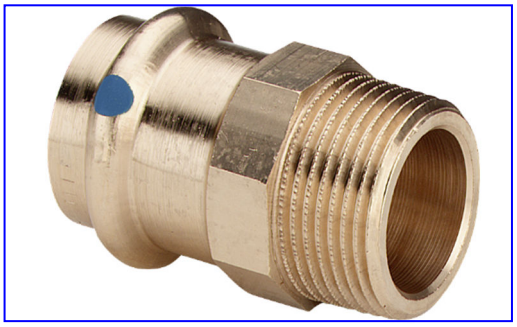
Environmental Product Declaration (EPD)

Declaration code EPD-VSP-GB-67.0



Viega GmbH & Co. KG

connecting technology

Sanpress press connectors and pipes

Basis:

DIN EN ISO 14025
EN 15804 + A2

Company EPD
Environmental
Product **D**eclaration

Publication date:
18.12.2023

Valid until:
18.12.2028

www.ift-rosenheim.de/
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EN ISO/IEC 17065

Environmental Product Declaration (EPD)

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Declaration holder	Viega GmbH & Co. KG Viega Platz 1 57439 Attendorn. Germany www.viega.de		
Declaration code	EPD-VSP-GB-67.0		
Designation of declared product	Sanpress press connectors and pipes		
Scope	Connecting and fitting technology for use in piping systems.		
Basis	This EPD was prepared on the basis of EN ISO 14025:2011 and DIN EN 15804:2012+A2:2019. In addition. the "Allgemeiner Leitfaden zur Erstellung von Typ III Umweltproduktdeklarationen" (General guideline for preparation of Type III Environmental Product Declarations) applies. The declaration is based on the PCR documents “PCR Part A” PCR-A-0.3:2018 and “Piping systems including connecting and fitting technology” PCR-RS-1.0:2022.		
Validity	Publication date: 18.12.2023	Last revision: 26.03.2026	Valid until: 18.12.2028
	This verified Company Environmental Product Declaration (company EPD) applies solely to the specified products and is valid for a period of five years from the date of publication in accordance with DIN EN 15804.		
LCA Basis	The LCA was prepared in accordance with DIN EN ISO 14040 and DIN EN ISO 14044. The base data includes the data collected at one production plant of Viega GmbH & Co. KG. and the generic data derived from the Ecoinvent 3 data base (v3.8 with aggregated inputs) and Ecoinvent EN 15804. LCA calculations were carried out for the included “cradle to grave” including all upstream chains (e.g. raw material extraction. etc.).		
Notes	The ift-Guidance Sheet “Conditions and Guidance for the Use of ift Test Documents” applies. The declaration holder assumes full liability for the underlying data. certificates and verifications.		

Christoph Seehauser Deputy Head of Sustainability	Dr. Torsten Mielecke Chairman of Expert Committee ift-EPD and PCR	Prof. Dr. Eric Brehm External verifier

1 General Product Information

Product definition

The EPD relates to the product group connecting technology and applies to:

1 kg Sanpress press connector and 1 linear metre Sanpress pipe of company Viega GmbH & Co. KG

These are divided into the following product groups:

Product group (PG)		Unit weight
PG1	Sanpress	0.022 - 5.355 kg
PG2	Sanpress LF	0.0394 - 5.200 kg
PG3	Sanpress pipe	0.266 - 5.202 kg

*The respective conversion values can be found in Annex B.

Table 1 Product groups*

The declared unit is obtained by summing up:

PG	Assessed product	Unit weight	Declared unit
1	Weighted average	177.05 g[1]	1 kg
2	Adapter with SC (Item no. 430863)	39.35 g[1]	1 kg
3	Sanpress pipe (Item no. 354848)	4.653.00 g[1]	1 linear metre

[1]A conversion for different unit weights/length weights is possible by dividing the results by the balanced unit weight/length weight and multiplying them by the respective unit weight/length weight from Annex B.

Table 2 Functional unit per reference product

Averaging is explained in the background report.

The average unit is declared as follows:
Directly used material flows are determined by means of manufactured masses (kg) and allocated to the declared unit. All other inputs and outputs in the production were scaled to the declared unit in their entirety since there is no typical functional unit due to the high number of variants. The reference period is the year 2022.

The validity of the EPD is restricted to the systems listed in *The respective conversion values can be found in Annex B.
Table 1.

Product description

Sanpress
Flow-optimized press connector system with press connectors made of gunmetal or silicon bronze (change of material due to the current production changeover from gunmetal to silicon bronze alloy standardised for Viega worldwide) and pipes made of stainless steel 1.4401 and 1.4521. The press connector features a cylindrical pipe guide to protect the sealing element. Press connector sizes ranging from d76.1 diameter with stainless steel cutting ring to ensure the mechanical strength of the connection. Pipes are fitted with pipe plugs for protection. The pressing force is applied in front and behind the sealing element seat. Suitable for wall mounting and concealed applications of risers and storey installations.

Sanpress LF
Flow-optimized press connector system with press connectors made of gunmetal or silicon bronze (change of material due to the current production changeover from gunmetal to silicon bronze alloy standardised for Viega worldwide) and pipes made of stainless steel 1.4401 and 1.4521. Free from paint wetting impairing substances (labs-free) such as: Silicone. grease or oil. Particularly suitable for use in pipe installations in paint shops. The press connector features a cylindrical pipe guide to protect the sealing element. Press connector sizes ranging from d76.1 diameter with stainless steel cutting ring to ensure the mechanical strength of the connection. Pipes are fitted with pipe plugs for protection. The pressing force is applied in front and behind the sealing element seat. Suitable for wall mounting and concealed applications of risers and storey installations.

For a detailed product description refer to the manufacturer specifications or the product specifications of the respective offer/quotation.

Product manufacture

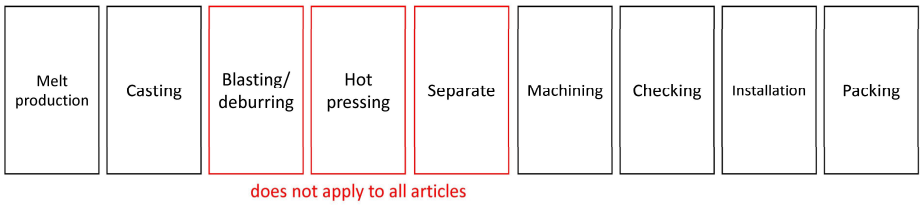


Illustration 1 Manufacturing process

Note: Depending on the product type. not all production steps are carried out.

Application

- Drinking water
- Rainwater
- Compressed air systems
- Agriculture
- Industrial applications

Test evidence / reports

For information on updated verifications (incl. other national approvals) refer to Sanpress | viega.de.

Management systems

The following management systems are held:

- Quality management system as per DIN EN ISO 9001:2015
- Energy management system as per DIN EN ISO 50001:2018
- Environmental management system as per DIN EN ISO 14001:2015
- Occupational health and safety management system as per DIN EN ISO 45001:2018

Additional information

For additional verifications of applicability or conformity refer to the CE marking and the documents accompanying the product. if applicable.

2 Materials used

Primary materials

The raw materials used can be found in Section 6.2 Inventory analysis (Inputs).

Declarable substances

Substances according to REACH candidate list are included (declaration of 04.10.2023). Further information on the listed substance and the corresponding SCIP number are available on request from the manufacturer.

All relevant safety data sheets are available from Viega GmbH & Co. KG.

3 Construction process stage

Processing recommendations. installation

Observe the instructions for assembly/installation. operation. maintenance and disassembly. provided by the manufacturer. For this. see www.viega.de

4 Use stage

Emissions to the environment

No emissions to indoor air. water and soil are known. There may be VOC emissions. There is no contact with the indoor/outdoor air.

Reference service life (RSL)

The RSL information was provided by the manufacturer. The RSL must be established under specified reference conditions of use and relate to the declared technical and functional performance of the product within the building. It must be determined according to all specific rules given in European product standards or. if none are available. according to a c-PCR. It must also take into account ISO 15686-1. -2. -7 and -8. If there is guidance on deriving RSLs from European Product Standards or a c-PCR. then such guidance must take precedence.
If it is not possible to determine the service life as the RSL in accordance with ISO 15686. the BBSR table “Nutzungsdauer von Bauteilen zur Lebenszyklusanalyse nach BNB” (service life of building components for life cycle assessment in accordance with the sustainable construction evaluation system) can be used. For further information and explanations refer to www.nachhaltigesbauen.de.

For this EPD the following applies:
For a "cradle to grave" EPD and Module D (A + B + C + D). a reference service life (RSL) must be specified.
The service life for Sanpress press connectors and pipes of company Viega GmbH & Co. KG is specified as 50 years according to the manufacturer.

The service life is dependent on the characteristics of the product and in-use conditions. The conditions and characteristics described in the EPD are applicable. in particular the characteristics listed below:

- Outdoor environment: Climatic influences may have a negative impact on the service life.

- Indoor environment: No impacts (e.g. humidity. temperature) known that have a negative effect on the service life.

The service life solely applies to the characteristics specified in this EPD or the corresponding references.
The RSL does not reflect the actual life time. which is usually determined by the service life and the redevelopment of a building. It does not give any information on the useful life. warranty referring to performance characteristics or guarantees.

5 End-of-life stage

Possible end-of-life stages

Sanpress press connectors and pipes are sent to central collection points. There the products are usually shredded and sorted into their constituents. The end-of-life stage depends on the site where the products are used and is therefore subject to the local regulations. Observe the locally applicable regulatory requirements.

In this EPD. the modules of after-use are presented according to the market situation. Metal and plastics are recycled to certain parts. Residual fractions are sent to landfill or. in part. thermally recycled.

Disposal routes

The LCA includes the average disposal routes.

All life cycle scenarios are detailed in the Annex.

6 Life Cycle Assessment (LCA)

Environmental product declarations are based on life cycle assessments (LCAs) which use material and energy flows for the calculation and subsequent representation of environmental impacts.

As a basis for this. life cycle assessments were prepared for Sanpress press connectors and pipes. These LCAs are in conformity with the requirements set out in DIN EN 15804 and the international standards DIN EN ISO 14040. DIN EN ISO 14044. ISO 21930 and EN ISO 14025.

The LCA is representative of the products presented in the Declaration and the specified reference period.

6.1 Definition of goal and scope

Aim

The goal of the LCA is to demonstrate the environmental impacts of the products. In accordance with DIN EN 15804. the environmental impacts covered by this Environmental Product Declaration are presented for the entire product life cycle in the form of basic information. No other additional environmental impacts are specified.

Data quality. data availability and geographical and time-related system boundaries

The specific data originate exclusively from the 2022 fiscal year. They were collected on-site at the plant located in Ennest and originate in parts from company records and partly from values directly obtained by measurement.

Generic data are selected as accurately as possible in terms of geographic reference. If no country-specific data sets are available or if the regional reference cannot be determined. European or globally valid data sets are used.

Data gaps were either filled with comparable data or conservative assumptions. or the data were cut off in compliance with the 1% rule.

The life cycle was modelled using the sustainability software tool “Umberto 11” for the development of life cycle assessments.

The data quality complies with the requirements of prEN 15941:2022.

Scope / system boundaries

The system boundaries refer to the supply of raw materials and purchased parts. manufacture/production. use and end-of-life stage of the Sanpress press connectors and pipes.
No additional data from pre-suppliers/subcontractors or other sites were taken into consideration.

Cut-off criteria

All company data collected. i.e. all commodities/input and raw materials used. the thermal energy and electricity consumption. were taken into consideration.

The boundaries cover only the product-relevant data. Building sections/parts of facilities that are not relevant to the manufacture of the products. were excluded.

The transport distances of the pre-products used were taken into consideration as a function of 100% of the mass of the products. The following means of transport was assumed: >32 t truck/semitrailer. Euro 6. diesel. 53 % capacity utilization

Other transport distances of the pre-products were not taken into consideration.

The criteria for the exclusion of inputs and outputs as set out in DIN EN 15804 are fulfilled. From the data analysis it can be assumed that the total of negligible processes per life cycle stage does not exceed 1% of the mass/primary energy. This way the total of negligible processes does not exceed 5% of the energy and mass input. The life cycle calculation also includes material and energy flows that account for less than 1%.

6.2 Inventory analysis

Aim

All material and energy flows are described below. The processes covered are presented as input and output parameters and refer to the declared units.

Life cycle stages

The complete life cycle of Sanpress press connectors and pipes is shown in the annex. The product stage "A1 – A3". construction process stage "A4 – A5". use stage "B1 – B7". end-of-life stage "C1 – C4" and the benefits and loads beyond the system boundaries "D" are considered.

Benefits

The below benefits have been defined as per DIN EN 15804:

- Benefits from recycling
- Benefits (thermal and electrical) from incineration

Allocation of co-products

Allocations occur during production.
Allocation was based on the masses (units) of products produced.

Allocations for re-use. recycling and recovery

If the products are reused/recycled and recovered during the product stage (rejects). the elements are shredded. if necessary and then sorted into their constituents. This is done by various process plants. e.g. magnetic separators.
The system boundaries were set following their disposal. reaching the end-of-waste status.

Allocations beyond life cycle boundaries

The use of recycled materials in the manufacturing process was based on the current market-specific situation. In parallel to this. a recycling potential was taken into consideration that reflects the economic value of the product after recycling (recyclate).
The system boundary set for the recycled material refers to collection.

Secondary material

The use of secondary material in module A3 by Viega GmbH & Co. KG was considered. Secondary material is not used.

Inputs

The following production-related inputs were recorded in the life cycle assessment for each **1 kg Sanpress press connector** and **1 linear metre of Sanpress pipe**:

Energy
For the input material natural gas. "natural gas. high pressure (GER). domestic supply with seasonal storage" was assumed. For the electricity mix. "electricity. high voltage. production mix (GER)" was assumed.

A portion of the process heat is used for space heating. This can. however. not be quantified. hence a “worst case” figure was taken into account for the product.

Water
There is no water consumption in the individual process steps for production.

The consumption of fresh water specified in Section 6.3 originates (among others) from the process chain of the pre-products and the process water for cooling.

Raw material/Pre-products
The charts below show the share of raw materials/pre-products in percent.

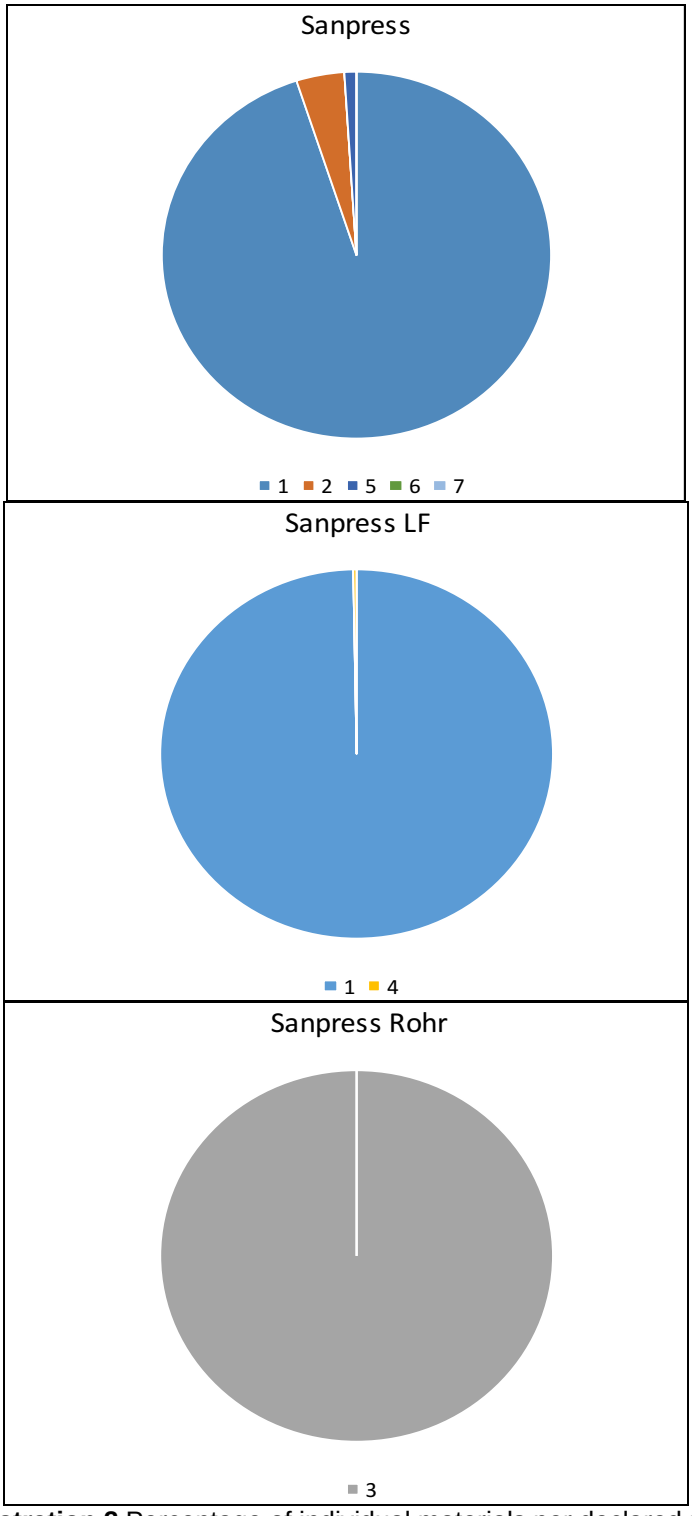


Illustration 2 Percentage of individual materials per declared unit

Ref.	Material	Mass in %		
		Sanpress	Sanpress LF	Sanpress pipe
1	Silicon bronze (SiBr)	94.75 %	99.72 %	0.00 %
2	Stainless steel	3.79 %	0.00 %	0.00 %
3	Stainless steel alloy 1.4401	0.00 %	0.00 %	100.00 %
4	EPDM seal	0.29 %	0.28 %	0.00 %
5	Brass	1.17 %	0.00 %	0.00 %
6	PE	0.00 %	0.00 %	0.00 %
7	PA	0.00 %	0.00 %	0.00 %

Table 3 Percentage of individual materials per declared unit

Ancillary materials and consumables
1 g of ancillary materials and consumables are used for Sanpress. There are no ancillary materials and consumables for the other product groups.

Product packaging
The amounts used for product packaging are as follows:

Material	Mass in kg		
	Sanpress	Sanpress LF	Sanpress pipe
Film	0.02	0.19	0.52
Paper/cardboard	0.01	0.00	0.00

Table 4 Weight in kg of packaging per declared unit

Biogenic carbon content
Only the biogenic carbon content of the associated packaging is reported. as the total mass of biogenic carbon-containing materials is less than 5% of the total mass of the product and associated packaging. According to EN 16449. the following amounts of biogenic carbon are generated for packaging:

Product	Part	Content in kg C
Sanpress	In the corresponding packaging	0.01
Sanpress LF	In the corresponding packaging	0.00
Sanpress pipe	In the corresponding packaging	0.00

Table 5 Biogenic carbon content of the packaging at the factory gate per declared unit

Outputs

The following manufacturing-related outputs were included in the LCA per 1 kg Sanpress press connector or 1 linear metre Sanpress pipe:

Waste
Secondary raw materials were included in the benefits.
See Section 6.3 Impact assessment.

Waste water
Manufacture of Sanpress produces 0.258 kg waste water. There are no ancillary materials and consumables for the other product groups.

6.3 Impact assessment

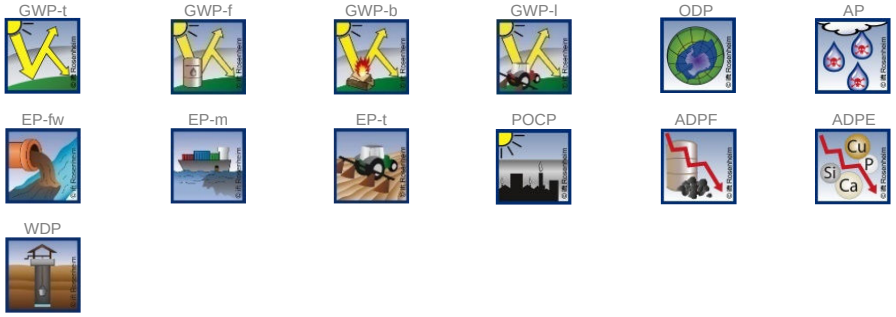
Aim

The impact assessment covers both inputs and outputs. The impact categories applied are stated below:

Core indicators

The models for impact assessment were applied as described in DIN EN 15804-A2.
The core indicators presented in the EPD are as follows:

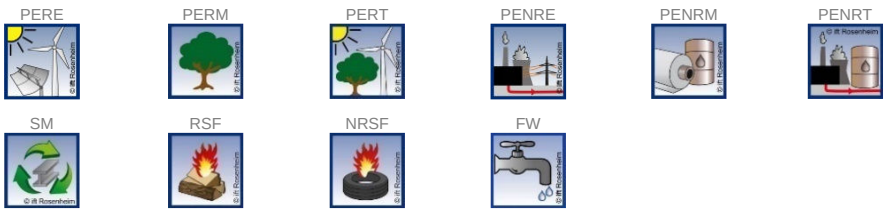
- Climate change - total (GWP-t)
- Climate change - fossil (GWP-f)
- Climate change - biogenic (GWP-b)
- Climate change - land use & land use change (GWP-l)
- Ozone depletion (ODP)
- Acidification (AP)
- Eutrophication freshwater (EP-fw)
- Eutrophication salt water (EP-m)
- Eutrophication land (EP-t)
- Photochemical ozone creation (POCP)
- Depletion of abiotic resources - fossil fuels (ADPF)
- Depletion of abiotic resources - minerals and metals (ADPE)
- Water use (WDP)



Resource management

The models for impact assessment were applied as described in DIN EN 15804-A2.
The following resource use indicators are presented in the EPD:

- Renewable primary energy as energy source (PERE)
- Renewable primary energy for material use (PERM)
- Total use of renewable primary energy (PERT)
- Non-renewable primary energy as energy source (PENRE)
- Renewable primary energy for material use (PENRM)
- Total use of non-renewable primary energy (PENRT)
- Use of secondary materials (SM)
- Use of renewable secondary fuels (RSF)
- Use of non-renewable secondary fuels (NRSF)
- Net use of freshwater resources (FW)

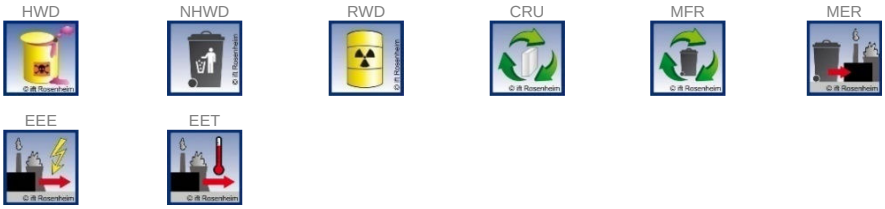


Waste

The waste generated during the production of 1 kg Sanpress press connector or 1 linear metre of Sanpress pipe is evaluated and shown separately for the fractions trade wastes. special wastes and radioactive wastes. Since waste handling is modelled within the system boundaries. the amounts shown refer to the deposited wastes. A portion of the waste indicated is generated during the manufacture of the pre-products.

The models for impact assessment were applied as described in DIN EN 15804-A2.
The following waste categories and indicators for output closures are presented in the EPD:

- Disposed hazardous waste (HWD)
- Non-hazardous waste disposed (NHWD)
- Radioactive waste disposed (RWD)
- Components for re-use (CRU)
- Materials for recycling (MFR)
- Materials for energy recovery (MER)
- Exported electrical energy (EEE)
- Exported thermal energy (EET)



Additional environmental impact indicators

The models for impact assessment were applied as described in DIN EN 15804-A2.
The additional impact categories presented in the EPD are as follows:

- Particulate matter emissions (PM)
- Ionizing radiation. human health (IRP)
- Ecotoxicity – freshwater (ETP-fw)
- Human toxicity. carcinogenic effects (HTP-c)
- Human toxicity. non-carcinogenic effects (HTP-nc)
- Impacts associated with land use/soil quality (SQP)

	Results per 1 kg Sanpress															
	Unit	**A1-A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
Core indicators																
GWP-t	kg CO_2 equivalent	9.99E+00	6.46E-02	4.21E-02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05E-02	3.65E-02	4.50E-04	-6.81E+00
GWP-f	kg CO_2 equivalent	9.79E+00	6.45E-02	1.22E-02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05E-02	3.21E-02	4.47E-04	-6.77E+00
GWP-b	kg CO_2 equivalent	1.88E-01	2.25E-05	2.99E-02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.47E-06	4.32E-03	2.72E-06	-2.54E-02
GWP-l	kg CO_2 equivalent	1.56E-02	3.31E-05	1.10E-06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.21E-06	5.44E-05	3.25E-07	-1.23E-02
ODP	kg CFC-11-eq.	2.14E-05	1.09E-09	3.09E-11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.72E-10	4.26E-10	1.06E-11	-7.13E-06
AP	mol H^+-eq.	4.31E-01	2.52E-04	4.61E-05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.47E-05	2.53E-04	4.30E-06	-8.88E-02
EP-fw	kg P-eq.	3.46E-02	5.40E-06	2.85E-07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.52E-07	1.43E-05	1.17E-07	-3.45E-02
EP-m	kg N-eq.	2.47E-02	4.61E-05	4.44E-05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.68E-05	7.95E-05	1.19E-06	-2.29E-02
EP-t	mol N-eq.	3.31E-01	4.76E-04	1.17E-04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.80E-04	8.37E-04	1.27E-05	-3.15E-01
POCP	kg NMVOC-eq.	9.49E-02	1.76E-04	2.52E-05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.59E-05	3.05E-04	3.18E-06	-4.31E-01
ADPF*[2]	MJ	1.20E+02	0.00E+00	5.84E-09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.91E-08	1.39E-06	9.36E-10	-6.61E-03
ADPE*[2]	kg Sb equivalent	6.43E-03	9.77E-01	2.06E-02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.54E-01	3.91E-01	9.76E-03	-8.07E+01
WDP*[2]	m^3 world-eq. deprived	9.27E+03	4.88E-03	1.40E-03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.74E-04	5.81E-03	5.40E-05	-5.31E+00
Resource management																
PERE	MJ	2.37E+01	1.23E-02	1.61E-01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.94E-03	4.59E-02	1.66E-04	-2.11E+01
PERM	MJ	1.90E-01	0.00E+00	-1.60E-01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	2.39E+01	1.23E-02	1.00E-03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.94E-03	4.59E-02	1.66E-04	-2.11E+01
PENRE	MJ	1.19E+02	9.78E-01	4.31E-01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.54E-01	1.42E+00	5.07E-02	-8.07E+01
PENRM	MJ	1.44E+00	0.00E+00	-4.10E-01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	-1.03E+00	-4.10E-02	0.00E+00
PENRT	MJ	1.20E+02	9.78E-01	2.06E-02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.54E-01	3.91E-01	9.76E-03	-8.07E+01
SM	kg	3.54E-01	4.10E-04	7.38E-05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.48E-05	3.94E-04	3.73E-06	-3.37E-01
RSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m^3	1.68E-01	1.34E-04	5.07E-06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.13E-05	1.49E-04	9.80E-06	-1.56E-01
Categories of waste																
HWD	kg	1.00E+00	7.17E-04	5.40E-05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.13E-04	1.05E-03	8.38E-06	-8.45E-01
NHWD	kg	1.25E+02	2.29E-02	1.30E-03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.62E-03	5.50E-02	2.50E-04	-1.24E+02
RWD	kg	2.48E-04	0.00E+00	1.40E-08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34E-08	3.70E-07	3.08E-09	-1.77E-04
Output material flows																
CRU	kg	0.00E+00	0.00E+00	0.00E+00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MFR	kg	6.32E-02	0.00E+00	7.60E-03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20E-06	9.50E-01	6.81E-08	-1.25E-02
MER	kg	4.62E-05	0.00E+00	8.62E-10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.52E-09	5.44E-08	3.06E-10	-4.40E-05
EE	MJ	1.25E-01	0.00E+00	6.31E-03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.76E-05	2.14E-04	1.68E-06	-1.02E-01

Key:
GWP-t – global warming potential - total **GWP-f** – global warming potential fossil fuels **GWP-b** – global warming potential - biogenic **GWP-l** – global warming potential - land use and land use change **ODP** – ozone depletion potential **AP** - acidification potential **EP-fw** - eutrophication potential - aquatic freshwater **EP-m** - eutrophication potential - aquatic marine **EP-t** - feutrophication potential - terrestrial **POCP** - photochemical ozone formation potential **ADPF*[2]** - abiotic depletion potential – fossil resources **ADPE*[2]** - abiotic depletion potential - minerals&metals **WDP*[2]** - Water (user) deprivation potential **PERE** - Use of renewable primary energy **PERM** - use of renewable primary energy resources **PERT** - total use of renewable primary energy resources **PENRE** - use of non-renewable primary energy **PENRM** - use of non-renewable primary energy resources **PENRT** - total use of non-renewable primary energy resources **SM** - use of secondary material **RSF** - use of renewable secondary fuels **NRSF** - use of non-renewable secondary fuels **FW** - net use of fresh water **HWD** - hazardous waste disposed **NHWD** - non-hazardous waste disposed **RWD** - radioactive waste disposed **CRU** - components for re-use **MFR** - materials for recycling **MER** - materials for energy recovery **EE** - exported energy

	Results per 1 kg Sanpress														
	Unit	**A1-A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
Additional environmental impact indicators																
PM	Disease incidence	1.15E-06	6.26E-09	1.36E-08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.08E-09	5.86E-09	6.85E-11	-1.08E-06
IRP*[1]	kBq U235-eq.	9.45E-01	8.87E-04	6.46E-05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.41E-04	1.49E-03	1.28E-05	-6.83E-01
ETP-fw*[2]	CTUe	5.23E+02	5.16E-01	1.67E-01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.13E-02	3.66E-01	4.24E-03	-5.28E+02
HTP-c*[2]	CTUh	7.13E-08	0.00E+00	8.39E-11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.57E-12	5.49E-11	2.51E-13	-6.96E-08
HTP-nc*[2]	CTUh	5.51E-06	2.87E-11	3.12E-10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.12E-10	1.71E-09	2.84E-12	-5.64E-06
SQP*[2]	dimensionless	1.48E+02	9.61E-01	1.91E-02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55E-01	6.85E-01	2.21E-02	-1.42E+02

Key:
PM – particulate matter emissions potential **IRP*[1]** – ionizing radiation potential – human health **ETP-fw*[2]** - Eco-toxicity potential – freshwater **HTP-c*[2]** - Human toxicity potential – cancer effects **HTP-nc*[2]** - Human toxicity potential – non-cancer effects **SQP*[2]** – soil quality potential

Disclaimers:

*1 This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents. occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionising radiation from the soil. from radon and from some building materials is also not measured by this indicator.

*2 The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.

	Results per 1 kg Sanpress LF														
	Unit	**A1-A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
Core indicators																
GWP-t	kg CO_2 equivalent	1.29E+01	7.46E-02	1.16E-01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05E-02	2.79E-02	4.65E-04	-7.30E+00
GWP-f	kg CO_2 equivalent	1.28E+01	7.45E-02	1.16E-01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05E-02	2.85E-02	4.62E-04	-7.27E+00
GWP-b	kg CO_2 equivalent	5.89E-02	2.60E-05	1.30E-04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.47E-06	-6.49E-04	2.81E-06	-1.48E-02
GWP-l	kg CO_2 equivalent	1.65E-02	3.82E-05	1.99E-06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.21E-06	4.15E-05	3.36E-07	-1.42E-02
ODP	kg CFC-11-eq.	7.75E-05	1.26E-09	9.03E-11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.72E-10	3.79E-10	1.09E-11	-7.54E-06
AP	mol H^+-eq.	5.26E-01	2.91E-04	2.63E-04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.47E-05	2.27E-04	4.45E-06	-1.04E-01
EP-fw	kg P-eq.	4.15E-02	6.24E-06	4.93E-07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.52E-07	1.46E-05	1.21E-07	-4.14E-02
EP-m	kg N-eq.	3.01E-02	5.32E-05	3.55E-04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.68E-05	6.87E-05	1.23E-06	-2.66E-02
EP-t	mol N-eq.	4.04E-01	5.50E-04	8.51E-04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.80E-04	7.62E-04	1.32E-05	-3.69E-01
POCP	kg NMVOC-eq.	1.16E-01	2.03E-04	1.53E-04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.59E-05	2.93E-04	3.29E-06	-5.18E-01
ADPF*[2]	MJ	1.52E+02	0.00E+00	1.08E-08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.91E-08	1.52E-06	9.68E-10	-7.89E-03
ADPE*[2]	kg Sb equivalent	7.68E-03	1.13E+00	4.31E-02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.54E-01	3.49E-01	1.01E-02	-8.82E+01
WDP*[2]	m^3 world-eq. deprived	7.27E+00	5.64E-03	3.98E-03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.74E-04	5.47E-03	5.58E-05	-7.58E+00
Resource management																
PERE	MJ	2.66E+01	1.42E-02	1.52E-03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.94E-03	4.82E-02	1.72E-04	-2.81E+01
PERM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	2.66E+01	1.42E-02	1.52E-03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.94E-03	4.82E-02	1.72E-04	-2.81E+01
PENRE	MJ	1.48E+02	1.13E+00	3.94E+00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.54E-01	5.25E-01	1.73E-02	-8.82E+01
PENRM	MJ	4.07E+00	0.00E+00	-3.90E+00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	-1.75E-01	-7.19E-03	0.00E+00
PENRT	MJ	1.52E+02	1.13E+00	4.31E-02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.54E-01	3.49E-01	1.01E-02	-8.82E+01
SM	kg	3.34E-01	4.73E-04	1.02E-04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.48E-05	3.65E-04	3.85E-06	-3.18E-01
RSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m^3	2.08E-01	1.54E-04	6.64E-05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.13E-05	1.43E-04	1.01E-05	-2.10E-01
Categories of waste																
HWD	kg	9.36E-01	8.28E-04	2.58E-04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.13E-04	1.02E-03	8.66E-06	-7.85E-01
NHWD	kg	1.50E+02	2.65E-02	2.23E-03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.62E-03	5.70E-02	2.58E-04	-1.49E+02
RWD	kg	2.67E-04	0.00E+00	2.10E-08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34E-08	3.71E-07	3.18E-09	-2.13E-04
Output material flows																
CRU	kg	0.00E+00	0.00E+00	0.00E+00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MFR	kg	6.55E-02	0.00E+00	9.22E-03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20E-06	9.54E-01	7.04E-08	-1.51E-02
MER	kg	4.31E-05	0.00E+00	2.75E-09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.52E-09	5.23E-08	3.16E-10	-4.16E-05
EE	MJ	1.30E-01	0.00E+00	7.66E-03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.76E-05	2.04E-04	1.74E-06	-1.03E-01

Key:
GWP-t – global warming potential - total **GWP-f** – global warming potential fossil fuels **GWP-b** – global warming potential - biogenic **GWP-l** – global warming potential - land use and land use change **ODP** – ozone depletion potential **AP** - acidification potential **EP-fw** - eutrophication potential - aquatic freshwater **EP-m** - eutrophication potential - aquatic marine **EP-t** - feutrophication potential - terrestrial **POCP** - photochemical ozone formation potential **ADPF*[2]** - abiotic depletion potential – fossil resources **ADPE*[2]** - abiotic depletion potential - minerals&metals **WDP*[2]** - Water (user) deprivation potential **PERE** - Use of renewable primary energy **PERM** - use of renewable primary energy resources **PERT** - total use of renewable primary energy resources **PENRE** - use of non-renewable primary energy **PENRM** - use of non-renewable primary energy resources **PENRT** - total use of non-renewable primary energy resources **SM** - use of secondary material **RSF** - use of renewable secondary fuels **NRSF** - use of non-renewable secondary fuels **FW** - net use of fresh water **HWD** - hazardous waste disposed **NHWD** - non-hazardous waste disposed **RWD** - radioactive waste disposed **CRU** - components for re-use **MFR** - materials for recycling **MER** - materials for energy recovery **EE** - exported energy

Results per 1 kg Sanpress LF															
	Unit	**A1-A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
Additional environmental impact indicators																
PM	Disease incidence	1.51E-06	7.23E-09	1.08E-07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.08E-09	4.18E-09	7.08E-11	-1.25E-06
IRP*[1]	kBq U235-eq.	1.02E+00	1.02E-03	9.31E-05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.41E-04	1.50E-03	1.32E-05	-7.99E-01
ETP-fw*[2]	CTUe	6.14E+02	5.96E-01	1.14E+00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.13E-02	2.72E-01	4.39E-03	-6.00E+02
HTP-c*[2]	CTUh	8.74E-08	0.00E+00	6.67E-10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.57E-12	4.04E-11	2.59E-13	-7.81E-08
HTP-nc*[2]	CTUh	6.68E-06	3.31E-11	2.30E-09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.12E-10	1.73E-09	2.93E-12	-6.79E-06
SQP*[2]	dimensionless	1.75E+02	1.11E+00	6.74E-02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55E-01	6.09E-01	2.29E-02	-1.67E+02

Key:
PM – particulate matter emissions potential **IRP*[1]** – ionizing radiation potential – human health **ETP-fw*[2]** - Eco-toxicity potential – freshwater **HTP-c*[2]** - Human toxicity potential – cancer effects **HTP-nc*[2]** - Human toxicity potential – non-cancer effects **SQP*[2]** – soil quality potential

Disclaimers:
*1 This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents. occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionising radiation from the soil. from radon and from some building materials is also not measured by this indicator.

*2 The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.

	Results per 1 linear metre of Sanpress pipe															
	Unit	**A1-A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
Core indicators																
GWP-t	kg CO_2 equivalent	4.95E+01	3.24E-01	3.13E-01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.87E-02	4.34E-01	-4.10E-02	-2.37E+01
GWP-f	kg CO_2 equivalent	4.91E+01	3.24E-01	3.13E-01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.87E-02	2.60E-01	-4.07E-02	-2.34E+01
GWP-b	kg CO_2 equivalent	2.58E-01	1.13E-04	1.05E-05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.62E-05	1.74E-01	-2.48E-04	-2.31E-01
GWP-l	kg CO_2 equivalent	1.31E-01	1.66E-04	2.29E-06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.43E-05	6.51E-04	-2.96E-05	-2.49E-02
ODP	kg CFC-11-eq.	7.46E-07	5.48E-09	1.95E-10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.02E-10	3.41E-09	-9.62E-10	-2.40E-07
AP	mol H^+-eq.	3.40E-01	1.27E-03	7.03E-04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.01E-04	1.99E-03	-3.92E-04	-8.76E-02
EP-fw	kg P-eq.	3.27E-02	2.71E-05	7.83E-07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.96E-06	5.78E-05	-1.07E-05	-8.04E-03
EP-m	kg N-eq.	6.10E-02	2.31E-04	9.65E-04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.82E-05	7.05E-04	-1.08E-04	-2.39E-02
EP-t	mol N-eq.	6.15E-01	2.39E-03	2.28E-03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.36E-04	6.25E-03	-1.16E-03	-2.52E-01
POCP	kg NMVOC-eq.	1.99E-01	8.82E-04	4.03E-04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.13E-04	1.78E-03	-2.90E-04	-1.31E-01
ADPF*[2]	MJ	6.95E+02	0.00E+00	1.88E-08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.35E-07	2.24E-06	-8.53E-08	-5.65E-04
ADPE*[2]	kg Sb equivalent	7.55E-03	4.91E+00	7.58E-02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.18E-01	3.11E+00	-8.89E-01	-2.64E+02
WDP*[2]	m^3 world-eq. deprived	1.43E+02	2.45E-02	7.63E-03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.60E-03	3.76E-02	-4.92E-03	-7.53E+00
Resource management																
PERE	MJ	4.88E+02	6.17E-02	2.32E-03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.02E-03	1.44E-01	-1.51E-02	-5.93E+01
PERM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	4.88E+02	6.17E-02	2.32E-03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.02E-03	1.44E-01	-1.51E-02	-5.93E+01
PENRE	MJ	6.84E+02	4.91E+00	1.07E+01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.18E-01	3.29E+00	-8.84E-01	-2.64E+02
PENRM	MJ	1.06E+01	0.00E+00	-1.07E+01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	-1.77E-01	-5.36E-03	0.00E+00
PENRT	MJ	6.95E+02	4.91E+00	7.58E-02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.18E-01	3.11E+00	-8.89E-01	-2.64E+02
SM	kg	8.74E-01	2.06E-03	4.61E-05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.01E-04	2.70E-03	-3.40E-04	-2.59E+00
RSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m^3	2.98E+00	6.71E-04	1.95E-04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.90E-05	8.65E-04	-8.93E-04	-2.13E-01
Categories of waste																
HWD	kg	3.82E+00	3.60E-03	6.41E-04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.27E-04	5.65E-03	-7.64E-04	-7.16E+00
NHWD	kg	1.59E+02	1.15E-01	3.53E-03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.68E-02	1.95E-01	-2.27E-02	-3.75E+01
RWD	kg	2.38E-03	0.00E+00	3.19E-08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.56E-07	1.66E-06	-2.80E-07	-3.64E-04
Output material flows																
CRU	kg	0.00E+00	0.00E+00	0.00E+00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MFR	kg	4.92E-02	0.00E+00	1.37E-06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.59E-06	4.33E+00	-6.20E-06	-6.00E-03
MER	kg	1.23E-04	0.00E+00	5.82E-09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.03E-08	3.19E-07	-2.79E-08	-3.27E-04
EE	MJ	3.77E-01	0.00E+00	2.36E-05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.28E-04	1.30E-03	-1.53E-04	-4.91E-01

Key:
GWP-t – global warming potential - total **GWP-f** – global warming potential fossil fuels **GWP-b** – global warming potential - biogenic **GWP-l** – global warming potential - land use and land use change **ODP** – ozone depletion potential **AP** - acidification potential **EP-fw** - eutrophication potential - aquatic freshwater **EP-m** - eutrophication potential - aquatic marine **EP-t** - feutrophication potential - terrestrial **POCP** - photochemical ozone formation potential **ADPF*[2]** - abiotic depletion potential – fossil resources **ADPE*[2]** - abiotic depletion potential - minerals&metals **WDP*[2]** - Water (user) deprivation potential **PERE** - Use of renewable primary energy **PERM** - use of renewable primary energy resources **PERT** - total use of renewable primary energy resources **PENRE** - use of non-renewable primary energy **PENRM** - use of non-renewable primary energy resources **PENRT** - total use of non-renewable primary energy resources **SM** - use of secondary material **RSF** - use of renewable secondary fuels **NRSF** - use of non-renewable secondary fuels **FW** - net use of fresh water **HWD** - hazardous waste disposed **NHWD** - non-hazardous waste disposed **RWD** - radioactive waste disposed **CRU** - components for re-use **MFR** - materials for recycling **MER** - materials for energy recovery **EE** - exported energy

Results per 1 linear metre of Sanpress pipe															
	Unit	**A1-A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
Additional environmental impact indicators																
PM	Disease incidence	3.81E-06	3.14E-08	2.95E-07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.01E-09	7.93E-08	-6.25E-09	-1.88E-06
IRP*[1]	kBq U235-eq.	8.03E+00	4.45E-03	1.37E-04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.54E-04	6.86E-03	-1.16E-03	-1.46E+00
ETP-fw*[2]	CTUe	5.16E+02	2.59E+00	3.08E+00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.78E-01	4.63E+00	-3.87E-01	-9.43E+01
HTP-c*[2]	CTUh	1.99E-07	0.00E+00	1.82E-09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.12E-11	7.04E-10	-2.28E-11	-1.49E-07
HTP-nc*[2]	CTUh	1.41E-06	1.44E-10	6.26E-09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.22E-10	7.15E-09	-2.59E-10	-5.36E-07
SQP*[2]	dimensionless	2.18E+02	4.83E+00	1.50E-01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.22E-01	5.52E+00	-2.02E+00	-1.21E+02

Key:
PM – particulate matter emissions potential **IRP*[1]** – ionizing radiation potential – human health **ETP-fw*[2]** - Eco-toxicity potential – freshwater **HTP-c*[2]** - Human toxicity potential – cancer effects **HTP-nc*[2]** - Human toxicity potential – non-cancer effects **SQP*[2]** – soil quality potential

Disclaimers:

*1 This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents. occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionising radiation from the soil. from radon and from some building materials is also not measured by this indicator.

*2 The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.

6.4 Interpretation. LCA presentation and critical review

Evaluation

The environmental impacts of

- Sanpress
- Sanpress LF
- Sanpress pipe

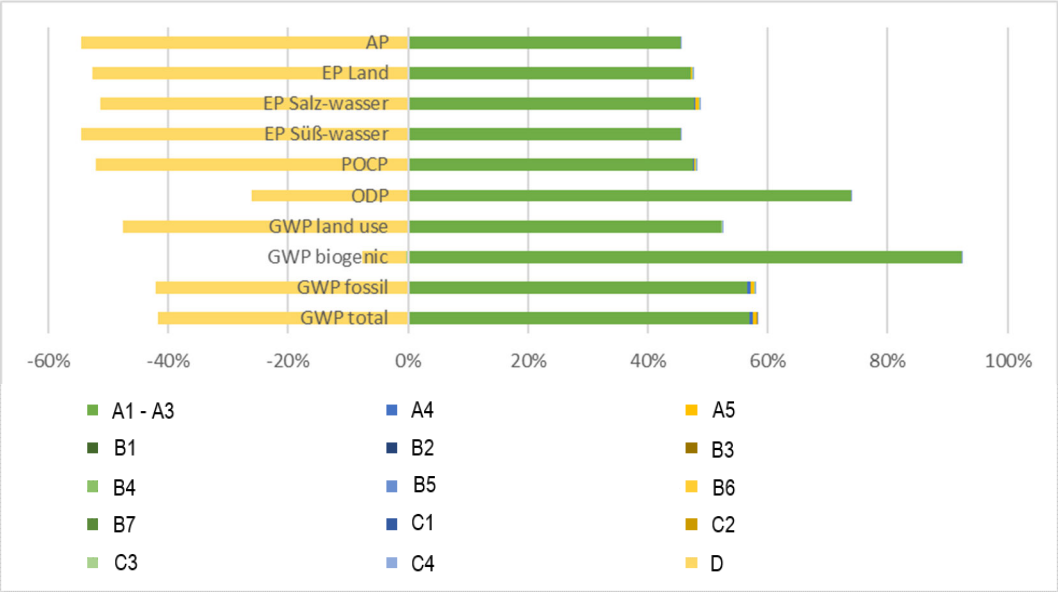
The differences in the environmental impact of the products lie in the various pre-products and raw materials used and in the mass of the pre-products and raw materials used in each case. Increasing the proportion of recycling can reduce these environmental impacts.
The main environmental impact of production is caused by the raw material stainless steel. This is to be expected. as the main proportion of stainless steel is up to 100 percent depending on the product (pipes) and the high LCIA values associated with the raw material are the main source of emissions.

The LCA covers the complete life cycle. As the products do not generate any emissions in the use stage. here the value is 0. The replacement was balanced separately in B4 for 1 year as a scenario. Otherwise. there is no environmental impact during the use phase. The more stainless steel in the product. the greater the environmental impact. Due to the main material stainless steel. there are correspondingly high credits at the end of life (depending on the environmental indicator).

The charts below show the allocation of the main environmental impacts.

The values obtained from the LCA calculation are suitable for the certification of buildings.

Sanpress



Sanpress LF

Sanpress pipe

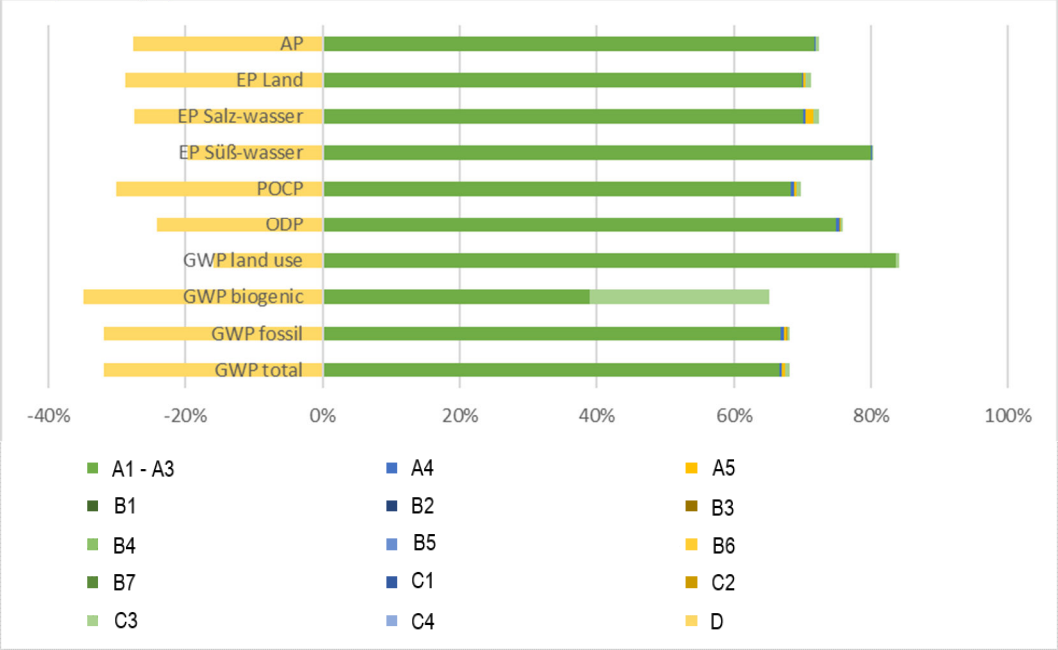


Illustration 3 Percentage of the modules in selected environmental impact indicators

Report

The LCA report underlying this EPD was developed according to the requirements of DIN EN ISO 14040 and DIN EN ISO 14044 as well as DIN EN 15804 and DIN EN ISO 14025. It is deposited with ift Rosenheim. The results and conclusions reported to the target group are complete. correct. without bias and transparent. The results of the study are not designed to be used for comparative statements intended for publication.

Critical review

The critical review of the LCA and of the report took place in the course of verification of the EPD and was carried out by the external auditor Prof. Dr. Eric Brehm.

7 General information regarding the EPD

Comparability

This EPD was prepared in accordance with DIN EN 15804 and is therefore only comparable to those EPDs that also comply with the requirements set out in DIN EN 15804.
Any comparison must refer to the building context and the same boundary conditions of the various life cycle stages.
For comparing EPDs of construction products. the rules set out in DIN EN 15804. Clause 5.3. apply.

The detailed individual results of the products were summarised on the basis of conservative assumptions and differ from the average results. Identification of the product groups and the resulting variations are documented in the background report.

Communication

The communications format of this EPD meets the requirements of EN 15942:2012 and is therefore the basis for B2B communication. Only the nomenclature has been changed according to DIN EN 15804.

Verification

Verification of the Environmental Product Declaration is documented in accordance with the ift "Richtlinie zur Erstellung von Typ III Umweltproduktdeklarationen" (Guidance on preparing Type III Environmental Product Declarations) in accordance with the requirements set out in DIN EN ISO 14025.

This declaration is based on the PCR documents “PCR Part A” PCR-A-0.3:2018 and “Piping systems including connecting and fitting technology” PCR-RS-1.0:2022.

The European standard EN 15804 serves as the core PCR [a)]
Independent verification of the declaration and statement according to EN ISO 14025:2010
Independent third party verifier: [b)] Eric Brehm
[a)] Product category rules [b)] Optional for business-to-business communication Mandatory for business-to-consumer communication (see EN ISO 14025:2010. 9.4).

Revisions of this document

No.	Date	Note	Person in charge	Testing personnel
1	18.12.2023	External verification	Pscherer	Brehm
2	25.01.2024	Formal adaptation	Thiele	Brehm
3	05.08.2024	Formal adaptation	Pscherer	--
4	29.10.2025	Adjustment Conversion factors	Ludwig	--
5	26.03.2026	Adaptation of Annex B	Hannemann	--

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9 Annex A

Description of life cycle scenarios for Sanpress press connectors and pipes

Product stage			Con-struction process stage		Use stage*							End-of-life stage				Benefits and loads beyond system boundaries
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Raw material supply	Transport	production	Transport	Construction/installation process	Use	maintenance	Repair	replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction/demolition	Transport	Waste processing	Disposal	Reuse Recovery Recycling potential
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

* For declared B-modules. the calculation of the results is performed taking into account the specified RSL related to one year

Table 6: Overview of applied life cycle stages

The scenarios were calculated taking into account the defined RSL (see 4 Use stage).

The scenarios were furthermore based on the research project “EPDs for transparent building components”. (1)

Note: The standard scenarios selected are presented in bold type. They were also used for calculating the indicators in the summary table.

- ✓ Included in the LCA
- — Not included in the LCA

A4 Transport to construction site

No.	Scenario	Description
A4.1	**National**	**Transport mix 35-53% capacity used[1]. approx. 600 km**
A4.2	International/EU country	Transport mix 35-53% capacity used[1]. approx. 2.000 km
A4.3	International/Non-EU	Transport mix 35-53% capacity used[1]. approx. 15.000 km

[1] Capacity used: utilized loading capacity of the truck

The transport distances shown represent a transport average with the following transport mix. The scenarios include the return transport. if applicable.

Shipping method	Network fleet structure	Share in %		
		A4.1	A4.2	A4.3
Parcel service provider (CEP - Courier-Express- Parcel service)	Van 7.5 – 16 t (Euro 6). diesel. 35% capacity utilization	2	0	0.5
Forwarding agency and own truck fleet	32 - 40 t truck/semitrailer (Euro 6). diesel. 53% capacity utilization	98	90	85
Air freights	Cargo and passenger aircrafts. kerosene	0	9	11
Seagoing vessels/containers	Seagoing/container vessels to receiving port. heavy oil	0	1	3.5

A4 Transport to construction site	Transport weight [kg] per declared unit	Density [kg/m³]	Capacity load factor[2]
Sanpress	1.03	7.90	0.80
Sanpress LF	1.19		
Sanpress pipe	5.17		

[2] Capacity load factor:
= 1 Product completely fills the packaging (without air inclusion)
< 1 Packaging contains unused volume (e.g.: air. filling material)
> 1 Product is packed in compressed form

The scenarios were calculated per kg and can be scaled to the product group using the above masses.

A4 Transport to construction site	Unit	A4.1	A4.2	A4.3
Core indicators				
GWP-t	kg CO_2 equivalent	**6.27E-05**	3.33E-04	2.81E-03
GWP-f	kg CO_2 equivalent	**6.26E-05**	3.33E-04	2.81E-03
GWP-b	kg CO_2 equivalent	**2.18E-08**	8.84E-08	7.09E-07
GWP-l	kg CO_2 equivalent	**3.21E-08**	1.06E-07	7.96E-07
ODP	kg CFC-11-eq.	**1.06E-12**	5.45E-12	4.58E-11
AP	mol H^+-eq.	**1.71E-07**	1.16E-06	1.03E-05
EP-fw	kg P-eq.	**5.24E-09**	1.74E-08	1.31E-07
EP-m	kg N-eq.	**4.47E-08**	3.98E-07	3.63E-06
EP-t	mol N-eq.	**2.45E-07**	1.62E-06	1.42E-05
POCP	kg NMVOC-eq.	**4.62E-07**	4.21E-06	3.85E-05
ADPF	MJ	**9.49E-04**	4.78E-03	4.00E-02
ADPE	kg Sb equivalent	**1.81E-10**	5.55E-10	4.09E-09
WDP	m^3 world-eq. deprived	**4.74E-06**	1.66E-05	1.27E-04
Resource management				
PERE	MJ	**1.19E-05**	4.13E-05	3.15E-04
PERM	MJ	**0.00**	0.00	0.00
PERT	MJ	**1.19E-05**	4.13E-05	3.15E-04
PENRE	MJ	**9.49E-04**	4.78E-03	4.00E-02
PENRM	MJ	**0.00**	0.00	0.00
PENRT	MJ	**9.49E-04**	4.78E-03	4.00E-02

SM	kg	**3.98E-07**	1.33E-06	1.00E-05
RSF	MJ	**0.00**	0.00	0.00
NRSF	MJ	**0.00**	0.00	0.00
FW	m³	**1.30E-07**	4.63E-07	3.54E-06
Categories of waste				
HWD	kg	**6.96E-07**	2.36E-06	1.78E-05
NHWD	kg	**2.23E-05**	7.40E-05	5.57E-04
RWD	kg	**2.05E-10**	7.39E-10	5.69E-09
Output material flows				
CRU	kg	**0.00**	0.00	0.00
MFR	kg	**7.38E-09**	2.84E-08	2.27E-07
MER	kg	**4.16E-11**	1.35E-10	1.02E-09
EE	MJ	**1.68E-07**	5.81E-07	4.41E-06
Additional environmental impact indicators				
PM	Disease incidence	**6.08E-12**	1.94E-11	1.43E-10
IRP	kBq U235-eq.	**8.61E-07**	3.15E-06	2.44E-05
ETPfw	CTUe	**5.01E-04**	2.44E-03	2.02E-02
HTPc	CTUh	**2.78E-14**	9.74E-14	7.45E-13
HTPnc	CTUh	**6.85E-13**	3.61E-12	3.04E-11
SQP	dimensionless	**9.33E-04**	2.92E-03	2.12E-02

A5 Construction/Installation

No.	Scenario	Description
A5.1	**Manual**	**According to the manufacturer. the products are installed with battery-operated pressing pliers (0.0009 kWh/kg. electricity mix (GLO)).**

In case of deviating consumption during installation/assembly of the products which forms part of the site management. they are covered at the building level.

The following quantities of waste materials are produced during installation.

Product group	Waste materials in kg	of which quantities collected for waste recycling (output materials) in kg
Sanpress	0.030	0.025
Sanpress LF	0.190	0.030
Sanpress pipe	0.517	0.000

Ancillary materials. consumables. use of water. use of other resources. material losses as well as direct emissions during installation are negligible.

It is assumed that the packaging material in the Module construction / installation is sent to waste handling. Waste is only thermally recycled in line with the conservative approach. Benefits from A5 are specified in module D.

- Electricity replaces electricity mix (GLO. high voltage. market group);
- Thermal energy replaces thermal energy from natural gas (district or industrial. natural gas. RoW);
- Stainless steel recyclate used in A5 replaces 100% of stainless steel;
- SiBr recyclate used in A5 replaces 100 % SiBr.

Transport to the recycling plants is included.

Since this is a single scenario. the results are shown in the relevant summary table.

B1 Use (not relevant)

Refer to Section 4 Use stage - Emissions to the environment.
No emissions are known which may occur during the use stage of the products because press fitting is without contact to air. water and soil.

Since this is a single scenario. the results are shown in the relevant summary table.

B2 Cleaning. maintenance and repair (not relevant)

B2.1 Cleaning (not relevant)

No cleaning is required.

Ancillary materials. consumables. use of energy and water. material losses and waste as well as transport distances during cleaning are negligible.

Since this is a single scenario. the results are shown in the relevant summary table.

B2.2 Maintenance and repair (not relevant)

No maintenance is required.

Ancillary materials. consumables. use of energy and water. waste. material losses and transport distances during maintenance are negligible.

Since this is a single scenario. the results are shown in the relevant summary table.

B3 Repair (not relevant)

No repair of the components of the building part is required.

For updated information refer to the respective instructions for assembly/installation. operation and maintenance from Viega GmbH & Co. KG.

Ancillary materials. consumables. use of energy and water. waste. material losses and transport distances during repair are negligible.

Since this is a single scenario. the results are shown in the relevant summary table.

B4 Exchange / Replacement

No.	Scenario	Description
B4.1	**No replacement**	**According to manufacturer. a replacement is not planned.**
B4.2	Normal use and heavy use	One-time replacement after 50 years (RSL)* Energy consumption 0.0009 kWh/kg.

*Assumptions for evaluation of possible environmental impacts; statements made do not constitute any guaranty or warranty of performance.
The statements made in this EPD are only informative to allow evaluation at the building level.

It is assumed that no replacement will be necessary during the 50-year reference service life and the 50-year building service life. The environmental impacts of replacement are due to the product. construction and disposal stages.
The results were based on one year. taking into account the RSL.

For updated information refer to the respective instructions for assembly/installation. operation and maintenance from Viega GmbH & Co. KG.

B4 Exchange/ replacement	Unit	B4.1	B4.2		
			Sanpress	Sanpress LF	Sanpress pipe
Core indicators					
GWP-t	kg CO_2 equivalent	**0.00**	3.81E+01	4.33E+01	2.69E+01
GWP-f	kg CO_2 equivalent	**0.00**	3.78E+01	4.31E+01	2.66E+01
GWP-b	kg CO_2 equivalent	**0.00**	2.57E-01	1.09E-01	2.01E-01
GWP-l	kg CO_2 equivalent	**0.00**	7.00E-02	7.43E-02	1.07E-01
ODP	kg CFC-11-eq.	**0.00**	1.46E-05	7.04E-05	5.14E-07
AP	mol H^+-eq.	**0.00**	2.63E+00	2.85E+00	2.12E-01
EP-fw	kg P-eq.	**0.00**	2.11E-01	2.28E-01	2.47E-02
EP-m	kg N-eq.	**0.00**	1.36E-01	1.49E-01	3.90E-02
EP-t	mol N-eq.	**0.00**	1.89E+00	2.06E+00	3.73E-01
POCP	kg NMVOC-eq.	**0.00**	5.32E-01	5.80E-01	1.15E-01
ADPF	MJ	**0.00**	4.70E+02	5.29E+02	4.38E+02
ADPE	kg Sb equivalent	**0.00**	3.99E-02	4.30E-02	6.98E-03
WDP	m^3 world-eq. deprived	**0.00**	9.30E+03	3.09E+01	1.36E+02
Resource management					
PERE	MJ	**0.00**	1.18E+02	1.23E+02	4.29E+02
PERM	MJ	**0.00**	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	**0.00**	1.18E+02	1.23E+02	4.29E+02
PENRE	MJ	**0.00**	4.71E+02	5.29E+02	4.38E+02
PENRM	MJ	**0.00**	3.19E-16	-2.23E-16	1.10E-15
PENRT	MJ	**0.00**	4.71E+02	5.29E+02	4.38E+02
SM	kg	**0.00**	1.63E+00	1.76E+00	-1.71E+00
RSF	MJ	**0.00**	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	**0.00**	0.00E+00	0.00E+00	0.00E+00
FW	m^3	**0.00**	8.84E-01	9.40E-01	2.77E+00
Categories of waste					
HWD	kg	**0.00**	4.06E+00	4.36E+00	-3.33E+00
NHWD	kg	**0.00**	7.60E+02	8.20E+02	1.21E+02
RWD	kg	**0.00**	1.01E-03	1.07E-03	2.02E-03
Output material flows					
CRU	kg	**0.00**	0.00E+00	0.00E+00	0.00E+00
MFR	kg	**0.00**	1.08E+00	1.09E+00	4.38E+00
MER	kg	**0.00**	2.08E-04	2.24E-04	-2.03E-04
EE	MJ	**0.00**	5.42E-01	5.89E-01	-1.12E-01
Additional environmental impact indicators					
PM	Disease incidence	**0.00**	6.37E-06	7.15E-06	2.33E-06
IRP	kBq U235-eq.	**0.00**	3.88E+00	4.12E+00	6.58E+00
ETPfw	CTUe	**0.00**	3.04E+03	3.30E+03	4.32E+02
HTPc	CTUh	**0.00**	3.98E-07	4.37E-07	5.23E-08
HTPnc	CTUh	**0.00**	3.45E-05	3.72E-05	8.94E-07
SQP	dimensionless	**0.00**	8.55E+02	9.24E+02	1.06E+02

B5 Improvement/modernization (not relevant)
According to the manufacturer. the elements are not included in the improvement / modernisation activities for buildings.

For updated information refer to the respective instructions for assembly/installation. operation and maintenance from Viega GmbH & Co. KG.

Ancillary materials. consumables. use of energy and water. material losses. waste as well as transport distances during installation are negligible.

Since this is a single scenario. the results are shown in the relevant summary table.

B6 Operational energy use (not relevant)

There is no energy used during normal use.

Ancillaries. consumables. water use. material losses. waste materials. transport distances and other scenarios are negligible.

Since this is a single scenario. the results are shown in the relevant summary table.

B7 Operational water use (not relevant)

No water consumption when used as intended. Water consumption for cleaning is specified in Module B2.1.

Ancillaries. consumables. energy use. material losses. waste materials. transport distances and other scenarios are negligible.

Since this is a single scenario. the results are shown in the relevant summary table.

C1 Deconstruction

No.	Scenario	Description
C1	**Deconstruction**	**Connecting technology 99% deconstruction.** **Further deconstruction rates are possible. give adequate reasons.**

No relevant inputs or outputs apply to the scenario selected. Energy consumption during dismantling is not required.

Since this is a single scenario. the results are shown in the relevant summary table.

In case of deviating consumption the removal of the products forms part of site management and is covered at the building level.

C2 Transport

No.	Scenario	Description
C2	**Transport**	**Transport to collection point with >32 t truck (Euro 4). diesel. 29.96 t payload. 53% capacity used. 50 km (1)**

Since this is a single scenario. the results are shown in the relevant summary table.

C3 Waste management

No.	Scenario	Description
C3	Current market situation	**Share for recirculation of materials:** • **Stainless steel 98% in melt** (UBA. 2017) • **SiBr 98% in melt** (UBA. 2017) • **Brass 98% in melt** (UBA. 2017) • **Plastics 60 % thermal recycling in incineration plants** (Zukunft Bauen. 2017) • **Plastics 40 % recycled** (Zukunft Bauen. 2017) • **Remainder to landfill/disposal.**

No electricity consumption for the recycling plant per declared unit was taken into account for waste treatment due to the low proportion and lack of sources.

As the products are placed on the European market. the disposal scenario is based on average European data sets.

The below table presents the disposal processes and their percentage by mass/weight. The calculation is based on the above mentioned shares in percent related to the declared unit of the product system.

C3 Disposal	Unit	Sanpress	Sanpress LF	Sanpress pipe
Collection process. collected separately	kg	0.99	0.99	4.61
Collection process. collected as mixed construction waste	kg	0.01	0.01	0.05
Recovery system. for re-use	kg	0.00	0.00	0.00
Recovery system. for recycling	kg	0.96	0.96	4.52
Recovery system. for energy recovery	kg	0.01	0.01	0.00
Disposal	kg	0.04	0.04	0.14

The 100% scenarios differ from the current average recovery shown here (in background report C3.4). The evaluation of each scenario is described in the background report.

Since this is a single scenario. the results are shown in the summary table.

C4 Disposal

No.	Scenario	Description
C4	Disposal	**The non-recordable amounts and losses within the re-use/recycling chain (C1 and C3) are modelled as “disposed” (EU-28).**

The 100% scenarios differ from the current average recovery shown here (in background report C4.4). The evaluation of each scenario is described in the background report.

The consumption in scenario C4 results from physical pre-treatment. waste recycling and management of the disposal site. The benefits obtained here from the substitution of primary material production are allocated to Module D. e.g. electricity and heat from waste incineration.

Since this is a single scenario. the results are shown in the summary table.

D Benefits and loads from beyond the system boundaries		
No.	**Scenario**	**Description**
D	**Recycling potential**	• **Stainless steel scrap from C3 excluding the scrap used in A3 replaces 100% of stainless steel;** • **SiBr scrap from C3 excluding the scrap used in A3 replaces 100% of SiBr;** • **Brass scrap from C3 excluding the scrap used in A3 replaces 100% of brass;** • **Plastic recyclate from C3 excluding the plastics used in A3 replaces 60% of tetrafluoroethylene.** • **Benefits from incineration plant: Electricity replaces electricity mix (GLO). thermal energy replaces thermal energy from natural gas (RoW).**

The values in Module D result from recycling of the packaging material in Module A5 and from deconstruction at the end of service life.

The 100% scenarios differ from the current average recovery shown here (in background report D4). The evaluation of each scenario is described in the background report.

Since this is a single scenario. the results are shown in the summary table.

Annex B

Conversion table for unit weights

As some products are OEM items, they are not listed in the overview but were taken into account when calculating the EPD results. The EPD therefore also covers the OEM items that are not explicitly shown.

Material no.	Item no.	Model no.	System name/ brand name	Material short text	Mass in g	Mass in kg	Dimensions
204211	443689	2211	Sanpress	2211 Adapter piece w.sc 14x3/8 NB1 9	33,90	0,034	14 X 3/8
204221	443696	2211	Sanpress	2211 Adapter piece w.sc 14x1/2 NB1 9	43,60	0,044	14 X 1/2
204231	443702	2211	Sanpress	2211 Adapter piece w.sc 16x1/2 NB1 9	48,40	0,048	16 X 1/2
204241	443719	2211	Sanpress	2211 Adapter piece w.sc 16x3/4 NB1 9	63,00	0,063	16 X 3/4
204251	443726	2212	Sanpress	2212 Adapter piece w.sc 14x1/2 NB1 9	56,30	0,056	14 X 1/2
204261	443733	2212	Sanpress	2212 Adapter piece w.sc 16x1/2 NB1 9	60,60	0,061	16 X 1/2
204431	476786	2263	Sanpress	2263 union with SC 14x3/8 NB1 9	53,50	0,054	14 X 3/8
204601	444006	2214	Sanpress	2214 elbow 90°with SC 14x1/2 NO1 9	60,00	0,060	14 X 1/2
204611	444013	2214	Sanpress	2214 elbow 90°with SC 16x1/2 NO1 9	60,50	0,061	16 X 1/2
204631	444150	2263	Sanpress	2263 union with SC 14x3/4 NB1 9	68,75	0,069	14 X 3/4
204641	444167	2263	Sanpress	2263 union with SC 16x1/2 NB1 9	55,00	0,055	16 X 1/2
204651	444174	2263	Sanpress	2263 union with SC 16x3/4 NB1 9	69,50	0,070	16 X 3/4
204831	444020	2214.2	Sanpress	22142 angle 90°with SC 14x1/2 NO1 9	60,70	0,061	14 X 1/2
204841	444037	2214.2	Sanpress	22142 angle 90°with SC 16x1/2 NO1 9	73,50	0,074	16 X 1/2
204851	444044	2225.5	Sanpress	22255 wall plate with SC 14x1/2 NP1 9	110,90	0,111	14 X 1/2
204861	444556	2225.5	Sanpress	22255 wall plate with SC 16x1/2 NO1 9	116,00	0,116	16 X 1/2
214621		2928.7ZL	Sanpress	29287ZLdouble wall plate with SC-CoNG1 9	176,90	0,177	1/2 X 1/2 X 1/2
214641		2928.7ZL	Sanpress	29287ZLdouble wall plate with SC-CoNG1 9	260,00	0,260	3/4 X 3/4 X 3/4
215271	432256	2216XLLF	Sanpress XL LF	2216LF elbow 90°p. 76,1 2G1 9	2300,00	2,300	76,1
215281	432263	2216XLLF	Sanpress XL LF	2216LF elbow 90°p. 88,9 2G1 9	2710,00	2,710	88,9
215291	432270	2216XLLF	Sanpress XL LF	2216LF elbow 90°p. 108,0 2G1 9	3820,00	3,820	108,0
215371	432287	2216.1XLLF	Sanpress XL LF	22161LFelbow 90°p. 76,1 2G1 9	2091,00	2,091	76,1
215391	432300	2216.1XLLF	Sanpress XL LF	22161LFelbow 90°p. 108,0 2G1 9	3550,00	3,550	108,0
215491	432331	2226XLLF	Sanpress XL LF	2226LF elbow 45°p. 108,0 2G1 9	2915,00	2,915	108,0
215681	430306	2214.2LF	Sanpress LF	22142LFelbow with SC 15x1/2 2G1 9	89,00	0,089	15 X 1/2

Material no.	Item no.	Model no.	System name/ brand name	Material short text	Mass in g	Mass in kg	Dimensions
215691	430313	2214.2LF	Sanpress LF	22142LFangle 15x3/4 2G1 9	119,00	0,119	15 X 3/4
215701	430320	2214.2LF	Sanpress LF	22142LFelbow with SC 18x1/2 2G1 9	88,70	0,089	18 X 1/2
215731	430351	2214.2LF	Sanpress LF	22142LFangle 22x3/4 2G1 9	154,00	0,154	22 X 3/4
215751	430375	2214.2LF	Sanpress LF	22142LFelbow with SC 28x1 2G1 9	247,00	0,247	28 X 1
216491		2928.7ZL	Sanpress	29287ZLdouble wall plate with SC-CoNG1 9	246,70	0,247	3/4 X 3/4 X 1/2
216501		2928.7ZL	Sanpress	29287ZLdouble wall plate with SC-CoNG1 9	322,00	0,322	1 X 1 X 1/2
217331	432386	2218XLLF	Sanpress XL LF	2218LF tee 88,9 2G1 9	3710,00	3,710	88,9
217341	432393	2218XLLF	Sanpress XL LF	2218LF tee 108,0 2G1 9	5200,00	5,200	108,0
217351	432409	2218XLLF	Sanpress XL LF	2218LF tee 76,1x54x76,1 2G1 9	2458,00	2,458	76,1 X 54 X 76,1
217361	432416	2218XLLF	Sanpress XL LF	2218LF tee 88,9x54x88,9 2G1 9	2740,00	2,740	88,9 X 54 X 88,9
217371	432423	2218XLLF	Sanpress XL LF	2218LF tee 88,9x76,1x88,9 2G1 9	3555,00	3,555	88,9 X 76,1 X 88,9
217381	432430	2218XLLF	Sanpress XL LF	2218LF tee 108,0x54x108,0 2G1 9	3598,00	3,598	108,0 X 54 X 108,0
217401	432454	2218XLLF	Sanpress XL LF	2218LF tee 108,0x88,9x108,0 2G1 9	4676,00	4,676	108,0X88,9X108,0
217471	430245	2217.2LF	Sanpress LF	22172LFtee 15x1/2x15 2G1 9	118,30	0,118	15 X 1/2 X 15
217481	430757	2217.2LF	Sanpress LF	22172LFt-piece w. sc 18x1/2x18 2G1 9	198,00	0,198	18 X 1/2 X 18
217491	430764	2217.2LF	Sanpress LF	22172LFtee 22x1/2x22 2G1 9	211,00	0,211	22 X 1/2 X 22
217511	430788	2217.2LF	Sanpress LF	22172LFt-piece w. sc 28x1/2x28 2G1 9	259,00	0,259	28 X 1/2 X 28
217521	430795	2217.2LF	Sanpress LF	22172LFtee 28x3/4x28 2G1 9	302,00	0,302	28 X 3/4 X 28
217531	430801	2217.2LF	Sanpress LF	22172LFt-piece w. sc 35x1/2x35 2G1 9	298,00	0,298	35 X 1/2 X 35
217541	430818	2217.2LF	Sanpress LF	22172LFtee 35x1x35 2G1 9	457,00	0,457	35 X 1 X 35
217561	430832	2217.2LF	Sanpress LF	22172LFt-piece w. sc 42x1x42 2G1 9	658,00	0,658	42 X 1 X 42
217571	430849	2217.2LF	Sanpress LF	22172LFt-piece w. sc 54x1/2x54 2G1 9	620,00	0,620	54 X 1/2 X 54
217591	432461	2217.2XLLF	Sanpress XL LF	22172LFtee 76,1x3/4x76,1 2G1 9	1962,00	1,962	76,1 X 3/4 X 76,1
217651	430863	2211LF	Sanpress LF	2211LF Adapter piece w.sc 15x1/2 NB1 9	39,40	0,039	15 X 1/2
217661	430870	2211LF	Sanpress LF	2211LF adapter piece 15x3/4 NB1 9	57,20	0,057	15 X 3/4
217671	430887	2211LF	Sanpress LF	2211LF Adapter piece w.sc 18x1/2 NB1 9	45,30	0,045	18 X 1/2
217691	430900	2211LF	Sanpress LF	2211LF Adapter piece w.sc 22x1/2 NB1 9	65,00	0,065	22 X 1/2
217701	430917	2211LF	Sanpress LF	2211LF Adapter piece w.sc 22x3/4 NB1 9	70,60	0,071	22 X 3/4
217711	430924	2211LF	Sanpress LF	2211LF Adapter piece w.sc 22x1 NB1 9	116,50	0,117	22 X 1
217721	430931	2211LF	Sanpress LF	2211LF Adapter piece w.sc 28x1 NB1 9	112,00	0,112	28 X 1

Material no.	Item no.	Model no.	System name/ brand name	Material short text	Mass in g	Mass in kg	Dimensions
217731	430948	2211LF	Sanpress LF	2211LF adapter piece 28x11/4 NB1 9	185,00	0,185	28 X 1 1/4
217751	430962	2211LF	Sanpress LF	2211LF Adapter piece w.sc 35x11/4 NB1 9	207,00	0,207	35 X 1 1/4
217761	430979	2211LF	Sanpress LF	2211LF adapter piece 35x11/2 NB1 9	227,70	0,228	35 X 1 1/2
217771	430986	2211LF	Sanpress LF	2211LF Adapter piece w.sc 42x11/4 NB1 9	211,80	0,212	42 X 1 1/4
217781	430993	2211LF	Sanpress LF	2211LF Adapter piece w.sc 42x11/2 NB1 9	234,50	0,235	42 X 1 1/2
217801	431013	2211LF	Sanpress LF	2211LF Adapter piece w.sc 54x2 2 1 9	503,00	0,503	54 X 2
217811	432522	2211XLLF	Sanpress XL LF	2211LF adapter piece 76,1x21/2 2G1 9	1005,00	1,005	76,1 X 2 1/2
217841	431020	2212LF	Sanpress LF	2212LF Adapter piece w.sc 15x1/2 NB1 9	47,90	0,048	15 X 1/2
217851	431037	2212LF	Sanpress LF	2212LF adapter piece 15x3/4 NB1 9	57,80	0,058	15 X 3/4
217861	431044	2212LF	Sanpress LF	2212LF Adapter piece w.sc 18x1/2 NB1 9	51,30	0,051	18 X 1/2
217881	431068	2212LF	Sanpress LF	2212LF Adapter piece w.sc 22x1/2 NB1 9	60,50	0,061	22 X 1/2
217891	431075	2212LF	Sanpress LF	2212LF adapter piece 22x3/4 NB1 9	70,40	0,070	22 X 3/4
217901	431082	2212LF	Sanpress LF	2212LF adapter piece 22x1 NB1 9	100,40	0,100	22 X 1
217911	431099	2212LF	Sanpress LF	2212LF Adapter piece w.sc 28x1 NB1 9	99,20	0,099	28 X 1
217931	431112	2212LF	Sanpress LF	2212LF adapter piece 35x1 NB1 9	110,00	0,110	35 X 1
217941	431129	2212LF	Sanpress LF	2212LF Adapter piece w.sc 35x11/4 NB1 9	165,10	0,165	35 X 1 1/4
217951	431136	2212LF	Sanpress LF	2212LF adapter piece 42x11/4 NB1 9	222,60	0,223	42 X 1 1/4
217961	431143	2212LF	Sanpress LF	2212LF Adapter piece w.sc 42x11/2 NB1 9	280,60	0,281	42 X 1 1/2
217981	431167	2212LF	Sanpress LF	2212LF Adapter piece w.sc 54x2 2 1 9	475,00	0,475	54 X 2
218061	432553	2215XLLF	Sanpress XL LF	2215LF pipe coupling 76,1 2G1 9	1237,00	1,237	76,1
218071	432560	2215XLLF	Sanpress XL LF	2215LF pipe coupling 88,9 2G1 9	1412,00	1,412	88,9
218081	432577	2215XLLF	Sanpress XL LF	2215LF pipe coupling 108,0 2G1 9	2045,00	2,045	108,0
218161	432584	2215.5XLLF	Sanpress XL LF	22155LFsliding coupling 76,1 2G1 9	1221,00	1,221	76,1
218171	432591	2215.5XLLF	Sanpress XL LF	22155LFsliding coupling 88,9 2G1 9	1384,00	1,384	88,9
218341	432614	2215.1XLLF	Sanpress XL LF	22151LFreducer 76,1x54 2G1 9	770,00	0,770	76,1 X 54
218351	432621	2215.1XLLF	Sanpress XL LF	22151LFreducer 88,9x54 2G1 9	959,00	0,959	88,9 X 54
218361	432638	2215.1XLLF	Sanpress XL LF	22151LFreducer 88,9x76,1 2G1 9	1245,00	1,245	88,9 X 76,1
218371	432645	2215.1XLLF	Sanpress XL LF	22151LFreducer 108,0x54 2G1 9	1315,00	1,315	108,0 X 54
218381	432850	2215.1XLLF	Sanpress XL LF	22151LFreducer 108,0x76,1 2G1 9	1615,25	1,615	108,0 X 76,1
218391	432867	2215.1XLLF	Sanpress XL LF	22151LFreducer 108,0x88,9 2G1 9	1658,00	1,658	108,0 X 88,9

Material no.	Item no.	Model no.	System name/ brand name	Material short text	Mass in g	Mass in kg	Dimensions
218401	431464	2260LF	Sanpress LF	2260LF union 15 NB1 9	125,30	0,125	15
218421	431488	2260LF	Sanpress LF	2260LF union with SC 22 NB1 9	225,00	0,225	22
218431	431495	2260LF	Sanpress LF	2260LF union with SC 28 NB1 9	364,00	0,364	28
218591	431655	2265LF	Sanpress LF	2265LF union with SC 18x1/2 NB1 9	130,70	0,131	18 X 1/2
218611	431679	2265LF	Sanpress LF	2265LF union with SC 22x1/2 NB1 9	198,00	0,198	22 X 1/2
218621	431686	2265LF	Sanpress LF	2265LF union with SC 22x3/4 NB1 9	210,00	0,210	22 X 3/4
218651	431716	2265LF	Sanpress LF	2265LF union with SC 35x11/4 NB1 9	435,00	0,435	35 X 1 1/4
218661	431723	2265LF	Sanpress LF	2265LF union with SC 42x11/2 2 1 9	569,00	0,569	42 X 1 1/2
218671	431730	2265LF	Sanpress LF	2265LF union with SC 54x2 2C1 9	991,00	0,991	54 X 2
218771	431839	2263LF	Sanpress LF	2263LF union with SC 15x3/4 NB1 9	67,40	0,067	15 X 3/4
218791	431853	2263LF	Sanpress LF	2263LF union with SC 18x3/4 NB1 9	72,20	0,072	18 X 3/4
218801	431860	2263LF	Sanpress LF	2263LF union 18x1 NB1 9	89,00	0,089	18 X 1
218811	431877	2263LF	Sanpress LF	2263LF union with SC 22x3/4 NB1 9	88,30	0,088	22 X 3/4
218821	431884	2263LF	Sanpress LF	2263LF union with SC 22x1 NB1 9	112,40	0,112	22 X 1
218851	431914	2263LF	Sanpress LF	2263LF union with SC 28x11/4 NB1 9	172,00	0,172	28 X 1 1/4
218881	431945	2263LF	Sanpress LF	2263LF union with SC 42x13/4 NB1 9	345,40	0,345	42 X 1 3/4
218901	431969	2263LF	Sanpress LF	2263LF union with SC 54x23/8 2 1 9	564,00	0,564	54 X 2 3/8
220251	432027	2225.5LF	Sanpress LF	22255LFwall plate with SC 15x1/2 2G1 9	138,00	0,138	15 X 1/2
220261	432034	2225.5LF	Sanpress LF	22255LFwall plate with SC 18x1/2 2G1 9	130,00	0,130	18 X 1/2
220281	432058	2225.5LF	Sanpress LF	22255LFwall plate 22x1/2 2G1 9	183,00	0,183	22 X 1/2
224001	424435	2244	Sanpress	2244 cross piece with SC 15x15x152G1 9	183,00	0,183	15 X 15 X 15
224051	424497	2244	Sanpress	2244 cross piece with SC 22x15x222G1 9	224,00	0,224	22 X 15 X 22
224061	446628	2273.1	Sanpress	22731 connectionset with SC-Contur2G4 9	845,00	0,845	15 X 1/2 X 15
224071	446635	2273.1	Sanpress	22731 connectionset with SC-Contur2G4 9	855,00	0,855	18 X 1/2 X 18
224161	443030	2214	Sanpress	2214 elbow 90° with SC 15x3/4 NO1 9	117,34	0,117	15 X 3/4
224191	446611	2214.2	Sanpress	22142 angle 90° with SC 28x3/4 NO1 9	127,75	0,128	28 X 3/4
224611	442033	2214.2	Sanpress	22142 angle 90° with SC 28x1/2 NO1 9	117,00	0,117	28 X 1/2
235361	460402	2240.9	Easytop	22409 insert 1/2 2 1 9	69,70	0,070	1/2
235371	460419	2240.9	Easytop	22409 Einsatz 3/4 2 1 9	115,00	0,115	3/4
244481	632236	2276.9	Smartloop	22769 tension coupling 12 0 1 9	30,52	0,031	12

Material no.	Item no.	Model no.	System name/ brand name	Material short text	Mass in g	Mass in kg	Dimensions
244491	632229	2276.1	Smartloop	22761 connectionset with SC-ConturNB1 9	185,33	0,185	28/35 X 12
245301	469450	2267	Sanpress	2267 ins.union w.sc 15x1/2 NB1 9	193,30	0,193	15 X 1/2
245311	469467	2267	Sanpress	2267 ins.union w.sc 15x3/4 NB1 9	199,50	0,200	15 X 3/4
245321	469474	2267	Sanpress	2267 ins.union w.sc 18x1/2 NB1 9	331,60	0,332	18 X 1/2
245331	469481	2267	Sanpress	2267 ins.union w.sc 18x3/4 NB1 9	307,90	0,308	18 X 3/4
245341	469498	2267	Sanpress	2267 ins.union w.sc 22x3/4 NB1 9	464,57	0,465	22 X 3/4
245351	469504	2267	Sanpress	2267 ins.union w.sc 22x1 NB1 9	442,86	0,443	22 X 1
245361	469511	2267	Sanpress	2267 ins.union w.sc 28x1 NB1 9	451,80	0,452	28 X 1
245371	469528	2267	Sanpress	2267 ins.union w.sc 35x11/4 NB1 9	777,50	0,778	35 X 1 1/4
245381	469535	2267	Sanpress	2267 ins.union w.sc 42x11/2 NB1 9	853,60	0,854	42 X 1 1/2
245391	469542	2267	Sanpress	2267 ins.union w.sc 54x2 NB1 9	1334,00	1,334	54 X 2
247001	479855	2259.5	Sanpress	22595 flange adapter with SC 28(DNNB1 9	1340,00	1,340	28 (DN25)
247011	479879	2259.5	Sanpress	22595 flange adapter with SC 35(DNNB1 9	1970,00	1,970	35 (DN32)
247021	479886	2259.5	Sanpress	22595 flange adapter with SC 42(DNNB1 9	2394,00	2,394	42 (DN40)
247031	479893	2259.5	Sanpress	22595 flange adapter with SC 54(DNNB1 9	2849,00	2,849	54 (DN50)
247041	479954	2259.5XL	Sanpress XL	22595XLflange adapter 76,1(DN65) 2C1 9	3520,00	3,520	76,1 (DN65)
247051	479978	2259.5XL	Sanpress XL	22595XLflange adapter 88,9(DN80) 2C1 9	4446,50	4,447	88,9 (DN80)
247061	480011	2259.5XL	Sanpress XL	22595XLflange adapter 108,0(DN100) 2C1 9	5160,00	5,160	108,0 (DN100)
248801	470272	2276.1	Smartloop	22761 connectionset with SC-ConturNB1 9	202,10	0,202	35 X 12
248811	470289	2276.1	Smartloop	22761 connectionset with SC-ConturNB1 9	149,10	0,149	28 X 12
250001	705596	2217.4	Sanpress	22174 t-piece w. sc 15x1/4x15 2G1 9	85,00	0,085	15 X 1/4 X 15
250011	705602	2217.4	Sanpress	22174 t-piece w. sc 18x1/4x18 2G1 9	100,00	0,100	18 X 1/4 X 18
250021	705619	2217.4	Sanpress	22174 t-piece w. sc 22x1/4x22 2G1 9	130,00	0,130	22 X 1/4 X 22
250031	705626	2217.4	Sanpress	22174 t-piece w. sc 28x1/4x28 2G1 9	163,00	0,163	28 X 1/4 X 28
250041	705633	2217.4	Sanpress	22174 t-piece w. sc 35x1/4x35 2G1 9	220,00	0,220	35 X 1/4 X 35
250051	705640	2217.4	Sanpress	22174 t-piece w. sc 42x1/4x42 2G1 9	380,00	0,380	42 X 1/4 X 42
250061	705855	2217.4	Sanpress	22174 t-piece w. sc 54x1/4x54 2G1 9	530,00	0,530	54 X 1/4 X 54
253467	706852	2211CR	Sanpress	2211CR Adapter piece w.sc 12x3/8 NB7 9	28,20	0,028	12 X 3/8
253477	706869	2211CR	Sanpress	2211CR Adapter piece w.sc 12x1/2 NB7 9	33,27	0,033	12 X 1/2
253487	706876	2211CR	Sanpress	2211CR Adapter piece w.sc 15x1/2 NB7 9	41,10	0,041	15 X 1/2

Material no.	Item no.	Model no.	System name/ brand name	Material short text	Mass in g	Mass in kg	Dimensions
253497	706883	2212CR	Sanpress	2212CR Adapter piece w.sc 12x1/2 NB7 9	54,50	0,055	12 X 1/2
253507	706890	2212CR	Sanpress	2212CR Adapter piece w.sc 15x1/2 NB7 9	48,80	0,049	15 X 1/2
256821	475956	2263	Sanpress	2263 union with SC 12x3/8 NB1 9	47,90	0,048	12 X 3/8
256831	475963	2263	Sanpress	2263 union with SC 15x3/8 NB1 9	53,90	0,054	15 X 3/8
268421	426743	2263	Sanpress	2263 union with SC 54x21/4 2 1 9	456,00	0,456	54 X 2 1/4
268431	426750	2263	Sanpress	2263 union with SC 54x23/4 NB1 9	622,45	0,622	54 X 2 3/4
273961	193331	2209.3	Sanpress	22093 sanpress-overbow 22 E 1 9	140,50	0,141	22
273971	193324	2209.3	Sanpress	22093 sanpress-overbow 15 E 1 9	61,30	0,061	15
274641	193294	2209.3	Sanpress	22093 sanpress-overbow 28 E 1 9	219,00	0,219	28
274811	289010	2209.3	Sanpress	22093 sanpress-overbow 18 E 1 9	86,90	0,087	18
275061	215835	2215	Sanpress	2215 sleeve with SC 54 2 1 9	355,00	0,355	54
276211	297930	2211	Sanpress	2211 Adapter piece w.sc 42x11/4 2A1 9	235,30	0,235	42 X 1 1/4
276221	297947	2211	Sanpress	2211 Adapter piece w.sc 35x1 2A1 9	134,60	0,135	35 X 1
276291	283490	2211	Sanpress	2211 Adapter piece w.sc 18x1/2 2 1 9	51,30	0,051	18 X 1/2
276551	313616	2218	Sanpress	2218 t-piece w. sc 35x18x35 NG1 9	239,50	0,240	35 X 18 X 35
276561	313623	2218	Sanpress	2218 t-piece w. sc 22x28x22 NO1 9	236,00	0,236	22 X 28 X 22
276571	313630	2218	Sanpress	2218 t-piece w. sc 12x15x12 2G1 9	102,00	0,102	12 X 15 X 12
276581	313647	2218	Sanpress	2218 t-piece w. sc 15x18x15 NO1 9	136,00	0,136	15 X 18 X 15
276791	283230	2211	Sanpress	2211 Adapter piece w.sc 18x3/4 NB1 9	63,70	0,064	18 X 3/4
276951	365097	2212	Sanpress	2212 Adapter piece w.sc 54x11/2 2 1 9	381,60	0,382	54 X 1 1/2
277141	104306	2211	Sanpress	2211 Adapter piece w.sc 22x3/4 NB1 9	72,10	0,072	22 X 3/4
277151	106508	2211	Sanpress	2211 Adapter piece w.sc 28x1 2 1 9	119,00	0,119	28 X 1
277161	110352	2211	Sanpress	2211 Adapter piece w.sc 35x11/4 2 1 9	184,50	0,185	35 X 1 1/4
277171	115340	2211	Sanpress	2211 Adapter piece w.sc 42x11/2 2 1 9	255,20	0,255	42 X 1 1/2
277181	105044	2211	Sanpress	2211 Adapter piece w.sc 15x1/2 NB1 9	41,30	0,041	15 X 1/2
277201	115418	2211.1	Sanpress	22111 plug piece 15x1/2 NB1 9	44,00	0,044	15 X 1/2
277211	119676	2211.1	Sanpress	22111 plug piece 22x1/2 NB1 9	53,80	0,054	22 X 1/2
277221	116767	2211.1	Sanpress	22111 plug piece 22x3/4 NB1 9	79,02	0,079	22 X 3/4
277231	122034	2211.1	Sanpress	22111 plug piece 28x1 NB1 9	120,00	0,120	28 X 1
277241	125288	2211.1	Sanpress	22111 plug piece 35x11/4 NB1 9	185,60	0,186	35 X 1 1/4

Material no.	Item no.	Model no.	System name/ brand name	Material short text	Mass in g	Mass in kg	Dimensions
277251	132231	2211.1	Sanpress	22111 plug piece 42x11/2 NB1 9	258,00	0,258	42 X 1 1/2
277261	108465	2212	Sanpress	2212 Adapter piece w.sc 22x3/4 2 1 9	84,60	0,085	22 X 3/4
277271	114329	2212	Sanpress	2212 Adapter piece w.sc 28x1 2 1 9	126,60	0,127	28 X 1
277281	357542	2212	Sanpress	2212 Adapter piece w.sc 35x3/4 NB1 9	115,80	0,116	35 X 3/4
277291	117733	2212.1	Sanpress	22121 plug piece 15x1/2 NB1 9	41,20	0,041	15 X 1/2
277301	120917	2212.1	Sanpress	22121 plug piece 22x1/2 NB1 9	49,61	0,050	22 X 1/2
277311	117481	2212.1	Sanpress	22121 plug piece 22x3/4 NB1 9	61,40	0,061	22 X 3/4
277321	122942	2212.1	Sanpress	22121 plug piece 28x1 NB1 9	93,30	0,093	28 X 1
277331	130954	2212.1	Sanpress	22121 plug piece 28x3/4 NB1 9	67,75	0,068	28 X 3/4
277341	134730	2212.1	Sanpress	22121 plug piece 35x1 NB1 9	116,00	0,116	35 X 1
277351	130589	2212.1	Sanpress	22121 plug piece 35x11/4 NB1 9	171,50	0,172	35 X 1 1/4
277361	135430	2212.1	Sanpress	22121 plug piece 42x11/2 NB1 9	225,20	0,225	42 X 1 1/2
277371	323707	2215.1NC	Sanpress	22151NCreducer 15x14 2A1 9	50,00	0,050	15 X 14
277381	366865	2215.1	Sanpress	22151 reduc. piece w. sc 22x12 NB1 9	36,30	0,036	22 X 12
277401	107543	2212	Sanpress	2212 Adapter piece w.sc 15x1/2 2 1 9	63,60	0,064	15 X 1/2
277411	116774	2212	Sanpress	2212 Adapter piece w.sc 35x11/4 2 1 9	174,80	0,175	35 X 1 1/4
277421	124236	2212	Sanpress	2212 Adapter piece w.sc 42x11/2 2 1 9	319,80	0,320	42 X 1 1/2
277441	335281	2214.1	Sanpress	22141 angle 90°with SC 15x1/2 NP1 9	52,80	0,053	15 X 1/2
277461	112950	2214	Sanpress	2214 elbow 90°with SC 15x1/2 NO1 9	56,00	0,056	15 X 1/2
277471	115623	2214	Sanpress	2214 elbow 90°with SC 22x3/4 NO1 9	101,90	0,102	22 X 3/4
277481	118730	2214	Sanpress	2214 elbow 90°with SC 28x1 NO1 9	180,00	0,180	28 X 1
277491	128500	2214	Sanpress	2214 elbow 90°with SC 42x11/2 NG1 9	364,00	0,364	42 X 1 1/2
277561	281205	2214	Sanpress	2214 elbow 90°with SC 18x1/2 NP1 9	73,00	0,073	18 X 1/2
277571	127329	2214	Sanpress	2214 elbow 90°with SC 35x11/4 NG1 9	278,00	0,278	35 X 1 1/4
277601	108090	2215	Sanpress	2215 sleeve with SC 22 2 1 9	73,20	0,073	22
277611	108618	2215	Sanpress	2215 sleeve with SC 28 2 1 9	99,24	0,099	28
277621	114930	2215	Sanpress	2215 sleeve with SC 35 NB1 9	112,00	0,112	35
277631	116835	2215	Sanpress	2215 sleeve with SC 42 NB1 9	195,50	0,196	42
277641	108250	2215.1	Sanpress	22151 reduc. piece w. sc 22x15 NB1 9	38,80	0,039	22 X 15
277651	308636	2215	Sanpress	2215 sleeve with SC 12 NB1 9	24,30	0,024	12

Material no.	Item no.	Model no.	System name/ brand name	Material short text	Mass in g	Mass in kg	Dimensions
277661	323714	2215.1NC	Sanpress	22151NCreducer 15x16 2A1 9	61,50	0,062	15 X 16
277671	323721	2215.1NC	Sanpress	22151NCreducer 18x16 2A1 9	68,10	0,068	18 X 16
277701	109974	2215.1	Sanpress	22151 reduc. piece w. sc 28x22 NB1 9	66,20	0,066	28 X 22
277711	115753	2215.1	Sanpress	22151 reduc. piece w. sc 35x22 NB1 9	97,10	0,097	35 X 22
277721	116934	2215.1	Sanpress	22151 reduc. piece w. sc 35x28 NB1 9	97,80	0,098	35 X 28
277731	124489	2215.1	Sanpress	22151 reduc. piece w. sc 42x28 NB1 9	160,90	0,161	42 X 28
277741	122775	2215.1	Sanpress	22151 reduc. piece w. sc 42x35 NB1 9	148,70	0,149	42 X 35
277751	282660	2215	Sanpress	2215 sleeve with SC 18 NB1 9	46,20	0,046	18
277801	104818	2216	Sanpress	2216 elbow 90°with SC 22 NP1 9	118,50	0,119	22
277811	106348	2216	Sanpress	2216 elbow 90°with SC 28 NP1 9	161,80	0,162	28
277821	111953	2216	Sanpress	2216 elbow 90°with SC 35 NG1 9	230,00	0,230	35
277831	119560	2216	Sanpress	2216 elbow 90°with SC 42 NG1 9	381,00	0,381	42
277901	108120	2216.1	Sanpress	22161 elbow 90°with SC 22 NO1 9	107,00	0,107	22
277911	115159	2216.1	Sanpress	22161 elbow 90°with SC 28 NP1 9	164,00	0,164	28
277921	117603	2216.1	Sanpress	22161 elbow 90°with SC 35 NG1 9	250,00	0,250	35
277931	130497	2216.1	Sanpress	22161 elbow 90°with SC 42 NG1 9	368,00	0,368	42
277941	107932	2216.1	Sanpress	22161 elbow 90°with SC 15 NO1 9	47,86	0,048	15
277991	103750	2216	Sanpress	2216 elbow 90°with SC 15 NP1 9	56,00	0,056	15
278001	115944	2217.2	Sanpress	22172 t-piece w. sc 22x1/2x22 NP1 9	123,60	0,124	22 X 1/2 X 22
278011	115630	2217.2	Sanpress	22172 t-piece w. sc 15x1/2x15 NP1 9	80,00	0,080	15 X 1/2 X 15
278031	119768	2217.2	Sanpress	22172 t-piece w. sc 28x1/2x28 NP1 9	150,60	0,151	28 X 1/2 X 28
278041	121945	2217.2	Sanpress	22172 t-piece w. sc 35x1/2x35 NG1 9	216,77	0,217	35 X 1/2 X 35
278061	109165	2218	Sanpress	2218 t-piece w. sc 22x15x22 NO1 9	131,00	0,131	22 X 15 X 22
278071	109257	2218	Sanpress	2218 t-piece w. sc 22 NO1 9	160,00	0,160	22
278081	111625	2218	Sanpress	2218 t-piece w. sc 28x22x28 NO1 9	195,00	0,195	28 X 22 X 28
278091	111915	2218	Sanpress	2218 t-piece w. sc 28 NO1 9	213,70	0,214	28
278101	113469	2218	Sanpress	2218 t-piece w. sc 35x22x35 NG1 9	268,00	0,268	35 X 22 X 35
278111	118341	2218	Sanpress	2218 t-piece w. sc 35x28x35 NG1 9	296,00	0,296	35 X 28 X 35
278121	115265	2218	Sanpress	2218 t-piece w. sc 35 NG1 9	320,00	0,320	35
278131	120672	2218	Sanpress	2218 t-piece w. sc 42x35x42 NG1 9	472,00	0,472	42 X 35 X 42

Material no.	Item no.	Model no.	System name/ brand name	Material short text	Mass in g	Mass in kg	Dimensions
278141	121259	2218	Sanpress	2218 t-piece w. sc 42 NG1 9	518,00	0,518	42
278231	106614	2218	Sanpress	2218 t-piece w. sc 15 NO1 9	75,80	0,076	15
278261	126230	2217.2	Sanpress	22172 t-piece w. sc 42x1/2x42 NG1 9	387,00	0,387	42 X 1/2 X 42
278301	108441	2214.2	Sanpress	22142 angle 90°with SC 15x1/2 NO1 9	57,34	0,057	15 X 1/2
278321	107727	2215	Sanpress	2215 sleeve with SC 15 NB1 9	33,80	0,034	15
278331	314910	2262	Sanpress	2262 union with SC 18x3/4 NB1 9	131,40	0,131	18 X 3/4
278341	113186	2226	Sanpress	2226 elbow 45°with SC 15 NO1 9	48,00	0,048	15
278351	112004	2226	Sanpress	2226 elbow 45°with SC 22 NO1 9	90,50	0,091	22
278361	111670	2226	Sanpress	2226 elbow 45°with SC 28 NP1 9	125,00	0,125	28
278371	116156	2226	Sanpress	2226 elbow 45°with SC 35 NG1 9	217,90	0,218	35
278381	128531	2226	Sanpress	2226 elbow 45°with SC 42 NG1 9	350,00	0,350	42
278441	121600	2218	Sanpress	2218 t-piece w. sc 22x15x15 NO1 9	121,00	0,121	22 X 15 X 15
278451	135102	2218	Sanpress	2218 t-piece w. sc 28x22x22 NO1 9	176,00	0,176	28 X 22 X 22
278461	121754	2218	Sanpress	2218 t-piece w. sc 35x28x28 NG1 9	265,90	0,266	35 X 28 X 28
278541	109332	2226.1	Sanpress	22261 elbow 45°with SC 15 NO1 9	44,30	0,044	15
278551	110949	2226.1	Sanpress	22261 elbow 45°with SC 22 NO1 9	80,00	0,080	22
278561	113346	2226.1	Sanpress	22261 elbow 45°with SC 28 NP1 9	115,00	0,115	28
278571	121594	2226.1	Sanpress	22261 elbow 45°with SC 35 NG1 9	226,00	0,226	35
278581	134471	2226.1	Sanpress	22261 elbow 45°with SC 42 NG1 9	372,00	0,372	42
278641	119485	2215.5	Sanpress	22155 sliding sleeve 15 2 1 9	82,10	0,082	15
278661	119041	2215.5	Sanpress	22155 sliding sleeve 22 2 1 9	124,40	0,124	22
278681	122133	2215.5	Sanpress	22155 sliding sleeve 28 2 1 9	172,50	0,173	28
278701	124335	2215.5	Sanpress	22155 sliding sleeve 35 2 1 9	229,80	0,230	35
278711	310936	2217.1	Sanpress	22171 t-piece w. sc 54x11/4x54 2G1 9	831,00	0,831	54 X 1 1/4 X 54
278721	131494	2215.5	Sanpress	22155 sliding sleeve 42 2 1 9	387,70	0,388	42
278731	310929	2217.1	Sanpress	22171 t-piece w. sc 54x1x54 NG1 9	749,00	0,749	54 X 1 X 54
278771	124502	2221	Sanpress	2221 Mounting unit with SC 15x1/2NO1 9	450,00	0,450	15X1/2X45X150/200
278781	135119	2221.1	Sanpress	22211 Mounting unit with SC 15x1/2NO1 9	410,00	0,410	15X1/2X45X80/100
278811	287061	2215.5	Sanpress	22155 sliding sleeve 18 2 1 9	99,30	0,099	18
278861	116057	2225.5	Sanpress	22255 wall plate with SC 22x3/4 NO1 9	174,00	0,174	22 X 3/4

Material no.	Item no.	Model no.	System name/ brand name	Material short text	Mass in g	Mass in kg	Dimensions
278881	291389	2265	Sanpress	2265 union with SC 12x1/2 NB1 9	115,20	0,115	12 X 1/2
278901	125660	2255	Sanpress	2255 angle union with SC 15x1/2 N 1 9	161,90	0,162	15 X 1/2
278911	122614	2255	Sanpress	2255 angle union with SC 22x3/4 N 1 9	232,60	0,233	22 X 3/4
278921	132637	2255	Sanpress	2255 angle union with SC 22x1 2G1 9	283,54	0,284	22 X 1
278931	128159	2255	Sanpress	2255 angle union with SC 28x1 N 1 9	363,65	0,364	28 X 1
278941	132729	2255	Sanpress	2255 angle union with SC 35x11/4 N 1 9	536,00	0,536	35 X 1 1/4
278951	139872	2255	Sanpress	2255 angle union with SC 42x11/2 N 1 9	794,00	0,794	42 X 1 1/2
278971	116552	2225	Sanpress	2225 wall plate with SC 15x1/2x45NO1 9	166,00	0,166	15 X 1/2 X 45
278981	107345	2225.5	Sanpress	22255 wall plate with SC 15x1/2 NP1 9	107,10	0,107	15 X 1/2
279021	194123	2217.1	Sanpress	22171 t-piece w. sc 22x3/4x22 NO1 9	148,33	0,148	22 X 3/4 X 22
279031	194130	2217.1	Sanpress	22171 t-piece w. sc 28x3/4x28 NO1 9	172,00	0,172	28 X 3/4 X 28
279041	194147	2217.1	Sanpress	22171 t-piece w. sc 35x3/4x35 NG1 9	268,00	0,268	35 X 3/4 X 35
279101	194239	2215.1	Sanpress	22151 reduc. piece w. sc 54x28 NB1 9	254,90	0,255	54 X 28
279111	194222	2215.1	Sanpress	22151 reduc. piece w. sc 54x35 NB1 9	262,30	0,262	54 X 35
279121	195267	2211	Sanpress	2211 Adapter piece w.sc 54x2 2 1 9	418,80	0,419	54 X 2
279161	195304	2212	Sanpress	2212 Adapter piece w.sc 54x2 2 1 9	416,60	0,417	54 X 2
279201	126148	2260	Sanpress	2260 union with SC 15 NB1 9	121,70	0,122	15
279211	126124	2260	Sanpress	2260 union with SC 22 NB1 9	217,30	0,217	22
279221	124311	2260	Sanpress	2260 union with SC 28 NB1 9	318,20	0,318	28
279231	130947	2260	Sanpress	2260 union with SC 35 NB1 9	404,65	0,405	35
279241	132446	2260	Sanpress	2260 union with SC 42 NB1 9	613,40	0,613	42
279311	283384	2262	Sanpress	2262 union with SC 18x1/2 NB1 9	126,80	0,127	18 X 1/2
279321	283377	2265	Sanpress	2265 union with SC 18x3/4 NB1 9	131,60	0,132	18 X 3/4
279331	283360	2265	Sanpress	2265 union with SC 18x1/2 NB1 9	126,70	0,127	18 X 1/2
279341	287436	2260	Sanpress	2260 union with SC 18 NB1 9	134,00	0,134	18
279541	365103	2262	Sanpress	2262 union with SC 28x3/4 NB1 9	250,70	0,251	28 X 3/4
279551	131937	2262	Sanpress	2262 union with SC 15x1/2 NB1 9	122,60	0,123	15 X 1/2
279561	133160	2262	Sanpress	2262 union with SC 15x3/4 NB1 9	124,10	0,124	15 X 3/4
279571	125318	2262	Sanpress	2262 union with SC 22x3/4 NB1 9	205,50	0,206	22 X 3/4
279581	133900	2262	Sanpress	2262 union with SC 22x1 NB1 9	235,50	0,236	22 X 1

Material no.	Item no.	Model no.	System name/ brand name	Material short text	Mass in g	Mass in kg	Dimensions
279591	128975	2262	Sanpress	2262 union with SC 28x1 NB1 9	332,40	0,332	28 X 1
279601	138875	2262	Sanpress	2262 union with SC 35x11/4 NB1 9	404,10	0,404	35 X 1 1/4
279611	141745	2262	Sanpress	2262 union with SC 42x11/2 NB1 9	558,65	0,559	42 X 1 1/2
279641	365110	2265	Sanpress	2265 union with SC 28x3/4 NB1 9	306,30	0,306	28 X 3/4
279651	291372	2265	Sanpress	2265 union with SC 12x3/8 NB1 9	109,75	0,110	12 X 3/8
279681	199104	2212.1	Sanpress	22121 plug piece 54x2 NB1 9	394,86	0,395	54 X 2
279701	120108	2265	Sanpress	2265 union with SC 15x1/2 NB1 9	121,38	0,121	15 X 1/2
279711	119133	2265	Sanpress	2265 union with SC 22x3/4 NB1 9	201,60	0,202	22 X 3/4
279721	120047	2265	Sanpress	2265 union with SC 28x1 NB1 9	302,20	0,302	28 X 1
279731	128425	2265	Sanpress	2265 union with SC 35x11/4 NB1 9	410,00	0,410	35 X 1 1/4
279741	135966	2265	Sanpress	2265 union with SC 42x11/2 NB1 9	558,30	0,558	42 X 1 1/2
279751	140878	2265	Sanpress	2265 union with SC 15x3/4 NB1 9	126,90	0,127	15 X 3/4
279761	142674	2265	Sanpress	2265 union with SC 22x1/2 NB1 9	191,35	0,191	22 X 1/2
279771	148492	2265	Sanpress	2265 union with SC 22x1 NB1 9	198,70	0,199	22 X 1
279791	357351	2222.6EX	Sanpress	22226EXMounting unit with SC 12x3/8NO1 9	195,00	0,195	12 X 3/8 X 120
279861	308674	2222.2	Sanpress	22222 Mounting unit with SC 15x1/2NP1 9	203,95	0,204	15 X 1/2 X 100
279901	308681	2222.05	Sanpress	222205 Mounting unit with SC 15x1/2NP1 9	230,00	0,230	15 X 1/2 X 150
279921	198879	2215.1	Sanpress	22151 reduc. piece w. sc 54x42 NB1 9	299,20	0,299	54 X 42
279941	265304	2263	Sanpress	2263 union with SC 42x13/4 NB1 9	332,80	0,333	42 X 1 3/4
279961	265328	2263	Sanpress	2263 union with SC 54x23/8 2 1 9	549,00	0,549	54 X 2 3/8
279981	289423	2269	Sanpress	2269 test plug 18 0 1 9	264,00	0,264	18
279991	187798	2269	Sanpress	2269 test plug 54 0 1 9	1111,60	1,112	54
280001	141523	2269	Sanpress	2269 test plug 15 0 1 9	221,60	0,222	15
280011	140557	2269	Sanpress	2269 test plug 22 0 1 9	312,00	0,312	22
280021	142568	2269	Sanpress	2269 test plug 28 0 1 9	452,70	0,453	28
280031	144111	2269	Sanpress	2269 test plug 35 0 1 9	625,00	0,625	35
280041	144999	2269	Sanpress	2269 test plug 42 0 1 9	825,00	0,825	42
280171	265731	2263	Sanpress	2263 union with SC 35x11/2 NB1 9	205,60	0,206	35 X 1 1/2
280201	265700	2263	Sanpress	2263 union with SC 28x11/4 NB1 9	159,60	0,160	28 X 1 1/4
280221	265687	2263	Sanpress	2263 union with SC 22x1 NB1 9	110,10	0,110	22 X 1

Material no.	Item no.	Model no.	System name/ brand name	Material short text	Mass in g	Mass in kg	Dimensions
280241	265663	2263	Sanpress	2263 union with SC 15x3/4 NB1 9	65,00	0,065	15 X 3/4
280251	283391	2263	Sanpress	2263 union with SC 18x3/4 NB1 9	70,90	0,071	18 X 3/4
280291	290801	2269	Sanpress	2269 test plug 12 0 1 9	190,00	0,190	12
280361	285081	2211.1	Sanpress	22111 plug piece 18x1/2 NB1 9	47,10	0,047	18 X 1/2
280381	285104	2211.1	Sanpress	22111 plug piece 18x3/4 NB1 9	74,00	0,074	18 X 3/4
280451	291310	2211.1	Sanpress	22111 plug piece 12x1/2 NB1 9	44,30	0,044	12 X 1/2
280471	297954	2211	Sanpress	2211 Adapter piece w.sc 28x3/4 2 1 9	100,30	0,100	28 X 3/4
280481	297961	2211	Sanpress	2211 Adapter piece w.sc 22x1/2 2 1 9	71,76	0,072	22 X 1/2
280491	297978	2211	Sanpress	2211 Adapter piece w.sc 28x11/4 2 1 9	160,10	0,160	28 X 1 1/4
280521	297985	2211	Sanpress	2211 Adapter piece w.sc 15x3/8 NB1 9	36,50	0,037	15 X 3/8
280561	290863	2214	Sanpress	2214 elbow 90°with SC 12x3/8 NO1 9	39,40	0,039	12 X 3/8
280571	290870	2214	Sanpress	2214 elbow 90°with SC 12x1/2 NO1 9	52,04	0,052	12 X 1/2
280611	281236	2214.2	Sanpress	22142 angle 90°with SC 18x1/2 NO1 9	68,00	0,068	18 X 1/2
280631	283704	2214.2	Sanpress	22142 angle 90°with SC 35x11/4 NG1 9	304,00	0,304	35 X 1 1/4
280641	283711	2214.2	Sanpress	22142 angle 90°with SC 22x3/4 NO1 9	106,40	0,106	22 X 3/4
280651	283728	2214.2	Sanpress	22142 angle 90°with SC 28x1 NO1 9	162,95	0,163	28 X 1
280661	290924	2214.2	Sanpress	22142 angle 90°with SC 12x3/8 NO1 9	43,60	0,044	12 X 3/8
280721	293611	2263	Sanpress	2263 union with SC 12x3/4 NB1 9	64,40	0,064	12 X 3/4
280771	290931	2214.2	Sanpress	22142 angle 90°with SC 12x1/2 NO1 9	50,68	0,051	12 X 1/2
280801	287009	2212.3	Sanpress	22123 Adapter piece w.sc 22x1/2 2G1 9	72,00	0,072	22 X 1/2
280811	287016	2212.3	Sanpress	22123 Adapter piece w.sc 15x1/2 NO1 9	54,72	0,055	15 X 1/2
280881	295462	2222	Sanpress	2222 Mounting unit with SC 15x1/2NP1 9	247,80	0,248	15 X 1/2 X 150
280911	298319	2215.1	Sanpress	22151 reduc. piece w. sc 28x18 NB1 9	57,20	0,057	28 X 18
280941	298227	2214.2	Sanpress	22142 angle 90°with SC 18x3/4 NO1 9	85,75	0,086	18 X 3/4
280951	298234	2214.2	Sanpress	22142 angle 90°with SC 22x1/2 NO1 9	92,00	0,092	22 X 1/2
280961	298241	2214.2	Sanpress	22142 angle 90°with SC 15x3/8 NO1 9	46,70	0,047	15 X 3/8
281001	287085	2212.1	Sanpress	22121 plug piece 18x1/2 NB1 9	44,10	0,044	18 X 1/2
281021	287108	2212.1	Sanpress	22121 plug piece 18x3/4 NB1 9	57,90	0,058	18 X 3/4
281051	291341	2212.1	Sanpress	22121 plug piece 12x1/2 NB1 9	39,30	0,039	12 X 1/2
281061	299415	2214.2	Sanpress	22142 angle 90°with SC 42x11/2 NG1 9	425,24	0,425	42 X 1 1/2

Material no.	Item no.	Model no.	System name/ brand name	Material short text	Mass in g	Mass in kg	Dimensions
281071	299422	2214.2	Sanpress	22142 angle 90°with SC 54x2 NG1 9	789,00	0,789	54 X 2
281101	288228	2215.1	Sanpress	22151 reduc. piece w. sc 28x15 NB1 9	52,00	0,052	28 X 15
281121	298302	2215.1	Sanpress	22151 reduc. piece w. sc 15x12 NB1 9	25,60	0,026	15 X 12
281191	199395	2216	Sanpress	2216 elbow 90°with SC 54 NG1 9	592,00	0,592	54
281211	191221	2216.1	Sanpress	22161 elbow 90°with SC 54 NG1 9	594,00	0,594	54
281231	197506	2226	Sanpress	2226 elbow 45°with SC 54 NG1 9	557,00	0,557	54
281251	191825	2226.1	Sanpress	22261 elbow 45°with SC 54 NG1 9	574,00	0,574	54
281271	197988	2214	Sanpress	2214 elbow 90°with SC 54x2 NG1 9	632,00	0,632	54 X 2
281291	197858	2217.1	Sanpress	22171 t-piece w. sc 54x3/4x54 NG1 9	581,95	0,582	54 X 3/4 X 54
281311	197353	2217.2	Sanpress	22172 t-piece w. sc 54x1/2x54 NG1 9	569,00	0,569	54 X 1/2 X 54
281331	199364	2218	Sanpress	2218 t-piece w. sc 54 NG1 9	890,00	0,890	54
281341	195991	2218	Sanpress	2218 t-piece w. sc 54x22x54 NG1 9	575,00	0,575	54 X 22 X 54
281351	197469	2218	Sanpress	2218 t-piece w. sc 54x35x54 NG1 9	626,00	0,626	54 X 35 X 54
281361	198541	2218	Sanpress	2218 t-piece w. sc 54x42x54 NG1 9	760,00	0,760	54 X 42 X 54
281411	216153	2215.5	Sanpress	22155 sliding sleeve 54 2 1 9	619,00	0,619	54
281431	221676	2255	Sanpress	2255 angle union with SC 54x2 N 1 9	1384,00	1,384	54 X 2
281441	226329	2260	Sanpress	2260 union with SC 54 2 1 9	1010,00	1,010	54
281511	222017	2262	Sanpress	2262 union with SC 54x2 2G1 9	800,00	0,800	54 X 2
281521	221997	2265	Sanpress	2265 union with SC 54x2 2C1 9	984,00	0,984	54 X 2
281591	187279	2218	Sanpress	2218 t-piece w. sc 54x42x42 NG1 9	683,00	0,683	54 X 42 X 42
281621	288068	2213	Sanpress	2213 union with SC 16x15 2 1 9	102,40	0,102	16 X 15
281641	293024	2262	Sanpress	2262 union with SC 12x1/2 NB1 9	119,46	0,119	12 X 1/2
281681	290986	2217.2	Sanpress	22172 t-piece w. sc 12x1/2x12 NO1 9	68,00	0,068	12 X 1/2 X 12
281701	273231	2217.1	Sanpress	22171 t-piece w. sc 42x3/4x42 NG1 9	364,50	0,365	42 X 3/4 X 42
281721	281328	2217.1	Sanpress	22171 t-piece w. sc 18x3/4x18 NO1 9	115,00	0,115	18 X 3/4 X 18
281741	281359	2217.2	Sanpress	22172 t-piece w. sc 18x1/2x18 NP1 9	92,00	0,092	18 X 1/2 X 18
281841	279288	2232.1	Sanpress	22321 wall bushing with SC 15x1/2xNG1 9	178,00	0,178	15X1/2X3/4X55
281851	279295	2232.1	Sanpress	22321 wall bushing with SC 15x1/2xNG1 9	205,00	0,205	15X1/2X3/4X65
281861	279301	2232.1	Sanpress	22321 wall bushing with SC 15x1/2xNG1 9	128,00	0,128	15X1/2X3/4X25
281871	279318	2232.1	Sanpress	22321 wall bushing with SC 15x1/2xNG1 9	136,00	0,136	15X1/2X3/4X35

Material no.	Item no.	Model no.	System name/ brand name	Material short text	Mass in g	Mass in kg	Dimensions
282001	287337	2215.1	Sanpress	22151 reduc. piece w. sc 22x18 NB1 9	41,50	0,042	22 X 18
282011	287344	2215.1	Sanpress	22151 reduc. piece w. sc 18x12 NB1 9	31,34	0,031	18 X 12
282021	287351	2215.1	Sanpress	22151 reduc. piece w. sc 54x22 NB1 9	276,00	0,276	54 X 22
282031	287368	2215.1	Sanpress	22151 reduc. piece w. sc 42x22 NB1 9	154,13	0,154	42 X 22
282041	287375	2215.1	Sanpress	22151 reduc. piece w. sc 18x15 NB1 9	34,20	0,034	18 X 15
282451	428174	2212	Sanpress	2212 Adapter piece w.sc 28x1/2 NB1 9	88,45	0,088	28 X 1/2
282491	293017	2260	Sanpress	2260 union with SC 12 NB1 9	115,00	0,115	12
282501	281267	2216	Sanpress	2216 elbow 90°with SC 18 NP1 9	75,76	0,076	18
282521	281298	2216.1	Sanpress	22161 elbow 90°with SC 18 NO1 9	69,50	0,070	18
282541	298340	2216	Sanpress	2216 elbow 90°with SC 12 NO1 9	64,00	0,064	12
282561	298371	2218	Sanpress	2218 t-piece w. sc 15x12x15 2G1 9	117,00	0,117	15 X 12 X 15
282571	298388	2218	Sanpress	2218 t-piece w. sc 15x22x15 NO1 9	161,00	0,161	15 X 22 X 15
282581	298395	2218	Sanpress	2218 t-piece w. sc 18x22x18 NO1 9	126,50	0,127	18 X 22 X 18
282591	298401	2218	Sanpress	2218 t-piece w. sc 22x18x18 NO1 9	122,00	0,122	22 X 18 X 18
282601	298418	2218	Sanpress	2218 t-piece w. sc 22x22x15 NO1 9	140,00	0,140	22 X 22 X 15
282611	298425	2218	Sanpress	2218 t-piece w. sc 28x18x28 NO1 9	171,13	0,171	28 X 18 X 28
282621	298432	2218	Sanpress	2218 t-piece w. sc 22x15x18 NO1 9	126,29	0,126	22 X 15 X 18
282701	281380	2218	Sanpress	2218 t-piece w. sc 22x18x22 NO1 9	130,00	0,130	22 X 18 X 22
282711	281397	2218	Sanpress	2218 t-piece w. sc 18x15x15 NO1 9	90,00	0,090	18 X 15 X 15
282721	281403	2218	Sanpress	2218 t-piece w. sc 18x15x18 NO1 9	95,36	0,095	18 X 15 X 18
282731	281410	2218	Sanpress	2218 t-piece w. sc 18 NO1 9	110,00	0,110	18
282841	283513	2218	Sanpress	2218 t-piece w. sc 28x15x28 2G1 9	223,00	0,223	28 X 15 X 28
282851	283520	2218	Sanpress	2218 t-piece w. sc 35x15x35 NG1 9	230,00	0,230	35 X 15 X 35
282861	283537	2218	Sanpress	2218 t-piece w. sc 42x22x42 NG1 9	397,70	0,398	42 X 22 X 42
282871	283544	2218	Sanpress	2218 t-piece w. sc 42x28x42 NG1 9	420,00	0,420	42 X 28 X 42
282881	283551	2218	Sanpress	2218 t-piece w. sc 42x35x35 NG1 9	396,00	0,396	42 X 35 X 35
282891	283568	2218	Sanpress	2218 t-piece w. sc 54x28x54 NG1 9	585,00	0,585	54 X 28 X 54
282901	281502	2225.5	Sanpress	22255 wall plate with SC 18x1/2 NO1 9	111,90	0,112	18 X 1/2
282921	291013	2225.5	Sanpress	22255 wall plate with SC 12x1/2 NO1 9	93,50	0,094	12 X 1/2
282981	298913	2212.3	Sanpress	22123 Adapter piece w.sc 18x1/2 NO1 9	66,90	0,067	18 X 1/2

Material no.	Item no.	Model no.	System name/ brand name	Material short text	Mass in g	Mass in kg	Dimensions
283001	281533	2226	Sanpress	2226 elbow 45°with SC 18 NP1 9	60,81	0,061	18
283021	281564	2226.1	Sanpress	22261 elbow 45°with SC 18 NO1 9	58,50	0,059	18
283111	325060	2232.3	Sanpress	22323 wall bushing with SC 15x1/2xNG1 9	108,00	0,108	15X 1/2X 3/4X 30
283151	309398	2229	Sanpress	2229 Mounting unit with SC 1/2 2G1 9	1266,00	1,266	1/2
283201	308001	2214.3	Sanpress	22143 Plug-in elbow 90°15x1/2 NO1 9	52,67	0,053	15 X 1/2
283341	313951	2217.2	Sanpress	22172 t-piece w. sc 15x3/8x15 NO1 9	78,90	0,079	15 X 3/8 X 15
283351	313968	2217.2	Sanpress	22172 t-piece w. sc 28x3/4x28 NO1 9	192,00	0,192	28 X 3/4 X 28
283361	313975	2217.2	Sanpress	22172 t-piece w. sc 22x3/4x22 NO1 9	156,76	0,157	22 X 3/4 X 22
283401	283483	2212	Sanpress	2212 Adapter piece w.sc 18x1/2 NB1 9	53,80	0,054	18 X 1/2
283421	291068	2212	Sanpress	2212 Adapter piece w.sc 12x1/2 NB1 9	54,00	0,054	12 X 1/2
283431	291075	2212	Sanpress	2212 Adapter piece w.sc 12x3/8 NB1 9	28,70	0,029	12 X 3/8
283471	294519	2212	Sanpress	2212 Adapter piece w.sc 18x3/4 NB1 9	67,80	0,068	18 X 3/4
283481	298050	2212	Sanpress	2212 Adapter piece w.sc 42x11/4 2 1 9	219,80	0,220	42 X 1 1/4
283491	298067	2212	Sanpress	2212 Adapter piece w.sc 22x1/2 NB1 9	61,80	0,062	22 X 1/2
283501	298074	2212	Sanpress	2212 Adapter piece w.sc 15x3/8 NB1 9	31,20	0,031	15 X 3/8
283511	298081	2212	Sanpress	2212 Adapter piece w.sc 28x3/4 NB1 9	82,00	0,082	28 X 3/4
283521	298098	2212	Sanpress	2212 Adapter piece w.sc 15x3/4 NB1 9	69,80	0,070	15 X 3/4
283531	298104	2212	Sanpress	2212 Adapter piece w.sc 28x11/4 NB1 9	166,10	0,166	28 X 1 1/4
283541	298111	2212	Sanpress	2212 Adapter piece w.sc 35x1 NB1 9	119,30	0,119	35 X 1
283551	298128	2212	Sanpress	2212 Adapter piece w.sc 22x1 2 1 9	132,50	0,133	22 X 1
283601	283469	2255	Sanpress	2255 angle union with SC 18x1/2 N 1 9	167,00	0,167	18 X 1/2
283611	283452	2255	Sanpress	2255 angle union with SC 18x3/4 N 1 9	206,00	0,206	18 X 3/4
283621	292980	2255	Sanpress	2255 angle union with SC 12x1/2 2G1 9	159,00	0,159	12 X 1/2
283771	305260	2263	Sanpress	2263 union with SC 22x11/2 NB1 9	166,30	0,166	22 X 1 1/2
283781	305048	2263	Sanpress	2263 union with SC 28x11/2 NB1 9	182,90	0,183	28 X 1 1/2
283791	305031	2263	Sanpress	2263 union with SC 42x2 NB1 9	355,90	0,356	42 X 2
283801	305024	2263	Sanpress	2263 union with SC 35x2 NB1 9	262,70	0,263	35 X 2
283811	305017	2263	Sanpress	2263 union with SC 18x1 NB1 9	81,40	0,081	18 X 1
283821	305000	2263	Sanpress	2263 union with SC 15x1 NB1 9	80,30	0,080	15 X 1
284401	314040	2218	Sanpress	2218 t-piece w. sc 18x12x18 2G1 9	146,00	0,146	18 X 12 X 18

Material no.	Item no.	Model no.	System name/ brand name	Material short text	Mass in g	Mass in kg	Dimensions
284421	314071	2218	Sanpress	2218 t-piece w. sc 22x12x22 2G1 9	176,00	0,176	22 X 12 X 22
284441	314101	2218	Sanpress	2218 t-piece w. sc 28x18x22 NO1 9	163,00	0,163	28 X 18 X 22
284471	314132	2218	Sanpress	2218 t-piece w. sc 28x28x15 NO1 9	178,20	0,178	28 X 28 X 15
284491	314163	2218	Sanpress	2218 t-piece w. sc 28x28x18 NO1 9	182,00	0,182	28 X 28 X 18
284511	314194	2218	Sanpress	2218 t-piece w. sc 35x22x28 NG1 9	243,70	0,244	35 X 22 X 28
284531	314224	2218	Sanpress	2218 t-piece w. sc 42x15x42 NG1 9	380,10	0,380	42 X 15 X 42
284751	287764	2211	Sanpress	2211 Adapter piece w.sc 15x3/4 NB1 9	59,00	0,059	15 X 3/4
284761	287771	2211	Sanpress	2211 Adapter piece w.sc 22x1 2 1 9	112,40	0,112	22 X 1
284791	290764	2211	Sanpress	2211 Adapter piece w.sc 12x1/2 NB1 9	33,37	0,033	12 X 1/2
284801	290771	2211	Sanpress	2211 Adapter piece w.sc 12x3/8 NB1 9	27,30	0,027	12 X 3/8
284831	314651	2211	Sanpress	2211 Adapter piece w.sc 35x11/2 2 1 9	225,80	0,226	35 X 1 1/2
284841	314668	2211	Sanpress	2211 Adapter piece w.sc 54x11/2 2 1 9	365,70	0,366	54 X 1 1/2
288601	335229	2225.5	Sanpress	22255 wall plate with SC 22x1/2 NO1 9	129,56	0,130	22 X 1/2
288611	335236	2225.5	Sanpress	22255 wall plate with SC 18x3/4 NP1 9	156,00	0,156	18 X 3/4
288641	347307	2225.6	Sanpress	22256 wall plate with SC 15x1/2 NG1 9	149,00	0,149	15 X 1/2
289461	314354	2214	Sanpress	2214 elbow 90°with SC 18x3/4 NO1 9	111,00	0,111	18 X 3/4
289471	314361	2214	Sanpress	2214 elbow 90°with SC 15x3/8 NO1 9	54,00	0,054	15 X 3/8
289481	314378	2214.2	Sanpress	22142 angle 90°with SC 22x1 NO1 9	132,00	0,132	22 X 1
289491	314385	2214.2	Sanpress	22142 angle 90°with SC 15x3/4 NO1 9	75,27	0,075	15 X 3/4
290121	317423	2213P	Sanfix P	2213P Adapter piece w.sc 16x15 2 1 9	44,20	0,044	16 X 15
290131	317430	2213P	Sanfix P	2213P Adapter piece w.sc 20x15 2 1 9	50,40	0,050	20 X 15
290141	317447	2213P	Sanfix P	2213P Adapter piece w.sc 16x18 2 1 9	56,50	0,057	16 X 18
290151	317454	2213P	Sanfix P	2213P Adapter piece w.sc 20x18 2 1 9	58,40	0,058	20 X 18
290221	317508	2213P	Sanfix P	2213P Adapter piece w.sc 20x22 2 1 9	67,00	0,067	20 X 22
292001	322410	2248	Sanpress	2248 cross piece with SC 15x15 2G1 9	215,00	0,215	15 X 15
292011	322427	2248	Sanpress	2248 cross piece with SC 18x15 2G1 9	246,00	0,246	18 X 15
292041	323363	2248	Sanpress	2248 cross piece with SC 28x15 2G1 9	353,00	0,353	28 X 15
292051	323370	2248	Sanpress	2248 cross piece with SC 22x15 2G1 9	285,00	0,285	22 X 15
292301	325978	2247	Sanpress	2247 cross piece with SC 22x15 2G1 9	202,00	0,202	22 X 15
292311	325985	2247	Sanpress	2247 cross piece with SC 18x15 2G1 9	180,40	0,180	18 X 15

Material no.	Item no.	Model no.	System name/ brand name	Material short text	Mass in g	Mass in kg	Dimensions
292491	424534	2263	Sanpress	2263 union with SC 15x11/4 NB1 9	172,50	0,173	15 X 1 1/4
292801	354664	2215.1XL	Sanpress XL	22151XLreduc. piece w. sc 76,1x54 2G1 9	740,80	0,741	76,1 X 54
292811	354671	2215.1XL	Sanpress XL	22151XLreduc. piece w. sc 88,9x54 2G1 9	895,00	0,895	88,9 X 54
292821	354688	2215.1XL	Sanpress XL	22151XLreducer 88,9x76,1 2G1 9	1200,00	1,200	88,9 X 76,1
292831	354695	2215.1XL	Sanpress XL	22151XLreducer 108,0x54 2G1 9	1390,00	1,390	108,0 X 54
292841	354701	2215.1XL	Sanpress XL	22151XLreducer 108,0x76,1 2G1 9	1587,00	1,587	108,0 X 76,1
292851	354718	2215.1XL	Sanpress XL	22151XLreducer 108,0x88,9 2G1 9	1614,00	1,614	108,0 X 88,9
293604	326357	2272.1	Sanpress	22721 return pipe screw fitting SC2G4 9	203,00	0,203	1/2 X 15
293614	326364	2272.2	Sanpress	22722 return pipe screw fitting SC2G4 9	237,00	0,237	15 X 1/2
293851	361204	2217.2	Sanpress	22172 t-piece w. sc 35x1x35 NG1 9	314,00	0,314	35 X 1 X 35
293861	361211	2217.2	Sanpress	22172 t-piece w. sc 42x1x42 NG1 9	452,00	0,452	42 X 1 X 42
293871	361228	2217.2	Sanpress	22172 t-piece w. sc 54x1x54 NG1 9	655,00	0,655	54 X 1 X 54
294201	353650	2216.1XL	Sanpress XL	22161XLelbow 90°p. 76,1 2G1 9	1610,00	1,610	76,1
294211	353667	2216.1XL	Sanpress XL	22161XLelbow 90°p. 88,9 2G1 9	2496,70	2,497	88,9
294221	353674	2216.1XL	Sanpress XL	22161XLelbow 90°p. 108,0 2G1 9	3538,00	3,538	108,0
294231	353681	2226.1XL	Sanpress XL	22261XLelbow 45°p. 76,1 2G1 9	1847,00	1,847	76,1
294241	353698	2226.1XL	Sanpress XL	22261XLelbow 45°p. 88,9 2G1 9	2188,00	2,188	88,9
294251	353704	2226.1XL	Sanpress XL	22261XLelbow 45°p. 108,0 2G1 9	3165,00	3,165	108,0
294321	354398	2218XL	Sanpress XL	2218XL t-piece w. sc 76,1x54x76,1 2G1 9	2447,00	2,447	76,1 X 54 X 76,1
294331	354404	2218XL	Sanpress XL	2218XL t-piece w. sc 88,9x54x88,9 2G1 9	2813,00	2,813	88,9 X 54 X 88,9
294341	354411	2218XL	Sanpress XL	2218XL tee 88,9x76,1x88,9 2G1 9	3529,00	3,529	88,9 X 76,1 X 88,9
294351	354428	2218XL	Sanpress XL	2218XL t-piece w. sc 108,0x54x108,02G1 9	3614,00	3,614	108,0 X 54 X 108,0
294361	354435	2218XL	Sanpress XL	2218XL tee 108,0x76,1x108,0 2G1 9	4400,00	4,400	108,0X76,1X108,0
294371	354442	2218XL	Sanpress XL	2218XL tee 108,0x88,9x108,0 2G1 9	4676,00	4,676	108,0X88,9X108,0
294441	354572	2217.2XL	Sanpress XL	22172XLtee 76,1x3/4x76,1 2G1 9	1939,00	1,939	76,1 X 3/4 X 76,1
294451	354589	2217.2XL	Sanpress XL	22172XLtee 88,9x3/4x88,9 2G1 9	2222,00	2,222	88,9 X 3/4 X 88,9
294461	354596	2217.2XL	Sanpress XL	22172XLtee 108,0x3/4x108,0 2G1 9	2932,00	2,932	108,0 X 3/4 X108,0
294509	690250	2251	Sanpress	2251 compensator with SC 15 NB1 9	146,00	0,146	15
294519	690267	2251	Sanpress	2251 compensator with SC 18 NB1 9	183,50	0,184	18
294529	690274	2251	Sanpress	2251 compensator with SC 22 NB1 9	248,17	0,248	22

Material no.	Item no.	Model no.	System name/ brand name	Material short text	Mass in g	Mass in kg	Dimensions
294539	690281	2251	Sanpress	2251 compensator with SC 28 NB1 9	364,00	0,364	28
294549	690298	2251	Sanpress	2251 compensator with SC 35 NB1 9	495,00	0,495	35
294559	690304	2251	Sanpress	2251 compensator with SC 42 NB1 9	757,84	0,758	42
294569	690311	2251	Sanpress	2251 compensator with SC 54 NB1 9	870,30	0,870	54
294901	363420	2215.2NC	Sanpress	22152NCpipe coupling 15x14 2 1 9	57,29	0,057	15 X 14
294911	363437	2215.2NC	Sanpress	22152NCpipe coupling 16x15 2 1 9	63,80	0,064	16 X 15
294921	363444	2215.2NC	Sanpress	22152NCpipe coupling 18x16 2 1 9	77,10	0,077	18 X 16
295401	351502	2263	Sanpress	2263 union with SC 22x3/4 NB1 9	85,60	0,086	22 X 3/4
295481	397166	2252	Sanpress	2252 floor pavement distributor 22G1 9	614,00	0,614	22 X 15 X 22
295501	338503	2264	Sanpress	2264 union 15x3/4 NB1 9	58,10	0,058	15 X 3/4
295511	338510	2264	Sanpress	2264 union 18x3/4 NB1 9	59,40	0,059	18 X 3/4
295521	338527	2264	Sanpress	2264 union 22x1 NB1 9	86,60	0,087	22 X 1
295531	338534	2264	Sanpress	2264 union 28x11/4 NB1 9	132,00	0,132	28 X 1 1/4
295541	338541	2264	Sanpress	2264 union 35x11/2 NB1 9	184,00	0,184	35 X 1 1/2
295551	338558	2264	Sanpress	2264 union 42x13/4 NB1 9	267,20	0,267	42 X 1 3/4
295561	338565	2264	Sanpress	2264 union 54x23/8 2 1 9	413,00	0,413	54 X 2 3/8
295651	350598	2215XL	Sanpress XL	2215XL pipe coupling 76,1 2G1 9	1219,00	1,219	76,1
295661	350604	2215XL	Sanpress XL	2215XL pipe coupling 88,9 2G1 9	1400,00	1,400	88,9
295671	350611	2215XL	Sanpress XL	2215XL pipe coupling 108,0 2G1 9	2044,00	2,044	108,0
295681	350628	2218XL	Sanpress XL	2218XL tee 76,1 2G1 9	3155,00	3,155	76,1
295691	350635	2218XL	Sanpress XL	2218XL tee 88,9 2G1 9	3676,00	3,676	88,9
295701	350642	2218XL	Sanpress XL	2218XL tee 108,0 2G1 9	5327,00	5,327	108,0
295711	350659	2211XL	Sanpress XL	2211XL adapter piece 76,1x21/2 2G1 9	995,00	0,995	76,1 X 2 1/2
295721	350666	2211XL	Sanpress XL	2211XL adapter piece 88,9x3 2G1 9	1200,00	1,200	88,9 X 3
295731	350673	2211XL	Sanpress XL	2211XL adapter piece 108,0x4 2G1 9	1678,00	1,678	108,0 X 4
295741	350680	2216XL	Sanpress XL	2216XL elbow 90° p. 88,9 2G1 9	2750,00	2,750	88,9
295751	350697	2216XL	Sanpress XL	2216XL elbow 90° p. 76,1 2G1 9	1607,00	1,607	76,1
295761	350703	2216XL	Sanpress XL	2216XL elbow 90° p. 108,0 2G1 9	3858,00	3,858	108,0
295951	365127	2263XL	Sanpress XL	2263XL union 76,1x3 2G1 9	1678,00	1,678	76,1 X 3
295961	365134	2263XL	Sanpress XL	2263XL union 88,9x31/2 2G1 9	1997,00	1,997	88,9 X 3 1/2

Material no.	Item no.	Model no.	System name/ brand name	Material short text	Mass in g	Mass in kg	Dimensions
296071	341961	2263	Sanpress	2263 union with SC 54x21/2 2 1 9	694,00	0,694	54 X 2 1/2
296601	351342	2226XL	Sanpress XL	2226XL elbow 45°p. 76,1 2G1 9	1815,00	1,815	76,1
296611	351359	2226XL	Sanpress XL	2226XL elbow 45°p. 88,9 2G1 9	2160,00	2,160	88,9
296621	351366	2226XL	Sanpress XL	2226XL elbow 45°p. 108,0 2G1 9	2979,00	2,979	108,0
296661	351434	2217.2XL	Sanpress XL	22172XLtee 76,1x2x76,1 2G1 9	2580,00	2,580	76,1 X 2 X 76,1
296671	351441	2217.2XL	Sanpress XL	22172XLtee 88,9x2x88,9 2G1 9	2923,00	2,923	88,9 X 2 X 88,9
296701	352097	2217.2XL	Sanpress XL	22172XLtee 108,0x2x108,0 2G1 9	3398,00	3,398	108,0 X 2 X 108,0
296721	353315	2215.5XL	Sanpress XL	22155XLSchiebemuffe 76,1 2G1 9	1218,00	1,218	76,1
296731	353322	2215.5XL	Sanpress XL	22155XLSchiebemuffe 88,9 2G1 9	1391,00	1,391	88,9
296741	353339	2215.5XL	Sanpress XL	22155XLSchiebemuffe 108,0 2G1 9	1979,00	1,979	108,0
296781	353377	2256XL	Sanpress XL	2256XL cap with SC 76,1 2G1 9	970,00	0,970	76,1
296791	353384	2256XL	Sanpress XL	2256XL cap with SC 88,9 2G1 9	1160,00	1,160	88,9
296801	353391	2256XL	Sanpress XL	2256XL cap with SC 108,0 2G1 9	1670,00	1,670	108,0
297851	380878	2263	Sanpress	2263 union with SC 12x1/2 NB1 9	46,10	0,046	12 X 1/2
297861	380885	2263	Sanpress	2263 union with SC 15x1/2 NB1 9	51,30	0,051	15 X 1/2
297921	367015	2263	Sanpress	2263 union with SC 22x11/4 NB1 9	191,60	0,192	22 X 1 1/4
298501	491079	2259.5LF	Sanpress LF	22595LFflange adapter with SC 28(DNNB1 9	1381,80	1,382	28 (DN25)
298521	491093	2259.5LF	Sanpress LF	22595LFflange adapter with SC 42(DNNB1 9	2414,20	2,414	42 (DN40)
298531	491109	2259.5LF	Sanpress LF	22595LFflange adapter with SC 54(DNNB1 9	2930,40	2,930	54 (DN50)
298541	491116	2259.5XLLF	Sanpress XL LF	22595LFflange adapter 76,1(DN65) 2 1 9	3569,50	3,570	76,1 (DN65)
298551	491123	2259.5XLLF	Sanpress XL LF	22595LFflange adapter 88,9(DN80) 2 1 9	4470,00	4,470	88,9 (DN80)
298561	491130	2259.5XLLF	Sanpress XL LF	22595LFflange adapter 108,0(DN100) 2 1 9	5150,00	5,150	108,0 (DN100)
320741	605490	2213P	Sanfix P	2213P Adapter piece w.sc 25x22 2 1 9	98,00	0,098	25 X 22
320751	605506	2213P	Sanfix P	2213P Adapter piece w.sc 32x28 2 1 9	143,00	0,143	32 X 28
320771	605520	2213P	Sanfix P	2213P Adapter piece w.sc 40x35 2 1 9	203,50	0,204	40 X 35
328741	592011	2259.5U	Seapress	22595U flange adapter with SC 28(1)2 1 9	1400,00	1,400	28 (1)
328761	592035	2259.5U	Seapress	22595U flange adapter with SC 42(112 1 9	1927,76	1,928	42 (1 1/2)
328771	592042	2259.5U	Seapress	22595U flange adapter with SC 54(2)2 1 9	2925,00	2,925	54 (2)
328791	592066	2259.5XU	Seapress	22595XUflange adapter 88,9(3) 2 1 9	4549,00	4,549	88,9 (3)
365741	641597	2259.2XL	Sanpress XL	22592XLflange adapter 21/2(DN65) 2 1 9	3580,00	3,580	2 1/2 (DN65)

Material no.	Item no.	Model no.	System name/ brand name	Material short text	Mass in g	Mass in kg	Dimensions
365751	641603	2259.2XL	Sanpress XL	22592XLflange adapter 3(DN80) 2 1 9	4513,00	4,513	3 (DN80)
365761	641610	2259.2XL	Sanpress XL	22592XLflange adapter 4(DN100) 2 1 9	5355,00	5,355	4 (DN100)
384591	643188	2276.8	Smartloop	22768 repair coupling 12x1 NB1 9	22,20	0,022	12 X 1
402351	493325	2249.3	Sanpress	22493 cross-T-piece with SC 15x15x2G1 9	666,00	0,666	15 X 15 X 15
402361	493332	2249.3	Sanpress	22493 cross-T-piece with SC 18x15x2G1 9	677,00	0,677	18 X 15 X 18
402371	493349	2249.3	Sanpress	22493 cross-T-piece with SC 22x18x2G1 9	713,00	0,713	22 X 18 X 22
402381	493356	2249.3	Sanpress	22493 cross-T-piece with SC 22x15x2G1 9	705,00	0,705	22 X 15 X 22
409601	588533	2215.4	Sanpress	22154 sliding sleeve 22 NB1 9	162,50	0,163	22
409611	588540	2215.4	Sanpress	22154 sliding sleeve 28 NB1 9	245,20	0,245	28
409621	588557	2215.4	Sanpress	22154 sliding sleeve 35 NB1 9	348,20	0,348	35
412801	588564	2215.6	Sanpress	22156 Adapter piece w.sc 1x28 2 1 9	527,00	0,527	1 X 28
412811	588328	2215.6	Sanpress	22156 Adapter piece w.sc 11/4x35 2 1 9	972,40	0,972	1 1/4 X 35
431431	652340	2259.3XL	Sanpress XL	22593XLflange adapter 76,1(DN65)x4 2C1 9	3700,00	3,700	76,1 (DN65) X 4
433371	644864	2217.3	Sanpress	22173 wall plate-t-piece 15x1/2x15NG1 9	117,00	0,117	15 X 1/2 X 15
434121	625726	2217.3	Sanpress	22173 wall plate-t-piece 22x1/2x22NG1 9	178,50	0,179	22 X 1/2 X 22
466401	493851	2211.2	Sanpress	22112 Adapter piece w.sc 15x1/2NPT2A1 9	62,60	0,063	15 X 1/2NPT
466411	493868	2211.2	Sanpress	22112 Adapter piece w.sc 22x3/4NPT2A1 9	97,10	0,097	22 X 3/4NPT
466421	493875	2211.2	Sanpress	22112 Adapter piece w.sc 28x1NPT 2A1 9	147,00	0,147	28 X 1NPT
466431	493882	2211.2	Sanpress	22112 Adapter piece w.sc 35x11/4NP2A1 9	209,70	0,210	35 X 1 1/4NPT
466441	493899	2211.2	Sanpress	22112 Adapter piece w.sc 42x11/2NP2A1 9	316,00	0,316	42 X 1 1/2NPT
466451	493905	2211.2	Sanpress	22112 Adapter piece w.sc 54x2NPT 2 1 9	538,00	0,538	54 X 2NPT
479281	625078	2218.4	Sanpress	22184 fixing set 22x3/4x22 2G1 9	668,50	0,669	22 X 3/4 X 22
483251	692797	2228.7	Sanpress	22287 double wall plate with SC-CoNG1 9	195,00	0,195	18 X 1/2 X 18
527821	717407	2228.7LF	Sanpress LF	22287LFdouble wall plate with SC-Co2G1 9	212,30	0,212	15 X 1/2 X 15
527831	717414	2228.7LF	Sanpress LF	22287LFdouble wall plate with SC-Co2G1 9	228,40	0,228	18 X 1/2 X 18
527841	717421	2228.7LF	Sanpress LF	22287LFdouble wall plate with SC-Co2G1 9	289,00	0,289	22 X 1/2 X 22
571051	695835	2211.5	Sanpress	22115 Injection duct 22 NB1 9	65,10	0,065	22
571061	695842	2211.5	Sanpress	22115 Injection duct 28 NB1 9	88,80	0,089	28
571071	696252	2211.5	Sanpress	22115 Injection duct 35 NB1 9	136,40	0,136	35
571081	696269	2211.5	Sanpress	22115 Injection duct 42 NB1 9	217,60	0,218	42

Material no.	Item no.	Model no.	System name/ brand name	Material short text	Mass in g	Mass in kg	Dimensions
571091	696276	2211.5	Sanpress	22115 Injection duct 54 NB1 9	321,50	0,322	54
571101	696283	2211.5	Sanpress	22115 Injection duct 64 NB1 9	496,40	0,496	64
576511	687892	2228.7	Sanpress	22287 double wall plate with SC-CoNG1 9	174,00	0,174	15 X 1/2 X 15
576521	687908	2228.7	Sanpress	22287 double wall plate with SC-CoNG1 9	252,00	0,252	22 X 1/2 X 22
580591	628635	4517.2	Profipress S	45172 t-piece w. sc 15x1/2x15 2G1 9	100,00	0,100	15 X 1/2 X 15
580601	628642	4517.2	Profipress S	45172 t-piece w. sc 18x1/2x18 NP1 9	96,00	0,096	18 X 1/2 X 18
580611	628659	4517.2	Profipress S	45172 t-piece w. sc 22x1/2x22 NP1 9	128,00	0,128	22 X 1/2 X 22
580621	628666	4517.2	Profipress S	45172 t-piece w. sc 28x1/2x28 NP1 9	152,00	0,152	28 X 1/2 X 28
580631	628673	4517.2	Profipress S	45172 t-piece w. sc 35x1/2x35 NG1 9	235,00	0,235	35 X 1/2 X 35
580641	628680	4511	Profipress S	4511 Adapter piece w.sc 12x3/8 2 1 9	32,70	0,033	12 X 3/8
580651	628697	4511	Profipress S	4511 Adapter piece w.sc 15x1/2 2 1 9	49,90	0,050	15 X 1/2
580661	628703	4511	Profipress S	4511 Adapter piece w.sc 12x1/2 2 1 9	39,50	0,040	12 X 1/2
580671	628710	4511	Profipress S	4511 Adapter piece w.sc 18x1/2 2 1 9	53,50	0,054	18 X 1/2
580681	628727	4511	Profipress S	4511 Adapter piece w.sc 18x3/4 2 1 9	70,80	0,071	18 X 3/4
580691	628734	4511	Profipress S	4511 Adapter piece w.sc 22x3/4 2 1 9	80,00	0,080	22 X 3/4
580701	628741	4511	Profipress S	4511 Adapter piece w.sc 22x1 2 1 9	114,90	0,115	22 X 1
580711	628758	4511	Profipress S	4511 Adapter piece w.sc 28x1 2 1 9	122,10	0,122	28 X 1
580721	628765	4511	Profipress S	4511 Adapter piece w.sc 28x11/4 2 1 9	163,00	0,163	28 X 1 1/4
580731	628772	4511	Profipress S	4511 Adapter piece w.sc 35x1 2 1 9	154,00	0,154	35 X 1
580741	627232	4511	Profipress S	4511 Adapter piece w.sc 35x11/4 2 1 9	202,00	0,202	35 X 1 1/4
580751	627249	4511	Profipress S	4511 Adapter piece w.sc 35x11/2 2 1 9	250,60	0,251	35 X 1 1/2
580761	628857	4512	Profipress S	4512 Adapter piece w.sc 12x3/8 2 1 9	33,40	0,033	12 X 3/8
580771	628864	4512	Profipress S	4512 Adapter piece w.sc 15x1/2 2 1 9	66,40	0,066	15 X 1/2
580781	628871	4512	Profipress S	4512 Adapter piece w.sc 18x1/2 2 1 9	64,50	0,065	18 X 1/2
580791	628888	4512	Profipress S	4512 Adapter piece w.sc 18x3/4 2 1 9	77,20	0,077	18 X 3/4
580801	628895	4512	Profipress S	4512 Adapter piece w.sc 22x3/4 2 1 9	86,97	0,087	22 X 3/4
580811	628901	4512	Profipress S	4512 Adapter piece w.sc 22x1 2 1 9	134,74	0,135	22 X 1
580821	628918	4512	Profipress S	4512 Adapter piece w.sc 28x1 2 1 9	125,00	0,125	28 X 1
580831	628925	4512	Profipress S	4512 Adapter piece w.sc 35x11/4 2 1 9	177,60	0,178	35 X 1 1/4
580991	629083	4551	Profipress S	4551 compensator with SC 15 NB1 9	154,40	0,154	15

Material no.	Item no.	Model no.	System name/ brand name	Material short text	Mass in g	Mass in kg	Dimensions
581001	629090	4551	Profipress S	4551 compensator with SC 18 NB1 9	194,40	0,194	18
581011	629106	4551	Profipress S	4551 compensator with SC 22 NB1 9	252,04	0,252	22
581021	629113	4551	Profipress S	4551 compensator with SC 28 NB1 9	366,52	0,367	28
581031	629120	4551	Profipress S	4551 compensator with SC 35 NB1 9	504,50	0,505	35
581041	629137	4511.4	Profipress S	45114 Adapter piece w.sc 18x3/4 2 1 9	69,90	0,070	18 X 3/4
581051	629144	4511.4	Profipress S	45114 Adapter piece w.sc 22x1 NB1 9	116,00	0,116	22 X 1
581061	629151	4562	Profipress S	4562 union with SC 15x1/2 2 1 9	141,00	0,141	15 X 1/2
581071	629168	4562	Profipress S	4562 union with SC 18x3/4 2 1 9	134,30	0,134	18 X 3/4
581081	629175	4562	Profipress S	4562 union with SC 22x3/4 2 1 9	231,00	0,231	22 X 3/4
581091	629182	4562	Profipress S	4562 union with SC 28x1 2 1 9	355,00	0,355	28 X 1
581101	629199	4562	Profipress S	4562 union with SC 35x11/4 2 1 9	430,00	0,430	35 X 1 1/4
626444	662509	2277.2	Sanpress	22772 connection piece . - 2G4 9	815,00	0,815	-
626451	662516	2233.5	Sanpress	22335 plug adapter 15 2 1 9	51,80	0,052	15
626461	662523	2233.5	Sanpress	22335 plug adapter 18 2 1 9	57,11	0,057	18
626471	662530	2233.5	Sanpress	22335 plug adapter 22 2 1 9	68,54	0,069	22
626481	663346	2233.6	Sanpress	22336 closing piece - 2 1 9	46,92	0,047	-
629781	660222	2211.4	Sanpress	22114 adapter piece 15x1/2 NB1 9	41,90	0,042	15 X 1/2
637301	744212	0763.1	Sanpress	07631 elbow union DN15x1/2 NG1 9	77,30	0,077	DN15 X 1/2
646231	692629	2263	Sanpress	2263 union with SC 28x1 NB1 9	120,50	0,121	28 X 1
663161		2914.2ZL	Sanpress	29142ZLangle 1/2x3/8 NG1 9	61,80	0,062	1/2 X 3/8
663171		2914.2ZL	Sanpress	29142ZLangle 1/2x1/2 NG1 9	82,10	0,082	1/2 X 1/2
663181		2914.2ZL	Sanpress	29142ZLangle 1/2x3/4 NG1 9	110,22	0,110	1/2 X 3/4
663191		2914.2ZL	Sanpress	29142ZLangle 3/4x1/2 NG1 9	111,00	0,111	3/4 X 1/2
663251		2960ZL	Sanpress	2960ZL union with SC 1/2 NB1 9	149,54	0,150	1/2
663261		2960ZL	Sanpress	2960ZL union with SC 3/4 NB1 9	229,65	0,230	3/4
663271		2960ZL	Sanpress	2960ZL union with SC 1 NB1 9	401,52	0,402	1
663281		2960ZL	Sanpress	2960ZL union with SC 11/4 NB1 9	495,30	0,495	1 1/4
663291		2960ZL	Sanpress	2960ZL union with SC 11/2 NB1 9	794,20	0,794	1 1/2
663301		2960ZL	Sanpress	2960ZL union with SC 2 NB1 9	1281,10	1,281	2
663311		2967ZL	Sanpress	2967ZL ins.union w.sc 1/2x1/2NPT NB1 9	369,60	0,370	1/2 X 1/2 NPT

Material no.	Item no.	Model no.	System name/ brand name	Material short text	Mass in g	Mass in kg	Dimensions
663321		2967ZL	Sanpress	2967ZL ins.union w.sc 3/4x3/4NPT NB1 9	518,70	0,519	3/4 X 3/4 NPT
663331		2967ZL	Sanpress	2967ZL ins.union w.sc 1x1NPT NB1 9	475,00	0,475	1 X 1 NPT
663341		2967ZL	Sanpress	2967ZL ins.union w.sc 11/4x11/4NPT NB1 9	706,70	0,707	1 1/4 X 1 1/4 NPT
663351		2967ZL	Sanpress	2967ZL ins.union w.sc 11/2x11/2NPT NB1 9	830,60	0,831	1 1/2 X 1 1/2 NPT
663361		2967ZL	Sanpress	2967ZL ins.union w.sc 2x2NPT NB1 9	1300,00	1,300	2 X 2 NPT
663381		2925.5ZL	Sanpress	29255ZLwall plate 1/2x3/8 NG1 9	90,72	0,091	1/2 X 3/8
663391		2925.5ZL	Sanpress	29255ZLwall plate 1/2x1/2 NP1 9	113,40	0,113	1/2 X 1/2
663401		2925.5ZL	Sanpress	29255ZLwall plate 3/4x3/4 NG1 9	195,00	0,195	3/4 X 3/4
663421		2925.2ZL	Sanpress	29252ZLwall plate 1/2x1/2 NG1 9	100,20	0,100	1/2 X 1/2
663431		2911ZL	Sanpress	2911ZL Adapter piece w.sc 1/2x3/8NPNB1 9	41,21	0,041	1/2 X 3/8 NPT
663441		2911ZL	Sanpress	2911ZL Adapter piece w.sc 1/2x1/2NPNP1 9	47,90	0,048	1/2 X 1/2 NPT
663451		2911ZL	Sanpress	2911ZL Adapter piece w.sc 1/2x3/4NPNB1 9	68,01	0,068	1/2 X 3/4 NPT
663461		2911ZL	Sanpress	2911ZL Adapter piece w.sc 3/4x1/2NPNB1 9	66,44	0,066	3/4 X 1/2 NPT
663471		2911ZL	Sanpress	2911ZL Adapter piece w.sc 3/4x3/4NPNB1 9	70,34	0,070	3/4 X 3/4 NPT
663481		2911ZL	Sanpress	2911ZL Adapter piece w.sc 3/4x1NPT NB1 9	107,60	0,108	3/4 X 1 NPT
663491		2911ZL	Sanpress	2911ZL Adapter piece w.sc 1x3/4NPT NB1 9	106,40	0,106	1 X 3/4 NPT
663501		2911ZL	Sanpress	2911ZL Adapter piece w.sc 1x1NPT NB1 9	118,00	0,118	1 X 1 NPT
663511		2911ZL	Sanpress	2911ZL Adapter piece w.sc 1x11/4NPTNB1 9	207,90	0,208	1 X 1 1/4 NPT
663521		2911ZL	Sanpress	2911ZL Adapter piece w.sc 11/4x1NPTNB1 9	146,30	0,146	1 1/4 X 1 NPT
663531		2911ZL	Sanpress	2911ZL Adapter piece w.sc 11/4x11/4NB1 9	203,60	0,204	1 1/4 X 1 1/4 NPT
663541		2911ZL	Sanpress	2911ZL Adapter piece w.sc 11/4x11/2NB1 9	236,80	0,237	1 1/4 X 1 1/2 NPT
663551		2911ZL	Sanpress	2911ZL Adapter piece w.sc 11/2x11/4NB1 9	270,70	0,271	1 1/2 X 1 1/4 NPT
663561		2911ZL	Sanpress	2911ZL Adapter piece w.sc 11/2x11/2NB1 9	248,80	0,249	1 1/2 X 1 1/2 NPT
663571		2911ZL	Sanpress	2911ZL Adapter piece w.sc 11/2x2NPTNB1 9	424,00	0,424	1 1/2 X 2 NPT
663581		2911ZL	Sanpress	2911ZL Adapter piece w.sc 2x11/2NPTNB1 9	382,86	0,383	2 X 1 1/2 NPT
663591		2911ZL	Sanpress	2911ZL Adapter piece w.sc 2x2NPT NB1 9	387,10	0,387	2 X 2 NPT
663601		2912ZL	Sanpress	2912ZL Adapter piece w.sc 1/2x3/8NPNB1 9	37,80	0,038	1/2 X 3/8 NPT
663611		2912ZL	Sanpress	2912ZL Adapter piece w.sc 1/2x1/2NPNP1 9	55,09	0,055	1/2 X 1/2 NPT
663631		2914.2ZL	Sanpress	29142ZLelbow with SC 3/4x3/4 NG1 9	135,50	0,136	3/4 X 3/4
663641		2912ZL	Sanpress	2912ZL Adapter piece w.sc 3/4x1/2NPNB1 9	66,80	0,067	3/4 X 1/2 NPT

Material no.	Item no.	Model no.	System name/ brand name	Material short text	Mass in g	Mass in kg	Dimensions
663651		2912ZL	Sanpress	2912ZL Adapter piece w.sc 3/4x3/4NPNB1 9	80,00	0,080	3/4 X 3/4 NPT
663661		2912ZL	Sanpress	2912ZL Adapter piece w.sc 1x1/2NPT NB1 9	81,34	0,081	1 X 1/2 NPT
663671		2912ZL	Sanpress	2912ZL Adapter piece w.sc 1x3/4NPT NB1 9	94,40	0,094	1 X 3/4 NPT
663681		2912ZL	Sanpress	2912ZL Adapter piece w.sc 1x1NPT NB1 9	125,60	0,126	1 X 1 NPT
663691		2912ZL	Sanpress	2912ZL Adapter piece w.sc 1x11/4NPTNB1 9	168,00	0,168	1 X 1 1/4 NPT
663701		2912ZL	Sanpress	2912ZL Adapter piece w.sc 11/4x1/2NNB1 9	99,80	0,100	1 1/4 X 1/2 NPT
663711		2912ZL	Sanpress	2912ZL Adapter piece w.sc 11/4x1NPTNB1 9	137,20	0,137	1 1/4 X 1 NPT
663721		2912ZL	Sanpress	2912ZL Adapter piece w.sc 11/4x11/4NB1 9	166,50	0,167	1 1/4 X 1 1/4 NPT
663731		2912ZL	Sanpress	2912ZL Adapter piece w.sc 11/4x11/2NB1 9	211,30	0,211	1 1/4 X 1 1/2 NPT
663741		2914.2ZL	Sanpress	29142ZLelbow with SC 1x1/2 NG1 9	142,00	0,142	1 X 1/2
663751		2912ZL	Sanpress	2912ZL Adapter piece w.sc 11/2x11/4NB1 9	211,00	0,211	1 1/2 X 1 1/4 NPT
663761		2912ZL	Sanpress	2912ZL Adapter piece w.sc 11/2x11/2NB1 9	253,90	0,254	1 1/2 X 1 1/2 NPT
663771		2914.2ZL	Sanpress	29142ZLelbow with SC 1x1 NG1 9	210,00	0,210	1 X 1
663791		2914.2ZL	Sanpress	29142ZLelbow with SC 11/4x11/4 NG1 9	315,00	0,315	1 1/4 X 1 1/4
663801		2912ZL	Sanpress	2912ZL Adapter piece w.sc 2x2NPT NB1 9	354,20	0,354	2 X 2 NPT
663811		2914.2ZL	Sanpress	29142ZLelbow with SC 11/2x11/2 NG1 9	436,00	0,436	1 1/2 X 1 1/2
663821		2914.2ZL	Sanpress	29142ZLelbow with SC 2x2 NG1 9	730,00	0,730	2 X 2
663831		2911.1ZL	Sanpress	29111ZLplug piece 1/2x3/8NPT NB1 9	30,00	0,030	1/2 X 3/8 NPT
663851		2917.2ZL	Sanpress	29172ZLt-piece w. sc 1/2x1/2x1/2 NG1 9	107,64	0,108	1/2 X 1/2 X 1/2
663861		2917.2ZL	Sanpress	29172ZLt-piece w. sc 3/4x3/4x1/4 NG1 9	115,00	0,115	3/4 X 3/4 X 1/4
663871		2911.1ZL	Sanpress	29111ZLplug piece 1/2x1/2NPT NB1 9	46,56	0,047	1/2 X 1/2 NPT
663881		2911.1ZL	Sanpress	29111ZLplug piece 1/2x3/4NPT NB1 9	62,10	0,062	1/2 X 3/4 NPT
663891		2911.1ZL	Sanpress	29111ZLplug piece 3/4x1/2NPT NB1 9	45,69	0,046	3/4 X 1/2 NPT
663901		2911.1ZL	Sanpress	29111ZLplug piece 3/4x3/4NPT NB1 9	68,76	0,069	3/4 X 3/4 NPT
663911		2917.2ZL	Sanpress	29172ZLt-piece w. sc 3/4x3/4x1/2 NG1 9	139,20	0,139	3/4 X 3/4 X 1/2
663921		2911.1ZL	Sanpress	29111ZLplug piece 1x3/4NPT NB1 9	75,50	0,076	1 X 3/4 NPT
663931		2911.1ZL	Sanpress	29111ZLplug piece 1x1NPT NB1 9	111,30	0,111	1 X 1 NPT
663941		2917.2ZL	Sanpress	29172ZLt-piece w. sc 1x1x1/2 NG1 9	188,00	0,188	1 X 1 X 1/2
663951		2917.2ZL	Sanpress	29172ZLt-piece w. sc 1x1x3/4 NG1 9	223,40	0,223	1 X 1 X 3/4
663961		2911.1ZL	Sanpress	29111ZLplug piece 11/4x11/4NPT NB1 9	227,70	0,228	1 1/4 X 1 1/4 NPT

Material no.	Item no.	Model no.	System name/ brand name	Material short text	Mass in g	Mass in kg	Dimensions
663971		2911.1ZL	Sanpress	29111ZLplug piece 11/2x11/2NPT NB1 9	255,60	0,256	1 1/2 X 1 1/2 NPT
663981		2911.1ZL	Sanpress	29111ZLplug piece 2x2NPT NB1 9	406,10	0,406	2 X 2 NPT
663991		2912.1ZL	Sanpress	29121ZLadapter 1/2x3/8NPT NB1 9	31,20	0,031	1/2 X 3/8 NPT
664001		2917.2ZL	Sanpress	29172ZLt-piece w. sc 11/4x11/4x1/2 NG1 9	240,00	0,240	11/4 X 11/4 X 1/2
664011		2912.1ZL	Sanpress	29121ZLadapter 1/2x1/2NPT NB1 9	46,70	0,047	1/2 X 1/2 NPT
664021		2917.2ZL	Sanpress	29172ZLt-piece w. sc 11/4x11/4x3/4 NG1 9	283,50	0,284	11/4 X 11/4 X 3/4
664031		2912.1ZL	Sanpress	29121ZLadapter 1/2x3/4NPT NB1 9	63,50	0,064	1/2 X 3/4 NPT
664041		2917.2ZL	Sanpress	29172ZLt-piece w. sc 11/2x11/2x1/2 NG1 9	367,00	0,367	11/2 X 11/2 X 1/2
664051		2912.1ZL	Sanpress	29121ZLadapter 3/4x1/2NPT NB1 9	50,20	0,050	3/4 X 1/2 NPT
664061		2912.1ZL	Sanpress	29121ZLadapter 3/4x3/4NPT NB1 9	66,83	0,067	3/4 X 3/4 NPT
664071		2917.2ZL	Sanpress	29172ZLt-piece w. sc 11/2x11/2x3/4 NG1 9	408,50	0,409	11/2 X 11/2 X 3/4
664081		2912.1ZL	Sanpress	29121ZLadapter 1x1NPT NB1 9	117,10	0,117	1 X 1 NPT
664091		2917.2ZL	Sanpress	29172ZLt-piece w. sc 2x2x1/2 NG1 9	461,70	0,462	2 X 2 X 1/2
664101		2912.1ZL	Sanpress	29121ZLadapter 1x1/2NPT NB1 9	78,21	0,078	1 X 1/2 NPT
664121		2917.2ZL	Sanpress	29172ZLt-piece w. sc 2x2x3/4 NG1 9	590,00	0,590	2 X 2 X 3/4
664131		2912.1ZL	Sanpress	29121ZLadapter 11/4x11/4NPT NB1 9	182,20	0,182	1 1/4 X 1 1/4 NPT
664151		2912.1ZL	Sanpress	29121ZLadapter 11/2x11/2NPT NB1 9	235,40	0,235	1 1/2 X 1 1/2 NPT
664171		2912.1ZL	Sanpress	29121ZLadapter 2x2NPT NB1 9	374,20	0,374	2 X 2 NPT
664231		2917.3ZL	Sanpress	29173ZLt-piece w. sc 1/2x1/8x1/2 NG1 9	73,70	0,074	1/2 X 1/8 X 1/2
664241		2917.3ZL	Sanpress	29173ZLt-piece w. sc 3/4x1/8x3/4 NG1 9	105,46	0,105	3/4 X 1/8 X 3/4
664251		2962ZL	Sanpress	2962ZL union with SC 1/2x1/2NPT NB1 9	139,80	0,140	1/2 X 1/2 NPT
664261		2962ZL	Sanpress	2962ZL union with SC 3/4x3/4NPT NB1 9	199,06	0,199	3/4 X 3/4 NPT
664271		2962ZL	Sanpress	2962ZL union with SC 1x1NPT NB1 9	372,80	0,373	1 X 1 NPT
664281		2962ZL	Sanpress	2962ZL union with SC 11/4x11/4NPT NB1 9	459,46	0,459	1 1/4 X 1 1/4 NPT
664291		2962ZL	Sanpress	2962ZL union with SC 11/2x11/2NPT NB1 9	760,90	0,761	1 1/2 X 1 1/2 NPT
664301		2962ZL	Sanpress	2962ZL union with SC 2x2NPT NB1 9	1293,30	1,293	2 X 2 NPT
664311		2965ZL	Sanpress	2965ZL union with SC 1/2x1/2NPT NB1 9	148,10	0,148	1/2 X 1/2 NPT
664321		2965ZL	Sanpress	2965ZL union with SC 3/4x3/4NPT NB1 9	231,32	0,231	3/4 X 3/4 NPT
664331		2965ZL	Sanpress	2965ZL union with SC 1x1NPT NB1 9	408,80	0,409	1 X 1 NPT
664341		2965ZL	Sanpress	2965ZL union with SC 11/4x11/4NPT NB1 9	516,70	0,517	1 1/4 X 1 1/4 NPT

Material no.	Item no.	Model no.	System name/ brand name	Material short text	Mass in g	Mass in kg	Dimensions
664351		2965ZL	Sanpress	2965ZL union with SC 11/2x11/2NPT NB1 9	751,00	0,751	1 1/2 X 1 1/2 NPT
664361		2965ZL	Sanpress	2965ZL union with SC 2x2NPT NB1 9	1292,40	1,292	2 X 2 NPT
664371		2912ZL	Sanpress	2912ZL Adapter piece w.sc 1/2x3/4NPNB1 9	70,95	0,071	1/2 X 3/4 NPT
664381		2917.2ZL	Sanpress	29172ZLt-piece w. sc 3/4x3/4x3/4 NG1 9	158,00	0,158	3/4 X 3/4 X 3/4
664521		2959.5ZL	Sanpress	29595ZLflange adapter with SC 1 NB1 9	1493,70	1,494	1
664531		2959.5ZL	Sanpress	29595ZLflange adapter with SC 11/4 NT1 9	1658,30	1,658	1 1/4
664541		2959.5ZL	Sanpress	29595ZLflange adapter with SC 11/2 NT1 9	1982,20	1,982	1 1/2
664551		2959.5ZL	Sanpress	29595ZLflange adapter with SC 2 NT1 9	2727,00	2,727	2
664681		2957ZL	Sanpress	2957ZL union 1/2x1 NB1 9	100,00	0,100	1/2 X 1
664691		2957ZL	Sanpress	2957ZL union 1x1 NB1 9	138,00	0,138	1 X 1
664701		2957ZL	Sanpress	2957ZL union 3/4x1 NB1 9	112,70	0,113	3/4 X 1
664711		2957ZL	Sanpress	2957ZL union 1x11/4 NB1 9	175,26	0,175	1 X 1 1/4
664721		2915.1ZL	Sanpress	29151ZLreducer 11/2x1/2 NB1 9	147,40	0,147	1 1/2 X 1/2
664731		2915.1ZL	Sanpress	29151ZLreducer 2x1/2 NB1 9	238,90	0,239	2 X 1/2
664741		2915.1ZL	Sanpress	29151ZLreducer 2x3/4 NB1 9	236,38	0,236	2 X 3/4
979821	335946	9777.9	Sanpress	97779 pipe coupling 10 NB1 9	20,12	0,020	10
979831	335953	9778.0	Sanpress	97780 pipe coupling 12x10 NB1 9	27,20	0,027	12 X 10
979841	335960	9778.1	Sanpress	97781 pipe coupling 15x10 NB1 9	33,24	0,033	15 X 10

Conversion table for unit weights

Note: As Viega only has one pipe for the Sanpress and Sanpress Inox systems, the data for the pipes corresponds to the Sanpress Inox product overview.

Material no.	Item no.	Model no.	System name	Material short text	Mass in g/m	Mass in kg/m	Dimensions	Conversion factor
109801	751159	2205.3	Sanpress	22053 sanpress-pipe 15x1,0x3M(60) E 539	338,00	0,338	15 X 1,0 X3M (60)	0,073
109811	751166	2205.3	Sanpress	22053 sanpress-pipe 18x1,0x3M(30) E 539	411,00	0,411	18 X 1,0 X3M (30)	0,088
109821	751173	2205.3	Sanpress	22053 sanpress-pipe 22x1,2x3M(30) E 539	603,00	0,603	22 X 1,2 X3M (30)	0,130
109831	751180	2205.3	Sanpress	22053 sanpress-pipe 28x1,2x3M(30) E 539	778,00	0,778	28 X 1,2 X3M (30)	0,167
109841	751197	2205.3	Sanpress	22053 sanpress-pipe 35x1,5x3M(15) E 539	1215,00	1,215	35 X 1,5 X3M (15)	0,261
109851	751203	2205.3	Sanpress	22053 sanpress-pipe 42x1,5x3M(15) E 539	1469,00	1,469	42 X 1,5 X3M (15)	0,316
109861	751210	2205.3	Sanpress	22053 sanpress-pipe 54x1,5x3M(15) E 539	1872,00	1,872	54 X 1,5 X3M (15)	0,402
109951	751258	2205.3XL	Sanpress XL	22053XLsanpress-pipe 108x2,0x3M(15)E 539	5028,00	5,028	108 X 2,0 X3M (15)	1,081
273271	289034	2203	Sanpress	2203 sanpress-pipe 18x1,0(240) E 529	433,00	0,433	18 X 1,0 (240)	0,093
273276	807122	2203	Sanpress	2203 sanpress-pipe 18x1,0(60) E 529	404,00	0,404	18 X 1,0 (60)	0,087
273431	193676	2203	Sanpress	2203 sanpress-pipe 54x1,5(60) E 529	1967,00	1,967	54 X 1,5 (60)	0,423
273436	807177	2203	Sanpress	2203 sanpress-pipe 54x1,5(30) E 529	1900,00	1,900	54 X 1,5 (30)	0,408
277050	102036	2203	Sanpress	2203 sanpress-pipe 15x1,0(600) E 529	342,00	0,342	15 X 1,0 (600)	0,074
277056	807115	2203	Sanpress	2203 sanpress-pipe 15x1,0(120) E 529	333,00	0,333	15 X 1,0 (120)	0,072
277060	102708	2203	Sanpress	2203 sanpress-pipe 22x1,2(420) E 529	624,00	0,624	22 X 1,2 (420)	0,134
277066	807139	2203	Sanpress	2203 sanpress-pipe 22x1,2(60) E 529	603,00	0,603	22 X 1,2 (60)	0,130
277070	104924	2203	Sanpress	2203 sanpress-pipe 28x1,2(240) E 529	775,00	0,775	28 X 1,2 (240)	0,167
277076	807146	2203	Sanpress	2203 sanpress-pipe 28x1,2(60) E 529	775,00	0,775	28 X 1,2 (60)	0,167
277080	108588	2203	Sanpress	2203 sanpress-pipe 35x1,5(180) E 529	1255,00	1,255	35 X 1,5 (180)	0,270
277086	807153	2203	Sanpress	2203 sanpress-pipe 35x1,5(30) E 529	1200,00	1,200	35 X 1,5 (30)	0,258
277090	113001	2203	Sanpress	2203 sanpress-pipe 42x1,5(120) E 529	1518,00	1,518	42 X 1,5 (120)	0,326
277096	807160	2203	Sanpress	2203 sanpress-pipe 42x1,5(30) E 529	1518,00	1,518	42 X 1,5 (30)	0,326
277101	354862	2203XL	Sanpress XL	2203XL sanpress-pipe 76,1x2,0(30) E 529	3622,00	3,622	76,1 X 2,0 (30)	0,778
277106	807207	2203XL	Sanpress XL	2203XL sanpress-pipe 76,1x2,0(6) E 529	3596,00	3,596	76,1 X 2,0 (6)	0,773
277111	354855	2203XL	Sanpress XL	2203XL sanpress-pipe 88,9x2,0(30) E 529	4341,00	4,341	88,9 X 2,0 (30)	0,933
277116	807214	2203XL	Sanpress XL	2203XL sanpress-pipe 88,9x2,0(6) E 529	4244,00	4,244	88,9 X 2,0 (6)	0,912
277121	354848	2203XL	Sanpress XL	2203XL sanpress-pipe 108,0x2,0(30) E 529	5170,00	5,170	108,0 X 2,0 (30)	1,111

Material no.	Item no.	Model no.	System name	Material short text	Mass in g/m	Mass in kg/m	Dimensions	Conversion factor
277126	807184	2203XL	Sanpress XL	2203XL sanpress-pipe 108,0x2,0(6) E 529	5202,00	5,202	108,0 X 2,0 (6)	1,118
280441	297824	2203	Sanpress	2203 sanpress-pipe 12x1,0(60) E 529	275,00	0,275	12 X 1,0 (60)	0,059
282123	799366	2206	Sanpress	2206 sanpress-pipe 22x1,2 E FH9	667,00	0,667	22 X 1,2	0,143
282133	799373	2206	Sanpress	2206 sanpress-pipe 28x1,2 E FH9	850,00	0,850	28 X 1,2	0,183
282143	799380	2206	Sanpress	2206 sanpress-pipe 35x1,5 E FH9	1315,00	1,315	35 X 1,5	0,283
282153	799397	2206	Sanpress	2206 sanpress-pipe 42x1,5 E FH9	1611,11	1,611	42 X 1,5	0,346
282163	799403	2206	Sanpress	2206 sanpress-pipe 54x1,5 E FH9	2029,16	2,029	54 X 1,5	0,436
342751	578626	2203XL	Sanpress XL	2203XL sanpress-pipe 64,0x2,0(60) E 529	3032,00	3,032	64,0 X 2,0 (60)	0,652
342756	807191	2203XL	Sanpress XL	2203XL sanpress-pipe 64,0x2,0(6) E 529	3030,00	3,030	64,0 X 2,0 (6)	0,651
365981	615987	2205	Sanpress	2205 sanpress-pipe 12x1,0(60) E 539	266,00	0,266	12 X 1,0 (60)	0,057
365991	615994	2205	Sanpress	2205 sanpress-pipe 15x1,0(600) E 539	330,00	0,330	15 X 1,0 (600)	0,071
365996	807351	2205	Sanpress	2205 sanpress-pipe 15x1,0(120) E 539	330,00	0,330	15 X 1,0 (120)	0,071
366001	616007	2205	Sanpress	2205 sanpress-pipe 18x1,0(240) E 539	402,00	0,402	18 X 1,0 (240)	0,086
366006	807368	2205	Sanpress	2205 sanpress-pipe 18x1,0(60) E 539	405,00	0,405	18 X 1,0 (60)	0,087
366011	616014	2205	Sanpress	2205 sanpress-pipe 22x1,2(420) E 539	604,00	0,604	22 X 1,2 (420)	0,130
366016	807375	2205	Sanpress	2205 sanpress-pipe 22x1,2(60) E 539	593,00	0,593	22 X 1,2 (60)	0,127
366021	616021	2205	Sanpress	2205 sanpress-pipe 28x1,2(240) E 539	778,00	0,778	28 X 1,2 (240)	0,167
366026	807382	2205	Sanpress	2205 sanpress-pipe 28x1,2(60) E 539	762,00	0,762	28 X 1,2 (60)	0,164
366031	616038	2205	Sanpress	2205 sanpress-pipe 35x1,5(180) E 539	1216,00	1,216	35 X 1,5 (180)	0,261
366036	807399	2205	Sanpress	2205 sanpress-pipe 35x1,5(30) E 539	1185,00	1,185	35 X 1,5 (30)	0,255
366041	616045	2205	Sanpress	2205 sanpress-pipe 42x1,5(120) E 539	1420,00	1,420	42 X 1,5 (120)	0,305
366046	807405	2205	Sanpress	2205 sanpress-pipe 42x1,5(30) E 539	1440,00	1,440	42 X 1,5 (30)	0,309
366051	616557	2205	Sanpress	2205 sanpress-pipe 54x1,5(60) E 539	1905,00	1,905	54 X 1,5 (60)	0,409
366056	807412	2205	Sanpress	2205 sanpress-pipe 54x1,5(30) E 539	1865,00	1,865	54 X 1,5 (30)	0,401
366061	616564	2205XL	Sanpress XL	2205XL sanpress-pipe 64x2,0(60) E 539	3000,00	3,000	64 X 2,0 (60)	0,645
366066	807436	2205XL	Sanpress XL	2205XL sanpress-pipe 64x2,0(6) E 539	2908,00	2,908	64 X 2,0 (6)	0,625
366071	616571	2205XL	Sanpress XL	2205XL sanpress-pipe 76,1x2,0(30) E 539	3507,00	3,507	76,1 X 2,0 (30)	0,754
366076	807443	2205XL	Sanpress XL	2205XL sanpress-pipe 76,1x2,0(6) E 539	3477,00	3,477	76,1 X 2,0 (6)	0,747
366081	616588	2205XL	Sanpress XL	2205XL sanpress-pipe 88,9x2,0(30) E 539	4111,00	4,111	88,9 X 2,0 (30)	0,884
366086	807450	2205XL	Sanpress XL	2205XL sanpress-pipe 88,9x2,0(6) E 539	4061,00	4,061	88,9 X 2,0 (6)	0,873

Material no.	Item no.	Model no.	System name	Material short text	Mass in g/m	Mass in kg/m	Dimensions	Conversion factor
366091	616595	2205XL	Sanpress XL	2205XL sanpress-pipe 108x2,0(30) E 539	4955,00	4,955	108 X 2,0 (30)	1,065
366096	807429	2205XL	Sanpress XL	2205XL sanpress-pipe 108x2,0(6) E 539	4958,00	4,958	108 X 2,0 (6)	1,066
386201		4003	Sanpress	4003 sanpress-pipe 1/2 E 1 9	556,84	0,557	1/2	0,120
386211		4003	Sanpress	4003 sanpress-pipe 3/4 E 1 9	803,59	0,804	3/4	0,173
386221		4003	Sanpress	4003 sanpress-pipe 1 E 1 9	1050,34	1,050	1	0,226
386231		4003	Sanpress	4003 sanpress-pipe 11/4 E 1 9	1299,81	1,300	1 1/4	0,279
386251		4003	Sanpress	4003 sanpress-pipe 2 E 1 9	2038,12	2,038	2	0,438
553541		4003	Sanpress	4003 sanpress-pipe 11/2 E 1 9	1543,84	1,544	1 1/2	0,332
553561		4007XL	Sanpress XL	4007XL sanpress-pipe 21/2 E 1 9	3243,04	3,243	2 1/2	0,697
553571		4007XL	Sanpress XL	4007XL sanpress-pipe 3 E 1 9	3879,85	3,880	3	0,834
553581		4007XL	Sanpress XL	4007XL sanpress-pipe 4 E 1 9	5153,37	5,153	4	1,108

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Notes
This EPD is mainly based on the work and findings of Institut für Fenstertechnik e.V.. Rosenheim (ift Rosenheim) and specifically on ift-Guideline NA-01/3 “Allgemeiner Leitfaden zur Erstellung von Typ III Umweltproduktdeklarationen” (Guidance on preparing Type III Environmental Product Declarations).

Layout
ift Rosenheim GmbH – 2021

Photographs (front page)
Viega GmbH & Co. KG

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