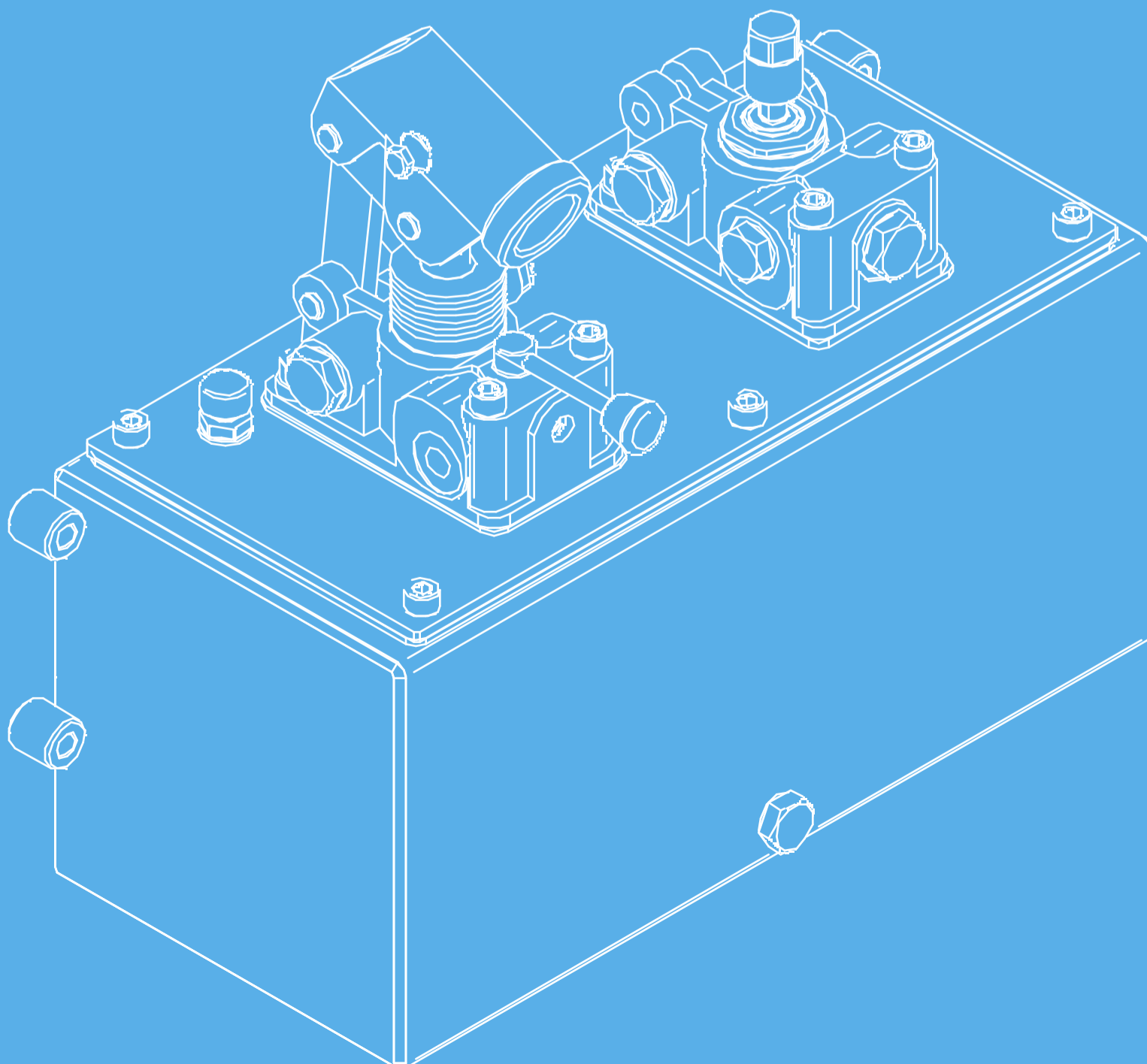
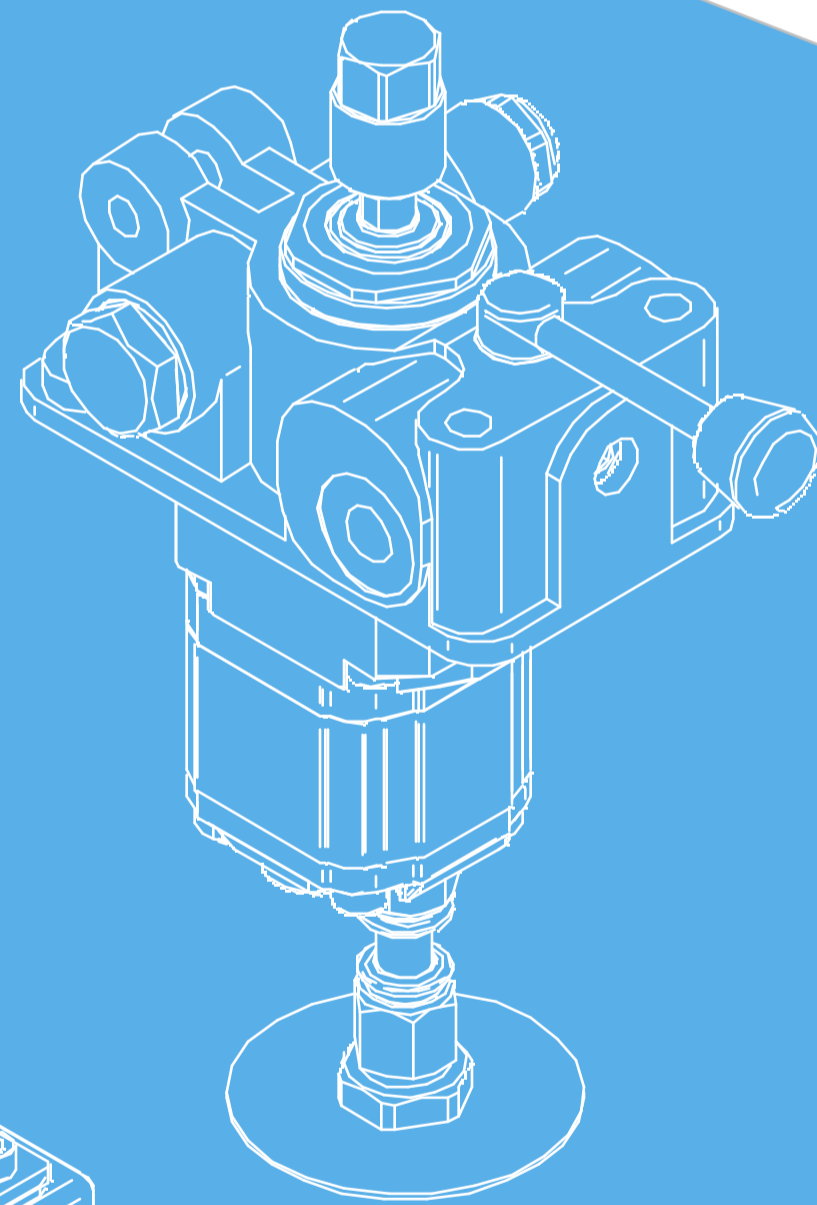
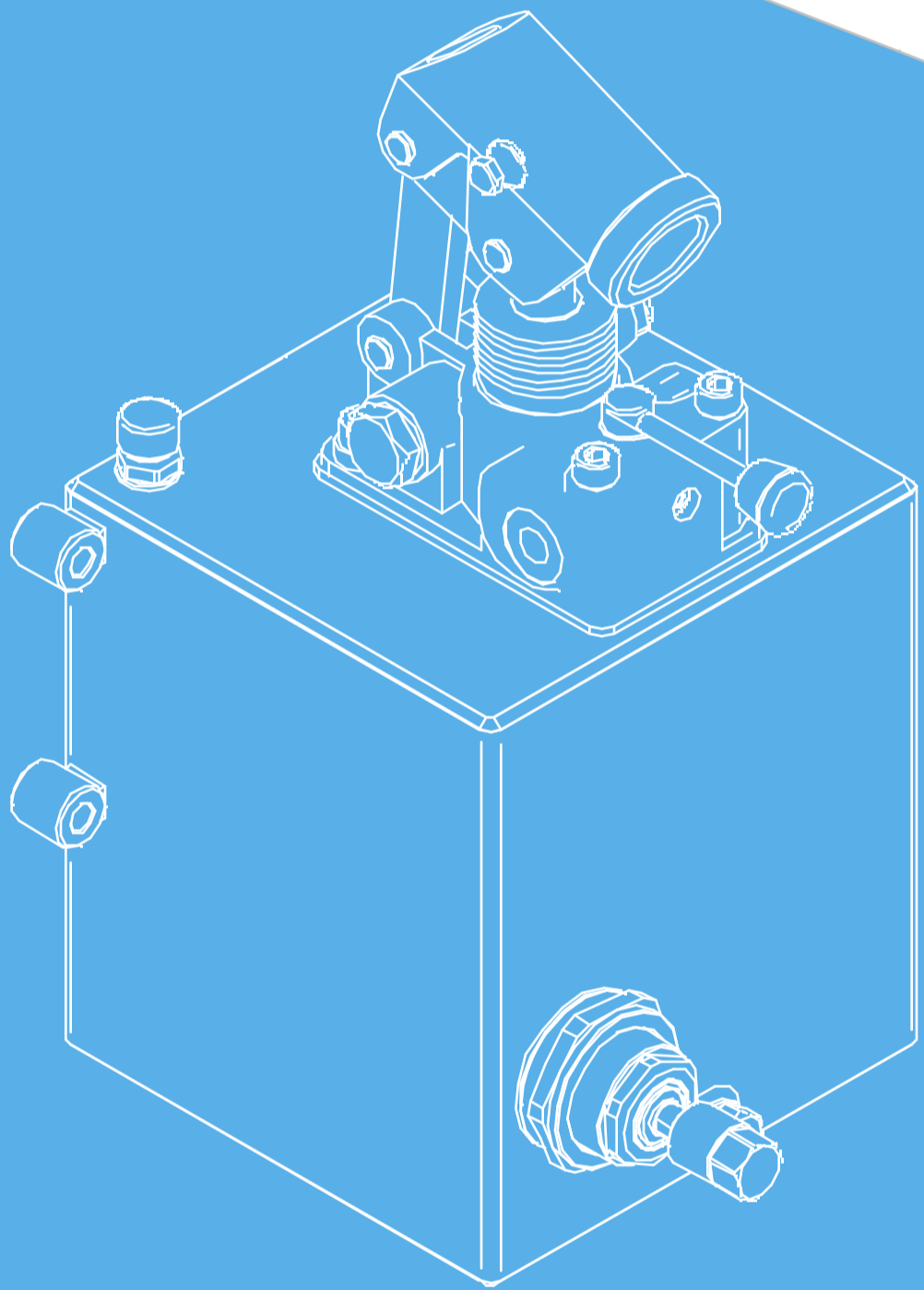


# ZES

*Zero Effort System*



G.L. HYDRAULIC S.R.L. è una realtà produttiva all'avanguardia specializzata nella realizzazione di una vasta gamma di componenti oleodinamici che trovano applicazione nei più diversi settori industriali.

Gli elevati standard qualitativi del prodotto vengono scrupolosamente garantiti dall'impiego dei materiali migliori e dalla rigorosa attuazione di severe procedure di controllo. Grazie all'esperienza, alla profonda conoscenza del mercato e all'elevata competenza tecnica, G.L. HYDRAULIC S.R.L. è un punto di riferimento indispensabile per tutti coloro che cercano risposte puntuali e soluzioni concrete alle esigenze più diversificate. L'ottima assistenza pre e post vendita e la rapidità delle consegne assicurano servizi efficaci e tempestivi, frutto di una gestione aziendale dinamica e flessibile che è sinonimo di competenza e professionalità.

G.L. HYDRAULIC S.R.L. is a leading-edge manufacturer who specializes in producing a wide range of hydraulic components for application in a variety of industrial sectors.

The exceptional product quality standards are carefully guaranteed through the use of very best materials and the implementation of extremely tough quality-control procedures. Thanks to its experience, extensive knowledge of the market and outstanding technical skills, G.L. HYDRAULIC S.R.L. is an indispensable port of call for those seeking prompt, concrete solutions for every type of requirement, no matter how difficult it might seem. Excellent pre and after assistance, together with fast delivery, ensure a highly efficient customer service arising from the flexible, dynamic company management synonymous with skill and professionalism

# *CATALOGO TECNICO* *TECHNICAL CATALOGUE*

## **ZES**

*Zero Effort System*

***Patented***

**G.L. HYDRAULIC S.R.L.**

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[www.glhydraulic.it](http://www.glhydraulic.it)

C.F. - P.I. : IT01808760357

# Indice - Index

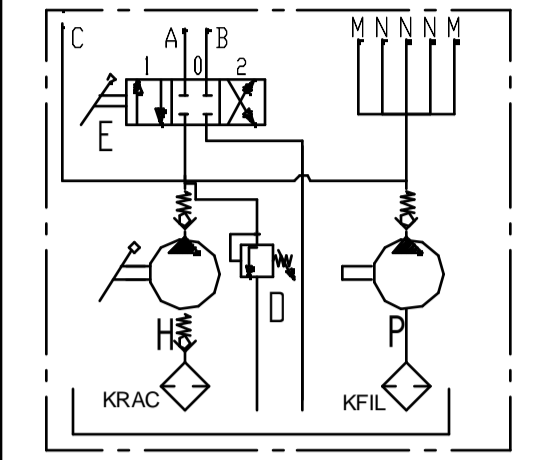
<b>ZES - "Zero Effort System"</b>	<b>Pag.</b>
- ZES con serbatoio per cilindro a doppio effetto con pompa manuale e pompa a ingranaggi - ZES with oil tank for a double acting cylinder with hand pump and gear pump - Line ZES_DE_	5
- ZES con serbatoio per cilindro a semplice effetto con pompa manuale e pompa a ingranaggi - ZES with oil tank for a single acting cylinder with hand pump and gear pump - Line ZES_SE_	6
- ZES senza serbatoio per cilindro a doppio effetto con pompa manuale e pompa a ingranaggi - ZES without oil tank for a double acting cylinder with hand pump and gear pump - Line ZES_DEWOT	7
- ZES senza serbatoio per cilindro a semplice effetto con pompa manuale e pompa a ingranaggi - ZES without oil tank for a single acting cylinder with hand pump and gear pump - Line ZES_SEWOT	8
- ZES senza serbatoio per cilindro a doppio effetto con pompa manuale e pompa a ingranaggi - ZES without oil tank for a double acting cylinder with hand pump and gear pump - Line ZES_DEWOTC	9
- ZES senza serbatoio per cilindro a semplice effetto con pompa manuale e pompa a ingranaggi - ZES without oil tank for a single acting cylinder with hand pump and gear pump - Line ZES_SEWOTC	10
- ZES con serbatoio per cilindro a doppio effetto con pompa manuale e pompa a ingranaggi - ZES with oil tank for a double acting cylinder with hand pump and gear pump - Line ZES_DE_SR_	11
- ZES con serbatoio per cilindro a semplice effetto con pompa manuale e pompa a ingranaggi - ZES with oil tank for a single acting cylinder with hand pump and gear pump - Line ZES_SE_SR_	12
- ZES con serbatoio per cilindro a doppio effetto con pompa a ingranaggi - ZES with oil tank for a double acting cylinder with gear pump - Line ZES_DE_	13
- ZES con serbatoio per cilindro a semplice effetto con pompa a ingranaggi - ZES with oil tank for a single acting cylinder with gear pump - Line ZES_SE_	14
- ZES senza serbatoio per cilindro a doppio effetto con pompa a ingranaggi - ZES without oil tank for a double acting cylinder with gear pump - Line ZES_DEB	15
- ZES senza serbatoio per cilindro a semplice effetto con pompa a ingranaggi - ZES without oil tank for a single acting cylinder with gear pump - Line ZES_SEB	16
- ZES stand alone per cilindro a doppio effetto con pompa a ingranaggi - ZES stand alone for a double acting cylinder with gear pump - Line ZES_DEBP	17
- ZES stand alone per cilindro a semplice effetto con pompa a ingranaggi - ZES stand alone for a single acting cylinder with gear pump - Line ZES_SEBP	18
- Kit filtro aspirazione - Suction kit - Line KFIL - KFILL - KFILS - KRAC	19

DE

Clockwise rotation  
Rotazione oraria

For double acting cylinder  
with oil tank

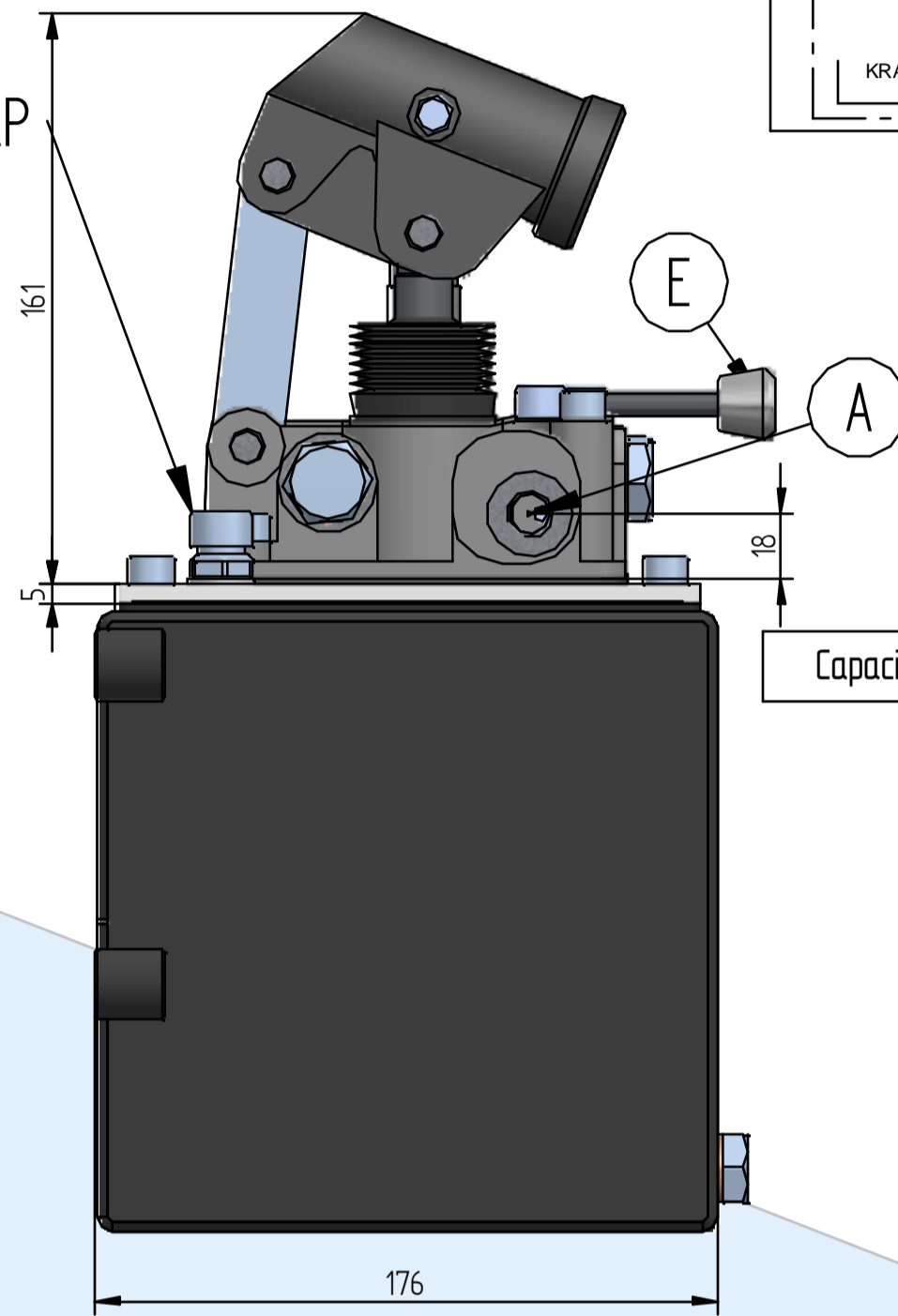
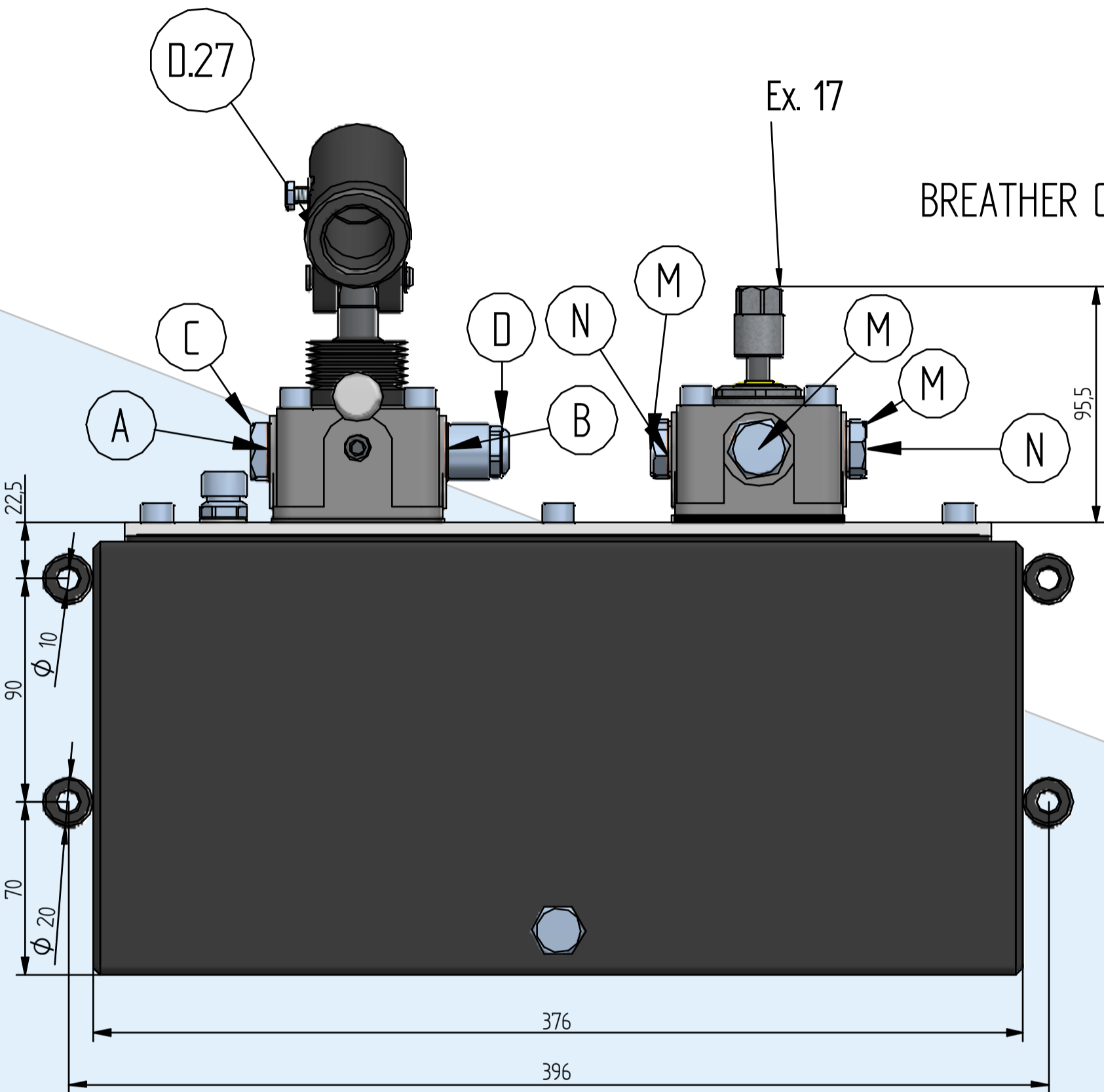
For double acting cylinder  
Per cilindro a doppio effetto



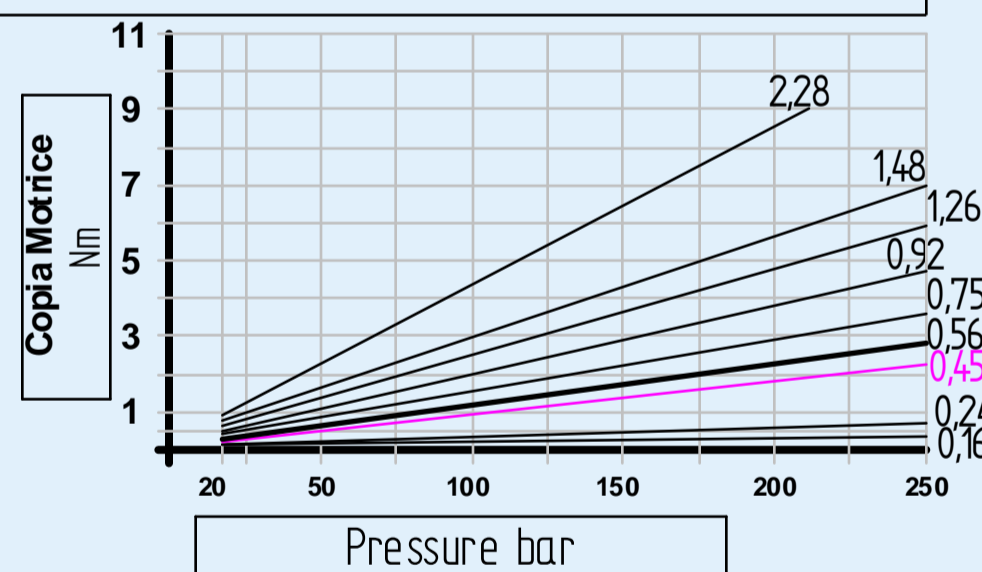
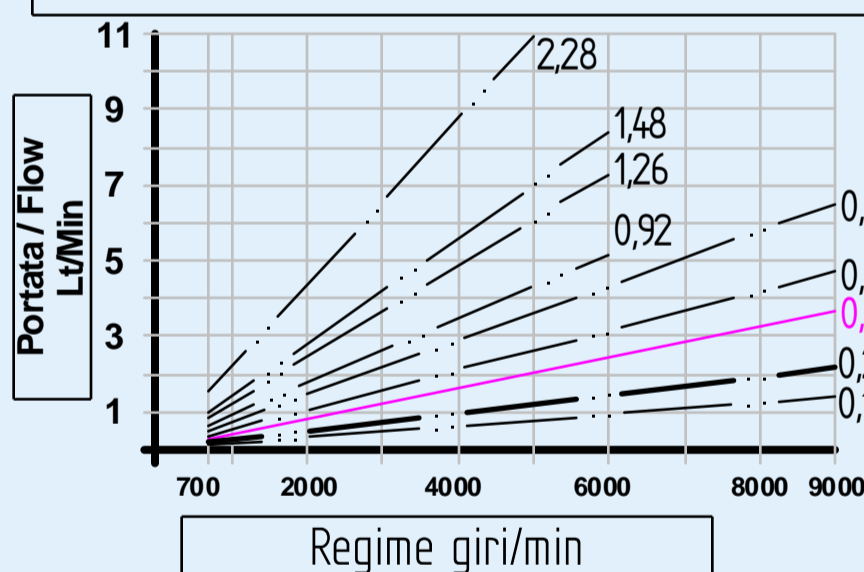
A	1/4 gas
B	1/4 gas
C	3/8 gas
D	Relief valve
M	1/4 gas
N	3/8 gas

Capacity of oil tank 10 Litres

Weight: 16,2 Kg



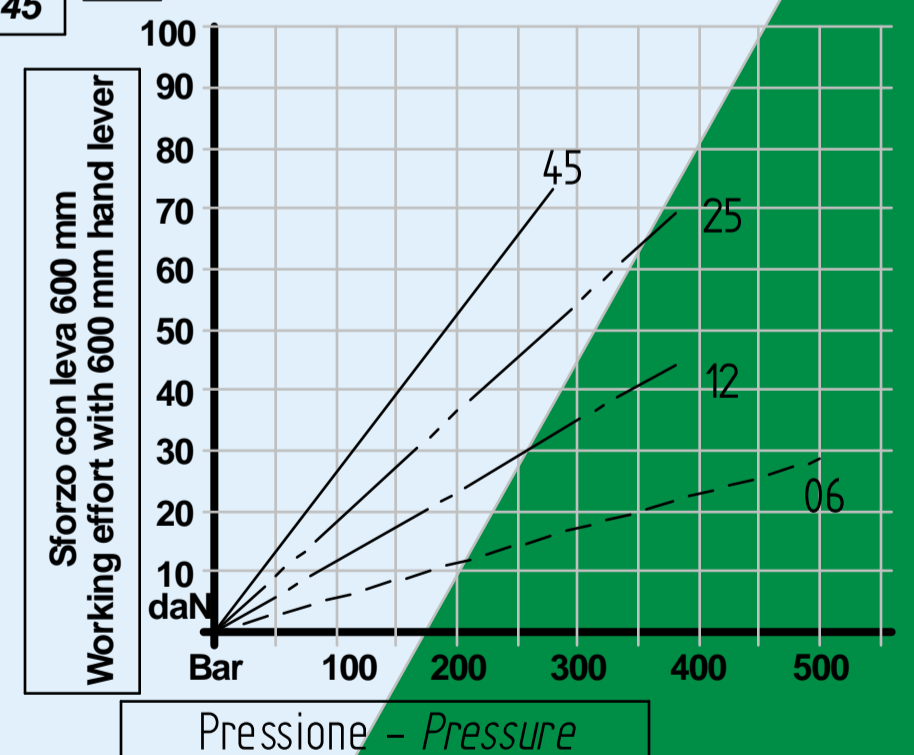
#### Pompa ad ingranaggi - Gear pump



Coppia di serraggio vite con rivetto: 8/10 Nm  
Torque of fastened screw: 8/10 Nm

06  
12  
25  
45

#### Diagramma prove di carico Load curve



#### Codice di ordinazione - Ordering code

ZES	Option 1	017
		025
		045
		057
		076
		098
		127
		230

DE	Option 2	06
		12
		25
		45

#### Option 1 cc Gear pump

017	0,16 cc
025	0,24 cc
045	0,45 cc - Standard Version
057	0,56 cc
076	0,75 cc
098	0,92 cc
127	1,26 cc
152	1,48 cc
230	2,28 cc

#### Option 2 cc Hand pump

6	6 cc
12	12,5 cc
25	19,5 cc - Standard Version
45	28 cc

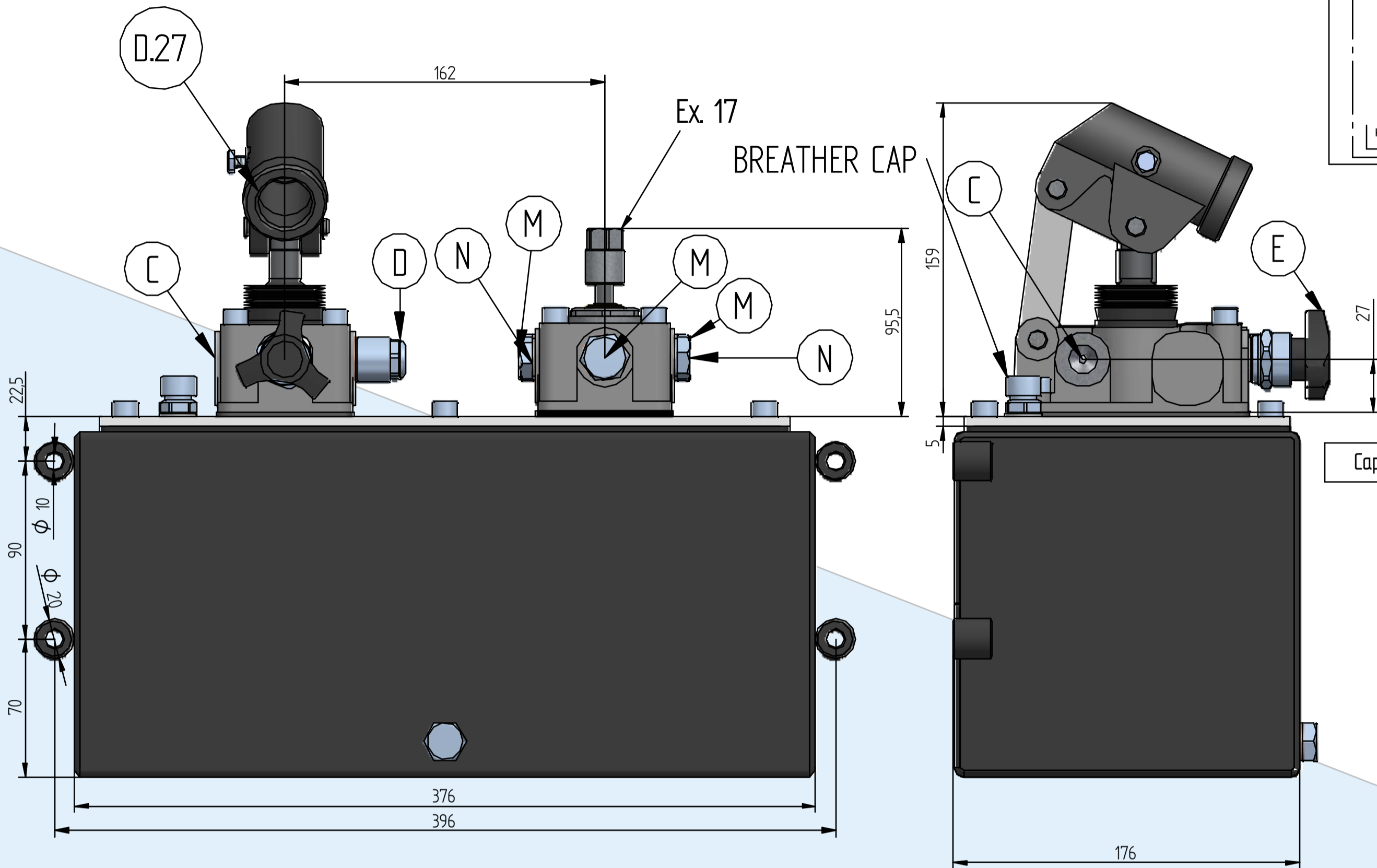
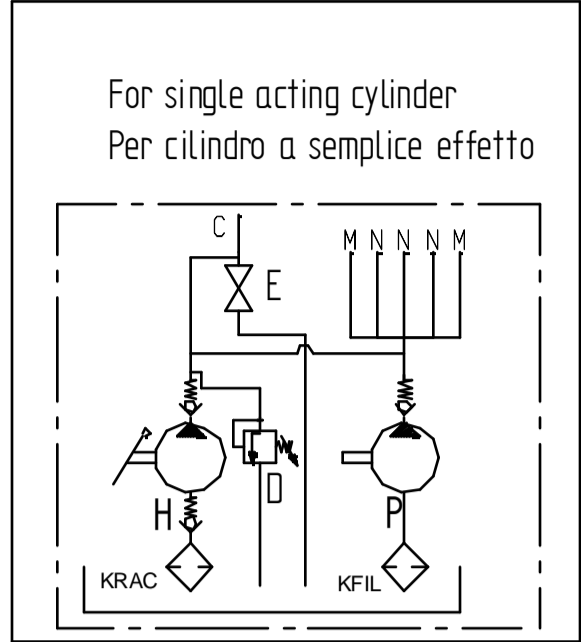
Taratura valvola di massima pressione - comunque non oltre la pressione massima della pompa.  
Relief valve setting - However not over the pumps' max pressure  
min - max (bar) 30 - (...)

Cilindrata Flow (cc)	Pressione massima Max pressure (bar)	Type	Cilindrata Flow (cc)	Pressione massima Max pressure (bar)	rpm min.	rpm max.
6	400	017	0,16	260	700	9.000
12,5	320	025	0,24	260	700	9.000
		045	0,45	280	700	9.000
		057	0,56	280	700	9.000
19,4	300	076	0,75	280	700	9.000
		098	0,92	280	700	6.000
		127	1,26	280	700	6.000
28	250	152	1,48	280	700	6.000
		230	2,28	210	700	5.000

## SE

Clockwise rotation  
Rotazione oraria

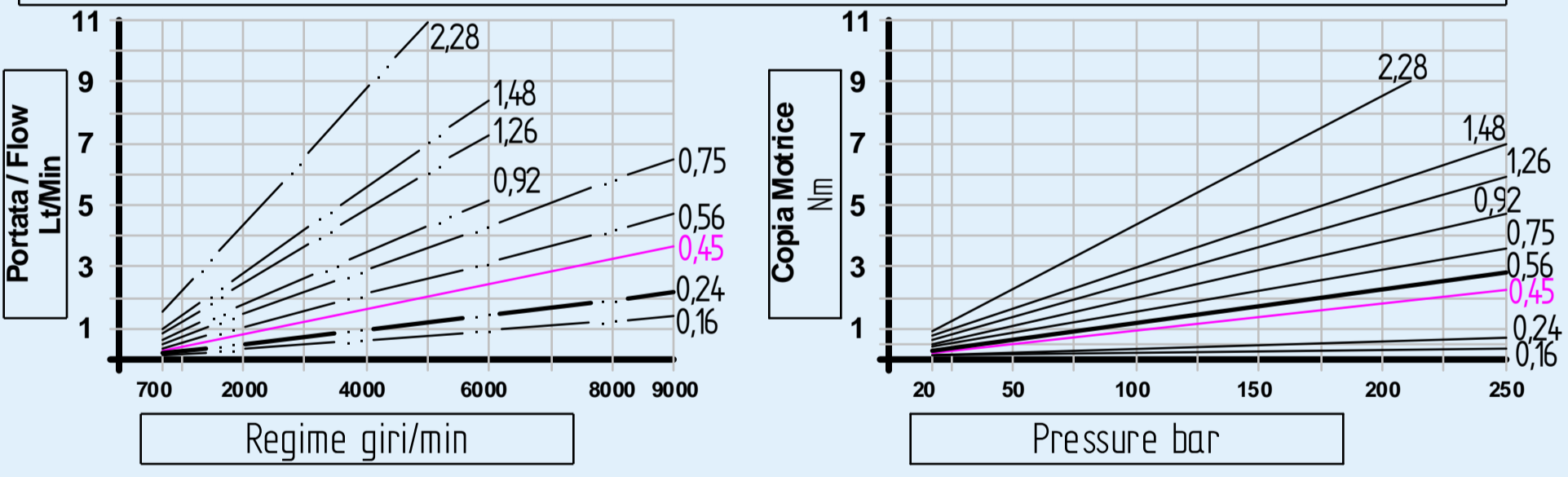
For single acting cylinder  
with oil tank



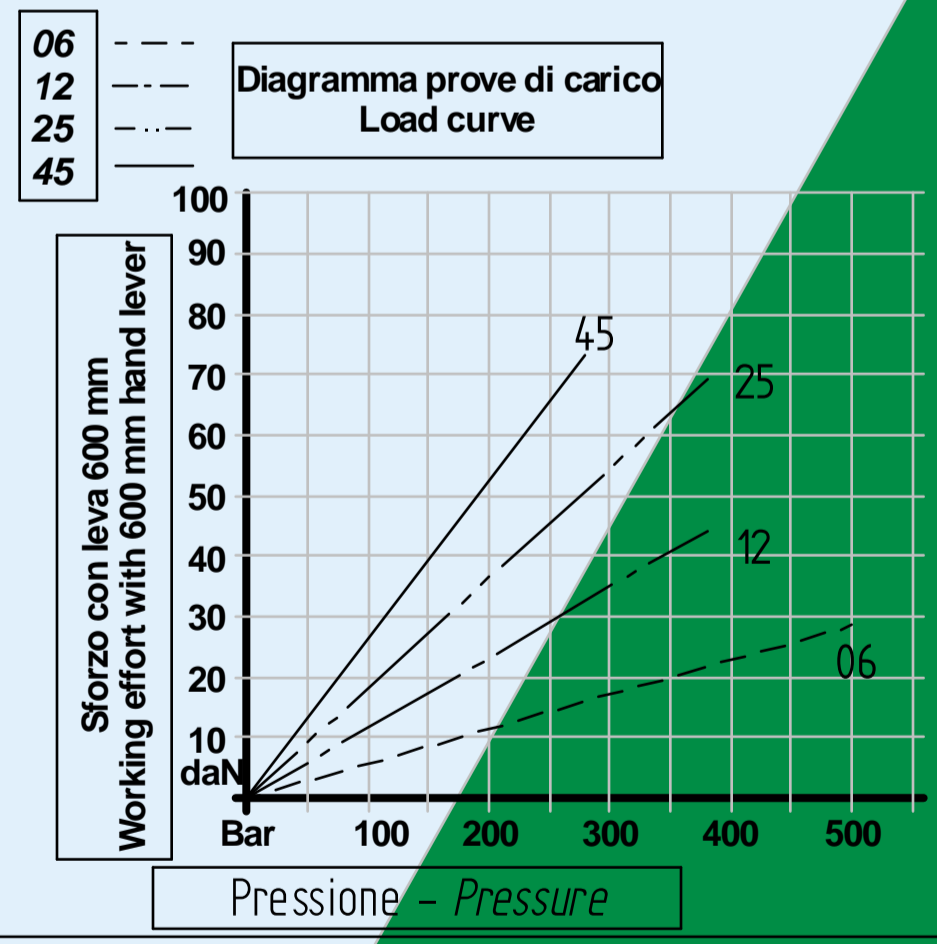
C	3/8 gas
D	Relief valve
M	1/4 gas
N	3/8 gas

Capacity of oil tank 10 Litres  
Weight: 16,2 Kg

### Pompa ad ingranaggi - Gear pump



Coppia di serraggio vite con rivetto: 8/10 Nm  
Torque of fastened screw: 8/10 Nm



### Codice di ordinazione - Ordering code

ZES	Option 1	017	SE	Option 2	06
		025			12
		045			25
		057			45
		076			
		098			
		127			
		152			
230					

Option 1 cc Gear pump		Option 2 cc Hand pump	
017	0,16 cc	6	6 cc
025	0,24 cc	12	12,5 cc
045	0,45 cc - Standard Version	25	19,5 cc - Standard Version
057	0,56 cc	45	28 cc
076	0,75 cc		
098	0,92 cc		
127	1,26 cc		
152	1,48 cc		
230	2,28 cc		

Taratura valvola di massima pressione - Comunque non oltre la pressione massima della pompa.  
Relief valve setting - However not over the pumps' max pressure  
min - max (bar) 30 - (...)

Cilindrata Flow (cc)	Pressione massima Max pressure (bar)	Type	Cilindrata Flow (cc)	Pressione massima Max pressure (bar)	rpm min.	rpm max.
6	400	017	0,16	260	700	9.000
12,5	320	025	0,24	260	700	9.000
		045	0,45	280	700	9.000
		057	0,56	280	700	9.000
19,4	300	076	0,75	280	700	9.000
		098	0,92	280	700	6.000
		127	1,26	280	700	6.000
28	250	152	1,48	280	700	6.000
		230	2,28	210	700	5.000

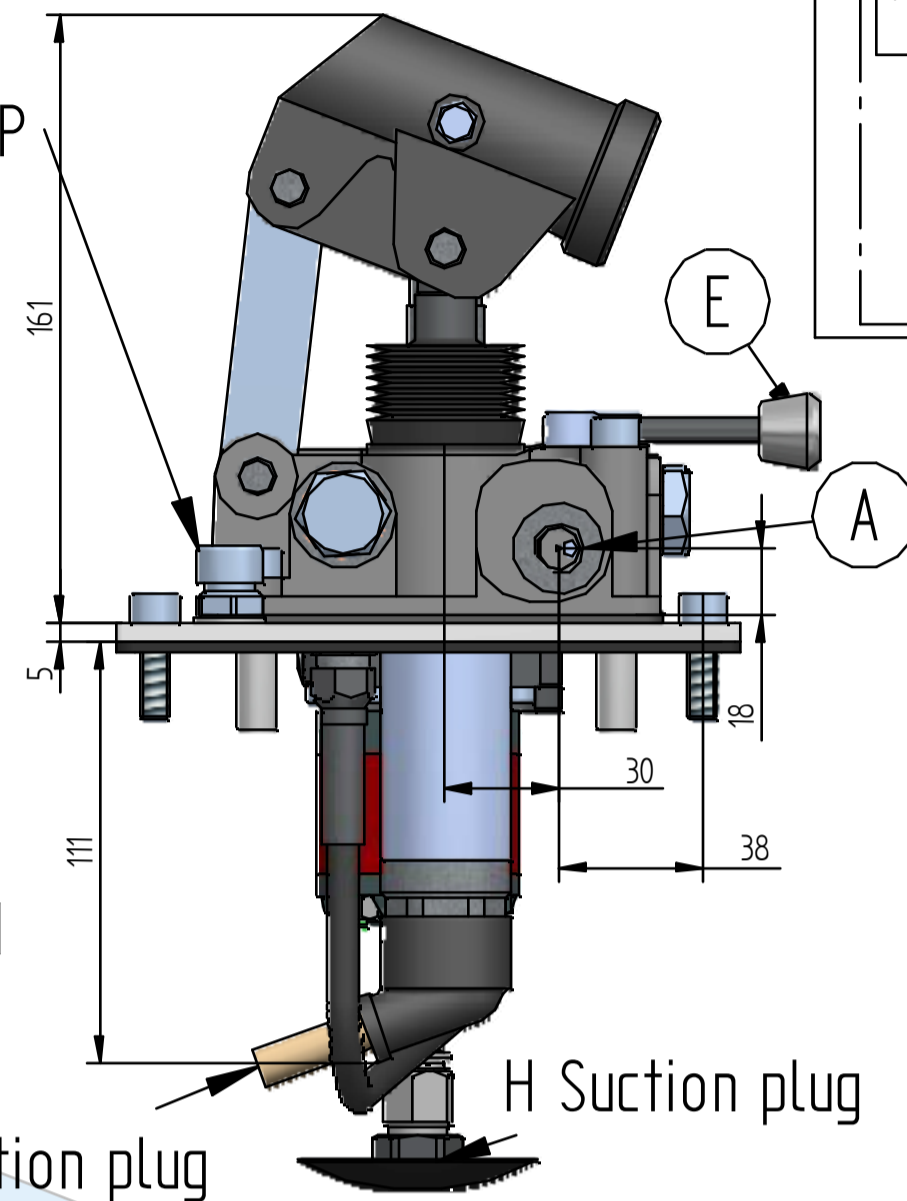
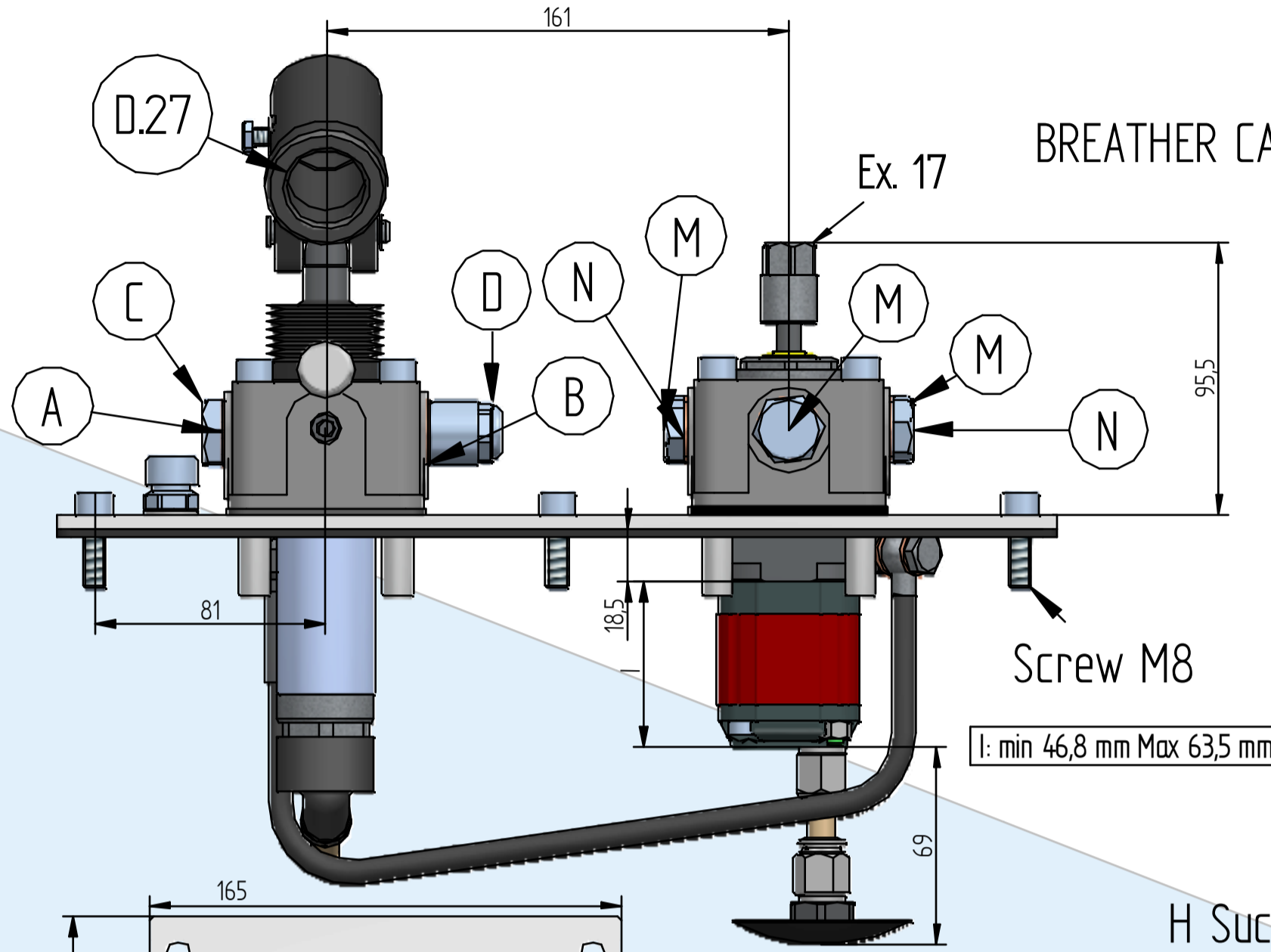
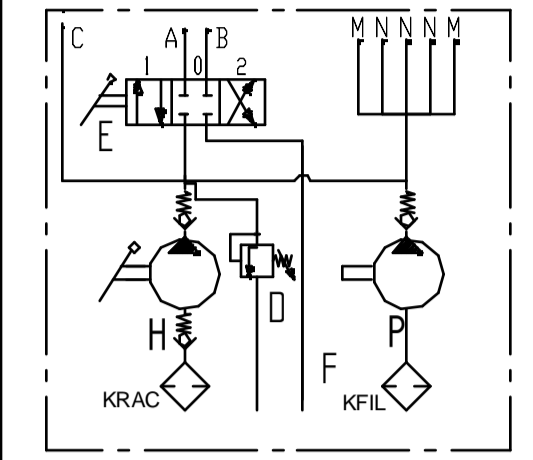
Dati tecnici indicativi e non impegnativi.  
L'azienda si riserva di apportare modifiche in qualsiasi momento e senza preavviso.  
Technical data not binding. Modifications reserved without prior notice.

## WOT

Clockwise rotation  
Rotazione oraria

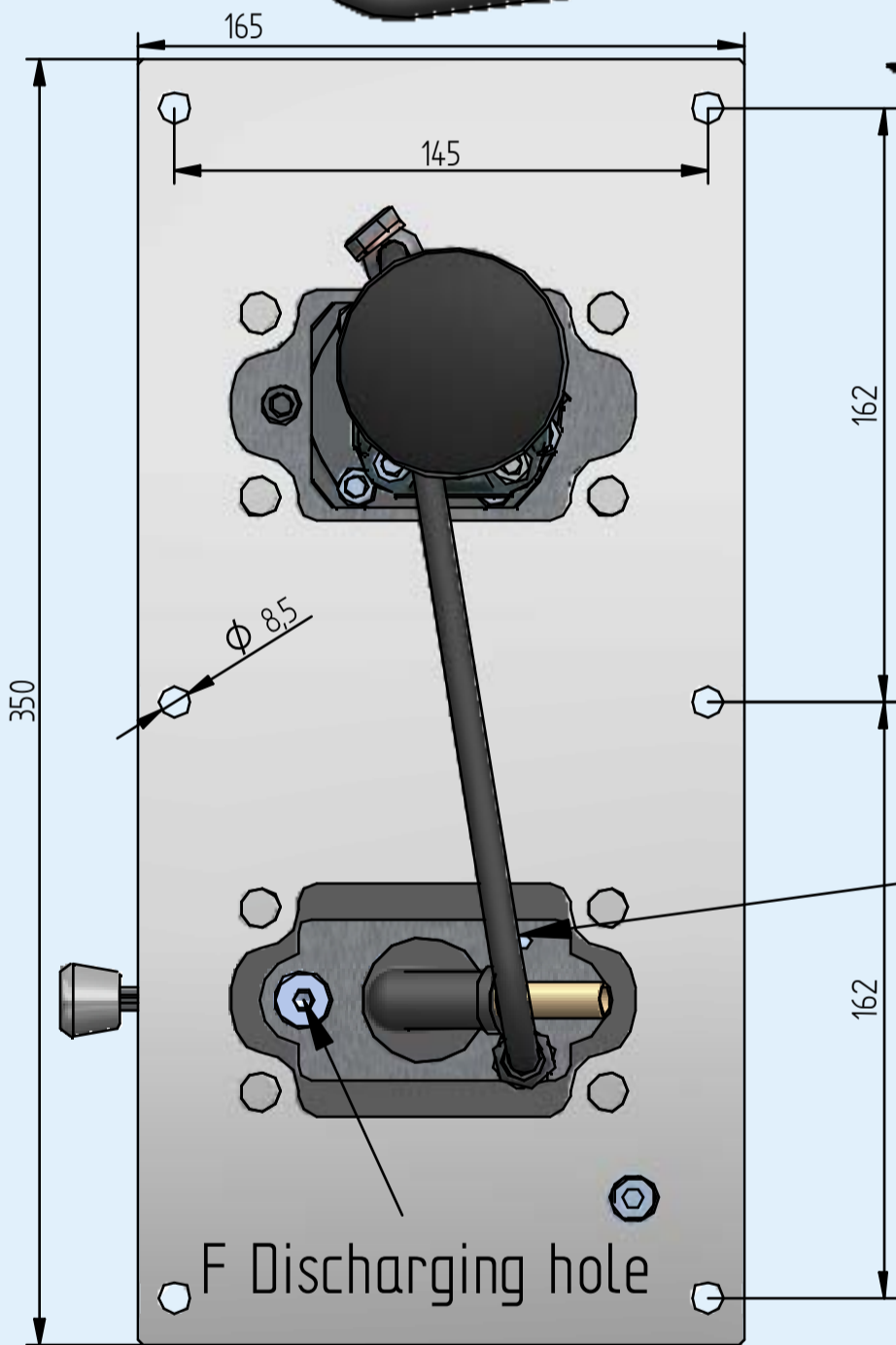
For double acting cylinder  
without oil tank

For double acting cylinder  
Per cilindro a doppio effetto

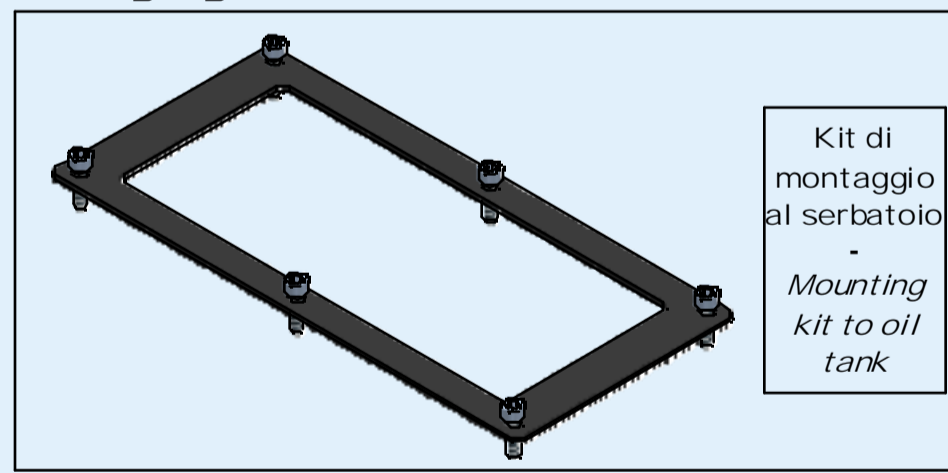


A	1/4 gas
B	1/4 gas
C	3/8 gas
D	Relief valve
F	Hole
H	Suction
M	1/4 gas
N	3/8 gas

Weight: 9 Kg

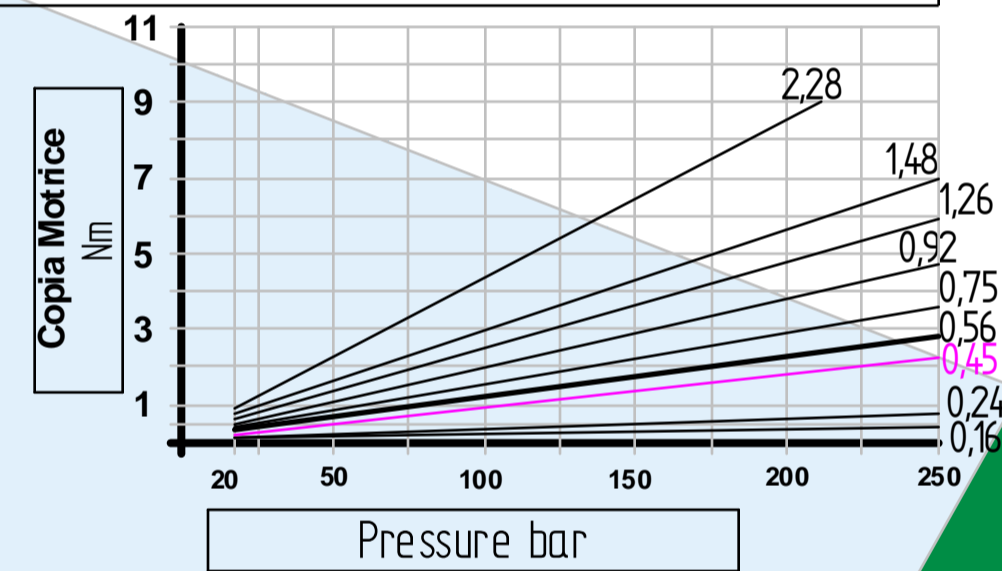
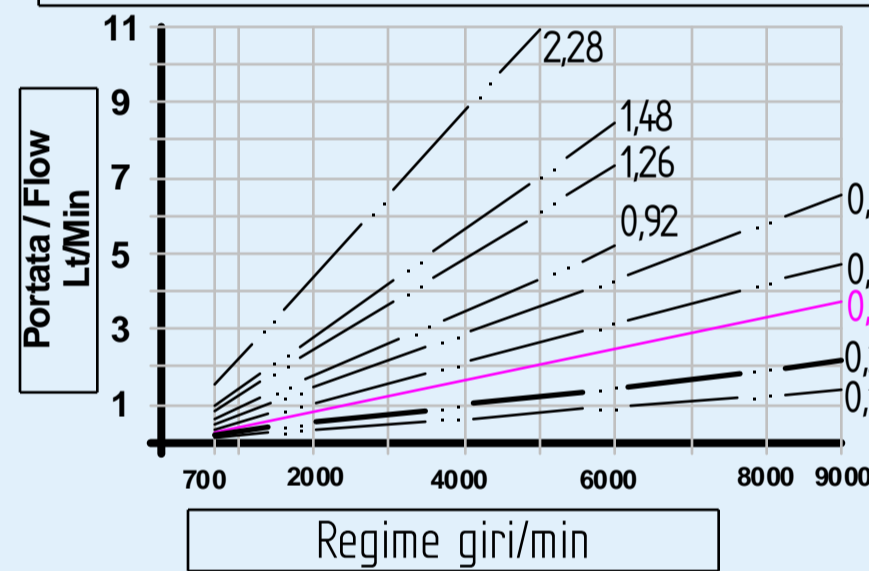


D Discharging hole

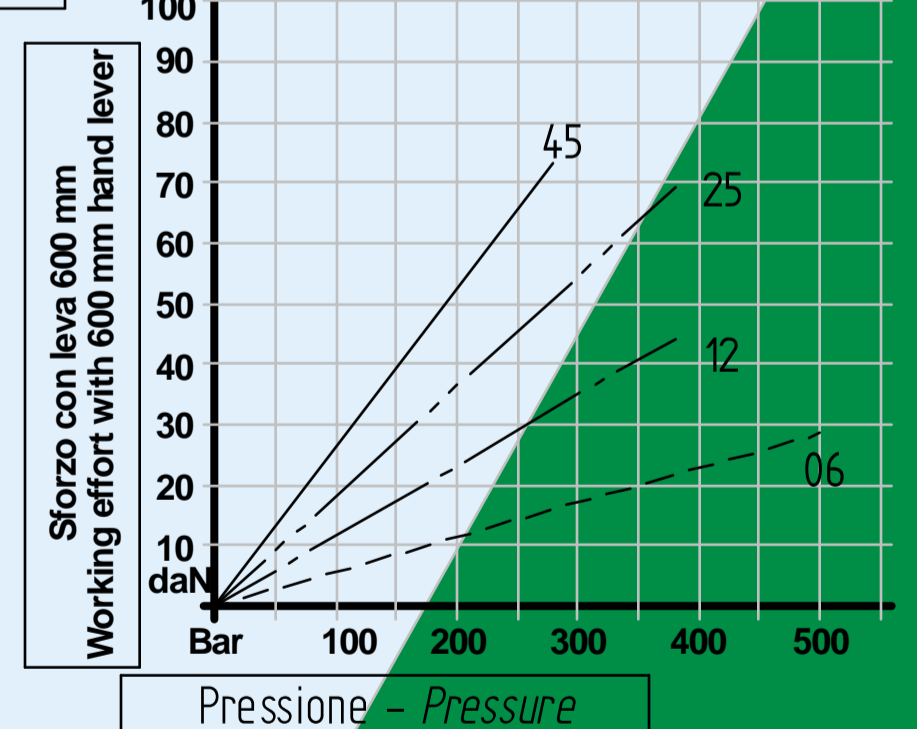


Kit di montaggio al serbatoio  
-  
Mounting kit to oil tank

### Pompa ad ingranaggi - Gear pump



### Diagramma prove di carico Load curve



Taratura valvola di massima pressione - Comunque non oltre la pressione massima della pompa.  
Relief valve setting - However not over the pumps' max pressure  
min - max (bar) 30 - (...)

### Codice di ordinazione - Ordering code

ZES	Option 1	017	DE	Option 2	06	WOT
		025				
		045				
		057				
		076				
		098				
		127				
		152				
230						
	Option 2	6		12		
		12				
		25				
		45				

Option 1 cc Gear pump	
017	0,16 cc
025	0,24 cc
045	0,45 cc - Standard Version
057	0,56 cc
076	0,75 cc
098	0,92 cc
127	1,26 cc
152	1,48 cc
230	2,28 cc

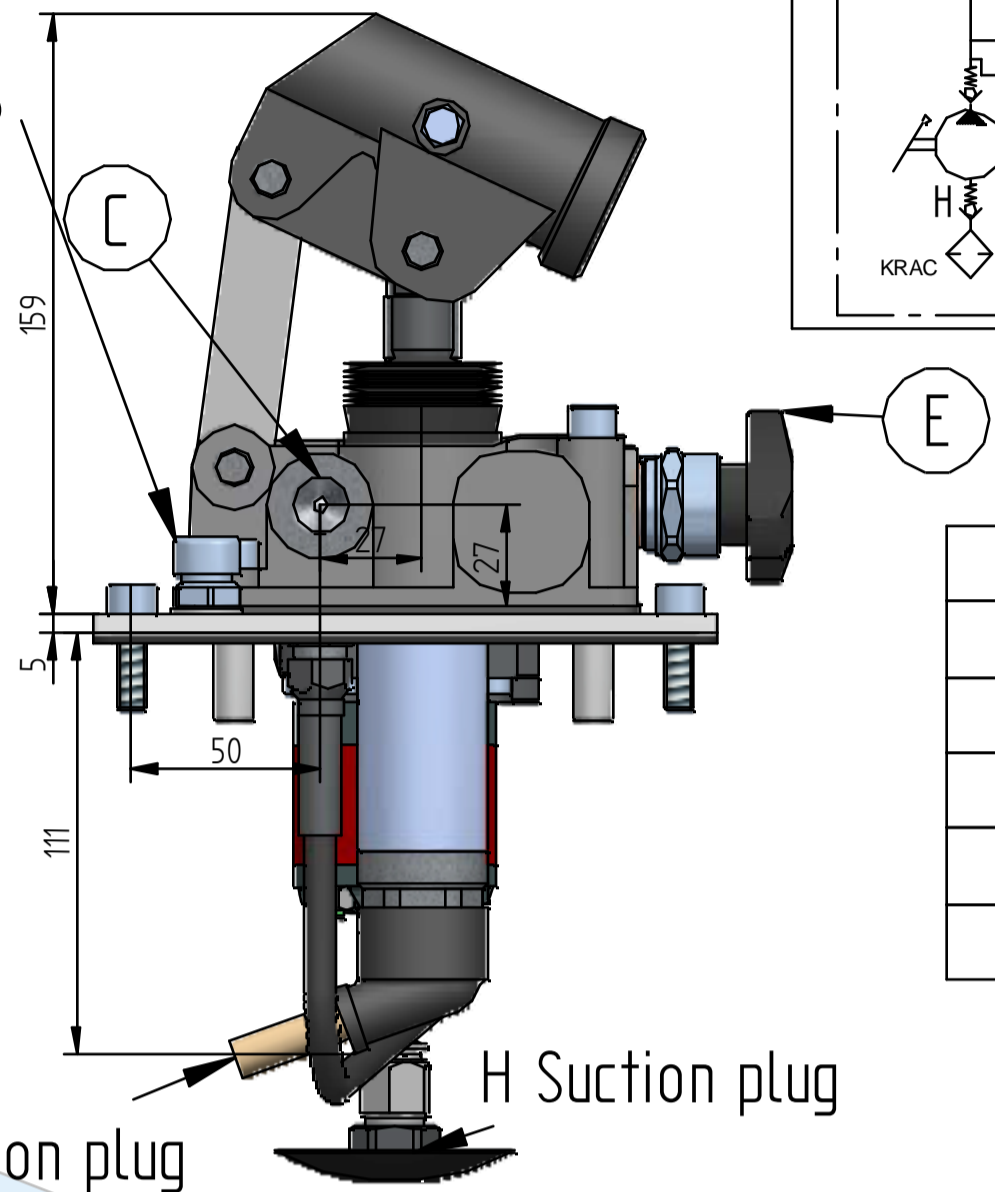
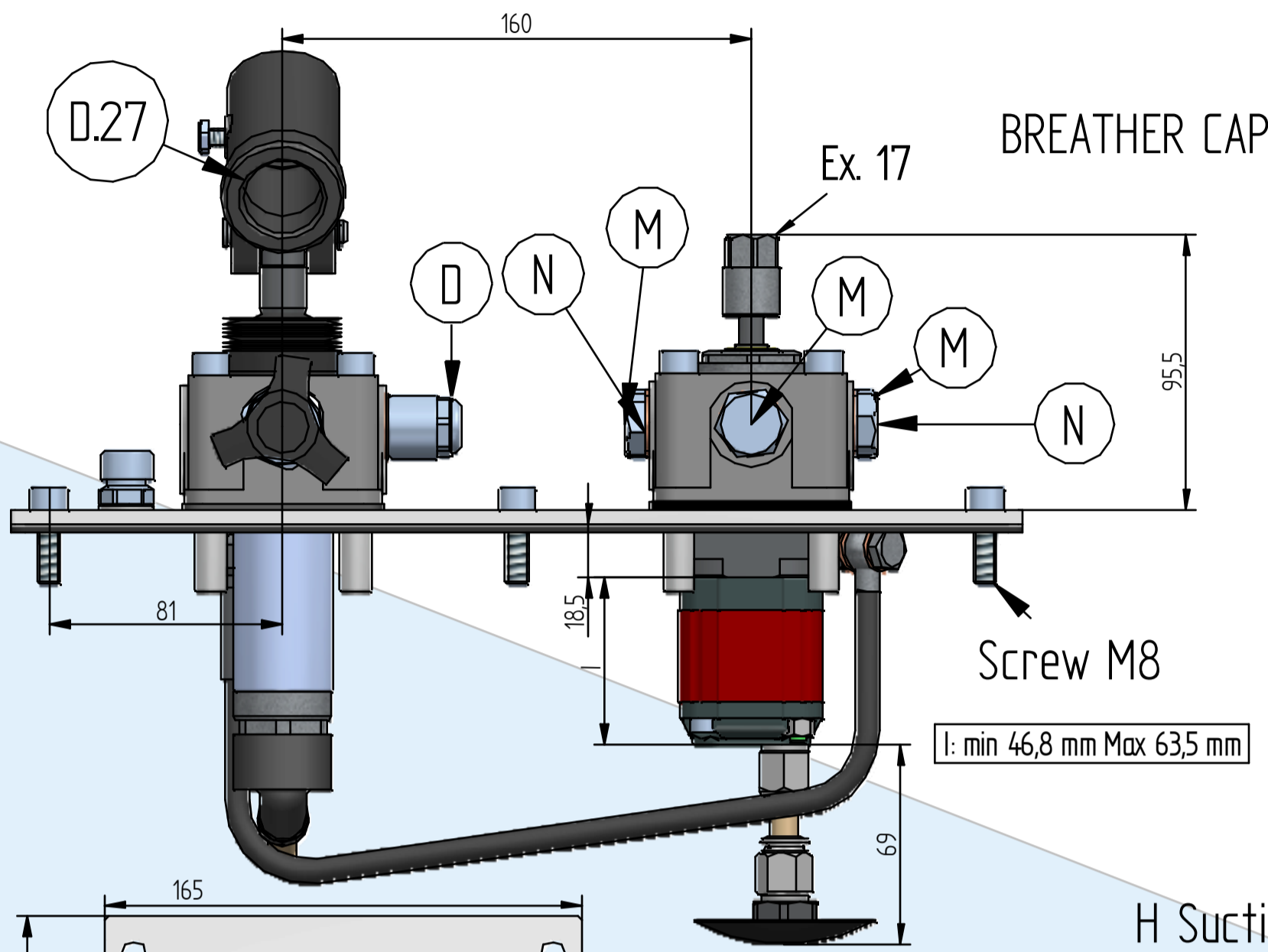
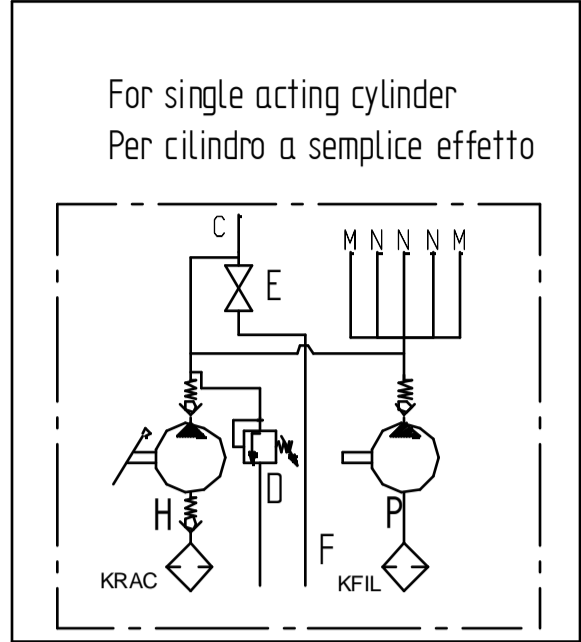
Option 2 cc Hand pump	
6	6 cc
12	12,5 cc
25	19,5 cc - Standard Version
45	28 cc

Cilindrata Flow (cc)	Pressione massima Max pressure (bar)	Type	Cilindrata Flow (cc)	Pressione massima Max pressure (bar)	rpm min.	rpm max.
6	400	017	0,16	260	700	9.000
12,5	320	025	0,24	260	700	9.000
		045	0,45	280	700	9.000
		057	0,56	280	700	9.000
19,4	300	076	0,75	280	700	9.000
		098	0,92	280	700	6.000
		127	1,26	280	700	6.000
28	250	152	1,48	280	700	6.000
		230	2,28	210	700	5.000

## WOT

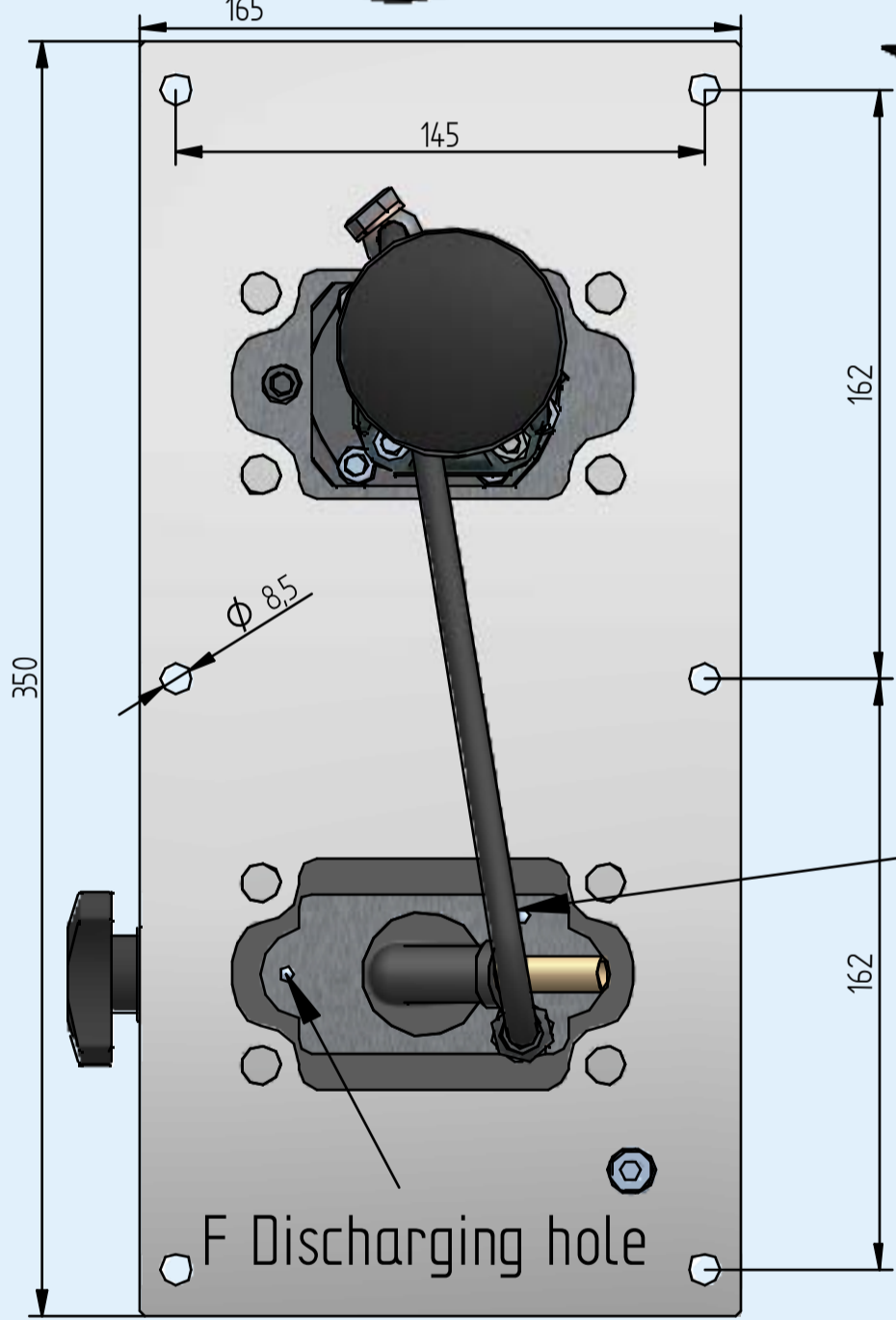
Clockwise rotation  
Rotazione oraria

For single acting cylinder  
without oil tank

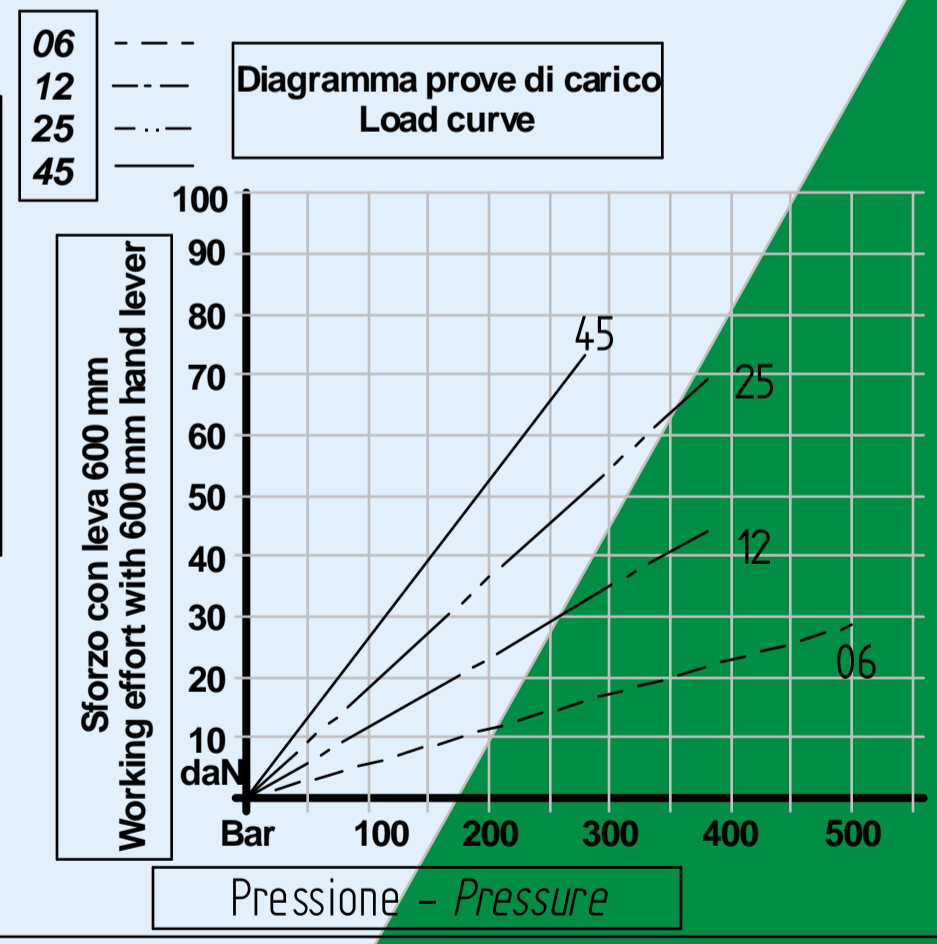
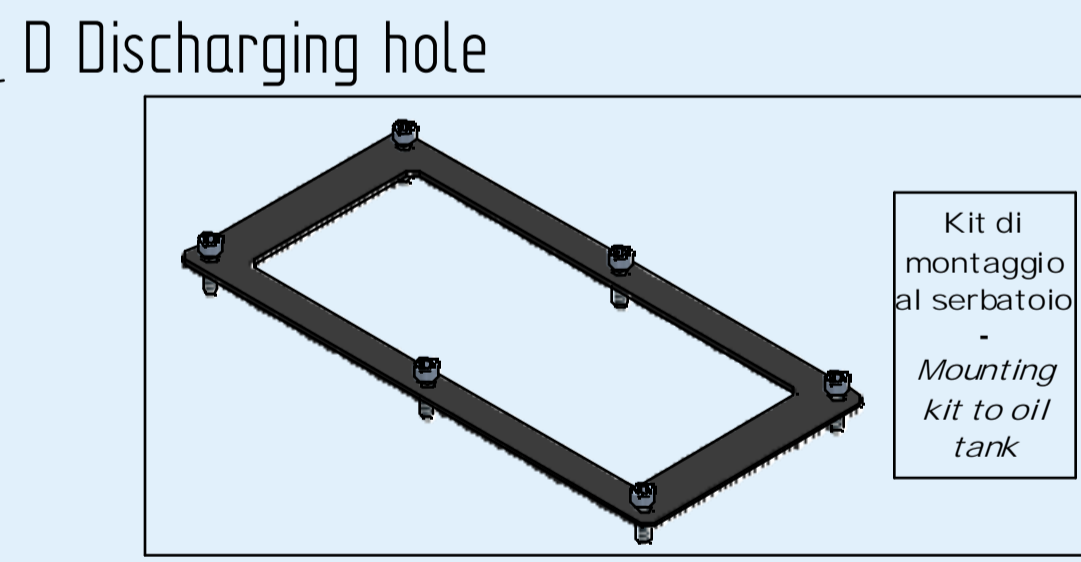
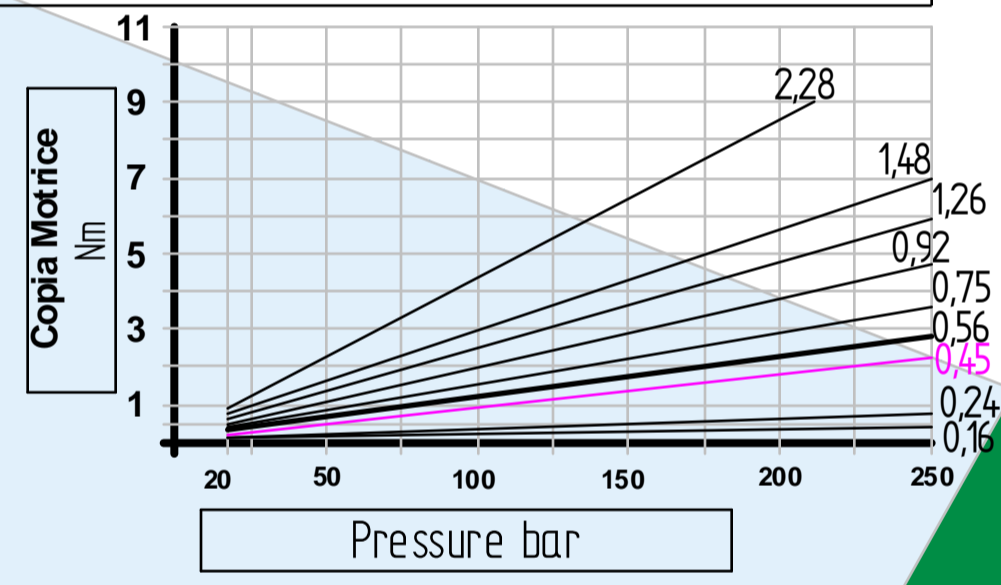
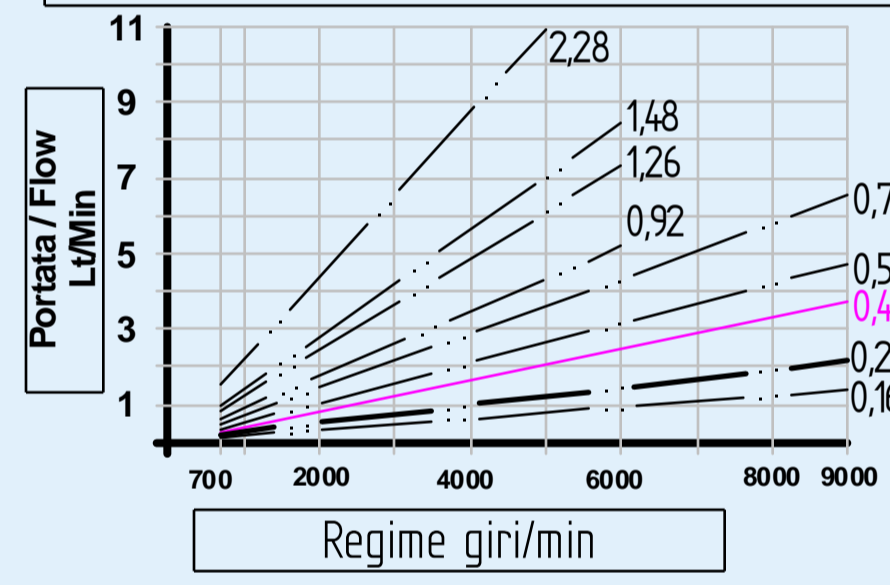


C	3/8 gas
D	Relief valve
F	Hole
H	Suction
M	1/4 gas
N	3/8 gas

Weight: 9 Kg



### Pompa ad ingranaggi - Gear pump



Taratura valvola di massima pressione - Comunque non oltre la pressione massima della pompa.  
Relief valve setting - However not over the pumps' max pressure  
min - max (bar) 30 - (...)

### Codice di ordinazione - Ordering code

ZES	Option 1	017	SE	Option 2	WOT
		025			
		045			
		057			
		076			
		098			
		127			
		152			
230					

Option 1 cc Gear pump		Option 2 cc Hand pump	
017	0,16 cc	6	6 cc
025	0,24 cc	12	12,5 cc
045	0,45 cc - Standard Version	25	19,5 cc - Standard Version
057	0,56 cc	45	28 cc
076	0,75 cc		
098	0,92 cc		
127	1,26 cc		
152	1,48 cc		
230	2,28 cc		

Cilindrata Flow (cc)	Pressione massima Max pressure (bar)	Type	Cilindrata Flow (cc)	Pressione massima Max pressure (bar)	rpm min.	rpm max.
6	400	017	0,16	260	700	9.000
12,5	320	025	0,24	260	700	9.000
		045	0,45	280	700	9.000
		057	0,56	280	700	9.000
19,4	300	076	0,75	280	700	9.000
		098	0,92	280	700	6.000
		127	1,26	280	700	6.000
28	250	152	1,48	280	700	6.000
		230	2,28	210	700	5.000

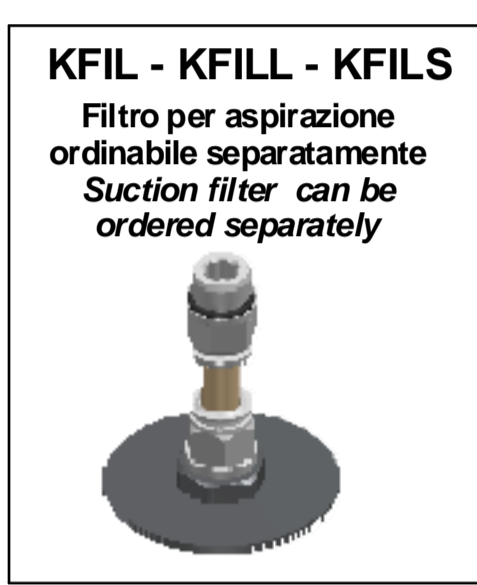
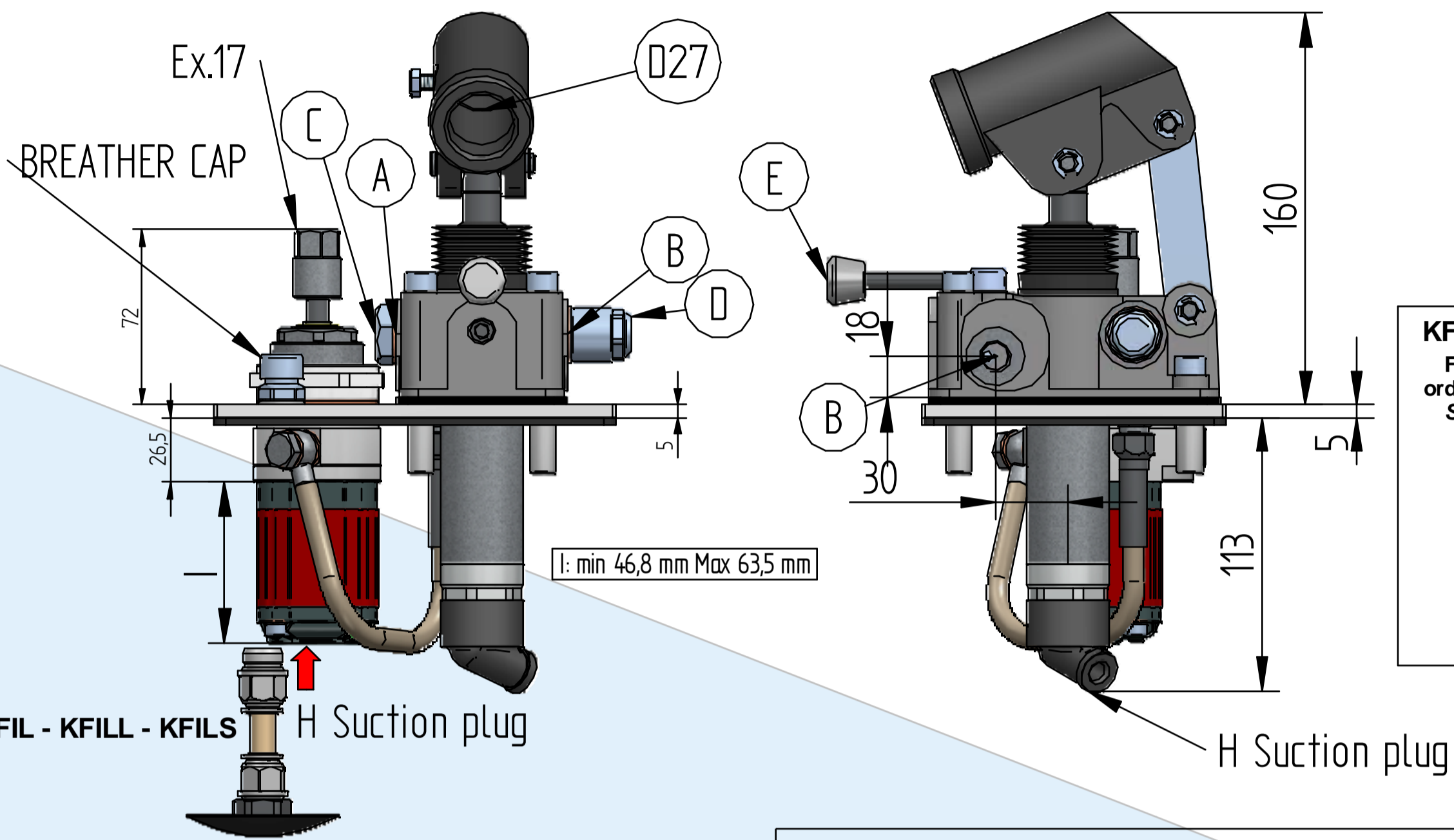
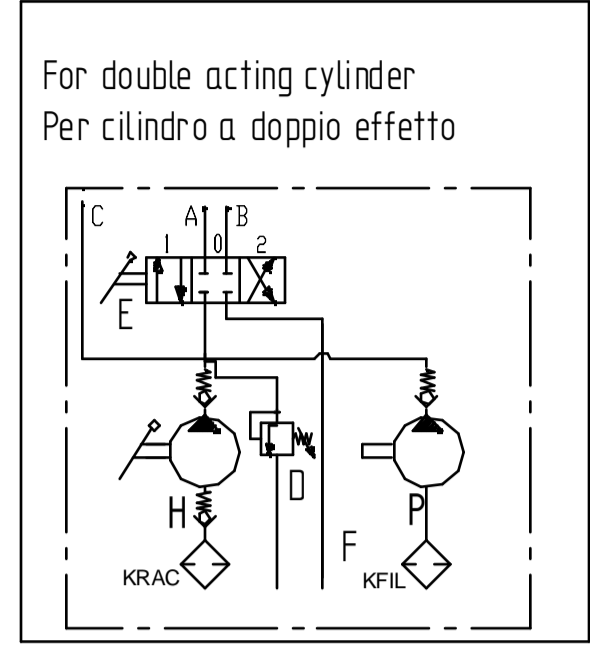
Dati tecnici indicativi e non impegnativi.  
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Technical data not binding. Modifications reserved without prior notice.



## WOTC

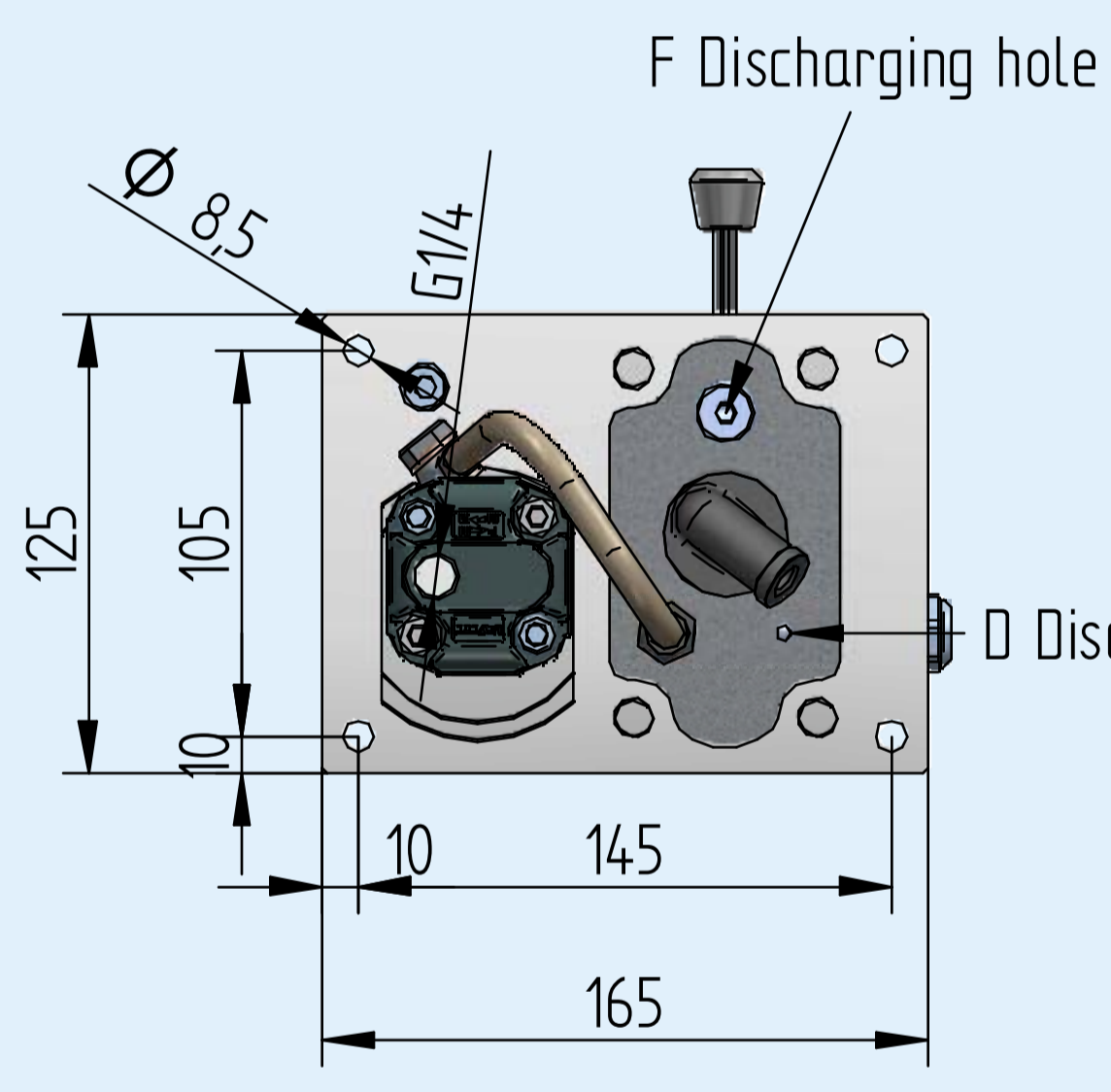
Clockwise rotation  
Rotazione oraria

For double acting cylinder  
without oil tank version 165

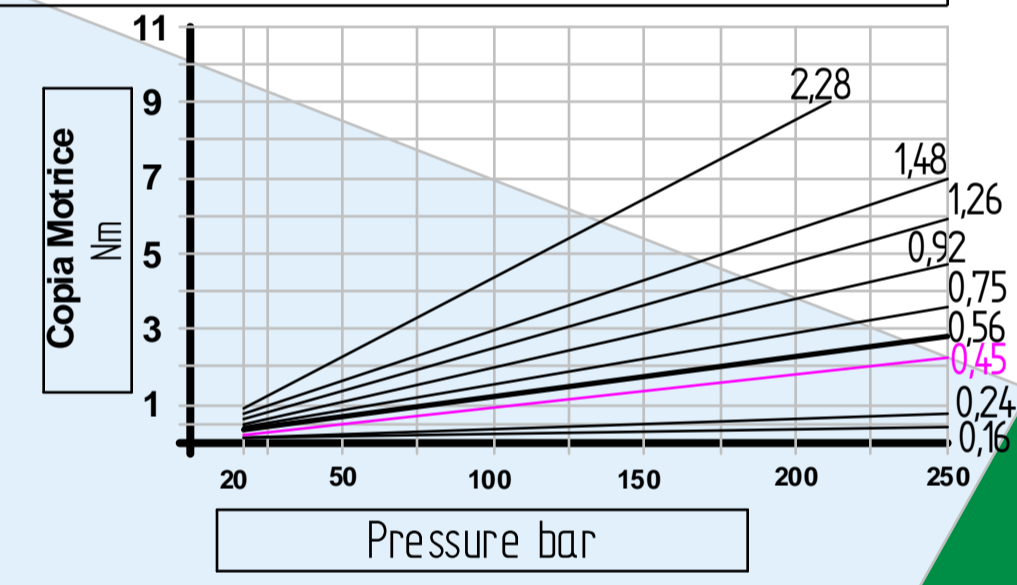
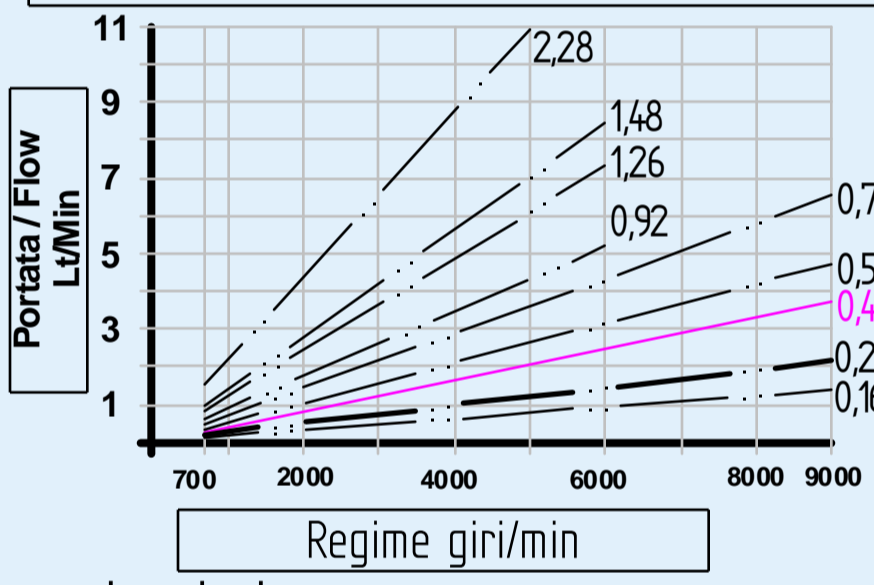


A	1/4 gas
B	1/4 gas
C	3/8 GAS ATTENTION
D	Relief valve
F	Hole
H	Suction

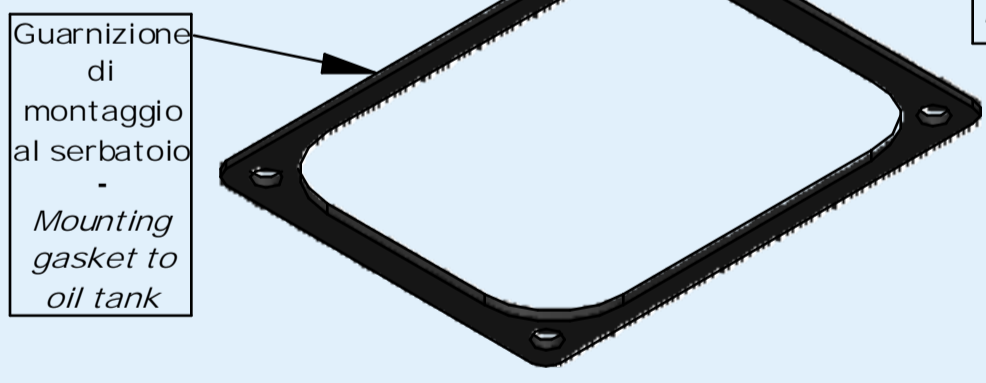
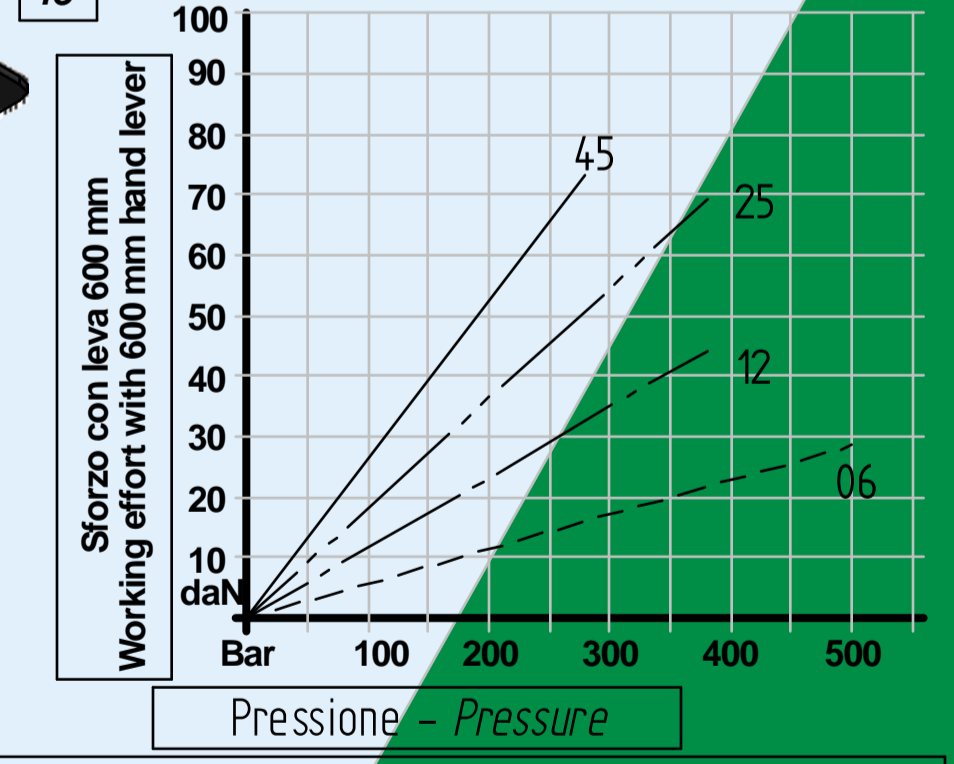
Weight: 6,2 Kg



### Pompa ad ingranaggi - Gear pump



### Diagramma prove di carico - Load curve



### Codice di ordinazione - Ordering code

ZES	Option 1	017	DE	Option 2	06	WOTC
		025				
		045				
		057				
		076				
		098				
		127				
		152				
230						
	Option 2	6		12		
		12				
		25				
		45				

Option 1 cc Gear pump	
017	0,16 cc
025	0,24 cc
045	0,45 cc - Standard Version
057	0,56 cc
076	0,75 cc
098	0,92 cc
127	1,26 cc
152	1,48 cc
230	2,28 cc

Option 2 cc Hand pump	
6	6 cc
12	12,5 cc
25	19,5 cc - Standard Version
45	28 cc

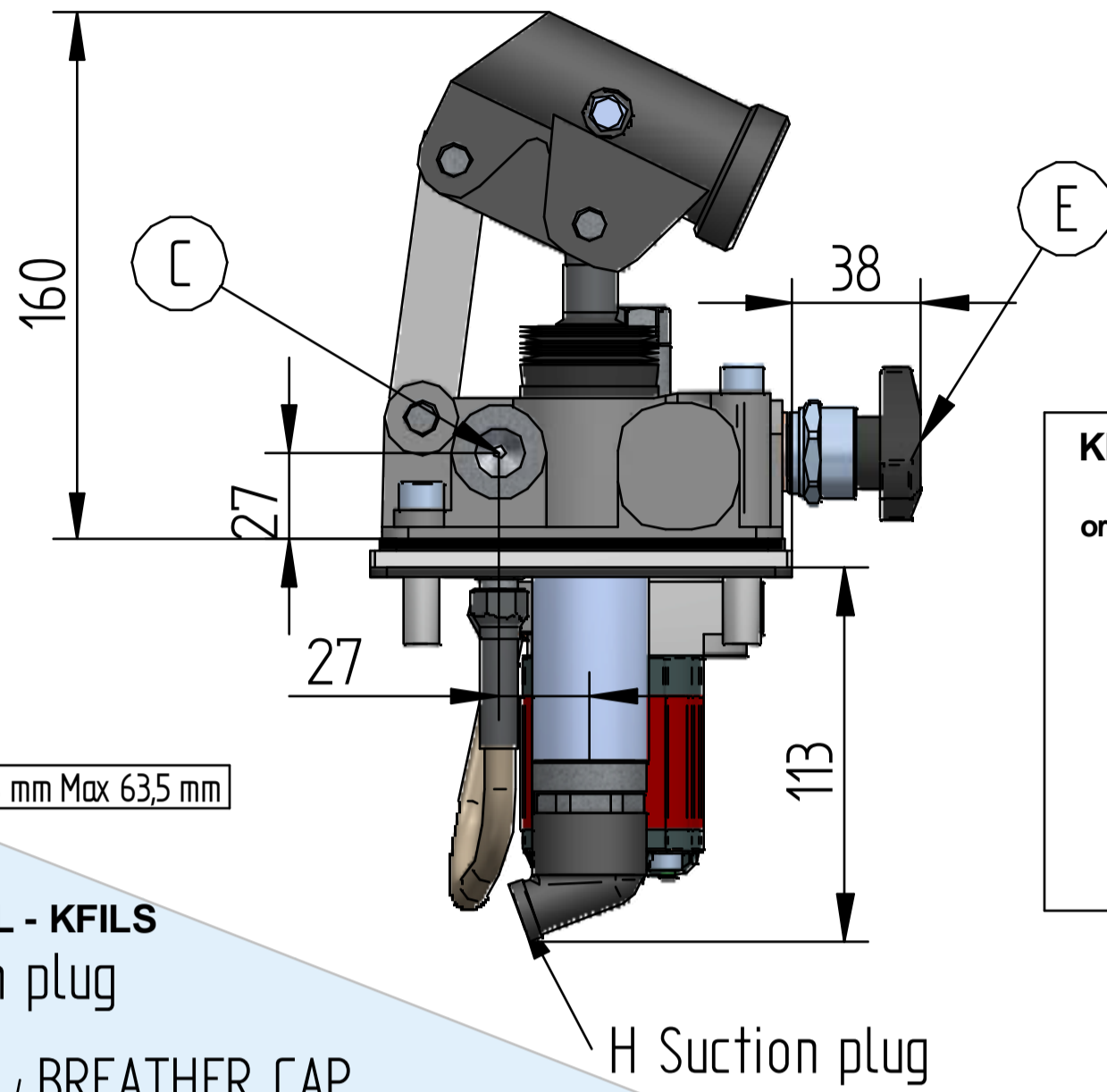
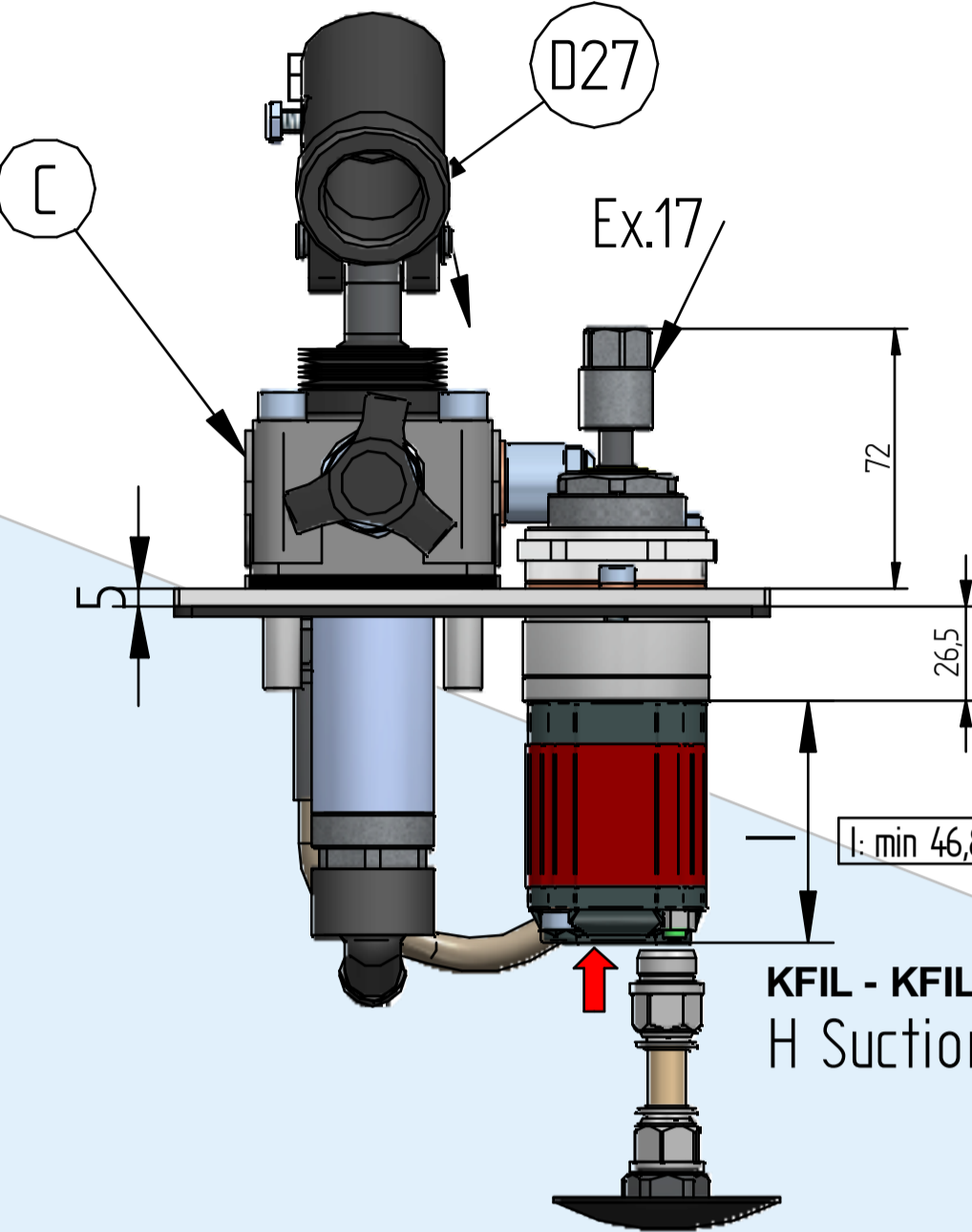
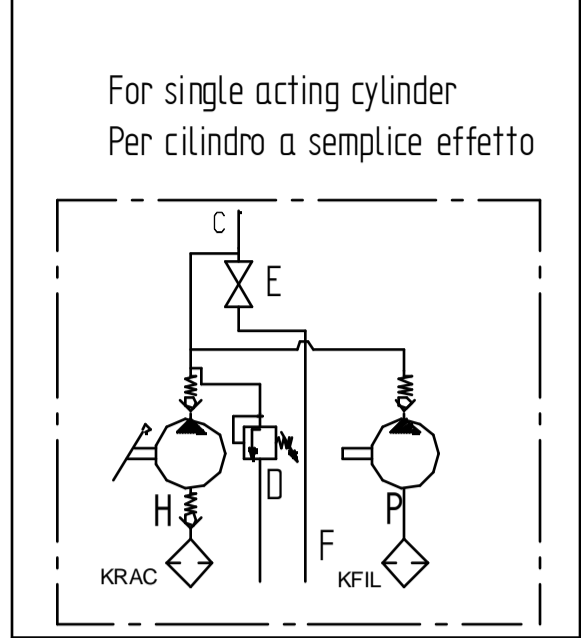
Taratura valvola di massima pressione - comunque non oltre la pressione massima della pompa.  
Relief valve setting - However not over the pumps' max pressure  
min - max (bar) 30 - (...)

Cilindrata Flow (cc)	Pressione massima Max pressure (bar)	Type	Cilindrata Flow (cc)	Pressione massima Max pressure (bar)	rpm min.	rpm max.
6	400	017	0,16	260	700	9.000
12,5	320	025	0,24	260	700	9.000
19,4	300	045	0,45	280	700	9.000
28	250	057	0,56	280	700	9.000
		076	0,75	280	700	9.000
		098	0,92	280	700	6.000
		127	1,26	280	700	6.000
		152	1,48	280	700	6.000
		230	2,28	210	700	5.000

## WOTC

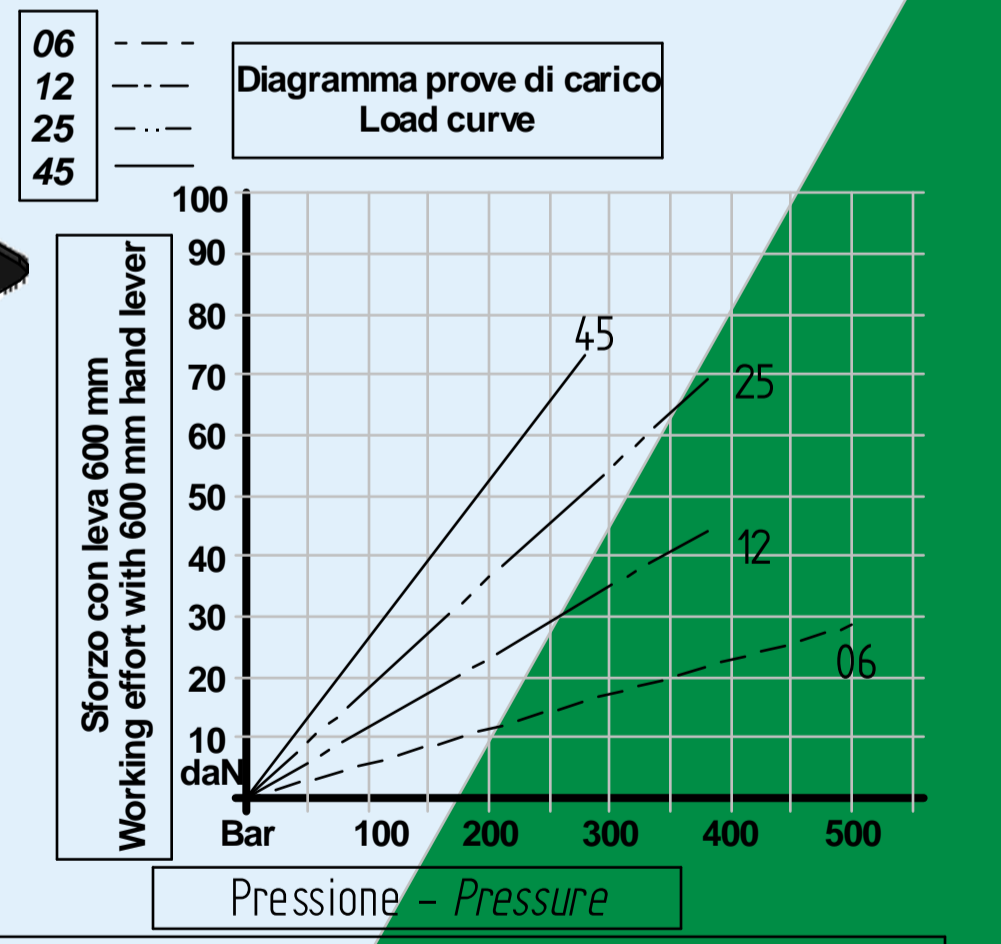
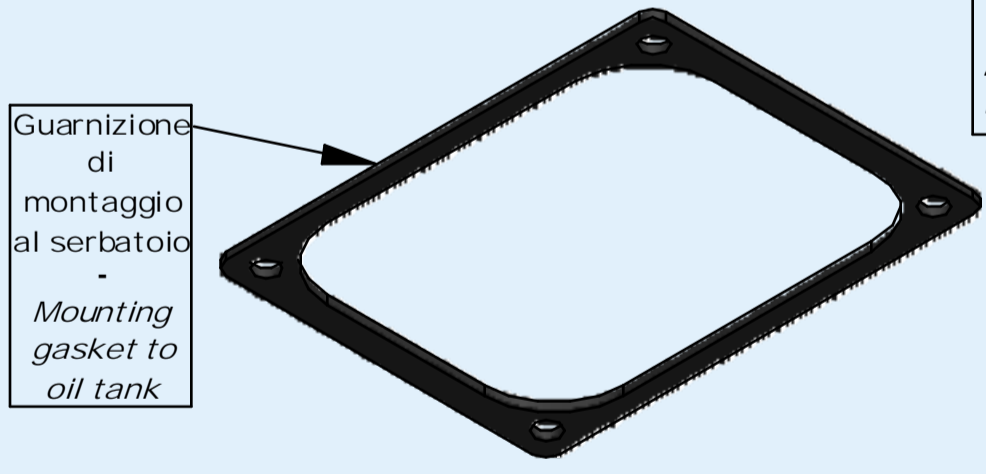
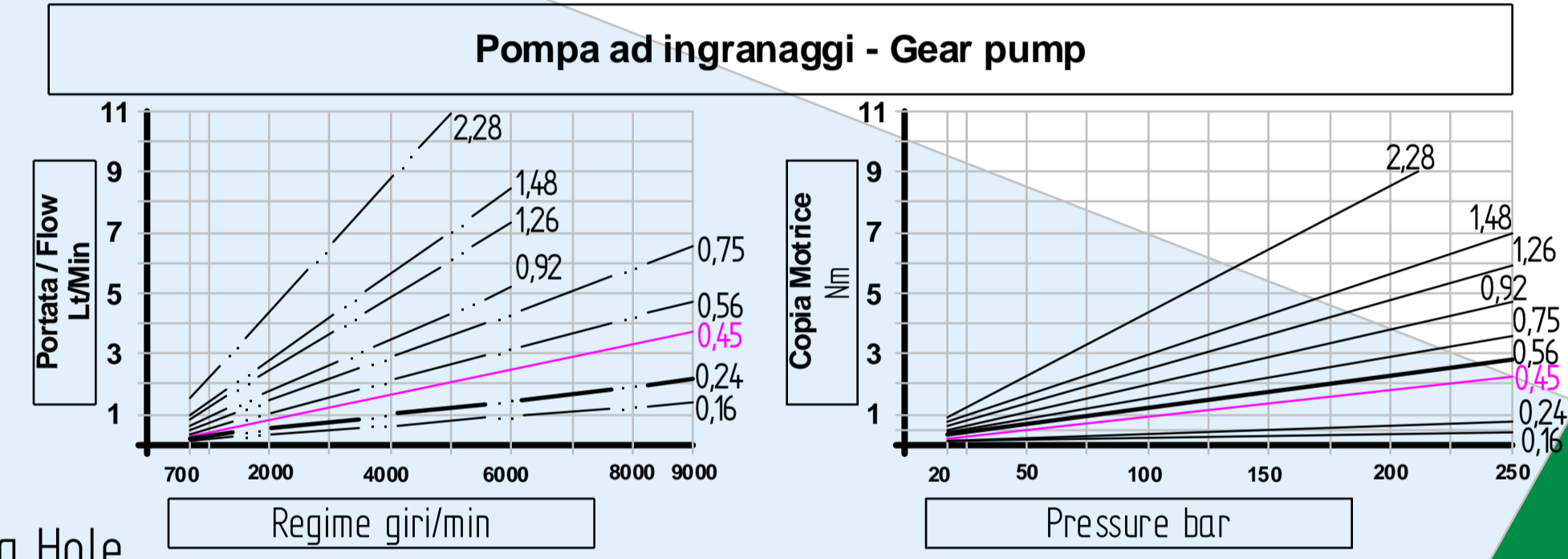
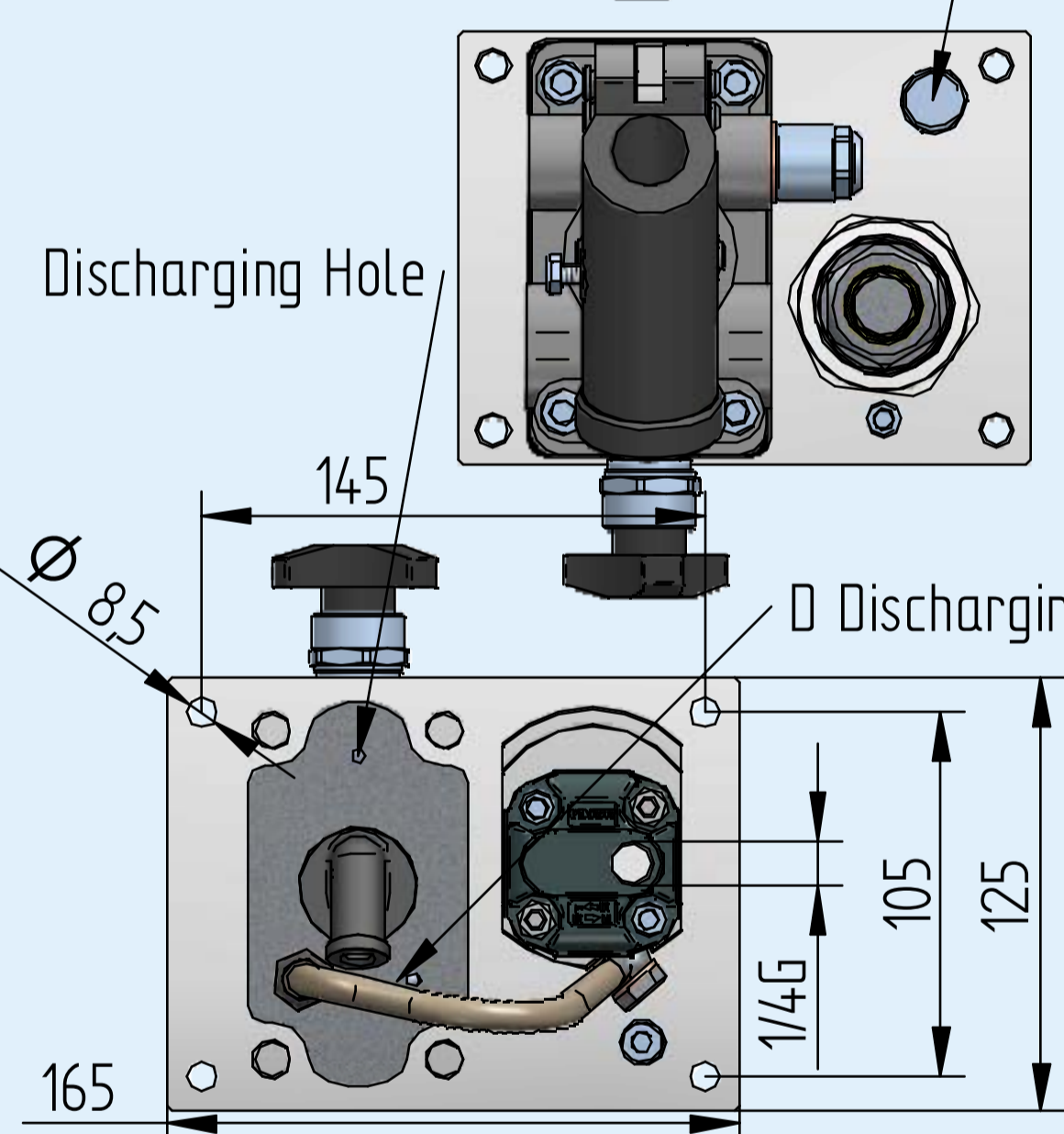
Clockwise rotation  
Rotazione oraria

For single acting cylinder  
without oil tank version 165



C	3/8 GAS
D	Relief valve
F	Hole
E	Release valve
H	Suction

Weight: 6,2 Kg



Taratura valvola di massima pressione - comunque non oltre la pressione massima della pompa.  
Relief valve setting - However not over the pumps' max pressure  
min - max (bar) 30 - (...)

### Codice di ordinazione - Ordering code

<b>ZES</b>	Option 1	017	<b>SE</b>	Option 2	06	<b>WOTC</b>
		025				
		045				
		057				
		076				
		098				
		127				
		152				
230						

**Option 1 cc Gear pump**

017	0,16 cc
025	0,24 cc
045	0,45 cc - Standard Version
057	0,56 cc
076	0,75 cc
098	0,92 cc
127	1,26 cc
152	1,48 cc
230	2,28 cc

**Option 2 cc Hand pump**

6	6 cc
12	12,5 cc
25	19,5 cc - Standard Version
45	28 cc

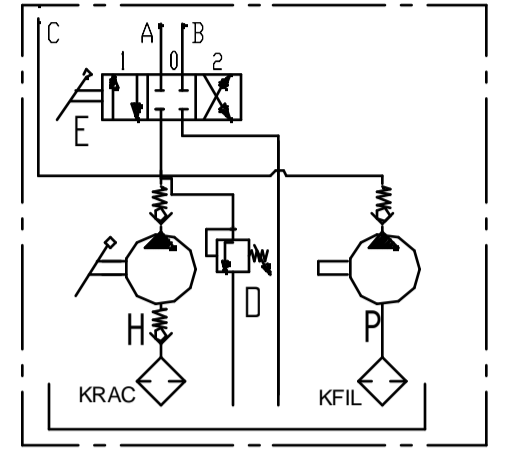
Cilindrata Flow (cc)	Pressione massima Max pressure (bar)	Type	Cilindrata Flow (cc)	Pressione massima Max pressure (bar)	rpm min.	rpm max.
6	400	017	0,16	260	700	9.000
		025	0,24	260	700	9.000
		045	0,45	280	700	9.000
12,5	320	057	0,56	280	700	9.000
		076	0,75	280	700	9.000
19,4	300	098	0,92	280	700	6.000
		127	1,26	280	700	6.000
		152	1,48	280	700	6.000
28	250	230	2,28	210	700	5.000

## DE\_SR

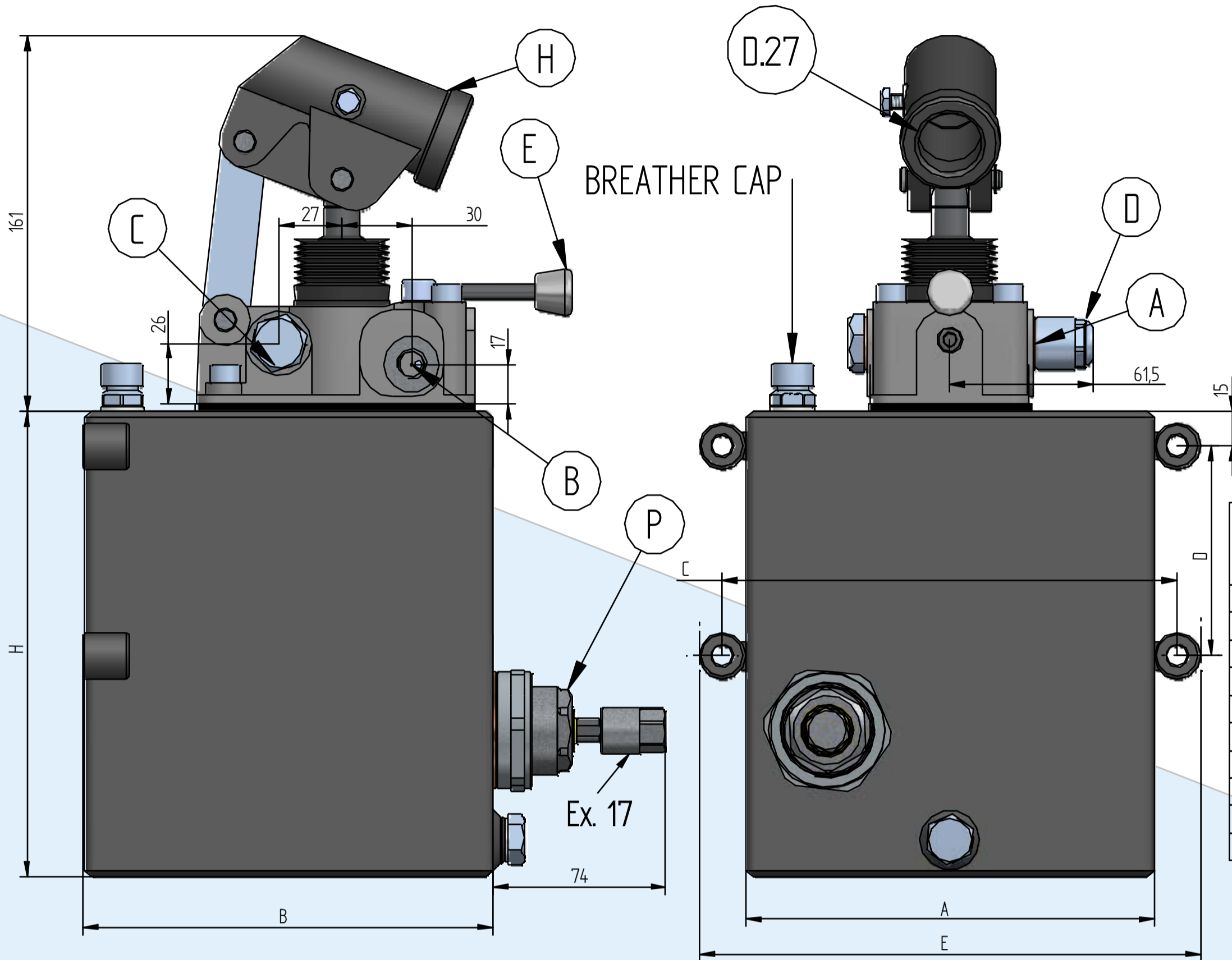
Clockwise rotation  
Rotazione oraria

For double acting cylinder  
with oil tank

For double acting cylinder  
Per cilindro a doppio effetto



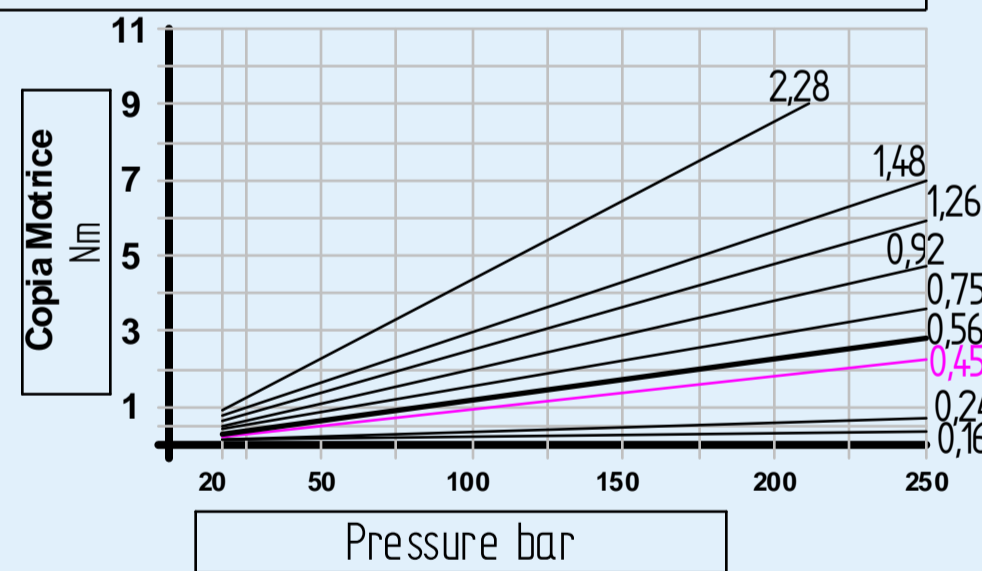
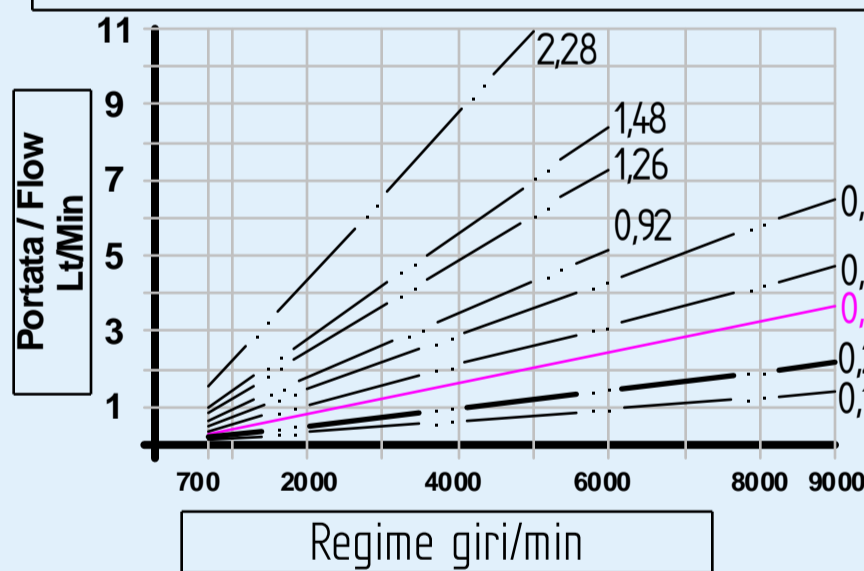
A	1/4 gas
B	1/4 gas
C	3/8 gas
D	Relief valve



Oil Tank	SR 03 FE	SR 05 FE	SR 07 FE	SR 10 FE
Capacità - Tank capacity (litres)	3	5	7	10
Tappo sfiato - Breather cap	X	X	X	X
Ferro verniciato - Painted iron	X	X	X	X
A (mm)	100	175	175	175
B (mm)	150	175	175	175
C (mm)	120	195	195	195
D (mm)	90	90	90	90
E (mm)	140	215	215	215
H (mm)	245	200	269	376
Peso - Weight (Kg)	2,5	4,5	5,4	6,8

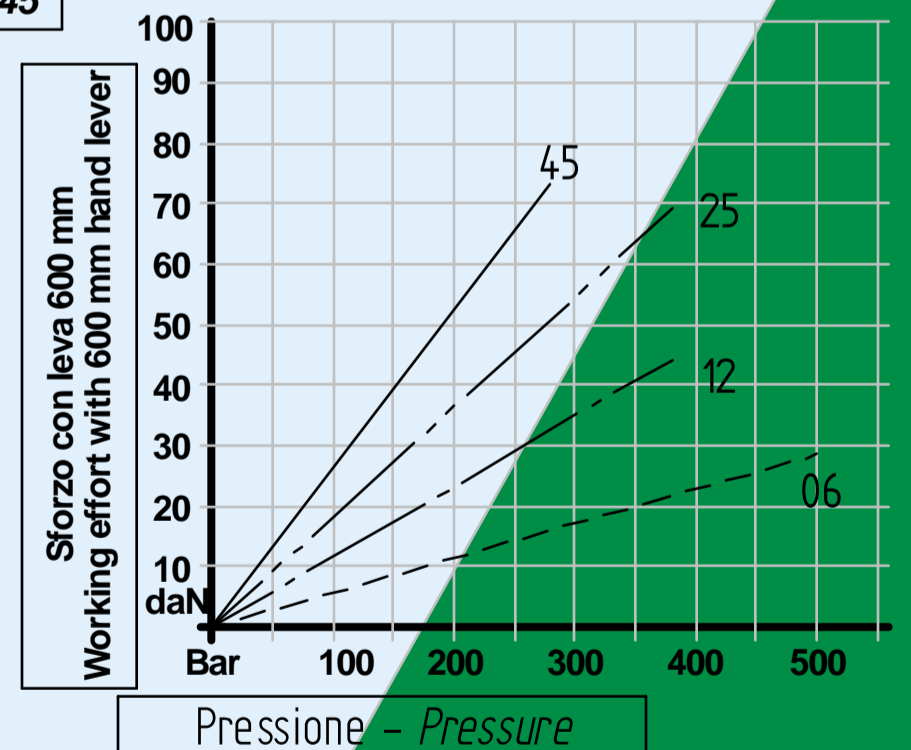
Total Weight Kg  
5,7 + Weight of oil tank

### Pompa ad ingranaggi - Gear pump



Coppia di serraggio vite con rivetto: 8/10 Nm  
Torque of fastened screw: 8/10 Nm

06 ---  
12 - - -  
25 - - -  
45 - - -  
Diagramma prove di carico  
Load curve



Taratura valvola di massima pressione - Comunque non oltre la pressione massima della pompa.  
Relief valve setting - However not over the pumps' max pressure  
min - max (bar) 30 - (...)

### Codice di ordinazione - Ordering code

ZES	Option 1	017	DE	Option 2	06	SR	Option 3	03
		025			12			05
		045			25			07
		057			45			10
		076						
		098						
		127						
		152						
230								

Option 1 cc Gear pump	
017	0,16 cc
025	0,24 cc
045	0,45 cc - Standard Version
057	0,56 cc
076	0,75 cc
098	0,92 cc
127	1,26 cc
152	1,48 cc
230	2,28 cc

Option 2 cc Hand pump	
6	6 cc
12	12,5 cc
25	19,5 cc - Standard Version
45	28 cc

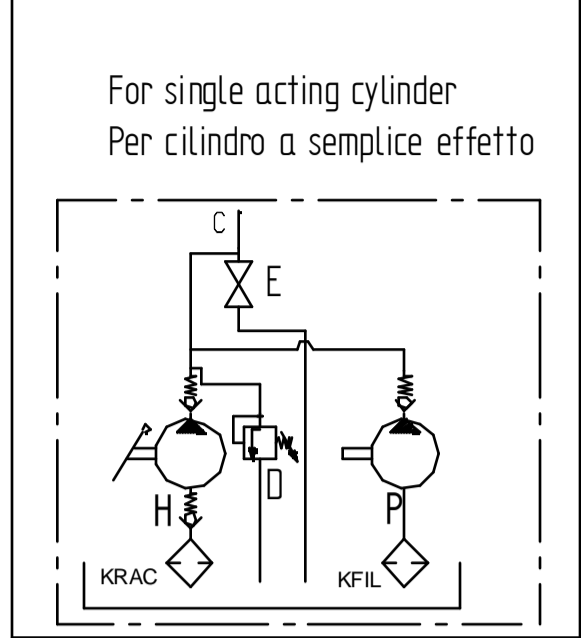
Option 3 Lt Oil Tank	
SR03	3
SR05	5
SR07	7
SR10	10

Cilindrata Flow (cc)	Pressione massima Max pressure (bar)	Type	Cilindrata Flow (cc)	Pressione massima Max pressure (bar)	rpm min.	rpm max.
6	400	017	0,16	260	700	9.000
		025	0,24	260	700	9.000
		045	0,45	280	700	9.000
12,5	320	057	0,56	280	700	9.000
		076	0,75	280	700	9.000
19,4	300	098	0,92	280	700	6.000
		127	1,26	280	700	6.000
		152	1,48	280	700	6.000
28	250	230	2,28	210	700	5.000

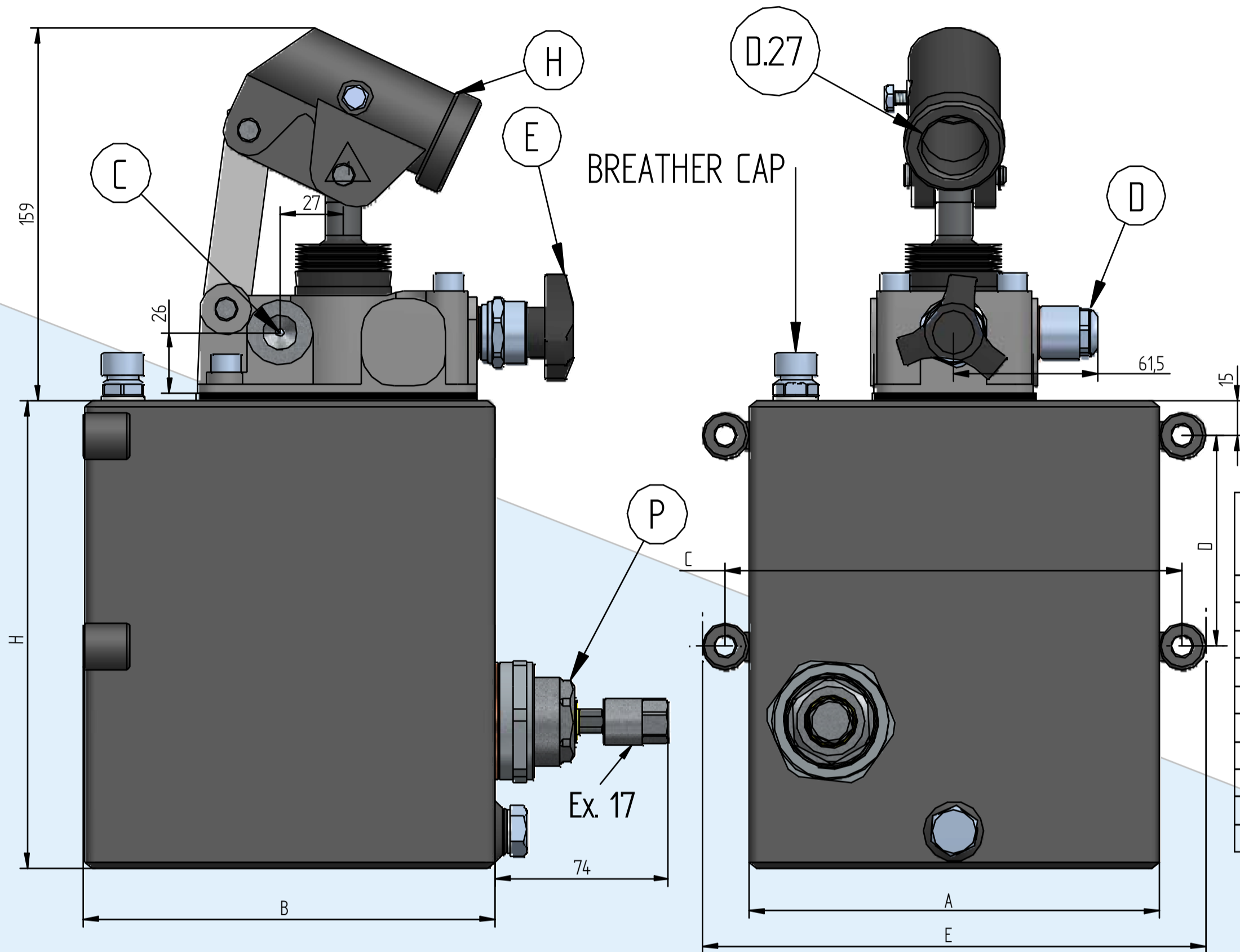
SE\_SR

Clockwise rotation  
Rotazione oraria

For single acting cylinder  
with oil tank



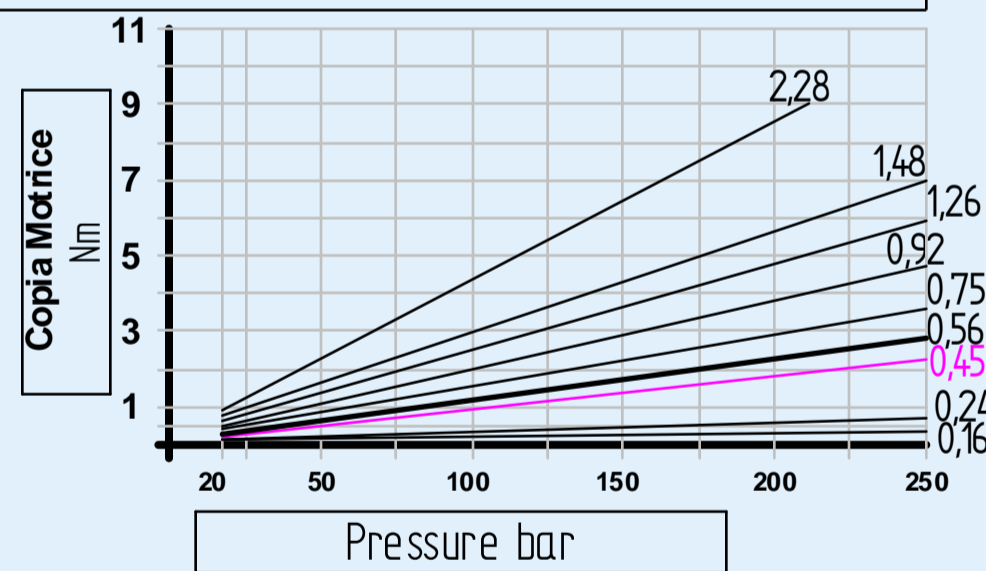
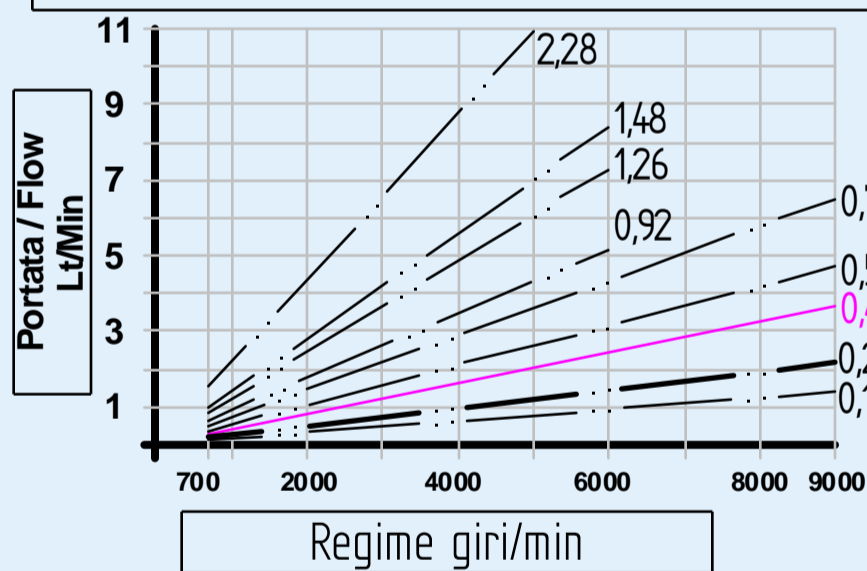
C	3/8 gas
D	Relief valve



Oil Tank	SR 03 FE	SR 05 FE	SR 07 FE	SR 10 FE
Capacità - Tank capacity (litres)	3	5	7	10
Tappo sfiato - Breather cap	X	X	X	X
Ferro verniciato - Painted iron	X	X	X	X
A (mm)	100	175	175	175
B (mm)	150	175	175	175
C (mm)	120	195	195	195
D (mm)	90	90	90	90
E (mm)	140	215	215	215
H (mm)	245	200	269	376
Peso - Weight (Kg)	2,5	4,5	5,4	6,8

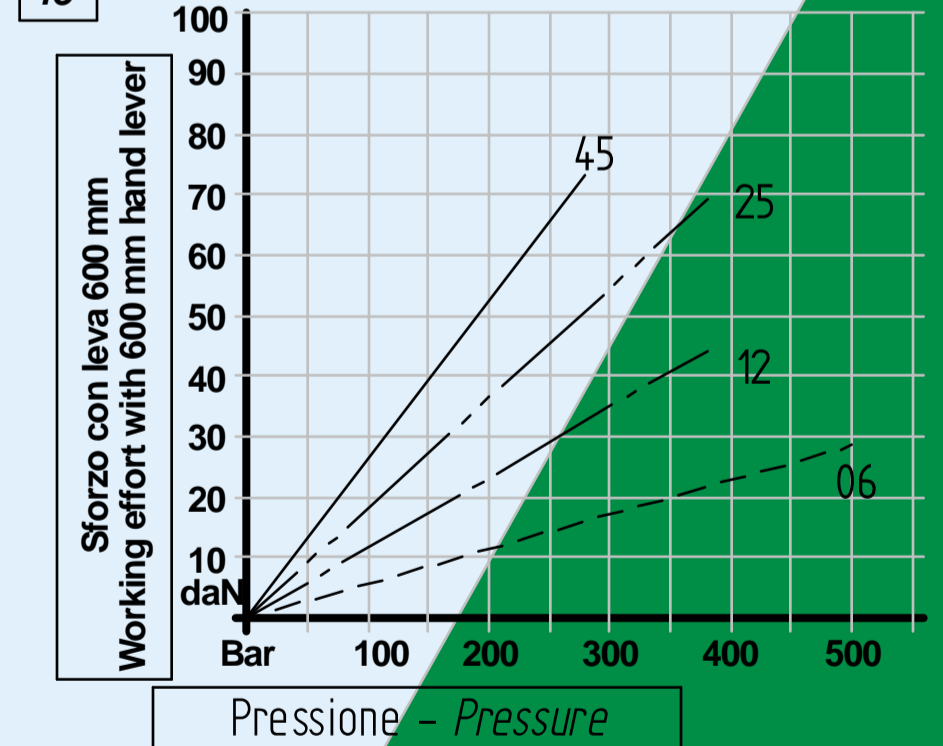
Total Weight Kg  
5,7 + Weight of oil tank

#### Pompa ad ingranaggi - Gear pump



Coppia di serraggio vite con rivetto: 8/10 Nm  
Torque of fastened screw: 8/10 Nm

#### Diagramma prove di carico Load curve



#### Codice di ordinazione - Ordering code

ZES	Option 1	017	SE	Option 2	06	SR	Option 3	03
		025			12			05
		045			25			07
		057			45			10
		076						
		098						
		127						
		152						
230								

Option 1 cc Gear pump	
017	0,16 cc
025	0,24 cc
045	0,45 cc - Standard Version
057	0,56 cc
076	0,75 cc
098	0,92 cc
127	1,26 cc
152	1,48 cc
230	2,28 cc

Option 2 cc Hand pump	
6	6 cc
12	12,5 cc
25	19,5 cc - Standard Version
45	28 cc

Option 3 Lt Oil Tank	
SR03	3
SR05	5
SR07	7
SR10	10

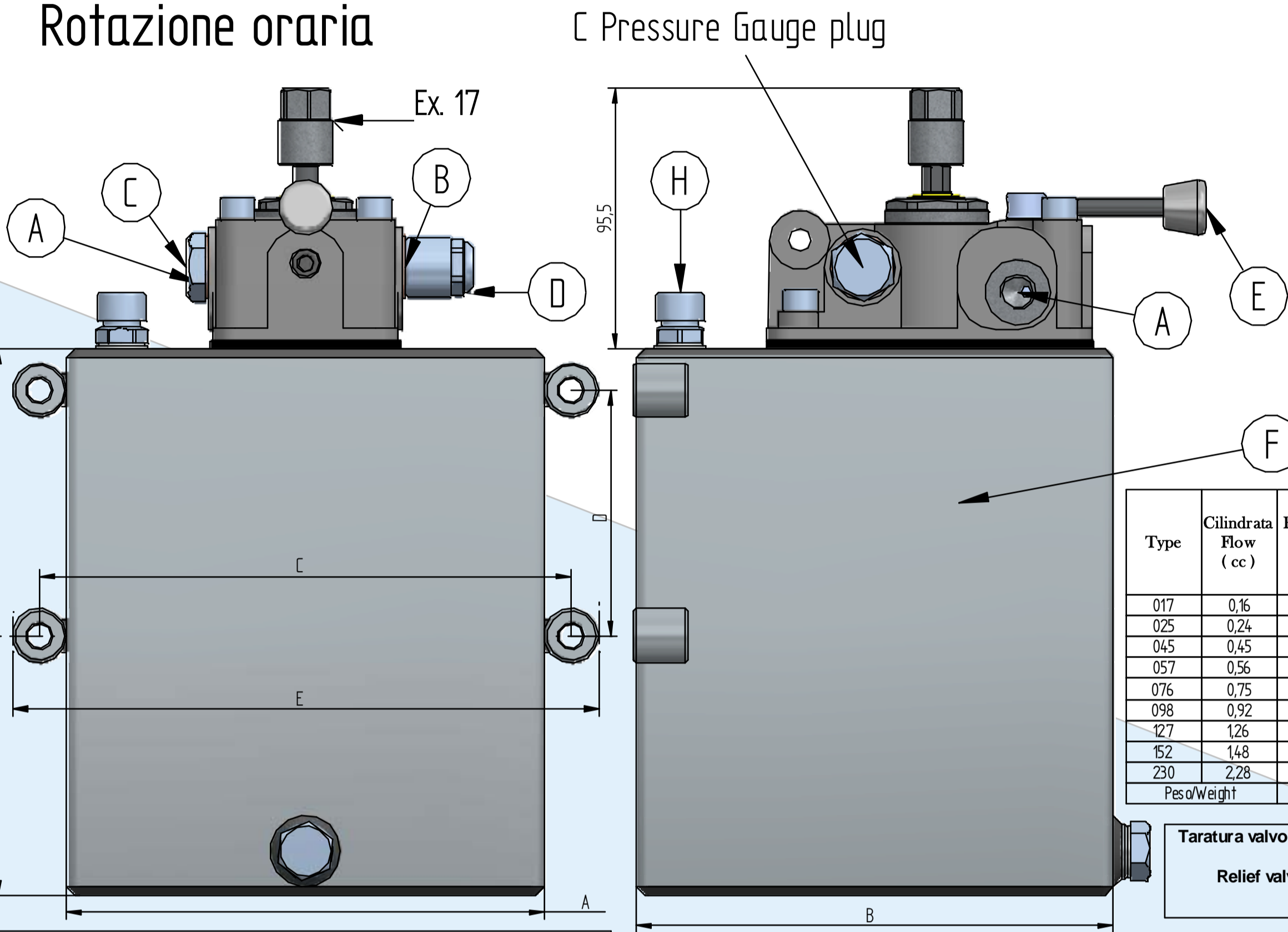
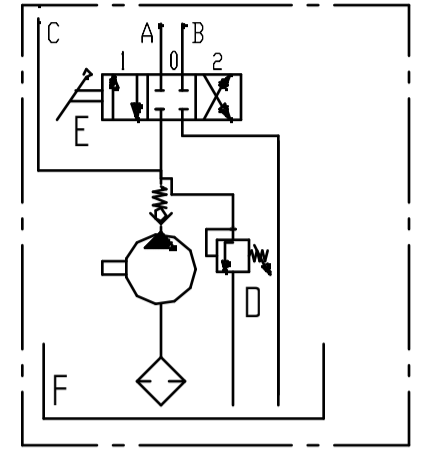
Taratura valvola di massima pressione - Comunque non oltre la pressione massima della pompa.  
Relief valve setting - However not over the pumps' max pressure  
min - max (bar) 30 - (...)

Cilindrata Flow (cc)	Pressione massima Max pressure (bar)	Type	Cilindrata Flow (cc)	Pressione massima Max pressure (bar)	rpm min.	rpm max.
6	400	017	0,16	260	700	9.000
		025	0,24	260	700	9.000
		045	0,45	280	700	9.000
12,5	320	057	0,56	280	700	9.000
		076	0,75	280	700	9.000
19,4	300	098	0,92	280	700	6.000
		127	1,26	280	700	6.000
		152	1,48	280	700	6.000
28	250	230	2,28	210	700	5.000

For double acting cylinder  
with oil tank

Clockwise rotation  
Rotazione oraria

For double acting cylinder  
Per cilindro a doppio effetto



A	1/4 gas
B	1/4 gas
C	3/8 gas
D	Relief valve
F	Oil Tank
H	Breather cap

Type	Cilindrata Flow (cc)	Pressione massima Max pressure (bar)	rpm min.	rpm max.
017	0,16	260	700	9,000
025	0,24	260	700	9,000
045	0,45	280	700	9,000
057	0,56	280	700	9,000
076	0,75	280	700	9,000
098	0,92	280	700	6,000
127	1,26	280	700	6,000
152	1,48	280	700	6,000
230	2,28	210	700	5,000
Peso/Weight		3,3 Kg		

Taratura valvola di massima pressione - Comunque non oltre la pressione massima della pompa.  
Relief valve setting - However not over the pump's max pressure  
min - max (bar) 30 - (...)

### Codice di ordinazione Ordering code

ZES **Option 1** DE **Option 2**

#### Option 1

cc Gear pump

#### Option 2

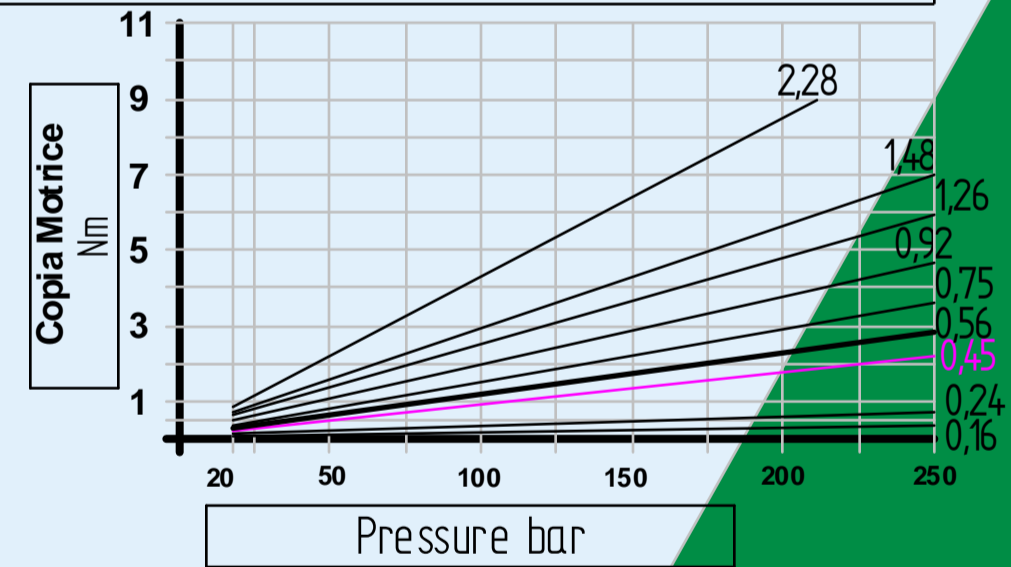
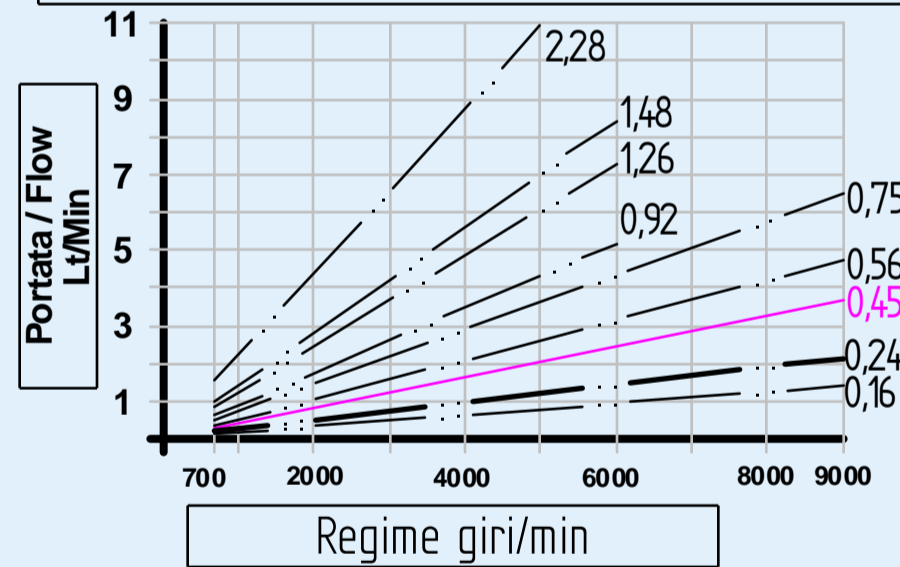
Oil Tank

017	0,16 cc
025	0,24 cc
045	0,45 cc - Standard Version
057	0,56 cc
076	0,75 cc
098	0,92 cc
127	1,26 cc
152	1,48 cc
230	2,28 cc

Total Weight Kg  
3,3 + Weight of oil tank

Coppia di serraggio vite con rivetto: 8/10 Nm  
Torque of fastened screw: 8/10 Nm

### Pompa ad ingranaggi - Gear pump

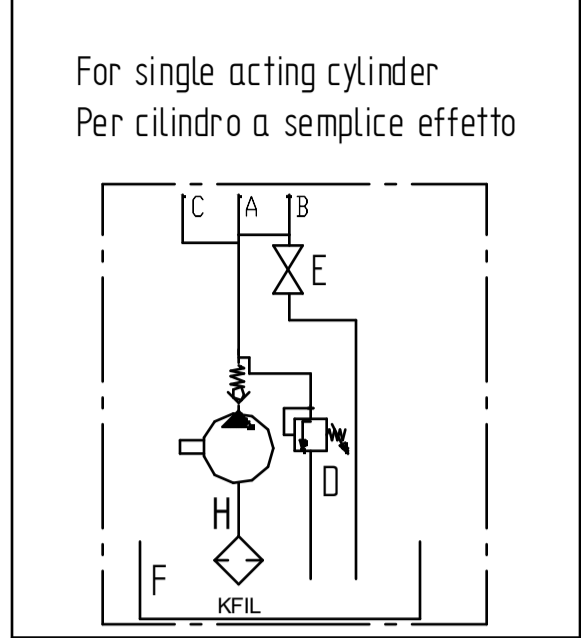


## Option 2

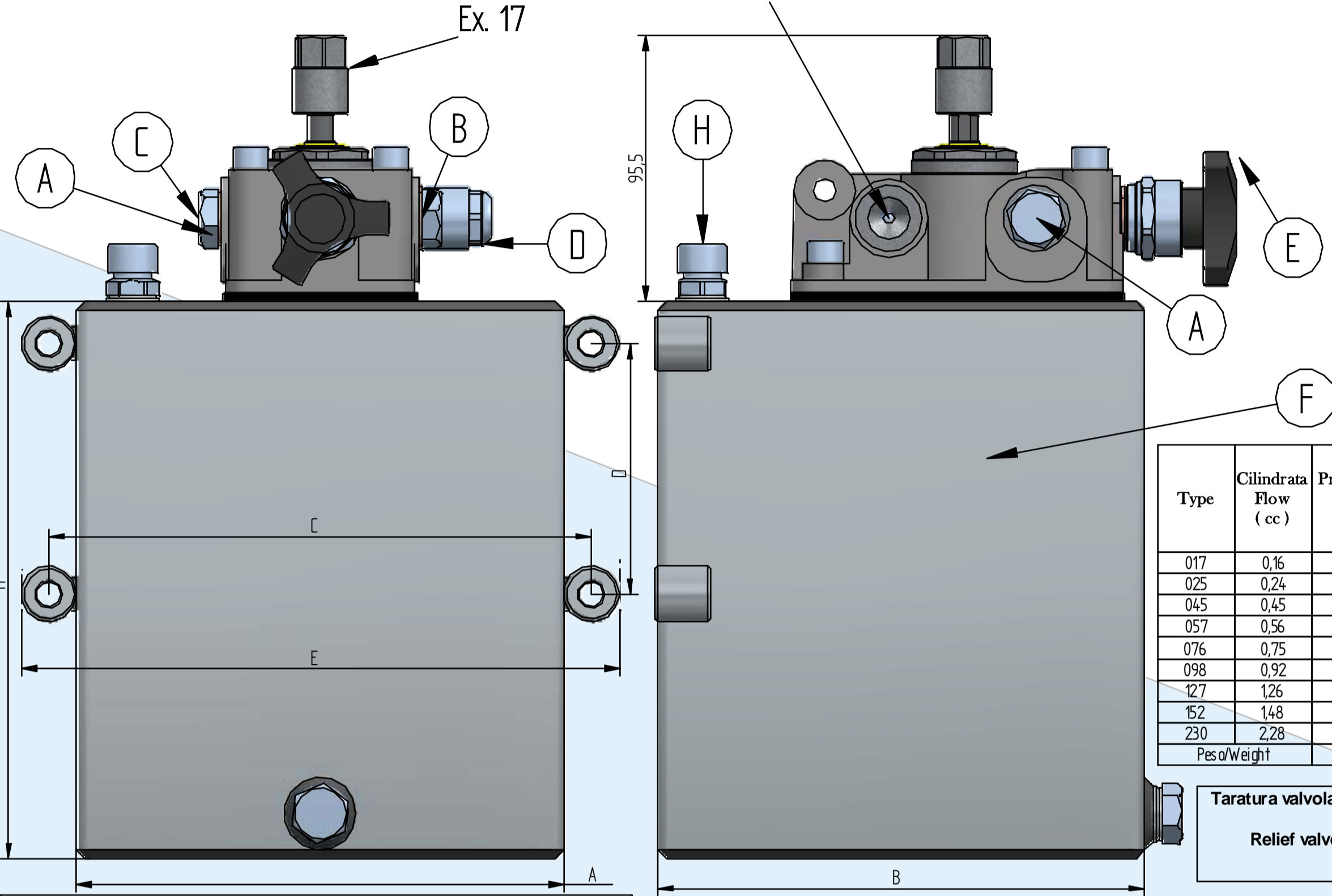
	SR 01	SR 02	SR 03	SR 05	SR 07	SR 10	SR 02,5 -160	SR 04 -160	SR 06 -160	SR 08 -160	SR 02 -150	SR 03 -150	SR 05 -150	SR 07 -150	SR 10 -150	SR 01 ALO	SR 02 ALO	SR 03 ALO	SR 05 ALO
Capacità - Tank capacity (litres)	1	2	3	5	7	10	2,5	4	6	8	2	3	5	7	10	1	2	3	5
Spie livello olio - Oil level																x	x	x	x
Tappo sfiato - Breather cap	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Alluminio - Aluminium																x	x	x	x
Ferro verniciato - Painted iron	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x				
A (mm)	100	100	100	175	175	175	160	160	160	160	150	150	150	150	150	132	174	174	174
B (mm)	150	150	150	175	175	175	160	160	160	160	150	150	150	150	150	157	181	181	181
C (mm)	120	120	120	195	195	195	180	180	180	180	170	170	170	170	170	96	180	180	180
D (mm)	90	90	90	90	90	90	90	90	90	90	80	80	80	80	80	110	90	90	90
E (mm)	140	140	140	215	215	215	200	200	200	200	190	190	190	190	190	132	202	202	202
H (mm)	120	180	245	200	269	376	120	180	265	350	120	156	245	340	485	145	142	223	303
Peso - Weight (Kg)	2	2,2	2,5	4,5	5,4	6,8	2,9	3,9	5,0	6,2	2,6	3,1	4,3	5,6	7,6	1,3	1,7	1,9	2,4

For single acting cylinder  
with oil tank

Clockwise rotation  
Rotazione oraria



A	1/4 gas
B	1/4 gas
C	3/8 gas
D	Relief valve
F	Oil Tank
H	Breather cap



Type	Cilindrata Flow (cc)	Pressione massima Max pressure (bar)	rpm min.	rpm max.
017	0,16	260	700	9,000
025	0,24	260	700	9,000
045	0,45	280	700	9,000
057	0,56	280	700	9,000
076	0,75	280	700	9,000
098	0,92	280	700	6,000
127	1,26	280	700	6,000
152	1,48	280	700	6,000
230	2,28	210	700	5,000
Peso/Weight		3,3 Kg		

Taratura valvola di massima pressione - Comunque non oltre la pressione massima della pompa.  
Relief valve setting - However not over the pump's max pressure  
min - max (bar) 30 - (...)

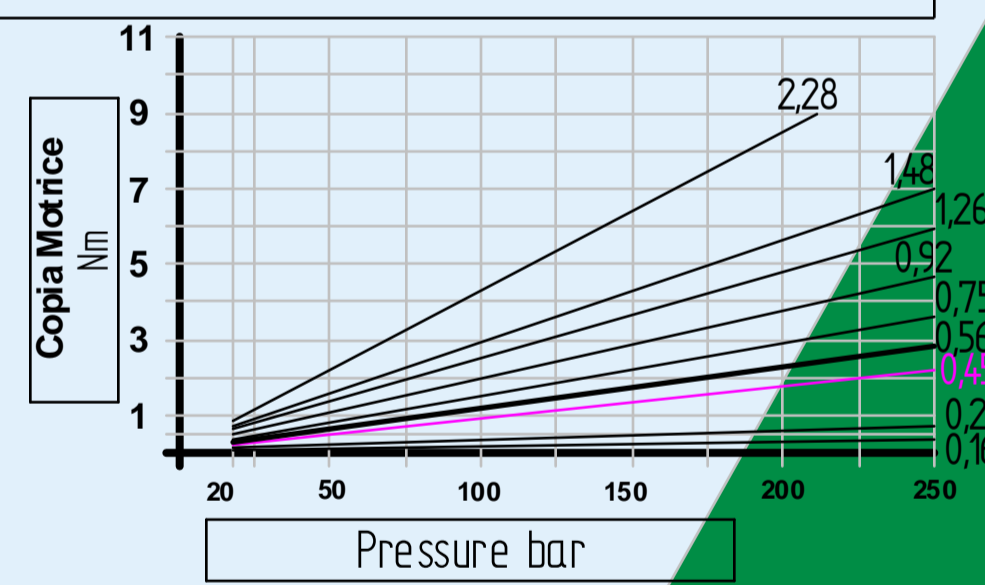
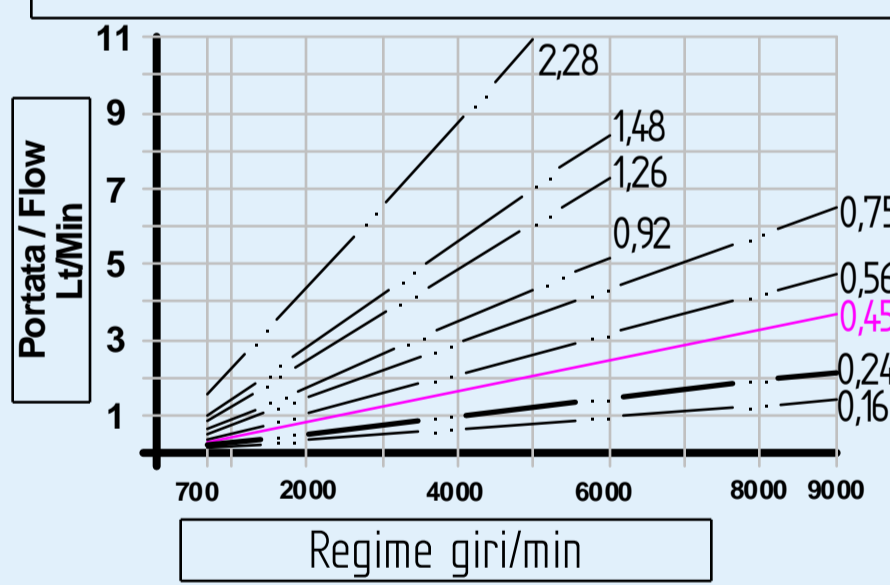
**Codice di ordinazione**  
**Ordering code**  
ZES **Option 1** SE **Option 2**

Option 1 cc Gear pump		Option 2 Oil Tank
017	0,16 cc	
025	0,24 cc	
045	0,45 cc - Standard Version	
057	0,56 cc	
076	0,75 cc	
098	0,92 cc	
127	1,26 cc	
152	1,48 cc	
230	2,28 cc	

Total Weight Kg  
3,3 + Weight of oil tank

Coppia di serraggio vite con rivetto: 8/10 Nm  
Torque of fastened screw: 8/10 Nm

**Pompa ad ingranaggi - Gear pump**



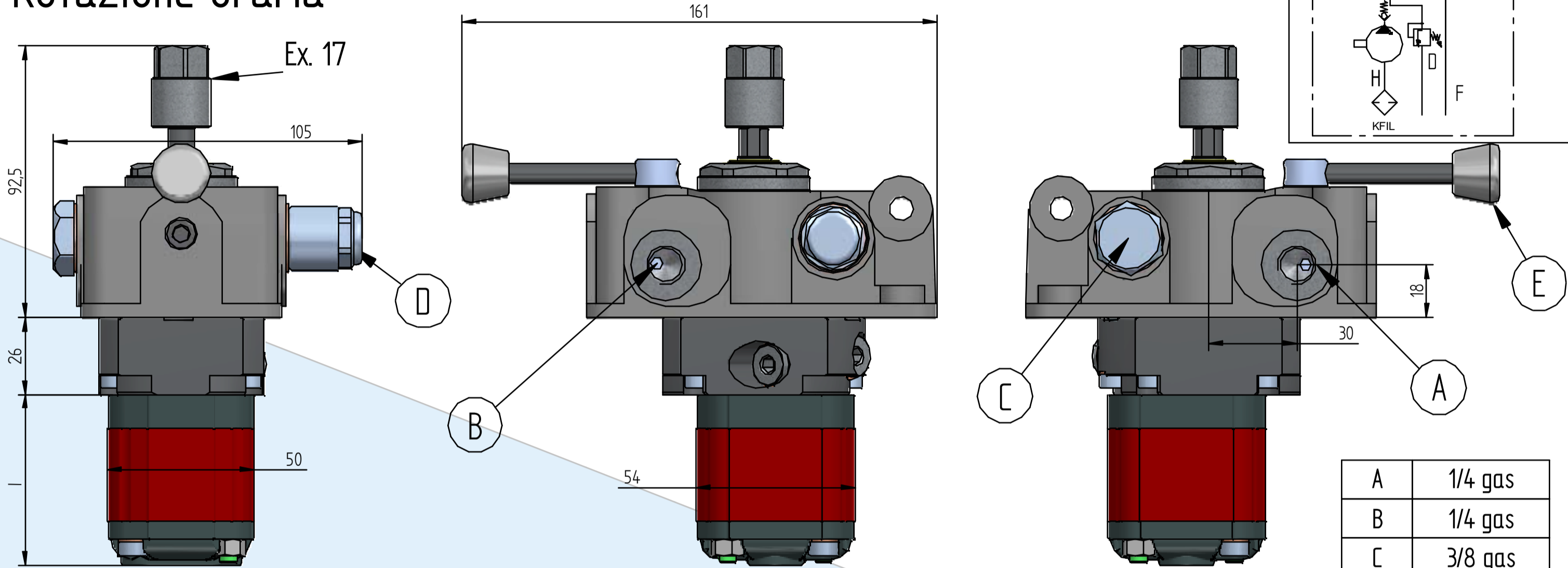
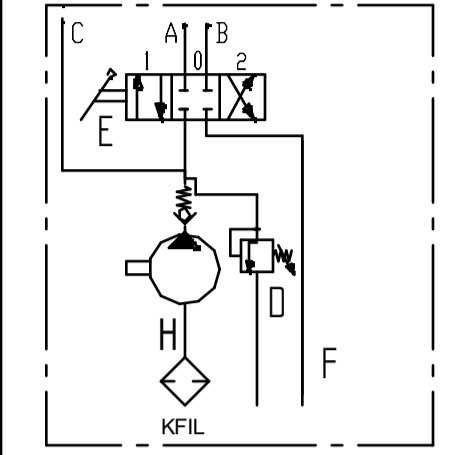
Option 2	SR 01	SR 02	SR 03	SR 05	SR 07	SR 10	SR 02,5	SR 04	SR 06	SR 08	SR 02	SR 03	SR 05	SR 07	SR 10	SR 01	SR 02	SR 03	SR 05
	01	02	03	05	07	10	-160	-160	-160	-160	-150	-150	-150	-150	-150	ALO	ALO	ALO	ALO
Capacità - Tank capacity (litres)	1	2	3	5	7	10	2,5	4	6	8	2	3	5	7	10	1	2	3	5
Spie livello olio - Oil level																x	x	x	x
Tappo sfiato - Breather cap	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Alluminio - Aluminium																x	x	x	x
Ferro verniciato - Painted iron	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x				
A (mm)	100	100	100	175	175	175	160	160	160	160	150	150	150	150	150	132	174	174	174
B (mm)	150	150	150	175	175	175	160	160	160	160	150	150	150	150	150	157	181	181	181
C (mm)	120	120	120	195	195	195	180	180	180	180	170	170	170	170	170	96	180	180	180
D (mm)	90	90	90	90	90	90	90	90	90	90	80	80	80	80	80	110	90	90	90
E (mm)	140	140	140	215	215	215	200	200	200	200	190	190	190	190	190	132	202	202	202
H (mm)	120	180	245	200	269	376	120	180	265	350	120	156	245	340	485	145	142	223	303
Peso - Weight (Kg)	2	2,2	2,5	4,5	5,4	6,8	2,9	3,9	5,0	6,2	2,6	3,1	4,3	5,6	7,6	1,3	1,7	1,9	2,4

Dati tecnici indicativi e non impegnativi.  
L'azienda si riserva di apportare modifiche in qualsiasi momento e senza preavviso.  
Technical data not binding. Modifications reserved without prior notice.

For double acting cylinder  
without oil tank

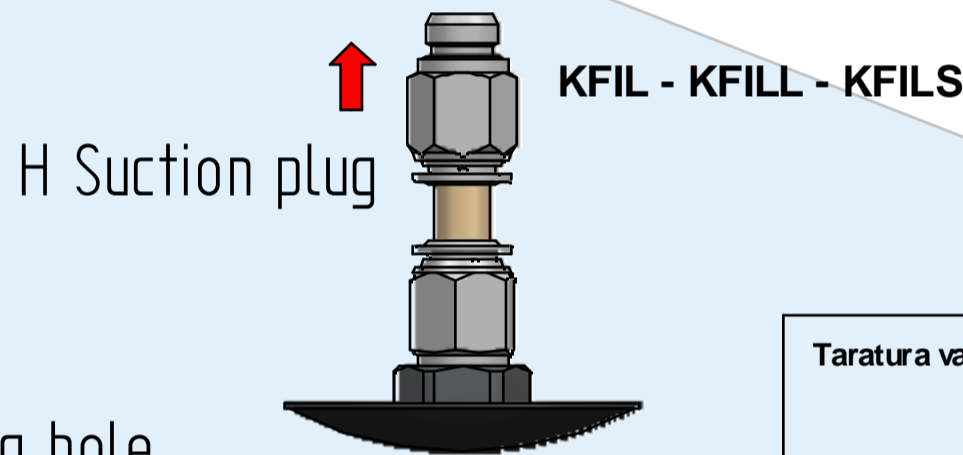
Clockwise rotation  
Rotazione oraria

For double acting cylinder  
Per cilindro a doppio effetto



l: min 46,8 mm Max 63,5 mm

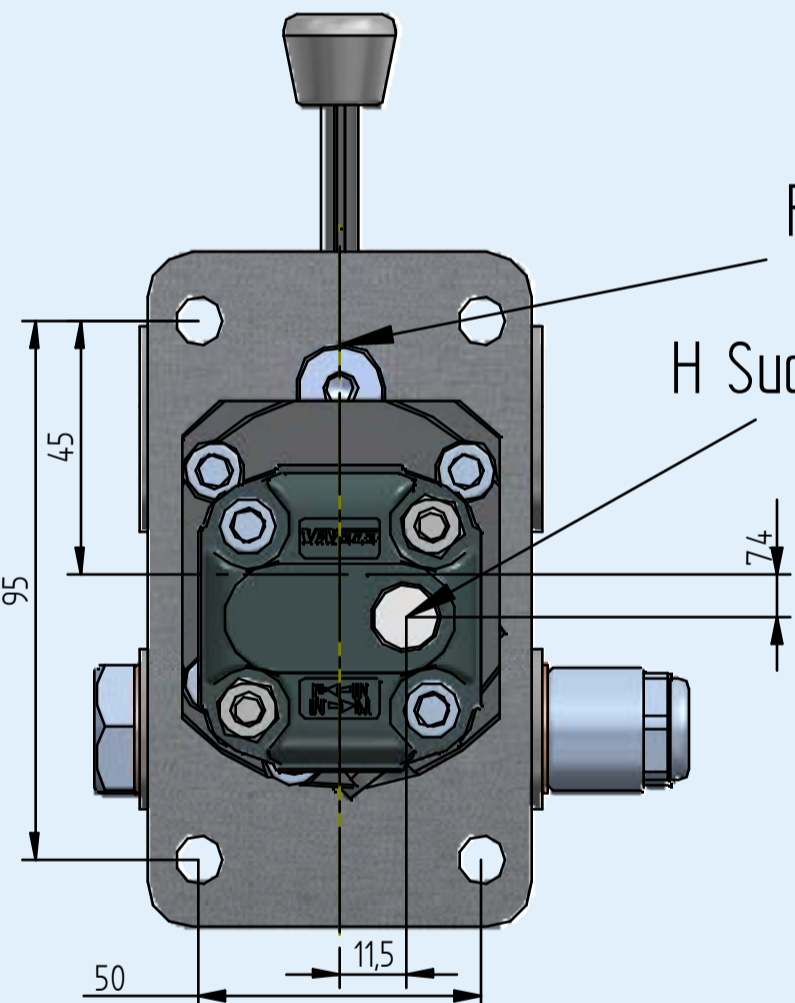
A	1/4 gas
B	1/4 gas
C	3/8 gas
D	Relief valve
F	Hole
H	1/4 gas



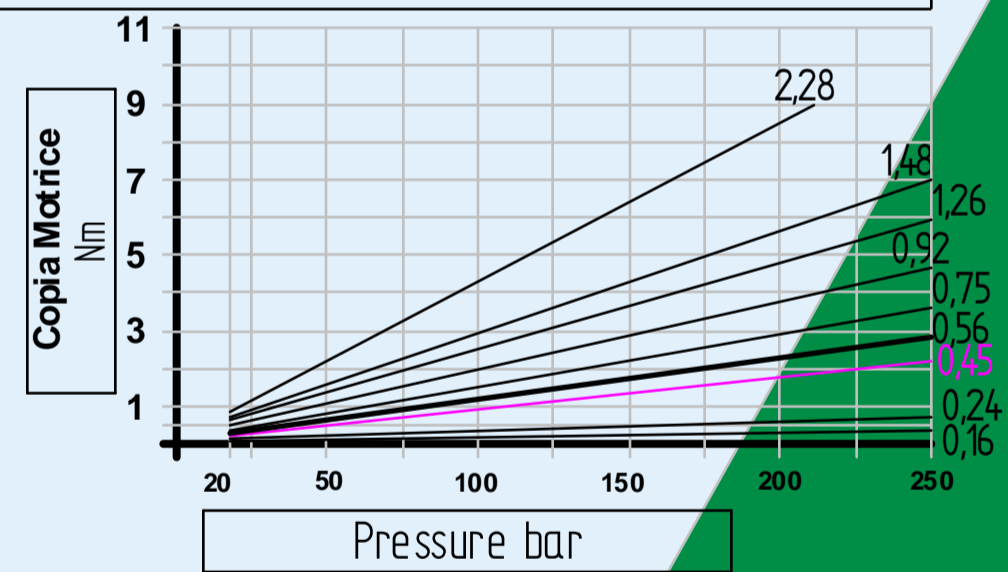
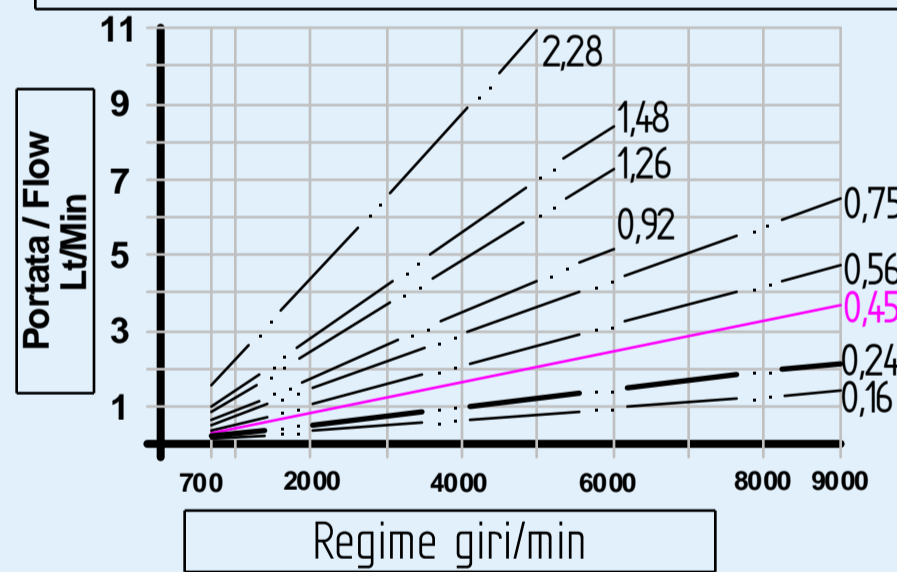
Taratura valvola di massima pressione - Comunque non oltre la pressione massima della pompa.  
Relief valve setting - However not over the pump's max pressure  
min - max (bar) 30 - (...)

F Discharging hole

H Suction plug



### Pompa ad ingranaggi - Gear pump

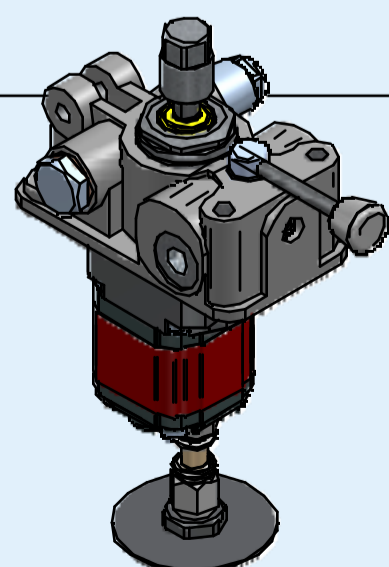


### Codice di ordinazione - Ordering code

ZES	Option 1	017	DEB
		025	
		045	
		057	
		076	
		098	
		127	
		152	
		230	

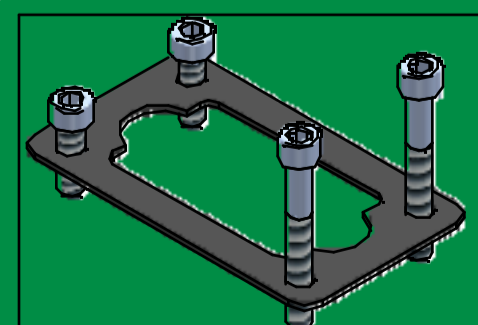
### Option 1 cc Gear pump

017	0,16 cc
025	0,24 cc
045	0,45 cc - Standard Version
057	0,56 cc
076	0,75 cc
098	0,92 cc
127	1,26 cc
152	1,48 cc
230	2,28 cc



Type	Cilindrata Flow (cc)	Pressione massima Max pressure (bar)	rpm min.	rpm max.
017	0,16	260	700	9.000
025	0,24	260	700	9.000
045	0,45	280	700	9.000
057	0,56	280	700	9.000
076	0,75	280	700	9.000
098	0,92	280	700	6.000
127	1,26	280	700	6.000
152	1,48	280	700	6.000
230	2,28	210	700	5.000
Peso/Weight		3,3 kg		

KFIL - KFILL - KFILLS  
Filtro per aspirazione ordinabile separatamente  
Suction filter can be ordered separately

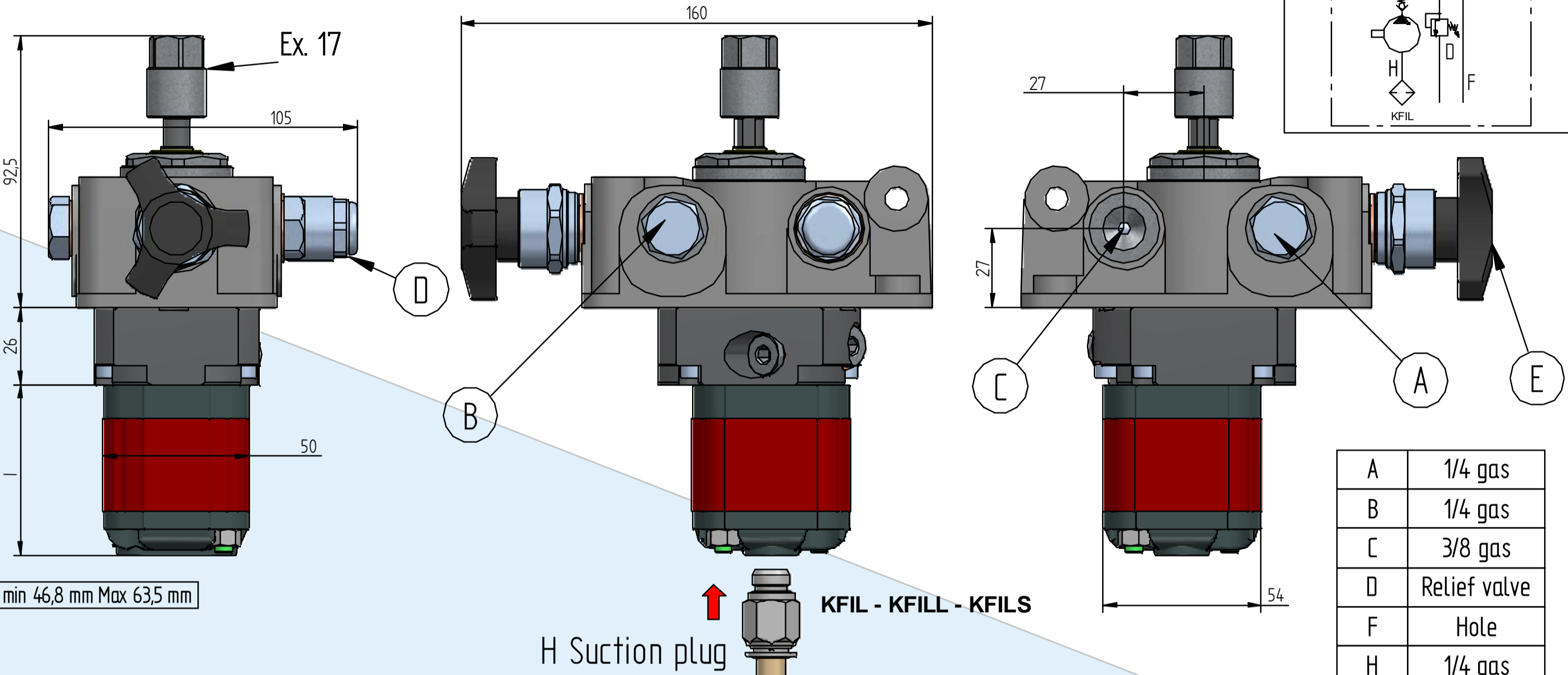
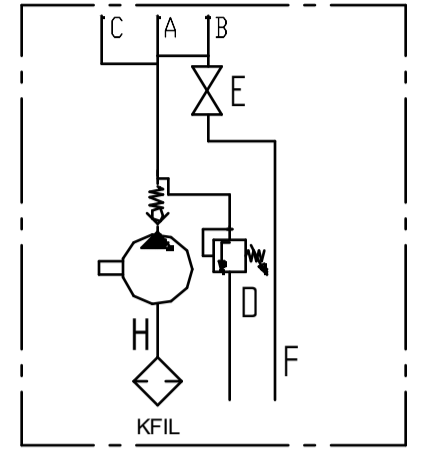


Kit di montaggio al serbatoio - Mounting kit to oil tank

For single acting cylinder  
without oil tank

Clockwise rotation  
Rotazione oraria

For single acting cylinder  
Per cilindro a semplice effetto

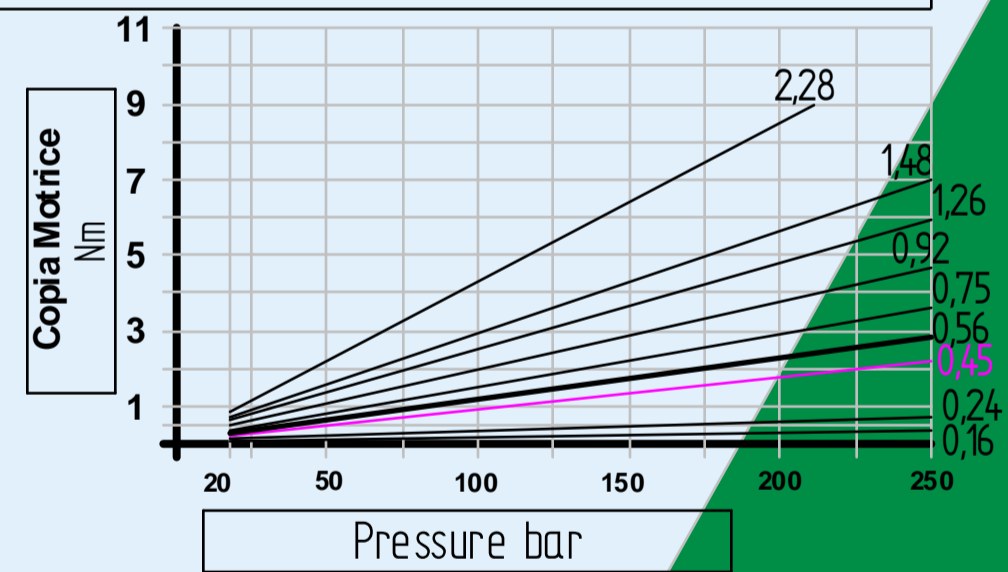
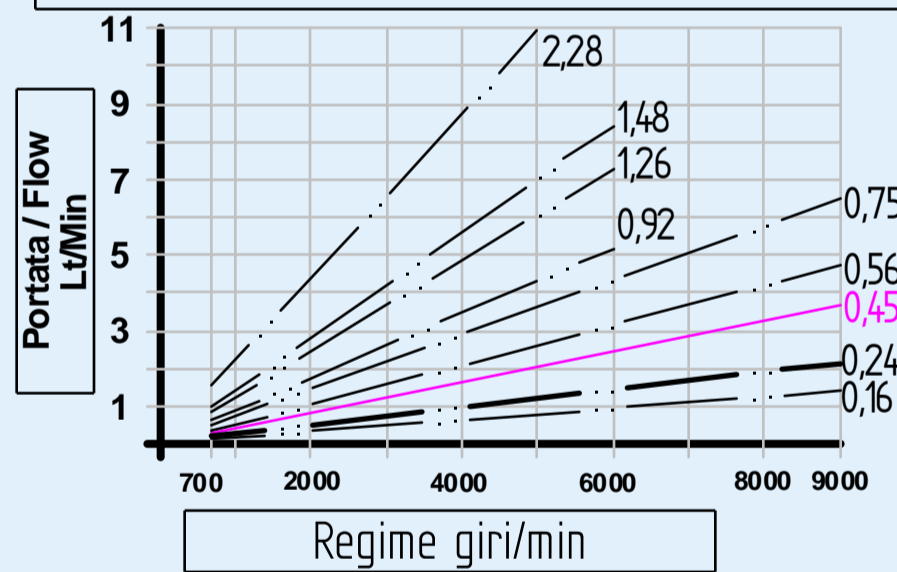


Taratura valvola di massima pressione - Comunque non oltre la pressione massima della pompa.  
Relief valve setting - However not over the pump's max pressure  
min - max (bar) 30 - (...)

F Discharging hole

H Suction plug

### Pompa ad ingranaggi - Gear pump



### Codice di ordinazione - Ordering code

ZES

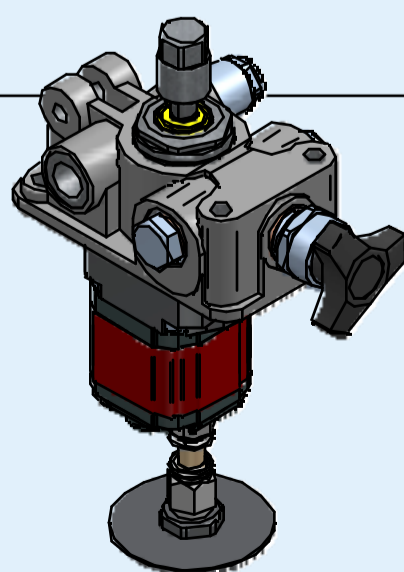
Option 1	017
	025
	045
	057
	076
	098
	127
	152
	230

SEB

### Option 1

### cc Gear pump

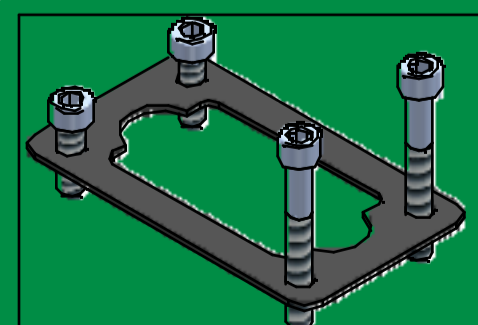
017	0,16 cc
025	0,24 cc
045	0,45 cc - Standard Version
057	0,56 cc
076	0,75 cc
098	0,92 cc
127	1,26 cc
152	1,48 cc
230	2,28 cc



Type	Cilindrata Flow (cc)	Pressione massima Max pressure (bar)	rpm min.	rpm max.
017	0,16	260	700	9.000
025	0,24	260	700	9.000
045	0,45	280	700	9.000
057	0,56	280	700	9.000
076	0,75	280	700	9.000
098	0,92	280	700	6.000
127	1,26	280	700	6.000
152	1,48	280	700	6.000
230	2,28	210	700	5.000
Peso/Weight		3,3 kg		

### KFIL - KFILL - KFILS

Filtro per aspirazione ordinabile separatamente  
Suction filter can be ordered separately



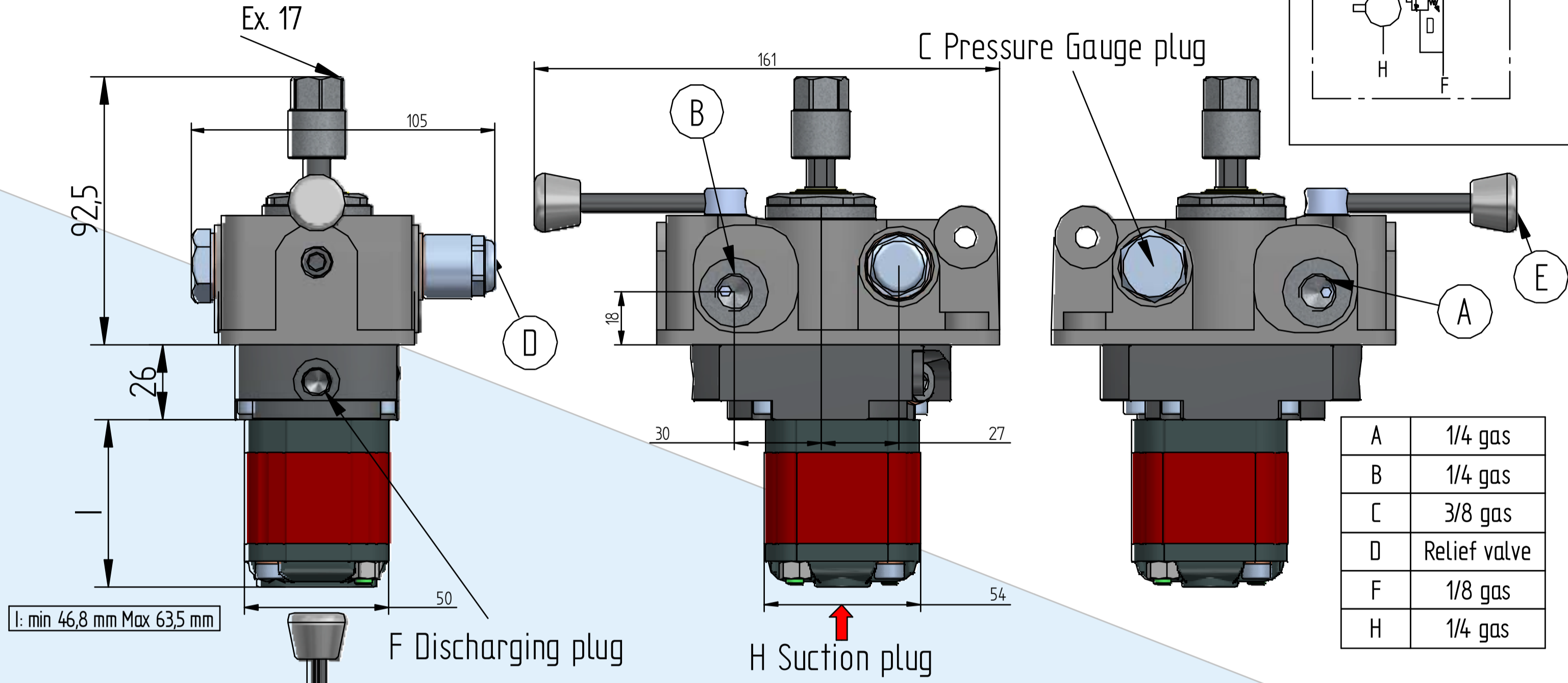
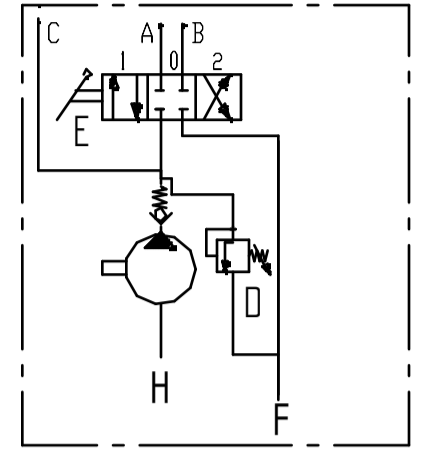
Kit di montaggio al serbatoio - Mounting kit to oil tank



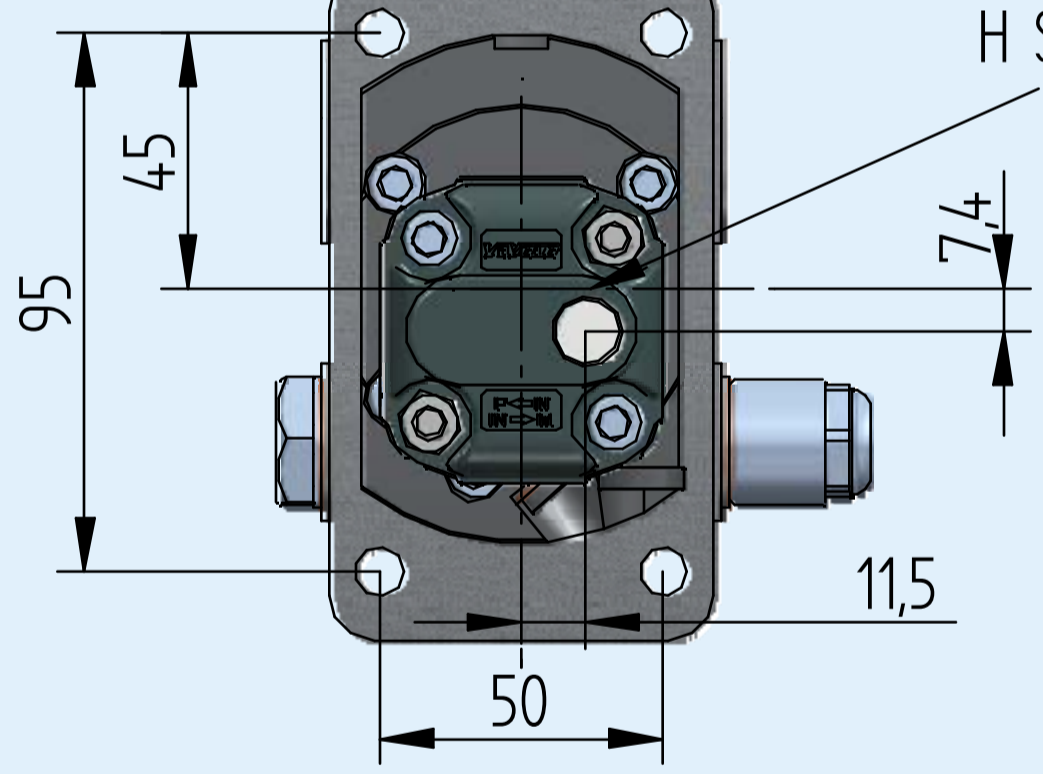
*For double acting cylinder  
stand alone*

Clockwise rotation  
Rotazione oraria

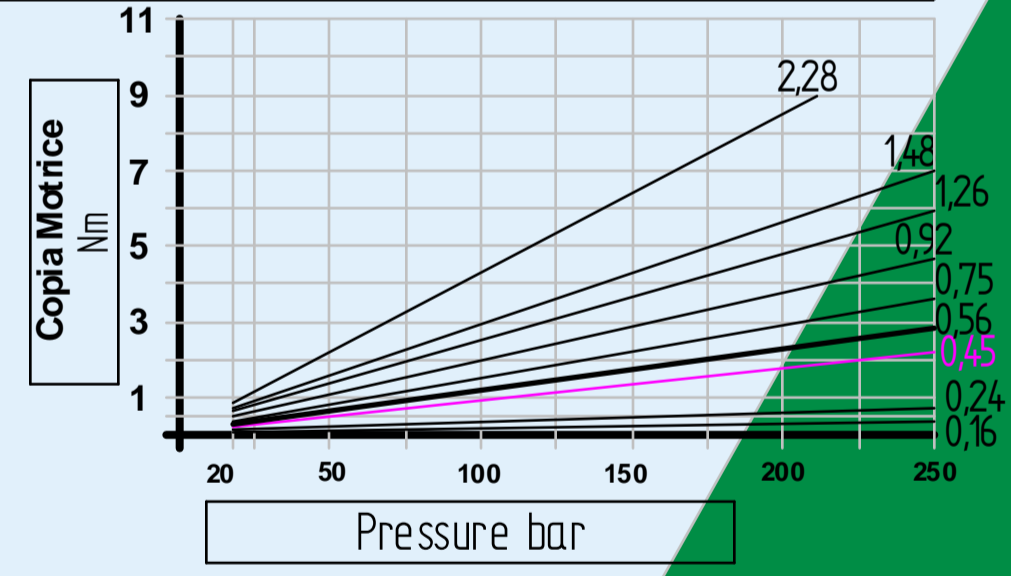
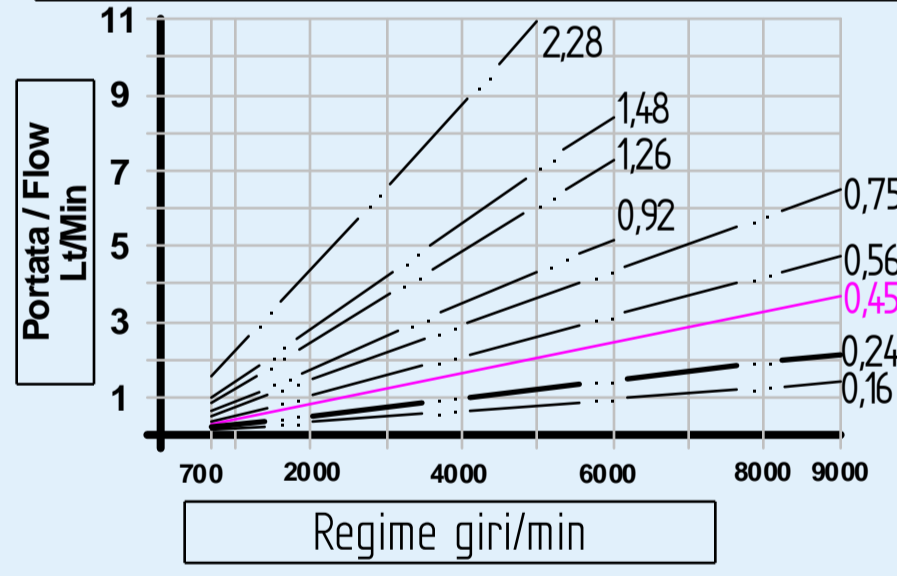
For double acting cylinder  
Per cilindro a doppio effetto



**Taratura valvola di massima pressione - Comunque non oltre la pressione massima della pompa.**  
**Relief valve setting - However not over the pump's max pressure**  
min - max (bar) 30 - (...)



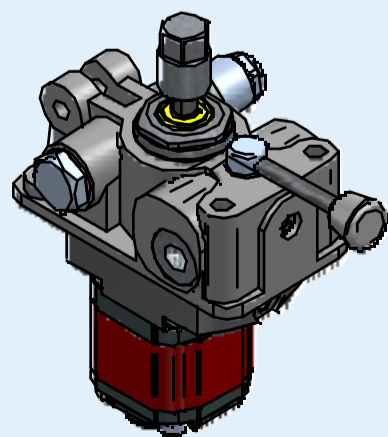
### Pompa ad ingranaggi - Gear pump



### Codice di ordinazione - Ordering code

ZES	Option 1	017	DEBP
		025	
		045	
		057	
		076	
		098	
		127	
		152	
		230	

Option 1 cc Gear pump	
017	0,16 cc
025	0,24 cc
045	0,45 cc - Standard Version
057	0,56 cc
076	0,75 cc
098	0,92 cc
127	1,26 cc
152	1,48 cc
230	2,28 cc

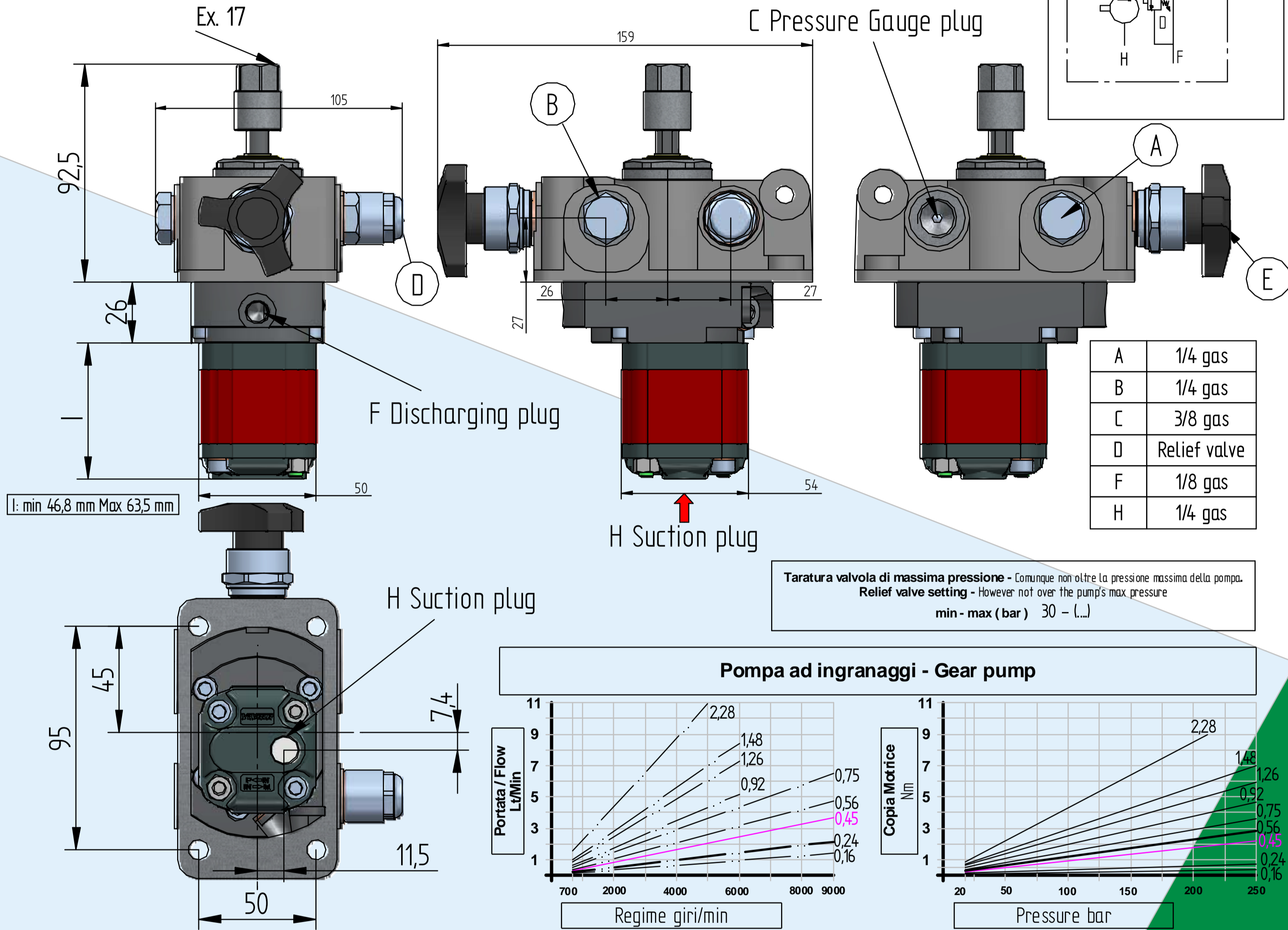
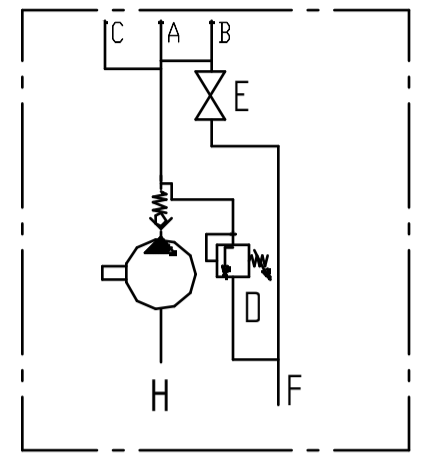


Type	Cilindrata Flow (cc)	Pressione massima Max pressure (bar)	rpm min.	rpm max.
017	0,16	260	700	9.000
025	0,24	260	700	9.000
045	0,45	280	700	9.000
057	0,56	280	700	9.000
076	0,75	280	700	9.000
098	0,92	280	700	6.000
127	1,26	280	700	6.000
152	1,48	280	700	6.000
230	2,28	210	700	5.000
Peso/Weight		3,3 kg		

For single acting cylinder  
stand alone

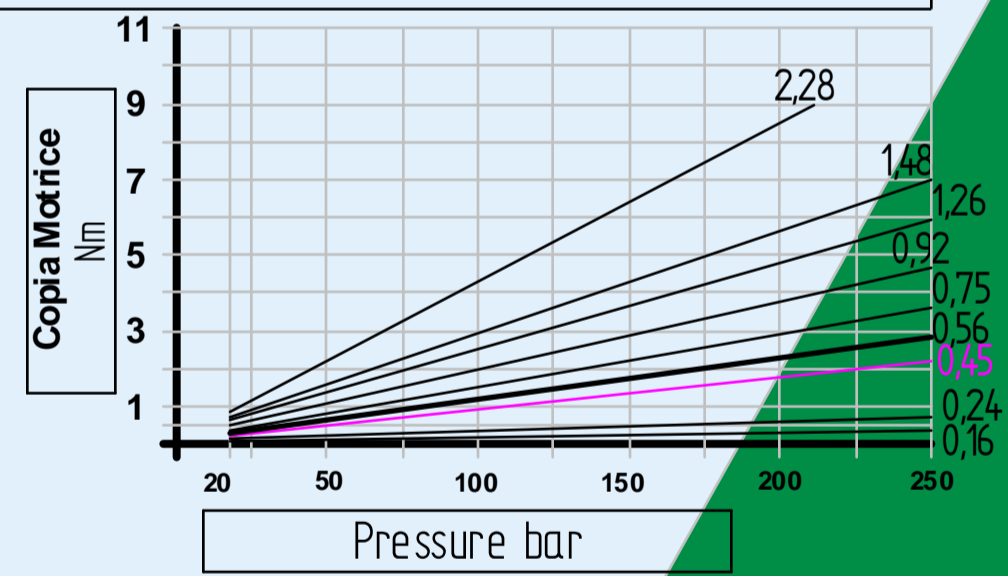
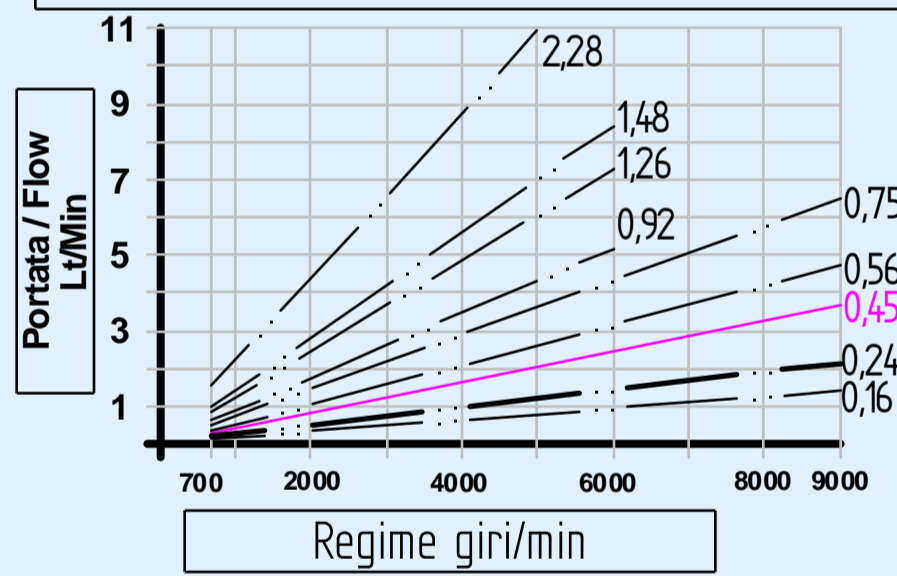
Clockwise rotation  
Rotazione oraria

For single acting cylinder  
Per cilindro a semplice effetto



Taratura valvola di massima pressione - Comunque non oltre la pressione massima della pompa.  
Relief valve setting - However not over the pump's max pressure  
min - max (bar) 30 - (...)

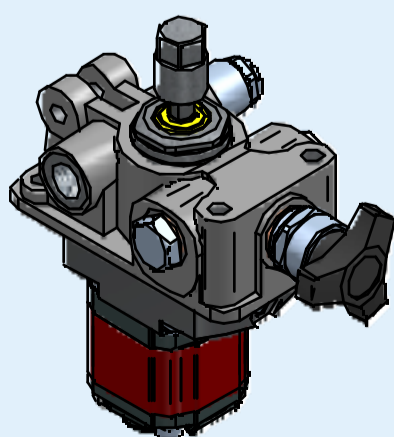
### Pompa ad ingranaggi - Gear pump



### Codice di ordinazione - Ordering code

ZES	Option 1	017	SEBP
		025	
		045	
		057	
		076	
		098	
		127	
		152	
		230	

Option 1 cc Gear pump	
017	0,16 cc
025	0,24 cc
045	0,45 cc - Standard Version
057	0,56 cc
076	0,75 cc
098	0,92 cc
127	1,26 cc
152	1,48 cc
230	2,28 cc



Type	Cilindrata Flow (cc)	Pressione massima Max pressure (bar)	rpm min.	rpm max.
017	0,16	260	700	9.000
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045	0,45	280	700	9.000
057	0,56	280	700	9.000
076	0,75	280	700	9.000
098	0,92	280	700	6.000
127	1,26	280	700	6.000
152	1,48	280	700	6.000
230	2,28	210	700	5.000
Peso/Weight		3,3 kg		

# KFIL KRAC

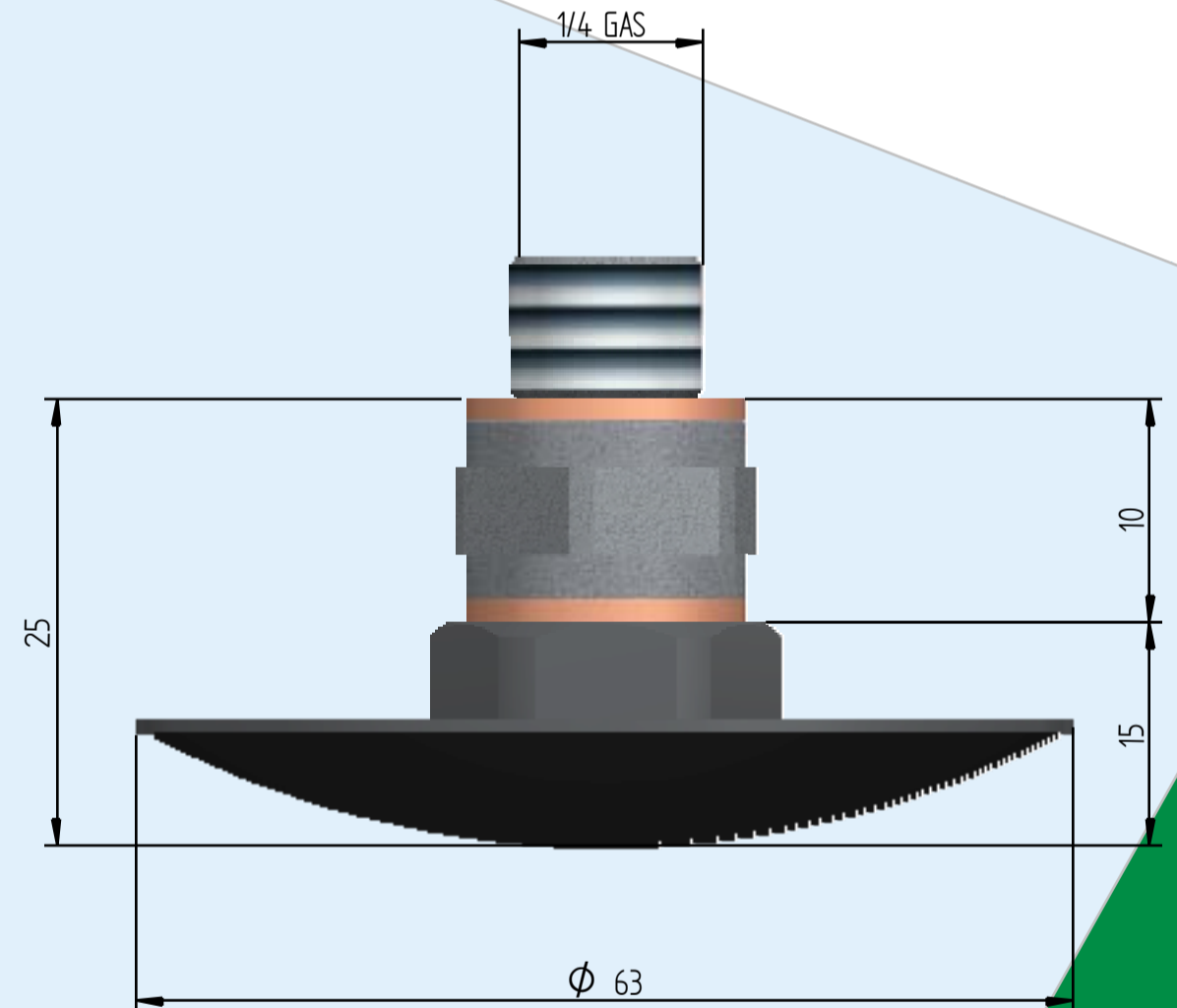
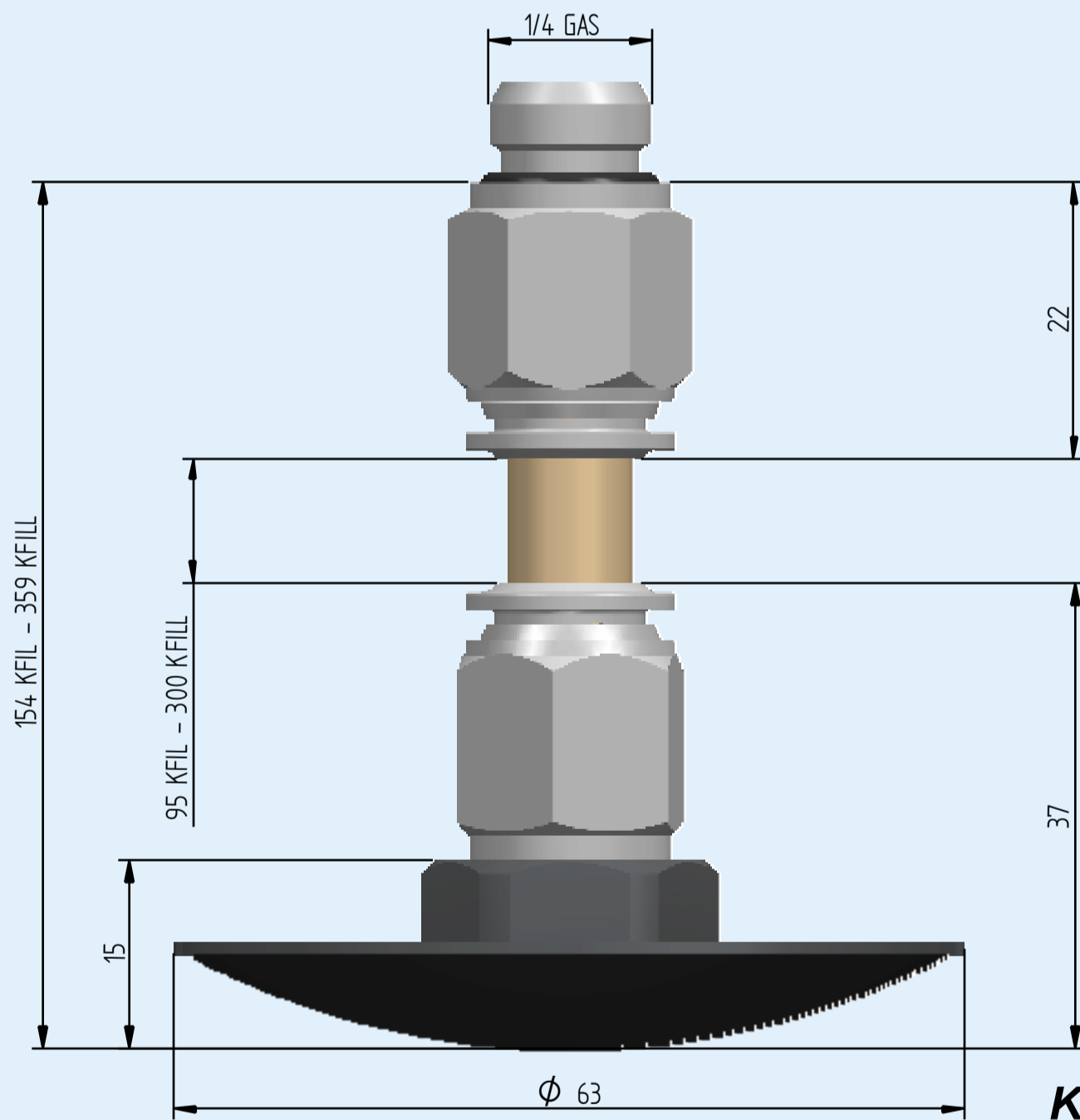
Kit filtro aspirazione  
Suction kit



Codice / Code	KFIL	KFILS	KFILL	KRAC
Filtro / Filter (Micron)	90	90	90	520
Superficie filtrante / Filtering surface (mm <sup>2</sup> )	3000	3000	3000	415
Portata / Flow (Lt/Min)	7	7	7	2,5
Oil tank with measure H (mm) equal or less than 145 mm	NO	OK	NO	OK
Oil tank with measure H (mm) between 146 mm and 249 mm	OK	NO	NO	OK
Oil tank with measure H (mm) equal or more than 250 mm	NO	NO	OK	OK
Mounted with KCHP on oil tank	OK	NO	OK	OK

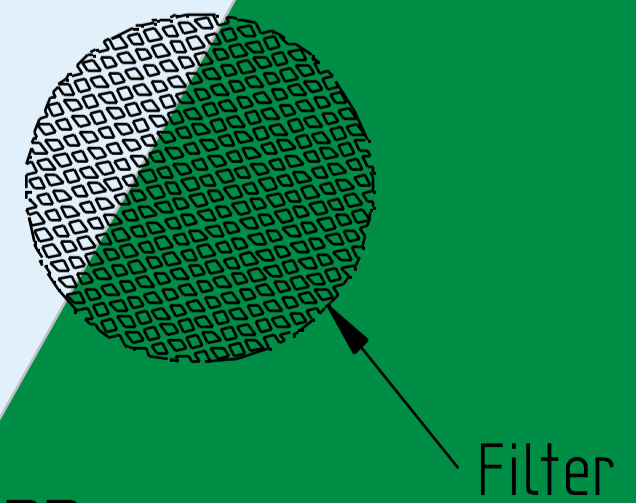
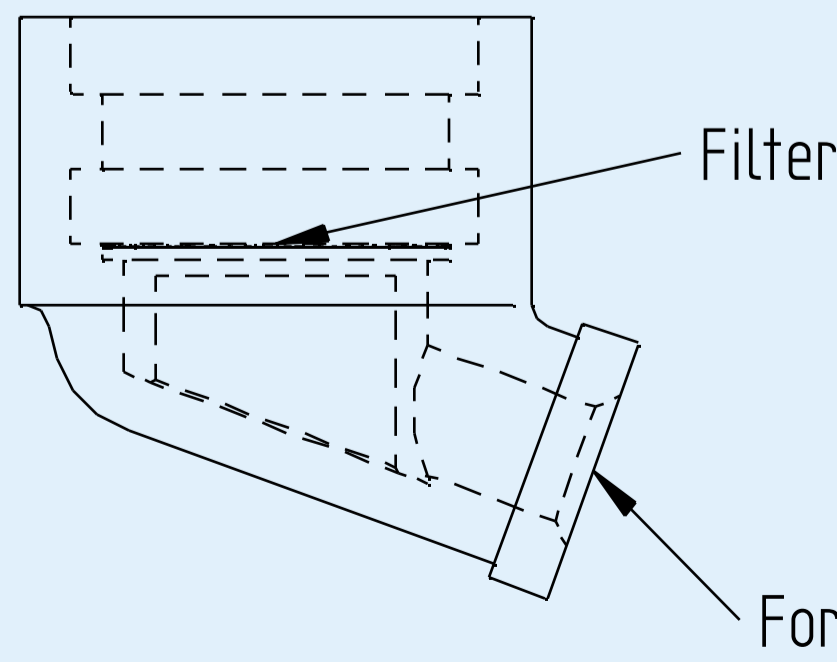
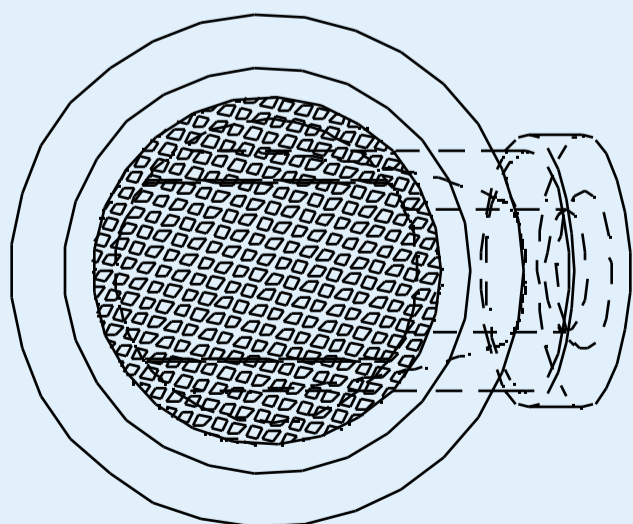
## KFIL ~ KFILL

## KFILS



**KFIL - KFILL - KFILS to be used only with 1/4 gas aspiration suction**

## KRAC





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