



Sealing Inserts

+ White Tank Solutions

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+ Black Tank Solutions

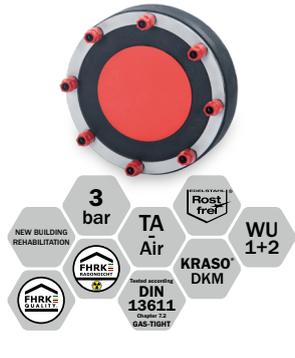
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KRASO® Sealing Inserts Simply just better

- + For core drillings or casings
- + **KRASO® Sealing Insert quality:** 5 mm thick clamping plates made of non-corrosive stainless steel V2A, a specially developed rubber mixture with even better sealing characteristics, welded-on studs instead of through bolts, more studs for even pressure distribution.
- + **Torque Control Nut KRASO® DKM:** integrated torque limiter - no torque wrench required!
- + Tested gas-tight according to DIN EN 13611 (chapter 7.2) proven by the DVGW research centre at the Engler-Bunte-Institute (EBI) of the Institute for Technology in Karlsruhe!
- + MPA-tested: protects reliably against pressing water up to 10 bar!
- + Gas- and odour-tight – high-quality in terms of TA-Air!
- + Radon tightness IAF tested - meets the requirements for radon precautionary areas according to FHRK leaflet MB 101
- + Certified with the quality seal of the FHRK e. V.
- + **KRASO® Sealing Insert Configurator** – simple and fast: configure the matching sealing insert online or via our app!

**KRASO® Sealing Insert
Universal DD**



**KRASO® Sealing Insert
Type ED + DD + VD**



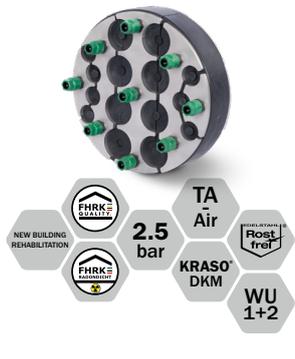
**KRASO® Sealing Insert
Type Blind ED + DD + VD**



**KRASO® Sealing Insert
Type GR**



**KRASO® Sealing Insert
Universal Multiple
- split -**



**KRASO® Sealing Insert
Type SD**



**KRASO® Sealing Insert
Type TD-X**



- + Total control over torque and contact pressure!
- + Audible and tactile signal indicates the ideal torque!
- + Installation has never been so easy: no torque wrench required!
- + Can be loosened and retightened with automatic torque limitation!
- + Over-twisting and fretting: impossible!



KRASO® Sealing Insert Universal DD
Check the installation video
(Just scan the QR code!)



KRASO® Sealing Insert Universal DD

Simple, tight, universal use

- + For core drillings or casings
- + Onion ring technology: universal use for various external diameters of media pipes or cables!
- + **KRASO® Sealing Insert quality:** non-corrosive stainless steel V2A, high quality 40 mm rubber seal, welded-on studs instead of through bolts
- + **Torque Control Nut KRASO® DKM:** integrated torque limiter - no torque wrench required!
- + MPA-tested: protects reliably against pressing water up to 3 bar!
- + Gas- and odour-tight – high-quality in terms of TA-Air!
- + Radon tightness IAF tested - meets the requirements for radon precautionary areas according to FHRK leaflet MB 101!
- + Certified with the quality seal of the FHRK e. V.
- + DafStB waterproof concrete guideline: stress class 1 + 2



Universal 80 DD



Universal 100 DD



Universal 100 DD/T



Universal 110 DD



Universal 110 DD/T



Universal 150 DD



Universal 150 DD/T



Universal 160 DD/T



Universal 200 DD



Universal 200 DD/T



Universal 250 DD



Universal 250 DD/T



KRASO® Sealing Insert Universal DD **LG 1**

for installation of cables or pipes, double sealing against pressing water up to 3 bar. Can also be used as blind plug until later installation of cables or pipes (except **KRASO® Universal 250 DD** and **Universal 250 DD/T**) | **DafStB waterproof concrete guideline: stress class 1 + 2**

Item	KRASO® Universal DD					
Core drilling / casing in mm	Universal 80 DD	Universal 100 DD	Universal 100 DD/T <small>(split design for retrofit installation)</small>	Universal 110 DD	Universal 110 DD/T <small>(split design for retrofit installation)</small>	Universal 150 DD
A sealing insert for all pipes or cables listed in the table on the right (in mm)	stepless onion ring technology: 18 - 43 mm or blind	stepless onion ring technology: 18 - 65 mm or blind	stepless onion ring technology: 18 - 65 mm or blind	stepless onion ring technology: 18 - 75 mm or blind	stepless onion ring technology: 18 - 75 mm or blind	110 DN 110 KG pipe, DN 110 SML pipe 90 DN 80 steel pipe, PE pipe 75 DN 70 HT pipe blind
KRASO® Universal DD	52 €	56 €	62 €	61 €	67 €	84 €

Item	KRASO® Universal DD					
Core drilling / casing in mm	Universal 150 DD/T <small>(split design for retrofit installation)</small>	Universal 160 DD/T <small>(split design for retrofit installation)</small>	Universal 200 DD	Universal 200 DD/T <small>(split design for retrofit installation)</small>	Universal 250 DD	Universal 250 DD/T <small>(split design for retrofit installation)</small>
A sealing insert for all pipes or cables listed in the table on the right (in mm)	stepless onion ring technology: 75 - 110 mm or blind	stepless onion ring technology: 75 - 110 mm or blind	160 DN 160 KG pipe, DN 160 SML pipe 135 DN 125 SML pipe 125 DN 125 KG pipe 110 DN 110 KG pipe, DN 110 SML pipe blind	stepless onion ring technology: 110 - 160 mm or blind	210 DN 200 SML pipe 200 DN 200 KG pipe, DN 200 KG 2000 180 DN 170 PE pipe 170 steel/cast pipe 160 DN 160 KG pipe, DN 160 SML pipe	210 DN 200 SML pipe 200 DN 200 KG pipe, DN 200 KG 2000 180 DN 170 PE pipe 170 steel/cast pipe 160 DN 160 KG pipe, DN 160 SML pipe
KRASO® Universal DD	96 €	106 €	113 €	124 €	144 €	158 €



KRASO® Sealing Insert Universal 150 K - split - **LG 1**

for installation of cables or pipes, split design for retrofit installation, stepless onion ring technology for diameters from 12 - 75 mm, double sealing against pressing water up to 3 bar, can also be used as blind plug until later installation of cables or pipes | **DafStB waterproof concrete guideline: stress class 1 + 2**

Item	KRASO® Universal 150 K - split -
Core drilling / casing in mm	150
A sealing insert for all pipes or cables listed in the table on the right (in mm)	1 x 12 - 75 mm or blind
KRASO® Universal 150 K - split -	123 €



KRASO® Sealing Insert Universal DD/M **LG 1**

for simultaneous installation of up to 5 cables or pipes, double sealing against pressing water up to 3 bar, **Torque Control Nut KRASO® DKM**, non-corrosive stainless steel V2A, 40 mm seal. Can also be used as blind plug until later installation of pipes or cables | **DafStB waterproof concrete guideline: stress class 1 + 2**

Item	KRASO® Universal DD/M
Core drilling / casing in mm	100
A sealing insert for all pipes or cables listed in the table on the right (in mm)	1 x 8 - 10 mm or blind 1 x 11 - 13 mm or blind 1 x 14 - 16 mm or blind 1 x 17 - 19 mm or blind and 1 x stepless onion ring technology: 20 - 35 mm or blind
KRASO® Universal DD/M	72 €



KRASO® Sealing Insert
 Type ED + DD + VD
 Check the installation video
 (Just scan the QR code!)



KRASO® Type DD



KRASO® Sealing Insert Type ED + DD + VD LG1

for installation of pipes, Torque Control Nut **KRASO® DKM**, non-corrosive stainless steel V2A, single sealing, against pressing water up to 1 bar, 20 mm seal (**KRASO® Type ED, KRASO® Type ED/T**), double sealing, against pressing water up to 3 bar, 40 mm seal (**KRASO® Type DD, KRASO® Type DD/T**), quadruple sealing, against pressing water up to 8 bar, 80 mm seal (**KRASO® Type VD**) | DafStB waterproof concrete guideline: stress class 1 + 2

Item	KRASO® Type ED • KRASO® Type DD • KRASO® Type VD • KRASO® Type ED - split - • KRASO® Type DD - split -									
Core drilling / casing in mm (from - to)	80 (79 - 83)	100 (99 - 103)	125 (124 - 128)	150 (149 - 153)	200 (198 - 203)	250 (248 - 253)	300 (298 - 303)	350 (348 - 353)	400 (398 - 403)	500 (497 - 503)
Media line (from - to)	25 (20 - 26)	32 (29 - 35)	63 (58 - 64)	75 (70 - 76)	110 (105 - 111)	160 (156 - 162)	200 (196 - 202)	200 (196 - 202)	273 (269 - 275)	400 (397 - 402)
	32 (29 - 35)	43 (38 - 44)	75 (72 - 78)	80 (75 - 81)	114 (113 - 119)	170 (165 - 171)	210 (206 - 212)	210 (206 - 212)	280 (276 - 282)	429 (426 - 431)
	43 (38 - 44)	50 (45 - 51)	80 (75 - 81)	90 (85 - 91)	125 (120 - 126)	180 (176 - 182)	219 (215 - 221)	219 (215 - 221)	315 (311 - 317)	450 (447 - 452)
		63 (58 - 64)		110 (105 - 111)	135 (130 - 136)	200 (196 - 202)	225 (221 - 227)	225 (221 - 227)	326 (322 - 328)	
					140 (135 - 141)	210 (206 - 212)	250 (246 - 252)	250 (246 - 252)		
					160 (155 - 161)			273 (269 - 275)		
								280 (276 - 282)		
KRASO® Type ED (20 mm)	51 €	56 €	69 €	77 €	106 €	125 €	164 €	178 €	192 €	276 €
KRASO® Type ED/T (20 mm - split design for retrofit installation)	59 €	64 €	79 €	89 €	122 €	144 €	189 €	205 €	221 €	317 €
KRASO® Type DD (40 mm)	61 €	70 €	86 €	102 €	128 €	149 €	216 €	257 €	298 €	374 €
KRASO® Type DD/T (40 mm - split design for retrofit installation)	70 €	81 €	99 €	117 €	147 €	171 €	248 €	296 €	343 €	430 €
KRASO® Type VD (80 mm)	76 €	88 €	108 €	128 €	160 €	186 €	270 €	321 €	373 €	468 €

Other diameters available as special sealing insert! All sealing inserts available in V4A for an additional charge!

Usually ready for
dispatch
within 24 hours!



KRASO® Sealing Insert Type SD
Check the installation video
(Just scan the QR code!)



KRASO® Type SD 60 - T split



KRASO® Sealing Insert Type SD

The solution for special situations

- + For core drillings and casings
- + Individual and custom-made solution: with large flange or split!
- + MPA-tested: protects reliably against pressing water up to 2.5 bar / 5 bar!
- + Gas- and odour-tight – high-quality in terms of TA-Air!
- + Radon tightness IAF tested - meets the requirements for radon precautionary areas according to FHRK leaflet MB 101!
- + Certified with the quality seal of the FHRK e. V.
- + With arrangement template: see the arrangement at a glance!
- + Generally available within 24 hours!
- + Available at an additional charge: stainless steel V4A / KTW-recommendation / NBR - oil- and petrol-resistant / temperature resistant up to 220 °C
- + DafStB waterproof concrete guideline: stress class 1 + 2

KRASO® Sealing Insert Type SD 30 • KRASO® Sealing Insert Type SD 60 **LG1**

for installation of pipes or cables, Torque Control Nut KRASO® DKM* | DafStB waterproof concrete guideline: stress class 1 + 2

Core drilling / casing in mm (from - to)	50 (49 - 52)	60 (59 - 62)	70 (69 - 72)	80 (79 - 83)	100 (99 - 103)	125 (124 - 128)	150 (149 - 153)	200 (198 - 203)	250 (248 - 253)	300 (298 - 303)	350 (348 - 353)	400 (398 - 403)	450 (448 - 453)	500 (497 - 503)
max. external diameter pipe or cable														
from	0	0	0	0	0	0	0	0	0	0	0	0	0	0
to	25	35	45	55	75	100	125	175	225	275	325	375	425	475
KRASO® Type SD 30														
KRASO® Type SD 30	100 €	100 €	100 €	108 €	108 €	137 €	156 €	202 €	272 €	348 €	417 €	478 €	563 €	627 €
KRASO® Type SD 30 - T	115 €	115 €	115 €	124 €	124 €	158 €	179 €	233 €	312 €	399 €	480 €	549 €	648 €	720 €
KRASO® Type SD 30 - GF	110 €	110 €	110 €	118 €	118 €	152 €	171 €	222 €	299 €	381 €	459 €	525 €	619 €	689 €
KRASO® Type SD 60														
KRASO® Type SD 60	134 €	144 €	144 €	144 €	154 €	189 €	222 €	286 €	372 €	487 €	566 €	631 €	746 €	873 €
KRASO® Type SD 60 - T	155 €	165 €	165 €	165 €	177 €	217 €	255 €	329 €	426 €	561 €	652 €	725 €	858 €	1,004 €
KRASO® Type SD 60 - GF	147 €	158 €	158 €	158 €	169 €	209 €	243 €	315 €	409 €	536 €	623 €	694 €	820 €	960 €
Surcharge: additional drilling	up to 5 drillings each additional drilling 18 €, each further additional drilling 11.50 €													

* In some cases, allen screws must be used due to the design.

All sizes and diameters available on request!



KRASO® Sealing Insert Universal Multiple - split - 100
Design 1



KRASO® Sealing Insert Universal Multiple - split - 100
Design 2



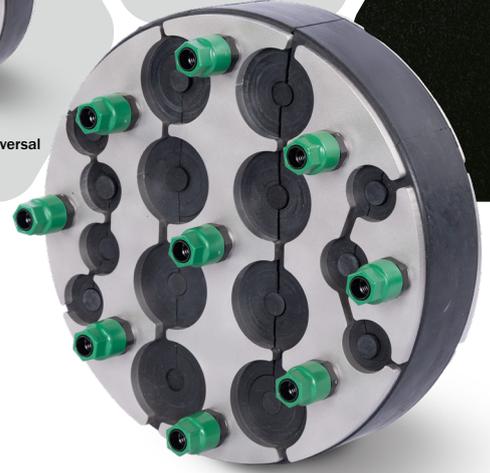
KRASO® Sealing Insert Universal Multiple - split - 100
Design 3



KRASO® Sealing Insert Universal Multiple - split - 150
Design 2



KRASO® Sealing Insert Universal Multiple - split - 150
Design 1



KRASO® Sealing Insert Universal Multiple - split - 200
Design 2

Stepless onion ring technology!



KRASO® Sealing Insert Universal Multiple - split - Universally usable – multiply flexible

- + For core drillings and casings
- + Stepless onion ring technology: universally usable for various external diameters of media lines/cables - also for multiple installation! Split design for retrofit installation!
- + **KRASO® Sealing Insert quality:** 5 mm thick clamping plates made of non-corrosive stainless steel V2A, 40 mm seal made of specially developed rubber mixture, welded-on studs instead of through bolts
- + **Torque Control Nut KRASO® DKM:** integrated torque limiter - no torque wrench required!
- + MPA-tested: protects reliably against pressing water up to 2.5 bar!
- + Gas- and odour-tight – high-quality in terms of TA-Air!
- + Radon tightness IAF tested - meets the requirements for radon precautionary areas according to FHRK leaflet MB 101!
- + Certified with the quality seal of the FHRK e. V.
- + DafStB waterproof concrete guideline: stress class 1 + 2

KRASO® Sealing Insert Universal Multiple - split - LG 1

for the installation of several media lines/cables, split design for retrofit installation | DafStB waterproof concrete guideline: stress class 1 + 2

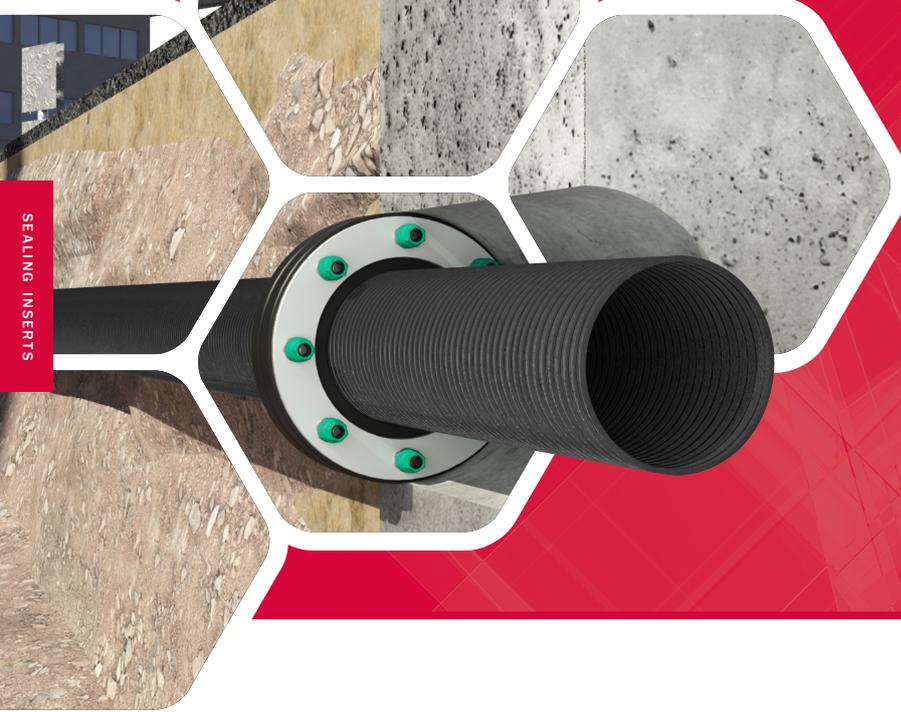
Item	KRASO® Sealing Insert Universal Multiple - split -			
	100	125	150	200
Core drilling / casing in mm	100	125	150	200
	stepless onion ring technology: external cable diameter from ... to ... in mm			
Design 1	4 x 6 - 33 mm or blind	6 x 6 - 28 mm or blind	3 x 6 - 52 mm or blind	3 x 6 - 28 mm or blind 4 x 6 - 52 mm or blind
Design 2	3 x 6 - 18 mm or blind 2 x 6 - 33 mm or blind	-	4 x 6 - 18 mm or blind 6 x 6 - 33 mm or blind	7 x 6 - 18 mm or blind 8 x 6 - 33 mm or blind
Design 3	8 x 6 - 18 mm or blind	-	6 x 6 - 38 mm or blind	-
KRASO® Sealing Insert Universal Multiple - split -	107 €	115 €	162 €	251 €

Further arrangements available at short notice!



KRASO® Sealing Insert Type GR
Check the installation video
(Just scan the QR code!)

Specially for
ribbed media pipes



KRASO® Sealing Insert Type GR

The sealing insert for ribbed media pipes

- + For core drillings and casings
- + For corrugated and ribbed pipes!
- + With a specially developed soft rubber seal – double sealing with 40 mm seal or quadruple sealing with 80 mm seal – and central pressure disk for even pressure distribution
- + **KRASO® Sealing Insert quality:** 5 mm thick clamping plates made of non-corrosive stainless steel V2A, more studs for even pressure distribution, welded-on studs instead of through bolts
- + **Torque Control Nut KRASO® DKM:** integrated torque limiter - no torque wrench required!
- + MPA-tested: protects reliably against pressing water up to 1 bar / 2 bar!
- + Gas- and odour-tight – high-quality in terms of TA-Air
- + Radon tightness IAF tested - meets the requirements for radon precautionary areas according to FHRK leaflet MB 101
- + Certified with the quality seal of the FHRK e. V.
- + DafStB waterproof concrete guideline: stress class 1 + 2



KRASO® Type DD/GR
ribbed media pipes



KRASO® Type VD/GR
ribbed media pipes

KRASO® Sealing Insert Type GR **LG 1**

for installation of ripped or corrugated media pipes | DafStB waterproof concrete guideline: stress class 1 + 2

Item	KRASO® Type DD/GR • KRASO® Type VD/GR								
	100 (99 - 103)	125 (124 - 128)	150 (149 - 153)	200 (198 - 203)	250 (248 - 253)	300 (298 - 303)	350 (348 - 353)	400 (398 - 403)	500 (497 - 503)
Core drilling / casing in mm (from - to)									
max. external diameter pipe or cable from ... to ... in mm	0 - 75	0 - 100	0 - 125	0 - 175	0 - 225 ¹	0 - 275 ¹	0 - 325 ¹	0 - 375 ¹	0 - 475 ¹
KRASO® Type DD/GR (40 mm)	123 €	151 €	178 €	224 €	260 €	378 €	449 €	521 €	655 €
KRASO® Type VD/GR (80 mm)	155 €	189 €	224 €	281 €	326 €	474 €	558 €	647 €	814 €

¹ From 200 mm external diameter of pipe or cable: KRASO® Sealing Insert Type DD/GR with 60 mm seal

Further sizes and diameters available on request! All sealing inserts available in V4A for an additional charge!

Inner seal for ribbed media pipes



KRASO® Sealing Insert Type IN-GR® - split - Inner seal for ribbed media pipes

- + Sealing insert for the internal sealing of one or several media lines in cable protective hoses Type-R
- + Stepless onion ring technology: universally suitable for a wide range of external diameters of media lines/ cables – even for multiple installation! Split design for retrofit installation!
- + **Torque Control Nut KRASO® DKM**: integrated torque limiter - no torque wrench required!
- + Certified with the quality seal of the FHRK e. V.
- + Non-corrosive stainless steel V2A, 30 mm seal
- + DafStB waterproof concrete guideline: stress class 1 + 2

Stepless onion ring technology!
Example
KRASO® Sealing Insert Type IN-GR® DN 110 - split -
1 x 5 - 18 mm, 1 x 5 - 38 mm

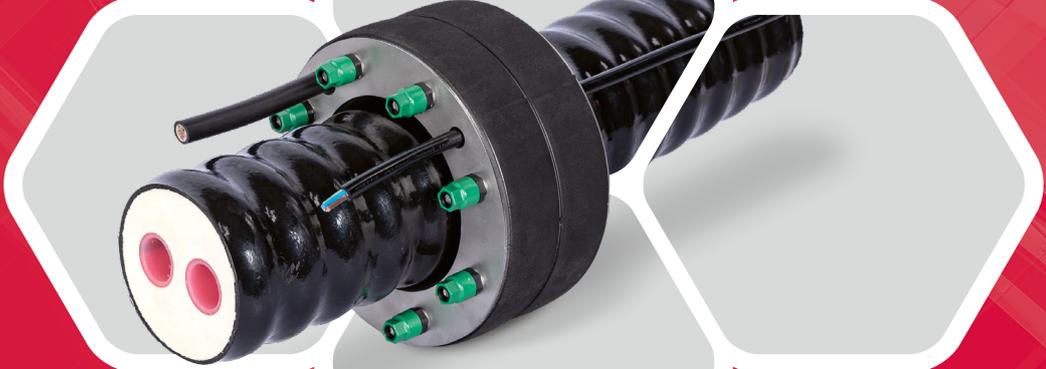


KRASO® Sealing Insert Type IN-GR® - split **LG 1**

inner seal for cable protective hoses Type-R/corrugated pipes for the installation of one or several media lines or cables | **DafStB waterproof concrete guideline: stress class 1 + 2**

Item	KRASO® Type IN-GR® - split -						
Corrugated pipe diameter DN in mm (internal diameter in mm)	90 (75)	110 (92)	110 (92)	110 (92)	160 (136)	160 (136)	160 (136)
Stepless onion ring technology: external diameter cable from ... to ... in mm	1 x 5 - 33 mm or blind	1 x 5 - 48 mm or blind	1 x 5 - 18 mm 1 x 5 - 38 mm or blind	4 x 5 - 18 mm or blind	3 x 5 - 43 mm or blind	4 x 5 - 38 mm or blind	6 x 5 - 33 mm or blind
KRASO® Type IN-GR® - split -	89 €	95 €	118 €	118 €	145 €	145 €	145 €

Further sizes and diameters available on request! All sealing inserts available in V4A for an additional charge!



Example:
KRASO® Type VD/FW
with optional additional drillings
for electricity and control cables



NEW BUILDING REHABILITATION

5 bar

TA Air

ROSTFREI

KRASO® DKM

KRASO® Sealing Insert Type VD/FW

Effective sealing for district heating connections

- + For core drillings and casings
- + For the sealing of local and district heating connections in the wall
- + For insulated district heating lines: smooth, corrugated or ribbed
- + Extra soft rubber seal: shore hardness 40 A
- + 80 mm seal width (2 x 40 mm): against pressing water up to 5 bar!
- + **KRASO® Sealing Insert quality:** 5 mm thick clamping plates made of non-corrosive stainless steel V2A, more studs for even pressure distribution, welded-on studs instead of through bolts
- + **Torque Control Nut KRASO® DKM:** integrated torque limiter - no torque wrench required!
- + Optional: additional drillings for cables
- + DafStB waterproof concrete guideline: stress class 1 + 2

KRASO® Sealing Insert Type VD/FW **LG1**

for the installation of local and district heating lines and additional control cables (optional) | DafStB waterproof concrete guideline: stress class 1 + 2

Item	KRASO® Type VD/FW			
Core drilling / casing in mm	150	200	250	300
max. external diameter pipe or cable from ... to ... in mm	0 - 125	0 - 175	0 - 225	0 - 275
KRASO® Type VD/FW	224 €	281 €	326 €	474 €
Surcharge: additional drillings for cable	each drilling 27 €			

Further sizes and diameters available on request! All sealing inserts available in V4A for an additional charge!



10 bar!
For special tasks!



KRASO® Sealing Insert Type TD-X

The trio seal of a superior class

- + For core drillings or casings
- + 20% thicker steel plates made of non-corrosive stainless steel V2A!
- + Triple sealing with 60 mm seal made of specially developed sealing rubber!
- + Two circular pressure discs guarantee optimal pressure distribution!
- + More studs for even pressure distribution, welded-on studs instead of through bolts!
- + **Torque Control Nut KRASO® DKM**: integrated torque limiter - no torque wrench required!
- + MPA-tested: protects reliably against pressing water up to 10 bar!
- + Gas- and odour-tight – high-quality in terms of TA-Air!
- + Radon tightness IAF tested - meets the requirements for radon precautionary areas according to FHRK leaflet MB 101!
- + Certified with the quality seal of the FHRK e. V.
- + DafStB waterproof concrete guideline: stress class 1 + 2

KRASO® Sealing Insert Type TD-X **LG 1**

for installation of pipes, Torque Control Nut **KRASO® DKM*** | DafStB waterproof concrete guideline: stress class 1 + 2

Item	KRASO® Type TD-X									
Core drilling / casing in mm	80	100	125	150	200	250	300	350	400	500
(from - to)	(79 - 83)	(99 - 103)	(124 - 128)	(149 - 153)	(198 - 203)	(248 - 253)	(298 - 303)	(348 - 353)	(398 - 403)	(497 - 503)
max. external diameter pipe or cable from ... to ... in mm	0 - 55	0 - 75	0 - 100	0 - 125	0 - 175	0 - 225	0 - 275	0 - 325	0 - 375	0 - 475
KRASO® Type TD-X	127 €	143 €	167 €	200 €	264 €	318 €	469 €	589 €	709 €	1,004 €

* In some cases, allen screws must be used due to the design

All sizes and diameters available on request! All sealing inserts available in V4A for an additional charge!



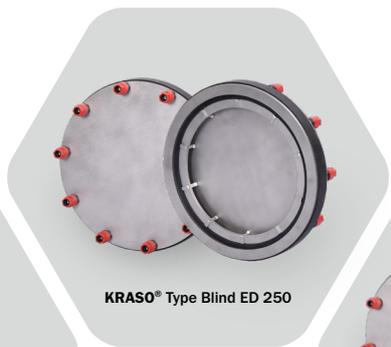
KRASO® Sealing Insert Type FIX **LG 1**

for installation of pipes, with mounting bracket for fixing to the wall, Torque Control Nut **KRASO® DKM***, non-corrosive stainless steel V2A, single sealing, against pressing water up to 1 bar, 20 mm seal (**KRASO® Type ED/FIX**), double sealing, against pressing water up to 3 bar, 40 mm seal (**KRASO® Type DD/FIX**) | DafStB waterproof concrete guideline: stress class 1 + 2

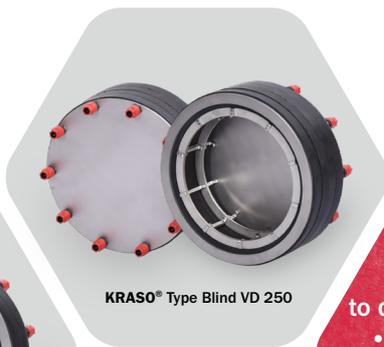
Item	KRASO® Type ED/FIX • KRASO® Type DD/FIX									
	80	100	125	150	200	250	300	350	400	500
Core drilling / casing in mm (from - to)	80 (79 - 83)	100 (99 - 103)	125 (124 - 128)	150 (149 - 153)	200 (198 - 203)	250 (248 - 253)	300 (298 - 303)	350 (348 - 353)	400 (398 - 403)	500 (497 - 503)
max. external diameter pipe or cable from ... to ... in mm	0 - 55	0 - 75	0 - 100	0 - 125	0 - 175	0 - 225	0 - 275	0 - 325	0 - 375	0 - 475
KRASO® Type ED/FIX	64 €	70 €	84 €	100 €	131 €	160 €	234 €	294 €	354 €	503 €
KRASO® Type DD/FIX	96 €	108 €	126 €	150 €	198 €	239 €	351 €	442 €	533 €	754 €

* In some cases, allen screws must be used due to the design

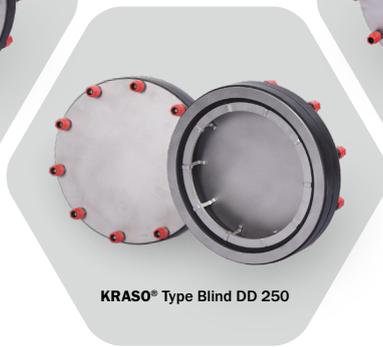
All sizes and diameters available on request! All sealing inserts available in V4A for an additional charge!



KRASO® Type Blind ED 250



KRASO® Type Blind VD 250



KRASO® Type Blind DD 250

With inner core to distribute the pressure:
 • lower installation weight
 • easy installation
 • perfect pressure distribution



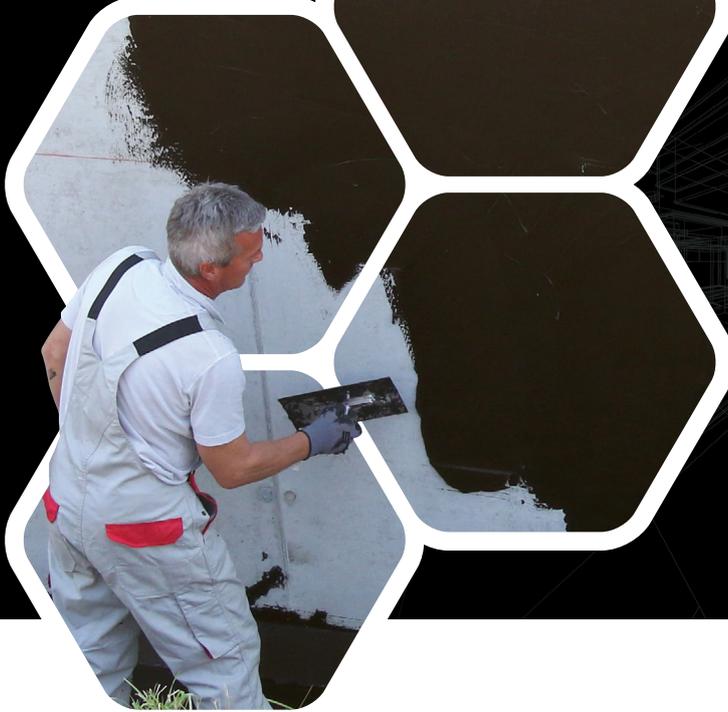
KRASO® Type Blind ED KRASO® Type Blind DD KRASO® Type Blind VD

KRASO® Sealing Insert Type Blind ED + DD + VD **LG 1**

blind plug, for pressing water, Torque Control Nut **KRASO® DKM**, non-corrosive stainless steel V2A, single sealing, against pressing water up to 1 bar, 20 mm seal (**KRASO® Type Blind ED**), double sealing, against pressing water up to 3 bar, 40 mm seal (**KRASO® Type Blind DD**), quadruple sealing, against pressing water up to 8 bar, 80 mm seal (**KRASO® Type Blind VD**), from DN 250 with central distribution plate: lower installation weight, easier installation, perfect pressure distribution | DafStB waterproof concrete guideline: stress class 1 + 2

Item	KRASO® Type Blind ED • KRASO® Type Blind DD • KRASO® Type Blind VD									
	80	100	125	150	200	250	300	350	400	500
Core drilling / casing in mm (from - to)	80 (79 - 83)	100 (99 - 103)	125 (124 - 128)	150 (149 - 153)	200 (198 - 203)	250 (248 - 253)	300 (298 - 303)	350 (348 - 353)	400 (398 - 403)	500 (497 - 503)
KRASO® Type Blind ED (20 mm seal)	56 €	62 €	76 €	85 €	117 €	138 €	180 €	196 €	211 €	304 €
KRASO® Type Blind DD (40 mm seal)	67 €	77 €	95 €	112 €	141 €	164 €	238 €	283 €	328 €	411 €
KRASO® Type Blind VD (80 mm seal)	84 €	96 €	118 €	140 €	176 €	205 €	297 €	353 €	410 €	514 €

Further diameters available on request! All sealing inserts available in V4A for an additional charge!



The alternative to a fixed-loose flange!



KRASO® Foil Clamping Flange Type FKF

When “tight” means simply tight – sealing solutions for the “black tank”

- + Designers and building contractors face numerous structural-physical conditions. The protection of below-ground structural elements against moisture and water is regulated by DIN 18533, stating different water exposure classes and provisions regarding the waterproofing of buildings.
- + For the sealing of utility lines in regard to buildings with exterior sealing (“black tank”) we offer our **KRASO® Casing Type FL** with fixed-loose flange construction according to DIN 18533 W1 -E or W2 -E.
- + According to DIN 18533, the **KRASO® Foil Clamping Flange Type FKF** is an effective alternative for the integration of media lines into the sealing of larger areas.

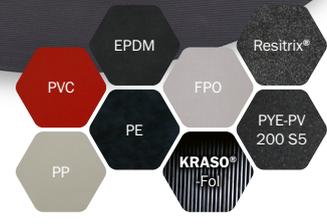
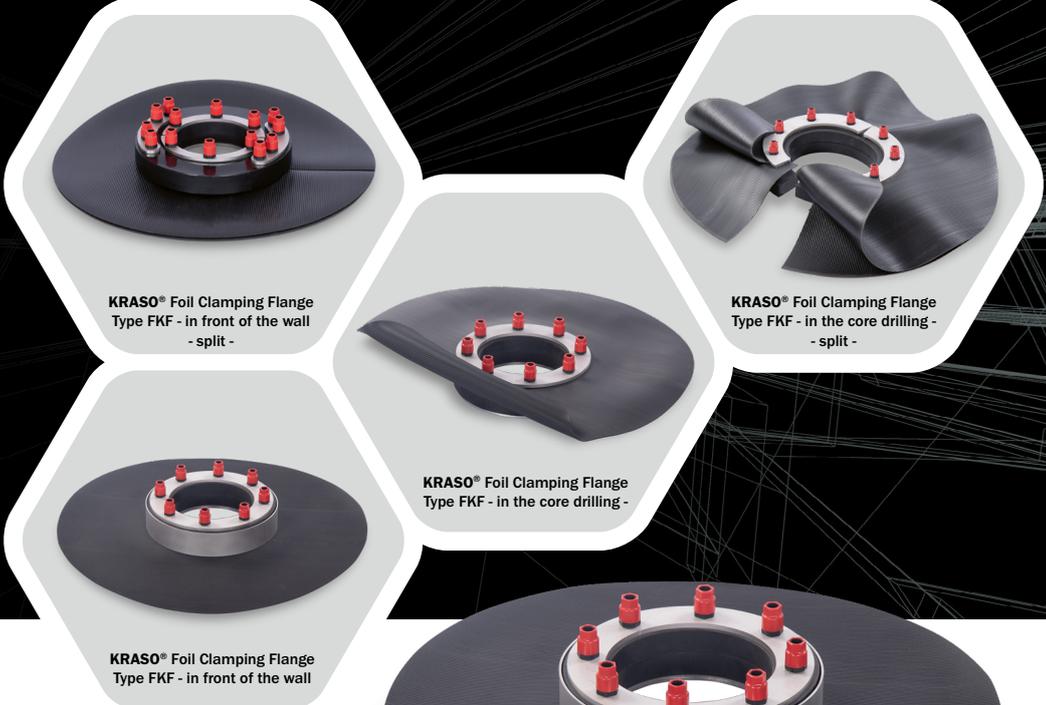
Your advantages

- + Cost-effective, saves time and money
- + Test-certificate from material testing institute in North-Rhine-Westphalia: water pressure tight up to 2.5 bar
- + We are able to adjust the type of sealing sheets or foils individually
- + Noticeably lower weight than a fixed-loose flange construction, for an easier installation, helps to avoid installation errors
- + Suitable for every external diameter of media lines and all kinds of materials
- + Metal components made of non-corrosive stainless steel V2A
- + For new buildings and rehabilitation

The alternative to a fixed-loose flange!



KRASO®
Foil Clamping Flange Type FKF
Check the installation video
(Just scan the QR code!)



KRASO® Foil Clamping Flange Type FKF

The revolution in terms of the integration of media lines into the sealing of larger areas

- + Innovative: water pressure tight sealing of any even and stable cable with our **KRASO® Foil Clamping Flange Type FKF** foil flange!
- + Suitable for all external diameters of media lines and for all materials!
- + We can individually customise the type of sealing sheets or foils: e.g. PVC, EPDM, FPO, Resitrix®, PP, PE, **KRASO®-Fol**, PYE-PV 200 S5 etc.
- + **Torque Control Nut KRASO® DKM**: integrated torque limiter - no torque wrench required!
- + Metal components made of non-corrosive stainless steel V2A
- + For new buildings and rehabilitation! Various designs for almost every situation!
- + Simple and fast mounting!
- + MPA-tested: water pressure tight up to 2.5 bar!
- + Certified with the quality seal of the FHRK e. V.
- + DIN 18533 W1 -E and W2.1 -E



KRASO® Foil Clamping Flange Type FKF **LG 1**

for the sealing of media of all kinds of materials in front of a wall or in the core drilling, with foil flange 1.2 mm, according to DIN 16937, oil- and bitumen resistant, surrounding approx. 15 cm, 30 mm seal | DIN 18533 W1 -E and W2.1 -E

Core drilling / casing in mm	(from - to)	max. external diameter pipe or cable from ... to ... in mm	KRASO® Foil Clamping Flange Type FKF - in front of the wall -	KRASO® Foil Clamping Flange Type FKF - in front of the wall - split -	KRASO® Foil Clamping Flange Type FKF - in the core drilling -	KRASO® Foil Clamping Flange Type FKF - in the core drilling - split -
80	(79 - 83)	0 - 40	219 €	297 €	219 €	241 €
100	(99 - 103)	0 - 63	231 €	332 €	231 €	254 €
125	(124 - 128)	0 - 80	265 €	377 €	265 €	291 €
150	(149 - 153)	0 - 110	321 €	446 €	321 €	354 €
200	(198 - 203)	0 - 160	402 €	561 €	402 €	441 €
250	(248 - 253)	0 - 210	548 €	783 €	548 €	602 €
300	(298 - 303)	0 - 250	753 €	1,022 €	753 €	828 €

Scope of supply: KRASO® Foil Clamping Flange Type FKF, adhesive and sealant KRASO® PU 50, serrated spatula, pressure roller and pencil
Further sizes and diameters available on request! Also available with other sealing sheets!



Specially for
ribbed media
pipes

SEALING INSERTS

KRASO® Foil Clamping Flange Type FKF DD/GR **LG1**

for the sealing of media of all kinds of material in front of a wall or in the core drilling, with foil flange 1.2 mm, according to DIN 16937, oil and bitumen resistant, surrounding approx. 15 cm, 40 mm especially soft seal, central pressure distribution plate for even pressure distribution with corrugated media pipes, against pressing water up to 1 bar, **Torque Control Nut KRASO® DKM**, non-corrosive stainless steel V2A | **DIN 18533 W1-E and W2.1-E**

Core drilling / casing in mm	max. external diameter pipe or cable from ... to ... in mm	KRASO®	KRASO®	KRASO®	KRASO®
		Foil Clamping Flange Type FKF DD/GR - in front of the wall -	Foil Clamping Flange Type FKF DD/GR - in front of the wall - split -	Foil Clamping Flange Type FKF DD/GR - in the core drilling -	Foil Clamping Flange Type FKF DD/GR - in the core drilling - split -
100 (99 - 103)	0 - 63	311 €	426 €	311 €	331 €
125 (124 - 128)	0 - 80	357 €	491 €	357 €	378 €
150 (149 - 153)	0 - 110	434 €	595 €	434 €	457 €
200 (198 - 203)	0 - 160	542 €	745 €	542 €	571 €
250 (248 - 253)	0 - 200 ¹	739 €	1,016 €	739 €	833 €
300 (298 - 303)	0 - 250 ¹	1,017 €	1,397 €	1,017 €	1,098 €

¹ From 200 mm external diameter of the pipe or cable: **KRASO® Foil Clamping Flange Type FKF DD/GR** with 60 mm seal

Scope of supply: **KRASO® Foil Clamping Flange Type FKF DD/GR**, adhesive and sealant **KRASO® PU 50**, serrated spatula, pressure roller and pencil

Further sizes and diameters available on request! Also available with other sealing sheets!



KRASO® Foil Clamping Flange Type FKF Universal **LG1**

for the sealing of media of all kinds of material in front of the wall or in the core drilling, with foil flange 1.2 mm, according to DIN 16937, oil- and bitumen resistant, surrounding approx. 15 cm, 40 mm seal, against pressing water up to 1.5 bar, **Torque Control Nut KRASO® DKM**, non-corrosive stainless steel V2A | **DIN 18533 W1-E and W2.1-E**

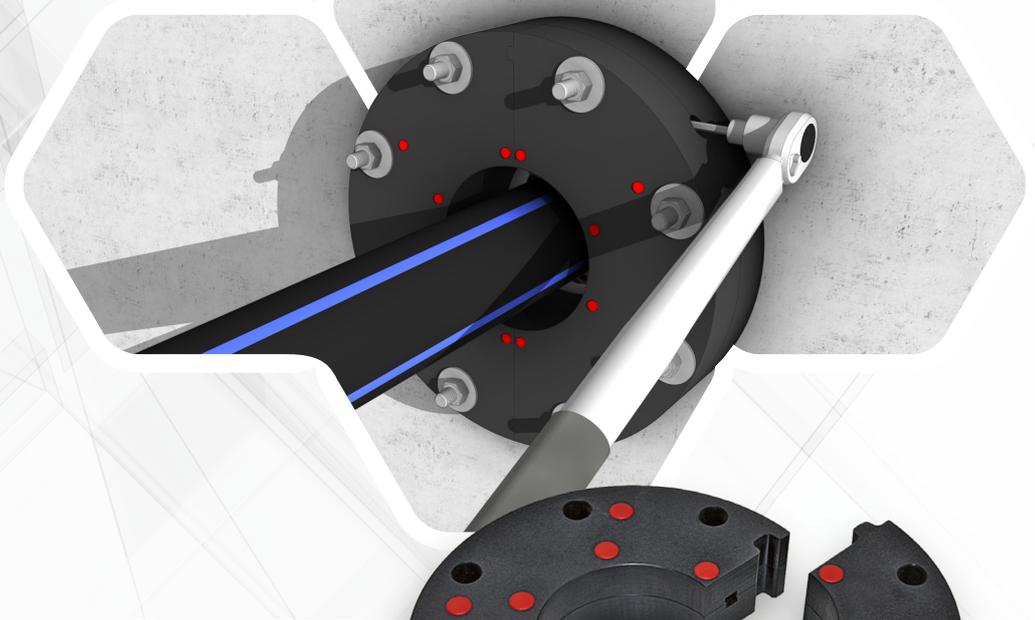
External diameter or core drilling in mm	KRASO® Foil Clamping Flange Type FKF Universal 100	KRASO® Foil Clamping Flange Type FKF Universal 150	KRASO® Foil Clamping Flange Type FKF Universal 200	KRASO® Foil Clamping Flange Type FKF Universal 250
A sealing insert for all pipes or cables listed in the table on the right (in mm)	steplless onion ring technology: 18 - 65 mm or blind	110 (DN 110 KG pipe) (DN 110 SML pipe)	160 (DN 160 KG pipe) (DN 160 SML pipe)	210 (DN 200 SML pipe)
		90 (DN 80 steel pipe, PE pipe)	135 (DN 125 SML pipe)	200 (DN 200 KG pipe) (DN 200 KG 2000)
		75 (DN 70 HT pipe)	125 (DN 125 KG pipe)	180 (DN 170 PE pipe)
		0	110 (DN 110 KG pipe) (DN 110 SML pipe)	170 (steel / cast iron pipe)
			0	160 (DN 160 KG pipe) (DN 160 SML pipe)
KRASO® Type FKF Universal - in the core drilling -	203 €	277 €	339 €	408 €
KRASO® Type FKF Universal - in front of the wall -	203 €	277 €	339 €	408 €

Scope of supply: **KRASO® Foil Clamping Flange Type FKF Universal**, adhesive and sealant **KRASO® PU 50**, serrated spatula, pressure roller and pencil

Further sizes and diameters available on request! Also available with other sealing sheets!



KRASO® Plastic Flange Plate
Type KFP - split -
Check the installation video
(Just scan the QR code!)

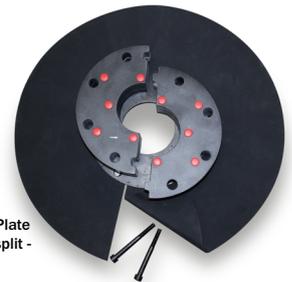


KRASO® Plastic Flange Plate Type KFP - split - A proven solution reinvented

- + Like a “split casing”: the flange plate made of high-strength special plastic can be installed retrospectively
- + No core drilling: no need for the separation of media pipes for installation!
- + Installation in front of a wall made of waterproof concrete or as **KRASO® Type KFP with foil flange** in front of a wall with sealing of larger areas
- + Easy installation by just one person thanks to the low weight!
- + Latest CNC production technology: absolute dimensional compliance – no tolerances like they are usual with solutions involving metal
- + Tongue and groove system: the two halves of the plastic flange plate pull together with 100% accurate fit automatically. Installation errors are thus avoided due to this innovation!
- + Subsequent sealing of the media lines in the plastic flange plate using a sealing insert
- + DafStB waterproof concrete guideline: stress class 1 + 2, with foil flange DIN 18533 W1 -E and W2.1 -E



KRASO® Plastic Flange Plate
Type KFP - split -



KRASO® Plastic Flange Plate
Type KFP - Foil Flange - split -

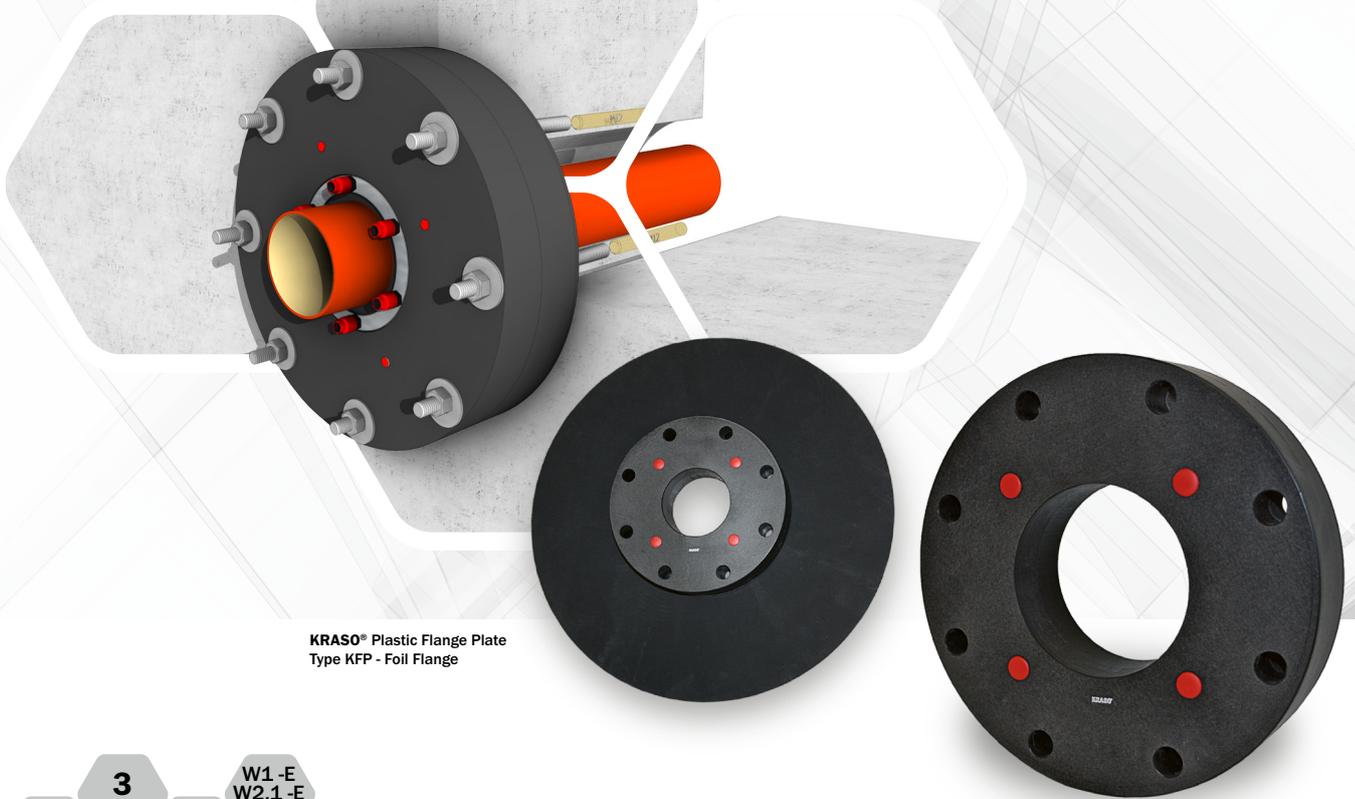
KRASO® Plastic Flange Plate Type KFP - split - **LG 1**

for installation of pipes or cables using a sealing insert (not included in the scope of supply), ID = InternalDiameter
| DafStB waterproof concrete guideline: stress class 1 + 2, with foil flange DIN 18533 W1 -E and W2.1 -E

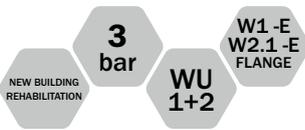
Item	KRASO® Type KFP - split - • KRASO® Type KFP - Foil Flange - split -						
InternalDiameter ID	80	100	125	150	200	250	300
max. external diameter pipe or cable from ... to ... in mm	0 - 55	0 - 75	0 - 100	0 - 125	0 - 175	0 - 225	0 - 275
Plate size approx. in mm	d = 240	d = 260	d = 285	d = 310	d = 360	d = 410	d = 460
KRASO® Plastic Flange Plate Type KFP - split -	363 €	374 €	403 €	422 €	488 €	556 €	613 €
KRASO® Plastic Flange Plate Type KFP - Foil Flange - split -	454 €	469 €	505 €	527 €	611 €	696 €	765 €

Scope of supply: KRASO® Plastic Flange Plate Type KFP - split - or KRASO® Plastic Flange Plate Type KFP - Foil Flange - split -, EPDM flat seal to the component and fixing material, adhesive and sealant **KRASO® PU 50**

Further sizes and diameters available on request!



KRASO® Plastic Flange Plate
Type KFP - Foil Flange



KRASO® Plastic Flange Plate Type KFP

The flange plate made of high-strength special plastic

- + Due to changes in the groundwater level the rehabilitation of old buildings and the sealing of basements become necessary from time to time. Existing pipes and cables should also be sealed using the latest technology.
- + The sealing of the media lines inside the plastic flange plate is completed by using a sealing insert.
- + DafStB waterproof concrete guideline: stress class 1 + 2, with foil flange DIN 18533 W1 -E and W2.1 -E

KRASO® Plastic Flange Plate Type KFP **LG 1**

for installation of pipes or cables using a sealing insert (not included in the scope of supply), no core drilling required, EPDM flat seal, ID = InternalDiameter | DafStB waterproof concrete guideline: stress class 1 + 2, with foil flange DIN 18533 W1 -E and W2.1 -E

Item	KRASO® Type KFP • KRASO® Type KFP - Foil Flange						
	80	100	125	150	200	250	300
InternalDiameter ID	80	100	125	150	200	250	300
max. external diameter pipe or cable from ... to ... in mm	0 - 55	0 - 75	0 - 100	0 - 125	0 - 175	0 - 225	0 - 275
Plate size approx. in mm	d = 240	d = 260	d = 285	d = 310	d = 360	d = 410	d = 460
KRASO® Plastic Flange Plate Type KFP	259 €	268 €	288 €	302 €	349 €	398 €	439 €
KRASO® Plastic Flange Plate Type KFP - Foil Flange	325 €	334 €	360 €	378 €	438 €	496 €	548 €

Scope of supply: KRASO® Plastic Flange Plate Type KFP or KRASO® Plastic Flange Plate Type KFP - Foil Flange, EPDM flat seal to the component and fixing material, adhesive and sealant KRASO® PU 50

Further sizes and diameters available on request!

KRASO® KFP Installation Kit

suitable for KRASO® Plastic Flange Plate Type KFP: KRASO® Torque Wrench, socket wrench insert 8, Ø 19 mm nut, cartridge pressing pistol, blower for drilled holes





A proven solution
reinvented!

KRASO® Plastic Flange Plate Type KFP - multiple / multiple split

- + The flange plate made of high-strength special plastic can be installed retrospectively
- + Installation in front of a wall made of waterproof concrete (WU) or in front of a wall with sealing of larger areas
- + Subsequent sealing of the media lines in the plastic flange plate using a sealing insert

NEW BUILDING
REHABILITATION

KRASO® Core Drilling Sealing Additional protection for concrete

- + Protects reinforcing steel from corrosion
- + Prevents moisture penetration into concrete
- + Good hardening – even at low temperatures
- + UV, ageing and weather resistant



KRASO® Core Drilling Sealing **LG 6**

two-component PU cast resin, in a two-chamber bag, for protecting reinforcing steel in core drillings, including brush for application

Item	KRASO® Core Drilling Sealing		
Quantity in ml	95	240	400
For area in m ²	approx. 0.6	approx. 1.5	approx. 2.5
KRASO® Core Drilling Sealing	33 €	60 €	80 €

Scope of supply: KRASO® Core Drilling Sealing in a two-chamber bag, brush for application



KRASO® Catalogue 2026 as Excel file
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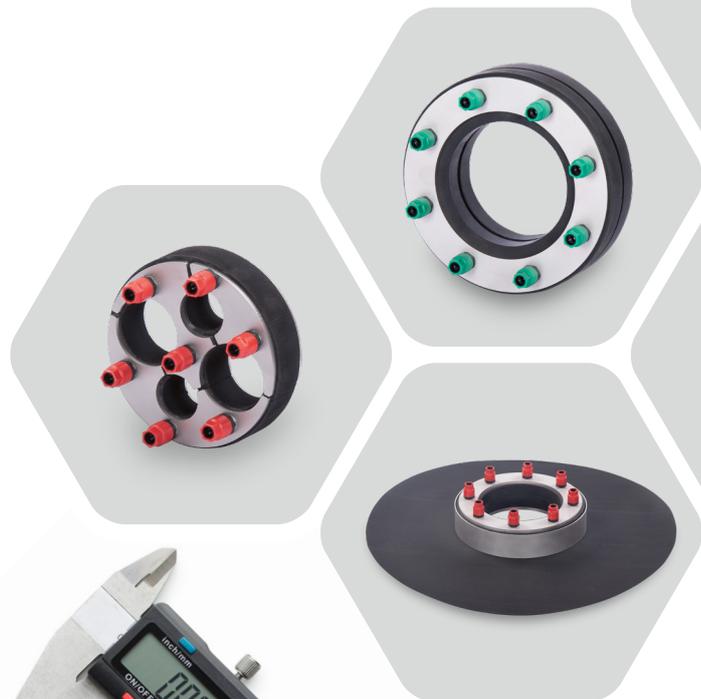
The **KRASO®** Catalogue 2026 For your merchandise management system!

- + All **KRASO®** Products with all relevant data for your merchandise management system
- + Simply download as an Excel file from **KRASO.de**

Important note

KRASO® Sealing Inserts External diameter of the media lines

- + For the following sealing inserts, please determine the external diameter of the media line(s) and specify this when placing your order:
- + **KRASO®** Sealing Insert Type SD
- + **KRASO®** Sealing Insert Type GR
- + **KRASO®** Foil Clamping Flange Type FKF





For all standard wall types!



NEW BUILDING REHABILITATION

1 bar

W2.1 -E

WU 1+2

KRASO® Inject Wall Penetrations Solutions for existing buildings

- + For retrofit installation: casings, empty pipes, wall penetrations with flow direction
- + Fast and easy installation: injection system with fast-curing expansion resin
- + Suitable for all common types of walls – also for hollow bricks
- + With sealing flange for exterior sealing (“black tank”)
- + Ideal for rehabilitation and new connections into existing buildings
- + Integrated torque control (IDK) – no torque wrench required
- + Version as
 - KRASO® Inject FE – thick-walled true diameter plastic casing
 - KRASO® Inject LR – empty pipe
 - KRASO® Inject FR – flow direction
- + Gas and water pressure tight up to 1 bar
- + DIN 18533 W2.1 -E (“moderate impact of pressing water”)
- + DafStB waterproof concrete guideline: stress class 1 + 2

KRASO® Inject FE **LG 6**

recess for retrofit installation of cables and pipes using a sealing insert (not included in the scope of supply), with injection system | DIN 18533 W2.1 -E, DafStB waterproof concrete guideline: stress class 1 + 2



Item	KRASO® Inject FE	
Internal Diameter in mm	100	150
Wall thickness from ... to ...	200 - 600	
Diameter core drilling min ... max ...	149 - 153	199 - 203
External diameter sealing flange	250	300
KRASO® Inject FE	325 €	495 €

Scope of supply: KRASO® Inject FE, including inject sealing insert with IDK (integrated torque control), thick-walled true diameter plastic casing, wall fixing ring, expansion resin (300 ml)

Further diameters and wall thicknesses available on request!

KRASO® Inject LR **LG 6**

empty pipe as recess for retrofit installation of cables and pipes using a casing pipe end plug (electricity/water, telecommunication or fibreglass, with injection system | DIN 18533 W2.1 -E, DafStB waterproof concrete guideline: stress class 1 + 2



Item	KRASO® Inject LR		
Core drilling / casing in mm (from - to)	100 (99 - 103)		
Wall thickness from ... to ...	200 - 600 / 200 - 1,200		
External diameter sealing flange	200		
Casing pipe end plug, optional:	Electricity/water	Telecommunication	Glass fibre
External diameter in mm	25 - 63	2 x 5 - 7 4 x 7 - 13 1 x 13 - 21	2 x 5 - 7 2 x 7 - 13 1 x 12 - 16 1 x 23 - 40
KRASO® Inject LR for wall thickness 200 - 600 mm	195 €		
KRASO® Inject LR for wall thickness 200 - 1,200 mm	295 €		

Scope of supply: KRASO® Inject LR, including inject sealing insert with IDK (integrated torque control), thick-walled true diameter casing, wall fixing ring, expansion resin (150 ml), casing pipe end plug

Further diameters and wall thicknesses available on request!

KRASO® Inject FR **LG 6**

wall penetration for the connection of KG/KG 2000 pipes, with injection system | DIN 18533 W2.1 -E, DafStB waterproof concrete guideline: stress class 1 + 2



Item	KRASO® Inject FR	
Diameter DN	110	160
Wall thickness from ... to ...*	200 - 400	
Diameter core drilling min ... max ... in mm	149 - 153	199 - 203
External diameter sealing flange	250	300
Length KG pipe* in cm	50	
KRASO® Inject FR	295 €	425 €

*Extendable on-site

Scope of supply: KRASO® Inject FR, including inject sealing insert with IDK (integrated torque control), pipe with sleeve and spigot, wall fixing ring, expansion resin (300 ml)

Further diameters and wall thicknesses available on request!

KRASO® Inject - Accessories **LG 6**

2 component expansion resin (Tangit), 2 cartridges, 150 ml each, suitable for KRASO® Inject FE, KRASO® Inject LR, KRASO® Inject FR • cartridge pressing pistol | DIN 18533 W2.1 -E, DafStB waterproof concrete guideline: stress class 1 + 2



Item	KRASO® Inject Accessories
Inject expansion resin	30 €
Cartridge pressing pistol	79 €

Scope of supply: Inject expansion resin, 2 cartridges, 150 ml each • cartridge pressing pistol



KRASO® Multi Flange Plate Type MFP
Check the installation video
(Just scan the QR code!)



KRASO® Multi Flange Plate Type MFP

Smart combination – innovative solution

- + Combination of high-quality **KRASO® Sealing Insert** and flange plate made of high-strength special plastic!
- + Fast and easy installation thanks to the low weight – even by just one person!
- + Installation in front of the waterproof concrete wall. EPDM flat seal, fixing material and adhesive and sealant **KRASO® PU 50** are included in the scope of supply.
- + For new buildings and rehabilitation! Easy and fast installation and sealing of media lines, also retrospectively. Special designs can usually be produced and dispatched within 24 hours.
- + MPA-tested: water pressure tight up to 1 bar!
- + **Torque Control Nut KRASO® DKM**: integrated torque limiter - no torque wrench required!
- + DafStB waterproof concrete guideline: stress class 1 + 2

KRASO® Multi Flange Plate Type MFP, EPDM flat seal, fixing material, adhesive and sealant **KRASO® PU 50**



KRASO® Multi Flange Plate Type MFP **LG 1**

for installation of pipes, sealing width to the media pipe or cable 20 mm | DafStB waterproof concrete guideline: stress class 1 + 2

Item	KRASO® Multi Flange Plate Type MFP						
Diameter integrated KRASO® Sealing Insert	80	100	125	150	200	250	300
Plate size approx. in mm	d = 206	d = 226	d = 243	d = 273	d = 323	d = 373	d = 423
Diameter pipe or cable from ... to ... in mm	22 - 25	32 - 35	60 - 63	78 - 80	108 - 110	158 - 160	200
	32 - 35	40 - 43	75 - 77	88 - 90	114 - 118	168 - 170	210
	40 - 43	48 - 50	78 - 80	108 - 110	123 - 125	177 - 180	219
		60 - 63			133 - 135	200	225
					139 - 140	210	250
				158 - 160			
KRASO® Multi Flange Plate Type MFP	213 €	225 €	244 €	261 €	315 €	361 €	444 €

Scope of supply: KRASO® Multi Flange Plate Type MFP, EPDM flat seal incl. fixing material, adhesive and sealant **KRASO® PU 50**

Further sizes and diameters available on request!

KRASO® Casing Type FL/ZA
for dowel-fixing - non-corrosive
stainless steel - with special coating

- threaded protective caps protect the threaded bolts against contamination with thick coating
- spacers prevent the thick coating from being pressed off



KRASO® Casing and Sealing Insert Type FL

Fixed-loose flange for dowel-fixing or for concreting and as a sealing insert

- + For buildings with exterior sealing ("black tank"): according to DIN 18533 ("sealing of below-ground structural elements")
- + Each design available as separate types for pressing and non-pressing water
- + Available in non-corrosive stainless steel V2A or V4A and in electrogalvanised steel!
- + Upon request available with special coating for buildings with thick coating (e.g. KMB)!
- + DIN 18533: water exposure classes W1 -E and W2.2 -E ("soil moisture and non-pressing water" or "high impact of pressing water (water column ≥ 3 metres)")

KRASO® Casing Type FL/ZA
- for dowel-fixing -



non-corrosive stainless steel V2A

KRASO® Casing Type FL/ZE
- for concreting -



non-corrosive stainless steel V2A

KRASO® Sealing Insert Type FL/DD
- double sealing -



non-corrosive stainless steel V2A



electrogalvanised



electrogalvanised,
with plastic casing



electrogalvanised



KRASO® Casing Type FL/ZA
Check the installation video
(Just scan the QR code!)



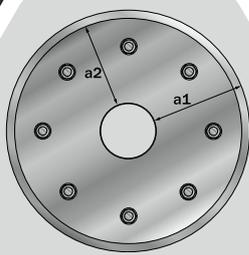
KRASO® Casing Type FL/ZA - fixed-loose flange for dowel-fixing **LG2**

fixed-loose flange for dowel-fixing, with casing, for installation of media pipes using a sealing insert (not included in the scope of supply), for buildings with exterior sealing ("black tank") according to DIN 18533. Available in non-corrosive stainless steel V2A or electrogalvanised, each with or without special coating. ID = InternalDiameter | **DIN 18533 W1-E and W2.2-E**

Item	KRASO® Casing Type FL/ZA - DIN 18533 W2.2-E: HIGH IMPACT OF PRESSING WATER (WATER COLUMN ≥ 3 METRES)						
Casing InternalDiameter ID	80	100	125	150	200	250	300
Protrusion in mm	80						
Diameter fixed-flange a1	surrounding 160 mm - t = 10 mm						
Diameter loose-flange a2	surrounding 150 mm - t = 10 mm						
KRASO® Casing Type FL/ZA - non-corrosive stainless steel V2A -	766 €	863 €	931 €	1,045 €	1,262 €	1,486 €	1,737 €
KRASO® Casing Type FL/ZA - electrogalvanised -	546 €	616 €	671 €	747 €	884 €	1,085 €	1,332 €
EPDM supplement (2 pcs.)	32 €	35 €	39 €	44 €	58 €	75 €	86 €
Surcharge special coating	144 €	151 €	166 €	183 €	201 €	222 €	243 €

Item	KRASO® Casing Type FL/ZA - DIN 18533 W1-E: SOIL MOISTURE AND NON-PRESSING WATER						
Casing Internal Diameter ID	80	100	125	150	200	250	300
Diameter fixed-flange a1	surrounding 70 mm - t = 6 mm						
Diameter loose-flange a2	surrounding 60 mm - t = 6 mm						
KRASO® Casing Type FL/ZA - non-corrosive stainless steel V2A -	514 €	603 €	650 €	751 €	939 €	1,181 €	1,423 €
KRASO® Casing Type FL/ZA - electrogalvanised -	384 €	448 €	499 €	585 €	730 €	907 €	1,142 €
EPDM supplement (2 pcs.)	22 €	23 €	28 €	30 €	39 €	53 €	61 €
Surcharge special coating	122 €	129 €	135 €	142 €	149 €	157 €	164 €

Scope of supply: KRASO® Casing Type FL/ZA, casing with welded fixed-flange, loose-flange, dowels M8 x 100, bolts, nuts and washers M20 or M12
Further diameters and protrusions available on request! Also available in V4A!

Schematic
top view

KRASO® Casing Type FL/ZE
Check the installation video
(Just scan the QR code!)



KRASO® Casing Type FL/ZE - fixed-loose flange for concreting **LG2**

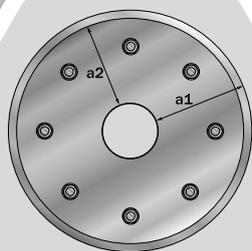
fixed-loose flange for concreting, with casing, for installation of media pipes using a sealing insert (not included in the scope of supply) for buildings with exterior sealing ("black tank") against pressing/non-pressing water according to DIN 18533. Available in non-corrosive stainless steel V2A or electrogalvanised with plastic casing, each with or without special coating. ID = InternalDiameter | **DIN 18533 W2.1 -E and W2.2 -E**

Item	KRASO® Casing Type FL/ZE - DIN 18533 W2.2 -E: HIGH IMPACT OF PRESSING WATER (WATER COLUMN ≥ 3 METRES)						
Casing Internal Diameter ID	80	100	125	150	200	250	300
Wall thickness in cm	20 • 24 • 25 • 30 • 35 • 36.5 • 40 • 45 • 50						
Diameter fixed-flange a1	surrounding 160 mm - t = 10 mm						
Diameter loose-flange a2	surrounding 150 mm - t = 10 mm						
KRASO® Casing Type FL/ZE - non-corrosive stainless steel V2A -	839 €	918 €	997 €	1,121 €	1,400 €	1,722 €	2,036 €
KRASO® Casing Type FL/ZE - electrogalvanised -	587 €	642 €	698 €	785 €	980 €	1,206 €	1,425 €
EPDM supplement (2 pcs.)	32 €	35 €	39 €	44 €	58 €	75 €	86 €
Surcharge special coating	144 €	151 €	166 €	183 €	201 €	222 €	243 €

Item	KRASO® Casing Type FL/ZE - DIN 18533 W1 -E: SOIL MOISTURE AND NON-PRESSING WATER						
Diameter fixed-flange a1	surrounding 70 mm - t = 6 mm						
Diameter loose-flange a2	surrounding 60 mm - t = 6 mm						
KRASO® Casing Type FL/ZE - non-corrosive stainless steel V2A -	622 €	679 €	759 €	874 €	1,169 €	1,666 €	1,833 €
KRASO® Casing Type FL/ZE - electrogalvanised -	436 €	476 €	531 €	612 €	818 €	1,166 €	1,283 €
EPDM supplement (2 pcs.)	22 €	23 €	28 €	30 €	39 €	53 €	61 €
Surcharge special coating	122 €	129 €	135 €	142 €	149 €	157 €	164 €

Scope of supply: KRASO® Casing Type FL/ZE, with welded fixed-flange, loose-flange, dowels M8 x 100, bolts, nuts and washers M20 or M12

Further diameters and wall thicknesses available on request! Also available in V4A!

Schematic
top view

KRASO® Sealing Insert Type FL
Check the installation video
(Just scan the QR code!)



KRASO® Sealing Insert Type FL - fixed-loose flange **LG2**

fixed-loose flange with **KRASO® Sealing Insert**, for installation of media pipes for buildings with exterior sealing ("black tank") according to DIN18533. Available in non-corrosive stainless steel V2A or electrogalvanised, each with or without special coating, **Torque Control Nut KRASO® DKM | DIN 18533 W1-E and W2.2-E**

Diameter DN	80	100	125	150	200	250	300
	max. external diameter pipe or cable						
from	0	0	0	0	0	0	0
to	55	75	100	125	175	225	275

Item	KRASO® Sealing Insert Type FL/DD - DIN 18533 W2.2-E: HIGH IMPACT OF PRESSING WATER (WATER COLUMN ≥ 3 METRES)						
Diameter fixed-flange a1	surrounding 160 mm - t = 10 mm						
Diameter loose-flange a2	surrounding 150 mm - t = 10 mm						
KRASO® Sealing Insert Type FL/DD - non-corrosive stainless steel V2A -	779 €	876 €	954 €	1,063 €	1,258 €	1,543 €	1,900 €
KRASO® Sealing Insert Type FL/DD - electrogalvanised -	546 €	616 €	671 €	747 €	884 €	1,085 €	1,332 €
EPDM supplement (2 pcs.)	32 €	35 €	39 €	44 €	58 €	75 €	86 €
Surcharge special coating	144 €	151 €	166 €	183 €	201 €	222 €	243 €

Item	KRASO® Sealing Insert Type FL/ED - DIN 18533 W1-E: SOIL MOISTURE AND NON-PRESSING WATER						
Diameter fixed-flange a1	surrounding 70 mm - t = 6 mm						
Diameter loose-flange a2	surrounding 60 mm - t = 6 mm						
KRASO® Sealing Insert Type FL/ED - non-corrosive stainless steel V2A -	550 €	639 €	711 €	833 €	1,038 €	1,293 €	1,632 €
KRASO® Sealing Insert Type FL/ED - electrogalvanised -	384 €	448 €	499 €	585 €	730 €	907 €	1,143 €
EPDM supplement (2 pcs.)	22 €	23 €	28 €	30 €	39 €	53 €	61 €
Surcharge special coating	122 €	129 €	135 €	142 €	149 €	157 €	164 €

Scope of supply: KRASO® Sealing Insert Type FL/DD / KRASO® Sealing Insert Type FL/ED, sealing insert with welded fixed-flange, loose-flange, dowels M8 x 100, bolts, nuts and washers M20 or M12, 40 mm or 20 mm seal

Further diameters available on request! Also available in V4A!



KRASO® Flange Plate non-corrosive stainless steel V2A **LG 2**

for installation of pipes or cables using a sealing insert (not included in the scope of supply), in front of a core drilling in concrete or masonry wall, made of non-corrosive stainless steel V2A, EPDM flat seal. ID = InternalDiameter | DafStB waterproof concrete guideline: stress class 1 + 2

Item	KRASO® Flange Plate non-corrosive stainless steel V2A						
	80	100	125	150	200	250	300
InternalDiameter ID tubular sleeve	80	100	125	150	200	250	300
Protrusion in mm	80	80	80	80	80	80	80
Plate size in mm	d = 240	d = 260	d = 290	d = 310	d = 360	d = 410	d = 460
KRASO® Flange Plate non-corrosive stainless steel V2A	228 €	236 €	252 €	265 €	308 €	348 €	384 €

Scope of supply: KRASO® Flange Plate non-corrosive stainless steel V2A, with welded stainless steel tubular sleeve, EPDM flat seal incl. fixing material and adhesive and sealant **KRASO® PU 50**

Further sizes and diameters available on request! Available for an additional charge: split design, fixed-loose flange construction according to DIN 18533, stainless steel V4A!



KRASO® Flange Plate electrogalvanised **LG 2**

for installation of pipes or cables using a sealing insert (not included in the scope of supply), in front of a core drilling in concrete or masonry wall, electrogalvanised steel, EPDM flat seal. ID = InternalDiameter | DafStB waterproof concrete guideline: stress class 1 + 2

Item	KRASO® Flange Plate electrogalvanised						
	80	100	125	150	200	250	300
InternalDiameter ID tubular sleeve	80	100	125	150	200	250	300
Protrusion in mm	80	80	80	80	80	80	80
Plate size in mm	d = 240	d = 260	d = 290	d = 310	d = 360	d = 410	d = 460
KRASO® Flange Plate electrogalvanised	171 €	177 €	190 €	199 €	230 €	262 €	289 €

Scope of supply: KRASO® Flange Plate electrogalvanised, with welded tubular sleeve, EPDM flat seal incl. fixing material and adhesive and sealant **KRASO® PU 50**

Further sizes and diameters available on request!

Non-corrosive steel or galvanised?

Note the following

- + **Long-lasting quality:** non-corrosive stainless steel has got an especially high proportion of chromium. Combined with further alloying constituents, this is a protective layer ("chromium-oxide") providing a special protection against corrosion and acids
- + **Cost-effective alternative:** electrogalvanised steel has got a protective coating made of zinc. However, the coating is only a few microns. If this is damaged e.g. on the construction site, the risk of corrosion increases. If there is constant dampness, it is advisable to use the quality of non-corrosive steel.





Rn
Radon-tight

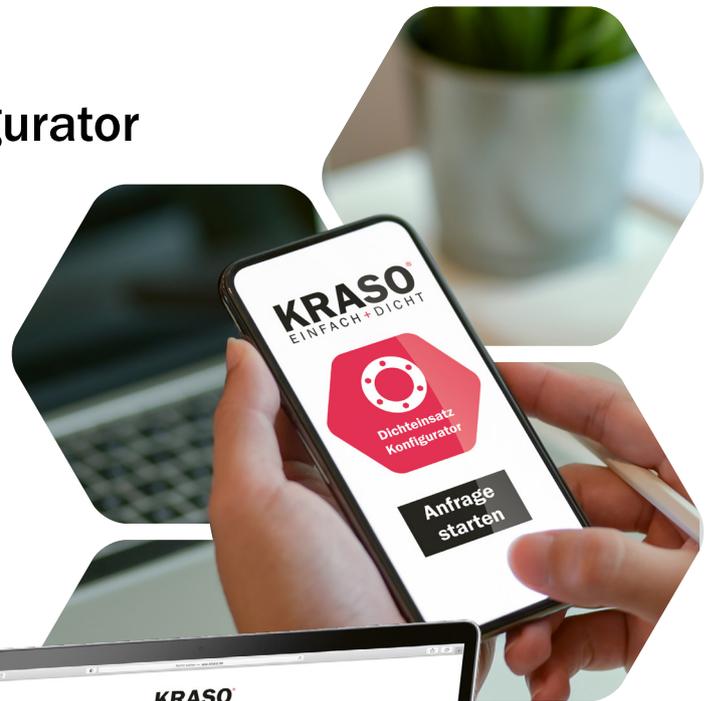
KRASO® Sealing Inserts Protection against radon!

- + Radon is a naturally occurring noble gas. An accumulation of the radioactive gas in rooms is harmful to health!
- + **KRASO® Sealing Inserts** and **KRASO® Pipe Penetrations with 4 Seal** do not only protect against pressing water, but they are also gas-tight – MPA- and IAF-tested!
- + For a reliable protection against radon, look out for the label “Rn RADON-TIGHT!” and the “FHRK Radon Tight“ seal!



KRASO® Sealing Insert Configurator Online and as app

- + Simple and fast: configure the fitting sealing insert and request an offer online or via app. Just enter the quantity and diameters of the media lines and the sealing insert configurator proves the feasibility or proposes the suitable diameter for a core drilling. Available free of charge for iOS or at [KRASO.de/en](https://www.kraso.de/en).



KRASO® Sealing Insert Configurator
(Just scan the QR code!)

