

# INSPECTION OPENINGS

FOR THE THERMOPLASTIC CONTAINER AND PLAST CONSTRUCTION

## MWF MANHOLE

- FLEXIBILITY
- ERGONOMICS
- SAFETY

DN300  
TO  
DN800



**PRODUCT  
INNOVATION**

NOW EVEN  
MORE  
SELECTION



## MANHOLES

PASSABLE INSPECTION  
OPENINGS

## REVISION NOZZLES

ACCESSORY AND  
SPARE PARTS

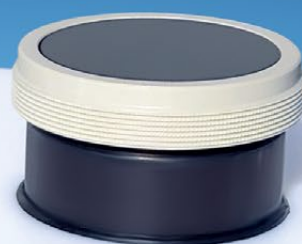
PRECISION in plastics and metal



# Universally applicable and easily maintained

Inspection openings of 90 to 800 mm  
diameter hand hole or manhole

ø Manholes  
to DN800



## MWF Revision Nozzles

A wide range in terms of  
types, materials and spare  
parts (see pages 10+11).



## MWF Manhole

The deep-drawn ergonomic cap was manufactured from one material (e.g. PVC transparent). The clamping ring made of stainless steel allows for an easy and quick opening/closing of the inspection opening. Now also available as adjustable clamping ring (see right, standard for DN800).





MWF Manhole



Cap in ergonomic design



Clamping ring as quick-acting closure



Sealing of TPE-S



Flange available made of six raw materials, see right side

## Certified specialist for plastics technology

For more than 15 years, MWF Technik has been developing and manufacturing a unique product range for distributing, measuring and neutralizing chemical liquids. Today, we offer **more than 1,600 articles and options**, beginning with the simple moulded part over container accessories all the way to modern valves and systems for the most diversified application fields. Furthermore, we develop, construct and manufacture according to the customer's order individual product solutions in plastics and metal technology.

We are a **certified specialist according to WHG** (federal water resources law), and we have trained specialists for plastic and rubber technology as well as for plastic welding according to DVS 2212-1 (Deutscher Verband für Schweißtechnik e.V. = German Welding Association).

## MWF Manholes


### Passable inspection openings for the thermoplastic container and plant construction


In the field of manholes, we offer since 2020 an unique range of innovative solutions. In the first concept and development phase, we analyze existing market solutions and closely consult with users and experts at the chemical plant construction, the water industry and environmental technology. **Our goal is to offer a new generation of manholes that offers more possibilities for usage and handling due to more flexibility, ergonomics and certified quality.**

Our specialists in development, 3D construction, plastics technology and metal technology work hand in hand. The result is a completely new production area at MWF Technik. This includes the tools for production with the deep-drawing process of innovative cap design which are explained in detail. For the multi-step manufacturing of the flange, we have developed our own machines. The mould and material concepts for sealing and clamping ring also come from our own development, rounding off our intelligent overall solution.

### Quality of MWF Technik

For the manufacture of MWF Manholes, we have developed a complete production process on our own and have adjusted it to series maturity. Our components and overall solution are certified with works and material certificates.

 **Six raw materials are available: PP, PP flame resistant, PE, PE nature, PE electrically conductive, and PVC** (cap optionally PVC transparent). *Other materials, such as PE blue for drinking water elevated tanks, on request.*

 **Now also available in adjustable version, for retensioning the cap** (Standard for DN800).



# MWF Manhole DN300-DN800 with quick-acting closure



INCLUDING:  
**Certifications,  
certificates  
and licenses**

## MWF Manhole as passable inspection openings for the thermoplastic container and plant construction

- **Nominal size DN300-DN800**

According to BG rule 117-1 (German employers' liability insurance association): "In carrying out operations in confined spaces such as vessels, silos and tight spaces", a minimal manhole diameter of 800 mm is recommended

- **Materials**

PP, PP flame resistant, PE, PE nature, PE electrically conductive, PVC

- **Sealing made of TPE-S**

O-rings endless, without splice, especially developed sealing profile, resistant to nearly all common chemicals, compliant with the standards of the food industry

- **Clamping rings made of stainless steel 1.4301**

Optionally in adjustable design, for retensioning the cap

- **Available with or without nozzle**

- **Fall protection for vertical installation**

Prevents the manhole cap from falling down during the revision process

- **Certificates for your documentation**

Material certificate 3.1, factory certification 2.2, WHG (federal water resources law), DIN ISO 9001, DVS2212, food approval



**SKZ - the plastics center**  
Tested according to test report no. 214010/20  
of SKZ Testing GmbH in Würzburg, Germany



Fachbetrieb  
WHG



www.tuv.com  
ID 0100001430



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Bundesministerium  
für Wirtschaft  
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des Deutschen Bundestages

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innovation project.



DIN EN ISO 9001  
REG.-NR. Q1 0117188

# Advantages of MWF Manhole



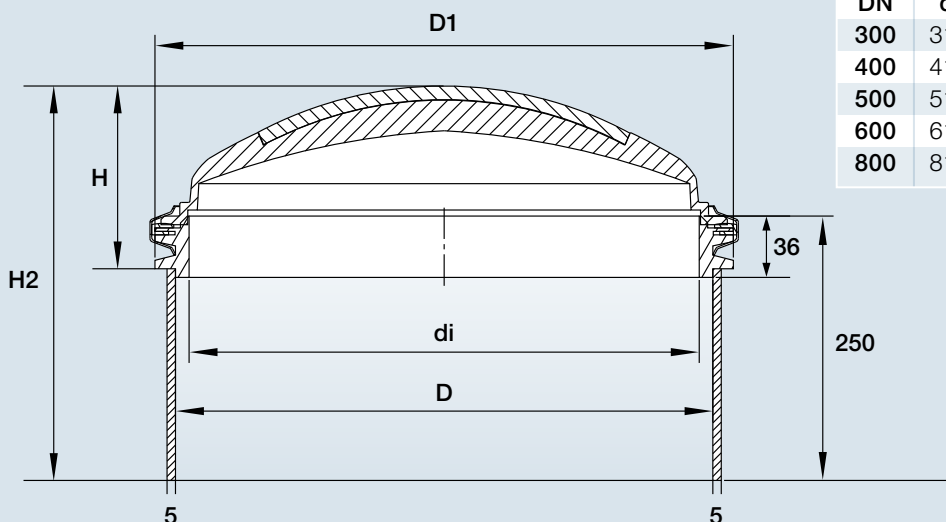
The ergonomic handle eases use and gives the cap additional stability.



The fall protection set (see accessory) eases the revision process at the vertical installation of the manhole.

- Deep-drawn cap with high stability, manufactured with only one material
- Ergonomic design of the handle with stabilizing function
- Screwless quick-acting closure with clamping ring made of stainless steel
- Five nominal sizes to DN800
- Huge choices at the market, material selection incl. PE nature, PE electrically conductive and PVC
- Endless O-rings without splice
- Optional cap fall protection for the vertical installation
- Certifications and testimonies for the documentation, incl. food approval

Dimensions (mm)



DN	di	D	D1	H ca.	H2 ca.
300	312	322	352	90	304
400	410	420	450	103	317
500	510	520	550	116	330
600	610	620	650	129	343
800	810	820	850	155	370

With optional nozzle

WITHOUT NOZZLE









## MWF Manhole with flange, cap and quick-acting closure, without nozzle



Example:  
Cap PVC transparent,  
flange PE black

Further  
materials,  
like PE blue **b**  
for drinking water  
elevated tanks,  
on request.



DN mm	Material Flange/cap	Version flange	Article no.	
			With standard clamping ring	With adjustable clamping ring 
300	PP/PP	PP-H grey	99777	100715
400	PP/PP	PP-H grey	99778	100716
500	PP/PP	PP-H grey	99779	100717
600	PP/PP	PP-H grey	99780	100718
800	PP/PP	PP-H grey	–	99781
300	PE/PE	PE black	99782	100719
400	PE/PE	PE black	99783	100720
500	PE/PE	PE black	99784	100721
600	PE/PE	PE black	99785	100722
800	PE/PE	PE black	–	99786
300	PE/PVC*	PE black	99787 	100723
400	PE/PVC*	PE black	99788	100724
500	PE/PVC*	PE black	99789	100725
600	PE/PVC*	PE black	99790	100726
800	PE/PVC*	PE black	–	99791
300	PP/PVC*	PP-H grey	99792 	100727
400	PP/PVC*	PP-H grey	99793	100728
500	PP/PVC*	PP-H grey	99794	100729
600	PP/PVC*	PP-H grey	99795	100730
800	PP/PVC*	PP-H grey	–	99796
300	PP-s/PP-s	PP flame retardant	99797 	100731
400	PP-s/PP-s	PP flame retardant	99798	100732
500	PP-s/PP-s	PP flame retardant	99799	100733
600	PP-s/PP-s	PP flame retardant	99800	100734
800	PP-s/PP-s	PP flame retardant	–	99801
300	PE-n/PE-n	PE nature	99802	100735
400	PE-n/PE-n	PE nature	99803	100736
500	PE-n/PE-n	PE nature	99804	100737
600	PE-n/PE-n	PE nature	99805	100738
800	PE-n/PE-n	PE nature	–	99806
300	PE-el/PE-el	PE electrically conductive	99807 	100739
400	PE-el/PE-el	PE electrically conductive	99808	100740
500	PE-el/PE-el	PE electrically conductive	99809	100741
600	PE-el/PE-el	PE electrically conductive	99810	100742
800	PE-el/PE-el	PE electrically conductive	–	99811
300	PVC/PVC*	PVC	99812 	100743
400	PVC/PVC*	PVC	99813	100744
500	PVC/PVC*	PVC	99814	100745
600	PVC/PVC*	PVC	99815	100746
800	PVC/PVC*	PVC	–	99816

\*Cap optionally PVC transparent

DN800 version only available with adjustable clamping ring.

WITH NOZZLE

**BIGGEST  
SELECTION  
ON THE MARKET**







## MWF Manhole with flange, cap and quick-acting closure, with nozzle



Example:  
Cap PVC transparent,  
flange and nozzle PE  
black

Further  
materials,  
like PE blue **b**  
for drinking water  
elevated tanks,  
on request.



DN mm	Material Flange/cap	Version flange	Article no.	
			With standard clamping ring	With adjustable clamping ring 
300	PP/PP	PP-H grey	99874	100747
400	PP/PP	PP-H grey	99875	100748
500	PP/PP	PP-H grey	99876	100749
600	PP/PP	PP-H grey	99877	100750
800	PP/PP	PP-H grey	–	99878
300	PE/PE	PE black	99879	100751
400	PE/PE	PE black	99880	100752
500	PE/PE	PE black	99881	100753
600	PE/PE	PE black	99882	100754
800	PE/PE	PE black	–	99883
300	PE/PVC*	PE black	99884 	100755
400	PE/PVC*	PE black	99885	100756
500	PE/PVC*	PE black	99886	100757
600	PE/PVC*	PE black	99887	100758
800	PE/PVC*	PE black	–	99888
300	PP/PVC*	PP-H grey	99889 	100759
400	PP/PVC*	PP-H grey	99890	100710
500	PP/PVC*	PP-H grey	99891	100760
600	PP/PVC*	PP-H grey	99892	100761
800	PP/PVC*	PP-H grey	–	99893
300	PP-s/PP-s	PP flame retardant	99894 	100762
400	PP-s/PP-s	PP flame retardant	99895	100763
500	PP-s/PP-s	PP flame retardant	99896	100764
600	PP-s/PP-s	PP flame retardant	99897	100765
800	PP-s/PP-s	PP flame retardant	–	99898
300	PE-n/PE-n	PE nature	99899	100766
400	PE-n/PE-n	PE nature	99900	100767
500	PE-n/PE-n	PE nature	99901	100768
600	PE-n/PE-n	PE nature	99902	100769
800	PE-n/PE-n	PE nature	–	99903
300	PE-el/PE-el	PE electrically conductive	99904 	100770
400	PE-el/PE-el	PE electrically conductive	99905	100771
500	PE-el/PE-el	PE electrically conductive	99906	100772
600	PE-el/PE-el	PE electrically conductive	99907	100773
800	PE-el/PE-el	PE electrically conductive	–	99908
300	PVC/PVC*	PVC	99910 	100774
400	PVC/PVC*	PVC	99911	100775
500	PVC/PVC*	PVC	99912	100776
600	PVC/PVC*	PVC	99913	100777
800	PVC/PVC*	PVC	–	99914

\*Cap optionally PVC transparent

DN800 version only available with adjustable clamping ring.

# Accessory/spare parts MWF Manholes

## Fall protection set MWF Manhole cap



Brackets Containers/caps	Length	Material Version	Article no.	
PP/PP	0,5 m	PP-H grey/Stainless steel 1.4301	99847	
PP/PVC	0,5 m	PP-H grey/PVC/Stainless steel 1.4301	99848	●
PP-s/PP-s	0,5 m	PP flame retardant/Stainless steel 1.4301	99849	s
PE-n/PE-n	0,5 m	PE nature/Stainless steel 1.4301	99850	
PE/PE	0,5 m	PE black/Stainless steel 1.4301	99851	
PE/PVC	0,5 m	PE black/PVC/Stainless steel 1.4301	99852	●
PVC/PVC	0,5 m	PVC/Stainless steel 1.4301	99853	
PE-el/PE-el	0,5 m	PE electrically conductive/Stainless steel 1.4301	99854	⚡ el
PP/PP	1,0 m	PP-H grey/Stainless steel 1.4301	99855	
PP/PVC	1,0 m	PP-H grey/PVC/Stainless steel 1.4301	99856	●
PP-s/PP-s	1,0 m	PP flame retardant/Stainless steel 1.4301	99857	s
PE-n/PE-n	1,0 m	PE nature/Stainless steel 1.4301	99858	
PE/PE	1,0 m	PE black/Stainless steel 1.4301	99859	
PE/PVC	1,0 m	PE black/PVC/Stainless steel 1.4301	99860	●
PVC/PVC	1,0 m	PVC/Stainless steel 1.4301	99861	
PE-el/PE-el	1,0 m	PE electrically conductive/Stainless steel 1.4301	99862	⚡ el

## Clamping ring MWF Manhole



DN mm	Material Stainless steel	Article no.	
		Standard	Adjustable
300	1.4301	99748	100672
400	1.4301	99749	100673
500	1.4301	99750	100674
600	1.4301	99751	100675
800	1.4301	–	99753

DN800 version only available with adjustable clamping ring.

## Sealing MWF Manhole



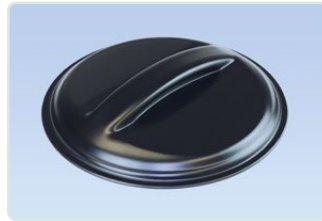
DN mm	Material Version	Article no.
300	TPE-S	99754
400	TPE-S	99755
500	TPE-S	99756
600	TPE-S	99757
800	TPE-S	99759



## Cap MWF Manhole



PP-H grey



PE black



PP flame retardant



PE nature



PE electrically conductive



PVC



PVC transparent

Version PE blue <sup>b</sup>  
or other  
materials on request

The cap made of PVC is  
optionally available in the  
transparent version.

DN mm	Material		Article no.
Cap	Version		
300	PP	PP-H grey	99817
400	PP	PP-H grey	99818
500	PP	PP-H grey	99819
600	PP	PP-H grey	99820
800	PP	PP-H grey	99821
300	PE	PE black	99822
400	PE	PE black	99823
500	PE	PE black	99824
600	PE	PE black	99825
800	PE	PE black	99826
300	PP-s	PP flame retardant	99827 <sup>s</sup>
400	PP-s	PP flame retardant	99828
500	PP-s	PP flame retardant	99829
600	PP-s	PP flame retardant	99830
800	PP-s	PP flame retardant	99831
300	PE-n	PE nature	99832
400	PE-n	PE nature	99833
500	PE-n	PE nature	99834
600	PE-n	PE nature	99835
800	PE-n	PE nature	99836
300	PVC*	PVC (*optionally transparent)	99837 <sup>*</sup>
400	PVC*	PVC (*optionally transparent)	99838
500	PVC*	PVC (*optionally transparent)	99839
600	PVC*	PVC (*optionally transparent)	99840
800	PVC*	PVC (*optionally transparent)	99841
300	PE-el	PE electrically conductive	99842 <sup>el</sup>
400	PE-el	PE electrically conductive	99843
500	PE-el	PE electrically conductive	99844
600	PE-el	PE electrically conductive	99845
800	PE-el	PE electrically conductive	99846



\*Cap optionally PVC transparent

# Revision nozzle

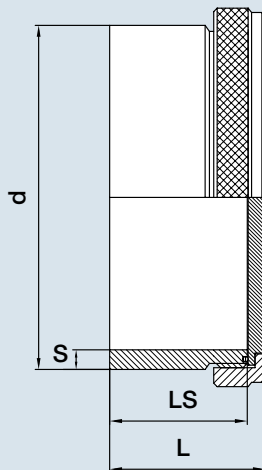


## Revision nozzle for installation in containers or pipes

- usable as control or cleaning opening
- suitable for shrink-wrapping of measuring instruments (level probe, etc.)
- sealing material EPDM
- cap protected against falling out by union nut and is easily changeable
- suitable for pressure-less operation in chemical facilities

d mm	LS mm	L mm	S mm	Article no.		
				PP/PP	PE/PE	PVC/PVC*
90	80	90	8,2	91569	91568	91623
110	80	90	10,0	91297	91296	91443
125	80	90	11,4	91299	91298	91624
140	80	90	8,3	91748	91719	92100
160	80	90	9,5	91301	91300	91486
200	80	90	11,9	91303	91302	91304
250	80	90	14,8	91306	91305	91625
280	80	90	16,6	91308	91307	91626

\*PVC/PVC: nozzle PVC grey, cap PVC transparent.



## Revision nozzle electrically conductive

d mm	LS mm	L mm	S mm	Article no.	
				PE-el	
110	80	90	10,0	100267	
160	80	90	9,5	100261	
200	80	90	11,9	100264	

## Revision nozzle with transparent cap



d mm	LS mm	L mm	S mm	Article no.			
				PP	PVC	PE	PVC
90	80	90	8,2	99090		99091	
110	80	90	10,0	99092		99093	
125	80	90	11,4	99094		99095	
140	80	90	8,3	99096		99097	
160	80	90	9,5	99098		99099	
200	80	90	11,9	99100		99101	
250	80	90	14,8	99102		99103	
280	80	90	16,6	99104		99105	

Other dimensions  
and materials on request.

# Spare parts revision nozzle

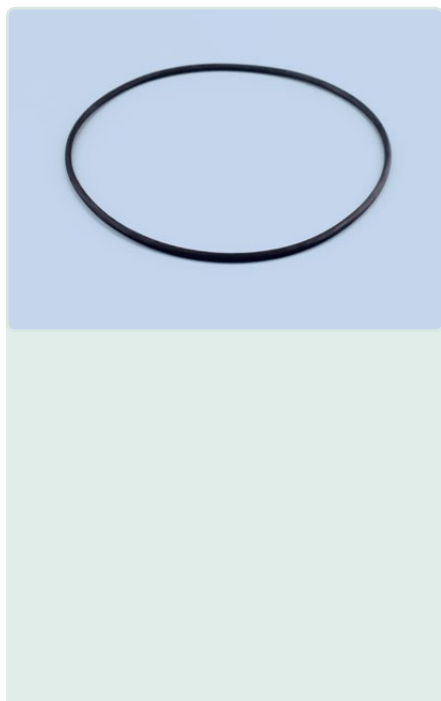


Inlay cap for revision nozzle

Outer diameter mm	Article no.			
	PP	PE	PVC	PE-el
90	99301	99302	99303	–
110	91090	90888	91264	100268
125	91091	90889	91265	–
140	99304	99305	99306	–
160	91092	90890	91266	100262
200	91093	90891	91267	100266
250	91094	90892	91268	–
280	91095	90893	91269	–



Other dimensions  
and materials on request.



O-ring for revision nozzle

Material Version	d* mm	Article no.
EPDM	90	91750
	110	91751
	125	91752
	140	91753
	160	91754
	200	91755
	250	91756
	280	91757
FPM Viton	90	91758
	110	91759
	125	91760
	140	91761
	160	91762
	200	91763
	250	91764
	280	91765

\*Diameter for revision nozzle



Union nut for revision nozzle

d* mm	Article no.	
	PP	PE-el
90	91913	–
110	91230	100269
125	91231	–
140	91914	–
160	91232	100263
200	91233	100265
250	91234	–
280	91235	–



\*Diameter for revision nozzle

You will find additional products in our main catalog  
or at [www.mwf-technik.de](http://www.mwf-technik.de)

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