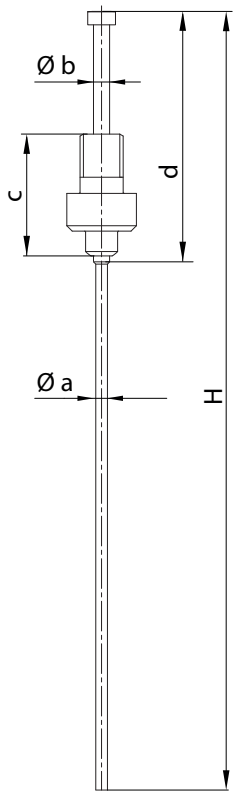


Gruppo spillo - Valve gate pin group

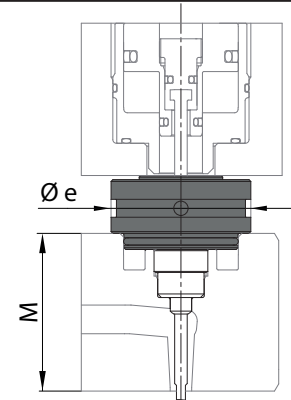


Valve Gate type <i>Tipo gr.ott.</i>	S20 - S28 - S32				K32	
Nozzle type <i>Tipo ugello</i>	TF12 - TF17 - TF23 - TD18 - TD22					
Pin group code <i>Codice gr.spillo</i>	E18330	E20309	E18331	E20310	E18332	E18333
Ø a					Ø 2.5	
Ø b					Ø 3.5	
d	82				57	
c	22.5	37	22.5	37	22.5	
H	280		500		280	500

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		

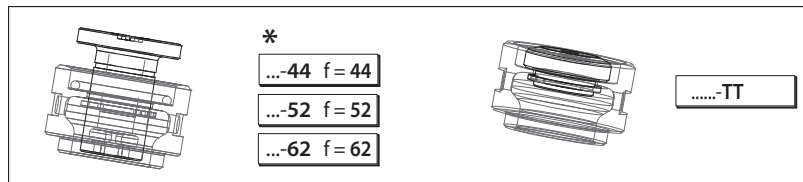
Valve Gate type <i>Tipo gr.ott.</i>	S60 - K40					
Nozzle type <i>Tipo ugello</i>	FN46 - DN44					
Pin group code <i>Codice gr.spillo</i>	E18336			E18337		
Ø a					Ø 5.8	
Ø b					Ø 6	
d					120	
c					30.5	
H	400			600		

Gruppo contrasto - Pressure group

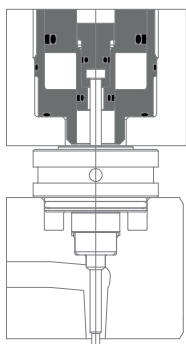


Manifold type <i>Tipo piastra</i>	C - Conventional / Tradizionale					
Valve gate type <i>Tipo gr.otturatore</i>	S20		S28 - S32		S60	
Pressure gr. code <i>Codice gr.contrasto</i>	E20327 - *		E20328 - *		E21474	
Nozzle type <i>Tipo ugello</i>	TFØ12/17/23 - TDØ18/22		TFØ12/17/23/32 TDØ18/22/30		FNØ46 - 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					



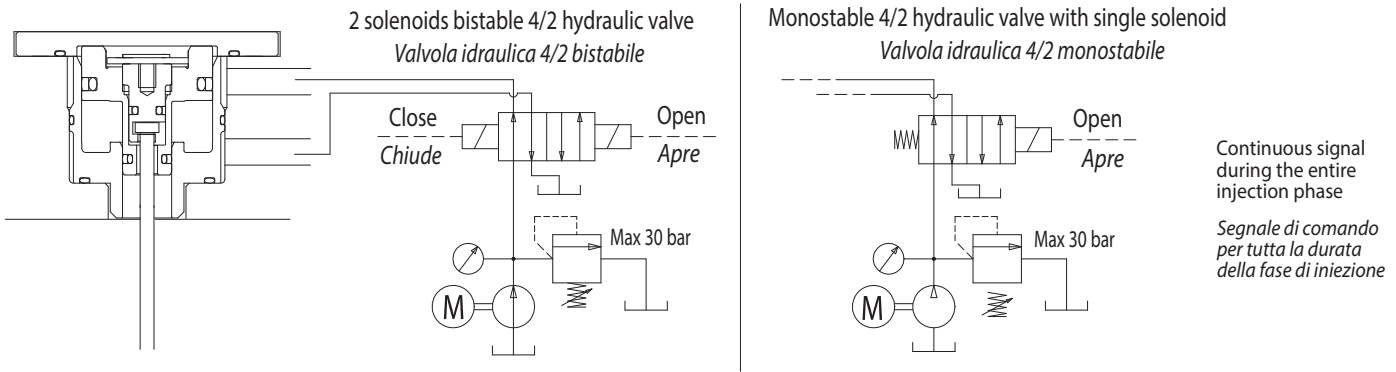
Gruppo otturatore - Valve gate group



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			



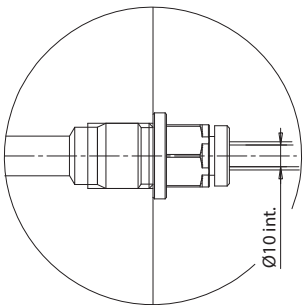
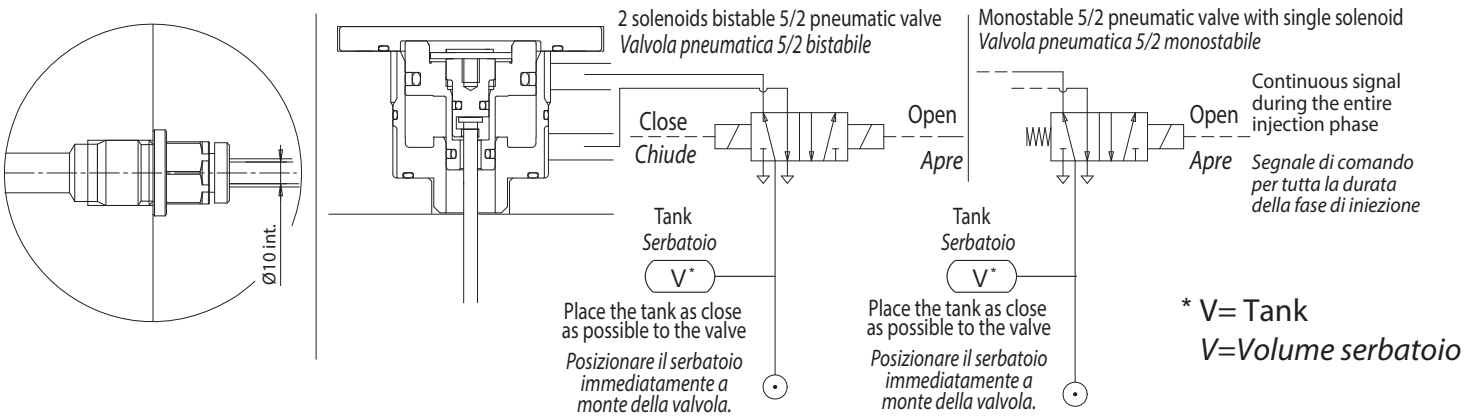
HYDRAULIC OPERATION / AZIONAMENTO IDRAULICO



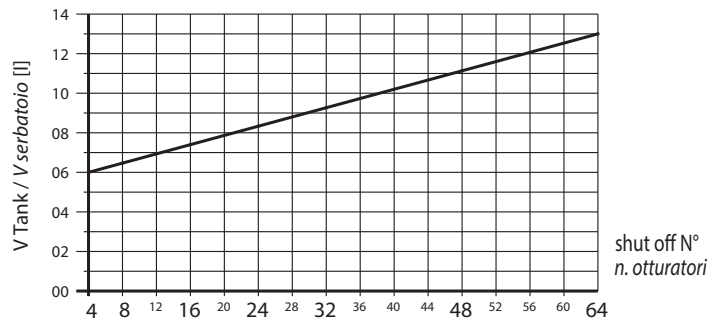
HYDRAULIC OPERATION: 30 bar MAX - FUNZIONAMENTO IDRAULICO MAX 30 bar

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.

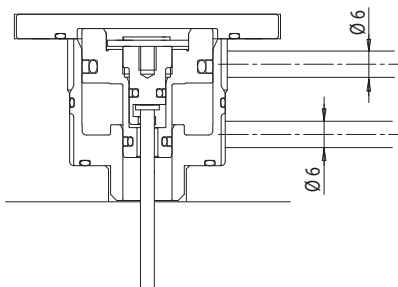
PNEUMATIC OPERATION / AZIONAMENTO PNEUMATICO



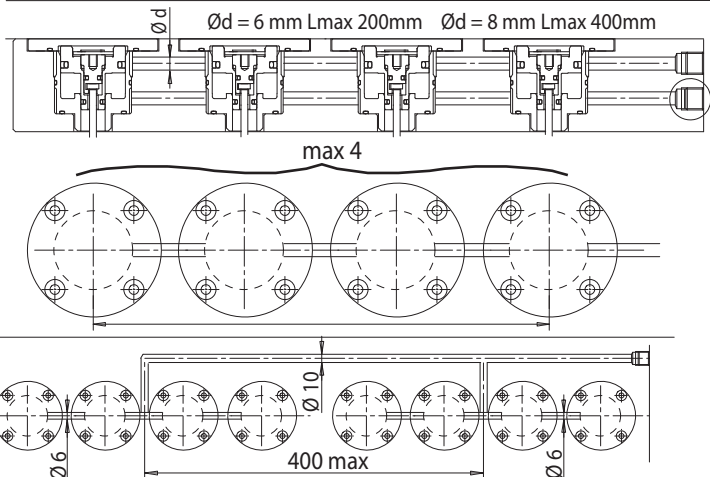
VALVE SIZE DIMENSIONE VALVOLA	SHUT OFF N° n. OTTURATORI	Valve flow rate Portata della valvola
1 → 8		≥ 550 NI/min
9 → 16		≥ 1100 NI/min
17 → 64		≥ 4600 NI/min



1 SHUT OFF GROUPS / 1 OTTURATORE



IN SERIES SHUT OFF GROUPS / OTTURATORI IN SERIE

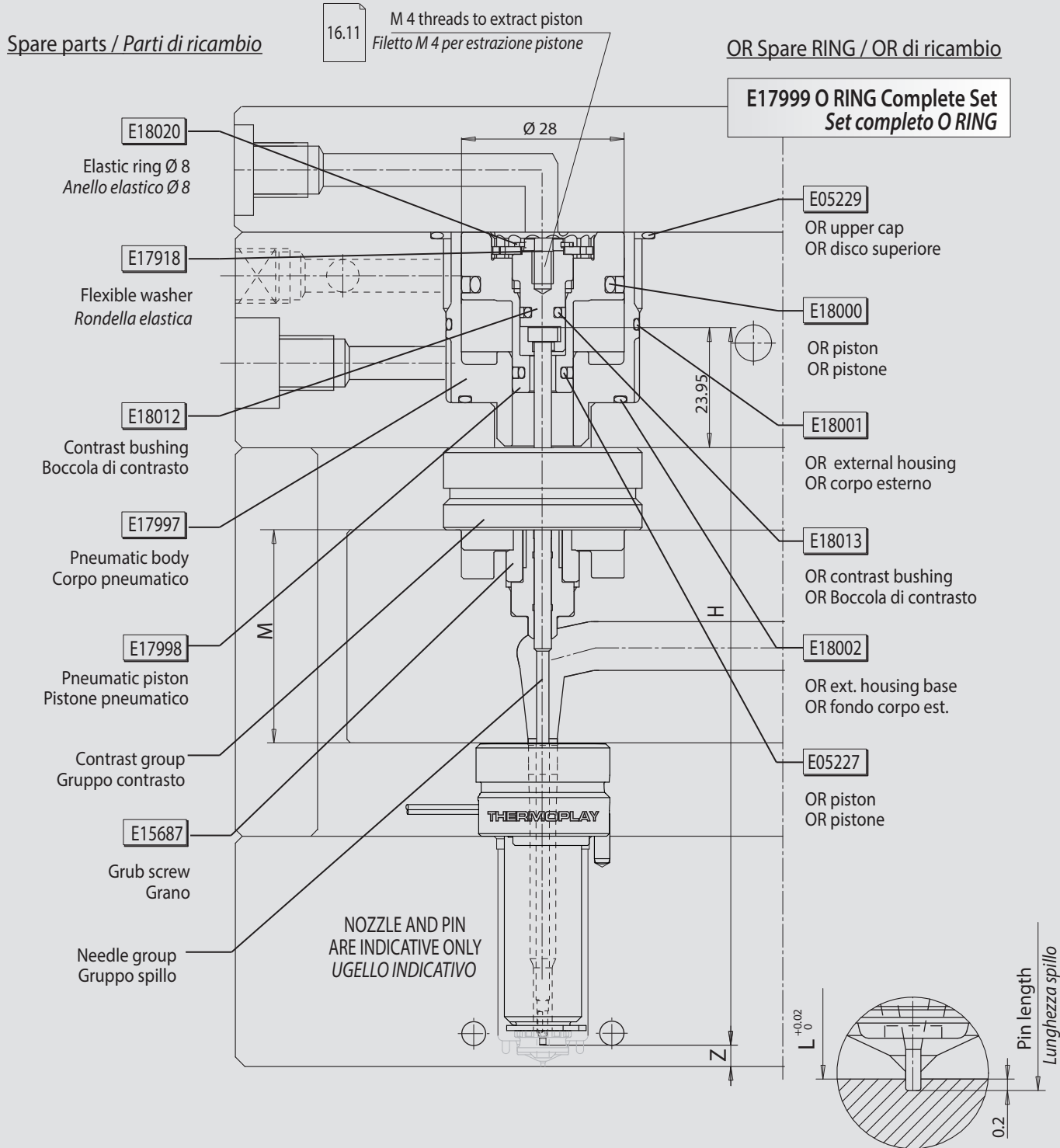


PNEUMATIC OPERATION: 10 bar ADVISED - FUNZIONAMENTO PNEUMATICO CONSIGLIATI 10 bar



S28-PN

"S" TYPE VALVE GATE GROUP - BORE PISTON 28 - PNEUMATIC
GRUPPO OTTURATORE TIPO "S" - ALESAGGIO PISTONE 28 - PNEUMATICO



Z = Pin stroke 10 mm (for TF3Ø 12 stroke 7 mm) / Corsa spillo 10 mm (per TF3Ø 12 corsa 7 mm)

M = Manifold height / Altezza distributore

H = Pin length / Lunghezza spillo

Not suggested for filled resins and technical polymers. All applications subjected to Thermoplay A.E. review
Non indicato per materiali caricati e polimeri tecnici. Tutte le applicazioni sono soggette a verifica in fase di offerta

FOR NOZZLES / PER UGELLI

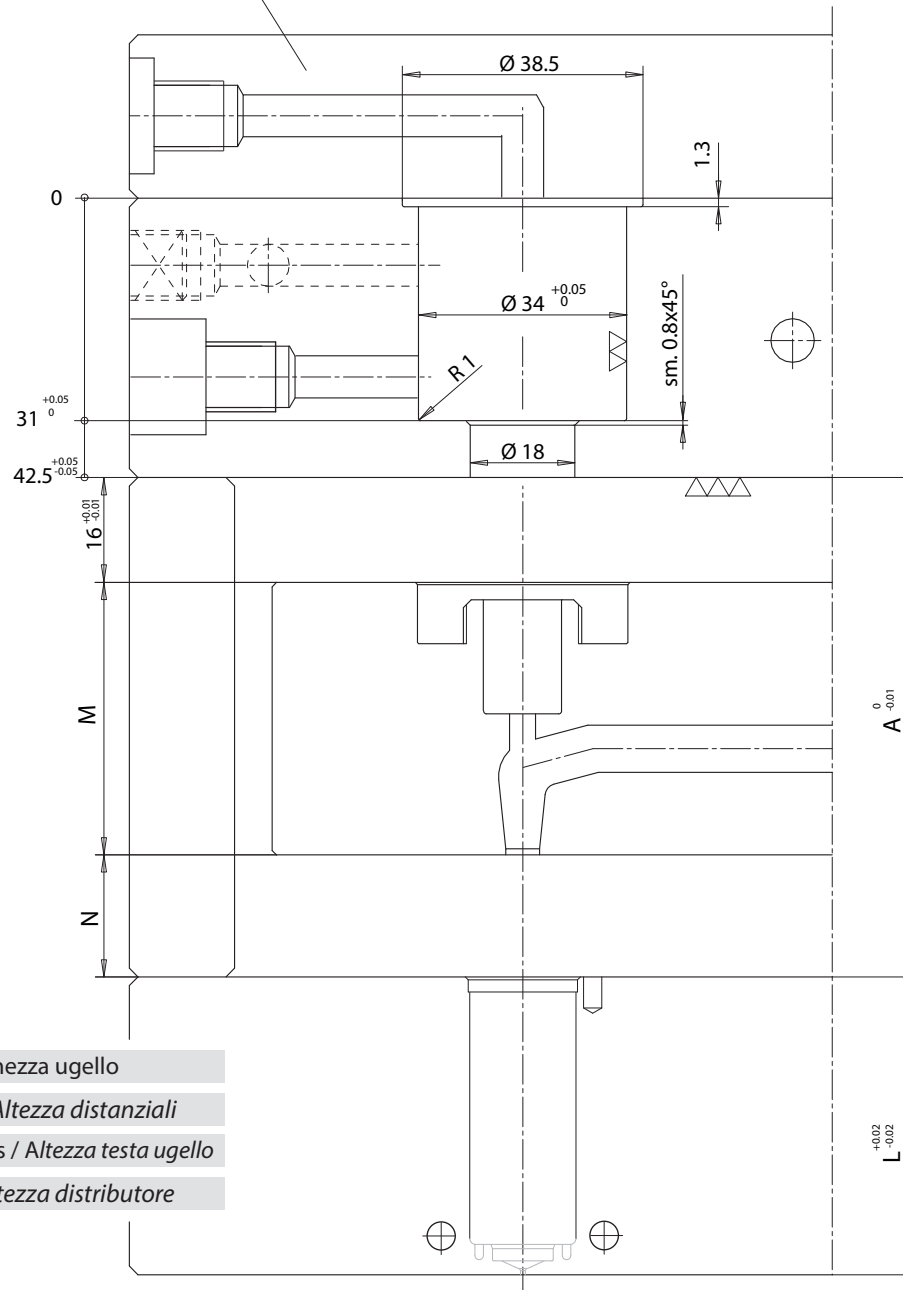
TF3 Ø12 - TF3-TF3B-TF3DSLA-TF3DSLUI Ø17-23 - TD3 Ø18-22



"S" TYPE VALVE GATE GROUP CUT OUT - BORE PISTON 28 - PNEUMATIC
SEDE GRUPPO OTTURATORE TIPO "S" - ALESAGGIO PISTONE 28 - PNEUMATICO

S28-PN

Piastra in acciaio bonificato 110 Kg/mm²
in alternativa acciaio temprato HRc 42-46
Plaque en acier trempé et revenu 110 Kg/mm²
en alternative acier trempé HRc 42-46



L = Nozzle length / Lunghezza ugello

A = Spacers thickness / Altezza distanziali

N = Nozzle head thickness / Altezza testa ugello

M = Manifold height / Altezza distributore

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.

Not suggested for filled resins and technical polymers. All applications subjected to Thermoplay A.E. review
Non indicato per materiali caricati e polimeri tecnici. Tutte le applicazioni sono soggette a verifica in fase di offerta

FOR NOZZLES / PER UGELLI

TF3 Ø12 - TF3-TF3B-TF3DSL A-TF3DSL U Ø17-23- TD3 Ø18-22



S20-HY

S28-PN

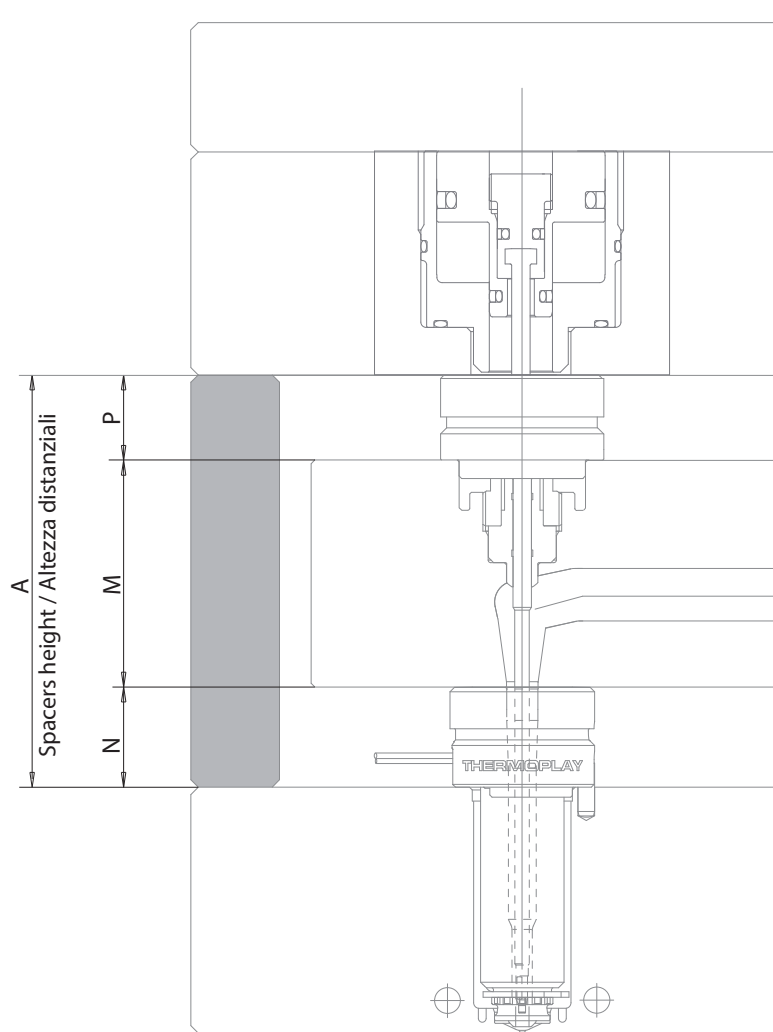
S32-PN

S32-HY

S60-PN

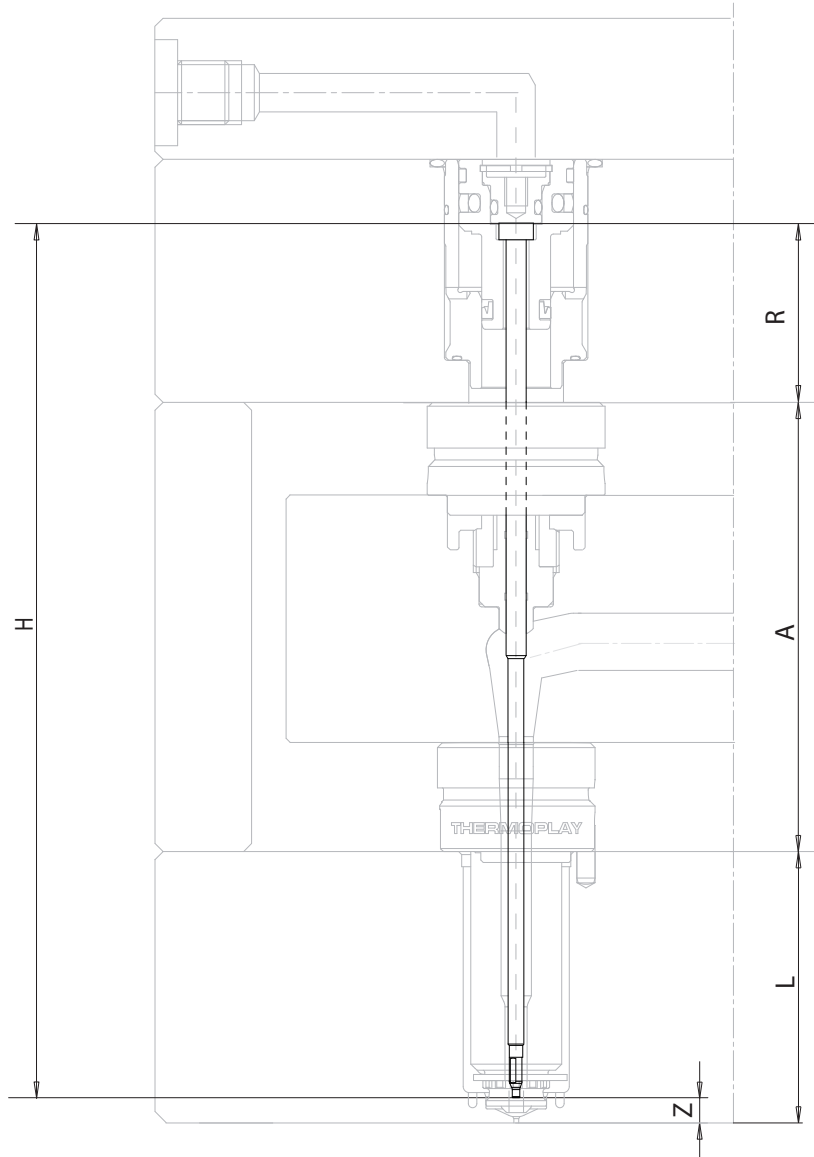
K32-PN

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									



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

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

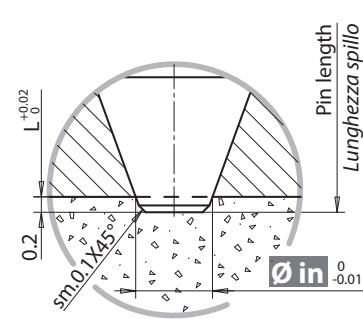
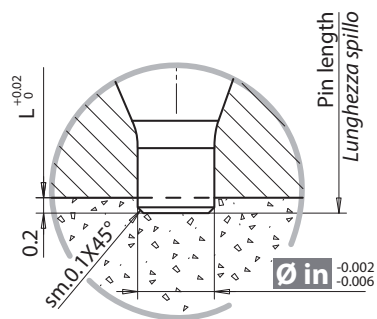
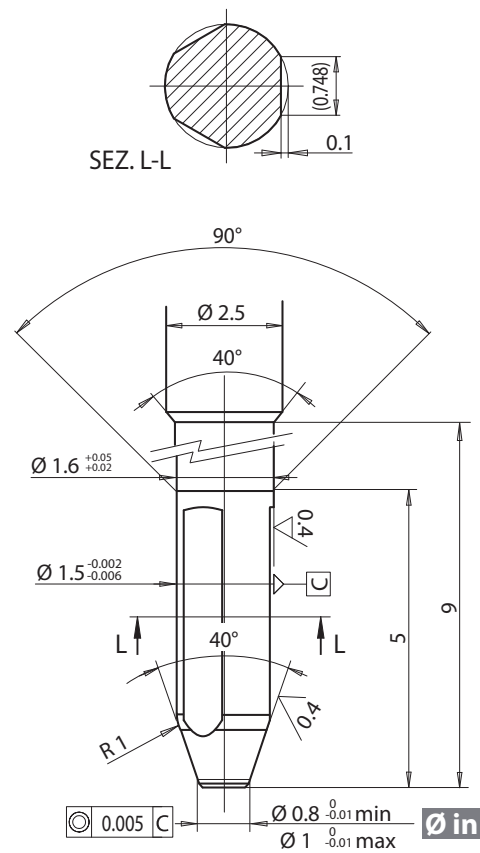
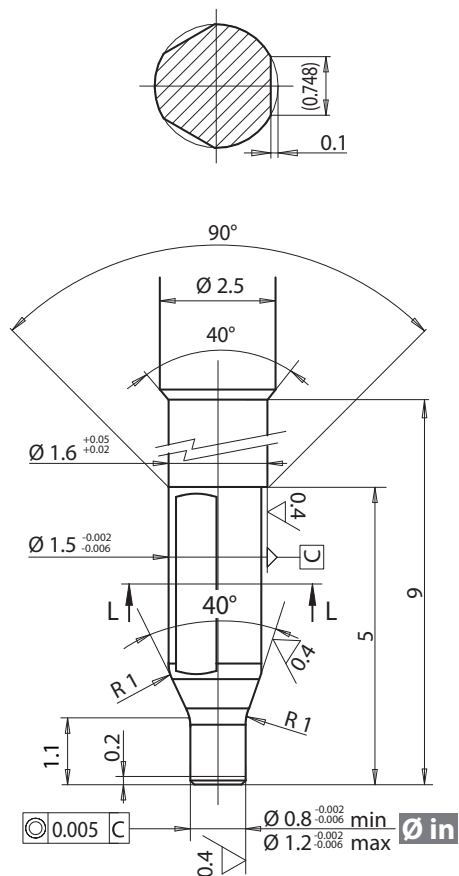
H	Pin length (cold) / Lunghezza spillo a freddo			
L	Nozzle length / Lunghezza ugello			
A	Spacer height (including expansion) / Misura dei distanziali comprensiva della dilatazione per il serraggio			
	Valve gate group type / Tipo gruppo otturatore			
	S20HY	S28PN	S32HY	S32PN
R	31.4	23.95		35.45
Z	10			16
	Nozzle TIP type / Tipo puntale ugello			
	TF3/3B-TF3D/3DSL A all diameters TD18/22/30 - 3 - DN44-3		TF17/23-FN32 - 3DSL U	FN46-3DSL 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			



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

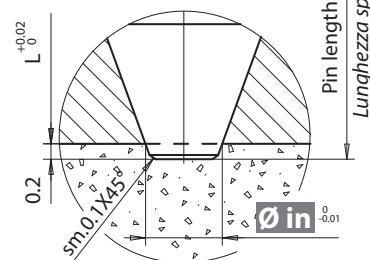
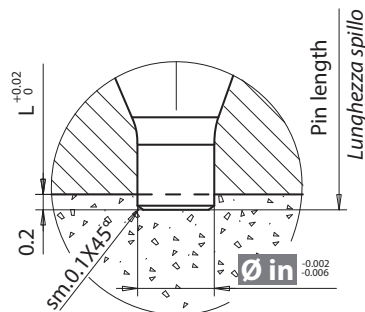
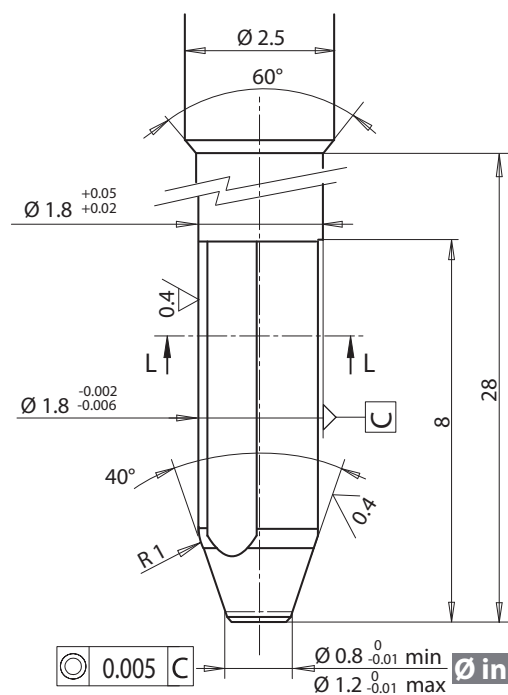
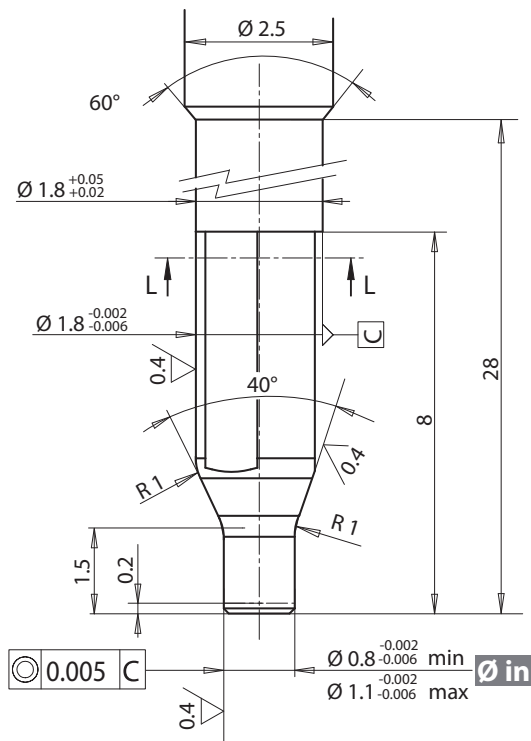
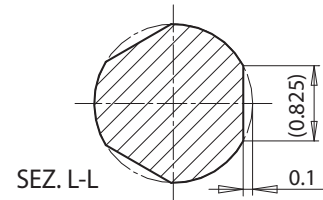
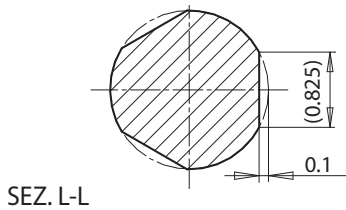


NOZZLE / UGELLO
TD3 Ø18

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

CILINDRIC

CONICAL



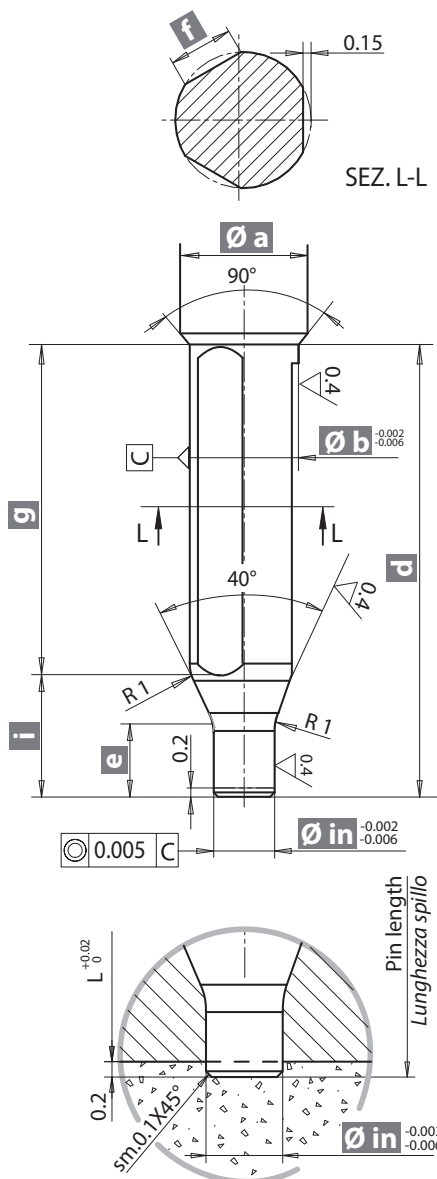
ATTENTION - ATTENZIONE!

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



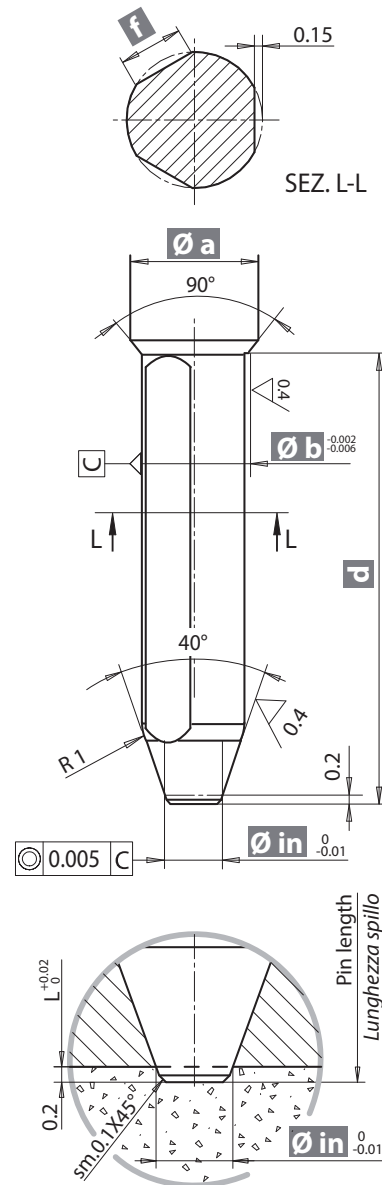
CILINDRIC

(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 <i>Tipo ugello</i>						
TF17	TF23	FN32	FN46	TD22	TD30	DN44
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

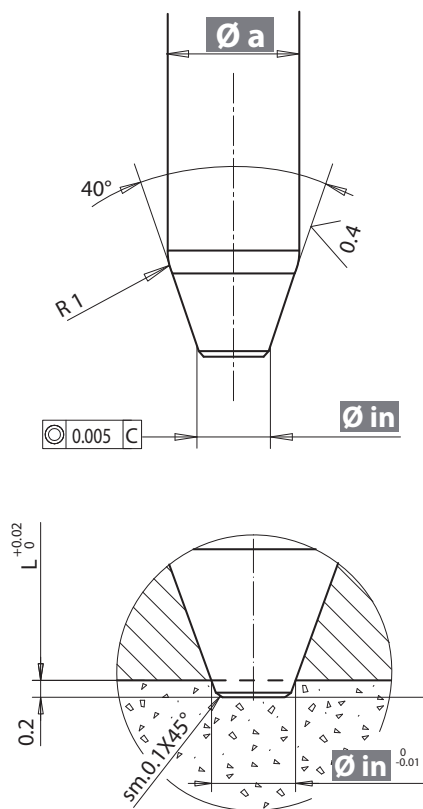
CONICAL						
Nozzle type <i>Tipo ugello</i>						
TF17	TF23	FN32	FN46	TD22	TD30	DN44
0.8	0.8	1.6	3.5	0.8	1.6	3.5
1.3	1.3	2.5	4.5	1.6	2.5	4.5
2.5	2.5	3.3	5.8	2.5	3.3	5.8
2.4	2.4	3.2	5.7	2.4	3.2	5.7
9	9	9	13	9	9	13
-	-	-	-	-	-	-
1.16	1.16	1.35	1.82	1.16	1.35	1.82
-	-	7.7	11.2	-	7.7	11.2
-	-	1.3	1.8	-	1.3	1.8



NOZZLE / UGELLO
TF3D-TF3DSLA

CONICAL

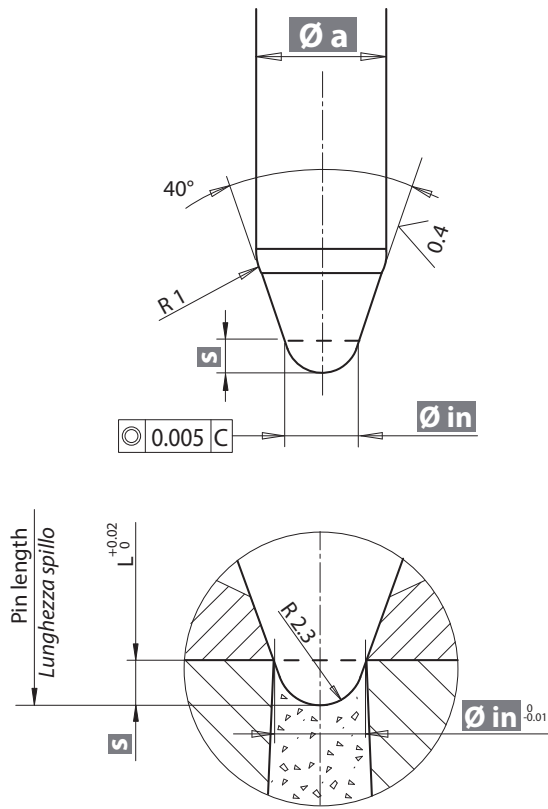
(execution customer care - *a cura cliente*)



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		1.3	2.5	3.3	5.8
	1.7	3.6			1.9	3.7					
0.9	1.8	3.7		1.1	2.1	4.1		2.5	3.3	5.8	Ø a
	1.9	3.8			2.3	4.3					
1.0	2.0	3.9		1.3	2.5	4.5		0.63	1.02	1.76	s
	2.1	4.0									
1.1	2.2	4.1									
	2.3	4.2									
1.2	2.4	4.3									
	2.5	4.4									
1.3		4.5									
2.5	3.3	5.8		2.5	3.3	5.8	Ø a	2.5	3.3	5.8	
--	--	--		--	--	--	s	0.63	1.02	1.76	