

**Wuerth Industrial Services Malaysia**

# **W.TEC<sup>®</sup> COVER CAP**

**Innovative plastic protective elements**



## Table of contents

Page

### Preface

1

### Application

3

### Product range

Pipe protective cap WP 250	4-5
Sealing plug WP 300 F	6
Universal protector WP 600	7-9
Universal protector WP 620	10
Screw plug WP 700, for metric thread	11
Screw plug WP 700, for pipe thread	12
Screw cap WP 800, for metric thread	13
Screw cap WP 800, for pipe thread	13

### Material-technical characteristics

Physical properties	15
Resistance to chemical influences	16
Temperature resistance	17
Information on the environmental impact	18

### Your notes

19-20

#### Liability:

All information in this brochure has been carefully researched and compiled. Nevertheless, errors can occur, details can be translated incorrectly, information may be missing or the information provided may have changed in the meantime. Therefore we do not assume any guarantee or liability for the correctness, completeness, topicality or quality of the information provided. We do not accept any liability for damages, especially direct or indirect as well as material or immaterial arising from the use or misuse of information given in this brochure unless not based on intent or gross negligence of our part.

**Dear customer of Würth Industrie Service,**

Würth Industrie Service specialises in supplying the manufacturing industry in the field of automated C-Parts Management within the Würth Group. Originally located in Künzelsau as the Industry Division within Adolf Würth GmbH & Co. KG, the company was founded in 1999 as an independent subsidiary at the "Industriepark Würth" in Bad Mergentheim.



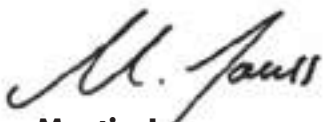
A specialised range consisting of more than 1,000,000 items forms the basis for professional industrial C-Parts Management. Besides DIN and standard parts, as well as connectors and fasteners, the product range also covers special parts and parts designed as per drawings to customer requirements, operating supplies (MRO) and much more. Industrial production, maintenance and repairs are supported by product and system solutions, as well as by technical application and design advice.

Under the name W.TEC® Würth Industrie Service in cooperation with leading manufacturers offers sophisticated and approved products which are tailored to the current and future needs of our customers. Being permanently in contact with the manufacturer ensures that individual wishes can be incorporated in the development and are realised within a short period of time. This is supported by competent contacts in our in-house team and in the field as well as by our accredited test laboratory under the terms of DIN EN ISO/IEC 17025.

W.TEC®-Products stands for solutions that meet the demands, for sector-specific innovations, for reliable quality and for technical service. We guarantee shortest delivery times due to the fact that standard dimensions are available on stock.

W.TEC®COVER CAP protect your employees, your constructions and attachment parts, facilitate work steps like painting and cleaning and are easy to handle.

We look forward to a cooperative partnership and we thank you for your confidence.

**Martin Jauss**

Head of Marketing &amp; IT

Würth Industrie Service GmbH &amp; Co. KG



Whether automotive, engineering or construction industry, complex constructions require a temporary protection against external and internal influences.

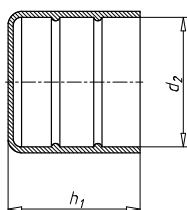
W.TEC® COVER CAP products protect against mechanical damage, dust and dirt, prevent liquids such as oil from leaking and protect your employees against injury during assembly. Additional work such as painting and cleaning will be considerably easier due to the fact that holes can be sealed.

Even during a possible transport W.TEC® COVER CAP protective elements offer a reliable protection. Fitting accuracy and suitable threads allow that our protective elements can be easily and securely applied and removed.



## PIPE PROTECTIVE CAP WP 250

Polyethylene, yellow



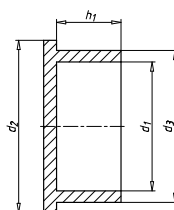
- Cylindrical protective cap
- Particularly suitable for straight pipes
- **Colour:** Yellow

Internal diameter (d2)	Height (h1)	Material	Art.-Nr.
5.3 mm	15.5 mm	LDPE	0597 250 054
5.6 mm	15.7 mm	LDPE	0597 250 056
6.2 mm	15 mm	LDPE	0597 250 062
6.3 mm	15.7 mm	LLDPE	0597 250 063
7.8 mm	18.1 mm	LDPE	0597 250 080
9.6 mm	17.7 mm	LDPE	0597 250 096
10.3 mm	19.1 mm	LDPE	0597 250 100
11.1 mm	15 mm	LDPE	0597 250 110
12.2 mm	19 mm	LDPE	0597 250 120
12.8 mm	18.9 mm	LDPE	0597 250 127
14.2 mm	13 mm	LDPE	0597 250 140
14.8 mm	20 mm	LDPE	0597 250 150
16.4 mm	20.8 mm	LDPE	0597 250 164
17.8 mm	20.7 mm	LDPE	0597 250 178
18.4 mm	21 mm	LDPE	0597 250 184
19.4 mm	19.7 mm	LDPE	0597 250 190
20.2 mm	21.6 mm	LDPE	0597 250 208
21.1 mm	21.8 mm	LDPE	0597 250 209
21.9 mm	25 mm	LDPE	0597 250 220
22 mm	20.6 mm	LDPE	0597 250 213
23.1 mm	23.5 mm	LDPE	0597 250 230
24.2 mm	19.4 mm	LDPE	0597 250 240
25.3 mm	25.7 mm	LDPE	0597 250 250
25.8 mm	26 mm	LDPE	0597 250 258
26.9 mm	26 mm	LDPE	0597 250 270
28 mm	25.5 mm	LDPE	0597 250 280
30.3 mm	29.5 mm	LDPE	0597 250 300
31 mm	28.6 mm	LDPE	0597 250 305
32.6 mm	28.6 mm	LDPE	0597 250 320
33 mm	28.4 mm	LDPE	0597 250 330
34 mm	29.5 mm	LDPE	0597 250 337
36.5 mm	29.7 mm	LDPE	0597 250 360
36.7 mm	9.8 mm	LDPE	0597 250 370
38.6 mm	29 mm	LDPE	0597 250 380
40.3 mm	29.8 mm	LDPE	0597 250 400
42.1 mm	28.7 mm	LDPE	0597 250 408
42.7 mm	29.5 mm	LDPE	0597 250 424
45.3 mm	36.5 mm	LDPE	0597 250 443
48.5 mm	37.4 mm	LDPE	0597 250 485
48.6 mm	36.7 mm	LDPE	0597 250 483
50.5 mm	29.6 mm	LDPE	0597 250 500
57.6 mm	36.5 mm	LDPE	0597 250 570
58.3 mm	51 mm	LDPE	0597 250 580

Internal diameter (d2)	Height (h1)	Material	Art.-Nr.
60.1 mm	37.6 mm	LDPE	<b>0597 250 600</b>
60.3 mm	37.3 mm	LDPE	<b>0597 250 603</b>
63.6 mm	37.5 mm	LDPE	<b>0597 250 635</b>
76.2 mm	37.5 mm	LDPE	<b>0597 250 760</b>
90.6 mm	36.5 mm	LDPE	<b>0597 250 889</b>
102 mm	34.2 mm	LDPE	<b>0597 251 030</b>
107.7 mm	35 mm	LDPE	<b>0597 251 080</b>
114.3 mm	35 mm	LDPE	<b>0597 251 143</b>
131.3 mm	37 mm	LDPE	<b>0597 251 330</b>
138.6 mm	36.1 mm	LDPE	<b>0597 251 397</b>
159 mm	36.6 mm	LDPE	<b>0597 251 590</b>
170.4 mm	36.5 mm	LDPE	<b>0597 251 683</b>
180 mm	40 mm	LDPE	<b>0597 251 800</b>
193.7 mm	37 mm	LDPE	<b>0597 251 937</b>
223 mm	36.4 mm	LDPE	<b>0597 252 191</b>
275.2 mm	36.3 mm	LDPE	<b>0597 252 730</b>
324 mm	37.4 mm	LLDPE	<b>0597 253 239</b>
363.2 mm	47.1 mm	LLDPE	<b>0597 253 556</b>
405 mm	56.5 mm	LLDPE	<b>0597 254 050</b>
419 mm	37 mm	LLDPE	<b>0597 254 190</b>
460.8 mm	56.6 mm	LLDPE	<b>0597 254 572</b>
508 mm	57 mm	LLDPE	<b>0597 255 080</b>
609.6 mm	65 mm	LLDPE	<b>0597 256 096</b>
710 mm	100 mm	HDPE	<b>0597 257 112</b>
810 mm	100 mm	HDPE	<b>0597 258 128</b>
914.4 mm	100 mm	HDPE	<b>0597 259 144</b>

## SEALING PLUG WP 300 F

Polyethylene, natural



### Application as

- Cap (external)
- Plug (internal)

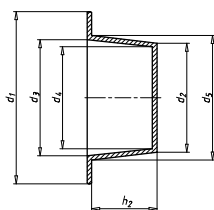
- **Material:** LDPE
- **Colour:** Natural

Nominal diameter (d3)	Internal diameter (d1)	Outer diameter (d2)	Insertion depth (h1)	Art.-Nr.
8.300 mm	4.9 mm	10.0 mm	3 mm	<b>0597 300 083</b>
9.200 mm	6.7 mm	14.3 mm	5.5 mm	<b>0597 300 092</b>
10.600 mm	8.6 mm	14.4 mm	5.5 mm	<b>0597 300 106</b>
11.300 mm	9.5 mm	14.4 mm	5.5 mm	<b>0597 300 113</b>
12.2 mm	10.2 mm	18.4 mm	7 mm	<b>0597 300 123</b>
14.400 mm	12.3 mm	18.7 mm	7 mm	<b>0597 300 144</b>
15.800 mm	13.4 mm	18.7 mm	7 mm	<b>0597 300 158</b>
16.500 mm	14 mm	18.7 mm	7 mm	<b>0597 300 165</b>
17.100 mm	14.7 mm	24.2 mm	9 mm	<b>0597 300 171</b>
18.500 mm	16.1 mm	24.3 mm	9 mm	<b>0597 300 185</b>
19.3 mm	17.2 mm	24.2 mm	9 mm	<b>0597 300 195</b>
23.7 mm	21.7 mm	29 mm	10 mm	<b>0597 300 237</b>
23.9 mm	20.9 mm	31.5 mm	9.9 mm	<b>0597 300 239</b>
24.8 mm	22.8 mm	28.3 mm	9 mm	<b>0597 300 247</b>
25.300 mm	22.8 mm	28.3 mm	8.9 mm	<b>0597 300 253</b>
27.700 mm	23 mm	32.6 mm	8.8 mm	<b>0597 300 277</b>
31.5 mm	27.7 mm	34.5 mm	11.6 mm	<b>0597 300 312</b>
32.600 mm	29 mm	34.3 mm	12 mm	<b>0597 300 326</b>
33.400 mm	30.7 mm	35.6 mm	12 mm	<b>0597 300 334</b>
40.400 mm	37.1 mm	45 mm	11.9 mm	<b>0597 300 404</b>
46.700 mm	41.9 mm	58.7 mm	18 mm	<b>0597 300 467</b>
59.600 mm	56.2 mm	73.5 mm	17.5 mm	<b>0597 300 596</b>
60.100 mm	56.2 mm	71.8 mm	18 mm	<b>0597 300 601</b>



# UNIVERSAL PROTECTOR WP 600

Polyethylene, red



### Application as

- Cap (external)
- Plug (internal)
- **Colour:** Red

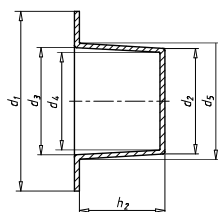
Outer diameter (d1)	Min./max. taper external diameter (d2/d5)	Insertion depth (h2)	Min./max. taper internal diameter (d4/d3)	Material	Art.-Nr.
4.9 mm	2.5-3.3 mm	5 mm	1.1-2.1 mm	LDPE	<b>0597 600 025</b>
5 mm	2.8-3.5 mm	4 mm	1.3-2.1 mm	LDPE	<b>0597 600 028</b>
5.9 mm	1.3-4 mm	8 mm	1.1-2.1 mm	LDPE	<b>0597 600 013</b>
7.4 mm	4.1-4.6 mm	5.5 mm	1-2.1 mm	LDPE	<b>0597 600 041</b>
7.4 mm	5-5.9 mm	8 mm	3.6-4.6 mm	LDPE	<b>0597 600 050</b>
7.6 mm	3.9-4.4 mm	3.1 mm	2-2 mm	LDPE	<b>0597 600 039</b>
8 mm	4.8-5.5 mm	5.7 mm	3.2-4 mm	LDPE	<b>0597 600 048</b>
8.9 mm	5.5-6.2 mm	5.9 mm	4-4.8 mm	LDPE	<b>0597 600 055</b>
10 mm	3.1-4.9 mm	8 mm	1.2-2.9 mm	LDPE	<b>0597 600 031</b>
10.6 mm	6-6.7 mm	5.9 mm	4.5-5.3 mm	LDPE	<b>0597 600 060</b>
11.5 mm	6.8-7.4 mm	6.8 mm	5-5.6 mm	LDPE	<b>0597 600 068</b>
12 mm	7.6-8.5 mm	8 mm	6-7.1 mm	LDPE	<b>0597 600 076</b>
12.8 mm	8.3-9.9 mm	9 mm	6.8-8 mm	LDPE	<b>0597 600 083</b>
13.2 mm	8.3-9.4 mm	9 mm	6.9-7.9 mm	LDPE	<b>0597 600 085</b>
14.1 mm	9.2-10.6 mm	10 mm	7.6-9 mm	LDPE	<b>0597 600 092</b>
15 mm	10.1-11 mm	9.9 mm	8.2-9.5 mm	LDPE	<b>0597 600 101</b>
16.2 mm	10.8-12.5 mm	9.6 mm	9.2-10.8 mm	LDPE	<b>0597 600 108</b>
16.9 mm	11.4-12.8 mm	9.8 mm	10.1-11.3 mm	LDPE	<b>0597 600 116</b>
17.9 mm	12-13.8 mm	11.1 mm	10.6-12.1 mm	LDPE	<b>0597 600 120</b>
18.9 mm	14.2-15.7 mm	12.8 mm	13-14.7 mm	LDPE	<b>0597 600 142</b>
19 mm	13.1-14.5 mm	11.1 mm	11.5-12.9 mm	LDPE	<b>0597 600 131</b>
19 mm	13.5-14.7 mm	11.7 mm	12-13.2 mm	LDPE	<b>0597 600 135</b>
19.1 mm	13.9-15.4 mm	12 mm	12.4-14 mm	LDPE	<b>0597 600 139</b>
20.1 mm	16.3-18 mm	13.4 mm	14.40-16.3 mm	LDPE	<b>0597 600 163</b>
20.3 mm	14.9-16.8 mm	12.8 mm	14-15.5 mm	LDPE	<b>0597 600 149</b>
23 mm	17.2-18.9 mm	14 mm	15.8-17.6 mm	LDPE	<b>0597 600 172</b>
24 mm	16.7-16.8 mm	8 mm	15.4-15.5 mm	LDPE	<b>0597 600 168</b>
24 mm	18.7-20 mm	9 mm	17.4-18.7 mm	LDPE	<b>0597 600 187</b>
24.2 mm	18.2-20.2 mm	13.9 mm	16.4-18.8 mm	LDPE	<b>0597 600 182</b>
25.3 mm	19.3-21.1 mm	13.7 mm	17.6-19.5 mm	LDPE	<b>0597 600 193</b>
25.7 mm	20.3-22.9 mm	16.6 mm	18.4-21.5 mm	LDPE	<b>0597 600 203</b>
25.9 mm	20.4-22.5 mm	15 mm	18.9-20.9 mm	LDPE	<b>0597 600 204</b>
26 mm	20.1-21.8 mm	17.2 mm	18.6-20.3 mm	LDPE	<b>0597 600 202</b>
26.9 mm	19.8-21 mm	8.9 mm	17.1-18.4 mm	LDPE	<b>0597 600 198</b>
27.7 mm	21.4-23.4 mm	15 mm	19.7-21.5 mm	LDPE	<b>0597 600 214</b>
28.8 mm	22.2-25.5 mm	15.5 mm	20.2-23.3 mm	LDPE	<b>0597 600 222</b>
29.5 mm	24.2-26 mm	13.7 mm	22.4-23.5 mm	LDPE	<b>0597 600 242</b>
30.7 mm	25.2-26.8 mm	13.9 mm	23.7-25.4 mm	LDPE	<b>0597 600 252</b>
32.4 mm	26.8-29.8 mm	16.4 mm	25.3-28.2 mm	LDPE	<b>0597 600 268</b>
34.8 mm	27.9-30.6 mm	13.9 mm	26-28.8 mm	LDPE	<b>0597 600 279</b>
35 mm	27.5-28.6 mm	13.7 mm	25.3-26.7 mm	LDPE	<b>0597 600 275</b>
35.5 mm	30.9-32.7 mm	17.8 mm	29.5-31.9 mm	LDPE	<b>0597 600 309</b>
36.2 mm	29.7-32 mm	17 mm	27.9-30.3 mm	LDPE	<b>0597 600 297</b>

Outer diameter (d1)	Min./max. taper external diameter (d2/d5)	Insertion depth (h2)	Min./max. taper internal diameter (d4/d3)	Material	Art.-Nr.
36.2 mm	30.7-32.8 mm	16.2 mm	29.1-31.1 mm	LDPE	<b>0597 600 307</b>
36.3 mm	24.6-28 mm	16.6 mm	22.8-26 mm	LDPE	<b>0597 600 249</b>
37.3 mm	31.3-33.7 mm	16.4 mm	29.8-32.2 mm	LDPE	<b>0597 600 316</b>
39.5 mm	33.1-35.2 mm	16.7 mm	31.7-33.4 mm	LDPE	<b>0597 600 331</b>
41 mm	35.6-38.2 mm	16.5 mm	33.7-36.5 mm	LDPE	<b>0597 600 357</b>
41.8 mm	34.3-37.5 mm	17.5 mm	33-36 mm	LDPE	<b>0597 600 343</b>
44.6 mm	38-40 mm	17.1 mm	36.6-38.4 mm	LDPE	<b>0597 600 377</b>
45.7 mm	36.8-39.5 mm	16.8 mm	35.3-38 mm	LDPE	<b>0597 600 368</b>
46.5 mm	37.8-40.5 mm	18.3 mm	36.8-39.2 mm	LDPE	<b>0597 600 378</b>
46.8 mm	39.3-42.2 mm	19.9 mm	38-40.8 mm	LDPE	<b>0597 600 393</b>
47.3 mm	41.1-44.5 mm	16.8 mm	40.1-42.6 mm	LDPE	<b>0597 600 411</b>
48 mm	41.4-43.7 mm	17.9 mm	40-42 mm	LDPE	<b>0597 600 414</b>
50 mm	44.2-46.4 mm	19 mm	42.4-44.6 mm	LDPE	<b>0597 600 442</b>
51.3 mm	44.4-47.3 mm	18.7 mm	42.3-44.9 mm	LDPE	<b>0597 600 444</b>
52.4 mm	45.6-48 mm	18.9 mm	43.5-45.9 mm	LDPE	<b>0597 600 456</b>
52.7 mm	46.2-48.7 mm	18.5 mm	44.6-48.8 mm	LDPE	<b>0597 600 462</b>
53.8 mm	46.9-49.3 mm	18.9 mm	45.7-48.1 mm	LDPE	<b>0597 600 469</b>
56.5 mm	49.6-51.8 mm	18.8 mm	47.8-50.1 mm	LDPE	<b>0597 600 491</b>
57.5 mm	49.4-49.7 mm	8.9 mm	46.4-47.5 mm	LDPE	<b>0597 600 494</b>
58.2 mm	51.7-55.5 mm	19.6 mm	50.1-53.4 mm	LDPE	<b>0597 600 519</b>
59.4 mm	47.9-52.3 mm	14.5 mm	46-48.7 mm	LDPE	<b>0597 600 479</b>
59.6 mm	50.8-54.3 mm	19.8 mm	49.4-52.6 mm	LDPE	<b>0597 600 508</b>
62.3 mm	55.7-58.3 mm	19.6 mm	54.1-56.4 mm	LDPE	<b>0597 600 555</b>
62.4 mm	46.5-49 mm	18.4 mm	45.7-47 mm	LDPE	<b>0597 600 465</b>
65.1 mm	58.3-60.7 mm	19.3 mm	56.9-59 mm	LDPE	<b>0597 600 583</b>
65.2 mm	57.5-59.6 mm	19.6 mm	55.9-57.6 mm	LDPE	<b>0597 600 575</b>
67.7 mm	57.8-61.7 mm	13 mm	56-59.9 mm	LDPE	<b>0597 600 578</b>
69 mm	62.7-66.5 mm	19.7 mm	61.1-64.6 mm	LDPE	<b>0597 600 630</b>
70 mm	59.6-63.7 mm	18.8 mm	58.1-62 mm	LDPE	<b>0597 600 596</b>
70 mm	63.3-66 mm	20.4 mm	61-63.7 mm	LDPE	<b>0597 600 633</b>
72.3 mm	64.8-68.5 mm	28.6 mm	63.5-65.6 mm	LDPE	<b>0597 600 652</b>
72.7 mm	66.1-68.4 mm	19.8 mm	64.2-66.7 mm	LDPE	<b>0597 600 661</b>
74.2 mm	67.7-70.4 mm	20.8 mm	66.2-69 mm	LDPE	<b>0597 600 677</b>
75 mm	67.8-72.4 mm	22.1 mm	66.3-70.2 mm	LDPE	<b>0597 600 684</b>
78.1 mm	70.1-74.3 mm	20.7 mm	69.2-71.8 mm	LDPE	<b>0597 600 701</b>
78.3 mm	68.6-74.2 mm	29.1 mm	67-70.6 mm	LDPE	<b>0597 600 686</b>
80.9 mm	73.8-76 mm	20.9 mm	71.8-74.4 mm	LDPE	<b>0597 600 738</b>
82.6 mm	74.8-77.7 mm	21.5 mm	72.1-75.6 mm	LDPE	<b>0597 600 748</b>
84.8 mm	77.9-80.3 mm	20.4 mm	76.1-78.1 mm	LDPE	<b>0597 600 781</b>
86 mm	78.8-82 mm	21.9 mm	77.5-80.2 mm	LDPE	<b>0597 600 788</b>
87.8 mm	77.9-83.8 mm	30.4 mm	76.5-81.8 mm	LDPE	<b>0597 600 779</b>
87.8 mm	79.6-84.5 mm	25.7 mm	78-72.8 mm	LDPE	<b>0597 600 804</b>
88.1 mm	80.9-83.2 mm	21.8 mm	78.4-81.2 mm	LDPE	<b>0597 600 809</b>
91 mm	83.4-86.3 mm	21.4 mm	81-83.7 mm	LDPE	<b>0597 600 834</b>
92 mm	84.1-87.3 mm	21.6 mm	83.3-85.6 mm	LDPE	<b>0597 600 850</b>
95 mm	87.7-90.5 mm	21.8 mm	85.8-88.6 mm	LDPE	<b>0597 600 877</b>
95 mm	88-90.9 mm	21.8 mm	86.6-89 mm	LDPE	<b>0597 600 880</b>
100 mm	90.1-92.3 mm	23.4 mm	86.6-87.8 mm	LDPE	<b>0597 600 901</b>
100.5 mm	94.2-97.3 mm	23.8 mm	92-96 mm	LDPE	<b>0597 600 942</b>
102 mm	91.2-95.7 mm	23.4 mm	89.4-94.2 mm	LDPE	<b>0597 600 912</b>
104.2 mm	96.3-99.2 mm	22.5 mm	93.2-97.6 mm	LDPE	<b>0597 600 963</b>
104.6 mm	98.9-101.2 mm	21.9 mm	97.2-98.7 mm	LDPE	<b>0597 600 989</b>
111.1 mm	103.5-107.1 mm	22.8 mm	101.6-105.2 mm	LDPE	<b>0597 601 035</b>

Outer diameter (d1)	Min./max. taper external diameter (d2/d5)	Insertion depth (h2)	Min./max. taper internal diameter (d4/d3)	Material	Art.-Nr.
113.7 mm	103.9-110.7 mm	31.5 mm	102.0-113.7 mm	LDPE	<b>0597 601 039</b>
117.2 mm	109.4-112.3 mm	24 mm	107.2-110.6 mm	LLDPE	<b>0597 601 094</b>
118.2 mm	111.9-114.5 mm	24.3 mm	110.5-113.5 mm	LDPE	<b>0597 601 119</b>
119.5 mm	110.5-112.2 mm	27.5 mm	108-111 mm	LDPE	<b>0597 601 105</b>
137 mm	123.5-126.1 mm	24.9 mm	121.5-124.5 mm	LDPE	<b>0597 601 235</b>
138 mm	129.9-135 mm	32.5 mm	126.9-132.9 mm	LDPE	<b>0597 601 295</b>
139.5 mm	128.6-131.6 mm	25.6 mm	126.5-129.5 mm	LDPE	<b>0597 601 262</b>
143.5 mm	126.2-133.6 mm	36.5 mm	123.4-130.6 mm	LDPE	<b>0597 601 336</b>
143.9 mm	133.8-136 mm	26.9 mm	131.1-134.1 mm	LDPE	<b>0597 601 338</b>
152.5 mm	142.8-148.7 mm	28.5 mm	141.4-146.9 mm	LDPE	<b>0597 601 428</b>
166.3 mm	148.7-152.2 mm	27.3 mm	144.9-149.8 mm	LDPE	<b>0597 601 487</b>
167 mm	151.6-157.9 mm	29.1 mm	149.7-155.7 mm	LDPE	<b>0597 601 516</b>
168.2 mm	157.4-160.5 mm	27.9 mm	156.1-149.4 mm	LDPE	<b>0597 601 574</b>
176.9 mm	165.5-168.2 mm	28.3 mm	160.3-163.7 mm	LDPE	<b>0597 601 655</b>
180 mm	167.5-171.1 mm	28 mm	165.1-169.5 mm	LDPE	<b>0597 601 675</b>
189 mm	178.3-181.3 mm	27.8 mm	176.1-179.4 mm	LDPE	<b>0597 601 783</b>
215.9 mm	196.7-200.8 mm	31.6 mm	194.2-198.1 mm	LDPE	<b>0597 601 967</b>
218 mm	199.5-203.9 mm	33.2 mm	196.9-200.9 mm	LDPE	<b>0597 601 995</b>
332.7 mm	303.4-314 mm	55 mm	300.1-310.8 mm	LLDPE	<b>0597 603 034</b>

# UNIVERSAL PROTECTOR WP 620

Polyethylene, red



**Application as**

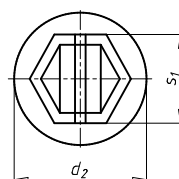
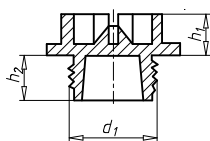
- Cap (external)
- Plug (internal)

- **Material:** LDPE
- **Colour:** Red

Outer diameter (d1)	Min./max. taper external diameter (d2 / d5)	Insertion depth (h2)	Min./max. taper internal diameter (d4 / d3)	Art.-Nr.
25.7 mm	14.3-16.1 mm	11.8 mm	12.7-14.5 mm	<b>0597 620 161</b>
29 mm	17-18.7 mm	13.8 mm	15.8-17.3 mm	<b>0597 620 190</b>
30 mm	17.8-20.2 mm	14 mm	16.3-18.8 mm	<b>0597 620 204</b>
33 mm	20.2-22.4 mm	15 mm	18.9-20.9 mm	<b>0597 620 224</b>
37 mm	24-25.7 mm	13.8 mm	22.7-24.2 mm	<b>0597 620 257</b>
40 mm	24.9-27.2 mm	13.8 mm	23.7-25.7 mm	<b>0597 620 272</b>
48 mm	31-33.4 mm	17.3 mm	29.5-31.9 mm	<b>0597 620 310</b>
54 mm	37.0-39.9 mm	16.5 mm	35.4-38.6 mm	<b>0597 620 399</b>
67.9 mm	41.7-44.7 mm	16.3 mm	39.2-42.8 mm	<b>0597 620 447</b>

## SCREW PLUG WP 700, FOR METRIC THREAD

Polyethylene, yellow

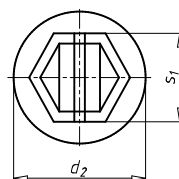
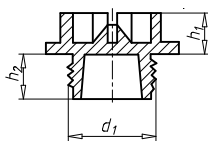


- Particularly suitable for hydraulic components
- **Material:** HDPE
- **Colour:** Yellow

Thread type x nominal diameter (d1)	Pitch	Outer diameter (d2)	Height (h1)	Insertion depth (h2)	Width across flats (s1)	Art.-Nr.
M8	1.25 mm	16.6 mm	7.4 mm	8.4 mm	12 mm	<b>0597 270 080</b>
M10	1 mm	16.6 mm	7.4 mm	8.5 mm	12 mm	<b>0597 270 100</b>
M10	1.5 mm	16.6 mm	7.4 mm	8.5 mm	12 mm	<b>0597 270 101</b>
M12	1.500 mm	17.8 mm	7.3 mm	8.1 mm	17 mm	<b>0597 270 125</b>
M12	1.75 mm	20.6 mm	7.5 mm	8.5 mm	17 mm	<b>0597 270 120</b>
M14	1.500 mm	20.6 mm	7 mm	8.1 mm	17 mm	<b>0597 270 145</b>
M16	1.5 mm	20.6 mm	7.5 mm	8.5 mm	17 mm	<b>0597 270 165</b>
M16	2 mm	25 mm	7.5 mm	8.4 mm	17 mm	<b>0597 270 160</b>
M18	1.500 mm	20.6 mm	7.5 mm	8 mm	17 mm	<b>0597 270 185</b>
M20	1.500 mm	26.5 mm	7.2 mm	8.3 mm	22 mm	<b>0597 270 205</b>
M20	2.5 mm	28.5 mm	7.5 mm	8.5 mm	22 mm	<b>0597 270 200</b>
M22	1.500 mm	26.5 mm	7.5 mm	8.3 mm	22 mm	<b>0597 270 225</b>
M24	1.500 mm	26.5 mm	7.5 mm	8.3 mm	22 mm	<b>0597 270 245</b>
M26	1.500 mm	34.5 mm	7.5 mm	8.3 mm	27 mm	<b>0597 270 265</b>
M27	2.000 mm	32.5 mm	7.5 mm	11.5 mm	27 mm	<b>0597 270 272</b>
M28	1.500 mm	35 mm	7.5 mm	12 mm	27 mm	<b>0597 270 285</b>
M30	1.500 mm	38 mm	7.3 mm	8.3 mm	32 mm	<b>0597 270 305</b>
M30	2.000 mm	35 mm	7.5 mm	8.3 mm	27 mm	<b>0597 270 302</b>
M33	2.000 mm	38.5 mm	7.5 mm	8 mm	32 mm	<b>0597 270 332</b>
M36	2.000 mm	44 mm	7.2 mm	9.3 mm	32 mm	<b>0597 270 362</b>
M42	2.000 mm	53 mm	8.3 mm	8.6 mm	36 mm	<b>0597 270 422</b>
M52	2.000 mm	59.3 mm	8.6 mm	9.5 mm	36 mm	<b>0597 270 522</b>

## SCREW PLUG WP 700, FOR PIPE THREAD

Polyethylene, yellow



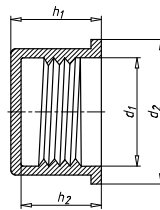
- For pipe thread according to ISO 228-1 & DIN EN 10226
- Particularly suitable for hydraulic components

- **Material:** HDPE
- **Colour:** Yellow

Thread type x nominal diameter (d1)	Outer diameter (d2)	Height (h1)	Insertion depth (h2)	Width across flats (s1)	Art.-Nr.
G1/8	16.6 mm	7.4 mm	8.5 mm	12 mm	<b>0597 370 018</b>
G1/4	20.5 mm	7.5 mm	7.8 mm	17 mm	<b>0597 370 014</b>
G3/8	20.5 mm	7.4 mm	8 mm	17 mm	<b>0597 370 038</b>
G1/2	26.4 mm	7.5 mm	7.8 mm	22 mm	<b>0597 370 012</b>
G5/8	28.6 mm	7.5 mm	8.3 mm	22 mm	<b>0597 370 058</b>
G3/4	26.5 mm	7.5 mm	8.5 mm	22 mm	<b>0597 370 034</b>
G1	38.3 mm	7.5 mm	8.2 mm	32 mm	<b>0597 370 100</b>
G1-1/4	53 mm	8.2 mm	13.8 mm	36 mm	<b>0597 370 114</b>
G1-1/2	53 mm	8.2 mm	10.9 mm	36 mm	<b>0597 370 112</b>
G2	66 mm	11 mm	12 mm	41 mm	<b>0597 370 200</b>
G3	93 mm	7.8 mm	15.5 mm	70 mm	<b>0597 370 300</b>

## SCREW CAP WP 800, FOR METRIC THREAD

Polyethylene, yellow



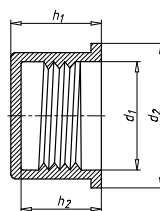
For protecting pipes and fittings with male thread

- **Material:** HDPE
- **Colour:** Yellow

Thread type x nominal diameter (d1)	Pitch	Outer diameter (d2)	Height (h1)	Interior height (h2)	Art.-Nr.
M8	1 mm	12 mm	10.5 mm	9 mm	<b>0597 280 081</b>
M12	1 mm	17 mm	12 mm	10.3 mm	<b>0597 280 121</b>
M12	1.5 mm	17 mm	11.9 mm	10.1 mm	<b>0597 280 125</b>
M14	1.5 mm	19.1 mm	11.9 mm	10.5 mm	<b>0597 280 145</b>
M16	1.5 mm	20.9 mm	13.5 mm	11.8 mm	<b>0597 280 165</b>
M18	1.5 mm	22.40 mm	12.50 mm	10.40 mm	<b>0597 280 185</b>
M20	1.5 mm	25.30 mm	15.30 mm	13.90 mm	<b>0597 280 205</b>
M22	1.5 mm	26.8 mm	14.5 mm	13.7 mm	<b>0597 280 225</b>
M24	1.5 mm	29.5 mm	13.5 mm	12 mm	<b>0597 280 245</b>
M30	2 mm	36 mm	14.5 mm	12.8 mm	<b>0597 280 302</b>
M36	1.5 mm	41.4 mm	17 mm	15.5 mm	<b>0597 280 365</b>
M42	2 mm	49.1 mm	16.3 mm	14.8 mm	<b>0597 280 422</b>
M52	2 mm	59.3 mm	18.7 mm	16.9 mm	<b>0597 280 522</b>

## SCREW CAP WP 800, FOR PIPE THREAD

Polyethylene, yellow



- For pipe thread according to ISO 228-1 & DIN EN 10226
- Particularly suitable for hydraulic components

- **Colour:** Yellow

Thread type x nominal diameter (d1)	Outer diameter (d2)	Height (h1)	Interior height (h2)	Material	Art.-Nr.
G1/8	13.0 mm	11.0 mm	10.3 mm	LLDPE	<b>0597 802 018</b>
G1/4	16.9 mm	14.3 mm	13.5 mm	LLDPE	<b>0597 380 014</b>
G3/8	21.2 mm	13.3 mm	12 mm	LLDPE	<b>0597 380 038</b>
G1/2	26.8 mm	14.6 mm	13.8 mm	LLDPE	<b>0597 380 012</b>
G3/4	32 mm	15.4 mm	13.6 mm	HDPE	<b>0597 380 034</b>
G1	38.8 mm	24 mm	22.8 mm	HDPE	<b>0597 380 100</b>
G1-1/4	48.9 mm	24.6 mm	23.5 mm	LLDPE	<b>0597 380 114</b>
G1-1/2	55.4 mm	27.9 mm	25.9 mm	HDPE	<b>0597 380 112</b>
G2	69.6 mm	28.6 mm	26.8 mm	HDPE	<b>0597 380 200</b>
G2-1/2	82.6 mm	26 mm	24.5 mm	HDPE	<b>0597 380 212</b>





## Physical properties

Different plastics are used for manufacturing protective caps and plugs. The following table contains information on technical properties of the materials and on their resistance regarding the short-term effect of different chemical compounds and liquids.

Abbreviation	Designation	Density	Elongation after rupture	Tensile strength	Modulus of elasticity	Water absorption
LDPE	Polyethylen, low density	0.92 g/cm <sup>3</sup>	>550%	8 MPa	0.17 GPa	<0.1%
LLDPE	Polyethylen, linear low density	0.93 g/cm <sup>3</sup>	>500%	11 MPa	0.32 GPa	<0.1%
HDPE	Polyethylen, high density	0.96 g/cm <sup>3</sup>	>400%	26 MPa	1.15 GPa	<0.1%
PA 6	Polyamid 6	1.13 g/cm <sup>3</sup>	>50%	50 MPa	1.2 GPa	9%
PA 6.6	Polyamid 6.6	1.13 g/cm <sup>3</sup>	>50%	60 MPa	1.8 GPa	8%
PA 6.6 m/15%	Polyamid 6.6 mit 15 % Glasfaser	1.23 g/cm <sup>3</sup>	>10%	100 MPa	4.2 GPa	6%
PS	Polystyrol	1.04 g/cm <sup>3</sup>	>2%	42 MPa	3.2 GPa	0.06%
PP	Polypropylen	0.91 g/cm <sup>3</sup>	>50%	35 MPa	1.55 GPa	<0.1%
EVA	Ethylenvinylacetat	0.94 g/cm <sup>3</sup>	750%	19 MPa	0.07 GPa	0.10%
TPE	Thermoplastisches Elastomer	0.98 g/cm <sup>3</sup>	460%	8.3 MPa	0.06 GPa	0%
SI	Polysiloxane (Silicon)	1.36 g/cm <sup>3</sup>	700%	7.6 MPa	-	0%
PF	Phenolplast (Bakelit)	1.40 g/cm <sup>3</sup>	4%	45 MPa	8 MPa	0.50%

The values given in the table are reference values and have to be checked for every single application.

**Resistance to chemical influences**

	LDPE	LLDPE	HDPE	PA 6	PA 6.6	PA 6.6 15%GF	PS	PP	EVA	TPE <sup>2</sup>	SI	Bake- lit
Water (cold)	●	●	●	●	●	●	●	●	●	●	●	●
Water (warm)	●	●	●	◻	◻	●	●	●	●	●	●	●
Chlorine solution	○	○	●	○	○	○	◻	○	○	●	◻	
Engine oil	●	●	●	●	●	●	○	○	◻	○	◻	●
Diesel oil	◻	◻	◻	●	●	●	○	○	◻	○	◻	●
Silicone oil	◻	◻	●	●	●	●	●	◻	○	○		●
Petrol	◻	◻	●	●	●	●	○	○	○	◻	◻	●
Acetone	◻	◻	◻	●	●	●	○	○	○	◻	◻	
Alcohol	●	●	●	◻	◻	◻	○	●	●	●	●	●
Nitric acid 10%	●	●	●	●	●	●	●	●		●	●	
Ammonia 30%	●	●	●	●	●	●	●	◻	●	◻	○	◻
Chromic acid 20%	◻	○	○	○	○	○	●			●	●	
Phosphoric acid 20%	●	●	●	○	○	○	●	●		●	○	
Hydrochloric acid 35%	●	●	●	○	○	○	●	●	●	◻	○	◻
Sulphuric acid 40%	◻	◻	●	○	○	○	●	●	○	●	○	○
Sodium hydroxide 10%	○	○	●	○	○	○	◻	◻	○	◻	○	○
UV radiation <sup>1</sup>	○	○	○	◻	◻	◻	○	○	○	●	●	◻

● resistant      ◻ partly resistant      ○ no tolerance

The data given in the table are reference values as the temperature and the exposure time play an important role for the determination of the resistance to chemical influences. Individual tests have to be carried out for every single application. The values given in the table refer to an ambient temperature of approx. 20 °C.

<sup>1</sup> Some plastic types can be resistant to UV radiation by adding UV stabilisers or by using black products.

<sup>2</sup> TPE is not suitable for caps and plugs that are in contact with oil as oil makes them swell. However, this quality ensures a very tight seal and in combination with threaded plugs it is therefore used for sealing.

**Temperature resistance**

Abbreviation	Designation	Hardness	Min.	Temporary max.	Permanent max.
LDPE	Polyethylene, low density	Soft and elastic	-30°C	+70°C	+50°C
LLDPE	Polyethylene, linear low density	Soft and elastic	-30°C	+80°C	+70°C
HDPE	Polyethylene, high density	Relatively stiff	-30°C	+110°C	+80°C
PA 6	Polyamide 6	Hard and tough	-30°C	+160°C	+70°C
PA 6.6	Polyamide 6.6	Hard and tough	-30°C	+200°C	+90°C
PA 6.6 m/15%	Polyamide 6.6 with 15% glass fibre	Hard and tough	-30°C	+240°C	+120°C
PS	Polystyrene	Hard and brittle	-10°C	+80°C	+70°C
PP	Polypropylene	Stiff and hard	-10°C	+154°C	+110°C
EVA	Ethylene vinyl acetate	Very soft and elastic	-60°C	+65°C	+55°C
TPE	Thermoplastic elastomer	Extremely soft and elastic	-60°C	+150°C	+135°C
SI	Polysiloxane (Silicone)	Extremely soft and elastic	-50°C	+315°C	+230°C

Temperatures: Dimensionally stable without load

The values given in the table are reference values as they do not include parameters of real products such as a sample or the wall thickness. Individual tests have to be carried out for every single application.

The short-term maximum temperature is the time needed for powder-coating a product.

**Information on the environmental impact**

Abbreviation	Designation	Calorific value	Release of
LDPE	Polyethylene, low density	88.55 MJ/kg	Water (H <sub>2</sub> O), Carbon dioxide (CO <sub>2</sub> )
LLDPE	Polyethylene, linear low density		Water (H <sub>2</sub> O), Carbon dioxide (CO <sub>2</sub> )
HDPE	Polyethylene, high density	80.98 MJ/kg	Water (H <sub>2</sub> O), Carbon dioxide (CO <sub>2</sub> )
PA 6	Polyamide 6		Water (H <sub>2</sub> O), Carbon dioxide (CO <sub>2</sub> ), Carbon monoxide (CO), Nitrogen (N <sub>2</sub> )
PA 6.6	Polyamide 6.6	143.61 MJ/kg	Water (H <sub>2</sub> O), Carbon dioxide (CO <sub>2</sub> ), Carbon monoxide (CO), Nitrogen (N <sub>2</sub> )
PA 6.6 m/15%	Polyamide 6.6 with 15 % glass fibre		Water (H <sub>2</sub> O), Carbon dioxide (CO <sub>2</sub> ), Carbon monoxide (CO), Nitrogen (N <sub>2</sub> )
PS	Polystyrene	83.64 MJ/kg	Water (H <sub>2</sub> O), Carbon dioxide (CO <sub>2</sub> ), Carbon monoxide (CO)
PP	Polypropylene	80.03 MJ/kg	Water (H <sub>2</sub> O), Carbon dioxide (CO <sub>2</sub> ), Carbon monoxide (CO)
EVA	Ethylene vinyl acetate		Water (H <sub>2</sub> O), Carbon dioxide (CO <sub>2</sub> )
TPE	Thermoplastic elastomer	48.15 MJ/kg	Water (H <sub>2</sub> O), Carbon dioxide (CO <sub>2</sub> ), Nitrogen (N <sub>2</sub> )
SI	Polysiloxane (Silicon)		Carbon dioxide (CO <sub>2</sub> ), Carbon monoxide (CO), Formaldehyde CH <sub>2</sub> O
PF	Phenoplast (Bakelite)		Water (H <sub>2</sub> O), Carbon dioxide (CO <sub>2</sub> ), Ammonia (NH <sub>3</sub> )

The values given in the table are only reference values. Individual tests have to be carried out for every single application. Standard combustion takes place in an incineration plant at approx. 1,100 °C. In case of burning below 1,100 °C harmful waste could be produced. Therefore it is not recommended to use this disposal method.

**Free from harmful substances**

- **EC Directive 2011/65/EU; (RoHS)**
- **EC Directive 2002/96/EG; (WEEE)**
- **EC Rectification 2003/11/EG**
- **VDA list (GADSL)**
- **REACH**





**In cooperation with**

**DBI plastics** 

Protect your business

# W.TEC<sup>®</sup> COVER CAP

**Innovative plastic protective elements**

Wuerth Industrial Services Malaysia Sdn. Bhd. (879037-K)  
Lot 806, Jalan Subang 5, Taman Perindustrian Subang,  
47600 Subang Jaya, Selangor, Malaysia.  
T +60 3 8021 0200 F +60 3-8021 0210  
info@wuerth-industry.my  
www.wuerth-industry.my

© Würth Industrie Service GmbH & Co. KG

Printed in Germany, all right reserved  
Responsible for the content: Martin Jauss/M  
Editor: Ruben Link/MPM  
MW - FA - AH - STEP - DBRO609 - 1' - 09/17

Printed on environmentally friendly paper. We reserve the right to make product changes at any time and without prior notice or information, if in our opinion the quality is improved by doing this. Illustrations are examples that may differ from the delivered goods. We reserve the right to make errors and we do not assume any liability for misprints. Our General Terms and Conditions apply.