

### **ELAPHARM®**

# Hose Assemblies for use in the Pharmaceutical and Biotech Industries

- Clean transfer: hose assemblies for highest media purity requirements
- ultra smooth lining of Teflon® PTFE
- flexible, homogeneous, kink resistant, pressure and vacuum resistant elastomer hose construction to DIN 26055-3/EN 16820
- FDA / USP Class VI conforming
- (EU) Nr. 10/2011, Nr. 1282/2011, Nr. 1183/2011, Nr. 202/2014 (EU), Nr. 1935/2004 and Nr. 2023/2006; Bed.Ggst V, 24.6.2013; LFGB
- as ELAPHARM (non electrically conductive) or ELAPHARM OHM (fully electrically conductive)
- nominal bore DN 13 50 mm
- temperature up to +150° C, vacuum 0,8 bar, PN 16

The homogeneous hose construction of ELAPHARM where all layers incl. the lining are permanently bonded to each other results in a good kink and vacuum resistance and assists durability and flexibility.

The FDA-conform PTFE liner is suitable for all commonly used media in the foodstuff, pharmaceutical and chemical industries. It is easy to clean and also suitable for highly viscous media.

There is a choice of fittings, e.g. free of dead spaces/flared, meaning the PTFE lining flared over ends, no entrapment.

Hose assembling to customer specification is done in-house by Elaflex, straight from the reel - for a fast delivery of your assemblies.

Hose Weight	HOSE SIZE			Working Pressure	Test Pressure	max. Vacuum	Bending Radius	Reel Length	PART NUMBER
≈kg/m	IDin.	IDmm	ODmm	bar	bar	bar	mm	≈ m	Туре
0,4	1/2"	13	23				110		EPH 13
0,5	5/8"	16	27				140		EPH 16
0,6	3/4"	19	31				170		EPH 19
0,9	1"	25	37	16	25	0,8	105	40	EPH 25
1,2	11/4"	32	44				110		EPH 32
1,3	1½"	38	51				145		EPH 38
2,3	2	50	66				210		EPH 50

**ELAPHARM** electrically isolating 'I', blue cover. Corresponds to DIN 26055-3/EN 16820, Type A. FDA conform. Homogeneous elastomer hose construction with smooth, white Teflon® PTFE liner.

Type EPH



Lining

: Teflon® PTFE white, permanently bonded with reinforcement, non electrically conductive, seamless,

smooth, FDA conform\*).

Reinforcements: DN 13-19 stainless steel braids, no helix

DN 25-50 high-tensile, temperature restistant

textile braids, stainless steel helix

Cover

: EPDM blue, satin finish, non electrically conductive,

FDA conform\*).

Application: Hose assemblies for use in the pharmaceutical and biotech industries, as well as for foodstuffs and chemicals.

Suitable for all commonly used media. Temperature range -30°C up to +150°C depending on medium, working pressure from -0,8 bar (vacuum) up to 16 bar.

Supplied in fitted lengths complete with crimped end fittings. Choice of connection types and mounting systems (see overleaf).

Marking on coupling ferrule (example):

ELAFLEX · Type · DIN · DN · PTFE · Serial Number · Month.Year · PT (bar)

Hose Marking: DN · Quarter-Year · Batch-No. and

$\overline{\text{ELAPHARM}^{\$} \cdot \text{DIN 26055-3} \cdot \text{A:FDA} \cdot \text{PTFE} \cdot \text{SD} \cdot \text{Isolating} \cdot 16\text{/-}0,8 \text{ bar} \cdot -30^{\circ}\text{C} + 150^{\circ}\text{C} \cdot \text{ELAFLEX} \cdot \textcircled{\$}}$										
$\overline{\text{ELAPHARM}\$\text{OHM}\cdot\text{DIN}260553\cdot\text{A:FDA}\cdot\text{PTFE}\cdot\text{SD}\cdot\Omega/\text{T}\cdot\text{16/-0,8}\text{bar}\cdot30^{\circ}\text{C}+\text{150}^{\circ}\text{C}\cdot\text{ELAFLEX}\cdot\underline{\circledast}}$										
0,4	1/2"	13	23				110		EPH-OHM 13 G	
0,5	5/8"	16	27				140		EPH-OHM 16 G	
0,6	3/4"	19	31				170		EPH-OHM 19 G	
0,9	1"	25	37	16	25	0,8	105	40	EPH-0HM 25 G	
1,2	1¼"	32	44				110		EPH-0HM 32 G	
1,3	1½"	38	51				145		EPH-OHM 38 G	
2,3	2	50	66				210		EPH-0HM 50 G	

**ELAPHARM OHM G** electrically conductive ' $\Omega/T$ ', light grey cover. Corresponds to DIN 26055-3 / EN 16820, Type A. FDA conform. Homogeneous elastomer hose construction with smooth, black Teflon® PTFE liner.







Lining

: Teflon® PTFE black, permanently bonded with reinforcement, electrically conductive, seamless,

smooth, FDA conform\*).

Reinforcements: DN 13-19 stainless steel braids, no helix DN 25-50 high-tensile, temperature restistant

textile braids, stainless steel helix

Cover : EPDM light grey with OHM conductive stripe,

satin finish, electrically conductive. FDA conform\*).

Also available on request: ELAPHARM OHM electrically conductive 'Ω/T' with black cover.

<sup>\*)</sup> Lining and cover corresponds to FDA guideline 21 CFR 177.1550 and CFR 178.3297 as well as USP Class VI and fulfils the requirements of EU regulations No. 1935/2004 and No. 10/2011.

# Clean Connection.

Elaflex supplies all ELAPHARM hose assemblies in fitted lengths, with crimped couplings.

 In your enquiry please provide us with the requested coupling type.

For ELAPHARM we offer among other the following coupling types with integrated hose tail.

Screw, flange and clamp connections to

**DIN 32676** ('Triclamp')

**DIN 11864**-1/-2/-3 ('Aseptic')

DIN 11853 - 1/-2/-3 ('Hygiene')

**DIN 11851** ('Foodstuff Thread')

EN 14420-7 ('Cam Locking Couplings')

Flanges e.g. EN 1092-1

Welding Nipples acc. DIN 11866

Other on request.

 In your enquiry please provide us with the requested mounting system.

For pharmaceuticals, biotech media and foodstuffs we suggest the following two systems.

#### Crimping 'free of dead spaces/flared'

Crimped hose coupling, PTFE lining flared over ends (patented process). No entrapment, use for highest media purity requirements. Usually used with DIN 32676 (Triclamp), foodstuff thread DIN 11851 or flanged hose couplings.

## Crimping 'gap minimised'

Crimped hose coupling with flush-mounted hose tail. No obstruction of inner cross-section, almost no gap or dead volume between lining and hose tail. For high purity requirements. Suitable for all coupling types.

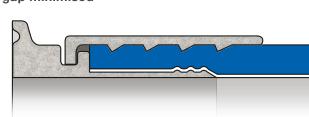


Crimping
'free of dead spaces / flared'

Materials: coupling with hose tail stainless steel 1.4404, crimping ferrule stainless steel 1.4301

Crimping

'gap minimised'



Materials: coupling with hose tail e.g. stainless steel 1.4404, crimping ferrule stainless steel 1.4301, surface finish Ra < 0,8  $\mu m$ 

