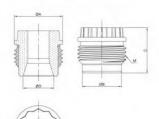
- Nozzles for PDC Drill Bits

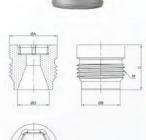




Threaded nozzle of plumblossom teeth wrench series

Uni	ded nozzie of plumbiossom teeth wrench series								
M	ΦЕ	ΦD	С	ФВ	ФА	Stock No.			
1-1/16-12UN-2	5.6	17.5	25.4	21.9	27.1	PDX100702			
1-1/16-12UN-2	6.4	17.5	25.4	21.9	27.1	PDX100802			
1-1/16-12UN-2A	7.1	17.5	25.4	21.9	27.1	PDX100902			
1-1/16-12UN-2A	7.9	17.5	25.4	21.9	27.1	PDX101002			
1-1/16-12UN-2	8.7	17.5	25.4	21.9	27.1	PDX101102			
1-1/16-12UN-2A	9.5	17.5	25.4	21.9	27.1	PDX101202			
1-1/16-12UN-2	10.3	17.5	25.4	21.9	27.1	PDX101302			
1-1/16-12UN-2	11.1	17.5	25.4	21.9	27.1	PDX101402			
1-1/16-12UN-2	11.9	17.5	25.4	21.9	27.1	PDX101502			
1-1/16-12UN-2	12.7	17.5	25.4	21.9	27.1	PDX101602			
1-1/16-12UN-2	13.5	17.5	25.4	21.9	27.1	PDX101702			
1-1/16-12UN-2	14.3	17.5	25.4	21.9	27.1	PDX101802			
1-1/16-12UN-2	15.1	17.5	25.4	21.9	27.1	PDX101902			
1-1/16-12UN-2A	15.9	17.5	25.4	21.9	27.1	PDX102002			
1-1/16-12UN-2	16.7	17.5	25.4	21.9	27.1	PDX102102			
1-1/16-12UN-2/	17.5	17.5	25.4	21.9	27.1	PDX102202			

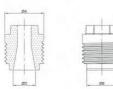




Threaded nozzle of inner hexagon wrench series

						Unit: mr
Stock No.	ФА	ФВ	С	ФD	ΦЕ	М
PDN200601	27.1	21.9	25.4	18.0	6.4	1"-1/16-12UN-2A
PDN200701	27.1	21.9	25.4	18.0	7.1	1"-1/16-12UN-2A
PDN200801	27.1	21.9	25.4	18.0	7.9	1"-1/16-12UN-2A
PDN200901	27.1	21.9	25.4	18.0	9.5	1"-1/16-12UN-2A
PDN201101	27.1	21.9	25.4	18.0	11.1	1"-1/16-12UN-2A
PDN201301	27.1	21.9	25.4	18.0	12.7	1"-1/16-12UN-2A
PDN201401	27.1	21.9	25.4	18.0	14.3	1"-1/16-12UN-2A
PDN201601	27.1	21.9	25.4	18.0	15.9	1"-1/16-12UN-2A
PDN300501	19.1	16.1	23.0	13.0	5.6	3/4"-12UN-2A
PDN300601	19.1	16.1	23.0	13.0	6.4	3/4"-12UN-2A
PDN300701	19.1	16.1	23.0	13.0	7.1	3/4"-12UN-2A
PDN300801	19.1	16.1	23.0	13.0	7.9	3/4"-12UN-2A
PDN300901	19.1	16.1	23.0	13.0	9.5	3/4"-12UN-2A
PDN301101	19.1	16.1	23.0	13.0	11.1	3/4"-12UN-2A





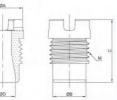


Threaded nozzle of hexagon wrench series

						PATHE ITH
Stock No.	ФА	ΦВ	С	ФD	ΦЕ	M
PDX200702	25.4	20.4	28.6	15.9	7.1	1"-14UNS-2A
PDX200802	25.4	20.4	28.6	15.9	7.9	1"-14UNS-2A
PDX200902	25,4	20.4	28.6	15.9	8.7	1"-14UNS-2A
PDX201002	25.4	20.4	28.6	15.9	9.5	1"-14UNS-2A
PDX200102	25.4	20.4	28.6	15.9	10.3	1"-14UNS-2A
PDX201102	25.4	20.4	28.6	15.9	11.1	1"-14UNS-2A
PDX201202	25.4	20.4	28.6	15.9	11.9	1"-14UNS-2A
PDX201302	25.4	20.4	28.6	15.9	12.7	1"-14UNS-2A
PDX201402	25.4	20.4	28.6	15.9	13.5	1"-14UNS-2A
PDX201502	25.4	20.4	28.6	15.9	14.3	1"-14UNS-2A
PDX201602	25.4	20.4	28.6	15.9	15.1	1"-14UNS-2A
PDX201702	25.4	20.4	28.6	15.9	15.9	1"-14UNS-2A





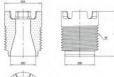




Threaded nozzle of castle top wrench series

	Control of the Contro								
Stock No.	ФА	ФВ	С	ΦD	ΦЕ	M			
PDD500701	20.3	16.1	30.5	12.5	5.6	3/4"-12UN-2A			
PDD500801	20.3	16.1	30.5	12.5	6.4	3/4"-12UN-2A			
PDD500901	20.3	16.1	30.5	12.5	7.1	3/4"-12UN-2A			
PDD501001	20.3	16.1	30.5	12.5	7.9	3/4"-12UN-2A			
PDD501101	20.3	16.1	30.5	12.5	8.7	3/4"-12UN-2A			
PDD501201	20.3	16.1	30.5	12.5	9.5	3/4"-12UN-2A			
PDD501301	20.3	16.1	30.5	12.5	10.3	3/4"-12UN-2A			
PDD501401	20.3	16.1	30.5	12.5	11.1	3/4"-12UN-2A			
PDD501501	20.3	16.1	30.5	12.5	11.9	3/4"-12UN-2A			
PDD501601	20.3	16.1	30.5	12.5	12.7	3/4"-12UN-2A			





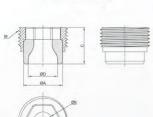


Threaded nozzle of castle top wrench series

Stock No. ФА ΦВ C ΦD ΦЕ M PDD200902 30.7 1"-14UNS-2A 25.4 20.4 17.5 7.1 1"-14UNS-2A PDD201002 25.4 20.4 30.7 17.5 7.9 PDD201102 25.4 20.4 30.7 17.5 8.7 1"-14UNS-2A PDD201202 25.4 20.4 17.5 9.5 1"-14UNS-2A 30.7 PDD201302 25.4 20.4 30.7 17.5 10.3 1"-14UNS-2A PDD201402 25.4 20.4 1"-14UNS-2A 30.7 17.5 11.1 PDD201502 25.4 20.4 30.7 17.5 11.9 1"-14UNS-2A PDD201602 25.4 20.4 30.7 17.5 12.7 1"-14UNS-2A PDD201702 25.4 20.4 30.7 17.5 13.5 1"-14UNS-2A PDD201802 25.4 20.4 30.7 17.5 14.3 1"-14UNS-2A PDD201902 25.4 20.4 30.7 17.5 15.1 1"-14UNS-2A PDD202002 25.4 20.4 1"-14UNS-2A 30.7 17.5 15.9 PDD202102 25.4 20.4 30.7 17.5 16.7 1"-14UNS-2A PDD202202 1"-14UNS-2A 25.4 20.4 30.7 17.5 17.5

Unit: mm





Nozzle cased in threaded steel sleeve

					Unit: n
Stock No.	ФА	С	ΦD	ΦЕ	M
PC2300001	20.3	18.9	15.2	0.0	1"-14UNS-2A
PC2305501	20.3	18.9	15.2	5.6	1"-14UNS-2A
PC2306301	20.3	18.9	15.2	6.4	1"-14UNS-2A
PC2307101	20.3	18.9	15.2	7.1	1"-14UNS-2A
PC2307901	20.3	18.9	15.2	7.9	1"-14UNS-2A
PC2308701	20.3	18.9	15.2	8.7	1"-14UNS-2A
PC2309501	20.3	18.9	15.2	9.5	1"-14UNS-2A
CS500701	31.8	28.7	26.7	5.6	1-1/2"-12UNF-2/
PCS500801	31.8	28.7	26.7	6.4	1-1/2"-12UNF-2
CS500901	31.8	28.7	26.7	7.1	1-1/2"-12UNF-2
PCS501001	31.8	28.7	26.7	7.9	1-1/2"-12UNF-2
CS501101	31.8	28.7	26.7	8.7	1-1/2"-12UNF-2/
CS501201	31.8	28.7	26.7	9.5	1-1/2"-12UNF-2
CS501301	31.8	28.7	26.7	10.3	1-1/2"-12UNF-2
CS501401	31.8	28.7	26.7	11.1	1-1/2"-12UNF-2/
CS501501	31.8	28.7	26.7	11.9	1-1/2"-12UNF-2/

Nozzle cased in threaded steel sleeve









						Unit: m
Stock No.	ФА	ΦВ	С	ФD	ΦЕ	M
PDX100701	27.1	21.9	25.4	17.5	5.6	1-1/16-12UN-2A
PDX100801	27.1	21.9	25.4	17.5	6.4	1-1/16-12UN-2A
PDX100901	27.1	21.9	25.4	17.5	7.1	1-1/16-12UN-2A
PDX101001	27.1	21.9	25.4	17.5	7.9	1-1/16-12UN-2A
PDX101101	27.1	21.9	25.4	17.5	8.7	1-1/16-12UN-2A
PDX101201	27.1	21.9	25.4	17.5	9.5	1-1/16-12UN-2A
PDX101301	27.1	21.9	25.4	17.5	10.3	1-1/16-12UN-2A
PDX101401	27.1	21.9	25.4	17.5	11,1	1-1/16-12UN-2A
PDX101501	27.1	21.9	25.4	17.5	11.9	1-1/16-12UN-2A
PDX101601	27.1	21.9	25.4	17.5	12.7	1-1/16-12UN-2A
PDX101701	27.1	21.9	25.4	17.5	13.5	1-1/16-12UN-2A
PDX101801	27.1	21.9	25.4	17.5	14.3	1-1/16-12UN-2A
PDX101901	27.1	21.9	25.4	17.5	15.1	1-1/16-12UN-2A
PDX102001	27.1	21.9	25.4	17.5	15.9	1-1/16-12UN-2A
PDX102101	27.1	21.9	25.4	17.5	16.7	1-1/16-12UN-2A
PDX102201	27.1	21.9	25.4	17.5	17.5	1-1/16-12UN-2A



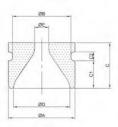


Jet sleeve

ret sieeve			Unit: mm
Stock No.	ФА	ФВ	С
HX022011	28.5	22.0	40.0
HX022012	28.5	22.0	70.0
HX018001	24.6	18.0	35.0
HX018002	24.6	18.0	50.0
HX018006	22.9	18.0	35.0
HX011006	16.5	11.5	40.0

- Nozzles for Roller Cone Drill Bits

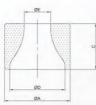




Grooved nozzle

Stock No.	ФА	ФВ	С	C1	C2	ФD	ΦЕ
PCK100801	18.9	16.3	18.8	11.9	4.0	14.7	6.4
PCK101301	18.9	16.3	18.8	11.9	4.0	14.7	10.3
PCK101601	18.9	16.3	18.8	11.9	4.0	14.7	12.7
PCK200701	22.1	18.8	18.8	11.9	4.0	17.5	5.5
PCK200901	22.1	18.8	18.8	11.9	4.0	17.5	7,1
PCK201401	22.1	18.8	18.8	11.9	4.0	17.5	11.1
PCK201601	22.1	18.8	18.8	11.9	4.0	17.5	12.7
PCK300901	30.0	26.3	20.6	12.4	4.0	25.4	7.1
PCK301301	30.0	26.3	20.6	12.4	4.0	25.4	10.3
PCK302201	30.0	26.3	20.6	12.4	4.0	25.4	17.5
PCK401001	33.2	29.9	27.0	19.1	4.0	28.6	7.9
PCK502801	37.8	34.2	28.6	20.5	4.0	33.3	22.2
PCK503201	37.8	34.2	28.6	20.5	4.0	33.3	25.4

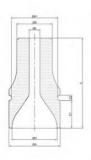




Non-shrouded nozzle

				Unit: mm
Stock No.	ФА	С	ФД	ΦЕ
PCS500701	31.8	22.2	26.7	5.6
PCS500901	31.8	22.2	26.7	7.1
PCS501201	31.8	22.2	26.7	9.5
PCS502001	31.8	22.2	26.7	15.9
PC2305501	20.3	12.6	15.2	5.6
PC2314201	20.3	12.6	15.2	14.3
PC2309202	20.4	12.7	15.9	9.3

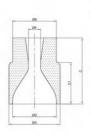




Grooved extended nozzle

								Unit. mr
Stock No.	ФА	ФВ	ФВ1	С	C1	C2	ΦD	ΦЕ
PCL100901	30.0	22.9	26.3	46.0	12.4	4.0	25.4	7.1
PCL101401	30.0	22.9	26.3	46.0	12.4	4.0	25.4	11.1
PCL200901	33.2	21.6	29.9	61.9	19.1	4.0	28.6	7.1
PCL201301	33.2	21.6	29.9	61.9	19.1	4.0	28.6	10.3
PCL201501	33.2	21.6	29.9	61.9	19.1	4.0	28.6	11.9
PCL301001	37.8	26.2	34.2	66.7	20.5	4.0	33.3	8.0
PCL301501	37.8	26.2	34.2	66.7	20.5	4.0	33.3	11.9
PCL302001	37.8	26.2	34.2	66.7	20.5	4.0	33.3	15.9

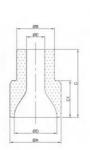




Extended nozzle

Stock No.	ФА	ФВ	С	C1	ФD	ΦЕ
PCZ101001	33.2	28.4	42.9	27.0	28.6	7.9
PCZ101201	33.2	28.4	42.9	27.0	28.6	9.5
PCZ101401	33.2	28.4	42.9	27.0	28.65	11.1
PCZ101402	33.2	28.4	42.9	27.0	28.6	11.4
PCZ101602	33.2	28.4	42.9	27.0	28.6	12.9
PCZ101802	33.2	28.4	42.9	27.0	28.6	14.5
PCZ102002	33.2	28.4	42.9	27.0	28.6	16.0
PCZ102202	33.2	28.4	42.9	27.0	28.6	17.5
PCZ102402	33.2	28.4	42.9	27.0	28.6	19.1





Extended nozzle

						Unit. mi
Stock No.	ФА	ФВ	С	C1	ФD	ΦЕ
PCL400801	26.8	19.7	35.7	19.1	22.2	6.4
PCL401101	26.8	19.7	35.7	19.1	22.2	8.7
PCL401601	26.8	19.7	35.7	19.1	22.2	12.7
PCL501001	33.2	28.4	42.9	27.0	28.6	7.9
PCL501301	33.2	28.4	42.9	27.0	28.6	10.3
PCL501801	33.2	28.4	42.9	27.0	28.6	14.3
PCL502401	33.2	28.4	42.9	27.0	28.6	19.1