



Hose and Tube Fittings Series 1 - 3

out of plastics PP, PVDF, PTFE

Series 1

Special Features

- Corrosion resistant
- Gas tight
- Easy to handle
- Different connection threads

Application

Hose and tube fittings as well as fittings of series 1 to 3 out of plastics are indispensable and well proven accessories in the analysis technique in order to guarantee a safe and gastight connection of equipment with hoses and tubes

Description

The hose fittings series 1 are used for connection of nonrigid flexible tubes with a defined inside and outside diameter. The sealing and clamp system of the tube fitting 1 is based on a special fittings body with a centered hose nozzle. The tube must be cut straightly before it is pushed over the hose nozzle until the limit stop. The tube is locked via the ferrule that is pressed on the tube by a knurled nut. This avoids shearing forces and torsion effects. For safety reasons the clamp ring is equipped with a shoulder that pushes against the fittings body during the installation. This guarantees a defined contact pressure of the tube.

Tube fittings series 2 are applicable for unflexible rigid hoses and tubes with given outside diameter. Both hoses and tubes must be cut straightly and burred before they are pushed into the fitting until the limit stop. The tightness is guaranteed by the double cone ferrule 2 respectively the separate back and front ferrule 2N which are pressed on the line via the hexagon nut. Thread fittings and flanges of the series 3 complete the range of necessary accessories.

For GL-connections please use the special M&C GL-adapters. You can find corresponding hoses and hose cutters in the M&C catalogue.

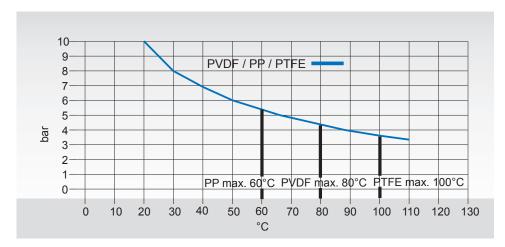
- See data sheet 11.5, 11.7. -



The following fittings are preferred standard versions and available in stock. Other executions, materials, dimensions (in inches as well) on request (minimum order quantity!).

Technical Data

Fitting Series 1-3	Material PVDF (Polyvinylidenefluoride)	Material PP (Polypropylene)
Operating temperature	-20 °C up to +80 °C	-5 °C up to +60 °C
Storage temperature	-30 °C up to +110 °C	-20 °C up to +80 °C
Max. permitted operating pressure at 20 °C	PN10, 10 bar	
Connection thread	G 1/8, 1/4, 3/8, 1/2 pipe thread, DIN ISO 228 1/8, 1/4, 3/8, 1/2 NPT-thread, USAS B2.1 M 10x 1,5 metric screw thread, DIN 13	
Hose connection dimensions Series 1	DN 4/6, 6/8, 8/10, 10/12 mm inside-/outside dia	ameter
Hose connection dimensions Series 2	6, 8, 10, 12 mm outside diameter	



The max, operation pressure decreases with increasing temperature. The temperature of 20 $^{\circ}\text{C}$ is related to air at 65 % humidity (DIN 50014).

Male Connector Series 1





Example of order:

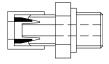
20 pieces of male elbows, G1/4"-DN10/12, PVDF. Part No. 05V4070.

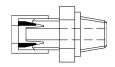
Look at the table for male elbow. In the adjacent field you can see the material PVDF. The corresponding part No. is written down in line 'G1/4' and column '10/12' - 05V4070.

Male Connector, Series 1, out of PVDF and PP

Please find the Part No. of all available standard versions in this list:

	Dimension	DN mm, ı	material PVDF	:	Dimension	Dimension DN mm, material PP			
Thread	4/6	6/8	8/10	10/12	4/6	6/8	8/10	10/12	
G 1/8"	05V1045	05V1050		05V1055	05V1090	05V1095		05V1100	
G 1/4"	05V1060	05V1065	05V1067	05V1070	05V1105	05V1110		05V1115	
G 3/8"	05V1075	05V1080	05V1069	05V1085	05V1120	05V1125		05V1130	
G 1/2"				05V1087				05V1135	
1/8" NPT	05V2045	05V2050		05V2055	05V2090	05V2095		05V2100	
1/4" NPT	05V2060	05V2065		05V2070	05V2105	05V2110		05V2115	
3/8" NPT	05V2075	05V2080		05V2085	05V2120	05V2125		05V2130	
1/2" NPT	05V2086			05V2087					
M10 x 1,5	05V3000				99A1440				





Male Elbow Connector, Series 1, out of PVDF and PP

Please find the Part No. of all available standard versions in this list:

	Dimension	DN mm, n	naterial PVDF		Dimension DN mm, material PP				
Thread	4/6	6/8	8/10	10/12	4/6	6/8	8/10	10/12	
G 1/8"	05V4045	05V4050		05V4055	05V4090	05V4095		05V4100	
G 1/4"	05V4060	05V4065		05V4070	05V4110	05V4115		05V4120	
G 3/8"	05V4075	05V4080		05V4085	05V4125	05V4130		05V4135	
G 1/2"				05V4087					
1/8" NPT	05V6045								
1/4" NPT	05V6060	05V6065			05V6110				

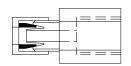




Female Connector, Series 1, of PVDF and PP

Please find the Part No. of all available standard versions in this list:

	Dimension	Dimension DN mm, material PVDF					Dimension DN mm, material PP			
Thread	4/6	6/8	8/10	10/12	4/6	6/8	8/10	10/12		
G 1/8"	05V3910				05V3805					
G 1/4"	05V3900			05V3915	05V3800					
G 3/8"										



G 1/2"

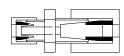
Union Connector, Series 1 out of PVDF and PP, hose / hose,

hose / tube

Please find the Part No. of all available standard versions in this list:

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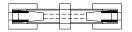
	Dimension	DN mm, n	naterial PVDF		Dimension	DN mm, n	naterial PP	
Ø DN bzw. D	4/6	6/8	8/10	10/12	4/6	6/8	8/10	10/12
4/6	05V3015	05V3505	05V3510	05V3515	05V3030	05V3500		05V3502
6/8	05V3505	05V3020	05V3520	05V3525	05V3500	05V3035		
8/10	05V3510	05V3520	05V3022	05V3530				
10/12	05V3515			05V3025				05V3040
6	05V3115	05V3190			05V3130			
8	05V3119	05V3120				05V3135		
10								
12	05V3128			05V3125	05V3150			05V3140



Union Connector, Series 2, tube / tube out of PVDF and PTFE

Please find the Part No. of all available standard versions in this list:

	Dimens	Dimension DN mm, material PVDF			Dimensio	Dimension DN mm, material PTFE			
ØD	6	6 8 10 12				8	10	12	
6					06V1000				
8									
10									
12									

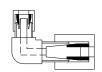


Elbow Connector, Series 1 out of PVDF and PP, hose / hose, hose / tube

Please find the Part No. of all available standard versions in this list:

	Dimension	DN mm, n	naterial PVDF		Dimension DN mm, material PP			
Ø DN bzw. D	4/6	6/8	8/10	10/12	4/6	6/8	8/10	10/12
4/6	05V3350							
6/8	05V3355							
8/10								
10/12								
6	05V3180				05V3160			
8								
10								
12	05V3185				05V3165			

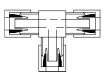




Tee-Connector, Series 1, out of PVDF and PP

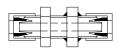
Please find the Part No. of all available standard versions in this list:

	Dimension [ON mm, m	aterial PVDF		Dimension DN mm, material PP			
Ø DN	4/6	6/8	8/10	10/12	4/6	6/8	8/10	10/12
4/6	05V5015				05V5030			
6/8		05V5020				05V5035		
8/10			05V5045					
10/12				05V5025				05V5040



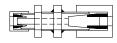
Bulkhead Connector, Series 1 out of PVDF and PP, hose / hose, hose / tube





Please find the Part No. of all available standard versions in this list:

	Dimension I	DN mm, m	aterial PVDF		Dimension DN mm, material PP				
Ø DN resp. D	4/6	6/8	8/10	10/12	4/6	6/8	8/10	10/12	
4/6	05V3215	05V3216			05V3230				
6/8		05V3220				05V3235			
8/10			05V3222						
10/12				05V3225				05V3240	
6									
8									
10									
12									



Plug, Series 3, out of PTFE, PVDF and PP

Please find the Part No. of all available standard versions in this list:

	Thread:				Thread:				
Material	G 1/8"	G 1/4"	G 3/8"	G 1/2"	1/8" NPT	1/4" NPT	3/8" NPT	1/2" NPT	
PTFE	06V7000	06V7005	06V7010						
PVDF	06V7015	06V7020	06V7025						
PP									

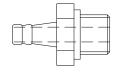




Hose nozzle, Series 3, out of PVDF and PP

Please find the Part No. of all available standard versions in this list:

	Tube i. ø mm, material PVDF				Tube i. ø m	Tube i. ø mm, material PP			
Thread	4	6	8	10	4	6	8	10	
G 1/8"					06V8000	06V8010	06V8015		
G 1/4"					06V8020	06V8025	06V8030		
G 3/8"					06V8035	06V8040	06V8045		



Spare parts, Series 1 and 2, out of PVDF and PP

Please find the Part No. of all available standard versions in this list:

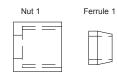
	Dimension DN mm, material PVDF				Dimension DN mm, material PP			
Spare parts	4/6	6/8	8/10	10/12	4/6	6/8	8/10	10/12
Front ferrule 1	05V6600	05V6602		05V6604	05V6500	05V6502		05V6504
Nut 1	05V6605	05V6607		05V6609	05V6505	05V6506		05V6508
Front ferrule 2								
Nut 2								
Back ferrule 2N								

Front ferrule 2N

Front ferrule 2 and back-/ front ferrule combination 2N are compatible.

Back ferrule 2N made of PTFE, front ferrule 2N made of PEEK.

Series 1



Series 2



Back/Front ferrule 2N

