\circ}$ Celsius of the series DHS KH for district heating valves.

The cap consists of two half shells with tongue and groove on the abutting surfaces that prevent slipping. They are fastened with electrogalvanized galvanized spring rings or clamps. In order to prevent water vapor diffusion, a sealing paste must be used in the temperature range $-8\,^{\circ}$ C to $+\ 12\,^{\circ}$ C.



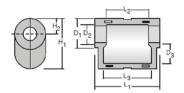
Measureme	Measurements in mm											
ArtNr.	Туре	L1	L2	H1	H2	H5	D1	D2	Price in EURO			
1603301	DN15/20	125	68	70	44	51,5	26	30	7,12			
1603302	DN25/32	156	97	85	60	65	33	43	9,13			
1603303	DN40/50	218	132	124	88	100	48	60	11,15			
1603304	DN65/80	300	200	188	120	147	77	90	14,91			





For all common strainers with threaded connection

Makes / manufacturers



Type MS

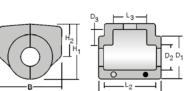
TOPO MS for insulation in the range up to + 130 ° Celsius for mud flaps with sleeves. According to the EnEV consisting of two PUR half-shells, which are coated with PS foil and fixed with straps.



Measureme	ents in mm									
ArtNr.	Туре	L1	L2	L3	D1	D2	D3	H1	H2	Price in EURO
1501601	MS 15/20	140	95	108	70	40	48	117	35	20,13
1501602	MS 25	162	111	127	85	57	62	138	43	22,82
1501603	MS 32/40	222	155	185	117	75	95	207	62	28,19
1501604	MS 50	260	188	244	140	93	113	242	72	30,87

SERIE ME





Valves	Makes / manufacturers
For diaphragm valves	Saunders
	Sisto

Type ME

TOPO ME for insulation in the range up to + 130 ° Celsius for diaphragm valves with sleeves. According to the EnEV consisting of two PUR half-shells, which are coated with PS foil and fixed with straps.

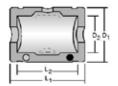


Measureme	ents in mm										
ArtNr.	Туре	В	L1	L2	L3	D1	D2	D3	H1	H2	Price in EURO
1501701	ME 15/20	126	125	94	64	90	47	33	102	59	20,13
1501702	ME 25	140	136	111	75	98	59	34	123	75	22,82
1501703	ME 32	155	156	135	87	118	63	47	150	92	25,50
1501704	ME 40	172	175	149	100	145	85	55	182	110	28,19
1501705	ME 50	212	205	177	117	155	95	45	193	115	30,87



SERIE FK







Valves Makes / manufacturers

For diaphragm valves, ball valves, valves with grease, with flanges

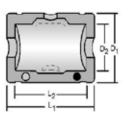
Type FK TOPO FK for insulation in the range up to + 130° degrees Celsius for ball valves, diaphragm valves and relubricated taps.

According to the EnEV consisting of two PUR half-shells, which are coated with PS foil and fixed with straps.

Measurements in mm											
ArtNr.	Туре	L1	L2	D1	D2	Price in EURO					
1501101	FK 15	212	180	148	98	30,87					
1501102	FK 20/25	250	200	165	120	41,61					
1501103	FK32	260	230	200	145	46,98					
1501104	FK 40	290	265	230	155	51,01					
1501105	FK 50	340	290	250	170	53,03					
1501106	FK 65	340	290	270	190	57,72					
1501106-l	FK 65-I	440	390	270	190	60,40					
1501107	FK 80	400	350	290	205	60,40					
1501108	FK 100	445	380	330	230	67,11					
1501109	FK 125	510	480	350	258	73,83					

SERIE K





Valves Makes / manufacturers

Ball valve with welding ends

Type K

TOPO K for insulation in the range up to + 130° degrees Celsius for ball valves with sockets and welding connection. According to the EnEV consisting of two PUR half-shells, which are coated with PS foil and fixed with straps.

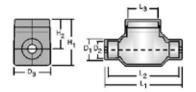


Measureme	nts in mm					
ArtNr.	Туре	L1	L2	D1	D2	Price in EURO
1502401	K 25/50	200	140	145	93	22,82
1502402	K 65	230	170	200	115	36,24
1502403	K 80	230	167	220	135	41,61
1502404	K 100	315	245	245	162	46,98
1502405	K 125	320	245	270	190	73,83
1502406	K 150	440	360	308	225	80,54

Valves Makes / manufacturers

Caps for heat and water meters







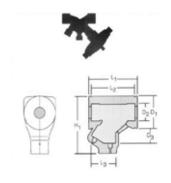
Type T TOPO T for insulation in the range up to + 130° degrees Celsius for water and heat meters.

According to the EnEV consisting of two PUR half-shells, which are coated with PS foil and fixed with straps.



Maße in m	m									
ArtNr.	Туре	L1	L2	L3	D1	D2	D3	Н1	H2	Price in EURO
1502705	T 190	225	207	90	70	45	124	154	100	26,85
1502706	T 220	260	238	90	70	45	124	154	100	29,53

SERIE OM

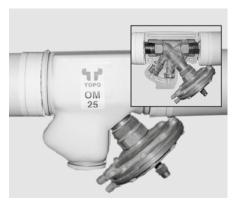


Valves	Makes / manufacturers
Line regulating valves STAD	TA Heimeier
Threaded line regulating valves	Danfoss
BOA-control valve -Control SAR	KSB
	Oventrop

Type OM

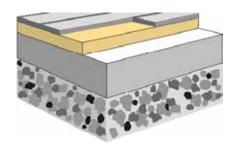
TOPO OM for insulation in the range up to + 130° degrees Celsius.

According to the EnEV consisting of two PUR half-shells, which are coated with PS foil and fixed with straps.



Measureme	ents in mm	1							
ArtNr.	Туре	L1	L2	L3	D1	D2	D3	H1	Price in EURO
1502902	OM 20	132	115	80	75	45	40	155	20,13
1502903	OM 25	155	140	80	100	53	40	175	22,82
1502904	OM 32	165	140	80	110	60	40	195	25,50
1502905	OM 40	178	150	80	128	65	40	212	28,19
1502906	OM 50	210	185	80	162	83	40	247	30,87





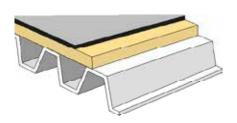
INSULATING FLOORS AND CEILINGS

Tinby Skumplast supplies PUR and PIR for insulating and retro-fitting insulation in floors and ceilings. PUR/PIR provides complete coverage of the floor area so that no cold bridging can occur. Pouring is done directly onto the concrete without using shutters. The finished flooring, such as particle board or parquet flooring, can be laid directly on top of the insulation panels.



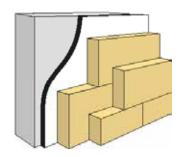
INSULATING IN THE REFRIGERATION SECTOR

We manufacture insulation panels in PUR and PIR for refrigeration vehicles, containers, transport units, portable office structures, and trailers. Insulation sheets in PUR/PIR can be affixed directly onto metal or fibreglass panels (sandwich construction).



INSULATING ROOFS

PUR and PIR are excellent materials for insulating and retro-fitting insulation in roofs in storage facilities and industrial premises. Tinby Skumplast supplies foam panels which can be laid either directly on top of steel plates or directly on top of existing roofing felt, and new asphalt roofing can also be laid on top of insulating foam sheets.



INSULATING WALLS AND CEILINGS

PUR and PIR can be used to insulate and retro-fit insulation in walls, façades and windows in buildings, in gas concrete or in solid walls. The foam panels provide a good base for the final wall coverings, and can be used for external doors as well as façade sections.

COMPRESSIVE STRENGTHS

Density	35 kg/m³	40 kg/m³
On surfaces	2.3 kg/cm²	2.9 kg/cm²
On the sides	1.5 kg/cm²	2.0 kg/cm²

Higher densities can be manufactured to order





PUR insulation comprises a group of insulating materials which are based on polyurethane (PUR) or polyisocyanurate (PIR). The closed-cell structure and high crosslink density of these insulating materials give them their excellent insulating properties, efficient heat resistance and high compressive strength.

Insulating with PUR and PIR can help improve the energy efficiency of buildings and reduce CO₂ emissions. PUR is one of the most effective insulation materials available, and can deliver a very high level of thermal efficiency using a minimum of insulating thickness.

With lambda (thermal conductivity) values as low as 0.024 W/m*K, an insulation effect (expressed in U-values) that equals that attained using other insulating materials can be achieved, even though significantly thinner layers of PUR are used.

PUR insulating materials are used:

- In roof construction
- In external wall construction
- In new buildings
- For renovations
- For retro-fitting of insulation
- In subfloors and baseboards
- For insulating refrigerated vehicles
- For insulating temporary portable office structures



We do everything in our power to be the strong partner our clients need - one who is at the forefront of technological developments within our core competencies. Our aim, as a supplier, is to offer our clients total flexibility.

INSULATION CAPS FOR DISTRICT HEATING VALVES PRICE LIST TOPO DHS

PRICE LIST TOPO ENERGY BOX INSULATION CAPS

γγp	MS	MΕ	¥	×	F	MO
Størrelse	"til snavssamlere med muffer"	"til membranventiler med muffer"	"til Flange-, kugle og membranventiler"	"til kugleventiler med muffer"	"Vand- og varmemålere"	"til strengreguleringsventiler"
DN 10						
DN 15	MS-015 20,13	ME-015 20,13	FK-015 30,87			
DN 20	MS-020 20,13	ME-020 20,13	FK-020 41,61			OM-020 20,13
DN 25	MS-025 22,82	ME-025 22,82	FK-025 41,16	K-025 22,82		OM-025 22,82
DN 32	MS-032 28,19	ME-032 25,50	FK-032 46,98	K-032 22,82		OM-032 25,50
DN 40	MS-040 28,19	ME-040 28,19	FK-040 51,01	K-040 22,82		OM-040 28.19
DN 50	MS-050 30,87	ME-050 30,87	FK-050 55,03	K-050 22,82		OM-050 30,87
DN 65			FK-065 57,72	K-065 36,24		
DN 80			FK-080 60,40	K-080 41,61		
DN 100			FK-100 67,11	K-100 46,98		
DN 125			FK-125 73,83	K-125 73,83		
DN 150				K-150 80,54		
					T190 26,85	
					T220 29,53	

PRICE LIST TOPO ENERGY BOX, ALU Please indicate an exat fitting type with each order

	SVF DWV	smudsfiltre trevejsventil og med med fristrømsven- flangetilsluttiler ming"		SVF-AL-015 DWV-AL-015 35,00 37,60	SVF-AL-020 DWV-AL-020 37,80 39,00	SVF-AL-025 DWV-AL-025 39,30 40,80	SVF-AL-032 DWV-AL-032 44,80 46,20	SVF-AL-040 DWV-AL-040 47,30 48,90	SVF-AL-050 DWV-AL-050 52,70 54,90	SVF-AL-065 DWV-AL-065 64,50 68,20	SVF-AL-080 DWV-AL-080 77,00 81,60	SVF-AL-100 DWV-AL-100 94,40 101,00	SVF-AL-125 DWV-AL-125 110,90 121,70	SVF-AL-150 DWV-AL-150
	FVL	"fil lange kugle-, membran-, sæde- og flangeven- tiler iht. DIN-længde F1"		FVL-AL-015 35,00	FVL-AL-020 37,80	FVL-AL-025 39,30	FVL-AL-032 44,80	FVL-AL-040 47,30	FVL-AL-050 52,70	FVL-AL-065 64,50	FVL-AL-080 77,00	FVL-AL-100 94,40	FVL-AL-125 110,90	FVL-AL-150
Flange	FVK	"til korte kugle-, membran-, sæde- og flangeven- tiler iht. DIN-længde F4"		FVK-AL-015 35,90	FVK-AL-020 38,70	FVK-AL-025 41,10	FVK-AL-032 44,90	FVK-AL-040 48,40	FVK-AL-050 53,80	FVK-AL-065 66,20	FVK-AL-080 78,80	FVK-AL-100 93,20	FVK-AL-125 111,30	FVK-AL-150
	BSC	"til KSB-Boa Super Com- pact"		BSC-AL-015 33,70	BSC-AL-020 35,90	BSC-AL-025 37,20	BSC-AL-032 40,00	BSC-AL-040 42,10	BSC-AL-050 45,00	BSC-AL-065 50,80	BSC-AL-080 61,40	BSC-AL-100 73,60	BSC-AL-125 87,00	BSC-AL-150
	FKL	"til butterflyven- tiler, klapkontra- ventiler og kompensa- torer"		FKL-AL-015 33,30	FKL-AL-020 34,50	FKL-AL-025 37,00	FKL-AL-032 39,70	FKL-AL-040 41,90	FKL-AL-050 44,70	FKL-AL-065 49,70	FKL-AL-080 60,40	FKL-AL-100 71,60	FKL-AL-125 81,90	FKL-AL-150
	FPA	"til flangepar og blindflan- ger"		FPA-AL-015 32,90	FPA-AL-020 33,00	FPA-AL-025 33,50	FPA-AL-032 34,50	FPA-AL-040 37,60	FPA-AL-050 39,40	FPA-AL-065 50,20	FPA-AL-080 57,40	FPA-AL-100 63,20	FPA-AL-125 71,30	FPA-AL-150
	DWM	"til 3-vejsventi- ler med muffetilslut- ning"	DWM-AL-010 23,70	DWM-AL-015 23,90	DWM-AL-020 24,20	DWM-AL-025 26,90	DWM-AL-032 29,30	DWM-AL-040 30,80	DWM-AL-050 35,40					
	HSG	"til Heimeier Vario & Kemper Mul- tiTherm"	HSG-AL-010 23,70	HSG-AL-015 23,90	HSG-AL-020 24,20	HSG-AL-025 26,90	HSG-AL-032 29,30	HSG-AL-040 30,80	HSG-AL-050 35,40	HSG-AL-065 42,90				
	HCM	"til TA-strengu- lerings- ventiler STS, STAD, STAM, STAP"	HCM-AL-010 22,10	HCM-AL-015 22,80	HCM-AL-020 23,20	HCM-AL-025 26,40	HCM-AL-032 28,70	HCM-AL-040 31,40	HCM-AL-050 35,40	HCM-AL-065 42,90				
	OMG	"til Oventrop Hydrocontrol Oventrop "Aquastrom" KFR og MNG ALWA KFR"	OMG-AL-010 22,10	OMG-AL-015 22,80	OMG-AL-020 23,20	OMG-AL-025 26,40	OMG-AL-032 28,70	OMG-AL-040 31,40	OMG-AL-050 35,40	OMG-AL-065 42,90				
	SFM	"til smudsfiltre i muffeudfø- relse"	SFM-AL-010 21,30	SFM-AL-015 21,60	SFM-AL-020 22,10	SFM-AL-025 25,30	SFM-AL-032 27,20	SFM-AL-040 29,40	SFM-AL-050 34,80	SFM-AL-065 40,50				
Muffe	SVM	"til ventiler med skrå spindel og kontraven- tiler med muffetilslut- ning"	SVM-AL-010 20,70	SVM-AL-015 21,30	SVM-AL-020 21,60	SVM-AL-025 24,60	SVM-AL-032 26,90	SVM-AL-040 29,20	SVM-AL-050 33,30	SVM-AL-065 39,30				
	SVK	"fil fristrømsventil MNG-Kombi II og III"	SVK-AL-010 20,70	SVK-AL-015 21,30	SVK-AL-020 21,60	SVK-AL-025 24,60	SVK-AL-032 26,90	SVK-AL-040 29,20	SVK-AL-050 33,30	SVK-AL-065 39,30				
Muffe	MVQ.	"til skydere, sædeven- til og kontraklap- per med muffetilslut- ning"	GVM-AL-010 20,70	GVM-AL-015 21,30	GVM-AL-020 21,60	GVM-AL-025 24,60	GVM-AL-032 26,90	GVM-AL-040 29,20	GVM-AL-050 33,30	GVM-AL-065 39,60				
	PKH	"til pumpe- kuglehaner"			PKH-AL-025 18,60	PKH-AL-031 20,30	PKH-AL-032 24,50							
	Σ Σ	"til kuglehaner med muffetislut- ning og kort spindel"	KHM-AL-010 16,60	KHM-AL-015 17,90	KHM-AL-020 18,60	KHM-AL-025 20,30	KHM-AL-032 24,50	KHM-AL-040 28,70	KHM-AL-050 32,60	KHM-AL-065 38,00				
	Туре	Størrelse	DN 10	DN 15	DN 20	DN 25	DN 32	DN 40	DN 50	DN 65	DN 80	DN 100	DN 125	DN 150

PRISLISTE TOPO ENERGY BOX, PS Enter an exact fixture type with each order.

						Muffe										Flange			
Туре	Σ Σ	PKH	GVM	SVK	SVM	SFM	OMG	Σ T C M	HSG	DWM	NSN	UKM	FPA	FKL	BSC	FVK	FVL	SVF	DWV
Størrelse	"fil kuglehaner med muffetilslut- ning og kort spindel"	"fil pumpe- kuglehaner"	"til skydere, sædeventil og kontra- klapper med muffe- tilslutning"	"til fristrøm- sventil MNG - Kombi II og III"	"til ventiler med skrå spindel og kontraventiler med muffetil- slutning"	"til smudsfiltre i muffeudfø- relse"	"til Oventrop Hydrocontrol Oventrop "Aquastrom" KFR og MNG ALWA KFR"	"til TA-strengule- rings- ventiler STS, STAD, STAM, STAP"	"til Heimeier Vario & Kemper Mul- tTherm"	"til 3-vejsventiler med muffetislut- ning"	alle almindeli- ge fristrøms- ventiler	ale almindeli- ge kuglehaner i med muffetil- slutning	"til flangepar og blindflan- ger"	"fil butterflyven- tiler, klapkontra- ventiler og kompen sa- torer"	"fil KSB-Boa Super Com- pact"	"fil korte kugle-, membran-, sæde- og flangeven- tiler iht. DIN-længde F4"	'til lange kugle-, membran-, sæde- og flangeven- tiler iht. DIN-længde F1"	'til smuds- filtre og fristrømsven- tiler med flangetilslut- ning"	"til trevejsventil med flangetilslut- ning"
DN 10	KHM-PS-010 11,60		GVM-PS-010 16,40	SVK-PS-010 16,40	SVM-PS-010 16,40	SFM-PS-010 16,40		OMG-PS-010 HCM-PS-010 18,30 18,30	HSG-PS-010 19,20	DWM-PS-010 19,20	USV-PS-010 18,30	UKM-PS-010 16,40							
DN 15	KHM-PS-015 11,90		GVM-PS-015 16,70	SVK-PS-015 16,70	SVM-PS-015 16,70	SFM-PS-015 16,70		OMG-PS-015 HCM-PS-015 19,00 19,00	HSG-PS-015 19,20	DWM-PS-015 19,20	USV-PS-015 19,00	UKM-PS-015 16,70	FPA-PS-015 26,80	FKL-PS-015 27,30	BSC-PS-015 35,30	FVK-PS-015 35,10	FVL-PS-015 37,70	SVF-PS-015 37,70	DWW-PS-015 57,30
DN 20	KHM-PS-020 12,50	PKH-PS-025 12,50	GVM-PS-020 17,50	SVK-PS-020 17,50	SVM-PS-020 17,50	SFM-PS-020 17,50		OMG-PS-020 HCM-PS-020 19,00 19,00	HSG-PS-020 19,20	DWM-PS-020 19,20	USV-PS-020 19,00	UKM-PS-020 17,50	FPA-PS-020 26,90	FKL-PS-020 27,80	BSC-PS-020 36,70	FVK-PS-020 35,30	FVL-PS-020 38,70	SVF-PS-020 38,70	DWV-PS-020 58,50
DN 25	KHM-PS-025 14,10	PKH-PS-031 14,10	GVM-PS-025 19,80	SVK-PS-025 19,80	SVM-PS-025 19,80	SFM-PS-025 19,80		OMG-PS-025 HCM-PS-025 21,80 21,80	HSG-PS-025 21,90	DWM-PS-025 21,90	USV-PS-025 21,80	UKM-PS-025 19,80	FPA-PS-025 27,30	FKL-PS-025 31,30	BSC-PS-025 37,70	FVK-PS-025 37,10	FVL-PS-025 41,70	SVF-PS-025 41,70	DWV-PS-025 62,20
DN 32	KHM-PS-032 17,00	PKH-PS-032 16,90	GVM-PS-032 21,60	SVK-PS-032 21,60	SVM-PS-032 21,60	SFM-PS-032 21,60		OMG-PS-032 HCM-PS-032 23,30 23,30	HSG-PS-032 23,70	DWM-PS-032 23,70	USV-PS-032 23,30	UKM-PS-032 21,60	FPA-PS-032 28,50	FKL-PS-032 35,30	BSC-PS-032 44,60	FVK-PS-032 42,40	FVL-PS-032 48,20	SVF-PS-032 48,20	DWV-PS-032 70,70
DN 40	KHM-PS-040 20,40		GVM-PS-040 24,30	SVK-PS-040 24,30	SVM-PS-040 24,30	SFM-PS-040 24,30		OMG-PS-040 HCM-PS-040 25,30 25,30	HSG-PS-040 26,70	DWM-PS-040 26,70	USV-PS-040 25,30	UKM-PS-040 24,30	FPA-PS-040 31,30	FKL-PS-040 42,00	BSC-PS-040 49,00	FVK-PS-040 48,00	FVL-PS-040 54,90	SVF-PS-040 54,90	DWV-PS-040 80,30
DN 50	KHM-PS-050 24,50		GVM-PS-050 27,30	SVK-PS-050 27,30	SVM-PS-050 27,30	SFM-PS-050 27,30		OMG-PS-050 HCM-PS-050 27,80 27,80	HSG-PS-050 29,70	DWM-PS-050 29,70	USV-PS-050 27,80	UKM-PS-050 27,30	FPA-PS-050	FKL-PS-050 45,70	BSC-PS-050 54,70	FVK-PS-050 53,80	FVL-PS-050 65,70	SVF-PS-050 65,70	DWW-PS-050 94,60
DN 65	KHM-PS-065 29,10		GVM-PS-065	SVK-PS-065	SVM-PS-065 33,30	SFM-PS-065 33,30		OMG-PS-065 HCM-PS-065 36,90 36,90					FPA-PS-065 42,30	FKL-PS-065 51,40	BSC-PS-065 64,20	FVK-PS-065 62,00	FVL-PS-065 79,90	SVF-PS-065 79,90	DWV-PS-065 112,90
DN 80													FPA-PS-080 48,40	FKL-PS-080 59,70	BSC-PS-080 74,70	FVK-PS-080 73,50	FVL-PS-080 98,10	SVF-PS-080 98,10	DWV-PS-080 138,40
DN 100													FPA-PS-100 53,50	FKL-PS-100 66,10	BSC-PS-100 85,40	FVK-PS-100 85,00	FVL-PS-100 125,60	SVF-PS-100 125,60	DWV-PS-100 174,70
DN 125													FPA-PS-125 60,00	FKL-PS-125 79,60	BSC-PS-125 97,00	FVK-PS-125 96,50	FVL-PS-125 141,50	SVF-PS-125 141,50	DWV-PS-125 204,10
DN 150													FPA-PS-150 67,50	FKL-PS-150 96,30	BSC-PS-150 106,20	FVK-PS-150 109,80	FVL-PS-150 170,70	SVF-PS-150 170,00	DWV-PS-150 216,80

CONTACT PERSONS



Erik Kaag Sales and Marketing Manager

eka@tinby.dk Ph. +45 4233 0187

TECHNICAL SUPPORT



Jytte Simonsen Logistical Coordinator

js@tinby.dk Ph. +45 6489 1440

Tinby A/S | Snavevej 6-10 | DK-5471 Søndersø

tinby@tinby.dk Ph. +45 6489 1440 www.tinby.dk



CONDITIONS OF SALE AND TERMS OF DELIVERY FOR PLASTIC COMPONENTS

1. Terms of Delivery

Delivery shall be made in accordance with Incoterms 2000 EXW (Ex Works)

2. Terms of payment

Payment shall be made in Danish kroner, unless otherwise agreed in writing.

If payment is not made when due, interest shall be charged at 1% per month or part thereof.

3. Property reservation and retention right

TINBY shall retain property in the delivered products, until the full purchase sum with interest, costs, etc., has been paid. TINBY may retain tools, until all outstanding amounts have been paid.

4. Complaints

All and any risks related to the goods shall pass to the Buyer at the time of delivery of the goods. Any complaints regarding the goods shall be made in writing to TINBY as soon as possible, but not later than eight days after delivery. If TINBY has not received the complaint within the stated deadline, the Buyer's right to object to quantity and quality shall be lost.

TINBY shall be entitled and obliged to remedy all deficiencies. TINBY itself shall decide whether such remedial action shall take the form of repair or replacement of the defective part/s, or a replacement delivery.

TINBY's liability shall only cover deficiencies which appear within twelve months of the date of delivery.

Other than as mentioned above, TINBY shall not be liable for deficiencies. This concerns any loss which the deficiency may cause, including operating loss, loss of profit or other financial, consequential losses.

5. Warranties

If TINBY has undertaken to offer a warranty, this warranty shall cover defects and deficiencies in materials and manufacture. A warranty offered by TINBY does not cover defects and deficiencies caused by inadequate maintenance, incorrect installation, changes made by the Buyer or incorrect use of the product. Furthermore, the warranty does not cover normal wear and normal deterioration. TINBY's warranty obligation requires that the Buyer is able to document that any ascertained defect or deficiency has not been caused by the elements exempted from the warranty, cf. above.

The Buyer shall notify TINBY in writing of any defects or deficiencies in the products sold not later than eight days after the defect or deficiency was or should have been discovered by the Buyer. If the Buyer does not notify TINBY by this deadline and before the expiry of the warranty period, the Buyer shall lose his right to advance any claims in relation to such defect or deficiency. TINBY shall be entitled and obliged to remedy all deficiencies covered by a warranty issued by TINBY. It is up to TINBY itself to decide whether such remedial action shall take the form of repair or replacement of the defective part/s, all on the terms stated under item 4.

TINBY shall have no other liability in connection with such deficiencies. This applies to any loss caused by the deficiency, including operating loss, loss of profit or any other financial, consequential losses.

6. Product liability

The Buyer shall indemnify TINBY to the extent TINBY is held liable towards a third party for such damage and such loss for which TINBY is not liable towards the Buyer in accordance with this item.

TINBY shall not be liable for damage caused by the products sold: a) on real property or chattels, where such damage occurs while the equipment is in the Buyer's possession.

b) on products manufactured by the Buyer or products in which such products form part, or for damage to real property or chattels caused by such products as a result of the products sold. In no case shall TINBY be liable for operating loss, loss of profit or any other financial, consequential losses.

If a third party advances a claim against either party for damages in accordance with this item, the party against which the claim is advanced shall immediately inform the other party. TINBY and the Buyer shall be mutually obliged to let themselves be sued before the court or arbitration tribunal, which deals with the compensation claim advanced against either of them on the basis of damage or loss claimed to be caused by the equipment. However, disputes between the Buyer and TINBY shall always be decided before the agreed venue in accordance with these Conditions of Sale and Terms of Delivery.

7. Delavs

If a delay occurs, the Buyer shall be informed accordingly. In case of a delay, the Buyer shall not acquire any other rights than to be able to cancel the agreement. The Buyer may only cancel the agreement if the delay is significant to the Buyer and the delay can be attributed to TINBY. In such case, the Buyer shall – after delivery was to have been made – forward a written request to TINBY that delivery be made within three weeks. If delivery is not made within the three-week deadline, the Buyer may cancel the purchase.

8. Insurance, storage and maintenance of tools

The Buyer shall be obliged to take out insurance covering tools stored by TINBY. Such insurance shall cover fire, theft, wilful and fortuitous destruction.

If the tools are stored by TINBY, TINBY shall store the Buyer's tools safely and maintain them.

If tools are stored, but not used, the Buyer shall pay DKK 3,000 per year storage rent. Tools which have not been used for three years may be returned by TINBY for the Buyer's account.

9. Disclaimer and force majeure

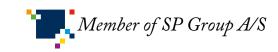
The following circumstances shall release TINBY from any liability, provided such circumstances occur after the agreement was made, and these circumstances shall also release TINBY from any duty to execute the agreement:

Strike, lock-out, business interruption, delayed delivery from subcontractors and similar cases which delay the time of delivery correspondingly. War, civil unrest, Acts of God and similar circumstances beyond the parties' control, including shortage of goods, seizure, currency restrictions or authority intervention shall entitle TINBY to fully or partially cancel any offer made or any standing order. The party claiming force majeure shall be obliged to inform the other party by express letter / fax / e-mail within 14 days of such a force majeure situation occurring.

10. Disputes

All and any disputes between the parties shall be decided in accordance with Danish law. Attempts shall always be made to settle disputes amicably. If a dispute cannot be settled amicably, such dispute shall be decided by the Danish Institute of Arbitration in Copenhagen. However, TINBY may choose to file a lawsuit with the ordinary courts of law.

TINBY A/S



- A PART OF SP GROUP

Tinby A/S was founded in 1972 and is today Scandinavia's leading supplier of polyurethane solutions. Our blanks, made from flexible, solid, or foamed polyurethane, are used in furniture, instruments, window insulation, and wind turbines, among other applications. As a comprehensive supplier, we develop highly specialised plastics to meet diverse product requirements. Additionally, we offer a wide range of technologies and techniques for refining the material.

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