

HDPE TECHNICAL INFORMATION

The following standard PowerSeal products have been evaluated and approved for use with high density polyethylene pipe based upon certain modifications and restrictions related to the unique properties of HDPE pipe compared with more commonly used rigid pipe materials.



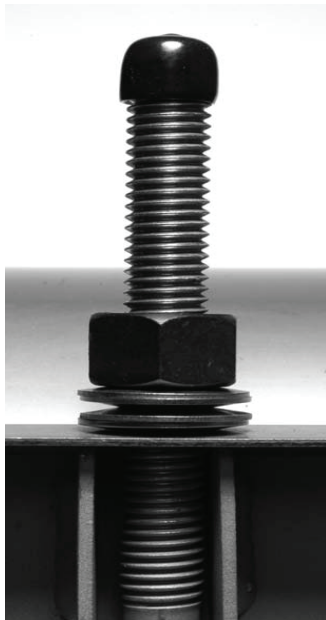
Products shown in the HDPE section are the only products suitable for HDPE applications. Do not use products in other sections on HDPE pipe.

PRODUCT RESTRICTIONS WHEN USED WITH HDPE

- Maximum operating pressure: 150 PSI (150 Mpa)
- Temperatures ranges: 32° - 75°F (0° - 23.9° C)
- Manufacturing standard: AWWA/ANSI C906-90
- Underground service only
- Pipe Stiffeners must be placed in each pipe end when used on mechanical bolt on fittings
- Clamp and sleeve width must exceed pipe diameter
- Pipe SDR (wall thickness) no more than 17 (PN-10)
- Each bolt must have four spring washers

KEY PROPERTIES INHERENT WITH HDPE

- Toe in happens when HDPE is cut which can alter the ability of any sleeve or saddle to seal and affect the installation of stiffeners.
- The coefficient of thermal expansion is over 10 times that of ductile and steel pipe and 3 times as much as PVC. This equates to the possibility of shrinkage at these same levels versus these types of pipes when it gets cold. This raises the chances of a fitting loosening on it. It also has a tendency to shrink lengthwise 1 inch (25.4mm) per 100 feet (30.48m) of pipe with a 10°F (5.5° C) reduction temperature. This results in the pipe pulling out of fittings.
- A low coefficient of friction makes the exterior surface of the pipe very smooth or slick which results in gasket fittings being prone to rotation or movement on the pipe.
- Pipe systems must be engineered to allow for pipe movements so to limit fittings movement.

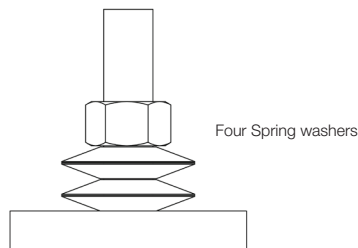
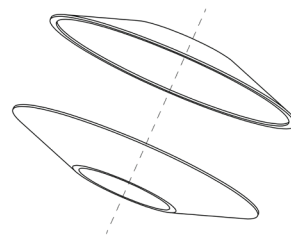


All bolts will be supplied with four spring washer.

SPRING WASHERS

NOTICE!!

PowerSeal does not warrant products used when the installation does not conform to any of the restrictions listed above. Contact our engineering department if you have questions about using our products on HDPE.



3490AS-PE / 3490CS-PE TAP SLEEVE W/ FLANGE OUTLET

FLANGE: Type 304 (18-8) Stainless Steel or A36 Carbon Steel per AWWA C207.

PANEL: Type 304 (18-8) Stainless Steel per ASTM A240.

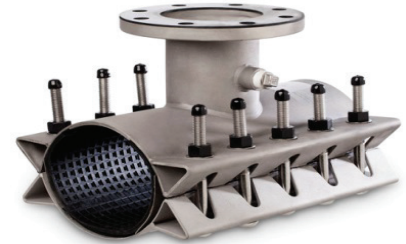
SHELL GASKET: SBR per ASTM D2000 Chek-O-Seal with multi o-ring sealing ribs from 100% new rubber to ensure performance under varying pressures with superior storage characteristics. Suitable for mild acids, water and salt media with a temperature range of -25°F to +200°F per ASTM D2000. Other materials available.

SHELL GASKET: SBR per ASTM D2000 Chek-O-Seal with multi o-ring sealing ribs from 100% new rubber to ensure performance under varying pressures with superior storage characteristics. Suitable for mild acids, water and salt media with a temperature range of -25°F to +200°F per ASTM D2000. Other materials available.

BRANCH GASKET: NBR per ASTM D2000 with Hydro TwinSeal® dual o-ring design incorporating both hydrostatic and mechanical forces to affect a dynamic seal.

BOLTS & NUTS : Type 304 (18-8) Stainless Steel per ASTM A193 and A194 for sleeves with Stainless Steel Flange and Low Alloy Steel Bolts and Nuts per ASTM A325 and ASTM A563 for sleeves with Carbon Steel Flange. NOTE: Stainless Steel hex nuts are furnished with fusion bonded coating to prevent seizing and galling.

WASHERS: Stainless Steel per ASTM A240, type 304. Special spring type.



Nominal Pipe Size		Pipe OD Range			BY	Branch Size Size		Stainless Steel Flange		Carbon Steel Flange	
Inches	MM	Inches	MM	Inches.		mm.	Catalog Number	List Price	Catalog Number	List Price	
4	100	A	4.50-4.70	114-119	X	2	50	348004A020AS-PE	\$ 1,522.00	348004A020CS-PE	\$ 1,472.00
		B	4.70-4.90	119-124				348004B020AS-PE		348004B020CS-PE	
		C	4.80-5.00	112-127				348004C020AS-PE		348004C020CS-PE	
4	100	A	4.50-4.70	114-119	X	3	80	348004A030AS-PE	\$ 1,522.00	348004A030CS-PE	\$ 1,472.00
		B	4.70-4.90	119-124				348004B030AS-PE		348004B030CS-PE	
		C	4.80-5.00	112-127				348004C030AS-PE		348004C030CS-PE	
4	100	A	4.50-4.70	114-119	X	4	100	348004A040AS-PE	\$ 1,522.00	348004A040CS-PE	\$ 1,472.00
		B	4.70-4.90	119-124				348004B040AS-PE		348004B040CS-PE	
		C	4.80-5.00	112-127				348004C040AS-PE		348004C040CS-PE	
6	150	B	6.60-7.00	168-178	X	2	50	348006B020AS-PE	\$ 1,586.10	348006B020CS-PE	\$ 1,536.10
		C	6.90-7.30	175-185				348006C020AS-PE		348006C020CS-PE	
6	150	B	6.60-7.00	168-178	X	3	80	348006B030AS-PE	\$ 1,586.10	348006B030CS-PE	\$ 1,536.10
		C	6.90-7.30	175-185				348006C030AS-PE		348006C030CS-PE	
6	150	B	6.60-7.00	168-178	X	4	100	348006B040AS-PE	\$ 1,586.10	348006B040CS-PE	\$ 1,536.10
		C	6.90-7.30	175-185				348006C040AS-PE		348006C040CS-PE	
6	150	B	6.60-7.00	168-178	X	6	150	348006B060AS-PE	\$ 1,809.00	348006B060CS-PE	\$ 1,746.50
		C	6.90-7.30	175-185				348006C060AS-PE		348006C060CS-PE	
8	200	B	8.60-9.05	218-230	X	2	50	348008B020AS-PE	\$ 1,642.40	348008B020CS-PE	\$ 1,592.40
		C	9.05-9.45	230-240				348008C020AS-PE		348008C020CS-PE	
8	200	B	8.60-9.05	218-230	X	3	80	348008B030AS-PE	\$ 1,642.40	348008B030CS-PE	\$ 1,592.40
		C	9.05-9.45	230-240				348008C030AS-PE		348008C030CS-PE	
8	200	B	8.60-9.05	218-230	X	4	100	348008B040AS-PE	\$ 1,642.40	348008B040CS-PE	\$ 1,592.40
		C	9.05-9.45	230-240				348008C040AS-PE		348008C040CS-PE	
8	200	B	8.60-9.05	218-230	X	6	150	348008B060AS-PE	\$ 1,826.60	348008B060CS-PE	\$ 1,764.10
		C	9.05-9.45	230-240				348008C060AS-PE		348008C060CS-PE	
8	200	B	8.60-9.05	218-230	X	8	200	348008B080AS-PE	\$ 2,269.40	348008B080CS-PE	\$ 2,194.40
		C	9.05-9.45	230-240				348008C080AS-PE		348008C080CS-PE	

3490AS-PE / 3490CS-PE TAP SLEEVE W/ FLANGE OUTLET

Nominal Pipe Size			Pipe OD Range		BY	Branch Size Size		Stainless Steel Flange		Carbon Steel Flange	
Inches	MM		Inches	MM		Inches.	mm.	Catalog Number	List Price	Catalog Number	List Price
10	250	B	10.70-11.10	272-282	X	2	50	348010B020AS-PE	\$ 1,783.60	348010B020CS-PE	\$ 1,733.60
		C	11.10-11.50	282-292				348010C020AS-PE		348010C020CS-PE	
10	250	B	10.70-11.10	272-282	X	3	80	348010B030AS-PE	\$ 1,783.60	348010B030CS-PE	\$ 1,733.60
		C	11.10-11.50	282-292				348010C030AS-PE		348010C030CS-PE	
10	250	B	10.70-11.10	272-282	X	4	100	348010B040AS-PE	\$ 1,783.60	348010B040CS-PE	\$ 1,733.60
		C	11.10-11.50	282-292				348010C040AS-PE		348010C040CS-PE	
10	250	B	10.70-11.10	272-282	X	6	150	348010B060AS-PE	\$ 1,937.10	348010B060CS-PE	\$ 1,874.60
		C	11.10-11.50	282-292				348010C060AS-PE		348010C060CS-PE	
10	250	B	10.70-11.10	272-282	X	8	200	348010B080AS-PE	\$ 2,456.40	348010B080CS-PE	\$ 2,381.40
		C	11.10-11.50	282-292				348010C080AS-PE		348010C080CS-PE	
10	250	B	10.70-11.10	272-282	X	10	250	348010B100AS-PE	\$ 4,070.40	348010B100CS-PE	\$ 3,945.40
		C	11.10-11.50	282-292				348010C100AS-PE		348010C100CS-PE	
12	300	B	12.50-12.90	318-328	X	2	50	348012B020AS-PE	\$ 2,110.40	348012B020CS-PE	\$ 2,060.40
		C	13.20-13.60	335-345				348012C020AS-PE		348012C020CS-PE	
		E	13.90-14.30	355-363				348012E020AS-PE		348012E020CS-PE	
12	300	B	12.50-12.90	318-328	X	3	80	348012B030AS-PE	\$ 2,110.40	348012B030CS-PE	\$ 2,060.40
		C	13.20-13.60	335-345				348012C030AS-PE		348012C030CS-PE	
		E	13.90-14.30	355-363				348012E030AS-PE		348012E030CS-PE	
12	300	B	12.50-12.90	318-328	X	4	100	348012B040AS-PE	\$ 2,110.40	348012B040CS-PE	\$ 2,060.40
		C	13.20-13.60	335-345				348012C040AS-PE		348012C040CS-PE	
		E	13.90-14.30	355-363				348012E040AS-PE		348012E040CS-PE	
12	300	B	12.50-12.90	318-328	X	6	150	348012B060AS-PE	\$ 2,321.60	348012B060CS-PE	\$ 2,259.10
		C	13.20-13.60	335-345				348012C060AS-PE		348012C060CS-PE	
		E	13.90-14.30	355-363				348012E060AS-PE		348012E060CS-PE	
12	300	B	12.50-12.90	318-328	X	8	200	348012B080AS-PE	\$ 2,806.60	348012B080CS-PE	\$ 2,731.60
		C	13.20-13.60	335-345				348012C080AS-PE		348012C080CS-PE	
		E	13.90-14.30	355-363				348012E080AS-PE		348012E080CS-PE	
12	300	B	12.50-12.90	318-328	X	10	250	348012B100AS-PE	\$ 4,420.00	348012B100CS-PE	\$ 4,295.00
		C	13.20-13.60	335-345				348012C100AS-PE		348012C100CS-PE	
		E	13.90-14.30	355-363				348012E100AS-PE		348012E100CS-PE	
12	300	B	12.50-12.90	318-328	X	12	300	348012B120AS-PE	\$ 5,266.60	348012B120CS-PE	\$ 5,104.10
		C	13.20-13.60	335-345				348012C120AS-PE		348012C120CS-PE	
		E	13.90-14.30	355-363				348012E120AS-PE		348012E120CS-PE	
14	350	B	15.30-15.70	389-399	X	2	50	348014B020AS-PE	\$ 2,923.40	348014B020CS-PE	\$ 2,873.40
		C	15.90-16.30	404-414				348014C020AS-PE		348014C020CS-PE	
14	350	B	15.30-15.70	389-399	X	3	80	348014B030AS-PE	\$ 2,923.40	348014B030CS-PE	\$ 2,873.40
		C	15.90-16.30	404-414				348014C030AS-PE		348014C030CS-PE	
14	350	B	15.30-15.70	389-399	X	4	100	348014B040AS-PE	\$ 2,923.40	348014B040CS-PE	\$ 2,873.40
		C	15.90-16.30	404-414				348014C040AS-PE		348014C040CS-PE	
14	350	B	15.30-15.70	389-399	X	6	150	348014B060AS-PE	\$ 3,205.00	348014B060CS-PE	\$ 3,142.50
		C	15.90-16.30	404-414				348014C060AS-PE		348014C060CS-PE	

3490AS-PE / 3490CS-PE TAP SLEEVE W/ FLANGE OUTLET

Nominal Pipe Size		Pipe OD Range			BY	Branch Size Size		Stainless Steel Flange		Carbon Steel Flange	
Inches	MM		Inches	MM		Inches.	mm.	Catalog Number	List Price	Catalog Number	List Price
14	350	B	15.30-15.70	389-399	X	8	200	348014B080AS-PE	\$ 4,211.60	348014B080CS-PE	\$ 4,136.60
		C	15.90-16.30	404-414				348014C080AS-PE		348014C080CS-PE	
14	350	B	15.30-15.70	389-399	X	10	250	348014B100AS-PE	\$ 5,701.30	348014B100CS-PE	\$ 5,576.30
		C	15.90-16.30	404-414				348014C100AS-PE		348014C100CS-PE	
14	350	B	15.30-15.70	389-399	X	12	300	348014B120AS-PE	\$ 6,753.40	348014B120CS-PE	\$ 6,590.90
		C	15.90-16.30	404-414				348014C120AS-PE		348014C120CS-PE	
16	400	B	17.40-17.80	442-452	X	2	50	348016B020AS-PE	\$ 3,375.00	348016B020CS-PE	\$ 3,325.00
		C	17.70-18.10	450-460				348016C020AS-PE		348016C020CS-PE	
16	400	B	17.40-17.80	442-452	X	3	80	348016B030AS-PE	\$ 3,375.00	348016B030CS-PE	\$ 3,325.00
		C	17.70-18.10	450-460				348016C030AS-PE		348016C030CS-PE	
16	400	B	17.40-17.80	442-452	X	4	100	348016B040AS-PE	\$ 3,375.00	348016B040CS-PE	\$ 3,325.00
		C	17.70-18.10	450-460				348016C040AS-PE		348016C040CS-PE	
16	400	B	17.40-17.80	442-452	X	6	150	348016B060AS-PE	\$ 3,656.60	348016B060CS-PE	\$ 3,594.10
		C	17.70-18.10	450-460				348016C060AS-PE		348016C060CS-PE	
16	400	B	17.40-17.80	442-452	X	8	200	348016B080AS-PE	\$ 4,356.60	348016B080CS-PE	\$ 4,281.60
		C	17.70-18.10	450-460				348016C080AS-PE		348016C080CS-PE	
16	400	B	17.40-17.80	442-452	X	10	250	348016B100AS-PE	\$ 6,050.00	348016B100CS-PE	\$ 5,925.00
		C	17.70-18.10	450-460				348016C100AS-PE		348016C100CS-PE	
16	400	B	17.40-17.80	442-452	X	12	300	348016B120AS-PE	\$ 6,936.60	348016B120CS-PE	\$ 6,436.60
		C	17.70-18.10	450-460				348016C120AS-PE		348016C120CS-PE	
18	450	C	19.30-19.70	490-500	X	2	50	348018C020AS-PE	\$ 3,445.00	348018C020CS-PE	\$ 3,395.00
		D	19.80-20.20	503-513				348018D020AS-PE		348018D020CS-PE	
18	450	C	19.30-19.70	490-500	X	3	80	348008C030AS-PE	\$ 3,445.00	348018C030CS-PE	\$ 3,395.00
		D	19.80-20.20	503-513				348018D030AS-PE		348018D030CS-PE	
18	450	C	19.30-19.70	490-500	X	4	100	348018C040AS-PE	\$ 3,445.00	348018C040CS-PE	\$ 3,395.00
		D	19.80-20.20	503-513				348018D040AS-PE		348018D040CS-PE	
18	450	C	19.30-19.70	490-500	X	6	150	348018C060AS-PE	\$ 3,728.40	348018C060CS-PE	\$ 3,665.90
		D	19.80-20.20	503-513				348018D060AS-PE		348018D060CS-PE	
18	450	C	19.30-19.70	490-500	X	8	200	348018C080AS-PE	\$ 4,483.40	348018C080CS-PE	\$ 4,407.50
		D	19.80-20.20	503-513				348018D080AS-PE		348018D080CS-PE	
18	450	C	19.30-19.70	490-500	X	10	250	348018C100AS-PE	\$ 6,195.00	348018C100CS-PE	\$ 6,070.00
		D	19.80-20.20	503-513				348018D100AS-PE		348018D100CS-PE	
18	450	C	19.30-19.70	490-500	X	12	300	348018C120AS-PE	\$ 7,081.60	348018C120CS-PE	\$ 6,919.10
		D	19.80-20.20	503-513				348018D120AS-PE		348018D120CS-PE	
20	500	A	21.40-21.80	544-554	X	2	50	348020A020AS-PE	\$ 3,953.40	348020A020CS-PE	\$ 3,903.40
		B	21.90-22.30	556-566				348020B020AS-PE		348020B020CS-PE	
20	500	A	21.40-21.80	544-554	X	3	80	348020A030AS-PE	\$ 3,953.40	348020A030CS-PE	\$ 3,903.40
		B	21.90-22.30	556-566				348020B030AS-PE		348020B030CS-PE	
20	500	A	21.40-21.80	544-554	X	4	100	348020A040AS-PE	\$ 3,953.40	348020A040CS-PE	\$ 3,903.40
		B	21.90-22.30	556-566				348020B040AS-PE		348020B040CS-PE	
20	500	A	21.40-21.80	544-554	X	6	150	348020A060AS-PE	\$ 422.50	348020A060CS-PE	\$ 4,110.00
		B	21.90-22.30	556-566				348020B060AS-PE		348020B060CS-PE	

3490AS-PE / 3490CS-PE TAP SLEEVE W/ FLANGE OUTLET

Nominal Pipe Size		Pipe OD Range			BY	Branch Size Size		Stainless Steel Flange		Carbon Steel Flange	
Inches	MM		Inches	MM		Inches.	mm.	Catalog Number	List Price	Catalog Number	List Price
20	500	A	21.40-21.80	544-554	X	8	200	348020A080AS-PE	\$ 5,175.00	348020A080CS-PE	\$ 5,100.00
		B	21.90-22.30	556-566				348020B080AS-PE		348020B080CS-PE	
20	500	A	21.40-21.80	544-554	X	10	250	348020A100AS-PE	\$ 7,006.60	348020A100CS-PE	\$ 6,881.60
		B	21.90-22.30	556-566				348020B100AS-PE		348020B100CS-PE	
20	500	A	21.40-21.80	544-554	X	12	300	348020A120AS-PE	\$ 7,893.40	348020A120CS-PE	\$ 7,730.90
		B	21.90-22.30	556-566				348020B120AS-PE		348020B120CS-PE	
24	600	A	25.60-26.00	650-660	X	2	50	348024A020AS-PE	\$ 4,143.40	348024A020CS-PE	\$ 4,093.40
24	600	A	25.60-26.00	650-660	X	3	80	348024A030AS-PE	\$ 4,143.40	348024A030CS-PE	\$ 4,093.40
24	600	A	25.60-26.00	650-660	X	4	100	348024A040AS-PE	\$ 4,143.40	348024A040CS-PE	\$ 4,093.40
24	600	A	25.60-26.00	650-660	X	6	150	348024A060AS-PE	\$ 4,425.00	348024A060CS-PE	\$ 4,362.50
24	600	A	25.60-26.00	650-660	X	8	200	348024A080AS-PE	\$ 5,386.60	348024A080CS-PE	\$ 5,311.60
24	600	A	25.60-26.00	650-660	X	10	250	348024A100AS-PE	\$ 7,236.60	348024A100CS-PE	\$ 7,111.60
24	600	A	25.60-26.00	650-660	X	12	300	348024A120AS-PE	\$ 8,130.00	348024A120CS-PE	\$ 7,967.50

HOW TO ORDER: Choose the Pipe Size Letter Code corresponding to a Pipe OD Range that covers the Pipe OD to be tapped and then specify the desired branch size. EXAMPLE: 12" HDPE pipe O.D. 13.20" with 8" Branch. Order 3480AS-PE or 3480CS-PE -12C x 8. **Part Number:** 348012C080CS-PE .

NOTE: Other ranges, tap sizes available upon request.