

POLO-INFO

# POLO-UV PP-R WATER PIPING SYSTEM



## THE SAFEST MOST RELIABLE CHOICE FOR EXPOSED POTABLE WATER APPLICATIONS

POLO-UV is the worldwide first audited UV-resistant PP-R system consisting of pipe and fitting, which can be fused together the same way as standard PP-R. Furthermore, the especially developed material of the POLO-UV system, ensures vast UV-resistance.

**High quality – Made in Germany.**

**UV-RESISTANT  
MADE IN  
GERMANY**

**poloplast**  
PIPE SYSTEMS

# SOLUTION FOR OUTDOOR APPLICATIONS

The POLO-UV system consists of the well established POLO-UV ML5 fiber pipe and a new range of fittings, made of high grade PP-R. It was especially developed for situations, where the pipe distribution is exposed to UV-radiation. Therefore the POLO-UV system is especially suitable for the installation in outdoor environments such as drinking water systems and irrigation systems.

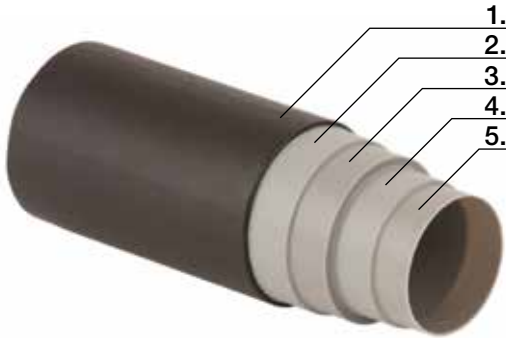
**HIGHT QUALITY  
COMBINED  
IN ONE SYSTEM**



# POLO-UV PP-R WATER PIPING SYSTEM

## PRODUCT RANGE POLO-UV SYSTEM

### Material POLO-UV ML5 Pipe



1. PP-R UV black
2. PP-R GF
3. PP-RCT
4. PP-R GF
5. PP-RCT

**Linear expansion coefficient:**  $\alpha = 0,038 \text{ mm/m K}$   
third party certified: OFI Institute Vienna

## WORKING PRESSURE

### Long Therm Stress Behaviour with safety factor 1.25

Temperature °C	Years of operation				
	1	5	10	25	50
	Maximum working pressure in bar				
20 °C	28.5	26.8	26.1	25.2	24.5
30 °C	24.2	22.7	22.1	21.3	20.7
40 °C	20.6	19.2	18.7	18.0	17.4
50 °C	17.4	16.2	15.7	15.1	14.7
60 °C	14.7	13.6	13.2	12.7	12.3
70 °C	12.3	11.7	11.1	9.6	8.1
80 °C	10.3	9.1	7.7	6.2	
95 °C	7.3	4.9			

## PIPE

### POLO-UV ML5

Fibre-pipe with UV protection layer, SDR 7.4/ S 3.2 for hot and cold water acc. to DIN EN ISO 15874, EN ISO 21003, class 1/8 bar, class 2/6 bar, Color black



A.Nr.	Outer diameter	Wall thickness	Inner diameter	Water Content	Weight	Packing unit parcel/bar
40322	20	2.8	14.4	0.163	0.149	100 m / 4 m
40323	25	3.5	18.0	0.254	0.236	60 m / 4 m
40324	32	4.4	23.2	0.423	0.385	40 m / 4 m
40325	40	5.5	29.0	0.661	0.584	20 m / 4 m
40326	50	6.9	36.2	1.029	0.916	20 m / 4 m
40327	63	8.6	45.8	1.647	1.474	12 m / 4 m

## FITTINGS

### POLO-UV

Welding socket



A.Nr.	Outer diameter	Packing unit parcel/bar
44002	20	600 / 10
44003	25	400 / 10
44004	32	300 / 10
44005	40	200 / 5
44006	50	100 / 5
44007	63	50 / 1

### POLO-UV

Welding elbow 90°



A.Nr.	Outer diameter	Packing unit parcel/bar
44042	20	500 / 10
44043	25	350 / 10
44044	32	200 / 10
44045	40	100 / 5
44046	50	50 / 5
44047	63	25 / 1

### POLO-UV

Welding elbow 45°



A.Nr.	Outer diameter	Packing unit parcel/bar
44102	20	200 / 10
44103	25	150 / 10
44104	32	100 / 10
44105	40	50 / 5
44106	50	25 / 5
44107	63	12 / 1

### POLO-UV

Welding tee



A.Nr.	Outer diameter	Packing unit parcel/bar
44202	20	400 / 10
44203	25	250 / 10
44204	32	100 / 10
44205	40	40 / 5
44206	50	20 / 5
44207	63	10 / 1

**POLO-UV**

Welding tee reduced



A.Nr.	Outer diameter	Packing unit parcel/bar
44254	25x20x25	250 / 10
44273	32x20x32	120 / 5
44275	32x25x32	120 / 5
44305	40x20x40	80 / 5
44307	40x25x40	80 / 5
44309	40x32x40	80 / 5
44334	50x25x50	50 / 5
44336	50x32x50	50 / 5
44338	50x40x50	40 / 5
44352	63x25x63	25 / 1
44354	63x32x63	25 / 1
44356	63x40x63	25 / 1
44358	63x50x63	25 / 1

**POLO-UV**

Welding reducer



A.Nr.	Outer diameter	Packing unit parcel/bar
44603	25x20	300 / 10
44605	32x20	250 / 10
44606	32x25	200 / 10
44609	40x25	400 / 5
44610	40x32	300 / 5
44614	50x32	250 / 5
44615	50x40	150 / 5
44620	63x40	100 / 1
44621	63x50	75 / 1

**POLO-UV**

Welding adapter male



A.Nr.	Outer diameter	Packing unit parcel/bar
44156	25 x 1/2"	100 / 10
44157	25 x 3/4"	100 / 10
44159	32 x 1"	50 / 5
44161	40 x 1 1/4"	30 / 5
44163	50 x 1 1/2"	20 / 5
44165	63 x 2"	20 / 1

# POLO-UV PP-R WATER PIPING SYSTEM

## ADVANTAGES

- 10 years UV-resistant guarantee
- corrosion free
- increased flow rate
- fast and easy installation
- low linear expansion
- high stability

## AUDITED UV-RESISTANCE

The resistance of POLO-UV system against UV-radiation was tested by an accredited test laboratory. In planned intervals during the complete process, samples were taken in order to check possible mechanical changes based on a tensile test.

The used irradiation rate is equivalent to more than 10 years in the city of Assuan, Egypt (one of the highest yearly UV-radiations worldwide).



## AREAS OF APPLICATION

POLO-UV system is approved for the contact with potable water and is the best choice for boiler connection on the top to the tapping points – outdoor and indoor.

It can be used as an ideal distribution system for Hot & Cold Water in residential and commercial buildings as well as for irrigation systems.

