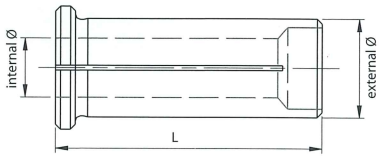
Reduction Sleeves - for Ø 12 mm

Sealed Version

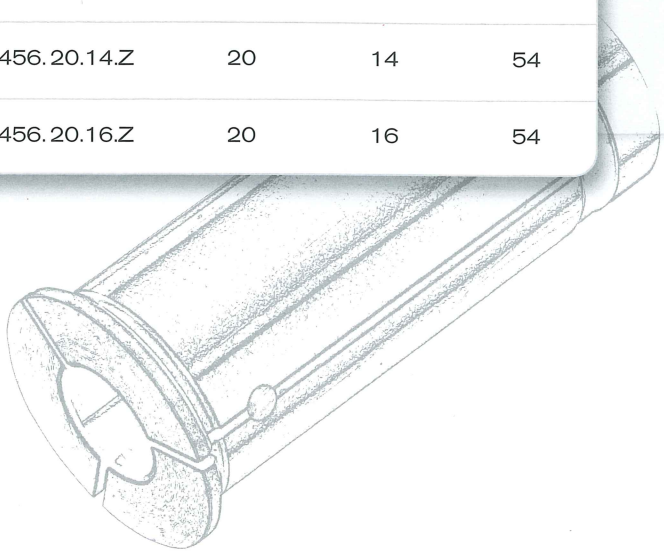
Ordering Code	External-Ø [mm]	Internal-Ø [mm]	L [mm]
40.456.12.03.Z	12	3	46
40.456.12.04.Z	12	4	46
40.456.12.05.Z	12	5	46
40.456.12.06.Z	12	6	46
40.456.12.08.Z	12	8	46

Reduction Sleeves - for Ø 20 mm

Sealed Version



Ordering Code	External-Ø [mm]	Internal-Ø [mm]	L [mm]
40.456.20.03.Z	20	3	54
40.456.20.04.Z	20	4	54
40.456.20.05.Z	20	5	54
40.456.20.06.Z	20	6	54
40.456.20.08.Z	20	8	54
40.456.20.10.Z	20	10	54
40.456.20.12.Z	20	12	54
40.456.20.14.Z	20	14	54
40.456.20.16.Z	20	16	54



Reduction Sleeves - for Ø 32 mm

Sealed Version

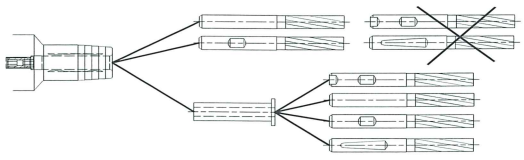
Ordering Code	External-Ø [mm]	Internal-Ø [mm]	L [mm]
40.456.32.06.Z	32	6	64
40.456.32.08.Z	32	8	64
40.456.32.10.Z	32	10	64
40.456.32.12.Z	32	12	64
40.456.32.14.Z	32	14	64
40.456.32.16.Z	32	16	64
40.456.32.18.Z	32	18	64
40.456.32.20.Z	32	20	64
40.456.32.25.Z	32	25	64

Technical Information

Torque setting for Hydraulic Chucks

This chart shows the maximum torque settings for the various clamping diameters (h6 tolerance). The values are for clamping suitable cylindrical shanks and reduction sleeves.

	Tool Diameter [mm]												
	3	4	5	6	8	10	12	14	16	18	20	25	32
Minimum shank [mm] inside Hydraulic Chuck	–	–	–	27 mm	27 mm	31 mm	36 mm	36 mm	39 mm	39 mm	41 mm	47 mm	51 mm
Torque [Nm] when clamping directly on tool shank	–	–	–	20 Nm	35 Nm	45 Nm	80 Nm	100 Nm	130 Nm	180 Nm	210 Nm	350 Nm	450 Nm
Torque (Nm) when clamping on shank in 32 mm reduction sleeve	–	–	–	25 Nm	35 Nm	50 Nm	105 Nm	130 Nm	150 Nm	210 Nm	230 Nm	300 Nm	–
Torque (Nm) when clamping on shank in 20 mm reduction sleeve	5 Nm	7 Nm	13 Nm	28 Nm	35 Nm	65 Nm	95 Nm	125 Nm	140 Nm	–	–	–	–
Torque (Nm) when clamping on shank in 12 mm reduction sleeve	3 Nm	4 Nm	7 Nm	10 Nm	18 Nm	–	–	–	–	–	–	–	–



Suitable shanks (h6 tolerance) for clamping with and without reduction sleeve:

- DIN 1835A, DIN 6535HA, DIN 6535HAK from diameter 3 - 32 mm
- DIN 1835B, DIN 6535HB, DIN 6535HBK up to diameter 20 mm

Suitable shanks (h6 tolerance) but only with reduction sleeve:

- DIN 1835B, DIN 6535HB, DIN 6535HBK over diameter 20 mm
- DIN 1835D/E, DIN 6535HE, DIN 6535HEK

Holder specification

- Material 1600-1800 N/mm²
- Hardness 52+2 HRC
- Balanced to G 6,3 at 15.000 rpm
- Design according to DiN69882-7
- with axial length adjustment (maximum 10mm)
- Maximum rpm = 40.000
- Optimum working temperature 20-50 degree celcius
- Maximum 80 Bar coolant pressure.

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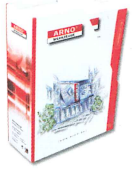

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