

## GENERAL

To ensure the transition to other pipework or hoses, you will also find various adapters or bellows on the following pages. Other versions can either be found in the process technology catalogue or are available on request. Conductive and non-conductive coatings, as well as amber glass based on borosilicate glass or quartz glass versions are available on request.

We mainly use pipework with flanges from the collar flange system (KF) and flat flange system (PF). These have proven themselves in use and are constantly being further developed by us. We attach great importance to the compatibility of the components and thus guarantee you constant availability and accuracy of fit of the components.



## KF ADAPTERS AND BELLOWS

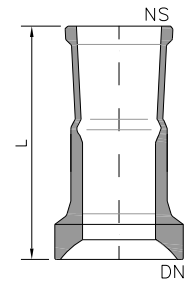


- 1 Very good sealing due to precise manufacturing
- 2 Sturdy design for a long service life
- 3 Suitable for all clamp ring connections

We will be happy to advise you on choosing the right adapter. We are also happy to manufacture customised solutions.

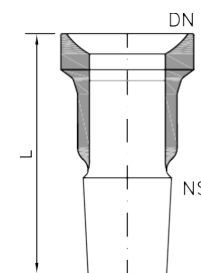
KF adapter cup to NS sleeve

Nominal size DN	Nominal size NS	Length L [mm]	Order no.
15	14/23	80	PA15/NSS1423-K
25	29/32	80	PA25/NSS2932-K
40	45/40	110	PA40/NSS4540-K
50	45/40	110	PA50/NSS4540-K

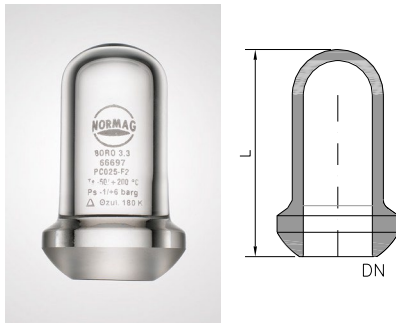


KF adapter pan to NS core

Nominal size DN	Nominal size NS	Length L [mm]	Order no.
15	14/23	80	PA15/NSC1423-K
25	29/32	80	PA25/NSC2932-K
40	45/40	110	PA40/NSC4540-K
50	45/40	110	PA50/NSC4540-K

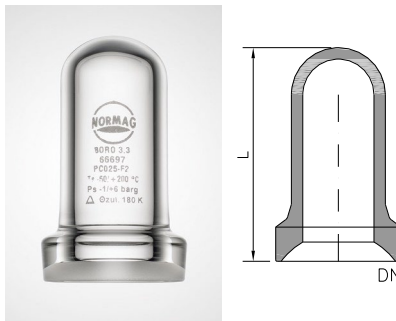


KF blind flange ball



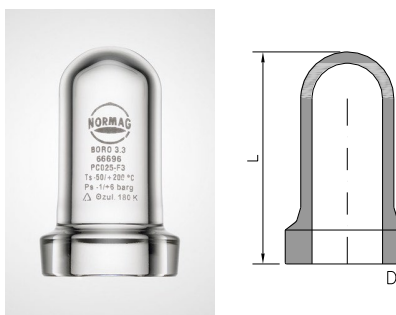
Nominal size DN	Length L [mm]	Order no.
15	40	PC015-F1
25	75	PC025-F1
40	75	PC040-F1
50	100	PC050-F1

KF blind flange pan



Nominal size DN	Length L [mm]	Order no.
15	40	PC015-F2
25	75	PC025-F2
40	75	PC040-F2
50	100	PC050-F2

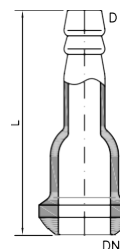
KF blind flange plan



Nominal size DN	Length L [mm]	Order no.
15	40	PC015-F3
25	75	PC025-F3
40	75	PC040-F3
50	100	PC050-F3

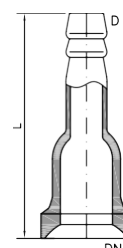
KF adapter ball to hose connection

Nominal size DN	Diameter d [mm]	Length L [mm]	Order no.
15	11	70	PA15/H11-F1
15	16	70	PA15/H16-F1
25	11	90	PA25/H11-F1
25	16	90	PA25/H16-F1
25	20	90	PA25/H20-F1
25	26	110	PA25/H26-F1
40	16	100	PA40/H16-F1
40	20	100	PA40/H20-F1
40	26	100	PA40/H26-F1



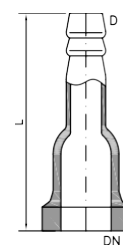
KF adapter pan to hose connection

Nominal size DN	Diameter d [mm]	Length L [mm]	Order no.
15	11	70	PA15/H11-K
15	16	70	PA15/H16-K
25	11	90	PA25/H11-K
25	16	90	PA25/H16-K
25	20	90	PA25/H20-K
25	26	110	PA25/H26-K
40	16	100	PA40/H16-K
40	20	100	PA40/H20-K
40	26	100	PA40/H26-K

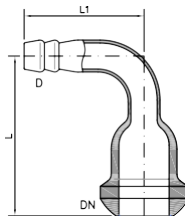


KF adapter plan to hose connection

Nominal size DN	Diameter d [mm]	Length L [mm]	Order no.
15	11	70	PA15/H11-F3
15	16	70	PA15/H16-F3
25	11	90	PA25/H11-F3
25	16	90	PA25/H16-F3
25	20	90	PA25/H20-F3
25	26	110	PA25/H26-F3
40	16	100	PA40/H16-F3
40	20	100	PA40/H20-F3
40	26	100	PA40/H26-F3

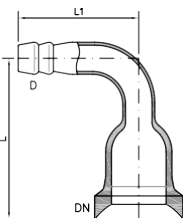


KF adapter ball to 90° hose connection



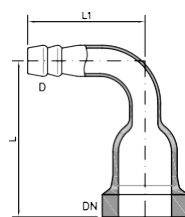
Nominal size DN	Diameter d [mm]	Length L [mm]	Length L1 [mm]	Order no.
15	11	60	60	PA90/15/H11-F1
15	16	60	60	PA90/15/H16-F1
25	11	60	60	PA90/25/H11-F1
25	16	80	60	PA90/25/H16-F1
25	20	80	60	PA90/25/H20-F1
25	26	80	70	PA90/25/H26-F1
40	16	80	70	PA90/40/H16-F1
40	20	80	70	PA90/40/H20-F1
40	26	80	70	PA90/40/H26-F1

KF adapter pan to 90° hose connection



Nominal size DN	Diameter d [mm]	Length L [mm]	Length L1 [mm]	Order no.
15	11	60	60	PA90/15/H11-K
15	16	60	60	PA90/15/H16-K
25	11	60	60	PA90/25/H11-K
25	16	80	60	PA90/25/H16-K
25	20	80	60	PA90/25/H20-K
25	26	80	70	PA90/25/H26-K
40	16	80	70	PA90/40/H16-K
40	20	80	70	PA90/40/H20-K
40	26	80	70	PA90/40/H26-K

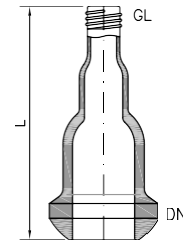
KF adapter plan to 90° hose connection



Nominal size DN	Diameter d [mm]	Length L [mm]	Length L1 [mm]	Order no.
15	11	60	40	PA90/15/H11-F3
15	16	60	60	PA90/15/H16-F3
25	11	60	60	PA90/25/H11-F3
25	16	80	60	PA90/25/H16-F3
25	20	80	60	PA90/25/H20-F3
25	26	80	70	PA90/25/H26-F3
40	16	80	70	PA90/40/H16-F3
40	20	80	70	PA90/40/H20-F3
40	26	80	70	PA90/40/H26-F3

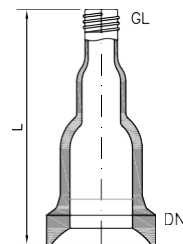
KF adapter ball to GL

Nominal size DN	Nominal size GL	Length L [mm]	Order no.
15	14	60	PA15/GL14-F1
15	18	70	PA15/GL18-F1
15	25	110	PA15/GL25-F1
25	14	80	PA25/GL14-F1
25	18	90	PA25/GL18-F1
25	25	110	PA25/GL25-F1
40	18	100	PA40/GL18-F1
40	25	100	PA40/GL25-F1
40	32	100	PA40/GL32-F1



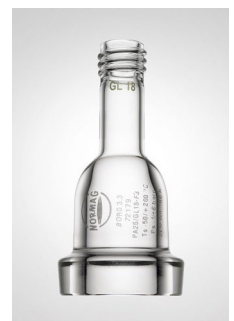
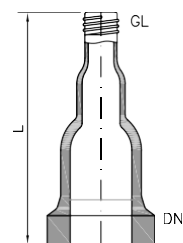
KF adapter pan to GL

Nominal size DN	Nominal size GL	Length L [mm]	Order no.
15	14	60	PA15/GL14-K
15	18	70	PA15/GL18-K
15	25	110	PA15/GL25-K
25	14	80	PA25/GL14-K
25	18	90	PA25/GL18-K
25	25	110	PA25/GL25-K
40	18	100	PA40/GL18-K
40	25	100	PA40/GL25-K
40	32	100	PA40/GL32-K

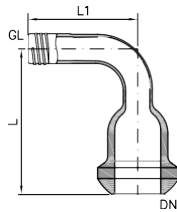


KF adapter plan to GL

Nominal size DN	Nominal size GL	Length L [mm]	Order no.
15	14	60	PA15/GL14-F3
15	18	70	PA15/GL18-F3
15	25	110	PA15/GL25-F3
25	14	80	PA25/GL14-F3
25	18	90	PA25/GL18-F3
25	25	110	PA25/GL25-F3
40	18	100	PA40/GL18-F3
40	25	100	PA40/GL25-F3
40	32	100	PA40/GL32-F3

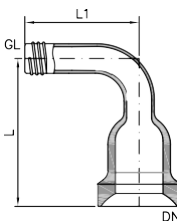


KF adapter ball to GL 90°



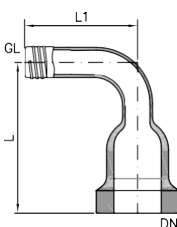
Nominal size DN	Nominal size GL	Length L [mm]	Length L1 [mm]	Order no.
15	14	60	60	PA90/15/GL14-F1
15	18	60	60	PA90/15/GL18-F1
15	25	80	60	PA90/15/GL25-F1
25	14	60	60	PA90/25/GL14-F1
25	18	80	60	PA90/25/GL18-F1
25	25	80	70	PA90/25/GL25-F1
40	18	80	60	PA90/40/GL18-F1
40	25	80	70	PA90/40/GL25-F1
40	32	80	80	PA90/40/GL32-F1

KF adapter pan to GL 90°



Nominal size DN	Nominal size GL	Length L [mm]	Length L1 [mm]	Order no.
15	14	60	60	PA90/15/GL14-K
15	18	60	60	PA90/15/GL18-K
15	25	80	60	PA90/15/GL25-K
25	14	60	60	PA90/25/GL14-K
25	18	80	60	PA90/25/GL18-K
25	25	80	70	PA90/25/GL25-K
40	18	80	60	PA90/40/GL18-K
40	25	80	70	PA90/40/GL25-K
40	32	80	80	PA90/40/GL32-K

KF adapter plan to GL 90°

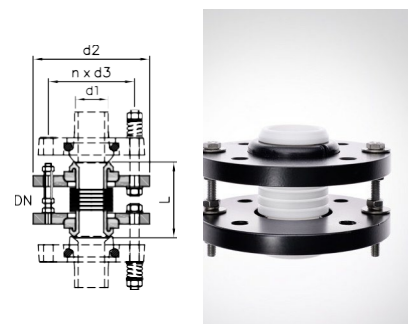


Nominal size DN	Nominal size GL	Length L [mm]	Length L1 [mm]	Order no.
15	14	60	60	PA90/15/GL14-F3
15	18	60	60	PA90/15/GL18-F3
15	25	80	60	PA90/15/GL25-F3
25	14	60	60	PA90/25/GL14-F3
25	18	80	60	PA90/25/GL18-F3
25	25	80	70	PA90/25/GL25-F3
40	18	80	60	PA90/40/GL18-F3
40	25	80	70	PA90/40/GL25-F3
40	32	80	80	PA90/40/GL32-F3



## KF bellows

Nominal size DN	Length L [mm]	Diameter d1 [mm]	Diameter d2 [mm]	Diameter n x d3 [mm]	Order no.
15	75 +/-5	23	95	50,3 x 7	CBG015-K
25	75 +/-5	34	115	85,4 x 9	CBG025-K
40	100 +/-5	51	150	110,4 x 9	CBG040-K
50	100 +/-6	63	165	125,4 x 9	CBG050-K



- Metal / glass on request

## PF ADAPTERS AND BELLOWS

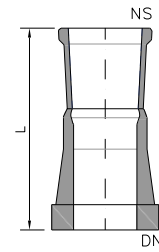


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- 2 Sturdy design for a long service life
- 3 Suitable for all clamp ring connections

We will be happy to advise you on choosing the right adapter. We are also happy to manufacture customised solutions.

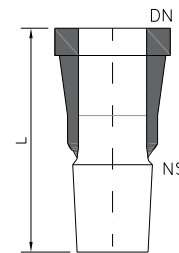
PF adapter to NS sleeve

Nominal size DN	Nominal size NS	Length L [mm]	Order no.
15	14/23	80	PA15/NSS1423-P
25	29/32	80	PA25/NSS2932-P
40	45/40	110	PA40/NSS4540-P
50	45/40	110	PA50/NSS4540-P



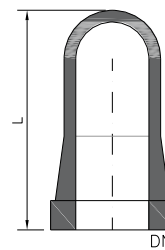
PF adapter to NS core

Nominal size DN	Nominal size NS	Length L [mm]	Order no.
15	14/23	80	PA15/NSC1423-P
25	29/32	80	PA25/NSC2932-P
40	45/40	110	PA40/NSC4540-P
50	45/40	110	PA50/NSC4540-P

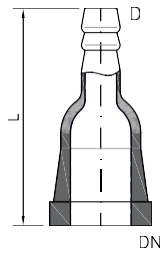


PF blind flanges

Nominal size DN	Length L [mm]	Order no.
15	40	PC015-P
25	75	PC025-P
40	75	PC040-P
50	100	PC050-P

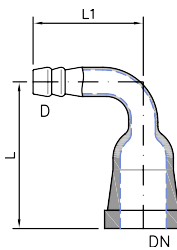


PF adapter to hose connection



Nominal size DN	Diameter d [mm]	Length L [mm]	Order no.
15	11	70	PA15/H11-P
15	16	70	PA15/H16-P
25	11	90	PA25/H11-P
25	16	90	PA25/H16-P
25	20	90	PA25/H20-P
25	26	110	PA25/H26-P
40	16	100	PA40/H16-P
40	20	100	PA40/H20-P
40	26	100	PA40/H26-P

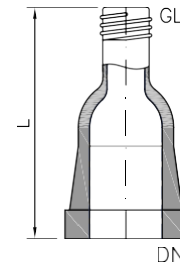
PF adapter to 90° hose connection



Nominal size DN	Diameter d [mm]	Length L [mm]	Length L1 [mm]	Order no.
15	11	60	60	PA90/15/H11-P
15	16	60	60	PA90/15/H16-P
25	11	60	60	PA90/25/H11-P
25	16	80	60	PA90/25/H16-P
25	20	80	60	PA90/25/H20-P
25	26	80	70	PA90/25/H26-P
40	16	80	70	PA90/40/H16-P
40	20	80	70	PA90/40/H20-P
40	26	80	70	PA90/40/H26-P

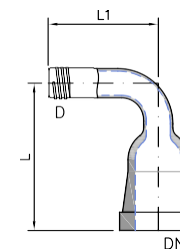
PF adapter to GL

Nominal size DN	Nominal size GL	Length L [mm]	Order no.
15	14	60	PA15/GL14-P
15	18	70	PA15/GL18-P
15	25	110	PA15/GL25-P
25	14	80	PA25/GL14-P
25	18	90	PA25/GL18-P
25	25	110	PA25/GL25-P
40	18	100	PA40/GL18-P
40	25	100	PA40/GL25-P
40	32	100	PA40/GL32-P

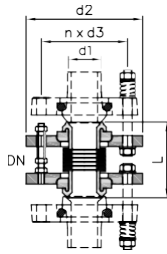


PF adapter to GL 90°

Nominal size DN	Diameter d [mm]	Length L [mm]	Length L1 [mm]	Order no.
15	14	60	60	PA90/15/GL14-P
15	18	60	60	PA90/15/GL18-P
15	25	80	60	PA90/15/GL25-P
25	14	80	60	PA90/25/GL14-P
25	18	80	60	PA90/25/GL18-P
25	25	80	70	PA90/25/GL25-P
40	18	80	60	PA90/40/GL18-P
40	25	80	70	PA90/40/GL25-P
40	32	80	80	PA90/40/GL32-P



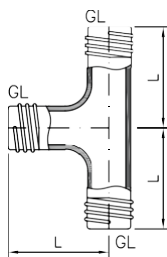
PF bellows glass-glass



Nominal size DN	Length L [mm]	Diameter d1 [mm]	Diameter d2 [mm]	Diameter n x d3 [mm]	Order no.
15	35 +/-5	23	80	50,3 x 7	CBG015-P
25	43 +/-5	34	105	70,3 x 9	CBG025-P
40	52 +/-5	48	125	86,3 x 9	CBG040-P
50	50 +/-6	61	140	98,3 x 9	CBG050-P

- Version for glass-to-metal connection on request

GL tees



Nominal size GL	Length L [mm]	Order no.
14	32	PTGL14
18	37	PTGL18
25	40	PTGL25
32	45	PTGL32

- GL tubes, GL elbows and other components on request

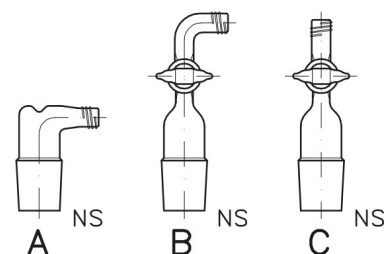


NS-ADAPTER



## Suction pieces with standard ground joint core

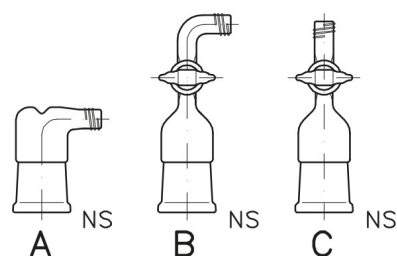
NS	Execution	Order no.
14/23	A	GSG 01080 01
29/23	A	GSG 01080 03
45/40	A	GSG 01080 04
14/23	B	GSG 01081 01
29/23	B	GSG 01081 03
45/40	B	GSG 01081 04
14/23	C	GSG 01085 01
29/32	C	GSG 01085 03
45/40	C	GSG 01085 04



- With GL14 glass thread as standard
- also available with Olive D 11 on request
- Version B + C have a standard tap with 3 mm hole

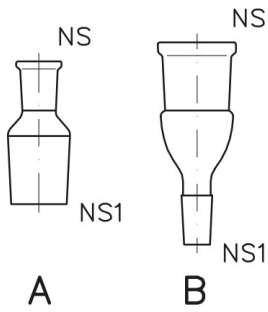
## Suction pieces with standard ground joint sleeve

NS	Execution	Order no.
14/23	A	GSG 01082 01
29/23	A	GSG 01082 03
45/40	A	GSG 01082 04
14/23	B	GSG 01083 01
29/23	B	GSG 01083 03
45/40	B	GSG 01083 04
14/23	C	GSG 01086 01
29/32	C	GSG 01086 03
45/40	C	GSG 01086 04



- With GL14 glass thread as standard
- also available with Olive D 11 on request
- Version B + C have a standard tap with 3 mm hole

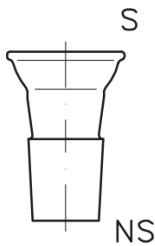
Transition pieces sleeve/core



NS	NS 1	Execution	Order no.
14/23	29/32	A	<a href="#">GSG 01016 02</a>
29/23	45/40	A	<a href="#">GSG 01016 04</a>
29/32	60/46	A	<a href="#">GSG 01016 05</a>
29/32	14/23	B	<a href="#">GSG 01017 02</a>
45/40	29/32	B	<a href="#">GSG 01017 04</a>
60/46	45/40	B	<a href="#">GSG 01017 05</a>

- Very short design to achieve a low overall height
- Spherical ground joint shells on the transition pieces are also available in millimetre versions

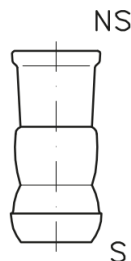
Transition pieces shell/core



S	NS	Order no.
19	14/23	<a href="#">GSG 07010D 01</a>
19	29/32	<a href="#">GSG 07010D 03</a>
35	29/32	<a href="#">GSG 07010D 04</a>
40	29/32	<a href="#">GSG 07010D 05</a>
51	29/32	<a href="#">GSG 07010D 06</a>
64	45/40	<a href="#">GSG 07010D 07</a>

- Very short design to achieve a low overall height
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Transition pieces sleeve/ball

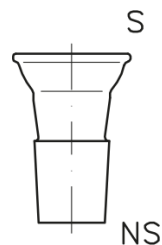


NS	S	Order no.
14/23	19	<a href="#">GSG 07016D 01</a>
29/32	35	<a href="#">GSG 07016D 03</a>
29/32	40	<a href="#">GSG 07016D 04</a>
29/32	51	<a href="#">GSG 07016D 05</a>
29/32	64	<a href="#">GSG 07016D 06</a>
45/40	64	<a href="#">GSG 07016D 07</a>

- Very short design to achieve a low overall height
- Spherical ground joint shells on the transition pieces are also available in millimetre versions

Transition pieces core/core

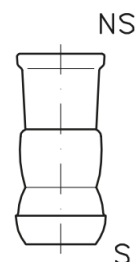
NSNS 1		Order no.
14/23	14/23	GSG 01015K 01
29/32	29/32	GSG 01015K 03
14/23	29/32	GSG 01015K 05



- Very short design to achieve a low overall height
- Spherical ground joint shells on the transition pieces are also available in millimetre versions

Transition pieces sleeve/sleeve

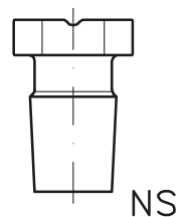
NSNS 1		Order no.
14/23	14/23	GSG 01015H 01
29/32	29/32	GSG 01015H 03
14/23	29/32	GSG 01015H 05



- Very short design to achieve a low overall height
- Spherical ground joint shells on the transition pieces are also available in millimetre versions

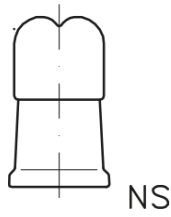
Taper ground hollow plug without grease groove

NS	Order no.
7/16	GSG 01014 01
10/19	GSG 01014 02
12/21	GSG 01014 03
14/23	GSG 01014 04
19/26	GSG 01014 06
29/32	GSG 01014 08
45/40	GSG 01014 09



- with flat base and safety groove

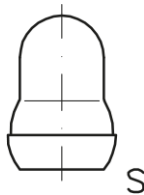
Closures with conical ground joint sleeve



NS	Order no.
14/23	GSG 01084 01
19/26	GSG 01084 02
29/32	GSG 01084 03
45/40	GSG 01084 04

- Caps have a safety groove

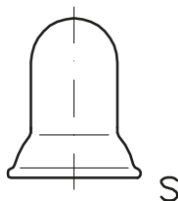
Clasps with spherical bead



S	Order no.
13	GSG 07033D 01
19	GSG 07033D 02
29	GSG 07033D 03
35	GSG 07033D 04
40	GSG 07033D 05
51	GSG 07033D 06
64	GSG 07033D 07

- All spherical beads also available in millimetre versions

Closures with spherical ground joint



S	Order no.
13	GSG 07034D 01
19	GSG 07034D 02
29	GSG 07034D 03
35	GSG 07034D 04
40	GSG 07034D 05
51	GSG 07034D 06
64	GSG 07034D 07

- All spherical beads also available in millimetre versions