

NPA



Member IMC Group
Ingersoll
Cutting Tools

New Product Announcement

NEW-389 • 05/2024

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MILLING - TOOL HOLDERS

Featuring
INNOFIT™
adaption

Pilot Diameters

0.750-1.500"

22-40 mm

Modular Adaptions

InnoFit Z4

InnoFit Z5

Master Shank Adapters

BT40 Z4

BT50 Z4, Z5

CAT40 Z4

CAT50 Z4, Z5

DIN69871-40 Z4

DIN69871-50 Z4, Z5

HSKA63 Z4

HSKA80 Z4, Z5

HSKA100 Z4, Z5

!ABSORBER™
An **INNOFIT™** Product

Modular Damping System for Shell Mills

- » Damping extension reduces vibration in long reach milling applications
- » Fully compatible with all InnoFit holders and extensions
- » Modular InnoFit connection features 3-point clamping for maximum rigidity
- » Suitable for use with 2-6" (50-160 mm) cutter bodies



See it in
action! »



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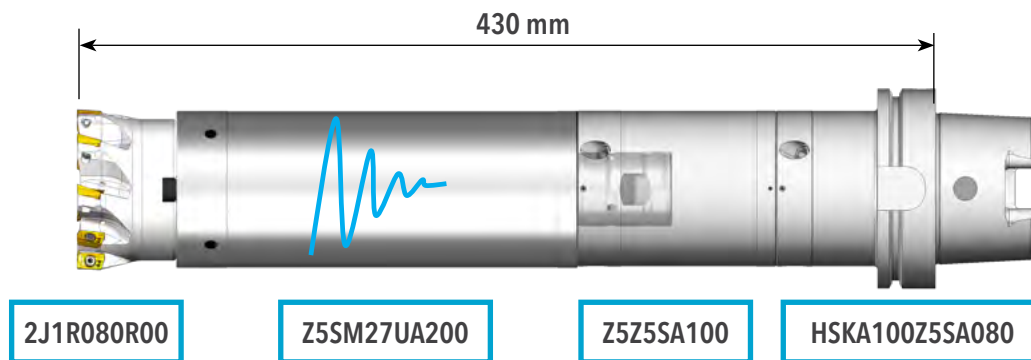


Overview

Ingersoll's proven **InnoFit** modular adaption system is expanding to include the new **I-Absorber** vibration damped shell mill extension. The new **I-Absorber** anti-vibratory shell mill extension is available in the Z4 and Z5 **InnoFit** adaption with both inch and metric pilot diameters and is compatible for use with all standardized **InnoFit** master shank adapters, reducers, and extenders.

Application Range

In long reach applications that exceed 4xD, the operation is oftentimes only possible when vibration damped tool combinations are utilized. The new standardized I-Absorber vibration damped shell mill extensions were specifically designed to handle the radial milling loads in these long reach applications. The self centering 3-point clamping connection of the modular InnoFit adaption prevents misalignment of the damped extension while resisting bending forces uniformly, transmitting axial forces from cut to spindle. The example below shows how the I-Absorber can be combined with InnoFit master shank adapters and InnoFit extensions to achieve an overall length of 430 mm with an 80 mm cutter body.

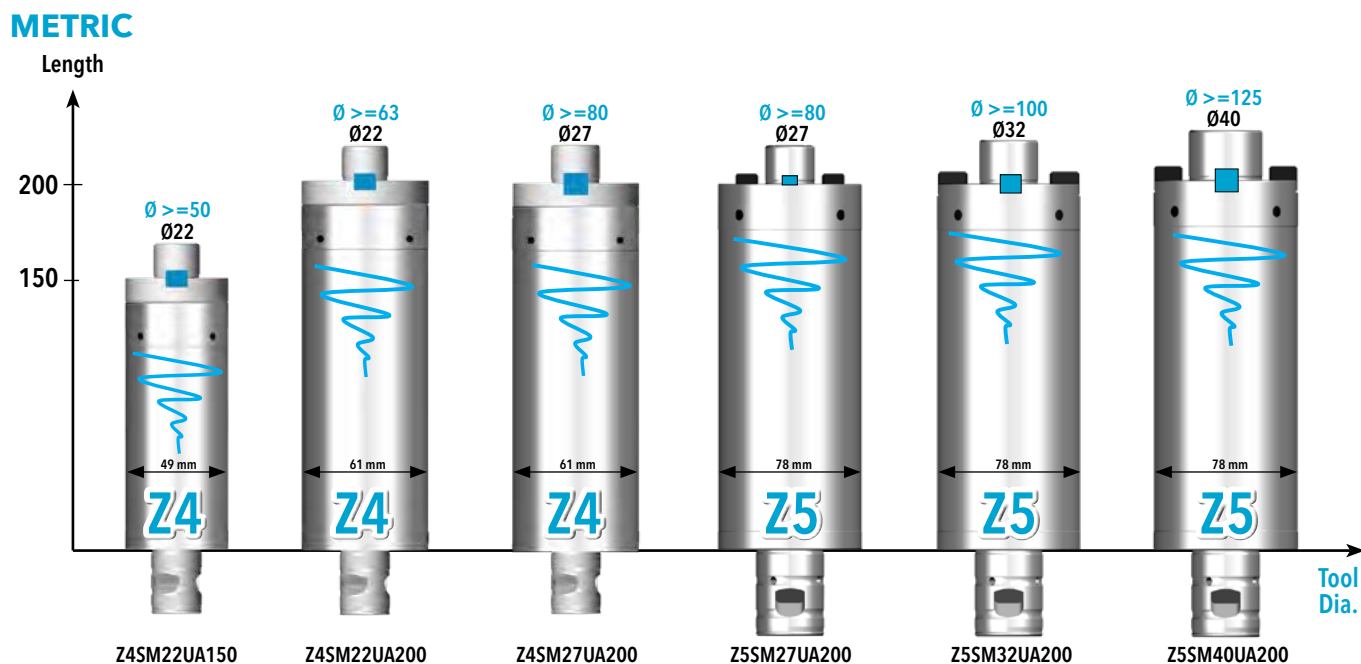
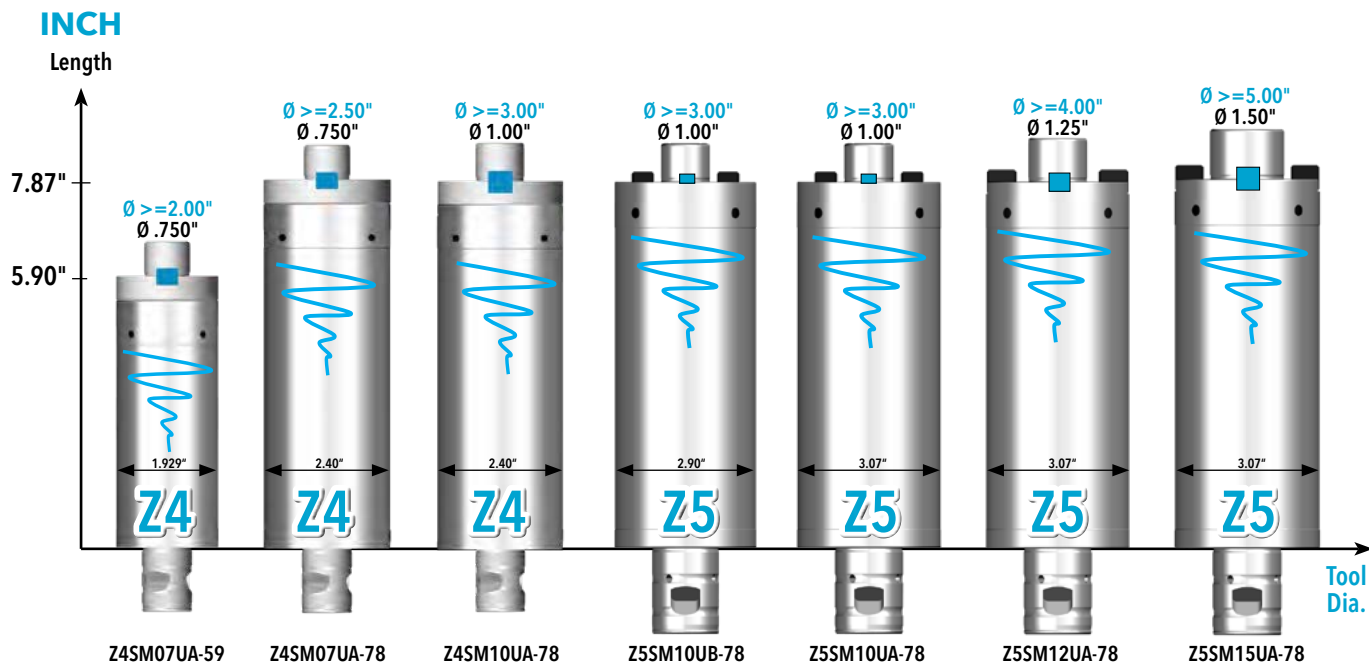


Use and Care

- Preliminary indications suggest a max 2000 RPM limit when using **I-Absorber** shell mill adapters.
- **I-Absorber** shell mill adapters should be wiped clean, free of debris, and stored in a vertical position when not in use.

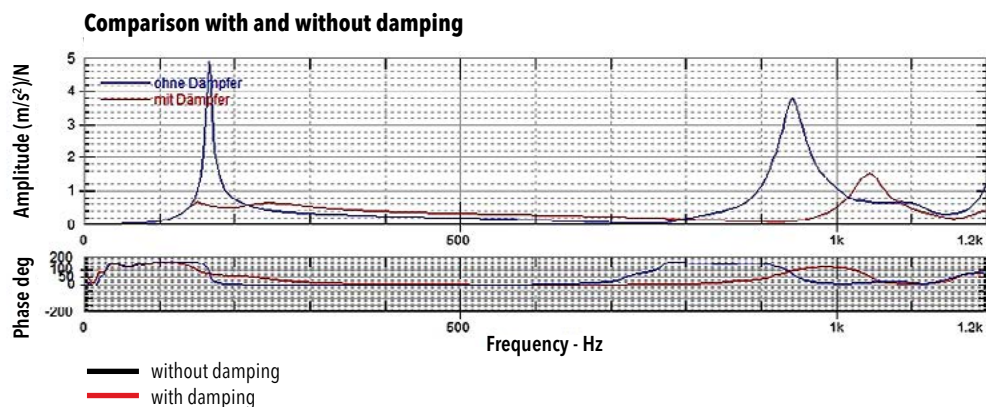
Technical Features

The standardized I-Absorber shell mill extensions are designed and tuned for the typical standard milling tool weights according to each pilot diameter and cannot be misaligned.



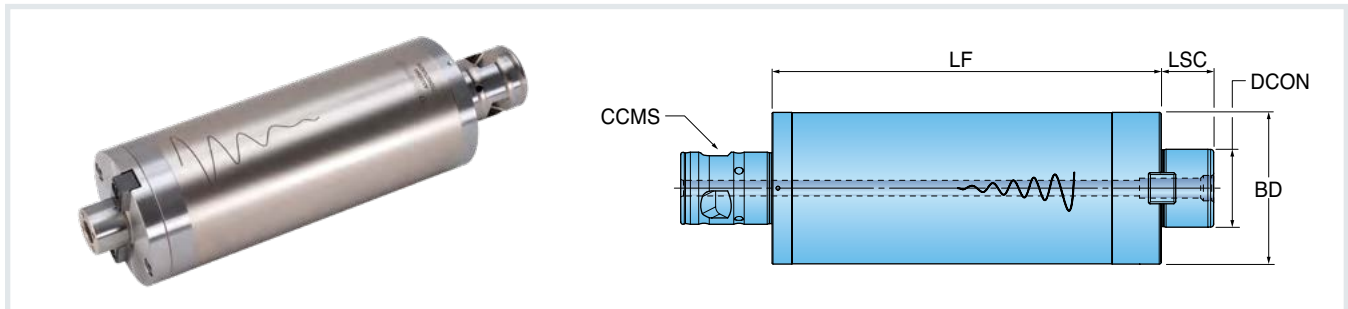
Advantages

- Vibration damping prolongs tool life
- Increased productivity
 - a) Larger DOC can be applied due to the damping effect
 - b) Higher feed rates can often be achieved with the use of a damped combination
- Better surface finish quality can be obtained in long reach applications
- Cannot be misaligned
- Modular system compatible with standard InnoFit Z4 & InnoFit Z5 adaptations
- Significant improvement using damped combination when compared with standard extensions (see graph below)



Series Z_SM_UA

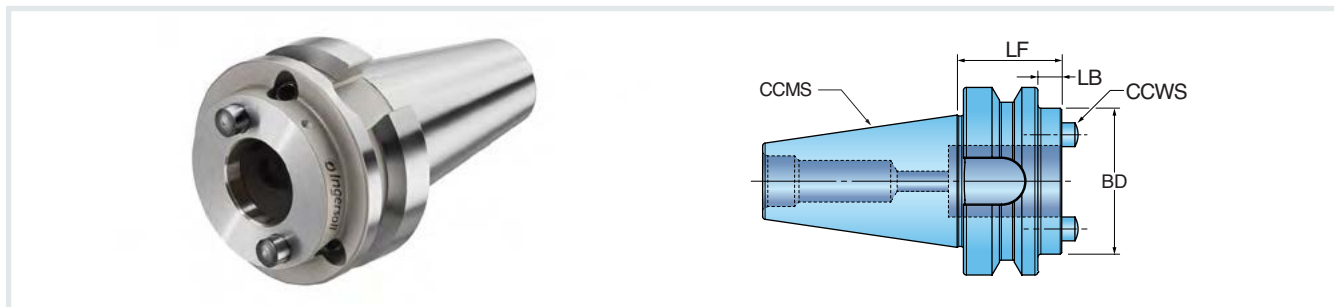
ANTI-VIBRATION SHELL MILL ADAPTER FOR INNOFIT MODULAR SYSTEM



Part Number	CCMS Connection Code Machine Side	DCON Pilot Diameter	LF Functional Length	BD Body Diameter	LSC Clamping Length
INCH					
Z4SM07UA-59	Z4	0.750	5.900	1.929	0.68
Z4SM07UA-78	Z4	0.750	7.870	2.400	0.68
Z4SM10UA-78	Z4	1.000	7.870	2.400	0.68
Z5SM10UA-78	Z5	1.000	7.870	3.070	0.68
Z5SM10UB-78	Z5	1.000	7.870	2.900	0.68
Z5SM12UA-78	Z5	1.250	7.870	3.070	0.68
Z5SM15UA-78	Z5	1.500	7.870	3.070	0.94
METRIC					
Z4SM22UA150	Z4	22 mm	150 mm	49 mm	19 mm
Z4SM22UA200	Z4	22 mm	200 mm	61 mm	19 mm
Z4SM27UA200	Z4	27 mm	200 mm	61 mm	21 mm
Z5SM27UA200	Z5	27 mm	200 mm	78 mm	21 mm
Z5SM32UA200	Z5	32 mm	200 mm	78 mm	24 mm
Z5SM40UA200	Z5	40 mm	200 mm	78 mm	27 mm

Series BT_Z_SA

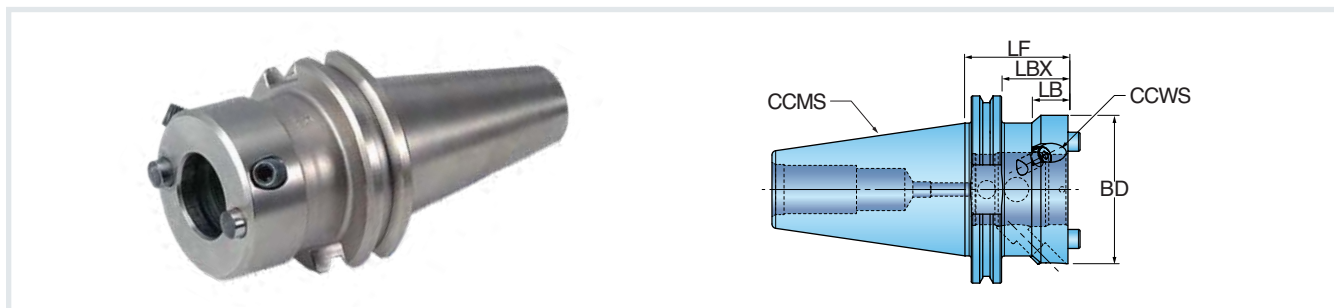
BT V-FLANGE - INNOFIT MASTER SHANK ADAPTER



Part Number	CCMS Connection Code Machine Side	CCWS Connection Code Workpiece Side	LF Functional Length	LB Body Length	BD Body Diameter
METRIC					
BT40Z4SA035	BT40	Z4	35 mm	7 mm	49 mm
BT50Z4SA045	BT50	Z4	45 mm	6 mm	49 mm
BT50Z5SA045	BT50	Z5	45 mm	6 mm	78 mm

Series CAT_Z_SA

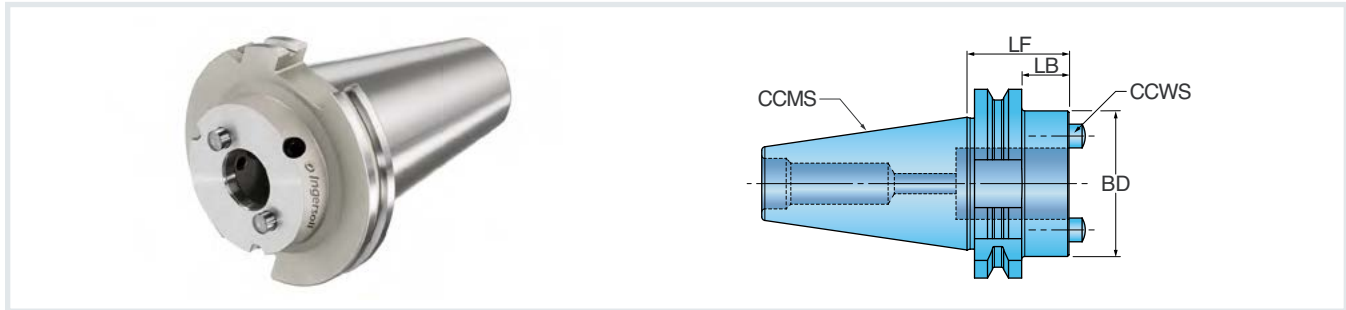
CAT V-FLANGE - INNOFIT MASTER SHANK ADAPTER



Part Number	CCMS Connection Code Machine Side	CCWS Connection Code Workpiece Side	LF Functional Length	LB Body Length	LBX Body Length Max.	BD Body Diameter
INCH						
C40Z4SA-13	CAT40	Z4	1.375	0.625	-	1.937
C40Z4SA-21-01	CAT40	Z4	2.125	1.375	-	1.937
C50Z5SB-21	CAT50	Z5	2.125	0.75	1.375	3.07
C50Z5SA-21-03	CAT50	Z5	2.125	0.75	1.375	2.90

Series DIN69871_Z_SA

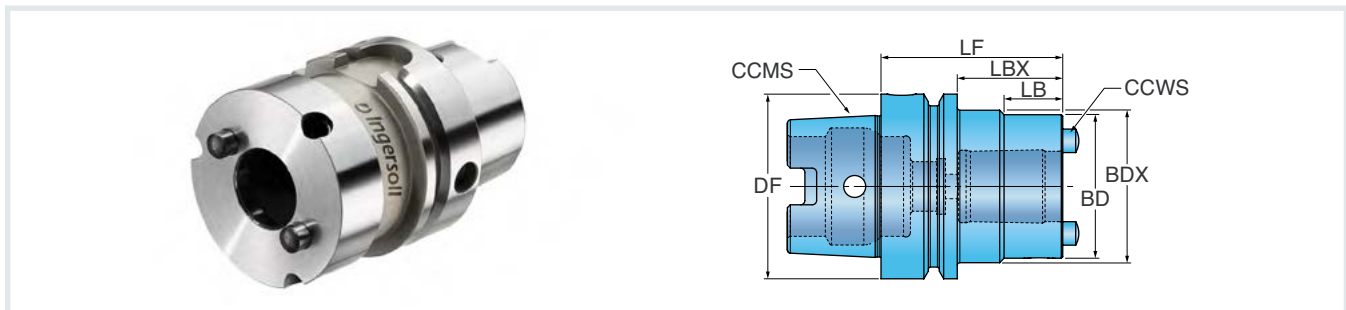
INNOFIT MASTER SHANK ADAPTER



Part Number	CCMS Connection Code Machine Side	CCWS Connection Code Workpiece Side	LF Functional Length	LB Body Length	BD Body Diameter
METRIC					
DIN6987140Z4SA035	DIN69871-40	Z4	35 mm	15 mm	49 mm
DIN6987150Z4SA035	DIN69871-50	Z4	35 mm	13 mm	49 mm
DIN6987150Z4SB035	DIN69871-50	Z4	35 mm	15 mm	61 mm
DIN6987150Z5SA035	DIN69871-50	Z5	35 mm	15 mm	78 mm

Series HSKA_Z_SA

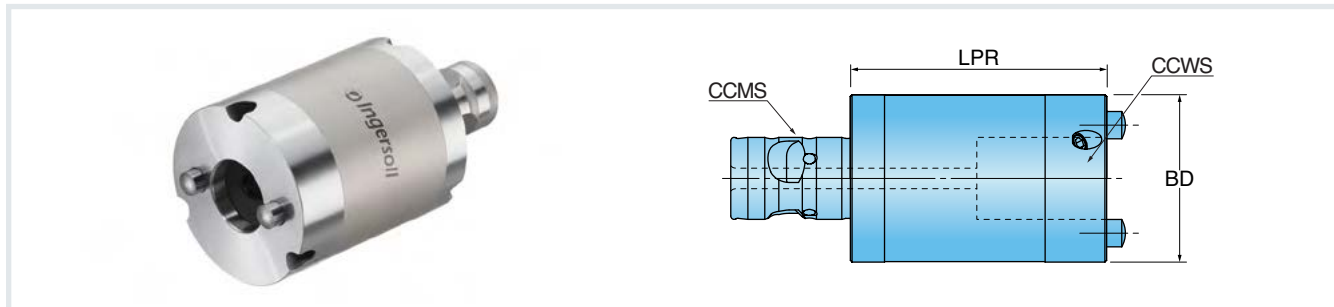
INNOFIT MASTER SHANK ADAPTER



Part Number	CCMS Connection Code Machine Side	CCWS Connection Code Workpiece Side	LF Functional Length	LB Body Length	LBX Body Length Max.	BD Body Diameter	BDX Body Dia. Max.	DF Flange Diameter
METRIC								
HSKA100Z4SA080	HSKA100	Z4	80 mm	51 mm	-	49 mm	-	100 mm
HSKA100Z4SB080	HSKA100	Z4	80 mm	51 mm	-	61 mm	-	100 mm
HSKA100Z5SA080	HSKA100	Z5	80 mm	51 mm	-	78 mm	-	100 mm
HSKA63Z4SA062	HSKA63	Z4	62 mm	20 mm	36 mm	49 mm	52 mm	63 mm
HSKA63Z4SB062	HSKA63	Z4	62 mm	18 mm	38 mm	61 mm	-	63 mm
HSKA80Z4SA068	HSKA80	Z4	68 mm	42 mm	-	49 mm	-	80 mm
HSKA80Z5SA080	HSKA80	Z5	80 mm	32 mm	54 mm	78 mm	-	80 mm

Series Z_Z_SA

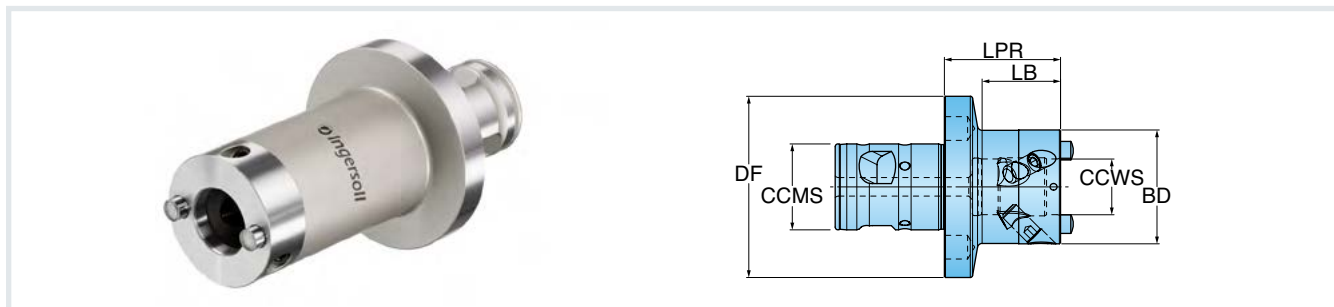
EXTENSIONS FOR INNOFIT MODULAR SYSTEM



Part Number	CCMS Connection Code Machine Side	CCWS Connection Code Workpiece Side	LPR Protruding Length	BD Body Diameter
INCH				
Z4Z4SA050	Z4	Z4	1.97	1.93
Z4Z4SA075	Z4	Z4	2.95	1.93
Z4Z4SA100	Z4	Z4	3.94	1.93
Z5Z5SA075	Z5	Z5	2.95	3.07
Z5Z5SB-29	Z5	Z5	2.95	2.90
Z5Z5SA100	Z5	Z5	3.94	3.07
Z5Z5SA125	Z5	Z5	4.93	3.07
Z5Z5SB-49	Z5	Z5	4.93	2.90

Series Z5Z4SA

REDUCERS FOR INNOFIT MODULAR SYSTEM



Part Number	CCMS Connection Code Machine Side	CCWS Connection Code Workpiece Side	LB Body Length	LPR Protruding Length	BD Body Diameter	DF Flange Diameter
INCH						
Z5Z4SA025	Z5	Z4	0.355	0.99	1.93	3.07
Z5Z4SA050	Z5	Z4	1.370	1.97	1.93	3.07
Z5Z4SA075	Z5	Z4	2.320	2.96	1.93	3.07
Z5Z4SA100	Z5	Z4	3.310	3.94	1.93	3.07