

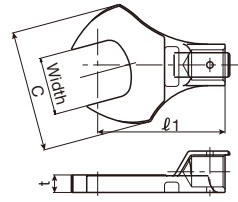
Interchangeable Head

SH

Open Spanner Head

RoHS

The SH type spanner heads suit for the place where sockets can not be used, for flare nuts in piping and for work in narrow places.



SH15Dx19

Tohnichi Head Size	Model (Body Size x Width)	Allowable Torque		Outside Width C [mm]	Thickness t [mm]
		[N·m]	[kgf·cm]		
8D	SH8Dx5.5	1.5	15	13	3
	SH8Dx6	2.5	25	15	3.5
	SH8Dx7	3.5	35	17	4
	SH8Dx8	7	70	20	4.5
	SH8Dx10	14	140	25	5.5
	SH8Dx11			27	
	SH8Dx12			29	6.5
	SH8Dx13				
	SH8Dx14			31	6.5
	SH8Dx16	15	150		
	SH8Dx17			32	
	SH8Dx19			35	
	SH8Dx21			36	
	SH8Dx22			37	
SH8Dx24			38		
10D	SH10Dx7	20	200	28	6.5
	SH10Dx8				
	SH10Dx10				
	SH10Dx11				
	SH10Dx12				
	SH10Dx13			32	
	SH10Dx14				
	SH10Dx16				
	SH10Dx17	25	250		
	SH10Dx18			39	
SH10Dx19					
SH10Dx21					
SH10Dx22					
SH10Dx24			43		
12D	SH12Dx8	7	70	20	5
	SH12Dx10	12	120	24	
	SH12Dx11	20.5	205	28	5.5
	SH12Dx12	29.5	295	31	6.5
	SH12Dx13			32	
	SH12Dx14			38	8
	SH12Dx16	59	590		
	SH12Dx17			40	10
	SH12Dx18				
	SH12Dx19			41	11
SH12Dx21	70	700			
SH12Dx22			43		
SH12Dx24			48	13	
SH12Dx27			52		
15D	SH15Dx12	59	590	38	8
	SH15Dx13				
	SH15Dx14				
	SH15Dx16				
	SH15Dx17				
	SH15Dx18	140	1400	51	13
	SH15Dx19				
	SH15Dx21				
SH15Dx22					

Tohnichi Head Size	Model (Body Size x Width)	Allowable Torque		Outside Width C [mm]	Thickness t [mm]
		[N·m]	[kgf·cm]		
15D	SH15Dx24	140	1400	60	12
	SH15Dx26				
	SH15Dx27				
	SH15Dx30				
	SH15Dx32				
SH15Dx36			68		
SH19Dx17					
SH19Dx18	200	2000			
SH19Dx19			54	13	
SH19Dx21					
SH19Dx22	180	1800			
SH19Dx24					
SH19Dx27	200	2000	60	15	
SH19Dx30	180	1800			
SH19Dx32					
SH19Dx34	200	2000	76	11	
SH19Dx36					
SH19Dx41	180	1800			
SH22Dx19					
SH22Dx22	280	2800	63		
SH22Dx24	500	5000			
SH22Dx27					
SH22Dx30	420	4200	78		
SH22Dx32					
SH22Dx34	500	5000		15	
SH22Dx36	420	4200			
SH22Dx41			85		
SH22Dx46	280	2800			
SH22Dx50			103		
SH22Dx55	500	5000	108		
SH27Dx22	255	2550	65	14	
SH27Dx24	350	3500	72	15	
SH27Dx27	490	4900	82	16	
SH27Dx30	670	6700	88	19	
SH27Dx32	750	7500	92	20	
SH27Dx34	670	6700	90	20	
SH27Dx36			94	21	
SH27Dx41			98	22	
SH27Dx46	750	7500	100	24	
SH27Dx50			103	26	
SH32Dx27					
SH32Dx30					
SH32Dx32	850	8500	105	18	
SH32Dx34					
SH32Dx36					
SH32Dx41			110	24	
SH32Dx46					
SH32Dx50	1200	12000			
SH32Dx55			120	29	
SH32Dx60					

Inch Size Models

Commonly used in the airline industry and for specific American product installation and maintenance.

Tohnichi Head Size	Model (Body Size x Inner Width [in])	Inner Width [mm]	Allowable Torque		Outside Width C [mm]	Thickness t [mm]
			N·m [lbf·in]	mm [in]		
8D	SH8Dx1/4	6.35	2.5 [22]	15 [0.59]	3.5 [0.14]	
	SH8Dx5/16	7.94	7 [61]	20 [0.79]	4.5 [0.18]	
	SH8Dx3/8	9.53	14 [123]	25 [0.98]		
	SH8Dx7/16	11.11		27 [1.06]	5.5 [0.22]	
	SH8Dx1/2	12.7	15 [132]			
	SH8Dx9/16	14.29		29 [1.14]	6.5 [0.26]	
10D	SH10Dx1/4	6.35				
	SH10Dx5/16	7.94	20 [177]	28 [1.10]		
	SH10Dx3/8	9.53				
	SH10Dx7/16	11.11		32 [1.26]	6.5 [0.26]	
	SH10Dx1/2	12.7	25 [221]			
	SH10Dx9/16	14.29		39 [1.54]		
12D	SH12Dx3/8	9.53	12 [106]	24 [0.94]	5 [0.20]	
	SH12Dx7/16	11.11	20.5 [181]	31 [1.22]		
	SH12Dx1/2	12.7	29.5 [261]	32 [1.26]	6.5 [0.26]	
	SH12Dx9/16	14.29				
	SH12Dx5/8	15.88	59 [522]	40 [1.57]	10 [0.39]	
	SH12Dx11/16	17.46	70 [620]	41 [1.61]	11 [0.43]	
15D	SH15Dx1/2	12.7		38 [1.50]	8 [0.31]	
	SH15Dx9/16	14.29	59 [522]			
	SH15Dx5/8	15.88				
	SH15Dx11/16	17.46				
	SH15Dx3/4	19.05		51 [2.01]	13 [0.51]	
	SH15Dx13/16	20.64				
	SH15Dx7/8	22.23				
	SH15Dx15/16	23.81				
	SH15Dx1	25.40			60 [2.36]	12 [0.47]
	SH15Dx1-1/16	26.99				

Tohnichi Head Size	Model (Body Size x Inner Width [in])	Inner Width [mm]	Allowable Torque		Outside Width C [mm]	Thickness t [mm]
			N·m [lbf·in]	mm [in]		
15D	SH15Dx1-1/8	28.58				
	SH15Dx1-3/16	30.16			60 [2.36]	
	SH15Dx1-1/4	31.75				
	SH15Dx1-5/16	33.34	140 [1239]		66 [2.59]	12 [0.47]
	SH15Dx1-3/8	34.93				
19D	SH15Dx1-7/16	36.51			69 [2.72]	
	SH15Dx1-1/2	38.10				
	SH19Dx15/16	23.81				
	SH19Dx1	25.4			60 [2.36]	15 [0.59]
	SH19Dx1-1/16	26.99				
	SH19Dx1-1/8	28.58				
	SH19Dx1-3/16	30.16	200 [1947]		72 [2.83]	
	SH19Dx1-1/4	31.75				
	SH19Dx1-5/16	33.34				11 [0.43]
	SH19Dx1-3/8	34.93				
SH19Dx1-7/16	36.51			76 [2.99]		
	SH19Dx1-1/2	38.1				

The Relationship between Interchangeable Heads and Torque Wrenches

Tohnichi's interchangeable head wrenches have specific diameter round ends that fit into corresponding head base openings. Head and wrench model names include the diameter sizes so heads can be matched to wrenches that will accept those heads.

For example: SH15D×17 will fit on CL100N×15D

A variety of different head types (SH, RH, QH, RQH, FH, DH, AH and SH-N) can be used on one wrench or different types of wrenches such as CL (for tightening) and CEM3-G (for inspection) can use the same head that has the corresponding diameter size.

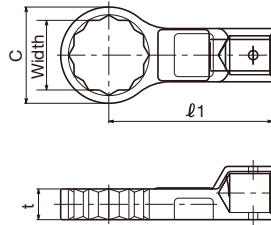


RH Ring Head

RoHS

The RH type ring heads guarantee the safe work as the axes of bolt and RH ring head are always aligned and prevent the heads will drop.

Note: RH8D×5.5 to RH8D×7 are single hex shape.



RH15D×17

Tohnichi Head Size	Model (Body Size x Width)	Allowable Torque		Outside Width C [mm]	Thickness t [mm]	
		[N·m]	[kgf·cm]			
8D	RH8D×5.5	1.5	15	10.5	5	
	RH8D×6	2.4	24	11		
	RH8D×7	3.6	36	12	6	
	RH8D×8	7.2	72	13.5		
	RH8D×10	12.2	122	15.5		
	RH8D×11			17	7	
	RH8D×12	15	140	18		
	RH8D×13			19		
	10D	RH10D×8	7.2	72	12.5	6
		RH10D×10	12.2	122	15.5	7
RH10D×11		20	200	17	8	
RH10D×12				18		
RH10D×13				19		
RH10D×14				20	10	
RH10D×16				22		
RH10D×17		25	250	24		
RH10D×18				25		
RH10D×19				26		
RH10D×21			28			
RH10D×22			29			
12D	RH12D×8	7.2	72	15	5	
	RH12D×10	12.2	122	16	5.5	
	RH12D×11	20	200	18		
	RH12D×12			20	6.5	
	RH12D×13	29.5	295	21		
	RH12D×14			20		
	RH12D×16	59	590	24	10	
	RH12D×17			25	12	
	RH12D×18			26		
	RH12D×19	70	700	29		
RH12D×21			30	13		
RH12D×22			30	13		
RH15D×12	29.5	295	19			
RH15D×13			22			
RH15D×14			25			
RH15D×16	59	590	25			
RH15D×17			26			
RH15D×18	100	1000	26			
RH15D×19			28			
RH15D×21			31			
RH15D×22			34			
RH15D×24	140	1400	34			
RH15D×27			37			
RH15D×30			41			

Tohnichi Head Size	Model (Body Size x Width)	Allowable Torque		Outside Width C [mm]	Thickness t [mm]
		[N·m]	[kgf·cm]		
19D	RH19D×14	59	590	22.5	8
	RH19D×17			27	10
	RH19D×18	100	1000	28	11
	RH19D×19			29	13
	RH19D×21	166	1660	32	
	RH19D×22			35	
	RH19D×24			39	15
	RH19D×27			41	
	RH19D×30	200	2000	44	
	RH19D×32			47	
RH19D×34			49		
RH19D×36			55	14	
RH19D×41			55		
RH22D×19	166	1660	30		
RH22D×22			34		
RH22D×24	255	2550	37		
RH22D×27	490	4900	41		
RH22D×30			44		
RH22D×32			45		
RH22D×34			49		
RH22D×36	500	5000	51		
RH22D×41			57	17	
RH22D×46			62		
RH27D×22	255	2550	38		
RH27D×24	350	3500	38		
RH27D×27	490	4900	42		
RH27D×30	670	6700	46		
RH27D×32	750	7500	48		
RH27D×34	670	6700	51		
RH27D×36			52		
RH27D×41			58		
RH27D×46	750	7500	64		
RH27D×50			69	20	
RH32D×27	490	4900	43		
RH32D×30	670	6700	46.5		
RH32D×32			49		
RH32D×34	860	8600	52		
RH32D×36			53		
RH32D×41			59		
RH32D×46			65		
RH32D×50	1200	12000	69		
RH32D×55			75		
RH32D×60			80		

Inch Size Models

Commonly used in the airline industry and for specific American product installation and maintenance.

Tohnichi Head Size	Model (Body Size x Inner Width [in])	Inner Width [mm]	Allowable Torque N·m [lbf·in]	Outside Width C [mm [in]]	Thickness t [mm [in]]
8D	RH8D×1/4	6.35	3.6 [31]	11 [0.43]	5 [0.20]
	RH8D×5/16	7.94	7.2 [63]	13.5 [0.53]	6 [0.24]
	RH8D×3/8	9.53	12.2 [108]	15 [0.59]	7 [0.28]
	RH8D×7/16	11.11	15 [132]	17 [0.67]	7 [0.28]
10D	RH10D×1/4	6.35		11 [0.43]	6 [0.24]
	RH10D×5/16	7.94	7.2 [64]	12.5 [0.49]	
	RH10D×3/8	9.53	12.2 [108]	15.5 [0.61]	7 [0.28]
	RH10D×7/16	11.11		17 [0.67]	8 [0.31]
	RH10D×1/2	12.7	25 [221]	19 [0.75]	
	RH10D×9/16	14.29		20 [0.79]	
12D	RH12D×3/8	9.53	12.2 [108]	16 [0.63]	5 [0.20]
	RH12D×7/16	11.11	20 [177]	18 [0.71]	5.5 [0.22]
	RH12D×1/2	12.7	29.5 [261]	21 [0.83]	6.5 [0.26]
	RH12D×9/16	14.29		20 [0.79]	10 [0.39]
RH12D×5/8	15.88	59 [522]	24 [0.94]		

Tohnichi Head Size	Model (Body Size x Inner Width [in])	Inner Width [mm]	Allowable Torque N·m [lbf·in]	Outside Width C [mm [in]]	Thickness t [mm [in]]
15D	RH15D×1/2	12.7	29.5 [261]	19 [0.81]	7 [0.28]
	RH15D×9/16	14.29		22 [0.87]	8 [0.31]
	RH15D×5/8	15.88	59 [522]	25 [0.98]	
	RH15D×11/16	17.46	100 [885]	26 [1.06]	
	RH15D×3/4	19.05	140 [1239]	28 [1.10]	13 [0.51]

Accessories



The Relationship between Interchangeable Heads and Torque Wrenches

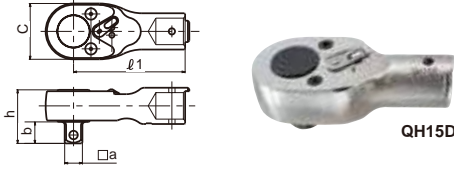
Tohnichi's interchangeable head wrenches have specific diameter round ends that fit into corresponding head base openings. Head and wrench model names include the diameter sizes so heads can be matched to wrenches that will accept those heads.

For example: SH15D×17 will fit on CL100N×15D

A variety of different head types (SH, RH, QH, RQH, FH, DH, AH and SH-N) can be used on one wrench or different types of wrenches such as CL (for tightening) and CEM3-G (for inspection) can use the same head that has the corresponding diameter size.



QH Ratchet Head **RoHS**

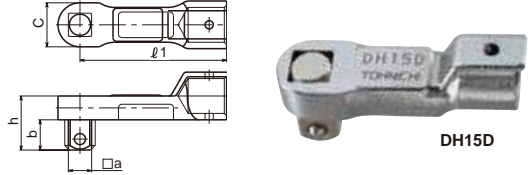


As the QH type ratchet heads need only small swing for tightening, they suit for operations in narrow spaces.

Head Size	Model	Dimensions			
		Sq. Drive a [mm]	Outside Width c [mm]	h [mm]	b [mm]
8D	QH8D	6.35	23	17.5	7.5
10D	QH10D-1/4		26	18.5	
	QH10D			22	
12D	QH12D	9.53	32	25.6	11
15D	QH15D-3/8		37.5	30.5	
	QH15D			33.5	14
19D	QH19D	12.7	40	38.4	15.4
22D	QH22D-1/2		51	41.5	15.5
	QH22D			46.5	20.5
27D	QH27D	19.05	70	49.7	21.5
32D	QH32D	25.4	74	55.7	26.5

Note 1. For the model having 25.4mm square drive, use a through-hole socket. QH15D-3/8 Tmax 100N·m
QH22D-1/2 Tmax 280N·m
2. Ratchet protective cover is available. Refer to page 49.

DH Square Drive Head **RoHS**

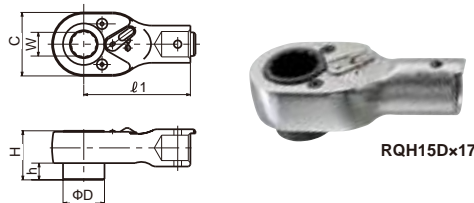


The DH square drive heads are the standard interchangeable head. They are useful when tightening a large number of matching screws with a common torque wrench. It is recommended to keep one set. They are used with sockets.

Head Size	Model	Dimensions			
		Sq. Drive a [mm]	Outside Width c [mm]	h [mm]	b [mm]
10D	DH10D	9.53	18	22.5	13
12D	DH12D			23	
15D	DH15D		22		
19D	DH19D	12.7	24	29.5	16.5
22D	DH22D		34	43.3	23.5
27D	DH27D	19.05		42	
32D	DH32D	25.4	50	58.5	30.25

Note DH32D is a through hole type.

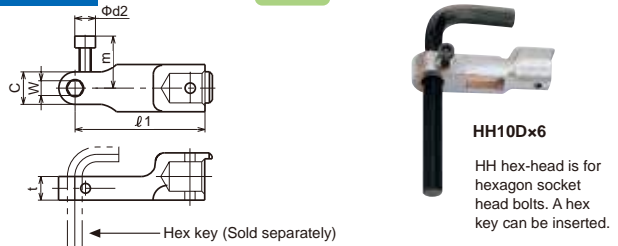
RQH Female Ratchet Head **RoHS**



As the RQH type ratchet heads need only small swing for tightening, they suit for operations in narrow and low ceiling spaces.

Head Size	Model (Body Size × Width)	Dimensions			
		D [mm]	Outside Width C [mm]	H [mm]	h [mm]
12D	RQH12D×12	20.5	32	24.1	
	RQH12D×14				
15D	RQH15D×14	24.5	37.5	29	
	RQH15D×17				
19D	RQH19D×17	31	45	28	10
	RQH19D×19				
22D	RQH19D×22	35.2	51	35	
	RQH22D×24				

HH Hex Head **RoHS**



The HH hex-head is for hex. socket head cap screws.

Head Size	Model (Body Size × Width)	Dimensions			
		Outside Width C [mm]	t [mm]	m [mm]	φd2 b [mm]
8D	HH8D	12	14.5	-	-
	HH10D×5	11			
10D	HH10D×6	12	8		
	HH10D×8	15			
12D	HH12D×5	11		19	7
	HH12D×6	14	10		
	HH12D×8	15			
15D	HH12D×10	17			
	HH15D×8	14			
	HH15D×10	17		21	
19D	HH15D×12	20			
	HH15D×14	21.5			
	HH19D×10	17	13		8.5
22D	HH19D×12	21.5			
	HH19D×14	23		23	
	HH19D×17	27			
27D	HH19D×19	29			
	HH22D×12	19.5			
	HH22D×14	27			
	HH22D×17	30	17	26	10
32D	HH22D×19	32			
	HH22D×22	35			

Note 1. To be used with hex. key inserted.
2. HH8D is not used with hex. key but interchangeable bit.
3. Insertion of HH10D×5 and HH10D×6 are hexagon. Others are double hexagon.



Bits are sold separately. Refer to page 10.

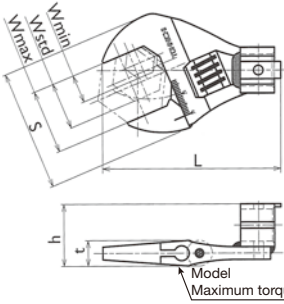
Ratchet Protective Cover for QH/RQH

Fit on your Tohnichi Ratchet Head to protect your work



Part #	Applicable Interchangeable Head
870	QH8D
871	QH10D
872	QH12D/RQH12D
874	QH15D/RQH15D
875	QH19D
876	RQH19D
878	QH22D/RQH22D

AH/AH2 Adjustable Open End Head RoHS



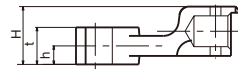
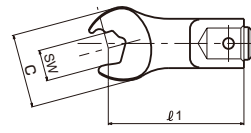
AH15D2x30

AH is easy and convenient to use for applications that require different size bolt heads. Available currently only for the 15mm diameter root shaped Tohnichi torque wrenches.

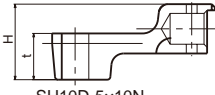
Head Size	Model (Body Size x Width)	Allowable Torque		Inner Width Min.-Standard- Max.[mm]	Dimensions			
		[N·m]	[kgf·cm]		S [mm]	L [mm]	t [mm]	h [mm]
10D	AH10Dx13	25	250	3-8-13	36	57	9	23
	AH10Dx26			7-17-26	49	62	11	25
12D	AH12Dx13	30	300	3-8-13	36	66	9	23
	AH12Dx26			7-17-26	49	71	11	26
15D	AH12Dx36	50	500	8-22-36	65	78	13	27
	AH15D2x26			10-18-26	50	77	11	31
	AH15D2x30	100	1000	13-22-30	60	84	12	32
	AH15D2x36	140	1400	13-24-36	65	87	13	33

Note Use with a click type torque wrench.

SH-N Open End Head with Notch RoHS



SH-N models (except for SH10D-5x10N)



SH10D-5x10N



SH10D-1x10N

The notch creates speed in the tightening process by grasping the side of the fastener without removing the wrench. Ideal for brake line assembly.

Head Size	Model (Body Size x Width)	Allowable Torque		Dimensions			
		[N·m]	[kgf·cm]	Outside Width C [mm]	Thickness		
				H [mm]	t [mm]	h [mm]	
10D	SH10D-1x10N			18.75	12	6	
	SH10D-3x10N	22.5	225	20.25	15	7.5	
	SH10D-5x10N	19	190	24.5	15	-	
	SH10D-4x10N			17.75	10	5	
	SH10D-9x10N	22.5	225	18.75	10	6	
12D	SH10Dx11N			18.8	12	6	
	SH10Dx12N	25	250	32	16	6.5	3.25
	SH12Dx11N			30	19	7.5	-
	SH12D-1x12N			21	12	6	
	SH12D-3x12N	30	300	22.5	15	7.5	
	SH12D-5x12N			26	15	-	
	SH12D-4x12N			20	10	5	
	SH12D-1x14N			21	12	6	
	SH12D-3x14N	40	400	22.5	15	7.5	
	SH12D-5x14N			26	15	-	
15D	SH12D-4x14N			20	10	5	
	SH12D-1x17N			21	12	6	
	SH12D-3x17N	50	500	22.5	15	7.5	
	SH12D-5x17N			26	15	-	
	SH12D-4x17N			20	10	5	

PH Pipe Wrench Head RoHS



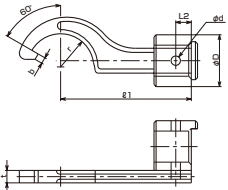
PH15Dx350

The PH heads suit for use with pipes and plumbing applications.

Head Size	Model (Body Size x Width)	Pipe Wrench Head Max. Length [mm]	Applicable Pipe Diameter [mm]	Standard Pipe Diameter [mm]	Recommendable Torque Wrench
15D	PH15Dx350				
19D	PH19Dx350	350	13-38	25.5	CSP
22D	PH22Dx350				
	PH22Dx450	450	26-52	39	

Note 1. PH can be used with CSP model (P.18) only.
2. When ordering with CSP, please specify PH model name and required set torque.
3. In case of using graduated torque wrench, order PHL models.

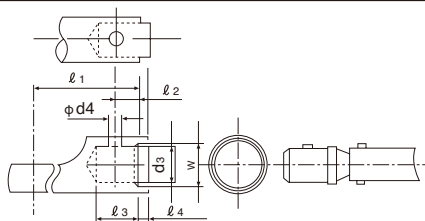
FH Hook Head RoHS



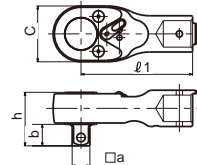
FH

The FH hook heads are ideal for use with bearing locknut applications.

Head Size	Model (Body Size x Width)	Applicable Size of Nut Outside Diameter [mm]	Nominal Size of Screw	Dimensions								
				r [mm]	O [mm]	b [mm]	t [mm]	H [mm]	D [mm]	L2 [mm]	d [mm]	
15D	FH15Dx30	30-38	M20	16								
	FH15Dx38	38-45	M25	20		3	6	30				
	FH15Dx45	45-52	M30	24								
	FH15Dx52	52-58	M35	27	60	3.5	7	30.5	25	7.5	4.5	
19D	FH15Dx58	58-65	M40	31		4.5		31				
	FH19Dx65	65-75	M45, M50	35.5			8	35.5	29	9.5		
22D	FH22Dx75	75-85	M60, M65	39				38.5				
	FH22Dx85	85-98	M70, M75	45.5	45	5	10	40	32	11	5.5	



CPQH Corrosion-Resistant Ratchet Head



CPQH12D

QH type ratchet head with anticorrosion coating is ideal for wet conditions and features ratcheting action for narrow spaces.

Head Size	Model	Dimensions			
		Sq. Drive a [mm]	Outside Width c [mm]	h [mm]	b [mm]
10D	CPQH10D		26	22	
12D	CPQH12D	9.53	32	25.6	11
15D	CPQH15D		37.5	33.5	14
19D	CPQH19D	12.7	40	38.4	15.4

Common Dimensions for Interchangeable Head

Model	Dimensions [mm]						
	l1	l2	l3	l4	d3	d4	W
SH8D, RH, QH, HH	35	4	10	2	8	3.0	9
SH10D, RH, QH, HH, DH, SH-N	44	5	12	2.5	10	3.5	12
SH12D, RH, QH, HH, DH, RQH	53	6	14	3	12	3.5	14
SH15D, RH, QH, HH, DH, RQH, FH	63	7.5	17	3	15	4.5	17
SH19D, RH, QH, HH, DH, RQH, FH	80	9.5	21	3	19	4.5	21
SH22D, RH, QH, HH, DH, RQH, FH	100	11	24	3.5	22	5.5	24
SH27D, RH, QH, DH	125	13.5	29	5	27	6.5	30
SH32D, RH, QH, DH	160	16	34	7	32	6.5	35

Note When requesting a special head that is used with various types of torque wrench, it is strictly required to follow the "l1" dimension to keep torque accuracy. Any deviation from the "l1" dimension affects torque accuracy.

