SLIPSIL® SEAUNG 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





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CSD THE SIMPLE SEAL SYSTEM, DRIFIL, DYNATITE, FIRSTO, FIWA, LEAXEAL, MULTI-ALL-MIX, NOFIRNO, RAPID TRANSIT SYSTEM, RIACNOF, RISE, RISWAT, \$, SLIPSIL, flanges SLIPSIL plugs,

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SELECTION OF SLIPSIL SEALING PLUGS

- 1. Determine <u>actual</u> O.D. of pipe(s) or cable(s) being passed.
- 2. Determine whether your conduit sleeve will be Schedule 40 or Schedule 80.
- 3. Check the Reference Chart Below to determine the SLIPSIL plug series that fits into your desired sleeve schedule.
- 4. Check the plug series tables inside the brochure to determine the appropriate plug part number to seal around your pipe/cable.

(Note): Many times a service pipe can be sealed in two different size conduit sleeves with two different series SLIPSIL plugs. Always check the next lower size conduit sleeve to determine if you have selected the smallest possible size sleeve/plug for your application.

Nominal Pipe Size (Sleeve)	Plug Series for Use Inside Schedule 40 Sleeve	Plug Series for Use Inside Schedule 80 Sleeve			
1 Inch	25	N/A (Use NOFIRNO)			
1-1/4 Inch	35	32			
2 Inch	53	50			
3 Inch	78	75			
3-1/2 Inch	90	N/A (Use NOFIRNO)			
4 Inch	102	97			
5 Inch	128	122			
6 Inch	154	146			
8 Inch	203	N/A (Use NOFIRNO)			





BEELE ENGINEERING -SAFETY. RELIABILITY. INVOLVEMENT

Every moment of the day, in every business and every situation, the threat of fire is present. For over three decades, BEELE Engineering has specialized in passive fire safety in the form of systems which prevent the spread of fire, smoke, water and gases via cable and pipe penetrations. With our superior sealing technologies, we have become the undisputed Number One in this particular field.

It is BEELE Engineering's philosophy that R&D exists to respond to market demands. Only then can research and development activities be classed as functional. Only then are innovative solutions generated for problems that have current or near-term relevance. Our policy is one of continuous active response to customers' demands, or to modified or new functional requirements. We listen, we observe and we interpret, and so we arrive at new product developments and bold innovations.

BEELE Engineering has built up an enormous body of specialized expertise and knowledge. Our company is the world market leader in sealing systems for state-of-the-art shipbuilding applications as well as civil and industrial applications. We do not follow trends, we set them.

Development of new products and technologies, as well as pioneering know-how, are present in every fibre of our organization. We are driven by passion for our specialization, and our customer involvement drives us to exceed the boundaries of what is technically feasible.

BEELE Engineering operates world-wide. From our agencies in virtually every industrialized country, our support and services are always somewhere nearby. We are there for you – also for on-site advice or in-house demonstrations, instructions and support at your location.







Our development, test and production facilities are among the most advanced in the world. The factory is equipped with state of the art machines, which are tailor made to the requirements of our company. We work to a high-level ISO system, with unmatched involvement. Continuous investment in design technologies, combined with highest quality polymers, is our guarantee for the safety of lives and equipment. That is why BEELE Engineering is internationally recognized by all relevant certification institutes and classification societies.





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.







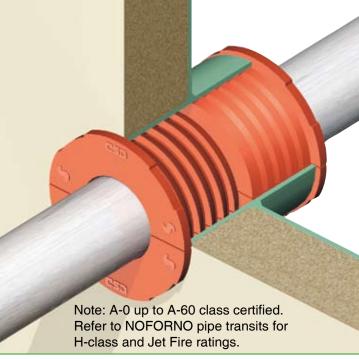
The NOFIRNO® rubber grade, which is compounded under strict conditions in our factory, is suitable for gas and water tight ducting and for fire rated applications as well.

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 performance of the rubber.

NOFIRNO® rubber is traceable to prevent counterfeiting and to guarantee users the proven NOFIRNO® quality. By examining the surface charring and the rubber residues inside the product, it can easily be determined whether or not NOFIRNO® has been used.

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 exposurec) prevents smoke emission
 - 5) Higher thermal insulation values under fire load.



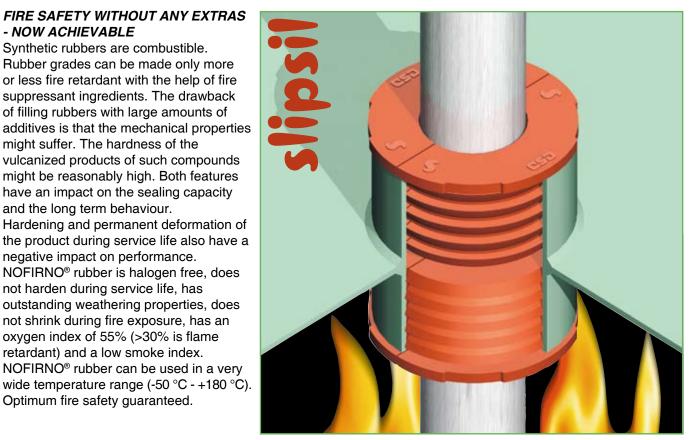
- 6) Shorter conduit depths.
- 7) Approved for A-0 and H-0 class without the use of any insulation. Certified up to A-60 and H-120 class.
- 8) Successfully exposed to a 2 hour Jet Fire test.
- 9) Can be combined with RISE® and RISE®/ULTRA.





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



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.

Optimum fire safety guaranteed.

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.











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

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 diameter	plug type	article number	cable/ pipe diameter	plug type	article number	cable/ pipe diamete		plug type	article numbe
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.	2x10. 3x7. 5x7
9-10	25/9-10	40.0109	9-10	34/9-10	40.0609			40 man 10 max.	2410, 041, 041
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	25/11 12	40.0112	12-13	34/12-13	40.0612	6-7		41/6-7	40.1006
12	23/12	40.0112							
is the second	07/0	40.0000	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_10	27/10-11	40.0210	5-6	35/5-6	40.0705	18-20		41/18-20	40.1014
10 10			67 8				Е		
12-13	27/12-13	40.0212	6-7	35/6-7	40.0706	20-22	Е	41/20-22	40.1016
13-14 .5	27/13-14	40.0213	7-8 .5	35/7-8	40.0707	22-23	ij	41/22-23	40.1017
112-13	27/14-15	40.0214	6-7 7-8 8-9 9-10 10-11 11-12	35/8-9	40.0708	23-24	dimensions in mm	41/23-24	40.1018
15 🤶	27/15	40.0215	9-10	35/9-10	40.0709	24-25	Sio	41/24-25	40.1019
ene.			10-11 👸	35/10-11	40.0710	25	e SU	41/25	40.1020
blind 🖺	28/0	40.0300	11-12	35/11-12	40.0711		ŭ	44	010 07 57
5-6	28/5-6	40.0305	12-13	35/12-13	40.0712		Ö	41 multi is max.	2X10, 3X7, 5X7
6-7 a	28/6-7	40.0306	13-14	35/13-14	40.0712	blind	all	43/0	40.1100
			13-14						
7-8	28/7-8	40.0307	14-15	35/14-15	40.0714	5-6		43/5-6	40.1105
3-9	28/8-9	40.0308	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	40.0310	17-18	35/17-18	40.0717	8-9		43/8-9	40.1108
11-12	28/11-12	40.0311	18-19	35/18-19	40.0718	9-10		43/9-10	40.1109
12-13	28/12-13	40.0312	19-20	35/19-20	40.0719	10-12		43/10-12	40.1110
13-14	28/13-14	40.0313	20	35/20	40.0720	12-14		43/12-14	40.1111
14-15	28/14-15	40.0313	20	33/20	40.0720	14-16		43/14-16	40.1112
			L.C. al	07/0	40.0000				
15	28/15	40.0315	blind	37/0	40.0800	16-18		43/16-18	40.1113
			5-6	37/5-6	40.0805	18-20		43/18-20	40.1114
olind	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
3-9	30/8-9	40.0408	10-11	37/10-11	40.0810	26-27		43/26-27	40.1119
		40.0409			40.0810				
9-10	30/9-10		11-12	37/11-12		27-28		43/27-28	40.1120
10-11	30/10-11	40.0410	12-13	37/12-13	40.0812	28		43/28	40.1121
11-12	30/11-12	40.0411	13-14	37/13-14	40.0813			43 multi is max.	2x10, 3x7, 5x7
12-13	30/12-13	40.0412	14-15	37/14-15	40.0814				
13-14	30/13-14	40.0413	15-16	37/15-16	40.0815	blind		50/0	40.1200
14-15	30/14-15	40.0414	16-17	37/16-17	40.0816	6-7		50/6-7	40.1205
5-16	30/15-16	40.0415	17-18	37/17-18	40.0817	7-8		50/7-8	40.1206
6	30/16	40.0416	18-19	37/18-19	40.0818	8-9		50/8-9	40.1207
. •	00/10	-U.U-1U	19-20	37/19-20	40.0819	9-10		50/9-10	40.1207
مانمما	20/0	40.0500							
olind	32/0	40.0500	20	37/20	40.0820	10-12		50/10-12	40.1209
5-6	32/5-6	40.0505				12-14		50/12-14	40.1210
S-7	32/6-7	40.0506	blind	40/0	40.0900	14-16		50/14-16	40.1211
⁷ -8	32/7-8	40.0507	5-6	40/5-6	40.0905	16-18		50/16-18	40.1212
3-9	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	40.0509	8-9	40/8-9	40.0908	22-24		50/20-22	40.1214
11-12	32/11-12	40.0511	9-10	40/9-10	40.0909	24-26		50/24-26	40.1216
12-13	32/12-13	40.0512	10-11	40/10-11	40.0910	26-28		50/26-28	40.1217
13-14	32/13-14	40.0513	11-12	40/11-12	40.0911	28-29		50/28-29	40.1218
14-15	32/14-15	40.0514	12-14	40/12-14	40.0912	29-30		50/29-30	40.1219
	32/15-16	40.0515	14-16	40/14-16	40.0913	30-31		50/30-31	40.1220
15-16				,				,	





cable/ pipe diameter	plug type	article number	cable/ pipe diameter	plug type	article number	cable/ pipe diameter	plug type	article numbe
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			
18-20	53/18-20	40.1313	32-34	60/32-34	40.1620		68 multi is max.	2x22, 3x12, 5x12
20-22	53/20-22	40.1314	34-36	60/34-36	40.1621	blind	70/0	40.2000
20-22 22-24	53/22-24	40.1314	36-37	60/36-37	40.1622	20-22	70/20-22	40.2000
						22-24		
24-26	53/24-26	40.1316	37-38	60/37-38	40.1623		70/22-24	40.2015
26-28	53/26-28	40.1317	38-39	60/38-39	40.1624	24-26	70/24-26	40.2016
28-30	53/28-30	40.1318	39-40 €	60/39-40	40.1625	26-28	70/26-28	40.2017
30-31	53/30-31	40.1319	40 E	60/40	40.1626	28-30	70/28-30	40.2018
31-32 🗏	53/31-32	40.1320	Sir	60 multi is max.	2x15, 3x10	30-32	70/30-32	40.2019
32-33	53/32-33	40.1321	, K			32-34	70/32-34	40.2020
28-30 EE 30-31 E 31-32 E 32-33 S 2-33 S 24 E 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	53/33-34	40.1322	39-40 40	62/0	40.1700	26-28 28-30 30-32 32-34 34-36 36-38 38-40	70/34-36	40.2021
34 මූ	53/34	40.1323	14-16 මූ	62/14-16	40.1711	36-38 <u>ම</u>	70/36-38	40.2022
ij	53 multi is max.	2x15, 3x10, 5x10	16-18	62/16-18	40.1712	38-40 ≒	70/38-40	40.2023
) 			18-20	62/18-20	40.1713	40-42	70/40-42	40.2024
blind	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			
12-14	55/12-14	40.1410	32-34	62/32-34	40.1720		70 multi 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	40.1721	22-24	75/22-24	40.2115
			37-38			24-26		
18-20	55/18-20	40.1413		62/37-38	40.1723		75/24-26	40.2116
20-22 22-24	55/20-22	40.1414	38-39	62/38-39	40.1724	26-28	75/26-28	40.2117
	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 ie may	2x15, 3x10, 5x10	30-32	67/30-32	40.1819	46-48	75/46-48	40.2127
	55 man 15 max.	2210, 0210, 0210	32-34	67/32-34	40.1820	48-50	75/48-50	40.2128
olind	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			
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	40.1513	40-42 42-44	67/42-44	40.1825	24-26	78/24-26	40.2216
20-22 22-24	57/20-22 57/22-24	40.1515	44-46	67/44-46	40.1826	26-28	78/26-28	40.2217
22-24 24-26	57/24-26	40.1516	46-48	67/46-48	40.1827	28-30	78/28-30	40.2217
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	40.1519		00/0	40.4000	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	40.1521	20-22	68/20-22	40.1914	38-40	78/38-40	40.2223
36-37	57/36-37	40.1522	22-24	68/22-24	40.1915	40-42	78/40-42	40.2224
37-38	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
39-40	57/39-40	40.1525	28-30	68/28-30	40.1918	46-48	78/46-48	40.2227





cable/ pipe diamete	er	plug type	article number	cable/ pipe diame	ter	plug type	article number	cable/ pipe diame		plug type	article number
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
		70 milli in may	0.00 0.15 5.15	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
اما: اما		00/0	40,0000								
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				
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	40.2322	62-64		94/62-64	40.2631	28-30		103/28-30	40.3014
38-40		80/38-40	40.2323	64		94/64	40.2632	40-42		103/40-42	40.3020
40-42		80/40-42	40.2324					42-44		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		97/42-44	40.2721	48-50		103/48-50	40.3024
	Ĭ.			44-46	шш				<u>u</u>	103/48-50	
48-50	Ш	80/48-50	40.2328		Ш	97/44-46	40.2722	50-52	Е		40.3025
50-52	ij	80/50-52	40.2329	46-48	i	97/46-48	40.2723	52-54	ij	103/52-54	40.3026
52-54	all dimensions in mm	80/52-54	40.2330	48-50	dimensions in	97/48-50	40.2724	54-56	all dimensions in mm	103/54-56	40.3027
54-56	10	80/54-56	40.2331	50-52	<i>j</i> 0	97/50-52	40.2725	56-58	jō	103/56-58	40.3028
56-58	ns	80/56-58	40.2332	52-54	ns	97/52-54	40.2726	58-60	ns	103/58-60	40.3029
	ne				Je.				<i>1</i> 6		
58-60	Ë	80/58-60	40.2333	54-56	ij	97/54-56	40.2727	60-62	ij	103/60-62	40.3030
60	=	80/60	40.2334	56-58	all (97/56-58	40.2728	62-64) 	103/62-64	40.3031
	a	80 multi is may	2x22, 3x15, 5x15	58-60	æ	97/58-60	40.2729	64-66	a	103/64-66	40.3032
		oo maa is max.	ZXZZ, 0X10, 0X10	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					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		100/42-44	40.2821				
				44-46				blind		105/0	40.0100
38-40		82/38-40	40.2423			100/44-46	40.2822				40.3100
40-42		82/40-42	40.2424	46-48		100/46-48	40.2823	40-42		105/40-42	40.3120
42-44		82/42-44	40.2425	48-50		100/48-50	40.2824	42-44		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		100/72 74	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
								7.5		100/10	TO.0 100
50-52		90/50-52	40.2525	42-44		102/42-44	40.2921			407/2	40.05
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		102/40-50	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
62-64		90/62-64	40.2531	54-56		102/54-56	40.2927	48-50		107/48-50	40.3224
64		90/64	40.2532	56-58		102/56-58	40.2928	50-52		107/50-52	40.3225
				58-60		102/58-60	40.2929	52-54		107/52-54	40.3226
•		90 multi is max.		00.00		102/00-00	TU.LULU	JZ .J4		101/02-04	70.0220





cable/ pipe diamet	er	plug type	article number	cable/ pipe diamete	r	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		107/54-58	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	02		122/02	10.0010	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
. •			10.0200	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	ш	110/52-54	40.3327	80-82	ш	125/80-82	40.3640	120	=	140/120	40.0000
56-58	in mm	110/56-58	40.3328	82-84	n 1	125/82-84	40.3641	blind .s	=	150/0	40.4000
58-60	Si	110/58-60	40.3329	84-86	Si	125/84-86	40.3642	88-90	5	150/88-90	40.4020
60-62	ion	110/60-62	40.3330	86-88	ion	125/86-88	40.3643	90-92	5	150/90-92	40.4021
62-64	nsı	110/62-64	40.3331	88-90	nsı	125/88-90	40.3644	92-94	2	150/92-94	40.4022
64-66	ив	110/64-66	40.3332	90-92	ше	125/90-92	40.3645	94-96	5	150/94-96	40.4023
66-68	all dimensions	110/66-68	40.3333	92	all dimensions in mm	125/92	40.3646	blind	3	150/96-98	40.4024
68-70	all	110/68-70	40.3334	02	al	120/02	10.0010	98-100	3	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		150/122-124	40.4037
68-70		118/68-70	40.3434	82-84		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		152/96-98	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
66-68		122/66-68	40.3533	78-80		131/78-80	40.3839	114-116		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
72-74		122/72-74	40.3536	84-86		131/84-86	40.3842	120-122		152/120-122	40.4136
74-76		122/74-76	40.3537	86-88		131/86-88	40.3843	122-124		152/122-124	40.4137
76-78		122/76-78	40.3538	88-90		131/88-90	40.3844	124-125		152/124-125	40.4138
78-80		122/78-80	40.3539	90-92		131/90-92	40.3845	125		152/125	40.4139
			40.3540			131/92					





cable pipe diame		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		-7-3	
88-90		154/88-90	40.4220	125	160/125	40.4439	45		A DES
90-92		154/90-92	40.4221	120	100/120	10.1100			
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	V.	1	
96-98		154/96-98	40.4224	114-116	190/114	40.4523	900		-1
98-100		154/98-100	40.4225	125-127	190/125	40.4528			
100-10	>	154/100-102	40.4226	133-135	190/133	40.4531			
102-104		154/102-104	40.4227	139-141	190/139	40.4533			
104-10		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			
110-11		154/110-112	40.4231	100 101	100/100	10.1010			
112-114		154/112-114	40.4232	blind	200/0	40.4600			
114-11		154/114-116	40.4232	110-112	200/110	40.4620			
116-11		154/116-118	40.4234	114-116	200/110	40.4623			
118-12		154/118-118	40.4234	120-122	200/114	40.4626			
120-12	_	154/120-122	40.4235		200/125	40.4628	type code:	series/2xcabl	e diameter
120-12	, E	154/120-122	40.4236	125-127 133-135	200/123	40.4632		e 40/2x6-7	
124-12	+ 4	154/124-125	40.4237	135-137 .⊊	200/135	40.4631			
1	s i			139-141	200/139	40.4633			
125	io	154/125	40.4239	159-161	200/159	40.4643			
blind	or 45 to all dimensions in mm	156/0	40.4300	139-141 <i>suoje</i> 159-161 <i>suoje</i> blind <i>ij</i>	200/139	40.4043			
88-90	me	156/88-90	40.4320	blind 🗒	203/0	40.4700			A STATE OF THE PARTY OF THE PAR
90-92	ğ	156/90-92	40.4321	110-112	203/110	40.4720		100	
90-92	a	156/90-92	40.4321	110-112 	203/114	40.4723		-	
94-96		156/92-94	40.4323	125-127	203/125	40.4728	No.		
96-98		156/96-98	40.4324	133-135	203/133	40.4731	96		-1
98-100		156/98-100	40.4324	139-141	203/139	40.4733		2	
100-100		156/100-102	40.4326	141-143	203/141	40.4734			
100-102		156/102-104	40.4327	159-161	203/159	40.4743			
104-10		156/104-106	40.4328	168-170	203/168	40.4748			
106-108		156/106-108	40.4329						
108-110		156/108-110	40.4330	blind	207/0	40.4800			
110-11		156/110-112	40.4331	110-112	207/110	40.4820			
112-114		156/112-114	40.4332	114-116	207/114	40.4823			
114-110	3	156/114-116	40.4333	125-127	207/125	40.4828			
116-118		156/116-118	40.4334	133-135	207/133	40.4831	•		
118-120)	156/118-120	40.4335	139-141	207/139	40.4833			
120-12	2	156/120-122	40.4336	159-161	207/159	40.4843		series/3xcabl	e diameter
122-12		156/122-124	40.4337	168-170	207/168	40.4848	For instanc	e 40/3x6-7	
124-12	5	156/124-125	40.4338						
125		156/125	40.4339	160-162	250/160	40.5010			
				168-170	250/168	40.5014			
blind		160/0	40.4400	171-173	250/171	40.5015		S	1
88-90		160/88-90	40.4420	200-202	250/200	40.5030		- 0	1 -
90-92		160/90-92	40.4421	160 160	060/160	40 F010	(1000
92-94		160/92-94	40.4422	160-162 219-221	260/160 260/219	40.5210 40.5239	压	-	ا دھا ﴿
94-96		160/94-96	40.4423	219-221	200/219	40.5239		7	U.S.
96-98 98-100		160/96-98 160/98-100	40.4424	200-202	300/200	40.5321		~ ====	
100-102)	160/98-100	40.4425 40.4426	250-252	300/250	40.5346		THE PERSON	
100-102		160/100-102	40.4427	200 202	000/200	40.0040			
102-104		160/102-104	40.4428	* the series 19	90 up to 340 are	made upon	2		
106-108		160/104-108	40.4429		uest. The listed s				
108-110		160/108-110	40.4430		other sizes, plea		1		
110-112		160/110-112	40.4431	our sales dep					
112-114		160/112-114	40.4432	·					19
114-116		160/114-116	40.4433						
116-118		160/116-118	40.4434				-		
118-120		160/118-120	40.4435						
120-12		160/120-122	40.4436				type code:	series/5xcabl	le diameter
1 .20 12	4	160/122-124	40.4437	I			7.	ce 40/5x6-7	





Cutting Edge NOFIRNO® 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

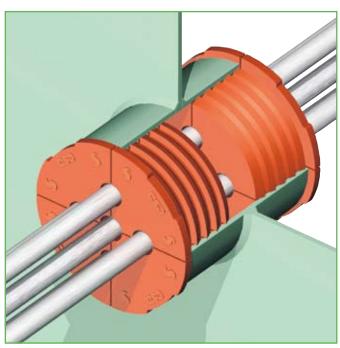
SYSTEM PREVENTS CORROSION INSIDE THE TRANSIT

APPROVED FOR STEEL AND ALUMINIUM PARTITIONS

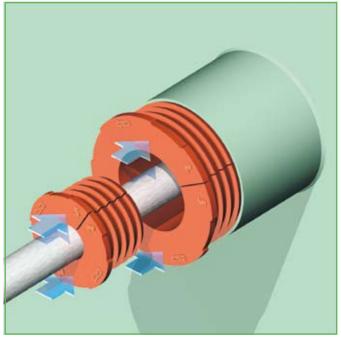
MAINTENANCE FRIENDLY



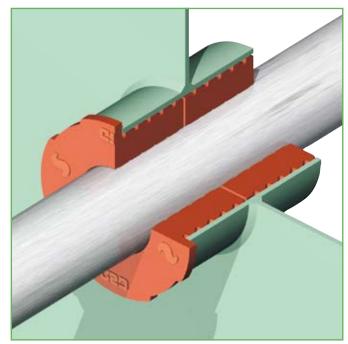




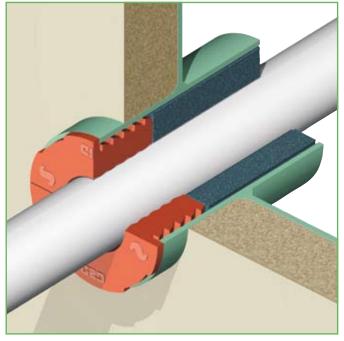
Several options are available with the SLIPSIL® plugs. Especially for hydraulic and pneumatic lines, a series of SLIPSIL® multi-sealing plugs have been developed to enable ducting of 2 - 5 same diameter pipes.



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.

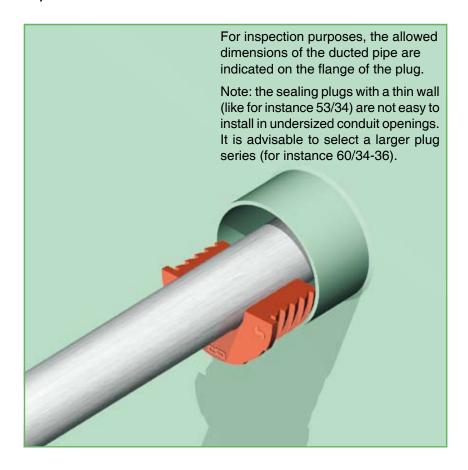








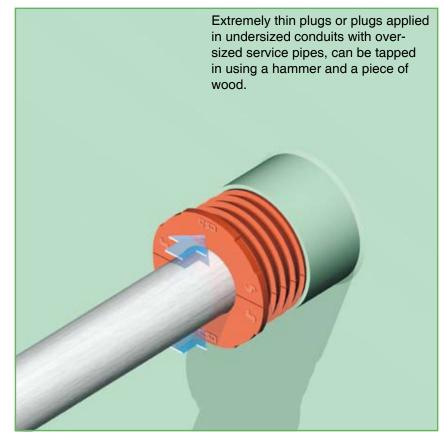
5) Both segments of the SLIPSIL® sealing plug are placed around the ducted pipe and then pushed into the conduit sleeve as far as the first serration. The first serration is smaller than the other serrations to make this procedure very easy.



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.

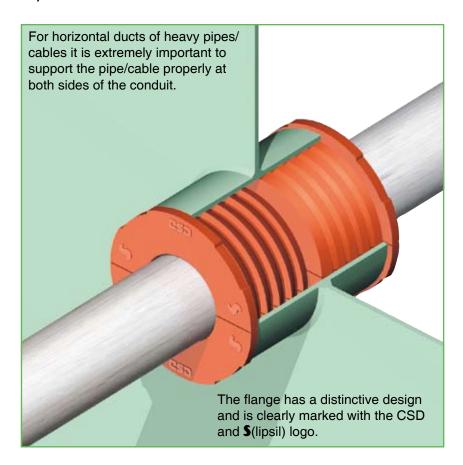






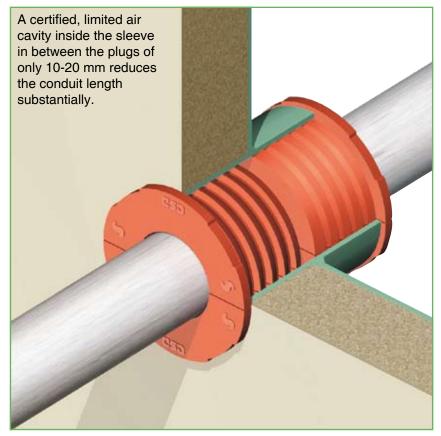


7) The flanged edges of the sealing plugs must be flush against the front side of the conduit sleeve at both sides. Note: tightness and installation are optimum at nominal sizes (for instance for 60/34-36 optimum is 60 mm ID of the sleeve and 34 mm OD of the ducted pipe).



slipsil

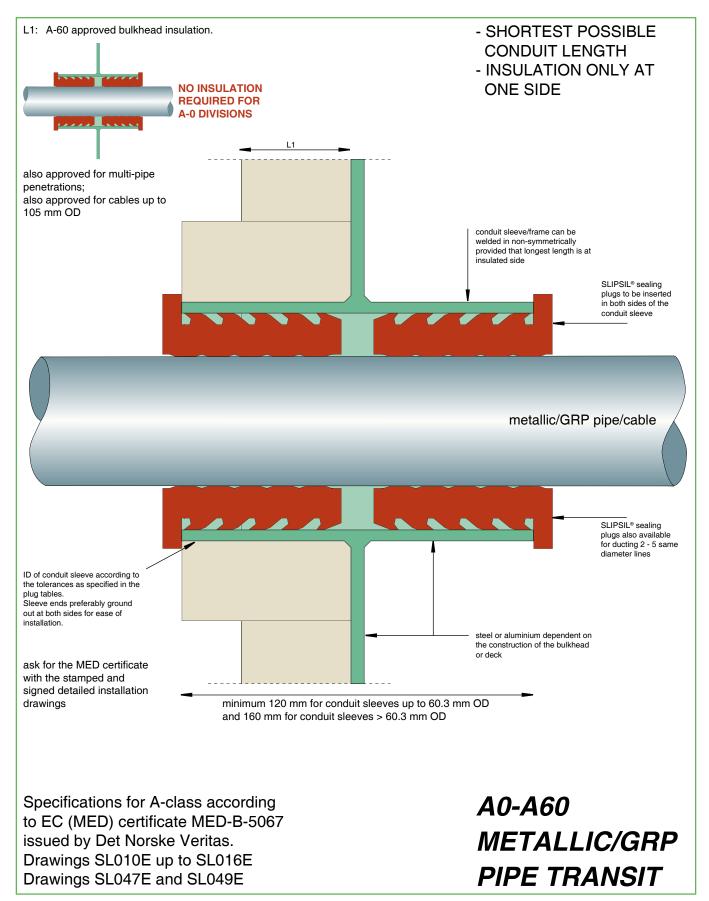
8) For A-class penetrations (which are insulated), the conduit sleeve needs to be insulated only at the insulated side of the bulkhead or at the lower side of the deck. The ducted pipe has to be insulated according to the specifications on the certified drawings.





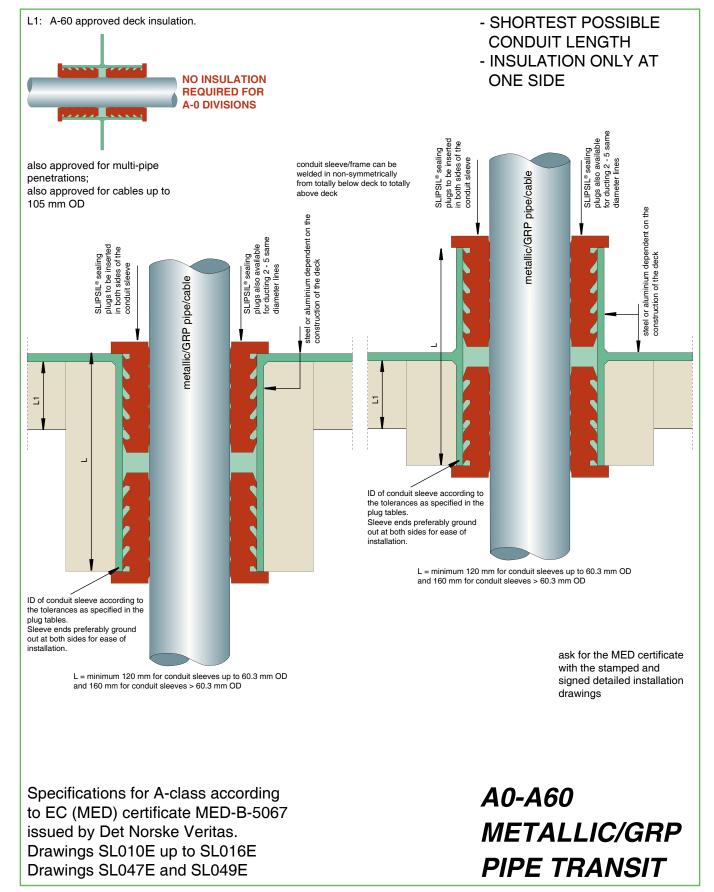
















cable/ pipe diamete	er	plug type	article number	cable/ pipe diame		plug type	article number	cable/ pipe diameter	plug type	article number
6-7		40/2x6-7	40.0926	11-12		68/2x11-12	40.1936	15-16	90/2x15-16	40.2541
7-8		40/2x7-8	40.0927	12-13		68/2x12-13	40.1937	16-17	90/2x16-17	40.2542
8-9		40/2x8-9	40.0928	13-14		68/2x13-14	40.1938	17-18	90/2x17-18	40.2543
9-10				14-15				18-19		
		40/2x9-10	40.0929			68/2x14-15	40.1939		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
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	22 20		OO/EXEL EO	40.1047			
7-8				44.40		70/0 44 40	40.0000			
		43/2x7-8	40.1127	11-12		70/2x11-12	40.2036	4 1.1		
8-9		43/2x8-9	40.1128	12-13		70/2x12-13	40.2037		for other plug sei	
9-10		43/2x9-10	40.1129	13-14		70/2x13-14	40.2038		er request. The li	
10-11		43/2x10-11	40.1130	14-15		70/2x14-15	40.2039	are standard	items. For other	sizes, please
	١			15-16	١	70/2x15-16	40.2040	contact our s	ales department.	
6-7	ш	50/2x6-7	40.1231	16-17	шш	70/2x16-17	40.2041		·	
7-8	<i>u</i>	50/2x7-8	40.1232	17-18	7 1	70/2x17-18	40.2042			
8-9	Si	50/2x8-9	40.1233	18-19	S i	70/2x17 10 70/2x18-19	40.2043			
9-10	0	50/2x9-10	40.1234		0					
	isi			19-20	isi	70/2x19-20	40.2044			
10-11	all dimensions in mm	50/2x10-11	40.1235	20-21	all dimensions in	70/2x20-21	40.2045			
11-12	Ë	50/2x11-12	40.1236	21-22	ij	70/2x21-22	40.2046			
12-13	≅	50/2x12-13	40.1237	22-23	≅	70/2x22-23	40.2047			
13-14	10	50/2x13-14	40.1238		10					
14-15		50/2x14-15	40.1239	12-13		78/2x12-13	40.2241			
15-16		50/2x15-16	40.1240	13-14		78/2x13-14	40.2242	SI IDSII ® mu	lti-sealing plugs 1	for two up to
				14-15		78/2x14-15	40.2243			
6-7		53/2x6-7	40.1331	15-16		78/2x15-16	40.2244		meter cables or p	
7-8		53/2x7-8	40.1332	16-17		78/2x16-17	40.2245		or four equal parts	
8-9		53/2x8-9	40.1333						lled after the cab	
9-10				17-18		78/2x17-18	40.2246	have been la	id. For selecting t	he right type
		53/2x9-10	40.1334	18-19		78/2x18-19	40.2247	of sealing plu	g, look for the plu	g series from
10-11		53/2x10-11	40.1335	19-20		78/2x19-20	40.2248	the tables.		
11-12		53/2x11-12	40.1336	20-21		78/2x20-21	40.2249			
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							
9-10		55/2x9-10	40.1434	16-17		80/2x16-17	40.2345			
10-11		55/2x10-11	40.1434	17-18		80/2x17-18	40.2346	_		
				18-19		80/2x18-19	40.2347		5	15
11-12		55/2x11-12	40.1436	19-20		80/2x19-20	40.2348			
12-13		55/2x12-13	40.1437	20-21		80/2x20-21	40.2349			S
13-14		55/2x13-14	40.1438	21-22		80/2x21-22	40.2350		1	
14-15		55/2x14-15	40.1439	22-23		80/2x22-23	40.2351	400 3545	1	
15-16		55/2x15-16	40.1440						0	
				12-13		82/2x12-13	40.2441		Name and Address of the Owner, where the Owner, which is the Owner, where the Owner, which is the Owner, which i	4
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							100
14-15		60/2x14-15	40.1639	15-16		82/2x15-16	40.2444			
				16-17		82/2x16-17	40.2445			
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			
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		100	
		62/2x14-15	40.1739	22-23		82/2x22-23	40.2451			
14-15 15-16		62/2x15-16	40.1740			02/2/122 20		type code	: series/2xcable c	liameter





article

40.2366

40.2367

40.2368

40.2369

40.2370

40.2371

40.2466

40.2467

40.2468

40.2469

40.2470

40.2471

number

SLIPSIL® MULTI-SEALING PLUGS FOR PIPE/CABLE ENTRIES

cable/ pipe diamete	er	plug type	article number	cable/ pipe diamete	er	plug type	article number
6-7		40/3x6-7	40.0936	10-11		80/3x10-11	40.2356
7-8		40/3x7-8	40.0937	11-12		80/3x11-12	40.2357
, 0		TO/OX/	10.0007	12-13		80/3x12-13	40.2358
6-7		41/3x6-7	40.1036	13-14		80/3x13-14	40.2359
7-8		41/3x7-8	40.1037	14-15		80/3x14-15	40.2360
7-0		41/38/1-0	40.1007	15-16		80/3x15-16	40.2361
6-7		43/3x6-7	40.1136	13-10		60/3X13-10	40.2301
7-8		43/3x7-8	40.1137	10-11		82/3x10-11	40.2456
7-0		43/3X/-0	40.1137				
0.7		F0/0C 7	40 4044	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
		50/0 0 7	10.1011	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	и	53/3x10-11	40.1345	13-14	и	90/3x13-14	40.2559
	Ĭ			14-15	Ĭ	90/3x14-15	40.2560
6-7	in	55/3x6-7	40.1441	15-16	i	90/3x15-16	40.2561
7-8	ns	55/3x7-8	40.1442		ns		
8-9	Sio	55/3x8-9	40.1443		9,0		
9-10	916	55/3x9-10	40.1444		916		
10-11	ij	55/3x10-11	40.1445	6-7	ij	40/5x6-7	40.0941
	all dimensions in mm			7-8	all dimensions in mm	40/5x7-8	40.0942
6-7	a	60/3x6-7	40.1646		a		
7-8		60/3x7-8	40.1647	6-7		41/5x6-7	40.1041
8-9		60/3x8-9	40.1648	7-8		41/5x7-8	40.1042
9-10		60/3x9-10	40.1649				
10-11		60/3x10-11	40.1650	6-7		43/5x6-7	40.1141
		00,000.0	.0	7-8		43/5x7-8	40.1142
6-7		62/3x6-7	40.1746			.0,0,1.	
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			00/0/0	40.1200
10 11		02/02/10 11	40.1700	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		33/3X10-11	40.1333
10-11 11-12		68/3x10-11 68/3x11-12	40.1955	6.7		55/5x6-7	40.1451
12-13			40.1956	6-7			
12-13		68/3x12-13	40.1957	7-8		55/5x7-8	40.1452
0.7		70/0 0 7	10.0051	8-9		55/5x8-9	40.1453
6-7		70/3x6-7	40.2051	9-10		55/5x9-10	40.1454
7-8		70/3x7-8	40.2052	10-11		55/5x10-11	40.1455
8-9		70/3x8-9	40.2053				
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				
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		78/5x13-14	40.2269
				14-15		78/5x14-15	40.2270
				15-16		78/5x15-16	40.2271
						. 5, 5, 10 10	
				1			

* 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

82/5x14-15

82/5x15-16

cable/

diameter

pipe

10-11

11-12

12-13 13-14

14-15

15-16

10-11 11-12

12-13 13-14

14-15

15-16

* 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.

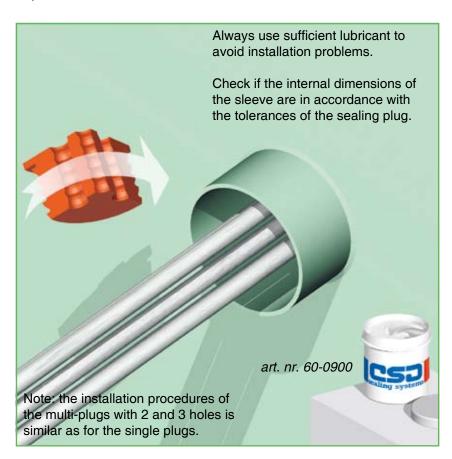
For selecting the right sealing plug, look for the plug series and the plug type in this series on the basis of the ID of the sleeve and the OD of the ducted pipes.



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.



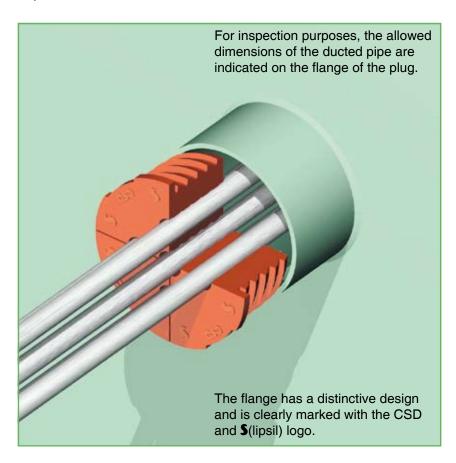








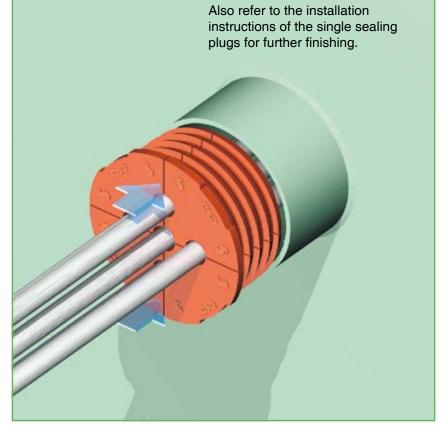
3) The segments of the SLIPSIL® multi-sealing plug are placed around the ducted pipes and then pushed into the conduit sleeve as far as the first serration. The first serration is smaller than the other serrations to make this procedure very easy.



slipsil

4) Then the four segments of the SLIPSIL® multisealing 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.

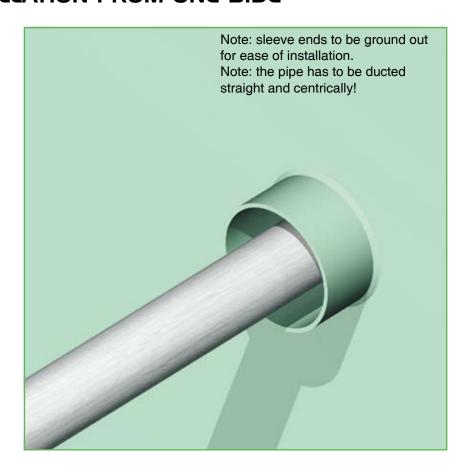








1) Before starting the installation procedure, any dirt, oil residues or welding spots should be removed from the conduit sleeve. For ease of installation, it is advisable to grind out the front side of the sleeve.



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.









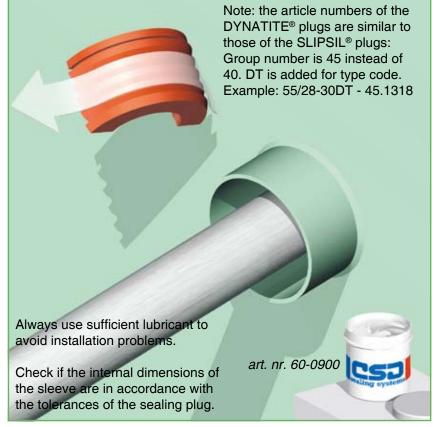
3) The inside surfaces of both segments of the DYNATITE® sealing plug are then treated with CSD® lubricant.

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.



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.





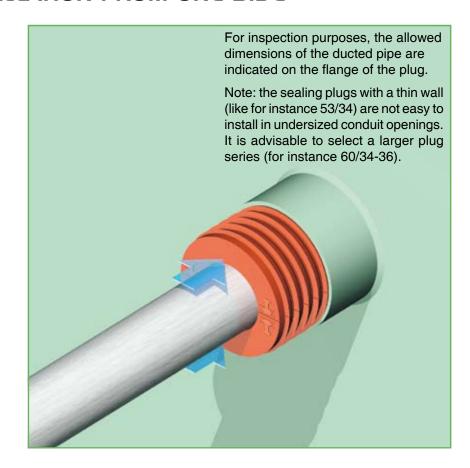






5) Both segments of the DYNATITE® sealing plug are placed around the ducted pipe, then pushed into the conduit sleeve as far as the first serration.

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



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





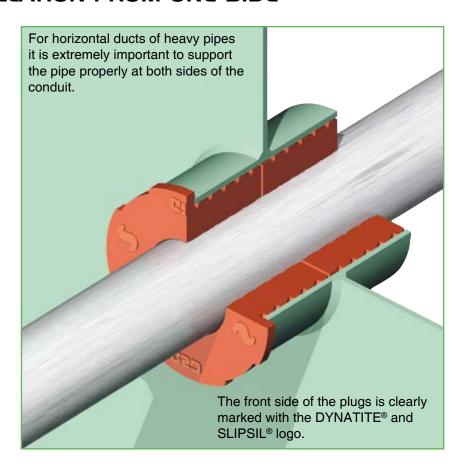
slipsil dynarite



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

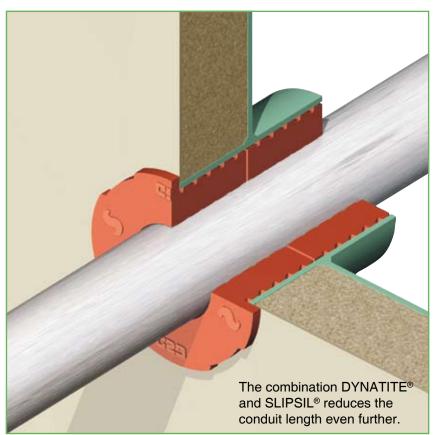
7) Both segments of the SLIPSIL® sealing plug are then installed in the same way as the DYNATITE® plug.

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.



slipsil

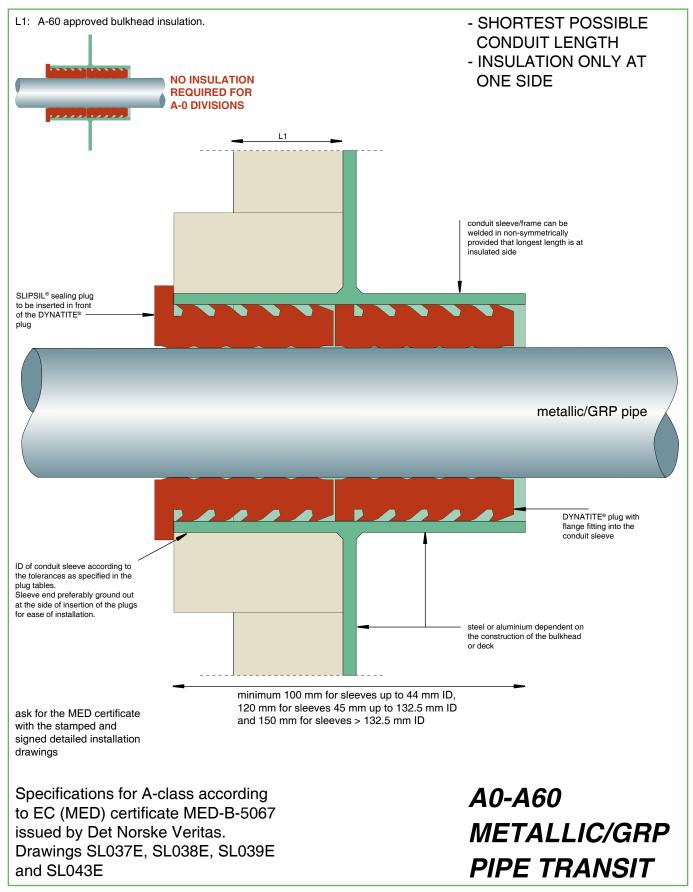
8) For A-class penetrations (which are insulated), the conduit sleeve needs to be insulated only at the insulated side of the bulkhead or at the lower side of the deck. The ducted pipe has to be insulated according to the specifications on the certified drawings.





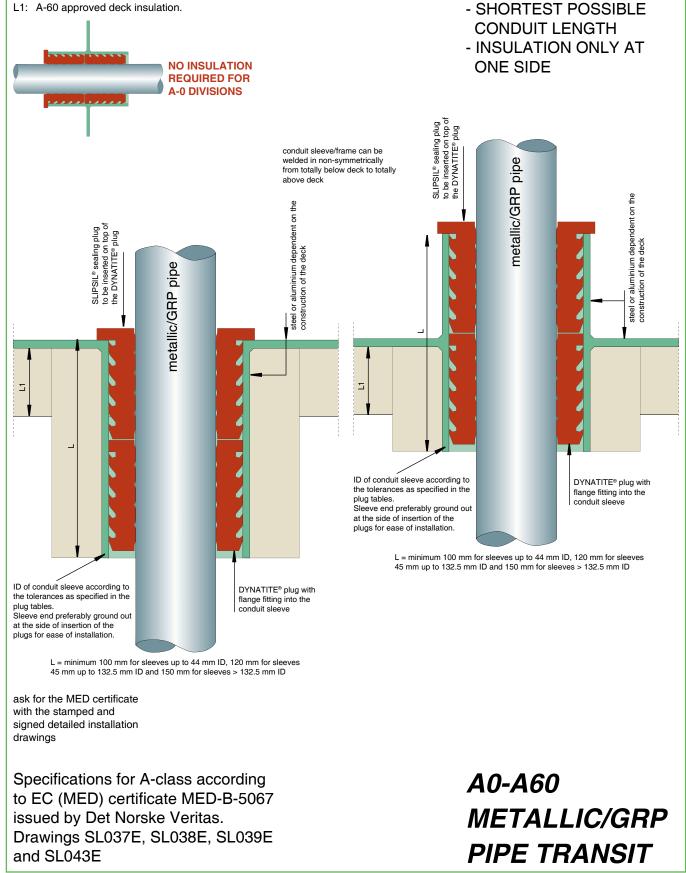














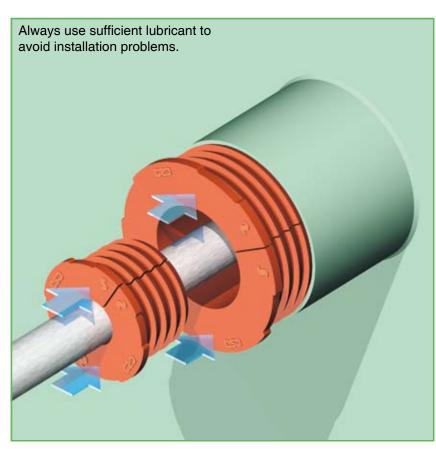


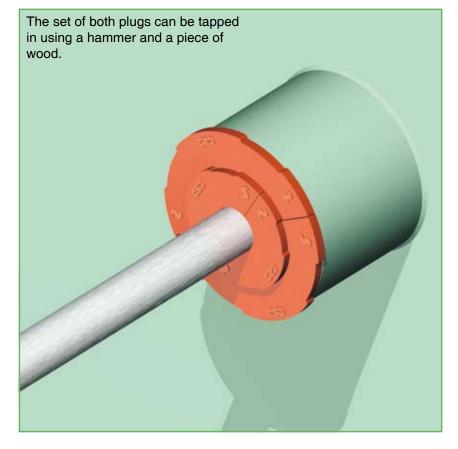
SLIPSIL® ADAPTER PLUGS FOR OVERSIZED PIPE/CABLE ENTRIES



plug	article	plug	article
type	number	type	number
68/40AD 70/40AD 75/40AD 78/50AD 80/50AD 82/50AD 90/60AD 94/60AD 97/60AD	40.1995 40.2095 40.2195 40.2295 40.2395 40.2495 40.2595 40.2695 40.2795 40.2895	118/80AD 122/80AD 125/80AD 128/80AD 131/80AD 146/118AD 150/118AD 152/118AD 154/118AD 156/118AD	40.3495 40.3595 40.3695 40.3795 40.3895 40.3995 40.4095 40.4195 40.4295 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® cable transits for specifications of the putty.

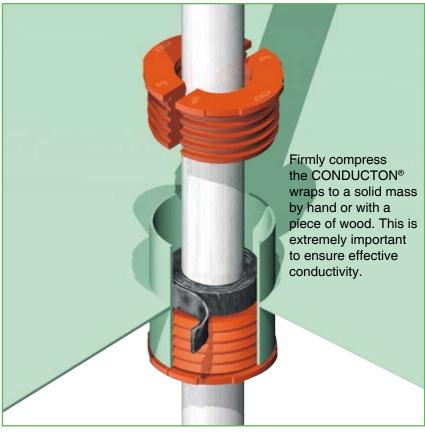
CONDUCTON® flexible rubber is used to fill the cavity around the ducted pipes in the conduit sleeve. This rubber can be molded by hand and offers the highest attenuation.

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.

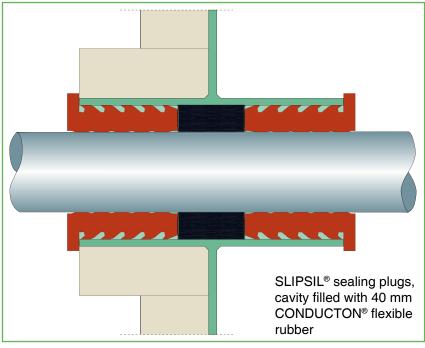




IMPORTANT INFORMATION:

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









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 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 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 80.2810 80.2811 80.2812 80.2813
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 54.5 54.5 82.5 82.5 107.1 131.7 159.3 159.3 207.3	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 80.2849 80.2850 80.2851 80.2852 80.2853
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 80.7 105.3 130.8 155.2 155.2 202.7 202.7	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 80.2913
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 80.7 105.3 130.8 155.2 202.7 202.7	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 80.2949 80.2950 80.2951 80.2952
* special crush wrap 1000x140	0x2.5 mm	ne available p	lug	sizes	80.2512
wrap 1000x160	0x2.5 mm				80.2513

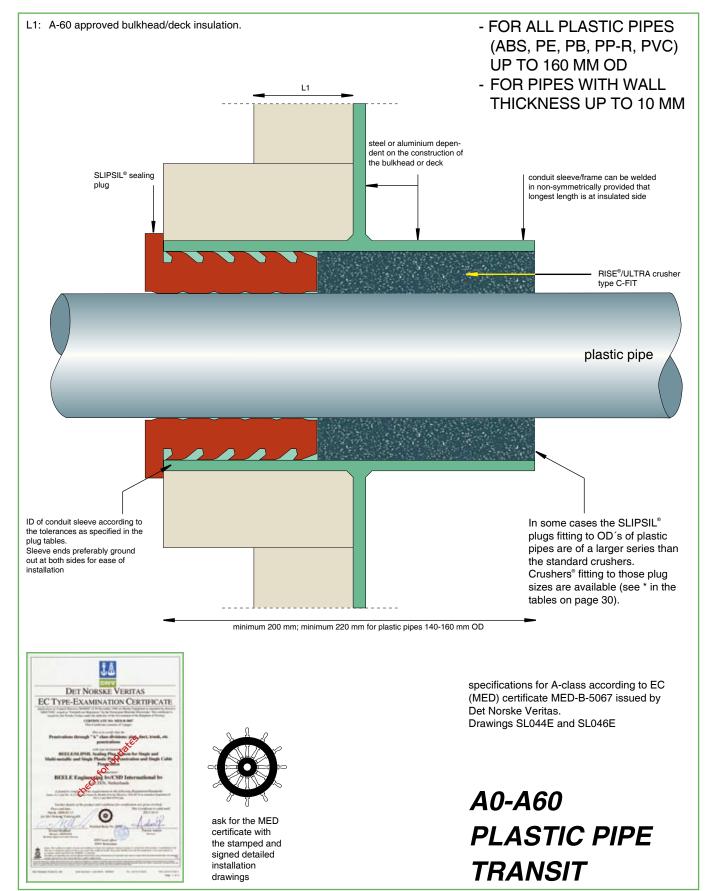
80.2514

80.2515

all dimensions in mm



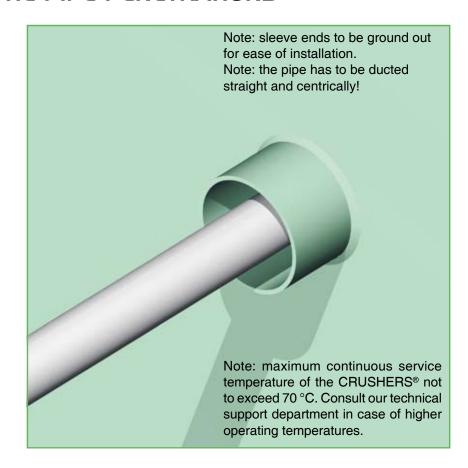






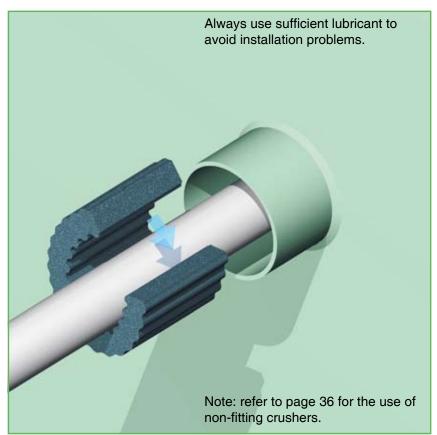


1) Before starting the installation procedure, any dirt, oil residues or welding spots should be removed from the conduit sleeve. For ease of installation, it is advisable to grind out the front side of the sleeve.





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

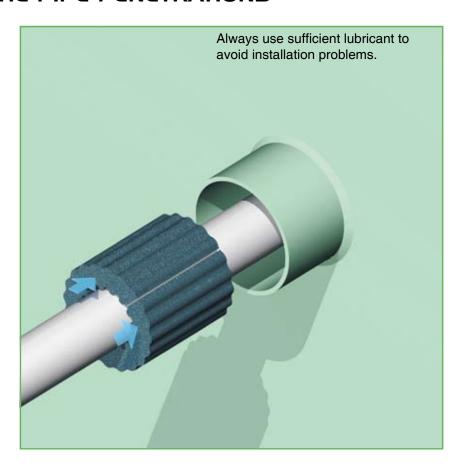








3) In case of a tight fitting crusher, the outside of the crusher and the inner wall of the conduit should be treated with CSD® lubricant for ease of installation. Push the crusher into the conduit sleeve. Check for a tight fit.



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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.







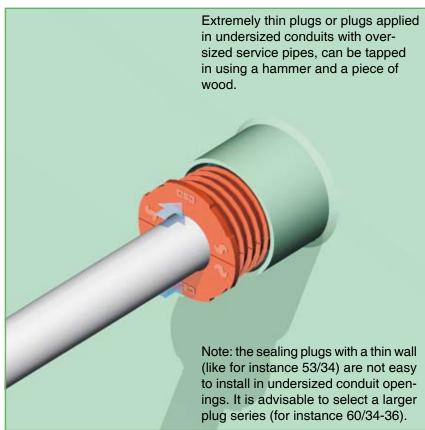


5) Both segments of the SLIPSIL® sealing plug are placed around the ducted pipe and then pushed into the conduit sleeve as far as the first serration. The first serration is smaller than the other serrations to make this procedure very easy.





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



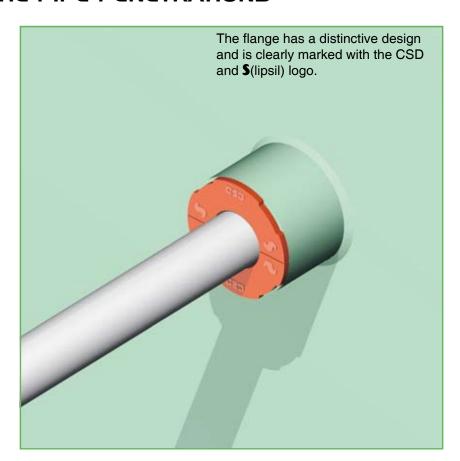






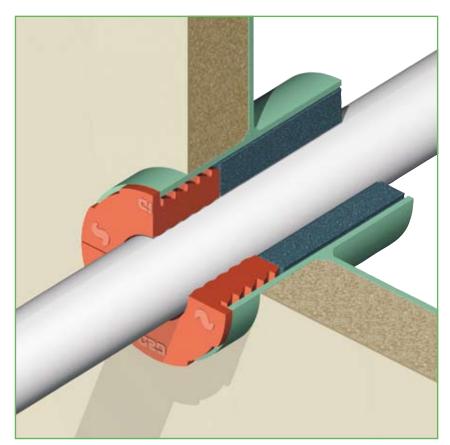
7) The flanged edge of the sealing plug must be flush against the front side of the conduit sleeve.

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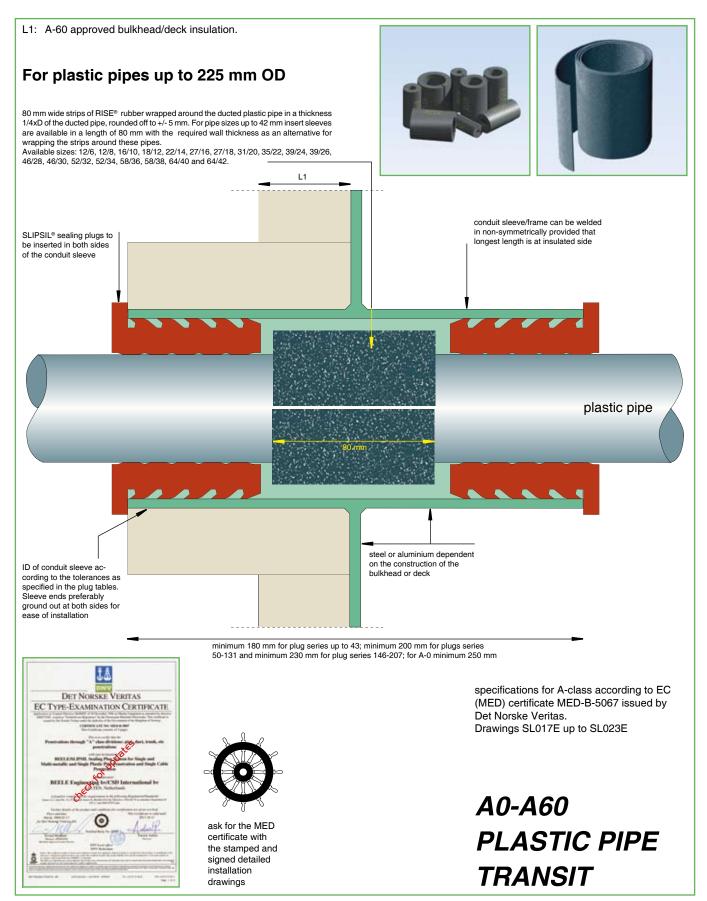
8) For A-class penetrations (which are insulated), the conduit sleeve needs to be insulated only at the insulated side of the bulkhead or the lower side of the deck. The ducted pipe does not need to be insulated.















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

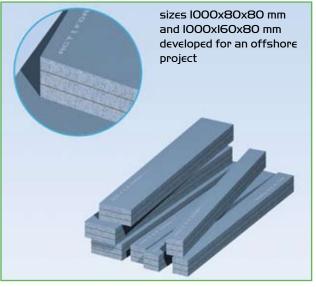
- Gaskets and rubber sheets for applications in which the transits, coamings or conduit sleeves are bolted to the partition.
- Successfully tested for A-class RISE®, RIACNOF® and NOFIRNO® sealing systems for multi-cable and pipe transits bolted to the partitions.
- NOFIRNO® rubber will remain stable 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.

Martine D

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.





BEELE ENGINEERING: A COMPANY DEDICATED TO SAFETY FOR OVER 35 YEARS



BEELE Engineering by - CSD International by

CSD Sealing Systems - North America, LLC 21 Meadowbrook Lane - Unit 12, Gilford, NH 03249 USA Tel. 603-293-0100 Fax 603-293-0200 E-Mail info@csd.us.com

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