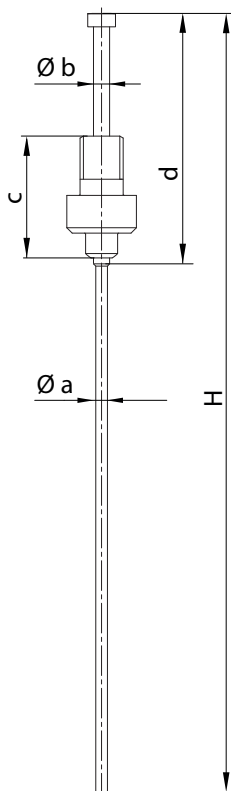


Gruppo spillo - Valve gate pin group

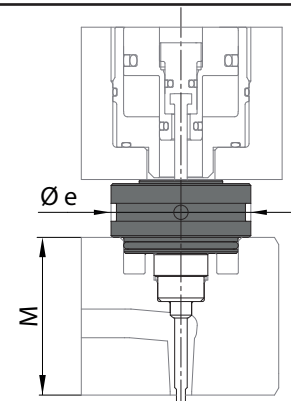


Valve Gate type <i>Tipo gr.ott.</i>	S20 - S28 - S32				K32	
Nozzle type <i>Tipo ugello</i>	TF12 - TF17 - TF23 - TD18 - TD22					
Pin group code <i>Codice gr.spillo</i>	E18330	E20309	E18331	E20310	E18332	E18333
Ø a					Ø 2.5	
Ø b					Ø 3.5	
d	82				57	
c	22.5	37	22.5	37	22.5	
H	280		500		280	500

Valve Gate type <i>Tipo gr.ott.</i>	S28 - S32				K32	
Nozzle type <i>Tipo ugello</i>	FN32 - TD30					
Pin group code <i>Codice gr.spillo</i>	E18334	E20313	E18332	E18333		
Ø a					Ø 3.3	
Ø b					Ø 3.5	
d					98	
c	22.5	37	22.5	37	22.5	37
H	280			500		

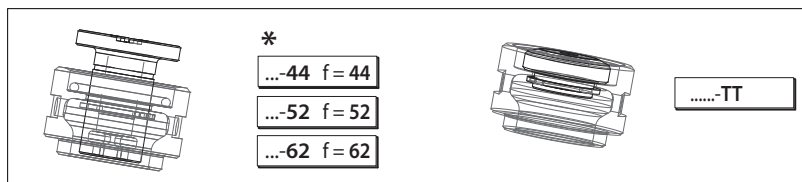
Valve Gate type <i>Tipo gr.ott.</i>	S60 - K40					
Nozzle type <i>Tipo ugello</i>	FN46 - DN44					
Pin group code <i>Codice gr.spillo</i>	E18336			E18337		
Ø a					Ø 5.8	
Ø b					Ø 6	
d					120	
c					30.5	
H	400			600		

Gruppo contrasto - Pressure group

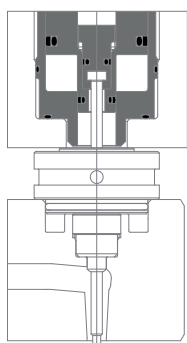


Manifold type <i>Tipo piastra</i>	C - Conventional / Tradizionale					
Valve gate type <i>Tipo gr.otturatore</i>	S20		S28 - S32		S60	
Pressure gr. code <i>Codice gr.contrasto</i>	E20327 - *		E20328 - *		E21474	
Nozzle type <i>Tipo ugello</i>	TFØ12/17/23 - TDØ18/22		TFØ12/17/23/32 TDØ18/22/30		FNØ46 -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

Manifold type <i>Tipo piastra</i>	B - bolted down					
M	44		52		62	
Ø e	Ø 31	Ø 39	Ø 31	Ø 39	Ø 31	Ø 39
Pressure gr. code <i>Codice gr.contrasto</i>	E21375	E21466	E21383	E21467	E21384	E21468
Valve gate type <i>Tipo gr.otturatore</i>	S20 - S28 - S32					
Nozzle type <i>Tipo ugello</i>	TFØ12/17/23/32 - TDØ18/22/30					



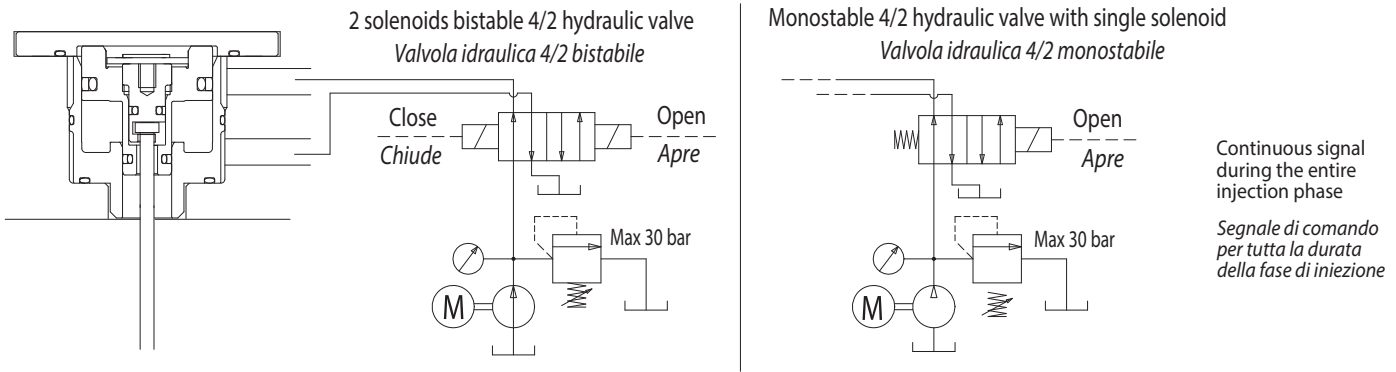
Gruppo otturatore - Valve gate group



Manifold type <i>Tipo piastra</i>	C - Conventional / Tradizionale					
Valve gate type <i>Tipo gr.otturatore</i>	S				K	
Valve gate type <i>Tipo gr.otturatore</i>	S20 - HY	S28 - PN	S32 - PN	S32 - HY	S60 - PN	K32 - PN K40 - PN
Valve gate gr.code <i>Codice gr.otturatore</i>	E21105 - *	E21474 - *	E19399 - *	E21487 - *	E18327	E18326 E18329
Nozzle type <i>Tipo ugello</i>	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 <i>Tipo piastra</i>	B - bolted down					
Valve gate type <i>Tipo gr.otturatore</i>	S					
Valve gate type <i>Tipo gr.otturatore</i>	S20 - HY	S28 - PN	S32 - PN	S32 - HY		
Valve gate gr.code <i>Codice gr.otturatore</i>	E21360	E21492	E21361	E21362		
Nozzle type <i>Tipo ugello</i>	TFØ12/17/23 TDØ18/22	TFØ12/17/23/32 TDØ18/22/30	TFØ12/17/23/32 TDØ18/22/30			



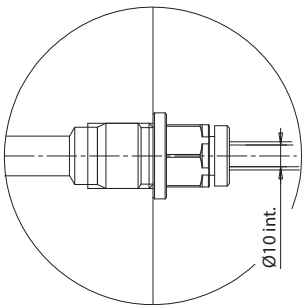
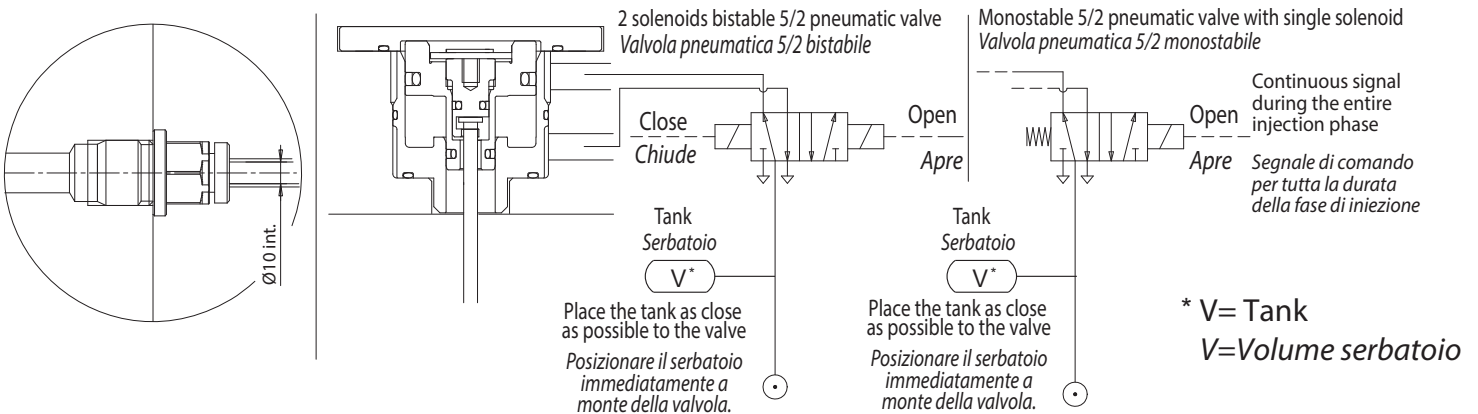
HYDRAULIC OPERATION / AZIONAMENTO IDRAULICO



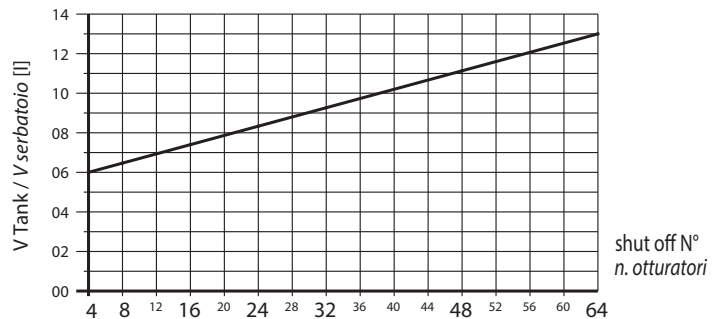
HYDRAULIC OPERATION: 30 bar MAX - FUNZIONAMENTO IDRAULICO MAX 30 bar

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.

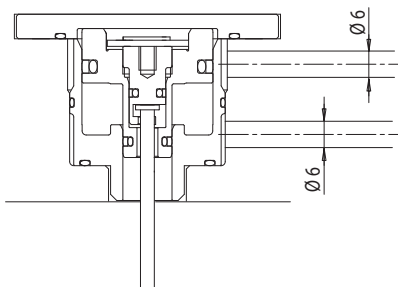
PNEUMATIC OPERATION / AZIONAMENTO PNEUMATICO



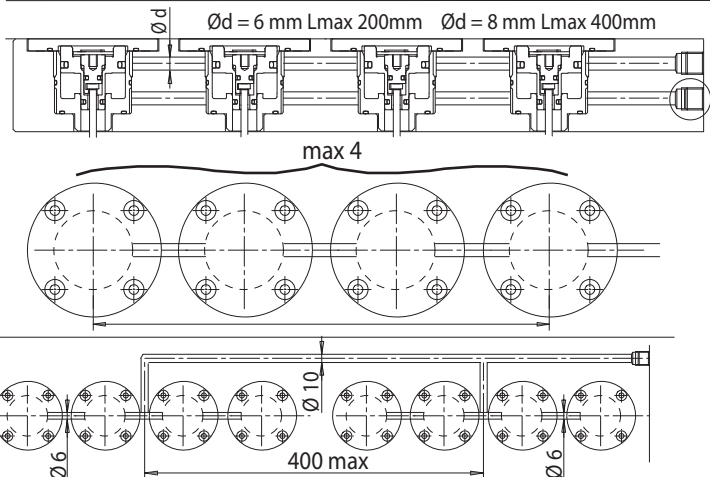
VALVE SIZE DIMENSIONE VALVOLA	SHUT OFF N° n. OTTURATORI	Valve flow rate Portata della valvola
1 → 8		≥ 550 NI/min
9 → 16		≥ 1100 NI/min
17 → 64		≥ 4600 NI/min



1 SHUT OFF GROUPS / 1 OTTURATORE



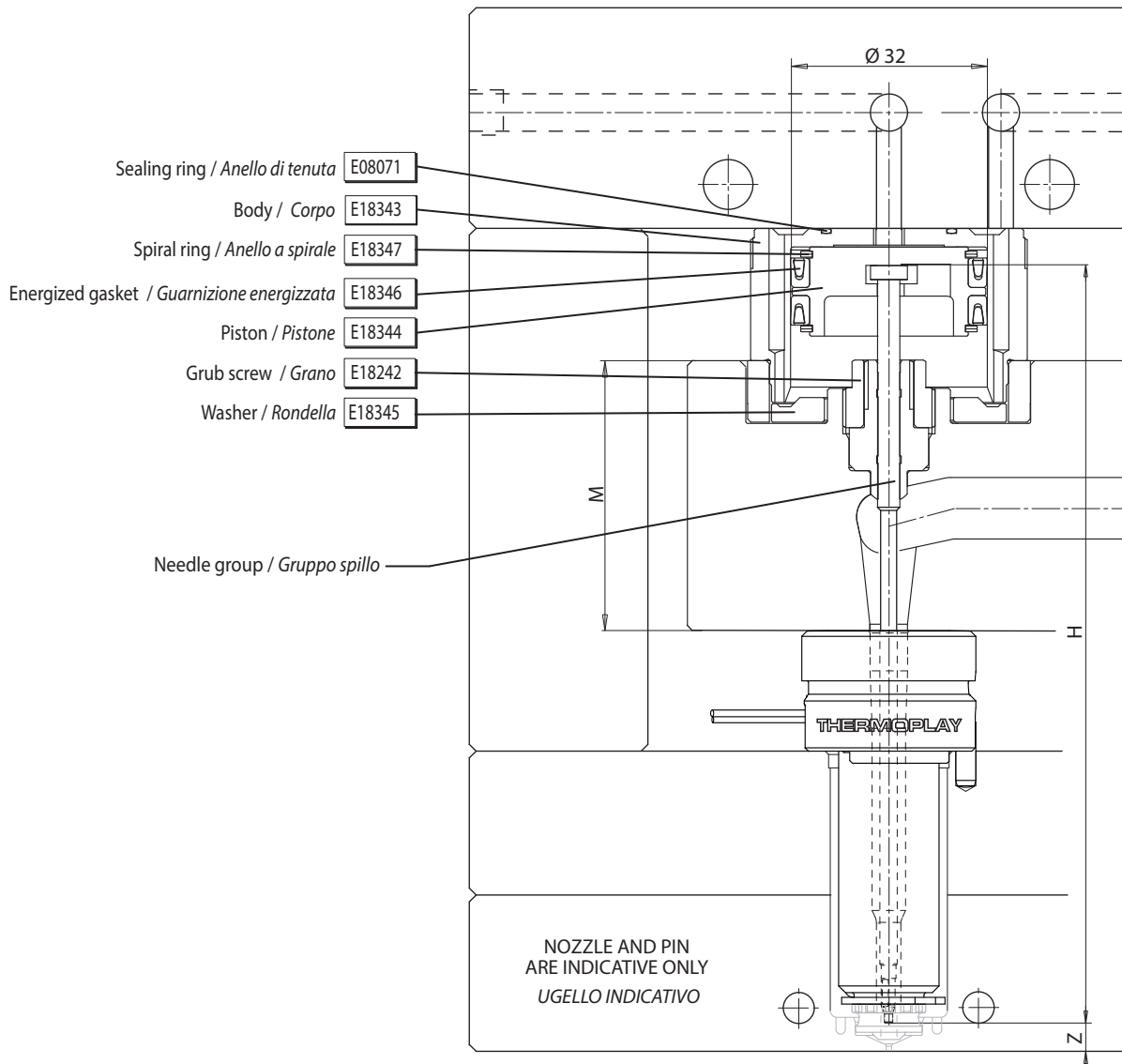
IN SERIES SHUT OFF GROUPS / OTTURATORI IN SERIE



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

**K32-PN**

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



Z = Pin stroke 10.5 mm (for TF3Ø 12 stroke 7 mm) / Corsa spillo 10.5 mm (per TF3Ø 12 corsa 7 mm)

M = Manifold height / Altezza distributore

H = Pin length / Lunghezza spillo

ATTENZIONE!

Si consiglia di non azionare il gruppo otturazione a sistema d'iniezione freddo.

FUNZIONAMENTO PNEUMATICO consigliati 10 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

When testing the injection system on the bench, use 5 bar maximum pressure.

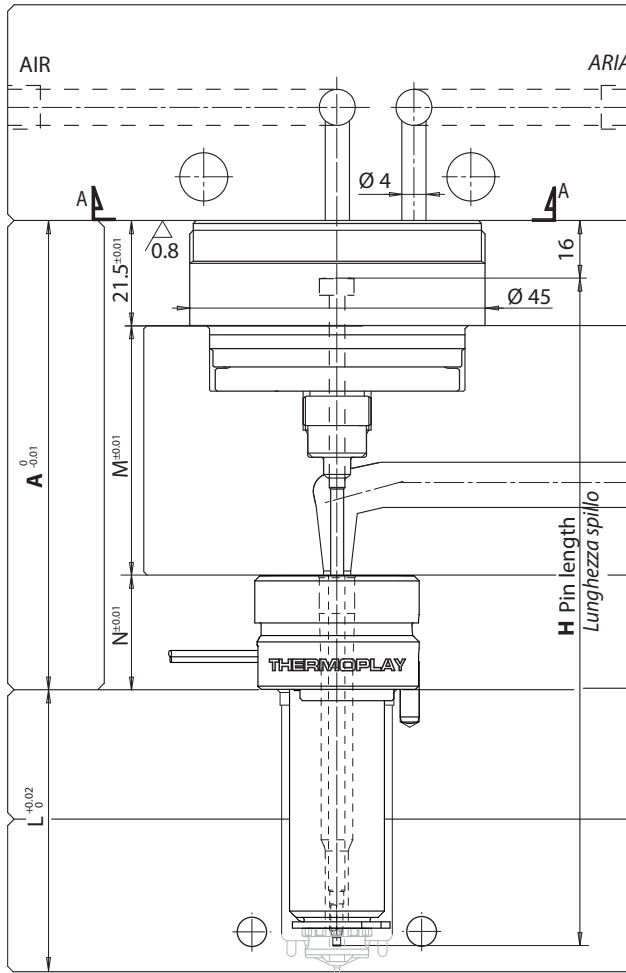
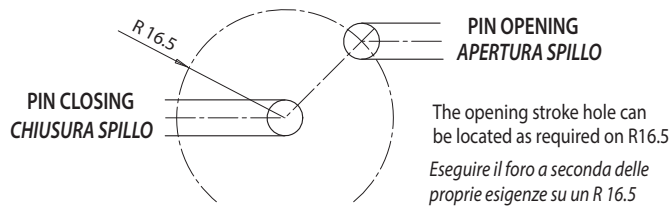
FOR NOZZLES / PER UGELLI

TF3 Ø12 - TF3-TF3B-TF3DLSA-TF3DSL0 Ø17-23-32 - TD3 Ø18-22-30



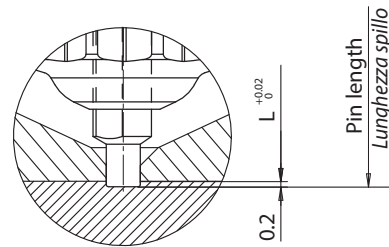
"K" TYPE VALVE GATE GROUP CUTOUT - BORE PISTON 32 - PNEUMATIC
SEDE GRUPPO OTTURATORE TIPO "K" - ALESAGGIO PISTONE 32 - PNEUMATICO

K32-PN



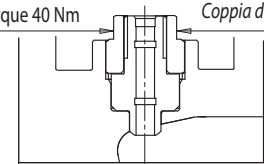
ATTENTION!
Do not activate the shut off group when the injection system is cold
PNEUMATIC OPERATION: 10 bar ADVISED
When testing the injection system on the bench, use 5 bar maximum pressure.

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



Fastening grub screw with hexagon key
(Ø12 DIN 3120 UNI ISO 1174)
Tightening torque 40 Nm

Chiusura grano chiave esagonale
(Ø12 DIN 3120 UNI ISO 1174)
Coppia di serraggio 40 Nm



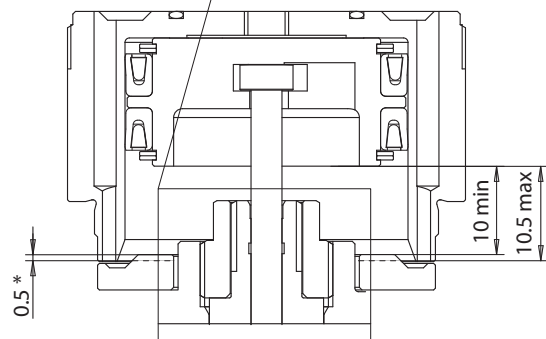
16.11

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

PIN LENGTH ADJUSTMENT WASHER
RONDELLA DI REGOLAZIONE CORSA

Code / Codice	E18345
---------------	--------

* 0.5 = maximum machining to adjust pin length.
* 0.5 = spessore massimo da asportare per regolare la corsa a seconda delle proprie esigenze.



FOR NOZZLES / PER UGELLI

TF3 Ø12 - TF3-TF3B-TF3DLSA-TF3DSLUI Ø17-23-32 - TD3 Ø18-22-30



S20-HY

S28-PN

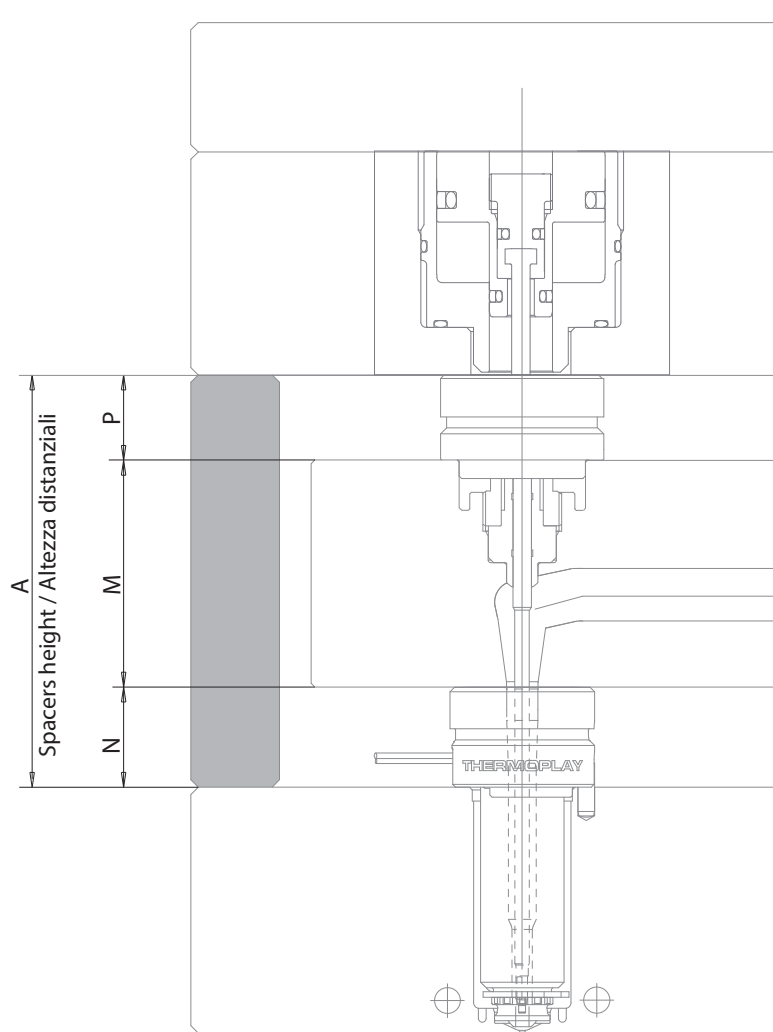
S32-PN

S32-HY

S60-PN

K32-PN

K40-PN



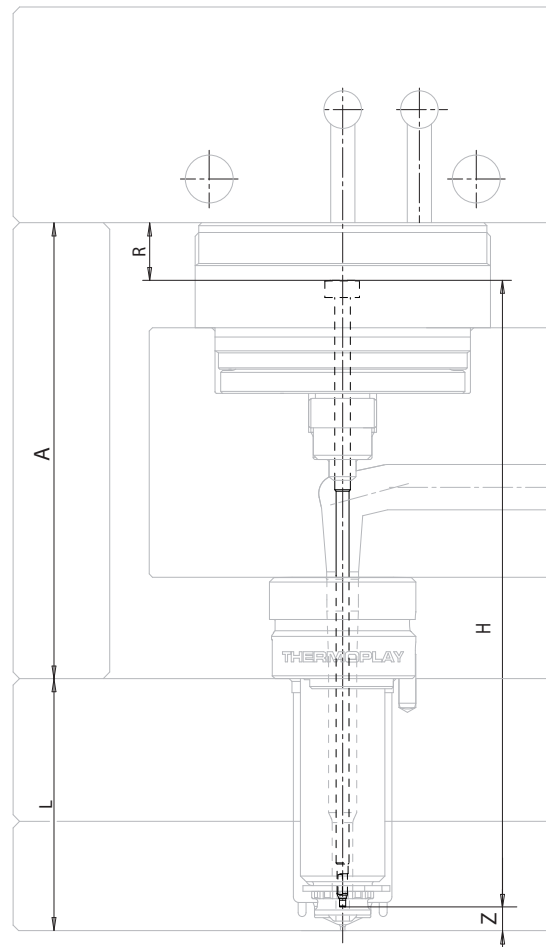
$$A = (N+M+P) + [(N+M+6) \times \Delta t \times K] - 0.05 = \text{mm}$$

A	Spacer height / Altezza distanziali								
	Nozzle type / Tipo ugelli								
	TF12	TF17	TF23	FN32	FN46	TD18	TD22	TD30	DN44
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 / Coeficiente di dilatazione termica dell'acciaio 0.000125								
0.05	Theoretical compression value / Valore teorico di chiusura								



K32-PN

K40-PN



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

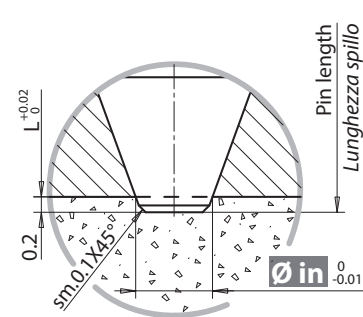
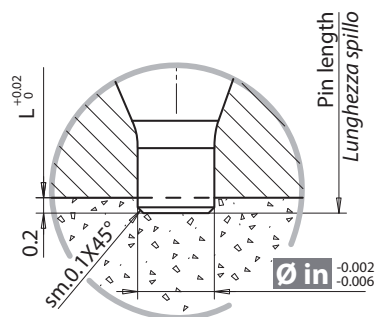
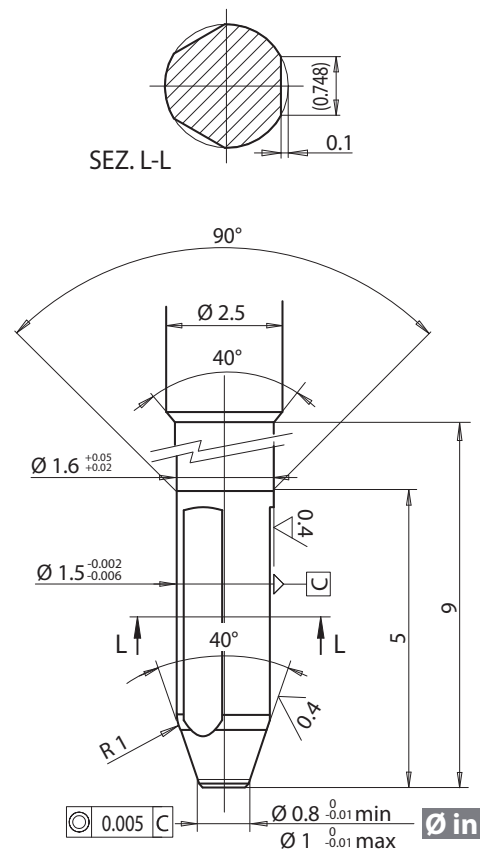
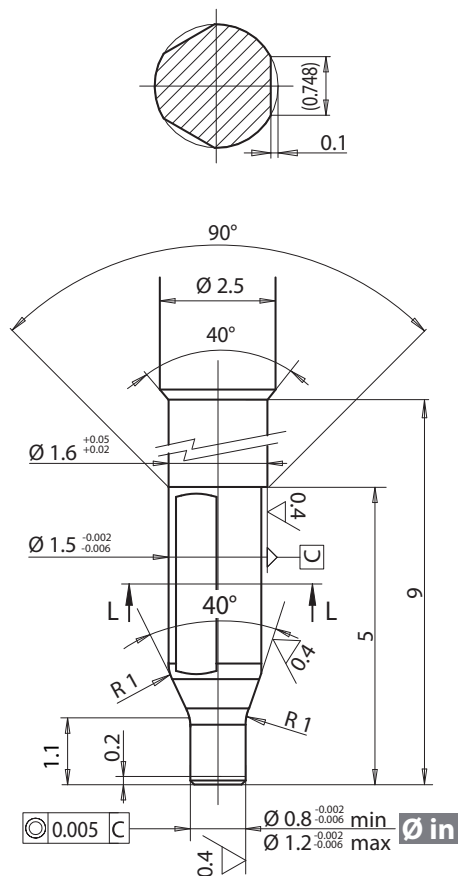
H	Pin length (cold) / Lunghezza spillo a freddo			
L	Nozzle length / Lunghezza ugello			
A	Spacer height (including expansion) / Misura dei distanziali comprensiva della dilatazione per il serraggio			
Valve gate group type / Tipo gruppo otturatore				
	K32PN	K40PN		
R	16	23		
Z	10	16		
Nozzle TIP type / Tipo puntale ugello				
	TF3/3B-TF3D/3DSL A Ø12-17-23-32-46 TD18/22/30-3 - DN44-3	TF17/23-3DSL U	TF32-3DSL U	FN44-3DSL U
N	0.2	0.63	1.02	1.76
k	Coefficient of thermal expansion for steel / Coeficiente di dilatazione termica dell'acciaio 0.000125			
ΔT	Temperature difference between manifold and mold / Differenza di temperatura tra canale caldo e stampo			



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

CILINDRIC

CONICAL



ATTENTION - ATTENZIONE!

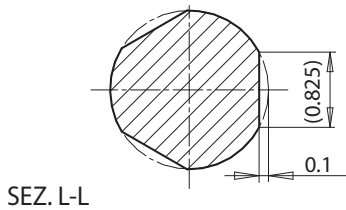
With conical shut off, if pin stroke adjustment or length are not correct, damage can occur to steel in the gate area.
Nella chiusura conica l'errata regolazione della corsa dello spillo o della sua lunghezza potrebbero causare danni alla matrice



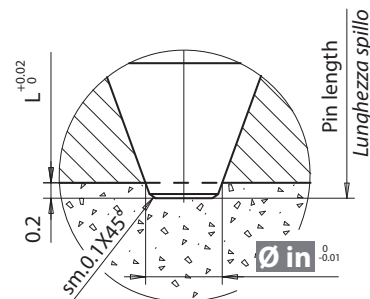
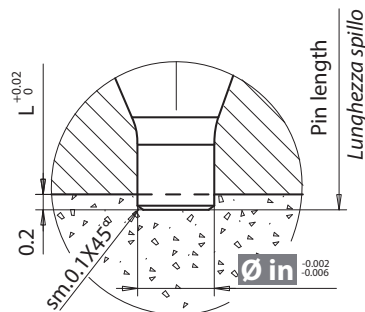
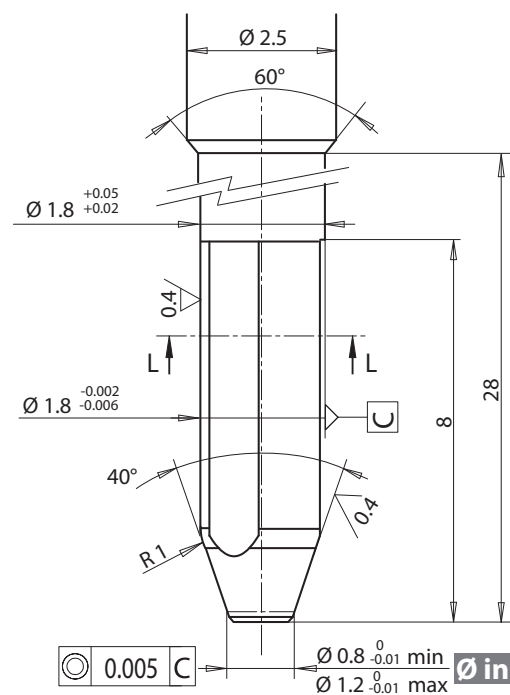
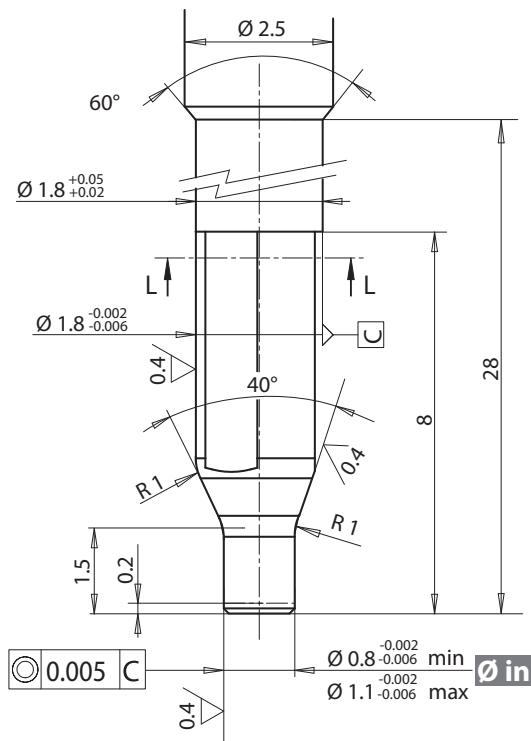
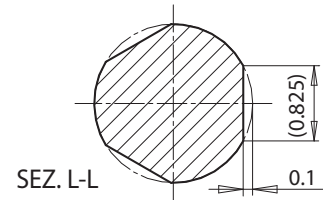
NOZZLE / UGELLO
TD3 Ø18

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

CILINDRIC



CONICAL



ATTENTION - ATTENZIONE!

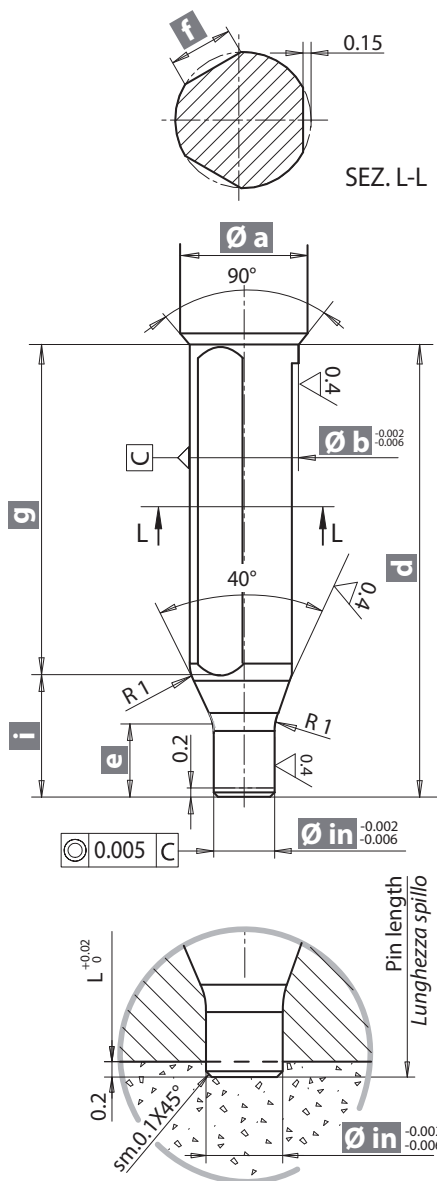
With conical shut off, if pin stroke adjustment or length are not correct, damage can occur to steel in the gate area.
Nella chiusura **conica** l'errata regolazione della corsa dello spillo o della sua lunghezza potrebbero causare danni alla matrice



NOZZLE / UGELLO
TF3-TF3B-TD3

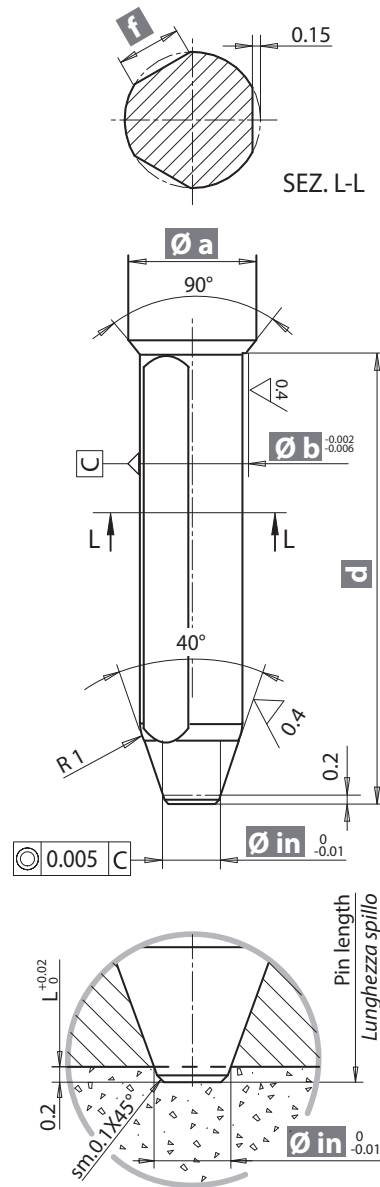
CILINDRIC

(execution customer care - *a cura cliente*)



CONICAL

(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

CILINDRIC

Nozzle type Tipo ugello

TF17	TF23	FN32	FN46	TD22	TD30	DN44	
0.8	0.8	1.6	3.5	0.8	1.6	3.5	Ø in min
1.8	2	3	5.5	1.3	2	4	Ø in max
2.5	2.5	3.3	5.8	2.5	3.3	5.8	Ø a
2.4	2.4	3.2	5.7	2.4	3.2	5.7	Ø b
9	9	9	13	9	9	13	d
1.5	1.5	1.8	2.2	1.5	1.8	2.2	e
1.16	1.16	1.35	1.82	1.16	1.35	1.82	f
-	-	7.7	11.2	-	7.7	11.2	g
-	-	1.3	1.8	-	1.3	1.8	i

CONICAL

Nozzle type Tipo ugello

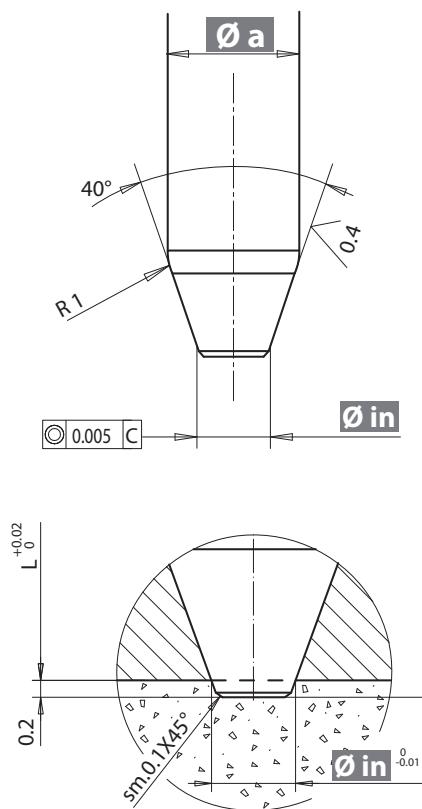
TF17	TF23	FN32	FN46	TD22	TD30	DN44	
0.8	0.8	1.6	3.5	0.8	1.6	3.5	Ø in min
1.3	1.3	2.5	4.5	1.6	2.5	4.5	Ø in max
2.5	2.5	3.3	5.8	2.5	3.3	5.8	Ø a
2.4	2.4	3.2	5.7	2.4	3.2	5.7	Ø b
9	9	9	13	9	9	13	d
-	-	-	-	-	-	-	e
1.16	1.16	1.35	1.82	1.16	1.35	1.82	f
-	-	7.7	11.2	-	7.7	11.2	g
-	-	1.3	1.8	-	1.3	1.8	i



NOZZLE / UGELLO
TF3D-TF3DSLA

CONICAL

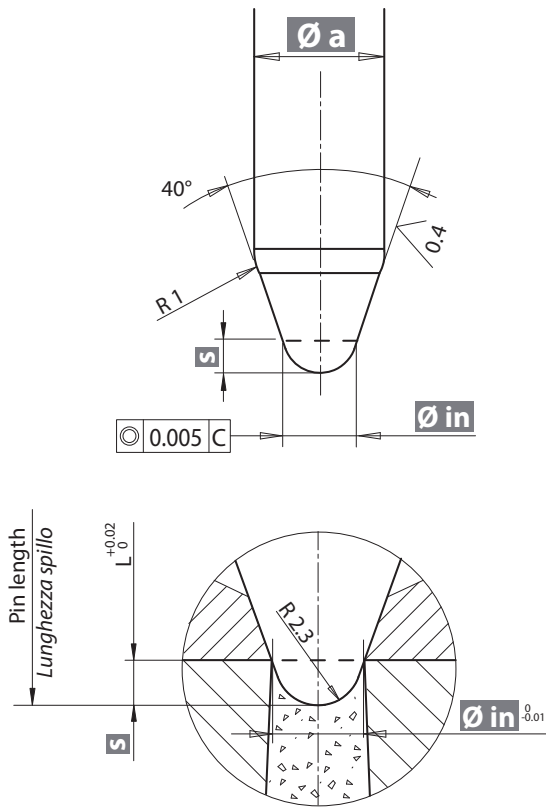
(execution customer care - *a cura cliente*)



NOZZLE / UGELLO
TF3DSL

CONICAL

(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								Nozzle type						
3D				3DSLA				3DSL						
TF17	TF23	FN32	FN46	TF17	TF23	FN32	FN46	TF17	TF23	FN32	FN46			
0.8	1.6	3.5	0.9	1.7	3.5	Ø in	1.3	2.5	3.3	5.8	Ø a			
	1.7	3.6										1.9	3.7	
0.9	1.8	3.7	1.1	2.1	4.1									
	1.9	3.8										1.3	2.3	4.3
1.0	2.0	3.9	2.5	4.5										
	1.1	2.1			4.1							2.5	4.5	
1.2		2.2	4.2	2.5	4.5									
	1.2	2.3	4.3									2.5	4.5	
1.3		2.4	4.4	2.5	4.5									
	1.3	2.5	4.5									2.5	4.5	
2.5		3.3	5.8	2.5	3.3									5.8
--	--	--	--	--	--							s	0.63	1.02