

POLIRAN

Pipe and Fittings
Compression and But Fusion Fittings



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Butt fusion fittings (PN6-PN10-PE100)

Tee 45 °  Size : 110 - 250 (mm)	Tee 90 °  Size : 90 - 250 (mm)	Reducer Tee 90 °  Size : 90 - 250 (mm)	Elbow 90 °  Size : 50 - 250 (mm)
Elbow 45 °  Size : 50 - 250 (mm)	Reducer  Size : 50 - 250 (mm)	Cap  Size : 90 - 250 (mm)	Butt Fusion Flange  Size : 63 - 315 (mm)

Poliran Butt fusion fittings are made of High Density Polyethylene "HDPE 100". we use this material because its molecular structure provides higher density applying advanced machinery and production method and modern manufacturing process results in more stable and strong products with less thickness and weight. It means longer lifetime and better performance. Its more economical these items are used in water conveyance system, water distribution network, irrigation systems , drainage system and rainwater network

Advantages :

- Highly resistant against impact and crash caused by external pressures.
- Stable against corrosion and Abrasion.
- Smooth and polished out and inside walls that prevents sediments also no pressure drops that cab be caused by insid walls friction.
- Available in nominal pressures PN6/SDR26 and PN10/ SDR17
- In accordance international standard BS EN 12201-3
- Available in angles 45° and 90°
- No change in the smell and taste of water

Compression Fittings (PP)

Tee 90 °  Size : 20 - 125 (mm)	Coupling  Size : 20 - 125 (mm)	Threaded Famale Elbow 90 °  Size : 20 - 110 (mm)	Threaded Male Elbow 90 °  Size : 20 - 110 (mm)
Elbow 90 °  Size : 20 - 125 (mm)	Threaded Famale Tee 90 °  Size : 20 - 110 (mm)	Reducing Coupling  Size : 20 - 125 (mm)	End Cap  Size : 20 - 125 (mm)

Compression Fittings (PP)

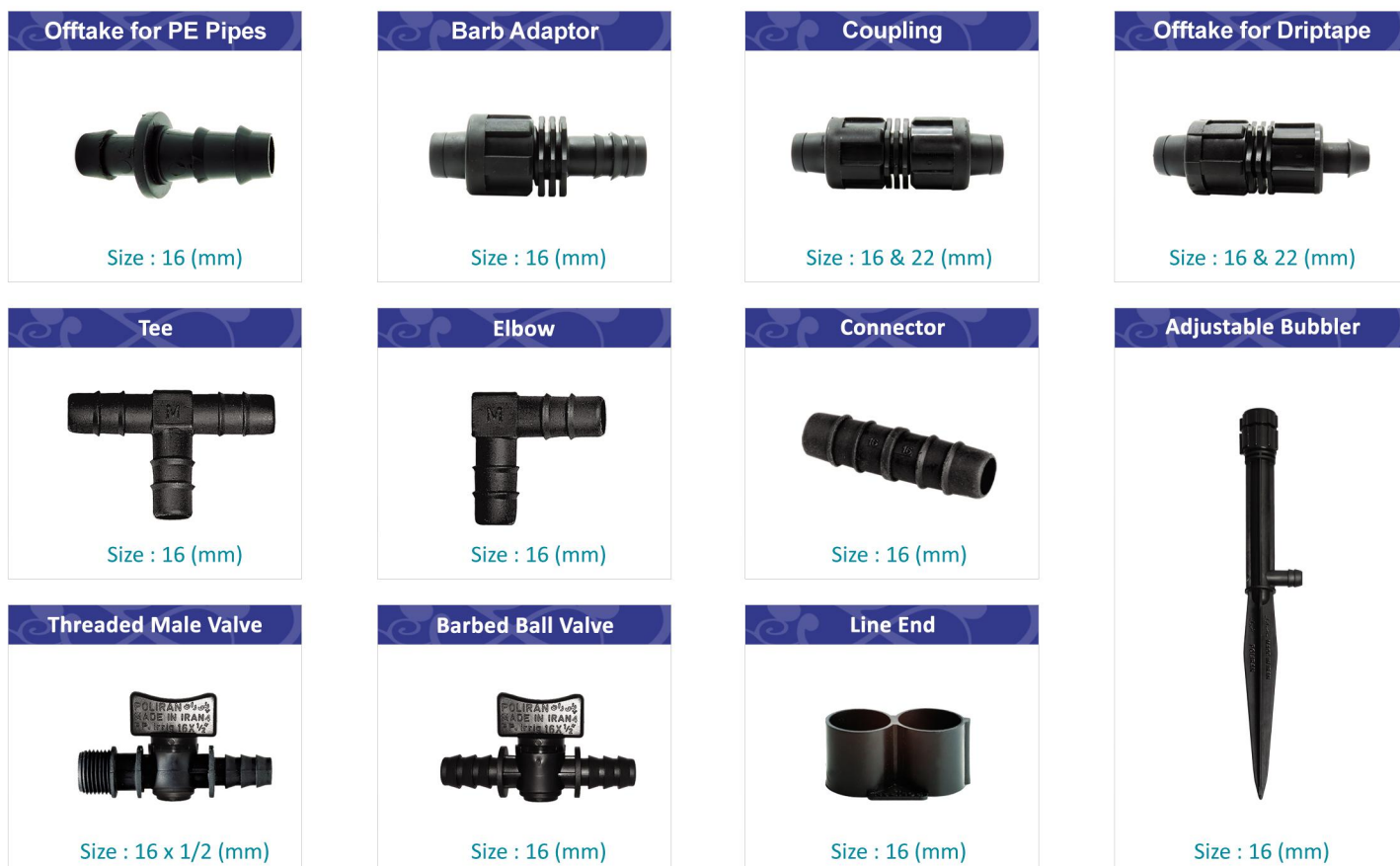


Saddle clamps Its structure is different from compression fittings. It includes two main parts: Base and branch; both made of co-polymer polypropylene. according to their size, they may have 2, 4, 6 bolt and nuts all of them covered by cold galvanized coating.

Flange fitting has an additional part. it is a metal ring coated by chrome, its thickness 8 mm.

Nipple It is made of Polyacetal and is extremely strong item.

Special fittings for drip irrigation systems



Special fittings for drip irrigation systems



Polyethylene pipes (HDPE/ LDPE)

Poliran high pressure Polyethylene pipes are used in water conveyance and under pressure irrigation systems. Its available in nominal pressures PN 6 and PN 10 and PN 16, size from 20 mm to 250 mm in accordance DIN8074 made of PE 100 and PE 80 raw material

Also, Poliran LDPE pipe in nominal pressure PN4 & PN5 & PN6 are suitable for drip irrigation system its available size is 16 and 20 mm in accordance ISO 8779. it is made of PE 40 and PE 32 raw material



This table is according to DIN 8074

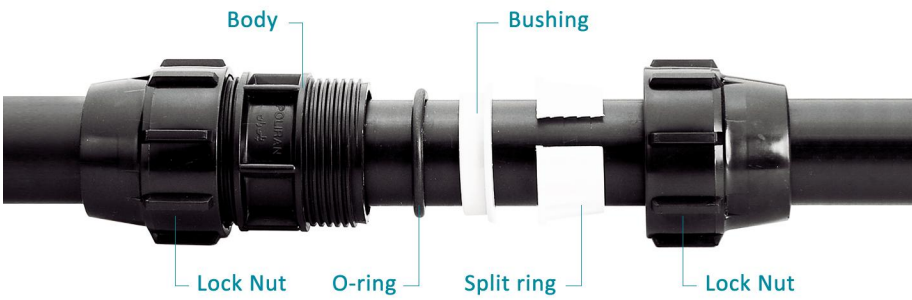
SDR	11		11		11		21		26	
PE80	PN 12.5 bar		PN 10 bar		PN 8 bar		PN 6 bar		PN 5 bar	
PE100	PN 16 bar		PN 12.5 bar		PN 10 bar		PN 8 bar		PN 6 bar	
DN (mm)	Thickness (mm)	Ave.weight (kg/m)	Thickness (mm)	Ave.weight (kg/m)	Thickness (mm)	Ave.weight (kg/m)	Thickness (mm)	Ave.weight (kg/m)	Thickness (mm)	Ave.weight (kg/m)
20	2.0	0.117	-	-	-	-	-	-	-	-
25	2.3	0.171	2.0	0.148	-	-	-	-	-	-
32	3.0	0.277	2.4	0.232	2.0	0.193	-	-	-	-
40	3.7	0.430	3.0	0.356	2.4	0.295	2.0	0.245	1.8	0.227
50	4.6	0.666	3.7	0.549	3.0	0.453	2.4	0.374	2.0	0.314
63	5.8	1.05	4.7	0.873	3.8	0.721	3.0	0.580	2.5	0.494
75	6.8	1.47	5.6	1.24	4.5	1.02	3.6	0.828	2.9	0.675
90	8.2	2.12	6.7	1.77	5.4	1.46	4.3	1.18	3.5	0.978
110	10.0	3.14	8.1	2.62	6.6	2.17	5.3	1.77	4.2	1.43
125	11.4	4.08	9.2	3.37	7.4	2.76	6.0	2.27	4.8	1.84
160	14.6	6.67	11.8	5.50	9.5	4.52	7.7	3.72	6.2	3.04
200	18.2	10.4	14.7	8.56	11.9	7.05	9.6	5.78	7.7	4.69
250	22.7	16.2	18.4	13.4	14.8	11.0	11.9	8.93	9.6	7.30

This table is according to ISO 8779

SDR	11		13.6		17		21		26	
PE32	PN 5 bar		PN 4 bar		PN 3.2 bar		PN 2.5 bar		PN 5 bar	
PE40	PN 6 bar		PN 5 bar		PN 4 bar		PN 3.2 bar		PN 6 bar	
DN (mm)	Thickness Minimum (mm)	Thickness Maximum (mm)	Thickness Minimum (mm)	Thickness Maximum (mm)	Thickness Minimum (mm)	Thickness Maximum (mm)	Thickness Minimum (mm)	Thickness Maximum (mm)	Thickness Minimum (mm)	Thickness Maximum (mm)
16	1.5	1.8	1.2	1.5	1	1.3	-	-	-	-
20	1.9	2.3	1.5	1.8	1.2	1.5	1	1.3	-	-

POLIRAN With more than half a century of experience, produces a wide range of compression fittings has been able to meet the needs of water supply and under pressure irrigation projects. It has always provided customer satisfaction by maintaining consistent quality Poliran compression fittings is produced in a wide range of size from 20 to 125 mm and saddle clamps from 20 to 250mm . Their PN pressure rating is 10 bar. These fittings are in accordance with national and international standards : ISO 17885 ,ISO 13460-1 and ISO7-1. All parts of these fittings are made of high quality row materials, has long life time and fully water sealed no leaks. For installation there is no need to any instruments. it's easy install. If reinstallation is required, you can easily take apart and install again.

Different items of compression fittings



Body and Lock Nut

Is made of co-polymer polypropylene it's a line isomer of polypropylene compared to polyethylene is more resistant against chemicals bad environmental conditions and sun light and against heat.

Split ring

It holds the pipe and prevents it from ejecting body. It is made of polyacetal. fully resistant against chemicals acid and alkaline. Its also stable against wearing and physical stress.

Bushing

It pushes pressure on O-ring to help water sealing. it is made of polyethylene. It is a highly stable thermoplastic materials and is widely used to in irrigation system and watering products.

O-ring

It is a ring made of natural plastic (NR) combined with SBR that finally provides the water seal.

Advantages :

- Easy and fast installation
- Fully guaranteed water sealed.
- Long life performance and function
- Variety and wide range of size available
- Subsurface application
- Impact resistant
- UV protected.
- No change in the smell and taste of water

Some of National Standards

The image displays five Iranian national standards (SIS) for Poliran fittings, each with a red border and the Iranian flag. The standards are as follows:

- SIS 17885-1:2014**: Standard for the design and manufacturing of compression fittings for water supply and irrigation systems. It specifies requirements for materials, dimensions, and testing methods.
- SIS 13460-1:2014**: Standard for the design and manufacturing of compression fittings for water supply and irrigation systems. It specifies requirements for materials, dimensions, and testing methods.
- SIS 7-1:2014**: Standard for the design and manufacturing of compression fittings for water supply and irrigation systems. It specifies requirements for materials, dimensions, and testing methods.
- SIS 17885-2:2014**: Standard for the design and manufacturing of compression fittings for water supply and irrigation systems. It specifies requirements for materials, dimensions, and testing methods.
- SIS 13460-2:2014**: Standard for the design and manufacturing of compression fittings for water supply and irrigation systems. It specifies requirements for materials, dimensions, and testing methods.

Each standard includes a title in Persian, a description of the product, and technical specifications. The standards are issued by the Iranian Standards Organization (SIS).

Established in 1973, Poliran aimed a grate change in the field of manufacturing polymeric pipe and fittings. Both in building and agriculture sectors. After more than half a century, Poliran with four advanced and highly equipped factories in Jajroud region of Tehran has been always committed to maintaining and improving quality, innovation also relaying on its brilliant history has made Poliran the leading manufacturer of polymer pipes and fittings in Iran. Attention to improving the quality of products, innovation to meet the needs of customers and continuous development of production facilities, along with the use of the best raw materials and the latest technologies, and mass production in accordance with national and international standards, has enabled Poliran to compete with the best in the world and at the same time, has made Poliran the leading manufacturer of polymer pipes and fittings in Iran. More than 50 years of experience in the manufacturing, also its technical and engineering services in consultant system design sum up and supervisory in projects has improved Poliran to the first and best choice for ultra big and mega size projects both in building and agriculture sectors.



We are committed to provide you the best solutions.



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