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Introduction

ACO pipe is the ideal system for gray and black water, rainwater and industrial waste water drainage applications. When used with ACO gully and ACO channel systems, ACO pipe provides a unique, complex building drainage solution.

ACO pipe and fittings are available in 40 mm, 50 mm, 75 mm, 110 mm, 125 mm, 160 mm, 200 mm, 250 mm and 315 mm external diameters with the standard lengths from 0.15 meter up to 6 meter for optimum practicality and ease of assembly.

ACO pipe push-fit connection

Reliable for vacuum and gravity piping systems.

ACO pipe double lip seal delivers the ultimate system reliability. The unique and sophisticated design of lips and cavities provide tight connections.

Push-fit advantages

- Easy to assemble
- Time saving
- Cost saving
- Tight connection



System overview

Straight pipes



Fittings



Bends



Branches



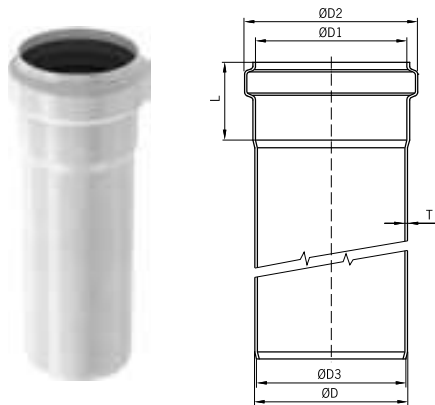
Accessories

Straight pipes

Product information

- Pipes are available in 40 mm, 50 mm, 75 mm, 110 mm, 125 mm, 160 mm, 200 mm, 250 mm and 315 mm external diameters
- Lengths from 0.15 meter up to 6 meter
- Available in 1.4301 (AISI 304) and 1.4404 (AISI 316L) grades stainless steel
- Push-fit system for quick assembly
- Superior seal security – components comprise a unique double lip sealing system, ideal for extraneous conditions
- Fully comply to EN 1124
- EPDM and Viton® seals available
- Fully pickled and passivated

ACO pipe - straight pipe



ACO pipe - double socketed pipe

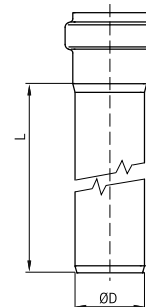


Dimensions of socket and spigot

øD [mm]	øD ₁ [mm]	øD ₂ [mm]	øD ₃ [mm]	Socket length L [mm]	Wall thickness T [mm]
40	41	51.5	38	40	1.0
50	51	62.0	47	42	1.0
75	76	87.5	72	50	1.0
110	111	125.5	107	57	1.0
125	126	141.0	122	63	1.0
160	161	178.0	156	70	1.25
200	201	219.0	195	80	1.5
250	251	268.6	245	90	1.5
315	316.2	334.2	309	100	2.0

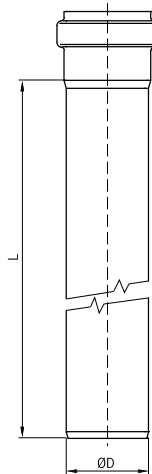
ACO pipe - straight pipe 40 mm

Seal material	Outlet diameter øD [mm]	Active length L [mm]	Weight [kg]	Item number 1.4301	Item number 1.4404
EPDM	40	150	0.2	417304	417320
	40	250	0.3	417306	417322
	40	500	0.6	417308	417324
	40	750	0.8	417310	417278
	40	1000	1.1	417312	417380
	40	1500	1.6	417314	417282
	40	2000	2.1	417316	417284
	40	2500	2.8	417260	417262
	40	3000	3.1	417318	417334
	40	4000	4.1	417264	417270
	40	5000	5.1	417266	417272
	40	6000	6.1	417268	417274



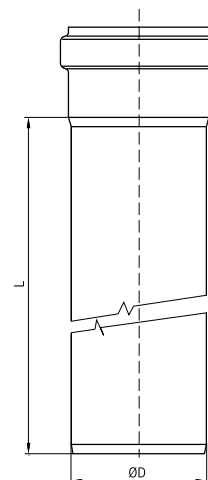
ACO pipe - straight pipe 50 mm

Seal material	Outlet diameter øD [mm]	Active length L [mm]	Weight [kg]	Item number 1.4301	Item number 1.4404
EPDM	50	150	0.2	98500	98550
	50	250	0.4	98502	98552
	50	500	0.7	98504	98554
	50	750	1.0	98506	98556
	50	1000	1.3	98508	98558
	50	1500	1.9	98510	98560
	50	2000	2.6	98512	98562
	50	2500	3.2	419274	419282
	50	3000	3.8	98514	98564
	50	4000	5.0	419458	419482
	50	5000	6.3	419466	419490
	50	6000	7.5	419474	419498
Viton®	50	150	0.2	98501	98551
	50	250	0.4	98503	98553
	50	500	0.7	98505	98555
	50	750	1.0	98507	98557
	50	1000	1.3	98509	98559
	50	1500	1.9	98511	98561
	50	2000	2.6	98513	98563
	50	2500	3.2	419275	419283
	50	3000	3.8	98515	98565
	50	4000	5.0	419459	419483
	50	5000	6.3	419467	419491
	50	6000	7.5	419475	419499



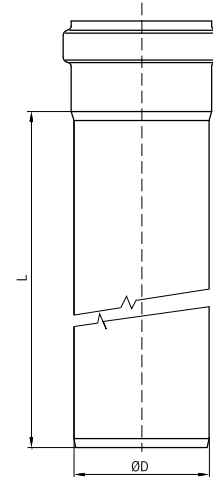
ACO pipe - straight pipe 75 mm

Seal material	Outlet diameter øD [mm]	Active length L [mm]	Weight [kg]	Item number 1.4301	Item number 1.4404
EPDM	75	150	0.4	98516	98566
	75	250	0.6	98518	98568
	75	500	1.0	98520	98570
	75	750	1.5	98522	98572
	75	1000	2.0	98524	98574
	75	1500	2.9	98526	98576
	75	2000	3.6	98528	98578
	75	2500	4.8	419276	419284
	75	3000	5.7	98530	98580
	75	4000	7.6	419460	419484
	75	5000	9.4	419468	419492
	75	6000	11.3	419476	419500
Viton®	75	150	0.4	98517	98567
	75	250	0.6	98519	98569
	75	500	1.0	98521	98571
	75	750	1.5	98523	98573
	75	1000	2.0	98525	98575
	75	1500	2.9	98527	98577
	75	2000	3.6	98529	98579
	75	2500	4.8	419277	419285
	75	3000	5.7	98531	98581
	75	4000	7.6	419461	419485
	75	5000	9.4	419469	419493
	75	6000	11.3	419477	419501



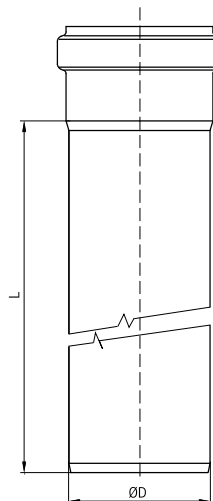
ACO pipe - straight pipe 110 mm

Seal material	Outlet diameter øD [mm]	Active length L [mm]	Weight [kg]	Item number 1.4301	Item number 1.4404
EPDM	110	150	0.6	98532	98582
	110	250	0.9	98534	98584
	110	500	1.5	98536	98586
	110	750	2.2	98538	98588
	110	1000	2.9	98540	98590
	110	1500	4.3	98542	98592
	110	2000	5.7	98544	98594
	110	2500	7.1	419278	419286
	110	3000	8.4	98546	98596
	110	4000	11.1	419462	419486
	110	5000	13.9	419470	419494
Viton®	110	6000	16.7	419478	419502
	110	150	0.6	98533	98583
	110	250	0.9	98535	98585
	110	500	1.5	98537	98587
	110	750	2.2	98539	98589
	110	1000	2.9	98541	98591
	110	1500	4.3	98543	98593
	110	2000	5.7	98545	98595
	110	2500	7.1	419279	419287
	110	3000	8.4	98547	98597
	110	4000	11.1	419463	419487
	110	5000	13.9	419471	419495
	110	6000	16.7	419479	419503



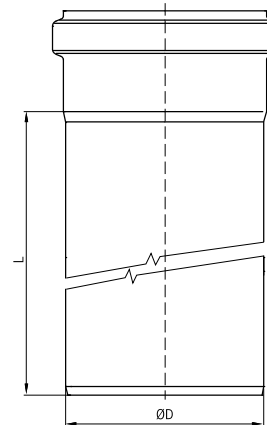
ACO pipe - straight pipe 125 mm

Seal material	Outlet diameter øD [mm]	Active length L [mm]	Weight [kg]	Item number 1.4301	Item number 1.4404
EPDM	125	150	0.7	419692	419712
	125	250	1.0	419694	419714
	125	500	1.7	419696	419716
	125	750	2.5	419698	419718
	125	1000	3.3	419700	419720
	125	1500	4.9	419702	419722
	125	2000	6.5	419704	419724
	125	2500	8.1	419708	419728
	125	3000	9.6	419706	419726
Viton®	125	6000	19.0	419710	419730
	125	150	0.7	419693	419713
	125	250	1.0	419695	419715
	125	500	1.7	419697	419717
	125	750	2.5	419699	419719
	125	1000	3.3	419701	419721
	125	1500	4.9	419703	419723
	125	2000	6.5	419705	419725
	125	2500	8.1	419709	419729
	125	3000	9.6	419707	419727
	125	6000	19.0	419711	419731



ACO pipe - straight pipe 160 mm

Seal material	Outlet diameter øD [mm]	Active length L [mm]	Weight [kg]	Item number 1.4301	Item number 1.4404
EPDM	160	150	1.1	98548	98598
	160	250	1.6	98600	98650
	160	500	2.9	98602	98652
	160	750	4.1	98604	98654
	160	1000	5.4	98606	98656
	160	1500	7.9	98608	98658
	160	2000	10.4	98610	98660
	160	2500	12.9	419280	419288
	160	3000	15.4	98612	98662
	160	4000	20.4	419464	419488
	160	5000	25.4	419472	419496
	160	6000	30.4	419480	419504
Viton®	160	150	1.1	98549	98599
	160	250	1.6	98601	98651
	160	500	2.9	98603	98653
	160	750	4.1	98605	98655
	160	1000	5.4	98607	98657
	160	1500	7.9	98609	98659
	160	2000	10.4	98611	98661
	160	2500	12.9	419281	419289
	160	3000	15.4	98613	98663
	160	4000	20.4	419465	419489
	160	5000	25.4	419473	419497
	160	6000	30.4	419481	419505



ACO pipe - straight pipe 200 mm

Seal material	Outlet diameter øD [mm]	Active length L [mm]	Weight [kg]	Item number 1.4301	Item number 1.4404
EPDM	200	500	4.5	419383	419384
	200	1000	8.3	419387	419388
	200	2000	15.8	419391	419392
	200	3000	23.2	419395	419396
Viton®	200	500	4.5	419385	419386
	200	1000	8.3	419389	419390
	200	2000	15.8	419393	419394
	200	3000	23.2	419397	419398

ACO pipe - straight pipe 250 mm

Seal material	Outlet diameter øD [mm]	Active length L [mm]	Weight [kg]	Item number 1.4301	Item number 1.4404
EPDM	250	500	5.5	417071	417072
	250	1000	10.2	417075	417076
	250	2000	19.4	417079	417080
	250	3000	28.7	417083	417084
Viton®	250	500	5.5	417073	417074
	250	1000	10.2	417077	417078
	250	2000	19.4	417081	417082
	250	3000	28.7	417085	417086

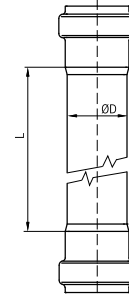
ACO pipe - straight pipe 315 mm

Seal material	Outlet diameter øD [mm]	Active length L [mm]	Weight [kg]	Item number 1.4301	Item number 1.4404
EPDM	315	500	9.8	417238	417200
	315	1000	17.7	417239	417201
	315	2000	33.5	417240	417202
	315	3000	49.3	417241	417203

Double socketed pipes

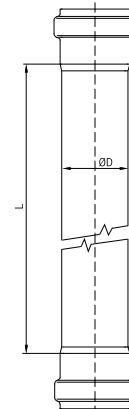
ACO pipe - double socketed pipe 40 mm

Seal material	Outlet diameter øD [mm]	Active length L [mm]	Weight [kg]	Item number 1.4301	Item number 1.4404
EPDM	40	250	0.2	417276	417290
	40	500	0.6	417278	417292
	40	750	0.9	417280	417294
	40	1000	1.2	417282	417296
	40	1500	1.8	417284	417298
	40	2000	2.4	417286	417300
	40	3000	3.6	417288	417302



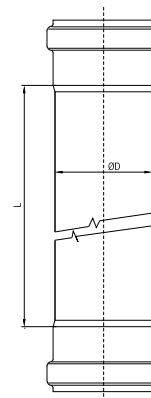
ACO pipe - double socketed pipe 50 mm

Seal material	Outlet diameter øD [mm]	Active length L [mm]	Weight [kg]	Item number 1.4301	Item number 1.4404
EPDM	50	250	0.4	419554	419594
	50	500	0.7	419556	419596
	50	750	1.1	419558	419598
	50	1000	1.4	419560	419600
	50	1500	2.0	419562	419602
	50	2000	2.6	419564	419604
	50	3000	3.9	419566	419606
Viton®	50	250	0.4	419555	419595
	50	500	0.7	419557	419597
	50	750	1.1	419559	419599
	50	1000	1.4	419561	419601
	50	1500	2.0	419563	419603
	50	2000	2.6	419565	419605
	50	3000	3.9	419567	419607



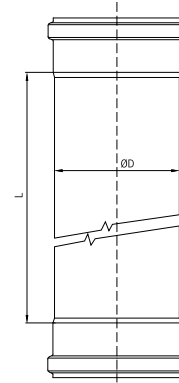
ACO pipe - double socketed pipe 75 mm

Seal material	Outlet diameter øD [mm]	Active length L [mm]	Weight [kg]	Item number 1.4301	Item number 1.4404
EPDM	75	250	0.7	419568	419608
	75	500	1.2	419570	419610
	75	750	1.6	419572	419612
	75	1000	2.1	419574	419614
	75	1500	3.0	419576	419616
	75	2000	4.0	419578	419618
	75	3000	5.8	419580	419620
Viton®	75	250	0.7	419569	419609
	75	500	1.2	419571	419611
	75	750	1.6	419573	419613
	75	1000	2.1	419575	419615
	75	1500	3.0	419577	419617
	75	2000	4.0	419579	419619
	75	3000	5.8	419581	419621



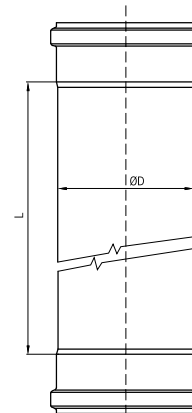
ACO pipe - double socketed pipe 110 mm

Seal material	Outlet diameter øD [mm]	Active length L [mm]	Weight [kg]	Item number 1.4301	Item number 1.4404
EPDM	110	500	1.7	419582	419622
	110	750	2.4	419584	419624
	110	1000	3.0	419586	419626
	110	1500	4.4	419588	419628
	110	2000	5.7	419590	419630
	110	3000	8.4	419592	419632
Viton®	110	500	1.7	419583	419623
	110	750	2.4	419585	419625
	110	1000	3.0	419587	419627
	110	1500	4.4	419589	419629
	110	2000	5.7	419591	419631
	110	3000	8.4	419593	419633



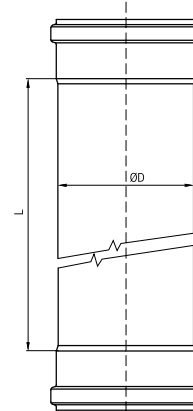
ACO pipe - double socketed pipe 125 mm

Seal material	Outlet diameter øD [mm]	Active length L [mm]	Weight [kg]	Item number 1.4301	Item number 1.4404
EPDM	125	500	1.7	419787	419799
	125	750	2.5	419789	419801
	125	1000	3.3	419791	419803
	125	1500	4.9	419793	419805
	125	2000	6.5	419795	419807
	125	3000	9.6	419797	419809
Viton®	125	500	1.7	419788	419800
	125	750	2.5	419790	419802
	125	1000	3.3	419792	419804
	125	1500	4.9	419794	419806
	125	2000	6.5	419796	419808
	125	3000	9.6	419798	419810



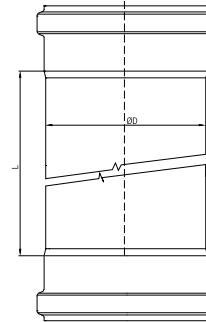
ACO pipe - double socketed pipe 160 mm

Seal material	Outlet diameter øD [mm]	Active length L [mm]	Weight [kg]	Item number 1.4301	Item number 1.4404
EPDM	160	500	3.3	419634	419646
	160	750	4.5	419636	419648
	160	1000	5.8	419638	419650
	160	1500	8.2	419640	419652
	160	2000	10.7	419642	419654
	160	3000	15.7	419644	419656
Viton®	160	500	3.3	419635	419647
	160	750	4.5	419637	419649
	160	1000	5.8	419639	419651
	160	1500	8.2	419641	419653
	160	2000	10.7	419643	419655
	160	3000	15.7	419645	419657



ACO pipe - double socketed pipe 200 mm

Seal material	Outlet diameter øD [mm]	Active length L [mm]	Weight [kg]	Item number 1.4301	Item number 1.4404
EPDM	200	500	5.0	419658	419659
	200	1000	8.6	419662	419663
	200	2000	15.9	419666	419667
	200	3000	23.1	419670	419671
Viton®	200	500	5.0	419660	419661
	200	1000	8.6	419664	419665
	200	2000	15.9	419668	419669
	200	3000	23.1	419672	419673

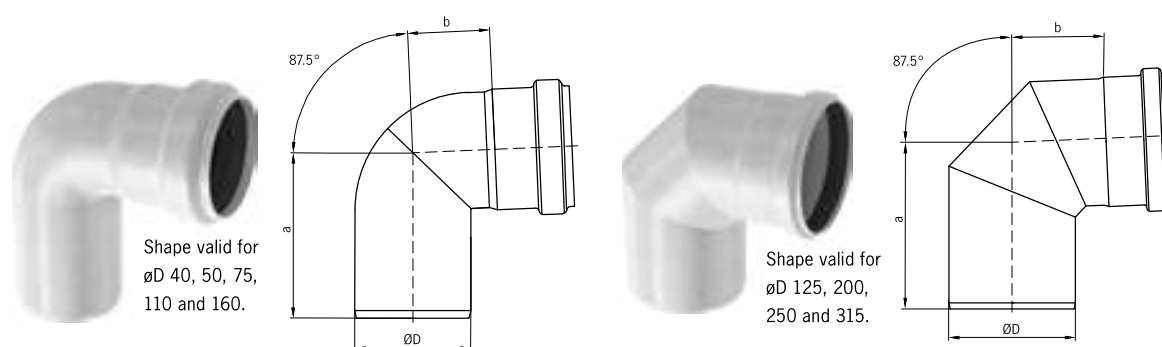


Bends

Product information

- Bends are available in 40 mm, 50 mm, 75 mm, 110 mm, 125 mm, 160 mm, 200 mm, 250 mm and 315 mm external diameters
- Available in 1.4301 (AISI 304) and 1.4404 (AISI 316L) grades stainless steel
- Push-fit system for quick assembly
- Superior seal security – components comprise a unique double lip sealing system, ideal for extraneous conditions
- Fully chemically pickled and passivated
- EPDM and Viton® seals available
- Fully comply to EN 1124

ACO pipe - bend 87.5°

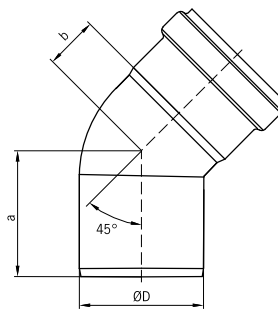


Seal material	Outlet diameter ØD [mm]	Dimensions		Weight [kg]	Item number 1.4301	Item number 1.4404
EPDM	40	79	32	0.2	417342	417350
	50	86	40	0.2	98700	98750
	75	107	53	0.4	98702	98752
	110	134	67	0.7	98704	98754
	125	161	93	0.8	419732	419734
	160	181	105	1.7	98706	98756
	200	215	129	3.9	419411	419413
	250	297	198	5.1	-	417088
Viton®	315	393	286	12.8	-	417204
	50	86	40	0.2	98701	98751
	75	107	53	0.4	98703	98753
	110	134	67	0.7	98705	98755
	125	161	93	0.8	419733	419735
	160	181	105	1.7	98707	98757
	200	215	129	3.9	419412	419414
	250	297	198	5.1	-	417090

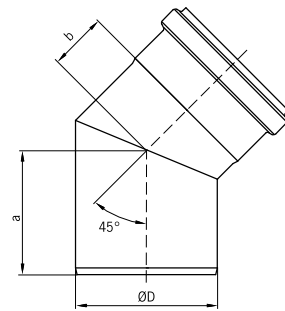
ACO pipe - bend 45°



Shape valid for
øD 40, 50, 75,
110 and 160.

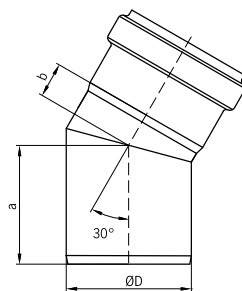


Shape valid for
øD 125, 200,
250 and 315.

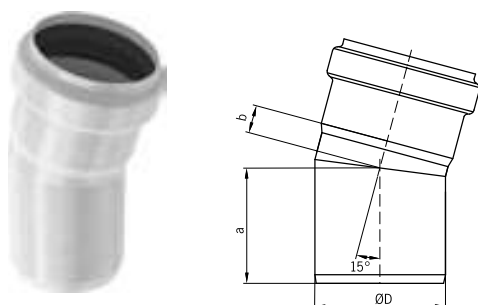


Seal material	Outlet diameter øD [mm]	Dimensions		Weight [kg]	Item number	
		a [mm]	b [mm]		1.4301	1.4404
EPDM	40	58	21	0.2	417344	417352
	50	62	24	0.2	98708	98758
	75	76	32	0.3	98710	98760
	110	93	42	0.5	98712	98762
	125	110	50	0.6	419736	419738
	160	131	55	1.3	98714	98764
	200	152	60	2.7	419407	419409
	250	177	76	4.1	-	417092
Viton®	315	199	91	7.2	-	417205
	50	62	24	0.2	98709	98759
	75	76	32	0.3	98711	98761
	110	93	42	0.5	98713	98763
	125	110	50	0.6	419737	419739
	160	131	55	1.3	98715	98765
	200	152	60	2.7	419408	419410
	250	177	76	4.1	-	417094

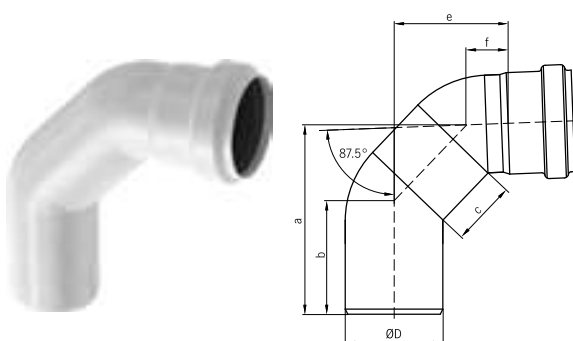
ACO pipe - bend 30°



Seal material	Outlet diameter øD [mm]	Dimensions		Weight [kg]	Item number	
		a [mm]	b [mm]		1.4301	1.4404
EPDM	40	55	14	0.1	417346	417354
	50	57	16	0.2	98716	98766
	75	71	21	0.3	98718	98768
	110	85	27	0.5	98720	98770
	125	98	28	0.6	419740	419742
	160	110	40	1.2	98722	98772
	200	137	45	2.3	419403	419405
	250	153	58	2.9	-	417096
Viton®	315	172	68	5.8	-	417206
	50	57	16	0.2	98717	98767
	75	71	21	0.3	98719	98769
	110	85	27	0.5	98721	98771
	125	98	28	0.6	419741	419743
	160	110	40	1.2	98723	98773
	200	137	45	2.3	419404	419406
	250	153	58	2.9	-	417098

ACO pipe - bend 15°


Seal material	Outlet diameter øD [mm]	Dimensions		Weight [kg]	Item number 1.4301	Item number 1.4404
		a [mm]	b [mm]			
EPDM	40	53	11	0.1	417348	417356
	50	54	12	0.1	98724	98774
	75	66	16	0.3	98726	98776
	110	78	15	0.4	98728	98778
	125	84	19	0.5	419744	419746
	160	99	29	1.0	98730	98780
	200	123	31	1.9	419399	419401
	250	136	40	2.5	-	417100
Viton®	315	151	46	5.4	-	417207
	50	54	12	0.1	98725	98775
	75	66	16	0.3	98727	98777
	110	78	15	0.4	98729	98779
	125	84	19	0.5	419745	419747
	160	99	29	1.0	98731	98781
	200	123	31	1.9	419400	419402
	250	136	40	2.5	-	417102

ACO pipe - long bend 87.5°


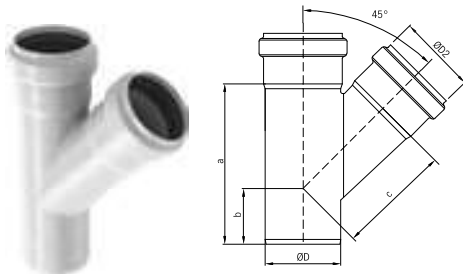
Seal material	Outlet diameter øD [mm]	Dimensions					Weight [kg]	Item number 1.4301	Item number 1.4404
		a [mm]	b [mm]	c [mm]	e [mm]	f [mm]			
EPDM	40	105	64	50	67	40	0.2	417340	417338
	50	123	71	50	75	25	0.3	419146	419000
	75	146	87	50	88	32	0.5	419148	419002
	110	316	103	250	246	39	1.4	419150	419004
	160	360	126	250	270	92	2.2	419152	419144
Viton®	50	123	71	50	75	25	0.3	419147	419001
	75	146	87	50	88	32	0.5	419149	419003
	110	316	103	250	246	39	1.4	419151	419005
	160	360	126	250	270	92	2.2	419153	419145

Branches

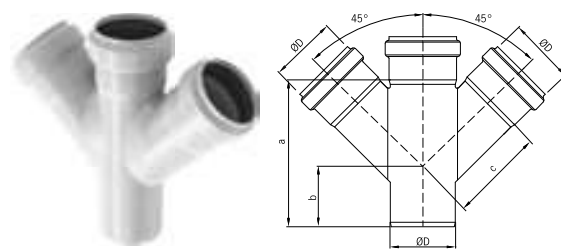
Product information

- Branches are available in 40 mm, 50 mm, 75 mm, 110 mm, 125 mm, 160 mm, 200 mm, 250 mm and 315 mm external diameters
- Available in 1.4301 (AISI 304) and 1.4404 (AISI 316L) grades stainless steel
- Push-fit system for quick assembly
- Superior seal security – components comprise a unique double lip sealing system, ideal for extraneous conditions
- Fully comply to EN 1124
- EPDM and Viton® seals available
- Fully pickled and passivated

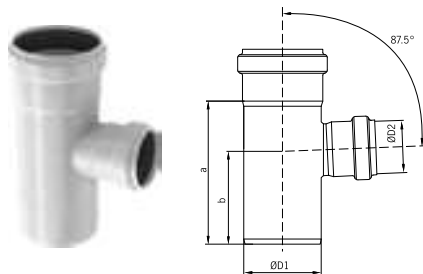
ACO pipe - single branch



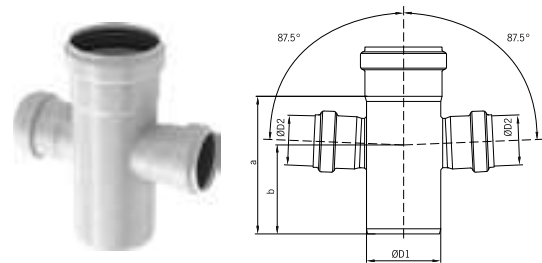
ACO pipe - double branch



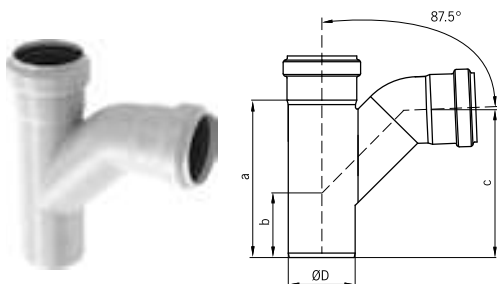
ACO pipe - single branch reduction



ACO pipe - double branch reduction

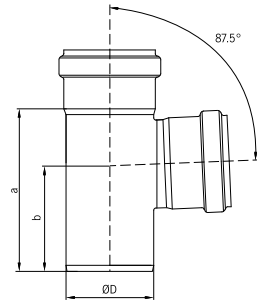


ACO pipe - swept single branch



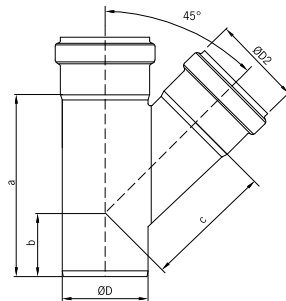
Single branches

ACO pipe - single branch 87.5°



Seal material	Outlet diameter øD [mm]	Dimensions		Weight [kg]	Item number 1.4301	Item number 1.4404
EPDM	40	101	69	0.3	417362	417368
	50	106	71	0.3	98732	98782
	75	139	90	0.5	98734	98784
	110	183	117	0.8	98736	98786
	125	220	135	0.9	419748	419750
	160	288	184	2.3	98738	98788
	200	333	206	4.5	419419	419421
	250	363	215	5.5	-	417104
Viton®	315	476	281	14.8	-	417208
	50	106	71	0.3	98733	98783
	75	139	90	0.5	98735	98785
	110	183	117	0.8	98737	98787
	125	220	135	0.9	419749	419751
	160	288	184	2.3	98739	98789
	200	333	206	4.5	419420	419422
	250	363	215	5.5	-	417106

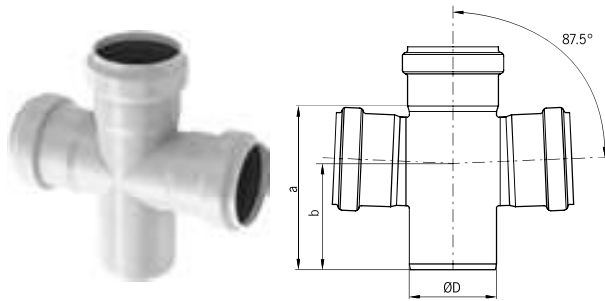
ACO pipe - single branch 45°



Seal material	Outlet diameter øD [mm]	Dimensions			Weight [kg]	Item number 1.4301	Item number 1.4404
EPDM	40	118	58	63	0.3	417366	417372
	50	128	57	76	0.3	98748	98798
	75	179	74	110	0.5	98800	98850
	110	233	88	149	1.0	98802	98852
	125	273	103	170	1.1	419760	419762
	160	332	119	222	2.6	98804	98854
	200	415	151	274	5.7	419427	419429
	250	513	172	336	9.2	-	417108
Viton®	315	616	195	521	20.6	-	417209
	50	128	57	76	0.3	98749	98799
	75	179	74	110	0.5	98801	98851
	110	233	88	149	1.0	98803	98853
	125	273	103	170	1.1	419761	419763
	160	332	119	222	2.6	98805	98855
	200	415	151	274	5.7	419428	419430
	250	513	172	336	9.2	-	417110

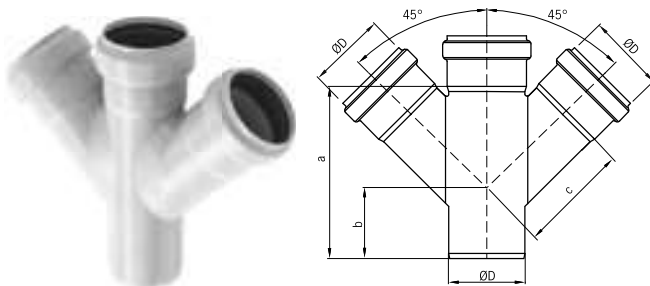
Double branches

ACO pipe - double branch 87.5°



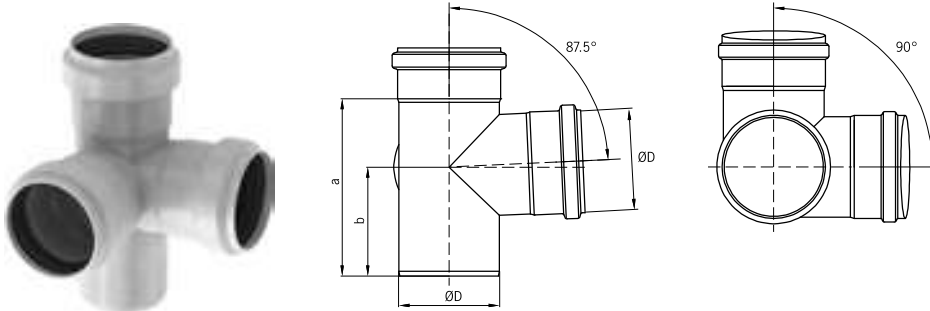
Seal material	Outlet diameter øD [mm]	Dimensions		Weight [kg]	Item number	
		a [mm]	b [mm]		1.4301	1.4404
EPDM	40	101	69	0.3	417364	417370
	50	106	71	0.3	98740	98790
	75	139	90	0.6	98742	98792
	110	183	117	0.9	98744	98794
	160	288	184	2.7	98746	98796
Viton®	50	106	71	0.3	98741	98791
	75	139	90	0.6	98743	98793
	110	183	117	0.9	98745	98795
	160	288	184	2.7	98747	98797

ACO pipe - double branch 45°



Seal material	Outlet diameter øD [mm]	Dimensions			Weight [kg]	Item number	
		a [mm]	b [mm]	c [mm]		1.4301	1.4404
EPDM	40	118	58	63	0.4	417374	417378
	50	128	57	76	0.4	98806	98856
	75	179	74	110	0.7	98808	98858
	110	233	88	149	1.2	98810	98860
	160	332	184	222	3.5	98812	98862
	250	509	172	336	11	-	417120
	315	616	195	521	29.7	-	417212
Viton®	50	128	57	76	0.4	98807	98857
	75	179	74	110	0.7	98809	98859
	110	233	88	149	1.2	98811	98861
	160	332	184	222	3.5	98813	98863
	250	509	172	336	11	-	417122

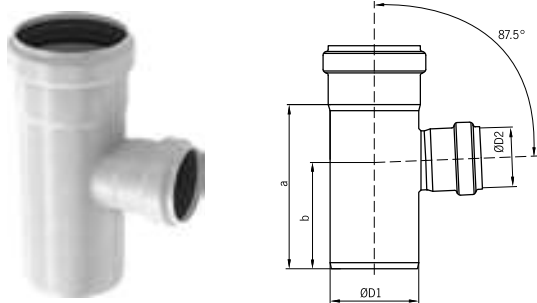
ACO pipe - corner branch 87.5°



Seal material	Outlet diameter ØD [mm]	Dimensions		Weight [kg]	Item number	
		a [mm]	b [mm]		1.4301	1.4404
EPDM	40	101	69	0.3	417414	417415
	50	106	71	0.4	419162	419210
	75	139	90	0.7	419164	419212
	110	183	117	1.1	419166	419214
	160	288	184	2.9	419168	419216
Viton®	50	106	71	0.4	419163	419211
	75	139	90	0.7	419165	419213
	110	183	117	1.1	419167	419215
	160	288	184	2.9	419169	419217

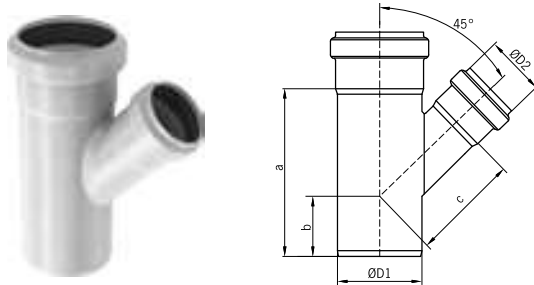
Single branch reductions

ACO pipe - single branch reduction 87.5°



Seal material	Outlet diameter		Dimensions		Weight [kg]	Item number 1.4301	Item number 1.4404
	ØD1 [mm]	ØD2 [mm]	a [mm]	b [mm]			
EPDM	50	40	106	98	0.3	417442	417443
	75	40	139	98	0.3	417444	417445
	75	50	139	90	0.3	98928	98930
	110	50	183	117	0.5	98932	98934
	110	75	183	117	0.8	98936	98938
	125	75	187	110	0.9	419752	419754
	125	110	205	127	0.9	419756	419758
	160	110	288	184	2.3	400691	400693
	200	160	293	186	3.7	419415	419417
	250	200	349	226	5.8	-	417112
Viton®	315	250	411	248	10.5	-	417210
	75	50	139	90	0.3	98929	98931
	110	50	183	117	0.5	98933	98935
	110	75	183	117	0.8	98937	98939
	125	75	187	110	0.9	419753	419755
	125	110	205	127	0.9	419757	419759
	160	110	288	184	2.3	400692	400694
	200	160	293	186	3.7	419416	419418
	250	200	349	226	5.8	-	417114

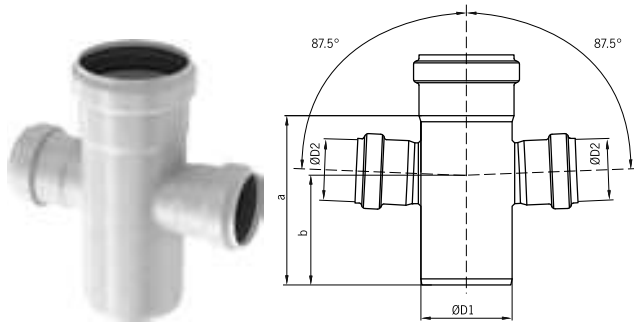
ACO pipe - single branch reduction 45°



Seal material	Outlet diameter		Dimensions			Weight [kg]	Item number 1.4301	Item number 1.4404
	ØD1 [mm]	ØD2 [mm]	a [mm]	b [mm]	c [mm]			
EPDM	50	40	119	55	71	0.3	417406	417408
	75	40	144	94	56	0.3	417446	417447
	75	50	144	56	94	0.3	400661	400663
	110	50	147	42	119	0.5	400665	400667
	110	75	182	60	135	1.0	400669	400671
	125	75	200	65	141	1.1	419764	419766
	125	110	250	90	160	1.1	419768	419770
	160	110	332	119	191	2.6	400699	400701
	200	160	359	123	250	4.7	419423	419425
	250	200	429	175	307	7.6	-	417116
Viton®	315	250	513	149	382	14.0	-	417211
	75	50	144	56	94	0.3	400662	400664
	110	50	147	42	119	0.5	400666	400668
	110	75	182	60	135	1.0	400670	400672
	125	75	200	65	141	1.1	419765	419767
	125	110	250	90	160	1.1	419769	419771
	160	110	332	119	191	2.6	400700	400702
	200	160	359	123	250	4.7	419424	419426
	250	200	429	175	307	7.6	-	417118

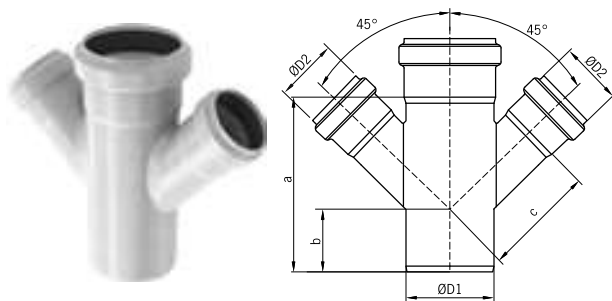
Double branch reductions

ACO pipe - double branch reduction 87.5°



Seal material	Outlet diameter		Dimensions		Weight [kg]	Item number	
	ØD1 [mm]	ØD2 [mm]	a [mm]	b [mm]		1.4301	1.4404
EPDM	75	50	139	90	0.3	98940	98942
	110	50	183	117	0.6	98944	98946
	110	75	183	117	0.9	98900	98902
	160	110	288	184	2.7	400695	400697
Viton®	75	50	139	90	0.3	98941	98943
	110	50	183	117	0.6	98945	98947
	110	75	183	117	0.9	98901	98903
	160	110	288	184	2.7	400696	400698

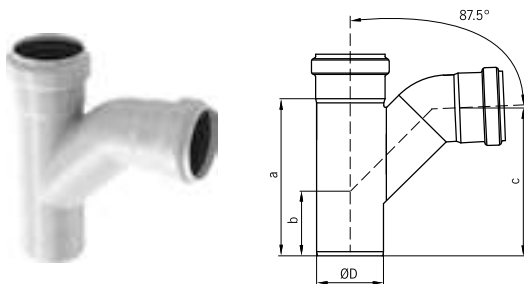
ACO pipe - double branch reduction 45°



Seal material	Outlet diameter		Dimensions			Weight [kg]	Item number	
	ØD1 [mm]	ØD2 [mm]	a [mm]	b [mm]	c [mm]		1.4301	1.4404
EPDM	50	40	119	55	71	0.3	417410	417412
	75	50	144	56	94	0.4	400673	400675
	110	50	147	42	119	0.7	400677	400679
	110	75	182	60	135	1.2	400681	400683
	160	110	332	119	190	3.5	400703	400705
	250	200	429	150	307	10.1	-	417124
	315	250	513	149	382	17.8	-	417213
Viton®	75	50	144	56	94	0.4	400674	400676
	110	50	147	42	119	0.7	400678	400680
	110	75	182	60	135	1.2	400682	400684
	160	110	332	119	190	3.5	400704	400706
	250	200	429	150	307	10.1	-	417126

Swept single branch

ACO pipe - swept single branch 87.5°



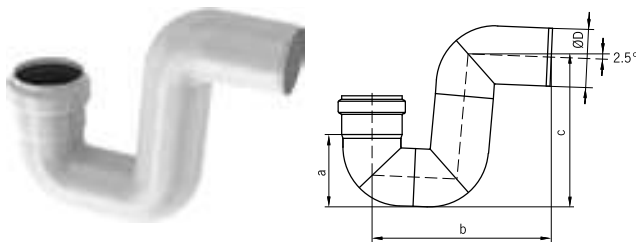
Seal material	Outlet diameter øD [mm]	Dimensions			Weight [kg]	Item number 1.4301	Item number 1.4404
		a [mm]	b [mm]	c [mm]			
EPDM	40	115	55	105	0.3	417376	417380
	50	128	57	117	0.3	98814	98864
	75	179	74	157	0.6	98816	98866
	110	233	88	209	1.1	98818	98868
	160	332	184	302	2.8	98820	98870
Viton®	50	128	57	117	0.3	98815	98865
	75	179	74	157	0.6	98817	98867
	110	233	88	209	1.1	98819	98869
	160	332	184	302	2.8	98821	98871

Accessories

Product information

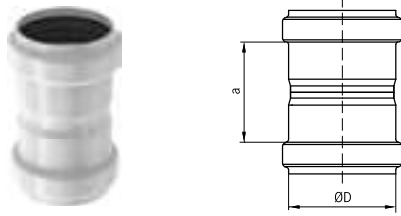
- Accessories are available in 40 mm, 50 mm, 75 mm, 110 mm, 125 mm, 160 mm, 200 mm, 250 mm and 315 mm external diameters
- Available in 1.4301 (AISI 304) and 1.4404 (AISI 316L) grades stainless steel
- Push-fit system for quick assembly
- Superior seal security – components comprise a unique double lip sealing system, ideal for extraneous conditions
- Fully comply to EN 1124
- EPDM and Viton® seals available
- Fully pickled and passivated

"P" trap



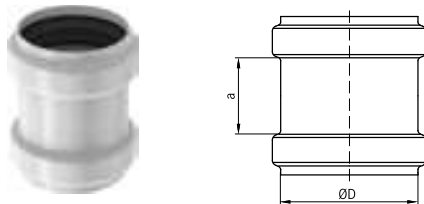
Seal material	Outlet diameter	Dimensions			Weight [kg]	Item number	Item number
	ØD [mm]	a [mm]	b [mm]	c [mm]		1.4301	1.4404
EPDM	50	68	187	149	0.5	98822	98872
	75	94	232	193	0.7	98824	98874
	110	132	300	254	1.3	98826	98876
	160	190	403	347	3.3	98828	98878
Viton®	50	68	187	149	0.5	98823	98873
	75	94	232	193	0.7	98825	98875
	110	132	300	254	1.3	98827	98877
	160	190	403	347	3.3	98829	98879

Straight coupling



Seal material	Outlet diameter ØD [mm]	Dimensions a [mm]	Weight [kg]	Item number 1.4301	Item number 1.4404
EPDM	40	51	0.1	417392	417394
	50	54	0.1	98920	98970
	75	75	0.2	98922	98972
	110	84	0.4	98924	98974
	125	140	0.4	419813	419815
	160	110	0.8	98926	98976
	200	136	1.8	419431	419433
	250	181	3.1	-	417159
Viton®	315	179	5.2	-	417225
	50	54	0.1	98921	98971
	75	75	0.2	98923	98973
	110	84	0.4	98925	98975
	125	140	0.4	419814	419816
	160	110	0.8	98927	98977
	200	136	1.8	419432	419434
	250	181	3.1	-	417161

Repair coupling



Seal material	Outlet diameter ØD [mm]	Dimensions a [mm]	Weight [kg]	Item number 1.4301	Item number 1.4404
EPDM	50	44	0.1	98830	98880
	75	46	0.2	98832	98882
	110	52	0.3	98834	98884
	125	70	0.3	419772	419774
	160	76	0.7	98836	98886
	200	100	1.5	419435	419437
	250	182	2.4	-	417139
Viton®	315	179	4.9	-	417220
	50	44	0.1	98831	98881
	75	46	0.2	98833	98883
	110	52	0.3	98835	98885
	125	70	0.3	419773	419775
	160	76	0.7	98837	98887
	200	100	1.5	419436	419438
	250	182	2.4	-	417141

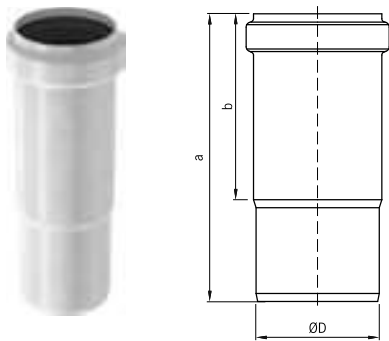
Note:

Repair couplings are used to aid a convenient repair to a damaged in-situ pipe. Unlike the standard straight coupling, there is no central registration to limit the insertion depth of the pipe. The repair coupling slides completely over a pipe joint and simply re-positioned to bridge the required pipe joint.

Installation tip:

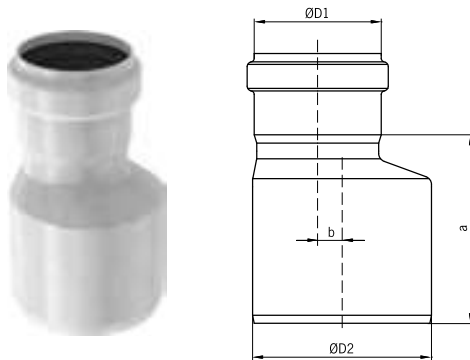
Mark the final position of the repair coupling on the installed pipe system to ensure the coupling seals are positioned symmetrically about the pipe joint.

Expansion socket



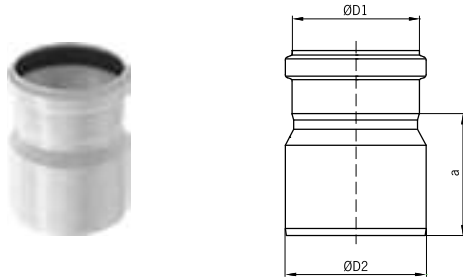
Seal material	Outlet diameter		Dimensions		Weight [kg]	Item number 1.4301	Item number 1.4404
	ØD [mm]		a [mm]	b [mm]			
EPDM	40		150	90	0.2	417382	417384
	50		159	102	0.2	98664	98666
	75		175	113	0.3	98668	98670
	110		200	121	0.5	98672	98674
	125		250	165	0.6	419776	419778
	160		292	170	1.4	98676	98678
	250		400	190	3.8	-	417143
Viton®	315		450	200	7.2	-	417221
	50		159	102	0.2	98665	98667
	75		175	113	0.3	98669	98671
	110		200	121	0.5	98673	98675
	125		250	165	0.6	419777	419779
	160		292	170	1.4	98677	98679
	250		400	190	3.8	-	417145

Eccentric increaser coupling



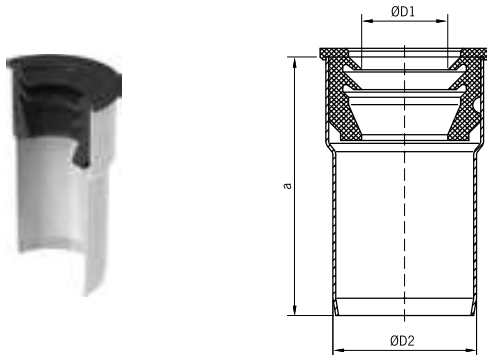
Seal material	Outlet diameter		Dimensions		Weight [kg]	Item number 1.4404
	ØD1 [mm]	ØD2 [mm]	a [mm]	b [mm]		
EPDM	40	50	85	5	0.3	417418
	50	75	75	7	0.3	98892
	50	110	110	25	0.4	98978
	75	110	110	15	0.5	98894
	110	160	160	22	1.1	98896
	200	250	180	15	2.4	417135
	250	315	190	15	4.4	417218
Viton®	50	75	75	7	0.3	98893
	50	110	110	25	0.4	98979
	75	110	110	15	0.5	98895
	110	160	160	22	1.1	98897
	200	250	180	15	2.4	417136

Concentric increaser coupling



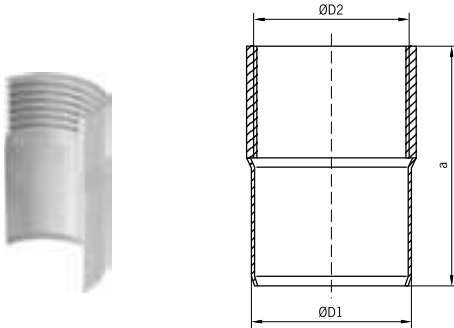
Seal material	Outlet diameter		Dimension a [mm]	Weight [kg]	Item number
	ØD1 [mm]	ØD2 [mm]			
EPDM	40	75	85	0.3	417417
	50	75	88	0.3	419826
	50	110	113	1.4	417018
	75	125	105	0.6	419828
	110	125	107	0.6	419780
	110	160	126	0.9	419830
	125	160	160	1.2	419811
	160	200	200	1.8	419441
	200	250	180	2.4	417133
Viton®	315	250	190	4.4	417217
	110	125	125	0.6	419781
	125	160	160	1.2	419812
	160	200	200	1.8	419442
	200	250	180	2.4	417134

Increaser connector



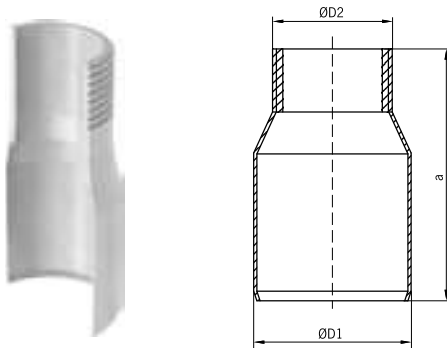
Seal material	Outlet diameter		Dimensions a [mm]	Weight [kg]	Item number
	ØD1 [mm]	ØD2 [mm]			
NBR	32	50	90	0.2	419373
	40	50	90	0.2	419374

Connector with internal screw thread and spigot



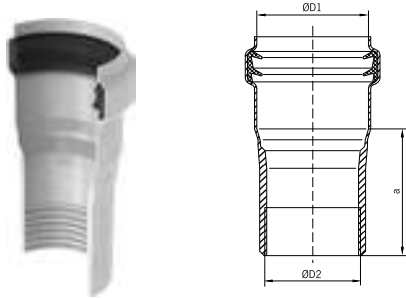
Outlet diameter		Dimensions	Weight	Item number
ØD1 [mm]	ØD2 [mm]	a [mm]	[kg]	1.4404
50	G 1¼"	72	0.2	98956
50	G 1½"	75	0.3	98957
50	G 2"	80	0.3	98958

Connector with external screw thread and spigot



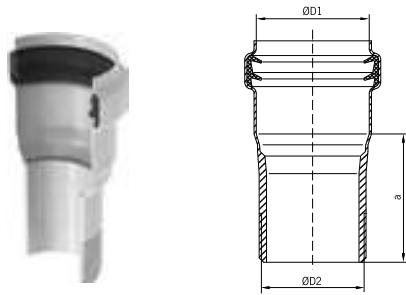
Outlet diameter		Dimensions	Weight	Item number
ØD1 [mm]	ØD2 [mm]	a [mm]	[kg]	1.4404
50	G 1¼"	100	0.2	419330
50	G 1½"	100	0.3	419331
50	G 2"	100	0.3	419332

Connector with socket and internal screw thread



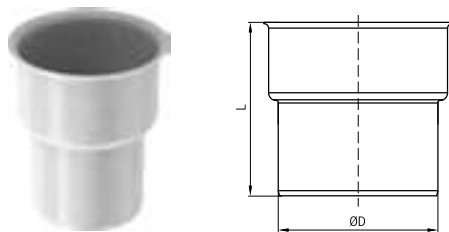
Seal material	Outlet diameter		Dimensions a [mm]	Weight [kg]	Item number
	ØD1 [mm]	ØD2 [mm]			
EPDM	50	G 1¼"	58	0.2	1.4404 419333
	50	G 1½"	58	0.3	419335
	50	G 2"	58	0.3	419337
Viton®	50	G 1¼"	58	0.2	419334
	50	G 1½"	58	0.3	419336
	50	G 2"	58	0.3	419338

Connector with socket and external screw thread



Seal material	Outlet diameter		Dimensions a [mm]	Weight [kg]	Item number
	ØD1 [mm]	ØD2 [mm]			
EPDM	50	G 1¼"	58	0.2	1.4404 419250
	50	G 1½"	58	0.3	419252
	50	G 2"	58	0.3	419254
Viton®	50	G 1¼"	58	0.2	419251
	50	G 1½"	58	0.3	419253
	50	G 2"	58	0.3	419255

Connector cast iron spigot → ACO pipe socket

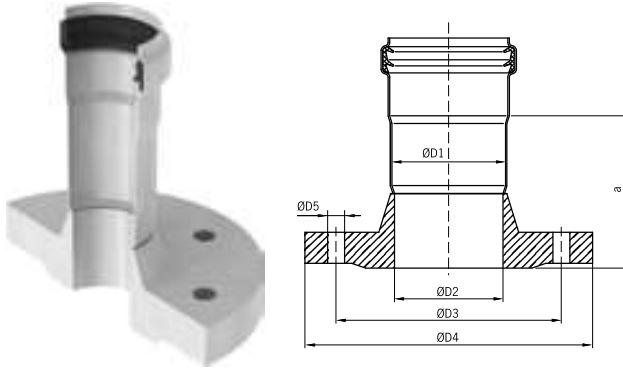


Outlet diameter ØD [mm]	Dimensions L [mm]	Weight [kg]	Item number
75	121	0.4	1.4404 98904
110	137	0.6	98906

Note:

To be used with reduction sealing item number 400580 for DN 75 and 400581 for DN 110

Connector with socket and flange



Seal material	Outlet diameter				n x ØD5 [mm]	Dimensions a [mm]	Weight [kg]	Item number
	ØD1 [mm]	ØD2 [mm]	ØD3 [mm]	ØD4 [mm]				
EPDM	50	DN 40	110	150	4 × 18	100	2.3	1.4404 419256
	50	DN 50	125	165	4 × 18	100	2.7	419258
	75	DN 65	145	185	4 × 18	100	3.4	419260
	110	DN 100	180	220	8 × 18	100	4.9	419262
	200	DN 200	295	340	12 × 22	102	12.0	419514
Viton®	50	DN 40	110	150	4 × 18	100	2.3	419257
	50	DN 50	125	165	4 × 18	100	2.7	419259
	75	DN 65	145	185	4 × 18	100	3.4	419261
	110	DN 100	180	220	8 × 18	100	4.9	419263
	200	DN 200	295	340	12 × 22	102	12.0	419515

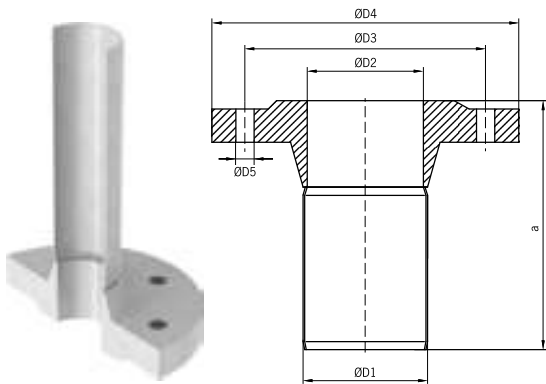
Note:

n – number of holes for screws in the flange.

Flange PN 16 DIN 2633.

Flange PN 6 and PN 10 available on request.

Connector with flange and spigot



ØD1 [mm]	Outlet diameter			n x ØD5 [mm]	Dimensions a [mm]	Weight [kg]	Item number
	ØD2 [mm]	ØD3 [mm]	ØD4 [mm]				
50	DN 40	110	150	4 × 18	192	2.3	419264
50	DN 50	125	165	4 × 18	192	2.7	419265
75	DN 65	145	185	4 × 18	245	3.4	419266
110	DN 100	180	220	8 × 18	259	4.9	419267
160	DN 150	240	285	8 × 22	200	8.5	419540
200	DN 200	295	240	12 × 22	240	12.3	419541

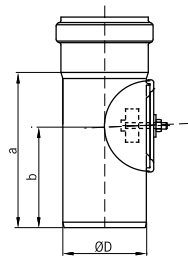
Note:

n – number of holes for screws in the flange.

Flange PN 16 DIN 2633.

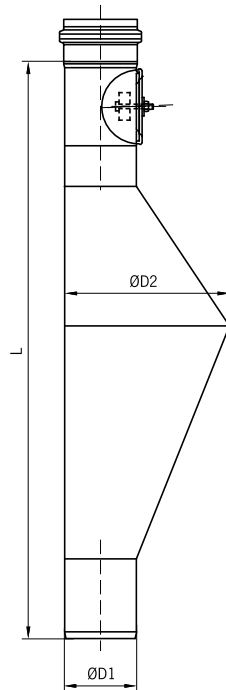
Flange PN 6 and PN 10 available on request.

Access unit



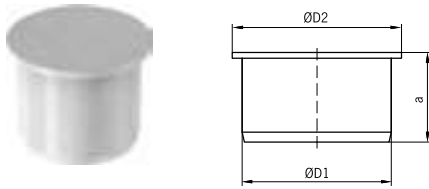
Seal material	Outlet diameter ØD [mm]	Dimensions		Weight [kg]	Item number	
		a [mm]	b [mm]		1.4301	1.4404
EPDM	75	139	90	0.5	98913	98963
	110	183	117	0.8	98915	98965
	125	210	135	0.9	419783	419785
	160	288	184	2.3	98917	98967
	200	293	186	3.7	419676	419678
	250	290	184	3.8	-	417128
Viton®	315	340	228	8.9	-	417214
	75	139	90	0.5	98914	98964
	110	183	117	0.8	98916	98966
	125	210	135	0.9	419784	419786
	160	288	184	2.3	98918	98968
	200	293	186	3.7	419677	419679
	250	290	184	3.8	-	417130

Rat-stop



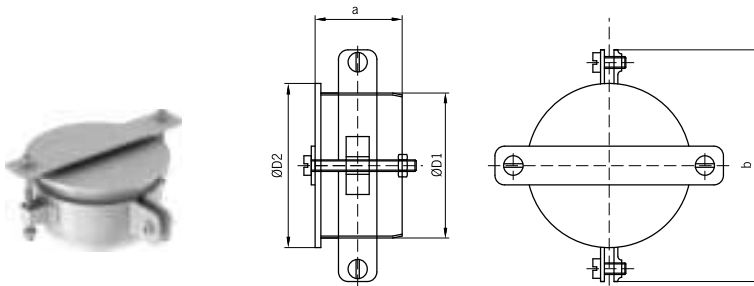
Seal material	Outlet diameter		Dimensions L [mm]	Weight [kg]	Item number	
	ØD1 [mm]	ØD2 [mm]			1.4301	1.4404
EPDM	110	250	864	3.8	419268	419270
Viton®	110	250	864	3.8	419269	419271

Socket plug



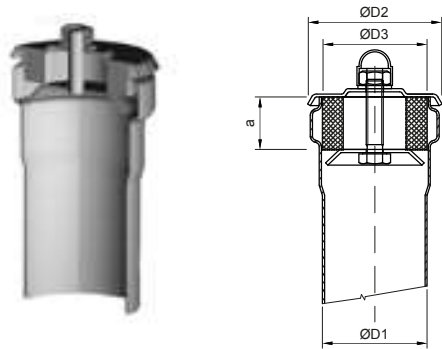
Outlet diameter		Dimensions	Weight	Item number
ØD1 [mm]	ØD2 [mm]	a [mm]	[kg]	1.4404
40	35	50	0.1	417405
50	58	45	0.1	98888
75	85	45	0.3	98889
110	120	45	0.5	98890
125	135	50	0.6	419782
160	170	50	0.5	98891
200	210	50	0.7	98994
250	260	83	1.0	417131
315	325	73	2.2	417215

Socket plug with clamp



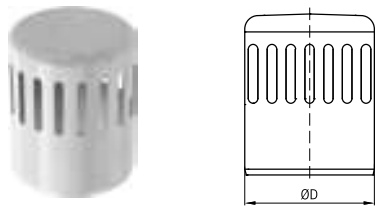
Outlet diameter		Dimensions		Weight	Item number
ØD1 [mm]	ØD2 [mm]	a [mm]	b [mm]	[kg]	1.4404
40					417402
50	58	45	88	0.4	419138
75	85	45	120	0.6	419139
110	120	45	167	0.8	419140
160	170	50	214	1.1	419141
250	260	83	302	1.3	417132
315	325	130	371	3.7	417216

Drainplugs with screwed plug



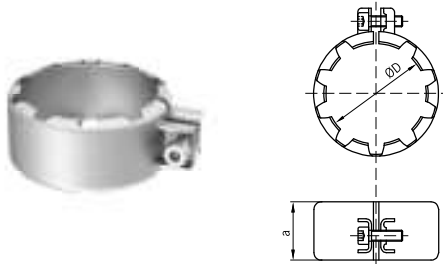
Outlet diameter			Dimensions	Weight	Item number	
ØD1 [mm]	ØD2 [mm]	ØD3 [mm]			1.4301	1.4404
50	64	50	25	0.08	419942	419948
75	92	75	25	0.5	419943	419949
110	126	105	15	0.5	419944	419950
125	160	124	12	0.9	419945	419951
160	186	166	20	1.2	419946	419952

Vent cowl



Outlet diameter	Weight	Item number
ØD [mm]	[kg]	1.4404
110	0.4	98962

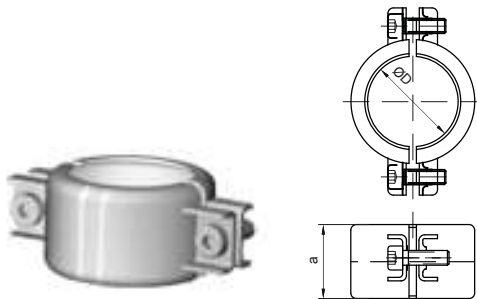
Socket clamp



Outlet diameter øD [mm]	Dimensions a [mm]	Weight [kg]	Item number 1.4404
50	40	0.11	417067
75	43	0.16	417069
110	43	0.25	417227

Note: See page 193 for maximum operating pressures

Socket clamp - two parts



Outlet diameter øD [mm]	Dimensions a [mm]	Weight [kg]	Item number 1.4301	Item number 1.4404
40	36	0.10	417396	417397
50	40	0.14	417024	417025
75	40	0.25	417026	417027
110	43	0.34	417028	417029
125	45	0.38	417016	417017
160	45	0.48	417030	417031
200	45	0.51	–	419983
250	45	0.71	–	417137
315	48	0.9	417219	–

Note: See page 193 for maximum operating pressures

Seal



Outlet diameter øD [mm]	Weight [kg]	Item number EPDM	Item number NBR	Item number Viton®
40	0.01	417400	417401	–
50	0.01	98400	417037	98404
75	0.02	98401	417038	98405
110	0.05	98402	417039	98406
125	0.06	419453	417041	419454
160	0.08	98403	417040	98407
200	0.10	98433	417042	98437
250	0.12	417146	417148	417147
315	0.30	417222	417223	–

Note:

Detailed technical data sheet on page 228

Reduction sealing cast iron spigot → ACO pipe socket



Outlet diameter øD [mm]	Weight [kg]	Item number EPDM
DN 70/75	0.06	400580
DN 100/110	0.10	400581
DN 150/160	0.14	400582

Note:

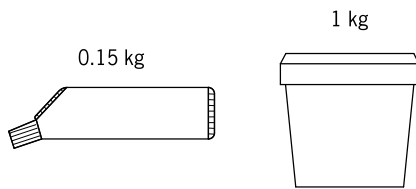
While purchasing AP reduction sealing cast iron spigot → ACO pipe, it is necessary to order AP cast iron connector.

Reduction sealing ACO pipe spigot → cast iron socket



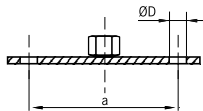
Outlet diameter øD [mm]	Weight [kg]	Item number EPDM
DN 70/75	0.05	400586
DN 100/110	0.08	400587
DN 150/160	0.12	400588

ACO Universal lubricant



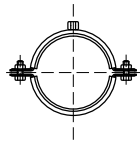
Weight [kg]	Item number
0.15	E80350000
1.00	E80350001

Fixing plate



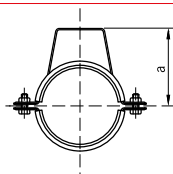
Outlet diameter ØD [mm]	Dimensions a [mm]	Weight [kg]	Item number Galvanised steel	Item number 1.4404
8.4	70	0.05	400525	400521

Support bracket with rubber infill



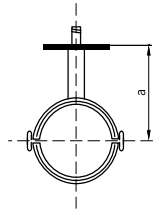
Outlet diameter ØD [mm]	Weight [kg]	Item number Galvanised steel	Item number 1.4404
40	0.12	417434	417359
50	0.14	400533	400529
75	0.23	400534	400530
110	0.33	400535	400531
125	0.36	419854	419855
160	0.39	400536	400532
200	0.44	419451	419675
250	0.60	—	417149
315	1.0	—	417224

Support bracket with rubber infill and stirrup



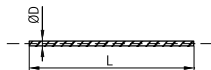
Outlet diameter ØD [mm]	Dimensions a [mm]	Weight [kg]	Item number Galvanised steel	Item number 1.4404
50	56	0.18	400541	400537
75	80	0.28	400542	400538
110	116	0.41	400543	400539
160	166	0.48	400544	400540

Support bracket with rubber infill and key



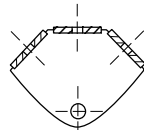
Outlet diameter $\varnothing D$ [mm]	Dimensions a [mm]	Weight [kg]	Item number Galvanised steel	Item number 1.4404
50	120	0.16	400549	400545
75	133	0.26	400550	400546
110	150	0.38	400551	400547
160	175	0.44	400552	400548

Threaded support pole M8



$\varnothing D$ [mm]	L [mm]	Weight [kg]	Item number Galvanised steel	Item number 1.4404
M8	1000	0.39	400557	400553
M8	90	0.03	400558	400554
M8	40	0.016	400559	400555

Set for axial fixing



Weight [kg]	Item number Galvanised steel	Item number 1.4404
0.11	400565	400561

Joiner/disjoiner



$\varnothing D$ [mm]	Weight [kg]	Item number
100 - 400	25	417070

Electric cutter 50 – 110 mm



Note	Weight [kg]	Item number
in plastic case	20	400745

Note: Convenient tool for pipe cutting, suitable for larger projects

Manual cutter set 50-110 mm



Note	Weight [kg]	Item number
in plastic case	3.50	419363

Manual cutter

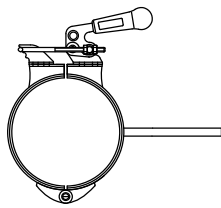


øD [mm]	Weight [kg]	Item number
50-110	1.0	419364
110-160	2.0	400738
160-250	2.0	417228

Note:

ACO pipe manual cutter should be ordered together with a holder for manual cutting.

Holder for manual cutting



øD [mm]	Weight [kg]	Item number
125	3.5	419857
160	4.0	400742
200	4.5	400743

Note: ACO pipe holder for manual cutting should be ordered together with ACO pipe manual cutter.

Replacement discs for manual cutters



Note	Weight [kg]	Item number
for cutter 419363	0.005	419365
for cutters 400738 and 419364	0.005	400578

Note:

Minimum order quantity – 10 pcs.

Full bore flow rate tables for varying gradients

For rainwater/storm drainage applications

Flow rates based on Colebrook-White formula.

Roughness coefficient $k_s = 0.6$ mm

Gradient [%]	Pipe ø 50 mm		Pipe ø 75 mm		Pipe ø 110 mm		Pipe ø 125 mm	
	Flow rate Q [l/s]	Velocity v [m/s]	Flow rate Q [l/s]	Velocity v [m/s]	Flow rate Q [l/s]	Velocity v [m/s]	Flow rate Q [l/s]	Velocity v [m/s]
10.0	2.74	1.52	8.40	2.01	23.81	2.60	33.61	2.83
7.5	2.38	1.31	7.28	1.74	20.62	2.25	29.11	2.45
5.0	1.94	1.07	5.94	1.42	16.83	1.84	23.77	2.00
4.5	1.84	1.02	5.64	1.35	15.97	1.74	22.55	1.90
4.0	1.73	0.96	5.31	1.27	15.06	1.64	21.26	1.79
3.5	1.62	0.90	4.97	1.19	14.08	1.54	19.88	1.67
3.0	1.50	0.83	4.60	1.10	13.04	1.42	18.41	1.55
2.5	1.37	0.76	4.20	1.00	11.90	1.30	16.80	1.41
2.0	1.23	0.68	3.76	0.90	10.64	1.16	15.03	1.26
1.5	1.06	0.59	3.25	0.78	9.22	1.01	13.01	1.10
1.0	0.87	0.48	2.66	0.63	7.53	0.82	10.63	0.89

Gradient [%]	Pipe ø 160 mm		Pipe ø 200 mm		Pipe ø 250 mm		Pipe ø 315 mm	
	Flow rate Q [l/s]	Velocity v [m/s]	Flow rate Q [l/s]	Velocity v [m/s]	Flow rate Q [l/s]	Velocity v [m/s]	Flow rate Q [l/s]	Velocity v [m/s]
10.0	64.15	3.31	116.89	3.83	218.31	4.45	401.51	5.15
7.5	55.56	2.87	101.22	3.32	188.95	3.85	347.54	4.46
5.0	45.36	2.34	82.65	2.71	154.13	3.14	283.52	3.64
4.5	43.03	2.22	78.40	2.57	146.17	2.98	268.90	3.45
4.0	40.57	2.10	73.92	2.43	137.77	2.81	253.45	3.25
3.5	37.95	1.96	69.14	2.27	128.82	2.63	236.99	3.04
3.0	35.13	1.81	64.01	2.10	119.20	2.43	219.31	2.82
2.5	32.07	1.66	58.43	1.92	108.74	2.22	200.09	2.57
2.0	28.68	1.48	52.26	1.71	97.18	1.98	178.83	2.30
1.5	24.84	1.28	45.26	1.48	84.05	1.71	154.70	1.99
1.0	20.28	1.05	36.95	1.21	68.48	1.40	126.07	1.62

Note:

The flow rates shown above assume an unrestricted discharge from the pipe. For installations without an unrestricted discharge, the flow rate will be affected by the downstream throttle.

For shallow gradients, the Colebrook-White formula underestimates flow rates (because when gradient tends towards zero %, velocity also tends to zero).

For level or nearly level installations (slope < 1 %), spatially varied flow tables should be used.

For soil/foul water drainage applications

Flow rates based on Colebrook-White formula.

Roughness coefficient $k_s = 0.6 \text{ mm}$

Gradient [%]	Pipe ø 50 mm		Pipe ø 75 mm		Pipe ø 110 mm		Pipe ø 125 mm	
	Flow rate Q [l/s]	Velocity v [m/s]	Flow rate Q [l/s]	Velocity v [m/s]	Flow rate Q [l/s]	Velocity v [m/s]	Flow rate Q [l/s]	Velocity v [m/s]
10.0	2.30	1.27	7.14	1.71	20.45	2.23	28.97	2.44
7.5	1.99	1.10	6.19	1.48	17.71	1.93	25.09	2.11
5.0	1.63	0.90	5.05	1.21	14.46	1.58	20.49	1.72
4.5	1.54	0.85	4.79	1.14	13.72	1.50	19.43	1.64
4.0	1.46	0.80	4.52	1.08	12.94	1.41	18.32	1.54
3.5	1.36	0.75	4.23	1.01	12.10	1.32	17.14	1.44
3.0	1.26	0.70	3.91	0.93	11.20	1.22	15.87	1.34
2.5	1.15	0.64	3.57	0.85	10.23	1.12	14.49	1.22
2.0	1.03	0.57	3.19	0.76	9.15	1.00	12.96	1.09
1.5	0.89	0.49	2.77	0.66	7.92	0.86	11.22	0.94
1.0	0.73	0.40	2.26	0.54	6.47	0.71	9.16	0.77

Gradient [%]	Pipe ø 160 mm		Pipe ø 200 mm		Pipe ø 250 mm		Pipe ø 315 mm	
	Flow rate Q [l/s]	Velocity v [m/s]	Flow rate Q [l/s]	Velocity v [m/s]	Flow rate Q [l/s]	Velocity v [m/s]	Flow rate Q [l/s]	Velocity v [m/s]
10.0	55.61	2.87	101.81	3.34	206.87	4.22	382.95	4.92
7.5	48.16	2.49	88.17	2.89	177.84	3.62	329.47	4.23
5.0	39.32	2.03	71.99	2.36	143.52	2.93	266.21	3.42
4.5	37.30	1.93	68.30	2.24	135.71	2.77	251.81	3.23
4.0	35.17	1.82	64.39	2.11	127.46	2.60	236.59	3.04
3.5	32.90	1.70	60.23	1.98	118.69	2.42	220.42	2.83
3.0	30.46	1.57	55.76	1.83	109.29	2.23	203.07	2.61
2.5	27.80	1.44	50.90	1.67	99.10	2.02	184.25	2.37
2.0	24.87	1.28	45.53	1.49	87.86	1.79	163.50	2.10
1.5	21.53	1.11	39.43	1.29	75.18	1.53	140.05	1.80
1.0	17.58	0.91	32.19	1.06	60.25	1.23	112.42	1.44

Note:

The flow rates shown above assume an unrestricted discharge from the pipe. For installations without an unrestricted discharge, the flow rate will be affected by the downstream throttle.

For shallow gradients, the Colebrook-White formula underestimates flow rates (because when gradient tends towards zero %, velocity also tends to zero).

For level or nearly level installations (slope < 1 %), spatially varied flow tables should be used.

Operating pressures

The ACO pipe socketed stainless steel pipe systems are fitted with a unique, double lip seal manufactured from either EPDM or Viton®. The double lip seal arrangement provides added security for the ultimate long term reliability. The ACO pipe; socketed stainless steel pipe systems are tested and approved for operating pressures in gravity, siphonic and vacuum systems.

ACO pipe stainless steel pipe systems are designed for maximum working pressure 0.5 bar according to EN 1124. In case where higher pressure may apply, it is necessary to combine the system with socket clamps.

Pipe diameter [mm]	Operating pressure [bar]	
	Without socket clamp	With socket clamp
40	0.5	2.0
50	0.5	2.0
75	0.5	2.0
110	0.5	2.0
125	0.5	2.0
160	0.5	1.0
200	0.5	1.0
250	0.5	1.0
315	0.5	1.0

Vacuum applications	
Pipe diameter [mm]	Operating pressure [bar]
40	-0.8
50	-0.8
75	-0.8
110	-0.8
125	-0.8
160	-0.8
200	-0.8
250	-0.8
315	-0.8