



HDPE PIPE & FITTINGS

HDPE pipe and fittings

Nominal size	Approx. metric equivalent	Typical HDPE pipe material	Common fittings	Suitable insulation
1"	DN25	PE100 or PE80 HDPE, commonly SDR 11, SDR 13.6, or SDR 17	Compression coupler, equal tee, 90° elbow, 45° elbow, reducer, flange adaptor, end cap, ball valve adaptor	Closed-cell polyurethane foam, polyethylene foam wrap, elastomeric insulation, heat tracing where freeze protection is required
2"	DN50	PE100 or PE80 HDPE, commonly SDR 11, SDR 13.6, or SDR 17	Compression coupler, electrofusion coupler, butt-fusion elbow, equal tee, reducing tee, flange adaptor, stub flange, backing ring, end cap	Polyurethane foam, closed-cell polyethylene insulation, elastomeric insulation, insulated jacket system
3"	DN75	PE100 or PE80 HDPE, commonly SDR 11, SDR 13.6, or SDR 17	Electrofusion coupler, butt-fusion elbow, equal tee, reducer, flange adaptor, stub end, backing ring, end cap, transition adaptor	Rigid polyurethane foam, polyethylene-jacketed insulation, galvanized-steel jacket, aluminium jacket, heat tracing adaptor



A collection of black EPDM pipe and fittings, including elbows, tees, couplings, and threaded adapters, arranged on a white background. A circular logo with 'VS' and 'MROSE' is visible in the upper center.

EPDM PIPE & FITTINGS

EPDM pipe and fittings

EPDM is more commonly supplied as rubber hose, flexible tubing, gaskets, seals, and expansion joints than as rigid pressure pipe. The table therefore uses common EPDM hose/tube applications for the three nominal sizes.

Nominal size	Approx. internal diameter	Typical EPDM product	Common fittings	Suitable insulation
1"	25 mm	EPDM rubber hose or tube, smooth or reinforced	EPDM-compatible hose barb, stainless-steel clamps, camlock coupling, threaded adaptor, quick coupling, union, gasket	EPDM elastomeric tube insulation, closed-cell rubber insulation, polyethylene foam, protective outer jacket
2"	50 mm	Reinforced EPDM hose or flexible EPDM pipe	Hose barb, camlock coupling, grooved coupling, flanged adaptor, expansion joint, stainless-steel clamps, gasket	EPDM rubber insulation, polyurethane foam, polyethylene foam, aluminium or PVC jacket
3"	75 mm	Heavy-duty reinforced EPDM hose or flexible connector	Large hose barb, camlock coupling, flanged connection, grooved coupling, expansion joint, reducer, gasket	EPDM elastomeric insulation, polyurethane foam, closed-cell insulation, weatherproof outer jacket

EPDM insulation is available in internal diameters covering common pipe sizes, including sizes up to 6 inches, and in several insulation thicknesses. EPDM foam is valued for resistance to ozone, ultraviolet exposure, water, chemicals, and weathering.





Fittings and insulation schedule

Size	HDPE fittings	EPDM fittings	Recommended general insulation
1"	Compression fittings or small electrofusion fittings	Hose barb, clamp, threaded adaptor, camlock	13–25 mm closed-cell elastomeric or polyethylene insulation
2"	Compression, electrofusion, butt-fusion, or flanged fittings	Camlock, grooved, flanged, hose barb, expansion joint	19–32 mm elastomeric, polyurethane, or polyethylene insulation
3"	Electrofusion, butt-fusion, fabricated, or flanged fittings	Flanged connector, camlock, grooved coupling, expansion joint	25–50 mm polyurethane or elastomeric insulation, with weatherproof jacketing

For HDPE, insulation is normally installed outside the pipe, often using polyurethane foam with a polyethylene, aluminium, or galvanized-steel outer jacket; insulated HDPE fittings can be supplied factory-made or insulated in the field with fitting kits. For EPDM pipe or hose, use insulation whose internal diameter matches the actual hose outside diameter, not only the nominal pipe size.

Important specification notes

- Confirm whether the required 1", 2", and 3" sizes are IPS/NPS or metric OD sizes, because nominal sizes are not always interchangeable.
- Specify the HDPE material grade, SDR, PN pressure rating, and joining method.
- Specify EPDM temperature, pressure, chemical exposure, and reinforcement requirements.
- Use EPDM-compatible gaskets and seals; do not assume that every rubber gasket is suitable for the service medium.
- For outdoor insulation, add a UV- and weather-resistant jacket.
- For chilled-water or condensation control, seal all insulation joints with vapour-tight adhesive and vapour barriers.

