

NiroTherm®

**SANHA**  
a perfect fit

**combipress**

= Tool Compatibility + Push & Stay  
+ Leak Path Feature  
**exclusive from SANHA**

**New!**



**Premium solution for corrosive environments**

Optimal for heating, cooling and compressed air installations –  
high corrosion resistance – special series for industrial applications

# NiroTherm® press system

## Corrosion-protected – reliable – practical

External corrosion may occur where carbon steel systems are employed in moisture hazard areas such as within the floor screed. They must therefore be protected against contact with moisture in compliance with all national standards and engineering best practice, as well the appropriate SANHA insulation regulations – this type of corrosion protection is not only time consuming and labour intensive but also susceptible to damage in what can sometimes be a hectic routine at the site. Our new stainless steel NiroTherm® premium system (material no. 1.4301, AISI 304) offers a safe and reliable solution, in particular in moisture hazard areas without the risk of external corrosion and with substantially reduced insulation effort! NiroTherm® system press fittings can be ideally used in conjunction with a broad palette of tried-and-tested SANHA system pipes.

### Numerous products, good arguments: Stainless steel NiroTherm® system press fittings

**Safety against external corrosion:** the 1.4301 (AISI 304) stainless steel used by SANHA offer the maximum degree of protection against external corrosion. This reduces the insulation effort to substantially less than for other common carbon steel systems.\* This makes NiroTherm® a very practical and safe premium alternative to carbon steel systems.

**Save time and money:** thanks to the high corrosion resistance and the lesser insulation requirement, labour and cost-intensive tasks are reduced to a minimum, which means that you as the installer can offer an economically attractive and robust solution to help you secure the next project.

**Versatile and flexible:** we have a broad range. In addition to five different types of pipe (see p. 6), we offer numerous system press fittings, for example for industrial or high-temperature applications, such as NiroTherm® Industry with red, especially high-temperature resistant FKM sealing rings and the "HT" marking.

**Made in Germany:** all stainless steel systems are manufactured in our own factories in Berlin (pipes) and Schmiedefeld near Dresden (fittings). Of course, both factories are ISO certified. This allows us to guarantee consistent high quality at all times.

Please observe the technical documentation and installation instructions.

\* For example, diffusion resistant insulation is always required for cold and cooling water pipes to prevent condensate formation.

\*\* Depending on pressure and temperature – please contact us on 01628 819245 or [uk@sanha.com](mailto:uk@sanha.com), we would be pleased to help you.



Compatible with:  
**SANHA stainless steel system pipes**  
**Tried-and-tested stainless steel system pipes**

NiroTherm® system press fittings can be ideally combined with NiroTherm® system pipes and numerous other premium SANHA stainless steel system pipes.

- Trouble free installation beneath flooring screed
- Austenitic stainless steel
- Specially adapted to demands in industrial applications
- Ideally suited for open and closed circuits
- Optimised wall thickness
- Economical alternative

- A non-demountable, permanently sealed joint in a system with the NiroSan® stainless steel pipes NiroSan®, NiroSan®-ECO, NiroSan®-F and NiroTherm®
- System fittings operating conditions: Water and aqueous solutions and Technical gases (non-toxic, non-flammable):  
 Pipe outside diameter  $d \leq 108 \text{ mm}$  | Operating pressure: 16 bar
- Thread type: Pipe thread: R/Rp thread compliant with EN 10226, Fixing thread (union nut): G thread (cylindrical) compliant with ISO 228

Black EPDM sealing ring  
 Your Advantage: Tried and tested, proven durability

Heat resistant FKM sealing ring  
 Your Advantage: guaranteed safety up to 160 °C

**NiroTherm®**  
 series 91000

- Highly durable fitting and EPDM sealing ring

**Champs d'application**

- Open and closed heating systems
- Open and closed cooling systems
- Compressed air systems up to oil class 5 (25 mg/m³)

**Operating temperature**  
 – 30 °C – + 120 °C

Easily recognisable by the red dot

**NiroTherm® Industry**  
 series 98000

- For demanding industrial applications
- Special elastomer O rings for high thermal loads (with FKM sealing ring)

**Champs d'application**

- Industrial systems\*\*
- Compressed air systems with no oil class limitations

**Operating temperature**  
 – 20 °C – + 160 °C (depending on medium)

Easily recognisable by the red dot, additional marking  
 HT = high-temperature

| 9100 NiroTherm®<br>Material no. 1.4301/AISI 304 |             |
|-------------------------------------------------|-------------|
| Art.-Nr.                                        | Dimension   |
| 6910015                                         | 15 x 0,6    |
| 6910018                                         | 18 x 0,7    |
| 6910022                                         | 22 x 0,7    |
| 6910028                                         | 28 x 0,8    |
| 6910035                                         | 35 x 1,0    |
| 6910042                                         | 42 x 1,1    |
| 6910054                                         | 54 x 1,2    |
| 6910076                                         | 76,1 x 1,5  |
| 6910089                                         | 88,9 x 1,5  |
| 69100108                                        | 108 x 1,5   |
| 69100140                                        | 139,7 x 2,0 |
| 69100168                                        | 168,3 x 2,0 |

More information in our complete catalogue or at [www.sanha.com](http://www.sanha.com)

# NiroTherm® range

## 91001A bend, 90°

female end/male plain end

| Art.-Nr.   | Dimension |
|------------|-----------|
| 691001A15  | 15        |
| 691001A18  | 18        |
| 691001A22  | 22        |
| 691001A28  | 28        |
| 691001A35  | 35        |
| 691001A42  | 42        |
| 691001A54  | 54        |
| 691001A76  | 76,1      |
| 691001A89  | 88,9      |
| 691001A108 | 108       |



## 91002AG bend, 90°

female end and male thread

| Art.-Nr.      | Dimension  |
|---------------|------------|
| 691002AG1512  | 15 x 1/2   |
| 691002AG1812  | 18 x 1/2   |
| 691002AG1834  | 18 x 3/4   |
| 691002AG2234  | 22 x 3/4   |
| 691002AG281   | 28 x 1     |
| 691002AG35114 | 35 x 1 1/4 |
| 691002AG42112 | 42 x 1 1/2 |
| 691002AG542   | 54 x 2     |



## 91040 bend, 45°

female end/male plain end

| Art.-Nr.  | Dimension |
|-----------|-----------|
| 69104015  | 15        |
| 69104018  | 18        |
| 69104022  | 22        |
| 69104028  | 28        |
| 69104035  | 35        |
| 69104042  | 42        |
| 69104054  | 54        |
| 69104076  | 76,1      |
| 69104089  | 88,9      |
| 691040108 | 108       |



## 91001L bend, 90° longue

female end/male plain end

| Art.-Nr.  | Dimension |
|-----------|-----------|
| 691001L15 | 15        |
| 691001L18 | 18        |
| 691001L22 | 22        |
| 691001L28 | 28        |
| 691001L35 | 35        |
| 691001L42 | 42        |
| 691001L54 | 54        |



## 91002M bend, 90° with nut, flat Centellen seal, female thread

| Art.-Nr.     | Dimension  |
|--------------|------------|
| 691002M1534  | 15 x 3/4   |
| 691002M1834  | 18 x 3/4   |
| 691002M221   | 22 x 1     |
| 691002M28114 | 28 x 1 1/4 |



## 91002MG bend, 90° with nut, flat Centellen seal, female and male thread

| Art.-Nr.     | Dimension |
|--------------|-----------|
| 691002MG11   | 1 x 1     |
| 691002MG3434 | 3/4 x 3/4 |



## 91041 bend, 45°

female/female end

| Art.-Nr.  | Dimension |
|-----------|-----------|
| 69104115  | 15        |
| 69104118  | 18        |
| 69104122  | 22        |
| 69104128  | 28        |
| 69104135  | 35        |
| 69104142  | 42        |
| 69104154  | 54        |
| 69104176  | 76,1      |
| 69104189  | 88,9      |
| 691041108 | 108       |
| 691041140 | 139,7     |
| 691041168 | 168,3     |



## 91002A bend, 90°

female/female end

| Art.-Nr.   | Dimension |
|------------|-----------|
| 691002A15  | 15        |
| 691002A18  | 18        |
| 691002A22  | 22        |
| 691002A28  | 28        |
| 691002A35  | 35        |
| 691002A42  | 42        |
| 691002A54  | 54        |
| 691002A76  | 76,1      |
| 691002A89  | 88,9      |
| 691002A108 | 108       |
| 691002A140 | 139,7     |
| 691002A168 | 168,3     |



## 91003 Coude d'ajustage 90°

male plain ends

| Art.-Nr. | Dimension |
|----------|-----------|
| 69100315 | 15        |
| 69100318 | 18        |
| 69100322 | 22        |
| 69100328 | 28        |
| 69100335 | 35        |
| 69100342 | 42        |
| 69100354 | 54        |



## 91003G bend, 90°

male plain end and female thread

| Art.-Nr.    | Dimension |
|-------------|-----------|
| 691003G1812 | 18 x 1/2  |



## 91085 Crossover

female/female end

| Art.-Nr. | Dimension |
|----------|-----------|
| 69108515 | 15        |
| 69108518 | 18        |
| 69108522 | 22        |
| 69108528 | 28        |



## 91087 Chapeau de gendarme

male plain ends

| Art.-Nr. | Dimension |
|----------|-----------|
| 69108715 | 15        |
| 69108718 | 18        |
| 69108722 | 22        |
| 69108728 | 28        |



## 91002G bend, 90°

female end and female thread

| Art.-Nr.     | Dimension  |
|--------------|------------|
| 691002G1512  | 15 x 1/2   |
| 691002G1812  | 18 x 1/2   |
| 691002G1834  | 18 x 3/4   |
| 691002G2234  | 22 x 3/4   |
| 691002G281   | 28 x 1     |
| 691002G35114 | 35 x 1 1/4 |



## 91005 Pipe element

with flanging for overflow

| Art.-Nr.      | Dimension      |
|---------------|----------------|
| 6910052850034 | 28 x 500 x 3/4 |



You will also find many items with a red molded part seal (FKM).



### 91130 Tee female ends

| Art.-Nr.     | Dimension    | Art.-Nr.     | Dimension    | Art.-Nr.     | Dimension        | Art.-Nr.        | Dimension            |
|--------------|--------------|--------------|--------------|--------------|------------------|-----------------|----------------------|
| 69113015     | 15           | 691130221515 | 22 x 15 x 15 | 691130422842 | 42 x 28 x 42     | 691130894289    | 88,9 x 42 x 88,9     |
| 69113018     | 18           | 691130221522 | 22 x 15 x 22 | 691130423542 | 42 x 35 x 42     | 691130895489    | 88,9 x 54 x 88,9     |
| 69113022     | 22           | 691130221818 | 22 x 18 x 18 | 691130542254 | 54 x 22 x 54     | 691130897689    | 88,9 x 76,1 x 88,9   |
| 69113028     | 28           | 691130221822 | 22 x 18 x 22 | 691130542854 | 54 x 28 x 54     | 69113010822108  | 108 x 22 x 108       |
| 69113035     | 35           | 691130281528 | 28 x 15 x 28 | 691130543554 | 54 x 35 x 54     | 69113010828108  | 108 x 28 x 108       |
| 69113042     | 42           | 691130281828 | 28 x 18 x 28 | 691130544254 | 54 x 42 x 54     | 69113010835108  | 108 x 35 x 108       |
| 69113054     | 54           | 691130282222 | 28 x 22 x 22 | 691130762276 | 76,1 x 22 x 76,1 | 69113010842108  | 108 x 42 x 108       |
| 69113076     | 76,1         | 691130282228 | 28 x 22 x 28 | 691130762876 | 76,1 x 28 x 76,1 | 69113010854108  | 108 x 54 x 108       |
| 69113089     | 88,9         | 691130351535 | 35 x 15 x 35 | 691130763576 | 76,1 x 35 x 76,1 | 69113010876108  | 108 x 76,1 x 108     |
| 691130108    | 108          | 691130351835 | 35 x 18 x 35 | 691130764276 | 76,1 x 42 x 76,1 | 69113010889108  | 108 x 88,9 x 108     |
| 691130140    | 139,7        | 691130352235 | 35 x 22 x 35 | 691130765476 | 76,1 x 54 x 76,1 | 69113014076140  | 139,7 x 76,1 x 139,7 |
| 691130168    | 168,3        | 691130352835 | 35 x 28 x 35 | 691130892289 | 88,9 x 22 x 88,9 | 69113014089140  | 139,7 x 88,9 x 139,7 |
| 691130181515 | 18 x 15 x 15 | 691130421842 | 42 x 18 x 42 | 691130892889 | 88,9 x 28 x 88,9 | 691130140108140 | 139,7 x 108 x 139,7  |
| 691130181518 | 18 x 15 x 18 | 691130422242 | 42 x 22 x 42 | 691130893589 | 88,9 x 35 x 88,9 | 69113016889168  | 168,3 x 88,9 x 168,3 |
|              |              |              |              |              |                  | 691130168108168 | 168,3 x 108 x 168,3  |

### 91090 Elbow 90° female/female end

| Art.-Nr. | Dimension |
|----------|-----------|
| 69109022 | 22        |
| 69109028 | 28        |



### 91092AG Elbow 90° female end and male thread

| Art.-Nr.      | Dimension  |
|---------------|------------|
| 691092AG1512  | 15 x 1/2   |
| 691092AG1812  | 18 x 1/2   |
| 691092AG1834  | 18 x 3/4   |
| 691092AG2234  | 22 x 3/4   |
| 691092AG281   | 28 x 1     |
| 691092AG35114 | 35 x 1 1/4 |
| 691092AG42112 | 42 x 1 1/2 |
| 691092AG542   | 54 x 2     |



### 91090IG Elbow 90° female end and female thread

| Art.-Nr.      | Dimension  |
|---------------|------------|
| 691090IG1512  | 15 x 1/2   |
| 691090IG1834  | 18 x 3/4   |
| 691090IG2234  | 22 x 3/4   |
| 691090IG2812  | 28 x 1/2   |
| 691090IG281   | 28 x 1     |
| 691090IG3512  | 35 x 1/2   |
| 691090IG3534  | 35 x 3/4   |
| 691090IG35114 | 35 x 1 1/4 |



### 91130G Tee female/female end and female thread

| Art.-Nr.        | Dimension         |
|-----------------|-------------------|
| 691130G151215   | 15 x 1/2 x 15     |
| 691130G181218   | 18 x 1/2 x 18     |
| 691130G183418   | 18 x 3/4 x 18     |
| 691130G221222   | 22 x 1/2 x 22     |
| 691130G223422   | 22 x 3/4 x 22     |
| 691130G281228   | 28 x 1/2 x 28     |
| 691130G283428   | 28 x 3/4 x 28     |
| 691130G283428   | 28 x 1 x 28       |
| 691130G351235   | 35 x 1/2 x 35     |
| 691130G353435   | 35 x 3/4 x 35     |
| 691130G3511435  | 35 x 1 1/4 x 35   |
| 691130G421242   | 42 x 1/2 x 42     |
| 691130G423442   | 42 x 3/4 x 42     |
| 691130G4211242  | 42 x 1 1/2 x 42   |
| 691130G541254   | 54 x 1/2 x 54     |
| 691130G543454   | 54 x 3/4 x 54     |
| 691130G54254    | 54 x 2 x 54       |
| 691130G763476   | 76,1 x 3/4 x 76,1 |
| 691130G76276    | 76,1 x 2 x 76,1   |
| 691130G893489   | 88,9 x 3/4 x 88,9 |
| 691130G89289    | 88,9 x 2 x 88,9   |
| 691130G10834108 | 108 x 3/4 x 108   |
| 691130G1082108  | 108 x 2 x 108     |



### 91246G Transition element [coupling/nipple], with male plain end and female thread

| Art.-Nr.    | Dimension |
|-------------|-----------|
| 691246G1512 | 15a x 1/2 |
| 691246G1812 | 18a x 1/2 |
| 691246G1834 | 18a x 3/4 |
| 691246G2212 | 22a x 1/2 |
| 691246G2234 | 22a x 3/4 |
| 691246G2834 | 28a x 3/4 |



### 91270 Coupling female/female end

| Art.-Nr.  | Dimension |
|-----------|-----------|
| 69127015  | 15        |
| 69127018  | 18        |
| 69127022  | 22        |
| 69127028  | 28        |
| 69127035  | 35        |
| 69127042  | 42        |
| 69127054  | 54        |
| 69127076  | 76,1      |
| 69127089  | 88,9      |
| 691270108 | 108       |
| 691270140 | 139,7     |
| 691270168 | 168,3     |



### 91240 Reducing coupling female/female end

| Art.-Nr.   | Dimension |
|------------|-----------|
| 6912401815 | 18 x 15   |
| 6912402215 | 22 x 15   |
| 6912402218 | 22 x 18   |
| 6912402822 | 28 x 22   |



# NiroTherm® range

## 91270S Slip coupling female/female end

| Art.-Nr.   | Dimension |
|------------|-----------|
| 691270S15  | 15        |
| 691270S18  | 18        |
| 691270S22  | 22        |
| 691270S28  | 28        |
| 691270S35  | 35        |
| 691270S42  | 42        |
| 691270S54  | 54        |
| 691270S76  | 76,1      |
| 691270S89  | 88,9      |
| 691270S108 | 108       |



## 91270G Transition coupling with female end and female thread

| Art.-Nr.     | Dimension  |
|--------------|------------|
| 691246G1512  | 15 x 1/2   |
| 691270G1534  | 15 x 3/4   |
| 691270G1812  | 18 x 1/2   |
| 691270G1834  | 18 x 3/4   |
| 691270G221   | 22 x 1     |
| 691270G2212  | 22 x 1/2   |
| 691270G2234  | 22 x 3/4   |
| 691270G281   | 28 x 1     |
| 691270G2834  | 28 x 3/4   |
| 691270G35114 | 35 x 1 1/4 |
| 691270G42112 | 42 x 1 1/2 |
| 691270G542   | 54 x 2     |



## 91250 Transition nipple with male plain and groove for tube coupling

| Art.-Nr.     | Dimension   |
|--------------|-------------|
| 69125028337  | 28 x 33,7   |
| 69125035424  | 35 x 42,4   |
| 69125042483  | 42 x 48,3   |
| 69125054603  | 54 x 60,3   |
| 691250108114 | 108 x 114   |
| 691250761761 | 76,1 x 76,1 |
| 691250889889 | 88,9 x 88,9 |



## 91243 Fitting reducer with female and male plain end

| Art.-Nr.     | Dimension     |
|--------------|---------------|
| 6912431815   | 18a x 15      |
| 6912432215   | 22a x 15      |
| 6912432218   | 22a x 18      |
| 6912432815   | 28a x 15      |
| 6912432818   | 28a x 18      |
| 6912432822   | 28a x 22      |
| 6912433518   | 35a x 18      |
| 6912433522   | 35a x 22      |
| 6912433528   | 35a x 28      |
| 6912434222   | 42a x 22      |
| 6912434228   | 42a x 28      |
| 6912434235   | 42a x 35      |
| 6912435428   | 54a x 28      |
| 6912435435   | 54a x 35      |
| 6912435442   | 54a x 42      |
| 6912437654   | 76,1a x 54    |
| 6912438954   | 88,9a x 54    |
| 6912438976   | 88,9a x 76,1  |
| 69124310854  | 108a x 54     |
| 69124310876  | 108a x 76,1   |
| 69124310889  | 108a x 88,9   |
| 69124314089  | 139,7a x 88,9 |
| 691243140108 | 139,7a x 108  |
| 69124316889  | 168,3a x 88,9 |
| 691243168108 | 168,3a x 108  |



## 91243G Transition nipple with female end and male thread

| Art.-Nr.     | Dimension   |
|--------------|-------------|
| 691243G1084  | 108 x 4     |
| 691243G1512  | 15 x 1/2    |
| 691243G1534  | 15 x 3/4    |
| 691243G1538  | 15 x 3/8    |
| 691243G1812  | 18 x 1/2    |
| 691243G1834  | 18 x 3/4    |
| 691243G221   | 22 x 1      |
| 691243G2212  | 22 x 1/2    |
| 691243G2234  | 22 x 3/4    |
| 691243G281   | 28 x 1      |
| 691243G2834  | 28 x 3/4    |
| 691243G351   | 35 x 1      |
| 691243G35114 | 35 x 1 1/4  |
| 691243G42112 | 42 x 1 1/2  |
| 691243G542   | 54 x 2      |
| 691243G76212 | 76,1 x 21/2 |
| 691243G893   | 88,9 x 3    |



## 91280 Threaded double nipple male/male thread

| Art.-Nr. | Dimension |
|----------|-----------|
| 6912801  | 1         |
| 69128012 | 1/2       |
| 69128034 | 3/4       |



## 91280G Double nipple with male plain end and male thread

| Art.-Nr.    | Dimension |
|-------------|-----------|
| 691280G1512 | 15a x 1/2 |
| 691280G1812 | 18a x 1/2 |
| 691280G1834 | 18a x 3/4 |
| 691280G2212 | 22a x 1/2 |
| 691280G2234 | 22a x 3/4 |
| 691280G281  | 28a x 1   |



## 91370G Threaded hexagon nipple female/male thread

| Art.-Nr.    | Dimension |
|-------------|-----------|
| 691370G11   | 1 x 1     |
| 691370G3434 | 3/4 x 3/4 |



## 91301 Cap female end

| Art.-Nr. | Dimension |
|----------|-----------|
| 69130115 | 15        |
| 69130118 | 18        |
| 69130122 | 22        |
| 69130128 | 28        |
| 69130135 | 35        |
| 69130142 | 42        |
| 69130154 | 54        |



## 91872 Axial compensator for expansions female/female end

| Art.-Nr.  | Dimension |
|-----------|-----------|
| 69187215  | 15        |
| 69187218  | 18        |
| 69187222  | 22        |
| 69187228  | 28        |
| 69187235  | 35        |
| 69187242  | 42        |
| 69187254  | 54        |
| 69187276  | 76,1      |
| 69187289  | 88,9      |
| 691872108 | 108       |



You will also find many items with a red molded part seal (FKM).

**91330 Union**

with flat Centellen seal, stainless steel nut, female/female end

| Art.-Nr. | Dimension |
|----------|-----------|
| 69133015 | 15        |
| 69133018 | 18        |
| 69133022 | 22        |
| 69133028 | 28        |
| 69133035 | 35        |
| 69133042 | 42        |
| 69133054 | 54        |

**91333GMVA Union**

with flat Centellen seal, stainless steel nut, with female end and female thread

| Art.-Nr.        | Dimension  |
|-----------------|------------|
| 691333GMVA1512  | 15 x 1/2   |
| 691333GMVA1534  | 15 x 3/4   |
| 691333GMVA1812  | 18 x 1/2   |
| 691333GMVA2234  | 22 x 3/4   |
| 691333GMVA281   | 28 x 1     |
| 691333GMVA35114 | 35 x 1 1/4 |
| 691333GMVA42112 | 42 x 1 1/2 |
| 691333GMVA542   | 54 x 2     |

**91330G Union**

with flat Centellen seal, brass nut, with female end and female thread

| Art.-Nr.     | Dimension  |
|--------------|------------|
| 691330G1512  | 15 x 1/2   |
| 691330G1534  | 15 x 3/4   |
| 691330G1834  | 18 x 3/4   |
| 691330G221   | 22 x 1     |
| 691330G2234  | 22 x 3/4   |
| 691330G281   | 28 x 1     |
| 691330G2834  | 28 x 3/4   |
| 691330G35114 | 35 x 1 1/4 |
| 691330G42112 | 42 x 1 1/2 |
| 691330G542   | 54 x 2     |

**91330GMVA Union**

with flat Centellen seal, stainless steel nut, with female end and female thread

| Art.-Nr.        | Dimension  |
|-----------------|------------|
| 691330GMVA1512  | 15 x 1/2   |
| 691330GMVA1534  | 15 x 3/4   |
| 691330GMVA1834  | 18 x 3/4   |
| 691330GMVA221   | 22 x 1     |
| 691330GMVA2234  | 22 x 3/4   |
| 691330GMVA281   | 28 x 1     |
| 691330GMVA2834  | 28 x 3/4   |
| 691330GMVA35114 | 35 x 1 1/4 |
| 691330GMVA42112 | 42 x 1 1/2 |
| 691330GMVA542   | 54 x 2     |

**91333G Union**

with flat Centellen seal, brass nut, with female end and female thread

| Art.-Nr.     | Dimension  |
|--------------|------------|
| 691333G1512  | 15 x 1/2   |
| 691333G1534  | 15 x 3/4   |
| 691333G1812  | 18 x 1/2   |
| 691333G2234  | 22 x 3/4   |
| 691333G281   | 28 x 1     |
| 691333G35114 | 35 x 1 1/4 |
| 691333G42112 | 42 x 1 1/2 |
| 691333G542   | 54 x 2     |

**91359M Union adapter**

with flat Centellen seal, stainless steel nut, female end

| Art.-Nr.     | Dimension  |
|--------------|------------|
| 691359M1512  | 15 x 1/2   |
| 691359M1534  | 15 x 3/4   |
| 691359M1834  | 18 x 3/4   |
| 691359M221   | 22 x 1     |
| 691359M28114 | 28 x 1 1/4 |
| 691359M35112 | 35 x 1 1/2 |
| 691359M42134 | 42 x 1 3/4 |
| 691359M54238 | 54 x 2 3/8 |

**91359MMS Union adapter**

with flat Centellen seal, brass nut, female end

| Art.-Nr.       | Dimension  |
|----------------|------------|
| 691359MMS1512  | 15 x 1/2   |
| 691359MMS1534  | 15 x 3/4   |
| 691359MMS1834  | 18 x 3/4   |
| 691359MMS221   | 22 x 1     |
| 691359MMS28114 | 28 x 1 1/4 |
| 691359MMS35112 | 35 x 1 1/2 |
| 691359MMS42134 | 42 x 1 3/4 |
| 691359MMS54238 | 54 x 2 3/8 |

**9918 Stainless steel bracket**

with acoustic insulation

| Art.-Nr. | Dimension |
|----------|-----------|
| 6991812  | 12        |
| 6991815  | 15        |
| 6991818  | 18        |
| 6991822  | 22        |
| 6991828  | 28        |
| 6991835  | 35        |
| 6991842  | 42        |
| 6991854  | 54        |

**9919 Steel bracket**

with acoustic insulation

| Art.-Nr. | Dimension |
|----------|-----------|
| 6991912  | 12        |
| 6991915  | 15        |
| 6991918  | 18        |
| 6991922  | 22        |
| 6991928  | 28        |
| 6991935  | 35        |
| 6991942  | 42        |
| 6991954  | 54        |

**91-VA-PF****Crimping flanges**

with female end, PN 10/16, for drinking water and heating

| Art.-Nr.   | Dimension         |
|------------|-------------------|
| 691VAPF15  | DN 12 / 15 mm     |
| 691VAPF18  | DN 15 / 18 mm     |
| 691VAPF22  | DN 20 / 22 mm     |
| 691VAPF28  | DN 25 / 28 mm     |
| 691VAPF35  | DN 32 / 35 mm     |
| 691VAPF42  | DN 40 / 42 mm     |
| 691VAPF54  | DN 50 / 54 mm     |
| 691VAPF76  | DN 65 / 76,1 mm   |
| 691VAPF89  | DN 80 / 88,9 mm   |
| 691VAPF108 | DN 100 / 108 mm   |
| 691VAPF140 | DN 125 / 139,7 mm |
| 691VAPF168 | DN 150 / 168,3 mm |

**FL-D High-pressure flange seal**

asbestos-free, suitable for weld neck, threaded, press and loose flanges, max. 400°C, resistant against water, vapour, fuels, diluted alkaline solutions, oils, gases (DVGW tested according to DIN 3535 Part 6). Dimensions according to DIN EN 1514 - 1.2 mm thick for flanges. PN 10/16 = DIN EN 1092-1 and DIN EN 1092-2

| Art.-Nr. | Dimension                              |
|----------|----------------------------------------|
| 1D15     | DN 15 - PN10/16<br>(22 x 51 x 2 mm)    |
| 1D20     | DN 20 - PN10/16<br>(27 x 61 x 2 mm)    |
| 1D25     | DN 25 - PN10/16<br>(34 x 71 x 2 mm)    |
| 1D32     | DN 32 - PN10/16<br>(43 x 82 x 2 mm)    |
| 1D40     | DN 40 - PN10/16<br>(49 x 92 x 2 mm)    |
| 1D50     | DN 50 - PN10/16<br>(61 x 107 x 2 mm)   |
| 1D65     | DN 65 - PN10/16<br>(77 x 127 x 2 mm)   |
| 1D80     | DN 80 - PN10/16<br>(89 x 142 x 2 mm)   |
| 1D100    | DN 100 - PN10/16<br>(115 x 168 x 2 mm) |



## With safety on your side

### SANHA offers genuine advantages



As a family enterprise for over 50 years we have been observing a simple principle: every pipe and every fitting must give the customer added value in terms of safety and practical use at a fair price. This is our mission and, at the same time, the best recommendation from our satisfied customers.

As a specialist for pipeline systems we offer a unique breadth and depth of products for all of the usual connection techniques and applications from a one stop shop. Tried and tested installation techniques are as much a part of our program as practice-oriented innovations.

**And that's why: SANHA. Always a perfect fit.**

#### Your advantages:

**Always a perfect fit** Our customers are central to all our activities. As a family enterprise, SANHA highly values an active close and long term relationship with all our partners, from designers, installers, contractors and trading companies. With over fifty years of service, we are committed to close support of our customers, with a highly experience local and international technical service.

**Large product range** SANHA offers a wide material, product and dimension range, multiple connection methods, with significant expertise and experience – all from a one stop shop. SANHA, the pipeline specialist.

**Guaranteed safety** SANHA has all the important approvals, certifications and warranties, backed up by WRAS and BSI, ensuring you are always on the safe side.

**Nationwide technical service** SANHA is pleased to offer a wide range of services from installation training, technical seminars, design advice, specifications and on site support as and when required.