

**durability**

**TPU Industrial Hose**



industrial series

**AFS**<sup>®</sup>

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## durability

### Polyurethane Industrial Hose

- PVC free
- Phthalate free
- High flow rate
- Long shelf life
- Gas and liquid tight
- Chemical resistance
- B1 class fire resistant (only 0.5 - 1.00 mm thickness range)
- Clean core tubes (non-contaminating)
- High elasticity over the entire hardness range
- Excellent resistance to oils, grease and many solvents
- Superior abrasion resistance



Woodworking & Furniture Industry



Chemical Industry (Plants)



Paper Industry



Pharmaceutical Industry



Quarries  
(Rocket Support Mining)



Glass & Ceramics Industry



Sweeper Machines

## AFSTPU (STANDARD)

Wall	: Thermoplastic ester based PU
Thickness	: 0.4 - 0.5 - 0.7 - 1.0 mm
Color	: Transparent
Abrasion resistance (ISO 4649)	: 30 - 40 mm <sup>3</sup>
Wire	: Coated spring steel wire
Diameter Range (∅)	: 30 - 500 mm
Temperature Range	: -40 °C / +90 °C short term: 125 °C (tested for 4 hours)
Standard Length	: 6 m / 10 m
Packing	: Transparent plastic bag
Certificates	: DIN 4102-B1 (only 0.5 - 1.00 mm thickness range)



All technical details on this leaflet are information purposes only and are subject to change without prior notice.

Chemical Resistance Chart

Chemical	Temperature, °C	TPU
Acetone	RT	0
Al-chloride, aqueous, 5 %	RT	+
Ammonia, 10 %	RT	+
Aniline	RT	-
IRM oil 901	80	+
IRM oil 902	80	+
IRM oil 903	80	0/+
Petrol, standard grade	RT	+
Petrol, premium grade	RT	0/+
Benzene	RT	0
Butanol	RT	0
Butyl acetate	RT	-
Cyclohexanol	RT	0
Diesel oil	RT	+
Dimethyl formamide	RT	-
Fe chloride, aqueous, 5 %	40	0
Ethyl acetate	RT	-
Ethyl alcohol	RT	0
Ethyl ether	RT	+
Acetic acid, 20 %	RT	0
Potassium hydroxide solution 1 N	RT	+/0
Sodium chloride solution, conc.	RT	+
Isopropanol	RT	0
Methanol	RT	0
Methanol/benzene, 15/85	RT	+/0
Methylene chloride	RT	0/-
Methyl ethyl ketone	RT	0
Mineral oil	80	+
Soda soap fat	RT	+
Soda soap fat + 20 % water	RT	+/0
Sodium hydroxide solution N	RT	+/0
N-metyl pyrrolidone	RT	-
Nitric acid, 20 %	RT	-
Hydrochloric acid, 20 %	RT	0
Sulphuric acid, 20 %	RT	0
Sea water	RT	+*
Carbon tetrachloride	RT	0/-
Trichloro-ethylene	RT	0/-
Tetrahydrofurane	RT	-
Toluene	RT	-
Water	RT	+
	80	0/+
	100	0

+ = resistant over a prolonged period  
 0 = short-term contact possible under certain conditions  
 - = not resistant, pronounced attack or dissolution  
 \* = microbial attack possible  
 RT = room temperature, 23 °C

AFSTPU Application Areas

TYPES	TPU 05	TPU 07	TPU 10
Wood preparation machines		✓	✓
Refuse collection vehicles	✓	✓	✓
Paint Industry	✓	✓	✓
Glass particles transportation		✓	✓
Glass & Rock wool transportation	✓	✓	✓
Grass cutting devices	✓	✓	✓
Cement transportation		✓	✓
Suction/ Transport for high abrasive materials		✓	✓
Iron & Steel industry		✓	✓
Discharge units	✓	✓	✓
Foundries		✓	✓
Smoke & Polluted air exhaust	✓	✓	✓
Industrial vacuum cleaners	✓	✓	✓
Fan hoses	✓	✓	✓
Cesspit and waste water treatment plant	✓	✓	✓
Gas transportation	✓	✓	✓
Suction/ Transport for light & medium abrasive materials	✓	✓	✓
Heating, Cooling & Ventilation	✓	✓	✓
Cuttle units	✓	✓	✓
Paper Industry	✓	✓	✓
Welding works	✓	✓	✓
Chemicals transportation	✓	✓	✓
Tile Industry		✓	✓
Control cabinets	✓	✓	✓
Sand transportation		✓	✓
Quartz works		✓	✓
Small particles transportation	✓	✓	✓
Harbour installations	✓	✓	✓
Gravel transportation		✓	✓
Grase transportation	✓	✓	✓
Metal chips and dusts transportation	✓	✓	✓
Automotive industry	✓	✓	✓
Packaging technology	✓	✓	✓
Petrochemical Industry	✓	✓	✓
Pump hoses	✓	✓	✓
Spray dispensation	✓	✓	✓
Rail cleaning	✓	✓	✓
Chaff extraction	✓	✓	✓
Ceramic industry		✓	✓
Liquid transportation	✓	✓	✓
Quarries		✓	✓
Fresh air units	✓	✓	✓
Textile fibre transportation	✓	✓	✓
Textile industry	✓	✓	✓
Dockyard industry	✓	✓	✓
Dust extraction	✓	✓	✓
Oil mist extraction	✓	✓	✓
Surface cleaning	✓	✓	✓

**NEGATIVE PRESSURE DURABILITY FOR AFS TPU(STANDARD)**

Diameter (mm)	Wire Pitch (mm)	Wire diameter (mm)	Negative pressure (Pa) (Vacuum)*		
			TPU 05	TPU 07	TPU 10
30	16	1,5	26304	27746	27868
35	16	1,5	25904	27493	27639
40	16	1,5	25500	27207	27382
45	16	1,5	25089	26889	27093
50	20	1,5	24671	26536	26775
60	20	1,5	23821	25736	26039
64	20	1,5	23475	25375	25711
70	20	1,8	22950	24800	25182
76	20	1,8	22414	24175	24607
80	25	1,8	22050	23732	24196
90	25	1,8	21132	22536	23089
100	25	1,8	20186	21204	21857
110	25	1,8	19218	19739	20496
115	25	1,8	18729	18957	19771
120	25	1,8	18107	18146	19014
127	25	1,8	15714	15982	16921
130	25	1,8	15000	15371	16225
140	25	1,8	13450	13496	14107
153	30	2,0	11196	11854	12264
160	30	2,0	9432	10407	10661
180	30	2,0	6900	8025	8057
204	30	2,0	4950	5714	5757
225	30	2,0	3814	4214	4289
250	30	2,0	2882	2929	3021
279	30	2,0	1964	2000	2014
305	30	2,0	1429	1464	1500

The working vacuum pressure declared in this guidelines is obtained with testing vacuum pressure divided by 2.5. The working vacuum pressure data represents the standart condition ; e.g 25°C. Due to the difficulty in describing all operation conditions and testing the hose for various applications; the user should consider bigger safety factor for strong operating field.

## AFSTPU (FOODGRADE)

Wall	: Thermoplastic ester based PU
Thickness	: 0.4 - 0.5 - 0.7 mm
Color	: Transparent
Wire	: Coated spring steel wire
Diameter Range (Ø)	: 30 - 500 mm
Temperature Range	: -40 °C / +90 °C
Standard Length	: 6 m / 10 m
Packing	: Transparent plastic bag
Certificates	: Food grade raw material complies with Commission Regulation EU No 10 /2011

AFSTPU is produced by 100% thermoplastic polyester polyurethane and reinforced by high tension coated steel wire. There are four different types of thickness for various applications.



## durability

# AFSTPU (ANTISTATIC)

Wall	: Thermoplastic ester based PU
Thickness	: 0.5 - 0.7 - 1.0 mm
Color	: Transparent
Wire	: Coated spring steel wire
Diameter Range (Ø)	: 30 - 500 mm
Temperature Range	: -40 °C / +90 °C
Standard Length	: 6 m / 10 m
Packing	: Transparent plastic bag
Certificates	: <b>DIN EN ISO 8031</b>

# AFSTPVC

Wall	: Thermoplastic PVC
Thickness	: 0.4 - 0.5 - 0.7 mm
Color	: Black / Transparent
Wire	: Coated spring steel wire
Diameter Range (Ø)	: 50 - 500 mm
Temperature Range	: -40 °C / +70 °C
Standard Length	: 6 m / 10 m
Packing	: Transparent plastic bag



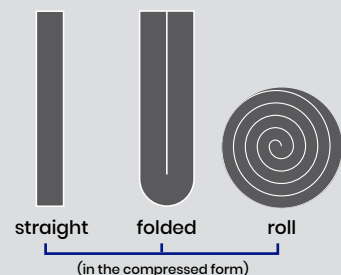
## PACKING DETAILS

AFSTPU(STANDARD) 05 & AFSTPU(STANDARD) 07

- 30 mm ≤ Ø ≤ 76 mm, roll
- 80 mm ≤ Ø ≤ 100 mm, folded
- 127 mm ≤ Ø ≤ 500 mm, straight

AFSTPU(STANDARD) 10

- 30 mm ≤ Ø ≤ 76 mm, roll
- 80 mm ≤ Ø ≤ 500 mm, folded





# TPU Industrial Hose

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**AFS**<sup>®</sup>

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