Reduced bore dedicated flange adaptor
Series C1 45

Enables connection and sealing of a flanged pipe or any flanged fittings to a plain-ended pipe.

Description

- For steel and ductile iron pipes.
  Other materials, on request.
- Ease of installation:
  - angular deflection ± 3°,
  - accommodates misalignment,
  - important setting gap,
  - full flange face suitable for use with Wafer valves.
- Reliability:
  - permanent leak tight joint when compressing the gasket between the end flange and the sleeve onto the pipe surface.
  - anticorrosion protection: epoxy powder coating and bolting made of steel.
- Conformity to standards:
  - E 29220: Industrial pipework – Flanged adaptors and disassembly seal for pipework – Specifications.
  - EN 545: Ductile iron pipes, fittings, accessories and their joints for water pipelines – requirements and test methods.
  - EN 1092: Flanges and their joints – Circular flanges for pipes, valves, fittings and accessories, PN designated.
  - ISO 2531: Ductile iron pipes, fittings, accessories and their joints for water applications.
  - ISO 7005: Metallic flanges and cast iron flanges.
  - ISO 7483: Dimensions of gaskets for use with flanges to ISO 7005.
- Approval: :
  - Drinking water approved.
- Nota:
  This coupling does not resist to longitudinal forces and pipe pull out will occur. Ensure adequate restraint is provided.

Technical data

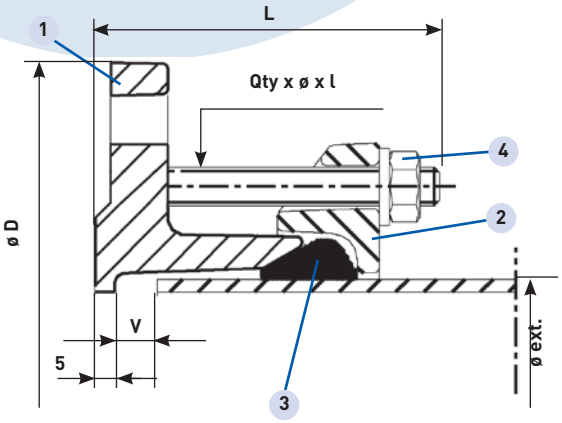
- Range:
  - For steel pipes: adaptor allowing anchoring with a kit
    DN 50 to 1600 – PN 10 and 16 ISO PN 10 and 16
    DN 50 to 1000 – PN 25 ISO PN 25
  - For ductile iron pipes:
    DN 80 to 1600 – PN 10 and 16 ISO PN 10 and 16
    DN 80 to 1000 – PN 25 ISO PN 25
    Other DN, on request.
  - For PVC-BO pipes:
    DN 100 to 300 - PN 25 ISO PN 25
- Temperatures: +0°C to +60°C.

Applications

- Drinking water networks.
- Pumping, treatment, watertank.
- Fire protection networks.
- Irrigation networks.
- Sewage networks and rain waters drainage (WC type - NF EN 681-1).

Reduced bore dedicated flange adaptor

DN 50 to 300



Item	Designation	Materials	Standards
1	Body	Ductile iron or welded steel*	EN 1563 - EN 10025
2	End-flange	Ductile iron or welded steel*	EN 1563 - EN 10025
3	Gasket	EPDM**	EN 681-1
4	Bolts	Mild steel HD galvanised***	
	Coating	Blue epoxy powder**** Ral 5015 250 µm	

** PN 16 ductile iron - PN 25 welded steel*
*** Nitrile on request*
**** Stainless steel 316 on request*
***** Other on request*

For steel pipes

DN	OD	PN 10				PN 16				PN 25			
	mm	D mm	L mm	Weight kg	Bolts Qty x ø x l en mm	D mm	L mm	Weight kg	Bolts Qty x ø x l en mm	D mm	L mm	Weight kg	Bolts Qty x ø x l en mm
50	60.3	165	128	3.6	2xM12x100	165	128	3.6	2xM12x100	165	168	3.6	2xM12x160
60/65	76.1	185	128	4.5	2xM12x100	185	128	4.5	2xM12x100	185	170	5	2xM12x160
80	88.9	200	130	5.1	4xM12x100	200	130	5.5	4xM12x100	200	172	5.1	4xM12x160
100	114.3	220	130	6	4xM12x100	220	130	6	4xM12x100	235	172	6.7	4xM12x160
125	139.7	225	130	5.9	4xM12x100	225	130	7.5	4xM12x100	225	174	9.6	4xM12x160
125	139.7	254	130	7.5	4xM12x100	254	130	7.5	4xM12x100	270	174	9.6	4xM12x160
150	159	285	130	8.8	4xM12x100	285	135	8.5	4xM12x100	300	176	11.1	4xM12x160
150	168.3	285	130	8.4	4xM12x100	285	130	9.5	4xM12x100	300	176	11.1	4xM12x160
200	219.1	340	132	12.5	4xM12x100	340	132	12.5	6xM12x120	360	178	15	6xM12x160
250	273.1	405	132	17.2	6xM12x100	405	132	16.5	6xM12x120	425	180	21	6xM12x160
300	323.9	460	132	20.1	6xM12x100	460	132	24	6xM12x120	485	182	29.8	8xM12x160

Tolerance : ø 50 to 200 +1,6 -0,4 mm - ø 250 and 300 +2,4 -0,8 mm

Min.-max. gap (V in mm) for steel pipes

- ISO PN 10/16 :
  - DN 50 to 150 , V=5-30
  - DN 200 to 300, V=5-50
- ISO PN 25
  - DN 50 to 80, V=5-30
  - DN 100 to 125, V=5-95
  - DN 150 to 250, V=5-100
  - DN 300, V=5-80

For ductile iron pipes

DN	OD	PN 10				PN 16				PN 25			
	mm	D mm	L mm	Weight kg	Bolts Qty x ø x l en mm	D mm	L mm	Weight kg	Bolts Qty x ø x l en mm	D mm	L mm	Weight kg	Bolts Qty x ø x l en mm
80	98	200	130	4.9	4xM12x120	200	130	4.9	4xM12x120	200	172	5.5	4xM12x160
100	118	220	130	6.3	4xM12x120	220	130	6.3	4xM12x120	235	172	8.5	4xM12x160
125	144	250	164	9.2	4xM12x160	250	164	9.2	4xM12x160	270	174	12	4xM12x160
150	170	285	130	9.4	4xM12x120	285	132	9.4	4xM12x120	300	176	14	4xM12x160
200	222	340	132	12.5	4xM12x120	340	132	17	4xM12x120	360	178	19	4xM12x160
250	274	405	132	16.6	6xM12x120	405	132	16.6	6xM12x120	425	180	26	6xM12x160
300	326	460	132	28	6xM12x120	460	132	28	6xM12x120	485	168	36	8xM16x160

Tolerance : ø 80 à 300 +1,0 -2,0 mm

Min.-max. gap (V in mm) for ductile iron pipes

- ISO PN 10/16 :
  - DN 80-100-150 , V=5-30
  - DN 125, V=5-45
  - DN 200 to 300, V=5-50
- ISO PN 25
  - DN 80 to 125, V=5-95
  - DN 150 to 250, V=5-100
  - DN 300, V=5-80

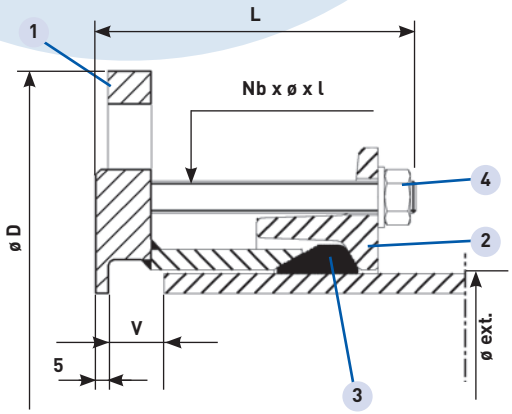
For PVC-BO pipes, please consult us.

Drilling

- ISO PN 10/16 for PN 16 excepted DN 200 ISO PN 10 or ISO PN 16.
- ISO PN 25 for PN 25.
- ISO PN 40 for PN 40 on request.

Reduced bore dedicated flange adaptor

DN 350 to 1600



Item	Designation	Materials	Standards
1	Body	Welded steel	NF EN 10025
2	End-flange	Welded steel*	NF EN 10025
3	Gasket	EPDM**	EN 681-1
4	Bolts	Mild steel HD galvanised***	
		galvanisé à chaud	
	Coating	Blue epoxy powder**** Ral 5015 250 µm	

** Notches for steel when necessary*
*** Nitrile on request*
**** Stainless steel 316 on request*
***** Other on request*

For steel pipes

DN	OD	PN 10				PN 16				PN 25			
		D	L	Weight	Bolts	D	L	Weight	Bolts	D	L	Weight	Bolts
	mm	mm	mm	kg	Qty x ø x l en mm	mm	mm	kg	Qty x ø x l en mm	mm	mm	kg	Qty x ø x l en mm
350	355.6	505	172	30	8xM12x160	520	178	36	8xM12x160	555	172	41	8xM16x160
400	406.4	565	174	36	8xM12x160	580	180	43	8xM12x160	620	174	51	8xM16x160
450	457.2	615	174	41	10xM12x160	640	180	50	10xM12x160	670	174	58	8xM16x160
500	508	670	174	44	10xM12x160	715	182	60	10xM12x160	730	178	66	8xM16x160
600	610	780	176	60	10xM12x160	840	184	83	10xM12x160	845	180	90	10xM16x150
700	711	895	174	81	12xM16x160	910	170	87	12xM16x150	960	180	107	12xM16x150
800	813	1015	176	100	12xM16x160	1025	172	104	12xM16x150	1085	184	135	12xM16x150
900	914	1115	178	97	14xM16x160	1125	174	125	14xM16x150	1185	188	154	14xM16x150
1000	1016	1230	178	113	14xM16x160	1255	176	169	14xM16x150	1320	192	193	14xM16x150
1100	1120	1355	178	126	16xM16x160	1365	179	199	16xM16x150	-	-	-	-
1200	1220	1455	182	158	16xM16x160	1485	192	235	16xM16x160	-	209	329	16xM16x160
1400	1420	1675	186	234	18xM16x160	1685	195	292	18xM16x160	-	209	366	18xM16x160
1500	1520	1785	189	258	18xM16x160	1820	198	341	18xM16x160	-	214	485	18xM16x160
1600	1620	1915	189	315	20xM16x160	1930	198	393	20xM16x160	-	-	-	-

Tolerance: +2,4 -0,8 mm

For ductile iron pipes

DN	OD	PN 10				PN 16				PN 25			
		D	L	Weight	Bolts	D	L	Weight	Bolts	D	L	Weight	Bolts
	mm	mm	mm	kg	Qty x ø x l en mm	mm	mm	kg	Qty x ø x l en mm	mm	mmkg		Qty x ø x l en mm
350	378	505	174	30	8xM12x160	520	178	35	8xM12x160	555	172	46	8xM16x160
400	429	565	174	37	8xM12x160	580	180	45	8xM12x160	620	174	57	8xM16x160
450	480	615	174	42	10xM12x160	640	180	67	10xM12x160	670	174	70	10xM16x160
500	532	670	174	45	10xM12x160	715	182	58	10xM12x160	730	178	71	10xM16x160
600	635	780	176	61	10xM12x160	840	184	90	10xM12x160	845	180	99	10xM16x160
700	738	895	164	82	12xM16x160	910	170	81	12xM16x160	960	180	153	12xM16x160
800	842	1015	166	102	12xM16x160	1025	172	117	12xM16x160	1085	184	160	12xM16x160
900	945	1115	168	112	14xM16x160	1125	174	121	14xM16x160	1185	188	166	14xM16x160
1000	1048	1230	168	130	14xM16x160	1255	174	140	14xM16x160	1320	192	236	14xM16x160
1100	1152	1340	170	146	16xM16x160	1355	189	164	16xM16x160				
1200	1255	1455	172	213	16xM16x160	1485	189	226	16xM16x160				
1400	1462	1675	174	228	18xM16x160	1685	194	270	18xM16x160				
1500	1565	1785	179	270	18xM16x160	1820	194	332	18xM16x160				
1600	1668	1915	180	357	20xM16x160	1930	199	332	20xM16x160				

Tolerance: +1,0 -2,0 mm

Drilling

- ISO PN 10 for PN 10.
- ISO PN 16 for PN 16.
- ISO PN 25 for PN 25.
- ISO PN 40 for PN 40 on request.

Déviation angulaire

- DN 350 to 450 ± 3°
- DN 500 - 600 ± 2,5°
- DN 600 - 750 ± 2°
- DN 800 to 1200 ± 1,5°
- DN 1250 to 1600 ± 1°

Min.-max. gap (V in mm) for steel and ductile iron pipes

- ISO PN 10 :
  - DN 350 to 500, V=5-65
  - DN 600 to 800, V=5-70
  - DN 900 to 1100, V=5-75
  - DN 1200 - 1400, V=5-80
  - DN 1500 - 1600, V=5-85
- ISO PN 16
  - DN 350 to 450, V=5-70
  - DN 500 to 700, V=5-75
  - DN 800 to 1000, V=5-80
  - DN 1100 - 1200, V=5-85
  - DN 1400, V=5-90
  - DN 1500 - 1600, V=5-95
- ISO PN 25
  - DN 350 to 450, V=5-80
  - DN 500 to 700, V=5-85
  - DN 800, V=5-90
  - DN 900, V=5-95
  - DN 1000, V=5-100

Reduced bore dedicated flange adaptor

Harnessing device

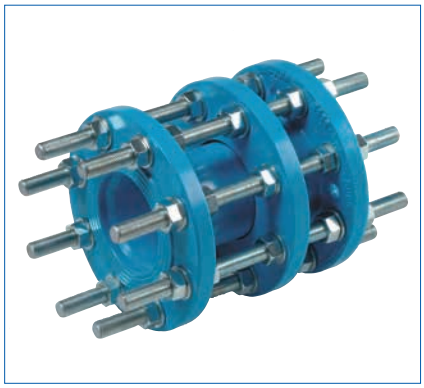
Dismantling joint (See Technical brochure Series C1 55)

Harness assembly to suit the magnitude of the working pressure and the adjustment between flanges.

"MDA" dismantling joint (See Technical brochure Series C4 30)

Harness assembly to accommodate the continuity of the mechanical characteristic of the pipe system at the working pressure. Allow adjustment between flanges.

Dismantling joint
Series C1 55



"MDA" dismantling joint
Series C4 30