

ENGINEERED FOR THE PIPELINE

FABRICATED HDPE FITTINGS

Large-diameter fittings shaped to suit project geometry, manufactured from PE100 pipe sections.

PROJECT RANGE

OD 32-1200 mm
SDR 6-32



UPI FABRICATED REDUCING TEE

FITTINGS IN THE SERIES



EQUAL TEE



ELBOW



Y TEE

DESIGN AND PRESSURE CLASS CONFIRMED PER FITTING

ISO 4427-3 / EN 12201-3 • DVS 2207

FABRICATED HDPE FITTINGS

TECHNICAL OVERVIEW

Fabricated geometry for large-diameter pressure pipelines

OUTSIDE DIAMETER

32-1200 mm

PIPE WALL RATIO

SDR 6-32

HOW THE FITTING IS DEFINED

01

PIPE SECTION

Diameter and SDR selected for the project pipe design.

02

GEOMETRY

Angle, branch and end lengths defined on the item drawing.

03

JOINING

Pipe sections butt-fused under qualified procedures.

TECHNICAL BASIS

Fittings: ISO 4427-3 or EN 12201-3

Welding guidance: DVS 2207

Pressure class and availability are confirmed for each configuration.

FABRICATED HDPE FITTINGS

PRODUCT RANGE

Flexible angles and branch layouts made to the project drawing



SEGMENTED ELBOWS

Bend angles above 7°



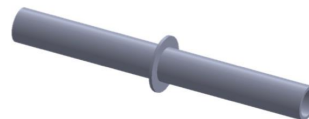
EQUAL TEES

90° branch fitting



Y TEES

45° / 60° branch



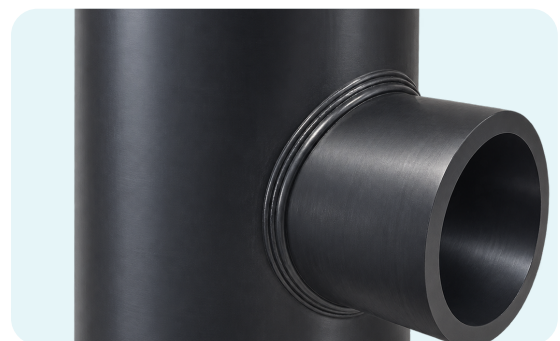
PUDDLE FLANGES

For wall and slab penetrations

REDUCING TEES

Main OD 110–1200 mm; branch OD 50–630 mm.

SDR 6–26 • pressure class by design.



WHY FABRICATION? Flexible geometry • Project-specific layouts • Pressure by design

FABRICATED HDPE FITTINGS

SEGMENTED ELBOWS

Direction changes produced from butt-fused pipe segments



45° ELBOW



90° ELBOW

FLEXIBLE BEND DESIGN

> 7°

ANY BEND ANGLE

> 4

SEGMENTS AVAILABLE

ENGINEERING SELECTION

Confirm OD, SDR, angle, centerline radius and end lengths.

Segment count and pressure class are checked for each item design.

Portfolio range: OD 32-1200 mm • SDR 6-32 • ISO 4427-3 / EN 12201-3

FABRICATED HDPE FITTINGS

EQUAL TEES

A 90° branch connection with equal main and branch diameters



EQUAL TEE

A PE100 branch fitting with equal main and branch OD at 90°.

GEOMETRY

Main OD = Branch OD

End lengths and branch position follow the approved item drawing.

SPECIFY FOR EACH PROJECT

OD + SDR

Match the connecting pipes

END LENGTHS

Run and branch dimensions

PRESSURE CLASS

Verified for the design

TECHNICAL BASIS

ISO 4427-3 / EN 12201-3 • DVS 2207 welding guidance

FABRICATED HDPE FITTINGS

Y TEES

Fabricated branch fittings with 45° and 60° angle options

Y TEE

An inclined branch joins the main run for directional pipeline take-offs.

AVAILABLE BRANCH ANGLES

45° / 60°

Select main and branch sizes, SDR, and end lengths for each design.



PROJECT DATA TO CONFIRM

BRANCH ANGLE

Choose 45° or 60°

MAIN / BRANCH OD

Sizes per pipe layout

END DIMENSIONS

Run and branch lengths

PRESSURE CLASS BY DESIGN

Confirm SDR, configuration and the applicable fitting drawing.

FABRICATED HDPE FITTINGS

REDUCING TEES

A smaller branch connection to the main pressure pipeline



REDUCING TEE

A 90° branch fitting with smaller branch OD than the main pipeline OD.

DIAMETER RELATIONSHIP

Main OD > Branch OD

Branch position and end lengths follow the approved item drawing.

PROJECT DATA TO CONFIRM

MAIN PIPE OD

110-1200 mm

BRANCH OD

50-630 mm

SDR RANGE

SDR 6-26

PRESSURE CLASS BY DESIGN

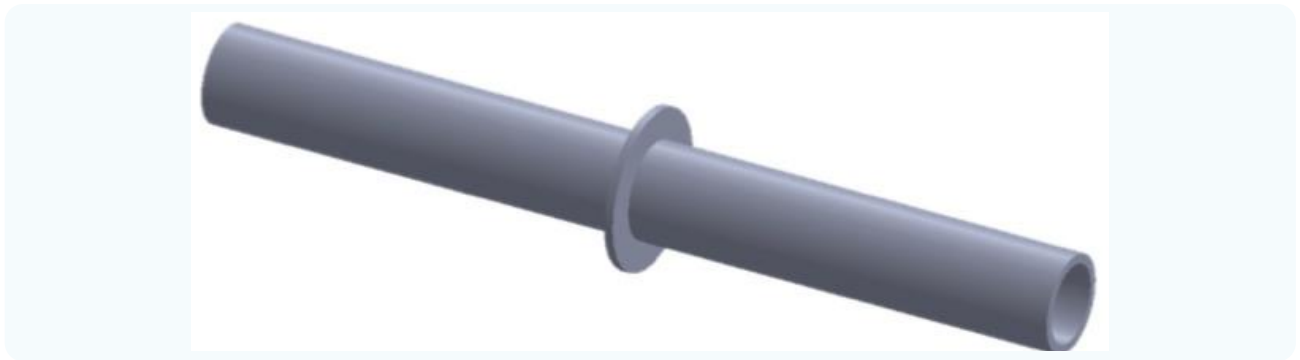
Confirm size combinations and pressure suitability per item drawing.

FABRICATED HDPE FITTINGS

PUDDLE FLANGES

Product image and dimensional schematic from the supplied SDR 11 drawing

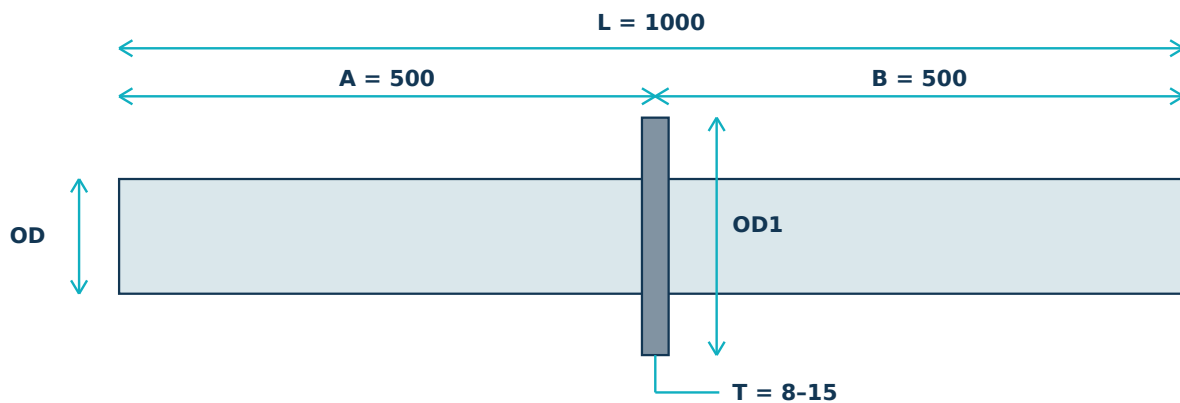
PUDDLE FLANGE



A = 500 mm B = 500 mm L = 1000 mm T = 8-15 mm

DIMENSIONAL SCHEMATIC

NOT TO SCALE • mm



OD AND OD1 DEPEND ON THE PIPE SIZE — SEE THE FULL SCHEDULE ON PAGE 09.

DRAWING BASIS

PE100 / SDR 11 drawing; confirm the installation and sealing details.

PUDDLE FLANGES

SDR 11 DIMENSIONS

UPI drawing schedule • all dimensions in millimetres

A	B	L	T
500 mm	500 mm	1000 mm	8-15 mm

PIPE OD / PUDDLE PLATE OD1

PIPE OD	PLATE OD1	PIPE OD	PLATE OD1
20	100	180	305
25	100	200	305
32	100	225	340
40	100	250	370
50	140	315	460
63	155	355	490
75	165	400	555
90	180	450	640
110	220	500	650
125	255	560	730
140	255	630	800
160	280		

SOURCE DRAWING: UPI PUDDLE FLANGE, SDR 11

The OD / OD1 pairs and common dimensions follow the supplied drawing.
Final configuration and pressure suitability require the approved item drawing.

FABRICATED HDPE FITTINGS

PROJECT ENGINEERING

The key inputs for a project-specific fabricated fitting drawing



ELBOWS



TEES



Y TEES

INFORMATION TO PROVIDE FOR THE ITEM DRAWING

01

MAIN PIPE OD

Connecting pipe
outside diameter

02

BRANCH OD

Where the fitting
has a branch

03

SDR / MATERIAL

Pipe wall ratio
and PE grade

04

GEOMETRY

Angle, radius or
branch position

05

END DIMENSIONS

Run and branch
end lengths

06

PRESSURE CLASS

Required service
pressure for review

ENGINEERING REVIEW

Fittings: ISO 4427-3 / EN 12201-3 • Welding guidance: DVS 2207

Final configuration and pressure suitability follow the approved item drawing.

FABRICATED HDPE FITTINGS

INSPECTION & DOCUMENTATION

Drawing-based checks and project-specific deliverables

CONFIGURATION REVIEW

Main / branch OD, SDR, fitting geometry and pressure requirements are defined by the approved project drawing.



01

DRAWING CONTROL

Check OD, branch position, angles and end dimensions.

02

MATERIAL & WELDING

Select compatible PE100 pipe and the applicable procedure.

03

DIMENSIONAL REVIEW

Compare key finished sizes with the approved drawing.

04

PROJECT RECORDS

Agree inspection and test documents for each order.

TECHNICAL REFERENCES

Fittings: ISO 4427-3 / EN 12201-3 • Welding guidance: DVS 2207

UNION PIPES INDUSTRY

CONTACT UPI

Fabricated fitting enquiries and project coordination

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