

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION

Highly flexible solar double pipe system applicable for indoor and outdoor installation. The double pipes are easy to separate due to special adhesive technology. Corrugated stainless steel pipes according to DIN 1.4404 insulated with a highly temperature-resistant, CFC-free EPDM-rubber insulation. The extruded and seamless protection film is tear-proof, UV-stabilized and contains a flame retardant which is free of halogens.



APPLICATION

Distributing and linking pipes for solar- and heating-systems or heat pumps for indoor and outdoor installation. On demand also as single pipe system available, with or without sensor cable.

TECHNICAL DATA

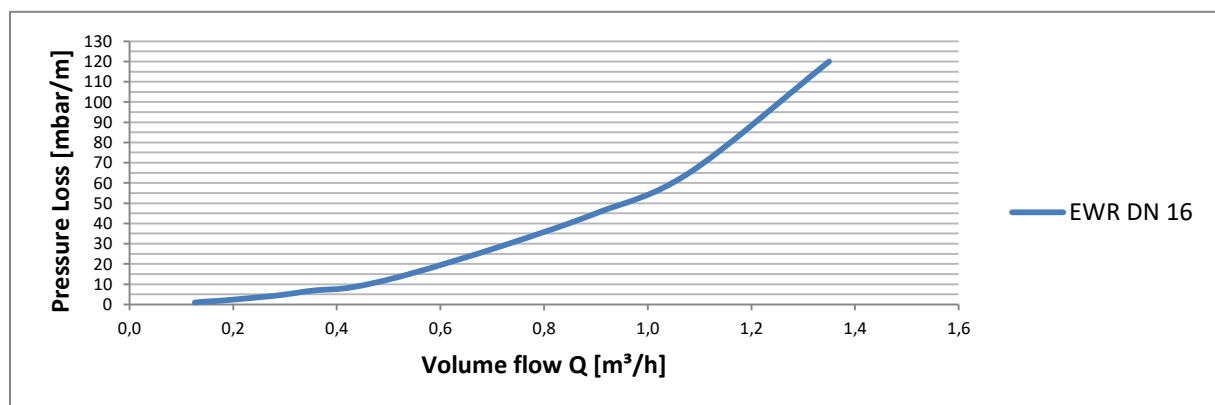
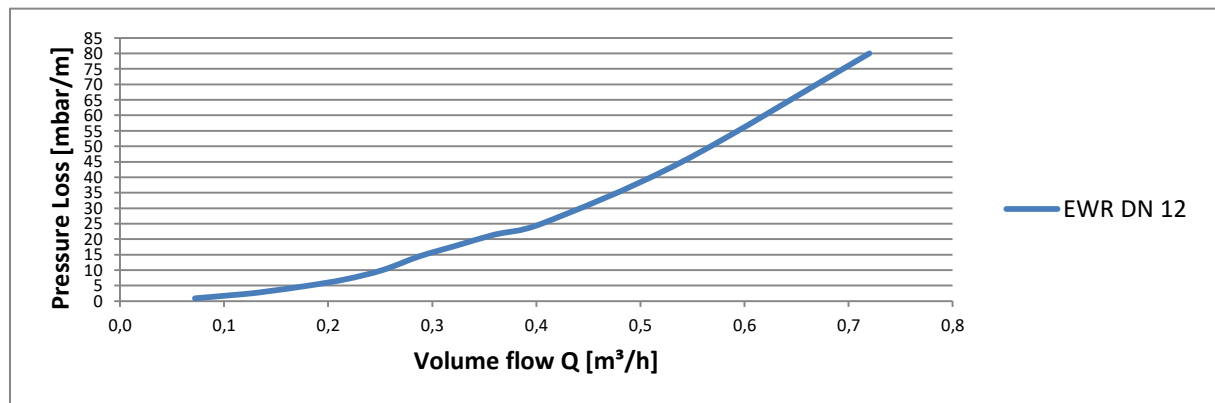
AUSTROFLEX® EWX Solarflex			
Insulation	closed cell, synthetic, high-temperature rubber		
Insulation thickness	13 or 19	[mm]	
Thermal conductivity	0 °C ≤ 0,038 40 °C ≤ 0,042	[W/m·K]	EN ISO 8497 EN 12667
Temperature range	- 50 to + 150	[°C]	
max. Temperature	+ 175	[°C]	short-term
Water vapour diffusion resistance factor μ	μ ≥ 3000		EN 13469
Fire behaviour of EPDM - rubber	D-s3-d0		DIN EN 13823 EN ISO 11925-2
Special features of EPDM - rubber	CFC- and HCFC-free		according to DIN 1988 Parts 2 and 7
Medium pipe	Highly flexible corrugated stainless steel pipe (Material DIN 1.4404; AISI 316L)		
Measurements Insulation thickness 13 mm (Width x Height)	2 x DN12 = 88 x 44 2 x DN16 = 96 x 48 2 x DN20 = 108 x 54 2 x DN25 = 122 x 61 1 x DN32 = 66 x 66	[mm]	
Measurements Insulation thickness 19 mm (Width x Height)	2 x DN12 = 112 x 56 2 x DN16 = 120 x 60 2 x DN20 = 132 x 66 2 x DN25 = 146 x 73 1 x DN32 = 78 x 78	[mm]	

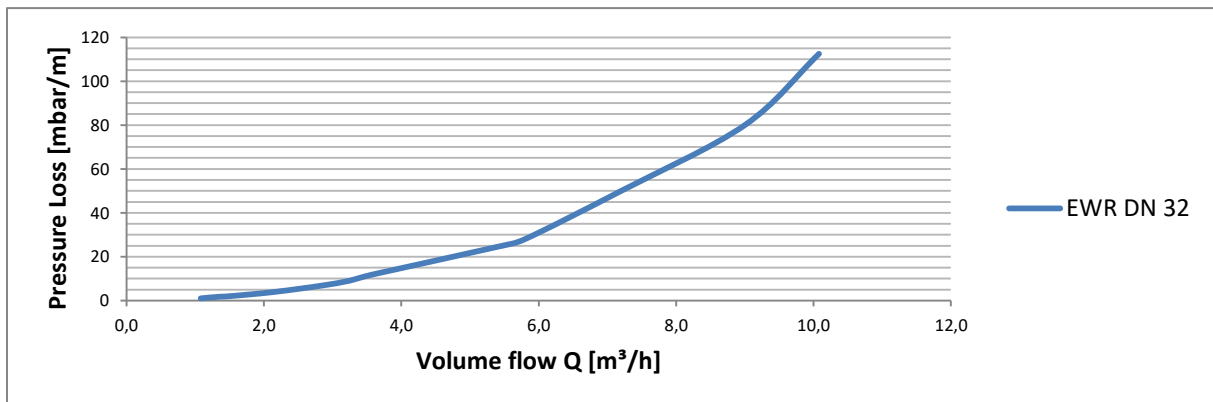
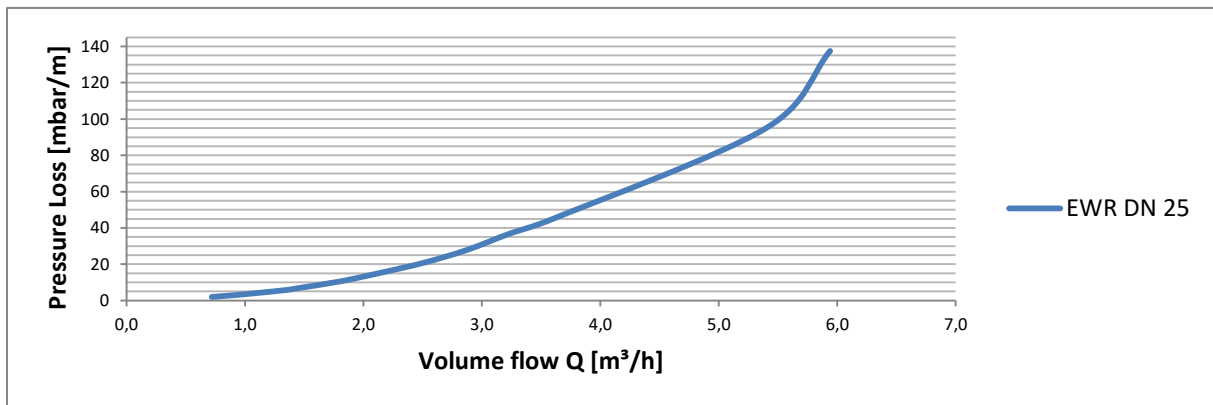
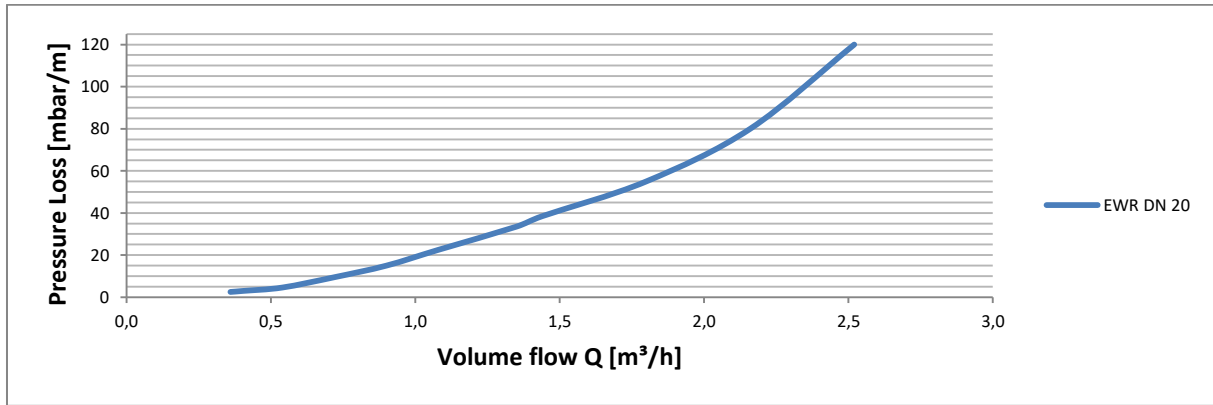
Corrugated stainless steel pipe						
Type	DN12	DN16	DN20	DN25	DN32	
Bend radius r min.	20	25	30	40	50	[mm]
Capacity (water)	0,16	0,29	0,45	0,64	1,09	[L/m]
Maximum working pressure 20°C	21	16	10	10	10	[bar]
Maximum working pressure 175°C	13,6	10,4	6,5	6,5	6,5	[bar]
Standard lengths	10, 15, 20, 25, 50, 100*					[m]
Sensor cable						
Material	PVC-insulated, flexible flat cable					
Type	2 x 0,50		[mm ²]			
Temperature range	+5 to +70		[°C]			
Colour of insulation	Black/red					

*DN 32 max. length 50m

Attention to handling details in user's manual!

PRESSURE LOSS STAINLESS STEEL PIPE (Medium: Water; Temperature: 20°C)





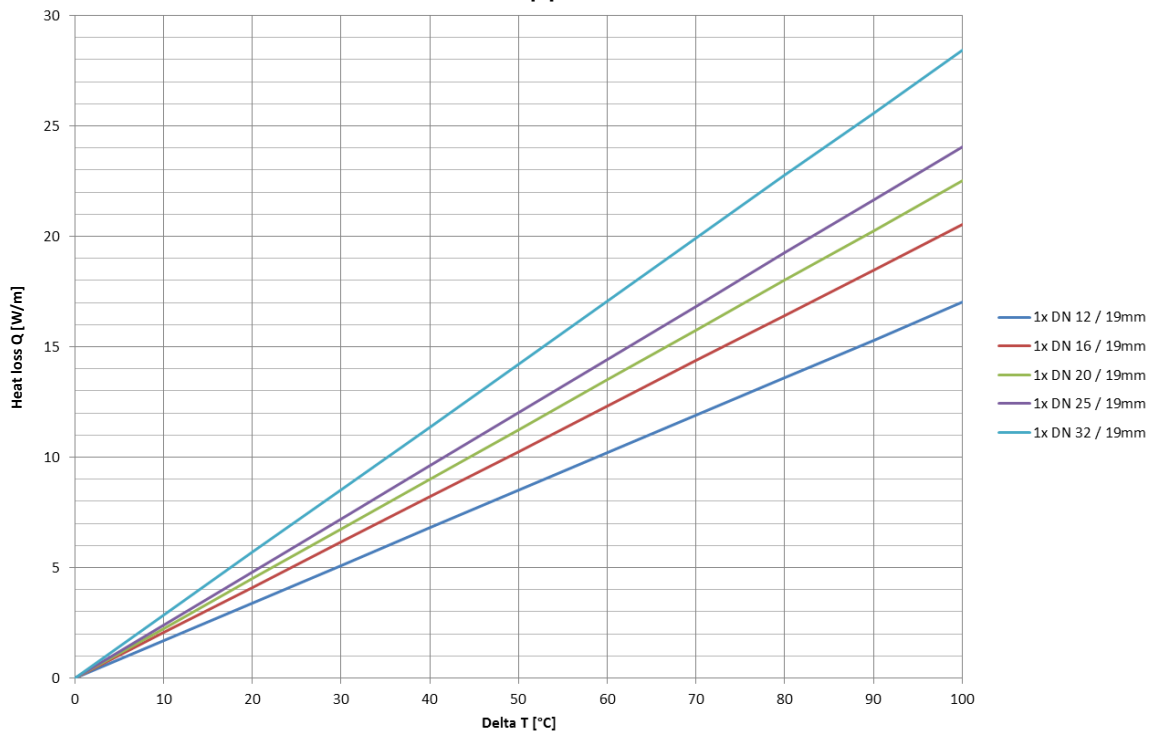
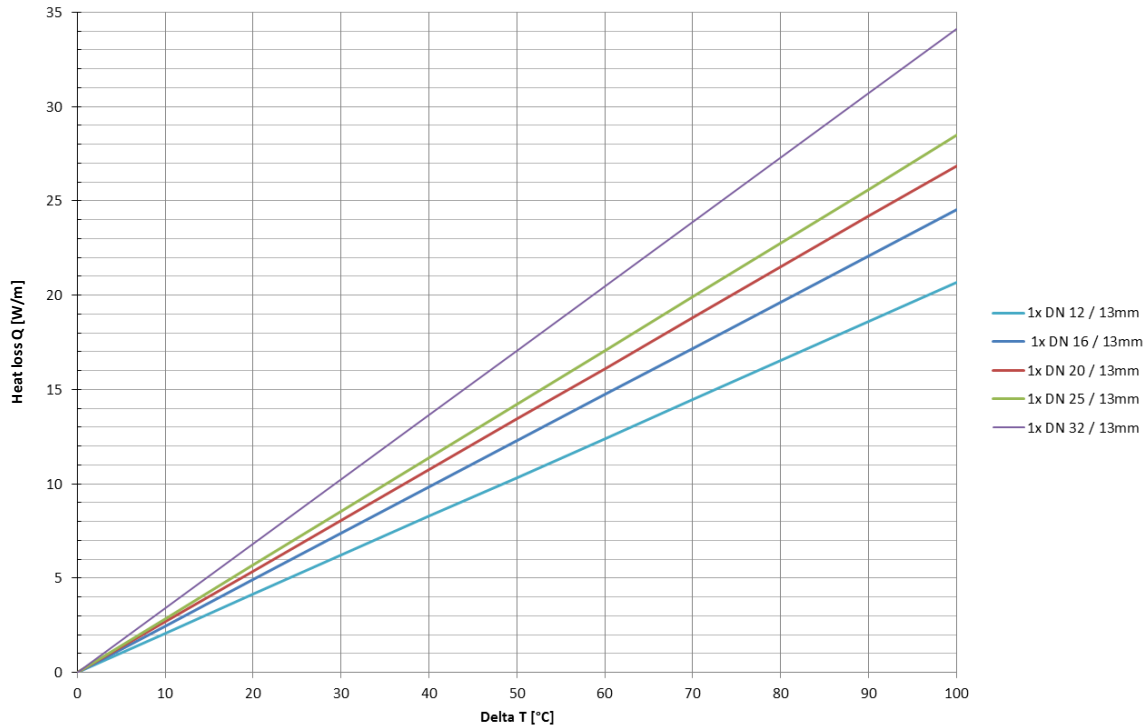
HEAT LOSS EWX SOLARFLEX

Parameters for the calculation :

Lambda insulation $\lambda(40^{\circ}\text{C}) = 0,042 \text{ W/mK}$
 Lambda corrugated stainless steel pipe = 21 W/mK
 Wind speed = 1 m/s
 Outside temperature $T_o = 10^{\circ}\text{C}$
 VL = flow temperature [$^{\circ}\text{C}$]

Method of calculation:

Media temperature $T_m = (V_L + R_L)/2$
 $\Delta T = T_v - T_o$
 Heat loss Solarflex single = $Q(\Delta T)$
 Heat loss Solarflex double = $2 \times Q(\Delta T)$
 RL = return temperature [$^{\circ}\text{C}$]



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