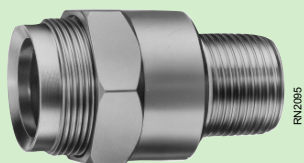


EEx d-Conduit Material

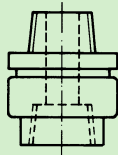
Conduit Fittings

Conduit fittings, BMF, with female/male union



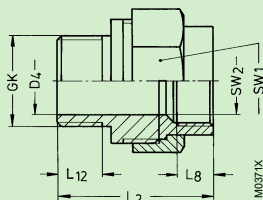
Selection table

Series	Type	Nominal diameter	Ordering code	Weight [kg]
BMF	BMF 1	1/2" NPT	461 557 0	0,15
	BMF 2	3/4" NPT	461 558 0	0,20
	BMF 3	1" NPT	461 559 0	0,28
	BMF 5	1 1/2" NPT	461 560 0	0,90
	BMF 6	2" NPT	461 561 0	1,02
	BMF 7	2 1/2" NPT	461 562 0	1,84
	BMF 8	3" NPT	461 563 0	2,38

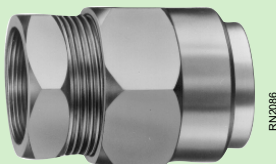


Explosion protection EEx d IIB
 Test certificate INIEX 83.103.424 U
 Material Zinc coated steel

	Type	Dimensions [mm]						
		GK	D ₄	L ₁₂	L ₂	L ₈	SW ₁	SW ₂
	BMF 1	1/2" NPT	14	19	59	20,5	30	15
	BMF 2	3/4" NPT	19	19	59	20,5	35	19
	BMF 3	1" NPT	25	26	72	25,5	40	24
	BMF 5	1 1/2" NPT	38	28	87	27	70	39
	BMF 6	2" NPT	50	28	87	27	84	50
	BMF 7	2 1/2" NPT	62	33	99	30	108	65
	BMF 8	3" NPT	75	33	99	30	121	76

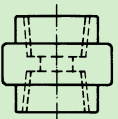


Conduit fitting, BFF, with female / female union



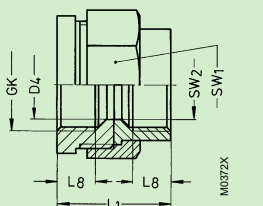
Selection table

Series	Type	Nominal diameter	Ordering code	Weight [kg]
BFF	BFF 1	1/2" NPT	461 549 0	0,13
	BFF 2	3/4" NPT	461 550 0	0,19
	BFF 3	1" NPT	461 551 0	0,26
	BFF 5	1 1/2" NPT	461 553 0	0,80
	BFF 6	2" NPT	461 554 0	0,84
	BFF 7	2 1/2" NPT	461 555 0	1,60
	BFF 8	3" NPT	461 556 0	1,92



Explosion protection EEx d IIB
 Test certificate INIEX 83.103.424 U
 Material Zinc coated steel

	Type	Dimensions [mm]					
		GK	D ₄	L ₈	L ₁	SW ₁	SW ₂
	BFF 1	1/2" NPT	14	20,5	46	30	15
	BFF 2	3/4" NPT	19	20,5	46	35	19
	BFF 3	1" NPT	24	25	56	42	24
	BFF 5	1 1/2" NPT	35	26	62	70	39
	BFF 6	2" NPT	45	26	62	84	50
	BFF 7	2 1/2" NPT	62	30	70	108	65
	BFF 8	3" NPT	75	30	70	121	76



STAHL

Male nipple, NP, 2 x male union



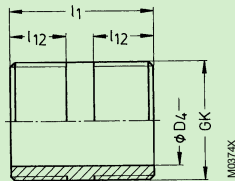
RN2088

Selection table

Series	Type	Nominal diameter	Ordering code	Weight [kg]
NP	NP 1	1/2" NPT	461 147 0	0,09
	NP 2	3/4" NPT	461 148 0	0,06
	NP 3	1" NPT	461 149 0	0,07
	NP 5	1 1/2" NPT	461 151 0	0,12
	NP 6	2" NPT	461 152 0	0,20
	NP 7	2 1/2" NPT	461 153 0	0,34
	NP 8	3" NPT	461 154 0	0,43

Explosion protection EEx d IIC
 Test certificate INIEX 85.103.430 U
 Material Zinc coated steel

	Type	Dimensions [mm]			
		GK	D ₄	L ₁₂	L ₁
NP 1	1/2" NPT	14	21	55	
NP 2	3/4" NPT	20	21	55	
NP 3	1" NPT	25	25	65	
NP 5	1 1/2" NPT	40	25	65	
NP 6	2" NPT	50	25	65	
NP 7	2 1/2" NPT	65	30	85	
NP 8	3" NPT	78	30	85	



M0374K

Reducers, RE, with male and female union



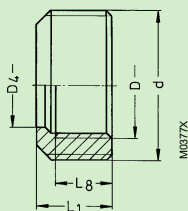
RN2088

Selection table

Series	Material	Ordering code/Type							
		Dimension A	Dimension B NPT						
			1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"
RE	Zinc coated steel	3/4" NPT	RE 21	–	–	–	–	–	–
		1" NPT	RE 31	RE 32	–	–	–	–	–
RE	Aluminium	1 1/4" NPT	RE 41	RE 42	RE 43	–	–	–	–
		1 1/2" NPT	RE 51	RE 52	RE 53	RE 54	–	–	–
		2" NPT	RE 61	RE 62	RE 63	RE 64	RE 65	–	–
		2 1/2" NPT	RE 71	RE 72	RE 73	RE 74	RE 75	RE 76	–
		3" NPT	RE 81	RE 82	RE 83	RE 84	RE 85	RE 86	RE 87

Explosion protection EEx d IIC
 Test certificate INIEX 85.103.430 U

	Type	Dimension [mm]					
		d	D		D ₄	L ₁	L ₈
			min.	max.			
RE 21	3/4" NPT	–	–	1/2" NPT	14	23	20
RE 3..	1" NPT	1/2" NPT	–	3/4" NPT	19	24	20
RE 4..	1 1/4" NPT	1/2" NPT	–	1" NPT	–	26	24
RE 5..	1 1/2" NPT	1/2" NPT	–	1 1/4" NPT	–	26	24
RE 6..	2" NPT	1/2" NPT	–	1 1/2" NPT	50	30	24
RE 7..	2 1/2" NPT	1/2" NPT	–	2" NPT	65	35	30
RE 8..	3" NPT	1/2" NPT	–	2 1/2" NPT	69	41	32



M037K



Elbows ELF, with 2 x female union

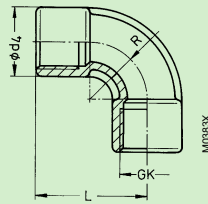


Selection table

Series	Type	Nominal diameter	Ordering code	Weight [kg]
ELF Elbow	ELF 1	1/2" NPT	460 823 0	0,11
	ELF 2	3/4" NPT	460 824 0	0,12
	ELF 3	1" NPT	460 825 0	0,17
	ELF 5	1 1/2" NPT	460 826 0	0,51
	ELF 6	2" NPT	460 827 0	0,69
	ELF 7	2 1/2" NPT	460 828 0	1,2
	ELF 8	3" NPT	460 829 0	1,46

Explosion protection EEx d IIC
 Test certificate INIEX 85.103.430 U
 Material Aluminium, copper free

Type	Dimensions [mm]			
	GK	∅ d ₄	R	L
ELF 1	1/2" NPT	32	30	57
ELF 2	3/4" NPT	36	30	57
ELF 3	1" NPT	42	35	70
ELF 5	1 1/2" NPT	62	50	85
ELF 6	2" NPT	76	60	100
ELF 7	2 1/2" NPT	92	65	114
ELF 8	3" NPT	108	114	154



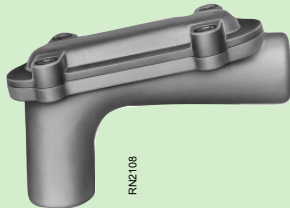
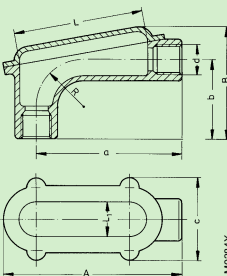
Pull box (open elbow) LBH, with 2 female/female union

Selection table

Series	Type	Nom. diameter	Dimensions [mm]				Ordering	Weight [kg]
			B	a	b	A		
LBH Pull box (open elbow)	LBH 2	3/4" NPT	98	122	68	150	461 103 0	0,36
	LBH 3	1" NPT	122	150	88	180	461 104 0	1,30
	LBH 5	1 1/2" NPT	162	218	115	260	461 105 0	1,16
	LBH 6	2" NPT	206	260	146	310	461 106 0	1,07
	LBH 7	2 1/2" NPT	277	352	200	416	461 107 0	3,80
	LBH 8	3" NPT	277	352	200	416	461 108 0	4,00

Explosion protection EEx d IIB T6
 Test certificate INIEX 82.103X
 Material Aluminium, copper free

Type	Dimensions [mm]									
	d	A	B	L	b	a	c	L ₁	R	
LBH 1	1/2" NPT	150	98	110	68	122	68	28	40	
LBH 2	3/4" NPT	150	98	110	68	122	68	28	40	
LBH 3	1" NPT	180	122	134	88	150	74	34	55	
LBH 5	1 1/2" NPT	260	162	210	115	218	106	52	80	
LBH 6	2" NPT	310	206	262	146	260	120	66	110	
LBH 7	2 1/2" NPT	416	277	360	200	352	148	86	160	
LBH 8	3" NPT	416	277	360	200	352	148	86	160	



Plug, PLG, with male union



RN2039

Selection table

Series	Type	Dimensions			Ordering code	Weight [kg]
		d	L	SW		
 PLG	PLG 1	1/2" NPT	20	10	461 157 0	0,011
	PLG 2	3/4" NPT	20	12	461 159 0	0,018
	PLG 3	1" NPT	26	17	461 160 0	0,039
	PLG 5	1 1/2" NPT	26	24	461 161 0	0,064
	PLG 6	2" NPT	29	24	461 162 0	0,111
	PLG 7	2 1/2" NPT	30	24	461 163 0	0,190
	PLG 8	3" NPT	30	24	461 164 0	0,244

Explosion protection EEx d IIC
 Test certificate INIEX 89.B.103.758 B
 Material Aluminium, copper free

Drain and breather valves ECD



RN2033

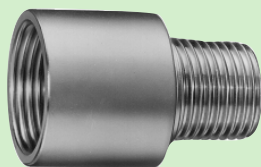
Drain valve and breather are recommended especially for condensation problems. The drain valve is mounted in such a way that the accumulated condensation in enclosures of pipes can be drained.

Selection table

Series	Type	Entry thread	Ordering code	Weight [kg]
 ECD	ECD 01	3/8" ISO 228	460 727 0	0,053
	ECD 1	1/2" NPT (ASA B 2.1)	460 728 0	0,086

Explosion protection with enclosure volumes $\leq 40 \text{ dm}^3$: EEx d IIC
 $\geq 40 \text{ dm}^3$: EEx d IIB
 Test certificate INIEX 85.103.441 U
 Material Stainless steel

Reducer, REB, with female/male reducer



RN2084

Selection table

Series	Ordering code/Type							
	Dimension A	Dimension B						
 REB	3/4" NPT	REB 21	—	—	—	—	—	—
	1" NPT	REB 31	REB 32	—	—	—	—	—
	1 1/4" NPT	REB 41	REB 42	REB 43	—	—	—	—
	1 1/2" NPT	REB 51	REB 52	REB 53	REB 54	—	—	—
	2" NPT	REB 61	REB 62	REB 63	REB 64	REB 65	—	—
	2 1/2" NPT	REB 71	REB 72	REB 73	REB 74	REB 75	REB 76	—
	3" NPT	REB 81	REB 82	REB 83	REB 84	REB 85	REB 86	REB 87

Explosion protection EEx d IIC
 Test certificate INIEX 85.103.430 U
 Material Zinc coated steel

Type	Dimensions [mm]							
	d	D		$\varnothing D_4$	L	L ₁	L ₉	$\varnothing d_4$
	min.	max.						
REB 21	3/4" NPT	—	1 1/2" NPT	14	21	45	20	30
REB 31	1" NPT	1/2" NPT	3/4" NPT	20	20	49	24	37
REB 41	1 1/4" NPT	1/2" NPT	1" NPT	25	25	54	25	48
REB 51	1 1/2" NPT	1/2" NPT	1 1/4" NPT	33	26	58	24	57
REB 61	2" NPT	1/2" NPT	1 1/2" NPT	37	26	60	26	70
REB 71	2 1/2" NPT	1/2" NPT	2" NPT	50	26	64	30	83
REB 81	3" NPT	1/2" NPT	2 1/2" NPT	60	33	71	30	96

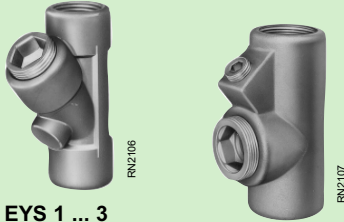
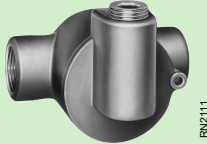
Conduit seals prevent the passage of gases, vapours or flame through the Ex d conduit systems from one part of the electrical system to another. The seals must be installed as close as possible to the Ex d enclosure, and completely stopped with an approved sealing material. To support the

sealing compound until it sets, the seal is plugged with mineral fiber.

Seals are available in two basic forms:
for vertical conduits
for vertical and horizontal conduits

EYS
EZS

Selection table

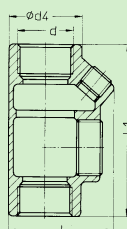
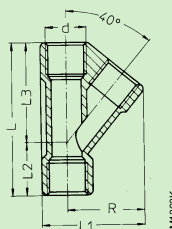
Series	Type	Nominal diameter	Compound "C" for 1 seal	Ordering code	Weight [kg]
for vertical conduits					
 <p>EYS 1 ... 3 EYS 5 ... 8</p>	EYS 1	1/2" NPT	0,03 kg	460 940 0	0,12
	EYS 2	3/4" NPT	0,05 kg	460 941 0	0,15
	EYS 3	1" NPT	0,10 kg	460 942 0	0,22
	EYS 5	1 1/2" NPT	0,18 kg	460 943 0	0,54
	EYS 6	2" NPT	0,30 kg	460 944 0	0,64
	EYS 7	2 1/2" NPT	0,65 kg	460 945 0	1,43
	EYS 8	3" NPT	1,10 kg	460 946 0	2,67
	for vertical and horizontal conduits				
 <p>EZS</p>	EZS 1	1/2" NPT	0,10 kg	460 947 0	0,35
	EZS 2	3/4" NPT	0,12 kg	460 948 0	0,33
	EZS 3	1" NPT	0,15 kg	460 949 0	0,37
	EZS 5	1 1/2" NPT	0,30 kg	460 950 0	0,65
	EZS 6	2" NPT	0,75 kg	460 951 0	0,67
	EZS 7	2 1/2" NPT	1,00 kg	460 952 0	1,32
	EZS 8	3" NPT	1,50 kg	460 953 0	1,32
	Explosion protection		EEx d IIC		
Test certificate		INIEX 82.103.137 X			
Material		Aluminium (copper free)			

STAHL

Accessories

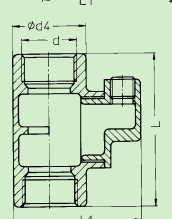
Designation	Description	Ordering code	Weight [kg]																				
Sealing compound	MC 1; Packing unit 1 kg	461 804 0	1																				
Fiber	FV 10; Packing unit 1 kg	460 992 0	1																				
	FV 20; Packing unit 2 kg	460 993 0	2																				
Required amount for conduit seals with nominal diameter:																							
	<table border="1"> <thead> <tr> <th>Ø</th> <th>kg</th> <th>Ø</th> <th>kg</th> </tr> </thead> <tbody> <tr> <td>1/2"</td> <td>0,09</td> <td>1 1/2"</td> <td>0,55</td> </tr> <tr> <td>3/4"</td> <td>0,16</td> <td>2"</td> <td>0,80</td> </tr> <tr> <td>1"</td> <td>0,25</td> <td>2 1/2"</td> <td>0,90</td> </tr> <tr> <td>1 1/4"</td> <td>0,45</td> <td>3"</td> <td>1,20</td> </tr> </tbody> </table>	Ø	kg	Ø	kg	1/2"	0,09	1 1/2"	0,55	3/4"	0,16	2"	0,80	1"	0,25	2 1/2"	0,90	1 1/4"	0,45	3"	1,20		
Ø	kg	Ø	kg																				
1/2"	0,09	1 1/2"	0,55																				
3/4"	0,16	2"	0,80																				
1"	0,25	2 1/2"	0,90																				
1 1/4"	0,45	3"	1,20																				

Conduit seals, EYS



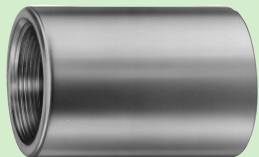
Type	Dimensions [mm]							
	d	L	L ₁	L ₂	L ₃	d ₄	d ₅	d ₆
EYS 1	1/2" NPT	77	60	31	54	—	1/2" NPT	—
EYS 2	3/4" NPT	88	68	31	61	—	3/4" NPT	—
EYS 3	1" NPT	106	84	39	74	—	1" NPT	—
EYS 5	1 1/2" NPT	131	87	—	—	62	1/2" NPT	1 1/2" NPT
EYS 6	2" NPT	141	100	—	—	76	1/2" NPT	2" NPT
EYS 7	2 1/2" NPT	184	124	—	—	92	3/4" NPT	2 1/2" NPT
EYS 8	3" NPT	190	138	—	—	108	3/4" NPT	3" NPT

Conduit seals, EZS



Type	Dimensions [mm]				
	d	L	L ₁	d ₄	d ₅
EZS 1	1/2" NPT	72	83	32	1/2" NPT
EZS 2	3/4" NPT	72	83	36	1/2" NPT
EZS 3	1" NPT	74	92	42	1/2" NPT
EZS 5	1 1/2" NPT	98	109	62	3/4" NPT
EZS 6	2" NPT	139	121	76	3/4" NPT
EZS 7	2 1/2" NPT	200	142	92	3/4" NPT
EZS 8	3" NPT	174	148	108	3/4" NPT

Conduit fitting, EM, with female/female coupling

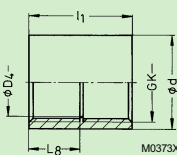


RN2097

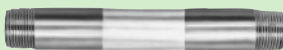
Selection table

Series	Type	Dimensions [mm]					Ordering code	Weight [kg]
		GK	D ₄	L ₈	L ₁	∅ d		
EM 1	1/2" NPT	18	20,5	45	25	460 831 0	0,09	
EM 2	3/4" NPT	24	20,5	45	30	460 832 0	0,085	
EM 3	1" NPT	29	25	55	37	460 833 0	0,16	
EM 5	1 1/2" NPT	44	26	60	54	460 834 0	0,26	
EM 6	2" NPT	56	26	60	66	460 835 0	0,54	
EM 7	2 1/2" NPT	67	30	70	82	460 836 0	0,64	
EM 8	3" NPT	83	30	70	95	460 837 0	1,3	

Explosion protection EEx (d) IIC
Test certificate INIEX 89.B.103.758 U
Material Zinc coated steel



Rigid conduit, SC, Conduit, standard length 3 m

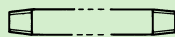


RN1082

Selection table

Series	Type	Nominal diameter	Max. outside ∅ [mm]	Min. internal ∅ [mm]	Ordering code	Weight [kg]
SC 401	1/2" NPT	21,3	16,0	461 331 0	1,32	
SC 402	3/4" NPT	26,9	21,8	461 332 0	1,75	
SC 403	1" NPT	33,7	27,2	461 333 0	2,65	
SC 405	1 1/2" NPT	48,3	41,8	461 335 0	4,05	
SC 406	2" NPT	60,32	53,0	461 336 0	5,43	
SC 407	2 1/2" NPT	73,02	62,7	461 337 0	8,62	
SC 408	3" NPT	88,90	77,92	461 338 0	11,30	

Product standards ASA* B 36.10
Material Steel, hot galvanized
Thread NPT-thread to ASA* B 2.1, with protection cap on both ends



Flexible conduit, FNN



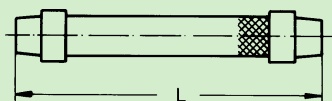
RN2104

Flexible conduits are installed where connections must be made to equipment subject to vibration, e.g. motors, pumps etc. They are also favoured for the installation of light fittings. Flexible conduits of series FNN are always male-fixed couplings.

Explosion protection Ex (d) IIB
Test report INIEX Nr. 5321
Material Inner stainless steel spiral with external steel braid (stainless)

Selection table

Series



Ordering code

Nominal diameter	Length L [mm]								
	300 mm	400 mm	500 mm	600 mm	700 mm	800 mm	900 mm	1000 mm	Special
1/2" NPT	FNN 1-3	FNN 1-4	FNN 1-5	FNN 1-6	FNN 1-7	FNN 1-8	FNN 1-9	FNN 1-10	FNN 1- □□□
3/4" NPT	FNN 2-3	FNN 2-4	FNN 2-5	FNN 2-6	FNN 2-7	FNN 2-8	FNN 2-9	FNN 2-10	FNN 2- □□□
1" NPT	FNN 3-3	FNN 3-4	FNN 3-5	FNN 3-6	FNN 3-7	FNN 3-8	FNN 3-9	FNN 3-10	FNN 3- □□□
1 1/2" NPT	–	–	FNN 5-5	FNN 5-6	FNN 5-7	FNN 5-8	FNN 5-9	FNN 5-10	FNN 5- □□□
2" NPT	–	–	FNN 6-5	FNN 6-6	FNN 6-7	FNN 6-8	FNN 6-9	FNN 6-10	FNN 6- □□□
2 1/2" NPT	–	–	–	–	–	FNN 7-8	FNN 7-9	FNN 7-10	FNN 7- □□□
3" NPT	only 1100 mm possible	–	–	–	–	–	–	–	FNN 8- □□□

