



SCHUCK GROUP

SCHUCK SMU SLEEVE

Self-sealing connection element for gas pipelines.

Safe. High-quality. Reliable.

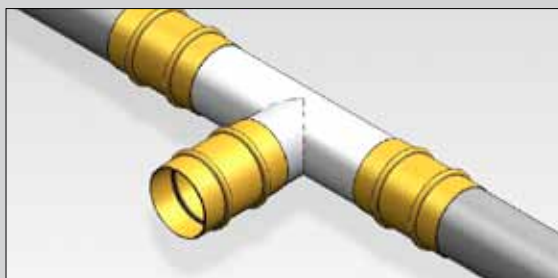


ORIGINAL

SCHUCK SMU SLEEVE

Self-sealing connection element for gas pipelines.

Safe. High-quality. Reliable.



APPLICATIONS

The SMU is used to connect gas pipelines up to a maximum pressure of 1 bar

For the operating medium gas (fluid group 1)

Pipeline pressure rating PN 16 to PN100

Nominal pipe width DN 25 to DN 400

Temperature range from -10° C to +50° C

Underground and aboveground installation

MANUFACTURING

In accordance with DVGW worksheet G463 > PN 16 or DIN 2470 part 1 ≤ PN 16

Acceptance in accordance with to EN 10204 3.1 / 3.2 from PN 40 DN 250

The Schuck sleeve has been TÜV-approved and procedure qualification has been obtained



PRODUCT FEATURES

- » Time and cost-savings
- » Elaborate bypasses are not needed
- » Significantly reduced risk of accidents
- » Safe alternative to cost-intensive flanging and interlinking
- » Rapid and simple connection of different diameters when repairing older pipes
- » Enabling rapid commissioning of the pipe network with reduced pressure



DESIGN

Screwless, self-sealing connection elements

Hot-rolled design

From PN 40 in the form of turned collar rings in accordance with AD Code of Practice W 13 with welded-in pipe sections

Sealing principle: Even at low internal pressures, the joint is automatically sealed by means of the rubber seal in the sealing chamber. The seal rings are not destroyed when properly welded (not automatic welding).

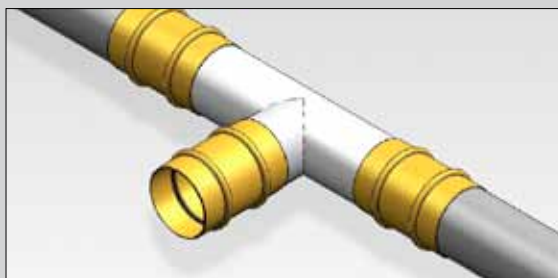
MATERIALS

In accordance with DIN EN 10305/1 and DIN EN 10305/2, EN 10216/2, DIN 1629, DIN 1626 and DIN 2391C or equivalent

Seal rings made of sponge rubber (EPDM) DIN 4060

SCHUCK SU SLEEVE

Sealing connection element for gas pipelines from DN 500.



APPLICATIONS

As in the case of the Schuck SMU sleeve, the Schuck SU sleeve is used to connect pipes. Unlike the SMU, the SU is not self-sealing and is only available for nominal widths of DN 500 or more.

For the operating medium gas (fluid group 1)

Pipeline pressure rating PN 16

Nominal pipe width DN 500 – DN 800

Temperature range from -10° C to +50° C

Underground and aboveground installation



MANUFACTURING

Acceptance in accordance with EN 10204 3.1

Without factory pressure test as standard

Anti-corrosion coating on the inside and unpainted black on the outside



PRODUCT FEATURES

- » Also for nominal widths of DN 500 or greater.
- » Available with weld-on collars on request
- » Elaborate bypasses are not needed
- » Significantly reduced risk of accidents
- » Enabling rapid commissioning of the pipeline network with reduced pressure



DESIGN

The Schuck SU sleeve is a sealing connection element in the form of turned collar rings in accordance with AD Code of Practice W 13, with intermediate welded-in pipe sections and special sealing rings inserted into the sealing chamber of the collar ring.

The seal is effected by tightening the Allen screws in the front of the collar ring. By adjusting the screws the profiled rubber seal is squashed by means of a metal collar so that a secure and controlled seal with the media pipe is achieved. After the seal has been completed the Allen screws are cut off flush with the collar ring.

Finally, the sleeve must be welded to the metal pipe. When welded correctly, the profiled rubber seal is not destroyed. In order to ensure the perfect weld and to achieve a meaningful test of the welded joint, we recommend the fitting of weld-on collars on both sides.

If necessary the air gap between the weld-on collars can be reduced to a minimum by flanging the weld-on collars.

MATERIALS

The SU is produced from S355J2G3.

SCHUCK SMU SLEEVE

SMU / SMU-R / SMU-1 / SMU-S / SMU-K / SMU-F / SU

Type overview and sample applications



TYP SMU

Push-on fitting on both sides, for pipes of equal dimensions

Nominal width: DN 25 – DN 400
Pressure rating: PN 16 – PN 100



TYP SMU-R

Reduced on one side for different pipe dimensions

Nominal width: DN 40 – DN 400
Pressure rating: PN 16 – PN 100



SMU-1

With one weld-on end for a fillet weld

Nominal width: DN 25 – DN 400
Pressure rating: PN 16



SMU-S

With one weld-on end for a v-weld

Nominal width: DN 80 – DN 400
Pressure rating: PN 16



TYP SMU-K

With sealing cap on one side

Nominal width: DN 25 – DN 400
Pressure rating: PN 16



SMU-F

Push-on sleeve on one side, flange connection on the other

Nominal width: DN 80 – DN 400
Pressure rating: PN 10 & PN 16





TYP SU

Push-on fitting on both sides, for pipes of equal dimensions

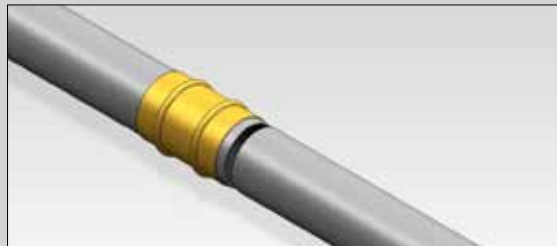
Nominal width: DN500 – DN 800

Pressure rating: PN 16



SCHUCK ÜBERSCHIEBER SMU

Anwendungsbeispiele



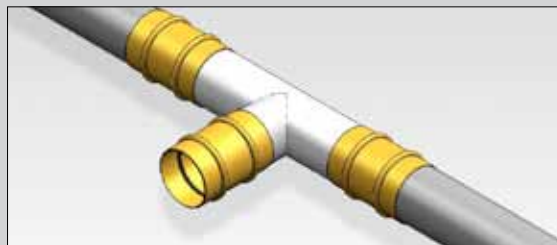
CONNECTING AND REDUCING

Pipes can easily be connected with the tried and tested Schuck sleeve. Alternatively, it is possible to connect and reduce at the same time with the Schuck SMU-R sleeve.



REPAIRS

Pipe repairs are easily carried out with the Schuck SMU sleeve. A new section of pipe and two sleeves are simply inserted and welded in place.



INTEGRATION OF A T-PIECE

The integration of a T-piece is also a simple task with Schuck sleeves. At least two SMUs are required (when integrating an additional valve) or three SMUs for a three-way pipe connection.



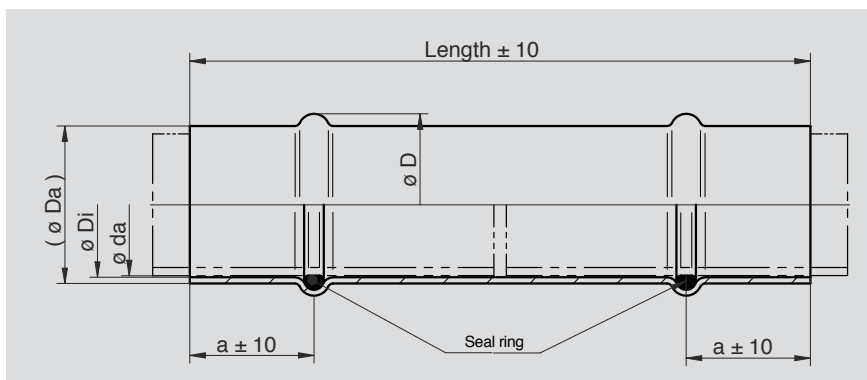
DECOMMISSIONING

Pipes can easily be decommissioned with Schuck SMU-K sleeves. The SMU-K is pushed onto the end of the pipe and welded in place.

SCHUCK SMU SLEEVE

DN 25 – DN 400 / PN 16

Push-on fitting on both sides, for pipes of equal dimensions



- DN nominal width
- PN nominal pressure
- da external diameter of existing pipe
- D external dimension of sealing chamber
- Da external diameter of sleeve
- Di internal diameter of sleeve
- a length from weld end to center

Schuck SMU sleeve / DN 25 – DN 400 / PN 16

PN	DN	ø da	ø D	ø Da	ø Di	a	Length	Acceptance	Part number	kg net
16	25	33,7	60,5	43,0	36,0	105	420	3.1	SMU03342001	1,60
16	32	42,4	78,0	51,6	44,6	105	420	3.1	SMU04242001	2,00
16	40	48,3	78,0	57,0	50,0	105	420	3.1	SMU04842001	2,00
16	50	57,0	90,0	66,0	59,0	105	420	3.1	SMU05742001	2,70
16	50	60,3	90,0	70,0	63,0	105	420	3.1	SMU06042001	2,70
16	65	70,0	103,5	82,0	72,0	105	420	3.1	SMU07042001	4,80
16	65	76,1	103,5	88,9	78,9	105	420	3.1	SMU07642001	4,80
16	80	88,9	120,0	101,6	91,6	100	500	3.1	SMU08850001	6,40
16	100	108,0	138,5	121,0	111,0	100	500	3.1	SMU10850001	7,50
16	100	114,3	145,0	127,0	117,0	100	500	3.1	SMU11450001	8,00
16	125	133,0	169,0	145,0	136,0	100	500	3.1	SMU13350001	8,50
16	125	139,7	169,0	152,4	143,4	100	500	3.1	SMU13950001	8,50
16	150	159,0	198,0	172,5	162,5	100	500	3.1	SMU15950001	10,60
16	150	168,3	207,0	182,5	172,5	100	500	3.1	SMU16850001	11,40
16	200	211,0	258,0	225,5	214,5	100	500	3.1	SMU21150000	16,00
16	200	214,0	258,0	228,5	217,5	100	500	3.1	SMU21450001	16,00
16	200	216,0	258,0	230,5	219,5	100	500	3.1	SMU21650001	16,00
16	200	219,1	258,0	233,5	222,5	100	500	3.1	SMU21950001	16,00
16	250	273,0	316,0	289,5	278,5	100	500	3.1	SMU27350001	19,50
16	300	318,0	369,0	336,0	323,0	100	500	3.1	SMU31850001	27,00
16	300	323,9	369,0	342,1	329,1	100	500	3.1	SMU32350001	27,00
16	400	406,4	451,0	423,6	411,0	100	500	3.1	SMU40650001	33,00
16	400	419,1	470,0	443,0	424,0	100	400	3.1	SMU41940001	60,00
16	400	426,0	475,0	450,0	431,0	100	400	3.1	SMU42640001	65,00

Manufactured in accordance with DIN 2470 part 1

Acceptance 3.1

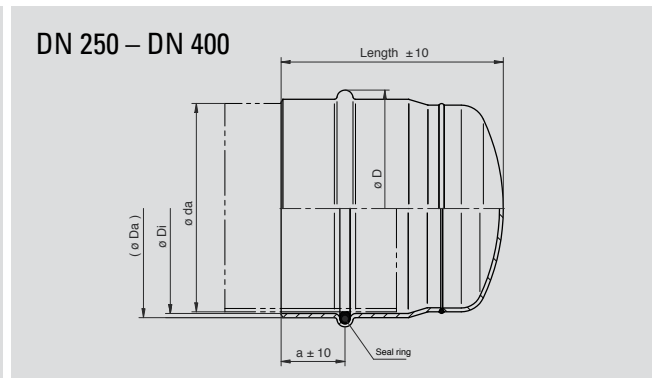
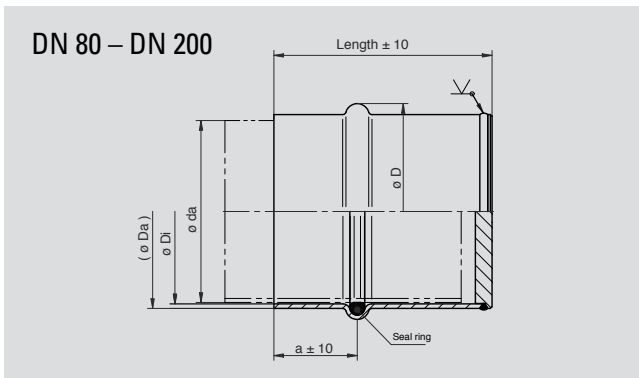
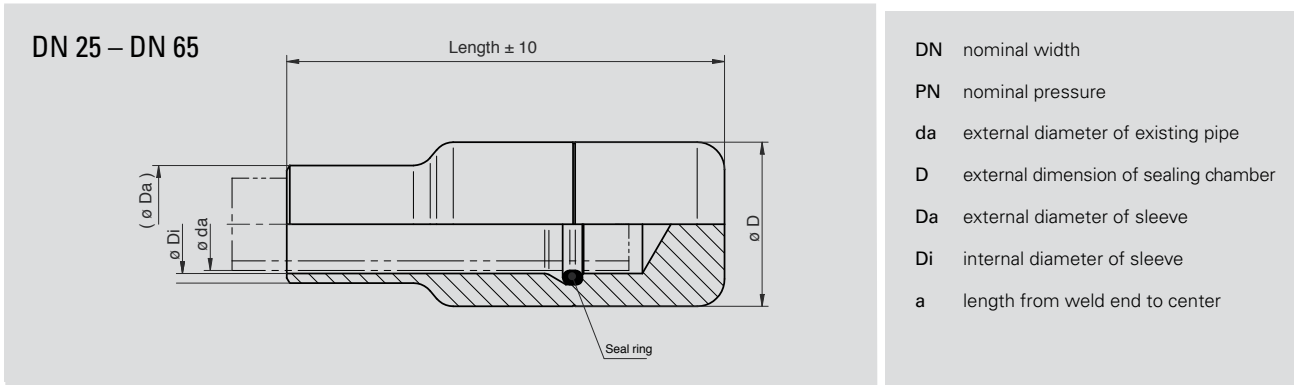
Special dimensions and special designs on request

Subject to change – dimensions with permissible variations

SCHUCK SMU-K SLEEVE

DN 25 – DN 400 / PN 16

With sealing cap on one side.



Schuck SMU-K sleeve / DN 25 – DN 400 / PN 16

PN	DN	ø da	ø D	ø Da	ø Di	a	Length	Part number	kg net
16	25	33,7	60	43,0	36,0	105	160	SMUK03316001	0,80
16	32	42,4	68	51,6	44,6	105	160	SMUK04216001	1,00
16	40	48,3	74	57,0	50,0	105	160	SMUK04816001	1,20
16	50	60,3	90	72,0	63,0	105	160	SMUK06016001	1,30
16	65	76,1	106	88,5	78,5	105	160	SMUK07616001	1,60
16	80	88,9	120,0	101,6	91,6	100	260	SMUK08829501	2,40
16	100	108,0	138,5	121	111,0	100	260	SMUK10826001	5,50
16	100	114,3	145,0	127	117,0	100	260	SMUK11430001	5,80
16	125	133,0	169,0	145	136,0	100	260	SMUK13327701	7,00
16	125	139,7	169,0	152,4	143,4	100	260	SMUK13930001	7,00
16	150	159,0	198,0	172,5	162,5	100	265	SMUK15931001	9,00
16	150	168,3	207,0	182,5	172,5	100	265	SMUK16831001	9,70
16	200	219,1	258,0	233,5	222,5	100	265	SMUK21932001	14,00
16	250	273,0	316	289,5	278,5	100	330	SMUK27333001	14,00
16	300	323,9	369	342,0	329,0	100	350	SMUK32335001	21,00
16	400	406,4	451	423,6	411,0	100	350	SMUK40635001	27,00

Manufactured in accordance with DIN 2470 part 1 / Acceptance 3.1

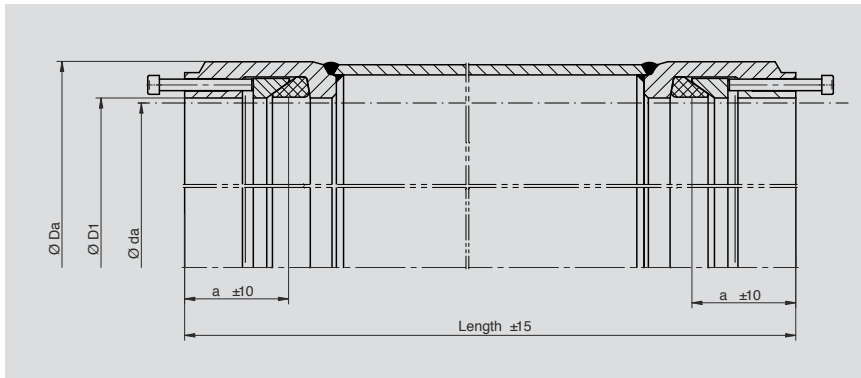
Special dimensions and special designs on request

Subject to change – dimensions with permissible variations

SCHUCK SU SLEEVE

DN 500 – DN 800 / PN 16

Push-on fitting on both sides, for pipes of equal dimensions



- DN nominal width
- PN nominal pressure
- da external diameter of existing pipe
- Da external diameter of sleeve
- Di internal diameter of sleeve
- a length from weld end to center

Schuck SU sleeve / DN 500 – DN 800 / PN 16

PN	DN	ø da	ø Da	ø Di	a	Length	Material	Part number	kg net
16	500	508	559	512	70	500	S355J2G3	SU50001600	80
16	600	609,6	664	610	70	500	S355J2G3	SU60001601	93
16	700	711	763	716	70	500	S355J2G3	SU70001601	120
16	800	813	875	820	75	600	S355J2G3	SU80001600	170

Weld-on collars for Schuck SU sleeve / DN 500 – DN 800 / PN 16

Weld-on collars can also be used for each Schuck SU sleeve (two needed for each SU)!

PN	DN	ø da	Length	Material	Part number	kg net
16	500	für 508	500	S355J2G3	SU50001650	12
16	600	für 609,6	500	S355J2G3	SU60001650	16
16	700	für 711	500	S355J2G3	SU70001650	22
16	800	für 813	600	S355J2G3	SU80001650	26

Manufactured in accordance with DIN2470 T.1
 Acceptance 3.1
 Special dimensions and special designs on request
 Subject to change – dimensions with permissible variations

SCHUCK SBS shrink-fit kit system

SMU / DN 50 – DN 400

SMU-R / DN 50 – DN 400

DON'T FORGET
TO ORDER
THESE!

Schuck SBS shrink-fit kit system

DN	To fit	Part number
60/65	SMU / SMU-R sleeves	SB S00006
80/100	SMU / SMU-R sleeves	SBS00003
100	SMU sleeve, divided design / SMU-R sleeve, divided design	SBS00007
125	SMU / SMU-R sleeves	SBS00010
150	SMU / SMU-R sleeves	SBS00004
200	SMU / SMU-R sleeves	SBS00005
300	SMU / SMU-R sleeves	SBS00008
250	SMU / SMU-R sleeves	SBS00009
400	SMU / SMU-R sleeves	SBS00011



DESCRIPTION

After the Schuck SMU sleeve has been fitted, not only must the sleeve itself be protected against corrosion, but a lengthy section of the old and new pipes as well.

With the Schuck shrink-fit kit system, this can be achieved simply, tidily and quickly. Depending on the pipe dimensions, the kits are comprised of either expanding shrink-fit hoses or split shrink-fit sleeve.

The shrink fit products are tested in accordance with DIN/EN 12068, class C, and DVGW approved.

DIMENSIONS

DN 80+100

Ready-to-mount kit, consisting of two closed shrink-fit hoses, each 750 mm long.

From DN 100

Ready-to-mount kit, consisting of two shrink-fit sleeve, one 650 mm and one 900 mm long.

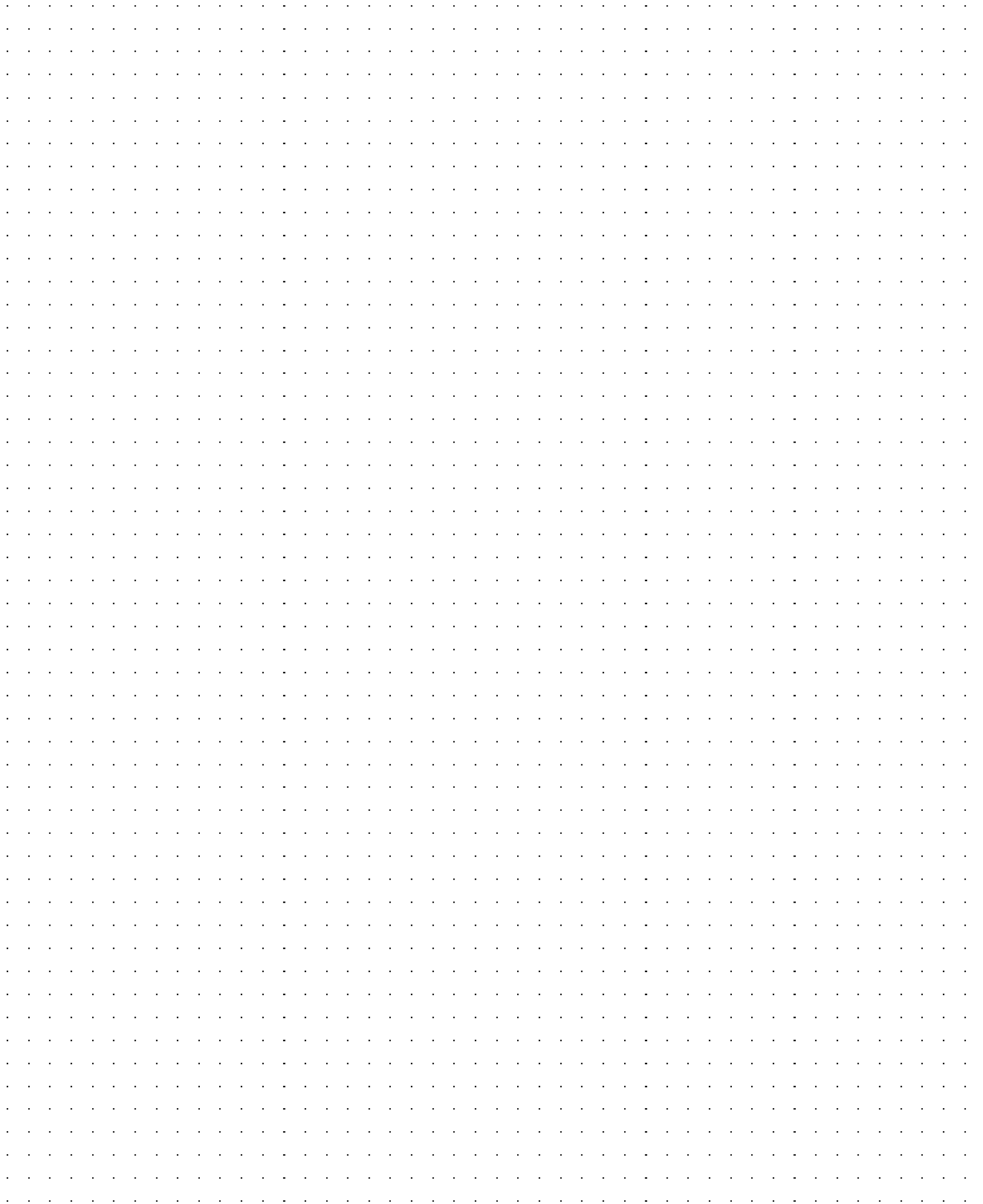
PRODUCT FEATURES

- » Considerably faster and easier installation compared with conventional systems
- » No priming necessary
- » No adhesive filler required at the edges
- » The shrink-fit kits are tailored to the pipe diameter, individually packed and labeled
- » The variations in the length to be sheathed are compensated for by the overlap range, as the kit system is made up of two sections
- » The variations in diameter are effortlessly bridged with this shrink-fit technology
- » Different pipe diameters are no problem (DIN with ISO pipes), nor are one-sided pipe reductions

SCHUCK FREE SPACE

Room for your notes







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We manufacture and distribute components for connecting pipeline systems in more than 50 countries, with 7 international offices and over 35 years of experience.

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