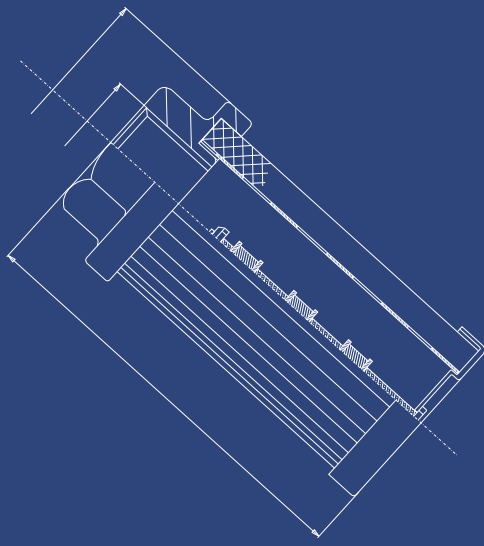


Suction Strainers

Suction Strainers



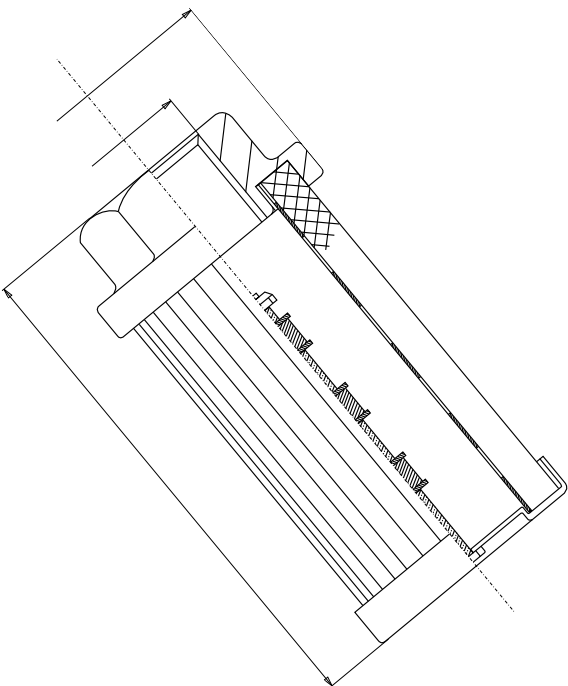
Uni-Cardan®

Index

Technical data _____ 1

Filters series USF - USP _____ 2

Filters series USFM - USPM _____ 4



Uni-Cardan Italia S.p.A. reserves the right to make technical changes to the products without notice.

The products shown in this catalogue have been developed by Uni-Cardan Italia S.p.A., a company owned by GKN Automotive.

Suction Strainers series USF-USP-USFM-USPM

Description

Filters series USF, USP, USFM, USPM are suitable for applications in the suction line of the pump, submerged in the reservoir.

They are available with connection ports from 1/4" up to 3" and flow rate up to 760 l/min.

The filters series USF and USP are available with or without By-pass valve.

The filters series USFM and USPM are supplied with an internal magnet column capable of retaining any metallic contaminant that has passed through the filter media. These filters are not available with By-pass valve.

Technical data complete filter

- Connection in aluminium alloy or Reinforced Nylon
- By-pass valve set at 0,25 bar \pm 9% (series USF and USP only)
- Working temperature -25° C up to $+90^{\circ}$ C
- Connections: BSP - NPT threaded ports from 1/4" up to 3"

Filtration rating is defined in microns by the maximum diameter of the sphere that will pass through the mesh.

Technical data filter elements

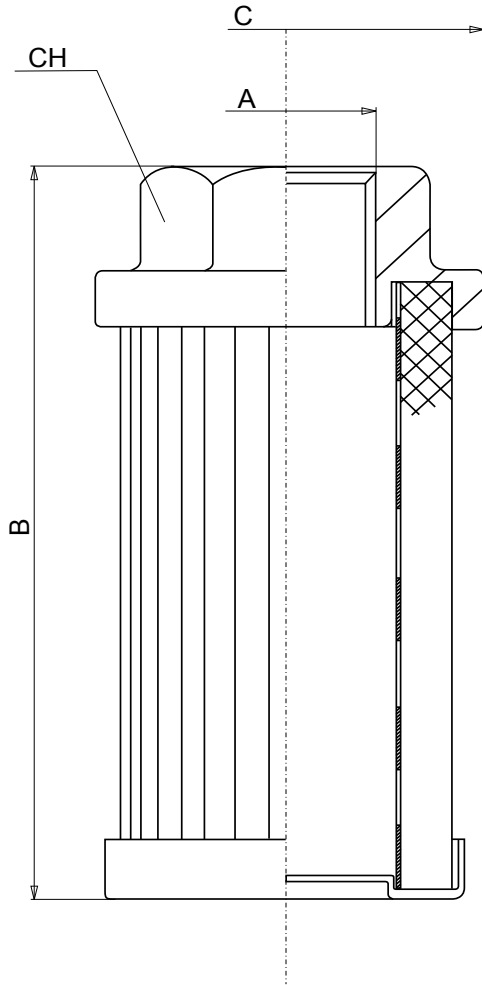
- R 60: wire mesh in inox (AISI 304), filtration rating 60 microns
- T 90: brass square wire mesh, filtration rating 90 microns
- T 125: brass square wire mesh, filtration rating 125 microns
- R 125: square wire mesh in inox (AISI 304), filtration rating 125 microns
- R 250: square wire mesh in inox (AISI 304), filtration rating 250 microns
- R 500: square wire mesh in inox (AISI 304), filtration rating 500 microns
- End cap in galvanized steel
- Support tube in galvanized steel
- Support mesh in galvanized steel with epoxy coating

Filter elements are manufactured in accordance with the following ISO standards:

- ISO 4572
Filtration performance valuated with Multi-pass test
- ISO 2941
Verification of collapse/burst resistance
- ISO 2942
Verification of fabrication integrity and determination of the first bubble point
- ISO 2943
Compatibility of materials with fluids (type HH, HM, HR, HV, HG according with ISO 6743/4)
- ISO 3723
Method for the end load test
- ISO 3724
Verification of flow fatigue characteristics
- ISO 3968
Evaluation of pressure drop versus flow characteristics



Filters series USF-USP



Series	USF	USP
Connection	Aluminium alloy	Reinforced Nylon
Fondello	Zinc plated steel	Zinc plated steel
Support tube	Zinc plated steel	Zinc plated steel
By-pass valve	Reinforced Nylon	Reinforced Nylon

Filtration area cm ²	
Type	USF USP
46A	330
46B	400
64A	540
64B	720
86A	900
86B	1.350
86C	1.820
86D	2.350
150A	1.600
150B	2.400
150C	3.200

Type	Flow rate l/min	Port BSP-NPT	B	C	CH
46A-14	10	1/4"	90	46	30
46A-38	16	3/8"	90	46	30
46B-12	22	1/2"	105	46	30
64A-34	56	3/4"	109	64	36
64A-12	22	1/2"	109	64	36
64B-34	56	3/4"	139	64	36
64B-100	100	1"	139	64	46
86A-100	100	1"	139	86	60
86A-114	140	1 1/4"	139	86	60
86A-112	200	1 1/2"	139	86	60
86B-112	200	1 1/2"	200	86	60
86C-112	200	1 1/2"	260	86	60
86C-200	340	2"	260	86	70
86D-200	340	2"	331	86	70
150A-112	200	1 1/2"	151	150	70
150A-200	340	2"	151	150	70
150B-212	660	2 1/2"	211	150	90
150C-300	760	3"	272	150	100

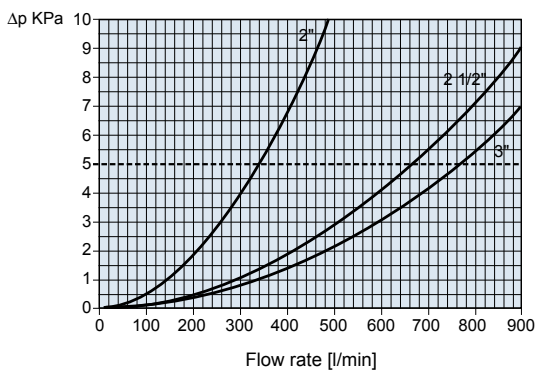
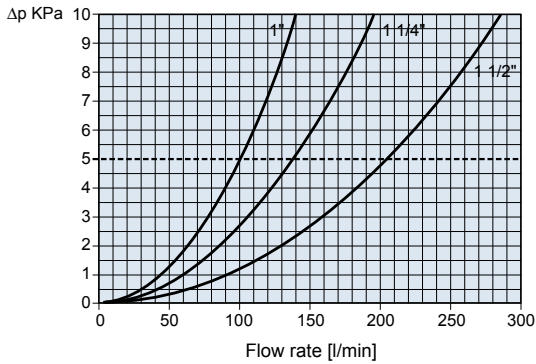
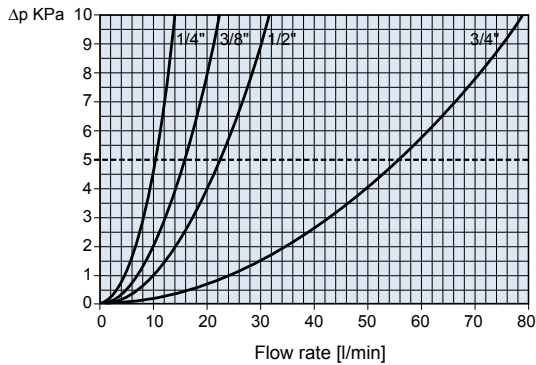
Effective surface area is the same for all the filtration elements.

Filter elements pressure drop

Housing pressure drop

All the curves have been obtained with mineral oil with a density of 860 Kg/m³ and kinematic viscosity of 30 cSt.

Maximum clean filter pressure drop shall be ≤ 5 kPa.



How to order the complete filter

Filtration elements	
R 60	Wire mesh in inox (AISI 304) 60 μ
T 90	Brass square wire mesh 90 μ
T 125	Brass square wire mesh 125 μ
R 125	Square wire mesh in inox (AISI 304) 125 μ
R 250	Square wire mesh in inox (AISI 304) 250 μ
R 500	Square wire mesh in inox (AISI 304) 500 μ

Series
USF USP

U S F 4 6 A 1 4 G R 1 2 5 V

Type	Connections
46A-14	1/4"
46A-38	3/8"
46B-12	1/2"
64A-34	3/4"
64A-12	1/2"
64B-34	3/4"
64B-100	1"
86A-100	1"
86A-114	1 1/4"
86A-112	1 1/2"
86B-112	1 1/2"
86C-112	1 1/2"
86C-200	2"
86D-200	2"
150A-112	1 1/2"
150A-200	2"
150B-212	2 1/2"
150C-300	3"

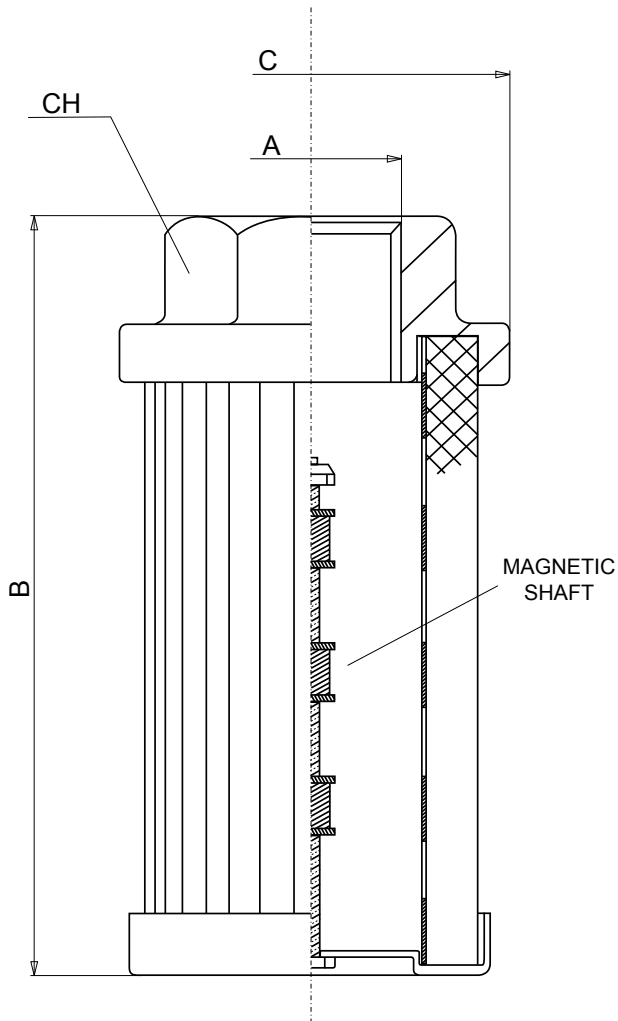
Thread type	
G	BSP
N	NPT

By-pass valve	
S	Without By-pass
R	With By-pass set at 0,25 bar



Uni-Cardan®

Filters series USFM-USPM



Series	USFM	USPM
Connection	Aluminium alloy	Reinforced Nylon
End cap	Zinc plated steel	Zinc plated steel
Support tube	Zinc plated steel	Zinc plated steel
Tie rod	Zinc plated steel	Zinc plated steel

Type	Flow rate l/min	Port BSP-NPT	B	C	CH
46A-14	10	1/4"	90	46	30
46A-38	16	3/8"	90	46	30
46B-12	22	1/2"	105	46	30
64A-34	56	3/4"	109	64	36
64A-12	22	1/2"	109	64	36
64B-34	56	3/4"	139	64	36
64B-100	100	1"	139	64	46
86A-100	100	1"	139	86	60
86A-114	140	1 1/4"	139	86	60
86A-112	200	1 1/2"	139	86	60
86B-112	200	1 1/2"	200	86	60
86C-112	200	1 1/2"	260	86	60
86C-200	340	2"	260	86	70
86D-200	340	2"	331	86	70
150A-112	200	1 1/2"	151	150	70
150A-200	340	2"	151	150	70
150B-212	660	2 1/2"	211	150	90
150C-300	760	3"	272	150	100

Filtration area cm ²	
Type	USFM USPM
46A	330
46B	400
64A	540
64B	720
86A	900
86B	1.350
86C	1.820
86D	2.350
150A	1.600
150B	2.400
150C	3.200

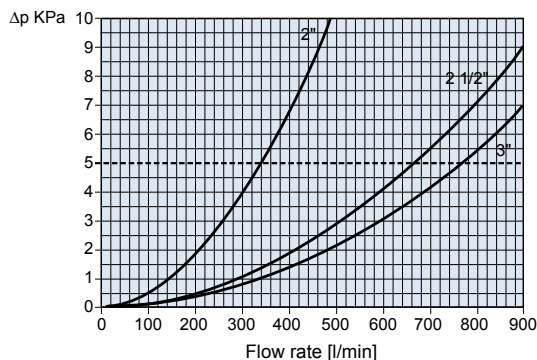
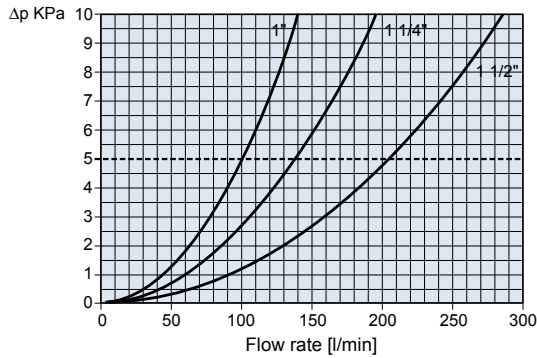
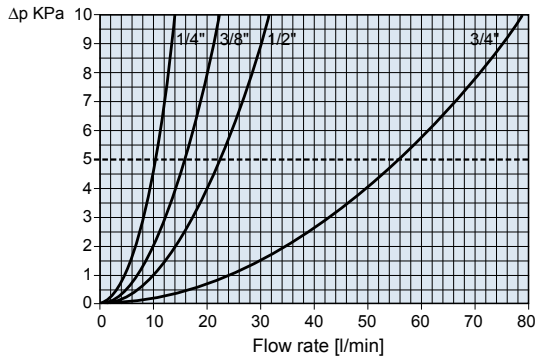
Effective surface area is the same for all the filtration elements.

Filter elements pressure drop

Housing pressure drop

All the curves have been obtained with mineral oil with a density of 860 Kg/m³ and kinematic viscosity of 30 cSt.

Maximum clean filter pressure drop shall be ≤ 5 kPa.



How to order the complete filter

Filtration elements	
R 60	Wire mesh in inox (AISI 304) 60 μ
T 90	Brass square wire mesh 90 μ
T 125	Brass square wire mesh 125 μ
R 125	Square wire mesh in inox (AISI 304) 125 μ
R 250	Square wire mesh in inox (AISI 304) 250 μ
R 500	Square wire mesh in inox (AISI 304) 500 μ

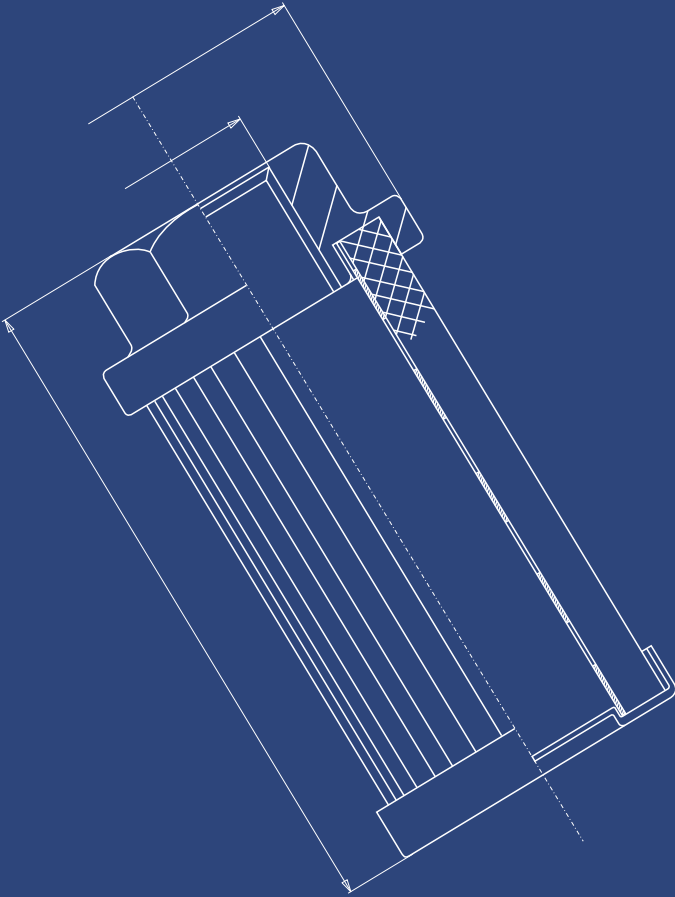
Series
USFM USPM

U S F M 4 6 A 1 4 G R 1 2 5

Type	Connections
46A-14	1/4"
46A-38	3/8"
46B-12	1/2"
64A-34	3/4"
64A-12	1/2"
64B-34	3/4"
64B-100	1"
86A-100	1"
86A-114	1 1/4"
86A-112	1 1/2"
86B-112	1 1/2"
86C-112	1 1/2"
86C-200	2"
86D-200	2"
150A-112	1 1/2"
150A-200	2"
150B-212	2 1/2"
150C-300	3"

Thread type	
G	BSP
N	NPT


Uni-Cardan®



Uni-Cardan[®]

