

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION

AUSTROFLEX EW-E is a pre-insulated single or double pipe system for high-temperature solar applications. The media pipes are stainless steel pipes insulated with mineral wool (core insulation for temperatures up to 250°C) and PE-X-foam (outer layer insulation). Between the insulation layers a multi conductor cable (sensor cable) is carried along in a cable conduit. The corrugated outside casing made of HDPE (High-Density-Polyethylene) provides high-grade flexibility and protects the piping system.



APPLICATION

AUSTROFLEX EW-E single/double systems are especially used as underground connections between solar panels and boilers.

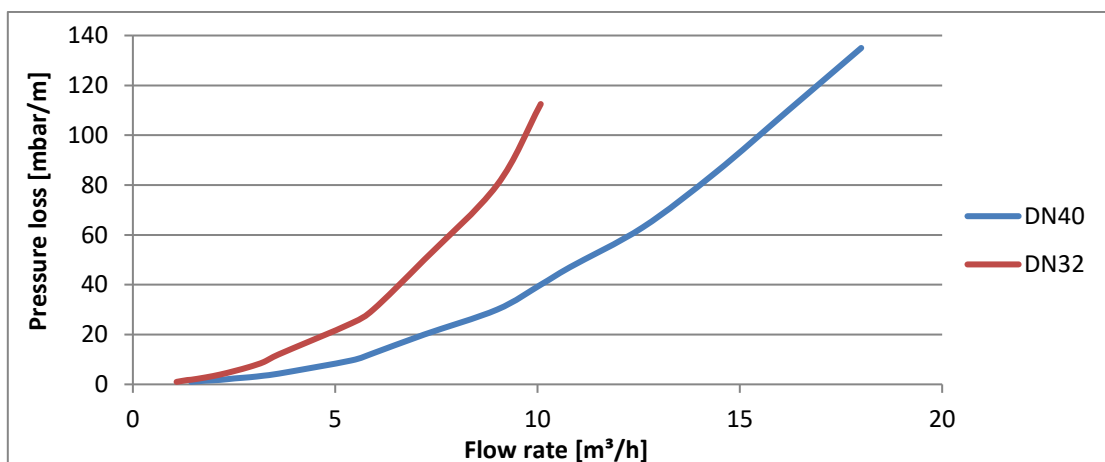
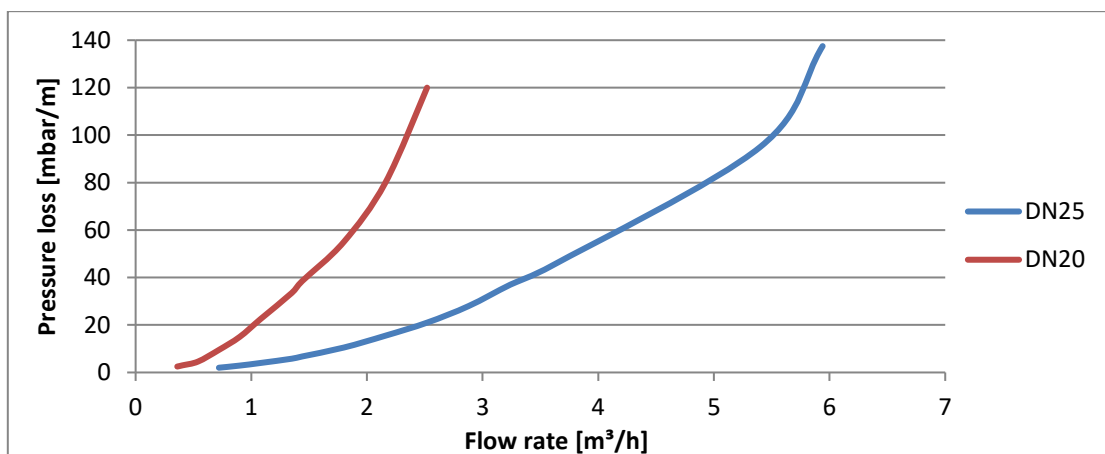
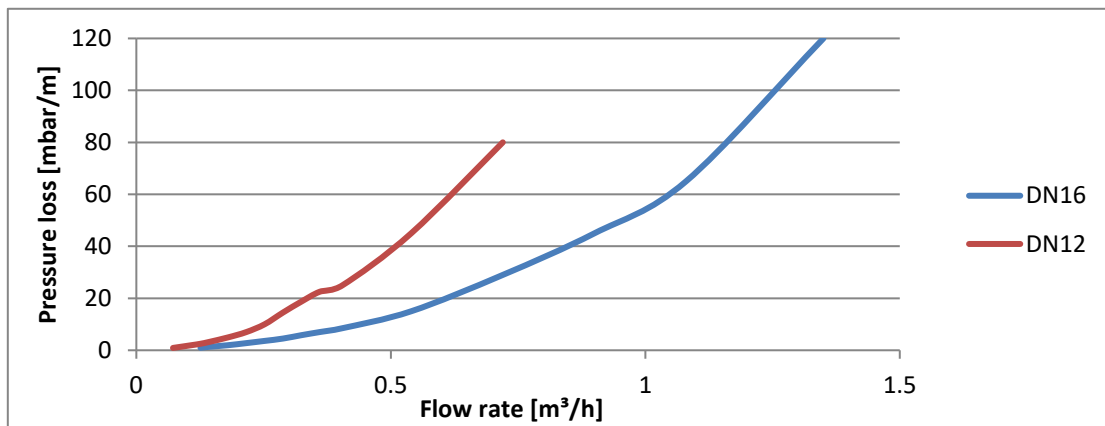
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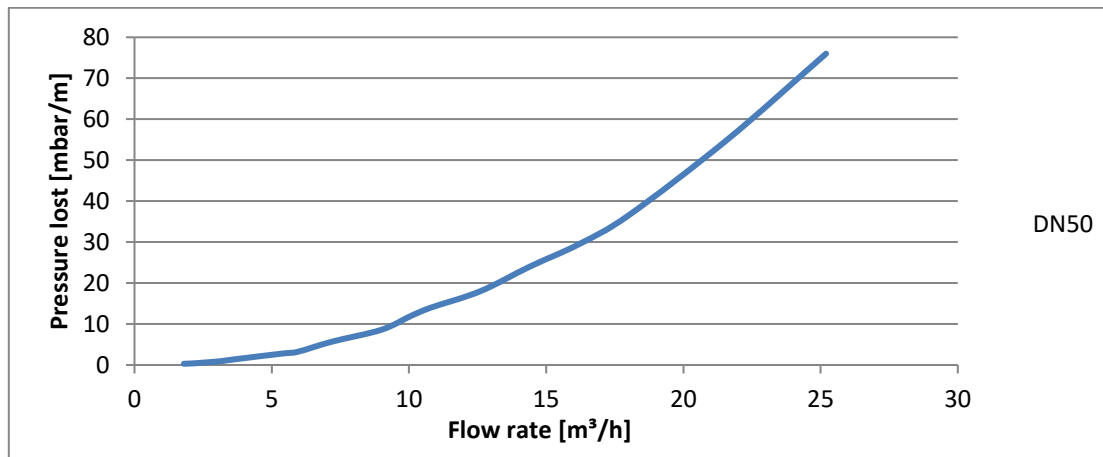
AUSTROFLEX® EW-E				
Media pipe	Corrugated, flexible stainless steel pipe			
Insulation	mineral wool (250°C core insulation), PE-X foam (outer layer insulation)			
Outside casing	flexible, corrugated HDPE jacked pipe			
Sensor cable / conduit	PVC-U cable conduit with quad-core cable			
Delivery length	100	[m]	special lengths on request	
Heat conductance	at 40 °C ≤ 0.039	[W/m·K]	acc. to DIN 52613	
Core insulation: mineral wool				
Properties	hydrophobic and odourless, hydrophobic according to AGI Q 132, produced in AS quality according to AGI Q 132			
Density	80	[kg/m³]		
Heat conductance	at 40 °C ≤ 0.037	[W/m·K]	DIN 52613, EN ISO 8497	
Max. temperature	250	[°C]		
Fire class mineral wool	A1		EN 13501-1	
Outer layer insulation: PE-X-foam				
Density	28	[kg/m³]		
Heat conductance	at 40 °C ≤ 0.040	[W/m·K]	DIN 52613	
Sensor cable				
Multi-conductor cable	PVC-insulated telecommunication cable			
Type	4 x 0.8	[mm²]		
Temperature range	+5 to +50	[°C]	(moved)	
Cable conduit	corrugated PVC-U-cable conduit		EN 61386-22	
Dimension	O.D.	16.0 mm	I.D. (min)	12.1 mm

Outside casing							
HDPE jacked pipe	high flexibility, high compressive strength, high impact strength						
Type	O.D. [mm]						
A125	122 ± 1,0						
A145	144 ± 1,2						
A175	174 ± 1,5						
A200	198 ± 1,8						
Stainless steel pipe							
General		parallel corrugated full metal tube – corrosion-, heat-, vibrations- und pressure resistance, high flexible and high transvers compressive strength					
Standard conformity		acc. to ISO-Norm 10380					
Material		high quality Chromium-nickel steel					
Material quality		AISI 316 L (Stainless steel) DIN 1.4404					
DN	12	16	20	25	32	40	50
Inside diameter [mm]	12,2	16,2	20,9	25,0	33,4	39,8	50,2
Outside diameter [mm]	16,7	21,3	26,4	31,2	40,6	49,8	60,8
Tolerance (±) [mm]	± 0,2	± 0,2	± 0,2	± 0,4	± 0,4	± 0,4	± 0,4
Weight [g/m] (± 5 %)	0,08	0,14	0,18	0,22	0,33	0,45	0,48
Wall thickness [mm]	0,15	0,18	0,18	0,2	0,25	0,25	0,25
Bending radius static [mm]	20	25	30	40	50	60	70
Surface [m²/lfm] (± 5 %)	0,06	0,09	0,11	0,14	0,22	0,34	0,44
Volume [lt/lfm] (± 5 %)	0,16	0,29	0,45	0,64	1,09	1,63	2,48
Max. operating pressure at 20°C (H₂O) [bar]	10	10	10	6	2,5	2,5	2,5
Max. operating pressure at 150°C (H₂O) [bar]	6,7	6,7	6,7	4,0	1,6	1,6	1,6
Max. operating pressure at 200°C (H₂O) [bar]	6,2	6,2	6,2	3,7	1,5	1,5	1,5
Bursting pressure [bar]		acc. ISO 10380 (4 x max. operating pressure)					
Available dimensions							
Single pipe:							
DN [mm]	O.D. Jacket pipe [mm]	Pipe connection [inch]	Average insulation thickness [mm]		Bend radius [m]		U-Value [W/m·K]
20	125	¾	41		0,5		0,1356
25	125	1	38		0,5		0,1557
32	125	1 ¼	34		0,6		0,1884
40	145	1 ½	42		0,7		0,1783
50	175	2	40		0,8		0,1987
Double pipe:							
2x16	145	½	37		0,6		0,1652
2x20	145	¾	32		0,6		0,1880
2x25	175	1	37		0,8		0,1918
2x32	200	1 ¼	38		1,1		0,2139
2x40	200	1 ½	28		1,1		0,2559

Attention to handling details in user's manual!

PRESSURE LOSS – diagrams (Media: Water, Temperature: 20°C)





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