

**SAF Brake Chambers for axles with disc brake: Test Reports in accordance with ECE R13**

Effective immediately the new test reports in accordance with ECE R13 for the proven SAF brake chambers are available on the SAF-HOLLAND Website [www.safholland.com](http://www.safholland.com).

The following table displays the most important technical data for the SAF Brake Chambers:

Model	Size	Type	Test Report	Max. Stroke $s_{\max}$ [mm]	Service Brake: Force [N] at 6.5 bar	Parking Brake: Force [N] at 30 mm Stroke
Diaphragm Brake Chamber	16"	MO S 16 00 B <sup>1)</sup> 6 0	BC 0060.0	64	6590	-
	18"	MO S 18 00 B <sup>1)</sup> 6 0	BC 0061.0	64	6961	-
	20"	MO S 20 00 B <sup>1)</sup> 6 0	BC 0062.0	65	7564	-
	22"	MO S 22 00 B <sup>1)</sup> 6 0	BC 0063.0	65	8055	-
	24"	MO S 24 00 B <sup>1)</sup> 6 0	BC 0064.0	65	9374	-
Double Diaphragm Brake Chamber	16"/24"	MM S 16 24 B <sup>1)</sup> 6 0	BC 0044.0	63	6454	6160
	18"/24"	MM S 18 24 B <sup>1)</sup> 6 0	BC 0045.0	63	6960	5911
	20"/24"	MM S 20 24 B <sup>1)</sup> 6 0	BC 0046.0	63	7564	6160

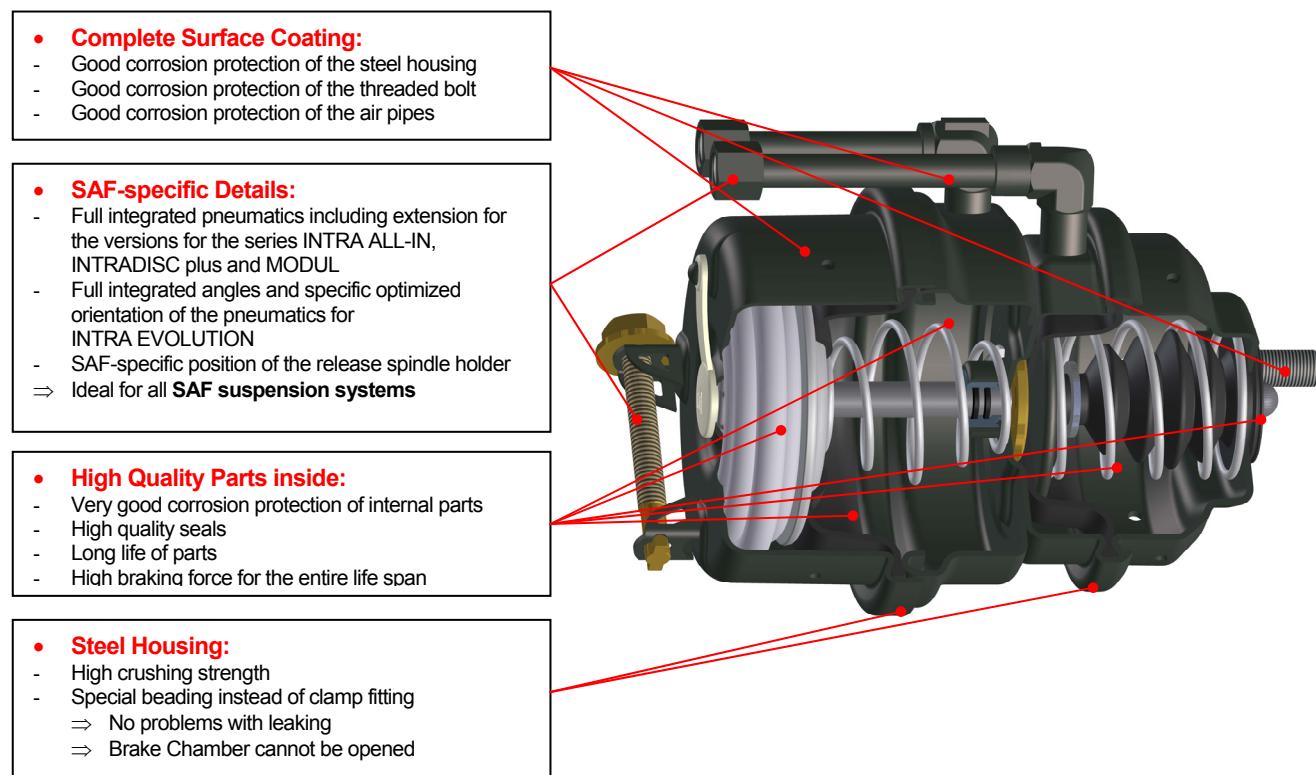
<sup>1)</sup> Approved version. Letter can be A-Z. Version has no effect on the type approvals.

**Please note that the new test reports are in accordance with ECE R13 and will require an update of the trailer type approval. Please also note that due to the new test procedure the output force characteristics of the brake chambers have changed.**

Further technical data can be found on the referenced test reports or can be provided by SAF-HOLLAND. Brake calculations with SAF brake chambers can be provided by the brake manufacturers WABCO, KNORR and HALDEX directly.

The SAF Brake Chambers can be combined with all 19.5" and 22.5" disc brakes produced by SAF-HOLLAND and can be installed in the series INTRA ALL-IN, INTRADISC plus and MODUL and will be offered for INTRA EVOLUTION in May 2007.

The SAF Brake Chambers have the following features and advantages:



The versions in the table are available both in OEM and spare parts:

Model	Size	SAF Ident-No. <sup>2)</sup> Brake Chambers			
		INTRA ALL-IN	INTRADISC plus	INTRA EVOLUTION	MODUL
Diaphragm Brake Chamber for Rigid Axles	16"	3 454 1065 60	3 454 1065 60	3 454 1065 60	3 454 1065 60
	18"	3 454 1066 60	3 454 1066 60	3 454 1066 60	3 454 1066 60
	20"	3 454 1067 60	3 434 1067 60	3 454 1067 60	3 454 1067 60
	22"	3 454 1068 60	3 454 1068 60	3 454 1068 60	3 454 1068 60
	24"	3 454 1069 60	3 454 1069 60	3 454 1069 60	3 454 1069 60
Diaphragm Brake Chamber for Steering Axles	16"	-	3 454 1081 60	3 454 1081 60	3 454 1081 60
	20"	-	3 454 1082 60	3 454 1082 60	3 454 1082 60
Double Diaphragm Brake Chamber for Rigid Axles	16"/24"	3 454 1077 64	3 454 1077 64	3 454 1093 60	3 454 1077 64
	18"/24"	3 454 1074 64	3 454 1074 64	3 454 1094 60	3 454 1074 64
	20"/24"	3 454 1079 64	3 454 1079 64	3 454 1095 60	3 454 1079 64

<sup>2)</sup> SAF Ident.-No.s include the fixing nut for the brake chambers

**Diaphragm Brake Chamber**



**Rigid Axle**

INTRA ALL-IN  
INTRADISC plus  
INTRA EVOLUTION  
MODUL



**Steering Axle**

INTRADISC plus  
INTRA EVOLUTION  
MODUL

**Double Diaphragm Brake Chamber**



**Rigid Axle**

INTRA ALL-IN  
INTRADISC plus  
MODUL



**Rigid Axle**

INTRA EVOLUTION