SLIPSIL® SEALING PLUGS FOR METALLIC/ GRP/PLASTIC PIPES & CABLES



TESTED TO IMO RESOLUTION A.754(I8);
FIRE CLASS AO-A60
EC (MED) CERTIFICATE
MED-B-5067 ISSUED BY DNV







BEELE Engineering is dedicated to fire safety. From the pictures below the text, it might be clear that fire prevention is not child's play, nor can it just be disregarded. In a fire, the partitions can get so hot that even approaching them is impossible. Right then it is of utmost importance that the cable and pipe penetration seals stop the spread of fire and smoke to adjacent areas. To address this problem, BEELE Engineering has developed the NOFIRNO® technology. The cable and pipe penetrations, based on this technology, have been tested successfully for A- and H-class, A-0 and H-0 class and Jet Fires.







The NOFIRNO® rubber grade, which is compounded under strict conditions in our factory, is suitable for gas and water tight ducting and for fire rated applications as well.

We have been involved with fire resistant rubbers for decades. The drawbacks of certain fire resistant rubbers are halogen content, hardness of the highly filled rubbers, hardening during lifetime, and high permanent deformation sets. All these disadvantages will have an impact on performance in the long run. NOFIRNO® rubber does not have the above mentioned drawbacks. The processing conditions for optimized compounding in our factory assure highest perfor-

mance of the rubber.

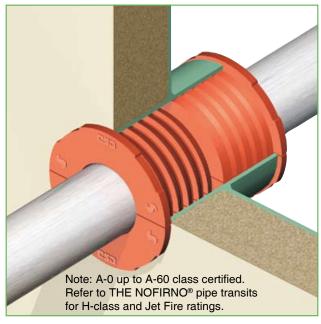
NOFIRNO® rubber is

traceable to prevent counterfeiting and to guarantee users the proven NOFIRNO® quality.

By way of surface charring and the rubber residues inside the product, it can easily be determined whether or not NOFIRNO® has been used (even after a fire).

1) the NOFIRNO® rubber shows minimum permanent deformation and limited stress relaxation, guaranteeing mechanical stability in the long term.

- 2) The NOFIRNO® rubber can be exposed to high temperatures (up to 180 °C), making the NOFIRNO® sealing system suitable for steam lines.
- 3) NOFIRNO® stays flexible at temperatures of -50 °C, allowing application in arctic environments.
- 4) The NOFIRNO® sealant/rubber has optimum fire stopping properties:
- a) creates immediately a protective layer at the fire side
- b) will not be consumed under fire exposure c) prevents smoke emission
- 5) Higher thermal insulation values under fire load.
- 6) Shorter conduit depths.
- 7) Approved for A-0 and H-0 class without the use of any insulation. Certified up to A-60 and H-120 class.
- 8) Successfully exposed to a 2 hour Jet Fire test.
- 9) Can be combined with RISE® and RISE®/ULTRA.



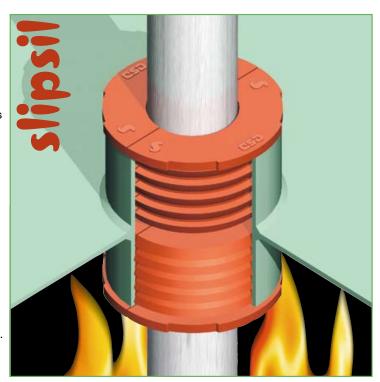






FIRE SAFETY WITHOUT ANY EXTRAS - NOW ACHIEVABLE

Synthetic rubbers are combustible. Rubber grades can be made only more or less fire retardant with the help of fire suppressant ingredients. The drawback of filling rubbers with large amounts of additives is that the mechanical properties might suffer. The hardness of the vulcanized products of such compounds might be reasonably high. Both features have an impact on the sealing capacity and the long term behaviour. Hardening and permanent deformation of the product during service life also have a negative impact on performance. NOFIRNO® rubber is halogen free, does not harden during service life, has outstanding weathering properties, does not shrink during fire exposure, has an oxygen index of 55% (>30% is flame retardant) and a low smoke index. NOFIRNO® rubber can be used in a very wide temperature range (-50 °C - +180 °C). Optimum fire safety guaranteed.



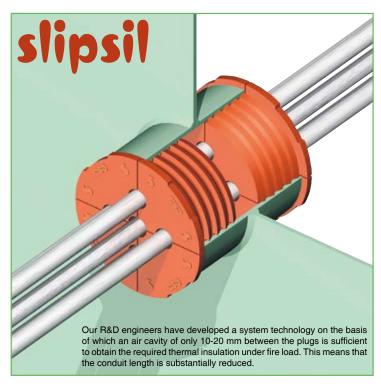
Because the plugs prevent direct contact between the service pipe and the sleeve, different types of pipes can be passed through steel or aluminium constructions without the problems of joints and electric couples.

Pipe penetrations sealed with plugs can be shorter in length than the common methods, in this way saving weight. With the use of SLIPSIL® sealing plugs, vibrations and noise transmission will be easily absorbed. Another advantage of the SLIPSIL® sealing plugs is that mechanical tensions between the bulkhead/deck and the service pipes are avoided. SLIPSIL® offers the possibility of using various pipe materials!

The plugs offer also a high degree of water tightness!

The design of the SLIPSIL® plugs is based on the LEAXEAL® technology, developed by BEELE Engineering, to obtain longest service life and highest tightness ratings.





















PLUG SERIES	CONDUIT SLEEVE		PLU LEN	G GTH	PIPE DIAME	ΓER
25	24.5 - 25.6		54		5 - 12	
27	26.5 - 27.6		54		5 - 15	
28	27.5 - 28.5		54		5 - 15	
30	29.5 - 30.5		54		5 - 16	
32	31.5 - 32.5		54		5 - 16	
34	33.5 - 34.5		54		5 - 18	
35	34.5 - 35.7		54		5 - 20	
37	36.5 - 37.7		54		5 - 20	
40	39.5 - 40.7		54		5 - 22	
41	40.5 - 41.7		54		5 - 25	
43	42.5 - 43.7		54		5 - 28	
50	49.5 - 50.7	6	66	6	6 - 32	-
53	52.0 - 53.7	Ē	66	Ë	6 - 34	Ē
55	54.0 - 55.7	Ë	66	Ë	6 - 34	ij
57	56.0 - 57.7	dimensions in mm	66	dimensions in mm	14 - 40	dimensions in mm
60	59.0 - 60.7	ısic	66	ısic	14 - 40	ısic
62	61.0 - 62.7	иеі	66	ие	14 - 40	ие
67	66.0 - 67.7		66		22 - 50	ij
68	67.0 - 68.7	all	66	all	20 - 50	all
70	69.0 - 70.7		66		22 - 50	
75	74.0 - 75.7		66		22 - 50	
78	77.0 - 78.7		66		22 - 50	
80	79.0 - 80.7		66		28 - 60	
82	81.0 - 82.7		66		28 - 60	
90	89.0 - 90.7		66		40 - 64	
94	93.0 - 94.7		66		40 - 64	
97	96.0 - 97.7		66		40 - 64	
100	99.0 - 100.7		66		40 - 75	
102	101.0 - 102.7		66		40 - 75	
103	102.0 - 103.7		66		26 - 75	
105	104.0 - 105.7		66		40 - 75	
107	106.0 - 107.7		66		40 - 76	
110	109.0 - 110.7		66		48 - 80	
118 122	117.5 - 119.2		66 66		60 - 90	
125	121.0 - 122.7 124.0 - 125.7		66 66		60 - 92 60 - 92	
128	127.0 - 128.7		66		60 - 92	
131	130.5 - 132.2		66		60 - 92	
146	145.0 - 146.7		79			
150	149.0 - 150.7		79 79		88 - 120 88 - 125	
152	151.0 - 152.7		79 79		88 - 125	
154	153.0 - 154.7		79 79		88 - 125	
156	155.0 - 156.7		79 79		88 - 125	
160	159.0 - 160.7		79		88 - 125	
190	189.0 - 190.7		79		110-160	
200	199.0 - 200.7		79		110-160	
203	202.0 - 203.7		79		110-168	
207	206.0 - 207.7		79		110-168	
250	249.0 - 250.7		91		160-200	
260	259.0 - 260.7		91		160-219	
300	299.0 - 300.7		91		160-250	

To select the right type of sealing plug, look for the plug series to be used on the basis of the outer diameter of the service pipe. Then make a choice for the plug type in the table of the selected plug series.

For instance: a copper pipe of 42 mm OD has to be ducted. Select the plug series on the basis of the ID of the conduit sleeve to be used and the OD of the duced pipe (67 up to 107 can be your choice). When a conduit sleeve 88.9x3.2 mm (ID = 82.5 mm) will be used a sealing plug 82/42-44 is the right choice. If a 54 mm OD copper pipe has to be ducted through a sleeve with an ID of 107.1 mm, plug type 107/54-56 has to be selected. See the tables of the series 82 and 107 on pages 7 and 8.

Note: the sealing plugs with a thin wall (like for instance 53/34) are not easy to install in undersized conduit openings. It is advisable to select a larger plug series (for instance 60/34-36).







cable/ pipe diamete	er	plug type	article number	cable/ pipe diameter	plug type	article number	cable/ pipe diameter	plug type	article number
blind		25/0	40.0100	blind	34/0	40.0600	18-20	40/18-20	40.0915
5-6		25/5-6	40.0105	5-6	34/5-6	40.0605	20-21	40/20-21	40.0916
6-7		25/6-7	40.0106	6-7	34/6-7	40.0606	21-22	40/21-22	40.0917
7-8		25/7-8	40.0107	7-8	34/7-8	40.0607	22	40/22	40.0918
8-9		25/8-9	40.0108	8-9	34/8-9	40.0608		40 multi is max.	2v10 3v7 5v7
9-10		25/9-10	40.0109	9-10	34/9-10	40.0609		40 mani is max.	2 10, 3 17, 3 17
10-11		25/10-11	40.0110	10-11	34/10-11	40.0610	blind	41/0	40.1000
11-12		25/11-12	40.0111	11-12	34/11-12	40.0611	5-6	41/5-6	40.1005
12		25/12	40.0112	12-13	34/12-13	40.0612	6-7	41/6-7	40.1006
				13-14	34/13-14	40.0613	7-8	41/7-8	40.1007
blind		27/0	40.0200	14-15	34/14-15	40.0614	8-9	41/8-9	40.1008
5-6		27/5-6	40.0205	15-16	34/15-16	40.0615	9-10	41/9-10	40.1009
6-7		27/6-7	40.0206	16-17	34/16-17	40.0616	10-11	41/10-11	40.1010
7-8		27/7-8	40.0207	17-18	34/17-18	40.0617	11-12	41/11-12	40.1011
8-9		27/8-9	40.0208	18	34/18	40.0618	12-14	41/12-14	40.1012
9-10		27/9-10	40.0209				14-16	41/14-16	40.1013
10-11		27/10-11	40.0210	blind	35/0	40.0700	16-18	41/16-18	40.1014
11-12		27/11-12	40.0211	5-6	35/5-6	40.0705	18-20	41/18-20	40.1015
12-13	ш	27/12-13	40.0212	6-7	35/6-7	40.0706	20-22	41/20-22	40.1016
13-14	ηL	27/13-14	40.0213	7-8	35/7-8	40.0707	22-23	41/22-23	40.1017
14-15	s ii	27/14-15	40.0214	8-9	35/8-9	40.0708	23-24	41/23-24	40.1018
15	io	27/15	40.0215	9-10	35/9-10	40.0709	24-25	41/24-25	40.1019
10	usi	27/13	40.0213	10-11	35/10-11	40.0709	25	41/25	40.1020
blind	all dimensions in mm	28/0	40.0300	6-7 7-8 8-9 9-10 10-11 11-12	35/11-12	40.0711	20-22		
5-6	ġ	28/5-6	40.0305	12-13	35/11-12	40.0711	ġ:	41 multi is max.	2x10, 3x7, 5x7
6-7	all	28/6-7	40.0306	13-14	35/12-13	40.0712	blind la	43/0	40.1100
7-8		28/7-8	40.0307	14-15	35/14-15	40.0714	5-6	43/5-6	40.1105
8-9		28/8-9	40.0307	15-16	35/15-16	40.0715	6-7	43/6-7	40.1106
9-10		28/9-10	40.0309	16-17	35/16-17	40.0716	7-8	43/7-8	40.1107
10-11		28/10-11	40.0309	17-18	35/17-18	40.0717	8-9	43/8-9	40.1107
11-12		28/11-12	40.0310	18-19	35/17-10	40.0717	9-10	43/9-10	40.1109
12-13		28/12-13	40.0311	19-20	35/19-20	40.0719	10-12	43/10-12	40.1110
13-14		28/13-14	40.0312	20	35/20	40.0719	12-14	43/12-14	40.1111
14-15		28/14-15	40.0314	20	33/20	40.0720	14-16	43/14-16	40.1112
15		28/15	40.0314	blind	37/0	40.0800	16-18	43/16-18	40.1112
15		20/13	40.0313	5-6	37/5-6	40.0805	18-20	43/18-20	40.1114
blind		30/0	40.0400	6-7	37/6-7	40.0806	20-22	43/20-22	40.1115
5-6		30/5-6	40.0405	7-8	37/7-8	40.0807	22-24	43/22-24	40.1116
6-7		30/6-7	40.0406	8-9	37/8-9	40.0808	24-25	43/24-25	40.1117
7-8		30/7-8	40.0407	9-10	37/9-10	40.0809	25-26	43/25-26	40.1118
8-9		30/8-9	40.0407	10-11	37/10-11	40.0810	26-27	43/26-27	40.1119
9-10		30/9-10	40.0409	11-12	37/11-12	40.0810	27-28	43/27-28	40.1119
10-11		30/10-11	40.0410	12-13	37/11-12	40.0811	28	43/28	40.1121
11-12		30/10-11	40.0410	13-14	37/13-14	40.0812	20		
12-13		30/12-13	40.0411	14-15	37/14-15	40.0813		43 multi is max.	2x10, 3x7, 5x7
						40.0815	blind	E0/0	40 1000
13-14 14-15		30/13-14	40.0413	15-16 16-17	37/15-16		blind 6-7	50/0 50/6-7	40.1200
14-15 15-16		30/14-15 30/15-16	40.0414	17-18	37/16-17 37/17-18	40.0816	6-7 7-8		40.1205
			40.0415			40.0817	7-8 8-9	50/7-8 50/8 0	40.1206
16		30/16	40.0416	18-19	37/18-19	40.0818		50/8-9	40.1207
blind		33/0	40.0500	19-20	37/19-20 37/20	40.0819	9-10	50/9-10 50/10 12	40.1208
blind 5.6		32/0	40.0500 40.0505	20	37/20	40.0820	10-12	50/10-12	40.1209
5-6		32/5-6		blind	40/0	40,0000	12-14	50/12-14	40.1210
6-7 7-8		32/6-7	40.0506	blind	40/0 40/5 6	40.0900	14-16	50/14-16 50/16-19	40.1211
		32/7-8	40.0507	5-6	40/5-6	40.0905	16-18	50/16-18	40.1212
8-9		32/8-9	40.0508	6-7	40/6-7	40.0906	18-20	50/18-20	40.1213
9-10		32/9-10	40.0509	7-8	40/7-8	40.0907	20-22	50/20-22	40.1214
10 11		32/10-11	40.0510	8-9	40/8-9 40/9-10	40.0908 40.0909	22-24 24-26	50/22-24 50/24-26	40.1215
10-11			40 0544						
11-12		32/11-12	40.0511	9-10					40.1216
11-12 12-13		32/11-12 32/12-13	40.0512	10-11	40/10-11	40.0910	26-28	50/26-28	40.1217
11-12 12-13 13-14		32/11-12 32/12-13 32/13-14	40.0512 40.0513	10-11 11-12	40/10-11 40/11-12	40.0910 40.0911	26-28 28-29	50/26-28 50/28-29	40.1217 40.1218
11-12 12-13 13-14 14-15		32/11-12 32/12-13 32/13-14 32/14-15	40.0512 40.0513 40.0514	10-11 11-12 12-14	40/10-11 40/11-12 40/12-14	40.0910 40.0911 40.0912	26-28 28-29 29-30	50/26-28 50/28-29 50/29-30	40.1217 40.1218 40.1219
11-12 12-13 13-14		32/11-12 32/12-13 32/13-14	40.0512 40.0513	10-11 11-12	40/10-11 40/11-12	40.0910 40.0911	26-28 28-29	50/26-28 50/28-29	40.1217 40.1218





cable/ pipe	plug type	article number	cable/ pipe	plug type	article number	cable/ pipe	plug type	article numbe
diameter	1		diameter			diameter		
32	50/32	40.1222	40	57/40	40.1526	30-32	68/30-32	40.1919
	50 multi is max	. 2x15, 3x8, 5x8				32-34	68/32-34	40.1920
			blind	60/0	40.1600	34-36	68/34-36	40.1921
blind	53/0	40.1300	14-16	60/14-16	40.1611	36-38	68/36-38	40.1922
6-7	53/6-7	40.1305	16-18	60/16-18	40.1612	38-40	68/38-40	40.1923
7-8	53/7-8	40.1306	18-20	60/18-20	40.1613	40-42	68/40-42	40.1924
8-9	53/8-9	40.1307	20-22	60/20-22	40.1614	42-44	68/42-44	40.1925
9-10	53/9-10	40.1308	22-24	60/22-24	40.1615	44-46	68/44-46	40.1926
10-12	53/10-12	40.1309	24-26	60/24-26	40.1616	46-48	68/46-48	40.1927
12-14	53/12-14	40.1310	26-28	60/26-28	40.1617	48-50	68/48-50	40.1928
14-16	53/14-16	40.1311	28-30	60/28-30	40.1618	50	68/50	40.1929
16-18	53/16-18	40.1312	30-32	60/30-32	40.1619		68 multi is max.	2x22, 3x12, 5x12
18-20	53/18-20	40.1313	32-34	60/32-34	40.1620	ام مناط	70/0	40,0000
20-22 22-24	53/20-22 53/22-24	40.1314	34-36 36-37	60/34-36 60/36-37	40.1621	blind 20-22	70/0 70/20-22	40.2000 40.2014
24-26	53/24-26	40.1315 40.1316	37-38	60/30-37	40.1622 40.1623	22-24	70/20-22 70/22-24	40.2014
26-28	53/26-28	40.1317	38-39	60/38-39	40.1624	24-26	70/24-26	40.2016
00.00	F0/00 00	40.1318		60/39-40	40.1625	00.00	70/24-20	40.2017
30-31	53/30-31	40.1319	40	60/40	40.1626	28-30 E	70/28-30	40.2017
31-32	≥ 53/31-32	40.1320	2.5			30-32 .∈	70/30-32	40.2019
32-33	53/32-33	40.1321	1 21	60 multi is max.	2x15, 3x10	32-34	70/32-34	40.2020
33-34	53/33-34	40.1322	blind s	62/0	40.1700	34-36	70/34-36	40.2021
34	53/28-30 53/30-31 53/31-32 53/32-33 53/33-34 53/34 53/34	40.1323	39-40 40 blind is usion is using the subject of the	62/14-16	40.1711	28-30 E 28-30 30-32 51 51 51 51 51 51 51 51 51 51 51 51 51	70/36-38	40.2022
	30/04		16-18	62/16-18	40.1712	38-40	70/38-40	40.2023
		. 2x15, 3x10, 5x10	18-20	62/18-20	40.1713	40-42	70/40-42	40.2024
blind	ਰੋ 55/0	40.1400	20-22	62/20-22	40.1714	42-44	70/42-44	40.2025
6-7	55/6-7	40.1405	22-24	62/22-24	40.1715	44-46	70/44-46	40.2026
7-8	55/7-8	40.1406	24-26	62/24-26	40.1716	46-48	70/46-48	40.2027
8-9	55/8-9	40.1407	26-28	62/26-28	40.1717	48-50	70/48-50	40.2028
9-10	55/9-10	40.1408	28-30	62/28-30	40.1718	50	70/50	40.2029
10-12	55/10-12	40.1409	30-32	62/30-32	40.1719		70 multi is max.	
12-14	55/12-14	40.1410	32-34	62/32-34	40.1720		70 muiu is max.	2X22, 3X12
14-16	55/14-16	40.1411	34-36	62/34-36	40.1721	blind	75/0	40.2100
16-18	55/16-18	40.1412	36-37	62/36-37	40.1722	22-24	75/22-24	40.2115
18-20	55/18-20	40.1413	37-38	62/37-38	40.1723	24-26	75/24-26	40.2116
20-22	55/20-22	40.1414	38-39	62/38-39	40.1724	26-28	75/26-28	40.2117
22-24	55/22-24	40.1415	39-40	62/39-40	40.1725	28-30	75/28-30	40.2118
24-26	55/24-26	40.1416	40	62/40	40.1726	30-32	75/30-32	40.2119
26-28	55/26-28	40.1417		62 multi is max.	2x15. 3x10	32-34	75/32-34	40.2120
28-30	55/28-30	40.1418			.,	34-36	75/34-36	40.2121
30-31	55/30-31	40.1419	blind	67/0	40.1800	36-38	75/36-38	40.2122
31-32	55/31-32	40.1420	22-24	67/22-24	40.1815	38-40	75/38-40	40.2123
32-33	55/32-33	40.1421	24-26	67/24-26	40.1816	40-42	75/40-42	40.2124
33-34	55/33-34	40.1422	26-28	67/26-28	40.1817	42-44	75/42-44	40.2125
34	55/34	40.1423	28-30	67/28-30	40.1818	44-46	75/44-46	40.2126
	55 multi is max	. 2x15, 3x10, 5x10	30-32	67/30-32	40.1819	46-48	75/46-48	40.2127
			32-34	67/32-34	40.1820	48-50	75/48-50	40.2128
blind	57/0	40.1500	34-36	67/34-36	40.1821	50	75/50	40.2129
14-16	57/14-16	40.1511	36-38	67/36-38	40.1822	le line at	70/0	40.0000
16-18	57/16-18	40.1512	38-40	67/38-40	40.1823	blind	78/0	40.2200
18-20	57/18-20	40.1513	40-42	67/40-42	40.1824	22-24	78/22-24	40.2215
20-22	57/20-22	40.1514	42-44	67/42-44	40.1825	24-26	78/24-26	40.2216
22-24	57/22-24	40.1515	44-46	67/44-46	40.1826	26-28	78/26-28	40.2217
24-26	57/24-26	40.1516	46-48	67/46-48	40.1827	28-30	78/28-30	40.2218
26-28	57/26-28	40.1517	48-50	67/48-50	40.1828	30-32	78/30-32	40.2219
28-30	57/28-30	40.1518	50	67/50	40.1829	32-34	78/32-34	40.2220
30-32	57/30-32 57/30-34	40.1519	blind	69/0	40 1000	34-36	78/34-36	40.2221
32-34	57/32-34	40.1520	blind	68/0	40.1900	36-38	78/36-38	40.2222
34-36	57/34-36 57/36-37	40.1521	20-22	68/20-22	40.1914	38-40	78/38-40	40.2223
36-37 37-38	57/36-37	40.1522	22-24	68/22-24	40.1915	40-42	78/40-42	40.2224
	57/37-38	40.1523	24-26	68/24-26	40.1916	42-44	78/42-44	40.2225
38-39	57/38-39	40.1524	26-28	68/26-28	40.1917	44-46	78/44-46	40.2226







cable/ pipe diameter	plug type	article number	cable/ pipe diamet	or	plug type	article number	cable/ pipe diamete		plug type	article number
diameter			diamet	er			diamete	r		
48-50	78/48-50	40.2228	blind		94/0	40.2600	60-62		102/60-62	40.2930
50-52	78/50-52	40.2229	40-42		94/40-42	40.2620	62-64		102/62-64	40.2931
52-53	78/52-53	40.2230	42-44		94/42-44	40.2621	64-66		102/64-66	40.2932
53-54	78/53-54	40.2231	44-46		94/44-46	40.2622	66-68		102/66-68	40.2933
54	78/54	40.2232	46-48		94/46-48	40.2623	68-70		102/68-70	40.2934
٠.			48-50		94/48-50	40.2624	70-72		102/70-72	40.2935
	78 muiti is max.	2x22, 3x15, 5x15	50-52		94/50-52	40.2625	72-74		102/72-74	40.2936
blind	80/0	40.2300	52-54		94/52-54	40.2626	74-75		102/74-75	40.2937
28-30	80/28-30	40.2318	54-56		94/54-56	40.2627	75		102/75	40.2938
30-32	80/30-32	40.2319	56-58		94/56-58	40.2628	70		102/10	40.2300
32-34	80/32-34	40.2320	58-60		94/58-60	40.2629	blind		103/0	40.3000
34-36	80/34-36	40.2321	60-62		94/60-62	40.2630	26-28		103/26-28	40.3013
36-38	80/36-38		62-64		94/62-64		28-30		103/28-30	
		40.2322				40.2631	40-42			40.3014
38-40	80/38-40	40.2323	64		94/64	40.2632	40-42 42-44		103/40-42	40.3020
40-42	80/40-42	40.2324	la Caral		07/0	40.0700			103/42-44	40.3021
42-44	80/42-44	40.2325	blind		97/0	40.2700	44-46		103/44-46	40.3022
44-46	80/44-46	40.2326	40-42		97/40-42	40.2720	46-48		103/46-48	40.3023
46-48	80/46-48	40.2327	42-44	н	97/42-44	40.2721	48-50	н	103/48-50	40.3024
48-50	80/48-50	40.2328	44-46	in mm	97/44-46	40.2722	50-52	Ē	103/50-52	40.3025
50-52 .5	80/50-52	40.2329	46-48	ij.	97/46-48	40.2723	52-54	12.	103/52-54	40.3026
52-54	80/52-54	40.2330	48-50	ns	97/48-50	40.2724	54-56	ns	103/54-56	40.3027
54-56	80/54-56	40.2331	50-52	Sio	97/50-52	40.2725	56-58	sio	103/56-58	40.3028
56-58	80/56-58	40.2332	52-54	Ü	97/52-54	40.2726	58-60	en	103/58-60	40.3029
48-50 50-52 52-54 54-56 56-58 58-60 60	80/58-60	40.2333	54-56	dimensions	97/54-56	40.2727	60-62	dimensions in mm	103/60-62	40.3030
60	80/60	40.2334	56-58		97/56-58	40.2728	62-64	9	103/62-64	40.3031
ā		2x22, 3x15, 5x15	58-60	all	97/58-60	40.2729	64-66	all	103/64-66	40.3032
	oo man is max.	222, 3213, 3213	60-62		97/60-62	40.2730	66-68		103/66-68	40.3033
blind	82/0	40.2400	62-64		97/62-64	40.2731	68-70		103/68-70	40.3034
28-30	82/28-30	40.2418	64		97/64	40.2732	70-72		103/70-72	40.3035
30-32	82/30-32	40.2419	01		07701	10.2702	72-74		103/72-74	40.3036
32-34	82/32-34	40.2420	blind		100/0	40.2800	74-75		103/74-75	40.3037
34-36	82/34-36	40.2421	40-42		100/40-42	40.2820	75		103/75	40.3038
36-38	82/36-38	40.2422	42-44		100/40 42	40.2821	70		100/10	40.0000
38-40	82/38-40	40.2423	44-46		100/44-46	40.2822	blind		105/0	40.3100
40-42	82/40-42		46-48				40-42		105/40-42	
40-42		40.2424			100/46-48	40.2823	40-42 42-44			40.3120
	82/42-44	40.2425	48-50		100/48-50	40.2824			105/42-44	40.3121
44-46	82/44-46	40.2426	50-52		100/50-52	40.2825	44-46		105/44-46	40.3122
46-48	82/46-48	40.2427	52-54		100/52-54	40.2826	46-48		105/46-48	40.3123
48-50	82/48-50	40.2428	54-56		100/54-56	40.2827	48-50		105/48-50	40.3124
50-52	82/50-52	40.2429	56-58		100/56-58	40.2828	50-52		105/50-52	40.3125
52-54	82/52-54	40.2430	58-60		100/58-60	40.2829	52-54		105/52-54	40.3126
54-56	82/54-56	40.2431	60-62		100/60-62	40.2830	54-56		105/54-56	40.3127
56-58	82/56-58	40.2432	62-64		100/62-64	40.2831	56-58		105/56-58	40.3128
58-60	82/58-60	40.2433	64-66		100/64-66	40.2832	58-60		105/58-60	40.3129
60	82/60	40.2434	66-68		100/66-68	40.2833	60-62		105/60-62	40.3130
	82 multi is max	2x22, 3x15, 5x15	68-70		100/68-70	40.2834	62-64		105/62-64	40.3131
		,,	70-72		100/70-72	40.2835	64-66		105/64-66	40.3132
blind	90/0	40.2500	72-74		100/72-74	40.2836	66-68		105/66-68	40.3133
40-42	90/40-42	40.2520	74-75		100/74-75	40.2837	68-70		105/68-70	40.3134
42-44	90/42-44	40.2521	75		100/75	40.2838	70-72		105/70-72	40.3135
44-46	90/44-46	40.2522					72-74		105/72-74	40.3136
46-48	90/46-48	40.2523	blind		102/0	40.2900	74-75		105/74-75	40.3137
48-50	90/48-50	40.2524	40-42		102/40-42	40.2920	75		105/75	40.3138
50-52	90/50-52	40.2525	42-44		102/42-44	40.2921			100,10	10.0100
52-54	90/52-54	40.2526	44-46		102/44-46	40.2922	blind		107/0	40.3200
54-56	90/54-56	40.2527	46-48		102/46-48	40.2923	40-42		107/40-42	40.3220
56-58	90/56-58	40.2528	48-50		102/48-50	40.2924	42-44		107/42-44	40.3221
58-60	90/58-60	40.2529	50-52		102/50-52	40.2925	44-46		107/44-46	40.3222
60-62	90/60-62	40.2530	52-54		102/52-54	40.2926	46-48		107/46-48	40.3223
	00/60 64	40.2531	54-56		102/54-56	40.2927	48-50		107/48-50	40.3224
62-64	90/62-64									
62-64 64	90/62-64	40.2532	56-58 58-60		102/56-58 102/58-60	40.2928 40.2929	50-52 52-54		107/50-52 107/52-54	40.3225 40.3226





cable/ pipe diamete	er	plug type	article number	cable/ pipe diamete	er	plug type	article number	cable/ pipe diameter	•	plug type	article number
54-56		107/54-56	40.3227	82-84		122/82-84	40.3541	blind		146/0	40.3900
56-58		107/56-58	40.3228	84-86		122/84-86	40.3542	88-90		146/88-90	40.3920
58-60		107/58-60	40.3229	86-88		122/86-88	40.3543	90-92		146/90-92	40.3921
60-62		107/60-62	40.3230	88-90		122/88-90	40.3544	92-94		146/92-94	40.3922
62-64		107/62-64	40.3231	90-92		122/90-92	40.3545	94-96		146/94-96	40.3923
64-66		107/64-66	40.3232	92		122/92	40.3546	96-98		146/96-98	40.3924
66-68		107/66-68	40.3233					98-100		146/98-100	40.3925
68-70		107/68-70	40.3234	blind		125/0	40.3600	100-102		146/100-102	40.3926
70-72		107/70-72	40.3235	60-62		125/60-62	40.3630	102-104		146/102-104	40.3927
72-74		107/72-74	40.3236	62-64		125/62-64	40.3631	104-106		146/104-106	40.3928
74-75		107/74-75	40.3237	64-66		125/64-66	40.3632	106-108		146/106-108	40.3929
75-76		107/75-76	40.3238	66-68		125/66-68	40.3633	108-110		146/108-110	40.3930
76		107/76	40.3239	68-70		125/68-70	40.3634	110-112		146/110-112	40.3931
70		107/76	40.3239								
				70-72		125/70-72	40.3635	112-114		146/112-114	40.3932
blind		110/0	40.3300	72-74		125/72-74	40.3636	114-116		146/114-116	40.3933
48-50		110/48-50	40.3324	74-76		125/74-76	40.3637	116-118		146/116-118	40.3934
50-52		110/50-52	40.3325	76-78		125/76-78	40.3638	118-120		146/118-120	40.3935
52-54	~	110/52-54	40.3326	78-80	~	125/78-80	40.3639	120	_	146/120	40.3936
54-56	7	110/54-56	40.3327	80-82	шш	125/80-82	40.3640		Ĕ		
56-58	ıυ	110/56-58	40.3328	82-84	ıυ	125/82-84	40.3641	blind	=	150/0	40.4000
58-60	i s	110/58-60		84-86	S ir	125/84-86	40.3642	88-90	=	150/88-90	40.4020
	č		40.3329		ii.			00-90	Ë		
60-62	dimensions in mm	110/60-62	40.3330	86-88	all dimensions in	125/86-88	40.3643	90-92	aimensions in min	150/90-92	40.4021
62-64	ē	110/62-64	40.3331	88-90	ē	125/88-90	40.3644	92-94	ĕ	150/92-94	40.4022
64-66	Ë	110/64-66	40.3332	90-92	ij	125/90-92	40.3645	94-96	5	150/94-96	40.4023
66-68	all c	110/66-68	40.3333	92	5	125/92	40.3646		2 	150/96-98	40.4024
68-70	a	110/68-70	40.3334		a			98-100	Ū	150/98-100	40.4025
70-72		110/70-72	40.3335	blind		128/0	40.3700	100-102		150/100-102	40.4026
72-74		110/72-74	40.3336	60-62		128/60-62	40.3730	102-104		150/102-104	40.4027
74-76		110/74-76	40.3337	62-64		128/62-64	40.3731	104-106		150/104-106	40.4028
76-78		110/76-78	40.3338	64-66		128/64-66	40.3732	106-108		150/106-108	40.4029
78-80		110/78-80	40.3339	66-68		128/66-68	40.3733	108-110		150/108-110	40.4030
80		110/80	40.3340	68-70		128/68-70	40.3734	110-112		150/110-112	40.4031
				70-72		128/70-72	40.3735	112-114		150/112-114	40.4032
blind		118/0	40.3400	72-74		128/72-74	40.3736	114-116		150/114-116	40.4033
60-62		118/60-62	40.3430	74-76		128/74-76	40.3737	116-118		150/116-118	40.4034
62-64		118/62-64	40.3431	76-78		128/76-78	40.3738	118-120		150/118-120	40.4035
64-66		118/64-66	40.3432	78-80		128/78-80	40.3739	120-122		150/120-122	40.4036
66-68		118/66-68	40.3433	80-82		128/80-82	40.3740	122-124		150/120 122	40.4037
				82-84							
68-70		118/68-70	40.3434			128/82-84	40.3741	124-125		150/124-125	40.4038
70-72		118/70-72	40.3435	84-86		128/84-86	40.3742	125		150/125	40.4039
72-74		118/72-74	40.3436	86-88		128/86-88	40.3743				
74-76		118/74-76	40.3437	88-90		128/88-90	40.3744	blind		152/0	40.4100
76-78		118/76-78	40.3438	90-92		128/90-92	40.3745	88-90		152/88-90	40.4120
78-80		118/78-80	40.3439	92		128/92	40.3746	90-92		152/90-92	40.4121
80-82		118/80-82	40.3440	· ·				92-94		152/92-94	40.4122
82-84		118/82-84	40.3441	blind		131/0	40.3800	94-96		152/94-96	40.4123
84-86		118/84-86	40.3442	60-62		131/60-62	40.3830	96-98		152/94-96	40.4124
86-88		118/86-88	40.3443	62-64		131/62-64	40.3831	98-100		152/98-100	40.4125
88-90		118/88-90	40.3444	64-66		131/64-66	40.3832	100-102		152/100-102	40.4126
90		118/90	40.3445	66-68		131/66-68	40.3833	102-104		152/102-104	40.4127
				68-70		131/68-70	40.3834	104-106		152/104-106	40.4128
blind		122/0	40.3500	70-72		131/70-72	40.3835	106-108		152/106-108	40.4129
60-62		122/60-62	40.3530	72-74		131/72-74	40.3836	108-110		152/108-110	40.4130
62-64		122/62-64	40.3531	74-76		131/74-76	40.3837	110-112		152/110-112	40.4131
64-66		122/64-66	40.3532	76-78		131/76-78	40.3838	112-114		152/112-114	40.4132
						131/78-80		114-116			
66-68		122/66-68	40.3533	78-80			40.3839			152/114-116	40.4133
68-70		122/68-70	40.3534	80-82		131/80-82	40.3840	116-118		152/116-118	40.4134
70-72		122/70-72	40.3535	82-84		131/82-84	40.3841	118-120		152/118-120	40.4135
70.74		122/72-74	40.3536	84-86		131/84-86	40.3842	120-122		152/120-122	40.4136
12-14		122/74-76	40.3537	86-88		131/86-88	40.3843	122-124		152/122-124	40.4137
72-74 74-76		122/14-10	40.0007							102/122-124	
74-76											
		122/76-78 122/78-80	40.3538 40.3539	88-90 90-92		131/88-90 131/90-92	40.3844 40.3845	124-125 125		152/124-125 152/125	40.4138 40.4139







cable/ pipe diameter	plug type	article number	cable/ pipe diameter	plug type	article number	cable/ pipe diameter	plug type	article number
blind	154/0	40.4200	124-125	160/124-125	40.4438			
88-90	154/88-90	40.4220	125	160/125	40.4439	19		100
90-92	154/90-92	40.4221	0	.00/ .20	1011100	1		
92-94	154/92-94	40.4222	blind	190/0	40.4500			
94-96	154/94-96	40.4223	110-112	190/110	40.4520	1	No.	
96-98	154/96-98	40.4224	114-116	190/114	40.4523	-		- 4
98-100	154/98-100	40.4225	125-127	190/125	40.4528		2	
100-102		40.4226	133-135	190/123	40.4531			
	154/100-102 154/102-104		139-141					
102-104		40.4227		190/139	40.4533	969		
104-106	154/104-106	40.4228	142-144	190/142	40.4534			
106-108	154/106-108	40.4229	153-155	190/153	40.4541			
108-110	154/108-110	40.4230	159-161	190/159	40.4543			
110-112	154/110-112	40.4231						
112-114	154/112-114	40.4232	blind	200/0	40.4600			
114-116	154/114-116	40.4233	110-112	200/110	40.4620			
116-118	154/116-118	40.4234	114-116	200/114	40.4623		1000	
118-120	154/118-120	40.4235	120-122	200/120	40.4626			
120-122 💂	154/120-122	40.4236	125-127	200/125	40.4628		series/2xcab	le diameter
122-124 È	154/122-124	40.4237	133-135	200/133	40.4632	For instance	e 40/2x6-7	
124-125 🗧	154/124-125	40.4238	135-137 .5	200/135	40.4631			
125	154/125	40.4239	139-141 ૄ	200/139	40.4633			
sio			159-161 · 🖟	200/159	40.4643			
120-122 122-124 124-125 125 125 125 125 125 125 125 120-122 124-125 125 129-129 129-12	156/0	40.4300	139-141 Suo 159-161 Suo blind blind					Carrie
88-90	156/88-90	40.4320	blind <u>.</u> Ĕ	203/0	40.4700	- 9		100
90-92	156/90-92	40.4321	110-112	203/110	40.4720		100	The state of the s
92-94	156/92-94	40.4322	114-116 g	203/114	40.4723	(6)	-	
94-96	156/94-96	40.4323	125-127	203/125	40.4728	No.		
96-98	156/96-98	40.4324	133-135	203/133	40.4731	90	es.	-
98-100	156/98-100	40.4325	139-141	203/139	40.4733			
100-102	156/100-102	40.4326	141-143	203/141	40.4734			
100-102	156/102-104	40.4327	159-161	203/159	40.4743			
104-106	156/104-106	40.4328	168-170	203/168	40.4748			
			100 170	200/100	40.4740			
106-108 108-110	156/106-108 156/108-110	40.4329 40.4330	blind	207/0	40.4800			
			110-112	207/110	40.4820			
110-112	156/110-112	40.4331	114-116	207/114	40.4823			
112-114	156/112-114 156/114-116	40.4332	125-127	207/114	40.4828			
114-116		40.4333	133-135	207/123	40.4831			
116-118	156/116-118	40.4334	139-141	207/133	40.4833	`		
118-120	156/118-120	40.4335	159-141	207/159	40.4843	type code:	series/3xcabl	e diameter
120-122	156/120-122	40.4336	168-170	207/168	40.4848	For instance		C diameter
122-124	156/122-124	40.4337	100-170	207/100	40.4646	i oi ilistano	C 40/0X0 /	
124-125	156/124-125	40.4338	160 162	250/160	40 5010			
125	156/125	40.4339	160-162 168-170	250/160 250/168	40.5010 40.5014			
امصناط	100/0	40 4400	171-173	250/168	40.5014			
blind	160/0	40.4400	200-202			1		/
88-90	160/88-90	40.4420	200-202	250/200	40.5030			1
90-92	160/90-92	40.4421	160-162	260/160	40 5010			E
92-94	160/92-94	40.4422		260/160	40.5210	13	-	
94-96	160/94-96	40.4423	219-221	260/219	40.5239		7	OS.
96-98	160/96-98	40.4424	200 200	200/202	40 E004		2	
98-100	160/98-100	40.4425	200-202	300/200	40.5321		-	
100-102	160/100-102	40.4426	250-252	300/250	40.5346			
102-104	160/102-104	40.4427	* 45	0.00				
104-106	160/104-106	40.4428		90 up to 340 are		1		
106-108	160/106-108	40.4429		uest. The listed si				
108-110	160/108-110	40.4430		other sizes, plea	se contact	1		
110-112	160/110-112	40.4431	our sales dep	artment.				
112-114	160/112-114	40.4432				1		
114-116	160/114-116	40.4433						
116-118	160/116-118	40.4434					-	
118-120	160/118-120	40.4435						-
120-122	160/120-122	40.4436					series/5xcab	le diameter
		40.4437				For instance	40/5 0 7	





Cutting Edge NOFIRNO® and LEAXEAL® technology for optimum performance under harshest conditions:

SYSTEM WILL NOT BE CONSUMED WHEN EXPOSED TO FIRE
SEALING PLUGS ARE MADE OF INERT SILICONE RUBBER
IN CASE OF FIRE: NON-TOXIC, LOW SMOKE INDEX
CE (MED) CERTIFICATES FOR A-O UP TO A-60

APPROVED WATER TIGHT UP TO 2.5 BAR

APPROVED GAS TIGHT UP TO I BAR

SHORTEST POSSIBLE CONDUIT LENGTH

WIDE TEMPERATURE RANGE: CAN BE USED FOR STEAM LINES AND ALSO IN ARCTIC CONDITIONS

HIGH LEVEL OF SOUND DAMPING/EMC ATTENUATION

SHOCK AND VIBRATION PROOF

NO MECHANICAL STRESSES TRANSFERRED TO THE DIVISION

UP TO 50 YEARS SERVICE LIFE

CAPABLE OF ABSORBING TEMPERATURE CHANGES

WEATHERING, UV AND OZONE RESISTANT

PROVIDES CATHODIC PROTECTION

ALLOWS LONGITUDINAL/RADIAL MOVEMENT

FOR METALLIC, GRP AND PLASTIC PIPES AND CABLES

EXTREMELY SIMPLE TO INSTALL

INSULATION ONLY AT THE INSULATED SIDE OF THE DIVISION

NO INSULATION REQUIRED FOR METALLIC AND GRP PIPES PASSING THROUGH A-O DIVISIONS

SYSTEM PREVENTS CORROSION INSIDE THE TRANSIT

APPROVED FOR STEEL AND ALUMINIUM PARTITIONS

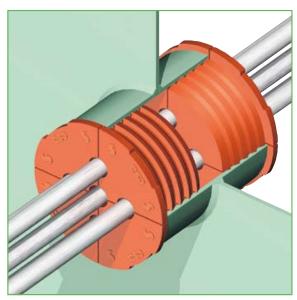
MAINTENANCE FRIENDLY



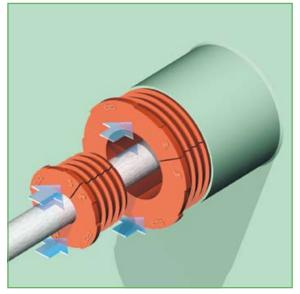




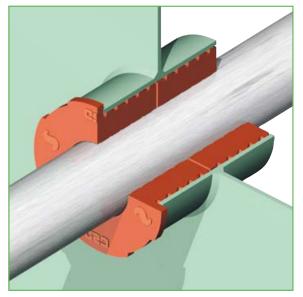




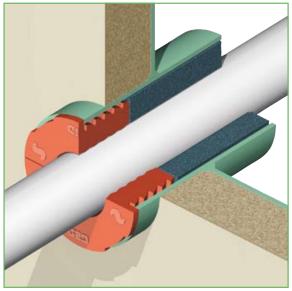
Several options are available with the SLIPSIL® plugs. Especially for hydraulic and pneumatic lines, a series of SLIPSIL® multi-sealing plugs have been developed to enable ducting of 2 - 5 same diameter pipes.



SLIPSIL® adapter plugs can be used in cases where conduit sleeves are much larger than the service pipe OD, and no individual sealing plug is available. A SLIPSIL® adapter plug with a standard SLIPSIL® plug offers the solution.



In case there is no access to install the sealing plugs from both sides, a solution has been found to install a combination of DYNATITE® and SLIPSIL® plugs. The flange of the DYNATITE® plug fits inside, and is inserted deeply into, the conduit sleeve. The SLIPSIL® sealing plug is then installed on top of the DYNATITE® plug.



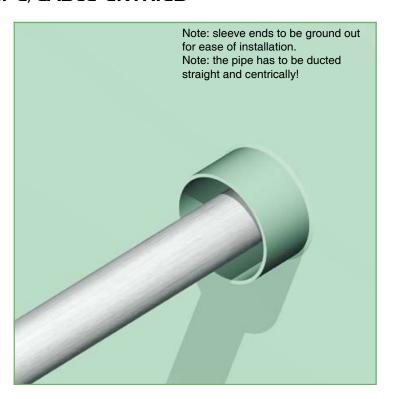
For plastic pipe penetrations, a combination of the SLIPSIL® sealing plugs and the RISE®/ULTRA crushers can be used.

Instead of RISE®/ULTRA crushers, RISE®/ULTRA wraps can be used. Note: the RISE®/ULTRA wraps are 2.5 mm thick and have to be wrapped to the required thickness.





1) Before starting the installation procedure, any dirt, oil residues or welding spots should be removed from the conduit sleeve. For ease of installation, it is advisable to grind out the front side of the sleeve.



slipsil

2) Then the inside wall of the conduit sleeve is treated with CSD® lubricant along a distance which approximately corresponds to the length of the sealing plug.











3) The inside surfaces of both segments of the SLIPSIL® sealing plug are then treated with CSD® lubricant.

For selecting the right sealing plug, look for the plug series and the plug type in this series on the basis of the ID of the sleeve and the OD of the ducted pipe.



slipsil

4) The segments of the SLIPSIL® sealing plug are also treated with CSD® lubricant on the outside. Please refer to the Safety Data Sheet of the CSD® lubricant for more information.



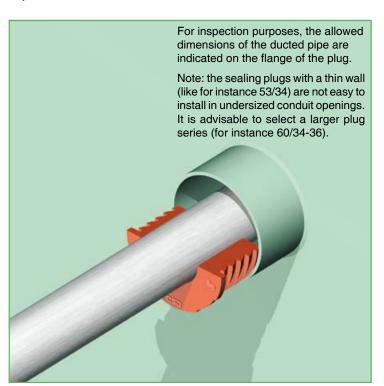








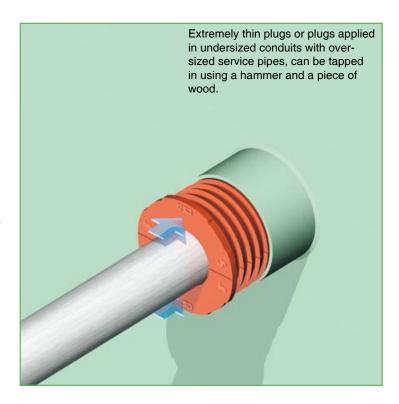
5) Both segments of the SLIPSIL® sealing plug are placed around the ducted pipe and then pushed into the conduit sleeve as far as the first serration. The first serration is smaller than the other serrations to make this procedure very easy.



slipsil

6) Then both segments of the SLIPSIL® sealing plug are pushed by hand evenly, serration by serration, further into the conduit sleeve.

For fire rated conduits, the plugs have to be applied at both sides. During insertion of the second plug, the air between both plugs will be compressed, and has to be released from time to time, by inserting a screw driver between both plug halves.



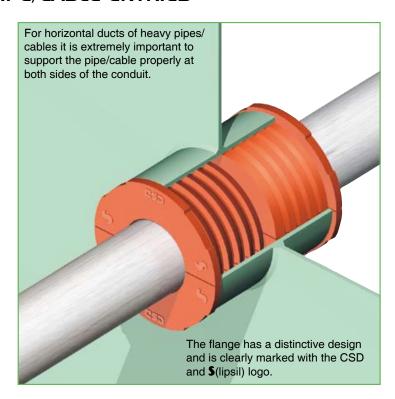






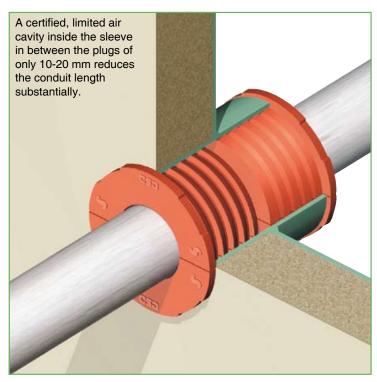


7) The flanged edges of the sealing plugs must be flush against the front side of the conduit sleeve at both sides. Note: tightness and installation are optimum at nominal sizes (for instance for 60/34-36 optimum is 60 mm ID of the sleeve and 34 mm OD of the ducted pipe).



slipsil

8) For A-class penetrations (which are insulated), the conduit sleeve needs to be insulated only at the insulated side of the bulkhead or at the lower side of the deck. The ducted pipe has to be insulated according to the specifications on the certified drawings.

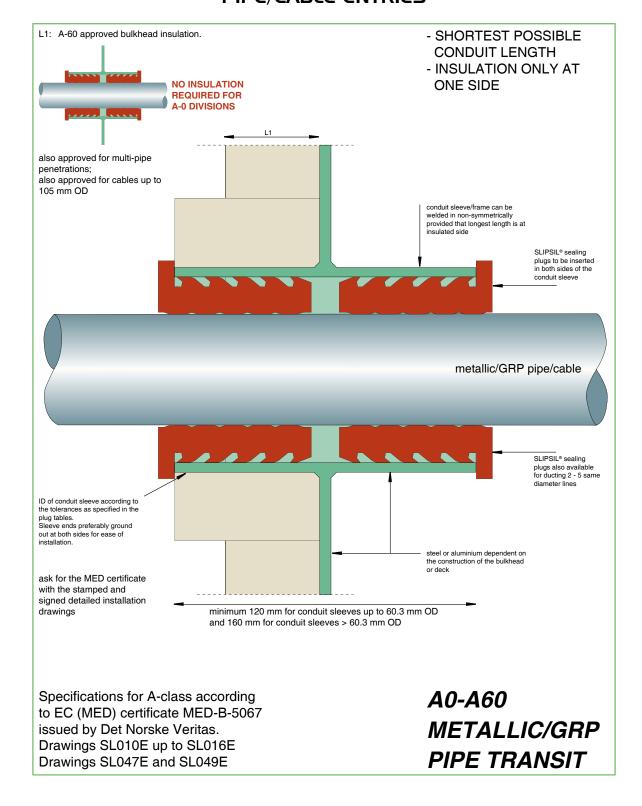


slipsil





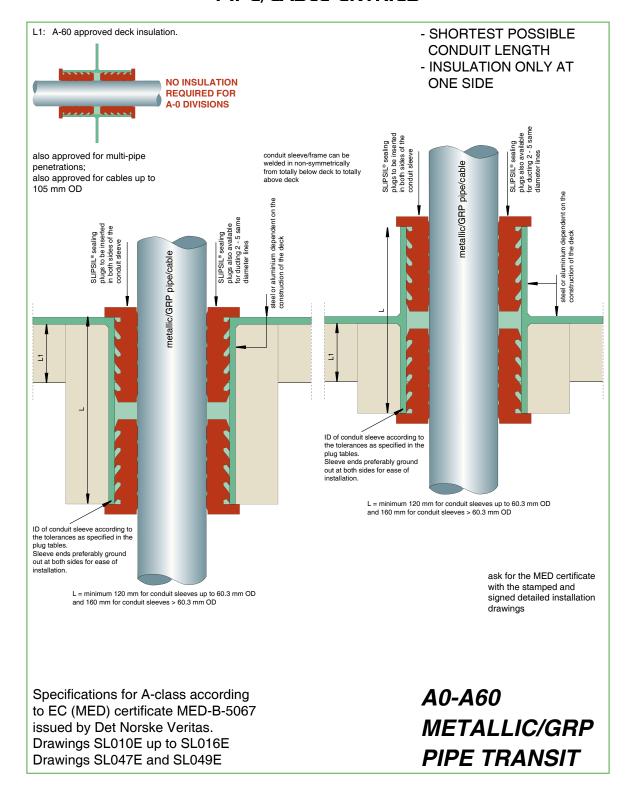
















cable/ pipe diamet	er	plug type	article number	cable/ pipe diamete	er	plug type	article number	cable/ pipe diameter	plug type	article number
6-7		40/2x6-7	40.0926	11-12		68/2x11-12	40.1936	15-16	90/2x15-16	40.2541
7-8		40/2x7-8	40.0927	12-13		68/2x12-13	40.1937	16-17	90/2x16-17	40.2542
8-9		40/2x8-9	40.0928	13-14		68/2x13-14	40.1938	17-18	90/2x17-18	40.2543
9-10		40/2x9-10	40.0929	14-15		68/2x14-15	40.1939	18-19	90/2x18-19	40.2544
10-11		40/2x10-11	40.0930	15-16		68/2x15-16	40.1940	19-20	90/2x19-20	40.2545
				16-17		68/2x16-17	40.1941	20-21	90/2x20-21	40.2546
6-7		41/2x6-7	40.1026	17-18		68/2x17-18	40.1942	21-22	90/2x21-22	40.2547
7-8		41/2x7-8	40.1027	18-19		68/2x18-19	40.1943	22-23	90/2x22-23	40.2548
8-9		41/2x8-9	40.1028	19-20		68/2x19-20	40.1944	23-24	90/2x23-24	40.2549
9-10		41/2x9-10	40.1029	20-21		68/2x20-21	40.1945	24-25	90/2x24-25	40.2550
			40.1029							
10-11		41/2x10-11	40.1030	21-22		68/2x21-22	40.1946	25-26	90/2x25-26	40.2551
				22-23		68/2x22-23	40.1947			
6-7		43/2x6-7	40.1126							
7-8		43/2x7-8	40.1127	11-12		70/2x11-12	40.2036			
8-9		43/2x8-9	40.1128	12-13		70/2x12-13	40.2037	* multi-plugs	for other plug ser	ies are made
9-10		43/2x9-10	40.1129	13-14		70/2x13-14	40.2038	upon custom	er request. The li	sted sizes
10-11		43/2x10-11	40.1130	14-15		70/2x16 11 70/2x14-15	40.2039		items. For other	
		10/2/10 11		45.40					ales department.	5.255, p.5455
6-7	Œ	50/2x6-7	40.1231	15-16	all dimensions in mm	70/2x15-16	40.2040	Contact out S	aloo dopariineni.	
	E			16-17	E	70/2x16-17	40.2041			
7-8	į.	50/2x7-8	40.1232	17-18	Ė	70/2x17-18	40.2042			
8-9	SU	50/2x8-9	40.1233	18-19	SU	70/2x18-19	40.2043			
9-10	sio	50/2x9-10	40.1234	19-20	sio	70/2x19-20	40.2044			
10-11	all dimensions in mm	50/2x10-11	40.1235	20-21	9	70/2x20-21	40.2045			
11-12	Ĭ.	50/2x11-12	40.1236	21-22	Ĕ	70/2x21-22	40.2046			
12-13	g	50/2x12-13	40.1237	22-23	ō	70/2x22-23	40.2047			
13-14	al	50/2x13-14	40.1238	22 20	a	TOTENZE ZO	40.2047			
14-15		50/2x14-15	40.1239	10.10		70/0-10 10	40.0044			
				12-13		78/2x12-13	40.2241			
15-16		50/2x15-16	40.1240	13-14		78/2x13-14	40.2242	SLIPSIL® mul	ti-sealing plugs f	or two up to
				14-15		78/2x14-15	40.2243	five same dia	meter cables or p	pipes consist
6-7		53/2x6-7	40.1331	15-16		78/2x15-16	40.2244	of two, three o	r four equal parts	. so that thev
7-8		53/2x7-8	40.1332	16-17		78/2x16-17	40.2245		ed after the cab	
8-9		53/2x8-9	40.1333	17-18		78/2x17-18	40.2246		d. For selecting t	
9-10		53/2x9-10	40.1334	18-19		78/2x18-19	40.2247		g, look for the plu	
10-11		53/2x10-11	40.1335	19-20		78/2x19-20	40.2248		j, look for the plut	y series iroin
11-12		53/2x11-12	40.1336	20-21		78/2x20-21	40.2249	the tables.		
12-13		53/2x12-13	40.1337	21-22		78/2x21-22	40.2250			
13-14		53/2x13-14	40.1338							
				22-23		78/2x22-23	40.2251			
14-15		53/2x14-15	40.1339							
15-16		53/2x15-16	40.1340	12-13		80/2x12-13	40.2341			
				13-14		80/2x13-14	40.2342			
6-7		55/2x6-7	40.1431	14-15		80/2x14-15	40.2343			
7-8		55/2x7-8	40.1432	15-16		80/2x15-16	40.2344			
8-9		55/2x8-9	40.1433	16-17		80/2x16-17	40.2345			
9-10		55/2x9-10	40.1434	17-18		80/2x17-18	40.2346			
10-11		55/2x10-11	40.1435	18-19		80/2x17-10	40.2347		0	
11-12		55/2x11-12	40.1436							-
				19-20		80/2x19-20	40.2348	100		
12-13		55/2x12-13	40.1437	20-21		80/2x20-21	40.2349		-	
13-14		55/2x13-14	40.1438	21-22		80/2x21-22	40.2350	N.	1000	
14-15		55/2x14-15	40.1439	22-23		80/2x22-23	40.2351	C 1245		
15-16		55/2x15-16	40.1440						2	
				12-13		82/2x12-13	40.2441		THE RESERVE	
11-12		60/2x11-12	40.1636	13-14		82/2x13-14	40.2442			
12-13		60/2x12-13	40.1637	14-15		82/2x14-15	40.2443			
13-14		60/2x13-14	40.1638	15-16		82/2x15-16	40.2444		Contract of the last of the la	100
14-15		60/2x14-15	40.1639					V. 11		1
				16-17		82/2x16-17	40.2445	1		
15-16		60/2x15-16	40.1640	17-18		82/2x17-18	40.2446	1		
				18-19		82/2x18-19	40.2447			
11-12		62/2x11-12	40.1736	19-20		82/2x19-20	40.2448	100		
12-13		62/2x12-13	40.1737	20-21		82/2x20-21	40.2449			
13-14		62/2x13-14	40.1738	21-22		82/2x21-22	40.2450		1	
		62/2x14-15	40.1739	22-23		82/2x22-23	40.2451			
				22 20		JE1 E VE E - E O	70.2701	type code:	series/2xcable d	
14-15 15-16		62/2x15-16	40.1740					type code.	Series/Zacable o	llameter





article

40.2366

40.2367

40.2368

40.2369

40.2370

40.2371

40.2466

40.2467

40 2468

40.2469

number

SLIPSIL® MULTI-SEALING PLUGS FOR PIPE/CABLE ENTRIES

cable/	plug	article	cable/		plug	article
pipe	type	number	pipe		type	number
diameter	type	Hamber	diamet	ter	type	Hamber
	40/0.0=					
6-7	40/3x6-7	40.0936	10-11		80/3x10-11	40.2356
7-8	40/3x7-8	40.0937	11-12 12-13		80/3x11-12	40.2357
6.7	41/05/07	40 1000	-		80/3x12-13 80/3x13-14	40.2358
6-7	41/3x6-7	40.1036	13-14			40.2359
7-8	41/3x7-8	40.1037	14-15 15-16		80/3x14-15 80/3x15-16	40.2360
6-7	43/3x6-7	40.1136	15-16		00/3X13-10	40.2361
7-8	43/3x7-8	40.1137	10-11		82/3x10-11	40.2456
7-0	45/577-0	40.1107	11-12		82/3x11-12	40.2457
6-7	50/3x6-7	40.1241	12-13		82/3x12-13	40.2458
7-8	50/3x7-8	40.1242	13-14		82/3x13-14	40.2459
8-9	50/3x8-9	40.1243	14-15		82/3x14-15	40.2460
			15-16		82/3x15-16	40.2461
6-7	53/3x6-7	40.1341				
7-8	53/3x7-8	40.1342	10-11		90/3x10-11	40.2556
8-9	53/3x8-9	40.1343	11-12		90/3x11-12	40.2557
9-10	53/3x9-10	40.1344	12-13		90/3x12-13	40.2558
10-11	53/3x10-11	40.1345	13-14	7	90/3x13-14	40.2559
			14-15	ä	90/3x14-15	40.2560
6-7 .⊊	55/3x6-7	40.1441	15-16	j.	90/3x15-16	40.2561
7-8	55/3x7-8	40.1442		ns		
8-9 <i>i</i> S	55/3x8-9	40.1443		Sio		
6-7 7-8 8-9 9-10 10-11	55/3x9-10	40.1444		neu		
10-11	55/3x10-11	40.1445	6-7	ij	40/5x6-7	40.0941
=	60/046.7	40.1646	7-8	all dimensions in mm	40/5x7-8	40.0942
0-7	60/3x6-7	40.1646	6.7		44/EuC 7	40.1041
7-8 8-9	60/3x7-8 60/3x8-9	40.1647 40.1648	6-7 7-8		41/5x6-7 41/5x7-8	40.1041
9-10	60/3x9-10	40.1649	7-0		41/32/-0	40.1042
10-11	60/3x10-11	40.1650	6-7		43/5x6-7	40.1141
10 11	00/0210 11	40.1000	7-8		43/5x7-8	40.1142
6-7	62/3x6-7	40.1746	, 0		10/0/17	10.1112
7-8	62/3x7-8	40.1747	6-7		50/5x6-7	40.1251
8-9	62/3x8-9	40.1748	7-8		50/5x7-8	40.1252
9-10	62/3x9-10	40.1749	8-9		50/5x8-9	40.1253
10-11	62/3x10-11	40.1750				
			6-7		53/5x6-7	40.1351
6-7	68/3x6-7	40.1951	7-8		53/5x7-8	40.1352
7-8	68/3x7-8	40.1952	8-9		53/5x8-9	40.1353
8-9	68/3x8-9	40.1953	9-10		53/5x9-10	40.1354
9-10	68/3x9-10	40.1954	10-11		53/5x10-11	40.1355
10-11	68/3x10-11	40.1955	6.7		EE/Eve 7	40 1451
11-12 12-13	68/3x11-12 68/3x12-13	40.1956 40.1957	6-7 7-8		55/5x6-7	40.1451 40.1452
12-13	00/3X1Z-13	40.1957	7-8 8-9		55/5x7-8 55/5x8-9	40.1452 40.1453
6-7	70/3x6-7	40.2051	9-10		55/5x9-10	40.1454
7-8	70/3x0-7 70/3x7-8	40.2052	10-11		55/5x10-11	40.1455
8-9	70/3x8-9	40.2053			30,0,10 11	100
9-10	70/3x9-10	40.2054	6-7		68/5x6-7	40.1961
10-11	70/3x10-11	40.2055	7-8		68/5x7-8	40.1962
11-12	70/3x11-12	40.2054	8-9		68/5x8-9	40.1963
12-13	70/3x12-13	40.2055	9-10		68/5x9-10	40.1964
			10-11		68/5x10-11	40.1965
10-11	78/3x10-11	40.2256	11-12		68/5x11-12	40.1966
11-12	78/3x11-12	40.2257	12-13		68/5x12-13	40.1967
12-13	78/3x12-13	40.2258	40		70/5 / 2 / /	40.0000
13-14	78/3x13-14	40.2259	10-11		78/5x10-11	40.2266
14-15	78/3x14-15	40.2260	11-12		78/5x11-12	40.2267
15-16	78/3x15-16	40.2261	12-13		78/5x12-13	40.2268
			13-14 14-15		78/5x13-14 78/5x14-15	40.2269 40.2270
			15-16		78/5x14-15 78/5x15-16	40.2270
			10-10		70/0810-10	70.2211
1						

14-15 82/5x14-15 40.2470
15-16 82/5x15-16 40.2471

* multi-plugs for other plug series are made upon customer request. The listed sizes are standard items. For other sizes, please contact our sales department.

plug

type

80/5x10-11

80/5x11-12

80/5x12-13

80/5x13-14

80/5x14-15

80/5x15-16

82/5x10-11

82/5x11-12

82/5x12-13

82/5x13-14

cable/

diameter

pipe

11-12

12-13

13-14

14-15

15-16

10-11

11-12

12-13

13-14

* the tooling for the multi-plugs 5x is very expensive. Specials only on request based on quantities.



type code: series/3xcable diameter For instance 40/3x6-7



type code: series/5xcable diameter For instance 40/5x6-7







1) The SLIPSIL® multisealing plug for five same diameter lines exists of four equal segments. The inside surfaces of the segments are treated with CSD® lubricant.

For selecting the right sealing plug, look for the plug series and the plug type in this series on the basis of the ID of the sleeve and the OD of the ducted pipes.



4) The segments are also treated with CSD® lubricant on the outside. Please refer to the Safety Data Sheet of the CSD® lubricant for more information.





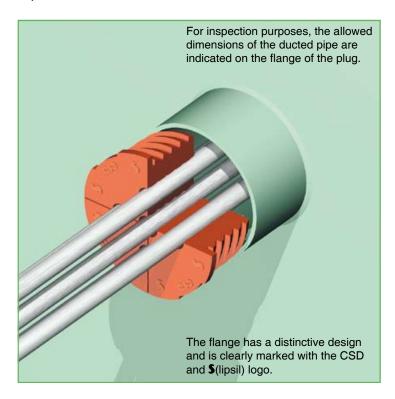








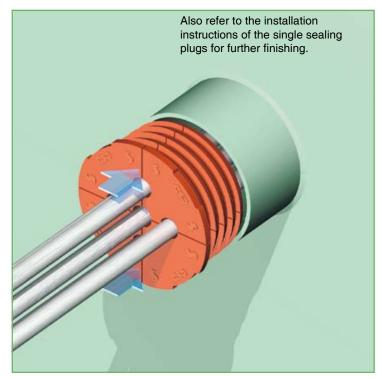
3) The segments of the SLIPSIL® multi-sealing plug are placed around the ducted pipes and then pushed into the conduit sleeve as far as the first serration. The first serration is smaller than the other serrations to make this procedure very easy.



slipsil

4) Then the four segments of the SLIPSIL® multi-sealing plug are pushed by hand evenly, serration by serration, further into the conduit sleeve.

For fire rated conduits, the plugs have to be applied at both sides. During insertion of the second plug, the air between both plugs will be compressed, and has to be released from time to time, by inserting a screw driver between both plug halves.









DYNATUTE SIIPSII

SLIPSIL®/DYNATITE® SEALING PLUGS FOR INSTALLATION FROM ONE SIDE

1) Before starting the installation procedure, any dirt, oil residues or welding spots should be removed from the conduit sleeve. For ease of installation, it is advisable to grind out the front side of the sleeve.



slipsil

2) Then the inside wall of the conduit sleeve is treated with CSD® lubricant along a distance which approximately corresponds to the length of the SLIPSIL®/DYNATITE® combination.





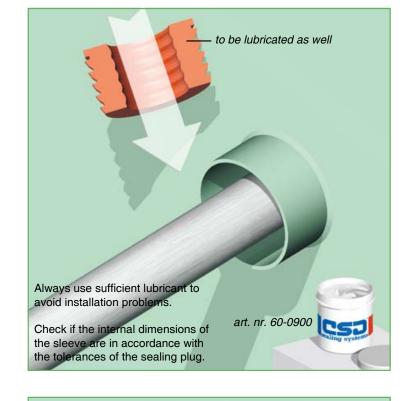






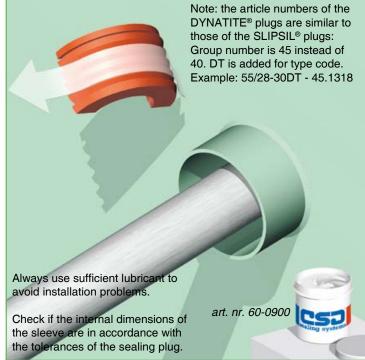
3) The inside surfaces of both segments of the DYNATITE® sealing plug are then treated with CSD® lubricant.

For selecting the right sealing plug, look for the plug series and the plug type in this series on the basis of the ID of the sleeve and the OD of the ducted pipe.



slipsil

4) The segments of the DYNATITE® sealing plug are also treated with CSD® lubricant on the outside. Please refer to the Safety Data Sheet of the CSD® lubricant for more information.







DYNATITE SIIPSII

SLIPSIL®/DYNATITE® SEALING PLUGS FOR INSTALLATION FROM ONE SIDE

5) Both segments of the DYNATITE® sealing plug are placed around the ducted pipe, then pushed into the conduit sleeve as far as the first serration.

Both halves are pushed by hand evenly, serration by serration, further into the conduit sleeve.



slipsil

6) The surfaces of both segments of the SLIPSIL® sealing plug are then treated with CSD® lubricant all around.





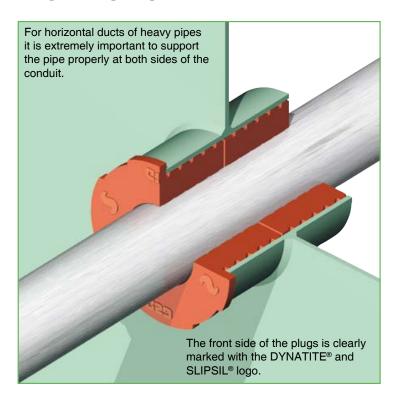






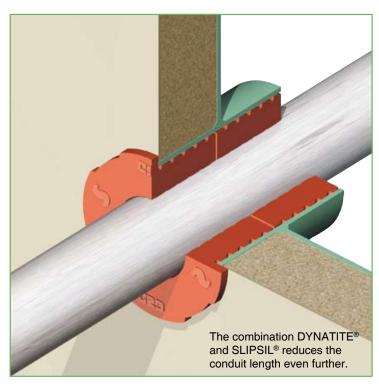
7) Both segments of the SLIPSIL® sealing plug are then installed in the same way as the DYNATITE® plug.

Note: for fire rated conduits, both plugs have to be applied.
During insertion of the second plug, the air between both plugs will be compressed, and has to be released from time to time, by inserting a screw driver between both plug halves.



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8) For A-class penetrations (which are insulated), the conduit sleeve needs to be insulated only at the insulated side of the bulkhead or at the lower side of the deck. The ducted pipe has to be insulated according to the specifications on the certified drawings.

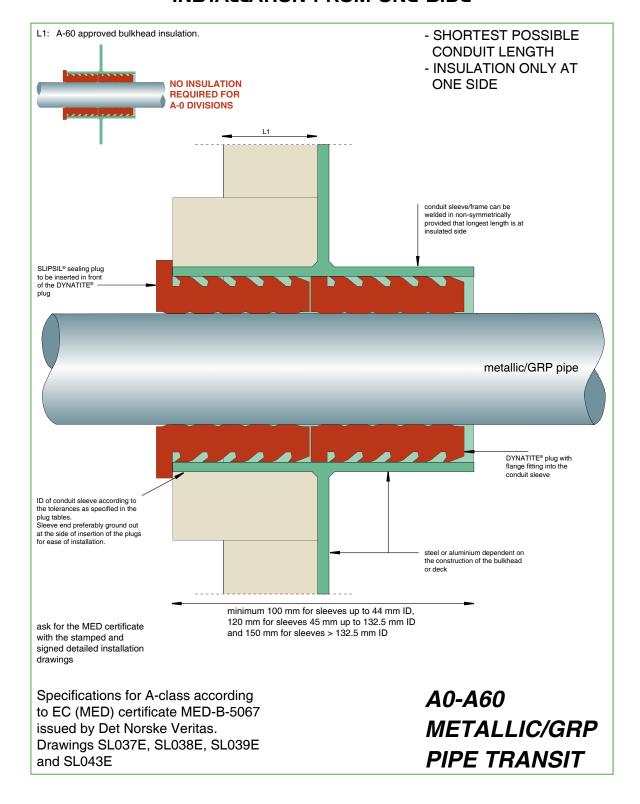








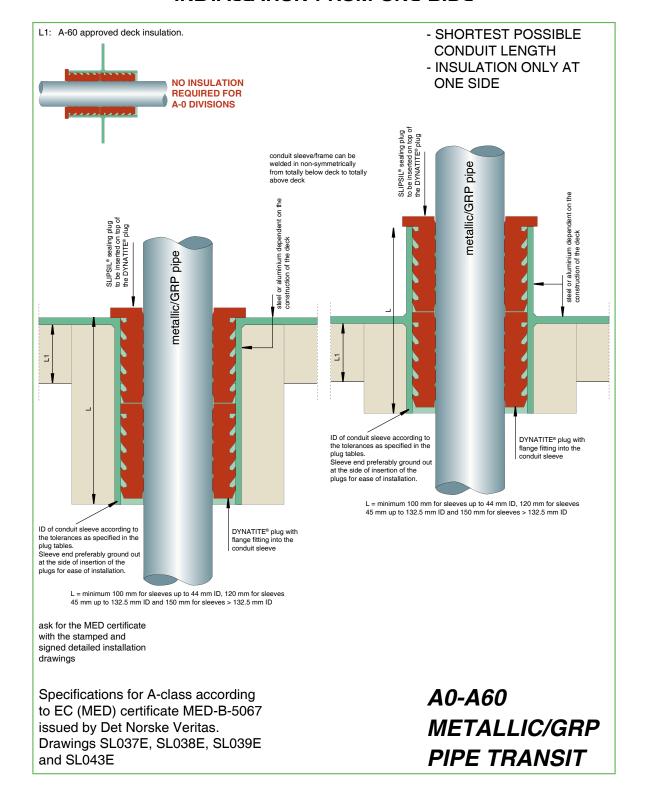














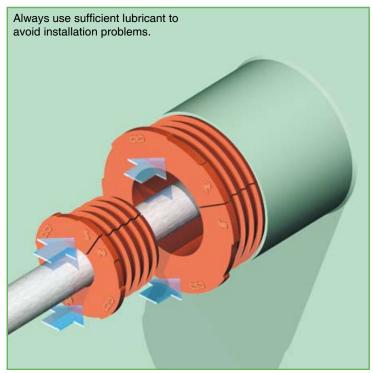


SLIPSIL® ADAPTER PLUGS FOR OVERSIZED PIPE/CABLE ENTRIES



plug type	article number	plug type	article number
68/40AD	40.1995	118/80AD	40.3495
70/40AD	40.2095	122/80AD	40.3595
75/40AD	40.2195	125/80AD	40.3695
78/50AD	40.2295	128/80AD	40.3795
80/50AD	40.2395	131/80AD	40.3895
82/50AD	40.2495	146/118AD	40.3995
90/60AD	40.2595	150/118AD	40.4095
94/60AD	40.2695	152/118AD	40.4195
97/60AD	40.2795	154/118AD	40.4295
100/60AD	40.2895	156/118AD	40.4395
102/60AD	40.2995	160/118AD	40.4495
103/60AD	40.3095	190/150AD	40.4595
105/60AD	40.3195	200/150AD	40.4695
107/60AD	40.3295	203/150AD	40.4795
110/70AD	40.3395	207/150AD	40.4895

SLIPSIL® adapter plugs can be used in cases where conduit sleeves are much larger than the service pipe OD, and no individual sealing plug is available. SLIPSIL® adapter plugs consist of two equal parts, so that they can be installed after the cable of pipe has been laid. The inside of the adapter plug is perfectly smooth, so that the SLIPSIL® single plug can be easily pushed in and obtain an effective seal between the two plugs. Especially developed for ducting flanged pipes.













SLIPSIL® SEALING PLUGS FOR EMC RATED PIPE PENETRATIONS

For the EMC protection of pipe penetrations entering shielded areas, an electrically conductive flexible rubber was developed for the SLIPSIL® pipe penetrations type EMC.

Tests carried out in our laboratories have shown that the electrical resistance from braiding to mass is about 1-2 Ohm.

Attenuation tests at DELTA Electronics Testing/Denmark have proven the outstanding damping properties of the SLIPSIL® EMC sealing system.

Attenuation measurements in the range of 0-1000 MHz:

40 mm CONDUCTON® flexible rubber offers an attenuation of 35 - 85 dB. Instead of the CONDUCTON® flexible rubber, CONDUCTON® putty can be used. The putty has to be cured before inserting the second plug. The attenuation ratings obtained with the CONDUCTON® putty are lower: 10 - 30 dB.

Refer to the brochure of the RISE® and NOFIRNO® cable transits for specifications of the putty.

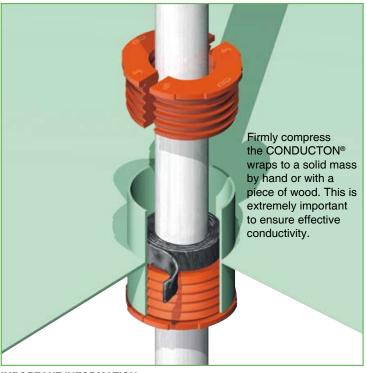
CONDUCTON® flexible rubber is used to fill the cavity around the ducted pipe in the conduit sleeve. This rubber can be molded by hand and offers the highest attenuation.

CONDUCTON® flexible rubber is absolutely HALOGEN FREE and has a toxicity index of 0,00 (tested according to Naval Engineering Standard NES 713: Issue 3).

Furthermore, CONDUCTON® has a low smoke index (NES 711: Issue 2: 1981), an oxygen index of 38,2% (ISO 4589-2: 1996), and a temperature index of 294 °C (ISO 4589-3: 1996).

CONDUCTON® flexible rubber fullfils the criteria for use on board of UK Navy vessels for EMP/EMI penetrations.

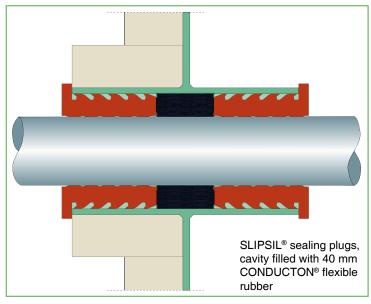




IMPORTANT INFORMATION:

The level of attenuation obtained with a CONDUCTON® penetration is partly dependent on:

- a) the distance between the ducted pipe and the wall of the conduit sleeve
- b) the contact surface with the conductive materials
- c) the greater or lesser homogeneous filling of the conductive mass
- d) the condition of the contact surface in the conduit sleeve











Note: maximum continuous service temperature of the CRUSHERS® not to exceed 70 °C. Consult our technical support department in case of higher operating temperatures.

CRUSHER® type WRAP

Note: maximum continuous service temperature of the CRUSHERS® not to exceed 70 °C. Consult our technical support department in case of higher operating temperatures.



NOFIRNO® is a paste-like compound which is simple to use. NOFIRNO® has a balanced viscosity and can be applied overhead. After applying the sealant, it can be smoothed by means of a wet cloth or by hand. Because the sealant adheres very tightly, the cloth and hands should be wetted with water before use to prevent sealant from sticking to them.

Shelf life is 12 months when stored properly. Since we have no control on storage, we can only guarantee for 6 months.

plastic pipe OD	crusher® type	conduit opening		crusher® length	article number
16 18 20 25 32 40 50 63 75 90 110 125 140 160	37/16 37/18 37/20 54/25* 54/32 82/40* 82/50 107/63* 107/75 131/90 159/110 159/125 207/140 207/160	37.2 37.2 37.2 37.2 54.5 54.5 82.5 82.5 107.1 131.7 159.3 159.3 207.3	all dimensions in mm	140 140 140 140 140 140 140 140 140 140	80.2800 80.2801 80.2802 80.2815 80.2804 80.2816 80.2806 80.2817 80.2808 80.2809 80.2811 80.2811 80.2811
16 18 20 25 32 40 50 63 75 90 110 125 140 160	37/16 37/18 37/20 54/25* 54/32 82/40* 82/50 107/63* 107/75 131/90 159/110 159/125 207/140 207/160	37.2 37.2 37.2 37.2 54.5 54.5 82.5 82.5 107.1 131.7 159.3 207.3 207.3	all dimensions in mm	170 170 170 170 170 170 170 170 170 170	80.2840 80.2841 80.2842 80.2855 80.2844 80.2856 80.2846 80.2857 80.2848 80.2850 80.2851 80.2851 80.2852
16 18 20 25 32 40 50 63 75 90 110 125 140 160	35/16 35/18 41/20 53/25* 53/32 80/40* 80/50 105/63* 105/75 130/90 155/110 155/125 202/140 202/160	35.9 35.9 41.1 41.1 53.9 53.9 80.7 80.7 105.3 130.8 155.2 155.2 202.7 202.7	all dimensions in mm	140 140 140 140 140 140 140 140 140 140	80.2900 80.2901 80.2902 80.2915 80.2904 80.2916 80.2906 80.2917 80.2908 80.2909 80.2910 80.2911 80.2912
16 18 20 25 32 40 50 63 75 90 1110 125 140 160	35/16 35/18 41/20 53/25* 53/32 80/40* 80/50 105/63* 105/75 130/90 155/110 155/125 202/140 202/160	35.9 35.9 41.1 41.1 53.9 53.9 80.7 80.7 105.3 130.8 155.2 155.2 202.7 202.7	all dimensions in mm	170 170 170 170 170 170 170 170 170 170	80.2940 80.2941 80.2942 80.2955 80.2944 80.2956 80.2946 80.2957 80.2948 80.2950 80.2951 80.2952 80.2953

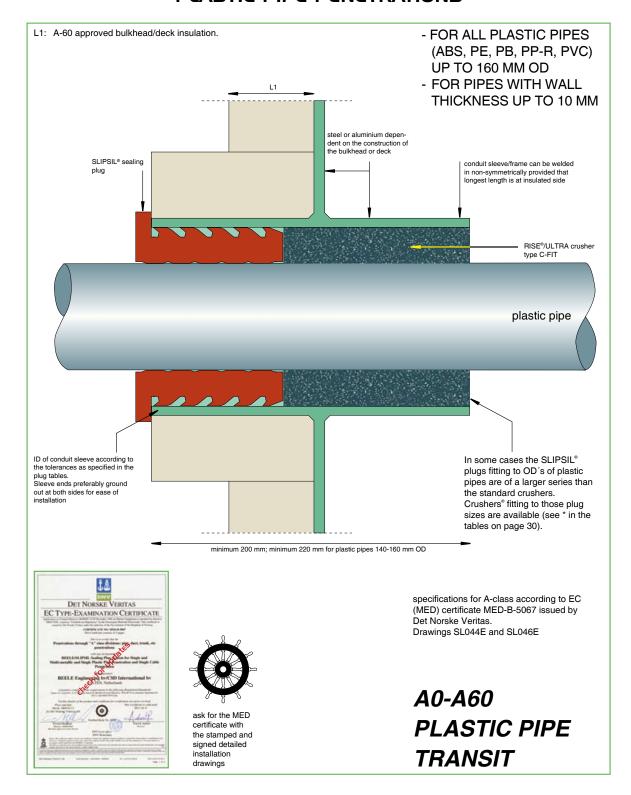
П	* special crushers fitting to the available plug sizes
	pocolar orderiors inting to the available plug sizes

wrap 1000x140x2.5 mm		80.2512
wrap 1000x160x2.5 mm		80.2513
wrap 1000x170x2.5 mm		80.2514
wrap 1000x190x2.5 mm	all dimensions in mm	80.2515







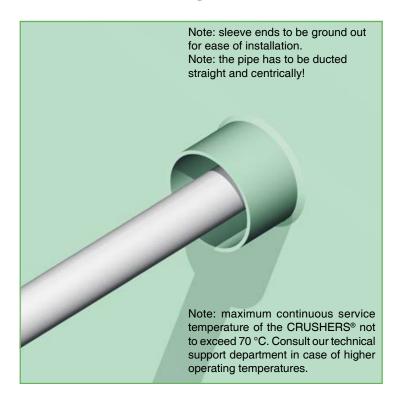






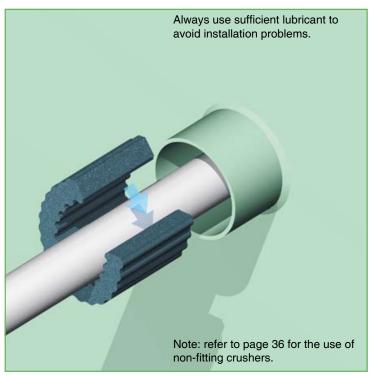


1) Before starting the installation procedure, any dirt, oil residues or welding spots should be removed from the conduit sleeve. For ease of installation, it is advisable to grind out the front side of the sleeve.



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2) The exact fitting RISE®/ ULTRA C-FIT crusher, which is split lengthwise, is folded around the ducted plastic pipe.











3) In case of a tight fitting crusher, the outside of the crusher and the inner wall of the conduit should be treated with CSD® lubricant for ease of installation. Push the crusher into the conduit sleeve. Check for a tight fit.



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4) The RISE®/ULTRA C-FIT crusher should be pushed in so that the first serrated profiles of the SLIPSIL® sealing plug can be inserted in the conduit sleeves.

The segments of the SLIPSIL® sealing plug are treated with CSD® lubricant all around.







Service Ph +64 9 368 0938 · service@generalmarine.co.nz



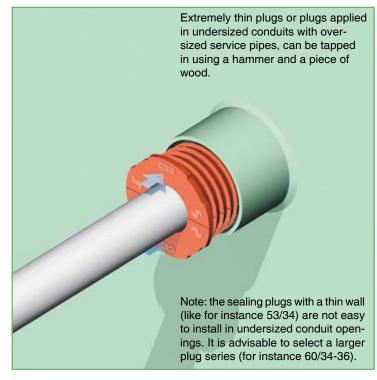


5) Both segments of the SLIPSIL® sealing plug are placed around the ducted pipe and then pushed into the conduit sleeve as far as the first serration. The first serration is smaller than the other serrations to make this procedure very easy.



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6) Then both segments of the SLIPSIL® sealing plug are pushed by hand evenly, serration by serration, further into the conduit sleeve.





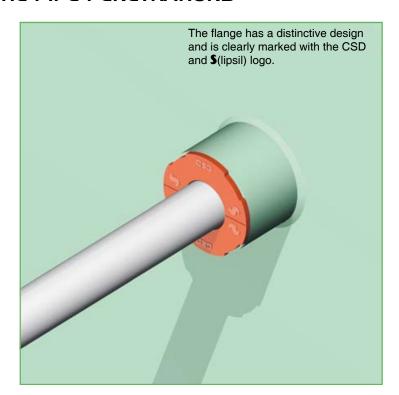






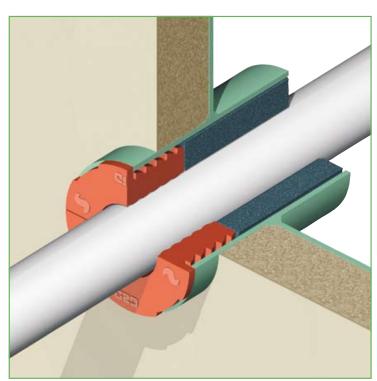
7) The flanged edge of the sealing plug must be flush against the front side of the conduit sleeve.

Note: tightness and installation are optimum at nominal sizes (for instance for 60/34-36 optimum is 60 mm ID of the sleeve and 34 mm OD of the ducted pipe).



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8) For A-class penetrations (which are insulated), the conduit sleeve needs to be insulated only at the insulated side of the bulkhead or the lower side of the deck. The ducted pipe does not need to be insulated.

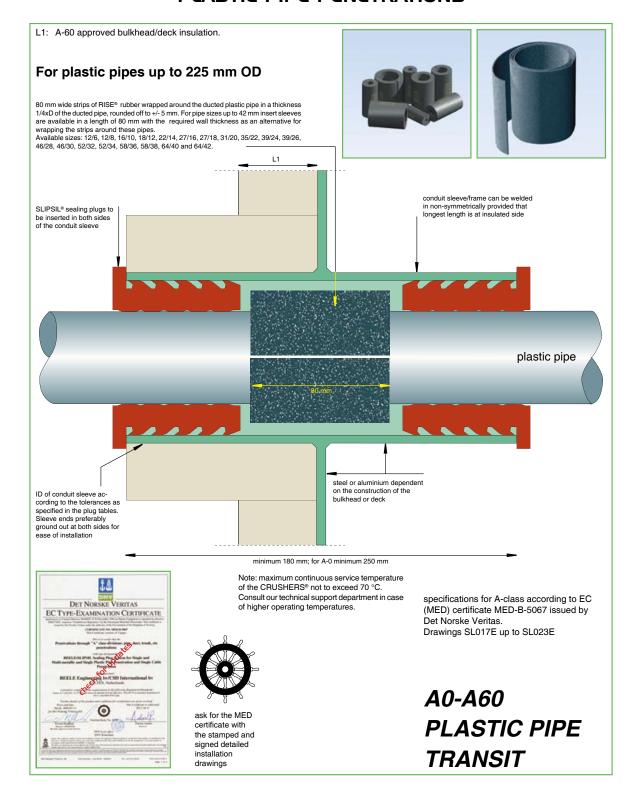


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BEELE - RESEARCH & DEVELOPMENT PRODUCTS FOR SPECIAL APPLICATIONS

NOFIRNO®

NEW TECHNOLOGY

- Approved for harshest fire ratings for pipe penetrations (A, H and Jet Fire class).
- Allows substantial movement of the ducted pipe within the conduit.
- High pressure ratings designed for gas and/or watertight penetrations.
- Prevents corrosion inside the penetration.
- Longest service life and best Total Cost of Ownership on the market.
- NOFIRNO® rubber sleeves and sealant will remain stable and not be consumed by fire.
- Breakthrough MULTI-ALL-MIX SYSTEM®
- Approved for any combination of cable and/or metallic, GRP or plastic pipes!



NOFIRNO®

NEW TECHNOLOGY

- Gaskets and rubber sheets for applications in which the transits, coamings or conduit sleeves are bolted to the partition.
- Successfully tested for A-class RISE®, RIACNOF® and NOFIRNO® sealing systems for multi-cable and pipe transits bolted to the partitions.
- NOFIRNO® rubber will remain stable and not be consumed by fire.
- NOFIRNO® rubber has excellent resistance against UV, Ozone and weathering.
- Wide temperature range: -50 °C up to +180 °C.
- Proven harshest fire exposure
- Special sizes of gaskets upon request.
- Products made of NOFIRNO® rubber upon request.

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ACTIFOAM®/ULTRA

NEWEST TECHNOLOGY

- Sealing of gaps and openings in constructions against the ingress of moisture and to avoid flame spread.
- ACTIFOAM® has high thermal insulation values due to the close cellular structure.
- RISE®/ULTRA adhesive properties under fire load.
- Breakthrough ACTIFOAM® sheets can be layered with RISE/ULTRA sheets.
- The sandwich construction acts as a "bridge bearing" enabling the carrying of very high loads.
- Highest fire ratings achievable due to the unique combination of the two rubber grades.
- · Successfully subjected to two hour hydrocarbon fire.

