

Retention System for Pressure Hoses



**INTERNATIONAL
PATENT**

ISO 4413 HYDRAULIC FLUID POWER, GENERAL RULES RELATING TO SYSTEM:

"Should the rupture of a hose assembly represent a whiplash hazard, the latter shall be restrained or shielded".



***DISPLAY RACKS AVAILABLE
UPON REQUEST FOR OUR
DEALERS.***

SAFETY GUARANTEE

The energy contained within a pressure hose, in case of disconnection from the fitting, can be very dangerous to anyone or anything in its vicinity. The Stopflex retention system was designed to arrest the trajectory of the flexible hose, thus avoiding that the energy contained inside may trigger a frightening "whip effect". As a matter of fact, thanks to the Stopflex system, the hose is secured to the plant by means of a cable protecting both the operators and components.

USE FLEXIBILITY

Stopflex components can be applied to all kinds of flexible hoses. A band, equipped with a rubber gasket, remains perfectly secured, simultaneously allowing the hose to swell according to the working pressure. The retaining components can be secured to nipples, to SAE flanges or other system components.

TESTED PROTECTION

The Stopflex system, upon correct mounting, was manufactured and tested to ensure the retention of the hose up to the maximum pressure indicated in this catalogue in compliance with the following standards regulating the manufacture of hydraulic flexible hoses:

EN 853 EN 854 EN 855
EN 856 EN 857 SAE J517

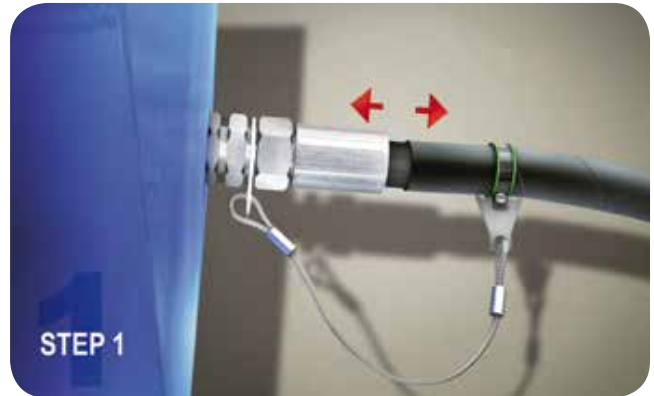
N.B.

In the market there are hydraulic flexible hoses capable of exceeding the pressures indicated in this catalogue. In case you encounter such hoses, please contact our technical department for further ascertainment regarding application thereof.
E-mail: service@op-srl.it

Basics of use

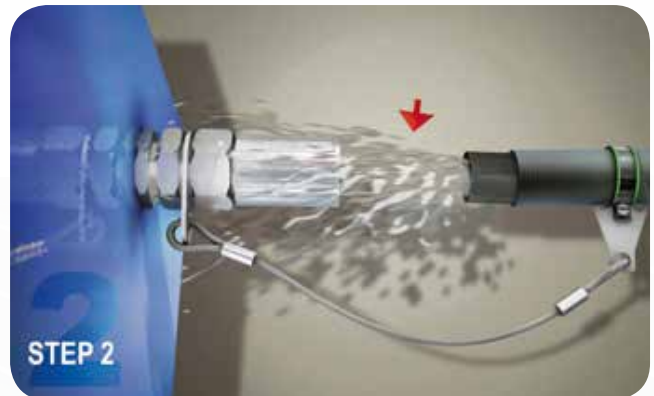
STEP 1: DISENGAGEMENT

The Stopflex system does not operate during the step of disengaging the flexible hose, but, if applied correctly, it ensures that the hose is fully disengaged from the ferrule that restrains it.



STEP 2: RELEASE / VENTING OF PRESSURE

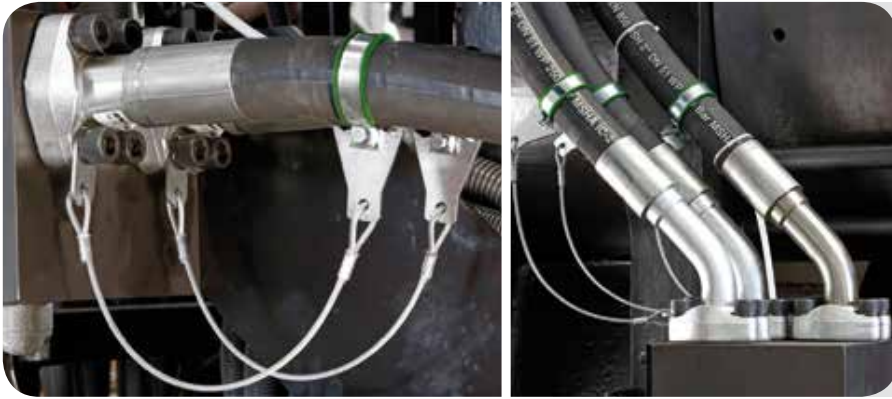
During this step, the pressurised oil exits from the flexible hose. The hose begins to release the energy contained therein, and gains considerable velocity, triggering a hazardous “whip effect” which is very dangerous to anyone or anything in its vicinity.



STEP 3: RESTRAINT

Once the hose has been disengaged and the pressure released, the flexible hose can be restrained. This is where the Stopflex system gets into operation: the stainless steel cable is tensioned and deformed while the plate cuts into the rubber of the hose, preventing the clamp, firmly attached to the hose, from disengaging. The hose clamp and plate start to deform in turn, elastically absorbing the force released from the travel of the flexible hose. This is a critical step which occurs within just a few seconds in which the materials and the components of the system, previously sized and tested, stop the dangerous travel of the flexible hose.

Assembly basics

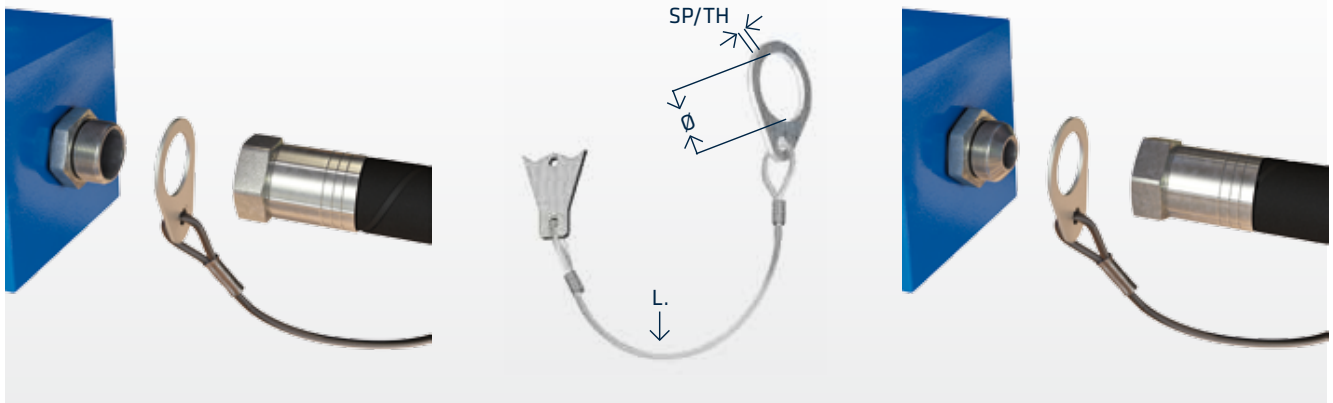


The assembly procedure of the application is fundamental to ensure the correct operation of the Stopflex system.

As a matter of fact, failure to carefully follow the assembly instructions, may actually jeopardise the operation of the system. After numerous tests on the test benches, we found the ideal combination of materials and assembly procedure to ensure the utmost efficiency in the system.

- *Given environmental conditions such as ultraviolet light, ozone, salty water, chemical agents (solvents, fuels, oils, greases, volatile chemical compounds, acids, disinfectants and other aggressive elements) can cause early deterioration of the band seal;*
- *The seal must be replaced every 4 years if the band is not assembled;*
- *The seal must be replaced every 2 years if the band is assembled;*
- *The STOPFLEX system must never be re-used in case of hose rupture, slip-off or replacement of the hose, as this will jeopardise the initial safety features of the system. Should the system be re-used, the assembler will be held entirely liable therefor.*

Nipple retention system



24° cone connectors (DIN)

CODICE CODE	ø mm ø inches	SP/TH mm inches	L. mm inches	Nr. Pezzi No. of PCS	P. Max di lav. ¹ Max operating P. bar - psi	Piastrina incisione Cutting Plate
STOPFUDIN145	14,5 0,571	2 0,079	300 11,811	10	450 6525	small
STOPFUDIN17	17 0,669	2 0,079	300 11,811	10	445 6453	small
STOPFUDIN185	18,5 0,728	2 0,079	300 11,811	10	420 6090	small
STOPFUDIN205	20,5 0,807	2 0,079	300 11,811	10	420 6090	small
STOPFUDIN225	22,5 0,886	2 0,079	300 11,811	10	420 6090	small
STOPFUDIN245	24,5 0,965	2 0,079	300 11,811	10	420 6090	small
STOPFUDIN265	26,5 1,043	2 0,079	300 11,811	10	420 6090	small
STOPFUDIN305	30,5 1,201	2,5 0,098	300 11,811	10	420 6090	small
STOPFUDIN34	34 1,339	2,5 0,098	450 17,717	10	420 6090	large
STOPFUDIN365	36,5 1,437	2,5 0,098	450 17,717	10	420 6090	large
STOPFUDIN425	42,5 1,673	2,5 0,098	450 17,717	10	420 6090	large
STOPFUDIN455	45,5 1,791	2,5 0,098	450 17,717	10	420 6090	large
STOPFUDIN49	49 1,929	2,5 0,098	450 17,717	10	420 6090	large
STOPFUDIN525	52,5 2,067	2,5 0,098	450 17,717	10	385 5583	large
STOPFUDIN60	60 2,362	2,5 0,098	450 17,717	10	350 5075	large

37° flared connectors (JIC)

CODICE CODE	ø mm ø inches	SP/TH mm inches	L. mm inches	Nr. Pezzi No. of PCS	P. Max lavoro Max operating P. bar - psi	Piastrina incisione Cutting Plate
STOPFUJIC115	11,5 0,452	2 0,079	300 11,811	10	450 6525	small
STOPFUJIC132	13,2 0,519	2 0,079	300 11,811	10	450 6525	small
STOPFUJIC148	14,8 0,452	2 0,079	300 11,811	10	450 6525	small
STOPFUJIC195	19,5 0,767	2 0,079	300 11,811	10	420 6090	small
STOPFUJIC228	22,8 0,897	2 0,079	300 11,811	10	420 6090	small
STOPFUJIC275	27,5 1,082	2,5 0,098	300 11,811	10	420 6090	small
STOPFUJIC307	30,7 1,208	2,5 0,098	300 11,811	10	420 6090	small
STOPFUJIC345	34 1,339	2,5 0,098	450 17,717	10	420 6090	small
STOPFUJIC34	34 1,339	2,5 0,098	450 17,717	10	420 6090	large
STOPFUJIC415S	41,5 1,633	2,5 0,098	450 17,717	10	420 6090	small
STOPFUJIC415	41,5 1,633	2,5 0,098	450 17,717	10	420 6090	large
STOPFUJIC48S	48 1,889	2,5 0,098	450 17,717	10	420 6090	small
STOPFUJIC48	48 1,889	2,5 0,098	450 17,717	10	420 6090	large
STOPFUJIC64	64 2,519	2,5 0,098	450 17,717	10	350 5075	large

¹ Intended as the MAX operating pressure of the Stopflex retention system.

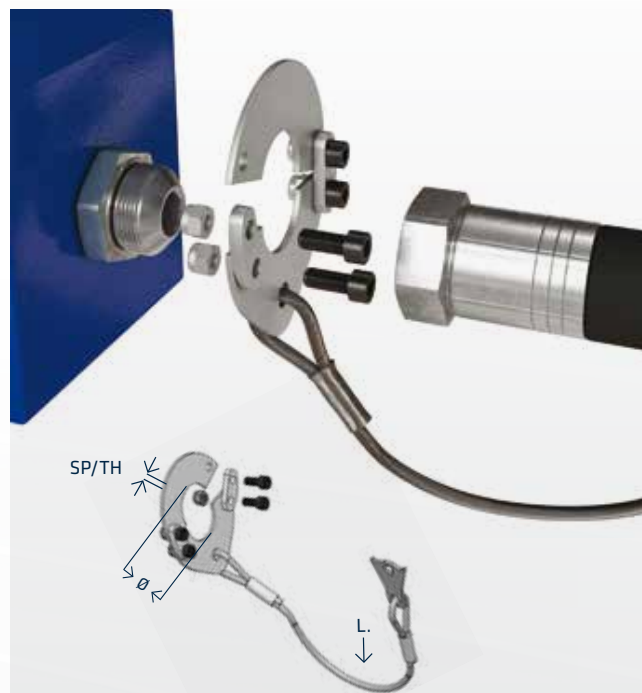
* Applications with SAE 3000 flanges for 3/4" hoses.

Nipple retention system - open 24° cone connectors (DIN)

Nipple retention system - open 37° flared connectors (JIC)

It's a further improvement of our **STOPFLEX** retention system designed for DIN fittings. Thanks to the two parts it is composed of, it can be installed on plants where hoses have already been assembled.

It's a further improvement of our **STOPFLEX** retention system designed for JIC fittings. Thanks to the two parts it is composed of, it can be installed on plants where hoses have already been assembled.



CODICE CODE	ø mm ø inches	SP/TH mm inches	L. mm inches	Nr. Pezzi No. of PCS	P. Max di lav. ¹ Max operating P. bar - psi	Piastrina incisione Cutting Plate
STOPFUDIN1450P	14,5 0,571	2 0,079	300 11,811	10	450 6525	small
STOPFUDIN170P	17 0,669	2 0,079	300 11,811	10	445 6453	small
STOPFUDIN1850P	18,5 0,728	2 0,079	300 11,811	10	420 6090	small
STOPFUDIN2050P	20,5 0,807	2 0,079	300 11,811	10	420 6090	small
STOPFUDIN2250P	22,5 0,886	2 0,079	300 11,811	10	420 6090	small
STOPFUDIN2450P	24,5 0,965	2 0,079	300 11,811	10	420 6090	small
STOPFUDIN2650P	26,5 1,043	2 0,079	300 11,811	10	420 6090	small
STOPFUDIN3050P	30,5 1,201	2,5 0,098	300 11,811	10	420 6090	small
STOPFUDIN340P	34 1,339	2,5 0,098	450 17,717	10	420 6090	large
STOPFUDIN3650P	36,5 1,437	2,5 0,098	450 17,717	10	420 6090	large
STOPFUDIN4250P	42,5 1,673	2,5 0,098	450 17,717	10	420 6090	large
STOPFUDIN4550P	45,5 1,791	2,5 0,098	450 17,717	10	420 6090	large
STOPFUDIN490P	49 1,929	2,5 0,098	450 17,717	10	420 6090	large
STOPFUDIN5250P	52,5 2,067	2,5 0,098	450 17,717	10	385 5583	large
STOPFUDIN600P	60 2,362	2,5 0,098	450 17,717	10	350 5075	large

CODICE CODE	ø mm ø inches	SP/TH mm inches	L. mm inches	Nr. Pezzi No. of PCS	P. Max di lav. ¹ Max operating P. bar - psi	Piastrina incisione Cutting Plate
STOPFUJIC1150P	Ø11.5	SP. 2	L.300	10	450 6525	small
STOPFUJIC1320P	Ø13.2	SP. 2	L.300	10	450 6525	small
STOPFUJIC1480P	Ø14.8	SP. 2	L.300	10	450 6525	small
STOPFUJIC1950P	Ø19.5	SP. 2	L.300	10	420 6090	small
STOPFUJIC2280P	Ø22.8	SP. 2	L.300	10	420 6090	small
STOPFUJIC2750P	Ø27.5	SP. 2.5	L.300	10	420 6090	small
STOPFUJIC3070P	Ø30.7	SP. 2.5	L.300	10	420 6090	small
STOPFUJIC3450P	Ø34	SP. 2.5	L.450	10	420 6090	small
STOPFUJIC340P	Ø34	SP. 2.5	L.450	10	420 6090	large
STOPFUJIC41550P	Ø41.5	SP. 2.5	L.450	10	420 6090	small
STOPFUJIC4150P	Ø41.5	SP. 2.5	L.450	10	420 6090	large
STOPFUJIC4850P	Ø48	SP. 2.5	L.450	10	420 6090	small
STOPFUJIC480P	Ø48	SP. 2.5	L.450	10	420 6090	large
STOPFUJIC640P	Ø64	SP. 2.5	L.450	10	350 5075	large

¹ Intended as the MAX operating pressure of the Stopflex retention system.

¹ Intended as the MAX operating pressure of the Stopflex retention system.

Retention system for various uses



CODICE CODE	Ø mm Ø inches	SP/TH mm inches	L. mm inches	Nr. Pezzi No. of PCS	P. Max di lav. ¹ Max operating P. bar - psi	Piastrina incisione Cutting Plate
STOPFUVARIE	13 0,512	4 0,157	450 17,717	10	420 6090	large
STOPFUVARIES	13 0,512	4 0,157	450 17,717	10	420 6090	small

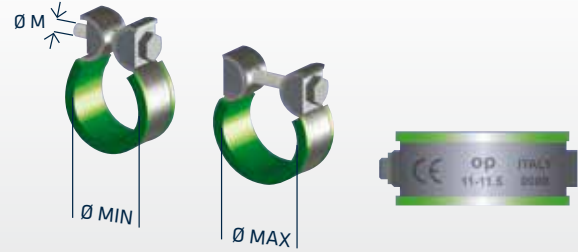
Retention system for 3000 and 6000 sae flanges



CODICE CODE	Ø mm Ø inches	SP/ TH mm inches	L. mm inches	Nr. Pezzi No. of PCS	P. Max di lav. ¹ Max operating P. bar - psi	Piastrina incisione Cutting Plate
STOPFUSAE085	8,5 0,335	4 0,157	300 11,811	10	415 6018	small
STOPFUSAE2105*	10,5 0,413	4 0,157	300 11,811	10	420 6090	small
STOPFUSAE105	10,5 0,413	4 0,157	450 17,717	10	420 6090	large
STOPFUSAE125	12,5 0,492	4 0,157	450 17,717	10	420 6090	large
STOPFUSAE145	14,5 0,571	4 0,157	450 17,717	10	420 6090	large
STOPFUSAE165	16,5 0,650	4 0,157	450 17,717	10	420 6090	large
STOPFUSAE205	20,5 0,807	4 0,157	450 17,717	10	350 5075	large
STOPFUSAE25	25 0,984	8 0,315	550 21,654	10	350 5075	large
STOPFUSAE32	32 1,260	8 0,315	550 21,654	10	210 3045	large

¹ Intended as the MAX operating pressure of the Stopflex retention system.

Stopflex hose bands



CODICE CODE	Ø M	Ø MIN		Ø MAX		Nr. Pezzi No. of PCS
		mm	inches	mm	inches	
STOPFA11115	M6	11	0,433	11,5	0,453	10
STOPFA12125	M6	12	0,472	12,5	0,492	10
STOPFA13135	M6	13	0,512	13,5	0,531	10
STOPFA14145	M6	14	0,551	15	0,591	10
STOPFA1617	M6	16	0,630	17	0,669	10
STOPFA1718	M6	17	0,669	18	0,709	10
STOPFA1819	M6	18	0,709	19	0,748	10
STOPFA2021	M6	20	0,787	21	0,827	10
STOPFA2122	M6	21	0,827	22	0,866	10
STOPFA2223	M6	22	0,866	23	0,906	10
STOPFA2425	M6	24	0,945	25	0,984	10
STOPFA2526	M6	25	0,984	26	1,024	10
STOPFA2627	M6	26	1,024	27	1,063	10
STOPFA2728	M6	27	1,063	28	1,102	10
STOPFA2829	M6	28	1,102	29	1,142	10
STOPFA3031	M6	30	1,181	31	1,220	10
STOPFA3233	M6	32	1,260	33	1,299	10
STOPFA3435	M6	34	1,339	35	1,378	10
STOPFA3637	M6	36	1,417	37	1,457	10
STOPFA3839	M6	38	1,496	39	1,535	10
STOPFA3940	M6	39	1,535	40	1,575	10
STOPFA4041	M6	40	1,575	41	1,614	10
STOPFA4243	M6	42	1,654	43	1,693	10
STOPFA4344	M6	43	1,693	44	1,732	10
STOPFA4445	M6	44	1,732	45	1,772	10
STOPFA4547	M8	45	1,772	47	1,850	10
STOPFA4850	M8	48	1,890	50	1,969	10
STOPFA5153	M8	51	2,008	53	2,087	10
STOPFA5354	M8	53	2,087	54	2,126	10
STOPFA5456	M8	54	2,126	56	2,205	10
STOPFA5759	M8	57	2,244	59	2,323	10
STOPFA6062	M8	60	2,362	62	2,441	10
STOPFA6365	M8	63	2,480	65	2,559	10
STOPFA6668	M8	66	2,598	68	2,677	10
STOPFA6971	M8	69	2,717	71	2,795	10
STOPFA7274	M8	72	2,835	74	2,913	10
STOPFA7577	M8	75	2,953	77	3,031	10
STOPFA7880	M8	78	3,071	80	3,150	10
STOPFA8183	M8	81	3,189	83	3,268	10
STOPFA8486	M8	84	3,307	86	3,386	10
STOPFA8789	M8	87	3,425	89	3,504	10
STOPFA9092	M8	90	3,543	92	3,622	10
STOPFA9395	M8	93	3,661	95	3,740	10

NB: The diameters indicated in the table shall be deemed indicative. They could slightly vary upon tightening the band.



STOPflex[®]
FOR PRESSURE HOSES

ENJOY THE **SAFETY**