



Male elbow connector for flexible tube, PVDF

Flexible and rigid tube fittings, plugs and connectors with barbed fitting

out of PP, PVDF or PTFE

Special Features

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

Application

Flexible and rigid tube fittings, plugs and connectors with barbed fitting made out of plastics are indispensable and well-proven accessories in the analytical technology in order to guarantee a safe and gas-tight connection of equipment with flexible and rigid tubes.

For GL connections, please use the special M&C GL connecting adapters. You can find corresponding rigid/flexible tubes and flexible tube cutters in the M&C catalogue.

– See data sheets “Fittings for GL Glass Connections” and “Sample Lines Type SL1-8 DN...” –

Description

Flexible tube fittings are used to connect connectors with male or female thread to soft, flexible tubes or as a connection for two or more soft, flexible tubes. The soft or flexible tubes need to have specified inside and outside diameter.

The sealing and clamp system of the flexible tube fitting is based on a special fittings body with a centered barbed fitting. The flexible tube must be cut straight before it is pushed over the barbed fitting up to the end stop. The knurled nut presses the clamping ring lightly onto the flexible tube, which is thereby locked.

The flexible tube is locked via the clamping ring that is slightly pressed on the tube by a knurled nut. This prevents shearing and torsional effects. For safety reasons, the clamping ring has a stop collar which is pushed against the body of the fitting during assembly, to ensure that the flexible tube is pressed on in a controlled manner.

Rigid tube fittings are used for unflexible, rigid tubes with a specific outside diameter. The rigid tube needs to be cut straight and deburred before mounting. The rigid tube is then pushed into the fitting as far as possible. For sealing, a double taper ring or a combination of sealing and clamping ring is pressed through the hexagon nut onto the rigid tube.

Plugs and connectors with barbed fitting complement the range of requirements.

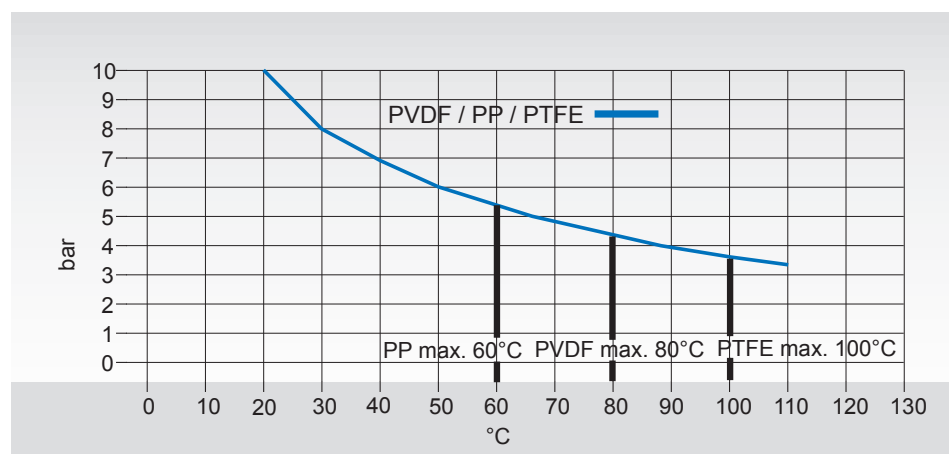
The following fittings are preferred standard versions and available from stock.

Other versions, materials, dimensions (in inches as well) upon request (please note the minimum order quantity).

Technical Data

Fitting Series 1-3	Material PVDF (Polyvinylidene fluoride)	Material PP (Polypropylene)
Operating temperature	-20 to +80 °C [-4 to 176 °F]	-5 to +60 °C [23 to 140 °F]
Storage temperature	-30 to +110 °C [-22 to 230 °F]	-20 to +80 °C [-4 to 176 °F]
Max. permitted operating pressure at 20 °C [68 °F]	PN 10, 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 10 x 1.5 metric screw thread, DIN 13	
Flexible tube connection dimensions	DN 4/6, 6/8, 8/10, 10/12 mm inside/outside diameter	
Rigid tube connection dimensions	6, 8, 10, 12 mm outside diameter	

* The fittings are manufactured with both male and female threads. All our threads, which include the complete thread element and sealing collar, are guaranteed to be seam-free. The thread lengths of the screw-in threads correspond to the respective applicable standard. The tolerances of the thread standards are matched to metal threads and cannot be applied to plastic threads.



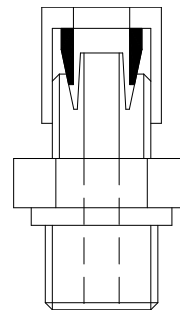
The max. operation pressure decreases with increasing temperature.
The temperature of 20 °C [68 °F] is related to 65 % air humidity (DIN 50014).

Straight Male Connector for Flexible Tube

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

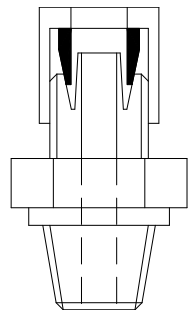
Material: PVDF	Flexible tube	Male thread	Part No.
GE PVDF DN 4/6 - G 1/8"	DN 4/6	G 1/8"	05V1045
GE PVDF DN 4/6 - G 1/4"	DN 4/6	G 1/4"	05V1060
GE PVDF DN 4/6 - G 3/8"	DN 4/6	G 3/8"	05V1075
GE PVDF DN 6/8 - G 1/8"	DN 6/8	G 1/8"	05V1050
GE PVDF DN 6/8 - G 1/4"	DN 6/8	G 1/4"	05V1065
GE PVDF DN 6/8 - G 3/8"	DN 6/8	G 3/8"	05V1080
GE PVDF DN 6/8 - G 1/2"	DN 6/8	G 1/2"	05V1081
GE PVDF DN 8/10 - G 1/8"	DN 8/10	G 1/8"	05V1057
GE PVDF DN 8/10 - G 1/4"	DN 8/10	G 1/4"	05V1067
GE PVDF DN 8/10 - G 3/8"	DN 8/10	G 3/8"	05V1069
GE PVDF DN 10/12 - G 1/8"	DN 10/12	G 1/8"	05V1055
GE PVDF DN 10/12 - G 1/4"	DN 10/12	G 1/4"	05V1070
GE PVDF DN 10/12 - G 3/8"	DN 10/12	G 3/8"	05V1085
GE PVDF DN 10/12 - G 1/2"	DN 10/12	G 1/2"	05V1087
GE PVDF DN 12/16 - G 1/4"	DN 12/16	G 1/4"	05V1071
GE PVDF DN 4/6 - NPT 1/8"	DN 4/6	NPT 1/8"	05V2045
GE PVDF DN 4/6 - NPT 1/4"	DN 4/6	NPT 1/4"	05V2060
GE PVDF DN 4/6 - NPT 3/8"	DN 4/6	NPT 3/8"	05V2075
GE PVDF DN 4/6 - NPT 1/2"	DN 4/6	NPT 1/2"	05V1086
GE PVDF DN 6/8 - NPT 1/8"	DN 6/8	NPT 1/8"	05V2050
GE PVDF DN 6/8 - NPT 1/4"	DN 6/8	NPT 1/4"	05V2065
GE PVDF DN 6/8 - NPT 3/8"	DN 6/8	NPT 3/8"	05V2080
GE PVDF DN 8/10 - NPT 1/8"	DN 8/10	NPT 1/8"	05V2052
GE PVDF DN 8/10 - NPT 1/4"	DN 8/10	NPT 1/4"	05V2066
GE PVDF DN 8/10 - NPT 3/8"	DN 8/10	NPT 3/8"	05V2069
GE PVDF DN 8/10 - NPT 1/2"	DN 8/10	NPT 1/2"	05V2088
GE PVDF DN 10/12 - NPT 1/8"	DN 10/12	NPT 1/8"	05V2055
GE PVDF DN 10/12 - NPT 1/4"	DN 10/12	NPT 1/4"	05V2070
GE PVDF DN 10/12 - NPT 3/8"	DN 10/12	NPT 3/8"	05V2085
GE PVDF DN 10/12 - NPT 1/2"	DN 10/12	NPT 1/2"	05V2087
GE PVDF DN 12/16 - NPT 1/4"	DN 12/16	NPT 1/4"	05V1071
GE PVDF DN 4/6 - M10 x 1.5	DN 4/4	M10 x 1.5	05V3000

Material: PP	Flexible tube	Male thread	Part No.
GE PP DN 4/6 - G 1/8"	DN 4/6	G 1/8"	05V1090
GE PP DN 4/6 - G 1/4"	DN 4/6	G 1/4"	05V1105
GE PP DN 4/6 - G 3/8"	DN 4/6	G 3/8"	05V1120
GE PP DN 6/8 - G 1/8"	DN 6/8	G 1/8"	05V1095
GE PP DN 6/8 - G 1/4"	DN 6/8	G 1/4"	05V1110
GE PP DN 6/8 - G 3/8"	DN 6/8	G 3/8"	05V1125
GE PP DN 10/12 - G 1/8"	DN 10/12	G 1/8"	05V1100
GE PP DN 10/12 - G 1/4"	DN 10/12	G 1/4"	05V1115
GE PP DN 10/12 - G 3/8"	DN 10/12	G 3/8"	05V1130
GE PP DN 10/12 - G 1/2"	DN 10/12	G 1/2"	05V1135
GE PP DN 4/6 - NPT 1/8"	DN 4/6	NPT 1/8"	05V2090
GE PP DN 4/6 - NPT 1/4"	DN 4/6	NPT 1/4"	05V2105
GE PP DN 4/6 - NPT 3/8"	DN 4/6	NPT 3/8"	05V2120
GE PP DN 6/8 - NPT 1/8"	DN 6/8	NPT 1/8"	05V2095
GE PP DN 6/8 - NPT 1/4"	DN 6/8	NPT 1/4"	05V2110
GE PP DN 6/8 - NPT 3/8"	DN 6/8	NPT 3/8"	05V2125
GE PP DN 10/12 - NPT 1/8"	DN 10/12	NPT 1/8"	05V2100
GE PP DN 10/12 - NPT 1/4"	DN 10/12	NPT 1/4"	05V2115
GE PP DN 10/12 - NPT 3/8"	DN 10/12	NPT 3/8"	05V2130
GE PP DN 4/6 - M10 x 1.5	DN 4/6	M10 x 1.5	99A1440



G or M male thread

Flexible tube connection



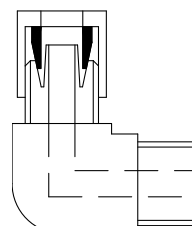
NPT male thread

Male Elbow Connector for Flexible Tube

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

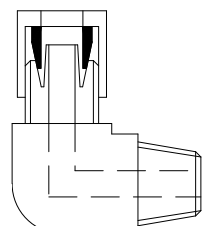
Material: PVDF	Flexible tube	Male thread	Part No.
WE PVDF DN 4/6 - G 1/8"	DN 4/6	G 1/8"	05V4045
WE PVDF DN 4/6 - G 1/4"	DN 4/6	G 1/4"	05V4060
WE PVDF DN 4/6 - G 3/8"	DN 4/6	G 3/8"	05V4075
WE PVDF DN 6/8 - G 1/8"	DN 6/8	G 1/8"	05V4050
WE PVDF DN 6/8 - G 1/4"	DN 6/8	G 1/4"	05V4065
WE PVDF DN 6/8 - G 3/8"	DN 6/8	G 3/8"	05V4080
WE PVDF DN 8/10 - G 1/2"	DN 8/10	G 1/4"	05V4066
WE PVDF DN 10/12 - G 1/8"	DN 10/12	G 1/8"	05V4055
WE PVDF DN 10/12 - G 1/4"	DN 10/12	G 1/4"	05V4070
WE PVDF DN 10/12 - G 3/8"	DN 10/12	G 3/8"	05V4085
WE PVDF DN 10/12 - G 1/2"	DN 10/12	G 1/2"	05V4087
WE PVDF DN 4/6 - NPT 1/8"	DN 4/6	NPT 1/8"	05V6045
WE PVDF DN 4/6 - NPT 1/4"	DN 4/6	NPT 1/4"	05V6060
WE PVDF DN 6/8 - NPT 1/4"	DN 6/8	NPT 1/4"	05V6065
WE PVDF DN 4/6 - NPT 3/8"	DN 4/6	NPT 3/8"	05V6075

Material: PP	Flexible tube	Male thread	Part No.
WE PP DN 4/6 - G 1/8"	DN 4/6	G 1/8"	05V4090
WE PP DN 4/6 - G 1/4"	DN 4/6	G 1/4"	05V4110
WE PP DN 4/6 - G 3/8"	DN 4/6	G 3/8"	05V4125
WE PP DN 6/8 - G 1/8"	DN 6/8	G 1/8"	05V4095
WE PP DN 6/8 - G 1/4"	DN 6/8	G 1/4"	05V4115
WE PP DN 6/8 - G 3/8"	DN 6/8	G 3/8"	05V4130
WE PP DN 10/12 - G 1/8"	DN 10/12	G 1/8"	05V4100
WE PP DN 10/12 - G 1/4"	DN 10/12	G 1/4"	05V4120
WE PP DN 10/12 - G 3/8"	DN 10/12	G 3/8"	05V4135
WE PP DN 4/6 - NPT 1/4"	DN 4/6	NPT 1/4"	05V6110



G male thread

Flexible tube connection



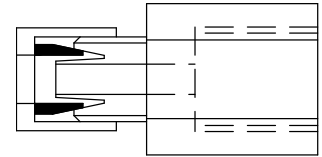
NPT male thread

Straight Female Connector for Flexible Tube



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

	Material	Flexible tube	Female thread	Part No.
GA PVDF DN 4/6 - G 1/4"	PVDF	DN 4/6	G 1/4"	05V3900
GA PVDF DN 4/6 - G 1/8"	PVDF	DN 4/6	G 1/8"	05V3910
GA PVDF DN 10/12 - G 1/4"	PVDF	DN 10/12	G 1/4"	05V3915
GA PP DN 4/6 - G 1/4"	PP	DN 4/6	G 1/4"	05V3800
GA PP DN 4/6 - G 1/8"	PP	DN 4/6	G 1/8"	05V3805
GA PP DN 4/6 - NPT 1/8"	PP	DN 4/6	NPT 1/8"	05V3806

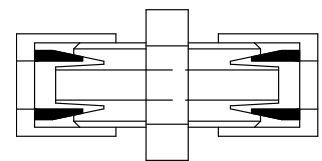


Flexible tube connection Female thread

Straight Union for Flexible Tubes

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

	Material	Flexible tubes	Part No.
VS PVDF DN 4/6	PVDF	2 x DN 4/6	05V3015
VS PVDF DN 6/8	PVDF	2 x DN 6/8	05V3020
VS PVDF DN 8/10	PVDF	2 x DN 8/10	05V3022
VS PVDF DN 10/12	PVDF	2 x DN 10/12	05V3025
VS PVDF DN 4/6 - 6/8	PVDF	DN 4/6 and DN 6/8	05V3505
VS PVDF DN 4/6 - 8/10	PVDF	DN 4/6 and DN 8/10	05V3510
VS PVDF DN 4/6 - 10/12	PVDF	DN 4/6 and DN 10/12	05V3515
VS PVDF DN 6/8 - 8/10	PVDF	DN 6/8 and DN 8/10	05V3520
VS PVDF DN 6/8 - 10/12	PVDF	DN 6/8 and DN 10/12	05V3525
VS PVDF DN 8/10 - 10/12	PVDF	DN 8/10 and DN 10/12	05V3530
VS PP DN 4/6	PP	2 x DN 4/6	05V3030
VS PP DN 6/8	PP	2 x DN 6/8	05V3035
VS PP DN 10/12	PP	2 x DN 10/12	05V3040
VS PP DN 4/6 - 6/8	PP	DN 4/6 and DN 6/8	05V3500
VS PP DN 4/6 - 10/12	PP	DN 4/6 and DN 10/12	05V3502

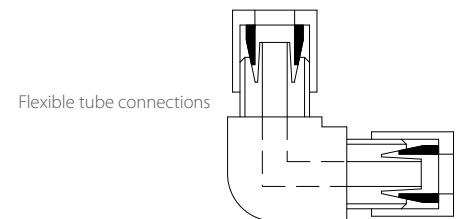


Flexible tube connections

Elbow Union for Flexible Tubes

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

	Material	Flexible tubes	Part No.
WV PVDF DN 4/6	PVDF	2 x DN 4/6	05V3350
WV PVDF DN 6/8	PVDF	2 x DN 6/8	05V3355
WV PVDF DN 10/12	PVDF	2 x DN 10/12	05V3365

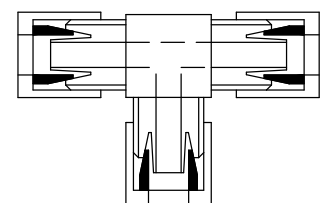


Flexible tube connections

Union Tee for Flexible Tubes

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

	Material	Flexible tubes	Part No.
TV PVDF DN 4/6	PVDF	3 x DN 4/6	05V5015
TV PVDF DN 6/8	PVDF	3 x DN 6/8	05V5020
TV PVDF DN 8/10	PVDF	3 x DN 8/10	05V5045
TV PVDF DN 10/12	PVDF	3 x DN 10/12	05V5025
TV PP DN 4/6	PP	3 x DN 4/6	05V5030
TV PP DN 6/8	PP	3 x DN 6/8	05V5035
TV PP DN 10/12	PP	3 x DN 10/12	05V5040

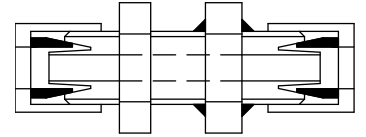


Flexible tube connections

Straight Bulkhead Union for Flexible Tubes

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

	Material	Flexible tubes	Part No.
SV PVDF DN 4/6	PVDF	2 x DN 4/6	05V3215
SV PVDF DN 6/8	PVDF	2 x DN 6/8	05V3220
SV PVDF DN 8/10	PVDF	2 x DN 8/10	05V3222
SV PVDF DN 10/12	PVDF	2 x DN 10/12	05V3225
SV PVDF DN 4/6 - 6/8	PVDF	DN 4/6 and DN 6/8	05V3216
SV PP DN 4/6	PP	2 x DN 4/6	05V3230
SV PP DN 6/8	PP	2 x DN 6/8	05V3235
SV PP DN 10/12	PP	2 x DN 10/12	05V3240



Flexible tube connections

Straight or Elbow Union for Flexible and Rigid Tubes

Compression fittings for tube connections are used where rigid tubes, e.g. made of PTFE, PE, etc. need to be connected to stainless steel tubes. Compression fittings are featured on the following M&C products:

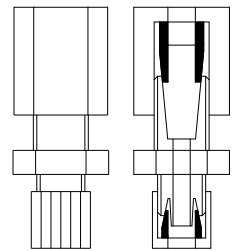
M&C product	Connection type	Connection dimensions
ECP-1	Sample gas IN/OUT Condensate OUT	6 mm 12 mm
ECM-2SS, ECM-2PV	Sample gas IN/OUT	6 mm

Straight Union for Flexible and Rigid Tubes

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

	Material	Flexible tube	Rigid tube	Part No.
VS PVDF DN 4/6 - D6	PVDF	DN 4/6	D 6 mm	05V3115
VS PVDF DN 4/6 - D8	PVDF	DN 4/6	D 8 mm	05V3119
VS PVDF DN 4/6 - D12	PVDF	DN 4/6	D 12 mm	05V3128
VS PVDF DN 6/8 - D6	PVDF	DN 6/8	D 6 mm	05V3190
VS PVDF DN 6/8 - D8	PVDF	DN 6/8	D 8 mm	05V3120
VS PVDF DN 10/12 - D12	PVDF	DN 10/12	D 12 mm	05V3125
VS PP DN 4/6 - D6	PP	DN 4/6	D 6 mm	05V3130
VS PP DN 4/6 - D12	PP	DN 4/6	D 12 mm	05V3150
VS PP DN 6/8 - D8	PP	DN 6/8	D 8 mm	05V3135
VS PP DN 10/12 - D12	PP	DN 10/12	D 12 mm	05V3140

Rigid tube connection



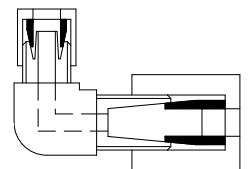
Flexible tube connection

Elbow Union for Flexible and Rigid Tubes

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

	Material	Flexible tube	Rigid tube	Part No.
WV PVDF DN 4/6 - D6	PVDF	DN 4/6	D 6 mm	05V3180
WV PVDF DN 4/6 - D12	PVDF	DN 4/6	D 12 mm	05V3185
WV PP DN 4/6 - D6	PP	DN 4/6	D 6 mm	05V3160
WV PP DN 4/6 - D12	PP	DN 4/6	D 12 mm	05V3165

Flexible tube connection

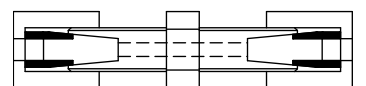


Rigid tube connection

Straight Union for Rigid Tubes

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

	Material	Rigid tube	Part No.
VS PTFE D 6	PTFE	2 x D6	06V1000



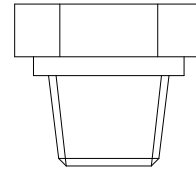
Rigid tube connections

Plug with Male Thread

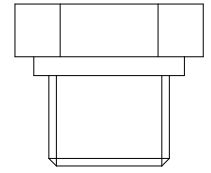


Please find the Part No. of all available standard versions in this list:

	Material	Male thread	Part No.
Plug PTFE G 1/8"	PTFE	G 1/8"	06V7000
Plug PTFE G 1/4"	PTFE	G 1/4"	06V7005
Plug PTFE G 3/8"	PTFE	G 3/8"	06V7010
Plug PTFE M10 x 1.5	PTFE	M10 x 1.5	06V7001
Plug PTFE 1/8" NPT	PTFE	1/8" NPT	06V7002
Plug PVDF G 1/8"	PVDF	G 1/8"	06V7015
Plug PVDF G 1/4"	PVDF	G 1/4"	06V7020
Plug PVDF G 3/8"	PVDF	G 3/8"	06V7025



NPT male thread

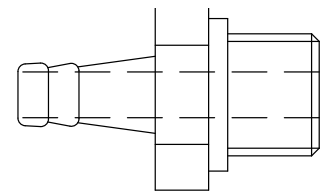


G or M male thread

Straight Male Connector with Barbed Fitting

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

	Material	Barbed fitting	Male thread	Part No.
ST PP DN 4 - G 1/8"	PP	DN 4	G 1/8"	06V8000
ST PP DN 6 - G 1/8"	PP	DN 6	G 1/8"	06V8010
ST PP DN 8 - G 1/8"	PP	DN 8	G 1/8"	06V8015
ST PP DN 4 - G 1/4"	PP	DN 4	G 1/4"	06V8020
ST PP DN 6 - G 1/4"	PP	DN 6	G 1/4"	06V8025
ST PP DN 8 - G 1/4"	PP	DN 8	G 1/4"	06V8030
ST PP DN 4 - G 3/8"	PP	DN 4	G 3/8"	06V8035
ST PP DN 6 - G 3/8"	PP	DN 6	G 3/8"	06V8040
ST PP DN 8 - G 3/8"	PP	DN 8	G 3/8"	06V8045



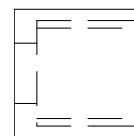
Barbed fitting

G male thread

Spare Parts: Clamping Ring and Knurled Nut for Flexible Tube Connection

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

	Material	Flexible tube	Part No.
Knurled nut DN 4/6	PVDF	DN 4/6	05V6605
Knurled nut DN 6/8	PVDF	DN 6/8	05V6607
Knurled nut DN 10/12	PVDF	DN 10/12	05V6609
Clamping ring DN 4/6	PVDF	DN 4/6	05V6600
Clamping ring DN 6/8	PVDF	DN 6/8	06V6602
Clamping ring DN 8/10	PVDF	DN 8/10	05V6603
Clamping ring DN 10/12	PVDF	DN 10/12	05V6604
Knurled nut DN 4/6	PP	DN 4/6	05V6505
Knurled nut DN 6/8	PP	DN 6/8	05V6506
Knurled nut DN 10/12	PP	DN 10/12	05V6608
Clamping ring DN 4/6	PP	DN 4/6	05V6500
Clamping ring DN 6/8	PP	DN 6/8	06V6502
Clamping ring DN 10/12	PP	DN 10/12	05V6504



Knurled nut



Clamping ring