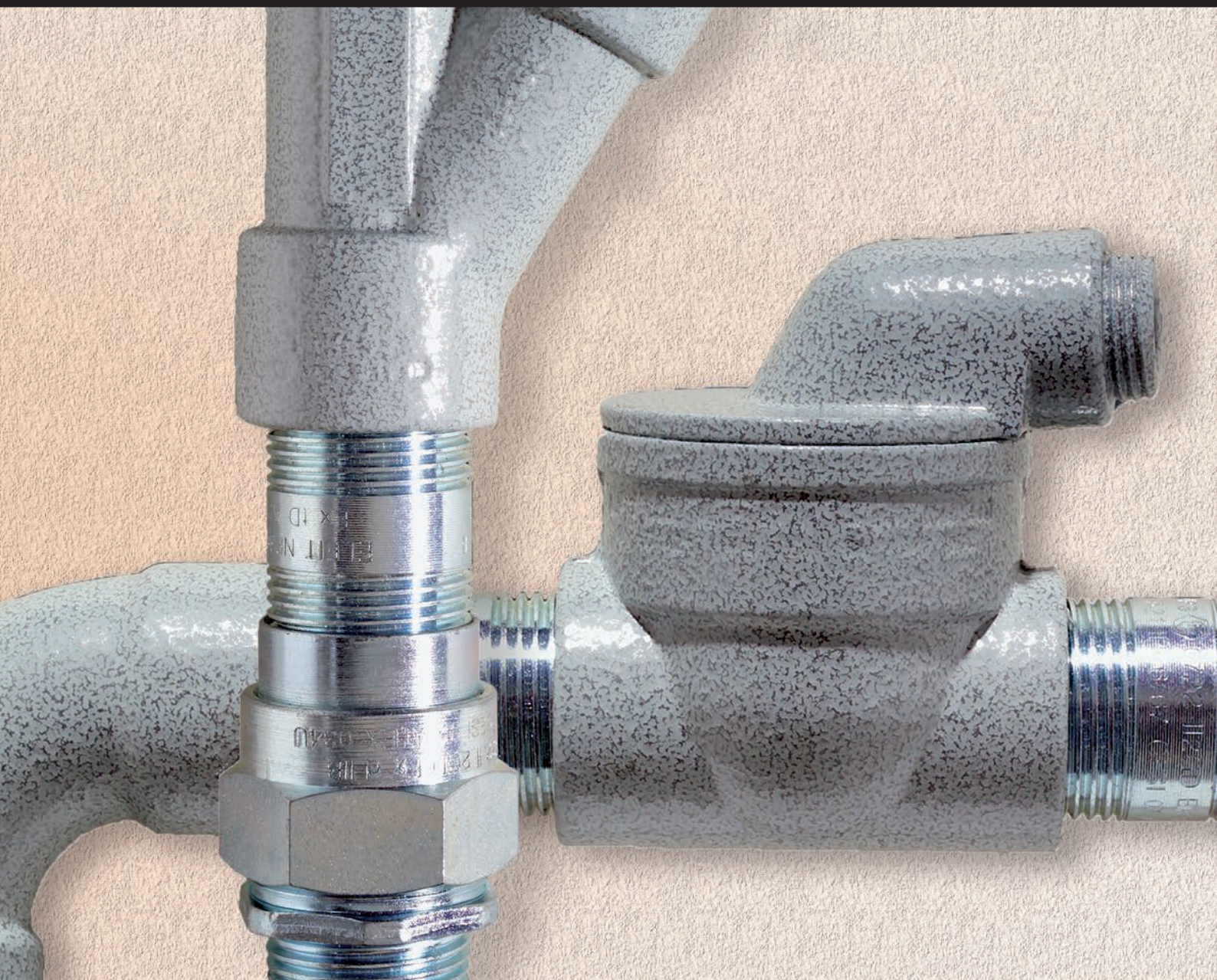




Electrical fittings for electrical plants



BMF series three pieces unions for IIB gas group enable an independent rotation and the connection between pipes, enclosures or different equipment.



Classification: 2014/34/UE	Group II	Category 2GD
Installation: EN 60079-14	zone 1 - zone 2 (Gas)	zone 21 - zone 22 (Dust)
Marking:	CE 0722 Ex II 2 GD Ex db IIB Gb Ex tb IIIC Db IP66/67 (B..)	
Certification:	ATEX	CESI 99 ATEX 034U
	IECEx	IECEx CES 10.0002U

For IEC Ex and others certifications data can be downloaded at www.elfit.com

Standards:	CENELEC EN 60079-0: 2012+A11:2013, EN 60079-1: 2014, EN 60079-31: 2014 and EUROPEAN DIRECTIVE 2014/34/UE IEC60079-0: 2011, IEC60079-1: 2007-04, IEC60079-31: 2008 Directive RoHS 2011/65/UE
Degree of protection:	IP66/67

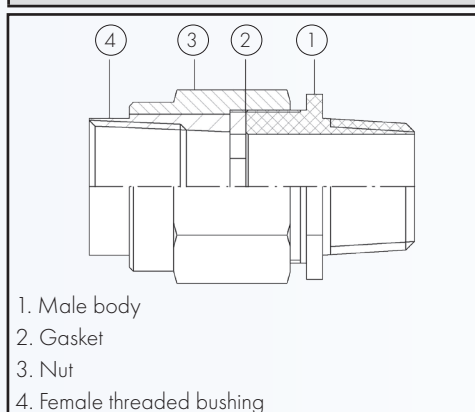


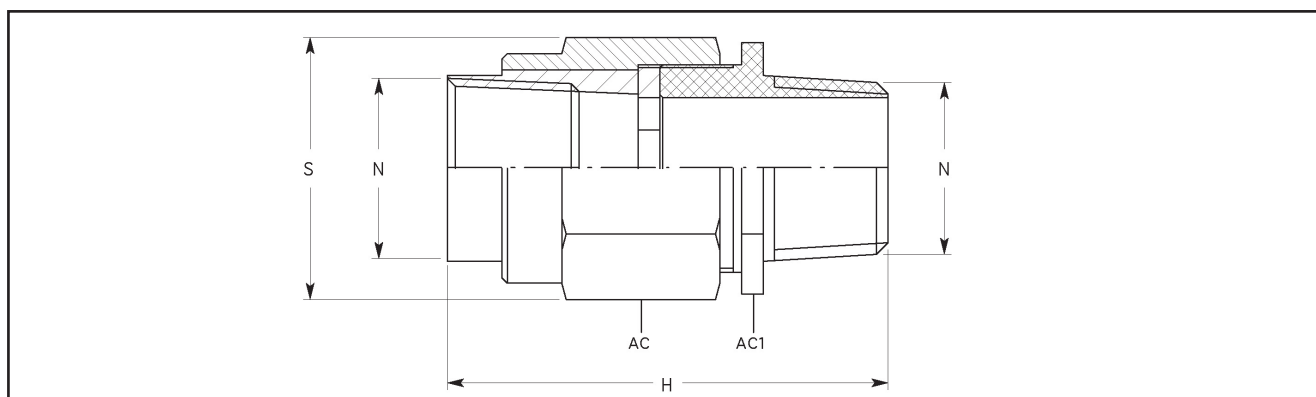
Operating temperature:

Three pieces unions series	Materials	Gaskets	Ambient temperature
BMF...	Galvanised steel (G), Nickel-plated brass (B)	Silicone	-20°C +60°C
BMF...S	Stainless steel (S)	Silicone	-60°C +60°C

Certificates are available on www.elfit.com

COMPOSITION OF STANDARD UNION

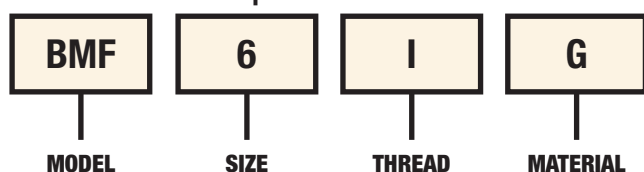




UNIONS SELECTION TABLE

Code In galvanised steel	Thread N	Dimensions in mm				Weight
		H	S	AC	AC1	Kg
BMF1G	1/2" ISO7/1	60	35	30	27	0,150
BMF2G	3/4" ISO7/1	61	40	35	32	0,185
BMF3G	1" ISO7/1	71,5	48	42	40	0,300
BMF4G	1 1/4" ISO7/1	86	60	55	59	0,760
BMF5G	1 1/2" ISO7/1	86,5	75	70	67	1,000
BMF6G	2" ISO7/1	88	90	84	77	1,400
BMF7G	2 1/2" ISO7/1	107	117	108	99	2,350
BMF8G	3" ISO7/1	109	132	121	108	2,800
BMF10G	4" ISO7/1	116,5	152	145	135	4,160
BMF1NG	1/2" NPT	60	35	30	27	0,150
BMF2NG	3/4" NPT	61	40	35	32	0,185
BMF3NG	1" NPT	71,5	48	42	40	0,300
BMF4NG	1 1/4" NPT	86	60	55	59	0,760
BMF5NG	1 1/2" NPT	86,5	75	70	67	1,000
BMF6NG	2" NPT	88	90	84	77	1,400
BMF7NG	2 1/2" NPT	107	117	108	99	2,350
BMF8NG	3" NPT	109	132	121	108	2,800
BMF10NG	4" NPT	116,5	152	145	135	4,160
BMF1IG	M20x1,5	60	35	30	27	0,150
BMF2IG	M25x1,5	61	40	35	32	0,185
BMF3IG	M32x1,5	71,5	48	42	40	0,300
BMF4IG	M40x1,5	86	60	55	59	0,760
BMF5IG	M50x1,5	86,5	75	70	67	1,000
BMF6IG	M63x1,5	88	90	84	77	1,400
BMF7IG	M75x1,5	107	117	108	99	2,350
BMF8IG	M90x1,5	109	132	121	108	2,800
BMF10IG	M100x1,5	116,5	152	145	135	4,160

Order code example



TECHNICAL NOTES:

- The silicone O-ring for the IP protection for cylindrical threads (ISO metric) is supplied already assembled on the union
- Available also in stainless steel (example code BMF1S)
- Available also upon request in nickel-plated brass (example code BMF1B)
- It is possible supply mixed thread, of the same equivalence, adding code for female thread (sample code for fitting in galvanised steel Male 1"NPT - Female M32x1,5: BMF3NIG)

BFF series three pieces unions for IIB gas group enable an independent rotation and connection between pipes, enclosures or different equipment.



Classification: 2014/34/UE	Group II	Category 2GD
Installation: EN 60079-14	zone 1 - zone 2 (Gas)	zone 21 - zone 22 (Dust)
Marking:	CE 0722 Ex II 2 GD Ex db IIB Gb Ex tb IIIC Db IP66/67 (B..)	
Certification:	ATEX	CESI 99 ATEX 034U
	IECEx	IECEx CES 10.0002U

For IEC Ex and others certifications data can be downloaded at www.elfit.com

Standards:	CENELEC EN 60079-0: 2012+A11:2013, EN 60079-1: 2014, EN 60079-31: 2014 and EUROPEAN DIRECTIVE 2014/34/UE IEC60079-0: 2011, IEC60079-1: 2007-04, IEC60079-31: 2008 Directive RoHS 2011/65/UE
Degree of protection:	IP66/67

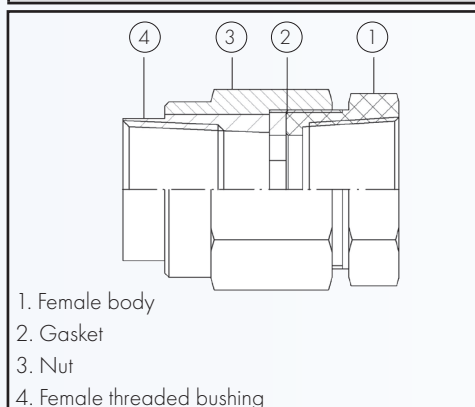


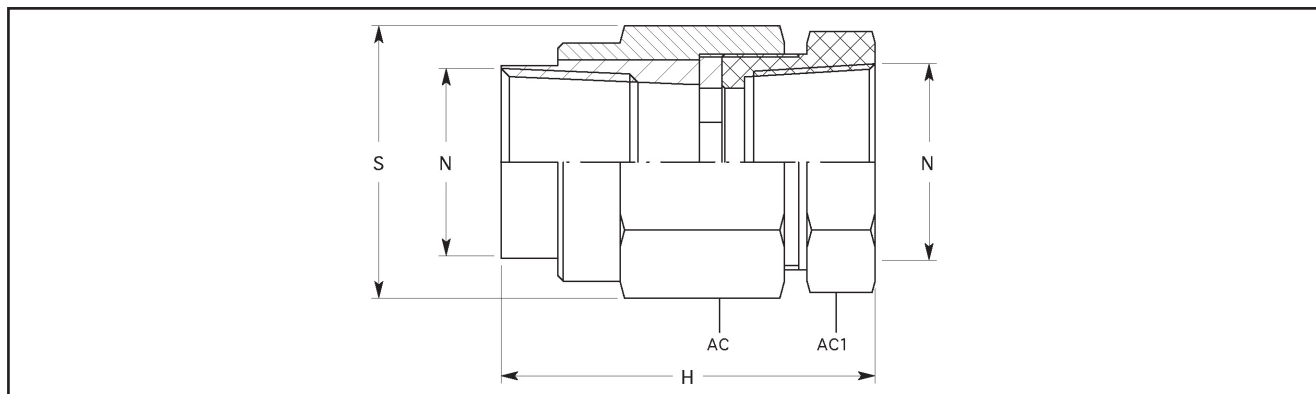
Operating temperature:

Three pieces unions series	Materials	Gaskets	Ambient temperature
BFF...	Galvanised steel (G), Nickel-plated brass (B)	Silicone	-20°C +60°C
BFF...S	Stainless steel (S)	Silicone	-60°C +60°C

Certificates are available on www.elfit.com

COMPOSITION OF STANDARD UNION

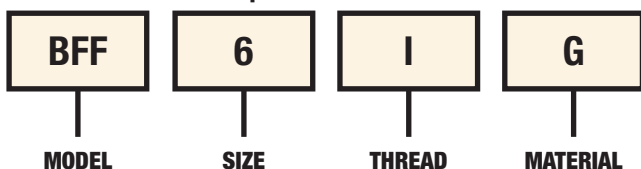




UNIONS SELECTION TABLE

Code In galvanised steel	Thread N	Dimensions in mm				Weight Kg
		H	S	AC	AC1	
BFF1G	1/2" ISO7/1	47	35	30	27	0,125
BFF2G	3/4" ISO7/1	47	40	35	32	0,150
BFF3G	1" ISO7/1	57	48	42	40	0,235
BFF4G	1 1/4" ISO7/1	63	60	55	59	0,640
BFF5G	1 1/2" ISO7/1	63	75	70	67	0,960
BFF6G	2" ISO7/1	64	90	84	77	1,220
BFF7G	2 1/2" ISO7/1	71	117	108	99	2,240
BFF8G	3" ISO7/1	71	132	121	108	2,600
BFF10G	4" ISO7/1	77	152	145	135	3,700
BFF1NG	1/2" NPT	57	35	30	27	0,125
BFF2NG	3/4" NPT	57	40	35	32	0,150
BFF3NG	1" NPT	67	48	42	40	0,235
BFF4NG	1 1/4" NPT	63	60	55	59	0,640
BFF5NG	1 1/2" NPT	63	75	70	67	0,960
BFF6NG	2" NPT	64	90	84	77	1,220
BFF7NG	2 1/2" NPT	71	117	108	99	2,240
BFF8NG	3" NPT	71	132	121	108	2,600
BFF10NG	4" NPT	77	152	145	135	3,700
BFF1IG	M20x1,5	47	35	30	27	0,125
BFF2IG	M25x1,5	47	40	35	32	0,150
BFF3IG	M32x1,5	52	48	42	40	0,235
BFF4IG	M40x1,5	63	60	55	59	0,640
BFF5IG	M50x1,5	63	75	70	67	0,960
BFF6IG	M63x1,5	64	90	84	77	1,220
BFF7IG	M75x1,5	71	117	108	99	2,240
BFF8IG	M90x1,5	71	132	121	108	2,600
BFF10IG	M100x1,5	77	152	145	135	3,700

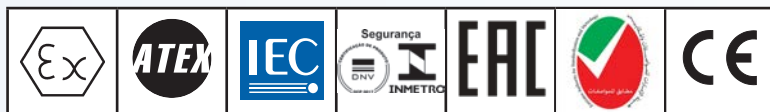
Order code example



TECHNICAL NOTES:

- The silicone O-ring for the IP protection for cylindrical threads (ISO metric) is supplied already assembled on the union
- Available also in stainless steel (example code BFF1**S**)
- Available also upon request in nickel-plated brass (example code BFF1**B**)

BMM series three pieces unions for IIB gas group enable an independent rotation and connection between pipes, enclosures or different equipment.



Classification: 2014/34/UE	Group II	Category 2GD
Installation: EN 60079-14	zone 1 - zone 2 (Gas)	zone 21 - zone 22 (Dust)
Marking:	CE 0722 Ex II 2 GD Ex db IIB Gb Ex tb IIIC Db IP66/67 (B..)	
Certification:	ATEX	CESI 99 ATEX 034U
	IECEX	IECEX CES 10.0002U For IEC Ex and others certifications data can be downloaded at www.elfit.com

Standards:	CENELEC EN 60079-0: 2012+A11:2013, EN 60079-1: 2014, EN 60079-31: 2014 and EUROPEAN DIRECTIVE 2014/34/UE IEC60079-0: 2011, IEC60079-1: 2007-04, IEC60079-31: 2008 Directive RoHS 2011/65/UE
Degree of protection:	IP66/67

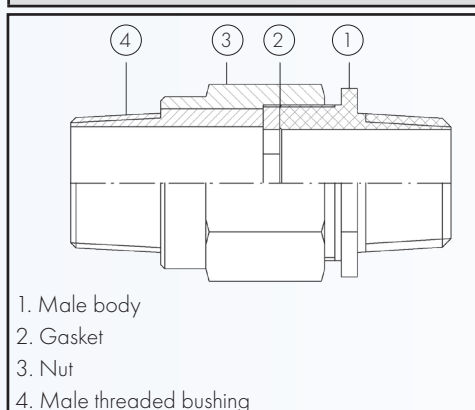


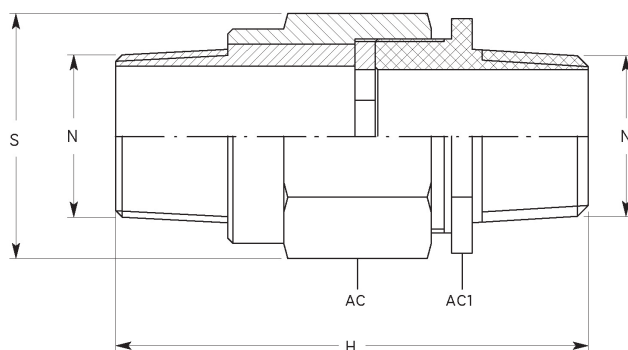
Operating temperature:

Three pieces unions series	Materials	Gaskets	Ambient temperature
BMM...	Galvanised steel (G), Nickel-plated brass (B)	Silicone	-20°C +60°C
BMM...S	Stainless steel (S)	Silicone	-60°C +60°C

Certificates are available on www.elfit.com

COMPOSITION OF STANDARD UNION

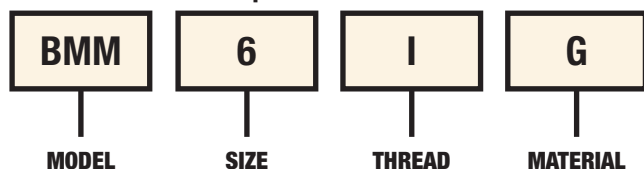




UNIONS SELECTION TABLE

Code In galvanised steel	Thread N	Dimensions in mm				Weight
		H	S	AC	AC1	Kg
BMM1G	1/2" ISO7/1	89	35	30	27	0,125
BMM2G	3/4" ISO7/1	87,5	40	35	32	0,150
BMM3G	1" ISO7/1	100,5	48	42	40	0,235
BMM4G	1 1/4" ISO7/1	111	60	55	59	0,640
BMM5G	1 1/2" ISO7/1	115	75	70	67	0,960
BMM6G	2" ISO7/1	113	90	84	77	1,220
BMM7G	2 1/2" ISO7/1	128	117	108	99	2,240
BMM8G	3" ISO7/1	130	132	121	108	2,600
BMM10G	4" ISO7/1	144	152	145	135	3,700
BMM1NG	1/2" NPT	89	35	30	27	0,125
BMM2NG	3/4" NPT	87,5	40	35	32	0,150
BMM3NG	1" NPT	100,5	48	42	40	0,235
BMM4NG	1 1/4" NPT	111	60	55	59	0,640
BMM5NG	1 1/2" NPT	115	75	70	67	0,960
BMM6NG	2" NPT	113	90	84	77	1,220
BMM7NG	2 1/2" NPT	128	117	108	99	2,240
BMM8NG	3" NPT	130	132	121	108	2,600
BMM10NG	4" NPT	144	152	145	135	3,700
BMM1IG	M20x1,5	89	35	30	27	0,125
BMM2IG	M25x1,5	87,5	40	35	32	0,150
BMM3IG	M32x1,5	100,5	48	42	40	0,235
BMM4IG	M40x1,5	111	60	55	59	0,640
BMM5IG	M50x1,5	115	75	70	67	0,960
BMM6IG	M63x1,5	113	90	84	77	1,220
BMM7IG	M75x1,5	128	117	108	99	2,240
BMM8IG	M90x1,5	130	132	121	108	2,600
BMM10IG	M100x1,5	144	152	145	135	3,700

Order code example



TECHNICAL NOTES:

- The silicone O-ring for the IP protection for cylindrical threads (ISO metric) is supplied already assembled on the union
- Available also in stainless steel (example code BMM1S)
- Available also upon request in nickel-plated brass (example code BMM1B)

RBMF series three pieces unions suitable for IIB gas group and extreme temperatures enable an independent rotation and connection between pipes, enclosures or different equipment.



Classification:
2014/34/UE

Group II

Category 2GD

Installation:
EN 60079-14

zone 1 - zone 2 (Gas)

zone 21 - zone 22 (Dust)

Marking:

CE 0722 Ex II 2 GD Ex db IIB Gb Ex tb IIIC Db IP66/67 (RB..)

Certification:

ATEX CESI 99 ATEX 034U

IECEX IECEX CES 10.0002U

For IEC Ex and others certifications data can be downloaded at www.elfit.com

Standards:

CENELEC EN 60079-0: 2012+A11:2013, EN 60079-1: 2014, EN 60079-31: 2014 and EUROPEAN DIRECTIVE 2014/34/UE
IEC60079-0: 2011, IEC60079-1: 2007-04, IEC60079-31: 2008 Directive RoHS 2011/65/UE

Degree of protection:

IP66/67

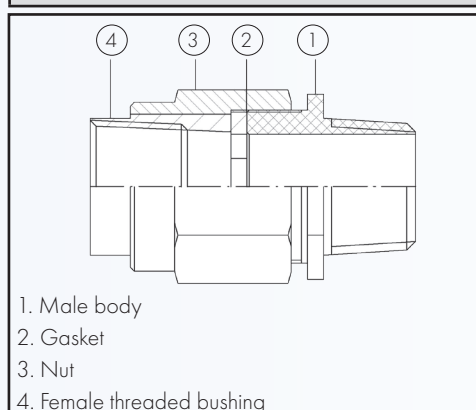


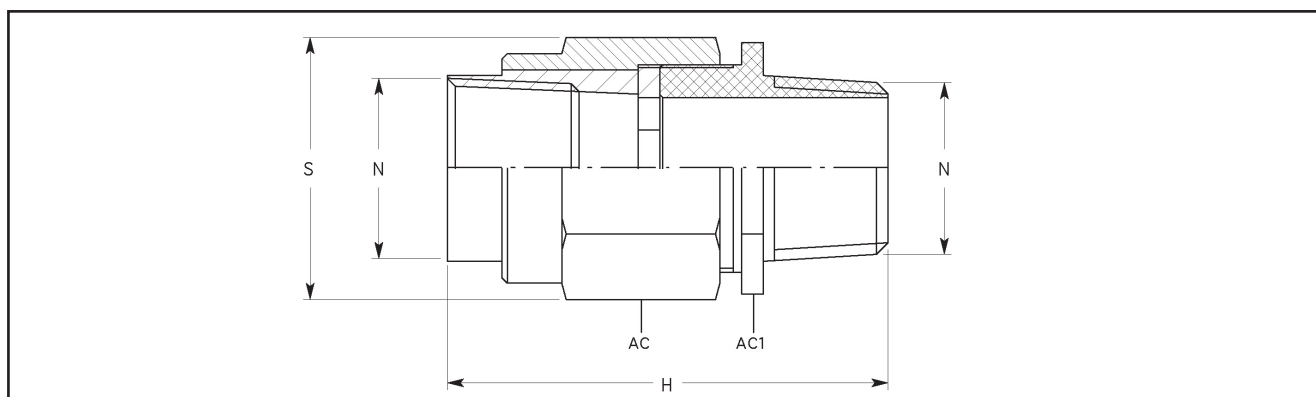
Operating temperature:

Three pieces unions series	Materials	Gaskets	Ambient temperature
RBMF...	Galvanised steel (G), Nickel-plated brass (B)	Silicone	-20°C +150°C
RBMF...S	Stainless steel (S)	Silicone	-60°C +150°C

Certificates are available on www.elfit.com

COMPOSITION OF STANDARD UNION




UNIONS SELECTION TABLE

Code In galvanised steel	Thread N	Dimensions in mm				Weight
		H	S	AC	AC1	Kg
RBMF1G	1/2" ISO7/1	71	35	30	27	0,150
RBMF2G	3/4" ISO7/1	72	40	35	32	0,185
RBMF3G	1" ISO7/1	82,5	48	42	40	0,300
RBMF4G	1 1/4" ISO7/1	86	60	55	59	0,760
RBMF5G	1 1/2" ISO7/1	86,5	75	70	67	1,000
RBMF6G	2" ISO7/1	88	90	84	77	1,400
RBMF7G	2 1/2" ISO7/1	107	117	108	99	2,350
RBMF8G	3" ISO7/1	109	132	121	108	2,800
RBMF10G	4" ISO7/1	116,5	152	145	135	4,160
RBMF1NG	1/2" NPT	71	35	30	27	0,150
RBMF2NG	3/4" NPT	72	40	35	32	0,185
RBMF3NG	1" NPT	82,5	48	42	40	0,300
RBMF4NG	1 1/4" NPT	86	60	55	59	0,760
RBMF5NG	1 1/2" NPT	86,5	75	70	67	1,000
RBMF6NG	2" NPT	88	90	84	77	1,400
RBMF7NG	2 1/2" NPT	107	117	108	99	2,350
RBMF8NG	3" NPT	109	132	121	108	2,800
RBMF10NG	4" NPT	116,5	152	145	135	4,160
RBMF1IG	M20x1,5	71	35	30	27	0,150
RBMF2IG	M25x1,5	72	40	35	32	0,185
RBMF3IG	M32x1,5	82,5	48	42	40	0,300
RBMF4IG	M40x1,5	86	60	55	59	0,760
RBMF5IG	M50x1,5	86,5	75	70	67	1,000
RBMF6IG	M63x1,5	88	90	84	77	1,400
RBMF7IG	M75x1,5	107	117	108	99	2,350
RBMF8IG	M90x1,5	109	132	121	108	2,800
RBMF10IG	M100x1,5	116,5	152	145	135	4,160

Order code example

RBMF	6	I	G
MODEL	SIZE	THREAD	MATERIAL

TECHNICAL NOTES:

- The silicone O-ring for the IP protection for cylindrical threads (ISO metric) is supplied already assembled on the union
- Available also in stainless steel (example code RBMF1**S**)
- Available also in nickel-plated brass (example code RBMF1**B**)
- It is possible supply mixed thread, of the same equivalence (sample code for fitting in galvanised steel Male 1"NPT - Female M32x1,5: RBMF3NG)

RBFF series three pieces unions suitable for IIB gas group and extreme temperatures enable an independent rotation and connection between pipes, enclosures or different instruments.


Classification:
2014/34/UE

Group II

Category 2GD

Installation:
EN 60079-14

zone 1 - zone 2 (Gas)

zone 21 - zone 22 (Dust)

Marking:

CE 0722 Ex II 2 GD Ex db IIB Gb Ex tb IIIC Db IP66/67 (RB..)

Certification:

ATEX CESI 99 ATEX 034U

IECEx IECEx CES 10.0002U

 For IEC Ex and others certifications data
can be downloaded at
www.elfit.com
Standards:

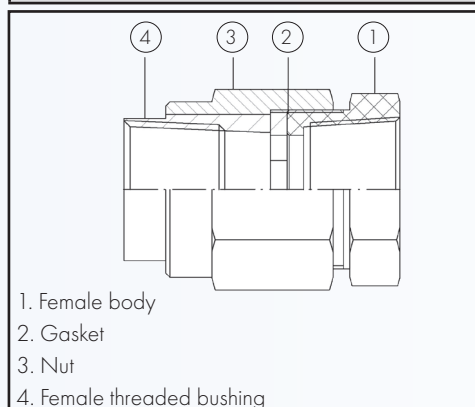
 CENELEC EN 60079-0: 2012+A11:2013, EN 60079-1: 2014, EN 60079-31: 2014 and EUROPEAN
DIRECTIVE 2014/34/UE
IEC60079-0: 2011, IEC60079-1: 2007-04, IEC60079-31: 2008 Directive RoHS 2011/65/UE

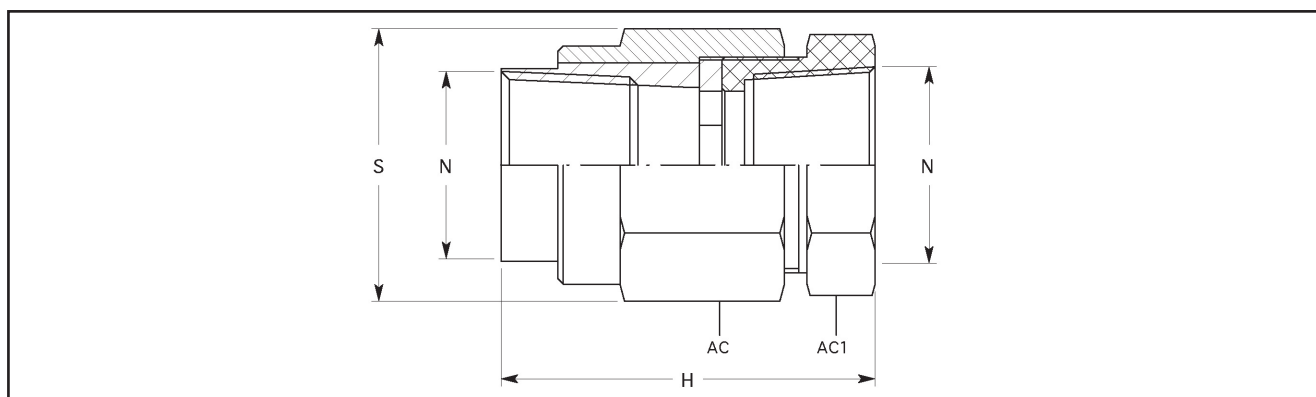
Degree of protection:

IP66/67


Operating temperature:

Three pieces unions series	Materials	Gaskets	Ambient temperature
RBFF...	Galvanised steel (G), Nickel-plated brass (B)	Silicone	-20°C +150°C
RBFF...S	Stainless steel (S)	Silicone	-60°C +150°C

 Certificates are available on www.elfit.com
COMPOSITION OF STANDARD UNION




UNIONS SELECTION TABLE

Code In galvanised steel	Thread N	Dimensions in mm				Weight Kg
		H	S	AC	AC1	
RBFF1G	1/2" ISO7/1	57	35	30	27	0,125
RBFF2G	3/4" ISO7/1	57	40	35	32	0,150
RBFF3G	1" ISO7/1	67	48	42	40	0,235
RBFF4G	1 1/4" ISO7/1	63	60	55	59	0,640
RBFF5G	1 1/2" ISO7/1	63	75	70	67	0,960
RBFF6G	2" ISO7/1	64	90	84	77	1,220
RBFF7G	2 1/2" ISO7/1	71	117	108	99	2,240
RBFF8G	3" ISO7/1	71	132	121	108	2,600
RBFF10G	4" ISO7/1	77	152	145	135	3,700
RBFF1NG	1/2" NPT	57	35	30	27	0,125
RBFF2NG	3/4" NPT	57	40	35	32	0,150
RBFF3NG	1" NPT	67	48	42	40	0,235
RBFF4NG	1 1/4" NPT	63	60	55	59	0,640
RBFF5NG	1 1/2" NPT	63	75	70	67	0,960
RBFF6NG	2" NPT	64	90	84	77	1,220
RBFF7NG	2 1/2" NPT	71	117	108	99	2,240
RBFF8NG	3" NPT	71	132	121	108	2,600
RBFF10NG	4" NPT	77	152	145	135	3,700
RBFF1IG	M20x1,5	57	35	30	27	0,125
RBFF2IG	M25x1,5	57	40	35	32	0,150
RBFF3IG	M32x1,5	67	48	42	40	0,235
RBFF4IG	M40x1,5	63	60	55	59	0,640
RBFF5IG	M50x1,5	63	75	70	67	0,960
RBFF6IG	M63x1,5	64	90	84	77	1,220
RBFF7IG	M75x1,5	71	117	108	99	2,240
RBFF8IG	M90x1,5	71	132	121	108	2,600
RBFF10IG	M100x1,5	77	152	145	135	3,700

Order code example

RBFF	6	I	G
MODEL	SIZE	THREAD	MATERIAL

TECHNICAL NOTES:

- The silicone O-ring for the IP protection for cylindrical threads (ISO metric) is supplied already assembled on the union
- Available also in stainless steel (example code RBFF1S)
- Available also in nickel-plated brass (example code RBFF1B)

RBMM series three pieces unions suitable for IIB gas group and extreme temperatures enable an independent rotation and connection between pipes, enclosures or different instruments.



Classification: 2014/34/UE	Group II	Category 2GD
Installation: EN 60079-14	zone 1 - zone 2 (Gas)	zone 21 - zone 22 (Dust)
Marking:	CE 0722 Ex II 2 GD Ex db IIB Gb Ex tb IIIC Db IP66/67 (RB..)	
Certification:	ATEX	CESI 99 ATEX 034U
	IECEX	IECEX CES 10.0002U

For IEC Ex and others certifications data can be downloaded at www.elfit.com

Standards:	CENELEC EN 60079-0: 2012+A11:2013, EN 60079-1: 2014, EN 60079-31: 2014 and EUROPEAN DIRECTIVE 2014/34/UE IEC60079-0: 2011, IEC60079-1: 2007-04, IEC60079-31: 2008 Directive RoHS 2011/65/UE
Degree of protection:	IP66/67

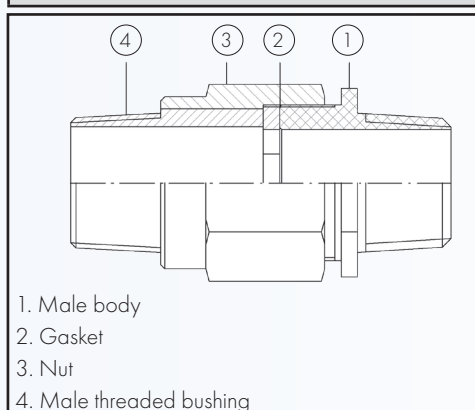


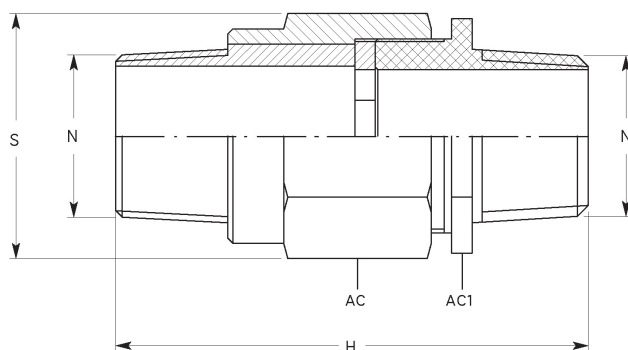
Operating temperature:

Three pieces unions series	Materials	Gaskets	Ambient temperature
RBMM...	Galvanised steel (G), Nickel-plated brass (B)	Silicone	-20°C +150°C
RBMM...S	Stainless steel (S)	Silicone	-60°C +150°C

Certificates are available on www.elfit.com

COMPOSITION OF STANDARD UNION

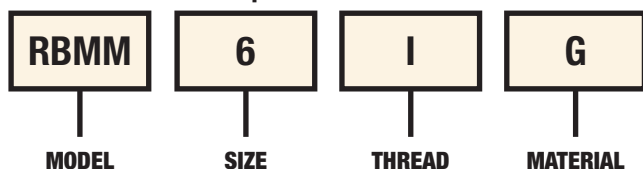




UNIONS SELECTION TABLE

Code In galvanised steel	Thread N	Dimensions in mm				Weight Kg
		H	S	AC	AC1	
RBMM1G	1/2" ISO7/1	99	35	30	27	0,125
RBMM2G	3/4" ISO7/1	97,5	40	35	32	0,150
RBMM3G	1" ISO7/1	110,5	48	42	40	0,235
RBMM4G	1 1/4" ISO7/1	121	60	55	59	0,640
RBMM5G	1 1/2" ISO7/1	125	75	70	67	0,960
RBMM6G	2" ISO7/1	123	90	84	77	1,220
RBMM7G	2 1/2" ISO7/1	143	117	108	99	2,240
RBMM8G	3" ISO7/1	145	132	121	108	2,600
RBMM10G	4" ISO7/1	144	152	145	135	3,700
RBMM1NG	1/2" NPT	99	35	30	27	0,125
RBMM2NG	3/4" NPT	97,5	40	35	32	0,150
RBMM3NG	1" NPT	110,5	48	42	40	0,235
RBMM4NG	1 1/4" NPT	121	60	55	59	0,640
RBMM5NG	1 1/2" NPT	125	75	70	67	0,960
RBMM6NG	2" NPT	123	90	84	77	1,220
RBMM7NG	2 1/2" NPT	143	117	108	99	2,240
RBMM8NG	3" NPT	145	132	121	108	2,600
RBMM10NG	4" NPT	144	152	145	135	3,700
RBMM1IG	M20x1,5	99	35	30	27	0,125
RBMM2IG	M25x1,5	97,5	40	35	32	0,150
RBMM3IG	M32x1,5	110,5	48	42	40	0,235
RBMM4IG	M40x1,5	121	60	55	59	0,640
RBMM5IG	M50x1,5	125	75	70	67	0,960
RBMM6IG	M63x1,5	123	90	84	77	1,220
RBMM7IG	M75x1,5	143	117	108	99	2,240
RBMM8IG	M90x1,5	145	132	121	108	2,600
RBMM10IG	M100x1,5	144	152	145	135	3,700

Order code example



TECHNICAL NOTES:

- The silicone O-ring for the IP protection for cylindrical threads (ISO metric) is supplied already assembled on the union
- Available also in stainless steel (example code **RBMM1S**)
- Available also in nickel-plated brass (example code **RBMM1B**)

RMF series three pieces unions for IIC gas group enable an independent rotation and connection between pipes, enclosures or different instruments.



Classification: 2014/34/UE	Group II	Category 2GD
Installation: EN 60079-14	zone 1 - zone 2 (Gas)	zone 21 - zone 22 (Dust)
Marking:	CE 0722 Ex II 2 GD Ex db IIC Gb Ex tb IIIC Db IP66/67 (R..)	
Certification:	ATEX	CESI 99 ATEX 034U
	IECEX	IECEX CES 10.0002U

For IEC Ex and others certifications data can be downloaded at www.elfit.com

Standards:	CENELEC EN 60079-0: 2012+A11:2013, EN 60079-1: 2014, EN 60079-31: 2014 and EUROPEAN DIRECTIVE 2014/34/UE IEC60079-0: 2011, IEC60079-1: 2007-04, IEC60079-31: 2008 Directive RoHS 2011/65/UE
Degree of protection:	IP66/67

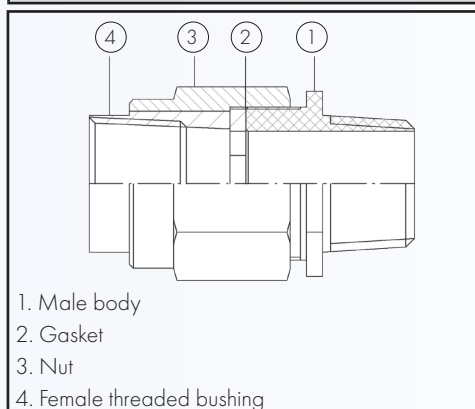


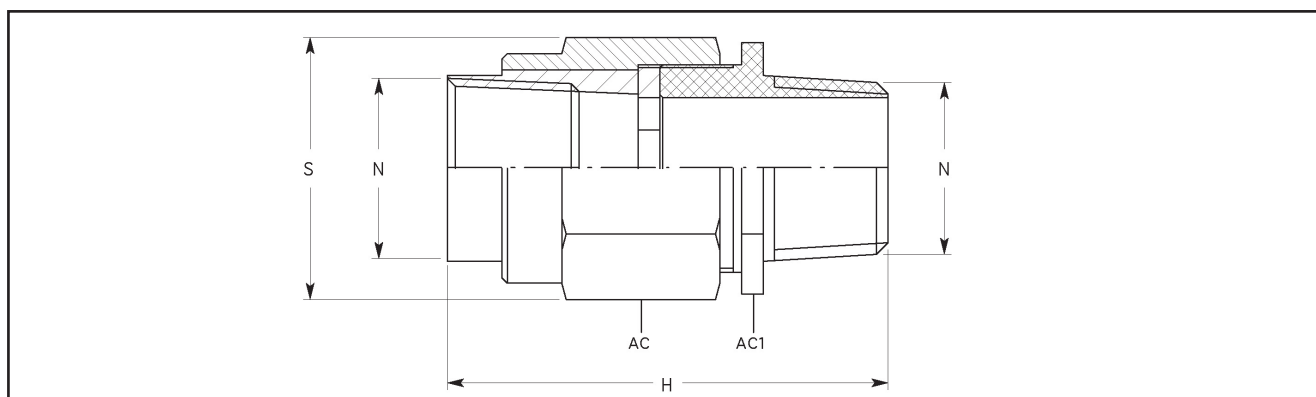
Operating temperature:

Three pieces unions series	Materials	Gaskets	Ambient temperature
RMF...	Galvanised steel (G), Nickel-plated brass (B)	Silicone	-20°C +60°C
RMF...S	Stainless steel (S)	Silicone	-60°C +60°C

Certificates are available on www.elfit.com

COMPOSITION OF STANDARD UNION

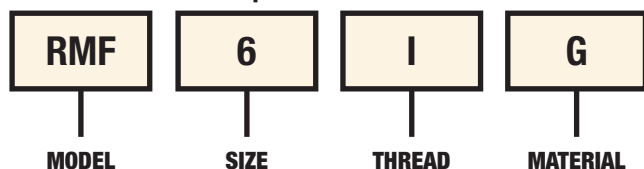




UNIONS SELECTION TABLE

Code In galvanised steel	Thread N	Dimensions in mm				Weight Kg
		H	S	AC	AC1	
RMF1G	1/2" ISO7/1	71	35	30	27	0,200
RMF2G	3/4" ISO7/1	71	40	35	32	0,230
RMF3G	1" ISO7/1	82	48	42	40	0,380
RMF4G	1 1/4" ISO7/1	87	60	55	59	0,940
RMF5G	1 1/2" ISO7/1	87	75	70	67	1,125
RMF6G	2" ISO7/1	87	90	84	77	1,540
RMF7G	2 1/2" ISO7/1	98	117	108	99	3,125
RMF8G	3" ISO7/1	98	132	121	108	3,990
RMF10G	4" ISO7/1	112	152	145	135	4,160
RMF1NG	1/2" NPT	71	35	30	27	0,200
RMF2NG	3/4" NPT	71	40	35	32	0,230
RMF3NG	1" NPT	82	48	42	40	0,380
RMF4NG	1 1/4" NPT	87	60	55	59	0,940
RMF5NG	1 1/2" NPT	87	75	70	67	1,125
RMF6NG	2" NPT	87	90	84	77	1,540
RMF7NG	2 1/2" NPT	98	117	108	99	3,125
RMF8NG	3" NPT	98	132	121	108	3,990
RMF10NG	4" NPT	112	152	145	135	4,160
RMF1IG	M20x1,5	71	35	30	27	0,200
RMF2IG	M25x1,5	71	40	35	32	0,230
RMF3IG	M32x1,5	82	48	42	40	0,380
RMF4IG	M40x1,5	87	60	55	59	0,940
RMF5IG	M50x1,5	87	75	70	67	1,125
RMF6IG	M63x1,5	87	90	84	77	1,540
RMF7IG	M75x1,5	98	117	108	99	3,125
RMF8IG	M90x1,5	98	132	121	108	3,990
RMF10IG	M100x1,5	112	152	145	135	4,160

Order code example



TECHNICAL NOTES:

- The silicone O-ring for the IP protection for cylindrical threads (ISO metric) is supplied already assembled on the union
- Available also in stainless steel (example code RMF1**S**)
- Available also in nickel-plated brass (example code RMF1**B**)
- It is possible supply mixed thread, of the same equivalence (sample code for fitting in galvanised steel Male 1"NPT - Female M32x1,5: RMF3NIG)

RFF series three pieces unions for IIC gas group enable an independent rotation and connection between pipes, enclosures or different equipment.



Classification: 2014/34/UE	Group II	Category 2GD
Installation: EN 60079-14	zone 1 - zone 2 (Gas)	zone 21 - zone 22 (Dust)
Marking:	CE 0722 Ex II 2 GD Ex db IIC Gb Ex tb IIIC Db IP66/67 (R..)	
Certification:	ATEX	CESI 99 ATEX 034U
	IECEx	IECEx CES 10.0002U

For IEC Ex and others certifications data can be downloaded at www.elfit.com

Standards:	CENELEC EN 60079-0: 2012+A11:2013, EN 60079-1: 2014, EN 60079-31: 2014 and EUROPEAN DIRECTIVE 2014/34/UE IEC60079-0: 2011, IEC60079-1: 2007-04, IEC60079-31: 2008 Directive RoHS 2011/65/UE
Degree of protection:	IP66/67

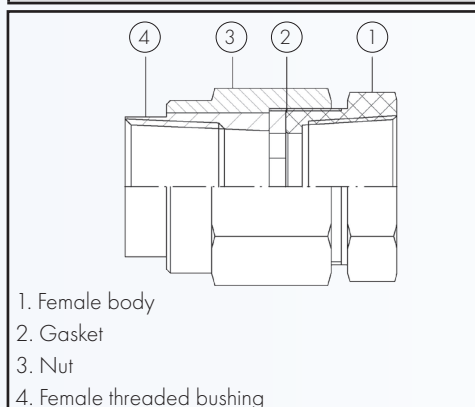


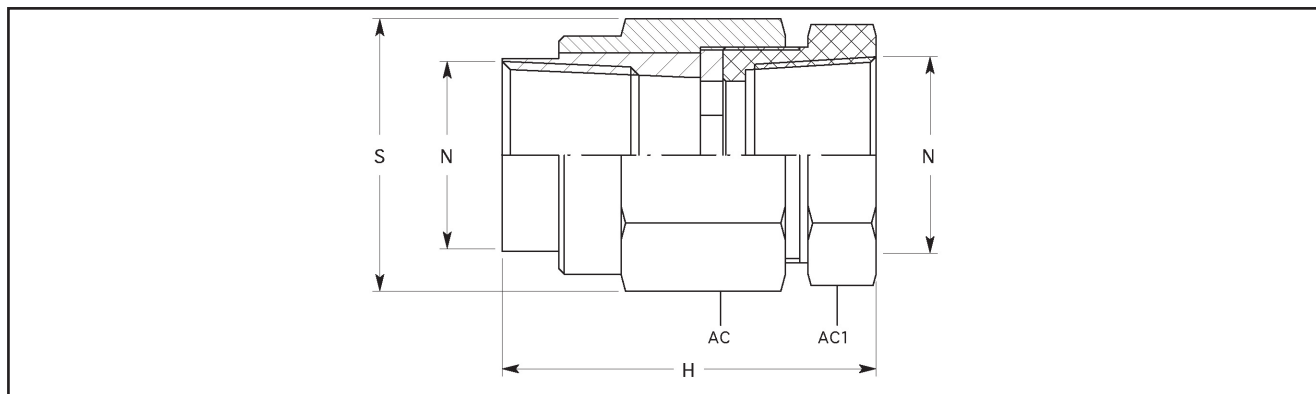
Operating temperature:

Three pieces unions series	Materials	Gaskets	Ambient temperature
RFF...	Galvanised steel (G), Nickel-plated brass (B)	Silicone	-20°C +60°C
RFF...S	Stainless steel (S)	Silicone	-60°C +60°C

Certificates are available on www.elfit.com

COMPOSITION OF STANDARD UNION

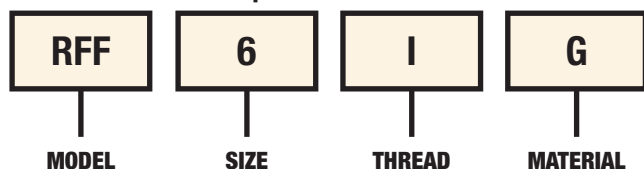




UNIONS SELECTION TABLE

Code In galvanised steel	Thread N	Dimensions in mm				Weight Kg
		H	S	AC	AC1	
RFF1G	1/2" ISO7/1	58	35	30	27	0,170
RFF2G	3/4" ISO7/1	58	40	35	32	0,200
RFF3G	1" ISO7/1	68	48	42	40	0,315
RFF4G	1 1/4" ISO7/1	63	60	55	59	0,820
RFF5G	1 1/2" ISO7/1	66	75	70	67	1,020
RFF6G	2" ISO7/1	66	90	84	77	1,390
RFF7G	2 1/2" ISO7/1	71	117	108	99	2,520
RFF8G	3" ISO7/1	71	132	121	108	2,900
RFF10G	4" ISO7/1	86	152	145	135	3,700
RFF1NG	1/2" NPT	58	35	30	27	0,170
RFF2NG	3/4" NPT	58	40	35	32	0,200
RFF3NG	1" NPT	68	48	42	40	0,315
RFF4NG	1 1/4" NPT	63	60	55	59	0,820
RFF5NG	1 1/2" NPT	66	75	70	67	1,020
RFF6NG	2" NPT	66	90	84	77	1,390
RFF7NG	2 1/2" NPT	71	117	108	99	2,520
RFF8NG	3" NPT	71	132	121	108	2,900
RFF10NG	4" NPT	86	152	145	135	3,700
RFF1IG	M20x1,5	58	35	30	27	0,170
RFF2IG	M25x1,5	58	40	35	32	0,200
RFF3IG	M32x1,5	68	48	42	40	0,315
RFF4IG	M40x1,5	63	60	55	59	0,820
RFF5IG	M50x1,5	66	75	70	67	1,020
RFF6IG	M63x1,5	66	90	84	77	1,390
RFF7IG	M75x1,5	71	117	108	99	2,520
RFF8IG	M90x1,5	71	132	121	108	2,900
RFF10IG	M100x1,5	86	152	145	135	3,700

Order code example



TECHNICAL NOTES:

- The silicone O-ring for the IP protection for cylindrical threads (ISO metric) is supplied already assembled on the union
- Available also in stainless steel (example code RFF1S)
- Available also in nickel-plated brass (example code RFF1B)

RMM series three pieces unions for IIC gas group enable an independent rotation and connection between pipes, enclosures or different equipment.



Classification: 2014/34/UE	Group II	Category 2GD
Installation: EN 60079-14	zone 1 - zone 2 (Gas)	zone 21 - zone 22 (Dust)
Marking:	CE 0722 Ex II 2 GD Ex db IIC Gb Ex tb IIIC Db IP66/67 (R..)	
Certification:	ATEX	CESI 99 ATEX 034U
	IECEx	IECEx CES 10.0002U

For IEC Ex and others certifications data can be downloaded at www.elfit.com

Standards:	CENELEC EN 60079-0: 2012+A11:2013, EN 60079-1: 2014, EN 60079-31: 2014 and EUROPEAN DIRECTIVE 2014/34/UE IEC60079-0: 2011, IEC60079-1: 2007-04, IEC60079-31: 2008 Directive RoHS 2011/65/UE
Degree of protection:	IP66/67

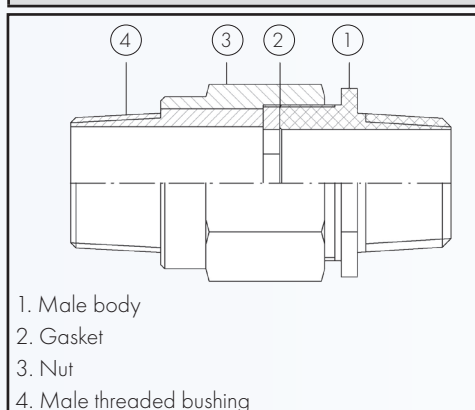


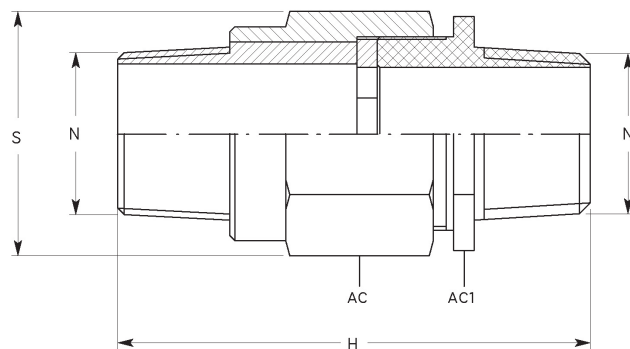
Operating temperature:

Three pieces unions series	Materials	Gaskets	Ambient temperature
RMM...	Galvanised steel (G), Nickel-plated brass (B)	Silicone	-20°C +60°C
RMM...S	Stainless steel (S)	Silicone	-60°C +60°C

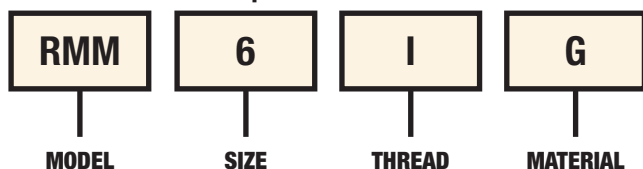
Certificates are available on www.elfit.com

COMPOSITION OF STANDARD UNION



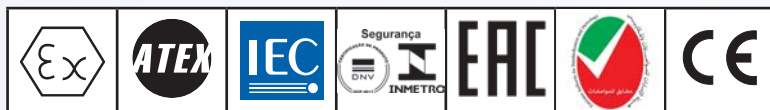

UNIONS SELECTION TABLE

Code In galvanised steel	Thread N	Dimensions in mm				Weight
		H	S	AC	AC1	Kg
RMM1G	1/2" ISO7/1	97	35	30	27	0,220
RMM2G	3/4" ISO7/1	97	40	35	32	0,290
RMM3G	1" ISO7/1	110	48	42	40	0,425
RMM4G	1 1/4" ISO7/1	125	60	55	59	1,200
RMM5G	1 1/2" ISO7/1	125	75	70	67	1,500
RMM6G	2" ISO7/1	125	90	84	77	1,900
RMM7G	2 1/2" ISO7/1	142	117	108	99	4,000
RMM8G	3" ISO7/1	142	132	121	108	4,000
RMM10G	4" ISO7/1	150	152	145	135	5,160
RMM1NG	1/2" NPT	97	35	30	27	0,220
RMM2NG	3/4" NPT	97	40	35	32	0,290
RMM3NG	1" NPT	110	48	42	40	0,425
RMM4NG	1 1/4" NPT	125	60	55	59	1,200
RMM5NG	1 1/2" NPT	125	75	70	67	1,500
RMM6NG	2" NPT	125	90	84	77	1,900
RMM7NG	2 1/2" NPT	142	117	108	99	4,000
RMM8NG	3" NPT	142	132	121	108	4,000
RMM10NG	4" NPT	150	152	145	135	5,160
RMM1IG	M20x1,5	97	35	30	27	0,220
RMM2IG	M25x1,5	97	40	35	32	0,290
RMM3IG	M32x1,5	110	48	42	40	0,425
RMM4IG	M40x1,5	125	60	55	59	1,200
RMM5IG	M50x1,5	125	75	70	67	1,500
RMM6IG	M63x1,5	125	90	84	77	1,900
RMM7IG	M75x1,5	142	117	108	99	4,000
RMM8IG	M90x1,5	142	132	121	108	4,000
RMM10IG	M100x1,5	150	152	145	135	5,160

Order code example

TECHNICAL NOTES:

- The silicone O-ring for the IP protection for cylindrical threads (ISO metric) is supplied already assembled on the union
- Available also in stainless steel (example code RMM1**S**)
- Available also in nickel-plated brass (example code RMM1**B**)

Reducers and adaptors are used to join instruments, enclosures, pipes and hubs of different diameter and threads.



Classification:
2014/34/UE

Installation:
EN 60079-14

Marking:

Certification

Group II

Category 2GD

zone 1 - zone 2 (Gas)

zone 21 - zone 22 (Dust)

CE 0722 Ex II 2 GD Ex db IIC Gb Ex tb IIIC Db IP66/67

CE 0722 Ex II 2 GD Ex eb IIC Gb Ex tb IIIC Db IP66/67

ATEX CESI 02 ATEX 049X

IECEX IECEX CES 10.0001X

For IEC Ex and others certifications data can be downloaded at www.elfit.com

Standards:

CENELEC EN 60079-0: 2012+A11: 2013, EN 60079-1: 2014, EN 60079-7: 2015, EN 60079-31: 2014 and EUROPEAN DIRECTIVE 2014/34/UE
IEC60079-0: 2011, IEC60079-1: 2007-04, IEC60079-7: 2006-07, IEC60079-31: 2008 Directive RoHS 2011/65/UE

Degree of protection:

IP66/67



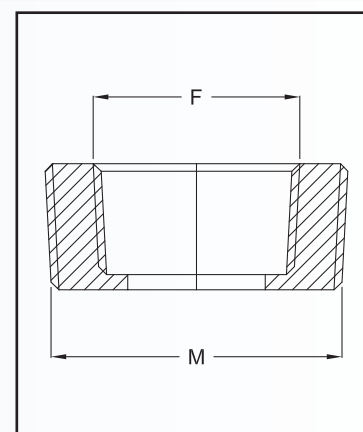
Operating temperature:

Adaptors	Material	Ambient temperature
RE...	Galvanised steel (G)	-20°C +80°C
RE...	Nickel-plated brass (B), Aluminium alloy (A)	-40°C +150°C
RE...	Stainless steel (S)	-60°C +150°C

Certificates are available on www.elfit.com

SELECTION TABLE OF STANDARD ADAPTORS

Thread ISO7/1	Ø FEMALE F								
	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"
Ø MALE M	3/8"	RE3814							
	1/2"	RE114	RE138						
	3/4"	RE214	RE238	RE21					
	1"	RE314	RE338	RE31	RE32				
	1 1/4"	RE414	RE438	RE41	RE42	RE43			
	1 1/2"	RE514	RE538	RE51	RE52	RE53	RE54		
	2"	RE614	RE638	RE61	RE62	RE63	RE64	RE65	
	2 1/2"			RE71	RE72	RE73	RE74	RE75	RE76
	3"			RE81	RE82	RE83	RE84	RE85	RE86



Order code example of
standard adaptors

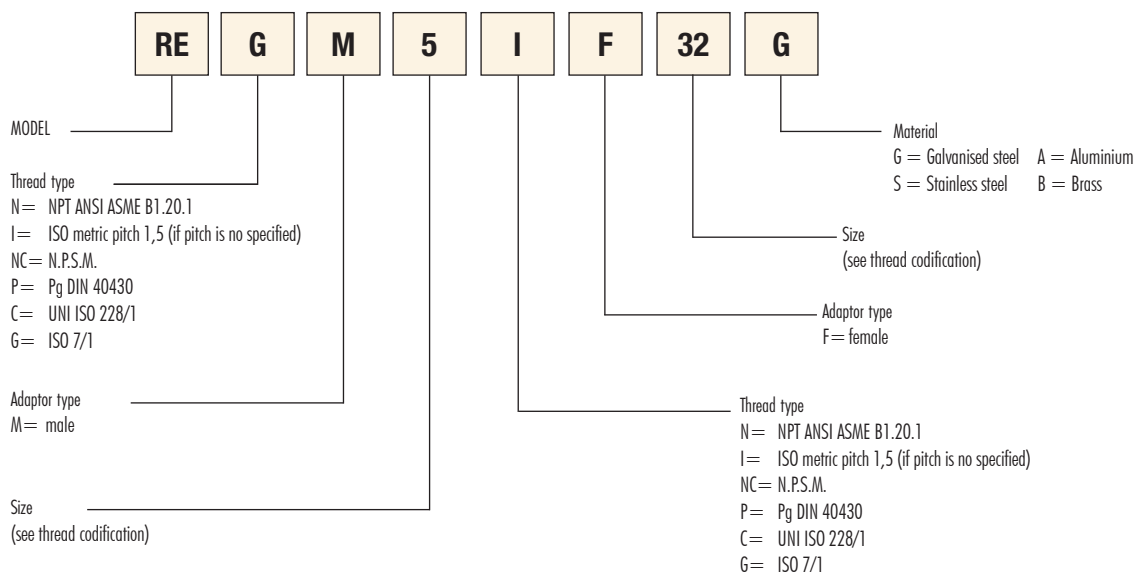
RE	31	G
MODEL	SIZE	MATERIAL

TECHNICAL NOTES:

- Available with other threads (example code RE31**NG**)
- Available in different materials (example code RE31**A**)
- Size over 3" upon request

SPECIAL ADAPTORS (MIXED THREADS)
Order code example

(Adaptor type RE, male 1 1/2" Gk, female M32x1,5, galvanised steel)


THREAD CODIFICATION
NPT, N.P.S.M., UNI ISO 228/1, ISO 7/1

02	01	1	2	3	4	5	6	7	8	9	10	12	14
1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2	2 1/2"	3"	3 1/2"	4"	5"	6"

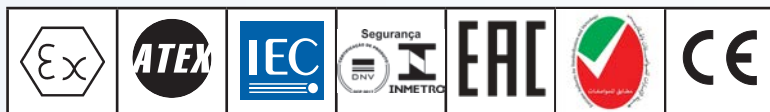
ISO Metric

12	16	20	25	32	40	50	63	75	90	100	63X2	75X2	90X2
M12x1,5	M16x1,5	M20x1,5	M25x1,5	M32x1,5	M40x1,5	M50x1,5	M63x1,5	M75x1,5	M90x1,5	M100x1,5	M63x2	M75x2	M90x2

Pg DIN 40430

2	3	4	5	6	7	8	9	10
PG9	PG11	PG13,5	PG16	PG21	PG29	PG36	PG42	PG48

Reducers and adaptors are used to join instruments, enclosures, pipes and hubs of different diameter and threads.



Classification:
2014/34/UE

Group II

Category 2GD

Installation:
EN 60079-14

zone 1 - zone 2 (Gas)

zone 21 - zone 22 (Dust)

Marking:

CE 0722 Ex II 2 GD Ex db IIC Gb Ex tb IIIC Db IP66/67

CE 0722 Ex II 2 GD Ex eb IIC Gb Ex tb IIIC Db IP66/67

Certification

ATEX CESI 02 ATEX 049X

IECEX IECEX CES 10.0001X

For IEC Ex and others certifications data can be downloaded at www.elfit.com

Standards:

CENELEC EN 60079-0: 2012+A11: 2013, EN 60079-1: 2014, EN 60079-7: 2015, EN 60079-31: 2014 and EUROPEAN DIRECTIVE 2014/34/UE
IEC60079-0: 2011, IEC60079-1: 2007-04, IEC60079-7: 2006-07, IEC60079-31: 2008 Directive RoHS 2011/65/UE

Degree of protection:

IP66/67



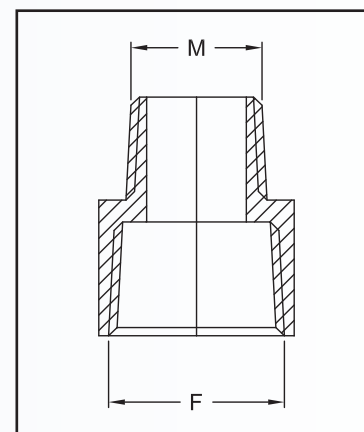
Operating temperature:

Adaptors	Material	Ambient temperature
REB...	Galvanised steel (G)	-20°C +80°C
REB...	Nickel-plated brass (B), Aluminium alloy (A)	-40°C +150°C
REB...	Stainless steel (S)	-60°C +150°C

Certificates are available on www.elfit.com

SELECTION TABLE OF STANDARD ADAPTORS

Thread ISO7/1	Ø MALE M								
	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"
Ø FEMALE F	3/8"	REB3814							
	1/2"	REB114	REB138						
	3/4"	REB214	REB238	REB21					
	1"	REB314	REB338	REB31	REB32				
	1 1/4"	REB414	REB438	REB41	REB42	REB43			
	1 1/2"	REB514	REB538	REB51	REB52	REB53	REB54		
	2"	REB614	REB638	REB61	REB62	REB63	REB64	REB65	
	2 1/2"			REB71	REB72	REB73	REB74	REB75	REB76
	3"			REB81	REB82	REB83	REB84	REB85	REB86



Order code example of
standard adaptors

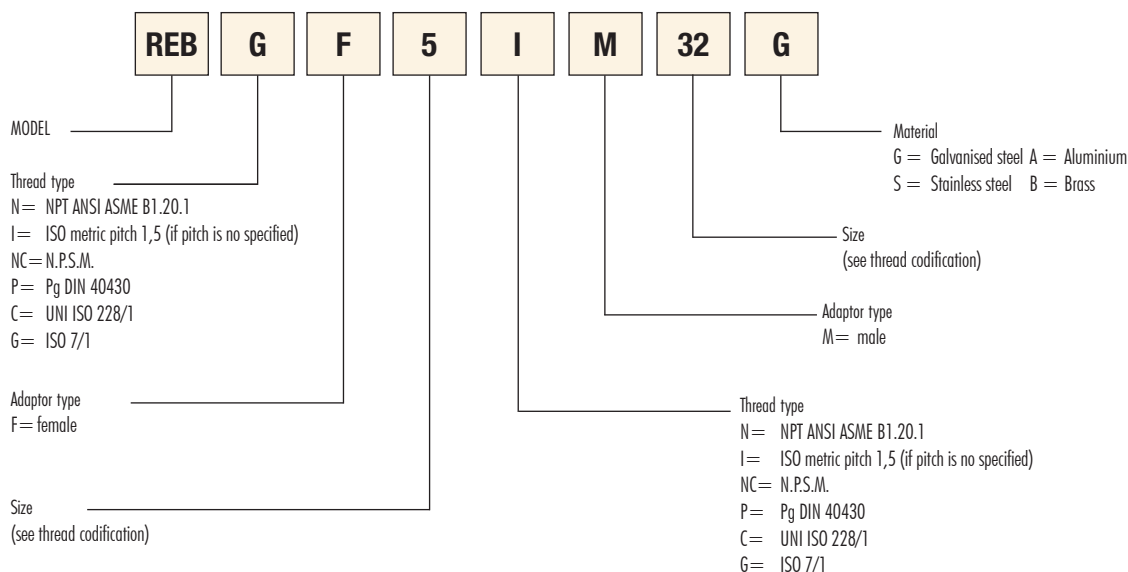
REB	31	G
MODEL	SIZE	MATERIAL

TECHNICAL NOTES:

- The silicone O-ring for the IP protection for cylindrical threads (ISO metric) is supplied already assembled
- Available with other threads (example code REB31**NG**)
- Available in different materials (example code REB31**A**)

SPECIAL ADAPTORS (MIXED THREADS)
Order code example

(Adaptor type REB, female 1 1/2" Gk, male M32x1,5, galvanised steel)


THREAD CODIFICATION
NPT, N.P.S.M., UNI ISO 228/1, ISO 7/1

02	01	1	2	3	4	5	6	7	8	9	10	12	14
1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2	2 1/2"	3"	3 1/2"	4"	5"	6"

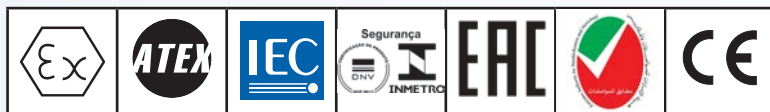
ISO Metric

12	16	20	25	32	40	50	63	75	90	100	63X2	75X2	90X2
M12x1,5	M16x1,5	M20x1,5	M25x1,5	M32x1,5	M40x1,5	M50x1,5	M63x1,5	M75x1,5	M90x1,5	M100x1,5	M63x2	M75x2	M90x2

Pg DIN 40430

2	3	4	5	6	7	8	9	10
PG9	PG11	PG13,5	PG16	PG21	PG29	PG36	PG42	PG48

Reducers and adaptors are used to join instruments, enclosures, pipes and hubs of different diameter and threads.



Classification:
2014/34/UE

Group II

Category 2GD

Installation:
EN 60079-14

zone 1 - zone 2 (Gas)

zone 21 - zone 22 (Dust)

Marking:

CE 0722 Ex II 2 GD Ex db IIC Gb Ex tb IIIC Db IP66/67

CE 0722 Ex II 2 GD Ex eb IIC Gb Ex tb IIIC Db IP66/67

Certification

ATEX CESI 02 ATEX 049X

IECEX IECEX CES 10.0001X

For IEC Ex and others certifications data
can be downloaded at
www.elfit.com

Standards:

CENELEC EN 60079-0: 2012+A11: 2013, EN 60079-1: 2014, EN 60079-7: 2015, EN 60079-31: 2014 and
EUROPEAN DIRECTIVE 2014/34/UE
IEC60079-0: 2011, IEC60079-1: 2007-04, IEC60079-7: 2006-07, IEC60079-31: 2008 Directive RoHS
2011/65/UE

Degree of protection:

IP66/67



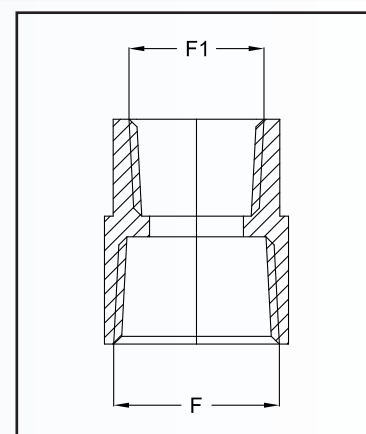
Operating temperature:

Adaptors	Material	Ambient temperature
REM...	Galvanised steel (G)	-20°C +80°C
REM...	Nickel-plated brass (B), Aluminium alloy (A)	-40°C +150°C
REM...	Stainless steel (S)	-60°C +150°C

Certificates are available on www.elfit.com

SELECTION TABLE OF STANDARD ADAPTORS

Thread ISO7/1	Ø FEMALE F1								
	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"
3/8"	REM3814								
1/2"	REM114	REM138							
3/4"	REM214	REM238	REM21						
1"	REM314	REM338	REM31	REM32					
1 1/4"	REM414	REM438	REM41	REM42	REM43				
1 1/2"	REM514	REM538	REM51	REM52	REM53	REM54			
2"	REM614	REM638	REM61	REM62	REM63	REM64	REM65		
2 1/2"			REM71	REM72	REM73	REM74	REM75	REM76	
3"			REM81	REM82	REM83	REM84	REM85	REM86	REM87



Order code example of
standard adaptors

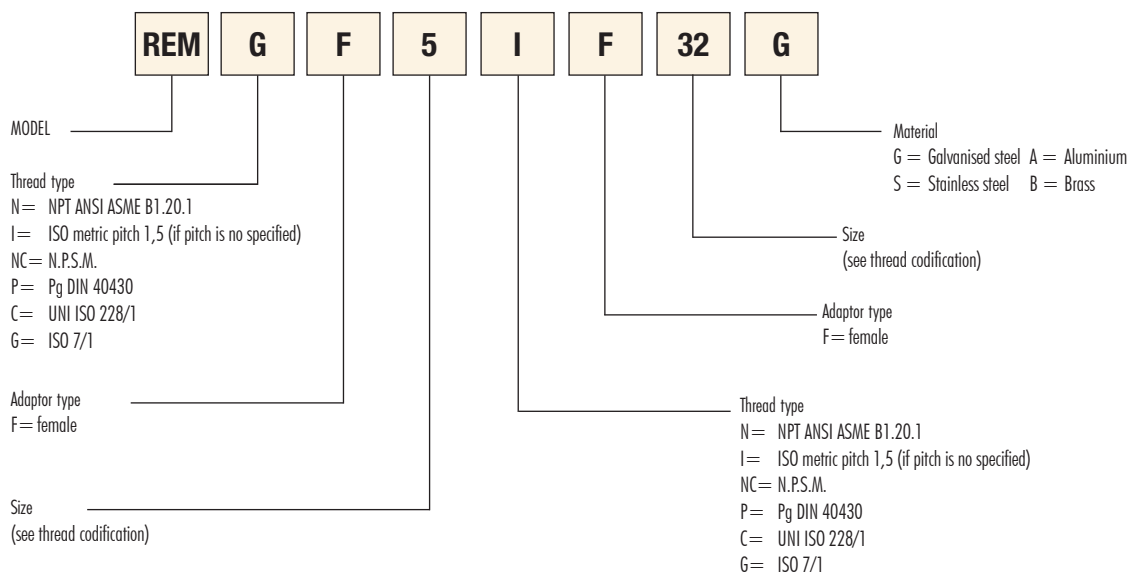
REM	31	G
MODEL	SIZE	MATERIAL

TECHNICAL NOTES:

- Available with other threads (example code REM31**NG**)
- Available in different materials (example code REM31**A**)

SPECIAL ADAPTORS (MIXED THREADS)
Order code example

(Adaptor type REM, female 1 1/2" Gk, female M32x1,5, galvanised steel)


THREAD CODIFICATION
NPT, N.P.S.M., UNI ISO 228/1, ISO 7/1

02	01	1	2	3	4	5	6	7	8	9	10	12	14
1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2	2 1/2"	3"	3 1/2"	4"	5"	6"

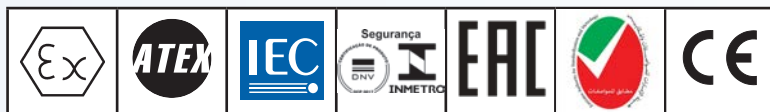
ISO Metric

12	16	20	25	32	40	50	63	75	90	100	63X2	75X2	90X2
M12x1,5	M16x1,5	M20x1,5	M25x1,5	M32x1,5	M40x1,5	M50x1,5	M63x1,5	M75x1,5	M90x1,5	M100x1,5	M63x2	M75x2	M90x2

Pg DIN 40430

2	3	4	5	6	7	8	9	10
PG9	PG11	PG13,5	PG16	PG21	PG29	PG36	PG42	PG48

Reducers and adaptors are used to join instruments, enclosures, pipes and hubs of different diameter and threads.



Classification:
2014/34/UE

Group II

Category 2GD

Installation:
EN 60079-14

zone 1 - zone 2 (Gas)

zone 21 - zone 22 (Dust)

Marking:

CE 0722 Ex II 2 GD Ex db IIC Gb Ex tb IIIC Db IP66/67

CE 0722 Ex II 2 GD Ex eb IIC Gb Ex tb IIIC Db IP66/67

Certification

ATEX CESI 02 ATEX 049X

IECEX IECEX CES 10.0001X

For IEC Ex and others certifications data can be downloaded at www.elfit.com

Standards:

CENELEC EN 60079-0: 2012+A11: 2013, EN 60079-1: 2014, EN 60079-7: 2015, EN 60079-31: 2014 and EUROPEAN DIRECTIVE 2014/34/UE
IEC60079-0: 2011, IEC60079-1: 2007-04, IEC60079-7: 2006-07, IEC60079-31: 2008 Directive RoHS 2011/65/UE

Degree of protection:

IP66/67



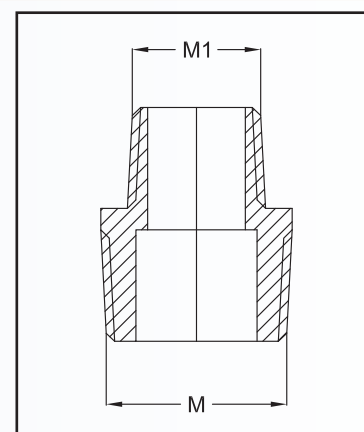
Operating temperature:

Adaptors	Material	Ambient temperature
REN...	Galvanised steel (G)	-20°C +80°C
REN...	Nickel-plated brass (B), Aluminium alloy (A)	-40°C +150°C
REN...	Stainless steel (S)	-60°C +150°C

Certificates are available on www.elfit.com

SELECTION TABLE OF STANDARD ADAPTORS

Thread ISO7/1	Ø MALE M1								
	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"
Ø MALE M	3/8"	REN3814							
	1/2"	REN114	REN138						
	3/4"	REN214	REN238	REN21					
	1"	REN314	REN338	REN31	REN32				
	1 1/4"	REN414	REN438	REN41	REN42	REN43			
	1 1/2"	REN514	REN538	REN51	REN52	REN53	REN54		
	2"	REN614	REN638	REN61	REN62	REN63	REN64	REN65	
	2 1/2"			REN71	REN72	REN73	REN74	REN75	REN76
	3"			REN81	REN82	REN83	REN84	REN85	REN86



Order code example of
standard adaptors

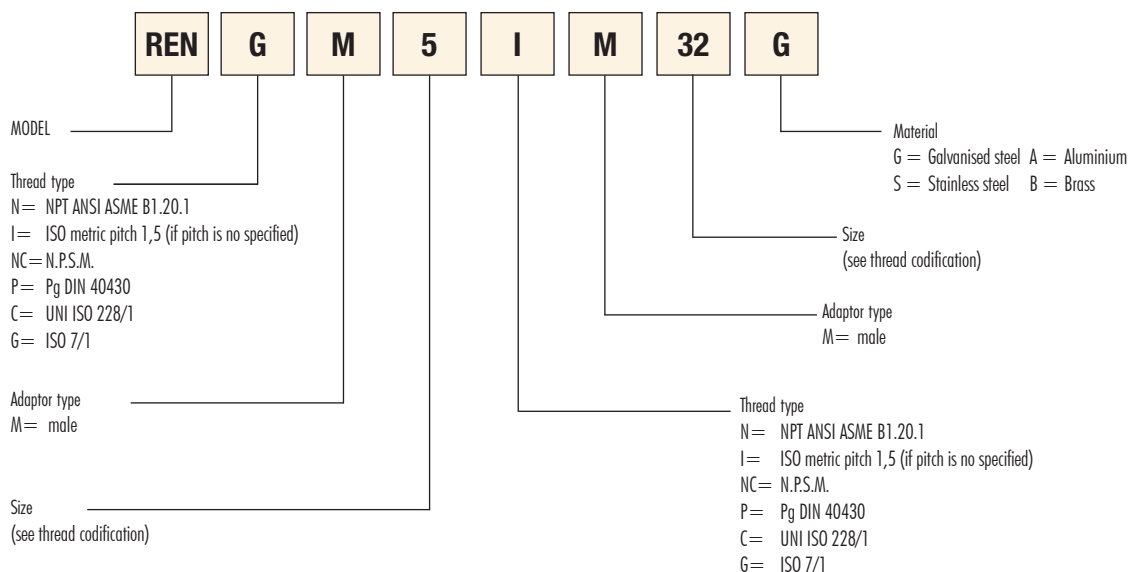
REN	31	G
MODEL	SIZE	MATERIAL

TECHNICAL NOTES:

- The silicone O-ring for the IP protection for cylindrical threads (ISO metric) is supplied already assembled
- Available with other threads (example code REN31**NG**)
- Available in different materials (example code REN31**A**)

SPECIAL ADAPTORS (MIXED THREADS)
Order code example

(Adaptor type REN, male 1 1/2" Gk, male M32x1,5, galvanised steel)


THREAD CODIFICATION
NPT, N.P.S.M., UNI ISO 228/1, ISO 7/1

02	01	1	2	3	4	5	6	7	8	9	10	12	14
1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2	2 1/2"	3"	3 1/2"	4"	5"	6"

ISO Metric

12	16	20	25	32	40	50	63	75	90	100	63X2	75X2	90X2
M12x1,5	M16x1,5	M20x1,5	M25x1,5	M32x1,5	M40x1,5	M50x1,5	M63x1,5	M75x1,5	M90x1,5	M100x1,5	M63x2	M75x2	M90x2

Pg DIN 40430

2	3	4	5	6	7	8	9	10
PG9	PG11	PG13,5	PG16	PG21	PG29	PG36	PG42	PG48

PLG series plugs are used for close-up unused entries. They feature a hexagonal recessed-type head to ensure the opening with proper tools only.


Classification:
 2014/34/UE

Group II

Category 2GD

Installation:
 EN 60079.14

zone 1 - zone 2 (Gas)

zone 21 - zone 22 (Dust)

Marking:

CE 0722 Ex II 2 GD Ex db IIC Gb Ex tb IIIC Db IP66/67

CE 0722 Ex II 2 GD Ex eb IIC Gb Ex tb IIIC Db IP66/67

Certification:

ATEX CESI 02 ATEX 049X

IECEx IECEx CES 10.0001X

For IEC Ex and others certifications data
 can be downloaded at
www.elfit.com

Standards:

CENELEC EN 60079-0: 2012+A11: 2013, EN 60079-1: 2014, EN 60079-7: 2015, EN 60079-31: 2014 and
 EUROPEAN DIRECTIVE 2014/34/UE
 IEC60079-0: 2011, IEC60079-1: 2007-04, IEC60079-7: 2006-07, IEC60079-31: 2008 Directive RoHS
 2011/65/UE

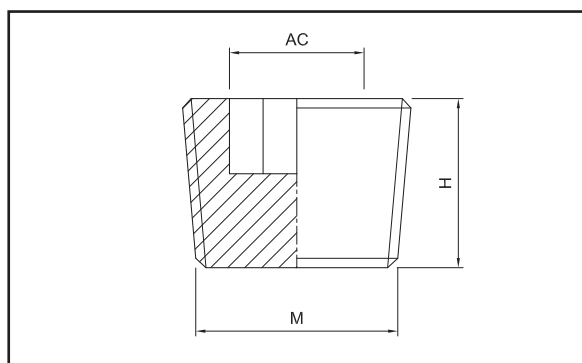
Degree of protection:

IP66/67


Operating temperature:

Close-up plugs	Material	Ambient temperature
PLG...	Galvanised steel (G)	-20°C +80°C
PLG...	Nickel-plated brass (B) , Aluminium alloy (A)	-40°C +150°C
PLG...	Stainless steel (S)	-60°C +150°C

Certificates are available on www.elfit.com


SELECTION TABLE FOR PLUGS WITH STANDARD CONICAL THREAD

Code	Thread M	Dimensions in mm		Material	Weight
		AC	H		Kg
PLG02NG	1/4" NPT	8	23	Galvanised steel	0,014
PLG01NG	3/8" NPT	8	14	Galvanised steel	0,024
PLG1NG	1/2" NPT	13	18	Galvanised steel	0,034
PLG2NG	3/4" NPT	17	18	Galvanised steel	0,054
PLG3NG	1" NPT	19	24	Galvanised steel	0,124
PLG4NA	1 1/4" NPT	24	24	Aluminium	0,061
PLG5NA	1 1/2" NPT	35	24	Aluminium	0,063
PLG6NA	2" NPT	36	24	Aluminium	0,109
PLG7NA	2 1/2" NPT	50	30	Aluminium	0,169
PLG8NA	3" NPT	50	30	Aluminium	0,242
PLG10NA	4" NPT	85	30	Aluminium	0,489
PLG12NA	5" NPT	102	32	Aluminium	0,735
PLG14NA	6" NPT	119	32	Aluminium	1,00
PLG02G	1/4" ISO 7/1	8	23	Galvanised steel	0,014
PLG01G	3/8" ISO 7/1	8	14	Galvanised steel	0,024
PLG1G	1/2" ISO 7/1	13	18	Galvanised steel	0,034
PLG2G	3/4" ISO 7/1	17	18	Galvanised steel	0,054
PLG3G	1" ISO 7/1	19	24	Galvanised steel	0,124
PLG4A	1 1/4" ISO 7/1	24	24	Aluminium	0,061
PLG5A	1 1/2" ISO 7/1	35	24	Aluminium	0,063
PLG6A	2" ISO 7/1	36	24	Aluminium	0,109
PLG7A	2 1/2" ISO 7/1	50	30	Aluminium	0,169
PLG8A	3" ISO 7/1	50	30	Aluminium	0,242
PLG10A	4" ISO 7/1	85	30	Aluminium	0,489
PLG12A	5" ISO 7/1	102	32	Aluminium	0,735
PLG14A	6" ISO 7/1	119	32	Aluminium	1,00

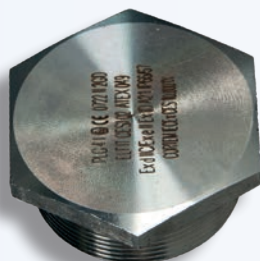
Order code example

PLG	10	N	B
MODEL	SIZE	THREAD	MATERIAL

TECHNICAL NOTES:

- Available also in stainless steel (example code **PLG3S**)
- Available also in nickel plated brass (example code **PLG1B**)
- Available also in aluminium (example code **PLG2A**)
- Available also in galvanized steel (example code **PLG6G**)

PLG series plugs are used for close-up unused entries. They feature a hexagonal external head to ensure the opening with proper tools only.


Classification:
2014/34/UE

Group II
Category 2GD
Installation:
EN 60079.14

zone 1 - zone 2 (Gas)
zone 21 - zone 22 (Dust)
Marking:
CE 0722 Ex II 2 GD Ex db IIC Gb Ex tb IIIC Db IP66/67
CE 0722 Ex II 2 GD Ex eb IIC Gb Ex tb IIIC Db IP66/67
Certification:
ATEX CESI 02 ATEX 049X
IECEX IECEX CES 10.0001X

For IEC Ex and others certifications data
can be downloaded at
www.elfit.com

Standards:

CENELEC EN 60079-0: 2012, EN 60079-1: 2007, EN 60079-31: 2009 and EUROPEAN DIRECTIVE 2014/34/UE
IEC60079-0: 2011, IEC60079-1: 2007-04, IEC60079-7: 2006-07, IEC60079-31: 2008 Directive RoHS 2011/65/UE

Degree of protection:
IP66/67

Operating temperature:

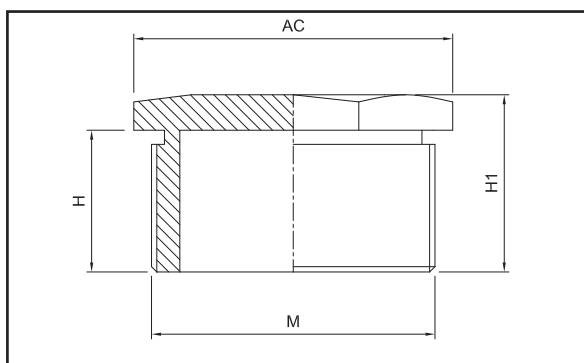
Close-up plugs	Material	Gaskets	Ambient temperature
PLG...	Galvanised steel (G)	Silicone	-20°C +80°C
PLG...	Nickel-plated brass (B), Aluminium alloy (A)	Silicone	-40°C +150°C
PLG...	Stainless steel (S)	Silicone	-60°C +150°C

Certificates are available on www.elfit.com

ACCESSORIES OPON REQUEST

Lock nuts *	Thread ISO228	Code	Material	ISO metric thread	Code	Material
	1/4"	DL02G	Galvanised steel	M12x1,5	DL02IB	Nickel-plated brass
	3/8"	DL01G	Galvanised steel	M16x1,5	DL01IB	Nickel-plated brass
	1/2"	DL1G	Galvanised steel	M20x1,5	DL1IB	Nickel-plated brass
	3/4"	DL2G	Galvanised steel	M25x1,5	DL2IB	Nickel-plated brass
	1"	DL3G	Galvanised steel	M32x1,5	DL3IB	Nickel-plated brass
	1 1/4"	DL4G	Galvanised steel	M40x1,5	DL4IB	Nickel-plated brass
	1 1/2"	DL5A	Aluminium	M50x1,5	DL5IB	Nickel-plated brass
	2"	DL6A	Aluminium	M63x1,5	DL6IB	Nickel-plated brass
	2 1/2"	DL7A	Aluminium	M75x1,5	DL7IB	Nickel-plated brass
	3"	DL8A	Aluminium	M90x1,5	DL8IB	Nickel-plated brass
	3 1/2"	DL9A	Aluminium	-	-	-
	4"	DL10A	Aluminium	M100x1,5	DL10IB	Nickel-plated brass

* For different material contact the sales office.


SELECTION TABLE FOR PLUGS WITH CYLINDRICAL THREAD

Code	Thread M	Dimensions in mm			Material	Weight
		AC	H	H1		Kg
PLG02C...	1/4" UNI ISO 228/1	17	16	21	On request	0,014
PLG01C...	3/8" UNI ISO 228/1	22	16	21		0,024
PLG1C...	1/2" UNI ISO 228/1	25	20	25		0,034
PLG2C...	3/4" UNI ISO 228/1	32	20	25		0,054
PLG3C...	1" UNI ISO 228/1	38	24	29		0,124
PLG4C...	1 1/4" UNI ISO 228/1	45	24	29		0,061
PLG5C...	1 1/2" UNI ISO 228/1	55	24	29		0,063
PLG6C...	2" UNI ISO 228/1	65	24	29		0,109
PLG7C...	2 1/2" UNI ISO 228/1	85	24	29		0,169
PLG8C...	3" UNI ISO 228/1	100	24	29		0,242
PLG10C...	4" UNI ISO 228/1	120	24	29		0,489
PLG01I...	M16x1,5	20	16	21	On request	0,014
PLG1I...	M20x1,5	24	16	21		0,024
PLG2I...	M25x1,5	30	16	21		0,034
PLG3I...	M32x1,5	36	16	21		0,054
PLG4I...	M40x1,5	46	16	21		0,124
PLG5I...	M50x1,5	55	16	21		0,061
PLG6I...	M63x1,5	70	18	23		0,063
PLG7I...	M75x1,5	85	18	23		0,109
PLG8I...	M90x1,5	95	18	23		0,169
PLG10I...	M100x1,5	105	18	23		0,242

Order code example

PLG	8	I	G
MODEL	SIZE	THREAD	MATERIAL

TECHNICAL NOTES:

- Available also in stainless steel (example code PLG3I**S**)
- Available also in nickel plated brass (example code PLG1I**B**)
- Available also in aluminium (example code PLG2I**A**)
- Available also in galvanized steel (example code PLG2I**G**)
- Available also with PG thread (example code PLG5**PA**)

THREAD CODIFICATION
Pg DIN 40430

2	3	4	5	6	7	8	9	10
PG9	PG11	PG13,5	PG16	PG21	PG29	PG36	PG42	PG48

PLG series plugs are used for close-up unused entries. They feature a hexagonal external head to ensure the opening with proper tools only.



Classification:
2014/34/UE

Group II

Category 2GD

Installation:
EN 60079-14

zone 1 - zone 2 (Gas)

zone 21 - zone 22 (Dust)

Marking:

CE 0722 Ex II 2 GD - Ex e IIC Gb Ex tb IIIC Db IP66/68

Certification:

ATEX IMQ 16 ATEX 005X

IECEX IECEX IMQ 15.0009X

Standards:

CENELEC EN 60079-0: 2012, EN 60079-7: 2007, EN 60079-11: 2012, EN 60079-31: 2014 and
EUROPEAN DIRECTIVE 2014/34/UE
IEC 60079-0: 2011, IEC 60079-7: 2006, IEC 60079-11: 2012, IEC 60079-31: 2014
Directive RoHS 2011/65/UE



Ambient Temp.:

-60°C +70°C

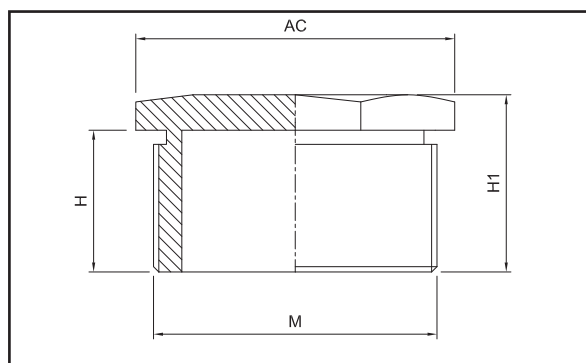
Degree of protection:

IP66/68

Certificates are available on www.elfit.com

ACCESSORIES OPON REQUEST

Lock nuts	ISO metric thread	Code	Material
	M12x1,5	DL02IXEP	polyamide
	M16x1,5	DL01IXEP	
	M20x1,5	DL1IXEP	
	M25x1,5	DL2IXEP	
	M32x1,5	DL3IXEP	
	M40x1,5	DL4IXEP	
	M50x1,5	DL5IXEP	
	M63x1,5	DL6IXEP	

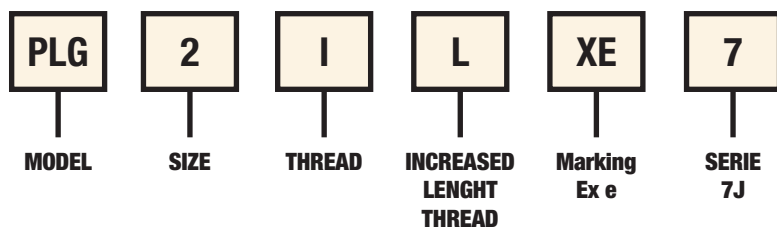


SELECTION TABLE FOR PLUGS WITH CYLINDRICAL THREAD

Code polyamide	Thread M	Dimensions in mm			Weight
		AC	H	H1	Kg
PLG02IXE7	M12x1,5	15	10	15	0,002
PLG01ILXE7	M16x1,5	19	15*	19,3	0,003
PLG1ILXE7	M20x1,5	23	15*	21	0,005
PLG2ILXE7	M25x1,5	28	15*	20,8	0,007
PLG3IXE7	M32x1,5	36	15	22,8	0,012
PLG4IXE7	M40x1,5	46	18	26,5	0,024
PLG5IXE7	M50x1,5	55	18	27,5	0,035
PLG6IXE7	M63x1,5	69	18	27,5	0,051

* reduced lenght thread (10mm) upon request.

Order code example



TECHNICAL NOTES:

- Silicone gaskets
- Black color plug RAL 9005 (Ex e)
- Impact resistance 7J

Elbows with ELF series female-female hubs, ELMF series male-female hubs and ELM series male-male hubs enable the 90° deviations of pipes.



Classification:
2014/34/UE

Group II

Category 2GD

Installation:
EN 60079.14

zone 1 - zone 2 (Gas)

zone 21 - zone 22 (Dust)

Marking:

CE 0722 Ex II 2 GD Ex db IIC Gb Ex tb IIIC Db IP66/67

CE 0722 Ex II 2 GD Ex eb IIC Gb Ex tb IIIC Db IP66/67

Certification:

ATEX CESI 01 ATEX 104U

IECEX IECEX CES 15.0005U

For IEC Ex and others certifications data
can be downloaded at
www.elfit.com

Standards:

CENELEC EN 60079-0: 2012+A11:2013, EN 60079-1: 2014, EN 60079-7: 2015, EN 60079-31: 2014 and
EUROPEAN DIRECTIVE 2014/34/UE
IEC60079-0: 2013, IEC60079-1: 2009, IEC60079-7: 2008, IEC60079-31: 2011
Directive RoHS 2011/65/UE



Operating temp.:

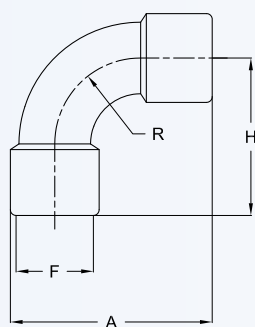
-60°C +150°C

Degree of protection:

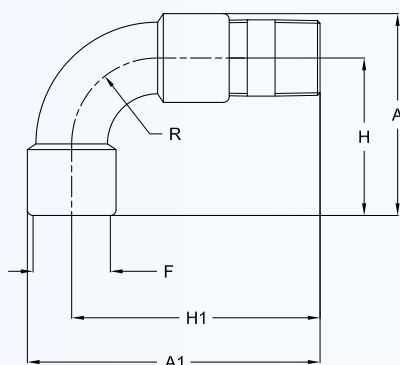
IP66/67

Certificates are available on www.elfit.com

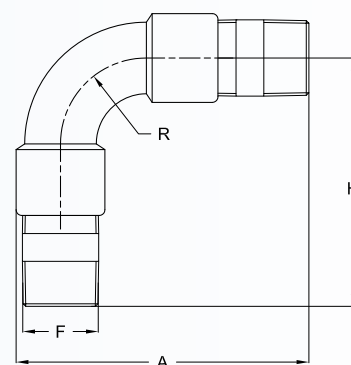
ELF



ELMF



ELM



THREAD CODIFICATION

NPT, N.P.S.M., UNI ISO 228/1

02	01	1	2	3	4	5	6	7	8	9	10	12	14
1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2	2 1/2"	3"	3 1/2"	4"	5"	6"

ISO Metric

12	16	20	25	32	40	50	63	75	90	100	63X2	75X2	90X2
M12x1,5	M16x1,5	M20x1,5	M25x1,5	M32x1,5	M40x1,5	M50x1,5	M63x1,5	M75x1,5	M90x1,5	M100x1,5	M63x2	M75x2	M90x2

SELECTION TABLE OF ELF 90° ELBOWS

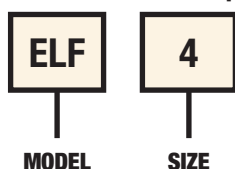
Code In aluminium	Thread F	Dimensions in mm			Weight
		A	H	R	Kg
ELF02	1/4" ISO 7/1	41	55	30	0,09
ELF01	3/8" ISO 7/1	41	55	30	0,08
ELF1	1/2" ISO 7/1	60	45	30	0,12
ELF2	3/4" ISO 7/1	75	55	30	0,10
ELF3	1" ISO 7/1	85	65	35	0,20
ELF4	1 1/4" ISO 7/1	100	75	50	0,39
ELF5	1 1/2" ISO 7/1	110	87	50	0,37
ELF6	2" ISO 7/1	120	90	60	0,62
ELF7	2 1/2" ISO 7/1	175	135	65	0,88
ELF8	3" ISO 7/1	210	160	85	1,48
ELF10	4" ISO 7/1	270	200	150	3,00

SELECTION TABLE OF ELMF 90° ELBOWS

Code In aluminium	Thread F	Dimensions in mm					Weight
		A	A1	H	H1	R	Kg
ELMF02	1/4" ISO 7/1	41	51	55	65	30	0,09
ELMF01	3/8" ISO 7/1	41	51	55	65	30	0,08
ELMF1	1/2" ISO 7/1	60	97	45	85	30	0,17
ELMF2	3/4" ISO 7/1	75	107	55	95	30	0,17
ELMF3	1" ISO 7/1	85	130	65	110	35	0,29
ELMF4	1 1/4" ISO 7/1	100	145	75	125	50	0,52
ELMF5	1 1/2" ISO 7/1	110	153	87	125	50	0,50
ELMF6	2" ISO 7/1	120	180	98	143	60	0,79
ELMF7	2 1/2" ISO 7/1	175	220	135	185	65	1,43
ELMF8	3" ISO 7/1	210	255	160	205	85	2,20
ELMF10	4" ISO 7/1	270	300	200	245	150	3,93

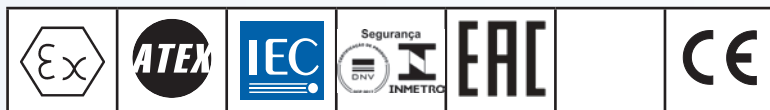
SELECTION TABLE OF ELM 90° ELBOWS

Code In aluminium	Thread F	Dimensions in mm			Weight
		A	H	R	Kg
ELM02	1/4" ISO 7/1	51	65	25	0,09
ELM01	3/8" ISO 7/1	51	65	25	0,08
ELM1	1/2" ISO 7/1	97	56	30	0,21
ELM2	3/4" ISO 7/1	107	56	30	0,22
ELM3	1" ISO 7/1	130	70	35	0,38
ELM4	1 1/4" ISO 7/1	145	85	50	0,64
ELM5	1 1/2" ISO 7/1	153	85	50	0,64
ELM6	2" ISO 7/1	180	143	60	0,96
ELM7	2 1/2" ISO 7/1	220	185	65	1,99
ELM8	3" ISO 7/1	255	205	85	2,92
ELM10	4" ISO 7/1	300	245	150	4,86

Order code example

TECHNICAL NOTES:

- Available also with NPT thread (example code ELF3**N**)
- Available upon request with ISO metric thread (example code ELF4**I**)

EM series couplings with female-female hubs, enable the connection between male hubs.



Classification: 2014/34/UE	Group II	Category 2GD
Installation: EN 60079.14	zone 1 - zone 2 (Gas)	zone 21 - zone 22 (Dust)
Marking:	CE 0722 Ex II 2 GD Ex db IIC Gb Ex tb IIIC Db IP66/67	
	CE 0722 Ex II 2 GD Ex eb IIC Gb Ex tb IIIC Db IP66/67	
Certification:	ATEX CESA 01 ATEX 104U	
	IECEx	IECEx CES 15.0005U

For IEC Ex and others certifications data can be downloaded at www.elfit.com

Standards:

CENELEC EN 60079-0: 2012+A11:2013, EN 60079-1: 2014, EN 60079-7: 2015, EN 60079-31: 2014 and EUROPEAN DIRECTIVE 2014/34/UE
 IEC60079-0: 2013, IEC60079-1: 2009, IEC60079-7: 2008, IEC60079-31: 2011
 Directive RoHS 2011/65/UE

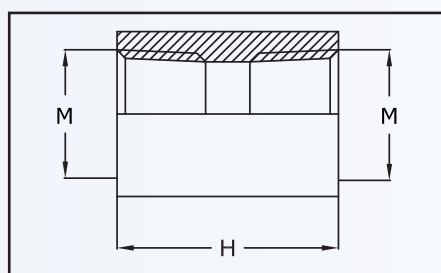

Operating temp.:

-20°C +80°C (-60°C +150°C only in stainless steel)

Degree of protection:

IP66/67

Certificates are available on www.elfit.com


Order code example

SELECTION TABLE OF EM COUPLINGS

Code In galvanised steel	Thread F	Dimensions in mm	Weight
		H	Kg
EM1G	1/2" ISO 7/1	39	0,090
EM2G	3/4" ISO 7/1	39	0,080
EM3G	1" ISO 7/1	51	0,150
EM4G	1 1/4" ISO 7/1	51	0,270
EM5G	1 1/2" ISO 7/1	51	0,270
EM6G	2" ISO 7/1	51	0,450
EM7G	2 1/2" ISO 7/1	65	0,650
EM8G	3" ISO 7/1	65	0,800
EM10G	4" ISO 7/1	65	1,000
EM12G	5" ISO 7/1	65	2,300
EM14G	6" ISO 7/1	65	2,800

TECHNICAL NOTES:

- Available also with NPT thread (example code EM3NG)
- Available also with UNI ISO228/1 thread (example code EM2CG)
- Available also with ISO METRIC thread (example code EM4IG)
- Available also in stainless steel (example code EM2S)
- Available also in aluminium (example code EM2A)
- Available also in nickel plated brass (example code EM2B)
- For threads equivalence have a look at the correlation table in the last page

NP series nipples with male-male hubs, enable the connection between two female hubs.



Classification:
2014/34/UE

Group II

Category 2GD

Installation:
EN 60079.14

zone 1 - zone 2 (Gas)

zone 21 - zone 22 (Dust)

Marking:

CE 0722 Ex II 2 GD Ex db IIC Gb Ex tb IIIC Db IP66/67

CE 0722 Ex II 2 GD Ex eb IIC Gb Ex tb IIIC Db IP66/67

Certification:

ATEX CESA 01 ATEX 104U

IECEX IECEX CES 15.0005U

For IEC Ex and others certifications data
can be downloaded at
www.elfit.com

Standards:

CENELEC EN 60079-0: 2012+A11:2013, EN 60079-1: 2014, EN 60079-7: 2015, EN 60079-31: 2014 and
EUROPEAN DIRECTIVE 2014/34/UE
IEC60079-0: 2013, IEC60079-1: 2009, IEC60079-7: 2008, IEC60079-31: 2011
Directive RoHS 2011/65/UE



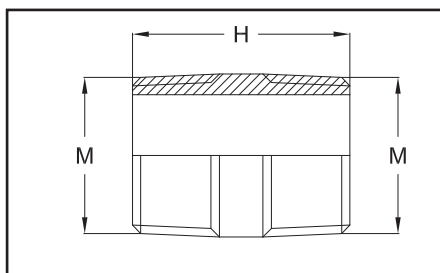
Operating temp.:

-20°C +80°C (-60°C +150°C only in stainless steel)

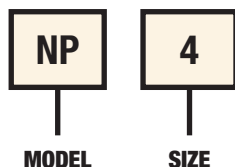
Degree of protection:

IP66/67

Certificates are available on www.elfit.com



Order code example



SELECTION TABLE OF NP NIPPLES

Code In galvanised steel	Thread F	Dimensions in mm	Weight
		H	Kg
NP1G	1/2" ISO 7/1	48	0,05
NP2G	3/4" ISO 7/1	48	0,06
NP3G	1" ISO 7/1	60	0,10
NP4G	1 1/4" ISO 7/1	55	0,14
NP5G	1 1/2" ISO 7/1	55	0,15
NP6G	2" ISO 7/1	55	0,20
NP7G	2 1/2" ISO 7/1	68	0,45
NP8G	3" ISO 7/1	68	0,70
NP10G	4" ISO 7/1	68	1,0
NP12G	5" ISO 7/1	68	1,25
NP14G	6" ISO 7/1	68	1,27

TECHNICAL NOTES:

- Available also with NPT thread (example code NP3**NG**)
- Available also with UNI ISO228/1 thread (example code NP2**CG**)
- Available also with ISO METRIC thread (example code NP4**IG**)
- Available also in stainless steel (example code NP2**S**)
- Available also in aluminium (example code NP2**A**)
- Available also in nickel plated brass (example code NP2**B**)
- For threads equivalence have a look at the correlation table in the last page

Our resin-filled sealing fittings can be divided into two different categories: sealing fittings and sealing bushing. The sealing fittings prevent gases, vapours or flames from spreading through the system of pipes in the electrical system. Such products can be divided into:

EYS vertical sealing fitting;

EZS horizontal sealing fitting;

EYD vertical sealing fitting complete of drain valve to breath a possible condensation developed inside the pipes;

The multicable sealing bushings are suitable to be assembled on junction boxes, electrical motors, panel boards and other electrical devices built in accordance to the Ex d IIC method of protection.

The standard sealing bushings are:

TP threaded sealing bushing;

CP sealing bushing with cylindrical joint;

NPS sealing nipple.

The **ECD** drain and breather valves are used both on our EYD and EZD series sealing fittings and in any type of equipment for draining the inner condensation or for breathing out possible inner vapours.

CRV420 sealing compound

Two-component polyurethan resin for sealing bushing and sealing fittings

CRV 420 resin is an exclusive Elfit product. Its chemical composition has been improved after countless sealing tests, made in collaboration with CESI laboratory. CRV 420 resin has been certified along with the sealing fittings type EYS and EZS, so they need to be sold together and never separated. Sealings have to be made perfectly, in order to block the passage of gases, vapours or flames through pipes systems.



Ambient Temp.:

-20°C +100°C

Quantity of resin for each sealing fitting		
Dimensions	EYS/EYD quantity of resin	EZS/EZD quantity of resin
1/2"	35 g	140 g
3/4"	50 g	140 g
1"	100 g	140 g
1 1/4"	240 g	390 g
1 1/2"	240 g	390 g
2"	380 g	570 g
2 1/2"	1250 g	1000 g
3"	1250 g	1000 g



ATTENTION!

THE PRODUCT SHELF LIFE DOES NOT EXCEED 5 MONTHS FROM THE DATE OF PREPARATION



SELECTION TABLE OF RESIN PACKAGE

Code	Component A	Component B
CRV420-B-100	100 g	20 g
CRV420-B-300	300 g	60 g
CRV420-B-400	400 g	80 g
CRV420-B-1000	1000 g	200 g

For further details about the resin compound preparation and safety information, look the instructions supplied with CRV420 resin.

PREPARATION OF THE RESIN COMPOUND

Characteristics

Polyuretan black resin (after mixing the two components)

Hardening time: around 4 hours

Cathalizing time: 24 hours

Code: CRV 420

RESIN (Component A)

- Black compound
- Code: CRV420H71
- Mixing ratio: 100%

CATALYST AGENT (Component B)

- Brown compound
- Code: CRV420H72
- Mixing ratio: 25%

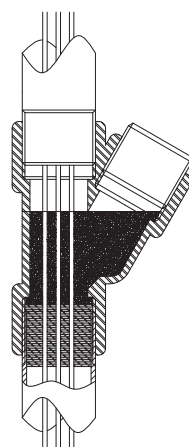
Ratio of compounds to be mixed

Ratio 100g (Compound A) with 20g (Compound B)
when ready to be used

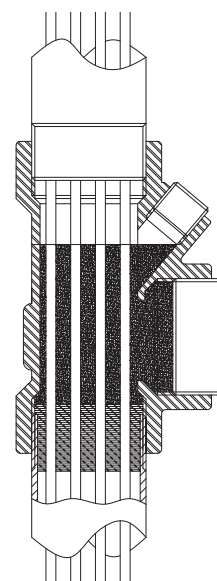
Time of use for the mixed up compound

- Ambient temperature equal to 20°C within 30 minutes from the mixing
- Ambient temperature of 15°C within 45 minutes from the mixing

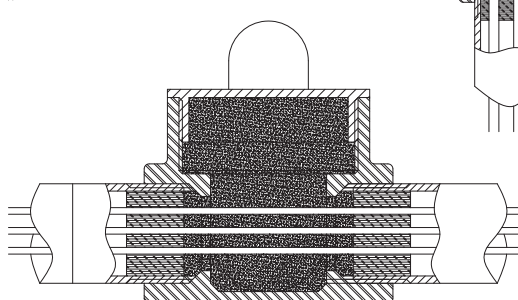
EYS - EYD



EYS - EYD



EZS



FV... Glass fiber

The glass fiber is inserted within sealing fittings to avoid that the sealing resin runs into the underlying connection pipe.



SELECTION TABLE OF GLASS FIBER

Code	Weight
FV-1	250 g
FV-5	500 g
FV-10	1000 g



EYS series sealing fittings prevent the passage of gas, vapours or flames through the pipe system in the electrical installation. They are used for vertical mounting and available in two different shapes, the first for dimensions less than 1", and the second up to 3" with an additional lateral opening for an easy introduction of the fiber. The sealing fittings must be installed as close as possible to the Ex d junction box and in accordance with the standard EN60079-1. They must be filled only with CRV420 resin that has to be requested in the amount indicated in the table. It is not allowed the use of other types of sealing compound.


Classification:
 2014/34/UE

Group II

Category 2GD

Installation:
 EN 60079.14

zone 1 - zone 2 (Gas)

zone 21 - zone 22 (Dust)

Marking:

CE 0722 Ex II 2 GD Ex db IIC Gb Ex tb IIIC Db IP66

Certification:

ATEX CESI 03 ATEX 085X

IECEX IECEX CES 14.0019X

 For IEC Ex and others certifications data
 can be downloaded at
www.elfit.com
Standards:
 CENELEC EN 60079-0: 2012, EN 60079-1: 2014, EN 60079-31: 2014 and EUROPEAN DIRECTIVE
 2014/34/UE
 IEC60079-0: 2011, IEC60079-1: 2015-06, IEC60079-31: 2013 Directive RoHS 2011/65/UE

Ambient Temp. (EYS):

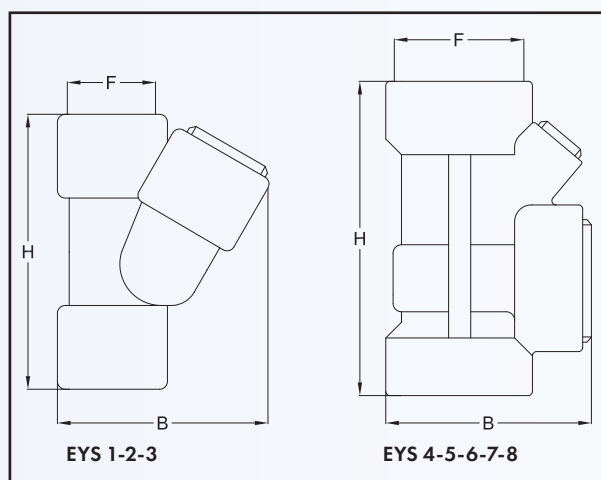
-20°C +100°C

Operating temperature:

-20°C +100°C

Degree of protection:

IP66

 Certificates are available on www.elfit.com


SELECTION TABLE OF EYS VERTICAL SEALING FITTINGS

Code In aluminium	Thread	Dimensions in mm		Amount of resin	Weight
	F	H	B	gr	Kg
EYS1	1/2" ISO 7/1	77	56	35	0,097
EYS2	3/4" ISO 7/1	87	66	50	0,147
EYS3	1" ISO 7/1	105	82	100	0,242
EYS4	1 1/4" ISO 7/1	145	84	240	0,576
EYS5	1 1/2" ISO 7/1	145	84	240	0,528
EYS6	2" ISO 7/1	150	95	380	0,643
EYS7	2 1/2" ISO 7/1	200	134	1250	1,580
EYS8	3" ISO 7/1	200	134	1250	1,480

TECHNICAL NOTES:

- Available also with NPT thread (example code EYS2N)
- Available upon request in stainless steel. Contact our Sales Office for availability.

EYD series sealing fittings are equipped with ECD valve to drain the possible condensation inside the conduits. They are used for vertical mounting and available in two different shapes, the first for dimensions less than 1", and the second up to 3" with an additional lateral opening for easy introduction of the fiber. The sealing fittings have to be installed as close as possible to the Ex d junction box and in accordance with the standard EN60079-1. They must be filled only with CRV420 resin that has to be requested in the amount indicated in the table. It is not allowed the use of other types of sealing compound.



Classification:
2014/34/UE

Group II

Category 2G

Installation:
EN 60079.14

zone 1 - zone 2 (Gas)

Marking:

CE 0722 Ex II 2 G Ex d IIC Gb

Certification

ATEX CESI 03 ATEX 085X

IECEX IECEX CES 14.0019X

All IEC Ex certification data can be
downloaded at
www.elfit.com

Standards:

CENELEC EN 60079-0: 2012, EN 60079-1: 2014, EN 60079-31: 2014 and EUROPEAN DIRECTIVE 2014/34/UE
IEC60079-0: 2011, IEC60079-1: 2015-06, IEC60079-31: 2013 Directive RoHS 2011/65/UE

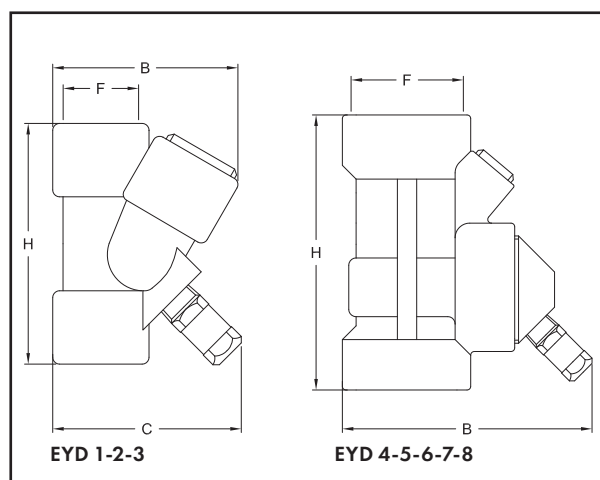
Ambient Temp. (EYD):

-20°C +60°C

Operating temperature:

-20°C +100°C

Certificates are available on www.elfit.com



SELECTION TABLE OF EYD VERTICAL SEALING FITTINGS

Code In aluminium	Thread	Dimensions in mm			Amount of resin	Weight
	F	H	B	C	gr	Kg
EYD1	1/2" ISO 7/1	88	63	67	35	0,280
EYD2	3/4" ISO 7/1	100	72	78	50	0,310
EYD3	1" ISO 7/1	117	85	85	100	0,430
EYD4	1 1/4" ISO 7/1	145	120	120	240	0,720
EYD5	1 1/2" ISO 7/1	145	120	120	240	0,600
EYD6	2" ISO 7/1	150	131	131	380	0,820
EYD7	2 1/2" ISO 7/1	200	165	165	1250	1,580
EYD8	3" ISO 7/1	200	165	165	1250	1,480

TECHNICAL NOTES:

- Available also with NPT thread (example code EYD2N)
- Available upon request in stainless steel. Contact our Sales Office for availability.

EZS series horizontal fittings prevent the passage of gas, vapours or flames through the pipe system in the electrical installation. EZS series can be used both for horizontal and vertical mounting. The sealing fittings have to be installed as close as possible to the Ex d junction box and in accordance with the standard EN60079-1. They must be filled only with CRV420 resin that has to be requested in the amount indicated in the table. It is not allowed the use of other types of sealing compound.



Classification:
2014/34/UE

Group II

Category 2GD

Installation:
EN 60079.14

zone 1 - zone 2 (Gas)

zone 21 - zone 22 (Dust)

Marking:

CE 0722 Ex II 2 GD Ex db IIC Gb Ex tb IIIC Db IP66

Certification:

ATEX CESI 03 ATEX 085X

IECEX IECEX CES 14.0019X

For IEC Ex and others certifications data
can be downloaded at
www.elfit.com

Standards:

CENELEC EN 60079-0: 2012, EN 60079-1: 2014, EN 60079-31: 2014 and EUROPEAN DIRECTIVE 2014/34/UE
IEC60079-0: 2011, IEC60079-1: 2015-06, IEC60079-31: 2013 Directive RoHS 2011/65/UE

Ambient Temp. (EZS):

-20°C +100°C

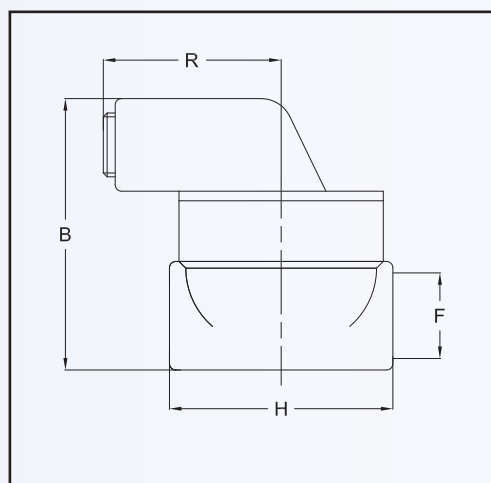
Operating temperature:

-20°C +100°C

Degree of protection:

IP66

Certificates are available on www.elfit.com



SELECTION TABLE OF EZS HORIZONTAL SEALING FITTINGS

Code In aluminium	Thread	Dimensions in mm			Amount of resin	Weight
	F	H	B	R	gr	Kg
EZS1	1/2" ISO 7/1	72	83	50	150	0,26
EZS2	3/4" ISO 7/1	72	83	50	140	0,25
EZS3	1" ISO 7/1	74	92	50	140	0,27
EZS4	1 ¼" ISO 7/1	98	110	80	390	0,52
EZS5	1 ½" ISO 7/1	98	110	80	390	0,48
EZS6	2" ISO 7/1	130	120	80	570	0,70
EZS7	2 ½" ISO 7/1	142	160	90	1000	1,50
EZS8	3" ISO 7/1	142	160	90	1000	1,74

TECHNICAL NOTES:

- Available also with NPT thread (example code EZS2N)
- Available upon request in stainless steel



Drain and breather valves are suitable for use in any type of explosion proof enclosure to drain the condensation and vapours developed inside the enclosure.



Classification: 2014/34/UE	Group II	Category 2GD	
Installation: EN 60079.14	zone 1 - zone 2 (Gas)		ECD-1...
	zone 1 - zone 2 (Gas)	zone 21 - zone 22 (Dust)	ECD-2...
Marking:	CE 0722 Ex II 2 G Ex d IIC/IIB Gb		ECD-1...
	CE 0722 Ex II 2 G Ex db IIB/IIC Gb II 2 G Ex eb IIB/IIC Gb II 2 D Ex tb IIIC Db		ECD-2...
Certification:	ATEX CESI 01 ATEX 081 U		
	IECEX IECEX CES 14.0016U		

For IEC Ex and others certifications data can be downloaded at www.elfit.com

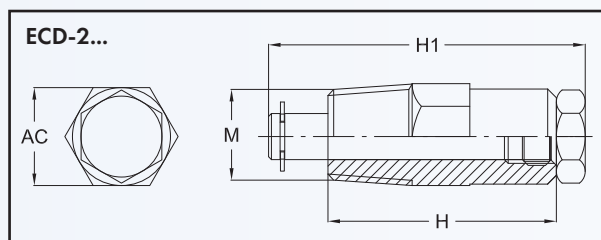
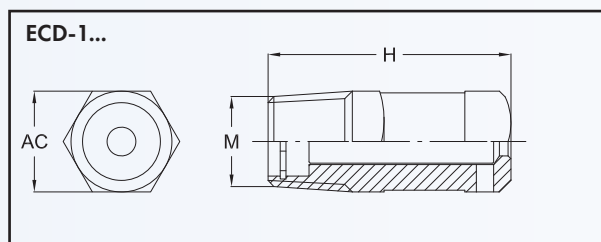
Standards:	CENELEC EN 60079-0: 2018, EN 60079-1: 2014, EN 60079-7: 2015/A1:2018, EN 60079-31: 2014 and EUROPEAN DIRECTIVE 2014/34/UE IEC60079-0: 2011, IEC60079-1: 2014, IEC 60079-7: 2015, IEC60079-31: 2013 Directive RoHS 2011/65/UE
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Operating temp. (IIC):	-60°C +60°C
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Operating temp. (IIB):	-60°C +150°C
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Degree of protection:	IP66
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Certificates are available on www.elfit.com



SELECTION TABLE OF ECD VALVES

Code In stainless steel AISI 316	Thread	Dimensions in mm			Use	Weight Kg
		F	H	H1		
ECD-110S	3/8" IS07/1	42	-	17	Drain	0,08
ECD-115S	1/2" IS07/1	43	-	22	Drain	0,08
ECDS-110S	3/8" IS07/1	42	-	17	Breather	0,10
ECD-210S	3/8" IS07/1	40	55	17	Drain	0,11
ECD-215S	1/2" IS07/1	40	55	22	Drain	0,20

TECHNICAL NOTES:

- Available also in aluminium (example code ECD 110)
- Available also with NPT thread (example code ECD 110NS)
- Available also with ISO METRIC thread

Automatic drainage and breather valves ECDE series are suitable to be used on increased safety, intrinsically safety or watertight enclosures to facilitate the elimination of condensation or vapors developed inside. Thanks to a precise mechanism, it is possible to obtain a continuous drainage and breathing of the junction box, protecting it from the possible formations of internal condensation and thus avoiding the periodic manual discharge, while ensuring a suitable IP degree of protection.

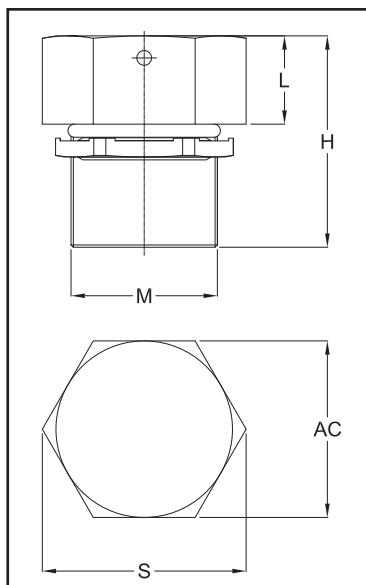


Classification: 2014/34/UE	Group II	Category 2GD
Installation: EN 60079.14	zone 1 - zone 2 (Gas)	zone 21 - zone 22 (Dust)
Marking:	CE 0722 Ex II 2 GD Ex eb IIC Gb Ex tb IIIC Db IP66	
Certification:	ATEX	CML 24 ATEX 3286X
	IECEX	IECEX CML16.0124X

All IEC Ex certification data can be downloaded at www.elfit.com

Standards:	CENELEC EN 60079-0: 2018, EN 60079-7: 2015+A1:2018, EN 60079-31: 2024 and EUROPEAN DIRECTIVE 2014/34/UE IEC60079-0: 2017, IEC 60079-7: 2017, IEC60079-31: 2022 Directive RoHS 2011/65/UE
Ambient temp.:	-60°C +150°C
Degree of protection:	IP66

Certificates are available on www.elfit.com



SELECTION TABLE OF ECDE VALVES

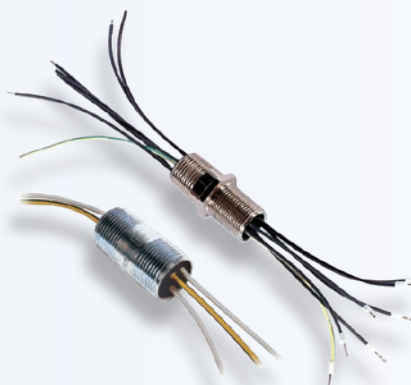
Code In stainless steel AISI 316	Code In nickel- plated brass	Thread	Dimensions in mm				Use
			M	H*	L	S	
ECDE-B1S	ECDE-B1B	M20x1,5	26	13	28	24	Breather
ECDE-B2S	ECDE-B2B	M25x1,5	26	13	35	30	Breather
ECDE-D1S**	ECDE-D1B**	M20x1,5	26	13	28	24	Breather/Drain
ECDE-D2S**	ECDE-D2B**	M25x1,5	26	13	35	30	Breather/Drain

TECHNICAL NOTES:

- * Different lengths for thick junction boxes upon request.
- ** When the ECDE are intended for use as a drain, they must be installed at the bottom of the enclosure

The sealed nipples are used to connect explosion-proof enclosures. The cables are sealed through a two-component resin set around each conductor.

Note: Please refer to the Sales Office for the available cables arrangements.

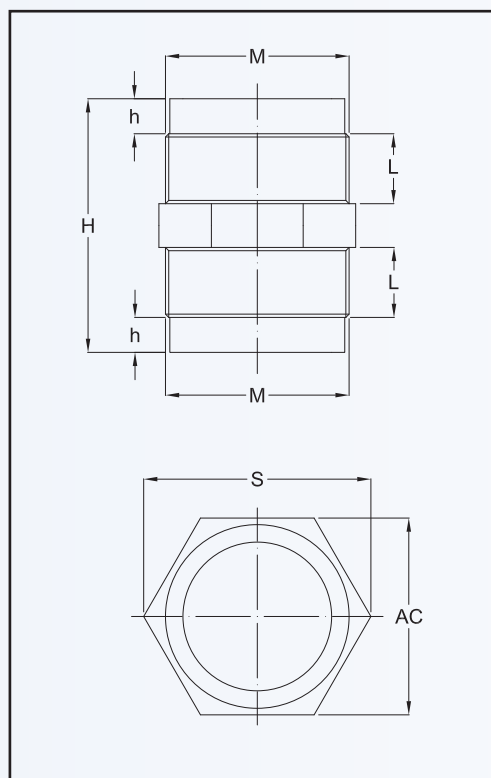


Classification: 2014/34/UE	Group II	Category 2GD
Installation: EN 60079.14	zone 1 - zone 2 (Gas)	zone 21 - zone 22 (Dust)
Marking:	CE 0722 Ex II 2 GD Ex d IIC Gb Ex tb IIIC Db IP66/67	
Certification:	ATEX	CESI 01 ATEX 080U
	IECEX	IECEX CES 10.0003U

For IEC Ex and others certifications data can be downloaded at www.elfit.com

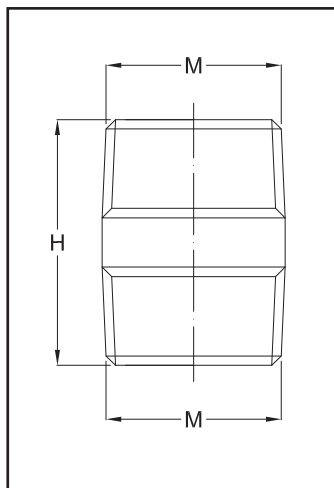
Standards:	CENELEC EN 60079-0: 2012, EN 60079-1: 2014, EN 60079-31: 2014 and EUROPEAN DIRECTIVE 2014/34/UE IEC60079-0: 2011, IEC60079-1: 2014-06, IEC60079-31: 2013 Directive RoHS 2011/65/UE
Operating temperature:	-50°C +110°C
Degree of protection:	IP66/67

Certificates are available on www.elfit.com



SELECTION TABLE OF ISO METRIC SEALED NIPPLES

Code In brass	ISO METRIC thread	Dimensions in mm				
		M	H	L	h	S
NPS10	M10x1,5	54	16	8	14	16,5
NPS12	M12x1,5				16	19
NPS16	M16x1,5				20	23,5
NPS20	M20x1,5				24	28
NPS24	M24x1,5				30	34,5
NPS25	M25x1,5				30	34,5
NPS32	M32x1,5				36	42
NPS33	M33x1,5				36	42
NPS36	M36x1,5				40	46,5
NPS38	M38x1,5				42	48,5
NPS40	M40x1,5				45	52
NPS42	M42x1,5				45	52


**SELECTION TABLE OF
ISO 7/1 SEALED NIPPLES**

Code In galvani- sed steel	Thread	Dimensions mm
	M	H
NPS1	1/2" ISO 7/1	48
NPS2	3/4" ISO 7/1	48
NPS3	1" ISO 7/1	60
NPS4	1 1/4" ISO 7/1	55
NPS5	1 1/2" ISO 7/1	55

**SELECTION TABLE OF NPT SE-
ALED NIPPLES**

Code In galvani- sed steel	Thread	Dimensions mm
	M	H
NPS1N	1/2" NPT	48
NPS2N	3/4" NPT	48
NPS3N	1" NPT	60
NPS4N	1 1/4" NPT	55
NPS5N	1 1/2" NPT	55

Order method for sealing nipples

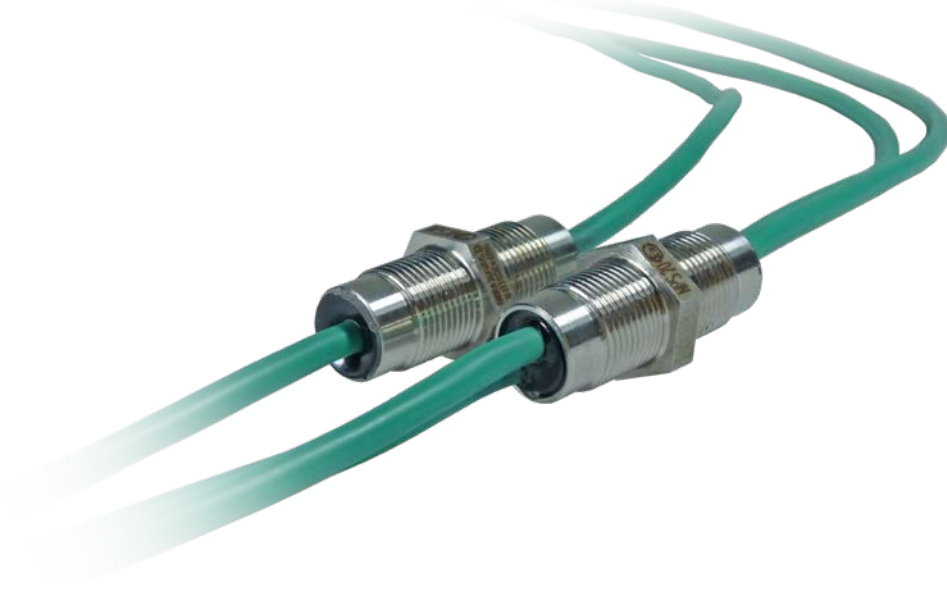
- 1 Indicate the NPS model based on the necessary thread type
- 2 Indicate amount, section, color of cables to be sealed in the nipple
- 3 Indicate the cables lenght on the two sides
- 4 Indicate the total amount of necessary sealed nipples

TECHNICAL NOTES:

- The maximum quantity as well as the kind of usable cables are specified on "Maximum quantity and wires type tables" in the following pages
- Available the installation of terminals or connectors
- Possible numeration of cables
- Possible to strip the cables' extremities
- Available also in stainless steel
- Available also in galvanised steel
- It is possible to supply sealing nipples with mixed thread
- Request the lock nuts for the sealing nipples with ISO metric thread

Upon request it's possible to supply sealing nipples with cables for thermocouples K type

- The maximum quantity and the kind of usable wires are specified on the following pages



The sealing bushings are used to connect explosion-proof enclosures. The cables are sealed through a two-component resin set around each conductor.



Classification: 2014/34/UE	Group II	Category 2GD
Installation: EN 60079.14	zone 1 - zone 2 (Gas)	
Marking:	CE 0722 Ex II 2 G Ex d IIC Gb	
Certification:	ATEX	CESI 01 ATEX 080U
	IECEX	IECEX CES 10.0003U

For IEC Ex and others certifications data can be downloaded at www.elfit.com

Standards:

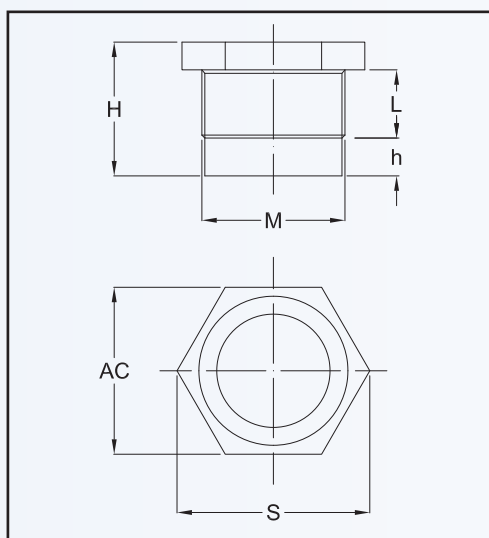
CENELEC EN 60079-0: 2012, EN 60079-1: 2014, EN 60079-31: 2014 and EUROPEAN DIRECTIVE 2014/34/UE
IEC60079-0: 2011, IEC60079-1: 2014-06, IEC60079-31: 2013 Directive RoHS 2011/65/UE



Operating temperature:

-50°C +110°C

Certificates are available on www.elfit.com



SELECTION TABLE OF SEALING BUSHINGS WITH THREADED JOINT

Code In brass	ISO METRIC thread	Dimensions in mm				
		M	H	L	h	AC
TP	10		30	15	9	14
TP	12					16
TP	16					20
TP	24					28
TP	25					30
TP	33					36
TP	36					40
TP	38					42
TP	42					45
						52

Order method for sealing bushings

- 1 Indicate the TP model based on the necessary thread type
- 2 Indicate amount, section, color of cables to be sealed in the nipple
- 3 Indicate cable lenght on the two sides
- 4 Indicate the total amount of necessary sealing nipples

TECHNICAL NOTES:

- The maximum quantity as well as the kind of usable cables are specified on "Maximum quantity and wires type tables" in the following pages
- Possible to strip the cables' extremities
- Available also in stainless steel
- Request the lock nuts for the block of the sealing bushings

The sealing bushings are used to connect explosion-proof enclosures. The cables are sealed through a two-component resin set around each conductor.



Classification: 2014/34/UE	Group II	Category 2GD
Installation: EN 60079-14	zone 1 - zone 2 (Gas)	
Marking:	CE 0722 Ex II 2 G Ex d IIC Gb	
Certification:	ATEX CESI 01 ATEX 080U	
	IECEX	IECEX CES 10.0003U

For IEC Ex and others certifications data can be downloaded at www.elfit.com

Standards:

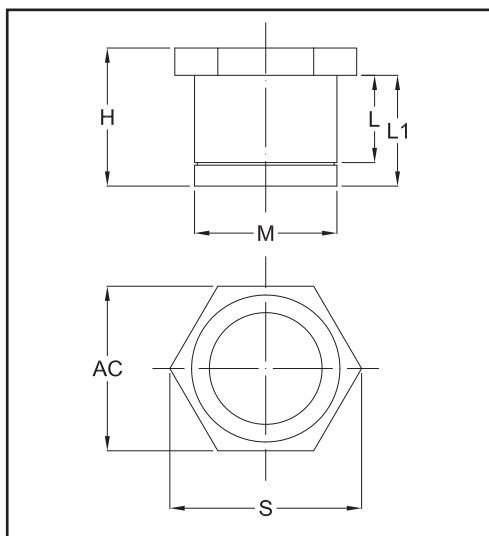
CENELEC EN 60079-0: 2012, EN 60079-1: 2014, EN 60079-31: 2014 and EUROPEAN DIRECTIVE 2014/34/UE
IEC60079-0: 2011, IEC60079-1: 2014-06, IEC60079-31: 2013 Directive RoHS 2011/65/UE



Operating temperature:

-50°C +110°C

Certificates are available on www.elfit.com



SELECTION TABLE OF SEALING BUSHINGS WITH CYLINDRICAL JOINT

Code In brass	ISO METRIC thread	Dimensions in mm				
	M	H	L	L1	AC	S
CP	10	35	25,5	29	14	16,5
CP	12				16	19
CP	16				20	23,5
CP	24				28	32,5
CP	29				32	37
CP	33				36	42
CP	36				40	46,5
CP	38				42	48,5
CP	42				45	52

Order method for sealing bushings

- 1 Indicate the TP model based on the necessary thread type
- 2 Indicate amount, section, color of cables to be sealed in the nipple
- 3 Indicate cable length on the two sides
- 4 Indicate the total amount of necessary sealing nipples

TECHNICAL NOTES:

- The maximum quantity as well as the kind of usable cables are specified on "Maximum quantity and wires type tables" in the following pages
- Possible to strip the cables' extremities
- Available also in stainless steel
- Request the lock nuts for the block of the sealing bushings

Max. N. of wires	Wires size mm ²	Rated current for continuous usage for max. temperature of 40°C	Rated Voltage	Thread size for TP - NPS		CP cylindrical Joint size
1 1 3 5 6 6 8 12 15 15 48	0,75	10 A	750 V	M10x1,5 M12x1,5 M16x1,5 M20x1,5 M24x1,5 M25x1,5 - M33x1,5 M36x1,5 M38x1,5 M42x1,5	1/8" 1/4" 3/8" 1/2" - 3/4" - 1" - - 1 1/4" - 1 1/2"	Ø 10 Ø 12 Ø 16 - Ø 24 Ø 25 Ø 29 Ø 33 Ø 36 Ø 38 Ø 42
1 1 3 5 6 6 8 12 15 15 21	1	12 A	1000 V	M10x1,5 M12x1,5 M16x1,5 M20x1,5 M24x1,5 M25x1,5 - M33x1,5 M36x1,5 M38x1,5 M42x1,5	1/8" 1/4" 3/8" 1/2" - 3/4" - 1" - - 1 1/4" - 1 1/2"	Ø 10 Ø 12 Ø 16 - Ø 24 Ø 25 Ø 29 Ø 33 Ø 36 Ø 38 Ø 42
1 1 3 5 6 6 8 12 15 36	1,5	15 A		M10x1,5 M12x1,5 M16x1,5 M20x1,5 M24x1,5 M25x1,5 - M33x1,5 M38x1,5 M42x1,5	1/8" 1/4" 3/8" 1/2" - 3/4" - 1" - 1 1/4" - 1 1/2"	Ø 10 Ø 12 Ø 16 - Ø 24 Ø 25 Ø 29 Ø 33 Ø 38 Ø 42
1 3 3 3 5 12 12 21 24	2,5	20 A		M16x1,5 M20x1,5 M24x1,5 M25x1,5 - M33x1,5 M38x1,5 M42x1,5	3/8" 1/2" - 3/4" - 1" - 1 1/4" - 1 1/2"	Ø 16 - Ø 24 Ø 25 Ø 29 Ø 33 Ø 38 Ø 42
1 2 3 3 5 6 8 8 18	4	27 A		M16x1,5 M20x1,5 M24x1,5 M25x1,5 - M33x1,5 M36x1,5 M38x1,5 M42x1,5	3/8" 1/2" - 3/4" - 1" - - 1 1/4" - 1 1/2"	Ø 16 - Ø 24 Ø 25 Ø 29 Ø 33 Ø 36 Ø 38 Ø 42
1 2 2 2 4 6 6 6 12	6	35 A		M16x1,5 M20x1,5 M24x1,5 M25x1,5 - M33x1,5 M38x1,5 M42x1,5	3/8" 1/2" - 3/4" - 1" - 1 1/4" - 1 1/2"	Ø 16 - Ø 24 Ø 25 Ø 29 Ø 33 Ø 38 Ø 42
1 3 6 6 6	10	49 A		M24x1,5 M33x1,5 M36x1,5 M38x1,5 M42x1,5	3/4" 1" - - 1 1/4" - 1 1/2"	Ø 24 Ø 33 Ø 36 Ø 38 Ø 42

Max. N. of wires	Wires size mm ²	Rated current for continuous usage for max. temperature of 40°C	Rated Voltage	Thread size for TP - NPS	CP cylindrical Joint size
1 1 3 6 6 6	16	65 A	1000 V	M24x1,5 - M25x1,5 3/4" M33x1,5 1" M36x1,5 - M38x1,5 - M42x1,5 1 1/4" - 1 1/2"	Ø 24 Ø 25 Ø 33 Ø 36 Ø 38 Ø 42
1 1 3	25	86 A		M24x1,5 - M25x1,5 3/4" M42x1,5 1 1/4" - 1 1/2"	Ø 24 Ø 25 Ø 42
1 1 3	35	107 A		M24x1,5 - M25x1,5 3/4" M42x1,5 1 1/4" - 1 1/2"	Ø 24 Ø 25 Ø 42
1 1 1	50	132 A		M24x1,5 - M25x1,5 3/4" M33x1,5 1"	Ø 24 Ø 25 Ø 33
1 1	70	165 A		M33x1,5 1" M36x1,5 -	Ø 33 Ø 36

Rated voltage 750V					
Max. N. of wires	Wires size mm ²	Rated current for continuous usage for max. temperature of 40°C	Thread size for TP - NPS		CP cylindrical joint size
3 3 8 12 16 16 20 20 25 35 45	0,5	5 A	M10x1,5 1/8" M12x1,5 1/4" M16x1,5 3/8" M20x1,5 1/2" M24x1,5 - M25x1,5 3/4" - M33x1,5 1" M36x1,5 - M38x1,5 - M42x1,5 1 1/4" - 1 1/2"	- - - - - - - - - - -	Ø 10 Ø 12 Ø 16 - Ø 24 Ø 25 Ø 29 Ø 33 Ø 36 Ø 38 Ø 42

Wire capacity range with cables for thermocouples K type - Rated current 100/100V					
Max. N. of wires	Wires size mm ²	Operating temperature	Thread size for TP - NPS		CP cylindrical joint size
1 1 2 2 5 5 7 7 9	2 x 0,22 2 x 0,50 2 x 0,80	110°C	M12x1,5 M16x1,5 M24x1,5 M25x1,5	-	Ø 12 Ø 16 Ø 24 Ø 25 Ø 29
			M33x1,5 M36x1,5 M38x1,5 M42x1,5	-	Ø 33 Ø 36 Ø 38 Ø 42
1 2 2 4 5 7 7 9	2 x 1,00		M16x1,5 M24x1,5 M25x1,5	-	Ø 16 Ø 24 Ø 25 Ø 29
			M33x1,5 M36x1,5 M38x1,5 M42x1,5	-	Ø 33 Ø 36 Ø 38 Ø 42
1 2 2 4 5 7 7 9	2 x 1,30 2 x 1,50		M16x1,5 M24x1,5 M25x1,5	-	Ø 16 Ø 24 Ø 25 Ø 29
			M33x1,5 M36x1,5 M38x1,5 M42x1,5	-	Ø 33 Ø 36 Ø 38 Ø 42

TECHNICAL NOTES:

- The rated current specified in the tables refers to a temperature of 40°C
- For other service temperatures up to 110°C, the derating of current must be evaluated by the end user.
- The resin must fill at least 20% of section (60079-1)
- For the type of cable allowed, please refer to the certificate

The conductor bushings are used as electrical connection between flameproof sides of enclosures or between flameproof side and increased safety side of enclosures. The conductor bushings are made in resin and equipped with a brass threaded rod.


Classification:
 2014/34/UE

Group II

Category 2GD

Installation:
 EN 60079.14

zone 1 - zone 2 (Gas)

Marking:

CE 0722 Ex II 2 G Ex d IIC

CE 0722 Ex II 2 G Ex de IIC

Certification:

ATEX CESI 11 ATEX 014U

Standards:

CENELEC EN 60079-0:2006, EN 60079-1:2007, EN 60079-7:2007 and EUROPEAN DIRECTIVE 2014/34/UE


Operating temperature:

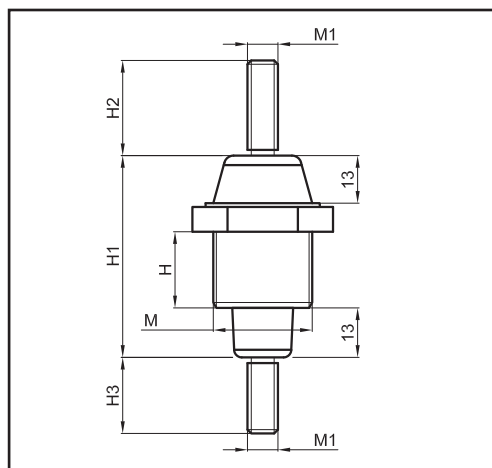
-50°C +150°C

ACCESSORIES UPON REQUEST

Locknuts	ISO thread	Nickel-plated brass	Stainless steel
	M12x1,5	DL02IB	DL02IS
	M16x1,5	DL01IB	DL01IS
	M26x1,5	DLIS026B	DLIS026S
	M30x1,5	DLIS030B	DLIS030S
	M36x1,5	DLIS036B	DLIS036S
	M42x1,5	DLIS042B	DLIS042S
	M48x1,5	DLIS048B	DLIS048S

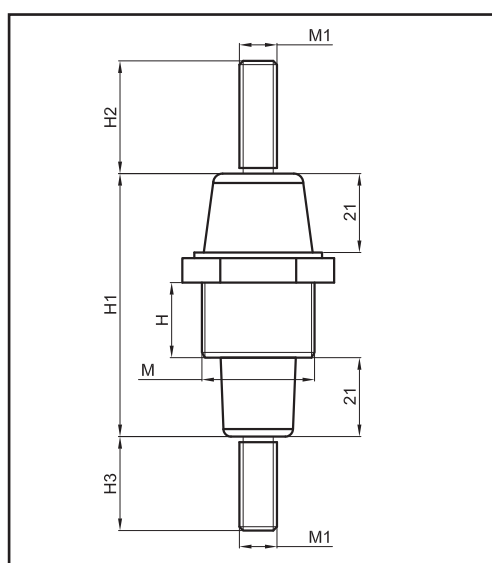
ELECTRICAL FEATURES

Code	Rated current	Rated voltage
CB2-690	6A	690Vac
CB8-690	100A	
CB12-690	250A	
CB20-690	400A	
CB5-1100	25A	1100Vac
CB10-1100	160A	
CB16-1100	315A	



CONDUCTOR BUSHING SELECTION TABLE

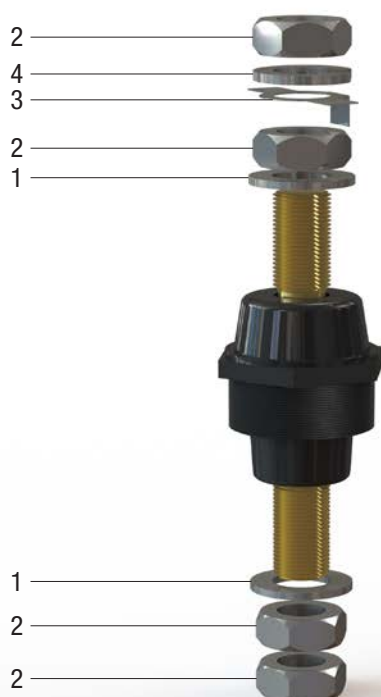
Code	ISO METRIC Thread	Dimensions in mm					
	M	M1	H	H1	H2	H3	AC
CB2-690	M12x1,5	M4	16	51,2	15	11,5	15
CB8-690	M26x1,5	M8	20	53	25	19,5	32
CB12-690	M36x1,5	M12	22	56	35	21,5	41
CB20-690	M48x1,5	M20	25	60	45	42	50



CONDUCTOR BUSHING SELECTION TABLE

Code	ISO METRIC Thread	Dimensions in mm					
	M	M1	H	H1	H2	H3	AC
CB5-1100	M16x1,5	M5	16	67	15	13,5	20
CB10-1100	M30x1,5	M10	20	70	30	19,5	35
CB16-1100	M42x1,5	M16	22	73	40	37	45

Including accessories



1. Stainless Steel Flat Washer
2. Stainless Steel Hex Nut
3. Stainless Steel Anti-Rotation Bracket
4. Stainless Steel Grover Washer

Flexible conduits are used for connecting misaligned equipments or equipments subjected to vibrations, such as electrical motors. They are suitable for installation of lighting fixtures and in alternative to rigid conduits when they are difficult to install. SP series flexible conduits have a good flexibility and a very good damping effect against vibrations.



Classification: 2014/34/UE	Group II	Category 2GD
Installation: EN 60079.14	zone 1 - zone 2 (Gas)	zone 21 - zone 22 (Dust)
Marking:	CE 0722 Ex II 2 GD Ex db IIB Gb Ex tb IIIC Db IP66/67	
	CE 0722 Ex II 2 GD Ex db IIC Gb Ex tb IIIC Db IP66/67	
Certification:	ATEX CESI 00 ATEX 048U	
	IECEX	IECEX CES 14.0011 U

For IEC Ex and others certifications data can be downloaded at www.elfit.com

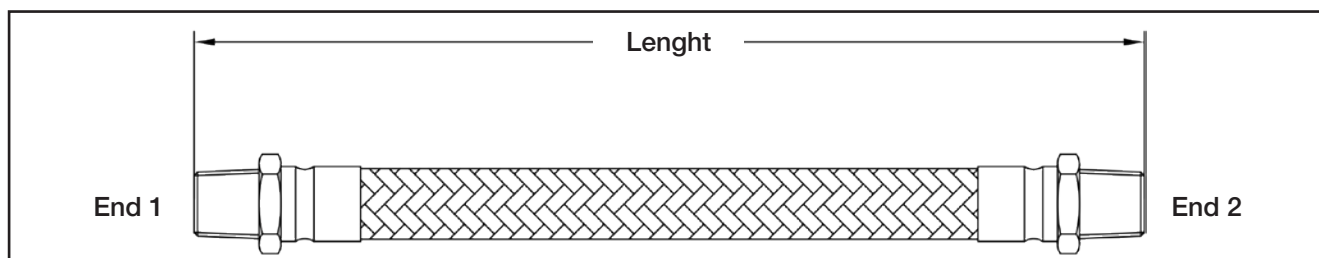
Standards:	CENELEC EN 60079-0: 2012+A11:2013, EN 60079-1: 2014, EN 60079-31: 2014, EN ISO 10807: 1996 and EUROPEAN DIRECTIVE 2014/34/UE IEC60079-0: 2011, IEC60079-1: 2007-04, IEC60079-31: 2008 Directive RoHS 2011/65/UE
Degree of protection:	IP66/67

Certificates are available on www.elfit.com



Ambient temperature

	Flexible conduit type	Method of protection	Construction material		Size	Ambient temperature
			Fixed fitting	Revolving fitting		
Fixed fitting	SPH - SPG - SPZ	Ex d IIC	Stainless steel	/	1/2" ÷ 1"	-20°C +150°C
			Galvanized steel	/	1 1/4" ÷ 4"	
	SPH - SPG - SPZ	Ex d IIC	Stainless steel	/	1/2" ÷ 1"	-60°C +150°C
Revolving fitting	B.. SPN - SPI - SPY - SPD SPP - SPE - SPT	Ex d IIB	Stainless steel	Galvanized steel	1/2" ÷ 1"	-20°C +60°C
			Galvanized steel	Galvanized steel	1 1/4" ÷ 4"	
	SPN - SPI - SPY - SPD SPP - SPE - SPT	Ex d IIB	Stainless steel	Stainless steel	1/2" ÷ 1"	-60°C +60°C
			Stainless steel	Stainless steel	1 1/4" ÷ 4"	
	R.. SPRN - SPRI - SPRY - SPRD SPRP - SPRE - SPRT	Ex d IIC	Stainless steel	Galvanized steel	1/2" ÷ 1"	-20°C +60°C
			Galvanized steel	Galvanized steel	1 1/4" ÷ 4"	
RB..	SPRN - SPRI - SPRY - SPRD SPRP - SPRE - SPRT	Ex d IIC	Stainless steel	Stainless steel	1/2" ÷ 4"	-60°C +60°C
			Stainless steel	Stainless steel	1/2" ÷ 4"	-60°C +150°C



End 2 \ End 1		Method of protection IIC		Method of protection IIB		Method of protection IIC		Method of protection IIB (Ta +150°C)	
		Fixed male	Fixed female	Revolving male	Revolving female	Revolving male	Revolving female	Revolving male	Revolving female
Method of protection IIC	Fixed male	SPH	SPG	SPN	SPI	SPRN	SPRI	SPRN	SPRI
	Fixed female		SPZ	SPY	SPD	SPRY	SPRD	SPRY	SPRD
Method of protection IIB	Revolving male			SPP	SPE				
	Revolving female				SPT				
Method of protection IIC	Revolving male					SPRP	SPRE		
	Revolving female						SPRT		
Method of protection IIB	Revolving male							SPRP	SPRE
	Revolving female								SPRT

Order code example

SPH	1	6	G
MODEL	SIZE	LENGHT	MATERIAL

Flexible conduits: lenghts and method of protection		
Lenght (mm)		Method of protection
from	to	
≥ 300	≤ 5000	Ex d IIB ÷ Ex d IIC
≥ 5000	≤ 10000	Ex d IIB

Conduit standard lenght	
Cod.	mm
3	300
4	400
5	500
6	600
7	700
8	800
9	900
10	1000

Thread hubs GAS UNI ISO 7/1

Size	1	2	3	4	5	6	7	8	9	10
Thread	1/2"	3/4"	1"	1 1/4"	1 1/2"	2	2 1/2"	3"	3 1/2"	4"
Ø min. int.	12	16	25,1	32,2	38,2	50,1	63,1	73,1	73,1	100,1
Curving radius min.	40	60	75	90	110	150	200	225	225	280

TECHNICAL NOTES:

- The flexible conduits and related fittings can be welded only by the manufacturer that certifies the method of protection
- Welded fittings: from 1/2" to 1" stainless steel - from 1 1/4" to 4" galvanized steel
- Revolving fittings: galvanized steel
- Flexible conduit with spiralled sheath : stainless steel
- Standard in galvanised steel (example code **SPH56G**)
- Available also in stainless steel (example code **SPH56S**)
- Available also with NPT thread (example code **SPH3N10G**)
- Available also with ISO thread (example code **SPH3I4G**)

ESP series flexible conduits are used to connect increased safety offset equipment or devices subject to vibrations. Compared to traditional explosion-proof conduits, they are lighter, and they are characterized by a mechanical assembly without the use of welding, greatly simplifying installation and maintenance. The fittings are available in nickel-plated brass and stainless steel, while the ESP flexible conduits are covered externally with a UV-resistant polyurethane sheath for a greater protection of the internal metal mesh.



Classification:
2014/34/UE

Group II

Category 2GD

Installation:
EN 60079-14

zone 1 - zone 2 (Gas)

zone 21 - zone 22 (Dust)

Marking:

CE 0722 Ex II 2 GD Ex eb IIC Gb - Ex tb IIIC Db

Certification:

ATEX IMQ 22 ATEX 057U

IECEX IECEX IMQ 22.0009U

Per tutti i dati di certificazione IEC Ex scaricare il certificato dal sito www.elfit.com

Standards:

CENELEC EN 60079-0: 2018, EN 60079-7: 2015+A1:2018, EN 60079-31: 2014 and EUROPEAN DIRECTIVE 2014/34/UE
 IEC60079-0: 2018, IEC60079-7: 2017, IEC60079-31: 2013 Direttiva RoHS 2011/65/UE

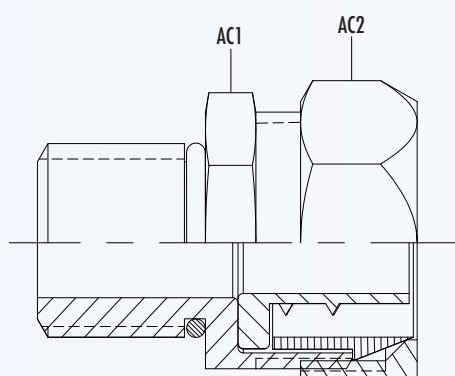
Operating temperature:

-60°C +80°C

Degree of protection:

IP66

Certificates are available on www.elfit.com



FITTINGS KEY OPENINGS (mm)

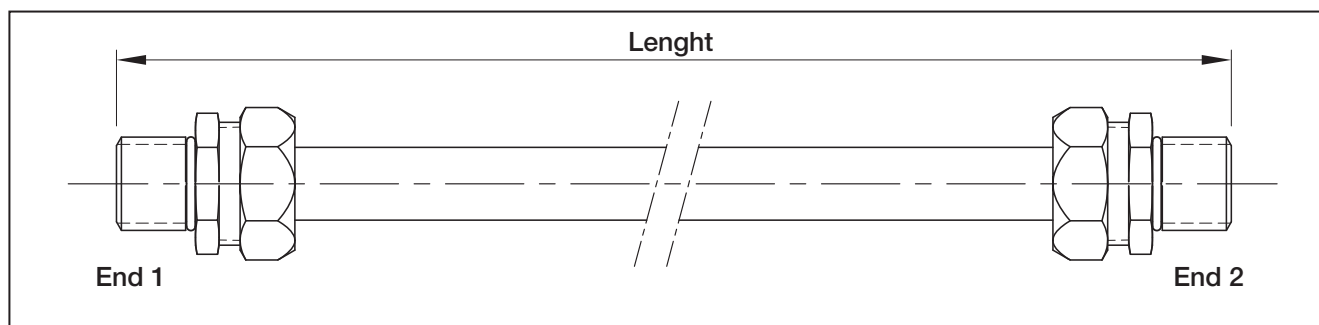
	01	1	2	3	4	5	6
AC1	26	30	37	45	52	62	74
AC2	24	28	35	42	50	58	70

The fitting can be supplied with male or female thread



Locknuts available on request

Locknuts	ISO thread	Nickel-plated brass	Stainless steel
	M16x1,5	DL01IB	DL01IS
	M20x1,5	DL1IB	DL1IS
	M25x1,5	DL2IB	DL2IS
	M32x1,5	DL3IB	DL3IS
	M40x1,5	DL4IB	DL4IS
	M50x1,5	DL5IB	DL5IS
	M63x1,5	DL6IB	DL6IS



	Male	Female
Male	ESPH	ESPG
Female		ESPZ

Conduit standard lenght	
Cod.	mm
3	300
4	400
5	500
6	600
7	700
8	800
9	900
10	1000

Sample order code

ESPH	1	I	B	5
MODEL	SIZE	THREAD	MATERIAL	LENGHT

Technical data flexible

Compressive strength 1250 N

Impact resistance 6 J

Tensile strength 1000N

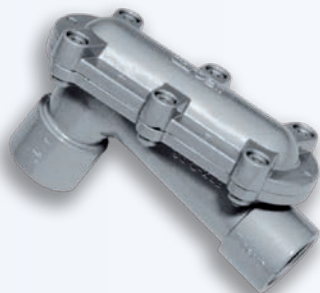
Suspended load resistance 450 N

Size	01	1	2	3	4	5	6
ISO thread	M16x1,5	M20x1,5	M25x1,5	M32x1,5	M40x1,5	M50x1,5	M63x1,5
ISO 7/1	3/8"	1/2"	3/4"	1"	1 ¼"	1 ½"	2"
NPT	3/8"	1/2"	3/4"	1"	1 ¼"	1 ½"	2"
Ø min. int.	9,7	13,4	17,9	23,8	31,8	37,7	47,5
Curving radius min.	70	90	120	140	190	240	300

TECHNICAL NOTES:

- Available also in nickel brass (example code ESPH5IB6)
- Available also in stainless steel (example code ESPH5IS6)
- Standard with ISO thread (example code ESPH3IB6)
- Available also with ISO 228/1 thread (example code ESPH3CB6)
- Available also with NPT thread (example code ESPH3NB6)
- Available also three pieces union B.. and R.. series
- For connection and use, see the safety, maintenance and mounting instruction
- Possibility of separate supply flexible and fittings for flexible conduit

LBH series open elbows L shaped with small radius are used for the cables insertion in conduit system of electrical installations. The back opening enables an easy inspection of the installation and easy insertion of electrical cables.



Classification:
2014/34/UE

Group II

Category 2G

Installation:
EN 60079-14

zone 1 - zone 2 (Gas)

Marking:

CE 0722 Ex II 2 G Ex d IIB

Certification:

ATEX CESI 03 ATEX 141 U

Standards:

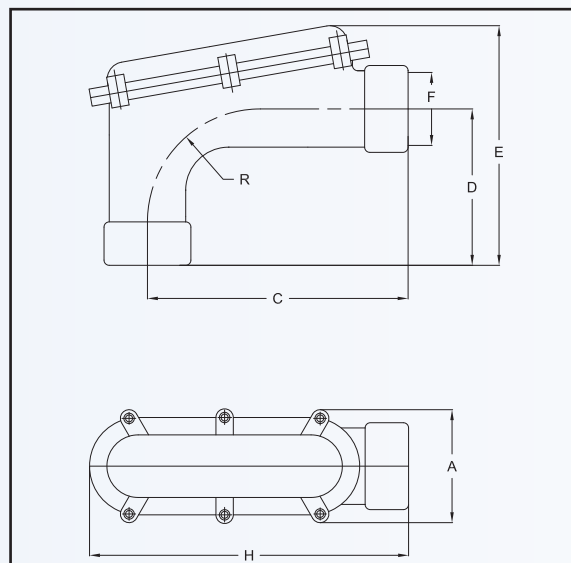
CENELEC EN 60079-0: 2006, EN 60079-1: 2004 and EUROPEAN DIRECTIVE 2014/34/UE
IEC60079-0: 2011, IEC60079-1: 2007-04, IEC60079-31: 2008 Directive RoHS 2011/65/UE



Ambient Temp.:

-20°C +60°C (Max. operating temperature +80°C)

Certificates are available on www.elfit.com



**SELECTION TABLE OF LBH
OPEN ELBOWS**

Code In aluminium	Thread	Dimensions in mm						Weight
	F	A	H	C	D	E	R	Kg
LBH1	1/2" ISO 7/1	70	165	132	45	95	21	0,434
LBH2	3/4" ISO 7/1	70	165	132	45	95	21	0,404
LBH3	1" ISO 7/1	70	168	132	60	112	30	0,455
LBH4	1 1/4" ISO 7/1	100	230	175	83	155	50	1,277
LBH5	1 1/2" ISO 7/1	110	265	220	83	132	70	1,142
LBH6	2" ISO 7/1	110	265	220	80	132	70	1,024
LBH7	2 1/2" ISO 7/1	136	363	267	140	250	96	3,569
LBH8	3" ISO 7/1	136	363	267	140	250	96	3,171
LBH10	4" ISO 7/1	181	720	605	175	305	125	10,850

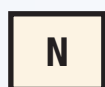
Order code example



MODEL



SIZE



THREAD

TECHNICAL NOTES:

- Available also with NPT thread (example code LBH3N)
- Available also with ISO 7/1 RP thread (example code LBH2C)
- Available also with ISO METRIC thread (example code LBH4I)
- 1/4" and 3/8" sizes can be obtained by assembling to the 1/2" LBH1 elbow the corresponding **RE114** or **RE138**

LBHS series open elbows with a large radius are used for the cables insertion in conduit system of electrical installations. The back opening enables an easy inspection of the installation and an easy insertion of electrical cables.

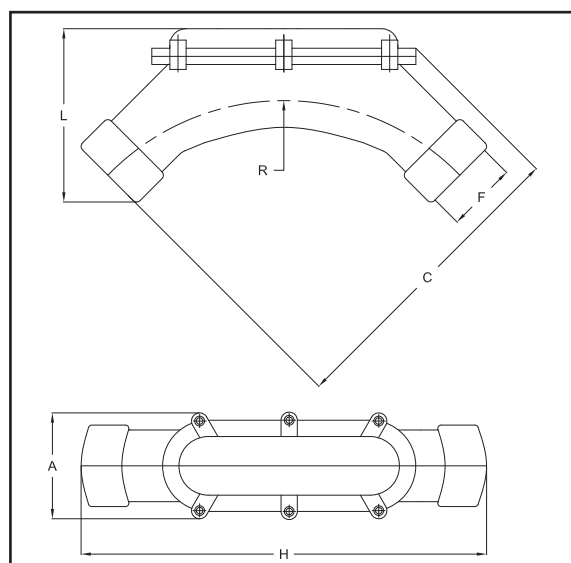


Classification: 2014/34/UE	Group II	Category 2G
Installation: EN 60079-14	zone 1 - zone 2 (Gas)	
Marking:	CE 0722 Ex II 2 G Ex d IIB	
Certification:	ATEX	CESI 03 ATEX 141 U
	TR CU	AVAILABLE

All TR CU certification data can be downloaded at www.elfit.com

Standards:	CENELEC EN 60079-0: 2006, EN 60079-1: 2004 and EUROPEAN DIRECTIVE 2014/34/UE IEC60079-0: 2011, IEC60079-1: 2007-04, IEC60079-31: 2008 Directive RoHS 2011/65/UE
Ambient Temp.:	-20°C +60°C (Max. operating temperature +80°C)

Certificates are available on www.elfit.com



SELECTION TABLE OF LBHS OPEN ELBOWS

Code In aluminium	Thread	Dimensions in mm					Weight
	F	A	H	C	L	R	Kg
LBHS1	1/2" ISO 7/1	70	305	197	110	195	0,543
LBHS2	3/4" ISO 7/1	70	305	197	110	195	0,467
LBHS3	1" ISO 7/1	70	300	190	110	195	0,629
LBHS4	1 1/4" ISO 7/1	105	400	288	145	260	1,539
LBHS5	1 1/2" ISO 7/1	105	400	288	145	260	1,481
LBHS6	2" ISO 7/1	120	495	348	165	315	2,297
LBHS7	2 1/2" ISO 7/1	142	565	448	205	350	4,473
LBHS8	3" ISO 7/1	149	688	478	220	445	4,914
LBHS10	4" ISO 7/1	164	910	680	310	574	11,110

Order code example

LBHS	4	N
MODEL	SIZE	THREAD

TECHNICAL NOTES:

- Available also with NPT thread (example code LBHS3**N**)
- Available also with ISO METRIC thread (example code LBHS4**I**)

EKC pulling boxes are used in conduit system of electrical plant to facilitate the cables insertion. The back opening enables an easy inspection of the installation and an easy insertion of electrical cables.



Classification:
2014/34/UE

Group II

Category 2G

Installation:
EN 60079-14

zone 1 - zone 2 (Gas)

Marking:

CE 0722 Ex II 2 G Ex d IIB

Certification:

ATEX CESI 03 ATEX 141 U

Standards:

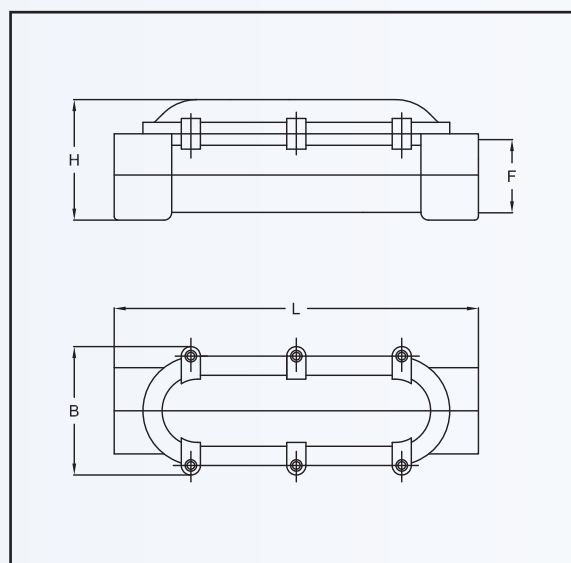
CENELEC EN 60079-0: 2006, EN 60079-1: 2004 and EUROPEAN DIRECTIVE 2014/34/UE
IEC60079-0: 2011, IEC60079-1: 2007-04, IEC60079-31: 2008 Directive RoHS 2011/65/UE



Ambient Temp.:

-20°C +60°C (Max. operating temperature +80°C)

Certificates are available on www.elfit.com



SELECTION TABLE OF EKC PULLING BOXES

Code In aluminium	Thread	Dimensions in mm			Weight
	F	H	L	S	Kg
EKC1	1/2" ISO 7/1	59	171	70	0,508
EKC2	3/4" ISO 7/1	59	171	70	0,485
EKC3	1" ISO 7/1	64	181	70	0,558
EKC4	1 1/4" ISO 7/1	87	240	99	1,211
EKC5	1 1/2" ISO 7/1	87	240	99	1,135
EKC6	2" ISO 7/1	112	298	105	1,745
EKC7	2 1/2" ISO 7/1	172	380	138	4,003
EKC8	3" ISO 7/1	172	380	138	3,609
EKC10	4" ISO 7/1	196	755	180	10,320

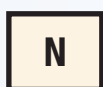
Order code example



MODEL



SIZE



THREAD

TECHNICAL NOTES:

- Available also with NPT thread (example code EKC3N)
- Available also with ISO METRIC thread (example code EKC4I)


BC rigid conduits

Rigid conduits are used in hazardous areas to connect electrical equipment setting up a complete explosion proof system through sealing fittings. The conduits are drawn inside so that all roughness, which could damage the electrical cables, are eliminated.



Installation:
EN 60079-14

zone 1 - zone 2 (Gas)

Standards:

EN 60079-0, EN 60079-1

Standard construction:

UNI 7683 galvanized steel conduit
Standard bar length: 6 meters
Plastic couplings for thread protection
ISO7/1 thread

Upon request:

Thread NPT: (example code BC-1N)
Bar of 3 m: (example code BC-3/300)

SELECTION TABLE OF RIGID CONDUITS

Code	Thread
BC-1	1/2" ISO 7/1
BC-2	3/4" ISO 7/1
BC-3	1" ISO 7/1
BC-4	1 1/4" ISO 7/1
BC-5	1 1/2" ISO 7/1
BC-6	2" ISO 7/1
BC-7	2 1/2" ISO 7/1
BC-8	3" ISO 7/1
BC-10	4" ISO 7/1

DB...A series bushings are made in aluminium. They are screwed to the pipe end they work as a cable guard. They prevent the cable from rubbing on any pipe burr/edge which could damage its sheath.



Standard construction:

Low copper content aluminium alloy body
ISO 228 thread

Upon request:

NPT thread: (example code DB3NA)
ISO METRIC: (example code DB3IA)
Galvanised steel (example code DB3G)
Stainless steel (example code DB3S)

SELECTION TABLE ALUMINIUM BUSHINGS

Code	Thread	Weight Kg
DB1A	1/2" ISO 7/1	0,012
DB2A	3/4" ISO 7/1	0,014
DB3A	1" ISO 7/1	0,020
DB4A	1 1/4" ISO 7/1	0,025
DB5A	1 1/2" ISO 7/1	0,032
DB6A	2" ISO 7/1	0,046
DB7A	2 1/2" ISO 7/1	0,062
DB8A	3" ISO 7/1	0,071
DB10A	4" ISO 7/1	0,107
DB12A	5" ISO 7/1	0,134

DB...P polypropylene bushings

DB...P series bushings, polypropylene made, are screwed to the pipe end and they work as a cable guard. They prevent the cable from rubbing on any pipe burr/edge which could damage its sheath.



Standard construction:

Polypropylene thermoplastic moulding
ISO 228 thread

SELECTION TABLE FOR POLYPROPYLENE BUSHING

Code	Thread	Weight Kg
DB1P	1/2" ISO 7/1	0,012
DB2P	3/4" ISO 7/1	0,014
DB3P	1" ISO 7/1	0,020
DB4P	1 1/4" ISO 7/1	0,025
DB5P	1 1/2" ISO 7/1	0,032
DB6P	2" ISO 7/1	0,046
DB7P	2 1/2" ISO 7/1	0,062
DB8P	3" ISO 7/1	0,071
DB10P	4" ISO 7/1	0,107
DB12P	5" ISO 7/1	0,134

DBT series bushings, aluminium made, are screwed to the pipe end and they work as a cable guard. They prevent the cable from rubbing on any pipe burr/edge which could damage its sheath. They are equipped with earth screw for metal parts grounding.


Standard construction:

Low copper content aluminium alloy body
 Stainless steel screw
 ISO 228 thread

Upon request:

NPT thread: (example code DBT3NA)
 ISO METRIC thread: (example code DBT3IA)
 Galvanised steel (example code DBT3G)
 Stainless steel (example code DBT3S)

SELECTION TABLE ALUMINIUM BUSHINGS

Code	Thread	Weight Kg
DBT1A	1/2" ISO 7/1	0,016
DBT2A	3/4" ISO 7/1	0,018
DBT3A	1" ISO 7/1	0,024
DBT4A	1 ¼" ISO 7/1	0,033
DBT5A	1 ½" ISO 7/1	0,040
DBT6A	2" ISO 7/1	0,054
DBT7A	2 ½" ISO 7/1	0,070
DBT8A	3" ISO 7/1	0,079
DBT10A	4" ISO 7/1	0,115
DBT12A	5" ISO 7/1	0,142

MC female closing plugs

MC series female plugs are used to close pipes ends.


Standard construction:

Galvanised steel or aluminium
 Standard thread: ISO 7/1 Rp

Upon request:

NPT thread: (example code MC3NG)
 ISO METRIC thread: (example code MC3IG)
 Stainless steel (example code MC3S)

SELECTION TABLE OF FEMALE CLOSING PLUGS

Code	Thread	Material	Weight Kg
MC1G	1/2" ISO 7/1	Galvanised steel	0,035
MC2G	3/4" ISO 7/1	Galvanised steel	0,039
MC3G	1" ISO 7/1	Galvanised steel	0,045
MC4G	1 ¼" ISO 7/1	Galvanised steel	0,052
MC5G	1 ½" ISO 7/1	Galvanised steel	0,285
MC6G	2" ISO 7/1	Galvanised steel	0,335
MC7A	2 ½" ISO 7/1	Aluminium	0,797
MC8A	3" ISO 7/1	Aluminium	0,887
MC10A	4" ISO 7/1	Aluminium	1,119

DL series locknuts are used to block cable glands or fittings with cylindrical thread on 'Ex e' or 'Ex i' junction box flange or walls with drilling for cables entry.



Standard construction:

Galvanised steel o Aluminium (look at the table below)
ISO 228/1 thread

Upon request:

Other threads
Other materials

SELECTION TABLE OF DL LOCKNUTS

Code	Thread	Material	Weight Kg
DL1G	1/2" ISO 228/1	Galvanised steel	0,008
DL2G	3/4" ISO 228/1	Galvanised steel	0,011
DL3G	1" ISO 228/1	Galvanised steel	0,013
DL4G	1 1/4" ISO 228/1	Galvanised steel	0,037
DL5A	1 1/2" ISO 228/1	Aluminium	0,027
DL6A	2" ISO 228/1	Aluminium	0,034
DL7A	2 1/2" ISO 228/1	Aluminium	0,052
DL8A	3" ISO 228/1	Aluminium	0,092
DL10A	4" ISO 228/1	Aluminium	0,132
DL12A	5" ISO 228/1	Aluminium	0,245

DL...P polyamide locknuts

DL...P series locknuts are used to block polyamide cable glands with cylindrical thread on 'Ex e' or 'Ex i' junction box walls or flange with drilling for cables entry.



Standard construction:

Polyamide

Upon request:

Marking Ex i: (example code DL02IXIP)

SELECTION TABLE OF DL LOCKNUTS

Code	ISO thread	Weight Kg
DL02IXEP	M12x1,5	0,004
DL01IXEP	M16x1,5	0,005
DL1IXEP	M20x1,5	0,005
DL2IXEP	M25x1,5	0,006
DL3IXEP	M32x1,5	0,006
DL4IXEP	M40x1,5	0,009
DL5IXEP	M50x1,5	0,013
DL6IXEP	M63x1,5	0,019

SELECTION TABLE OF DL LOCKNUTS

Code	PG thread	Weight Kg
DL1PXEP	PG7	0,003
DL2PXEP	PG9	0,004
DL3PXEP	PG11	0,005
DL4PXEP	PG13,5	0,005
DL5PXEP	PG16	0,006
DL6PXEP	PG21	0,006
DL7PXEP	PG29	0,009
DL8PXEP	PG36	0,013
DL9PXEP	PG42	0,019
DL10PXEP	PG48	0,026

MT series conduit clamps are used for mounting of cable conduits perpendicular to the support structure.



Standard construction:

Galvanised steel
Galvanized bolts and nuts.

SELECTION TABLE OF CONDUIT CLAMPS

Code	Thread	Weight Kg
MT1	1/2"	0,093
MT2	3/4"	0,129
MT3	1"	0,150
MT4	1 ¼"	0,194
MT5	1 ½"	0,232
MT6	2"	0,275
MT7	2 ½"	0,310
MT8	3"	0,579
MT10	4"	-

UBD U-bolts

U-bolts are used to fix rigid cable conduits to flat surfaces.



Standard construction:

Galvanised steel

Upon request:

Stainless steel (example code UBD3S)

SELECTION TABLE OF UBD U-BOLTS

Code	Ø cable conduits	Weight Kg
UBD1G	1/2"	0,035
UBD2G	3/4"	0,039
UBD3G	1"	0,045
UBD4G	1 ¼"	0,052
UBD5G	1 ½"	0,285
UBD6G	2"	0,335
UBD7G	2 ½"	0,797
UBD8G	3"	0,887
UBD10G	4"	1,119
UBD12G	5"	1,327

Saddles are used to fix cable conduits to walls or to flat surfaces.



Standard construction:

Galvanised steel or aluminium

Upon request:

Stainless steel (example code GF3S)

SELECTION TABLE OF GF SADDLES

Code	Pipe diameter	Threading	Weight Kg
GF1G	21	1/2"	0,028
GF2G	26	3/4"	0,037
GF3G	34	1"	0,045
GF4G	42	1 1/4"	0,087
GF5G	50	1 1/2"	0,115
GF6G	61	2"	0,156
GF7A	77	2 1/2"	0,158
GF8A	90	3"	0,215
GF10A	115	4"	0,284
GF12A	140	5"	-

MP conduit clamps

MP clamps are used for mounting cable conduits in parallel to the support structure.



Standard construction:

Galvanised steel

Upon request:

Stainless steel (example code MP3S)

SELECTION TABLE OF MP CONDUIT CLAMPS

Code	Diameter	Weight Kg
MP1	1/2"	0,138
MP2	3/4"	0,145
MP3	1"	0,198
MP4	1 1/4"	0,530
MP5	1 1/2"	0,590
MP6	2"	-
MP7	2 1/2"	-
MP8	3"	-
MP10	4"	-

Projection electrowelded collar connection packaged in a single bag, suitable for fixing steel pipes but usable for all pipes.



Standard construction:

Galvanised steel or aluminium

Upon request:

Stainless steel (example code **GF3S**)

SELECTION TABLE OF COLLAR

Code	Tube diameter	$\varnothing \div \varnothing$	Int. threading	Weight Kg
CST1	1/2"	20 ÷ 24	M8	0,65
CST2	3/4"	25 ÷ 30	M8	0,77
CST3	1"	32 ÷ 36	M8	0,92
CST4	1 ¼"	38 ÷ 44	M8	0,98
CST5	1 ½"	46 ÷ 50	M8	1,15
CST6	2"	58 ÷ 62	M8	1,24
CST7	2 ½"	74 ÷ 80	M10	1,75
CST8	3"	84 ÷ 89	M10	1,96
CST10	4"	112 ÷ 118	M10	2,55

