



ISO FLANGES AND FABRICATIONS

The ISO range of flanges and fittings are manufactured from high quality 304L (1.4306)* stainless steel. There are four different configurations as shown. Figure 1 illustrates the double claw-clamp assembly which is the most commonly used configuration; Figure 2 shows the wall clamp assembly where a claw-clamp flange is mounted to a rotatable bolt ring. This assembly combines the claw-clamp flange and bolt flanges with nuts and bolts. The rotatable bolt ring and fixed bolted assembly is shown in figure 3.

The rotatable bolt ring consists of a rotatable outer ring and a split retainer ring to hold the claw-clamp in place. Finally configuration 4 shows a bolted fixed flange and a tapped flange, or chamber wall for example.

All four configurations use an "O" ring seal held in place by a centering ring. This is effective down to 10^{-7} mbar. With Viton "O" ring assemblies bakable to 200°C (Sustained 150°C).



Figure 1



Figure 2



Figure 3

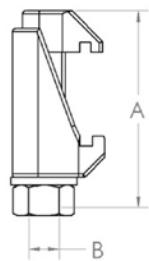


Figure 4

* 316L (1.4404) available on request.

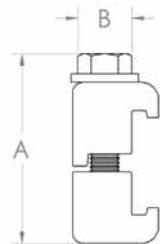
ISO DOUBLE CLAW CLAMPS - STEEL PLATED

PART NUMBER	PNEUROP	A	B	Clamps Req'd
ISO63/250DC	ISO63-250	60 (2.36)	M10	4
ISO320/500DC	ISO320-500	75 (2.95)	M12	8
ISO630DC	ISO630	85 (3.35)	M12	12



ISO DOUBLE CLAW CLAMPS - ALUMINIUM

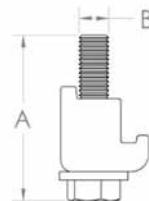
PART NUMBER	PNEUROP	A	B	Clamps Req'd
ISO63/100DCA	ISO63-100	50 (1.97)	M10	4
ISO160/250DCA	ISO160-250	52 (2.05)	M12	8
ISO320/500DCA	ISO320-500	68 (2.68)	M12	12



ISO WALL CLAMPS - STEEL

PART NUMBER	PNEUROP	A	B Thread size	Clamps Req'd
ISO63/100WC	ISO63-100	35 (1.38)	M8	4
ISO160/250WC	ISO160-250	40 (1.57)	M10	8
ISO320/500WC	ISO320-500	50 (1.97)	M12	12

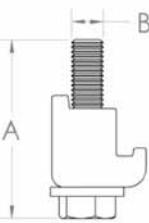
Used with blind tapped holes and centering ring.



ISO WALL CLAMPS - ALUMINIUM

PART NUMBER	PNEUROP	A	B Thread size	Clamps Req'd
ISO63/100WCA	ISO63-100	35 (1.38)	M18	4
ISO160/250WCA	ISO160-250	40 (1.57)	M10	8
ISO320/500WCA	ISO320-500	50 (1.97)	M12	12

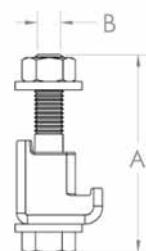
Used with blind tapped holes and centering ring.



ISO WALL CLAMPS, NUT & WASHER - STEEL

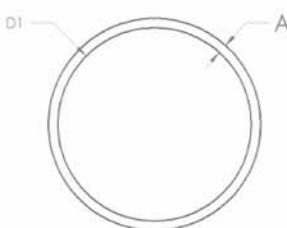
PART NUMBER	PNEUROP	A	Thread Size	Clamps Req'd
ISO63/100WCN	ISO63-100	45 (1.77)	M8	4
ISO160/250WCN	ISO160-250	50 (1.97)	M10	8
ISO320/500WCN	ISO320-500	60 (2.36)	M12	12

Used with through bolt holes and centering ring.
Also available with aluminium clamps on request.



ISO O-RING - VITON / NITRILE

PART NUMBER VITON	PNEUROP	A	D1	PART NUMBER NITRILE
ISO63VR	ISO63	5.3 (0.21)	76 (2.99)	ISO63NR
ISO80VR	ISO80	5.3 (0.21)	88 (3.46)	ISO80NR
ISO100VR	ISO100	5.3 (0.21)	107 (4.21)	ISO100NR
ISO160VR	ISO160	5.3 (0.21)	158 (6.22)	ISO160NR
ISO200VR	ISO200	5.3 (0.21)	221 (8.70)	ISO200NR
ISO250VR	ISO250	5.3 (0.21)	253 (9.96)	ISO250NR
ISO320VR	ISO320	7.0 (0.28)	330 (12.99)	ISO320NR
ISO400VR	ISO400	7.0 (0.28)	405 (15.94)	ISO400NR
ISO500VR	ISO500	7.0 (0.28)	507 (19.96)	ISO500NR
ISO630VR	ISO630	7.0 (0.28)	659 (25.94)	ISO630NR

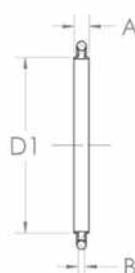


Viton O-ring

Nitrol O-ring

ISO CENTERING RING - 304L ST. STEEL INNER / VITON

PART NUMBER	PNEUROP	A	B	D1	O Ring size
ISO63SVCR	ISO63	8 (0.31)	3.9 (0.15)	70 (2.76)	5.3 (0.21)
ISO80SVCR	ISO80	8 (0.31)	3.9 (0.15)	83 (3.27)	5.3 (0.21)
ISO100SVCR	ISO100	8 (0.31)	3.9 (0.15)	102 (4.02)	5.3 (0.21)
ISO160SVCR	ISO160	8 (0.31)	3.9 (0.15)	153 (6.02)	5.3 (0.21)
ISO200SVCR	ISO200	8 (0.31)	3.9 (0.15)	213 (8.39)	5.3 (0.21)
ISO250SVCR	ISO250	8 (0.31)	3.9 (0.15)	261 (10.28)	5.3 (0.21)
ISO320SVCR	ISO320	14 (0.55)	5.6 (0.22)	318 (12.52)	7.0 (0.28)
ISO400SVCR	ISO400	14 (0.55)	5.6 (0.22)	400 (15.75)	7.0 (0.28)
ISO500SVCR	ISO500	14 (0.55)	5.6 (0.22)	501 (19.72)	7.0 (0.28)
ISO630SVCR	ISO630	14 (0.55)	5.6 (0.22)	651 (25.63)	7.0 (0.28)



ISO CENTERING RING - 304L ST. STEEL INNER / NITRILE

PART NUMBER	PNEUROP	A	B	D1	O Ring size
ISO63SNCR	ISO63	8 (0.31)	3.9 (0.15)	70 (2.76)	5.3 (0.21)
ISO80SNCR	ISO80	8 (0.31)	3.9 (0.15)	83 (3.27)	5.3 (0.21)
ISO100SNCR	ISO100	8 (0.31)	3.9 (0.15)	102 (4.02)	5.3 (0.21)
ISO160SNCR	ISO160	8 (0.31)	3.9 (0.15)	153 (6.02)	5.3 (0.21)
ISO200SNCR	ISO200	8 (0.31)	3.9 (0.15)	213 (8.39)	5.3 (0.21)
ISO250SNCR	ISO250	8 (0.31)	3.9 (0.15)	261 (10.28)	5.3 (0.21)
ISO320SNCR	ISO320	14 (0.55)	5.6 (0.22)	318 (12.52)	7.0 (0.28)
ISO400SNCR	ISO400	14 (0.55)	5.6 (0.22)	400 (15.75)	7.0 (0.28)
ISO500SNCR	ISO500	14 (0.55)	5.6 (0.22)	501 (19.72)	7.0 (0.28)
ISO630SNCR	ISO630	14 (0.55)	5.6 (0.22)	651 (25.63)	7.0 (0.28)



ISO TRAPPED CENTERING RING - 304L ST. STEEL INNER / VITON

PART NUMBER	PNEUROP	A	B	D1	D2	O Ring size
ISO63SVCRT	ISO63	8 (0.31)	3.9 (0.15)	70 (2.76)	94 (3.7)	5.3 (0.21)
ISO80SVCRT	ISO80	8 (0.31)	3.9 (0.15)	83 (3.27)	109 (4.29)	5.3 (0.21)
ISO100SVCRT	ISO100	8 (0.31)	3.9 (0.15)	102 (4.02)	128 (5.04)	5.3 (0.21)
ISO160SVCRT	ISO160	8 (0.31)	3.9 (0.15)	153 (6.02)	179 (7.05)	5.3 (0.21)
ISO200SVCRT	ISO200	8 (0.31)	3.9 (0.15)	213 (8.39)	239 (9.41)	5.3 (0.21)
ISO250SVCRT	ISO250	8 (0.31)	3.9 (0.15)	261 (10.28)	287 (11.3)	5.3 (0.21)
ISO320SVCRT	ISO320	14 (0.55)	5.6 (0.22)	318 (12.52)	358 (14.09)	7.0 (0.28)
ISO400SVCRT	ISO400	14 (0.55)	5.6 (0.22)	400 (15.75)	440 (17.32)	7.0 (0.28)
ISO500SVCRT	ISO500	14 (0.55)	5.6 (0.22)	501 (19.72)	541 (21.3)	7.0 (0.28)
ISO630SVCRT	ISO630	14 (0.55)	5.6 (0.22)	651 (25.63)	691 (27.2)	7.0 (0.28)



Inner centering ring stainless steel, outer aluminium

ISO TRAPPED CENTERING RING - 304L STAINLESS STEEL / NITRILE

PART NUMBER	PNEUROP	A	B	D1	D2	O Ring size
ISO63SNCRT	ISO63	8 (0.31)	3.9 (0.15)	70 (2.76)	94 (3.7)	5.3 (0.21)
ISO80SNCRT	ISO80	8 (0.31)	3.9 (0.15)	83 (3.27)	109 (4.29)	5.3 (0.21)
ISO100SNCRT	ISO100	8 (0.31)	3.9 (0.15)	102 (4.02)	128 (5.04)	5.3 (0.21)
ISO160SNCRT	ISO160	8 (0.31)	3.9 (0.15)	153 (6.02)	179 (7.05)	5.3 (0.21)
ISO200SNCRT	ISO200	8 (0.31)	3.9 (0.15)	213 (8.39)	239 (9.41)	5.3 (0.21)
ISO250SNCRT	ISO250	8 (0.31)	3.9 (0.15)	261 (10.28)	287 (11.3)	5.3 (0.21)
ISO320SNCRT	ISO320	14 (0.55)	5.6 (0.22)	318 (12.52)	358 (14.09)	7.0 (0.28)
ISO400SNCRT	ISO400	14 (0.55)	5.6 (0.22)	400 (15.75)	440 (17.32)	7.0 (0.28)
ISO500SNCRT	ISO500	14 (0.55)	5.6 (0.22)	501 (19.72)	541 (21.3)	7.0 (0.28)
ISO630SNCRT	ISO630	14 (0.55)	5.6 (0.22)	651 (25.63)	691 (27.2)	7.0 (0.28)



Inner centering ring stainless steel, outer aluminium

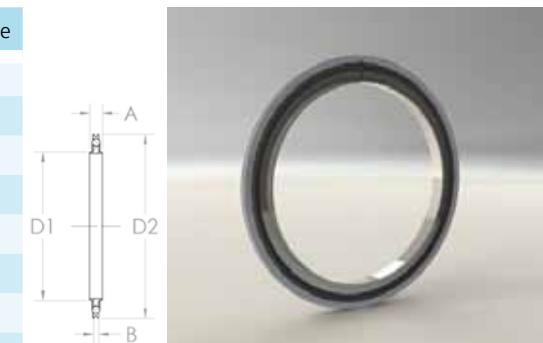
ISO TRAPPED CENTERING RING - ALUMINIUM / VITON

PART NUMBER	PNEUROP	A	B	D1	D2	O Ring size
ISO63AVCRT	ISO63	8 (0.31)	3.9 (0.15)	70 (2.76)	94 (3.7)	5.3 (0.21)
ISO80AVCRT	ISO80	8 (0.31)	3.9 (0.15)	83 (3.27)	109 (4.29)	5.3 (0.21)
ISO100AVCRT	ISO100	8 (0.31)	3.9 (0.15)	102 (4.02)	128 (5.04)	5.3 (0.21)
ISO160AVCRT	ISO160	8 (0.31)	3.9 (0.15)	153 (6.02)	179 (7.05)	5.3 (0.21)
ISO200AVCRT	ISO200	8 (0.31)	3.9 (0.15)	213 (8.39)	239 (9.41)	5.3 (0.21)
ISO250AVCRT	ISO250	8 (0.31)	3.9 (0.15)	261 (10.28)	287 (11.3)	5.3 (0.21)
ISO320AVCRT	ISO320	14 (0.55)	5.6 (0.22)	318 (12.52)	358 (14.09)	7.0 (0.28)
ISO400AVCRT	ISO400	14 (0.55)	5.6 (0.22)	400 (15.75)	440 (17.32)	7.0 (0.28)
ISO500AVCRT	ISO500	14 (0.55)	5.6 (0.22)	501 (19.72)	541 (21.3)	7.0 (0.28)
ISO630AVCRT	ISO630	14 (0.55)	5.6 (0.22)	651 (25.63)	691 (27.2)	7.0 (0.28)



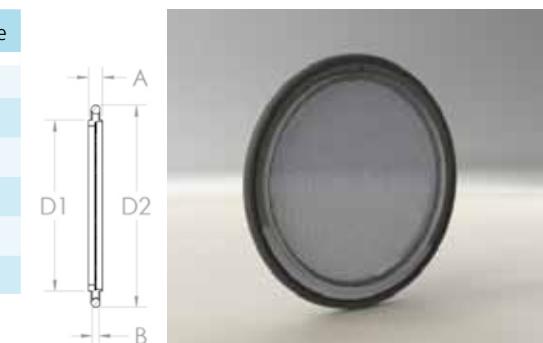
ISO TRAPPED CENTERING RING -ALUMINIUM / NITRILE

PART NUMBER	PNEUROP	A	B	D1	D2	O Ring size
ISO63ANCRT	ISO63	8 (0.31)	3.9 (0.15)	70 (2.76)	94 (3.7)	5.3 (0.21)
ISO80ANCRT	ISO80	8 (0.31)	3.9 (0.15)	83 (3.27)	109 (4.29)	5.3 (0.21)
ISO100ANCRT	ISO100	8 (0.31)	3.9 (0.15)	102 (4.02)	128 (5.04)	5.3 (0.21)
ISO160ANCRT	ISO160	8 (0.31)	3.9 (0.15)	153 (6.02)	179 (7.05)	5.3 (0.21)
ISO200ANCRT	ISO200	8 (0.31)	3.9 (0.15)	213 (8.39)	239 (9.41)	5.3 (0.21)
ISO250ANCRT	ISO250	8 (0.31)	3.9 (0.15)	261 (10.28)	287 (11.3)	5.3 (0.21)
ISO320ANCRT	ISO320	14 (0.55)	5.6 (0.22)	318 (12.52)	358 (14.09)	7.0 (0.28)
ISO400ANCRT	ISO400	14 (0.55)	5.6 (0.22)	400 (15.75)	440 (17.32)	7.0 (0.28)
ISO500ANCRT	ISO500	14 (0.55)	5.6 (0.22)	501 (19.72)	541 (21.3)	7.0 (0.28)
ISO630ANCRT	ISO630	14 (0.55)	5.6 (0.22)	651 (25.63)	691 (27.2)	7.0 (0.28)



ISO MESH CENTERING RING -STAINLESS / VITON

PART NUMBER	PNEUROP	A	B	D1	D2	O Ring size
ISO63MCRV	ISO63	8 (0.31)	3.9 (0.15)	70 (2.76)	86.6 (3.41)	5.3 (0.21)
ISO80MCRV	ISO80	8 (0.31)	3.9 (0.15)	83 (3.27)	98.6 (3.88)	5.3 (0.21)
ISO100MCRV	ISO100	8 (0.31)	3.9 (0.15)	102 (4.02)	117.6 (4.63)	5.3 (0.21)
ISO160MCRV	ISO160	8 (0.31)	3.9 (0.15)	153 (6.02)	168.6 (6.64)	5.3 (0.21)
ISO200MCRV	ISO100	8 (0.31)	3.9 (0.15)	102 (4.02)	231.6 (9.12)	5.3 (0.21)
ISO250MCRV	ISO160	8 (0.31)	3.9 (0.15)	153 (6.02)	263.6 (10.38)	5.3 (0.21)



Stainless steel centering ring with mesh screen and replacement Viton 'O' ring.

ISO MESH CENTERING RING -STAINLESS / NITRILE

PART NUMBER	PNEUROP	A	B	D1	D2	O Ring size
ISO63MCRN	ISO63	8 (0.31)	3.9 (0.15)	70 (2.76)	86.6 (3.41)	5.3 (0.21)
ISO80MCRN	ISO80	8 (0.31)	3.9 (0.15)	83 (3.27)	98.6 (3.88)	5.3 (0.21)
ISO100MCRN	ISO100	8 (0.31)	3.9 (0.15)	102 (4.02)	117.6 (4.63)	5.3 (0.21)
ISO160MCRN	ISO160	8 (0.31)	3.9 (0.15)	153 (6.02)	168.6 (6.64)	5.3 (0.21)
ISO200MCRN	ISO100	8 (0.31)	3.9 (0.15)	102 (4.02)	231.6 (9.12)	5.3 (0.21)
ISO250MCRN	ISO160	8 (0.31)	3.9 (0.15)	153 (6.02)	263.6 (10.38)	5.3 (0.21)

Stainless steel centering ring with mesh screen and replacement Viton 'O' ring.



ISO BLANK CLAW CLAMP FLANGE - 304L STAINLESS STEEL.

PART NUMBER	PNEUROP	A	D1	D2
ISO63BK	ISO63	12 (0.47)	95 (3.74)	70 (2.76)
ISO80BK	ISO80	12 (0.47)	110 (4.33)	83 (3.27)
ISO100BK	ISO100	12 (0.47)	130 (5.12)	102 (4.02)
ISO160BK	ISO160	12 (0.47)	180 (7.09)	153 (6.02)
ISO200BK	ISO200	12 (0.47)	240 (9.45)	213 (8.39)
ISO250BK	ISO250	12 (0.47)	290 (11.42)	261 (10.28)
ISO320BK	ISO320	17 (0.67)	370 (14.57)	318 (12.52)
ISO400BK	ISO400	17 (0.67)	450 (17.72)	400 (15.75)
ISO500BK	ISO500	17 (0.67)	550 (21.65)	501 (19.72)
ISO630BK	ISO630	17 (0.67)	690 (27.17)	651 (25.63)



ISO BORED CLAW CLAMP FLANGE - 304L STAINLESS STEEL.

PART NUMBER	PNEUROP	A	D1	D2	D3
ISO63B76	ISO63	12 (0.47)	95 (3.74)	76 (2.99)	70 (2.76)
ISO80B89	ISO80	12 (0.47)	110 (4.33)	89 (3.50)	83 (3.27)
ISO100B108	ISO100	12 (0.47)	130 (5.12)	108 (4.25)	102 (4.02)
ISO160B159	ISO160	12 (0.47)	180 (7.09)	159 (6.26)	153 (6.02)
ISO200B219	ISO200	12 (0.47)	240 (9.45)	219 (8.62)	213 (8.39)
ISO250B267	ISO250	12 (0.47)	290 (11.42)	267 (10.51)	261 (10.28)
ISO320B324	ISO320	17 (0.67)	370 (14.57)	324 (12.76)	318 (12.52)
ISO400B406	ISO400	17 (0.67)	450 (17.72)	406 (15.98)	400 (15.75)
ISO500B508	ISO500	17 (0.67)	550 (21.65)	508 (20.00)	501 (19.72)
ISO630B660	ISO630	17 (0.67)	690 (27.17)	660 (25.98)	651 (25.63)

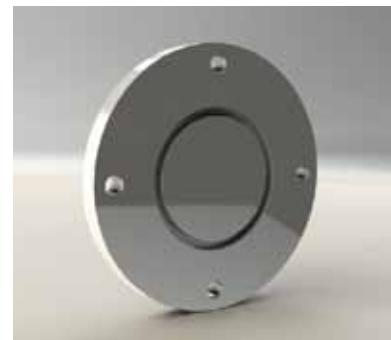
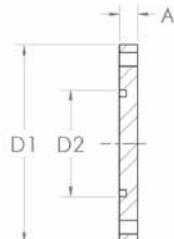
Imperial tube and special bores available on request.

ISO320B324 has a counter bored from vacuum side, D3 = C-ring dimension.



ISO BLANK FIXED BOLTED FLANGE - 304L STAINLESS STEEL.

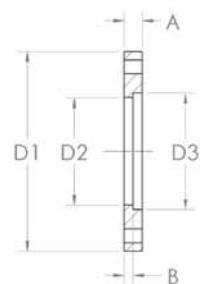
PART NUMBER	PNEUROP	A	D1	D2
ISO63FBK	ISO63	12 (0.47)	130 (5.12)	70 (2.76)
ISO80FBK	ISO80	12 (0.47)	145 (5.71)	83 (3.27)
ISO100FBK	ISO100	12 (0.47)	165 (6.50)	102 (4.02)
ISO160FBK	ISO160	12 (0.47)	225 (8.86)	153 (6.02)
ISO200FBK	ISO200	12 (0.47)	285 (11.22)	213 (8.39)
ISO250FBK	ISO250	12 (0.47)	335 (13.19)	261 (10.28)
ISO320FBK	ISO320	17 (0.67)	425 (16.73)	318 (12.52)
ISO400FBK	ISO400	17 (0.67)	510 (20.08)	400 (15.75)



ISO BORED FIXED BOLTED FLANGE - 304L STAINLESS STEEL.

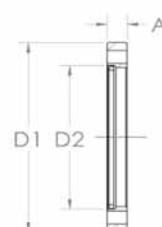
PART NUMBER	PNEUROP	A	B	D1	D2	D3
ISO63F76	ISO63	12 (0.47)	6 (0.24)	130 (5.12)	70 (2.76)	76 (2.99)
ISO80F89	ISO80	12 (0.47)	6 (0.24)	145 (5.71)	83 (3.27)	89 (3.50)
ISO100F108	ISO100	12 (0.47)	6 (0.24)	165 (6.50)	102 (4.02)	108 (4.25)
ISO160F159	ISO160	12 (0.47)	6 (0.24)	225 (8.86)	153 (6.02)	159 (6.26)
ISO200F219	ISO200	12 (0.47)	6 (0.24)	285 (11.22)	213 (8.39)	219 (8.62)
ISO250F267	ISO250	12 (0.47)	6 (0.24)	335 (13.19)	261 (10.28)	267 (10.51)
ISO320F324	ISO320	17 (0.67)	6 (0.24)	425 (16.73)	318 (12.52)	324 (12.76)
ISO400F406	ISO400	17 (0.67)	10 (0.29)	510 (20.08)	400 (15.75)	406 (15.98)

Imperial tube and special bores available on request. D3 = Tube Diameter



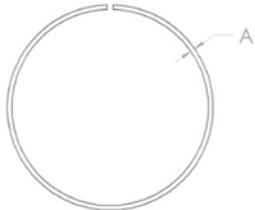
ISO ROTATABLE BOLT RING - STEEL.

PART NUMBER	PNEUROP	A	D1	D2
ISO63R	ISO63	12 (0.47)	130 (5.12)	98.5 (3.88)
ISO100R	ISO80	12 (0.47)	165 (6.50)	133.5 (5.26)
ISO160R	ISO100	16 (0.63)	225 (8.86)	185.7 (7.31)
ISO200R	ISO160	16 (0.63)	285 (11.22)	245.7 (9.67)
ISO250R	ISO200	16 (0.63)	335 (13.19)	295.7 (11.64)



ISO RETAINING RING - STEEL

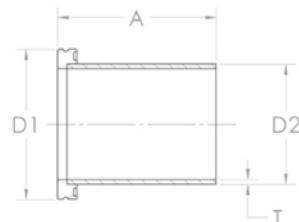
PART NUMBER	PNEUROP	A
ISO63RR	ISO63	3 (0.12)
ISO100RR	ISO80	3 (0.12)
ISO160RR	ISO100	5 (0.20)
ISO200RR	ISO160	5 (0.20)
ISO250RR	ISO200	5 (0.20)
ISO320RR	ISO320	5 (0.20)
ISO400RR	ISO400	8 (0.31)



ISO TUBULATION - 304L STAINLESS STEEL

PART NUMBER	PNEUROP	A	D1	D2	T
ISO63TU	ISO63	100 (3.94)	95 (3.74)	76 (2.99)	3.0 (0.12)
ISO80TU	ISO80	100 (3.94)	110 (4.33)	89 (3.50)	5.5 (0.22)
ISO100TU	ISO100	100 (3.94)	130 (5.12)	108 (4.25)	3.0 (0.12)
ISO160TU	ISO160	100 (3.94)	180 (7.09)	159 (6.26)	3.0 (0.12)
ISO200TU	ISO200	100 (3.94)	240 (9.45)	219 (8.62)	3.0 (0.12)
ISO250TU	ISO250	100 (3.94)	290 (11.42)	267 (10.51)	3.0 (0.12)
ISO320TU	ISO320	100 (3.94)	370 (14.57)	324 (12.76)	3.0 (0.12)
ISO400TU	ISO400	100 (3.94)	450 (17.72)	406 (15.98)	3.0 (0.12)
ISO500TU	ISO500	100 (3.94)	550 (21.65)	508 (20.00)	4.0 (0.16)
ISO630TU	ISO630	100 (3.94)	690 (27.17)	660 (25.98)	5.0 (0.20)

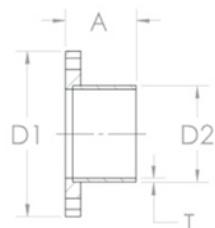
Special lengths available on request.



ISO FIXED BOLTED TUBULATION - 304L STAINLESS STEEL

PART NUMBER	PNEUROP	A	D1	D2	T
ISO63FTU	ISO63	100 (3.94)	130 (5.12)	76 (2.99)	3.0 (0.12)
ISO80FTU	ISO80	100 (3.94)	145 (5.71)	89 (3.50)	5.5 (0.22)
ISO100FTU	ISO100	100 (3.94)	165 (6.50)	108 (4.25)	3.0 (0.12)
ISO160FTU	ISO160	100 (3.94)	225 (8.86)	159 (6.26)	3.0 (0.12)
ISO200FTU	ISO200	100 (3.94)	285 (11.22)	219 (8.62)	3.0 (0.12)
ISO250FTU	ISO250	100 (3.94)	335 (13.19)	267 (10.51)	3.0 (0.12)
ISO320FTU	ISO320	100 (3.94)	425 (16.73)	324 (12.76)	3.0 (0.12)
ISO400FTU	ISO400	100 (3.94)	510 (20.08)	406 (15.98)	3.0 (0.12)
ISO500FTU	ISO500	100 (3.94)	610 (24.02)	508 (20.00)	4.0 (0.16)
ISO630FTU	ISO630	100 (3.94)	750 (29.53)	660 (25.98)	5.0 (0.20)

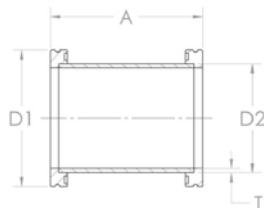
Special lengths available on request.



ISO STRAIGHT CONNECTOR - 304L STAINLESS STEEL

PART NUMBER	PNEUROP	A	D1	D2	T
ISO63SC	ISO63	100 (3.94)	95 (3.74)	76 (2.99)	3 (0.12)
ISO80SC	ISO80	100 (3.94)	110 (4.33)	89 (3.50)	3 (0.12)
ISO100SC	ISO100	100 (3.94)	130 (5.12)	108 (4.25)	3 (0.12)
ISO160SC	ISO160	100 (3.94)	180 (7.09)	159 (6.26)	3 (0.12)
ISO200SC	ISO200	100 (3.94)	240 (9.45)	219 (8.62)	3 (0.12)
ISO250SC	ISO250	100 (3.94)	290 (11.42)	267 (10.51)	3 (0.12)

Special lengths available on request.

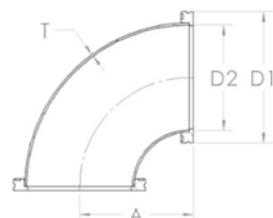
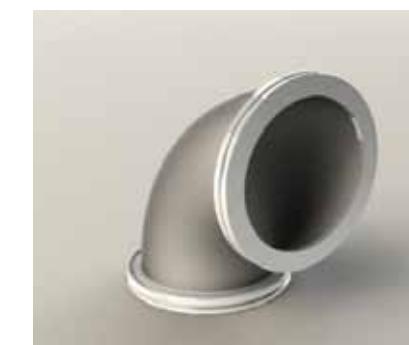


ISO 90 DEGREE ELBOW - 304L STAINLESS STEEL

PART NUMBER	PNEUROP	A	D1	D2	T	Elbow
ISO63E	ISO63	88 (3.46)	95 (3.74)	70 (2.76)	2 (0.08)	R
ISO80E	ISO80	98 (3.86)	110 (4.33)	70 (2.76)	2 (0.08)	R
ISO100E	ISO100	108 (4.25)	130 (5.12)	108 (4.25)	2 (0.08)	R
ISO160E	ISO160	138 (5.43)	180 (7.09)	159 (6.26)	3 (0.12)	M
ISO200E	ISO200	178 (7.01)	240 (9.45)	219 (8.62)	3 (0.12)	M
ISO250E	ISO250	208 (8.19)	290 (11.42)	267 (10.51)	3 (0.12)	M

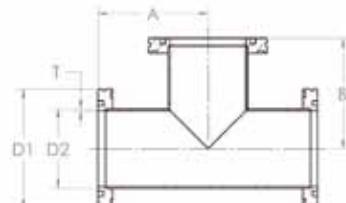
R - Radius elbow

M - Mitred elbow



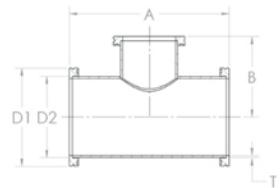
ISO TEE - 304L STAINLESS STEEL

PART NUMBER	PNEUROP	A	B	D1	D2	T
ISO63TE	ISO63	88 (3.46)	88 (3.46)	95 (3.74)	76 (2.99)	3.0 (0.12)
ISO80TE	ISO80	98 (3.86)	98 (3.86)	110 (4.33)	89 (3.50)	5.5 (0.22)
ISO100TE	ISO100	108 (4.25)	108 (4.25)	130 (5.12)	108 (4.25)	3.0 (0.12)
ISO160TE	ISO160	138 (5.43)	138 (5.43)	180 (7.09)	159 (6.26)	3.0 (0.12)
ISO200TE	ISO200	178 (7.01)	178 (7.01)	240 (9.45)	219 (8.62)	3.0 (0.12)
ISO250TE	ISO250	208 (8.19)	208 (8.19)	290 (11.42)	267 (10.51)	3.0 (0.12)



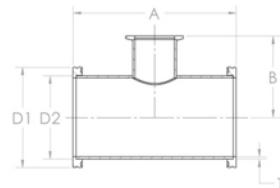
ISO UNEQUAL TEE - 304L STAINLESS STEEL

PART NUMBER	PNEUROP	A	B	D1	D2	T
ISO100TE63	ISO100/63	216 (8.50)	107 (4.21)	130 (5.12)	108 (4.25)	3 (0.12)
ISO160TE63	ISO160/63	276 (10.87)	130 (5.12)	180 (7.09)	159 (6.26)	3 (0.12)
ISO160TE100	ISO160/100	276 (10.87)	131 (5.16)	180 (7.09)	159 (6.26)	3 (0.12)
ISO200TE63	ISO200/63	276 (10.87)	160 (6.30)	240 (9.45)	219 (8.62)	3 (0.12)
ISO200TE100	ISO200/100	276 (10.87)	161 (6.34)	240 (9.45)	219 (8.62)	3 (0.12)
ISO200TE160	ISO200/160	276 (10.87)	168 (6.61)	240 (9.45)	219 (8.62)	3 (0.12)



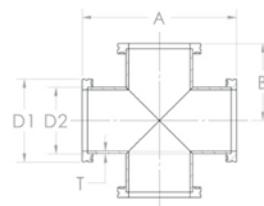
ISO-KF UNEQUAL TEE - 304L STAINLESS STEEL

PART NUMBER	PNEUROP	A	B	D1	D2	T
ISO63TE16	ISO63/NW16	204 (8.03)	58 (2.28)	95 (3.74)	76 (2.99)	3 (0.12)
ISO63TE25	ISO63/NW25	204 (8.03)	79 (3.11)	95 (3.74)	76 (2.99)	3 (0.12)
ISO63TE40	ISO63/NW40	204 (8.03)	76 (2.99)	95 (3.74)	76 (2.99)	3 (0.12)
ISO100TE25	ISO100/NW25	260 (10.24)	98 (3.86)	130 (5.12)	108 (4.25)	3 (0.12)
ISO100TE40	ISO100/NW40	260 (10.24)	95 (3.74)	130 (5.12)	108 (4.25)	3 (0.12)



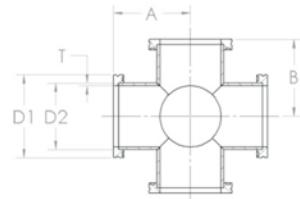
ISO 4-WAY CROSS - 304L STAINLESS STEEL

PART NUMBER	PNEUROP	A	B	D1	D2	T
ISO63X	ISO63	176 (6.93)	88 (3.46)	95 (3.74)	76 (2.99)	3.0 (0.12)
ISO80X	ISO80	196 (7.72)	98 (3.86)	110 (4.33)	89 (3.50)	5.5 (0.22)
ISO100X	ISO100	216 (8.50)	108 (4.25)	130 (5.12)	108 (4.25)	3.0 (0.12)
ISO160X	ISO160	276 (10.87)	138 (5.43)	180 (7.09)	159 (6.26)	3.0 (0.12)
ISO200X	ISO200	356 (14.02)	178 (7.01)	240 (9.45)	219 (8.62)	3.0 (0.12)
ISO250X	ISO250	416 (16.38)	208 (8.19)	290 (11.42)	267 (10.51)	3.0 (0.12)



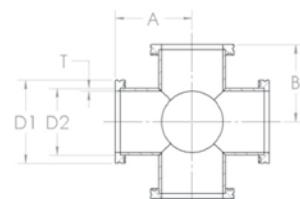
ISO 5-WAY CROSS - 304L STAINLESS STEEL

PART NUMBER	PNEUROP	A	B	D1	D2	T
ISO63FWX	ISO63	88 (3.46)	88 (3.46)	95 (3.74)	76 (2.99)	3.0 (0.12)
ISO80FWX	ISO80	98 (3.86)	98 (3.86)	110 (4.33)	89 (3.50)	5.5 (0.22)
ISO100FWX	ISO100	108 (4.25)	108 (4.25)	130 (5.12)	108 (4.25)	3.0 (0.12)
ISO160FWX	ISO160	138 (5.43)	138 (5.43)	180 (7.09)	159 (6.26)	3.0 (0.12)
ISO200FWX	ISO200	178 (7.01)	178 (7.01)	240 (9.45)	219 (8.62)	3.0 (0.12)
ISO250FWX	ISO250	208 (8.19)	208 (8.19)	290 (11.42)	267 (10.51)	3.0 (0.12)



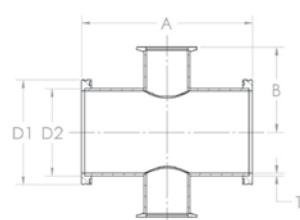
ISO 6-WAY CROSS - 304L STAINLESS STEEL

PART NUMBER	PNEUROP	A	B	D1	D2	T
ISO63XX	ISO63	88 (3.46)	88 (3.46)	95 (3.74)	76 (2.99)	3.0 (0.12)
ISO80XX	ISO80	98 (3.86)	98 (3.86)	110 (4.33)	89 (3.50)	5.5 (0.22)
ISO100XX	ISO100	108 (4.25)	108 (4.25)	130 (5.12)	108 (4.25)	3.0 (0.12)
ISO160XX	ISO160	138 (5.43)	138 (5.43)	180 (7.09)	159 (6.26)	3.0 (0.12)
ISO200XX	ISO200	178 (7.01)	178 (7.01)	240 (9.45)	219 (8.62)	3.0 (0.12)
ISO250XX	ISO250	208 (8.19)	208 (8.19)	290 (11.42)	267 (10.51)	3.0 (0.12)



ISO-KF REDUCING CROSS - 304L STAINLESS STEEL

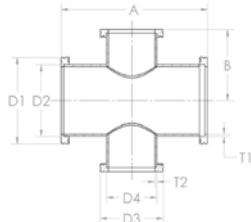
PART NUMBER	PNEUROP	A	B	D1	D2	T
ISO63X16	ISO63/NW16	204 (8.03)	58 (2.28)	95 (3.74)	76 (2.99)	3 (0.12)
ISO63X25	ISO63/NW25	204 (8.03)	79 (3.11)	95 (3.74)	76 (2.99)	3 (0.12)
ISO63X40	ISO63/NW40	204 (8.03)	76 (2.99)	95 (3.74)	76 (2.99)	3 (0.12)
ISO63X50	ISO63/NW50	204 (8.03)	92 (3.62)	95 (3.74)	76 (2.99)	3 (0.12)
ISO100X25	ISO100/NW25	260 (10.24)	98 (3.86)	130 (5.12)	108 (4.25)	3 (0.12)
ISO100X40	ISO100/NW40	260 (10.24)	95 (3.74)	130 (5.12)	108 (4.25)	3 (0.12)
ISO100X50	ISO100/NW50	260 (10.24)	111 (4.37)	130 (5.12)	108 (4.25)	3 (0.12)
ISO160X40	ISO160/NW40	320 (12.60)	121 (4.76)	130 (5.12)	159 (6.26)	3 (0.12)
ISO160X50	ISO160/NW50	320 (12.60)	136 (5.35)	130 (5.12)	159 (6.26)	3 (0.12)



All measurements are in millimetres (inches in brackets)

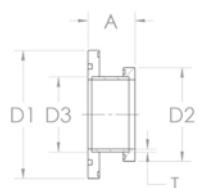
ISO REDUCING CROSS - 304L STAINLESS STEEL

PART NUMBER	PNEUROP	A	B	D1	D2	D3	D4	T1	T2
ISO100X63	ISO100/63	216 (8.5)	107 (4.21)	130 (5.12)	108 (4.25)	95 (3.74)	76 (2.99)	3 (0.12)	3 (0.12)
ISO160X63	ISO160/63	276 (10.87)	130 (5.12)	180 (7.09)	159 (6.26)	95 (3.74)	76 (2.99)	3 (0.12)	3 (0.12)
ISO160X100	ISO160/100	276 (10.87)	131 (5.16)	180 (7.09)	159 (6.26)	130 (5.12)	108 (4.25)	3 (0.12)	3 (0.12)
ISO200X160	ISO200/160	256 (10.08)	168 (6.61)	240 (9.45)	219 (8.62)	180 (7.09)	159 (6.26)	3 (0.12)	3 (0.12)



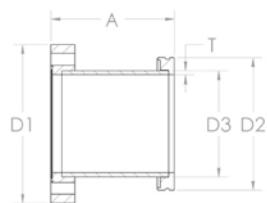
ISO REDUCING ADAPTOR - 304L STAINLESS STEEL

PART NUMBER	PNEUROP	A	D1	D2	D3	T
ISO80R63	ISO63/80	50 (1.97)	110 (4.33)	95 (3.74)	76 (2.99)	3.0 (0.12)
ISO100R63	ISO63/100	50 (1.97)	130 (5.12)	95 (3.74)	76 (2.99)	3.0 (0.12)
ISO160R63	ISO63/160	50 (1.97)	180 (7.09)	95 (3.74)	76 (2.99)	3.0 (0.12)
ISO200R63	ISO63/200	90 (3.54)	240 (9.45)	95 (3.74)	76 (2.99)	3.0 (0.12)
ISO100R80	ISO80/100	50 (1.97)	130 (5.12)	110 (4.33)	89 (3.50)	5.5 (0.22)
ISO160R80	ISO80/160	50 (1.97)	180 (7.09)	110 (4.33)	89 (3.50)	5.5 (0.22)
ISO160R100	ISO100/160	50 (1.97)	180 (7.09)	130 (5.12)	108 (4.25)	3.0 (0.12)
ISO200R100	ISO100/200	90 (3.54)	240 (9.45)	130 (5.12)	108 (4.25)	3.0 (0.12)
ISO200R160	ISO160/200	90 (3.54)	240 (9.45)	180 (7.09)	159 (6.26)	3.0 (0.12)
ISO250R160	ISO160/250	90 (3.54)	290 (11.42)	180 (7.09)	159 (6.26)	3.0 (0.12)
ISO250R200	ISO200/250	90 (3.54)	290 (11.42)	240 (9.45)	219 (8.62)	3.0 (0.12)



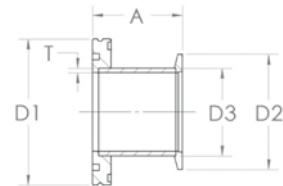
ISO TO CF ADAPTOR - 304L STAINLESS STEEL.

PART NUMBER	PNEUROP	A	D1	D2	D3	T
SA6363	ISO63/CF63	90 (3.54)	114 (4.49)	95 (3.74)	76 (2.99)	3 (0.12)
SA1063	ISO63/CF100	90 (3.54)	152 (5.98)	95 (3.74)	76 (2.99)	3 (0.12)
SA1010	ISO100/CF100	90 (3.54)	152 (5.98)	130 (5.12)	108 (4.25)	3 (0.12)
SA1016	ISO160/CF100	90 (3.54)	152 (5.98)	180 (7.09)	159 (6.26)	3 (0.12)
SA1510	ISO100/CF150	90 (3.54)	203 (7.99)	130 (5.12)	105 (4.13)	3 (0.12)
SA1516	ISO160/CF150	90 (3.54)	203 (7.99)	180 (7.09)	159 (6.26)	3 (0.12)



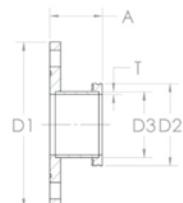
ISO TO NW ADAPTOR - 304L STAINLESS STEEL.

PART NUMBER	PNEUROP	A	D1	D2	D3	T
SK6325	ISO63/NW25	50 (1.97)	95 (3.74)	40 (1.57)	28.0 (1.10)	2 (0.08)
SK6340	ISO63/NW40	50 (1.97)	95 (3.74)	55 (2.17)	44.5 (1.75)	2 (0.08)
SK6350	ISO63/NW50	50 (1.97)	95 (3.74)	75 (2.95)	57.0 (2.24)	3 (0.12)
SK1025	ISO100/NW25	50 (1.97)	130 (5.12)	40 (1.57)	28.0 (1.10)	2 (0.08)
SK1040	ISO100/NW40	50 (1.97)	130 (5.12)	55 (2.17)	44.5 (1.75)	2 (0.08)
SK1050	ISO100/NW50	50 (1.97)	130 (5.12)	75 (2.95)	57.0 (2.24)	3 (0.12)



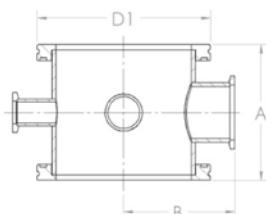
ISO TO ASA ADAPTOR - 304L STAINLESS STEEL

PART NUMBER	PNEUROP	A	D1	D2	D3	T
ISA632G	ISO63/ASA2	106 (4.17)	152 (5.98)	95 (3.74)	76 (2.99)	3.0 (0.12)
ISA802G	ISO80/ASA2	106 (4.17)	152 (5.98)	110 (4.33)	89 (3.50)	5.5 (0.22)
ISA1002G	ISO100/ASA2	106 (4.17)	152 (5.98)	130 (5.12)	108 (4.25)	3.0 (0.12)
ISA633G	ISO63/ASA3	106 (4.17)	190 (7.48)	95 (3.74)	76 (2.99)	3.0 (0.12)
ISA803G	ISO80/ASA3	106 (4.17)	190 (7.48)	110 (4.33)	89 (3.50)	5.5 (0.22)
ISA1003G	ISO100/ASA3	106 (4.17)	190 (7.48)	130 (5.12)	108 (4.25)	3.0 (0.12)



ISO STRAIGHT CONNECTOR WITH KF LATERAL PORTS - 304L STAINLESS STEEL.

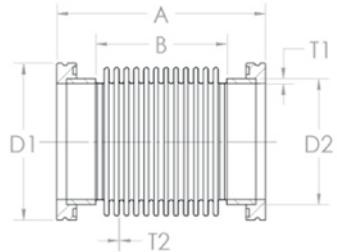
PART NUMBER	PNEUROP	A	B (NW16)	B (NW40)	D1
ISO63SC4016K	ISO63/NW40/16	88 (3.46)	60 (2.36)	80 (3.15)	95 (3.74)
ISO100SC4016K	ISO100/NW40/16	108 (4.25)	75 (2.95)	75 (2.95)	130 (5.12)
ISO160SC4016K	ISO100/NW40/16	138 (5.43)	100 (3.94)	100 (3.94)	180 (7.09)



All measurements are in millimetres (inches in brackets)

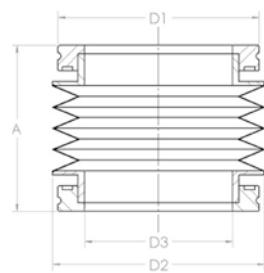
ISO FLEXIBLE BELLOWS - STAINLESS STEEL

PART NUMBER	PNEUROP	A	B	D1	D2	T1	T2
ISO63FXB	ISO63	127 (5.00)	70 (2.76)	95 (3.74)	76 (2.99)	3 (0.12)	0.2 (0.01)
ISO80FXB	ISO80	127 (5.00)	70 (2.76)	110 (4.33)	89 (3.50)	3 (0.12)	0.2 (0.01)
ISO100FXB	ISO100	127 (5.00)	60 (2.36)	130 (5.12)	108 (4.25)	3 (0.12)	0.4 (0.02)
ISO160FXB	ISO160	220 (8.66)	112 (4.41)	180 (7.09)	159 (6.26)	3 (0.12)	0.4 (0.02)
ISO200FXB	ISO200	220 (8.66)	170 (6.69)	240 (9.45)	219 (8.62)	3 (0.12)	0.6 (0.02)



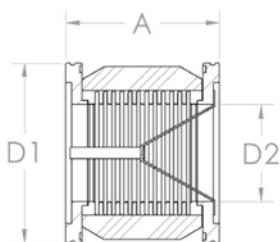
ISO EDGE WELDED BELLOWS - STAINLESS STEEL

PART NUMBER	PNEUROP	Convolutions	Stroke	A	D1	D2	D3	Bellows ID
ISO63EWB	ISO63	11	30.8 (1.21)	100 (3.94)	95 (3.74)	100 (3.94)	70 (2.76)	75 (2.95)
ISO100EWB	ISO100	11	33.0 (1.30)	115 (4.53)	130 (5.12)	132 (5.2)	104 (4.09)	102 (4.02)
ISO160EWB	ISO160	13	44.2 (1.74)	140 (5.51)	180 (7.09)	185 (7.28)	153 (6.02)	150 (5.91)



ISO VIBRATION ISOLATOR - STAINLESS STEEL

PART NUMBER	PNEUROP	A	D1	D2
ISO63VBD	ISO63	85 (3.35)	95 (3.74)	52 (2.05)
ISO100VBD	ISO100	85 (3.35)	130 (5.12)	76 (2.99)
ISO160VBD	ISO160	85 (3.35)	180 (7.09)	95 (3.74)



ISO FLEXIBLE HOSE - STAINLESS STEEL

PART NUMBER	PNEUROP	A	B	D1	D2	T1	T2
ISO63FX25	ISO63	250 (9.84)	172 (6.77)	95 (3.74)	76 (2.99)	3 (0.12)	0.28 (0.011)
ISO63FX50	ISO63	500 (19.69)	422 (16.61)	95 (3.74)	76 (2.99)	3 (0.12)	0.28 (0.011)
ISO63FX75	ISO63	750 (29.53)	672 (26.46)	95 (3.74)	76 (2.99)	3 (0.12)	0.28 (0.011)
ISO63FX100	ISO63	1000 (39.37)	922 (36.30)	95 (3.74)	76 (2.99)	3 (0.12)	0.28 (0.011)
ISO80FX25	ISO80	250 (9.84)	166 (6.54)	110 (4.33)	89 (3.50)	3 (0.12)	0.28 (0.011)
ISO80FX50	ISO80	500 (19.69)	416 (16.38)	110 (4.33)	89 (3.50)	3 (0.12)	0.28 (0.011)
ISO80FX75	ISO80	750 (29.53)	666 (26.22)	110 (4.33)	89 (3.50)	3 (0.12)	0.28 (0.011)
ISO80FX100	ISO80	1000 (39.37)	916 (36.06)	110 (4.33)	89 (3.50)	3 (0.12)	0.28 (0.011)
ISO100FX25	ISO100	250 (9.84)	181 (7.13)	130 (5.12)	108 (4.25)	3 (0.12)	0.28 (0.011)
ISO100FX50	ISO100	500 (19.69)	431 (16.97)	130 (5.12)	108 (4.25)	3 (0.12)	0.28 (0.011)
ISO100FX75	ISO100	750 (29.53)	681 (26.81)	130 (5.12)	108 (4.25)	3 (0.12)	0.28 (0.011)
ISO100FX100	ISO100	1000 (39.37)	931 (36.65)	130 (5.12)	108 (4.25)	3 (0.12)	0.28 (0.011)
ISO160FX25	ISO160	250 (9.84)	170 (6.69)	180 (7.09)	159 (6.26)	3 (0.12)	0.38 (0.015)
ISO160FX50	ISO160	500 (19.69)	420 (16.54)	180 (7.09)	159 (6.26)	3 (0.12)	0.38 (0.015)
ISO160FX75	ISO160	750 (29.53)	670 (26.38)	180 (7.09)	159 (6.26)	3 (0.12)	0.38 (0.015)
ISO160FX100	ISO160	1000 (39.37)	920 (36.22)	180 (7.09)	159 (6.26)	3 (0.12)	0.38 (0.015)

