

**ISO 21287 - UNITOP COMPACT CYLINDERS SERIES
CILINDRI PNEUMATICI COMPATTI ISO 21287 - UNITOP**

SERIE **NSK**

**PATENTED
BREVETTATO**

NSK series is a completely new range of Vesta compact cylinders. It has been worked out in one set of common basic components for a final assembly to ISO 21287 standard as well as UNITOP standard, which is covered by patent..

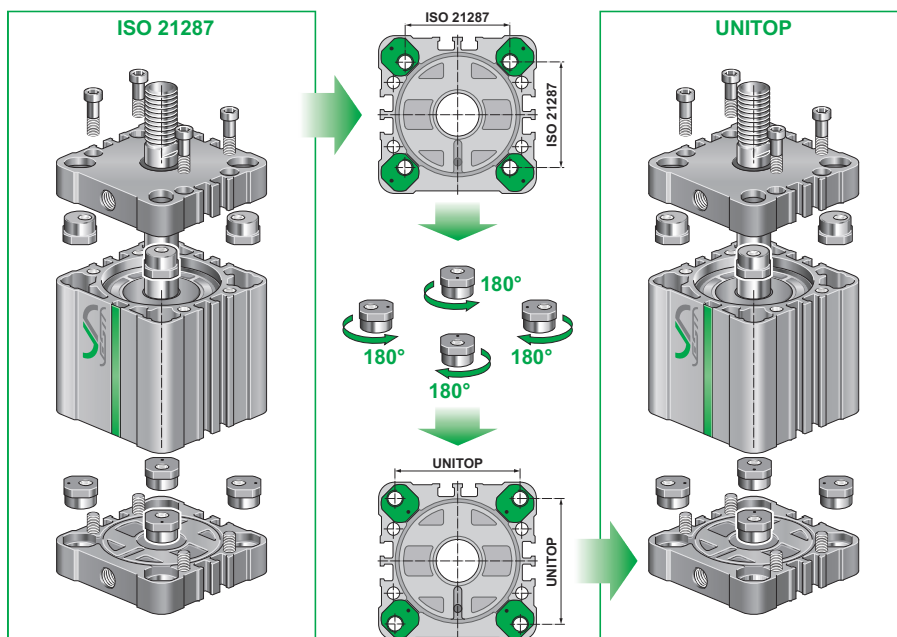
An extremely construction simplicity, new design and advanced technology make the compact series NSK highly competitive, able to meet even the hardest request of performance and reliability and give it a wide duty flexibility.

What also greatly significant is the advantage of a drastic reduction in construction elements, though saving the need of offering 2 standard version of product.

*Nuova gamma di cilindri compatti **NSK**, che con un unico set di componenti base è studiata per l'assemblaggio finale in versione standard ISO 21287 oppure in standard UNITOP (soluzione protetta da brevetto).*

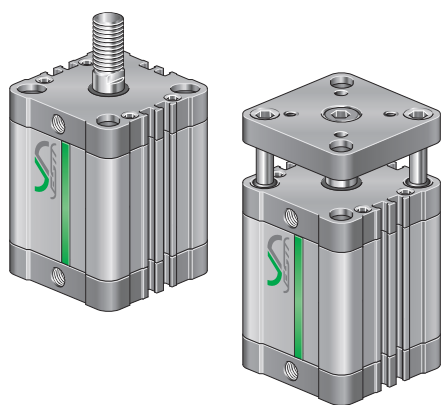
L'estrema semplicità costruttiva, il nuovo design e la innovativa tecnologia di produzione, rendono la serie compatta NSK molto competitiva ed in grado di soddisfare le più esigenti richieste di prestazioni ed affidabilità, unite a grande flessibilità nel servizio.

Di particolare evidenza il vantaggio ottenuto con la drastica riduzione di elementi costruttivi, salvaguardando l'esigenza di offrire due versioni standard di prodotto.



TECHNICAL FEATURES NSK CYLINDERS / CARATTERISTICHE TECNICHE CILINDRI NSK

ATEX versions see / Versioni ATEX vedi .. P. A-109



NSK	□	-	□	-	□	-	□	-	□	-	□	-	□	-	□
ISO 21287	I														
UNITOP	U														
Bore / Alesaggio (mm):															
Ø16															16
Ø20															20
Ø25															25
Ø32															32
Ø40															40
Ø50															50
Ø63															63
Ø80															80
Ø100															100
Stroke / Corsa (mm):															
Male thread															M
Filetto maschio															
Female thread															F
Filetto femmina															

VS High Temperature (-25 / +120 °C)
Polyurethan rod seal

Guarnizione dello stelo in Poliuretano per alte Temperature (-25/+120 °C)

VV High Temperature (-25 / +120 °C)
Polyurethan all seal

Tutte le guarnizioni in Poliuretano per alte Temperature (-25/+120 °C)

SEA Single acting front spring
Semplice effetto molla anteriore

SEP Single acting rear spring
Semplice effetto molla posteriore

P Through rod cylinder
Cilindro stelo passante

AR Non rotating
Cilindro antirotazione

Characteristic magnetic switches see **GENERAL CATALOGUE - Pag. A-19; A-33.**
*Caratteristiche finecorsa magnetico vedi **CATALOGO GENERALE - Pag. A-19; A-33.***

Head	Die-cast aluminium alloy.
Piston rod	Ø16 ÷ 25 stainless steel X5CrNi1810, Ø32 ÷ 100 stainless steel X20Cr13.
Barrel	Anodized profiled aluminium tube.
Seals	Polyurethan.
Cushioning	Mechanical buffers.

Testate	Pressofusione in lega di alluminio.
Stelo	Ø16 ÷ 25 acciaio inox X5CrNi1810, Ø32 ÷ 100 acciaio inox X20Cr13.
Camicia	Tube profilato ed anodizzato d' alluminio.
Guarnizioni	In poliuretano.
Ammortizzatori	Smorzatore meccanici d'urto.

Ambient temperature range	-20 °C ÷ +80 °C.
Temperature range of medium	0 °C ÷ +30 °C.
Lubrication	Not required.
Medium	Filtered air.
Max operating pressure	10 bar.

TECHNICAL FEATURES

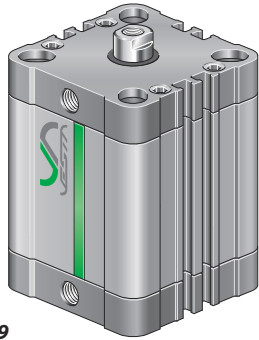
CARATTERISTICHE TECNICHE

Temperatura ambiente	-20 °C ÷ +80 °C.
Temperatura fluido	0 °C ÷ +30 °C.
Lubrificazione	Non necessaria.
Fluido	Aria filtrata
Pressione max d'esercizio	10 bar.

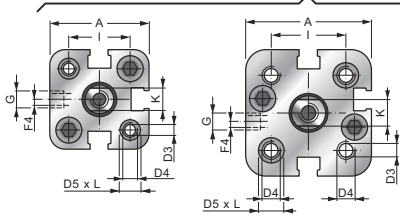


NSK . - ..

DOUBLE ACTING MAGNETIC CYLINDER CILINDRO A DOPPIO EFFETTO MAGNETICO

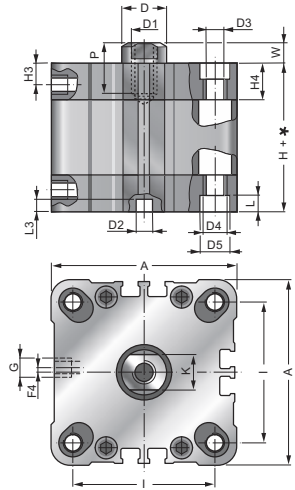


* = Stroke / Corsa



Ø 16 mm

Ø 20; 25 mm



Ø 32; 40; 50; 63; 80; 100 mm

ATEX versions see
Versioni ATEX vedi .. P. A-109

STANDARD ISO 21287

Ø	A	ØD	ØD2	ØD3	ØD4	ØD5	G	H3	H4	I	K	L	L3	W	F4	H	Code / Codice
16	29,2	8	6	3,3	M4	6	M5	7	12,8	18	6	3,5	2,2	4,5	0	37 (±0,5)	NSKI 16-...
20	37	10	6	4,2	M5	7,5	M5	7	12,3	22	8	4,2	2,5	6	4	37 (±0,5)	NSKI 20-...
25	41	10	6	4,2	M5	7,5	M5	7,5	13,5	26	8	4,2	2,5	6	3	39 (±0,5)	NSKI 25-...
32	49,2	12	6	5,2	M6	9	G1/8	7,5	15	32,5	10	4,5	2	7	0	44 (±0,5)	NSKI 32-...
40	57,2	12	6	5,2	M6	9	G1/8	7,5	15	38	10	4,2	2	7	0	45 (±0,7)	NSKI 40-...
50	67	16	8	6,7	M8	10,5	G1/8	7,5	14,6	46,5	13	4,7	2,5	8	0	45 (±0,7)	NSKI 50-...
63	80	16	8	6,7	M8	10,5	G1/8	8	15,5	56,5	13	5,2	2,5	8	0	49 (±0,8)	NSKI 63-...
80	102,6*	20	8	8,5	M10	13,5	G1/8	9	17	72	17	5,2	2,5	10	0	54 (±0,8)	NSKI 80-...
100	124*	25	8	8,5	M10	13,5	G1/4*	10	20	89	22	5,2	3	10	0	67 (±1,0)	NSKI 100-...

Thrust force Traction force Pressure range
Forza di spinta Forza di tiro Campo di press.

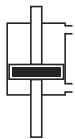
Ø	P= 6 bar	P= 6 bar	bar
16	121 N	91 N	1,6 - 10
20	188 N	142 N	1,5 - 10
25	295 N	248 N	1,2 - 10
32	482 N	415 N	1,1 - 10
40	754 N	687 N	0,9 - 10
50	1178 N	1058 N	0,8 - 10
63	1869 N	1750 N	0,7 - 10
80	3014 N	2829 N	0,6 - 10
100	4710 N	4420 N	0,5 - 10

STANDARD UNITOP

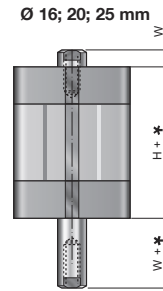
Ø	A	ØD	ØD2	ØD3	ØD4	ØD5	G	H3	H4	I	K	L	L3	W	F4	H	Code / Codice
16	29,2	8	6	3,3	M4	6	M5	7	12,8	18	6	3,5	2,2	4,5	0	38 (±0,5)	NSKT 16-...
20	37	10	6	4,2	M5	7,5	M5	7	12,3	22	8	4,2	2,5	4,5	4	38 (±0,5)	NSKT 20-...
25	41	10	6	4,2	M5	7,5	M5	7,5	13,5	26	8	4,2	2,5	5,5	3	39,5 (±0,5)	NSKT 25-...
32	49,2	12	6	5,2	M6	9	G1/8	7,5	15	32	10	4,5	2	6	0	44,5 (±0,5)	NSKT 32-...
40	57,2	12	6	5,2	M6	9	G1/8	7,5	15	42	10	4,2	2	6,5	0	45,5 (±0,7)	NSKT 40-...
50	67	16	8	6,7	M8	10,5	G1/8	7,5	14,6	50	13	4,7	2,5	7,5	0	45,5 (±0,7)	NSKT 50-...
63	80	16	8	6,7	M8	10,5	G1/8	8	15,5	62	13	5,2	2,5	7,5	0	50 (±0,8)	NSKT 63-...
80	102,6	20	8	8,5	M10	13,5	G1/8	9	17	82	17	5,2	2,5	8	0	56 (±0,8)	NSKT 80-...
100	124	25	8	8,5	M10	13,5	G1/4	10	20	103	22	5,2	3	10	0	66,5 (±1,0)	NSKT 100-...

NSK . - .. P

DOUBLE ACTING MAGNETIC THROUGH ROD CYLINDER CILINDRO MAGNETICO A DOPPIO EFFETTO STELO PASSANTE

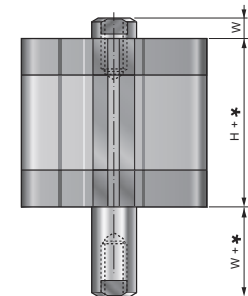


* = Stroke / Corsa



Ø 16; 20; 25 mm

Ø 32; 40; 50; 63; 80; 100 mm



ATEX versions see
Versioni ATEX vedi .. P. A-109

STANDARD ISO 21287

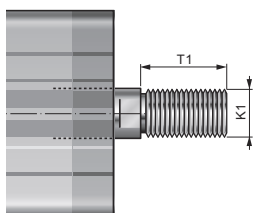
Ø	W	H	Code - Codice
16	4,5	37 (±0,5)	NSKI 16/... P
20	6	37 (±0,5)	NSKI 20/... P
25	6	39 (±0,5)	NSKI 25/... P
32	7	44 (±0,5)	NSKI 32/... P
40	7	45 (±0,7)	NSKI 40/... P
50	8	45 (±0,7)	NSKI 50/... P
63	8	49 (±0,8)	NSKI 63/... P
80	10	54 (±0,8)	NSKI 80/... P
100	10	67 (±1,0)	NSKI 100/... P

STANDARD UNITOP

Ø	W	H	Code - Codice
16	4,5	38 (±0,5)	NSKT 16/... P
20	4,5	38 (±0,5)	NSKT 20/... P
25	5,5	39,5 (±0,5)	NSKT 25/... P
32	6	44,5 (±0,5)	NSKT 32/... P
40	6,5	45,5 (±0,7)	NSKT 40/... P
50	7,5	45,5 (±0,7)	NSKT 50/... P
63	7,5	50 (±0,8)	NSKT 63/... P
80	8	56 (±0,8)	NSKT 80/... P
100	10	66,5 (±1,0)	NSKT 100/... P

NSK . - M

THREADED MALE PISTON ROD VERSION VERSIONE STELO FILETTATO MASCHIO



STANDARD ISO 21287

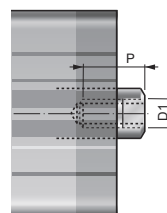
Ø	K1	T1
16	M8x1,25	20
20	M8x1,25	16
25	M8x1,25	16
32	M10x1,25	19
40	M10x1,25	19
50	M12x1,25	22
63	M12x1,25	22
80	M16x1,5	28
100	M16x1,5	28

STANDARD UNITOP

Ø	K1	T1
16	M8x1,25	20
20	M10x1,25	22
25	M10x1,25	22
32	M10x1,25	22
40	M10x1,25	22
50	M12x1,25	24
63	M12x1,25	24
80	M16x1,5	32
100	M20x1,5	40

NSK . - F

THREADED FEMALE PISTON ROD VERSION VERSIONE STELO FILETTATO FEMMINA



STANDARD ISO 21287

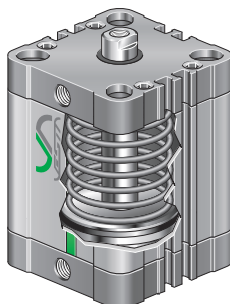
Ø	ØD1	P
16	M4	8
20	M6	10
25	M6	10
32	M8	12
40	M8	12
50	M10	16
63	M10	16
80	M12	20
100	M12	20

STANDARD UNITOP

Ø	ØD1	P
16	M4	8
20	M6	10
25	M6	10
32	M8	12
40	M8	12
50	M8	12
63	M8	14
80	M10	15
100	M12	20

NSK . - .. SEA

SIMPLE ACTING FRONT SPRING
SEMPLICE EFFETTO MOLLA ANTERIORE

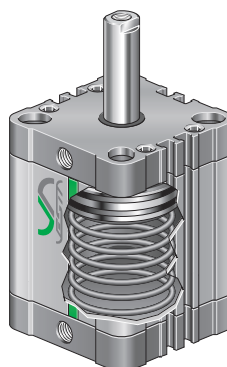


SPRING FORCE (N) STROKE 0 - 25 mm
FORZE MOLLA (N) CORSA 0 - 25 mm

Ø	F spring max (stroke 0 mm) F molla max (corsa 0 mm)	F spring min (stroke 25 mm) F molla min (corsa 25 mm)	H ISO 21287	H UNITOP
16	21	12	37 (±0,5)	38 (±0,5)
20	39	22	37 (±0,5)	38 (±0,5)
25	45	28	39 (±0,5)	39,5 (±0,5)
32	45	28	44 (±0,5)	44,5 (±0,5)
40	61	39	45 (±0,7)	45,5 (±0,7)
50	90	58	45 (±0,7)	45,5 (±0,7)
63	95	62	49 (±0,8)	50 (±0,8)
80	115	150	54 (±0,8)	56 (±0,8)
100	125	160	67 (±1,0)	66,5 (±1,0)

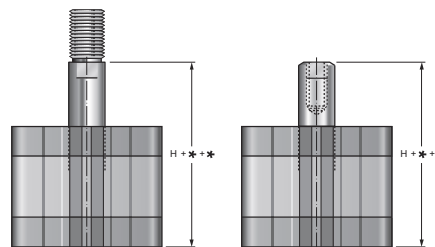
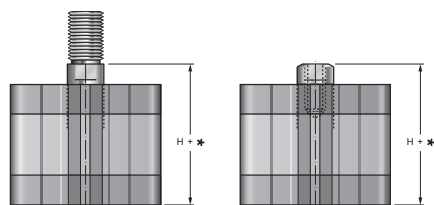
NSK . - .. SEP

SIMPLE ACTING REAR SPRING
SEMPLICE EFFETTO MOLLA POSTERIORE

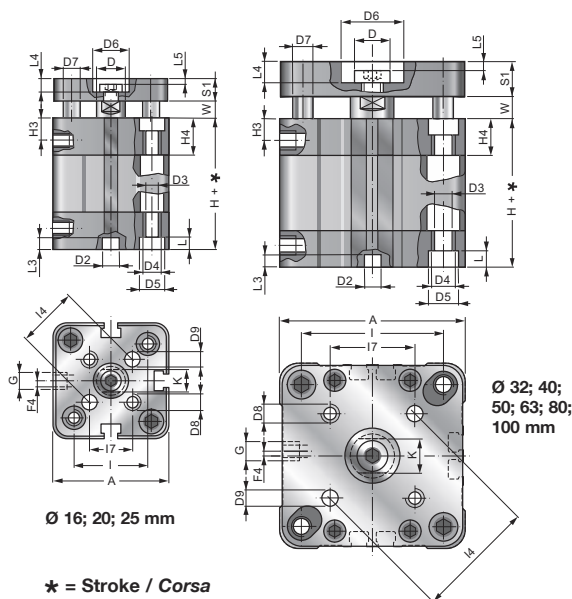


SPRING FORCE (N) STROKE 26 - 50 mm
FORZE MOLLA (N) CORSA 26 - 50 mm

Ø	F spring max (stroke 26 mm) F molla max (corsa 26 mm)	F spring min (stroke 50 mm) F molla min (corsa 50 mm)	H ISO 21287	H UNITOP
16	21	12	47 (±0,5)	48 (±0,5)
20	39	22	47 (±0,5)	48 (±0,5)
25	45	28	59 (±0,5)	59,5 (±0,5)
32	45	28	64 (±0,5)	64,5 (±0,5)
40	61	39	65 (±0,7)	65,5 (±0,7)
50	90	58	65 (±0,7)	65,5 (±0,7)
63	95	62	69 (±0,8)	70 (±0,8)
80	115	150	84 (±0,8)	86 (±0,8)
100	125	160	97 (±1,0)	96,5 (±1,0)



* = Stroke / Corsa

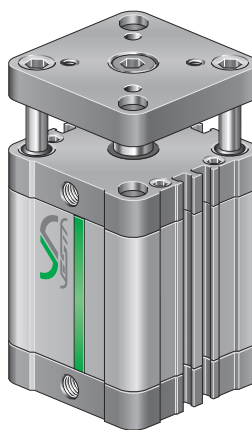


Ø 16; 20; 25 mm

* = Stroke / Corsa

NSK . - .. AR

DOUBLE ACTING MAGNETIC CYLINDER NON ROTATING
CILINDRO MAGNETICO A DOPPIO EFFETTO ANTIROTATIVO



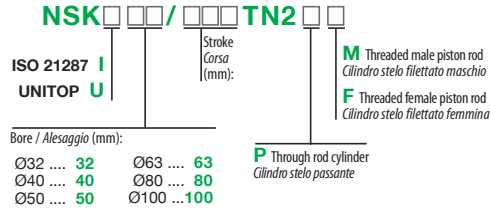
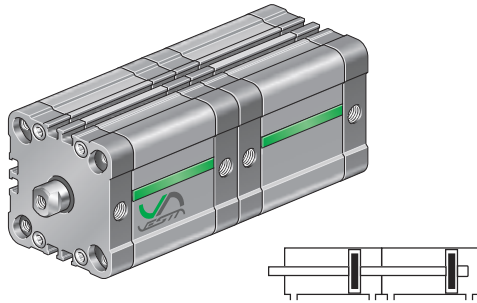
Ø	A	ØD	ØD2	ØD3	ØD4	ØD5	G	H3	H4	I	K	L	L3	W	F4	S1	W	H	Code / Codice
16	29,2	8	6	3,3	M4	6	M5	7	12,8	18	6	3,5	2,2	4,5	0	6	4,5	37 (±0,5)	NSKI 16-... AR
20	37	10	6	4,2	M5	7,5	M5	7	12,3	22	8	4,2	2,5	6	4	8	4,5	37 (±0,5)	NSKI 20-... AR
25	41	10	6	4,2	M5	7,5	M5	7,5	13,5	26	8	4,2	2,5	6	3	8	5,5	39 (±0,5)	NSKI 25-... AR
32	49,2	12	6	5,2	M6	9	G1/8	7,5	15	32,5	10	4,5	2	7	0	10	6	44 (±0,5)	NSKI 32-... AR
40	57,2	12	6	5,2	M6	9	G1/8	7,5	15	38	10	4,2	2	7	0	10	6,5	45 (±0,7)	NSKI 40-... AR
50	67	16	8	6,7	M8	10,5	G1/8	7,5	14,6	46,5	13	4,7	2,5	8	0	12	7,5	45 (±0,7)	NSKI 50-... AR
63	80	16	8	6,7	M8	10,5	G1/8	8	15,5	56,5	13	5,2	2,5	8	0	12	7,5	49 (±0,8)	NSKI 63-... AR
80	102,6*	20	8	8,5	M10	13,5	G1/8	9	17	72	17	5,2	2,5	10	0	14	8	54 (±0,8)	NSKI 80-... AR
100	124*	25	8	8,5	M10	13,5	G1/4*	10	20	89	22	5,2	3	10	0	14	10	67 (±1,0)	NSKI 100-... AR

Ø	A	ØD	ØD2	ØD3	ØD4	ØD5	G	H3	H4	I	K	L	L3	W	F4	S1	W	H	Code / Codice
16	29,2	8	6	3,3	M4	6	M5	7	12,8	18	6	3,5	2,2	4,5	0	6	4,5	38 (±0,5)	NSKT 16-... AR
20	37	10	6	4,2	M5	7,5	M5	7	12,3	22	8	4,2	2,5	4,5	4	8	4,5	38 (±0,5)	NSKT 20-... AR
25	41	10	6	4,2	M5	7,5	M5	7,5	13,5	26	8	4,2	2,5	5,5	3	8	5,5	39,5 (±0,5)	NSKT 25-... AR
32	49,2	12	6	5,2	M6	9	G1/8	7,5	15	32	10	4,5	2	6	0	10	6	44,5 (±0,5)	NSKT 32-... AR
40	57,2	12	6	5,2	M6	9	G1/8	7,5	15	42	10	4,2	2	6,5	0	10	6,5	45,5 (±0,7)	NSKT 40-... AR
50	67	16	8	6,7	M8	10,5	G1/8	7,5	14,6	50	13	4,7	2,5	7,5	0	12	7,5	45,5 (±0,7)	NSKT 50-... AR
63	80	16	8	6,7	M8	10,5	G1/8	8	15,5	62	13	5,2	2,5	7,5	0	12	7,5	45,5 (±0,7)	NSKT 63-... AR
80	102,6	20	8	8,5	M10	13,5	G1/8	9	17	82	17	5,2	2,5	8	0	14	8	56 (±0,8)	NSKT 80-... AR
100	124	25	8	8,5	M10	13,5	G1/4	10	20	103	22	5,2	3	10	0	14	10	66,5 (±1,0)	NSKT 100-... AR

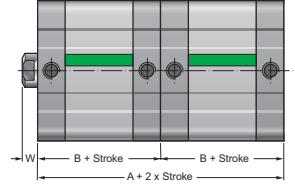


NSK ... TN2 ...

MULTI-THRUST TANDEM
TANDEM MULTISPINTA



For other dimensions please see **NSK** standard cylinder
Per altre dimensioni vedere cilindri **NSK** standard

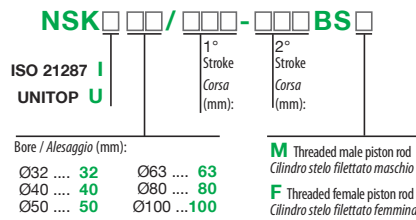
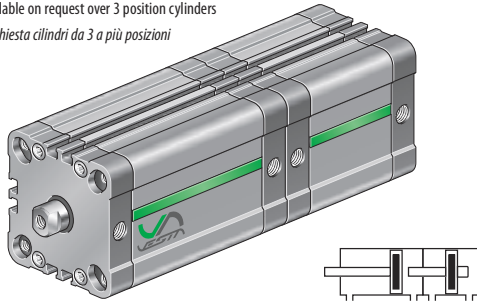


Ø	A	B	ISO 21287		UNITOP	
			Code - Codice	Code - Codice		
32	88,4	44,2	NSKI 32/... TN...	NSKT 32/... TN...		
40	90,4	44,2	NSKI 40/... TN...	NSKT 40/... TN...		
50	90,4	44,2	NSKI 50/... TN...	NSKT 50/... TN...		
63	99	49,5	NSKI 63/... TN...	NSKT 63/... TN...		
80	110	55	NSKI 80/... TN...	NSKT 80/... TN...		
100	133,4	66,7	NSKI 100/... TN...	NSKT 100/... TN...		

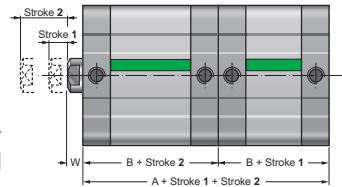
NSK ... BS ...

MULTI-POSITION
MULTIPOSIZIONE

Available on request over 3 position cylinders
A richiesta cilindri da 3 a più posizioni



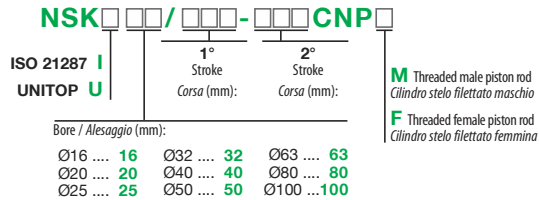
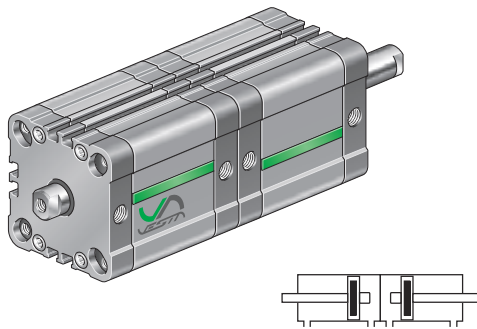
For other dimensions please see **NSK** standard cylinder
Per altre dimensioni vedere cilindri **NSK** standard



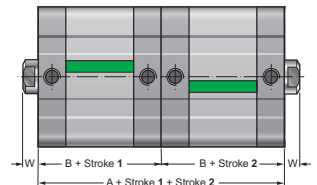
Ø	A	B	ISO 21287		UNITOP	
			Code - Codice	Code - Codice		
32	88,4	44,2	NSKI 32/... BS...	NSKT 32/... BS...		
40	90,4	44,2	NSKI 40/... BS...	NSKT 40/... BS...		
50	90,4	44,2	NSKI 50/... BS...	NSKT 50/... BS...		
63	99	49,5	NSKI 63/... BS...	NSKT 63/... BS...		
80	110	55	NSKI 80/... BS...	NSKT 80/... BS...		
100	133,4	66,7	NSKI 100/... BS...	NSKT 100/... BS...		

NSK ... CNP ...

REAR OPPOSED
CONTRAPPOSTI POSTERIORI



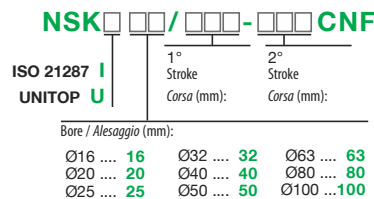
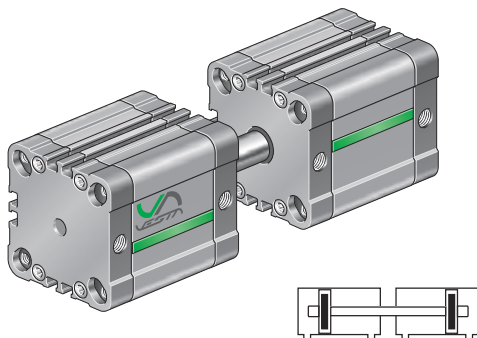
For other dimensions please see **NSK** standard cylinder
Per altre dimensioni vedere cilindri **NSK** standard



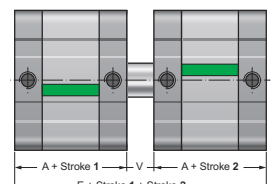
Ø	A	B	ISO 21287		UNITOP	
			Code - Codice	Code - Codice		
16	76	38	NSKI 16/... CNP...	NSKT 16/... CNP...		
20	76	38	NSKI 20/... CNP...	NSKT 20/... CNP...		
25	79	39,5	NSKI 25/... CNP...	NSKT 25/... CNP...		
32	88,4	44,2	NSKI 32/... CNP...	NSKT 32/... CNP...		
40	90,4	45,2	NSKI 40/... CNP...	NSKT 40/... CNP...		
50	90,4	45,2	NSKI 50/... CNP...	NSKT 50/... CNP...		
63	99	49,5	NSKI 63/... CNP...	NSKT 63/... CNP...		
80	110	55	NSKI 80/... CNP...	NSKT 80/... CNP...		
100	133,4	66,7	NSKI 100/... CNP...	NSKT 100/... CNP...		

NSK ... CNF ...

FRONT OPPOSED
CONTRAPPOSTI ANTERIORI



For other dimensions please see **NSK** standard cylinder
Per altre dimensioni vedere cilindri **NSK** standard



Ø	E	A	V	ISO 21287		UNITOP	
				Code - Codice	Code - Codice		
16	85	38	9	NSKI 16/... CNF...	NSKT 16/... CNF...		
20	85	38	9	NSKI 20/... CNF...	NSKT 20/... CNF...		
25	90	39,5	11	NSKI 25/... CNF...	NSKT 25/... CNF...		
32	100,4	44,2	12	NSKI 32/... CNF...	NSKT 32/... CNF...		
40	103,4	45,2	13	NSKI 40/... CNF...	NSKT 40/... CNF...		
50	104,4	45,2	15	NSKI 50/... CNF...	NSKT 50/... CNF...		
63	114	49,5	15	NSKI 63/... CNF...	NSKT 63/... CNF...		
80	126	55	16	NSKI 80/... CNF...	NSKT 80/... CNF...		
100	153,4	66,7	20	NSKI 100/... CNF...	NSKT 100/... CNF...		