CATALOGO GENERALE

raccorderia pneumatica • pneumatic fittings

technology & innovation

PNEUMAX®

SCHEDA TECNICA REGOLATORI DI FLUSSO

I Regolatori di flusso delle nostra serie RAP-TRAP-LRAP sono realizzati in Italia, a garanzia di elevati standard di qualità secondo le normative ISO di riferimento, e rispondono alle seguenti specifiche tecniche e applicative:

FLUIDO
Aria compressa, acqua fino a 100 °C (per altri fluidi contattare il nostro UT)

APPLICAZIONI
In abbinamento con valvole e cilindri Pneumax nell'ambito di applicazioni pneumatiche, secondo normativa DIN 3861-3870

TEMPERATURE E PRESSIONI
Le temperature e le pressioni dipendono generalmente dalle caratteristiche del tubo impiegato

FILETTATURE
BSP cilindrica UNI-ISO 228

MATERIALI UTILIZZATI
Ottone nichelato UNI EN 12164 CW614N (corpo RAP e colonnina di regolazione)
POM copolimero ISO1043-1 (corpo TRAP, spintore, distanziale, sottomolla)
Lega leggera ADC12 (corpo LRAP)
Acciaio Inox AISI 304 (pinza)
NBR 70 DWGV-EN549 UL157 (guarnizioni tenuta)

"SPEED CONTROLLERS" SERIES TECHNICAL SHEET

The RAP-TRAP-LRAP speed controlers series are produced in Italy according to the reference ISO norms as warranty of high quality level and answer to the followings technical specifications and applications:

FLUIDS
Compressed air, water up to 100 °C (for different fluid pls contact our Technical Dept.)

APPLICATIONS
In combination with valves and cylinders Pneumax for pneumatic applications, according to DIN 3861-3870 norms

TEMPERATURES AND PRESSURES
Temperatures and pressures usually depend by the technical features of the employed tubes

THREAD TYPE
BSP paralell UNI-ISO 228

MATERIALI UTILIZZATI
Nickel plated brass UNI EN 12164 CW614N (RAP body and regulation stem)
POM copolymer ISO1043-1 (TRAP body, sleeve, collar and back ring)
Light alloy ADC12 (LRAP body)
Stainless steel AISI 304 (spring)
NBR 70 DWGV-EN549 UL157 (seals)

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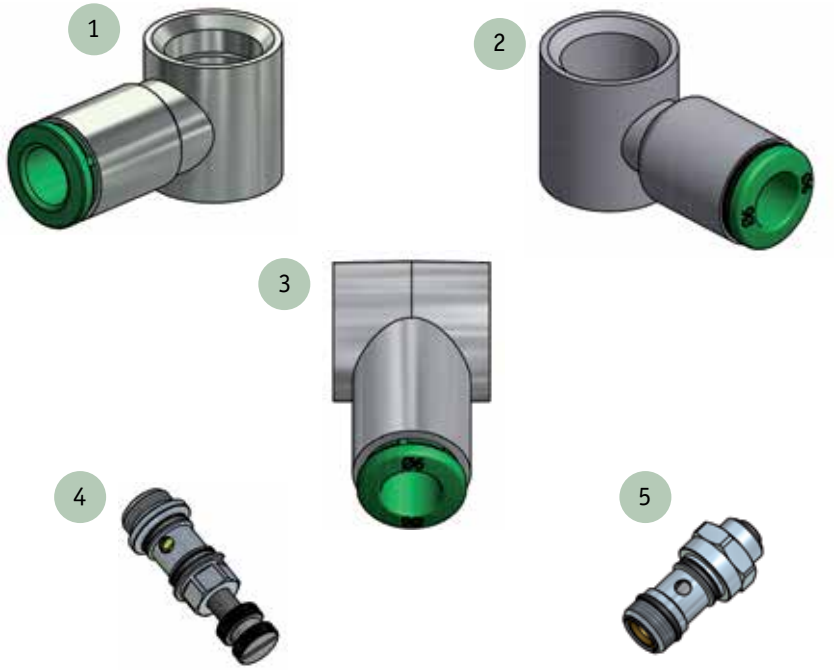
1 **RAP**
Anello girevole - Swivel banjo “13”

2 **TECNO-RAP**
Anello girevole - Swivel banjo “T13”

3 **L-RAP**
Anello girevole - Swivel banjo “L13”

4 **Asta di regolazione con pomolo**
Adjusting stem with knob
28A (per valvola - for valve)
29A (per cilindro - for cylinder)
30A (bidirezionale - bidirectional)

5 **Asta di regolazione con taglio a cacciavite**
Adjusting stem with screwdriver cut
28A (per valvola - for valve)
29A (per cilindro - for cylinder)
30A (bidirezionale - bidirectional)



CODIFICA DEI REGOLATORI DI FLUSSO

A	B	C	D	E
	28	04	18	
T	29	06	18	P
L	30	08	14	

ESEMPI DI ORDINAZIONE

A =		VERSIONE CON CORPO IN OTTONE
	T	VERSIONE CON CORPO IN TECNOPOLIMERO
	L	VERSIONE CON CORPO IN LEGA LEGGERA
B =	28	PER VALVOLA
	29	PER CILINDRO
	30	BIDIREZIONALE
C =	04	PER TUBO DIAM. 4 MM
	06	PER TUBO DIAM. 6 MM
	08	PER TUBO DIAM. 8 MM
	10	PER TUBO DIAM. 10 MM
	12	PER TUBO DIAM. 12 MM
D =	M5	FILETTATURA M5
	18	FILETTATURA 1/8
	14	FILETTATURA 1/4
	38	FILETTATURA 3/8
	12	FILETTATURA 1/2
E =		ORIENTABILE CON TAGLIO A CACCIAVITE
	P	GIREVOLE CON POMELLO DI REGOLAZIONE

CODING OF FLOW REGULATORS

A	B	C	D	E
	28	04	18	
T	29	06	18	P
L	30	08	14	

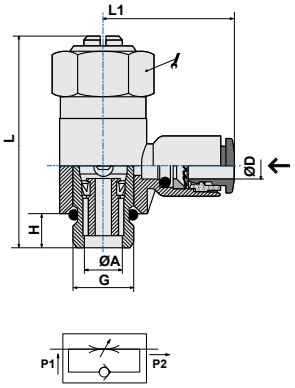
ORDERING EXAMPLES

A =		BRASS BODY VERSION
	T	TECHNOPOLYMER VERSION
	L	LIGHT ALLOY VERSION
B =	28	FOR VALVE
	29	FOR CILINDER
	30	BIDIRECTIONAL
C =	04	FOR TUBE DIAM. 4 MM
	06	FOR TUBE DIAM. 6 MM
	08	FOR TUBE DIAM. 8 MM
	10	FOR TUBE DIAM. 10 MM
	12	FOR TUBE DIAM. 12 MM
D =	M5	THREAD M5
	18	THREAD 1/8
	14	THREAD 1/4
	38	THREAD 3/8
	12	THREAD 1/2
E =		ORIENTABLE TYPE WITH SCREWDRIVER CUT
	P	SWIVEL TYPE WITH ADJUSTING KNOB

dimensioni di ingombro e informazioni tecniche sono fornite a puro titolo informativo e possono essere soggette a modifica senza preavviso

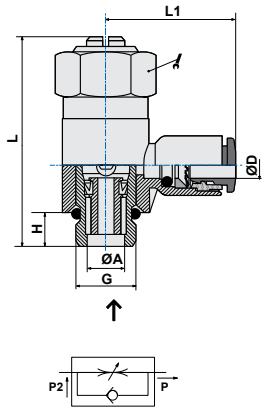
ART. 28 Regolatore di flusso unidirezionale per valvola
Unidirectional flow regulator for valve

CODICE	ØD	G	ØA	H	L1	L		
2804M5	4	M5	1,9	4,0	19,5	21,5	10	25
280418	4	1/8	5,5	5,5	21,1	34,0	14	25
280618	6	1/8	5,5	5,5	24,3	34,0	14	25
280614	6	1/4	6,0	6,5	25,5	42,0	17	25
280818	8	1/8	5,5	5,5	24,8	34,0	14	25
280814	8	1/4	6,0	6,5	26,5	42,0	17	25
280838	8	3/8	8,0	7,5	28,0	52,0	20	10
281014	10	1/4	6,0	6,5	28,4	42,0	17	25
281038	10	3/8	8,0	7,5	29,9	52,0	20	10
281238	12	3/8	8,0	7,5	31,4	52,0	20	10



ART. 29 Regolatore di flusso unidirezionale per cilindro
Unidirectional flow regulator for cylinder

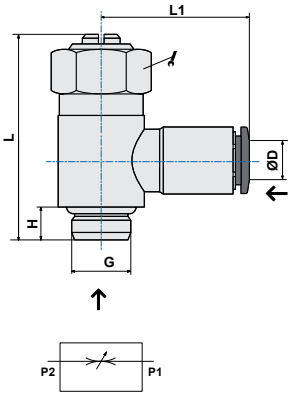
CODICE	ØD	G	ØA	H	L1	L		
2904M5	4	M5	1,9	4,0	19,5	21,5	10	25
290418	4	1/8	5,0	5,5	21,1	34,0	14	25
2906M5	6	M5	1,9	4,0	22,5	21,5	10	25
290618	6	1/8	5,0	5,5	24,3	34,0	14	25
290614	6	1/4	6,0	6,5	25,5	42,0	17	25
290818	8	1/8	5,0	5,5	24,8	34,0	14	25
290814	8	1/4	6,0	6,5	26,5	42,0	17	25
290838	8	3/8	6,5	7,5	28,0	52,0	20	10
291014	10	1/4	6,0	6,5	28,4	42,0	17	25
291038	10	3/8	6,5	7,5	29,9	52,0	20	10
291238	12	3/8	6,5	7,5	31,4	52,0	20	10
291212	12	1/2	10,0	9	34,9	61,0	26	10
291412	14	1/2	10,0	9	35,5	61,0	26	10



ART. 30 Regolatore di flusso bidirezionale
Bidirectional flow regulator

CODICE	ØD	G	H	L1	L		
300418	4	1/8	5,5	21,1	34	14	25
300618	6	1/8	5,5	24,3	34	14	25
300614	6	1/4	6,5	25,5	42	17	25
300818	8	1/8	5,5	24,8	34	14	25
300814	8	1/4	6,5	26,5	42	17	25
300838	8	3/8	7,5	28,0	52	20	10
301014	10	1/4	6,5	28,4	42	17	25
301038	10	3/8	7,5	29,9	52	20	10
301238	12	3/8	7,5	31,4	52	20	10
*301212	12	1/2	9	34,9	61	26	10
*301412	14	1/2	9	35,5	61	26	10

* con rondelle in pastica
* with plastic washer



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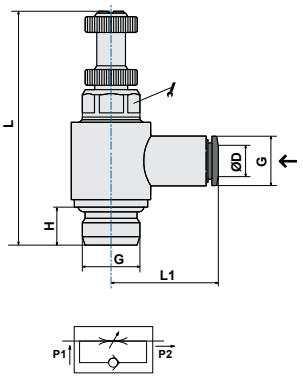
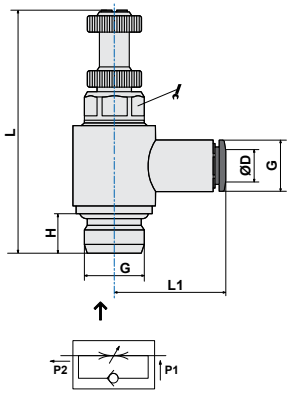
ART. 28P Regolatore di flusso per valvola girevole
Swivel flow regulator for valve

CODICE	ØD	G	H	L	L1		
2804M5P	4	5	4	19,5	33,7	8	25
280418P	4	1/8	5,5	43,0	21,1	9	25
280618P	6	1/8	5,5	43,0	24,3	9	25
280818P	8	1/8	5,5	43,0	24,8	9	25
280614P	6	1/4	6,5	50,0	25,5	12	25
280814P	8	1/4	6,5	50,0	26,5	12	25
281014P	10	1/4	6,5	50,0	28,4	12	25



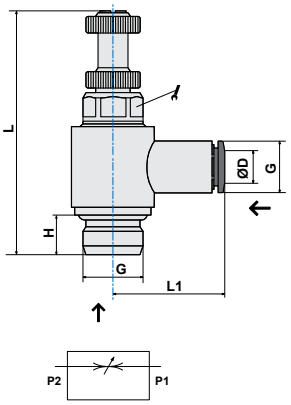
ART. 29P Regolatore di flusso per cilindro girevole
Swivel flow regulator for cylinder

CODICE	ØD	G	H	L	L1		
2904M5P	4	M5	4	19,5	33,7	8	25
290418P	4	1/8	5,5	43,0	21,1	9	25
2906M5P	4	M5	4	22,0	33,7	8	25
290618P	6	1/8	5,5	43,0	24,3	9	25
290818P	8	1/8	5,5	43,0	24,8	9	25
290614P	6	1/4	6,5	50,0	25,5	12	25
290814P	8	1/4	6,5	50,0	26,5	12	25
291014P	10	1/4	6,5	50,0	28,4	12	25



ART. 30P Regolatore di flusso bidirezionale
Bidirectional flow regulator

CODICE	ØD	G	H	L	L1		
300418P	4	1/8	5,5	43	21,1	9	25
300618P	6	1/8	5,5	43	24,3	9	25
300818P	8	1/8	5,5	43	24,8	9	25
300614P	6	1/4	6,5	50	25,5	12	25
300814P	8	1/4	6,5	50	26,5	12	25
301014P	10	1/4	6,5	50	28,4	12	25



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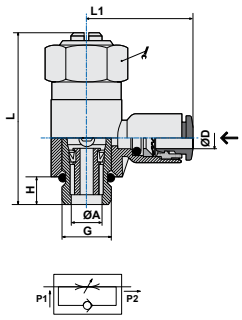
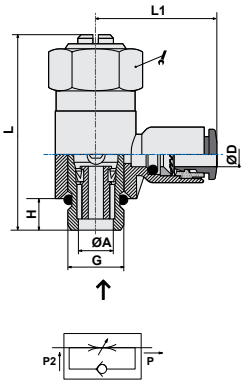
ART. L28 Regolatore di flusso unidirezionale per valvola
Unidirectional flow regulator for valve

CODICE	ØD	G	ØA	H	L1	L		
L280418	4	1/8	5,5	5,5	21,1	34,0	14	25
L280618	6	1/8	5,5	5,5	24,3	34,0	14	25
L280614	6	1/4	6,0	6,5	25,5	42,0	17	25
L280818	8	1/8	5,5	5,5	24,8	34,0	14	25
L280814	8	1/4	6,0	6,5	26,5	42,0	17	25



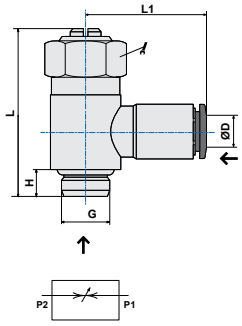
ART. L29 Regolatore di flusso unidirezionale per cilindro
Unidirectional flow regulator for cylinder

CODICE	ØD	G	ØA	H	L1	L		
L290418	4	1/8	5,0	5,5	21,1	34,0	14	25
L290618	6	1/8	5,0	5,5	24,3	34,0	14	25
L290614	6	1/4	6,0	6,5	25,5	42,0	17	25
L290818	8	1/8	5,0	5,5	24,8	34,0	14	25
L290814	8	1/4	6,0	6,5	26,5	42,0	17	25



ART. L30 Regolatore di flusso bidirezionale
Bidirectional flow regulator

CODICE	ØD	G	H	L1	L		
L300418	4	1/8	5,5	21,1	34	14	25
L300618	6	1/8	5,5	24,3	34	14	25
L300614	6	1/4	6,5	25,5	42	17	25
L300818	8	1/8	5,5	24,8	34	14	25
L300814	8	1/4	6,5	26,5	42	17	25



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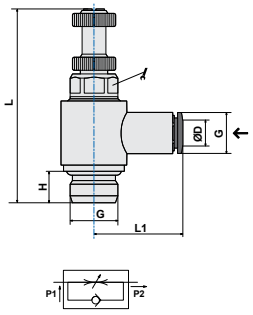
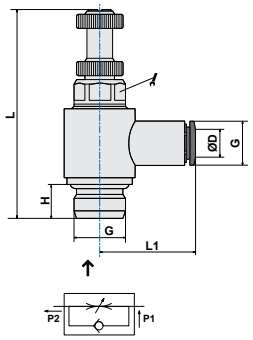
ART. L28P Regolatore di flusso per valvola girevole
Swivel flow regulator for valve

CODICE	ØD	G	H	L	L1		
L280418P	4	1/8	5,5	43,0	21,1	9	25
L280618P	6	1/8	5,5	43,0	24,3	9	25
L280818P	8	1/8	5,5	43,0	24,8	9	25
L280614P	6	1/4	6,5	50,0	25,5	12	25
L280814P	8	1/4	6,5	50,0	26,5	12	25



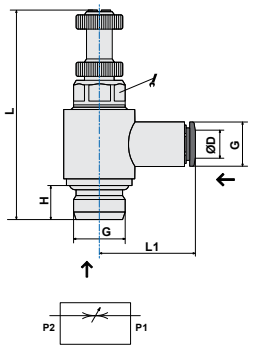
ART. L29P Regolatore di flusso per cilindro girevole
Swivel flow regulator for cylinder

CODICE	ØD	G	H	L	L1		
L290418P	4	1/8	5,5	43,0	21,1	9	25
L290618P	6	1/8	5,5	43,0	24,3	9	25
L290818P	8	1/8	5,5	43,0	24,8	9	25
L290614P	6	1/4	6,5	50,0	25,5	12	25
L290814P	8	1/4	6,5	50,0	26,5	12	25



ART. L30P Regolatore di flusso bidirezionale
Bidirectional flow regulator

CODICE	ØD	G	H	L	L1		
L300418P	4	1/8	5,5	43	21,1	9	25
L300618P	6	1/8	5,5	43	24,3	9	25
L300818P	8	1/8	5,5	43	24,8	9	25
L300614P	6	1/4	6,5	50	25,5	12	25
L300814P	8	1/4	6,5	50	26,5	12	25



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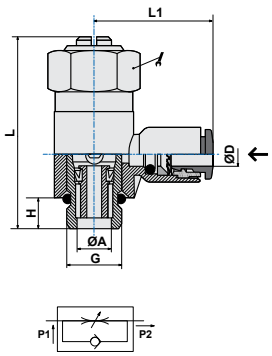
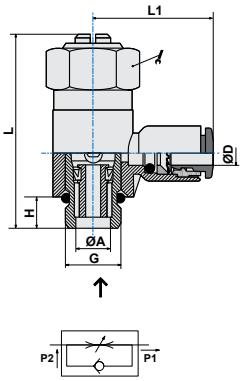
ART. T28 Regolatore di flusso unidirezionale per valvola
Unidirectional flow regulator for valve

CODICE	ØD	G	ØA	H	L1	L		
T2804M5	4	M5	2,0	4	19,0	22,5	8	25
T280418	4	1/8	5,0	5,5	21,1	34,0	14	25
T2806M5	6	M5	2,0	4	22,0	22,5	8	25
T280618	6	1/8	5,0	5,5	24,3	34,0	14	25
T280614	6	1/4	6,0	6,5	25,5	42,0	17	25
T280818	8	1/8	5,0	5,5	24,8	34,0	14	25
T280814	8	1/4	6,0	6,5	26,5	42,0	17	25
T280838	8	3/8	6,5	7,5	28,0	52,0	20	10
T281014	10	1/4	6,0	6,5	28,4	42,0	17	25
T281038	10	3/8	6,5	7,5	29,9	52,0	20	10
T281238	12	3/8	6,5	7,5	31,4	52,0	20	10



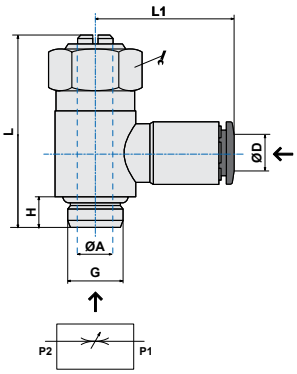
ART. T29 Regolatore di flusso unidirezionale per cilindro
Unidirectional flow regulator for cylinder

CODICE	ØD	G	ØA	H	L1	L		
T2904M5	4	M5	2,0	4	19,0	22,5	8	25
T290418	4	1/8	5,0	4	21,1	34,0	14	25
T2906M5	6	M5	2,0	4	22,0	22,5	8	25
T290618	6	1/8	5,0	5,5	24,3	34,0	14	25
T290614	6	1/4	6,0	6,5	25,5	42,0	17	25
T290818	8	1/8	5,0	5,5	24,8	34,0	14	25
T290814	8	1/4	6,0	6,5	26,5	42,0	17	25
T290838	8	3/8	6,5	7,5	28,0	52,0	20	10
T291014	10	1/4	6,0	6,5	28,4	42,0	17	25
T291038	10	3/8	6,5	7,5	29,9	52,0	20	10
T291012	10	1/2	10,0	9	30,0	61,0	26	10
T291238	12	3/8	6,5	7,5	31,4	52,0	20	10
T291212	12	1/2	10,0	9	34,9	61,0	26	10



ART. T30 Regolatore di flusso bidirezionale
Bidirectional flow regulator

CODICE	ØD	G	ØA	H	L1	L		
T3004M5	4	M5	2,0	4	19,0	22,5	8	25
T300418	4	1/8	5,0	4	21,1	34,0	14	25
T3006M5	6	M5	2,0	4	22,0	22,5	8	5
T300618	6	1/8	5,0	5,5	24,3	34,0	14	25
T300614	6	1/4	6,0	6,5	25,5	42,0	17	25
T300818	8	1/8	5,0	5,5	24,8	34,0	14	25
T300814	8	1/4	6,0	6,5	26,5	42,0	17	25
T300838	8	3/8	6,5	7,5	28,0	52,0	20	10
T301014	10	1/4	6,0	6,5	28,4	42,0	17	25
T301038	10	3/8	6,5	7,5	29,9	52,0	20	10
T301238	12	3/8	6,5	7,5	31,4	52,0	20	10
T301212	12	1/2	10,0	9	34,9	61,0	26	10



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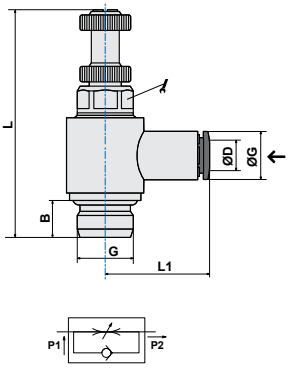
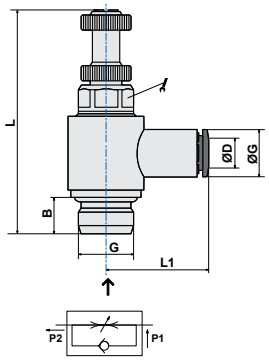
ART. T28P Regolatore di flusso unidirezionale per valvola
Unidirectional flow regulator for valve

CODICE	ØD	G	B	L	L1			
T2804M5P	4	M5	4	34	19,0		8,0	25
T280418P	4	1/8	5,5	43	21,1		9,0	25
T2806M5P	6	M5	4	34	22,0		8,0	25
T280618P	6	1/8	5,5	43	24,3		9,0	25
T280614P	6	1/4	6,5	50	25,5		12,0	25
T280638P	6	3/8	9,5	53	29,5		13,0	10
T280612P	6	1/2	12,0	61	30,2		13,0	10
T280818P	8	1/8	5,5	43	24,8		9,0	25
T280814P	8	1/4	6,5	50	26,5		12,0	25
T280838P	8	3/8	9,5	53	30,0		14,4	10
T280812P	8	1/2	1,2	61	35,8		14,4	10
T281018P	10	1/8	6,5	42	30,7		18,4	10
T281014P	10	1/4	6,5	50	28,4		12,0	25
T281038P	10	3/8	9,5	53	33,5		18,4	10
T281012P	10	1/2	12,0	61	36,5		18,4	10
T281214P	12	1/4	8,5	48	33,7		21,0	10
T281238P	12	3/8	9,5	53	35,5		19,0	10
T281212P	12	1/2	12,0	61	36,5		21,0	10



ART. T29P Regolatore di flusso unidirezionale per cilindro
Unidirectional flow regulator for cylinder

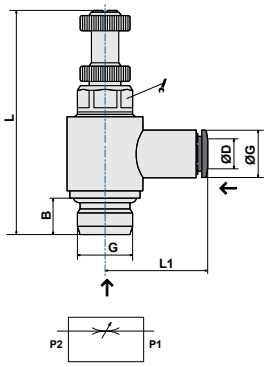
CODICE	ØD	G	B	L	L1			
T2904M5P	4	M5	4	34	15,0		8,0	25
T290418P	4	1/8	5,5	43	21,1		9,0	25
T2906M5P	6	M5	4	34	22,0		8,0	25
T290618P	6	1/8	5,5	43	24,3		9,0	25
T290614P	6	1/4	6,5	50	25,5		12,0	25
T290638P	6	3/8	9,5	53	29,5		13,0	10
T290612P	6	1/2	12,0	61	30,2		13,0	10
T290818P	8	1/8	5,5	43	24,8		9,0	25
T290814P	8	1/4	6,5	50	26,5		12,0	25
T290838P	8	3/8	9,5	53	30,0		14,4	10
T290812P	8	1/2	1,2	61	35,8		14,4	10
T291018P	10	1/8	6,5	42	30,7		18,4	10
T291014P	10	1/4	6,5	50	28,4		12,0	25
T291038P	10	3/8	9,5	53	33,5		18,4	10
T291012P	10	1/2	12,0	61	36,5		18,4	10
T291214P	12	1/4	8,5	48	33,7		21,0	10
T291238P	12	3/8	9,5	53	35,5		19,0	10
T291212P	12	1/2	12,0	61	36,5		21,0	10



dimensioni di ingombro e informazioni tecniche sono fornite a puro titolo informativo e possono essere soggette a modifica senza preavviso

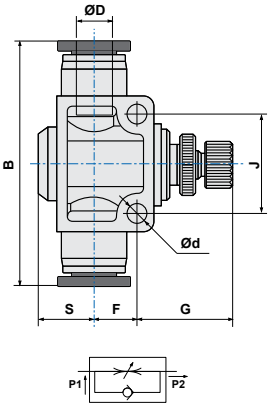
ART. T30P — Regolatore di flusso bidirezionale / *Bidirectional flow regulator*

CODICE	ØD	G	B	L	L1			
T3004M5P	4	M5	4	34	19,0		8	25
T300418P	4	1/8	5,5	43	21,1		9	25
T3006M5P	6	M5	4	34	22,0		8	25
T300618P	6	1/8	5,5	43	24,3		9	25
T300614P	6	1/4	6,5	50	25,5		12	25
T300818P	8	1/8	5,5	43	24,8		9	25
T300814P	8	1/4	6,5	50	26,5		12	25
T301014P	10	1/4	6,5	50	28,4		12	25



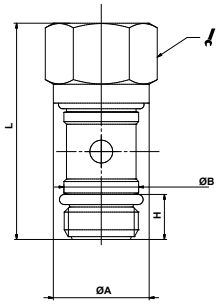
ART. T31 — Regolatore di flusso in linea / *Flat flow regulator*

CODICE	ØD	B	G	F	S	Ød	J	
T310400	4	40,5	14,4	6,5	6,5	3,2	14	25
T310600	6	48,7	25,3	8,5	11,0	4,3	20	25
T310800	8	54,4	25,1	9,5	12,0	4,3	22	25
T311000	10	64,3	28,8	10,5	12,5	4,3	26	10
T311200	12	74,6	26,1	13,0	16,0	4,3	32	10



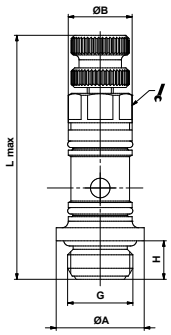
ART. 28/29/30A — Asta regolatore orientabile / *Positioned flow regulator stem*

CODICE	L	ØB	H	G	ØA		
28/29/30AM5	24,0	6,0	4,0	M5	5,0	8,0	10
28/29/30A18	31,5	9,8	7,0	1/8	13,5	14,0	10
28/29/30A14	38,0	13,0	8,0	1/4	17,0	17,0	10
28/29/30A38	46,5	16,5	9,0	3/8	21,0	21,0	10



ART. 28/29/30AP — Asta regolatore girevole / *Swivel flow regulator stem*

CODICE	L max	ØB	H	G	ØA		
28/29/30AM5P	35,0	6,0	4,2	M5	5,0	8,0	10
28/29/30A18P	37,5	9,8	5,9	1/8	13,5	9,0	10
28/29/30A14P	44,0	13,0	7,0	1/4	17,0	12,0	10



28 = per valvola (IN type) 29 = per cilindro (OUT type) 30 = bidirezionale (bi-directional)

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INFORMAZIONI TECNICHE AGGIUNTIVE

Prove di portata

Prova effettuata presso il laboratorio Pneumax su alcuni campioni di regolatori di flusso alle seguenti condizioni:

Fluido	aria filtrata
Temperatura	20°C
Pressione	6 bar

ADDITIONAL TECHNICAL INFORMATIONS

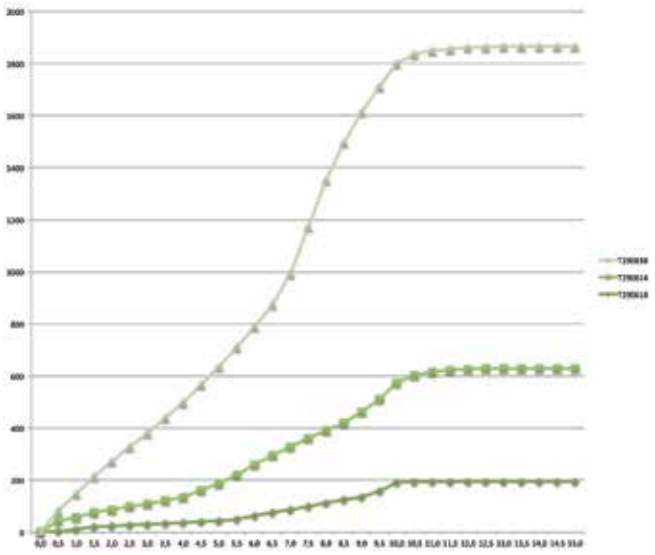
Flow tests

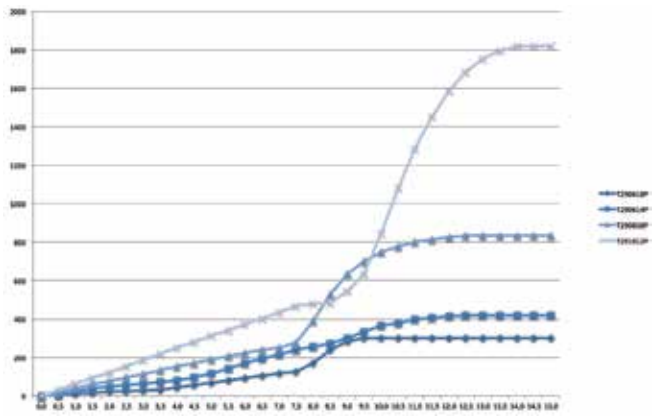
Test carried out at the Pneumax laboratory on a flow regulators sample under the following conditions:

Fluid	*filtered air*
Temperature	*20°C*
Pressure	*6 bar*

Risultati della prova • *Tests results*

N°giri spillo *Needle turns*	Portata • *Flow (ltr/min)*						
	T290618	T290618P	T290614	T290614P	T290838	T290838P	T291012P
0,0	0	0	0	0	0	0	0
0,5	5	5	38	2	40	21	30
1,0	10	10	48	23	92	40	63
1,5	20	16	55	41	139	59	94
2,0	23	22	65	50	185	78	123
2,5	27	25	72	58	230	96	156
3,0	30	28	80	64	272	115	186
3,5	34	33	88	73	318	135	220
4,0	37	43	100	81	361	153	251
4,5	40	55	121	97	405	171	282
5,0	44	68	145	118	447	190	312
5,5	52	80	170	142	489	207	343
6,0	64	93	196	169	530	224	375
6,5	75	105	220	193	580	240	404
7,0	88	118	241	217	664	251	437
7,5	101	127	260	238	811	276	466
8,0	113	172	277	255	963	392	480
8,5	126	240	294	273	1075	530	485
9,0	136	283	325	300	1154	635	543
9,5	158	300	355	334	1200	700	635
10,0	191		383	364	1228	750	845
10,5	195		408	379	1235	778	1083
11,0			421	400		802	1288
11,5			427	407		814	1454
12,0			432	414		824	1588
12,5			434	417		833	1685
13,0			436	418		835	1754
13,5							1795
14,0							1820
14,5							
15,0							

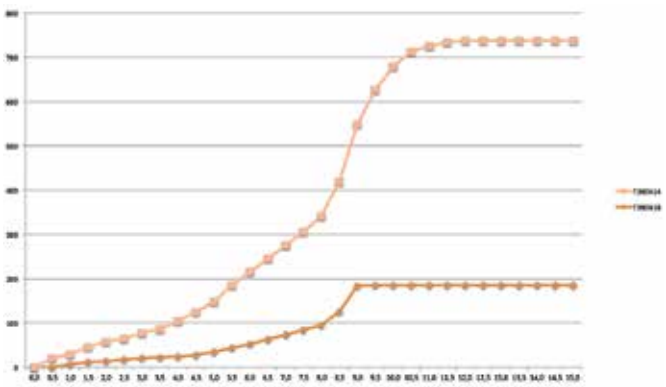


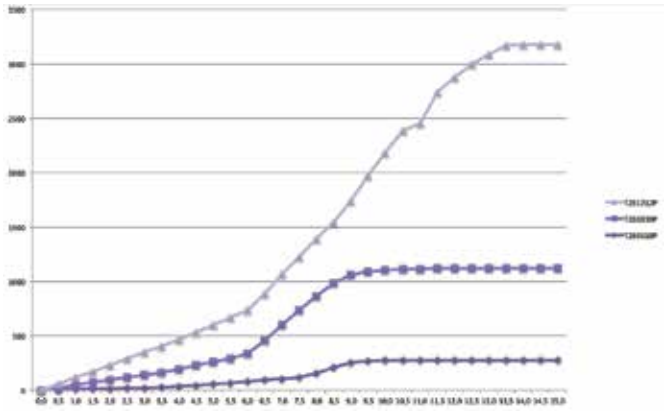


dimensioni di ingombro e informazioni tecniche sono fornite a puro titolo informativo e possono essere soggette a modifica senza preavviso

Risultati della prova • *Tests results*

N° giri spillo *Needle turns*	Portata • *Flow (ltr/min)*							
	T280618	T280618P	T280614	T280838P	T281212P	T290838-V	T290838-B	T290838-C
0,0	0	0	0	0	0	0	0	0
0,5	0	0	20	22	35	42	39	88
1,0	6	10	24	40	70	82	79	185
1,5	12	13	34	59	100	124	122	280
2,0	14	16	43	78	138	159	163	375
2,5	17	20	48	100	171	200	205	480
3,0	20	22	57	120	207	236	244	582
3,5	22	25	65	141	240	272	282	680
4,0	24	32	80	160	274	307	320	780
4,5	27	44	98	184	306	342	357	880
5,0	34	55	115	207	338	377	392	1110
5,5	44	69	142	226	370	411	425	1428
6,0	53	81	162	255	402	445	460	1628
6,5	64	94	182	360	433	478	496	1720
7,0	74	106	202	498	464	529	546	1767
7,5	84	120	221	614	494	640	642	1798
8,0	95	155	247	712	525	800	793	1820
8,5	125	207	294	778	560	970	983	1825
9,0	184	250	365	808	678	1088	1129	
9,5	185	269	442	823	877	1145	1222	
10,0		275	495	830	1079	1185		
10,5			528	835	1280	1187		
11,0			541	838	1340			
11,5			549	843	1623			
12,0			552		1760			
12,5			553		1880			
13,0					1970			
13,5					2055			
14,0					2060			
14,5								
15,0								





Codice regolatore *Regulator code*	Portata • *Flow (ltr/min)*	
	6 bar Δp=1 Nominale *6 bar Δp=1 Nominal*	6 bar max Scarico libero *6 bar max Free exhaust*
T280618	120	185
T280618P	170	280
T280614	320	550
T280838P	505	840
T281212P	1230	2060
T290618	120	195
T290618P	175	300
T290614	260	435
T290614P	245	420
T290838	790	1235
T290838P	525	835
T291012P	1120	1820
T300618	200	330
T301014	365	655
T290838-V	705	1185
T290838-B	775	1070
T291212-C	1160	1825

Aste G1/8" anello tubo 4 *Stems G1/8" banjo diam. 4*	1	2	3	4	5	m/a	um
Serraggio OK • *Clamping OK*	2,5	2,5	2,5	2,5		2,5	Nm
Anello schiacciato • *Ring crushed*	3,5	3,5	3,0	3,3		3,5	Nm
Anello deformato • *Deformed ring*	5,0	5,5	4,5	5,0		5,0	Nm
Rottura asta • *Stem breakage*	16,4	16,4	15,3	14,5		16,0	Nm
Aste G1/4" anello tubo 6 *Stems G1/4" banjo diam. 6*	1	2	3	4	5	m/a	um
Serraggio OK • *Clamping OK*	2,5	3,0	2,5	2,5	3,0	3,0	Nm
Anello schiacciato • *Ring crushed*	4,0	5,0	5,5	6,0	6,0	5,5	Nm
Anello deformato • *Deformed ring*	7,0	7,5	8,0	8,5	9,0	8,0	Nm
Rottura asta • *Stem breakage*	33,0	32,1	30,1	32,4	33,4	32,0	Nm
Aste G3/8" anello tubo 8 *Stems G3/8" banjo diam. 8*	1	2	3	4	5	m/a	um
Serraggio OK • *Clamping OK*	4,0	5,0				4,5	Nm
Anello schiacciato • *Ring crushed*	8,0	8,5				8,0	Nm
Anello deformato • *Deformed ring*	15,0	16,0				16,0	Nm
Rottura asta • *Stem breakage*	41,9	44,3				43,0	Nm

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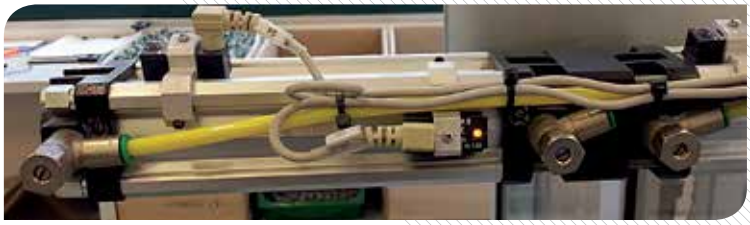
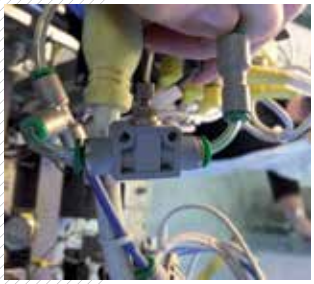
APPLICATION EXAMPLES





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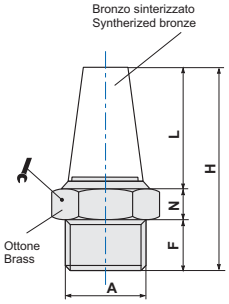
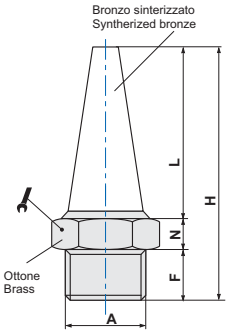


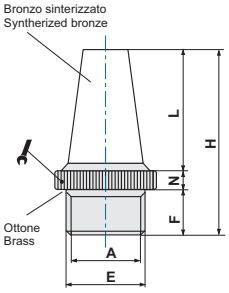
ART. SBE

CODICE	A	N	F	L	H		
SBE18	1/8" BSP	8	6	15	29	13	50
SBE14	1/4" BSP	8	7	17	32	16	50
SBE38	3/8" BSP	7	8	25	40	19	25
SBE12	1/2" BSP	9	9	27	45	24	25
SBE34	3/4" BSP	10	9	37	56	30	5
SBE01	1" BSP	10	11	45	66	36	5
SBE5MA	M5"	4	4	9	17	8	100
SBE18FEM	1/8" FEM BSP	8	7	15	30	13	50



ART. SAC

CODICE	A	N	F	L	H		
SAC18	1/8" BSP	8	6	30	44	13	100
SAC14	1/4" BSP	8	7	35	50	16	50
SAC38	3/8" BSP	7	8	39	54	19	25
SAC12	1/2" BSP	9	9	49	67	24	25
SAC34	3/4" BSP	10	9	46	65	30	5
SAC01	1" BSP	10	11	56	77	36	5
SAC5MA	M5"	4	4	18	26	8	100
SAC18FEM	1/8" FEM BSP	8	7	30	45	13	50



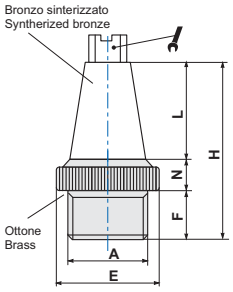
ART. SBT

CODICE	A	E	F	L	H	N	
SBT18	1/8" BSP	12	6	15	25	4	100
SBT14	1/4" BSP	16	7	20	30	3	50
SBT38	3/8" BSP	19	8	27	38	3	25
SBT12	1/2" BSP	23	10	28	42	4	25
SBT34	3/4" BSP	29	10	38	52	4	5
SBT01	1" BSP	36	12	46	65,5	7,5	5

ART. SBTE-SBTT

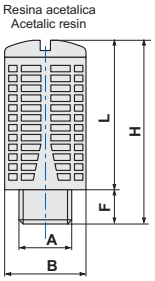
CODICE	A	E	F	L	H	N		
SBTT18	1/8" BSP	12	6	15	25	4	6	100
SBTT14	1/4" BSP	16	7	20	30	3	7	50
SBTT38	3/8" BSP	19	8	27	38	3	10	25
SBTT12	1/2" BSP	23	10	28	42	4	13	25
SBTT34	3/4" BSP	29	10	38	52	4	17	10
SBTT01	1" BSP	36	12	46	65,5	7,5	22	10
SBTE18	1/8" BSP	12	6	15	25	4	6	100
SBTE14	1/4" BSP	16	7	20	30	3	7	50
SBTE38	3/8" BSP	19	8	27	38	3	10	25
SBTE12	1/2" BSP	23	10	28	42	4	13	25
SBTE34	3/4" BSP	29	10	38	52	4	17	5
SBTE01	1" BSP	36	12	46	65,5	7,5	22	5

SBTE = Senza taglio
SBTE = Without screwdriver



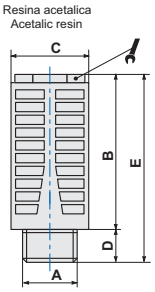
ART. SPL Dinamico / Dynamic

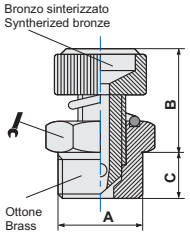
CODICE	A	B	F	L	H		
SPL18	1/8" BSP	15	8	27	35		100
SPL14	1/4" BSP	19,5	9	36	45		100
SPL38	3/8" BSP	24,5	11	47	58		50
SPL12	1/2" BSP	24,5	11	47	58		50
SPL34	3/4" BSP	48	18	96	114		10
SPL01	1" BSP	48	18	96	114		10



ART. SPLF Feltro - Statico / Felt - Static

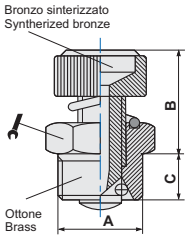
CODICE	A	B	C	D	E		
SPLF18	1/8" BSP	28	16	6	34	10	100
SPLF14	1/4" BSP	36	19	8	44	12	100
SPLF38	3/8" BSP	46	24	10	56	17	50
SPLF12	1/2" BSP	46	24	10	56	17	50





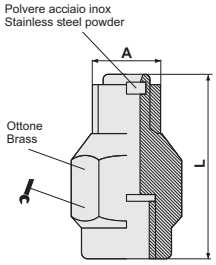
ART. SVE

CODICE	A		min B max	C		
SVE18	1/8" BSP		20 - 22	6		50
SVE14	1/4" BSP		22 - 24	8		50
SVE38	3/8" BSP		25 - 28	10		25
SVE12	1/2" BSP		26 - 29	11		25
SVE34	3/4" BSP		32 - 37	12		5
SVE01	1" BSP		32 - 37	12		5



ART. RBP

CODICE	A	min B max	C				
RBP18	1/8" BSP	14 - 19	6			12	50
RBP14	1/4" BSP	17 - 22	8			15	50
RBP38	3/8" BSP	18 - 24	9			19	25
RBP12	1/2" BSP	18 - 24	10,5			22	10

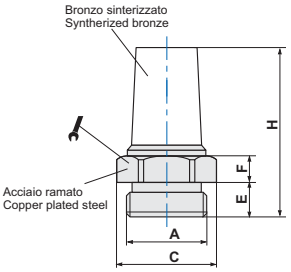


ART. SM

CODICE	A		L			
SM1018	1/8" BSP		30		14	50
SM2014	1/4" BSP		36		19	25
SM3038	3/8" BSP		45		27	25
SM4012	1/2" BSP		50		20	25

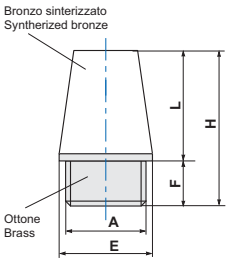
ART. SEB

CODICE	A	C	E	F	H		
SEB18	1/8" BSP	12,6	4,5	3,8	20,5	12	100
SEB14	1/4" BSP	16	6	4,5	26,5	15	50
SEB38	3/8" BSP	20	7	5,4	33,9	19	25
SEB12	1/2" BSP	24,5	8	7	40,5	23	25
SEB34	3/4" BSP	32	9	7,5	51,5	30	5
SEB01	1" BSP	38,5	11	9	66	36	5
SEB5MA	M5"	8	5,5	3,5	17	7	100



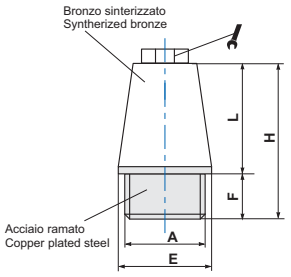
ART. SC

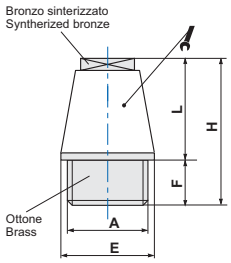
CODICE	A	E	F	L	H		
SC18	1/8" BSP	12	6	15	21		100
SC14	1/4" BSP	15	6	19	25		50
SC38	3/8" BSP	19	8	28	36		25
SC12	1/2" BSP	23	10	33	43		25
SC34	3/4" BSP	29	13	40	53		5
SC01	1" BSP	36	15	48	63		5
SC5MA	M5"	6	4,5	8,5	13		100



ART. SET

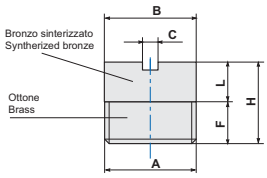
CODICE	A	E	F	L	H		
SET18	1/8" BSP	11,5	4,5	13	17,5	8	100
SET14	1/4" BSP	15	6	18	24	10	50
SET38	3/8" BSP	19	7	24	31	13	25
SET12	1/2" BSP	23	8	29	37	14	25
SET34	3/4" BSP	30	9	41	50	19	5
SET01	1" BSP	37	11	51	62	24	5
SET5MA	M5"	8,5	5	15	20	27	100





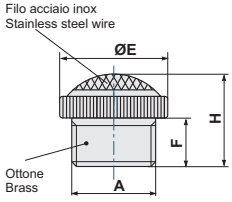
ART. SCQ

CODICE	A	E	F	L	H		
SCQ18	1/8" BSP	12	6	15	21	7	100
SCQ14	1/4" BSP	15	6	19	25	9	50
SCQ38	3/8" BSP	19	8	28	38	10	25
SCQ12	1/2" BSP	23	10	33	43	14	25
SCQ34	3/4" BSP	29	13	40	53	17	5
SCQ01	1" BSP	36	15	48	63	23	5



ART. STT

CODICE	A	B	F	L	H	C	
STT18	1/8" BSP	10	6	6	12	1,5	100
STT14	1/4" BSP	13	6	6	12	1,5	50
STT38	3/8" BSP	17	7	8	15	1,5	25
STT12	1/2" BSP	21	10	8	18	1,5	25
STT34	3/4" BSP	26	13	9	22	1,5	5
STT01	1" BSP	33	14	11	25	1,5	5

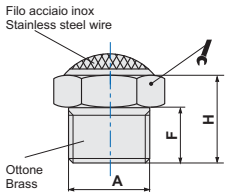


ART. SFT

CODICE	A		F	H	ØE		
SFT18	1/8" BSP		6	13	12		100
SFT14	1/4" BSP		7	14	16		50
SFT38	3/8" BSP		8	18	19		25
SFT12	1/2" BSP		10	19	23		25
SFT34	3/4" BSP		10	22	29		5
SFT01	1" BSP		12	23	36		5
SFT5MA	M5"		5	12	11		100
SFT18FEM	1/8" FEM BSP		7	14	12		100

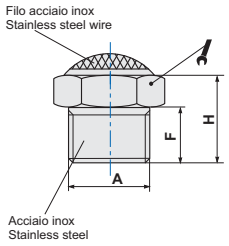
ART. SFE

CODICE	A		F	H		
SFE18	1/8" BSP		6	15	13	100
SFE14	1/4" BSP		7	18	16	50
SFE38	3/8" BSP		8	20	19	50
SFE12	1/2" BSP		10	22	24	25
SFE34	3/4" BSP		10	26	30	25
SFE01	1" BSP		12	28	36	10
SFE5MA	M5"		4	8	8	100
SFE18FEM	1/8" FEM BSP		7	18	14	50



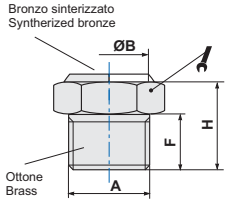
ART. SFEX

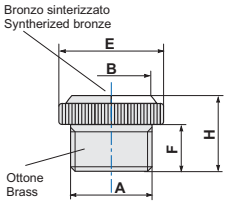
CODICE	A		F	H		
SFEX18	1/8" BSP		6	15	13	50
SFEX14	1/4" BSP		7	18	16	50
SFEX38	3/8" BSP		8	20	19	50
SFEX12	1/2" BSP		10	22	24	25
SFEX34	3/4" BSP		10	26	30	5
SFEX01	1" BSP		12	28	36	5



ART. SEP

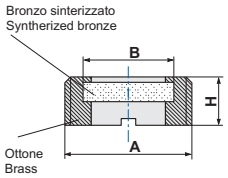
CODICE	A	B	F	H			
SEP18	1/8" BSP	11	6	14		13	100
SEP14	1/4" BSP	14	7	17		16	50
SEP38	3/8" BSP	17	8	18		19	25
SEP12	1/2" BSP	22	10	20		24	25
SEP34	3/4" BSP	28	10	23		30	5
SEP01	1" BSP	35	12	25		36	5
SEP5MA	M5"	7	5	12		8	100
SEP18FEM	1/8" FEM BSP	11	7	17		14	50





ART. SBP

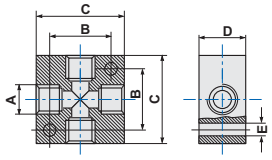
CODICE	A		B	E	F	H	
SBP18	1/8" BSP		11	12	6	12	100
SBP14	1/4" BSP		14	16	7	13	50
SBP38	3/8" BSP		17	19	8	17	25
SBP12	1/2" BSP		22	23	10	18	25
SBP34	3/4" BSP		28	29	10	20	5
SBP01	1" BSP		35	36	12	21	5
SBP5MA	M5"		11	12	5	11,5	100
SBP18FEM	1/8" FEM BSP		11	12	7	13	50



ART. SP

CODICE	A			B	H		
SP18	1/8" BSP			6	5		100
SP14	1/4" BSP			8	6		50
SP38	3/8" BSP			10	7		25
SP12	1/2" BSP			15	8		25
SP34	3/4" BSP			20	9		5
SP01	1" BSP			26	10		5

ART. RIP4V Ripartitore a 4 vie
Aluminium cross manifold



CODICE	A	B	C	D	E	
RIP4V1815	1/8"	17	25	15	4,5	25
RIP4V1816	1/8"	23	30	16	4,5	25
RIP4V1418	1/4"	23	30	18	4,5	25
RIP4V1420	1/4"	26	40	20	5,5	25
RIP4V3820	3/8"	30	40	20	5,5	25
RIP4V3825	3/8"	33	50	25	5,5	10
RIP4V1230	1/2"	33	50	30	5,5	10

ART. RIPUC Ripartitori con uscite contrapposte
Opposite output manifolds

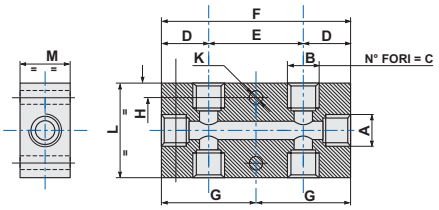


Fig. 1

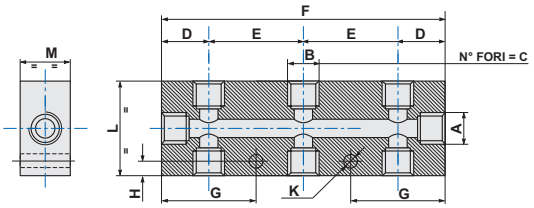


Fig. 2

CODICE	FIG.	A	B	C	D	E	F	G	H	K	L	M	FILETTATURA / THREAD	
RIPUC15122	1	1/4"	1/8"	4	15	30	60	30	4,5	5,25	30	20	6 VIE 2-1/4" 4-1/8"	5
RIPUC15222	1	3/8"	1/4"	4	18	36	72	36	6	6,5	40	20	6 VIE 2-3/8" 4-1/4"	5
RIPUC15133	2	1/4"	1/8"	6	15	30	90	30	4,5	5,25	30	20	8 VIE 2 1/4" 6-1/8"	5
RIPUC15144	2	1/4"	1/8"	8	15	30	120	30	4,5	5,25	30	20	10 VIE 2-1/4" 8-1/8"	5
RIPUC15155	2	1/4"	1/8"	10	15	30	150	30	4,5	5,25	30	20	12 VIE 2-1/4" 10-1/8"	5
RIPUC15233	2	3/8"	1/4"	6	18	36	108	36	6	6,5	40	20	8 VIE 2-3/8" 6-1/4"	5
RIPUC15244	2	3/8"	1/4"	8	18	36	144	36	6	6,5	40	20	10 VIE 2-3/8" 8-1/4"	5
RIPUC15255	2	3/8"	1/4"	10	18	36	180	36	6	6,5	40	20	12 VIE 2-3/8" 10-1/4"	5
RIPUC15422	1	1/2"	1/4"	4	22	36	80	40	6	6,5	40	28	6 VIE 2-1/2" 4-1/4"	5
RIPUC15433	2	1/2"	1/4"	6	22	36	116	40	6	6,5	40	28	8 VIE 2-1/2" 6-1/4"	5
RIPUC15444	2	1/2"	1/4"	8	22	36	152	40	6	6,5	40	28	10 VIE 2-1/2" 8-1/4"	5
RIPUC15455	2	1/2"	1/4"	10	22	36	188	40	6	6,5	40	28	12 VIE 2-1/2" 10-1/4"	5
RIPUC15522	1	1/2"	3/8"	4	22	36	80	40	6	6,5	40	28	6 VIE 2-1/2" 4-3/8"	5
RIPUC15533	2	1/2"	3/8"	6	22	36	116	40	6	6,5	40	28	8 VIE 2-1/2" 6-3/8"	5
RIPUC15544	2	1/2"	3/8"	8	22	36	152	40	6	6,5	40	28	10 VIE 2-1/2" 10-3/8"	5
RIPUC15555	2	1/2"	3/8"	10	22	36	188	40	6	6,5	40	28	12 VIE 2-1/2" 10-3/8"	5

ART. **RIPUL** Ripartitori con uscite lineari
In-line output manifolds

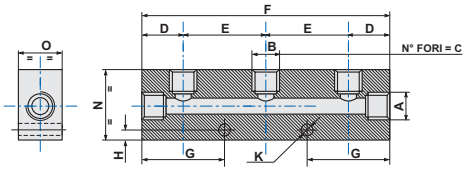


Fig. 1

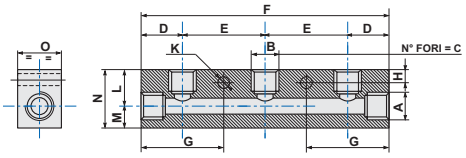


Fig. 2

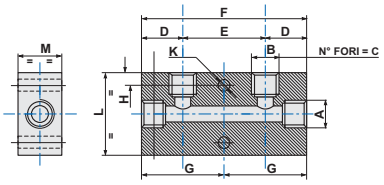


Fig. 3

CODICE	FIG.	A	B	C	D	E	F	G	H	K	L	M	N	O	FILETTATURA / THREAD	
RIPUL1512	3	1/4"	1/8"	2	15	30	60	30	4,5	5,25			30	20	4 VIE 2-1/4" 2-1/8"	5
RIPUL1513	1	1/4"	1/8"	3	15	30	90	30	4,5	5,25			30	20	5 VIE 2-1/4" 3-1/8"	5
RIPUL1514	1	1/4"	1/8"	4	15	30	120	30	4,5	5,25			30	20	6 VIE 2-1/4" 4-1/8"	5
RIPUL1515	1	1/4"	1/8"	5	15	30	150	30	4,5	5,25			30	20	7 VIE 2-1/4" 5-1/8"	5
RIPUL1516	1	1/4"	1/8"	6	15	30	180	30	4,5	5,25			30	20	8 VIE 2-1/4" 6-1/8"	5
RIPUL1522	3	3/8"	1/4"	4	18	36	72	36	6	6,5			40	20	4 VIE 2-3/8" 2-1/4"	5
RIPUL1523	2	3/8"	1/4"	3	18	36	108	36	6	6,5	19	11	30	20	5 VIE 2-3/8" 3-1/4"	5
RIPUL1524	2	3/8"	1/4"	4	18	36	144	36	6	4,5	19	11	30	20	6 VIE 2-3/8" 4-1/4"	5
RIPUL1525	2	3/8"	1/4"	5	18	36	180	36	6	6,5	19	11	30	20	7 VIE 2-3/8" 5-1/4"	5
RIPUL1526	2	3/8"	1/4"	6	18	36	216	36	6	6,5	19	11	30	20	8 VIE 2-3/8" 6-1/4"	5
RIPUL1542	3	1/2"	1/4"	2	22	36	80	40	6	6,5			40	28	4 VIE 2-1/2" 2-1/4"	5
RIPUL1543	1	1/2"	1/4"	3	22	36	116	40	6	6,5			40	28	5 VIE 2-1/2" 3-1/4"	5
RIPUL1544	1	1/2"	1/4"	4	22	36	152	40	6	6,5			40	28	6 VIE 2-1/2" 4-1/4"	5
RIPUL1545	1	1/2"	1/4"	5	22	36	188	40	6	6,5			40	28	7 VIE 2-1/2" 5-1/4"	5
RIPUL1546	1	1/2"	1/4"	6	22	36	224	40	6	6,5			40	28	8 VIE 2-1/2" 6-1/4"	5
RIPUL1552	3	1/2"	3/8"	2	22	36	80	40	6	6,5			40	28	4 VIE 2-1/2" 2-3/8"	5
RIPUL1553	1	1/2"	3/8"	3	22	36	116	40	6	6,5			40	28	5 VIE 2-1/2" 3-3/8"	5
RIPUL1554	1	1/2"	3/8"	4	22	36	152	40	6	6,5			40	28	6 VIE 2-1/2" 4-3/8"	5
RIPUL1555	1	1/2"	3/8"	5	22	36	188	40	6	6,5			40	28	7 VIE 2-1/2" 5-3/8"	5
RIPUL1556	1	1/2"	3/8"	6	22	36	224	40	6	6,5			40	28	8 VIE 2-1/2" 6-3/8"	5

Ugello rotondo a più canali POM
Circular multi-channel nozzle POM

Pezzo di precisione stampato in plastica antiurto POM.
In questo modello sono incorporati tutti i pregi dell'ugello piatto, in più ne amplia il campo d'impiego ed è pure idoneo per un impiego fisso.
Note: la forza soffiante è stata misurata a 50 mm dall'uscita e i valori sulla rumorosità sono dentro i parametri DIN 45645.
Nel montaggio di questo ugello a più canali, deve essere sfruttata tutta la lunghezza del pezzo filettato.

Dimensioni:
55 x 23 x 10
(lunghezza x diametro est. x lunghezza filettatura)
Raccordo del tubo:
R1/4" (filettatura esterna all'imbocco)
Caratteristiche:
antiurto sino a –40°C
indeformabile sino a +90°C
resistente a combustibili, oli minerali, lubrificanti e ogni tipo di solvente.
Cod. 838.926

Circular multi-channel nozzle POM.
Material:impact-resistant plastic
This model combines the undisputed advantages of the flat jet nozzle with a broader range of application and is ideal for stationary tasks.
Note: the blowing force was measured 50 mm in front of the nozzle. The sound levels were measured in compliance with DIN 45635.
When installing the multi-channel nozzles, the full thread length should be used.

Dimensions:
55 x 23 x10
(L x ext. diam. x thread length)
Pipe connection:
R 1/4" (external thread on air inlet)
Characteristics:
Impact-resistant down to –40°C
Dimensional stability up to +90°C
Resistant to fuels, mineral oils, lubrificants and commonly used solvents.
Part-No. 838.926

Ugello rotondo a più canali AL
Circular multi-channel nozzle AL

Pezzo di precisione stampato in alluminio.
Raccomandato in particolari condizioni d'impiego es. fonderia.
Campo d'impiego principale: pistole ad aria.
Note: la forza soffiante è stata misurata a 50 mm dall'uscita e i valori sulla rumorosità sono dentro i parametri DIN 45645.

Dimensioni:
31,5 x 18,5 x 8
(lunghezza x diametro est. x lunghezza filettatura)

Raccordo per tubo:
R1/4" (filettatura esterna all'imbocco)

Codice: 923.702

Material: aluminium.
Recommended for particularly harsh operating conditions, such as high temperatures (foundries, etc.) Principle application: blow guns.
Note: the blowing force was measured 50 mm in front of the nozzle. The sound levels were measured in compliance with DIN 45635.

Dimensions:
31.5 x 18.5 x 8
(L x ext. diam. x thread length)

Pipe connection:
R 1/4" (external thread on air inlet)

Part-No. 923.702

Ugello piatto a più canali
Multi-channel flat jet nozzle

Titan jet

Dimensioni:
90 x 47 x 14.5
(lunghezza x larghezza x altezza)
Tubo di raccordo:
R1/4" (filettatura esterna sul tubo di entrata)
Caratteristiche:
Antiurto sino a –40° C
Indeformabile sino a +90°C
Resistente a combustibili, oli minerali o solventi di ogni tipo.
Fornibile come:
Ugello piatto a più canali.

Cod. 069.523

La forza soffiante mirata.
La disposizione parallela dei getti d'aria, permette di avere un ampio raggio di soffiatura nei pezzi trasportati.
Anche pezzi di piccole dimensioni lavorati su torni automatici, possono venire investiti da un getto d'aria ben preciso.
La nuova forma ne permette la totale intercambiabilità con i modelli presenti sul mercato e garantisce un aumento della linea di soffiature.

Dimensions:
90 x 47 x 14,5 (LxWxH)
Pipe connection:
R 1/4 " (external thread on air inlet)
Characteristics:
Impact-resistant down to-40°C
Dimensional stability up to +90°C
Resistant to fuels, mineral oils, lubrificants and commonly used solvents
Form of delivery:
Multi-channel flat jet nozzle

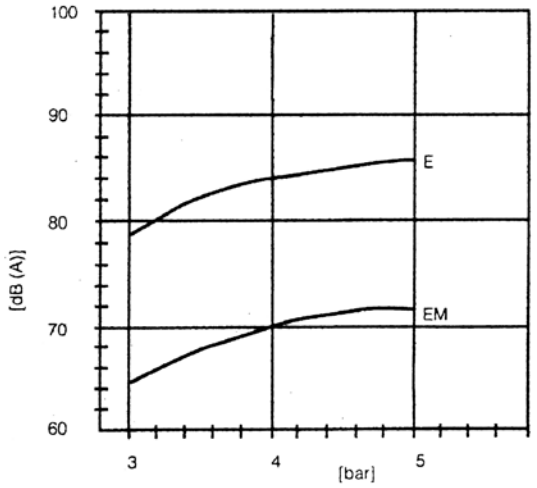
Part-No. 069.523

Concentrated blowing power.
The parallel arrangement of the component air streams gives an optinum blow-out width for work piece conveyance.
Even the smallest finisched parts, e.g. on lathes, can be accurately and efficiently blown out.
The new design enables the interchangeability with the main models available on the market and grant a larger blow-out line.

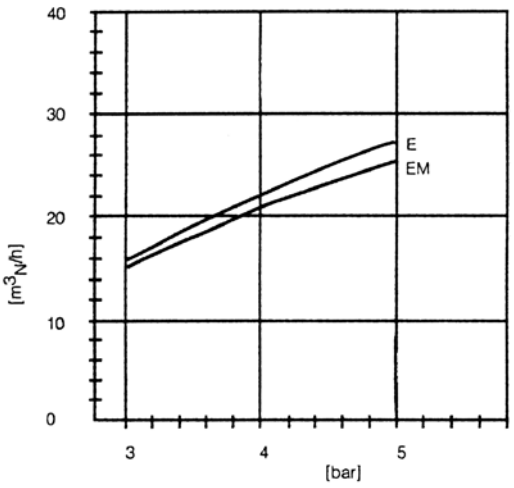
Caratteristiche di diversi ugelli di soffiatura aventi la stessa sezione di uscita
Characteristic curves of different blow-out nozzles with the same outlet cross-sectional area

E = Ugello a un foro EM = Ugello piatto a più canali
E = Single-hole nozzle EM = Multi-channel flat jet nozzle

Livello d'intensità sonora oggettiva / Pressione
Loudness level / Pressure

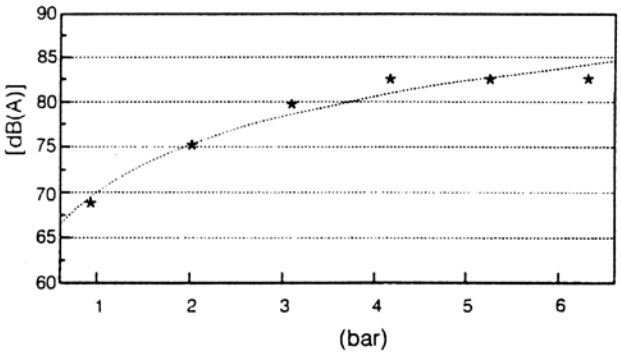


Consumo / Pressione
Consumption / Pressure

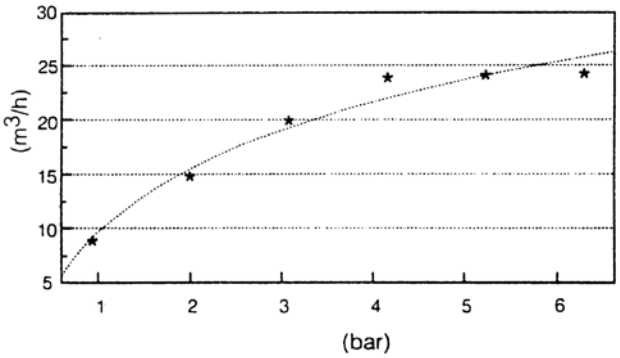


Caratteristiche degli ugelli rotondi a più canali
Characteristic curves of circular multi-channel nozzles

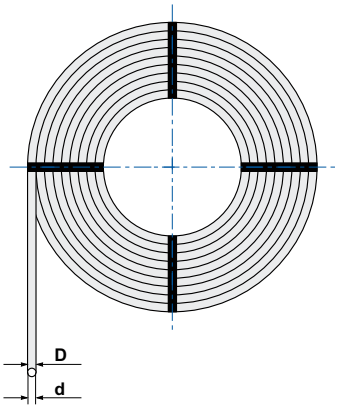
Livello d'intensità sonora oggettiva / Pressione
Loudness level / Pressure



Consumo / Pressione
Consumption / Pressure



ART. TPU Tubo Poliuretano / Polyurethane tube



CODICE	Dxd mm.	P bar	P1 bar	R mm.	
TPU0315	3 x 1,5	13,5	54	7,5	200
TPU0402	4 x 2	15	60	11	100
TPU0425	4 x 2,5	10(10)	40(40)	15	100
TPU0604	6 x 4	10	40(36)	18	100
TPU0805	8 x 5	13	52	25	100
TPU0855	8 x 5,5	9 (8)	37 (34)	30	100
TPU0806	8 x 6	7	28	35	100
TPU1065	10 x 6,5	10(7)	40(28)	30	100
TPU1075	10 x 7,5	6,5(6)	27(25)	40	100
TPU1008	10 x 8	5,5	22	45	100
TPU1209	12 x 9	6 (6)	25(24)	50	100

Nota: i dati fra parentesi si riferiscono alle misure disponibili anche nelle colorazioni traslucide (durezza 95 shoreA).
Notice: data between parenthesis refer to cristal colour types (hardness 95 shoreA).

[ ] = Neutro/Neutral, [B] = Nero/Black, [BU] = Azzurro/Light Blue, [G] = Verde/Green, [R] = Rosso/Red, [GR] = Grigio/Grey, [T] = Trasparente/Cristal, [Y] = Giallo/Yellow

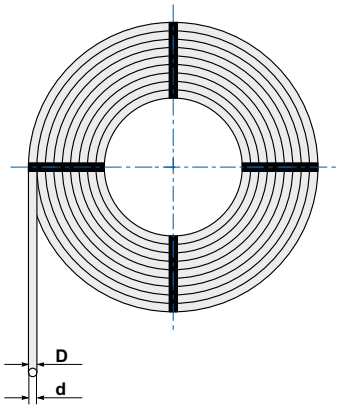
Scala di correzione in funzione della Temperatura
Adjusting scale on atmospheric temperature basis

- 20°C	0°C	+23°C	+30°C	+40°C	+50°C	+60°C	+70°C
1.87	1.4	1	0.84	0.70	0.60	0.52	0.47

D = diametro esterno – external diameter
d = diametro interno – internal diameter
P = pressione di esercizio – working pressure

P1 = pressione di scoppio – breaking pressure
R = raggio di curvatura – bending radius
= rotolo confezione – roll packing

ART. PA11 Tubo "Rilsan"
"Rilsan" tube



CODICE	Dxd mm.	P bar	P1 bar	R mm.	
PA110402	4 x 2	33	132	16	100
PA110425	4 x 2,5	22	88	24	100
PA110427 (*)	4 x 2,7	17	68	26	100
PA110604	6 x 4	20	80	35	100
PA110806	8 x 6	14	56	65	100
PA111007 (*)	10 x 7	17,5	70	83	100
PA111008	10 x 8	11	44	100	100
PA111210	12 x 10	9	36	125	100
PA111412	14 x 12	7,5	30	180	100

Nota: le misure contrassegnate con asterisco sono disponibili solo su richiesta.
Notice: (*) = sizes available on demand only.

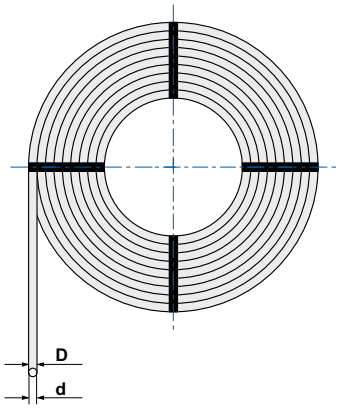
[N] = Neutro/Neutral, [B] = Nero/Black, [BU] = Azzurro/Light Blue, [G] = Verde/Green, [R] = Rosso/Red

Scala di correzione in funzione della Temperatura
Adjusting scale on atmospheric temperature basis

0°C	+23°C	+30°C	+40°C	+50°C	+60°C	+70°C	+80°C
1.4	1	0.84	0.70	0.60	0.52	0.47	0.42

D = diametro esterno – external diameter
d = diametro interno – internal diameter
P = pressione di esercizio – working pressure
P1 = pressione di scoppio – breaking pressure
R = raggio di curvatura – bending radius
= rotolo confezione – roll packing

ART. PA12 Tubo Poliammide
Polyamide tube



CODICE	Dxd mm.	P bar	P1 bar	R mm.	
PA120402 (*)	4 x 2	37	130	20	100
PA120425	4 x 2,5	32	112	20	100
PA120427	4 x 2,7	23	80	25	100
PA120604	6 x 4	26	90	30	100
PA120806	8 x 6	20	70	40	100
PA121007 (*)	10 x 7	25	88	70	100
PA121008	10 x 8	15	52	60	100
PA121210	12 x 10	12	42	85	100
PA121412	14 x 12	11	33	90	100

Nota: le misure contrassegnate con asterisco sono disponibili solo su richiesta.
Notice: (*) = sizes available on demand only.

[N] = Neutro/Neutral, [B] = Nero/Black, [BU] = Azzurro/Light Blue, [G] = Verde/Green, [R] = Rosso/Red, [Y] = Giallo/Yellow

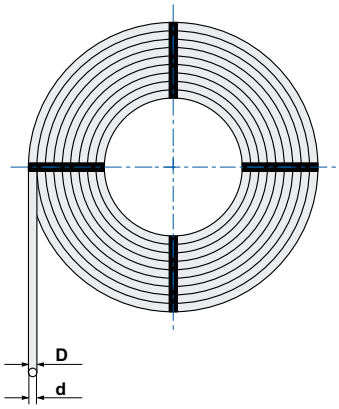
Scala di correzione in funzione della Temperatura
Adjusting scale on atmospheric temperature basis

- 20°C	0°C	+23°C	+30°C	+40°C	+50°C	+60°C	
1.87	1.4	1	0.80	0.60	0.50	0.40	

D = diametro esterno – external diameter
d = diametro interno – internal diameter
P = pressione di esercizio – working pressure

P1 = pressione di scoppio – breaking pressure
R = raggio di curvatura – bending radius
= rotolo confezione – roll packing

ART. PE Tubo Polietilene
Polyethylene tube



CODICE	Dxd mm.	p bar	P1 bar	R mm.	
PE0402	4 x 2	18,5	75	20	100
PE0425	4 x 2,5	15	60	25	100
PE0503 (*)	5 x 3	12,5	50	30	100
PE0604	6 x 4	10	40	40	100
PE6343 (*)	6,35 x 4,35	9	36	50	100
PE0806	8 x 6	7,5	30	50	100
PE9563 (*)	9,54 x 6,36	10	40	100	100
PE1008	10 x 8	6	25	120	100
PE1208 (*)	12 x 8	7,5	30	160	100
PE1209 (*)	12 x 9	7	28	120	100
PE1210	12 x 10	5	20	120	100

Nota: le misure contrassegnate con asterisco sono disponibili solo su richiesta.
Notice: (*) = sizes available on demand only.

[ ] = Neutro/Neutral, [B] = Nero/Black, [BU] = Azzurro/Light Blue, [G] = Verde/Green, [R] = Rosso/Red, [Y] = Giallo/Yellow

Scala di correzione in funzione della Temperatura
Adjusting scale on atmospheric temperature basis

- 20°C	0°C	+23°C	+30°C	+40°C	+60°C	+70°C	
1.87	1.4	1	0.80	0.60	0.50	0.40	

D = diametro esterno – external diameter
d = diametro interno – internal diameter
P = pressione di esercizio – working pressure

P1 = pressione di scoppio – breaking pressure
R = raggio di curvatura – bending radius
= rotolo confezione – roll packing

TUBO POLIURETANO

Materiale dalle eccezionali caratteristiche meccaniche, questo tubo nasce per risolvere le problematiche legate ad applicazioni particolarmente gravose.

PROPRIETÀ TECNICHE:

Durezza Shore A	98	
Temperatura di applicazione	- 20°C +70°C	
Allungamento a rottura	540%	(DIN 53504)
Densità (gr./cm^3)	1.18	(DIN 53479)
Perdita di abrasione (mm^3)	55	(DIN 53516)
Resistenza allo strappo (KN/m)	120	(DIN 53515)

CARATTERISTICHE TECNICHE:

Eccellente resistenza all'abrasione.
Altissima flessibilità alle basse temperature.
Buona resistenza agli agenti atmosferici.
Buon invecchiamento nel tempo.
Estremamente resistente alla fatica.
Poco sensibile all'effetto "click" e "stress cracking".

ALTRE CARATTERISTICHE:

Tolleranze: Diametro esterno +/- 0,1 mm Spessore +/-0,1 mm
Colore: Azzurro, rosso, nero, verde, giallo, neutro, grigio, blu trasparente, cristallino
Confezione: Bobine da mt. 100

PRINCIPALI APPLICAZIONI:

Robotica, Agricoltura, Pneumatica, Autofficine, ecc…

INFORMAZIONI GENERALI:

I poliuretani, pur essendo molto resistenti alla fatica o alle tensioflessioni, hanno la tendenza ad accumulare calore laddove vengono impiegati con pressioni pulsanti continue. Se tali condizioni si verificano in concomitanza con un'elevata temperatura ambiente, possono verificarsi rigonfiamenti o addirittura rotture del tubo, caratteristica che si evidenzia specialmente nelle misure 8x6, 10x8, 14x12.
Il poliuretano è in generale resistente all'ozono, idrocarburi, olii grassi, carburanti e soluzioni chimiche moderate. Non è resistente, o debolmente, ad acidi concentrati, ketoni, idrocarburi clorurati.

Sul tubo viene marcato il diametro int. x est., il tipo di materiale e il numero di lotto per la rintracciabilità.
Ogni lotto di materiale viene accompagnato da certificato di conformità.

TUBO POLIAMMIDE

Il poliammide è tra i materiali più diffusi nelle applicazioni tecniche per le sue caratteristiche di flessibilità, prestazioni meccaniche come specificato di seguito.

CARATTERISTICHE:

Elevate proprietà meccaniche alla trazione ed alla flessione continua ed alterna, notevole flessibilità, buona stabilità al calore, notevole resistenza all'invecchiamento, basso assorbimento d'acqua, notevole resistenza agli idrocarburi e olii e buona inerzia agli agenti chimici.

PROPRIETÀ FISICHE/MECCANICHE	METODO DI PROVA	VALORE
Densità	ASTM D-792	1,03g/cm^3
Durezza	ASTM D-2240	65ShD
Allungamento alla rottura	ASTM-D638	>300%
Modulo elastico	ASTM D-790	410MPa
Temperature di applicazione	-	-40°C/+70°C

Tolleranze: Diametro esterno +/- 0,1 mm Spessore +/-0,1 mm
Colore: Azzurro, nero, rosso e neutro.
Confezione: Bobine da mt. 100

APPLICAZIONI:

Questo tipo di materiale risulta essere particolarmente indicato per la realizzazione di tubi per pneumatica, robotica, utensileria, macchine industriali, ecc..., ovvero quando vi sia l'esigenza di una notevole flessibilità in special modo a freddo.

NORMATIVE:

ISO 1874 - DIN 73378 - DIN 74324

TUBO POLIETILENE

Il polietilene è forse il polimero più diffuso nelle applicazioni tecniche ed industriali. Questo materiale così versatile, ha una struttura molto semplice, la più semplice di tutti i polimeri commerciali. I tubi in Polietilene sono particolarmente indicati in tutte le applicazioni dove non vi siamo specifici problemi di pressioni e temperature particolarmente elevate.

CARATTERISTICHE:

Elevata resistenza all'impatto, poco sensibile all'effetto "click" e "stress cracking", eccellente resistenza agli agenti chimici, totalmente riciclabile, buone proprietà elettriche, ottima flessibilità.

PROPRIETÀ FISICHE/MECCANICHE	METODO DI PROVA	VALORE
Densità	ASTM D1505	0,921g/cm^3
Allungamento alla rottura	ASTM D882B MD/SL/L	400%
Resistenza alla lacerazione	ASTM D1922 MD/SL/L	30N/mm
Resistenza all'impatto	ASTM D1709	310g
Carico di rottura	ASTM D882B MD/SL/L	26MPa
Temperatura di applicazione	-	-20°/+60°C

Tolleranze: Diametro esterno +/- 0,1 mm Spessore +/-0,1 mm
Colore: Azzurro e neutro.
Confezione: Bobine da mt. 100

APPLICAZIONI:

Questo tipo di materiale risulta essere particolarmente indicato per applicazioni quali il trattamento delle acque, industria chimica, agricoltura, irrigazione, aria compressa, ecc....

NORMATIVE:

Idoneo al contatto con alimenti, conforme al D.M. 21/03/73 e successivi aggiornamenti, conforme a Direttiva 90/125/CEE, conforme ad FDA CFR177.1520, conforme a Farmacopea Europea.

NOTE:

Si consiglia di non montare il tubo in polietilene con raccordi che ne deformino troppo l'estremità in quanto tale materiale non sopporta allargamenti oltre il 15% circa. Problemi di "creep" potrebbero verificarsi con raccordi non idonei.

Foto, disegni e dati tecnici non impegnativi

Pictures, drawings and technical data not binding

Air hoses technical features

POLYURETHANE TUBE

TECHNICAL PROPERTY:

Hardness Shore A	98	
Temperature working range	- 20°C +70°C	
Breaking Elongation	540%	(DIN 53504)
Density (gr./cm^3)	1,18	(DIN 53479)
Abrasion loss (mm^3)	55	(DIN 53516)
Tensile strenght (N/mm^2)	120	(DIN 53515)

TECHNICAL FEATURES:

Excelent resistance at the abrasion
Good resistance at the atmospheric effects
Good process of becomming old
High flexbility at the lowest temperatures
Extremely endeavor resistance
Very low “click” and “stress cracking” effects

OTHER FEATURES:

Tolerances: O.D. +/-0,1 mm Thickness +/-0,1 mm
Colours avalaible: Light blue, Red, Black, Green, Yellow, Neutral, Cristal blue, Cristal
Packing: 100 mt. Rolls in plastic film

MAIN APPLICATIONS:

Pneumatic, Robotic, agriculture, garage, etc.

GENERAL NOTICES:

Polyurethane tube material has excelent mechanical features and it is particularly addressed to mostly solve the heavy applications.
Anyway polyurethanes, althoughthey are much resistant at the endeavor and at the flexion stress, trend to keep heat when working with continuous variable pressure and in case of high atmosphere temperature it could bring to the swelling or breaking of the tubing itself, specially on sizes 8x6, 10x8, 14x12.
Polyurethane is normally also resistant to ozone, hydrocarbon, oils and greases, fuel and moderate chemical solutions.
It is not, or very low, resistant to concentrated acids, ketons, esters and clhloride hydrocarbons.

POLYAMIDE TUBE

The polyamide is the most diffused material among the technical applications for its characteristics of flexibility and mechanical performances.

CHARACTERISTICS:

High mechanicl properies to traction and to continuous & alternate flexion, notable flexibility, good stability to heat, notable resistance to ageing, law water absorption, notable resistance to hydrocarbons and oils and good inertness to chemical agents.

MECHANICAL/PHYSICAL PROPERTIES	TRIAL METHOD	VALUE
Density	ASTM D-792	1,03g/cm^3
Hardness	ASTM D-2240	65ShD
Elongation at break	ASTM-D638	>300%
Elastic modulus	ASTM D-790	410MPa
Working pressure	-	-40°C/+70°C

Tolerances: O.D. +/- 0,1 mm Thickness +/-0,1 mm
Colours avalaible: Light blue, black, red and neutral.
Packing: 100 mt. Rolls in plastic film

APPLICATION:

This kind of material is particularly indicated for the realization of tubing for pneumatic, robotic, steel, industrial machineries, ecc..., when there is the necessity of notable flexibility.

REFERENCE NORMS:

ISO 1874 - DIN 73378 - DIN 74324

POLYETHYLENE TUBE

The polyethylene is maybe the most diffused polymer in the technical and industrial applications. This material, so versatile, has a very easy structure, the easiest of all the commercial polymers. The Polyethylene tubing are particularly indicated for all the applications where there aren’t specific problems of pressures and too high temperatures.

CHARACTERISTICS:

High impact resistance, law sensibility to “click” and “stres cracking” effect, excellent resistance to chemical agents, totally recyclable, good electrical properties, optimal flexibility.

MECHANICAL/PHYSICAL PROPERTIES	TRIAL METHOD	VALUE
Density	ASTM D1505	0,921g/cm^3
Elongation at break	ASTM D882B MD/SL/L	400%
Tear resistence	ASTM D1922 MD/SL/L	30N/mm
Impact resistance	ASTM D1709	310g
Tensile strength at break	ASTM D882B MD/SL/L	26MPa
Working temperature	-	-20°/+60°C

Tolerances: O.D. +/- 0,1 mm Thickness +/-0,1 mm
Colours avalaible: Light blue and neutral.
Packing: 100 mt. Rolls in plastic film

APPLICATION:

This kind of material results to be particularly indicated for applications as water treatments, chemical industry, agriculture, irrigation, ecc....

NORMATIVES:

Suitable for food contact, according to D.M. 21/03/73 and follows adjournments, according to Directive 90/127/CEE, according to FDA CFR177.1520, according to European Phamacopoeia.

NOTES:

It’s recommended to avoid to plant the polyethylene tubing with fittings that deforms its extremity, because this material doesn’t resist to enlargment over than 15%. “Creep” problems could verify with fittings not suitable.

ART. TMB0412TPU

Tamburo portatubo ecologico e riciclabile
Reutilizable ecological tube drum

Il tamburo portatubo riutilizzabile TMB0412TPU è composto da due semidischi smontabili concepiti per essere utilizzati in modo appropriato con le nostre matasse standard di tubo in poliuretano TPU dal diametro 4 mm al diametro 10 mm. Può comunque essere facilmente impiegato anche con altre misure ed altre tipologie di tubo per aria.

La vera novità introdotta con questo articolo non risiede nella sua concezione tecnica o nel design, per quanto originali, ma nel contributo che esso porta alla riduzione dell'impatto ambientale per due fondamentali motivi:

1) Non necessita di essere smaltito, a differenza dei vecchi modelli plastica/cartone, poiché ogni qual volta la matassa di tubo si esaurisce può essere reimpiegato.

2) Il materiale con cui è prodotto è un riciclato di altro materiale idoneo tecnicamente, ragione anche per la quale il colore del prodotto potrebbe essere differente da quello raffigurato a catalogo.

Possiamo concludere che il tamburo portatubo riutilizzabile TMB0412TPU è un prodotto ECOLOGICO e in quanto tale costituisce un valore aggiunto alle iniziative tecniche e commerciali che la nostra azienda stà portando avanti.

The reutilizable tube drum TMB0412TPU has made of two parts, easy to disassemble, which enable to fit our standard TPU polyurthane rolls, from diameter 4 mm to diameter 10 mm. Different sizes and types of air hoses can anyway easily emploied.

The real news introduced with this item are not its desgn or technical features, although originals, but the contribution it gives reducing the environmental impact according to the following matters:

1) It doesn't need to be refused, on the contrary of the old type plastic/cartoon, because when the roll end it is ready for a new one.

2) The drum material comes from recycled technically appropriate row material, reason why colour of the product could be different from the catalogue.

We can conclude that the reutilizable tube drum TMB0412TPU is an ECOLOGICAL product whchi gives additional value to the technical and marketing initiatives our company is bringing up.

Foto, disegni e dati tecnici non impegnativi

Pictures, drawings and technical data not binding