

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.



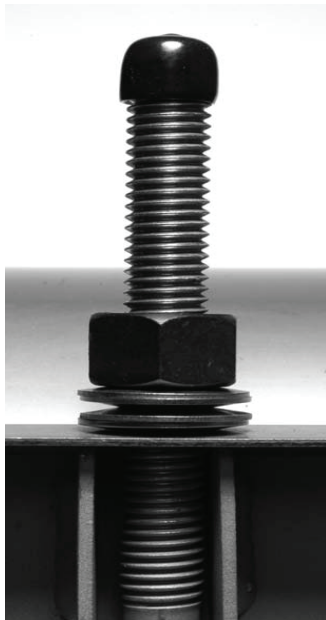
Products shown in the HDPE section are the only products suitable for HDPE applications. Do not use products in other sections on HDPE pipe.

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.

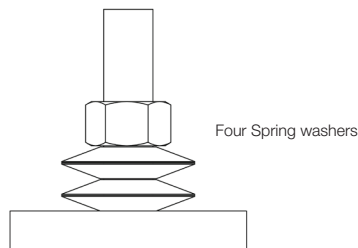
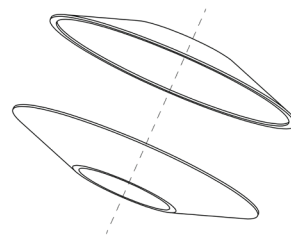


All bolts will be supplied with four spring washer.

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.



3490MJ-PE / 3490MJCS-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-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	349004A020MJ-PE	\$ 2,042.80	349004A020MJ-CSPE	\$ 1,980.30
		B	4.70-4.90	119-124				349004B020MJ-PE		349004B020MJ-CSPE	
		C	4.80-5.00	112-127				349004C020MJ-PE		349004C020MJ-CSPE	
4	100	A	4.50-4.70	114-119	X	3	80	349004A030MJ-PE	\$ 2,042.80	349004A030MJ-CSPE	\$ 1,980.30
		B	4.70-4.90	119-124				349004B030MJ-PE		349004B030MJ-CSPE	
		C	4.80-5.00	112-127				349004C030MJ-PE		349004C030MJ-CSPE	
4	100	A	4.50-4.70	114-119	X	4	100	349004A040MJ-PE	\$ 2,042.80	349004A040MJ-CSPE	\$ 1,980.30
		B	4.70-4.90	119-124				349004B040MJ-PE		349004B040MJ-CSPE	
		C	4.80-5.00	112-127				349004C040MJ-PE		349004C040MJ-CSPE	
6	150	B	6.60-7.00	168-178	X	2	50	349006B020MJ-PE	\$ 2,062.80	349006B020MJ-CSPE	\$ 2,000.30
		C	6.90-7.30	175-185				349006C020MJ-PE		349006C020MJ-CSPE	
6	150	B	6.60-7.00	168-178	X	3	80	349006B030MJ-PE	\$ 2,062.80	349006B030MJ-CSPE	\$ 2,000.30
		C	6.90-7.30	175-185				349006C030MJ-PE		349006C030MJ-CSPE	
6	150	B	6.60-7.00	168-178	X	4	100	349006B040MJ-PE	\$ 2,062.80	349006B040MJ-CSPE	\$ 2,000.30
		C	6.90-7.30	175-185				349006C040MJ-PE		349006C040MJ-CSPE	
6	150	B	6.60-7.00	168-178	X	6	150	349006B060MJ-PE	\$ 2,231.40	349006B060MJ-CSPE	\$ 2,156.40
		C	6.90-7.30	175-185				349006C060MJ-PE		349006C060MJ-CSPE	
8	200	B	8.60-9.05	218-230	X	2	50	349008B020MJ-PE	\$ 2,151.60	349008B020MJ-CSPE	\$ 2,089.10
		C	9.05-9.45	230-240				349008C020MJ-PE		349008C020MJ-CSPE	
8	200	B	8.60-9.05	218-230	X	3	80	349008B030MJ-PE	\$ 2,151.60	349008B030MJ-CSPE	\$ 2,089.10
		C	9.05-9.45	230-240				349008C030MJ-PE		349008C030MJ-CSPE	
8	200	B	8.60-9.05	218-230	X	4	100	349008B040MJ-PE	\$ 2,151.60	349008B040MJ-CSPE	\$ 2,089.10
		C	9.05-9.45	230-240				349008C040MJ-PE		349008C040MJ-CSPE	
8	200	B	8.60-9.05	218-230	X	6	150	349008B060MJ-PE	\$ 2,362.50	349008B060MJ-CSPE	\$ 2,287.50
		C	9.05-9.45	230-240				349008C060MJ-PE		349008C060MJ-CSPE	
8	200	B	8.60-9.05	218-230	X	8	200	349008B080MJ-PE	\$ 2,907.50	349008B080MJ-CSPE	\$ 2,782.50
		C	9.05-9.45	230-240				349008C080MJ-PE		349008C080MJ-CSPE	

3490MJ-PE / 3490MJCS-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	349010B020MJ-PE	\$ 2,451.60	349010B020MJ-CSPE	\$ 2,389.10
		C	11.10-11.50	282-292				349010C020MJ-PE		349010C020MJ-CSPE	
10	250	B	10.70-11.10	272-282	X	3	80	349010B030MJ-PE	\$ 2,451.60	349010B030MJ-CSPE	\$ 2,389.10
		C	11.10-11.50	282-292				349010C030MJ-PE		349010C030MJ-CSPE	
10	250	B	10.70-11.10	272-282	X	4	100	349010B040MJ-PE	\$ 2,451.60	349010B040MJ-CSPE	\$ 2,389.10
		C	11.10-11.50	282-292				349010C040MJ-PE		349010C040MJ-CSPE	
10	250	B	10.70-11.10	272-282	X	6	150	349010B060MJ-PE	\$ 2,691.40	349010B060MJ-CSPE	\$ 2,616.40
		C	11.10-11.50	282-292				349010C060MJ-PE		349010C060MJ-CSPE	
10	250	B	10.70-11.10	272-282	X	8	200	349010B080MJ-PE	\$ 3,298.60	349010B080MJ-CSPE	\$ 3,173.60
		C	11.10-11.50	282-292				349010C080MJ-PE		349010C080MJ-CSPE	
10	250	B	10.70-11.10	272-282	X	10	250	349010B100MJ-PE	\$ 4,805.90	349010B100MJ-CSPE	\$ 4,630.90
		C	11.10-11.50	282-292				349010C100MJ-PE		349010C100MJ-CSPE	
12	300	B	12.50-12.90	318-328	X	2	50	349012B020MJ-PE	\$ 2,161.60	349012B020MJ-CSPE	\$ 2,099.10
		C	13.20-13.60	335-345				349012C020MJ-PE		349012C020MJ-CSPE	
		E	13.90-14.30	355-363				349012E020MJ-PE		349012E020MJ-CSPE	
12	300	B	12.50-12.90	318-328	X	3	80	349012B030MJ-PE	\$ 2,161.60	349012B030MJ-CSPE	\$ 2,099.10
		C	13.20-13.60	335-345				349012C030MJ-PE		349012C030MJ-CSPE	
		E	13.90-14.30	355-363				349012E030MJ-PE		349012E030MJ-CSPE	
12	300	B	12.50-12.90	318-328	X	4	100	349012B040MJ-PE	\$ 2,161.60	349012B040MJ-CSPE	\$ 2,099.10
		C	13.20-13.60	335-345				349012C040MJ-PE		349012C040MJ-CSPE	
		E	13.90-14.30	355-363				349012E040MJ-PE		349012E040MJ-CSPE	
12	300	B	12.50-12.90	318-328	X	6	150	349012B060MJ-PE	\$ 2,460.00	349012B060MJ-CSPE	\$ 2,385.00
		C	13.20-13.60	335-345				349012C060MJ-PE		349012C060MJ-CSPE	
		E	13.90-14.30	355-363				349012E060MJ-PE		349012E060MJ-CSPE	
12	300	B	12.50-12.90	318-328	X	8	200	349012B080MJ-PE	\$ 3,118.40	349012B080MJ-CSPE	\$ 2,993.40
		C	13.20-13.60	335-345				349012C080MJ-PE		349012C080MJ-CSPE	
		E	13.90-14.30	355-363				349012E080MJ-PE		349012E080MJ-CSPE	
12	300	B	12.50-12.90	318-328	X	10	250	349012B100MJ-PE	\$ 3,948.40	349012B100MJ-CSPE	\$ 3,773.40
		C	13.20-13.60	335-345				349012C100MJ-PE		349012C100MJ-CSPE	
		E	13.90-14.30	355-363				349012E100MJ-PE		349012E100MJ-CSPE	
12	300	B	12.50-12.90	318-328	X	12	300	349012B120MJ-PE	\$ 4,260.00	349012B120MJ-CSPE	\$ 4,047.50
		C	13.20-13.60	335-345				349012C120MJ-PE		349012C120MJ-CSPE	
		E	13.90-14.30	355-363				349012E120MJ-PE		349012E120MJ-CSPE	
14	350	B	15.30-15.70	389-399	X	2	50	349014B020MJ-PE	\$ 2,531.60	349014B020MJ-CSPE	\$ 2,469.10
		C	15.90-16.30	404-414				349014C020MJ-PE		349014C020MJ-CSPE	
14	350	B	15.30-15.70	389-399	X	3	80	349014B030MJ-PE	\$ 2,531.60	349014B030MJ-CSPE	\$ 2,469.10
		C	15.90-16.30	404-414				349014C030MJ-PE		349014C030MJ-CSPE	
14	350	B	15.30-15.70	389-399	X	4	100	349014B040MJ-PE	\$ 2,531.60	349014B040MJ-CSPE	\$ 2,469.10
		C	15.90-16.30	404-414				349014C040MJ-PE		349014C040MJ-CSPE	
14	350	B	15.30-15.70	389-399	X	6	150	349014B060MJ-PE	\$ 2,831.60	349014B060MJ-CSPE	\$ 2,756.60
		C	15.90-16.30	404-414				349014C060MJ-PE		349014C060MJ-CSPE	

3490MJ-PE / 3490MJCS-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	349014B080MJ-PE	\$ 3,441.60	349014B080MJ-CSPE	\$ 3,316.60
		C	15.90-16.30	404-414				349014C080MJ-PE		349014C080MJ-CSPE	
14	350	B	15.30-15.70	389-399	X	10	250	349014B100MJ-PE	\$ 4,346.60	349014B100MJ-CSPE	\$ 4,171.60
		C	15.90-16.30	404-414				349014C100MJ-PE		349014C100MJ-CSPE	
14	350	B	15.30-15.70	389-399	X	12	300	349014B120MJ-PE	\$ 4,761.60	349014B120MJ-CSPE	\$ 4,549.10
		C	15.90-16.30	404-414				349014C120MJ-PE		349014C120MJ-CSPE	
16	400	B	17.40-17.80	442-452	X	2	50	349016B020MJ-PE	\$ 3,011.60	349016B020MJ-CSPE	\$ 2,949.10
		C	17.70-18.10	450-460				349016C020MJ-PE		349016C020MJ-CSPE	
16	400	B	17.40-17.80	442-452	X	3	80	349016B030MJ-PE	\$ 3,011.60	349016B030MJ-CSPE	\$ 2,949.10
		C	17.70-18.10	450-460				349016C030MJ-PE		349016C030MJ-CSPE	
16	400	B	17.40-17.80	442-452	X	4	100	349016B040MJ-PE	\$ 3,011.60	349016B040MJ-CSPE	\$ 2,949.10
		C	17.70-18.10	450-460				349016C040MJ-PE		349016C040MJ-CSPE	
16	400	B	17.40-17.80	442-452	X	6	150	349016B060MJ-PE	\$ 3,478.40	349016B060MJ-CSPE	\$ 3,403.40
		C	17.70-18.10	450-460				349016C060MJ-PE		349016C060MJ-CSPE	
16	400	B	17.40-17.80	442-452	X	8	200	349016B080MJ-PE	\$ 3,843.40	349016B080MJ-CSPE	\$ 3,718.40
		C	17.70-18.10	450-460				349016C080MJ-PE		349016C080MJ-CSPE	
16	400	B	17.40-17.80	442-452	X	10	250	349016B100MJ-PE	\$ 4,798.40	349016B100MJ-CSPE	\$ 4,623.40
		C	17.70-18.10	450-460				349016C100MJ-PE		349016C100MJ-CSPE	
16	400	B	17.40-17.80	442-452	X	12	300	349016B120MJ-PE	\$ 5,143.40	349016B120MJ-CSPE	\$ 4,930.90
		C	17.70-18.10	450-460				349016C120MJ-PE		349016C120MJ-CSPE	
18	450	C	19.30-19.70	490-500	X	2	50	349018C020MJ-PE	\$ 3,083.40	349018C020MJ-CSPE	\$ 3,020.90
		D	19.80-20.20	503-513				349018D020MJ-PE		349018D020MJ-CSPE	
18	450	C	19.30-19.70	490-500	X	3	80	349018C030MJ-PE	\$ 3,083.40	349018C030MJ-CSPE	\$ 3,020.90
		D	19.80-20.20	503-513				349018D030MJ-PE		349018D030MJ-CSPE	
18	450	C	19.30-19.70	490-500	X	4	100	349018C040MJ-PE	\$ 3,083.40	349018C040MJ-CSPE	\$ 3,020.90
		D	19.80-20.20	503-513				349018D040MJ-PE		349018D040MJ-CSPE	
18	450	C	19.30-19.70	490-500	X	6	150	349018C060MJ-PE	\$ 3,466.60	349018C060MJ-CSPE	\$ 3,391.60
		D	19.80-20.20	503-513				349018D060MJ-PE		349018D060MJ-CSPE	
18	450	C	19.30-19.70	490-500	X	8	200	349018C080MJ-PE	\$ 3,591.60	349018C080MJ-CSPE	\$ 3,466.60
		D	19.80-20.20	503-513				349018D080MJ-PE		349018D080MJ-CSPE	
18	450	C	19.30-19.70	490-500	X	10	250	349018C100MJ-PE	\$ 4,998.40	349018C100MJ-CSPE	\$ 4,823.40
		D	19.80-20.20	503-513				349018D100MJ-PE		349018D100MJ-CSPE	
18	450	C	19.30-19.70	490-500	X	12	300	349018C120MJ-PE	\$ 5,476.60	349018C120MJ-CSPE	\$ 5,264.10
		D	19.80-20.20	503-513				349018D120MJ-PE		349018D120MJ-CSPE	
20	500	A	21.40-21.80	544-554	X	2	50	349020A020MJ-PE	\$ 3,173.40	349020A020MJ-CSPE	\$ 3,110.90
		B	21.90-22.30	556-566				349020B020MJ-PE		349020B020MJ-CSPE	
20	500	A	21.40-21.80	544-554	X	3	80	349020A030MJ-PE	\$ 3,173.40	349020A030MJ-CSPE	\$ 3,110.90
		B	21.90-22.30	556-566				349020B030MJ-PE		349020B030MJ-CSPE	
20	500	A	21.40-21.80	544-554	X	4	100	349020A040MJ-PE	\$ 3,173.40	349020A040MJ-CSPE	\$ 3,110.90
		B	21.90-22.30	556-566				349020B040MJ-PE		349020B040MJ-CSPE	
20	500	A	21.40-21.80	544-554	X	6	150	349020A060MJ-PE	\$ 3,480.00	349020A060MJ-CSPE	\$ 3,405.00
		B	21.90-22.30	556-566				349020B060MJ-PE		349020B060MJ-CSPE	

3490MJ-PE / 3490MJCS-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	
20	500	A	21.40-21.80	544-554	X	8	200	349020A080MJ-PE	\$ 4,125.00	349020A080MJ-CSPE	\$ 4,000.00
		B	21.90-22.30	556-566				349020B080MJ-PE		349020B080MJ-CSPE	
20	500	A	21.40-21.80	544-554	X	10	250	349020A100MJ-PE	\$ 5,333.40	349020A100MJ-CSPE	\$ 5,158.40
		B	21.90-22.30	556-566				349020B100MJ-PE		349020B100MJ-CSPE	
20	500	A	21.40-21.80	544-554	X	12	300	349020A120MJ-PE	\$ 5,666.60	349020A120MJ-CSPE	\$ 5,454.10
		B	21.90-22.30	556-566				349020B120MJ-PE		349020B120MJ-CSPE	
24	600	A	25.60-26.00	650-660	X	2	50	349024A020MJ-PE	\$ 3,336.60	349024A020MJ-CSPE	\$ 3,274.10
24	600	A	25.60-26.00	650-660	X	3	80	349024A030MJ-PE	\$ 3,336.60	349024A030MJ-CSPE	\$ 3,274.10
24	600	A	25.60-26.00	650-660	X	4	100	349024A040MJ-PE	\$ 3,336.60	349024A040MJ-CSPE	\$ 3,274.10
24	600	A	25.60-26.00	650-660	X	6	150	349024A060MJ-PE	\$ 3,710.00	349024A060MJ-CSPE	\$ 3,635.00
24	600	A	25.60-26.00	650-660	X	8	200	349024A080MJ-PE	\$ 4,475.00	349024A080MJ-CSPE	\$ 4,350.00
24	600	A	25.60-26.00	650-660	X	10	250	349024A100MJ-PE	\$ 5,583.40	349024A100MJ-CSPE	\$ 5,408.40
24	600	A	25.60-26.00	650-660	X	12	300	349024A120MJ-PE	\$ 6,166.60	349024A120MJ-CSPE	\$ 5,954.10

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: 10" HDPE pipe 11.10" OD with 8 inch Branch. Order 3490MJ-PE -10C x 8.
Part Number: 349010C080MJ-PE

NOTE: IF STAINLEES STEEL BOLTS ARE REQUIRED WITH CARBON STEEL MJ BRANCH SLEEVE YOU MUST NOTIFY POWERSEAL CUSTOMER SERVICE AT TIME OF ORDERING. ADDITIONAL CHARGES APPLY

Other ranges, tap sizes available upon request.

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