

Submittal Data

PROJECT:	UNIT TAG:	QUANTITY:	
	 TYPE OF SERVICE:		
REPRESENTATIVE:	SUBMITTED BY:	 DATE:	
ENGINEER:	APPROVED BY:	DATE:	
CONTRACTOR:	 ORDER NO.:	 DATE:	

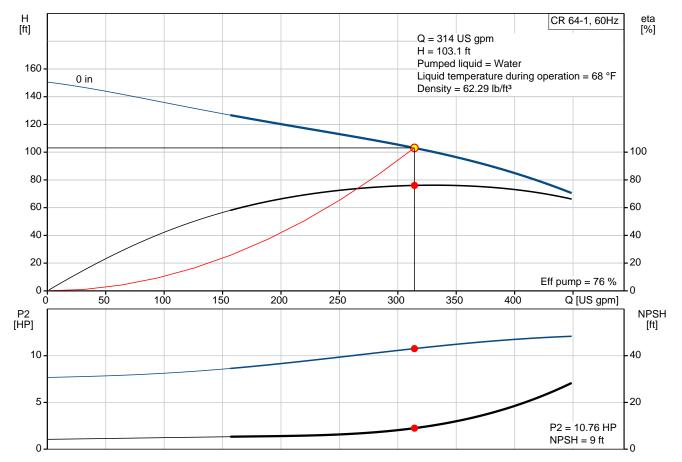


CR 64-1

Vertical, multistage centrifugal pump with suction and discharge ports on the same level. The pump head and base are in cast iron. All other wetted parts are in stainless steel (EN 1.4301) (AISI 304)

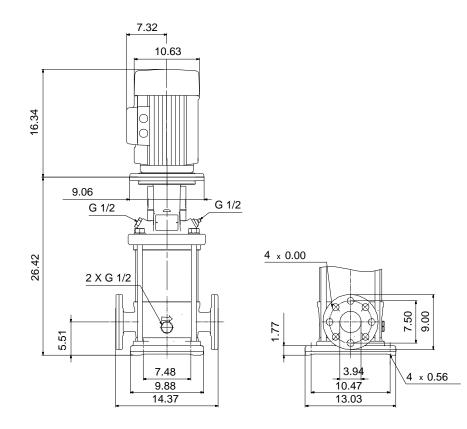
Product photo could vary from the actual product

Conditions	s of Service	Pump Data		Mc	otor Data
Flow:	314 US gpm	Max pressure at stated temperature:	232 psi / 250 °F	Rated power - P2:	15 HP
Head:	103.1 ft	Maximum ambient temperature:	104 °F	Rated voltage:	208-230/460 V
Efficiency:		Approvals:	CURUS,NSF61	Main frequency:	60 Hz
Liquid:	Water	Shaft seal:	HQQE	Enclosure class:	23 >12.5mm/Spraying
Temperature:	68 °F	Product number:	96418847	Insulation class:	F
NPSH required:	9 ft			Motor protection:	NONE
Viscosity:				Motor type:	BALDOR
Specific Gravity:	1.000				



Submittal Data





Materials:

Base: Impeller:

Code for rubber: E

Material code:

Cast iron EN 1563 EN-GJS-500-7 ASTM A536 80-55-06 Stainless steel AISI 304 EN 1.4301 A



Tender Text



Product No.: 96418847 CR 64-1 A-G-A-E-HQQE Vertical, non-self-priming, multistage, in-line, centrifugal pump for installation in pipe systems and mounting on a foundation. The pump has the following characteristics: Impellers and intermediate chambers are made of The shaft seal has assembly length according to EN 12756. - Power transmission is via cast iron split coupling. The motor is a 3-phase AC motor. Controls: Frequency converter: NONE Liquid: Pumped liquid: Water Liquid temperature during operation: 68 °F Density: 62.29 lb/ft3 **Technical:** Speed for pump data: 3444 rpm Actual calculated flow: 314 US gpm Resulting head of the pump: 103.1 ft Pump orientation: Vertical Shaft seal arrangement: Single Code for shaft seal: HQQE Approvals on nameplate: CURUS,NSF61 Curve tolerance: ISO9906:2012 3B Materials: Base: Cast iron EN 1563 EN-GJS-500-7 ASTM A536 80-55-06 Impeller: Stainless steel EN 1.4301 AISI 304 Bearing material: SIC Support bearing: Graflon Installation: Maximum ambient temperature: 104 °F Max pressure at stated temperature: 232 psi / 250 °F 232 psi / -22 °F

ANSI

Type of connection:

2/20/2018



Date:

2/20/2018

Size of suction port:	4 inch
Size of outlet port:	4 inch
Pressure rating:	PN 16
Flange size for motor:	254TC
Flange rating inlet:	150 lb

Electrical data:

Motor standard:	NEMA
Motor type:	BALDOR
IE Efficiency class:	NEMA Premium / IE3 60Hz
Rated power - P2:	15 HP
Power (P2) required by pump:	15 HP
Main frequency:	60 Hz
Rated voltage:	3 x 208-230/460 V
Service factor:	1.15
Rated current:	36-35/17.5 A
Rated speed:	3475 rpm
Number of poles:	2
Enclosure class (IEC 34-5):	23 >12.5mm/Spraying
Insulation class (IEC 85):	F
Others:	

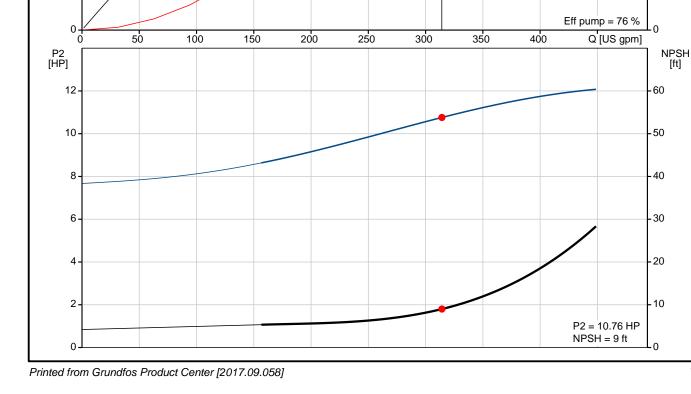
Net weight:	321 lb
Gross weight:	339 lb
Shipping volume:	10.9 ft ³

G	RU		Company Created by Phone:		
			Date:	2/20/2018	
Position	Count	Description			
	1	CR 64-1 A-G-A-E-HQQE			
		Product No.: 96418847 Vertical, non-self-priming, multist centrifugal pump for installation is and mounting on a foundation. The pump has the following chan - Impellers and intermediat - The shaft seal has assem according to EN 12756. - Power transmission is via	n pipe systems racteristics: e chambers are made ibly length	of	
		coupling. The motor is a 3-phase AC moto	r.		
		Controls: Frequency converter:	NONE		
		Liquid: Pumped liquid: Liquid temperature during operation Density:	Water tion: 68 °F 62.29 lb/ft ³		
		Technical: Speed for pump data: Actual calculated flow: Resulting head of the pump: Pump orientation: Shaft seal arrangement: Code for shaft seal: Approvals on nameplate: Curve tolerance:	3444 rpm 314 US gpm 103.1 ft Vertical Single HQQE CURUS,NSF61 ISO9906:2012 3B		
		Materials: Base:	Cast iron EN 1563 EN-GJS-500 ASTM A536 80-55-06		
		Impeller:	Stainless steel EN 1.4301 AISI 304	J	
		Bearing material: Support bearing:	SIC Graflon		
		Installation: Maximum ambient temperature: Max pressure at stated temperat			
		Type of connection: Size of suction port:	ANSI 4 inch		



			Date:	2/20/2018
Position	Count	Description		
		Size of outlet port:	4 inch	
		Pressure rating: Flange size for motor:	PN 16 254TC	
		Flange rating inlet:	150 lb	
		Electrical data: Motor standard:	NEMA	
		Motor type:	BALDOR	
		IE Efficiency class:	NEMA Premium / IE3 60Hz	
		Rated power - P2:	15 HP 15 HP	
		Power (P2) required by pump: Main frequency:	60 Hz	
		Rated voltage:	3 x 208-230/460 V	
		Service factor:	1.15	
		Rated current: Rated speed:	36-35/17.5 A 3475 rpm	
		Number of poles:	2	
		Enclosure class (IEC 34-5):	23 >12.5mm/Spraying	
		Insulation class (IEC 85):	F	
		Others:		
		Net weight:	321 lb	
		Gross weight: Shipping volume:	339 lb 10.9 ft³	

Company name: Created by: **GRUNDFOS** Phone: Date: 2/20/2018 96418847 CR 64-1 60 Hz H [ft] CR 64-1, 60Hz eta [%] Q = 314 US gpm H = 103.1 ft Pumped liquid = Water Liquid temperature during operation = 68 °F Density = 62.29 lb/ft3 160 0 in 140 120 100 100 80 80



60

40

20

60

40

-20

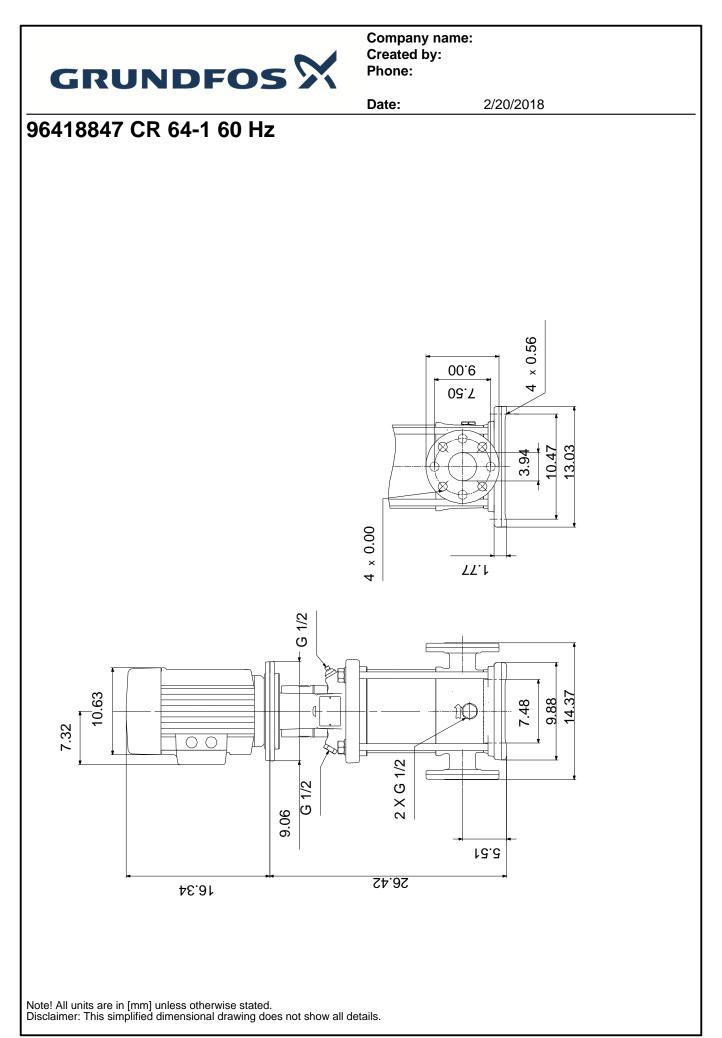


		Date:			2/20	/201	8				
Description	Value	H [ft]						C	R 64-1, 6	0Hz	eta [%]
General information:	value	լոյ			Q = 314 l			1	1 1		[/0]
Product name:	CR 64-1 A-G-A-E-HQQE				H = 103.1 Pumped I		Water				
Product No.:	96418847	160 -			Liquid ten	nperatu	re durin	g opera	ation = 68	3°F	
		100	0 in		Density =	62.29	b/ft ³	1			
EAN:	5700390736835	140 -									
Technical:											
Speed for pump data:	3444 rpm	120 -						_			
Actual calculated flow:	314 US gpm										
	103.1 ft	100 -					P				- 100
Resulting head of the pump:	1										
Stages:		80 -									- 80
mpellers:	1										
Low NPSH:	N	60 -						_			- 60
Pump orientation:	Vertical										
Shaft seal arrangement:	Single	40 -						_	_		- 40
Code for shaft seal:	HQQE										
Approvals on nameplate:	CURUS,NSF61	20 -	-	-				_			- 20
Curve tolerance:	ISO9906:2012 3B							Fff r	oump = 70	6%	
Pump version:	A	0	50	100 15	50 200	250	300	350			- 0
Model:	В	P2	50	100 13	JU 200	200	500	550	G [03 g	[III9	NPS
Cooling:	ODP	[HP]									[ft]
		. 1						+			
Materials:		10 -				\rightarrow	-	_			- 50
Base:	Cast iron	8-									- 40
	EN 1563 EN-GJS-500-7										
	ASTM A536 80-55-06	6-							1		- 30
Impeller:	Stainless steel	4 -									- 20
	EN 1.4301										
	AISI 304	2-							2 = 10.76		- 10
Material code:	A	0						N	PSH = 9 f	t	-0
Code for rubber:	E	۳									
Bearing material:	SIC			7.32							
Support bearing:	Graflon			10.6	3						
Capport boaring.	Claion										
Installation:		16.34			(
Maximum ambient temperature:	104 °F	-									
Max pressure at stated temperature:											
	232 psi / -22 °F		<u>9.06</u>	1/2	G 1/2						
Type of connection:	ANSI		_		H <u>a</u> r						
Connect code:	G	26.42		₩ <u></u>	ŦĽ	<u>4 × 0.0</u>	00				
	-	26	2	K G 1/2	" "			\square			
Size of suction port:	4 inch		⊢	_HIV#	714	~	16A	<u>}</u>	9.00		
Size of outlet port:	4 inch		5.51		±¶1	4.7		jø⁄Ľ	[
Pressure rating:	PN 16			7.48		1	3.9	<u>a</u> t []	4 × 0.56		
Flange size for motor:	254TC			9.88	<u> </u>		10.4	47			
Flange rating inlet:	150 lb										
1 ii.d.				LOW VOLTAGE			٦				
Liquid:	\A/=+		DI	RECTION OF ROT							
Pumped liquid:	Water										
Liquid temperature during operation:	68 °F										
Density:	62.29 lb/ft ³			(W2) (U	9 YE						
		. 📲	₽₽	<u>(U1) (</u> V	<u>1) (w1)</u>						
Electrical data:			<u> </u>			¥					
Motor standard:	NEMA			L1 L2	L3						
Notor type:	BALDOR	B		HIGH VOLTAGE							
E Efficiency class:	NEMA Premium / IE3 60Hz										
Rated power - P2:	15 HP		г								
Power (P2) required by pump:	15 HP			(w2)-(u	<u>2)-(v2)</u>						
KVA code:	G										
Main frequency:	60 Hz	` ⊺	Ţ		24						
Rated voltage:	3 x 208-230/460 V					⊜	1				

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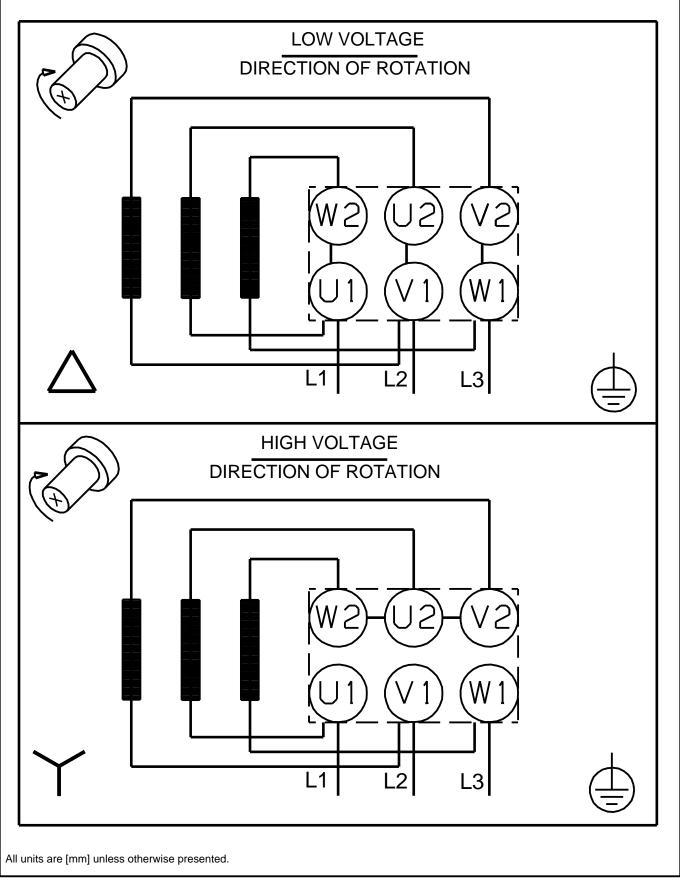
		Date:	2/20/2018
Description	Value		
Service factor:	1.15		
Rated current:	36-35/17.5 A		
Load current:	42-39.2/19.6 A		
Rated speed:	3475 rpm		
Number of poles:	2		
Enclosure class (IEC 34-5):	23 >12.5mm/Spraying		
Insulation class (IEC 85):	F		
Motor protection:	NONE		
Motor Number:	84Z00H19		
Controls:			
Frequency converter:	NONE		
Others:			
Net weight:	321 lb		
Gross weight:	339 lb		
Shipping volume:	10.9 ft ³		
Sales region:	Namreg		





2/20/2018

96418847 CR 64-1 60 Hz





2/20/2018

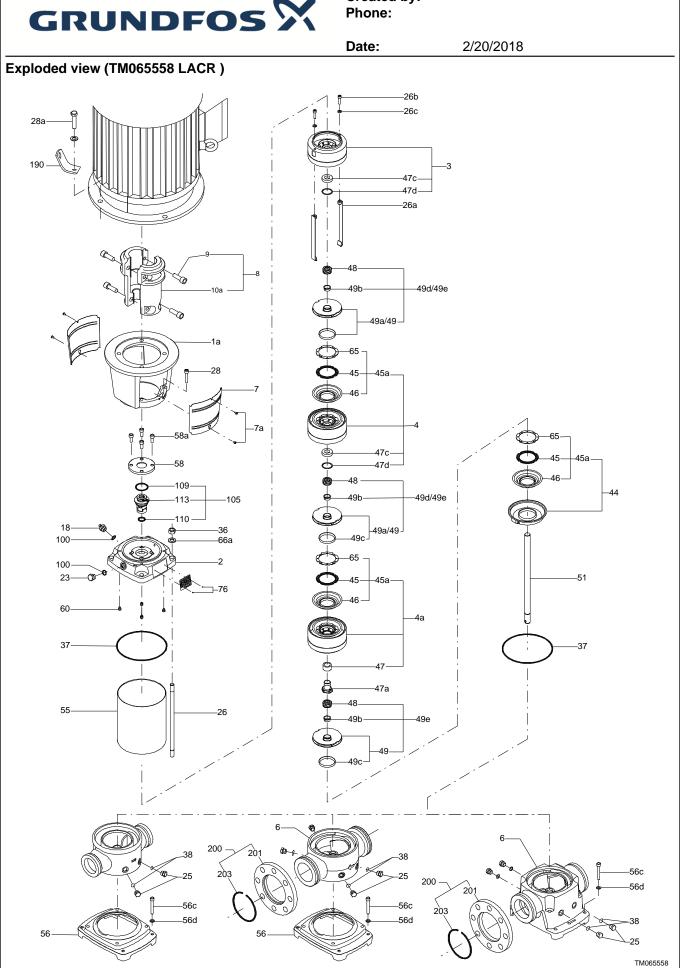
Order Data:

Product name: CR 64-1 A-G-A-E-HQQE Amount: 1 Product No.: 96418847

Total: Price on request



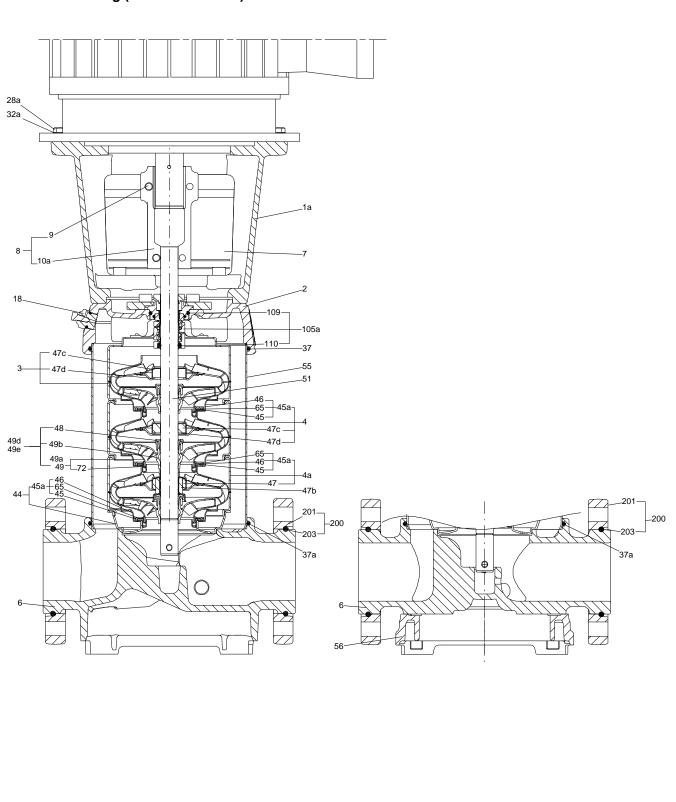
Company name: Created by:





2/20/2018

Sectional drawing (TM065571 LACR)





2/20/2018

Parts list CR 64-1, Prod number 96418847 Valid from 3.3.2014 (1410)

FUSICION	Description	Annotation	Classification data	Part No.		
	Motor				1	рс
	Flange cpl.				2	рс
201	Flange		Pressure (bar): 150	-4	1	
			Dimension: 229X25			
203	Lock ring				1	
	Motor stool cpl.				1	рс
1a	Motor stool				1	
7	Coupling guard				2	
7a	Socket button head screw				4	
28	Hex socket head cap screw		Designation: DIN 97	12	4	
			Length: 50			
			Thread: M10			
28a	Hex socket head cap screw		Length: 13		4	
	· · ·		Thread: 1/2"			
1	Basic unit				1	рс
2a	Pump head cpl.				1	
	O-ring					
2a	Pump head					
9	Hex socket head cap screw		Designation: DI	N 912		
0			Length: 25	11012		
			Thread: M10			
18	Air vent screw					
10	Plug					
	Spindle					
23	Plug					
58	Cover					
60	Spring					
100	O-ring		Diameter: 16,3			
100	O-Illig		Material type: EPDM			
			Thickness: 2,4			
Ch	Dece ent			٨	1	
6b	Base cpl.		Rubber type: EPDM	/1	I	
0	O-ring					
6	Base					
25	Plug			14054		
32	Washer		Designation: DI	N 125A		
			Inner diameter: 6,4			
			Outer diameter: 12,0			
<u></u>			Thickness: 1,6			
38	O-ring		Diameter: 16,3			
			Material type: EPDM			
			Thickness: 2,4			
26	Staybolt		Length: 250		4	
			Thread: M16			
36	Hex nut		Thread: M16		4	
55	Outer sleeve		Outer diameter: 216	6	1	
			Length: 106			
66a	Washer		Designation: DIN 12	25 A	4	
			Inner diameter: 17			
			Outer diameter: 30			
			Thickness: 3			
80	Chamber stack				1	
3	Upper chamber cpl.					
	Chamber					



Basitian	Description	Annotation	Classification data	Part No.	Court	
Position	Guide vane	Annotation	Classification data	Part No.	Count	Unit
	Cone					
	Guide cup					
	Guide cup					
3	Upper chamber cpl.					
47	Bearing					
26a	Strap cpl.					
204	Nut					
	Strip					
26b	Hex socket head cap screw					
26c	Washer		Designation:	DIN 125A		
			Inner diameter: 8,4	-		
			Outer diameter: 16			
			Thickness: 1,6			
44	Suction interconnector coupling					
	Neck ring					
	Inlet part					
45	Seal ring					
65	Top f/neck ring					
47a	Bearing cpl.					
	Disc spring					
	Bearing ring, rotating					
	Holder					
	Driver					
	Hairpin clip					
49	Impeller cpl.					
48	Nut					
49	Impeller					
	Impeller hub					
49c	Wear ring					
49b	Split cone					
51	Shaft		D: : 00/44.0			
8	Coupling cpl.		Dimension: 22/41,2	040	1	pcs
9	Hex socket head cap screw		Designation: DIN	912	4	
			Length: 25 Thread: M10			
100	Coupling holf				0	
10a 105	Coupling half Shaft seal		Matarial type: UOOF		2	000
105	Adjusting fork		Material type: HQQE		1	pcs
109	O-ring				1	
110	O-ring		Diameter: 21,5		1	
			Material type: EPDM		I	
			Thickness: 4,25			