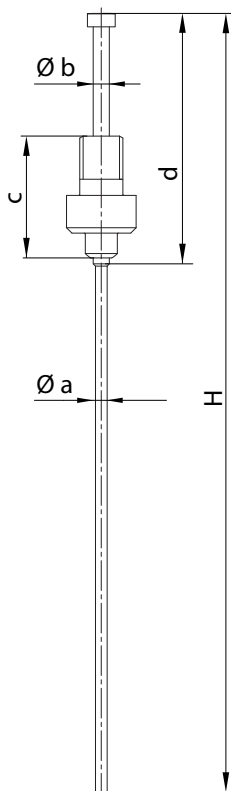




Gruppo spillo - Valve gate pin group

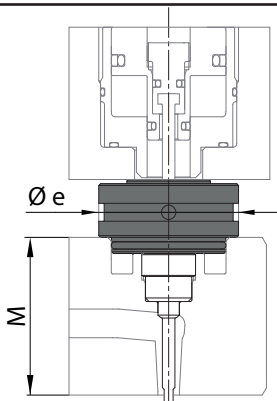


Valve Gate type / Tipo gr.ott.	S20 - S28 - S32				K32	
Nozzle type / Tipo ugello	TF12 - TF17 - TF23 - TD18 - TD22					
Pin group code / Codice gr.spillo	E18330	E20309	E18331	E20310	E18332	E18333
Ø a					Ø 2.5	
Ø b					Ø 3.5	
d	82				57	
c	22.5	37	22.5	37	22.5	
H	280		500		280	500

Valve Gate type / Tipo gr.ott.	S28 - S32				K32	
Nozzle type / Tipo ugello	FN32 - TD30					
Pin group code / Codice gr.spillo	E18334	E20313	E18335	E20314	E18334	E20313
Ø a					Ø 3.3	
Ø b					Ø 3.5	
d					98	
c	22.5	37			22.5	
H	280	500	280	500		

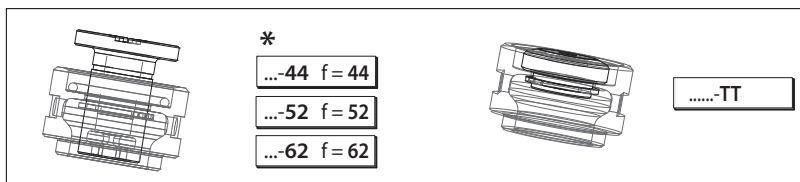
Valve Gate type / Tipo gr.ott.	S60 - K40					
Nozzle type / Tipo ugello	FN46 - DN44					
Pin group code / Codice gr.spillo	E18336			E18337		
Ø a					Ø 5.8	
Ø b					Ø 6	
d					120	
c					30.5	
H	400			600		

Gruppo contrasto - Pressure group

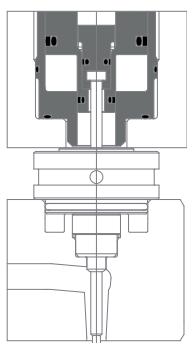


Manifold type / Tipo piastra	C - Conventional / Tradizionale					
Valve gate type / Tipo gr.otturatore	S20		S28 - S32		S60	
Pressure gr. code / Codice gr.contrasto	E20327 - *		E20328 - *		E21474	
Nozzle type / Tipo ugello	TFØ12/17/23 - TDØ18/22		TFØ12/17/23/32 TDØ18/22/30		FNØ46- DN44	
Ø e	Ø 31		Ø 39		Ø 54	
*M	44 - 52 - 62 - TT					

Manifold type / Tipo piastra	B - bolted down					
M	44		52		62	
Ø e	Ø 28	Ø 36	Ø 28	Ø 36	Ø 28	Ø 36
Pressure gr. code / Codice gr.contrasto	E21375	E21466	E21383	E21467	E21384	E21468
Valve gate type / Tipo gr.otturatore	S20 - S28 - S32					
Nozzle type / Tipo ugello	TFØ12/17/23/32 - TDØ18/22/30					



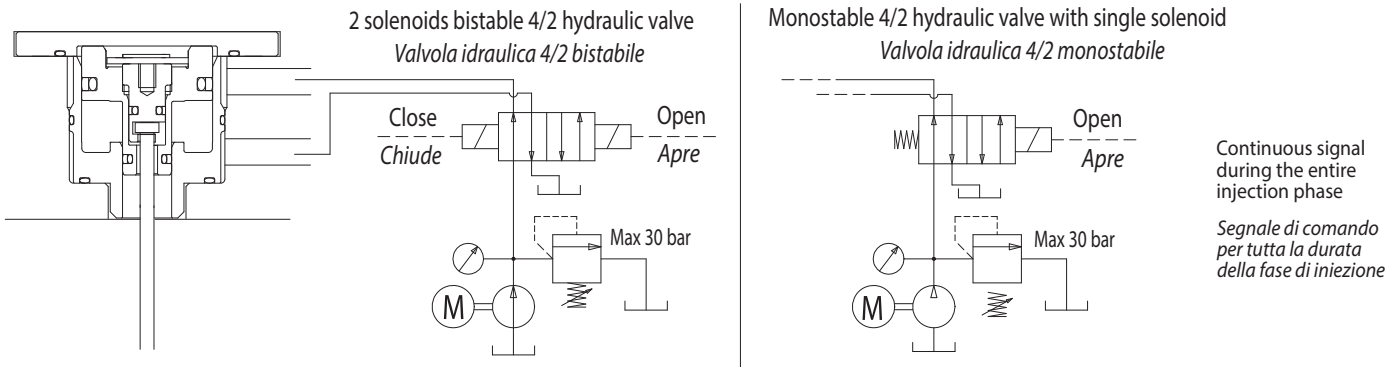
Gruppo otturatore - Valve gate group



Manifold type / Tipo piastra	C - Conventional / Tradizionale					
Valve gate type / Tipo gr.otturatore	S				K	
Valve gate type / Tipo gr.otturatore	S20 - HY	S28 - PN	S32 - PN	S32 - HY	S60 - PN	K32 - PN
Valve gate gr.code / Codice gr.otturatore	E21105 - *	E21474 - *	E19399 - *	E21487 - *	E18327	E18326
Nozzle type / Tipo ugello	TFØ12/17/23 TDØ18/22	TFØ12/17/23/32 TDØ18/22/30		FNØ46 DNØ44	TFØ12/17/23/32 TDØ18/22/30	FNØ46 DNØ44
Manifold type / Tipo piastra	B - bolted down					
Valve gate type / Tipo gr.otturatore	S					
Valve gate type / Tipo gr.otturatore	S20 - HY	S28 - PN	S32 - PN	S32 - HY		
Valve gate gr.code / Codice gr.otturatore	E21360	E21492	E21361		E21362	
Nozzle type / Tipo ugello	TFØ12/17/23 TDØ18/22	TFØ12/17/23/32 TDØ18/22/30		TFØ12/17/23/32 TDØ18/22/30		



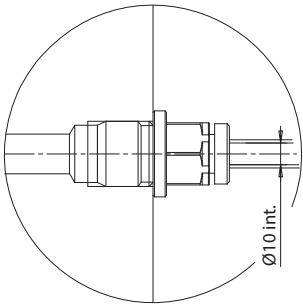
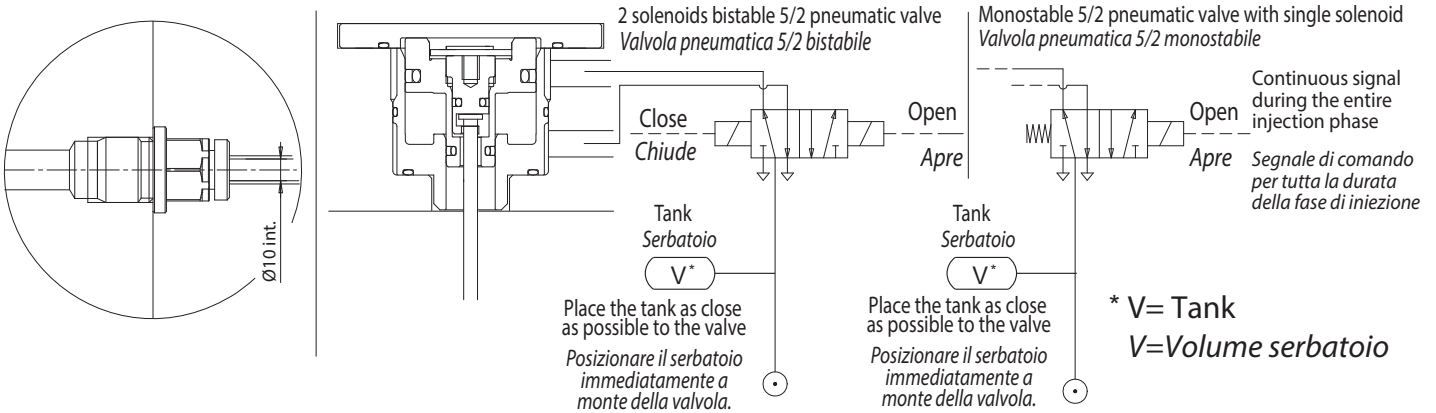
HYDRAULIC OPERATION / AZIONAMENTO IDRAULICO



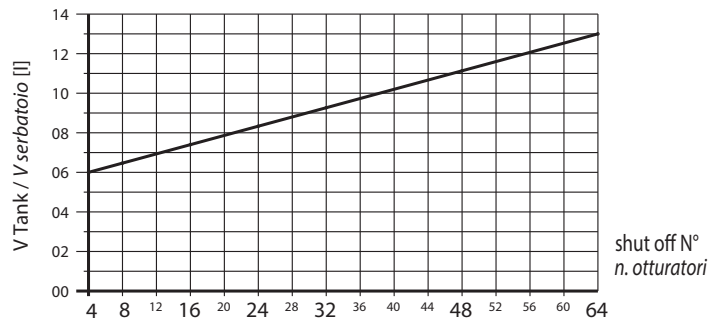
HYDRAULIC OPERATION: 30 bar MAX - FUNZIONAMENTO IDRAULICO MAX 30 bar

WARNING! When the injection system is cold, do not activate the shut off group. When testing the injection system on the bench, use 5 bar maximum pressure.
ATTENZIONE! Si consiglia di non azionare il gruppo otturazione a sistema d'iniezione freddo/Nelle prove eseguite con stampo non fissato sulla pressa NON utilizzare pressioni oltre i 5 bar.

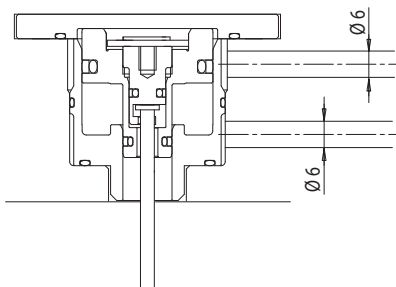
PNEUMATIC OPERATION / AZIONAMENTO PNEUMATICO



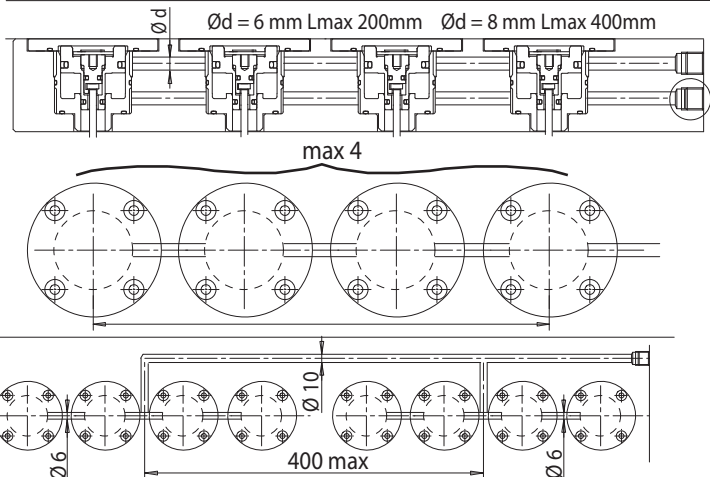
VALVE SIZE DIMENSIONE VALVOLA	SHUT OFF N° n. OTTURATORI	Valve flow rate Portata della valvola
1 → 8		≥ 550 NI/min
9 → 16		≥ 1100 NI/min
17 → 64		≥ 4600 NI/min



1 SHUT OFF GROUPS / 1 OTTURATORE



IN SERIES SHUT OFF GROUPS / OTTURATORI IN SERIE



PNEUMATIC OPERATION: 10 bar ADVISED - FUNZIONAMENTO PNEUMATICO CONSIGLIATI 10 bar



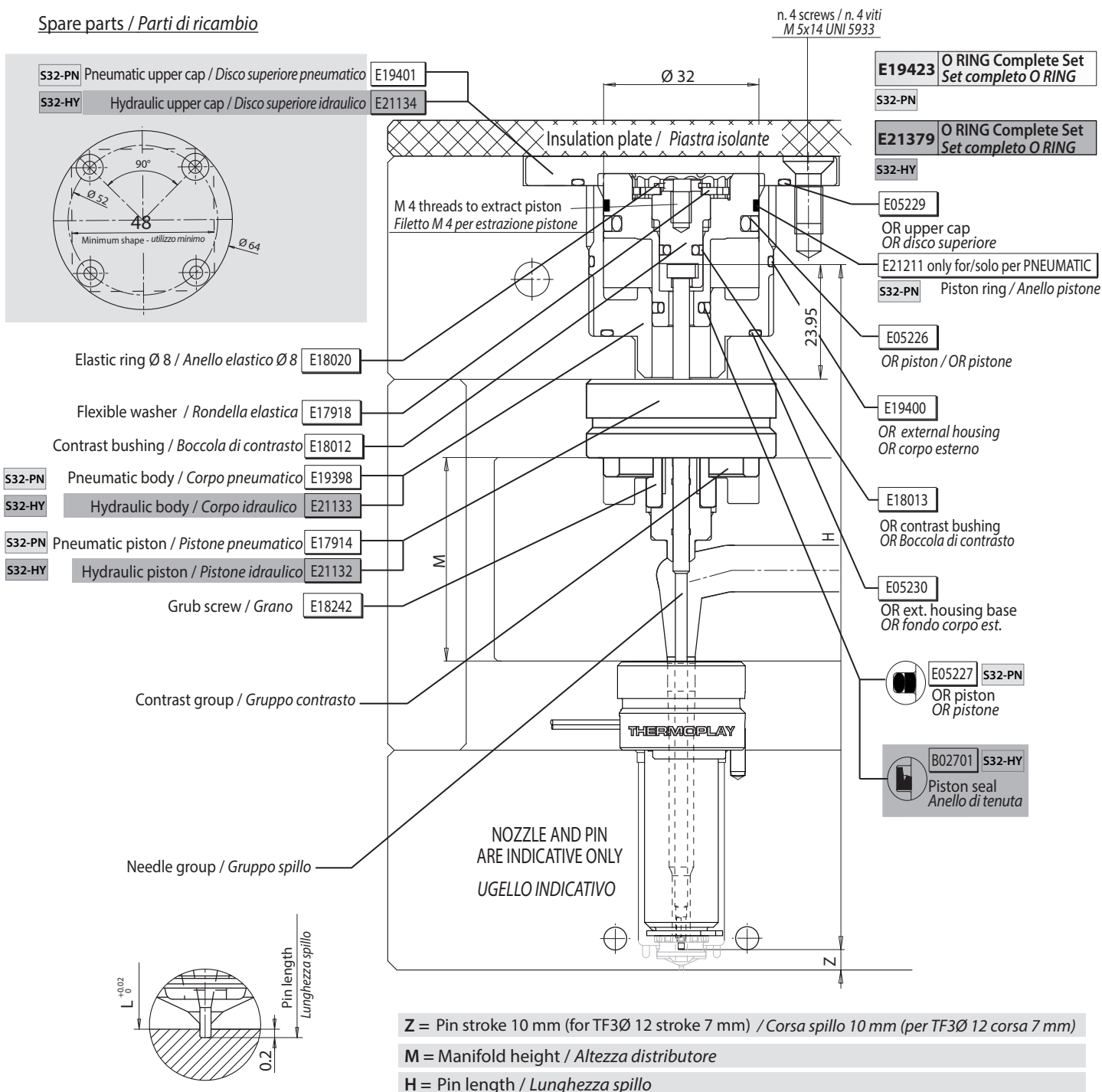
S32-HY

"S" TYPE VALVE GATE GROUP - BORE PISTON 32 - HYDRAULIC
GRUPPO OTTURATORE TIPO "S" - ALESAGGIO PISTONE 32 - IDRAULICO

S32-PN

"S" TYPE VALVE GATE GROUP - BORE PISTON 32 - PNEUMATIC
GRUPPO OTTURATORE TIPO "S" - ALESAGGIO PISTONE 32 - PNEUMATICO

Spare parts / Parti di ricambio



ATTENZIONE!
Si consiglia di non azionare il gruppo otturazione a sistema d'iniezione freddo.
FUNZIONAMENTO PNEUMATICO consigliati 10 bar.
FUNZIONAMENTO IDRAULICO MAX 30 bar.
Nelle prove eseguite con stampo non fissato sulla pressa **NON** utilizzare pressioni oltre i 5 bar.

ATTENTION!
Do not activate the shut off group when the injection system is cold
PNEUMATIC OPERATION: 10 bar ADVISED
HYDRAULIC OPERATION: 30 bar MAX
When testing the injection system on the bench, use 5 bar maximum pressure.

FOR NOZZLES / PER UGELLI
TF3 Ø12 - TF3-TF3B-TF3DSLA-TF3DSLU Ø17-23-32 - TD3 Ø18-22-30

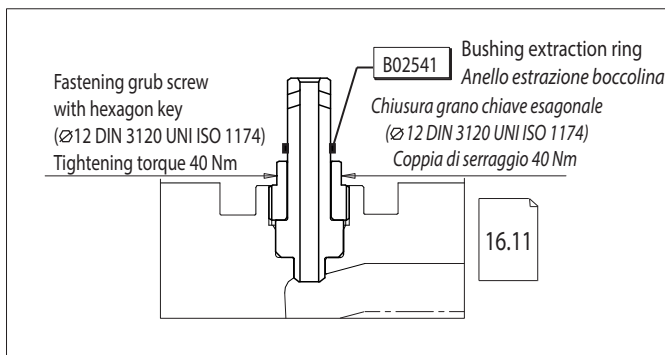
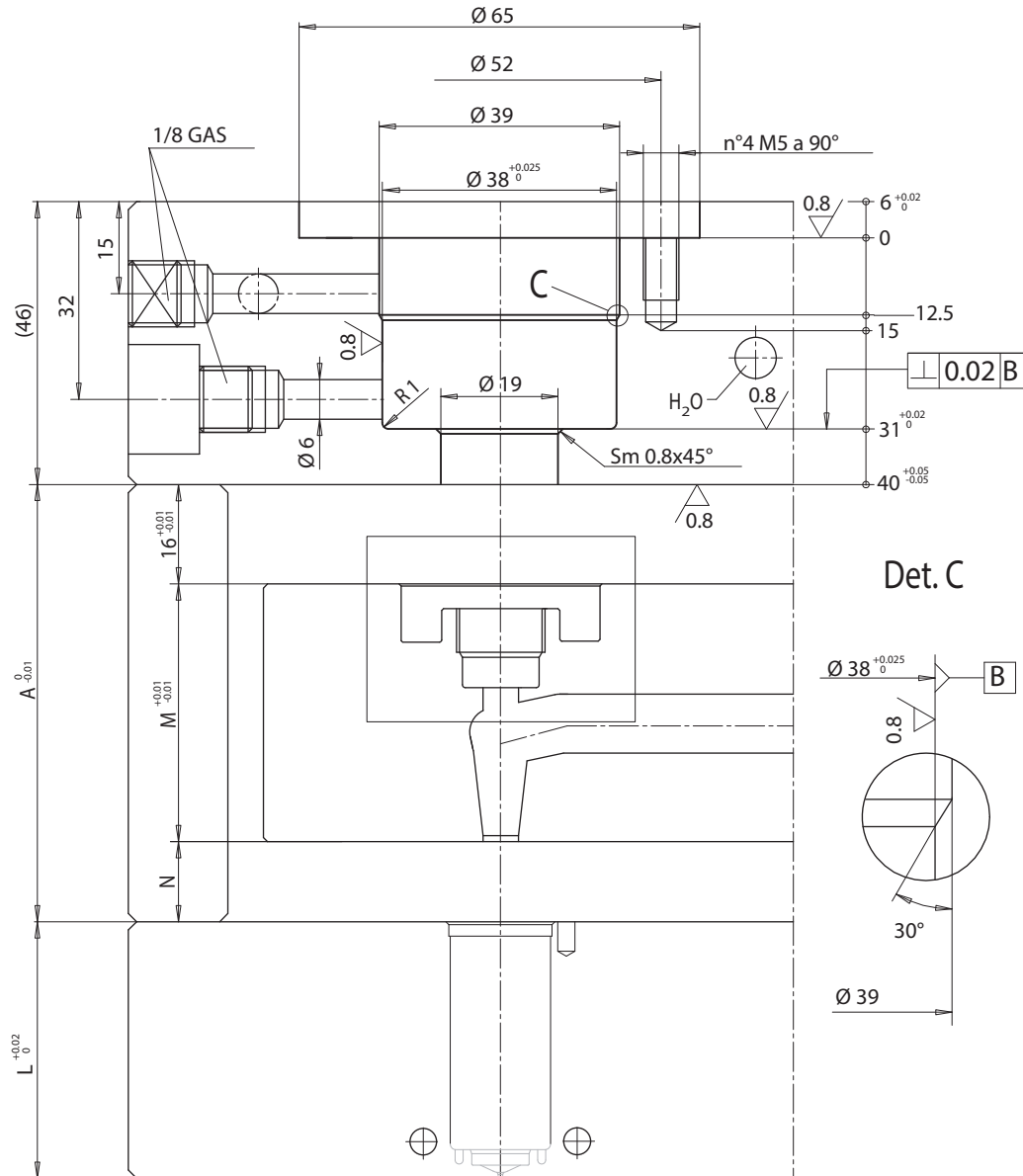


"S" TYPE VALVE GATE GROUP CUT OUT - BORE PISTON 32 - HYDRAULIC
SEDE GRUPPO OTTURATORE TIPO "S" - ALESAGGIO PISTONE 32 - IDRAULICO

S32-HY

"S" TYPE VALVE GATE GROUP CUT OUT - BORE PISTON 32 - PNEUMATIC
SEDE GRUPPO OTTURATORE TIPO "S" - ALESAGGIO PISTONE 32 - PNEUMATICO

S32-PN



- L** = Nozzle length / Lunghezza ugello
- A** = Spacers thickness / Altezza distanziali
- N** = Nozzle head thickness / Altezza testa ugello
- M** = Manifold height / Altezza distributore

FOR NOZZLES / PER UGELLI
TF3 Ø12 - TF3-TF3B-TF3DSLA-TF3DSLUS Ø17-23-32 - TD3 Ø18-22-30



S20-HY

S28-PN

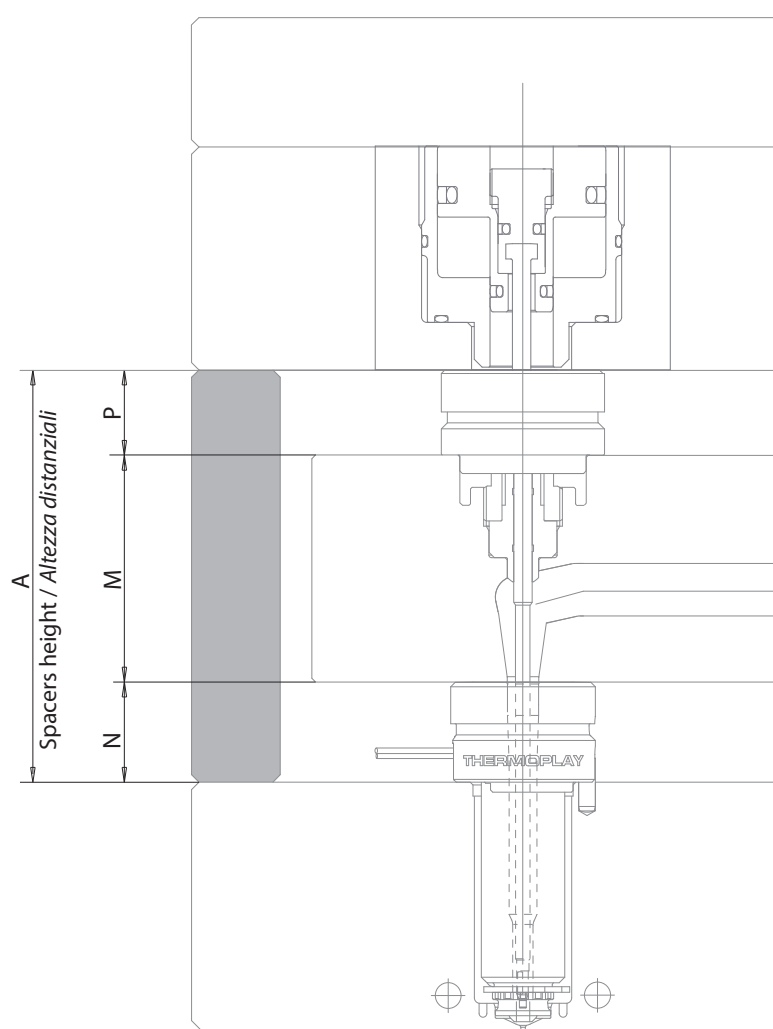
S32-PN

S32-HY

S60-PN

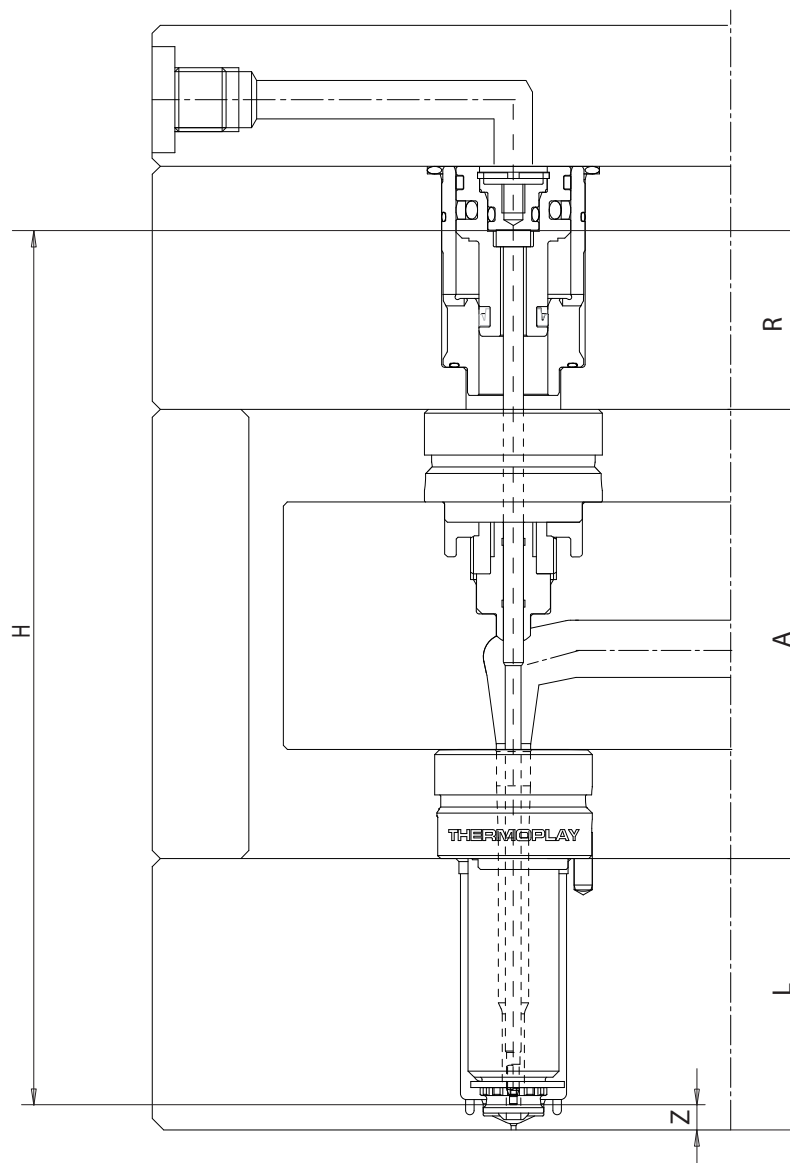
K32-PN

K40-PN



$$A = (N+M+P)+[(N+M+6) \times \Delta t \times K]-0.05 = \text{mm}$$

A	Spacer height / Altezza distanziali								
	Nozzle type / Tipo ugelli								
	TF12	TF17	TF23	TF32	TF46	TD18	TD22	TD30	TD44
N	13	18	20	20	25	18	20	20	25
M	Manifold height / Altezza distributore								
	Actuator group / Gruppo otturatore								
	S20HY	S28PN	S32HY	S32PN	S60PN	K32PN	K40PN		
P	16				20		21.5	30.5	
ΔT	Temperature difference between manifold and mold / Differenza di temperatura tra canale caldo e stampo								
k	Coefficient of thermal expansion for steel / Coeficente di dilatazione termica dell'acciaio 0.0000125								
0.05	Theoretical compression value / Valore teorico di chiusura								



- S20-HY
- S28-PN
- S32-PN
- S32-HY
- S60-PN

$$H = (L+A+R-Z) - [(L+A+R-Z) \times \Delta t \times k] + n = \text{mm}$$

H	Pin length (cold) / Lunghezza spillo a freddo			
L	Nozzle length / Lunghezza ugello			
A	Spacer height (including expansion) / Misura dei distanziali comprensiva della dilatazione per il serraggio			
	Valve gate group type / Tipo gruppo otturatore			
	S20HY	S28PN	S32HY	S32PN
R	31.4	23.95		35.45
Z	10			16
	Nozzle TIP type / Tipo puntale ugello			
	TF3/3B-TF3D/3DSL A all diameters		TD18/22/30/44-3	TF17/23-TF32 - 3DSL U
n	0.2		0.64	1.76
k	Coefficient of thermal expansion for steel / Coeficiente di dilatazione termica dell'acciaio 0.0000125			
ΔT	Temperature difference between manifold and mold / Differenza di temperatura tra canale caldo e stampo			

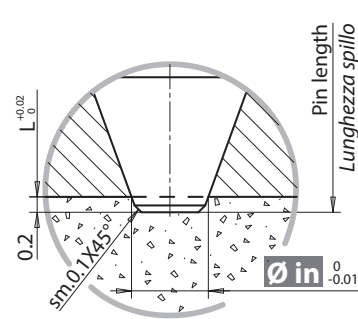
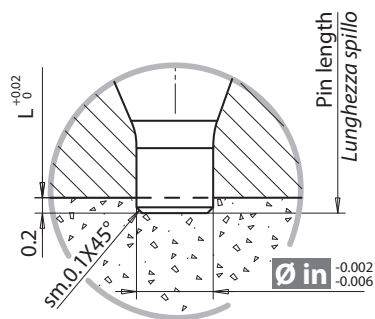
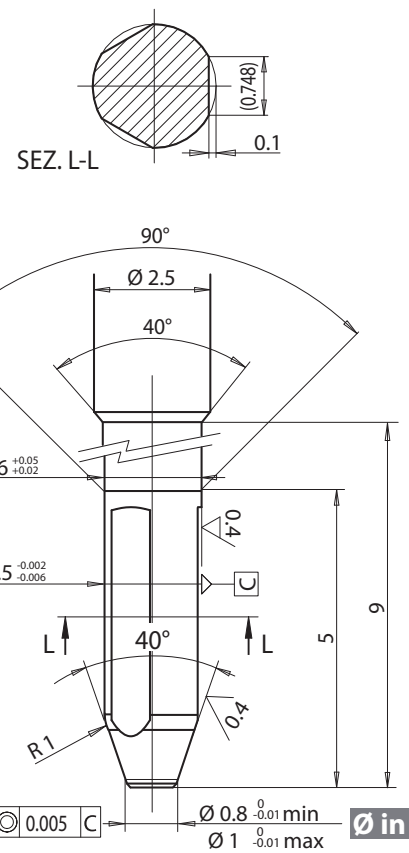
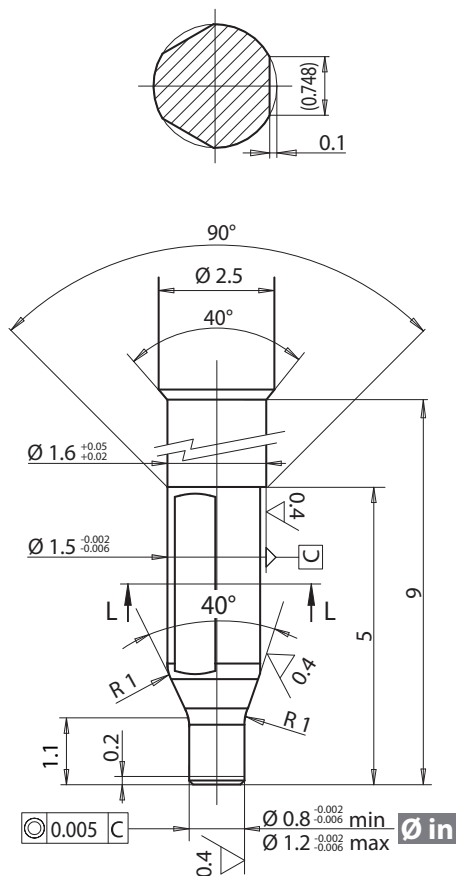


NOZZLE / UGELLO
TF3 Ø12

INDICATIONS FOR EXECUTION OF PIN PROFILE / INDICAZIONI PER L'ESECUZIONE DEL PROFILO PUNTA SPILLO
(execution customer care - a cura cliente)

CILINDRIC / CILINDRICO

CONICAL / CONICO



ATTENTION - ATTENZIONE!

With conical shut off, if pin stroke adjustment or length are not correct, damage can occur to steel in the gate area.
Nella chiusura conica l'errata regolazione della corsa dello spillo o della sua lunghezza potrebbero causare danni alla matrice

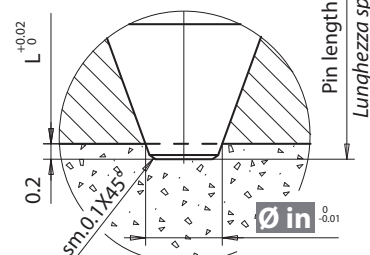
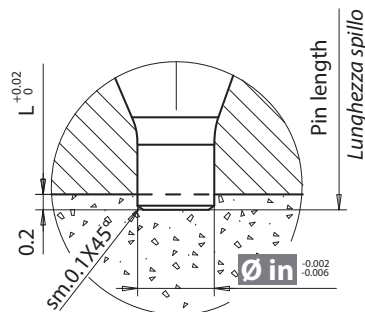
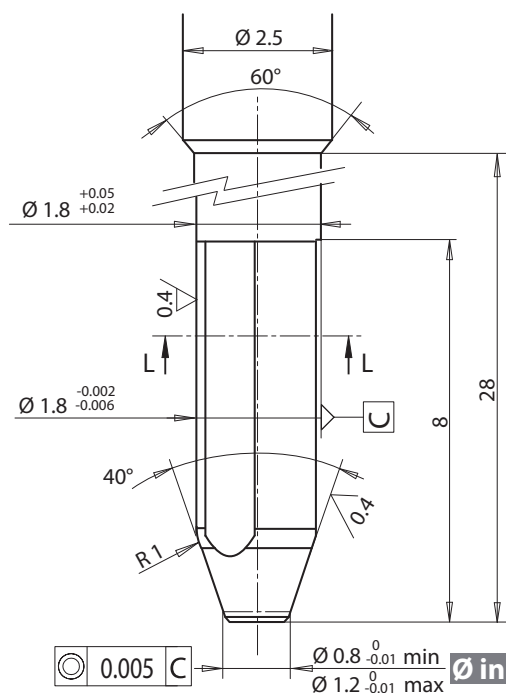
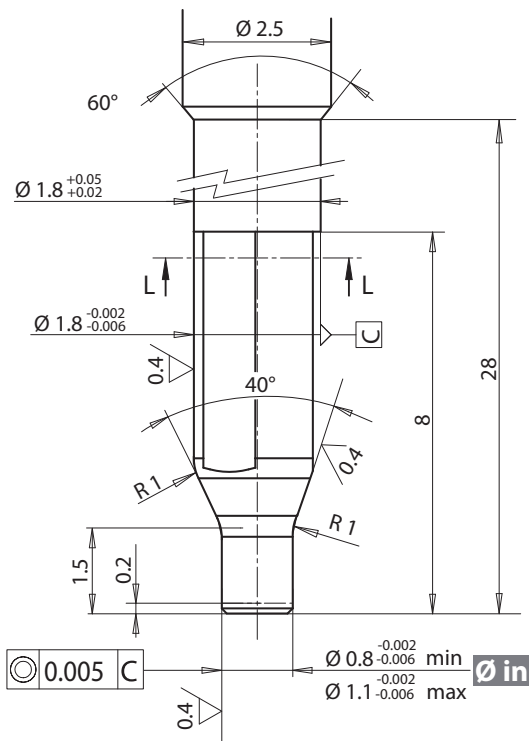
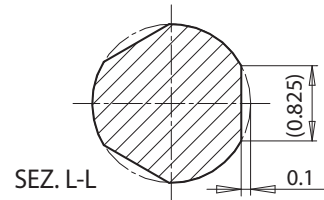
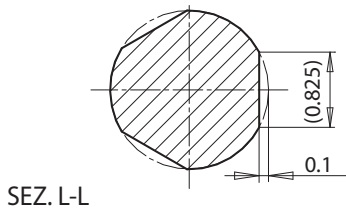


NOZZLE / UGELLO
TD3 Ø18

INDICATIONS FOR EXECUTION OF PIN PROFILE / INDICAZIONI PER L'ESECUZIONE DEL PROFILO PUNTA SPILLO
(execution customer care - a cura cliente)

CILINDRIC / CILINDRICO

CONICAL / CONICO



ATTENTION - ATTENZIONE!

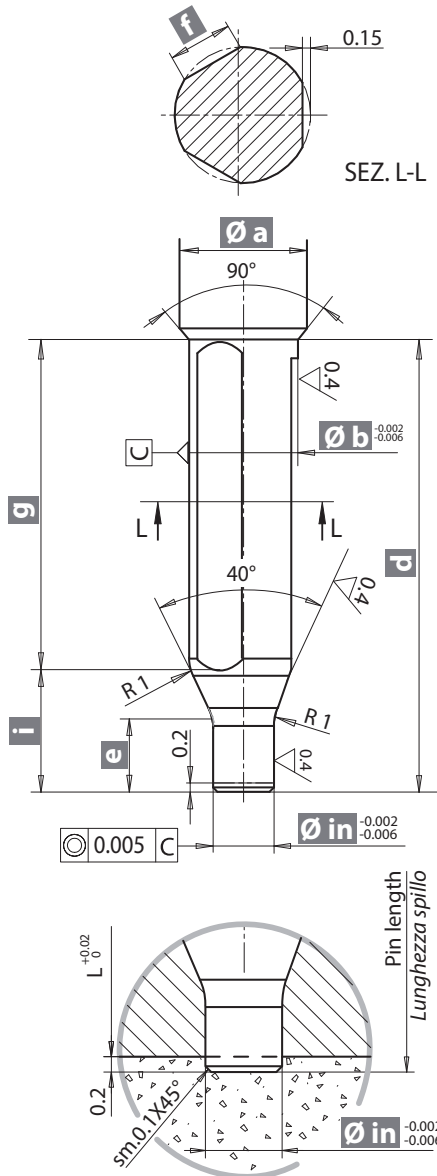
With conical shut off, if pin stroke adjustment or length are not correct, damage can occur to steel in the gate area.
Nella chiusura conica l'errata regolazione della corsa dello spillo o della sua lunghezza potrebbero causare danni alla matrice



NOZZLE / UGELLO
TF3-TF3B-TD3

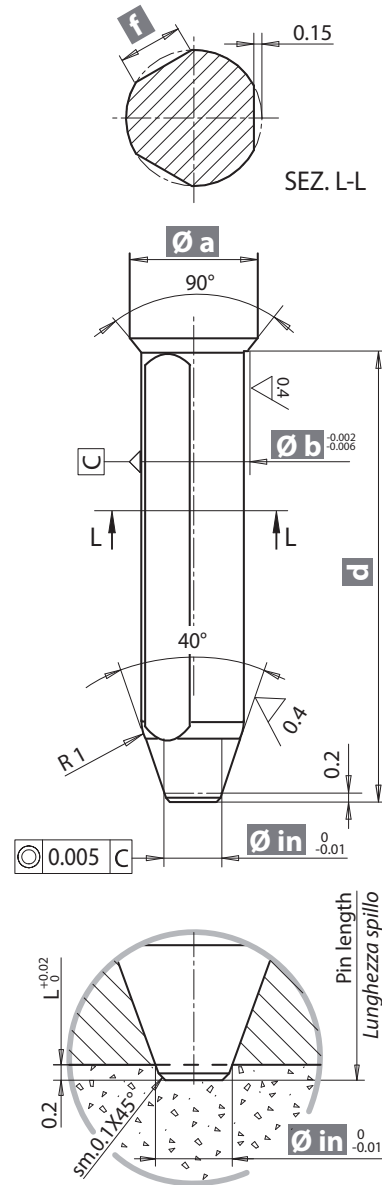
CILINDRIC / CILINDRICO

(execution customer care - a cura cliente)



CONICAL / CONICO

(execution customer care - a cura cliente)



ATTENTION - ATTENZIONE!
With conical shut off, if pin stroke adjustment or length are not correct, damage can occur to the gate area.
Nella chiusura conica l'errata regolazione della corsa dello spillo o della sua lunghezza potrebbero causare danni alla matrice

CILINDRIC / CILINDRICO						
Nozzle type / Tipo ugello						
TF17	TF23	TF32	TF46	TD22	TD30	TD44
0.8	0.8	1.6	3.5	0.8	1.6	3.5
1.8	2	3	5.5	1.3	2	4
2.5	2.5	3.3	5.8	2.5	3.3	5.8
2.4	2.4	3.2	5.7	2.4	3.2	5.7
9	9	9	13	9	9	13
1.5	1.5	1.8	2.2	1.5	1.8	2.2
1.16	1.16	1.35	1.82	1.16	1.35	1.82
-	-	7.7	11.2	-	7.7	11.2
-	-	1.3	1.8	-	1.3	1.8

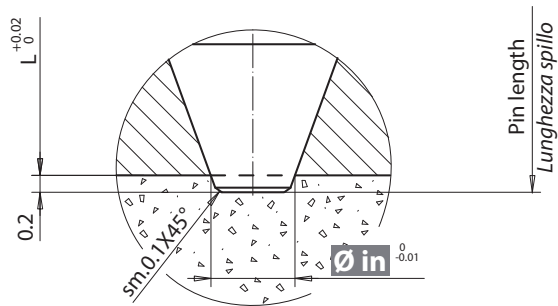
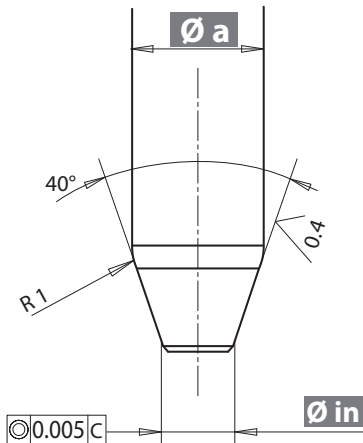
CONICAL / CONICO						
Nozzle type / Tipo ugello						
TF17	TF23	TF32	TF46	TD22	TD30	TD44
0.8	0.8	1.6	3.5	0.8	1.6	3.5
1.3	1.3	2.5	4.5	1.6	2.5	4.5
2.5	2.5	3.3	5.8	2.5	3.3	5.8
2.4	2.4	3.2	5.7	2.4	3.2	5.7
9	9	9	13	9	9	13
-	-	-	-	-	-	-
1.16	1.16	1.35	1.82	1.16	1.35	1.82
-	-	7.7	11.2	-	7.7	11.2
-	-	1.3	1.8	-	1.3	1.8



NOZZLE / UGELLO
TF3D-TF3DSL A

CILINDRIC / CILINDRICO

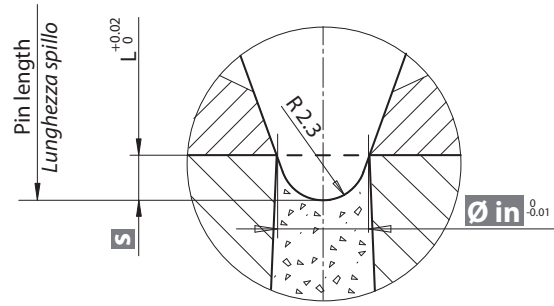
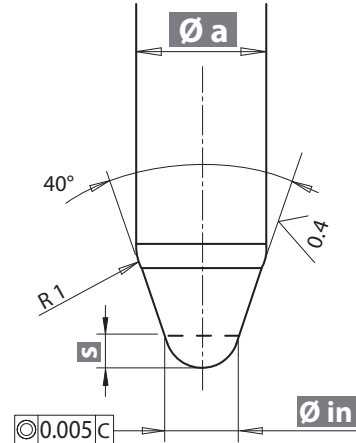
(execution customer care - *a cura cliente*)



NOZZLE / UGELLO
TF3DSL U

CONICAL / CONICO

(execution customer care - *a cura cliente*)



ATTENTION - ATTENZIONE!

With conical shut off, if pin stroke adjustment or length are not correct, damage can occur to steel in the gate area.
*Nella chiusura **conica** l'errata regolazione della corsa dello spillo o della sua lunghezza potrebbero causare danni alla matrice*

Nozzle type / Tipo ugello							
3D				3DSL A			
TF17	TF23	TF32	TF46	TF17	TF23	TF32	TF46
0.8	1.6	3.5		0.9		1.7	3.5
	1.7	3.6					
0.9	1.8	3.7		1.1		1.9	3.7
	1.9	3.8					
1.0	2.0	3.9		1.3		2.1	3.9
	2.1	4.0					
1.1	2.2	4.1				2.3	4.1
	2.3	4.2					
1.2	2.4	4.3				2.5	4.3
	2.5	4.4					
1.3		4.5					4.5
2.5	3.3	5.8		2.5	3.3	5.8	Ø in
--	--	--		--	--	--	s

Nozzle type / Tipo ugello			
3DSL U			
TF17	TF23	TF32	TF46
1.3		2.5	4.5
2.5		3.3	5.8
0.63		1.02	1.76