

# Ningbo Hyforce Hydraulic Machinery Co., Ltd

## Hydraulic Accessories



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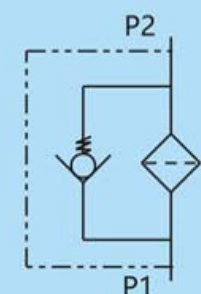
## Hydraulic Accessories Series

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## Hydraulic Accessories Series

### SP Series Spin-on Line Filter

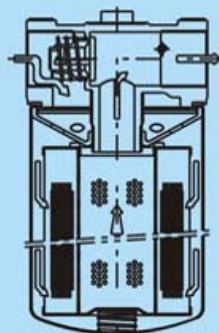
#### Symbol



Return Function



Suction Function



### Technical data

Model	Max. working pressure (MPa)	Blow up pressure (MPa)	By-pass setting pressure (MPa)	Max. flow rate (l/m)	
				Return function	Suction function
SP-06 × 10	0.7	2	0.25	60	20
SP-06 × 25				70	25
SP-08 × 10				60	20
SP-08 × 25				70	25
SP-10 × 10				144	42
SP-10 × 25				160	50
SPA-10 × 10				200	58
SPB-10 × 10				320	80

### How to order

SP	A	06	10	J	R
Product type	Element type	Size	Filtration precision	Function type	Indicator Gauge
Spin-on line filter	No code: Regular element A or B: Long element (Only for size 10×10μm)	06: Rc3/4" 08: Rc1" 10: Rc1 1/4"	10: 10μm 25: 25μm	No code: Return function J: Suction function	No code: Without gauge R: Gauge for return line S: Gauge for suction line

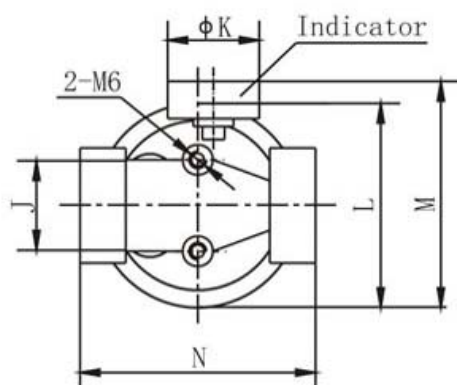


## Hydraulic Accessories Series

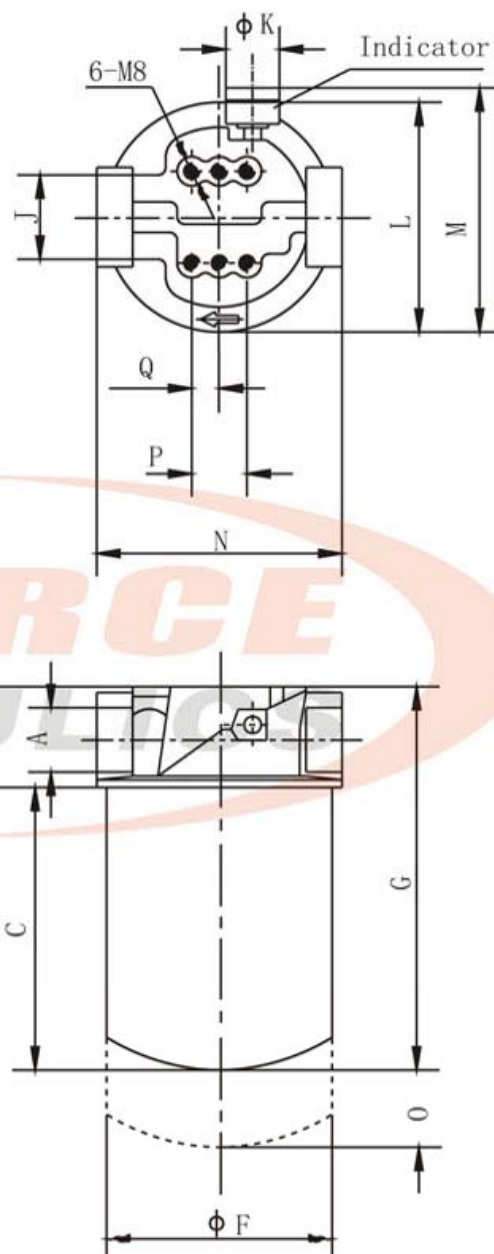
### Dimensions

Unit: mm

SP-06/SP-08



SP-10/SPA-10/SPB-10



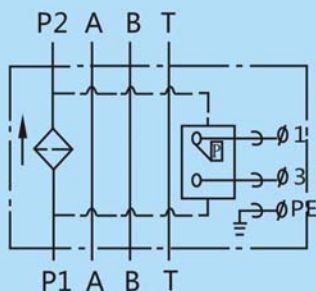
02

Model	A	B	C	F	G	J	K	L	M	N	O	P	Q	Weight (kgs)
SP-06 × ×	Rc3/4"	53	135	93	188	38	42	80	105	93	25	—	13	0.76
SP-08 × ×	Rc1"													0.76
SP-10 × ×	Rc1 1/4"	62	176	125	238	47	42	136	150	136	45	37	18.5	1.88
SPA-10 × ×			231		293									2.7
SPB-10 × ×			270		332									3.2

## Hydraulic Accessories Series

### DF Series Modular High Pressure Line Filter

#### Symbol



#### Technical data

Model	Size	Pressure loss (MPa)		Indicator power (V/W)
		Initial	Max.	
DF-H30 × *	NG6	≤0.1	0.5	24/48
DF-H60 × *	NG10			220/50
DF-H110 × *				

#### How to order

DF	BH	H	60	10	Y
Product type	Medium	Working pressure	Flow rate	Filtration precision	Indicator type
Modular high pressure line filter	No code: Hydraulic oil BH: Water-glycol	H: 32MPa	30: 30l/m 60: 60l/m 110: 110l/m	3: 3μm 5: 5μm 10: 10μm 20: 20μm	No code: Without indicator Y: With CM- I indicator C: With CS-III indicator

A

B

C

D

E

F

G

H

I

J

K

L

M

N

O3

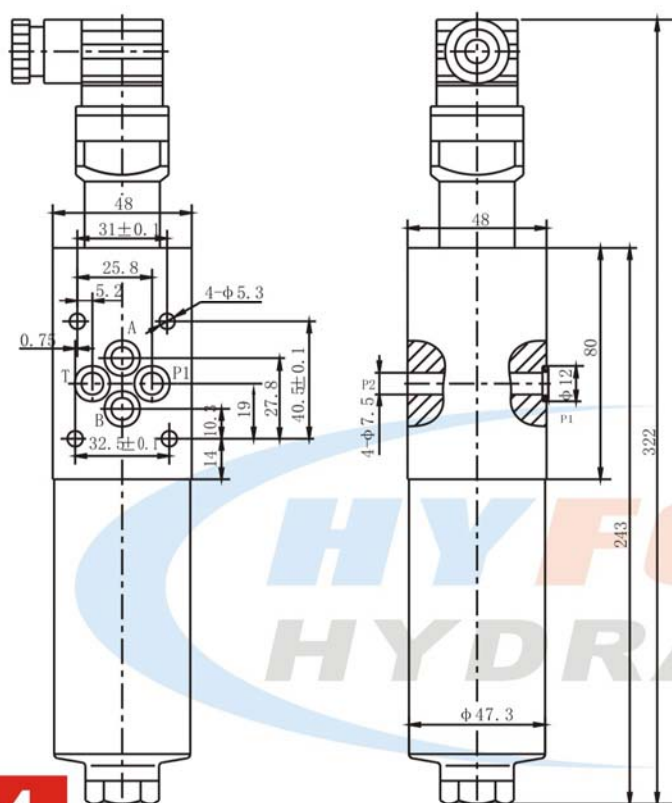
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## Hydraulic Accessories Series

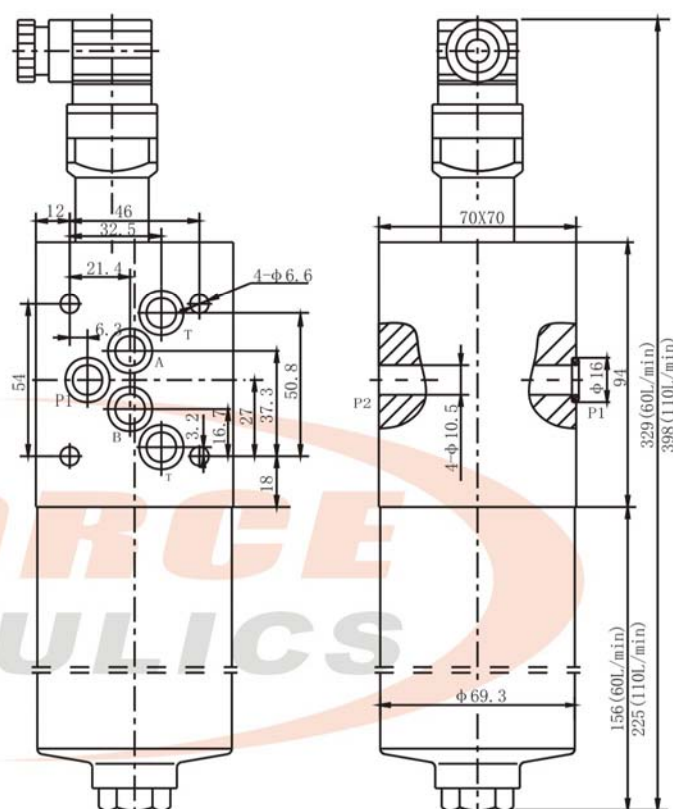
### Dimensions

Unit: mm

DF-H30



DF-H60/DF-H110



O4



## Hydraulic Accessories Series

### WF Series Magnetic Suction Filter

#### Symbol



With Magnet

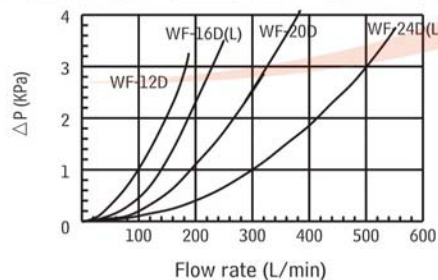
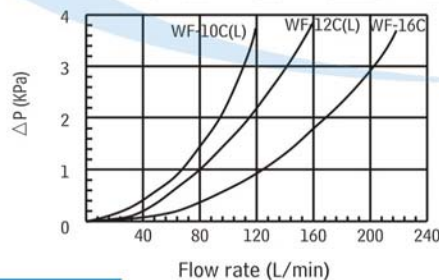
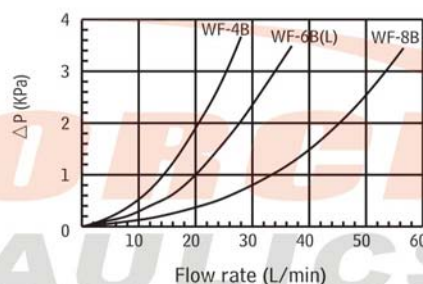
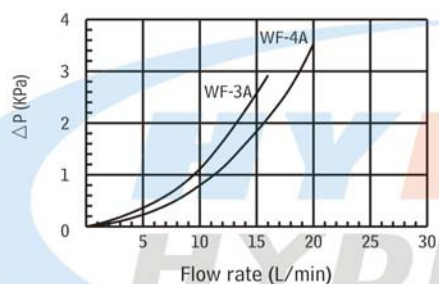


Without Magnet



### Performance curves

Viscosity: 30CST



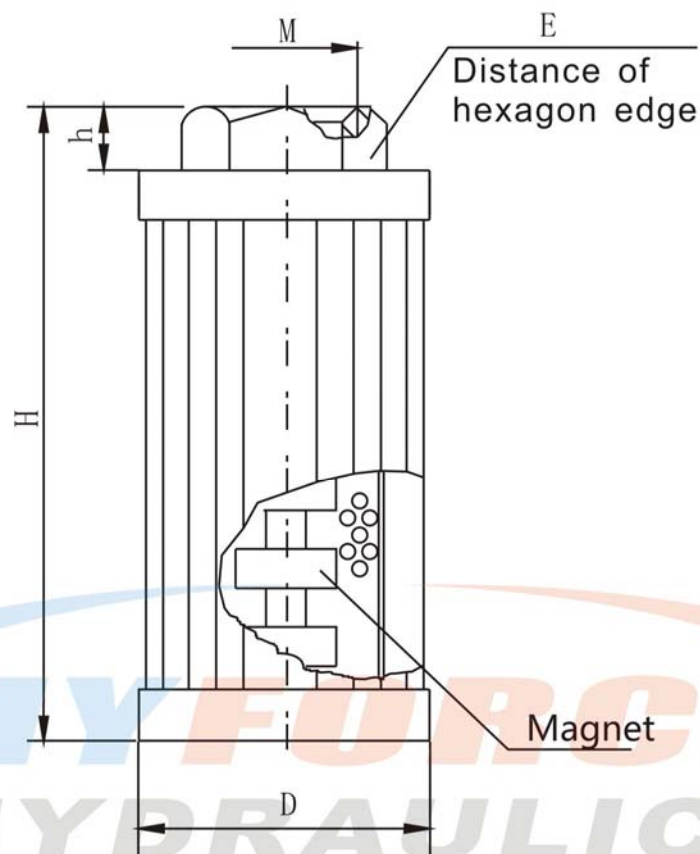
### How to order

WF	C	BH	6	A	80
Product type	With magnet	Medium	Thread size	Outside dia.	Filtration precision
Suction filter	No code: Without magnet	No code: Hydraulic oil	3: 3/8"	A: 50mm	80: 80μm
	C: With magnet	BH: Water-glycol	4: 1/2"	B: 70mm	100: 100μm
			6: 3/4"	BL: 70mm	180: 180μm
			8: 1"	C: 99mm	
			10: 1 1/4"	CL: 99mm	
			12: 1 1/2"	D: 130mm	
			16: 2"	DL: 130mm	
			20: 2 1/2"		
			24: 3"		

## Hydraulic Accessories Series

### Dimensions

Unit: mm



Model	M	D	E	h	H	Filter area (cm <sup>2</sup> )			
WF *-3A×*	G3/8"	50	30	10	85	282			
WF *-4A×*	G1/2"				70	41	95	530	
WF *-4B×*		G3/4"	145						832
WF *-6B×*	G1"						99	69	
WF *-6BL×*		G1 1/4"	232		2140				
WF *-8B×*	G1 1/2"		142	1206					
WF *-10C×*		G2"	232	2140					
WF *-10CL×*	130		100	20	170	2015			
WF *-12C×*		G1 1/2"			270	3590			
WF *-12CL×*							G3"	330	4320
WF *-16C×*		G2 1/2"			270	3590			
WF *-12D×*									
WF *-16D×*	G2 1/2"	270	3590						
WF *-16DL×*				G3"	270	3590			
WF *-20D×*	G3"	270	3590						
WF *-24D×*				G3"	270	3590			
WF *-24DL×*	G3"	270	3590						

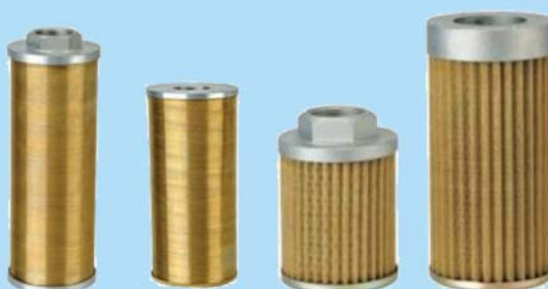
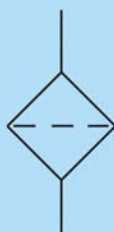
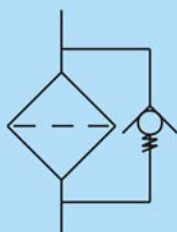
O6



## Hydraulic Accessories Series

### WU, XU Series Suction Filter

#### Symbol



With By-pass Valve    Without By-pass Valve

#### Technical data

Model	Initial pressure loss (MPa)	By-pass valve cracking pressure (MPa)	Connection type
* U-16 × * -J	≤0.01	≤0.02	Thread connection
* U-25 × * -J			
* U-40 × * -J			
* U-63 × * -J			
* U-100 × * -J			
* U-160 × * -J			
WU-225 × * G-J			Flange connection
* U-250 × * F-J			
* U-400 × * F-J			
* U-630 × * F-J			

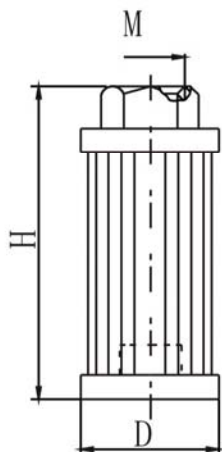
#### How to order

WU	I	BH	160	80	F
Product type	By-pass valve	Medium	Flow rate	Filtration precision	Connection type
WU: Wire mesh filter XU: Notched wire filter	No code: Without by-pass valve I: With by-pass valve	No code: Hydraulic oil BH: Water-glycol	6: 6l/m 10: 10l/m 16: 16l/m 25: 25l/m 40: 40l/m 63: 63l/m 100: 100l/m 160: 160l/m 225: 225l/m 250: 250l/m 400: 400l/m 630: 630l/m	80: 80μm 100: 100μm 180: 180μm (Only for WU series)	No code: Metric thread G: Inch thread F: Flange connection

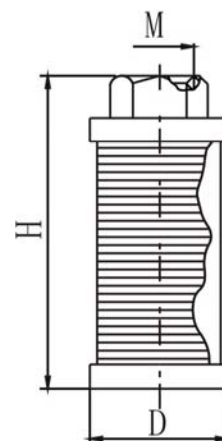
## Hydraulic Accessories Series

### Dimensions

Unit: mm

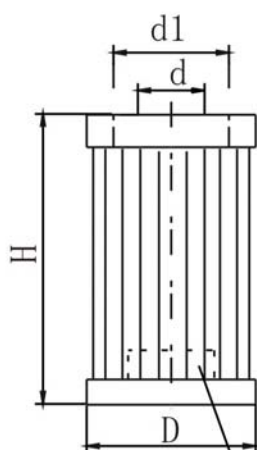


Model	H	D	M
WU * 16× *	84	35	M18×1.5
WU * 25× *	104	43	M22×1.5
WU * 40× *	124		M27×2
WU * 63× *	103	70	M33×2
WU * 100× *	153		M42×2
WU * 160× *	200	82	M48×2
WU * 225× * G	165	150	G2"



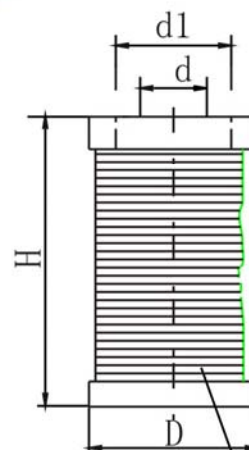
Model	H	D	M
XU * 6× *	73	56	M18×1.5
XU * 10× *	104		
XU * 16× *	158		
XU * 25× *	125	75	M22×1.5
XU * 40× *	198		M27×2
XU * 63× *	186	99	M33×2
XU * 100× *	288		M42×2
XU * 160× *	368	118	M48×2

O8



By-pass valve

Model	H	D	d	d1
WU * 250× * F	182	88	50	74
WU * 400× * F	229	105	65	93
WU * 630× * F	281	118	80	104



By-pass valve

Model	H	D	d	d1
XU * 250× * F	422	162	50	74
XU * 400× * F	491	222	65	93
XU * 630× * F	659	252	80	104

## Hydraulic Accessories Series

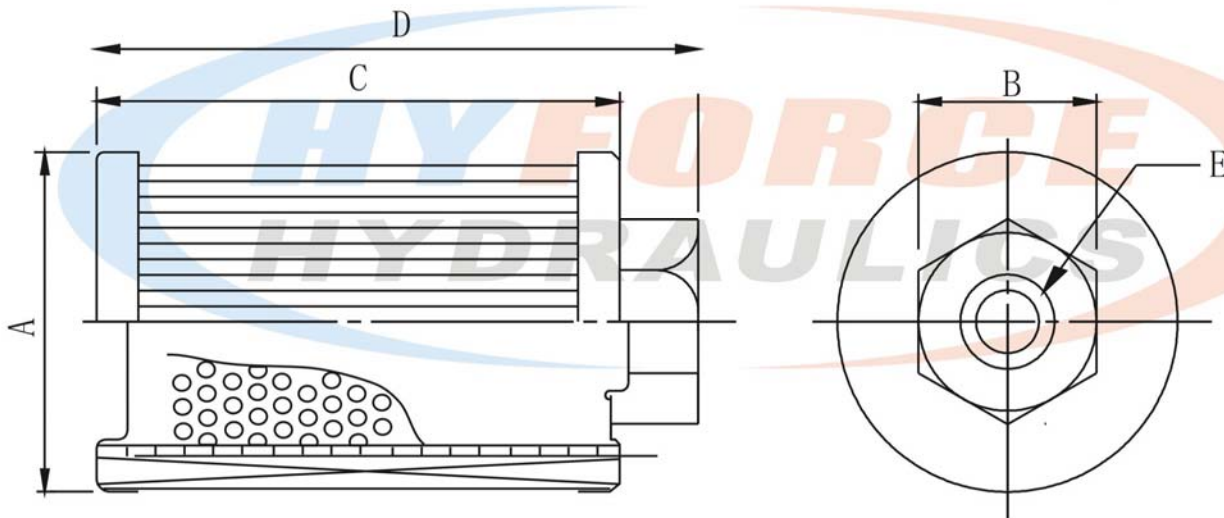
### MF Series Suction Filter

#### Symbol



### Dimensions & technical data

Unit: mm



Model	E	A	B	C	D	Filtration precision (μm)	Flow rate (m/l)	Weight (kg)		
MF-02	G1/4"	55	21	82	87	100	20	0.08		
MF-03	G3/8"						25	0.08		
MF-04	G1/2"	66	27	122	130		35	0.09		
MF-06	G3/4"		33				60	0.14		
MF-08	G1"		41				142	152	110	0.17
MF-10	G1 1/4"		50				162	174	210	0.19
MF-12	G1 1/2"	82	58	182	195		260	0.25		
MF-16	G2"	103	71	180	196		390	0.36		
MF-20	G2 1/2"	115	85	230	248		600	1.14		
MF-24	G3"	135	97		251		700	1.2		
MF-32	G4"	158	124	420	438		1000	3		



## Hydraulic Accessories Series

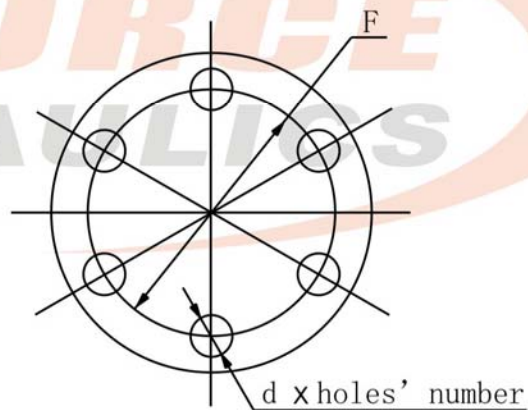
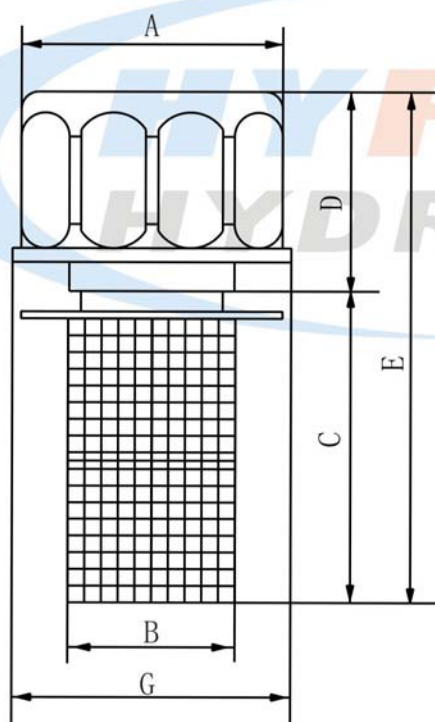
### AB Series Filler Breather Filter

#### Symbol



#### Dimensions & technical data

Unit: mm



O10

Model	Dia.	A	B	C	D	E	F	G	d x holes' number	Filtration precision	Weight (kg)
AB-1162	30	53	31	65	35	90	45	53	6×3	100µm	0.13
AB-1163	50	75	48	88	49	137	71	88	6×6		0.19

## Hydraulic Accessories Series

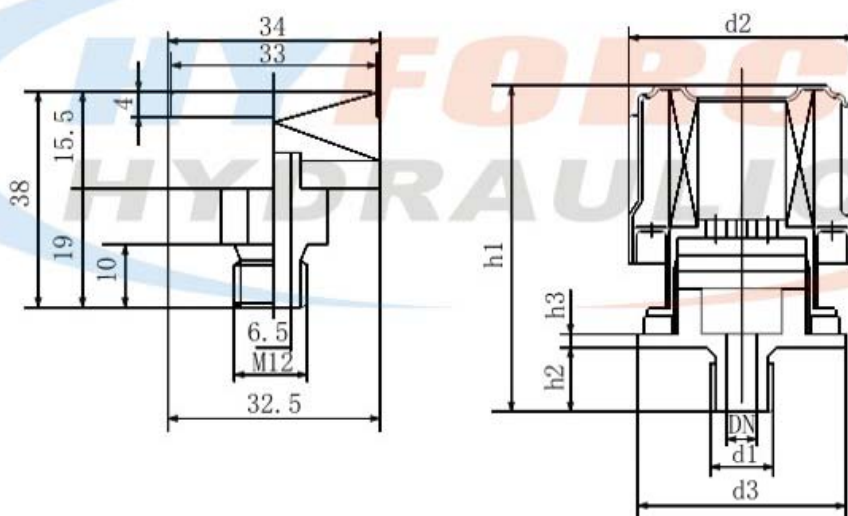
### CD Series Filler Breather Filter

#### Symbol



### Dimensions & technical data

Unit: mm



Filtration precision		d1		d2	d3	DN	h1	h2	h3	Air flow rate (m³/min)	
C type	D type	Metric thread	BSP thread							C type	D type
40μm	10μm	M12	G3/4"	—	—	6.5	—	—	—	0.75	0.45
		M33×2	G1"	113	96	25	102	17	6	3	1
		M42×2	G1 1/4"			32		19			
		M48×2	G1 1/2"	150	115	40	140	22	7	4	
		M60×2	G2"			50		24			
		M76×2	G2 1/2"			65		9	6.3	2.5	
		M90×2	G3"	256	186	80	147	26			

How to order: Product type + thread type, for example: C-M33×2, D-G1

## Hydraulic Accessories Series

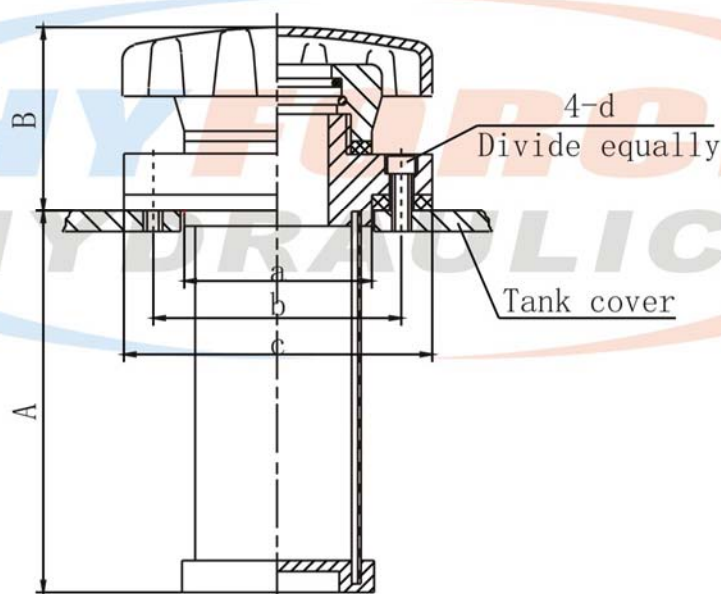
### EF Series Filler Breather Filter

#### Symbol



#### Dimensions & technical data

Unit: mm



012

Model	A	B	a	b	c	4-d	Filtration precision	Oil filter area (cm <sup>2</sup> )	Oil flow rate (l/min)	Air flow rate (l/min)
EF <sub>1</sub> -25	80	45	39	51	64	M4×10	125μm	80	9	65
EF <sub>2</sub> -32	100	50	47	59	70			120	14	105
EF <sub>3</sub> -40	120	55	55	66.5	80	M5×14		180	21	170
EF <sub>4</sub> -50	150	59	66	82	98	M6×14		270	32	260
EF <sub>5</sub> -65	190	70	81	102	120	M8×16		400	47	450
EF <sub>6</sub> -80	220	80	96	120	140			600	70	675
EF <sub>7</sub> -100	274	88	118	140	160	M8×20		942	110	1055
EF <sub>8</sub> -120	333	98	138	160	180			1370	160	1512



## Hydraulic Accessories Series

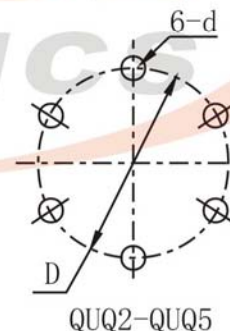
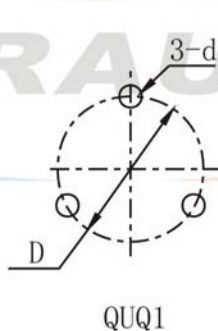
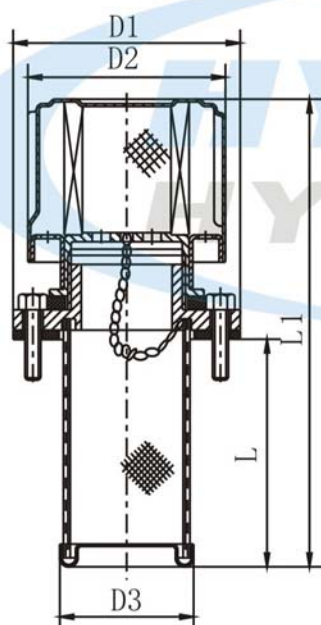
### QUQ Series Filler Breather Filter

#### Symbol



#### Dimensions & technical data

Unit: mm

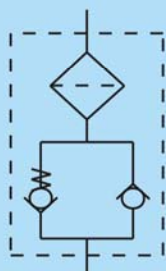


Model	D	D1	D2	D3	L	L1	d	Air filtration precision
QUQ1	41.3	50	44	28	82	134	3-M4×16	10μm
QUQ2	73	83	76	48	98	159	6-M4×8	
QUQ2.5	110	123	113	76	150	239		
QUQ3	145	160	150	89	195	320	6-M4×12	20μm
QUQ4	250	280	256	153	254	379	6-M10×20	40μm
QUQ5	280	320	295	197	270	395	6-M12×20	

## Hydraulic Accessories Series

### PAF Series Filler Breather Filter

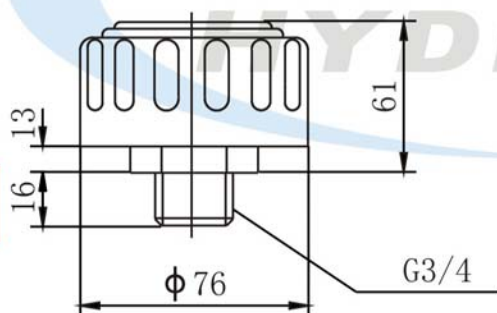
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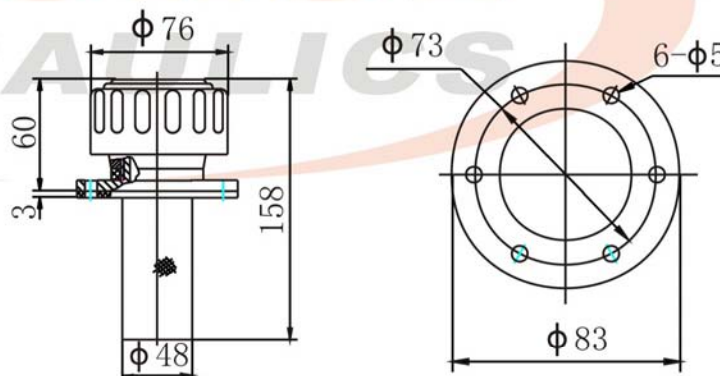
#### Dimensions & technical data

Unit: mm

#### Thread Connection Type



#### Flange Connection Type



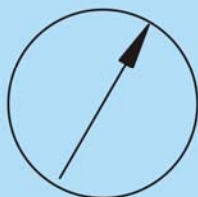
O14

Model	Connection type & size	Check valve cracking pressure (MPa)	Air filtration precision	Weight (kg)
PAF1	BSP Thread: G3/4"	0.02	10μm	0.2
PAF2	Flange: 6-M4×16	0.035	20μm	0.28
		0.07	40μm	

## Hydraulic Accessories Series

### PG63 Series Stainless Pressure Gauge

#### Symbol



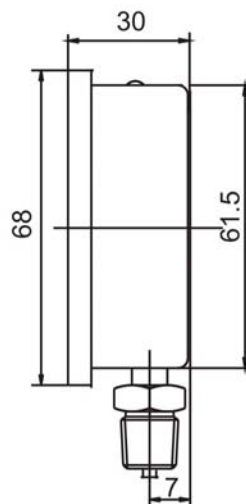
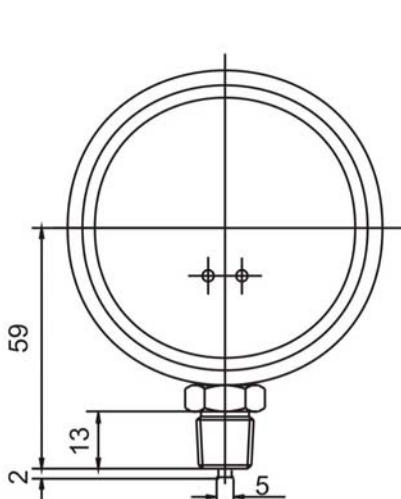
#### How to order

PG	63	B	100	G
Product type	Dial size	Connection option	Pressure range	Thread type & size
Pressure gauge	63mm	B: Bottom connection C: Back connection with U clamp F: Back connection with front flange	10: 0~10Bar 25: 0~25Bar 40: 0~40Bar 60: 0~60Bar 100: 0~100Bar 160: 0~160Bar 250: 0~250Bar 315: 0~315Bar 400: 0~400Bar	G: BSP1/4" Z: NPT1/4" S: SAE 6 M: M14×1.5

#### Dimensions

Unit: mm

#### Bottom Connection Type



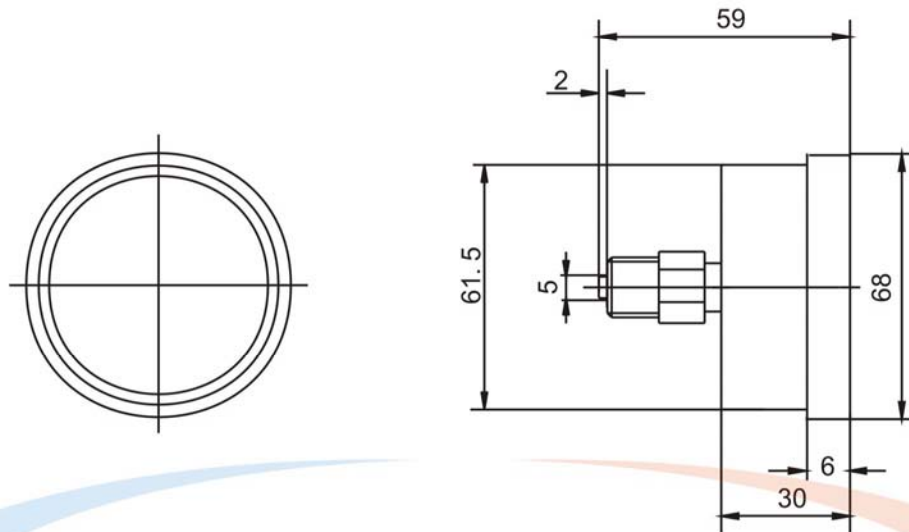


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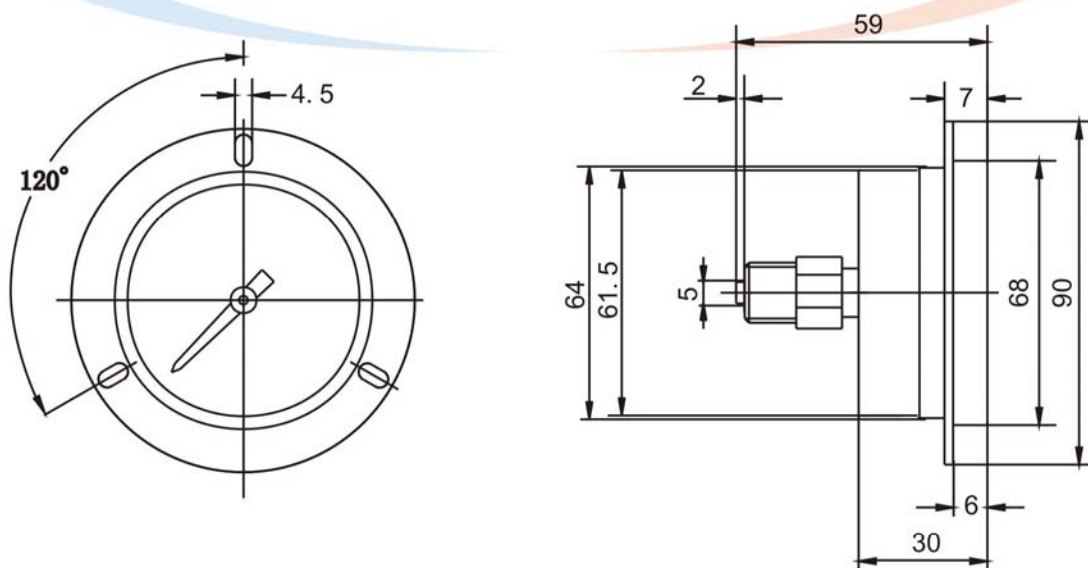
### Dimensions

Unit: mm

#### Back Connection Type



#### Back Connection Type with Front Flange

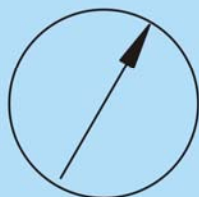


O16

## Hydraulic Accessories Series

### PG100 Series Stainless Pressure Gauge

#### Symbol



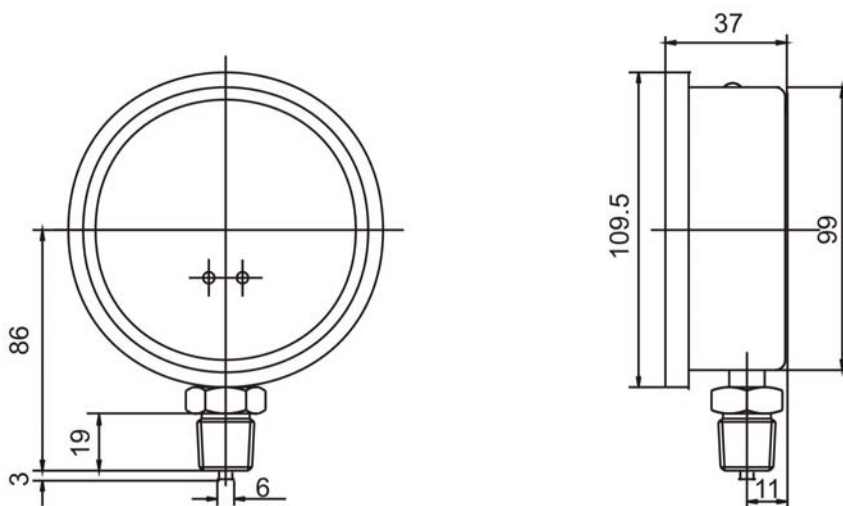
#### How to order

PG	100	B	100	G
Product type	Dial size	Connection option	Pressure range	Thread type & size
Pressure gauge	100mm	B: Bottom connection C: Back connection with U clamp F: Back connection with front flange	10: 0~10Bar 25: 0~25Bar 40: 0~40Bar 60: 0~60Bar 100: 0~100Bar 160: 0~160Bar 250: 0~250Bar 315: 0~315Bar 400: 0~400Bar	G: BSP1/2" Z: NPT1/2" S: SAE 8 M: M20×1.5

#### Dimensions

Unit: mm

#### Bottom Connection Type

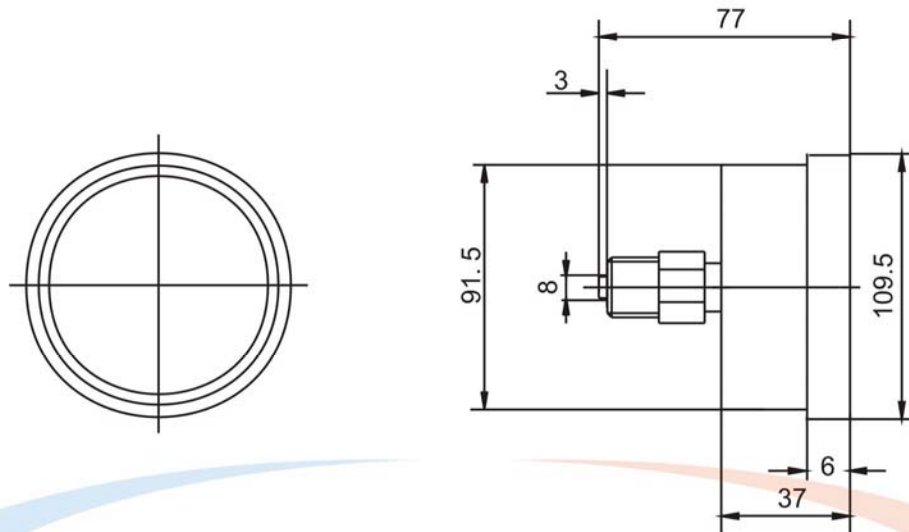


## Hydraulic Accessories Series

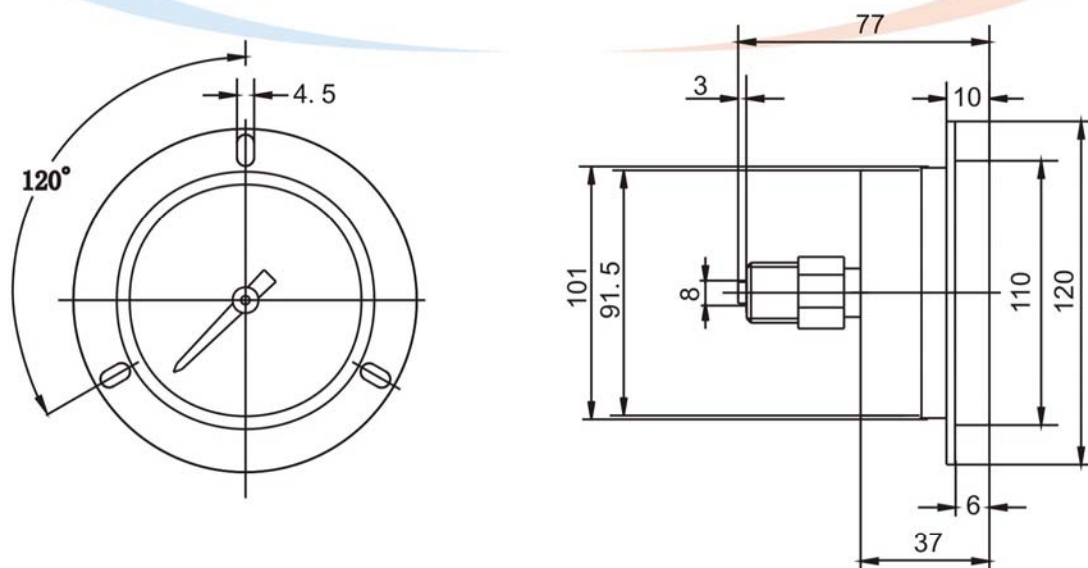
### Dimensions

Unit: mm

#### Back Connection Type



#### Back Connection Type with Front Flange



**O18**



## Hydraulic Accessories Series

### YWZ Series Level Fluid Indicator with Thermometer

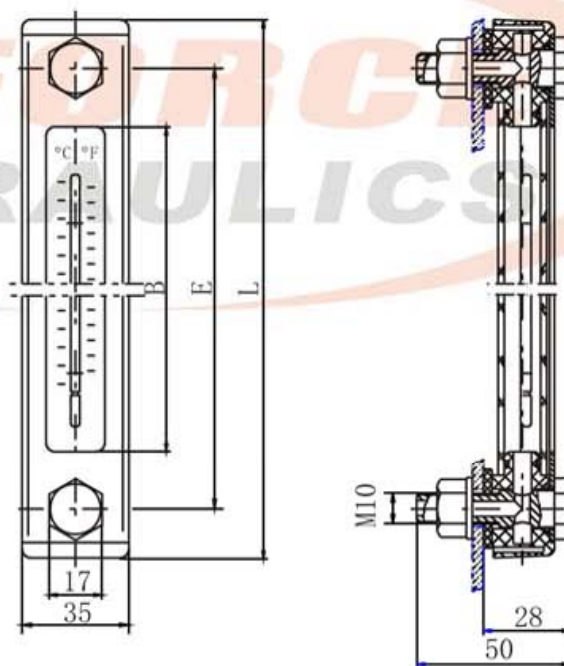
#### Symbol



#### Dimensions

Model	L	E	B
YWZ * 76 *	108	76	37
YWZ * 80 *	112	80	42
YWZ * 100 *	132	100	62
YWZ * 125 *	157	125	87
YWZ * 127 *	159	127	89
YWZ * 150 *	182	150	112
YWZ * 160 *	192	160	122
YWZ * 200 *	232	200	162
YWZ * 250 *	282	250	212
YWZ * 254 *	286	254	216
YWZ * 300 *	332	300	262
YWZ * 350 *	382	350	312
YWZ * 400 *	432	400	362
YWZ * 450 *	482	450	412
YWZ * 500 *	532	500	462

Unit: mm



#### How to order

YWZ	BH	127	T	M12
Product type	Medium	Dimension E	With thermometer	Bolt size
YWZ level indicator	No Code: Hydraulic Oil BH: Water-glycol	Refer to dimension chart	No code: Without thermometer T: With thermometer	No code: M10 Bolt M12: M12 Bolt

## Hydraulic Accessories Series

### CYW Series Level Fluid Indicator with Thermometer

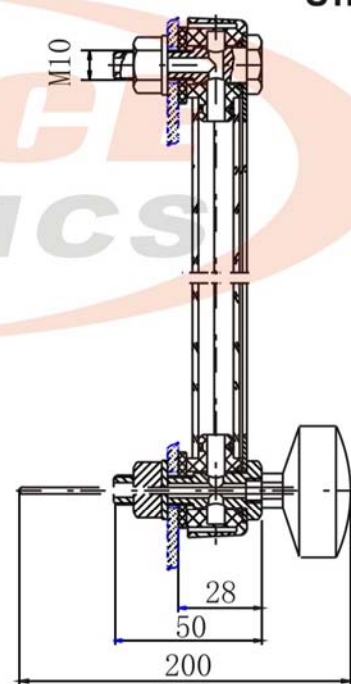
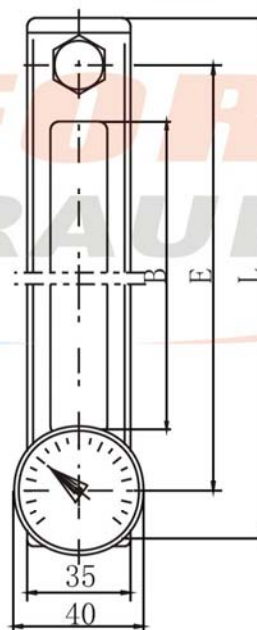
#### Symbol



#### Dimensions

Unit: mm

Model	L	E	B
CYW * 76	108	76	37
CYW * 80	112	80	42
CYW * 100	132	100	62
CYW * 125	157	125	87
CYW * 127	159	127	89
CYW * 150	182	150	112
CYW * 160	192	160	122
CYW * 200	232	200	162
CYW * 250	282	250	212
CYW * 254	286	254	216
CYW * 300	332	300	262
CYW * 350	382	350	312
CYW * 400	432	400	362
CYW * 450	482	450	412
CYW * 500	532	500	462



#### How to order

CYW	BH	127
Product type	Medium	Dimension E
CYW level indicator with thermometer	No code: Hydraulic oil BH: Water-glycol	Refer to dimension chart

## Hydraulic Accessories Series

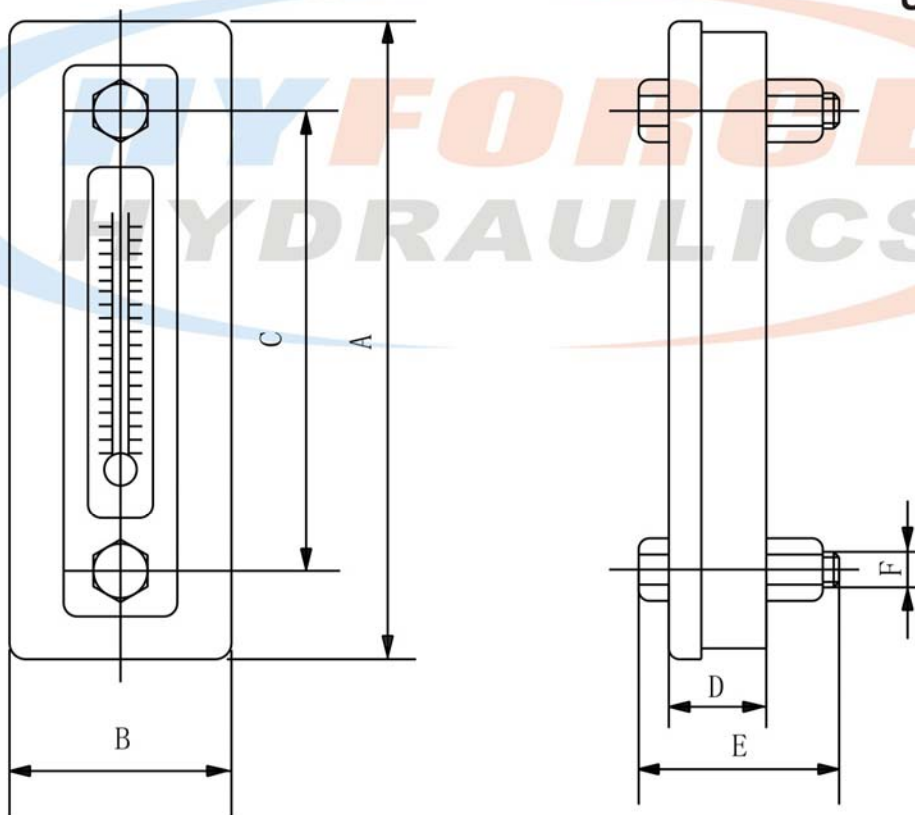
### LS Series Level Fluid Indicator with Thermometer

#### Symbol



#### Dimensions

Unit: mm



Model	A	B	C	D	E	F	Weight (kg)
LS-3"	118	41	80	18	37	M10	0.18
LS-5"	180	52	127	19.5	46	M12	0.33

A

B

C

D

E

F

G

H

I

J

K

L

M

N

O

P

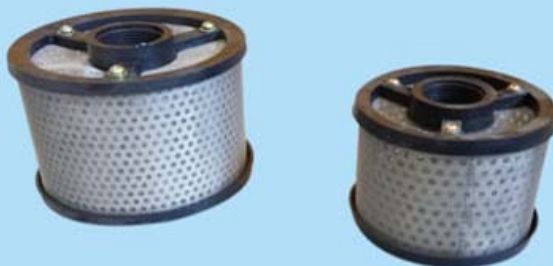
021



## Hydraulic Accessories Series

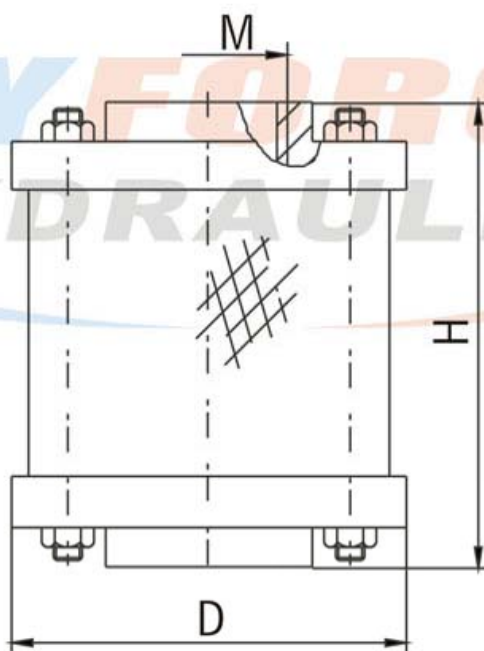
### HY37 Series Mesh Strainer

#### Symbol



#### Dimensions & technical data

Unit: mm



022

Model	Flow Rate (m/l)	H	D	M	Weight (kg)
HY37-50	50	87	105	M33×2	0.13
HY37-100	100	116	145	M42×2	0.22