

FRIAGRIP coupling (U-piece)

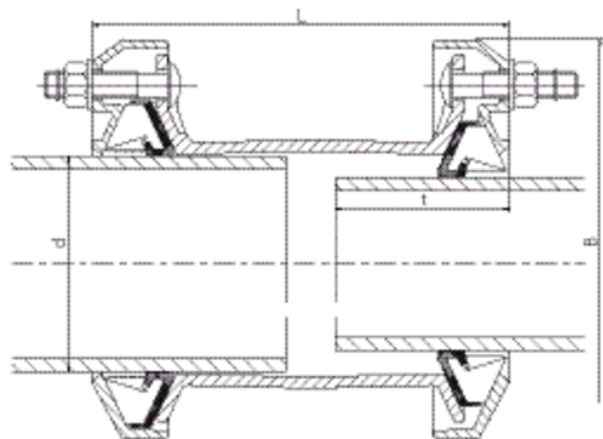
Restrained coupling for connecting pipes of different materials (steel, cast iron, ductile cast iron, asbestos cement, PVC, PE-HD/PEX).

- Body and ring are made of ductile cast iron (EN-GS-450-10)
- Corrosion protection Rilsan (min. 250 µm acc. GSK).
- Progressive Gripping Mechanism increases its end load restraint capability as the internal pressure in the pipe. One gripper system suits all recommended pipe materials and offers full end load resistance at full angular deflection.
- Carriers made of acetal, gripping segment made of acetal, corundum-coated
- Gasket material EPDM or NBR
- Diameter tolerance dimensionally dependent up to max. 54 mm
- Nuts and Bolts made of stainless steel.
- Maximum pipe deflection 8°

Note:

For application on PE-HD-/PEX-pipes our inner support sleeve SHVA is required.

When used on Asbestos cement pipes, the restrained locking cannot be guaranteed.



Gasket EPDM, DIN-EN 681-1 / KTW / UBA / DVGW-W270

PFA /PN Water: up to DN 300 = 16 bar, larger DN 300 = 10 bar

Reference	d	DN	BX	PU	L	t min	t max	Weight kg
672101	43,5-63,5	40	5	90	222	65	95	5,200
672102	48,0-71,0	50	4	30	256	65	110	5,600
672103	63,0-83,7	65	4	72	222	65	95	6,100
672105	85,7-107,0	80	1	30	248	65	110	7,700

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Reference	d	DN	BX	PU	L	t min	t max	Weight kg
672107	107,2-133,2	100	1	24	296	90	125	13,400
672109	132,2-160,2	125	1	12	296	90	125	14,300
672111	158,2-192,2	150	1	12	340	90	135	19,900
672113	192,2-226,9	175	1	12	347	125	165	32,800
672115	218,1-256,0	200	1	8	347	125	165	35,000
672117	266,2-310,2	250	1	2	484	125	165	52,300
672119	315,0-356,0	300	1	2	484	125	200	63,100
672121	352,2-396,0	350	1	1	485	125	200	73,800
672123	398,2-442,0	400	1	1	485	125	200	81,800
672125	448,0-492,0	400+	1	1	545	125	200	135,000
672127	498,0-552,0	500	1	1	565	140	215	142,000
672129	558,0-608,0	500+	1	1	565	140	215	162,000
672131	604,0-648,0	600	1	1	605	195	255	238,000
672133	676,0-726,0	600+	1	1	605	195	255	267,000

Gasket NBR, DIN-EN 682

MOP Gas: up to DN 400 = 5 bar

Other water qualities PFA /PN: up to DN 300 = 16 bar, larger DN 300 = 10 bar

Reference	d	DN	BX	PU	L	t min	t max	Weight kg
670101	43,5-63,5	40	5	90	222	65	95	5,200
670102	48,0-71,0	50	4	30	256	65	110	5,600
670103	63,0-83,7	65	4	72	222	65	95	6,100
670105	85,7-107,0	80	1	30	248	65	110	7,700
670107	107,2-133,2	100	1	24	296	90	125	13,400
670109	132,2-160,2	125	1	12	296	90	125	14,300
670111	158,2-192,2	150	1	12	340	90	135	19,900
670113	192,2-226,9	175	1	12	347	125	165	32,800
670115	218,1-256,0	200	1	8	347	125	165	35,000
670117	266,2-310,2	250	1	2	484	125	165	52,300
670119	315,0-356,0	300	1	2	484	125	200	63,100
670121	352,2-396,0	350	1	1	485	125	200	73,800
670123	398,2-442,0	400	1	1	485	125	200	81,800

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Areas of application

FRIAGRIP coupling FGK as a restrained coupling¹ for pipes made of different materials (steel, cast iron, ductile iron, fiber cement², PVC³, PE-HD/PEX⁴). Available from DN 40 to DN 600+.

FRIAGRIP components can only be used in buried areas

Processing instructions

FRIAGRIP, restrained couplings for connections without without abutments (exception: asbestos cement pipes).

The pipe ends must be prepared in accordance with the general installation requirements (see FRIAGRIP installation instructions).

The insertion depths tmin./tmax. must be strictly observed.

¹ Restrained; water: ≤ DN 300 PN 16, > DN 300 PN10 / restrained: ≤ DN 400 PN 5.

² Restrained cannot be guaranteed for asbestos cement pipes

³ For application on PVC gas pipes, see FRIAGRIP Technical Information. For PVC pipes with wall thicknesses < DIN 8061/62 – PN 10, use the FRIAGRIP support liners (type FRIATEC Mod. SHVA).

For application on stainless steel pipes, see FRIAGRIP Technical Information.

⁴ When used with PE-HD/PEX pipes, the FRIAGRIP support liners

Good reasons for FRIAGRIP

- Working in Pipe Trenches reduced to a minimum (no abutments required for directional changes)
- The components are delivered pre-assembled at the factory, thus no conversion and replacement work is required on site
- One gasket-package and one gripping segment for the pipe materials steel, cast iron, ductile iron, fiber cement, PVC, PE-HD/PEX.
- Gasket and gripping system operate independently of each other. This ensures a reliable seal under dynamic axial loads.
- Specially profiled gasket ensures full seal even on scored and corroded pipes.
- Deflection of the pipes up to 8° (coupling) or 4° (flange adapter).
- In case of pipe breakage, axial misalignment can be compensated by installing two couplings. The couplings act like a joint and keep the pipe stress-free
- Simple installation with standard tools
- One torque for all pipe materials
- Repeated checking of the tightening torque of the bolts not necessary
- The tolerance range of up to 54 mm allows different pipe materials to be connected to one FRIAGRIP-Size, therefore reduced stock-keeping necessary