

Aquatherm PP-R Flange adapters (incl. gasket) + metal plastic coated backing rings (DIN PN16)

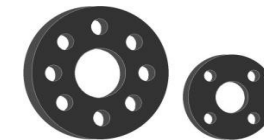
Art.-No. PP-R Flange Adapters	Dimension [mm] (OD pipe sizes)	Art.-No. Metal Backing Rings (DIN PN16 drilled)	Dimension [mm] (OD pipe sizes)	Dimension [mm] (DN pipe sizes)	Hole circle (pitch circle) [mm]	Number of holes	Bolt Size **
15512	32 mm	15712	∅32	DN25	85	4	M12
15514	40 mm	15714	∅40	DN32	100	4	M16
15516	50 mm	15716	∅50	DN40	110	4	M16
15518	63 mm	15718	∅63	DN50	125	4	M16
15520	75 mm	15720	∅75	DN65	145	4	M16
15522	90 mm	15722	∅90	DN80	160	8	M16
15524	110 mm	15724	∅110	DN100	180	8	M16
15526	125 mm*	15724	∅110	DN100	180	8	M16
15527	125 mm	15726	∅125	DN125	210	8	M16
15530	160 mm	15730	∅160	DN150	240	8	M20
15531	160 mm	15730	∅160	DN150	240	8	M20
15534	200 mm	15734	∅200	DN200	295	8	M20
15535	200 mm	15734	∅200	DN200	295	8	M20
15538	250 mm	15738	∅250	DN250	350	12	M20
15539	250 mm	15738	∅250	DN250	350	12	M20

(∅160mm and up) Red is SDR11, black is SDR7.4

** Bolt length depends on type/length of valve (if applicable)

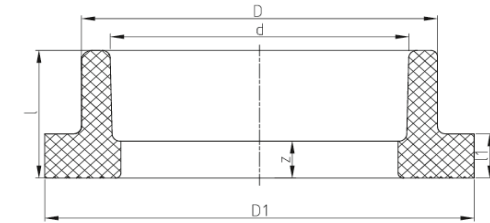


* Art.No. 15526
can only be used connected to a fitting!
(Pipe is ∅125 OD + ∅110 flange adapter)



Dimensions Aquatherm PP-R flange adapters (Ø32 - Ø125 socket fusion)

Art.-No. PP-R Flange Adapters	d (OD pipe sizes) [mm]	D [mm]	D1 [mm]	l [mm]	l1 [mm]	Z [mm]	Weight [kg]
15512	32 mm	41	68	35.0	11.0	17.0	0.053
15514	40 mm	50	78	36.5	12.5	16.5	0.071
15516	50 mm	61	88	39.5	12.0	16.0	0.095
15518	63 mm	76	102	43.5	15.5	16.0	0.130
15520	75 mm	90	122	46.0	16.0	16.0	0.191
15522	90 mm	108	138	50.0	17.0	17.0	0.257
15524	110 mm	131	158	55.5	18.5	18.5	0.329
15526	125 mm*	125	158	202.0	18.5	18.5	1.329
15527	125 mm	165	188	63.0	20.0	23.0	0.724

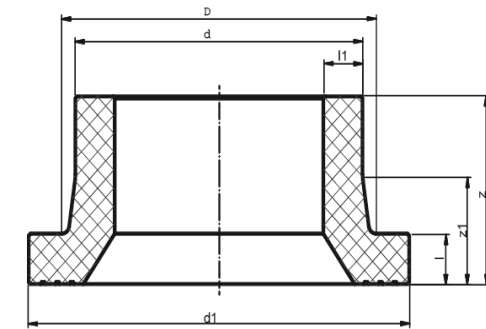


* Art.No. 15526 (= Ø125 spigot end)
can only be used connected to a fitting!
(Pipe is Ø125 OD + Ø110 flange adapter)

Dimensions Aquatherm PP-R flange adapters (Ø160 - Ø250 butt welding)

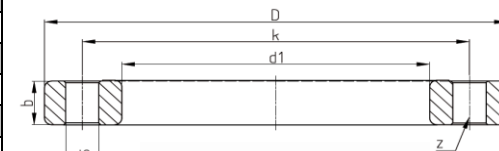
Art.-No. PP-R Flange Adapters	d (OD pipe sizes) [mm]	D [mm]	d1 [mm]	Z [mm]	Z1 [mm]	l [mm]	Weight [kg]
15530	160 mm	175	212	93	53	25	1.163
15531	160 mm	175	212	93	53	25	0.955
15534	200 mm	232	268	130	72	32	2.292
15535	200 mm	232	268	130	72	32	1.957
15538	250 mm	285	320	130	75	35	3.298
15539	250 mm	285	320	130	75	35	2.717

(Ø160mm and up) Red is SDR11, black is SDR7.4



Dimensions Aquatherm metal plastic coated backing rings (Ø32 - Ø250)

Art.-No. Metal Backing Rings (DIN PN16 drilled)	Dimension [mm] (OD pipe sizes)	D [mm]	k [mm]	d1 [mm]	b [mm]	d2 [mm]	Weight [kg]
15712	Ø32 / DN25	116	85	42	15.5	14.0	0.466
15714	Ø40 / DN32	141	100	51	17.5	18.0	0.681
15716	Ø50 / DN40	151	110	62	17.5	18.0	0.766
15718	Ø63 / DN50	166	125	78	19.0	18.0	0.885
15720	Ø75 / DN65	186	145	92	19.0	18.0	1.154
15722	Ø90 / DN80	201	160	110	21.0	18.0	1.404
15724	Ø110 / DN100	221	180	133	22.0	18.0	1.461
15726	Ø125 / DN125	251	210	167	26.0	18.0	2.096
15730	Ø160 / DN150	286	240	178	27.0	22.0	3.628
15734	Ø200 / DN200	341	295	235	28.0	22.0	4.643
15738	Ø250 / DN250	406	350	288	31.0	22.0	7.216



FLANGE ADAPTER FOR BUTTERFLY VALVES

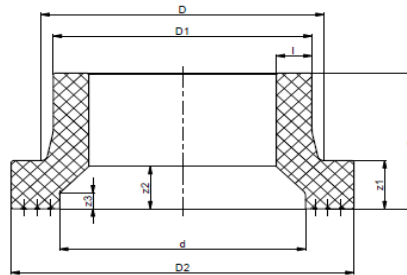
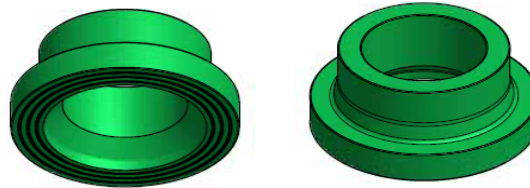
In the industrial pipe and plant construction butterfly valves with flange connection are often used as control and shut-off valves.

Some "exotic" versions of these butterflies cannot be combined with the aquatherm standard flange adapter (Art.-No. 15531-15549 & 2515530-2515554). The inner disk then cannot be opened completely. Therefore in the past adjustments were made to the standard flange adapter.

In order to present also a solution for the special shut-off valves, we now offer special flange adapter.

The dimensions, sizes and classification of the flange adapter can be found in the following drawing and table.

These flange adapter are not included in the current price list and must be requested separately.



FLANGE ADAPTER

Art.-No.	Dimension	D	D1	D2	d	l	z	z1	z2	z3
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
0015431	160 SDR 11	175	160	212	152	14,6	93	25	21,6	11
0015435	200 SDR 11	237,42	200	268	204	18,2	130	32	39,2	19
0015439	250 SDR 11	289,56	250	320	255	22,7	130	44	51,2	26
0015443	315 SDR 11	342,75	315	370	308	28,6	177	50	46,1	21
0015445	355 SDR 11	379,09	355	432	348	32,2	202	58	51,7	23
0015447	400 SDR 11	430,84	400	484	392	36,3	195	62	58,3	26
0015449	450 SDR 11	517,86	450	586	445	40,9	180	55	66,4	28
2515430	160 SDR 17,6	175	160	212	152	9,1	93	25	16,1	11
2515434	200 SDR 17,6	237,42	200	268	204	11,4	130	32	32,4	19
2515438	250 SDR 17,6	290,22	250	320	255	14,2	130	35	42,7	26
2515442	315 SDR 17,6	342,7	315	370	308	17,9	177	35	35,4	21
2515444	355 SDR 17,6	378,82	355	432	348	20,1	185	42	39,6	23
2515446	400 SDR 17,6	430,92	400	484	392	22,7	195	44	44,7	26
2515448	450 SDR 17,6	513,72	450	486	445	25,5	140	46	51	28
2515450	500 SDR 17,6	528,58	500	585	490	28,4	152	58	57,4	34
2515454	630 SDR 17,6	644,94	630	688	590	35,7	142	52	40,7	25

Metal DIN PN16 backing rings compared to AS Table E backing rings

Art.-No. Metal Backing Rings (DIN PN16 drilled)	Dimension [mm]	Hole circle [mm] (DIN PN16 drilled)	Number of holes (DIN PN16 drilled)	Bolt Size (DIN PN16 drilled)	Hole circle [mm] AS (Table E drilled)	Number of holes AS (Table E drilled)	Bolt Size AS (Table E drilled)
15712	ø32 / DN25	85	4	M12	83	4	M12
15714	ø40 / DN32	100	4	M16	87	4	M12
15716	ø50 / DN40	110	4	M16	98	4	M12
15718	ø63 / DN50	125	4	M16	114	4	M16
15720	ø75 / DN65	145	4	M16	127	4	M16
15722	ø90 / DN80	160	8	M16	146	4	M16
15724	ø110 / DN100	180	8	M16	178	8	M16
15724	ø110 / DN100	180	8	M16	178	8	M16
15726	ø125 / DN125	210	8	M16	210	8	M16
15730	ø160 / DN150	240	8	M20	235	8	M20
15730	ø160 / DN150	240	8	M20	235	8	M20
15734	ø200 / DN200	295	8	M20	292	8	M20
15738	ø250 / DN250	350	12	M20	356	12	M20



Metal DIN PN16 backing rings compared to AS Table D backing rings

Art.-No. Metal Backing Rings (DIN PN16 drilled)	Dimension [mm]	Hole circle [mm] (DIN PN16 drilled)	Number of holes (DIN PN16 drilled)	Bolt Size (DIN PN16 drilled)	Hole circle [mm] AS (Table D drilled)	Number of holes AS (Table D drilled)	Bolt Size AS (Table D drilled)
15712	ø32 / DN25	85	4	M12	83	4	M12
15714	ø40 / DN32	100	4	M16	87	4	M12
15716	ø50 / DN40	110	4	M16	98	4	M12
15718	ø63 / DN50	125	4	M16	114	4	M16
15720	ø75 / DN65	145	4	M16	127	4	M16
15722	ø90 / DN80	160	8	M16	146	4	M16
15724	ø110 / DN100	180	8	M16	178	4	M16
15724	ø110 / DN100	180	8	M16	178	4	M16
15726	ø125 / DN125	210	8	M16	210	8	M16
15730	ø160 / DN150	240	8	M20	235	8	M16
15730	ø160 / DN150	240	8	M20	235	8	M16
15734	ø200 / DN200	295	8	M20	292	8	M16
15738	ø250 / DN250	350	12	M20	356	8	M20



aquatherm

FLANGE CONNECTIONS

THE FOLLOWING MUST BE OBSERVED IN THE USE OF FLANGE CONNECTIONS:

Flange adapter respectively the sealing surfaces must always be aligned parallel to each other. A subsequent tightening of the flange connection after the welding process must be avoided. It is important to ensure that the flange faces are clean and undamaged.

The screw length should be selected so that the screw thread is as flush as possible, maximum two threads from the nut. To distribute the force of the screw head and the nut over a larger area, washers are used. Screws, nuts and washers must be clean and undamaged.

In order to achieve proper force distribution (surface pressure) acting on the seal, note the following:

- Screw joints must be tightened diagonally and evenly
- Torque information on the individual flanges must be observed (see table)

For flange connections, exposed to a mutual load, take care that they are checked as part of the maintenance and retightened, if necessary.



TORQUE FLANGE according to manufacturer's instructions

Art.-No.	Dimension	DN specification	Nm
15712	32mm	25	15
15714	40mm	32	20
15716	50mm	40	30
15718	63mm	50	35
15720	75mm	65	40
15722	90mm	80	40
15724	110mm	ohne	50
15726	125mm	100	50
15730	160mm	125	60
15734	200mm	150	75
15738	250mm	200	95
15742	315mm	250	100
15744	355mm	300	100
15746	400mm	350	244-366
15748	450mm	400	271-407
15750	500mm	450	271-407
15752	560mm	500	353-529
15754	630mm	500	393-590

TIGHTENING SEQUENCE

Number of screws	Criss-Cross Pattern Tightening Sequence
4	1 - 2 - 3 - 4
8	1 - 5 - 3 - 7 >> 2 - 6 - 4 - 8
12	1 - 7 - 4 - 10 >> 2 - 8 - 5 - 11 >> 3 - 9 - 6 - 12
16	1 - 9 - 5 - 13 >> 3 - 11 - 7 - 15 >> 2 - 10 - 6 - 14 >> 4 - 12 - 8 - 16
20	1 - 11 - 6 - 16 >> 3 - 13 - 8 - 18 >> 5 - 10 - 15 - 20 >> 2 - 12 - 7 - 17 >> 4 - 14 - 9 - 19

Following the table, tighten the given screw number to the desired torque value for the given round of tightening.

