

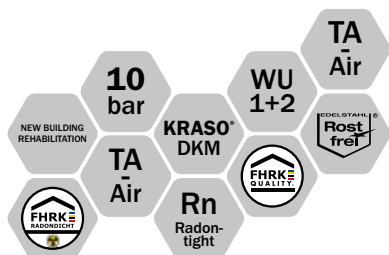


“White Tank“ Solutions

Sealing Insert Universal DD (p. 11) + Sealing Insert Universal DD/M (p. 12) + Sealing Insert Type ED + DD + VD (p. 13) + Sealing Insert Type SD (p. 14) + Sealing Insert Universal Multiple - split - (p. 15) + Sealing Insert Type GR (p. 16) + Sealing Insert Type IN-GR® (p. 17) + Sealing Insert Type TD-X (p. 18) + Sealing Insert Type FIX (p. 19) + Sealing Insert Type Blind ED + DD + VD (p. 19) + Plastic Flange Plate Type KFP (p. 23) + Multi-Flange Plate Type MFP (p. 26) + Flange Plate (p. 31)

“Black Tank“ Solutions

Foil Clamping Flange Type FKF (p. 20) + Foil Clamping Flange Type FKF DD/GR (p. 22) + Foil Clamping Flange Type FKF Universal (p. 22) + Plastic Flange Plate Type KFP - Foil Flange (from p. 23) + Casing Type FL/ZA (p. 28) + Casing Type FL/ZE (p. 29) + Sealing Insert Type FL (p. 30)



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 7.12) proven by the DVGW research centre at the Engler-Bunte-Institute (EBI) of the Institute for Technology in Karlsruhe
- + MPA-tested: protects reliably against pressurised 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!
- + Tested according to FHRK test specification GE 101!
- + **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



Patented technology!

KRASO® DKM Torque Control Nut

- + 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!)

**One
for all:
water-,
radon- and
gas-tight!**



SEALING INSERTS



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!
- + **Tested according to FHRK test specification GE 101!**
- + **DafStB waterproof concrete guideline:** stress class 1 + 2





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

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



Type / Item	KRASO® Universal DD					
Core drilling / casing in mm	Universal 80 DD	Universal 100 DD	Universal 100 DD/T (split design for retrofit installation)	Universal 110 DD	Universal 110 DD/T (split design for retrofit installation)	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 €



Type / Item	KRASO® Universal DD					
Core drilling / casing in mm	Universal 150 DD/T (split design for retrofit installation)	Universal 160 DD/T (split design for retrofit installation)	Universal 200 DD	Universal 200 DD/T (split design for retrofit installation)	Universal 250 DD	Universal 250 DD/T (split design for retrofit installation)
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	stepless onion ring technology: 110 - 160 mm or blind	210 DN 200 SML pipe	210 DN 200 SML pipe
			135 DN 125 SML pipe		200 DN 200 KG pipe, DN 200 KG 2000	200 DN 200 KG pipe, DN 200 KG 2000
			125 DN 125 KG pipe		180 DN 170 PE pipe	180 DN 170 PE pipe
			110 DN 110 KG pipe, DN 110 SML pipe		170 steel/cast pipe	170 steel/cast pipe
			blind		160 DN 160 KG pipe, DN 160 SML pipe	160 DN 160 KG pipe, DN 160 SML pipe
KRASO® Universal DD	96 €	106 €	113 €	124 €	144 €	158 €



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 for feed-through of pipes or cables | **DafStB waterproof concrete guideline: stress class 1 + 2**

Type / 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 ED



KRASO® Type ED/T
(split design for
retrofit installation)



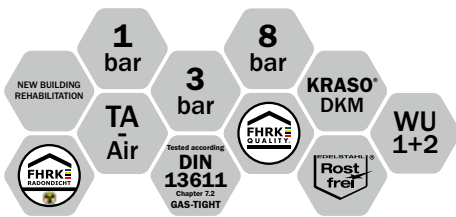
KRASO® Type DD



KRASO® Type DD/T
(split design for
retrofit installation)



KRASO® Type VD



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

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

Type / 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 at an additional charge!



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



KRASO® Type SD 30



KRASO® Type SD 30 - T



KRASO® Type SD 30 - GF



KRASO® Type SD 60



KRASO® Type SD 60 - T



KRASO® Type SD 60 - GF



KRASO® Sealing Insert Type SD

The solution for special situations

Usually
ready for
dispatch within
24 hours!

- + For core drillings and casings
- + Individual and custom-made solution: with large flange or split!
- + **KRASO® Sealing Insert quality:** 5 mm thick clamping plates made of non-corrosive stainless steel V2A, 30 or 60 mm seal made of a 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 / 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!
- + **Tested according to FHRK test specification GE 101!**
- + With arrangement template: see the arrangement of media pipes, pipes and cables 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 **LG 1**

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

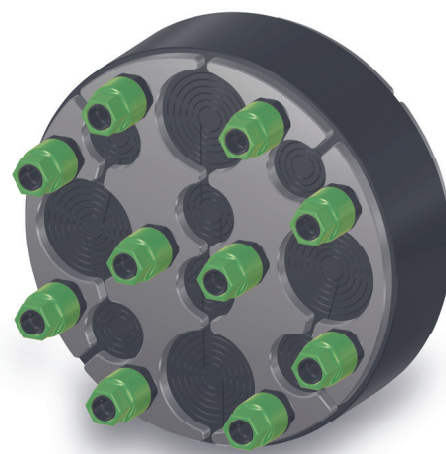
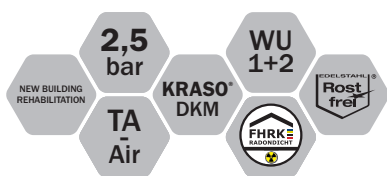
KRASO® Type SD 30 / KRASO® Type SD 30 - T, split / KRASO® Type SD 30 - GF, large flange

KRASO® Type SD 60 / KRASO® Type SD 60 - T, split / KRASO® Type SD 60 - GF, large flange

Core drilling / casing in mm	50	60	70	80	100	125	150	200	250	300	350	400	450	500
(from - to)	(49 - 52)	(59 - 62)	(69 - 72)	(79 - 83)	(99 - 103)	(124 - 128)	(149 - 153)	(198 - 203)	(248 - 253)	(298 - 303)	(348 - 353)	(398 - 403)	(448 - 453)	(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	91 €	91 €	91 €	98 €	98 €	125 €	142 €	184 €	248 €	317 €	380 €	435 €	513 €	571 €
KRASO® Type SD 30 - T	105 €	105 €	105 €	113 €	113 €	144 €	163 €	212 €	285 €	364 €	437 €	500 €	590 €	656 €
KRASO® Type SD 30 - GF	100 €	100 €	100 €	108 €	108 €	138 €	156 €	202 €	272 €	348 €	418 €	478 €	564 €	628 €
Surcharge: additional drilling	up to 5 drillings each additional drilling 17 €, each further additional drilling 11 €													
KRASO® Type SD 60														
KRASO® Type SD 60	122 €	131 €	131 €	131 €	140 €	172 €	202 €	261 €	339 €	444 €	516 €	575 €	680 €	795 €
KRASO® Type SD 60 - T	141 €	150 €	150 €	150 €	161 €	198 €	232 €	300 €	389 €	511 €	594 €	661 €	782 €	915 €
KRASO® Type SD 60 - GF	134 €	144 €	144 €	144 €	154 €	190 €	222 €	287 €	372 €	489 €	568 €	632 €	748 €	875 €
Surcharge: additional drilling	up to 5 drillings each additional drilling 17 €, each further additional drilling 11 €													

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

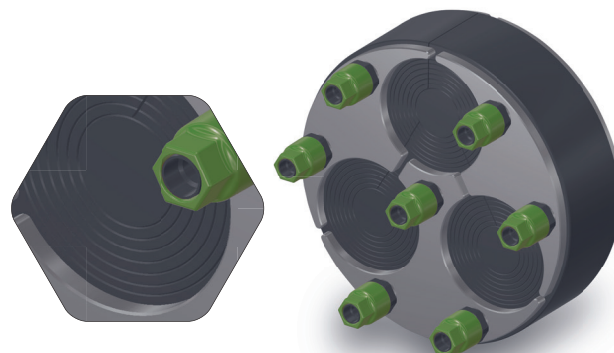
All sizes and diameters available on request!



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

- + For core drillings and casings
- + Stepless onion ring technology: universally usable for various external diameters of media lines / cables - even with several drillings! 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!
- + **DafStB waterproof concrete guideline:** stress class 1 + 2

Stepless onion ring technology!
example
KRASO® Sealing Insert Universal Multiple 150 - split - Design 1:
3 x 6 - 52 mm or blind



KRASO® Sealing Insert Universal Multiple - split - **LG 1**

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

Type / Item	KRASO® Sealing Insert Universal Multiple - split -			
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 -	95 €	103 €	145 €	225 €

Further arrangements available at short notice!



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



KRASO® Sealing Insert Type GR

The sealing insert for ribbed media pipes

- + 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!
- + Tested according to FHRK test specification GE 101!
- + 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

Type / Item	KRASO® Type DD/GR • KRASO® Type VD/GR								
Core drilling / casing in mm (from - to)	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 - 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!

NEW!
Internal sealing
for ribbed
media pipes



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



KRASO® Sealing Insert Type IN-GR®

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 of media lines/cables! Split design for retrofit installation!
- + Torque Control Nut **KRASO® DKM**: integrated torque limiter - no torque wrench required!
- + Non-corrosive stainless steel V2A, 30 mm seal
- + DafStB waterproof concrete guideline: stress class 1 + 2

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

Internal sealing insert 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

Type / Item	KRASO® Type IN-GR®						
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	1 x 5 - 48 mm	1 x 5 - 18 mm 1 x 5 - 38 mm	4 x 5 - 18 mm	3 x 5 - 43 mm	4 x 5 - 38 mm	6 x 5 - 33 mm
KRASO® Type IN-GR®	89 €	95 €	118 €	118 €	145 €	145 €	145 €

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!
- + Tested according to FHRK test specification GE 101!
- + DafStB waterproof concrete guideline: stress class 1 + 2

60 mm seal (3 x 20 mm) made of specially developed sealing rubber

Torque Control Nut **KRASO® DKM**: integrated torque limiter - no torque wrench required!

Welded-on studs instead of through bolts – more studs for even pressure distribution

20% thicker steel plates made of non-corrosive stainless steel V2A

Circular pressure discs

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

for installation of pipes | DafStB waterproof concrete guideline: stress class 1 + 2

Type / Item	KRASO® Type TD-X									
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 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!



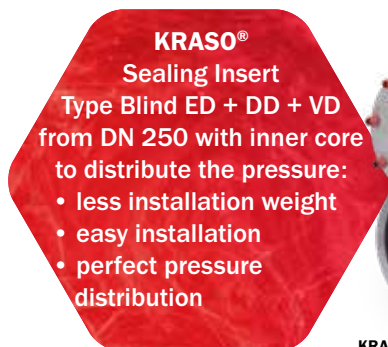
KRASO® Sealing Insert Type FIX **LG 1**

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

Type / Item	KRASO® Type ED/FIX • KRASO® Type DD/FIX									
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 DD 250



KRASO® Type Blind VD 250



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: low installation weight, easier installation, optimal pressure distribution | DafStB waterproof concrete guideline: stress class 1 + 2

Type / Item	KRASO® Type Blind ED • KRASO® Type Blind DD • KRASO® Type Blind VD									
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 (seal 20 mm)	56 €	62 €	76 €	85 €	117 €	138 €	180 €	196 €	211 €	304 €
KRASO® Type Blind DD (seal 40 mm)	67 €	77 €	95 €	112 €	141 €	164 €	238 €	283 €	328 €	411 €
KRASO® Type Blind VD (seal 80 mm)	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 class 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 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 NRW: water pressure tight up to 2.5 bar**
- + **We are able to adjust the type of sealing sheets or foils individually**
- + Noticeable 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!



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

The
alternative
to a fixed-
loose flange!



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!
- + Tested according to FHRK test specification GE 101!
- + DIN 18533 W1 -E and W2.1 -E

Included in the scope of supply

- **KRASO®** PU 50 - high-quality sealant
- pressure roller
- serrated spatula
- pencil for marking



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 -

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 - 200	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



KRASO® Foil Clamping Flange Type FKF DD/GR **LG 1**

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 specially 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	(from - to)	max. external diameter pipe or cable from ... to ... in mm	KRASO® Foil Clamping Flange Type FKF DD/GR - in front of the wall -	KRASO® Foil Clamping Flange Type FKF DD/GR - in front of the wall - - split -	KRASO® Foil Clamping Flange Type FKF DD/GR - in the core drilling -	KRASO® 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 **LG 1**

for the sealing of media of all kinds of materials 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
A sealing insert for all pipes or cables listed in the table on the right (in mm)	stepless 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)
		90 (DN 80 steel pipe, PE pipe)	135 (DN 125 SML pipe)
		75 (DN 70 HT pipe)	125 (DN 125 KG pipe)
		0	110 (DN 110 KG pipe) (DN 110 SML pipe)
			0
KRASO® Foil Clamping Flange Type FKF Universal - in the core drilling -	203 €	277 €	339 €
KRASO® Foil Clamping Flange Type FKF Universal - in front of the wall -	203 €	277 €	339 €

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 (WU)** 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 **KRASO® 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**

Type / 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 is completed by using a split 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 = Internal-Diameter | DafStB waterproof concrete guideline: stress class 1 + 2, with foil flange DIN 18533 W1 -E and W2.1 -E

Type / Item	KRASO® Type KFP • KRASO® Type KFP - Foil Flange						
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!

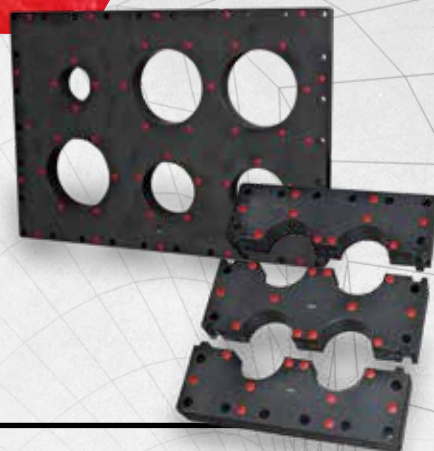
KRASO® KFP Installation kit

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 pipes in the plastic flange plate using a sealing insert.

You build -
we seal!

KRASO® Installation Service

- + Whether new building or rehabilitation: the **KRASO®** Installation Service helps you with sealing your construction-site. Our team will be happy to support you from measurement to installation. Our technicians develop a solution and our mechanics deal with the installation on-site.

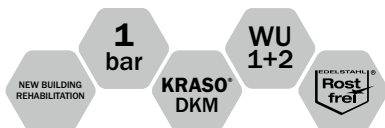
We are looking forward to your enquiry:

- + +49(0)2872-9535-0
- + WhatsApp +49(0)2872-9535-888 
- + export@kraso.de





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 (WU) 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! All kinds of media lines can also be installed or sealed retrospectively - easy and fast. 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

Type / 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

loose-flange

fixed-flange



EPDM supplement

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 W2.1 -E and W2.2 -E** ("medium impact of pressing water" (water column ≤ 3 metres) / „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



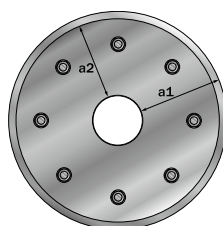
electrogalvanised

electrogalvanised,
with plastic casing

electrogalvanised



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



Schematic top view



KRASO® Casing Type FL/ZA - fixed-loose flange for dowel-fixing **LG 2**

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 W2.1 -E and W2.2 -E**

Type / Item	KRASO® Casing Type FL/ZA - 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
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 €

Type / Item	KRASO® Casing Type FL/ZA - DIN 18533 W2.1 -E: MEDIUM IMPACT OF PRESSING WATER (WATER COLUMN ≤ 3 METRES)						
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 €

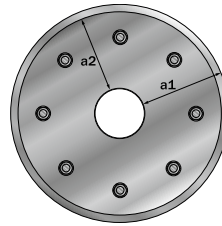
Scope of supply: KRASO® Casing Type FL/ZA, casing with welded fixed-flange, loose-flange, dowels M8 x 100, bolts, nuts and washers M20 /M12

Further diameters and protrusions available on request! Also available in V4A!





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



Schematic top view



KRASO® Casing Type FL/ZE - fixed-loose flange for concreting **LG 2**

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**

Type / 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
Standard wall thicknesses 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 €

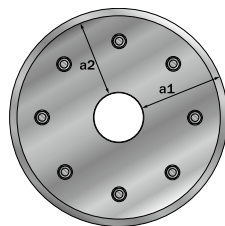
Type / Item	KRASO® Casing Type FL/ZE -DIN 18533 W2.1 -E: MEDIUM IMPACT OF PRESSING WATER (WATER COLUMN ≤ 3 METRES)						
Diameter fixed-flange a1	surrounding 70 mm - t = 6 mm						
Diameter loose -flange a2	surrounding 60 mm - t = 6 mm						
KRASO® Casing Type FL/ZE - non-corrosive stainless steel V2A -	622 €	679 €	759 €	874 €	1.169 €	1.666 €	2.036 €
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!



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



Schematic top view



KRASO® Sealing Insert Type FL - fixed-loose flange **LG 2**

fixed-loose flange with **KRASO®** Sealing Insert, for installation of media pipes 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, Torque Control Nut **KRASO®** DKM | DIN 18533 W2.1 -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

Type / 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 €

Type / Item	KRASO® Sealing Insert Type FL/ED -DIN 18533 W2.1 -E: MEDIUM IMPACT OF PRESSING WATER (WATER COLUMN ≤ 3 METRES)						
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**

Type / Item	KRASO® Flange Plate non-corrosive stainless steel V2A						
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, with welded tubular sleeve, EPDM flat seal. ID = InternalDiameter | **DafStB waterproof concrete guideline: stress class 1 + 2**

Type / Item	KRASO® Flange Plate electrogalvanised						
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, EPDM flat seal incl. fixing material and adhesive and sealant **KRASO® PU 50**

Further sizes and diameters available on request!

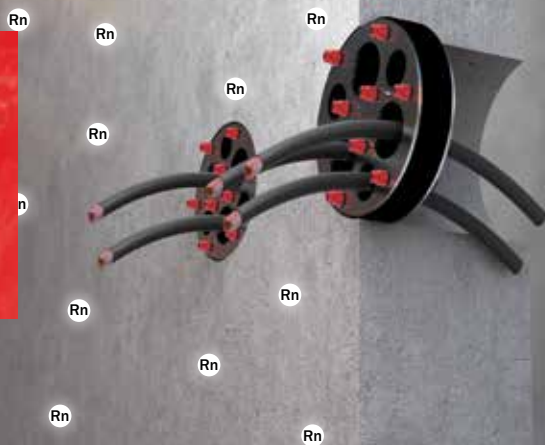
stainless
steel or
galvanised?

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.





KRASO® Sealing Inserts – protection against radon!



Rn
Radon-
tight

- + 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 „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 Android and iOS or at KRASO.de/en.



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