

Data sheet

# Hoses and fittings for APP pumps

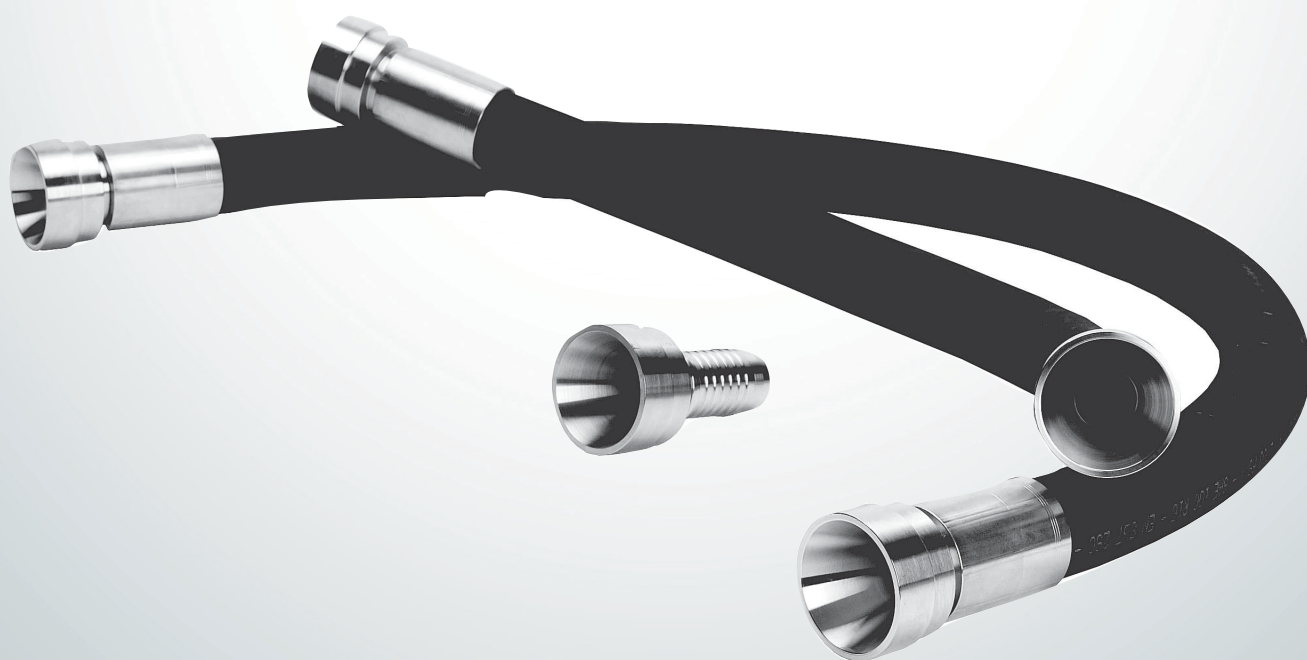


Table of contents

Contents

Table of contents .....	2
1. High-pressure hose with Victaulic (OGS cut groove) .....	2
2. 2" low-pressure hose kit with 2" Victaulic .....	4
3. 3" low-pressure hose kit with 3" Victaulic .....	6
4. Pump connections .....	8

Victaulic® is a registered trademark of Victaulic Corporation Inc.

1. High-pressure hose with Victaulic (OGS cut groove)

Introduction

The function of hoses with Victaulic® ends is to connect the APP pumps with the rest of the system in a flexible and noise-reducing way.

Features

The hose assembly is produced with a nitrile rubber high-pressure hose, highly flexible, with Victaulic ends made of Duplex/ Super Duplex-stainless steel.

If the recommendations in the manual are not followed, Danfoss reserves the right to void the warranty.



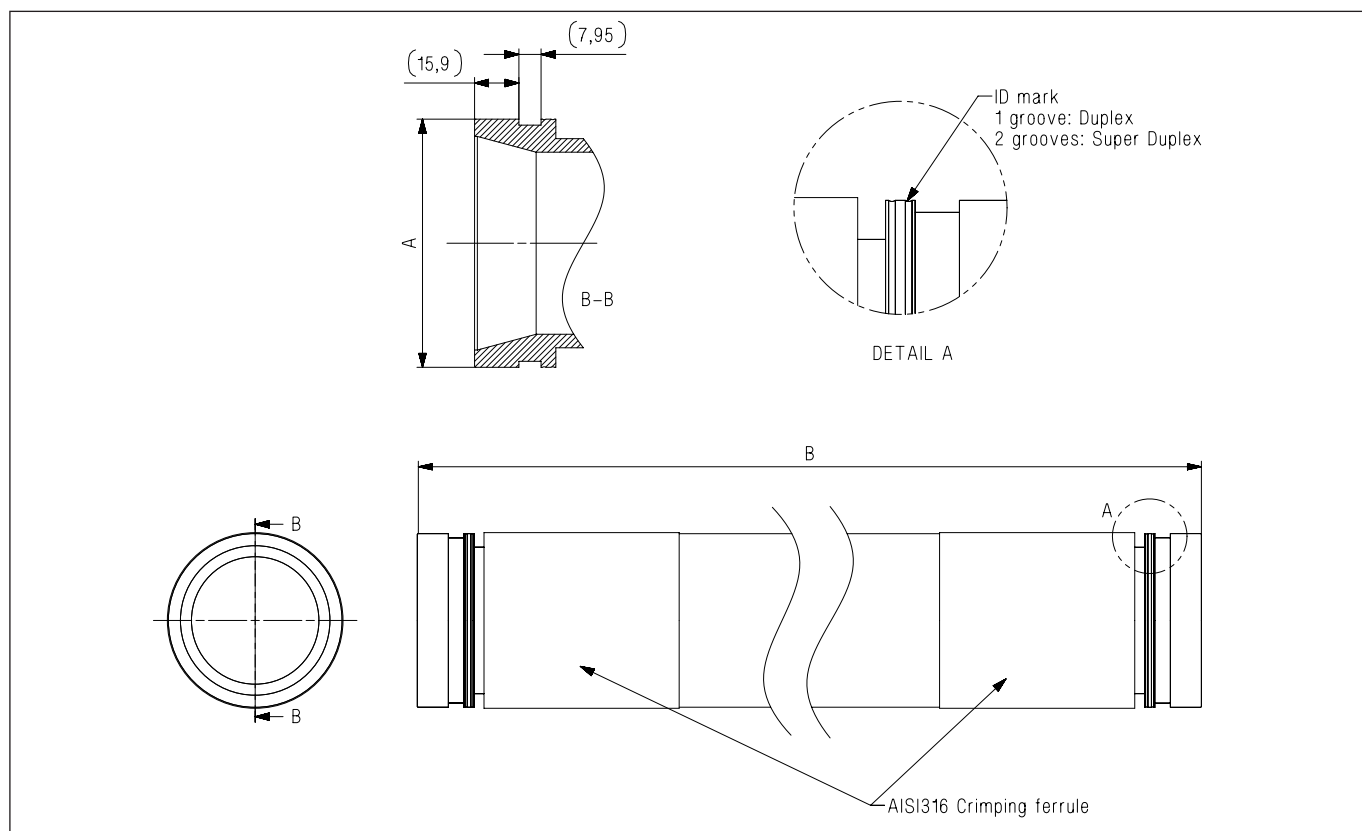
General conditions	
Temperature	Fluid and ambient 2 - 50°C (35.6 - 112° F), storage -30 - 70° C (-22 - 158°F)
Fluid	Brackish, seawater and antifreeze solutions
UV resistant	Limited lifetime (annual inspection is recommended - max. lifetime 5 years)
Max. allowable working pressure (MAWP)	83 barg (1,200 psig) <b>Use only style 77DX coupling<sup>1)</sup></b>
Test pressure	1.5 x MAWP according to ISO 1402, sec. 8.1
Test duration	according to ISO 1402, sec. 8.1
Storage	Storage in a cool and dry location, protected from sunlight or any artificial light. The original packaging must be kept on as long as possible, including caps protecting the ends of the hoses.

<sup>1)</sup> The installation instruction for Style 77DX is located in the Victaulic document I-100 Field Installation Handbook (<http://static.victaulic.com>)

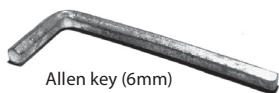
Technical data

Code number	Pipe connection <sup>1)</sup> [A]	Pipe connection material	Hose size Inner diameter	Hose length ISO 1436 [B]	Bending radius
180Z0228	1.5" Vic. OGS	Super duplex EN 1.4410	25.4 mm (1.0")	0.66 m (26")	152 mm (6.08"), max. 90°
180Z0229	1.5" Vic. OGS	Super duplex EN 1.4410	25.4 mm (1.0")	1.16 m (45.7")	152 mm (6.08"), max. 180°
180Z0167	1.5" Vic. OGS	Super duplex EN 1.4410	38.0 mm (1.5")	1.16 m (45.7")	250 mm (9.84"), max. 180°
180Z0140	2.0" Vic. OGS	Super duplex EN 1.4410	50 mm (2.0")	1.25 m (49")	630 mm (24.8"), max. 90°
180Z0263	2.5" Vic. OGS	Super duplex EN 1.4410	50 mm (2.0")	1.78 m (70")	630 mm (24.8"), max. 180°
180Z0280	2.5" Vic. OGS	Super duplex EN 1.4410	50 mm (2.0")	1.00 m (39.4")	630 mm (24.8"), max. 90°
180Z0619	2.5" Vic. OGS	Super duplex EN 1.4410	65 mm (2.5")	1.78 m (70")	200 mm (7.87"), max. 270°
180Z0618	2.5" Vic. OGS	Super duplex EN 1.4410	65 mm (2.5")	1.00 m (39.4")	200 mm (7.87"), max. 90°
180Z0612	3.0" Vic. OGS	Super duplex EN 1.4410	76 mm (3.0")	1.79 m (70.5")	250 mm (9.84"), max. 270°
180Z0611	3.0" Vic. OGS	Super duplex EN 1.4410	76 mm (3.0")	1.00 m (39.4")	250 mm (9.84"), max. 90°
180Z1000	3.0" Vic. OGS	Super duplex EN 1.4410	76 mm (3.0")	1,25 m (49")	250 mm (9.84"), max. 180°
180Z1001	3.0" Vic. OGS	Super duplex EN 1.4410	76 mm (3.0")	1,6 m (63")	250 mm (9.84"), max. 180°

<sup>1)</sup> The installation instruction for Style 77DX is located in the Victaulic document I-100 Field Installation Handbook (<http://static.victaulic.com>)



## 2. 2" low-pressure hose kit with 2" Victaulic



Allen key (6mm)

### Introduction

The function of hoses with Victaulic® ends is to connect the APP pumps with the rest of the system in a flexible and noise-reducing way.

### Features

The hose assembly is produced with a rubber low-pressure hose, highly flexible, and with two 2" Victaulic ends made of Super Duplex stainless steel.

The allen key is used for assembling the hose clamps.

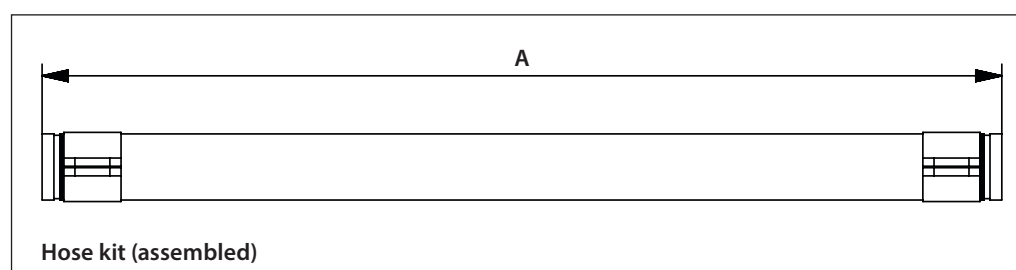
The hose clamps secure the hose/hosetail connection and prevent the hose from being torn off the hosetails.

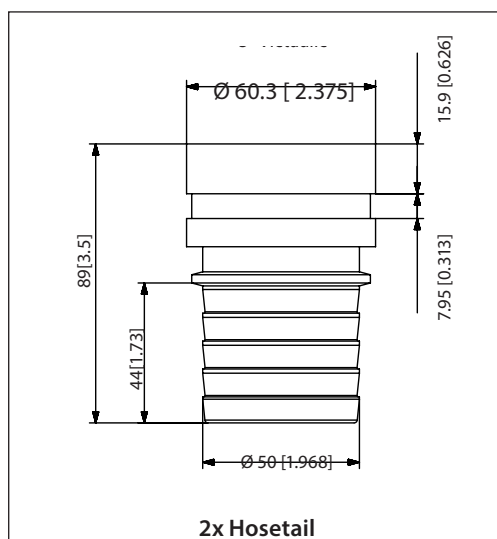
The hose can be reduced to fit the length required as long as the minimum bend radius is observed. The longer the hose is the more pulsation dampening effect it has.

### Technical data

Code numbers	
180Z0298	Low-pressure hose kit
Hose	FDA Tilt.21 - item 177.2600 and BFR XXI Cat. 2
Inner diameter	50.8 mm (2")
Min. bend radius	170 mm (6.7")
Materials	Chloridebutyl rubber (IIR)
UV resistant	Limited lifetime
Max. working pressure	10 barg (145 psig)
Hosetails (connections)*	2" Victaulic OGS cut groove
Materials	Super Duplex EN1.4410
Hose with Victaulic ends	
Length (A)	2.135 m (84")
Temperature	0 to + 50°C (32 to +122°F)

\* Please see next page





### 3. 3" low-pressure hose kit with 3" Victaulic



Allen key (6mm)

#### Introduction

The function of hoses with Victaulic® ends is to connect the APP pumps with the rest of the system in a flexible and noise-reducing way.

#### Features

The hose assembly is produced with a rubber low-pressure hose, highly flexible, and with two 3" Victaulic ends made of Super Duplex stainless steel.

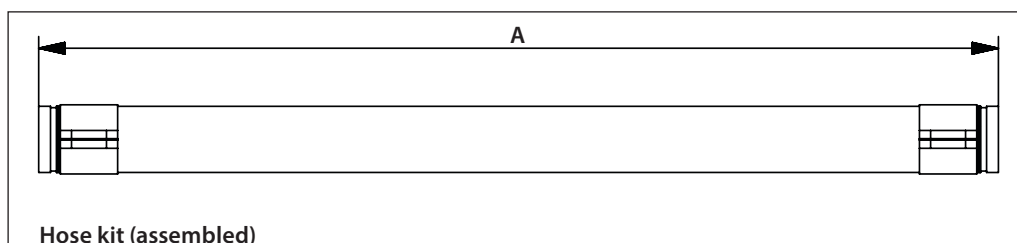
The Allen key is used for assembling the hose clamps. The hose clamps secure the hose/ hoesetail connection and prevent the hose from being torn off the hoesetails.

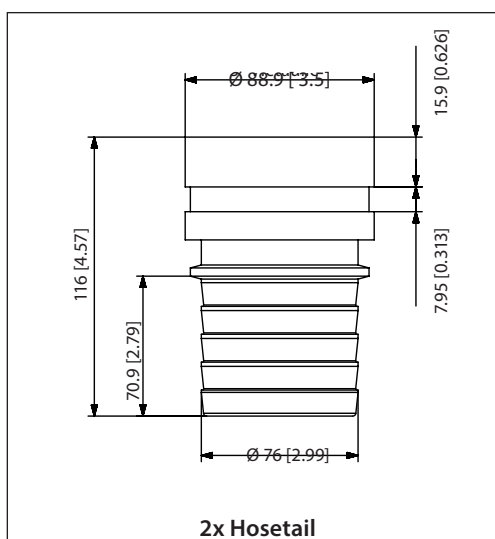
The hose can be reduced to fit the length required as long as the minimum bend radius is observed. The longer the hose is the more pulsation dampening effect it has.

#### Technical data

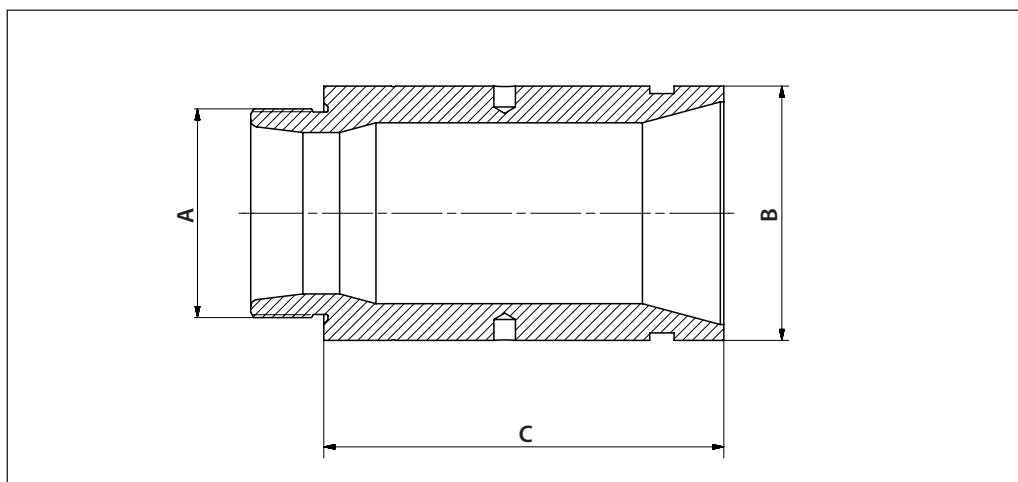
Code numbers	
180Z0144	Low pressure hose kit
Hose	FDA Tilt.21 - item 177.2600 and BGA XXI Cat. 2
Inner diameter	76.2 mm (3")
Min. bend radius	300 mm (11.8")
Materials	Chloridebutyl rubber (IIR)
UV resistant	Limited lifetime
Max. working pressure	10 barg (145 psig)
Hosetails (connections) *	3" Victaulic OGS cut groove
Materials	Super Duplex EN1.4410
Hose with Victaulic ends	
Length (A)	2.135 m (84")
Temperature	0 to + 50°C (32 to +122°F)

\* Please see next page



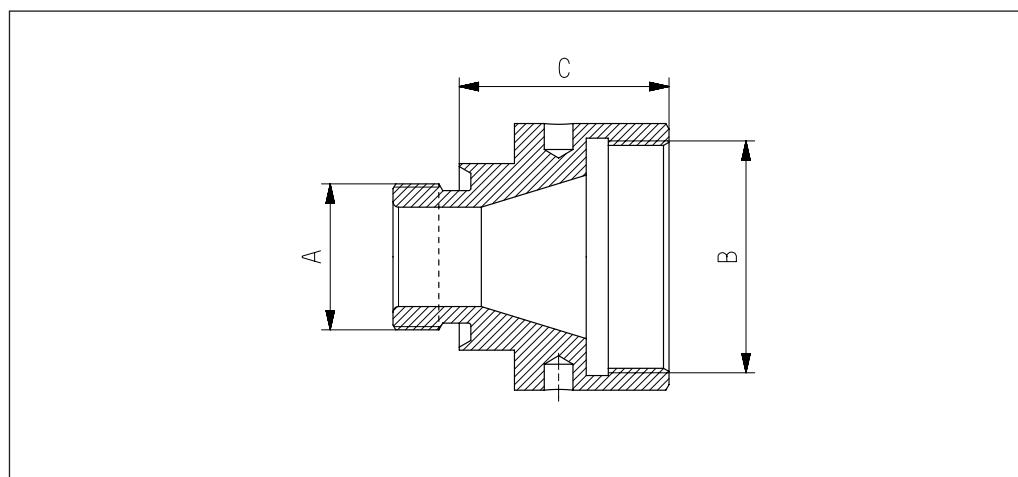


#### 4. Pump connections



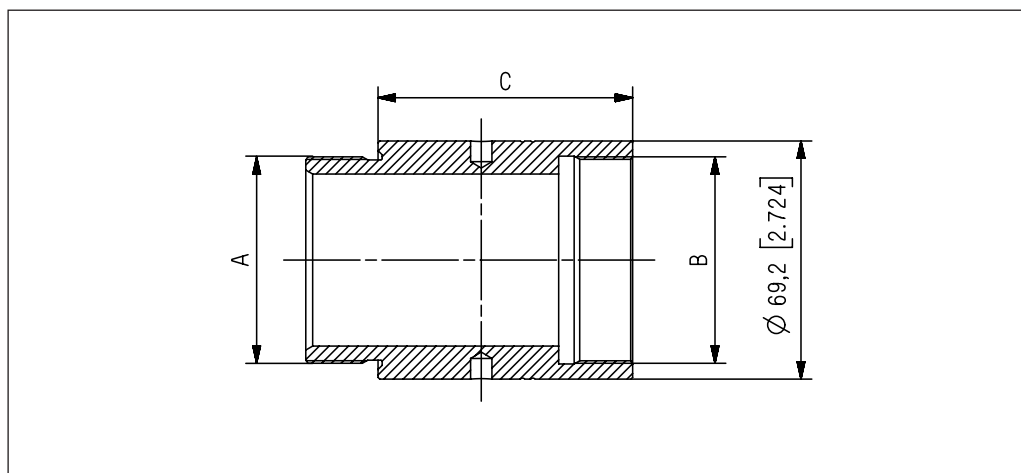
Code No.	Thread [A]	Victaulic <sup>1)</sup> [B]	Length [C]	Material	Max. Pressure	To be used for
180B3202	M42	1.5" Vic. OGS (48.3 mm)	45 mm (1.77")	Duplex	80 barg (1160 psig)	APP 5.1-10.2
180Z0166	M42	2.0" Vic. OGS (60.3 mm)	103 mm (4.05")	Super Duplex	80 barg (1160 psig)	APP 5.1-10.2 APP 11-13
180Z0165	M52	2.0" Vic. OGS (60.3 mm)	103 mm (4.05")	Super Duplex	80 barg (1160 psig)	APP 16-22
180B3206	M60	2.5" Vic. OGS (73.1 mm)	115 mm (4.53")	Super Duplex	80 barg (1160 psig)	APP 21-26
180B3208	M60	3.0" Vic. OGS (89.0 mm)	163 mm (6.42")	Super Duplex	80 barg (1160 psig)	APP 30-46

<sup>1)</sup> The installation instruction for Style 77DX is located in the Victaulic document I-100 Field Installation Handbook (<http://static.victaulic.com>)



Code No.	Outside thread (A)	Inside thread (B)	Length (C)	Material	Max. Pressure	To be used for
180B3209	3/4"	M42	38 mm (1.50")	Duplex	80 barg (1160 psig)	APP 1.5-3.5

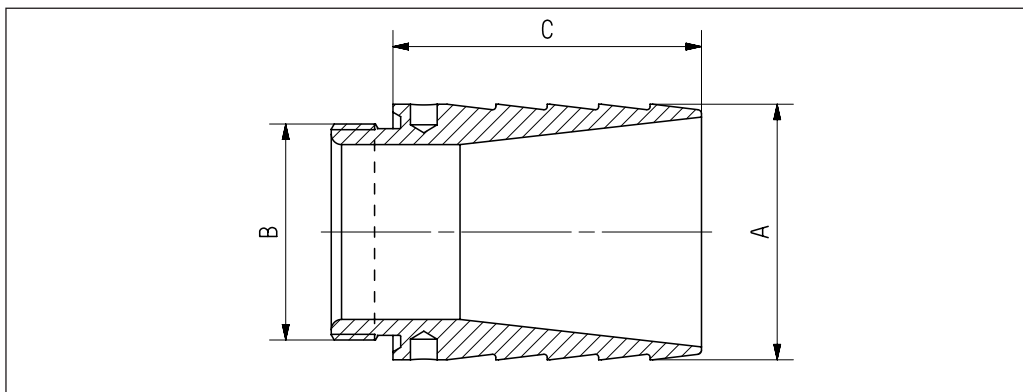




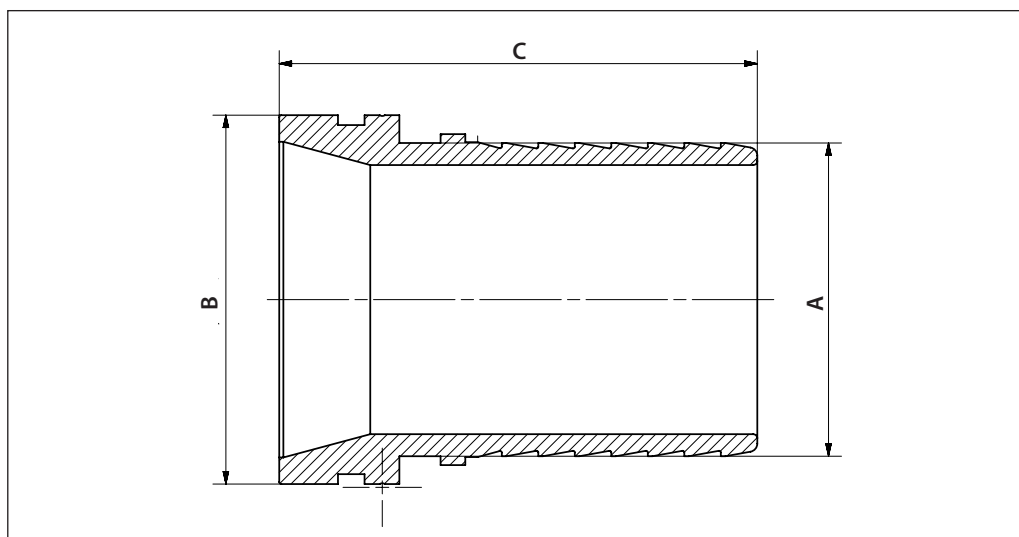
Code No.	Outside thread (A)	Inside thread (B)	Length (C)	Material	Max. Pressure	To be used for
180Z0624	M60	M60	74 mm (2.913")	Super Duplex	120 barg (1740 psig)	APP 21-46 APP W HC 21-30

Important:

If the rubber dampener is deselected an extension must be used together with a non return valve.



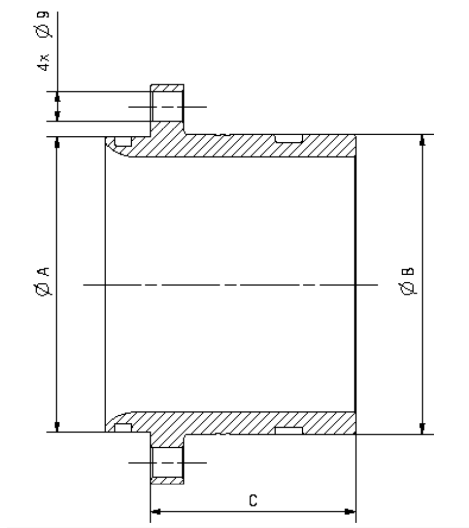
Code No.	For hose size (A)	Thread size (B)	Length (C)	Material	Max. Pressure	To be used for
180B3205	1.5"	M42	60 mm (2.83")	Duplex	6 barg (87 psig)	APP 5.1-10.2
180Z0059	2.0"	M42	60 mm (2.83")	Duplex	10 barg (145 psig)	APP 11-13



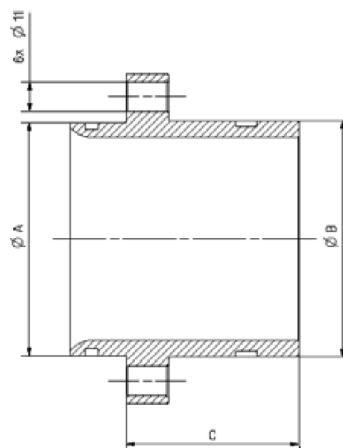
Code No.	For hose size (A)	Victaulic size <sup>1)</sup> (B)	Total length (C)	Material	Max. Pressure
180Z0297	2.0"	2.0" Vic. OGS (60.3 mm)	89 mm (3.50 inch)	Super Duplex	10 barg (145 psig)
180Z0061	3.0"	3.0" Vic. OGS (89.0 mm)	116 mm (4.57 inch)	Super Duplex	10 barg (145 psig)

<sup>1)</sup> The installation instruction for Style 77DX is located in the Victaulic document I-100 Field Installation Handbook (<http://static.victaulic.com>)

Inlet 3" Vic. OGS



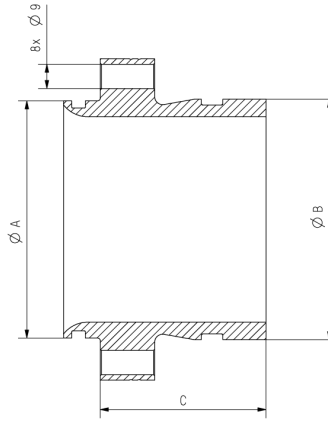
Outlet 3" Vic. OGS



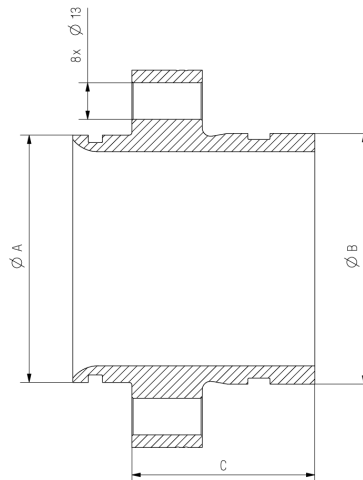
Code No.	Diameter [A]	Victaulic <sup>1)</sup> [B]	Length [C]	Material	Max. Pressure	To be used for
180Z0654 Inlet	87.8 mm (3.46")	3" Vic. OGS (76.1 mm)	61.0 mm (2.40")	Super Duplex	10 barg (145 psig)	APP 53-86 (up to series 7)
180Z0655 Outlet	87.8 mm (3.46")	3" Vic. OGS (76.1 mm)	65.0mm (2.56")	Super Duplex	80 barg (1160 psig)	APP 53-86 (up to series 7)

<sup>1)</sup> The installation instruction for Style 77DX is located in the Victaulic document I-100 Field Installation Handbook (<http://static.victaulic.com>)

Inlet 3" Vic. OGS



Outlet 3" Vic. OGS



Code No.	Diameter [A]	Victaulic <sup>1)</sup> [B]	Length [C]	Material	Max. Pressure	To be used for
180Z1991 Inlet	87.8 mm (3.46")	3" Vic. OGS (76.1 mm)	61.0 mm (2.40")	Super Duplex	10 barg (145 psig)	APP 53 - 92 (series 08 or higher)
180Z1992 Outlet	87.8 mm (3.46")	3" Vic. OGS (76.1 mm)	65.0mm (2.56")	Super Duplex	80 barg (1160 psig)	APP 53 - 92 (series 08 or higher)

<sup>1)</sup> The installation instruction for Style 77DX is located in the Victaulic document I-100 Field Installation Handbook (<http://static.victaulic.com>)

**Danfoss A/S**

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