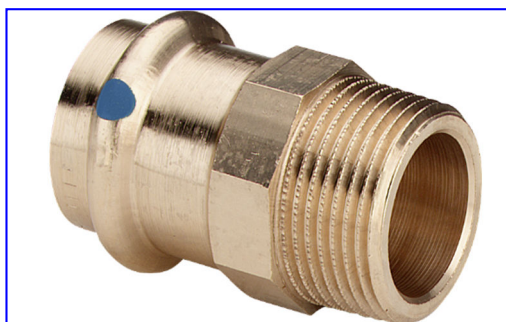


Environmental Product Declaration (EPD)



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 Declaration

Publication date:
18.12.2023
Valid until:
18.12.2028



www.ift-rosenheim.de/
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Environmental Product Declaration (EPD)



Declaration code EPD-VSP-GB-67.0

Programme operator	ift Rosenheim GmbH Theodor-Gietl-Straße 7-9 83026 Rosenheim, Germany		
Practitioner of the LCA	Viega GmbH & Co. KG Viega Platz 1 57439 Attendorn, Germany		
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: 25.01.2024	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.		

Christian Kehrer Head of Certification and Surveillance Body	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

Table 1 Product groups*

*The relevant piece weights [kg/piece] are specified in the conversion table of Annex B in accordance with PCR Part B. Specification of weights per unit length is not possible.

The declared unit is obtained by summing up:

PG	Assessed product	Unit weight	Declared unit
1	Weighted average	177.05 g	1 kg
2	Adapter with SC (Item no. 430863)	39.35 g	1 kg
3	Sanpress pipe (Item no. 354848)	4,653.00 g	1 linear metre

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 Table 1.

Product description

Sanpress

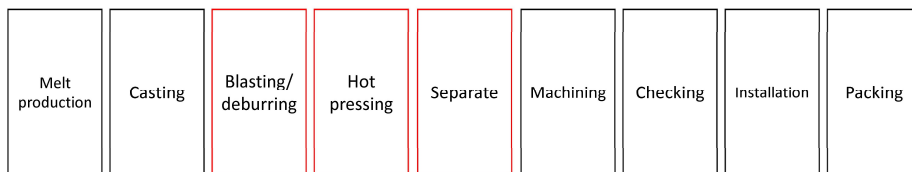
Flow-optimized press connector system with press connectors made of gunmetal or silicon bronze (change of material due to the current production changeover from gunmetal to silicon bronze alloy standardised for Viega worldwide) and pipes made of stainless steel 1.4401 and 1.4521. The press connector 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



does not apply to all articles

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](http://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	<p>The below benefits have been defined as per DIN EN 15804:</p> <ul style="list-style-type: none"> • Benefits from recycling • Benefits (thermal and electrical) from incineration
Allocation of co-products	<p>Allocations occur during production.</p> <p>Allocation was based on the masses (units) of products produced.</p>
Allocations for re-use, recycling and recovery	<p>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.</p> <p>The system boundaries were set following their disposal, reaching the end-of-waste status.</p>
Allocations beyond life cycle boundaries	<p>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).</p> <p>The system boundary set for the recycled material refers to collection.</p>
Secondary material	The use of secondary material in module A3 by Viega GmbH & Co. KG was considered. Secondary material is not used.
Inputs	<p>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:</p> <p>Energy</p> <p>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.</p> <p>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.</p> <p>Water</p> <p>There is no water consumption in the individual process steps for production.</p>

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.

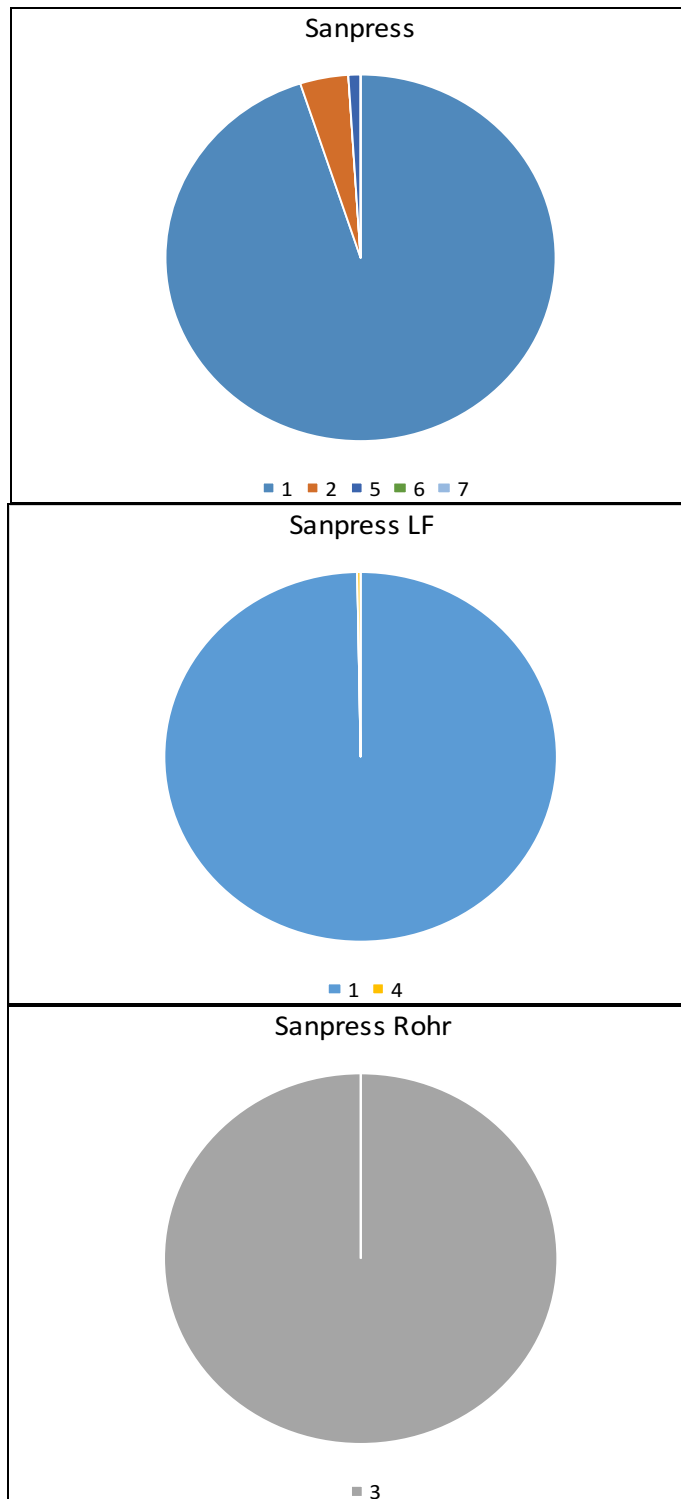


Illustration 2 Percentage of individual materials per declared unit

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.

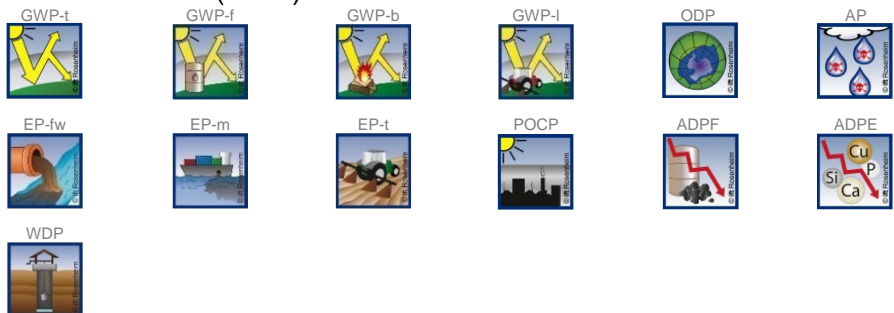
6.3 Impact assessment

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)

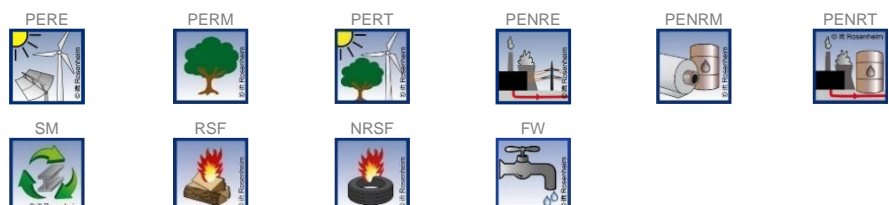


Resource management

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 - eutrophication 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


ift ROSENHEIM																
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 - eutrophication 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


ift ROSENHEIM		Results per 1 kg Sanpress LF														
		Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4
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 - eutrophication 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

ift ROSENHEIM																
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.

Product group connecting technology

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.

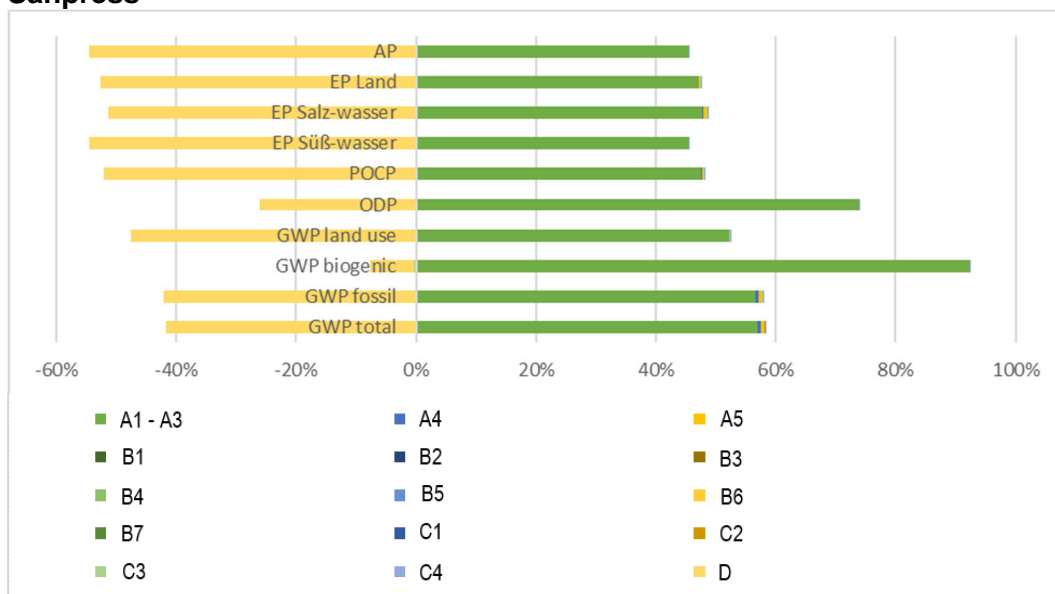
The main environmental impact of production is caused by the raw material stainless steel. This is to be expected, as the main proportion of stainless steel is up to 100 percent depending on the product (pipes) and the high LCIA values associated with the raw material are the main source of emissions.

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).

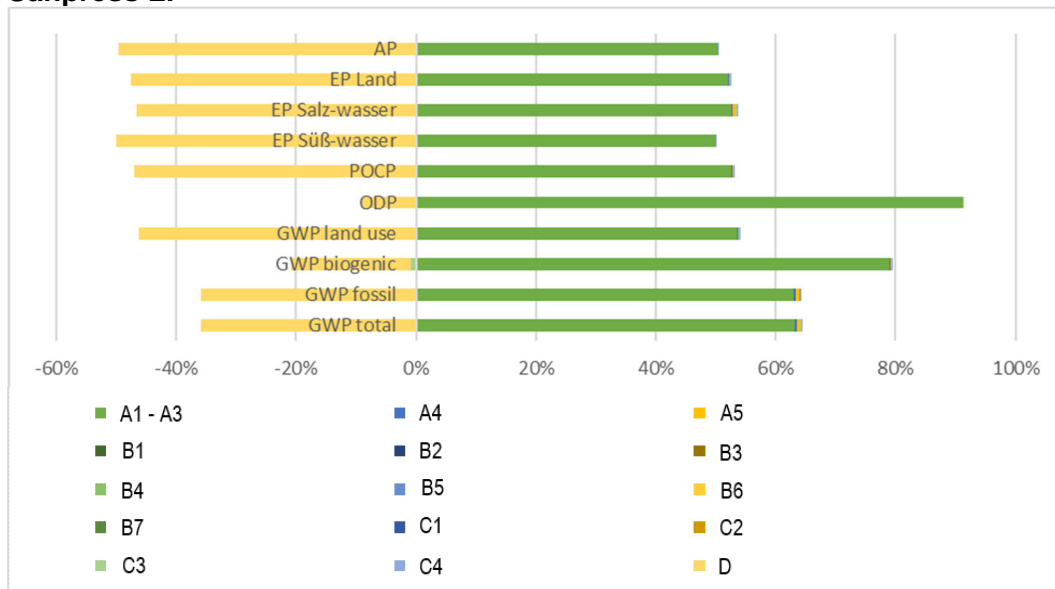
The charts below show the allocation of the main environmental impacts.

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

Sanpress



Sanpress LF



Sanpress pipe

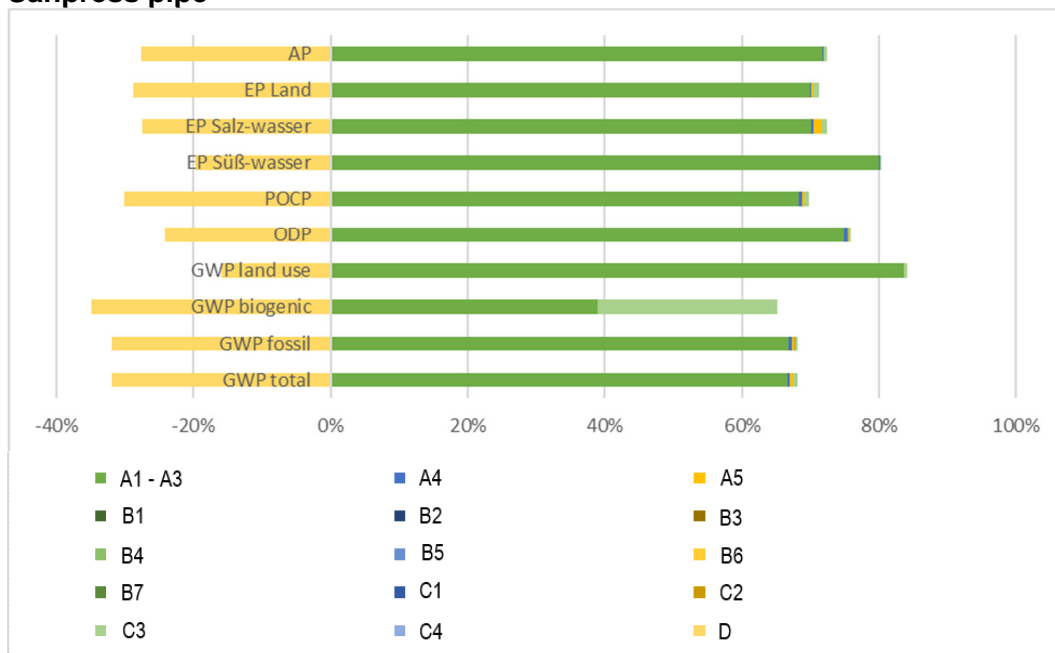


Illustration 3 Percentage of the modules in selected environmental impact indicators

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

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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/m ³]	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

Product group connecting technology

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.

Product group connecting technology

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	<p>Connecting technology 99% deconstruction.</p> <p>Further deconstruction rates are possible, give adequate reasons.</p>

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	<p>Transport to collection point with >32 t truck (Euro 4), diesel, 29.96 t payload, 53% capacity used, 50 km (1)</p>

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	<p>Share for recirculation of materials:</p> <ul style="list-style-type: none"> • 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	<p>The non-recordable amounts and losses within the re-use/recycling chain (C1 and C3) are modelled as “disposed” (EU-28).</p>

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	<ul style="list-style-type: none"> • 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.

10 Annex B - Product overview as of 2022

Press connector: Conversion table for unit weights

System	Product subgroup	Material	Designation	Model no.	Dimensions	Item no.	Mass in grams
Sanpress	Sanpress-Fittings	106441	Bogen 90° mit SC	2214NU	18 X 3/4	748456	115,000
Sanpress	Sanpress-Fittings	106491	Bogen 90° mit SC	2214NU	15 X 3/4	748470	114,000
Sanpress	Sanpress-Fittings	106441	Elbow 90° with SC	2214NU	18 X 3/4	748456	115
Sanpress	Sanpress-Fittings	106491	Elbow 90° with SC	2214NU	15 X 3/4	748470	114
Sanpress	Sanpress-Fittings	106751	Elbow 90° with SC	22142NU	15 X 3/8	747862	44
Sanpress	Sanpress-Fittings	106771	Elbow 90° with SC	22142NU	18 X 1/2	747879	68
Sanpress	Sanpress-Fittings	106781	Elbow 90° with SC	22142NU	22 X 1/2	747886	89
Sanpress	Sanpress-Fittings	106791	Elbow 90° with SC	22142NU	28 X 1/2	748487	117
Sanpress	Sanpress-Fittings	106831	Elbow 90° with SC	22142NU	28 X 3/4	748494	123,1
Sanpress	Sanpress-Fittings	106851	Elbow 90° with SC	22142NU	42 X 1 1/2	748500	420
Sanpress	Sanpress-Fittings	106861	Elbow 90° with SC	22142NU	22 X 1	748517	133
Sanpress	Sanpress-Fittings	106881	Elbow 90° with SC	22141NU	15 X 1/2	747916	52,8
Sanpress	Sanpress-Fittings	106911	Tee with SC	2218NU	15 X 18 X 15	748555	134,352
Sanpress	Sanpress-Fittings	106971	Elbow 90° with SC	2214NU	54 X 2	790684	636
Sanpress	Sanpress-Fittings	106981	Elbow 90° with SC	22142NU	54 X 2	790691	789
Sanpress	Sanpress-Fittings	107071	Tee with SC	22172NU	22 X 3/4 X 22	748609	157,3
Sanpress	Sanpress-Fittings	107091	Tee with SC	22172NU	35 X 1 X 35	748616	310
Sanpress	Sanpress-Fittings	107101	Tee with SC	22172NU	42 X 1 X 42	748623	450
Sanpress	Sanpress-Fittings	107111	Tee with SC	22172NU	54 X 1 X 54	748630	659
Sanpress	Sanpress-Fittings	107121	Tee with SC	22171NU	18 X 3/4 X 18	748647	120
Sanpress	Sanpress-Fittings	107151	Adapter	22609NU	22 X 1	752286	112,6
Sanpress	Sanpress-F. without thread	107181	Reducer with SC	22151NU	15 X 12	748678	25,42
Sanpress	Sanpress-F. without thread	107211	Sliding coupling with SC	22155NU	42	748708	339,31
Sanpress	Sanpress-Fittings	107231	Adapter with SC	2212NU	12 X 3/8	748722	30,2
Sanpress	Sanpress-Fittings	107251	Adapter with SC	2212NU	12 X 1/2	748739	54
Sanpress	Sanpress-Fittings	107271	Adapter with SC	2212NU	28 X 1/2	748746	81,32
Sanpress	Sanpress-Fittings	107301	Adapter with SC	2212NU	28 X 1 1/4	748753	150,47
Sanpress	Sanpress-Fittings	107311	Adapter with SC	2212NU	42 X 1 1/4	748760	192,9
Sanpress	Sanpress-Fittings	107321	Adapter with SC	2212NU	42 X 1 1/2	748777	250,15
Sanpress	Sanpress-Fittings	107341	Adapter with SC	2212NU	35 X 3/4	747930	112,7
Sanpress	Sanpress-Fittings	107421	Adapter with SC	2211NU	12 X 3/8	748906	27,6
Sanpress	Sanpress-Fittings	107431	Adapter with SC	2211NU	12 X 1/2	748913	33,8
Sanpress	Sanpress-Fittings	107441	Adapter with SC	2211NU	35 X 1 1/2	748920	216,8
Sanpress	Sanpress-Fittings	107451	Adapter with SC	2211NU	54 X 1 1/2	748937	355,25
Sanpress	Sanpress-Fittings	107521	Adapter	22114NU	15 X 1/2	748999	41,8
Sanpress	Sanpress-Fittings	107531	Adapter with SC	22123NU	15 X 1/2	749002	59,6

System	Product subgroup	Material	Designation	Model no.	Dimensions	Item no.	Mass in grams
Sanpress	Sanpress-Fittings	107541	Adapter with SC	22123NU	18 X 1/2	749019	68
Sanpress	Sanpress-Fittings	107551	Adapter with SC	22123NU	22 X 1/2	749026	72,5
Sanpress	Sanpress-Fittings	107641	Adapter with SC	22609NU	28 X 1 1/4	776640	163
Sanpress	Sanpress-Fittings	107681	Union with SC	2260NU	28	749033	317,14
Sanpress	Sanpress-Fittings	107701	Union with SC	2260NU	42	749057	613,83
Sanpress	Sanpress-Fittings	107801	Insulation union with SC	2267NU	18 X 3/4	749101	298
Sanpress	Sanpress-Fittings	107821	Insulation union with SC	2267NU	22 X 3/4	749118	474,5
Sanpress	Sanpress-Fittings	107841	Insulation union with SC	2267NU	22 X 1	749125	459,66
Sanpress	Sanpress-Fittings	107851	Insulation union with SC	2267NU	28 X 1	749132	449,1
Sanpress	Sanpress-Fittings	107861	Insulation union with SC	2267NU	35 X 1 1/4	749149	765,16
Sanpress	Sanpress-Fittings	107881	Insulation union with SC	2267NU	42 X 1 1/2	749156	855
Sanpress	Sanpress-Fittings	107891	Insulation union with SC	2267NU	54 X 2	749163	1332
Sanpress	Sanpress-Fittings	107901	Union with SC	2262NU	28 X 3/4	749170	249
Sanpress	Sanpress-Fittings	107921	Union with SC	2262NU	42 X 1 1/2	749187	558
Sanpress	Sanpress-Fittings	107941	Union with SC	2265NU	28 X 3/4	749200	303,2
Sanpress	Sanpress-Fittings	107951	Union with SC	2265NU	42 X 1 1/2	749217	564,2
Sanpress	Sanpress-Fittings	108051	Flange adapter with SC	22595NU	54 (DN50)	749286	2930,4
Sanpress	Sanpress-Fittings	108101	Wall plate with SC	22255NU	18 X 3/4	749293	161
Sanpress	Sanpress-Fittings	108151	Sliding coupling with SC	22154NU	28	749323	243
Sanpress	Sanpress-Fittings	108191	Union with SC	2263NU	28 X 1	749361	123,3
Sanpress	Sanpress-Fittings	108201	Union with SC	2263NU	54 X 2 3/4	749378	640
Sanpress	Sanpress-Fittings	108251	Union with SC	2263NU	42 X 2	749415	356
Sanpress	Sanpress-Fittings	108261	Union with SC	2263NU	15 X 1	749422	79,01
Sanpress	Sanpress-Fittings	108281	Union with SC	2263NU	18 X 1	749439	81,4
Sanpress	Sanpress-Fittings	108291	Union with SC	2263NU	22 X 3/4	749446	86,3
Sanpress	Sanpress-Fittings	108511	Adapter with SC	2212NU	54 X 1 1/2	747923	361,1
Sanpress	Sanpress-Fittings	109341	Coupling	97780NU	12 X 10	749705	27,2
Sanpress	Sanpress-Fittings	109401	Coupling	97781NU	15 X 10	749712	33,7
Sanpress	Sanpress-Fittings	109541	Adapter with SC	22609NU	35 X 1 1/2	776756	203,81
Sanpress	Sanpress-Fittings	109561	Adapter with SC	22609NU	18 X 3/4	776763	62,03
Sanpress	Sanpress-Fittings	204211	Adapter with SC	2211	14 X 3/8	443689	33,9
Sanpress	Sanpress-Fittings	204221	Adapter with SC	2211	14 X 1/2	443696	43,6
Sanpress	Sanpress-Fittings	204231	Adapter with SC	2211	16 X 1/2	443702	48,4
Sanpress	Sanpress-Fittings	204241	Adapter with SC	2211	16 X 3/4	443719	62,4
Sanpress	Sanpress-Fittings	204251	Adapter with SC	2212	14 X 1/2	443726	56,3
Sanpress	Sanpress-Fittings	204261	Adapter with SC	2212	16 X 1/2	443733	60,2
Sanpress	Sanpress-Fittings	204431	Union with SC	2263	14 X 3/8	476786	53,5
Sanpress	Sanpress-Fittings	204601	Elbow 90° with SC	2214	14 X 1/2	444006	60
Sanpress	Sanpress-Fittings	204611	Elbow 90° with SC	2214	16 X 1/2	444013	60,5
Sanpress	Sanpress-Fittings	204621	Union with SC	2263	14 X 1/2	443849	51,9

System	Product subgroup	Material	Designation	Model no.	Dimensions	Item no.	Mass in grams
Sanpress	Sanpress-Fittings	204631	Union with SC	2263	14 X 3/4	444150	68,75
Sanpress	Sanpress-Fittings	204641	Union with SC	2263	16 X 1/2	444167	54,8
Sanpress	Sanpress-Fittings	204651	Union with SC	2263	16 X 3/4	444174	69,5
Sanpress	Sanpress-Fittings	204831	Elbow 90° with SC	22142	14 X 1/2	444020	60,7
Sanpress	Sanpress-Fittings	204841	Elbow 90° with SC	22142	16 X 1/2	444037	73,5
Sanpress	Sanpress-Fittings	204851	Wall plate with SC	22255	14 X 1/2	444044	110,9
Sanpress	Sanpress-Fittings	204861	Wall plate with SC	22255	16 X 1/2	444556	116
Sanpress	Sanpress-Fittings	213251	Elbow	2255 713	1/2 X 3/4	390969	96,9
Sanpress	Sanpress-Fittings	213271	Elbow	2255 713	1 1/4 X 1 1/2	390983	322
Sanpress	Sanpress-Fittings	213311	Elbow	2255 713	3/4 X 1	391027	154
Sanpress	Sanpress-Fittings	214621	Double wall plate with SC	29287ZL	1/2 X 1/2 X 1/2	788005	176,9
Sanpress	Sanpress-Fittings	214641	Double wall plate with SC	29287ZL	3/4 X 3/4 X 3/4	788012	260
Sanpress	Sanpress-Fittings	214651	Adapter	29115ZL	1 1/4	788104	136
Sanpress	Sanpress-Fittings	214661	Adapter	29115ZL	1 1/2	788111	212,3
Sanpress	Sanpress-Fittings	214671	Adapter	29115ZL	2	788128	304,5
Sanpress LF	Sanpress XL	215271	Elbow 90°	2216LF	76,1	432256	2300
Sanpress LF	Sanpress XL	215281	Elbow 90°	2216LF	88,9	432263	2710
Sanpress LF	Sanpress XL	215291	Elbow 90°	2216LF	108,0	432270	3820
Sanpress LF	Sanpress XL	215371	Elbow 90°	22161LF	76,1	432287	2091
Sanpress LF	Sanpress XL	215391	Elbow 90°	22161LF	108,0	432300	3550
Sanpress LF	Sanpress XL	215491	Elbow 45°	2226LF	108,0	432331	2915
Sanpress LF	Sanpress-Fittings	215681	Elbow with SC	22142LF	15 X 1/2	430306	89
Sanpress LF	Sanpress-Fittings	215691	Elbow	22142LF	15 X 3/4	430313	119
Sanpress LF	Sanpress-Fittings	215701	Elbow with SC	22142LF	18 X 1/2	430320	88,7
Sanpress LF	Sanpress-Fittings	215731	Elbow	22142LF	22 X 3/4	430351	154
Sanpress LF	Sanpress-Fittings	215751	Elbow with SC	22142LF	28 X 1	430375	247
Sanpress	Sanpress-Fittings	216491	Double wall plate with SC	29287ZL	3/4 X 3/4 X 1/2	788029	246,7
Sanpress	Sanpress-Fittings	216501	Double wall plate with SC	29287ZL	1 X 1 X 1/2	788036	322
Sanpress LF	Sanpress XL	217331	Tee	2218LF	88,9	432386	3710
Sanpress LF	Sanpress XL	217341	Tee	2218LF	108,0	432393	5200
Sanpress LF	Sanpress XL	217351	Tee	2218LF	76,1 X 54 X 76,1	432409	2458
Sanpress LF	Sanpress XL	217361	Tee	2218LF	88,9 X 54 X 88,9	432416	2740
Sanpress LF	Sanpress XL	217371	Tee	2218LF	88,9 X 76,1 X 88,9	432423	3555
Sanpress LF	Sanpress XL	217381	Tee	2218LF	108,0 X 54 X 108,0	432430	3598
Sanpress LF	Sanpress XL	217401	Tee	2218LF	108,0X88,9X108,0	432454	4676
Sanpress LF	Sanpress-Fittings	217471	Tee	22172LF	15 X 1/2 X 15	430245	118,3
Sanpress LF	Sanpress-Fittings	217481	Tee with SC	22172LF	18 X 1/2 X 18	430757	198
Sanpress LF	Sanpress-Fittings	217491	Tee	22172LF	22 X 1/2 X 22	430764	211
Sanpress LF	Sanpress-Fittings	217511	Tee with SC	22172LF	28 X 1/2 X 28	430788	259
Sanpress LF	Sanpress-Fittings	217521	Tee	22172LF	28 X 3/4 X 28	430795	302

System	Product subgroup	Material	Designation	Model no.	Dimensions	Item no.	Mass in grams
Sanpress LF	Sanpress-Fittings	217531	Tee with SC	22172LF	35 X 1/2 X 35	430801	298
Sanpress LF	Sanpress-Fittings	217541	Tee	22172LF	35 X 1 X 35	430818	457
Sanpress LF	Sanpress-Fittings	217561	Tee with SC	22172LF	42 X 1 X 42	430832	658
Sanpress LF	Sanpress-Fittings	217571	Tee with SC	22172LF	54 X 1/2 X 54	430849	620
Sanpress LF	Sanpress XL	217591	Tee	22172LF	76,1 X 3/4 X 76,1	432461	1962
Sanpress LF	Sanpress-Fittings	217651	Adapter with SC	2211LF	15 X 1/2	430863	39,4
Sanpress LF	Sanpress-Fittings	217661	Adapter	2211LF	15 X 3/4	430870	57,2
Sanpress LF	Sanpress-Fittings	217671	Adapter with SC	2211LF	18 X 1/2	430887	45,3
Sanpress LF	Sanpress-Fittings	217691	Adapter with SC	2211LF	22 X 1/2	430900	65
Sanpress LF	Sanpress-Fittings	217701	Adapter with SC	2211LF	22 X 3/4	430917	70,6
Sanpress LF	Sanpress-Fittings	217711	Adapter with SC	2211LF	22 X 1	430924	116,5
Sanpress LF	Sanpress-Fittings	217721	Adapter with SC	2211LF	28 X 1	430931	112
Sanpress LF	Sanpress-Fittings	217731	Adapter	2211LF	28 X 1 1/4	430948	185
Sanpress LF	Sanpress-Fittings	217741	Adapter with SC	2211LF	35 X 1	430955	137,2
Sanpress LF	Sanpress-Fittings	217751	Adapter with SC	2211LF	35 X 1 1/4	430962	207
Sanpress LF	Sanpress-Fittings	217761	Adapter	2211LF	35 X 1 1/2	430979	227,7
Sanpress LF	Sanpress-Fittings	217771	Adapter with SC	2211LF	42 X 1 1/4	430986	211,8
Sanpress LF	Sanpress-Fittings	217781	Adapter with SC	2211LF	42 X 1 1/2	430993	234,5
Sanpress LF	Sanpress-Fittings	217791	Adapter with SC	2211LF	54 X 1 1/2	431006	493
Sanpress LF	Sanpress-Fittings	217801	Adapter with SC	2211LF	54 X 2	431013	503
Sanpress LF	Sanpress XL	217811	Adapter	2211LF	76,1 X 2 1/2	432522	1005
Sanpress LF	Sanpress-Fittings	217841	Adapter with SC	2212LF	15 X 1/2	431020	47,9
Sanpress LF	Sanpress-Fittings	217851	Adapter	2212LF	15 X 3/4	431037	57,8
Sanpress LF	Sanpress-Fittings	217861	Adapter with SC	2212LF	18 X 1/2	431044	51,3
Sanpress LF	Sanpress-Fittings	217881	Adapter with SC	2212LF	22 X 1/2	431068	60,5
Sanpress LF	Sanpress-Fittings	217891	Adapter	2212LF	22 X 3/4	431075	70,4
Sanpress LF	Sanpress-Fittings	217901	Adapter	2212LF	22 X 1	431082	100,4
Sanpress LF	Sanpress-Fittings	217911	Adapter with SC	2212LF	28 X 1	431099	99,2
Sanpress LF	Sanpress-Fittings	217931	Adapter	2212LF	35 X 1	431112	110
Sanpress LF	Sanpress-Fittings	217941	Adapter with SC	2212LF	35 X 1 1/4	431129	165,1
Sanpress LF	Sanpress-Fittings	217951	Adapter	2212LF	42 X 1 1/4	431136	222,6
Sanpress LF	Sanpress-Fittings	217961	Adapter with SC	2212LF	42 X 1 1/2	431143	280,6
Sanpress LF	Sanpress-Fittings	217981	Adapter with SC	2212LF	54 X 2	431167	475
Sanpress LF	Sanpress XL	218061	Coupling	2215LF	76,1	432553	1237
Sanpress LF	Sanpress XL	218071	Coupling	2215LF	88,9	432560	1412
Sanpress LF	Sanpress XL	218081	Coupling	2215LF	108,0	432577	2045
Sanpress LF	Sanpress XL	218161	Sliding coupling	22155LF	76,1	432584	1221
Sanpress LF	Sanpress XL	218171	Sliding coupling	22155LF	88,9	432591	1384
Sanpress LF	Sanpress XL	218341	Reducer	22151LF	76,1 X 54	432614	770
Sanpress LF	Sanpress XL	218351	Reducer	22151LF	88,9 X 54	432621	959

System	Product subgroup	Material	Designation	Model no.	Dimensions	Item no.	Mass in grams
Sanpress LF	Sanpress XL	218361	Reducer	22151LF	88,9 X 76,1	432638	1245
Sanpress LF	Sanpress XL	218371	Reducer	22151LF	108,0 X 54	432645	1315
Sanpress LF	Sanpress XL	218381	Reducer	22151LF	108,0 X 76,1	432850	1615,25
Sanpress LF	Sanpress XL	218391	Reducer	22151LF	108,0 X 88,9	432867	1658
Sanpress LF	Sanpress-Fittings	218401	Union	2260LF	15	431464	125,3
Sanpress LF	Sanpress-Fittings	218421	Union with SC	2260LF	22	431488	225
Sanpress LF	Sanpress-Fittings	218431	Union with SC	2260LF	28	431495	364
Sanpress LF	Sanpress-Fittings	218591	Union with SC	2265LF	18 X 1/2	431655	130,7
Sanpress LF	Sanpress-Fittings	218611	Union with SC	2265LF	22 X 1/2	431679	198
Sanpress LF	Sanpress-Fittings	218621	Union with SC	2265LF	22 X 3/4	431686	210
Sanpress LF	Sanpress-Fittings	218651	Union with SC	2265LF	35 X 1 1/4	431716	435
Sanpress LF	Sanpress-Fittings	218661	Union with SC	2265LF	42 X 1 1/2	431723	569
Sanpress LF	Sanpress-Fittings	218671	Union with SC	2265LF	54 X 2	431730	991
Sanpress LF	Sanpress-Fittings	218771	Union with SC	2263LF	15 X 3/4	431839	67,4
Sanpress LF	Sanpress-Fittings	218791	Union with SC	2263LF	18 X 3/4	431853	72,2
Sanpress LF	Sanpress-Fittings	218801	Union	2263LF	18 X 1	431860	89
Sanpress LF	Sanpress-Fittings	218811	Union with SC	2263LF	22 X 3/4	431877	88,3
Sanpress LF	Sanpress-Fittings	218821	Union with SC	2263LF	22 X 1	431884	112,4
Sanpress LF	Sanpress-Fittings	218851	Union with SC	2263LF	28 X 1 1/4	431914	172
Sanpress LF	Sanpress-Fittings	218881	Union with SC	2263LF	42 X 1 3/4	431945	345,4
Sanpress LF	Sanpress-Fittings	218901	Union with SC	2263LF	54 X 2 3/8	431969	564
Sanpress LF	Sanpress-Fittings	220251	Wall plate with SC	22255LF	15 X 1/2	432027	138
Sanpress LF	Sanpress-Fittings	220261	Wall plate with SC	22255LF	18 X 1/2	432034	130
Sanpress LF	Sanpress-Fittings	220281	Wall plate	22255LF	22 X 1/2	432058	183
Sanpress	Sanpress-F. without thread	224001	Cross piece with SC	2244	15 X 15 X 15	424435	183
Sanpress	Sanpress-F. without thread	224031	Cross piece with SC	2244	18 X 15 X 18	424473	204
Sanpress	Sanpress-F. without thread	224051	Cross piece with SC	2244	22 X 15 X 22	424497	224
Sanpress	Sanpress-Fittings	224061	Connection set with SC	22731	15 X 1/2 X 15	446628	845
Sanpress	Sanpress-Fittings	224071	Connection set with SC	22731	18 X 1/2 X 18	446635	855
Sanpress	Sanpress-Fittings	224161	Elbow 90° with SC	2214	15 X 3/4	443030	117,34
Sanpress	Sanpress-Fittings	224191	Elbow 90° with SC	22142	28 X 3/4	446611	127,75
Sanpress	Sanpress-Fittings	224611	Elbow 90° with SC	22142	28 X 1/2	442033	117
Sanpress	Sanpress-Fittings	225001	Adapter with SC	2211NU	15 X 1/2	389130	40,9
Sanpress	Sanpress-Fittings	225011	Adapter with SC	2211NU	15 X 3/4	389222	57,7
Sanpress	Sanpress-Fittings	225021	Adapter with SC	2211NU	15 X 3/8	389246	33,5
Sanpress	Sanpress-Fittings	225031	Adapter with SC	2211NU	18 X 1/2	389154	45,22
Sanpress	Sanpress-Fittings	225041	Adapter with SC	2211NU	18 X 3/4	389192	64,28
Sanpress	Sanpress-Fittings	225051	Adapter with SC	2211NU	22 X 1	389185	107,3
Sanpress	Sanpress-Fittings	225061	Adapter with SC	2211NU	22 X 1/2	389178	66,1
Sanpress	Sanpress-Fittings	225071	Adapter with SC	2211NU	22 X 3/4	389123	71,2

System	Product subgroup	Material	Designation	Model no.	Dimensions	Item no.	Mass in grams
Sanpress	Sanpress-Fittings	225081	Adapter with SC	2211NU	28 X 1	389147	109
Sanpress	Sanpress-Fittings	225091	Adapter with SC	2211NU	28 X 1 1/4	389239	140,3
Sanpress	Sanpress-Fittings	225101	Adapter with SC	2211NU	28 X 3/4	384951	88,1
Sanpress	Sanpress-Fittings	225111	Adapter with SC	2211NU	35 X 1	384968	126,4
Sanpress	Sanpress-Fittings	225121	Adapter with SC	2211NU	35 X 1 1/4	389161	175,6
Sanpress	Sanpress-Fittings	225131	Adapter with SC	2211NU	42 X 1 1/2	389215	236,7
Sanpress	Sanpress-Fittings	225141	Adapter with SC	2211NU	42 X 1 1/4	389253	205,9
Sanpress	Sanpress-Fittings	225151	Adapter with SC	2211NU	54 X 2	389208	426,7
Sanpress	Sanpress-Fittings	225161	Plug-in piece	22111NU	15 X 1/2	389260	44,9
Sanpress	Sanpress-Fittings	225171	Plug-in piece	22111NU	22 X 1/2	389284	54,1
Sanpress	Sanpress-Fittings	225181	Plug-in piece	22111NU	22 X 3/4	384975	79,2
Sanpress	Sanpress-Fittings	225191	Plug-in piece	22111NU	28 X 1	389277	119,35
Sanpress	Sanpress-Fittings	225301	Adapter with SC	2212NU	15 X 1/2	389291	51,33
Sanpress	Sanpress-Fittings	225311	Adapter with SC	2212NU	15 X 3/4	389383	57,8
Sanpress	Sanpress-Fittings	225321	Adapter with SC	2212NU	15 X 3/8	389390	30,7
Sanpress	Sanpress-Fittings	225331	Adapter with SC	2212NU	18 X 1/2	389345	53,44
Sanpress	Sanpress-Fittings	225341	Adapter with SC	2212NU	18 X 3/4	389369	66
Sanpress	Sanpress-Fittings	225351	Adapter with SC	2212NU	22 X 1	389376	100,4
Sanpress	Sanpress-Fittings	225361	Adapter with SC	2212NU	22 X 1/2	389314	60,4
Sanpress	Sanpress-Fittings	225371	Adapter with SC	2212NU	22 X 3/4	389307	70,3
Sanpress	Sanpress-Fittings	225381	Adapter with SC	2212NU	28 X 1	389321	107
Sanpress	Sanpress-Fittings	225391	Adapter with SC	2212NU	28 X 3/4	389338	84,17
Sanpress	Sanpress-Fittings	225401	Adapter with SC	2212NU	35 X 1	384982	119,62
Sanpress	Sanpress-Fittings	225411	Adapter with SC	2212NU	35 X 1 1/4	389352	155,7
Sanpress	Sanpress-Fittings	225421	Adapter with SC	2212NU	54 X 2	389406	387,8
Sanpress	Sanpress-Fittings	225431	Plug-in piece	22121NU	15 X 1/2	389420	43,86
Sanpress	Sanpress-Fittings	225441	Plug-in piece	22121NU	18 X 1/2	384999	41,1
Sanpress	Sanpress-Fittings	225451	Plug-in piece	22121NU	22 X 1/2	389413	48,89
Sanpress	Sanpress-Fittings	225461	Plug-in piece	22121NU	22 X 3/4	385002	62,73
Sanpress	Sanpress-Fittings	225471	Plug-in piece	22121NU	28 X 1	389444	97,8
Sanpress	Sanpress-Fittings	225481	Plug-in piece	22121NU	28 X 3/4	389437	67,76
Sanpress	Sanpress-Fittings	225611	Adapter with SC	2213PNU	20 X 22	389475	69
Sanpress	Sanpress-Fittings	225651	Elbow with SC	2214NU	15 X 1/2	389499	101
Sanpress	Sanpress-Fittings	225661	Elbow with SC	2214NU	18 X 1/2	389512	75
Sanpress	Sanpress-Fittings	225671	Elbow with SC	2214NU	22 X 3/4	389482	101,9
Sanpress	Sanpress-Fittings	225681	Elbow with SC	2214NU	28 X 1	385026	186
Sanpress	Sanpress-Fittings	225691	Elbow with SC	2214NU	35 X 1 1/4	389505	276
Sanpress	Sanpress-Fittings	225751	Elbow 90° with SC	22142NU	15 X 1/2	389529	57,34
Sanpress	Sanpress-Fittings	225761	Elbow 90° with SC	22142NU	22 X 3/4	389536	105,3
Sanpress	Sanpress-Fittings	225771	Elbow 90° with SC	22142NU	28 X 1	389543	162,81

System	Product subgroup	Material	Designation	Model no.	Dimensions	Item no.	Mass in grams
Sanpress	Sanpress-Fittings	225781	Elbow 90° with SC	22142NU	35 X 1 1/4	385033	304
Sanpress	Sanpress-F. without thread	226051	Sliding coupling with SC	22155NU	15	389758	68,53
Sanpress	Sanpress-F. without thread	226061	Sliding coupling with SC	22155NU	18	389765	84
Sanpress	Sanpress-F. without thread	226071	Sliding coupling with SC	22155NU	22	389734	115,3
Sanpress	Sanpress-F. without thread	226081	Sliding coupling with SC	22155NU	28	389727	152,18
Sanpress	Sanpress-F. without thread	226091	Sliding coupling with SC	22155NU	35	389741	213
Sanpress	Sanpress-Fittings	226103	Coupling with SC	2215NU	12	807900	27,06
Sanpress	Sanpress-Fittings	226113	Coupling with SC	2215NU	15	807917	37,15
Sanpress	Sanpress-Fittings	226123	Coupling with SC	2215NU	18	807924	49,43
Sanpress	Sanpress-Fittings	226133	Coupling with SC	2215NU	22	807931	70,5
Sanpress	Sanpress-Fittings	226143	Coupling with SC	2215NU	28	807948	86,2
Sanpress	Sanpress-Fittings	226301	Tee with SC	22171NU	22 X 3/4 X 22	389871	149
Sanpress	Sanpress-Fittings	226311	Tee with SC	22171NU	28 X 3/4 X 28	389864	172
Sanpress	Sanpress-Fittings	226321	Tee with SC	22171NU	35 X 3/4 X 35	389888	269
Sanpress	Sanpress-Fittings	226351	Tee with SC	22172NU	15 X 1/2 X 15	389918	80
Sanpress	Sanpress-Fittings	226361	Tee with SC	22172NU	18 X 1/2 X 18	389925	92,52
Sanpress	Sanpress-Fittings	226371	Tee with SC	22172NU	22 X 1/2 X 22	389895	125
Sanpress	Sanpress-Fittings	226381	Tee with SC	22172NU	28 X 1/2 X 28	389901	152
Sanpress	Sanpress-Fittings	226391	Tee with SC	22172NU	28 X 3/4 X 28	389949	192,5
Sanpress	Sanpress-Fittings	226401	Tee with SC	22172NU	35 X 1/2 X 35	389932	214
Sanpress	Sanpress-Fittings	226411	Tee with SC	22172NU	42 X 1/2 X 42	389956	384
Sanpress	Sanpress-Fittings	226701	Wall plate with SC	2225NU	15 X 1/2 X 45	385088	168
Sanpress	Sanpress-Fittings	226711	Wall plate with SC	22255NU	12 X 1/2	390143	91,2
Sanpress	Sanpress-Fittings	226721	Wall plate with SC	22255NU	15 X 1/2	390136	107,4
Sanpress	Sanpress-Fittings	226731	Wall plate with SC	22255NU	18 X 1/2	390150	111,9
Sanpress	Sanpress-Fittings	226741	Wall plate with SC	22255NU	22 X 1/2	390167	129
Sanpress	Sanpress-Fittings	226911	Union with SC	2263NU	15 X 3/4	390310	66,38
Sanpress	Sanpress-Fittings	226921	Union with SC	2263NU	18 X 3/4	390327	70,2
Sanpress	Sanpress-Fittings	226931	Union with SC	2263NU	22 X 1	390280	108,92
Sanpress	Sanpress-Fittings	226941	Union with SC	2263NU	28 X 1 1/4	390297	159,76
Sanpress	Sanpress-Fittings	226951	Union with SC	2263NU	35 X 1 1/2	390303	205,8
Sanpress	Sanpress-Fittings	226961	Union with SC	2263NU	42 X 1 3/4	390334	335
Sanpress	Sanpress-Fittings	226971	Union with SC	2263NU	54 X 2 3/8	390341	538
Sanpress	Sanpress-Fittings	234591	Union with SC	2263NU	22 X 1 1/4	629427	190,1
Sanpress	Sanpress-Fittings	234691	Union with SC	2263NU	22 X 1 1/2	629434	165,1
Sanpress	Sanpress-Fittings	234991	Union with SC	2263NU	28 X 1 1/2	629441	181,62
Sanpress	Sanpress-Fittings	235361	Insert	22409	1/2	460402	69,7
Sanpress	Sanpress-Fittings	235371	Insert	22409	3/4	460419	115
Sanpress	Sanpress-Fittings	235791	Union with SC	2263NU	35 X 2	629458	263,7
Sanpress	Sanpress-F. without thread	244481	Tension coupling	22769	12	632236	30,52

System	Product subgroup	Material	Designation	Model no.	Dimensions	Item no.	Mass in grams
Sanpress	Sanpress-F. without thread	244491	Connection set with SC	22761	28/35 X 12	632229	185,33
Sanpress	Sanpress-Fittings	245301	Insulation union with SC	2267	15 X 1/2	469450	193,3
Sanpress	Sanpress-Fittings	245311	Insulation union with SC	2267	15 X 3/4	469467	199,5
Sanpress	Sanpress-Fittings	245321	Insulation union with SC	2267	18 X 1/2	469474	331,6
Sanpress	Sanpress-Fittings	245331	Insulation union with SC	2267	18 X 3/4	469481	307,9
Sanpress	Sanpress-Fittings	245341	Insulation union with SC	2267	22 X 3/4	469498	464,57
Sanpress	Sanpress-Fittings	245351	Insulation union with SC	2267	22 X 1	469504	442,86
Sanpress	Sanpress-Fittings	245361	Insulation union with SC	2267	28 X 1	469511	462,3
Sanpress	Sanpress-Fittings	245371	Insulation union with SC	2267	35 X 1 1/4	469528	777,5
Sanpress	Sanpress-Fittings	245381	Insulation union with SC	2267	42 X 1 1/2	469535	853,6
Sanpress	Sanpress-Fittings	245391	Insulation union with SC	2267	54 X 2	469542	1334
Sanpress	Sanpress-F. without thread	247001	Flange adapter with SC	22595	28 (DN25)	479855	1340
Sanpress	Sanpress-F. without thread	247011	Flange adapter with SC	22595	35 (DN32)	479879	1970
Sanpress	Sanpress-F. without thread	247021	Flange adapter with SC	22595	42 (DN40)	479886	2394
Sanpress	Sanpress-F. without thread	247031	Flange adapter with SC	22595	54 (DN50)	479893	2849
Sanpress	Sanpress XL	247041	Flange adapter	22595XL	76,1 (DN65)	479954	3520
Sanpress	Sanpress XL	247051	Flange adapter	22595XL	88,9 (DN80)	479978	4446,5
Sanpress	Sanpress XL	247061	Flange adapter	22595XL	108,0 (DN100)	480011	5160
Sanpress	Sanpress-F. without thread	248801	Connection set with SC	22761	35 X 12	470272	202,1
Sanpress	Sanpress-F. without thread	248811	Connection set with SC	22761	28 X 12	470289	149,1
Sanpress	Sanpress-Fittings	250001	Tee with SC	22174	15 X 1/4 X 15	705596	85
Sanpress	Sanpress-Fittings	250011	Tee with SC	22174	18 X 1/4 X 18	705602	100
Sanpress	Sanpress-Fittings	250021	Tee with SC	22174	22 X 1/4 X 22	705619	130
Sanpress	Sanpress-Fittings	250031	Tee with SC	22174	28 X 1/4 X 28	705626	163
Sanpress	Sanpress-Fittings	250041	Tee with SC	22174	35 X 1/4 X 35	705633	220
Sanpress	Sanpress-Fittings	250051	Tee with SC	22174	42 X 1/4 X 42	705640	380
Sanpress	Sanpress-Fittings	250061	Tee with SC	22174	54 X 1/4 X 54	705855	530
Sanpress	Sanpress-Fittings	253217	Elbow 90° with SC	2214CR	15X1/2	706296	70
Sanpress	Sanpress-Fittings	253467	Adapter with SC	2211CR	12 X 3/8	706852	28,2
Sanpress	Sanpress-Fittings	253477	Adapter with SC	2211CR	12 X 1/2	706869	33,27
Sanpress	Sanpress-Fittings	253487	Adapter with SC	2211CR	15 X 1/2	706876	41,1
Sanpress	Sanpress-Fittings	253497	Adapter with SC	2212CR	12 X 1/2	706883	54,5
Sanpress	Sanpress-Fittings	253507	Adapter with SC	2212CR	15 X 1/2	706890	48,8
Sanpress	Sanpress-Fittings	254881	Adapter with SC	97119SI	22 X G1	635497	149,7
Sanpress	Sanpress-Fittings	256821	Union with SC	2263	12 X 3/8	475956	48
Sanpress	Sanpress-Fittings	256831	Union with SC	2263	15 X 3/8	475963	53,9
Sanpress	Sanpress-Fittings	268421	Union with SC	2263	54 X 2 1/4	426743	456
Sanpress	Sanpress-Fittings	268431	Union with SC	2263	54 X 2 3/4	426750	640,151
Sanpress	Sanpress-Fittings	273961	Sanpress-Crossover	22093	22	193331	140,5
Sanpress	Sanpress-Fittings	273971	Sanpress-Crossover	22093	15	193324	61,3

System	Product subgroup	Material	Designation	Model no.	Dimensions	Item no.	Mass in grams
Sanpress	Sanpress-Fittings	274641	Sanpress-Crossover	22093	28	193294	219
Sanpress	Sanpress-Fittings	274811	Sanpress-Crossover	22093	18	289010	86,9
Sanpress	Sanpress-F. without thread	275061	Coupling with SC	2215	54	215835	355
Sanpress	Sanpress-Fittings	276211	Adapter with SC	2211	42 X 1 1/4	297930	235,3
Sanpress	Sanpress-Fittings	276221	Adapter with SC	2211	35 X 1	297947	132,7
Sanpress	Sanpress-Fittings	276291	Adapter with SC	2211	18 X 1/2	283490	51,25
Sanpress	Sanpress-F. without thread	276551	Tee with SC	2218	35 X 18 X 35	313616	239,5
Sanpress	Sanpress-F. without thread	276561	Tee with SC	2218	22 X 28 X 22	313623	236
Sanpress	Sanpress-F. without thread	276571	Tee with SC	2218	12 X 15 X 12	313630	102
Sanpress	Sanpress-F. without thread	276581	Tee with SC	2218	15 X 18 X 15	313647	136
Sanpress	Sanpress-Fittings	276671	Sanpress-Pipe elbow 45°	22091	42 - 45°	164140	584
Sanpress	Sanpress-Fittings	276681	Sanpress-Pipe elbow 45°	22091	35 - 45°	163433	411
Sanpress	Sanpress-Fittings	276741	Sanpress-Pipe elbow 45°	22091	22 - 45°	157364	155
Sanpress	Sanpress-Fittings	276791	Adapter with SC	2211	18 X 3/4	283230	69,2
Sanpress	Sanpress-Fittings	276951	Adapter with SC	2212	54 X 1 1/2	365097	385,7
Sanpress	Sanpress-Fittings	277141	Adapter with SC	2211	22 X 3/4	104306	78,32
Sanpress	Sanpress-Fittings	277151	Adapter with SC	2211	28 X 1	106508	116,4
Sanpress	Sanpress-Fittings	277161	Adapter with SC	2211	35 X 1 1/4	110352	184,5
Sanpress	Sanpress-Fittings	277171	Adapter with SC	2211	42 X 1 1/2	115340	255,7
Sanpress	Sanpress-Fittings	277181	Adapter with SC	2211	15 X 1/2	105044	45,8
Sanpress	Sanpress-Fittings	277201	Plug-in piece	22111	15 X 1/2	115418	44
Sanpress	Sanpress-Fittings	277211	Plug-in piece	22111	22 X 1/2	119676	53,8
Sanpress	Sanpress-Fittings	277221	Plug-in piece	22111	22 X 3/4	116767	79,02
Sanpress	Sanpress-Fittings	277231	Plug-in piece	22111	28 X 1	122034	120
Sanpress	Sanpress-Fittings	277241	Plug-in piece	22111	35 X 1 1/4	125288	185,6
Sanpress	Sanpress-Fittings	277251	Plug-in piece	22111	42 X 1 1/2	132231	258
Sanpress	Sanpress-Fittings	277261	Adapter with SC	2212	22 X 3/4	108465	83,4
Sanpress	Sanpress-Fittings	277271	Adapter with SC	2212	28 X 1	114329	128,5
Sanpress	Sanpress-Fittings	277281	Adapter with SC	2212	35 X 3/4	357542	115,8
Sanpress	Sanpress-Fittings	277291	Plug-in piece	22121	15 X 1/2	117733	41,2
Sanpress	Sanpress-Fittings	277301	Plug-in piece	22121	22 X 1/2	120917	49,61
Sanpress	Sanpress-Fittings	277311	Plug-in piece	22121	22 X 3/4	117481	62,3
Sanpress	Sanpress-Fittings	277321	Plug-in piece	22121	28 X 1	122942	93,3
Sanpress	Sanpress-Fittings	277331	Plug-in piece	22121	28 X 3/4	130954	67,75
Sanpress	Sanpress-Fittings	277341	Plug-in piece	22121	35 X 1	134730	116
Sanpress	Sanpress-Fittings	277351	Plug-in piece	22121	35 X 1 1/4	130589	171,5
Sanpress	Sanpress-Fittings	277361	Plug-in piece	22121	42 X 1 1/2	135430	225,2
Sanpress	Sanpress-F. without thread	277371	Reducer	22151NC	15 X 14	323707	47,6
Sanpress	Sanpress-F. without thread	277381	Reducer with SC	22151	22 X 12	366865	36,3
Sanpress	Sanpress-Fittings	277401	Adapter with SC	2212	15 X 1/2	107543	64,7

System	Product subgroup	Material	Designation	Model no.	Dimensions	Item no.	Mass in grams
Sanpress	Sanpress-Fittings	277411	Adapter with SC	2212	35 X 1 1/4	116774	174,8
Sanpress	Sanpress-Fittings	277421	Adapter with SC	2212	42 X 1 1/2	124236	319,8
Sanpress	Sanpress-Fittings	277441	Elbow 90° with SC	22141	15 X 1/2	335281	52,8
Sanpress	Sanpress-Fittings	277461	Elbow 90° with SC	2214	15 X 1/2	112950	56
Sanpress	Sanpress-Fittings	277471	Elbow 90° with SC	2214	22 X 3/4	115623	101,9
Sanpress	Sanpress-Fittings	277481	Elbow 90° with SC	2214	28 X 1	118730	180
Sanpress	Sanpress-Fittings	277491	Elbow 90° with SC	2214	42 X 1 1/2	128500	364
Sanpress	Sanpress-Fittings	277561	Elbow 90° with SC	2214	18 X 1/2	281205	73
Sanpress	Sanpress-Fittings	277571	Elbow 90° with SC	2214	35 X 1 1/4	127329	278
Sanpress	Sanpress-F. without thread	277601	Coupling with SC	2215	22	108090	73,2
Sanpress	Sanpress-F. without thread	277611	Coupling with SC	2215	28	108618	99,24
Sanpress	Sanpress-F. without thread	277621	Coupling with SC	2215	35	114930	112,001
Sanpress	Sanpress-F. without thread	277631	Coupling with SC	2215	42	116835	195,5
Sanpress	Sanpress-F. without thread	277641	Reducer with SC	22151	22 X 15	108250	38,8
Sanpress	Sanpress-F. without thread	277651	Coupling with SC	2215	12	308636	24,3
Sanpress	Sanpress-F. without thread	277661	Reducer	22151NC	15 X 16	323714	61,5
Sanpress	Sanpress-F. without thread	277671	Reducer	22151NC	18 X 16	323721	68,1
Sanpress	Sanpress-F. without thread	277701	Reducer with SC	22151	28 X 22	109974	66,201
Sanpress	Sanpress-F. without thread	277711	Reducer with SC	22151	35 X 22	115753	97,1
Sanpress	Sanpress-F. without thread	277721	Reducer with SC	22151	35 X 28	116934	97,8
Sanpress	Sanpress-F. without thread	277731	Reducer with SC	22151	42 X 28	124489	160,9
Sanpress	Sanpress-F. without thread	277741	Reducer with SC	22151	42 X 35	122775	148,7
Sanpress	Sanpress-F. without thread	277751	Coupling with SC	2215	18	282660	46,2
Sanpress	Sanpress-F. without thread	277801	Elbow 90° with SC	2216	22	104818	118,5
Sanpress	Sanpress-F. without thread	277811	Elbow 90° with SC	2216	28	106348	161,8
Sanpress	Sanpress-F. without thread	277821	Elbow 90° with SC	2216	35	111953	230
Sanpress	Sanpress-F. without thread	277831	Elbow 90° with SC	2216	42	119560	381
Sanpress	Sanpress-F. without thread	277901	Elbow 90° with SC	22161	22	108120	117
Sanpress	Sanpress-F. without thread	277911	Elbow 90° with SC	22161	28	115159	164
Sanpress	Sanpress-F. without thread	277921	Elbow 90° with SC	22161	35	117603	250
Sanpress	Sanpress-F. without thread	277931	Elbow 90° with SC	22161	42	130497	368
Sanpress	Sanpress-F. without thread	277941	Elbow 90° with SC	22161	15	107932	48
Sanpress	Sanpress-F. without thread	277991	Elbow 90° with SC	2216	15	103750	56
Sanpress	Sanpress-Fittings	278001	Tee with SC	22172	22 X 1/2 X 22	115944	123,6
Sanpress	Sanpress-Fittings	278011	Tee with SC	22172	15 X 1/2 X 15	115630	80
Sanpress	Sanpress-F. without thread	278021	Adapter	97737	22 X 22	247645	82,7
Sanpress	Sanpress-Fittings	278031	Tee with SC	22172	28 X 1/2 X 28	119768	150,6
Sanpress	Sanpress-Fittings	278041	Tee with SC	22172	35 X 1/2 X 35	121945	216,767
Sanpress	Sanpress-F. without thread	278061	Tee with SC	2218	22 X 15 X 22	109165	131
Sanpress	Sanpress-F. without thread	278071	Tee with SC	2218	22	109257	160

System	Product subgroup	Material	Designation	Model no.	Dimensions	Item no.	Mass in grams
Sanpress	Sanpress-F. without thread	278081	Tee with SC	2218	28 X 22 X 28	111625	195
Sanpress	Sanpress-F. without thread	278091	Tee with SC	2218	28	111915	213,7
Sanpress	Sanpress-F. without thread	278101	Tee with SC	2218	35 X 22 X 35	113469	268
Sanpress	Sanpress-F. without thread	278111	Tee with SC	2218	35 X 28 X 35	118341	296
Sanpress	Sanpress-F. without thread	278121	Tee with SC	2218	35	115265	320
Sanpress	Sanpress-F. without thread	278131	Tee with SC	2218	42 X 35 X 42	120672	472
Sanpress	Sanpress-F. without thread	278141	Tee with SC	2218	42	121259	518
Sanpress	Sanpress-F. without thread	278231	Tee with SC	2218	15	106614	75,8
Sanpress	Sanpress-Fittings	278261	Tee with SC	22172	42 X 1/2 X 42	126230	387
Sanpress	Sanpress-Fittings	278301	Elbow 90° with SC	22142	15 X 1/2	108441	57,34
Sanpress	Sanpress-F. without thread	278321	Coupling with SC	2215	15	107727	33,8
Sanpress	Sanpress-Fittings	278331	Union with SC	2262	18 X 3/4	314910	131,4
Sanpress	Sanpress-F. without thread	278341	Elbow 45° with SC	2226	15	113186	61,1
Sanpress	Sanpress-F. without thread	278351	Elbow 45° with SC	2226	22	112004	90,5
Sanpress	Sanpress-F. without thread	278361	Elbow 45° with SC	2226	28	111670	156,3
Sanpress	Sanpress-F. without thread	278371	Elbow 45° with SC	2226	35	116156	217,9
Sanpress	Sanpress-F. without thread	278381	Elbow 45° with SC	2226	42	128531	350
Sanpress	Sanpress-F. without thread	278441	Tee with SC	2218	22 X 15 X 15	121600	121
Sanpress	Sanpress-F. without thread	278451	Tee with SC	2218	28 X 22 X 22	135102	176
Sanpress	Sanpress-F. without thread	278461	Tee with SC	2218	35 X 28 X 28	121754	265,9
Sanpress	Sanpress-F. without thread	278541	Elbow 45° with SC	22261	15	109332	40,4
Sanpress	Sanpress-F. without thread	278551	Elbow 45° with SC	22261	22	110949	80
Sanpress	Sanpress-F. without thread	278561	Elbow 45° with SC	22261	28	113346	148,11
Sanpress	Sanpress-F. without thread	278571	Elbow 45° with SC	22261	35	121594	226
Sanpress	Sanpress-F. without thread	278581	Elbow 45° with SC	22261	42	134471	372
Sanpress	Sanpress-F. without thread	278641	Sliding coupling with SC	22155	15	119485	81,91
Sanpress	Sanpress-F. without thread	278661	Sliding coupling with SC	22155	22	119041	124,4
Sanpress	Sanpress-F. without thread	278681	Sliding coupling with SC	22155	28	122133	166,52
Sanpress	Sanpress-F. without thread	278701	Sliding coupling with SC	22155	35	124335	229,8
Sanpress	Sanpress-Fittings	278711	Tee with SC	22171	54 X 1 1/4 X 54	310936	831
Sanpress	Sanpress-F. without thread	278721	Sliding coupling with SC	22155	42	131494	387,7
Sanpress	Sanpress-Fittings	278731	Tee with SC	22171	54 X 1 X 54	310929	749
Sanpress	Sanpress-Fittings	278771	Mounting unit with SC	2221	15X1/2X45X150/200	124502	450
Sanpress	Sanpress-Fittings	278781	Mounting unit with SC	22211	15X1/2X45X80/100	135119	410
Sanpress	Sanpress-F. without thread	278811	Sliding coupling with SC	22155	18	287061	99,3
Sanpress	Sanpress-Fittings	278861	Wall plate with SC	22255	22 X 3/4	116057	174
Sanpress	Sanpress-Fittings	278881	Union with SC	2265	12 X 1/2	291389	115,2
Sanpress	Sanpress-Fittings	278901	ElbowUnion with SC	2255	15 X 1/2	125660	161,9
Sanpress	Sanpress-Fittings	278911	ElbowUnion with SC	2255	22 X 3/4	122614	232,6
Sanpress	Sanpress-Fittings	278921	ElbowUnion with SC	2255	22 X 1	132637	328

System	Product subgroup	Material	Designation	Model no.	Dimensions	Item no.	Mass in grams
Sanpress	Sanpress-Fittings	278931	ElbowUnion with SC	2255	28 X 1	128159	404
Sanpress	Sanpress-Fittings	278941	ElbowUnion with SC	2255	35 X 1 1/4	132729	546
Sanpress	Sanpress-Fittings	278951	ElbowUnion with SC	2255	42 X 1 1/2	139872	837
Sanpress	Sanpress-Fittings	278971	Wall plate with SC	2225	15 X 1/2 X 45	116552	166
Sanpress	Sanpress-Fittings	278981	Wall plate with SC	22255	15 X 1/2	107345	107,1
Sanpress	Sanpress-Fittings	279021	Tee with SC	22171	22 X 3/4 X 22	194123	148,329
Sanpress	Sanpress-Fittings	279031	Tee with SC	22171	28 X 3/4 X 28	194130	172
Sanpress	Sanpress-Fittings	279041	Tee with SC	22171	35 X 3/4 X 35	194147	268
Sanpress	Sanpress-F. without thread	279101	Reducer with SC	22151	54 X 28	194239	249,2
Sanpress	Sanpress-F. without thread	279111	Reducer with SC	22151	54 X 35	194222	262,3
Sanpress	Sanpress-Fittings	279121	Adapter with SC	2211	54 X 2	195267	426,5
Sanpress	Sanpress-Fittings	279161	Adapter with SC	2212	54 X 2	195304	416,6
Sanpress	Sanpress-Fittings	279171	Threaded socket	3247 260	1 1/4 X 1 1/2	312473	218
Sanpress	Sanpress-Fittings	279201	Union with SC	2260	15	126148	121,7
Sanpress	Sanpress-Fittings	279211	Union with SC	2260	22	126124	217,3
Sanpress	Sanpress-Fittings	279221	Union with SC	2260	28	124311	318,2
Sanpress	Sanpress-Fittings	279231	Union with SC	2260	35	130947	404,65
Sanpress	Sanpress-Fittings	279241	Union with SC	2260	42	132446	613,4
Sanpress	Sanpress-Fittings	279311	Union with SC	2262	18 X 1/2	283384	126,8
Sanpress	Sanpress-Fittings	279321	Union with SC	2265	18 X 3/4	283377	131,6
Sanpress	Sanpress-Fittings	279331	Union with SC	2265	18 X 1/2	283360	126,7
Sanpress	Sanpress-Fittings	279341	Union with SC	2260	18	287436	134
Sanpress	Sanpress-Fittings	279541	Union with SC	2262	28 X 3/4	365103	250,7
Sanpress	Sanpress-Fittings	279551	Union with SC	2262	15 X 1/2	131937	122,6
Sanpress	Sanpress-Fittings	279561	Union with SC	2262	15 X 3/4	133160	124,1
Sanpress	Sanpress-Fittings	279571	Union with SC	2262	22 X 3/4	125318	205,5
Sanpress	Sanpress-Fittings	279581	Union with SC	2262	22 X 1	133900	235,5
Sanpress	Sanpress-Fittings	279591	Union with SC	2262	28 X 1	128975	332,4
Sanpress	Sanpress-Fittings	279601	Union with SC	2262	35 X 1 1/4	138875	404,1
Sanpress	Sanpress-Fittings	279611	Union with SC	2262	42 X 1 1/2	141745	558,65
Sanpress	Sanpress-Fittings	279641	Union with SC	2265	28 X 3/4	365110	306,3
Sanpress	Sanpress-Fittings	279651	Union with SC	2265	12 X 3/8	291372	109,6
Sanpress	Sanpress-Fittings	279681	Plug-in piece	22121	54 X 2	199104	394,86
Sanpress	Sanpress-Fittings	279701	Union with SC	2265	15 X 1/2	120108	121,38
Sanpress	Sanpress-Fittings	279711	Union with SC	2265	22 X 3/4	119133	201,6
Sanpress	Sanpress-Fittings	279721	Union with SC	2265	28 X 1	120047	305,7
Sanpress	Sanpress-Fittings	279731	Union with SC	2265	35 X 1 1/4	128425	410
Sanpress	Sanpress-Fittings	279741	Union with SC	2265	42 X 1 1/2	135966	558,3
Sanpress	Sanpress-Fittings	279751	Union with SC	2265	15 X 3/4	140878	126,9
Sanpress	Sanpress-Fittings	279761	Union with SC	2265	22 X 1/2	142674	191,35

System	Product subgroup	Material	Designation	Model no.	Dimensions	Item no.	Mass in grams
Sanpress	Sanpress-Fittings	279771	Union with SC	2265	22 X 1	148492	198,7
Sanpress	Sanpress-Fittings	279791	Mounting unit with SC	22226EX	12 X 3/8 X 120	357351	195
Sanpress	Sanpress-Fittings	279861	Mounting unit with SC	22222	15 X 1/2 X 100	308674	203,95
Sanpress	Sanpress-Fittings	279901	Mounting unit with SC	222205	15 X 1/2 X 150	308681	230
Sanpress	Sanpress-F. without thread	279921	Reducer with SC	22151	54 X 42	198879	299,2
Sanpress	Sanpress-Fittings	279941	Union with SC	2263	42 X 1 3/4	265304	332,8
Sanpress	Sanpress-Fittings	279961	Union with SC	2263	54 X 2 3/8	265328	549
Sanpress	Sanpress-Fittings	279981	Test plug	2269	18	289423	264
Sanpress	Sanpress-Fittings	279991	Test plug	2269	54	187798	1111,6
Sanpress	Sanpress-Fittings	280001	Test plug	2269	15	141523	221,6
Sanpress	Sanpress-Fittings	280011	Test plug	2269	22	140557	312
Sanpress	Sanpress-Fittings	280021	Test plug	2269	28	142568	452,7
Sanpress	Sanpress-Fittings	280031	Test plug	2269	35	144111	625
Sanpress	Sanpress-Fittings	280041	Test plug	2269	42	144999	825
Sanpress	Sanpress-Fittings	280171	Union with SC	2263	35 X 1 1/2	265731	205,6
Sanpress	Sanpress-Fittings	280201	Union with SC	2263	28 X 1 1/4	265700	159,6
Sanpress	Sanpress-Fittings	280221	Union with SC	2263	22 X 1	265687	110,1
Sanpress	Sanpress-Fittings	280241	Union with SC	2263	15 X 3/4	265663	65
Sanpress	Sanpress-Fittings	280251	Union with SC	2263	18 X 3/4	283391	71,7
Sanpress	Sanpress-Fittings	280291	Test plug	2269	12	290801	190
Sanpress	Sanpress-Fittings	280361	Plug-in piece	22111	18 X 1/2	285081	48,5
Sanpress	Sanpress-Fittings	280381	Plug-in piece	22111	18 X 3/4	285104	74
Sanpress	Sanpress-Fittings	280451	Plug-in piece	22111	12 X 1/2	291310	44,3
Sanpress	Sanpress-Fittings	280471	Adapter with SC	2211	28 X 3/4	297954	100,3
Sanpress	Sanpress-Fittings	280481	Adapter with SC	2211	22 X 1/2	297961	71,76
Sanpress	Sanpress-Fittings	280491	Adapter with SC	2211	28 X 1 1/4	297978	159,3
Sanpress	Sanpress-Fittings	280521	Adapter with SC	2211	15 X 3/8	297985	36,5
Sanpress	Sanpress-Fittings	280561	Elbow 90° with SC	2214	12 X 3/8	290863	39,4
Sanpress	Sanpress-Fittings	280571	Elbow 90° with SC	2214	12 X 1/2	290870	52,04
Sanpress	Sanpress-Fittings	280611	Elbow 90° with SC	22142	18 X 1/2	281236	68
Sanpress	Sanpress-Fittings	280631	Elbow 90° with SC	22142	35 X 1 1/4	283704	304
Sanpress	Sanpress-Fittings	280641	Elbow 90° with SC	22142	22 X 3/4	283711	106,4
Sanpress	Sanpress-Fittings	280651	Elbow 90° with SC	22142	28 X 1	283728	162,95
Sanpress	Sanpress-Fittings	280661	Elbow 90° with SC	22142	12 X 3/8	290924	43,6
Sanpress	Sanpress-Fittings	280689	Tee with SC	22172NU	12 X 1/2 X 12	763862	68,5
Sanpress	Sanpress-Fittings	280721	Union with SC	2263	12 X 3/4	293611	64,4
Sanpress	Sanpress-Fittings	280771	Elbow 90° with SC	22142	12 X 1/2	290931	50,68
Sanpress	Sanpress-Fittings	280801	Adapter with SC	22123	22 X 1/2	287009	72
Sanpress	Sanpress-Fittings	280811	Adapter with SC	22123	15 X 1/2	287016	59,6
Sanpress	Sanpress-Fittings	280881	Mounting unit with SC	2222	15 X 1/2 X 150	295462	247,8

System	Product subgroup	Material	Designation	Model no.	Dimensions	Item no.	Mass in grams
Sanpress	Sanpress-F. without thread	280911	Reducer with SC	22151	28 X 18	298319	57,2
Sanpress	Sanpress-Fittings	280941	Elbow 90° with SC	22142	18 X 3/4	298227	85,75
Sanpress	Sanpress-Fittings	280951	Elbow 90° with SC	22142	22 X 1/2	298234	92
Sanpress	Sanpress-Fittings	280961	Elbow 90° with SC	22142	15 X 3/8	298241	46,7
Sanpress	Sanpress-Fittings	281001	Plug-in piece	22121	18 X 1/2	287085	44,1
Sanpress	Sanpress-Fittings	281021	Plug-in piece	22121	18 X 3/4	287108	57,9
Sanpress	Sanpress-Fittings	281051	Plug-in piece	22121	12 X 1/2	291341	39,3
Sanpress	Sanpress-Fittings	281061	Elbow 90° with SC	22142	42 X 1 1/2	299415	425,24
Sanpress	Sanpress-Fittings	281071	Elbow 90° with SC	22142	54 X 2	299422	789
Sanpress	Sanpress-F. without thread	281101	Reducer with SC	22151	28 X 15	288228	52
Sanpress	Sanpress-F. without thread	281121	Reducer with SC	22151	15 X 12	298302	26,6
Sanpress	Sanpress-Fittings	281141	Threaded socket	3247 260	3/4 X 1	295837	88,9
Sanpress	Sanpress-Fittings	281151	Threaded socket	3247 260	3/8 X 3/4	295691	47,3
Sanpress	Sanpress-Fittings	281161	Threaded socket	3247 260	1/2 X 3/4	295820	51,4
Sanpress	Sanpress-F. without thread	281191	Elbow 90° with SC	2216	54	199395	592
Sanpress	Sanpress-F. without thread	281211	Elbow 90° with SC	22161	54	191221	594
Sanpress	Sanpress-F. without thread	281231	Elbow 45° with SC	2226	54	197506	557
Sanpress	Sanpress-F. without thread	281251	Elbow 45° with SC	22261	54	191825	574
Sanpress	Sanpress-Fittings	281271	Elbow 90° with SC	2214	54 X 2	197988	632
Sanpress	Sanpress-Fittings	281291	Tee with SC	22171	54 X 3/4 X 54	197858	607,4
Sanpress	Sanpress-Fittings	281311	Tee with SC	22172	54 X 1/2 X 54	197353	569
Sanpress	Sanpress-F. without thread	281331	Tee with SC	2218	54	199364	890
Sanpress	Sanpress-F. without thread	281341	Tee with SC	2218	54 X 22 X 54	195991	575
Sanpress	Sanpress-F. without thread	281351	Tee with SC	2218	54 X 35 X 54	197469	626
Sanpress	Sanpress-F. without thread	281361	Tee with SC	2218	54 X 42 X 54	198541	760
Sanpress	Sanpress-F. without thread	281411	Sliding coupling with SC	22155	54	216153	619
Sanpress	Sanpress-Fittings	281431	Elbow Union with SC	2255	54 X 2	221676	1384
Sanpress	Sanpress-Fittings	281441	Union with SC	2260	54	226329	1010
Sanpress	Sanpress-Fittings	281511	Union with SC	2262	54 X 2	222017	800
Sanpress	Sanpress-Fittings	281521	Union with SC	2265	54 X 2	221997	984
Sanpress	Sanpress-F. without thread	281591	Tee with SC	2218	54 X 42 X 42	187279	825
Sanpress	Sanpress-Fittings	281621	Union with SC	2213	16 X 15	288068	102,4
Sanpress	Sanpress-Fittings	281641	Union with SC	2262	12 X 1/2	293024	119,46
Sanpress	Sanpress-Fittings	281681	Tee with SC	22172	12 X 1/2 X 12	290986	68
Sanpress	Sanpress-Fittings	281701	Tee with SC	22171	42 X 3/4 X 42	273231	364,5
Sanpress	Sanpress-Fittings	281721	Tee with SC	22171	18 X 3/4 X 18	281328	115
Sanpress	Sanpress-Fittings	281741	Tee with SC	22172	18 X 1/2 X 18	281359	92
Sanpress	Sanpress-Fittings	281841	Wall bushing with SC	22321	15X1/2X3/4X55	279288	178
Sanpress	Sanpress-Fittings	281851	Wall bushing with SC	22321	15X1/2X3/4X65	279295	205
Sanpress	Sanpress-Fittings	281861	Wall bushing with SC	22321	15X1/2X3/4X25	279301	128

System	Product subgroup	Material	Designation	Model no.	Dimensions	Item no.	Mass in grams
Sanpress	Sanpress-Fittings	281871	Wall bushing with SC	22321	15X1/2X3/4X35	279318	136
Sanpress	Sanpress-Fittings	281921	Valve oberteil	2230 454	M28 X 1,5	274979	335
Sanpress	Sanpress-F. without thread	282001	Reducer with SC	22151	22 X 18	287337	41,5
Sanpress	Sanpress-F. without thread	282011	Reducer with SC	22151	18 X 12	287344	31,34
Sanpress	Sanpress-F. without thread	282021	Reducer with SC	22151	54 X 22	287351	276
Sanpress	Sanpress-F. without thread	282031	Reducer with SC	22151	42 X 22	287368	154,13
Sanpress	Sanpress-F. without thread	282041	Reducer with SC	22151	18 X 15	287375	34,2
Sanpress	Sanpress-Fittings	282451	Adapter with SC	2212	28 X 1/2	428174	88,45
Sanpress	Sanpress-Fittings	282491	Union with SC	2260	12	293017	115
Sanpress	Sanpress-F. without thread	282501	Elbow 90°with SC	2216	18	281267	76
Sanpress	Sanpress-F. without thread	282521	Elbow 90°with SC	22161	18	281298	69,5
Sanpress	Sanpress-F. without thread	282541	Elbow 90°with SC	2216	12	298340	64
Sanpress	Sanpress-F. without thread	282561	Tee with SC	2218	15 X 12 X 15	298371	117
Sanpress	Sanpress-F. without thread	282571	Tee with SC	2218	15 X 22 X 15	298388	161
Sanpress	Sanpress-F. without thread	282581	Tee with SC	2218	18 X 22 X 18	298395	126,5
Sanpress	Sanpress-F. without thread	282591	Tee with SC	2218	22 X 18 X 18	298401	122
Sanpress	Sanpress-F. without thread	282601	Tee with SC	2218	22 X 22 X 15	298418	140
Sanpress	Sanpress-F. without thread	282611	Tee with SC	2218	28 X 18 X 28	298425	156
Sanpress	Sanpress-F. without thread	282621	Tee with SC	2218	22 X 15 X 18	298432	161,4
Sanpress	Sanpress-F. without thread	282701	Tee with SC	2218	22 X 18 X 22	281380	130
Sanpress	Sanpress-F. without thread	282711	Tee with SC	2218	18 X 15 X 15	281397	90
Sanpress	Sanpress-F. without thread	282721	Tee with SC	2218	18 X 15 X 18	281403	95,36
Sanpress	Sanpress-F. without thread	282731	Tee with SC	2218	18	281410	110,001
Sanpress	Sanpress-F. without thread	282841	Tee with SC	2218	28 X 15 X 28	283513	223
Sanpress	Sanpress-F. without thread	282851	Tee with SC	2218	35 X 15 X 35	283520	230
Sanpress	Sanpress-F. without thread	282861	Tee with SC	2218	42 X 22 X 42	283537	397,7
Sanpress	Sanpress-F. without thread	282871	Tee with SC	2218	42 X 28 X 42	283544	420
Sanpress	Sanpress-F. without thread	282881	Tee with SC	2218	42 X 35 X 35	283551	396
Sanpress	Sanpress-F. without thread	282889	Tee with SC	2218NU	42 X 35 X 35	805623	400
Sanpress	Sanpress-F. without thread	282891	Tee with SC	2218	54 X 28 X 54	283568	585
Sanpress	Sanpress-Fittings	282901	Wall plate with SC	22255	18 X 1/2	281502	111,9
Sanpress	Sanpress-Fittings	282921	Wall plate with SC	22255	12 X 1/2	291013	93,5
Sanpress	Sanpress-Fittings	282981	Adapter with SC	22123	18 X 1/2	298913	66,9
Sanpress	Sanpress-F. without thread	283001	Elbow 45°with SC	2226	18	281533	60,814
Sanpress	Sanpress-F. without thread	283021	Elbow 45°with SC	22261	18	281564	58,5
Sanpress	Sanpress-Fittings	283111	Wall bushing with SC	22323	15X 1/2X 3/4X 30	325060	108
Sanpress	Sanpress-Fittings	283151	Mounting unit with SC	2229	1/2	309398	1295
Sanpress	Sanpress-Fittings	283201	Elbow 90°	22143	1 5 X 1/2	308001	52,67
Sanpress	Sanpress-Fittings	283341	Tee with SC	22172	15 X 3/8 X 15	313951	78,9
Sanpress	Sanpress-Fittings	283351	Tee with SC	22172	28 X 3/4 X 28	313968	192

System	Product subgroup	Material	Designation	Model no.	Dimensions	Item no.	Mass in grams
Sanpress	Sanpress-Fittings	283361	Tee with SC	22172	22 X 3/4 X 22	313975	156,76
Sanpress	Sanpress-Fittings	283401	Adapter with SC	2212	18 X 1/2	283483	66,8
Sanpress	Sanpress-Fittings	283421	Adapter with SC	2212	12 X 1/2	291068	54
Sanpress	Sanpress-Fittings	283431	Adapter with SC	2212	12 X 3/8	291075	28,7
Sanpress	Sanpress-Fittings	283471	Adapter with SC	2212	18 X 3/4	294519	77
Sanpress	Sanpress-Fittings	283481	Adapter with SC	2212	42 X 1 1/4	298050	219,8
Sanpress	Sanpress-Fittings	283491	Adapter with SC	2212	22 X 1/2	298067	70,701
Sanpress	Sanpress-Fittings	283501	Adapter with SC	2212	15 X 3/8	298074	36,6
Sanpress	Sanpress-Fittings	283511	Adapter with SC	2212	28 X 3/4	298081	94,5
Sanpress	Sanpress-Fittings	283521	Adapter with SC	2212	15 X 3/4	298098	69,8
Sanpress	Sanpress-Fittings	283531	Adapter with SC	2212	28 X 1 1/4	298104	166,1
Sanpress	Sanpress-Fittings	283541	Adapter with SC	2212	35 X 1	298111	119,3
Sanpress	Sanpress-Fittings	283551	Adapter with SC	2212	22 X 1	298128	132,501
Sanpress	Sanpress-Fittings	283601	ElbowUnion with SC	2255	18 X 1/2	283469	167
Sanpress	Sanpress-Fittings	283611	ElbowUnion with SC	2255	18 X 3/4	283452	237
Sanpress	Sanpress-Fittings	283621	ElbowUnion with SC	2255	12 X 1/2	292980	159
Sanpress	Sanpress-Fittings	283771	Union with SC	2263	22 X 1 1/2	305260	166,8
Sanpress	Sanpress-Fittings	283781	Union with SC	2263	28 X 1 1/2	305048	182,9
Sanpress	Sanpress-Fittings	283791	Union with SC	2263	42 X 2	305031	353,7
Sanpress	Sanpress-Fittings	283801	Union with SC	2263	35 X 2	305024	262,7
Sanpress	Sanpress-Fittings	283811	Union with SC	2263	18 X 1	305017	81,4
Sanpress	Sanpress-Fittings	283821	Union with SC	2263	15 X 1	305000	80,3
Sanpress	Sanpress-F. without thread	284401	Tee with SC	2218	18 X 12 X 18	314040	146
Sanpress	Sanpress-F. without thread	284421	Tee with SC	2218	22 X 12 X 22	314071	176
Sanpress	Sanpress-F. without thread	284441	Tee with SC	2218	28 X 18 X 22	314101	163
Sanpress	Sanpress-F. without thread	284471	Tee with SC	2218	28 X 28 X 15	314132	178,2
Sanpress	Sanpress-F. without thread	284491	Tee with SC	2218	28 X 28 X 18	314163	182
Sanpress	Sanpress-F. without thread	284511	Tee with SC	2218	35 X 22 X 28	314194	243,7
Sanpress	Sanpress-F. without thread	284531	Tee with SC	2218	42 X 15 X 42	314224	380,1
Sanpress	Sanpress-Fittings	284751	Adapter with SC	2211	15 X 3/4	287764	65,2
Sanpress	Sanpress-Fittings	284761	Adapter with SC	2211	22 X 1	287771	112,24
Sanpress	Sanpress-Fittings	284791	Adapter with SC	2211	12 X 1/2	290764	33,37
Sanpress	Sanpress-Fittings	284801	Adapter with SC	2211	12 X 3/8	290771	27,3
Sanpress	Sanpress-Fittings	284831	Adapter with SC	2211	35 X 1 1/2	314651	225,8
Sanpress	Sanpress-Fittings	284841	Adapter with SC	2211	54 X 1 1/2	314668	365,7
Sanpress	Sanpress-Fittings	288601	Wall plate with SC	22255	22 X 1/2	335229	129,557
Sanpress	Sanpress-Fittings	288611	Wall plate with SC	22255	18 X 3/4	335236	156
Sanpress	Sanpress-Fittings	288641	Wall plate with SC	22256	15 X 1/2	347307	149
Sanpress	Sanpress-Fittings	289461	Elbow 90° with SC	2214	18 X 3/4	314354	111
Sanpress	Sanpress-Fittings	289471	Elbow 90° with SC	2214	15 X 3/8	314361	54

System	Product subgroup	Material	Designation	Model no.	Dimensions	Item no.	Mass in grams
Sanpress	Sanpress-Fittings	289481	Elbow 90° with SC	22142	22 X 1	314378	132
Sanpress	Sanpress-Fittings	289491	Elbow 90° with SC	22142	15 X 3/4	314385	75,273
Sanpress	Sanpress-Fittings	290121	Adapter with SC	2213P	16 X 15	317423	44,2
Sanpress	Sanpress-Fittings	290131	Adapter with SC	2213P	20 X 15	317430	50,4
Sanpress	Sanpress-Fittings	290141	Adapter with SC	2213P	16 X 18	317447	56,5
Sanpress	Sanpress-Fittings	290151	Adapter with SC	2213P	20 X 18	317454	58,4
Sanpress	Sanpress-Fittings	290221	Adapter with SC	2213P	20 X 22	317508	67
Sanpress	Sanpress-F. without thread	292001	Cross piece with SC	2248	15 X 15	322410	215
Sanpress	Sanpress-F. without thread	292011	Cross piece with SC	2248	18 X 15	322427	246
Sanpress	Sanpress-F. without thread	292041	Cross piece with SC	2248	28 X 15	323363	353
Sanpress	Sanpress-F. without thread	292051	Cross piece with SC	2248	22 X 15	323370	285
Sanpress	Sanpress-F. without thread	292301	Cross piece with SC	2247	22 X 15	325978	202
Sanpress	Sanpress-F. without thread	292311	Cross piece with SC	2247	18 X 15	325985	180,4
Sanpress	Sanpress-Fittings	292491	Union with SC	2263	15 X 1 1/4	424534	172,5
Sanpress	Sanpress XL	292801	Reducer with SC	22151XL	76,1 X 54	354664	740,8
Sanpress	Sanpress XL	292811	Reducer with SC	22151XL	88,9 X 54	354671	895
Sanpress	Sanpress XL	292821	Reducer	22151XL	88,9 X 76,1	354688	1200
Sanpress	Sanpress XL	292831	Reducer	22151XL	108,0 X 54	354695	1390
Sanpress	Sanpress XL	292841	Reducer	22151XL	108,0 X 76,1	354701	1587
Sanpress	Sanpress XL	292851	Reducer	22151XL	108,0 X 88,9	354718	1614
Sanpress	Sanpress-Fittings	293604	Return Union with SC	22721	1/2 X 15	326357	203
Sanpress	Sanpress-Fittings	293614	Return Union with SC	22722	15 X 1/2	326364	237
Sanpress	Sanpress-Fittings	293851	Tee with SC	22172	35 X 1 X 35	361204	314
Sanpress	Sanpress-Fittings	293861	Tee with SC	22172	42 X 1 X 42	361211	452
Sanpress	Sanpress-Fittings	293871	Tee with SC	22172	54 X 1 X 54	361228	655
Sanpress	Sanpress-Fittings	293959	Elbow 90° with SC	22142NU	12 X 1/2	804053	50
Sanpress	Sanpress-Fittings	293999	Tee with SC	22172NU	54 X 1/2 X 54	799762	562
Sanpress	Sanpress XL	294201	Elbow 90°	22161XL	76,1	353650	1610
Sanpress	Sanpress XL	294211	Elbow 90°	22161XL	88,9	353667	2496,7
Sanpress	Sanpress XL	294221	Elbow 90°	22161XL	108,0	353674	3538
Sanpress	Sanpress XL	294231	Elbow 45°	22261XL	76,1	353681	1847
Sanpress	Sanpress XL	294241	Elbow 45°	22261XL	88,9	353698	2188
Sanpress	Sanpress XL	294251	Elbow 45°	22261XL	108,0	353704	3165
Sanpress	Sanpress XL	294321	Tee with SC	2218XL	76,1 X 54 X 76,1	354398	2447
Sanpress	Sanpress XL	294331	Tee with SC	2218XL	88,9 X 54 X 88,9	354404	2813
Sanpress	Sanpress XL	294341	Tee	2218XL	88,9 X 76,1 X 88,9	354411	3529
Sanpress	Sanpress XL	294351	Tee with SC	2218XL	108,0 X 54 X 108,0	354428	3614
Sanpress	Sanpress XL	294361	Tee	2218XL	108,0 X 76,1 X 108,0	354435	4400
Sanpress	Sanpress XL	294371	Tee	2218XL	108,0 X 88,9 X 108,0	354442	4676
Sanpress	Sanpress XL	294441	Tee	22172XL	76,1 X 3/4 X 76,1	354572	1939

System	Product subgroup	Material	Designation	Model no.	Dimensions	Item no.	Mass in grams
Sanpress	Sanpress XL	294451	Tee	22172XL	88,9 X 3/4 X 88,9	354589	2240
Sanpress	Sanpress XL	294461	Tee	22172XL	108,0 X 3/4 X 108,0	354596	2932
Sanpress	Sanpress-Fittings	294509	Compensator with SC	2251	15	690250	130
Sanpress	Sanpress-Fittings	294519	Compensator with SC	2251	18	690267	169,52
Sanpress	Sanpress-Fittings	294529	Compensator with SC	2251	22	690274	228,04
Sanpress	Sanpress-Fittings	294539	Compensator with SC	2251	28	690281	345,52
Sanpress	Sanpress-Fittings	294549	Compensator with SC	2251	35	690298	476,5
Sanpress	Sanpress-Fittings	294559	Compensator with SC	2251	42	690304	757,84
Sanpress	Sanpress-Fittings	294569	Compensator with SC	2251	54	690311	870,3
Sanpress	Sanpress-F. without thread	294901	Coupling	22152NC	15 X 14	363420	57,29
Sanpress	Sanpress-F. without thread	294911	Coupling	22152NC	16 X 15	363437	63,8
Sanpress	Sanpress-F. without thread	294921	Coupling	22152NC	18 X 16	363444	77,1
Sanpress	Sanpress-Fittings	295401	Union with SC	2263	22 X 3/4	351502	84,3
Sanpress	Sanpress-F. without thread	295481	Screed manifold with SC	2252	22 X 15 X 22	397166	614
Sanpress	Sanpress-Fittings	295501	Union	2264	15 X 3/4	338503	58,1
Sanpress	Sanpress-Fittings	295511	Union	2264	18 X 3/4	338510	59
Sanpress	Sanpress-Fittings	295521	Union	2264	22 X 1	338527	86,6
Sanpress	Sanpress-Fittings	295531	Union	2264	28 X 1 1/4	338534	132
Sanpress	Sanpress-Fittings	295541	Union	2264	35 X 1 1/2	338541	184
Sanpress	Sanpress-Fittings	295551	Union	2264	42 X 1 3/4	338558	267,2
Sanpress	Sanpress-Fittings	295561	Union	2264	54 X 2 3/8	338565	413
Sanpress	Sanpress XL	295651	Coupling	2215XL	76,1	350598	1219
Sanpress	Sanpress XL	295661	Coupling	2215XL	88,9	350604	1400
Sanpress	Sanpress XL	295671	Coupling	2215XL	108,0	350611	2044
Sanpress	Sanpress XL	295681	Tee	2218XL	76,1	350628	3155
Sanpress	Sanpress XL	295691	Tee	2218XL	88,9	350635	3676
Sanpress	Sanpress XL	295701	Tee	2218XL	108,0	350642	5327
Sanpress	Sanpress XL	295711	Adapter	2211XL	76,1 X 2 1/2	350659	995
Sanpress	Sanpress XL	295721	Adapter	2211XL	88,9 X 3	350666	1200
Sanpress	Sanpress XL	295731	Adapter	2211XL	108,0 X 4	350673	1678
Sanpress	Sanpress XL	295741	Elbow 90°	2216XL	88,9	3 50680	2750
Sanpress	Sanpress XL	295751	Elbow 90°	2216XL	76,1	3 50697	1607
Sanpress	Sanpress XL	295761	Elbow 90°	2216XL	108,0	350703	3858
Sanpress	Sanpress XL	295951	Union	2263XL	76,1 X 3	365127	1678
Sanpress	Sanpress XL	295961	Union	2263XL	88,9 X 3 1/2	365134	1997
Sanpress	Sanpress-Fittings	296071	Union with SC	2263	54 X 2 1/2	341961	694
Sanpress	Sanpress XL	296601	Elbow 45°	2226XL	76,1	3 51342	1815
Sanpress	Sanpress XL	296611	Elbow 45°	2226XL	88,9	3 51359	2160
Sanpress	Sanpress XL	296621	Elbow 45°	2226XL	108,0	351366	2979
Sanpress	Sanpress XL	296661	Tee	22172XL	76,1 X 2 X 76,1	351434	2580

System	Product subgroup	Material	Designation	Model no.	Dimensions	Item no.	Mass in grams
Sanpress	Sanpress XL	296671	Tee	22172XL	88,9 X 2 X 88,9	351441	2923
Sanpress	Sanpress XL	296701	Tee	22172XL	108,0 X 2 X 108,0	352097	3398
Sanpress	Sanpress XL	296721	Sliding coupling	22155XL	76,1	353315	1218
Sanpress	Sanpress XL	296731	Sliding coupling	22155XL	88,9	353322	1391
Sanpress	Sanpress XL	296741	Sliding coupling	22155XL	108,0	353339	1979
Sanpress	Sanpress XL	296781	Cap with SC	2256XL	76,1	353377	970
Sanpress	Sanpress XL	296791	Cap with SC	2256XL	88,9	353384	1160
Sanpress	Sanpress XL	296801	Cap with SC	2256XL	108,0	353391	1670
Sanpress	Sanpress-Fittings	297851	Union with SC	2263	12 X 1/2	380878	46,1
Sanpress	Sanpress-Fittings	297861	Union with SC	2263	15 X 1/2	380885	51,3
Sanpress	Sanpress-Fittings	297921	Union with SC	2263	22 X 1 1/4	367015	191,6
Sanpress LF	Sanpress-Fittings	298501	Flange adapter with SC	22595LF	28 (DN25)	491079	1381,8
Sanpress LF	Sanpress-Fittings	298521	Flange adapter with SC	22595LF	42 (DN40)	491093	2414,2
Sanpress LF	Sanpress-Fittings	298531	Flange adapter with SC	22595LF	54 (DN50)	491109	2930,4
Sanpress LF	Sanpress XL	298541	Flange adapter	22595LF	76,1 (DN65)	491116	3569,5
Sanpress LF	Sanpress XL	298551	Flange adapter	22595LF	88,9 (DN80)	491123	4470
Sanpress LF	Sanpress XL	298561	Flange adapter	22595LF	108,0 (DN100)	491130	5150
Sanpress	Sanpress-Fittings	320741	Adapter with SC	2213P	25 X 22	605490	98
Sanpress	Sanpress-Fittings	320751	Adapter with SC	2213P	32 X 28	605506	143
Sanpress	Sanpress-Fittings	320771	Adapter with SC	2213P	40 X 35	605520	203,5
Sanpress	Sanpress-F. without thread	328741	Flange adapter with SC	22595U	28 (1)	592011	1400
Sanpress	Sanpress-Fittings	328761	Flange adapter with SC	22595U	42 (1 1/2)	592035	1927,76
Sanpress	Sanpress-Fittings	328771	Flange adapter with SC	22595U	54 (2)	592042	2925
Sanpress	Sanpress XL	328781	Flange adapter	22595XU	76,1 (2 1/2)	592059	3840
Sanpress	Sanpress XL	328791	Flange adapter	22595XU	88,9 (3)	592066	4549
Sanpress	Sanpress XL	328801	Flange adapter	22595XU	108 (4)	592073	6419
Sanpress	Sanpress-Fittings	328951	Sanpress-Pipe elbow	22094	22 - 15°	594473	140
Sanpress	Sanpress-Fittings	328961	Sanpress-Pipe elbow	22094	28 - 15°	594480	198
Sanpress	Sanpress-Fittings	328981	Sanpress-Pipe elbow	22094	42 - 15°	594503	580
Sanpress	Sanpress-Fittings	329031	Sanpress-Pipe elbow	22094XL	108,0 - 15°	594558	5050
Sanpress	Sanpress-Fittings	329041	Sanpress-Pipe elbow	22095	15 - 30°	594565	78
Sanpress	Sanpress-Fittings	329051	Sanpress-Pipe elbow	22095	18 - 30°	594572	96
Sanpress	Sanpress-Fittings	329061	Sanpress-Pipe elbow	22095	22 - 30°	594589	140
Sanpress	Sanpress-Fittings	329071	Sanpress-Pipe elbow	22095	28 - 30°	594596	198
Sanpress	Sanpress-Fittings	329081	Sanpress-Pipe elbow	22095	35 - 30°	594602	372
Sanpress	Sanpress-Fittings	329091	Sanpress-Pipe elbow	22095	42 - 30°	594619	600
Sanpress	Sanpress-Fittings	329101	Sanpress-Pipe elbow	22095	54 - 30°	594626	920
Sanpress	Sanpress-Fittings	329211	Sanpress-Pipe elbow	22096	22 - 60°	594732	140
Sanpress	Sanpress-Fittings	329221	Sanpress-Pipe elbow	22096	28 - 60°	594749	198
Sanpress	Sanpress-Fittings	329231	Sanpress-Pipe elbow	22096	35 - 60°	594756	374

System	Product subgroup	Material	Designation	Model no.	Dimensions	Item no.	Mass in grams
Sanpress	Sanpress-Fittings	329241	Sanpress-Pipe elbow	22096	42 - 60°	594763	600
Sanpress	Sanpress-Fittings	329251	Sanpress-Pipe elbow	22096	54 - 60°	594770	920
Sanpress	Sanpress-Fittings	329301	Sanpress-Pipe elbow	22097	15 - 75°	594824	78
Sanpress	Sanpress-Fittings	329311	Sanpress-Pipe elbow	22097	18 - 75°	594831	96
Sanpress	Sanpress-Fittings	329321	Sanpress-Pipe elbow	22097	22 - 75°	594848	140
Sanpress	Sanpress-Fittings	329331	Sanpress-Pipe elbow	22097	28 - 75°	594855	198
Sanpress	Sanpress-Fittings	329341	Sanpress-Pipe elbow	22097	35 - 75°	594862	374
Sanpress	Sanpress-Fittings	329351	Sanpress-Pipe elbow	22097	42 - 75°	594879	590
Sanpress	Sanpress-Fittings	329361	Sanpress-Pipe elbow	22097	54 - 75°	594886	930
Sanpress	Sanpress-Fittings	329431	Sanpress-Pipe elbow	2209XL	88,9 - 90°	594954	3530
Sanpress	Sanpress-Fittings	351351	Adapter with SC	0712	DN15 X 1/2	579555	59,2
Sanpress	Sanpress-Fittings	351361	Adapter with SC	0712	DN20 X 3/4	579562	69,4
Sanpress	Sanpress-Fittings	351371	Adapter with SC	0712	DN25 X 1	579579	103,1
Sanpress	Sanpress-Fittings	351381	Adapter with SC	0712	DN32 X 1 1/4	579586	164,4
Sanpress	Sanpress-Fittings	351391	Adapter with SC	0712	DN40 X 1 1/2	579593	254,5
Sanpress	Sanpress-Fittings	351401	Adapter with SC	0712	DN50 X 2	579609	411,7
Sanpress	Sanpress-Fittings	351411	Adapter with SC	0711	DN15 X 1/2	579616	41,4
Sanpress	Sanpress-Fittings	351421	Adapter with SC	0711	DN20 X 3/4	579623	62,5
Sanpress	Sanpress-Fittings	351431	Adapter with SC	0711	DN25 X 1	579630	111,7
Sanpress	Sanpress-Fittings	351441	Adapter with SC	0711	DN32 X 1 1/4	579647	176,5
Sanpress	Sanpress-Fittings	351451	Adapter with SC	0711	DN40 X 1 1/2	579654	253,9
Sanpress	Sanpress-Fittings	351461	Adapter with SC	0711	DN50 X 2	579661	405,3
Sanpress	Sanpress-Fittings	351661	Tee with SC	07172	DN25 X DN25 X 3/4	579685	232
Sanpress	Sanpress-Fittings	351671	Tee with SC	07172	DN32 X DN32 X 1/2	579692	241
Sanpress	Sanpress-Fittings	351681	Tee with SC	07172	DN32 X DN32 X 3/4	579708	275
Sanpress	Sanpress-Fittings	351701	Tee with SC	07172	DN50 X DN50 X 3/4	579722	610
Sanpress	Sanpress-Fittings	354481	Flange adapter with SC	07595	DN50	580117	2191
Sanpress	Sanpress-Fittings	354551	Wall plate with SC	07255	DN15 X 1/2	579920	104
Sanpress	Sanpress-Fittings	354561	Wall plate with SC	07255	DN20 X 3/4	579937	150
Sanpress	Sanpress-Fittings	354571	Wall bushing	07321	DN15 X 1/2 X 75	579944	154,2
Sanpress	Sanpress-Fittings	356611	Union	0763	DN20 X 1/2	624866	62,3
Sanpress	Sanpress-Fittings	356751	Union	0765	DN25 X 1	624873	387,8
Sanpress	Sanpress-Fittings	357541	Union	0763	DN15 X 1/2	591915	50,9
Sanpress	Sanpress-Fittings	357551	Union	0763	DN20 X 3/4	591922	82,26
Sanpress	Sanpress-Fittings	365551	Union	0765	DN32 X 1 1/4	625696	465,9
Sanpress	Sanpress-Fittings	365571	Union	0765	DN40 X 1 1/2	625719	600
Sanpress	Sanpress-Fittings	365581	Union	0765	DN50 X 2	625733	1028,3
Sanpress	Sanpress XL	365741	Flange adapter	22592XL	2 1/2 (DN65)	641597	3580
Sanpress	Sanpress XL	365751	Flange adapter	22592XL	3 (DN80)	641603	4513
Sanpress	Sanpress XL	365761	Flange adapter	22592XL	4 (DN100)	641610	5355

System	Product subgroup	Material	Designation	Model no.	Dimensions	Item no.	Mass in grams
Sanpress	Sanpress-F. without thread	384591	Repair coupling	22768	12 X 1	643188	22,2
Sanpress	Sanpress-F. without thread	402351	Crossing-tee with SC	22493	15 X 15 X 15	493325	666
Sanpress	Sanpress-F. without thread	402361	Crossing-tee with SC	22493	18 X 15 X 18	493332	677
Sanpress	Sanpress-F. without thread	402371	Crossing-tee with SC	22493	22 X 18 X 22	493349	713
Sanpress	Sanpress-F. without thread	402381	Crossing-tee with SC	22493	22 X 15 X 22	493356	705
Sanpress	Sanpress-F. without thread	409601	Sliding coupling with SC	22154	22	588533	162,5
Sanpress	Sanpress-F. without thread	409611	Sliding coupling with SC	22154	28	588540	245,2
Sanpress	Sanpress-F. without thread	409621	Sliding coupling with SC	22154	35	588557	348,2
Sanpress	Sanpress-F. without thread	412801	Adapter with SC	22156	1 X 28	588564	527
Sanpress	Sanpress-F. without thread	412811	Adapter with SC	22156	1 1/4 X 35	588328	972,4
Sanpress	Sanpress-Fittings	427041	Adapter	0411	3/4 X R3/4	450908	71,9
Sanpress	Sanpress-Fittings	427071	Adapter	0411	1 X R1	450915	121,2
Sanpress	Sanpress-Fittings	427101	Adapter	0411	1 1/4 X 1 1/4	450922	185,8
Sanpress	Sanpress-Fittings	427131	Adapter	0411	1 1/2 X R1 1/2	450939	280
Sanpress	Sanpress-Fittings	427141	Adapter	0411	2 X R2	450946	397,8
Sanpress	Sanpress-Fittings	427441	Adapter	0412	3/4 X RP3/4	450960	75,7
Sanpress	Sanpress-Fittings	427521	Adapter	0412	1 1/4 X RP1 1/4	450984	183,1
Sanpress	Sanpress-Fittings	427571	Adapter	0412	2 X RP2	451004	475
Sanpress	Sanpress XL	431431	Flange adapter	22593XL	76,1 (DN65) X 4	652340	3700
Sanpress	Sanpress-Fittings	433371	Wall platen-Tee	22173	15 X 1/2 X 15	644864	117
Sanpress	Sanpress-Fittings	434121	Wall platen-Tee	22173	22 X 1/2 X 22	625726	178,5
Sanpress	Sanpress-Fittings	436791	Threaded socket	22659NU	1 X 1 1/4	654153	150,63
Sanpress	Sanpress-Fittings	466401	Adapter with SC	22112	15 X 1/2NPT	493851	62,6
Sanpress	Sanpress-Fittings	466411	Adapter with SC	22112	22 X 3/4NPT	493868	97,1
Sanpress	Sanpress-Fittings	466421	Adapter with SC	22112	28 X 1NPT	493875	147
Sanpress	Sanpress-Fittings	466431	Adapter with SC	22112	35 X 1 1/4NPT	493882	209,7
Sanpress	Sanpress-Fittings	466441	Adapter with SC	22112	42 X 1 1/2NPT	493899	316
Sanpress	Sanpress-Fittings	466451	Adapter with SC	22112	54 X 2NPT	493905	538
Sanpress	Sanpress-Fittings	479281	Fastening kit	22184	22 X 3/4 X 22	625078	668,5
Sanpress	Sanpress-Fittings	483251	Double wall plate with SC	22287	18 X 1/2 X 18	692797	195
Sanpress LF	Sanpress-Fittings	527821	Double wall plate with SC	22287LF	15 X 1/2 X 15	717407	212,3
Sanpress LF	Sanpress-Fittings	527831	Double wall plate with SC	22287LF	18 X 1/2 X 18	717414	228,4
Sanpress LF	Sanpress-Fittings	527841	Double wall plate with SC	22287LF	22 X 1/2 X 22	717421	289
Sanpress	Sanpress-F. without thread	557151	Hose nozzle with SC	97907WP	DN15	796648	32,8
Sanpress	Sanpress-F. without thread	557911	Hose nozzle with SC	22133YI	12 X DN12	691684	23,6
Sanpress	Sanpress-Fittings	564241	Elbow 90° with SC	0714	DN 15 X 1/2	700898	53
Sanpress	Sanpress-Fittings	571051	Adapter	22115	22	695835	65,1
Sanpress	Sanpress-Fittings	571061	Adapter	22115	28	695842	93,3
Sanpress	Sanpress-Fittings	571071	Adapter	22115	35	696252	140
Sanpress	Sanpress-Fittings	571081	Adapter	22115	42	696269	217,6

System	Product subgroup	Material	Designation	Model no.	Dimensions	Item no.	Mass in grams
Sanpress	Sanpress-Fittings	571091	Adapter	22115	54	696276	328,6
Sanpress	Sanpress-Fittings	571101	Adapter	22115	64	696283	496,4
Sanpress	Sanpress-Fittings	576511	Double wall plate with SC	22287	15 X 1/2 X 15	687892	174
Sanpress	Sanpress-Fittings	576521	Double wall plate with SC	22287	22 X 1/2 X 22	687908	252
Sanpress	Sanpress-Fittings	580591	Tee with SC	45172	15 X 1/2 X 15	628635	100
Sanpress	Sanpress-Fittings	580601	Tee with SC	45172	18 X 1/2 X 18	628642	96
Sanpress	Sanpress-Fittings	580611	Tee with SC	45172	22 X 1/2 X 22	628659	128
Sanpress	Sanpress-Fittings	580621	Tee with SC	45172	28 X 1/2 X 28	628666	152
Sanpress	Sanpress-Fittings	580631	Tee with SC	45172	35 X 1/2 X 35	628673	235
Sanpress	Sanpress-Fittings	580641	Adapter with SC	4511	12 X 3/8	628680	32,7
Sanpress	Sanpress-Fittings	580651	Adapter with SC	4511	15 X 1/2	628697	49,9
Sanpress	Sanpress-Fittings	580661	Adapter with SC	4511	12 X 1/2	628703	39,5
Sanpress	Sanpress-Fittings	580671	Adapter with SC	4511	18 X 1/2	628710	53,5
Sanpress	Sanpress-Fittings	580681	Adapter with SC	4511	18 X 3/4	628727	70,8
Sanpress	Sanpress-Fittings	580691	Adapter with SC	4511	22 X 3/4	628734	80
Sanpress	Sanpress-Fittings	580701	Adapter with SC	4511	22 X 1	628741	114,9
Sanpress	Sanpress-Fittings	580711	Adapter with SC	4511	28 X 1	628758	122,1
Sanpress	Sanpress-Fittings	580721	Adapter with SC	4511	28 X 1 1/4	628765	185
Sanpress	Sanpress-Fittings	580731	Adapter with SC	4511	35 X 1	628772	154
Sanpress	Sanpress-Fittings	580741	Adapter with SC	4511	35 X 1 1/4	627232	202
Sanpress	Sanpress-Fittings	580751	Adapter with SC	4511	35 X 1 1/2	627249	250,6
Sanpress	Sanpress-Fittings	580761	Adapter with SC	4512	12 X 3/8	628857	33,4
Sanpress	Sanpress-Fittings	580771	Adapter with SC	4512	15 X 1/2	628864	66,4
Sanpress	Sanpress-Fittings	580781	Adapter with SC	4512	18 X 1/2	628871	64,5
Sanpress	Sanpress-Fittings	580791	Adapter with SC	4512	18 X 3/4	628888	77,2
Sanpress	Sanpress-Fittings	580801	Adapter with SC	4512	22 X 3/4	628895	86,97
Sanpress	Sanpress-Fittings	580811	Adapter with SC	4512	22 X 1	628901	134,74
Sanpress	Sanpress-Fittings	580821	Adapter with SC	4512	28 X 1	628918	125
Sanpress	Sanpress-Fittings	580831	Adapter with SC	4512	35 X 1 1/4	628925	177,6
Sanpress	Sanpress-Fittings	580991	Compensator with SC	4551	15	629083	154,4
Sanpress	Sanpress-Fittings	581001	Compensator with SC	4551	18	629090	194,4
Sanpress	Sanpress-Fittings	581011	Compensator with SC	4551	22	629106	252,04
Sanpress	Sanpress-Fittings	581021	Compensator with SC	4551	28	629113	366,52
Sanpress	Sanpress-Fittings	581031	Compensator with SC	4551	35	629120	504,5
Sanpress	Sanpress-Fittings	581041	Adapter with SC	45114	18 X 3/4	629137	69,9
Sanpress	Sanpress-Fittings	581051	Adapter with SC	45114	22 X 1	629144	116
Sanpress	Sanpress-Fittings	581061	Union with SC	4562	15 X 1/2	629151	141
Sanpress	Sanpress-Fittings	581071	Union with SC	4562	18 X 3/4	629168	134,3
Sanpress	Sanpress-Fittings	581081	Union with SC	4562	22 X 3/4	629175	231
Sanpress	Sanpress-Fittings	581091	Union with SC	4562	28 X 1	629182	355

System	Product subgroup	Material	Designation	Model no.	Dimensions	Item no.	Mass in grams
Sanpress	Sanpress-Fittings	581101	Union with SC	4562	35 X 1 1/4	629199	430
Sanpress	Sanpress-Fittings	626444	Connection piece	22772	-	662509	815
Sanpress	Sanpress-F. without thread	626451	Plug adapter	22335	15	662516	51,8
Sanpress	Sanpress-F. without thread	626461	Plug adapter	22335	18	662523	57,11
Sanpress	Sanpress-F. without thread	626471	Plug adapter	22335	22	662530	68,54
Sanpress	Sanpress-F. without thread	626481	Closing piece	22336	-	663346	46,92
Sanpress	Sanpress-Fittings	628323	Adapter with SC	2911OM	1/2 X 1/2 NPT	773902	54,431
Sanpress	Sanpress-Fittings	628333	Adapter with SC	2911OM	3/4 X 3/4 NPT	773957	77,11
Sanpress	Sanpress-Fittings	628603	Adapter with SC	2911OM	1 X 1 NPT	774008	122,469
Sanpress	Sanpress-Fittings	629753	Adapter with SC	2911OM	3/4 X 1/2 NPT	774336	74,842
Sanpress	Sanpress-Fittings	629763	Union with SC	2960OM	1/2	774343	147,417
Sanpress	Sanpress-Fittings	629773	Wall plate	29255OM	1/2 X 1/2	774367	127,006
Sanpress	Sanpress-Fittings	629781	Adapter	22114	15 X 1/2	660222	41,9
Sanpress	Sanpress-Fittings	635641	Union	0763	DN20 X 1	663995	101,51
Sanpress	Sanpress-Fittings	635671	Elbow	07141	DN20 X 3/4	668969	86
Sanpress	Sanpress-Fittings	635931	Elbow 90°	07142	DN20 X 3/4	744199	96
Sanpress	Sanpress-Fittings	637301	ElbowUnion	07631	DN15 X 1/2	744212	77,3
Sanpress	Sanpress-Fittings	637411	ElbowUnion	07631	DN20 X 3/4	744229	124
Sanpress	Sanpress-Fittings	637621	Union	0765	DN20 X 3/4	744243	159,2
Sanpress	Sanpress-Fittings	640391	Adapter with SC	0711	DN20 X 1/2	700638	51,7
Sanpress	Sanpress-Fittings	640441	Adapter with SC	0711	DN25 X 3/4	700645	82,4
Sanpress	Sanpress-Fittings	646231	Union with SC	2263	28 X 1	692629	122
Sanpress	Sanpress-Fittings	663161	Elbow	29142ZL	1/2 X 3/8	795201	61,8
Sanpress	Sanpress-Fittings	663171	Elbow	29142ZL	1/2 X 1/2	795256	82,1
Sanpress	Sanpress-Fittings	663181	Elbow	29142ZL	1/2 X 3/4	795300	110,223
Sanpress	Sanpress-Fittings	663191	Elbow	29142ZL	3/4 X 1/2	795355	111
Sanpress	Sanpress-Fittings	663251	Union with SC	2960ZL	1/2	791258	149,54
Sanpress	Sanpress-Fittings	663261	Union with SC	2960ZL	3/4	791302	229,65
Sanpress	Sanpress-Fittings	663269	Union with SC	2960ZOM	3/4	793221	228,157
Sanpress	Sanpress-Fittings	663271	Union with SC	2960ZL	1	791357	401,52
Sanpress	Sanpress-Fittings	663281	Union with SC	2960ZL	1 1/4	791401	495,3
Sanpress	Sanpress-Fittings	663291	Union with SC	2960ZL	1 1/2	791456	794,2
Sanpress	Sanpress-Fittings	663301	Union with SC	2960ZL	2	791500	1281,1
Sanpress	Sanpress-Fittings	663311	Insulation union with SC	2967ZL	1/2 X 1/2 NPT	791555	369,6
Sanpress	Sanpress-Fittings	663321	Insulation union with SC	2967ZL	3/4 X 3/4 NPT	791609	518,7
Sanpress	Sanpress-Fittings	663331	Insulation union with SC	2967ZL	1 X 1 NPT	791654	475
Sanpress	Sanpress-Fittings	663341	Insulation union with SC	2967ZL	1 1/4 X 1 1/4 NPT	791708	706,7
Sanpress	Sanpress-Fittings	663351	Insulation union with SC	2967ZL	1 1/2 X 1 1/2 NPT	791753	820,7
Sanpress	Sanpress-Fittings	663361	Insulation union with SC	2967ZL	2 X 2 NPT	791807	1300
Sanpress	Sanpress-Fittings	663371	connectionset with SC	29761ZL	VARIED	790008	194,800

System	Product subgroup	Material	Designation	Model no.	Dimensions	Item no.	Mass in grams
Sanpress	Sanpress-Fittings	663381	wall plate	29255ZL	1/2 X 3/8	791852	110,000
Sanpress	Sanpress-Fittings	663391	wall plate	29255ZL	1/2 X 1/2	791906	113,398
Sanpress	Sanpress-Fittings	663401	wall plate	29255ZL	3/4 X 3/4	791951	195,000
Sanpress	Sanpress-Fittings	663421	wall plate	29252ZL	1/2 X 1/2	792057	100,200
Sanpress	Sanpress-Fittings	663431	adapter piece with SC	2911ZL	1/2 X 3/8 NPT	792101	41,210
Sanpress	Sanpress-Fittings	663441	adapter piece with SC	2911ZL	1/2 X 1/2 NPT	792156	47,900
Sanpress	Sanpress-Fittings	663451	adapter piece with SC	2911ZL	1/2 X 3/4 NPT	792200	68,010
Sanpress	Sanpress-Fittings	663461	adapter piece with SC	2911ZL	3/4 X 1/2 NPT	792255	66,440
Sanpress	Sanpress-Fittings	663471	adapter piece with SC	2911ZL	3/4 X 3/4 NPT	792309	70,340
Sanpress	Sanpress-Fittings	663481	adapter piece with SC	2911ZL	3/4 X 1 NPT	792354	107,600
Sanpress	Sanpress-Fittings	663491	adapter piece with SC	2911ZL	1 X 3/4 NPT	792408	106,400
Sanpress	Sanpress-Fittings	663501	adapter piece with SC	2911ZL	1 X 1 NPT	792453	118,000
Sanpress	Sanpress-Fittings	663511	adapter piece with SC	2911ZL	1 X 1 1/4 NPT	792507	207,900
Sanpress	Sanpress-Fittings	663521	adapter piece with SC	2911ZL	1 1/4 X 1 NPT	792552	146,300
Sanpress	Sanpress-Fittings	663531	adapter piece with SC	2911ZL	1 1/4 X 1 1/4 NPT	792606	203,600
Sanpress	Sanpress-Fittings	663541	adapter piece with SC	2911ZL	1 1/4 X 1 1/2 NPT	792651	236,800
Sanpress	Sanpress-Fittings	663551	adapter piece with SC	2911ZL	1 1/2 X 1 1/4 NPT	792705	270,700
Sanpress	Sanpress-Fittings	663561	adapter piece with SC	2911ZL	1 1/2 X 1 1/2 NPT	792750	248,800
Sanpress	Sanpress-Fittings	663571	adapter piece with SC	2911ZL	1 1/2 X 2 NPT	792804	424,000
Sanpress	Sanpress-Fittings	663581	adapter piece with SC	2911ZL	2 X 1 1/2 NPT	792859	382,860
Sanpress	Sanpress-Fittings	663591	adapter piece with SC	2911ZL	2 X 2 NPT	792903	387,100
Sanpress	Sanpress-Fittings	663601	adapter piece with SC	2912ZL	1/2 X 3/8 NPT	792958	37,800
Sanpress	Sanpress-Fittings	663611	adapter piece with SC	2912ZL	1/2 X 1/2 NPT	793009	55,090
Sanpress	Sanpress-Fittings	663619	adapter piece with SC	2912ZOM	1/2 X 1/2NPT	793177	65,770
Sanpress	Sanpress-Fittings	663631	elbow with SC	29142ZL	3/4 X 3/4	795409	135,500
Sanpress	Sanpress-Fittings	663641	adapter piece with SC	2912ZL	3/4 X 1/2 NPT	793108	66,800
Sanpress	Sanpress-Fittings	663651	adapter piece with SC	2912ZL	3/4 X 3/4 NPT	793153	80,000
Sanpress	Sanpress-Fittings	663659	adapter piece with SC	2912ZOM	3/4 X 3/4 NPT	793160	86,182
Sanpress	Sanpress-Fittings	663661	adapter piece with SC	2912ZL	1 X 1/2 NPT	793207	81,340
Sanpress	Sanpress-Fittings	663671	adapter piece with SC	2912ZL	1 X 3/4 NPT	793252	94,400
Sanpress	Sanpress-Fittings	663681	adapter piece with SC	2912ZL	1 X 1 NPT	793306	125,600
Sanpress	Sanpress-Fittings	663691	adapter piece with SC	2912ZL	1 X 1 1/4 NPT	793351	168,000
Sanpress	Sanpress-Fittings	663701	adapter piece with SC	2912ZL	1 1/4 X 1/2 NPT	793405	99,800
Sanpress	Sanpress-Fittings	663711	adapter piece with SC	2912ZL	1 1/4 X 1 NPT	793450	137,200
Sanpress	Sanpress-Fittings	663721	adapter piece with SC	2912ZL	1 1/4 X 1 1/4 NPT	793504	177,400
Sanpress	Sanpress-Fittings	663731	adapter piece with SC	2912ZL	1 1/4 X 1 1/2 NPT	793559	211,300
Sanpress	Sanpress-Fittings	663741	elbow with SC	29142ZL	1 X 1/2	795454	142,000
Sanpress	Sanpress-Fittings	663751	adapter piece with SC	2912ZL	1 1/2 X 1 1/4 NPT	793603	211,000
Sanpress	Sanpress-Fittings	663761	adapter piece with SC	2912ZL	1 1/2 X 1 1/2 NPT	793658	253,900
Sanpress	Sanpress-Fittings	663771	elbow with SC	29142ZL	1 X 1	795508	210,000

System	Product subgroup	Material	Designation	Model no.	Dimensions	Item no.	Mass in grams
Sanpress	Sanpress-Fittings	663791	elbow with SC	29142ZL	1 1/4 X 1 1/4	795607	315,000
Sanpress	Sanpress-Fittings	663801	adapter piece with SC	2912ZL	2 X 2 NPT	793702	354,200
Sanpress	Sanpress-Fittings	663811	elbow with SC	29142ZL	1 1/2 X 1 1/2	795652	436,000
Sanpress	Sanpress-Fittings	663821	elbow with SC	29142ZL	2 X 2	795706	730,000
Sanpress	Sanpress-Fittings	663831	plug piece	29111ZL	1/2 X 3/8 NPT	793757	30,000
Sanpress	Sanpress-Fittings	663851	t-piece with SC	29172ZL	1/2 X 1/2 X 1/2	795805	107,640
Sanpress	Sanpress-Fittings	663861	t-piece with SC	29172ZL	3/4 X 3/4 X 1/4	795850	115,000
Sanpress	Sanpress-Fittings	663871	plug piece	29111ZL	1/2 X 1/2 NPT	793801	46,560
Sanpress	Sanpress-Fittings	663881	plug piece	29111ZL	1/2 X 3/4 NPT	793856	62,100
Sanpress	Sanpress-Fittings	663891	plug piece	29111ZL	3/4 X 1/2 NPT	793900	45,690
Sanpress	Sanpress-Fittings	663901	plug piece	29111ZL	3/4 X 3/4 NPT	793955	68,760
Sanpress	Sanpress-Fittings	663911	t-piece with SC	29172ZL	3/4 X 3/4 X 1/2	795904	139,200
Sanpress	Sanpress-Fittings	663921	plug piece	29111ZL	1 X 3/4 NPT	794006	75,500
Sanpress	Sanpress-Fittings	663931	plug piece	29111ZL	1 X 1 NPT	794051	111,300
Sanpress	Sanpress-Fittings	663941	t-piece with SC	29172ZL	1 X 1 X 1/2	797601	188,000
Sanpress	Sanpress-Fittings	663951	t-piece with SC	29172ZL	1 X 1 X 3/4	797656	223,400
Sanpress	Sanpress-Fittings	663961	plug piece	29111ZL	1 1/4 X 1 1/4 NPT	794105	227,700
Sanpress	Sanpress-Fittings	663971	plug piece	29111ZL	1 1/2 X 1 1/2 NPT	794150	255,600
Sanpress	Sanpress-Fittings	663981	plug piece	29111ZL	2 X 2 NPT	794204	406,100
Sanpress	Sanpress-Fittings	663991	adapter	29121ZL	1/2 X 3/8 NPT	794259	31,200
Sanpress	Sanpress-Fittings	664001	t-piece with SC	29172ZL	1 1/4 X 1 1/4 X 1/2	797700	240,000
Sanpress	Sanpress-Fittings	664011	adapter	29121ZL	1/2 X 1/2 NPT	794303	46,700
Sanpress	Sanpress-Fittings	664021	t-piece with SC	29172ZL	1 1/4 X 1 1/4 X 3/4	797755	283,500
Sanpress	Sanpress-Fittings	664031	adapter	29121ZL	1/2 X 3/4 NPT	794358	63,500
Sanpress	Sanpress-Fittings	664041	t-piece with SC	29172ZL	1 1/2 X 1 1/2 X 1/2	797809	367,000
Sanpress	Sanpress-Fittings	664051	adapter	29121ZL	3/4 X 1/2 NPT	794402	50,200
Sanpress	Sanpress-Fittings	664061	adapter	29121ZL	3/4 X 3/4 NPT	794457	63,300
Sanpress	Sanpress-Fittings	664071	t-piece with SC	29172ZL	1 1/2 X 1 1/2 X 3/4	797854	408,500
Sanpress	Sanpress-Fittings	664081	adapter	29121ZL	1 X 1 NPT	794501	117,100
Sanpress	Sanpress-Fittings	664091	t-piece with SC	29172ZL	2 X 2 X 1/2	797908	522,000
Sanpress	Sanpress-Fittings	664101	adapter	29121ZL	1 X 1/2 NPT	794556	78,210
Sanpress	Sanpress-Fittings	664111	adapter	29121ZL	1 1/4 X 1/2 NPT	794600	121,300
Sanpress	Sanpress-Fittings	664121	t-piece with SC	29172ZL	2 X 2 X 3/4	797953	590,000
Sanpress	Sanpress-Fittings	664131	adapter	29121ZL	1 1/4 X 1 1/4 NPT	794655	182,200
Sanpress	Sanpress-Fittings	664151	adapter	29121ZL	1 1/2 X 1 1/2 NPT	794709	235,400
Sanpress	Sanpress-Fittings	664171	adapter	29121ZL	2 X 2 NPT	794754	374,200
Sanpress	Sanpress-Fittings	664231	t-piece with SC	29173ZL	1/2 X 1/8 X 1/2	796352	73,700
Sanpress	Sanpress-Fittings	664241	t-piece with SC	29173ZL	3/4 X 1/8 X 3/4	796406	113,400
Sanpress	Sanpress-Fittings	664251	union with SC	2962ZL	1/2 X 1/2 NPT	797007	139,800
Sanpress	Sanpress-Fittings	664261	union with SC	2962ZL	3/4 X 3/4 NPT	797052	199,060

System	Product subgroup	Material	Designation	Model no.	Dimensions	Item no.	Mass in grams
Sanpress	Sanpress-Fittings	664271	union with SC	2962ZL	1 X 1 NPT	797106	372,800
Sanpress	Sanpress-Fittings	664281	union with SC	2962ZL	1 1/4 X 1 1/4 NPT	797151	459,460
Sanpress	Sanpress-Fittings	664291	union with SC	2962ZL	1 1/2 X 1 1/2 NPT	797205	760,900
Sanpress	Sanpress-Fittings	664301	union with SC	2962ZL	2 X 2 NPT	797250	1287,000
Sanpress	Sanpress-Fittings	664311	union with SC	2965ZL	1/2 X 1/2 NPT	797304	148,100
Sanpress	Sanpress-Fittings	664321	union with SC	2965ZL	3/4 X 3/4 NPT	797359	231,320
Sanpress	Sanpress-Fittings	664331	union with SC	2965ZL	1 X 1 NPT	797403	408,800
Sanpress	Sanpress-Fittings	664341	union with SC	2965ZL	1 1/4 X 1 1/4 NPT	797458	516,700
Sanpress	Sanpress-Fittings	664351	union with SC	2965ZL	1 1/2 X 1 1/2 NPT	797502	750,400
Sanpress	Sanpress-Fittings	664361	union with SC	2965ZL	2 X 2 NPT	797557	1291,900
Sanpress	Sanpress-Fittings	664371	adapter piece with SC	2912ZL	1/2 X 3/4 NPT	793054	70,950
Sanpress	Sanpress-Fittings	664381	t-piece with SC	29172ZL	3/4 X 3/4 X 3/4	795959	158,000
Sanpress	Sanpress-Fittings	664521	flange adapter with SC	29595ZL	1	796802	1493,700
Sanpress	Sanpress-Fittings	664531	flange adapter with SC	29595ZL	1 1/4	796857	1450,000
Sanpress	Sanpress-Fittings	664541	flange adapter with SC	29595ZL	1 1/2	796901	1982,200
Sanpress	Sanpress-Fittings	664551	flange adapter with SC	29595ZL	2	796956	2727,000
Sanpress	Sanpress-Fittings	664681	union	2957ZL	1/2 X 1	798004	100,000
Sanpress	Sanpress-Fittings	664691	union	2957ZL	1 X 1	798103	138,000
Sanpress	Sanpress-Fittings	664701	union	2957ZL	3/4 X 1	798059	112,700
Sanpress	Sanpress-Fittings	664711	union	2957ZL	1 X 1 1/4	798158	175,260
Sanpress	Sanpress-Fittings	664721	reducer	29151ZL	1 1/2 X 1/2	798509	147,400
Sanpress	Sanpress-Fittings	664731	reducer	29151ZL	2 X 1/2	798554	238,900
Sanpress	Sanpress-Fittings	664741	reducer	29151ZL	2 X 3/4	798608	236,380
Sanpress	Sanpress-Fittings	667103	screw piece	29802ZL	01. Feb	822006	39,890
Sanpress	Sanpress-Fittings	667113	screw piece	29802ZL	03. Apr	822051	61,210
Sanpress	Sanpress-Fittings	667123	screw piece	29802ZL	1	822105	93,580
Sanpress	Sanpress-Fittings	667133	screw piece	29802ZL	1 1/4	822150	125,900
Sanpress	Sanpress-Fittings	667143	screw piece	29802ZL	1 1/2	822204	174,000
Sanpress	Sanpress-Fittings	667153	screw piece	29802ZL	2	822259	241,000
Sanpress	Sanpress-Fittings	668533	adapter piece with SC	22119RK	1/2 X 1/2 NPT	823399	47,000
Sanpress	Sanpress-Fittings	668543	adapter piece with SC	22119RK	3/4 X 3/4 NPT	823405	70,300
Sanpress	Sanpress-Fittings	668553	adapter piece with SC	22119RK	1 X 1 NPT	823412	116,700
Sanpress	Sanpress-Fittings	668801	union	2957HO	1/2 X 1	798165	99,950
Sanpress	Sanpress-Fittings	669501	union	2957HO	3/4 X 1	798172	105,200
Sanpress	Sanpress-Fittings	669561	union	2957HO	1 X 1	798189	133,600
Sanpress	Sanpress-Fittings	670111	adapter piece with SC	2911WA	3/4 X 3/4 NPT	798615	68,600
Sanpress	Sanpress-Fittings	670121	adapter piece with SC	2911WA	1/2 X 1/2 NPT	798622	47,900
Sanpress	Sanpress-Fittings	670131	adapter piece with SC	2911WA	1 X 1 NPT	798639	116,400
Sanpress	Sanpress-Fittings	670201	adapter piece with SC	2911WA	1 1/2 X 1 1/2 NPT	798653	236,300
Sanpress	Sanpress-Fittings	670221	adapter piece with SC	2911WA	2 X 2 NPT	798660	384,100

System	Product subgroup	Material	Designation	Model no.	Dimensions	Item no.	Mass in grams
Sanpress	Sanpress-Fittings	839821	adapter piece with SC	99575	15 X 1/2	598921	39,200
Sanpress	Sanpress-Fittings	839834	adapter piece	99575HE	15 X 1/2	598938	39,600
Sanpress	Sanpress-Fittings	879941	adapter piece with SC	99575HE	22 X 3/4	601898	58,520
Sanpress	Sanpress-Fittings	879951	adapter piece with SC	99575HE	28 X 1	601904	90,090
Sanpress	Sanpress-Fittings	879961	adapter piece with SC	99575HE	35 X 1 1/4	601911	139,900
Sanpress	Sanpress-Fittings	913081	union with SC	98450	15 X 1	460051	81,500
Sanpress	Sanpress-Fittings	917911	union with SC	2263AFM	15 X 3/4	470807	72,530
Sanpress	Sanpress-Fittings	917921	union with SC	2263AFM	18 X 3/4	470814	72,100
Sanpress	Sanpress-Fittings	917941	union with SC	2263AFM	22 X 1	470821	113,380
Sanpress	Sanpress-Fittings	917961	union with SC	2263AFM	28 X 1 1/4	470838	165,600
Sanpress	Sanpress-Fittings	917971	union with SC	2263AFM	35 X 1 1/2	470845	212,100
Sanpress	Sanpress-Fittings	917981	union with SC	2263AFM	42 X 1 3/4	470852	349,100
Sanpress	Sanpress-Fittings	917991	union with SC	2263AFM	54 X 2 3/8	470869	548,000
Sanpress	Sanpress-F.o.Gew	944181	connection piece	97946IS	15	368982	790,000
Sanpress	Sanpress-F.o.Gew	944251	connection piece	97947IS	18	369064	790,000
Sanpress	Sanpress-F.o.Gew	944281	connection piece	97948IS	22	369101	766,000
Sanpress	Sanpress-F.o.Gew	945441	housing	97975AM	15	374846	551,600
Sanpress	Sanpress-F.o.Gew	945451	housing	97975AM	18	374853	557,000
Sanpress	Sanpress-F.o.Gew	945461	housing	97975AM	22	374860	562,000
Sanpress	Sanpress-Fittings	963081	adapter piece	97737	18 X 18	316204	46,900
Sanpress	Sanpress-F.o.Gew	972701	adapter piece	97737	15 X 15	333201	37,100
Sanpress	Sanpress-F.o.Gew	979821	coupling	97779	10	335946	20,120
Sanpress	Sanpress-F.o.Gew	979831	coupling	97780	12 X 10	335953	27,200
Sanpress	Sanpress-F.o.Gew	979841	coupling	97781	15 X 10	335960	33,240

Pipes: 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	System	Product subgroup	Material short text	Designation	Model no.	Dimensions	Item no.	Mass in grams	Mass in kg	Mass in kg per linear metre
109801	Sanpress Inox	Sanpress-Pipe 1.4521	22053 Sanpress-Pipe 15x1,0x3M(60) E 539	Sanpress-Pipe	22053	15 X 1,0 X3M (60)	751159	338	0,338	0,056
109811	Sanpress Inox	Sanpress-Pipe 1.4521	22053 Sanpress-Pipe 18x1,0x3M(30) E 539	Sanpress-Pipe	22053	18 X 1,0 X3M (30)	751166	411	0,411	0,069
109821	Sanpress Inox	Sanpress-Pipe 1.4521	22053 Sanpress-Pipe 22x1,2x3M(30) E 539	Sanpress-Pipe	22053	22 X 1,2 X3M (30)	751173	603	0,603	0,101
109831	Sanpress Inox	Sanpress-Pipe 1.4521	22053 Sanpress-Pipe 28x1,2x3M(30) E 539	Sanpress-Pipe	22053	28 X 1,2 X3M (30)	751180	778	0,778	0,13
109841	Sanpress Inox	Sanpress-Pipe 1.4521	22053 Sanpress-Pipe 35x1,5x3M(15) E 539	Sanpress-Pipe	22053	35 X 1,5 X3M (15)	751197	1215	1,215	0,203

Material	System	Product subgroup	Material short text	Designation	Model no.	Dimensions	Item no.	Mass in grams	Mass in kg	Mass in kg per linear metre
109851	Sanpress Inox	Sanpress-Pipe 1.4521	22053 Sanpress-Pipe 42x1,5x3M(15) E 539	Sanpress-Pipe	22053	42 X 1,5 X3M (15)	751203	1469	1,469	0,245
109861	Sanpress Inox	Sanpress-Pipe 1.4521	22053 Sanpress-Pipe 54x1,5x3M(15) E 539	Sanpress-Pipe	22053	54 X 1,5 X3M (15)	751210	1872	1,872	0,312
109951	Sanpress Inox	Sanpress-Pipe 1.4521	22053XLSanpress-Pipe 108x2,0x3M(15)E 539	Sanpress-Pipe	22053XL	108 X 2,0 X3M (15)	751258	5028	5,028	0,838
273271	Sanpress Inox	Sanpress-Pipe 1.4401	2203 Sanpress-Pipe 18x1,0(240) E 529	Sanpress-Pipe	2203	18 X 1,0 (240)	289034	433	0,433	0,072
273276	Sanpress Inox	Sanpress-Pipe 1.4401	2203 Sanpress-Pipe 18x1,0(60) E 529	Sanpress-Pipe	2203	18 X 1,0 (60)	807122	404	0,404	0,067
273431	Sanpress Inox	Sanpress-Pipe 1.4401	2203 Sanpress-Pipe 54x1,5(60) E 529	Sanpress-Pipe	2203	54 X 1,5 (60)	193676	1967	1,967	0,328
273436	Sanpress Inox	Sanpress-Pipe 1.4401	2203 Sanpress-Pipe 54x1,5(30) E 529	Sanpress-Pipe	2203	54 X 1,5 (30)	807177	1900	1,9	0,317
277050	Sanpress Inox	Sanpress-Pipe 1.4401	2203 Sanpress-Pipe 15x1,0(600) E 529	Sanpress-Pipe	2203	15 X 1,0 (600)	102036	342	0,342	0,057
277056	Sanpress Inox	Sanpress-Pipe 1.4401	2203 Sanpress-Pipe 15x1,0(120) E 529	Sanpress-Pipe	2203	15 X 1,0 (120)	807115	333	0,333	0,056
277057	Sanpress Inox	Sanpress-Pipe 1.4401	2203 Sanpress-Pipe 15x1,0(60) E 529	Sanpress-Pipe	2203	15 X 1,0 (60)	639785	340	0,34	0,057
277060	Sanpress Inox	Sanpress-Pipe 1.4401	2203 Sanpress-Pipe 22x1,2(420) E 529	Sanpress-Pipe	2203	22 X 1,2 (420)	102708	624	0,624	0,104
277066	Sanpress Inox	Sanpress-Pipe 1.4401	2203 Sanpress-Pipe 22x1,2(60) E 529	Sanpress-Pipe	2203	22 X 1,2 (60)	807139	603	0,603	0,101
277070	Sanpress Inox	Sanpress-Pipe 1.4401	2203 Sanpress-Pipe 28x1,2(240) E 529	Sanpress-Pipe	2203	28 X 1,2 (240)	104924	775	0,775	0,129
277076	Sanpress Inox	Sanpress-Pipe 1.4401	2203 Sanpress-Pipe 28x1,2(60) E 529	Sanpress-Pipe	2203	28 X 1,2 (60)	807146	775	0,775	0,129
277080	Sanpress Inox	Sanpress-Pipe 1.4401	2203 Sanpress-Pipe 35x1,5(180) E 529	Sanpress-Pipe	2203	35 X 1,5 (180)	108588	1255	1,255	0,209
277086	Sanpress Inox	Sanpress-Pipe 1.4401	2203 Sanpress-Pipe 35x1,5(30) E 529	Sanpress-Pipe	2203	35 X 1,5 (30)	807153	1200	1,2	0,2
277090	Sanpress Inox	Sanpress-Pipe 1.4401	2203 Sanpress-Pipe 42x1,5(120) E 529	Sanpress-Pipe	2203	42 X 1,5 (120)	113001	1518	1,518	0,253
277096	Sanpress Inox	Sanpress-Pipe 1.4401	2203 Sanpress-Pipe 42x1,5(30) E 529	Sanpress-Pipe	2203	42 X 1,5 (30)	807160	1518	1,518	0,253
277101	Sanpress Inox	Sanpress-Pipe 1.4401	2203XL Sanpress-Pipe 76,1x2,0(30) E 529	Sanpress-Pipe	2203XL	76,1 X 2,0 (30)	354862	3622	3,622	0,604
277106	Sanpress Inox	Sanpress-Pipe 1.4401	2203XL Sanpress-Pipe 76,1x2,0(6) E 529	Sanpress-Pipe	2203XL	76,1 X 2,0 (6)	807207	3596	3,596	0,599
277111	Sanpress Inox	Sanpress-Pipe 1.4401	2203XL Sanpress-Pipe 88,9x2,0(30) E 529	Sanpress-Pipe	2203XL	88,9 X 2,0 (30)	354855	4341	4,341	0,724
277116	Sanpress Inox	Sanpress-Pipe 1.4401	2203XL Sanpress-Pipe 88,9x2,0(6) E 529	Sanpress-Pipe	2203XL	88,9 X 2,0 (6)	807214	4244	4,244	0,707
277121	Sanpress Inox	Sanpress-Pipe 1.4401	2203XL Sanpress-Pipe 108,0x2,0(30) E 529	Sanpress-Pipe	2203XL	108,0 X 2,0 (30)	354848	5170	5,17	0,862
277126	Sanpress Inox	Sanpress-Pipe 1.4401	2203XL Sanpress-Pipe 108,0x2,0(6) E 529	Sanpress-Pipe	2203XL	108,0 X 2,0 (6)	807184	5202	5,202	0,867
280441	Sanpress Inox	Sanpress-Pipe 1.4401	2203 Sanpress-Pipe 12x1,0(60) E 529	Sanpress-Pipe	2203	12 X 1,0 (60)	297824	275	0,275	0,046
282123	Sanpress Inox	Sanpress-Pipe 1.4401	2206 Sanpress-Pipe 22x1,2 E FH9	Sanpress-Pipe	2206	22 X 1,2	799366	667	0,667	0,111
282133	Sanpress Inox	Sanpress-Pipe 1.4401	2206 Sanpress-Pipe 28x1,2 E FH9	Sanpress-Pipe	2206	28 X 1,2	799373	850	0,85	0,142
282143	Sanpress Inox	Sanpress-Pipe 1.4401	2206 Sanpress-Pipe 35x1,5 E FH9	Sanpress-Pipe	2206	35 X 1,5	799380	1315	1,315	0,219
282153	Sanpress Inox	Sanpress-Pipe 1.4401	2206 Sanpress-Pipe 42x1,5 E FH9	Sanpress-Pipe	2206	42 X 1,5	799397	1611,11	1,61111	0,269
282163	Sanpress Inox	Sanpress-Pipe 1.4401	2206 Sanpress-Pipe 54x1,5 E FH9	Sanpress-Pipe	2206	54 X 1,5	799403	2029,16	2,02916	0,338
342751	Sanpress Inox	Sanpress-Pipe 1.4401	2203XL Sanpress-Pipe 64,0x2,0(60) E 529	Sanpress-Pipe	2203XL	64,0 X 2,0 (60)	578626	3032	3,032	0,505
342756	Sanpress Inox	Sanpress-Pipe 1.4401	2203XL Sanpress-Pipe 64,0x2,0(6) E 529	Sanpress-Pipe	2203XL	64,0 X 2,0 (6)	807191	3030	3,03	0,505
365301	Sanpress Inox	Sanpress-Pipe 1.4301	0103 Pipe 1/2 E 1 9	Pipe	0103	1/2	870007	556,84	0,55684	0,093
365311	Sanpress Inox	Sanpress-Pipe 1.4301	0103 Pipe 3/4 E 1 9	Pipe	0103	3/4	870052	803,59	0,80359	0,134
365321	Sanpress Inox	Sanpress-Pipe 1.4301	0103 Pipe 1 E 1 9	Pipe	0103	1	870106	1050,34	1,05034	0,175
365331	Sanpress Inox	Sanpress-Pipe 1.4301	0103 Pipe 1 1/4 E 1 9	Pipe	0103	1 1/4	870151	1299,81	1,29981	0,217
365341	Sanpress Inox	Sanpress-Pipe 1.4301	0103 Pipe 1 1/2 E 1 9	Pipe	0103	1 1/2	870205	1543,8	1,5438	0,257
365351	Sanpress Inox	Sanpress-Pipe 1.4301	0103 Pipe 2 E 1 9	Pipe	0103	2	870250	2038,12	2,03812	0,34

Material	System	Product subgroup	Material short text	Designation	Model no.	Dimensions	Item no.	Mass in grams	Mass in kg	Mass in kg per linear metre
365981	Sanpress Inox	Sanpress-Pipe 1.4521	2205 Sanpress-Pipe 12x1,0(60) E 539	Sanpress-Pipe	2205	12 X 1,0 (60)	615987	266	0,266	0,044
365991	Sanpress Inox	Sanpress-Pipe 1.4521	2205 Sanpress-Pipe 15x1,0(600) E 539	Sanpress-Pipe	2205	15 X 1,0 (600)	615994	330	0,33	0,055
365996	Sanpress Inox	Sanpress-Pipe 1.4521	2205 Sanpress-Pipe 15x1,0(120) E 539	Sanpress-Pipe	2205	15 X 1,0 (120)	807351	330	0,33	0,055
365997	Sanpress Inox	Sanpress-Pipe 1.4521	2205 Sanpress-Pipe 15x1,0(60) E 539	Sanpress-Pipe	2205	15 X 1,0 (60)	639174	338	0,338	0,056
366001	Sanpress Inox	Sanpress-Pipe 1.4521	2205 Sanpress-Pipe 18x1,0(240) E 539	Sanpress-Pipe	2205	18 X 1,0 (240)	616007	402	0,402	0,067
366006	Sanpress Inox	Sanpress-Pipe 1.4521	2205 Sanpress-Pipe 18x1,0(60) E 539	Sanpress-Pipe	2205	18 X 1,0 (60)	807368	405	0,405	0,068
366007	Sanpress Inox	Sanpress-Pipe 1.4521	2205 Sanpress-Pipe 18x1,0(30) E 539	Sanpress-Pipe	2205	18 X 1,0 (30)	649180	397	0,397	0,066
366011	Sanpress Inox	Sanpress-Pipe 1.4521	2205 Sanpress-Pipe 22x1,2(420) E 539	Sanpress-Pipe	2205	22 X 1,2 (420)	616014	604	0,604	0,101
366016	Sanpress Inox	Sanpress-Pipe 1.4521	2205 Sanpress-Pipe 22x1,2(60) E 539	Sanpress-Pipe	2205	22 X 1,2 (60)	807375	593	0,593	0,099
366017	Sanpress Inox	Sanpress-Pipe 1.4521	2205 Sanpress-Pipe 22x1,2(30) E 539	Sanpress-Pipe	2205	22 X 1,2 (30)	649197	604	0,604	0,101
366021	Sanpress Inox	Sanpress-Pipe 1.4521	2205 Sanpress-Pipe 28x1,2(240) E 539	Sanpress-Pipe	2205	28 X 1,2 (240)	616021	778	0,778	0,13
366026	Sanpress Inox	Sanpress-Pipe 1.4521	2205 Sanpress-Pipe 28x1,2(60) E 539	Sanpress-Pipe	2205	28 X 1,2 (60)	807382	762	0,762	0,127
366027	Sanpress Inox	Sanpress-Pipe 1.4521	2205 Sanpress-Pipe 28x1,2(30) E 539	Sanpress-Pipe	2205	28 X 1,2 (30)	649203	760	0,76	0,127
366031	Sanpress Inox	Sanpress-Pipe 1.4521	2205 Sanpress-Pipe 35x1,5(180) E 539	Sanpress-Pipe	2205	35 X 1,5 (180)	616038	1216	1,216	0,203
366036	Sanpress Inox	Sanpress-Pipe 1.4521	2205 Sanpress-Pipe 35x1,5(30) E 539	Sanpress-Pipe	2205	35 X 1,5 (30)	807399	1185	1,185	0,198
366041	Sanpress Inox	Sanpress-Pipe 1.4521	2205 Sanpress-Pipe 42x1,5(120) E 539	Sanpress-Pipe	2205	42 X 1,5 (120)	616045	1420	1,42	0,237
366046	Sanpress Inox	Sanpress-Pipe 1.4521	2205 Sanpress-Pipe 42x1,5(30) E 539	Sanpress-Pipe	2205	42 X 1,5 (30)	807405	1440	1,44	0,24
366047	Sanpress Inox	Sanpress-Pipe 1.4521	2205 Sanpress-Pipe 42x1,5(6) E 539	Sanpress-Pipe	2205	42 X 1,5 (6)	649210	1470	1,47	0,245
366051	Sanpress Inox	Sanpress-Pipe 1.4521	2205 Sanpress-Pipe 54x1,5(60) E 539	Sanpress-Pipe	2205	54 X 1,5 (60)	616557	1905	1,905	0,318
366056	Sanpress Inox	Sanpress-Pipe 1.4521	2205 Sanpress-Pipe 54x1,5(30) E 539	Sanpress-Pipe	2205	54 X 1,5 (30)	807412	1865	1,865	0,311
366057	Sanpress Inox	Sanpress-Pipe 1.4521	2205 Sanpress-Pipe 54x1,5(6) E 539	Sanpress-Pipe	2205	54 X 1,5 (6)	649227	1870	1,87	0,312
366061	Sanpress Inox	Sanpress-Pipe 1.4521	2205XL Sanpress-Pipe 64x2,0(60) E 539	Sanpress-Pipe	2205XL	64 X 2,0 (60)	616564	3000	3	0,5
366066	Sanpress Inox	Sanpress-Pipe 1.4521	2205XL Sanpress-Pipe 64x2,0(6) E 539	Sanpress-Pipe	2205XL	64 X 2,0 (6)	807436	2908	2,908	0,485
366071	Sanpress Inox	Sanpress-Pipe 1.4521	2205XL Sanpress-Pipe 76,1x2,0(30) E 539	Sanpress-Pipe	2205XL	76,1 X 2,0 (30)	616571	3507	3,507	0,585
366076	Sanpress Inox	Sanpress-Pipe 1.4521	2205XL Sanpress-Pipe 76,1x2,0(6) E 539	Sanpress-Pipe	2205XL	76,1 X 2,0 (6)	807443	3477	3,477	0,58
366081	Sanpress Inox	Sanpress-Pipe 1.4521	2205XL Sanpress-Pipe 88,9x2,0(30) E 539	Sanpress-Pipe	2205XL	88,9 X 2,0 (30)	616588	4111	4,111	0,685
366086	Sanpress Inox	Sanpress-Pipe 1.4521	2205XL Sanpress-Pipe 88,9x2,0(6) E 539	Sanpress-Pipe	2205XL	88,9 X 2,0 (6)	807450	4061	4,061	0,677
366091	Sanpress Inox	Sanpress-Pipe 1.4521	2205XL Sanpress-Pipe 108x2,0(30) E 539	Sanpress-Pipe	2205XL	108 X 2,0 (30)	616595	4955	4,955	0,826
366096	Sanpress Inox	Sanpress-Pipe 1.4521	2205XL Sanpress-Pipe 108x2,0(6) E 539	Sanpress-Pipe	2205XL	108 X 2,0 (6)	807429	4958	4,958	0,826
386201	Sanpress Inox	Sanpress-Pipe 1.4401	4003 Sanpress-Pipe 1/2 E 1 9	Sanpress-Pipe	4003	1/2	820002	556,84	0,55684	0,093
386211	Sanpress Inox	Sanpress-Pipe 1.4401	4003 Sanpress-Pipe 3/4 E 1 9	Sanpress-Pipe	4003	3/4	820057	803,59	0,80359	0,134
386221	Sanpress Inox	Sanpress-Pipe 1.4401	4003 Sanpress-Pipe 1 E 1 9	Sanpress-Pipe	4003	1	820101	1050,34	1,05034	0,175
386231	Sanpress Inox	Sanpress-Pipe 1.4401	4003 Sanpress-Pipe 1 1/4 E 1 9	Sanpress-Pipe	4003	1 1/4	820156	1299,81	1,29981	0,217
386251	Sanpress Inox	Sanpress-Pipe 1.4401	4003 Sanpress-Pipe 2 E 1 9	Sanpress-Pipe	4003	2	820255	2038,12	2,03812	0,34
553471	Sanpress Inox	Sanpress-Pipe	0107XL Sanpress-Pipe 21/2 E 1 9	Sanpress-Pipe	0107XL	2 1/2	870953	3243,04	3,24304	0,541
553481	Sanpress Inox	Sanpress-Pipe	0107XL Sanpress-Pipe 3 E 1 9	Sanpress-Pipe	0107XL	3	871004	3879,82	3,87982	0,647
553491	Sanpress Inox	Sanpress-Pipe	0107XL Sanpress-Pipe 4 E 1 9	Sanpress-Pipe	0107XL	4	871059	5153,37	5,15337	0,859
553541	Sanpress Inox	Sanpress-Pipe 1.4401	4003 Sanpress-Pipe 11/2 E 1 9	Sanpress-Pipe	4003	1 1/2	820200	1543,84	1,54384	0,257
553561	Sanpress Inox	Sanpress-Pipe	4007XL Sanpress-Pipe 21/2 E 1 9	Sanpress-Pipe	4007XL	2 1/2	820422	3243,04	3,24304	0,541

Material	System	Product subgroup	Material short text	Designation	Model no.	Dimensions	Item no.	Mass in grams	Mass in kg	Mass in kg per linear metre
553571	Sanpress Inox	Sanpress-Pipe	4007XL Sanpress-Pipe 3 E 1 9	Sanpress-Pipe	4007XL	3	820507	3879,85	3,87985	0,647
553581	Sanpress Inox	Sanpress-Pipe	4007XL Sanpress-Pipe 4 E 1 9	Sanpress-Pipe	4007XL	4	820552	5153,37	5,15337	0,859
553591	Sanpress Inox	Sanpress-Pipe	0108 Sanpress-Pipe 1/2 E 1 9	Sanpress-Pipe	0108	1 1/2	870502	395	0,395	0,066
553601	Sanpress Inox	Sanpress-Pipe	0108 Sanpress-Pipe 3/4 E 1 9	Sanpress-Pipe	0108	3/4	870557	670	0,67	0,112
553611	Sanpress Inox	Sanpress-Pipe	0108 Sanpress-Pipe 1 E 1 9	Sanpress-Pipe	0108	1	870601	872	0,872	0,145
553621	Sanpress Inox	Sanpress-Pipe	0108 Sanpress-Pipe 1 1/4 E 1 9	Sanpress-Pipe	0108	1 1/4	870656	1334	1,334	0,222
553631	Sanpress Inox	Sanpress-Pipe	0108 Sanpress-Pipe 1 1/2 E 1 9	Sanpress-Pipe	0108	1 1/2	870700	1584	1,584	0,264
553641	Sanpress Inox	Sanpress-Pipe	0108 Sanpress-Pipe 2 E 1 9	Sanpress-Pipe	0108	2	870755	2090	2,09	0,348
553651	Sanpress Inox	Sanpress-Pipe	0108XL Sanpress-Pipe 2 1/2 E 1 9	Sanpress-Pipe	0108XL	2 1/2	870809	3433,41 7	3,43341 7	0,572
553661	Sanpress Inox	Sanpress-Pipe	0108XL Sanpress-Pipe 3 E 1 9	Sanpress-Pipe	0108XL	3	870854	3841	3,841	0,64
553671	Sanpress Inox	Sanpress-Pipe	0108XL Sanpress-Pipe 4 E 1 9	Sanpress-Pipe	0108XL	4	870908	5102	5,102	0,85

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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).

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