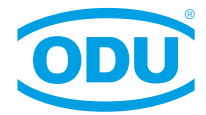


ODU DISPOSABLE SYSTEMS



Economical system solutions



Economical system solutions



Applications:

- Medical electronics

Features:

- Economical system solutions including cable and cable assembly
- Mechanical keying possibilities
- ETO sterilizable
- DEHP free
- Wipe disinfection
- 0.9% NaCl resistant
- Very space saving
- More than 5 000 mating cycles
- Blind mating possible.

The latest version of this catalogue is posted on our websites:

www.odu.de

www.odu-usa.com

www.odu-china.com

www.disposable-connector.com

All dimensions in mm.

All figures are illustrations or photos.

Changes reserved.

Content

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3	ODU MEDI-SNAP Disposable – A5 – A6	13 21	
4	Technical information	29	

Order information

How to find the right connector:

Choose on page 6 one type of connector with the desired features:

- ODU MINI-MED with PVC cable
- ODU MINI-MED with silicone cable
- ODU MEDI-SNAP, style A5
- ODU MEDI-SNAP, style A6

In the tables you will find the part numbers according to cable length and positions:

- ODU MINI-MED with PVC cable page 7
- ODU MINI-MED with silicone cable page 7
- ODU MEDI-SNAP, style A5 page 13
- ODU MEDI-SNAP, style A6 page 21

Product description



Important issues at a glance



- Economical system solutions including cable and cable assembly
- Break-apart connectors
- Mechanical keying possibilities
- ETO sterilizable
- DEHP free
- Wipe disinfection
- 0.9% NaCl resistant
- Very space saving
- More than 5.000 mating cycles
- Different cable length available
- Suitable receptacles and in-line receptacles available
- Operating temperature:
 - 25° C up to +80° C or rather -15° C up to +80° C
- Blind mating.

Assistant to find the right connector

	ODU MINI-MED with PVC cable	ODU MINI-MED with silicone cable	ODU MEDI-SNAP type A5	ODU MEDI-SNAP type A6
Protection class IP 68 in mated condition	✓	✓		
Protection class IP 67 in mated condition*			✓	✓
Assembled with extreme flexible silicone cable		✓		
Assembled with PVC cable	✓		✓	✓
Receptacle/In-line receptacle available	✓	✓	✓	✓
Economical solution up to 5 000 pieces	✓	✓	✓	
Economical solution from 5 000 pieces	✓	✓		✓
2- up to 6-positions	✓	✓	✓	✓
7- up to 14-positions			✓	

* in combination with receptacle

ODU MINI-MED
assembled with PVC cable or
extreme flexible silicone cable



Features ODU MINI-MED

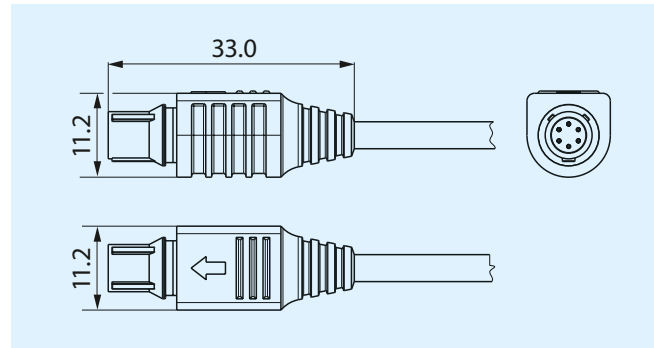


- 2- to 6-positions
- Protection class IP 68 in mated condition
- Mechanical keying
- Turned contacts
- Mating cycles: 5 000
- Operating temperature:
PVC cable: -15° C to +80° C
Silicone cable: -25° C to +80° C
- Blind mating possible
- Assembled with PVC or extreme flexible silicone cable
- FDA conform cable sheath (silicone cable)
- Available in cable length:
0.5 m / 1.0 m / 1.5 m / 2.0 m / 3.0 m / 5.0 m
- ETO sterilizable
- DEHP free
- Wipe disinfection
- 0.9% NaCl resistant.

Inserts and technical features

Positions	Contact diameter mm	Clearance and creepage distance acc. DIN EN 60664-1 (2003) mm	Cable cross section		Max. current load acc. DIN 60512-5-2 (2003) (max. ambient temperature 50° C) complete in A	Test voltage acc. SAE 13441 (1998) V	Insert	
			AWG	mm ²			View from termination side Pin part	Socket
02	0.9	0.9	22	0.38	8	875		
03	0.9	0.7	22	0.38	8	875		
04	0.7	0.7	26	0.14	4	875		
05	0.7	0.6	26	0.14	4	750		
06	0.5	0.7	28	0.08	3	750		

Plug including cable, cable assembly and overmolding



Order information plug including cable and cable assembly, cable end cut

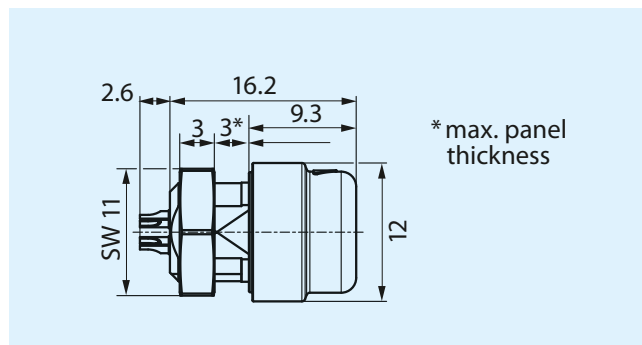
Assembled with PVC cable white, (similar RAL 9003), UL style 2464

Positions	Cable length						Cable diameter mm	Cross section	
	0.50 m	1.00 m	1.50 m	2.00 m	3.00 m	5.00 m		mm ²	AWG
02	C00.707.100.020.013	C00.707.100.020.014	C00.707.100.020.015	C00.707.100.020.016	C00.707.100.020.017	C00.707.100.020.018	4.1	0.38	22
03	C00.707.100.030.013	C00.707.100.030.014	C00.707.100.030.015	C00.707.100.030.016	C00.707.100.030.017	C00.707.100.030.018	4.6	0.38	22
04	C00.707.100.040.013	C00.707.100.040.014	C00.707.100.040.015	C00.707.100.040.016	C00.707.100.040.017	C00.707.100.040.018	4.1	0.14	26
05	C00.707.100.050.013	C00.707.100.050.014	C00.707.100.050.015	C00.707.100.050.016	C00.707.100.050.017	C00.707.100.050.018	4.4	0.14	26
06	C00.707.100.060.013	C00.707.100.060.014	C00.707.100.060.015	C00.707.100.060.016	C00.707.100.060.017	C00.707.100.060.018	4.4	0.08	28

Assembled with high flexible silicon cable, grey (similar RAL 7045), FDA conform cable jacket

Positions	Cable length						Cable diameter mm	Cross section	
	0.50 m	1.00 m	1.50 m	2.00 m	3.00 m	5.00 m		mm ²	AWG
02	C00.707.100.020.001	C00.707.100.020.002	C00.707.100.020.003	C00.707.100.020.004	C00.707.100.020.005	C00.707.100.020.006	4.4	0.38	22
03	C00.707.100.030.001	C00.707.100.030.002	C00.707.100.030.003	C00.707.100.030.004	C00.707.100.030.005	C00.707.100.030.006	4.6	0.38	22
04	C00.707.100.040.001	C00.707.100.040.002	C00.707.100.040.003	C00.707.100.040.004	C00.707.100.040.005	C00.707.100.040.006	4.1	0.14	26
05	C00.707.100.050.001	C00.707.100.050.002	C00.707.100.050.003	C00.707.100.050.004	C00.707.100.050.005	C00.707.100.050.006	4.4	0.14	26
06	C00.707.100.060.001	C00.707.100.060.002	C00.707.100.060.003	C00.707.100.060.004	C00.707.100.060.005	C00.707.100.060.006	4.4	0.08	28

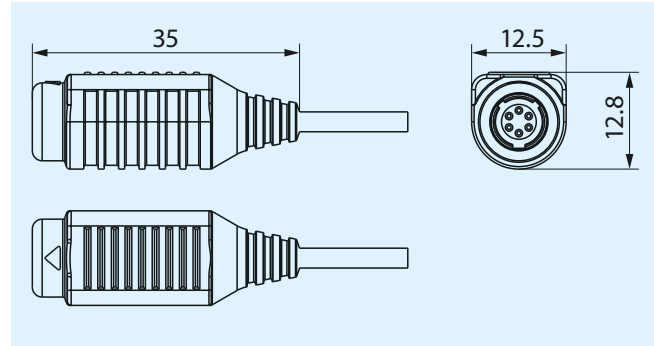
Receptacle



Order information receptacle

Positions		Cross section	
		mm ²	AWG
02	756.199.404.000.000	0.38	22
03	756.199.403.000.000	0.38	22
04	756.199.402.000.000	0.14	26
05	756.199.401.000.000	0.14	26
06	756.199.400.000.000	0.08	28

In-line receptacle including cable, cable assembly and overmolding



Order information plug including cable and cable assembly, cable end cut

Assembled with PVC cable, white (similar RAL 9003), UL style 2464

Positions	Cable length						Cable diameter mm	Cross section	
	0.50 m	1.00 m	1.50 m	2.00 m	3.00 m	5.00 m		mm ²	AWG
02	C00.707.100.020.019	C00.707.100.020.020	C00.707.100.020.021	C00.707.100.020.022	C00.707.100.020.023	C00.707.100.020.024	4.1	0.38	22
03	C00.707.100.030.019	C00.707.100.030.020	C00.707.100.030.021	C00.707.100.030.022	C00.707.100.030.023	C00.707.100.030.024	4.6	0.38	22
04	C00.707.100.040.019	C00.707.100.040.020	C00.707.100.040.021	C00.707.100.040.022	C00.707.100.040.023	C00.707.100.040.024	4.1	0.14	26
05	C00.707.100.050.019	C00.707.100.050.020	C00.707.100.050.021	C00.707.100.050.022	C00.707.100.050.023	C00.707.100.050.024	4.4	0.14	26
06	C00.707.100.060.019	C00.707.100.060.020	C00.707.100.060.021	C00.707.100.060.022	C00.707.100.060.023	C00.707.100.060.024	4.4	0.08	28

Assembled with high flexible silicon cable, grey (similar RAL 7045), FDA conform cable jacket

Positions	Cable length						Cable diameter mm	Cross section	
	0.50 m	1.00 m	1.50 m	2.00 m	3.00 m	5.00 m		mm ²	AWG
02	C00.707.100.020.007	C00.707.100.020.008	C00.707.100.020.009	C00.707.100.020.010	C00.707.100.020.011	C00.707.100.020.012	4.4	0.38	22
03	C00.707.100.030.007	C00.707.100.030.008	C00.707.100.030.009	C00.707.100.030.010	C00.707.100.030.011	C00.707.100.030.012	4.6	0.38	22
04	C00.707.100.040.007	C00.707.100.040.008	C00.707.100.040.009	C00.707.100.040.010	C00.707.100.040.011	C00.707.100.040.012	4.1	0.14	26
05	C00.707.100.050.007	C00.707.100.050.008	C00.707.100.050.009	C00.707.100.050.010	C00.707.100.050.011	C00.707.100.050.012	4.4	0.14	26
06	C00.707.100.060.007	C00.707.100.060.008	C00.707.100.060.009	C00.707.100.060.010	C00.707.100.060.011	C00.707.100.060.012	4.4	0.08	28



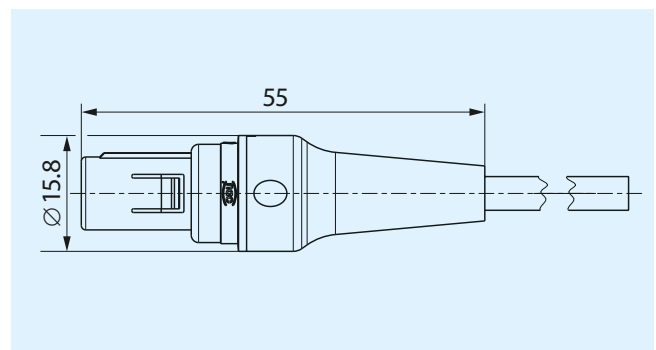
ODU MEDI-SNAP break-apart plug, style A5 assembled with PVC cable



Features ODU MEDI-SNAP break-apart plug, style A5



- ODU MEDI-SNAP break-apart-plug, style A5 – Size 1, available in black, grey and white colour
- Mechanical keying standard: 0° / 40° / 170°
- 2- to 14-positions
- Assembled with PVC cable white (similar RAL 9003)
- Cable UL-style 2464
- Available in the cable length:
0.25 m / 0.50 m / 0.75 m / 1.00 m / 2.0 m
- Protection class IP 67 in combination with receptacle style G4 – in mated condition
- Operating temperature: -15° C to +80° C
- ETO sterilizable
- DEHP free
- Wipe disinfection
- 0.9% NaCl resistant
- Mateable with all standard ODU MEDI-SNAP receptacles and in-line receptacles.



Inserts and technical features

Positions	Contact diameter	Clearance and creepage distance acc. DIN EN 60664-1 (2003)	Cable cross section		Max. current load acc. DIN 60512-5-2 (2003) (max. ambient temperature 50°C) complete A	Test voltage acc. SAE 13441 (1998) V	Insert	
	mm		mm	AWG			mm ²	View from termination side
02	1.3	1.30	20	0.50	11	1.50		
03	1.3	1.20	20	0.50	9	1.50		
04	0.9	1.20	22	0.38	6	1.50		
05	0.9	0.80	22	0.38	6	1.50		
06	0.7	0.85	26	0.14	3	1.50		
07	0.7	0.85	26	0.14	3	1.50		
08	0.7	0.60	26	0.14	3	1.50		
09	0.5	0.65	28	0.08	2	1.35		
10	0.5	0.50	28	0.08	2	1.35		
12	0.5	0.50	28	0.08	2	1.20		
14	0.5	0.50	28	0.08	2	1.20		

Order information plugs – mechanical keying 0°



Plug including cable and cable assembly, cable end cut
 Assembled with PVC cable, white (similar RAL 9003), UL-style 2464

Positions	Colour Plug and overmolding	Cable length					Cable dia- meter	Cross section	
		0.25 m	0.50 m	0.75 m	1.00 m	2.00 m		mm	mm ²
02	grey	C00.510.100.020.001	C00.510.100.020.002	C00.510.100.020.003	C00.510.100.020.004	C00.510.100.020.005	4.4	0.50	20
	black	C00.510.100.020.006	C00.510.100.020.007	C00.510.100.020.008	C00.510.100.020.009	C00.510.100.020.010			
	white	C00.510.100.020.011	C00.510.100.020.012	C00.510.100.020.013	C00.510.100.020.014	C00.510.100.020.015			
03	grey	C00.510.100.030.001	C00.510.100.030.002	C00.510.100.030.003	C00.510.100.030.004	C00.510.100.030.005	4.6	0.50	20
	black	C00.510.100.030.006	C00.510.100.030.007	C00.510.100.030.008	C00.510.100.030.009	C00.510.100.030.010			
	white	C00.510.100.030.011	C00.510.100.030.012	C00.510.100.030.013	C00.510.100.030.014	C00.510.100.030.015			
04	grey	C00.510.100.040.001	C00.510.100.040.002	C00.510.100.040.003	C00.510.100.040.004	C00.510.100.040.005	4.5	0.38	22
	black	C00.510.100.040.006	C00.510.100.040.007	C00.510.100.040.008	C00.510.100.040.009	C00.510.100.040.010			
	white	C00.510.100.040.011	C00.510.100.040.012	C00.510.100.040.013	C00.510.100.040.014	C00.510.100.040.015			
05	grey	C00.510.100.050.001	C00.510.100.050.002	C00.510.100.050.003	C00.510.100.050.004	C00.510.100.050.005	4.9	0.38	22
	black	C00.510.100.050.006	C00.510.100.050.007	C00.510.100.050.008	C00.510.100.050.009	C00.510.100.050.010			
	white	C00.510.100.050.011	C00.510.100.050.012	C00.510.100.050.013	C00.510.100.050.014	C00.510.100.050.015			
06	grey	C00.510.100.060.001	C00.510.100.060.002	C00.510.100.060.003	C00.510.100.060.004	C00.510.100.060.005	4.6	0.14	26
	black	C00.510.100.060.006	C00.510.100.060.007	C00.510.100.060.008	C00.510.100.060.009	C00.510.100.060.010			
	white	C00.510.100.060.011	C00.510.100.060.012	C00.510.100.060.013	C00.510.100.060.014	C00.510.100.060.015			
07	grey	C00.510.100.070.001	C00.510.100.070.002	C00.510.100.070.003	C00.510.100.070.004	C00.510.100.070.005	4.6	0.14	26
	black	C00.510.100.070.006	C00.510.100.070.007	C00.510.100.070.008	C00.510.100.070.009	C00.510.100.070.010			
	white	C00.510.100.070.011	C00.510.100.070.012	C00.510.100.070.013	C00.510.100.070.014	C00.510.100.070.015			
08	grey	C00.510.100.080.001	C00.510.100.080.002	C00.510.100.080.003	C00.510.100.080.004	C00.510.100.080.005	5.0	0.14	26
	black	C00.510.100.080.006	C00.510.100.080.007	C00.510.100.080.008	C00.510.100.080.009	C00.510.100.080.010			
	white	C00.510.100.080.011	C00.510.100.080.012	C00.510.100.080.013	C00.510.100.080.014	C00.510.100.080.015			
09	grey	C00.510.100.090.001	C00.510.100.090.002	C00.510.100.090.003	C00.510.100.090.004	C00.510.100.090.005	5.0	0.08	28
	black	C00.510.100.090.006	C00.510.100.090.007	C00.510.100.090.008	C00.510.100.090.009	C00.510.100.090.010			
	white	C00.510.100.090.011	C00.510.100.090.012	C00.510.100.090.013	C00.510.100.090.014	C00.510.100.090.015			
10	grey	C00.510.100.100.001	C00.510.100.100.002	C00.510.100.100.003	C00.510.100.100.004	C00.510.100.100.005	5.0	0.08	28
	black	C00.510.100.100.006	C00.510.100.100.007	C00.510.100.100.008	C00.510.100.100.009	C00.510.100.100.010			
	white	C00.510.100.100.011	C00.510.100.100.012	C00.510.100.100.013	C00.510.100.100.014	C00.510.100.100.015			
12	grey	C00.510.100.120.001	C00.510.100.120.002	C00.510.100.120.003	C00.510.100.120.004	C00.510.100.120.005	5.0	0.08	28
	black	C00.510.100.120.006	C00.510.100.120.007	C00.510.100.120.008	C00.510.100.120.009	C00.510.100.120.010			
	white	C00.510.100.120.011	C00.510.100.120.012	C00.510.100.120.013	C00.510.100.120.014	C00.510.100.120.015			
14	grey	C00.510.100.140.001	C00.510.100.140.002	C00.510.100.140.003	C00.510.100.140.004	C00.510.100.140.005	5.5	0.08	28
	black	C00.510.100.140.006	C00.510.100.140.007	C00.510.100.140.008	C00.510.100.140.009	C00.510.100.140.010			
	white	C00.510.100.140.011	C00.510.100.140.012	C00.510.100.140.013	C00.510.100.140.014	C00.510.100.140.015			

Order information plugs – mechanical keying 40°



Plug including cable and cable assembly, cable end cut
 Assembled with PVC cable, white (similar RAL 9003), UL-style 2464

Positions	Colour Plug and overmolding	Cable length					Cable dia- meter mm	Cross section	
		0.25 m	0.50 m	0.75 m	1.00 m	2.00 m		mm ²	AWG
02	grey	C00.510.100.020.016	C00.510.100.020.017	C00.510.100.020.018	C00.510.100.020.019	C00.510.100.020.020	4.4	0.50	20
	black	C00.510.100.020.021	C00.510.100.020.022	C00.510.100.020.023	C00.510.100.020.024	C00.510.100.020.025			
	white	C00.510.100.020.026	C00.510.100.020.027	C00.510.100.020.028	C00.510.100.020.029	C00.510.100.020.030			
03	grey	C00.510.100.030.016	C00.510.100.030.017	C00.510.100.030.018	C00.510.100.030.019	C00.510.100.030.020	4.6	0.50	20
	black	C00.510.100.030.021	C00.510.100.030.022	C00.510.100.030.023	C00.510.100.030.024	C00.510.100.030.025			
	white	C00.510.100.030.026	C00.510.100.030.027	C00.510.100.030.028	C00.510.100.030.029	C00.510.100.030.030			
04	grey	C00.510.100.040.016	C00.510.100.040.017	C00.510.100.040.018	C00.510.100.040.019	C00.510.100.040.020	4.5	0.38	22
	black	C00.510.100.040.021	C00.510.100.040.022	C00.510.100.040.023	C00.510.100.040.024	C00.510.100.040.025			
	white	C00.510.100.040.026	C00.510.100.040.027	C00.510.100.040.028	C00.510.100.040.029	C00.510.100.040.030			
05	grey	C00.510.100.050.016	C00.510.100.050.017	C00.510.100.050.018	C00.510.100.050.019	C00.510.100.050.020	4.9	0.38	22
	black	C00.510.100.050.021	C00.510.100.050.022	C00.510.100.050.023	C00.510.100.050.024	C00.510.100.050.025			
	white	C00.510.100.050.026	C00.510.100.050.027	C00.510.100.050.028	C00.510.100.050.029	C00.510.100.050.030			
06	grey	C00.510.100.060.016	C00.510.100.060.017	C00.510.100.060.018	C00.510.100.060.019	C00.510.100.060.020	4.6	0.14	26
	black	C00.510.100.060.021	C00.510.100.060.022	C00.510.100.060.023	C00.510.100.060.024	C00.510.100.060.025			
	white	C00.510.100.060.026	C00.510.100.060.027	C00.510.100.060.028	C00.510.100.060.029	C00.510.100.060.030			
07	grey	C00.510.100.070.016	C00.510.100.070.017	C00.510.100.070.018	C00.510.100.070.019	C00.510.100.070.020	4.6	0.14	26
	black	C00.510.100.070.021	C00.510.100.070.022	C00.510.100.070.023	C00.510.100.070.024	C00.510.100.070.025			
	white	C00.510.100.070.026	C00.510.100.070.027	C00.510.100.070.028	C00.510.100.070.029	C00.510.100.070.030			
08	grey	C00.510.100.080.016	C00.510.100.080.017	C00.510.100.080.018	C00.510.100.080.019	C00.510.100.080.020	5.0	0.14	26
	black	C00.510.100.080.021	C00.510.100.080.022	C00.510.100.080.023	C00.510.100.080.024	C00.510.100.080.025			
	white	C00.510.100.080.026	C00.510.100.080.027	C00.510.100.080.028	C00.510.100.080.029	C00.510.100.080.030			
09	grey	C00.510.100.090.016	C00.510.100.090.017	C00.510.100.090.018	C00.510.100.090.019	C00.510.100.090.020	5.0	0.08	28
	black	C00.510.100.090.021	C00.510.100.090.022	C00.510.100.090.023	C00.510.100.090.024	C00.510.100.090.025			
	white	C00.510.100.090.026	C00.510.100.090.027	C00.510.100.090.028	C00.510.100.090.029	C00.510.100.090.030			
10	grey	C00.510.100.100.016	C00.510.100.100.017	C00.510.100.100.018	C00.510.100.100.019	C00.510.100.100.020	5.0	0.08	28
	black	C00.510.100.100.021	C00.510.100.100.022	C00.510.100.100.023	C00.510.100.100.024	C00.510.100.100.025			
	white	C00.510.100.100.026	C00.510.100.100.027	C00.510.100.100.028	C00.510.100.100.029	C00.510.100.100.030			
12	grey	C00.510.100.120.016	C00.510.100.120.017	C00.510.100.120.018	C00.510.100.120.019	C00.510.100.120.020	5.0	0.08	28
	black	C00.510.100.120.021	C00.510.100.120.022	C00.510.100.120.023	C00.510.100.120.024	C00.510.100.120.025			
	white	C00.510.100.120.026	C00.510.100.120.027	C00.510.100.120.028	C00.510.100.120.029	C00.510.100.120.030			
14	grey	C00.510.100.140.016	C00.510.100.140.017	C00.510.100.140.018	C00.510.100.140.019	C00.510.100.140.020	5.5	0.08	28
	black	C00.510.100.140.021	C00.510.100.140.022	C00.510.100.140.023	C00.510.100.140.024	C00.510.100.140.025			
	white	C00.510.100.140.026	C00.510.100.140.027	C00.510.100.140.028	C00.510.100.140.029	C00.510.100.140.030			

Order information plugs – mechanical keying 170°



Plug including cable and cable assembly, cable end cut
 Assembled with PVC cable, white (similar RAL 9003), UL-style 2464

Positions	Colour Plug and overmolding	Cable length					Cable dia- meter	Cross section	
		0.25 m	0.50 m	0.75 m	1.00 m	2.00 m		mm	mm ²
02	grey	C00.510.100.020.031	C00.510.100.020.032	C00.510.100.020.033	C00.510.100.020.034	C00.510.100.020.035	4.4	0.50	20
	black	C00.510.100.020.036	C00.510.100.020.037	C00.510.100.020.038	C00.510.100.020.039	C00.510.100.020.040			
	white	C00.510.100.020.041	C00.510.100.020.042	C00.510.100.020.043	C00.510.100.020.044	C00.510.100.020.045			
03	grey	C00.510.100.030.031	C00.510.100.030.032	C00.510.100.030.033	C00.510.100.030.034	C00.510.100.030.035	4.6	0.50	20
	black	C00.510.100.030.036	C00.510.100.030.037	C00.510.100.030.038	C00.510.100.030.039	C00.510.100.030.040			
	white	C00.510.100.030.041	C00.510.100.030.042	C00.510.100.030.043	C00.510.100.030.044	C00.510.100.030.045			
04	grey	C00.510.100.040.031	C00.510.100.040.032	C00.510.100.040.033	C00.510.100.040.034	C00.510.100.040.035	4.5	0.38	22
	black	C00.510.100.040.036	C00.510.100.040.037	C00.510.100.040.038	C00.510.100.040.039	C00.510.100.040.040			
	white	C00.510.100.040.041	C00.510.100.040.042	C00.510.100.040.043	C00.510.100.040.044	C00.510.100.040.045			
05	grey	C00.510.100.050.031	C00.510.100.050.032	C00.510.100.050.033	C00.510.100.050.034	C00.510.100.050.035	4.9	0.38	22
	black	C00.510.100.050.036	C00.510.100.050.037	C00.510.100.050.038	C00.510.100.050.039	C00.510.100.050.040			
	white	C00.510.100.050.041	C00.510.100.050.042	C00.510.100.050.043	C00.510.100.050.044	C00.510.100.050.045			
06	grey	C00.510.100.060.031	C00.510.100.060.032	C00.510.100.060.033	C00.510.100.060.034	C00.510.100.060.035	4.6	0.14	26
	black	C00.510.100.060.036	C00.510.100.060.037	C00.510.100.060.038	C00.510.100.060.039	C00.510.100.060.040			
	white	C00.510.100.060.041	C00.510.100.060.042	C00.510.100.060.043	C00.510.100.060.044	C00.510.100.060.045			
07	grey	C00.510.100.070.031	C00.510.100.070.032	C00.510.100.070.033	C00.510.100.070.034	C00.510.100.070.035	4.6	0.14	26
	black	C00.510.100.070.036	C00.510.100.070.037	C00.510.100.070.038	C00.510.100.070.039	C00.510.100.070.040			
	white	C00.510.100.070.041	C00.510.100.070.042	C00.510.100.070.043	C00.510.100.070.044	C00.510.100.070.045			
08	grey	C00.510.100.080.031	C00.510.100.080.032	C00.510.100.080.033	C00.510.100.080.034	C00.510.100.080.035	5.0	0.14	26
	black	C00.510.100.080.036	C00.510.100.080.037	C00.510.100.080.038	C00.510.100.080.039	C00.510.100.080.040			
	white	C00.510.100.080.041	C00.510.100.080.042	C00.510.100.080.043	C00.510.100.080.044	C00.510.100.080.045			
09	grey	C00.510.100.090.031	C00.510.100.090.032	C00.510.100.090.033	C00.510.100.090.034	C00.510.100.090.035	5.0	0.08	28
	black	C00.510.100.090.036	C00.510.100.090.037	C00.510.100.090.038	C00.510.100.090.039	C00.510.100.090.040			
	white	C00.510.100.090.041	C00.510.100.090.042	C00.510.100.090.043	C00.510.100.090.044	C00.510.100.090.045			
10	grey	C00.510.100.100.031	C00.510.100.100.032	C00.510.100.100.033	C00.510.100.100.034	C00.510.100.100.035	5.0	0.08	28
	black	C00.510.100.100.036	C00.510.100.100.037	C00.510.100.100.038	C00.510.100.100.039	C00.510.100.100.040			
	white	C00.510.100.100.041	C00.510.100.100.042	C00.510.100.100.043	C00.510.100.100.044	C00.510.100.100.045			
12	grey	C00.510.100.120.031	C00.510.100.120.032	C00.510.100.120.033	C00.510.100.120.034	C00.510.100.120.035	5.0	0.08	28
	black	C00.510.100.120.036	C00.510.100.120.037	C00.510.100.120.038	C00.510.100.120.039	C00.510.100.120.040			
	white	C00.510.100.120.041	C00.510.100.120.042	C00.510.100.120.043	C00.510.100.120.044	C00.510.100.120.045			
14	grey	C00.510.100.140.031	C00.510.100.140.032	C00.510.100.140.033	C00.510.100.140.034	C00.510.100.140.035	5.5	0.08	28
	black	C00.510.100.140.036	C00.510.100.140.037	C00.510.100.140.038	C00.510.100.140.039	C00.510.100.140.040			
	white	C00.510.100.140.041	C00.510.100.140.042	C00.510.100.140.043	C00.510.100.140.044	C00.510.100.140.045			

Receptacle/in-line receptacle

The ODU MEDI-SNAP Disposable is plugable with all standard ODU MEDI-SNAP receptacles and in-line receptacles.

Dimensions etc. look at the separate "ODU MEDI-SNAP" product catalogue.

Overview receptacle versions



Style G1
Protection class IP 50,
installation from front
of panel



Style G2
Protection class IP 50,
one-piece housing



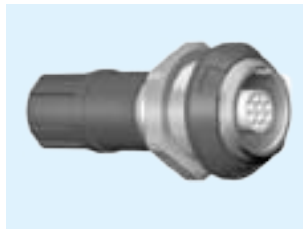
Style G3
Protection class IP 50,
installation from front
of panel



Style G4
Protection class IP 67 in
mated condition, Protection
class IP 50 to end device, in-
stallation from front of panel



Style G5
Protection class IP 50,
installation from front
and rear of panel



Style G6
Protection class IP 50,
installation from front and
rear of panel with standard
back-nut



Style G8
Protection class IP 50,
installation from rear of
panel

Overview in-line receptacles



Style K1
Protection class IP 50 with
standard back nut



Style K2
Protection class IP 50 with
back nut for cable bend relief



ODU MEDI-SNAP break-apart plug, style A6 assembled with PVC cable

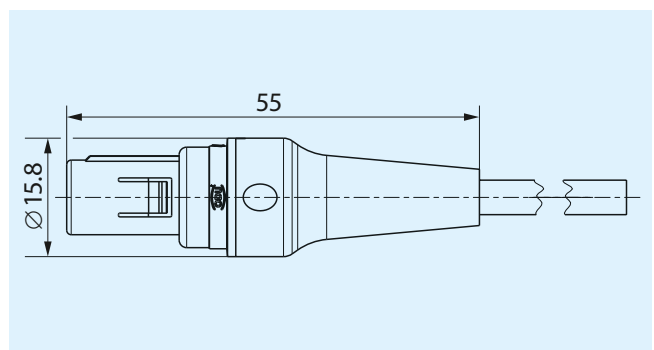
Economical solution at high quantities



Features ODU MEDI-SNAP break-apart plug, style A6



- ODU MEDI-SNAP break-apart plug, style A6 – size 1, available in black, grey and white color
- Only available as system solution (plug + cable + cable assembly + overmolding)
- Mechanical keying standard: 0°/40°/170°
- 2- to 8-positions
- Assembled with PVC cable white (similar RAL 9003)
- Cable UL-style 2464
- Available in the cable length: 0.25 m / 0.50 m / 0.75 m / 1.00 m / 2.0 m
- Protection class IP 67 in combination with receptacle style G4 – in mated condition
- Operating temperature: -15° C to +80° C
- ETO sterilizable
- DEHP free
- Wipe disinfection
- 0.9% NaCl resistant
- Mateable with all standard ODU MEDI-SNAP receptacles and in-line receptacles
- Extremely economical solution at high quantities



Inserts and technical features

Positions	Contact diameter mm	Clearance and creepage distance acc. DIN EN 60664-1 (2003) mm	Cable cross section		Max. current load acc. DIN 60512-5-2 (2003) (max. ambient temperature 50°C) complete in A	Test voltage acc. SAE 13441 (1998) V	Insert	
			AWG	mm ²			View from termination side Pin part	Socket
02	1.3	0.70	24	0.25	7	1.50		
03	1.3	0.60	24	0.25	7	1.35		
04	0.9	1.00	26	0.14	4	1.50		
05	0.9	0.50	26	0.14	4	1.35		
06	0.7	0.70	28	0.08	2	1.50		
07	0.7	0.70	28	0.08	2	1.50		
08	0.7	0.50	28	0.08	2	1.35		

Order information plugs – mechanical keying 0°



Plug including cable and cable assembly, cable end cut
Assembled with PVC cable, white (similar RAL 9003), UL-style 2464

Positions	Colour Plug and overmolding	Cable length					Cable dia- meter mm	Cross section	
		0.25 m	0.50 m	0.75 m	1.00 m	2.00 m		mm ²	AWG
02	grey	C00.510.100.020.046	C00.510.100.020.047	C00.510.100.020.048	C00.510.100.020.049	C00.510.100.020.050	4.1	0.22	24
	black	C00.510.100.020.051	C00.510.100.020.052	C00.510.100.020.053	C00.510.100.020.054	C00.510.100.020.055			
	white	C00.510.100.020.056	C00.510.100.020.057	C00.510.100.020.058	C00.510.100.020.059	C00.510.100.020.060			
03	grey	C00.510.100.030.046	C00.510.100.030.047	C00.510.100.030.048	C00.510.100.030.049	C00.510.100.030.050	4.0	0.22	24
	black	C00.510.100.030.051	C00.510.100.030.052	C00.510.100.030.053	C00.510.100.030.054	C00.510.100.030.055			
	white	C00.510.100.030.056	C00.510.100.030.057	C00.510.100.030.058	C00.510.100.030.059	C00.510.100.030.060			
04	grey	C00.510.100.040.046	C00.510.100.040.047	C00.510.100.040.048	C00.510.100.040.049	C00.510.100.040.050	4.1	0.14	26
	black	C00.510.100.040.051	C00.510.100.040.052	C00.510.100.040.053	C00.510.100.040.054	C00.510.100.040.055			
	white	C00.510.100.040.056	C00.510.100.040.057	C00.510.100.040.058	C00.510.100.040.059	C00.510.100.040.060			
05	grey	C00.510.100.050.046	C00.510.100.050.047	C00.510.100.050.048	C00.510.100.050.049	C00.510.100.050.050	4.4	0.08	28
	black	C00.510.100.050.051	C00.510.100.050.052	C00.510.100.050.053	C00.510.100.050.054	C00.510.100.050.055			
	white	C00.510.100.050.056	C00.510.100.050.057	C00.510.100.050.058	C00.510.100.050.059	C00.510.100.050.060			
06	grey	C00.510.100.060.046	C00.510.100.060.047	C00.510.100.060.048	C00.510.100.060.049	C00.510.100.060.050	4.4	0.08	28
	black	C00.510.100.060.051	C00.510.100.060.052	C00.510.100.060.053	C00.510.100.060.054	C00.510.100.060.055			
	white	C00.510.100.060.056	C00.510.100.060.057	C00.510.100.060.058	C00.510.100.060.059	C00.510.100.060.060			
07	grey	C00.510.100.070.046	C00.510.100.070.047	C00.510.100.070.048	C00.510.100.070.049	C00.510.100.070.050	4.3	0.08	28
	black	C00.510.100.070.051	C00.510.100.070.052	C00.510.100.070.053	C00.510.100.070.054	C00.510.100.070.055			
	white	C00.510.100.070.056	C00.510.100.070.057	C00.510.100.070.058	C00.510.100.070.059	C00.510.100.070.060			
08	grey	C00.510.100.080.046	C00.510.100.080.047	C00.510.100.080.048	C00.510.100.080.049	C00.510.100.080.050	4.6	0.08	28
	black	C00.510.100.080.051	C00.510.100.080.052	C00.510.100.080.053	C00.510.100.080.054	C00.510.100.080.055			
	white	C00.510.100.080.056	C00.510.100.080.057	C00.510.100.080.058	C00.510.100.080.059	C00.510.100.080.060			

Order information plugs – mechanical keying 40°



Plug including cable and cable assembly, cable end cut
 Assembled with PVC cable, white (similar RAL 9003), UL-style 2464

Positions	Colour Plug and overmolding	Cable length					Cable dia- meter mm	Cross section	
		0.25 m	0.50 m	0.75 m	1.00 m	2.00 m		mm ²	AWG
02	grey	C00.510.100.020.061	C00.510.100.020.062	C00.510.100.020.063	C00.510.100.020.064	C00.510.100.020.065	4.1	0.22	24
	black	C00.510.100.020.066	C00.510.100.020.067	C00.510.100.020.068	C00.510.100.020.069	C00.510.100.020.070			
	white	C00.510.100.020.071	C00.510.100.020.072	C00.510.100.020.073	C00.510.100.020.074	C00.510.100.020.075			
03	grey	C00.510.100.030.061	C00.510.100.030.062	C00.510.100.030.063	C00.510.100.030.064	C00.510.100.030.065	4.0	0.22	24
	black	C00.510.100.030.066	C00.510.100.030.067	C00.510.100.030.068	C00.510.100.030.069	C00.510.100.030.070			
	white	C00.510.100.030.071	C00.510.100.030.072	C00.510.100.030.073	C00.510.100.030.074	C00.510.100.030.075			
04	grey	C00.510.100.040.061	C00.510.100.040.062	C00.510.100.040.063	C00.510.100.040.064	C00.510.100.040.065	4.1	0.14	26
	black	C00.510.100.040.066	C00.510.100.040.067	C00.510.100.040.068	C00.510.100.040.069	C00.510.100.040.070			
	white	C00.510.100.040.071	C00.510.100.040.072	C00.510.100.040.073	C00.510.100.040.074	C00.510.100.040.075			
05	grey	C00.510.100.050.061	C00.510.100.050.062	C00.510.100.050.063	C00.510.100.050.064	C00.510.100.050.065	4.4	0.08	28
	black	C00.510.100.050.066	C00.510.100.050.067	C00.510.100.050.068	C00.510.100.050.069	C00.510.100.050.070			
	white	C00.510.100.050.071	C00.510.100.050.072	C00.510.100.050.073	C00.510.100.050.074	C00.510.100.050.075			
06	grey	C00.510.100.060.061	C00.510.100.060.062	C00.510.100.060.063	C00.510.100.060.064	C00.510.100.060.065	4.4	0.08	28
	black	C00.510.100.060.066	C00.510.100.060.067	C00.510.100.060.068	C00.510.100.060.069	C00.510.100.060.070			
	white	C00.510.100.060.071	C00.510.100.060.072	C00.510.100.060.073	C00.510.100.060.074	C00.510.100.060.075			
07	grey	C00.510.100.070.061	C00.510.100.070.062	C00.510.100.070.063	C00.510.100.070.064	C00.510.100.070.065	4.3	0.08	28
	black	C00.510.100.070.066	C00.510.100.070.067	C00.510.100.070.068	C00.510.100.070.069	C00.510.100.070.070			
	white	C00.510.100.070.071	C00.510.100.070.072	C00.510.100.070.073	C00.510.100.070.074	C00.510.100.070.075			
08	grey	C00.510.100.080.061	C00.510.100.080.062	C00.510.100.080.063	C00.510.100.080.064	C00.510.100.080.065	4.6	0.08	28
	black	C00.510.100.080.066	C00.510.100.080.067	C00.510.100.080.068	C00.510.100.080.069	C00.510.100.080.070			
	white	C00.510.100.080.071	C00.510.100.080.072	C00.510.100.080.073	C00.510.100.080.074	C00.510.100.080.075			

Order information plugs – mechanical keying 170°



Plug including cable and cable assembly, cable end cut
 Assembled with PVC cable, white (similar RAL 9003), UL-style 2464

Positions	Colour Plug and overmolding	Cable length					Cable dia- meter	Cross section	
		0.25 m	0.50 m	0.75 m	1.00 m	2.00 m		mm	mm ²
02	grey	C00.510.100.020.076	C00.510.100.020.077	C00.510.100.020.078	C00.510.100.020.079	C00.510.100.020.080	4.1	0.22	24
	black	C00.510.100.020.081	C00.510.100.020.082	C00.510.100.020.083	C00.510.100.020.084	C00.510.100.020.085			
	white	C00.510.100.020.086	C00.510.100.020.087	C00.510.100.020.088	C00.510.100.020.089	C00.510.100.020.090			
03	grey	C00.510.100.030.076	C00.510.100.030.077	C00.510.100.030.078	C00.510.100.030.079	C00.510.100.030.080	4.0	0.22	24
	black	C00.510.100.030.081	C00.510.100.030.082	C00.510.100.030.083	C00.510.100.030.084	C00.510.100.030.085			
	white	C00.510.100.030.086	C00.510.100.030.087	C00.510.100.030.088	C00.510.100.030.089	C00.510.100.030.090			
04	grey	C00.510.100.040.076	C00.510.100.040.077	C00.510.100.040.078	C00.510.100.040.079	C00.510.100.040.080	4.1	0.14	26
	black	C00.510.100.040.081	C00.510.100.040.082	C00.510.100.040.083	C00.510.100.040.084	C00.510.100.040.085			
	white	C00.510.100.040.086	C00.510.100.040.087	C00.510.100.040.088	C00.510.100.040.089	C00.510.100.040.090			
05	grey	C00.510.100.050.076	C00.510.100.050.077	C00.510.100.050.078	C00.510.100.050.079	C00.510.100.050.080	4.4	0.08	28
	black	C00.510.100.050.081	C00.510.100.050.082	C00.510.100.050.083	C00.510.100.050.084	C00.510.100.050.085			
	white	C00.510.100.050.086	C00.510.100.050.087	C00.510.100.050.088	C00.510.100.050.089	C00.510.100.050.090			
06	grey	C00.510.100.060.076	C00.510.100.060.077	C00.510.100.060.078	C00.510.100.060.079	C00.510.100.060.080	4.4	0.08	28
	black	C00.510.100.060.081	C00.510.100.060.082	C00.510.100.060.083	C00.510.100.060.084	C00.510.100.060.085			
	white	C00.510.100.060.086	C00.510.100.060.087	C00.510.100.060.088	C00.510.100.060.089	C00.510.100.060.090			
07	grey	C00.510.100.070.076	C00.510.100.070.077	C00.510.100.070.078	C00.510.100.070.079	C00.510.100.070.080	4.3	0.08	28
	black	C00.510.100.070.081	C00.510.100.070.082	C00.510.100.070.083	C00.510.100.070.084	C00.510.100.070.085			
	white	C00.510.100.070.086	C00.510.100.070.087	C00.510.100.070.088	C00.510.100.070.089	C00.510.100.070.090			
08	grey	C00.510.100.080.076	C00.510.100.080.077	C00.510.100.080.078	C00.510.100.080.079	C00.510.100.080.080	4.6	0.08	28
	black	C00.510.100.080.081	C00.510.100.080.082	C00.510.100.080.083	C00.510.100.080.084	C00.510.100.080.085			
	white	C00.510.100.080.086	C00.510.100.080.087	C00.510.100.080.088	C00.510.100.080.089	C00.510.100.080.090			

Receptacle/In-line receptacle

The ODU MEDI-SNAP Disposable is plugable with all standard ODU MEDI-SNAP receptacles and in-line receptacles.

Dimensions etc. look at the separate “ODU MEDI-SNAP” product catalogue.

Overview receptacle versions



Style G1
Protection class IP 50,
installation from front of
panel



Style G2
Protection class IP 50,
one-piece housing



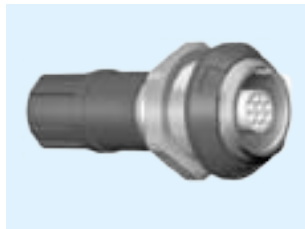
Style G3
Protection class IP 50,
installation from front
of panel



Style G4
Protection class IP 67 in
mated condition, Protection
class IP 50 to end device, in-
stallation from front of panel



Style G5
Protection class IP 50,
installation from front and
rear of panel



Style G6
Protection class IP 50, in-
stallation from front and
rear of panel with standard
back-nut



Style G8
Protection class IP 50,
installation from rear of
panel

Overview in-line receptacles



Style K1
Protection class IP 50 with
standard back nut



Style K2
Protection class IP 50 with
back nut for cable bend relief



Technical information



Explanation of voltage information in compliance with VDE

General

A connector cannot be chosen by taking into consideration only functionality, number of contacts and current or voltage characteristics. The consideration of the place where it will be used and the installation conditions that prevail there are essential. Depending on the installation conditions and local conditions, the connector can be used in different voltage and current ranges, according to the standardization.

The most important influencing quantities and the electrical characteristics tuned to them are explained in more detail in the following. If you have further questions, we would be happy to provide support.

The following texts and tables are excerpts from the specified standards. The originals, DIN EN 60664-1 from November 2003 and DIN EN 61984 from September 2002, remain authoritative for all technical information given.

Standards applied:
 DIN EN 60664-1 (VDE 0110 – part 1)
 DIN EN 61984 (VDE 0627)

Overvoltage category

Using the overvoltage category, the necessary rated surge voltage is defined according to table "Voltage information" and the nominal voltage used. The particular overvoltage category for the device, depending on the installation location, is selected according to the criteria listed below.

- **Overvoltage category I:**
 Devices for connection to electric circuits in which measures have been taken to limit transient overvoltages to a suitable low level, for example: Connectors for the power supply of computer hardware that is permanently connected to a power pack with electronic overvoltage limiting.
- **Overvoltage category II:**
 Devices that consume energy and that are supplied from the fixed wiring system, for example: Household appliances, portable tools and similar devices.
- **Overvoltage category III:**
 Devices in fixed wiring systems and for those cases in which particular demands are placed on the reliability and availability of the devices, for example: Switches in fixed wiring systems and devices for industrial use with permanent connection to the fixed wiring system.
- **Overvoltage category IV:**
 Devices for use at the wiring system connecting point, for example: Electric meters and primary overvoltage protective devices.

Voltage information

Nominal voltage of the electric power supply system according to IEC 60038		Voltage line to neutral derived from nominal voltages a.c. or d.c. to and including V	Rated impulse voltage (in V)			
Three-phase-system	Single-phase-system		Overvoltage category			
			I	II	III	IV
		50	330	500	800	1,500
		100	500	800	1,500	2,500
		150	800	1,500	2,500	4,000
230/400	277/480	300	1,500	2,500	4,000	6,000
400/690		600	2,500	4,000	6,000	8,000
1 000	120 – 240	1,000	4,000	6,000	8,000	12,000

Pollution degree

Combined with moisture, any pollution that may arise can influence the insulating property on the surface of the connector. For defining the different rated values, a pollution degree must be selected for the device, according to the criteria listed below.

For a connector with a degree of protection of at least IP54 (to IEC 60529), the insulating parts inside the encapsulation may be measured for a lower pollution degree according to the standard. This also applies to inserted connectors where the encapsulation is ensured by the connector housing and that are detached only for testing and maintenance purposes.

– **Pollution degree 1:**

There is either no pollution or only dry, non-conductive pollution. The pollution has no influence, for example: Measuring instruments and hardware in computer systems.

– **Pollution degree 2:**

Only non-conductive pollution occurs. Transient conductivity caused by dewfall must be expected occasionally, however, for example: Devices in laboratories and in living areas and sales and other commercial areas.

– **Pollution degree 3:**

Conductive pollution occurs or dry, non-conductive pollution that becomes conductive because of dewfall must be expected, for example: Devices in industrial, commercial and agricultural operations, unheated storage areas, and workshops.

– **Pollution degree 4:**

Continuous conductivity occurs, caused by conductive dust, rain or wetness, for example: Devices in open-air plants and on construction machines.

Operating voltage (VDE: rated voltage)

The level of a voltage that is specified by the manufacturer for a component, device or piece of equipment and to which the operating and performance parameters apply.

The rated voltage depends on the connector's insulating material group and the respective creepage distances between the separate contacts, according to the specified pollution degree.

By differing the positioning of the contacts in the insulators, it is possible to influence the rated voltage considerably (devices are permitted to have more than one value for the rated voltage or to have a range of rated voltages).

Nominal voltage

A suitable rounded voltage level, which is specified for a device by the manufacturer for labeling or identification. In these explanations, the term nominal voltage is used for the value of the output voltage specified by the power company or the manufacturer of the voltage source for classification of the overvoltage category.

Rated impulse voltage

Value of the impulse test voltage that is specified by the manufacturer for a device or a part thereof and that indicates the defined staying power of its accompanying insulation against transient (short-term, lasting a few milliseconds) overvoltages. The impulse test voltage here is the highest level of the impulse voltage of a defined shape and polarity that is not permitted to lead to any insulation disruptive discharge under defined conditions. The rated impulse voltage depends on the clearance distance between the separate contacts, according to the specified pollution degree.

By differing the positioning of the contacts in the insulators, it is possible to influence the rated impulse voltage considerably.

Impulse test voltage/power-frequency test voltage

Highest value of the impulse voltage of a defined shape and polarity that is not permitted to lead to any insulation disruptive discharge or sparkover under defined conditions.

Clearance distance

Shortest distance between two conductive parts through the air.

Explanations of voltage information in compliance with MIL

Creepage distance

Shortest distance between two conductive parts, along the surface of an insulating material (The creepage distance is influenced by the pollution degree used).

Test Voltage

The connector's electric strength is tested to the standard according to the specified rated impulse voltage by applying the test voltage (impulse test voltage or power-frequency test voltage according to table "Test voltage") over a defined time period.

Test voltage

Rated impulse voltage kV	Test voltage		
	Impulse test voltage* kV (1.2/50 µs)		Power frequency test voltage kV (50/60 Hz)
	up to 2,000 m	at sea level	
0.5	0.5	0.55	0.37
0.8	0.8	0.91	0.50
1.5	1.5	1.75	0.84
2.5	2.5	2.95	1.39
4.0	4.0	4.80	2.21
6.0	6.0	7.30	3.31
8.0	8.0	9.80	4.26
12.0	12.0	14.80	6.60

*An interpolation of the rated impulse voltage is acceptable, if the testing laboratory is between sea level and 2,000 m.

General information

The values according to SAE AS 13441-method 3001.1 correspond to those of MIL-Std 1344-method 3001. The specified values were determined in accordance with IEC 60512-2, Test 4a.

Each insert was tested when inserted, whereby the test voltage was applied to the male insert.

All tests were conducted at normal room climate and are valid to an altitude of 2,000 meters. If there are deviations, the reduction factors according to the relevant standards should be taken into consideration.

Test voltage

The test voltage is defined as 75 % of the disruptive discharge voltage established according to the standard.

$$\text{Test voltage} = \text{disruptive discharge voltage} \times 0.75$$

Operating voltage:

According to the standard, the operating voltage is defined as one third of the established test voltage.

$$\text{Operating voltage} = \text{disruptive discharge voltage} \times 0.75 \times 0.33$$

Please note:

For some applications, the safety requirements for electric devices are very strict with regard to the operating voltage. In these cases, the operating voltage is correspondingly defined according to the clearance and creepage distances between exposed parts. When making a selection for these connectors, please contact us and tell us the safety standard with which the product must comply.

Standards applied:
















SAE AS 13441-method 3001.1
MIL-Std 1344-method 3001
IEC 60512-2, Test 4a

International protecting (IP) classes DIN EN 60 529 (respectively IEC 529/VDE 0470 T1)

The housing and the locking system of the ODU Disposable Systems protect the contacts against outside mechanical influence, such as impact shocks, impurities, dust, unintended contact, and penetration of moisture, water or other liquids (coolants, oils, etc.) Protection classification is indicated with the letters **IP** and two numbers.

To achieve leak tightness at the cable gland, the sealing system must be adapted to the cable and the cable must be smooth, cylindrical and grooveless.

If coordination to the cable is not possible, the cable area can also be potted.

Code letters (international protection)		First index figure (foreign bodies protection)	Second index figure (water protection)	
IP		6	8	
Index	Degree of protection	Index	Degree of protection	
0	 No protection against accidental contact, no protection against intrusion of solid foreign bodies	0		No protection against water
1	 Protection against contact with any large area by hand and against large solid foreign bodies with $\varnothing > 50$ mm	1		Protection against vertical water drips
2	 Protection against contact with the fingers, protection against large solid foreign bodies with $\varnothing > 12$ mm	2		Protection against water drips (up to a 15° angle)
3	 Protection against tools, wires or similar objects with $\varnothing > 2.5$ mm. Protection against small foreign solid bodies with $\varnothing > 2.5$ mm	3		Protection against diagonal water drips (up to a 60° angle)
4	 As 3 however $\varnothing > 1$ mm	4		Protection against splashed water from all directions
5	 Full protection against contact. Protection against interior detrimental dust deposition	5		Protection against water spray from all directions
6	 Total protection against contact. Protection against intrusion of dust	6		Protection against temporary flooding
		7		Protection against temporary immersion
		8		Protection against water pressure

In accordance with DIN VDE 0470, DIN EN 60 529, IEC 529
 Source: ZVEI = German Association of the Electrotechnical and Electronic Industry e.V.

Conversions AWG – cross section (AWG = American Wire Gauge)

The AWG system describes the cross section of a wire using a gauge number for every 26% increase in conductor cross section. With larger wire diameters, the AWG gauge numbers decrease; as the wire sizes increase, the AWG gauge numbers decrease. **This is only valid for solid conductors.**

Most wires are made with **stranded conductors**. Compared to solid conductors stranded wires offer higher durability, higher flexibility and better performance under bending and vibration.

Stranded wires are made from wires with smaller gauge sizes (higher AWG gauge number). The AWG gauge number of the stranded wire is equal to that of a solid conductor of the same size wire. The cross section of the stranded conductor is the sum of cross sections of the single conductors. For example, a AWG-20 stranded wire of 7 AWG-28 conductors has a cross section of 0.563 mm²; an AWG-20 stranded wire with 19 AWG-32 conductors has a cross section of 0.616 mm².

Conversion table AWG/mm²

Circular wire					
AWG	Diameter		Cross section mm ²	Weight kg/km	Max. resistance Ω/km
	Inch	mm			
10 (1)	0.1020	2.5900	5.2700	47.000	3.45
10 (37/26)	1.1090	2.7500	4.5300	43.600	4.13
12 (1)	0.0808	2.0500	3.3100	29.500	5.45
12 (19/25)	0.0895	2.2500	3.0800	28.600	6.14
12 (37/28)	0.0858	2.1800	2.9700	26.300	6.36
14 (1)	0.0641	1.6300	2.0800	18.500	8.79
14 (19/27)	0.0670	1.7000	1.9400	18.000	9.94
14 (37/30)	0.0673	1.7100	1.8700	17.400	10.50
16 (1)	0.0508	1.2900	1.3100	11.600	13.94
16 (19/29)	0.0551	1.4000	1.2300	11.000	15.70
18 (1)	0.0403	1.0200	0.8200	7.320	22.18
18 (19/30)	0.0480	1.2200	0.9600	8.840	20.40
20 (1)	0.0320	0.8130	0.5200	4.610	35.10
20 (7/28)	0.0366	0.9300	0.5600	5.150	34.10
20 (19/32)	0.0384	0.9800	0.6200	5.450	32.00
22 (1)	0.0252	0.6400	0.3240	2.890	57.70
22 (7/30)	0.0288	0.7310	0.3540	3.240	54.80
22 (19/34)	0.0307	0.7800	0.3820	3.410	51.80
24 (1)	0.0197	0.5000	0.1960	1.830	91.20
24 (7/32)	0.0230	0.5850	0.2270	2.080	86.00
24 (19/36)	0.0252	0.6400	0.2400	2.160	83.30
26 (1)	0.1570	0.4000	0.1220	1.140	147.00
26 (7/34)	0.0189	0.4800	0.1400	1.290	140.00
26 (19/38)	0.0192	0.4870	0.1500	1.400	131.00
28 (1)	0.0126	0.3200	0.0800	0.716	231.00
28 (7/36)	0.0150	0.3810	0.0890	0.813	224.00
28 (19/40)	0.0151	0.3850	0.0950	0.931	207.00
30 (1)	0.0098	0.2500	0.0506	0.451	374.00
30 (7/38)	0.0115	0.2930	0.0550	0.519	354.00
30 (19/42)	0.0123	0.3120	0.0720	0.622	310.00
32 (1)	0.0080	0.2030	0.0320	0.289	561.00
32 (7/40)	0.0094	0.2400	0.0350	0.340	597.10
32 (19/44)	0.0100	0.2540	0.0440	0.356	492.00
34 (1)	0.0063	0.1600	0.0201	0.179	951.00
34 (7/42)	0.0083	0.2110	0.0266	0.113	1491.00
36 (1)	0.0050	0.1270	0.0127	0.072	1519.00
36 (7/44)	0.0064	0.1630	0.0161	0.130	1322.00
38 (1)	0.0040	0.1000	0.0078	0.072	2402.00
40 (1)	0.0031	0.0800	0.0050	0.043	3878.60
42 (1)	0.0028	0.0700	0.0038	0.028	5964.00
44 (1)	0.0021	0.0540	0.0023	0.018	8660.00

Technical terms / definitions / informations

AWG

(See page 34)

Clearance distance

The shortest distance, measured as a thread measure, between two live metallic parts in the air.

Coding (Orientation)

System of projections and grooves on mating connectors which prevent otherwise identical connectors from being mated. This is useful when several connectors of the same style are used in the same application.

Connector =

ODU MEDI-SNAP/ODU MINI-MED/ ODU Disposable Systems

A component that allows the connection of electrical conductors and that is intended to set up connections with a suitable mating component and/or to separate them. Connectors are operating materials that are not permitted to be inserted or separated when used as intended (when energized).

The connector consists of the connector housing and the contact elements.

Creepage distances

Shortest distance between live parts on the surface of insulators. All elevations and depressions in the insulator are taken into account as far as the specified minimum dimensions are given.

Current carrying capacity

(nominal current and maximal continuous current)

The information refers to sufficiently dimensioned connection cables in accordance with DIN VDE 0295 (EN 60228) in Class 5, so that this is not the source of a greater temperature increase. The specified temperature increase takes place through the contact. The information provided refers to average values.

Fixed connector

A connector for attachment to a rigid surface (panel).

Free connector

A connector for attachment to the free end of a wire or cable. Also called free hanging connector or in-line receptacle.

Insertion or withdrawal force

Force that, without the influence of a coupling or locking device, is required for completely inserting or withdrawing pluggable components.

Insulator

Non-conductive part of a connector, for electrically and mechanically separating live parts and for protection against accidental touching.

Mating cycles

Mechanical operation of connectors and plug-in devices by insertion and withdrawal. One mating cycle comprises one insertion and one withdrawal.

Maximal continuous current

The metrologically determined current intensity at room temperature (approx. 20° C) that causes the contact temperature to rise to the limit temperature.

Nominal single contact current load

Current load that can load every single contact.

Nominal voltage

Nominal voltage characterizes a component.

Operating temperature

ODU MEDI-SNAP A5/A6 and ODU MINI-MED:

-15° C up to +80° C

ODU MINI-MED with silicone cable:

-25° C up to +70° C

Plug appliance coupler

Operating materials that are permitted to be inserted or separated during the intended use (when energized or electrically charged).

Solder connection

Termination technology in which a melted added metal (solder), whose melting temperature is less than that of the base materials to be connected, is used to join two metallic materials.

Termination cross-section

The specified cross-sections correspond to DIN VDE 0295 (EN 60228) Class 5.

Technical terms / definitions / informations

Termination techniques

Methods for connecting a wire to an electro-mechanical component, e.g. solderless connection according to EN 60352, such as crimp, press-in, etc. or solder contacts.

Test voltage

The voltage that a connector withstands without flashover or arcing under specified conditions.

Watertightness (DIN EN 60529)

(See page 33)

Wire

Wires may be provided with an insulation cover (electrical shielding). Cables or conductors may consist of one or more wires.

Connecting diagram of plugs

ODU MINI-MED and ODU MEDI-SNAP style A5 / A6

Pin no.	Cable colour
1	white
2	black
3	red
4	green
5	yellow
6	blue
7	brown
8	orange
9	grey
10	purple
11	white-black
12	white-red
13	white-green
14	white-yellow

A correct connecting diagramm is included by shipments.

Care must be taken to assure that no person can come in contact with live conductors during installation or operation of the connectors.

ODU reserves the right to change the design and performance of any product to meet changing technical developments without prior notice.

ODU reserves the right to discontinue any part in this catalog without prior notice and without obligation to continue production after the change.

Quality management at ODU

ODU has had a powerful quality management system in place for years. ODU has been successfully certified to ISO 9001 since 1994. In addition, the automotive sector of the company group is certified to ISO/TS 16949.

The certification process was carried out by the internationally active BVQI (Bureau Veritas Quality International) company.

ODU is also certified according the medical norm ISO 13485:2003 + AC:2007.

Additional to this ODU ist approved to different certifications: VDE, UL, UL wiring harness, SCA, VG und MIL.



The complete ODU product range

<p>Single contacts (round or flat)</p>			
<p>High current connectors</p>			
<p>Cylindrical connectors with push-pull locking</p>			
<p>Modular attachable connectors</p>			
<p>PCB connectors</p>			
<p>Robust connectors</p>			
<p>Disposable Systems</p>			
<p>Custom specific connectors</p>			
<p>AMC – Advanced Military Connector</p>			
<p>Cable assembly</p>			

Your partner in all areas

ODU stands for quality, flexibility and reliability. That's the reason why customers of all areas trust in our products:

- Medical electronics
- Telecommunication
- Industrial electronics and automatisaton
- Measurement and testing
- Engineering and heavy industrie
- Military defence
- Renewable energy



Please visit our websites!

www.disposable-connector.com



www.odu.de



www.odu-usa.com



www.odu-china.com



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