

## 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.



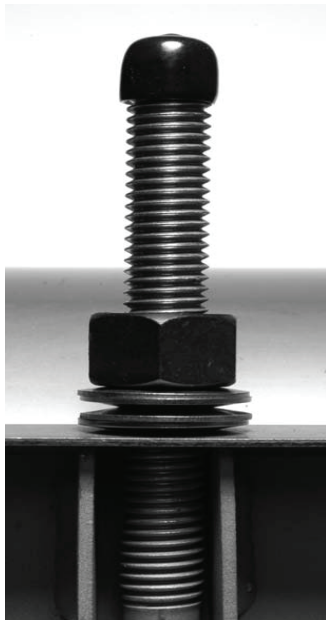
Products shown in the HDPE section are the only products suitable for HDPE applications. Do not use products in other sections on HDPE pipe.

### 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.

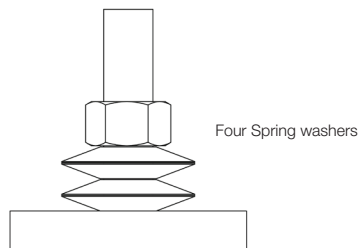
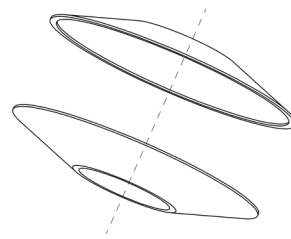


All bolts will be supplied with four spring washer.

### 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.



### 3480MJ-PE / 3480MJCS-PE TAP SLEEVE W/ MECHANICAL JOINT OUTLET

**MJ OUTLET:** Type 304 (18-8) Stainless Steel per ASTM A743 and ANSI/AWWA C111 or Carbon Steel.

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

**SHELL GASKET:** SBR per ASTM D2000 Chek-0-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.

NOTE: 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		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	348004A020MJ-PE	\$ 1,547.00	348004A020MJ-CSPE	\$ 1,484.50
		B	4.70-4.90	119-124				348004B020MJ-PE		348004B020MJ-CSPE	
		C	4.80-5.00	112-127				348004C020MJ-PE		348004C020MJ-CSPE	
4	100	A	4.50-4.70	114-119	X	3	80	348004A030MJ-PE	\$ 1,547.00	348004A030MJ-CSPE	\$ 1,484.50
		B	4.70-4.90	119-124				348004B030MJ-PE		348004B030MJ-CSPE	
		C	4.80-5.00	112-127				348004C030MJ-PE		348004C030MJ-CSPE	
4	100	A	4.50-4.70	114-119	X	4	100	348004A040MJ-PE	\$ 1,547.00	348004A040MJ-CSPE	\$ 1,484.50
		B	4.70-4.90	119-124				348004B040MJ-PE		348004B040MJ-CSPE	
		C	4.80-5.00	112-127				348004C040MJ-PE		348004C040MJ-CSPE	
6	150	B	6.60-7.00	168-178	X	2	50	348006B020MJ-PE	\$ 1,611.10	348006B020MJ-CSPE	\$ 1,548.60
		C	6.90-7.30	175-185				348006C020MJ-PE		348006C020MJ-CSPE	
6	150	B	6.60-7.00	168-178	X	3	80	348006B030MJ-PE	\$ 1,611.10	348006B030MJ-CSPE	\$ 1,548.60
		C	6.90-7.30	175-185				348006C030MJ-PE		348006C030MJ-CSPE	
6	150	B	6.60-7.00	168-178	X	4	100	348006B040MJ-PE	\$ 1,611.10	348006B040MJ-CSPE	\$ 1,548.60
		C	6.90-7.30	175-185				348006C040MJ-PE		348006C040MJ-CSPE	
6	150	B	6.60-7.00	168-178	X	6	150	348006B060MJ-PE	\$ 1,871.50	348006B060MJ-CSPE	\$ 1,796.50
		C	6.90-7.30	175-185				348006C060MJ-PE		348006C060MJ-CSPE	
8	200	B	8.60-9.05	218-230	X	2	50	348008B020MJ-PE	\$ 1,667.40	348008B020MJ-CSPE	\$ 1,604.90
		C	9.05-9.45	230-240				348008C020MJ-PE		348008C020MJ-CSPE	
8	200	B	8.60-9.05	218-230	X	3	80	348008B030MJ-PE	\$ 1,667.40	348008B030MJ-CSPE	\$ 1,604.90
		C	9.05-9.45	230-240				348008C030MJ-PE		348008C030MJ-CSPE	
8	200	B	8.60-9.05	218-230	X	4	100	348008B040MJ-PE	\$ 1,667.40	348008B040MJ-CSPE	\$ 1,604.90
		C	9.05-9.45	230-240				348008C040MJ-PE		348008C040MJ-CSPE	
8	200	B	8.60-9.05	218-230	X	6	150	348008B060MJ-PE	\$ 1,889.10	348008B060MJ-CSPE	\$ 1,814.10
		C	9.05-9.45	230-240				348008C060MJ-PE		348008C060MJ-CSPE	
8	200	B	8.60-9.05	218-230	X	8	200	348008B080MJ-PE	\$ 2,356.90	348008B080MJ-CSPE	\$ 2,231.90
		C	9.05-9.45	230-240				348008C080MJ-PE		348008C080MJ-CSPE	

## 3480MJ-PE / 3480MJCS-PE TAP SLEEVE W/ MECHANICAL JOINT OUTLET

Nominal Pipe Size		Pipe OD Range			BY	Branch 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	348010B020MJ-PE	\$ 1,808.60	348010B020MJ-CSPE	\$ 1,746.10
		C	11.10-11.50	282-292				348010C020MJ-PE		348010C020MJ-CSPE	
10	250	B	10.70-11.10	272-282	X	3	80	348010B030MJ-PE	\$ 1,808.60	348010B030MJ-CSPE	\$ 1,746.10
		C	11.10-11.50	282-292				348010C030MJ-PE		348010C030MJ-CSPE	
10	250	B	10.70-11.10	272-282	X	4	100	348010B040MJ-PE	\$ 1,808.60	348010B040MJ-CSPE	\$ 1,746.10
		C	11.10-11.50	282-292				348010C040MJ-PE		348010C040MJ-CSPE	
10	250	B	10.70-11.10	272-282	X	6	150	348010B060MJ-PE	\$ 1,999.60	348010B060MJ-CSPE	\$ 1,924.60
		C	11.10-11.50	282-292				348010C060MJ-PE		348010C060MJ-CSPE	
10	250	B	10.70-11.10	272-282	X	8	200	348010B080MJ-PE	\$ 2,543.90	348010B080MJ-CSPE	\$ 2,418.90
		C	11.10-11.50	282-292				348010C080MJ-PE		348010C080MJ-CSPE	
10	250	B	10.70-11.10	272-282	X	10	250	348010B100MJ-PE	\$ 4,182.90	348010B100MJ-CSPE	\$ 4,007.90
		C	11.10-11.50	282-292				348010C100MJ-PE		348010C100MJ-CSPE	
12	300	B	12.50-12.90	318-328	X	2	50	348012B020MJ-PE	\$ 2,135.40	348012B020MJ-CSPE	\$ 2,072.90
		C	13.20-13.60	335-345				348012C020MJ-PE		348012C020MJ-CSPE	
		E	13.90-14.30	355-363				348012E020MJ-PE		348012E020MJ-CSPE	
12	300	B	12.50-12.90	318-328	X	3	80	348012B030MJ-PE	\$ 2,135.40	348012B030MJ-CSPE	\$ 2,072.90
		C	13.20-13.60	335-345				348012C030MJ-PE		348012C030MJ-CSPE	
		E	13.90-14.30	355-363				348012E030MJ-PE		348012E030MJ-CSPE	
12	300	B	12.50-12.90	318-328	X	4	100	348012B040MJ-PE	\$ 2,135.40	348012B040MJ-CSPE	\$ 2,072.90
		C	13.20-13.60	335-345				348012C040MJ-PE		348012C040MJ-CSPE	
		E	13.90-14.30	355-363				348012E040MJ-PE		348012E040MJ-CSPE	
12	300	B	12.50-12.90	318-328	X	6	150	348012B060MJ-PE	\$ 2,384.10	348012B060MJ-CSPE	\$ 2,309.10
		C	13.20-13.60	335-345				348012C060MJ-PE		348012C060MJ-CSPE	
		E	13.90-14.30	355-363				348012E060MJ-PE		348012E060MJ-CSPE	
12	300	B	12.50-12.90	318-328	X	8	200	348012B080MJ-PE	\$ 2,894.10	348012B080MJ-CSPE	\$ 2,769.10
		C	13.20-13.60	335-345				348012C080MJ-PE		348012C080MJ-CSPE	
		E	13.90-14.30	355-363				348012E080MJ-PE		348012E080MJ-CSPE	
12	300	B	12.50-12.90	318-328	X	10	250	348012B100MJ-PE	\$ 4,282.50	348012B100MJ-CSPE	\$ 4,107.50
		C	13.20-13.60	335-345				34802C100MJ-PE		348012C100MJ-CSPE	
		E	13.90-14.30	355-363				348012E100MJ-PE		348012E100MJ-CSPE	
12	300	B	12.50-12.90	318-328	X	12	300	348012B120MJ-PE	\$ 5,391.60	348012B120MJ-CSPE	\$ 5,179.10
		C	13.20-13.60	335-345				348012C120MJ-PE		348012C120MJ-CSPE	
		E	13.90-14.30	355-363				348012E120MJ-PE		348012E120MJ-CSPE	
14	350	B	15.30-15.70	389-399	X	2	50	348014B020MJ-PE	\$ 2,948.40	348014B020MJ-CSPE	\$ 2,885.10
		C	15.90-16.30	404-414				348014C020MJ-PE		348014C020MJ-CSPE	
14	350	B	15.30-15.70	389-399	X	3	80	348014B030MJ-PE	\$ 2,948.40	348014B030MJ-CSPE	\$ 2,885.10
		C	15.90-16.30	404-414				348014C030MJ-PE		348014C030MJ-CSPE	
14	350	B	15.30-15.70	389-399	X	4	100	348014B040MJ-PE	\$ 2,948.40	348014B040MJ-CSPE	\$ 2,885.10
		C	15.90-16.30	404-414				348014C040MJ-PE		348014C040MJ-CSPE	
14	350	B	15.30-15.70	389-399	X	6	150	348014B060MJ-PE	\$ 3,267.50	348014B060MJ-CSPE	\$ 3,192.50
		C	15.90-16.30	404-414				348014C060MJ-PE		348014C060MJ-CSPE	

**3480MJ-PE / 3480MJCS-PE TAP SLEEVE W/  
MECHANICAL JOINT 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	348014B080MJ-PE	\$ 4,299.10	348014B080MJ-CSPE	\$ 4,174.10
		C	15.90-16.30	404-414				348014C080MJ-PE		348014C080MJ-CSPE	
14	350	B	15.30-15.70	389-399	X	10	250	348014B100MJ-PE	\$ 5,813.80	348014B100MJ-CSPE	\$ 5,638.80
		C	15.90-16.30	404-414				348014C100MJ-PE		348014C100MJ-CSPE	
14	350	B	15.30-15.70	389-399	X	12	300	348014B120MJ-PE	\$ 6,878.40	348014B120MJ-CSPE	\$ 6,665.90
		C	15.90-16.30	404-414				348014C120MJ-PE		348014C120MJ-CSPE	
16	400	B	17.40-17.80	442-452	X	2	50	348016B020MJ-PE	\$ 3,400.00	348016B020MJ-CSPE	\$ 3,337.50
		C	17.70-18.10	450-460				348016C020MJ-PE		348016C020MJ-CSPE	
16	400	B	17.40-17.80	442-452	X	3	80	348016B030MJ-PE	\$ 3,400.00	348016B030MJ-CSPE	\$ 3,337.50
		C	17.70-18.10	450-460				348016C030MJ-PE		348016C030MJ-CSPE	
16	400	B	17.40-17.80	442-452	X	4	100	348016B040MJ-PE	\$ 3,400.00	348016B040MJ-CSPE	\$ 3,337.50
		C	17.70-18.10	450-460				348016C040MJ-PE		348016C040MJ-CSPE	
16	400	B	17.40-17.80	442-452	X	6	150	348016B060MJ-PE	\$ 3,719.10	348016B060MJ-CSPE	\$ 3,644.10
		C	17.70-18.10	450-460				348016C060MJ-PE		348016C060MJ-CSPE	
16	400	B	17.40-17.80	442-452	X	8	200	348016B080MJ-PE	\$ 4,444.10	348016B080MJ-CSPE	\$ 4,319.10
		C	17.70-18.10	450-460				348016C080MJ-PE		348016C080MJ-CSPE	
16	400	B	17.40-17.80	442-452	X	10	250	348016B100MJ-PE	\$ 6,162.50	348016B100MJ-CSPE	\$ 5,991.30
		C	17.70-18.10	450-460				348016C100MJ-PE		348016C100MJ-CSPE	
16	400	B	17.40-17.80	442-452	X	12	300	348016B120MJ-PE	\$ 7,061.60	348016B120MJ-CSPE	\$ 6,849.10
		C	17.70-18.10	450-460				348016C120MJ-PE		348016C120MJ-CSPE	
18	450	C	19.30-19.70	490-500	X	2	50	348018C020MJ-PE	\$ 3,470.00	348018C020MJ-CSPE	\$ 3,407.50
		D	19.80-20.20	503-513				348018D020MJ-PE		348018D020MJ-CSPE	
18	450	C	19.30-19.70	490-500	X	3	80	348018C030MJ-PE	\$ 3,470.00	348018C030MJ-CSPE	\$ 3,407.50
		D	19.80-20.20	503-513				348018D030MJ-PE		348018D030MJ-CSPE	
18	450	C	19.30-19.70	490-500	X	4	100	348018C040MJ-PE	\$ 3,470.00	348018C040MJ-CSPE	\$ 3,407.50
		D	19.80-20.20	503-513				348018D040MJ-PE		348018D040MJ-CSPE	
18	450	C	19.30-19.70	490-500	X	6	150	348018C060MJ-PE	\$ 3,790.00	348018C060MJ-CSPE	\$ 3,715.90
		D	19.80-20.20	503-513				348018D060MJ-PE		348018D060MJ-CSPE	
18	450	C	19.30-19.70	490-500	X	8	200	348018C080MJ-PE	\$ 4,570.90	348018C080MJ-CSPE	\$ 4,445.90
		D	19.80-20.20	503-513				348018D080MJ-PE		348018D080MJ-CSPE	
18	450	C	19.30-19.70	490-500	X	10	250	348018C100MJ-PE	\$ 6,307.50	348018C100MJ-CSPE	\$ 6,132.50
		D	19.80-20.20	503-513				348018D100MJ-PE		348018D100MJ-CSPE	
18	450	C	19.30-19.70	490-500	X	12	300	348018C120MJ-PE	\$ 7,206.60	348018C120MJ-CSPE	\$ 6,994.10
		D	19.80-20.20	503-513				348018D120MJ-PE		348018D120MJ-CSPE	
20	500	A	21.40-21.80	544-554	X	2	50	348020A020MJ-PE	\$ 3,978.40	348020A020MJ-CSPE	\$ 3,915.90
		B	21.90-22.30	556-566				348020B020MJ-PE		348020B020MJ-CSPE	
20	500	A	21.40-21.80	544-554	X	3	80	348020A030MJ-PE	\$ 3,978.40	348020A030MJ-CSPE	\$ 3,915.90
		B	21.90-22.30	556-566				348020B030MJ-PE		348020B030MJ-CSPE	
20	500	A	21.40-21.80	544-554	X	4	100	348020A040MJ-PE	\$ 3,978.40	348020A040MJ-CSPE	\$ 3,915.90
		B	21.90-22.30	556-566				348020B040MJ-PE		348020B040MJ-CSPE	
20	500	A	21.40-21.80	544-554	X	6	150	348020A060MJ-PE	\$ 4,235.00	348020A060MJ-CSPE	\$ 4,160.00
		B	21.90-22.30	556-566				348020B060MJ-PE		348020B060MJ-CSPE	

## 3480MJ-PE / 3480MJCS-PE TAP SLEEVE W/ MECHANICAL JOINT 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	348020A080MJ-PE	\$ 5,262.50	348020A080MJ-CSPE	\$ 5,137.50
		B	21.90-22.30	556-566				348020B080MJ-PE		348020B080MJ-CSPE	
20	500	A	21.40-21.80	544-554	X	10	250	348020A100MJ-PE	\$ 7,119.10	348020A100MJ-CSPE	\$ 6,944.10
		B	21.90-22.30	556-566				348020B100MJ-PE		348020B100MJ-CSPE	
20	500	A	21.40-21.80	544-554	X	12	300	348020A120MJ-PE	\$ 8,018.40	348020A120MJ-CSPE	\$ 7,805.90
		B	21.90-22.30	556-566				348020B120MJ-PE		348020B120MJ-CSPE	
24	600	A	25.60-26.00	650-660	X	2	50	348024A020MJ-PE	\$ 4,168.40	348024A020MJ-CSPE	\$ 4,105.90
24	600	A	25.60-26.00	650-660	X	3	80	348024A030MJ-PE	\$ 4,168.40	348024A030MJ-CSPE	\$ 4,105.90
24	600	A	25.60-26.00	650-660	X	4	100	348024A040MJ-PE	\$ 4,168.40	348024A040MJ-CSPE	\$ 4,105.90
24	600	A	25.60-26.00	650-660	X	6	150	348024A060MJ-PE	\$ 4,487.50	348024A060MJ-CSPE	\$ 4,412.50
24	600	A	25.60-26.00	650-660	X	8	200	348024A080MJ-PE	\$ 5,474.10	348024A080MJ-CSPE	\$ 5,349.10
24	600	A	25.60-26.00	650-660	X	10	250	348024A100MJ-PE	\$ 7,349.10	348024A100MJ-CSPE	\$ 7,174.10
24	600	A	25.60-26.00	650-660	X	12	300	348024A120MJ-PE	\$ 8,255.00	348024A120MJ-CSPE	\$ 8,042.50

**HOW TO ORDER:** 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: 16" HDPE pipe O.D. 17.40" with 8 inch MJ Branch. Order 3480ASMJ-PE -16B x 8. **Part Number:** 348016B080MJ-PE .

**NOTE:** Other ranges, tap sizes available upon request.

\*Manufactured under U.S. Patent 6,227,234.