

STANDARD

FLEXOLINE® safety clamps have been developed and manufactured in close collaboration with customers and hose manufacturers. The hose industry developed thin-wall hoses that are lighter and more flexible than ever before. The standard RK safety clamps complying with EN 14420-3 / DIN 2817 are too big for this new generation thin-wall hoses. To solve this inconvenience and for safety reasons LMC-Couplings developed FLEXOLINE® safety clamps for thin-wall rubber hoses.

OPERATION

FLEXOLINE® safety clamps are based on the shell type clamps, and are intended for use with thin-wall hoses. FLEXOLINE® safety clamps have a rim on the inside, which fits over the hose tail collar when the bolts are tightened. When FLEXOLINE® safety clamps are assembled correctly, the coupling cannot be pulled out of the hose. Another advantage of FLEXOLINE® safety clamps is that when a hose is withdrawn from service for any reason, the LMC-Couplings shells and couplings can be easily dismantled for reuse if not damaged during service.

FLEXOLINE® safety clamps can be used to replace worm drive clamps or bolt clamps in hose coupling assemblies.

APPLICATION

Assembly of thin-wall rubber hoses

WORKING PRESSURE

-0.8 bar / -11 psi up to 25 bar/360 psi

TEMPERATURE

-20°C/-4 °F to + 65°C/149°F

Hose, coupling, assembly method and seal must be chosen in relation with the desired application and temperature.

MATERIAL

■ FLEXOLINE® safety clamp shells

Forged aluminium	USA	ASTM B247, grade 6061-T6
	Germany	DIN 1749 grade AlMgSi1 F28 work stock No. 3.2315.61
	UK	BS 1472 HE 20 Grade 6061

Cast stainless steel	USA	ASTM A666 grade 316 stainless steel
	Germany	DIN 17440 grade 1.4401 X5CrNiMo1810
	UK	BS 316 S16

■ Nuts and bolts

Aluminium FLEXOLINE® safety clamps: bolts complying with EN ISO 4762 / DIN 912, zinc plated 10.9
nuts complying with EN ISO 4032 / DIN 934, zinc plated 10.9

FLEXOLINE® safety clamps are supplied complete with nuts and bolts.

ASSEMBLY

See chapter E for assembly instructions on smooth hose shank couplings.



FLEXOLINE® SAFETY CLAMPS



FLEXOLINE® SAFETY CLAMPS: ALUMINIUM

ND	For hose mm	OD hose min-max mm	Dimensions		Nuts and bolts		Weight/pc Kg	Reference
			Height mm	Width mm	Quantity	Thread metric		
25	25 x 5.0	34 - 36	50	69	4	M6	0.19	FRK025005
32	32 x 5.0	41 - 43	50	76	4	M6	0.28	FRK032005
40	38 x 5.0	47 - 49	50	83	4	M6	0.28	FRK038005
50	50 x 5.0	59 - 61	56	96	4	M8	0.38	FRK050005
65	63 x 6.0	74 - 76	74	117	4	M8	0.53	FRK063006
80	75 x 6.0	86 - 88	76	128	4	M8	0.58	FRK075006
100	100 x 6.5	112 - 114	120	166	4	M10	1.16	FRK100065



Production method: forging

Set of FLEXOLINE® safety clamps = one pair of clamps, nuts and bolts included

Bolts: DIN 912 / EN ISO 4762, zinc plated 10.9

Nuts: DIN 934 / EN ISO 4032, zinc plated 10.9

FLEXOLINE® SAFETY CLAMPS: STAINLESS STEEL

ND	For hose mm	OD hose min-max mm	Dimensions		Nuts and bolts		Weight/pc Kg	Reference
			Height mm	Width mm	Quantity	Thread metric		
50	50 x 5.5	60 - 62	56	96	4	M8	0.38	FRKR050005
65	63 x 6.0	74 - 76	74	117	4	M8	0.53	FRKR063006
80	75 x 6.5	87 - 89	76	128	4	M8	0.58	FRKR075006



Production method: investment casting

Set of FLEXOLINE® safety clamps = one pair of clamps, nuts and bolts included

Bolts: DIN 912 / EN ISO 4762, stainless steel A.2 class 70

Nuts: DIN 934 / EN ISO 4032, stainless steel A.2 class 70

BOLTS EN ISO 4762

Size	Material	Box quantity	Weight/pc Kg	Reference
M6x20	Zinc plated 10.9	500	3.22	BVID06X20
M8x25	Zinc plated 10.9	200	2.94	BVID08X25
M10x40	Zinc plated 10.9	100	3.20	BVID10X40
M6x20	Stainless steel A.2	500	3.16	BRID06X20
M8x25	Stainless steel A.2	200	3.00	BRID08X25



NUTS EN ISO 4032

Size	Material	Box quantity	Weight/pc Kg	Reference
M6	Zinc plated 10.9	250	0.55	MVD06
M8	Zinc plated 10.9	250	1.20	MVD08
M10	Zinc plated 10.9	250	1.75	MVD10
M6	Stainless steel A.2	250	0.50	MRD06
M8	Stainless steel A.2	250	1.10	MRD08



IDENTIFICATION RING

ND	Material	Ø ID mm	Weight/pc Kg	Reference
25	Stainless steel	43.0	0.07	IR025
32	Stainless steel	48.3	0.08	IR032
40	Stainless steel	60.3	0.12	IR038
50	Stainless steel	70.0	0.11	IR050
80	Stainless steel	101.6	0.28	IR075
100	Stainless steel	129.0	0.44	IR100



Polished stainless steel AISI 304 - 1.4301
 Identification rings are slid across the hose containing engraved technical information like working pressure, hose identification, certification number, ...