



Angle-pad couplings provide a full rigid connection of grooved pipes and/or grooved fittings. The coupling has been designed to achieve angular and axial stiffness by firmly clamping in the groove base. Small internal dents give an anti-torsional resistance and the angled bolt-pads guarantee rigidity under all pipe and groove conditions.

Reference		Nominal size		Pipe Ø O.D.	Rigid coupling dimensions				Bolt size	Socket wrench	Torque	Weight	Marking
Red	Galva	NPS inch	DN mm	mm	ØD mm	L mm	H mm	C mm	d1xL	mm	Nm	kg	
GKAR1	GKAG1	1	25	33,7	56,0	96,0	47	74	M10x50	15	44-54	0,55	GKA
GKAR11/4	GKAG11/4	1¼	32	42,4	64,0	106,0	47	83	M10x60	15	44-54	0,61	GKA
GKAR11/2	GKAG11/2	1½	40	48,3	69,0	113,0	47	90	M10x60	15	44-54	0,64	GKA
GKAR2	GKAG2	2	50	60,3	88,0	122,0	47	100	M10x60	15	44-54	0,78	GKA
GKAR73	GKAG73	2½	65	73,0	100,0	137,0	47	114	M10x70	15	44-54	0,88	GKA
GKAR21/2	GKAG21/2	2½	65	76,1	100,0	137,0	47	114	M10x70	15	44-54	0,88	GKA
GKAR3	GKAG3	3	80	88,9	116,0	154,0	47	130	M10x70	15	44-54	1,02	GKA
GKAR4	GKAG4	4	100	114,3	142,0	188,0	52	162	M12x75	18	90-100	1,37	GKA
GKAR5	GKAG5	5	125	139,7	170,0	219,0	52	191	M12x80	18	90-100	1,88	GKA
GKAR141	GKAG141	5	125	141,3	171,0	219,0	52	191	M12x80	18	90-100	2,15	GKA
GKAR165	GKAG165	6	150	165,1	199,0	244,0	52	217	M12x80	18	90-100	2,48	GKA
GKAR6	GKAG6	6	150	168,3	199,0	246,0	52	218	M12x80	18	90-100	2,22	GKA
GKAR8	GKAG8	8	200	219,1	262,0	322,0	66	287	M16x120	24	200-230	4,42	GKA
GKAR10	GKAG10	10	250	273,0	325,0	400,0	66	354	M20x170	30	270-300	8,00	GKA
GKAR12	GKAG12	12	300	323,9	376,0	468,0	67	412	M22x185	34	370-410	11,05	GKA
GKAR14	GKAG14	14	350	356,0	-	-	-	-	-	-	-	14,50	GKA*
GKAR16	GKAG16	16	400	406,4	460,0	550,0	75	497	M22x190	32	270-300	15,50	GKA*

### Material specifications

**Housing:** ductile iron conform to ASTM A536 GR 65-45-12

**Coating:**

- Hot dip galvanized
- Red paint coating RAL 3000, EPD Epoxy coating

**Bolts and nuts:** medium carbon steel grade 8.8, zinc electroplated, quenched and tempered

**Rubber gasket:** EPDM gaskets dispose of the international certifications and have undergone the aging test at 135°C/275°F for a period of 45 days/1080 hours and the freezing test at -40°C/-40°F for a period of 4 days/96 hours.

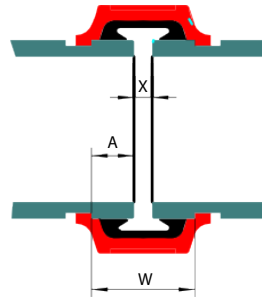
### Working pressure

300 PSI/2068 kPa/20,7 barg

### General notes:

- \* No FM-approval.
- Pressure ratings listed are CWP (cold working pressure) or MWP (maximum working pressure) at a maximum service temperature of 50°C. This rating may occasionally differ from maximum working pressure listed and/or approved by UL and/or FM, as testing conditions and test pipes differ. For more information, please contact info@profitings.eu.
- Maximum working pressure listed is the total of internal and external pressures, based on standard weight (ANSI) steel pipe and standard roll or cut groove, in accordance with Profit specifications. For more information, please contact info@profitings.eu.
- For one time field test only, the maximum joint working pressure may be increased by 150% the figure shown.
- Warning: Piping systems must always be depressurized and drained before attempting disassembly and/or removal of any components.
- Profit reserves the right to change specifications, designs and/or standard equipment without notice and without incurring in any obligations.
- Profit red coated products are intended for piping with indoor application (EN 12944-2 corrosivity category C1 & C2). For outdoor installations near the sea (corrosivity category C3) we advise the use of our hot dip galvanized couplings and fittings. For application in corrosivity category C4 (higher salinity climate) or higher, please contact info@profitings.eu.
- We advise to always store our products in closed and dry environments.
- Independent technical datasheet for bolts and nuts and rubber gaskets.

# ANGLE-PAD RIGID COUPLING GKA



Reference		Nominal size		Pipe Ø O.D.	W	A mm			Max. axial displacement X mm		Max. end load N
Red	Galva	NPS inch	DN mm	mm	mm	basic	max.	min.	max.	min.	
GKAR1	GKAG1	1	25	33,7	34	15,9	16,6	15,1	1,6	0	1800
GKAR11/4	GKAG11/4	1¼	32	42,4	34	15,9	16,6	15,1	1,6	0	2920
GKAR11/2	GKAG11/2	1½	40	48,3	34	15,9	16,6	15,1	1,6	0	3790
GKAR2	GKAG2	2	50	60,3	35	15,9	16,6	15,1	1,6	0	5910
GKAR73	GKAG73	2½	65	73,0	35	15,9	16,6	15,1	1,6	0	8640
GKAR21/2	GKAG21/2	2½	65	76,1	35	15,9	16,6	15,1	1,6	0	9410
GKAR3	GKAG3	3	80	88,9	35	15,9	16,6	15,1	1,6	0	12840
GKAR4	GKAG4	4	100	114,3	36	15,9	16,6	15,1	4,1	0	21220
GKAR5	GKAG5	5	125	139,7	37	15,9	16,6	15,1	4,1	0	31700
GKAR141	GKAG141	5	125	141,3	37	15,9	16,6	15,1	4,1	0	31700
GKAR165	GKAG165	6	150	165,1	38	15,9	16,6	15,1	4,1	0	44131
GKAR6	GKAG6	6	150	168,3	38	15,9	16,6	15,1	4,1	0	46000
GKAR8	GKAG8	8	200	219,1	44	19,1	19,8	18,3	4,1	0	77970
GKAR10	GKAG10	10	250	273,0	47	19,1	19,8	18,3	4,1	0	121050
GKAR12	GKAG12	12	300	323,9	48	19,1	19,8	18,3	4,1	0	170390
GKAR14	GKAG14	14	350	356,0	-	23,8	24,2	29,0	4,1	0	198530
GKAR16	GKAG16	16	400	406,4	-	23,8	24,2	29,0	4,1	0	259300

**THE ACTUAL GAP BETWEEN PIPES MAY CHANGE ACCORDING TO THE ACTUAL CUT AND ROLL GROOVE**

**General notes:**

- Pressure ratings listed are CWP (cold working pressure) or MWP (maximum working pressure) at a maximum service temperature of 50°C. This rating may occasionally differ from maximum working pressure listed and/or approved by UL and/or FM, as testing conditions and test pipes can differ. For more information, please contact info@profitings.eu.
- Maximum working pressure listed is total of internal and external pressures based on standard weight (ANSI) steel pipe and standard roll or cut groove in accordance with Profit specifications. For more information, please contact info@profitings.eu.
- For one time field test only, the maximum joint working pressure may be increased one and a half times the figure shown.
- Warning: Piping systems must always be depressurized and drained before attempting disassembly and/or removal of any components.
- Profit reserves the right to change specifications, designs and/or standard equipment without notice and without incurring in any obligations.
- Profit red coated products are intended for piping with indoor application (EN 12944-2 corrosivity category C1 & C2). For outdoor installations near the sea (corrosivity category C3) we advise to use our hot dip galvanized couplings and fittings. For application in corrosivity category C4 (higher salinity climate) or higher, please contact info@profitings.eu.
- We strongly advise to always store our products in closed and dry warehouses.
- Independent technical datasheet for bolts and nuts and rubber gaskets.

## MINIMUM PIPE WALL THICKNESS

Allowable minimum pipe wall thickness combinations with PROFIT - couplings GKA and rolled grooves.

Nominal pipe size		Minimum thickness T* (Not FM approved) MWP = 20,7 Barg	Minimum thickness T** MWP = 20,7 Barg	Minimum thickness T*** Only combined with FM-approved pipes	
NPS (DN)		mm	mm	Thickness (mm)	MWP (Barg)
1	25	2,3	2,77	-	-
1¼	32	2,6	2,77	-	-
1½	40	2,6	2,77	2,1	20,7
2	50	2,9	2,77	2,1	20,7
2½	65	2,9	3,05	-	-
3	80	3,2	3,05	2,4	20,7
4	100	3,6	3,05	2,5	20,7
5	125	4	3,40	-	-
6	150	4,5	3,40	-	-
8	200	6,3	4,00	-	-
10	250	6,3	5,00	-	-
12	300	7,1	6,70	-	-

T\* Pipe dimensions according ISO 4200/E.

T\*\* For FM-application when couplings are combined with pipes with wall thickness equal or bigger than the minimum thickness according to FM Property Loss Prevention datasheet 2-0.

T\*\*\* For FM-application only when combination of coupling and pipe are FM-listed.

MWP= maximum working pressure.

For installations within Europe (EC) please note that the minimum pipe thickness in fire sprinkler piping should be according to standard EN 12845.