

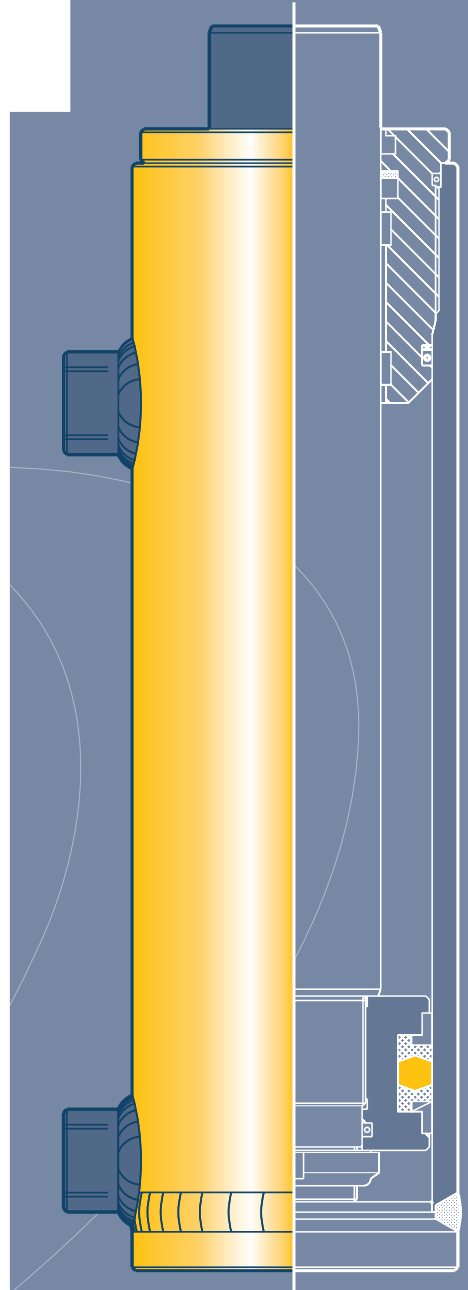


HYDROVEN
OLEODINAMICA



***CILINDRI oleodinamici**
HYDRAULIC CYLINDERS

▶ **CILINDRI**
CDE



A MEMBER OF  **INTERPUMP GROUP**

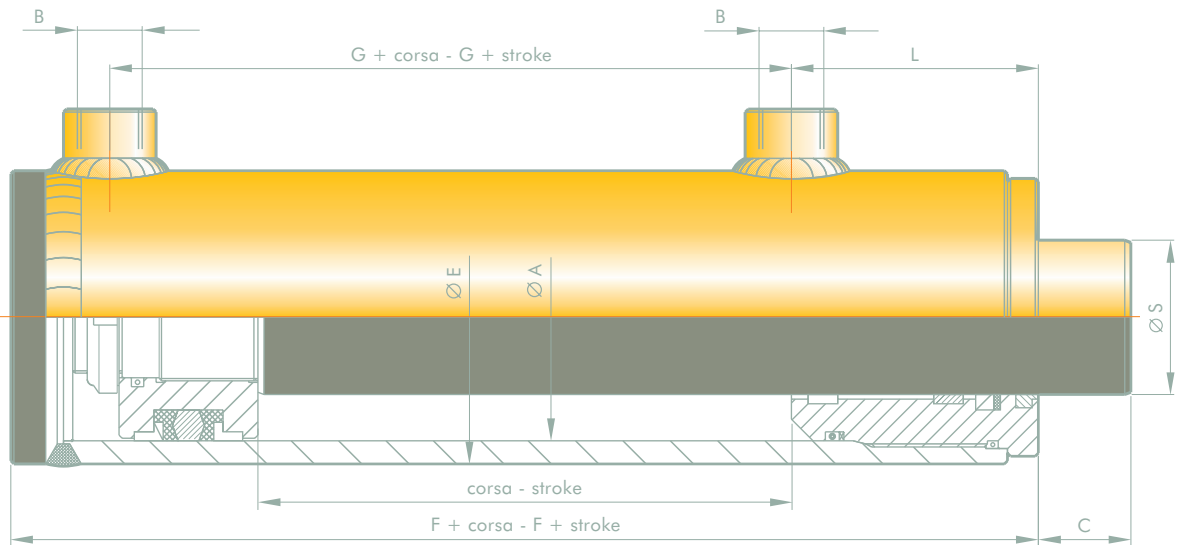
***CILINDRI oleodinamici**
HYDRAULIC CYLINDERS

4	CILINDRI CDE CDE CYLINDERS
6	FLANGIA ROTONDA A SEI FORI MFR ROUND FLANGE WITH 6 HOLES MFR
7	ATTACCO A PIVOT MT4 PIVOT CONNECTION MT4
8	FILETTATURA A STELO SECONDO UNI ISO 4395 ROD THREAD UNI ISO 4395
9	FONDELLO FF MP3 DRILLED BOTTOM FF MP3
10	BOCCOLA BS BMP BUSHING BS BMP
11	FORCELLE FEMMINA FILETTATE FC FN THREADED FEMALE FORKS FC FN
12	SNODI SFERICI DA SALDARE SC-SCF BALL JOINTS FOR WELDING SC-SCF
13	SNODI SFERICI DA SALDARE OS-RS BALL JOINTS FOR WELDING OS-RS
14	SNODI SFERICI FILETTATI SIR SA THREADED BALL JOINTS SIR SA
15	ATTACCO PL H CONNECTION PL H
16	MARTINETTO TELESCOPICO DOPPIO EFFETTO CON GUARNIZIONI DOUBLE ACTING HYDRAULIC TELESCOPE CYLINDER WITH PACKINGS



Cilindro CDE

CDE cylinder



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ESEMPIO DI ORDINAZIONE EXAMPLE ORDER

CDE	CDE CILINDRO DOPPIO EFFETTO - DOUBLE-ACTING CYLINDER		
50	ALESAGGIO - BORE		
60	Ø ESTERNO - OUTER		
25	Ø STELO - ROD		
200	CORSA UTILE - STROKE		
0	ATTACCO FONDELLO - BOTTOM CONNECTION		
	FF Fondello forato Drilled bottom	BMP Attacco a boccia con bussola cementata Bushing connection with casehardened bush	RS Snodo sf. agric. base piatta Ball joint agri. flat base
	MP3 Cerniera maschio Male hinge	OS Snodo sf. agricolo base tonda Ball joint agri. round base	SCF Snodo sf. industriale Industrial ball joint
	BS Attacco a boccia Bushing connection	O Nessun attacco No connection	
MT4.050	ATTACCO CAMICIA - LINER CONNECTION		
	PL Piastra di supporto laterale Side support plate	MFR Flangia rotonda a 6 fori Round flange with 6 holes	O Nessun attacco No connection
	H Attacco a piedino Foot connection	MT4 Attacco a pivot Pivot joint	
K018	ATTACCO STELO - ROD CONNECTION		
	FC Forcella filettata con clips Threaded fork with clips	OS Snodo sf. agricolo base tonda Ball joint agri. round base	SA Snodo sferico fil. maschio Male thread ball joint
	FN Forcella filettata Threaded fork	RS Snodo sf. agricolo base piatta Ball joint agri. flat base	K Filettatura maschio Male thread
	BS Attacco a boccia Bushing connection	SC Snodo sferico industriale Industrial ball joint	Y Filettatura femmina Female thread
	BMP Attacco a boccia con bussola cementata Bushing connection with casehardened bush	SIR Snodo sferico fil. femmina Female thread ball joint	O Nessun attacco No connection

A ORIENTAMENTO MANICOTTI - SLEEVE POSITION



NB: per l'orientamento dei manicotti rispetto agli attacchi tipo "PL" e "H", vedere il disegno evidenziato nella scheda relativa a quest'ultimi.

NB: for positioning of sleeves with respect to "PL" type and "H" type connections see drawing highlighted in the card relative to the latter.



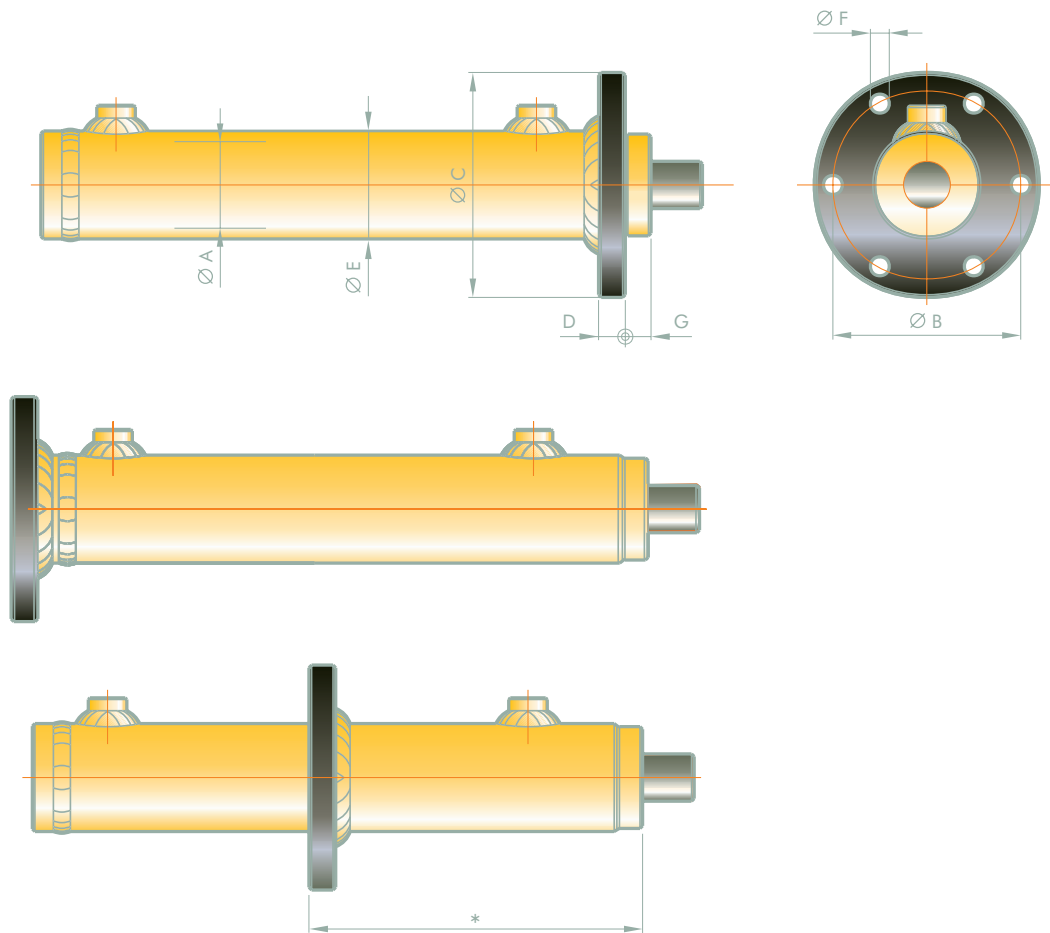
CARATTERISTICHE DIMENSIONALI DIMENSIONAL CHARACTERISTICS

Ø F	PRESSIONE PRESSURE bar*		Ø S	F	C	B	L	G	AREA SPINTA PUSH AREA cm ²	AREA TIRO PULL AREA cm ²				
	180	250												
25	35		15	88	15	1/4"G	33	31	4.91	3.14				
32		42	20	110	20				40	8.04	4.9			
40		50	20	115	25	3/8"G	48	43	12.57	9.42				
			25							7.66				
50	60	65	25						30	19.63	14.73			
			30									12.57		
			35									10.01		
60	70	75	30						40	28.27	21.21			
			35									18.65		
			40									15.71		
63	73	78	30						31.17	24.1				
			35								21.55			
			40	18.61										
70	80	85	30	132	30	1/2"G	60	44	38.48	31.42				
			35							28.86				
			40							25.92				
			50							18.85				
80	90	95	40						50.27	37.7				
			50								30.63			
			60								21.99			
90	100	105	40						132	61	63.62	51.05		
			45										47.71	
			50										43.98	
			60	35.34										
			70	25.92										
100	115	120	50	153	80	78.54	58.9							
			60					50.27						
			70					40.06						
110	125	130	60	155	80	95.03	75.4							
			70					66.76						
			80					56.55						
120	135	140	60	160	35	113.1	84.82							
			70					74.61						
			80					62.83						
125	140	145	70					84.23						
			80						72.45					
130	145	150	90					122.72	59.1					
			70							94.25				
			80							82.47				
140	160	165	70					185	3/4"G	89	56	132.73	115.45	
			90											69.12
150	170	175	80	190	40	176.71	126.45							
			100					98.17						
160	180	190	90					195	201.06	137.44				
			100								122.52			
180	200	210	80					210	254.47	204.2				
			100								175.93			
200	225	230	100					215	1"G	90	64	314.16	235.62	
			120											201.06
			140											160.22

* Valutare il carico di punta
Evaluate peak loading

Attacco MFR

Connection MFR



MFR3

MFR4

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MFR5

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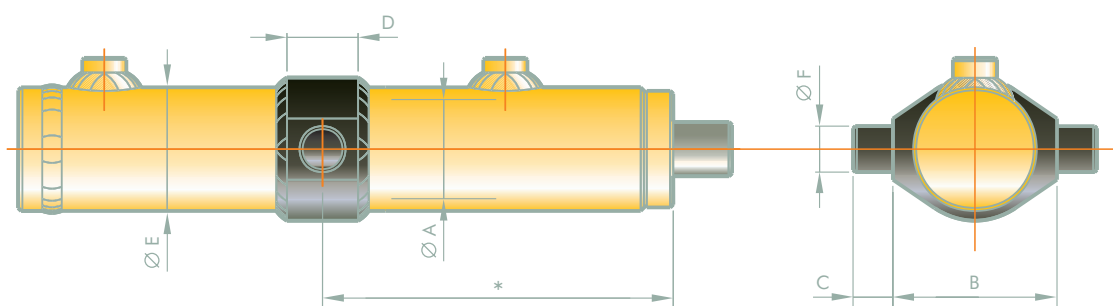
TIPO TYPE	Ø A	Ø E	Ø B	Ø C	Ø F	D	G
MFR - 025	25	35	60	80	8.5	8	9
MFR - 032	32	42	70	90		10	10
MFR - 040	40	50	90	110		10.5	
MFR - 050	50	60-65	100	120	12		
MFR - 060	60	70-75	116	140	15		
MFR - 063	63	73-78	126	150	13	20	
MFR - 070	70	80-85					
MFR - 080	80	90-95	136	160	15	25	
MFR - 090	90	100-105	156	186			
MFR - 100	100	115-120	160	190			17
MFR - 110	110	125-130	170	200			
MFR - 120	120	135-140	200	260	21	32	15
MFR - 125	125	140-145	210				
MFR - 130	130	145-150					
MFR - 140	140	160-165	216	25	37		
MFR - 150	150	170-175	220				
MFR - 160	160	180-190	240	280	25	37	
MFR - 180	180	200-210	270	330			
MFR - 200	200	225-230	290	340			

* A richiesta - On request



Attacco MT4

Connection MT4



MT4

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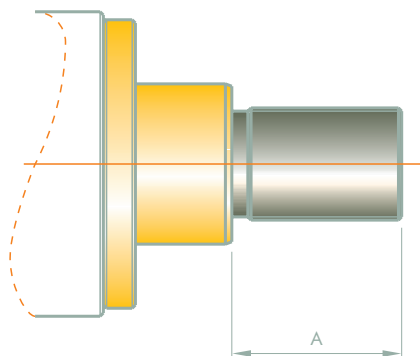


TIPO TYPE	Ø A	Ø E	B	C	D	Ø F
MT4 025	25	35	48	12	20	12
MT4 032	32	42	55	16	30	16
MT4 040	40	50	65	25	40	25
MT4 050	50	60	78			
MT4 050A		65	84			
MT4 060	60	70	92	30	50	30
MT4 060A		75	96			
MT4 063	63	73	92	35	70	35
MT4 063A		78	96			
MT4 070	70	80	100	40	90	40
MT4 070A		85	105			
MT4 080	80	90	110	40	90	40
MT4 080A		95	115			
MT4 090	90	100	130	40	90	40
MT4 090A		105	135			
MT4 100	100	115	140	40	90	40
MT4 100A		120	145			

* A richiesta - On request

Filettatura maschio K

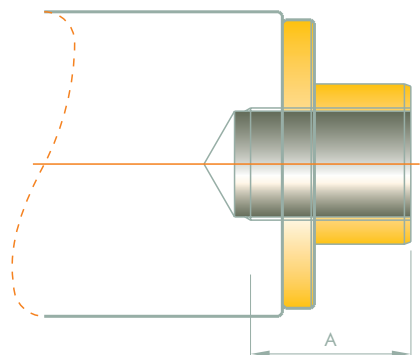
Male thread K



TIPO TYPE	FILETTO THREAD	A
K008-Y008	M8 x 1	12
K008A-Y008A		20
K010-Y010	M10 x 1,25	14
K010A-Y010A		22
K012-Y012	M12 x 1,25	16
K012A-Y012A		24
K014-Y014	M14 x 1,5	18
K014A-Y014A		28
K016-Y016	M16 x 1,5	22
K016A-Y016A		32
K018-Y018	M18 x 1,5	25
K018A-Y018A		36
K020-Y020	M20 x 1,5	28
K020A-Y020A		40
K022-Y022	M22 x 1,5	30
K022A-Y022A		44
K024-Y024	M24 x 2	32
K024A-Y024A		48
K027-Y027	M27 x 2	36
K027A-Y027A		54
K030-Y030	M30 x 2	40
K030A-Y030A		60
K033-Y033	M33 x 2	45
K033A-Y033A		66

Filettatura femmina Y

Female thread Y

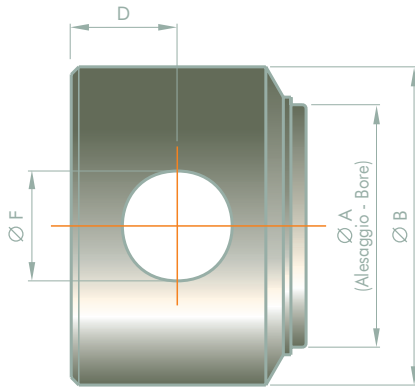


TIPO TYPE	FILETTO THREAD	A
K036-Y036	M36 x 2	50
K036A-Y036A		72
K042-Y042	M42 x 2	56
K042A-Y042A		84
K048-Y048	M48 x 2	63
K048A-Y048A		96
K056-Y056	M56 x 2	75
K056A-Y056A		112
K064-Y064	M64 x 3	85
K064A-Y064A		128
K072-Y072	M72 x 3	85
K072A-Y072A		128
K080-Y080	M80 x 3	95
K080A-Y080A		140
K090-Y090	M90 x 3	106
K090A-Y090A		140
K100-Y100	M100 x 3	112
K100A-Y100A		-
K110-Y110	M110 x 3	112
K110A-Y110A		-
K125-Y125	M125 x 4	125
K125A-Y125A		-

Se per la registrazione necessitano dadi di bloccaggio, utilizzare la filettatura di tipo lungo.
If lock nuts are required for adjustment, use long type thread.

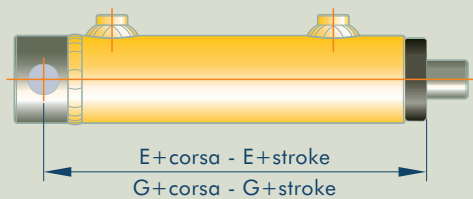
Fondello forato FF

Drilled bottom FF



TIPO TYPE	Ø A	Ø B	Ø F	D	E	G
FF35	35	45	14.2	16	-	86
FF40	40	50	16.2	18	127	99
FF50	50	65	20.2	22	128	103
FF60	60	75	25.2	25	133	108
FF70	70	85	25.2	25	147	-
FF80	80	95	30.2	28	*	-
FF90	90	105	35.5	32	**	-
FF100	100	120	35.5	32	***	-

- * per alesaggio = 80 stelo - rod = 40, 50 E = 149
for bore = 80 stelo - rod = 60 E = 170
- ** per alesaggio = 90 stelo - rod = 40, 50 E = 155
for bore = 90 stelo - rod = 45, 60 E = 176
- *** per alesaggio = 100 stelo - rod = 50, 60 E = 176
for bore = 100 stelo - rod = 70 E = 178

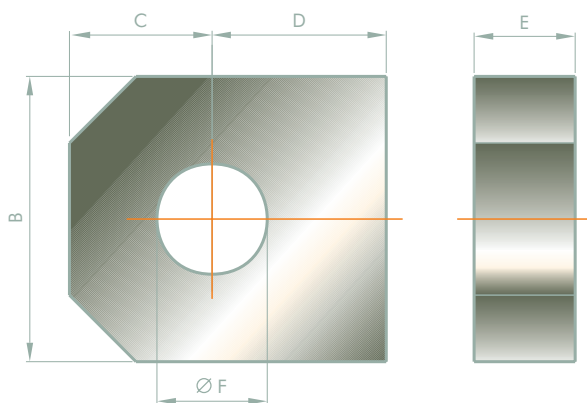


E = Applicazione su cilindro doppio effetto
Application on double-acting cylinder

G = Applicazione su cilindro tuffante
Application on plunger cylinder

Cerniera maschio per fondello MP3

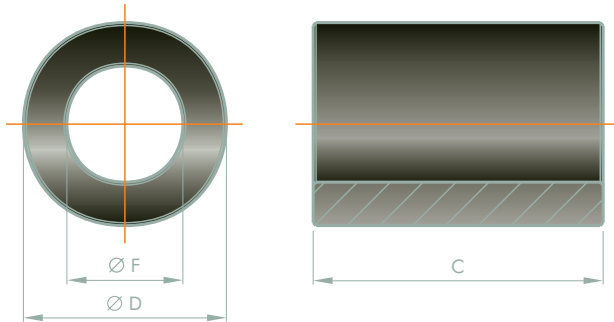
Male hinge for base MP3



TIPO TYPE	Ø F	B	C	D	E
MP3 10	10	25	12	20	12
MP3 12	12	30	15	25	15
MP3 16	16	40	15	25	20
MP3 20	20	50	20	30	20
MP3 25	25	55	25	30	20
MP3 30	30	60	30	45	40
MP3 35	35	70	25	40	40
MP3 40	40	80	40	70	50

Attacco a boccola BS

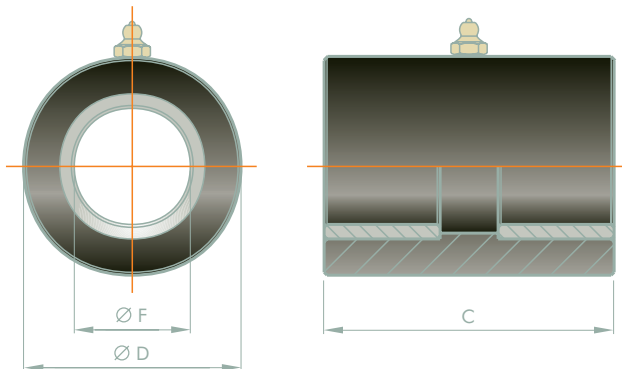
Bushing connection BS



TIPO TYPE	$\varnothing F$	$\varnothing D$	C
BSS15	15	30	25
BSC15			35
BSS20	20	40	40
BSC20			50
BSC20A			55
BSS25	25	50	50
BSC25			70
BSS30	30	60	50
BSC30			80
BSS35	35	65	60
BSC35			90
BSS40	40	70	70
BSC40			100
BSS50	50	80	80
BSC50			125

Attacco a boccola con anello cementato BMP

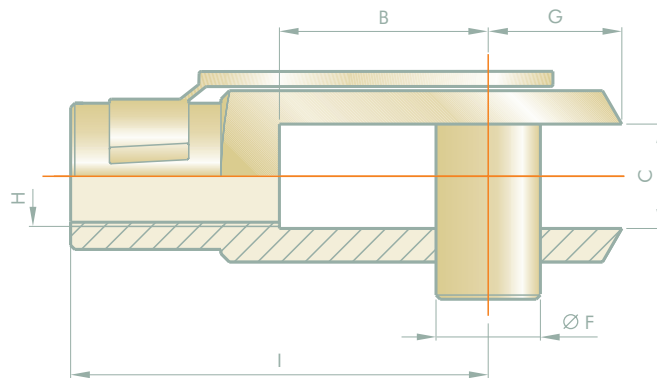
Bushing connection with casehardened ring BMP



TIPO TYPE	$\varnothing F$	$\varnothing D$	C
BMPS20	20	50	40
BMPC20			50
BMPC20A			55
BMPS25	25	60	50
BMPC25			70
BMPS30			30
BMPC30	80		
BMPS35	35	70	60
BMPC35			90
BMPS40	40	75	70
BMPC40			100
BMPS50	50	88	80
BMPC50			125

Forcella FC

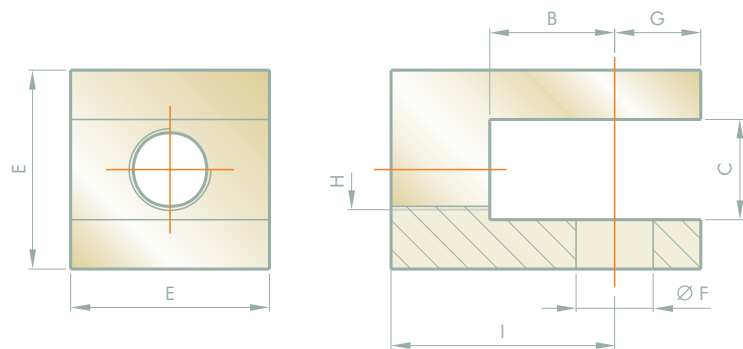
Threaded fork FC



TIPO TYPE	Ø F	I	C	G	B	H	NORMA STANDARD
FC10	10	40	10	12	20	M10x1.5	UNI 1676
FC12	12	48	12	14	24	M12x1.75	
FC14	14	56	14	16	28	M14x2	
FC16	16	64	16	18	32	M16x2	
FC16A	16	63	22	18	33	M20x1.5	CNOMO
FC20	20	80	20	25	40	M20x1.5	CETOP
FC20A	20	85	30	21	40	M27x2	CNOMO
FC25	25	100	25	32	50	M24x2	CETOP

Forcella FN

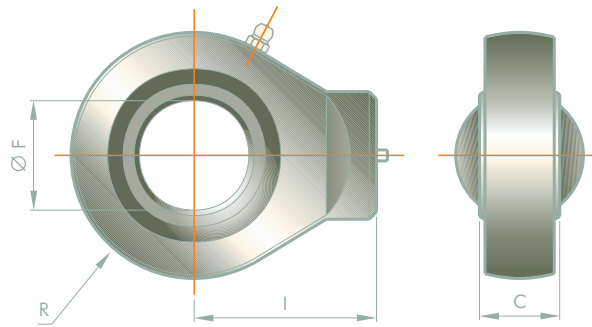
Threaded fork FN



TIPO TYPE	Ø F	I	C	G	B	H	E
FN16	16	39	16	16	24	M16x1.5	35
FN20	20	45	20	20	30	M20x1.5	40
FN25	25	50	25	25		M24x2	50
FN30	30	65	30	30	35	M30x2	60
FN35	35	75	35	35	40	M33x2	70

Snodo SC

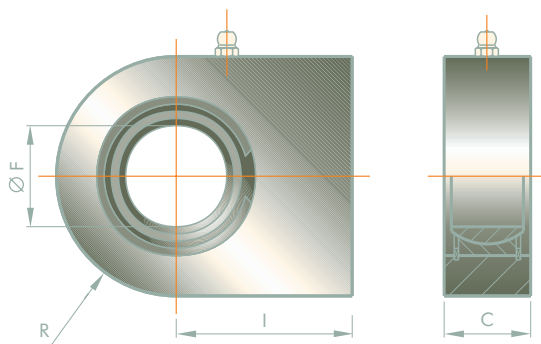
Ball joint SC



TIPO TYPE	Ø F	I	C	R
SC20	20	38	16	26.5
SC25	25	45	20	32
SC30	30	51	22	36.5
SC35	35	61	25	41
SC40	40	69	28	46
SC45	45	77	32	51
SC50	50	88	35	56
SC60	60	100	44	67.5
SC70	70	115	49	80
SC80	80	141	55	90

Snodo SCF

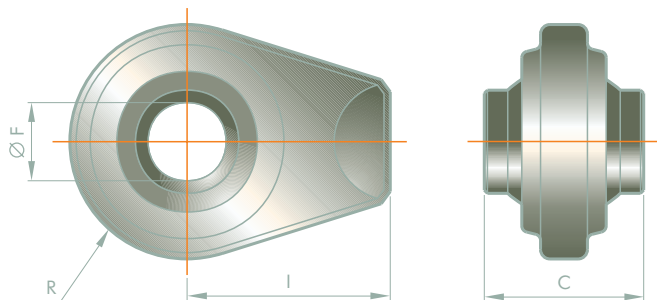
Ball joint SCF



TIPO TYPE	Ø F	I	C	R
SCF20	20	38	19	25
SCF25	25	45	23	27.5
SCF30	30	51	28	32.5
SCF35	35	61	30	41.5
SCF40	40	69	35	50
SCF45	45	77	40	55
SCF50	50	88	40	61.5
SCF60	60	100	50	70
SCF70	70	115	55	82
SCF80	80	141	60	90

Snodo OS

Ball joint OS



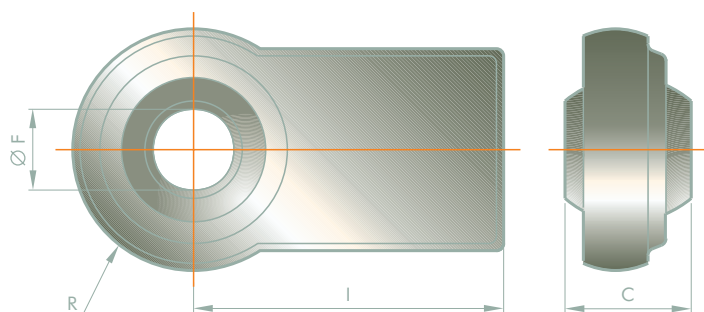
TIPO TYPE	Ø F	l	C	R
OS20	20	60	44	31
OS25	25	65	51	37.5
OS30	30	65	55	41.5
OS35	35	65	55	41.5
OS40	40	85	75	54
OS45	45	85	75	54
OS50	50	85	75	54
OS60	60	85	100	70

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OS

Snodo RS

Ball joint RS



TIPO TYPE	Ø F	l	C	R
RS16	16	60	20	23
RS19	19	45	35	32.5
RS22	22	50	35	33.5
RS25	25	50	33	38
RS32	32	65	45	48
RS35	35	65	45	48
RS37	37	65	45	48

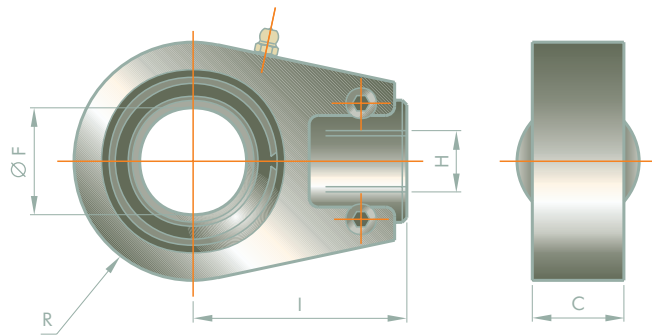
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RS

Snodo SIR

Ball joint SIR



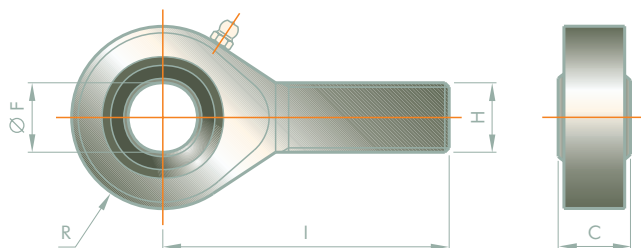
TIPO TYPE	Ø F	I	C	R	H
SIR20	20	50	19	30	M16x1.5
SIR25	25		23		
SIR30	30	60	28	34	M22x1.5
SIR35	35	70	30	42	M28x1.5
SIR40	40	85	35	50	M35x1.5
SIR50	50	105	40	63	M45x1.5

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SIR

Snodo SA

Ball joint SA

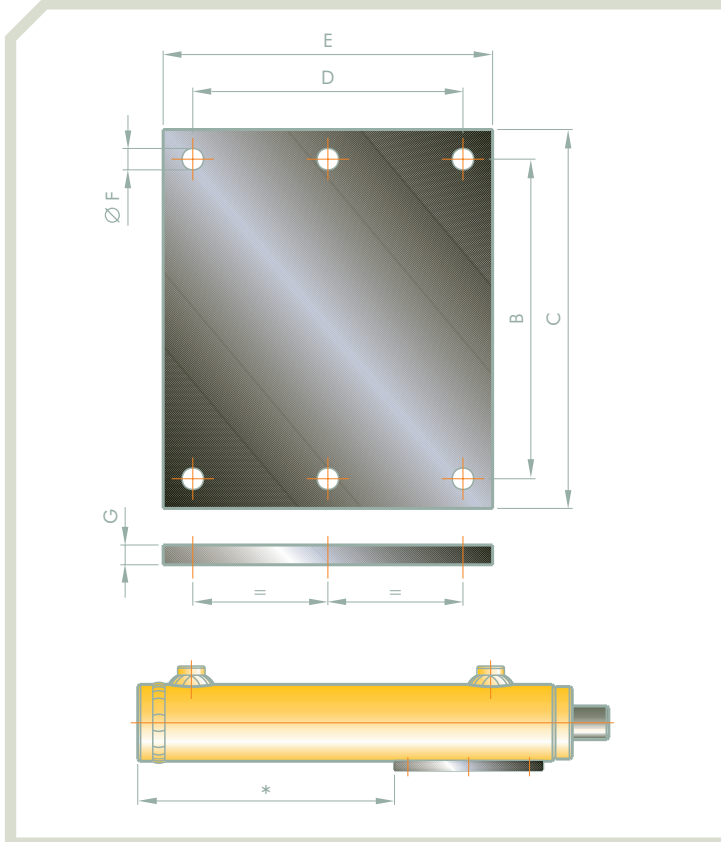


TIPO TYPE	Ø F	I	C	R	H
SA10	10	48	9	14.5	M10x1.5
SA12	12	54	10	17	M12x1.75
SA15	15	63	12	20	M14x2
SA17	17	69	14	23	M16x2
SA20	20	78	16	26.5	M20x1.5
SA25	25	94	20	32	M24x2
SA30	30	110	22	36.5	M30x2



SA

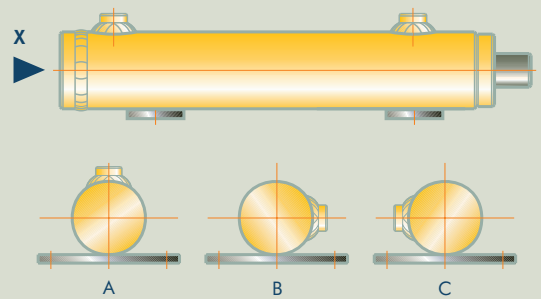
Piastra di supporto laterale Side support plate



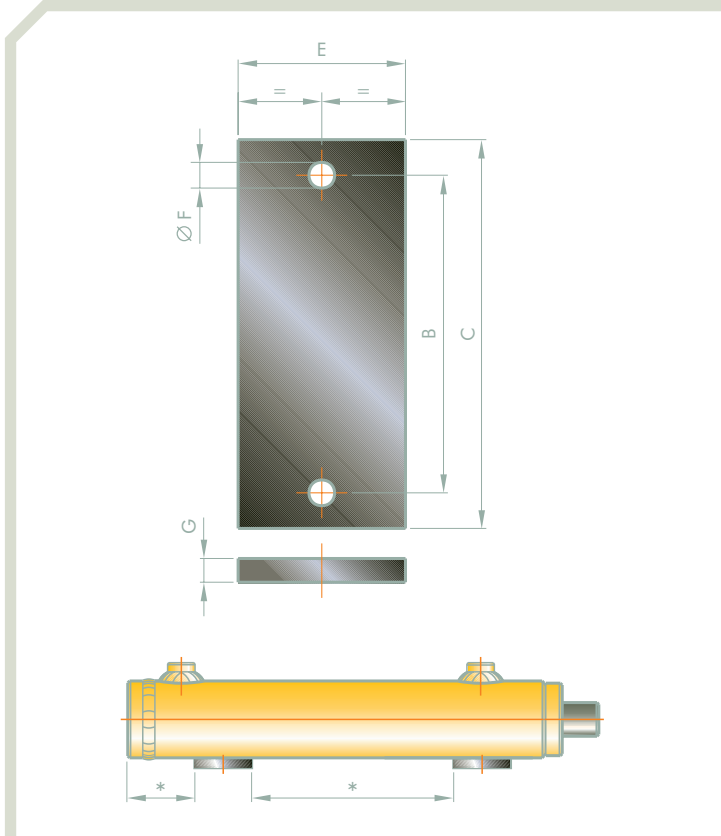
TIPO TYPE	B	C	D	E	Ø F	G	N. FORI N. HOLES
PL144	144	180	114	150	13	12	6
PL180	180	250	140	200	21	15	6
PL194	194	230	164	200	13	12	6
PL200	200	270	230	250	15	12	6

* A richiesta - On request

ORIENTAMENTO MANICOTTI SLEEVE POSITION



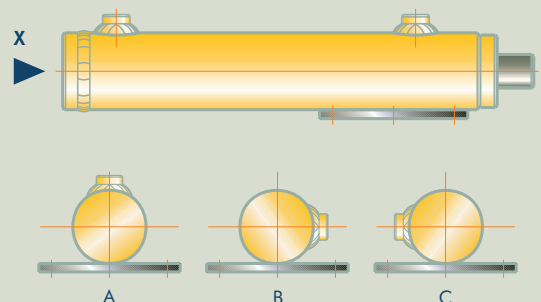
Attacco a piedino Male hinge for base

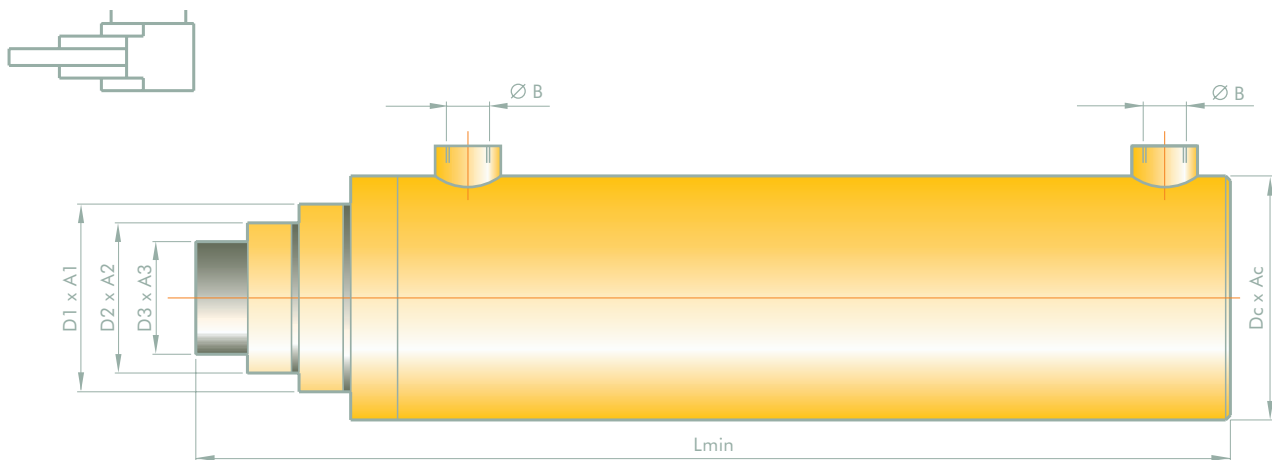


TIPO TYPE	B	C	E	Ø F	G
H025	50	70	25	6.5	10
H032	60	80	30	9	10
H040	80	100	40	11	12
H050	95	120	40	13	12
H060	115	150	50	15	15
H080	135	170	60	17	15
H100	160	200	70	21	20

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ORIENTAMENTO MANICOTTI SLEEVE POSITION





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$$L_{min} = \frac{\text{corsa utile - stroke}}{n^{\circ} \text{ sfilamenti} - n^{\circ} \text{ extensions}} + E$$

Valori di **L** superiori a **L_{min}** si possono ottenere aumentando la sporgenza delle sfilate a cilindro chiuso o aggiungendo all'interno dei distanziali.

L values higher than **L_{min}** can be obtained by increasing the projection of the extensions with cylinder closed or by adding spacers inside.

$$F_{max} = P_e \times S_{min}$$

F_{max} (kG) = forza max sviluppata alla pressione di esercizio
maximum force developed at working pressure

P_e (bar) = pressione di esercizio
working pressure

S_{min} (cm²) = superficie min di spinta o tiro (vedi valori in tabella)
minimum push or pull surface (see values in table)

Pressione massima di esercizio: indicativamente può essere considerata quella riportata nella tabella delle caratteristiche dimensionali, previa verifica a carico di punta delle sfilate e relativo dimensionamento degli attacchi utilizzati. Non trascurare sovrappressioni indotte da:

- valvole di strozzo nei circuiti
- carichi verticali con steli rivolti verso il basso

Indicatively, maximum working pressure can be considered than given in the dimensional characteristics table after checking the extensions with peak load and relative dimensioning of the connections used. Do not neglect overpressures induced by:

- throttle valves in the circuits
- vertical loads with rods facing downwards

CARATTERISTICHE TECNICHE TECHNICAL DETAILS

Temperatura - Temperature range: Min. -15° / Max +70°

Velocità max - Max speed: 0.5 m/s

Fluido olio idraulico minerale - Fluid hydraulic mineral oil: 2°-5° e a 50 °c

Grado di filtrazione olio - Right filtering: 20/17; x=75; 25u

CARATTERISTICHE DIMENSIONALI DIMENSIONAL CHARACTERISTICS

VERSIONE LEGGERA - PRESSIONE MAX DI ESERCIZIO 180 BAR
LIGHT VERSION - MAXIMUM WORKING PRESSURE 180 BAR

NUMERO SFILATE EXTENSION NUMBER	Ø CAMICIA SLEEVE Ø	Ø SFILAMENTI EXTENSION Ø			ØB		SUPERFICIE MINIMA MINIMUM SURFACE		CORSA MASSIMA A 180 BAR MAX STROKE AT 180 BAR	
							DI SPINTA PUSH cm ²	DI TIRO PULL cm ²	DI SPINTA PUSH cm ²	DI TIRO PULL cm ²
3	135 x 120	105 x 90	80 x 70	60 x 50	1/2"G	294	33.58	5.30	3500	4500
3	105 x 90	80 x 70	60 x 50	40 x 30	1/2"G	260	17.09	4.52	2600	3000
2	135 x 120	105 x 90	80 x 70	-	1/2"G	251	61.07	10.81	2800	3000
2	105 x 90	80 x 70	60 x 50	-	1/2"G	210	37.35	9.08	4200	2000
2	85 x 70	60 x 50	40 x 30	-	3/8"G	185	17.09	4.52	2600	3000

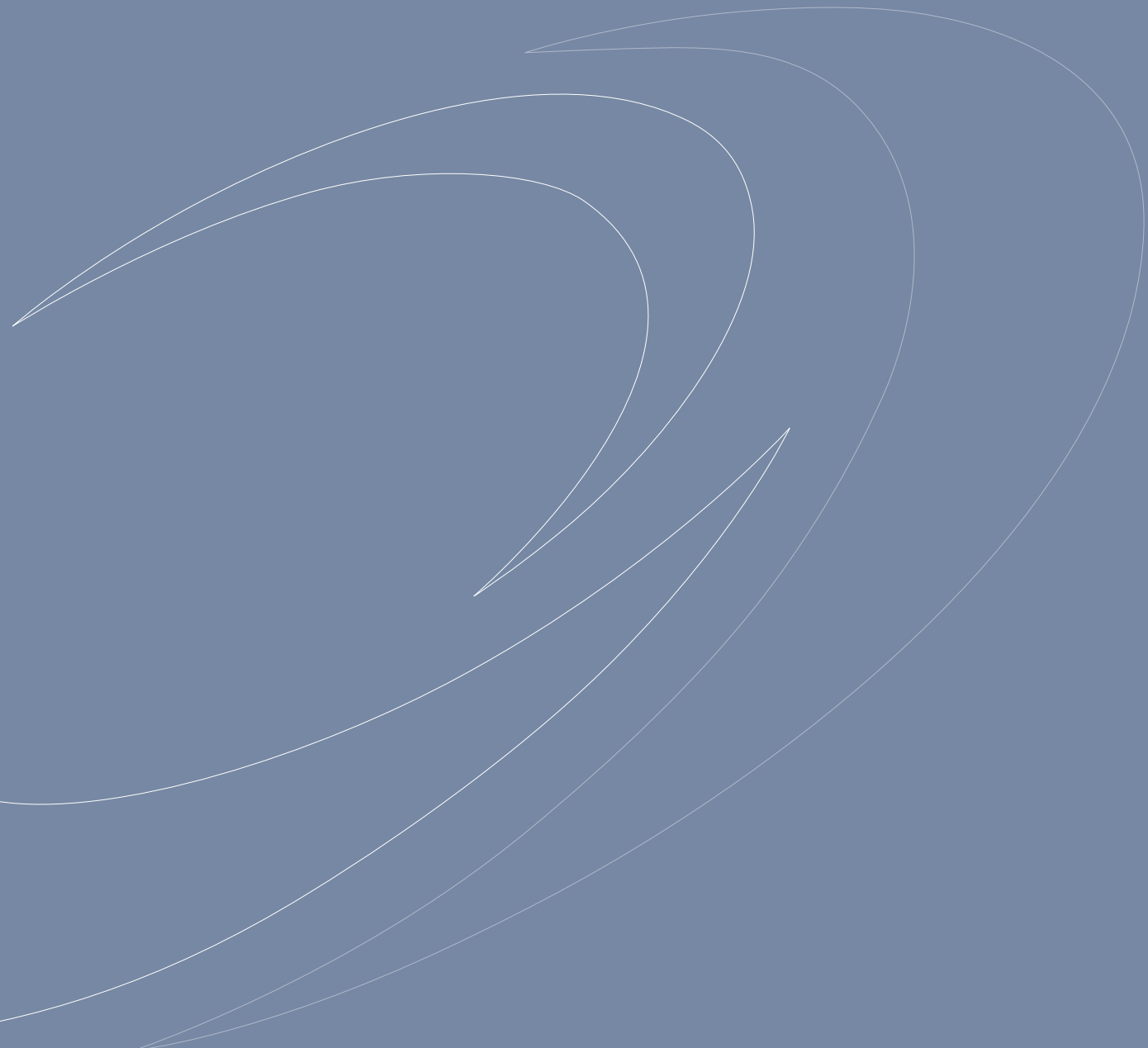
CARATTERISTICHE DIMENSIONALI DIMENSIONAL CHARACTERISTICS

VERSIONE PESANTE - PRESSIONE MAX DI ESERCIZIO 250 BAR
HEAVY VERSION - MAXIMUM WORKING PRESSURE 250 BAR

NUMERO SFILATE EXTENSION NUMBER	Ø CAMICIA SLEEVE Ø	Ø SFILAMENTI EXTENSION Ø			ØB		SUPERFICIE MINIMA MINIMUM SURFACE		CORSA MASSIMA A 250 BAR MAX STROKE AT 250 BAR	
							DI SPINTA PUSH cm ²	DI TIRO PULL cm ²	DI SPINTA PUSH cm ²	DI TIRO PULL cm ²
3	205 x 180	160 x 140	120 x 105	90 x 75	1"G	477	81.68	18.06	4300	2400
3	160 x 140	120 x 105	90 x 75	50 x 35	3/4"G	397	39.27	19.63	2300	2400
2	205 x 180	160 x 140	120 x 105	-	1"G	453	147.78	34.63	3400	4000
2	160 x 140	120 x 105	90 x 75	-	3/4"G	352	81.68	18.06	2900	3500
2	120 x 105	90 x 75	50 x 35	-	1/2"G	295	39.27	19.63	1550	3500



OLEODINAMICA



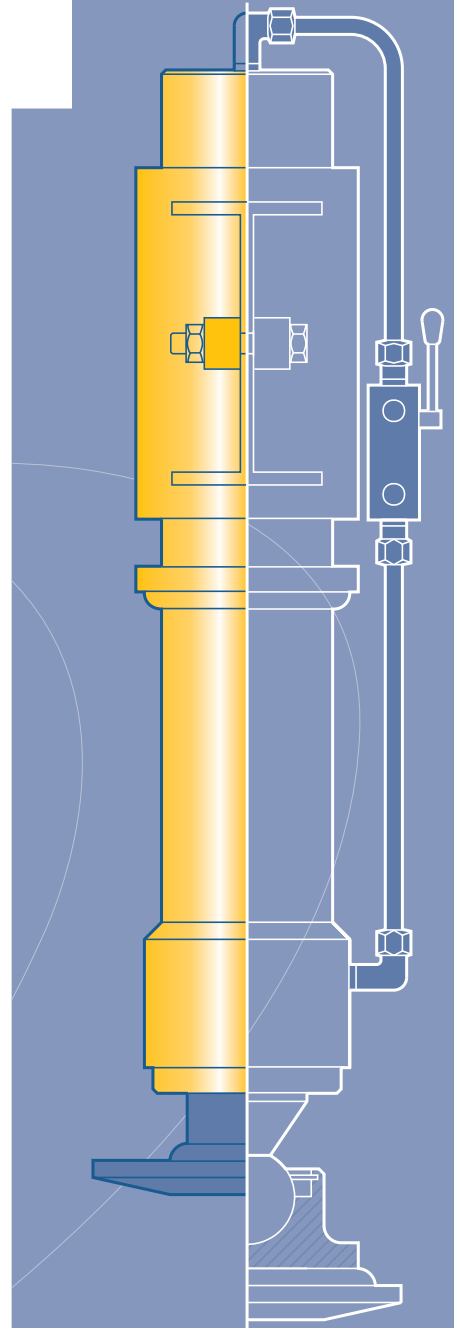


HYDROVEN
OLEODINAMICA



***CILINDRI oleodinamici**
HYDRAULIC CYLINDERS

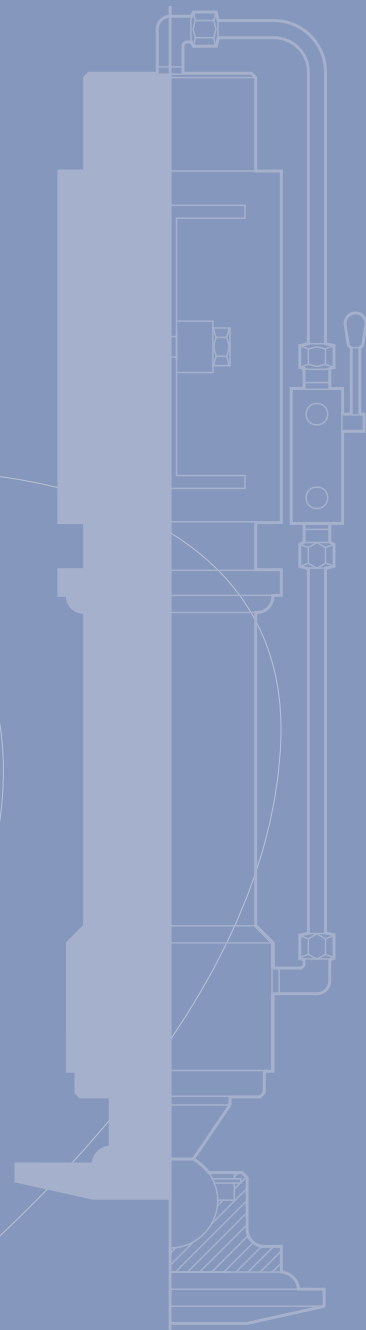
CILINDRI oleodinamici



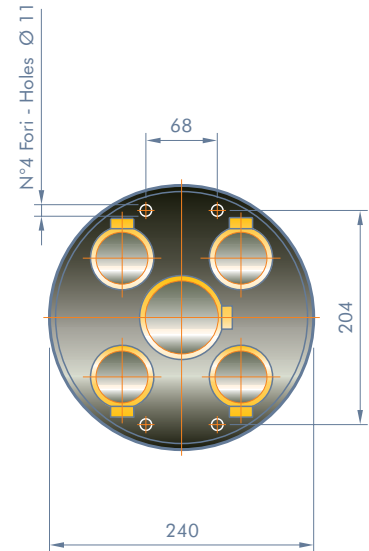
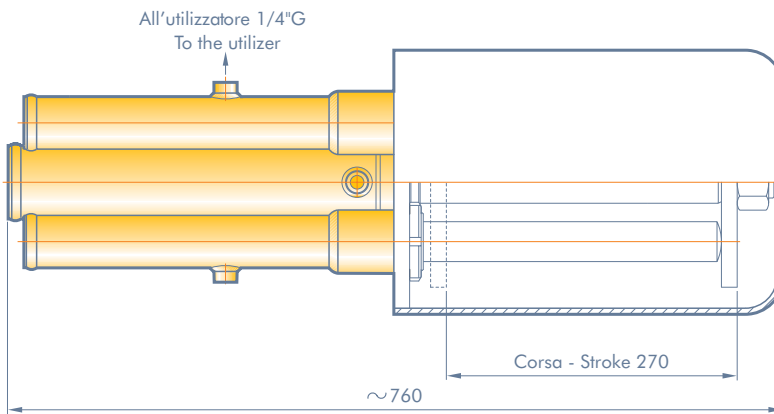
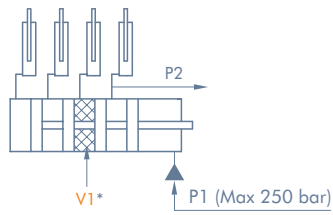
A MEMBER OF  **INTERPUMP GROUP**

***CILINDRI oleodinamici**
HYDRAULIC CYLINDERS

4	DIVISORE IDRAULICO A 4 VIE HYDRAULIC CYLINDER WITH 4 FLOW PATHS
5	DIVISORE IDRO PNEUMATICO A 4 VIE HYDRAULIC PNEUMATIC DIVIDER WITH 4 FLOW PATHS
6	CILINDRI DOPPIO EFFETTO PER CENTINA HYDRAULIC CYLINDERS FOR HOOP
7	CILINDRI PER CENTINA TUFFANTI E DOPPIO EFFETTO DE - TF PLUNGER AND DOUBLE EFFECT CYLINDERS FOR HOOP MOD. DE-TF
8	CILINDRI PER AGGANCIO CASSONE TIPO L - TIPO N HYDRAULIC CYLINDERS FOR COUPLING TRUCK BOX TYPE L - TYPE N
9	CILINDRI PER AGGANCIO SPONDA VERSIONE IN TIRO E IN SPINTA HYDRAULIC CYLINDERS FOR COUPLING GATE PULL AND PUSH VERSION
10	MARTINETTI STABILIZZATORI HYDRAULIC STABILIZER CYLINDERS
11	MARTINETTI STABILIZZATORI CON BOCCOLA DI FISSAGGIO - CON FLANGIA LATERALE HYDRAULIC STABILIZER WITH FIXING BUSHING - WITH SIDE FLANGE
12	CILINDRI PER SCARRABILE TIPO FF UNLOADING HYDRAULIC CYLINDERS TRUCK BOX FF TYPE
13	CILINDRI PER SCARRABILE TIPO FL UNLOADING HYDRAULIC CYLINDERS TRUCK BOX FL TYPE
14	CILINDRI PER SCARRABILE TIPO SG UNLOADING HYDRAULIC CYLINDER TRUCK BOX SG TYPE
15	CILINDRI PER SCARRABILE TIPO SF UNLOADING HYDRAULIC CYLINDERS TRUCK BOX SF TYPE



HYDRAULIC CYLINDER WITH 4 FLOW PATHS



ACCESSORI OPTIONAL



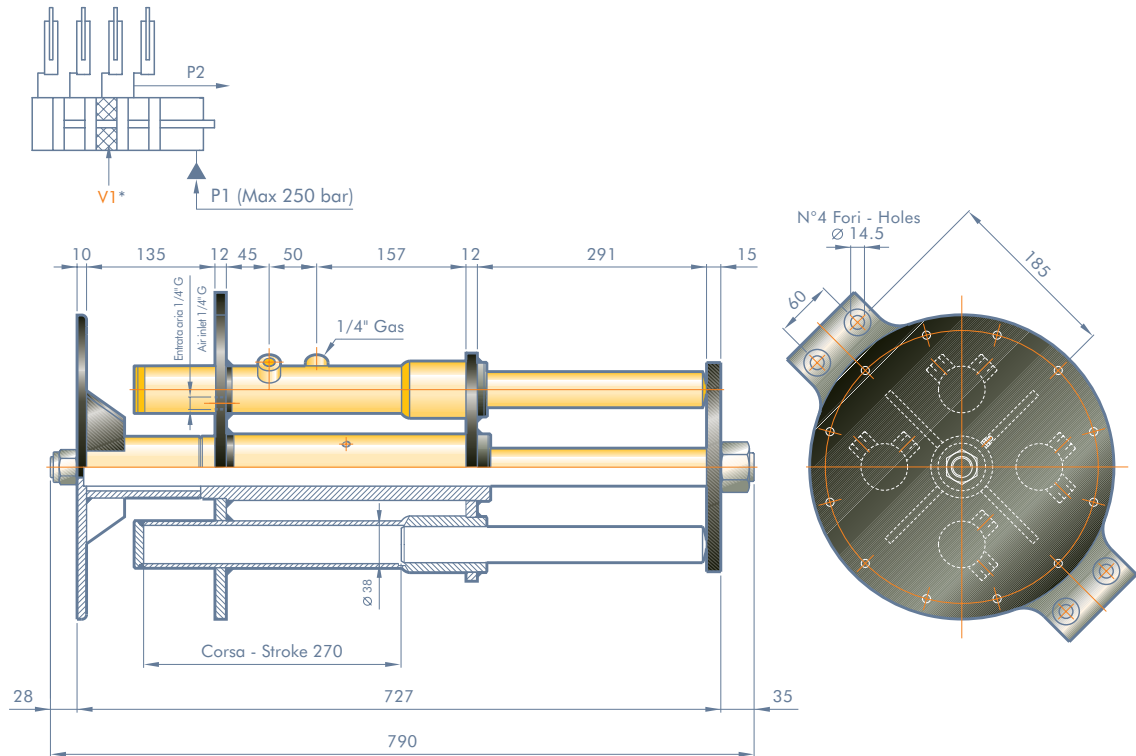
* V1 = Volume olio spostato - Moved oil volume = 306 cm³

CODICE CODE	ØG	L	M	KK	CORSA MAX MAX STROKE	Ø STELO ROD Ø
450M05386000	3/8" G	1350	24 x 2	M14	1200	18

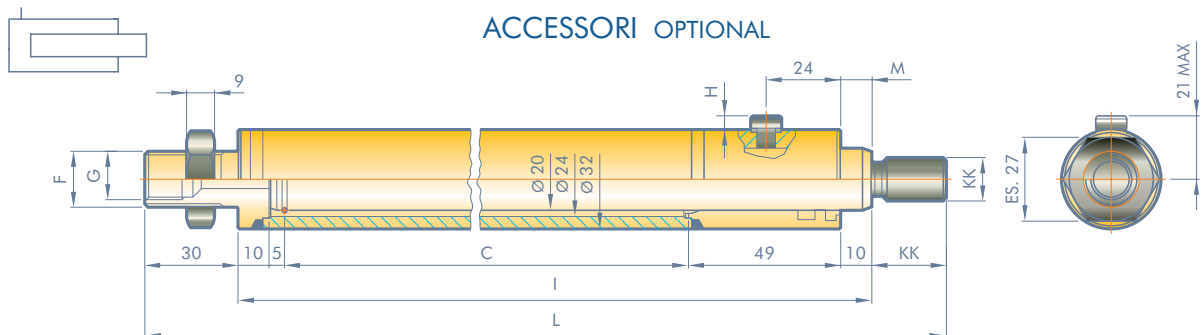
CARATTERISTICHE TECNICHE TECHNICAL CHARACTERISTICS

Pressione max di esercizio - Operating max pressure: 18 MPa (180 bar)
 Temperatura - Temperature range: Min. -15 °C - Max +70 °C
 Velocità max - Max speed: 0.5 m/s
 Fluido olio idraulico minerale - Fluid hydraulic mineral oil: 2° - 5° E a 50 °C
 Fluido olio grado di filtrazione - Fluid right filtering oil: 20/17; X=75; 25µ

HYDRAULIC PNEUMATIC DIVIDER WITH 4 FLOW PATHS



ACCESSORI OPTIONAL



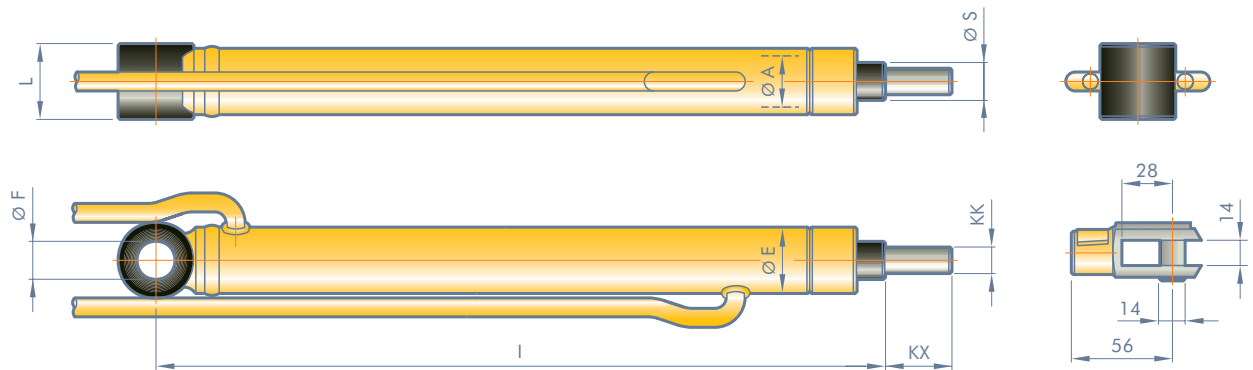
* V1 = Volume olio spostato - Moved oil volume = 306 cm³

CODICE CODE	F	G	L	Ø STELO ROD Ø	Ø CAMICIA SLEEVE Ø	C CORSA MAX MAX STROKE C	I	H	M	KK	KX
450M07188000	M18x1.5	1/4"G	730	20	32x25.5	600	674	12.5	10	M14	24
450M07043A00	M18x1.5	1/4"G	930	20	32x25.5	800	874	12.5	10	M14	24
450M07214000	M18x1.5	1/4"G	1130	20	32x25.5	1000	1074	12.5	10	M14	24
450M0A134000	M18x1.5	1/4"G	1330	20	32x25.5	1200	1274	12.5	10	M14	24

CARATTERISTICHE TECNICHE TECHNICAL CHARACTERISTICS

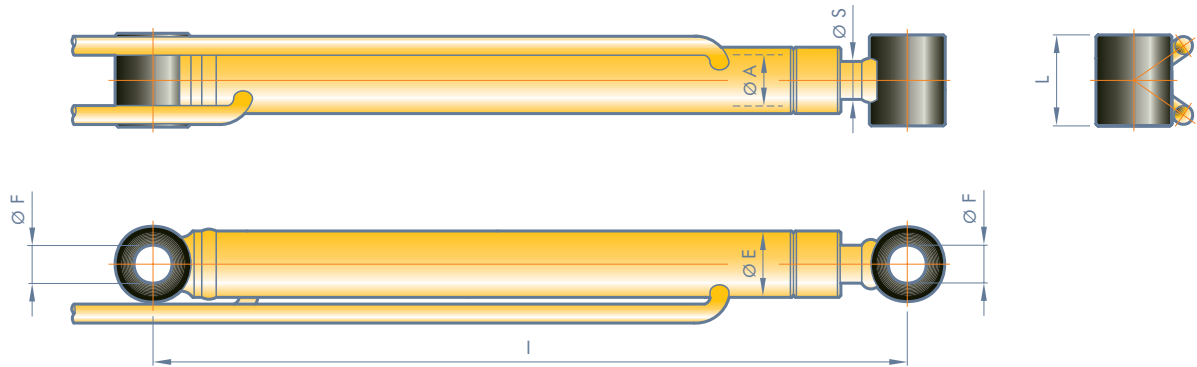
Pressione max di esercizio - Operating max pressure: 18 MPa (180 bar)
 Temperatura - Temperature range: Min. -15 °C - Max +70 °C
 Velocità max - Max speed: 0.5 m/s
 Fluido olio idraulico minerale - Fluid hydraulic mineral oil: 2° - 5° E a 50 °C
 Fluido olio grado di filtrazione - Fluid right filtering oil: 20/17; X=75; 25µ

HYDRAULIC CYLINDERS FOR HOOP "DE"



CODICE CODE	ØE	ØA	ØS	I	CORSA MAX MAX STROKE	ØF	L	KK	KX
450M90020001	30	25	20	1650	1500	20	30	M14	35
450M90019000	30	25	20	1350	1200	20	30	M14	35
450M90018001	30	25	20	1150	1000	20	30	M14	35
450M90017001	30	25	20	950	800	20	30	M14	35
450M90016501	30	25	20	750	600	20	30	M14	35

HYDRAULIC CYLINDERS FOR HOOP

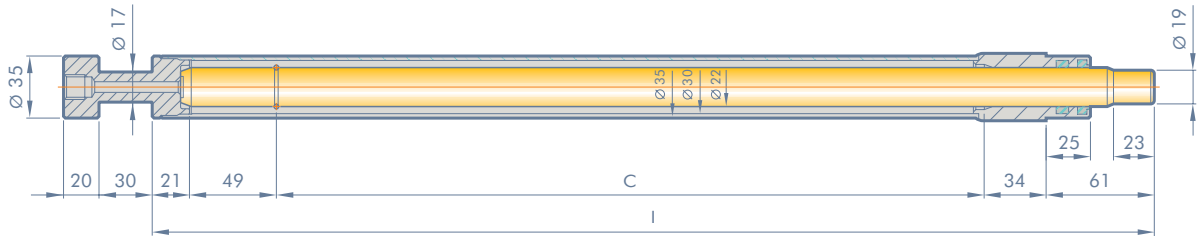


CODICE CODE	ØE	ØA	ØS	I	CORSA MAX MAX STROKE	ØF	L
450M90025100	50	40	25	1670	1500	20.5	55

CARATTERISTICHE TECNICHE TECHNICAL CHARACTERISTICS

Pressione max di esercizio - Operating max pressure: 18 MPa (180 bar)
 Temperatura - Temperature range: Min. -15 °C - Max +70 °C
 Velocità max - Max speed: 0.5 m/s
 Fluido olio idraulico minerale - Fluid hydraulic mineral oil: 2° - 5° E a 50 °C
 Fluido olio grado di filtrazione - Fluid right filtering oil: 20/17; X=75; 25µ

PLUNGER CYLINDERS WITH DIFFERENT SECTION TO BE USED WITH CYLINDERS DE

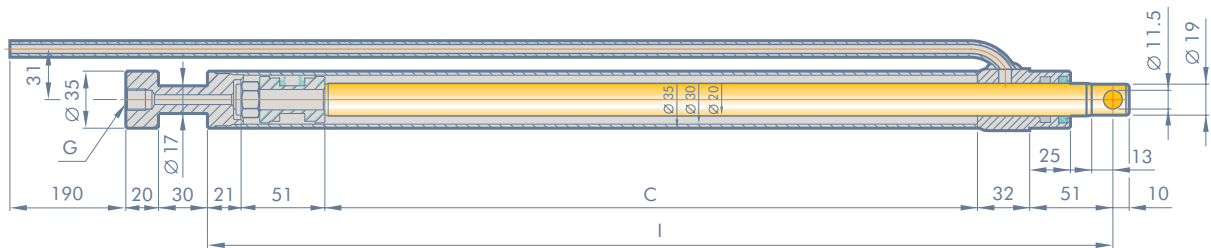


CODICE CODE	Ø G	Ø CAMICIA SLEEVE Ø	Ø ALESAGGIO BORE Ø	Ø STELO ROD Ø	C CORSA MAX MAX STROKE C	I
450M09759000	1/4" G	30x35	30	22	400	565
450M09161000	1/4" G	30x35	30	22	800	965
450M09466000	1/4" G	30x35	30	22	1000	1165

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DOUBLE EFFECT CYLINDERS WITH DIFFERENT SECTION TO BE USED WITH CYLINDERS TF



CODICE CODE	Ø G	Ø CAMICIA SLEEVE Ø	Ø ALESAGGIO BORE Ø	Ø STELO ROD Ø	C CORSA MAX MAX STROKE C	I
450M09758000	1/4" G	30x35	30	20	400	555
450M09160000	1/4" G	30x35	30	20	800	955
450M09465000	1/4" G	30x35	30	20	1000	1155

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CARATTERISTICHE TECNICHE TECHNICAL CHARACTERISTICS

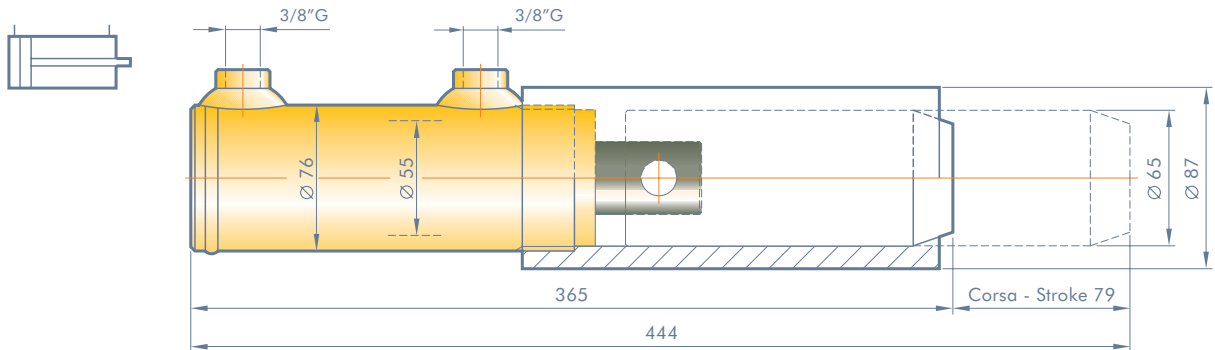
Pressione max di esercizio - Operating max pressure: 18 MPa (180 bar)
 Temperatura - Temperature range: Min. -15 °C - Max +70 °C
 Velocità max - Max speed: 0.5 m/s
 Fluido olio idraulico minerale - Fluid hydraulic mineral oil: 2° - 5° E a 50 °C
 Fluido olio grado di filtrazione - Fluid right filtering oil: 20/17; X=75; 25µ

DE

* CILINDRI PER AGGANCO CASSONE

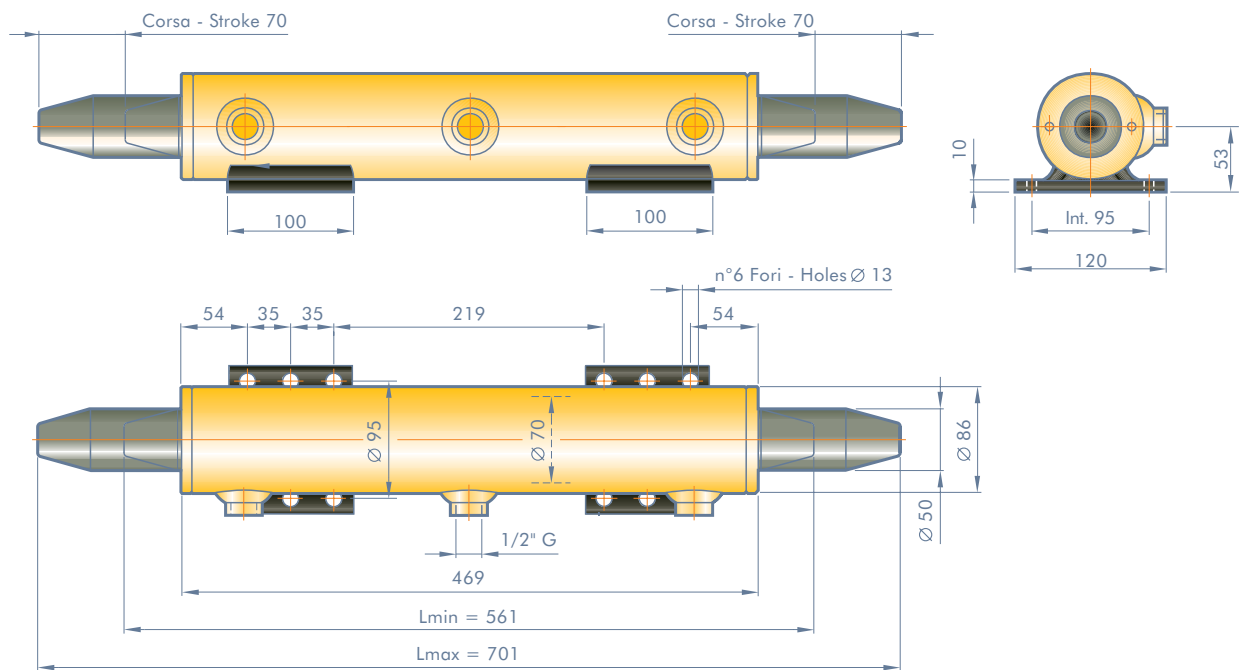
TIPO L - TIPO N

HYDRAULIC CYLINDERS FOR COUPLING TRUCK BOX TYPE L



CODICE CODE 450M00132000

HYDRAULIC CYLINDERS FOR COUPLING TRUCK BOX TYPE N



CODICE CODE 450M00131000

CARATTERISTICHE TECNICHE TECHNICAL CHARACTERISTICS

- Pressione max di esercizio - Operating max pressure: 18 MPa (180 bar)
- Temperatura - Temperature range: Min. -15 °C - Max +70 °C
- Velocità max - Max speed: 0.5 m/s
- Fluido olio idraulico minerale - Fluid hydraulic mineral oil: 2° - 5° E a 50 °C
- Fluido olio grado di filtrazione - Fluid right filtering oil: 20/17; X=75; 25µ
- * Precarico molla - Spring preload: 625 N (63 Kg)
- * Carico molla a fine corsa - Spring endstroke load: 2050 N (209 Kg)

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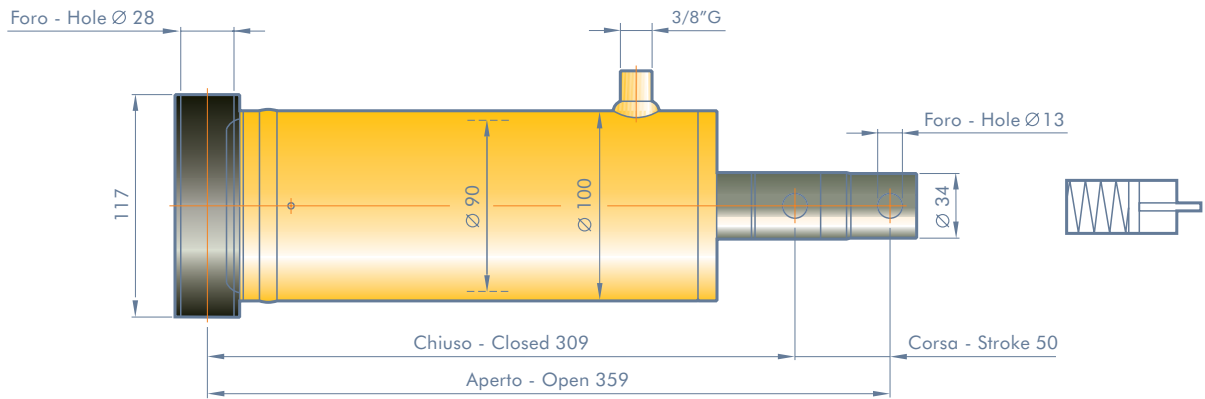


N

* CILINDRI PER AGGANCIAMENTO SPONDA

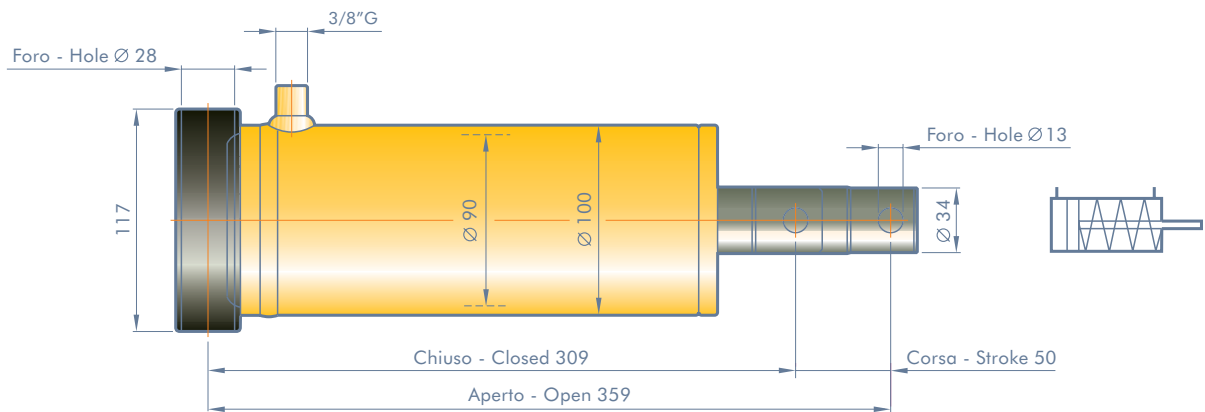
VERSIONE IN TIRO E IN SPINTA

HYDRAULIC CYLINDERS FOR COUPLING GATE PULL VERSION



CODICE CODE 450M90030T00

HYDRAULIC CYLINDERS FOR COUPLING GATE PUSH VERSION



CODICE CODE 450M90030S00

CARATTERISTICHE TECNICHE TECHNICAL CHARACTERISTICS

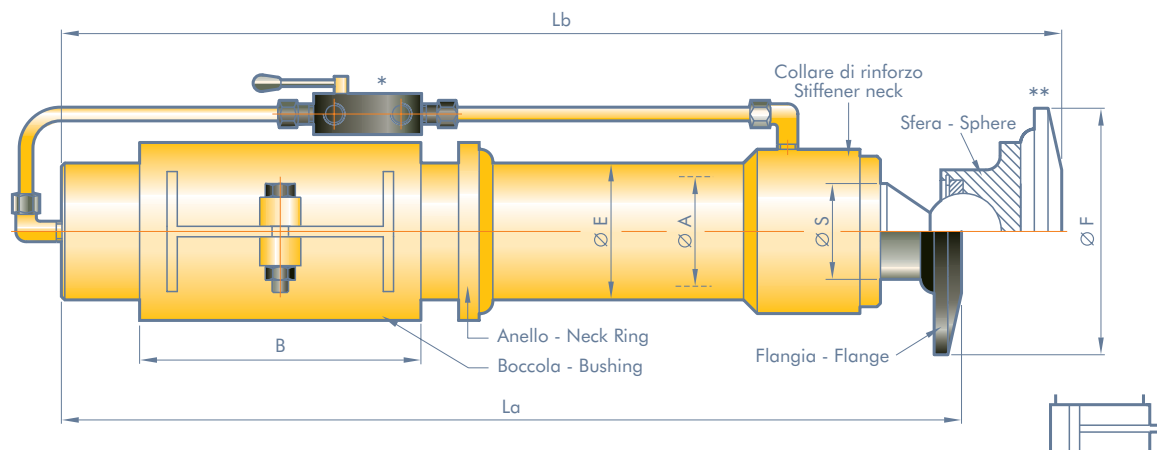
- Pressione max di esercizio - Operating max pressure: 18 MPa (180 bar)
- Temperatura - Temperature range: Min. -15 °C - Max +70 °C
- Velocità max - Max speed: 0.5 m/s
- Fluido olio idraulico minerale - Fluid hydraulic mineral oil: 2° - 5° E a 50 °C
- Fluido olio grado di filtrazione - Fluid right filtering oil: 20/17; X=75; 25 μ
- * Precarico molla - Spring preload: 625 N (63 Kg)
- * Carico molla a fine corsa - Spring endstroke load: 2050 N (209 Kg)

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HYDRAULIC STABILIZER CYLINDER



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TIPO TYPE	CODICE CODE	$\varnothing E$	$\varnothing A$	$\varnothing S$	B	CORSA STROKE	L_a	$\varnothing F$	L_b	ATTACCHI CILINDRO THREADED CONNECTIONS
CS0400	450M5C040000	50	40	25	100	250	395	80	-	1/4"
CS0600	450M5C060000	70	60	40	150	360	530	120	580	3/8"
CS0700	450M5C070010	85	70	50	180	450	635	150	687	3/8"
CS0800	450M5C080000	95	80	60	200	500	705	150	797	3/8"
CS0900	450M5C090000	105	90	70	220	600	795	200	857	1/2"
CS1100	450M5C110010	125	110	90	260	500	715	200	787	1/2"

* Valvola blocco con rubinetto o fissa (optional) - Lump valve with or without cock (optional)

** Appoggio tipo "B" (optional) - Bearing type B (optional)

CARATTERISTICHE TECNICHE TECHNICAL CHARACTERISTICS

Pressione max di esercizio - Operating max pressure: 18 MPa (180 bar)

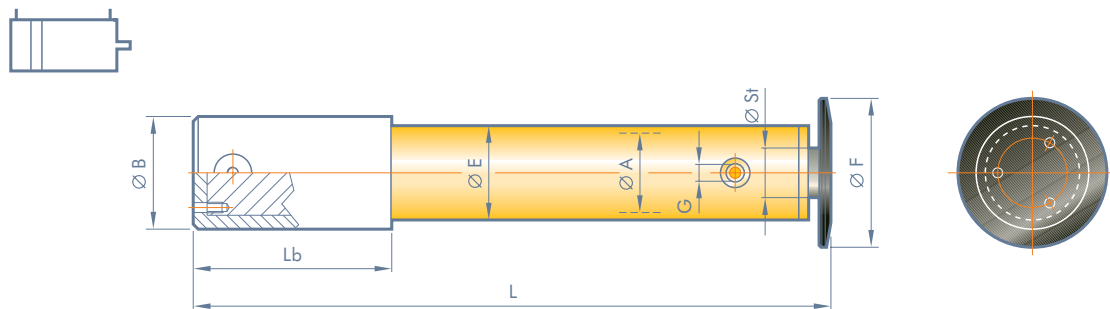
Temperatura - Temperature range: Min. -15 °C - Max +70 °C

Velocità max - Max speed: 0.5 m/s

Fluido olio idraulico minerale - Fluid hydraulic mineral oil: 2° - 5° E a 50 °C

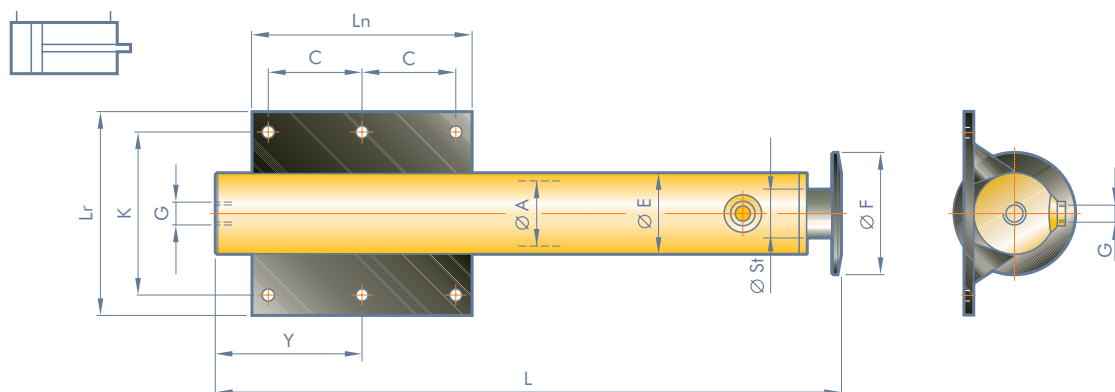
Fluido olio grado di filtrazione - Fluid right filtering oil: 20/17; X=75; 25 μ

HYDRAULIC STABILIZER WITH FIXING BUSHING



CODICE CODE	ØE	ØA	ØS	L	CORSA MAX MAX STROKE	ØG	LB	B	F
450M93007000	95	80	50	700	510	3/8" G	200	113.5	150
450M93007100	95	80	50	800	610	3/8" G	200	113.5	150

HYDRAULIC STABILIZER WITH SIDE FLANGE

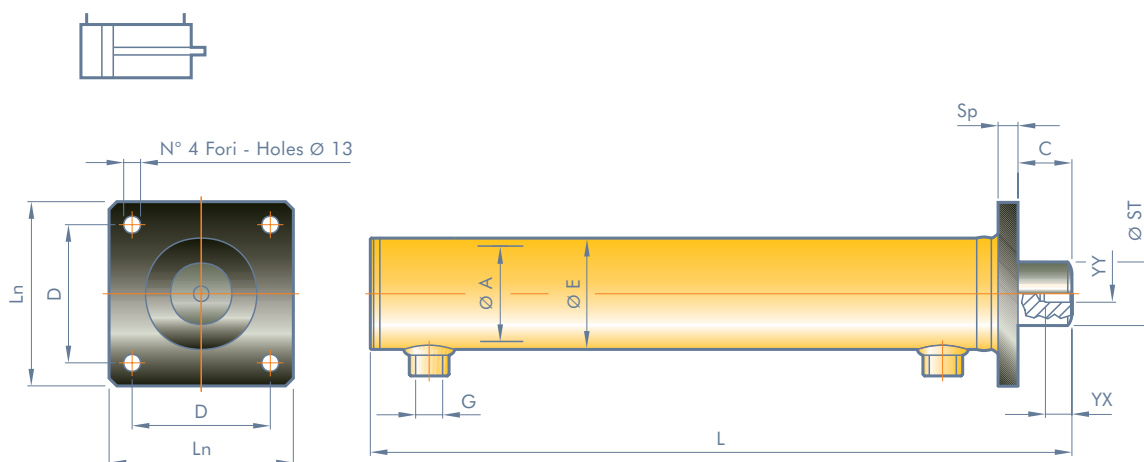


CODICE CODE	ØE	ØA	ØS	L	CORSA MAX MAX STROKE	LNxLR	Y	K	C	G	F
450M90060560	100	80	60	760	560	270x250	180	200	115	1/2"G	150

CARATTERISTICHE TECNICHE TECHNICAL CHARACTERISTICS

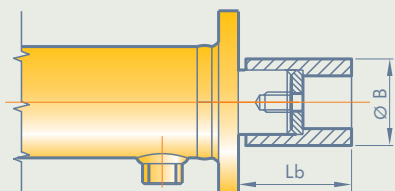
Pressione max di esercizio - Operating max pressure: 18 MPa (180 bar)
 Temperatura - Temperature range: Min. -15 °C - Max +70 °C
 Velocità max - Max speed: 0.5 m/s
 Fluido olio idraulico minerale - Fluid hydraulic mineral oil: 2° - 5° E a 50 °C
 Fluido olio grado di filtrazione - Fluid right filtering oil: 20/17; X=75; 25µ

UNLOADING HYDRAULIC CYLINDER TRUCK BOX FF TYPE



TIPO TYPE	CODICE CILINDRO CYLINDER CODE	ØA	ØE	ØST	L	CORSA MAX MAX STROKE	ØG	C	YX	YY	LnLn	Sp	D	F
SCR060	451S060FFT10	60	70	40	466	300	3/8"	40	30	M12	120x120	13	90	11
SCR070	451S070FFT10	75	85	45	466	300	3/8"	40	30	M12	120x120	13	90	11
SCR080	451S080FFT10	80	95	60	650	450	3/8"	55	30	M16	150x150	13	110	13
SCR090	451S090FFT10	90	105	60	650	450	3/8"	55	30	M16	150x150	13	110	13
SCR100	451S100FFT10	100	115	60	650	450	3/8"	55	30	M16	150x150	13	110	13

ACCESSORI OPTIONAL

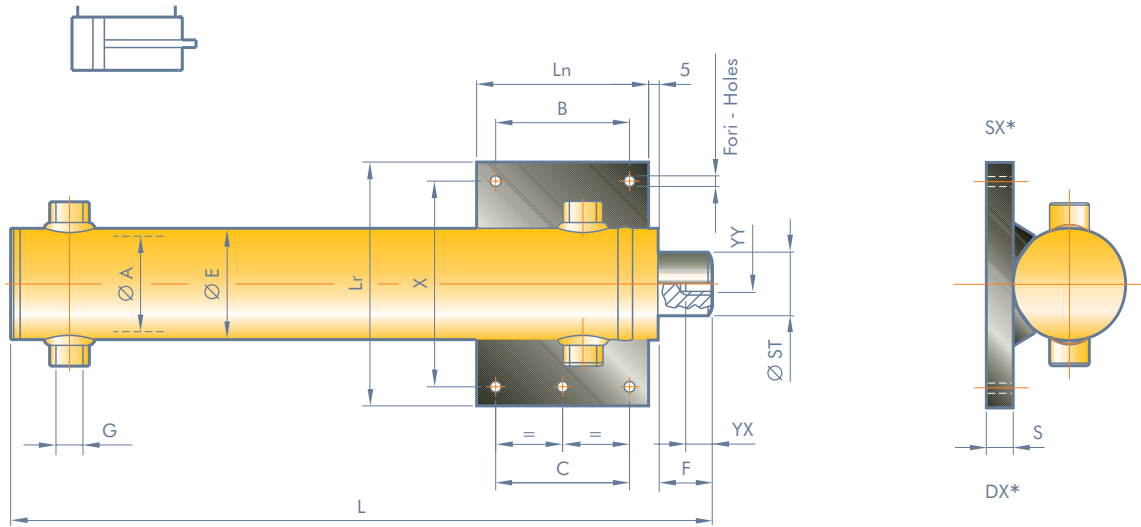


CODICE BOCCOLA BUSHING CODE	CODICE CILINDRO CYLINDER CODE	Lb	B
5521B0031010	451S060FFT10	85	63.5
	451S070FFT10	85	63.5
5521B1960000	451S080FFT10	107	82
	451S090FFT10	107	82
	451S100FFT10	107	82

CARATTERISTICHE TECNICHE TECHNICAL CHARACTERISTICS

Pressione max di esercizio - Operating max pressure: 18 MPa (180 bar)
 Temperatura - Temperature range: Min. -15 °C - Max +70 °C
 Velocità max - Max speed: 0.5 m/s
 Fluido olio idraulico minerale - Fluid hydraulic mineral oil: 2° - 5° E a 50 °C
 Fluido olio grado di filtrazione - Fluid right filtering oil: 20/17; X=75; 25µ

UNLOADING HYDRAULIC CYLINDER TRUCK BOX FL TYPE

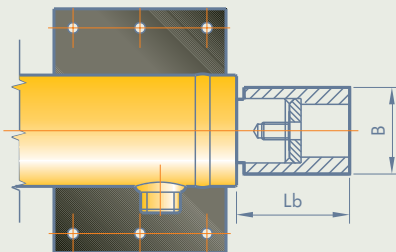


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TIPO TYPE	CODICE CODE	ØA	ØE	ØST	L	CORSA MAX MAX STROKE	ØG	ØF	YX	YY	LnXr	S	X	B	C	FORI HOLES
SCR060	451S060FLT10	60	70	40	466	300	3/8"	40	30	M12	120x150	12	120	90	-	4-Ø13
SCR070	451S070FLT10	75	85	45	466	300	3/8"	40	30	M12	120x150	12	120	90	-	4-Ø13
SCR080	451S080FLT20	80	95	60	580	380	3/8"	55	30	M16	200x230	12	194	-	164	6-Ø13
SCR080	451S080FLT10	80	95	60	650	450	3/8"	55	30	M16	200x230	12	194	-	164	6-Ø13
SCR090	451S090FLT10	90	105	60	650	450	3/8"	55	30	M16	200x230	12	194	-	164	6-Ø13
SCR100	451S100FLT10	100	115	60	650	450	3/8"	55	30	M16	200x230	12	194	-	164	6-Ø13

* Fornibile versione DX o SX - Right and left version

ACCESSORI OPTIONAL



COD. BOCCOLA BUSHING CODE	CODICE CODE	Lb	B
5521B0031010	451S060FLT10	85	63.5
	451S070FLT10	85	63.5
5521B1960000	451S080FLT20	107	82
	451S080FLT10	107	82
	451S090FLT10	107	82
	451S100FLT10	107	82

CARATTERISTICHE TECNICHE TECHNICAL CHARACTERISTICS

Pressione max di esercizio - Operating max pressure: 18 MPa (180 bar)

Temperatura - Temperature range: Min. -15 °C - Max +70 °C

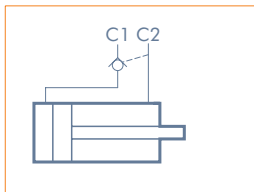
Velocità max - Max speed: 0.5 m/s

Fluido olio idraulico minerale - Fluid hydraulic mineral oil: 2° - 5° E a 50 °C

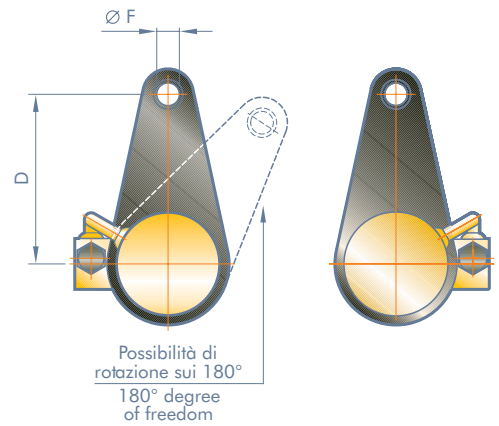
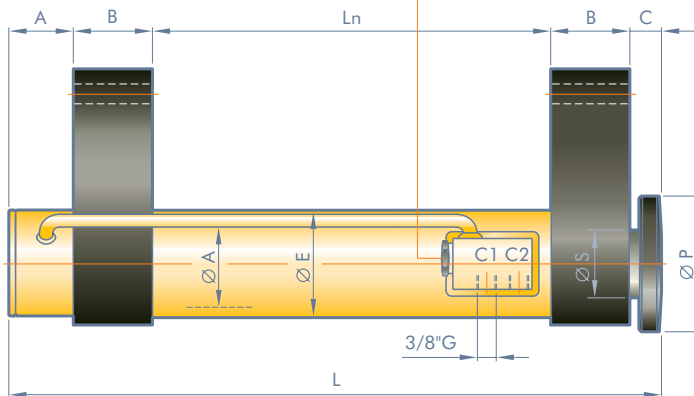
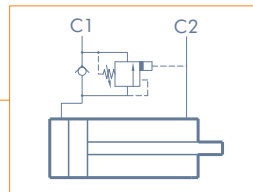
Fluido olio grado di filtrazione - Fluid right filtering oil: 20/17; X=75; 25µ

UNLOADING HYDRAULIC CYLINDERS TRUCK BOX SG TYPE

Valvola di Ritegno Pilotata di serie
Piloted Check Valve serial



Valvola Controllo Discesa optional
Counterbalance (Overcenter) Valve optional



Versione Sx - Sx version Versione Dx - Dx version

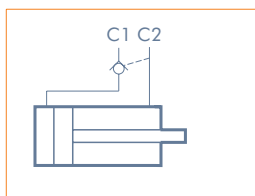
TIPO TYPE	CODICE CODE	ØE	ØA	ØS	CORSA MAX MAX STROKE	D	L	F	Ln	B	A	C	P	G
SG070	450M4SG070D0/SO	85	70	50	1000	120	1181	20	1020	40	53	28	100	3/8" G
SG080	450M4SG080D0/SO	95	80	60	1500	150	1716	20	1491	70	57	28	120	3/8" G
SG090	450M4SG090D0/SO	105	90	60	1500	150	1716	24	1491	70	57	28	120	3/8" G
SG100	450M4SG100D0/SO	115	100	60	1500	150	1716	24	1491	70	57	28	120	3/8" G

CARATTERISTICHE TECNICHE TECHNICAL CHARACTERISTICS

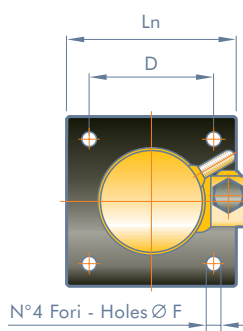
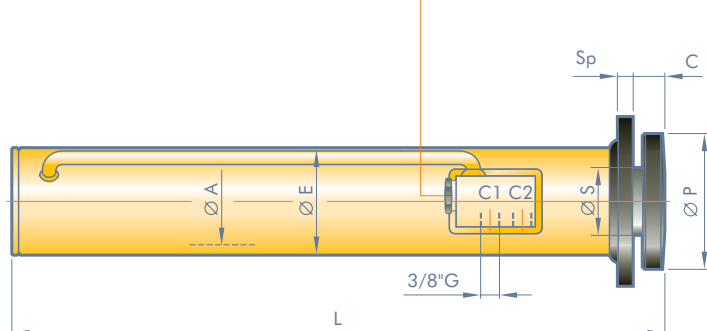
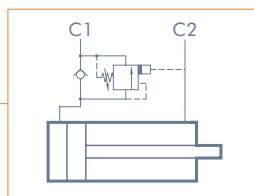
Pressione max di esercizio - Operating max pressure: 18 MPa (180 bar)
 Temperatura - Temperature range: Min. -15 °C - Max +70 °C
 Velocità max - Max speed: 0.5 m/s
 Fluido olio idraulico minerale - Fluid hydraulic mineral oil: 2° - 5° E a 50 °C
 Fluido olio grado di filtrazione - Fluid right filtering oil: 20/17; X=75; 25µ

UNLOADING HYDRAULIC CYLINDERS TRUCK BOX SF TYPE

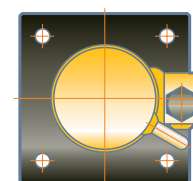
Valvola di Ritegno Pilotata di serie
Piloted Check Valve mounted as default



Valvola Controllo Discesa optional
Counterbalance (Overcenter) Valve optional



Versione Sx - Sx version



Versione Dx - Dx version

TIPO TYPE	CODICE CODE	ØE	ØA	ØS	CORSA MAX MAX STROKE	D	L	F	Ln	Sp	C	P	G
SF070	450M4SF070D0/SO	85	70	50	1000	90	1181	11	120	13	28	100	3/8" G
SF080	450M4SF080D0/SO	95	80	60	1500	110	1716	13	150	13	28	120	3/8" G
SF090	450M4SF090D0/SO	105	90	60	1500	110	1716	13	150	13	28	120	3/8" G
SF100	450M4SF100D0/SO	115	100	60	1500	110	1716	13	150	13	28	120	3/8" G

KIT SCARRABILI AGENTI A TERRA UNLOADING HYDRAULIC CYLINDERS TRUCK BOX

CODICE KIT KIT CODE	KIT COMPOSTO DA KIT COMPOSED BY	KIT TIPO KIT TYPE
450M90070100	N° 2 SF070 E N° 2 SG070	2 FISSI - 2 GIREVOLI 2 FIXED - 2 REVOLVABLE
450M90080000	N° 2 SF080 E N° 2 SG080	
450M90090000	N° 2 SF090 E N° 2 SG090	
450M90070B00	N° 4 SG070	4 GIREVOLI 4 REVOLVABLE
450M90080A00	N° 4 SG080	
450M90090100	N° 4 SG090	
450M93080100	N° 2 SF080 E N° 2 SG100	2 FISSI - 2 GIREVOLI SEZ. DIFFERENZIATA 2 FIXED - 2 REVOLVABLE WITH VARIABLE SEC.

CARATTERISTICHE TECNICHE TECHNICAL CHARACTERISTICS

Pressione max di esercizio - Operating max pressure: 18 MPa (180 bar)
 Temperatura - Temperature range: Min. -15 °C - Max +70 °C
 Velocità max - Max speed: 0.5 m/s
 Fluido olio idraulico minerale - Fluid hydraulic mineral oil: 2° - 5° E a 50 °C
 Fluido olio grado di filtrazione - Fluid right filtering oil: 20/17; X=75; 25µ



▶ NOTES

A series of horizontal dotted lines for writing notes, with a large, light gray, stylized wave graphic overlaid on the page.

▶ NOTES

Lined area for notes with horizontal dotted lines.

