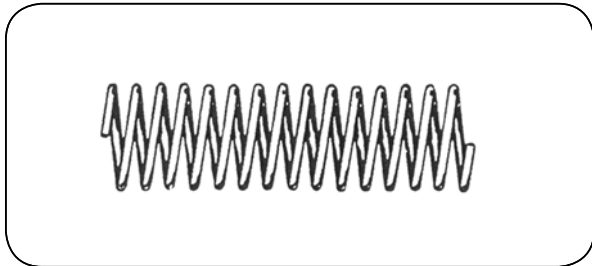


MACHINES AND ACCESSORIES - protection and sealing

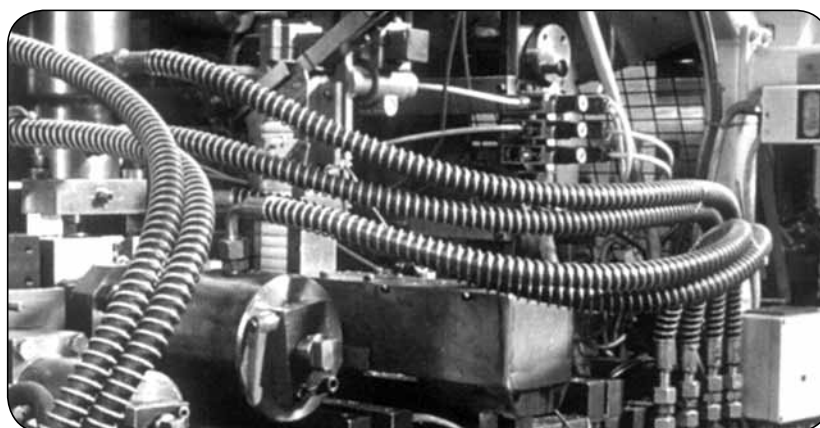


SPRING

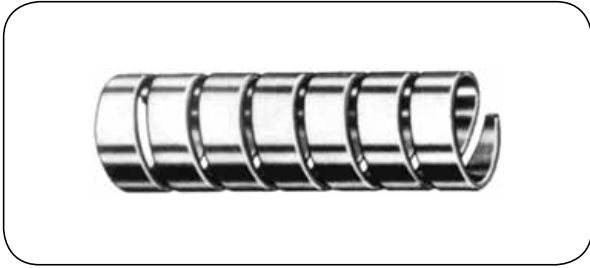
Material: Galvanized spring steel

Protective spiral made of steel wire designed to protect hoses (cables) against abrasion, kinking and crushing. Standard length 5 m.

code	I.D. [mm]	distance between coils [mm]	wire diameter [mm]
RF-SPRING-10	10	5	1.6
RF-SPRING-12	12	5	1.6
RF-SPRING-14	14	5	1.6
RF-SPRING-15	15	5	1.6
RF-SPRING-17	17	5	1.6
RF-SPRING-19	19	5	1.6
RF-SPRING-20	20	5	1.6
RF-SPRING-22	22	6	2
RF-SPRING-24	24	6	2
RF-SPRING-25	25	6	2
RF-SPRING-27	27	6	2
RF-SPRING-29	29	6	2
RF-SPRING-30	30	6	2
RF-SPRING-33	33	10	3
RF-SPRING-34	34	10	3
RF-SPRING-37	37	10	3
RF-SPRING-40	40	10	3
RF-SPRING-42	42	10	3
RF-SPRING-46	46	10	3
RF-SPRING-48	48	10	3
RF-SPRING-50	50	10	3



MACHINES AND ACCESSORIES - protection and sealing

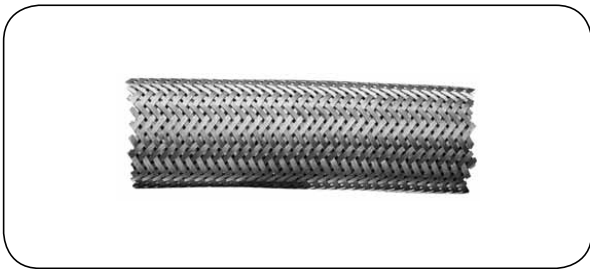


FLAT G

Material: Galvanized steel

Protective spiral made of steel band designed to protect hoses (cables) against abrasion, kinking and crushing.

code	I.D. [mm]	distance between coils [mm]	band thickness [mm]	band width [mm]	standard length [m]
RF-GFLAT-14	14	1.57	0.8	6.35	10
RF-GFLAT-16	16	1.57	0.8	6.35	10
RF-GFLAT-18	18	1.57	0.8	6.35	10
RF-GFLAT-20	20	1.57	0.8	6.35	10
RF-GFLAT-22	22	1.57	0.8	6.35	10
RF-GFLAT-24	24	1.57	0.8	6.35	10



304 B

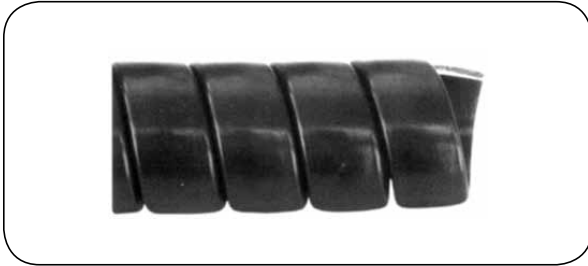
Material: AISI 304 steel

Type: Standard

Steel braids are used as an external hose shield in order to protect hoses against mechanical damage, abrasion, etc. They can be clamped with clamping bands or ferrules.

code	hose I.D. [inch]	braid I.D. [mm]
AT-304B-010	3/8	16.5
AT-304B-012	1/2	21.5
AT-304B-020	3/4	28.5
AT-304B-025	1	36
AT-304B-032	1.1/4	43.5
AT-304B-040	1.1/2	53
AT-304B-050	2	67.5
AT-304B-065	2.1/2	81
AT-304B-080	3	96
AT-304B-100	4	-
AT-304B-125	5	-
AT-304B-150	6	-
AT-304BB-200	8	-
AT-304BB-250	10	-

MACHINES AND ACCESSORIES - protection and sealing

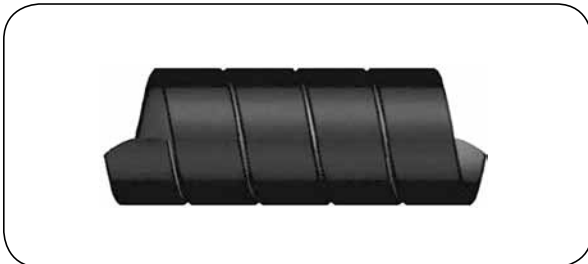


SPIRALINA

Material: Rigid PVC (exhibits memory effect)
Working temp.: From -10°C up to +60°C
 (with peaks up to +70°C)

Protective spiral designed to protect hoses (cables) against abrasion and squeezing. Also used to wrap group of hoses (cables) to form bundles. Resistant to weather influence, UV radiation, ozone, flame (according to UL94VO), oil, diesel oil, water. Not conductive - surface conductivity $10^{10} \Omega$.

code	I.D. [mm]	O.D. [mm]	band thickness [mm]	band width [mm]	range diameter [mm]	weight [kg/m]
SPIRALINA FLEX						
ME-SPIRALINAFX-013	13	15.4	1.2	10	12 ÷ 18	0.05
ME-SPIRALINAFX-016	16	18.4	1.2	12	16 ÷ 26	0.06
ME-SPIRALINAFX-020	20	23.6	1.8	14.5	20 ÷ 27	0.12
ME-SPIRALINAFX-024	24	27.3	1.9	15	23 ÷ 30	0.16
ME-SPIRALINAFX-027	27	30.8	1.9	16	27 ÷ 35	0.20
ME-SPIRALINAFX-030	30	34.4	2.2	18	30 ÷ 45	0.23
ME-SPIRALINAFX-035	35	40	2.2	20.5	35 ÷ 60	0.28
ME-SPIRALINAFX-044	43.5	48	2.3	23	45 ÷ 75	0.40
SPIRALINA						
ME-SPIRALINA-056	56	63	3.5	26	50 ÷ 90	0.85
ME-SPIRALINA-065	64	72.5	4.3	30	60 ÷ 120	1.15
ME-SPIRALINA-080	81	91	5	35	75 ÷ 200	1.70



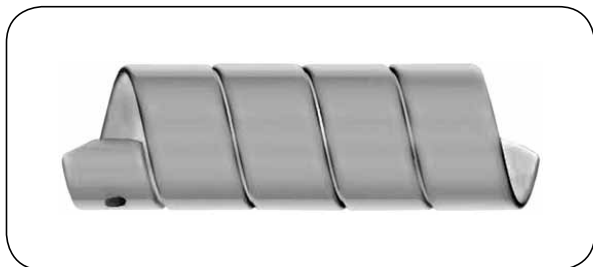
BINDING SPIRAL

Material: Black polyethylene (PE)
Working temp.: From -30°C up to +80°C

Lightweight, very flexible protective spiral made of a band cut from a PE pipe. Designed to protect electric cables and hoses and to wrap them to form bundles. Resistant to acids, oils, solvents and UV radiation.

code	I.D. [mm]	O.D. [mm]	band thickness [mm]	band width [mm]	coil length [m]
SF-BINDING-06	4	6	1	5.5	100
SF-BINDING-08	6	8	1	5.5	50
SF-BINDING-10	8	10	1	8	50
SF-BINDING-12	10	12	1	8	50
SF-BINDING-15	12.5	15	1.25	10	50
SF-BINDING-20	16.6	20	1.7	12.5	25
SF-BINDING-25	21	25	2	12.5	25
SF-BINDING-32	28	32	2	15	25

MACHINES AND ACCESSORIES - protection and sealing



PROTECTOR

Material: Polyethylene (HDPE)
Working temp.: From -50°C up to +100°C

A protective spiral designed to protect hoses (cables) against abrasion, impact and kinking. Also used to wrap several hoses (cables) in order to form a bundle. Improves the visibility of covered hoses or cables. Resistant to acids, oils, solvents and UV radiation. There are holes at both ends of each spiral with an external diameter from 75 mm to 140 mm, which allow joining several protectors together (not coils though). Can be installed either before or after hose assembly installation. Supplied in 1, 1.5 and 6 m lengths in yellow and black (other colours available).

code *	I.D. [mm]	O.D. [mm]	band thickness [mm]	band width [mm]	weight [kg/m]	coil length [m]	hose O.D. [mm]
SF-PROTECTOR-012	9.6	12	1.2	10.5	0.04	25	9 ÷ 13
SF-PROTECTOR-016	13.4	16	1.3	12	0.06	25	13 ÷ 18
SF-PROTECTOR-020	16	20	2	20	0.09	25	16 ÷ 22
SF-PROTECTOR-025	20.6	25	2.2	25	0.15	25/50	20 ÷ 27
SF-PROTECTOR-032	27	32	2.5	22	0.19	25/50	27 ÷ 36
SF-PROTECTOR-040	34.6	40	2.7	24	0.30	25	34 ÷ 44
SF-PROTECTOR-050	43.2	50	3.4	30	0.34	25/50	43 ÷ 55
SF-PROTECTOR-063	55.6	63	3.7	37	0.65	25	55 ÷ 67
SF-PROTECTOR-075	66.2	75	4.4	45	0.73	20	66 ÷ 80
SF-PROTECTOR-090	80.2	90	4.9	45	1.21	20	80 ÷ 98
SF-PROTECTOR-110	99	110	5.5	50	1.76	15	99 ÷ 115
SF-PROTECTOR-125	113.2	125	5.9	52	2.05	12	113 ÷ 130
SF-PROTECTOR-140	127	140	6.5	55	2.51	10	125 ÷ 155

- yellow - add Y to the code, black - add BK to the code



FLEX SPIRAL

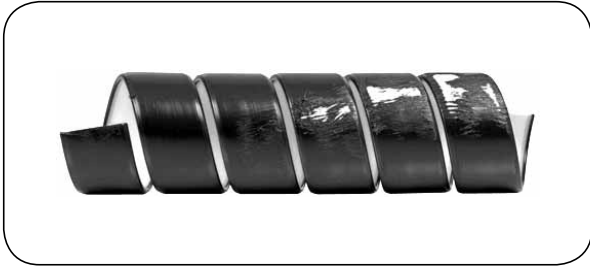
Material: Polyethylene (HDPE)
Working temp.: From -50°C up to +100°C

Extremely flexible variation of PROTECTOR spiral, with smaller band width and thinner wall. For application in places where the ease of spiral installation on already mounted assemblies is of the highest importance. Supplied only in 25 m coils in yellow and black.

code *	I.D. [mm]	O.D. [mm]	band thickness [mm]	band width [mm]	weight [kg/m]	coil length [m]
SF-FLEX-020	16.8	20	1.6	16	0.08	25
SF-FLEX-025	21.6	25	1.7	19	0.10	25
SF-FLEX-032	28	32	2	22	0.18	25
SF-FLEX-050	44.8	50	2.6	24	0.35	25
SF-FLEX-075	68.6	75	3.2	35	0.65	20

- yellow - add Y to the code, black - add BK to the code

MACHINES AND ACCESSORIES - protection and sealing



ABRA

Material: Polyethylene (HDPE)
(black outside, yellow inside)

Working temp.: From -50°C up to +100°C

ABRA, 2-colour version of PROTECTOR spiral with wear indicator. It is black outside and yellow inside. ABRA helps to identify the spots that require careful observation - once the black layer wears off, yellow shows and warns that the spiral may soon need to be replaced with a new one. Available in coils only.

code	I.D. [mm]	O.D. [mm]	band thickness [mm]	band width [mm]	weight [kg/m]	coil length [m]	hose O.D. [mm]
SF-PRO-ABRA-020	16	20	2	20	0.09	25	16 ÷ 22
SF-PRO-ABRA-025	20.6	25	2.2	21.5	0.15	25	20 ÷ 27
SF-PRO-ABRA-032	27.0	32	2.5	22	0.19	25	27 ÷ 36
SF-PRO-ABRA-040	34.6	40	2.7	24	0.30	25	34 ÷ 44
SF-PRO-ABRA-050	43.2	50	3.4	30	0.40	25	43 ÷ 55
SF-PRO-ABRA-063	55.6	63	3.7	27	0.65	25	55 ÷ 67
SF-PRO-ABRA-075	66.2	75	4.4	42	0.73	20	66 ÷ 80



ASTA

Material: Polyethylene (HDPE)
(black outside, green inside)

Working temp.: From -50°C up to +100°C

ASTA, 2-colour version of PROTECTOR spiral. Entirely antistatic, designed for underground operation and for other applications in special environments that require surface conductivity. Average surface resistance: 8 kΩ/m². It is black outside and green inside. Available in coils only.

code	I.D. [mm]	O.D. [mm]	band thickness [mm]	band width [mm]	weight [kg/m]	coil length [m]	hose O.D. [mm]
SF-PRO-ASTA-020	16	20	2	20	0.11	25	16 ÷ 22
SF-PRO-ASTA-025	20.6	25	2.2	21.5	0.17	25	20 ÷ 27
SF-PRO-ASTA-032	27	32	2.5	22	0.23	25	27 ÷ 36
SF-PRO-ASTA-040	34.6	40	2.7	24	0.29	25	34 ÷ 44
SF-PRO-ASTA-050	43.2	50	3.4	30	0.41	25	43 ÷ 55
SF-PRO-ASTA-063	55.6	63	3.7	27	0.70	25	55 ÷ 67
SF-PRO-ASTA-075	66.2	75	4.4	42	0.88	20	66 ÷ 80
SF-PRO-ASTA-090	80.2	90	4.9	45	1.20	20	80 ÷ 98
SF-PRO-ASTA-110	99	110	5.5	50	1.61	15	99 ÷ 115

MACHINES AND ACCESSORIES - protection and sealing



MINE SPIRAL

Material: Brown-grey polyethylene (HDPE)
Working temp.: From -50°C up to +100°C

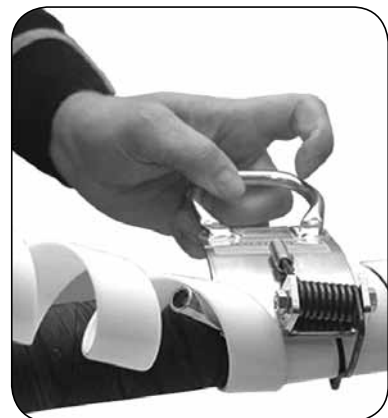
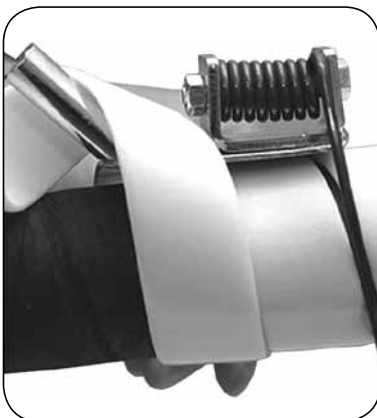
MINE SPIRAL is a version of PROTECTOR spiral with special additives reducing flammability and ignitability. It is intended for machines and many other applications in mines. It is approved for operations in mines as flame resistant - MSHA IC-271 issued by Mine Safety and Health Administration. Available in coils only. MINE SPIRAL+ version is entirely antistatic.

code	I.D. [mm]	O.D. [mm]	band thickness [mm]	band width [mm]	weight [kg/m]	coil length [m]	hose O.D. [mm]
SF-PRO-MSHA-020	16	20	2	20	0.11	25	16 ÷ 22
SF-PRO-MSHA-025	20.6	25	2.2	21.5	0.17	25	20 ÷ 27
SF-PRO-MSHA-032	27	32	2.5	22	0.23	25	27 ÷ 36
SF-PRO-MSHA-040	34.6	40	2.7	24	0.29	25	34 ÷ 44
SF-PRO-MSHA-050	43.2	50	3.4	30	0.41	25	43 ÷ 55
SF-PRO-MSHA-063	55.6	63	3.7	27	0.70	25	55 ÷ 67
SF-PRO-MSHA-075	66.2	75	4.4	42	0.88	20	66 ÷ 80
SF-PRO-MSHA-090	80.2	90	4.9	45	1.20	20	80 ÷ 98
SF-PRO-MSHA-110	99	110	5.5	50	1.61	15	99 ÷ 115

Mounting protective spirals

Protective hose spirals are mounted on hoses using special tools. They are available in two sizes depending on the outer diameter of the hose protective spiral. The spring allows keeping regular distance between the subsequent coils of the spiral.

SF-HAKOP - for hose protective spirals with O.D. from 20 up to 50 mm.
 SF-HAKOI - for hose protective spirals with O.D. from 63 up to 140 mm.



MACHINES AND ACCESSORIES - protection and sealing



SAFE SLEEVE

Material: Black polypropylene (not branded)
Working temp.: From -40°C up to +80°C

SAFE SLEEVE MSHA

Material: Black polyester (branded)
Working temp.: From -40°C up to +120°C

A protective sleeve made of dense fabric intended to protect hydraulic or pneumatic hoses or hose assembly bundles. Excellent abrasion resistance (tested to EN ISO 12947-3), chemical and UV radiation resistance, low electrical conductivity. SAFE SLEEVE perfectly safeguards a hose operator in case of oil burst caused by the breaking hose. Meets the requirements of EN ISO 3457 and EN 12999 EN. MSHA-approved SAFE SLEEVE is suitable for operation in mines as flame resistant.

code	code	I.D. [mm]	width (flat) [mm]	recommended hose O.D. [mm]	standard length [m]
SF-SLRD-017	SF-SLRD-MSHA-017	17	30	14	50
SF-SLRD-023	SF-SLRD-MSHA-023	23	40	15	50
SF-SLRD-027	SF-SLRD-MSHA-027	27	45	22	50
SF-SLRD-030	SF-SLRD-MSHA-030	30	50	25	50
SF-SLRD-036	SF-SLRD-MSHA-036	36	60	30	50
SF-SLRD-039	SF-SLRD-MSHA-039	39	65	34	50
SF-SLRD-046	SF-SLRD-MSHA-046	46	75	40	50
SF-SLRD-055	SF-SLRD-MSHA-055	55	90	48	50
SF-SLRD-062	SF-SLRD-MSHA-062	62	100	55	50
SF-SLRD-078	SF-SLRD-MSHA-078	78	125	70	50
SF-SLRD-109	SF-SLRD-MSHA-109	109	175	100	50
SF-SLRD-125	SF-SLRD-MSHA-125	125	200	115	50



Aluminium ferrules for attaching SAFE SLEEVES

code	O.D. [mm]	I.D. [mm]
SF-ALU-20X16	20	16
SF-ALU-25X21	25	21
SF-ALU-30X26	30	26
SF-ALU-35X31	35	31
SF-ALU-40X35	40	35
SF-ALU-45X38	45	38
SF-ALU-50X45	50	45



SAFE STRIP

Material: Black polypropylene
Working temp.: From -40°C up to +80°C

Strips made of dense fabric designed to bind hose assemblies into bundles. They are branded with SAFE STRIP label.

Three versions are available:

- STRD (with Velcro®),
- STRDR (with Velcro® and a mounting eye),
- STFLL (with stainless steel buckle).

code	code	width [mm]	max. bundle diameter [mm]
SF-STRD-070	SF-STRDR-070	40	70
SF-STRD-100	SF-STRDR-100		100
SF-STRD-125	SF-STRDR-125		125
SF-STRD-155	SF-STRDR-155		155
SF-STRD-180	SF-STRDR-180		180

code	width [mm]	length [m]
SF-STFLL-050	25	500
SF-STFLL-100		1000
SF-STFLL-150		1500



SAFE WRAP

Material: Black polyamide fabric coated with black polyurethane

Working temp.: From -20°C up to +120°C

Very strong wrap cover with Velcro® fasteners attached lengthwise. Very easy to install on hose bundles and to dismantle. The fabric of SAFE WRAP features excellent elongation resistance (EN ISO 13934-1) and 100% water repellence (EN 24920). SAFE WRAP meets the requirements of ISO 3457 standard (tested for porosity). It is highly resistant to abrasion. Other internal diameters also available.

code	I.D. [mm]	length [m]
SF-WRRD-040	40	10 ÷ 30
SF-WRRD-060	60	
SF-WRRD-080	80	
SF-WRRD-100	100	
SF-WRRD-120	120	

MACHINES AND ACCESSORIES - protection and sealing

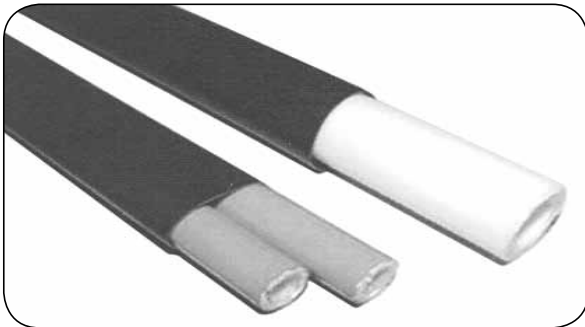


GT 35

Material: Polyester
Working temp.: Up to +100°C

Protective sleeve made of extremely dense polyester fabric. Designed for single hose or hose assembly bundle protection in hydraulic or pneumatic applications. Good resistance to mechanical impact, oils and organic products. Protects the hose and safeguards its operator in case of oil burst caused by hose bursting.

code	I.D. [mm]	width [mm]	weight [kg/m]	standard length [m]
ZC-GT-035	20	35	0.027	100
ZC-GT-040	22	40	0.032	100
ZC-GT-045	25	45	0.034	100
ZC-GT-050	28	50	0.038	100
ZC-GT-055	32	55	0.042	100
ZC-GT-060	35	60	0.045	100
ZC-GT-065	38	65	0.048	100
ZC-GT-080	45	80	0.060	100
ZC-GT-090	50	90	0.065	100
ZC-GT-120	70	120	0.096	100
ZC-GT-150	90	150	0.112	100



GPVC

Material: PVC
Working temp.: Up to +70°C

Protective sleeve made of PVC. Designed for single hose or hose assembly bundle protection in hydraulic or pneumatic applications. Protects the hose and safeguards its operator in case of oil burst caused by hose bursting.

code	I.D. [mm]	wall thickness [mm]	weight [kg/m]	standard length [m]
ZC-GPVC-10	10	0.5	0.026	150
ZC-GPVC-16	16	0.5	0.039	100
ZC-GPVC-20	20	0.6	0.058	100
ZC-GPVC-22	22	0.6	0.063	100
ZC-GPVC-25	25	0.6	0.072	100
ZC-GPVC-25S	25	1.5	0.157	100
ZC-GPVC-28	28	0.6	0.082	100
ZC-GPVC-30	30	0.6	0.087	50
ZC-GPVC-30S	30	1.5	0.187	50
ZC-GPVC-33	33	0.7	0.104	50
ZC-GPVC-33S	33	1.5	0.218	50
ZC-GPVC-38	38	0.7	0.135	50
ZC-GPVC-38S	38	1.5	0.285	50
ZC-GPVC-40	40	0.7	0.141	50
ZC-GPVC-45	45	0.7	0.144	50
ZC-GPVC-50	50	0.7	0.167	50
ZC-GPVC-55	55	0.7	0.184	50

MACHINES AND ACCESSORIES - protection and sealing



CABLE ISOL®

Reinforcement: Vulcanized synthetic cord
Internal layer: Black SBR rubber
Working temp.: From -30°C up to +80°C

Thin-walled protective hose intended for application in industry and welding machines. Other hose version, CABLE ISOL with non-conductive external layer is also available.

code	I.D. [mm]	O.D. [mm]	weight [kg/m]	standard length [m]
IV-CABLEISOL-19X22	19	22	0.12	40
IV-CABLEISOL-20X23	20	23	0.12	40
IV-CABLEISOL-22X24	22	24	0.10	40
IV-CABLEISOL-22X25	22	25	0.14	40
IV-CABLEISOL-25X27	25	27	0.11	40
IV-CABLEISOL-25X28	25	28	0.15	40
IV-CABLEISOL-28X31	28	31	0.17	40
IV-CABLEISOL-32X35	32	35	0.19	40
IV-CABLEISOL-40X43	40	43	0.24	40
IV-CABLEISOL-45X48	45	48	0.27	40



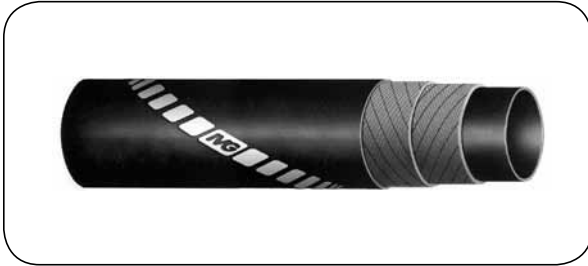
COOLCABLE®

Internal layer: Black SBR/NR rubber
Reinforcement: Textile braid
External layer: Black SBR/NR rubber
Working temp.: From -30°C up to +80°C

Thin-walled insulating hose designed to cool electric cables in automatic welding systems. Electrical resistance $R > 10^8 \Omega/m$.

code	I.D. [mm]	O.D. [mm]	working pressure [bar]	theoretical bursting press. [bar]	weight [kg/m]	standard length [m]
IV-COOLCABLE-12	12	22	10	30	0.35	120
IV-COOLCABLE-14	14	21	10	30	0.25	120
IV-COOLCABLE-15	15	22	10	30	0.26	120
IV-COOLCABLE-18	18	28	10	30	0.47	120
IV-COOLCABLE-20	20	30	10	30	0.51	120
IV-COOLCABLE-25	25	33	10	30	0.45	120
IV-COOLCABLE-28	28	35	10	30	0.44	120
IV-COOLCABLE-30	30	40	10	30	0.72	120
IV-COOLCABLE-35	35	45	10	30	0.77	120
IV-COOLCABLE-38	38	47	10	30	0.72	120
IV-COOLCABLE-42	42	50	10	30	0.70	120
IV-COOLCABLE-48	48	60	10	30	1.30	120
IV-COOLCABLE-55	55	65	10	30	1.16	120

MACHINES AND ACCESSORIES - protection and sealing

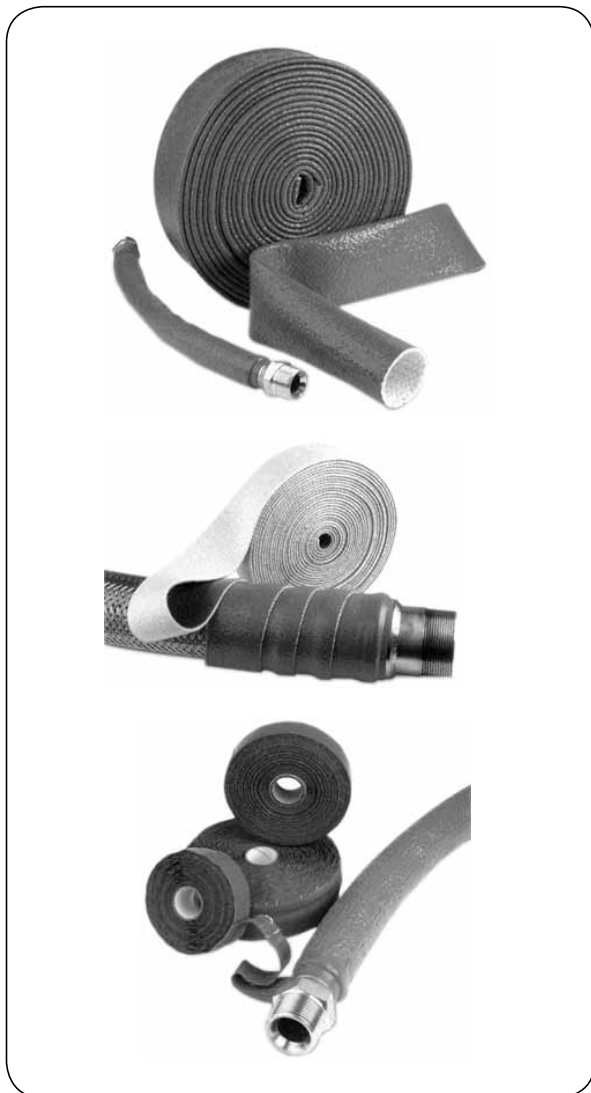


GUARDIAN® ELECTRO

Internal layer: Black EPDM rubber
Reinforcement: Textile braid
External layer: Black EPDM rubber
Working temp.: From -40°C up to +90°C
 (with peaks up to +110°C)

Delivery hose designed to protect and cool electrical cables in steelmaking industry. The internal hose layer is resistant to hot cooling water, process water, corrosion inhibitors and water with anti-freezing additives. The internal and external layers are non-conductive. Electrical resistance $R > 10^8 \Omega/m$, break down voltage $> 6 \text{ kV/mm}$. The external layer is resistant to ageing, ozone and radiant heat from electric arc furnaces, self-extinguishing (compliant with ASTM C-542 standard). Bending radius is defined at 1 bar pressure.

code	I.D. [mm]	O.D. [mm]	working pressure [bar]	bursting pressure [bar]	bending radius [mm]	weight [kg/m]	standard length [m]
IV-GUARDIAN-019	19	30	10	30	70	0.51	120
IV-GUARDIAN-025	25	37	10	30	80	0.72	120
IV-GUARDIAN-030	30	42	10	30	80	0.83	120
IV-GUARDIAN-032	32	44	10	30	90	0.88	120
IV-GUARDIAN-035	35	48	10	30	100	1.06	120
IV-GUARDIAN-040	40	53	10	30	140	1.20	120
IV-GUARDIAN-042	42	55	10	30	150	1.24	120
IV-GUARDIAN-050	50	65	10	30	150	1.70	120
IV-GUARDIAN-055	55	70	10	30	170	1.85	120
IV-GUARDIAN-060	60	76	10	30	170	2.14	120
IV-GUARDIAN-063	63.5	79	10	30	180	2.18	120
IV-GUARDIAN-070	70	86	10	30	190	2.49	120
IV-GUARDIAN-080	80	96	10	30	220	2.67	120
IV-GUARDIAN-090	90	108	10	30	220	3.35	120
IV-GUARDIAN-100	100	118	10	30	300	3.69	120



PYROJACKET PYROTAPE PYROSIL

Material: Glass fibre with silicone coating in iron oxide red colour

Working temp.: From -54°C up to +260°C
Up to +1090°C for 15 ÷ 20 minutes
Up to +1650°C for 15 ÷ 30 seconds

For thermal protection of hoses, cables and ropes. Resistant to abrasion, oils, fuels and the majority of industrial chemicals. Widely used in steel melting plants, steel mills, glass works and foundries - molten metal or glass splashes are shed by the coating immediately. Also used to insulate steam and hot oil installations - protection against burns and energy losses. The variation meant for aviation made according to SAE Aerospace Standard 1072D.

Both PYROTAPE and self-bonding PYROSIL tape are perfect for use as an end sealant of PYROJACKET shield at the ends of assemblies and for any object of irregular shape.

Also available as a protective sheet - PYROBLANKET.

PYROJACKET

code	coating internal diameter [mm]	standard length [m]
FQ-PJ-008	8	30
FQ-PJ-010	10	30
FQ-PJ-013	13	30
FQ-PJ-016	16	30
FQ-PJ-019	19	30
FQ-PJ-022	22	30
FQ-PJ-025	25	30
FQ-PJ-029	29	30
FQ-PJ-032	32	30
FQ-PJ-035	35	30
FQ-PJ-038	38	30
FQ-PJ-041	41	30
FQ-PJ-044	44	30
FQ-PJ-051	51	30
FQ-PJ-057	57	30
FQ-PJ-064	64	30
FQ-PJ-070	70	30
FQ-PJ-076	76	30
FQ-PJ-083	83	30
FQ-PJ-089	89	30
FQ-PJ-095	95	30
FQ-PJ-102	102	30
FQ-PJ-114	114	30
FQ-PJ-127	127	30

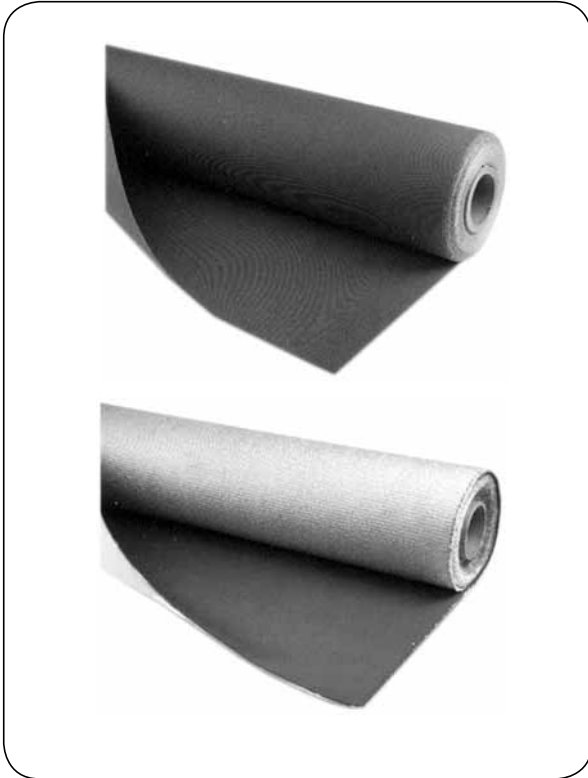
PYROTAPE

code	band width [mm]	roll length [m]
FQ-PT-025	25	15 or 30
FQ-PT-050	50	15 or 30
FQ-PT-075	76	15 or 30
FQ-PT-100	102	15 or 30
FQ-PT-125	127	15 or 30

PYROSIL

code	band width [mm]	tape thickness [mm]	roll length [m]
FQ-PST-25X05	25	0.5	11
FQ-PST-38X15	38	1.5	11

MACHINES AND ACCESSORIES - protection and sealing



PYROBLANKET

Material: Glass fibre with silicone coating in iron oxide red colour
Working temp.: From -54°C up to +260°C
Up to +1090°C for 15 ÷ 20 minutes
Up to +1650°C for 15 ÷ 30 seconds

Thermal protective shield in a sheet version. Resistant to abrasion, oils, fuels and the majority of industrial chemicals. Widely used in steel melting plants, steel mills, glass works and foundries - molten metal or glass splashes are shed by the coating immediately.

Available in two variations:

PYROBLANKET 32 - glass fabric coated both sides with iron-oxide silicone compound, with 1085 g/m² basis weight. Primarily used as weld splatter protection as well as for lighter application in foundries. Available in roll widths of 915 and 1525 mm;

PYROBLANKET 96 - thick glass fabric coated one side with thick layer of iron-oxide silicone compound, with 3260 g/m² basis weight. Primarily used to make protective covers in foundries - the external compound layer sheds molten metal almost immediately. Available in roll width of 1016 mm.



EAF CABLE COVER

Material: Glass fibre with silicone coating in iron oxide red colour
Working temp.: From -54°C up to +260°C
Up to +1090°C for 15 ÷ 20 minutes
Up to +1650°C for 15 ÷ 30 seconds

Designed for thermal protection of water-cooled power cables feeding electric arc furnaces in steel plants. Made of PYROBLANKET 96 fabric equipped with a Nomex® hook and loop closure system to enable installation without disconnecting the cables. Resistant to heat radiation, abrasion, impact, flame and molten metal splash occurring during furnace charging operations. The cover is both non-conductive and not influenced by furnace magnetic induction. Available in a full diameter range up to 12" (305 mm).



PYROSEALANT

Material: Amorphous silica, polydimethylsiloxane, iron oxide and curing catalyst compound
Working temp.: Up to +287°C
(with peaks up to +538°C)

High temperature resistant, semi-liquid sealing compound that cures to a tack-free state in 10+15 minutes, and completely within approximately 18 hours. Supplied in 310 ml tubes.

FQ-PS-310



THERMOSLEEVE B

Material: Fibre glass
Working temp.: Up to +538°C (with peaks up to +705°C)

Thermal, heavy wall protective sleeve made of glass fibre. Features excellent thermal and electrical insulation properties. THERMOSLEEVE B can be used as the only protection of hoses and cables or it can be covered with some extra shield such as PYROJACKET or SILICAFLEX in order to increase the degree of insulation. It is available in two wall thickness options: 1/8" (3.2 mm) and 1/16" (1.6 mm).

THERMOSLEEVE B

code	coating I.D. [mm]	thickness [mm]	length [m]
FQ-TSB-08	13	3.2	100
FQ-TSB-12	19	3.2	90
FQ-TSB-14	22	3.2	90
FQ-TSB-16	25	3.2	88
FQ-TSB-20	32	3.2	85
FQ-TSB-24	38	3.2	68
FQ-TSB-32	51	3.2	57
FQ-TSB-40	64	3.2	54
FQ-TSB-48	76	3.2	51
FQ-TSB-64	102	3.2	42

THERMOSLEEVE BL

code	coating I.D. [mm]	thickness [mm]	length [m]
FQ-TSBL-08	13	1.6	100
FQ-TSBL-12	19	1.6	90
FQ-TSBL-14	22	1.6	90
FQ-TSBL-16	25	1.6	88
FQ-TSBL-20	32	1.6	85
FQ-TSBL-24	38	1.6	68
FQ-TSBL-32	51	1.6	57
FQ-TSBL-40	64	1.6	54
FQ-TSBL-48	76	1.6	51
FQ-TSBL-64	102	1.6	42



THERMOSLEEVE S

Material: Fibre glass
Working temp.: Up to +538°C (with peaks up to +705°C)

Thermal protective sleeve made of glass fibre braid, heat cleaned and saturated with special acrylic substance. It is smooth with no loose fibres falling out. It fits well and is relatively highly resistant to abrasion. The construction of the braid enables expansion and contraction by 25% so it adjusts to the diameter required.

code	coating I.D. [mm]	diameter range [mm]	code	coating I.D. [mm]	diameter range [mm]
FQ-TSS-10	16	16 ÷ 22	FQ-TSS-22	35	35 ÷ 57
FQ-TSS-14	22	23 ÷ 32	FQ-TSS-44	70	58 ÷ 102

MACHINES AND ACCESSORIES - protection and sealing



SILICAFLEX

Material: Silica fibre (silicon dioxide)
Working temp.: +982°C (with peaks up to +1650°C)

Thermal protective shield available as a sheet, sleeve or tape. Very strong and resistant to chemicals (except for hydrofluoric acid, phosphoric acid and strong bases). Completely resistant to flames. High content of pure silica (over 96%) guarantees excellent heat resistance, flexibility and minimum shrinkage. Electric insulation is its further property.

SILICAFLEX BLANKET available in thickness of: 0.76 mm and 1.27 mm and standard width of 915 mm. SILICAFLEX SLEEVE available in a diameter range from 3/8" (10 mm) to 7" (178 mm).

SILICAFLEX TAPE AB coated one side with pressure sensitive backing that cures when the tape is stretched. Available in two standard widths of: 51 mm and 102 mm.

SILICAFLEX BLANKET

code	band width [mm]	band thickness [mm]	length [m]
FQ-SFB18-36	915	0.76	up to 45
FQ-SFB32-36	915	1.27	up to 45

SILICAFLEX TAPE AB

code	band width [mm]	standard length [m]
FQ-STAB-02	51	45
FQ-STAB-04	102	45

SILICAFLEX SLEEVE

code	coating internal diameter [mm]	standard length [m]
FQ-SFHD-06	10	15
FQ-SFHD-08	13	15
FQ-SFHD-12	19	15
FQ-SFHD-16	25	15
FQ-SFHD-24	38	15
FQ-SFHD-32	51	15
FQ-SFHD-48	76	15
FQ-SFHD-64	102	15
FQ-SFHD-80	127	15
FQ-SFHD-96	152	15
FQ-SFHD-116	178	15



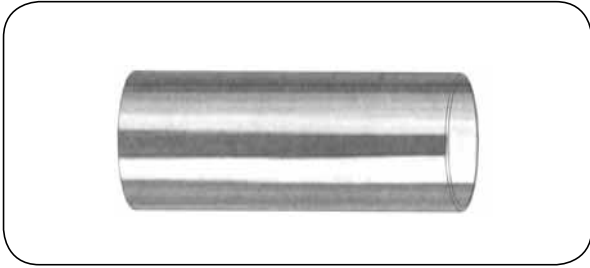
PYREFLECT SLEEVE

Material: Aramid fibre, aluminium film
Working temp.: +343°C (with peaks up to +538°C, laboratory tested up to +1650°C (1 min.))

Thermal reflective sleeve. Reflects more than 90% of radiant heat energy. Commonly used to stop occasional infrared radiation. Resistant to molten metal splashes, abrasion, water and oil. Good resistance to flame. Available with snap fasteners or Velcro® fasteners attached lengthwise (attached without disconnection of hoses or cables). It is also available as a sheet (PYREFLECT BLANKET).

code	coating internal diameter [mm]	code	coating internal diameter [mm]
FQ-PRF-08	13	FQ-PRF-32	51
FQ-PRF-12	19	FQ-PRF-40	64
FQ-PRF-16	25	FQ-PRF-48	76
FQ-PRF-20	32	FQ-PRF-56	89
FQ-PRF-24	38	FQ-PRF-64	102
FQ-PRF-28	44		

MACHINES AND ACCESSORIES - protection and sealing



FEP heat shrinkable sleeve

Material: Fluorinated ethylene propylene
Max. working temp.: +204°C
Shrink temp.: From +121°C up to +204°C
 (shrinkage range 20÷25%)
Hardness: 53° Shore (A)
Density: 2.15 g/cm³

FEP shrinkable sleeve, highly resistant to kinking and cracking, for application in numerous branches of industry. Long service life can be counted in years, even when it operates under high pressure. Smooth surface prevents dirt sticking. Excellent thermal resistance. Widely used in industry (e.g. as a sleeve for rollers in paper production or in printing houses). Certified by FDA.

code	I.D. [mm]	length [cm]	shrinkage range [mm]	code	I.D. [mm]	length [cm]	shrinkage range [mm]
VE-HFE6-10020-01	28	30.5	22 ÷ 26	VE-HFE6-25020-01	71.5	30.5	54 ÷ 67
VE-HFE6-10020-02		61		VE-HFE6-25020-02		61	
VE-HFE6-10020-03		91		VE-HFE6-25020-03		91	
VE-HFE6-10020-04		122		VE-HFE6-25020-04		122	
VE-HFE6-10020-05		152		VE-HFE6-25020-05		152	
VE-HFE6-10020-06		183		VE-HFE6-25020-06		183	
VE-HFE6-10020-07		213		VE-HFE6-25020-07		213	
VE-HFE6-10020-08		244		VE-HFE6-25020-08		244	
VE-HFE6-10020-09		274		VE-HFE6-25020-09		274	
VE-HFE6-10020-10		305		VE-HFE6-25020-10		305	
VE-HFE6-12520-01	35	30.5	27 ÷ 32	VE-HFE6-30020-01	80	30.5	68 ÷ 74
VE-HFE6-12520-02		61		VE-HFE6-30020-02		61	
VE-HFE6-12520-03		91		VE-HFE6-30020-03		91	
VE-HFE6-12520-04		122		VE-HFE6-30020-04		122	
VE-HFE6-12520-05		152		VE-HFE6-30020-05		152	
VE-HFE6-12520-06		183		VE-HFE6-30020-06		183	
VE-HFE6-12520-07		213		VE-HFE6-30020-07		213	
VE-HFE6-12520-08		244		VE-HFE6-30020-08		244	
VE-HFE6-12520-09		274		VE-HFE6-30020-09		274	
VE-HFE6-12520-10		305		VE-HFE6-30020-10		305	
VE-HFE6-15020-01	47	30.5	33 ÷ 43	VE-HFE6-35020-01	99.5	30.5	75 ÷ 92
VE-HFE6-15020-02		61		VE-HFE6-35020-02		61	
VE-HFE6-15020-03		91		VE-HFE6-35020-03		91	
VE-HFE6-15020-04		122		VE-HFE6-35020-04		122	
VE-HFE6-15020-05		152		VE-HFE6-35020-05		152	
VE-HFE6-15020-06		183		VE-HFE6-35020-06		183	
VE-HFE6-15020-07		213		VE-HFE6-35020-07		213	
VE-HFE6-15020-08		244		VE-HFE6-35020-08		244	
VE-HFE6-15020-09		274		VE-HFE6-35020-09		274	
VE-HFE6-15020-10		305		VE-HFE6-35020-10		305	
VE-HFE6-20020-01	57	30.5	44 ÷ 53	VE-HFE6-40020-01	117	30.5	93 ÷ 108
VE-HFE6-20020-02		61		VE-HFE6-40020-02		61	
VE-HFE6-20020-03		91		VE-HFE6-40020-03		91	
VE-HFE6-20020-04		122		VE-HFE6-40020-04		122	
VE-HFE6-20020-05		152		VE-HFE6-40020-05		152	
VE-HFE6-20020-06		183		VE-HFE6-40020-06		183	
VE-HFE6-20020-07		213		VE-HFE6-40020-07		213	
VE-HFE6-20020-08		244		VE-HFE6-40020-08		244	
VE-HFE6-20020-09		274		VE-HFE6-40020-09		274	
VE-HFE6-20020-10		305		VE-HFE6-40020-10		305	

MACHINES AND ACCESSORIES - protection and sealing

FEP heat shrinkable sleeve

Table continuation:

code	I.D. [mm]	length [cm]	shrinkage range [mm]	code	I.D. [mm]	length [cm]	shrinkage range [mm]
VE-HFE6-50020-01	140.5	30.5	109 ÷ 130	VE-HFE6-10520-01	285.5	30.5	242 ÷ 266
VE-HFE6-50020-02		61		VE-HFE6-10520-02		61	
VE-HFE6-50020-03		91		VE-HFE6-10520-03		91	
VE-HFE6-50020-04		122		VE-HFE6-10520-04		122	
VE-HFE6-50020-05		152		VE-HFE6-10520-05		152	
VE-HFE6-50020-06		183		VE-HFE6-10520-06		183	
VE-HFE6-50020-07		213		VE-HFE6-10520-07		213	
VE-HFE6-50020-08		244		VE-HFE6-10520-08		244	
VE-HFE6-50020-09		274		VE-HFE6-10520-09		274	
VE-HFE6-50020-10		305		VE-HFE6-10520-10		305	
VE-HFE6-60020-01	162	30.5	131 ÷ 150	VE-HFE6-12025-01	324.5	30.5	267 ÷ 302
VE-HFE6-60020-02		61		VE-HFE6-12025-02		61	
VE-HFE6-60020-03		91		VE-HFE6-12025-03		91	
VE-HFE6-60020-04		122		VE-HFE6-12025-04		122	
VE-HFE6-60020-05		152		VE-HFE6-12025-05		152	
VE-HFE6-60020-06		183		VE-HFE6-12025-06		183	
VE-HFE6-60020-07		213		VE-HFE6-12025-07		213	
VE-HFE6-60020-08		244		VE-HFE6-12025-08		244	
VE-HFE6-60020-09		274		VE-HFE6-12025-09		274	
VE-HFE6-60020-10		305		VE-HFE6-12025-10		305	
VE-HFE6-70020-01	189.5	30.5	151 ÷ 176	VE-HFE6-13025-01	368.5	30.5	303 ÷ 343
VE-HFE6-70020-02		61		VE-HFE6-13025-02		61	
VE-HFE6-70020-03		91		VE-HFE6-13025-03		91	
VE-HFE6-70020-04		122		VE-HFE6-13025-04		122	
VE-HFE6-70020-05		152		VE-HFE6-13025-05		152	
VE-HFE6-70020-06		183		VE-HFE6-13025-06		183	
VE-HFE6-70020-07		213		VE-HFE6-13025-07		213	
VE-HFE6-70020-08		244		VE-HFE6-13025-08		244	
VE-HFE6-70020-09		274		VE-HFE6-13025-09		274	
VE-HFE6-70020-10		305		VE-HFE6-13025-10		305	
VE-HFE6-80020-01	218	30.5	177 ÷ 203	VE-HFE6-14025-01	447.5	30.5	344 ÷ 416
VE-HFE6-80020-02		61		VE-HFE6-14025-02		61	
VE-HFE6-80020-03		91		VE-HFE6-14025-03		91	
VE-HFE6-80020-04		122		VE-HFE6-14025-04		122	
VE-HFE6-80020-05		152		VE-HFE6-14025-05		152	
VE-HFE6-80020-06		183		VE-HFE6-14025-06		183	
VE-HFE6-80020-07		213		VE-HFE6-14025-07		213	
VE-HFE6-80020-08		244		VE-HFE6-14025-08		244	
VE-HFE6-80020-09		274		VE-HFE6-14025-09		274	
VE-HFE6-80020-10		305		VE-HFE6-14025-10		305	
VE-HFE6-90020-01	259	30.5	204 ÷ 241	VE-HFE6-16525-01	500.5	30.5	417 ÷ 466
VE-HFE6-90020-02		61		VE-HFE6-16525-02		61	
VE-HFE6-90020-03		91		VE-HFE6-16525-03		91	
VE-HFE6-90020-04		122		VE-HFE6-16525-04		122	
VE-HFE6-90020-05		152		VE-HFE6-16525-05		152	
VE-HFE6-90020-06		183		VE-HFE6-16525-06		183	
VE-HFE6-90020-07		213		VE-HFE6-16525-07		213	
VE-HFE6-90020-08		244		VE-HFE6-16525-08		244	
VE-HFE6-90020-09		274		VE-HFE6-16525-09		274	
VE-HFE6-90020-10		305		VE-HFE6-16525-10		305	