

+GF+ WAGA PLUS Couplings

The WAGA PLUS multi joint range of pipe couplings, offer a mechanical jointing method with end load restraint for all common pipe materials. These so called "large range couplings" are designed to accept an extremely wide variation in pipe size allowing a single fitting to be used on any common pipe material in a given size.

All items contained in this price list are coated with a special RESICOAT epoxy powder coating for maximum corrosion protection and come standard with unique NBR seals and stainless steel bolts that are suitable for water and gas. The Resicoat powder coating is resistant to attack from aggressive or polluted soil.

PE, PVC, ABS, PP, AC, Cast Iron, Ductile Iron, Steel, Stainless, Copper...

	CODE:	Size	Price
 (6301)	Restraint Coupling	FWC/050	50mm
		FWC/065	65mm
		FWC/080	80mm
		FWC/100	100mm
		FWC/125	125mm
		FWC/150	150mm
		FWC/200	200mm
		FWC/225	225mm
		FWC/250	250mm
		FWC/300	300mm
 (6306)		FWC/350	350mm
		FWC/400	400mm
	Restraint Flange	FWFL/050	50mm
		FWFL/065	65mm
		FWFL/080	80mm
		FWFL/100	100mm
		FWFL/125	125mm
		FWFL/150	150mm
		FWFL/200	200mm
		FWFL/250	250mm
 (6301)	Restraint Reducing Flange	FWFLR/225x200	225x200mm
		FWFLR/250x225	250x225mm

	CODE:	Size	Price
 (3107)	Restraint Reducing Coupling	FWCR/065x050	65 x 50mm
		FWCR/080x065	80 x 65mm
		FWCR/100x080	100 x 80mm
		FWCR/125x100	125 x 100mm
		FWCR/150x100	150 x 100mm
		FWCR/150x125	150 x 125mm
		FWCR/200x150	200 x 150mm
		FWCR/225x200	225 x 200mm
		FWCR/250x225	250 x 225mm
		FWCR/300x250	300 x 250mm
 (6301)	Restraint Blind End Cap	FWCAP/050	50mm
		FWCAP/065	65mm
		FWCAP/080	80mm
		FWCAP/100	100mm
		FWCAP/125	125mm
		FWCAP/150	150mm
		FWCAP/200	200mm
		FWCAP/225	225mm
		FWCAP/250	250mm
		FWCAP/300	300mm

* Threaded end caps available on request.

Sizing & Pressure Ratings

Sizing

WAGA Multi/Joint® fittings are wide range couplings and will fit any pipe material in a given pipe dimension.

Pressure Rating

Multi/Joint couplings come standard with restraint connections and a 16 bar pressure rating*

(300mm Multi/Joint® Only 10 bar).

With Multi/Joint® couplings the fiksers that provide the endload restraint can be removed to provide a non-restraint connection and an increased pressure rating of 25bar.

* Based on water at 20°C

Size (mm)		Pressure Rating Bar	
(DN)	Range (OD)	Restraint	Non-Restraint
50	46 - 71	16	25
65	69 - 90	16	25
80	84 - 105	16	25
100	104 - 132	16	25
125	132 - 155	16	25
150	154 - 192	16	25
200	192 - 232	16	25
225	232 - 257	16	25
250	267 - 310	16	25
300	315 - 356	10	25
350	352-393	10	25
400	392-433	10	25

PRICES INDICATED DO NOT INCLUDE GST



WAGA PLUS Insert Stiffener


When using mechanical couplings on **PE** or **PVC** (pressure class <PN10), insert stiffeners are advisable or even mandatory because of:


Continual load of the sealing and restraining mechanism



Residual stress and bending torques



	CODE:	Size (OD)	Price
Economy Insert SDR11 	FWEI11/063	63mm	
	FWEI11/075	75mm	
	FWEI11/090	90mm	
	FWEI11/110	110mm	
	FWEI11/125	125mm	
	FWEI11/140	140mm	
	FWEI11/160	160mm	
	FWEI11/180	180mm	
	FWEI11/200	200mm	
	FWEI11/225	225mm	
	FWEI11/250	250mm	
	FWEI11/280	280mm	
	FWEI11/315	315mm	
	FWEI11/355	355mm	
Economy Insert SDR17	FWEI17/063	63mm	
	FWEI17/075	75mm	
	FWEI17/090	90mm	
	FWEI17/110	110mm	
	FWEI17/125	125mm	
	FWEI17/140	140mm	
	FWEI17/160	160mm	
	FWEI17/180	180mm	
	FWEI17/200	200mm	
	FWEI17/225	225mm	
	FWEI17/250	250mm	
	FWEI17/280	280mm	
	FWEI17/315	315mm	
	FWEI17/355	355mm	

	CODE:	Size (OD)	Price
Wedge Insert SDR11 	FWWI11/063	63mm	
	FWWI11/075	75mm	
	FWWI11/090	90mm	
	FWWI11/110	110mm	
	FWWI11/125	125mm	
	FWWI11/140	140mm	
	FWWI11/160	160mm	
	FWWI11/180	180mm	
	FWWI11/200	200mm	
	FWWI11/225	225mm	
	FWWI11/250	250mm	
	FWWI11/280	280mm	
	FWWI11/315	315mm	
	FWWI11/335	355mm	
Wedge Insert SDR17	FWWI17/063	63mm	
	FWWI17/075	75mm	
	FWWI17/090	90mm	
	FWWI17/100	110mm	
	FWWI17/125	125mm	
	FWWI17/140	140mm	
	FWWI17/160	160mm	
	FWWI17/180	180mm	
	FWWI17/200	200mm	
	FWWI17/225	225mm	
	FWWI17/250	250mm	
	FWWI17/280	280mm	
	FWWI17/315	315mm	
	FWWI17/335	355mm	

* SDR13.5 Wedge Inserts available on request

Installation Instructions

1. CHECK

- Did you receive the coupling complete?
- Are the Fiskers equally spaced and fitted?
- Are the teeth of the Fiskers pointing to the inside of the coupling?

2. PIPE INSERTION DEPTH & PREPERATION

- Mark the insertion depth, approx half of the total coupling length, on the pipe-end.
- Clean the pipe-ends over this length plus approx 30mm to remove all loose or flaking surface material including paint and bitumen coating.

PLEASE NOTE: Ensuring a secure connection on AC pipes requires additional pipe preparation and it is recommend to consult with Plastic Systems prior to installation on this material to ensure joint integrity.

3. PIPE ASSEMBLY

- The rubber must be on the side of the body!!
- Push the pipes into the coupling up to the marked line on the pipe.
- Take care that there is 3-5mm space between the two pipe ends.

4. TIGHTEN THE BOLTS

Tighten the bolts equally, with the following torques:

PVC:

DN50-65:

40-50Nm
(= 4-5kgm or 29-36lbf/ft)

DN80-150:

60-70Nm
(= 6-7kgm or 44-52lbf/ft)

DN200-225:

80-90Nm
(= 8-9kgm or 58-65lbf/ft)

DN250:

120-130Nm
(= 12-13kgm or 87-94lbf/ft)

DN300:

100-110Nm
(= 10-11kgm or 72-80lbf/ft)

Stainless Steel:

DN50-65:

60-70Nm
(= 6-7kgm or 43-51lbf/ft)

DN80-225:

80-90Nm
(= 8-9kgm or 58-65lbf/ft)

DN250:

140-150Nm
(= 14-15kgm or 101-109lbf/ft)

DN300:

120-130Nm
(= 12-13kgm or 87-94lbf/ft)

Cast Iron:

DN50-65:

60-70Nm
(= 6-7kgm or 43-51lbf/ft)

DN80-150:

80-90Nm
(= 8-9kgm or 58-65lbf/ft)

DN200-225:

100-110Nm
(= 10-11kgm or 72-80lbf/ft)

DN250-300:

140-150Nm
(= 14-15kgm or 101-109lbf/ft)

PE80-100:

DN50-65-80:

75-85Nm
(= 7.5-8.5kgm or 55-63lbf/ft)

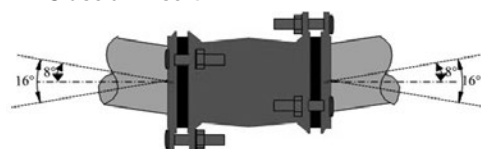
DN100-150:

90-100Nm
(= 9-10kgm or 66-74lbf/ft)

DN200-300:

110-120Nm
(= 11-12kgm or 81-89lbf/ft)

**for PE pipes
ALWAYS use an insert!**



Nominal Angularity

Restraint connection: 4° per coupling side
Flexible connection: 8° per coupling side

ATTENTION:

- Georg Fischer WAGA advises to use a torque-wrench to give final correct values to the bolts.
- For pipes below pressure class PN10 assembly instructions are available on request.